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

2006-0080
Application I. D. Number

4/18/2006
Application Date

Building Renovation
Project Name/Description

2320 Congress Street Llc
Applicant

57 Congress St , Portland, ME 04101
Applicant's Mailing Address

Consultant/Agent

2320 - 2320 Congress St, Portland, Maine
Address of Proposed Site

Applicant Ph: (207) 775-4200 Agent Fax:
Applicant or Agent Daytime Telephone, Fax

237 A009001
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) Parking Lot

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 4/25/2006

DRC Approval Status:

Reviewer

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

Approval Date Approval Expiration Extension to ☐ Additional Sheets Attached

☐ Condition Compliance 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	

SGC ENGINEERING, LLC
• Civil Design & Survey Engineering
• Environmental & Regulatory Permitting
• Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

517001

April 18, 2006

Ms. Sarah Hopkins, Development Review Services Manager
Planning and Development Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

RE: **Renovation of Commercial Building at 2320 Congress Street, Portland, Maine**
Application for Minor Site Plan Review

Dear Ms. Hopkins:

SGC Engineering is pleased to submit on behalf of our client, 2320 Congress Street, LLC., plans for Minor Site Plan Review for the site improvements proposed to support the renovation of the existing commercial building at 2320 Congress Street. This submittal has been prepared per the requirements of the *City of Portland Code of Ordinances* and the *City's Technical and Design Standards and Guidelines*. The submission includes nine copies of the set of development plans, comprised of five sheets, as well as the Application for Site Plan Review.

The 2320 Congress Street parcel is recorded in the City of Portland assessor's database as Tax Map 237, Block Lot 9 in the I-M Industrial Zone. In its current condition, the property is 50,050 square feet in size with an existing 7,927-square foot commercial building located on it. 2320 Congress Street, LLC has purchased the property and proposes to renovate it for its own use. This requires adding parking to the parcel. The new deed for the parcel is recorded at the Cumberland County Registry of Deeds at Deed Book 23578, Page 124. SGC Engineering has completed a boundary and topographic survey of the parcel.

The access to the site remains unchanged. The plans describe the expanded parking that will necessitate paving 5,633 square feet in front, and 2,323 square feet in the rear of the property. This will provide the area for 17 more parking spaces and 3 handicapped parking spaces for a total of 48. A ramp will be constructed to provide a new handicap access to the building.

No changes are proposed to the water, sewer, gas, or electrical services.

A vegetated, underdrained swale located along the property's frontage with Congress Street will treat the stormwater runoff from the impervious surface. Runoff is directed to the swale and a portion will pass through a soil media filter before discharging through a 4-inch perforated underdrain pipe into the existing catch basin located on Congress Street. Any excess stormwater runoff will be conveyed to the catch basin via a riprapped overflow swale.

We look forward to addressing the City's questions and comments at a Development Review Committee meeting. Please contact me if you have any questions or comments that I should address prior to that meeting. Thank you.

Very truly yours,
SGC ENGINEERING, LLC

John M. Riordan, P.E.
Director of Civil Engineering

Enclosures

cc: Bruce Brown

SGC

City of Portland Site Plan Application

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

Address of Proposed Development: 2320 Congress Street		Zone: I-M Industrial Zone
Total Square Footage of Proposed Structure: No proposed Structure	Square Footage of Lot: 50,050 SF	
Tax Assessor's Chart, Block & Lot: Chart# Block# Lot# 9 Tax Map 237	Property owner's mailing address: 2320 Congress Street LLC. 57 Congress Street Portland, Maine 04101	Telephone #: 207-775-4200 Bruce Brown
Consultant/Agent, mailing address, phone # & contact person: John M. Riordan, P.E. SGC Engineering 501 County Road 207-347-8100 Westbrook, ME 04092	Applicant's name, mailing address, telephone #/Fax#/Pager#: See Property Owner above.	Project name: 2320 Congress Street

Fee For Service Deposit (all applications) ✓ ($200.00)

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) $_____ + major site plan fee if applicable
___ Site Location of Development ($3,000.00)
(except for residential projects which shall be $200.00 per lot_____)
___ Traffic Movement ($1,000.00) ___ Storm water 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 #)

See Property Owner Above

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 checklist
d. 1 set of 11 x 17 plans

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 which is available on our web site: **portlandmaine.gov**

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.

Agent: John M. Riordan, P.E
SGC Engineering

Signature of applicant: John M Riordan	Date: 4/18/06

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

WARRANTY DEED

(Maine Statutory Short Form)

KNOW ALL BY THESE PRESENTS, that **S. Richard Mack**, whose mailing address is 750 Warren Avenue, Portland, Maine 04103, for consideration paid, GRANTS to **2320 Congress Street, LLC**, a Maine limited liability company with a principal place of business at 57 Congress Street, Portland, Maine 04101, with WARRANTY COVENANTS, certain real estate located in Portland, Cumberland County, Maine, which is more particularly described in Exhibit A attached hereto and made a part hereof.

This conveyance is made SUBJECT, HOWEVER, to real estate taxes which are not yet due and payable, which, by acceptance hereof, Grantee assumes and agrees to pay.

IN WITNESS WHEREOF, S. Richard Mack has executed this deed as a sealed instrument this 4th day of January, 2006.

MAINE REAL ESTATE TAX PAID

SIGNED, SEALED AND DELIVERED
IN THE PRESENCE OF

Witness

S. Richard Mack, by ~~Alvin~~ G. Mack,
his attorney-in-fact

STATE OF MAINE
County of Cumberland, SS. January 4, 2006

Then personally appeared the above-named Alvin G. Mack in his capacity as attorney-in-fact for S. Richard Mack, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of said S. Richard Mack.

SEAL

Before me,

~~Notary Public~~/Maine Attorney-at-Law
Printed Name: Katherine B. Allen

23578/124

Exhibit A

A certain lot or parcel of land, together with the buildings, situated in Portland, being on the Southerly side of Congress Street, bounded and described as follows:

Commencing at a stake in the Southerly sideline of Congress Street, three hundred (300) feet from a granite monument marking the Northwesterly corner of land of the Maine Turnpike Authority and designated as Parcel 3A on a plan of said Turnpike Authority recorded in the Cumberland County Registry of Deeds in Book 41, Page 66; thence Westerly by the Southerly sideline of said Congress Street two hundred and fifty (250) feet to a point; thence Southerly at right angles to said Congress Street two hundred (200) feet to a stake; thence Easterly at right angles to the second course two hundred and fifty (250) feet to a stake; thence Northerly at right angles to the last course two hundred (200) feet to the point of beginning.

Being a rectangular lot containing 50,000 square feet, and being a portion of premises conveyed to Harry A. Harmon and George M. Hutchins by Robert D. Schwarz, et al., Trustees, October 29, 1965, recorded in the Cumberland County Registry of Deeds in Book 2931, Page 239. Said lot also is described as Lot No. 2.

The above premises are subject to the six specific conditions set forth in a Warranty Deed from Congress Plaza, Inc. to Arthur Serunian, Jr., dated October 31, 1974 and recorded in said Registry of Deeds in Book 3617, Page 160.

Being the same premises conveyed to the Grantor herein by ATBRO Corp. by deed dated April 18, 1980 and recorded in the Cumberland County Registry of Deeds in Book 4591, Page 286.

H:\Client Matters\Mack, S. Richard\Warranty Deed - Mack to 2320 Congress St LLC.doc

Received
Recorded Register of Deeds
Jan 10,2006 10:39:19A
Cumberland County
John B OBrien

2320 Congress St. LLC

286 7848

Know all Men by these Presents,

That ATBRO CORP.

a Corporation organized and existing under the laws of the State of Maine and located at Portland in the County of Cumberland and State of Maine in consideration of One Dollar ($1.00) and other valuable considerations

paid by S. RICHARD MACK of Portland, County of Cumberland and State of Maine

and whose mailing address is 101 Vannah Avenue, Portland, Maine 04103

the receipt whereof it does hereby acknowledge, does hereby remise, release, bargain, sell and convey, and forever quit-claim unto the said

S. Richard Mack,

his heirs and assigns forever,

A certain lot or parcel of land, together with the buildings, situated in Portland, being on the Southerly side of Congress Street, bounded and described as follows:

Commencing at a stake in the Southerly sideline of Congress Street, three hundred (300) feet from a granite monument marking the Northwesterly corner of land of the Maine Turnpike Authority and designated as Parcel 3A on a plan of said Turnpike Authority recorded in the Cumberland County Registry of Deeds in Book 41, Page 66; thence Westerly by the Southerly sideline of said Congress Street two hundred and fifty (250) feet to a point; thence Southerly at right angles to said Congress Street two hundred (200) feet to a stake; thence Easterly at right angles to the second course two hundred and fifty (250) feet to a stake; thence Northerly at right angles to the last course two hundred (200) feet to the point of beginning.

Being a rectangular lot containing 50,000 square feet, and being a portion of premises conveyed to Harry A. Harmon and George M. Hutchins by Robert D. Schwarz, et al., Trustees, October 29, 1965, recorded in the Cumberland County Registry of Deeds in Book 2931, Page 239. Said lot also is described as Lot No. 2.

The above premises are subject to the six specific conditions set forth in a Warranty Deed from Congress Plaza, Inc. to Arthur Serunian, Jr. dated October 31, 1974 and recorded in said Registry of Deeds in Book 3617, Page 160.

TM 237, Lot 9

Being the same premises conveyed to the Grantor herein by Sally Ann Serunian, Executrix of the Estate of Arthur Serunian, Jr., by deed dated April , 1980, to be recorded in said Registry of Deeds.

The above-described premises are conveyed subject to 1980 real estate taxes, which the Grantee, by the acceptance hereof, hereby assumes and agrees to pay.

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To Have and to Hold the same, together with all the privileges and appurtenances thereunto belonging, to the said

S. Richard Mack, his

Heirs and Assigns forever.

And the said Grantor Corporation does covenant with the said

S. Richard Mack, his

Heirs and Assigns, that it will Warrant and Forever Defend the premises to him the said Grantee, his Heirs and Assigns forever, against the lawful claims and demands of all persons claiming by, through, or under it, except as aforesaid.

In Witness Whereof, the said ATBRO CORP.

has caused this instrument to be sealed with its corporate seal and signed in its corporate name by William H. Webster, its President thereunto duly authorized, this 18th day of April in the year one thousand nine hundred and eighty.

Signed, Sealed and Delivered in presence of

Robert B. Patterson Jr.

ATBRO CORP.
(Corporate Name)

By William H. Webster
Its President

(Corporate Seal)

April 18 1980.

State of Maine. } ss.
CUMBERLAND

Personally appeared the above named William H. Webster President of said Grantor Corporation as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of said corporation.

Before me, Robert B. Patterson
~~Justice of the Peace.~~
~~Notary Public.~~
Attorney at Law.

APR 18 1980
REGISTRY OF DEEDS CUMBERLAND COUNTY, MAINE
Received at 3 H 28 M A.M., and recorded in
BOOK 4591 PAGE 286 Edward D. Gunstein Register

SGC ENGINEERING, LLC
- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

LETTER OF TRANSMITTAL

TO: Ms. Jean Fraser
Planning and Development Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

DATE: August 04, 2006
PROJ. NO.: 517001
RE: 2320 Congress Street
Portland, Maine
Revised Plans

WE ARE SENDING YOU [x] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Plans [ ] Samples [ ] Specifications
[ ] Copy of letter [ ] Change order [ ] _____

COPIES	DATE	NO.	DESCRIPTION
9	08/04/06		Revised Site Plan
9	08/04/06		Revised Landscape Plan

THESE ARE TRANSMITTED as checked below:

[X] For approval [ ] Approved as submitted [ ] Resubmit _____ copies for approval
[ ] For your use [ ] Approved as noted [ ] Submit _____ copies for distribution
[X] As requested [ ] Returned for corrections [ ] Return _____ corrected prints
[ ] For review and comment [ ] Returned

REMARKS:

Ms. Fraser,
Please find 9 copies of the revised site plan and landscape plan for 2320 Congress Street project as you requested. If you have any questions or need anything else please feel free to give me a call. Thanks.

COPY TO: _____

SIGNED: Michael R. Roy
Michael R. Roy

All approved

501 County Road, Westbrook, Maine 04092 - Office: 207-347-8100 • Fax: 207-347-8101
Target Technology Center, 20 Godfrey Drive, Suite 200, Orono, Maine 04473 - Office: 207-866-6571 • Fax: 207-866-6501
www.sgceng.com • E-mail: sgc@sgceng.com

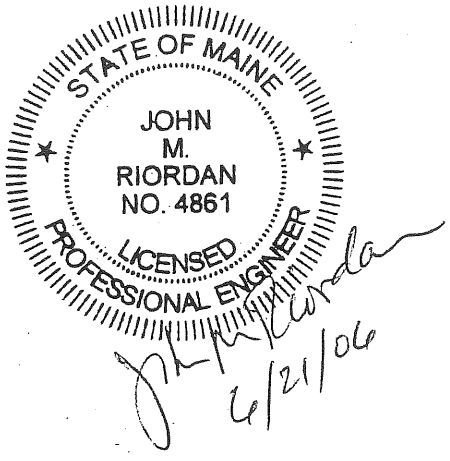
STORMWATER MANAGEMENT REPORT

2320 CONGRESS STREET

PORTLAND, MAINE

JUNE 2006

Prepared for:
2320 CONGRESS STREET LLC
PO BOX 1052
PORTLAND, MAINE



Prepared By: SGC Engineering, LLC

Project No. 517001

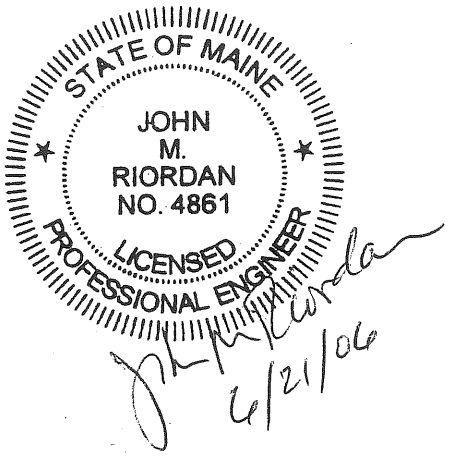
STORMWATER MANAGEMENT REPORT

2320 CONGRESS STREET

PORTLAND, MAINE

JUNE 2006

Prepared for:
2320 CONGRESS STREET LLC
PO BOX 1052
PORTLAND, MAINE



Prepared By: SGC Engineering, LLC

Project No. 517001

SGC ENGINEERING, LLC
- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

Memo

Date:	June 20, 2006	Project No.:	517001
To:	File		
From:	Michael Roy		
Project Name:	2320 Congress Street		
Subject:	Summary of Stormwater Management Design		

2320 Congress Street
Summary of Stormwater Management Design

Outline

Project summary

Existing conditions

- Existing 7,927 sf single-story commercial building that was constructed in 1975
- 1.149 acre site
- Single paved access from Congress Street
- Site is largely paved providing approximately 23 parking stalls

Proposed development objectives

- Refurbishment of existing commercial building for a single business entity, a financial investment company
- Architectural improvements needed to provide handicap accessibility
- Continued use of access from Congress Street
- Improved parking by conversion of loading dock area into parking area, expanding paved parking out front, expanding paved parking along
- Improved landscaping

Stormwater Management Objectives

- Site is largely paved
- With building footprint the % imperviousness is equal to 56.7%

501 County Road, Westbrook, Maine 04092 - Office: 207-347-8100 • Fax: 207-347-8101
Target Technology Center, 20 Godfrey Drive, Suite 200, Orono, Maine 04473 - Office: 207-866-6571 • Fax: 207-866-6501
www.sgceng.com • E-mail: sgc@sgceng.com

- Site drains to Congress Street
  - 87% drains to curb line above an existing catch basin within the site's frontage; runoff enters this catch basin which discharges through a 15-inch diameter storm drain that pipes the storm flow across Congress Street to a series of swales and culverts that ultimately discharge into a very well defined drainage swale that conveys the storm flows from the properties on both sides of Congress to Stroudwater river.
  - 13% drains to the curb line of Congress Street downgradient from the existing catch basin; this portion of the flow follows the curb line down to the next catch basin which also is connected to the major drainage swale conveying stormwater runoff to the Presumpscot River.
- The existing runoff from this site is not creating any known capacity or erosion or quality problems in the down stream conveyance systems (catch basins, culverts, drainage swales.
- The proposed site improvements will increase the amount of imperviousness by 5,633 sf, or 11.2 %
- The design objective emphasizes treatment of runoff, rather than rate control, which is consistent with the recent shift in emphasize reflected in the DEP's Chapter 500 rules.
- Only the runoff from the paved area will be treated.
- The runoff from as much of the paved area as practicable will be directed to the treatment device.
- The runoff from the roof is considered uncontaminated and will be excluded from the treatment device; it will be discharged to the grassed drainage swale on the ease side of the building
- The treatment device will be a soil filter within a landscaped bed.
- The treatment device will be sized to capture at least the runoff volume from the "first flush" from all storm events.
- The treatment device will control overflows to allow the collected runoff to flow directly to the existing catch basin when the capacity of the soil filter is exceeded.

Design Criteria

- Treatment Device
  - Soil filter:
    - 4 feet x 90 feet (maximize available frontage of site)
    - Filter media: sand 18 inches deep
    - Design percolation rate: 2.5 inches/hour
    - Catchment volume over filter media created with landscape timber cribbing lined with impermeable liner; impoundment depth equal to 12 inches
    - Filter media underdrained by perforated pipe with crushed stone bed
    - Perforated pipe conveys filtered flow to existing catchbasin
    - Soil filter overflow allows flows exceeding filter capacity to overflow directly to catch basin
- Treatment volumes

	Total Runoff	Total Treated (Filtered)	% Treated
2 year event	0.121 af	0.041 af	33.9 %
10 year event	0.209 af	0.045 af	21.5 %
25 year event	0.251 af	0.046 af	18.3 %

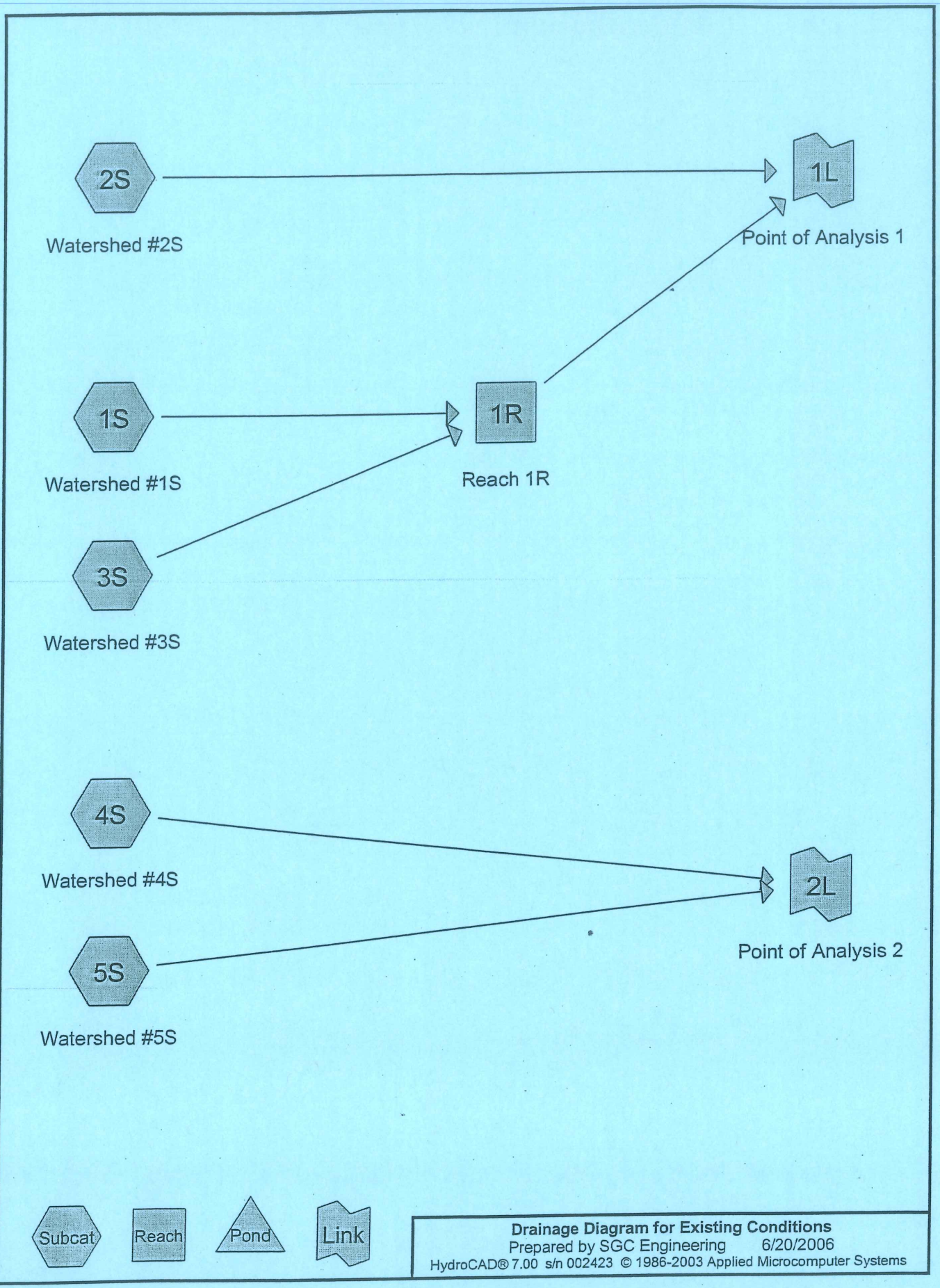
SGC

Substantial portion of all rain events is treated.

- Runoff flows at existing catch basin
  - Existing 15" culvert capacity = 12.7 cfs
  - Pre-development peak flow from site during 25 year event = 3.19 cfs
  - Post-development peak flow form site during 25 year event = 4.98 cfs
  - Flows to catch basin are buffered by delay imposed by soil filter on the 18-33% amount of the total runoff treated.

- Existing and Proposed development stormwater modeling and watershed plans are attached.

SGC


2S
Watershed #2S
1L
Point of Analysis 1
1S
Watershed #1S
1R
Reach 1R
3S
Watershed #3S
4S
Watershed #4S
2L
Point of Analysis 2
5S
Watershed #5S
Subcat
Reach
Pond
Link
Drainage Diagram for Existing Conditions
Prepared by SGC Engineering 6/20/2006
HydroCAD® 7.00 s/n 002423 © 1986-2003 Applied Microcomputer Systems

Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=2.72"
Tc=0.0 min CN=98 Runoff=0.61 cfs 0.041 af

Subcatchment 2S: Watershed #2S Runoff Area=27,598 sf Runoff Depth=1.98"
Flow Length=458' Tc=17.6 min CN=90 Runoff=1.04 cfs 0.105 af

Subcatchment 3S: Watershed #3S Runoff Area=11,096 sf Runoff Depth=1.19"
Flow Length=157' Tc=5.7 min CN=79 Runoff=0.34 cfs 0.025 af

Subcatchment 4S: Watershed #4S Runoff Area=13,503 sf Runoff Depth=0.81"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.16 cfs 0.021 af

Subcatchment 5S: Watershed #5S Runoff Area=6,305 sf Runoff Depth=0.91"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.15 cfs 0.011 af

Reach 1R: Reach 1R Peak Depth=0.28' Max Vel=3.3 fps Inflow=0.82 cfs 0.066 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=0.79 cfs 0.066 af

Link 1L: Point of Analysis 1 Inflow=1.46 cfs 0.171 af
Primary=1.46 cfs 0.171 af

Link 2L: Point of Analysis 2 Inflow=0.21 cfs 0.032 af
Primary=0.21 cfs 0.032 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.203 af Average Runoff Depth = 1.60"

Subcatchment 1S: Watershed #1S

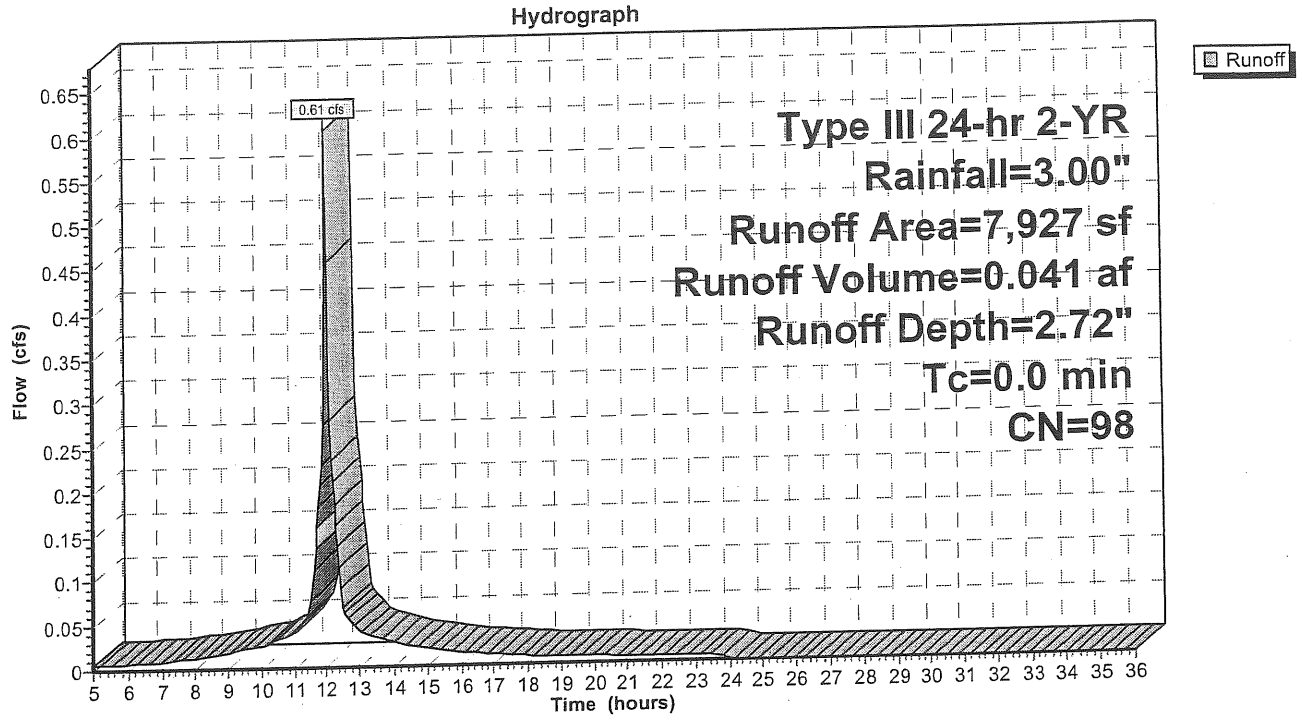
Runoff = 0.61 cfs @ 12.00 hrs, Volume= 0.041 af, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
7,927	98	Existing Building

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.0					**Direct Entry, Direct Entry into Swale**

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

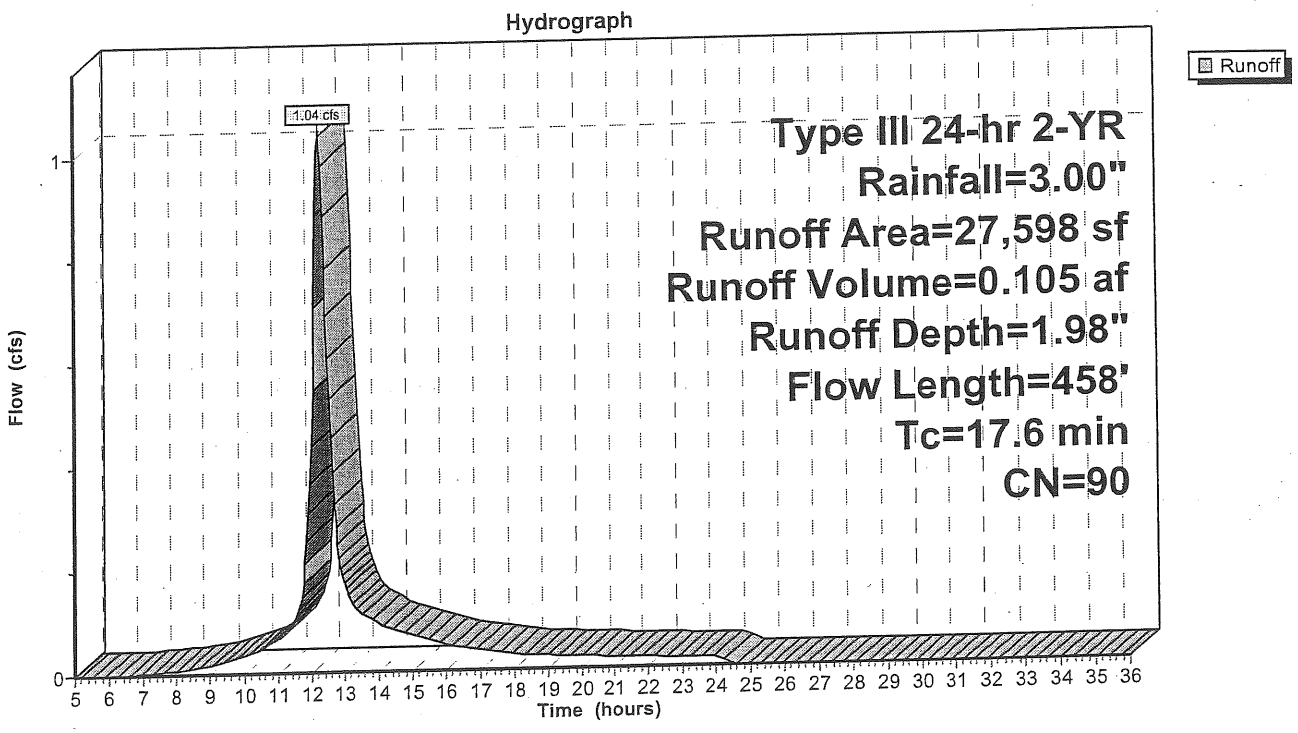
Runoff = 1.04 cfs @ 12.24 hrs, Volume= 0.105 af, Depth= 1.98"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
16,127	98	Existing Pavement
5,635	74	Pasture/grassland/range, Good, HSG C
3,584	72	Woods/grass comb., Good, HSG C
2,252	98	Ledge Outcroppings
27,598	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	114	0.0614	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.6	146	0.0410	4.1		**Shallow Concentrated Flow, Shallow Concentrated B-C** Paved Kv= 20.3 fps
0.7	51	0.0290	1.2		**Shallow Concentrated Flow, Shallow Concentrated C-D** Short Grass Pasture Kv= 7.0 fps
0.6	147	0.0370	3.9		**Shallow Concentrated Flow, Shallow Concentrated D-E** Paved Kv= 20.3 fps
17.6	458	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

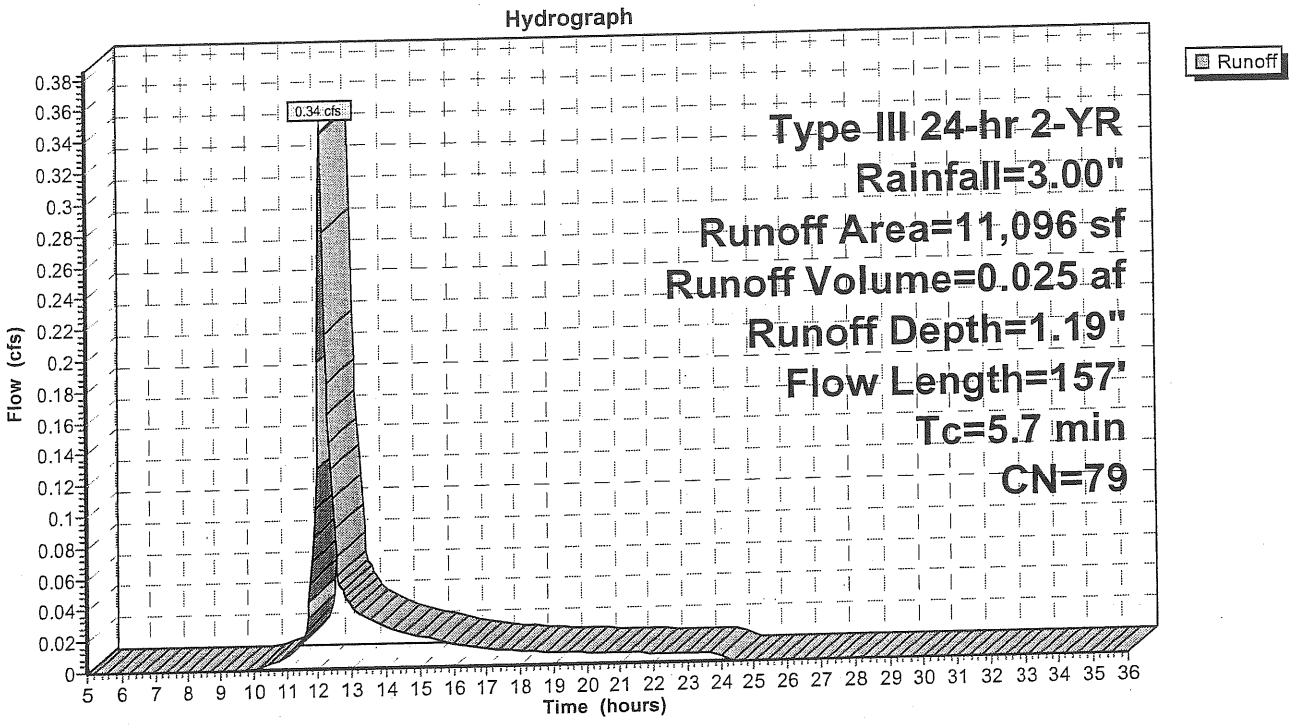
Runoff = 0.34 cfs @ 12.09 hrs, Volume= 0.025 af, Depth= 1.19"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
8,165	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
11,096	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	44	0.1360	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
5.7	157	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

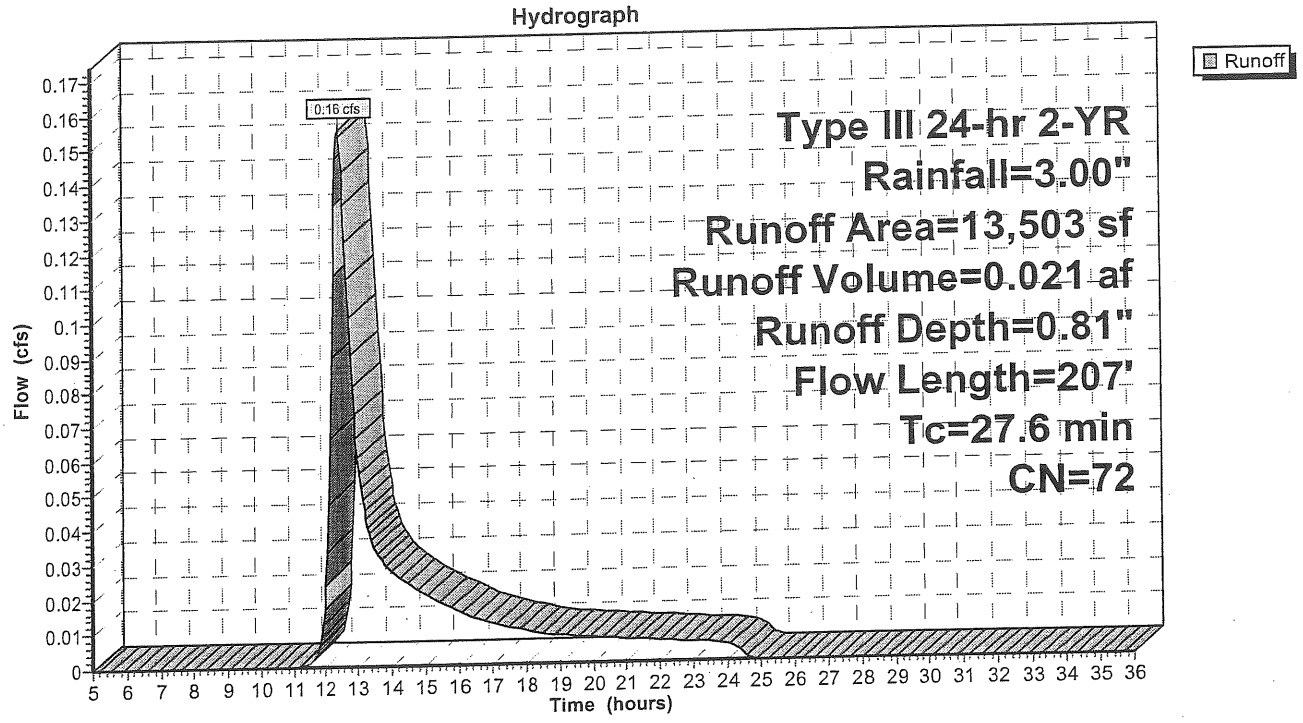
Runoff = 0.16 cfs @ 12.43 hrs, Volume= 0.021 af, Depth= 0.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
13,503	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

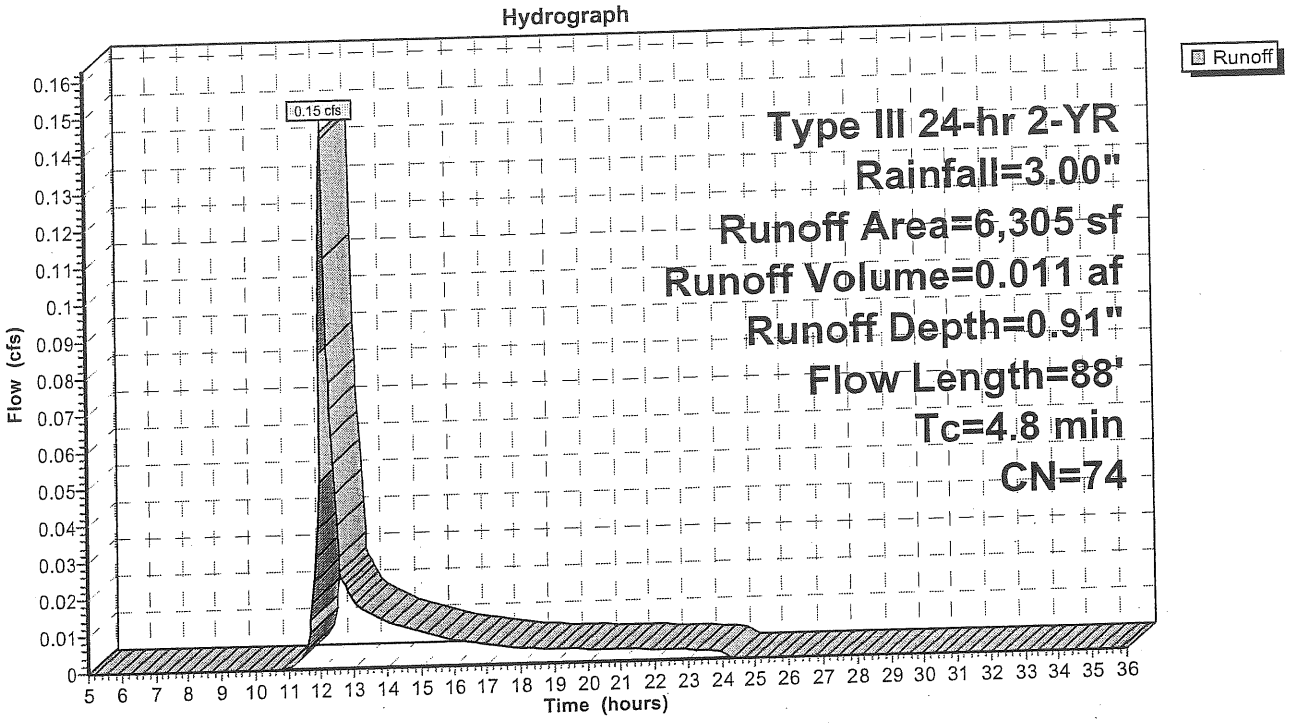
Runoff = 0.15 cfs @ 12.09 hrs, Volume= 0.011 af, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
6,305	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



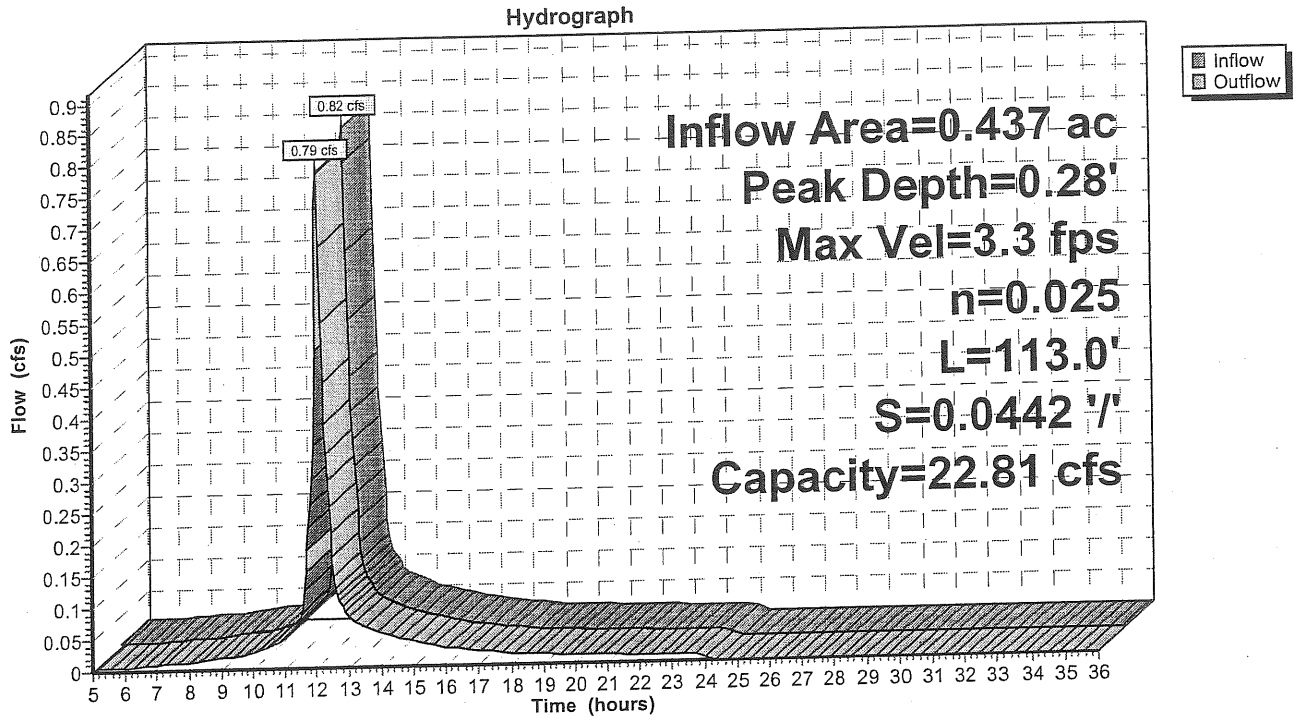
Reach 1R: Reach 1R

Inflow Area = 0.437 ac, Inflow Depth = 1.83" for 2-YR event
Inflow = 0.82 cfs @ 12.02 hrs, Volume= 0.066 af
Outflow = 0.79 cfs @ 12.04 hrs, Volume= 0.066 af, Atten= 4%, Lag= 1.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.3 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.4 fps, Avg. Travel Time= 1.4 min

Peak Depth= 0.28' @ 12.03 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



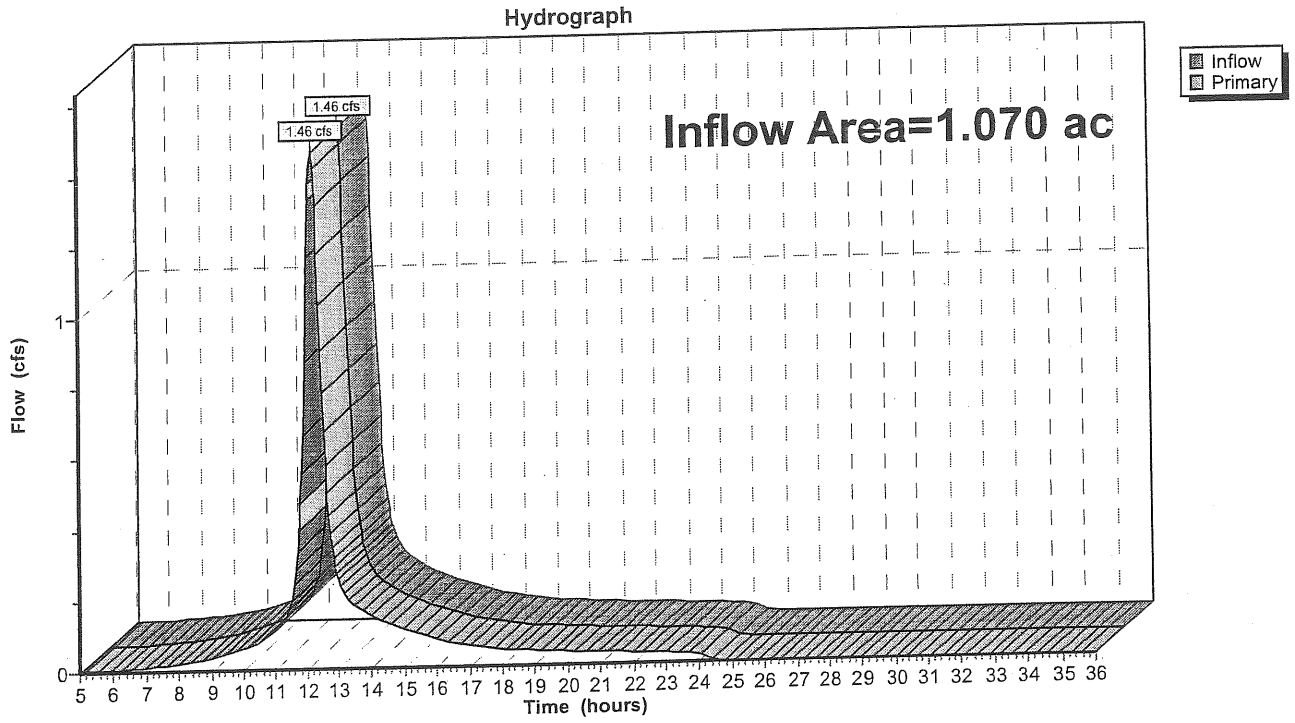
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.070 ac, Inflow Depth = 1.92" for 2-YR event
Inflow = 1.46 cfs @ 12.20 hrs, Volume= 0.171 af
Primary = 1.46 cfs @ 12.20 hrs, Volume= 0.171 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

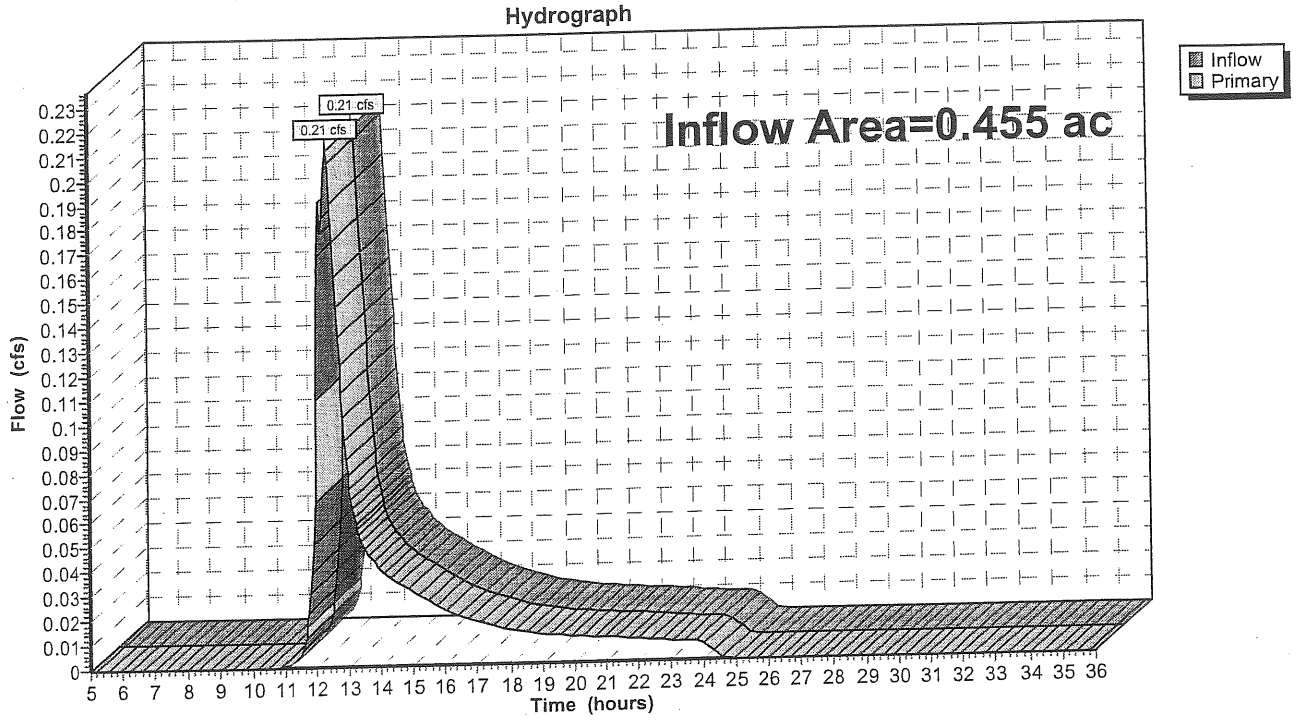


Link 2L: Point of Analysis 2

Inflow Area = 0.455 ac, Inflow Depth = 0.84" for 2-YR event
Inflow = 0.21 cfs @ 12.37 hrs, Volume= 0.032 af
Primary = 0.21 cfs @ 12.37 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=4.35"
Tc=0.0 min CN=98 Runoff=0.96 cfs 0.066 af

Subcatchment 2S: Watershed #2S Runoff Area=27,598 sf Runoff Depth=3.59"
Flow Length=458' Tc=17.6 min CN=90 Runoff=1.84 cfs 0.189 af

Subcatchment 3S: Watershed #3S Runoff Area=11,096 sf Runoff Depth=2.55"
Flow Length=157' Tc=5.7 min CN=79 Runoff=0.75 cfs 0.054 af

Subcatchment 4S: Watershed #4S Runoff Area=13,503 sf Runoff Depth=1.97"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.41 cfs 0.051 af

Subcatchment 5S: Watershed #5S Runoff Area=6,305 sf Runoff Depth=2.13"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.36 cfs 0.026 af

Reach 1R: Reach 1R Peak Depth=0.36' Max Vel=3.8 fps Inflow=1.46 cfs 0.120 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=1.42 cfs 0.120 af

Link 1L: Point of Analysis 1 Inflow=2.64 cfs 0.309 af
Primary=2.64 cfs 0.309 af

Link 2L: Point of Analysis 2 Inflow=0.54 cfs 0.077 af
Primary=0.54 cfs 0.077 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.386 af Average Runoff Depth = 3.04"

Subcatchment 1S: Watershed #1S

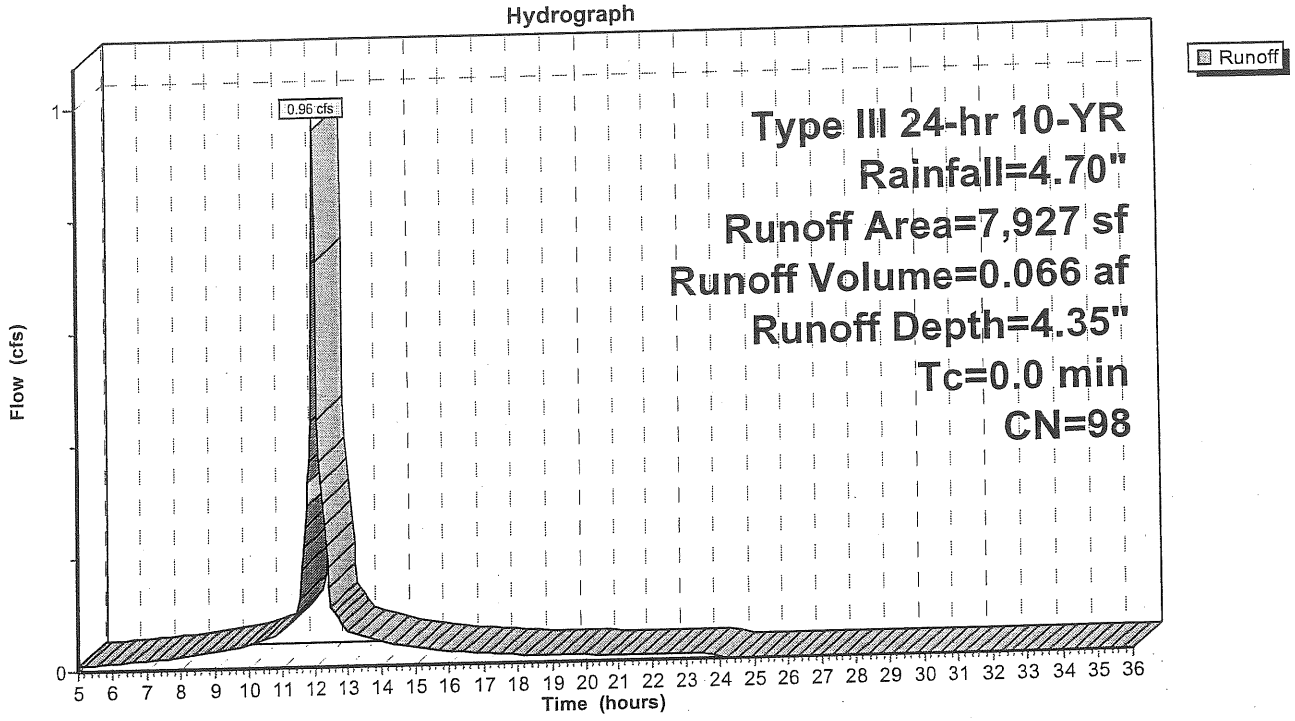
Runoff = 0.96 cfs @ 12.00 hrs, Volume= 0.066 af, Depth= 4.35"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
7,927	98	Existing Building

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

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

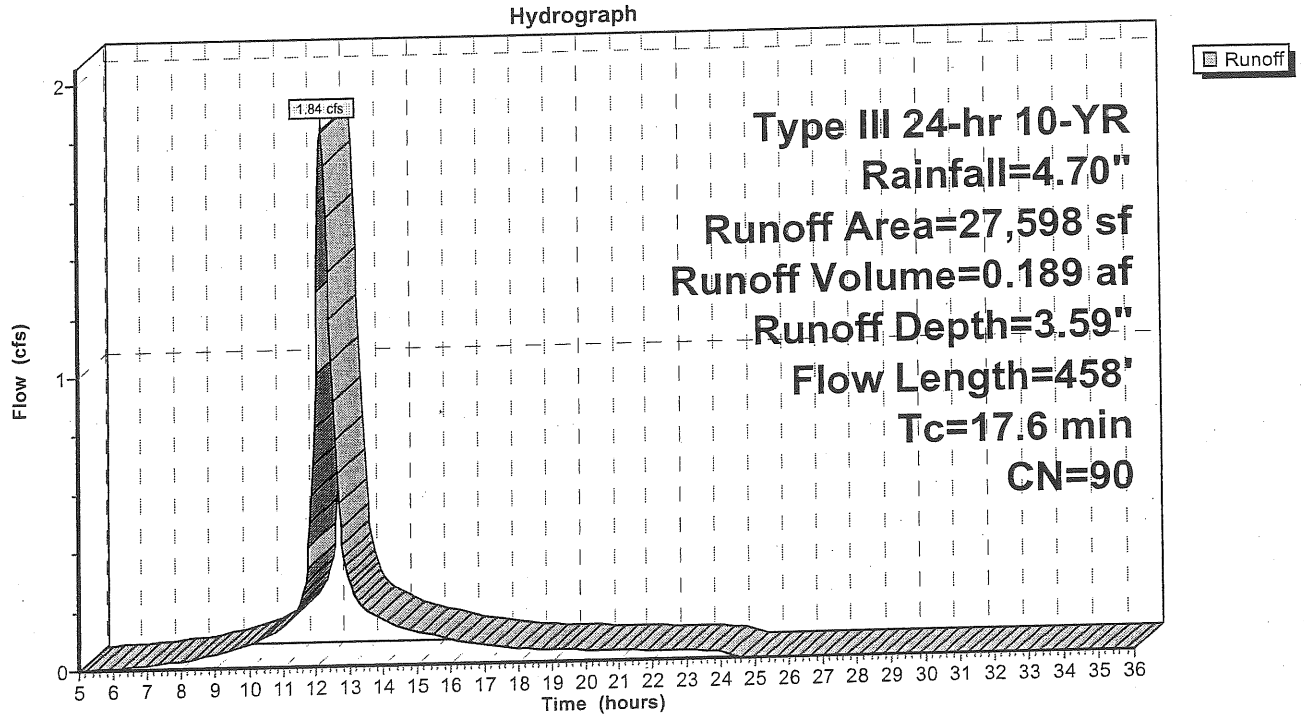
Runoff = 1.84 cfs @ 12.24 hrs, Volume= 0.189 af, Depth= 3.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
16,127	98	Existing Pavement
5,635	74	Pasture/grassland/range, Good, HSG C
3,584	72	Woods/grass comb., Good, HSG C
2,252	98	Ledge Outcroppings
27,598	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	114	0.0614	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.6	146	0.0410	4.1		**Shallow Concentrated Flow, Shallow Concentrated B-C** Paved Kv= 20.3 fps
0.7	51	0.0290	1.2		**Shallow Concentrated Flow, Shallow Concentrated C-D** Short Grass Pasture Kv= 7.0 fps
0.6	147	0.0370	3.9		**Shallow Concentrated Flow, Shallow Concentrated D-E** Paved Kv= 20.3 fps
17.6	458	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

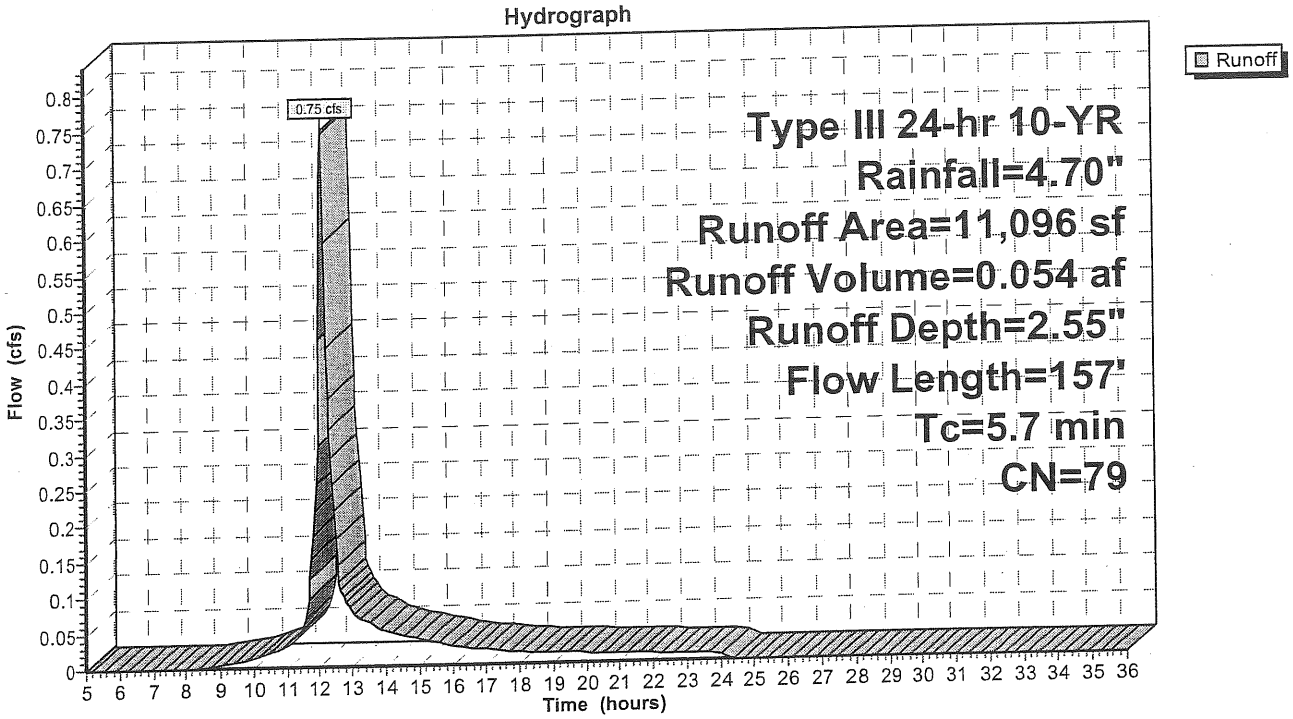
Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.054 af, Depth= 2.55"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
8,165	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
11,096	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	44	0.1360	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
5.7	157	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

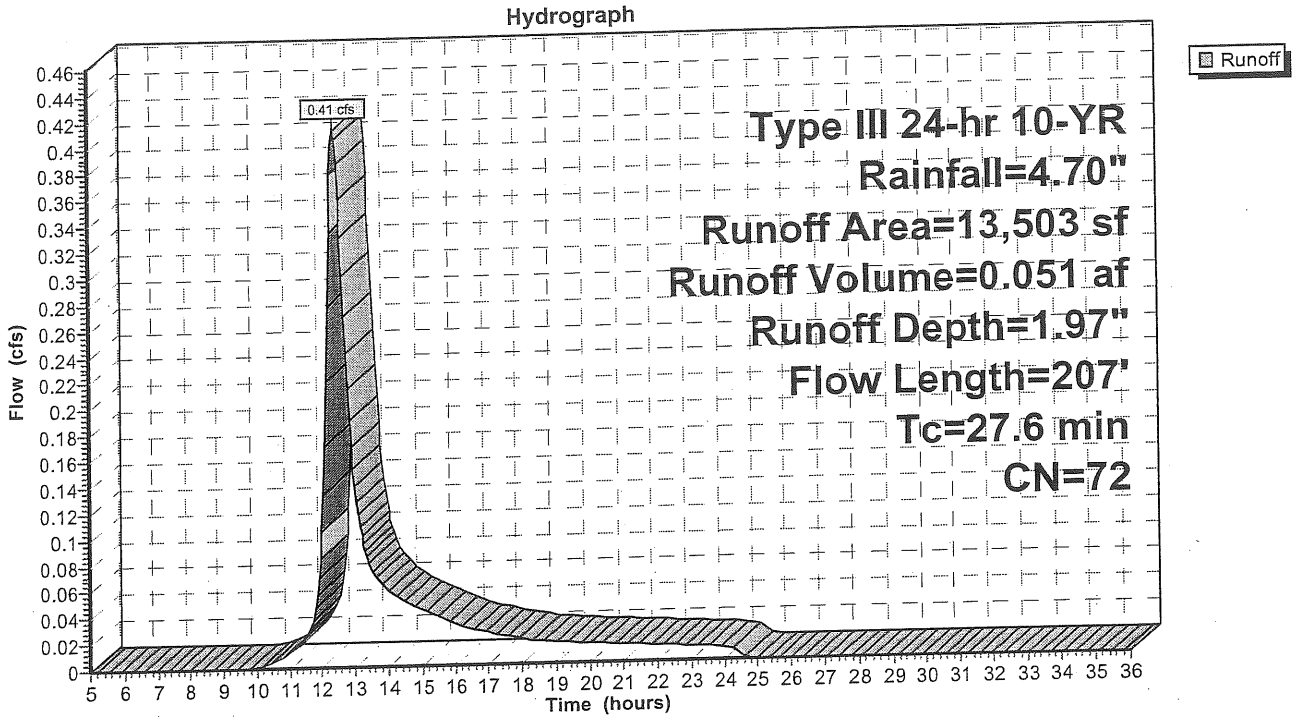
Runoff = 0.41 cfs @ 12.40 hrs, Volume= 0.051 af, Depth= 1.97"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
13,503	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

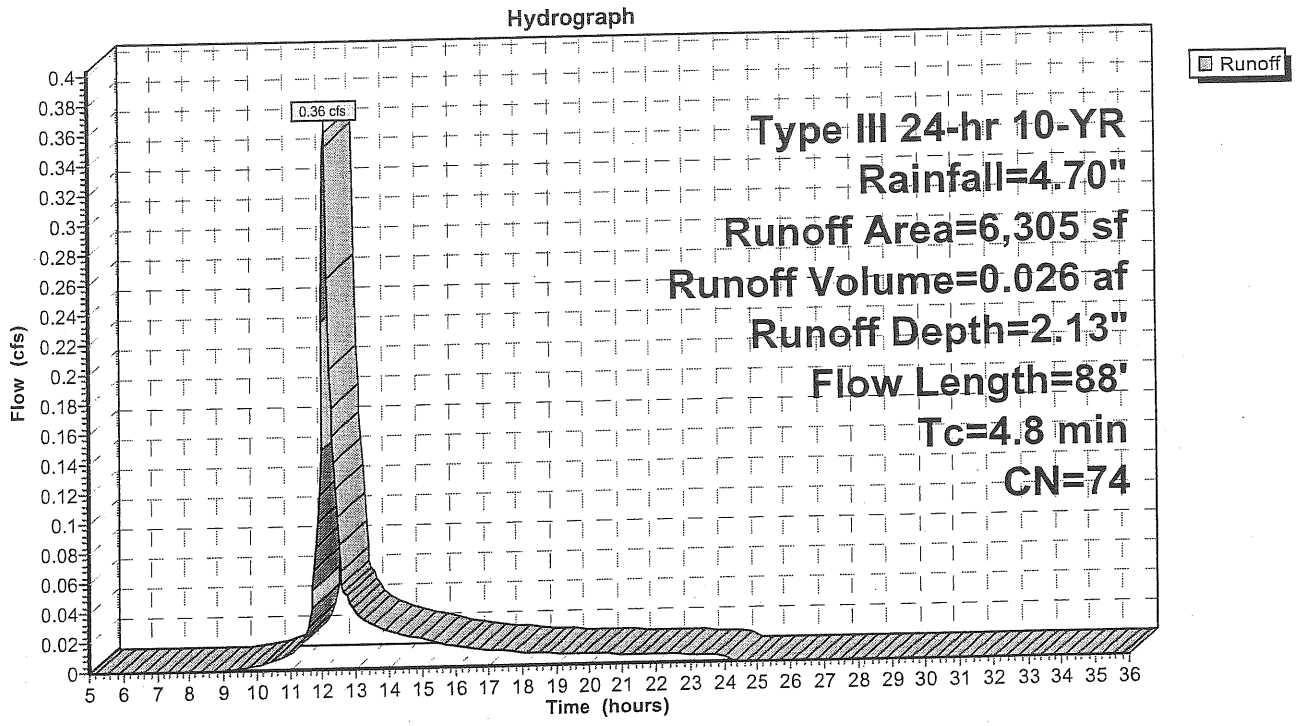
Runoff = 0.36 cfs @ 12.08 hrs, Volume= 0.026 af, Depth= 2.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
6,305	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



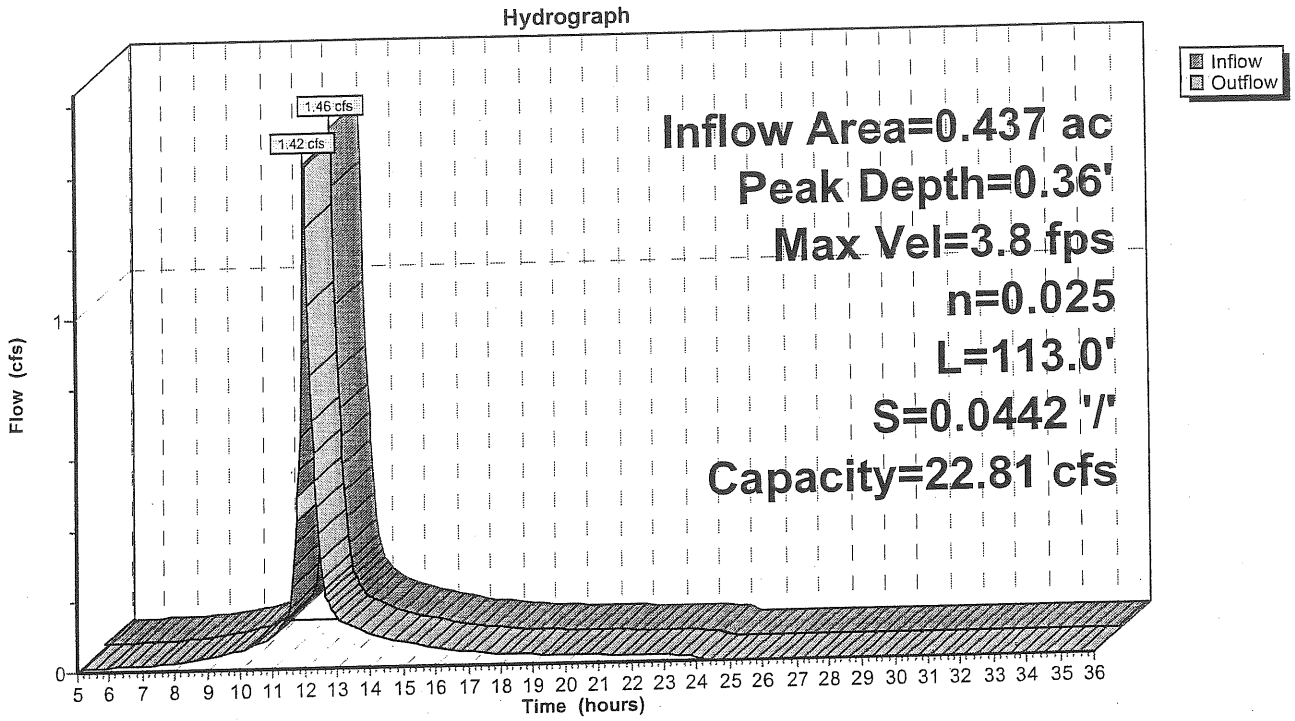
Reach 1R: Reach 1R

Inflow Area = 0.437 ac, Inflow Depth = 3.30" for 10-YR event
Inflow = 1.46 cfs @ 12.02 hrs, Volume= 0.120 af
Outflow = 1.42 cfs @ 12.05 hrs, Volume= 0.120 af, Atten= 2%, Lag= 1.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.8 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.6 fps, Avg. Travel Time= 1.2 min

