

320 A 2

400 - 400 Riverside St

Riverside St

Riverside properties

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

19980109 I. D. Number

Planning Department Copy

Riverside Properties

Applicant

400 Riverside St, Portland, ME 04103

Applicants' Mailing Address

Sheridan Corp

Consultant/Agent

Applicant or Agent Daytime Telephone, Fax

Assessor's Reference: Chart-Block-Lot

320 A002

Address of Proposed Site

400 - 400 Riverside St

Project Name/Description

Riverside St

Application Date

08/25/1998

Check Review Required:

Site Plan Subdivision PAD Review 14-403 Streets Review

(major/minor)

of lots

Historic Preservation

DEP Local Certification

Flood Hazard

Shoreland

Zoning Conditional

Zoning Variance

Other

Fees Paid: Site Plan \$500.00

Subdivisio

Engineer Review \$712.00

Date 10/30/1998

Proposed Building square Feet or # of Units

18.1

Zoning

I-M zone

17,020 Sq Ft

Proposed Development (check all that apply):

- Office
- Retail
- Manufacturing
- Warehouse/Distribution
- Parking Lot
- Other (specify)
- Building Addition
- Change Of Use
- Residential

Planning Approval Status:

Reviewer Kandice Talbot

Approved w/Conditions

Denied

Approved

See Attached

Additional Sheets Attached

Approval Date 10/13/1998

Approval Expiration 10/13/1999

Extension to

10/30/1998

OK to Issue Building Permi

Kandice Talbot

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

10/30/1998

\$47,052.00

04/15/1999

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

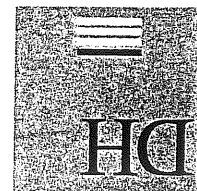
amount

expiration date

Defect Guarantee Released

date

signature



DELOACH-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL: 207 775 1121
FAX: 207 879 0896

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

June 20, 2005

Ms. Kandi Talbot
City of Portland
389 Congress Street
Portland, Maine 04101

Subject: Response to Peer Review Comments of November 22, 2004
Lot 4 of the 400 Riverside Street Properties
Applicant, Rist/Brunet Family Trust

Dear Kandi:

We offer the following responses to comments provided by Barry Sheff of Woodard and Curran regarding the proposed project at 400 Riverside Street. As you are aware, the Rist/Brunet Family Trust is no longer proposing development activity at Lot 6 of the McAlister Farm Drive Subdivision since they propose to transfer the property to Rio-Tierra LLC. On behalf of Rio-Tierra LLC, Mohr & Serein has recently received Planning Board approval for development activity on the Lot 6 property. Therefore, the applicant is now only seeking Planning Board approval for the proposed 23,140 SF office/warehouse building on Lot 4 of the 400 Riverside Street Properties. Amended Site Plan drawings detailing the Lot 4 development activities are included with this submission package.

Our responses to the peer review comments are provided as they were presented in the summary section of Mr. Sheff's memorandum.

1. Wastewater – We understand that the City of Portland and the City of Westbrook have executed an Inter-municipal agreement whereby the remaining existing sewer collection system in Riverside Street has been activated and is now collecting and conveying wastewater flows to the Westbrook Pump Station located off Route 302. We are also in receipt of the attached letter from the City of Portland Public Works Department (PWD) confirming that a Public Hearing will be scheduled to allow public comment on the applicant's request that the 400 Riverside Street Properties be included within the Riverside Street sewer service area. Pending no significant public concern, we assume that the properties will be included within the service area and that the existing and proposed developments contained within the 400 Riverside Street Properties will be allowed connection for the discharge of wastewater to the Riverside Street sewer system. We understand that it is the PWD's intent to make a positive recommendation on this request. We also understand that the Lot 6 development was granted conditional approval by the Planning Authority based on similar circumstances.

2. Stormwater – DeLuca-Hoffman Associates, Inc. (DHA) continues to request a variance from the regulatory stormwater quantity standard based on the planned development being located in the lower region of the overall watershed area comprising the Presumpscot River, and in the region proximate to where the Presumpscot River experiences tidal effects and ultimately discharges to Casco Bay. Our variance request is also based on previously submitted stormwater calculations that demonstrated that the existing tributary swale has sufficient capacity in the postdevelopment conditions to sufficiently handle the slight increase in flow and the fact that no downstream properties will be negatively impacted as a result of this proposal. In our opinion this waiver request is consistent with previous City reviews and approvals.

We have also reviewed the drainage computations and specifically the subcatchment areas and made minor modifications to the hydrologic model to clarify the pre and postdevelopment data. Accompanying this letter, please find hydraulic computations and supporting documentation for the predevelopment and postdevelopment conditions in support of the analysis.

Finally, we have reviewed the previously submitted Level Lip Spreader design computations and confirmed that the 10-year, 4.7-inch peak runoff rates used to size the BMP measures do, in fact, reflect the anticipated peak runoff rates discharging to the two Level Lip Spreaders planned within the development site. Simply stated, the Level Lip Spreaders were sized based on the peak discharge rates generated from the portions of the existing and proposed impervious surfaces within the subcatchment areas that are actually tributary to the Level Lip Spreaders. Accompanying this letter, please find hydrologic computations and supporting documentation for the Level Lip Spreaders. Also enclosed, please find hydrologic computations and vendor sizing worksheets for the two (2) planned Water Quality Units tributary to the Level Lip Spreaders. We note that the Level Lip Spreaders were sized based on the 10-year, 4.7-inch storm even, while the Water Quality Units were sized based on vendor sizing criteria that included the 1-year, 2.5-inch storm event.

In accordance with the design criteria for Level Lip Spreaders provided in the Maine Erosion and Sediment Control BMP Manual, we have included the previously submitted design calculations for the proposed Level Lip Spreaders. The calculations are as follows:

Summary of Level Lip Spreader Design Calculations		
Estimated Design Flow (10-yr, 24-hr storm)	Length (0.25 CFS/LF)	Upstream Flow Area (4 X CFS)
WQUNo. 1 - 4.48 cfs	18.0 ft	18.0 sq. ft.
WQUNo. 2 - 7.23 cfs	29.0 ft	29.0 sq. ft.

Additionally, DHAI has revised Sheet 10 – Erosion Control Details by replacing the reference for a 25-foot long Level Lip Spreader with “Refer to Sheet 5 – Grading, Drainage and Erosion Control Plan for Level Lip Spreader design information”.

3. Historic Sites – We understand that the Maine Historic Preservation Commission has previously signed off on the Lot 6 property as part of the Rio-Tierra LLC application materials supplied by Mohr & Sereidin. We assume no further action is necessary on this issue, since the Commission's concerns largely pertained to the undeveloped Lot 6 parcel and the applicant is only requesting approval on the partly developed Lot 4 parcel.

4. Existing Natural Resources – This 100' setback issue pertains to Lot 6 and is no longer applicable to the current proposal on Lot 4.

5. Maintenance and Inspection of Facilities – DHAI has modified the Maintenance Manual for Stormwater Management System and Common Facilities with the following specific measures:

a. During construction, the general contractor will be responsible for regular inspection and monitoring of the stormwater facilities. Upon substantial completion of the construction and acceptance by the owner, these responsibilities will be transferred to the owner and their property management personnel. The Rist/Brunet Family Trust has managed the existing properties for several years and has the staff and contracted services currently in place to handle these responsibilities.

b. A statement regarding the yearly inspection and maintenance for the buffer setbacks has been added to the manual.

c. An Inspection and Maintenance log has been added to the manual for use as each site element is routinely inspected.

d. The owner will maintain copies of any permits granted for the project within the manual with the intent that the Contractor will maintain the manual during construction and the owner and their property management personnel will maintain it after construction.

6. Grading – The planned development was located and sized to mitigate disturbances to natural resources found within the site. Several design considerations have been incorporated in the site development to mitigate the limits of disturbances to wetlands. These considerations included grading the slope to the north of the proposed building to minimize the encroachment into the nearby wetland. Turf reinforcement will be replaced by riprap on this slope and all slopes greater than 3:1.

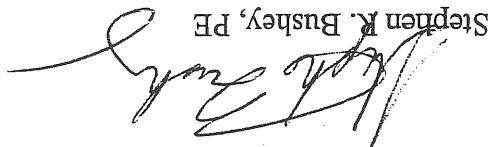
Ms. Kandi Talbot
June 20, 2005
Page 4

7. Utilities - The lot 6 utilities layout has been revised based on the design drawings prepared by Mohr & Seredin on behalf of Rio-Tierra LLC; therefore, the concern regarding pipe cover no longer applies. DHAI will review the location of the pump station on Lot 4 with the owner/applicant.

We trust these responses will satisfy the Planning Authority and the project may be placed on the next available Planning Board Agenda for consideration of Final Approval. If you have any further questions, please call this office.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.



Stephen R. Bushey, PE
Senior Engineer

SRB/sq/TN2314/Talbot-6-8-05

Attachments:

- Amended Lot 4 Site Plans
- Letter from Portland Public Works concerning scheduling of a Public Hearing on the applicant's request that the 400 Riverside Street Properties be included within the Riverside Street sewer service area
- Amended Hydrologic Computations & Support Documentation
- Hydrologic Computations and Supporting Documentation for the Level Lip Spreaders and Hydrologic Computations and Water Quality Unit Vendor Sizing Worksheets and Supporting Documentation
- Stormwater Management System Inspection and Maintenance Manual for Stormwater Management Systems and Common Facilities

c: Marty Rist

Memorandum
Department of Planning and Development
Planning Division



To: Chair Deleagu and Members of the Portland Planning Board

From: Kandice Talbot, Planner

Date: August 20, 2004

Re: August 24, 2004 Planning Board Workshop
Two Multi-Tenant Buildings, Lot 6 of McAlister Farm Subdivision and
Lot 4 of 400 Riverside Street Properties
Rist/Brunet Family Trust, Applicant

Introduction

Rist/Brunet Family Trust is requesting major site plan review of a proposal to develop two adjoining lots located off of Riverside Street. The project sites include Lot 6 of the McAlister Farm Subdivision off McAlister Farm Drive and Lot 4 of the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, at 400 Riverside Street. Lot 6 of the McAlister Farm Subdivision is zoned I-M Industrial Moderate and is approximately 10.6 acres in size. Lot 4 of the 400 Riverside Street Properties is zoned I-M Industrial Moderate and is approximately 14.5 acres in size.

The applicant proposes to construct a one (1) story, 41,255 sq. ft. office building/warehouse on Lot 6 of the McAlister Farm Subdivision. The site is currently undeveloped and includes an undeveloped, 28-foot-wide gravel access drive to the site located off the end of the cul-de-sac at the end of McAlister Farm Drive. The applicant is proposing to construct a one (1) story, 23,400 sq. ft. office building/warehouse on Lot 4 of the 400 Riverside Street Properties. The site is currently developed and includes an existing 26-foot-wide paved access drive from Riverside Street, a two (2) story, 20,000 sq. ft. office building/warehouse, and a two (2) story, 5,250 sq. ft. office building/warehouse.

In conjunction with this review, there will be a number of land transfers of property within the McAlister Farm Subdivision and the 400 Riverside Street Properties United States Postal Service and within the Rist/Brunet Family Trust. The land

transfers are discussed in the applicant's submittal dated April 20, 2004 and included as Attachment 1.

The proposal is to be reviewed for compliance with the site plan standards of the land use code and is subject to Site Location of Development review.

Shoreland Review

Lot 6, McAlister Farm Subdivision

As stated previously, the applicant proposes to develop Lot 6 of the McAlister Farm Subdivision to include a 41,255 sq. ft. office building/warehouse on the existing 10.6 acre parcel.

Access/Parking

Lot 6 contains an existing, undeveloped gravel drive from McAlister Farm Drive. This access will be improved to a paved 26-foot-wide access driveway.

The applicant is proposing 52 parking spaces for the site. The Zoning Administrator is currently reviewing the parking.

Since the Presumpscot River borders Lot 6, staff is recommending that the applicant provide a pedestrian easement along the river.

Utilities

The utility service for water to the proposed development will come from McAlister Farm Drive. An existing 12-inch water main extends along McAlister Farm Drive from the 12-inch water main in Riverside Street to the existing access drive of the planned development. A water capacity letter is included as Attachment 3.

Sanitary sewer service will include an 8-inch PVC gravity sewer lateral that will convey wastewater from the proposed building to a proposed onsite duplex pump station. A force main will tie into the sanitary sewer service proposed as part of the planned development for Lot 4 of the 400 Riverside Street Properties. Since the sewer within Riverside Street is not active at this time, the applicant is also considering the installation of a temporary onsite sewer-holding tank at Lot 6. Public Works is currently reviewing the plan.

Electrical service will include the installation of underground or overhead electric service from a utility pole located on McAlister Farm Drive. If the applicant proposes overhead electric service, they must request a waiver of the technical standards.

Drainage

A stormwater collection system will serve the entire development and will collect stormwater runoff from approximately 2.0 acres of impervious surface and convey it into

a water quality treatment unit prior to discharge to a tritrap plunge pool and level lip spreader adjacent to a large tributary swale containing a regulated stream that discharges to the Presumpscot River.

The Review Engineer has reviewed the plans and comments are included as Attachment 14.

Lighting

The applicant is proposing pole-mounted shoebox fixtures and wall-pack units. Lighting catalogue cuts and a photometric plan shall be submitted to determine that the lighting is in compliance with the City's technical standards.

Landscaping

The applicant is proposing that landscaping will be minimal and the existing mature trees will be maintained along the property lines of the project site to the extent practicable. Tree plantings and shrubs are being proposed adjacent to some of the paved area. The City Arborist is currently reviewing the plan.

Building Design

The proposed structure will be typical metal-framed buildings similar in design to nearby buildings. Elevations of the building shall be submitted prior to public hearing.

Fire

Sprinkler service will be provided by the development. There is also a hydrant proposed in the vicinity of the proposed building. The hydrant location will have to be shown on the plan and approved by the Fire Department.

Lot 4, 400 Riverside Street Properties

As stated previously, the applicant proposes to develop Lot 4 of 400 Riverside Street Properties to include a 23,400 sq. ft. office building/warehouse on the existing 14.5-acre parcel. The site is currently developed with a 20,000 sq. ft. office building/warehouse and a 35,250 sq. ft. office building/warehouse.

Access/Parking

Lot 6 contains an existing 26 ft. wide paved access drive from Riverside Street. No changes are planned for this existing drive. Access to the site will be provided from an existing 30 ft. wide paved access drive within the development.

The site currently has 89 parking spaces. The applicant is proposing 45 new parking spaces for a total of 126 parking spaces. The Zoning Administrator is currently reviewing the parking.

Since the Presumpscot River borders Lot 4, staff is recommending that the applicant provide a pedestrian easement along the river.

Utilities

The utility service for water to the proposed development will come from Riverside Street. Two existing 2-inch domestic water service lines extend along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. A water capacity letter is included as Attachment 3.

Lot 4 is provided with an onsite subsurface wastewater disposal system that will be removed as part of the Lot 4 development. The applicant is proposing a sanitary sewer service, which will include an 8-inch PVC gravity sewer lateral that will convey wastewater from the proposed building and the two existing buildings to a proposed onsite duplex pump station. This pump station would also receive wastewater flows from the Lot 6 development. The overall plan is to consolidate these flows into one discharge connection to the Riverside Street sewer.

Currently, the segment of sewer main installed on Riverside Street and proposed for the in has not been activated. This sewer main will need to be activated prior to the acceptance of sewer flows from the planned development.

Electrical service will include the installation of underground or overhead electric service. If the applicant proposes overhead electric service, they must request a waiver of the technical standards.

Drainage

A stormwater collection system will serve the planned development and will collect stormwater runoff from the site's impervious surfaces and convey it into two water quality treatment units prior to discharge to riprap plunge pools. The first riprap plunge pool will discharge adjacent to a natural emergency marsh and the second will discharge to a natural tributary swale to the north. Both swales are tributary to the Presumpscot River.

The Review Engineer has reviewed the plans and comments are included as Attachment 14.

Lighting

The applicant is proposing pole-mounted shoebox fixtures and wall-pack units. Lighting is in compliance with the City's technical standards.

Landscaping

The applicant is proposing that landscaping will be minimal and the existing mature trees will be maintained along the property lines of the project site to the extent practicable. Tree plantings and shrubs are being proposed adjacent to some of the paved area. The City Arborist is currently reviewing the plan.

Building Design

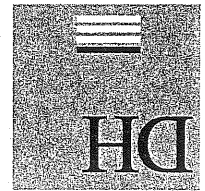
The proposed structure will be typical metal-framed buildings similar in design to nearby buildings. Elevations of the building shall be submitted prior to public hearing.

Fire

Sprinkler service will be provided by the development. There is also a hydrant proposed in the vicinity of the proposed building. The hydrant location will have to be shown on the plan and approved by the Fire Department.

- Issues to Resolved Prior to Public Hearing
1. DRC's Memo
 2. Landscaping
 3. Lighting
 4. Building Elevations
 5. Fire Hydrant

- Attachments:
1. Applicant's Submittal Letter dated April 20, 2004
 2. Development Description
 3. Utility Letters
 4. Right, Title and Interest
 5. Financial Capacity
 6. Technical Capacity
 7. Wildlife Habitat
 8. Review Criteria
 9. Solid Waste
 10. Surface Drainage and Runoff
 11. Erosion Control
 12. Landscape Information
 13. Fire Memo dated May 5, 2004
 14. DRC's Memo dated August 18, 2004
 15. Plans



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL 207 775 1121
FAX 207 879 0896

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

April 20, 2004

2314/44

Ms. Sarah Hopkins, Development Review Coordinator
City of Portland Planning Authority
389 Congress Street
Portland, Maine 04101

Subject:
Application for Major Site Plan Review
Lot 6 - McAlister Farm Subdivision &
Lot 4 - 400 Riverside Street Properties
Applicant - Rist/Brunet Family Trust

Dear Sarah:

Deluca-Hoffman Associates, Inc. has prepared a submission package for a Major Site Plan Review on behalf of the Rist/Brunet Family Trust. The applicant is proposing to develop two adjoining lots located off of Riverside Street in Portland, Maine. The project sites include Lot 6 of the McAlister Farm Subdivision off McAlister Farm Drive and Lot 4 of the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, at 400 Riverside Street. The applicant is proposing to develop one (1) unit of multiple-tenant space at Lot 6 of the McAlister Farm Subdivision and one (1) unit of multiple-tenant space at Lot 4 of the 400 Riverside Street Properties.

The project sites are located off McAlister Farm Drive and Riverside Street and are bordered by multiple industrial properties and the Presumpscot River. The 10.6-acre parcel containing Lot 6 and the 14.5-acre parcel containing Lot 4 are located in the City of Portland Industrial-Moderate zoning district. The site areas are located within 250 feet of the Presumpscot River and are also located within the City's Shoreland Zoning District. No building activity is proposed within the Shoreland Zone. A 200-foot wildlife corridor along the river was also established for Lot 6 as part of the original MeDEP permit approvals for the McAlister Farm Subdivision. No development activity is proposed within this 200-foot corridor. Location and resource maps are included with this application.

The applicant proposes to develop Lot 6 of the McAlister Farm Subdivision to include a one (1) story, 41,255 square foot (sq. ft.) office building/warehouse on the existing 461,736 sq. ft. (10.6-acre) lot represented on Portland Tax Map 320 as Block A, Lot 1. The site is currently undeveloped and includes an undeveloped, 28-foot-wide gravel access drive to the site located off the end of the cul-de-sac at the end of McAlister Farm Drive. When completed, there will be 52 parking spaces provided, as well as multiple loading areas to serve the building's warehouse functions.

The applicant also proposes to develop Lot 4 of the 400 Riverside Street Properties. The development will include a one (1) story, 23,400 sq. ft. office building/warehouse on the existing 631,620 sq. ft. (14.5-acre) lot represented on Portland Tax Map 320 as Block A, Lot 2. The site is currently developed and includes an existing 26-foot-wide paved access drive from Riverside Street, a two (2) story, 20,000 sq. ft. office building/warehouse, and a two (2) story, 35,250 sq. ft. office

1A

Ms. Sarah Hopkins
April 20, 2004
Page 2

building/warehouse. The developed site is provided with 89 tenant parking spaces, an onsite stormwater drainage system and an onsite subsurface wastewater disposal system. When completed, there will be 45 new parking spaces for the planned development for a total of 126 parking spaces provided, as well as multiple loading areas to serve the building's warehouse functions.

The proposed structures will be typical metal-framed buildings similar in design to nearby buildings. The buildings are expected to have primarily a metal-faced siding and may be either flat roofed or slightly pitched. The applicant may subdivide the building spaces to allow multiple-tenant occupants, or they may function as a single-tenant space.

The applicant currently owns Lot 6 and property identified as Lot 1A of the McAlister Farm Subdivision, which is a 2.05-acre parcel located to the south of Lot 6. This area was formerly part of the 10.0-acre Lot 1 (now owned by the U.S. Postal Service). The applicant also owns properties identified as Lots 1, 4 and 5 at 400 Riverside Street. Lots 1, 4, and 5 were formerly included in the five (5) lot subdivision identified as the 36.8-acre Donald D. Butler Subdivision.

In conjunction with this submission, Deluca-Hoffman Associates, Inc. will be filing an Agreement for the Exchange of Real Property on behalf of the Rist/Brunet Family Trust with the Planning Department for review and approval. The Agreement for the Exchange of Real Property is to include the exchange of portions of real property located within the McAlister Farm Subdivision and the 400 Riverside Street Properties with the United States Postal Service and within the Rist/Brunet Family Trust and shall include the following:

- Transfer of 17,756 sq. ft. of a certain parcel identified as Lot 1A of the McAlister Farm Subdivision and owned by the Rist/Brunet Family Trust to an adjacent parcel identified as Lot 1 of the McAlister Farm Subdivision and owned by the United States Postal Service.
- Transfer of 12,525 sq. ft. of a certain parcel identified as Lot 1 of the McAlister Farm Subdivision and owned by the United States Postal Service, currently under consideration for development and owned by the Rist/Brunet Family Trust.
- Transfer of 5,231 sq. ft. of a certain parcel identified as Lot 1 of the McAlister Farm Subdivision and owned by the United States Postal Service to an adjacent parcel identified as Lot 5 of the 400 Riverside Street Properties and owned by the Rist/Brunet Family Trust.
- Transfer of 51,503 sq. ft. of a certain parcel identified as Lot 6 of the McAlister Farm Subdivision and owned by the Rist/Brunet Family Trust to an adjacent parcel identified as Lot 4 of the 400 Riverside Street Properties and owned by the Rist/Brunet Family Trust.
- Transfer of 28,704 sq. ft. of a certain parcel identified as Lot 1A of the McAlister Farm Subdivision and owned by the Rist/Brunet Family Trust to an adjacent parcel identified as Lot 4 of the 400 Riverside Street Properties and owned by the Rist/Brunet Family Trust.

- Transfer of 54,590 sq. ft. of a certain parcel identified as Lot 4 of the 400 Riverside Street Properties and owned by the Rist/Brunet Family Trust to an adjacent parcel identified as Lot 6 of the McAlister Farm Subdivision and owned by the Rist/Brunet Family Trust.

The Agreement for the Exchange of Real Property will allow for the planned development at Lot 4 of the 400 Riverside Street Properties. The properties shall be conveyed by each party to the other subject to applicable land use laws and regulations and shall be free and clear of all encumbrances except covenants, conditions, easements and restrictions of record which do not adversely affect the continued use of the premises for commercial/industrial warehouse and distribution purposes.

No revisions to the McAlister Farm Subdivision Plats were completed for the previous division of Lot 1 into Lots 1 and 1A, nor were any modifications to the MeDEP Permit Orders completed for Lot 1, if they exist, to the best of our knowledge. Copies of the last recorded Subdivision Plats for the McAlister Farm Subdivision and for the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, accompany this application submission.

An existing 50-foot-wide Portland Water District utility easement traverses the back portion of the project sites. This easement contains a 48-inch reinforced concrete pipe transmission water main. This main is a primary transmission line serving the Portland community; therefore, no structures are proposed for development within the easement and all construction activities will ensure that the main is not disturbed.

As part of the planned development for Lot 6, the applicant proposes to place granular fills varying in depth from approximately 4 feet to 0 feet, and approximately 11,000 sq. ft. of impervious paved area within the Portland Water District easement and over the existing water main. On behalf of the applicant, Deluca-Hoffman Associates, Inc. has had discussions with the Portland Water District to determine what activities will be allowed within the easement. Based on these discussions, it is our understanding that these activities may be allowed by the District, provided an easement is obtained and that no overnight parking or permanent storage facilities be allowed in this area, in the event that the District requires access to the 48-inch water main. We will continue discussions with the District to determine what practices are acceptable within the easement and, on behalf of the applicant, will obtain District approval and all necessary easements prior to commencing any construction activities. Future easements that may be required relate to a proposed sewer extension from Lot 6 across Lot 4, and a proposed sewer extension from Lot 4 along the frontage of Lot 3 of the Donald D. Butler Subdivision and owned by the Maine Turnpike Authority in order to tie in to the existing sewer main on Riverside Street. Finally, a wetlands mitigation area is proposed on Lot 6.

The planned development for Lot 6 will include the following site improvements:

- The Lot 6 site contains one existing, undeveloped gravel drive from McAlister Farm Drive. This access will be improved to a paved 26-foot-wide access driveway. The proposed development will include upgrading, paving, installation of guardrails and extension of the existing access drive to within the planned development.
- The utility service for water to the proposed development will come from McAlister Farm Drive and is considered adequate for the modest needs of the site. An existing 12-inch water main

extends along McAlister Farm Drive from the 12-inch water main in Riverside Street to the existing access drive of the planned development. This water main provides service to the existing lots in the area. The 12-inch water main was installed complete with hydrant and 8-inch fire service stub-out in the vicinity of the planned development. Sprinkler service will be provided for the development by installing an 8-inch fire service line off the existing 8-inch fire service stub-out and will include one (1) hydrant located in the vicinity of the proposed building. Also, a 1 1/2-inch domestic water service line will be provided to the proposed building.

Electrical service will include the installation of underground or overhead electric service from a utility pole located on McAlister Farm Drive in the vicinity of the development.

A stormwater collection system will serve the entire development and will collect stormwater runoff from approximately 2.0 acres of impervious surface and convey it into a water quality treatment unit prior to discharge to a riprap plunge pool and level lip spreader adjacent to a large tributary swale containing a regulated stream that discharges to the Presumpscot River. The storm drain system will include catch basins, drain manholes, and 24-inch, 18-inch, and 12-inch HDPE storm drains. The remainder of the site will remain as in the predevelopment conditions. Changes to existing drainage patterns have been mitigated to the extent practicable. Onsite postdevelopment stormwater discharges increase slightly from predevelopment rates; however, a stormwater analysis has been completed demonstrating that the existing tributary swale has sufficient capacity in the postdevelopment conditions to sufficiently handle the slight increases in flows, and the large capacity of the Presumpscot River mitigates any impacts downstream from the planned developments.

Sanitary sewer service will include an 8-inch PVC gravity sewer lateral that will convey wastewater from the proposed building to a proposed onsite duplex pump station. A 1 1/2-inch force main will tie in to the sanitary sewer service proposed as part of the planned development for Lot 4 of the 400 Riverside Street Properties. A 4-inch force main will tie in to the municipal sewer system on Riverside Street that ultimately discharges to the Presumpscot North Main Interceptor Sewer. Utility easements will be established for these infrastructure routes.

Erosion and sediment control measures will be installed during construction. The project will include building construction and disturbance for paved or gravel surfaces. Best management practices will include siltation barriers, inlet sediment barriers, inlet and outlet riprap channels, vegetative swales, and a stormwater discharge riprap plunge pool. These erosion and sediment control measures will minimize erosion potential and sediment transport.

The site's lighting will primarily consist of pole-mounted shoebox fixtures and wall-pack units to minimize glare. The project location is such that no spillover or glare from the existing lighting appears to be a problem.

Since the project is located in a light industrial area, landscaping will be minimal and the existing mature trees will be maintained along the property lines of the project site to the extent practicable. Due to the project site being located at the back of the subdivision and being bordered by the wooded shoreline of the Presumpscot River to the north, very limited

1D

Ms. Sarah Hopkins
April 20, 2004
Page 5

landscaping measures are proposed for the development. Tree plantings and shrubs will be installed adjacent to some of the paved areas for the planned development, since the project is located in a light industrial area and is also located on a site sheltered by mature trees all around it. Where necessary, the owner will provide grass cover to stabilize non-gravel or non-paved surfaces. Where necessary, the owner will provide grass cover to stabilize non-gravel or non-paved surfaces.

- The proposed development may utilize natural gas available from within Riverside Street, or LP gas may be used from a small onsite LP gas tank farm, depending on costs and availability.

