420-A-7 2004-0006

385 Presumpscot St.

Amendment to Plan - Diver Down

Jon Couture

on Spreadsheet

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

2004-0006
Application I. D. Number

1/13/2004
Application Date

Couture Jon Rene
Applicant

399 Presumpscot St, Portland, ME 04103
Applicant's Mailing Address

Diver Down Amended Site Plan
Project Name/Description

Consultant/Agent

399 - 399 Presumpscot St, Portland, Maine
Address of Proposed Site

Applicant Ph: (207) 828-0444 Agent Fax:
Applicant or Agent Daytime Telephone, Fax

420 A007001
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) Portable Overhead Structure

Proposed Building square Feet or # of Units | Acreage of Site | IM Zoning

Check Review Required:

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

Fees Paid: Site Pla $400.00 Subdivision Engineer Review Date 1/15/2004

Planning Approval Status:

Reviewer

☐ **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

☐ 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	

Sebago Technics
Engineering Expertise You Can Build On

sebagotechnics.com
One Chabot Street
P.O. Box 1339
Westbrook, Maine
04098-1339
Ph. 207-856-0277
Fax 856-2206

January 14, 2004
03111

JAN 15 2004

Ms. Sarah Hopkins
Planning and Development Dept.
City of Portland
389 Congress Street
Portland, ME 04101

Amended Minor Site Plan Application, Diver Down Underwater Services
399 Presumpscot Street, Portland, Maine

Dear Sarah:

We have prepared a second amendment to the recently approved Amended Minor Site Plan application for Jon Couture of Diver Down Underwater Services. The property is located at 399 Presumpscot Street in Portland. The applicant previously submitted an Amended Minor Site Plan application that was approved on October 14, 2003.

The current application requests approval for the following:

1. Addition of a 1,620 square foot portable building.
2. Revisions to gravel limits in storage/maneuvering areas.

Portable Building

The applicant has purchased a portable structure that is approximately 36 feet wide, 45 feet long, with an overall height of 42 feet. The structure was designed and built by Cianbro to be used as a temporary duct enclosure for a recent project. The applicant has purchased the structure to be stored and utilized at his property on Presumpscot Street.

Elevation sketches (SK1, SK2, and SK3) of the structure as prepared by Cianbro are attached. SK1 is a longitudinal elevation sketch, SK2 is a transverse elevation sketch of the interior bays, and SK3 is a transverse elevation sketch of the end bays (note that the 26' diameter circle on SK2 depicts Cianbro's temporary duct and is not relevant to the structure).

The roofing and siding over the steel structure will be either fabric or panels. The fabric is a white flame-retardant fabric and the sides can be rolled up in summer. The fabric roofing and siding may be substituted with removable galvanized corrugated roof and siding panels.

The structure is portable and has been constructed to include cable attachments so that it can be lifted and moved by crane. Diver Down owns a crane truck that is parked at the site when not in use. The applicant intends to keep the structure at the back of the property within the building setback limits as shown on the attached plan. The structure may be moved on the site within the allowable building area, depending on the use and the amount of seasonal equipment stored on the site. The applicant intends to use the structure as a temporary covering for different projects associated with their marine services business. For example, the structure may be lifted and placed over the boat during repair or for storage, or the structure may be used for overhead protection during welding or fabrication projects.

Gravel Areas

The applicant proposes revisions to the gravel limits in the storage and maneuvering areas at the back of the site. As shown on the attached Amended Site Plan, the proposed gravel surface is generally located within the area shown to be fenced, with the exception of the southern area where an existing ditch and the proposed fill slope are located. There will be no gravel surface in this area, and a portion of existing gravel near the ditch will be removed and loamed and seeded. The total proposed impervious area on the site, including the building area, is just under 37,000 square feet, or 74.4% of the site area. This amount of impervious area is within the zoning requirement of no more than 75% of the total site area.

Please feel free to give me a call to discuss the Amended Site Plan if you have any questions or comments. Thank you for your time.

Sincerely,

SEBAGO TECHNICS, INC.

Danielle D. Betts, P.E.
Sr. Project Manager

DDB:ddb/jc
Enc.

cc: Jon Couture

September 19, 1997

Alexander Jaegerman, AICP
Chief Planner
Office of Planning & Urban Development
City of Portland
389 Congress Street
Portland, Maine 04101

RE: Addendum 1 - Application for Permit to Develop
Diver Down Underwater Services
385 Presumpscot Street - Portland, Maine

Dear Mr. Jaegerman:

On behalf of Diver Down Underwater Services, owner of 385 Presumpscot Street in Portland, Maine, we are pleased to submit this addendum to the Application for Permit to Develop the warehouse and storage facility proposed for construction on the referenced site. The addendum addresses the comments of Deluca Hoffman Associates, Inc. and calls for a reduction of the footprint for the warehouse from 10,000-sq. ft. to 6,000-sq. ft. The site is an undeveloped, approximately 0.93 acre lot identified as Tax Map No.: 420-A-1-6-2. The site is bordered by Presumpscot Street to the west, to the further west, north and south by commercial properties, and to the east by railroad easement.

The facility, as changed by this addendum, will consist of a warehouse (6,000-sq. ft.), gravel driveway and parking area (7,675-sq. ft.), and a gravel covered storage area to be enclosed with a chain link fence (5,000-sq. ft.). The final site condition will include minor grading and landscaping with approximately 22,000-sq. ft. of the site remaining "green". A minimum setback of 25 feet has been used for the building at all property boundaries.

The warehouse will be used predominately for equipment storage, with no permanent employees. The building will be equipped with a single toilet and sink and an underground holding tank of 2,000 gallons has been specified for temporary holding of septage waste. Other utilities to the site will include a water hookup to the municipal supply located in Presumpscot Street and an electrical connection to the utility pole also located on Presumpscot Street. Solid waste generation will be minimal due to the company's aggressive waste reduction and recycling practices. Solid waste generated onsite will be temporarily staged in private hauler containers to be located behind the building adjacent to the storage area.

Traffic entering and exiting the facility will utilize a single twenty-foot wide entranceway located on the northerly side of the lot. Line of sight at the entrance and exit onto Presumpscot Street is at least 580 feet to the north and over a 1,000 feet to the south affording safe access to and from the facility.

43 LONGFELLOW AVENUE
BRUNSWICK, MAINE 04011
PHONE: (207) 729-4547
FAX: (207) 729-4538

Open areas on the developed property, including areas adjacent to Presumpscot Street and along the southern boundary, will provide landscape relief to the front and side of the building. All disturbed areas will be loamed, mulched and seeded with grass according to appropriate seeding plans for the area. Several trees will also be located in "green" areas adjacent to the building facade.

In addition, to address the comments of Deluca Hoffman we have done the following:

- Revised the stormwater analysis (attached) and provided a stormwater detention/retention area as shown on the revised site plan, thereby eliminating the use of the drainage course on-site for stormwater storage. The detention/retention basin has been sized to accommodate the additional, post-development condition runoff of approximately 0.1 acre-feet. Runoff will be directed to the basin via a roadside drainage swale, via sheet flow from the parking and storage area, and via a roof drain from the warehouse. An outlet pipe will dewater the basin during large storm events and direct runoff to the drainage course as shown on the plans.

- Provided a typical roadway cross section.

- Identified a roof drain that will drain the roof and direct the runoff to the detention basin.

- Adjusted the footprint for the silt fence.

- Provided roadway layout information (e.g. curve radii) and building setbacks from the property line.

- Added erosion control and seeding notes.

We look forward to reviewing the application and addendum with the Planning Board at its earliest convenience. Please feel free to contact us should you have any questions.

Yours truly,
BALDWIN ENGINEERING, INC.

Christopher Baldwin, P.E.
Principal Engineer

Attachments

cc: J. Couture - Diver Down Underwater Services

Sebago Technics
Engineering Expertise You Can Build On

sebagotechnics.com
One Chabot Street
P.O. Box 1339
Westbrook, Maine
04098-1339
Ph. 207-856-0277
Fax 856-2206

October 22, 2003
03111

Ms. Sarah Hopkins
Planning and Development Dept.
Portland City Hall
389 Congress Street
Portland, ME 04101

Amended Minor Site Plan Application, Diver Down Underwater Services
399 Presumpscot Street, Portland, Maine

Dear Sarah:

As requested in the approval letter dated October 14, 2003, we have revised the Amended Site Plan to include an 8' wide esplanade with two 3" caliper Honey Locust trees, and we have also revised the trees in the front yard to be Honey Locust.

We have enclosed seven (7) sets of final plans and one CD with the electronic Cadd.dxf files, as requested in requirement #6 of the approval letter.

Please call with any questions. Thank you.

Sincerely,

SEBAGO TECHNICS, INC.

Danielle D. Betts, P.E.
Sr. Project Manager

DDB:ddb/jc
Enc.

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 Division.

Address of Proposed Development: 399 PRESUMPSCOT ST. **Zone:** IM

Total Square Footage of Proposed Structure:
1,620 Sq. ft. PORTABLE STRUCTURE

Square Footage of Lot:
49,564 Sq. ft. (deed)

Tax Assessor's Chart, Block & Lot:
Chart# Block# Lot#
420 - A - 007

Property owner's mailing address:
JON COUTURE, DIVER DOWN UNDERWATER SERVICES, INC.
399 PRESUMPSCOT ST.
PORTLAND, ME 04103

Telephone #:
207/828-0444

Consultant/Agent, mailing address, phone # & contact person:
CONTACT: DANIELLE D. BETTS
PHONE: 207/856-0277
SEBAGO TECHNICS, INC.
ONE CHABOT ST., P.O. BOX 1339
WESTBROOK, ME 04098

Applicant's name, mailing address, telephone #/Fax#/Pager#:
~ SAME AS OWNER ~

Project name:
AMENDED SITE PLAN - DIVER DOWN

Proposed Development (check all that apply)

X New Building* ___Building Addition ___Change of Use ___Residential ___Office ___Retail
___Manufacturing ___Warehouse/Distribution ___Parking lot
___Subdivision ($500.00) + amount of lots____ ($25.00 per lot) $_____
___Site Location of Development ($3,000.00)
(except for residential projects which shall be $200.00 per lot_____)
___Traffic Movement ($1,000.00) ___Stormwater Quality ($250.00)
___Section 14-403 Review ($400.00 + $25.00 per lot)
___Other_____

* PORTABLE OVERHEAD STRUCTURE, SEE ATTACHED DRAWINGS

Major Development (more than 10,000 sq. ft.)

___Under 50,000 sq. ft. ($500.00)
___50,000 - 100,000 sq. ft. ($1,000.00)
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Minor Site Plan Review

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Plan Amendments

___Planning Staff Review ($250.00)
___Planning Board Review ($500.00)

- Please see next page -

Who billing will be sent to: (Company, Contact Person, Address, Phone #)

JON COUTURE
DIVER DOWN UNDERWATER SERVICES, INC.
399 PRESUMPSCOT ST.
PORTLAND, ME 04103
207/828-0444

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, & 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: Daniel A Bacon AGENT Sebago Technics	**Date:** 01.13.04

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

Sebago Technics
Engineering Expertise You Can Build On

sebagotechnics.com
One Chabot Street
P.O. Box 1339
Westbrook, Maine
04098-1339
Ph. 207-856-0277
Fax 856-2206

January 14, 2004
03111

Ms. Sarah Hopkins
Planning and Development Dept.
City of Portland
389 Congress Street
Portland, ME 04101

Amended Minor Site Plan Application, Diver Down Underwater Services
399 Presumpscot Street, Portland, Maine

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Please feel free to give me a call to discuss the Amended Site Plan if you have any questions or comments. Thank you for your time.

Sincerely,

SEBAGO TECHNICS, INC.

Danielle D. Betts, P.E.
Sr. Project Manager

DDB:ddb/jc
Enc.

cc: Jon Couture

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 Division.

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1,620 Sq. Ft. PORTABLE STRUCTURE

Square Footage of Lot:
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Tax Assessor's Chart, Block & Lot:
Chart# Block# Lot#
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JON COUTURE, DIVER DOWN UNDERWATER SERVICES, INC.
399 PRESUMPSCOT ST.
PORTLAND, ME 04103

Telephone #:
207/828-0444

Consultant/Agent, mailing address, phone # & contact person:
CONTACT: DANIELLE D. BETTS
PHONE: 207/856-0277
SEBAGO TECHNICS, INC.
ONE CHABOT ST., P.O. BOX 1339
WESTBROOK, ME 04098

Applicant's name, mailing address, telephone #/Fax#/Pager#:
~ SAME AS OWNER ~

Project name:
AMENDED SITE PLAN - DIVER DOWN

Proposed Development (check all that apply)

X New Building* ___Building Addition ___Change of Use ___Residential ___Office ___Retail
___Manufacturing ___Warehouse/Distribution ___Parking lot
___Subdivision ($500.00) + amount of lots____ ($25.00 per lot) $_____
___Site Location of Development ($3,000.00)
(except for residential projects which shall be $200.00 per lot_____)
___Traffic Movement ($1,000.00) ___Stormwater Quality ($250.00)
___Section 14-403 Review ($400.00 + $25.00 per lot)
___Other_____

* PORTABLE OVERHEAD STRUCTURE, SEE ATTACHED DRAWINGS

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___Under 50,000 sq. ft. ($500.00)
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- Please see next page -

Who billing will be sent to: (Company, Contact Person, Address, Phone #)

JON COUTURE
DIVER DOWN UNDERWATER SERVICES, INC.
399 PRESUMPSCOT ST.
PORTLAND, ME 04103
207/828-0444

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

a. **copy of application**
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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:	AGENT Sebago Technics	**Date:** 01.13.04

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

City of Portland Site Plan Application

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Address of Proposed Development: PRESUMPSCOTT STREET **Zone:** IM

Total Square Footage of Proposed Structure:
10,000 SF

Square Footage of Lot:
111,824.4 SF = 2.57 Ac.

Tax Assessor's Chart, Block & Lot:

Chart#	Block#	Lot#
419		1
419	A	7

Property owner's mailing address:
CITY OP PORTLAND

Telephone #:

Consultant/Agent, mailing address, phone # & contact person:
Engineering Assist. & Design
Ross A. Cudlitz, PE
10 North Road , Yarmouth
207-846-0839 04096

Applicant's name, mailing address, telephone #/Fax#/Pager#:
Kevin McQuinn
c/o Turner Barker Realty
202 US Route One
Falmouth, Maine 04105
207-450-8700

Project name:
Presumpscott St.

Proposed Development (check all that apply)

✓ New Building ___Building Addition ___Change of Use ___Residential ___Office ___Retail
___Manufacturing ✓ Warehouse/Distribution ___Parking lot
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- Please see next page -

Who billing will be sent to: (Company, Contact Person, Address, Phone #)

KEVIN MCQUINN
C/o TURNER BAKER REALTY
202 US ROUTE ONE
FALMOUTH, MAINE 04195

207-450-8700

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Signature of applicant: Thomas A. Cuddy (agent)	**Date:** 5/24/04

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

From: John Lufkin
To: Kandi Talbot; Sarah Hopkins
Date: 07/27/2005 10:52:59 AM
Subject: Fwd: Site Plan File

Kandi or Sarah, did this go out? Did one of you call him?

Thanks,
Jack.

>>> John Lufkin 7/15/2005 3:41:47 PM >>>
Kandi, I didn't get this today, so can I ask that you make a copy and send it to Monsuer Al-Alwi at 8 Evergreen Lane, North Yarmouth, Maine 04097. Could I further ask that some one give him a call at 829-3333 or 318-8449 and let him know when to expect the material. He is in the process of preforming due diligence on whether to buy the site or not and this info would be helpful to him.

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Jack.

>>> John Lufkin 7/15/2005 7:41:17 AM >>>
Kandi, can you get me today the file on 469 Presumpscot Street - it was a 2004 approval from Kevin McQuinn of Turner Barker Realty.

Thanks,
Jack.

From: John Lufkin
To: Kandi Talbot; Sarah Hopkins
Date: 07/27/2005 10:52:59 AM
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Jack.

CITY OF PORTLAND, MAINE
SITE PLAN CHECKLIST

Presumpscott St. 5/24/04
Project Name, Address of Project

Application Number

Submitted () & Date	Item	Required Information	Section 14-525 (b,c)
✓	(1)	Standard boundary survey (stamped by a registered surveyor, at a scale of not less than 1 inch to 100 feet and including:	1
✓	(2)	Name and address of applicant and name of proposed development	a
✓	(3)	Scale and north points	b
✓	(4)	Boundaries of the site	c
✓	(5)	Total land area of site	d
✓	(6)	Topography - existing and proposed (2 feet intervals or less)	e
✓	(7)	Plans based on the boundary survey including:	2
✓	(8)	Existing soil conditions	a
✓	(9)	Location of water courses, marshes, rock outcroppings and wooded areas	b
✓	(10)	Location, ground floor area and grade elevations of building and other structures existing and proposed, elevation drawings of exterior facades, and materials to be used	c
✓	(11)	Approx location of buildings or other structures on parcels abutting the site	d
✓	(12)	Location of on-site waste receptacles	e
✓	(13)	Public utilities	e
✓	(14)	Water and sewer mains	e
✓	(15)	Culverts, drains, existing and proposed, showing size and directions of flows	e
N/A	(16)	Location and dimensions, and ownership of easements, public or private rights-of-way, both existing and proposed	f
✓	(17)	Location and dimensions of on-site pedestrian and vehicular access ways	g
✓	(18)	Parking areas	g
✓	(19)	Loading facilities	g
✓	(20)	Design of ingress and egress of vehicles to and from the site onto public streets	g
✓	(21)	Curb and sidewalks	g
✓	(22)	Landscape plan showing:	h
✓	(23)	Location of existing proposed vegetation	h
✓	(24)	Type of vegetation	h
✓	(25)	Quantity of plantings	h
✓	(26)	Size of proposed landscaping	h
✓	(27)	Existing areas to be preserved	h
N/A	(28)	Preservation measures to be employed	h
✓	(29)	Details of planting and preservation specifications	h
✓	(30)	Location and dimensions of all fencing and screening	i
✓	(31)	Location and intensity of outdoor lighting system	j
✓	(32)	Location of fire hydrants, existing and proposed	k
	(33)	Written statement	c
✓	(34)	Description of proposed uses to be located on site	l
N/A	(35)	Quantity and type of residential, if any	l
✓	(36)	Total land area of the site	b2
✓	(37)	Total floor area and ground coverage of each proposed building and structure	b2
N/A	(38)	General summery of existing and proposed easements or other burdens	c3
✓	(39)	Method of handling solid waste disposal	4
✓	(40)	Applicant's evaluation of availability of off-site public facilities, including sewer, water and streets	5
✓	(41)	Description of any problems of drainage or topography, or a representation that there are none	6
LATER	(42)	An estimate of the time period required for completion of the development	7
N/A	(43)	A list of all state and federal regulatory approvals to which the development may be subject to	8
N/A	(44)	The status of any pending applications	8
N/A	(45)	Anticipated timeframe for obtaining such permits	h8

LATER (46) A letter of non jurisdiction h8

LATER (47) Evidence of financial and technical capability to undertake and complete the development including a letter from a responsible financial institution stating that is has reviewed the planned development and would seriously consider financing it when approved.

Note: Depending on the size and scope of the proposed development, the Planning Board or Planning Authority may request additional information, including (but not limited to):

- drainage patterns and facilities;
- erosion and sedimentation controls to be used during construction;
- a parking and/or traffic study; and
- a noise study;
- an environmental impact study;
- a sun shadow study;
- a study of particulates and any other noxious emissions;
- a wind impact analysis.

Other comments:

THIS IS A PRELIMINARY SUBMITTAL FOR STAFF REVIEW ADDITIONAL INFORMATION WILL BE PROVIDED AT STAFF'S REQUEST. SUCH AS:

- BUILDING MATERIALS
- FINANCIAL/TECHNICAL ABILITY OF APPLICANT
- SIDEWALK WAIVER ON PRESUMPSCOT ST.
- CURBING WAIVER ON PRESUMPSCOT ST.

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

July 1, 2004

Mr. Ross Cudlitz, P.E.
Engineering Assistance & Design, Inc.
P.O. Box 794
South Freeport, Maine 04078

RE: Proposed Warehouse Building, Presumpscot Street
ID #2004-0104, CBL #419-A-007

Dear Mr. Cudlitz:

After review of the submittal of the proposed warehouse on Presumpscot Street, the following comments shall be addressed:

1. Right, title and interest must be submitted to determine that the applicant has the right to develop this site. Has this property been divided off from an abutting property?

2. Information regarding building materials proposed for the building elevation shall be submitted.

3. The dumpster shall be enclosed on all sides with a gated enclosure.

4. Capacity letters from the Portland Water District and Portland Sewer Division shall be submitted stating that there is adequate water and sewer capacity for this site.

5. Chapter 25 requires granite curb and sidewalk along the frontage of a property being developed. The plans must show sidewalk and granite curb. If the applicant wishes to request a waiver, the waiver must be requested in writing and must meet the waiver requirements, which are included as an attachment to this letter.

6. Catalogue cuts of the lighting shall be submitted to ensure that the lighting meets the City's technical standards. Fixture height shall not exceed 20 ft.

7. A letter of financial capability must be submitted from a responsible financial institution stating that it has reviewed the planned development and would seriously consider financing it when approved.

389 Congress Street • Portland, Maine 04101 • (207) 874-8721 • FAX 756-8258 • TTY 874-8936

The Zoning Administrator, Development Review Coordinator, Traffic Engineer and City Arborist are currently reviewing the plans. As soon as I receive any further comments, I will forward them to you. If you have any questions, please do not hesitate to contact me at 874-8901.

Sincerely,

Kandice Talbot

Kandice Talbot
Planner

CC: Sarah Hopkins, Development Review Services Manager

Sec. 25-96. Required for nonresidential, two-family or multi-family development; exceptions.

Where a nonresidential, or a two-family or multi-family development requiring site plan approval abuts any accepted street and a sidewalk with granite curbing satisfactory to the public works authority has not already been provided, a sidewalk constructed of bituminous concrete, portland cement concrete, brick or other paving material and granite curbing shall be provided along the entire street frontage of the lot. If either a sidewalk or curbing, but not both, shall exist at such location which is satisfactory to the public works authority, only a sidewalk or curbing, as the case may be, shall be provided. In either case, such sidewalk and curbing shall be constructed in accordance with the specifications and to the satisfaction of the public works authority at no cost to the city. In conjunction with major site plan review, the planning board, or with minor site plan review, the planning authority, may waive or modify the requirements contained herein upon a like finding and on the same terms and conditions as set forth in section 14-506(b) of this Code.

Sec.14 –506 (b) Modifications.

(b) Where the planning board or planning authority finds that, for each of the requirements listed below, two or more of the conditions exist with respect to compliance with the requirements set forth in sections 14-498 and 14-499 pertaining to the provision and construction of curbs and/or sidewalks, it may vary the regulations so that substantial justice may be done and the public interest secured:

Sidewalks-

1. There is no reasonable expectation for pedestrian usage coming from, going to and traversing the site.
2. There is no sidewalk in existence or expected within 1000 feet and the construction of sidewalks does no contribute to the development of a pedestrian oriented infrastructure.
3. A safe alternative-walking route is reasonably available, for example, by way of a sidewalk on the other side of the street.
4. The street is scheduled for major reconstruction as a component of the Capital Improvement Program.
5. The street has been constructed or reconstructed without sidewalks within the last 24 months.
6. Strict adherence to the curb and sidewalk requirement would result in the loss of significant site features related to landscaping or topography that are deemed to be of a greater public value.

Curbing-

1. The cost to construct the curbing, including any applicable street opening fees, is in excess of 5% of the overall project cost

2. The street is scheduled for major reconstruction as a component of the Capital Improvement Program.
3. The street has been rehabilitated without curbing in the last 60 months.
4. Strict adherence to the curb and sidewalk requirement would result in the loss of significant site features related to landscaping or topography that are deemed to be of a greater public value.

In no event shall the variation have the effect of creating potentially hazardous vehicle and pedestrian conflict or nullifying the intent and purpose and policies of the land development plan relating to transportation and pedestrian infrastructure and the regulations of this article. At its discretion, the planning authority may refer any petition for a variance from the curb and sidewalk requirement to the planning board for decision.

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

August 13, 2004

Mr. Kevin McQuinn
Turner Barker Realty
225 Commercial Street
Portland, ME 04101

RE: Proposed Warehouse Building, 469 Presumpscot Street
ID #2004-0104, CBL #419A-A-007

Dear Mr. McQuinn:

On August 12, 2004, the Portland Planning Authority approved a proposal for a 10,000 sq. ft. warehouse/commercial building to be located at 469 Presumpscot Street, as shown on the approved plan, with the following conditions:

i. A capacity letter from the Portland Water District shall be submitted to staff prior to issuance of a building permit.

ii. Proposed lighting shall be full cut-off light fixtures as required by the Lighting technical standards.

iii. The grading of the front sidewalk shall be adjusted to assure the swale centered off the walk closer to the frontage along Presumpscot Street. Public Works shall review and approve the drainage collection near the proposed sidewalk and granite curb, prior to issuance of a building permit.

iv. During excavation of the site and placing of fill, that a geotechnical engineer, whom will provide written evidence that the slope is stabilized, inspect the site and that the existing materials re-used, and soil placement layering methods that are used are suitable to support the building and parking lot. Written evidence shall be submitted to staff prior to issuance of a certificate of occupancy.

389 Congress Street • Portland, Maine 04101 • (207) 874-8721 • FAX 756-8258 • TTY 874-8936

v. An environmental assessment shall be provided to staff, along with evidence of cleanups or recommendations to be conducted, prior to issuance of a building permit.

vi. The following details shall be added to the plan, prior to issuance of a building permit:

a. pedestrian ramp shall show flush curbing at the pavement edge.
b. guardrail details are needed.
c. pavement details and cross-sections are inconsistent with each other. It is recommended that the access road cross-section have the same base as the parking lot. The section at the street shall have the Industrial Street standard with 5 inches total pavement. Base under the sidewalks can be reduced to 6 inches depth if desired. Also common borrow under road sub-grade for build up shall be called out per MDOT specifications (i.e. common borrow).
d. a casco trap or floatable trap shall be installed in the last catch basin prior to outfall on both the City drainage system and private system.
e. a City standard "Type E" catch basin detail shall be shown.

vii. The driveway width shall be reduced to 24 feet.

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
Michael Bobinsky, Public Works Director
Inspections
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
Correspondence File

383 Pleasingscot St →

→ clear yesterday →
→ driveway →

→ Nissen's

Nov. 26th → Tues

→ storage →

Margaret Brown
772-5704

* 4 driveways / traffic

Ross A. Cudlitz, PE
PO Box 794
So. Freeport, Maine 04078

Engineering Assistance & Design (EA&D), Inc.
Phone/Fax: 207 - 846 - 0839
Cell / Voice Mail: 207-838 - 7663

May 24, 2004

City of Portland
Department of Planning & Development
Congress St.
Portland, Maine 04101

RE: "Presumpscott St., Commercial Site" – Preliminary Submittal

Dear Planning Board:

On behalf of my client Kevin McQuinn, and pursuant to the City of Portland Minor Site Plan Application, we respectfully submit the subject project to the Planning Staff for their review and consideration.

We have enclosed 9 copies of all necessary information, plans and reports for your us. The Applicant and I will are available to answer your questions and receive some guidance from you as to how to proceed towards final approval.

If I may be of further assistance to you please do not hesitate to contact me at the numbers above, or Kevin McQuinn at 450-8700

Sincerely,

Ross A. Cudlitz, PE
EA & D, Inc.

Cc: Kevin McQuinn
C/o/ Turner Barker Realty

PROJECT REPORT

and

STORMWATER ANALYSIS

FOR

PRESUMPSCOTT STREET
COMMERCIAL SITE
PORTLAND, MAINE

APPLICANT:

KEVIN MCQUINN
C/O TURNER BARKER REALTY
202 US ROUTE ONE
FALMOUTH, MAINE 04105
207-450-8700

MAY 2004

Prepared by:

Ross A. Cudlitz, PE
Engineering Assistance & Design, Inc.
PO Box 794
South Freeport, Maine 04078
Ph/Fax: 1-207-846-0839

ENCLOSED MATERIAL (IN ORDER)

COPY OF CITY OF PORTLAND APPLICATION & CHECK LIST

LIST OF ABUTTORS

USGS TOPO QUAD LOCATION MAP

REPORT AND STORMWATER MANAGEMENT CALCULATIONS

- **PROJECT REPORT (followed by):**
    1. **COPY OF USDA MEDIUM INTENSITY SOILS MAP**
    2. **USGS CUT SHEET SHOWING LOCATION**
    3. **SOILS TEST PIT LOGS BY SCOTT MCLAREN, SE #346**
    4. **HYDROCAD STORMWATER MODEL INPUT/OUTPUT**

PLANS IN PLAN SET

- **BOUNDARY PLAN, BY BACK BAY BOUNDARY, SHT. 1 OF 1**
- **SITE PLAN, SHT. 1 OF 7**
- **ELEVATIONS, SHT. 2 OF 7**
- **LIGHTING AND LANDSCAPING PLAN, SHT. 3 OF 7**
- **EROSION & SEDIMENTATION NARRATIVE & DETAILS, SHT. 4 OF 7**
- **MISC. DETAIL SHEETS 5 & 6 OF 7**
- **PRE AND POST STORMWATER MANAGEMENT PLAN, SHT. 7 OF 7**

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 Division.

Address of Proposed Development: PRESUMPSCOTT STREET		**Zone:** IM
Total Square Footage of Proposed Structure: 10,000 SF	**Square Footage of Lot:** 111,824.4 SF = 2.57 Ac.	
Tax Assessor's Chart, Block & Lot: Chart# 419, Block# , Lot# 1; Chart# 419, Block# A, Lot# 7	**Property owner's mailing address:** CITY OF PORTLAND	**Telephone #:**
Consultant/Agent, mailing address, phone # & contact person: Engineering Assist. & Design Ross A. Cudlitz, PE 10 North Road , Yarmouth 207-846-0839 04096	**Applicant's name, mailing address, telephone #/Fax#/Pager#:** Kevin McQuinn c/o Turner Barker Realty 202 US Route One Falmouth, Maine 04105 207-450-8700	**Project name:** Presumpscott St.

Proposed Development (check all that apply)

✓ New Building ___ Building Addition ___ Change of Use ___ Residential ___ Office ___ Retail
___ Manufacturing ✓ Warehouse/Distribution ___ Parking lot
___ Subdivision ($500.00) + amount of lots____ ($25.00 per lot) $_____
___ Site Location of Development ($3,000.00)
(except for residential projects which shall be $200.00 per lot_____)
___ Traffic Movement ($1,000.00) ___ Stormwater Quality ($250.00)
___ Section 14-403 Review ($400.00 + $25.00 per lot)
___ Other_____

Major Development (more than 10,000 sq. ft.)

___ Under 50,000 sq. ft. ($500.00)
___ 50,000 - 100,000 sq. ft. ($1,000.00)
___ Parking Lots over 100 spaces ($1,000.00)
___ 100,000 - 200,000 sq. ft. ($2,000.00)
___ 200,000 - 300,000 sq. ft. ($3,000.00)
___ Over 300,000 sq. ft. ($5,000.00)
___ After-the-fact Review ($1,000.00 + applicable application fee)

Minor Site Plan Review

✓ Less than 10,000 sq. ft. ($400.00)
___ After-the-fact Review ($1,000.00 + applicable application fee)

Plan Amendments

___ Planning Staff Review ($250.00)
___ Planning Board Review ($500.00)

- Please see next page -

Who billing will be sent to: (Company, Contact Person, Address, Phone #)

KEVIN MCQUINN
C/o TURNER BAKER REALTY
202 US ROUTE ONE
FALMOUTH, MAINE 04195

207-450-8700

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, & 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: Ron G Cuddy (agent)	**Date:** 5/24/04

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

CITY OF PORTLAND, MAINE
SITE PLAN CHECKLIST

Presumpscott St. 5/24/04
Project Name, Address of Project

Application Number

Submitted () & Date	Item	Required Information	Section 14-525 (b,c)
✓	(1)	Standard boundary survey (stamped by a registered surveyor, at a scale of not less than 1 inch to 100 feet and including:	1
✓	(2)	Name and address of applicant and name of proposed development	a
✓	(3)	Scale and north points	b
✓	(4)	Boundaries of the site	c
✓	(5)	Total land area of site	d
✓	(6)	Topography - existing and proposed (2 feet intervals or less)	e
✓	(7)	Plans based on the boundary survey including:	2
✓	(8)	Existing soil conditions	a
✓	(9)	Location of water courses, marshes, rock outcroppings and wooded areas	b
✓	(10)	Location, ground floor area and grade elevations of building and other structures existing and proposed, elevation drawings of exterior facades, and materials to be used	c
✓	(11)	Approx location of buildings or other structures on parcels abutting the site	d
✓	(12)	Location of on-site waste receptacles	e
✓	(13)	Public utilities	e
✓	(14)	Water and sewer mains	e
✓	(15)	Culverts, drains, existing and proposed, showing size and directions of flows	e
N/A	(16)	Location and dimensions, and ownership of easements, public or private rights-of-way, both existing and proposed	f
✓	(17)	Location and dimensions of on-site pedestrian and vehicular access ways	g
✓	(18)	Parking areas	g
✓	(19)	Loading facilities	g
✓	(20)	Design of ingress and egress of vehicles to and from the site onto public streets	g
✓	(21)	Curb and sidewalks	g
✓	(22)	Landscape plan showing:	h
✓	(23)	Location of existing proposed vegetation	h
✓	(24)	Type of vegetation	h
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✓	(26)	Size of proposed landscaping	h
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✓	(32)	Location of fire hydrants, existing and proposed	k
	(33)	Written statement	c
✓	(34)	Description of proposed uses to be located on site	l
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✓	(36)	Total land area of the site	b2
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✓	(41)	Description of any problems of drainage or topography, or a representation that there are none	6
LATER	(42)	An estimate of the time period required for completion of the development	7
N/A	(43)	A list of all state and federal regulatory approvals to which the development may be subject to	8
NA	(44)	The status of any pending applications	8
N/A	(45)	Anticipated timeframe for obtaining such permits	h8

LATER (46) A letter of non jurisdiction h8

LATER (47) Evidence of financial and technical capability to undertake and complete the development including a letter from a responsible financial institution stating that is has reviewed the planned development and would seriously consider financing it when approved.

Note: Depending on the size and scope of the proposed development, the Planning Board or Planning Authority may request additional information, including (but not limited to):

- drainage patterns and facilities;
- erosion and sedimentation controls to be used during construction;
- a parking and/or traffic study; and
- a noise study;
- an environmental impact study;
- a sun shadow study;
- a study of particulates and any other noxious emissions;
- a wind impact analysis.

Other comments:

THIS IS A PRELIMINARY SUBMITTAL FOR STAFF REVIEW
ADDITIONAL INFORMATION WILL BE PROVIDED AT STAFF'S
REQUEST. SUCH AS:

- BUILDING MATERIALS
- FINANCIAL/TECHNICAL ABILITY OF APPLICANT
- SIDEWALK WAIVER ON PRESUMPSCOT ST.
- CURBING WAIVER ON PRESUMPSCOT ST.

ABUTTORS LIST

Project: Presumpscott Street
Kevin McQuinn
c/o Turner Barker Realty
202 US Route One
Falmouth, Maine 04105

Map: 419 Lot: 1
419-A 7

Location: Presumpscott St. Portland

Map/Lot	Property Address	Owner/Owners	Mailing Address
419A-A-5	451 Presumpscott St. Portland, Maine	T / S Development Group LLC	451 Presumpscott St. Portland, Maine 04101
419-A-2	419 Presumpscott St. Portland, Maine	Interstate Brands Corp.	Prop. Tax Depts. PO Box 419627 Kansas City, MO 64141
419-A-4 419-A-8	Canadian RR	State of Maine	Prop/. Tax Div. State House Sta. 211 Augusta, Maine 04333
418A-A-2	474 Presumpscott St.	Vincent & Ethel Devito	479 Presumpscott St. Portland, Maine 04101

Project Report for Presumpscott St.
Portland, Maine

Stormwater Report / Erosion Control

Project Background

The subject 2.57 acre parcel is located on the east side of Presumpscott St., approximately 350 feet south of intersection Route 9 and Presumpscott St. The project is located in the IM Zone.

The Applicant is proposing a 10,000 SF commercial building for use by a an occupant similar to a moving and storage company. The site will be serviced by city public water, private septic systems and underground electrical.

Watershed

The parcel is in the direct watershed of the tidal flats of Casco Bay. There are no culverts entering the site from any up gradient concentrated flow.

This site is not in the direct watershed of a great pond, river, stream or estuary identified as a sensitive or threatened region, as mapped and defined by the ME DEP Southern Office. This project does not propose new use impervious of greater than one acre, therefore it does not trigger State permitting for stormwater management relative to impervious area and/or water quality.

In addition, this site does not propose parking spaces in excess of twenty.

Wetlands & Streams

There are no mapped wetlands on the site.

Soils

The soils represented on this site are mapped per the Cumberland County Medium Intensity Soils Map as follows:

HrC, HrD – Hollis fine sandy loam, 3-25% slopes, HSG "C/D"

The Hollis soil is characteristic of moderate surface runoff and rapid permeability, due to steepness and depth to bed rock.

The erodibility index of the stony soils is low due to the coarse texture. Because this site has moderate slopes, suspended sediment leaving the immediate work area should not be overlooked. The erosion control measures proposed are tailored to this site.

Stormwater Modeling

The site has been modeled in the pre and post conditions using the HydroCAD model version 7.00. HydroCAD is a TR-20 based model that utilizes TR-55 watershed description input data. For this region of Cumberland County the rain events for the TYPE - III, 24 hour 2, 10 and 25-year storms are 3.0, 4.7 and 5.5 inches respectively, as provided by the State of Maine DEP BMP's for Stormwater.

A small area of offsite up gradient topography south of the project was interpolated from USGS Quad sheets.

Pre Condition Model

The pre condition breaks the area into five subareas. The predominant subarea is SA-3, which is comprised of approx. 1.5 aces of concrete soils on a steep hill. This concrete pile is the proposed site of the new building, and grass slope below it.

The discharge point for the site is the north east corner where all flow enters an off site culvert under the railroad tracks

Post Condition Model

The post model is slightly more micro managed and broken down into seven subareas so as to demonstrate the timing of runoff and the changes in discharge rates due to land use conversion from steep hard slopes top flat impervious areas and grass slopes.

Please refer to the composite Pre & Post Stormwater Plan and the HydroCAD stormwatyer model attached.

Model Summary: Results in CFS (Cubic Feet per Second = Rate)

	PRE Point of Study			POST Point of Study		
	2R	3R	4R	2R	3R	4R
2 YR.	1.78	4.11	0.29	1.11	2.53	0.06
10 YR	2.99	6.93	0.56	2.03	5.28	0.13
25 YR	3.55	8.30	0.69	2.46	6.64	0.16

Evaluation of Stormwater Model Results

The model results in decreasing changes in the 2, 10-year events.

The reason that development can take place and stormwatyer runoff quantity not necessarily increase is because the division of the land into new subareas and new surface characteristics that results in some areas running off at different times, thus missing the peak of slower up gradient areas.

Water Quality and Quantity Considerations

Quantity: There are no increases, per the stormwater model as stated above. Quantity (CFS rate) of runoff has been mitigated by land grading and new vegetated and subsequent new flow paths being established.

Quality: Pollutants associated with runoff from developed areas, has been addressed through the use of an aggressive erosion control plan, grass slopes, plunge pool/spreader, revegetation of old hardened areas and the natural forested buffers

Erosion Control

When implemented, standard and prudent erosion control practices shall suffice for resource protection. Such practices would be; silt fence below disturbed areas, seed and mulch on newly graded areas outside the work area immediately after foundation backfill, early planting of new vegetation. All topsoil stockpiles should be contained by silt fence and located within the limited maximum permissible cleared area shown on the plans. If top soil is not used within 30 days, it should be rye seeded and mulched.

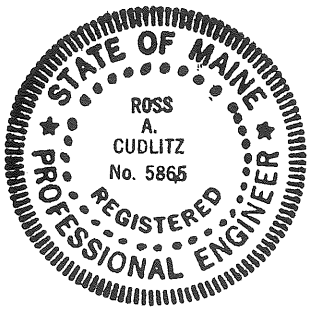
If properly adhered to, the attached comprehensive erosion control plan, narrative and details is adequate and sufficient for this level of activity. The soils should result in no problems during construction providing the measures recommended are installed.

Conclusion

Every effort has been made to keep post development flows and impacts to the resources at an absolute minimum or less through the use of land grading, reductions in allowable disturbed area, erosion control practices and land use. We believe this project will not have any adverse impacts on abutters, down gradient systems or adjacent resources.

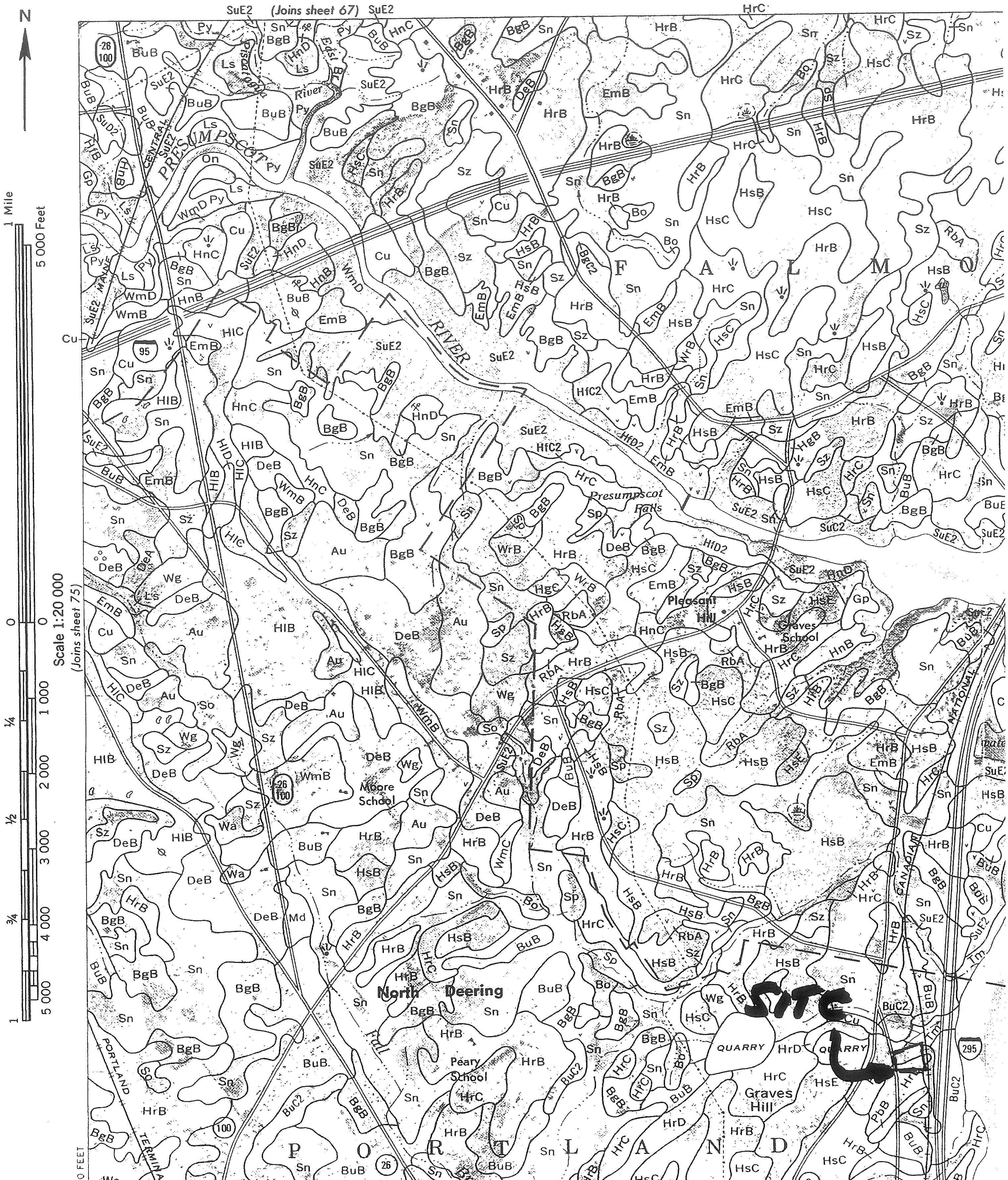
Sincerely

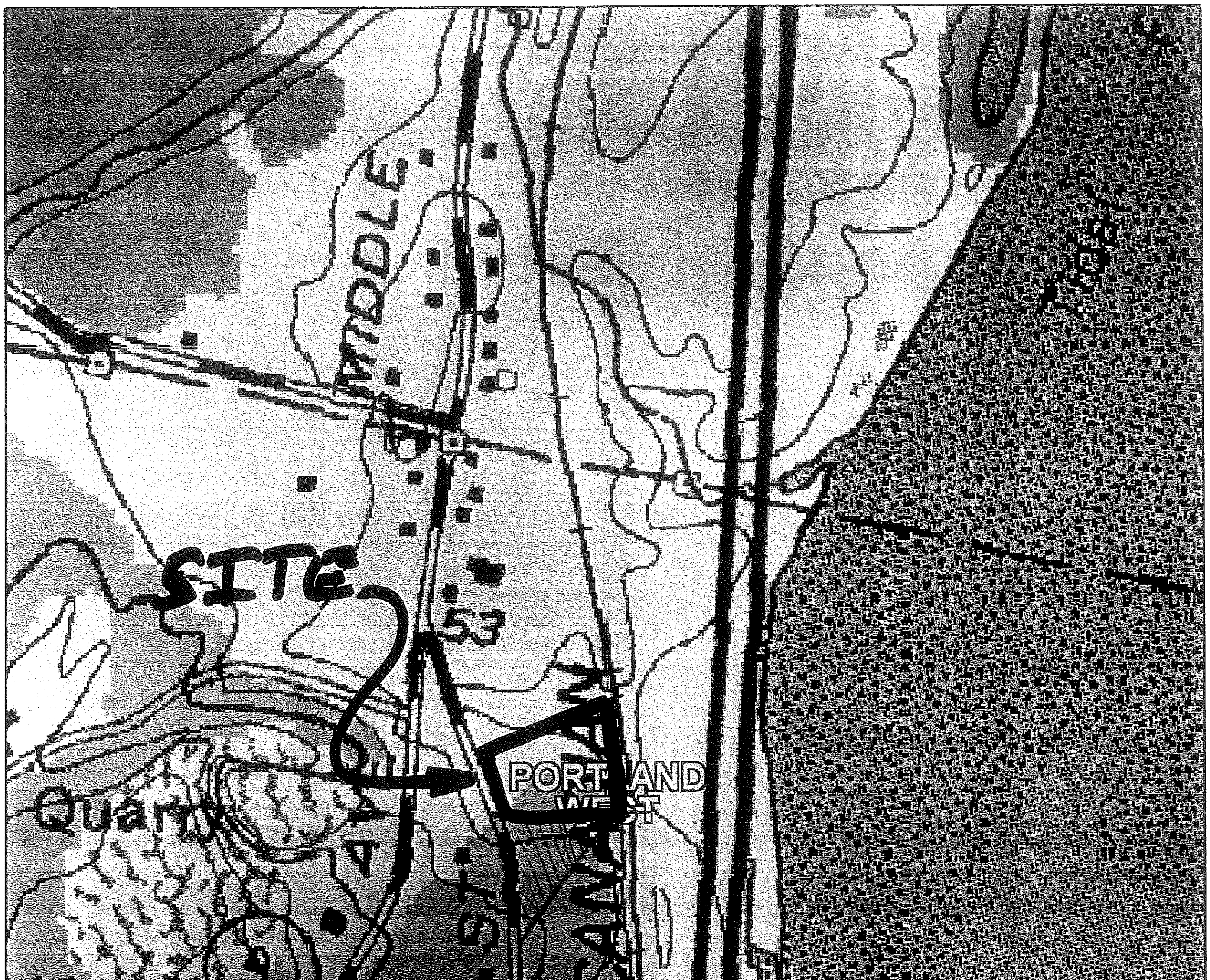
Ross A. Cudlitz, PE
Me PE #5865
CPESC #2400
EA&D, Inc.