Peak Depth= 0.36' @ 12.04 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



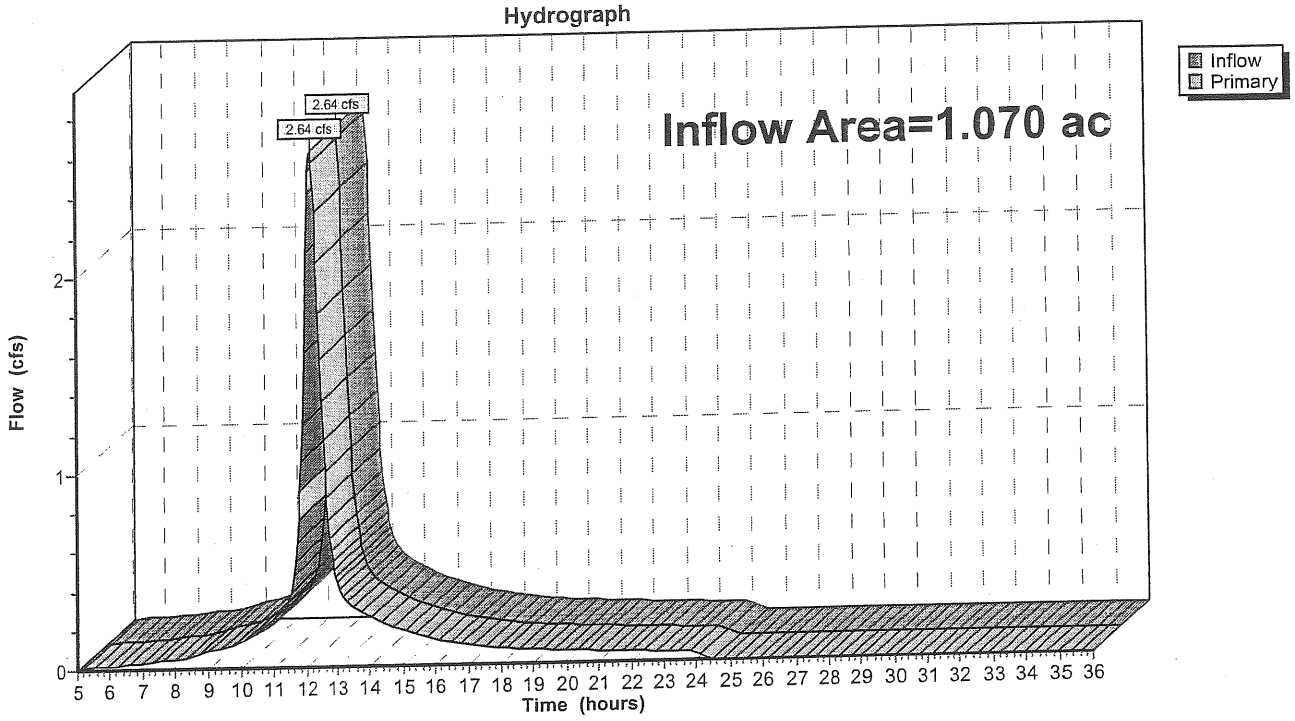
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.070 ac, Inflow Depth = 3.47" for 10-YR event
Inflow = 2.64 cfs @ 12.18 hrs, Volume= 0.309 af
Primary = 2.64 cfs @ 12.18 hrs, Volume= 0.309 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

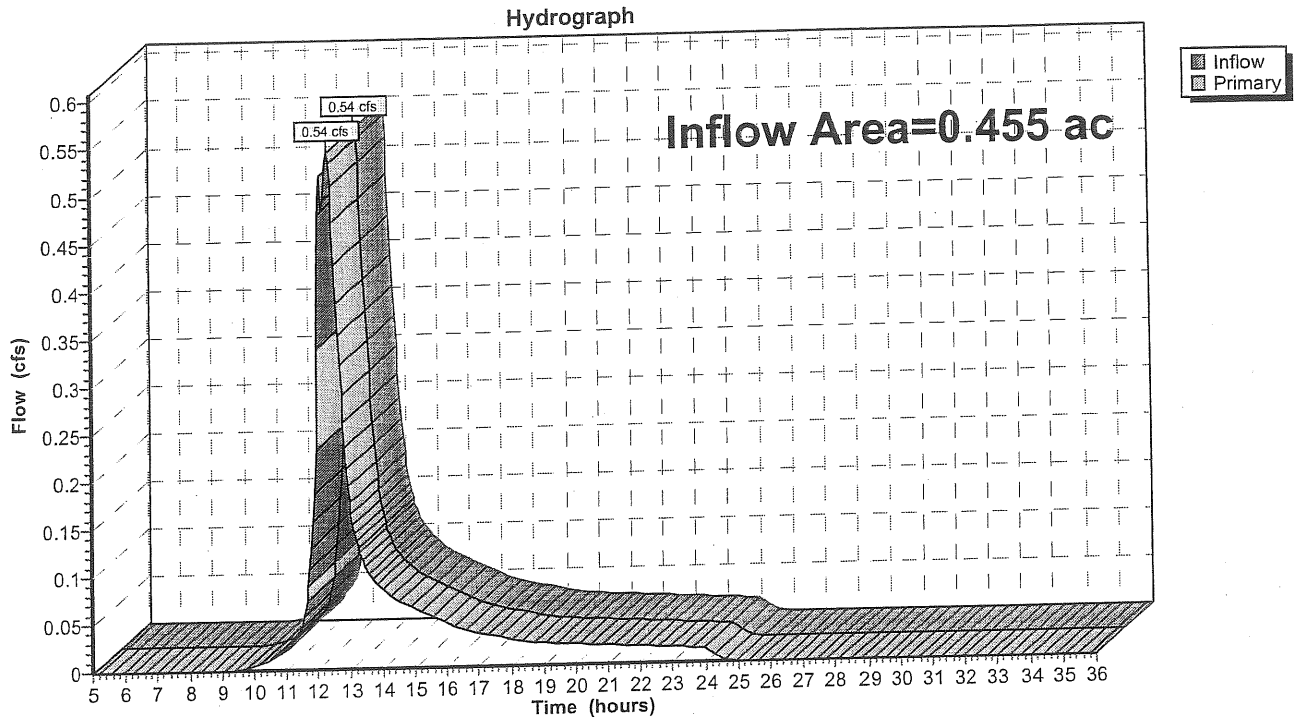


Link 2L: Point of Analysis 2

Inflow Area = 0.455 ac, Inflow Depth = 2.02" for 10-YR event
Inflow = 0.54 cfs @ 12.35 hrs, Volume= 0.077 af
Primary = 0.54 cfs @ 12.35 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=5.11"
Tc=0.0 min CN=98 Runoff=1.12 cfs 0.077 af

Subcatchment 2S: Watershed #2S Runoff Area=27,598 sf Runoff Depth=4.36"
Flow Length=458' Tc=17.6 min CN=90 Runoff=2.21 cfs 0.230 af

Subcatchment 3S: Watershed #3S Runoff Area=11,096 sf Runoff Depth=3.24"
Flow Length=157' Tc=5.7 min CN=79 Runoff=0.95 cfs 0.069 af

Subcatchment 4S: Watershed #4S Runoff Area=13,503 sf Runoff Depth=2.59"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.55 cfs 0.067 af

Subcatchment 5S: Watershed #5S Runoff Area=6,305 sf Runoff Depth=2.77"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.47 cfs 0.033 af

Reach 1R: Reach 1R Peak Depth=0.38' Max Vel=4.0 fps Inflow=1.75 cfs 0.146 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=1.74 cfs 0.146 af

Link 1L: Point of Analysis 1 Inflow=3.19 cfs 0.376 af
Primary=3.19 cfs 0.376 af

Link 2L: Point of Analysis 2 Inflow=0.72 cfs 0.100 af
Primary=0.72 cfs 0.100 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.476 af Average Runoff Depth = 3.75"

Subcatchment 1S: Watershed #1S

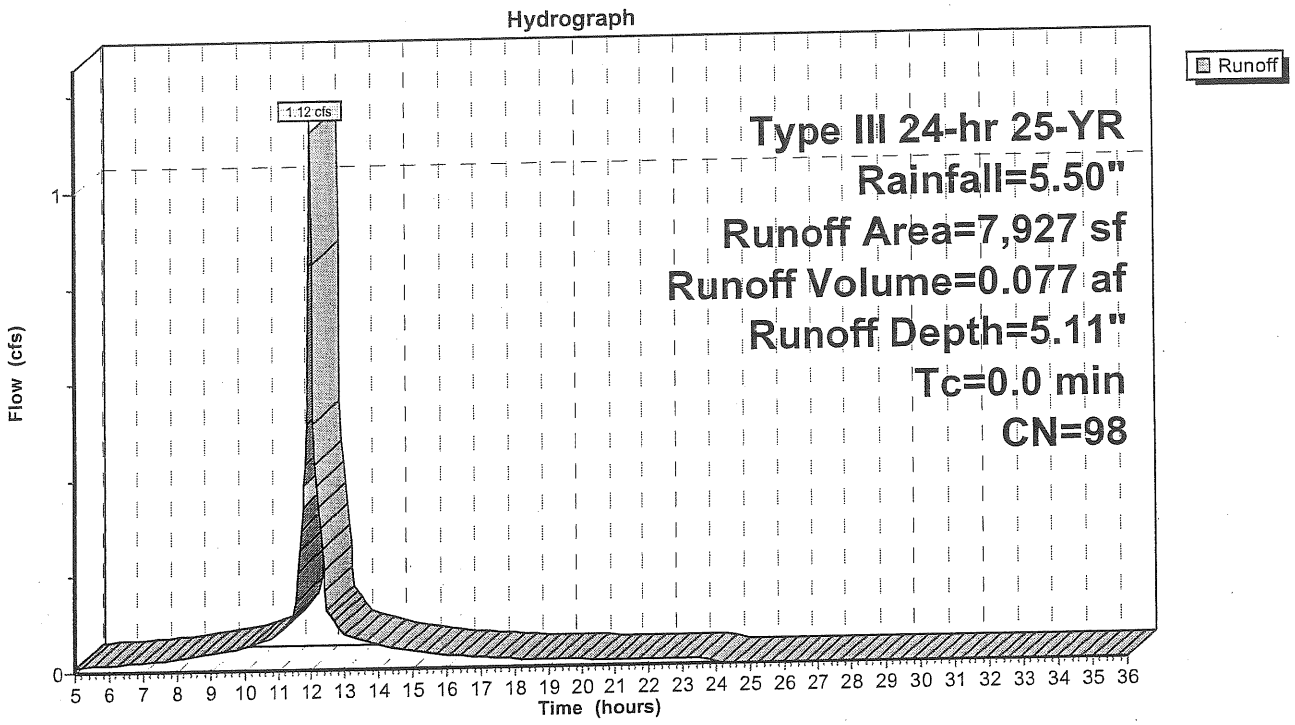
Runoff = 1.12 cfs @ 12.00 hrs, Volume= 0.077 af, Depth= 5.11"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
7,927	98	Existing Building

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

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

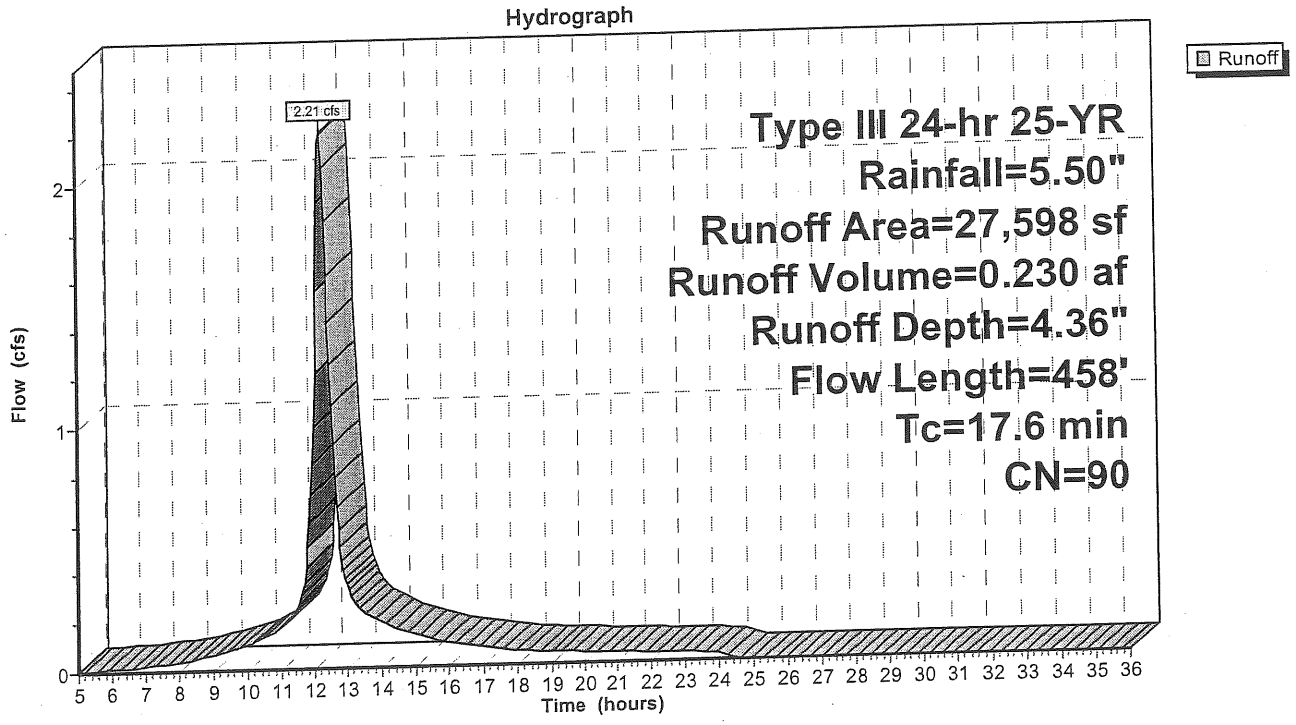
Runoff = 2.21 cfs @ 12.23 hrs, Volume= 0.230 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
16,127	98	Existing Pavement
5,635	74	Pasture/grassland/range, Good, HSG C
3,584	72	Woods/grass comb., Good, HSG C
2,252	98	Ledge Outcroppings
27,598	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	114	0.0614	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.6	146	0.0410	4.1		**Shallow Concentrated Flow, Shallow Concentrated B-C** Paved Kv= 20.3 fps
0.7	51	0.0290	1.2		**Shallow Concentrated Flow, Shallow Concentrated C-D** Short Grass Pasture Kv= 7.0 fps
0.6	147	0.0370	3.9		**Shallow Concentrated Flow, Shallow Concentrated D-E** Paved Kv= 20.3 fps
17.6	458	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

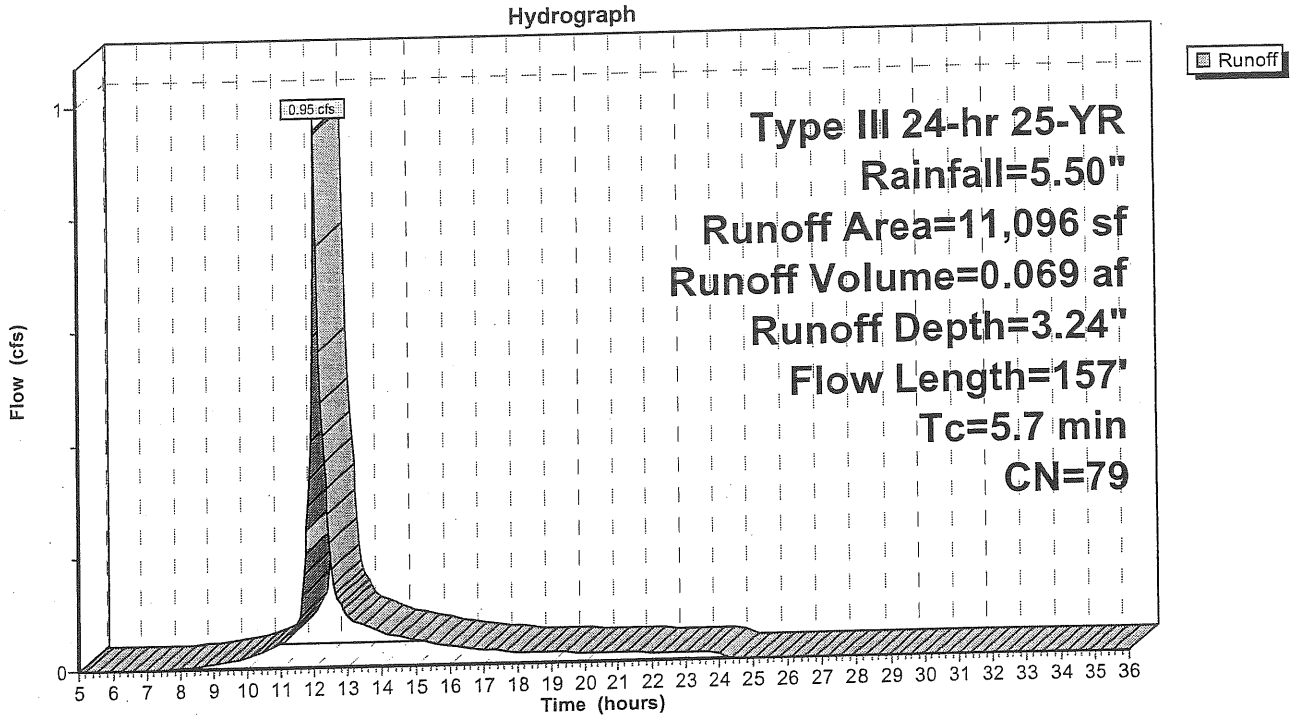
Runoff = 0.95 cfs @ 12.09 hrs, Volume= 0.069 af, Depth= 3.24"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
8,165	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
11,096	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	44	0.1360	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
5.7	157	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

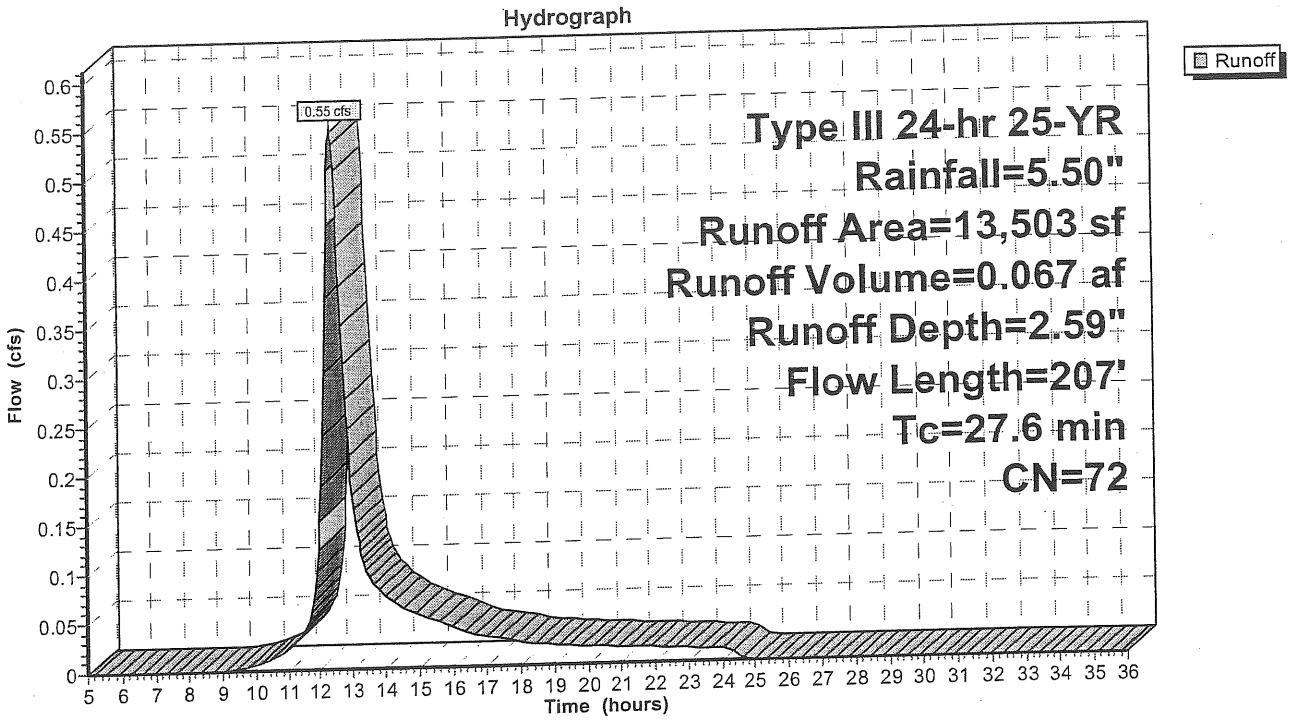
Runoff = 0.55 cfs @ 12.39 hrs, Volume= 0.067 af, Depth= 2.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
13,503	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

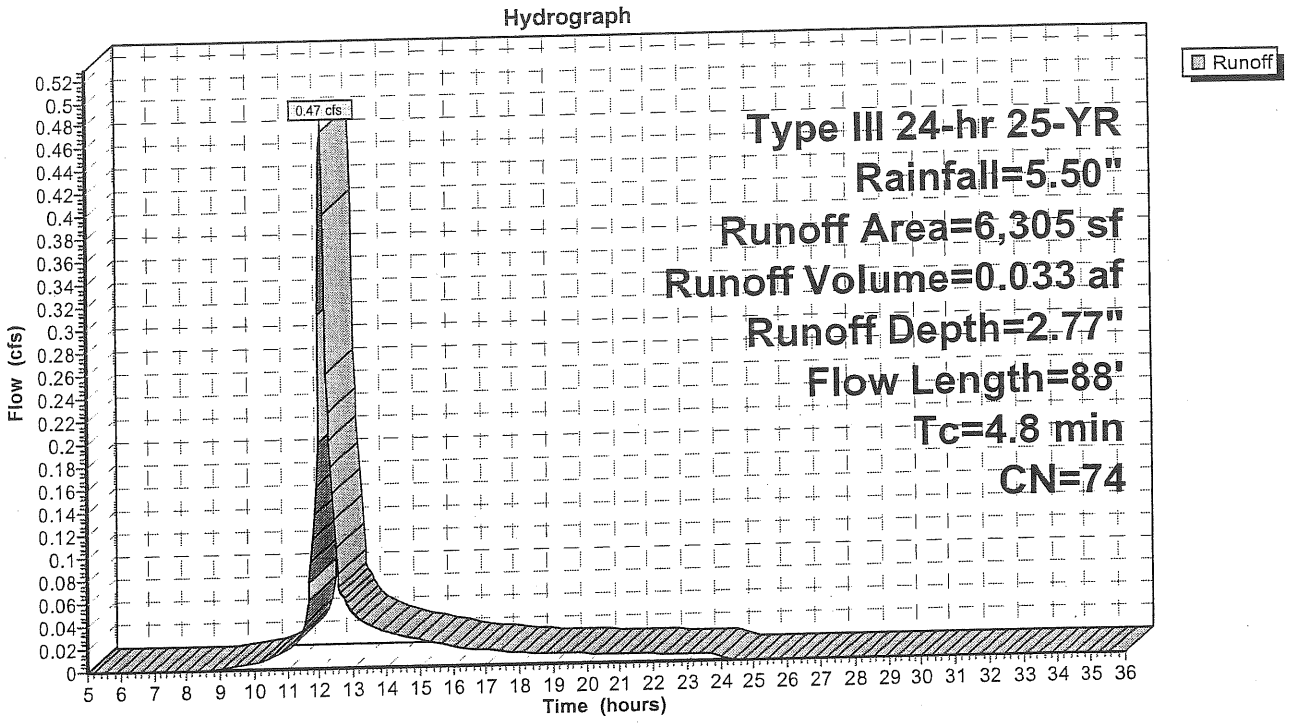
Runoff = 0.47 cfs @ 12.08 hrs, Volume= 0.033 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
6,305	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



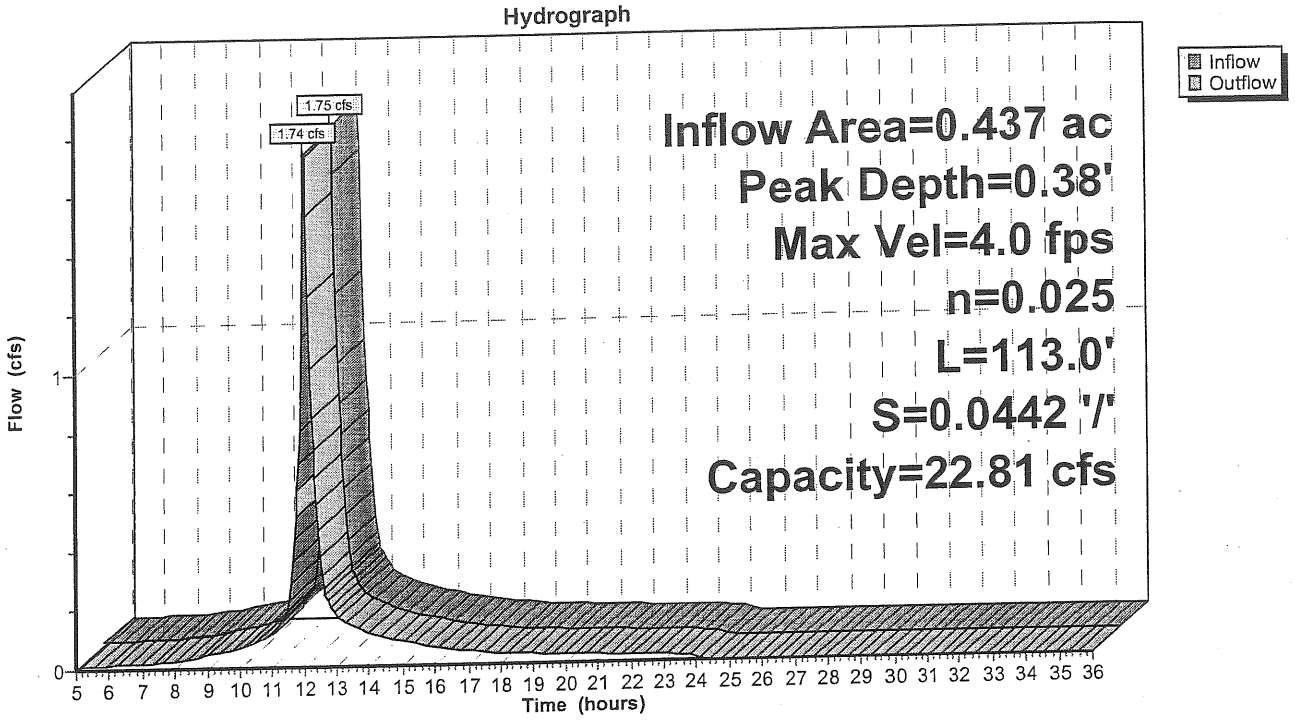
Reach 1R: Reach 1R

Inflow Area = 0.437 ac, Inflow Depth = 4.02" for 25-YR event
Inflow = 1.75 cfs @ 12.03 hrs, Volume= 0.146 af
Outflow = 1.74 cfs @ 12.05 hrs, Volume= 0.146 af, Atten= 1%, Lag= 1.2 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.0 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.7 fps, Avg. Travel Time= 1.1 min

Peak Depth= 0.38' @ 12.04 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



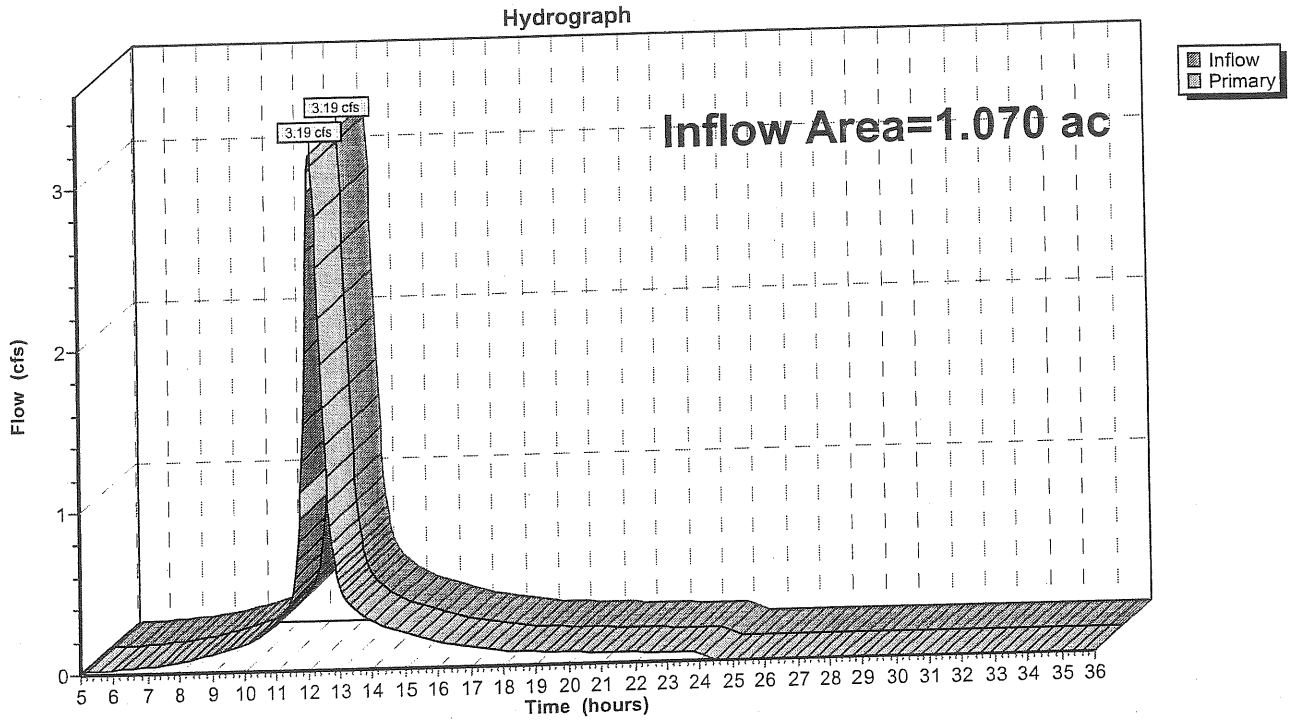
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.070 ac, Inflow Depth = 4.22" for 25-YR event
Inflow = 3.19 cfs @ 12.17 hrs, Volume= 0.376 af
Primary = 3.19 cfs @ 12.17 hrs, Volume= 0.376 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

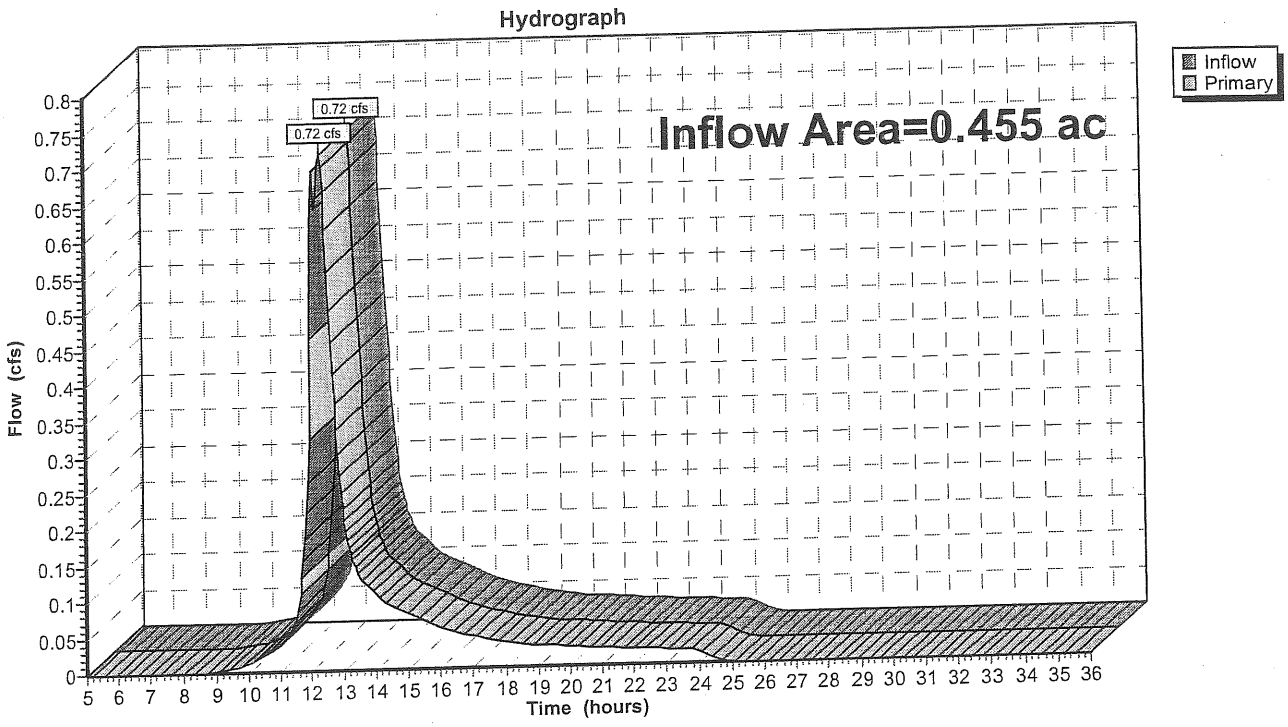


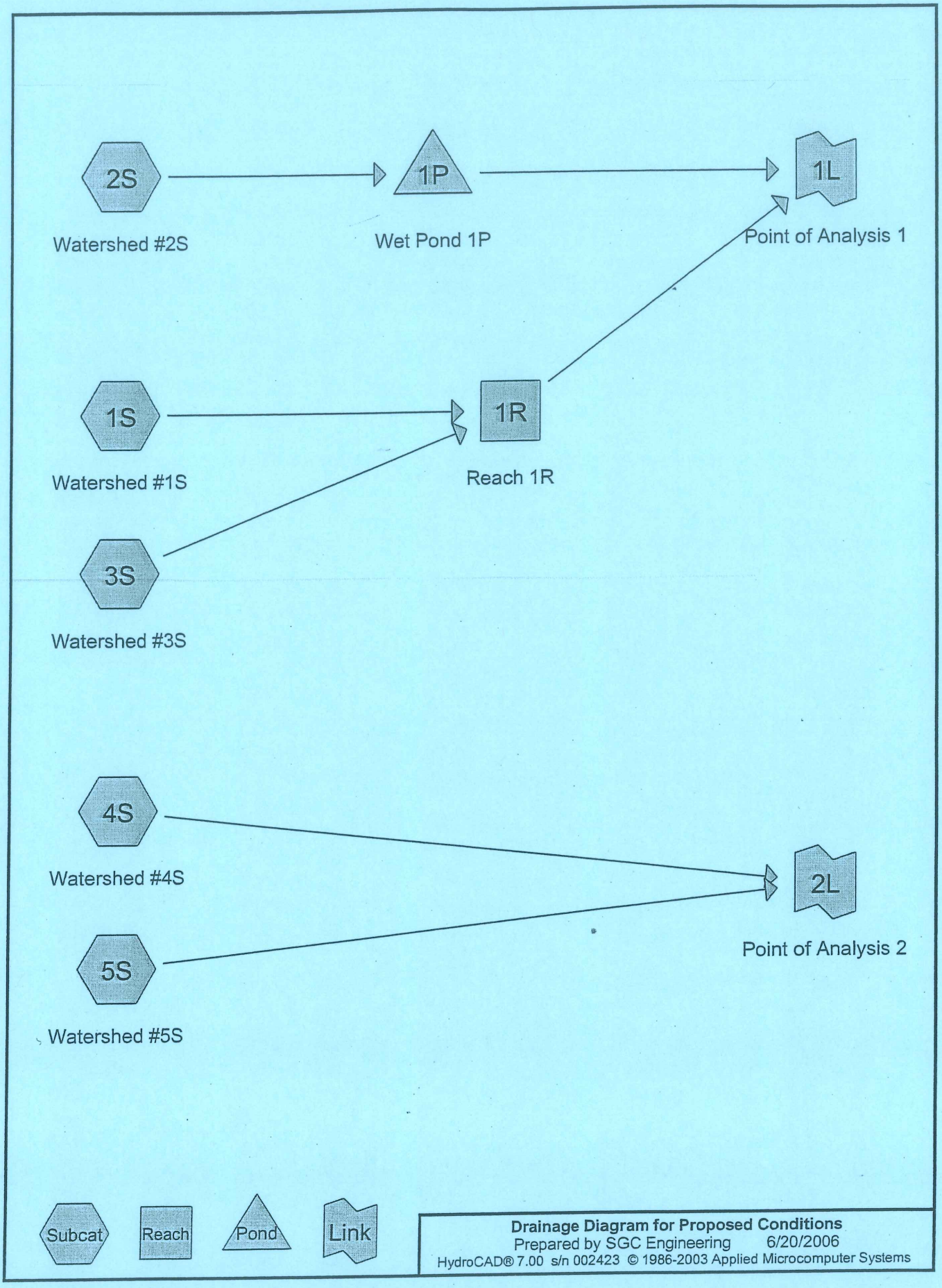
Link 2L: Point of Analysis 2

Inflow Area = 0.455 ac, Inflow Depth = 2.65" for 25-YR event
Inflow = 0.72 cfs @ 12.34 hrs, Volume= 0.100 af
Primary = 0.72 cfs @ 12.34 hrs, Volume= 0.100 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2




2S
1P
1L
Watershed #2S
Wet Pond 1P
Point of Analysis 1
1S
1R
Watershed #1S
Reach 1R
3S
Watershed #3S
4S
Watershed #4S
2L
Point of Analysis 2
5S
Watershed #5S
Subcat
Reach
Pond
Link
Drainage Diagram for Proposed Conditions
Prepared by SGC Engineering 6/20/2006
HydroCAD® 7.00 s/n 002423 © 1986-2003 Applied Microcomputer Systems

Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=2.72"
Tc=0.0 min CN=98 Runoff=0.61 cfs 0.041 af

Subcatchment 2S: Watershed #2S Runoff Area=28,113 sf Runoff Depth=2.25"
Flow Length=295' Tc=2.1 min CN=93 Runoff=1.81 cfs 0.121 af

Subcatchment 3S: Watershed #3S Runoff Area=14,435 sf Runoff Depth=1.07"
Flow Length=263' Tc=17.5 min CN=77 Runoff=0.28 cfs 0.030 af

Subcatchment 4S: Watershed #4S Runoff Area=13,684 sf Runoff Depth=0.81"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.16 cfs 0.021 af

Subcatchment 5S: Watershed #5S Runoff Area=2,270 sf Runoff Depth=0.91"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.05 cfs 0.004 af

Reach 1R: Reach 1R Peak Depth=0.27' Max Vel=3.2 fps Inflow=0.70 cfs 0.071 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=0.66 cfs 0.071 af

Pond 1P: Wet Pond 1P Peak Elev=197.30' Storage=543 cf Inflow=1.81 cfs 0.121 af
Primary=1.78 cfs 0.080 af Secondary=0.02 cfs 0.041 af Outflow=1.81 cfs 0.121 af

Link 1L: Point of Analysis 1 Inflow=2.44 cfs 0.192 af
Primary=2.44 cfs 0.192 af

Link 2L: Point of Analysis 2 Inflow=0.18 cfs 0.025 af
Primary=0.18 cfs 0.025 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.217 af Average Runoff Depth = 1.71"

Subcatchment 1S: Watershed #1S

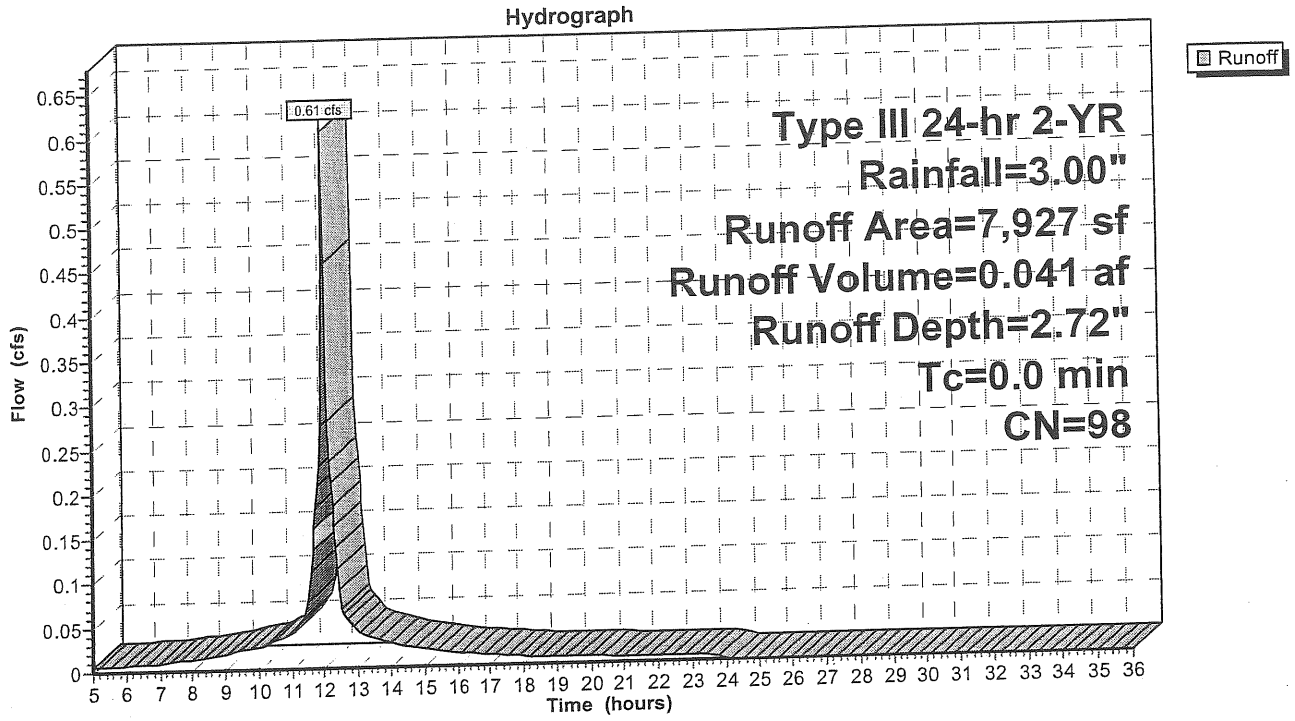
Runoff = 0.61 cfs @ 12.00 hrs, Volume= 0.041 af, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
7,927	98	Existing Building

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

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

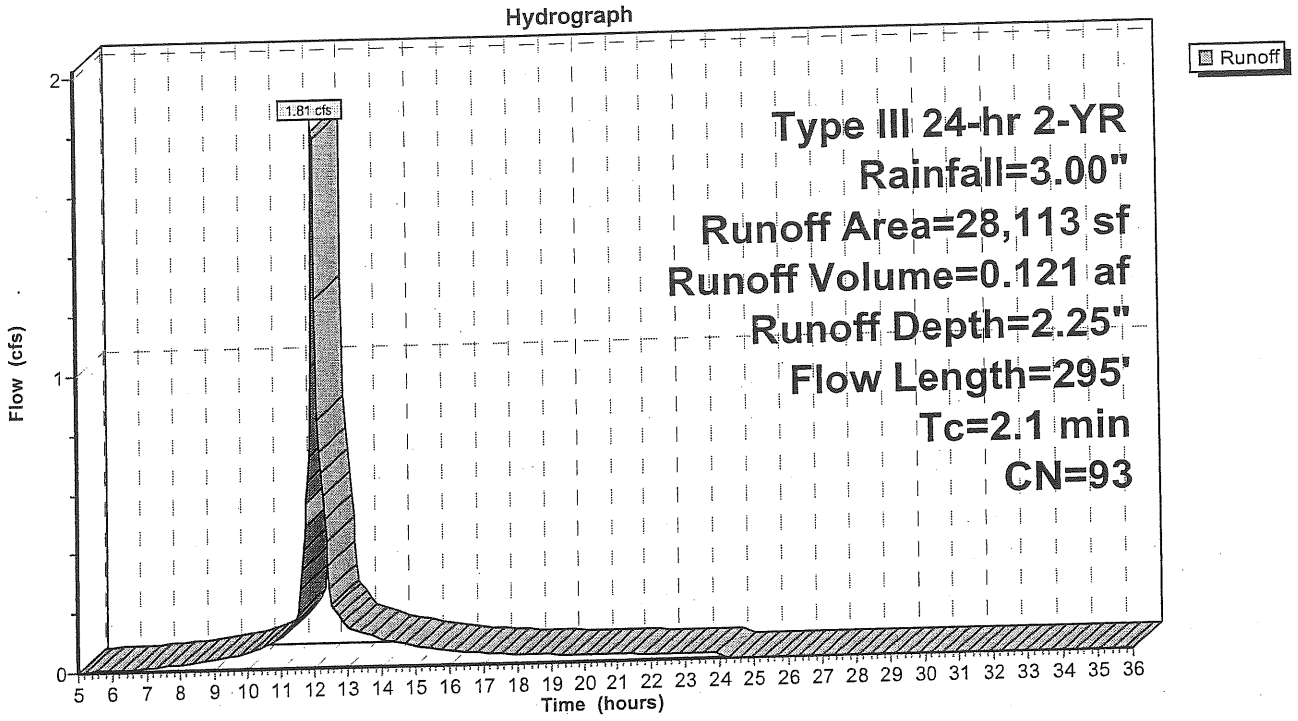
Runoff = 1.81 cfs @ 12.04 hrs, Volume= 0.121 af, Depth= 2.25"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
22,759	98	Impervious Coverage
5,354	74	Landscaped Areas
28,113	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	44	0.0210	1.2		**Sheet Flow, Sheet Flow A-B** Smooth surfaces n= 0.011 P2= 3.00"
0.8	150	0.0210	2.9		**Shallow Concentrated Flow, Shallow Concentrated A-B** Paved Kv= 20.3 fps
0.5	53	0.0750	1.9		**Shallow Concentrated Flow, Shallow Concentrated B-C** Short Grass Pasture Kv= 7.0 fps
0.2	48	0.0417	4.1		**Shallow Concentrated Flow, Shallow Concentrated C-D** Paved Kv= 20.3 fps
2.1	295	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

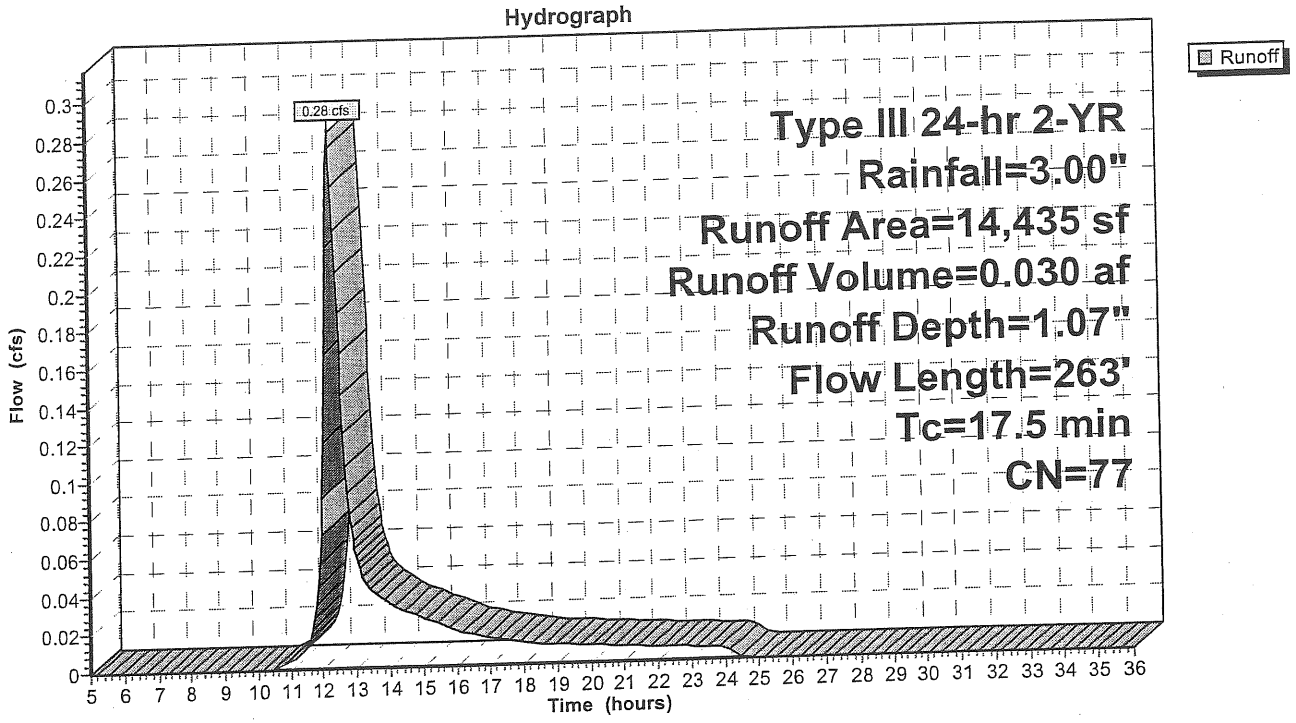
Runoff = 0.28 cfs @ 12.26 hrs, Volume= 0.030 af, Depth= 1.07"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
11,504	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
14,435	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.1	150	0.0867	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
17.5	263	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

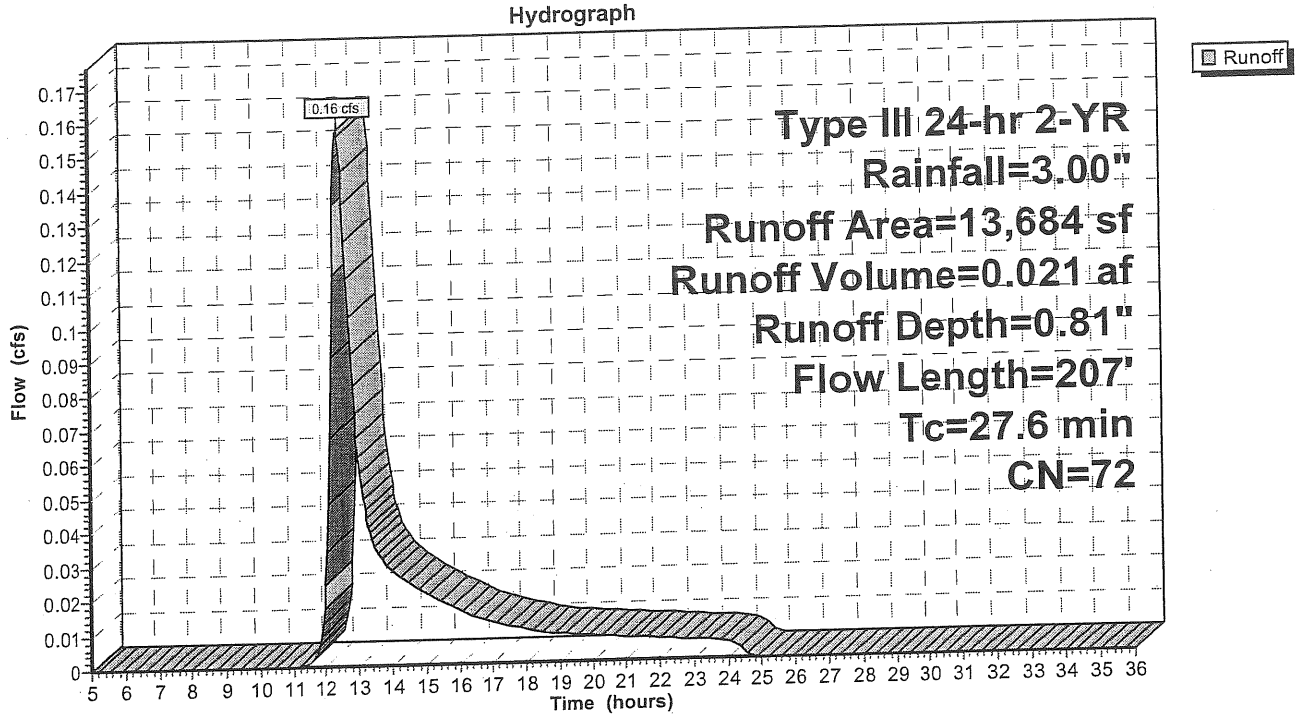
Runoff = 0.16 cfs @ 12.43 hrs, Volume= 0.021 af, Depth= 0.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
13,684	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

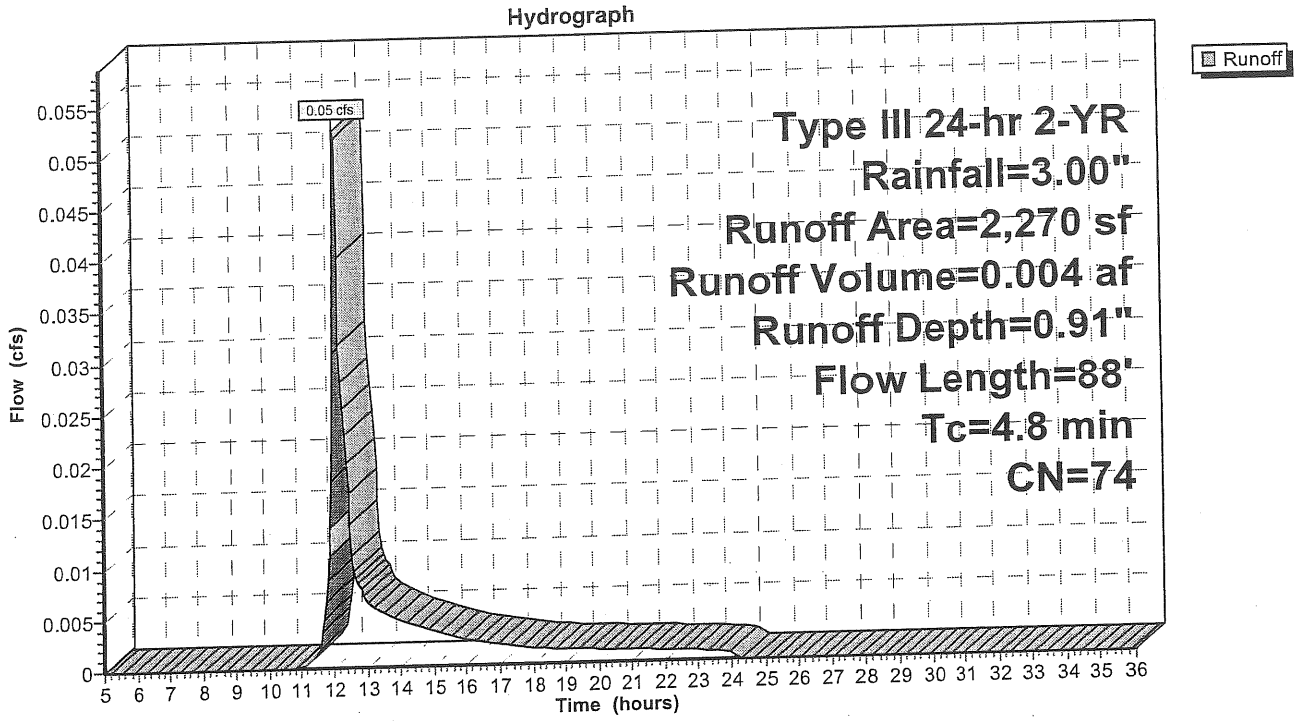
Runoff = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
2,270	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



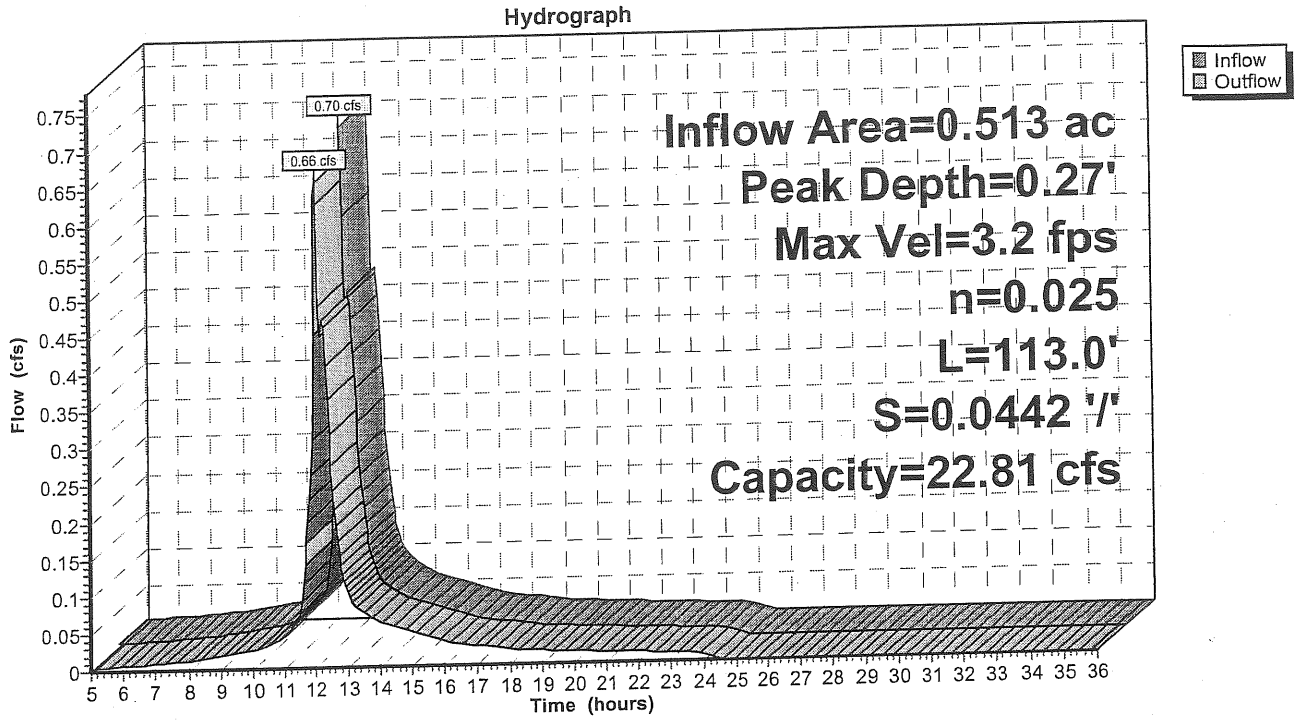
Reach 1R: Reach 1R

Inflow Area = 0.513 ac, Inflow Depth = 1.66" for 2-YR event
Inflow = 0.70 cfs @ 12.00 hrs, Volume= 0.071 af
Outflow = 0.66 cfs @ 12.02 hrs, Volume= 0.071 af, Atten= 6%, Lag= 1.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.2 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.4 fps, Avg. Travel Time= 1.4 min

Peak Depth= 0.27' @ 12.01 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



Pond 1P: Wet Pond 1P

Inflow Area = 0.645 ac, Inflow Depth = 2.25" for 2-YR event
Inflow = 1.81 cfs @ 12.04 hrs, Volume= 0.121 af
Outflow = 1.81 cfs @ 12.04 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.5 min
Primary = 1.78 cfs @ 12.04 hrs, Volume= 0.080 af
Secondary = 0.02 cfs @ 11.40 hrs, Volume= 0.041 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 197.30' @ 12.04 hrs Surf.Area= 421 sf Storage= 543 cf
Plug-Flow detention time= 75.7 min calculated for 0.121 af (100% of inflow)
Center-of-Mass det. time= 76.0 min (867.4 - 791.4)

#	Invert	Avail.Storage	Storage Description
1	196.00'	838 cf	**Custom Stage Data (Prismatic)** Listed below

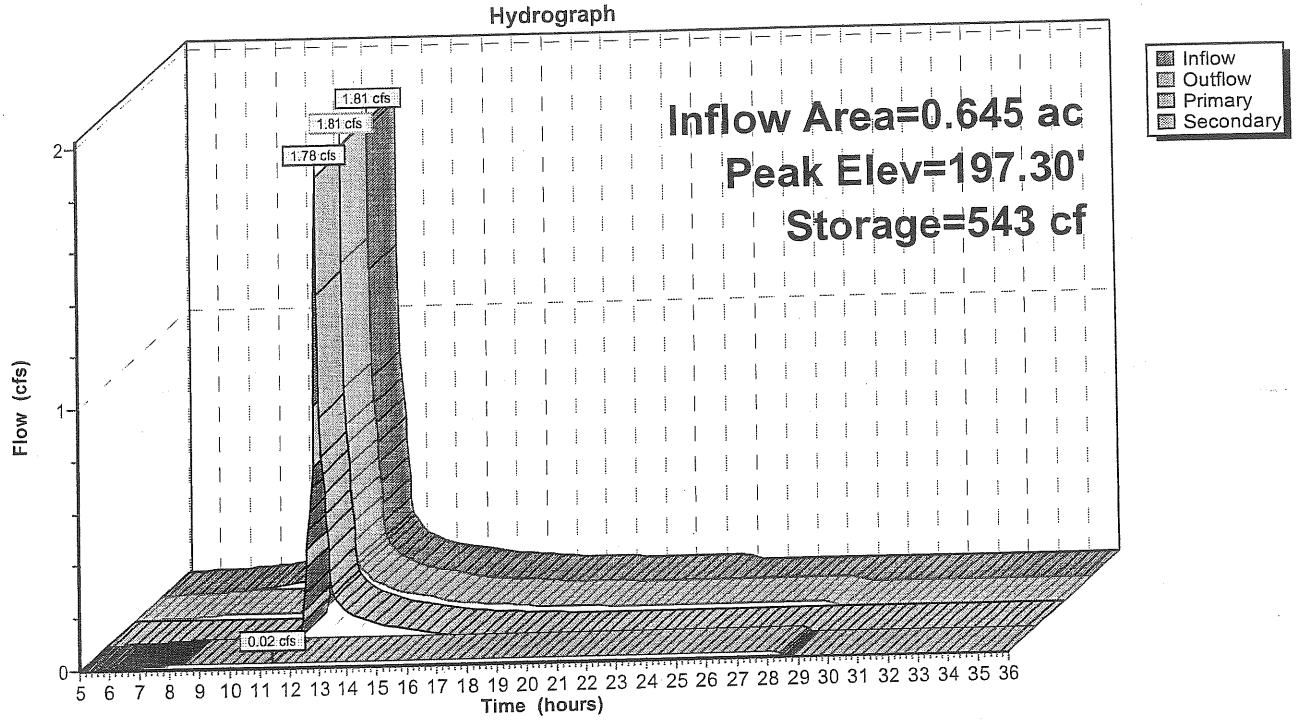
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	412	0	0
197.00	421	417	417
198.00	421	421	838

#	Routing	Invert	Outlet Devices
1	Primary	197.00'	**Special (user-defined)**
			Head (feet) 0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50
			Disch. (cfs) 0.00 0.02 0.07 0.15 0.49 1.02 1.76 2.74 3.97 5.49 7.31
2	Secondary	0.00'	**0.003340 fpm Exfiltration over entire Surface area**

Primary OutFlow Max=1.74 cfs @ 12.04 hrs HW=197.30' (Free Discharge)
↑—**1=Special (user-defined)** (Custom Controls 1.74 cfs)

Secondary OutFlow Max=0.02 cfs @ 11.40 hrs HW=197.03' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Pond 1P: Wet Pond 1P



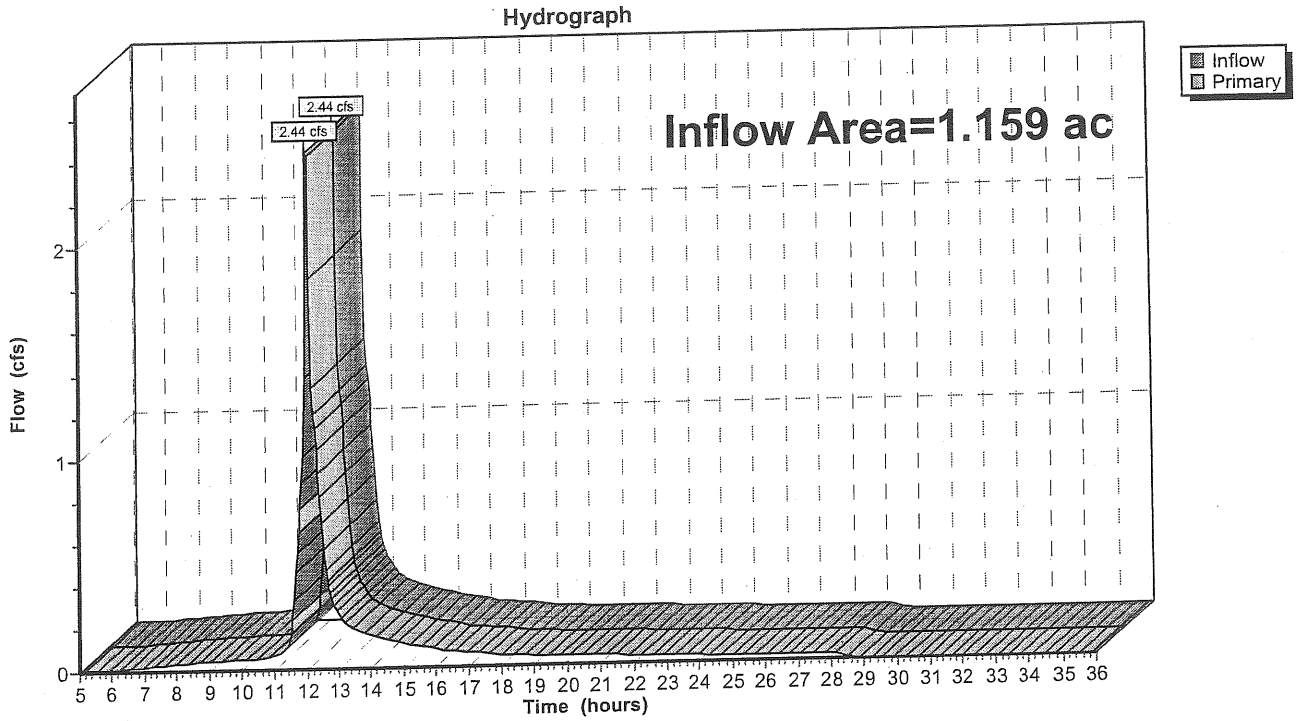
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.159 ac, Inflow Depth = 1.99" for 2-YR event
Inflow = 2.44 cfs @ 12.04 hrs, Volume= 0.192 af
Primary = 2.44 cfs @ 12.04 hrs, Volume= 0.192 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

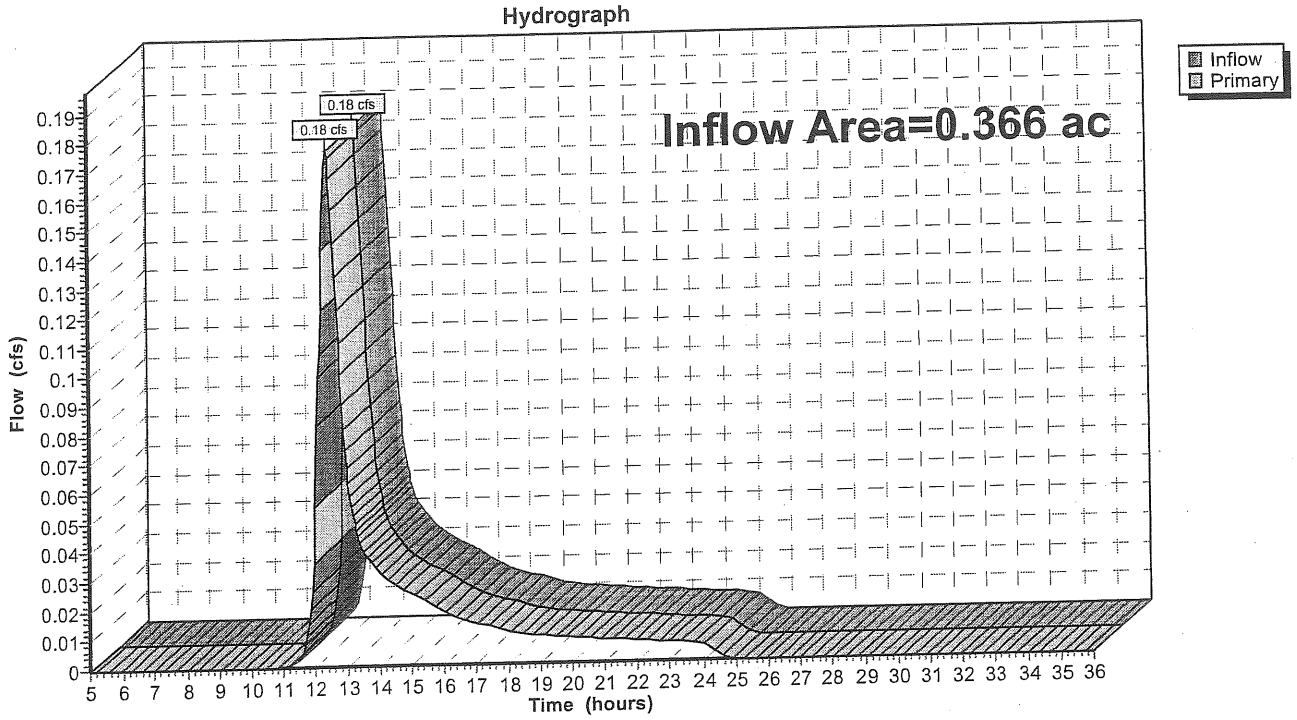


Link 2L: Point of Analysis 2

Inflow Area = 0.366 ac, Inflow Depth = 0.82" for 2-YR event
Inflow = 0.18 cfs @ 12.41 hrs, Volume= 0.025 af
Primary = 0.18 cfs @ 12.41 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=4.35"
Tc=0.0 min CN=98 Runoff=0.96 cfs 0.066 af