The planned development for Lot 4 will include the following site improvements:

- The developed site contains an existing 26-foot-wide paved access drive from Riverside Street. No changes are planned for this existing access drive. Access will be provided to the planned development from an existing 30-foot-wide paved access drive within the development. The proposed development will include upgrading, paving, and extension of the existing access drive to within the planned development.

- The utility service for water to the proposed development will come from Riverside Street and is considered adequate for the modest needs of the site. Two existing 2-inch domestic water service lines extend along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. An 8-inch fire service main also extends along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. Sprinkler service is currently provided for the existing buildings and will be provided for the planned development off the existing 8-inch fire service. One (1) hydrant will be provided for the site and will be located in the vicinity of the proposed building. Also, a 1 1/2-inch domestic water service line will be provided to the proposed building.

- Electrical service will include the installation of underground or overhead electric service from a utility pole located within the developed site and in the vicinity of the planned development.

- A stormwater collection system will serve the planned development and will collect stormwater runoff from the site's impervious surfaces and convey it into two (2) water quality treatment units prior to discharge to riprap plunge pools. The first riprap plunge pool will discharge adjacent to a natural emergent marsh and the second will discharge to a natural tributary swale to the north. Both swales are tributary to the Presumpscot River. Also, the existing stormwater collection system provided for the existing development will be upgraded and extended to improve stormwater runoff collection for the existing development. An existing water quality treatment unit may be reused/relocated for this stormwater collection system. The storm drain systems will include catch basins, drain manholes, and 24-inch, 18-inch, 15-inch and 12-inch HDPE storm drains. The remainder of the site will remain as in the predevelopment conditions. Changes to existing drainage patterns have been mitigated to the extent practicable. Onsite post-development stormwater discharges increase slightly from predevelopment rates; however, a stormwater analysis has been completed demonstrating that the existing natural swales have sufficient capacity in the postdevelopment conditions to sufficiently handle the slight increases in flows,

and the large capacity of the Presumpscot River mitigates any impacts downstream from the planned developments.

- Lot 4 currently is provided with an onsite subsurface wastewater disposal system that will be removed as part of the Lot 4 development. Sanitary sewer service will include an 8-inch PVC gravity sewer lateral that will convey wastewater from the proposed building and the two existing buildings to a proposed onsite duplex pump station. This onsite pump station will also receive wastewater flows from the Lot 6 development. The overall plan is to consolidate these flows into one discharge connection to the Riverside Street Sewer. A 4-inch force main will be installed along the existing access drive for the 400 Riverside Street properties prior to tie in to the municipal sewer system on Riverside Street that ultimately discharges to the Presumpscot North Main Interceptor Sewer. The force main may need to be installed along the frontage of the Maine Turnpike Authority property along Riverside Street in order to tie in to the existing sewer main on Riverside Street. Utility easements will be established for these infrastructure routes.

Currently, the segment of sewer main installed on Riverside Street and proposed for tie in has not been activated. Based on conversations with the Portland Public Works Department, a proposed cross-country sewer line to the Presumpscot River Pumping Station in Westbrook will need to be constructed prior to the activation of the Riverside Street sewer. The Department stated that this cross-country main is tentatively scheduled for construction during the summer of 2004. This sewer main will need to be activated prior to the acceptance of sewer flows from the planned development.

Due to off-site sewer disposal for the planned developments being dependent on the construction schedules of the Portland Public Works Department and the Portland Water District to construct the cross-country sewer line and to activate the remaining portion of main on Riverside Street, the applicant is considering the installation of a temporary onsite sewer holding tank at Lot 6. If implemented, the applicant will enter into an agreement with a local waste disposal hauler in the interim until the main is activated and tie in can be completed.

- Erosion and sediment control measures will be installed during construction. The project will include building construction and disturbance for paved or gravel surfaces. Best management practices will include siltation barriers, inlet sediment barriers, inlet and outlet trap channels, vegetative swales, and stormwater discharge trap plunge pools. These erosion and sediment control measures will minimize erosion potential and sediment transport.

- The site's lighting will primarily consist of pole-mounted shoebox fixtures and wall-pack units to minimize glare. The project location is such that no spillover or glare from the existing lighting appears to be a problem.

- Since the project is located in a light industrial area, landscaping will be minimal and the existing mature trees will be maintained along the property lines of the project site to the extent practicable. Due to the project site being located at the back of the subdivision and being bordered by the wooded shoreline of the Presumpscot River to the north, very limited landscaping measures are proposed for the development. Tree plantings and shrubs will be

IF

installed adjacent to some of the paved areas for the planned development. Where necessary, the owner will provide grass cover to stabilize non-gravel or non-paved surfaces.

- The proposed development may utilize natural gas available from within Riverside Street, or LP gas may be used from a small onsite LP gas tank farm, depending on costs and availability.

The following statements are provided as part of the planned developments at Lot 6 of the McAlister Farm Subdivision and at Lot 4 of the 400 Riverside Street Properties in accordance with Section 14-525 (c):

1. The proposed developments will include a one (1) story, 41,255 sq. ft. office building/warehouse at Lot 6 and a one (1) story, 23,400 sq. ft. office building/warehouse at Lot 4.
2. The Lot 6 project parcel size is 461,736 sq. ft. or 10.6 acres and the Lot 4 project parcel size is 631,620 sq. ft. or 14.5-acres.

3. The Lot 6 site contains one existing, undeveloped gravel drive from McAlister Farm Drive. This access will be improved to a paved 26-foot-wide access driveway. The proposed development will include upgrading, paving, installation of guardrails and extension of the existing access drive to within the planned development. The Lot 4 site contains an existing 26-foot-wide paved access drive from Riverside Street. No changes are planned for this existing access drive. Access will be provided to the planned development from an existing 30-foot-wide paved access drive within the development. The proposed development will include upgrading, paving, and extension of the existing access drive to within the planned development.
4. The project sites will generate small amounts of construction debris that will be disposed of at the Riverside Street disposal facility or other approved location. After completion, operations from the buildings are expected to generate only a small amount of solid waste that will be disposed of in onsite dumpsters that will be emptied on a weekly basis by an area trash hauler.

5. The Lot 6 project site will be served with public water and power from McAlister Farm Drive. Sanitary sewer service for Lot 6 will include an 8-inch PVC gravity sewer lateral that will convey wastewater from the proposed building to a proposed onsite duplex pump station. A 1½-inch force main will tie in to the sanitary sewer service proposed as part of the planned development for Lot 4 at 400 Riverside Street.

The Lot 4 project site is currently served with public water and power from Riverside Street, and these will be extended to serve the planned development. No capacity issues currently exist on the site for public water and power. The Lot 4 project site is currently provided with an onsite subsurface wastewater disposal system that will be removed as part of the Lot 4 development. Sanitary sewer service will include an 8-inch PVC gravity sewer lateral that will convey wastewater from the proposed building and the two existing buildings to a proposed onsite duplex pump station. This onsite pump station will also receive wastewater flows from the Lot 6 development. The overall plan is to consolidate these flows into one discharge

IG

Ms. Sarah Hopkins
April 20, 2004
Page 8

connection to the Riverside Street sewer. A 4-inch force main will be installed along the existing access drive for the 400 Riverside Street properties prior to tie in to the municipal sewer system on Riverside Street that ultimately discharges to the Presumpscot North Main Interceptor Sewer. The force main may need to be installed along the frontage of the Maine Turnpike Authority property along Riverside Street in order to tie in to the existing sewer main on Riverside Street. Utility easements will be established for these infrastructure routes.

The use of the buildings for industrial/warehouse space will not result in excess wastewater flows to the system. The buildings will have only simple restroom and wash facilities and will not require significant water or sewer service capacity. "Ability to Serve" letters have been received from the Portland Water District and Public Works and have been included in the attached submittal.

6. The project sites will maintain the existing drainage patterns to the extent practicable. The majority of the runoff from the project sites discharges to natural swales tributary to the Presumpscot River. Postdevelopment stormwater discharges increase slightly from predevelopment rates for each project site; however, stormwater analysis has been completed demonstrating that the natural swales have sufficient capacity in the postdevelopment conditions to sufficiently handle the slight increases in flows and the large capacity of the Presumpscot River mitigates any impacts downstream from the planned developments.

7. Erosion control measures including silt barriers, inlet sediment barriers, inlet and outlet riprap channels, vegetative swales, and stormwater discharge riprap pools will be provided. The project includes constructing new buildings and paved surfaces. The work is anticipated to begin this year and be completed by the end of the year.

8. The project sites are subject to a Major Site Plan review by the Portland Planning Authority and Building Permits by the Code Enforcement Office. The project sites also qualify for MeDEP Site Law review, which is assumed to be covered by the City's delegated review authority. The work will require Natural Resources Protection Act Permits from the MeDEP for wetland impacts up to 15,000 sq. ft. for the Lot 4 development and up to 43,650 sq. ft. for the Lot 6 development. Multiple concepts have been prepared in an effort to minimize wetland impacts and as part of the Alternatives Analysis required under MeDEP NRP A guidelines. As a result, the planned developments for Lot 6 and Lot 4 will impact approximately 0.91 acres of wetland when considered for cumulative impacts.

Based on discussions with the MeDEP, wetlands impacts on the project site at Lot 6 may be mitigated by creation of new wetlands areas on the site. Wetlands creation will include the relocation of existing wetlands sods from areas of proposed fills to newly created wet areas on the project site to the extent practicable. Wetlands were delineated by Sebago Technics, Inc., who is responsible for the NRP A permitting aspects of the project. On behalf of the owner, Sebago Technics, Inc. will be submitting a NRP A Tier II permit application to the MeDEP for wetlands impacts as part of the Lot 6 development and a NRP A Tier I permit application to the MeDEP for wetlands impacts as part of the Lot 4 development. A copy of the permits will be forwarded to the Planning Department upon receipt from Sebago Technics, Inc. Wetland limits and new wetlands areas are identified on the accompanying plans.

14

Ms. Sarah Hopkins
April 20, 2004
Page 9

9. The Rist/Brunet Family Trust Riverside Street LLC has provided evidence of financial capacity from New England Realty Resources, LLC. It is apparent the applicant has sufficient capacity to undertake the project.

10. Copies of the deeds are contained in the application package supporting right, title or interest in the properties.

11. The respective agencies have been contacted in regards to the locations of the proposed developments for unusual areas, wildlife and fisheries habitats, and archaeological sites. Copies of their responses accompany this application submission. No rare or endangered species have been identified on the sites.

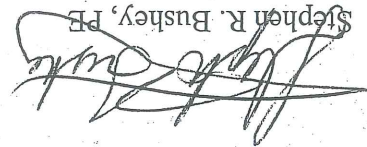
12. Deluca-Hoffman Associates, Inc. will provide CADD, DXF files to the Department upon final approval of the plans.

13. The planned developments will generate only a modest amount of recyclable materials. Paper and cardboard will be collected and containerized for removal by area paper and cardboard recyclers such as W. M. Goodman & Sons. These materials will likely be collected inside the buildings in plastic containers supplied by the collection vendors. The materials will be collected on a regular basis and removed from the sites by a selected vendor.

We trust these statements and the supporting application plans and materials satisfy the City's requirements and we look forward to your review and approval of the project. Please contact this office with any questions or concerns.

Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.



Stephen R. Bushey, PE
Senior Engineer

SRB/sq/JN2314/Hopkins4-13-04

Enclosures

c: Martin Rist, Rist/Brunet Family Trust

Att. 2

SECTION 1

DEVELOPMENT DESCRIPTION

Overview

1.0

Deluca-Hoffman Associates, Inc. has prepared a submission package for a Major Site Plan Review on behalf of the Ris/Brunet Family Trust. The applicant is proposing to develop two adjoining lots located off of Riverside Street in Portland, Maine. The project sites include Lot 6 of the McAlister Farm Subdivision off McAlister Farm Drive and Lot 4 of the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, at 400 Riverside Street. The applicant is proposing to develop one (1) unit of multiple-tenant space at Lot 6 of the McAlister Farm Subdivision and one (1) unit of multiple-tenant space at Lot 4 of the 400 Riverside Street Properties. The project sites are located off McAlister Farm Drive and Riverside Street, respectively, and are bordered by multiple industrial properties and the Presumpscot River.

The development at Lot 6 of the McAlister Farm Subdivision will include a one (1) story, 41,255 square foot (sq. ft.) office building/warehouse on the existing 461,736 sq. ft. (10.6-acre) lot represented on Portland Tax Map 320 as Block A, Lot 1. The site is currently undeveloped and includes an undeveloped, 28-foot-wide, gravel access drive to the site off the end of the cul-de-sac at the end of McAlister Farm Drive. When completed, there will be 52 parking spaces provided, as well as multiple loading areas to serve the building's warehouse functions.

The development at Lot 4 of the 400 Riverside Street Properties will include a one (1) story, 23,400 sq. ft. office building/warehouse on the existing 631,620 sq. ft. (14.5-acre) lot represented on Portland Tax Map 320 as Block A, Lot 2. The site is currently developed and includes an existing 26-foot-wide paved access drive from Riverside Street, a two (2) story, 20,000 sq. ft. office building/warehouse and a two (2) story, 35,250 sq. ft. office building/warehouse. The developed site is provided with 89 tenant parking spaces, an on-site stormwater drainage system and an on-site subsurface wastewater disposal system. When completed, there will be 45 new parking spaces provided for the planned development for a total of 126 parking spaces for the site, as well as multiple loading areas to serve the building's warehouse functions. Additionally, the planned development will include the installation of three (3) loading bays and a lift system for the existing two (2) story, 35,250 sq. ft. office building/warehouse.

The proposed structures will be typical metal-framed buildings similar in design to nearby buildings. The buildings are expected to have primarily a metal-faced siding and may be either flat roofed or slightly pitched. The applicant may subdivide the building spaces to allow multiple tenant occupants, or they may function as a single tenant space.

Lot 6 will continue to be accessed off the end of McAlister Farm Drive. A 26-foot-wide paved access drive will be constructed along the alignment of the existing dirt access drive off the cul-de-sac.

Lot 4 will continue to be accessed off the existing 26-foot-wide paved access drive to 400 Riverside Street. No additional changes are planned to the existing access drive.

Both development sites contain various natural resources including onsite streams and wetlands that require Natural Resources Protection Act permitting from the MedEP. Additional information on these natural resources is provided later in this narrative.

The 10.6-acre parcel containing Lot 6 and the 13.7-acre parcel containing Lot 4 are located in the City of Portland Industrial-Moderate zoning district. The site areas are located within 250 feet of the Presumpscot River and are also located within the City's Shoreland Zoning District. No building activity is proposed within the Shoreland Zone. A 200-foot wildlife corridor along the river was also established for the McAllister Farm Subdivision as part of the original MedEP permit approvals. No development activity is proposed within this 200-foot corridor.

1.1 Land Transfer

The applicant currently owns Lot 6 and property identified as Lot 1A of the McAllister Farm Subdivision, which is a 2.05-acre parcel located to the south of Lot 6. This area was formerly part of the 10.0-acre Lot 1 (now owned by the U.S. Postal Service). The applicant also owns property identified as Lots 1, 4 and 5 at the 400 Riverside Street Properties. Lots 1, 4, and 5 were formerly included in the five (5) lot parcel identified as the 36.8-acre Donald D. Butler Subdivision.

In conjunction with this submission, Deluca-Hoffman Associates, Inc. will be filing an Agreement for the Exchange of Real Property on behalf of the Rist/Brunet Family Trust to the Planning Department for review and approval. The Agreement for the Exchange of Real Property is to include the exchange of portions of real property located within the McAllister Farm Subdivision and the 400 Riverside Street Properties with the United States Postal Service and within the Rist/Brunet Family Trust and shall include the following:

- Transfer of 17,756 sq. ft. of a certain parcel identified as Lot 1A of the McAllister Farm Subdivision and owned by the Rist/Brunet Family Trust to an adjacent parcel identified as Lot 1 of the McAllister Farm Subdivision and owned by the United States Postal Service.
- Transfer of 12,525 sq. ft. of a certain parcel identified as Lot 1 of the McAllister Farm Subdivision and owned by the United States Postal Service, currently under consideration for development and owned by the Rist/Brunet Family Trust.
- Transfer of 5,231 sq. ft. of a certain parcel identified as Lot 1 of the McAllister Farm Subdivision and owned by the United States Postal Service to an adjacent parcel identified as Lot 5 of the 400 Riverside Street Properties and owned by the Rist/Brunet Family Trust.
- Transfer of 51,503 sq. ft. of a certain parcel identified as Lot 6 of the McAllister Farm Subdivision and owned by the Rist/Brunet Family Trust to an adjacent parcel identified as Lot 4 of the 400 Riverside Street Properties and owned by the Rist/Brunet Family Trust.

2A

2B

- Transfer of 54,590 sq. ft. of a certain parcel identified as Lot 4 of the 400 Riverside Street Properties and owned by the Rist/Brunet Family Trust to an adjacent parcel identified as Lot 6 of the McAllister Farm Subdivision and owned by the Rist/Brunet Family Trust.
- Transfer of 28,704 sq. ft. of a certain parcel identified as Lot 1A of the McAllister Farm Subdivision and owned by the Rist/Brunet Family Trust to an adjacent parcel identified as Lot 4 of the 400 Riverside Street Properties and owned by the Rist/Brunet Family Trust.

The Agreement for the Exchange of Real Property will allow for the planned development at Lot 4 of the 400 Riverside Street Properties. The properties shall be conveyed by each party to the other subject to applicable land use laws and regulations and shall be free and clear of all encumbrances except covenants, conditions, easements and restrictions of record which do not adversely affect the continued use of the premises for commercial/industrial warehouse and distribution purposes.

No revisions to the McAllister Farm Subdivision Plats were completed for the subsequent division of Lot 1 into Lots 1 and 1A, nor were any modifications to the MeDEP Permit Orders completed for Lot 1, if they exist, to the best of our knowledge. Copies of the last recorded Subdivision Plats for the McAllister Farm Subdivision and 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, accompany this application submission.

The following chronology of permitting actions is associated with the McAllister Farm Subdivision and specifically the Lot 6 parcel:

- The Portland Planning Board approved the original recording plat for the McAllister Farm Subdivision on June 9, 1986.
- An Amended Subdivision Plat for the McAllister Farm Subdivision was approved by the Portland Planning Board on February 6, 1987. The project site was originally contained within Lot 4 (33.9 acres).
- As outlined in MeDEP Permit Order #L-014644-26-A-N, the Lot 4 owner, B&B Properties, was granted Department approval to construct a warehouse on Warren Avenue on September 16, 1987.
- As outlined in MeDEP Permit Order #L-014644-26-C-M dated December 5, 1988, the original Lot 4 was subdivided into three lots consisting of the following:
 - Lot 4 – 15 Acres
 - Lot 4A – 6.8 Acres
 - Lot 4B – 10.6 Acres

Part of the project included the extension of what is now known as McAllister Farm Drive to access Lots 4A and 4B.

- Lot 4A was developed by Jordan Milton Co. under MeDEP #L-015533-26-A-N. This lot is now owned by Dirigo Drywall Associates.

2c

- A Final Subdivision Recording Plat for the McAlister Farm Subdivision was approved by the Portland Planning Board on July 26, 1988 and subsequently revised and approved by the Planning Director on January 7, 1989. This revised plan, recorded at the Cumberland County Registry of Deeds, Plan Book 176, Page 44, also notes that MEDFP Lot 4A is the same as Lot 5 and Lot 4B is the same as Lot 6 on the Recording Plat. Lot 6 is the lot currently under consideration for development.

- MEDFP Permit Order #L-14644-26-D-M was issued on August 2, 1989 for a reduction in the culvert sizing passing beneath McAlister Farm Drive.

- MEDFP Permit Order #L-14644-E-M was issued on December 7, 1989 to allow a 6-foot diameter corrugated metal pipe to be installed beneath McAlister Farm Drive instead of the originally approved concrete pipe.

The Lot 6 project site was acquired by the applicant, The Rist/Brunet Family Trust, on August 19, 2002.

The Portland Planning Board approved the original recording plat for the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, in 1981 and it included a 36.8-acre subdivision owned by Delta Realty and included the creation of five lots for industrial use. The project site, Lot 4, was 20.6 acres and the remaining lots ranged in size from 2.4 acres to 7.3 acres. All lots were to have access from Riverside Street.

The following chronology of permitting actions is associated with the original Donald D. Butler Subdivision and specifically the Lot 4 parcel:

- An Amended Subdivision Plat for the Donald D. Butler Subdivision was approved by the Portland Planning Board on October 1, 1981 and included a revision to the boundary line between Lots 4 and 5 owned by Delta Realty. The project site, Lot 4, was amended to 20.4 acres.

- As outlined in MEDFP Permit Order #L-39-7696-05170, the Donald D. Butler Subdivision was granted Department approval for the creation of five lots for industrial use on January 8, 1982.

- As outlined in MEDFP Permit Order #L-007696-39-A-M, the Donald D. Butler Subdivision was granted Department approval to relocate its subsurface wastewater disposal field on April 10, 1985.

- An Amended Subdivision Plat for the Donald D. Butler Subdivision was approved by the Portland Planning Board on February 6, 1987 and included a revision to the boundary line between Lot 5 of the Donald D. Butler Subdivision owned by Delta Realty and Lot 1 of the McAlister Farm Subdivision owned by C & N Enterprises (now the U.S. Postal Service site).

- A Final Subdivision Recording Plat for the Donald D. Butler Subdivision was approved by the Portland Planning Board on June 6, 1996. Lots 1, 4, and 5 of the Donald D. Butler Subdivision were recorded as being owned by the applicant, 400 Riverside Street Properties, at that time. This revised plan is recorded at the

2D

Cumberland County Registry of Deeds, Plan Book 197, Page 115. The Final Subdivision Recording Plat included Lot 1 being increased to 13.7 acres and Lot 4 being reduced to 14.5 acres. Lot 4 is the lot currently under consideration for development.

- MedEP Permit Order #L-007696-39-C-M, dated June 17, 1996, reflects Lot 1 being increased to 13.7 acres and Lot 4 being reduced to 14.5 acres.

Also, the applicant at that time, 400 Riverside Street Properties, proposed to amend MedEP Permit Order #L-39-7696-05170, Special Condition #3, from "no development including cutting and filling shall occur within 100 feet of the major flood limit boundary shown on the final subdivision plan dated August 27, 1981 excluding the subsurface disposal system on Lot 4" to include "no disturbance shall be allowed within the 250-foot Shoreland Zone adjacent to the Presumpscot River except for some minor grading associated with the construction of a new 15,000 sq. ft. commercial building on Lot 1 and for a future walking trail which shall be set back a minimum of 50 feet from the top of the embankment at the river's edge".

Existing and Proposed Easements/Rights-of-Way

1.2

An existing 50-foot-wide Portland Water District utility easement traverses the back portion of both project sites. This easement contains a 48-inch reinforced concrete pipe transmission water main. This main is a primary transmission line serving the Portland community; therefore, no structures are proposed for development within the easement and all construction activities will ensure that the main is not disturbed.

As part of the planned development for Lot 6, the applicant proposes to place granular fills varying in depth from approximately 4 feet to 0 feet, and approximately 11,000 sq. ft. of impervious paved area within the Portland Water District easement and over the existing water main. On behalf of the applicant, Deluca-Hoffman Associates, Inc. has had discussions with the Portland Water District to determine what activities will be allowed within the easement. Based on these discussions, it is our understanding that these activities may be allowed by the District, provided an easement is obtained and that no overnight parking or permanent storage facilities be allowed in this area, in the event that the District requires access to the 48-inch water main. We will continue discussions with the District to determine what practices are acceptable within the easement and, on behalf of the applicant, will obtain District approval and all necessary easements prior to commencing any construction activities. Future easements that may be required relate to a proposed sewer extension from Lot 6 across Lot 4, proposed sewer extension from Lot 4 along the frontage of Lot 3 of the Donald D. Butler Subdivision and owned by the Maine Turnpike Authority in order to tie in to the existing sewer main on Riverside Street, and a wetlands mitigation area on Lot 6.

Natural Resources

1.3

Lot 6 of the McAlister Farm Subdivision and Lot 4 of the 400 Riverside Street Properties about the Presumpscot River to the north. The northern portions of the project sites are within the City's Resource Protection Zone. Development activity is restricted within the two hundred and fifty (250) foot Resource Protection Zone. A 200-foot wildlife corridor along the river was also established for the McAlister Farm Subdivision as part of the original MedEP permit approvals. No development activity is proposed within this 200-

foot corridor. The project sites are also within the 100-year flood plain (U.S.G.S. Mean Sea Level, Elev. 35.7 ft.), which is largely contained within large tributary swales. The setbacks are shown on the accompanying plans.

Lot 6 is an undeveloped lot and contains variable topography with several high knolls, a natural emergent marsh, and a large tributary swale containing a regulated stream that discharges to the Presumpscot River. Lot 6 also contains multiple wetland areas, some of which will be impacted by the development. Wetland areas identified as wet meadows have been identified across the site's open areas. Stream-related wetlands and an emergent wetland area have been identified within the site's lower elevations. The stream-related wetlands have been identified as wetlands of special significance due to their location within the 100-year flood plain.

Lot 4 consists of a developed lot with two (2) office building/warehouse buildings totaling 55,250 sq. ft., associated parking, subsurface wastewater disposal system, and a stormwater drainage system complete with a proprietary water quality treatment unit that discharges to a natural swale within Lot 4. Lot 4 contains variable topography with several vegetated embankments and is bordered to the east by a wet meadow and to the west by the natural emergent marsh contained on the adjacent Lot 6. This wet meadow and the natural emergent marsh discharge stormwater runoff via two (2) natural swales to the north of the project site and tributary to the Presumpscot River.

Lot 4 also contains multiple wetland areas, some of which will be impacted by the development. A wetland area identified as a wet meadow has been identified across a portion of the site's open area. Wetlands contained within the two large swales and an emergent wetland area have been identified within the site's lower elevations. The wetlands associated with the large swales have been identified as wetlands of special significance due to their location within the 100-year flood plain.

Multiple concepts have been prepared in an effort to minimize wetland impacts and as part of the Alternative Analysis required under MedEP NRP A guidelines. As a result, the planned developments for Lot 6 and Lot 4 will impact approximately 0.91 acres of wetland when considered for cumulative impacts.

Based on discussions with the MedEP, wetlands impacts on the project site at Lot 6 may be mitigated by creation of new wetlands areas on the site. Wetlands creation will include the relocation of existing wetlands sods from areas of proposed fills to newly created wet areas on the project site to the extent practicable. Wetlands were delineated by Sebago Technics, Inc., who is responsible for the NRP A permitting aspects of the project. On behalf of the owner, Sebago Technics, Inc. will be submitting a NRP A Tier II permit application to the MedEP for wetlands impacts as part of the Lot 6 development and a NRP A Tier I permit application to the MedEP for wetlands impacts as part of the Lot 4 development. A copy of the permits will be forwarded to the Planning Department upon receipt from Sebago Technics, Inc. Wetland limits and new wetlands areas are identified on the accompanying plans.

Many of the industrial sites on Riverside Street and in the vicinity of the project sites discharge stormwater runoff to the tributary swale containing the regulated stream on the Lot 6 site. In accordance with the Natural Resources Protection Act, all structures

ZE

25

within the proposed developments must be set back 25 feet from the embankment of the tributary swales. This requirement has been accounted for in the layout plans. Deluca-Hoffman Associates, Inc. has contacted various State and Federal agencies regarding the presence of rare or endangered species on the development site. Their responses are attached to this application. No rare or endangered species have been identified on the sites.

1.4 Subsurface Conditions

R.W. Gillespie & Associates, Inc. completed a preliminary Geotechnical Investigation of the development sites in the summer of 2002. The Lot 6 site contains variable topography with several high knolls, a natural pond, and a large tributary swale containing a regulated stream that discharges to the Presumpscot River. The Lot 4 site contains variable topography with several vegetated embankments and is bordered to the east by a wet meadow and to the west by the natural emergent marsh contained on the adjacent Lot 6. The wet meadow and the natural emergent marsh discharge stormwater runoff via two (2) tributary swales to the north of the project site to the Presumpscot River.

The subsurface exploration included four test borings varying in depth from twenty-two (22) feet to ninety-two (92) feet. A Geotechnical Investigation report indicates the sites are underlain by naturally deposited silty clays over glacial tills and bedrock at depths from fifty-one (51) feet to ninety-one (91) feet below the local ground surface. Groundwater levels across the sites were observed at varying depths and fluctuate with precipitation and the season.

The preliminary geotechnical recommendations for the Lot 6 site suggest that a soils preload and wick drains may be warranted to promote pre-consolidation of soft underlying soils prior to building construction. If chosen, this method will require up to 8 months of time. Alternatively, piles may be selected as the foundation support method, in which case building construction could commence immediately.