Ross A. Cudlitz, PE
10 North Road
Yarmouth, Maine 04096

Engineering Assistance & Design (EA&D), Inc.
Phone/Fax: 207-846-0839
Mobile Ph: 207-838-7663


N
(Joins sheet 67)
(Joins sheet 75)
(Joins sheet 82)
Scale 1:20 000
1 Mile
5 000 Feet
PRESUMPSCOT RIVER
F A L M O
Presumpscot Falls
Pleasant Hill
Graves School
Moore School
North Deering
Peary School
Graves Hill
QUARRY
P O R T L A N D
SITE
313 000 FEET
465 000 FEET



DELORME

Zoom Level: 14-5 Datum: WGS84

Scale 1 : 6,000
1" = 500 ft

0 200 400 600 800 1000 ft
0 60 120 180 240 300 m

TN
MN
16.7°W

September 2, 2003

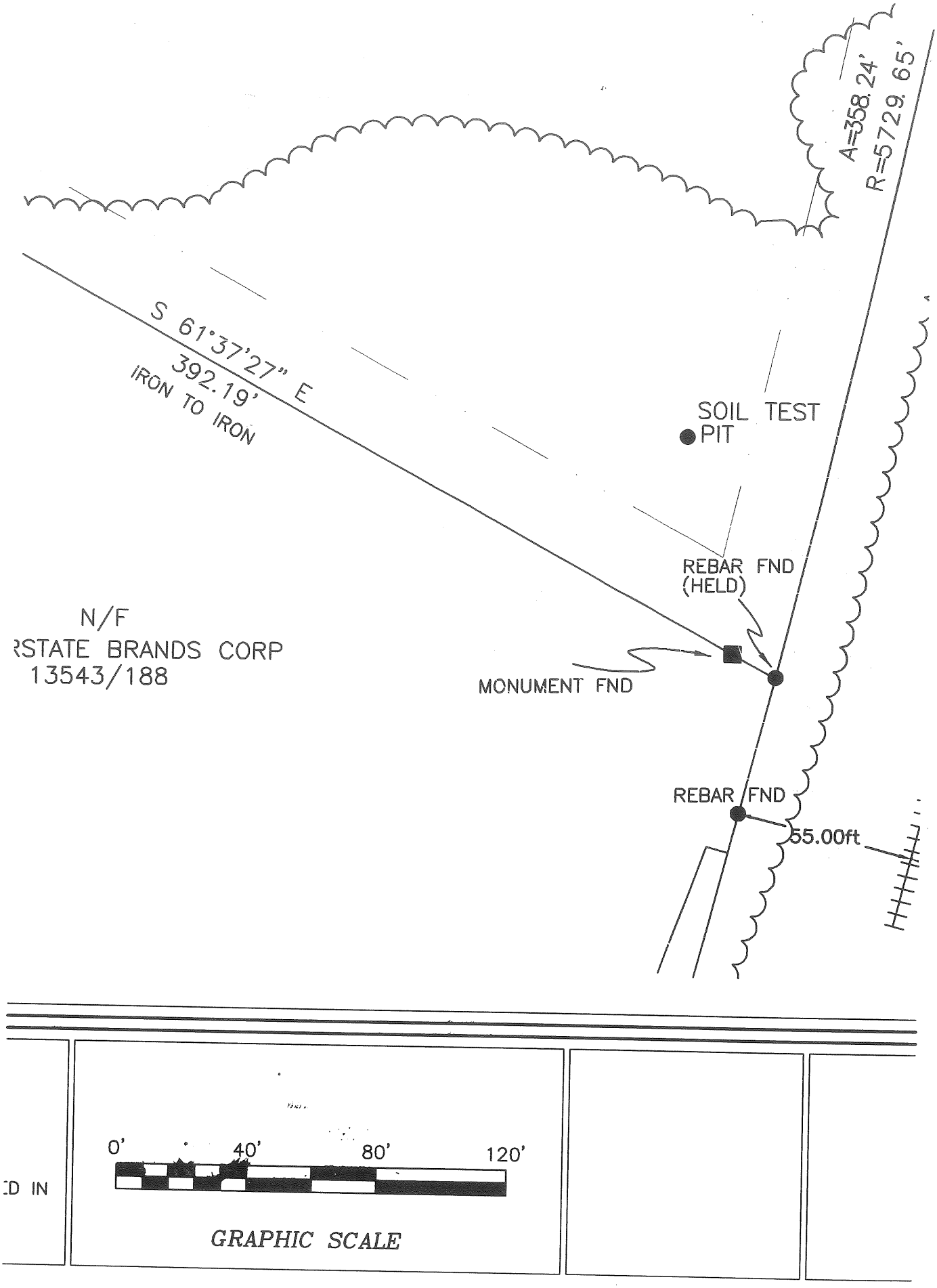
Ross Cudlitz
EA&D, Inc.
P.O. Box 794
South Freeport, ME 04078

Dear Ross,

I completed a site and soil evaluation upon your request for Turner Barker on a lot of land located on Presumpscot St. in Portland on Wednesday, August 27th to determine the feasibility of on-site subsurface wastewater disposal. Please find attached a copy of a plan map sketch showing the approximate location of the soil test pit on the lot as well as page 2 of form HHE-200 that shows a soil log describing the soil characteristics found. The soil type found is an acceptable soil type for subsurface wastewater disposal according to The Maine State Plumbing Code. If a septic system disposal field were designed at the test pit location, it would require an Extra-Large disposal area sizing. If you have questions or need further assistance, I can be reached at 329-7435. Thank you.

Sincerely,

Scott McLaren
Licensed Site Evaluator #346


A=358.24'
R=5729.65'
S 61°37'27" E
392.19'
IRON TO IRON
SOIL TEST
PIT
REBAR FND
(HELD)
N/F
RSTATE BRANDS CORP
13543/188
MONUMENT FND
REBAR FND
55.00ft
0'
40'
80'
120'
GRAPHIC SCALE
CD IN

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 10
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner or Applicant Name
PORTLAND	PRESUMPSCOT ST.	TURNER BARKER

SITE PLAN

Scale: 1" = _____ ft.

SEE ATTACHED PLAN MAP
SKETCH FOR LOCATION
OF SOIL TEST PIT

SITE LOCATION MAP
(Attach map from Maine Atlas for First Time System Variance)

SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole # TP1 ☑ Test Pit ☐ Boring

1 " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)

	Texture	Consistency	Color	Mottling
0	SILT LOAM	FRIABLE	DARK GRAY	
6	VERY FINE SANDY LOAM		MEDIUM BROWN	
12				
18	SILTY CLAY	FIRM	BLUISH GRAY	FEW, FAINT
24				
30				
36	LIMIT OF		TEST PIT	
42				
48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
9	D	12-15	14	☑ Groundwater ☐ Restrictive Layer ☐ Bedrock

Observation Hole # _____ ☐ Test Pit ☐ Boring

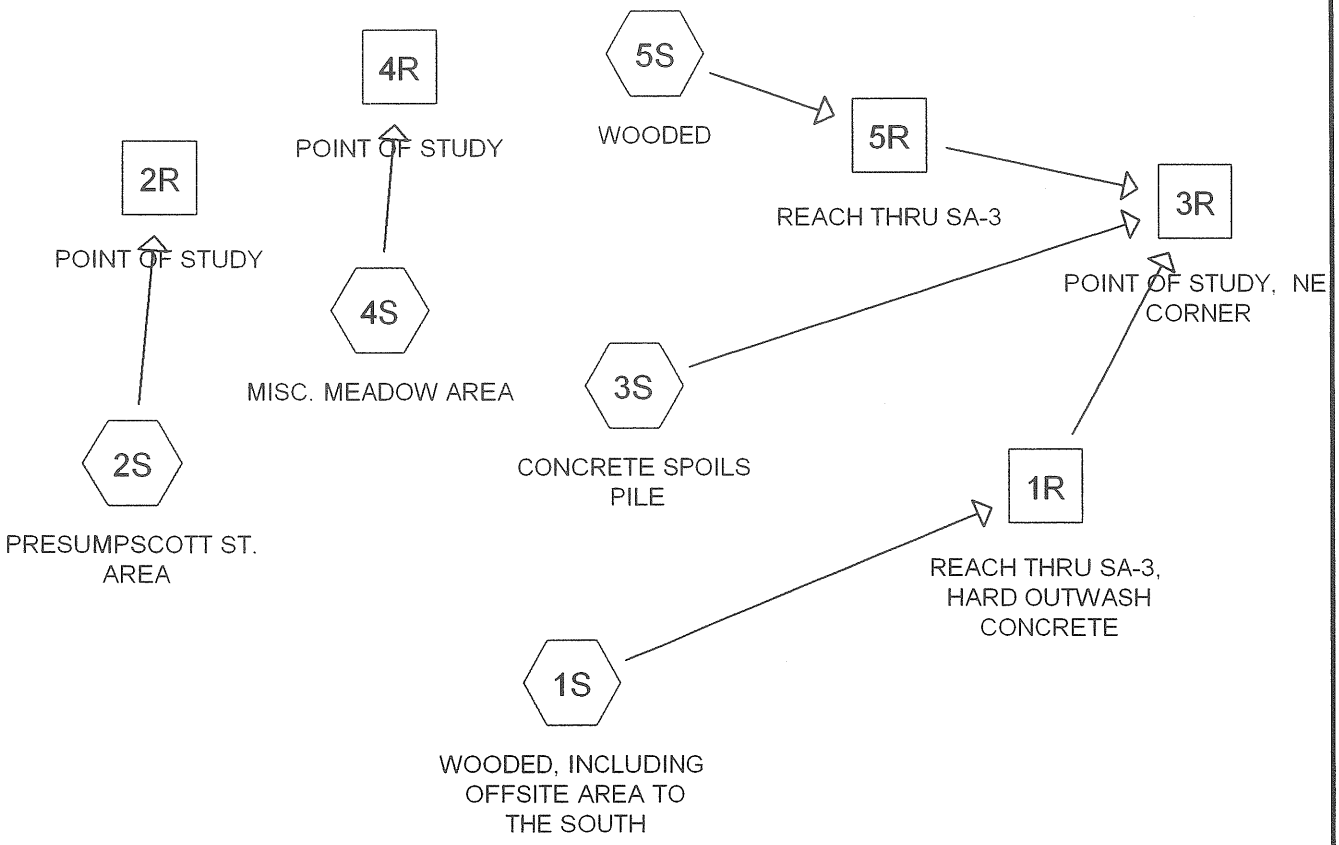
_____ " Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)

	Texture	Consistency	Color	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
				☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Site Evaluator Signature _____ SE # _____ Date _____



Subcat Reach Pond Link

Drainage Diagram for Presumpscott Street - PRE
Prepared by Engineering Assistance & Design, Inc. 5/24/2004

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.670 ac Runoff Depth=0.73"
Flow Length=725' Tc=41.7 min CN=77 Runoff=1.55 cfs 0.162 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.650 ac Runoff Depth=1.83"
Flow Length=645' Tc=4.2 min CN=93 Runoff=1.78 cfs 0.099 af

Subcatchment 3S: CONCRETE SPOILS PILE Runoff Area=1.150 ac Runoff Depth=2.33"
Flow Length=350' Tc=1.4 min CN=98 Runoff=3.91 cfs 0.223 af

Subcatchment 4S: MISC. MEADOW AREA Runoff Area=0.150 ac Runoff Depth=1.22"
Flow Length=73' Tc=4.7 min CN=85 Runoff=0.29 cfs 0.015 af

Subcatchment 5S: WOODED Runoff Area=0.250 ac Runoff Depth=0.76"
Flow Length=185' Tc=20.3 min CN=77 Runoff=0.20 cfs 0.016 af

Reach 1R: REACH THRU SA-3, HARD OUTWASH Peak Depth=0.09' Max Vel=1.1 fps Inflow=1.55 cfs 0.162 af
n=0.025 L=130.0' S=0.0154 '/' Capacity=70.88 cfs Outflow=1.55 cfs 0.161 af

Reach 2R: POINT OF STUDY Inflow=1.78 cfs 0.099 af
Outflow=1.78 cfs 0.099 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=4.11 cfs 0.399 af
Outflow=4.11 cfs 0.399 af

Reach 4R: POINT OF STUDY Inflow=0.29 cfs 0.015 af
Outflow=0.29 cfs 0.015 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.08' Max Vel=0.2 fps Inflow=0.20 cfs 0.016 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.19 cfs 0.015 af

Total Runoff Area = 4.870 ac Runoff Volume = 0.516 af Average Runoff Depth = 1.27"

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.670 ac Runoff Depth=1.73"
Flow Length=725' Tc=41.7 min CN=77 Runoff=3.57 cfs 0.384 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.650 ac Runoff Depth=3.22"
Flow Length=645' Tc=4.2 min CN=93 Runoff=2.99 cfs 0.175 af

Subcatchment 3S: CONCRETE SPOILS PILE Runoff Area=1.150 ac Runoff Depth=3.78"
Flow Length=350' Tc=1.4 min CN=98 Runoff=6.18 cfs 0.362 af

Subcatchment 4S: MISC. MEADOW AREA Runoff Area=0.150 ac Runoff Depth=2.46"
Flow Length=73' Tc=4.7 min CN=85 Runoff=0.56 cfs 0.031 af

Subcatchment 5S: WOODED Runoff Area=0.250 ac Runoff Depth=1.78"
Flow Length=185' Tc=20.3 min CN=77 Runoff=0.46 cfs 0.037 af

Reach 1R: REACH THRU SA-3, HARD OUTWASH Peak Depth=0.13' Max Vel=1.4 fps Inflow=3.57 cfs 0.384 af
n=0.025 L=130.0' S=0.0154 '/' Capacity=70.88 cfs Outflow=3.56 cfs 0.381 af

Reach 2R: POINT OF STUDY Inflow=2.99 cfs 0.175 af
Outflow=2.99 cfs 0.175 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=6.93 cfs 0.780 af
Outflow=6.93 cfs 0.780 af

Reach 4R: POINT OF STUDY Inflow=0.56 cfs 0.031 af
Outflow=0.56 cfs 0.031 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.11' Max Vel=0.2 fps Inflow=0.46 cfs 0.037 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.44 cfs 0.036 af

Total Runoff Area = 4.870 ac Runoff Volume = 0.989 af Average Runoff Depth = 2.44"

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.670 ac Runoff Depth=2.25"
Flow Length=725' Tc=41.7 min CN=77 Runoff=4.60 cfs 0.501 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.650 ac Runoff Depth=3.89"
Flow Length=645' Tc=4.2 min CN=93 Runoff=3.55 cfs 0.211 af

Subcatchment 3S: CONCRETE SPOILS PILE Runoff Area=1.150 ac Runoff Depth=4.46"
Flow Length=350' Tc=1.4 min CN=98 Runoff=7.25 cfs 0.427 af

Subcatchment 4S: MISC. MEADOW AREA Runoff Area=0.150 ac Runoff Depth=3.08"
Flow Length=73' Tc=4.7 min CN=85 Runoff=0.69 cfs 0.038 af

Subcatchment 5S: WOODED Runoff Area=0.250 ac Runoff Depth=2.32"
Flow Length=185' Tc=20.3 min CN=77 Runoff=0.60 cfs 0.048 af

Reach 1R: REACH THRU SA-3, HARD OUTWASH Peak Depth=0.14' Max Vel=1.5 fps Inflow=4.60 cfs 0.501 af
n=0.025 L=130.0' S=0.0154 '/' Capacity=70.88 cfs Outflow=4.59 cfs 0.498 af

Reach 2R: POINT OF STUDY Inflow=3.55 cfs 0.211 af
Outflow=3.55 cfs 0.211 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=8.30 cfs 0.973 af
Outflow=8.30 cfs 0.973 af

Reach 4R: POINT OF STUDY Inflow=0.69 cfs 0.038 af
Outflow=0.69 cfs 0.038 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.13' Max Vel=0.2 fps Inflow=0.60 cfs 0.048 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.57 cfs 0.047 af

Total Runoff Area = 4.870 ac Runoff Volume = 1.226 af Average Runoff Depth = 3.02"

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE SOUTH

OFFSITE AREA TAKEN FROM USGA TOPO QUAD

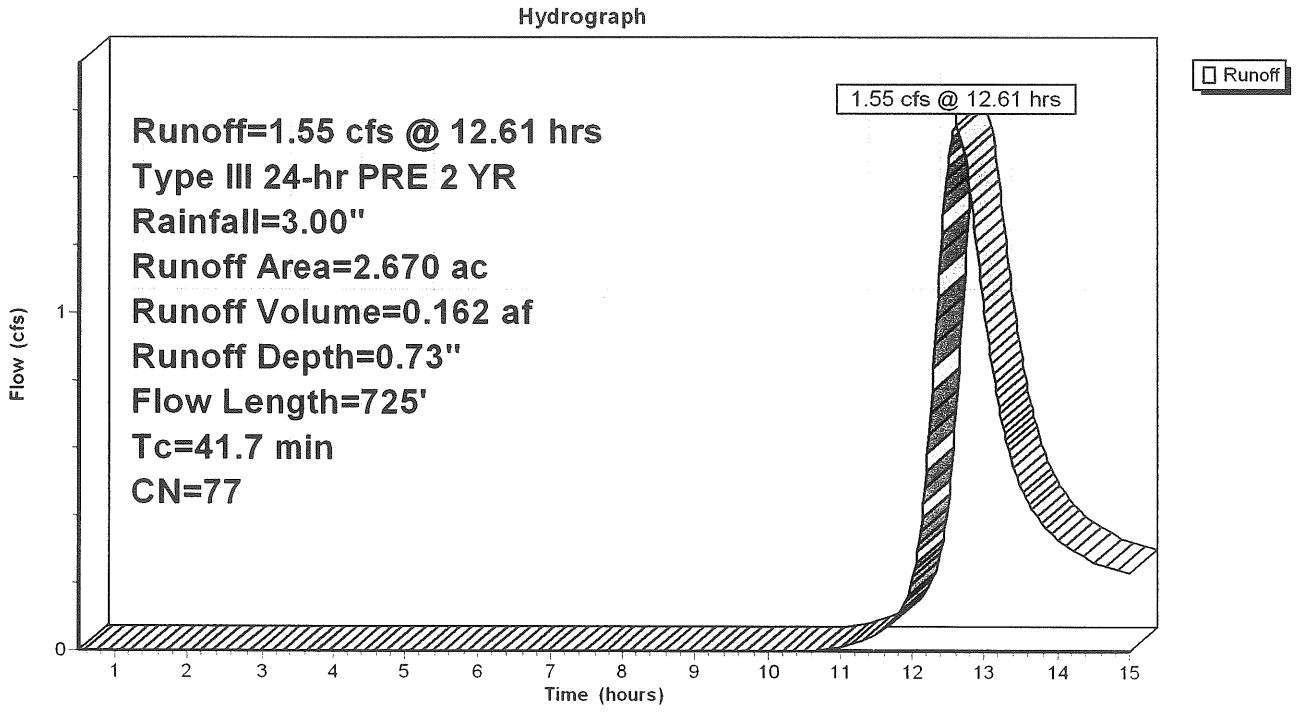
Runoff = 1.55 cfs @ 12.61 hrs, Volume= 0.162 af, Depth= 0.73"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 2 YR Rainfall=3.00"

Area (ac)	CN	Description
2.670	77	GOOD WOODS HOLLIS C/D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.0	120	0.0500	0.1		**Sheet Flow, AB** Woods: Dense underbrush n= 0.800 P2= 3.00"
5.7	340	0.1600	1.0		**Shallow Concentrated Flow, BC** Forest w/Heavy Litter Kv= 2.5 fps
1.5	110	0.2400	1.2		**Shallow Concentrated Flow, CD** Forest w/Heavy Litter Kv= 2.5 fps
2.0	51	0.0300	0.4		**Shallow Concentrated Flow, DE** Forest w/Heavy Litter Kv= 2.5 fps
1.5	104	0.0130	1.1		**Shallow Concentrated Flow, EF** Nearly Bare & Untilled Kv= 10.0 fps
41.7	725	Total			

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE SOUTH



Subcatchment 2S: PRESUMPSCOTT ST. AREA

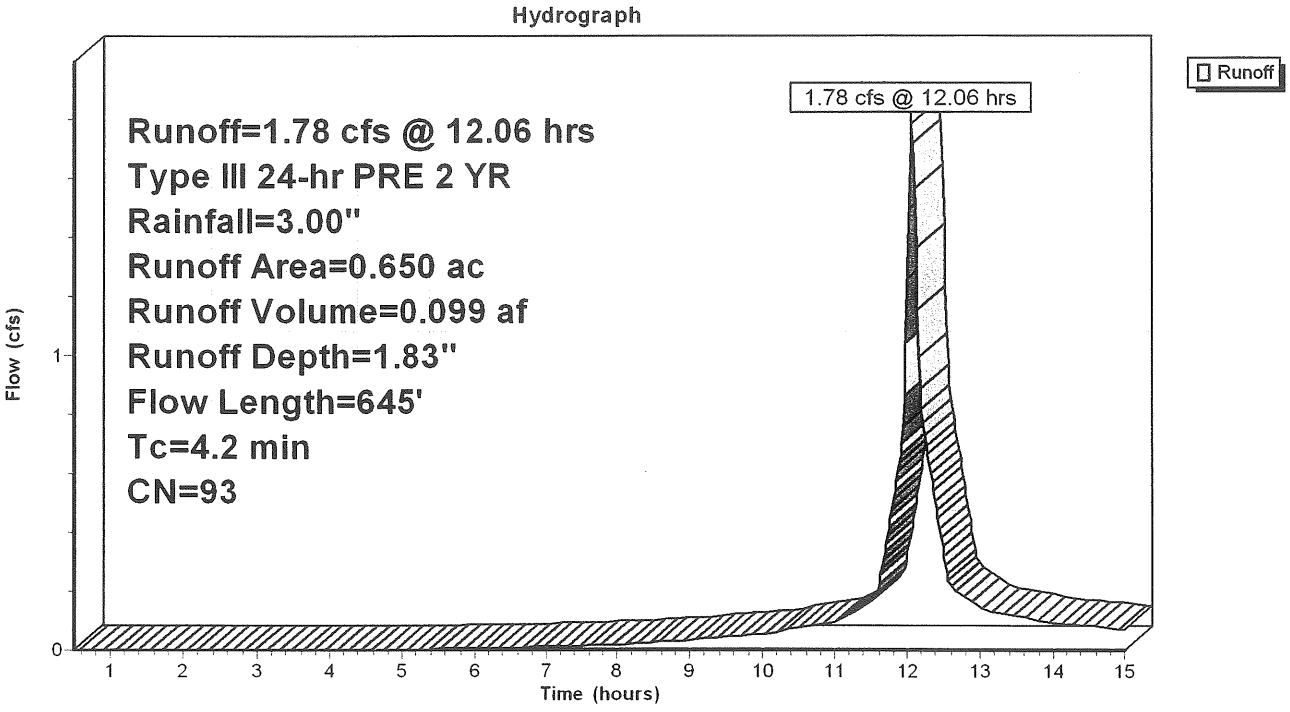
Runoff = 1.78 cfs @ 12.06 hrs, Volume= 0.099 af, Depth= 1.83"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.490	98	PAVED ROAD/WASTE CONCRETE
0.160	77	GOOD VEGETATION HOLLIS C/D
0.650	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	30	0.0100	0.8		**Sheet Flow, AB TOP OF STREEET** Smooth surfaces n= 0.011 P2= 3.00"
1.0	395	0.1000	6.4		**Shallow Concentrated Flow, BC CURBED GUTTER** Paved Kv= 20.3 fps
2.6	220	0.0500	1.4	11.08	**Channel Flow, CD GRASS ROADSIDE SWALE** Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.240
4.2	645	Total			

Subcatchment 2S: PRESUMPSCOTT ST. AREA



Subcatchment 3S: CONCRETE SPOILS PILE

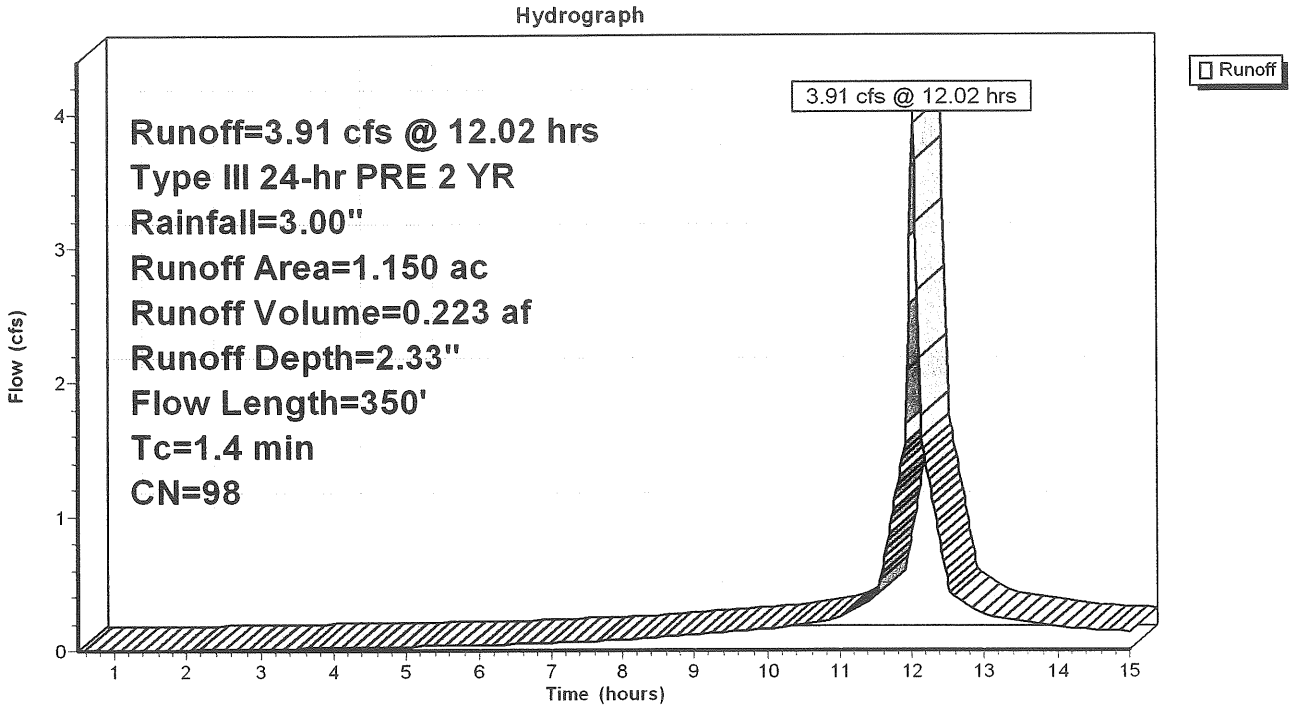
Runoff = 3.91 cfs @ 12.02 hrs, Volume= 0.223 af, Depth= 2.33"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 2 YR Rainfall=3.00"

Area (ac)	CN	Description
1.150	98	OUTWASH CONCRETE

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	40	0.2000	2.8		**Sheet Flow, AB** Smooth surfaces n= 0.011 P2= 3.00"
0.3	180	0.2200	9.5		**Shallow Concentrated Flow, BC** Paved Kv= 20.3 fps
0.9	130	0.0150	2.5		**Shallow Concentrated Flow, CD** Paved Kv= 20.3 fps
1.4	350	Total			

Subcatchment 3S: CONCRETE SPOILS PILE



Subcatchment 4S: MISC. MEADOW AREA

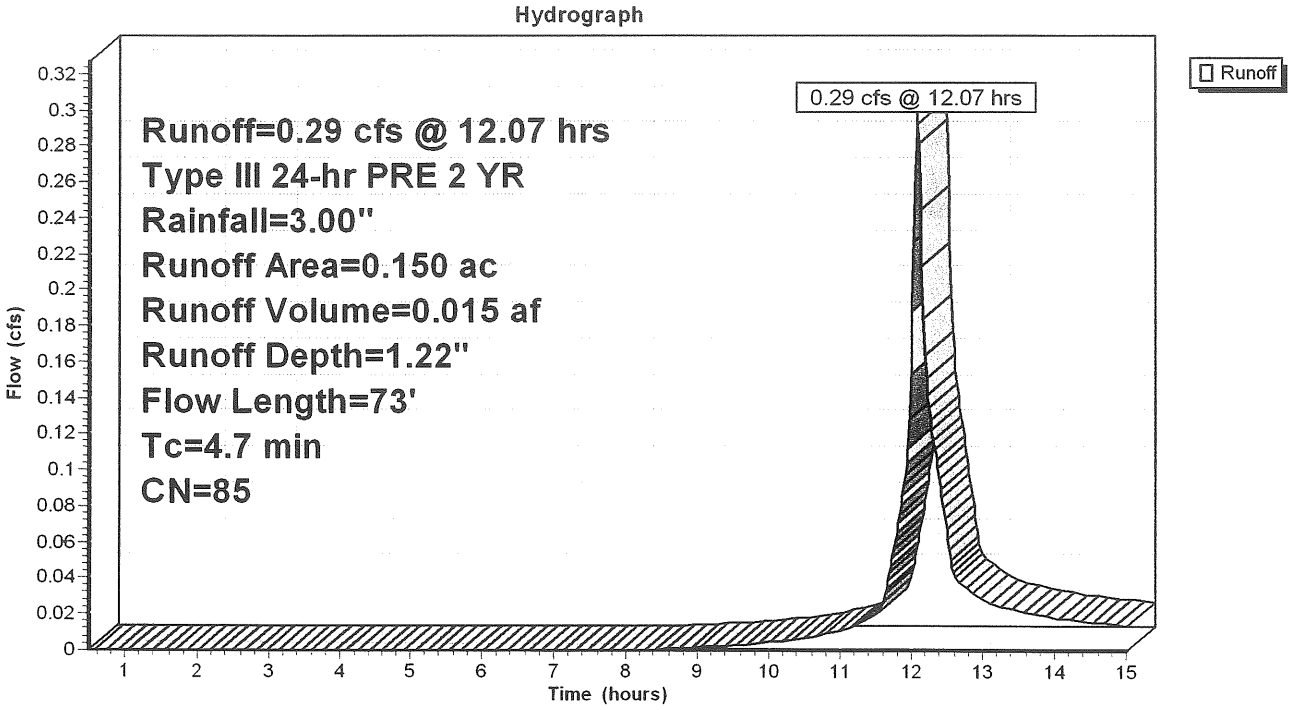
Runoff = 0.29 cfs @ 12.07 hrs, Volume= 0.015 af, Depth= 1.22"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.050	98	WASTE CONCRETE
0.090	78	MEADOW GRASS HOLIS C/D
0.010	77	GOOD WOODS HOLLIS C/D
0.150	85	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	73	0.1900	0.3		**Sheet Flow, AB** Grass: Dense n= 0.240 P2= 3.00"

Subcatchment 4S: MISC. MEADOW AREA



Subcatchment 5S: WOODED

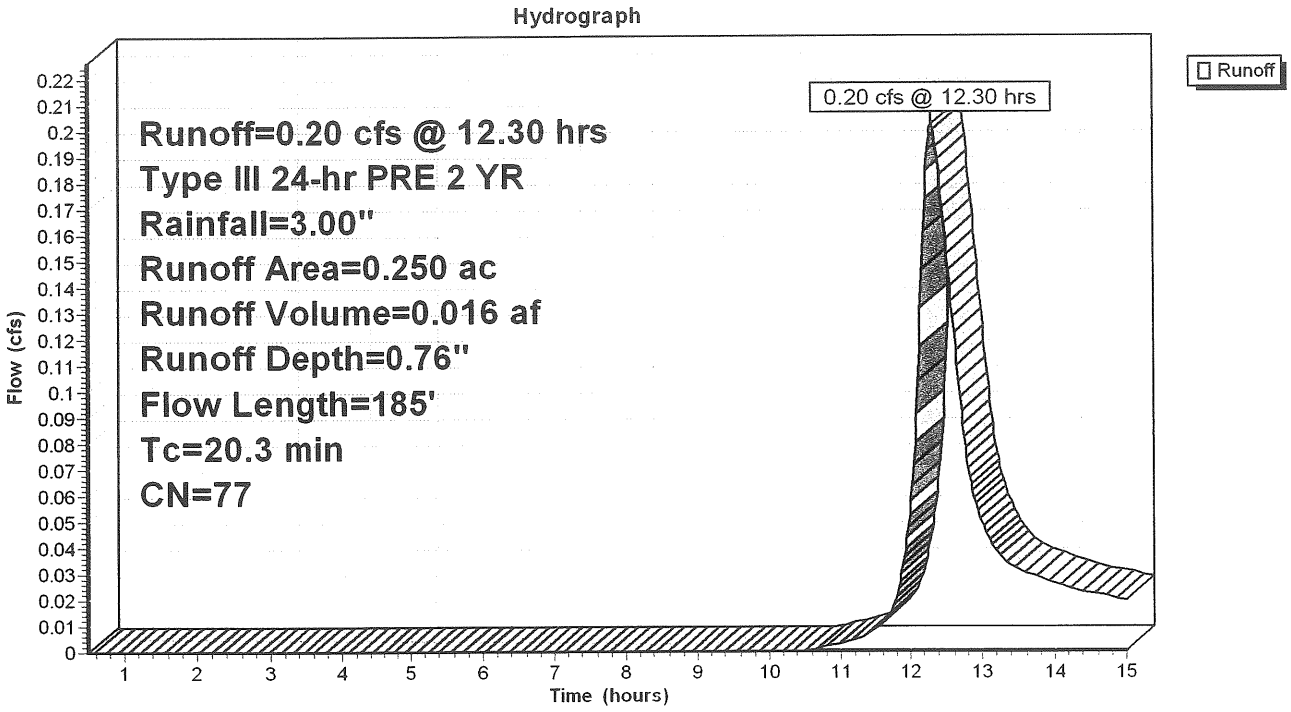
Runoff = 0.20 cfs @ 12.30 hrs, Volume= 0.016 af, Depth= 0.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.250	77	GOOD WOODS HOLLIS C/D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.7	70	0.0600	0.1		**Sheet Flow, AB** Woods: Dense underbrush n= 0.800 P2= 3.00"
1.6	115	0.2400	1.2		**Shallow Concentrated Flow, BC** Forest w/Heavy Litter Kv= 2.5 fps
20.3	185	Total			

Subcatchment 5S: WOODED



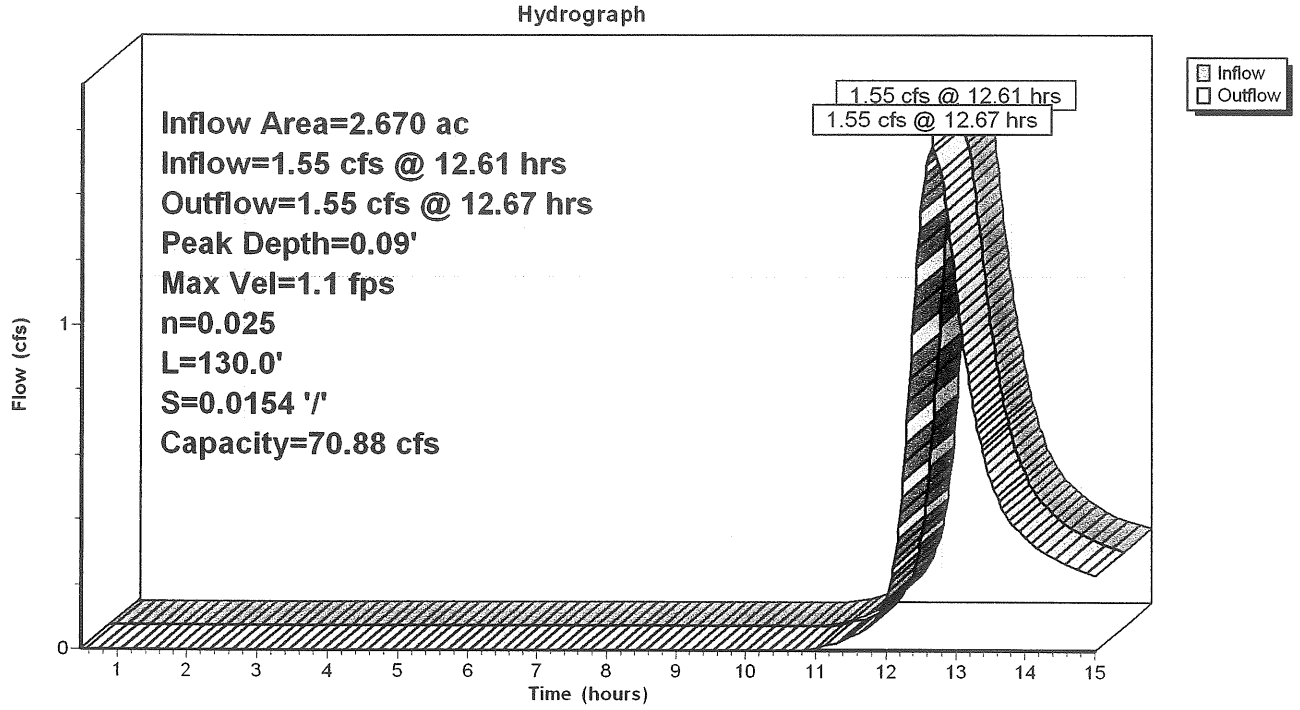
Reach 1R: REACH THRU SA-3, HARD OUTWASH CONCRETE

Inflow Area = 2.670 ac, Inflow Depth = 0.73" for PRE 2 YR event
Inflow = 1.55 cfs @ 12.61 hrs, Volume= 0.162 af
Outflow = 1.55 cfs @ 12.67 hrs, Volume= 0.161 af, Atten= 0%, Lag= 3.7 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 1.1 fps, Min. Travel Time= 2.0 min
Avg. Velocity = 0.6 fps, Avg. Travel Time= 3.5 min

Peak Depth= 0.09' @ 12.64 hrs
Capacity at bank full= 70.88 cfs
Inlet Invert= 10.00', Outlet Invert= 8.00'
60.00' x 0.50' deep Parabolic Channel, n= 0.025 Length= 130.0' Slope= 0.0154 '/'

Reach 1R: REACH THRU SA-3, HARD OUTWASH CONCRETE

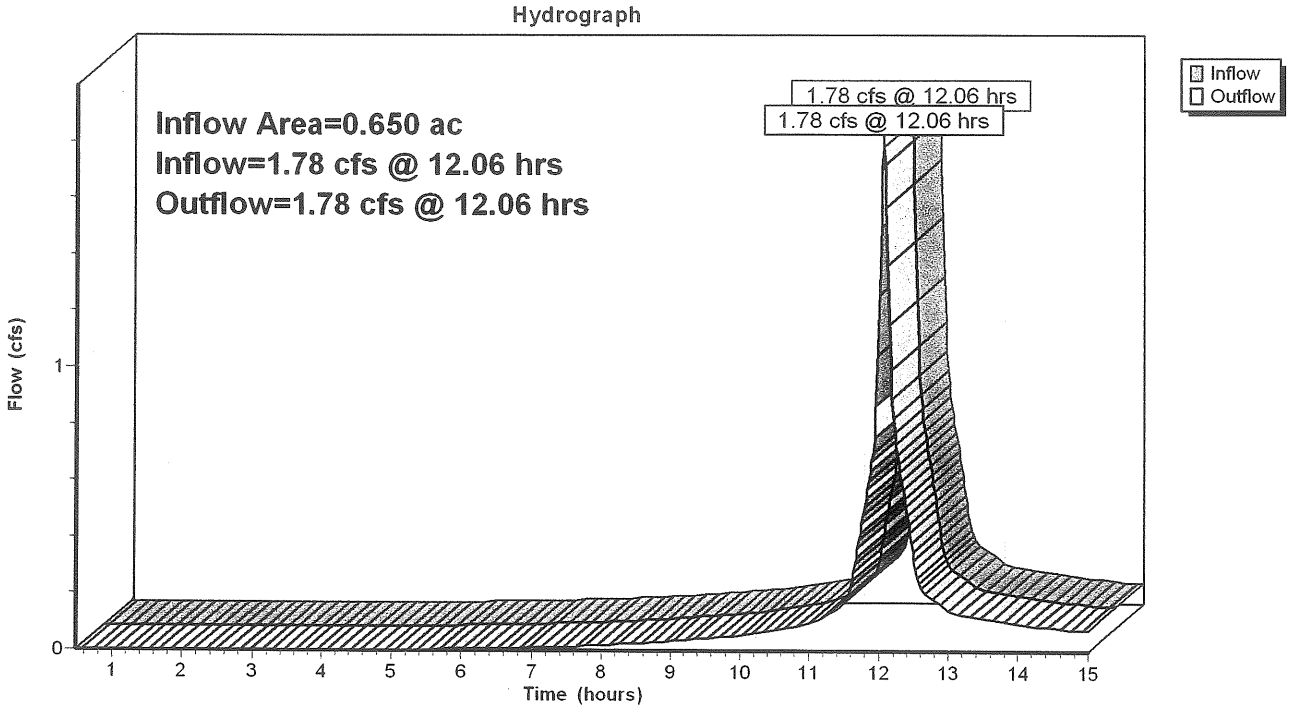


Reach 2R: POINT OF STUDY

Inflow Area = 0.650 ac, Inflow Depth = 1.83" for PRE 2 YR event
Inflow = 1.78 cfs @ 12.06 hrs, Volume= 0.099 af
Outflow = 1.78 cfs @ 12.06 hrs, Volume= 0.099 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 2R: POINT OF STUDY

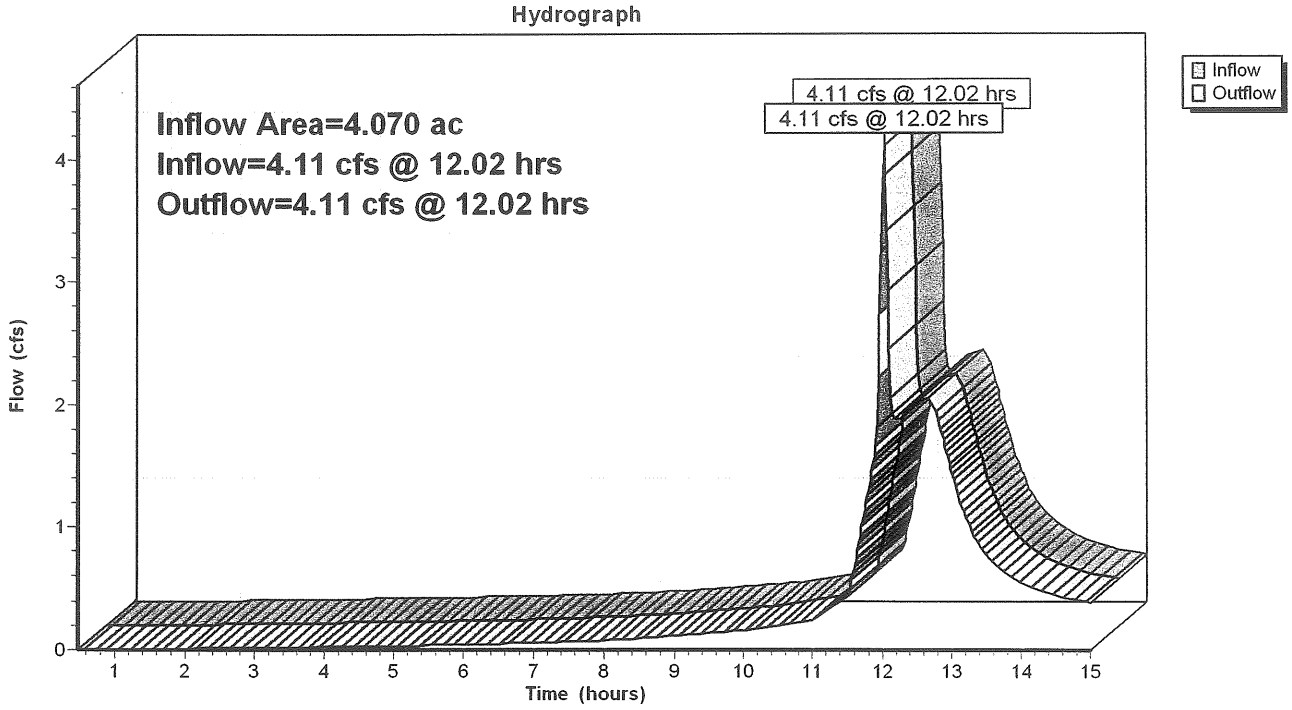


Reach 3R: POINT OF STUDY, NE CORNER

Inflow Area = 4.070 ac, Inflow Depth = 1.18" for PRE 2 YR event
Inflow = 4.11 cfs @ 12.02 hrs, Volume= 0.399 af
Outflow = 4.11 cfs @ 12.02 hrs, Volume= 0.399 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 3R: POINT OF STUDY, NE CORNER

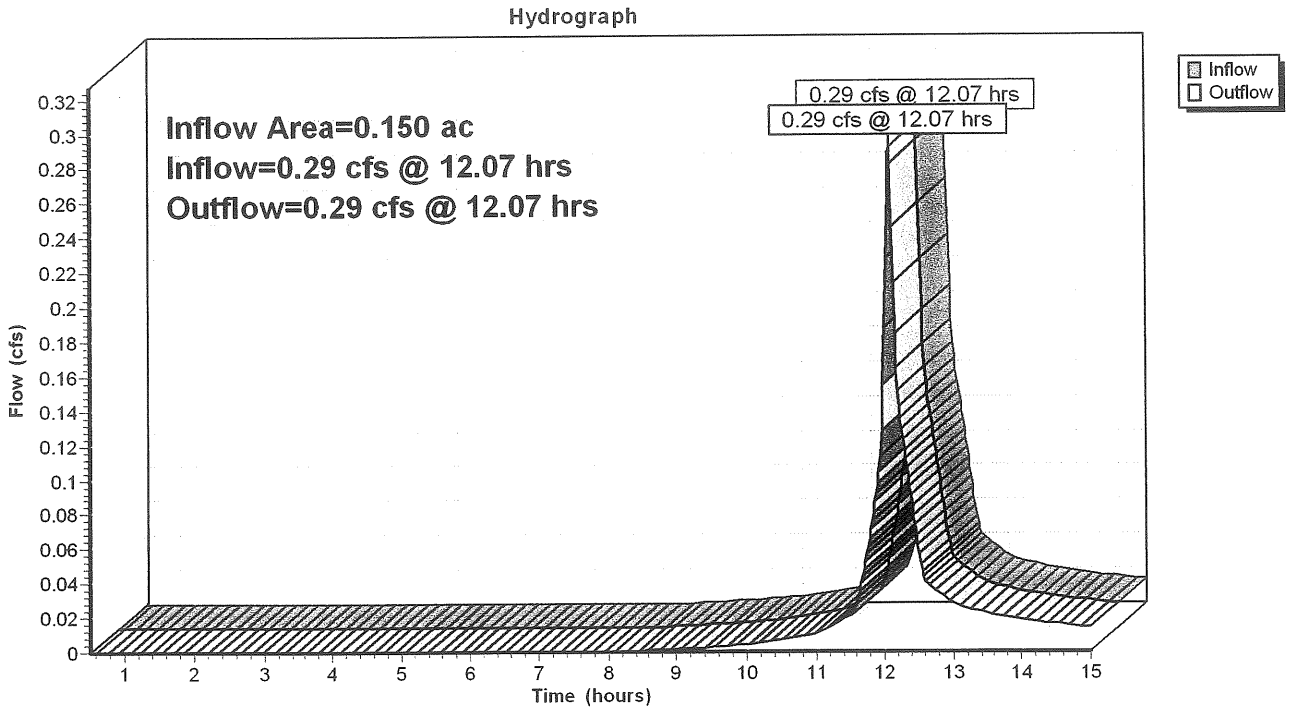


Reach 4R: POINT OF STUDY

Inflow Area = 0.150 ac, Inflow Depth = 1.22" for PRE 2 YR event
Inflow = 0.29 cfs @ 12.07 hrs, Volume= 0.015 af
Outflow = 0.29 cfs @ 12.07 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 4R: POINT OF STUDY