Subcatchment 2S: Watershed #2S Runoff Area=28,113 sf Runoff Depth=3.89"
Flow Length=295' Tc=2.1 min CN=93 Runoff=3.03 cfs 0.209 af

Subcatchment 3S: Watershed #3S Runoff Area=14,435 sf Runoff Depth=2.37"
Flow Length=263' Tc=17.5 min CN=77 Runoff=0.65 cfs 0.066 af

Subcatchment 4S: Watershed #4S Runoff Area=13,684 sf Runoff Depth=1.97"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.42 cfs 0.052 af

Subcatchment 5S: Watershed #5S Runoff Area=2,270 sf Runoff Depth=2.13"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.13 cfs 0.009 af

Reach 1R: Reach 1R Peak Depth=0.33' Max Vel=3.6 fps Inflow=1.21 cfs 0.131 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=1.16 cfs 0.131 af

Pond 1P: Wet Pond 1P Peak Elev=197.36' Storage=569 cf Inflow=3.03 cfs 0.209 af
Primary=3.03 cfs 0.164 af Secondary=0.02 cfs 0.045 af Outflow=3.05 cfs 0.209 af

Link 1L: Point of Analysis 1 Inflow=4.17 cfs 0.341 af
Primary=4.17 cfs 0.341 af

Link 2L: Point of Analysis 2 Inflow=0.46 cfs 0.061 af
Primary=0.46 cfs 0.061 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.401 af Average Runoff Depth = 3.16"

Subcatchment 1S: Watershed #1S

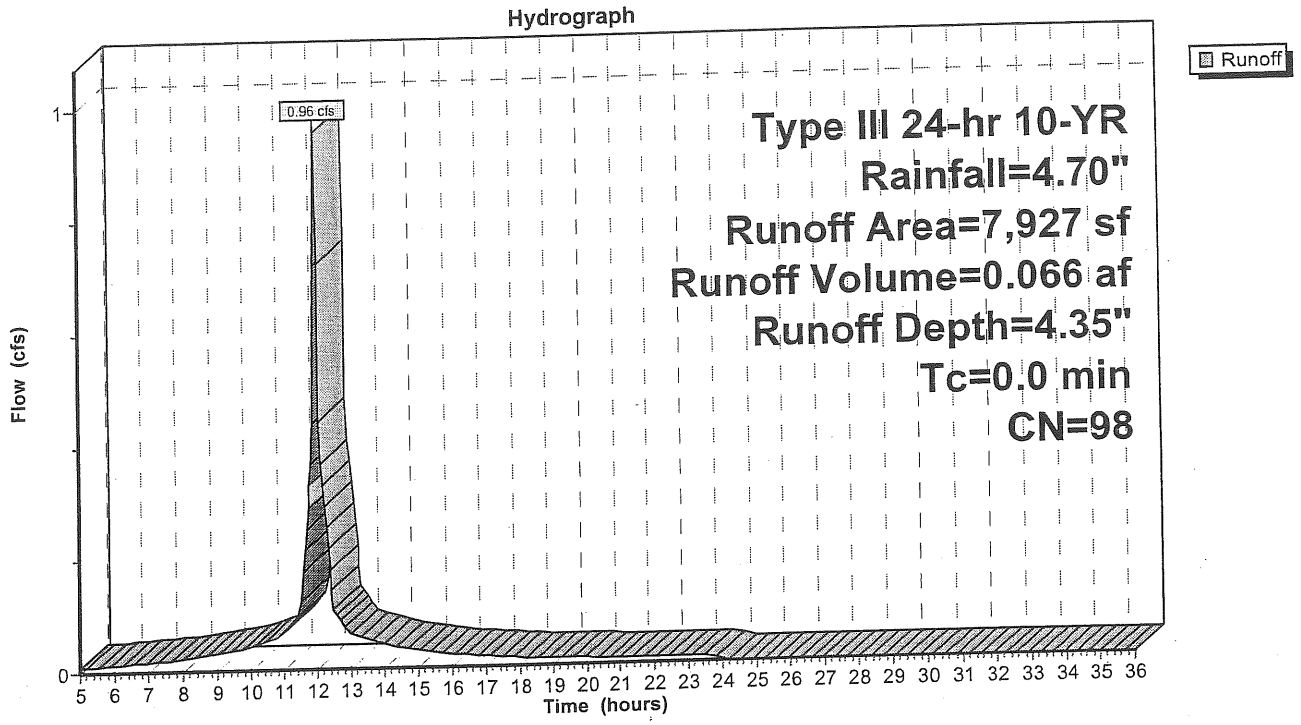
Runoff = 0.96 cfs @ 12.00 hrs, Volume= 0.066 af, Depth= 4.35"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
7,927	98	Existing Building

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

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

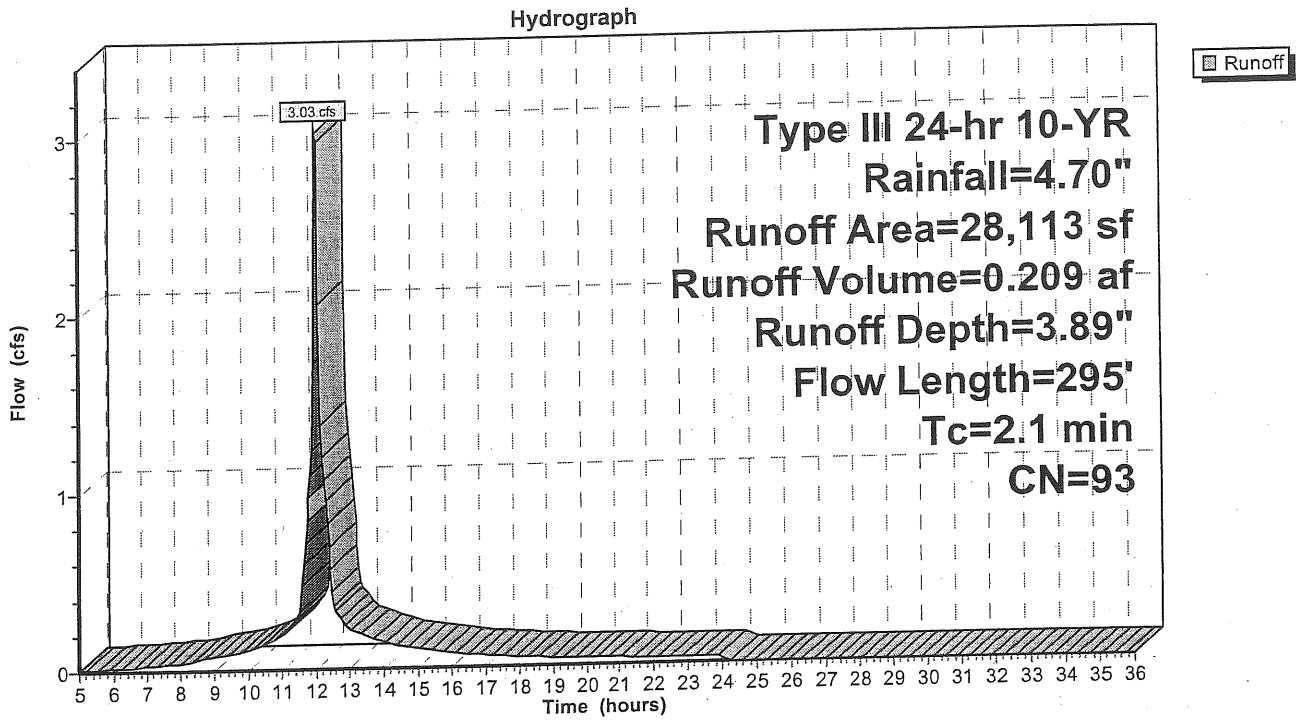
Runoff = 3.03 cfs @ 12.04 hrs, Volume= 0.209 af, Depth= 3.89"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
22,759	98	Impervious Coverage
5,354	74	Landscaped Areas
28,113	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	44	0.0210	1.2		**Sheet Flow, Sheet Flow A-B** Smooth surfaces n= 0.011 P2= 3.00"
0.8	150	0.0210	2.9		**Shallow Concentrated Flow, Shallow Concentrated A-B** Paved Kv= 20.3 fps
0.5	53	0.0750	1.9		**Shallow Concentrated Flow, Shallow Concentrated B-C** Short Grass Pasture Kv= 7.0 fps
0.2	48	0.0417	4.1		**Shallow Concentrated Flow, Shallow Concentrated C-D** Paved Kv= 20.3 fps
2.1	295	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

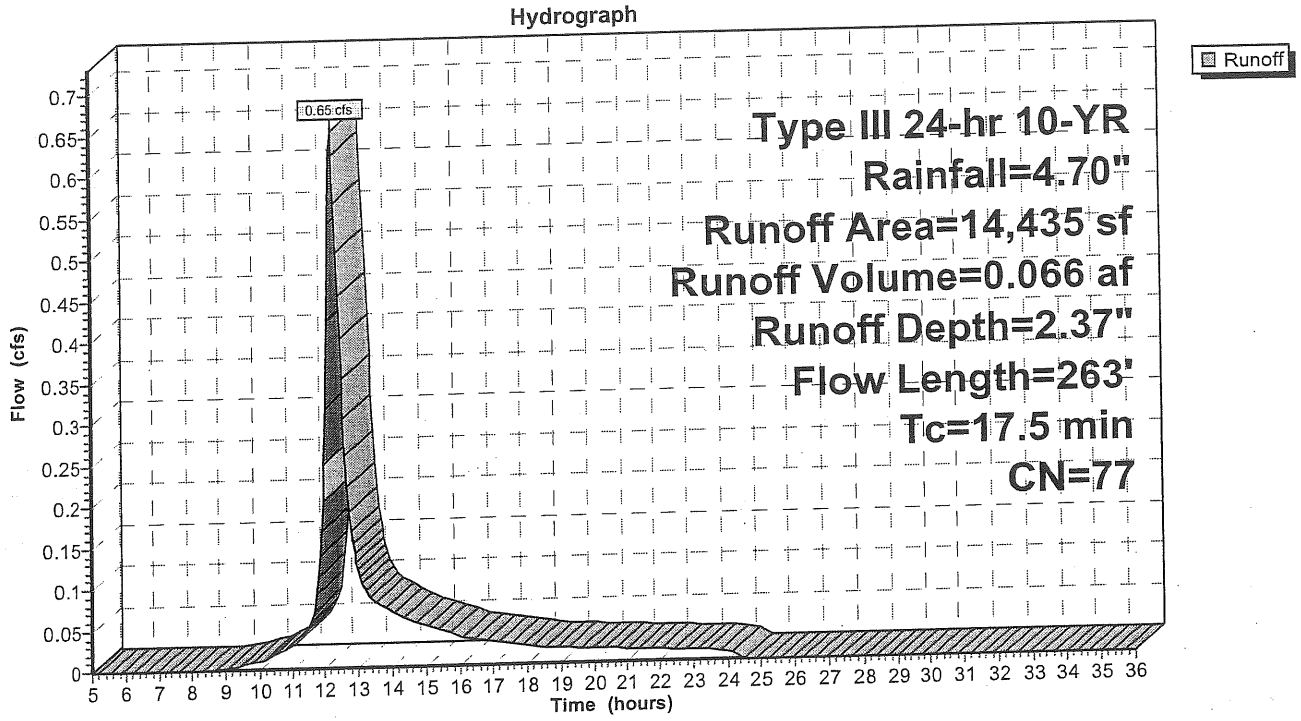
Runoff = 0.65 cfs @ 12.25 hrs, Volume= 0.066 af, Depth= 2.37"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
11,504	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
14,435	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.1	150	0.0867	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
17.5	263	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

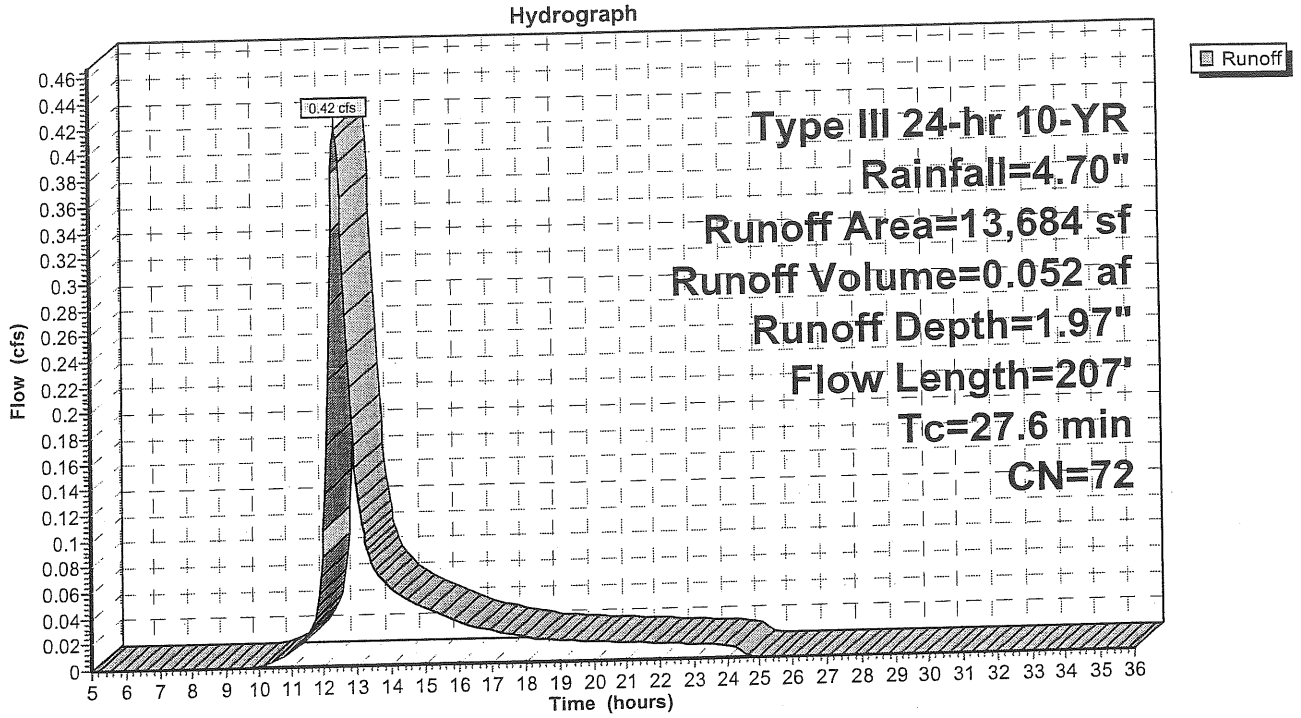
Runoff = 0.42 cfs @ 12.40 hrs, Volume= 0.052 af, Depth= 1.97"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
13,684	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

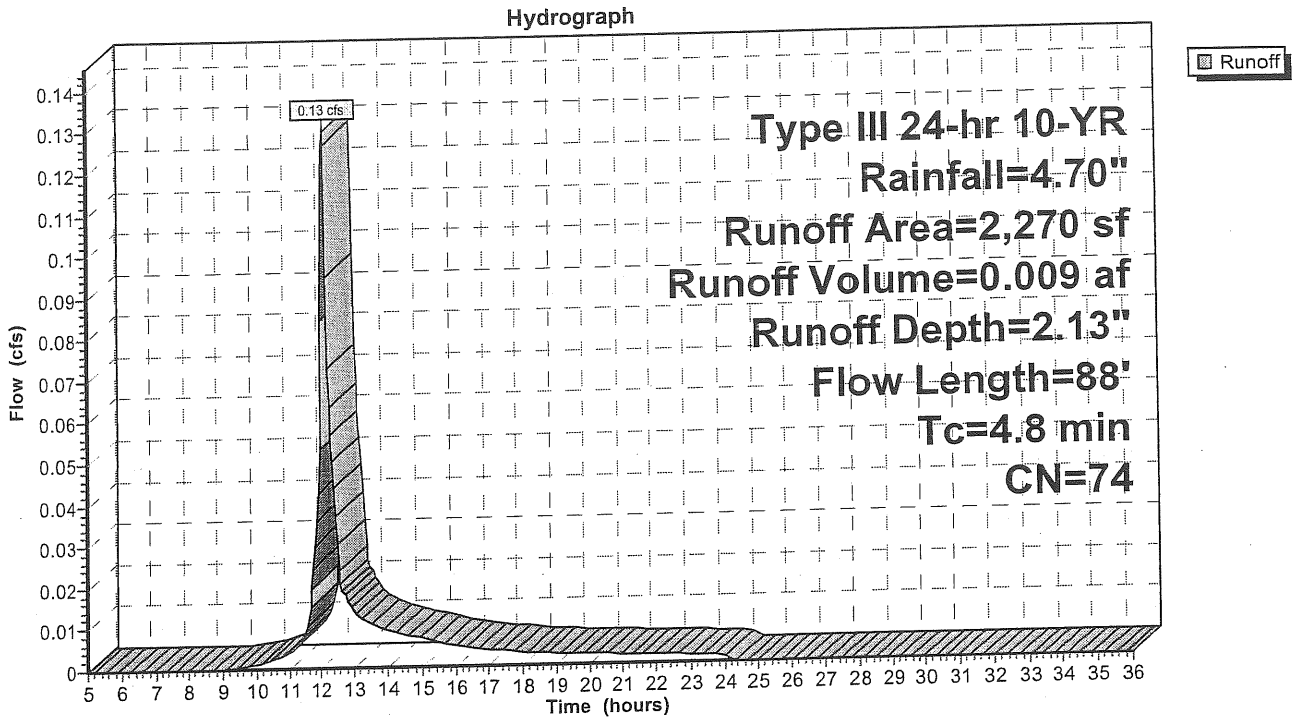
Runoff = 0.13 cfs @ 12.08 hrs, Volume= 0.009 af, Depth= 2.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
2,270	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



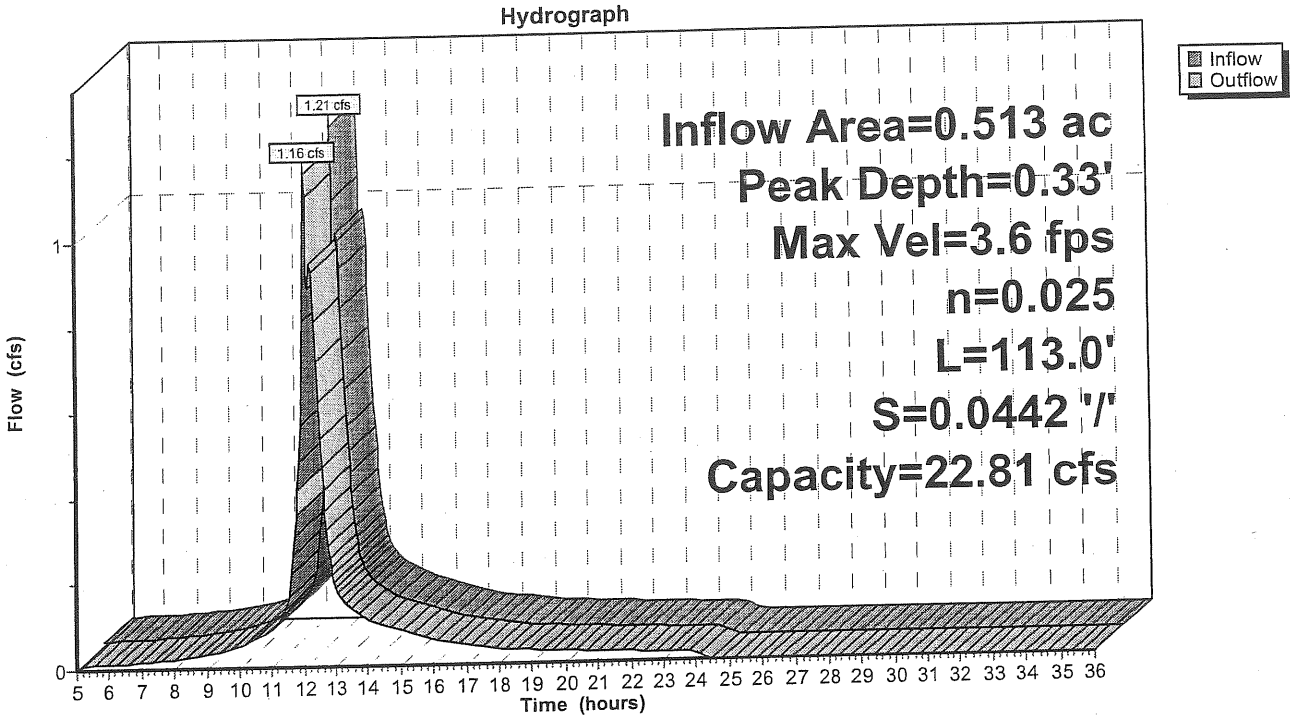
Reach 1R: Reach 1R

Inflow Area = 0.513 ac, Inflow Depth = 3.07" for 10-YR event
Inflow = 1.21 cfs @ 12.01 hrs, Volume= 0.131 af
Outflow = 1.16 cfs @ 12.02 hrs, Volume= 0.131 af, Atten= 4%, Lag= 0.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.6 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.6 fps, Avg. Travel Time= 1.2 min

Peak Depth= 0.33' @ 12.01 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



Pond 1P: Wet Pond 1P

Inflow Area = 0.645 ac, Inflow Depth = 3.89" for 10-YR event
Inflow = 3.03 cfs @ 12.04 hrs, Volume= 0.209 af
Outflow = 3.05 cfs @ 12.04 hrs, Volume= 0.209 af, Atten= 0%, Lag= 0.4 min
Primary = 3.03 cfs @ 12.04 hrs, Volume= 0.164 af
Secondary = 0.02 cfs @ 9.95 hrs, Volume= 0.045 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 197.36' @ 12.04 hrs Surf.Area= 421 sf Storage= 569 cf
Plug-Flow detention time= 51.7 min calculated for 0.209 af (100% of inflow)
Center-of-Mass det. time= 52.0 min (830.4 - 778.5)

#	Invert	Avail.Storage	Storage Description
1	196.00'	838 cf	**Custom Stage Data (Prismatic)** Listed below

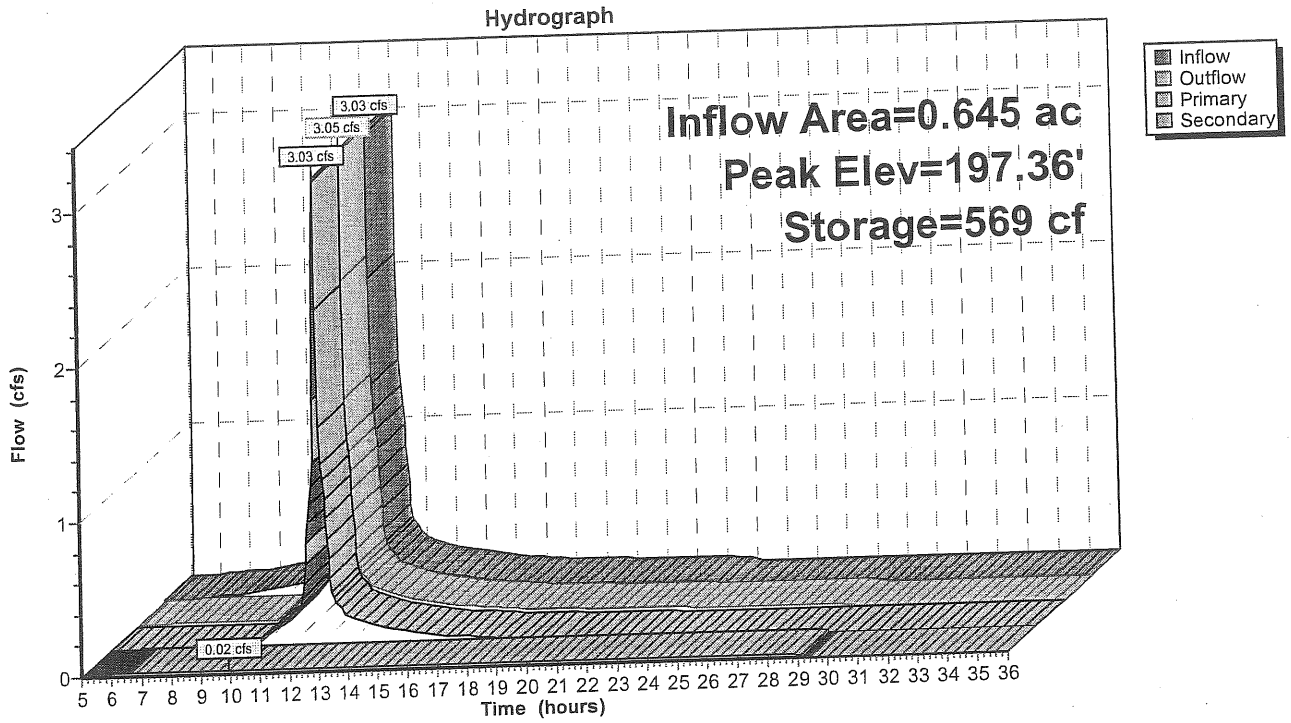
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	412	0	0
197.00	421	417	417
198.00	421	421	838

#	Routing	Invert	Outlet Devices
1	Primary	197.00'	**Special (user-defined)**
			Head (feet) 0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50
			Disch. (cfs) 0.00 0.02 0.07 0.15 0.49 1.02 1.76 2.74 3.97 5.49 7.31
2	Secondary	0.00'	**0.003340 fpm Exfiltration over entire Surface area**

Primary OutFlow Max=2.93 cfs @ 12.04 hrs HW=197.36' (Free Discharge)
↑—**1=Special (user-defined)** (Custom Controls 2.93 cfs)

Secondary OutFlow Max=0.02 cfs @ 9.95 hrs HW=197.01' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Pond 1P: Wet Pond 1P



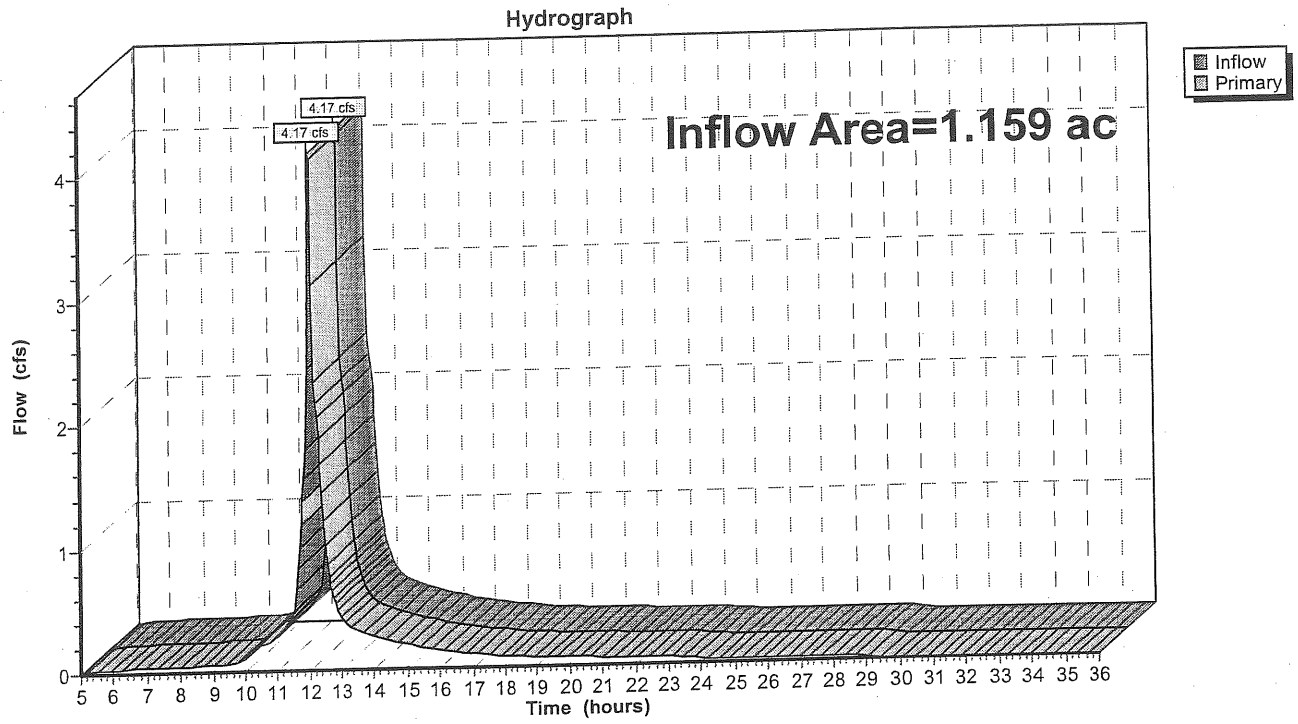
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area =	1.159 ac,	Inflow Depth =	3.53"	for 10-YR event
Inflow =	4.17 cfs @	12.04 hrs,	Volume=	0.341 af
Primary =	4.17 cfs @	12.04 hrs,	Volume=	0.341 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

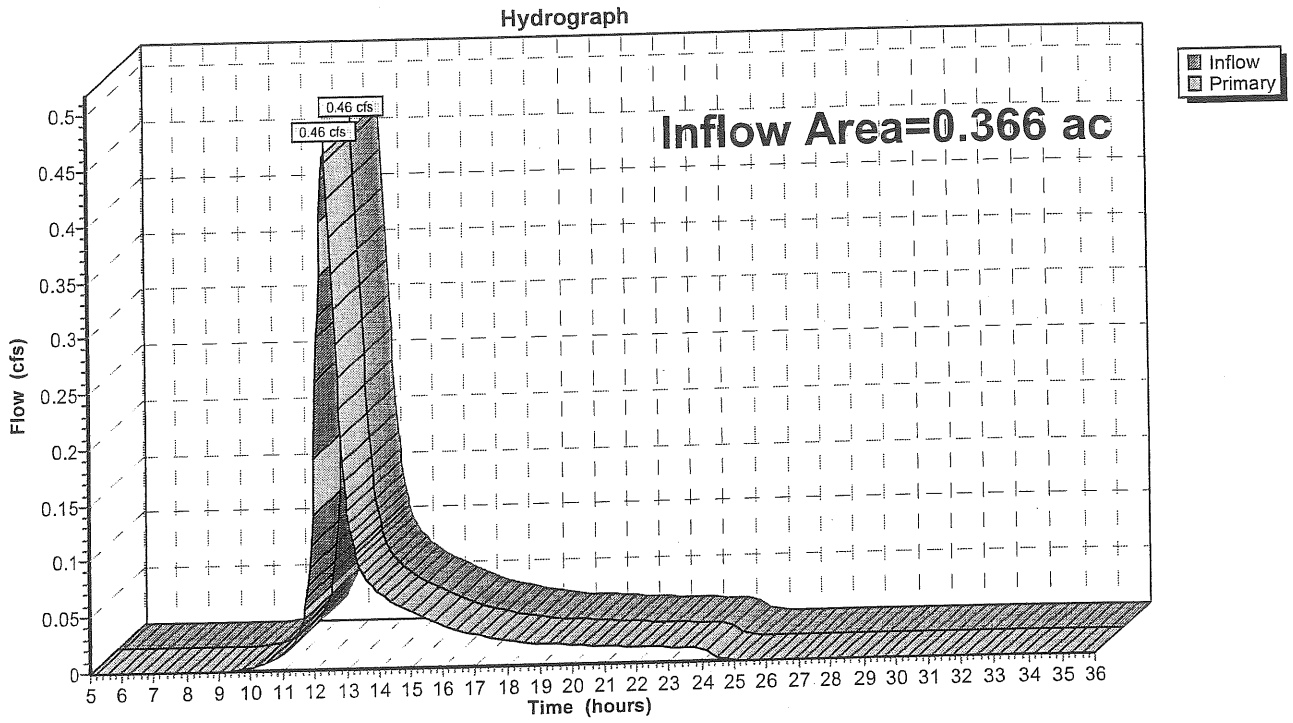


Link 2L: Point of Analysis 2

Inflow Area = 0.366 ac, Inflow Depth = 1.99" for 10-YR event
Inflow = 0.46 cfs @ 12.38 hrs, Volume= 0.061 af
Primary = 0.46 cfs @ 12.38 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=5.11"
Tc=0.0 min CN=98 Runoff=1.12 cfs 0.077 af

Subcatchment 2S: Watershed #2S Runoff Area=28,113 sf Runoff Depth=4.66"
Flow Length=295' Tc=2.1 min CN=93 Runoff=3.61 cfs 0.251 af

Subcatchment 3S: Watershed #3S Runoff Area=14,435 sf Runoff Depth=3.05"
Flow Length=263' Tc=17.5 min CN=77 Runoff=0.84 cfs 0.084 af

Subcatchment 4S: Watershed #4S Runoff Area=13,684 sf Runoff Depth=2.59"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.55 cfs 0.068 af

Subcatchment 5S: Watershed #5S Runoff Area=2,270 sf Runoff Depth=2.77"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.17 cfs 0.012 af

Reach 1R: Reach 1R Peak Depth=0.36' Max Vel=3.8 fps Inflow=1.46 cfs 0.162 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=1.40 cfs 0.162 af

Pond 1P: Wet Pond 1P Peak Elev=197.38' Storage=579 cf Inflow=3.61 cfs 0.251 af
Primary=3.60 cfs 0.205 af Secondary=0.02 cfs 0.046 af Outflow=3.62 cfs 0.251 af

Link 1L: Point of Analysis 1 Inflow=4.98 cfs 0.412 af
Primary=4.98 cfs 0.412 af

Link 2L: Point of Analysis 2 Inflow=0.61 cfs 0.080 af
Primary=0.61 cfs 0.080 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.492 af Average Runoff Depth = 3.87"

Subcatchment 1S: Watershed #1S

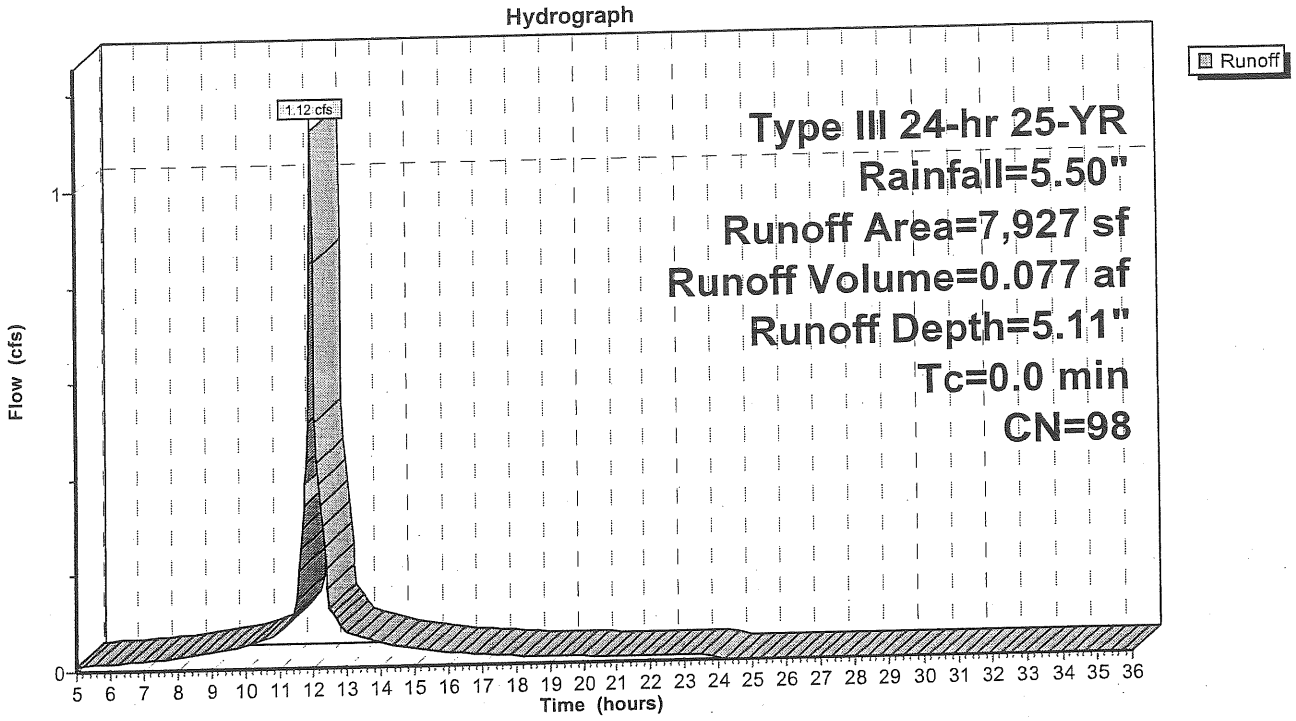
Runoff = 1.12 cfs @ 12.00 hrs, Volume= 0.077 af, Depth= 5.11"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
7,927	98	Existing Building

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

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

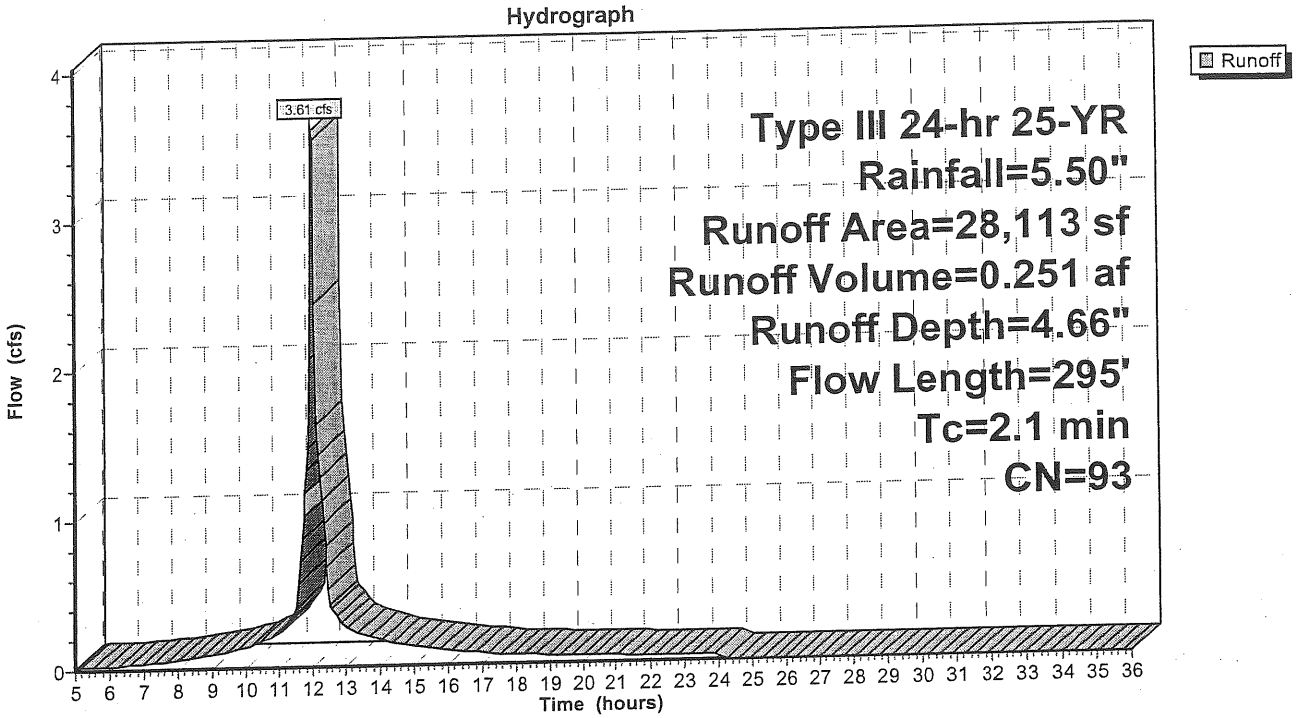
Runoff = 3.61 cfs @ 12.04 hrs, Volume= 0.251 af, Depth= 4.66"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
22,759	98	Impervious Coverage
5,354	74	Landscaped Areas
28,113	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	44	0.0210	1.2		**Sheet Flow, Sheet Flow A-B** Smooth surfaces n= 0.011 P2= 3.00"
0.8	150	0.0210	2.9		**Shallow Concentrated Flow, Shallow Concentrated A-B** Paved Kv= 20.3 fps
0.5	53	0.0750	1.9		**Shallow Concentrated Flow, Shallow Concentrated B-C** Short Grass Pasture Kv= 7.0 fps
0.2	48	0.0417	4.1		**Shallow Concentrated Flow, Shallow Concentrated C-D** Paved Kv= 20.3 fps
2.1	295	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

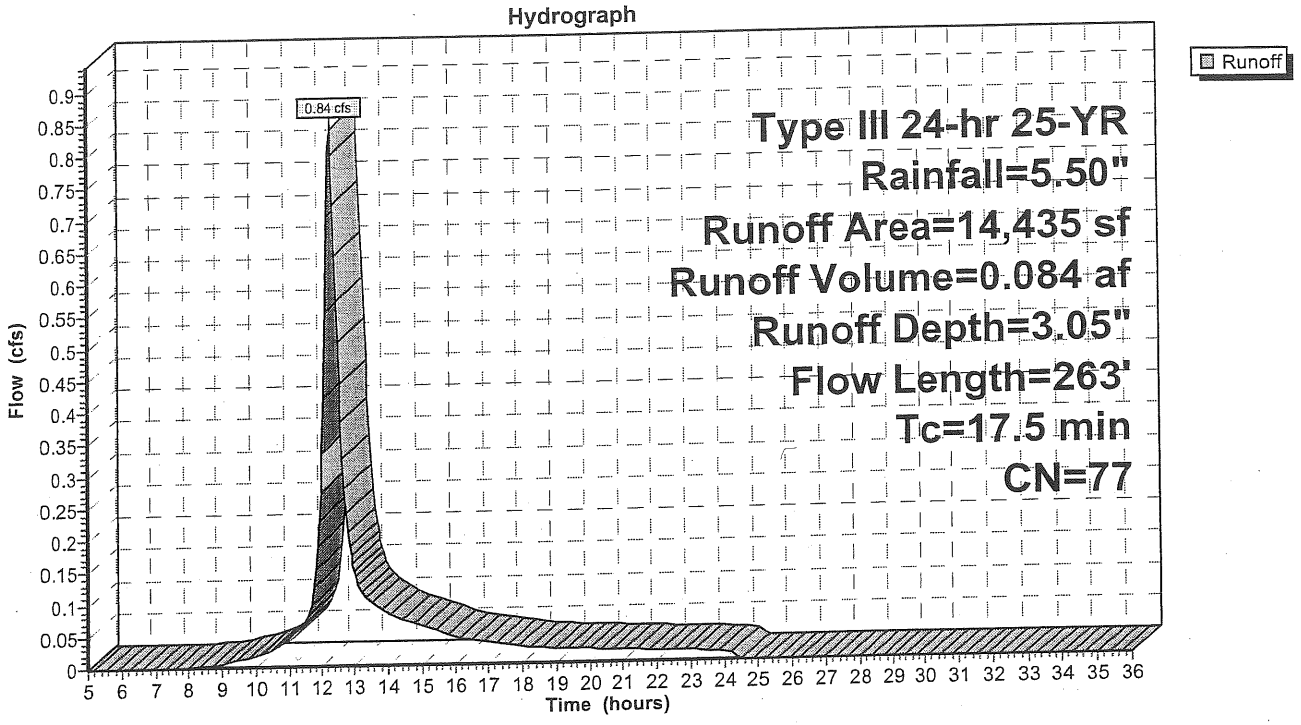
Runoff = 0.84 cfs @ 12.24 hrs, Volume= 0.084 af, Depth= 3.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
11,504	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
14,435	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.1	150	0.0867	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
17.5	263	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

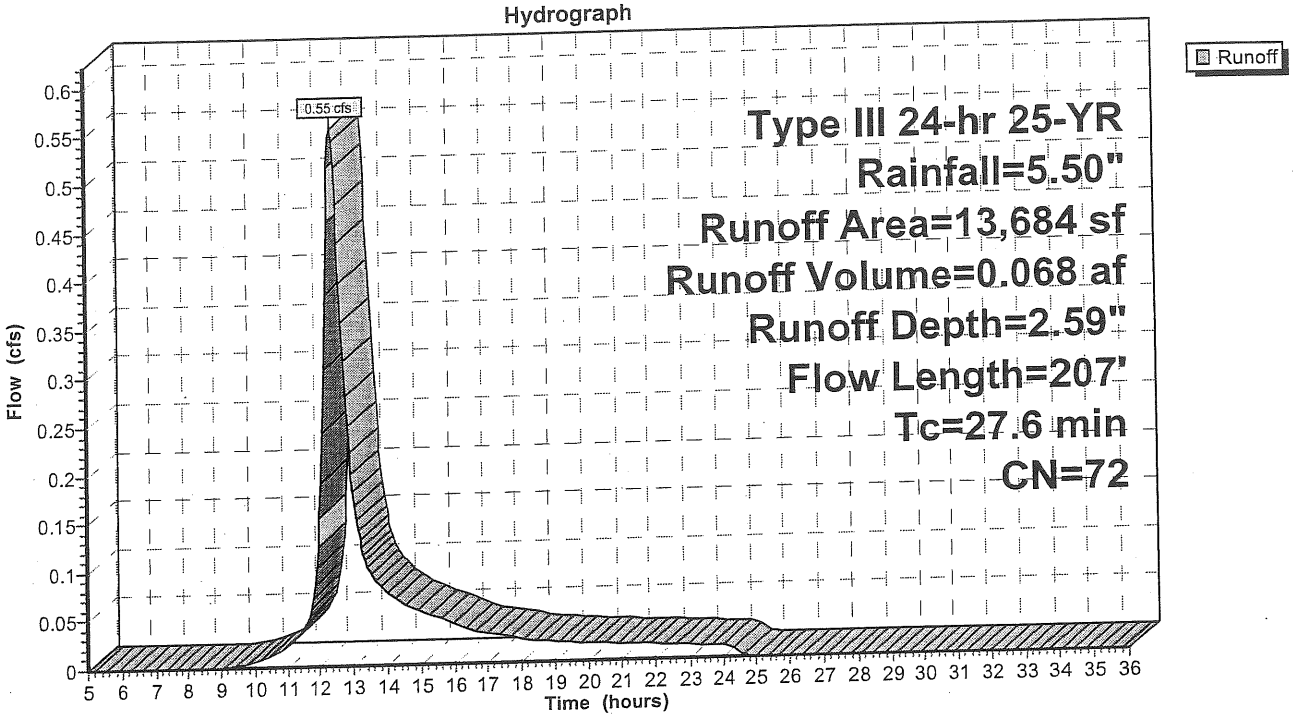
Runoff = 0.55 cfs @ 12.39 hrs, Volume= 0.068 af, Depth= 2.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
13,684	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

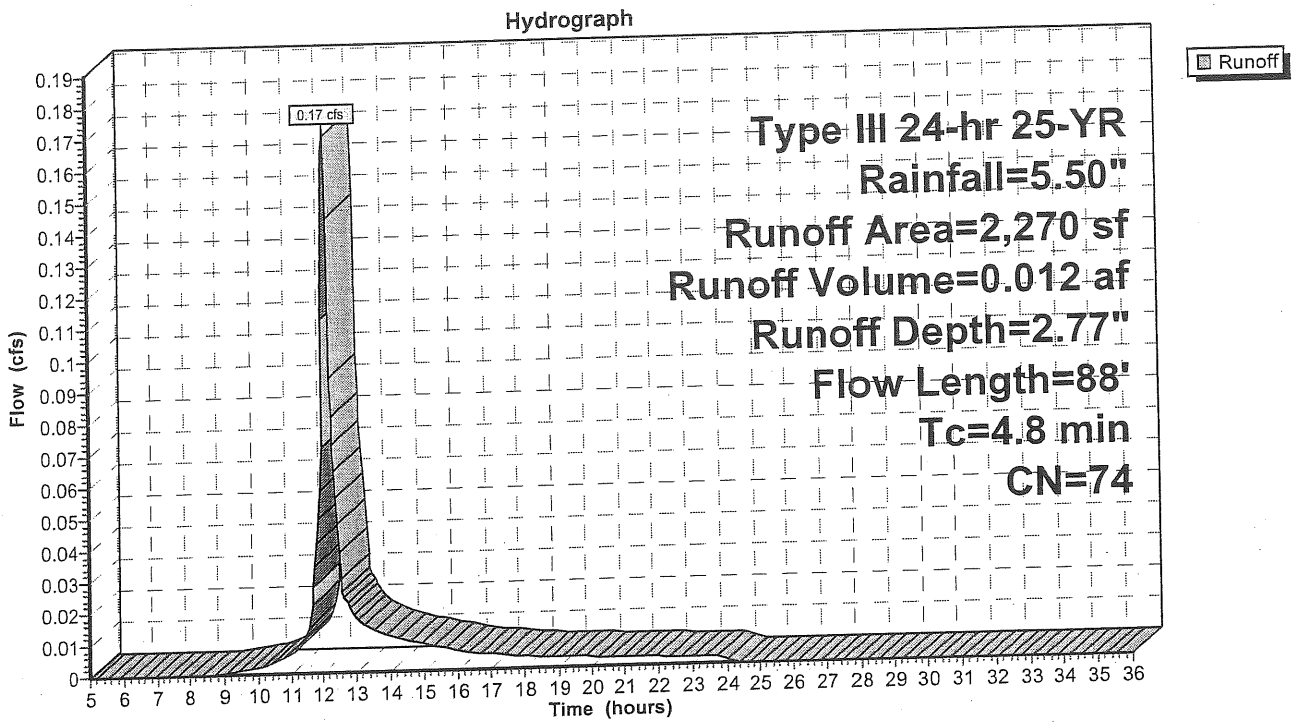
Runoff = 0.17 cfs @ 12.08 hrs, Volume= 0.012 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
2,270	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



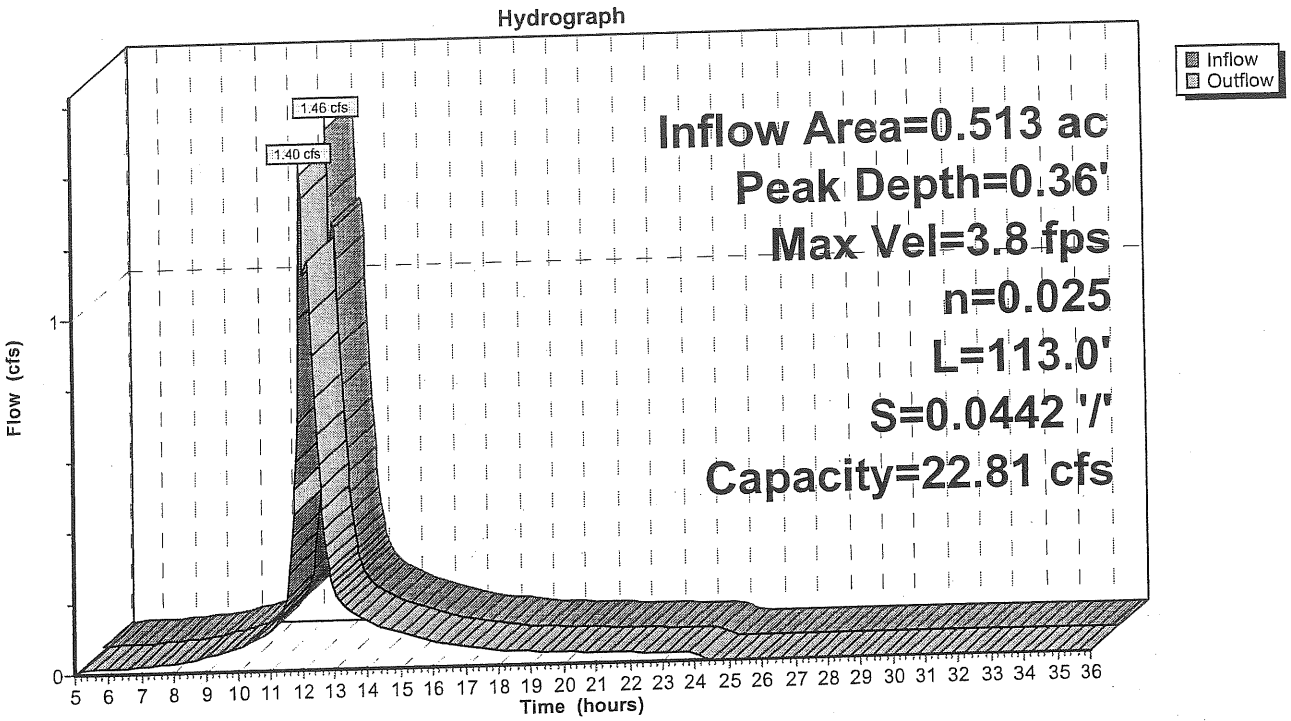
Reach 1R: Reach 1R

Inflow Area = 0.513 ac, Inflow Depth = 3.78" for 25-YR event
Inflow = 1.46 cfs @ 12.01 hrs, Volume= 0.162 af
Outflow = 1.40 cfs @ 12.02 hrs, Volume= 0.162 af, Atten= 4%, Lag= 0.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.8 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.7 fps, Avg. Travel Time= 1.1 min

Peak Depth= 0.36' @ 12.01 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



Pond 1P: Wet Pond 1P

Inflow Area =	0.645 ac,	Inflow Depth =	4.66"	for 25-YR event
Inflow =	3.61 cfs @	12.04 hrs, Volume=	0.251 af	
Outflow =	3.62 cfs @	12.04 hrs, Volume=	0.251 af,	Atten= 0%, Lag= 0.4 min
Primary =	3.60 cfs @	12.04 hrs, Volume=	0.205 af	
Secondary =	0.02 cfs @	9.40 hrs, Volume=	0.046 af	

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 197.38' @ 12.04 hrs Surf.Area= 421 sf Storage= 579 cf
Plug-Flow detention time= 45.6 min calculated for 0.251 af (100% of inflow)
Center-of-Mass det. time= 45.4 min (820.2 - 774.9)

#	Invert	Avail.Storage	Storage Description
1	196.00'	838 cf	**Custom Stage Data (Prismatic)** Listed below

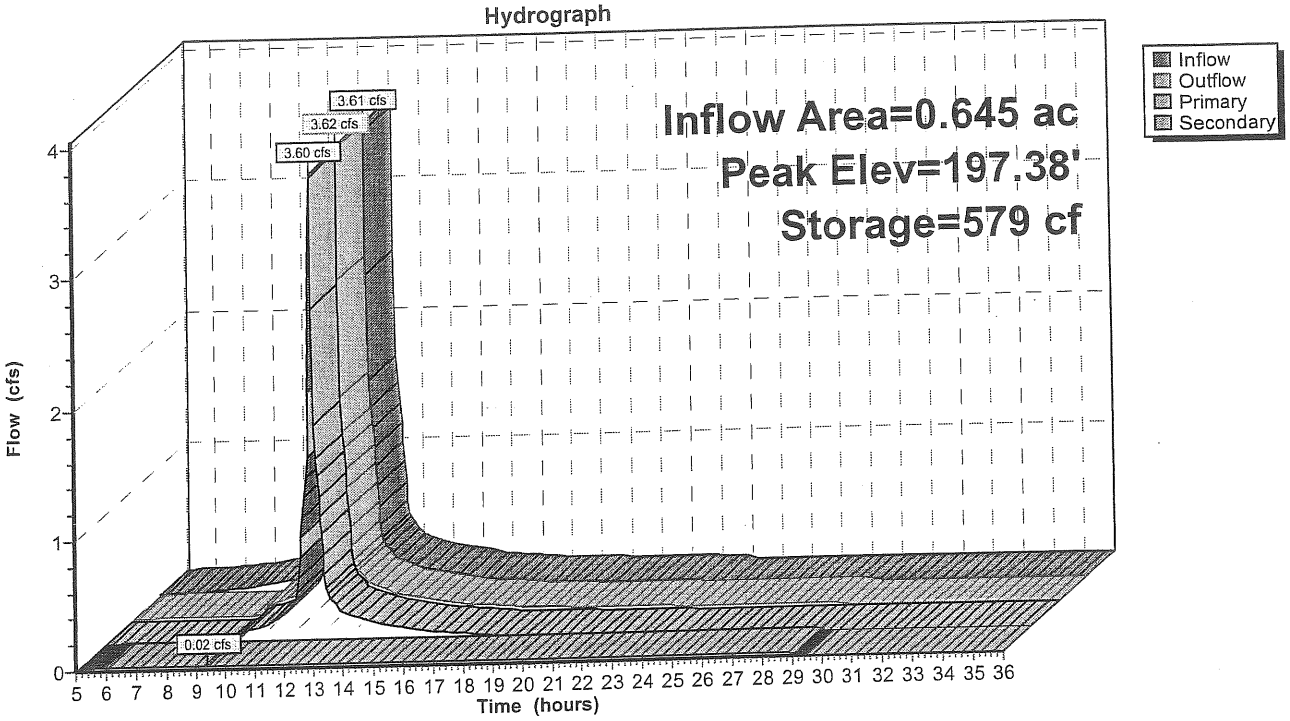
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	412	0	0
197.00	421	417	417
198.00	421	421	838

#	Routing	Invert	Outlet Devices
1	Primary	197.00'	**Special (user-defined)**
			Head (feet) 0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50
			Disch. (cfs) 0.00 0.02 0.07 0.15 0.49 1.02 1.76 2.74 3.97 5.49 7.31
2	Secondary	0.00'	**0.003340 fpm Exfiltration over entire Surface area**

Primary OutFlow Max=3.49 cfs @ 12.04 hrs HW=197.38' (Free Discharge)
↑—**1=Special (user-defined)** (Custom Controls 3.49 cfs)

Secondary OutFlow Max=0.02 cfs @ 9.40 hrs HW=197.03' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Pond 1P: Wet Pond 1P



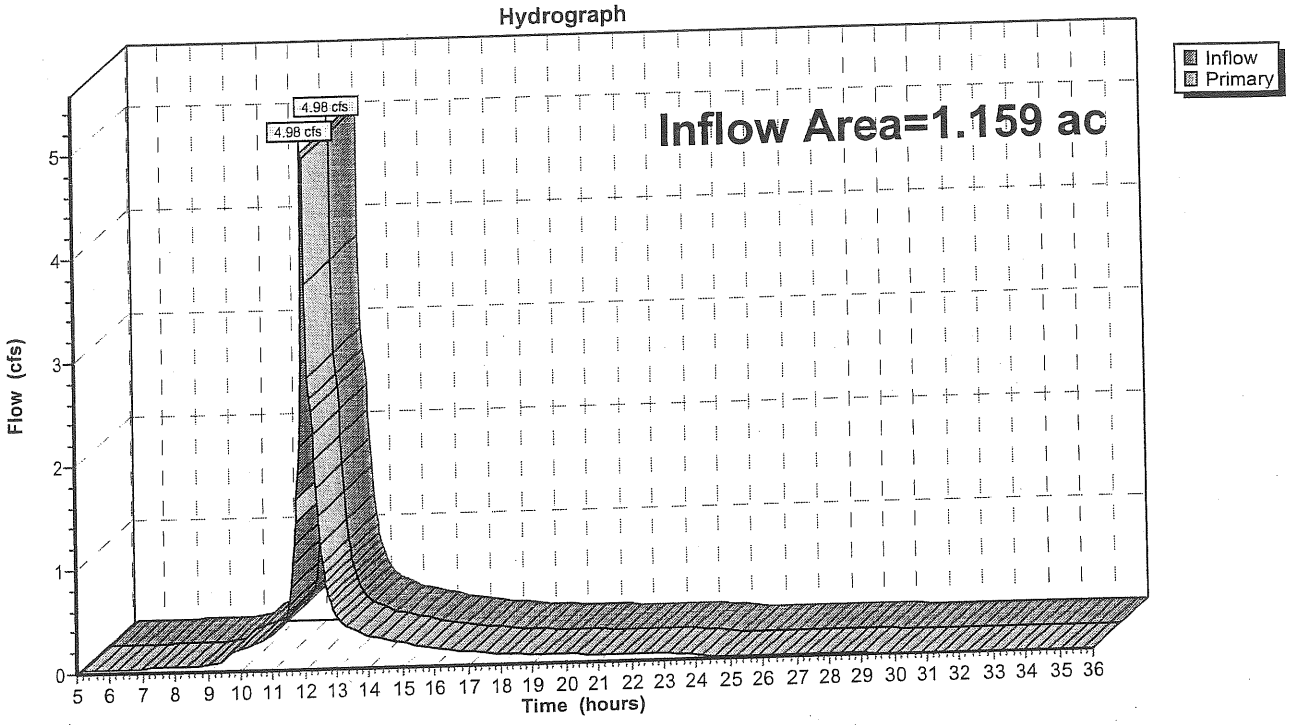
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.159 ac, Inflow Depth = 4.27" for 25-YR event
Inflow = 4.98 cfs @ 12.04 hrs, Volume= 0.412 af
Primary = 4.98 cfs @ 12.04 hrs, Volume= 0.412 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

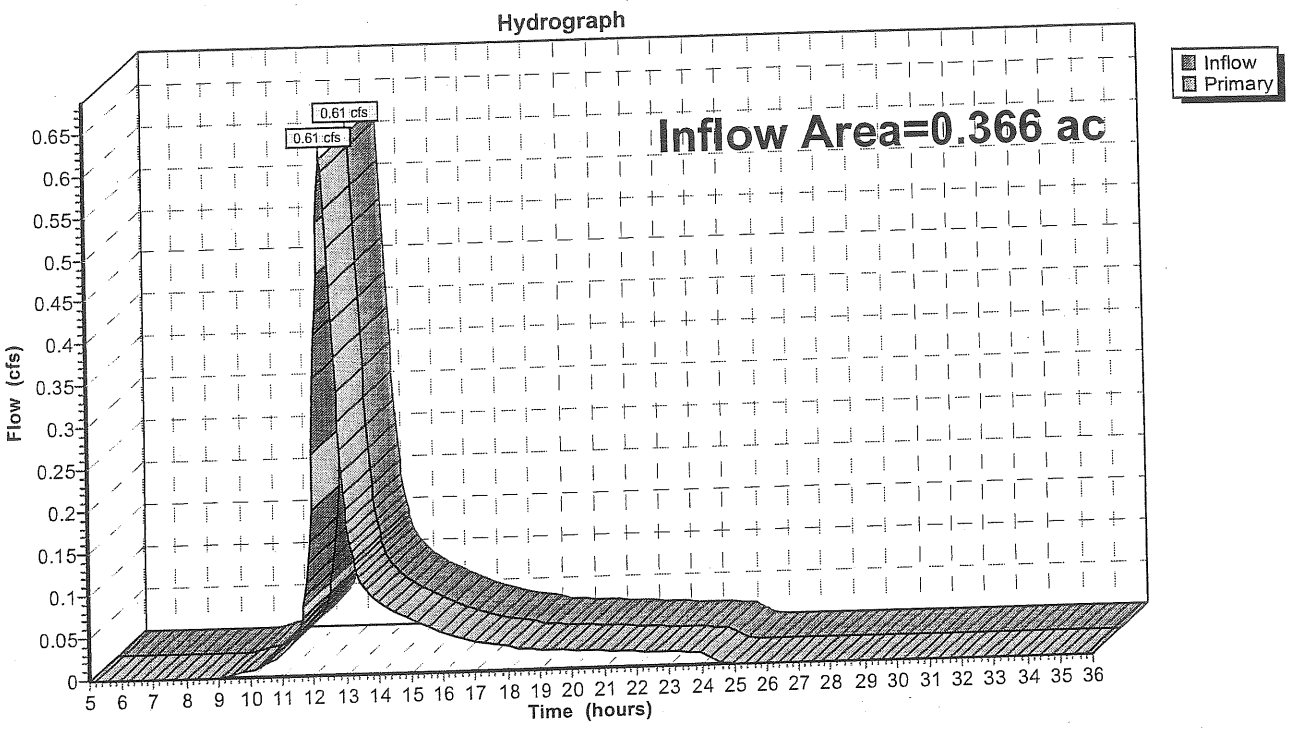


Link 2L: Point of Analysis 2

Inflow Area = 0.366 ac, Inflow Depth = 2.62" for 25-YR event
Inflow = 0.61 cfs @ 12.37 hrs, Volume= 0.080 af
Primary = 0.61 cfs @ 12.37 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



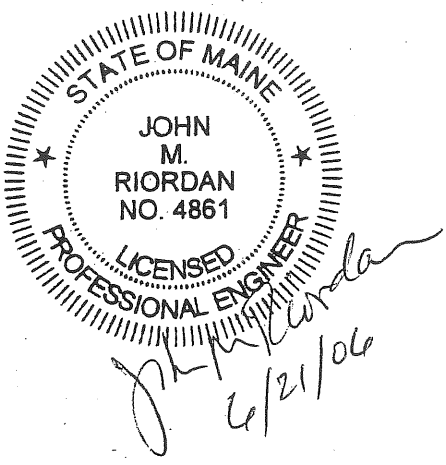
STORMWATER MANAGEMENT REPORT

2320 CONGRESS STREET

PORTLAND, MAINE

JUNE 2006

Prepared for:
2320 CONGRESS STREET LLC
PO BOX 1052
PORTLAND, MAINE



Prepared By: SGC Engineering, LLC

Project No. 517001

SGC ENGINEERING, LLC
- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

Memo

Date:	June 20, 2006	Project No.:	517001
To:	File		
From:	Michael Roy		
Project Name:	2320 Congress Street		
Subject:	Summary of Stormwater Management Design		

2320 Congress Street
Summary of Stormwater Management Design

Outline

Project summary

Existing conditions

- Existing 7,927 sf single-story commercial building that was constructed in 1975
- 1.149 acre site
- Single paved access from Congress Street
- Site is largely paved providing approximately 23 parking stalls

Proposed development objectives

- Refurbishment of existing commercial building for a single business entity, a financial investment company
- Architectural improvements needed to provide handicap accessibility
- Continued use of access from Congress Street
- Improved parking by conversion of loading dock area into parking area, expanding paved parking out front, expanding paved parking along
- Improved landscaping

Stormwater Management Objectives

- Site is largely paved
- With building footprint the % imperviousness is equal to 56.7%

501 County Road, Westbrook, Maine 04092 - Office: 207-347-8100 • Fax: 207-347-8101
Target Technology Center, 20 Godfrey Drive, Suite 200, Orono, Maine 04473 - Office: 207-866-6571 • Fax: 207-866-6501
www.sgceng.com • E-mail: sgc@sgceng.com

- Site drains to Congress Street
  - 87% drains to curb line above an existing catch basin within the site's frontage; runoff enters this catch basin which discharges through a 15-inch diameter storm drain that pipes the storm flow across Congress Street to a series of swales and culverts that ultimately discharge into a very well defined drainage swale that conveys the storm flows from the properties on both sides of Congress to Stroudwater river.
  - 13% drains to the curb line of Congress Street downgradient from the existing catch basin; this portion of the flow follows the curb line down to the next catch basin which also is connected to the major drainage swale conveying stormwater runoff to the Presumpscot River.
- The existing runoff from this site is not creating any known capacity or erosion or quality problems in the down stream conveyance systems (catch basins, culverts, drainage swales.
- The proposed site improvements will increase the amount of imperviousness by 5,633 sf, or 11.2 %
- The design objective emphasizes treatment of runoff, rather than rate control, which is consistent with the recent shift in emphasize reflected in the DEP's Chapter 500 rules.
- Only the runoff from the paved area will be treated.
- The runoff from as much of the paved area as practicable will be directed to the treatment device.
- The runoff from the roof is considered uncontaminated and will be excluded from the treatment device; it will be discharged to the grassed drainage swale on the ease side of the building
- The treatment device will be a soil filter within a landscaped bed.
- The treatment device will be sized to capture at least the runoff volume from the "first flush" from all storm events.
- The treatment device will control overflows to allow the collected runoff to flow directly to the existing catch basin when the capacity of the soil filter is exceeded.