The preliminary geotechnical recommendations for the Lot 4 site suggest that long-term settlement of new structures relative to existing structures may require appropriate design measures to allow for settlement of soft underlying soils. Alternatively, piles may be selected as the foundation support method in order to mitigate the potential for long-term settlement of new structures.

According to the Medium Intensity Soil Survey for Cumberland County, the development sites consist of the following soil:

- Suffield Silty Loam
- Scantic Silty Loam
- Belgrade Fine Silty Loam

These surficial soils types warrant a careful layout and sequence of construction activities. The drawings include specific erosion and sediment control measures that are required to overcome the erodible soils characteristics.

26

The site grading and drainage plans have also been developed in a manner that considers limitations associated with high ground water and avoids excessive earthwork cuts that would place foundations, utilities or drainage measures within the soft clay zones within the site.

1.5 Infrastructure

The proposed developments will require utility service extensions, as shown on the accompanying plan set. These will include the following items:

Lot 6 – McAlister Farm Subdivision:

- An existing 12-inch water main extends along McAlister Farm Drive from the 12-inch water main in Riverside Street to the existing access drive of the planned development and provides service to the existing lots in the area. The 12-inch water main was installed complete with hydrant and 8-inch fire service stub-out in the vicinity of the planned development. Sprinkler service will be provided for the development by installing an 8-inch fire service line off the existing 8-inch fire service stub-out and will include one (1) hydrant located in the vicinity of the proposed building. Also, a 1½-inch domestic water service line will be provided to the proposed building. All work shall be in accordance with City of Portland Water District standards.

- The existing site contains one undeveloped gravel drive from McAlister Farm Drive. This access will be improved to a paved 26-foot-wide access driveway. The existing access drive crosses a large tributary swale containing a regulated stream. MeDEP order #L-014644-26-E-M approved the stream crossing and provided for a 6-foot diameter corrugated metal culvert pipe as part of the stream crossing. The proposed development will include upgrading, paving, installation of guardrails and extension of the existing access drive to within the planned development. All work shall be in accordance with City of Portland Public Works standards and the conditions pursuant to MeDEP Permit Order #L-014644-26-E-M.

- Electrical service includes the installation of underground or overhead electric service from a utility pole located on McAlister Farm Drive and in the vicinity of the development. All work shall be in accordance with Verizon and CIMP standards.
- A stormwater collection system will serve the entire development and will collect stormwater runoff from approximately 2.0 acres of impervious surface and convey it into a water quality treatment unit prior to discharge to a riprap plunge pool adjacent to the existing stream. The storm drain system will include catch basins, drain manholes, 24-inch, 18-inch, and 12-inch HDPPE storm drains. The remainder of the site will remain as in the pre-developed conditions.

- Sanitary sewer service will include an 8-inch PVC gravity sewer lateral that will convey wastewater from the proposed building to a proposed onsite duplex pump station. A 1½-inch force main will tie-in to the sanitary sewer service proposed as part of the planned development for Lot 4 at 400 Riverside Street. The force main is located to minimize impacts to the open water wetlands located at the eastern boundary of the project site. A 4-inch force main will tie-in to the municipal sewer system on Riverside Street that ultimately discharges to the Presumpscot North

ZH

Main Interceptor Sewer. Utility easements will be established for these infrastructure routes.

Lot 4 – 400 Riverside Street Properties:

- Two (2) existing 2-inch domestic water service lines extend along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. An 8-inch fire service main also extends along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. Sprinkler service is currently provided for the existing buildings and will be provided for the planned development off the existing 8-inch fire service. One (1) hydrant will be provided for the site and will be located in the vicinity of the proposed building. Also, a 1½-inch domestic water service line will be provided to the proposed building. All work shall be in accordance with City of Portland Water District standards.

- The developed site contains an existing 26-foot-wide paved access drive from Riverside Street. No changes are planned for this existing access drive. Access will be provided to the planned development from an existing 30-foot-wide paved access drive within the development. The proposed development will include upgrading, paving, and extension of the existing access drive to within the planned development. All work shall be in accordance with City of Portland Public Works standards.

- Electrical service includes the installation of underground or overhead electric service from a utility pole located within the developed site and in the vicinity of the planned development. All work shall be in accordance with Verizon and CMP standards.

- A stormwater collection system will serve the development and will collect stormwater runoff from the site's impervious surfaces and convey it into two (2) riprap plunge pool will discharge adjacent to the natural emergent marsh, and the second riprap plunge pool will discharge adjacent to a tributary swale to the north. Also, the existing stormwater collection system provided for the existing development will be upgraded and extended to improve stormwater runoff collection for the existing development. The existing water quality treatment unit on the Lot 4 site may be reused/relocated for this stormwater collection system. The storm drain systems will include catch basins, drain manholes, and 24-inch, 18-inch, 15-inch and 12-inch HDPE storm drains. The remainder of the site will remain as in the redevelopment conditions.

- Lot 4 currently is provided with an on-site subsurface wastewater disposal system that will be removed as part of the Lot 4 development. Sanitary sewer service will include an 8-inch PVC gravity sewer lateral that will convey wastewater from the proposed building and the two existing buildings to a proposed onsite duplex pump station. This on-site pump station will also receive wastewater flows from the Lot 6 development. The overall plan is to consolidate these flows into one discharge connection to the Riverside Street Sewer. A 4-inch force main will be installed along the existing access drive for the 400 Riverside Street properties prior to tie-in to the municipal sewer system on Riverside Street that ultimately discharges to the

Presumpscot North Main Interceptor Sewer. The force main may need to be installed along the frontage of the Maine Turnpike Authority property along Riverside Street in order to tie in to the existing sewer main on Riverside Street. Utility easements will be established for these infrastructure routes.

Currently, the segment of sewer main installed on Riverside Street and proposed for tie-in has not been activated. Based on conversations with the Portland Public Works Department, a proposed cross-country sewer line to the Presumpscot River Pumping Station in Westbrook will need to be constructed prior to the activation of the Riverside Street sewer. The Department stated that this cross-country main is tentatively scheduled for construction during the summer of 2004. This sewer main will need to be activated prior to the acceptance of sewer flows from the planned development.

Due to off-site sewer disposal for the planned developments being dependent on the construction schedules of the Portland Public Works Department and the Portland Water District to construct the cross-country sewer line and to activate the remaining portion of main on Riverside Street, the applicant is considering the installation of a temporary on-site sewer holding tank at Lot 6. If implemented, the applicant will enter into an agreement with a local waste disposal hauler in the interim until the main is activated and tie in can be completed.

- The proposed development may utilize natural gas available from within Riverside Street, or LP gas may be used from a small onsite LP gas tank farm, depending on costs and availability.

Construction Plan

1.6

The proposed schedule developed for these projects is as follows:

Item	Site Work	Buildings
Local Site Plan Approvals	July 2004	August 2004
Start Construction	July 2004	August 2004
Building Construction	N/A	August 2004 *
Complete Site Work	September 2004	May 2005
Complete Building	N/A	May 2005
Building Occupancy	N/A	May 2005

*Depends on foundation support method – add 8 months for pre-load surcharge for Lot 6.

1.7 Figures, Plates and Drawings

Figure	Description
1	Delorme Location Map
2	USGS Topographic Map
3	Property Tax Map
4	Zoning Map
5	USDA SCS Soils Map
6	MGS Sand and Gravel Aquifer Map
7	Fresh-Water Wetlands Map

21

Plan Sheets	Description
1	Cover Sheet, General Notes and Legend
2	Overall Property Summary Plan
2A	Existing Conditions Plan - Lot 6
2B	Existing Conditions Plan - Lot 4
3A	Site Layout Plan - Lot 6
3B	Site Layout Plan - Lot 4
4A	Grading, Drainage and Erosion Control Plan - Lot 6
4B	Grading, Drainage and Erosion Control Plan - Lot 4
5A	Utility Plan - Lot 6
5B	Utility Plan - Lot 4
6	Site Details
7	Site Details
8	Utility Details
9	Storm Drain Details
10	Erosion Control Details
11	Erosion Control Notes

1.8 Figures, Plates and Drawings (Continued)

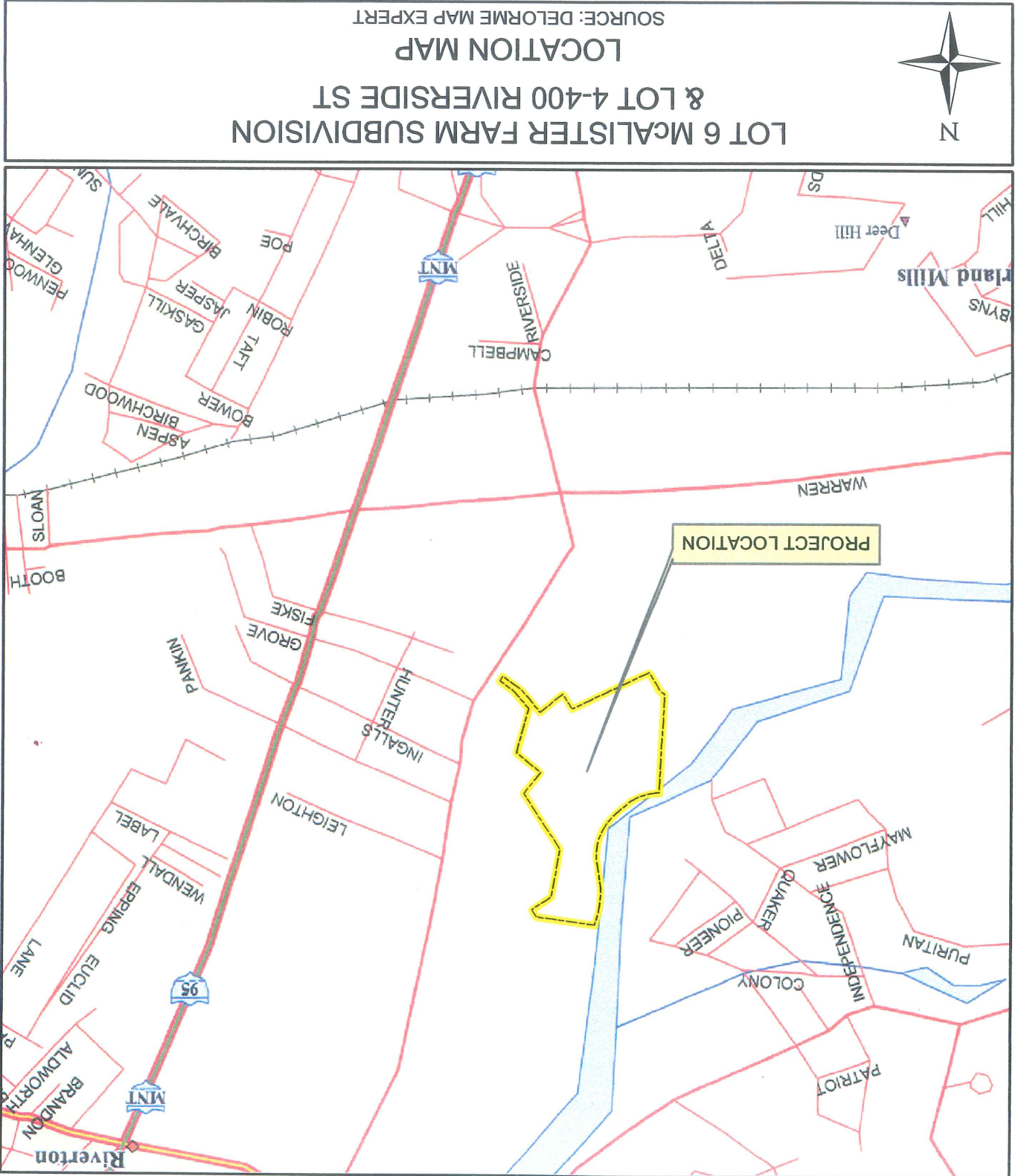
Plate	Description
1	Predevelopment Watershed Plan - Lot 6
2	Postdevelopment Watershed Plan - Lot 6
3	Predevelopment Watershed Plan - Lot 4
4	Postdevelopment Watershed Plan - Lot 4

25

Deluca-Hoffman Associates, Inc.
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, ME 04106
 207-775-1121
 www.delucahoffman.com

DRAWN: RJK
 CHECKED: CJO
 DATE: NOV. 2003
 FILENAME: I:\2300 Jobs\2314new\2314figs\2314-DELORME-FIG1.mxd
 SCALE: 1 inch equals 1,000 feet

FIGURE 1



2K

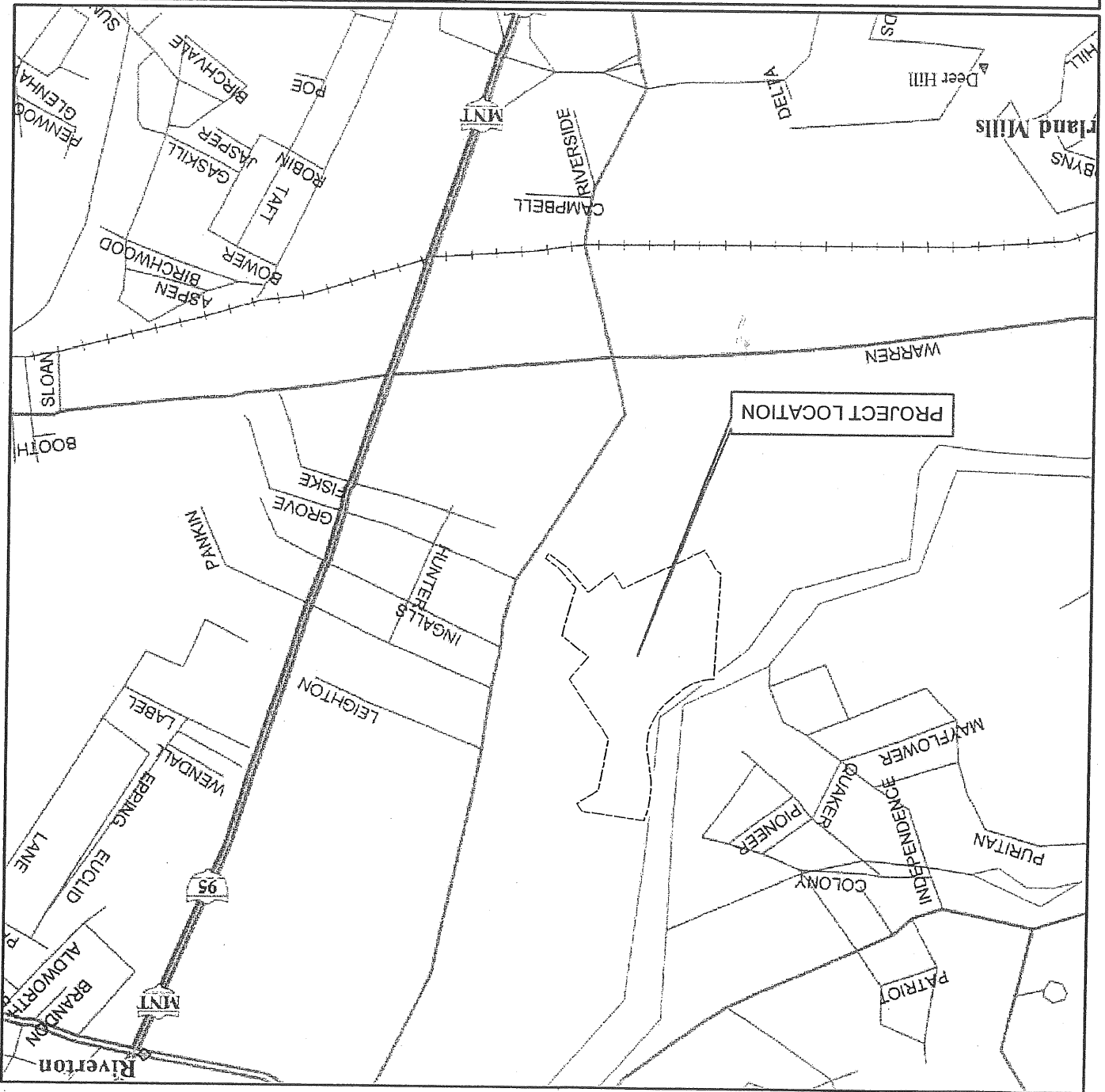
Deluca-Hoffman Associates, Inc.
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, ME 04106
 207-775-1121
 www.delucahoffman.com

DRAWN: RJK
 CHECKED: CJO
 DATE: NOV. 2003
 FILENAME: I:\2300 Jobs\2314\new2314\figs\2314-DELORME-FIG1.mxd
 SCALE: 1 inch equals 1,000 feet

FIGURE 1

LOT 6 McALISTER FARM SUBDIVISION
 & LOT 4-400 RIVERSIDE ST
 LOCATION MAP

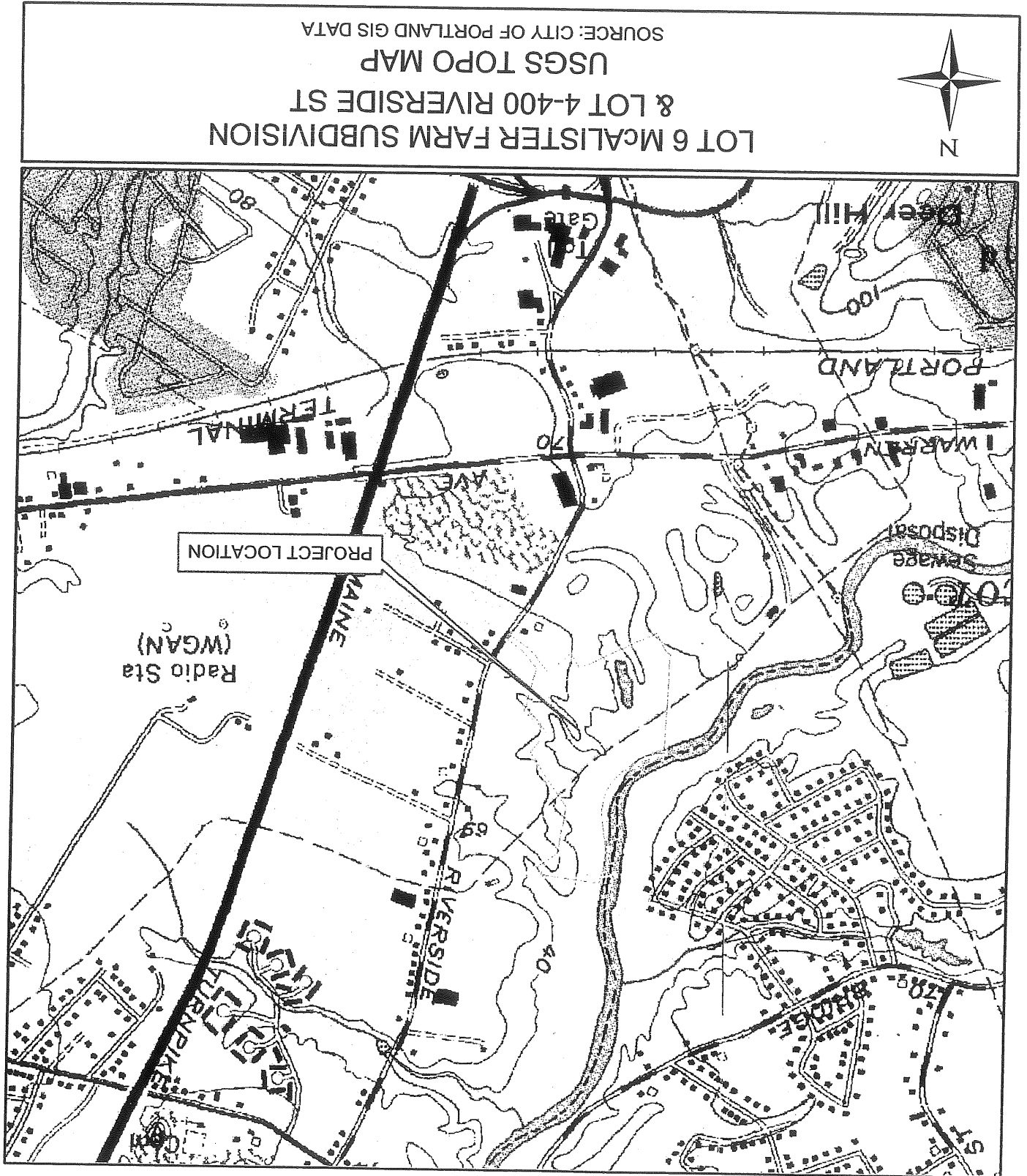
SOURCE: DELORME MAP EXPERT



Deluca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207-775-1121
www.delucahoffman.com

DRAWN: RJK
CHECKED: CJO
DATE: NOV. 2003
FILENAME: I:\2300 Jobs\2314new\2314figs\2314-USGS-FIG2.mxd
SCALE: 1 inch equals 1,000 feet

FIGURE 2



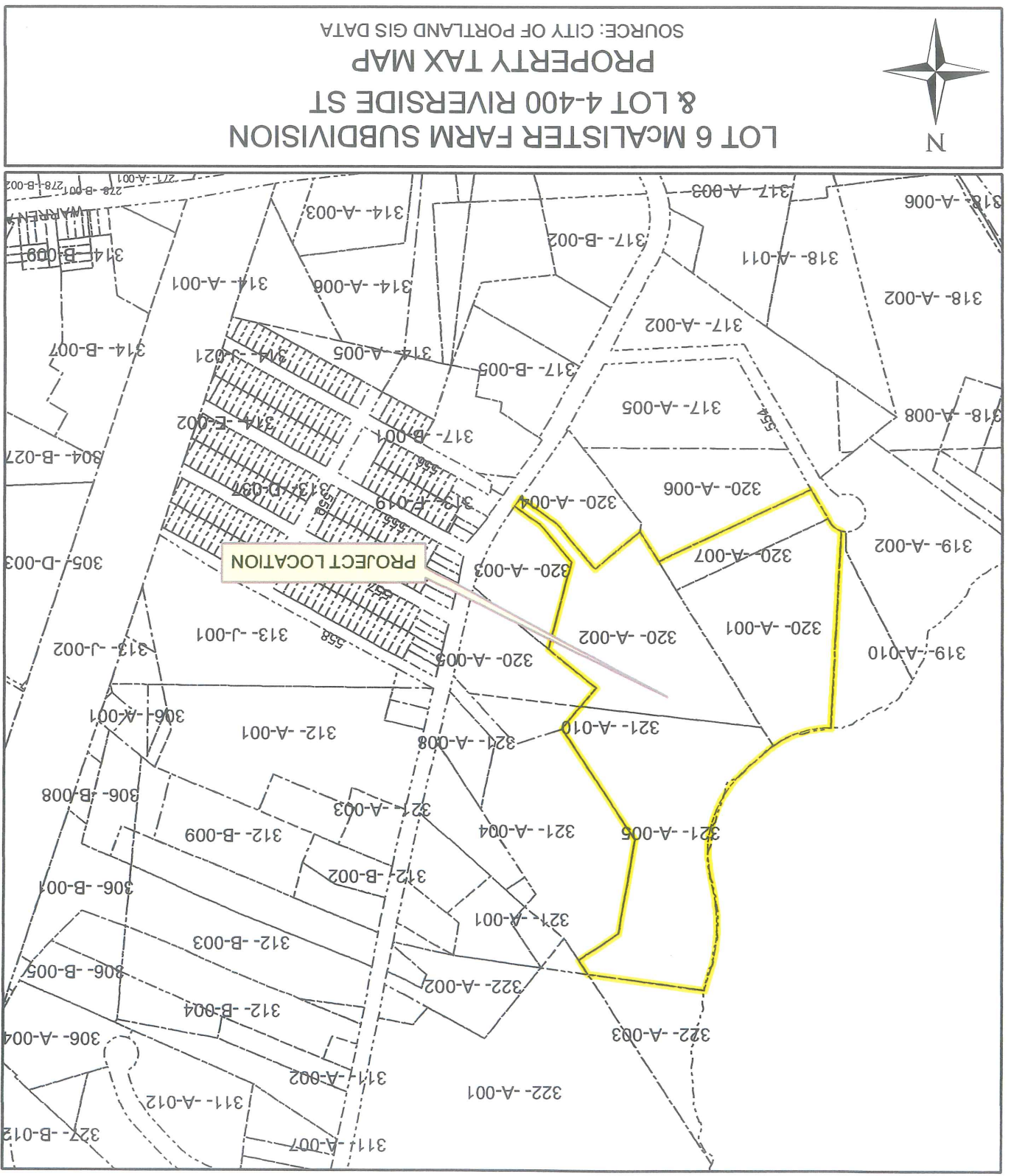
ZM

Deluca-Hoffman Associates, Inc.
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, ME 04106
 207-775-1121
www.delucahoffman.com

DRAWN: RJK
 CHECKED: CJO
 DATE: NOV. 2003
 FILENAME: I:\2300 Jobs\2314new\2314figs\2314-TAX-FIG3.mxd
 SCALE: 1 inch equals 500 feet

3

FIGURE



ZN

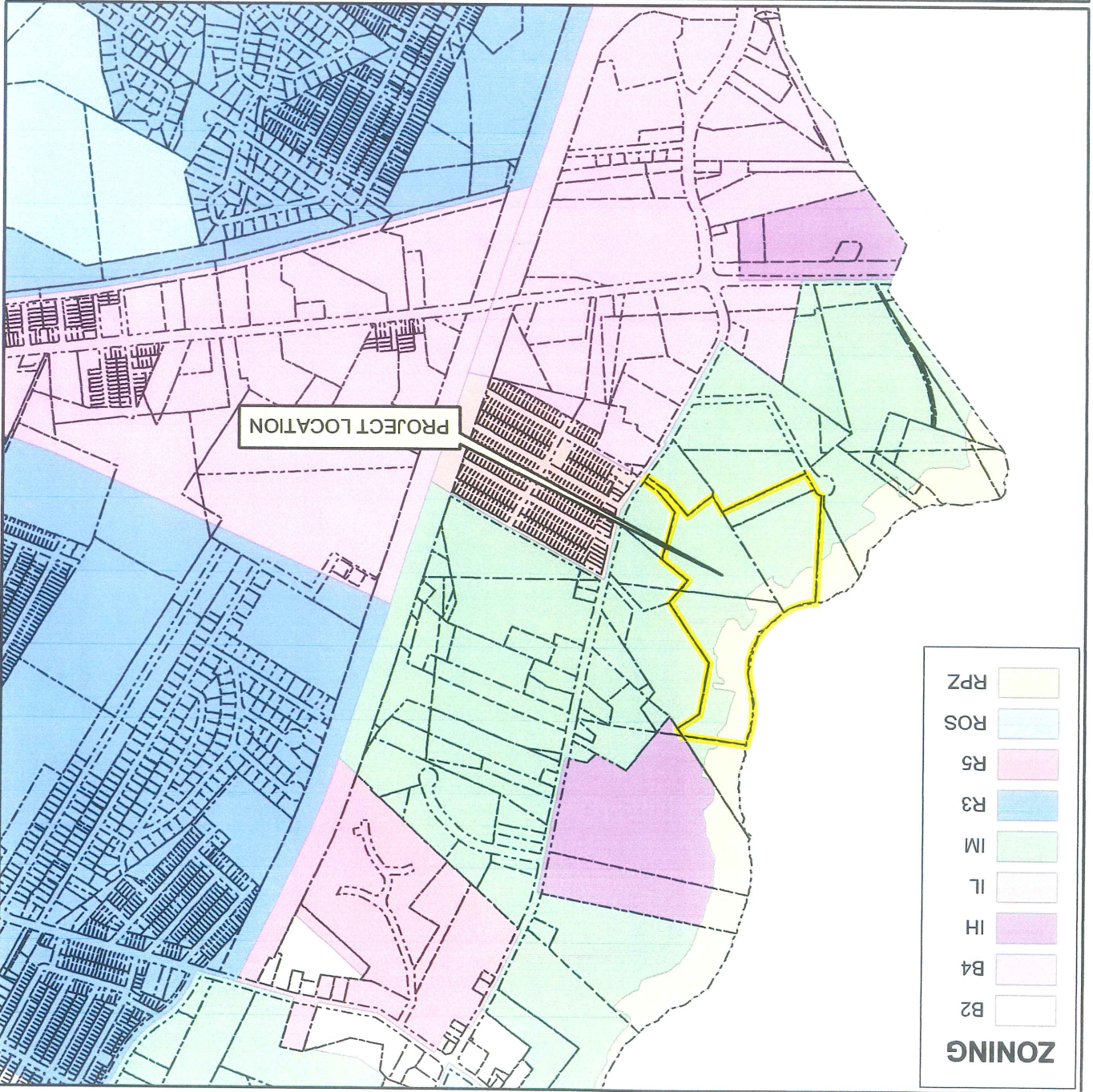
Deluca-Hoffman Associates, Inc.
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, ME 04106
 207-775-1121
www.delucahoffman.com