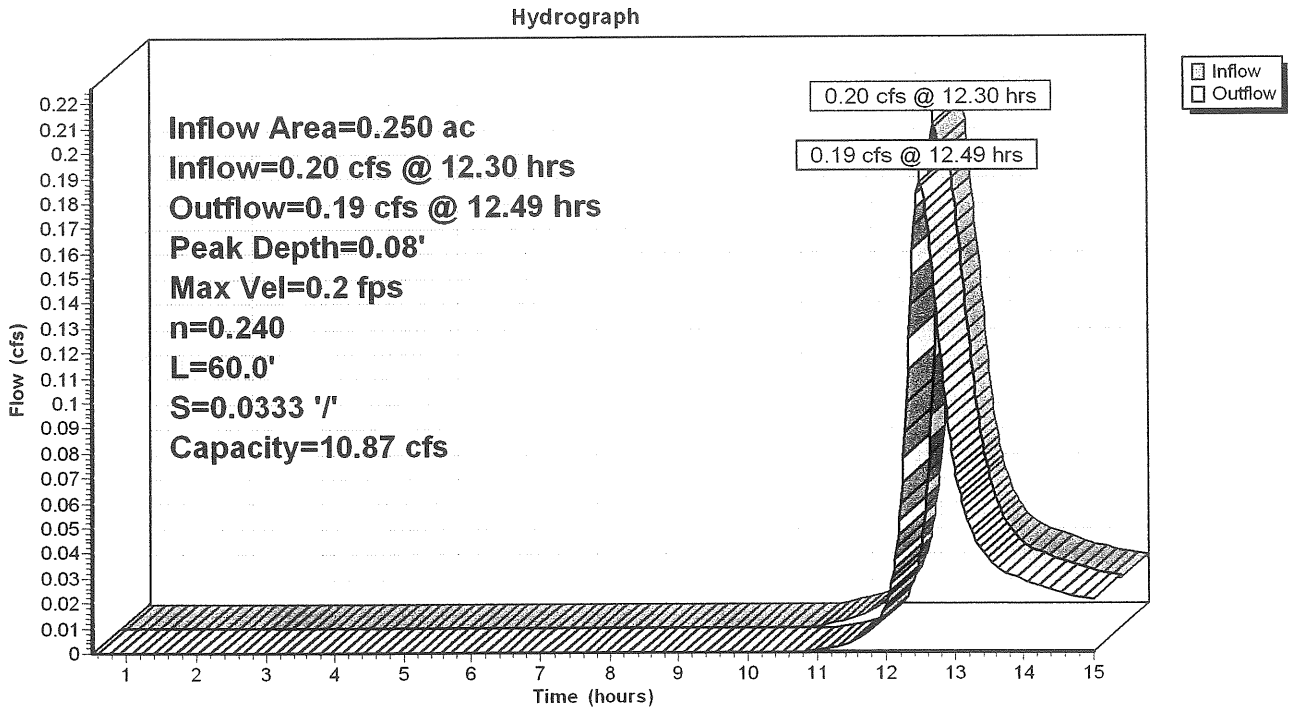
Reach 5R: REACH THRU SA-3

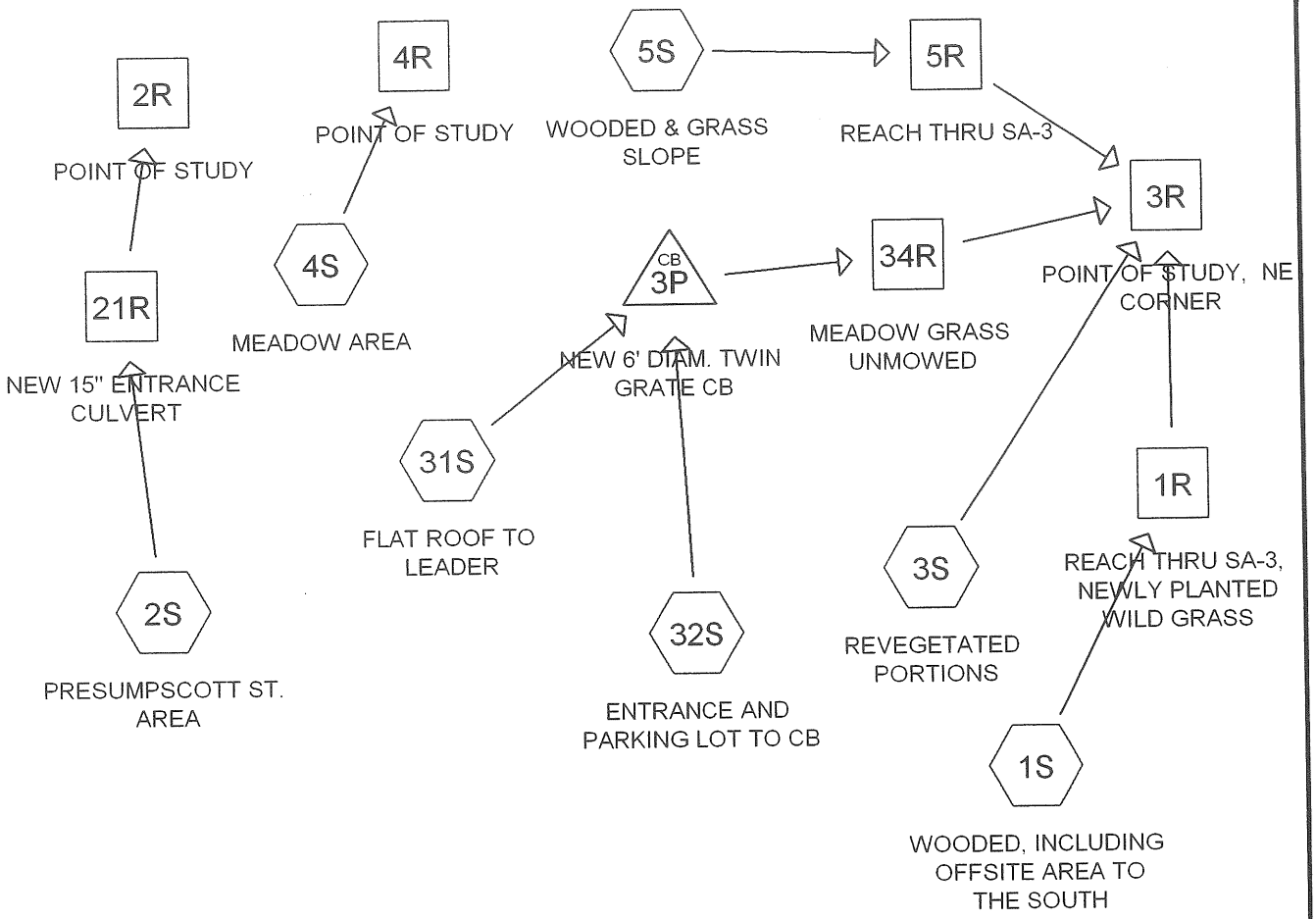
Inflow Area = 0.250 ac, Inflow Depth = 0.76" for PRE 2 YR event
Inflow = 0.20 cfs @ 12.30 hrs, Volume= 0.016 af
Outflow = 0.19 cfs @ 12.49 hrs, Volume= 0.015 af, Atten= 7%, Lag= 11.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 0.2 fps, Min. Travel Time= 6.4 min
Avg. Velocity = 0.1 fps, Avg. Travel Time= 12.1 min

Peak Depth= 0.08' @ 12.38 hrs
Capacity at bank full= 10.87 cfs
Inlet Invert= 10.00', Outlet Invert= 8.00'
60.00' x 0.50' deep Parabolic Channel, n= 0.240 Length= 60.0' Slope= 0.0333 '/'

Reach 5R: REACH THRU SA-3





Subcat Reach Pond Link

Drainage Diagram for Presumpscott Street - POST
Prepared by Engineering Assistance & Design, Inc. 5/24/2004

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.530 ac Runoff Depth=0.73"
Flow Length=685' Tc=40.1 min CN=77 Runoff=1.50 cfs 0.154 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.480 ac Runoff Depth=1.43"
Flow Length=565' Tc=3.3 min CN=88 Runoff=1.12 cfs 0.057 af

Subcatchment 3S: REVEGETATED PORTIONS Runoff Area=0.610 ac Runoff Depth=0.93"
Flow Length=205' Tc=2.8 min CN=80 Runoff=0.99 cfs 0.047 af

Subcatchment 4S: MEADOW AREA Runoff Area=0.040 ac Runoff Depth=0.83"
Flow Length=30' Tc=3.4 min CN=78 Runoff=0.06 cfs 0.003 af

Subcatchment 5S: WOODED & GRASS SLOPE Runoff Area=0.160 ac Runoff Depth=0.84"
Flow Length=200' Tc=32.4 min CN=79 Runoff=0.12 cfs 0.011 af

Subcatchment 31S: FLAT ROOF TO LEADER Runoff Area=0.230 ac Runoff Depth=2.33"
Flow Length=170' Tc=2.4 min CN=98 Runoff=0.76 cfs 0.045 af

Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB Runoff Area=0.580 ac Runoff Depth=2.22"
Flow Length=180' Tc=2.1 min CN=97 Runoff=1.89 cfs 0.107 af

Reach 1R: REACH THRU SA-3, NEWLY PLANTED Peak Depth=0.23' Max Vel=0.2 fps Inflow=1.50 cfs 0.154 af
n=0.240 L=130.0' S=0.0154 '/' Capacity=7.38 cfs Outflow=1.41 cfs 0.146 af

Reach 2R: POINT OF STUDY Inflow=1.11 cfs 0.057 af
Outflow=1.11 cfs 0.057 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=2.53 cfs 0.346 af
Outflow=2.53 cfs 0.346 af

Reach 4R: POINT OF STUDY Inflow=0.06 cfs 0.003 af
Outflow=0.06 cfs 0.003 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.06' Max Vel=0.1 fps Inflow=0.12 cfs 0.011 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.11 cfs 0.011 af

Reach 21R: NEW 15" ENTRANCE CULVERT Peak Depth=0.31' Max Vel=4.7 fps Inflow=1.12 cfs 0.057 af
D=15.0" n=0.010 L=103.0' S=0.0097 '/' Capacity=8.27 cfs Outflow=1.11 cfs 0.057 af

Reach 34R: MEADOW GRASS UNMOWED Peak Depth=0.39' Max Vel=0.1 fps Inflow=2.64 cfs 0.152 af
n=0.700 L=130.0' S=0.0138 '/' Capacity=10.16 cfs Outflow=1.31 cfs 0.142 af

Pond 3P: NEW 6' DIAM. TWIN GRATE CB Peak Elev=42.98' Inflow=2.64 cfs 0.152 af
12.0" x 134.0' Culvert Outflow=2.64 cfs 0.152 af

Total Runoff Area = 4.630 ac Runoff Volume = 0.425 af Average Runoff Depth = 1.10"

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.530 ac Runoff Depth=1.73"
Flow Length=685' Tc=40.1 min CN=77 Runoff=3.45 cfs 0.365 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.480 ac Runoff Depth=2.74"
Flow Length=565' Tc=3.3 min CN=88 Runoff=2.05 cfs 0.109 af

Subcatchment 3S: REVEGETATED PORTIONS Runoff Area=0.610 ac Runoff Depth=2.05"
Flow Length=205' Tc=2.8 min CN=80 Runoff=2.11 cfs 0.104 af

Subcatchment 4S: MEADOW AREA Runoff Area=0.040 ac Runoff Depth=1.89"
Flow Length=30' Tc=3.4 min CN=78 Runoff=0.13 cfs 0.006 af

Subcatchment 5S: WOODED & GRASS SLOPE Runoff Area=0.160 ac Runoff Depth=1.90"
Flow Length=200' Tc=32.4 min CN=79 Runoff=0.26 cfs 0.025 af

Subcatchment 31S: FLAT ROOF TO LEADER Runoff Area=0.230 ac Runoff Depth=3.78"
Flow Length=170' Tc=2.4 min CN=98 Runoff=1.19 cfs 0.072 af

Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB Runoff Area=0.580 ac Runoff Depth=3.66"
Flow Length=180' Tc=2.1 min CN=97 Runoff=3.01 cfs 0.177 af

Reach 1R: REACH THRU SA-3, NEWLY PLANTED Peak Depth=0.35' Max Vel=0.3 fps Inflow=3.45 cfs 0.365 af
n=0.240 L=130.0' S=0.0154 '/' Capacity=7.38 cfs Outflow=3.33 cfs 0.352 af

Reach 2R: POINT OF STUDY Inflow=2.03 cfs 0.109 af
Outflow=2.03 cfs 0.109 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=5.28 cfs 0.716 af
Outflow=5.28 cfs 0.716 af

Reach 4R: POINT OF STUDY Inflow=0.13 cfs 0.006 af
Outflow=0.13 cfs 0.006 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.09' Max Vel=0.2 fps Inflow=0.26 cfs 0.025 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.25 cfs 0.025 af

Reach 21R: NEW 15" ENTRANCE CULVERT Peak Depth=0.42' Max Vel=5.6 fps Inflow=2.05 cfs 0.109 af
D=15.0" n=0.010 L=103.0' S=0.0097 '/' Capacity=8.27 cfs Outflow=2.03 cfs 0.109 af

Reach 34R: MEADOW GRASS UNMOWED Peak Depth=0.50' Max Vel=0.1 fps Inflow=4.20 cfs 0.249 af
n=0.700 L=130.0' S=0.0138 '/' Capacity=10.16 cfs Outflow=2.26 cfs 0.236 af

Pond 3P: NEW 6' DIAM. TWIN GRATE CB Peak Elev=43.73' Inflow=4.20 cfs 0.249 af
12.0" x 134.0' Culvert Outflow=4.20 cfs 0.249 af

Total Runoff Area = 4.630 ac Runoff Volume = 0.859 af Average Runoff Depth = 2.23"

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.530 ac Runoff Depth=2.26"
Flow Length=685' Tc=40.1 min CN=77 Runoff=4.44 cfs 0.476 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.480 ac Runoff Depth=3.38"
Flow Length=565' Tc=3.3 min CN=88 Runoff=2.49 cfs 0.135 af

Subcatchment 3S: REVEGETATED PORTIONS Runoff Area=0.610 ac Runoff Depth=2.63"
Flow Length=205' Tc=2.8 min CN=80 Runoff=2.67 cfs 0.133 af

Subcatchment 4S: MEADOW AREA Runoff Area=0.040 ac Runoff Depth=2.45"
Flow Length=30' Tc=3.4 min CN=78 Runoff=0.16 cfs 0.008 af

Subcatchment 5S: WOODED & GRASS SLOPE Runoff Area=0.160 ac Runoff Depth=2.45"
Flow Length=200' Tc=32.4 min CN=79 Runoff=0.33 cfs 0.033 af

Subcatchment 31S: FLAT ROOF TO LEADER Runoff Area=0.230 ac Runoff Depth=4.46"
Flow Length=170' Tc=2.4 min CN=98 Runoff=1.40 cfs 0.085 af

Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB Runoff Area=0.580 ac Runoff Depth=4.34"
Flow Length=180' Tc=2.1 min CN=97 Runoff=3.53 cfs 0.210 af

Reach 1R: REACH THRU SA-3, NEWLY PLANTED Peak Depth=0.39' Max Vel=0.3 fps Inflow=4.44 cfs 0.476 af
n=0.240 L=130.0' S=0.0154 '/' Capacity=7.38 cfs Outflow=4.31 cfs 0.461 af

Reach 2R: POINT OF STUDY Inflow=2.46 cfs 0.135 af
Outflow=2.46 cfs 0.135 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=6.64 cfs 0.907 af
Outflow=6.64 cfs 0.907 af

Reach 4R: POINT OF STUDY Inflow=0.16 cfs 0.008 af
Outflow=0.16 cfs 0.008 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.10' Max Vel=0.2 fps Inflow=0.33 cfs 0.033 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.32 cfs 0.032 af

Reach 21R: NEW 15" ENTRANCE CULVERT Peak Depth=0.47' Max Vel=5.9 fps Inflow=2.49 cfs 0.135 af
D=15.0" n=0.010 L=103.0' S=0.0097 '/' Capacity=8.27 cfs Outflow=2.46 cfs 0.135 af

Reach 34R: MEADOW GRASS UNMOWED Peak Depth=0.54' Max Vel=0.1 fps Inflow=4.93 cfs 0.295 af
n=0.700 L=130.0' S=0.0138 '/' Capacity=10.16 cfs Outflow=2.72 cfs 0.280 af

Pond 3P: NEW 6' DIAM. TWIN GRATE CB Peak Elev=44.18' Inflow=4.93 cfs 0.295 af
12.0" x 134.0' Culvert Outflow=4.93 cfs 0.295 af

Total Runoff Area = 4.630 ac Runoff Volume = 1.081 af Average Runoff Depth = 2.80"

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE SOUTH

OFFSITE AREA TAKEN FROM USGA TOPO QUAD

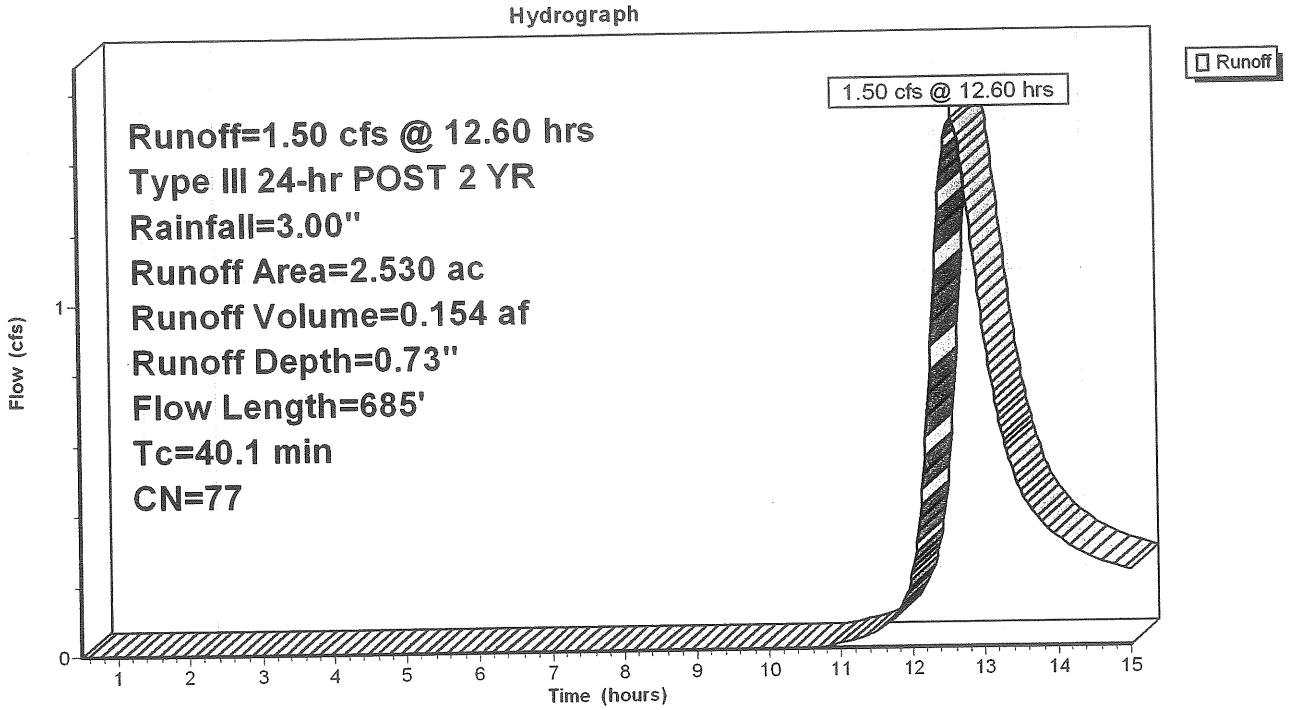
Runoff = 1.50 cfs @ 12.60 hrs, Volume= 0.154 af, Depth= 0.73"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 2 YR Rainfall=3.00"

Area (ac)	CN	Description
2.390	77	GOOD WOODS HOLLIS C/D
0.140	80	GOOD GRASS HOLLIS C/D
2.530	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.0	120	0.0500	0.1		**Sheet Flow, AB** Woods: Dense underbrush n= 0.800 P2= 3.00"
5.7	340	0.1600	1.0		**Shallow Concentrated Flow, BC** Forest w/Heavy Litter Kv= 2.5 fps
0.9	65	0.2400	1.2		**Shallow Concentrated Flow, CD** Forest w/Heavy Litter Kv= 2.5 fps
0.1	45	0.2500	7.5		**Shallow Concentrated Flow, DE** Grassed Waterway Kv= 15.0 fps
2.4	115	0.0130	0.8		**Shallow Concentrated Flow, EF** Short Grass Pasture Kv= 7.0 fps
40.1	685	Total			

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE SOUTH



Subcatchment 2S: PRESUMPSCOTT ST. AREA

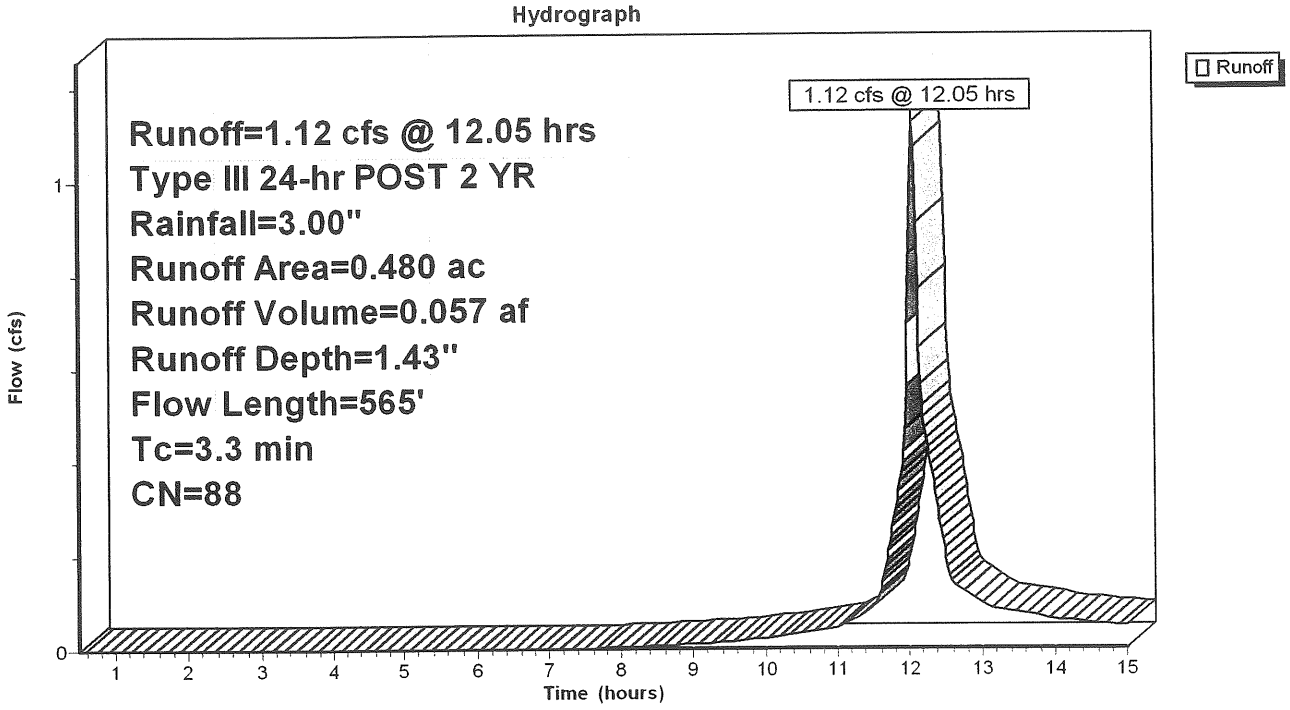
Runoff = 1.12 cfs @ 12.05 hrs, Volume= 0.057 af, Depth= 1.43"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.250	98	PAVED ROAD& ENTRANCE
0.160	77	GOOD VEGETATION HOLLIS C/D
0.070	80	ROW GRASS DITCH
0.480	88	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	30	0.0100	0.8		**Sheet Flow, AB TOP OF STREEET** Smooth surfaces n= 0.011 P2= 3.00"
1.0	395	0.1000	6.4		**Shallow Concentrated Flow, BC CURBED GUTTER** Paved Kv= 20.3 fps
1.7	140	0.0500	1.4	11.08	**Channel Flow, CD GRASS ROADSIDE SWALE** Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.240
3.3	565	Total			

Subcatchment 2S: PRESUMPSCOTT ST. AREA



Subcatchment 3S: REVEGETATED PORTIONS

THIS AREA PREVIOUISLY WAS OUTWASH CONCRETE. RECLIAMED TO UNMOWED MEADOW GRASSES

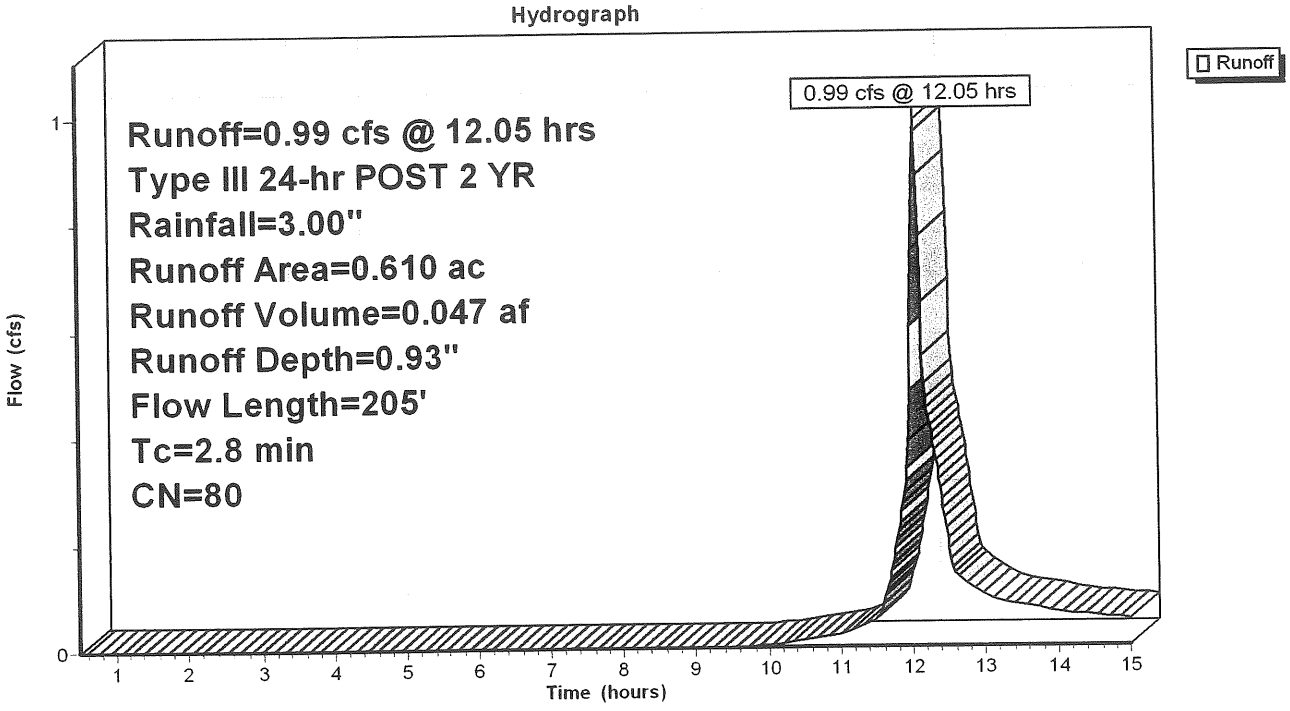
Runoff = 0.99 cfs @ 12.05 hrs, Volume= 0.047 af, Depth= 0.93"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.590	80	NEW GRASS OVER BACKFILL
0.020	78	RECLAIMED OUTWASH AREA
0.610	80	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	75	0.5000	4.6		**Sheet Flow, AB ROOF RUNOFF TO LEADERS** Smooth surfaces n= 0.011 P2= 3.00"
2.5	130	0.0150	0.9		**Shallow Concentrated Flow, BC** Short Grass Pasture Kv= 7.0 fps
2.8	205	Total			

Subcatchment 3S: REVEGETATED PORTIONS



Subcatchment 4S: MEADOW AREA

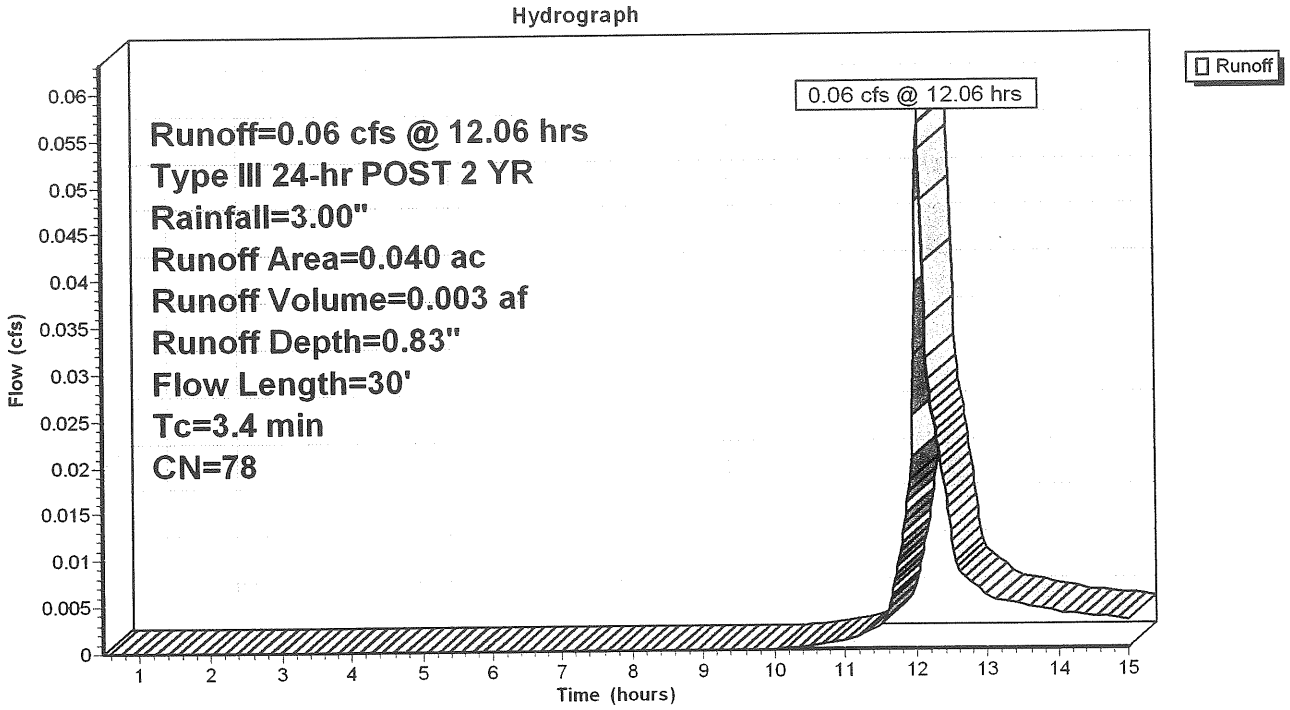
Runoff = 0.06 cfs @ 12.06 hrs, Volume= 0.003 af, Depth= 0.83"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.010	77	GOOD WOODS HOLLIS C/D
0.030	78	MEADOW GRASS HOLLIS C/D
0.040	78	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	30	0.2000	0.1		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.00"

Subcatchment 4S: MEADOW AREA



Subcatchment 5S: WOODED & GRASS SLOPE

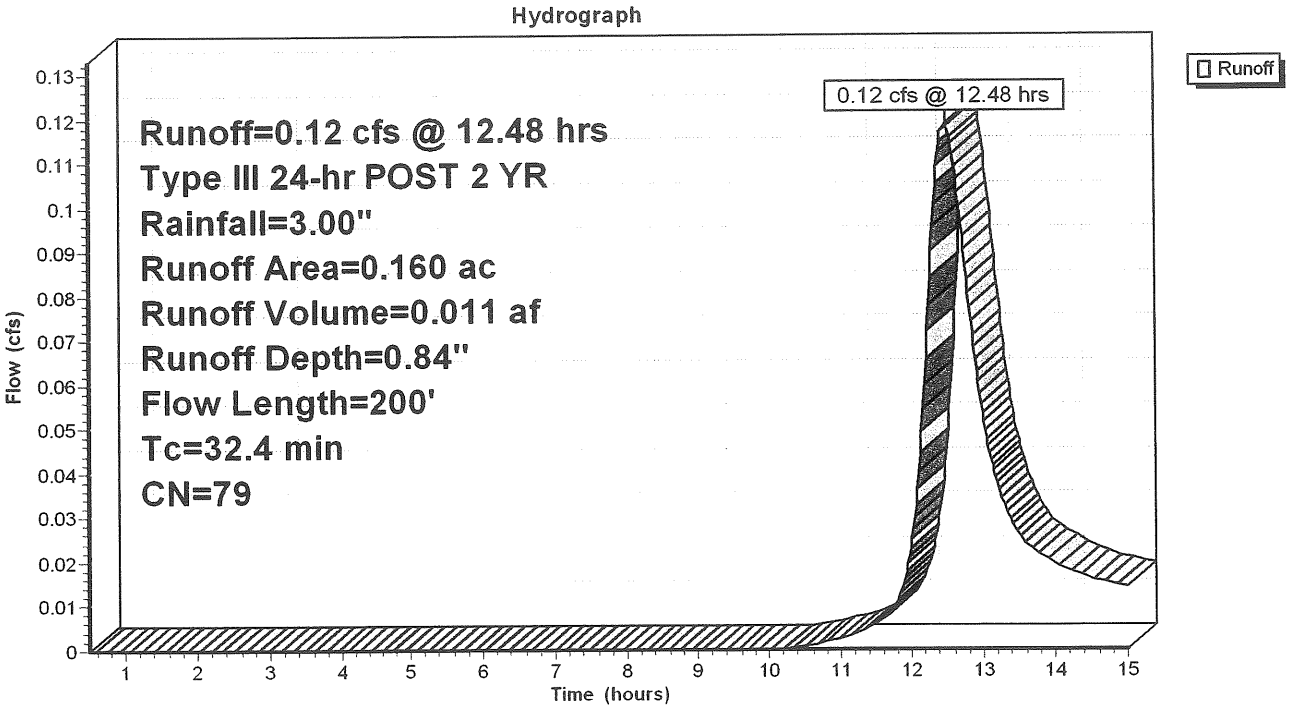
Runoff = 0.12 cfs @ 12.48 hrs, Volume= 0.011 af, Depth= 0.84"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.080	77	GOOD WOODS HOLLIS C/D
0.080	80	GOOD GRASS HOLLIS C/D
0.160	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.1	85	0.0230	0.0		**Sheet Flow, AB** Woods: Dense underbrush n= 0.800 P2= 3.00"
0.3	115	0.2400	7.3		**Shallow Concentrated Flow, BC** Grassed Waterway Kv= 15.0 fps
32.4	200	Total			

Subcatchment 5S: WOODED & GRASS SLOPE



Subcatchment 31S: FLAT ROOF TO LEADER

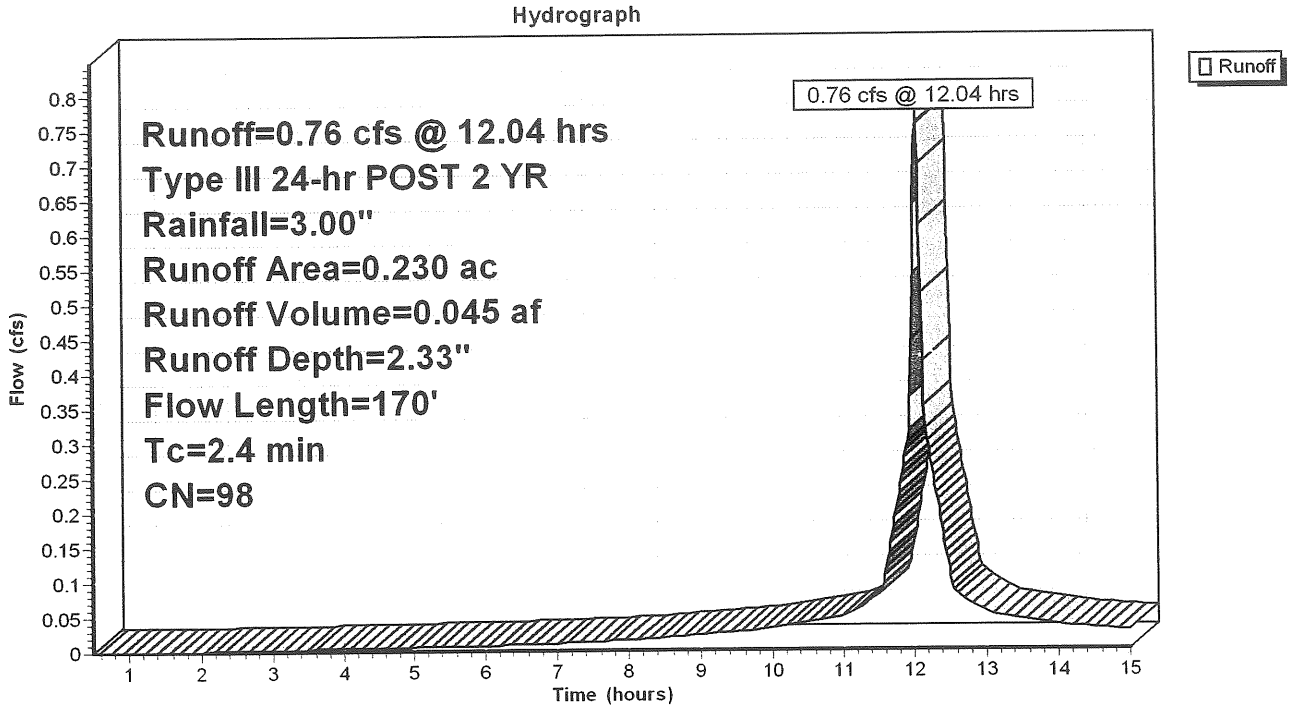
Runoff = 0.76 cfs @ 12.04 hrs, Volume= 0.045 af, Depth= 2.33"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.230	98	NEW ROOF

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.1	95	0.0050	0.8		**Sheet Flow, AB** Smooth surfaces n= 0.011 P2= 3.00"
0.3	75	0.0100	3.7	0.73	**Circular Channel (pipe), BC ROOF LEADER TO CB** Diam= 6.0" Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010
2.4	170	Total			

Subcatchment 31S: FLAT ROOF TO LEADER



Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB

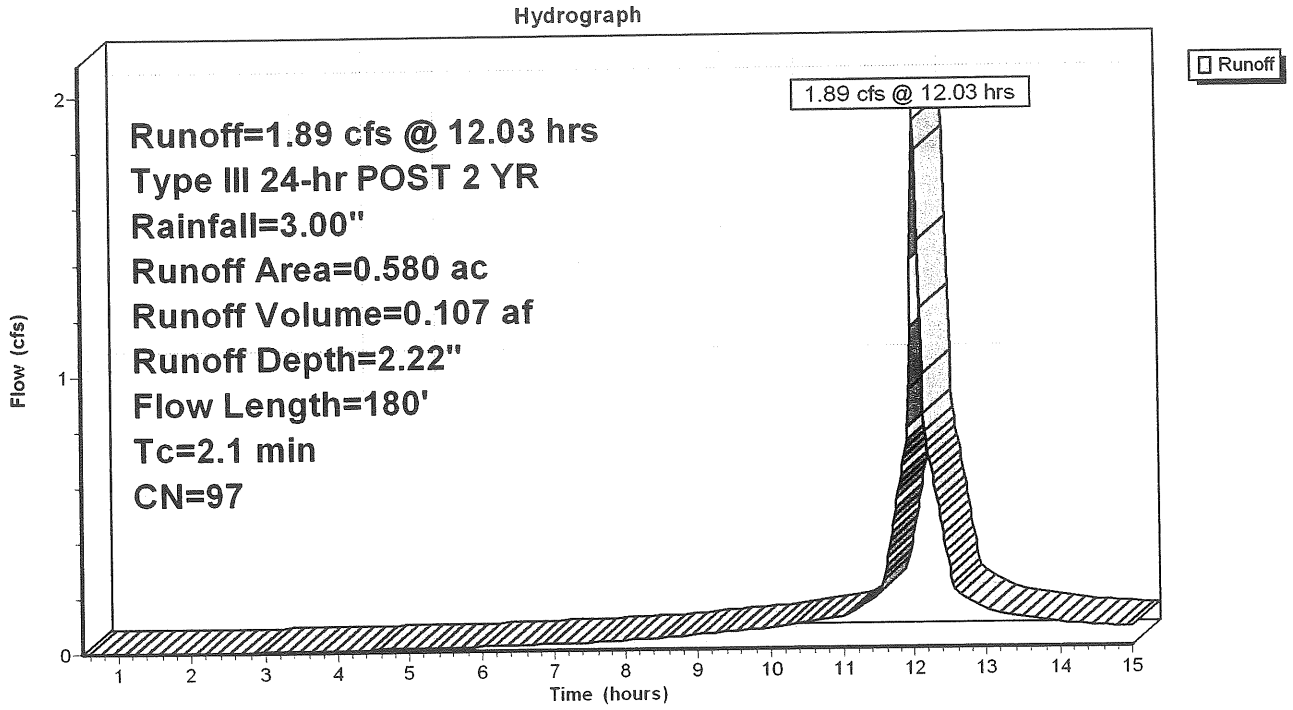
Runoff = 1.89 cfs @ 12.03 hrs, Volume= 0.107 af, Depth= 2.22"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 2 YR Rainfall=3.00"

Area (ac)	CN	Description
0.030	80	MISC. LAWN
0.550	98	ENTRANCE AND PARKING LOT
0.580	97	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	110	0.0180	1.3		**Sheet Flow, AB** Smooth surfaces n= 0.011 P2= 3.00"
0.7	70	0.0070	1.7		**Shallow Concentrated Flow, BC** Paved Kv= 20.3 fps
2.1	180	Total			

Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB



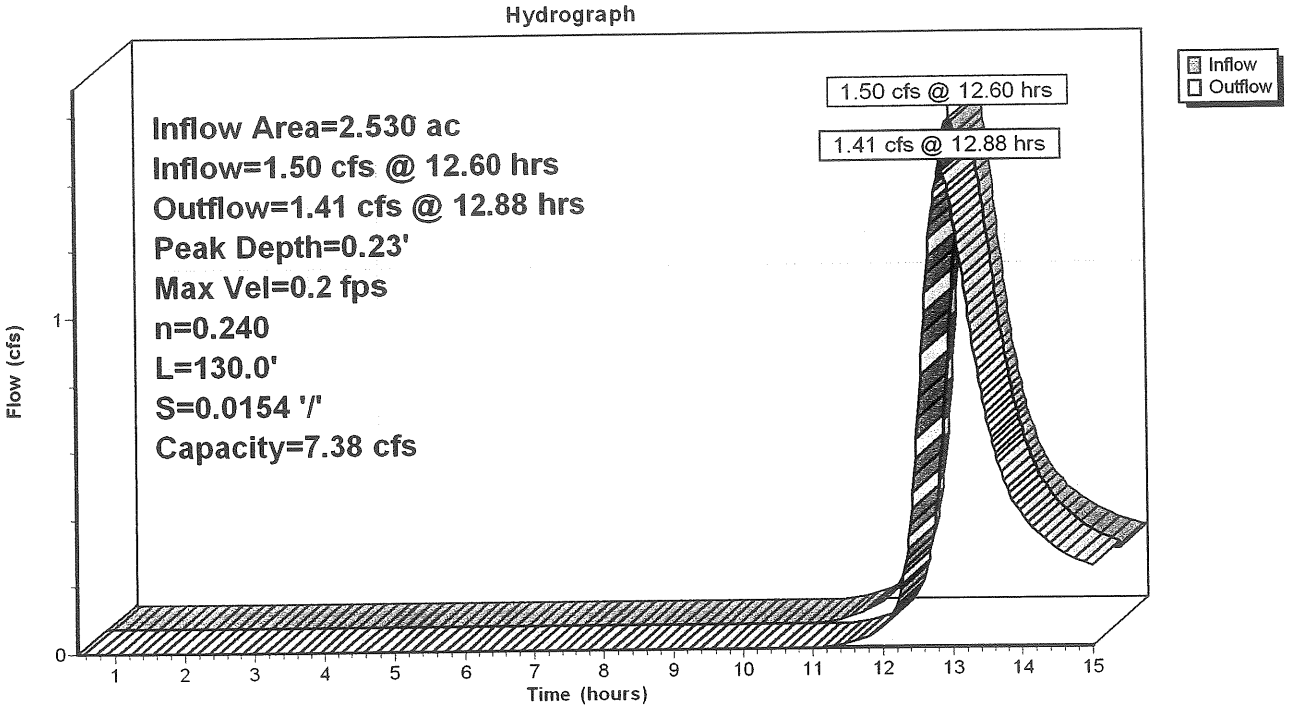
Reach 1R: REACH THRU SA-3, NEWLY PLANTED WILD GRASS

Inflow Area = 2.530 ac, Inflow Depth = 0.73" for POST 2 YR event
Inflow = 1.50 cfs @ 12.60 hrs, Volume= 0.154 af
Outflow = 1.41 cfs @ 12.88 hrs, Volume= 0.146 af, Atten= 6%, Lag= 16.7 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 0.2 fps, Min. Travel Time= 9.8 min
Avg. Velocity = 0.1 fps, Avg. Travel Time= 17.8 min

Peak Depth= 0.23' @ 12.71 hrs
Capacity at bank full= 7.38 cfs
Inlet Invert= 10.00', Outlet Invert= 8.00'
60.00' x 0.50' deep Parabolic Channel, n= 0.240 Length= 130.0' Slope= 0.0154 '/'

Reach 1R: REACH THRU SA-3, NEWLY PLANTED WILD GRASS

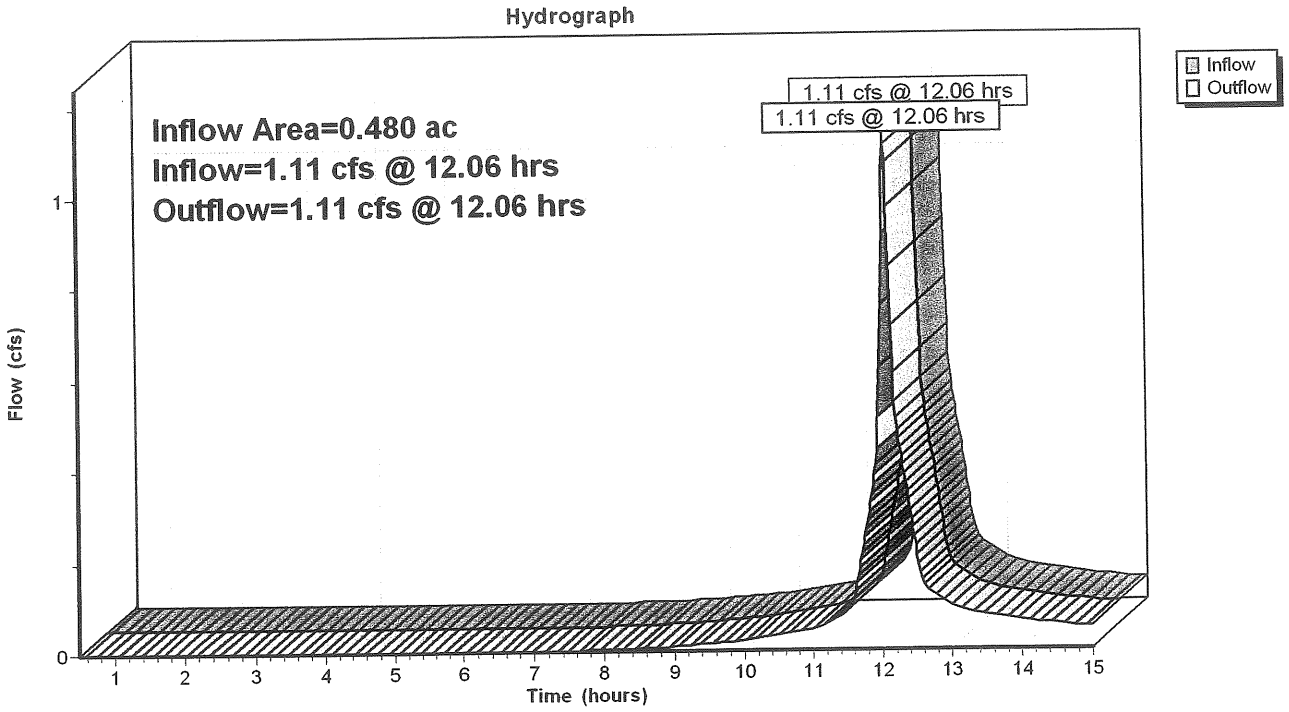


Reach 2R: POINT OF STUDY

Inflow Area = 0.480 ac, Inflow Depth = 1.43" for POST 2 YR event
Inflow = 1.11 cfs @ 12.06 hrs, Volume= 0.057 af
Outflow = 1.11 cfs @ 12.06 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 2R: POINT OF STUDY