Design Criteria

- Treatment Device
  - Soil filter:
    - 4 feet x 90 feet (maximize available frontage of site)
    - Filter media: sand 18 inches deep
    - Design percolation rate: 2.5 inches/hour
    - Catchment volume over filter media created with landscape timber cribbing lined with impermeable liner; impoundment depth equal to 12 inches
    - Filter media underdrained by perforated pipe with crushed stone bed
    - Perforated pipe conveys filtered flow to existing catchbasin
    - Soil filter overflow allows flows exceeding filter capacity to overflow directly to catch basin
- Treatment volumes

	Total Runoff	Total Treated (Filtered)	% Treated
2 year event	0.121 af	0.041 af	33.9 %
10 year event	0.209 af	0.045 af	21.5 %
25 year event	0.251 af	0.046 af	18.3 %

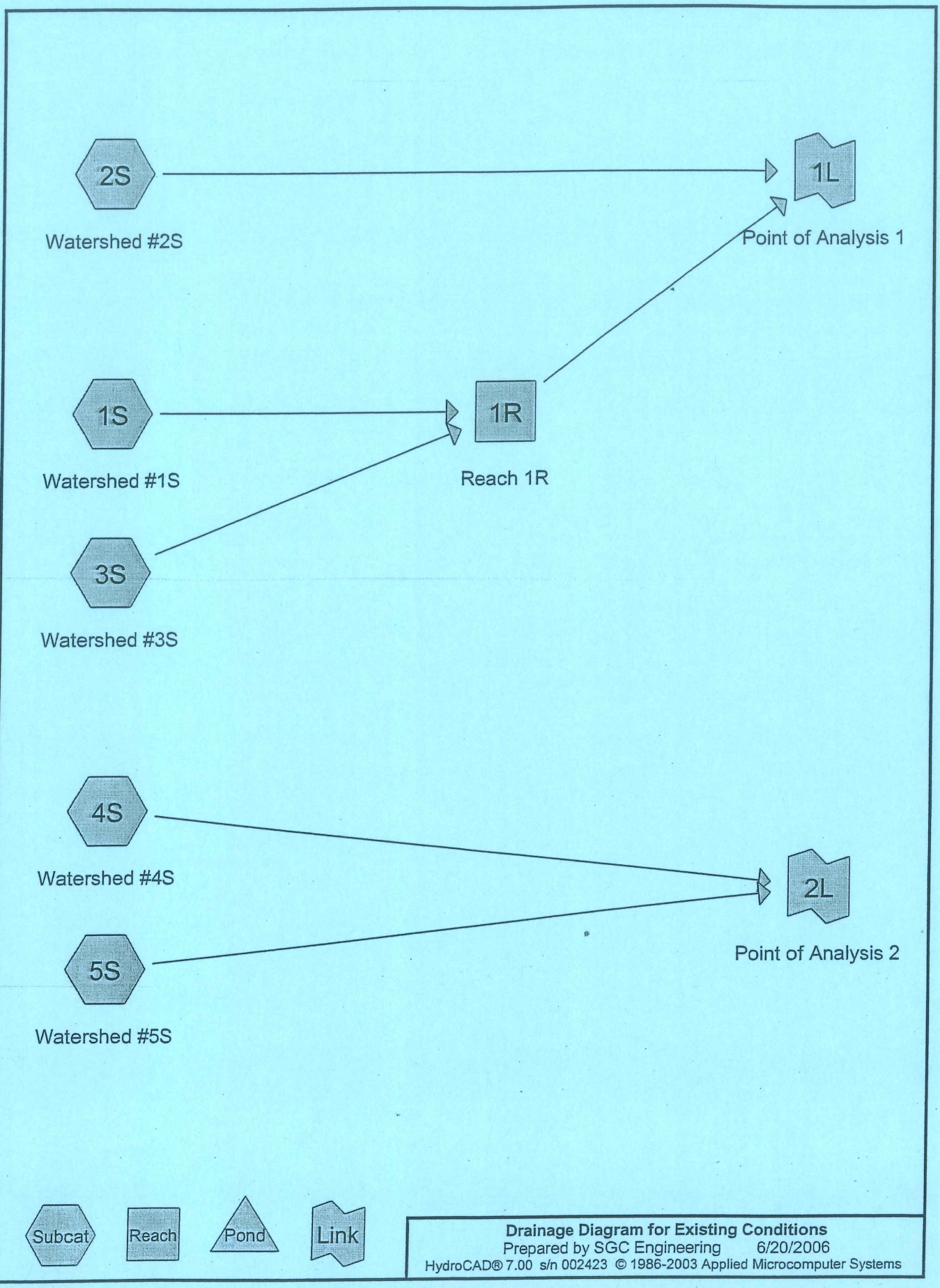
SGC

Substantial portion of all rain events is treated.

- Runoff flows at existing catch basin
  - Existing 15" culvert capacity = 12.7 cfs
  - Pre-development peak flow from site during 25 year event = 3.19 cfs
  - Post-development peak flow form site during 25 year event = 4.98 cfs
  - Flows to catch basin are buffered by delay imposed by soil filter on the 18-33% amount of the total runoff treated.

- Existing and Proposed development stormwater modeling and watershed plans are attached.

SGC


2S
Watershed #2S
1L
Point of Analysis 1
1S
Watershed #1S
1R
Reach 1R
3S
Watershed #3S
4S
Watershed #4S
2L
Point of Analysis 2
5S
Watershed #5S
Subcat
Reach
Pond
Link
Drainage Diagram for Existing Conditions
Prepared by SGC Engineering 6/20/2006
HydroCAD® 7.00 s/n 002423 © 1986-2003 Applied Microcomputer Systems

Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=2.72"
Tc=0.0 min CN=98 Runoff=0.61 cfs 0.041 af

Subcatchment 2S: Watershed #2S Runoff Area=27,598 sf Runoff Depth=1.98"
Flow Length=458' Tc=17.6 min CN=90 Runoff=1.04 cfs 0.105 af

Subcatchment 3S: Watershed #3S Runoff Area=11,096 sf Runoff Depth=1.19"
Flow Length=157' Tc=5.7 min CN=79 Runoff=0.34 cfs 0.025 af

Subcatchment 4S: Watershed #4S Runoff Area=13,503 sf Runoff Depth=0.81"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.16 cfs 0.021 af

Subcatchment 5S: Watershed #5S Runoff Area=6,305 sf Runoff Depth=0.91"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.15 cfs 0.011 af

Reach 1R: Reach 1R Peak Depth=0.28' Max Vel=3.3 fps Inflow=0.82 cfs 0.066 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=0.79 cfs 0.066 af

Link 1L: Point of Analysis 1 Inflow=1.46 cfs 0.171 af
Primary=1.46 cfs 0.171 af

Link 2L: Point of Analysis 2 Inflow=0.21 cfs 0.032 af
Primary=0.21 cfs 0.032 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.203 af Average Runoff Depth = 1.60"

Subcatchment 1S: Watershed #1S

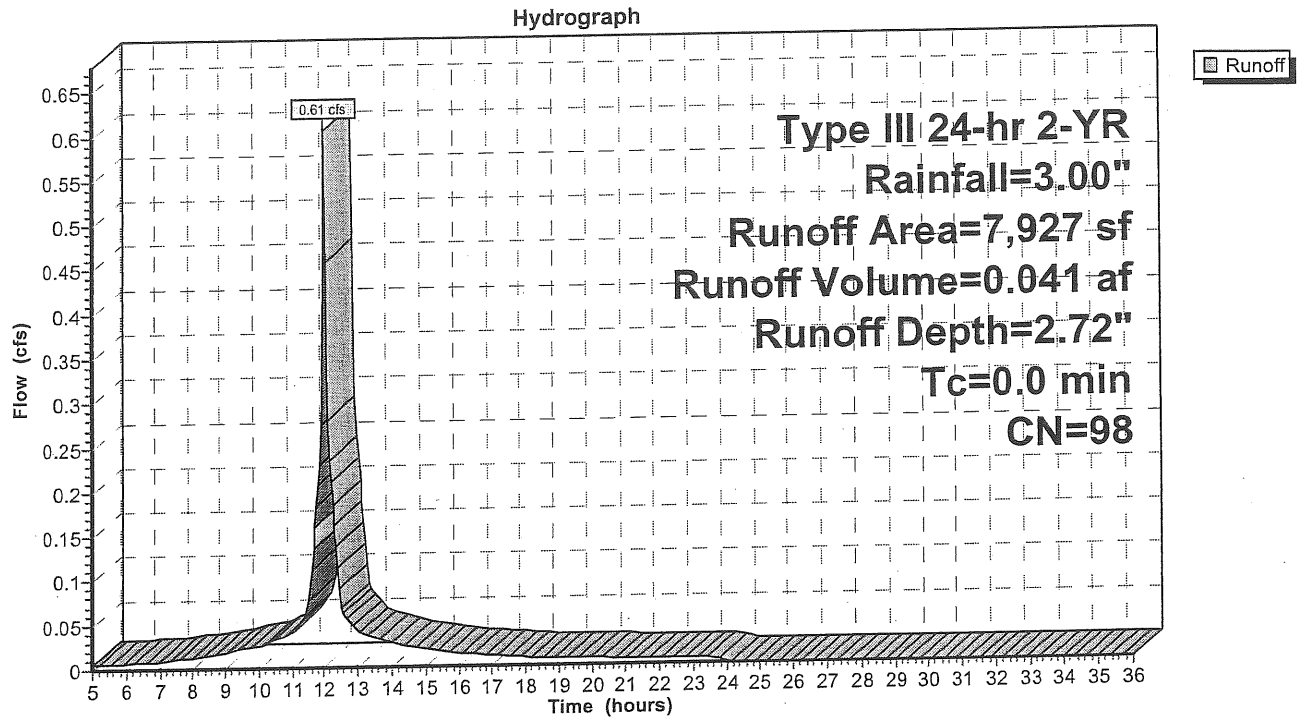
Runoff = 0.61 cfs @ 12.00 hrs, Volume= 0.041 af, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
7,927	98	Existing Building

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.0					**Direct Entry, Direct Entry into Swale**

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

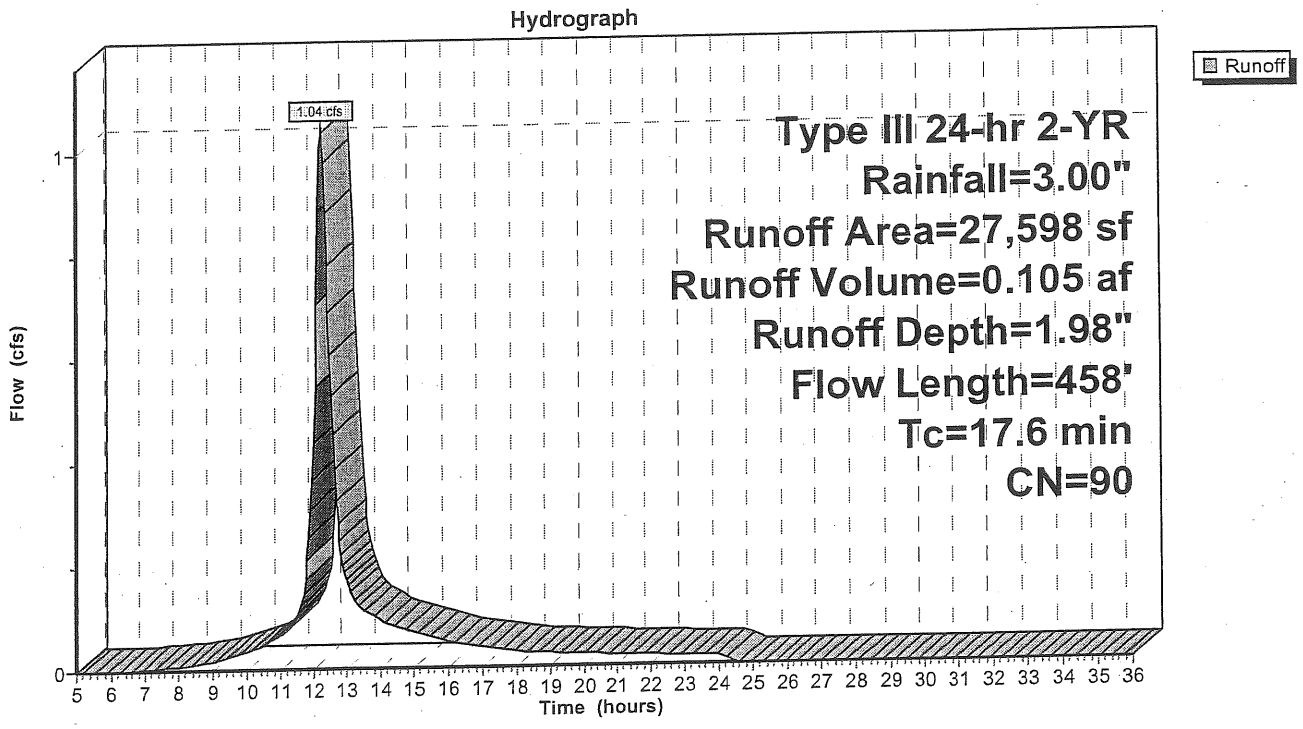
Runoff = 1.04 cfs @ 12.24 hrs, Volume= 0.105 af, Depth= 1.98"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
16,127	98	Existing Pavement
5,635	74	Pasture/grassland/range, Good, HSG C
3,584	72	Woods/grass comb., Good, HSG C
2,252	98	Ledge Outcroppings
27,598	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	114	0.0614	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.6	146	0.0410	4.1		**Shallow Concentrated Flow, Shallow Concentrated B-C** Paved Kv= 20.3 fps
0.7	51	0.0290	1.2		**Shallow Concentrated Flow, Shallow Concentrated C-D** Short Grass Pasture Kv= 7.0 fps
0.6	147	0.0370	3.9		**Shallow Concentrated Flow, Shallow Concentrated D-E** Paved Kv= 20.3 fps
17.6	458	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

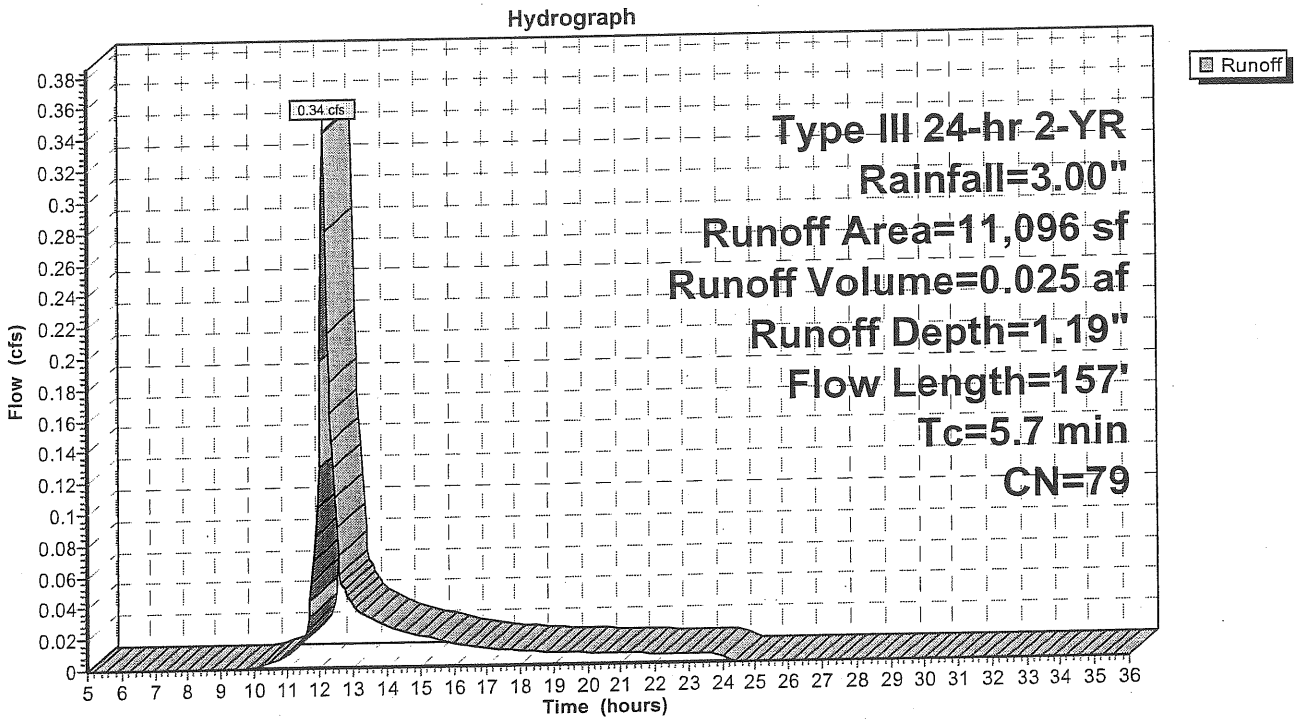
Runoff = 0.34 cfs @ 12.09 hrs, Volume= 0.025 af, Depth= 1.19"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
8,165	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
11,096	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	44	0.1360	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
5.7	157	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

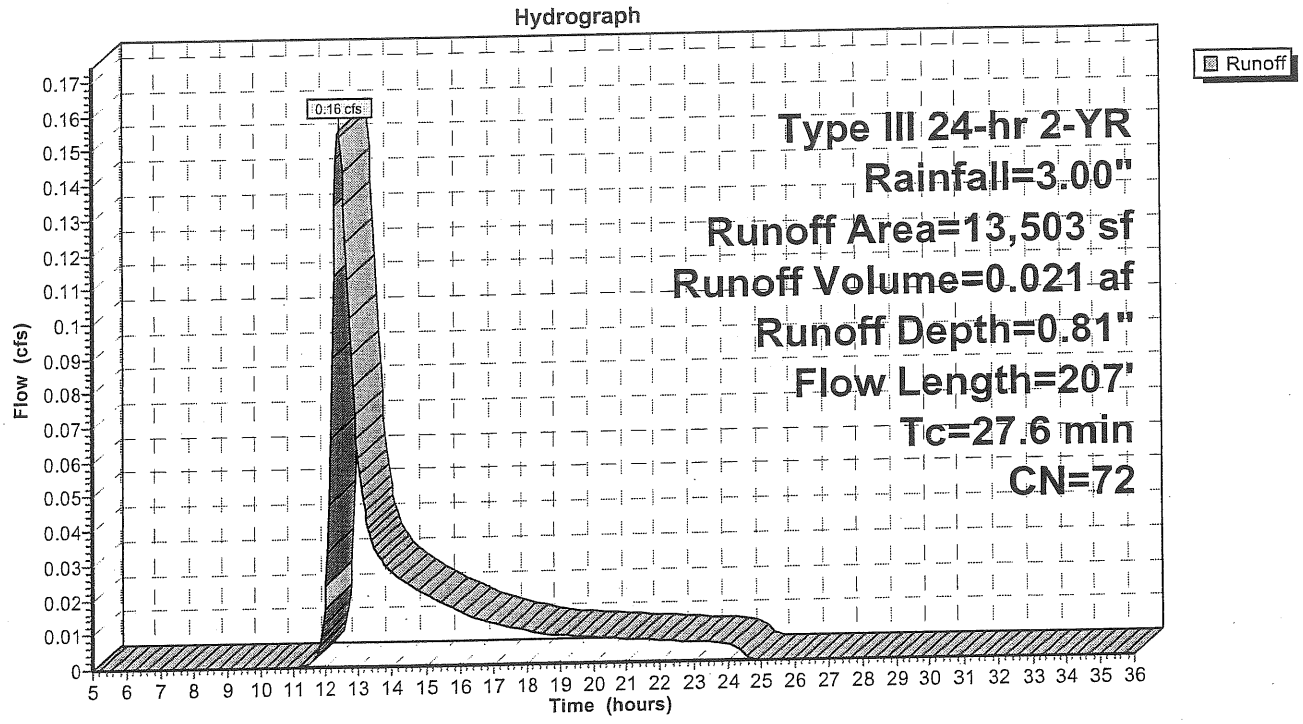
Runoff = 0.16 cfs @ 12.43 hrs, Volume= 0.021 af, Depth= 0.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
13,503	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

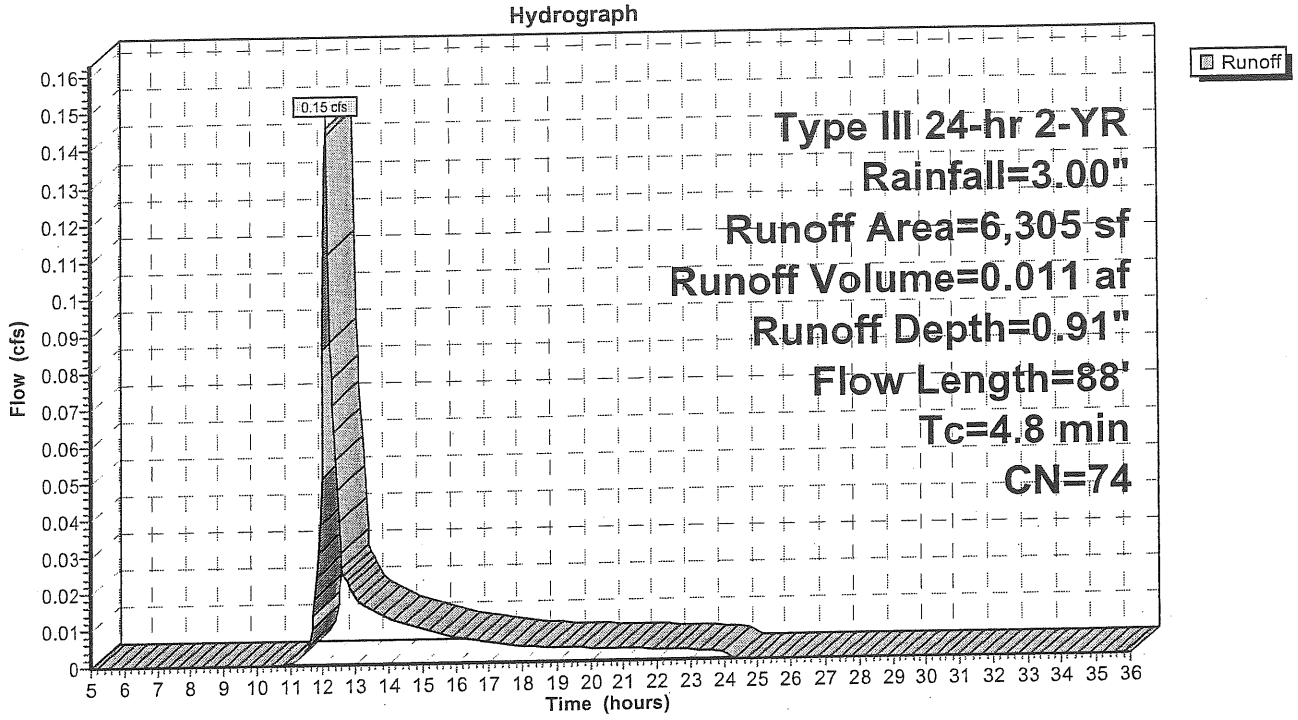
Runoff = 0.15 cfs @ 12.09 hrs, Volume= 0.011 af, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
6,305	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



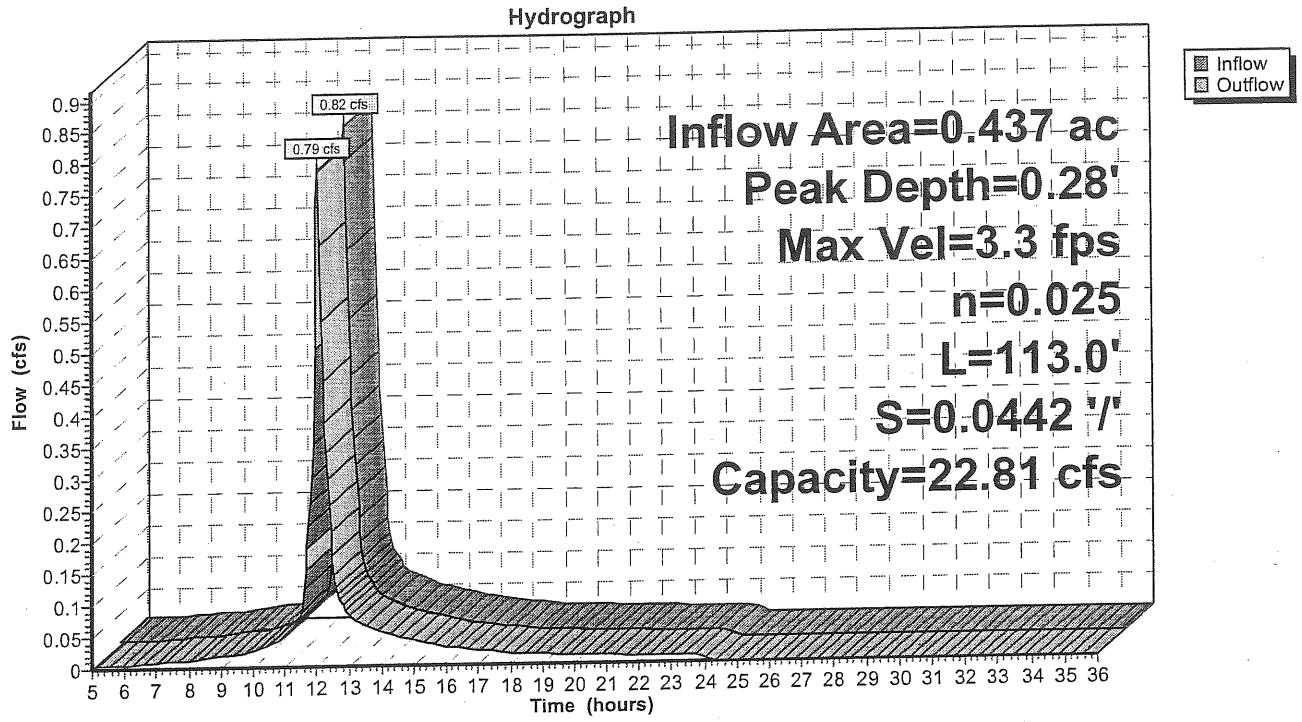
Reach 1R: Reach 1R

Inflow Area = 0.437 ac, Inflow Depth = 1.83" for 2-YR event
Inflow = 0.82 cfs @ 12.02 hrs, Volume= 0.066 af
Outflow = 0.79 cfs @ 12.04 hrs, Volume= 0.066 af, Atten= 4%, Lag= 1.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.3 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.4 fps, Avg. Travel Time= 1.4 min

Peak Depth= 0.28' @ 12.03 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



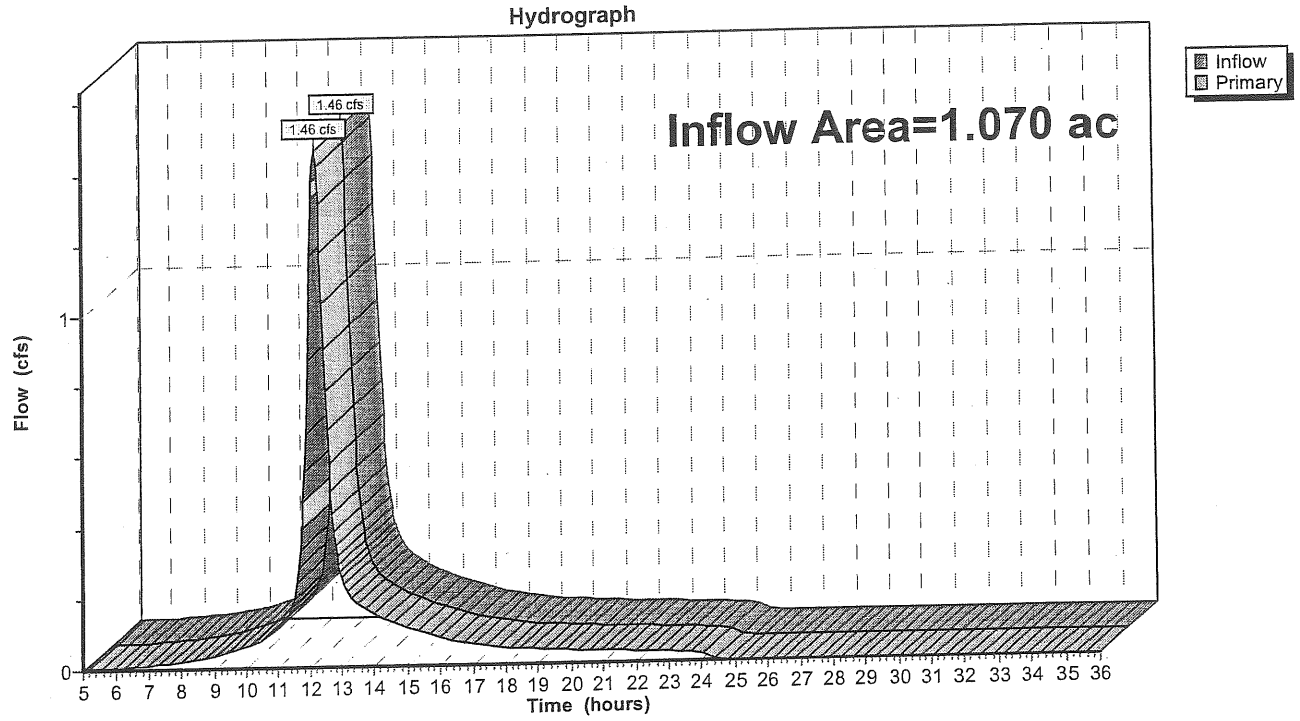
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.070 ac, Inflow Depth = 1.92" for 2-YR event
Inflow = 1.46 cfs @ 12.20 hrs, Volume= 0.171 af
Primary = 1.46 cfs @ 12.20 hrs, Volume= 0.171 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

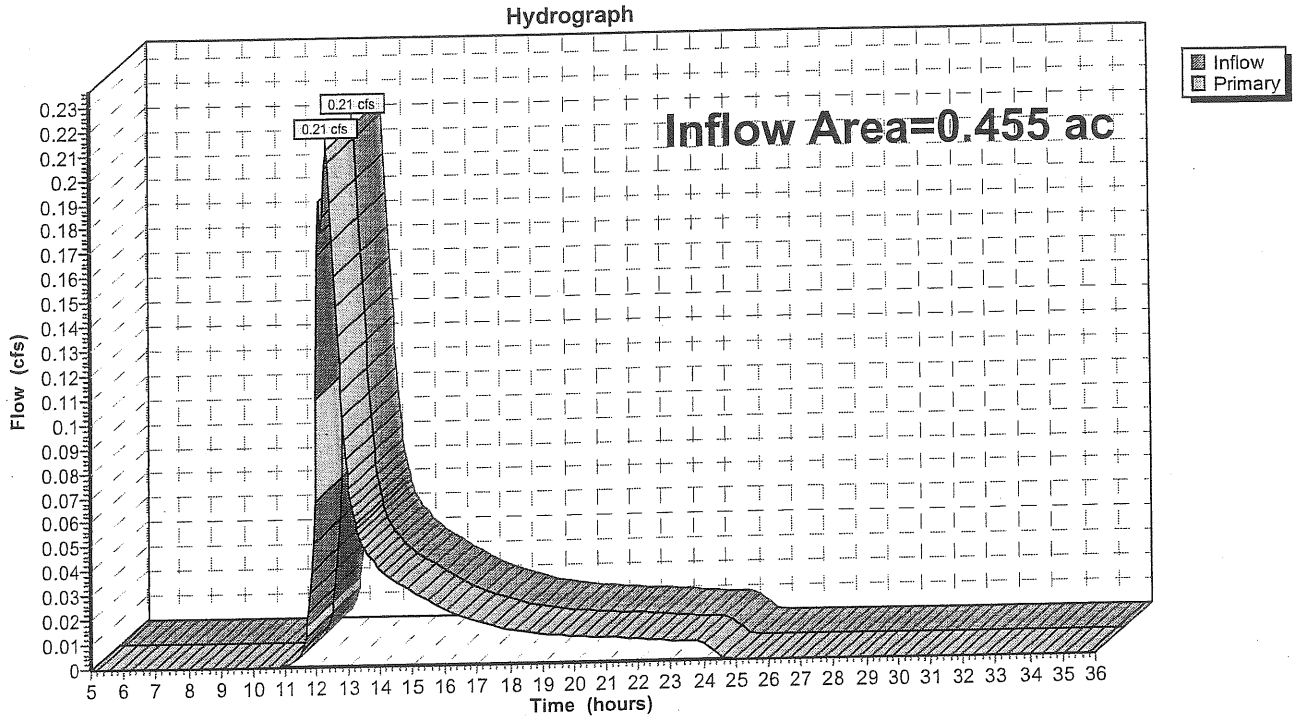


Link 2L: Point of Analysis 2

Inflow Area = 0.455 ac, Inflow Depth = 0.84" for 2-YR event
Inflow = 0.21 cfs @ 12.37 hrs, Volume= 0.032 af
Primary = 0.21 cfs @ 12.37 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=4.35"
Tc=0.0 min CN=98 Runoff=0.96 cfs 0.066 af

Subcatchment 2S: Watershed #2S Runoff Area=27,598 sf Runoff Depth=3.59"
Flow Length=458' Tc=17.6 min CN=90 Runoff=1.84 cfs 0.189 af

Subcatchment 3S: Watershed #3S Runoff Area=11,096 sf Runoff Depth=2.55"
Flow Length=157' Tc=5.7 min CN=79 Runoff=0.75 cfs 0.054 af

Subcatchment 4S: Watershed #4S Runoff Area=13,503 sf Runoff Depth=1.97"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.41 cfs 0.051 af

Subcatchment 5S: Watershed #5S Runoff Area=6,305 sf Runoff Depth=2.13"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.36 cfs 0.026 af

Reach 1R: Reach 1R Peak Depth=0.36' Max Vel=3.8 fps Inflow=1.46 cfs 0.120 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=1.42 cfs 0.120 af

Link 1L: Point of Analysis 1 Inflow=2.64 cfs 0.309 af
Primary=2.64 cfs 0.309 af

Link 2L: Point of Analysis 2 Inflow=0.54 cfs 0.077 af
Primary=0.54 cfs 0.077 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.386 af Average Runoff Depth = 3.04"

Subcatchment 1S: Watershed #1S

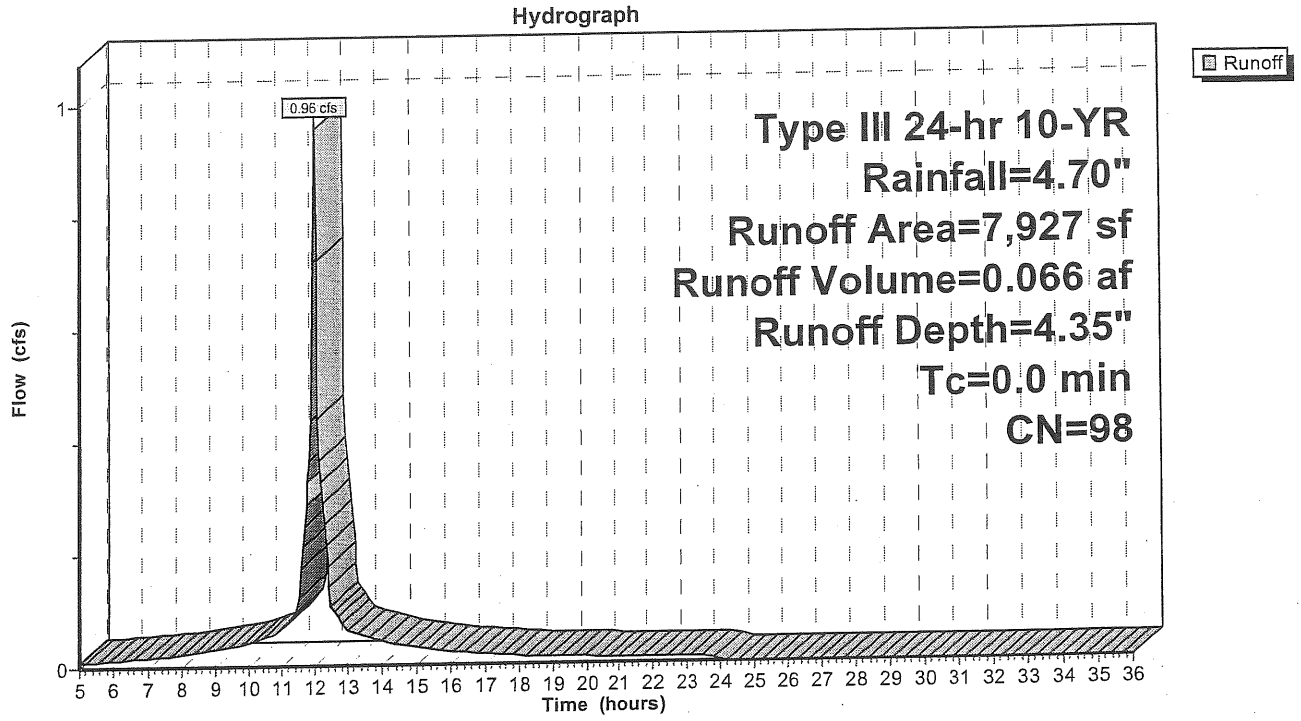
Runoff = 0.96 cfs @ 12.00 hrs, Volume= 0.066 af, Depth= 4.35"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
7,927	98	Existing Building

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.0					**Direct Entry, Direct Entry into Swale**

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

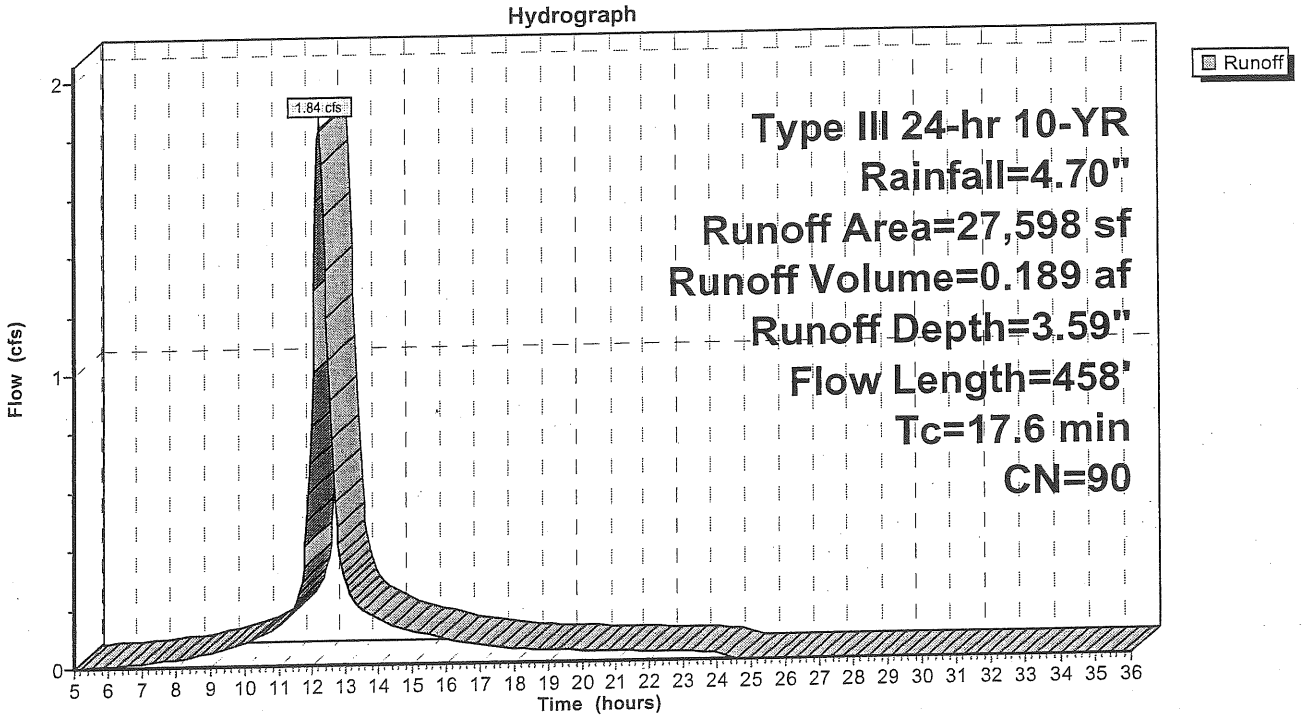
Runoff = 1.84 cfs @ 12.24 hrs, Volume= 0.189 af, Depth= 3.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
16,127	98	Existing Pavement
5,635	74	Pasture/grassland/range, Good, HSG C
3,584	72	Woods/grass comb., Good, HSG C
2,252	98	Ledge Outcroppings
27,598	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	114	0.0614	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.6	146	0.0410	4.1		**Shallow Concentrated Flow, Shallow Concentrated B-C** Paved Kv= 20.3 fps
0.7	51	0.0290	1.2		**Shallow Concentrated Flow, Shallow Concentrated C-D** Short Grass Pasture Kv= 7.0 fps
0.6	147	0.0370	3.9		**Shallow Concentrated Flow, Shallow Concentrated D-E** Paved Kv= 20.3 fps
17.6	458	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

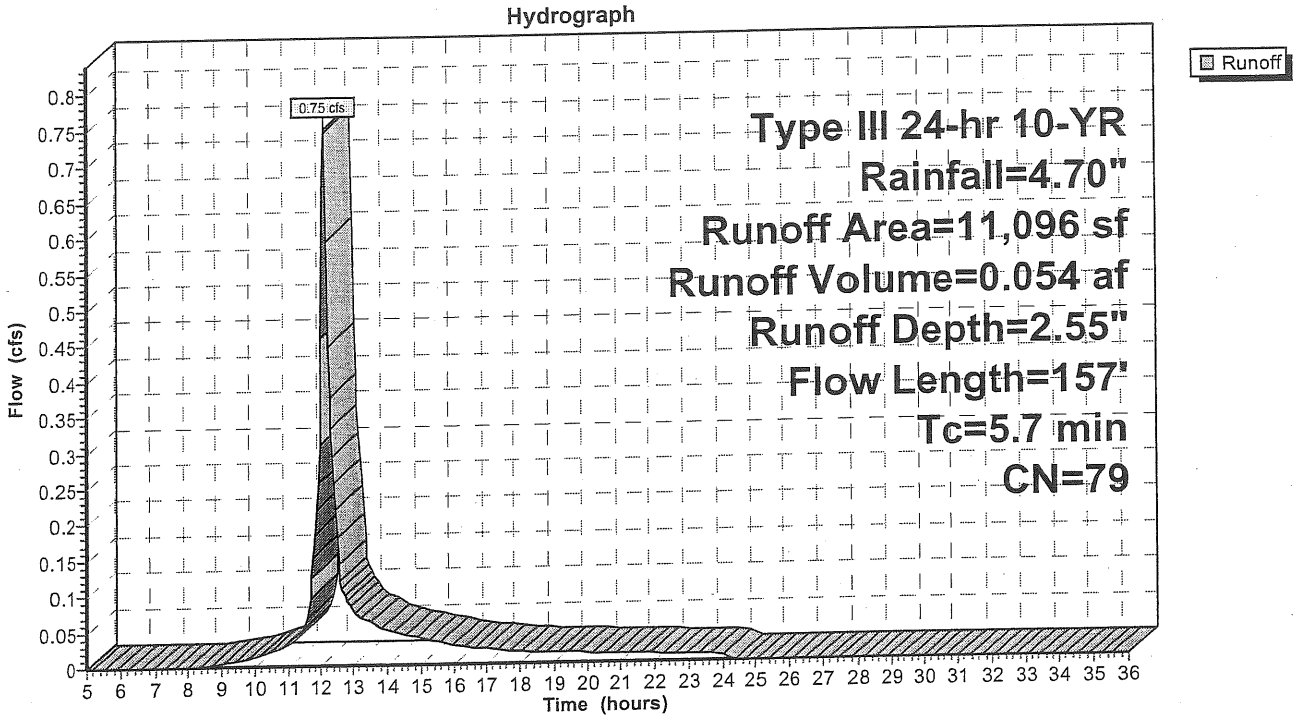
Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.054 af, Depth= 2.55"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
8,165	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
11,096	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	44	0.1360	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
5.7	157	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

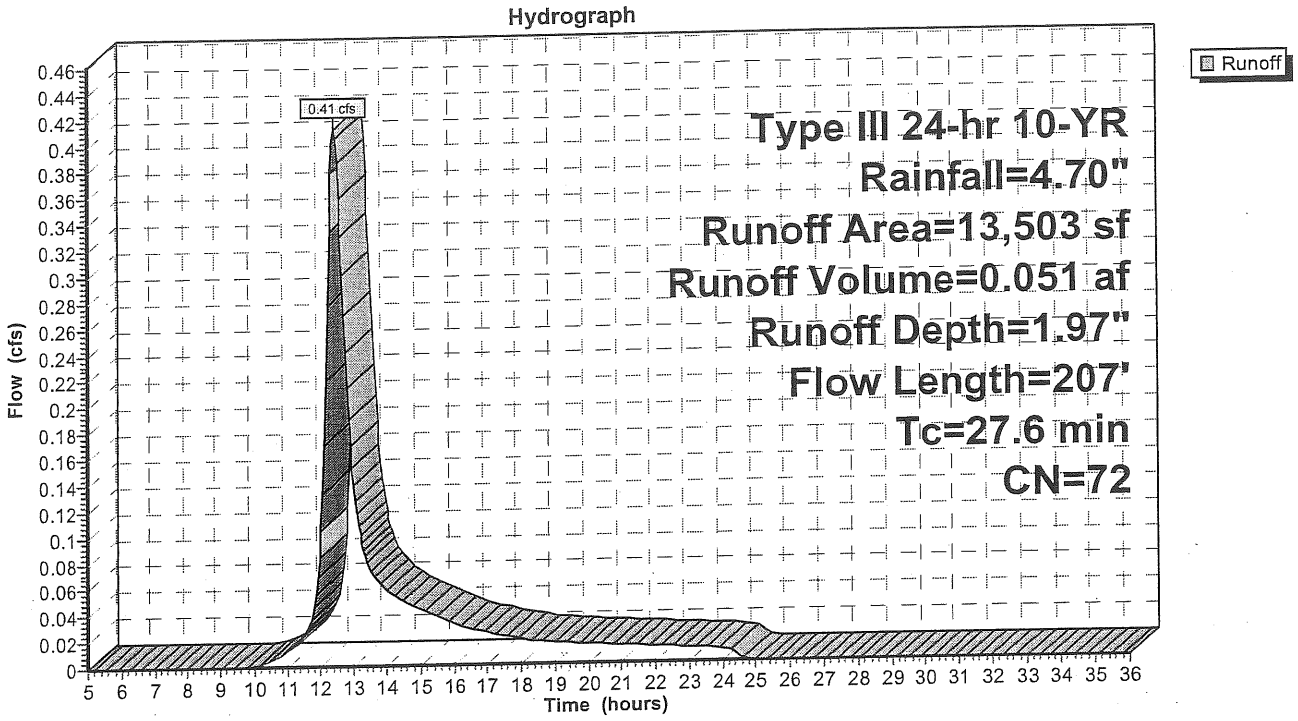
Runoff = 0.41 cfs @ 12.40 hrs, Volume= 0.051 af, Depth= 1.97"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
13,503	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

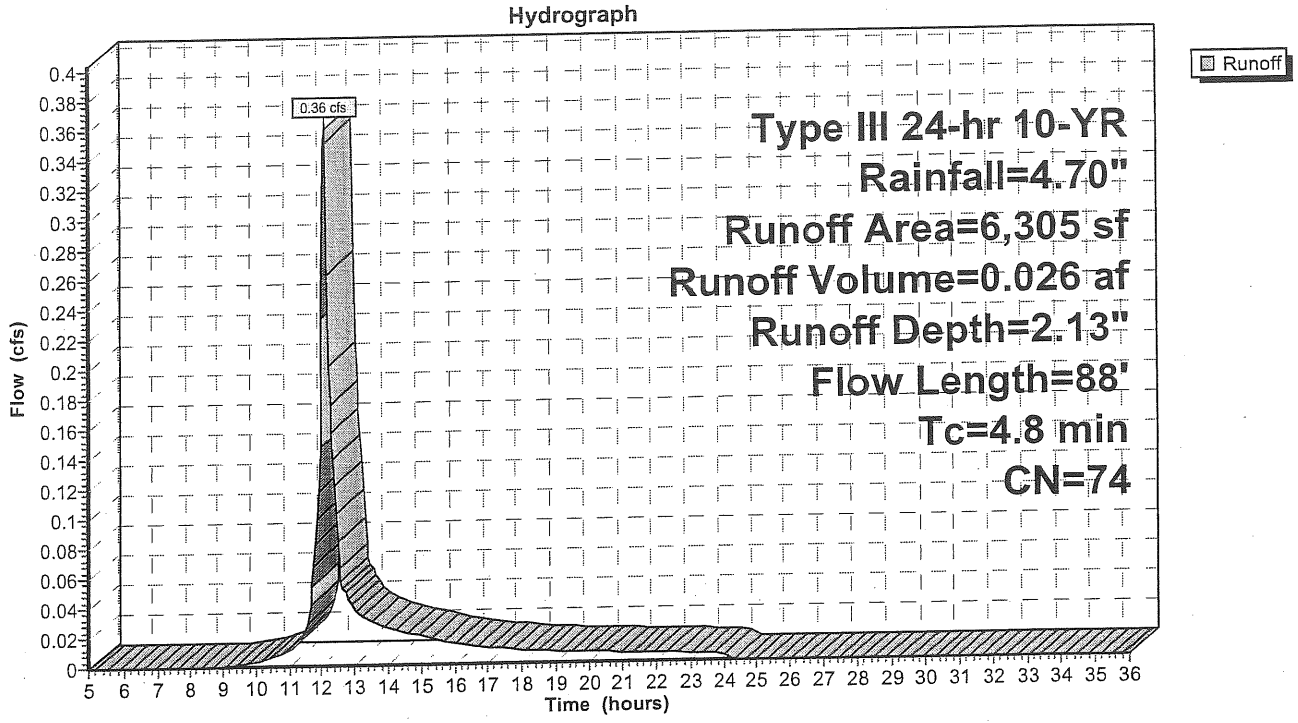
Runoff = 0.36 cfs @ 12.08 hrs, Volume= 0.026 af, Depth= 2.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
6,305	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



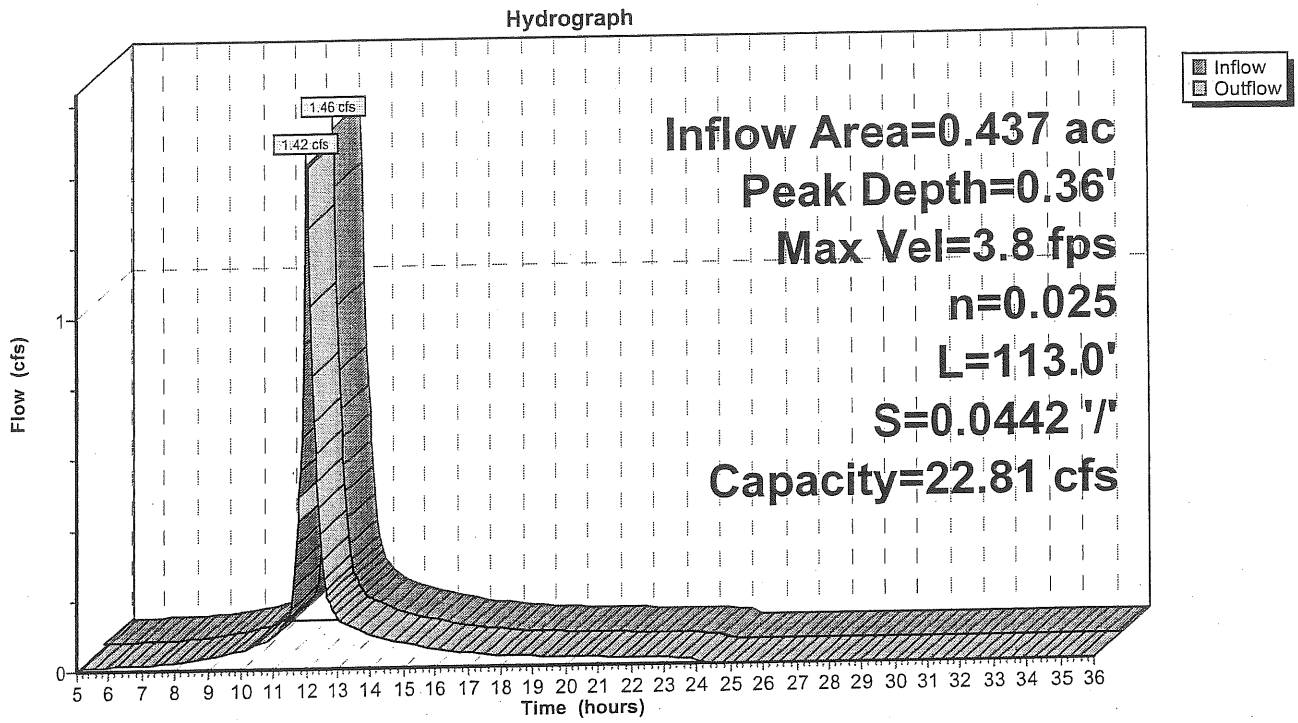
Reach 1R: Reach 1R

Inflow Area = 0.437 ac, Inflow Depth = 3.30" for 10-YR event
Inflow = 1.46 cfs @ 12.02 hrs, Volume= 0.120 af
Outflow = 1.42 cfs @ 12.05 hrs, Volume= 0.120 af, Atten= 2%, Lag= 1.3 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.8 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.6 fps, Avg. Travel Time= 1.2 min

Peak Depth= 0.36' @ 12.04 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



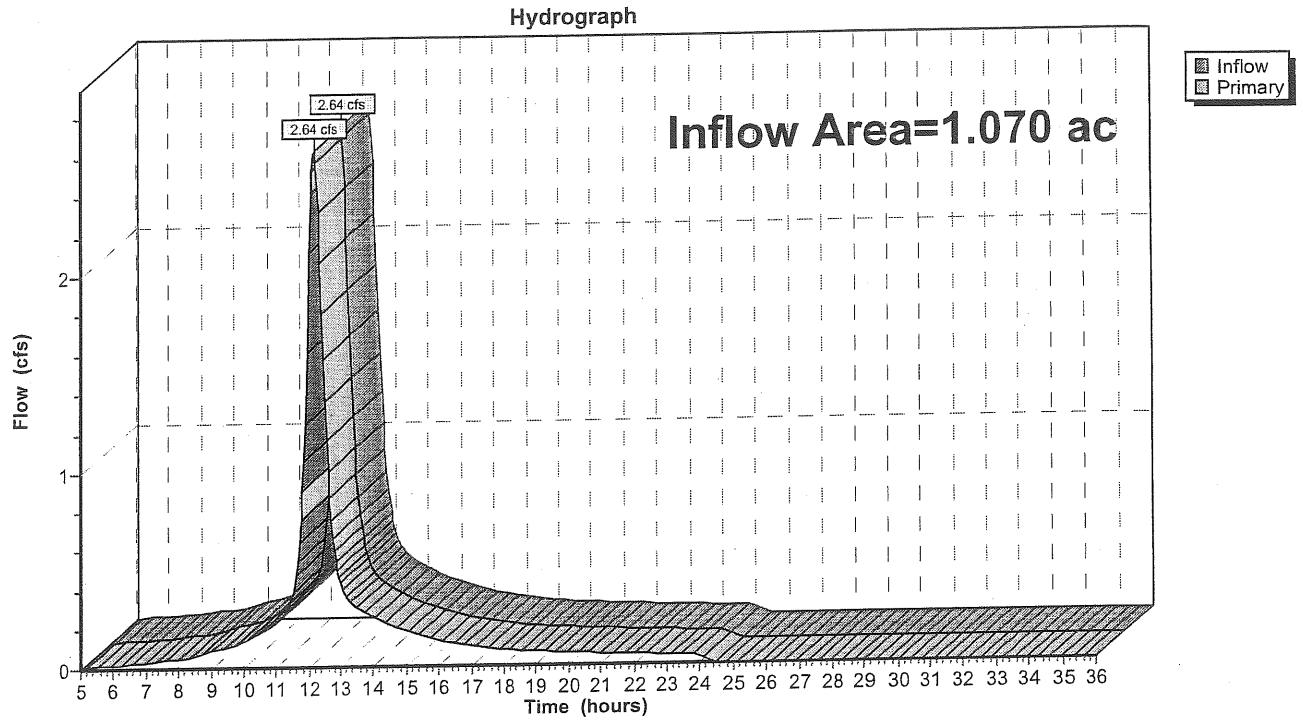
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area =	1.070 ac,	Inflow Depth =	3.47"	for 10-YR event
Inflow =	2.64 cfs @	12.18 hrs,	Volume=	0.309 af
Primary =	2.64 cfs @	12.18 hrs,	Volume=	0.309 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

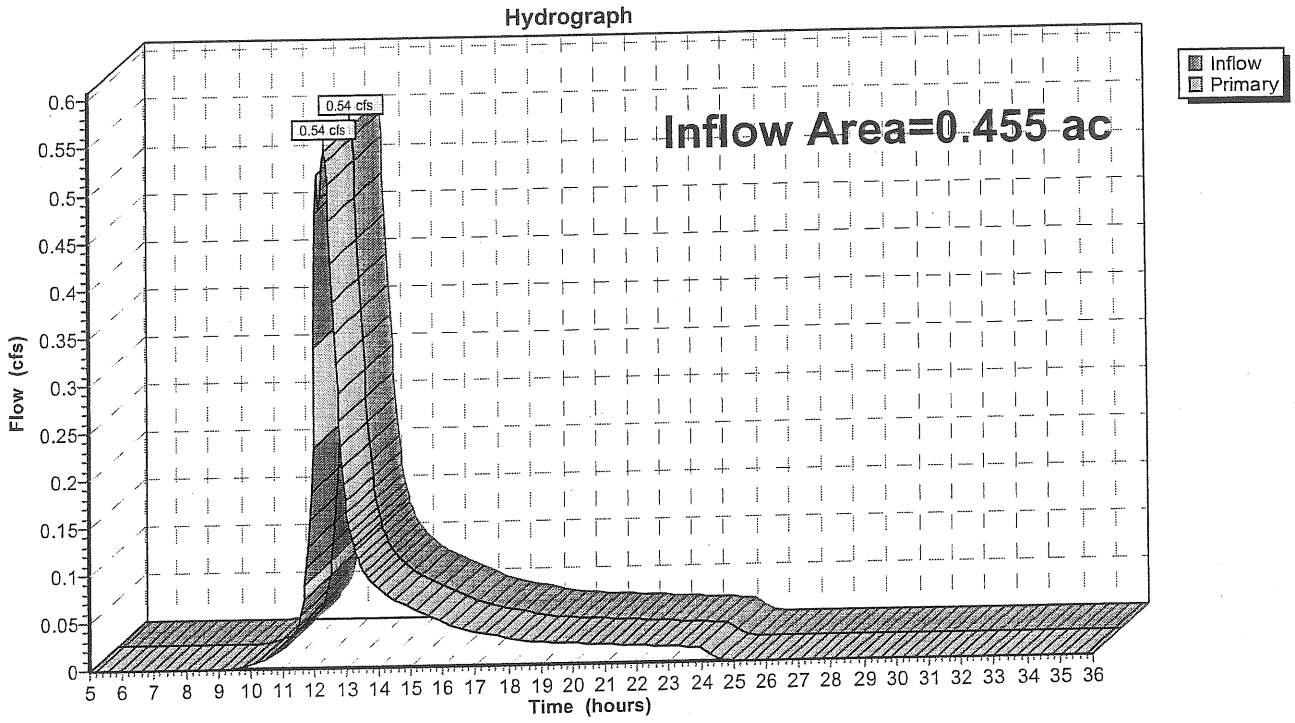


Link 2L: Point of Analysis 2

Inflow Area = 0.455 ac, Inflow Depth = 2.02" for 10-YR event
Inflow = 0.54 cfs @ 12.35 hrs, Volume= 0.077 af
Primary = 0.54 cfs @ 12.35 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=5.11"
Tc=0.0 min CN=98 Runoff=1.12 cfs 0.077 af

Subcatchment 2S: Watershed #2S Runoff Area=27,598 sf Runoff Depth=4.36"
Flow Length=458' Tc=17.6 min CN=90 Runoff=2.21 cfs 0.230 af

Subcatchment 3S: Watershed #3S Runoff Area=11,096 sf Runoff Depth=3.24"
Flow Length=157' Tc=5.7 min CN=79 Runoff=0.95 cfs 0.069 af

Subcatchment 4S: Watershed #4S Runoff Area=13,503 sf Runoff Depth=2.59"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.55 cfs 0.067 af

Subcatchment 5S: Watershed #5S Runoff Area=6,305 sf Runoff Depth=2.77"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.47 cfs 0.033 af

Reach 1R: Reach 1R Peak Depth=0.38' Max Vel=4.0 fps Inflow=1.75 cfs 0.146 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=1.74 cfs 0.146 af

Link 1L: Point of Analysis 1 Inflow=3.19 cfs 0.376 af
Primary=3.19 cfs 0.376 af

Link 2L: Point of Analysis 2 Inflow=0.72 cfs 0.100 af
Primary=0.72 cfs 0.100 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.476 af Average Runoff Depth = 3.75"

Subcatchment 1S: Watershed #1S

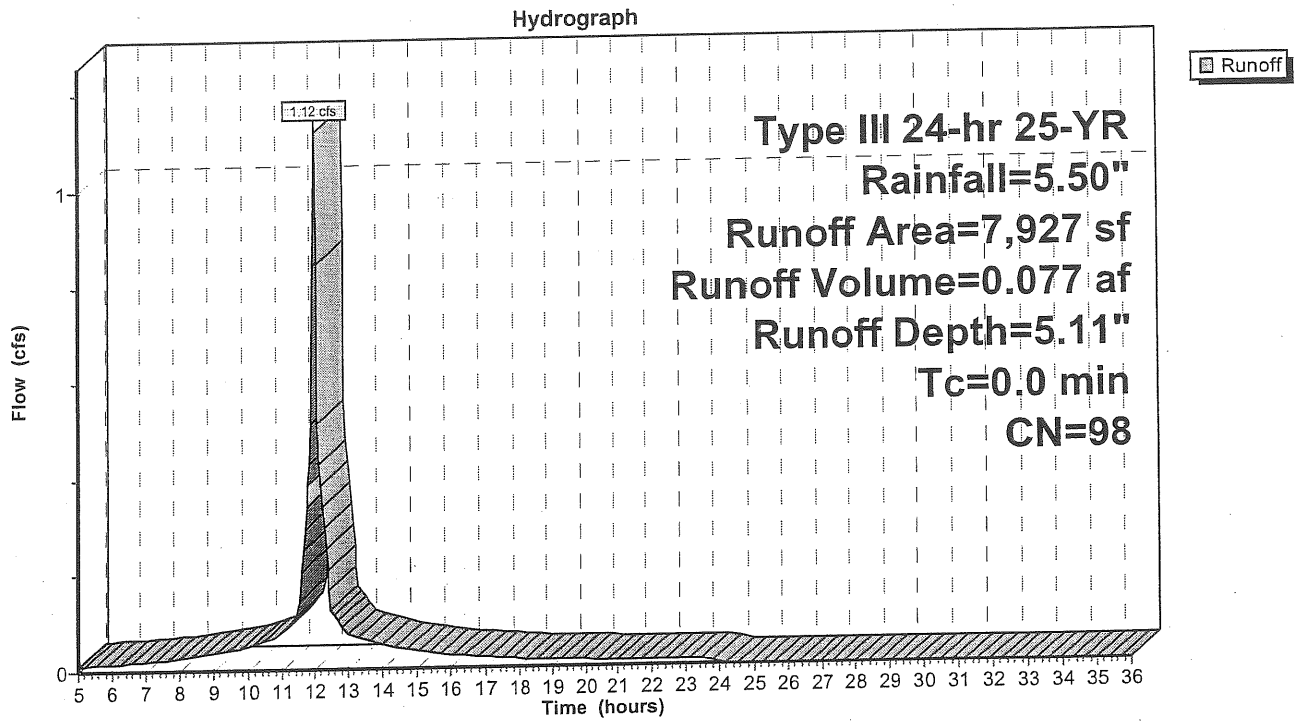
Runoff = 1.12 cfs @ 12.00 hrs, Volume= 0.077 af, Depth= 5.11"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
7,927	98	Existing Building

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

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

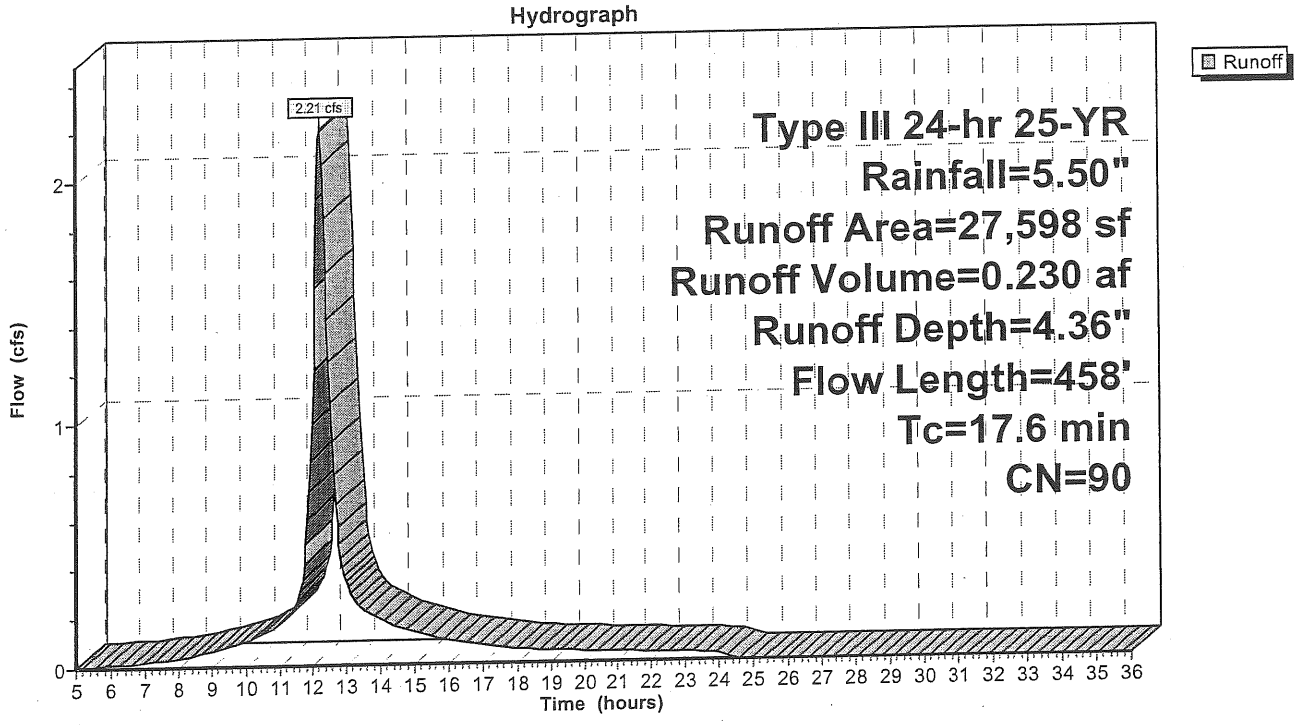
Runoff = 2.21 cfs @ 12.23 hrs, Volume= 0.230 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
16,127	98	Existing Pavement
5,635	74	Pasture/grassland/range, Good, HSG C
3,584	72	Woods/grass comb., Good, HSG C
2,252	98	Ledge Outcroppings
27,598	90	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	114	0.0614	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.6	146	0.0410	4.1		**Shallow Concentrated Flow, Shallow Concentrated B-C** Paved Kv= 20.3 fps
0.7	51	0.0290	1.2		**Shallow Concentrated Flow, Shallow Concentrated C-D** Short Grass Pasture Kv= 7.0 fps
0.6	147	0.0370	3.9		**Shallow Concentrated Flow, Shallow Concentrated D-E** Paved Kv= 20.3 fps
17.6	458	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

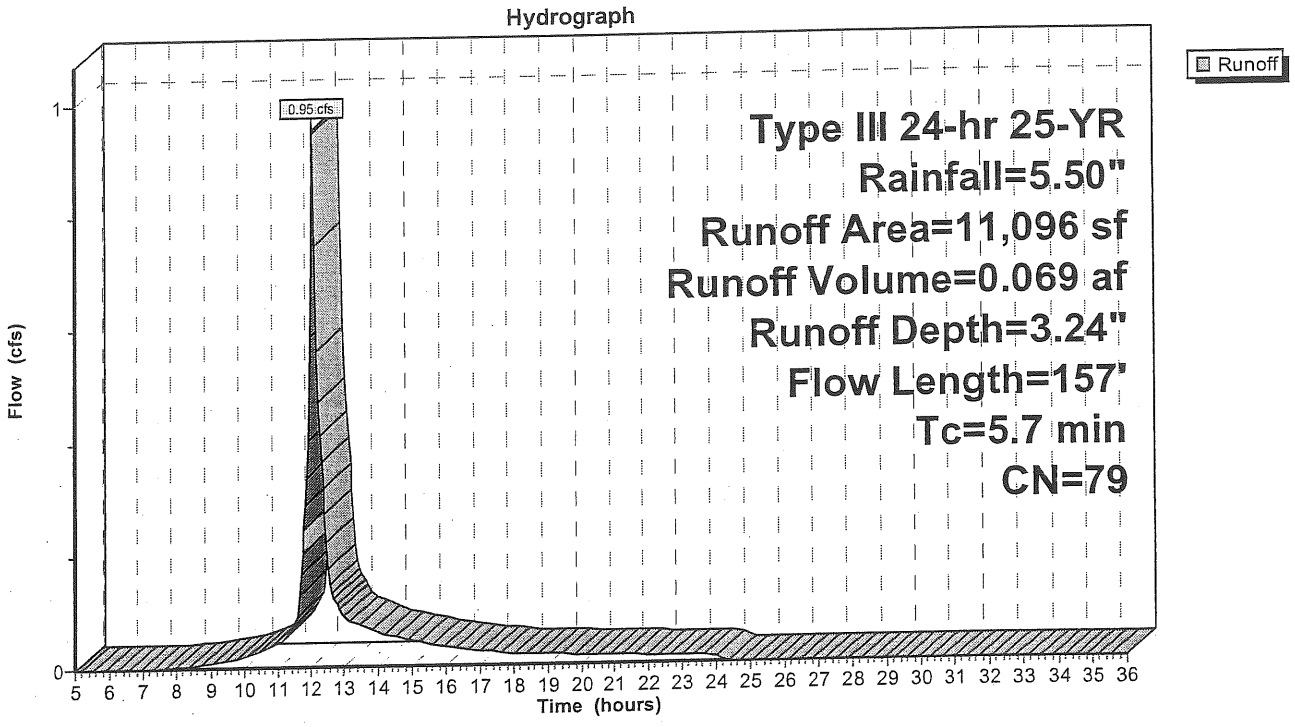
Runoff = 0.95 cfs @ 12.09 hrs, Volume= 0.069 af, Depth= 3.24"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
8,165	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
11,096	79	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.3	44	0.1360	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
5.7	157	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