DRAWN: RJK
 CHECKED: CJO
 DATE: NOV. 2003
 FILENAME: I:\2300 Jobs\2314\new2314figs\2314-ZONE-FIG4.mxd
 SCALE: 1 inch equals 1,000 feet



FIGURE 4

LOT 6 McALISTER FARM SUBDIVISION
 & LOT 4-400 RIVERSIDE ST
 ZONING MAP
 SOURCE: CITY OF PORTLAND GIS DATA



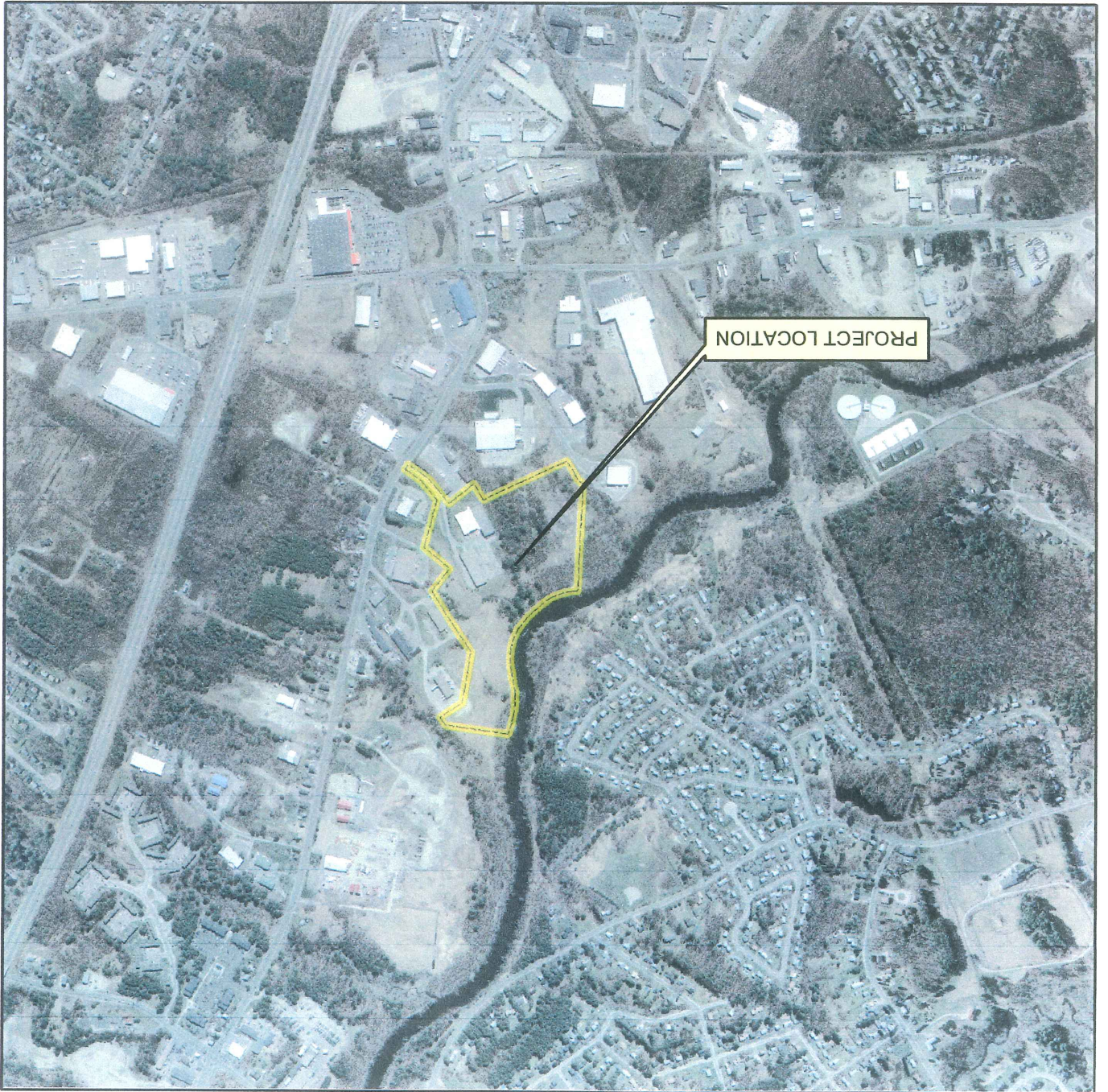
Deluca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207-775-1121
www.delucahoffman.com

DRAWN: RJK
CHECKED: CJO
DATE: NOV. 2003
FILENAME: I:\2300 Jobs\2314new\2314figs\2314-AERIAL-FIG5.mxd
SCALE: 1 inch equals 1,000 feet

5

FIGURE

LOT 6 McALISTER FARM SUBDIVISION
& LOT 4-400 RIVERSIDE ST
AERIAL PHOTOGRAPH
SOURCE: MAINE OFFICE OF GIS



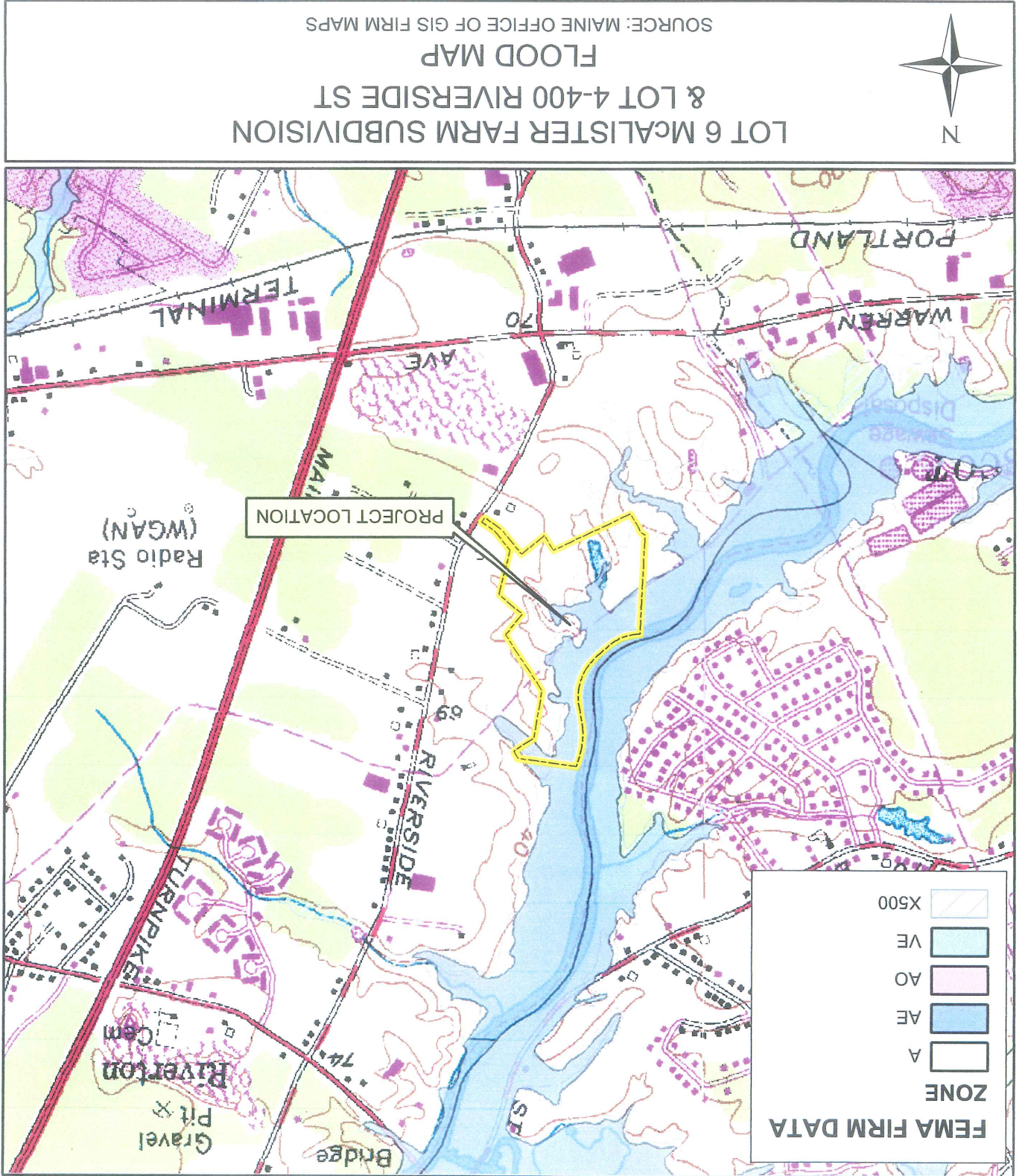
2P

Deluca-Hoffman Associates, Inc.
 778 MAIN STREET, SUITE 8
 SOUTH PORTLAND, ME 04106
 207-775-1121
 www.delucahoffman.com

DRAWN: RJK
 CHECKED: CJO
 DATE: NOV. 2003
 FILENAME: I:\2300 Jobs\2314new\2314figs\2314-FLOOD-FIG7.mxd
 SCALE: 1 inch equals 1,000 feet

7

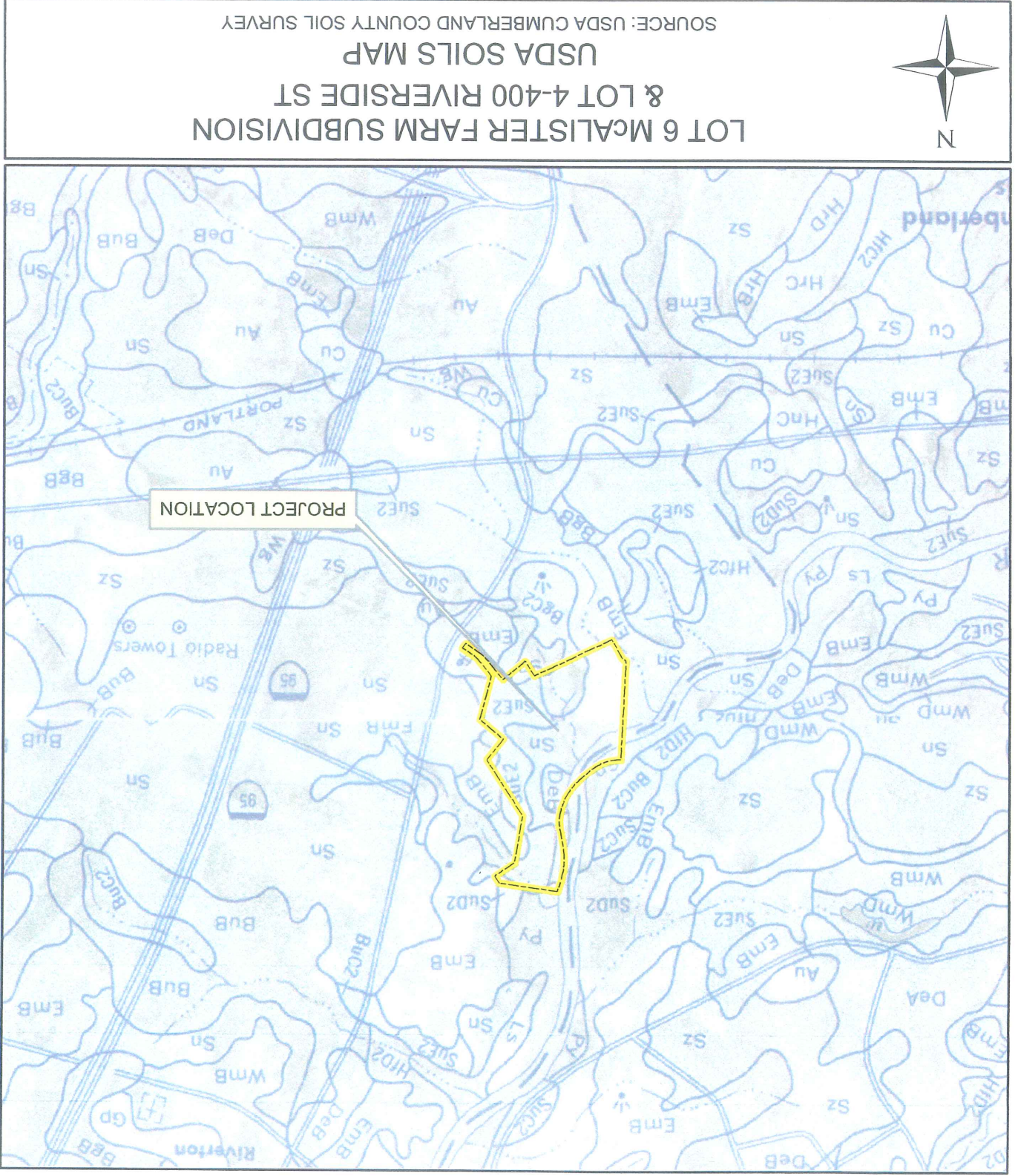
FIGURE



20

DRAWN: RJK
CHECKED: CJO
DATE: NOV, 2003
FILENAME: I:\2300 Jobs\2314new\2314fig\2314-SOILS-FIG8.mxd
SCALE: 1 inch equals 1,000 feet

Deluca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207-775-1121
www.delucahoffman.com



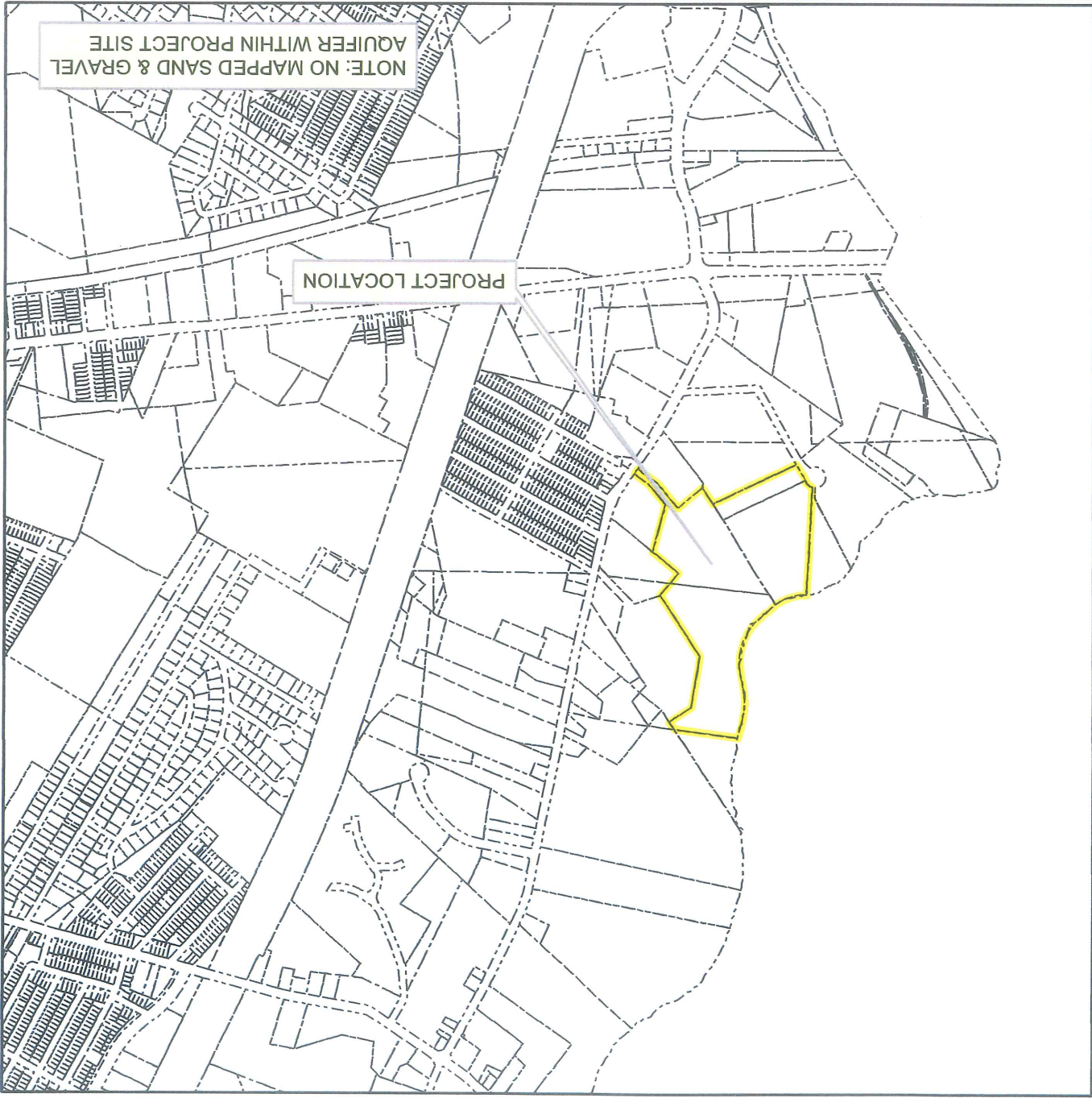
Deluca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207-775-1121
www.delucahoffman.com

DRAWN: RJK
CHECKED: CJO
DATE: NOV. 2003
FILENAME: I:\2300 Jobs\2314new\2314figs\2314-AQFR-FIG9.mxd
SCALE: 1 inch equals 1,000 feet

9

FIGURE

LOT 6 McALISTER FARM SUBDIVISION
& LOT 4-400 RIVERSIDE ST
MGS SAND AND GRAVEL AQUIFER
SOURCE: MAINE OFFICE OF GIS



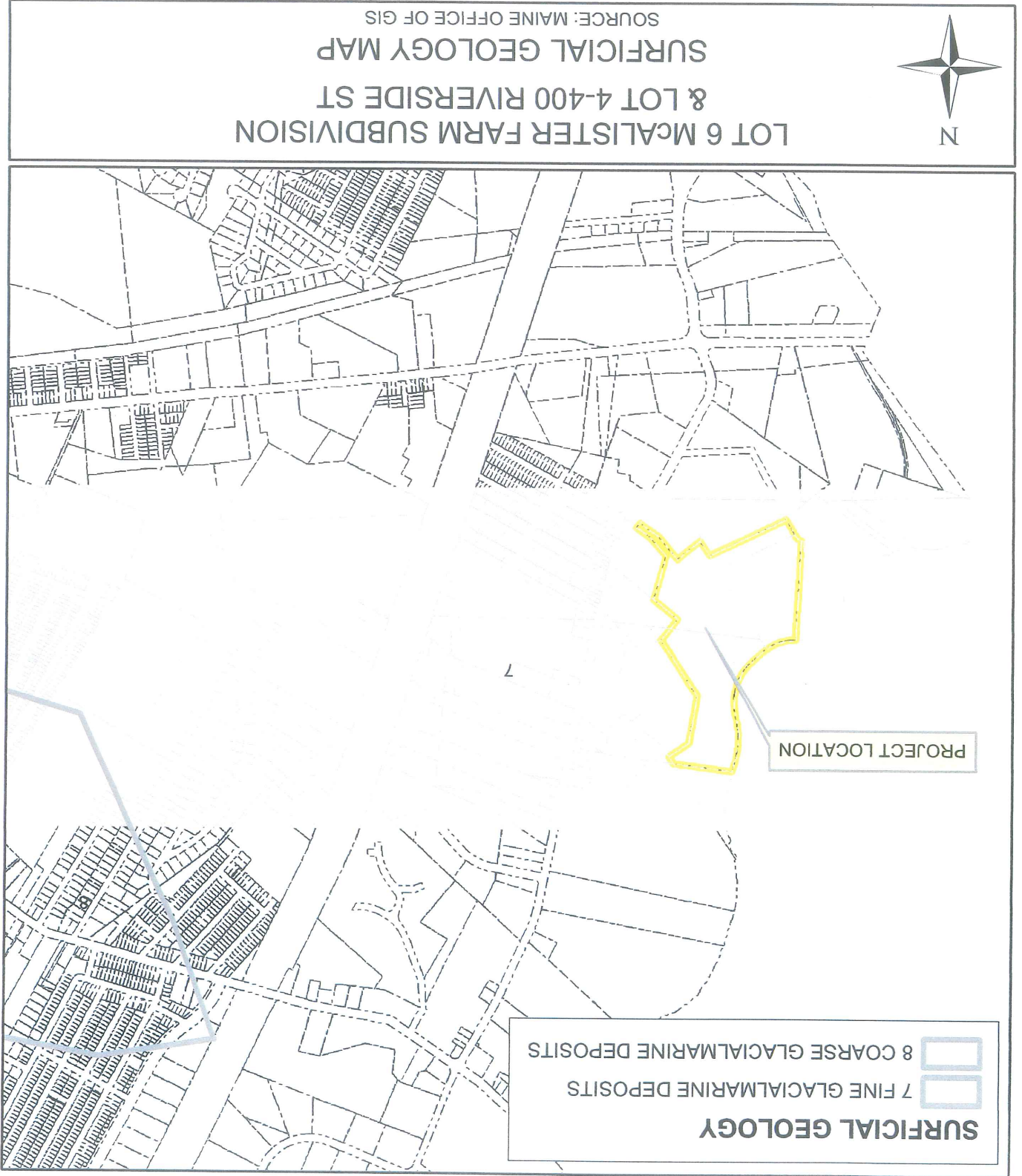
25

Deluca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207-775-1121
www.delucahoffman.com

DRAWN: RJK
CHECKED: CJO
DATE: NOV. 2003
FILENAME: I:\2300 Jobs\2314new\2314figs\2314-SURFGEO-FIG10.mxd
SCALE: 1 inch equals 1,000 feet

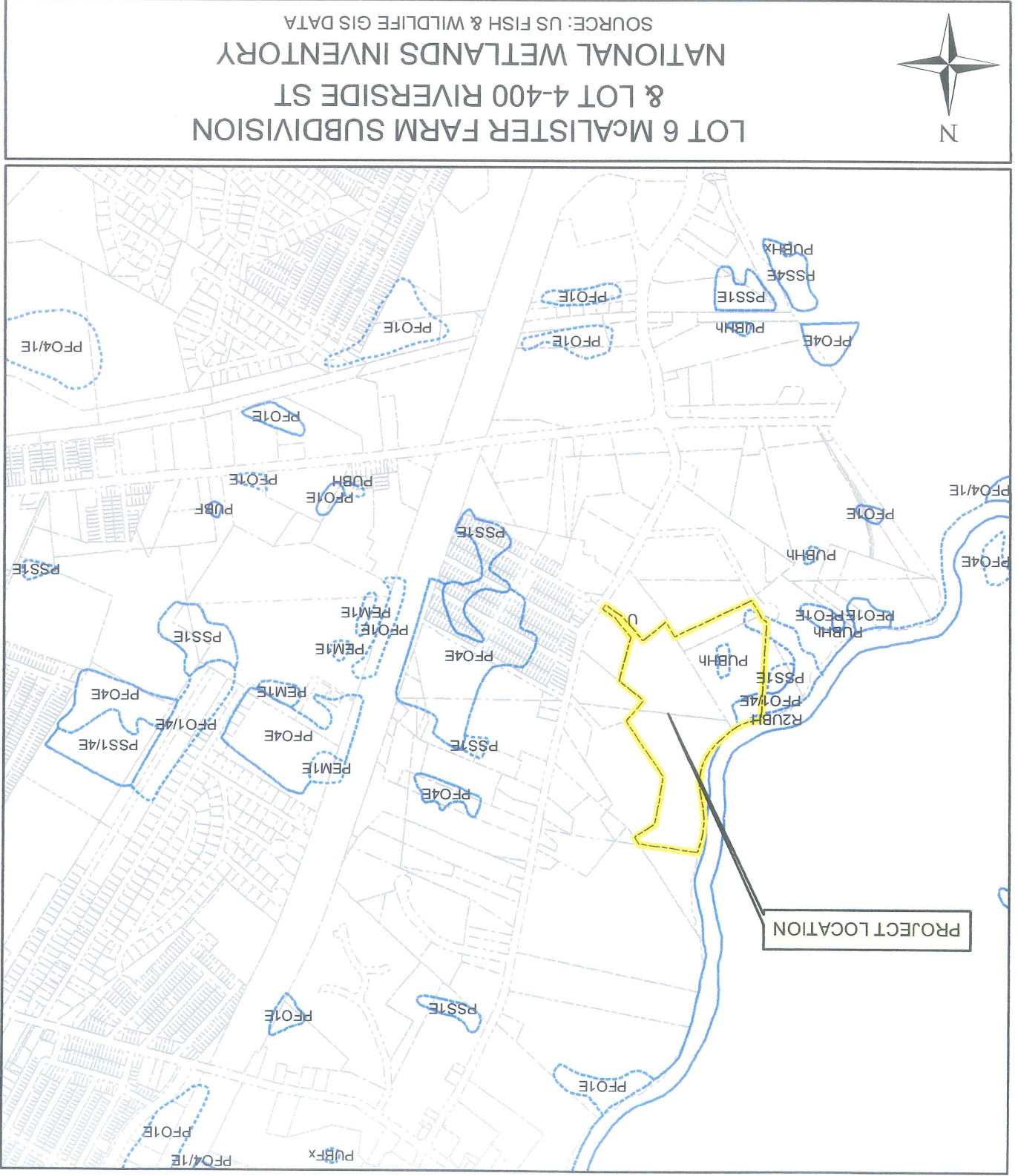
10

FIGURE



21

FIGURE 11



2U



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

Customer Service Hotline (207) 761-8310
(207) 774-5961
FAX (207) 879-5837

November 26, 2003

Tim Michaud, EIT

Delucca-Hoffman Associates, Inc.

778 Main St.

Suite 8

South Portland, Me. 04106

Re: Lot 6 McAlister Farm Dr. & 400 Riverside St.

Portland, Me.

Tim:

This letter is to confirm there should be an adequate supply of clean and healthful water to serve the needs of the proposed 41,255 square foot building at lot 7 McAlister Farm Dr. and a 21,600 square foot building expansion at 400 Riverside St. in Portland. Checking District records, I find there is a 12" ductile iron water main in McAlister Farm Rd., as well as a water hydrant in at the beginning and end of the street.

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

Hydrant Location: McAlister Farm Dr. @Cul-De-Sac
Hydrant # 1793

Static pressure = 82 PSI

Flow = 1383 GPM

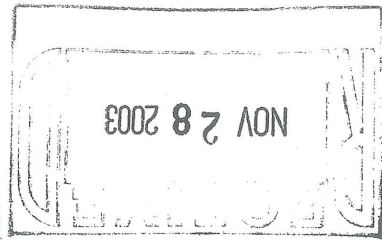
Last Tested = 7/13/90

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

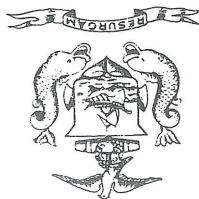
Sincerely,
Portland Water District

Jim Pandiscio

Means Coordinator

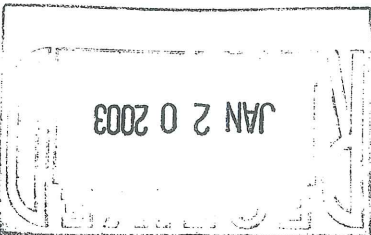


Att. 3



CITY OF PORTLAND

15 January 2004



Mr. Timothy Michaud, E.I.T.,
Project Engineer,
Deluca-Hoffman Associates, Inc.,
778 Main Street, Suite 8,
South Portland, Maine 04106

**RE: The Capacity to Handle Wastewater Flows, from 400 Riverside Street,
Portland, Maine, Site of a Proposed Warehouse/Office Park.**

Dear Mr. Michaud:

At the present time, there is no City sewer readily available to service your proposed project. The sanitary sewer system, in Riverside Street (from The Maine Turnpike Authority property northward to the Terrace Pond property) is "dry." It awaits connection to the operational Forest Avenue sewer, northwest of Waste Management of Maine. This sewer connection (a cross-country interceptor skirting Waste Management of Maine) is scheduled to be built, by The Portland Water District, probably during the 2004 construction season.