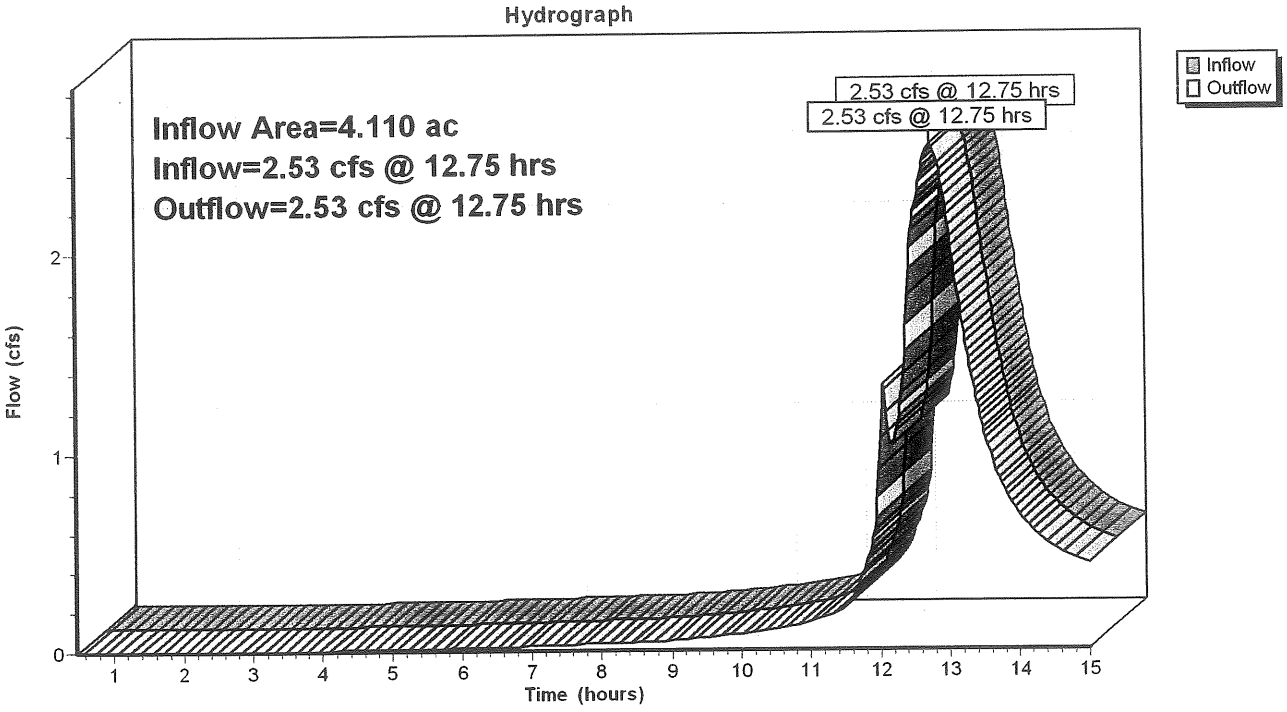


Reach 3R: POINT OF STUDY, NE CORNER

Inflow Area = 4.110 ac, Inflow Depth = 1.01" for POST 2 YR event
Inflow = 2.53 cfs @ 12.75 hrs, Volume= 0.346 af
Outflow = 2.53 cfs @ 12.75 hrs, Volume= 0.346 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 3R: POINT OF STUDY, NE CORNER

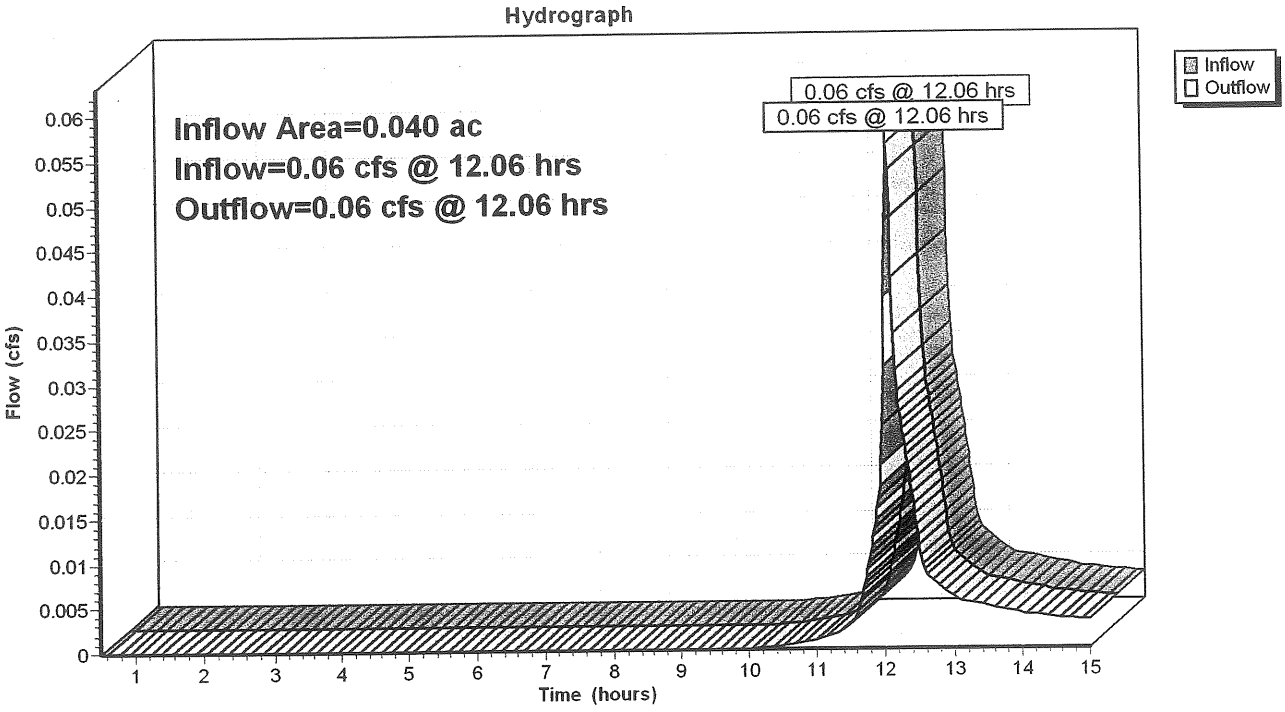


Reach 4R: POINT OF STUDY

Inflow Area = 0.040 ac, Inflow Depth = 0.83" for POST 2 YR event
Inflow = 0.06 cfs @ 12.06 hrs, Volume= 0.003 af
Outflow = 0.06 cfs @ 12.06 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 4R: POINT OF STUDY



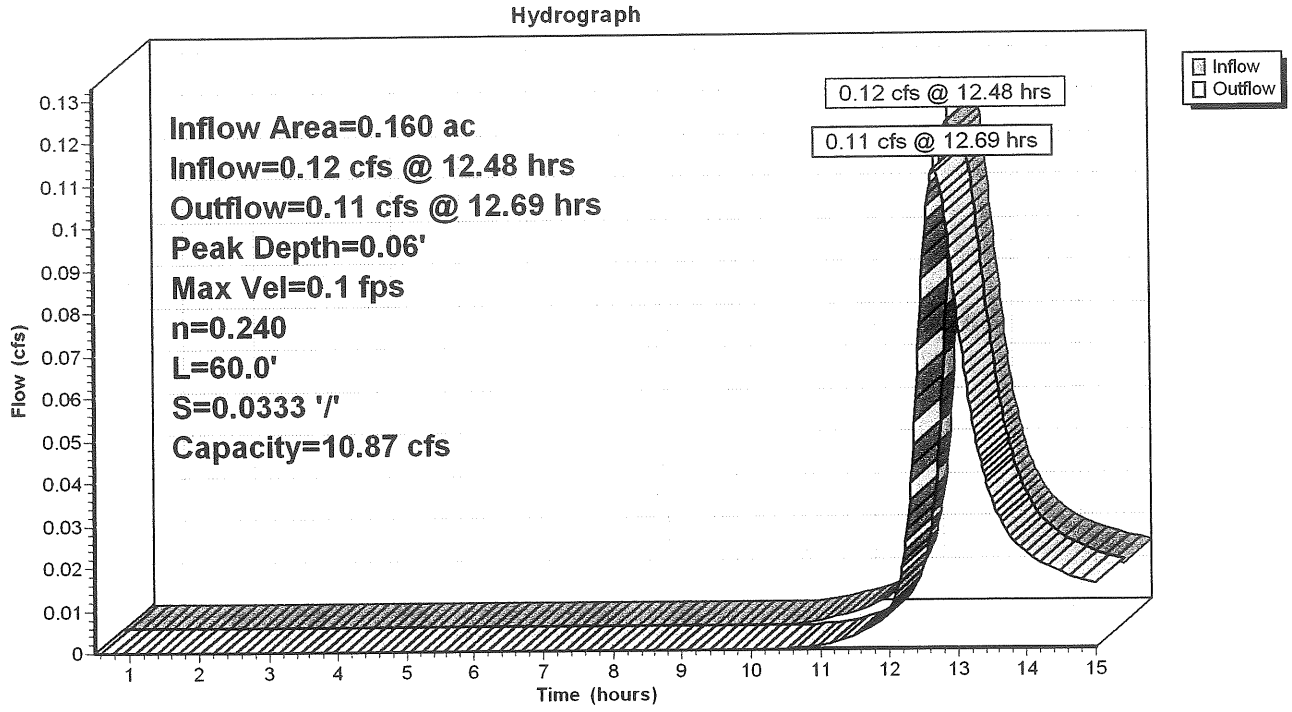
Reach 5R: REACH THRU SA-3

Inflow Area = 0.160 ac, Inflow Depth = 0.84" for POST 2 YR event
Inflow = 0.12 cfs @ 12.48 hrs, Volume= 0.011 af
Outflow = 0.11 cfs @ 12.69 hrs, Volume= 0.011 af, Atten= 5%, Lag= 13.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 0.1 fps, Min. Travel Time= 7.5 min
Avg. Velocity = 0.1 fps, Avg. Travel Time= 13.9 min

Peak Depth= 0.06' @ 12.57 hrs
Capacity at bank full= 10.87 cfs
Inlet Invert= 10.00', Outlet Invert= 8.00'
60.00' x 0.50' deep Parabolic Channel, n= 0.240 Length= 60.0' Slope= 0.0333 '/'

Reach 5R: REACH THRU SA-3



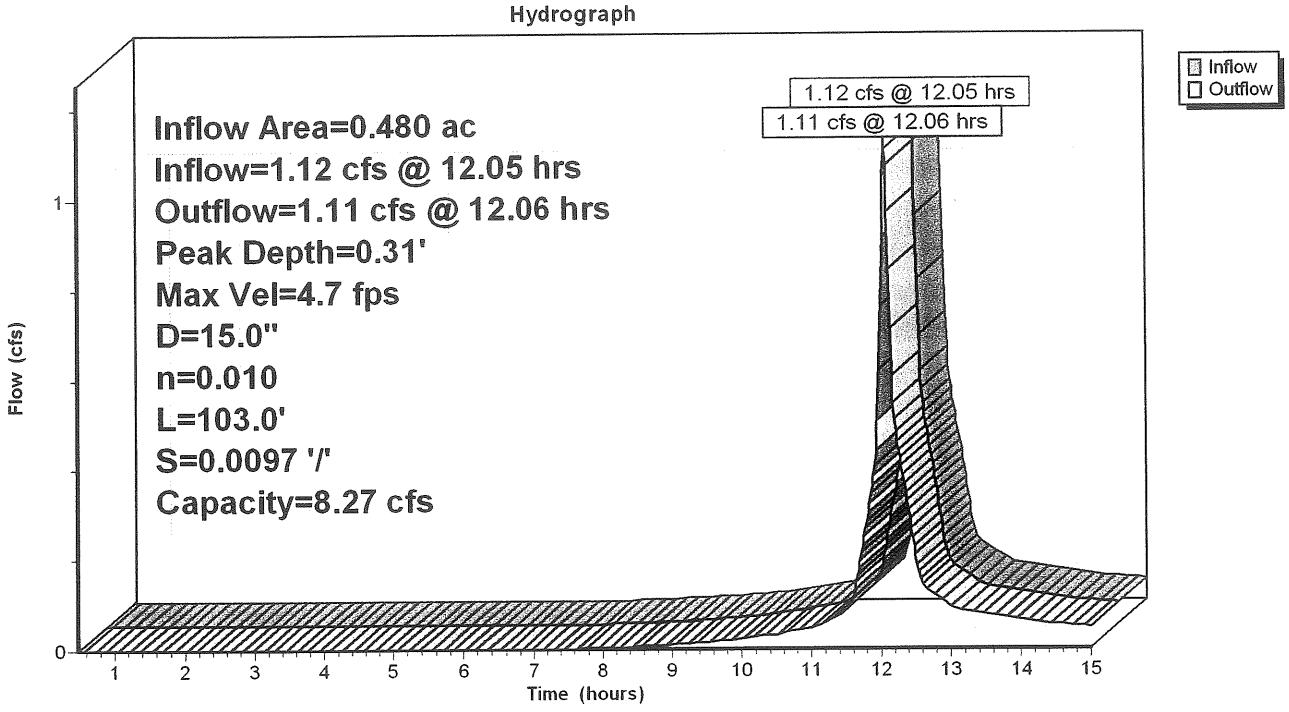
Reach 21R: NEW 15" ENTRANCE CULVERT

Inflow Area = 0.480 ac, Inflow Depth = 1.43" for POST 2 YR event
Inflow = 1.12 cfs @ 12.05 hrs, Volume= 0.057 af
Outflow = 1.11 cfs @ 12.06 hrs, Volume= 0.057 af, Atten= 1%, Lag= 0.7 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 4.7 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 1.8 fps, Avg. Travel Time= 1.0 min

Peak Depth= 0.31' @ 12.06 hrs
Capacity at bank full= 8.27 cfs
Inlet Invert= 43.00', Outlet Invert= 42.00'
15.0" Diameter Pipe n= 0.010 Length= 103.0' Slope= 0.0097 '/'

Reach 21R: NEW 15" ENTRANCE CULVERT



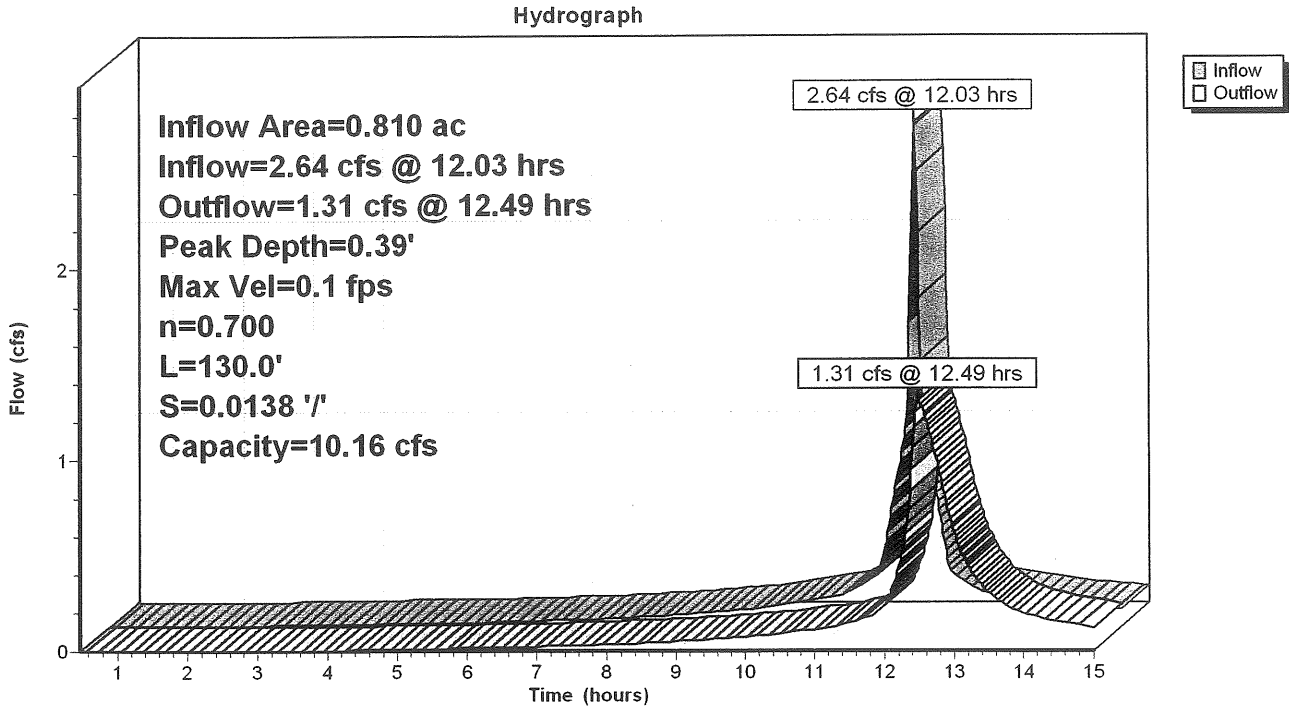
Reach 34R: MEADOW GRASS UNMOWED

Inflow Area = 0.810 ac, Inflow Depth = 2.25" for POST 2 YR event
Inflow = 2.64 cfs @ 12.03 hrs, Volume= 0.152 af
Outflow = 1.31 cfs @ 12.49 hrs, Volume= 0.142 af, Atten= 50%, Lag= 27.2 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 0.1 fps, Min. Travel Time= 21.4 min
Avg. Velocity = 0.0 fps, Avg. Travel Time= 56.8 min

Peak Depth= 0.39' @ 12.13 hrs
Capacity at bank full= 10.16 cfs
Inlet Invert= 11.80', Outlet Invert= 10.00'
80.00' x 1.00' deep Parabolic Channel, n= 0.700 Length= 130.0' Slope= 0.0138 '/'

Reach 34R: MEADOW GRASS UNMOWED



Pond 3P: NEW 6' DIAM. TWIN GRATE CB

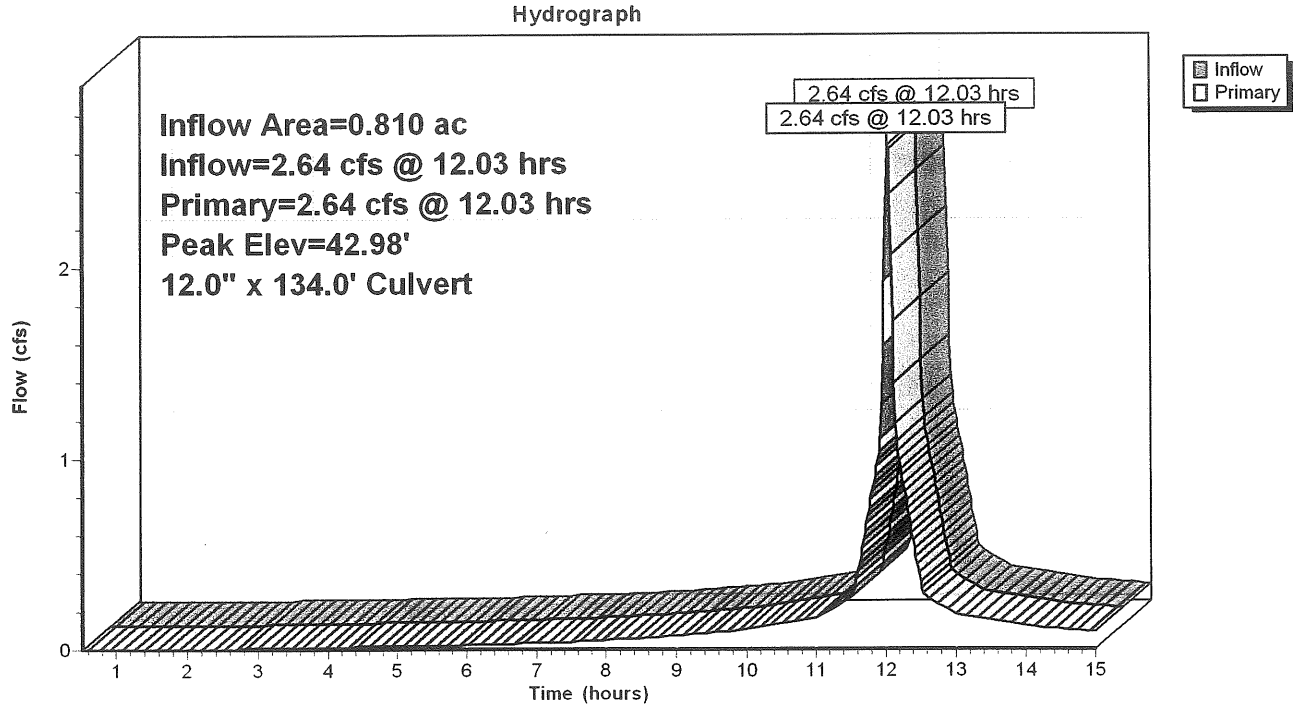
Inflow Area = 0.810 ac, Inflow Depth = 2.25" for POST 2 YR event
Inflow = 2.64 cfs @ 12.03 hrs, Volume= 0.152 af
Outflow = 2.64 cfs @ 12.03 hrs, Volume= 0.152 af, Atten= 0%, Lag= 0.0 min
Primary = 2.64 cfs @ 12.03 hrs, Volume= 0.152 af

Routing by Stor-Ind method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Peak Elev= 42.98' @ 12.03 hrs
Plug-Flow detention time= 0.0 min calculated for 0.152 af (100% of inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

#	Routing	Invert	Outlet Devices
1	Primary	42.00'	**12.0" x 134.0' long 12 " ADS CORRUGATED CULVERT** CPP, square edge headwall, Ke= 0.500 Outlet Invert= 12.50' S= 0.2201 '/' n= 0.025 Cc= 0.900

Primary OutFlow Max=2.61 cfs @ 12.03 hrs HW=42.97' (Free Discharge)
↑—**1=12 " ADS CORRUGATED CULVERT** (Inlet Controls 2.61 cfs @ 3.4 fps)

Pond 3P: NEW 6' DIAM. TWIN GRATE CB



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04P104

TO: **Kandi Talbot – Planner**

FROM: **Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.**

RE: **Approx 435 Presumpscot Street – Warehouse Building, Kevin McQuinn**

DATE: **August 12, 2004**

Sebago Technics has completed its review of the revised submitted materials for the proposed commercial development at the location of approximately 435 Presumpscot Street. Based on a review of the submitted materials, we feel that several of the concerns require attention. The following are our comments that respond to the latest plan revisions. ***The revised comments are in bold italics below each previous statement:***

1. **Road Access & Circulation**

A. The access drive entrance as proposed appears to be wider than necessary and excessive based on the internal circulation layout. Can the width be narrowed to accommodate the necessary turning radius needed at the property line (prefer 24 feet)? The current layout requires a 56 feet opening at the ROW/property line and a width of 120 feet at the actual street line. The turning radius appears to support a large trailer truck, however the internal circulation cannot support such movements. Based on the layouts the applicant shall either document intended trucking use or revise either the entrance or internal parking/access to accommodate the intended use. ***Tom Errico, P.E., reviews the entrance design to the project, and his suggestions will address the turning radius and driveway layout. We will review grading and drainage design.***

B. Presumpscot Street is currently not constructed with curbing and sidewalks along this stretch. However, other recent projects near this vicinity (Nissen, Libra Foundation, Quality Crane, Collins Insect Control, have been required to at a minimal add granite curbing, and in some cases add the sidewalk. The proposed project will require unless waived by the Planning Board granite curbs, sidewalk, and grass esplanade. Please add these to the plan until the Board has waived. ***The applicant has shown the curbing and sidewalk, the only issue is the drainage collection. The collection is functional as designed but is not typical for standard street construction. Given the uniqueness of the site***

location, we will discuss this design and recommend to Public Works that the design be accepted. However, they will have final comments.

C. The internal loading dock area to the north appears difficult to exit the site and also appears to partially block access if the vehicle were to be a standard trailer truck. What will the proposed delivery program or trucking use, and size for the commercial business is? ***Please forward all comments to Tom Errico.***

2 **Utilities**

A. The water layout and available capacity shall require written acceptance by the Portland Water District. The Fire Dept. shall comment if sprinklers will be required, at a minimum please note on the plans the nearest available fire hydrant. ***The applicant has noted the hydrant location and a letter is forth coming from the Water District. This can be a condition of approval.***

B. The sewer discussed is private, since no sewer serves this section of Presumpscot Street. The applicant is required to disclose the subsurface wastewater design system for the use (HHE-200). Given the slopes and poor soils concerns will be raised regarding surface breakouts, and actual physical placement and grading. ***The HHE-200 form has been provided and prior to building permit the formal submission for the plumbing permit will need to include this final subsurface wastewater design.***

C. Electric service is noted from a proposed pole. Central Maine Power shall verify this layout and need for relocating the pole. It appears that an existing pole can function for service but then a separate pole would be needed to light the entrance. Please confirm the need to relocate CMP poles. ***The final electric design appears to meet City requirements and should confirm with CMP prior to acquiring the building permit.***

3. Stormwater Management

A. The bottom of the site appears to be a wetland or ponding area, which is acting as a form of detention. The engineer shall review and model the site with this as a pond. The detention pond area needs to show the various stage storage levels for each design storm. The outlet control for the ponding area indicates that an existing culvert under the railroad is the only outlet available. What are the invert elevations, culvert size, and inlet condition? It appears from the survey that the culvert is the actual property corner and is not offsite. Please verify. ***Wetlands have been mapped and shown but do not exceed land area requiring a wetland alteration permit. The stormwater redesign for this pond area is acceptable.***

B. There are some inconsistencies with the stormwater calculations. It appears that the engineer is claiming more restricted surface conditions in the pre-developed condition than exists. Our opinion is that this is not accurate, and this decreases the actual rates. The engineer shall document and describe the chosen surface types selected in both conditions. This issue is to understand the actual volume and velocity of runoff and not about detention issues. We do not foresee issues about detaining since the site is adjacent to the ocean. However adequate

protection from erosion and sediment is a must and current indications are that is a current problem for this site. ***The current redesign of the stormwater outfall and quantity is acceptable. There is a very slight rate increase over the pre-developed rates, but given the proximity of the bay, and culvert size this is not of concern. The velocities and erosion protection shown are an acceptable, and provide excellent energy dissipation to eliminate outfall caused erosion.***

C. Drainage at the entrance is difficult to interpret, please show a specific detail of the entrance indicating grades and patterns to direct runoff to adjacent catch basins or ditches. ***This detail has been provided***

4. Grading, Erosion Controls, and Soil Stability

A. The site is currently the former site of a concrete washing outfall, with several inches of concrete slag. Downstream areas have been impacted by the concrete components, sediment, and aggregates through erosion and sedimentation. This plan intends to fill some areas with as much as 24 feet of fill and create a slope of 45 degrees with an elevation difference of up to 35 feet. We have several concerns regarding the placement, type, and erosion potential of these slopes. We recommend that the applicant obtain the services of a geotechnical engineer to recommend, fill material preparations of existing cover prior to placing fill, and general slope stability. We also feel given the steep slopes, that a bench drainage diversion be considered to eliminate potential for side slope scouring, especially if winter snow is plowed over the slope. ***The applicant has described their plan to bust up the slag surface and re-use or remove the concrete fill. Drainage benches have been designed to assist in the slope wash, and erosion control matting is planned for the entire sloped surface. We still recommend that during excavation and placing of fill that the site be inspected by a geotechnical engineer, whom will provide written evidence that the slope is stabilized and that the existing materials re-used, and soil placement layering methods*** *that are used are suitable to support the building and parking lot.*

B. The erosion controls (silt fence) proposed at the bottom may not be adequate. We further recommend that a supporting erosion control berm be used to further protect sediment from exiting the site. Given the exposure and steep slope we see this as a likely issue. ***Additional protection has been added.***

C. The pipe velocities that will be generated from the site will be substantial given slopes in the 20% or higher grade. We feel that the riprap outlet apron shall be designed for the 25 yr storm with supporting calculations. Our concerns are that the outlet not be blown out by the outflow energy produced from the proposed pipe. (Also the model is not showing the same elevation and slope as the plan) ***This has been previously addressed (# 3.A above).***

D. The grading of the front sidewalk needs to be adjusted to assure the swale is centered off the walk between closer to the frontage along Presumpscot Street.

5. General

A. Although the plans indicate that wetlands are not present we feel that there should be an evaluation by a persons qualified to locate wetlands, to review if the bottom area is an actual wetland. ***Adequately completed.***

B. Please check with Public Works (John Giles) for the appropriate addresses to be used for the property and 911 responses. ***This has been requested, please make it a condition of approval***

C. We feel based on past site visit that the site may have buried or dumped waste that could be deemed harmful. The applicant should provide the City evidence that an Environmental Assessment, and if necessary, evidence of cleanups or recommendations to be conducted. ***Please make it a condition that all copies of environmental studies are forwarded to the City.***

D. Does the site have blasting requirements? The proposed grade at the front cut the site down by at least 12 feet. Please review City Blasting requirements with the Fire Dept. and note on the plans if blasting is required. ***This has been addressed with notes and letter responses.***

4. Details and Notes

A. Detention Pond x-section with flood elevations.***OK***

B. Pedestrian ramp shall show flush curbing at the pavement edge. ***Not Provided***

C. Needs dumpster enclosure detail ***OK***

D. Needs typical Portland Standard granite curb section (7-inch reveal) ***OK***

E. Typical pipe trench detail shall be stone bedding per City standard details. ***OK***

F. Existing/proposed CB's shall be protected with Silt-sac during construction. ***OK***

G. Sewer/leach field design details. ***OK***

H. Guardrail details are needed. ***Not Provide or shown on plan.***

I. Pavement trench repair detail to match thickness in Presumpscot Street with limits of construction shown. ***Pavement details and x-sections are inconsistent with each other. We recommend that the access road cross-section have the same base as the parking lot. The section at the street shall have the Industrial Street standard with 5 inches total pavement. Base under the sidewalks can be reduced to 6 inches depth if desired. Also common borrow under road sub-grade for build up shall be called out per MDOT specifications (i.e. common borrow). This can be taken care of as a condition as well***

J. ***A Casco trap or floatable trap shall be installed in the last catch basin prior to outfall on both the City drainage system and private system.***

K. ***The applicant needs to show a City standard "Type E" Catch basin.***

There are several small detailed issues that need be followed up but they can be made conditions of approval. The applicant has made efforts to comply with all of our comments and the outstanding issues are merely detailed engineering issues that can be resolved and should not hold up the final approval
Please contact our office if you have any questions.

From: "Tom Errico" <terrico@wilbursmith.com>
To: "Kandi Talbot" <kcote@ci.portland.me.us>
Date: 08/12/2004 3:42:43 PM
Subject: 435 Presumpscot Street - Warehouse Building, Kevin McQuinn

Kandi--

I have reviewed the most recent submittal dated August 11, 2004 and offer the following comments.

a.. Based upon the information provided by the applicant, that the site will be regulated to single-unit trucks, I would suggest that the driveway width be reduced to 24 feet. I have reviewed access movements with a turning template for a single-unit vehicle (SU-30) and believe a 24-foot driveway width and 35-foot radii will provide adequate design features.

b.. I would like to note that trucks exiting the loading docks will not be able to exit directly to the egress driveway. Trucks will be required to make a backing maneuver. While I do not believe this to be a good design feature, low traffic activity and should limit conflicts and safety problems.

c.. Sight distance information was reviewed with the following commentary:

a.. Plans indicate that 390 feet of sight distance will be available to the right and 450 feet to the left when exiting the proposed driveway.

b.. According to the City of Portland Technical and Design Standards and Guidelines, for a road with a posted speed limit of 35mph, the recommended sight distance is 513 feet. It does note that a reduced minimum standard may be applied if warranted by a traffic study. The reduced sight distance is 359 feet.

c.. MaineDOT has sight distance requirements for entrances like the one proposed. For a road with a posted speed limit of 35mph, 305 feet of sight is required. If 30% or more of the projected traffic to use the proposed entrance will be larger vehicles, 455 feet of sight distance is required.

d.. According to the applicant the likely tenant(s) will include businesses that primarily generate passenger vehicles and pick-up trucks with the exception of truck deliveries occurring 2 to 3 time per week. Based upon the fact that limited truck generation is anticipated, it is my professional opinion that the reduced sight distance requirement is applicable, and accordingly adequate sight distance is anticipated.

If you have any questions of need additional information, please contact me.

Thomas A. Errico, P.E.
Senior Transportation Engineer
Wilbur Smith Associates
59 Middle Street
Portland, Maine 04101
(207) 871-1785
(207) 871-5825 fax

CC: "Katherine Earley" <KAS@ci.portland.me.us>, "Lucie Cote" <ljc@ci.portland.me.us>

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04P104

TO: **Kandi Talbot – Planner**

FROM: **Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.**

RE: **Approx 435 Presumpscot Street – Warehouse Building, Kevin McQuinn**

DATE: **July 12, 2004**

Sebago Technics has completed its review of the submitted materials for the proposed commercial development at the location of approximately 435 Presumpscot Street. Based on a review of the submitted materials, we feel that several of the concerns require attention. The following are our concerns that should be addressed by the applicant:

1. **Road Access & Circulation**

   A. The access drive entrance as proposed appears to wider than necessary and excessive based on the internal circulation layout. Can the width be narrowed to accommodate the necessary turning radius needed at the property line (prefer 24 feet)? The current layout requires a 56 feet opening at the ROW/property line and a width of 120 feet at the actual street line. The turning radius appears to support a large trailer truck, however the internal circulation cannot support such movements. Based on the layouts the applicant shall either document intended trucking use or revise either the entrance or internal parking/access to accommodate the intended use.

   B. Presumpscot Street is currently not constructed with curbing and sidewalks along this stretch. However, other recent projects near this vicinity (Nissen, Libra Foundation, Quality Crane, Collins Insect Control, have been required to at a minimal add granite curbing, and in some cases add the sidewalk. The proposed project will require unless waived by the Planning Board granite curbs, sidewalk, and grass esplanade. Please add these to the plan until the Board has waived.

   C. The internal loading dock area to the north appears difficult to exit the site and also appears to partially block access if the vehicle were to be a standard trailer truck. What will the proposed delivery program or trucking use, and size for the commercial business be?

2 Utilities

A. The water layout and available capacity shall require written acceptance by the Portland Water District. The Fire Dept. shall comment if sprinklers will be required, at a minimum please note on the plans the nearest available fire hydrant

B. The sewer discussed is private, since no sewer serves this section of Presumpscot Street. The applicant is required to disclose the subsurface wastewater design system for the use (HHE-200). Given the slopes and poor soils concerns will be raised regarding surface breakouts, and actual physical placement and grading.

C. Electric service is noted from a proposed pole. Central Maine Power shall verify this layout and need for relocating the pole. It appears that an existing pole can function for service but then a separate pole would be needed to light the entrance. Please confirm the need to relocate CMP poles.

3. Stormwater Management

A. The bottom of the site appears to be a wetland or ponding area, which is acting as a form of detention. The engineer shall review and model the site with this as a pond. The detention pond area needs to show the various stage storage levels for each design storm. The outlet control for the ponding area indicates that an existing culvert under the railroad is the only outlet available. What are the invert elevations, culvert size, and inlet condition? It appears from the survey that the culvert is the actual property corner and is not offsite. Please verify.

B. There are some inconsistencies with the stormwater calculations. It appears that the engineer is claiming more restricted surface conditions in the pre-developed condition than exists. Our opinion is that this is not accurate, and this decreases the actual rates. The engineer shall document and describe the chosen surface types selected in both conditions. This issue is to understand the actual volume and velocity of runoff and not about detention issues. We do not foresee issues about detaining since the site is adjacent to the ocean. However adequate protection from erosion and sediment is a must and current indications are that is a current problem for this site.

C. Drainage at the entrance is difficult to interpret, please show a specific detail of the entrance indicating grades and patterns to direct runoff to adjacent catch basins or ditches.

4. Grading, Erosion Controls, and Soil Stability

A. The site is currently the former site of a concrete washing outfall, with several inches of concrete slag. Downstream areas have been impacted by the concrete components, sediment, and aggregates through erosion and sedimentation. This plan intends to fill some areas with as much as 24 feet of fill and create a slope of 45 degrees with an elevation difference of up to 35 feet. We have several concerns regarding the placement, type, and erosion potential of these slopes. We recommend that the applicant obtain the services of a geotechnical engineer to recommend, fill material preparations of existing cover prior to placing fill, and general slope stability. We also feel given the steep slopes, that a bench

drainage diversion be considered to eliminate potential for side slope scouring, especially if winter snow is plowed over the slope.

B. The erosion controls (silt fence) proposed at the bottom may not be adequate. We further recommend that a supporting erosion control berm be used to further protect sediment from exiting the site. Given the exposure and steep slope we see this as a likely issue.

C. The pipe velocities that will be generated from the site will be substantial given slopes in the 20% or higher grade. We feel that the riprap outlet apron shall be designed for the 25 yr storm with supporting calculations. Our concerns are that the outlet not be blown out by the outflow energy produced from the proposed pipe. (Also the model is not showing the same elevation and slope as the plan)

5. **General**

A. Although the plans indicate that wetlands are not present we feel that there should be an evaluation by a persons qualified to locate wetlands, to review if the bottom area is an actual wetland.

B. Please check with Public Works (John Giles) for the appropriate addresses to be used for the property and 911 responses.

C. We feel based on past site visit that the site may have buried or dumped waste that could be deemed harmful. The applicant should provide the City evidence that an Environmental Assessment, and if necessary, evidence of cleanups or recommendations to be conducted.

D. Does the site have blasting requirements? The proposed grade at the front cut the site down by at least 12 feet. Please review City Blasting requirements with the Fire Dept. and note on the plans if blasting is required.

4. **Details and Notes**

The following details and notes need to be added or revised:

A. Detention Pond x-section with flood elevations.
B. Pedestrian ramp shall show flush curbing at the pavement edge of street.
C. Needs dumpster enclosure detail
D. Needs typical Portland Standard granite curb section (7-inch reveal)
E. Typical pipe trench detail shall be stone bedding per City standard details.
F. Existing/proposed CB's shall be protected with Silt-sac during construction.
G. Sewer/leachfield design details.
H. Guardrail details are needed.
I. Pavement trench repair detail to match thickness in Presumpscot Street with limits of construction shown.

There are several issues that must be followed up before approval can be recommended. If a meeting is required we will be available by phone or in person to discuss. Please contact our office if you have any questions.

JRS/jrs

Ross A. Cudlitz, PE
PO Box 794
So. Freeport, Maine 04078

Engineering Assistance & Design (**EA&D**), Inc.
Phone/Fax: 207 - 846 - 0839
Cell / Voice Mail: 207-838 - 7663

August 11, 2004

Ms. Kandice Talbot, Planner
City of Portland
Department of Planning & Development
389 Congress St.
Portland, Maine 04101

RE: Proposed Warehouse Building Presumpscott Street
ID #2004-0104, CBL #419-A-007

Dear Kandice:

On behalf of my client Kevin McQuinn, and pursuant to our meeting last week, we respectfully submit the subject project revisions to the Planning Staff for their review and final approval.

We have enclosed 6 copies of all necessary information, plans and reports for your use.

Unfortunately the e-mail you sent me with your letter dated 07/0104 did not download properly; therefore I am presenting the questions and responses in order and not in your format.

Sincerely,

Ross A. Cudlitz, PE
EA & D, Inc.

Cc: Kevin McQuinn, TBR

Responses to this letter left in its original format follow the question.

TO: **Kandi Talbot – Planner**
FROM: **Jim Seymour – Development Review Coordinator, Sebago Technics, Inc.**
RE: **Approx 435 Presumpscot Street – Warehouse Building, Kevin McQuinn**
DATE: **July 12, 2004**

Sebago Technics has completed its review of the submitted materials for the proposed commercial development at the location of approximately 435 Presumpscot Street. Based on a review of the submitted materials, we feel that several of the concerns require attention. The following are our concerns that should be addressed by the applicant:

1. **Road Access & Circulation**

A. *The access drive entrance as proposed appears to wider than necessary and excessive based on the internal circulation layout. Can the width be narrowed to accommodate the necessary turning radius needed at the property line (prefer 24 feet)? The current layout requires a 56 feet opening at the ROW/property line and a width of 120 feet at the actual street line. The turning radius appears to support a large trailer truck, however the internal circulation cannot support such movements. Based on the layouts the applicant shall either document intended trucking use or revise either the entrance or internal parking/access to accommodate the intended use.*

The Applicant has decided to limit tenant use to vehicles that are fixed body commercial vehicles and do not exceed the size of a standard school bus template (30 ft.) The radius at the entrance has been revised to be 35 feet. This is chosen to assure that vehicles exiting can make the right hand turn without crossing the middle of Presumpscott Street.

B. *Presumpscott Street is currently not constructed with curbing and sidewalks along this stretch. However, other recent projects near this vicinity (Nissen, Libra Foundation, Quality Crane, Collins Insect Control, have been required to at a minimal add granite curbing, and in some cases add the sidewalk. The proposed project will require unless waived by the Planning Board granite curbs, sidewalk, and grass esplanade. Please add these to the plan until the Board has waived.*

See item 5 in previous response to Kandice Talbot letter.

C. *The internal loading dock area to the north appears difficult to exit the site and also appears to partially block access if the vehicle were to be a standard trailer truck. What will the proposed delivery program or trucking use, and size for the commercial business be?*

This building and site is intended for warehousing and distribution of products that are stored in side and delivered and redistributed in box/panel fixed bed vehicles.

2 **Utilities**

A. *The water layout and available capacity shall require written acceptance by the Portland Water District. The Fire Dept. shall comment if sprinklers will be required, at a minimum please note on the plans the nearest available fire hydrant.*

The fire hydrant is on the plans and located ~180 feet north of the entrance on the same side of the street. It is the Applicants intent to keep the building size at that that is just under the sprinkler requirement.

B. *The sewer discussed is private, since no sewer serves this section of Presumpscot Street. The applicant is required to disclose the subsurface wastewater design system for the use (HHE-200). Given the slopes and poor soils concerns will be raised regarding surface breakouts, and actual physical placement and grading.*

Attached isHHE-200 design by Scott McLaren, SE #346

C. *Electric service is noted from a proposed pole. Central Maine Power shall verify this layout and need for relocating the pole. It appears that an existing pole can function for service but then a separate pole would be needed to light the entrance. Please confirm the need to relocate CMP poles.*

CMP Pole #52 must be moved regardless of the entrance width. CMP and the Applicant can work out which is best whether to move the pole north or south and were to put the street light, on separate pole or combined with the site service.

3. **Stormwater Management**

A. *The bottom of the site appears to be a wetland or ponding area, which is acting as a form of detention. The engineer shall review and model the site with this as a pond. The detention pond area needs to show the various stage storage levels for each design storm. The outlet control for the ponding area indicates that an existing culvert under the railroad is the only outlet available. What are the invert elevations, culvert size, and inlet condition? It appears from the survey that the culvert is the actual property corner and is not offsite. Please verify.*

The stormwater model has been revised to represent a wetland/ponding area at the northeast corner of the site. Scott McLaren delineated the wetland based on the three Army Corp criteria (hydrology, vegetation and hydric soils). The culvert at the northeast corner of the site is the controlling structure for this site and other off site watersheds to the north. What we are demonstrating is that our site has no impacts on that structure as it relates to our property line. In the end result the 25-year event has an insignificant increase of 0.19 CFS that also passes through the culvert ~6 minutes earlier than the rest of the watershed feeding it. It is my conclusion that because we be the peak ever so slightly, have an insignificant

change in quantity, and are directly tributary to the bay, that the project is acceptable and detention or attenuation is neither warranted nor practical.

B. *There are some inconsistencies with the stormwater calculations. It appears that the engineer is claiming more restricted surface conditions in the pre-developed condition than exists. Our opinion is that this is not accurate, and this decreases the actual rates. The engineer shall document and describe the chosen surface types selected in both conditions. This issue is to understand the actual volume and velocity of runoff and not about detention issues. We do not foresee issues about detaining since the site is adjacent to the ocean. However adequate protection from erosion and sediment is a must and current indications are that is a current problem for this site.*

The model has been revised as aforementioned and as per my meeting with Jim Seymour last week.

C. *Drainage at the entrance is difficult to interpret, please show a specific detail of the entrance indicating grades and patterns to direct runoff to adjacent catch basins or ditches.*

Entrance characteristics have been reshot in the field. The drawings now reflect accurate elevations and grades. The Presumpscott street drainage has been revamped to include, storm drains, basins, and a field outlet to the north of the property that discharges into the original location.

4. **Grading, Erosion Controls, and Soil Stability**

A. *The site is currently the former site of a concrete washing outfall, with several inches of concrete slag. Downstream areas have been impacted by the concrete components, sediment, and aggregates through erosion and sedimentation. This plan intends to fill some areas with as much as 24 feet of fill and create a slope of 45 degrees with an elevation difference of up to 35 feet. We have several concerns regarding the placement, type, and erosion potential of these slopes. We recommend that the applicant obtain the services of a geotechnical engineer to recommend, fill material preparations of existing cover prior to placing fill, and general slope stability. We also feel given the steep slopes, that a bench drainage diversion be considered to eliminate potential for side slope scouring, especially if winter snow is plowed over the slope.*

It is the intention of the Applicants contractor and me that the concrete waste area will be demolished by blasting and or excavation down to native material. If the spoils can be ground up and used as suitable fill they will be. Back fill of the site is planned in stages similar to structural back fill for buildings and bridges; that being stable material installed in 12" lifts and compacted to 95% proctor density. We have no intention of creating a cold interface that could lead to a slope failure, and agree with your comments.

Two diversion swales have been contoured into the grassed slope below the parking lot, thus breaking up the long sheet flow into several smaller areas.

B. *The erosion controls (silt fence) proposed at the bottom may not be adequate. We further recommend that a supporting erosion control berm be used to further protect sediment from exiting the site. Given the exposure and steep slope we see this as a likely issue.*

Drawings have been revised to require an erosion control berm in conjunction with the silt fence at the bottom of the slope.

C. *The pipe velocities that will be generated from the site will be substantial given slopes in the 20% or higher grade. We feel that the riprap outlet apron shall be designed for the 25 yr storm with supporting calculations. Our concerns are that the outlet not be blown out by the outflow energy produced from the proposed pipe. (Also the model is not showing the same elevation and slope as the plan)*

The stone lined plunge poll has been replaced with a 6 foot diameter catch basin sump for energy discipitation. The inside of the basin is lined with a stainless steel plate opposite the inflow to prevent corrosive action on the concrete. The sump has holes in the bottom to relieve any upward pressure and to allow it to drain out. Discharge will enter the sump and then flow out over a stable rock apron.

5. **General**

A. *Although the plans indicate that wetlands are not present we feel that there should be an evaluation by a persons qualified to locate wetlands, to review if the bottom area is an actual wetland.*

Done as aforementioned,

B. *Please check with Public Works (John Giles) for the appropriate addresses to be used for the property and 911 responses.*

A letter to John Giles has been enclosed. I also sent mr. Giles the electronic drawing as he requested.

C. *We feel based on past site visit that the site may have buried or dumped waste that could be deemed harmful. The applicant should provide the City evidence that an Environmental Assessment, and if necessary, evidence of cleanups or recommendations to be conducted.*

This was discussed at the meeting with staff.

D. *Does the site have blasting requirements? The proposed grade at the front cut the site down by at least 12 feet. Please review City Blasting requirements with the Fire Dept. and note on the plans if blasting is required.*

No building permit will be applied for until the proper blasting survey and documents are presented. We have no intention of designing the building foundation until we know what the native material is under the waste concrete as well.

4. **Details and Notes**

The following details and notes need to be added or revised:

All of the following have been addressed in the aforementioned responses and documentation with the exception of Items H and I.

A. Detention Pond x-section with flood elevations.
B. Pedestrian ramp shall show flush curbing at the pavement edge of street.
C. Needs dumpster enclosure detail
D. Needs typical Portland Standard granite curb section (7-inch reveal)
E. Typical pipe trench detail shall be stone bedding per City standard details.
F. Existing/proposed CB's shall be protected with Silt-sac during construction.
G. Sewer/leachfield design details.

The Engineer has every intention of complying with the two items below. The truth of the matter is that I ran out of time due to the thunderstorm this AM and other technical difficulties with plotters and equipment. I ask that the Staff condition these two items. They can be rectified on 08/12/04 and a set of plans showing such can be delivered by the end of the day.

H. Guardrail details are needed.
I. Pavement trench repair detail to match thickness in Presumpscot Street with limits of construction shown.

There are several issues that must be followed up before approval can be recommended. If a meeting is required we will be available by phone or in person to discuss. Please contact our office if you have any questions.

JRS/jrs

PURCHASE AND SALE AGREEMENT

THIS AGREEMENT for the purchase and sale of real estate made as of the 18th day of October, 2002 by and between the **CITY OF PORTLAND**, a body politic and corporate with a place of business at 389 Congress Street, Portland, Maine 04101 (hereinafter referred to as "**CITY**"), and _____ **TURNER BARKER REALTY, INC.** a Maine corporation with a place of business at 225 Commercial Street, Portland, in Cumberland County, Maine (hereinafter referred to as "**BUYER**").

WITNESSETH:

WHEREAS, CITY did issue a Request for Proposals, RFP #7302, entitled "Sale and Re-Use of the Property located at 469 Presumpscot Street; Chart, Block and Lot numbers: 419-A-1; 419A-A-7; 418A-C-1(hereinafter "Property") and

WHEREAS, BUYER submitted a proposal dated June 5, 2002 in response to said Request for Proposals; and

WHEREAS, CITY has determined that **BUYER**'s Proposal best suits the development of the Property;

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the parties intend to be legally bound as follows:

1. **SALE.**

CITY agrees to sell the Property as shown in Attachment 1 to Attachment A attached hereto and incorporated herein, to the **BUYER**, and **BUYER** agrees to purchase the Property in accordance with the provisions hereof.