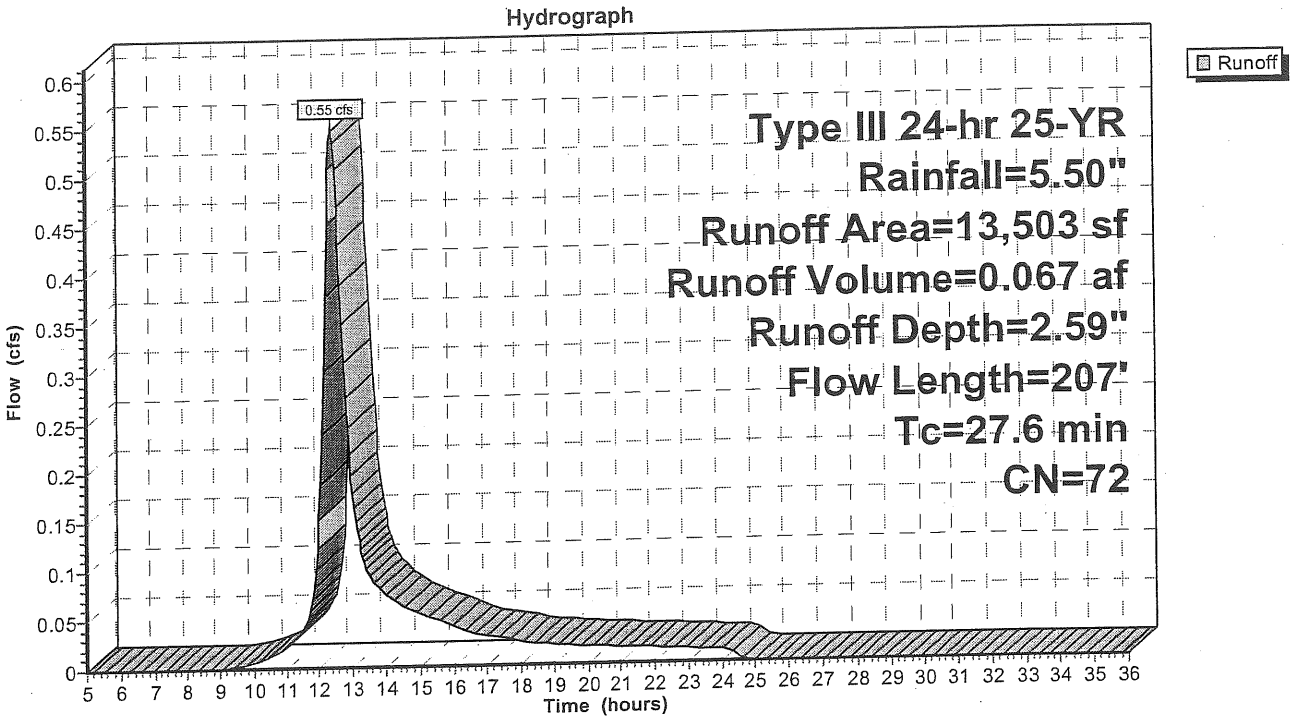
Runoff = 0.55 cfs @ 12.39 hrs, Volume= 0.067 af, Depth= 2.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
13,503	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

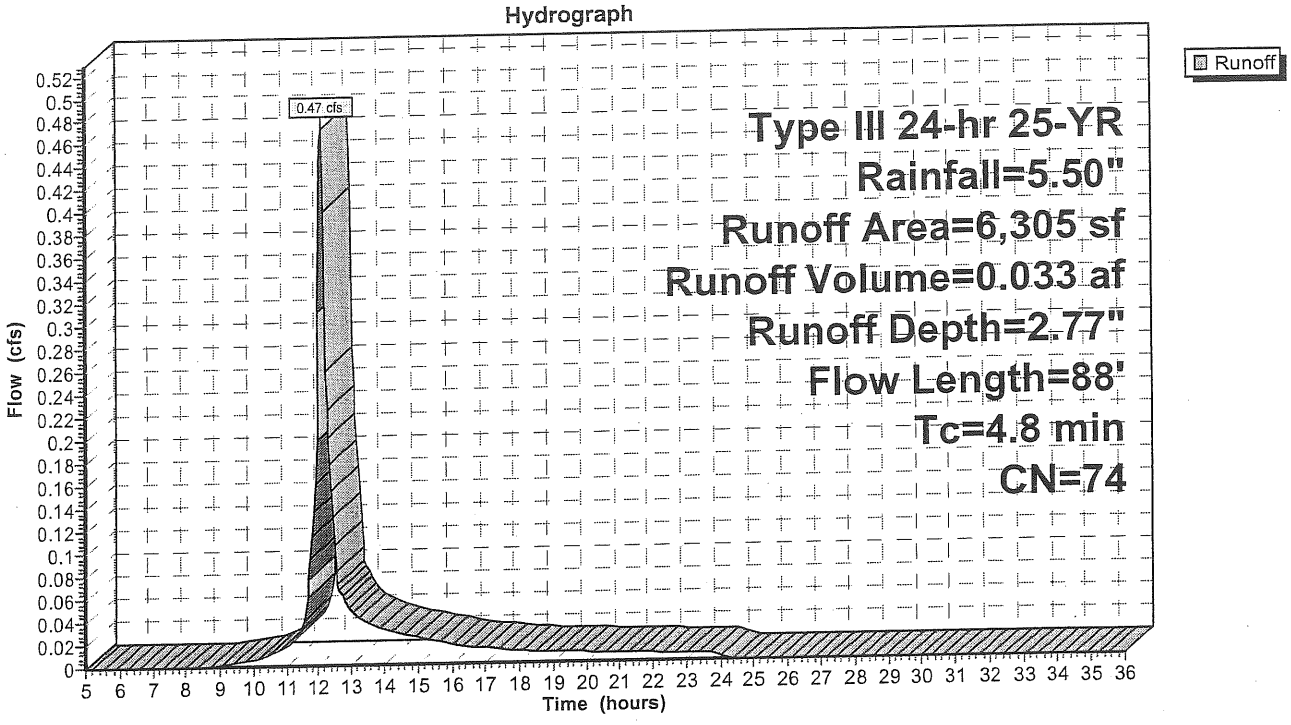
Runoff = 0.47 cfs @ 12.08 hrs, Volume= 0.033 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
6,305	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



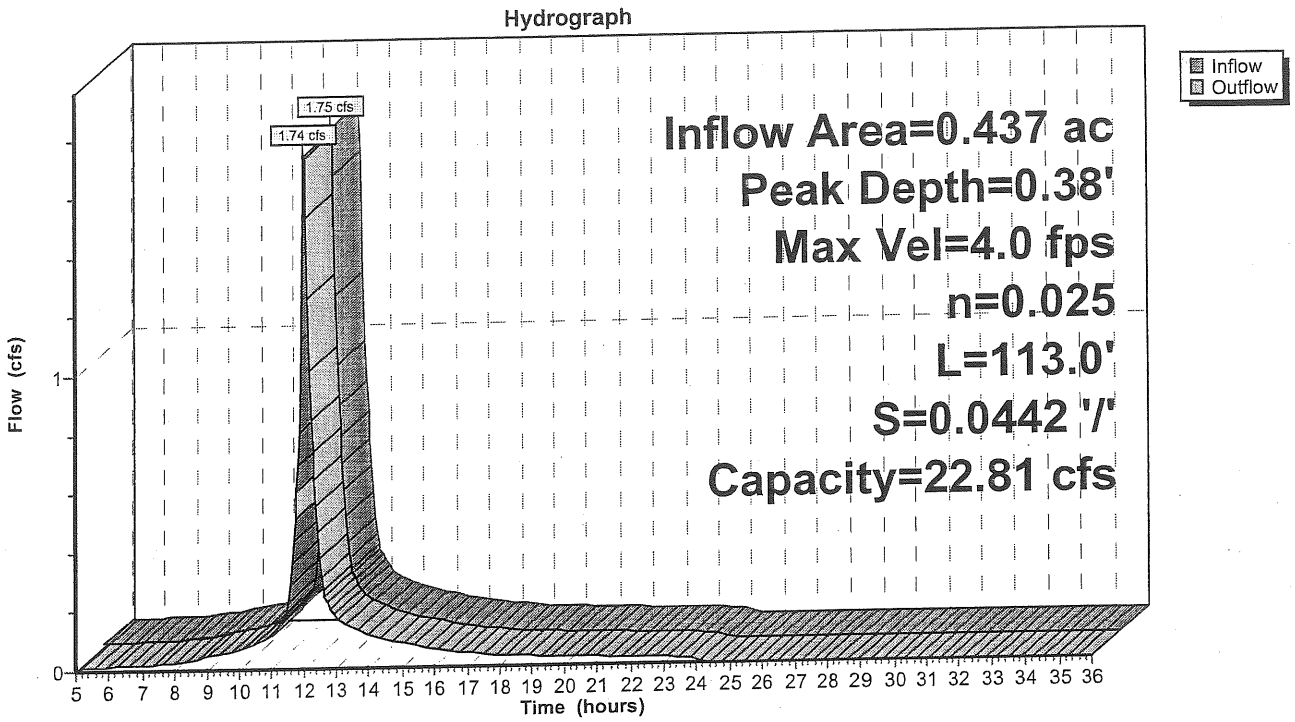
Reach 1R: Reach 1R

Inflow Area = 0.437 ac, Inflow Depth = 4.02" for 25-YR event
Inflow = 1.75 cfs @ 12.03 hrs, Volume= 0.146 af
Outflow = 1.74 cfs @ 12.05 hrs, Volume= 0.146 af, Atten= 1%, Lag= 1.2 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.0 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.7 fps, Avg. Travel Time= 1.1 min

Peak Depth= 0.38' @ 12.04 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



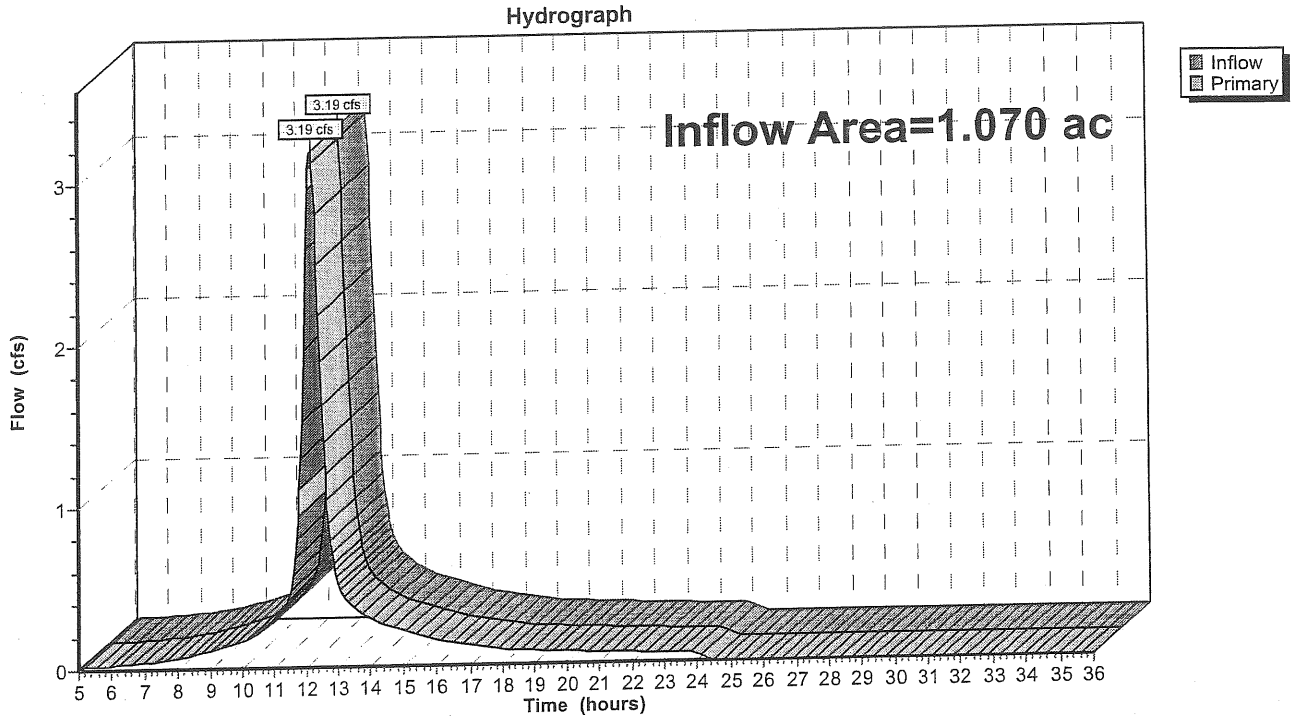
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.070 ac, Inflow Depth = 4.22" for 25-YR event
Inflow = 3.19 cfs @ 12.17 hrs, Volume= 0.376 af
Primary = 3.19 cfs @ 12.17 hrs, Volume= 0.376 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

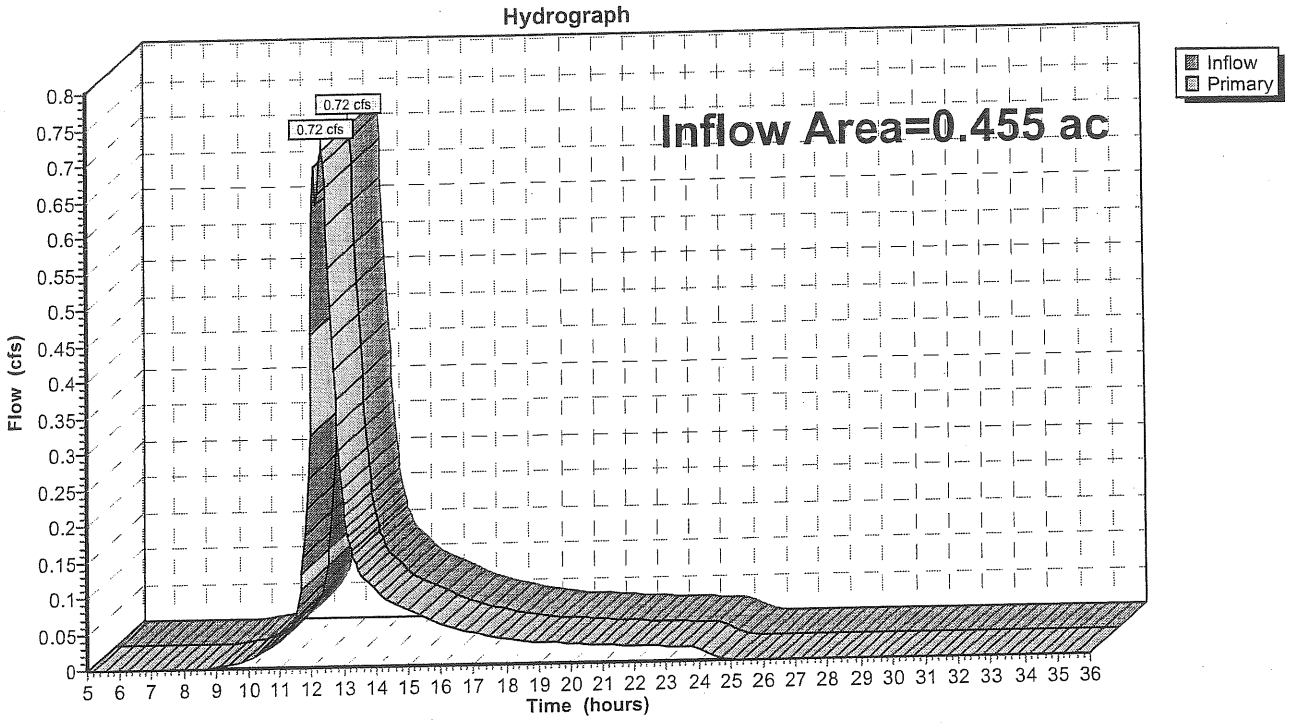


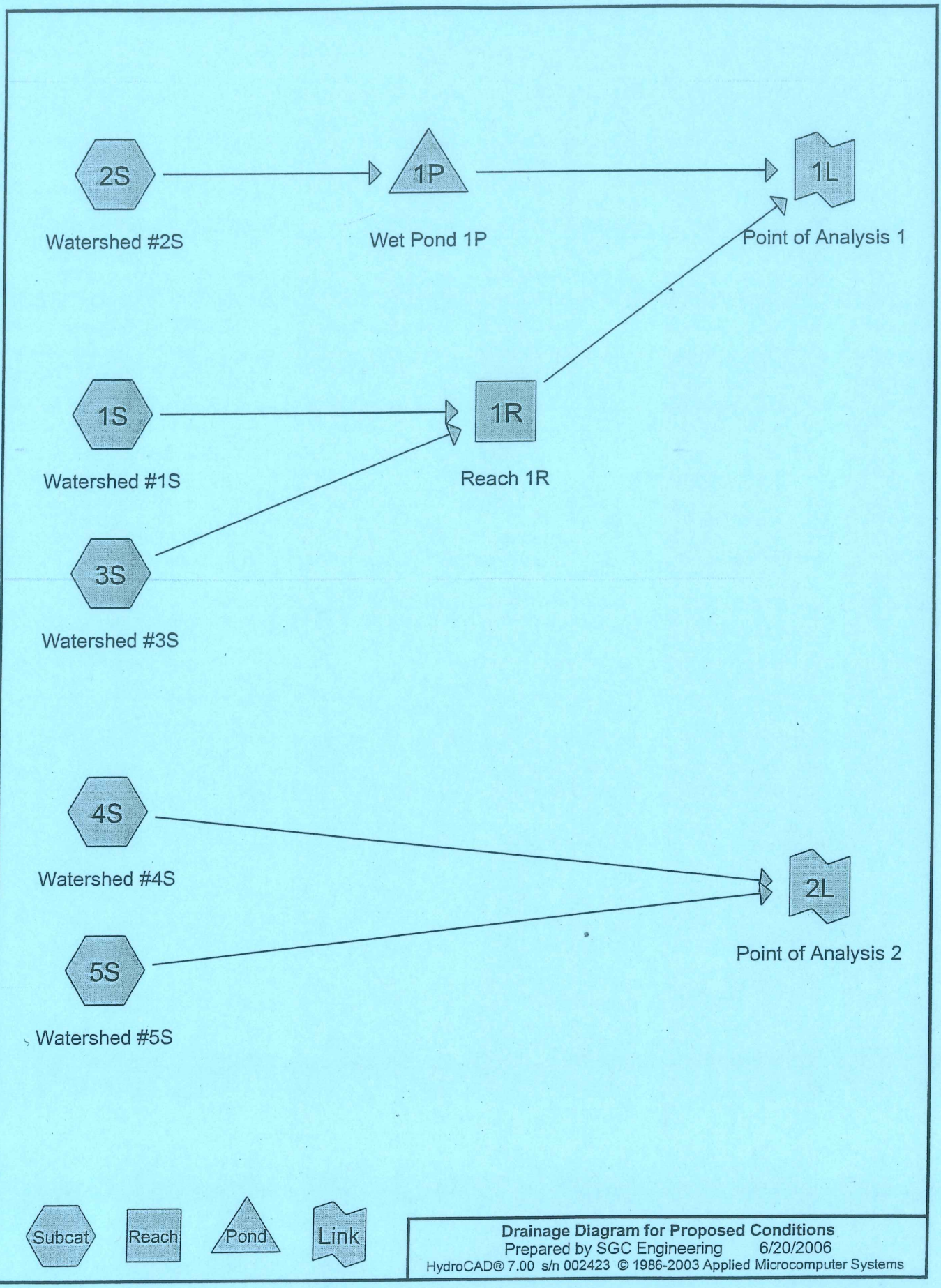
Link 2L: Point of Analysis 2

Inflow Area = 0.455 ac, Inflow Depth = 2.65" for 25-YR event
Inflow = 0.72 cfs @ 12.34 hrs, Volume= 0.100 af
Primary = 0.72 cfs @ 12.34 hrs, Volume= 0.100 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2




2S
1P
1L
Watershed #2S
Wet Pond 1P
Point of Analysis 1
1S
1R
Watershed #1S
Reach 1R
3S
Watershed #3S
4S
Watershed #4S
2L
Point of Analysis 2
5S
Watershed #5S
Subcat
Reach
Pond
Link
Drainage Diagram for Proposed Conditions
Prepared by SGC Engineering 6/20/2006
HydroCAD® 7.00 s/n 002423 © 1986-2003 Applied Microcomputer Systems

Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=2.72"
Tc=0.0 min CN=98 Runoff=0.61 cfs 0.041 af

Subcatchment 2S: Watershed #2S Runoff Area=28,113 sf Runoff Depth=2.25"
Flow Length=295' Tc=2.1 min CN=93 Runoff=1.81 cfs 0.121 af

Subcatchment 3S: Watershed #3S Runoff Area=14,435 sf Runoff Depth=1.07"
Flow Length=263' Tc=17.5 min CN=77 Runoff=0.28 cfs 0.030 af

Subcatchment 4S: Watershed #4S Runoff Area=13,684 sf Runoff Depth=0.81"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.16 cfs 0.021 af

Subcatchment 5S: Watershed #5S Runoff Area=2,270 sf Runoff Depth=0.91"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.05 cfs 0.004 af

Reach 1R: Reach 1R Peak Depth=0.27' Max Vel=3.2 fps Inflow=0.70 cfs 0.071 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=0.66 cfs 0.071 af

Pond 1P: Wet Pond 1P Peak Elev=197.30' Storage=543 cf Inflow=1.81 cfs 0.121 af
Primary=1.78 cfs 0.080 af Secondary=0.02 cfs 0.041 af Outflow=1.81 cfs 0.121 af

Link 1L: Point of Analysis 1 Inflow=2.44 cfs 0.192 af
Primary=2.44 cfs 0.192 af

Link 2L: Point of Analysis 2 Inflow=0.18 cfs 0.025 af
Primary=0.18 cfs 0.025 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.217 af Average Runoff Depth = 1.71"

Subcatchment 1S: Watershed #1S

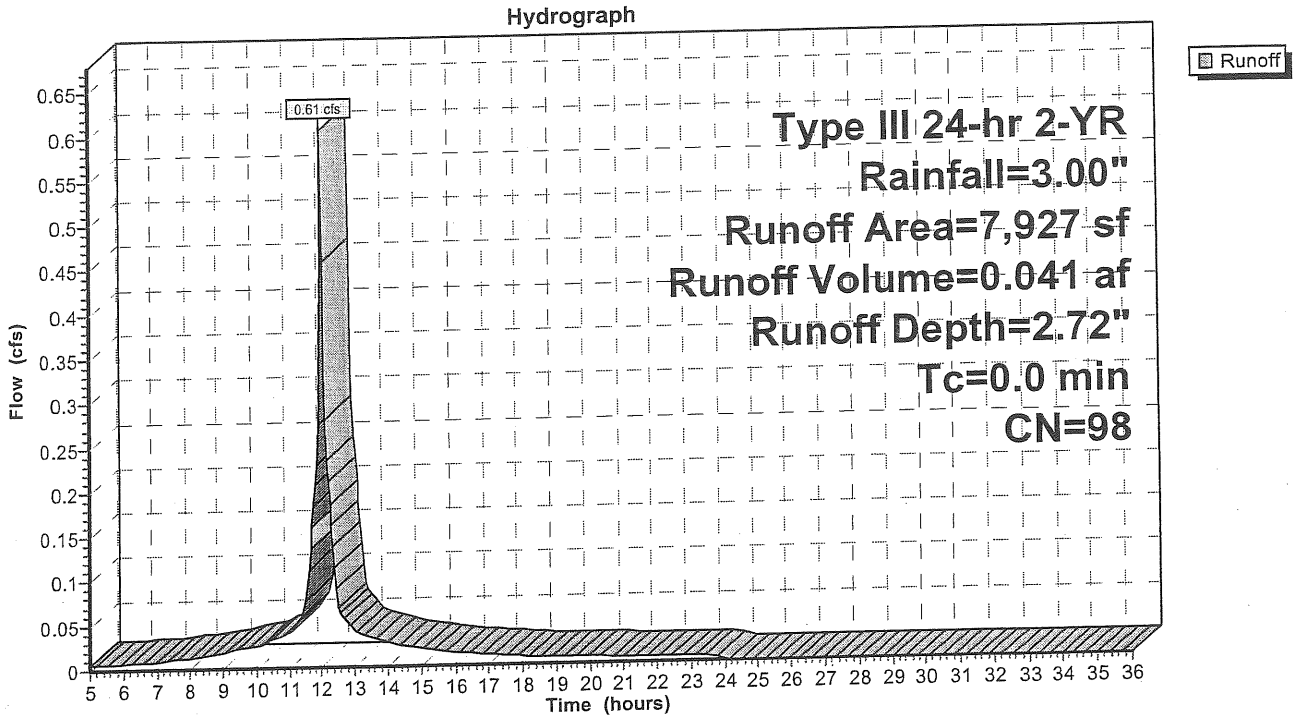
Runoff = 0.61 cfs @ 12.00 hrs, Volume= 0.041 af, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
7,927	98	Existing Building

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

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

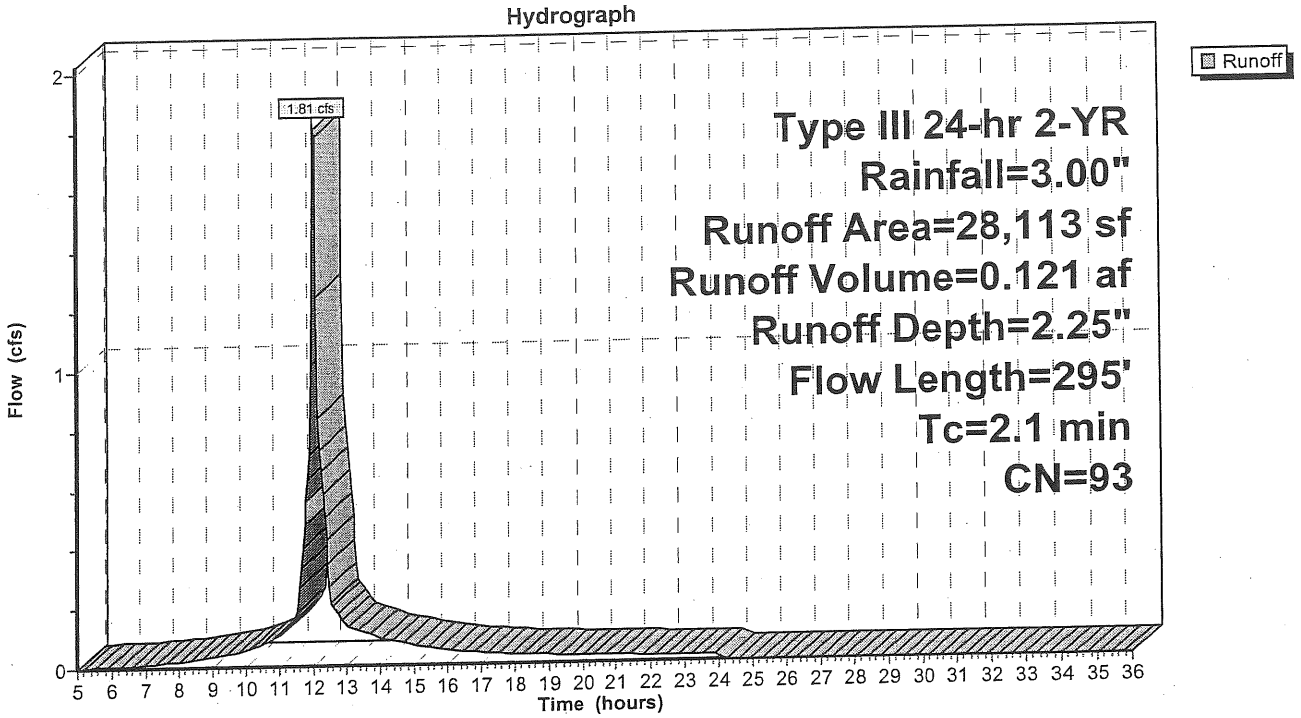
Runoff = 1.81 cfs @ 12.04 hrs, Volume= 0.121 af, Depth= 2.25"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
22,759	98	Impervious Coverage
5,354	74	Landscaped Areas
28,113	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	44	0.0210	1.2		**Sheet Flow, Sheet Flow A-B** Smooth surfaces n= 0.011 P2= 3.00"
0.8	150	0.0210	2.9		**Shallow Concentrated Flow, Shallow Concentrated A-B** Paved Kv= 20.3 fps
0.5	53	0.0750	1.9		**Shallow Concentrated Flow, Shallow Concentrated B-C** Short Grass Pasture Kv= 7.0 fps
0.2	48	0.0417	4.1		**Shallow Concentrated Flow, Shallow Concentrated C-D** Paved Kv= 20.3 fps
2.1	295	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

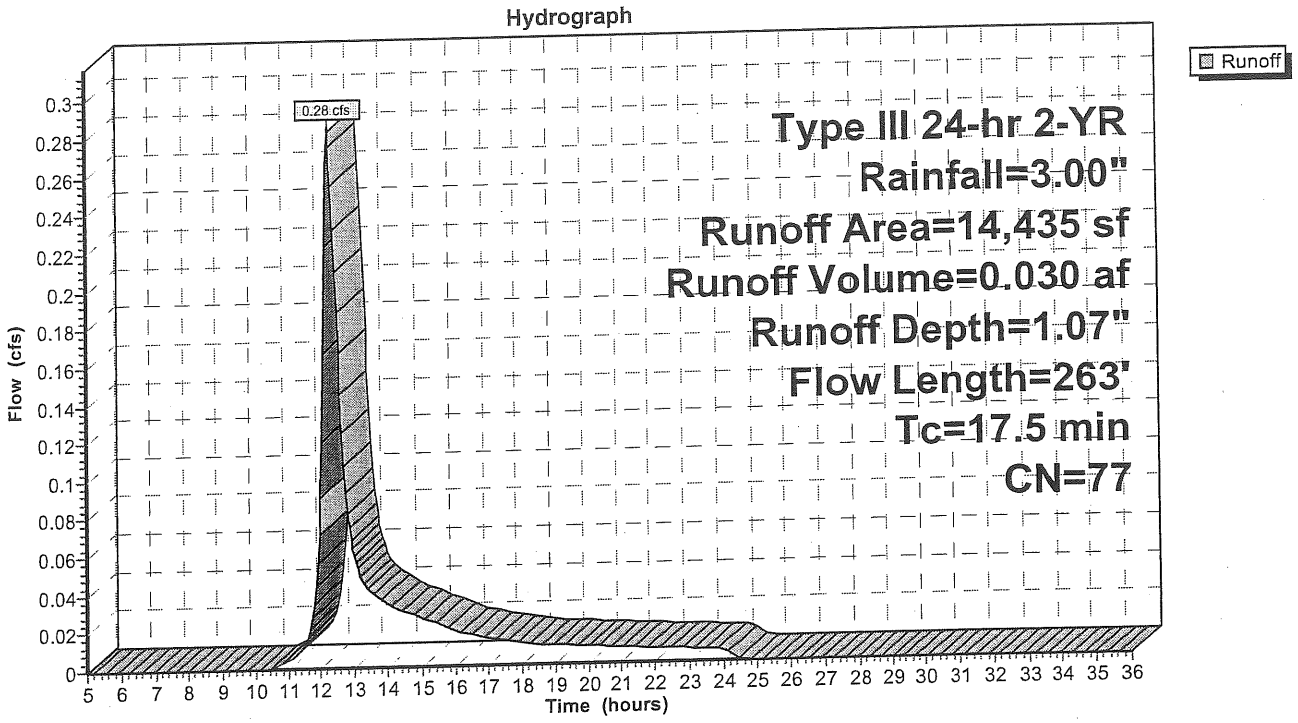
Runoff = 0.28 cfs @ 12.26 hrs, Volume= 0.030 af, Depth= 1.07"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
11,504	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
14,435	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.1	150	0.0867	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
17.5	263	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

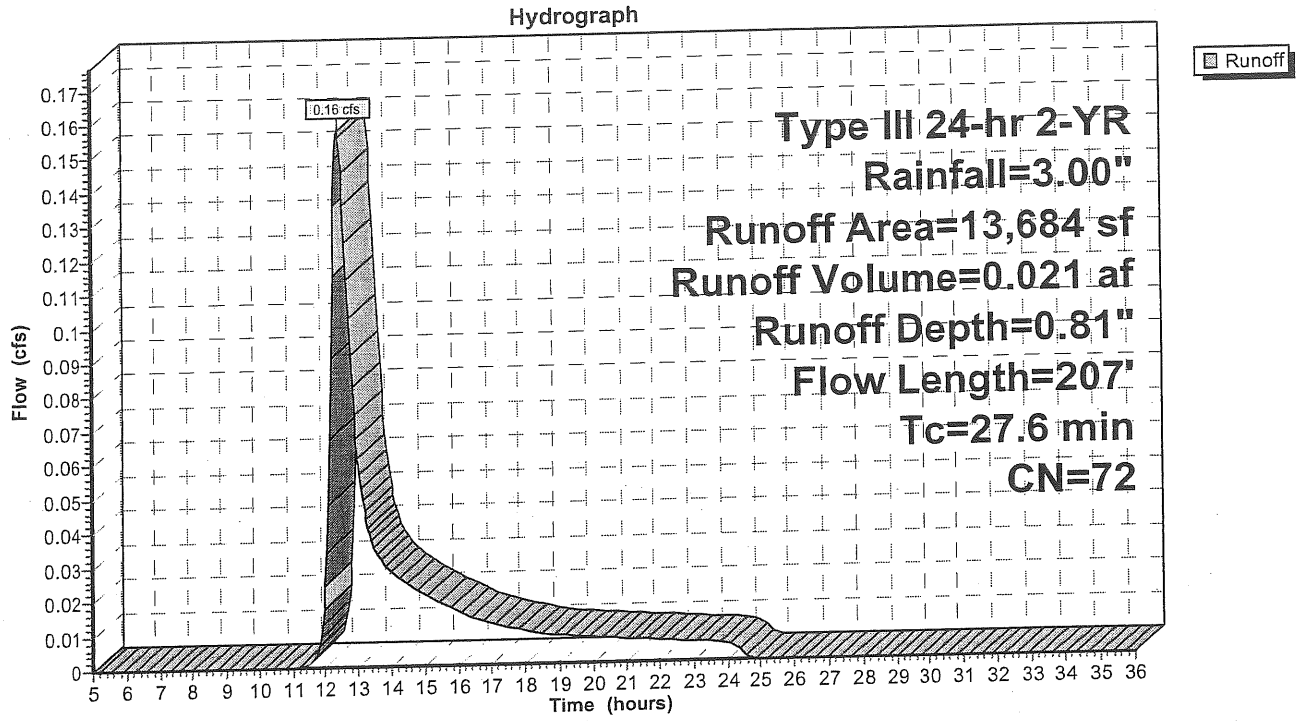
Runoff = 0.16 cfs @ 12.43 hrs, Volume= 0.021 af, Depth= 0.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
13,684	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

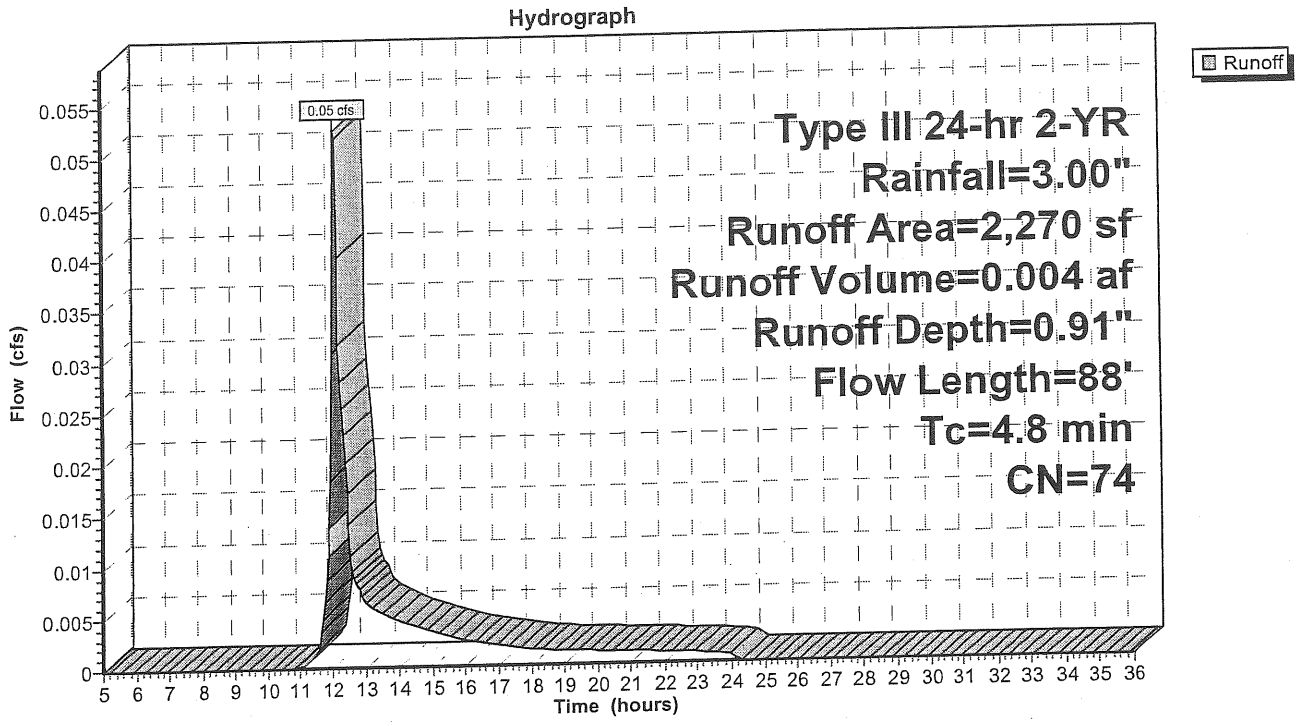
Runoff = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af, Depth= 0.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.00"

Area (sf)	CN	Description
2,270	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



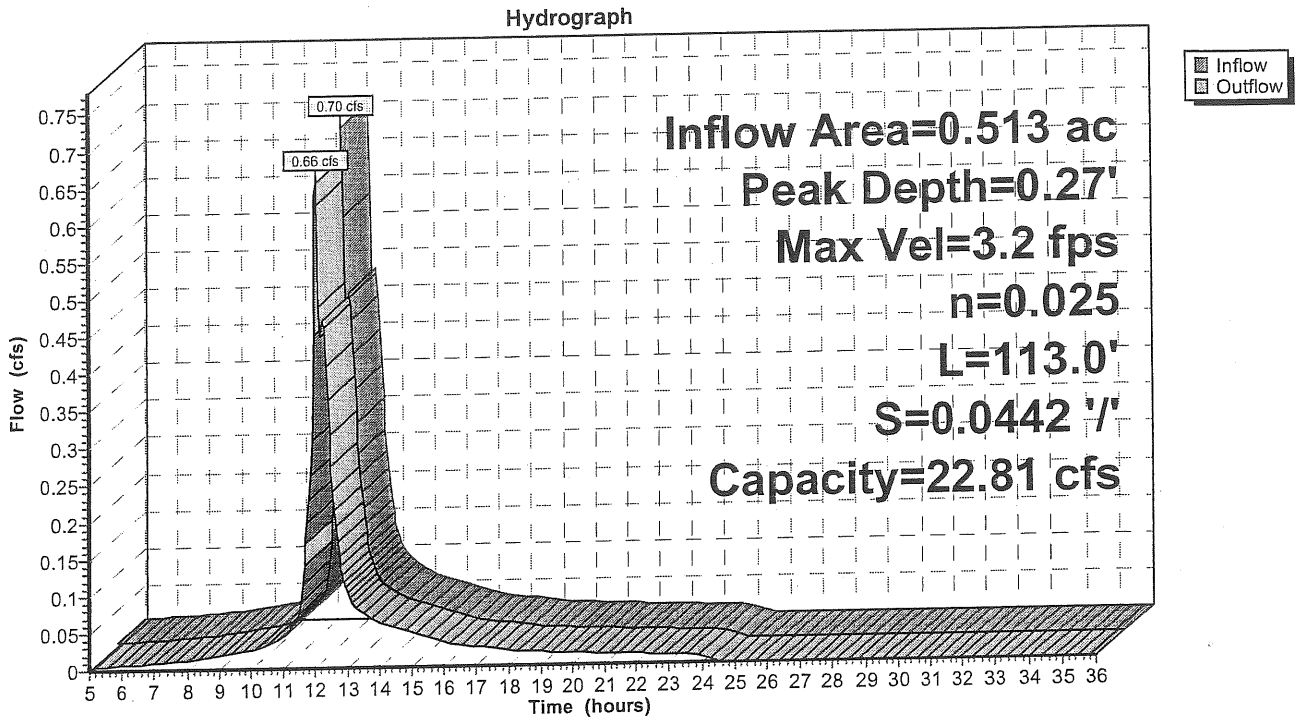
Reach 1R: Reach 1R

Inflow Area = 0.513 ac, Inflow Depth = 1.66" for 2-YR event
Inflow = 0.70 cfs @ 12.00 hrs, Volume= 0.071 af
Outflow = 0.66 cfs @ 12.02 hrs, Volume= 0.071 af, Atten= 6%, Lag= 1.1 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.2 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.4 fps, Avg. Travel Time= 1.4 min

Peak Depth= 0.27' @ 12.01 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



Pond 1P: Wet Pond 1P

Inflow Area =	0.645 ac,	Inflow Depth =	2.25"	for 2-YR event	
Inflow =	1.81 cfs @	12.04 hrs,	Volume=	0.121 af	
Outflow =	1.81 cfs @	12.04 hrs,	Volume=	0.121 af,	Atten= 0%, Lag= 0.5 min
Primary =	1.78 cfs @	12.04 hrs,	Volume=	0.080 af	
Secondary =	0.02 cfs @	11.40 hrs,	Volume=	0.041 af	

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 197.30' @ 12.04 hrs Surf.Area= 421 sf Storage= 543 cf
Plug-Flow detention time= 75.7 min calculated for 0.121 af (100% of inflow)
Center-of-Mass det. time= 76.0 min (867.4 - 791.4)

#	Invert	Avail.Storage	Storage Description
1	196.00'	838 cf	**Custom Stage Data (Prismatic)** Listed below

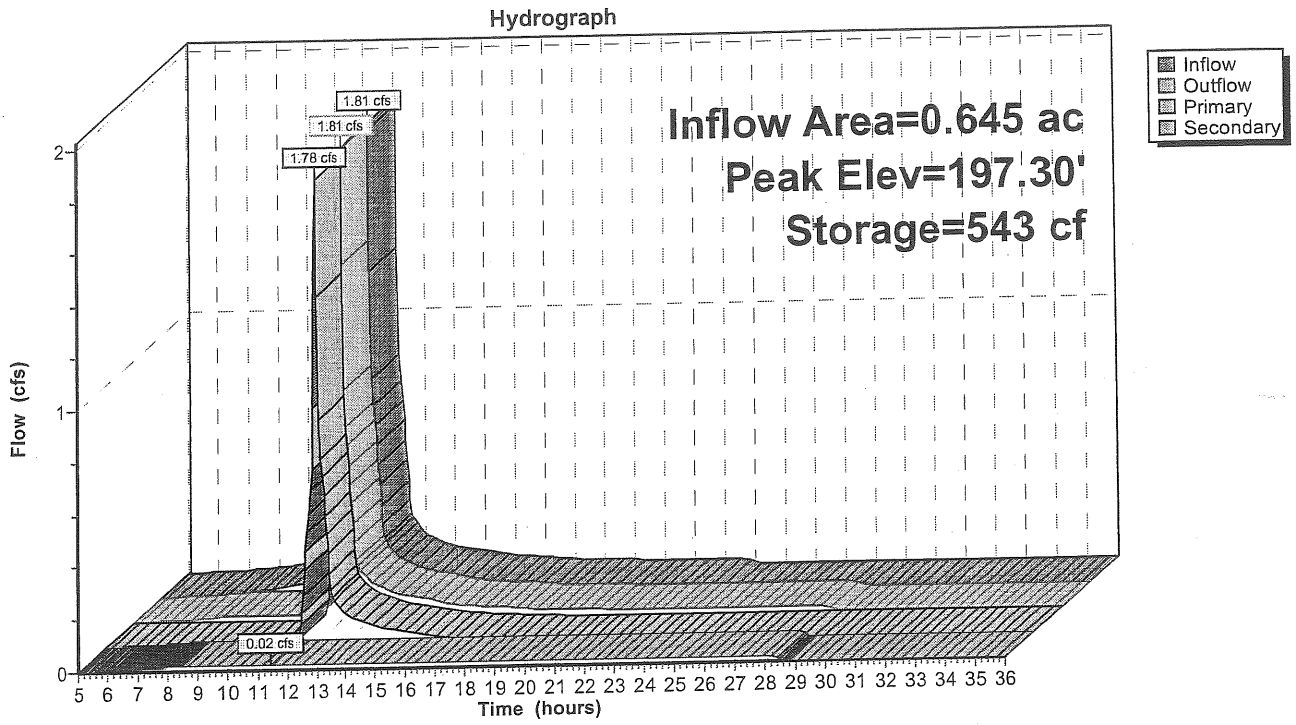
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	412	0	0
197.00	421	417	417
198.00	421	421	838

#	Routing	Invert	Outlet Devices
1	Primary	197.00'	**Special (user-defined)**
			Head (feet) 0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50
			Disch. (cfs) 0.00 0.02 0.07 0.15 0.49 1.02 1.76 2.74 3.97 5.49 7.31
2	Secondary	0.00'	**0.003340 fpm Exfiltration over entire Surface area**

Primary OutFlow Max=1.74 cfs @ 12.04 hrs HW=197.30' (Free Discharge)
↑—**1=Special (user-defined)** (Custom Controls 1.74 cfs)

Secondary OutFlow Max=0.02 cfs @ 11.40 hrs HW=197.03' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Pond 1P: Wet Pond 1P



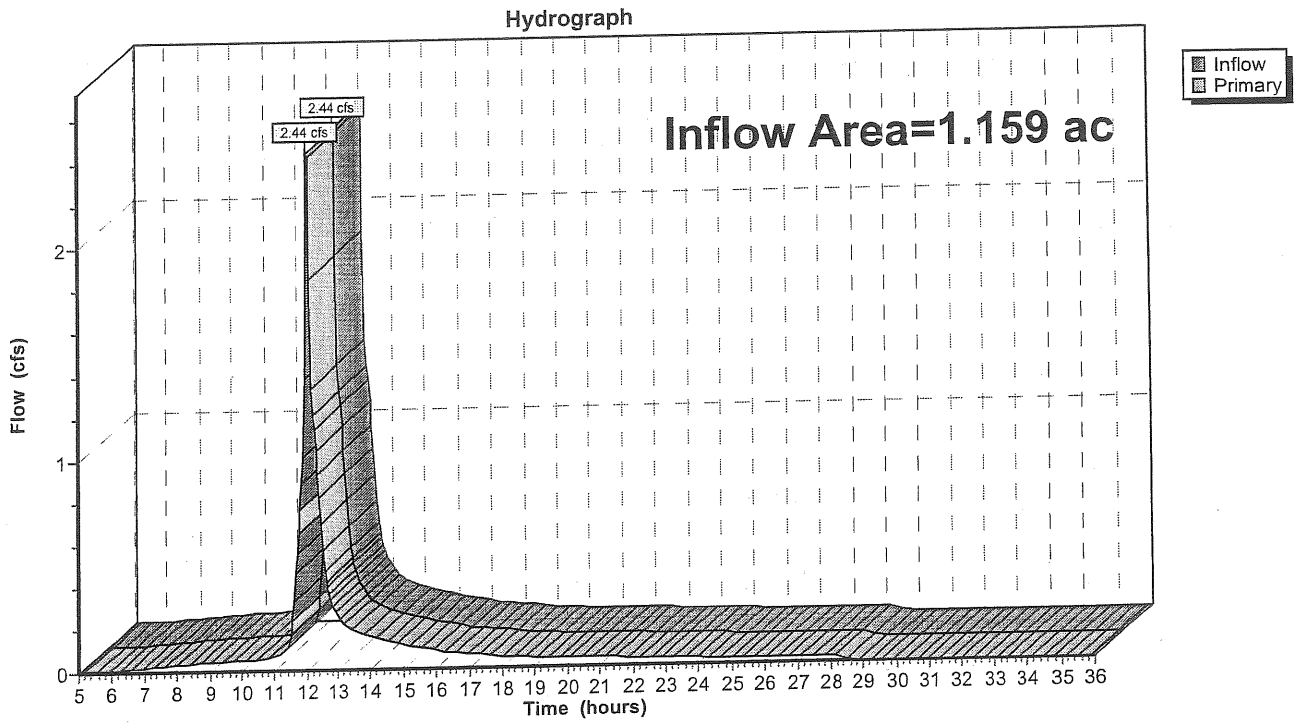
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.159 ac, Inflow Depth = 1.99" for 2-YR event
Inflow = 2.44 cfs @ 12.04 hrs, Volume= 0.192 af
Primary = 2.44 cfs @ 12.04 hrs, Volume= 0.192 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

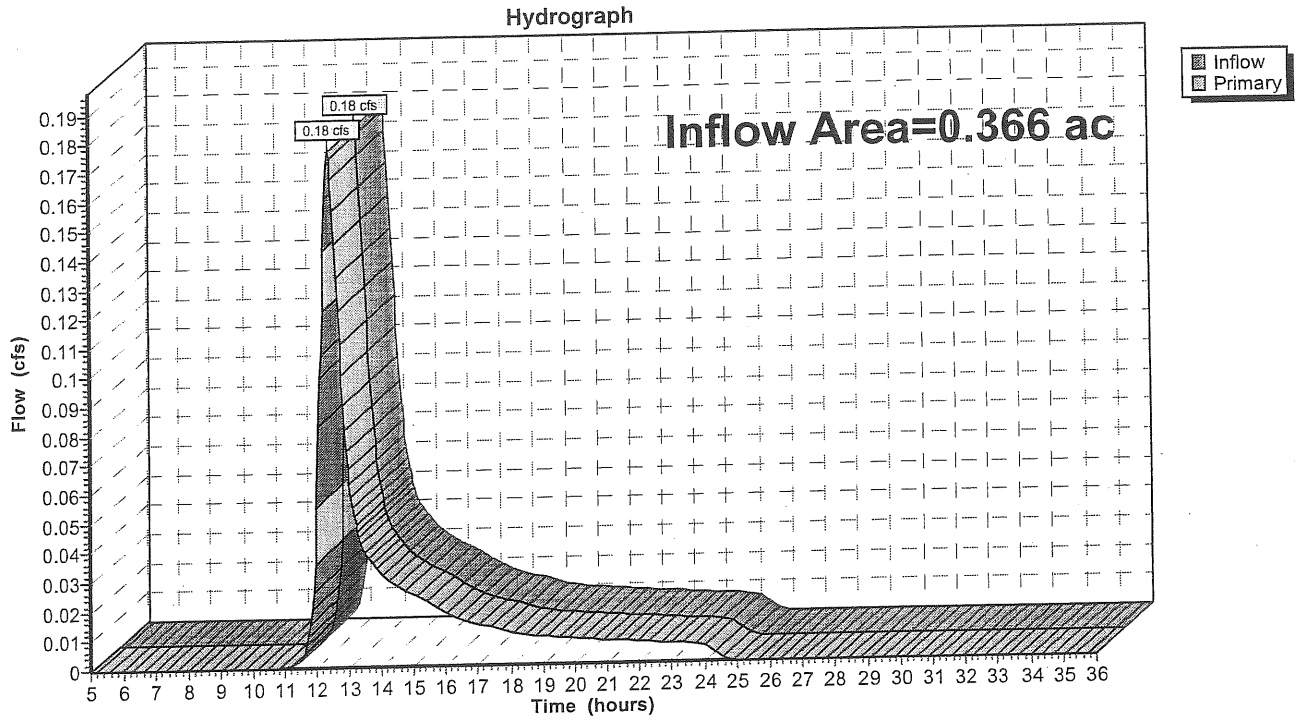


Link 2L: Point of Analysis 2

Inflow Area = 0.366 ac, Inflow Depth = 0.82" for 2-YR event
Inflow = 0.18 cfs @ 12.41 hrs, Volume= 0.025 af
Primary = 0.18 cfs @ 12.41 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=4.35"
Tc=0.0 min CN=98 Runoff=0.96 cfs 0.066 af

Subcatchment 2S: Watershed #2S Runoff Area=28,113 sf Runoff Depth=3.89"
Flow Length=295' Tc=2.1 min CN=93 Runoff=3.03 cfs 0.209 af

Subcatchment 3S: Watershed #3S Runoff Area=14,435 sf Runoff Depth=2.37"
Flow Length=263' Tc=17.5 min CN=77 Runoff=0.65 cfs 0.066 af

Subcatchment 4S: Watershed #4S Runoff Area=13,684 sf Runoff Depth=1.97"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.42 cfs 0.052 af

Subcatchment 5S: Watershed #5S Runoff Area=2,270 sf Runoff Depth=2.13"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.13 cfs 0.009 af

Reach 1R: Reach 1R Peak Depth=0.33' Max Vel=3.6 fps Inflow=1.21 cfs 0.131 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=1.16 cfs 0.131 af

Pond 1P: Wet Pond 1P Peak Elev=197.36' Storage=569 cf Inflow=3.03 cfs 0.209 af
Primary=3.03 cfs 0.164 af Secondary=0.02 cfs 0.045 af Outflow=3.05 cfs 0.209 af

Link 1L: Point of Analysis 1 Inflow=4.17 cfs 0.341 af
Primary=4.17 cfs 0.341 af

Link 2L: Point of Analysis 2 Inflow=0.46 cfs 0.061 af
Primary=0.46 cfs 0.061 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.401 af Average Runoff Depth = 3.16"

Subcatchment 1S: Watershed #1S

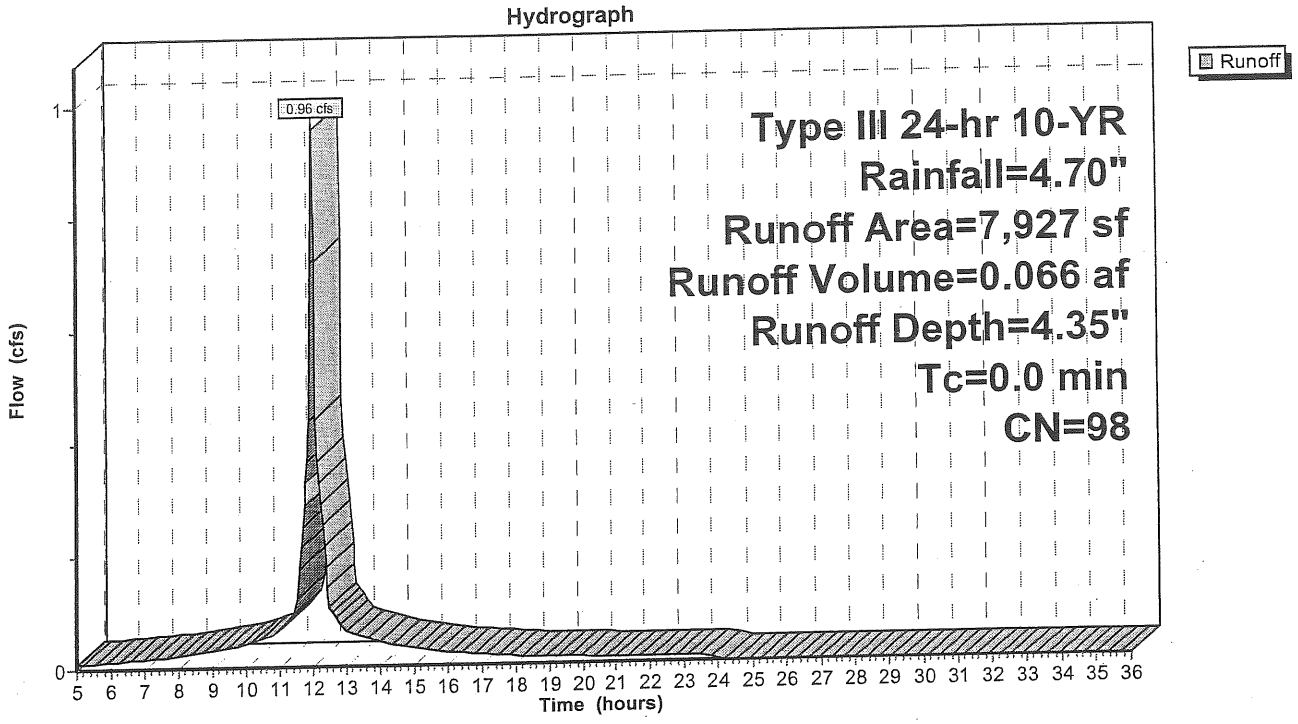
Runoff = 0.96 cfs @ 12.00 hrs, Volume= 0.066 af, Depth= 4.35"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
7,927	98	Existing Building

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

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

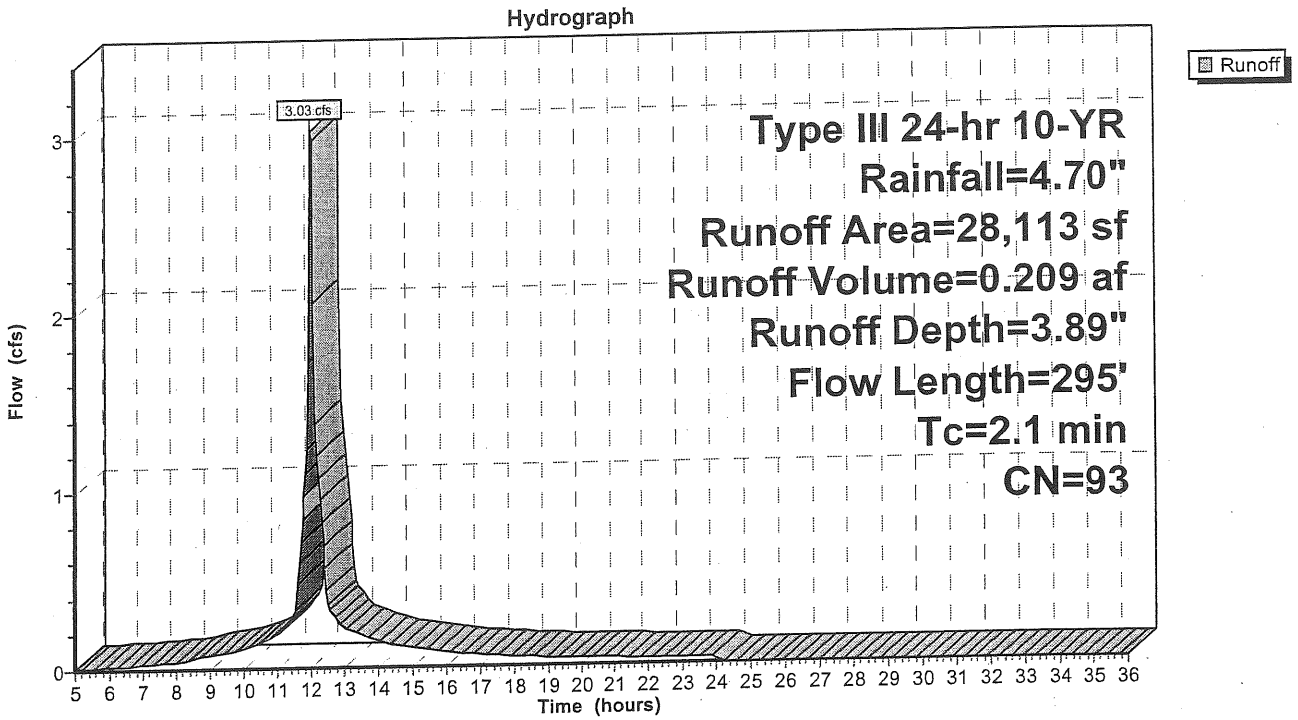
Runoff = 3.03 cfs @ 12.04 hrs, Volume= 0.209 af, Depth= 3.89"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
22,759	98	Impervious Coverage
5,354	74	Landscaped Areas
28,113	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	44	0.0210	1.2		**Sheet Flow, Sheet Flow A-B** Smooth surfaces n= 0.011 P2= 3.00"
0.8	150	0.0210	2.9		**Shallow Concentrated Flow, Shallow Concentrated A-B** Paved Kv= 20.3 fps
0.5	53	0.0750	1.9		**Shallow Concentrated Flow, Shallow Concentrated B-C** Short Grass Pasture Kv= 7.0 fps
0.2	48	0.0417	4.1		**Shallow Concentrated Flow, Shallow Concentrated C-D** Paved Kv= 20.3 fps
2.1	295	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

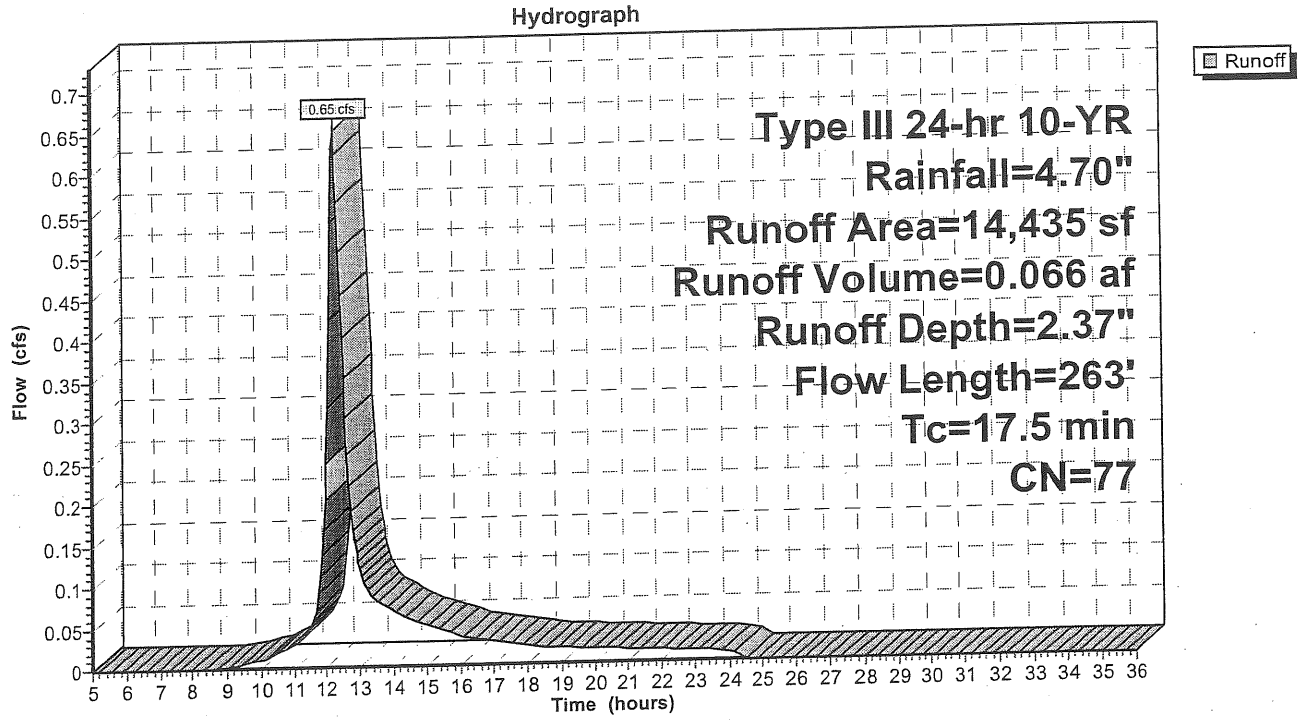
Runoff = 0.65 cfs @ 12.25 hrs, Volume= 0.066 af, Depth= 2.37"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
11,504	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
14,435	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.1	150	0.0867	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
17.5	263	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

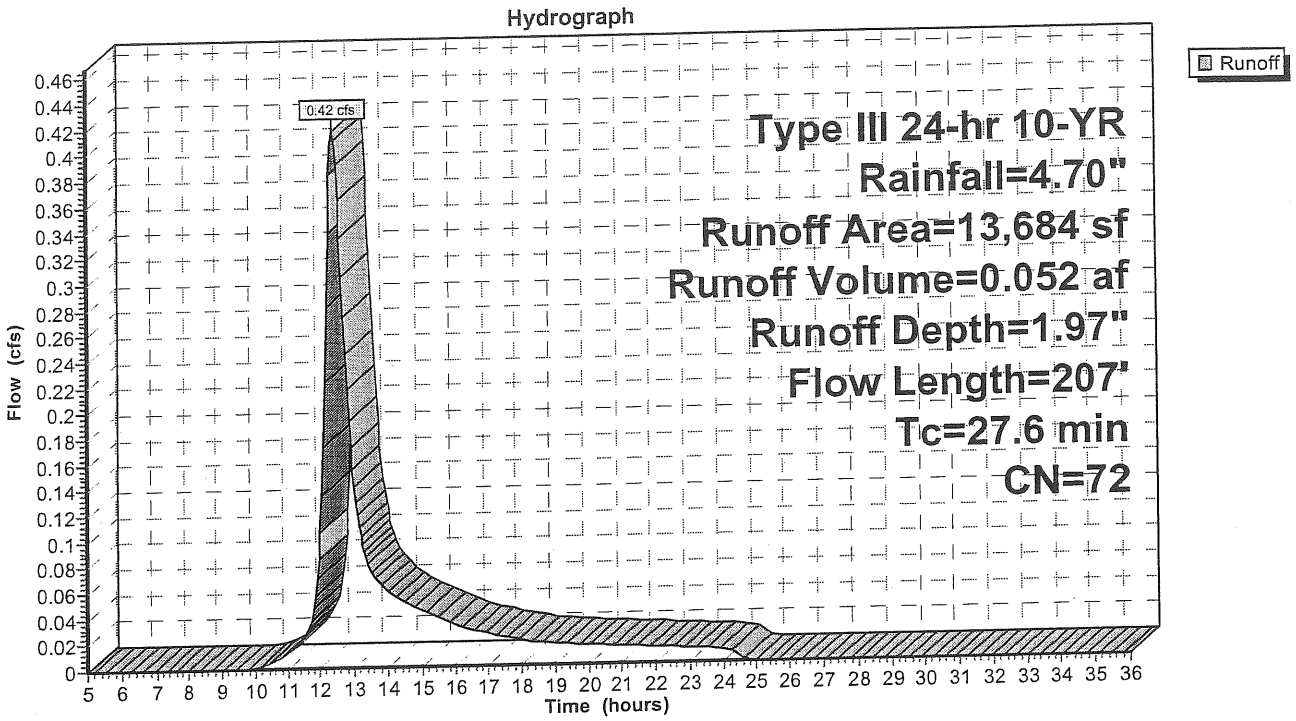
Runoff = 0.42 cfs @ 12.40 hrs, Volume= 0.052 af, Depth= 1.97"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
13,684	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