Sincerely,

CITY OF PORTLAND

Frank J. Brancely
Frank J. Brancely, BA, MA
Senior Engineering Technician

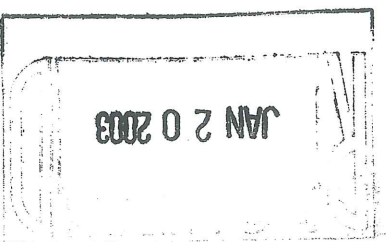
FJB

cc: Alexander Q. Jaegerman, Director, Planning Division, Department of Planning, and Urban Development, City of Portland
Kandice S. Talbot, Planner, Department of Planning, and Urban Development, City of Portland
Eric Labelle, P.E., City Engineer, City of Portland
Bradley A. Roland, P.E., Environmental Projects Engineer, City of Portland
Anthony W. Lombardo, P.E., Project Engineer, City of Portland
Stephen K. Harris, Assistant Engineer, City of Portland
Todd Merkle, Field Inspections Coordinator, City of Portland
Desk file



CITY OF PORTLAND

15 January 2004



3B

Mr. Timothy Michaud, E.I.T.,
Project Engineer,
DeLuca-Hoffman Associates, Inc.,
778 Main Street, Suite 8,
South Portland, Maine 04106

RE: The Capacity to Handle Wastewater Flows, from 95 McAllister Farm Road, Portland, Maine, Site of a Proposed Warehouse/Office Park.

Dear Mr. Michaud:

At the present time, there is no City sewer readily available to service your proposed lot six project. The sanitary sewer system, in Riverside Street (from The Maine Turnpike Authority property northward to the Terrace Pond property) is "dry." It awaits connection to the operational Forest Avenue sewer, northwest of Waste Management of Maine. This sewer connection (a cross-country interceptor skirting Waste Management of Maine) is scheduled to be built, by The Portland Water District, probably during the 2004 construction season.

Sincerely,
CITY OF PORTLAND

Frank J. Brancey
Frank J. Brancey, BA, MA
Senior Engineering Technician

FJB

cc: Alexander Q. Jaegerman, Director, Planning Division, Department of Planning, and Urban Development, City of Portland
Kandice S. Talbot, Planner, Department of Planning, and Urban Development, City of Portland
Eric Labelle, P.E., City Engineer, City of Portland
Bradley A. Roland, P.E., Environmental Projects Engineer, City of Portland
Anthony W. Lombardo, P.E., Project Engineer, City of Portland
Stephen K. Harris, Assistant Engineer, City of Portland
Todd Merkle, Field Inspections Coordinator, City of Portland
Desk file

- The Rist/Brunet Family Trust owns the lots proposed for development: Lot 6 of the McAlister Farm Subdivision and Lot 4 of the 400 Riverside Street Properties. Copies of the Quitclaim Deeds are attached to this section and include:
- Lot 6 - McAlister Farm Subdivision Quitclaim Deed recorded in the Cumberland County Registry of Deeds, Book 176, Page 17.
 - Lot 4 - Riverside Street Properties Quitclaim Deed recorded in the Cumberland County Registry of Deeds, Book 197, Page 115.

2.0 Overview

TITLE, RIGHT AND INTEREST

SECTION 2

Att. 4

4A

QUITCLAIM DEED (with Covenant)

RIVERSIDE PROPERTIES LLC, a Maine limited liability company with a mailing address of P.O. Box 334, Westbrook, ME 04098, for consideration paid, grants to **MARTIN RIST** and **BARNYSUE J. BRUNET** a/k/a **BONNIE BRUNET**, both of Camden, Maine, with a mailing address of 21 Lily Pond Drive, Camden, ME 04843, not individually but in their capacities as co-Trustees of the **RIST/BRUNET FAMILY TRUST**, created under trust agreement dated March 27, 1997, with Quitclaim Covenants, the land in the City of Portland, Cumberland County, Maine, as described on Exhibit A.

Meaning and intending to convey and hereby conveying a portion of the property described in the deed of 400 Riverside Properties to the undersigned, which deed is dated May 19, 1997 and recorded in the Cumberland County Registry of Deeds in Book 13090, Page 145.

Witness our hands and seals this 5th day of March, 1999.

Riverside Properties LLC

By: *Bobby R. Billings*
its Member

[Signature]
Witness

State of Maine
County of Cumberland, ss.

March 5, 1999

The foregoing instrument was acknowledged before me this 5th day of March, 1999, by Robert Billings, duly authorized member of Riverside Properties, LLC.

[Signature]
Notary Public/Attorney at Law
Print Name: David E. Curran

4B

EXHIBIT A

Two certain lots or parcels of land situated northwesterly of Riverside Street in the city of Portland, Cumberland County, Maine, and being more particularly described as follows:

Lot #5 and revised Lot #4 (Four) as shown on the third Amended Recording Plat of the Donald O. Butler Subdivision dated April 30, 1996 as approved by the City of Portland Planning Board on June 11, 1996, said subdivision plan being recorded in the Cumberland County Registry of Deeds in Plan Book 197 at Page 115, being a revision of the former plans recorded in Plan Book 161 at Page 15 and in Plan Book 132, Page 13.

The above-described premises are conveyed subject to the easements and encumbrances reflected on said third Amended Subdivision Plats and with the reservations thereon stated, and are subject to any applicable terms and provisions of Site Location Order of the Department of Environmental Protection dated January 8, 1982 and recorded in said Registry of Deeds in Book 4916, Page 174 as amended April 10, 1985 and recorded in Book 6741, Page 223, and as further amended on 6/17/96, being #L-7696-39-C-M and as further amended on June 17, 1996 and recorded in Book 12605, Page 130.

MEANING AND INTENDING TO CONVEY AND HEREBY CONVEYING a portion of the premises conveyed in a Warranty Deed from Delta Realty Co., Inc. to 400 Riverside Properties dated December 26, 1986 and recorded in the Cumberland County Registry of Deeds in Book 7559, Page 222 (Parcels I and II), premises conveyed in a Warranty Deed from Exit Eight distribution Associates to 400 Riverside Properties dated June 16, 1987 and recorded at Book 8362, Page 178 (now a portion Parcel I), but excepting and reserving premises conveyed in a Warranty Deed from 400 Riverside Properties to Exit Eight Distribution Associates dated June 16, 1987 and recorded in Book 8362, Page 180.

Subject to and together with the benefit of Easement Deeds from 400 Riverside Properties to Central Maine Power Company and New England Telephone & Telegraph Company dated April 28, 1987 and recorded at Book 7929, Page 44; dated June 20, 1988 and recorded at Book 8642, Page 34; dated February 7, 1989 and recorded at Book 8680, Page 111; and dated April 19, 1989 and recorded at Book 8731, Page 162.

SHORT FORM WARRANTY DEED

Doc #: 68219
BK: 17989 Pg: 303

4C

C & N ENTERPRISES, a Maine General Partnership, with a place of business at 33 Sheridan Drive, Fairfield, ME 04937 for consideration paid, grants to MARTIN RIST AND BARNYSUE J. BRUNET (ALSO KNOWN AS BONNIE BRUNET), TRUSTEES, OF THE RIST/BRUNET FAMILY TRUST DATED MARCH 27, 1997, with a mailing address of 201 US Rte 1, PMB 205, Scarborough, ME 04074, certain real property, together with any improvements thereon, located in Portland, Cumberland County, Maine, more particularly described as follows:

Lot 6 located in the McAlister Farm Subdivision as shown on a certain revised subdivision plan revised December 19, 1988 and recorded in the Cumberland County Registry of Deeds in Plan Book 176, Page 17 and further revised December 29, 1988 and recorded in the Cumberland County Registry of Deeds in Plan Book 176, Page 17 and further revised December 29, 1988 and recorded in the Cumberland County Registry of Deeds in Plan Book 176, Page 44.

This conveyance is made subject to the following conditions:

1. Any future development on Lot 6 shall be subject to the review and approval of the Maine Department of Environmental Protection prior to construction on said lots.
2. No development of any kind shall be permitted in the wildlife buffer shown on the Plan.

Also conveying a right of way in common with others, fifty (50) feet in width and running from Riverside Street, along courses of five hundred two and forty-two hundredths (502.42) feet and seven hundred three and seventy-five hundredths (703.75) feet, as shown on said Plan; said right of way shall be for all purposes of travel by persons and vehicles and for roads, sewers, poles, wires, lines and other utilities services and facilities under, on and above the ground.

Doc #: 68219 BK: 17989 Pg: 304
Being a portion of the premises conveyed to C & N Enterprises by deed of B & B Properties dated March 7, 1989 and recorded in the Cumberland County Registry of Deeds in Book 8685,

Page 152.

IN WITNESS WHEREOF, C & N Enterprises has caused this instrument to be executed by Bradley B. Nelson and Douglas Cutchin, its General Partners therunto duly authorized this 19th day of August, 2002.

C & N ENTERPRISES

By: Bradley B. Nelson
Its: General Partner

By: Douglas Cutchin
Its: General Partner

WITNESS
WITNESS

STATE OF MAINE
CUMBERLAND, SS

August 19th, 2002

PERSONALLY APPEARED before me the above-named Bradley B. Nelson and Douglas Cutchin, the General Partners of C & N Enterprises as aforesaid, and acknowledged the foregoing instrument to be in their said capacity and the free act and deed of said General Partnership.

Jonathan T. Harris
Attorney at Law

Received
Recorded Register of Deeds
Aug 23/2002 02:35P
Cumberland County
Jack D Brien

Doc#: 97130 BK:18445 Pg1 289

Received
Recorder of Deeds
Nov 25 2002 03:53:35P
Cumberland County
John B. O'Brien

4E

PARTIAL RELEASE

KNOW ALL PERSONS BY THESE PRESENTS, that L.T. BEAN, INC., a Maine corporation with its principal place of business in Freeport, Cumberland County, Maine ("Lessee"), the lessee under that certain Lease between WARREN PROPERTIES, successor in interest to B & B PROPERTIES LIMITED PARTNERSHIP, and L.T. BEAN, INC., dated September 21, 1987, as evidenced by a Memorandum of Lease dated June 10, 1988, as amended (the "Lease"), hereby releases and waives all of its interest acquired under said Lease, including, but not limited to, the right of first refusal referenced in the above mentioned Memorandum of Lease, in and to that portion of the leased premises described as Lot 6 located in McAlister Farm Subdivision as shown on a certain subdivision plan revised December 10, 1988 and recorded in the Cumberland County Registry of Deeds in Book 176, Page 17 (the "Plan").

The purpose of this instrument is to release and waive any interest the Lessee may have in and to the said Lot 6 from the operation and effect of the Lease, said Lease otherwise to remain in full force and effect.

The undersigned does not, however, hereby release any right or interest, including but not limited to, the right of first refusal referenced in the above mentioned Memorandum of Lease, in and to any other premises described in said Lease.

IN WITNESS WHEREOF, the said L.T. BEAN, INC. has caused this instrument to be executed this 15 day of August, 2002 by Randy D. Reynolds, its Director, duly authorized.

L.T. BEAN, INC.
By: Randy Reynolds
Print Name: Randy D Reynolds
Its: Director

WITNESS:
[Signature]

STATE OF MAINE
COUNTY OF CUMBERLAND, ss.

Personally appeared the above-named Randy D. Reynolds Director of L.T. BEAN, INC. and acknowledged the foregoing to be his/her free act and deed in his/her said capacity and the free act and deed of L.T. BEAN, INC.

Before me,

Anna R. Young
Notary Public
Printed Name: Anna R. Young
My commission expires: 11/27/04

ANNA R. YOUNG
Notary Public, Maine
My Commission Expires November 27, 2004

FILESDAM318751PARTIAL.REL

SEALED

SHORT FORM QUITCLAIM DEED WITH COVENANT

Exit Eight Distribution Associates, a Maine General Partnership with a place of business at Portland, Maine, FOR CONSIDERATION PAID, grants to Martin Rist and Barnysue J. Brunet (a/k/a Bonnie Brunet), as Trustees of the Rist/Brunet Family Trust dated March 27, 1997, a California trust with a mailing address of 201 U.S. Route 1, Scarborough, Maine, with QUITCLAIM COVENANT, certain real property, together with any improvements thereon, located in the City of Portland, County of Cumberland, and State of Maine and more particularly described on Exhibit A attached hereto and made a part hereof.

Being the same premises conveyed to the grantor herein by deed from C & N Enterprises dated July 8, 1986 and recorded in the Cumberland County Registry of Deeds in Book 7260, Page 287.

IN WITNESS WHEREOF, Exit Eight Distribution Associates has caused this instrument to be executed by Kenneth M. Nelson, its Managing Partner therunto duly authorized, this 20 day of August, 2002.

WITNESS:

EXIT EIGHT DISTRIBUTION ASSOCIATES

Name:

By:

Kenneth M. Nelson
Kenneth M. Nelson
Its Managing Partner

State of Maine
County of Cumberland, ss.

August 20, 2002

PERSONALLY APPEARBD the above-named Kenneth M. Nelson, Managing Partner of Exit Eight Distribution Associates 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 General Partnership.

Before me,
Matthew L. Caras
Name: MATTHEW L. CARAS
~~Notary Public/Attorney at Law~~

Doc #: 68223 BK: 17989 Pg: 330

4F

Doc # : 68223 BK : 17989 Pg : 331

46

EXHIBIT A
to Deed from Exhibit Eight Distribution Associates to
Martin Rist and Bonnie Brunet, as Trustees of the Rist/Brunet Family Trust
(Page 1 of 1)

A certain lot or parcel of land with any improvements thereon located in the City of Portland, Cumberland County, Maine and more particularly described as follows:

Beginning at an iron pipe at the Northeast corner of a 10-acre parcel of land conveyed by deed dated September 9, 1985 to Exit Eight Distribution Associates and recorded in the Cumberland County Registry of Deeds in Book 6893, Page 224; thence North 15° 16' West along the Easterly line of land now or formerly of C & N Enterprises and along the Westerly line of land now or formerly of Delta Realty Co., Inc. a distance of 134 feet to a pipe; thence South 74° 44' West a distance of 650 feet to a pipe; thence South 15° 16' East a distance of 134 feet to a pipe; thence North 74° 44' East along the Northerly line of land now or formerly of Exit Eight Distribution Associates, being that referenced above, a distance of 650 feet to the point of beginning, containing 2 acres more or less.

Also conveying a right-of-way in common with C & N Enterprises, its successors and assigns and others, 50 feet in width and running from Riverside Street along courses of 502 feet, 540 feet, and 134 feet to the most westerly corner of the above described premises; said right-of-way shall be for all purposes of travel by persons and vehicles and for roads, sewers, wires, lines and other utility services and facilities under, on and above the ground.

The premises herein conveyed is subject to, and benefited by, all matters of record affecting same.

Received
Recorder of Deeds
AUG 23 2002 02:41P
Cumberland County
Jack O'Brien

44

Bk: 17989 Pg: 328

Doc #: 68222

CONFIRMATION OF LEASE DESCRIPTION

THE UNDERSIGNED, being the duly authorized Managing Partner of Exit Eight Distribution Associates, a Maine partnership, and former Landlord/Lessor of the United States Postal Service, as Tenant/Lessee under Lease entered into on March 18, 1993 concerning certain premises at 380 Riverside Street, Portland, Maine, so-called, which Lease Agreement is referenced in the Acknowledgment of Lease Commencement acknowledged July 21, 1993 and recorded in the Cumberland County Registry of Deeds at Book 10839, Page 280 (the "Lease"). Said Lease contained an option to purchase in favor of the Tenant/Lessee, which option was exercised, and the property that was the subject thereof was conveyed by Short Form Warranty Deed from Exit Eight Distribution Associates to the United States Postal Service dated July 20, 1993, and recorded in the said Registry of Deeds at Book 10839, Page 284. The purpose of this Confirmation is to evidence in the title records the legal description of the real property that was the subject of the Lease, and attached hereto and made a part hereof is a one-page "Description of Land Premises in Lease from Exit 8 Distribution Associates (EIDA) to United States Postal Service," which description is the description of the premises under the Lease.

IN WITNESS WHEREOF, the undersigned has executed this Confirmation of Lease Description as of this 16 day of August, 2002.

WITNESS:

Jamela A. Moore

By:

David L. Small
 Exit Eight Distribution Associates
 Managing Partner

STATE OF MAINE:
CUMBERLAND ss.

8/16/
 2002

PERSONALLY APPEARED the above-named DAVID L. SMALL, Managing Partner of Exit Eight Distribution Associates, 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 Partnership.

Before me,

Clare J. Lunnane
 Name: CLARE BURNHIVE

Title:

MY COMMISSION EXPIRES NOV. 15, 2002

SEAL

41

Description of Land Premises Doc In 08222

OK: 17989 Pg: 329

Lease from Exit Eight Distribution Associates (EDA) to United States Postal Service

The legal description shall consist of the 10 acre parcel conveyed to EDA by warranty deed from C & N Enterprises dated 9/9/85 recorded in the Cumberland County Registry of Deeds in Book 6893, Page 224, minus that portion of a 2662 sq. ft. silver therefrom, which portion lies southerly of the 650' property line as described in the September 9, 1985 deed; the entire 2662 sq. ft. silver is described in a deed from EDA to 400 Riverside Properties (RP) dated June 16, 1987, recorded in the Cumberland County Registry of Deeds in Book 8362, Page 0178; plus that portion of another 2662 sq. ft. silver added by deed from RP to EDA dated June 16, 1987 and recorded in the Cumberland County Registry of Deeds in Book 8362, Page 0180, which portion is generally southerly of the 650' property line described in the September 9, 1985 deed referred to above.

LMN/244 01360752.002

Received Recorded Register of Deeds
23,2002 02:39P
Cumberland County
Jack O'Brien

6/23/12
HMM
JLS

The Rist/Brunet Family Trust has been conducting business for a number of years and currently owns several light industrial facilities. New England Realty Resources, LLC has provided a letter supporting their ability to finance the proposed project, which is attached to this section.

3.0 Overview

FINANCIAL CAPACITY

SECTION 3

Att. 5

NEW ENGLAND

realty resources, LLC

Commercial Real Estate Capital

January 28, 2004

City of Portland
Planning Department
Portland, ME

To Whom It May Concern:

We at New England Realty Resources have done business with the Rist/Brunet Family Trust (RBFT) with Mr. Martin Rist and Ms. Bonnie Brunet as Trustees for several years. We currently service six (6) loans with RBFT on behalf of our correspondent lenders. In addition we are currently working with RBFT on the financing of a retail plaza in Portland, ME for a prospective loan of \$6.5 million on a property valued in excess of \$9 million.

Based upon our typical lending criteria, the financial strength of RBFT would currently be able to support additional debt in excess of \$8 million.

Please feel free to call if you have any questions.

Sincerely,

Michael Chase
Vice President
New England Realty Resources, LLC

5A

Att. 6

SECTION 4

TECHNICAL ABILITY

4.0 Overview

The applicant has contracted the site development and design work to Deluca-Hoffman Associates, Inc., a civil engineering firm located in South Portland, Maine. Deluca-Hoffman Associates, Inc. was founded in 1986 and has provided engineering services to private, industrial, commercial, municipal and governmental clients for the past 17 years. Qualifications materials can be forwarded to the Department upon request if necessary.

The applicant has contracted the environmental permitting work to Sebago Technics, Inc. and the geotechnical investigation work to R.V. Gillespie & Associates, Inc. Deluca-Hoffman Associates, Inc., will be coordinating all work activities on behalf of the applicant.

The Rist/Brunet Family Trust, doing business as the Galloway Group, operates the existing industrial/warehousing developments at 400 Riverside. They also own and operate similar properties in the Greater Portland Region.

MARTIN RIST and BONNIE BRUNET
400 Riverside St. Suite A7
Portland, Maine 04103
January 25, 2004

REAL ESTATE EXPERIENCE - 1976 TO PRESENT

1976-1983 Co-founders of MBR Development Corp, which developed and built over 10 million dollars of condominium projects in California.

1983-1988 Co-developed, built and operated Hearthstone Lodge Assisted Living Centers, geriatric care centers in Orange County California. Business was sold and Facilities leased to a geriatric care company in 1988.

Founded The Galloway Group in 1995, a closely held Maine corporation, to manage commercial properties acquired and developed for the Rist/Brunet Family Trust.

Since 1995 acquired or built and presently manage under the Galloway Group approximately 200,000 s.f. of retail, office and industrial real estate in the state of Maine. Presently under development is a 12 acre 95,000 s.f. industrial park in Portland Maine, slated for completion in June 2004.

PROFESSIONAL LICENSES

California General Contractors Since 1976

BANK REFERENCES

New England Realty Resources
Boston, Ma. 02110, Edward Riekstins, Vice President 617-728-9538

Union Trust Bank, Waldoboro Maine,
Tina Torres York, Vice President 800-540-5363

FINANCIAL CAPACITY

Current net worth exceeds 8 Million Dollars with total real estate assets in excess of 19 Million Dollars. A detailed financial statement is available upon request.

60A

UNUSUAL NATURAL AREAS, WILDLIFE AND FISHERIES
HABITATS OR ARCHAEOLOGICAL SITES

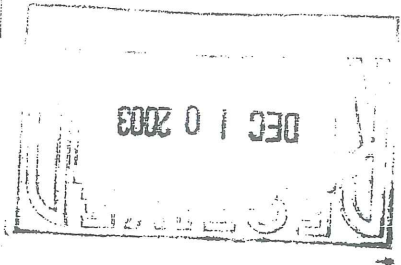
SECTION 5

5.0 Overview

The respective agencies have been contacted in regards to the location of the proposed development for unusual areas, wildlife and fisheries habitats, and archaeological sites. Copies of their responses are attached to this section.

Att. 7

EGS/mj
enc:



Earle G. Shettleworth, Jr.
State Historic Preservation Officer

Sincerely,

A list of qualified contract archaeologists is enclosed along with material explaining the Phase I/II approach to archaeological survey. This office must approve any proposal for archaeological fieldwork. Once the survey has been completed and all information collected, our office will forward a response regarding the results of our evaluation. Please contact Mike Johnson of my staff if we can be of further assistance in this matter.

Additionally, we have determined that a portion of the project area is sensitive for prehistoric archaeological sites and are requiring a Phase I prehistoric archaeological survey of the project area from the 50' contour line to the Presumpscot River.

Based on the location and scope of work, I have concluded that additional information is necessary to determine whether historic architectural resources exist within or adjacent to the project area. Therefore, we are requesting photos of any buildings over fifty years old that are on, adjacent to, or across the road from, the proposed project site, including any associated access roads. Photos should be keyed to a topographic map and submitted on the enclosed *Maine Historic Preservation Commission Historic Building/Structure Survey Form* with lines 3-5 filled out. If no such buildings exist, please indicate this in writing.

In response to your recent request, I have reviewed the information received November 20, 2003 to initiate consultation on the above referenced project. This project was reviewed pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended.

Dear Mr. Michaud:

Project: MHP# 2576-03 - McAlister Farm Subdivision, 400 Riverside Street
Location: Portland, ME
778 Main St., Suite 8
South Portland, ME 04106
Deluca-Hoffman Associates, Inc.
Project Engineer
Tim Michaud, EIT

December 5, 2003

ANGUS S. KING, JR.
GOVERNOR



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

7A



JOHN ELIAS BALDACCIO

GOVERNOR

December 1, 2003

Tim Michaud
Project Engineer
Deluca-Hoffman Associates, Inc.
778 Maine St., Suite 8
South Portland, ME 04106

Re: Rare and exemplary botanical features, 400 Riverside St., Portland.

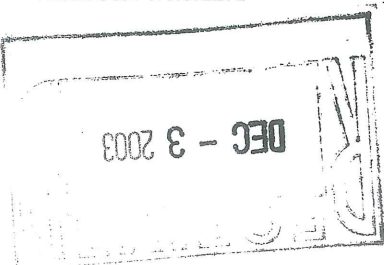
Dear Mr. Michaud:

I have searched the Natural Areas Program's Biological and Conservation Data System files in response to your request of November 18, 2003 for information on the presence of rare or unique botanical features documented from the vicinity of the project site in the City of Portland, Maine. Rare and unique botanical features include the habitat of rare, threatened or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been



PATRICK K. MCGOWAN

COMMISSIONER

7B

STATE OF MAINE
DEPARTMENT OF CONSERVATION
157 HOSPITAL STREET
93 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0093



PRINTED ON RECYCLED PAPER

MAINE NATURAL AREAS PROGRAM
MOLLY DOGHERTY, DIRECTOR

PHONE: (207) 287-8044
FAX: (207) 287-8040
TTY: (207) 287-2213

documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

7c

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. The Natural Areas Program welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by the Natural Areas Program are to be published in any form, the Program should be informed at the outset and credited as the source.

The Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$75.00 for our services.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,



Toni Bingle Pied

GIS Specialist/Assistant Ecologist

93 State House Station

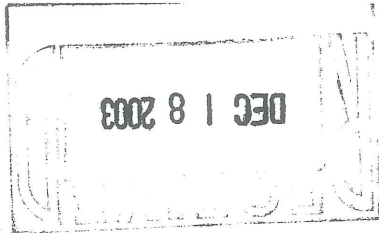
Augusta, ME 04333-0093

207-287-8044

toni.pied@maine.gov

Enclosures

Enclosure



Mark A. McCollough,
Endangered Species Biologist

Sincerely,

If you have any questions, please call me at (207) 827-5938.

A list of federally-listed species in Maine is enclosed for your information. Please contact the Maine Department of Inland Fisheries and Wildlife and Maine Natural Areas Program for an up to date account of state-listed species in the project area.

Based on the information currently available to us, no federally-listed species under the jurisdiction of the Service are known to occur in the project area, with the exception of occasional, transient bald eagles (*Haliaeetus leucocephalus*). Accordingly, no further action is required under Section 7 of the ESA, unless: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner that was not considered in this review; or (3) a new species is listed or critical habitat determined that may be affected by the identified action.

Project Name/Location: McAlister Farm Subdivision / Portland **Log Number:** 4-055

Thank you for your letter dated November 18, 2003 requesting information or recommendations from the U.S. Fish and Wildlife Service. This form provides the Service's response pursuant to Section 7 of the Endangered Species Act (ESA), as amended (16 U.S.C. 1531-1543), and the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667d).

Dear Mr. Michaud:

Mr. Tim Michaud, EIT
Deluca-Hoffman Associates, Inc.
778 Main Street, Suite 8
South Portland, Maine 04106

In Reply Refer To:
FWS/Region 5/ES/MEFO

December 11, 2003

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Maine Field Office

1168 Main Street

Old Town, ME 04468-2023

(207) 827-5938



7D



March 29, 2004

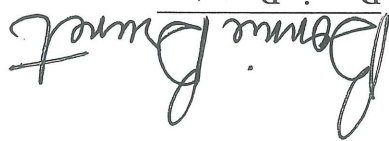
To Whom It May Concern:

Martin Rist and Bonnie Brunet, Trustees of the Rist/Brunet Family Trust, hereby authorize Deluca-Hoffman Associates, Inc. of South Portland, Maine to act as agent in the preparation and submittal of applications and supporting materials for proposed development activities at McAlister Farm Drive and 400 Riverside Street in Portland, Maine.

Sincerely



Martin Rist
Trustee



Bonnie Brunet
Trustee

Attachment (map)

Josephine A. Power

Josephine A. Power

Sincerely,

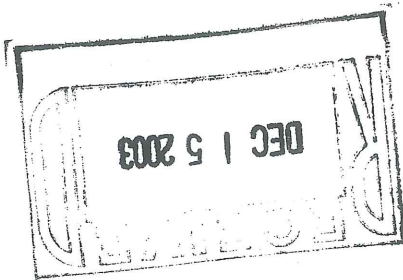
There are no significant wildlife habitats associated with the McAlister Farm Subdivision development site located at 400 Riverside Street in Portland, Maine.

Dear Mr. Michaud:

RE: McAlister Farm Subdivision/Portland, Maine

Mr. Tim Michaud, EIT
DeLuca-Hoffman Associates, Inc.
778 Main Street
Suite 8
South Portland, Maine 04106

Friday, December 12, 2003



ROLAND D. MARTIN
COMMISSIONER

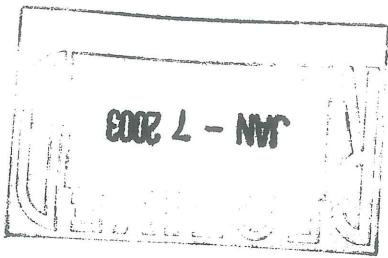
7F



STATE OF MAINE
DEPARTMENT OF INLAND FISHERIES & WILDLIFE
RR#1, 385 Shaker Road
Gray, Maine 04039

JOHN ELIAS BALDACC
GOVERNOR





MDIFW
Fishery Biologist

James Pellerin

Sincerely,

I have reviewed your request for fishery resource information, and there are no known threatened/endangered fish species or habitat in the vicinity of the proposed project. However, this parcel borders the Presumpscot River, which supports a variety of inland and anadromous fish species. In addition, there appears to be a small, unnamed tributary to the Presumpscot River at the southern portion of the property. We have no data on this stream, but it may be seasonally utilized by fish species present in the larger river system.