2. **CONSIDERATION.**

The purchase price for the Property shall be Fifteen Thousand Dollars ($15,000.00), which amount shall be paid at the closing set forth in Paragraph 6 hereof but subject to the terms of Paragraph 7 hereof.

3. **TITLE.**

Title to the Property shall be conveyed by Quitclaim Deed and shall be free of CITY liens or other liens which may affect the **BUYER**'s intended use of the Property. In the event that there is a defect in title, **BUYER** shall so notify **CITY** and **CITY** shall have a reasonable time to cure said title defect. If the defect cannot be cured by **CITY** within a reasonable time, **CITY** may cancel this Agreement at its option and shall return **BUYER**'s earnest money deposit.

4. **POSSESSION.**

Full possession of the Property will be given at the transfer of title.

5. **RISK OF LOSS.**

The risk of loss or damage to the Property by fire or otherwise, until transfer of title hereunder, is assumed by **CITY**. The Property is to be delivered in substantially the same condition as of the date of this Agreement, subject to the right of **CITY** to remove certain property as set forth in said Request for Proposal.

6. **CLOSING.**

The closing shall be held at Portland City Hall, at a time mutually agreeable to the parties within thirty (30) days of the completion of all conditions to closing described in paragraph 7 of this Agreement, but in any event no later than Three Hundred and Sixty Five (365) days from the date of this Agreement first written above.

7. **CONDITIONS TO CLOSING.**

a. **BUYER** shall obtain all necessary federal, State and City approvals for the construction of a commercial/industrial flex space building of a square footage amount of eight thousand five hundred (8,500) feet and accompanying site improvements as described in **BUYER**'s aforesaid Proposal (hereinafter collectively, "Project") which is hereby incorporated and made part of this agreement (see Attachment B);

b. **BUYER** shall provide proof of financial commitments and/or financial information acceptable to **CITY** demonstrating **BUYER**'s ability to construct the Project within six months of the date of this Agreement;

c. **BUYER** shall provide proof of application for a building permit;

8. **CONDITIONS WHICH SURVIVE THE CLOSING.**

CITY makes no warranties whatsoever with respect to the environmental conditions on the Property. **BUYER** accepts the Property as is, where is. **BUYER** agrees that it shall be responsible for any environmental remediation which may be required for its development of the Property. **BUYER** shall defend and indemnify **CITY** against any and all environmental claims associated with Property to the extent those claims were not caused in whole or in part by **CITY**, its agents, officials or employees.

9. **BINDING EFFECT.**

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, administrators, successors and assigns.

10. **ENTIRE AGREEMENT.**

This Agreement represents the entire and complete Agreement and understanding between the parties and supersedes any prior Agreement or understanding, written or oral, between the parties with respect to the acquisition or exchange of the Property.

11. **HEADINGS AND CAPTIONS.**

The headings and captions appearing herein are for the convenience of reference only and shall not in any way affect the substantive provisions hereof.

12. **GOVERNING LAW.**

This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Maine.

13. **NOTICE.**

Any notice required or permitted under this Agreement shall be deemed sufficient if mailed with first class postage affixed or delivered in person to:

FOR THE CITY:	City of Portland ATTN: CITY MANAGER 389 Congress Street Portland, ME 04101
With a copy to:	Lee Urban, Director of Economic Development
FOR THE BUYER:	Tuner Barker Realty, Inc. 225 Commercial Street Portland, ME 04101

14. **DEPOSIT.**

BUYER has paid to **CITY** the sum of One Thousand Dollars ($1,000.00) as a deposit on said Property. This amount shall be credited toward the final purchase price. In the event that **BUYER** does not complete the purchase within thirty (30) days of the completion of the requirements described in Paragraph 7 of this Agreement, the deposit shall be retained by the **CITY** as liquidated damages.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals on the day and year first above written.

CITY OF PORTLAND

WITNESS

By: _____
Joseph E. Gray
Its City Manager

TURNER BARKER REALTY, INC.

WITNESS

By: _____

Printed name: G. Kevin McQueen

Its: President

C:\OFFICE\CONTRACT\P&SAGREE\Turner p&s.doc

APPROVED AS TO FORM:

_____
CORPORATION COUNSEL'S OFFICE

CASCO BAY ENGINEERING

CIVIL & STRUCTURAL ENGINEERING
www.cascobayengineering.com

90 Hodsdon Rd., Pownal, ME 04069 Phone 207.688.4630 Fax 207.688.4986

July 26, 2004

Mr. Ross Cudlitz, PE
Engineering Assistance & Design, Inc.
PO Box 794
South Freeport, ME 04078

RE: Proposed Warehouse Building, Presumpscot Street, Portland, ME
Project No. 04018

Dear Ross:

As requested, Casco Bay Engineering is providing information regarding building materials for the above referenced project. The proposed building materials are as follows:

- The building will consist of a pre-engineered metal building. This will consists of steel moment frames for the main structure with diagonal cross bracing for lateral support and steel girts to support the exterior siding.
- The building will have 8" thick concrete foundation walls with footings with a slab on grade for the floor system.
- The roof is planned to be a rubber EPDM flat (minimally sloped) roof.
- The exterior façade will be a split-faced cmu block up to 2'-8" above grade around the building and metal siding from the split faced block up to the roof eaves.

Please contact us if you have any questions or concerns.

Sincerely,

Eric Dube
Casco Bay Engineering

Steve Doten Cell (233-9003)
Doten Construction, Inc.
175 S Freeport Rd
Freeport, ME 04032
Phone (207) 865-4412 Fax (207) 865-6373

Turner Barker Realty
Attn. Mark Primeau

July 26, 2004

Presumscot Street Property

Building will be a pre-engineered type to be designed

Building Materials:

1. Footings: Concrete with re-bar, to be designed by others.
2. Frost Wall: Concrete with re-bar, to be designed by others.
3. 6" Slab: Concrete with re-bar, to be designed by others.
4. Walls: First 32" split block, pre-engineered panel above as shown on plans.
5. Structural: Pre-engineered beams, columns, perlams, decking, all engineered by others.
6. Glazing: From Cumberland County Glass, themapane uni-tube frames
7. Exterior Doors: Metal doors with egress in mind.
8. Rubber Roof
9. Interior Rooms: Metals studs, 5/8" sheetrock, suspended ceilings, covebase, metal doors, medium grade carpeting. All doors are 3-0' x 7-0' layout to be determined.

Ross A. Cudlitz, PE
10 North Road
Yarmouth, Maine 04096

Engineering Assistance & Design, Inc.
Phone/Fax: 207 - 846 - 0839
Cell / Voice Mail: 207-838 - 7663

August 4, 2004

Mr. Jim Pandiscio
Portland Water District Engineering Department
PO Box 3553-225
Douglass Street
Portland, Maine 04104

RE: Request of Letter of Capacity for Presumpscott Street Development
Chart 419/Lot 1 & Chart 419/Block A/Lot 7

Dear Jim:

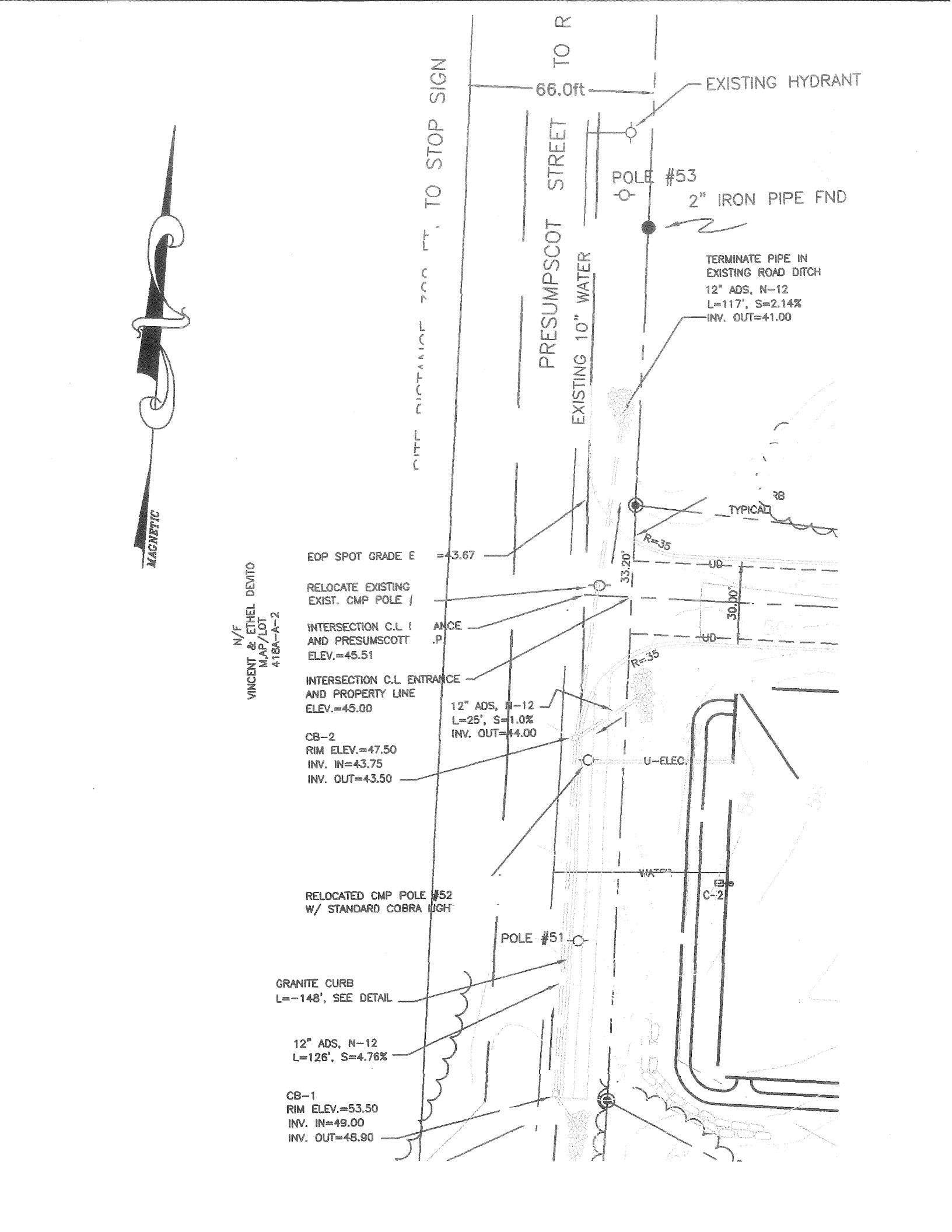
Kevin McQuinn is proposing a warehouse/distribution facility on the subject combined lots. The parcel is the site of the old Dragon concrete dump located on the east side of Presumpscott Street, approximately 300 feet south of the Route 9 intersection. There exists a 10 inch water main on the project side of the street and a hydrant just south of the same intersection on the project side as well. Currently it is the intention of the Applicant to keep the building size just under that that requires sprinkler systems.

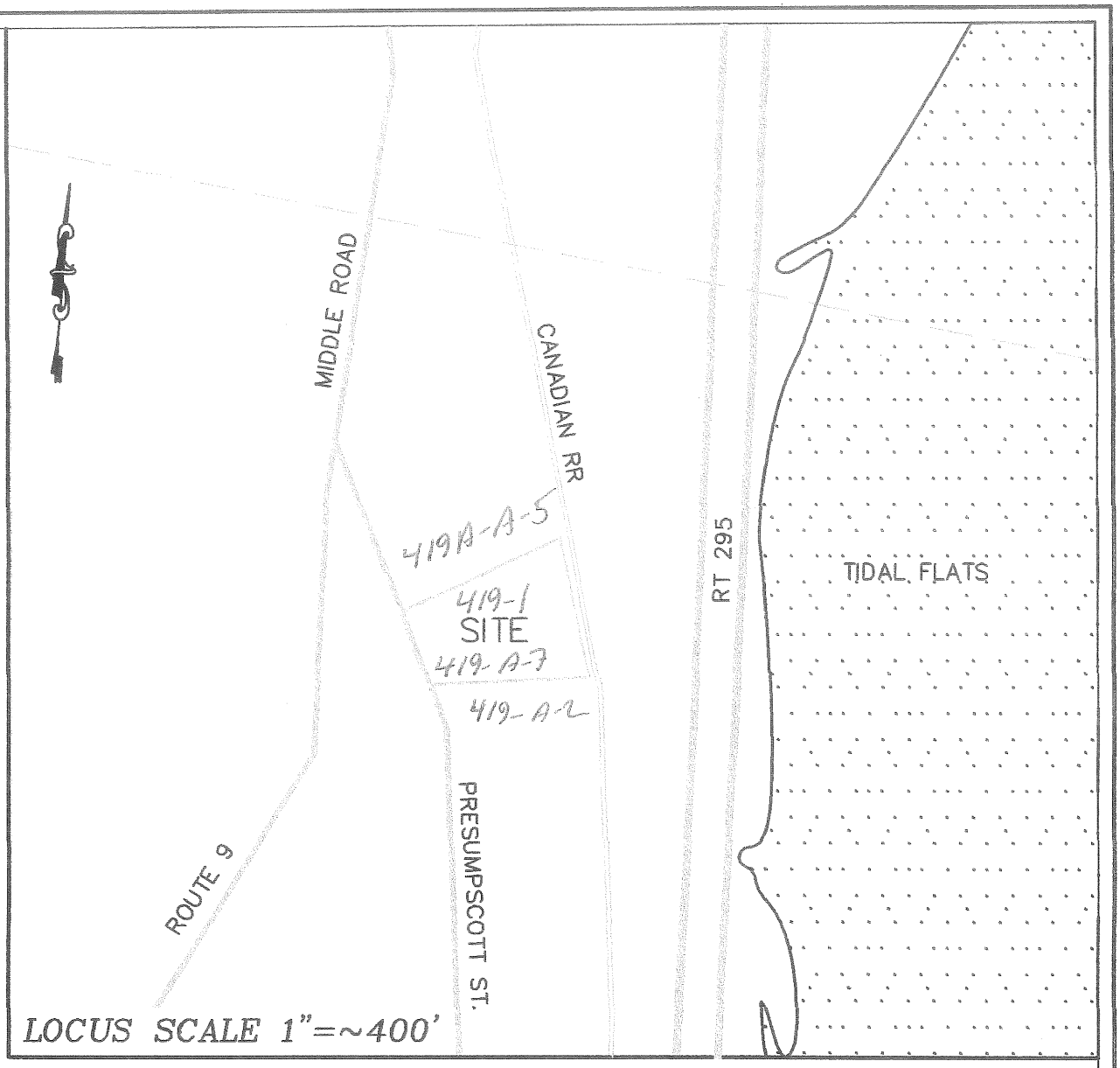
We are proposing to tie into the 10" water main as shown on the enclosed preliminary plan. We estimate the water usage to be 210 gallons per day {max. of 14 employees @15 gal/day/person]. Would you please provide me with a letter indicating availability of water service in at this location to satisfy the City of Portland Planning Staff review. Thank you for your time.

Sincerely,

Ross A. Cudlitz, PE
EA&D, Inc.

Cc: Kevin McQuinn, Applicant


MAGNETIC
N/F
VINCENT & ETHEL DEVITO
MAP/LOT
418A-A-2
SITE DISTANCE 250 FT. TO STOP SIGN
TO R
66.0ft
EXISTING HYDRANT
PRESUMPSCOT STREET
EXISTING 10" WATER
POLE #53
2" IRON PIPE FND
TERMINATE PIPE IN
EXISTING ROAD DITCH
12" ADS, N-12
L=117', S=2.14%
INV. OUT=41.00
TYPICAL
R=35
33.20'
UP
30.00'
UD
EOP SPOT GRADE E =43.67
RELOCATE EXISTING
EXIST. CMP POLE #
INTERSECTION C.L
AND PRESUMSCOTT
ELEV.=45.51
INTERSECTION C.L ENTRANCE
AND PROPERTY LINE
ELEV.=45.00
12" ADS, N-12
L=25', S=1.0%
INV. OUT=44.00
CB-2
RIM ELEV.=47.50
INV. IN=43.75
INV. OUT=43.50
U-ELEC.
C-2
RELOCATED CMP POLE #52
W/ STANDARD COBRA HIGH
POLE #51
GRANITE CURB
L=-148', SEE DETAIL
12" ADS, N-12
L=126', S=4.76%
CB-1
RIM ELEV.=53.50
INV. IN=49.00
INV. OUT=48.90



GEN

1.

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3. C

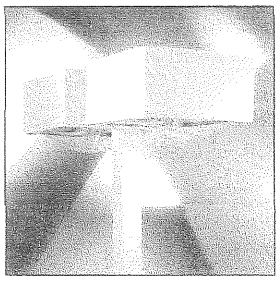
TOP(

PROJECT _____

FIXTURE TYPE _____

CATALOG NUMBER _____

Design SL-16/21/27



DISTRIBUTIONS

TYPE S	Square (Horiz. Lamp)	TYPE 3	Asymmetrical (Horiz. Lamp)
TYPE VS	Square (Vertical Lamp)	TYPE F	Forward Throw (Horiz. Lamp)
TYPE VR	Rectangular (Vert. Lamp)	TYPE V2	Asymmetrical (Vert. Lamp)
TYPE 1	Asymmetrical (Horiz. Lamp)	TYPE V	Symmetrical (Vert. Lamp)

ORDERING EXAMPLE SL-21-VS-HPS-400-CL-DB-120-CWB-FD-CL80 x 360

DESIGN	DISTRIBUTION	HPS	MH = Std. Metal Halide MHP = Pulse Start MH/MHP	LAMP	CL = Convex glass lens FL = Flat glass lens LENS
SL-16	S	70/100/150	70/100/150/175/200*	ED-17	FL
	1	70/100/150	70/100/150/175/200*	ED-17	FL
	3	70/100/150	70/100/150/175/200*	ED-17	FL
	F	70/100/150	70/100/150/175/200*	ED-17	FL
	VS	70/100/150	70/100/150/175/200*	ED-17	FL
SL-21	VS	250/400		ED-18	CL
	VS		250/400/450*	BT-28/BT-37	CL
	VS		400 Flat Lens	BT-28	FL
	V2	250/400		ED-18	CL
	V2		250/400/450*	BT-28/BT-37	CL
	S	250/400		ED-18	FL
	S		250/400	BT-28/BT-37	FL
	1	250/400		ED-18	FL
	1		250/400	BT-28/BT-37	FL
	3	250/400		ED-18	FL
	3		250/400	BT-28/BT-37	FL
	F	250/400		ED-18	FL
	F		250/400	BT-28/BT-37	FL
SL-27	V or VS	400		ED-18	CL or FL
	V or VS		400/450*	BT-37	CL or FL
	V or VS	750		BT-37	CL or FL
	V or VS		1000	BT-56	CL
	V or VS		1000 Flat Lens	BT-37	FL
	V or VS	1000 Flat Lens		BT-37	FL
	V or VS	1000		E-25	CL
	VR		1000	BT-56	CL
	VR		1000 Flat Lens	BT-37	FL
	VR	1000		E-25	CL
	F	1000		E-25	FL
	F		1000	BT-56	FL

* Available only in Pulse Start 70,100,150,200,450 MHP = Pulse Start

REQUIRED CHOICES

FINISH

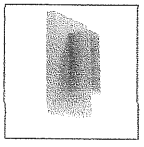
BK	Black	
BW	White	
DB	Bronze	
SL	Silver	
FG	Gray	
CC	Custom	Specify Color

VOLTAGES

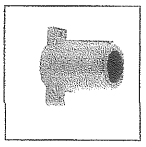
120
208
240
277
347
480

MOUNTINGS

SA	Standard Arm (2.5")
LA	Long Arm (13.5")
CWB	Cast Wall Bracket
ESF	External Slip Fitter (for 2-3/8" O.D. Pipe)



CWB



ESF

OPTIONAL CHOICES

ELECTRICAL OPTIONS

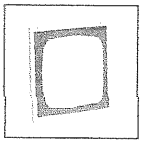
FD	Single Fusing 120V/277V
FDD	Double Fusing 480V
FDFD	Double Fusing 208V/240V
FDC	Single Fusing 347V
PCT	Photo Cell and Receptacle

OPTICAL OPTIONS

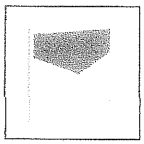
LX	Vandal Resistant Lens (SL-21 & SL-16 only)
CL	Convex glass for SL-21 only (Standard - acrylic)

LIGHT TRESPASS OPTIONS

CL80x360	Internal 80° Vert. x 360° Horiz. Lens Shielding
CL60x135	Internal 60° Vert. x 135° Horiz. Lens Shielding
HSS	House Side Shield (75° Standard) (external)
FL	Flat clear glass lens (see ordering information for availability)



CL80x360 - Internal 80° Vert. x 360° Horiz. Lens Shielding



CL60x135 - Internal 60° Vert. x 135° Horiz. Lens Shielding

There is no substitute for

Quality Lighting.

A Division of JJI Lighting Group Inc.

11500 MELROSE AVE. FRANKLIN PARK, IL 60131 - Phone (847) 451-0040 - FAX (847) 451-6768
e-mail: quality@mcs.com - www.qualitylighting.com

SPECIFICATIONS

HOUSING One piece highly tooled formed aluminum, with integral reinforcements and concealed fasteners and welds. The fixtures are C-UL & UL listed "suitable for wet locations."

LENS AND LENS FRAME Clear, heat and impact resistant tempered glass lens, secured in an extruded aluminum door frame. 21" & 27" *fixtures with VS, V and VR distribution use square convex lens (unless otherwise noted), all others use square flat lens.* Note: Drop acrylic lens (DA) is standard on 21" vertically lamped units.

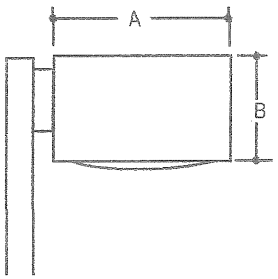
GASKETING The lens is fully gasketed to the lens frame with closed cell neoprene. The lens door frame is gasketed to the housing with a dense silicone extruded gasket featuring twin flexible extensions to provide a double seal.

INSTALLATION Design SL housings are provided with a cast aluminum 2.5" arm for mounting a single fixture or twin fixtures at 180°. A 13.5" long extruded aluminum arm (LA) is supplied for other mounting configurations.

REFLECTOR Reflector systems can be easily rotated in 90° increments or interchanged without the use of tools. Design SL is available with the following reflector systems: 1) Type S (16" & 21") — square distribution; 2) Type VS — square distribution; 3) Type VR (27") — rectangular distribution; 4) Type I (16" & 21") — asymmetrical distribution; 5) Type III — asymmetrical distribution; 6) Type F — forward throw distribution; 7) Type 2 —asymmetrical distribution; 8) Type V — symmetrical distribution.

BALLAST All CWA ballasts (+10% to -10% lamp power regulation) shall be tray mounted and supplied with quick-disconnects. Ballasts are rated for -20° F operation. All non CWA ballasts shall be HPF.

FINISH Polyester powder coat, electrostatically applied, which is preceded by a five step pre-treatment process including an iron phosphate priming stage for superior coating adhesion. This process meets or exceeds all ASTM testing requirements, including those for 1,000 - hour salt spray endurance testing.



DIMENSIONS

	16"	21"	27"
A	16.00" sq. (406.4 mm)	21.00" sq. (533.4 mm)	27.00" sq. (685.8mm)
B	9.50" (241.3 mm)	11.00" (279.4 mm)	15.00" (381.0 mm)

EFFECTIVE PROJECTED AREA (EPA)

	16"	21"	27"
1 Fixture	1.36 sq. ft. (.13M²)	2.08 sq. ft. (.19M²)	3.65 sq. ft. (.35M²)
2 Fixtures	2.72 sq. ft. (.26M²)	4.16 sq. ft. (.39M²)	7.30 sq. ft. (.70M²)
3 @ 90°	4.00 sq. ft. (.38M²)	6.24 sq. ft. (.59M²)	11.00 sq. ft. (1.05M²)
3 @ 120°	4.50 sq. ft. (.43M²)	6.75 sq. ft. (.64M²)	11.50 sq. ft. (1.1M²)
4 @ 90°	4.50 sq. ft. (.43M²)	6.75 sq. ft. (.64M²)	11.50 sq. ft. (1.1M²)

WEIGHT

16"	21"	27"
45 lbs. (20.45 kgs)	54 lbs. (24.54 kgs)	77 lbs. (35 kgs)

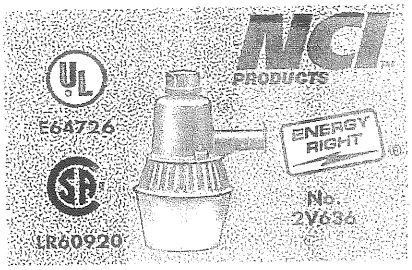
There is no substitute for

Quality Lighting™

A Division of JJI Lighting Group Inc.

11500 MELROSE AVE. FRANKLIN PARK, IL 60131 - Phone (847) 451-0040 - FAX (847) 451-6768
e-mail: quality@mcs.com - www.qualitylighting.com

70 & 175W AREA FIXTURES



Applications. Perimeter lighting, parking areas, rural homes, farm yards, loading platforms, and general commercial security lighting.

Factory pre-wired fixture, ready to install. Includes die-cast aluminum housing, twist-lock photoelectric cell, 5" mounting arm, and mounting hardware.

Plug-in twist-lock photoelectric cell. Automatically turns lights On at dusk and Off at dawn.

One-piece acrylic prismatic refractor and aluminum reflector screws directly into housing. Open at bottom for easy maintenance.

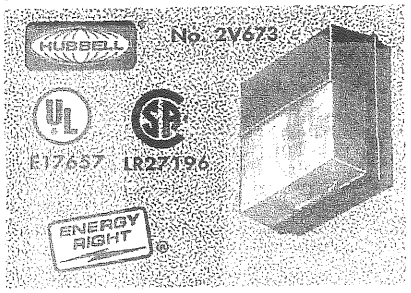
High reactance, 120V, 60 Hz normal power factor ballast starts lamp to -20°F.

Lamp included. Use replacement lamp listed below or see Index under Lamps, HID. No. 2V636 takes a mogul base lamp and 2V866 takes a medium base lamp.

UL Listed (E64726), CSA Certified (LR60920).

Lamp Type	Watts	Suggested Lamp Stock No.	Max Starting Line Amps	Max Operating Line Amps	NCI Model	Stock No.	With Lamp List	With Lamp Each	Shpg. Wt.
Mercury Vapor	175	4V583	4.65	3.00	NH1204M	**2V636**	$73.19	**$33.15**	11.0
HP Sodium (Med. Base)	70	2V632	2.26	1.60	E-70-H	**2V866**	130.57	**68.35**	8.8

100 TO 175 WATT HID WALL PACKS



Applications: Parking lots, garages, shopping centers, office buildings, warehouses.

Ballasts: HPF QuadTap® (120, 208, 240, 277V) class H insulated. HPS -40°F starting; MH -20° starting.

Housing: One piece door with prismatic lens. Hinged front housing locks with two captive screws to insure proper gasket sealing. Provision for photocell use No. 6P005 for 120V or No. 5U791 for 208-277V. When using a photocell, additional gasketing is recommended. Finished bronze.

Rear housing is one piece die cast aluminum. Finished with two ½" feed-trim wiring hubs. 14⅜H x 14⅞W x 7⅛"D.

Reflector: Anodal® finished, aluminum reflector. Designed optimum beam distribution.

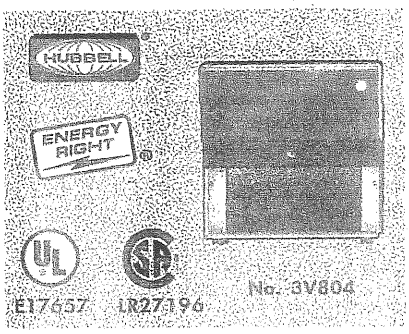
Installation: Mounts flush on wall or over recessed outlet box.

Lamp not included: Use suggested lamp listed below or see Index under Lamps, HID.

UL Listed (E17657), CSA Certified (LR27196).

Mogul Base Lamp Type	Suggested Lamp Stock No.	Starting Amps 120V	208V	240V	277V	Operating Amps 120V	208V	240V	277V	Hubbell Model	Stock No.	Less Lamp List	Less Lamp Each	Shpg. Wt.
100W HPS	2V519	1.3	.8	.7	.6	1.2	.7	.6	.5	PVL-0100S-118	✓**2V673**	$337.53	**$170.25**	19.0
150W HPS	2V452	2.0	1.2	1.0	.9	1.7	1.0	.8	.7	PVL-0150S-118	✓**2V674**	342.81	**173.25**	20.0
175W Metal Halide	4V550	1.3	.8	.7	.6	1.8	1.1	.9	.8	PVL-0175H-118	✓**2V876**	239.57	**170.75**	21.0

70 TO 175 WATT CUTOFF WALL PACKS



Applications: Parking lots, garages, shopping centers, office buildings, warehouses. Vandal resistant wall pack with controlled cutoff light output. For security illumination without glare or light pollution.

Housing: Polycarbonate front and one piece ballast cover is resistant to rocks. Twin captive screws secure door to die-cast back housing. Mounts over recessed wiring boxes or can be through wired. Bronze finish, painted inside polycarbonate. Provision for photocell, use No. 6P005 for 120V or No. 5U791 for 208-277V. When using a photocell, additional gasketing is recommended.

Reflector: Directs light down and out while shielding lamp. Medium base porcelain socket adjusts from 90° to 70° cutoff.

Ballasts: HPF QuadTap® (120, 208, 240, 277V) class H insulated. HPS -40°F starting; MH -20° starting.

UL Listed (E17657) for wet locations; CSA Certified (LR27196) for 120 or 277V indoor/outdoor use.

Dimensions: 14⅜H x 14⅞W x 7⅛"D.

Lamp not included: Use suggested lamp listed below or see Index under Lamps, HID.

Medium Base Lamp Type	Suggested Lamp Stock No.	Starting Amps 120V	208V	240V	277V	Operating Amps 120V	208V	240V	277V	Hubbell Model	Stock No.	Less Lamp List	Less Lamp Each	Shpg. Wt.
70W HPS	2V632	0.9	0.5	0.45	0.40	0.8	0.5	0.4	0.40	PRS-0070S-118LL	✓**3V804**	$263.30	**$177.00**	18.0
150W HPS	2V713	2.0	1.2	1.00	0.90	1.7	1.0	0.8	0.70	PRS-0150S-118LL	✓**3V805**	228.07	**182.50**	18.0
100W MH	6V749	1.2	0.7	0.60	0.45	1.2	0.7	0.6	0.45	PRS-0100H-118LL	✓**3V806**	256.32	**193.75**	18.0
175W MH	6V751	1.3	0.8	0.70	0.60	1.8	1.1	0.9	0.80	PRS-0175H-118LL	✓**3V807**	262.88	**177.00**	18.0

(✓) Denotes energy efficient product.

ACCESSORIES FOR GE ROADWAY FIXTURES

24" ROADWAY MOUNTING BRACKET

Galvanized steel pipe bracket for use with GE fixtures listed on page 1129. Designed for wall or pole mounting. Thru bolts and lag screws not included. 1¾" OD. GE brand (RBSCWH2X1.7GV).

No. 4V280. Shpg. wt. 3.5 lbs. List $20.98. Each.....$20.56

HEAVY-DUTY TWIST-LOCK SWITCH

Heavy-duty photoelectric switch provides dusk to dawn operation for roadway fixtures listed on page 1129. Meets EEI-NEMA standards for locking devices with solid brass terminals. 120-277V. Intermatic brand. (LC4536).

No. 5U792. Shpg. wt. 0.2 lbs. List $17.96. Each $8.07

LOADING DOCK LIGHTS

Peoples
A division of Banknorth, N.A.

One Portland Square
P.O. Box 9540
Portland, ME 04112-9540

tel. 800-462-3666
207-761-8500

July 16, 2004

Planning Department
c/o Sarah Hopkins
City of Portland
389 Congress St.
Portland, Maine 04101

Re: Kevin McQuinn/Stephen Doten

Dear Ms. Hopkins:

This letter will confirm that, based on our preliminary due diligence and subject to our standard underwriting requirements, Kevin McQuinn and Stephen Doten will have the financial capacity to complete a 10,000+/- square foot mixed-use building on the property at 469 Presumpscot Street, Portland, Maine. Please call me at 207-761-8783, should you have any questions.

Very truly yours,

Lawrence A. Wold
Senior Vice President

8/10/04
Letter of Credit expected
8/12/04.

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
Ecomonic Development

Notice to Developers, Architects, and Engineers

The municipal code requires that all development falling under site plan and/or subdivision review in the City of Portland be subject to a performance guarantee for various required improvements. The code further requires developers to pay a fee for the administrative costs associated with inspecting construction activity to ensure that it conforms with plans and specifications.

The performance guarantee covers major site improvements related to site plan and subdivision review, such as paving, roadway, utility connections, drainage, landscaping, lighting, etc. A detailed itemized cost estimate is required to be submitted, which upon review and approval by the City, determines the amount of the performance guarantee. The performance guarantee will usually be a letter of credit from a financial institution, although escrow accounts are acceptable. The form, terms, and conditions of the performance guarantee must be approved by the City through this office. The performance guarantee plus a check to the City of Portland in the amount of 2.0% of the performance guarantee or as assessed by the planning or public works engineer must be submitted prior to the issuance of any building permit for affected development.

Administration of performance guarantee and defect bonds is through this office. Inspections for improvements within existing and proposed public right-of-ways are the responsibility of the Department of Parks and Public Works. Inspections for site improvements are the responsibility of the Development Review Coordinator in the Planning Division.

Performance Guarantees will not be released by the City until all required improvements are completed and approved by the City and a Defect Bond has been submitted to and approved by the City.

Attachments

1. Cost Estimate of Improvements Form
2. Letter of Credit Performance Guarantee Form
3. Letter of Credit Defect Guarantee Form
4. Escrow Account (with private financial institution) Performance Guarantee Form
5. Escrow Account (with private financial institution) Defect Guarantee Form
6. Escrow Account (with City of Portland) Performance Guarantee Form
7. Escrow Account (with City of Portland) Defect Guarantee Form

Planning and Development Department
SUBDIVISION/SITE DEVELOPMENT

COST ESTIMATE OF IMPROVEMENTS TO BE COVERED BY PERFORMANCE GUARANTEE

Date: 8/10/04

Name of Project: Presumpscot Quarry

Address/Location: Presumpscot Street Portland ME 04103

Developer: Turner Barker Realty

Form of Performance Guarantee: Letter of Credit from BankNorth (Larry Weld)

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

TO BE FILLED OUT BY THE APPLICANT:

Item	PUBLIC Quantity	PUBLIC Unit Cost	PUBLIC Subtotal	PRIVATE Quantity	PRIVATE Unit Cost	PRIVATE Subtotal
1. STREET/SIDEWALK						
Road						
Granite Curbing	260'	10.00 per	$2600.00			
Sidewalks	260'	4800.00	$4800.00			
Esplanades	N/A					
Monuments	N/A					
Street Lighting	N/A					
Street Opening Repairs	20x20	$ 4200.00	$4200.00			
Other						
2. EARTH WORK						
Cut			$500.00			
Fill			$500.00			
3. SANITARY SEWER						
Manholes private			$3000.00			
Piping			$1,500.00			
Connections						
Main Line Piping						
House Sewer Service Piping						
Pump Stations						
Other						
4. WATER MAINS public			$8,000.00			
5. STORM DRAINAGE						
Manholes			$3000.00			
Catchbasins			$3000.00			
Piping						
Detention Basin						
Stormwater Quality Units						
Other						

6.	SITE LIGHTING						
7.	EROSION CONTROL						
	Silt Fence			$300.00			
	Check Dams						
	Pipe Inlet/Outlet Protection						
	Level Lip Spreader						
	Slope Stabilization						
	Geotextile						
	Hay Bale Barriers			$500.00			
	Catch Basin Inlet Protection			$200.00			
8.	RECREATION AND OPEN SPACE AMENITIES						
9.	LANDSCAPING (Attach breakdown of plant materials, quantities, and unit costs)			$5000.00			
10.	MISCELLANEOUS						
	TOTAL:						
	GRAND TOTAL:			$37,100.00			

INSPECTION FEE (to be filled out by the City)

		PUBLIC	PRIVATE	TOTAL
A:	2.0% of totals:		$742.00	$742.00
	or			
B:	Alternative Assessment:			
	Assessed by:	(name)	(name)	

Ross A. Cudlitz, PE
10 North Road
Yarmouth, Maine 04096

Engineering Assistance & Design, Inc.
Phone/Fax: 207 - 846 - 0839
Cell / Voice Mail: 207-838 - 7663

August 4, 2004

FAX TRANSMITTAL: 874-8852

Mr. John Giles
City of Portland Public Works Department
55 Portland Street
Portland, Maine 04101

RE: Request for Street Address and 911 Identification for Presumpscott Street Development
Chart 419/Lot 1 & Chart 419/Block A/Lot 7

Dear John:

Kevin McQuinn is proposing a warehouse/distribution facility on the subject combined lots. The parcel is the site of the old Dragon concrete dump located on the east side of Presumpscott Street, approximately 300 feet south of the Route 9 intersection. See attached Locus.

In order to comply with City of Portland Planning Staff review we have been asked to contact you for 911 response identification and a street address at this location. Please fax or call me with the information, or if you need additional clarification from me. Thank you for your time.

Sincerely,

Ross A. Cudlitz, PE
EA&D, Inc.

Cc: Kevin McQuinn, Applicant

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 Fax: (207) 287-3165

PROPERTY LOCATION

>> CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW <<

City, Town, or Plantation: PORTLAND

Street or Road: PRESUMPSCOT ST.

Subdivision, Lot #:

The Subsurface Wastewater Disposal System *shall not* be installed until a Permit is attached HERE by the Local Plumbing Inspector. The Permit shall *authorize the owner or installer to install the disposal system* in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

OWNER/APPLICANT INFORMATION

Name (last, first, MI): Mc QUINN, KEVIN ☑ Owner ☐ Applicant

Mailing Address of Owner/Applicant: c/o TURNER BARKER REALTY
202 US ROUTE ONE
FALMOUTH, ME 04195

Daytime Tel. #: 207-450-8700

Municipal Tax Map # _____ Lot # _____

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a Permit.

_____ _____
Signature of Owner or Applicant Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application. _____ (1st) date approved

_____ _____
Local Plumbing Inspector Signature (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

☑ 1. First Time System
☐ 2. Replacement System
Type replaced: _____
Year installed: _____
☐ 3. Expanded System
☐ a. Minor Expansion
☐ b. Major Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

☑ 1. No Rule Variance
☐ 2. First Time System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

☑ 1. Complete Non-engineered System
☐ 2. Primitive System (graywater & alt. toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000 gpd or more)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☐ 11. Pre-treatment, specify: _____
☐ 12. Miscellaneous Components

SIZE OF PROPERTY

2.57 ☐ SQ. FT ☑ ACRES

SHORELAND ZONING

☑ Yes ☐ No

DISPOSAL SYSTEM TO SERVE

☐ 1. Single Family Dwelling Unit, No. of Bedrooms: ____
☐ 2. Multiple Family Dwelling, No. of Units: ____
☑ 3. Other: COMMERCIAL (specify)
Current Use ☐ Seasonal ☐ Year Round ☑ Undeveloped

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

☑ 1. Concrete
☑ a. Regular
☐ b. Low Profile
☐ 2. Plastic
☐ 3. Other: _____
CAPACITY: 1000 GAL.

WITH LIFT STATION IF PUMPING REQUIRED

DISPOSAL FIELD TYPE & SIZE

☐ 1. Stone Bed ☐ 2. Stone Trench
☑ 3. Proprietary Device
☐ a. cluster array ☐ c. Linear
☐ b. regular load ☐ d. H-20 load
☐ 4. Other: _____
SIZE: 396 ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. multi-compartment tank
☐ b. ___ tanks in series
☐ c. increase in tank capacity
☐ d. Filter on Tank Outlet

DESIGN FLOW

210 gallons per day
BASED ON:
☐ 1. Table 501.1 (dwelling unit(s))
☑ 2. Table 501.2 (other facilities)
SHOW CALCULATIONS
— for other facilites —
14 EMPLOYEES AT PLACE OF EMPLOYMENT, NO SHOWERS
15 GPD/EMPLOYEE
X 14 = 210 GPD TOTAL
☐ 3. Section 503.0 (meter readings)
ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE CONDITION DESIGN
9 / C / 1
at Observation Hole # 7P1
Depth 15"
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

☐ 1. Small—2.0 sq. ft. / gpd
☐ 2. Medium—2.6 sq. ft. / gpd
☐ 3. Medium—Large 3.3 sq. ft / gpd
☐ 4. Large—4.1 sq. ft. / gpd
☑ 5. Extra Large—5.0 sq. ft. / gpd

EFFLUENT/EJECTOR PUMP

☐ 1. Not Required
☑ 2. May Be Required
☐ 3. Required
Specify only for engineered systems:
DOSE: _____ gallons

SITE EVALUATOR STATEMENT

I certify that on 8/3/04 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Scott McLaren #346 8/6/04
Site Evaluator Signature SE # Date

Scott McLaren 329-7435 _____
Site Evaluator Name Printed Telephone Number E-mail Address

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator.

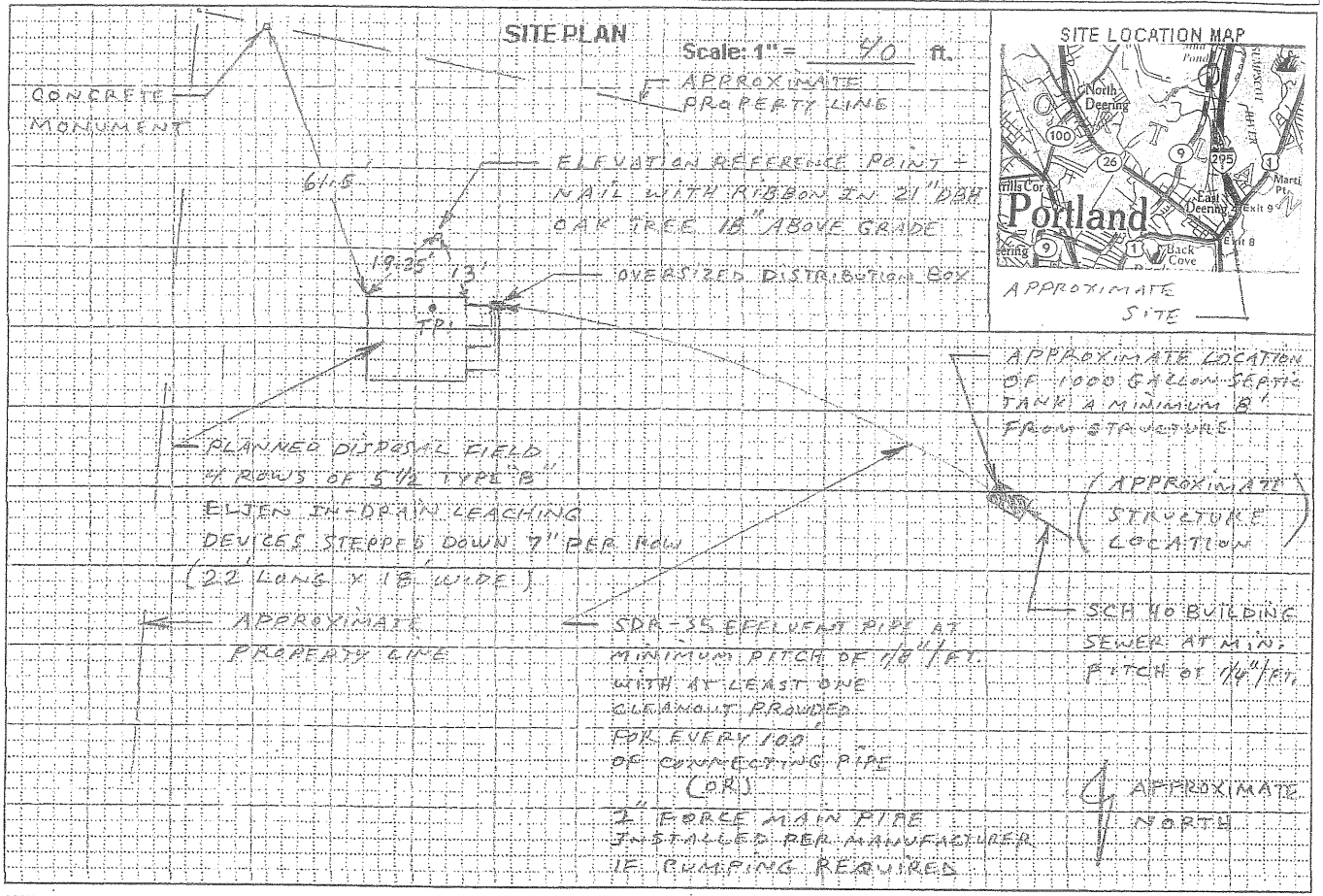
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 10
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner or Applicant Name
PORTLAND	PRESUMPSCOT STREET	KEVIN McQUINN

SITE PLAN

Scale: 1" = 40 ft.



SITE LOCATION MAP

APPROXIMATE SITE

SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole # TP1 ☒ Test Pit ☐ Boring

1" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0	SILT LOAM	FRIABLE	GRAYISH BROWN	
6			LIGHT OLIVE BROWN	
12				
18				COMMON/ FAINT
24	SILTY CLAY	FIRM	DARK GRAY	
30				
36				
42	LIMIT OF		TEST	PIT
48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
9	C	16-17	15.	☒ Groundwater ☐ Restrictive Layer ☐ Bedrock

Observation Hole # _____ ☐ Test Pit ☐ Boring

_____" Depth of organic horizon above mineral soil

Depth below mineral soil surface (inches)	Texture	Consistency	Color	Mottling
0				
6				
12				
18				
24				
30				
36				
42				
48				

Soil Profile	Classification Condition	Slope Percent	Limiting Factor Depth	
				☐ Groundwater ☐ Restrictive Layer ☐ Bedrock

Site Evaluator Signature

#346
SE #

8/6/04
Date

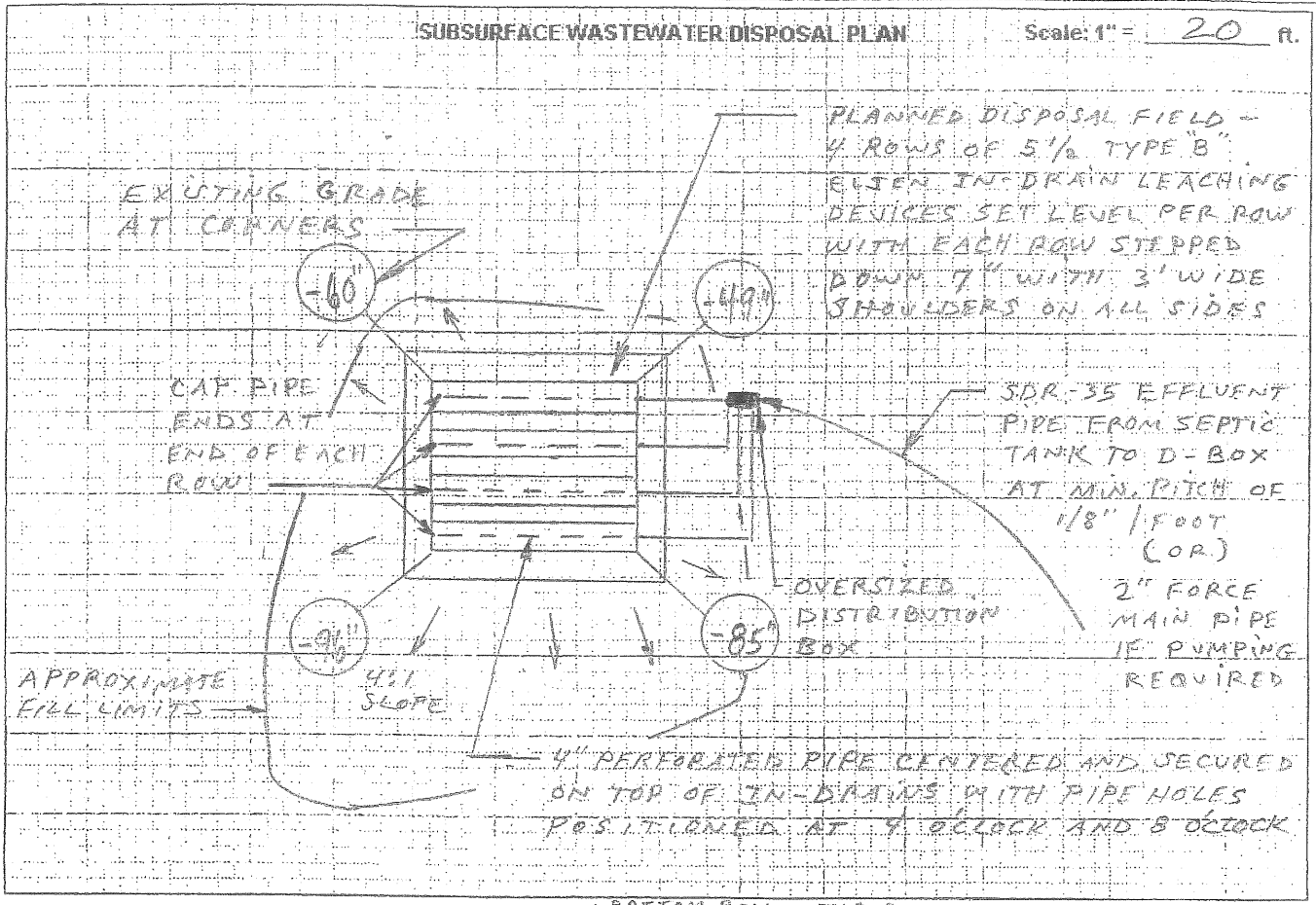
SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Department of Human Services
Division of Health Engineering, Station 10
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner or Applicant Name
PORTLAND	PRESUMPSOT STREET	KEVIN McQUINN

SUBSURFACE WASTEWATER DISPOSAL PLAN

Scale: 1" = 20 ft.