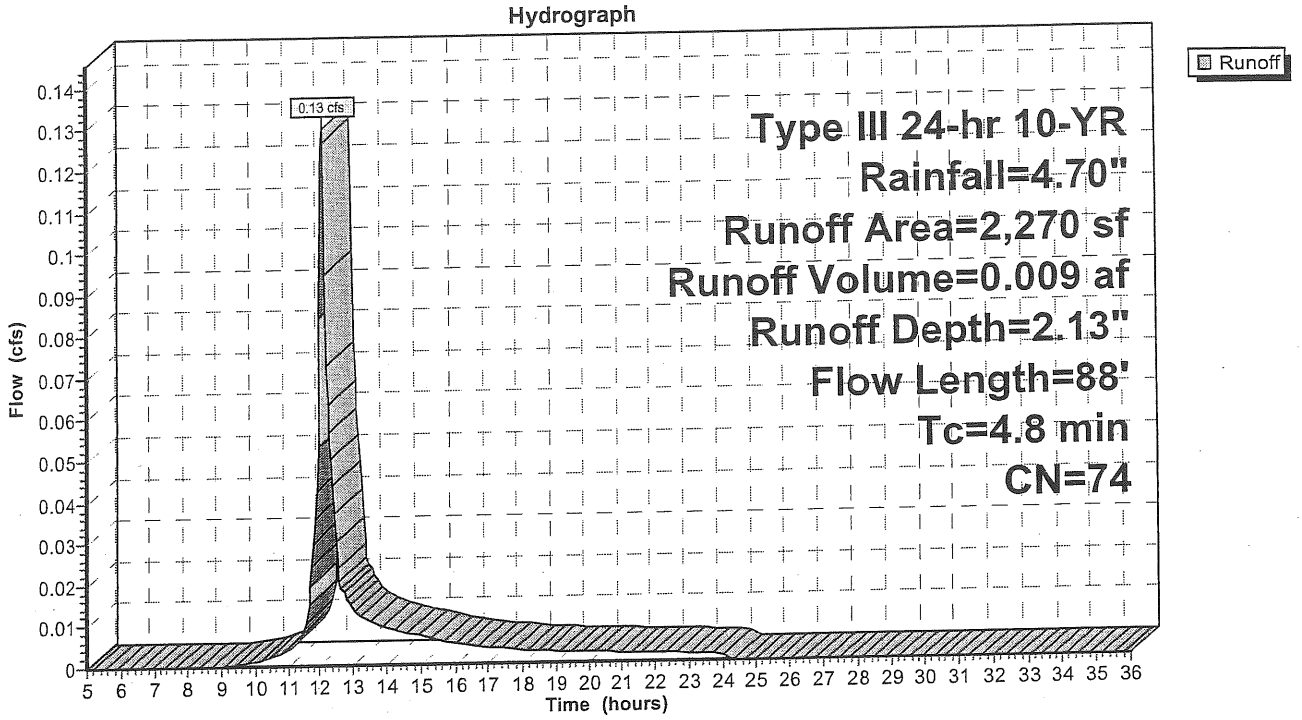
Runoff = 0.13 cfs @ 12.08 hrs, Volume= 0.009 af, Depth= 2.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.70"

Area (sf)	CN	Description
2,270	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



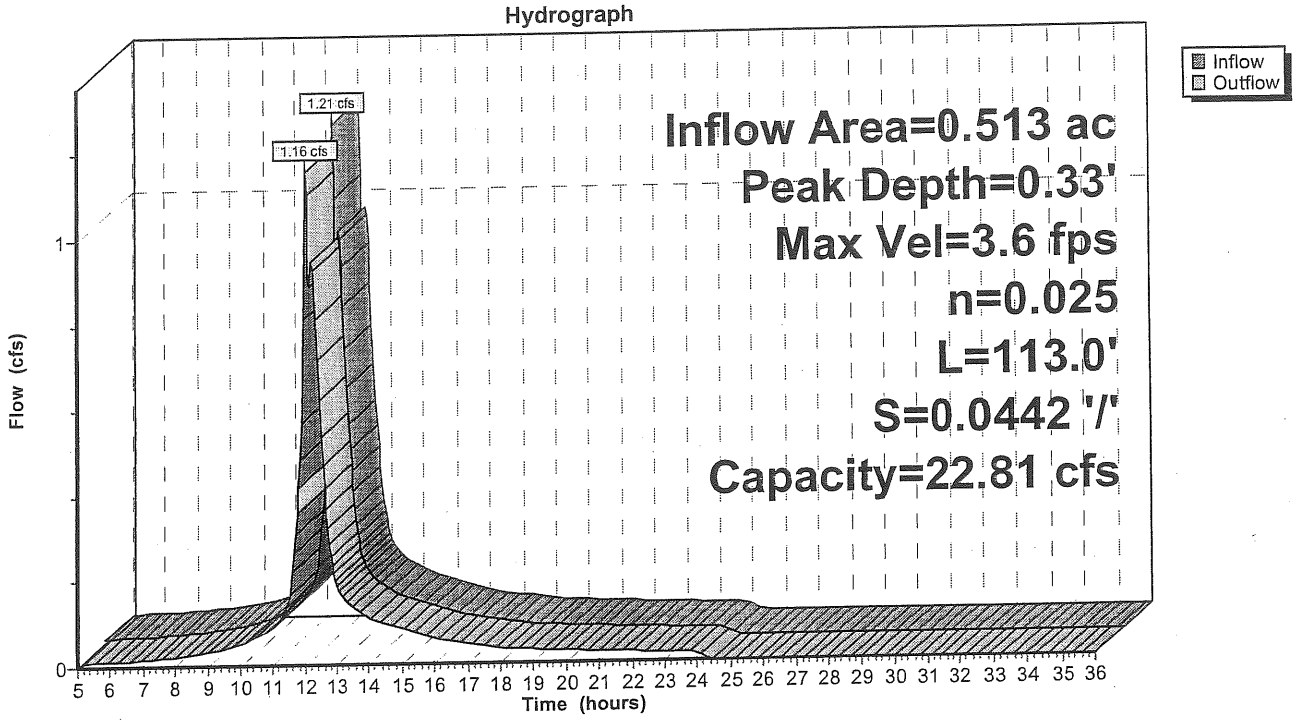
Reach 1R: Reach 1R

Inflow Area = 0.513 ac, Inflow Depth = 3.07" for 10-YR event
Inflow = 1.21 cfs @ 12.01 hrs, Volume= 0.131 af
Outflow = 1.16 cfs @ 12.02 hrs, Volume= 0.131 af, Atten= 4%, Lag= 0.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.6 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.6 fps, Avg. Travel Time= 1.2 min

Peak Depth= 0.33' @ 12.01 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



Pond 1P: Wet Pond 1P

Inflow Area = 0.645 ac, Inflow Depth = 3.89" for 10-YR event
Inflow = 3.03 cfs @ 12.04 hrs, Volume= 0.209 af
Outflow = 3.05 cfs @ 12.04 hrs, Volume= 0.209 af, Atten= 0%, Lag= 0.4 min
Primary = 3.03 cfs @ 12.04 hrs, Volume= 0.164 af
Secondary = 0.02 cfs @ 9.95 hrs, Volume= 0.045 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 197.36' @ 12.04 hrs Surf.Area= 421 sf Storage= 569 cf
Plug-Flow detention time= 51.7 min calculated for 0.209 af (100% of inflow)
Center-of-Mass det. time= 52.0 min (830.4 - 778.5)

#	Invert	Avail.Storage	Storage Description
1	196.00'	838 cf	**Custom Stage Data (Prismatic)** Listed below

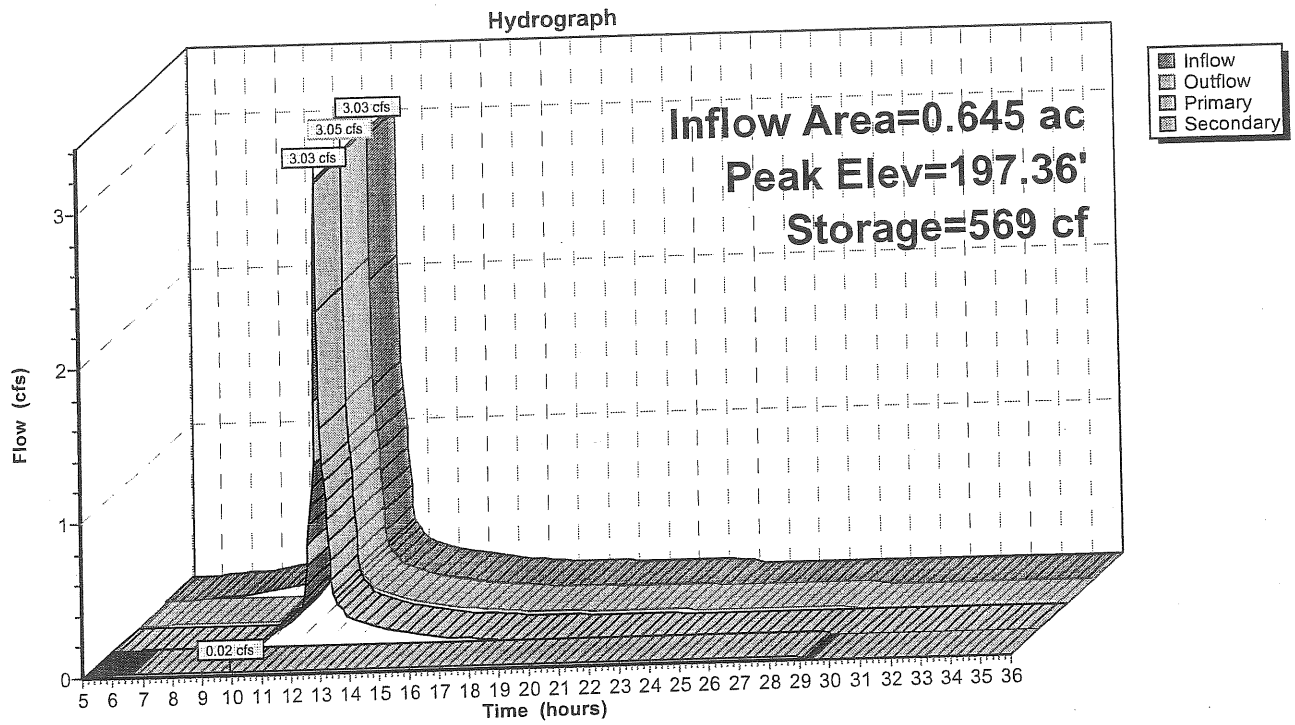
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	412	0	0
197.00	421	417	417
198.00	421	421	838

#	Routing	Invert	Outlet Devices
1	Primary	197.00'	**Special (user-defined)**
			Head (feet) 0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50
			Disch. (cfs) 0.00 0.02 0.07 0.15 0.49 1.02 1.76 2.74 3.97 5.49 7.31
2	Secondary	0.00'	**0.003340 fpm Exfiltration over entire Surface area**

Primary OutFlow Max=2.93 cfs @ 12.04 hrs HW=197.36' (Free Discharge)
↑—**1=Special (user-defined)** (Custom Controls 2.93 cfs)

Secondary OutFlow Max=0.02 cfs @ 9.95 hrs HW=197.01' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Pond 1P: Wet Pond 1P



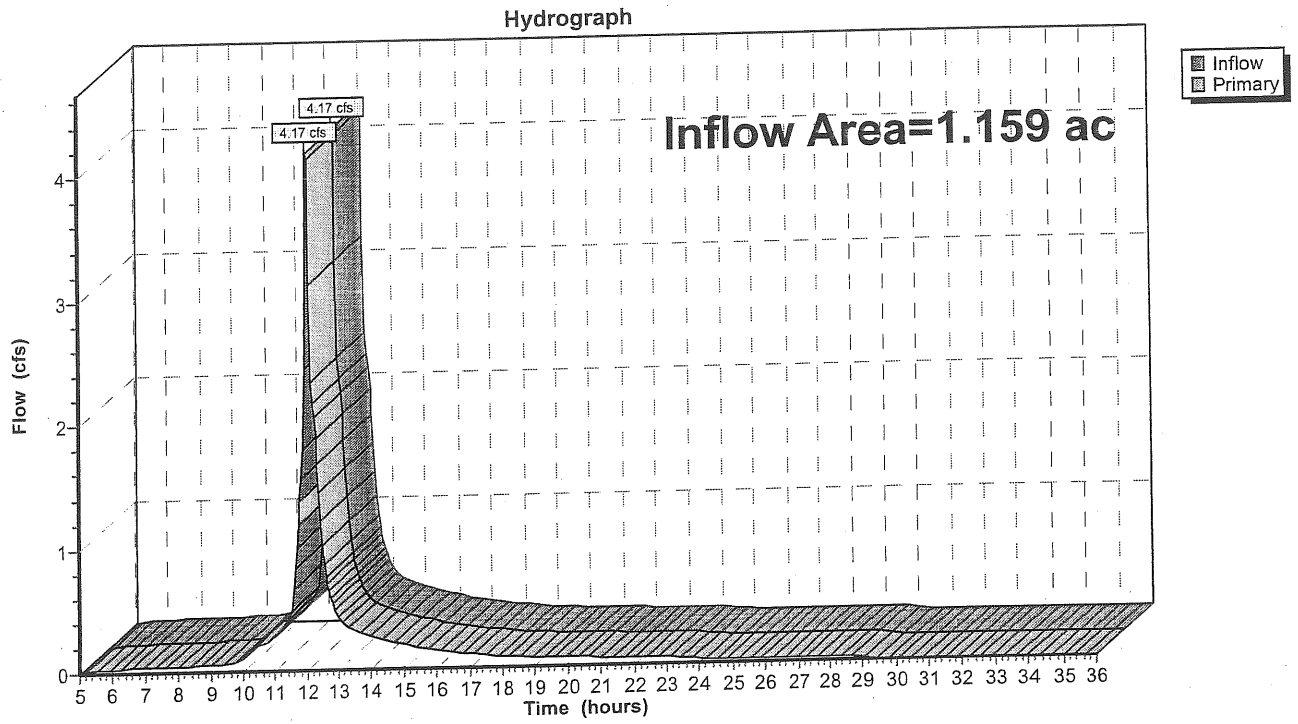
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area = 1.159 ac, Inflow Depth = 3.53" for 10-YR event
Inflow = 4.17 cfs @ 12.04 hrs, Volume= 0.341 af
Primary = 4.17 cfs @ 12.04 hrs, Volume= 0.341 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

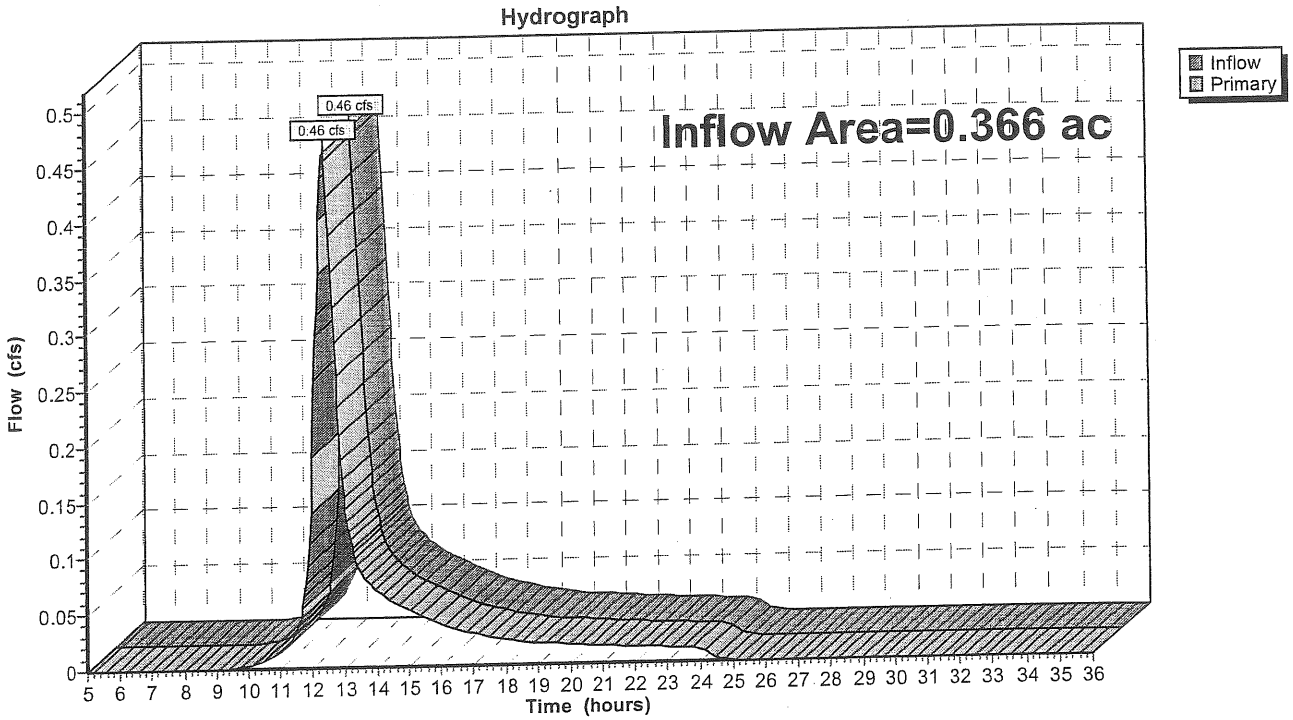


Link 2L: Point of Analysis 2

Inflow Area = 0.366 ac, Inflow Depth = 1.99" for 10-YR event
Inflow = 0.46 cfs @ 12.38 hrs, Volume= 0.061 af
Primary = 0.46 cfs @ 12.38 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Time span=5.00-36.00 hrs, dt=0.05 hrs, 621 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Watershed #1S Runoff Area=7,927 sf Runoff Depth=5.11"
Tc=0.0 min CN=98 Runoff=1.12 cfs 0.077 af

Subcatchment 2S: Watershed #2S Runoff Area=28,113 sf Runoff Depth=4.66"
Flow Length=295' Tc=2.1 min CN=93 Runoff=3.61 cfs 0.251 af

Subcatchment 3S: Watershed #3S Runoff Area=14,435 sf Runoff Depth=3.05"
Flow Length=263' Tc=17.5 min CN=77 Runoff=0.84 cfs 0.084 af

Subcatchment 4S: Watershed #4S Runoff Area=13,684 sf Runoff Depth=2.59"
Flow Length=207' Tc=27.6 min CN=72 Runoff=0.55 cfs 0.068 af

Subcatchment 5S: Watershed #5S Runoff Area=2,270 sf Runoff Depth=2.77"
Flow Length=88' Tc=4.8 min CN=74 Runoff=0.17 cfs 0.012 af

Reach 1R: Reach 1R Peak Depth=0.36' Max Vel=3.8 fps Inflow=1.46 cfs 0.162 af
n=0.025 L=113.0' S=0.0442 '/' Capacity=22.81 cfs Outflow=1.40 cfs 0.162 af

Pond 1P: Wet Pond 1P Peak Elev=197.38' Storage=579 cf Inflow=3.61 cfs 0.251 af
Primary=3.60 cfs 0.205 af Secondary=0.02 cfs 0.046 af Outflow=3.62 cfs 0.251 af

Link 1L: Point of Analysis 1 Inflow=4.98 cfs 0.412 af
Primary=4.98 cfs 0.412 af

Link 2L: Point of Analysis 2 Inflow=0.61 cfs 0.080 af
Primary=0.61 cfs 0.080 af

Total Runoff Area = 1.525 ac Runoff Volume = 0.492 af Average Runoff Depth = 3.87"

Subcatchment 1S: Watershed #1S

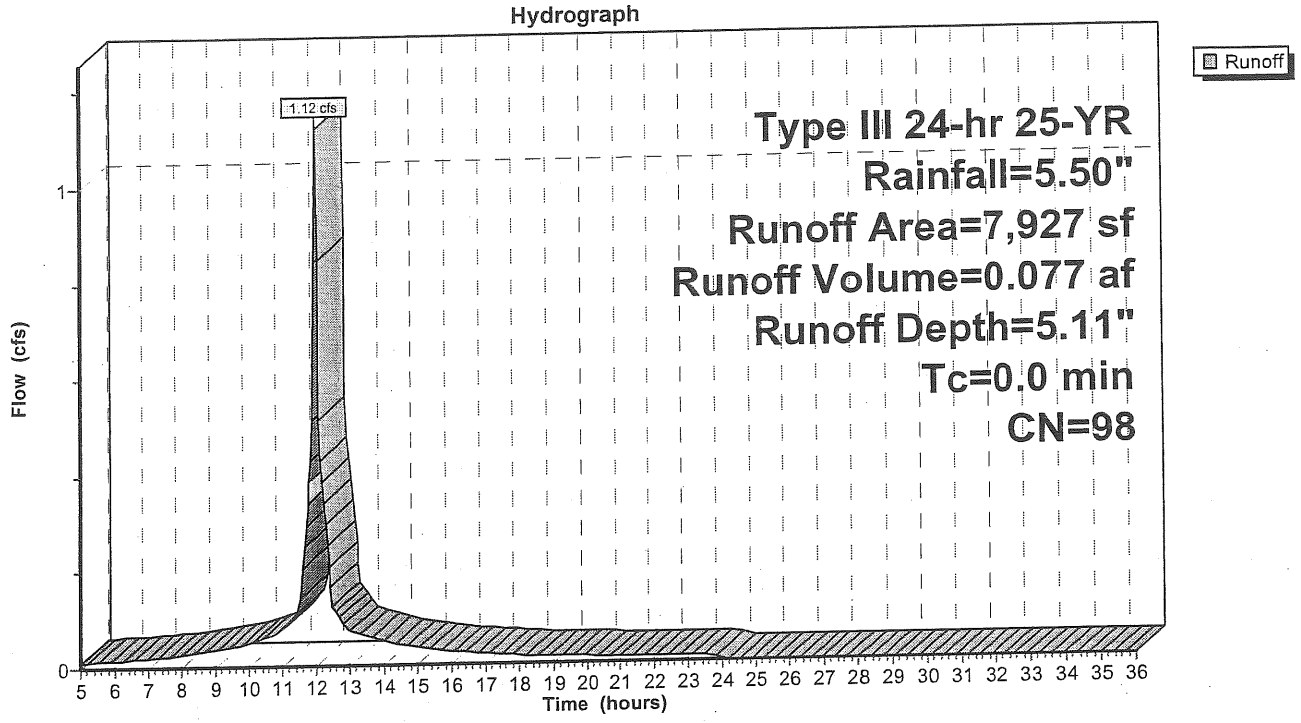
Runoff = 1.12 cfs @ 12.00 hrs, Volume= 0.077 af, Depth= 5.11"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
7,927	98	Existing Building

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.0					**Direct Entry, Direct Entry into Swale**

Subcatchment 1S: Watershed #1S



Subcatchment 2S: Watershed #2S

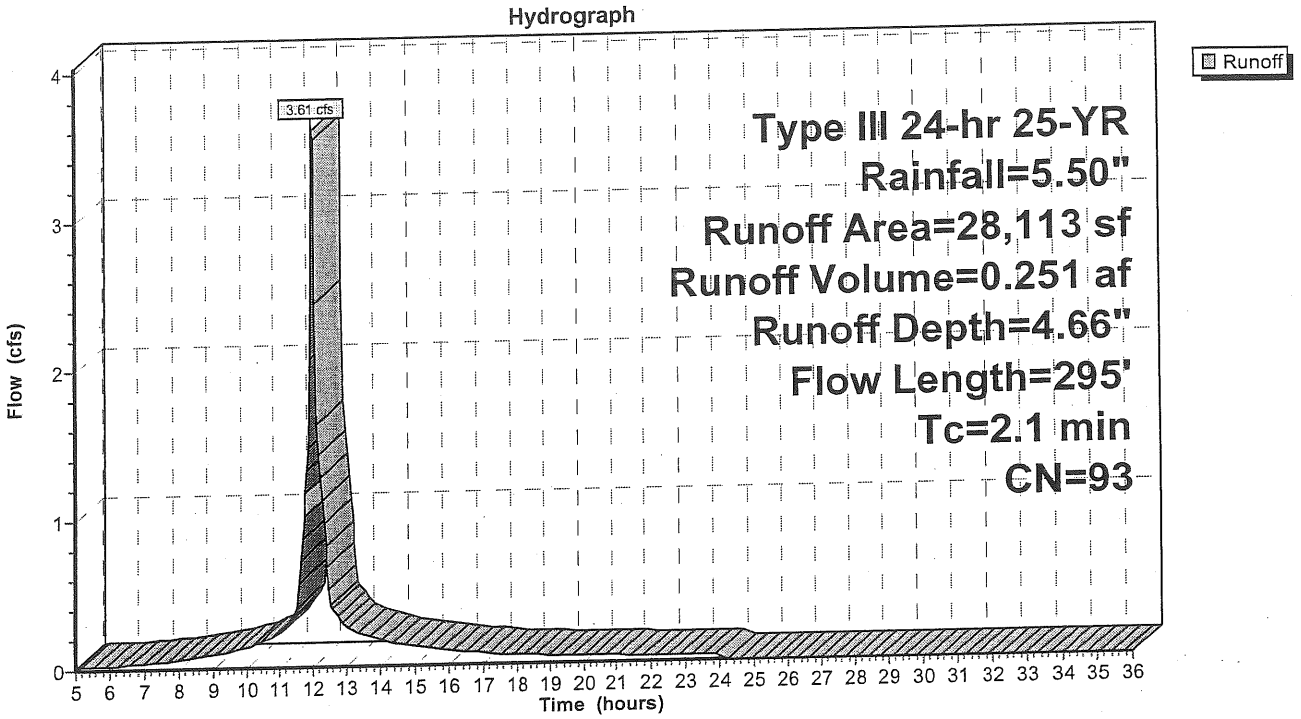
Runoff = 3.61 cfs @ 12.04 hrs, Volume= 0.251 af, Depth= 4.66"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
22,759	98	Impervious Coverage
5,354	74	Landscaped Areas
28,113	93	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	44	0.0210	1.2		**Sheet Flow, Sheet Flow A-B** Smooth surfaces n= 0.011 P2= 3.00"
0.8	150	0.0210	2.9		**Shallow Concentrated Flow, Shallow Concentrated A-B** Paved Kv= 20.3 fps
0.5	53	0.0750	1.9		**Shallow Concentrated Flow, Shallow Concentrated B-C** Short Grass Pasture Kv= 7.0 fps
0.2	48	0.0417	4.1		**Shallow Concentrated Flow, Shallow Concentrated C-D** Paved Kv= 20.3 fps
2.1	295	Total			

Subcatchment 2S: Watershed #2S



Subcatchment 3S: Watershed #3S

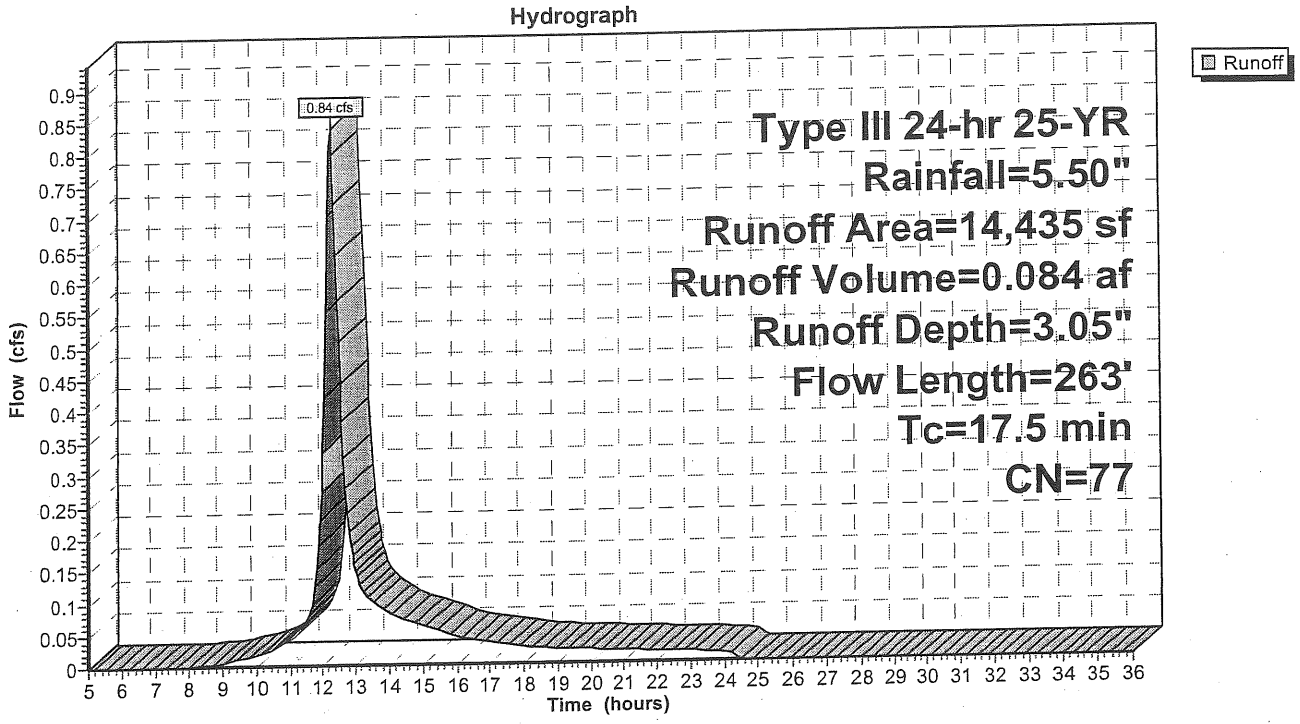
Runoff = 0.84 cfs @ 12.24 hrs, Volume= 0.084 af, Depth= 3.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
11,504	72	Woods/grass comb., Good, HSG C
2,931	98	Existing Pavement
14,435	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.1	150	0.0867	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
0.4	113	0.0440	4.9	14.60	**Channel Flow, Channel Flow Reach 1R** Area= 3.0 sf Perim= 12.3' r= 0.24' n= 0.025
17.5	263	Total			

Subcatchment 3S: Watershed #3S



Subcatchment 4S: Watershed #4S

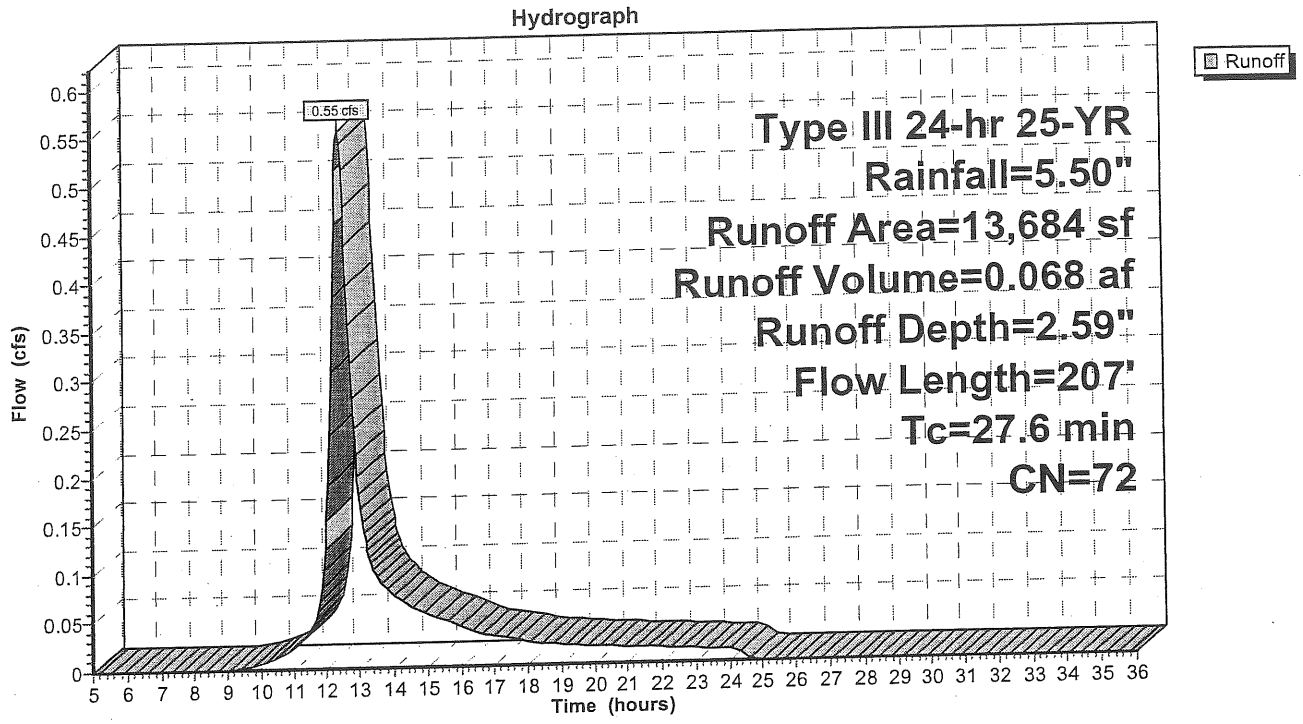
Runoff = 0.55 cfs @ 12.39 hrs, Volume= 0.068 af, Depth= 2.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
13,684	72	Woods/grass comb., Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
26.5	150	0.0289	0.1		**Sheet Flow, Sheet Flow A-B** Woods: Light underbrush n= 0.400 P2= 3.00"
1.1	57	0.0289	0.8		**Shallow Concentrated Flow, Shallow Concentrated A-B** Woodland Kv= 5.0 fps
27.6	207	Total			

Subcatchment 4S: Watershed #4S



Subcatchment 5S: Watershed #5S

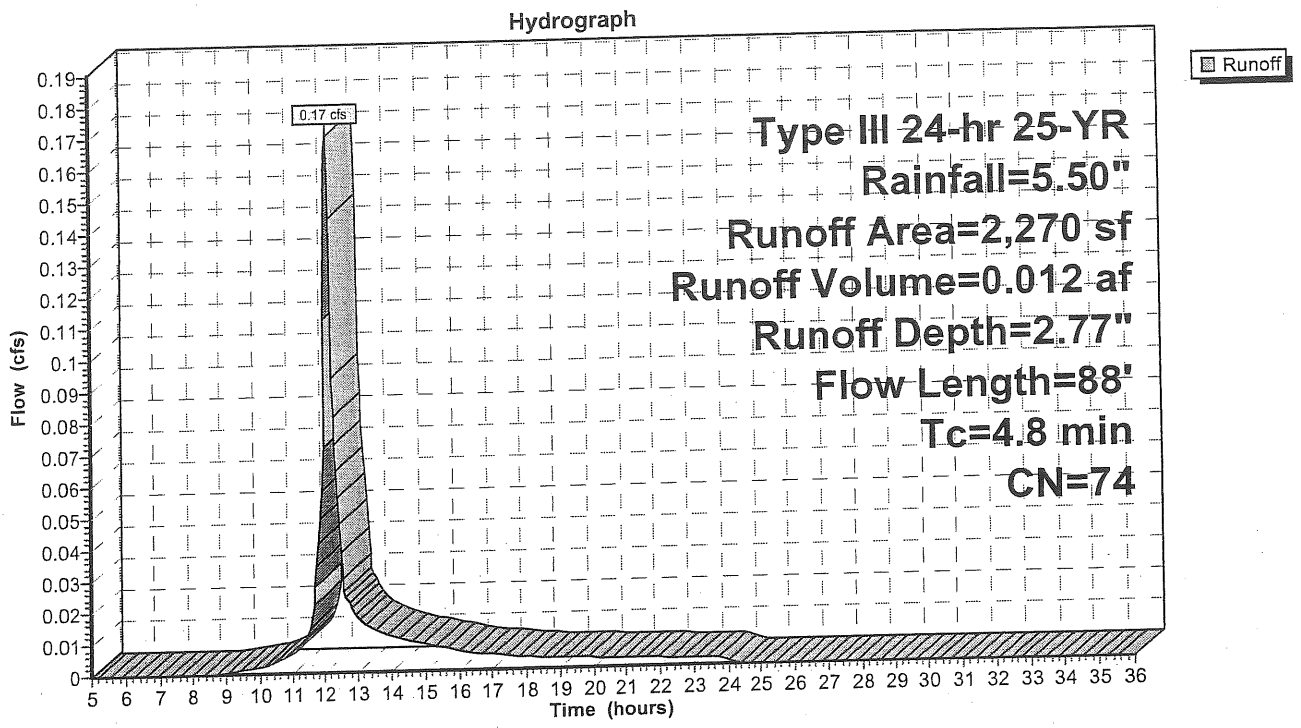
Runoff = 0.17 cfs @ 12.08 hrs, Volume= 0.012 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.50"

Area (sf)	CN	Description
2,270	74	Pasture/grassland/range, Good, HSG C

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.8	88	0.1020	0.3		**Sheet Flow, Sheet Flow A-B** Grass: Short n= 0.150 P2= 3.00"

Subcatchment 5S: Watershed #5S



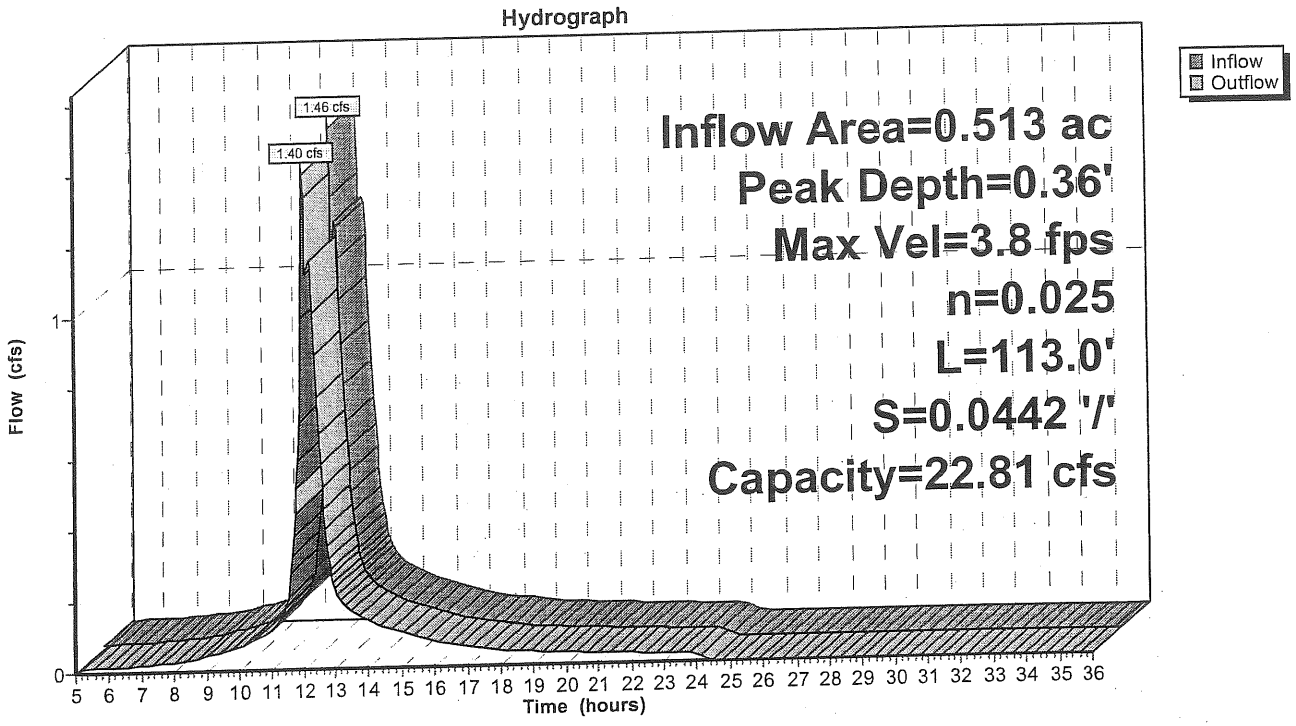
Reach 1R: Reach 1R

Inflow Area = 0.513 ac, Inflow Depth = 3.78" for 25-YR event
Inflow = 1.46 cfs @ 12.01 hrs, Volume= 0.162 af
Outflow = 1.40 cfs @ 12.02 hrs, Volume= 0.162 af, Atten= 4%, Lag= 0.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.8 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 1.7 fps, Avg. Travel Time= 1.1 min

Peak Depth= 0.36' @ 12.01 hrs
Capacity at bank full= 22.81 cfs
Inlet Invert= 203.00', Outlet Invert= 198.00'
0.00' x 1.00' deep channel, n= 0.025 Length= 113.0' Slope= 0.0442 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: Reach 1R



Pond 1P: Wet Pond 1P

Inflow Area = 0.645 ac, Inflow Depth = 4.66" for 25-YR event
Inflow = 3.61 cfs @ 12.04 hrs, Volume= 0.251 af
Outflow = 3.62 cfs @ 12.04 hrs, Volume= 0.251 af, Atten= 0%, Lag= 0.4 min
Primary = 3.60 cfs @ 12.04 hrs, Volume= 0.205 af
Secondary = 0.02 cfs @ 9.40 hrs, Volume= 0.046 af

Routing by Stor-Ind method, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs
Peak Elev= 197.38' @ 12.04 hrs Surf.Area= 421 sf Storage= 579 cf
Plug-Flow detention time= 45.6 min calculated for 0.251 af (100% of inflow)
Center-of-Mass det. time= 45.4 min (820.2 - 774.9)

#	Invert	Avail.Storage	Storage Description
1	196.00'	838 cf	**Custom Stage Data (Prismatic)** Listed below

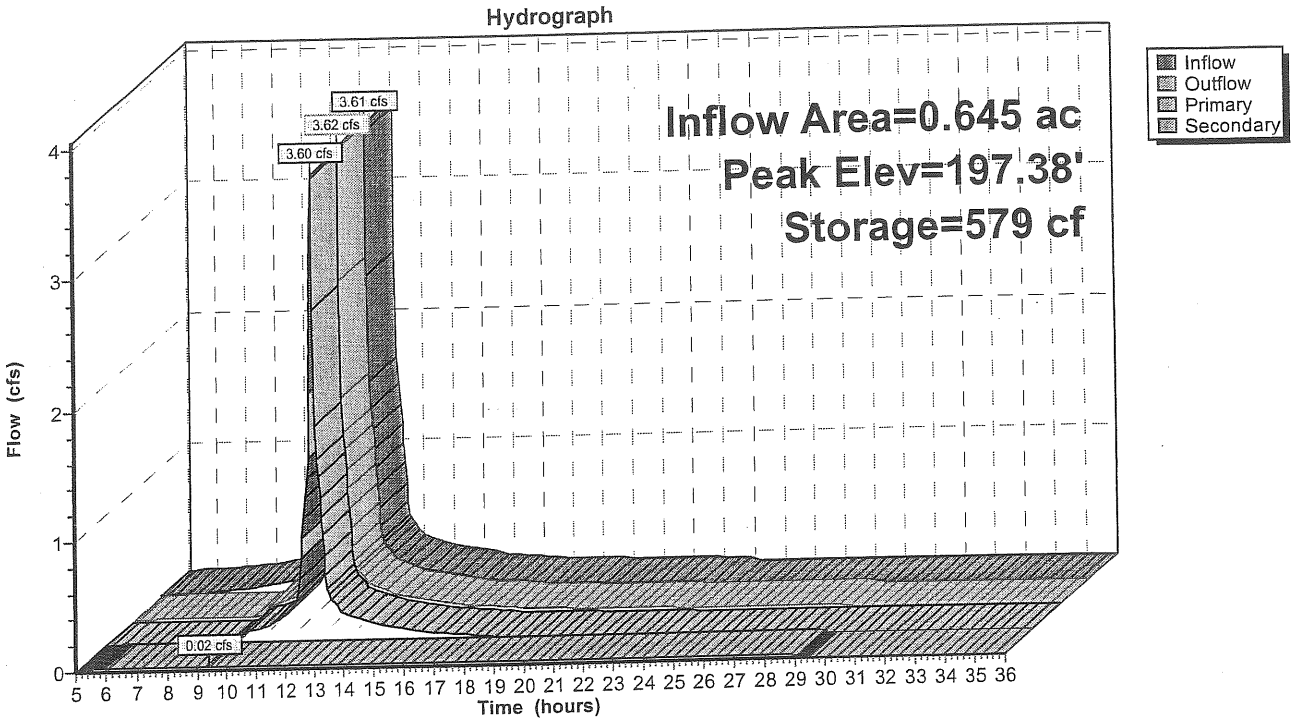
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
196.00	412	0	0
197.00	421	417	417
198.00	421	421	838

#	Routing	Invert	Outlet Devices
1	Primary	197.00'	**Special (user-defined)**
			Head (feet) 0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50
			Disch. (cfs) 0.00 0.02 0.07 0.15 0.49 1.02 1.76 2.74 3.97 5.49 7.31
2	Secondary	0.00'	**0.003340 fpm Exfiltration over entire Surface area**

Primary OutFlow Max=3.49 cfs @ 12.04 hrs HW=197.38' (Free Discharge)
↑—**1=Special (user-defined)** (Custom Controls 3.49 cfs)

Secondary OutFlow Max=0.02 cfs @ 9.40 hrs HW=197.03' (Free Discharge)
↑—**2=Exfiltration** (Exfiltration Controls 0.02 cfs)

Pond 1P: Wet Pond 1P



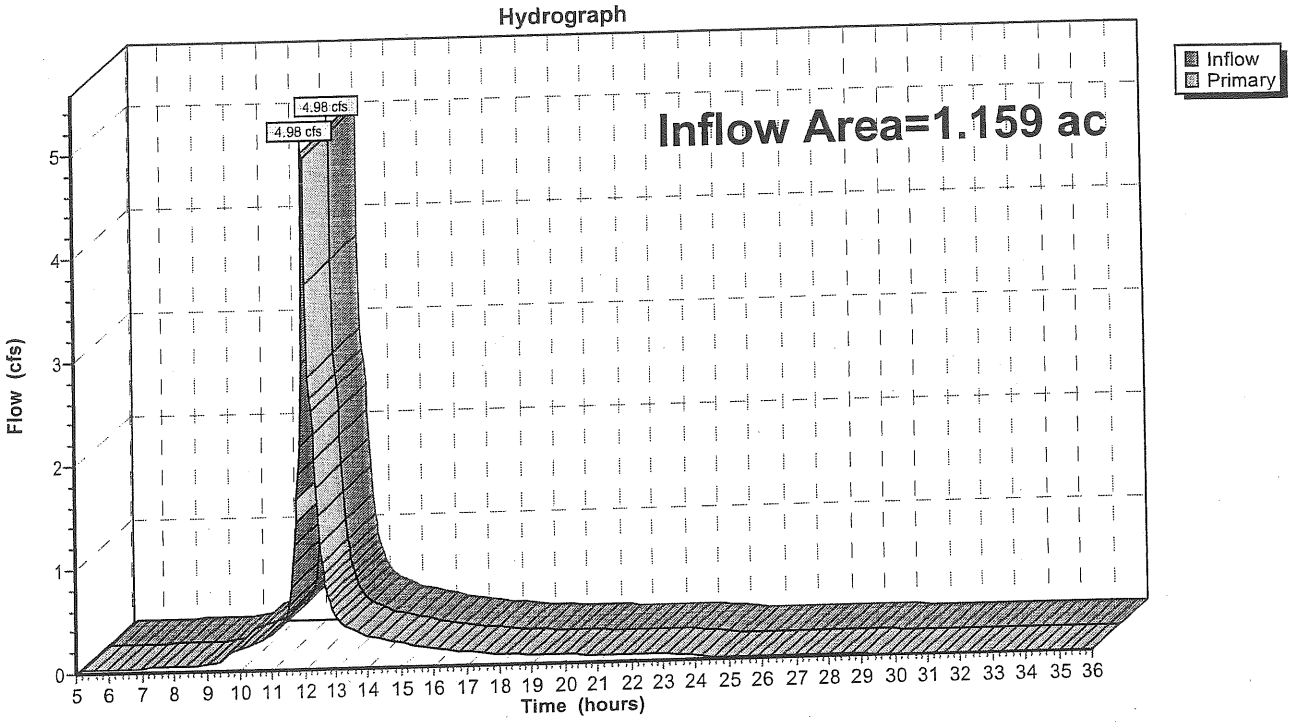
Link 1L: Point of Analysis 1

Offsite Discharge of Watershed #1S.

Inflow Area	=	1.159 ac,	Inflow Depth =	4.27"	for 25-YR event
Inflow	=	4.98 cfs @	12.04 hrs,	Volume=	0.412 af
Primary	=	4.98 cfs @	12.04 hrs,	Volume=	0.412 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 1L: Point of Analysis 1

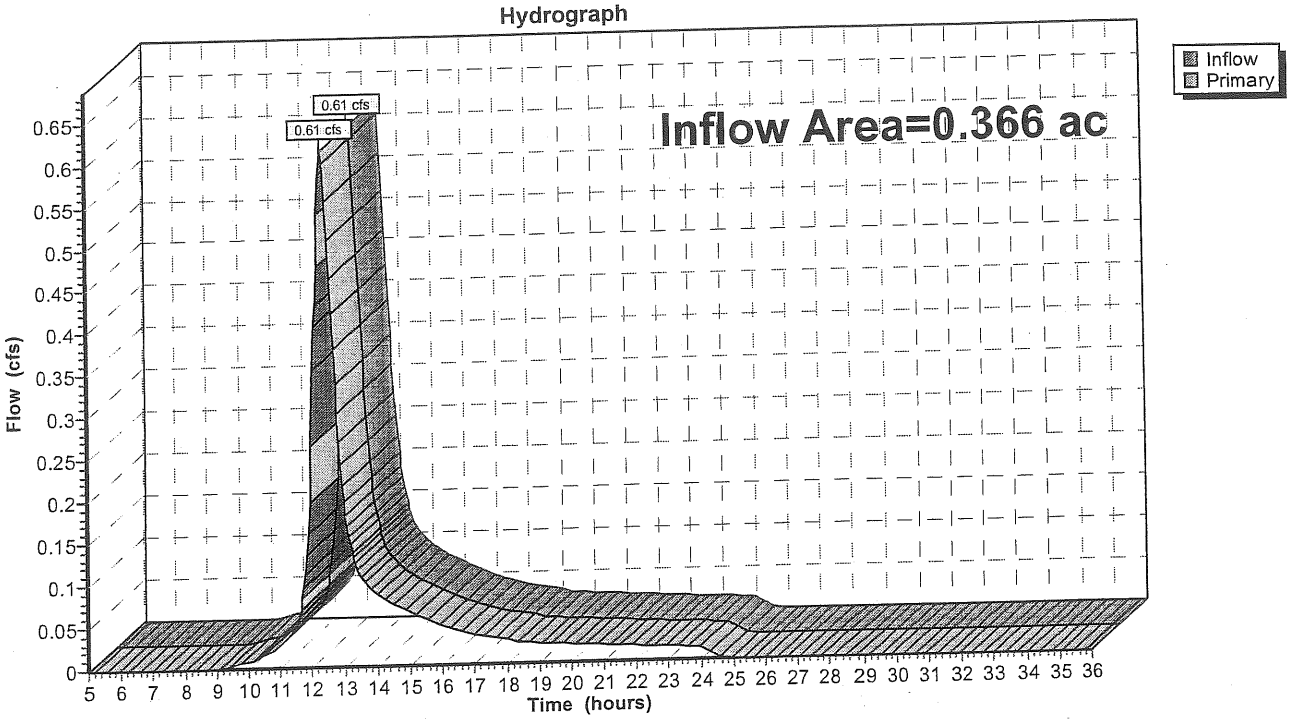


Link 2L: Point of Analysis 2

Inflow Area = 0.366 ac, Inflow Depth = 2.62" for 25-YR event
Inflow = 0.61 cfs @ 12.37 hrs, Volume= 0.080 af
Primary = 0.61 cfs @ 12.37 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-36.00 hrs, dt= 0.05 hrs

Link 2L: Point of Analysis 2



Planning & Urban Development Department
Penny St. Louis Littell, Director

October 21, 2008

Pete Kostopoulos
2320 Congress Street LLC
2320 Congress Street
Portland ME. 04102

Re: Condition of Approval re Sidewalk: **2320 Congress Street**
ID#2006-0080
CBL#237 A009001

Dear Mr Kostopoulos:

Further to your conversation with Phil DiPierro on October 20, 2008, the City understands you would like us to withdraw $5,500 from the performance guarantee you have on file with the City to satisfy the outstanding Condition iii of your approval namely, the requirement that a 5 foot wide bituminous asphalt sidewalk be constructed along Congress Street (on the opposite side of the street from the site) for a distance of at least 250 feet as shown on the approved plan, the precise location as approved by the City's Traffic Engineer.

We are happy to accommodate in this regard, and to thereafter reduce your performance guarantee to the defect guarantee and to issue a Certificate of Occupancy for the building. Please indicate your consent to this course of action by signing a copy of this letter on the line provided below and returning it to Phil DiPierro in the Planning Division.

Should you have any questions please telephone me (207) 874 8728 or Phil DiPierro (207) 874 8632.

Sincerely,

Jean Fraser

Jean Fraser
Planner

Seen and Agreed
Pete Kostopoulos as agent for
2320 Congress Street LLC

as of Oct. 23 expected it will be signed + returned Brown phoned me + Phil OK file copy

cc.
Penny Littell, Director, Planning and Urban Development
Barbara Barhydt, Development Review Manager
Katherine Earley, Engineering Services Manager
Jennifer Dorr, Planning Office Manager
Alex Jaegerman, Planning Division Director
Phil DiPierro, DRC
Building Inspections Division
Project file

PORTLAND MAINE

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Planning & Urban Development Department
Penny St. Louis Littell, Director

October 21, 2008

as sent.

Pete Kostopoulos
2320 Congress Street LLC
2320 Congress Street
Portland ME. 04102

Re: Condition of Approval re Sidewalk: **2320 Congress Street**
ID#2006-0080
CBL#237 A009001

Dear Mr Kostopoulos:

Further to your conversation with Phil DiPierro on October 20, 2008, the City understands you would like us to withdraw $5,500 from the performance guarantee you have on file with the City to satisfy the outstanding Condition iii of your approval namely, the requirement that a 5 foot wide bituminous asphalt sidewalk be constructed along Congress Street (on the opposite side of the street from the site) for a distance of at least 250 feet as shown on the approved plan, the precise location as approved by the City's Traffic Engineer.

We are happy to accommodate in this regard, and to thereafter reduce your performance guarantee to the defect guarantee and to issue a Certificate of Occupancy for the building. Please indicate your consent to this course of action by signing a copy of this letter on the line provided below and returning it to Phil DiPierro in the Planning Division.

Should you have any questions please telephone me (207) 874 8728 or Phil DiPierro (207) 874 8632.

Sincerely,

Jean Fraser

Jean Fraser
Planner

_____

Seen and Agreed
Pete Kostopoulos as agent for
2320 Congress Street LLC

cc.
Penny Littell, Director, Planning and Urban Development
Barbara Barhydt, Development Review Manager
Katherine Earley, Engineering Services Manager
Jennifer Dorr, Planning Office Manager
Alex Jaegerman, Planning Division Director
Phil DiPierro, DRC
Building Inspections Division
Project file

C:\Documents and Settings\jf\Desktop\2320CongressStreet01021208.doc

O drive ref.

Ref: 2300 Congress St.

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Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

November 2, 2007

Pete Kostopoulos
2320 Congress Street LLC
2320 Congress Street
Portland ME. 04102

Re: Conditions of Approval: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

Dear Mr Kostopoulos:

Further to my letter of May 25, 2007 and recent discussions regarding the Certificate of Occupancy, I am writing to suggest a way forward regarding compliance with one of the conditions included in the Site Plan approval for this project as dated August 3, 2006.

Condition iii states:

iii. The applicant shall provide a 5 foot wide bituminous asphalt sidewalk along Congress Street (on the opposite side of the street from the site) for a distance of at least 250 feet as shown on the approved plan, the precise location of the western terminus, location within the ROW, and design details to be agreed with the City Engineer to take account of existing topography and drainage.

The City's Traffic Engineer and MDOT have concluded that the sidewalk along this stretch of Congress Street (north side) must be constructed in conjunction with curbing because of the narrow right of way and difficulty of setting the sidewalk away from the travel lanes.

Therefore the City is offering to manage the construction of the sidewalk and curbing at this location as one project. This would allow the above condition to be met through a contribution of $5,500 to the City, which is the cost of constructing the sidewalk as described in the condition. In order to keep the accounts straight, this would be payable by check (via me) and then Phil DiPierro would arrange for the release of any monies owing you in relation to the Performance Guarantee.

Please telephone me (207) 874 8728 or Phil DiPierro (207) 874 8632 to confirm that this approach is acceptable to you and so we can make arrangements for settling accounts in relation to this project.

Sincerely,

Jean Fraser

Jean Fraser
Planner

cc.
Barbara Barhydt, Development Review Manager
Katherine Earley, Engineering Services Manager
Mike Farmer, Project Engineer
Jim Carmody, Transportation Engineer
Jeanie Bourke, Inspections
Phil DiPierro, DRC

O:\PLAN\DEVREVW\Congress 2320\Re Sidewalk SSS 11.02.2007.doc

From: Jean Fraser
To: DiPierro , Philip
Date: 7/16/2007 12:16:24 PM
Subject: 2320 congress street (Mortgage Co)

(this is next door to MTA going east)

Phil,

Further to our discussions on this and your note to the applicant of the many small items that have not been completed.

Pete Kostopolos (applicant) came in the AM and wanted to discuss all the items on your list with me.

This is what I said:

Dumpster: they need to show the location and enclosure and do this (he said he would do)
Striping: technically they should do this as shown on the plan but that by the handicapped spaces most important; rest is up to you
Detention Bio Cell: He said they have lowered it; my view is that is needs to 'work' and Dan Goyette or maybe PW need to determine whether it will meet the drainage needs and sign off. Pete said they found a gas main and a sewer in that area which necessitated redesign....
Landscaped island: He said he would be willing to do something and then asked what? I said I would look on site and speak to Jeff.
Concrete car stops: I have no view on these but didn't agree with him that they could replace wooden guardrail
Wooden Guardrail: I indicated this was an explicit request from the city during the review and therefore there needed to be a reason for their omission. He said that his engineers had advised him that the guardrail (together with the bio cell, sewer and gas mains) would result in no space for vegetation and therefore they substituted the concrete stops. I said that I would go and look at it and talk again to Jeff at Dev rev this Wed so that is unresolved.

Cumulatively there are quite a few changes and I think we need to ask Barbara whether we need to have them submit an amendment application...he seems to think that an as built plan given to you is all that is required. It may depend on what Jeff and I determine is appropriate re the landscape island and the fencing.

I will put it on Dev Rev agenda
[Barbara- we need to be consistent re the level of change that triggers the need for an amendment applicaiton....in the past Sarah advised on that to achieve some level of consistency....]

Jean

CC: Barhydt, Barbara

7.18.07
Discussed this at Dev Rev (incl Phil D, Alex J., Jeff Tarling, Barbara B, Penny etc) and agreed:

1) Dan to look at bio retention cell to confirm "will work"
2) Concrete car stops to be removed
3) Wooden guardrail and island w/ planting to be installed as per approved plan.

From: Jean Fraser
To: Tarling , Jeff
Date: 7/16/2007 11:46:41 AM
Subject: 2320 Congress (Mortgage Co)

Jeff,

I understand that Phil spoke to you about the fact that the applicant (Pete Kostopolos) has not put in the wooden guardrail nor the island along the row of parking nearest to Congress Street.

Pete came in to see me this morning and said his engnineers had recommended strongly against the wooden fencing as it would cause the loss of vegetation to put it in (although he was happy to put in the island if we insisted).

I said I would look at the site and re-review it with you (have you been out there) as they have done quite a few things differently along Congress Street because they discovered a gas main and a sewer main right along the edge of the Parking Lot. So given that those were immovable I think we need to see where they have got to and decide what more is needed to make it OK- more planting might be better than the guardrail if they keep the concrete things to stop cars (I think there is quite a slope there).

Could you have a look on site if you have not already and we can pick thi s p at the Wed Dev Rev meeting please
Thanks
Jean

CC: DiPierro , Philip

From: Jean Fraser
To: Farmer, Michael
Date: 6/14/2007 1:42:56 PM
Subject: Congress Street sidewalks

Mike,

You may recall I gave you a set of approval letters and extracts from the approved site plans for 2300 and 2320 congress street as each of these applicants were required (in the conditions and through notes on the approved site plans) to design/layout (with you) and construct 250 feet of sidewalk on the north side of congress Street.

Their sections plus the bit by MTA will make a continuous sidewalk east of Hutchins for a considerable distance.

Re 2300 (methadone Clinic) Steve Bushey (DeLuca Hoffman)said he would be in contact withyou to walk the route and create an engineering plan.

Re 2320 (mortgage company) Pete Kostopoulas (applicant) spoke with me earlier inthe week and confirmed that he, Mike Roy of SGC Engineering plan to walk their length with you to determine the location of the sidewalk and then SGC will provide a plan (Phil- once that planis available we can estimate the costs and keep that amount within the PG until its done- as we discussed).

Mike, the reason why the actual locations for these sections of sidewalk were left for discsssion with PW Engineer is that we wnt to keep all th existing trees along the frontage and there may be places where the topography determines the location- so while an esplanade is deisreable, it was agreed during the reviews that the sidewalk could be located in the ROW at varying distances from the road to ensure trees remain (and their roots won't be compromised), drainage is achieved etc. (You may want to include Jeff Tarling inthe walks withthe applicants/engineers).

So Pete will be contacting you soon to arrange that walk (Pete wants some of his PG back and that depends on getting the plan for the sidewalk done)- please expedite not just for Pete's sake but because this stretch of sidewalk is a big part of the discussion re MTA sidewalk construction.

Pete Kostapoulis is on 939 7139 if you want to coordinate a walk with him, SGC and Steve Bushey so that these contiguous sections are done "as one".

Thanks
Jean

CC: Barhydt, Barbara; DiPierro , Philip

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Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

May 25, 2007

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Pete Kostapoulis applicant 9397139

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

I am writing to follow up on the Site Plan approval for this project dated August 3, 2006 (copy attached).

I understand that a Certificate of Occupancy has not yet been issued and will not be issued until all of the conditions have been met. My records show that to date only Condition v. has been met.

Of particular concern is Condition iii as that needs to be completed in good weather and will require further liaison with the Public Works Department to ensure the sidewalk is located and constructed to City standards. I suggest that you/applicant submit a plan to Public Works (Mike Farmer and copied to me) that shows a right-of-way survey and topographic survey of the sidewalk construction area and the proposed sidewalk construction specifications and precise location. Once this is reviewed and approved the construction should be undertaken as soon as possible.

The development adjacent to this one (at 2300 Congress Street) is also responsible for constructing approximately 250 feet of sidewalk to the east of this one and connected to it; there may be some benefit if the construction program was coordinated. The agent for that section of sidewalk is Steve Bushey of Deluca Hoffman.

If you have any questions, please do not hesitate to contact me on (207) 874 8728.

Sincerely,

Jean Fraser
Planner

Enclosure: Approval letter dated August 3, 2006

Cc: (*continued next page*)

Barbara Barhydt, Development Review Manager
Katherine Earley, Engineering Services Manager
Mike Farmer, Project Engineer
Jim Carmody, Transportation Engineer
Jeanie Bourke, Inspections
Phil DiPierro, DRC
Jeff Tarling, City Arborist

Applicant: Pete Kostopoulos c/o 2320 Congress Street LLC
2320 Congress Street
Portland ME. 04102

and

158 Chute Road
Windham, ME. 04062

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Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

August 3, 2006

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

Dear Mr. Riordan,

On August 3, 2006, the Portland Planning Authority approved the proposed parking lot expansion (to a total of 48 spaces) in connection with the renovation of the existing commercial building at the above address, as shown on the approved plan with the following conditions:

i. The applicant shall place any dumpsters or other solid waste disposal receptacles at the rear of the site and enclose them with wooden fencing and/or planting so that they are not visible from the public street, parking areas and the building, in accordance with the City's Technical and Design Standards and Guidelines; and

ii. The applicant shall submit specifications, catalog cuts and photometric plans in respect of any external lighting (including within the parking lot) for the review and approval of the Planning Authority; and

iii. The applicant shall provide a 5 foot wide bituminous asphalt sidewalk along Congress Street (on the opposite side of the street from the site) for a distance of at least 250 feet as shown on the approved plan, the precise location of the western terminus, location within the ROW, and design details to be agreed with the City Engineer to take account of existing topography and drainage; and

iv. The applicant shall submit a planting plan/schedule indicating size of the planting shown on the submitted Landscaping Plan (rev. 7.24.2006) for review and approval of the City Arborist; and

v. That the applicant shall contribute $1500 to an account that would be used to fund traffic improvements to the intersection at Hutchins Drive / Congress Street. If part or all of the contribution remains unused, or is determined not to be required, within ten years after the issuance of the Certificate of Occupancy, the unexpended portion of the contribution funds shall be returned to the applicant.

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. Where submission drawings are available in electronic form, the applicant shall submit any available electronic Autocad files (*.dwg), release 14 or greater, with seven (7) sets of the final plans.

2. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount and 7 final sets of plans must be submitted to and approved by the Planning Division and Public Works prior to the release of the building permit. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

3. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the expiration date.

4. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

5. 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.

6. 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. 8828. (Only excavators licensed by the City of Portland are eligible.)

The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Jean Fraser, Planner at 874-8728 or jf@portlandmanine.gov.

Sincerely,

Alexander Jaegerman
Planning Division Director

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Services Manager

Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

May 25, 2007

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

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Of particular concern is Condition iii as that needs to be completed in good weather and will require further liaison with the Public Works Department to ensure the sidewalk is located and constructed to City standards. I suggest that you/applicant submit a plan to Public Works (Mike Farmer and copied to me) that shows a right-of-way survey and topographic survey of the sidewalk construction area and the proposed sidewalk construction specifications and precise location. Once this is reviewed and approved the construction should be undertaken as soon as possible.

The development adjacent to this one (at 2300 Congress Street) is also responsible for constructing approximately 250 feet of sidewalk to the east of this one and connected to it; there may be some benefit if the construction program was coordinated. The agent for that section of sidewalk is Steve Bushey of Deluca Hoffman.

If you have any questions, please do not hesitate to contact me on (207) 874 8728.

Sincerely,

Jean Fraser
Planner

Enclosure: Approval letter dated August 3, 2006

Cc: (*continued next page*)

Barbara Barhydt, Development Review Manager
Katherine Earley, Engineering Services Manager
Mike Farmer, Project Engineer
Jim Carmody, Transportation Engineer
Jeanie Bourke, Inspections
Phil DiPierro, DRC
Jeff Tarling, City Arborist

Applicant: Pete Kostopoulos c/o 2320 Congress Street LLC
2320 Congress Street
Portland ME. 04102

and

158 Chute Road
Windham, ME. 04062

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Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

August 3, 2006

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

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ii. The applicant shall submit specifications, catalog cuts and photometric plans in respect of any external lighting (including within the parking lot) for the review and approval of the Planning Authority; and

iii. The applicant shall provide a 5 foot wide bituminous asphalt sidewalk along Congress Street (on the opposite side of the street from the site) for a distance of at least 250 feet as shown on the approved plan, the precise location of the western terminus, location within the ROW, and design details to be agreed with the City Engineer to take account of existing topography and drainage; and

iv. The applicant shall submit a planting plan/schedule indicating size of the planting shown on the submitted Landscaping Plan (rev. 7.24.2006) for review and approval of the City Arborist; and

v. That the applicant shall contribute $1500 to an account that would be used to fund traffic improvements to the intersection at Hutchins Drive / Congress Street. If part or all of the contribution remains unused, or is determined not to be required, within ten years after the issuance of the Certificate of Occupancy, the unexpended portion of the contribution funds shall be returned to the applicant.

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6. 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. 8828. (Only excavators licensed by the City of Portland are eligible.)

The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Jean Fraser, Planner at 874-8728 or jf@portlandmanine.gov.

Sincerely,

Alexander Jaegerman
Planning Division Director

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Services Manager

Jean Fraser, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections
Michael Bobinsky, Public Works Director
Traffic Division
Eric Labelle, City Engineer
Bill Scott, Public Works
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Fire Prevention, Captain Greg Cass
Assessor's Office
Approval Letter File

cc. 2320 Congress Street LLC
57 Congress Street
Portland, ME 04101

Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

May 25, 2007

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

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Sincerely,

Jean Fraser
Planner

Enclosure: Approval letter dated August 3, 2006

Cc: (*continued next page*)

Barbara Barhydt, Development Review Manager
Katherine Earley, Engineering Services Manager
Mike Farmer, Project Engineer
Jim Carmody, Transportation Engineer
Jeanie Bourke, Inspections
Phil DiPierro, DRC
Jeff Tarling, City Arborist

Applicant: Pete Kostopoulos c/o 2320 Congress Street LLC
2320 Congress Street
Portland ME. 04102

and

158 Chute Road
Windham, ME. 04062

From: Jeanie Bourke
To: Jean Fraser
Date: 5/14/2007 4:50:02 PM
Subject: Re: Fwd: 2320 Congress Street

No CO has been issued, I put a note not to issue until we have planning sign off. When they call for the inspection, we email Phil for site inspection.

Jeanie Bourke
Inspection Services Division Director

City of Portland
Planning Dept./ Inspections Division
389 Congress St. Rm 315
Portland, ME 04101
jmb@portlandmaine.gov
(207)874-8715

>>> Jean Fraser 05/11 9:53 AM >>>
Can you shed any light on this please? Or ask someone to contact me?
Jean

>>> Jean Fraser 5/8/2007 5:53:39 PM >>>
Jeanie,

This is Pete Kostopoulos, applicant (alos got the BP) and I can tell from UI that he has Building Permits but it appears there is no CO.

...and hopefully there is no CO as they have not completed one of the conditions- which is particularly important as the adjacent sections of sidewalk (by other developers) will be starting soon and Mike Farmer needs to coordinate so that all three sections are constructed in the near future.

The condition on this property is:

"The applicant shall provide a 5 foot wide bituminous asphalt sidewalk along Congress Street (on the opposite side of the street from the site) for a distance of at least 250 feet as shown on the approved plan, the precise location of the western terminus, location within the ROW, and design details to be agreed with the City Engineer to take account of existing topography and drainage"

Could you confirm to me that a CO has still not been given for this project so I know the position as I try to get this condition complied with.

thanks
Jean

From: Ann Machado
To: Jean Fraser
Date: 8/8/2006 10:00:15 AM
Subject: Re: 2320 Congress Street

Jean -

I just left a message with Pete Kostopoulis telling him that he needs to apply for a permit because he has not done so yet.

Ann

>>> Jean Fraser 8/7/2006 2:16:24 PM >>>
Ann,

I believe Pete Kostopoulis has been in touch with you and I know they are pressing for their Permit.