Stream systems are vulnerable to environmental impacts associated with increased development and encroachment. If present, this project should be sensitive to these resource issues by including provisions for riparian buffers and minimizing any other potential stream impacts. Our regional buffer policy requests 100 foot undisturbed buffers along both sides of any stream or stream-associated wetlands. Buffers should be measured from the upland wetland edge of stream-associated wetlands, and if the natural vegetation has been previously altered then restoration may be warranted. This buffer requirement improves erosion/sedimentation problems; reduces thermal impacts; maintains water quality; supplies leaf litter and woody debris for the system; and provides valuable wildlife habitat. Protection of these important riparian functions insures that the overall health of the stream habitat is maintained.

I have forwarded your information requests to our wildlife division and they will be responding separately. If you have any additional questions or concerns then feel free to contact us.

Dear Tim,

RE: McAlister Farm Subdivision, Portland

Tim Michaud
Deluca-Hoffman Associates, Inc.
778 Main Street Suite 8
South Portland, ME 04106

December 31, 2003

John Elias Baldacci, Governor

Roland Martin, Commissioner

Telephone: 207-657-2345 ext.111
Fax: 207-657-2980
Email: james.pellerin@state.me.us

Maine Department of Inland
Fisheries and Wildlife
358 Shaker Road
Gray, Maine 04039



76

Att. 8

SECTION 6

REVIEW CRITERIA

City of Portland, Maine Standards
Requirements for Site Approval

6.1 Provisions for traffic and pedestrian circulation both on and off the site

Access to the sites from the existing access drives at McAllister Farm Drive off Riverside Street and at 400 Riverside Street will not aggravate or create a significant hazard to the safety of intersections and will not cause traffic congestion on any street in the project vicinity. Currently, there is one undeveloped gravel access drive to the Lot 6 site off McAllister Farm Drive that will be upgraded as part of the planned development and an existing 26-foot-wide paved access drive to the Lot 4 site off Riverside Street. No new access drives are proposed for the sites. The proposed developments are in the moderate impact industrial zone, IM Zone, and it is anticipated the developments will contain light industrial businesses with a minimal number of employees creating minimal impact to traffic congestion in the project vicinity. Based on the Institute of Transportation Engineers' manual "Trip Generation" 6th Edition, Land Use Code 150, Warehousing, the proposed 40,000 sq. ft. of building space will generate less than 50 trips during the AM or PM peak hours, therefore precluding the need for a Traffic Impact Study.

6.2 Construction of new structures and parking requirements

The proposed new structure on the existing 10.6-acre Lot 6 of the McAllister Farm Subdivision will include a one (1) story, 41,255 sq. ft. office building/warehouse, and the proposed new structure on the existing 14.5-acre Lot 4 of the 400 Riverside Street Properties will include a one (1) story, 23,400 sq. ft. office building/warehouse. Under Article II of the Zoning Ordinance for Industrial zones, off-street parking will be provided at greater than 1 space per 1,000 square feet of new structure. The proposed developments will provide for tenant parking for the structures based on the City Ordinance and on foreseeable demand for parking anticipated to be generated at the proposed sites. The current plans depict parking for 52 vehicles on the Lot 6 site and 45 new parking spaces for a total of 126 parking spaces on the Lot 4 site.

6.3 Impact of bulk, location or height of proposed buildings and structures on the neighbors

The proposed buildings and structures will have no adverse effects on abutting landowners. The proposed buildings have been set back from the property lines as per Article III of the Portland Code. Disturbances to woodlands on the project sites will be minimized to the extent feasible.

6.4 Impact on value of neighboring property due to proposed buildings

The proposed buildings should not affect the values of abutting structures. The proposed new buildings will be constructed in a zone designated for moderate impact industrial use.

BA

Effect of proposed project on public utilities

6.5

The proposed projects will not adversely affect the public utilities of the City of Portland. The proposed developments are in the moderate impact industrial zone and it is anticipated the developments will contain light industrial, non-process businesses with a minimal number of employees. Letters have been requested from the Portland Water District and the Portland Public Works Department stating their ability to service the proposed developments. Copies of their responses have been included with this submission.

On-site landscaping to provide a buffer with neighboring uses

6.6

The proposed developments are greater than 50 feet from the nearest off-site buildings. The existing vegetation on the sites will remain undisturbed to the extent feasible so as to provide adequate buffering between all adjacent buildings and the proposed developments.

The site plan minimizes, to the extent feasible, any disturbance or destruction of significant vegetation

6.7

The proposed project site plans minimize the disturbances of existing vegetation to the extent feasible as shown on sheets 4A and 4B of the plan set. The northern portions of the project sites are within the City's Resource Protection Zone. Development activity is restricted within the two hundred and fifty (250) foot Resource Protection Zone. A 200-foot wildlife corridor along the river was also established for the McAllister Farm Subdivision as part of the original MedEP permit approvals. No development activity is proposed within this 200-foot corridor. The project layouts have been developed to avoid activity within the City's Resource Protection Zone.

Site plan does not create any significant soil or drainage problems

6.8

Permanent and temporary erosion control measures will be implemented during and after construction in a manner that will minimize the transport of sediments. Drainage systems will be installed to collect, convey and treat stormwater runoff from the developed areas prior to discharge to existing natural swales.

Provision of appropriate exterior lighting

6.9

The planned exterior lighting will not be hazardous to motorists traveling on adjacent streets due to the setback of the developments from McAllister Farm Drive and Riverside Street. The proposed lighting will be adequate for users of the sites and will not spill over or glare onto abutting properties. Lighting measures will include pole-mounted shoebox fixtures to minimize glare. Wall-mounted fixtures will also be selected on this basis. Photometric plans have been requested from RUD Lighting, the vendor supplying the proposed fixtures. The plans will be forwarded to the Planning Department upon receipt.

6.10 The development will not create fire or other safety hazards and provides adequate access to the site and to the buildings on the site for emergency vehicles

An existing, undeveloped, gravel access drive will be upgraded to a twenty-six-foot wide ingress/egress access drive. The paved drive will provide adequate access to the site for emergency vehicles. The building will also have three-sided access for emergency vehicles.

The Lot 4 site contains one existing developed 26-foot-wide paved access drive from Riverside Street. No changes are planned for this existing access drive. Access will be provided to the planned development from an existing 30-foot paved access drive within the development. The proposed development will include upgrading, paving, and extension of the existing access drive to within the planned development. The paved drive will provide adequate access to the site for emergency vehicles. The building will also have three-sided access for emergency vehicles. All work shall be in accordance with City of Portland Public Works standards.

6.11 The proposed development is designed so as to be consistent with off-premises infrastructure, existing or planned by the City of Portland

The planned developments do not interfere with any existing or proposed City infrastructure. An existing 50-foot-wide Portland Water District utility easement traverses the back portion of the project sites. The easement contains a 48-inch reinforced concrete pipe transmission water main. This main is a primary transmission line serving the Portland community; therefore, no structures are proposed within the easement and all construction activities will ensure that the main is not disturbed.

6.12 Pertaining to industrial development

The developments will prevent undue adverse environmental consequences to neighboring structures or significant hazard to the health or safety of persons residing in the vicinity by controlling all emissions it generates.

6.13 Pertaining to development in R-P Zone

N/A

6.14 Pertaining to planned unit developments

N/A

6.15 Pertaining to multi-family developments

N/A

6.16 Pertaining to development in B-3 Zone

N/A

BB

Wetlands impacts have been minimized for each project site to the extent practicable. Based on discussions with the MedEF, wetlands impacts on the Lot 6 project site will be mitigated by creation of new wetlands areas on the project site. Wetlands creation will include relocation of existing wetlands sods from areas of proposed fills to newly created wet areas on the project site to the extent practicable. On behalf of the owner, Sebago Technics, Inc. will be submitting a NRP A Tier II permit application to the MedEF for wetlands impacts as part of the Lot 6 development and a NRP A Tier I permit application to the MedEF for wetlands

established for these infrastructure routes. tie in to the existing sewer main on Riverside Street. Utility easements will be frontage of the Maine Turnpike Authority property along Riverside Street in order to North Main Interceptor Sewer. The force main may need to be installed along the sewer system on Riverside Street that ultimately discharges to the Presumpscot access drive for the 400 Riverside Street Properties prior to tie in to the municipal to the Riverside Street Sewer. A 4-inch force main will be installed along the existing station. The overall plan is to consolidate these flows into one discharge connection proposed building and the two existing buildings to a proposed onsite duplex pump include an 8-inch PVC gravity sewer lateral that will convey wastewater from the will be removed as part of the Lot 4 development. Sanitary sewer service will 4 currently is provided with an on-site subsurface wastewater disposal system that proposed duplex pump station on the existing Lot 4 site at 400 Riverside Street. Lot sewer lateral that will convey wastewater from the proposed building and be conveyed by a proposed duplex pump station through a 1 1/2-inch force main to a Sanitary sewerage disposal on the Lot 6 site will include an 8-inch PVC gravity

- No adverse effects on existing natural resources are anticipated from the proposed developments. Stormwater runoff from paved areas will be routed through water quality treatment units prior to discharge from the sites.

6.20 No adverse effect on existing natural resources

N/A

6.19 Pertaining to view corridors

The proposed structures are not within 100 feet of any landmark, historic district or historic landscape district to the best of our knowledge, and are not within the City's Resource Protection Zone for the Presumpscot River.

6.18 Proximity to any landmark, historic district or historic landscape district

The application complies with and addresses all provisions noted in this code to the best of our knowledge. The application has also been formatted and contains the necessary information to allow the Planning Authority to review the project in accordance with the City's Delegated Review Authority to review projects under the MedEF Site Law.

6.17 The applicant has submitted all information required by this article and the development complies with all applicable provisions of this Code

80

impacts as part of the Lot 4 development. A copy of the permits will be forwarded to the Planning Department upon receipt from Sebago Technics, Inc.

6.21 Pertaining to discharge to a significant groundwater aquifer
According to the Portland West Quadrangle map of the Maine Geological Survey, there is no significant aquifer in the vicinity of the project location.

6.22 Pertaining to signs
The size, scale, proportions, design, materials, placement, and source and intensity of illumination of all permanent freestanding and building signs, if any, shall be designed to complement and enhance the architectural attributes of the buildings to which they are attached or visually related. Freestanding signs, if any, shall be integrated with other site and landscape features and lighting shall be designed to avoid glare and spillover and will comply with City standards. The applicant will file a separate application for any signs that may be proposed.

6.23 Pertaining to denial of sign under Section 14-369.5
N/A

6.24 Pertaining to major or minor businesses

No ingress/egress driveways are within 30 feet of an intersection.

6.25 Pertaining to development in industrial zones

The development has preserved the existing landscapes to the greatest extent possible to screen/enhance and buffer the properties from all adjacent properties as shown on Sheets 4A and 4B of the attached plan set.

6.26 Pertaining to development in B-5 and B-5b zones
N/A

Att. 9

SOLID WASTE

SECTION 7

7.0 Overview

This section provides the estimates, the use of recycling, the transport and disposal of solid wastes anticipated to be generated by the construction and operation of the proposed developments.

7.1

Solid wastes generated during construction of the site work

The solid wastes generated during construction consist of tree clearing and stump removal.

The contractor will be permitted to dispose of trees and limbs by chipping, with the biomass hauled to a biomass burner, or use of the material as erosion control mix. The contractor will be provided with the following options for stump disposal:

- On-site chipping – to be used for erosion control mix or landscape mulch.
- Transport to the Riverside Street Transfer Station in Portland, Maine or another licensed facility.

7.2

Solid wastes generated from the operation of the development

Cardboard from packaging will be compressed and privately hauled off. A dumpster will be provided for each planned development for miscellaneous wastes and will be hauled off by a private contractor. The developments are expected to generate less than 20 cubic yards of solid waste each per week.

Computations of Types and Volumes of Solid Wastes for Development Projects

Solid Wastes Computations and Disposal

- Type
- Basis of Quality Computations
- Site Work Construction

Area to be cleared	Volume @ 400cy/acre
4.0 acres	1,600 c.y.

Wood waste from clearing
Assume 400 c.y. of stumps/acre/each development

Att. 10

SECTION 8

SURFACE DRAINAGE AND RUNOFF

Introduction/Overview

8.0

• Lot 6 – McAllister Farm Subdivision

The project site is located off McAllister Farm Drive and is bordered by multiple industrial properties and the Presumpscot River to the north. The 10.6-acre Lot 6 is an undeveloped lot and contains variable topography with several high knolls, a natural emergent marsh, and a large tributary swale containing a regulated stream that discharges to the Presumpscot River.

Lot 6 also contains multiple wetland areas across the site's open areas that have been identified as wet meadows. Stream-related wetlands and an emergent wetland area have been identified within the site's lower elevations. The stream-related wetlands have been identified as wetlands of special significance due to their location within the 100-year flood plain.

The northern portion of the project site is within the City's Resource Protection Zone. Development activity is restricted within the two hundred and fifty (250) foot Resource Protection Zone and a two hundred (200) foot Wildlife Buffer Zone along the river was established for the McAllister Farm Subdivision as part of the original MEDeP permit approvals. No development activity is proposed within this 200-foot corridor. The project site is also within the 100-year flood plain (U.S.G.S. Mean Sea Level, Elev. 35.7 ft.), which is largely contained within the large tributary swale.

Stormwater criteria for the McAllister Farm Subdivision fell under the guidelines set forth in MEDeP Permit Order #L-014644-26-A-N which prohibited the alteration of established drainage courses within the Shoreland Zone.

The following chronology of MEDeP permitting actions is associated with the McAllister Farm Subdivision and specifically the Lot 6 parcel:

◆ As outlined in MEDeP Permit Order #L-014644-26-A-N, the Lot 4 owner, B&B Properties, was granted Department approval to construct a warehouse on Warren Avenue on September 16, 1987.

◆ As outlined in MEDeP Permit Order #L-014644-26-C-M dated December 5, 1988, the original Lot 4 was subdivided into three lots consisting of the following:

- Lot 4 – 15 Acres
- Lot 4A – 6.8 Acres
- Lot 4B – 10.6 Acres

Part of the project included the extension of what is now known as McAllister Farm Drive to access Lots 4A and 4B. The installation of the access drive for Lot 4B required the crossing of the regulated stream and included the installation of

The northern portion of the project site is within the City's Resource Protection Zone. Development activity is restricted within the two hundred and fifty (250) foot Resource Protection Zone. The project site is also within the 100-year flood plain (U.S.G.S. Mean Sea Level, Elev. 35.7 ft.), which is largely contained within the natural swales.

Lot 4 also contains multiple wetland areas across a portion of the site's open areas that have been identified as wet meadows. Wetlands contained within the two natural swales and a wet meadow have been identified within the site's lower elevations. The wetlands associated with the natural swales have been identified as wetlands of special significance due to their location within the 100-year flood plain.

The 14.5-acre Lot 4 consists of a developed lot with two (2) office building/warehouse buildings totaling 55,250 sq. ft., associated parking, on-site subsurface wastewater disposal system, and a stormwater drainage system complete with a proprietary water quality treatment unit that discharges to a natural emergent marsh contained within the adjacent Lot 6. Lot 4 contains variable topography with several vegetated embankments and is bordered to the east by a wet meadow and to the west by the natural emergent marsh contained on the adjacent Lot 6. The wet meadow and the natural emergent marsh discharge stormwater runoff via two (2) natural swales to the north of the project site and tributary to the Presumpscot River.

• **Lot 4 - 400 Riverside Street Properties**

The goal of the stormwater management evaluation completed for Lot 6 is to show that the proposed development will not result in any significant impacts to the regulated stream downstream from the planned development and prior to discharge to the Presumpscot River. This segment of tributary swale containing the regulated stream has been selected as the point of analysis for the Lot 6 stormwater management evaluation.

Many of the industrial sites on Riverside Street and in the vicinity of the Lot 6 project site discharge stormwater runoff to the tributary swale containing the regulated stream that discharges to the Presumpscot River.

◆ MedEP Permit Order #L-14644-E-M was issued on December 7, 1989 to allow a 6-foot-diameter corrugated metal pipe to be installed beneath McAllister Farm Drive instead of the originally approved concrete pipe.

◆ MedEP Permit Order #L-14644-26-D-M was issued on August 2, 1989 for a reduction in the culvert sizing passing beneath McAllister Farm Drive.

one (1) 144-inch culvert pipe at fifty feet in length. A Final Subdivision Recording Plat for the McAllister Farm Subdivision was approved by the Portland Planning Board on July 26, 1988 and subsequently revised and approved by the Planning Director on January 7, 1989. This revised plan notes that MedEP Lot 4B is the same as Lot 6 on the Recording Plat. Lot 6 is the lot currently under consideration for development.

10A

10B

Stormwater criteria for the original Donald D. Butler Subdivision fell under the guidelines set forth in MedDEP Permit Order #L-39-7696-05170.

The following chronology of MedDEP permitting actions is associated with the original Donald D. Butler Subdivision and specifically the Lot 4 parcel:

- As outlined in MedDEP Permit Order #L-39-7696-05170, the Donald D. Butler Subdivision was granted Department approval for the creation of five lots for industrial use on January 8, 1982.
- As outlined in MedDEP Permit Order #L-007696-39-A-M, the Donald D. Butler Subdivision was granted Department approval to relocate its subsurface wastewater disposal field on April 10, 1985.
- MedDEP Permit Order #L-007696-39-C-M, dated June 17, 1996, reflects Lot 1 being increased to 13.7 acres and Lot 4 being reduced to 14.5 acres.

Also, the applicant at that time, 400 Riverside Street Properties, proposed to amend MedDEP Permit Order #L-39-7696-05170, Special Condition #3, from "no development including cutting and filling shall occur within 100 feet of the major flood limit boundary shown on the final subdivision plan dated August 27, 1981 excluding the subsurface disposal system on Lot 4" to include "no disturbance shall be allowed within the 250-foot Shoreland Zone adjacent to the Presumpscot River except for some minor grading associated with the construction of a new 15,000 sq. ft. commercial building on Lot 1 and for a future walking trail which shall be set back a minimum of 50 feet from the top of the embankment at the river's edge".

The goal of the stormwater management evaluation completed for Lot 4 is to show that the proposed development will not result in any significant impacts downstream from the planned development. The wet meadow and the natural emergent marsh contained on the adjacent Lot 6 discharge stormwater runoff via two (2) natural swales downstream from the planned development. The two natural swales merge into a single natural swale tributary to the Presumpscot River. This segment of tributary swale has been selected as the point of analysis for the Lot 4 stormwater management evaluation.

Deluca-Hoffman Associates, Inc. completed a stormwater analysis for the project sites to confirm that the planned developments will only slightly increase stormwater flows to the natural swales above the predevelopment conditions.

Water quality treatment for the project sites will be achieved by the installation of Vortechics water quality treatment units, or approved equal, and located downstream from the planned developments and tributary to the swales. The intent is to treat the runoff from the impervious areas from the planned developments prior to discharge from the sites to the natural swales tributary to the Presumpscot River. Additional water quality treatment will be achieved from the natural wooded buffers in the undeveloped portions of the sites. The proprietary devices are recognized by the

Existing Conditions

MedEP as providing satisfactory removal of TSS from stormwater flows from developed areas.

• **Lot 6 – McAllister Farm Subdivision**

The 10.6-acre Lot 6 is currently an undeveloped lot and contains variable topography with several high knolls, a natural emergent marsh, and a large tributary swale containing a regulated stream that discharges to the Presumpscot River. The site contains multiple wetland areas within the site's lower elevations including wet meadows, stream-related wetlands, and a natural emergent marsh. The remainder of the site consists of woodlands and grassed areas. Existing drainage swales along the southern and western lot boundaries convey stormwater runoff into the existing tributary swale.

The pre-development watershed model was divided into two subcatchments as follows:

Subcatchment 1: This area consists of the southern portion of the project site and is bordered to the east and south by a high knoll and to the west by the tributary swale containing the regulated stream. Subcatchment 1 contains several wetland areas including a wet meadow, a natural emergent marsh and stream-related wetlands. The time of concentration flow path starts at the top of a knoll to the east and travels in a westerly direction before reaching the tributary swale containing the regulated stream and prior to reaching the point of analysis. Subcatchment 1 is approximately 1.93 acres in size, has a hydraulic flow length of 400 feet, and a time of concentration of 10.2 minutes. The composite curve number for this subarea is 82.

Subcatchment 2: This area consists of the northern portion of the project site and is bordered to the north by the Shoreland Zone to the Presumpscot River, to the east by the natural emergent marsh, and to the west by the tributary swale containing the regulated stream. Subcatchment 2 contains several wetland areas including a wet meadow and stream-related wetlands. The time of concentration flow path starts at the top of a knoll to the east and travels in a westerly direction before reaching the tributary swale containing the regulated stream and prior to reaching the point of analysis. Subcatchment 2 is approximately 1.80 acres in size, has a hydraulic flow length of 520 feet, and a time of concentration of 11.5 minutes. The composite curve number for this subarea is 86.

• **Lot 4 – 400 Riverside Street Properties**

The 14.5-acre Lot 4 consists of a developed lot with two (2) office building/warehouse buildings totaling 55,250 sq. ft., associated parking, on-site subsurface wastewater disposal system, and a stormwater drainage system complete with a proprietary water quality treatment unit that discharges to a natural swale within Lot 4. Lot 4 contains variable topography with several vegetated embankments and is bordered to the east by a wet meadow and to the west by the natural emergent marsh contained on the adjacent Lot 6. This wet meadow and the natural emergent marsh discharge stormwater runoff via two (2) natural swales to the

100

10D

north of the project site and tributary to the Presumpscot River. The remainder of the site consists of woodlands and grassed areas. Existing drainage swales along the western and northern lot boundaries convey stormwater runoff into the existing tributary swales.

The predevelopment watershed model was divided into four subcatchments as follows:

Subcatchment 1. This area consists of the eastern portion of the project site and is bordered to the east by a wet meadow and to the west by a portion of the existing development and a grassed embankment. Subcatchment 1 contains a vegetated low area that includes a wet meadow and wetlands associated with a natural swale. The time of concentration flow path starts at the top of the grassed embankment to the south and travels north to the wet meadow before reaching a tributary swale and prior to reaching the point of analysis. Subcatchment 1 is approximately 3.0 acres in size, has a hydraulic flow length of 680 feet, and a time of concentration of 12.4 minutes. The composite curve number for this subarea is 81.

Subcatchment 2. This area consists of the northern portion of the project site and is bordered to the south by the existing development and a grassed embankment and to the north by the natural swale that conveys stormwater runoff from the natural emergent marsh contained on the adjacent Lot 6 to the Presumpscot River. Subcatchment 2 also contains undeveloped woodlands and grasslands. The time of concentration flow path starts at the top of the grassed embankment adjacent to the existing development and travels north before reaching the natural swale and prior to reaching the point of analysis. Subcatchment 2 is approximately 0.75 acres in size, has a hydraulic flow length of 160 feet, and a time of concentration of 5.3 minutes. The composite curve number for this subarea is 71.

Subcatchment 3. This area consists of a majority of the project site and is bordered to the south by an existing development on Lot 3 and a grassed embankment, to the west by the natural emergent marsh contained on the adjacent Lot 6, and to the north by the natural swale that conveys stormwater runoff from the natural emergent marsh to the Presumpscot River. Subcatchment 3 contains undeveloped woodlands, grasslands, portions of a wet meadow and the existing developed site. The time of concentration flow path starts at the top of the grassed embankment to the south and travels northwest before reaching the natural emergent marsh and the tributary swale and prior to reaching the point of analysis. Subcatchment 3 is approximately 4.25 acres in size, has a hydraulic flow length of 780 feet, and a time of concentration of 11.6 minutes. The composite curve number for this subarea is 82.

Subcatchment 4. This area consists of the western portion of the project site and is bordered to the east by the existing development and a grassed embankment and to the west by the natural emergent marsh contained on the adjacent Lot 6. Subcatchment 4 contains undeveloped woodlands, grasslands, and a wet meadow. The time of concentration flow path starts at the top of the grassed embankment to the south and travels northwest before reaching the natural emergent marsh and the natural swale and prior to reaching the point of analysis. Subcatchment 4 is

10E

approximately 2.0 acres in size, has a hydraulic flow length of 420 feet, and a time of concentration of 8.5 minutes. The composite curve number for this subarea is 60.

8.2 Proposed Conditions

• Lot 6 – McAllister Farm Subdivision

The planned development at Lot 6 of the McAllister Farm Subdivision will include a one (1) story, 41,255 sq. ft. office building/warehouse on the existing 10.6-acre lot. When completed, there will be 52 parking spaces provided, as well as multiple loading areas to serve the building's warehouse functions.

The postdevelopment watershed model includes one subcatchment as follows:

Subcatchment 1: This area contains a majority of Subcatchments 1 and 2 from the predevelopment conditions and consists of the proposed building, attendant parking and paved surfaces. Woodlands, grasslands, and wetland areas along the boundaries of the planned development remain undisturbed from the predevelopment conditions to the extent practicable. The time of concentration flow path starts at the top of a knoll to the south and travels in a westerly direction before reaching the tributary swale containing the regulated stream and prior to reaching the point of analysis. Subcatchment 1 is approximately 3.35 acres in size, has a hydraulic flow length of 320 feet, and a time of concentration of 3.9 minutes. The composite curve number for this subarea is 92.

• Lot 4 – 400 Riverside Street Properties

The planned development at Lot 4 of the 400 Riverside Street Properties will include a one (1) story, 23,400 sq. ft. office building/warehouse. The site is currently developed and includes a two (2) story, 20,000 sq. ft. office building/warehouse and a two (2) story, 35,250 sq. ft. office building/warehouse. When completed, there will be 45 new parking spaces provided for the planned development for a total of 126 parking spaces, as well as multiple loading areas to serve the building's warehouse functions.

The postdevelopment watershed model includes four subcatchments as follows:

Subcatchment 1: This area is essentially unchanged from the predevelopment conditions and consists of the eastern portion of the project site and is bordered to the east by a wet meadow and a grassed embankment and to the west by a portion of the existing development. Subcatchment 1 contains a vegetated low area that includes a wet meadow and wetlands associated with a natural swale. The time of concentration flow path starts at the top of the grassed embankment to the south and travels north to the wet meadow before reaching the natural swale and prior to reaching the point of analysis. Subcatchment 1 is approximately 2.8 acres in size, has a hydraulic flow length of 680 feet, and a time of concentration of 12.4 minutes. The composite curve number for this subarea is 81.

Subcatchment 2: This area consists of the northern portion of the project site and is bordered by the planned development to the south and a grassed embankment and

The HydroCAD computer program was used in the stormwater analysis. This program determines the critical points of the overall drainage systems and uses SCS TR-20

Storm Event	24-Hour Rainfall
2-Year Storm	3.00 inches
10-Year Storm	4.70 inches
25-Year Storm	5.50 inches

The hydrologic analyses for the predevelopment and postdevelopment conditions for the project sites have been conducted based upon the methodology contained in the USDA Soil Conservation Service's Technical Release No. 20 (SCS TR-20). A 24-hour SCS Type III storm distribution was used for the analysis using the following storm frequencies and rainfall amounts for Portland, Maine:

8.3 Stormwater Runoff Analysis

Subcatchment 4: This area is bordered to the south by the existing development, to the east and north by Subcatchment 1, and to the west and north by Subcatchment 2. Subcatchment 3 consists of a majority of the existing parking for the site and a small parking extension included with the planned development. Subcatchment 4 includes a portion of Subcatchment 3 from the predevelopment conditions. The time of concentration flow path starts at the top of a grassed area to the south and travels northwest before reaching the proposed drainage system and water quality unit No. 1 and prior to reaching the point of analysis. Subcatchment 4 is approximately 1.0 acre in size, has a hydraulic flow length of 501 feet, and a time of concentration of 8.6 minutes. The composite curve number for this subarea is 97.

Subcatchment 3: This area is bordered to the south by the existing development on Lot 3 and a grassed embankment, to the west by the natural emergent marsh contained on the adjacent Lot 6, to the east by Subcatchment 1 and to the north by Subcatchment 2. Subcatchment 3 consists of a majority of the proposed parking for the planned development and includes Subcatchments 3 and 4 from the predevelopment conditions. The time of concentration flow path starts at the top of the grassed embankment to the south and travels northwest before reaching the natural emergent marsh and the tributary swale and prior to reaching the point of analysis. Subcatchment 3 is approximately 5.0 acres in size, has a hydraulic flow length of 565 feet, and a time of concentration of 11.1 minutes. The composite curve number for this subarea is 79.

Subcatchment 2: This area is bordered to the north by the natural emergent marsh contained on the adjacent Lot 6 to the Presumpscot River. Subcatchment 2 contains Subcatchment 2 and the northern portion of Subcatchment 3 from the predevelopment conditions and includes the proposed one (1) story, 23,400 sq. ft. office building/warehouse. The time of concentration flow path starts at the top of the grassed embankment adjacent to the proposed office building/warehouse, and travels north before reaching the tributary swale and prior to reaching the point of analysis. Subcatchment 2 is approximately 1.49 acres in size, has a hydraulic flow length of 190 feet, and a time of concentration of 1.5 minutes. The composite curve number for this subarea is 80.