BACKFILL REQUIREMENTS

Depth of Backfill (upslope)	19"-30"
Depth of Backfill (downslope)	34"-45"

DEPTHS AT CROSS-SECTION (shown below)

CONSTRUCTION ELEVATIONS

	Bottom Row	Top Row
Finished Grade Elevation	-51"	-30"
Top of Distribution Pipe or Proprietary Device	-46"	
Bottom of Disposal Field	-67" -74"	-53"

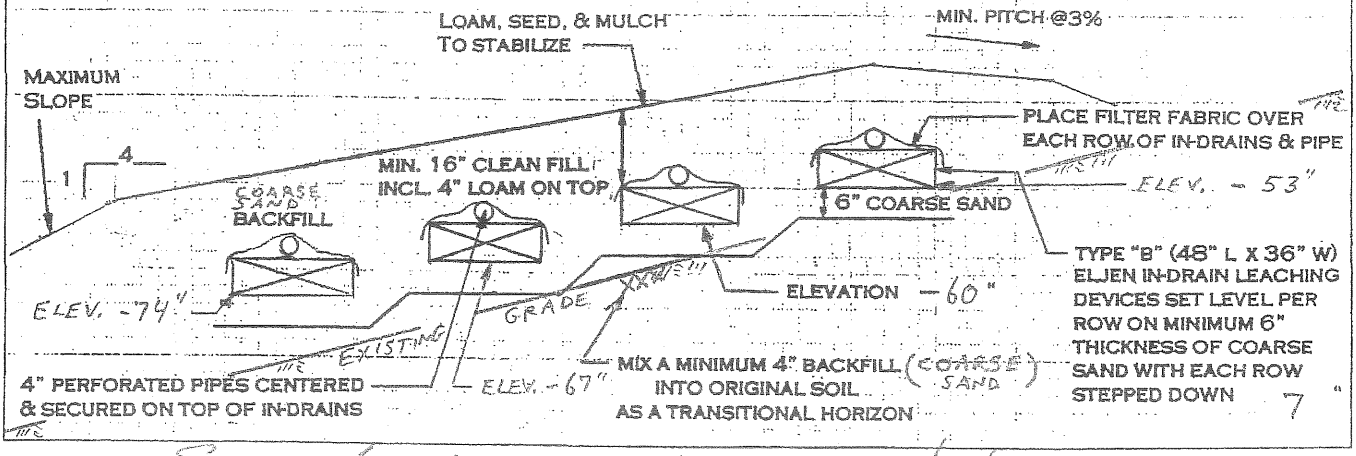
ELEVATION REFERENCE POINT

Location & Description: NAIL W/RIBBON IN DBH OAK TREE 18" ABOVE GRADE

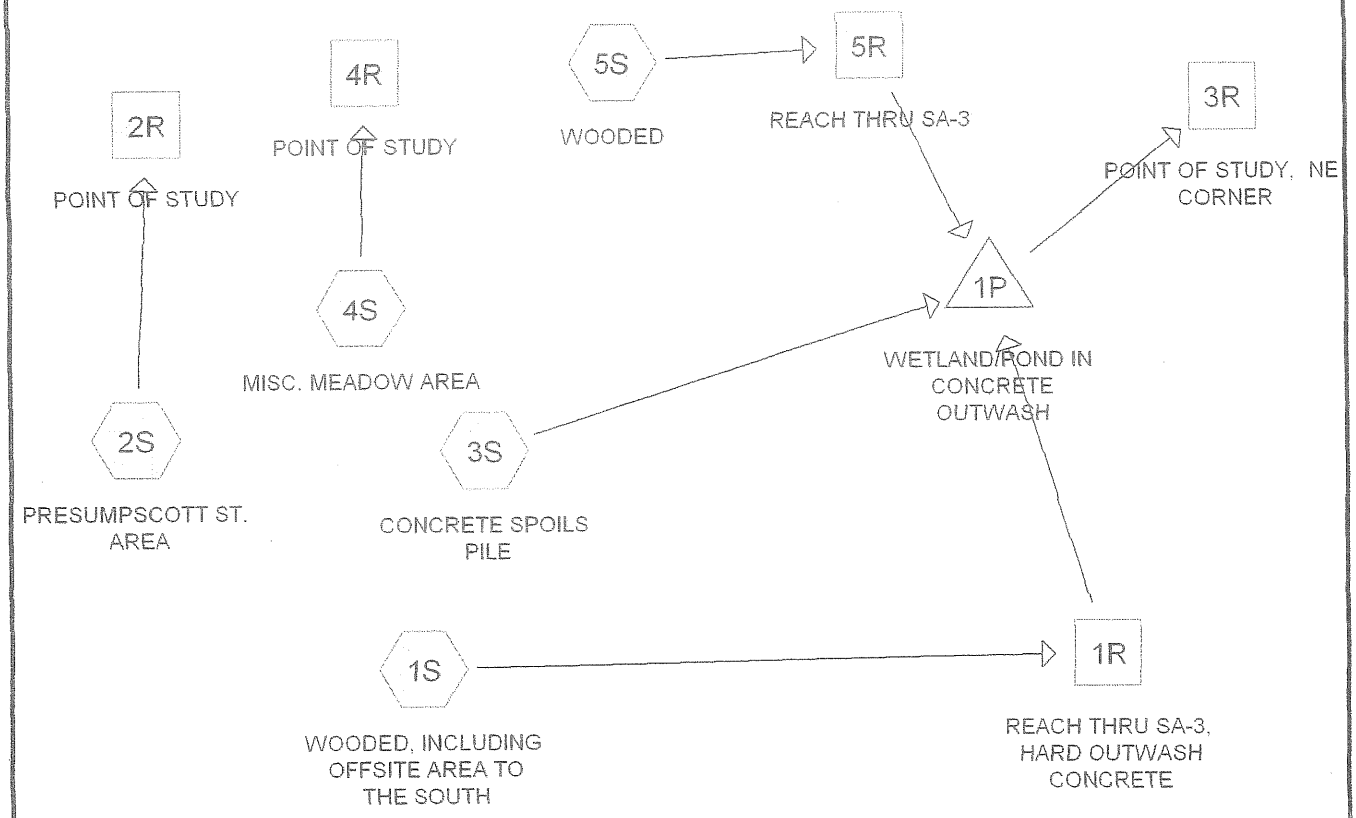
Reference Elevation is: 0.0" or: 00"

DISPOSAL FIELD CROSS-SECTION FOR ELJEN IN-DRAIN SYSTEM

Scales:
Vertical: 1" = 3' ft.
Horizontal: 1" = 5' ft.



Site Evaluator Signature | SE # #346 | Date 8/6/04



Subcat Reach Pond Link

Drainage Diagram for Presumpscott Street - PRE

Prepared by Engineering Assistance & Design, Inc. 8/11/2004

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.670 ac Runoff Depth=2.25"
Flow Length=725' Tc=41.7 min CN=77 Runoff=4.60 cfs 0.501 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.650 ac Runoff Depth=3.89"
Flow Length=645' Tc=4.2 min CN=93 Runoff=3.55 cfs 0.211 af

Subcatchment 3S: CONCRETE SPOILS PILE Runoff Area=1.190 ac Runoff Depth=3.90"
Flow Length=350' Tc=1.4 min CN=93 Runoff=7.16 cfs 0.387 af

Subcatchment 4S: MISC. MEADOW AREA Runoff Area=0.150 ac Runoff Depth=3.08"
Flow Length=73' Tc=4.7 min CN=85 Runoff=0.69 cfs 0.038 af

Subcatchment 5S: WOODED Runoff Area=0.250 ac Runoff Depth=2.32"
Flow Length=185' Tc=20.3 min CN=77 Runoff=0.60 cfs 0.048 af

Reach 1R: REACH THRU SA-3, HARD OUTWASH Peak Depth=0.14' Max Vel=1.5 fps Inflow=4.60 cfs 0.501 af
n=0.025 L=130.0' S=0.0154 '/' Capacity=70.88 cfs Outflow=4.59 cfs 0.498 af

Reach 2R: POINT OF STUDY Inflow=3.55 cfs 0.211 af
Outflow=3.55 cfs 0.211 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=7.59 cfs 0.891 af
Outflow=7.59 cfs 0.891 af

Reach 4R: POINT OF STUDY Inflow=0.69 cfs 0.038 af
Outflow=0.69 cfs 0.038 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.13' Max Vel=0.2 fps Inflow=0.60 cfs 0.048 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.57 cfs 0.047 af

Pond 1P: WETLAND/POND IN CONCRETE OUTW Peak Elev=11.15' Storage=2,623 cf Inflow=8.21 cfs 0.932 af
Outflow=7.59 cfs 0.891 af

Total Runoff Area = 4.910 ac Runoff Volume = 1.185 af Average Runoff Depth = 2.90"

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.670 ac Runoff Depth=1.73"
Flow Length=725' Tc=41.7 min CN=77 Runoff=3.57 cfs 0.384 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.650 ac Runoff Depth=3.22"
Flow Length=645' Tc=4.2 min CN=93 Runoff=2.99 cfs 0.175 af

Subcatchment 3S: CONCRETE SPOILS PILE Runoff Area=1.190 ac Runoff Depth=3.23"
Flow Length=350' Tc=1.4 min CN=93 Runoff=6.02 cfs 0.321 af

Subcatchment 4S: MISC. MEADOW AREA Runoff Area=0.150 ac Runoff Depth=2.46"
Flow Length=73' Tc=4.7 min CN=85 Runoff=0.56 cfs 0.031 af

Subcatchment 5S: WOODED Runoff Area=0.250 ac Runoff Depth=1.78"
Flow Length=185' Tc=20.3 min CN=77 Runoff=0.46 cfs 0.037 af

Reach 1R: REACH THRU SA-3, HARD OUTWASH Peak Depth=0.13' Max Vel=1.4 fps Inflow=3.57 cfs 0.384 af
n=0.025 L=130.0' S=0.0154 '/' Capacity=70.88 cfs Outflow=3.56 cfs 0.381 af

Reach 2R: POINT OF STUDY Inflow=2.99 cfs 0.175 af
Outflow=2.99 cfs 0.175 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=6.20 cfs 0.698 af
Outflow=6.20 cfs 0.698 af

Reach 4R: POINT OF STUDY Inflow=0.56 cfs 0.031 af
Outflow=0.56 cfs 0.031 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.11' Max Vel=0.2 fps Inflow=0.46 cfs 0.037 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.44 cfs 0.036 af

Pond 1P: WETLAND/POND IN CONCRETE OUTW Peak Elev=11.13' Storage=2,483 cf Inflow=6.77 cfs 0.738 af
Outflow=6.20 cfs 0.698 af

Total Runoff Area = 4.910 ac Runoff Volume = 0.947 af Average Runoff Depth = 2.31"

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.670 ac Runoff Depth=0.73"
Flow Length=725' Tc=41.7 min CN=77 Runoff=1.55 cfs 0.162 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.650 ac Runoff Depth=1.83"
Flow Length=645' Tc=4.2 min CN=93 Runoff=1.78 cfs 0.099 af

Subcatchment 3S: CONCRETE SPOILS PILE Runoff Area=1.190 ac Runoff Depth=1.84"
Flow Length=350' Tc=1.4 min CN=93 Runoff=3.58 cfs 0.182 af

Subcatchment 4S: MISC. MEADOW AREA Runoff Area=0.150 ac Runoff Depth=1.22"
Flow Length=73' Tc=4.7 min CN=85 Runoff=0.29 cfs 0.015 af

Subcatchment 5S: WOODED Runoff Area=0.250 ac Runoff Depth=0.76"
Flow Length=185' Tc=20.3 min CN=77 Runoff=0.20 cfs 0.016 af

Reach 1R: REACH THRU SA-3, HARD OUTWASH Peak Depth=0.09' Max Vel=1.1 fps Inflow=1.55 cfs 0.162 af
n=0.025 L=130.0' S=0.0154 '/' Capacity=70.88 cfs Outflow=1.55 cfs 0.161 af

Reach 2R: POINT OF STUDY Inflow=1.78 cfs 0.099 af
Outflow=1.78 cfs 0.099 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=3.34 cfs 0.320 af
Outflow=3.34 cfs 0.320 af

Reach 4R: POINT OF STUDY Inflow=0.29 cfs 0.015 af
Outflow=0.29 cfs 0.015 af

Reach 5R: REACH THRU SA-3 Peak Depth=0.08' Max Vel=0.2 fps Inflow=0.20 cfs 0.016 af
n=0.240 L=60.0' S=0.0333 '/' Capacity=10.87 cfs Outflow=0.19 cfs 0.015 af

Pond 1P: WETLAND/POND IN CONCRETE OUTW Peak Elev=11.09' Storage=2,155 cf Inflow=3.78 cfs 0.358 af
Outflow=3.34 cfs 0.320 af

Total Runoff Area = 4.910 ac Runoff Volume = 0.475 af Average Runoff Depth = 1.16"

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE SOUTH

OFFSITE AREA TAKEN FROM USGA TOPO QUAD

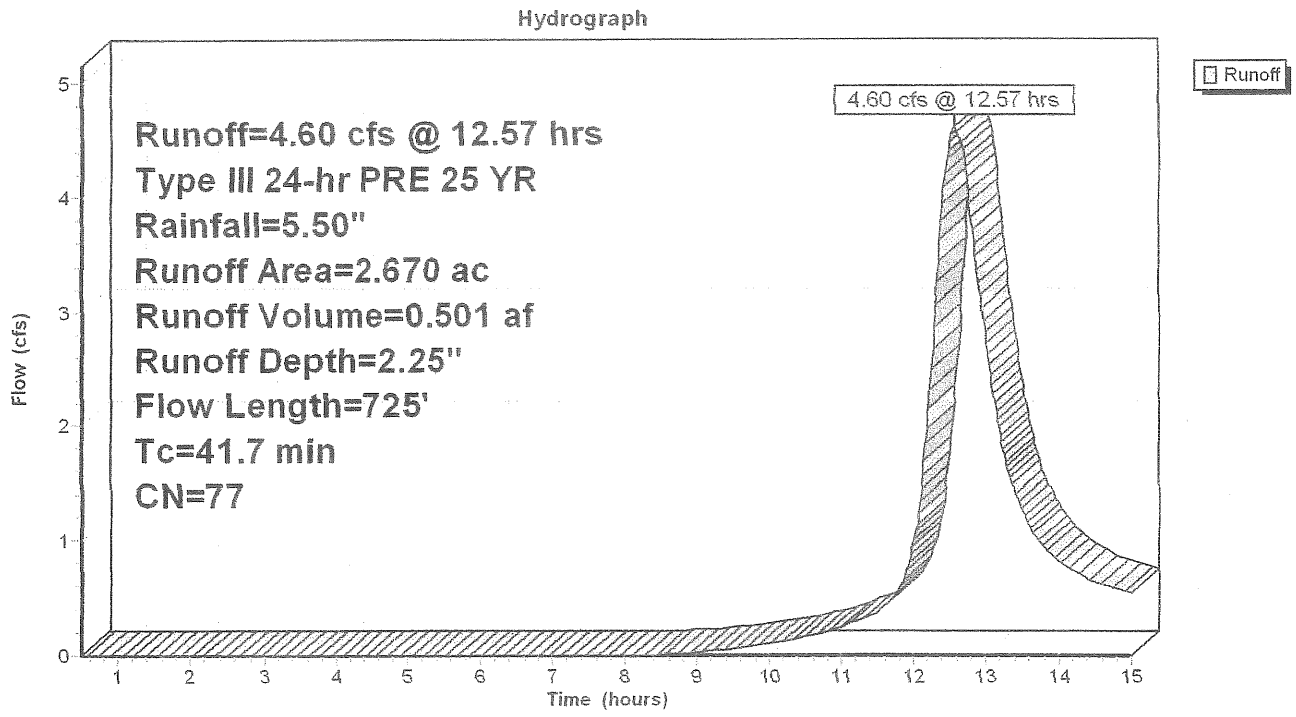
Runoff = 4.60 cfs @ 12.57 hrs, Volume= 0.501 af, Depth= 2.25"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 25 YR Rainfall=5.50"

Area (ac)	CN	Description
2.670	77	GOOD WOODS HOLLIS C/D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.0	120	0.0500	0.1		**Sheet Flow, AB** Woods: Dense underbrush n= 0.800 P2= 3.00"
5.7	340	0.1600	1.0		**Shallow Concentrated Flow, BC** Forest w/Heavy Litter Kv= 2.5 fps
1.5	110	0.2400	1.2		**Shallow Concentrated Flow, CD** Forest w/Heavy Litter Kv= 2.5 fps
2.0	51	0.0300	0.4		**Shallow Concentrated Flow, DE** Forest w/Heavy Litter Kv= 2.5 fps
1.5	104	0.0130	1.1		**Shallow Concentrated Flow, EF** Nearly Bare & Untilled Kv= 10.0 fps
41.7	725	Total			

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE SOUTH



Subcatchment 2S: PRESUMPSCOTT ST. AREA

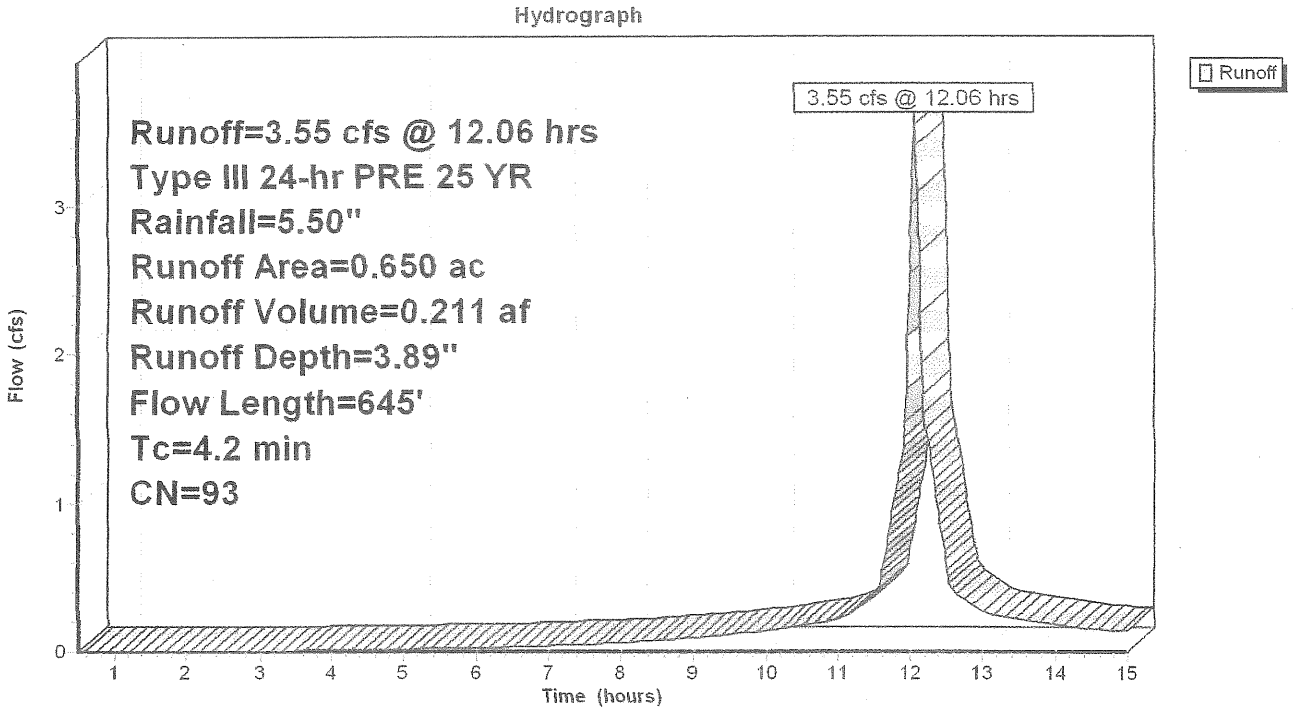
Runoff = 3.55 cfs @ 12.06 hrs, Volume= 0.211 af, Depth= 3.89"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.490	98	PAVED ROAD/WASTE CONCRETE
0.160	77	GOOD VEGETATION HOLLIS C/D
0.650	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	30	0.0100	0.8		**Sheet Flow, AB TOP OF STREEET** Smooth surfaces n= 0.011 P2= 3.00"
1.0	395	0.1000	6.4		**Shallow Concentrated Flow, BC CURBED GUTTER** Paved Kv= 20.3 fps
2.6	220	0.0500	1.4	11.08	**Channel Flow, CD GRASS ROADSIDE SWALE** Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.240
4.2	645	Total			

Subcatchment 2S: PRESUMPSCOTT ST. AREA



Subcatchment 3S: CONCRETE SPOILS PILE

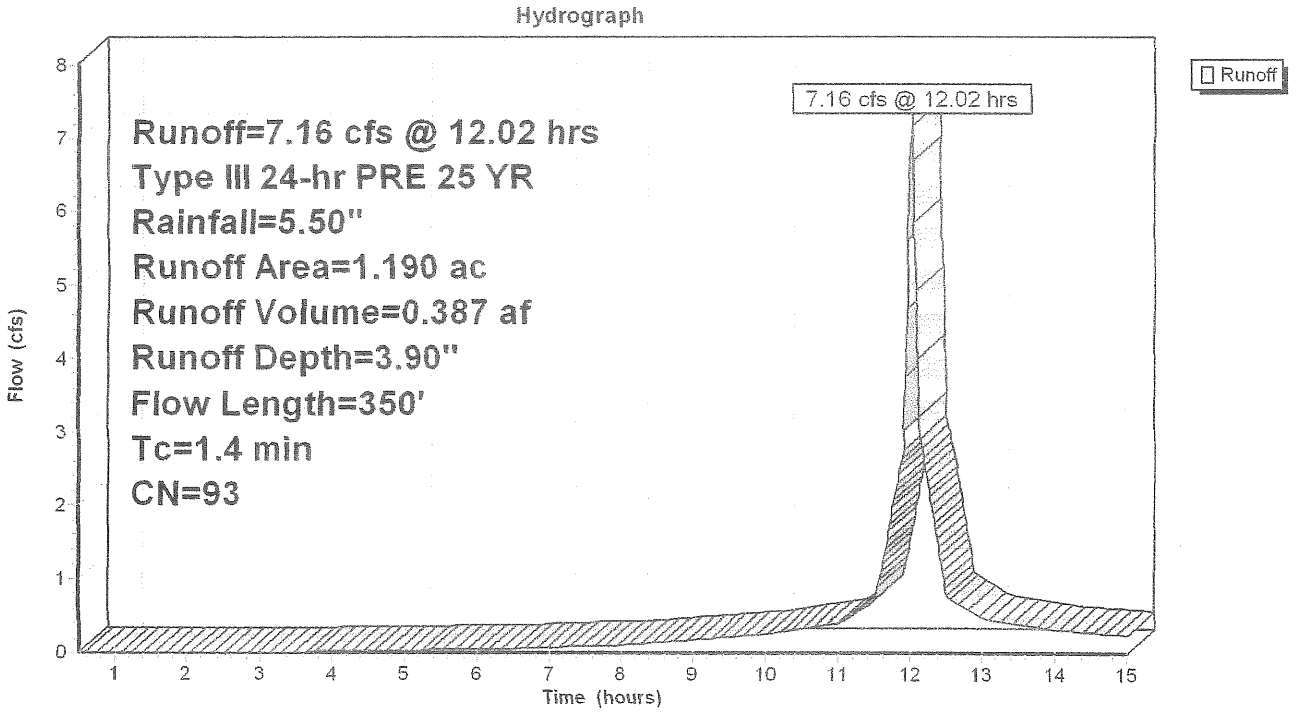
Runoff = 7.16 cfs @ 12.02 hrs, Volume= 0.387 af, Depth= 3.90"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.940	98	OUTWASH CONCRETE
0.250	73	WETLAND "D"
1.190	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	40	0.2000	2.8		**Sheet Flow, AB** Smooth surfaces n= 0.011 P2= 3.00"
0.3	180	0.2200	9.5		**Shallow Concentrated Flow, BC** Paved Kv= 20.3 fps
0.9	130	0.0150	2.5		**Shallow Concentrated Flow, CD** Paved Kv= 20.3 fps
1.4	350	Total			

Subcatchment 3S: CONCRETE SPOILS PILE



Subcatchment 4S: MISC. MEADOW AREA

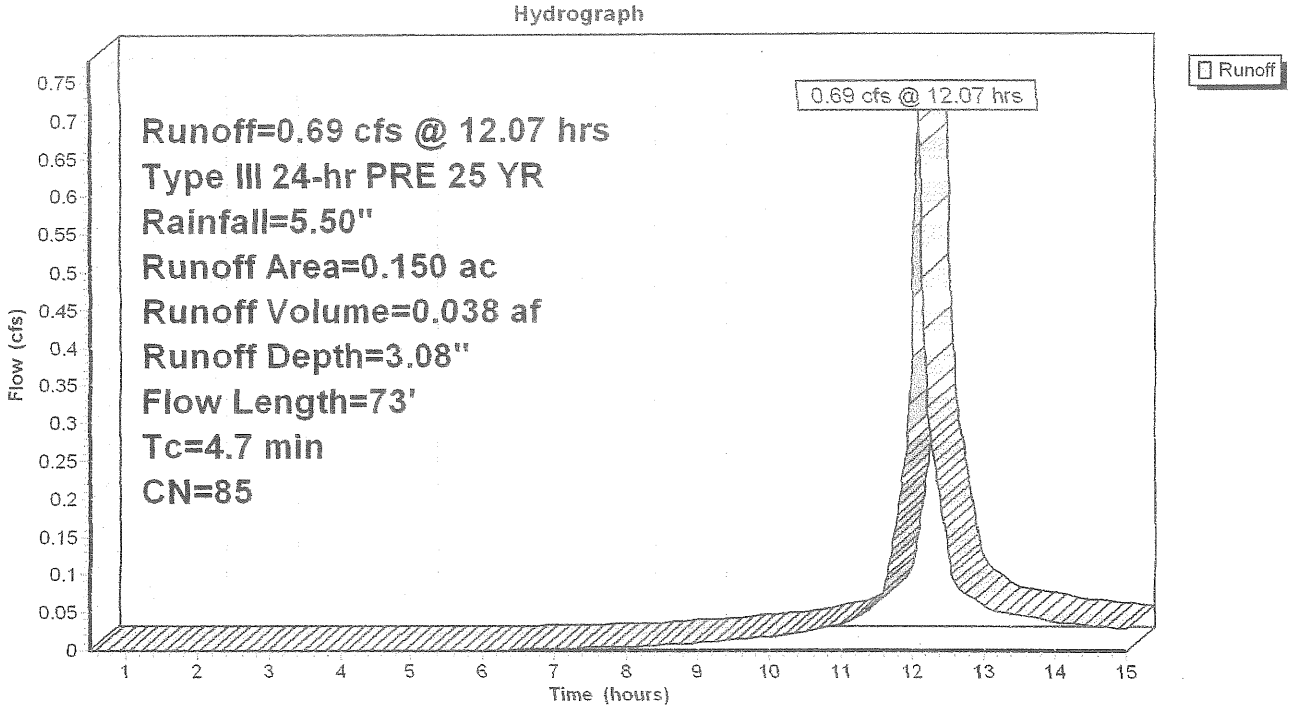
Runoff = 0.69 cfs @ 12.07 hrs, Volume= 0.038 af, Depth= 3.08"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.050	98	WASTE CONCRETE
0.090	78	MEADOW GRASS HOLIS C/D
0.010	77	GOOD WOODS HOLLIS C/D
0.150	85	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	73	0.1900	0.3		**Sheet Flow, AB** Grass: Dense n= 0.240 P2= 3.00"

Subcatchment 4S: MISC. MEADOW AREA



Subcatchment 5S: WOODED

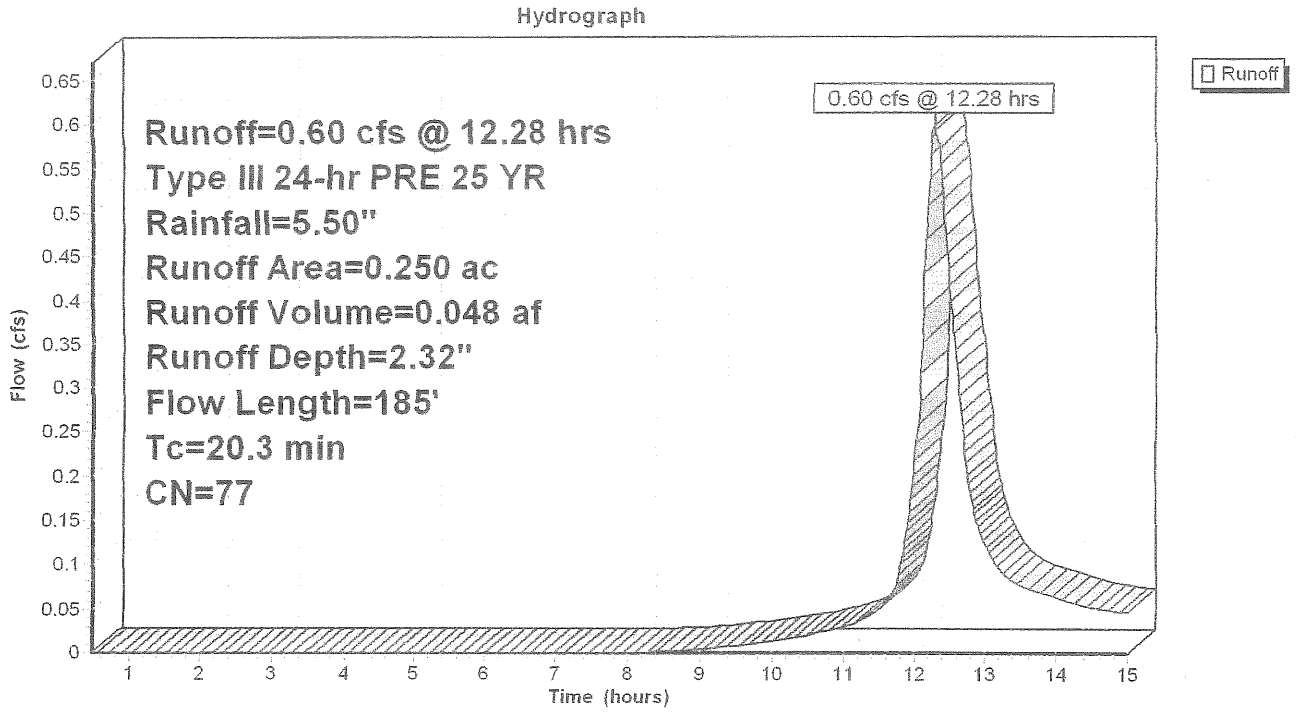
Runoff = 0.60 cfs @ 12.28 hrs, Volume= 0.048 af, Depth= 2.32"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr PRE 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.250	77	GOOD WOODS HOLLIS C/D

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.7	70	0.0600	0.1		**Sheet Flow, AB** Woods: Dense underbrush n= 0.800 P2= 3.00"
1.6	115	0.2400	1.2		**Shallow Concentrated Flow, BC** Forest w/Heavy Litter Kv= 2.5 fps
20.3	185	Total			

Subcatchment 5S: WOODED



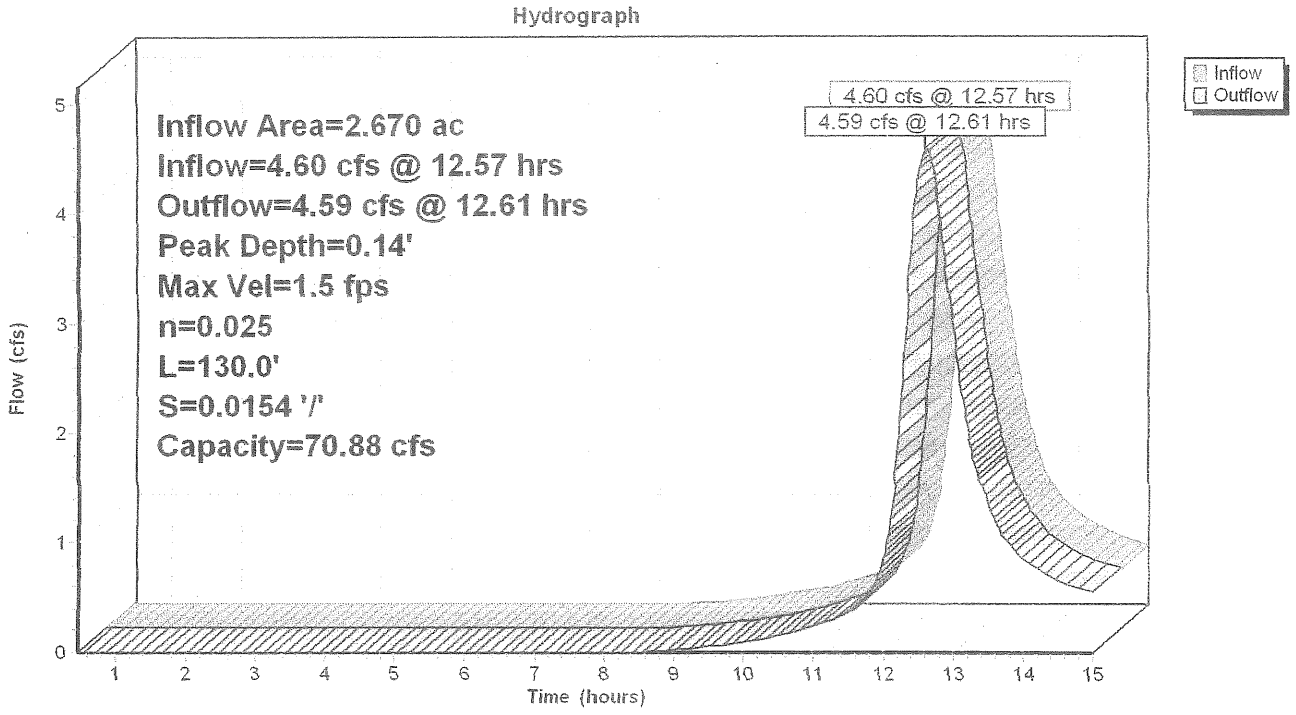
Reach 1R: REACH THRU SA-3, HARD OUTWASH CONCRETE

Inflow Area = 2.670 ac, Inflow Depth = 2.25" for PRE 25 YR event
Inflow = 4.60 cfs @ 12.57 hrs, Volume= 0.501 af
Outflow = 4.59 cfs @ 12.61 hrs, Volume= 0.498 af, Atten= 0%, Lag= 2.8 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 1.5 fps, Min. Travel Time= 1.4 min
Avg. Velocity = 0.7 fps, Avg. Travel Time= 3.0 min

Peak Depth= 0.14' @ 12.59 hrs
Capacity at bank full= 70.88 cfs
Inlet Invert= 10.00', Outlet Invert= 8.00'
60.00' x 0.50' deep Parabolic Channel, n= 0.025 Length= 130.0' Slope= 0.0154 '/'

Reach 1R: REACH THRU SA-3, HARD OUTWASH CONCRETE

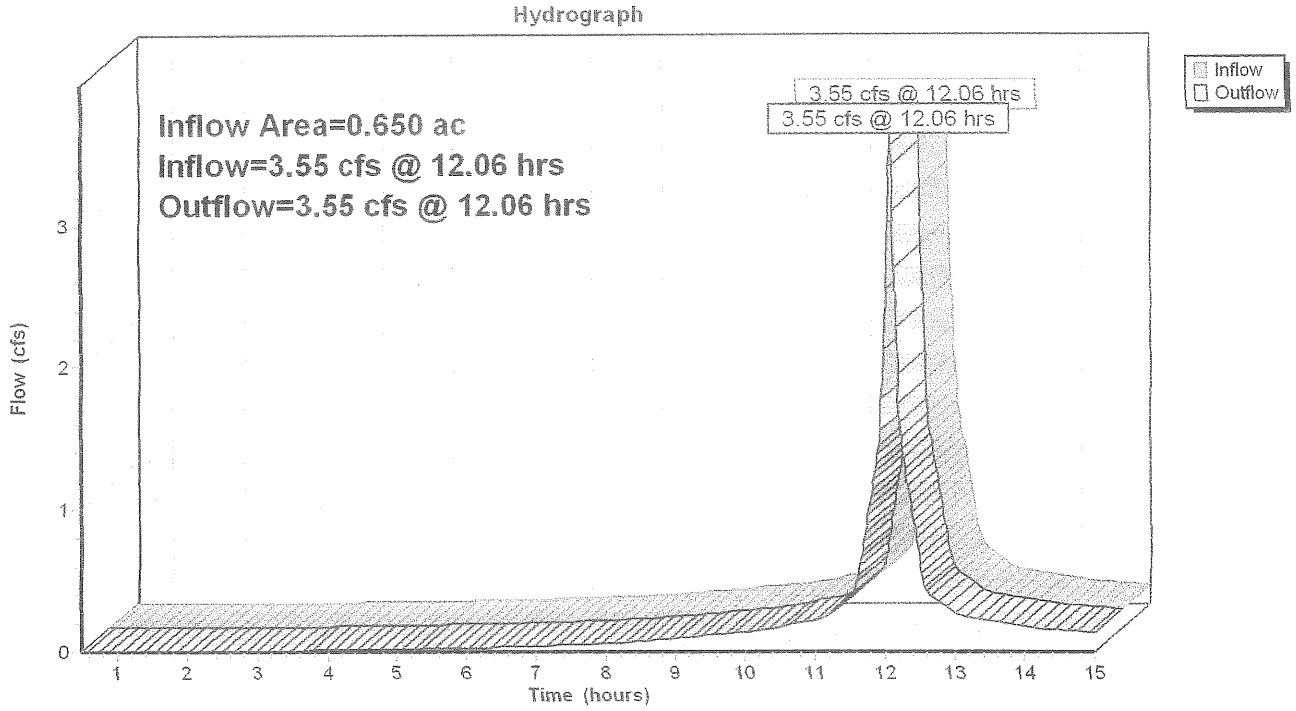


Reach 2R: POINT OF STUDY

Inflow Area = 0.650 ac, Inflow Depth = 3.89" for PRE 25 YR event
Inflow = 3.55 cfs @ 12.06 hrs, Volume= 0.211 af
Outflow = 3.55 cfs @ 12.06 hrs, Volume= 0.211 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 2R: POINT OF STUDY

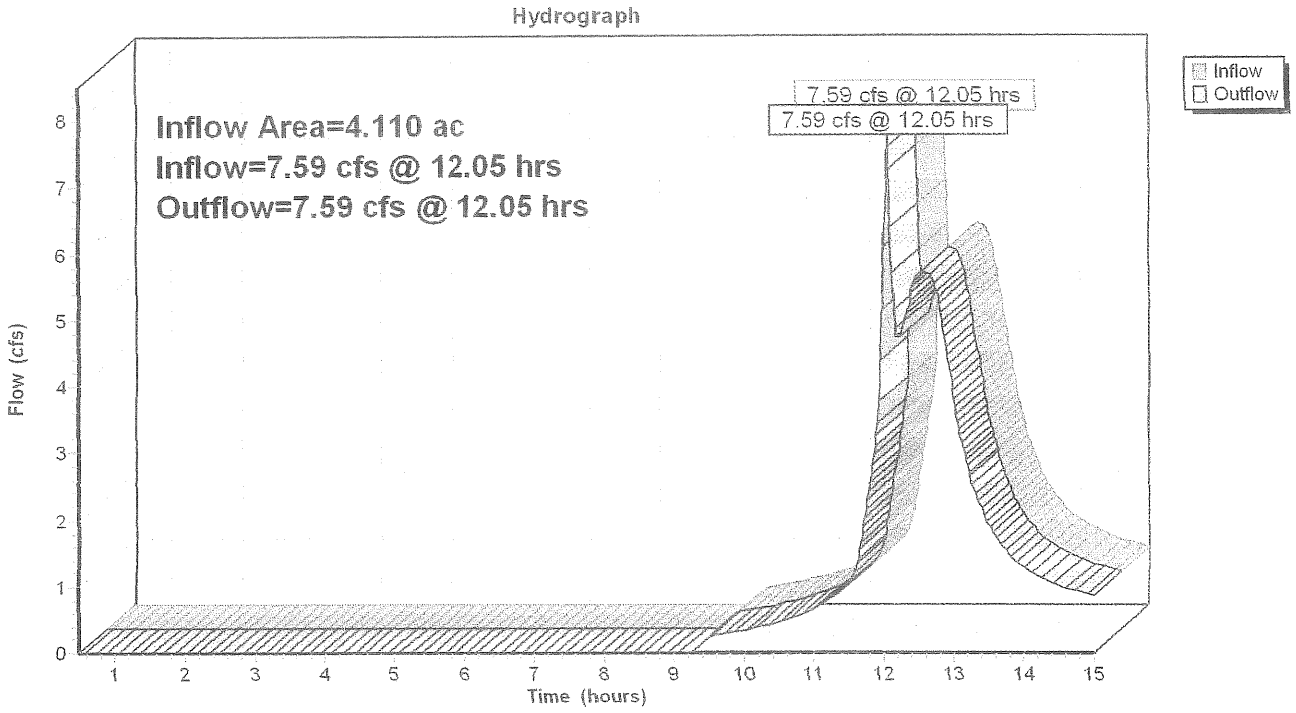


Reach 3R: POINT OF STUDY, NE CORNER

Inflow Area = 4.110 ac, Inflow Depth = 2.60" for PRE 25 YR event
Inflow = 7.59 cfs @ 12.05 hrs, Volume= 0.891 af
Outflow = 7.59 cfs @ 12.05 hrs, Volume= 0.891 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 3R: POINT OF STUDY, NE CORNER

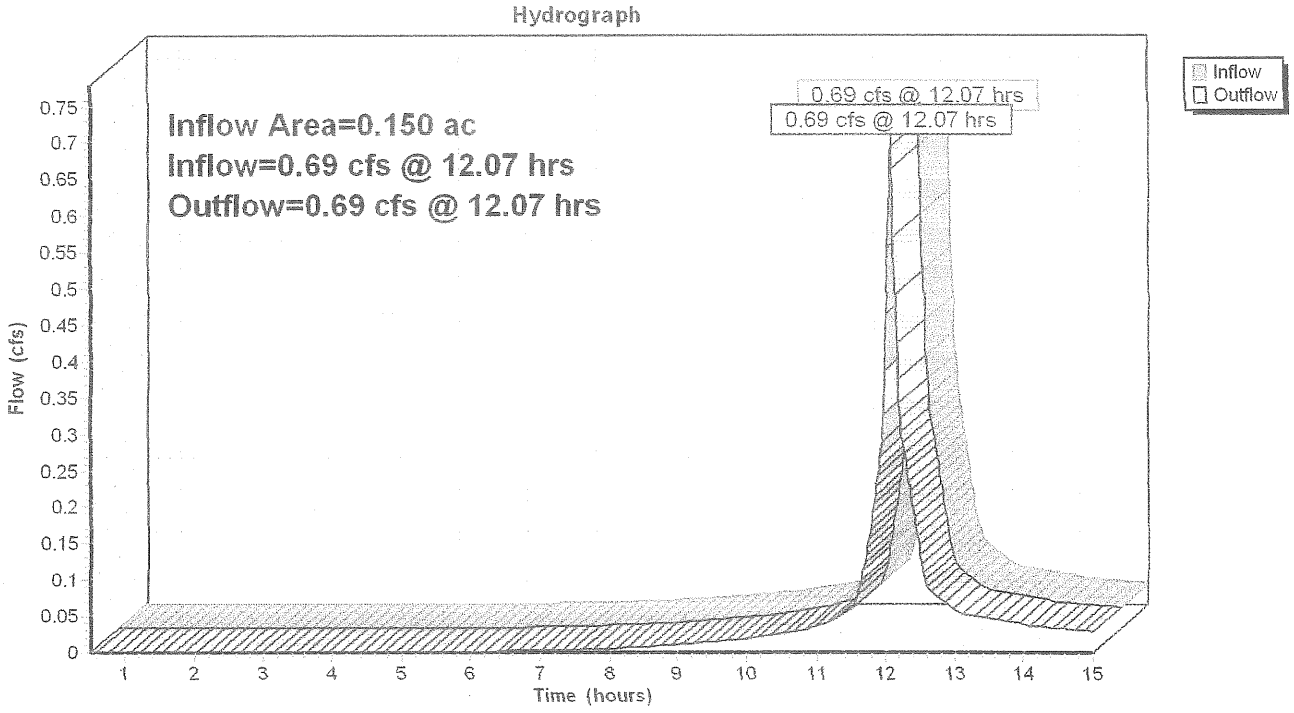


Reach 4R: POINT OF STUDY

Inflow Area = 0.150 ac, Inflow Depth = 3.08" for PRE 25 YR event
Inflow = 0.69 cfs @ 12.07 hrs, Volume= 0.038 af
Outflow = 0.69 cfs @ 12.07 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 4R: POINT OF STUDY



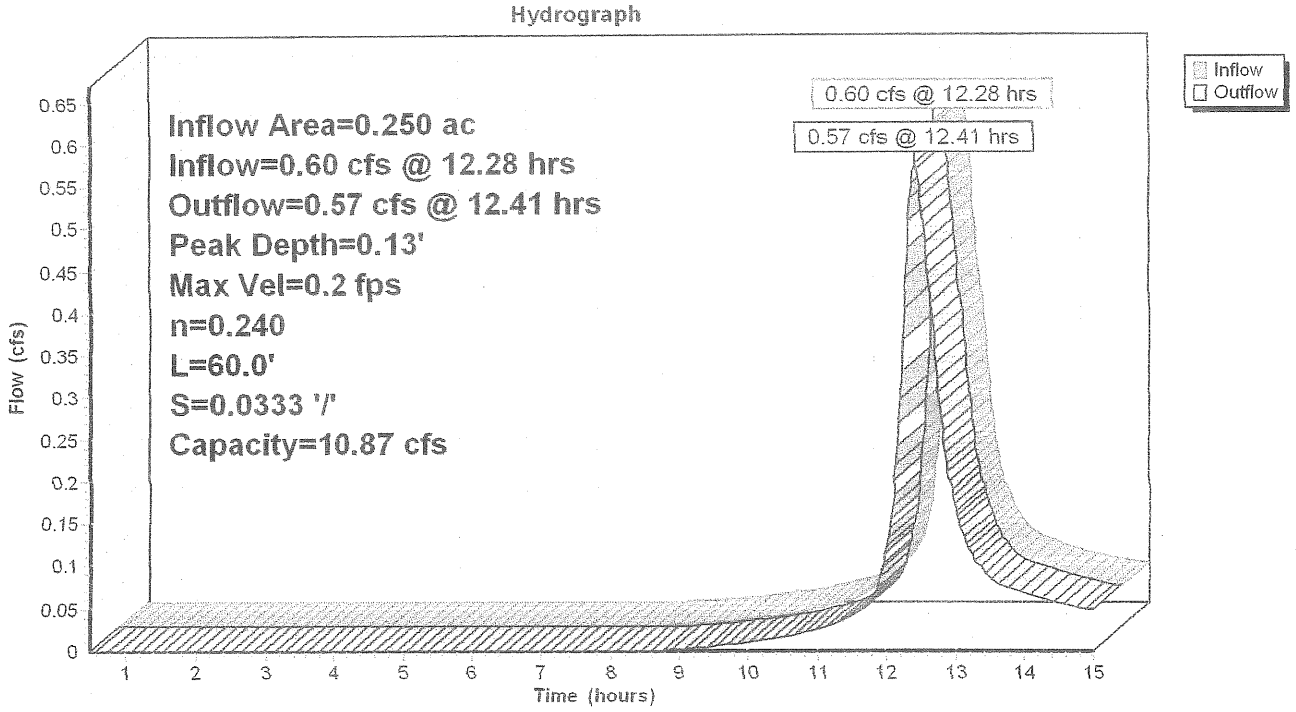
Reach 5R: REACH THRU SA-3

Inflow Area = 0.250 ac, Inflow Depth = 2.32" for PRE 25 YR event
Inflow = 0.60 cfs @ 12.28 hrs, Volume= 0.048 af
Outflow = 0.57 cfs @ 12.41 hrs, Volume= 0.047 af, Atten= 4%, Lag= 7.9 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 0.2 fps, Min. Travel Time= 4.5 min
Avg. Velocity = 0.1 fps, Avg. Travel Time= 10.3 min