They have planning approval and have met the relevant planning conditions, but Jay Reynolds is still processing the Performance Guarantee.

I will bring down a set of the approved plans so you have them.

Jean

CC: Jay Reynolds; Marge Schmuckal

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Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

August 3, 2006

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

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If there are any questions, please contact Jean Fraser, Planner at 874-8728 or jf@portlandmanine.gov.

Sincerely,

Alexander Jaegerman
Planning Division Director

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Services Manager

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Bill Scott, Public Works
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Fire Prevention, Captain Greg Cass
Assessor's Office
Approval Letter File

cc. 2320 Congress Street LLC
57 Congress Street
Portland, ME 04101

Jean Fraser, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections
Michael Bobinsky, Public Works Director
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Eric Labelle, City Engineer
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Approval Letter File

cc. 2320 Congress Street LLC
57 Congress Street
Portland, ME 04101

Infrastructure Financial Contribution Form

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

Amount $ 1500.00 **City Account Number:** 710-0000-236-52-00

Project Name: 2320 Congress Street

Project Job Number: (from Site Plan Application Form) 2006-0080

Project Location: 2320 Congress Street

Project Description: Parking lot expansion

Funds intended for: Contribution to account to be used to fund traffic improvements to the intersection at Hutchins Drive / Congress Street. (same as

Applicant's Name: 2320 CONGRESS STREET LLC

Applicant's Address: 2320 Congress Street, Portland ME 04102

Expiration:

☑ If funds are not expended or encumbered for the intended purpose by 2016, funds, or any balance of remaining funds, shall be returned to contributor within six months of said date.

☐ Funds shall be permanently retained by the City.

☐ Other (describe in detail) _____

Form of Contribution:

☐ Escrow Account

☑ Cash Contribution

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

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

Date of Form: 8/7/06
Planner: Jean Fraser

Person Completing Form: Pete Kostopoulos

- **Attach the approval letter, condition of approval or other documentation of the required contribution.**
- The original form, copy of the check, copy of report of receipts and all attachments shall be given to Debbie Marquis.
- The original check, copy of this form, and all attachments shall be filed by the Planning Division Office Manager.
- A copy of all of the above documents shall be given to the following people:

Peggy Axelson (Finance), Michael Bobinsky (Public Works), Eric Labelle (Public Works), Penny Littell (Corporation Counsel), Alexander Jaegerman (Planning), Planner for project, Applicant

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

Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

August 3, 2006

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

Dear Mr. Riordan,

On August 3, 2006, the Portland Planning Authority approved the proposed parking lot expansion (to a total of 48 spaces) in connection with the renovation of the existing commercial building at the above address, as shown on the approved plan with the following conditions:

i. The applicant shall place any dumpsters or other solid waste disposal receptacles at the rear of the site and enclose them with wooden fencing and/or planting so that they are not visible from the public street, parking areas and the building, in accordance with the City's Technical and Design Standards and Guidelines; and

ii. The applicant shall submit specifications, catalog cuts and photometric plans in respect of any external lighting (including within the parking lot) for the review and approval of the Planning Authority; and

iii. The applicant shall provide a 5 foot wide bituminous asphalt sidewalk along Congress Street (on the opposite side of the street from the site) for a distance of at least 250 feet as shown on the approved plan, the precise location of the western terminus, location within the ROW, and design details to be agreed with the City Engineer to take account of existing topography and drainage; and

iv. The applicant shall submit a planting plan/schedule indicating size of the planting shown on the submitted Landscaping Plan (rev. 7.24.2006) for review and approval of the City Arborist; and

v. That the applicant shall contribute $1500 to an account that would be used to fund traffic improvements to the intersection at Hutchins Drive / Congress Street. If part or all of the contribution remains unused, or is determined not to be required, within ten years after the issuance of the Certificate of Occupancy, the unexpended portion of the contribution funds shall be returned to the applicant.

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. Where submission drawings are available in electronic form, the applicant shall submit any available electronic Autocad files (*.dwg), release 14 or greater, with seven (7) sets of the final plans.

2. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount and 7 final sets of plans must be submitted to and approved by the Planning Division and Public Works prior to the release of the building permit. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

3. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the expiration date.

4. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

5. 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.

6. 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. 8828. (Only excavators licensed by the City of Portland are eligible.)

The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Jean Fraser, Planner at 874-8728 or jf@portlandmanine.gov.

Sincerely,

Alexander Jaegerman
Planning Division Director

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Services Manager

Jean Fraser, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections
Michael Bobinsky, Public Works Director
Traffic Division
Eric Labelle, City Engineer
Bill Scott, Public Works
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Fire Prevention, Captain Greg Cass
Assessor's Office
Approval Letter File

cc. 2320 Congress Street LLC
57 Congress Street
Portland, ME 04101

3466

2320 CONGRESS STREET LLC
2320 CONGRESS STREET
PORTLAND, MAINE 04102

KeyBank National Association
52-60/112

PAY

DATE	AMOUNT
8/7/06	$ 1,500.00

One Thousand Five Hundred and 00/100 Dollars

TO THE ORDER OF CITY OF PORTLAND

STOPLIGHT FEE

Security features. Details on back.

⑈003466⑈ ⑆011200608⑆ 19177401081 0⑈

REPORT OF RECEIPTS

To the Director of Finance, City of Portland, Maine

From the Department of Planning & Urban Dev. Date 8-8-06

68838

Source of Receipts For The Period of

HTE Description - up to 19 characters (_____)	Amount	Revenue /Expenditure Code Project #
Inspection Fee - Ck. 1652071	625.60	04
(Invoiced) # 2004-0003	747.50	04
Concert Saw.		
330 Cong St - Ck. 24166	1500.00	04
(Invoiced) # 2006-0080		
Interest Cont.		
Totals		
Notes/Wire Transfer $		
Total Credit Card Receipts $		
Total Direct Deposits $		
Total Checks $		
Total Cash $		
Total Amount	2873.10	

CITY OF PORTLAND
PAID
2006 AUG -8 A 11:16
THANK YOU

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

Receipted This Day

Authorized Agent _____ Phone # _____

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

SGC ENGINEERING, LLC
- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

LETTER OF TRANSMITTAL

TO: Ms. Jean Fraser
Planning and Development Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

DATE: August 07, 2006
PROJ. NO.: 517001
RE: 2320 Congress Street
Portland, Maine
Approved plans

WE ARE SENDING YOU [x] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Plans [ ] Samples [ ] Specifications
[ ] Copy of letter [ ] Change order [ ] _____

COPIES	DATE	NO.	DESCRIPTION
7	08/04/06		Approved plans
1	08/04/06		CD with electronic copies

THESE ARE TRANSMITTED as checked below:

[X] For approval [ ] Approved as submitted [ ] Resubmit _____ copies for approval
[ ] For your use [ ] Approved as noted [ ] Submit _____ copies for distribution
[X] As requested [ ] Returned for corrections [ ] Return _____ corrected prints
[ ] For review and comment [ ] Returned

REMARKS:

Ms. Fraser,
Please find 7 copies of the approved plans and a CD containing electronic copies of the plans for 2320 Congress Street project as you requested. If you have any questions or need anything else please feel free to give me a call. Thanks.

COPY TO: _____

SIGNED: _____
Michael R. Roy

501 County Road, Westbrook, Maine 04092 - Office: 207-347-8100 • Fax: 207-347-8101
Target Technology Center, 20 Godfrey Drive, Suite 200, Orono, Maine 04473 - Office: 207-866-6571 • Fax: 207-866-6501
www.sgceng.com • E-mail: sgc@sgceng.com

From: Gregory Cass
To: Jean Fraser
Date: 8/3/2006 8:02:39 AM
Subject: Re: 2320 Congress Street

Site Plan approved

>>> Jean Fraser 8/2/2006 11:26:39 AM >>>
GReg,

In your e-mail of 7.12.06 you said the access was OK but you were still waiting for confirmation re lcoation of hydrants.

I recently sent you a set of plans that have notes on them regarding the location of existing hydrants (I think there are 2 hydrants within 500 feet).

I would like to issue the approval letter and need a sign off from you either in UI or by e-mail.

Thanks
Jean

From: "Mike Roy" <mroy@sgceng.com>
To: "Eric Labelle" <ejl@portlandmaine.gov>
Date: 8/2/2006 4:54:09 PM
Subject: 2320 Congress Street

Mr. Labelle,

Jean Fraser has asked me to contact you regarding the length of sidewalk to be installed. In conversations with our client (the applicant), he understands that he is only required to install a length of sidewalk equivalent to the length of the property frontage on Congress Street. The properties frontage along Congress is 250-feet. Is it acceptable to you to install sidewalk for 250-feet from the entrance to the WISE building towards Hutchins Drive? The current plan requires sidewalk to be installed from the WISE building entrance to Hutchins Drive, which is approximately 400-feet from the edge of the property line.

I understand that Jean is prepared to issue the approval letter, and we are prepared to submit a revised plan requiring 250-feet sidewalk be installed, but will incorporate the length you believe appropriate. If it is the easiest for all parties, and will still allow the approval letter to be issued, we can revise the plan to require the sidewalk be installed, and the precise alignment and length (minimum of 250-feet) will be agreed with the Portland Public Works Department prior to construction.

If you have any questions or need any further information, please feel free to give me a call. Thanks.

Mike

Michael R. Roy

Project Engineer

SGC Engineering, LLC

501 County Road

Westbrook, Maine 04092

Tel : 207-347-8133

Fax : 207-347-8101

Cell : 207-671-8358

mroy@sgceng.com

CC: "Jean Fraser" <jf@portlandmaine.gov>

WOODARD & CURRAN
Engineering • Science • Operations

CORPORATE OFFICES: Maine, Massachusetts, New Hampshire, Connecticut, Florida
Operational offices throughout the U.S.

MEMORANDUM

06-080

TO: Jean Fraser, City of Portland Planner

FROM: Dan Goyette, PE – Development Review Coordinator, Woodard & Curran, Inc.

DATE: July 27, 2006

RE: Parking lot, 2320 Congress Street

This memo is the third review memo by Woodard & Curran with regard to the Minor Site Plan submission for the proposed project at 2320 Congress Street. The project has been revised to involve expanding an existing parking from 23 parking spaces to a total of 44 parking spaces. This will be accomplished by enlarging the current paved areas in the front and rear of the property.

Documents Reviewed

- Letter and attachments to Jean Fraser, City of Portland Planner, dated July 26, 2006, from John M. Riordan, P.E., SGC Engineering, LLC.
- Engineering plan set prepared by SGC Engineering, LLC, sheets1.0-5.0, signed and dated July 26, 2006.

1. General Comments

All concerns in Woodard & Curran's memo dated June 28, 2006 have been addressed as indicated below. Please contact our office if you have any questions.

A. A landscape plan has been submitted for review. The plan meets the City standards and we feel the earlier review comments have been adequately addressed.

B. A sidewalk across the street from 2320 Congress Street has been added to the site plan. This effectively addresses our earlier review comments.

C. The survey for the project has been adjusted to coincide with the approved City standards and adequately addresses our earlier review comments.

DRG
203848.49

cc: File

SGC ENGINEERING, LLC
• Civil Design & Survey Engineering
• Environmental & Regulatory Permitting
• Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

July 26, 2006

517001

Ms. Jean Fraser, Planner
City of Portland
Planning and Development Department
389 Congress Street
Portland, Maine 04101

w/plan revised 7.26.06.

RE: **2320 Congress Street**
Minor Site Plan Review
Response to DRC Comments dated June 28, 2006

Dear Ms. Fraser:

Regarding the Minor Site Plan Review that the City is conducting of the renovation of the commercial building and proposed site improvements at 2320 Congress Street proposed by 2320 Congress Street, LLC, we are in receipt of comments from Dan Goyette, P.E., the Development Review Coordinator, dated June 28, 2006. We are also in receipt of comments from Jean Fraser, Planner for the City of Portland, dated July 21, 2006. We have carefully reviewed these comments and have revised the plans as appropriate to fully address them. WE have summarized our responses to each comment below. For convenience, we have reiterated the review comments followed by our responses in bold type.

Dan Goyette's comments:

1. General Comments

   A. A landscaping plan has not been submitted for review. Parking lots containing more than 8 parking spaces should have a total landscaped area at least 10 percent of the area designated for parking and vehicle circulation. Also, there should be no more than 8 parking spaces (or 16 contiguous spaces) in a row without landscaped dividers. ***The parking lot layout has been revised to meet the standards set forth in the City's Technical and Design Standards and Guidelines. In addition, a Landscape Plan Sheet 4.0 has been added to the development plan set that reflects the landscaping agreed to at a meeting between Michael Roy of SGC and Jeff Tarling, City Arborist, at the subject property on July 17, 2006.***

   B. The project is required to install a new sidewalk along the length of the property line unless able to meet two or more of the waiver criteria detailed in Sec. 14-506 Modifications. It does not appear that the project will meet the waiver criteria. Due to site constraints, the applicant will be required to install a new sidewalk across the street from the property. ***The plans have been revised to propose a new 5-foot wide sidewalk across the street from 2320 Congress Street. As requested by the City, the sidewalk has been located at the edge of the Congress Street right-of-way line and will extend from the WISE property entrance to Hutchins Drive. The alignment of the sidewalk will be confirmed with the Portland Department of Public Works at the time of construction to allow for any realignment found necessary to take into account existing topography and drainage.***

C. The survey for the project does not coincide with approved City standards. The survey needs to be tied to the vertical datum of NGVD 1929. Also, the project needs to be tied to the Maine State Plane Coordinate System (2-zone projection), West Zone using the NAD 1983 (HARN) Datum and the U.S. Survey Foot as the unit of measure. ***The development plans have been revised as required to reflect the datum and coordinate system requested.***

Jean Fraser's comments:

1. Stormwater: The City's DRC has reviewed the submitted Stormwater Report and has no further comments on this issue. ***We acknowledge there are no further comments regarding stormwater.***

2. Sidewalk: Ordinance 25 (Public Works) requires the installation of a sidewalk and granite curbs along Congress Street. There is already a curb along the frontage of this site but no sidewalk. The problems of topography on both sides of Congress Street at this location have been discussed between the City Engineer (Eric Labelle) and Mike Roy and I understand that a final solution has been agreed upon regarding the location of a new sidewalk which will be included on the revised plan to be submitted. ***Addressed above in response to Dan Goyette's comments.***

3. Landscaping: I understand that Jeff Tarling has provided his comments direct to you last week and a landscaping plan will be submitted. ***A Landscape Plan Sheet 4.0 has been added to the development plan set that reflects the landscaping agreed to at a meeting between Michael Roy of SGC and Jeff Tarling, City Arborist, at the subject property on July 17, 2006.***

4. Encroachment: There is an existing pavement encroachment on the south west corner of the site which has been retained in the proposals. This should be regularized as part of this application. ***The Site Layout Sheet 2.0 has been revised to require the pavement encroachment be removed to the 2320 Congress Street property line. It is understood that this will be waived if an agreement with the abutter is obtained.***

5. Traffic Generation: I understand there could be up to 40 employees in this building as well as members of the public accessing the site. Based upon financial contribution requirements for the recently permitted Woodard & Curran Office Building Expansion Project, a contribution of $1,500.00 is requested for future traffic improvements at the Congress Street/Hutchins Drive Intersection. ***This contribution is acceptable to 2320 Congress Street, LLC.***

6. Survey: The 'Existing Conditions' Plan is the Boundary Survey and needs to meet the City's requirements for surveys as clarified in the memorandum from Dan Goyette (City's DRC) dated June 28, 2006 and previously emailed to Mike Roy. ***Addressed above in response to Dan Goyette's comments.***

7. Please show other relevant information on the revised plans including the location of existing and proposed fire hydrants; the location and proposed screening of solid waste receptacles; and lighting. ***The Site Layout Sheet 2.0 has been revised to show the location of the two nearest hydrants along Congress Street. A Life Safety Plan completed by John H. Leasure Architects, Inc. is attached and shows the buildings fire protection. A Lighting Plan and Power Plan completed by Bennett Engineering are attached and show the exterior building lighting.***

Please review these responses. If they are found to adequately address outstanding comments, we request that Minor Site Plan Approval be granted.

Thank you.

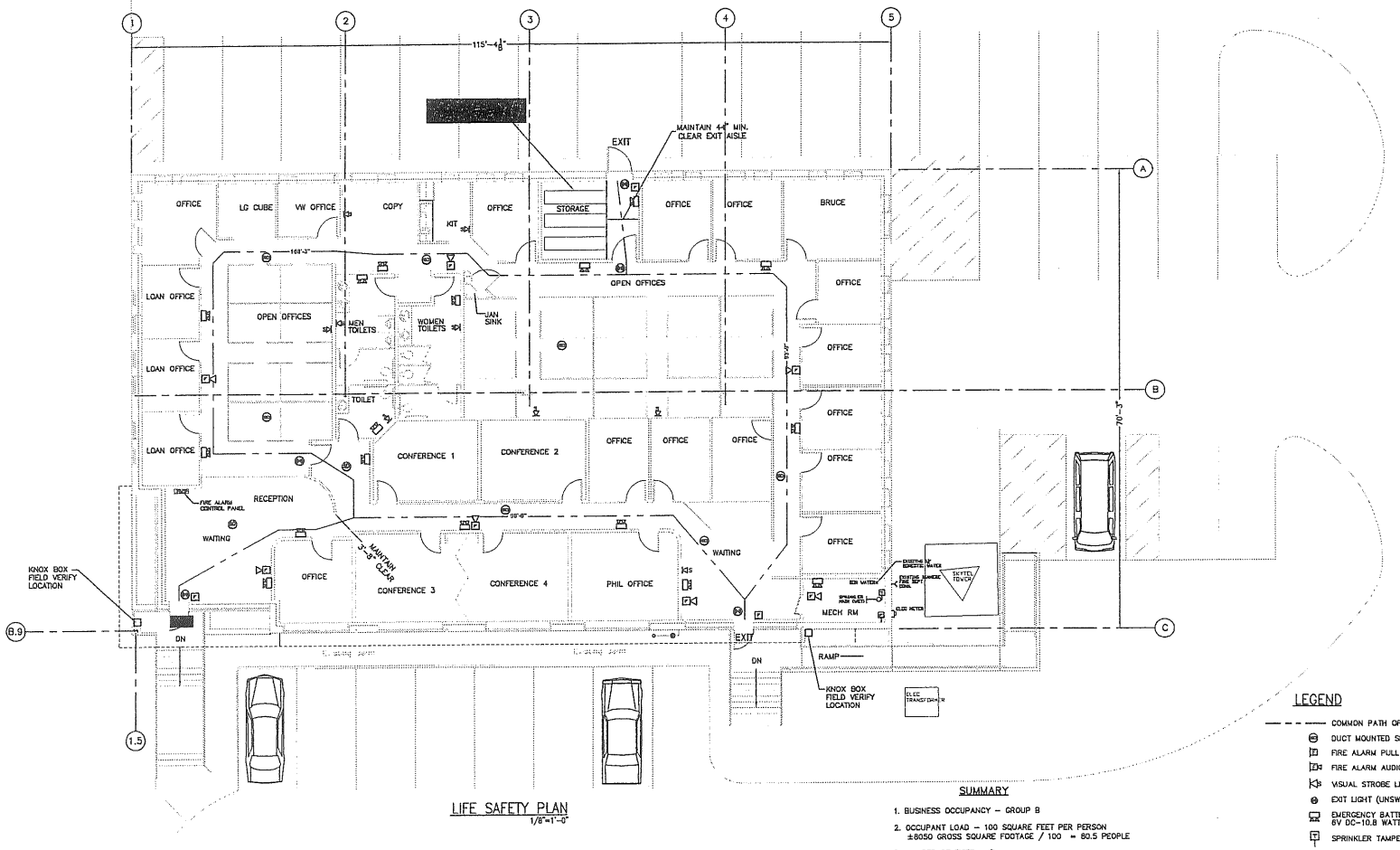
Very truly yours,
SGC ENGINEERING, LLC

John M. Riordan, P.E.
Director of Civil Engineering

Enclosure

cc: Bruce Brown

SGC



LIFE SAFETY PLAN
1/8"=1'-0"

SUMMARY

1. BUSINESS OCCUPANCY – GROUP B
2. OCCUPANT LOAD – 100 SQUARE FEET PER PERSON
   ±8050 GROSS SQUARE FOOTAGE / 100 = 80.5 PEOPLE
3. NUMBER OF EXITS – 3
4. EGRESS WIDTH PER OCCUPANT – 0.2 INCH PER PERSON
5. MAXIMUM TRAVEL DISTANCE – 300 FEET ALLOWED
   COMMON PATH OF TRAVEL NOT TO EXCEED 100 FEET
6. CLEAR WIDTH OF EXIT PASSAGEWAYS – MINIMUM 3'–8"
7. DIAGONAL DISTANCE ACROSS BUILDING INTERIOR = ±131'–6"
8. BUILDING SHALL BE FULLY SPRINKLERED IN ACCORDANCE WITH NFPA 13. CONTRACTOR SHALL INSPECT EXISTING SYSTEM; MODIFY TO CONFORM TO NFPA 13 AND SUBMIT SPRINKLER PLANS TO STATE OF MAINE AND CITY OF PORTLAND AS REQUIRED.
9. BUILDING SQUARE FOOTAGE (EXTERIOR FOOTPRINT) = 8102± S.F.

LEGEND

- COMMON PATH OF TRAVEL
- DUCT MOUNTED SMOKE DETECTOR
- FIRE ALARM PULL STATION (MTD 48" AFF)
- FIRE ALARM AUDIO/VISUAL (15 CANDELA)
- VISUAL STROBE LIGHT ONLY 15 CANDELA)
- EXIT LIGHT (UNSWITCHED)
- EMERGENCY BATTERY UNIT (2 HEADS) 6V DC–10.8 WATTS FOR 90 MINUTES
- SPRINKLER TAMPER SWITCH
- SPRINKLER FLOW SWITCH

THERE ARE NO FIRE RATED WALLS.
EXTERIOR WALLS – 5/8" GYPSUM BOARD APPLIED TO INTERIOR FACE.
INTERIOR WALLS – 5/8" GYPSUM BOARD APPLIED TO BOTH FACES.
[FOR WALL TYPES SEE DRAWING A7]

REGISTERED ARCHITECT JOHN H. LEASURE No. 310 STATE OF MAINE

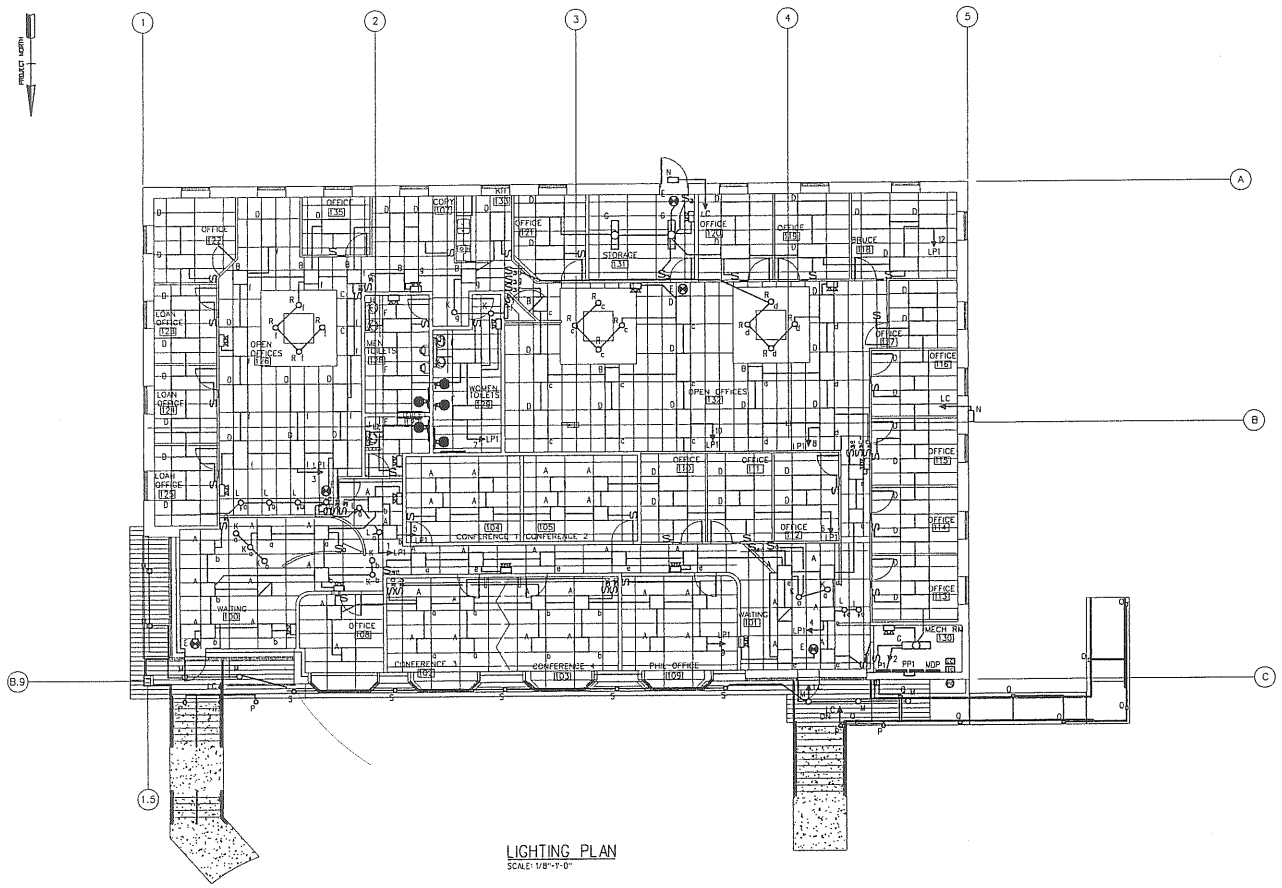
REV.	DATE	STATUS
1	4-11-06	REVISED OFFICE PLAN LAYOUT
2	4-28-06	REVISED CANOPY AND DOMESTIC WATER NOTE
3	5-5-06	

JOHN H. LEASURE ARCHITECT, INC.
60 STREET
SOUTH PORTLAND, MAINE 04106

IRST FINANCIAL MORTGAGE COMPANY &

A0

BENNETT ENGINEERING
CONSULTING ENGINEERS
Tel - (207) 865-9475
Fax - (207) 865-1602



LIGHTING PLAN
SCALE: 1/8"-1'-0"

REV	DATE	STATUS
	13-25-06	
1	14-25-06	ADDENDUM 1
2	5-5-06	ADDENDUM 2

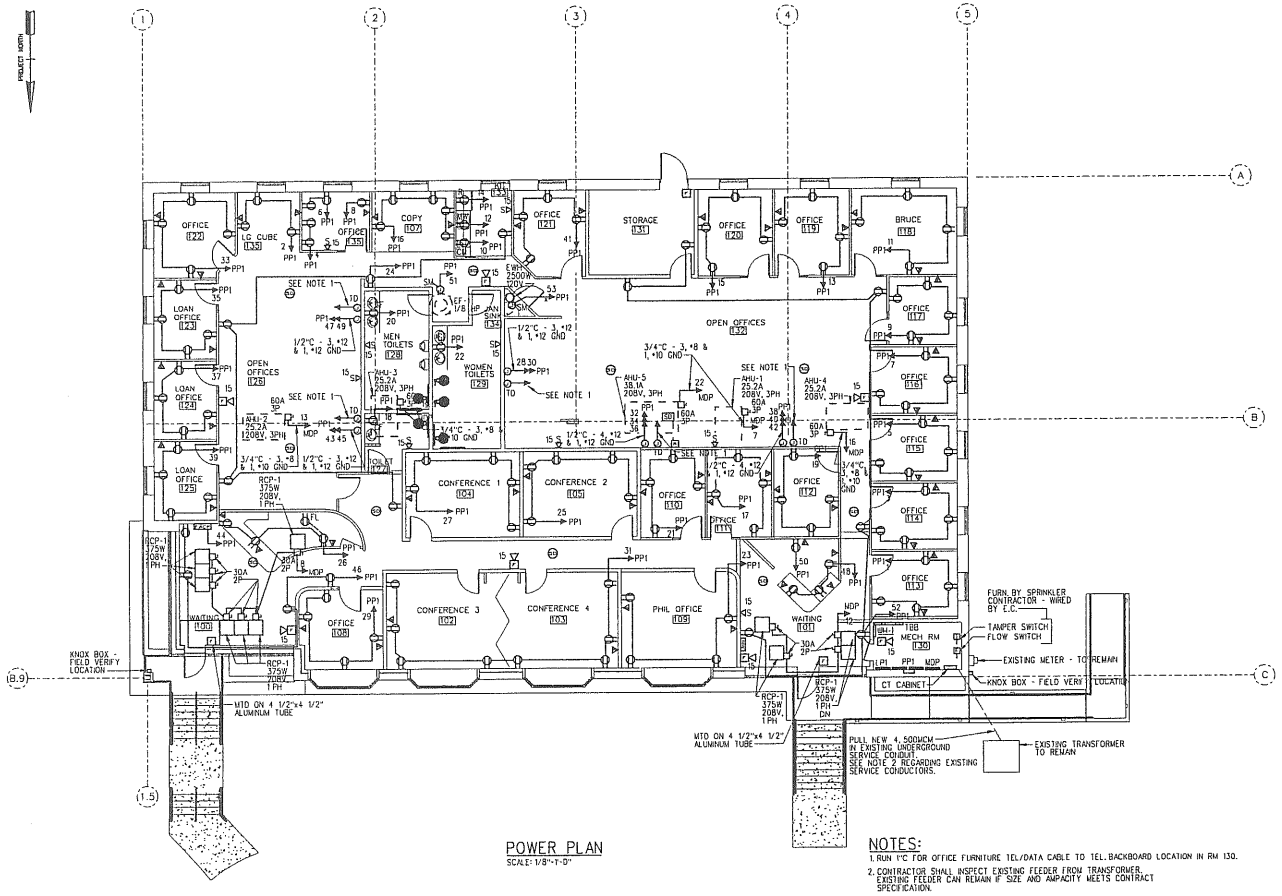
JOHN H. LEASURE ARCHITECT, INC.
6 O STREET
SOUTH PORTLAND, MAINE 04106

LIGHTING PLAN

ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY &
NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

E1

BENNETT ENGINEERING
CONSULTING ENGINEERS
Tel - (207) 563-8475
Fax - (207) 565-1605



POWER PLAN
SCALE: 1/8"=1'-0"

NOTES:

1. RUN 1"C FOR OFFICE FURNITURE TEL/DATA CABLE TO TEL. BACKBOARD LOCATION IN RM 130.
2. CONTRACTOR SHALL INSPECT EXISTING FEEDER FROM TRANSFORMER. EXISTING FEEDER CAN REMAIN IF SIZE AND AMPACITY MEETS CONTRACT SPECIFICATION.

REV	DATE	STATUS
	3-25-06	
1	4-28-06	ADDENDUM 1
2	5-5-06	ADDENDUM 2

JOHN H. LEASURE ARCHITECT, INC.
60 STREET
SOUTH PORTLAND, MAINE 04106

POWER PLAN

ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY &
NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

E2

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	LAMPS QUANTITY & TYPE	REMARKS
A	METALUX* 2P2GX-3U15/8-S-33-120-TEB81	(3) 31W T8- 3500 DEG	2'X2' PARABOLIC - 9 CELL - RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
B	METALUX* 2RDI-324T5-RP-120-TEB93	(3) 24T5 - 3500 DEG	2'X2' RECESSED DIRECT/INDIRECT - RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
C	METALUX* RDI-232T8-RP-120-TEB81	(2) F32T8 - 3500 DEG	TX4' DIRECT/INDIRECT- RECESSED IN GRID CEILING - (1) 2 LAMP ELECTRONIC BALLAST
D	METALUX* 2RDI-332-RP-120-TEB81	(3) F32T8 - 3500 DEG	2'X4' DIRECT/INDIRECT- RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
E	SURE-LITES *LPX 7 0 R WH	LED'S W/ FIXTURE	LED EXIT LIGHT - END/CEILING/WALL MOUNT - SINGLE OR DOUBLE FACE
F	METALUX* 2GC8-232-AI2-120-TEB8	(2) F32T8 - 3500 DEG	2'X4' LENS TROFFER - RECESSED IN GRID CEILING - (1) 2 LAMP ELECTRONIC BALLAST
G	METALUX *WS-332-A-120-EB83	(3) F32T8 - 3500 DEG	WRAPAROUND - SURFACE MOUNTED - (1) 3 LAMP ELECTRONIC BALLAST
H	METALUX *BC-132-120-EB81	(1) F32T8 3500 DEG	4' LONG - MOUNT ABOVE MIRROR IN BATHROOM
J	METALUX *BC-217-120-EB81	(2) F17T8 3500 DEG	2' LONG - MOUNT ABOVE MIRROR IN BATHROOM
K	HALO *H803HP-810C	(2) 26W CF	RECESSED DOWNLIGHT
L	HALO *H803HP-810WW	(2) 26W CF	RECESSED WALL WASHER DOWNLIGHT
M	PORTFOLIO* MD7-730-7780-LI-3G	(1) 70W MH	RECESSED IN CANOPY
N	LUMARK - MHP-C-70W-120-PE	(1) 70W MH	METAL HALIDE WALL PACK
P	ABGLITE *AD 150 INC LDS96WL GB A 3 GWT	(1) 150W INC.	SIGN LIGHT
Q	LUMIERE *ZUMA 1201-LA-35T4-12-BK, T300	(1) 35W/T4/GY6.35	STEP LIGHT - LOW VOLTAGE 12V - LUMIERE *T750 TRANSFORMER
R	PRESCOLITE *CFR826UEB-SS-SC8A	(2) 26W CF	RECESSED DOWNLIGHT - 45° SLOPED GYPSUM WALLBOARD CEILING
S	PORTFOLIO *MD6-7606710-LI	(1) 50W MH	RECESSED IN CANOPY

PROJECT: 2320 CONGRESS ST PORTLAND, MAINE — THREE PHASE PANELBOARD SCHEDULE — PANEL DESIGNATION: MDP

SURFACE MOUNT — MAIN BRKR: 400A, 3P — VOLTS: 120/208 — PHASE: 3 — WIRE: 4

KVA LOAD				KVA LOAD
5.3	PANEL LP1	1	2 PANEL PP1	10.0
5.3		3	4	10.0
5.3		5	6	10.0
3.0	ANU-1	7	8 (1) ECP-1	1.3
3.0		9	10	1.3
3.0		11	12 (4) ECP-1	.75
3.0	ANU-2	13	14	.75
3.0		15	16 ANU-4	3.0
3.0		17	18	3.0
3.0	ANU-3	19	20	3.0
3.0		21	22 ANU-5	4.8
3.0		23	24	4.8
	SPACE	25	26	4.8
		27	28 SPACE	
		29	30	
		31	32	
		33	34	
		35	36	
		37	38	
		39	40	
		41	42	

TOTAL CONN. LOAD 116.5 KVA — TOTAL DEM. LOAD 106.5 KVA

PROJECT: 2320 CONGRESS ST PORTLAND, MAINE — THREE PHASE PANELBOARD SCHEDULE — PANEL DESIGNATION: PP1 - LEFT SIDE

SURFACE MOUNT — MAIN LUGS: 225A — VOLTS: 120/208 — PHASE: 3 — WIRE: 4

KVA LOAD				KVA LOAD
1.6	OUTLETS - RMS 113 & 114	1	2 OUTLETS - LARGE CUBE	.80
1.6	OUTLETS - RMS 115 & 116	3	4 OUTLETS - RM 107	1.0
1.6	OUTLETS - RMS 117 & 118	5	6 OUTLETS - RM 107	1.0
1.6	OUTLETS - RMS 119 & 120	7	8 COPIER - RM 107	1.0
1.6	OUTLETS - RMS 111 & 112	9	10 OUTLETS - RM 133	1.0
1.6	OUTLETS - RMS 109 & 110	11	12 OUTLETS - RM 133	1.0
1.0	OUTLETS - RM 105	13	14 REFRIGERATOR - RM 133	1.5
1.0	OUTLETS - RM 104	15	16 OUTLETS - RM 132	.80
.80	OUTLETS - RM 108	17	18 OUTLET - RM 127	.50
1.6	OUTLETS - RM 102 & 103	19	20 OUTLET - RM 128	.50
1.6	OUTLETS - RM 122 & 123	21	22 OUTLET - RM 129	.50
1.6	OUTLETS - RM 124 & 125	23	24 OUTLETS - RM 126	1.0
.80	OUTLETS - RM 121	25	26 OUTLETS - RECEPTION	1.0
	SPARE	27	28 OFFICE FURNITURE POWER RM 133	1.0
		29	30	1.0
		31	32	1.0
	SPACE	33	34	1.0
		35	36	1.0
		37	38	1.0
		39	40	1.0
		41	42	1.0

SUB FEED LUGS

PROJECT: 2320 CONGRESS ST PORTLAND, MAINE — THREE PHASE PANELBOARD SCHEDULE — PANEL DESIGNATION: PP1- RIGHT SIDE

SURFACE MOUNT — VOLTS: 120/208 — PHASE: 3 — WIRE: 4

KVA LOAD				KVA LOAD
1.0	OFFICE FURNITURE POWER RM 129	43	44 FIRE ALARM SYSTEM	.50
1.0		45	46 OUTLETS - RM 100	.80
1.0		47	48 OUTLETS - RM 101	1.0
1.0		49	50 COPIER - RM 101	1.0
.50	EF-1	51	52 OUTLETS - RM 130, 131	1.2
2.5	EMH	53	54 SPACE	
	SPARE	55	56	
		57	58	
		59	60	
		61	62	
		63	64	
	SPACE	65	66	
		67	68	
		69	70	
		71	72	
		73	74	
		75	76	
		77	78	
		79	80	
		81	82	
		83	84	

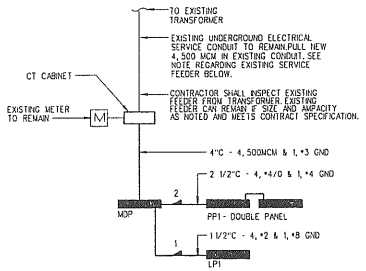
TOTAL CONN. LOAD 48.1 KVA — TOTAL DEM. LOAD 38.1 KVA

PROJECT: 2320 CONGRESS ST PORTLAND, MAINE — THREE PHASE PANELBOARD SCHEDULE — PANEL DESIGNATION: LP1

SURFACE MOUNT — MAIN LUGS: 100A — VOLTS: 120/208 — PHASE: 3 — WIRE: 4

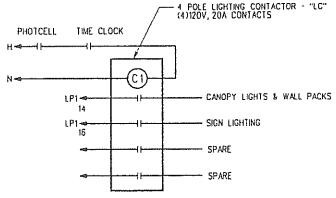
KVA LOAD				KVA LOAD
1.3	LTG - RMS 122-126	1	2 LTG - RMS 130, 117-117	1.2
1.6	LTG - RM 128	3	4 LTG - RM 101	1.8
1.4	LTG - RM 100	5	6 LTG - RMS 104,105, 110-112	1.3
1.2	LTG - RMS 127-129, 132-134	7	8 LTG - RM 132	1.0
1.3	LTG - RMS 106, 102, 103, 105	9	10 LTG - RM 132	1.0
	SPARE	11	12 LTG - RMS 118-121, 131	1.1
		13	14 EXTERIOR LIGHTING VIA CONTACTOR "LC"	1.1
		15	16 SIGN LIGHTING VIA CONTACTOR "LC"	1.0
		17	18 SPACE	
		19	20	
	SPACE	21	22	
		23	24	
		25	26	
		27	28	
		29	30	
		31	32	
		33	34	
		35	36	
		37	38	
		39	40	
		41	42	

TOTAL CONN. LOAD 10.5 KVA — TOTAL DEM. LOAD 10.5 KVA



ONE LINE DIAGRAM

SCALE: NONE



LIGHTING CONTACTOR "LC" DETAIL

SCALE: NONE

SYMBOL LEGEND

- POWER PANEL 120/208V, 3 PHS, 4 WIRE
- (MA) ELECTRIC MOTOR DRIVEN EQUIPMENT,HP SHOWN
- SM MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE, MOUNTED AT UNIT
- (J) JUNCTION BOX - "TD" DENOTES FOR TEL/DATA
- DISCONNECT SWITCH - 250 VOLT SIZE & NO. POLES AS NOTED.
- COMBINATION CIRCUIT BREAKER & MAGNETIC MOTOR STARTER - NEMA SIZE 1 HAND-OFF-AUTO SWITCH W/RED POWER ON PILOT LIGHT.
- LIGHTING FIXTURES- CAPITAL LETTERS DENOTE TYPE AS PER LIGHTING FIXTURE SCHEDULE. LOWER CASE LETTERS INDICATE SWITCH CONTROL- "eb" INDICATES INBOARD LAMPS CONTROLLED BY SWITCH "b"-OUTBOARD LAMPS CONTROLLED BY SWITCH "a", DIAGONAL LINE INDICATES NIGHT LIGHT (UNSWITCHED)
- RACEWAY & WIRING OR MC CABLE RUN CONCEALED IN WALLS/CEILINGS.
- RACEWAY & WIRING RUN EXPOSED
- RACEWAY & WIRING RUN CONCEALED UNDER GROUND/FLOOR
- HOME RUN TO PANEL- ARROWS INDICATE QUANTITY OF CIRCUITS- NUMERALS DENOTE CIRCUIT NUMBERS

BRANCH CIRCUIT WIRING SHALL CONSIST OF 3#12 1#12G 3/4"C UNLESS OTHERWISE NOTED. ASTERISK INDICATES #10 AWG FOR ALL CIRCUITS CONTAINED IN HOMERUN.

- S SINGLE POLE SWITCH,120 VOLT,15 AMP,SPEC GRADE, GROUNDING TYPE ,MOUNT 48" AFF, 3-3-WAY,4-4-WAY,K-WHITE LIGHT KEY SLOT, P-PILOT,WP-WEATHERPROOF. LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD.COLOR BY ARCHITECT PILOT LIGHT SWITCHES SHALL BE PROVIDED W/ ENGRAVED NAMEPLATE IDENTIFYING USE.
- DUPLEX RECEPTACLE- 15A, 125V, SPEC. GRADE GROUNDING TYPE AND MATCHING PLATE - FLUSH MOUNT 18" AFF. - "D" DENOTES DOUBLE DUPLEX "CM" DENOTES COFFEE MAKER, "MW" DENOTES MICROWAVE
- GF DUPLEX - GROUND FAULT RECEPTACLE 15A, 125V- TERMINAL TYPE - WITH MATCHING PLATE FURNISHED W/ RECEPTACLE. FLUSH MOUNTED 48" AFF EXCEPT AS NOTED. COLOR BY ARCHITECT
- TELEPHONE OUTLET - MOUNT 18"AFF - (1) CAT 6 CABLE BACK TO TBB "W" INDICATES WALL MOUNTED AT 48" AFF
- TELEPHONE/DATA OUTLET - MOUNT 18"AFF - (2) CAT 5 CABLES BACK TO TBB
- EXIT LIGHT FIXTURE-UNSWITCHED
- EMERGENCY BATTERY UNIT - WITH TWO HEADS - MOUNT 6'-8" AFF SURE-LITES *CC3-WH. 6V D.C., 10.8 WATTS FOR 90 MINUTES
- 200 FIRE ALARM HEAT DETECTOR, FIXED TEMPERATURE 200°F
- 135 FIRE ALARM HEAT DETECTOR, FIXED TEMPERATURE 135°F
- SMOKE DETECTOR, PHOTOELECTRIC TYPE- SYSTEM CONNECTED
- FACP FIRE ALARM CONTROL PANEL
- ANN FIRE ALARM REMOTE ANNUNCIATOR PANEL
- F FIRE ALARM PULL STATION MOUNT 48"AFF
- 15 FIRE ALARM AUDIO/VISUAL, MOUNT 6" BELOW CEILING NUMERALS DENOTE CANDELA RATING
- 15 SH FIRE ALARM VISUAL STROBE ONLY NUMERALS DENOTE CANDELA RATING MOUNT 6" BELOW CEILING
- SD DUCT MOUNTED SMOKE DETECTOR - FURNISHED WITH AHU UNIT
- REMOTE TEST STATION FOR DUCT MOUNTED SMOKE DETECTOR
- PC PHOTOCELL
- LC LIGHTING CONTACTOR
- TC TIME CLOCK
- T TRANSFORMER FOR STEP LIGHTING - SEE FIXTURE TYPE "Q"

BENNETT ENGINEERING
CONSULTING ENGINEERS
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Fax - (207) 865-1900

REV.	DATE	STATUS
3	3-28-06	
1	4-28-06	ADDENDUM 1
2	5-5-06	ADDENDUM 2

JOHN H. LEASURE ARCHITECT, INC.
60 STREET
SOUTH PORTLAND, MAINE 04106

ELECTRICAL DETAILS, LEGEND AND SCHEDULES

ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY & NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

E3

SGC ENGINEERING, LLC
• Civil Design & Survey Engineering
• Environmental & Regulatory Permitting
• Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

July 26, 2006

517001

Ms. Jean Fraser, Planner
City of Portland
Planning and Development Department
389 Congress Street
Portland, Maine 04101

Copies gone direct to Jeff Tarling + Dan Goyette 7.26.06

RE: **2320 Congress Street**
Minor Site Plan Review
Response to DRC Comments dated June 28, 2006

Dear Ms. Fraser:

Regarding the Minor Site Plan Review that the City is conducting of the renovation of the commercial building and proposed site improvements at 2320 Congress Street proposed by 2320 Congress Street, LLC, we are in receipt of comments from Dan Goyette, P.E., the Development Review Coordinator, dated June 28, 2006. We are also in receipt of comments from Jean Fraser, Planner for the City of Portland, dated July 21, 2006. We have carefully reviewed these comments and have revised the plans as appropriate to fully address them. WE have summarized our responses to each comment below. For convenience, we have reiterated the review comments followed by our responses in bold type.

Dan Goyette's comments:

1. General Comments

   A. A landscaping plan has not been submitted for review. Parking lots containing more than 8 parking spaces should have a total landscaped area at least 10 percent of the area designated for parking and vehicle circulation. Also, there should be no more than 8 parking spaces (or 16 contiguous spaces) in a row without landscaped dividers. ***The parking lot layout has been revised to meet the standards set forth in the City's Technical and Design Standards and Guidelines. In addition, a Landscape Plan Sheet 4.0 has been added to the development plan set that reflects the landscaping agreed to at a meeting between Michael Roy of SGC and Jeff Tarling, City Arborist, at the subject property on July 17, 2006.***

   B. The project is required to install a new sidewalk along the length of the property line unless able to meet two or more of the waiver criteria detailed in Sec. 14-506 Modifications. It does not appear that the project will meet the waiver criteria. Due to site constraints, the applicant will be required to install a new sidewalk across the street from the property. ***The plans have been revised to propose a new 5-foot wide sidewalk across the street from 2320 Congress Street. As requested by the City, the sidewalk has been located at the edge of the Congress Street right-of-way line and will extend from the WISE property entrance to Hutchins Drive. The alignment of the sidewalk will be confirmed with the Portland Department of Public Works at the time of construction to allow for any realignment found necessary to take into account existing topography and drainage.***

C. The survey for the project does not coincide with approved City standards. The survey needs to be tied to the vertical datum of NGVD 1929. Also, the project needs to be tied to the Maine State Plane Coordinate System (2-zone projection), West Zone using the NAD 1983 (HARN) Datum and the U.S. Survey Foot as the unit of measure. ***The development plans have been revised as required to reflect the datum and coordinate system requested.***

Jean Fraser's comments:

1. Stormwater: The City's DRC has reviewed the submitted Stormwater Report and has no further comments on this issue. ***We acknowledge there are no further comments regarding stormwater.***

2. Sidewalk: Ordinance 25 (Public Works) requires the installation of a sidewalk and granite curbs along Congress Street. There is already a curb along the frontage of this site but no sidewalk. The problems of topography on both sides of Congress Street at this location have been discussed between the City Engineer (Eric Labelle) and Mike Roy and I understand that a final solution has been agreed upon regarding the location of a new sidewalk which will be included on the revised plan to be submitted. ***Addressed above in response to Dan Goyette's comments.***

3. Landscaping: I understand that Jeff Tarling has provided his comments direct to you last week and a landscaping plan will be submitted. ***A Landscape Plan Sheet 4.0 has been added to the development plan set that reflects the landscaping agreed to at a meeting between Michael Roy of SGC and Jeff Tarling, City Arborist, at the subject property on July 17, 2006.***

4. Encroachment: There is an existing pavement encroachment on the south west corner of the site which has been retained in the proposals. This should be regularized as part of this application. ***The Site Layout Sheet 2.0 has been revised to require the pavement encroachment be removed to the 2320 Congress Street property line. It is understood that this will be waived if an agreement with the abutter is obtained.***

5. Traffic Generation: I understand there could be up to 40 employees in this building as well as members of the public accessing the site. Based upon financial contribution requirements for the recently permitted Woodard & Curran Office Building Expansion Project, a contribution of $1,500.00 is requested for future traffic improvements at the Congress Street/Hutchins Drive Intersection. ***This contribution is acceptable to 2320 Congress Street, LLC.***

6. Survey: The 'Existing Conditions' Plan is the Boundary Survey and needs to meet the City's requirements for surveys as clarified in the memorandum from Dan Goyette (City's DRC) dated June 28, 2006 and previously emailed to Mike Roy. ***Addressed above in response to Dan Goyette's comments.***

7. Please show other relevant information on the revised plans including the location of existing and proposed fire hydrants; the location and proposed screening of solid waste receptacles; and lighting. ***The Site Layout Sheet 2.0 has been revised to show the location of the two nearest hydrants along Congress Street. A Life Safety Plan completed by John H. Leasure Architects, Inc. is attached and shows the buildings fire protection. A Lighting Plan and Power Plan completed by Bennett Engineering are attached and show the exterior building lighting.***

Please review these responses. If they are found to adequately address outstanding comments, we request that Minor Site Plan Approval be granted.

Thank you.

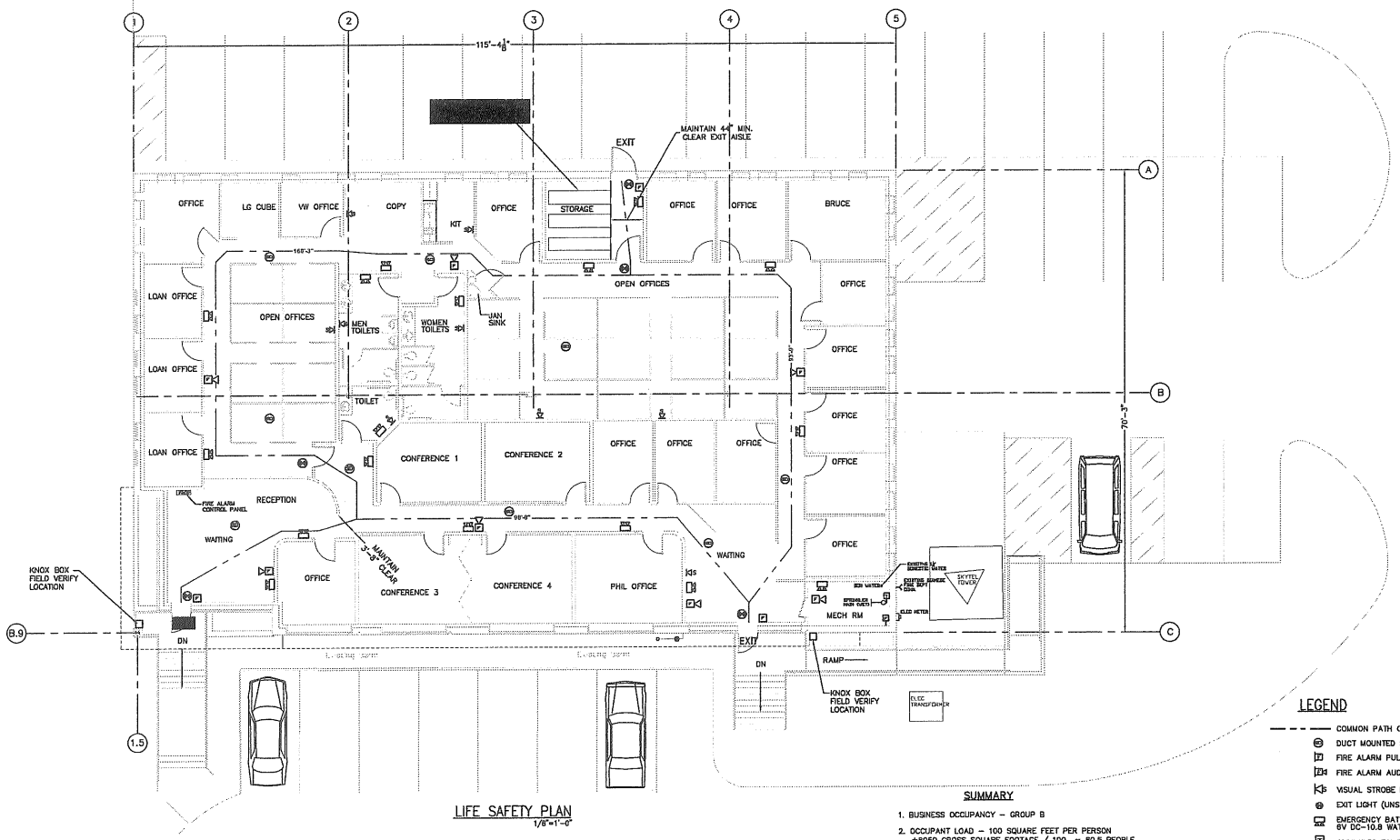
Very truly yours,
SGC ENGINEERING, LLC

John M. Riordan, P.E.
Director of Civil Engineering

Enclosure

cc: Bruce Brown

SGC



LIFE SAFETY PLAN
1/8"=1'-0"

SUMMARY

1. BUSINESS OCCUPANCY – GROUP B
2. OCCUPANT LOAD – 100 SQUARE FEET PER PERSON
   ±8050 GROSS SQUARE FOOTAGE / 100 = 80.5 PEOPLE
3. NUMBER OF EXITS – 3
4. EGRESS WIDTH PER OCCUPANT – 0.2 INCH PER PERSON
5. MAXIMUM TRAVEL DISTANCE – 300 FEET ALLOWED
   COMMON PATH OF TRAVEL NOT TO EXCEED 100 FEET
6. CLEAR WIDTH OF EXIT PASSAGEWAYS – MINIMUM 3'–6"
7. DIAGONAL DISTANCE ACROSS BUILDING INTERIOR = ±131'–6"
8. BUILDING SHALL BE FULLY SPRINKLERED IN ACCORDANCE WITH NFPA 13.
   CONTRACTOR SHALL INSPECT EXISTING SYSTEM; MODIFY TO CONFORM TO NFPA 13 AND SUBMIT SPRINKLER PLANS TO STATE OF MAINE AND CITY OF PORTLAND AS REQUIRED.
9. BUILDING SQUARE FOOTAGE (EXTERIOR FOOTPRINT) = 8102± S.F.

LEGEND

- COMMON PATH OF TRAVEL
- DUCT MOUNTED SMOKE DETECTOR
- FIRE ALARM PULL STATION (MTD 48" AFF)
- FIRE ALARM AUDIO/VISUAL (15 CANDELA)
- VISUAL STROBE LIGHT ONLY 15 CANDELA)
- EXIT LIGHT (UNSWITCHED)
- EMERGENCY BATTERY UNIT (2 HEADS) 6V DC–10.8 WATTS FOR 90 MINUTES
- SPRINKLER TAMPER SWITCH
- SPRINKLER FLOW SWITCH

THERE ARE NO FIRE RATED WALLS.
EXTERIOR WALLS – 5/8" GYPSUM BOARD APPLIED TO INTERIOR FACE.
INTERIOR WALLS – 5/8" GYPSUM BOARD APPLIED TO BOTH FACES.
[FOR WALL TYPES SEE DRAWING A7]

IRST FINANCIAL MORTGAGE COMPANY &

STATUS

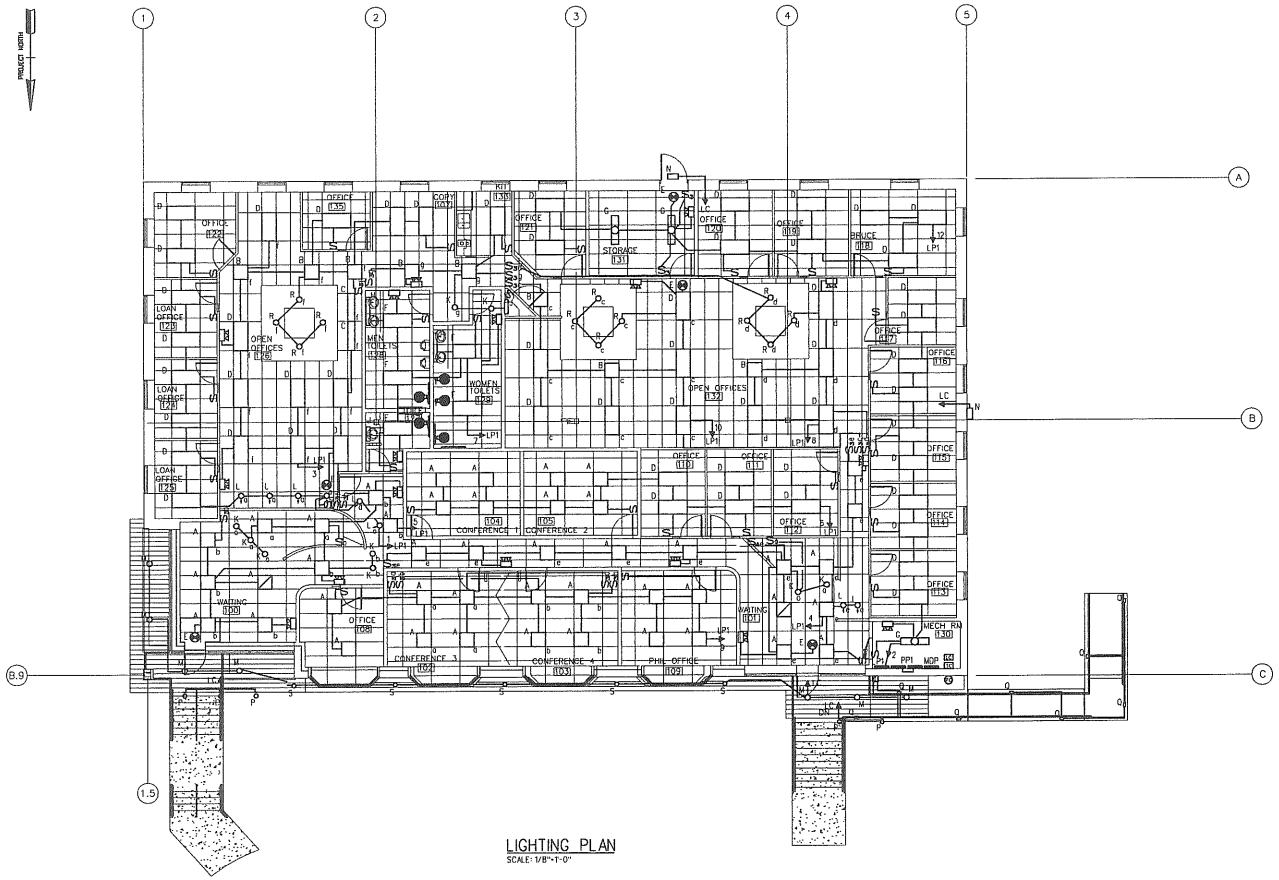
REV.	DATE	
	4-11-06	
	4-28-06	REVISED OFFICE PLAN LAYOUT
	5-5-06	REVISED CANOPY AND DOMESTIC WATER NOTE

JOHN H. LEASURE ARCHITECT, INC.
6 Q STREET
SOUTH PORTLAND, MAINE 04106

REGISTERED ARCHITECT
JOHN H. LEASURE
No. 310
STATE OF MAINE

A0

BENNETT ENGINEERING
CONSULTING ENGINEERS
Bennett Road, P.O. Box 297, Pownal, Maine 04069
TM - (207) 865-9475
Fax - (207) 865-1650



LIGHTING PLAN
SCALE: 1/8"=1'-0"

REV.	DATE	STATUS
	3-29-06	
1	4-28-06	ADDENDUM 1
2	5-5-06	ADDENDUM 2

JOHN H. LEASURE ARCHITECT, INC.
6 O STREET
SOUTH PORTLAND, MAINE 04106

LIGHTING PLAN

ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY &
NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

E1

BENNETT ENGINEERING
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Bennett Road, P.O. Box 297, Freeport, Maine 04033
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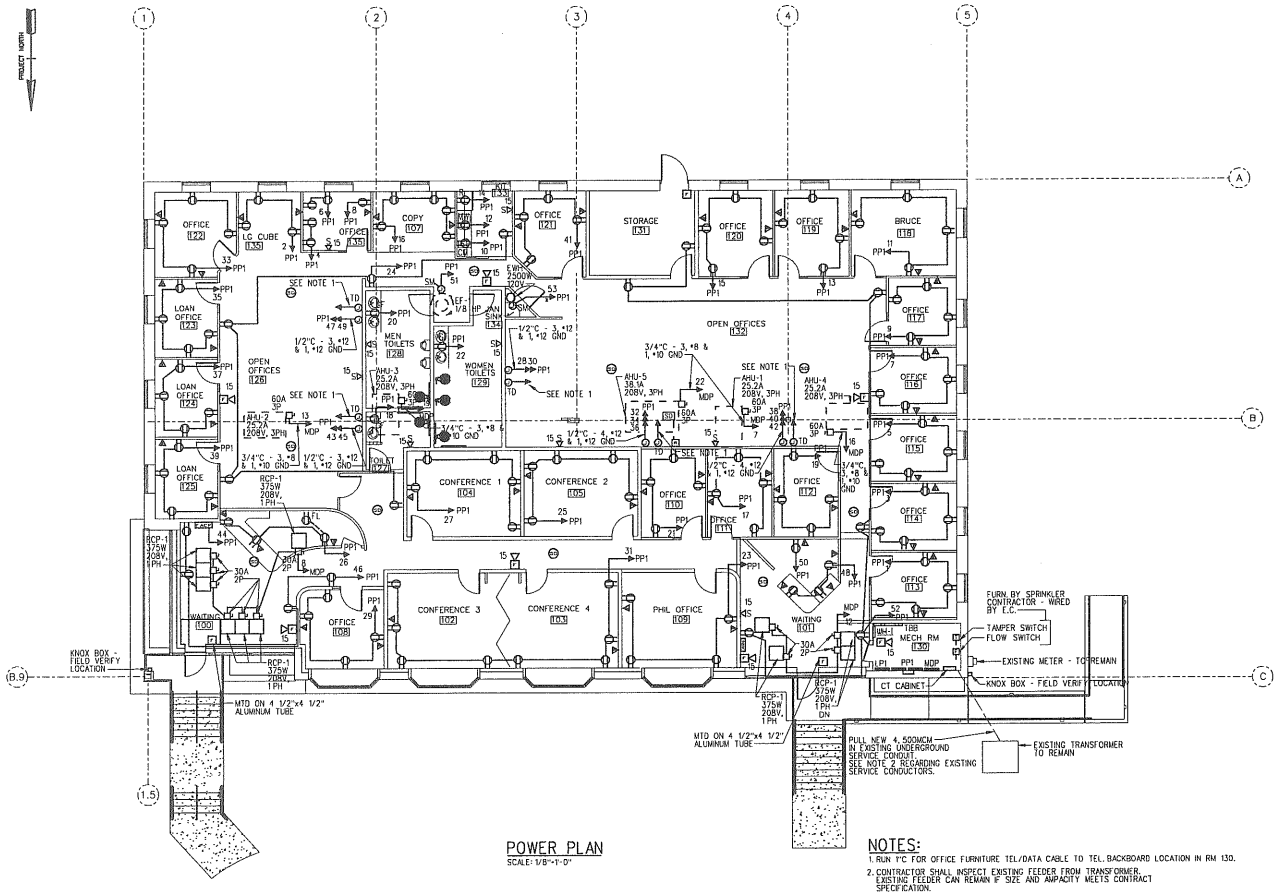
Fax - (207) 865-1830



POWER PLAN
SCALE: 1/8"=1'-0"

NOTES:
1. RUN 1"C FOR OFFICE FURNITURE TEL/DATA CABLE TO TEL. BACKBOARD LOCATION IN RM 130.
2. CONTRACTOR SHALL INSPECT EXISTING FEEDER FROM TRANSFORMER. EXISTING FEEDER CAN REMAIN IF SIZE AND AMPACITY MEETS CONTRACT SPECIFICATION.