10F

LOG

methodology for evaluation of the anticipated conditions at these points. Travel times, storage capacity, and the effects of hydraulic head are considered for analysis with this program where applicable. The model uses reservoirs and pipes to model actual conditions and can assess storage and kinematic effects.

Using the HydroCAD software, predevelopment and postdevelopment watershed characteristics and flows for the project sites were established. The following tables summarize the watershed characteristics for each subarea in the predevelopment and postdevelopment conditions for the project sites.

• Lot 6 – McAllister Farm Subdivision

Predevelopment Watershed Characteristics			
Subcatchment	Area (AC)	Composite CN	Time of Concentration (Min)
1	1.93	82	10.2
2	1.80	86	11.5

Postdevelopment Watershed Characteristics			
Subcatchment	Area (AC)	Composite CN	Time of Concentration (Min)
1	3.35	92	3.9

• Lot 4 – 400 Riverside Street Properties

Predevelopment Watershed Characteristics			
Subcatchment	Area (AC)	Composite CN	Time of Concentration (Min)
1	3.00	81	12.4
2	0.75	71	5.3
3	4.25	82	11.6
4	2.00	60	8.5

Postdevelopment Watershed Characteristics			
Subcatchment	Area (AC)	Composite CN	Time of Concentration (Min)
1	2.80	81	12.4
2	1.49	80	1.5
3	5.00	79	11.1
4	1.00	97	8.6

The following tables summarize the peak flows for each subcatchment in the predevelopment and postdevelopment conditions for each of the storms analyzed.

Summary of Peak Flows at the Tributary Swale Proximate to the Presumpscot River		
Storm Event	Predevelopment	Postdevelopment
2-Year	5.57 cfs	8.77 cfs
10-Year	10.98 cfs	14.98 cfs
25-Year	13.60 cfs	17.87 cfs

• Lot 6 - McAllister Farm Subdivision

The following tables summarize the peak flows at the point of analysis in the predevelopment and postdevelopment conditions for the 2, 10, and 25-year storms for the project sites.

Postdevelopment Peak Flows for Each Subcatchment					
Storm Event	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Totals for Subareas
2-Year	3.41 cfs	2.36 cfs	5.70 cfs	2.59 cfs	14.06 cfs
10-Year	7.21 cfs	5.02 cfs	12.51 cfs	4.13 cfs	28.87 cfs
25-Year	9.07 cfs	6.34 cfs	15.90 cfs	4.85 cfs	36.16 cfs

Predevelopment Peak Flows for Each Subcatchment					
Storm Event	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Totals for Subareas
2-Year	3.65 cfs	0.60 cfs	5.63 cfs	0.35 cfs	10.23 cfs
10-Year	7.73 cfs	1.63 cfs	11.57 cfs	2.07 cfs	23.00 cfs
25-Year	9.72 cfs	2.18 cfs	14.48 cfs	3.11 cfs	29.49 cfs

• Lot 4 - 400 Riverside Street Properties

Postdevelopment Peak Flow for Subcatchment	
Storm Event	Subarea 1
2-Year	8.77 cfs
10-Year	14.98 cfs
25-Year	17.87 cfs

Predevelopment Peak Flows for Each Subcatchment			
Storm Event	Subarea 1	Subarea 2	Totals for Subareas
2-Year	2.66 cfs	2.91 cfs	5.57 cfs
10-Year	5.46 cfs	5.52 cfs	10.98 cfs
25-Year	6.83 cfs	6.77 cfs	13.60 cfs

• Lot 6 - McAllister Farm Subdivision

10H

Lot 6 is currently undeveloped and contains no existing impervious surface. Of the existing 456,736 sq. ft. (10.6 acres) of vegetative area for the site, approximately 103,784 sq. ft. (2.38 acres) is proposed for development. The 103,784 sq. ft. of proposed impervious area represents 22.45% of the area for the site. The proposed impervious area requires a removal level of 40% TSS under the sliding scale TSS standard, which is within the removal levels recognized by the MedEP for a

• **Lot 6 - McAllister Farm Subdivision**

The applicant proposes to install water quality treatment units to collect and treat stormwater runoff from the developed surfaces for each development site. Deluca-Hoffman Associates, Inc. will forward the design plans and runoff computations to the Vortechics representatives for appropriate sizing and design confirmation. Confirmation from the vendor including unit sizing, flow rates, TSS removal efficiency and structural design will be forwarded to the Planning Authority upon receipt.

Water Quality Treatment

8.4

Also, it has been demonstrated that the existing tributary swales have sufficient capacities in the postdevelopment conditions to sufficiently handle the slight increases in flows and the installation of riprapped outlet plunge pools with level lip spreaders will mitigate any potential for erosion and sediment transport to the tributary swales and the large capacity of the Presumpscot River mitigates any impacts downstream from the planned developments. Details of these calculations can be found in Attachment 8.1 following this section.

The peak flows increase slightly in the postdevelopment conditions for each storm event at each development site due to the increase in impervious surfaces as a result of the proposed developments. A large tributary swale containing a regulated stream that discharges to the Presumpscot River was assumed as the point of analysis for both the predevelopment and postdevelopment conditions for the Lot 6 project site and a natural tributary swale that discharges to the Presumpscot River was assumed as the point of analysis for both the predevelopment and postdevelopment conditions for the Lot 4 project site. The overall peak flows within each tributary swale discharging to the Presumpscot River increase slightly in the postdevelopment conditions for each project site. Based on the above tables, discussion, and attached calculations, it has been demonstrated that the proposed developments will only slightly increase flows above the predevelopment levels for the 2, 10, and 25-year storm events at the point of analysis downstream from the project sites.

Summary of Peak Flows at the Tributary Swale Proximate to the Presumpscot River		
Storm Event	Predevelopment	Postdevelopment
2-Year	10.23 cfs	14.06 cfs
10-Year	23.00 cfs	28.87 cfs
25-Year	29.49 cfs	36.16 cfs

• **Lot 4 - 400 Riverside Street Properties**

101

105

Vortechics proprietary Water Quality Unit. Additional water quality treatment will be achieved by the installation of proposed in-line water quality inlets upstream from the water quality unit and by utilizing the natural vegetated buffers in and proximate to the site.

• **Lot 4 – 400 Riverside Street Properties**

Lot 4 of the 400 Riverside Street Properties is currently developed and contains 150,558 sq. ft (3.46-acres) of existing impervious area. Of the existing 631,620 sq. ft. (14.5-acre) for the site, approximately 67,622 sq. ft. (1.55 acres) is proposed for development. The 67,622 sq. ft. of proposed impervious area represents 1.07% of the area for the site.

MedEP Chapter 500 – “Stormwater Management”, Paragraph 12, - Transition, states that:

“Laws 1995, c.704 & B-4 provides that impervious areas and disturbed areas created prior to July 1, 1997 are not counted when determining the amount of such areas on a parcel, although such areas may be reviewed to the extent necessary to ensure that controls intended to address new areas function adequately. New construction on an impervious area created prior to July 1, 1997 is not counted when determining the amount of impervious area on a parcel. An area is considered “created” for purposes of this provision when local approval has been received, and construction has begun.”

It is our understanding that all existing impervious areas on the Lot 4 site were created prior to July 1, 1997 and that activities on the site prior to July 1, 1997, including those for impervious areas and disturbed areas, may not be included when determining the stormwater quantity and quality standards for the proposed development.

Therefore the 67,622 sq. ft. (1.55 acres) of proposed impervious area representing 1.07% of the area for the site requires a removal level of 40% TSS under the sliding scale TSS standard, which is within the removal levels recognized by the Department for a Vortechics proprietary Water Quality Unit. Additional water quality treatment will be achieved by the installation of proposed in-line water quality inlets upstream from the water quality units and by utilizing the natural vegetated buffers in and proximate to the site.

8.5

Conclusions

Peak discharge stormwater runoff rates from the project sites have been analyzed for the existing and proposed conditions. A large tributary swale containing a regulated stream that discharges to the Presumpscot River was assumed as the point of analysis for both the predevelopment and postdevelopment conditions for the Lot 6 project site and a tributary swale that discharges to the Presumpscot River was assumed as the point of analysis for both the predevelopment and postdevelopment conditions for the Lot 4 project site.

Based on the postdevelopment stormwater calculations, it has been demonstrated that the existing tributary swales have sufficient capacities in the postdevelopment conditions to sufficiently handle the slight increase in flows and the installation of riprapped outlet plunge pools with level lip spreaders will mitigate any potential for erosion and sediment transport to the tributary swales and the large capacity of the Presumpscot River mitigates any impacts downstream from the planned developments.

Stormwater quality treatment measures include the installation of Vortech units and the utilization of existing vegetated buffers to the extent practicable on the project sites. Temporary and permanent erosion control measures will be incorporated into the construction and long-term surface stabilization practices for each project site, thus minimizing erosion and sediment transport.

10K

See sheets 4A and 4B of the accompanying plan set for the locations of temporary and permanent erosion and sediment control measures. Sheet 11 of the plan set contains a complete Erosion Control Narrative outlining the procedures, materials, timing and maintenance responsibilities for the Contractor during construction.

9.0 Overview

TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL

SECTION 9

Att. 11

Att. 12

LANDSCAPE PLAN

SECTION 10

10.0 Overview

The current Lot 6 site consists primarily of woodlands and grassed areas. The site abuts the Presumpscot River to the north and contains variable topography with several high knolls, wet meadows, a natural emergent marsh, and a tributary swale containing a regulated stream that discharges to the Presumpscot River.

The current Lot 4 site is a developed site that consists primarily of woodlands and grassed areas. The site abuts the Presumpscot River to the north and contains variable topography with several vegetated embankments and is bordered to the east by a wet meadow and to the west by natural emergent marsh. This wet meadow and the natural emergent marsh contained on the adjacent Lot 6 discharge stormwater runoff via two (2) natural swales to the north of the project site and tributary to the Presumpscot River.

It is the intent of the applicant to maintain the wooded/vegetated environment around the proposed buildings to the extent practicable. The 200-foot wildlife buffer along the river will also remain undisturbed for the Lot 6 site.

Existing mature trees will be maintained along the property lines of the project sites to the extent practicable. Due to the project sites being located at the back of their respective subdivisions and being bordered by the wooded shoreline of the Presumpscot River to the north, very limited landscaping measures are proposed for each development. Tree plantings and shrubs will be installed adjacent to some of the paved areas for each planned development. Vegetative slopes will be used on most of the disturbed areas that are not subject to paving or other surface stabilization measures.

Att. 13

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

2004-0074 Application I. D. Number

04/16/2004 Application Date

Office/Warehouse Project Name/Description

400 - 400 Riverside Street, Portland, Maine
Address of Proposed Site

320 A001
Applicant or Agent Daytime Telephone, Fax

Assessor's Reference: Chart-Block-Lot
Proposed Development (check all that apply): New Building Building Addition Change Of Use Residential Office Retail Other (specify)

41,255/23,400
Proposed Building square Feet or # of Units

IM
Zoning
Acragage of Site

Site Plan
Subdivision
of lots

Flood Hazard
Shoreland
Historic Preservation

Zoning Conditional Use (ZBA/PB)
Zoning Variance

Engineer Review
Date

Site Plan
Fees Paid: Approved Approved w/Conditions Denied

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

Condition Compliance
Lt. MacDougal
signature

Performance Guarantee Required* Not Required

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

Performance Guarantee Accepted
Inspection Fee Paid
Building Permit Issue
Performance Guarantee Reduced
Temporary Certificate of Occupancy
Final Inspection
Certificate Of Occupancy
Performance Guarantee Released
Defect Guarantee Submitted
Defect Guarantee Released

date amount expiration date

date amount expiration date

date amount expiration date

date amount expiration date

date amount expiration date

date amount expiration date

date amount expiration date

CITY OF PORTLAND, MAINE

DEVELOPMENT REVIEW APPLICATION
PLANNING DEPARTMENT PROCESSING FORM

ADDENDUM

2004-0074 Application I. D. Number

04/16/2004 Application Date

Office/Warehouse

Project Name/Description

400 - 400 Riverside Street, Portland, Maine

Address of Proposed Site

320 A001

Assessor's Reference: Chart-Block-Lot

Ris/Brunet Family Trust

Applicant

400 Riverside Street, Suite A7, Portland, ME 04103

Applicant's Mailing Address

Consultant/Agent

Applicant Ph: (207) 878-6971 Agent Fax:

Applicant or Agent Daytime Telephone, Fax

Approval Conditions of Fire

1 hydrant locations shall be approved by the Portland Fire Department

13A

Att. 14

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



MEMORANDUM

TO: Kandi Talbot, Planner, City of Portland
FROM: Barry Sheff, P.E., Project Manager

DATE: August 18, 2004

RE: Peer Review: Application for Major Site Plan Review and Site Location of Development
McAlister Farm Subdivision - Lot 6 & 400 Riverside Properties - Lot 4

Woodard & Curran has performed a review of the Major Site Plan Application and its attached statements, drawings and figures for Lot 6 of McAlister Farm Subdivision, and Lot 4 of 400 Riverside Properties. The project includes two office/warehouse buildings, one each proposed on McAlister Farm Drive and Riverside Street. The documents reviewed were submitted by the Applicant's Engineer to the City of Portland for site plan approval and for site location of development approval per the City's delegated authority. The purpose of this review is to determine whether the proposed project meets the City's Ordinance criteria and the State's Site Location of Development Standards. Review criteria included within this memorandum are based upon our phone conversation of August 13, 2004.

Documents Reviewed

- Application for Major Site Plan Review, McAlister Farm Subdivision - Lot 6, McAlister Farm Drive & 400 Riverside Properties – Lot 4, 400 Riverside Street, prepared by Deluca-Hoffman Associates, Inc. to the City of Portland Planning Authority, on behalf of Rist/Brunet Family Trust, dated April 2004, with associated drawings and figures.
- Cover letter for above mentioned Application, from Deluca-Hoffman Associates, Inc. to the City of Portland Planning Authority, dated April 20, 2004.

Major Site Plan Review

Wastewater (City Site Plan, Sec 14-526, (a)(5); Site Law, Sec. 17)

There is no public sewer available to service the proposed project. In a letter included in the submitted materials Frank Brancey, City of Portland Department of Public Works, writes that a sewer connection that would enable the proposed project to be publicly sewered would probably be built during the 2004 construction season, by the Portland Water District (PWD). The Application does not appear to include any additional information regarding that proposed sewer connection.

The Applicant should provide documentation from the PWD and City of Portland Public Works regarding their ability to provide capacity to the project. In addition, the Applicant should provide documentation regarding impacts, if any, from wastewater generated at the proposed development to State regulated Combined Sewer Overflow Outfalls.

17A

The Applicant is proposing the use of on-site wastewater pumping stations and force main sewers, and should clarify whether these will be public or privately owned and maintained. The Applicant should provide any maintenance contracts and plans as appropriate.

The Applicant should clarify whether the existing two-story, 20,000 square foot building at 400 Riverside Properties - Lot 4 will be connected into the proposed wastewater disposal system.

The Applicant should provide additional information on the proposed use of temporary holding tanks, in lieu of public sewer. This information should include a calculation of wastewater discharge, required as a basis for the design of the temporary system; proposed location of the temporary system; design documents in accordance with the Maine Subsurface Wastewater Disposal Rules; and Contract with a licensed wastewater hauler and all associated supporting permit information.

Stormwater (City Site Plan, Sec 14-526, (a)(8); Site Law, Sec. 12)

The Applicant states that the proposed development will result in an increase of stormwater runoff from the site and that the large capacity of the Presumpscot River will mitigate this increase. The proposed development does not appear to meet the criterion for exemption from the peak discharge standard within Section V of the City of Portland Technical and Design Standards and Guidelines, or the variance criteria within Site Law.

The Applicant is proposing the use of manufactured stormwater treatment units. Design information should be submitted for each unit proposed. Should the existing unit at 400 Riverside Properties - Lot 4 be reused as proposed, the Applicant should provide calculations as evidence that the unit is adequately sized for the anticipated flows. The Applicant should provide maintenance contracts for all proposed units

The Applicant has also indicated that Level Lip Spreaders will be used at pipe outfalls. The Applicant should provide design calculations for the Level Lip Spreaders.

Odors, Noise, Particulates and other Emissions (City Site Plan, Sec 14-526, (a)(12); Site Law, Sec. 5, 21 and 22)

The Applicant states that the development will prevent undue environmental consequences by controlling all emissions it generates. The Applicant should provide supporting information to clarify the types of odors, noise, particulates, and other emissions anticipated and the proposed methods of control.

Historic Sites (City Site Plan, Sec 14-526, (a)(18); Site Law, Sec. 9)

The Applicant has submitted project information for review to Maine Historic Preservation Commission for review. In a letter from Earle G Shettleworth, Jr., Maine Historic Preservation Commission, to Deluca-Hoffman Associates, Inc., Mr. Shettleworth requests further information to determine whether historic architectural resources exist at or in close proximity to the proposed development; and a "Phase I prehistoric archaeological survey" is also requested. The Applicant does not appear to include any confirmation that further information was supplied or that the archaeological survey was performed.

Existing Natural Resources (City Site Plan, Sec 14-526, (a)(20); Site Law, Sec. 7, 8 and 10)

The Applicant has submitted project information for review to Maine Department of Inland Fisheries and Wildlife for review. In a letter from James Pellerin, Maine Department of Inland Fisheries and Wildlife, to Deluca-Hoffman Associates, Inc., Mr. Pellerin requests "100 foot undisturbed buffers along both sides of any stream or stream-associated wetlands." The project as proposed disturbs property within the requested buffers.

14B

Site Location of Development Review

The Application does not provide adequate information for review with regard to Site Location of Development. In particular, the following sections require additional information:

Soils (Site Law, Sec. 11)

The Application states that a geotechnical investigation has been performed; the investigation should be submitted in support of the Site Location of Development Application. We do not anticipate additional soil survey is required to support the project as reviewed.

Maintenance and Inspection of Facilities (Site Law, Sec. 13)

The Applicant should provide a written plan addressing inspection and maintenance of site elements including paved ways and ditches, parking areas, and stormwater conveyance and treatment measures.

Solid Waste (Site Law, Sec. 18)

The Applicant should provide letters of commitment covering the hauling and disposal of solid waste generated by occupants of the development.

Water Vapor and Sunlight (Site Law, Sec. 23 and 24)

The Applicant should provide information to support whether the project will or will not have adverse environmental impact related to either the discharge of water vapor or any blocking of sunlight.

Notices (Site Law, Sec. 25)

The Applicant should provide evidence of notice, and required Abutter information.

Summary

Based upon our findings and anticipated modifications as a result, we have not completed a thorough review of the stormwater model, grading plans or construction details. We understand the City will conduct separate review of traffic, parking, signage, buffers, setbacks, shoreland zoning, and lighting requirements. Further, we understand from the Applicant that MaineDEP will review the project's NRPA Application. We anticipate the Applicant will forward copy of the permit to the City and incorporate permit requirements into the plans.

On a conceptual level, the proposed project appears to have reached an appropriate level of development for Planning Board workshop. Clarification of project elements and additional information is required in order for Woodard & Curran to complete its review and advise the City of the project's compliance with the standards as set forth in the City's Ordinance criteria and the State's Site Location of Development law. We hope this information is useful to the City during its upcoming Planning Board Workshop.

Please contact me if you have any questions or comments regarding our review.

BSS/KRV/
203591.01
cc: File

Memorandum
Department of Planning and Development
Planning Division



To: Chair Lowry and Members of the Portland Planning Board

From: Kandice Talbot, Planner

Date: July 22, 2005

Re: July 26, 2005 Planning Board Workshop
Lot 4 of 400 Riverside Street Properties
Rist/Brunet Family Trust, Applicant

Introduction

Rist/Brunet Family Trust is requesting major site plan review of a proposal to develop a 23,140 sq. ft. office/warehouse building on Lot 4 of the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, at 400 Riverside Street.

Lot 4 of the 400 Riverside Street Properties is zoned I-M Industrial Moderate and is approximately 14.5 acres in size.

The applicant is proposing to construct a one (1) story, 23,140 sq. ft. office building/warehouse on Lot 4 of the 400 Riverside Street Properties. The site is currently developed and includes an existing 26-foot-wide paved access drive from Riverside Street, a two (2) story, 20,000 sq. ft. office building/warehouse, and a two (2) story 35,250 sq. ft. office building/warehouse.

The proposal is to be reviewed for compliance with the site plan standards of the land use code and is subject to Site Location of Development review.

Access/Parking

Lot 4 contains an existing 26 ft. wide paved access drive from Riverside Street. No changes are planned for this existing drive. Access to the site will be provided from an existing 30 ft. wide paved access drive within the development.

The site currently has 89 parking spaces. The applicant is proposing 45 new parking spaces for a total of 126 parking spaces. The Zoning Administrator is currently reviewing the parking.

Since the Presumpscot River borders Lot 4, staff is recommending that the applicant provide a pedestrian easement along the river.

Utilities

The utility service for water to the proposed development will come from Riverside Street. Two existing 2-inch domestic water service lines extend along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. A water capacity letter has been submitted.

The applicant has requested that the Westbrook/Portland interlocal sewer agreement be amended to allow Lot 4 to connect into the sewer within Riverside Street. Wastewater flows from the existing and proposed buildings on Lot 4 will be conveyed by 8-inch gravity sewer laterals to a proposed private pump station. Discharge will be via a proposed 3-inch force main to the municipal sewer system on Riverside Street. Alternatively, each existing and proposed building may be serviced by individual low pressure pump systems that each connect to the 3-inch force main to be installed and connected to the municipal sewer system on Riverside Street.

To amend the Westbrook/Portland interlocal agreement, Public Works must hold a public hearing to redefine the Westbrook Interlocal Sewer Service Area. Public Works will be recommending at this public hearing that Lot 4 be included within the Interlocal Sewer Service Area on Riverside Street. This service area has a total capacity of 150,000 gallons of wastewater that may be discharged to the City of Westbrook's Bridge Street Pump Station. However, due to the capacity limitation, Public Works is recommending that they be included in this service area with the condition that the wastewater generation be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge.

Electrical service will include the installation of underground electric service.

Drainage

A stormwater collection system will serve the planned development and will collect stormwater runoff from the site's impervious surfaces and convey it into two water quality treatment units prior to discharge to riprap plunge pools. The first riprap plunge pool will discharge adjacent to a natural emergency marsh and the second will discharge to a natural tributary swale to the north. Both swales are tributary to the Presumpscot River.

The applicant is requesting a variance from the regulatory stormwater quantity standard based on the planned development being located in the lower region of the overall watershed area comprising the Presumpscot River, and in the region proximate to where the Presumpscot River experiences tidal effects and ultimately discharges to Casco. The

variance request is also based on previously submitted stormwater calculations that demonstrated that the existing tributary swale has sufficient capacity in the post development conditions to sufficiently handle the slight increase in flow and the fact that no downstream properties will be negatively impacted as a result of this proposal.

The Review Engineer is currently reviewing the plans.

Lighting

The applicant is proposing pole-mounted shoebox fixtures and wall-pack units. Lighting catalogue cuts and a photometric plan shall be submitted to determine that the lighting is in compliance with the City's technical standards.

Landscaping

The applicant is proposing that landscaping will be minimal and the existing mature trees will be maintained along the property lines of the project site to the extent practicable. Tree plantings and shrubs are being proposed adjacent to some of the paved area. The City Arborist is currently reviewing the plan.

Building Design

The proposed structure will be typical metal-framed buildings similar in design to nearby buildings. Elevations of the building shall be submitted prior to public hearing.

Fire

Sprinkler service will be provided by the development. There is also a hydrant proposed in the vicinity of the proposed building. The hydrant location will have to be shown on the plan and approved by the Fire Department.

Issues to Resolved Prior to Public Hearing

1. DRC's Memo
2. Landscaping
3. Lighting
4. Building Elevations
5. Fire Hydrant

Attachments:

1. Applicant's Submittal Letter dated June 20, 2005
2. Letter from Public Works regarding Riverside Street Sewer Service Area
3. Amended Hydrologic Computations
4. Stormwater Management System Inspection and Maintenance Manual
5. Plans



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

778 MAIN STREET

SUITE 8

SOUTH PORTLAND, MAINE 04106

TEL. 207 775 1121

FAX 207 879 0896

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

September 23, 2005

Lucas Tree Expert Co., Inc.
636 Riverside Street
Portland, ME 04103

**Subject: Public Information Meeting
Rist/Brunet Family Trust
Proposed Site Development at Lot 4 of the 400 Riverside Street Properties**

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, DeLuca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the DeLuca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

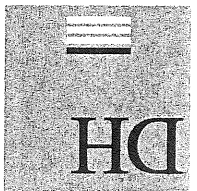
Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

c: Kandi Talbot - City of Portland
Marty Rist



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207 773 1121
FAX 207 879 6896

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

September 23, 2005

Dirigo Drywall Associates
225 Riverside Street
Portland, ME 04103

Subject: Public Information Meeting

**Rist/Brunet Family Trust
Proposed Site Development at Lot 4 of the 400 Riverside Street Properties**

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the Deluca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

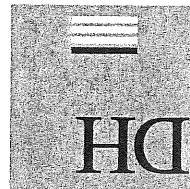
Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

Kandi Talbot - City of Portland
Marty Rist



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207 775 1121
FAX 207 879 0896

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

September 23, 2005

Maine Turnpike Authority
430 Riverside Street
Portland, ME 04103

Subject: Public Information Meeting

**Rist/Brunet Family Trust
Proposed Site Development at Lot 4 of the 400 Riverside Street Properties**

Dear Sir or Madam:


On behalf of the Rist/Brunet Family Trust, DeLuca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the DeLuca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

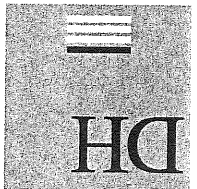
Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.


Stephen R. Bushy, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

Kandi Talbot - City of Portland
Marty Rist



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL: 207 755 1171
FAX: 207 879 0896

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

September 23, 2005

Crockett Riverside LLC
35 Graystone Lane
Portland, ME 04103

Subject: Public Information Meeting

Rist/Brunet Family Trust

Proposed Site Development at Lot 4 of the 400 Riverside Street Properties

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the Deluca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

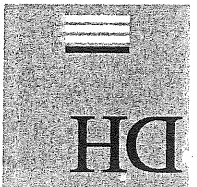
Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

c: Kandi Talbot – City of Portland
Marty Rist



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207 775 1171
FAX 207 879 0896

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

September 23, 2005

Pende Associates, Inc.
42 South Street
Yarmouth, ME 04096

Subject: Public Information Meeting

Rist/Brunet Family Trust

Proposed Site Development at Lot 4 of the 400 Riverside Street Properties

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the Deluca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

c: Kandi Talbot - City of Portland
Marty Rist

**CITY OF PORTLAND, MAINE
PLANNING BOARD**

Lee Lowry III, Chair
Kevin Beal, Vice Chair
John Anton
Michael Patterson
David Silk
Janice E. Tevastian
Shalom Odokara

November 18, 2005

Rist-Brunet Family Trust
400 Riverside Street
Suite A7
Portland, ME 04103

RE: New Building, Lot 4, 400 Riverside Street
ID #2004-0074, CBL #320-A-001

To Whom It May Concern:

On October 25, 2005, the Portland Planning Board voted 6-0 (Odokara absent) to approve the site location subject to two (2) conditions of approval and voted 5-1 (Beal opposed and Odokara absent) to approve the site plan, subject to eight (8) conditions of approval for a 23,140 sq. ft. office/warehouse building to be located at Lot 4, 400 Riverside Street. The approval was granted for the project with the following conditions:

Site Location

i. That the plans be revised in regards to the Development Review Coordinator's memo dated September 27, 2005 regarding stormwater, historic sites, and inspection of facilities.

ii. The developer shall submit a revised site plan showing the entire parcel, including the 200-foot wildlife corridor.

Site Plan

i. The wastewater generation from Lot 4, 400 Riverside Street shall be limited to flow as is defined in the current capacity letter, requests for sanitary flows and not be eligible to use these facilities for any high volume production discharge in the event the City adopts the amendment to the Westbrook, Portland and the local agreement, the applicant should connect and discharge to the Westbrook system.

ii. That the developer address the Development Review Coordinator's memorandum dated September 27, 2005 regarding stormwater, historic sites, and maintenance and inspection facilities.

iii. That the hydrant location shall be reviewed and approved by the Fire Department prior to issuance of a building permit.

iv. The applicant submit a revised site plan showing the full parcel together with the 200-foot wildlife preservation corridor and Portland Trails easement.

v. That Planning Report #55-05 is made to include the landscaping plan that had been reviewed and approved by the City Arborist.

vi. That the applicant submit an acknowledgment by the Maine Historic Preservation body that the application has no delagatory impacts within historic districts.

vii. That the applicant provide or grant a trail easement to Portland Trails for the easement, to be reviewed and approved by Corporation Counsel.

viii. That the applicant submit elevations of the proposed building for review and approval by the Planning Authority prior to the issuance of a building permit.