Peak Depth= 0.13' @ 12.34 hrs
Capacity at bank full= 10.87 cfs
Inlet Invert= 10.00', Outlet Invert= 8.00'
60.00' x 0.50' deep Parabolic Channel, n= 0.240 Length= 60.0' Slope= 0.0333 '/'

Reach 5R: REACH THRU SA-3



Pond 1P: WETLAND/POND IN CONCRETE OUTWASH

LIMITED PONDING IS TRAPPED WATER IN A CAT TAIL DEPRESSION

Inflow Area = 4.110 ac, Inflow Depth = 2.72" for PRE 25 YR event
Inflow = 8.21 cfs @ 12.02 hrs, Volume= 0.932 af
Outflow = 7.59 cfs @ 12.05 hrs, Volume= 0.891 af, Atten= 8%, Lag= 1.5 min
Primary = 7.59 cfs @ 12.05 hrs, Volume= 0.891 af

Routing by Stor-Ind method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Peak Elev= 11.15' @ 12.05 hrs Surf.Area= 4,688 sf Storage= 2,623 cf
Flood Elev= 12.00' Surf.Area= 10,944 sf Storage= 8,767 cf
Plug-Flow detention time= 20.0 min calculated for 0.891 af (96% of inflow)
Center-of-Mass det. time= 13.8 min (755.9 - 742.1)

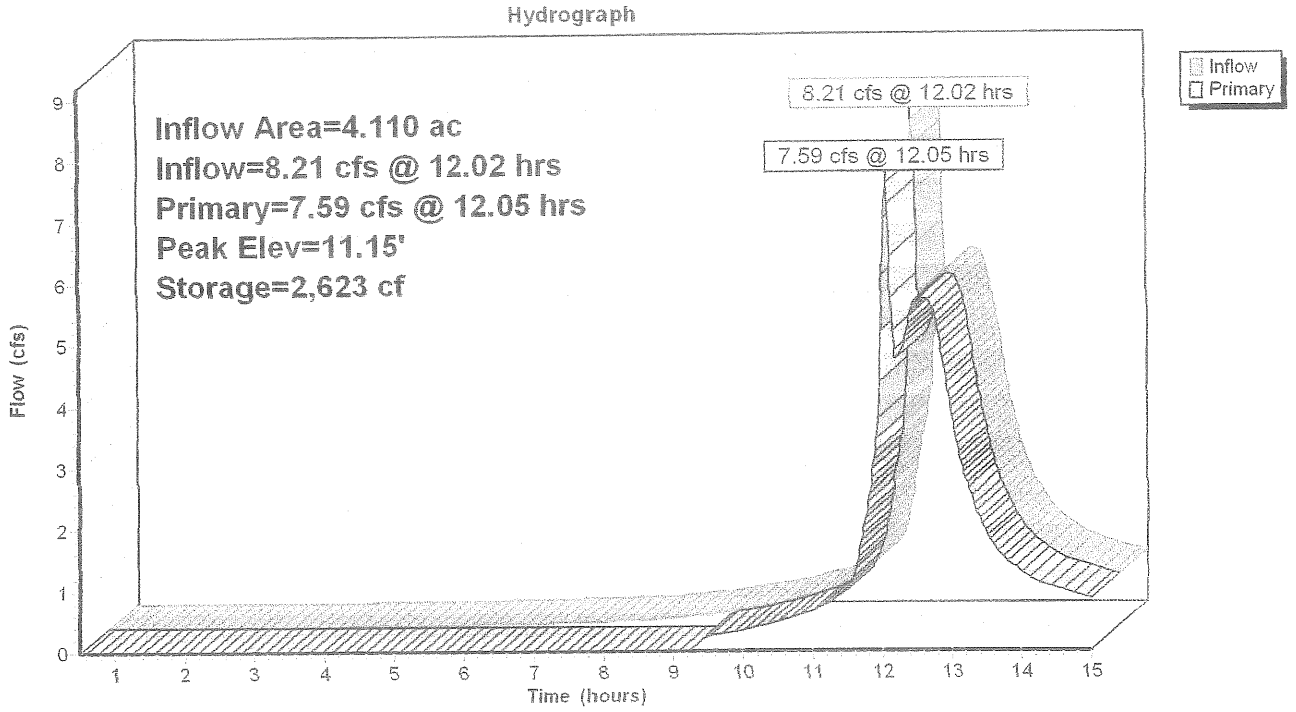
#	Invert	Avail.Storage	Storage Description
1	10.50'	8,767 cf	**Custom Stage Data (Prismatic)** Listed below

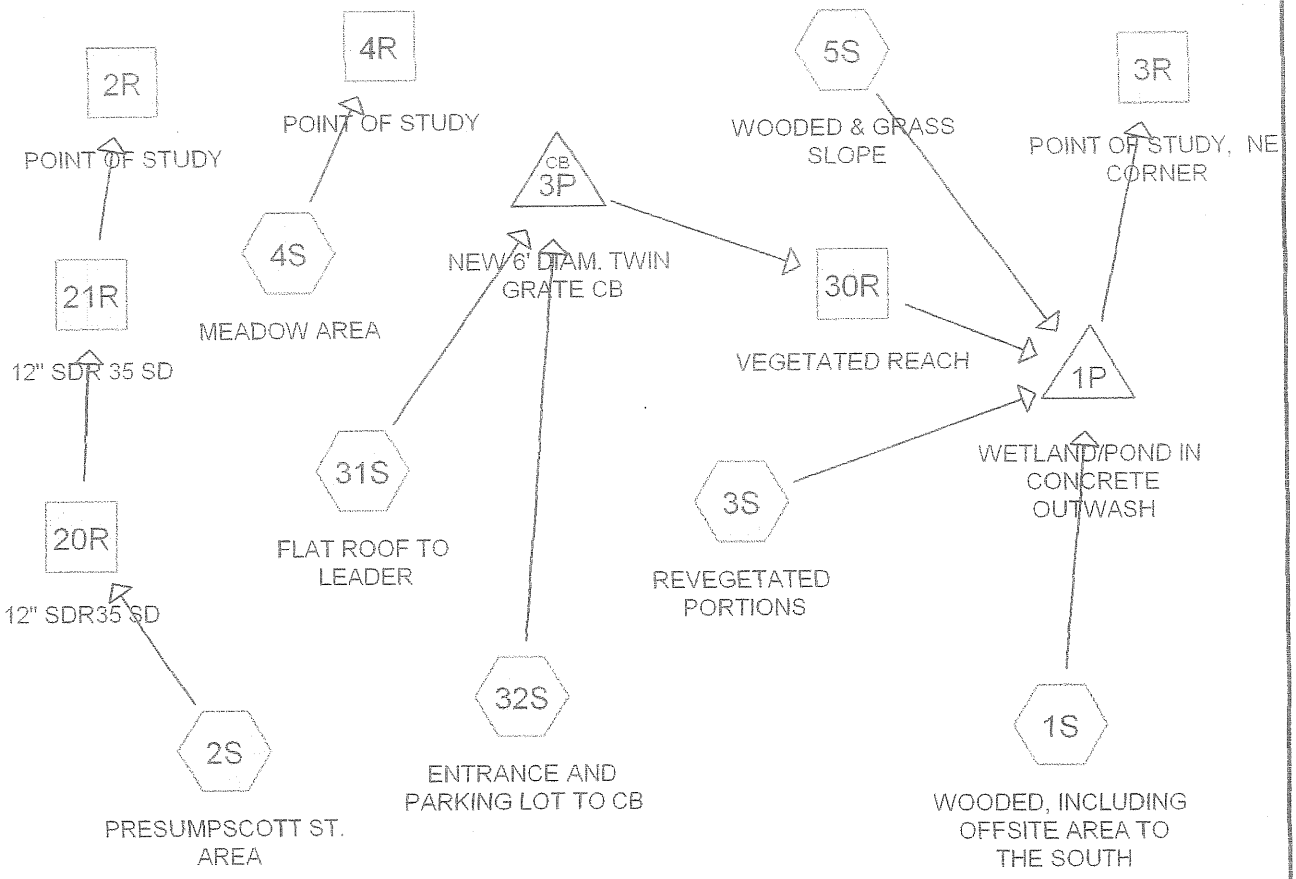
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
10.50	2,500	0	0
11.00	3,560	1,515	1,515
12.00	10,944	7,252	8,767

#	Routing	Invert	Outlet Devices
1	Primary	11.00'	***50.0' long x 2.0' 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 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=7.51 cfs @ 12.05 hrs HW=11.15' (Free Discharge)
↑**1=Broad-Crested Rectangular Weir** (Weir Controls 7.51 cfs @ 1.0 fps)

Pond 1P: WETLAND/POND IN CONCRETE OUTWASH





Subcat Reach Pond Link

Drainage Diagram for Presumpscott Street - POST
Prepared by Engineering Assistance & Design, Inc. 8/11/2004

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.530 ac Runoff Depth=2.26"
Flow Length=685' Tc=40.1 min CN=77 Runoff=4.44 cfs 0.476 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.480 ac Runoff Depth=3.38"
Flow Length=565' Tc=3.3 min CN=88 Runoff=2.49 cfs 0.135 af

Subcatchment 3S: REVEGETATED PORTIONS Runoff Area=0.610 ac Runoff Depth=2.36"
Flow Length=280' Tc=4.4 min CN=77 Runoff=2.31 cfs 0.120 af

Subcatchment 4S: MEADOW AREA Runoff Area=0.040 ac Runoff Depth=2.45"
Flow Length=30' Tc=3.4 min CN=78 Runoff=0.16 cfs 0.008 af

Subcatchment 5S: WOODED & GRASS SLOPE Runoff Area=0.160 ac Runoff Depth=2.45"
Flow Length=200' Tc=32.4 min CN=79 Runoff=0.33 cfs 0.033 af

Subcatchment 31S: FLAT ROOF TO LEADER Runoff Area=0.230 ac Runoff Depth=4.46"
Flow Length=170' Tc=2.4 min CN=98 Runoff=1.40 cfs 0.085 af

Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB Runoff Area=0.580 ac Runoff Depth=4.34"
Flow Length=175' Tc=3.0 min CN=97 Runoff=3.45 cfs 0.210 af

Reach 2R: POINT OF STUDY Inflow=2.45 cfs 0.135 af
Outflow=2.45 cfs 0.135 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=7.78 cfs 0.840 af
Outflow=7.78 cfs 0.840 af

Reach 4R: POINT OF STUDY Inflow=0.16 cfs 0.008 af
Outflow=0.16 cfs 0.008 af

Reach 20R: 12" SDR35 SD Peak Depth=0.35' Max Vel=10.1 fps Inflow=2.49 cfs 0.135 af
D=12.0" n=0.010 L=126.0' S=0.0409 '/' Capacity=9.36 cfs Outflow=2.47 cfs 0.135 af

Reach 21R: 12" SDR 35 SD Peak Depth=0.42' Max Vel=7.9 fps Inflow=2.47 cfs 0.135 af
D=12.0" n=0.010 L=117.0' S=0.0214 '/' Capacity=6.77 cfs Outflow=2.45 cfs 0.135 af

Reach 30R: VEGETATED REACH Peak Depth=0.82' Max Vel=0.4 fps Inflow=4.84 cfs 0.295 af
n=0.240 L=65.0' S=0.0154 '/' Capacity=1.84 cfs Outflow=4.41 cfs 0.293 af

Pond 1P: WETLAND/POND IN CONCRETE OUTW Peak Elev=11.41' Storage=4,454 cf Inflow=8.07 cfs 0.922 af
Outflow=7.78 cfs 0.840 af

Pond 3P: NEW 6' DIAM. TWIN GRATE CB Peak Elev=42.64' Inflow=4.84 cfs 0.295 af
12.0" x 161.0' Culvert Outflow=4.84 cfs 0.295 af

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.530 ac Runoff Depth=1.73"
Flow Length=685' Tc=40.1 min CN=77 Runoff=3.45 cfs 0.365 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.480 ac Runoff Depth=2.74"
Flow Length=565' Tc=3.3 min CN=88 Runoff=2.05 cfs 0.109 af

Subcatchment 3S: REVEGETATED PORTIONS Runoff Area=0.610 ac Runoff Depth=1.82"
Flow Length=280' Tc=4.4 min CN=77 Runoff=1.79 cfs 0.092 af

Subcatchment 4S: MEADOW AREA Runoff Area=0.040 ac Runoff Depth=1.89"
Flow Length=30' Tc=3.4 min CN=78 Runoff=0.13 cfs 0.006 af

Subcatchment 5S: WOODED & GRASS SLOPE Runoff Area=0.160 ac Runoff Depth=1.90"
Flow Length=200' Tc=32.4 min CN=79 Runoff=0.26 cfs 0.025 af

Subcatchment 31S: FLAT ROOF TO LEADER Runoff Area=0.230 ac Runoff Depth=3.78"
Flow Length=170' Tc=2.4 min CN=98 Runoff=1.19 cfs 0.072 af

Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB Runoff Area=0.580 ac Runoff Depth=3.66"
Flow Length=175' Tc=3.0 min CN=97 Runoff=2.93 cfs 0.177 af

Reach 2R: POINT OF STUDY Inflow=2.02 cfs 0.109 af
Outflow=2.02 cfs 0.109 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=6.27 cfs 0.648 af
Outflow=6.27 cfs 0.648 af

Reach 4R: POINT OF STUDY Inflow=0.13 cfs 0.006 af
Outflow=0.13 cfs 0.006 af

Reach 20R: 12" SDR35 SD Peak Depth=0.32' Max Vel=9.5 fps Inflow=2.05 cfs 0.109 af
D=12.0" n=0.010 L=126.0' S=0.0409 '/' Capacity=9.36 cfs Outflow=2.03 cfs 0.109 af

Reach 21R: 12" SDR 35 SD Peak Depth=0.38' Max Vel=7.5 fps Inflow=2.03 cfs 0.109 af
D=12.0" n=0.010 L=117.0' S=0.0214 '/' Capacity=6.77 cfs Outflow=2.02 cfs 0.109 af

Reach 30R: VEGETATED REACH Peak Depth=0.74' Max Vel=0.4 fps Inflow=4.12 cfs 0.249 af
n=0.240 L=65.0' S=0.0154 '/' Capacity=1.84 cfs Outflow=3.75 cfs 0.247 af

Pond 1P: WETLAND/POND IN CONCRETE OUTW Peak Elev=11.38' Storage=4,304 cf Inflow=6.54 cfs 0.730 af
Outflow=6.27 cfs 0.648 af

Pond 3P: NEW 6' DIAM. TWIN GRATE CB Peak Elev=42.19' Inflow=4.12 cfs 0.249 af
12.0" x 161.0' Culvert Outflow=4.12 cfs 0.249 af

Total Runoff Area = 4.630 ac Runoff Volume = 0.847 af Average Runoff Depth = 2.20"

Time span=0.50-15.00 hrs, dt=0.02 hrs, 726 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE Runoff Area=2.530 ac Runoff Depth=0.73"
Flow Length=685' Tc=40.1 min CN=77 Runoff=1.50 cfs 0.154 af

Subcatchment 2S: PRESUMPSCOTT ST. AREA Runoff Area=0.480 ac Runoff Depth=1.43"
Flow Length=565' Tc=3.3 min CN=88 Runoff=1.12 cfs 0.057 af

Subcatchment 3S: REVEGETATED PORTIONS Runoff Area=0.610 ac Runoff Depth=0.78"
Flow Length=280' Tc=4.4 min CN=77 Runoff=0.78 cfs 0.039 af

Subcatchment 4S: MEADOW AREA Runoff Area=0.040 ac Runoff Depth=0.83"
Flow Length=30' Tc=3.4 min CN=78 Runoff=0.06 cfs 0.003 af

Subcatchment 5S: WOODED & GRASS SLOPE Runoff Area=0.160 ac Runoff Depth=0.84"
Flow Length=200' Tc=32.4 min CN=79 Runoff=0.12 cfs 0.011 af

Subcatchment 31S: FLAT ROOF TO LEADER Runoff Area=0.230 ac Runoff Depth=2.33"
Flow Length=170' Tc=2.4 min CN=98 Runoff=0.76 cfs 0.045 af

Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB Runoff Area=0.580 ac Runoff Depth=2.22"
Flow Length=175' Tc=3.0 min CN=97 Runoff=1.84 cfs 0.107 af

Reach 2R: POINT OF STUDY Inflow=1.10 cfs 0.057 af
Outflow=1.10 cfs 0.057 af

Reach 3R: POINT OF STUDY, NE CORNER Inflow=3.14 cfs 0.276 af
Outflow=3.14 cfs 0.276 af

Reach 4R: POINT OF STUDY Inflow=0.06 cfs 0.003 af
Outflow=0.06 cfs 0.003 af

Reach 20R: 12" SDR35 SD Peak Depth=0.23' Max Vel=8.0 fps Inflow=1.12 cfs 0.057 af
D=12.0" n=0.010 L=126.0' S=0.0409 '/' Capacity=9.36 cfs Outflow=1.11 cfs 0.057 af

Reach 21R: 12" SDR 35 SD Peak Depth=0.27' Max Vel=6.4 fps Inflow=1.11 cfs 0.057 af
D=12.0" n=0.010 L=117.0' S=0.0214 '/' Capacity=6.77 cfs Outflow=1.10 cfs 0.057 af

Reach 30R: VEGETATED REACH Peak Depth=0.57' Max Vel=0.4 fps Inflow=2.59 cfs 0.152 af
n=0.240 L=65.0' S=0.0154 '/' Capacity=1.84 cfs Outflow=2.34 cfs 0.151 af

Pond 1P: WETLAND/POND IN CONCRETE OUTW Peak Elev=11.33' Storage=3,942 cf Inflow=3.45 cfs 0.356 af
Outflow=3.14 cfs 0.276 af

Pond 3P: NEW 6' DIAM. TWIN GRATE CB Peak Elev=41.46' Inflow=2.59 cfs 0.152 af
12.0" x 161.0' Culvert Outflow=2.59 cfs 0.152 af

Total Runoff Area = 4.630 ac Runoff Volume = 0.417 af Average Runoff Depth = 1.08"

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE SOUTH

OFFSITE AREA TAKEN FROM USGA TOPO QUAD

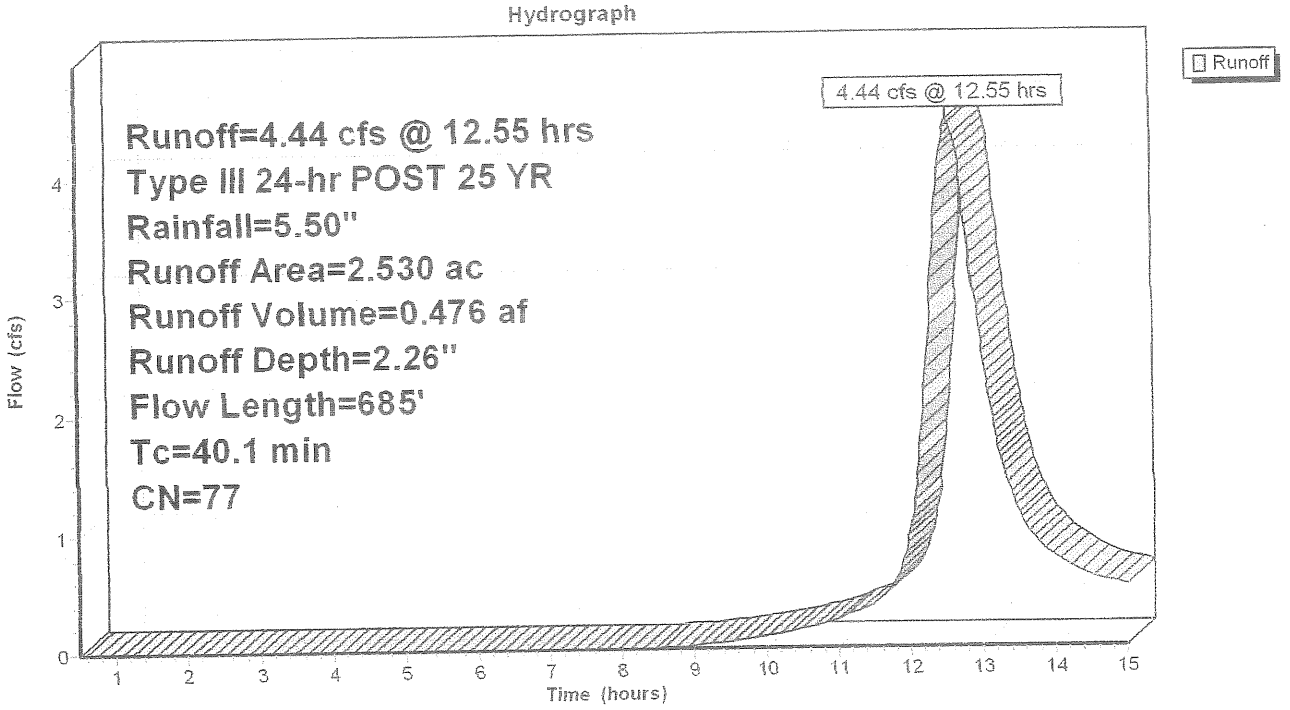
Runoff = 4.44 cfs @ 12.55 hrs, Volume= 0.476 af, Depth= 2.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 25 YR Rainfall=5.50"

Area (ac)	CN	Description
2.390	77	GOOD WOODS HOLLIS C/D
0.140	80	GOOD GRASS HOLLIS C/D
2.530	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
31.0	120	0.0500	0.1		**Sheet Flow, AB** Woods: Dense underbrush n= 0.800 P2= 3.00"
5.7	340	0.1600	1.0		**Shallow Concentrated Flow, BC** Forest w/Heavy Litter Kv= 2.5 fps
0.9	65	0.2400	1.2		**Shallow Concentrated Flow, CD** Forest w/Heavy Litter Kv= 2.5 fps
0.1	45	0.2500	7.5		**Shallow Concentrated Flow, DE** Grassed Waterway Kv= 15.0 fps
2.4	115	0.0130	0.8		**Shallow Concentrated Flow, EF** Short Grass Pasture Kv= 7.0 fps
40.1	685	Total			

Subcatchment 1S: WOODED, INCLUDING OFFSITE AREA TO THE SOUTH



Subcatchment 2S: PRESUMPSCOTT ST. AREA

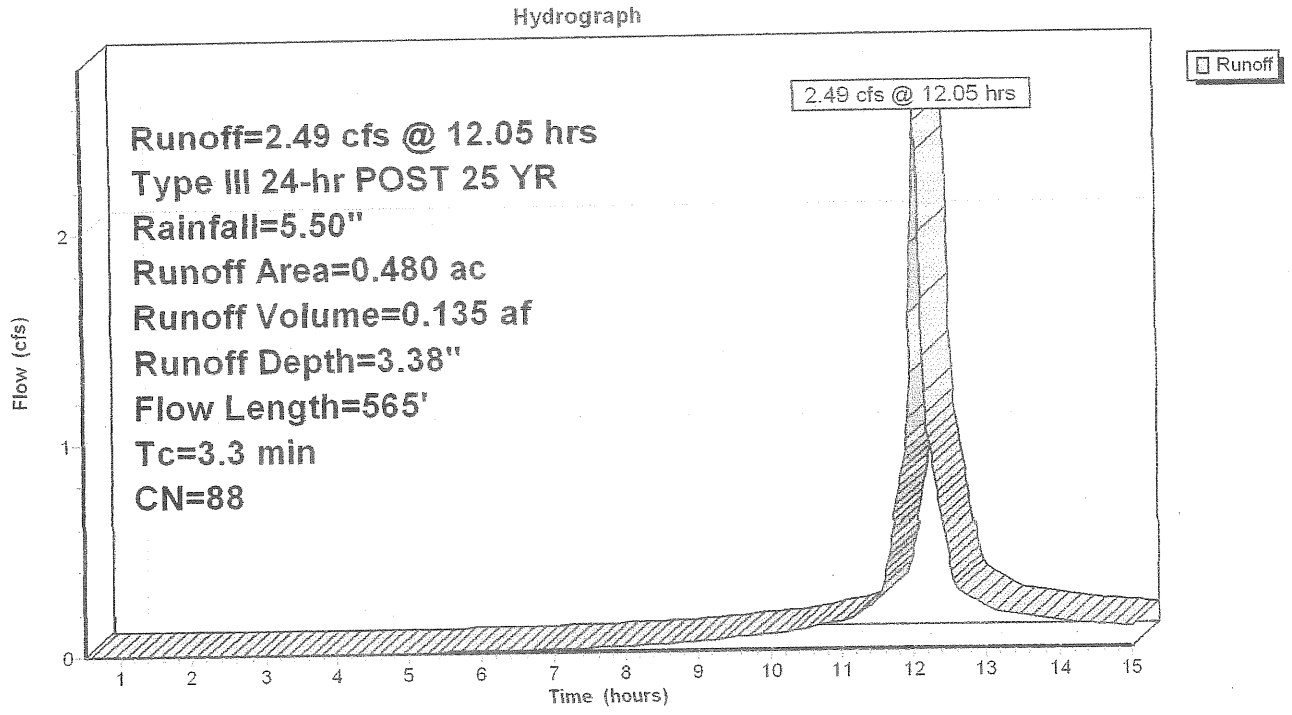
Runoff = 2.49 cfs @ 12.05 hrs, Volume= 0.135 af, Depth= 3.38"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.250	98	PAVED ROAD& ENTRANCE
0.160	77	GOOD VEGETATION HOLLIS C/D
0.070	80	ROW GRASS DITCH
0.480	88	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	30	0.0100	0.8		**Sheet Flow, AB TOP OF STREEET** Smooth surfaces n= 0.011 P2= 3.00"
1.0	395	0.1000	6.4		**Shallow Concentrated Flow, BC CURBED GUTTER** Paved Kv= 20.3 fps
1.7	140	0.0500	1.4	11.08	**Channel Flow, CD GRASS ROADSIDE SWALE** Area= 8.0 sf Perim= 8.0' r= 1.00' n= 0.240
3.3	565	Total			

Subcatchment 2S: PRESUMPSCOTT ST. AREA



Subcatchment 3S: REVEGETATED PORTIONS

THIS AREA PREVIOUISLY WAS OUTWASH CONCRETE. RECLIAMED TO UNMOWED MEADOW GRASSES

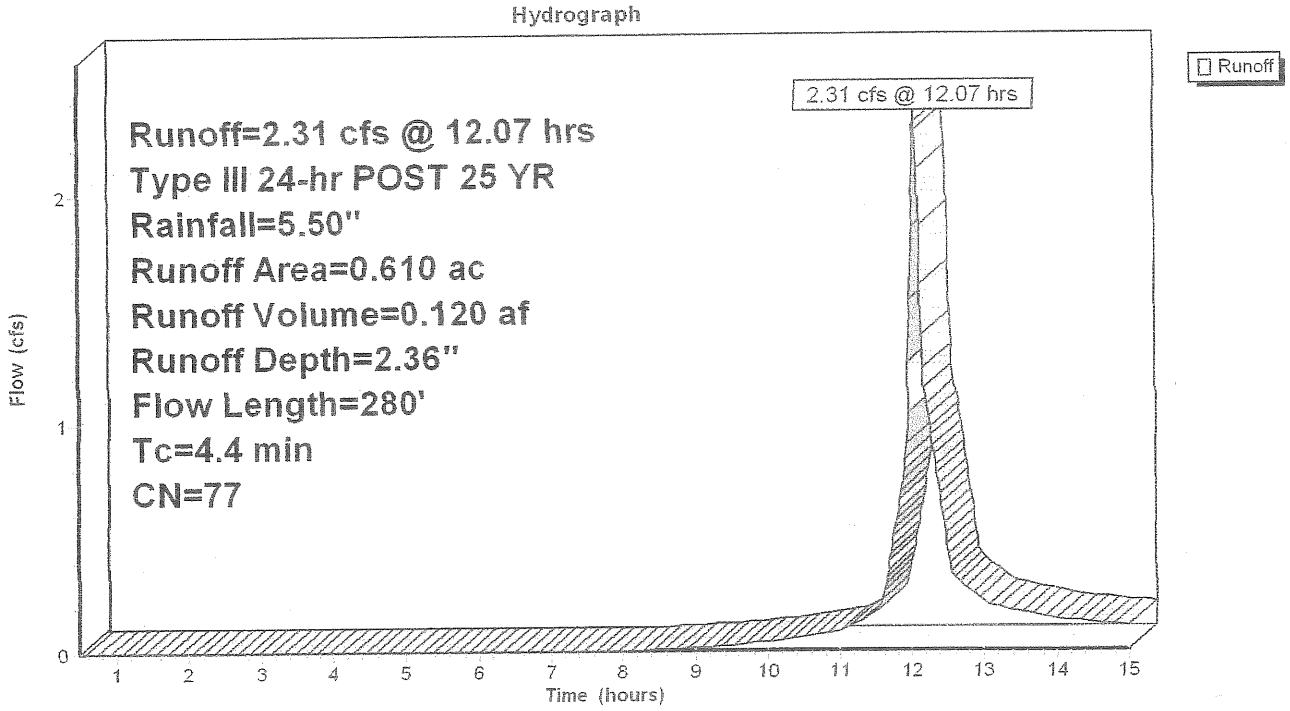
Runoff = 2.31 cfs @ 12.07 hrs, Volume= 0.120 af, Depth= 2.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.360	80	NEW GRASS OVER BACKFILL
0.250	73	WETLAND BRUSH "D"
0.610	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	40	0.5000	4.0		**Sheet Flow, AB VEGETATED SLOPE** Smooth surfaces n= 0.011 P2= 3.00"
1.7	100	0.0200	1.0		**Shallow Concentrated Flow, BC SHALLOW GRASS DIVERESION** Short Grass Pasture Kv= 7.0 fps
0.2	30	0.1500	2.7		**Shallow Concentrated Flow, CD SLOPE NEXT TO WOODS** Short Grass Pasture Kv= 7.0 fps
2.3	110	0.0130	0.8		**Shallow Concentrated Flow, DE OLD VEGETATION** Short Grass Pasture Kv= 7.0 fps
4.4	280	Total			

Subcatchment 3S: REVEGETATED PORTIONS



Subcatchment 4S: MEADOW AREA

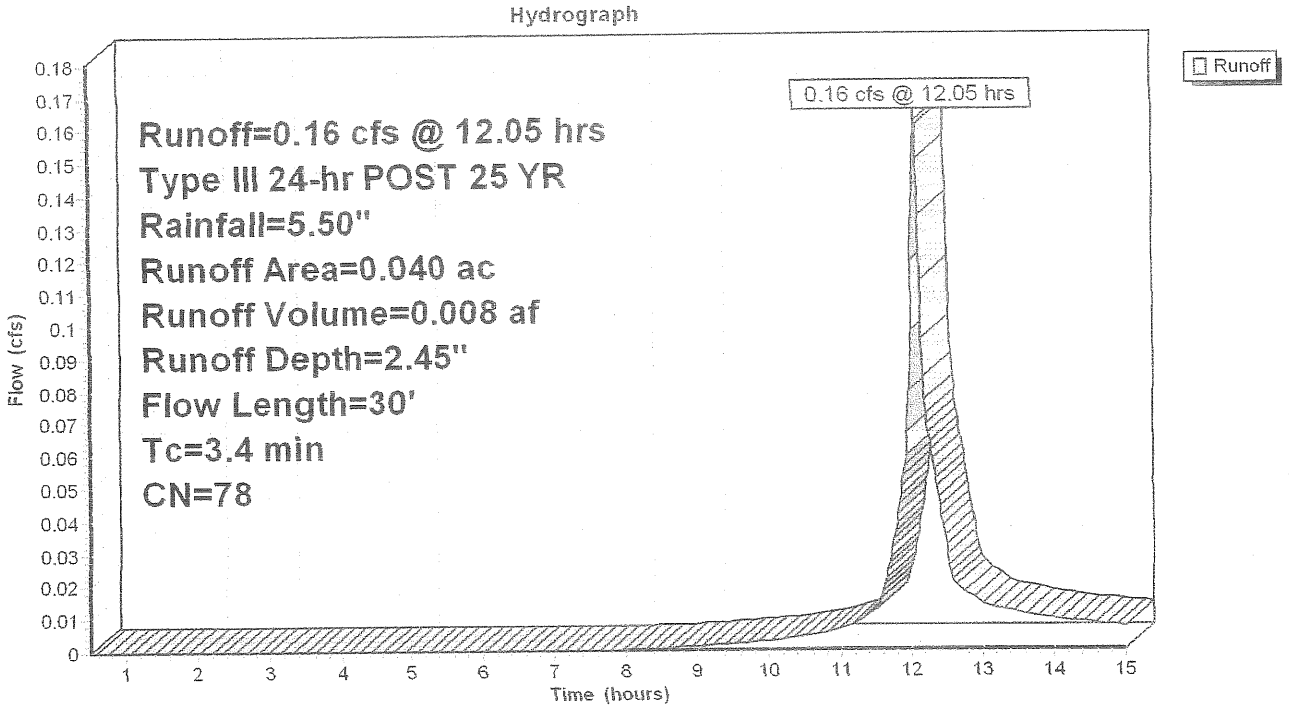
Runoff = 0.16 cfs @ 12.05 hrs, Volume= 0.008 af, Depth= 2.45"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.010	77	GOOD WOODS HOLLIS C/D
0.030	78	MEADOW GRASS HOLLIS C/D
0.040	78	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	30	0.2000	0.1		**Sheet Flow, AB** Woods: Light underbrush n= 0.400 P2= 3.00"

Subcatchment 4S: MEADOW AREA



Subcatchment 5S: WOODED & GRASS SLOPE

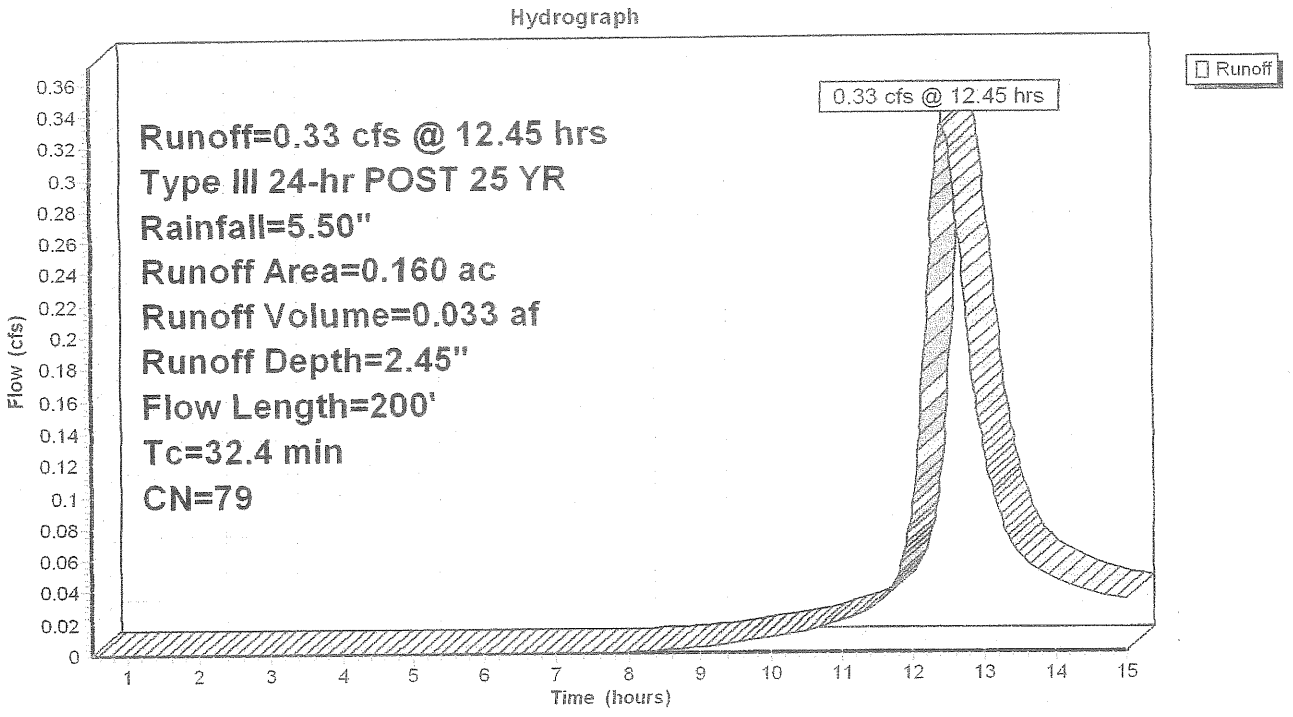
Runoff = 0.33 cfs @ 12.45 hrs, Volume= 0.033 af, Depth= 2.45"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.080	77	GOOD WOODS HOLLIS C/D
0.080	80	GOOD GRASS HOLLIS C/D
0.160	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
32.1	85	0.0230	0.0		**Sheet Flow, AB** Woods: Dense underbrush n= 0.800 P2= 3.00"
0.3	115	0.2400	7.3		**Shallow Concentrated Flow, BC** Grassed Waterway Kv= 15.0 fps
32.4	200	Total			

Subcatchment 5S: WOODED & GRASS SLOPE



Subcatchment 31S: FLAT ROOF TO LEADER

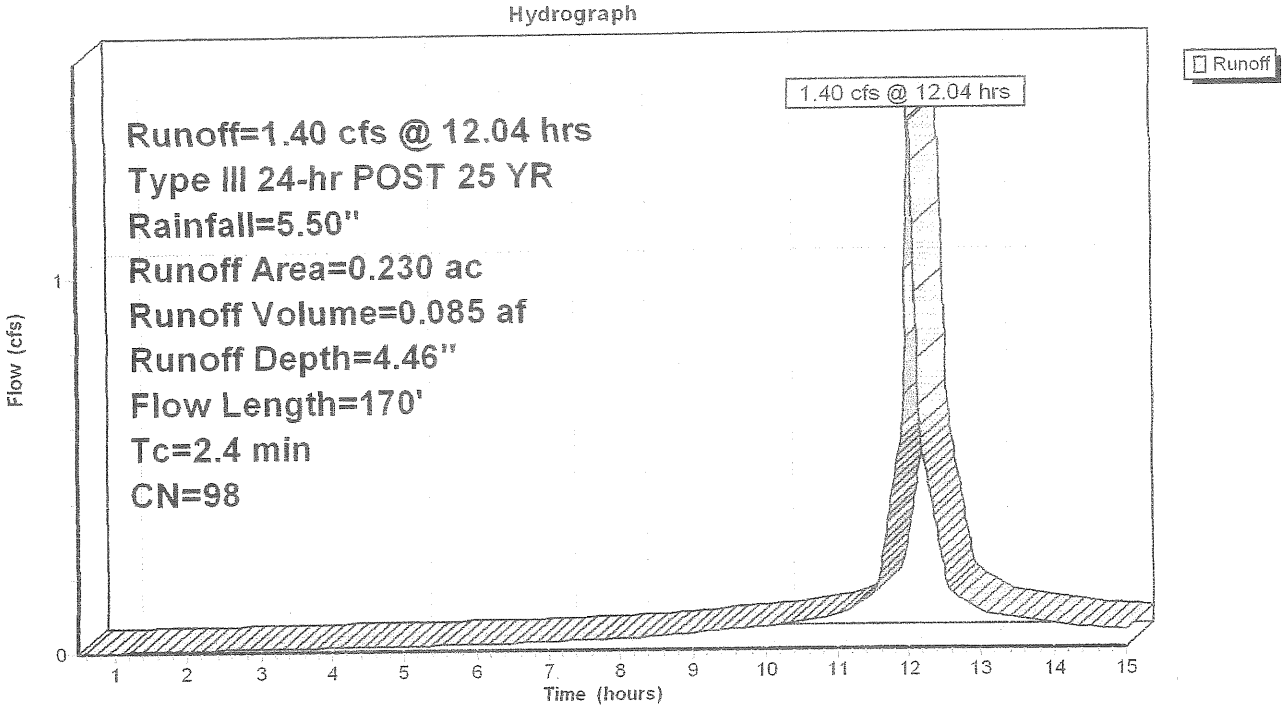
Runoff = 1.40 cfs @ 12.04 hrs, Volume= 0.085 af, Depth= 4.46"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.230	98	NEW ROOF

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.1	95	0.0050	0.8		**Sheet Flow, AB FLAT ROOF MEMBRANE** Smooth surfaces n= 0.011 P2= 3.00"
0.3	75	0.0100	3.7	0.73	**Circular Channel (pipe), BC ROOF LEADER TO CB** Diam= 6.0" Area= 0.2 sf Perim= 1.6' r= 0.13' n= 0.010
2.4	170	Total			

Subcatchment 31S: FLAT ROOF TO LEADER



Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB

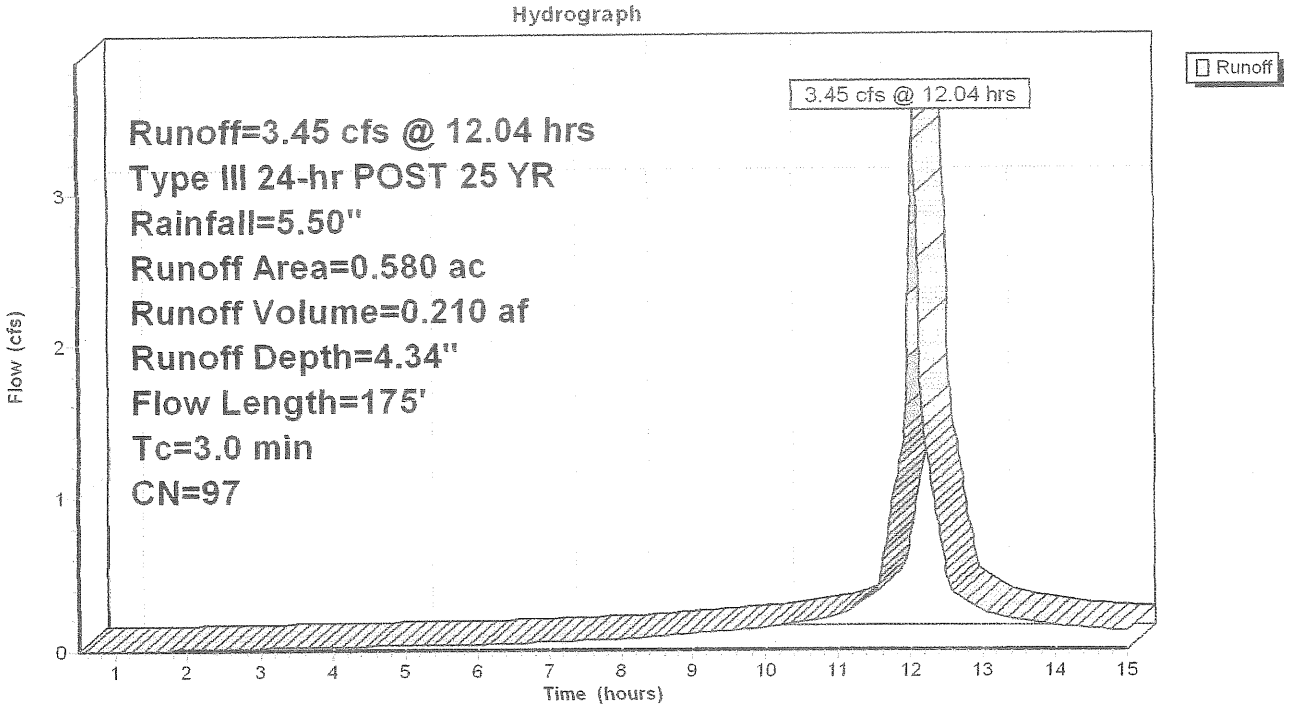
Runoff = 3.45 cfs @ 12.04 hrs, Volume= 0.210 af, Depth= 4.34"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Type III 24-hr POST 25 YR Rainfall=5.50"

Area (ac)	CN	Description
0.030	80	MISC. LAWN
0.550	98	ENTRANCE AND PARKING LOT
0.580	97	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	175	0.0068	1.0		**Sheet Flow, AB PARKING LOT** Smooth surfaces n= 0.011 P2= 3.00"

Subcatchment 32S: ENTRANCE AND PARKING LOT TO CB

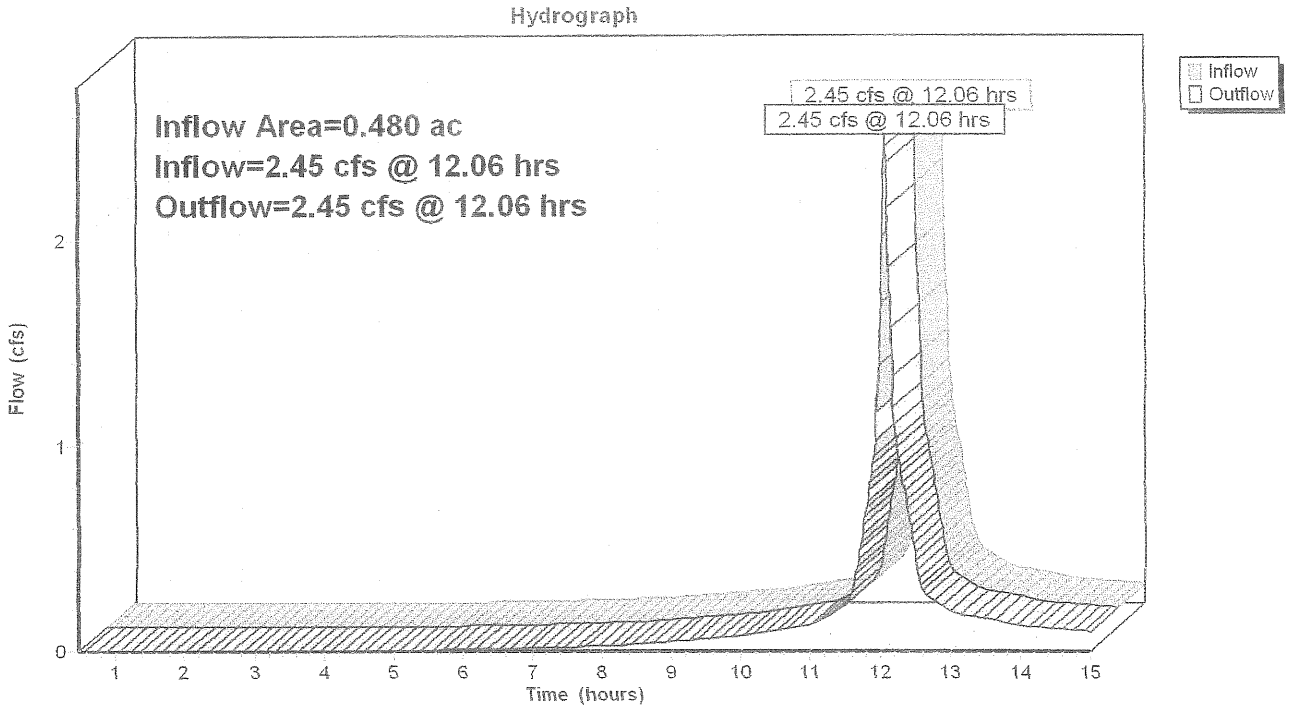


Reach 2R: POINT OF STUDY

Inflow Area = 0.480 ac, Inflow Depth = 3.37" for POST 25 YR event
Inflow = 2.45 cfs @ 12.06 hrs, Volume= 0.135 af
Outflow = 2.45 cfs @ 12.06 hrs, Volume= 0.135 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 2R: POINT OF STUDY