REV.	DATE	STATUS
	3-25-06	
1	4-28-06	ADDENDUM 1
2	5-5-06	ADDENDUM 2

JOHN H. LEASURE ARCHITECT, INC.
60 STREET
SOUTH PORTLAND, MAINE 04106

POWER PLAN

ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY &
NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

E2

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	LAMPS QUANTITY & TYPE	REMARKS
A	METALUX* 2P2GX-3U15/8-S-33-120-TEB81	(3) 31W T8- 3500 DEG	2'X2' PARABOLIC - 9 CELL - RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
B	METALUX* 2RDI-32415-RP-120-TEB53	(3) 2415 - 3500 DEG	2'X2' RECESSED DIRECT/INDIRECT - RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
C	METALUX* RDI-23278-RP-120-TEB81	(2) F32T8 - 3500 DEG	1'X4' DIRECT/INDIRECT- RECESSED IN GRID CEILING - (1) 2 LAMP ELECTRONIC BALLAST
D	METALUX* 2RDI-332-RP-120-TEB81	(3) F32T8 - 3500 DEG	2'X4' DIRECT/INDIRECT- RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
E	SURE-LITES *LPX 7 0 R WH	LED'S W/ FIXTURE	LED EXIT LIGHT - END/CEILING/WALL MOUNT - SINGLE OR DOUBLE FACE
F	METALUX* 2GC8-232-A12-120-TEB8	(2) F32T8 - 3500 DEG	2'X4' LENS TROFFER - RECESSED IN GRID CEILING - (1) 2 LAMP ELECTRONIC BALLAST
G	METALUX *WS-332-A-120-EB83	(3) F32T8 - 3500 DEG	WRAPAROUND - SURFACE MOUNTED - (1) 3 LAMP ELECTRONIC BALLAST
H	METALUX *BC-132-120-EB81	(1) F32T8 3500 DEG	4' LONG - MOUNT ABOVE MIRROR IN BATHROOM
J	METALUX *BC-217-120-EB81	(2) F17T8 3500 DEG	2' LONG - MOUNT ABOVE MIRROR IN BATHROOM
K	HALO *HB03HP-B10C	(2) 26W CF	RECESSED DOWNLIGHT
L	HALO *HB03HP-B10WW	(2) 26W CF	RECESSED WALL WASHER DOWNLIGHT
M	PORTFOLIO* MD7-730-7780-LI-3G	(1) 70W MH	RECESSED IN CANOPY
N	LUMARK - MHP-C-70W-120-PE	(1) 70W MH	METAL HALIDE WALL PACK
P	ABOLITE *AD 150 INC LDS96WL GB A 3 GWT	(1) 150W INC.	SIGN LIGHT
Q	LUMERE *ZUMA 1201-LA-35T4-12-BK, T300	(1) 35W/T4/GY6.35	STEP LIGHT - LOW VOLTAGE 12V - LUMIERE *T750 TRANSFORMER
R	PRESCOLITE *CFR826UEB-SS-SCBA	(2) 26W CF	RECESSED DOWNLIGHT - 45° SLOPED GYPSUM WALLBOARD CEILING
S	PORTFOLIO *MD6-7606710-LI	(1) 50W MH	RECESSED IN CANOPY

PROJECT: 2320 CONGRESS ST PORTLAND, MAINE — THREE PHASE PANELBOARD SCHEDULE — PANEL DESIGNATION: MDP

SURFACE MOUNT — MAIN BRKR: 400A, 3P — VOLTS: 120/208 — PHASE: 3 — WIRE: 4

KVA LOAD					KVA LOAD
5.5	PANEL LP1	1	2	PANEL PP1	16.0
5.5		3	4		16.0
5.5		5	6		16.0
3.0	AHU-1	7	8	(7) RCP-1	1.3
3.0		9	10		1.3
3.0		11	12	(4) RCP-1	.75
3.0	AHU-2	13	14		.75
3.0		15	16	AHU-4	3.0
3.0		17	18		3.0
3.0	AHU-3	19	20		3.0
2.9		21	22	AHU-5	4.6
3.0		23	24		4.6
	SPACE	25	26		4.6
		27	28	SPACE	
		29	30		
		31	32		
		33	34		
		35	36		
		37	38		
		39	40		
		41	42		

TOTAL CONN. LOAD 118.5 KVA — TOTAL DEM. LOAD 106.5 KVA

PROJECT: 2320 CONGRESS ST PORTLAND, MAINE — THREE PHASE PANELBOARD SCHEDULE — PANEL DESIGNATION: PP1 - LEFT SIDE

SURFACE MOUNT — MAIN LUGS: 225A — VOLTS: 120/208 — PHASE: 3 — WIRE: 4

KVA LOAD					KVA LOAD
1.6	OUTLETS - RMS 113 & 114	1	2	OUTLETS - LARGE CUBE	.80
1.6	OUTLETS - RMS 115 & 116	3	4	OUTLETS - RM 107	1.0
1.0	OUTLETS - RMS 117 & 118	5	6	OUTLETS - RM 107	1.0
1.6	OUTLETS - RMS 119 & 120	7	8	COPIER - RM 107	1.0
1.6	OUTLETS - RMS 111 & 112	9	10	OUTLETS - RM 133	1.0
1.6	OUTLETS - RMS 109 & 110	11	12	OUTLETS - RM 133	1.0
1.0	OUTLETS - RM 105	13	14	REFRIGERATOR - RM 133	1.5
1.0	OUTLETS - RM 104	15	16	OUTLETS - RM 132	.80
.80	OUTLETS - RM 108	17	18	OUTLET - RM 127	.50
1.6	OUTLETS - RM 102 & 103	19	20	OUTLET - RM 128	.50
1.6	OUTLETS - RM 122 & 123	21	22	OUTLET - RM 129	.50
1.6	OUTLETS - RM 124 & 125	23	24	OUTLETS - RM 126	1.0
.80	OUTLETS - RM 121	25	26	OUTLETS - RECEPTION	1.0
	SPARE	27	28	OFFICE FURNITURE POWER RM 132	1.0
		29	30		1.0
		31	32		1.0
	SPACE	33	34		1.0
		35	36		1.0
		37	38		1.0
		39	40		1.0
		41	42		1.0

SUB FEED LUGS

PROJECT: 2320 CONGRESS ST PORTLAND, MAINE — THREE PHASE PANELBOARD SCHEDULE — PANEL DESIGNATION: PP1 - RIGHT SIDE

SURFACE MOUNT — MAIN LUGS: 225A — VOLTS: 120/208 — PHASE: 3 — WIRE: 4

KVA LOAD					KVA LOAD
1.0	OFFICE FURNITURE POWER RM 128	43	44	FIRE ALARM SYSTEM	.50
1.0		45	46	OUTLETS - RM 100	.50
1.0		47	48	OUTLETS - RM 101	1.0
1.0		49	50	COPIER - RM 101	1.0
.50	EF-1	51	52	OUTLETS - RM 101, 130, 131	1.2
2.5	EWH	53	54	SPACE	
	SPARE	55	56		
		57	58		
		59	60		
		61	62		
		63	64		
	SPACE	65	66		
		67	68		
		69	70		
		71	72		
		73	74		
		75	76		
		77	78		
		79	80		
		81	82		
		83	84		

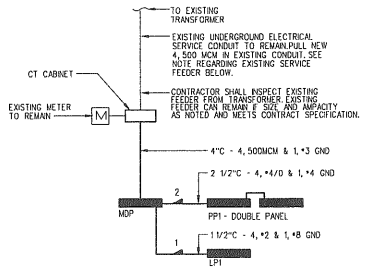
TOTAL CONN. LOAD 48.1 KVA — TOTAL DEM. LOAD 38.1 KVA

PROJECT: 2320 CONGRESS ST PORTLAND, MAINE — THREE PHASE PANELBOARD SCHEDULE — PANEL DESIGNATION: LP1

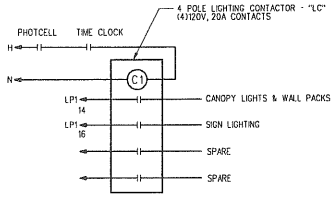
SURFACE MOUNT — MAIN LUGS: 100A — VOLTS: 120/208 — PHASE: 3 — WIRE: 4

KVA LOAD					KVA LOAD
1.3	LTG - RMS 122-126	1	2	LTG - RMS 130, 133-137	1.2
1.6	LTG - RM 106	3	4	LTG - RM 101	1.6
1.4	LTG - RM 109	5	6	LTG - RMS 104,105, 110-112	1.3
1.2	LTG - RMS 127-129, 132-134	7	8	LTG - RM 132	1.0
1.5	LTG - RMS 108, 102, 103, 105	9	10	LTG - RM 132	1.0
	SPARE	11	12	LTG - RMS 139-121, 131	1.1
		13	14	EXTERIOR LIGHTING VIA CONTACTOR "LC"	1.1
		15	16	SIGN LIGHTING VIA CONTACTOR "LC"	1.0
		17	18	SPACE	
		19	20		
	SPACE	21	22		
		23	24		
		25	26		
		27	28		
		29	30		
		31	32		
		33	34		
		35	36		
		37	38		
		39	40		
		41	42		

TOTAL CONN. LOAD 15.5 KVA — TOTAL DEM. LOAD 15.5 KVA



ONE LINE DIAGRAM
SCALE: NONE



LIGHTING CONTACTOR "LC" DETAIL
SCALE: NONE

SYMBOL LEGEND

- POWER PANEL 120/208V, 3 PHS, 4 WIRE
- (MA) ELECTRIC MOTOR DRIVEN EQUIPMENT,HP SHOWN
- SM MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE, MOUNTED AT UNIT
- (J) JUNCTION BOX - "TD" DENOTES FOR TEL/DATA
- DISCONNECT SWITCH - 250 VOLT SIZE & NO. POLES AS NOTED.
- COMBINATION CIRCUIT BREAKER & MAGNETIC MOTOR STARTER - NEMA SIZE 1 HAND-OFF-AUTO SWITCH W/RED POWER ON PILOT LIGHT.
- LIGHTING FIXTURES- CAPITAL LETTERS DENOTE TYPE AS PER LIGHTING FIXTURE SCHEDULE.LOWER CASE LETTERS INDICATE SWITCH CONTROL- "ob" INDICATES INBOARD LAMPS CONTROLLED BY SWITCH "b"-OUTBOARD LAMPS CONTROLLED BY SWITCH "o". DIAGONAL LINE INDICATES NIGHT LIGHT (UNSWITCHED)
- RACEWAY & WIRING OR MC CABLE RUN CONCEALED IN WALLS/CEILINGS.
- RACEWAY & WIRING RUN EXPOSED
- RACEWAY & WIRING RUN CONCEALED UNDER GROUND/FLOOR
- HOME RUN TO PANEL- ARROWS INDICATE QUANTITY OF CIRCUITS- NUMERALS DENOTE CIRCUIT NUMBERS

BRANCH CIRCUIT WIRING SHALL CONSIST OF 2-#12, 1-#12G,1/2"C UNLESS OTHERWISE NOTED. ASTERISK INDICATES #10 AWG FOR ALL CIRCUITS CONTAINED IN HOMERUN.

- S SINGLE POLE SWITCH,120 VOLT,15 AMP,SPEC GRADE, GROUNDING TYPE ,MOUNT 48" AFF, 3-3-WAY,4-4-WAY,K-KWIK LIGHT KEY SLOT, P-PILOT, WP-WEATHERPROOF. LOWER CASE LETTER INDICATES FIXTURE OR CONTROLLED LOAD. COLOR BY ARCHITECT PILOT LIGHT SWITCHES SHALL BE PROVIDED W/ ENGRAVED NAMEPLATE IDENTIFYING USE.
- DUPLEX RECEPTACLE- 15A, 125V SPEC. GRADE GROUNDING TYPE AND MATCHING PLATE - FLUSH MOUNT 18" AFF. - "D" DENOTES DOUBLE DUPLEX "CM" DENOTES COFFEE MAKER, "MW" DENOTES MICROWAVE
- GF DUPLEX - GROUND FAULT RECEPTACLE 15A, 125V- TERMINAL TYPE - WITH MATCHING PLATE FURNISHED W/ RECEPTACLE. FLUSH MOUNTED 48" AFF EXCEPT AS NOTED. COLOR BY ARCHITECT
- TELEPHONE OUTLET - MOUNT 18"AFF - (1) CAT 6 CABLE BACK TO TBB "W" INDICATES WALL MOUNTED AT 48" AFF
- TELEPHONE/DATA OUTLET - MOUNT 18"AFF - (2) CAT 6 CABLES BACK TO TBB
- EXIT LIGHT FIXTURE-UNSWITCHED
- EMERGENCY BATTERY UNIT - WITH TWO HEADS - MOUNT 6'-8" AFF SURE-LITES *CC3-WH, 6V D.C., 10.8 WATTS FOR 90 MINUTES
- 200 FIRE ALARM HEAT DETECTOR,FIXED TEMPERATURE 200°F
- 135 FIRE ALARM HEAT DETECTOR, FIXED TEMPERATURE 135°F
- SMOKE DETECTOR, PHOTOELECTRIC TYPE- SYSTEM CONNECTED
- FACP FIRE ALARM CONTROL PANEL
- ANN FIRE ALARM REMOTE ANNUNCIATOR PANEL
- F FIRE ALARM PULL STATION MOUNT 48"AFF
- 15 FIRE ALARM AUDIO/VISUAL, MOUNT 6" BELOW CEILING NUMERALS DENOTE CANDELA RATING
- 15 SPH FIRE ALARM VISUAL STROBE ONLY NUMERALS DENOTE CANDELA RATING MOUNT 6" BELOW CEILING
- SD DUCT MOUNTED SMOKE DETECTOR - FURNISHED WITH AHU UNIT
- R REMOTE TEST STATION FOR DUCT MOUNTED SMOKE DETECTOR
- PC PHOTOCELL
- LC LIGHTING CONTACTOR
- TC TIME CLOCK
- T TRANSFORMER FOR STEP LIGHTING - SEE FIXTURE TYPE "Q"

BENNETT ENGINEERING
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Tel.- (207) 865-9475
Fax.- (207) 865-1600

REV.	DATE	STATUS
0	3-25-06	
1	4-28-06	ADDENDUM 1
2	5-5-06	ADDENDUM 2

JOHN H. LEASURE ARCHITECT, INC.
60 STREET
SOUTH PORTLAND, MAINE 04106

ELECTRICAL DETAILS, LEGEND AND SCHEDULES

ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY &
NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

E3

SGC ENGINEERING, LLC
• Civil Design & Survey Engineering
• Environmental & Regulatory Permitting
• Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

July 26, 2006

517001

Ms. Jean Fraser, Planner
City of Portland
Planning and Development Department
389 Congress Street
Portland, Maine 04101

RE: **2320 Congress Street**
Minor Site Plan Review
Response to DRC Comments dated June 28, 2006

Dear Ms. Fraser:

Regarding the Minor Site Plan Review that the City is conducting of the renovation of the commercial building and proposed site improvements at 2320 Congress Street proposed by 2320 Congress Street, LLC, we are in receipt of comments from Dan Goyette, P.E., the Development Review Coordinator, dated June 28, 2006. We are also in receipt of comments from Jean Fraser, Planner for the City of Portland, dated July 21, 2006. We have carefully reviewed these comments and have revised the plans as appropriate to fully address them. WE have summarized our responses to each comment below. For convenience, we have reiterated the review comments followed by our responses in bold type.

Dan Goyette's comments:

1. General Comments

   A. A landscaping plan has not been submitted for review. Parking lots containing more than 8 parking spaces should have a total landscaped area at least 10 percent of the area designated for parking and vehicle circulation. Also, there should be no more than 8 parking spaces (or 16 contiguous spaces) in a row without landscaped dividers. ***The parking lot layout has been revised to meet the standards set forth in the City's Technical and Design Standards and Guidelines. In addition, a Landscape Plan Sheet 4.0 has been added to the development plan set that reflects the landscaping agreed to at a meeting between Michael Roy of SGC and Jeff Tarling, City Arborist, at the subject property on July 17, 2006.***

   B. The project is required to install a new sidewalk along the length of the property line unless able to meet two or more of the waiver criteria detailed in Sec. 14-506 Modifications. It does not appear that the project will meet the waiver criteria. Due to site constraints, the applicant will be required to install a new sidewalk across the street from the property. ***The plans have been revised to propose a new 5-foot wide sidewalk across the street from 2320 Congress Street. As requested by the City, the sidewalk has been located at the edge of the Congress Street right-of-way line and will extend from the WISE property entrance to Hutchins Drive. The alignment of the sidewalk will be confirmed with the Portland Department of Public Works at the time of construction to allow for any realignment found necessary to take into account existing topography and drainage.***

C. The survey for the project does not coincide with approved City standards. The survey needs to be tied to the vertical datum of NGVD 1929. Also, the project needs to be tied to the Maine State Plane Coordinate System (2-zone projection), West Zone using the NAD 1983 (HARN) Datum and the U.S. Survey Foot as the unit of measure. ***The development plans have been revised as required to reflect the datum and coordinate system requested.***

Jean Fraser's comments:

1. Stormwater: The City's DRC has reviewed the submitted Stormwater Report and has no further comments on this issue. ***We acknowledge there are no further comments regarding stormwater.***

2. Sidewalk: Ordinance 25 (Public Works) requires the installation of a sidewalk and granite curbs along Congress Street. There is already a curb along the frontage of this site but no sidewalk. The problems of topography on both sides of Congress Street at this location have been discussed between the City Engineer (Eric Labelle) and Mike Roy and I understand that a final solution has been agreed upon regarding the location of a new sidewalk which will be included on the revised plan to be submitted. ***Addressed above in response to Dan Goyette's comments.***

3. Landscaping: I understand that Jeff Tarling has provided his comments direct to you last week and a landscaping plan will be submitted. ***A Landscape Plan Sheet 4.0 has been added to the development plan set that reflects the landscaping agreed to at a meeting between Michael Roy of SGC and Jeff Tarling, City Arborist, at the subject property on July 17, 2006.***

4. Encroachment: There is an existing pavement encroachment on the south west corner of the site which has been retained in the proposals. This should be regularized as part of this application. ***The Site Layout Sheet 2.0 has been revised to require the pavement encroachment be removed to the 2320 Congress Street property line. It is understood that this will be waived if an agreement with the abutter is obtained.***

5. Traffic Generation: I understand there could be up to 40 employees in this building as well as members of the public accessing the site. Based upon financial contribution requirements for the recently permitted Woodard & Curran Office Building Expansion Project, a contribution of $1,500.00 is requested for future traffic improvements at the Congress Street/Hutchins Drive Intersection. ***This contribution is acceptable to 2320 Congress Street, LLC.***

6. Survey: The 'Existing Conditions' Plan is the Boundary Survey and needs to meet the City's requirements for surveys as clarified in the memorandum from Dan Goyette (City's DRC) dated June 28, 2006 and previously emailed to Mike Roy. ***Addressed above in response to Dan Goyette's comments.***

7. Please show other relevant information on the revised plans including the location of existing and proposed fire hydrants; the location and proposed screening of solid waste receptacles; and lighting. ***The Site Layout Sheet 2.0 has been revised to show the location of the two nearest hydrants along Congress Street. A Life Safety Plan completed by John H. Leasure Architects, Inc. is attached and shows the buildings fire protection. A Lighting Plan and Power Plan completed by Bennett Engineering are attached and show the exterior building lighting.***

Please review these responses. If they are found to adequately address outstanding comments, we request that Minor Site Plan Approval be granted.

Thank you.

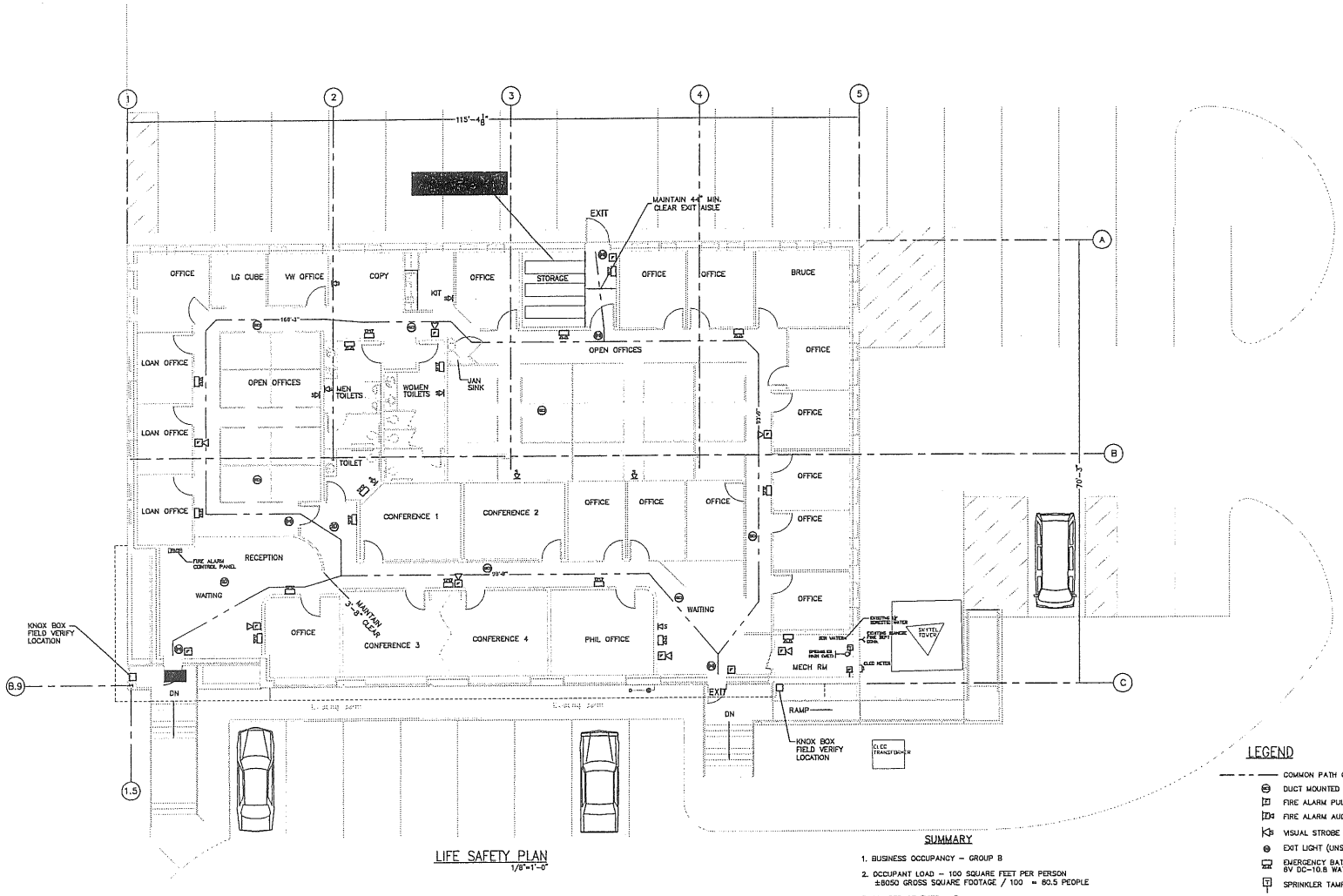
Very truly yours,
SGC ENGINEERING, LLC

John M. Riordan, P.E.
Director of Civil Engineering

Enclosure

cc: Bruce Brown

SGC



LIFE SAFETY PLAN
1/8"=1'-0"

SUMMARY

1. BUSINESS OCCUPANCY – GROUP B
2. OCCUPANT LOAD – 100 SQUARE FEET PER PERSON
   ±8050 GROSS SQUARE FOOTAGE / 100 = 80.5 PEOPLE
3. NUMBER OF EXITS – 3
4. EGRESS WIDTH PER OCCUPANT – 0.2 INCH PER PERSON
5. MAXIMUM TRAVEL DISTANCE – 300 FEET ALLOWED
   COMMON PATH OF TRAVEL NOT TO EXCEED 100 FEET
6. CLEAR WIDTH OF EXIT PASSAGEWAYS – MINIMUM 3'-8"
7. DIAGONAL DISTANCE ACROSS BUILDING INTERIOR = ±131'-6"
8. BUILDING SHALL BE FULLY SPRINKLERED IN ACCORDANCE WITH NFPA 13. CONTRACTOR SHALL INSPECT EXISTING SYSTEM; MODIFY TO CONFORM TO NFPA 13 AND SUBMIT SPRINKLER PLANS TO STATE OF MAINE AND CITY OF PORTLAND AS REQUIRED.
9. BUILDING SQUARE FOOTAGE (EXTERIOR FOOTPRINT) = 8102± S.F.

LEGEND

- COMMON PATH OF TRAVEL
- DUCT MOUNTED SMOKE DETECTOR
- FIRE ALARM PULL STATION (MTD 48" AFF)
- FIRE ALARM AUDIO/VISUAL (15 CANDELA)
- VISUAL STROBE LIGHT ONLY 15 CANDELA)
- EXIT LIGHT (UNSWITCHED)
- EMERGENCY BATTERY UNIT (2 HEADS) 6V DC-10.8 WATTS FOR 90 MINUTES
- SPRINKLER TAMPER SWITCH
- SPRINKLER FLOW SWITCH

THERE ARE NO FIRE RATED WALLS.
EXTERIOR WALLS – 5/8" GYPSUM BOARD APPLIED TO INTERIOR FACE.
INTERIOR WALLS – 5/8" GYPSUM BOARD APPLIED TO BOTH FACES.
[FOR WALL TYPES SEE DRAWING A7]

IRST FINANCIAL MORTGAGE COMPANY &

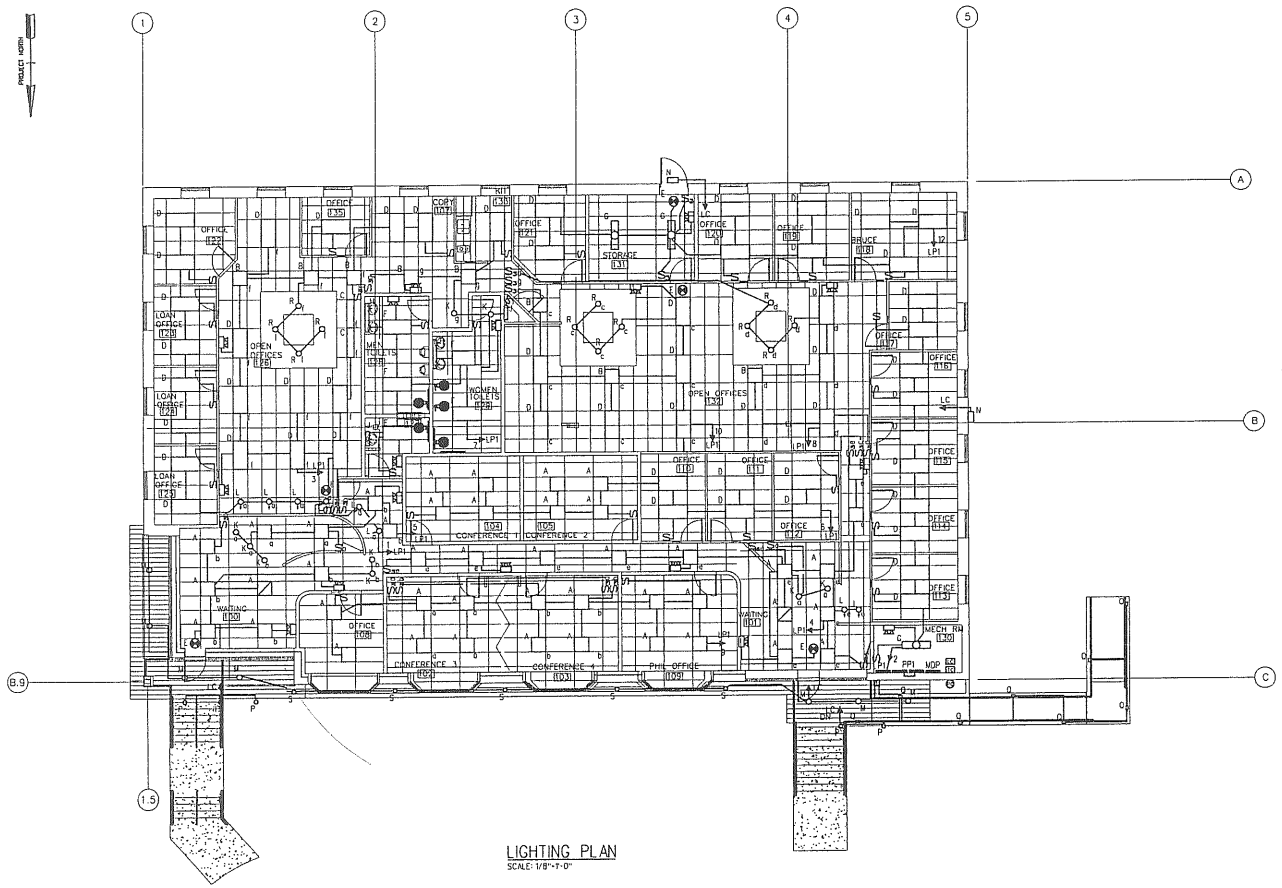
REGISTERED ARCHITECT JOHN H. LEASURE No. 310 STATE OF MAINE

REV.	DATE	STATUS
	4-11-06	REVISED OFFICE PLAN LAYOUT
	4-28-06	REVISED CANOPY AND DOMESTIC WATER NOTE
	5-5-06	

JOHN H. LEASURE ARCHITECT, INC.
6 Q STREET
SOUTH PORTLAND, MAINE 04106

A0

BENNETT ENGINEERING
CONSULTING ENGINEERS
Tel - (207) 865-9475
Fax - (207) 865-1100



LIGHTING PLAN
SCALE: 1/8"=1'-0"

REV	DATE	STATUS
	13-25-06	
1	14-28-06	ADDENDUM 1
2	15-5-06	ADDENDUM 2

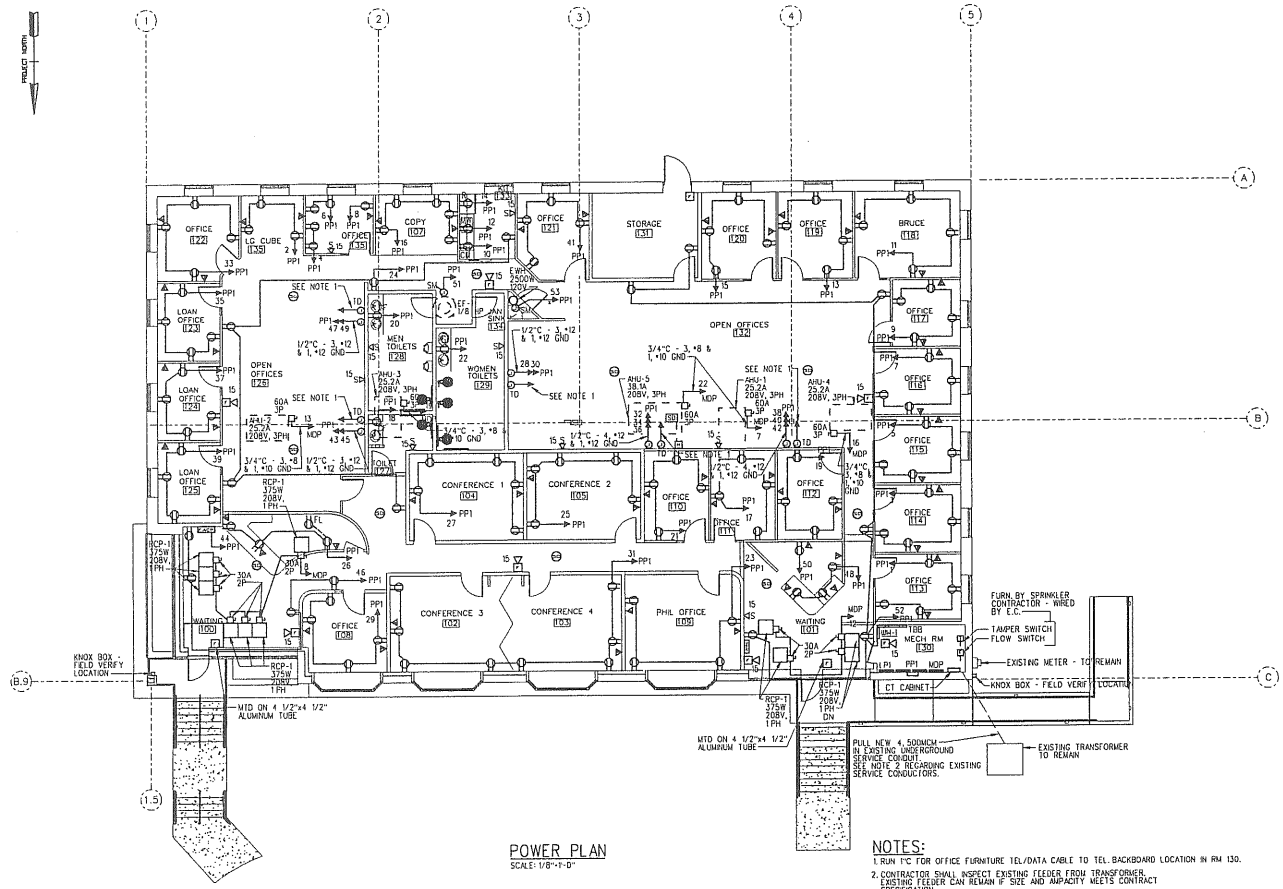
JOHN H. LEASURE ARCHITECT, INC.
60 STREET
SOUTH PORTLAND, MAINE 04106

LIGHTING PLAN

ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY &
NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

E1

BENNETT ENGINEERING
CONSULTING ENGINEERS
Bennett Road, P.O. Box 391, Freeport, Maine 04032
Tel - (207) 865-4713
Fax - (207) 865-1600



POWER PLAN
SCALE: 1/8"-1'-0"

NOTES:
1. RUN 1"C FOR OFFICE FURNITURE TEL/DATA CABLE TO TEL. BACKBOARD LOCATION IN RM 130.
2. CONTRACTOR SHALL INSPECT EXISTING FEEDER FROM TRANSFORMER. EXISTING FEEDER CAN REMAIN IF SIZE AND AMPACITY MEETS CONTRACT SPECIFICATION.

REV.	DATE	STATUS
	3-25-05	
1	4-26-05	ADDENDUM 1
2	5-5-05	ADDENDUM 2

JOHN H. LEASURE ARCHITECT, INC.
6 Q STREET
SOUTH PORTLAND, MAINE 04106

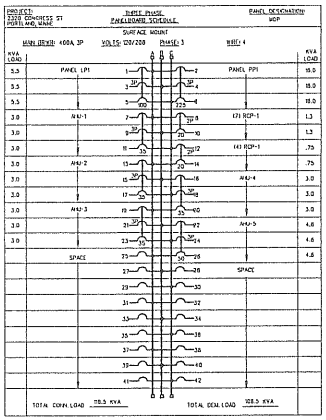
POWER PLAN

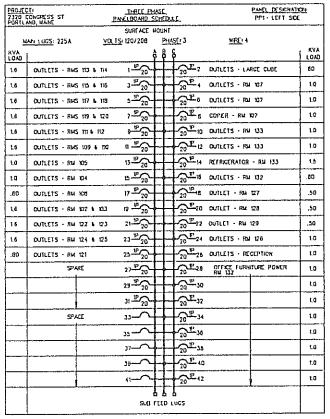
ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY &
NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

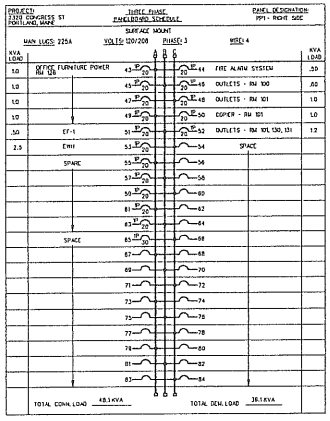
E2

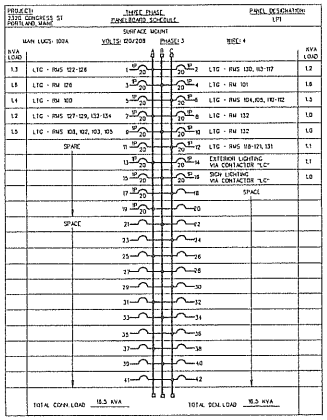
LIGHTING FIXTURE SCHEDULE

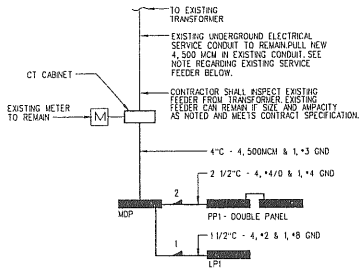
TYPE	DESCRIPTION	LAMPS QUANTITY & TYPE	REMARKS
A	METALUX* 2P2GX-3U15/B-S-33-120-TEB81	(3) 31W T8- 3500 DEG	2'X2' PARABOLIC - 9 CELL - RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
B	METALUX* 2RDI-32475-RP-120-TEB53	(3) 2475 - 3500 DEG	2'X2' RECESSED DIRECT/INDIRECT - RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
C	METALUX* RDI-232T8-RP-120-TEB81	(2) F32T8 - 3500 DEG	1'X4' DIRECT/INDIRECT- RECESSED IN GRID CEILING - (1) 2 LAMP ELECTRONIC BALLAST
D	METALUX* 2RDI-332-RP-120-TEB81	(3) F32T8 - 3500 DEG	2'X4' DIRECT/INDIRECT- RECESSED IN GRID CEILING - (1) 3 LAMP ELECTRONIC BALLAST
E	SURE-LITES *LPX 7 0 R WH	LED'S W/ FIXTURE	LED EXIT LIGHT - END/CEILING/WALL MOUNT - SINGLE OR DOUBLE FACE
F	METALUX* 2GC8-232-AI2-120-TEB8	(2) F32T8 - 3500 DEG	2'X4' LENS TROFFER - RECESSED IN GRID CEILING - (1) 2 LAMP ELECTRONIC BALLAST
G	METALUX *WS-332-A-120-EB83	(3) F32T8 - 3500 DEG	WRAPAROUND - SURFACE MOUNTED - (1) 3 LAMP ELECTRONIC BALLAST
H	METALUX *BC-132-120-EB81	(1) F32T8 3500 DEG	4' LONG - MOUNT ABOVE MIRROR IN BATHROOM
J	METALUX *BC-217-120-EB81	(2) F17T8 3500 DEG	2' LONG - MOUNT ABOVE MIRROR IN BATHROOM
K	HALO *H803HP-810C	(2) 26W CF	RECESSED DOWNLIGHT
L	HALO *H803HP-810WW	(2) 26W CF	RECESSED WALL WASHER DOWNLIGHT
M	PORTFOLIO* MD7-730-7780-LI-3G	(1) 70W MH	RECESSED IN CANOPY
N	LUMARK - MHP-C-70W-120-PE	(1) 70W MH	METAL HALIDE WALL PACK
P	ABOLITE *AD 150 INC LDS96WL GB A 3 GWT	(1) 150W INC	SIGN LIGHT
Q	LUMERE *ZUMA 1201-LA-35T4-12-BK, T300	(1) 35W/T4/GY6.35	STEP LIGHT - LOW VOLTAGE 12V - LUMERE *T750 TRANSFORMER
R	PRESCOLITE *CFR826UEB-SS-SC8A	(2) 26W CF	RECESSED DOWNLIGHT - 45° SLOPED GYPSUM WALLBOARD CEILING
S	PORTFOLIO *MD6-7606710-LI	(1) 50W MH	RECESSED IN CANOPY



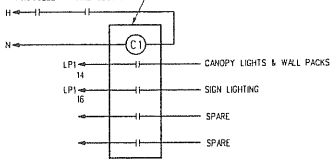








ONE LINE DIAGRAM
SCALE: NONE



LIGHTING CONTACTOR "LC" DETAIL
SCALE: NONE

SYMBOL LEGEND

- POWER PANEL 120/208V, 3 PHS, 4 WIRE
- V/4 — ELECTRIC MOTOR DRIVEN EQUIPMENT,HP SHOWN
- SM — MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD DEVICE, MOUNTED AT UNIT
- J — JUNCTION BOX - "TD" DENOTES FOR TEL/DATA
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- 200 — FIRE ALARM HEAT DETECTOR, FIXED TEMPERATURE 200°F
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- FACP — FIRE ALARM CONTROL PANEL
- ANN — FIRE ALARM REMOTE ANNUNCIATOR PANEL
- F — FIRE ALARM PULL STATION MOUNT 48"AFF
- 15 F — FIRE ALARM AUDIO/VISUAL, MOUNT 6" BELOW CEILING NUMERALS DENOTE CANDELA RATING
- 15 SP — FIRE ALARM VISUAL STROBE ONLY NUMERALS DENOTE CANDELA RATING MOUNT 6" BELOW CEILING
- SD — DUCT MOUNTED SMOKE DETECTOR - FURNISHED WITH AHU UNIT
- P — REMOTE TEST STATION FOR DUCT MOUNTED SMOKE DETECTOR
- PC — PHOTOCELL
- LC — LIGHTING CONTACTOR
- TC — TIME CLOCK
- T — TRANSFORMER FOR STEP LIGHTING - SEE FIXTURE TYPE "Q"

BENNETT ENGINEERING
CONSULTING ENGINEERS
Thomas Bennett, P.O. Box 297, Pownal, Maine 04062
Tel - (207) 865-4472
Fax - (207) 865-1800

REV	DATE	STATUS
	3-25-06	
1	4-26-06	ADDENDUM 1
2	5-3-06	ADDENDUM 2

JOHN H. LEASURE ARCHITECT, INC.
60 O STREET
SOUTH PORTLAND, MAINE 04106

ELECTRICAL DETAILS, LEGEND AND SCHEDULES

ALTERATIONS TO:
FIRST FINANCIAL MORTGAGE COMPANY & NEW ENGLAND TITLE COMPANY
2320 CONGRESS STREET
PORTLAND, MAINE

E3

SGC ENGINEERING, LLC
- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

LETTER OF TRANSMITTAL

TO: Ms. Jean Fraser
Planning and Development Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

DATE: June 26, 2005
PROJ. NO.: 517001
RE: 2320 Congress Street
Portland, Maine
Stormwater Management
Summary

WE ARE SENDING YOU [x] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Plans [ ] Samples [ ] Specifications
[ ] Copy of letter [ ] Change order [ ] _____

COPIES	DATE	NO.	DESCRIPTION
2	6/20/06		Stormwater Management Summary

THESE ARE TRANSMITTED as checked below:

[X] For approval [ ] Approved as submitted [ ] Resubmit _____ copies for approval
[ ] For your use [ ] Approved as noted [ ] Submit _____ copies for distribution
[X] As requested [ ] Returned for corrections [ ] Return _____ corrected prints
[ ] For review and comment [ ] Returned

REMARKS:

Ms. Fraser,
Please find attached the 2 copies of the Stormwater Management Summary and Report for the 2320 Congress Street property that you requested. If you have any questions or need anything else please feel free to give me a call. Thanks.

COPY TO: _____

SIGNED: _____
Michael R. Roy

501 County Road, Westbrook, Maine 04092 - Office: 207-347-8100 • Fax: 207-347-8101
Target Technology Center, 20 Godfrey Drive, Suite 200, Orono, Maine 04473 - Office: 207-866-6571 • Fax: 207-866-6501
www.sgceng.com • E-mail: sgc@sgceng.com

as sent

July 21, 2006

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

I am writing to clarify the current position regarding the Minor Site Plan review of this proposal for enlargement of the parking area associated with this property.

Since its submission in April, 2006 the City has been corresponding with Mike Roy of your office regarding further information needed in order to complete the review. The Stormwater Report was received on June 21, 2006 and the Landscaping Plan has not yet been received.

The current status of the issues previously raised is as follows:

1. Stormwater: the City's DRC has reviewed the submitted Stormwater Report and has no further comments on this issue.

2. Sidewalk: Ordinance 25 (Public Works) requires the installation of a sidewalk and granite curbs along the Congress Street. There is already a curb along the frontage of this site but no sidewalk. The problems of topography on both sides of Congress Street at this location have been discussed between the City Engineer (Eric Labelle) and Mike Roy and I understand that a final solution has been agreed regarding the location of a new sidewalk which will be included on the revised plan to be submitted.

3. Landscaping: I understand that Jeff Tarling has provided his comments direct to you last week and a landscaping plan will be submitted.

4. Encroachment: There is an existing pavement encroachment on the south west corner of the site which has been retained in the proposals. This should be regularized as part of this application.

5. Traffic Generation: I understand there could be up to 40 employees in this building as well as members of the public accessing the site. Based upon financial contribution requirements for the recently permitted Woodard & Curran Office Building Expansion Project, a contribution of $1,500.00 is requested for future traffic improvements at the Congress Street/Hutchins Drive intersection.

6. Survey: The 'Existing Conditions' Plan is the Boundary Survey and needs to meet the Citys requirements for surveys as clarified in the memorandum from Dan Goyette (Citys DRC) dated June 28, 2006 and previously e-mailed to Mike Roy.

7. Please show other relevant information on the revised plans including the location of existing and proposed fire hydrants; the location and proposed screening of solid waste receptacles; any lighting.

If you have any questions, please do not hesitate to contact me on (207) 874 8728.

Sincerely,

Jean Fraser

Jean Fraser
Planner, City of Portland

Cc Sarah Hopkins, Development Review Manager
Eric Labelle, City Engineer
Tom Errico, Traffic Reviewer
Jim Carmody, Transportation Engineer
Dan Goyette, DRC
Jeff Tarling, City Arborist

July 21, 2006

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

I am writing to clarify the current position regarding the Minor Site Plan review of this proposal for enlargement of the parking area associated with this property.

Since its submission in April, 2006 the City has been corresponding with Mike Roy of your office regarding further information needed in order to complete the review. The Stormwater Report was received on June 21, 2006 and the Landscaping Plan has not yet been received.

The current status of the issues previously raised is as follows:

1. Stormwater: the City's DRC has reviewed the submitted Stormwater Report and has no further comments on this issue.

2. Sidewalk: Ordinance 25 (Public Works) requires the installation of a sidewalk and granite curbs along the Congress Street. There is already a curb along the frontage of this site but no sidewalk. The problems of topography on both sides of Congress Street at this location have been discussed between the City Engineer (Eric Labelle) and Mike Roy and I understand that a final solution has been agreed regarding the location of a new sidewalk which will be included on the revised plan to be submitted.

From: James Carmody
To: Fraser, Jean
Date: 7/21/2006 4:44:10 PM
Subject: Re: 2320 CONGRESS STREET

Jean:
Sorry for the delay. Have been in meetings all day. Access to this site is acceptable. The increase in traffic from this site does not need any changes to the existing access to the site.

James Carmody
Transportation Engineer
City of Portland
207-874-8894
JPC@portlandmaine.gov

>>> Jean Fraser 07/21 4:39 PM >>>
Jim,

Having not heard back from you after Dev Rev I assume the access to this site is OK.

The attached letter has been sent- it was urgent because the Landscape Plan they promised me for yesterday has not materialized and the applicant/developer is pressing us and thinks we are the source of the delay. I needed to get this on the record.

Jean

CITY OF PORTLAND, MAINE
Planning and Development Department
Planning Division
389 Congress Street, Portland, Maine 04101
(207) 874-8719 Fax (207) 756-8258

2320 Congress St.

2006-0080.

Correspondence

As of Dev Rev 7/12

(Greg) 1) Fire - got info? happy? 7.13 Yes. all OK except my dbase

Dan to look & discuss w/ Eric

(Eric) 2) Sidewalk - other side of Congress ? esplanade (yes

3) Survey MR has done e-mailed 7.13

4) Traffic $1500 contribution

(Jim) need traffic obs re access. awaited from Jim

5) Landscaping - MR mtg Jeff Tasting today

plan on way

From: Jean Fraser
To: Roy, Mike
Date: 7/13/2006 5:17:41 PM
Subject: 2320 Congress Street

Mike,

Re the location of the sidewalk:

I have agreed with all concerned that you should show the sidewalk on the other side of Congress Street (from your site) between the drive to Wise east to Hutchins- with the back edge of the sidewalk at the back edge of the ROW so its on the property line (so there will be an esplanade- if no esplanade you would have to put in expensive curbing). It can be at whatever the grade is at present.

On the plan put a note that the precise location will be agreed with PW to allow for some minor realignment to take account of topography and drainage- and there will be a matching condition.

Hope thats OK and allows for submission of the revisions as we discussed.

Jean

CC: Goyette, Dan; Labelle, Eric; Sarah Hopkins

From: Jean Fraser
To: Carmody, James
Date: 7/12/2006 4:55:04 PM
Subject: 2320 Congress Street

Jim,

This application dates from April and we need to clear it- could you please confirm that the access is OK.

The buiding is an existing one and the access is existing- they are proposing to expand the parking lot from 23 to 48 spaces. Greg Cass is OK with Fire Access and the outstanding traffic issue (raised at Dev Rev metg some while back) was whether the existing access is OK- I am not sure they can move it because of the drainage swale. The access drive width is 27feet at the property line and its 2-way.

thanks
Jean

CC: Sarah Hopkins

From: "Dan Goyette" <DGoyette@woodardcurran.com>
To: "Eric Labelle" <EJL@portlandmaine.gov>, "Jean Fraser" <JF@portlandmaine.gov>
Date: 7/12/2006 2:38:24 PM
Subject: (Block) RE: 2320 Congress Street

Well,

I have a question and some answers. How much (linear feet) and where exactly are they going to be required to install the sidewalk? It appears that the area directly across from the site will require significant site work to be able to install a granite curb and esplanade. In addition, a new catch basin will be required over the existing culvert now that the water does not sheet flow across the lawns but collects at the granite curb. =20

When headed into the city you can see the existing culvert outfall and slope. When leaving the city you can see how the road drains across the lawns and down the slope. Curbing does exist at the intersection of Hutchins and Congress and storm water is collected. By installing a granite curb the existing drainage pattern may be altered where a significant amount of flow will be discharged to the existing lawn. By not requiring the granite curb, we could leave a lawn esplanade and put the sidewalk at grade, similar to what was done at Woodard & Curran. Because they don't have to install the granite curb, maybe we could have them extend the sidewalk to Hutchins. I have attached pictures so you can better understand what I am trying to explain. =20

Please email back with comments and questions.

Dan

agreed w/ Eric + Dan 7.13 to request an esplanade but put sidewalk at back of ROW on property line from drive w. to Hutchins

-----Original Message-----
From: Eric Labelle [mailto:EJL@portlandmaine.gov]=20
Sent: Tuesday, July 11, 2006 6:14 PM
To: Dan Goyette
Cc: Jean Fraser
Subject: Re: 2320 Congress Street

Dan,
The applicant has asked to place the sidewalk on curb line due to grades. Does this make the best sense in this instance?
Thanks
Eric

>>> "Dan Goyette" <DGoyette@woodardcurran.com> 06/28 1:22 PM >>>
Jean,

Here is my review memo. Please let me know if you need me to clarify anything.

Daniel Goyette, PE

41 Hutchins Drive
Portland, Maine 04102
Phone: 800-426-4262

Fax: 207-871-0724
Email: dgoyette@woodardcurran.com

.ZIP attachment type(s) blocked
This message contained attachments that have been blocked by Guinevere. Please see your system administrator for more details

.

From: Jean Fraser
To: Roy, Mike
Date: 7/11/2006 3:06:32 PM
Subject: Re: Warren Avenue Car Wash & 2320 Congress Street

Mike,

I have another meeting at 1:00 tomorrow so will not be able to attend- if you feel you can revise the plans to incorporate Jeffs suggestions and then submit so Jeff can 'sign off' that will be fine.

I will be seeing Eric Labelle tomorrow morning and will get his comments on both schemes- for 2320 its esplanade or not and for the Car Wash he was going to give an estimate for putting inthe sidewalk between the slip entrance and the MTA line since you weren't going to do it as part of the project. I will also confirm the traffic comments on both after tomorrow.

I also need to speak to you about the exchange of letters between attorneys re the car wash site...

Talk to you on Thursday,
Jean

>>> "Mike Roy" <mroy@sgceng.com> 7/11/2006 1:42:25 PM >>>

Jean,

I have scheduled a meeting with Jeff Tarling for tomorrow (July 12) at 1:00 at his office to discuss the landscaping for Warren Avenue and 2320 Congress Street. We hope to resolve the landscaping for both projects at this meeting. Would you be able to attend? If not, I will update you after as to the results of the discussions.

In addition, I am still trying to contact Eric Labelle to resolve the location of the sidewalk for 2320 Congress Street (ie an esplanade or not). We hope to resolve this week as well.

If you have any questions or need anything else, please feel free to give me a call. Thanks.

Mike

Michael R. Roy

Project Engineer

SGC Engineering, LLC

501 County Road

Westbrook, Maine 04092

Tel : 207-347-8100

Fax : 207-347-8101

Cell : 207-671-8358

mroy@sgceng.com

From: "Thomas Errico" <terrico@wilbursmith.com>
To: "'Jean Fraser'" <JF@portlandmaine.gov>
Date: 7/5/2006 3:21:36 PM
Subject: 2320 Congress Street - Traffic Impact Fee

Jean-

Based upon financial contribution requirements for the recently permitted Woodard & Curran Office Building Expansion Project, I have computed a $1,500.00 contribution for future traffic improvements at the Congress Street/Hutchins Drive intersection associated with the 2320 Congress Street Commercial Building Project. If you have any questions or comments, please contact me.

Thomas A. Errico, P.E.

Senior Transportation Engineer

Wilbur Smith Associates

59 Middle Street

Portland, Maine 04101

(207) 871-1785 Phone

(207) 871-5825 Fax

CC: <jpc@portlandmaine.gov>

From: Jean Fraser
To: Roy, Mike
Date: 7/5/2006 11:44:32 AM
Subject: 2320 Congress Street - FIRE

Mike,

In trying to finalize our review on this the Fire Department needs more info- they are a bit worried about being able to get access to the building in the event of a fire because of all the parking; also the question of how to get the fire appliances out.

I attach a checklist of information that the FIre Dept need and the last few items of the list are mostly missing from your submission and therefore they aren't able to 'sign off' on this until they have the information and hopefully there won't be a need for a change in the layout.

Please send the information asap direct to Captain Greg Cass (GEC@portlandmaine.gov) (874-8405) and to me at the same time so we can complete the review; if any question please call Captain Cass.

Sorry this has come up late- I had understood the review of the building itself had already been done but apparently not.

Thanks
Jean

CC: Carmody, James; Cass, Gregory

From: Jean Fraser
To: Roy, Mike
Date: 6/29/2006 11:53:44 AM
Subject: Fwd: 2320 Congress Street

Mike,

I forgot to attach the DRC update on the comments he sent of June 12, 2006 (forwarded to you on 6.19) which all also need to be addressed except 2 Stormwater.

I'll attach both so you have them together.

Jean

>>> Jean Fraser 6/29/2006 11:30:49 AM >>>
MIke,

I will put the comments below in a letter but am e-mailing them as I know there is some urgency to this project (I have just had Pete Kostopoulos in the office and updated him on the issues below so he is aware of what is needed to complete the review).

In summary, the position at the moment is:

1. Stormwater: thank you for the Stormwater Report sent June 21, 2006 (and I assume another 2 copies are in the mail to me) and our DRC has reviewed that and has no comments;

2. Sidewalk: The Ordinance requires that any development is responsible for providing curb and sidewalk along the frontage to their property. There is already a curb along this frontage but no sidewalk; the site is not suitable for a sidewalk because of the drainage so the applicant will be required to install a new sidewalk across the street from the property.

3. Landscaping: the current layout does not have the landscape dividers as set out in the City technical standards and on this site this is most important at the front and sides. A landscaping plan should be submitted that shows treesaves and proposed landscaping. If our landscape reviewer is unable to complete the review of that plan reasonably quickly, we will condition the details- but a plan needs to be submitted and the remaining plans revised to be consistent.

4. Encroachment: There is an existing pavement encroachment on the south west corner of the site which has been retained in the proposals. This should be regularized as part of this application.

5. Traffic Generation: I understand there could be up to 40 employees in this building as well as members of the public accessing the site. There may need to be a contribution to the intersection improvement at Hutchins/Congress and I am awaiting Tom Errico's comments on this issue; we may need further information and I will let you know today/tomoorow what the position is on this.

6. Survey: The 'Existing Conditions' Plan is the Boundary survey and needs to meet the citys requirements for surveys as clarified in the attached memorandum from Dan Goyette (Citys DRC).

Please telephone if you need further clarification etc.

Jean (Fraser)
Planner
874 8728

From: Jean Fraser
To: Errico, Thomas
Date: 6/29/2006 10:43:51 AM
Subject: 2320 Congresst St- contribution to intersection improvement

Tom,

At Dev Rev yesterday the question of whether this development should contribute to the intersection improvements came up and you were going to respond on that.

I have just spoken to the developer and made him aware of this possibility and hes OK- just wants to know the amount. I told him you might need more info re trip generation- he expects 30-40 employees (loan officers) some of whom will be arriving and leaving several times in the off peak hours plus a few members of the public. (total of 48 parking spaces)

I am not sure his staff would be putting pressure on that arm of the intersection but maybe you aren't taking that into account.

Anyway, all the other matters have now been sorted out so I would appreciate an early response on this, particularly if we need to ask for more information.

Thanks
Jean

CITY OF PORTLAND, MAINE
Planning and Development Department
Planning Division
389 Congress Street, Portland, Maine 04101
(207) 874-8719 Fax (207) 756-8258

Note for file

June 29, 2006. AM.

Pete Kostopoulos stopped by the Office and was wondering about the apparent delay as they are having to expend extra $ to stay where they are + were hoping to be moving soon (as works only take 30 days).

I clarified that we'd:

- received Stormwater Report June 21
- discussed at Dev Rev June 28 + confirmed (all had been mentioned to Pete by Sarah + to Roy by Jean)
  - sidewalk requirement
  - stormwater OK
  - Absence of landscaping proposals
  - Still ? re traffic contributions
  - Survey deficient
- I didn't mention these but we'll be req. clarification.
  - ?s lighting
  - ?. location + enclosure of solid waste
  - ? clear. of in/out lane

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Operational offices throughout the U.S.

MEMORANDUM

06-080

TO: Jean Fraser, City of Portland Planner

FROM: Dan Goyette, PE – Development Review Coordinator, Woodard & Curran, Inc.

DATE: June 28, 2006

RE: Parking lot, 2320 Congress Street

Woodard & Curran has reviewed the Minor Site Plan submission for the proposed project at 2320 Congress Street. The project involves expanding an existing parking lot by 20 spaces for a total of 48 parking spaces. This will be accomplished by enlarging the current paved areas in the front and rear of the property.

Documents Reviewed

- Stormwater Management Summary dated June 20, 2006 prepared by Michael Roy, SGC Engineering, LLC.
- Engineering plan set prepared by SGC Engineering, LLC, sheets1.0-4.0, signed and dated April 18, 2006.

2. General Comments

A. A landscaping plan has not been submitted for review. Parking lots containing more than 8 parking spaces should have a total landscaped area at least 10 percent of the area designated for parking and vehicle circulation. Also, there should be no more than 8 parking spaces (or 16 contiguous spaces) in a row without landscaped dividers.

B. The project is required to install a new sidewalk along the length of the property line unless able to meet two or more of the waiver criteria detailed in Sec. 14-506 Modifications. It does not appear that the project will meet the waiver criteria. Due to site constraints, the applicant will be required to install a new sidewalk across the street from the property.

C. The survey for the project does not coincide with approved City standards. The survey needs to be tied to the vertical datum of NGVD 1929. Also, the project needs to be tied to the Maine State Plane Coordinate System (2-zone projection), West Zone using the NAD 1983 (HARN) Datum and the U.S. Survey Foot as the unit of measure.

DRG
203848.49

cc: File

Discussed 6-28-06
Dev Rev.
All reviewers asked to expedite - but no Landscaping shown

41 Hutchins Drive • Portland, Maine 04102• (207) 774-2112 • (800) 426-4262 • (207) 774-6635 (Fax)
www.woodardcurran.com

From: Jean Fraser
To: Roy, Mike
Date: 6/26/2006 1:55:39 PM
Subject: RE: 2320 Congress Street

Mike,

I just got my copy. I think you have your dates wrong as your Trasnmittal letter is dated June 21, 2006 (envelope is postmarked June 21 as well) and it says that a copy went to Dan Goyette on June 21, 2006.

I need 1 more copy **asap** as the city engineer needs to see this too as he is repsonsible for sewers. So one copy **by 10am Wed** would speed things along.

And 1 more for the DRC in future- but that one is not so urgent.
Thanks
Jean

JF suggested he mail 2 copies to JF + JF's copy will go to EC.

>>> "Mike Roy" <mroy@sgceng.com> 6/26/2006 1:32:00 PM >>>
Jean,
I delivered the stormwater report to Dan Goyette on the morning of June 14. I also mailed you a copy of that report on the same day. Did you receive that copy? I will deliver 3 more copies to you tomorrow (6/27) to give you the four copies you requested. Let me know and I will bring 4 if you haven't received the other copy. If you need anything further please feel free to give me a call. Thanks.

Mike

-----Original Message-----
From: Jean Fraser [mailto:JF@portlandmaine.gov]
Sent: Monday, June 26, 2006 12:46 PM
To: mroy@sgceng.com
Subject: 2320 Congress Street

Mike,

I am receiving telephone calls that suggest the review on this proposal is urgent, but I have not yet received the Stormwater Report from you and therefore I would like it noted that the delay is with you and not the City.

It would expedite the Review if I get that report (4 copies) by 10am Wed June 28th so that we can review it as quickly as possible.

Thanks
Jean

SGC ENGINEERING, LLC
- Civil Design & Survey Engineering
- Environmental & Regulatory Permitting
- Electrical Power Systems Engineering
Offices - Westbrook & Orono, Maine

LETTER OF TRANSMITTAL

TO: Ms. Jean Fraser
Planning and Development Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

DATE: June 21, 2005
PROJ. NO.: 517001
RE: 2320 Congress Street
Portland, Maine
Stormwater Management
Summary

WE ARE SENDING YOU [x] Attached [ ] Under separate cover via _____ the following items:

[ ] Shop drawings [ ] Prints [ ] Plans [ ] Samples [ ] Specifications
[ ] Copy of letter [ ] Change order [ ] _____

COPIES	DATE	NO.	DESCRIPTION
1	6/20/06		Stormwater Management Summary

Gave this one to EL as 2 more copies coming to Jean see emails rec'd Mon June 26

THESE ARE TRANSMITTED

[X] For approval _____ copies for approval
[ ] For your use _____ copies for distribution
[X] As requested _____ corrected prints
[ ] For review and commen

REMARKS:

Ms. Fraser,
Please find attached and Report for the 2320 Congress Street prope 1/06. Feel free to give me a call if you need anyt nks.

COPY TO: _____

SIGNED: Michael R. Roy
Michael R. Roy

501 County Road, Westbrook, Maine 04092 - Office: 207-347-8100 • Fax: 207-347-8101
Target Technology Center, 20 Godfrey Drive, Suite 200, Orono, Maine 04473 - Office: 207-866-6571 • Fax: 207-866-6501
www.sgceng.com • E-mail: sgc@sgceng.com

From: Jean Fraser
To: Roy, Mike
Date: 6/19/2006 11:22:44 AM
Subject: 2320 Congress Street

Mike,

Further to our conversation last week, I note that you intend to submit a Stormwater Report and I confirm that the Site Plan Review can not be completed until that it submitted.

I attach the comments of the DRC as outlined to you on the 'phone- please note the last comment regarding the possible need for an easement.

I also attach the Waiver criteria for sidewlks and confirm that the request for a waiver would need to go to the Planning Board - but subject to confirmation with Sarah Hopkins I believe that can be a condition of the approval as long as it is shown on the plans.

I will be writing more formally as soon as I receive the comments from the Traffic Engineering Reviewer.

Jean (Fraser)
Planner

874 8728

CC: John Riordan, PE; Sarah Hopkins

From: Jean Fraser
To: Roy, Mike
Date: 6/26/2006 12:45:47 PM
Subject: 2320 Congress Street

Mike,

I am receiving telephone calls that suggest the review on this proposal is urgent, but I have not yet received the Stormwater Report from you and therefore I would like it noted that the delay is with you and not the City.

It would expedite the Review if I get that report (4 copies) by 10am Wed June 28th so that we can review it as quickly as possible.

Thanks
Jean

From: Jean Fraser
To: Roy, Mike
Date: 6/19/2006 11:22:44 AM
Subject: 2320 Congress Street

Mike,

Further to our conversation last week, I note that you intend to submit a Stormwater Report and I confirm that the Site Plan Review can not be completed until that it submitted.

I attach the comments of the DRC as outlined to you on the 'phone- please note the last comment regarding the possible need for an easement.

I also attach the Waiver criteria for sidewlks and confirm that the request for a waiver would need to go to the Planning Board - but subject to confirmation with Sarah Hopkins I believe that can be a condition of the approval as long as it is shown on the plans.

I will be writing more formally as soon as I receive the comments from the Traffic Engineering Reviewer.

Jean (Fraser)
Planner

874 8728

CC: John Riordan, PE; Sarah Hopkins

CITY OF PORTLAND, MAINE
Planning and Development Department
Planning Division
389 Congress Street, Portland, Maine 04101
(207) 874-8719 Fax (207) 756-8258

Re 2320 Congress Street

June 16, 2006.

Sarah

Please call Lynette Dunkerson
First Finance Mortgage Co.

321 - 5324
(she has left you a message)

1. She called + asked what was holding this up as they are working on the interior and ~~read~~ to start on the exterior.

2. The current delay (I informed her) is due to the need for a Stormwater Report. I spoke to Mike Roy yesterday who said he knew one needed to be submitted, it was being prepared and would be with us next week.

3. From my note you'll see I called him yesterday to convey the gist of the DRC comments; I am awaiting other comments (this was discussed at Dev Rev on June 7th; I had got it from you just before that)

*see blue papers attached

4. She didn't understand why (given the applic was in April) it had taken so long for these issues to be identified... I said I thought we had considered it would be an exemption ~~[redacted]~~ (as on plan it looked minor) then identified several issues.

5. I also mentioned that the City Ordinance requires a sidewalk and while it may meet two of the six waiver requirements it would need to go to the Planning Board - but I suggested she speak to you for confirmation that we could make that a condition of approval if all the other issues (drainage, traffic) are OK

Jean

From: Jean Fraser
To: Roy, Mike
Date: 6/12/2006 4:57:02 PM
Subject: Re: 2320 Congress Street

Mike,

Sarah Hopkins spoke to Peter last week and e-mailed me to clarify what she said; I understand that she mentioned likely concerns would be sidewalk/curb (Ordinance Requirement), street trees, landscaping, stormwater management/treatment, outdoor lighting, driveway layout and location.

Also there is the question of solid waste management ? dumpster?

She also confirmed to him that the City was collecting financial contributions for upgrades to the Hutchins Drive intersection and that he may be required to contribute.

I understand she told him I would probably be in touch with him this week with more formal comments which I intend to do once I have received the reviewing engineers comments.

So I will write in the next few days with formal comments- I would be happy to call or e-mail you sooner with more information but at the moment I do not have the detailed comments.

As with the Car Wash it is difficult for us to keep all the parties involved on the applicants side up-to-date and it would be helpful on both of these schemes to clarify the lines of communication.

Jean (Fraser)
Planner

.

>>> "Mike Roy" <mroy@sgceng.com> 6/12/2006 1:46:16 PM >>>

Jean,

We understand that you have been assigned to review the project at 2,320 Congress Street. We also understand that Peter Kostopoulos (works for our client) spoke to you last week regarding the project status, and you noted a couple of concerns or comments mentioned at the City meeting. I was just wondering when SGC could expect a comment letter from the City? Our client was has asked some project scheduling questions, and this would be helpful to pass along to him. If you have any questions or comments please feel free to give me a call. Thanks.

Mike

Michael R. Roy

Project Engineer

SGC Engineering, LLC

501 County Road

Westbrook, Maine 04092

Tel : 207-347-8133

Fax : 207-347-8101

Cell : 207-671-8358

mroy@sgceng.com

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MEMORANDUM

06-080

TO: Jean Fraser, City of Portland Planner

FROM: Dan Goyette, PE – Development Review Coordinator, Woodard & Curran, Inc.

DATE: June 12, 2006

RE: Parking lot, 2320 Congress Street

Woodard & Curran has reviewed the Minor Site Plan submission for the proposed project at 2320 Congress Street. The project involves expanding an existing parking lot by 20 spaces for a total of 48 parking spaces. This will be accomplished by enlarging the current paved areas in the front and rear of the property.

Documents Reviewed

- City of Portland Minor Site Plan Application for Commercial building Parking Lot, 2320 Congress Street, dated April 18, 2006
- Letter and attachments to Sarah Hopkins, City of Portland Development Review Services Manager, dated April 18, 2006, from John M. Riordan, PE, SGC Engineering, LLC.
- Engineering plan set prepared by SGC Engineering, LLC, sheets1.0-4.0, signed and dated April 18, 2006.

1. Parking/Circulation

A. The site driveway currently does not have granite curbing. In the event that alterations are made to the drive, curbing should be installed.

B. The aisle width between the 90 degree parking when first entering the lot is 21 feet wide. The minimum aisle width is 24 feet between 90 degree parking.

C. Plans do not indicate any landscaping in parking lot. Parking lots containing more than 8 parking spaces should have a total landscaped area at least 10 percent of the area designated for parking and vehicle circulation. Also, there should be no more than 8 parking spaces (or 16 contiguous spaces) in a row without landscaped dividers.

2. Stormwater Management

A. Since the parking lot indicates spaces for more than 25 vehicles, the applicant is required to provide on-site treatment for stormwater runoff. A Stormwater Management Report has not been submitted for review.

3. General Comments

A. A landscaping plan for the project has not been provided for review.

B. The impervious surface ratio of the proposed site has not been provided.

C. Plans do not indicate exterior lighting.

D. Currently a portion of the existing parking lot is on the abutters' property. This pavement should be removed or an easement granted for its existence.

DRG

203848.49

cc: File

From: Sarah Hopkins
To: Jean Fraser
Date: 6/8/2006 1:29:45 PM
Subject: Fwd: Pet Kostopoulos 939-7139

Hi Jean,
I called him back and left a message on the 2320 Congress parking site plan. I mentioned sidewalk/curb, street trees, landscaping, stormwater management/treatment, outdoor lighting, driveway layout and location. I also told him that the City was collecting $ for upgrades to the Hutchins Drive intersection and that he may be required to contribute.
I gave him your number and told him you would probably be in touch with him next week with more formal comments.
-s

Nuke Roy
347 8133

phoned Nuke Roy 6.15.06

1) conveyed DRC comments
2) He confirmed stormwater Report being prepared + with us next week
3) If confirmed would need PB waiver re sidewalk
4) If confirmed awaiting Traffic & Eng comments re pkg, design of drive + contribution to Hutchins Dr. Intersection.
5) Formal comments await Stormwater Plan.

DRB Rec June 7th 2006

2320 Congress.

Who has plans?
9 copies submitted; 2 left

existing parking = 23 spaces
proposed plkg = 48 spaces
(double)

8000 sq ft more impervious surface

new handicap access ramp

Drive = 27' wide at property line.

cutting into ledge at back

stormwater? steep grades + ledge

traffic? no traffic permit
contribution to intersection Hinesburg

sidewalks

---

mortgage company
have rx. to improve bldg
opt c/u adequate plkg.
site plan for plkg.

Landscape plan
Commentary on driveway
w/ out lane
sidewalks
? lighting
drainage
solid waste? dumpster

Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

August 3, 2006

John M. Riordan, PE
SGC Engineering
501 County Road
Westbrook, ME. 04092

Re: Minor Site Plan Review: 2320 Congress Street
ID#2006-0080; CBL#237 A009001

Dear Mr. Riordan,

On August 3, 2006, the Portland Planning Authority approved the proposed parking lot expansion (to a total of 48 spaces) in connection with the renovation of the existing commercial building at the above address, as shown on the approved plan with the following conditions:

i. The applicant shall place any dumpsters or other solid waste disposal receptacles at the rear of the site and enclose them with wooden fencing and/or planting so that they are not visible from the public street, parking areas and the building, in accordance with the City's Technical and Design Standards and Guidelines; and

ii. The applicant shall submit specifications, catalog cuts and photometric plans in respect of any external lighting (including within the parking lot) for the review and approval of the Planning Authority; and

iii. The applicant shall provide a 5 foot wide bituminous asphalt sidewalk along Congress Street (on the opposite side of the street from the site) for a distance of at least 250 feet as shown on the approved plan, the precise location of the western terminus, location within the ROW, and design details to be agreed with the City Engineer to take account of existing topography and drainage; and

iv. The applicant shall submit a planting plan/schedule indicating size of the planting shown on the submitted Landscaping Plan (rev. 7.24.2006) for review and approval of the City Arborist; and

v. That the applicant shall contribute $1500 to an account that would be used to fund traffic improvements to the intersection at Hutchins Drive / Congress Street. If part or all of the contribution remains unused, or is determined not to be required, within ten years after the issuance of the Certificate of Occupancy, the unexpended portion of the contribution funds shall be returned to the applicant.

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. Where submission drawings are available in electronic form, the applicant shall submit any available electronic Autocad files (*.dwg), release 14 or greater, with seven (7) sets of the final plans.

2. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount and 7 final sets of plans must be submitted to and approved by the Planning Division and Public Works prior to the release of the building permit. If you need to make any modifications to the approved site plan, you must submit a revised site plan for staff review and approval.

3. The site plan approval will be deemed to have expired unless work in the development has commenced within one (1) year of the approval or within a time period agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the expiration date.

4. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

5. 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.

6. 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. 8828. (Only excavators licensed by the City of Portland are eligible.)

The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Jean Fraser, Planner at 874-8728 or jf@portlandmanine.gov.

Sincerely,

Alexander Jaegerman
Planning Division Director

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Services Manager

Jean Fraser, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections
Michael Bobinsky, Public Works Director
Traffic Division
Eric Labelle, City Engineer
Bill Scott, Public Works
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Fire Prevention, Captain Greg Cass
Assessor's Office
Approval Letter File

cc. 2320 Congress Street LLC
57 Congress Street
Portland, ME 04101