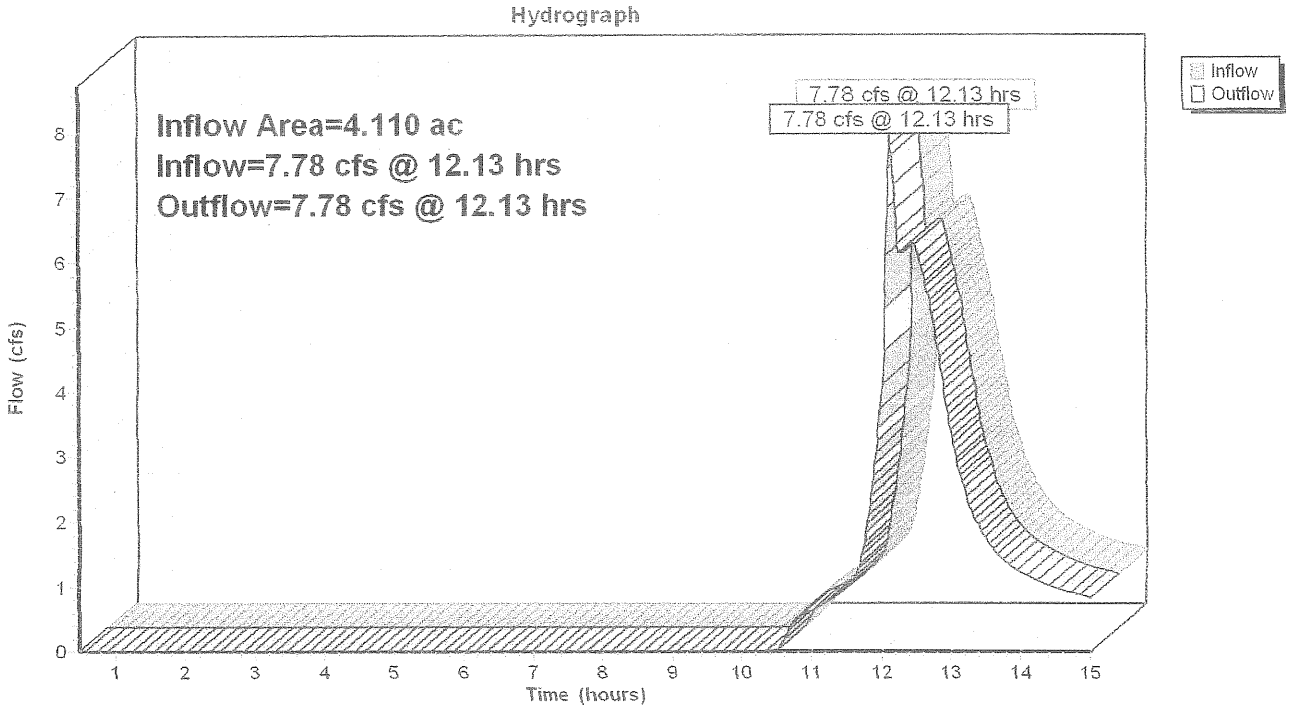


Reach 3R: POINT OF STUDY, NE CORNER

Inflow Area = 4.110 ac, Inflow Depth = 2.45" for POST 25 YR event
Inflow = 7.78 cfs @ 12.13 hrs, Volume= 0.840 af
Outflow = 7.78 cfs @ 12.13 hrs, Volume= 0.840 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 3R: POINT OF STUDY, NE CORNER

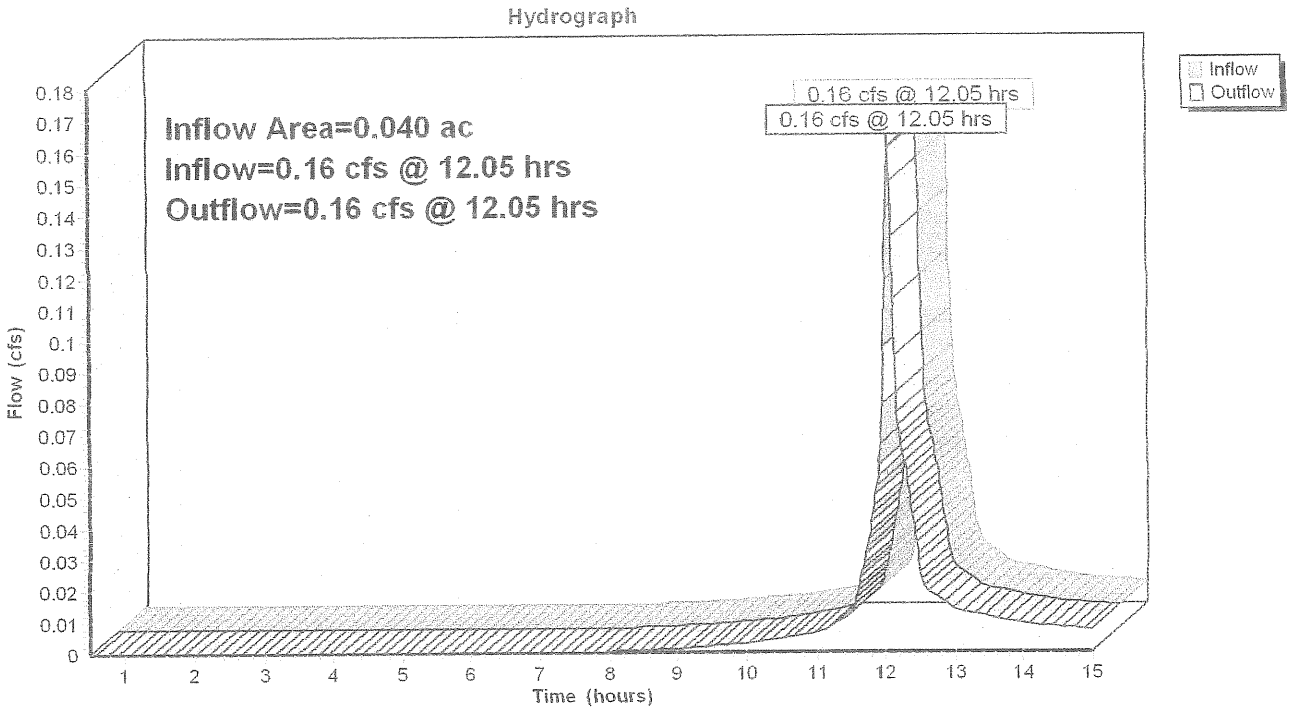


Reach 4R: POINT OF STUDY

Inflow Area = 0.040 ac, Inflow Depth = 2.45" for POST 25 YR event
Inflow = 0.16 cfs @ 12.05 hrs, Volume= 0.008 af
Outflow = 0.16 cfs @ 12.05 hrs, Volume= 0.008 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs

Reach 4R: POINT OF STUDY



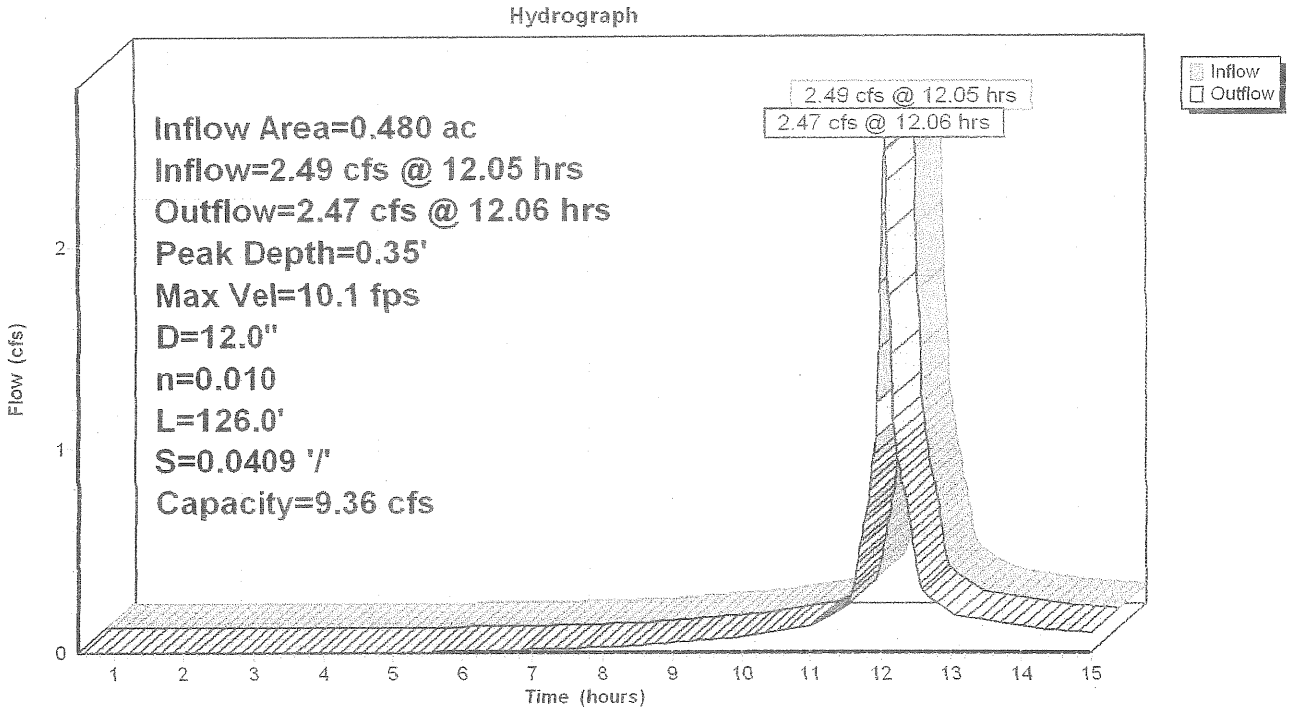
Reach 20R: 12" SDR35 SD

Inflow Area = 0.480 ac, Inflow Depth = 3.38" for POST 25 YR event
Inflow = 2.49 cfs @ 12.05 hrs, Volume= 0.135 af
Outflow = 2.47 cfs @ 12.06 hrs, Volume= 0.135 af, Atten= 1%, Lag= 0.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 10.1 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 3.6 fps, Avg. Travel Time= 0.6 min

Peak Depth= 0.35' @ 12.05 hrs
Capacity at bank full= 9.36 cfs
Inlet Invert= 48.90', Outlet Invert= 43.75'
12.0" Diameter Pipe n= 0.010 Length= 126.0' Slope= 0.0409 '/'

Reach 20R: 12" SDR35 SD



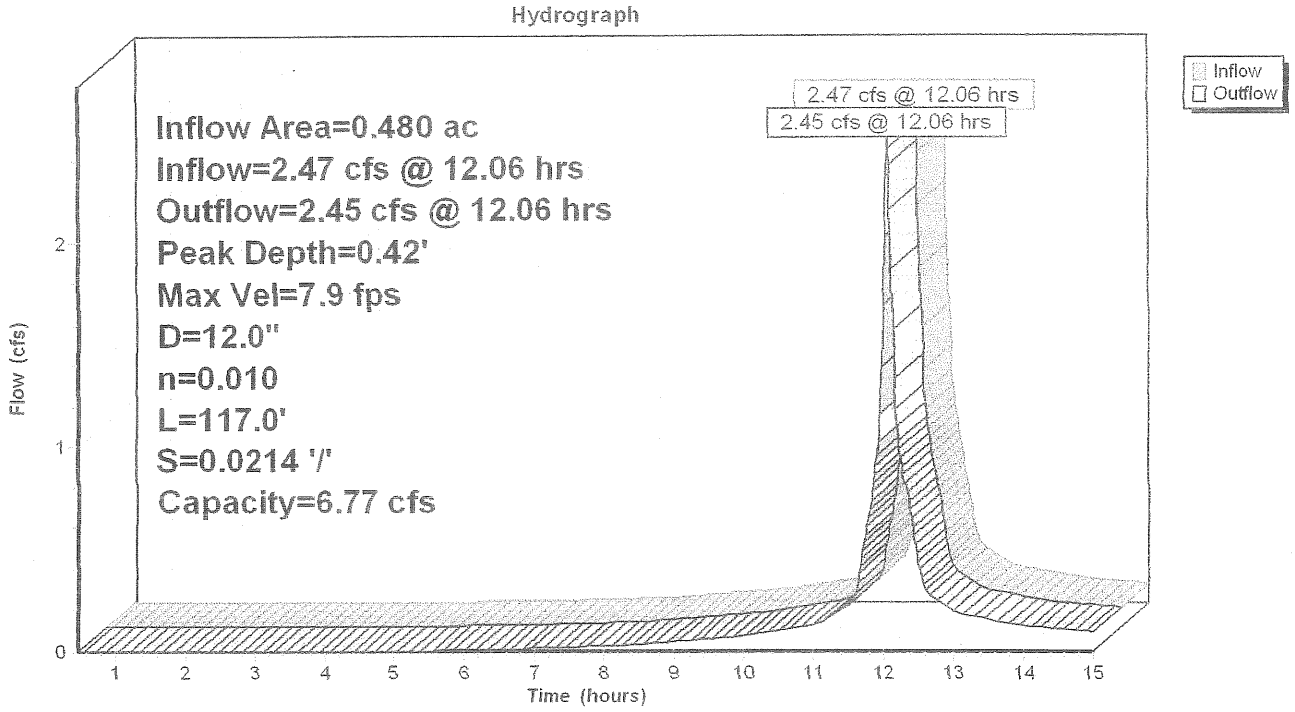
Reach 21R: 12" SDR 35 SD

Inflow Area = 0.480 ac, Inflow Depth = 3.37" for POST 25 YR event
Inflow = 2.47 cfs @ 12.06 hrs, Volume= 0.135 af
Outflow = 2.45 cfs @ 12.06 hrs, Volume= 0.135 af, Atten= 1%, Lag= 0.4 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 7.9 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 2.8 fps, Avg. Travel Time= 0.7 min

Peak Depth= 0.42' @ 12.06 hrs
Capacity at bank full= 6.77 cfs
Inlet Invert= 43.50', Outlet Invert= 41.00'
12.0" Diameter Pipe n= 0.010 Length= 117.0' Slope= 0.0214 '/'

Reach 21R: 12" SDR 35 SD



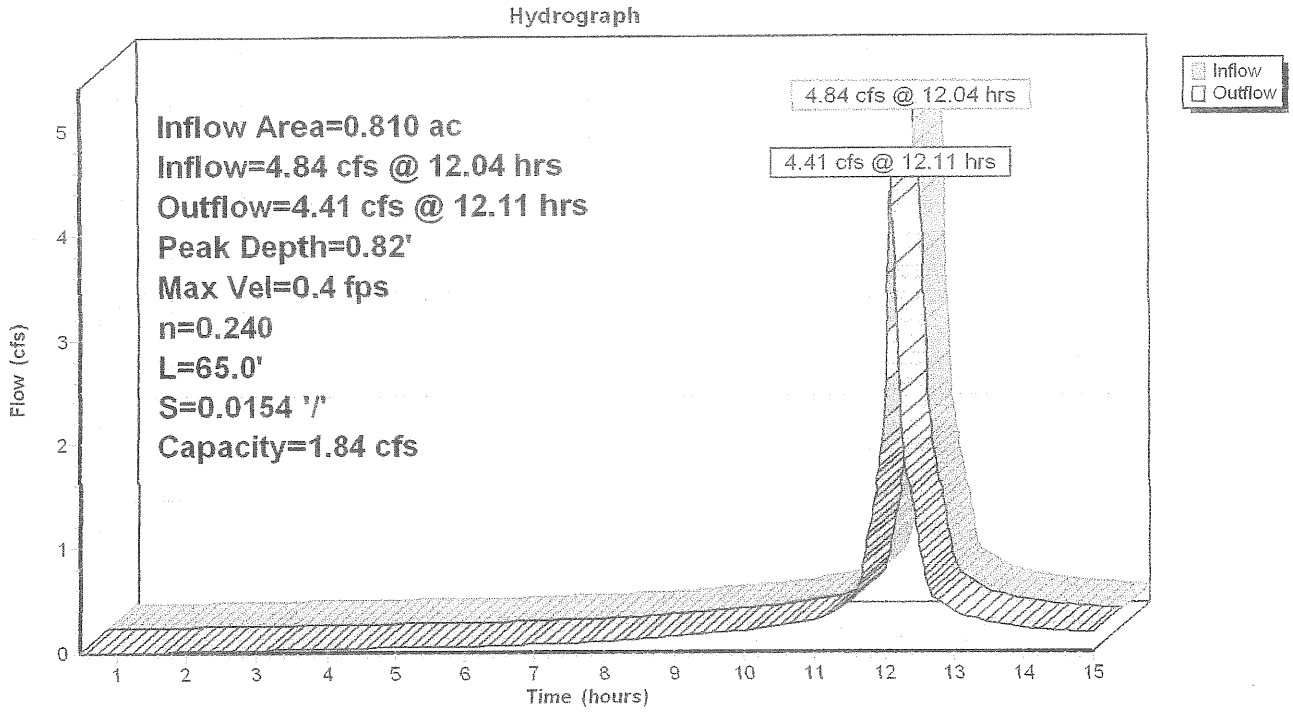
Reach 30R: VEGETATED REACH

Inflow Area = 0.810 ac, Inflow Depth = 4.37" for POST 25 YR event
Inflow = 4.84 cfs @ 12.04 hrs, Volume= 0.295 af
Outflow = 4.41 cfs @ 12.11 hrs, Volume= 0.293 af, Atten= 9%, Lag= 4.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Max. Velocity= 0.4 fps, Min. Travel Time= 2.4 min
Avg. Velocity = 0.2 fps, Avg. Travel Time= 6.8 min

Peak Depth= 0.82' @ 12.07 hrs
Capacity at bank full= 1.84 cfs
Inlet Invert= 12.00', Outlet Invert= 11.00'
15.00' x 0.50' deep Parabolic Channel, n= 0.240 Length= 65.0' Slope= 0.0154 '/'

Reach 30R: VEGETATED REACH



Pond 1P: WETLAND/POND IN CONCRETE OUTWASH

LIMITED PONDING IS WATER TRAPPED IN A CAT TAIL DEPRESSION

Inflow Area = 4.110 ac, Inflow Depth = 2.69" for POST 25 YR event
Inflow = 8.07 cfs @ 12.10 hrs, Volume= 0.922 af
Outflow = 7.78 cfs @ 12.13 hrs, Volume= 0.840 af, Atten= 4%, Lag= 1.7 min
Primary = 7.78 cfs @ 12.13 hrs, Volume= 0.840 af

Routing by Stor-Ind method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Peak Elev= 11.41' @ 12.13 hrs Surf.Area= 6,553 sf Storage= 4,454 cf
Flood Elev= 12.00' Surf.Area= 10,944 sf Storage= 8,767 cf
Plug-Flow detention time= 36.0 min calculated for 0.840 af (91% of inflow)
Center-of-Mass det. time= 23.6 min (761.8 - 738.1)

#	Invert	Avail.Storage	Storage Description
1	10.50'	8,767 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
10.50	2,500	0	0
11.00	3,560	1,515	1,515
12.00	10,944	7,252	8,767

#	Routing	Invert	Outlet Devices
1	Primary	11.25'	**50.0' long x 2.0' 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 Coef. (English) 2.54 2.61 2.61 2.60 2.66 2.70 2.77 2.89 2.88 2.85 3.07 3.20 3.32

Primary OutFlow Max=7.74 cfs @ 12.13 hrs HW=11.40' (Free Discharge)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 7.74 cfs @ 1.0 fps)

Pond 3P: NEW 6' DIAM. TWIN GRATE CB

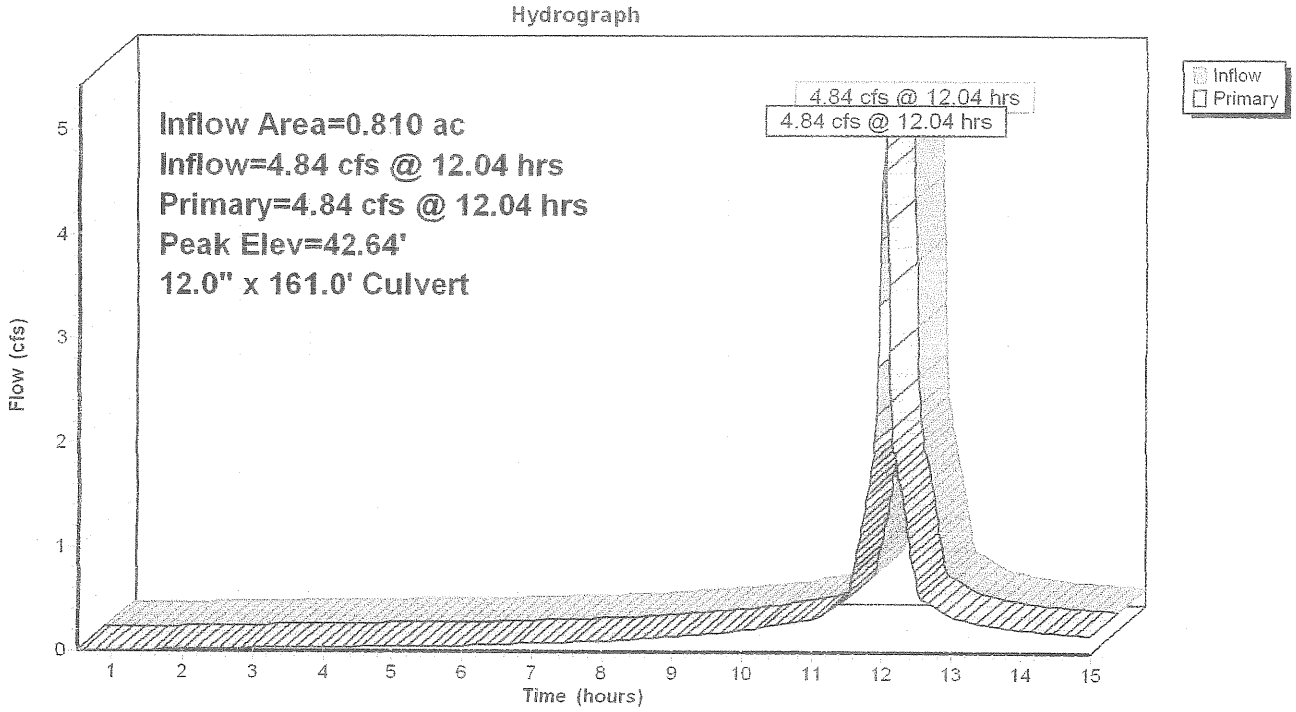
Inflow Area = 0.810 ac, Inflow Depth = 4.37" for POST 25 YR event
Inflow = 4.84 cfs @ 12.04 hrs, Volume= 0.295 af
Outflow = 4.84 cfs @ 12.04 hrs, Volume= 0.295 af, Atten= 0%, Lag= 0.0 min
Primary = 4.84 cfs @ 12.04 hrs, Volume= 0.295 af

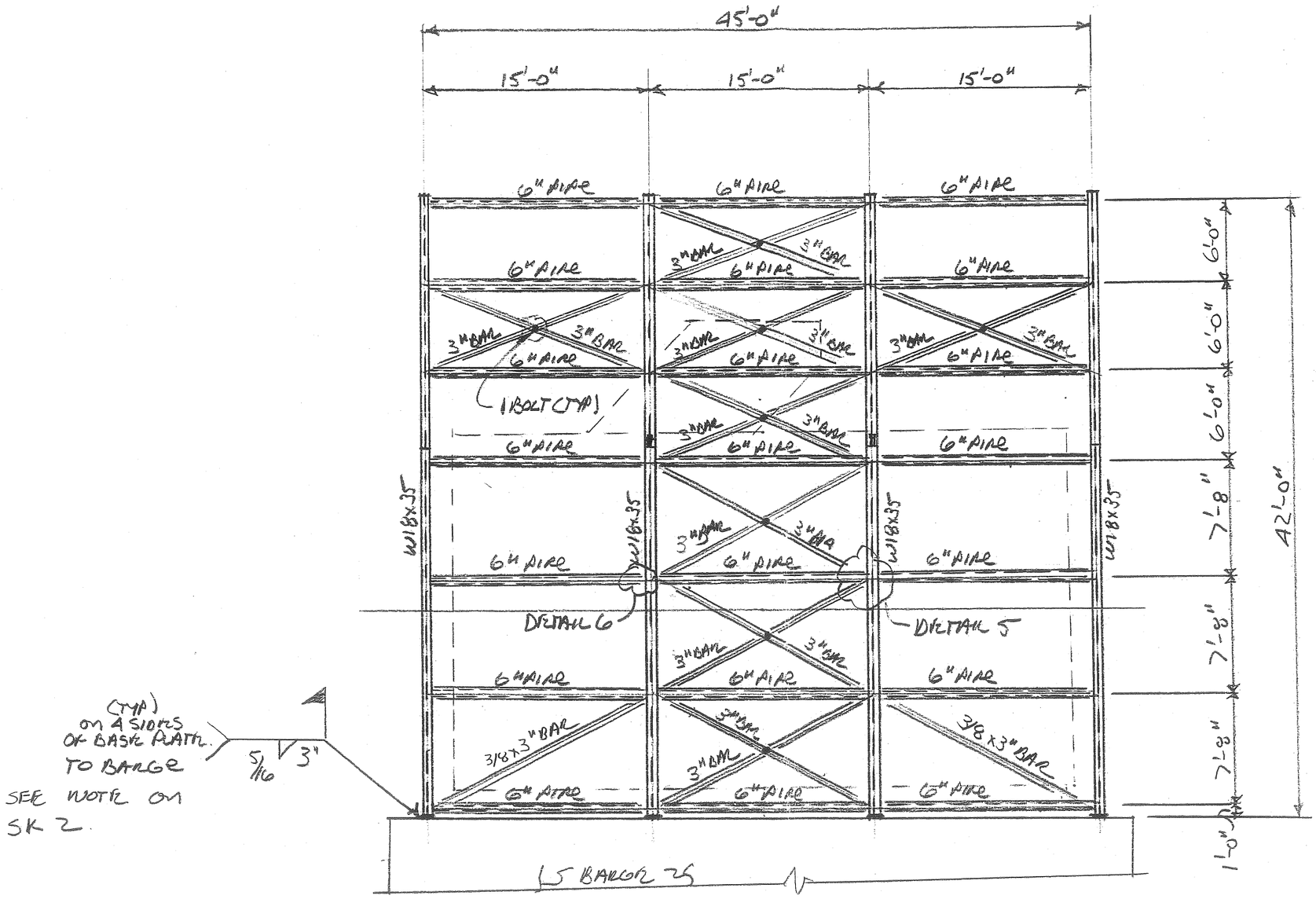
Routing by Stor-Ind method, Time Span= 0.50-15.00 hrs, dt= 0.02 hrs
Peak Elev= 42.64' @ 12.04 hrs
Plug-Flow detention time= (not calculated)
Center-of-Mass det. time= (not calculated)

#	Routing	Invert	Outlet Devices
1	Primary	40.50'	**12.0" x 161.0' long 12 " ADS CORRUGATED CULVERT** CPP, square edge headwall, Ke= 0.500 Outlet Invert= 12.00' S= 0.1770 '/' n= 0.025 Cc= 0.900

Primary OutFlow Max=4.83 cfs @ 12.04 hrs HW=42.63' (Free Discharge)
↑—**1=12 " ADS CORRUGATED CULVERT** (Inlet Controls 4.83 cfs @ 6.1 fps)

Pond 3P: NEW 6' DIAM. TWIN GRATE CB





3" BAR = 1/4" x 3"

6" PIPE = 6" Sch 40 Gr. 50

LONGITUDINAL ELEVATION

(OPPOSING SIDE - SAME)

CIANBRO

THE CONSTRUCTORS

Hunnewell Square
PITTSFIELD, MAINE 04967
(207) 487-3311

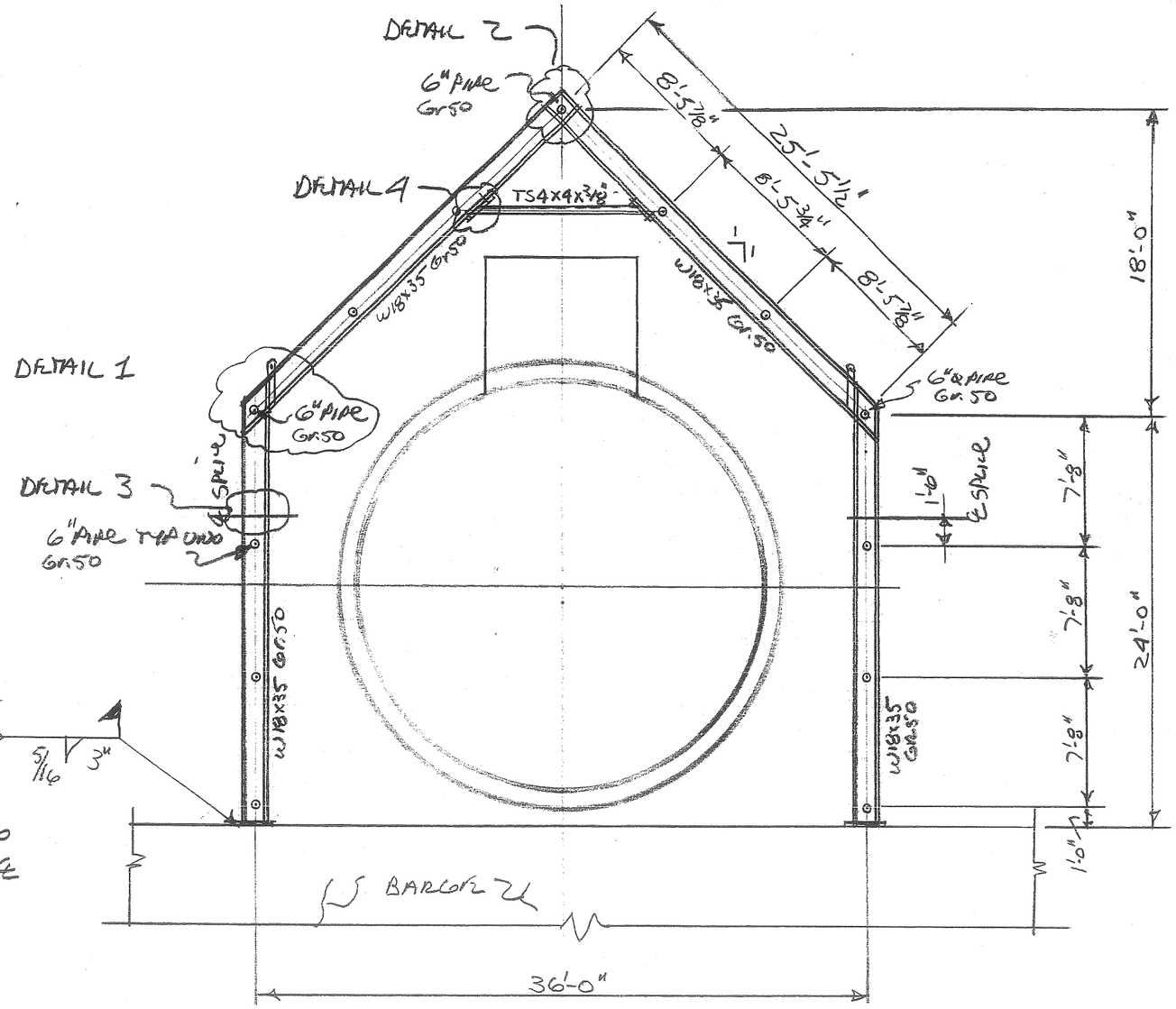
JOB TEMPORARY DUCT ENCLOSURE

SHEET NO. SK1 OF 14 SCALE

CALCULATED BY DRS DATE 11-13-01

CHECKED BY DATE

DWG/SUBJECT



SIDING – 1/4" AIRCRAFT CABLE @ 3'-0" C-C W/ MONARFLEX FLAME SPRAY SHEETING.

NOTE: Before welding verify ℄ column to ℄ column distance is 36'-0".

TRANSVERSE ELEVATION

INTERIOR BAYS

CIANBRO

THE CONSTRUCTORS

Hunnewell Square
PITTSFIELD, MAINE 04967
(207) 487-3311

JOB TEMPORARY DUCT ENCLOSURE

SHEET NO. SK 2 OF 14 SCALE 1/8"=1'-0"

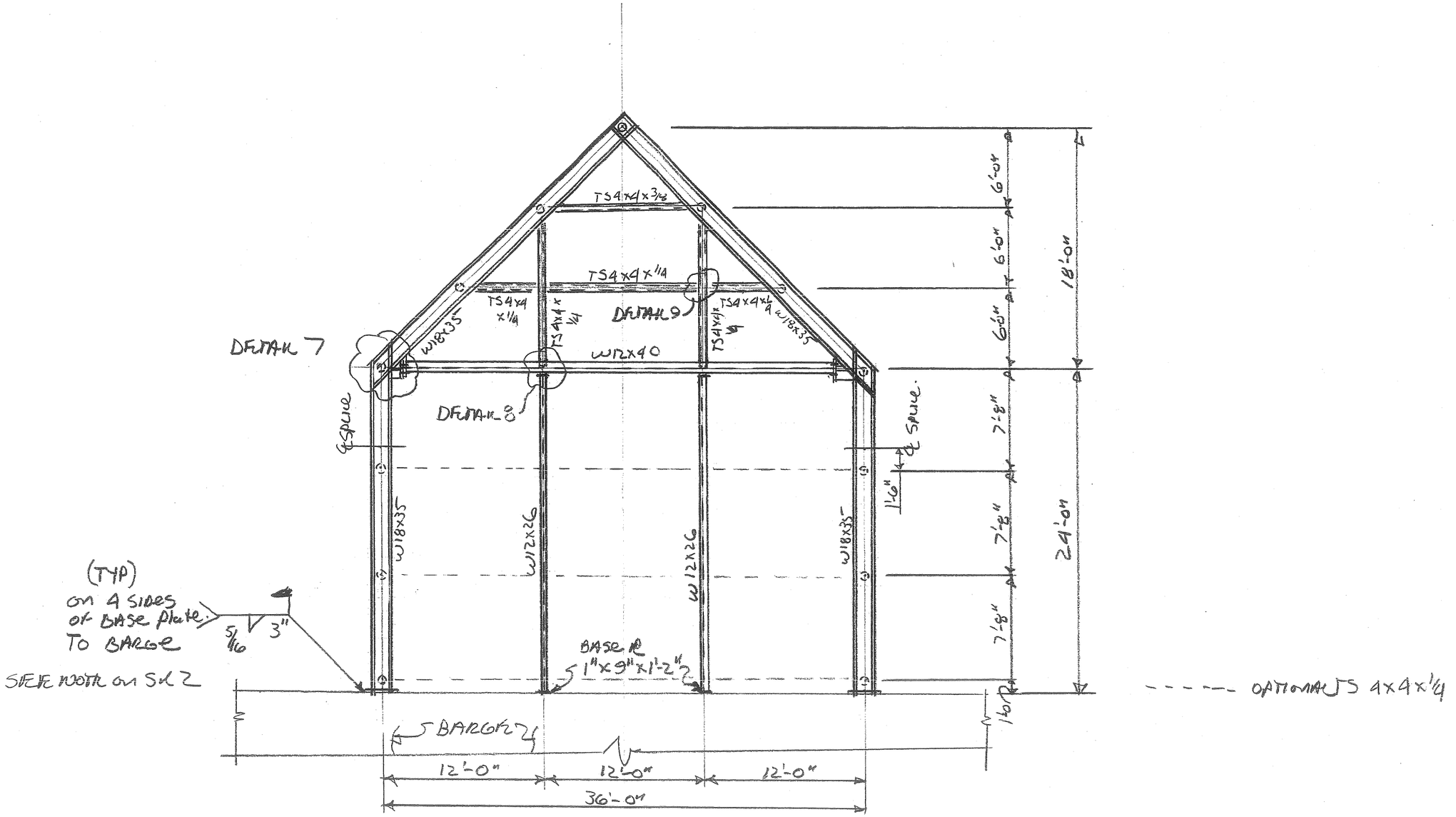
CALCULATED BY SRB DATE 11-8-01

CHECKED BY _____ DATE _____

DWG/SUBJECT _____

REV 12/96

ED315



TRANSVERSE ELEVATION
END BAYS

CIANBRO

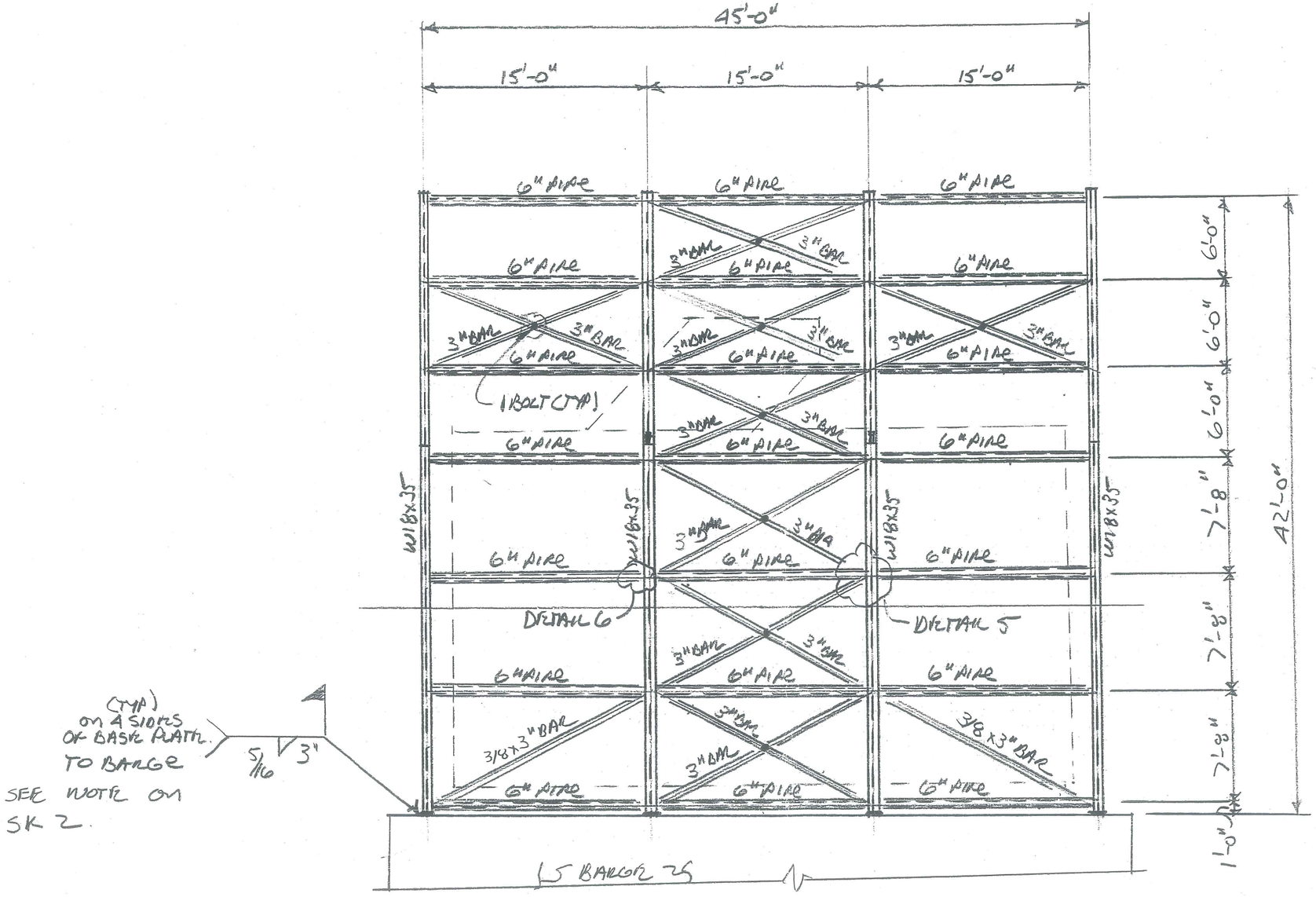
THE CONSTRUCTORS

Hunnewell Square
PITTSFIELD, MAINE 04967
(207) 487-3311

TEMPORARY.
JOB DOCT ENCLOSURE
SHEET NO. SK3 OF 14 SCALE 1/8"=1'-0"
CALCULATED BY DBB. DATE 11-13-01
CHECKED BY _____ DATE _____
DWG/SUBJECT _____

REV 12/96

ED315



3" BAR = 1/4" x 3"

6" PIPE = 6" sch 40 Gr. 50

LONGITUDINAL ELEVATION

(OPPOSING SIDE - SAME)

CITY OF PORTLAND
APPROVED SITE PLAN
Subject to Dept. Conditions
Date of Approval:

CIANBRO
THE CONSTRUCTORS
Hunnewell Square
PITTSFIELD, MAINE 04967
(207) 487-3311

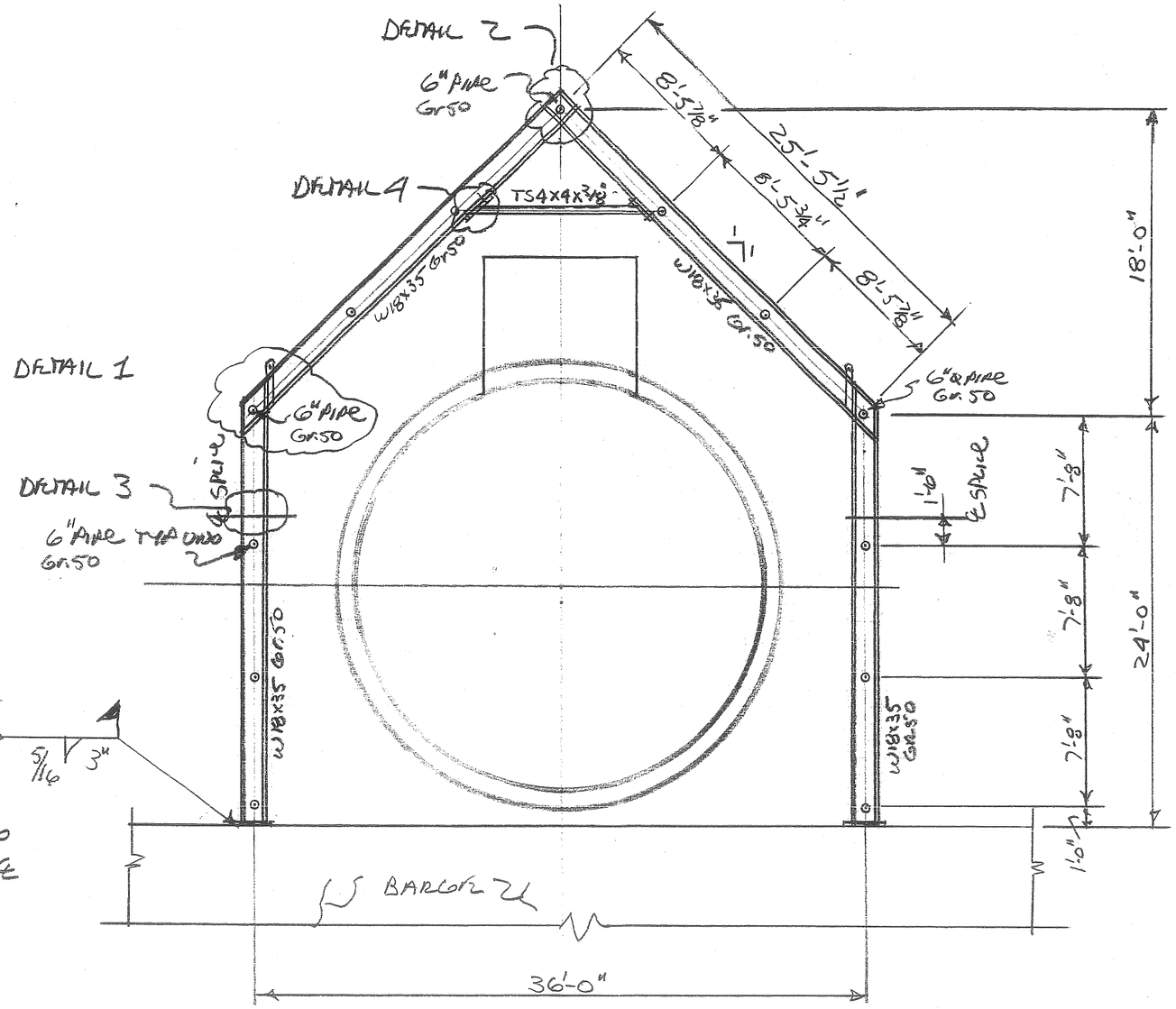
JOB TEMPORARY DUCT ENCLOSURE

SHEET NO. SK1 OF 14 SCALE

CALCULATED BY SRB DATE 11-13-01

CHECKED BY DATE

DWG/SUBJECT



NOTE: Before welding verify ℄ column to ℄ column distance is 36'-0".

SIDING – 1/4" aircraft cable @ 3'-0" c-c w/ monarflex flame spray sheeting.

TRANSVERSE ELEVATION

INTERIOR BAYS

CIANBRO

THE CONSTRUCTORS

Hunnewell Square
PITTSFIELD, MAINE 04967
(207) 487-3311

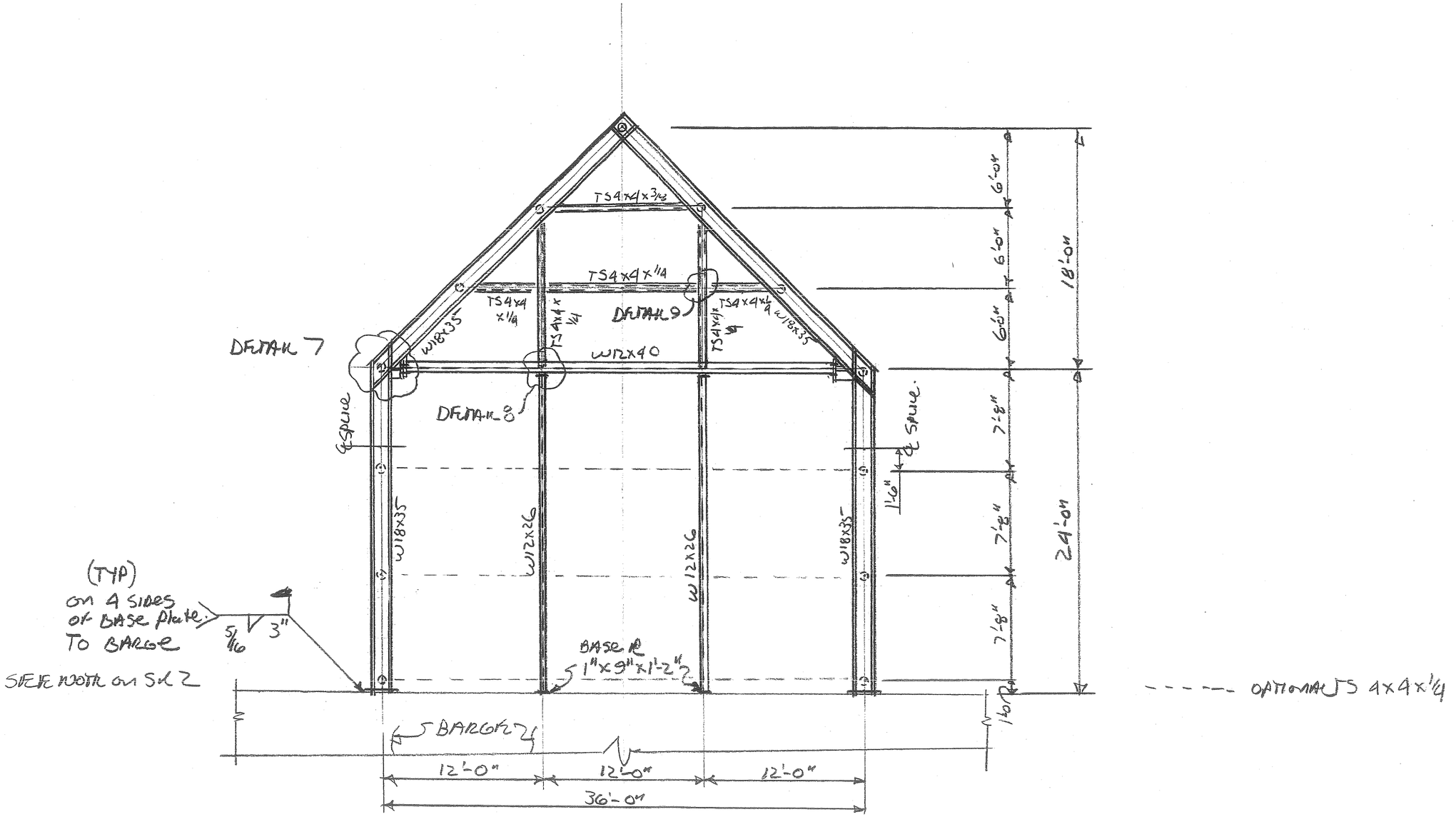
JOB TEMPORARY DUCT ENCLOSURE

SHEET NO. SK2 OF 14 SCALE 1/8"=1'-0"

CALCULATED BY SRB DATE 11-13-01

CHECKED BY _____ DATE _____

DWG/SUBJECT _____



TRANSVERSE ELEVATION
END BAYS

CIANBRO
THE CONSTRUCTORS
Hunnewell Square
PITTSFIELD, MAINE 04967
(207) 487-3311

TEMPORARY.
JOB DOCT ENCLOSURE
SHEET NO. SK3 OF 14 SCALE 1/8"=1'-0"
CALCULATED BY DRS. DATE 11-13-01
CHECKED BY _____ DATE _____
DWG/SUBJECT _____

REV 12/96

ED315