The approval is based on the submitted site plan and the findings related to site plan and subdivision review standards as contained in Planning Report #55-05, which is attached.

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.

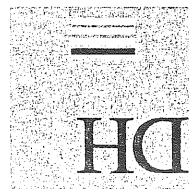
5. Prior to construction, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Works representative and owner to review

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

Sincerely,

 Lee Lowry III, Chair
 Portland Planning Board

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

7. The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Division at 874-8632. Please 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.
 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 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.



January 19, 2005

Mr. Michael Bobinsky
 Portland Public Works Department, Director
 55 Portland Street
 Portland, ME 04101

Subject: Request for Amendment to the Portland-Westbrook Inter-municipal Sewer Service Agreement

Dear Mr. Harris:

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. (DHAI) is requesting that the Portland Public Works Department (PWD) consider an amendment to the planned sewer service area established in the Portland-Westbrook Inter-municipal Sewer Service Agreement to include additional existing and planned developments along Riverside Street. It is our understanding that the PWD has been given authority to establish rules and regulations governing the availability and use of city wastewater collection and treatment facilities and that the Inter-municipal Sewer Service Agreement will be administered by the Portland Industrial Pretreatment Program.

Our request that the Department consider an amendment to expand the planned sewer service area along Riverside Street is based on the significant need for public sewerage collection and treatment in the Riverside/Warren Avenue/Forest Avenue vicinity, a majority of which is located within the City of Portland Industrial-Moderate zoning district.

Specifically, DHAI is requesting that the planned sewer service area be expanded to include the following properties:

- Lot 6 of the McAlister Farm Subdivision located on McAlister Farm Drive. This existing lot is approximately 451,136 square foot (sq. ft.) (10.6 acres) and is identified on City of Portland Tax Map 320 as Block A, Lot 1.
- Lot 4 of the 400 Riverside Street Properties located at 400 Riverside Street. This existing lot is approximately 583,072 sq. ft. (13.7 acres) and is identified on City of Portland Tax Map 320 as Block A, Lot 2.
- Lot 5 of the 400 Riverside Street Properties located at 400 Riverside Street. This existing lot is approximately 113,256 sq. ft. (2.6 acres) and is identified on City of Portland Tax Map 320 as Block A, Lot 4.

Mr. Michael Bobinsky
January 19, 2005
Page 2

These properties about the planned sewer service area to the south along Riverside Street. The Service Agreement and location map is attached to this letter for further explanation of these existing and planned development site locations.

The request to expand the planned sewer service area would include providing public sewerage collection and treatment services for existing and planned developments that include the following:

- Planned development for Lot 6 of the McAlister Farm Subdivision that could include one or more multi-tenant space(s) consisting of office building/warehouse.

- The planned development at Lot 4 of the 400 Riverside Street Properties will include one (1) unit of multiple-tenant space consisting of a one (1) story, 23,400 sq. ft. office building/warehouse.

- The existing developments at Lot 4 of the 400 Riverside Street Properties include a two (2) story, 20,000 sq. ft. office building/warehouse and a two (2) story, 35,250 sq. ft. office building/warehouse.

- The existing developments at Lot 5 of the 400 Riverside Street Properties include a two (2) story, 16,000 sq. ft. office building/warehouse, a two (2) story, 3,500 sq. ft. office building/warehouse, and a two (2) story, 2,400 sq. ft. office building/warehouse.

The sites requested for consideration comprise three adjoining lots located off McAlister Farm Drive and 400 Riverside Street. The planned developments are currently under regulatory review by the Portland Planning Authority as part of a Major Site Plan submission package. The submission package has included off-site wastewater disposal for each of the three (3) development sites into the municipal sewer system on Riverside Street pending approval of the amendment to the service area presented with this submission.

The current tenant occupying the existing Lot 4 development site is Jotul, a company that manufactures and distributes woodstoves, fireplaces, and accessories. Jotul has stated that they will require an expansion to their current facilities in order to conduct future business operations. If Jotul is unable to expand their existing operations within the existing development site, then they will likely have to relocate. The planned development will be adequate for their future needs and allow the company to maintain proximity to the Maine Turnpike (Interstate 95).

The Lot 6 site is undeveloped. Currently, a prospective tenant (Porter Drywall) is considering acquiring the development site, pending the acquisition of permits. The prospective tenant is considering the development site due to their needs and inability to acquire or find other suitable property in the region. It has come to our attention that several tenants currently conducting business within the Riverside Street vicinity are looking to either relocate or expand their business operations within the area.

As you may be aware, the industrial zoning within the communities of Portland, Westbrook, South Portland, and Scarborough is generally characterized by previously developed land with few opportunities for lot growth and availability. In the undeveloped areas of the Industrial zones, the land is generally limited by natural resources or other infrastructure restrictions.

A summary of the anticipated wastewater flows generated from the existing and planned developments discussed above is provided below:

- The anticipated wastewater design flows at Lot 6 and at 400 Riverside Street have been calculated for the following capacities using the requirements contained in the Maine Subsurface Wastewater Disposal Rules (MSWDR) and are based on our assumptions for potential occupancies that include the following:

Lot 6 - McAlister Farm Subdivision (currently undeveloped)

(1) Proposed Building:

Number of Tenants for Proposed Building:

Employees per Tenant:

Design Flow per MSWDR Table 901.2:

4 Tenants
8 Employees
15gpd/employee
480 GPD

Design Flow:

Lot 4 - 400 Riverside Street Properties (Lots 4 & 5)

(1) Proposed Building:

Number of Tenants for Proposed Building:

Employees per Tenant:

Design Flow per MSWDR Table 901.2:

4 Tenants
8 Employees
15gpd/employee
480 GPD

Design Flow:

Water Use Records for (5) Existing Buildings:
(1) Proposed Building:

Number of Tenants for Proposed Building:

Employees per Tenant:

Design Flow per MSWDR Table 901.2:

Subtotal:

Design Flow:

Total Combined Design Flow:

$3,000 \text{ gpd} + 480 \text{ gpd} = 3,480 \text{ GPD}$

$480 \text{ GPD} + 3,480 \text{ GPD} = 3,960 \text{ GPD}$

- A review of water use records obtained from the Portland Water District for the 400 Riverside Street properties shows approximately 2,000 GPD of water usage for the period from September 2002 to October 2003. It is our understanding that these flows are for the existing buildings on the site. Per MSWDR Section 903.2.2, monthly water use records include a multiplier of 1.5 to establish an anticipated design flow and include:

$2,000 \text{ gpd} \times 1.5 = 3,000 \text{ GPD}$

Mr. Michael Bobinsky
January 19, 2005
Page 4

The existing developments on Lot 4 and Lot 5 are served by on-site subsurface wastewater disposal systems. As part of our services for the owner, concepts were developed to continue on-site subsurface wastewater disposal from the existing and planned developments in accordance with the requirements included in the MSWDR and were based on our understanding of the existing site constraints, sizing, physical setbacks, approximate groundwater table elevation, and fate of effluent.

The conclusions resulting from the site layout concepts for on-site subsurface sewerage disposal include the following:

- The Lot 6 development site on McAlister Farm Drive is severely limited for the placement of an on-site wastewater disposal system. The limitations are principally due to on-site wetlands and natural topographic constraints associated with a ravine containing a regulated stream and floodplain wetland.

- The Lot 4 development site at 400 Riverside Street Properties is also severely limited for the placement of a new on-site subsurface wastewater disposal system or expansion to the existing disposal field. The existing site footprint area is abutted by wetlands to the north, east and west and contains a natural drainage way to the northwest of the site. Due to these site constraints, the planned development at Lot 4 includes the placement of the existing 23,400 sq. ft. office building/warehouse in the approximate vicinity of the existing subsurface disposal field; therefore, the existing subsurface disposal system would need to be relocated if the new building is to be constructed.

- The existing developments at Lots 4 and 5 at the 400 Riverside Street Properties include existing on-site subsurface wastewater disposal systems that may be nearing their design capacities and design life, and appear to have operating conditions that are worsening over time. On this basis, the owner is seeking approval to discharge to the new municipal sewer once it is activated.

It is the owner's intent to discontinue these on-site subsurface systems and discharge wastewater flows from the existing buildings as well as the proposed buildings to the soon-to-be-activated Riverside Street Sewer. The overall plan would be to consolidate these flows into one discharge connection to the municipal sewer system on Riverside Street that ultimately discharges to the Presumpscot North Main Interceptor Sewer.

Wastewater flows from the existing and proposed buildings would be conveyed by proposed private, low-pressure sewer pump systems that discharge via a planned 3-inch force main to either a planned private, on-site pump station at the adjacent Lot 4 development site prior to discharge to the municipal sewer system on Riverside Street, or directly via a planned 3-inch force main to the municipal sewer system on Riverside Street. All systems would be privately owned and maintained. The owner, operating as the Galloway Group, currently provides all site management functions including maintenance and upkeep of the property. They routinely

Mr. Michael Bobinsky
January 19, 2005
Page 5

contract maintenance and construction needs with area subcontractors and would continue to do so in the future.

The design intent and anticipated construction sequence for connection to the Riverside Street sewer includes the following:

- a. Installation of a proposed 3-inch force main along the 400 Riverside Street access drive and connection to the last sewer manhole in Riverside Street in front of the Turnpike Authority property along Riverside Street in order to tie-in to the existing sewer main on Riverside Street. Utility easements would be established for these infrastructure routes.

- b. Installation of the proposed private, low-pressure sewer pump systems for the existing buildings on the Lot 4 development site.

- c. Once the existing Lot 4 buildings are connected to the municipal sewer system on Riverside Street, the existing subsurface disposal field would be abandoned/removed and construction of a one (1) story, 23,400 sq. ft. office building/warehouse would commence in the location identified on the plans. The planned development would include the installation of the proposed private, low-pressure sewer pump system.

- d. The Lot 6 development may occur prior to the activation of the Riverside Street sewer. If approved, Porter Drywall proposes to install a temporary holding tank(s) to collect wastewater until the Riverside Street sewer becomes active, at which time a force main connection crossing Lot 4 would be installed to connect to the terminus manhole in the street, or to a force main installed for the proposed Lot 4 development. Sanitary sewerage generated on the Lot 6 site would be collected from the proposed building by a 6" PVC gravity sewer lateral conveying wastewater to a proposed private, low-pressure sewer pump system.

- e. The existing facilities at Lot 5 would tie-in to the force main prior to the municipal sewer system on Riverside Street, and may also require an independent pump and force main configurations.

In all cases, a 3-inch PVC force main would be installed along the existing 400 Riverside Street access drive to convey sanitary sewer flows from the on-site pump stations to the Riverside Street sewer. The force main may need to be installed along the frontage of the Maine Turnpike Authority property along Riverside Street in order to tie-in to the existing sewer main on Riverside Street. Utility easements would be established for these infrastructure routes. All work would be performed in accordance with the City of Portland Technical Standards. Please find Utility Plans 4A and 4B for the planned off-site sewer disposal layout attached to this letter.

Mr. Michael Bobinsky
January 19, 2005
Page 6

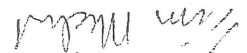
It is our understanding that during the summer of 2004 the Portland Water District installed the cross-country sewer line that would convey flows from the Riverside Street sewer service area to the Presumpscot River Pumping Station. We acknowledge that this cross-country sewer line would need to be activated prior to the activation of the remaining inactive portion of sewer main on Riverside Street and acceptance of sewer flows from the existing and planned developments.

We look forward to your timely response to our request for consideration to amend the sewer service area established in the Portland-Westbrook Inter-municipal Sewer Service Agreement to include the development sites at Lot 6 of the McAlister Farm Subdivision and Lots 4 and 5 of the 400 Riverside Street Properties at 400 Riverside Street.

Please call this office with any questions or if additional information is required.

Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.



for Stephen R. Bushey, PE
Senior Engineer

SRB/sq/JN2314/Bobinsky-PPW-1-18-05

Enclosures: Riverside Street Sewer Service Area Map
Location Map
Site Utility Plans, 4A and 4B

c: Martin Rist, Rist/Brunet Family Trust

Kandi Talbot, Portland Planning Department

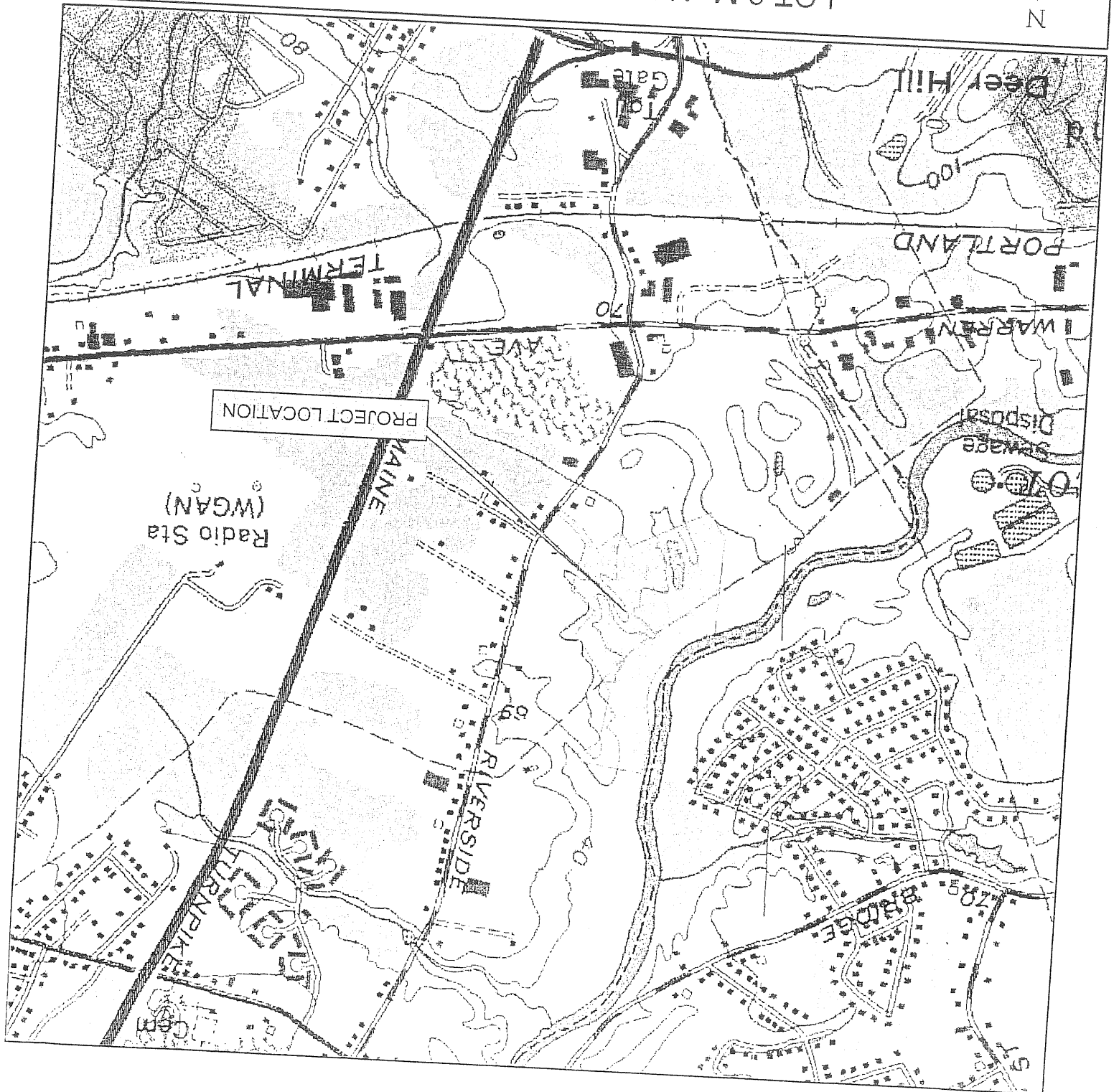
Deluca-Hoffman Associates, Inc.
778 MAIN STREET, SUITE 8
SOUTH PORTLAND, ME 04106
207-775-1121
www.delucahoffman.com

DRAWN: RJK
CHECKED: CJO
DATE: NOV. 2003
FILENAME: I:\2300 Jobs\2314\2314-FIGURE1.mxd
SCALE: 1 inch equals 1,000 feet



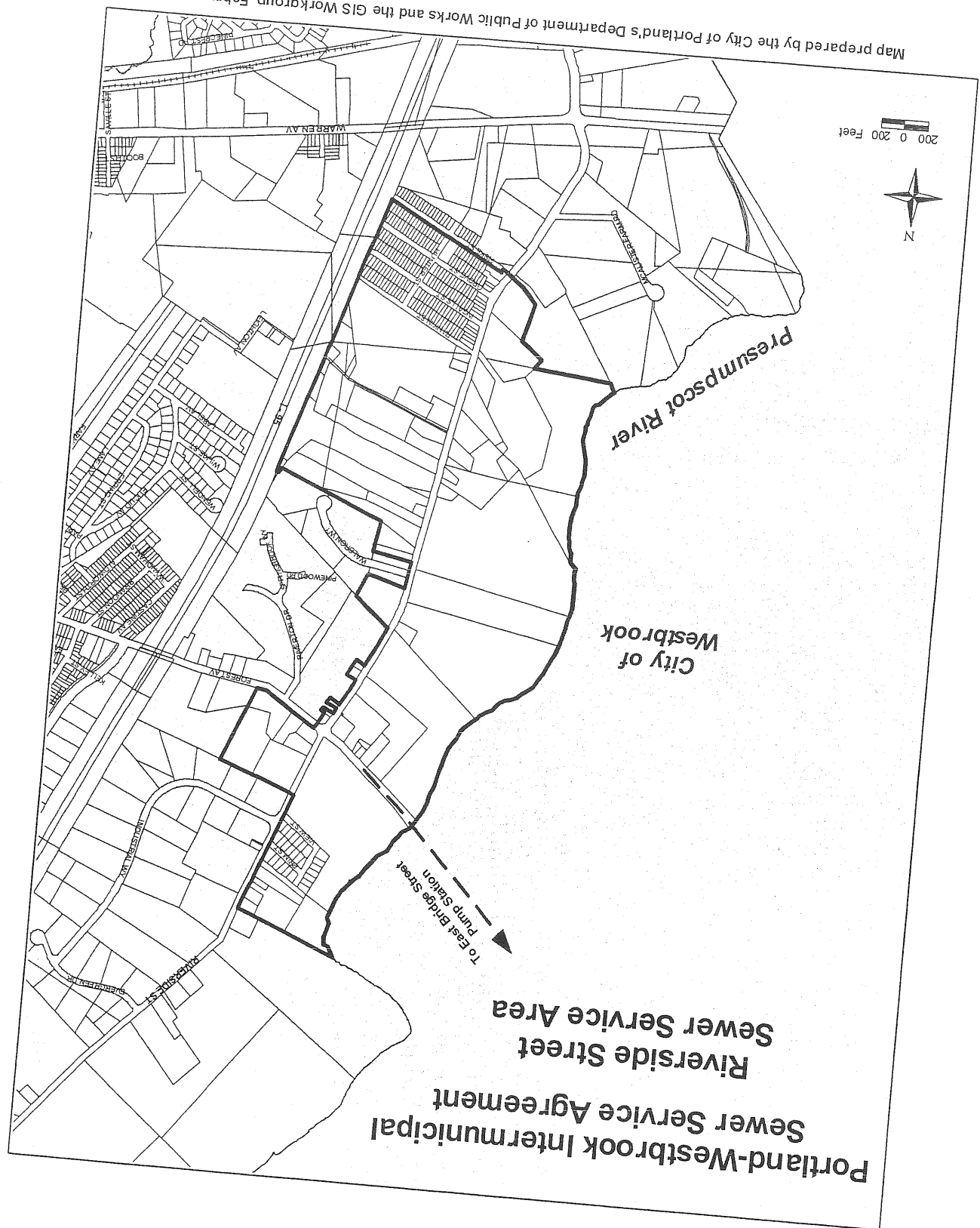
FIGURE 1

LOT 6 McALISTER FARM SUBDIVISION
USGS TOPO MAP
SOURCE: CITY OF PORTLAND GIS DATA



**City of Portland Rules & Regulations
For The Use Of The Wastewater System-Exhibit "A"
Westbrook Inter municipal Sewer Service Agreement**

**Portland-Westbrook Inter municipal
Sewer Service Agreement
Riverside Street
Sewer Service Area**



Map prepared by the City of Portland's Department of Public Works and the GIS Workgroup February 2003

WAREHOUSE BUILDING
LOT 4 OF 400 RIVERSIDE STREET
SITE PLAN AND SITE LOCATION OF DEVELOPMENT REVIEW
RIST/BRUNET FAMILY TRUST, APPLICANT

Submitted to:
Portland Planning Board
Portland, Maine

Submitted by:
Kandice Talbot, Planner

October 20, 2005

6. Soils and Drainage

A stormwater collection system will serve the planned development and will collect stormwater runoff from the site's impervious surfaces and convey it into two water quality treatment units prior to discharge to riprap plunge pools. The first riprap plunge pool will discharge adjacent to a natural marsh and the second will discharge to a natural tributary swale to the north. Both swales are tributary to the Presumpscot River.

The applicant had previously requested a waiver of the stormwater standards because there appeared to be an increase in the post development conditions. However, since the last workshop, new calculations were completed and there is no need for a waiver because the post development runoff is less than the pre development runoff.

The Development Review Coordinator has reviewed the plans and the review memo is included as Attachment 9. The DRC is recommending that the applicant revisit the site of a proposed level lip spreader and provide some clarification of the design of the Stormwater Treatment units. The DRC is also requesting additional information shall be provided regarding the Historic Sites standard of Site Location and additional information be provided for the maintenance and inspection of the facilities. A potential condition of approval is:

- that the developer address the Development Review Coordinator's memo dated September 27, 2005 regarding stormwater, historic sites and maintenance and inspection of facilities.

7. Exterior Lighting

The applicant is proposing pole-mounted shoebox fixtures and wall-pack units. Catalogue cuts of the lights are included as Attachment 7. A photometric plan has been submitted and the lighting appears to meet the lighting standards.

8. Fire

Sprinkler service will be provided by the development. There is also a hydrant proposed in the vicinity of the proposed building. The hydrant location will have to be approved by the Fire Department. A potential condition of approval is:

- that the hydrant location shall be reviewed and approved by the Fire Department prior to issuance of a building permit.

I. INTRODUCTION

Rist/Brunet Family Trust is requesting major site plan review of a proposal to develop a 23,140 sq. ft. office/warehouse building on Lot 4 of the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, at 400 Riverside Street.

Lot 4 of the 400 Riverside Street Properties is zoned I-M Industrial Moderate and is approximately 14.5 acres in size.

The applicant is proposing to construct a one (1) story, 23,140 sq. ft. office building/warehouse on Lot 4 of the 400 Riverside Street Properties. The site is currently developed and includes an existing 26-foot-wide paved access drive from Riverside Street, a two (2) story, 20,000 sq. ft. office building/warehouse, and a two (2) story 35,250 sq. ft. office building/warehouse.

90 notices were sent to neighborhood property owners. A neighborhood meeting was held, with one attendee. The neighborhood information is included as Attachment 10.

II. STAFF REVIEW

The proposed development has been reviewed by staff for conformance with the relevant review standards of the site plan ordinance and DEP Site Location of Development Act. Staff comments are highlighted in this report.

III. SITE PLAN REVIEW

1/2. Traffic

Lot 4 contains an existing 26 ft. wide paved access drive from Riverside Street. No changes are planned for this existing drive. Access to the site will be provided from an existing 30 ft. wide paved access drive within the development.

The site currently has 89 parking spaces. The applicant is proposing 45 new parking spaces for a total of 126 parking spaces.

Since the Presumpscot River borders Lot 4, staff is recommending that the applicant provide a pedestrian trail easement along the river. Portland Trails has acquired a trail easement from Lucas Tree and Sani Clean located at 470 Riverside Street, and this would allow for future connection of trails. A proposed condition of approval is:

- that the applicant provide a trail easement to the City along the rear of the property to connect to the trail easements, prior to issuance of a building permit.

3. Bulk, Location, Height of Proposed Buildings

The proposed structure will be typical metal-framed buildings similar in design to nearby buildings.

4. Sewers, Stormdrains, Water

The utility service for water to the proposed development will come from Riverside Street. Two existing 2-inch domestic water lines extend along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. A water capacity letter has been submitted.

The applicant has requested that the Westbrooke/Portland interlocal sewer agreement be amended to allow Lot 4 to connect into the sewer within Riverside Street. Wastewater flows from the existing and proposed buildings on Lot 4 will be conveyed by 8-inch gravity sewer laterals to a proposed private pump station. Discharge will be via a proposed 3-inch force main to the municipal sewer system on Riverside Street. Alternatively, each existing and proposed building may be serviced by individual low-pressure pump systems that each connect to the 3-inch force main to be installed and connected to the municipal sewer system on Riverside Street.

To amend the Westbrooke/Portland interlocal agreement, Public Works must hold a public hearing to redefine the Westbrooke Interlocal Sewer Service Area. Public Works will be recommending at this public hearing that Lot 4 be included within the Interlocal Sewer Service Area on Riverside Street. This service area has a total capacity of 150,000 gallons of wastewater that may be discharged to the City of Westbrooke's Bridge Street Pump Station. However, due to the capacity limitation, Public Works is recommending that they be included in this service area with the condition that the wastewater generation be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge. A potential condition of approval is:

- that the wastewater generation from Lot 4, 400 Riverside Street shall be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge. In the event the City adopts an amendment to the Westbrooke/Portland inter-local agreement, the applicant shall connect and discharge to the Westbrooke system.

Electrical service will include the installation of underground electric service.

5. Landscaping and Existing Vegetation

The applicant is proposing that the existing mature trees will be maintained along the property lines of the project site to the extent practicable. Tree plantings and shrubs are being proposed adjacent to some of the paved area. The City Arborist has reviewed and approved the plans.

IV. STAFF RECOMMENDATION

This project, as proposed meets the Site Plan ordinance and the Site Location of Development Law. Staff is recommending that the Planning Board approve this proposal with conditions.

V. MOTIONS FOR THE BOARD TO CONSIDER

On the basis of plans and materials submitted by the applicant and on the basis of information contained in Planning Report 55-05 relevant to standards for site plan regulations, Site Location of Development Law and other findings as follows:

A. That the proposed development [is/is not] in conformance with the Site Location of Development Review.

i. that the developer address the Development Review Coordinator's memo dated September 27, 2005 regarding stormwater, historic sites and maintenance and inspection of facilities.

B. That the plan [is/is not] in conformance with the site plan standards of the land use code.

i. that the wastewater generation from Lot 4, 400 Riverside Street shall be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge. In the event the City adopts an amendment to the Westbrook/Portland inter-local agreement, the applicant shall connect and discharge to the Westbrook system.

ii. that the developer address the Development Review Coordinator's memo dated September 27, 2005 regarding stormwater, historic sites and maintenance and inspection of facilities.

iii. that the hydrant location shall be reviewed and approved by the Fire Department prior to issuance of a building permit.

Attachments:

1. Applicant's Submittal Letter dated June 20, 2005
2. Letter from Public Works regarding Riverside Street Sewer Service Area
3. Amended Hydrologic Computations
4. Stormwater Management System Inspection and Maintenance Manual
5. Tier 1 NRPA Application
6. Applicant's Submittal dated September 13, 2005
7. Lighting Catalogue Cuts
8. Typical Building Elevation
9. DRC's Memo dated September 27, 2005
10. Neighborhood Meeting Information
11. Plans

iv. Full parcel overlap wildlife corridor

v. 55-05 Historic Commission

vi. Historic Commission

vii. Commission

viii. Decided draft easement to Portland Trails

1. Wastewater – We understand that the City of Portland and the City of Westbrook have executed an Inter-municipal agreement whereby the remaining existing sewer collection system in Riverside Street has been activated and is now collecting and conveying wastewater flows to the Westbrook Pump Station located off Route 302. We are also in receipt of the attached letter from the City of Portland Public Works Department (PWD) confirming that a Public Hearing will be scheduled to allow public comment on the applicant's request that the 400 Riverside Street Properties be included within the Riverside Street sewer service area. Pending no significant public concern, we assume that the properties will be included within the service area and that the existing and proposed developments contained within the 400 Riverside Street Properties will be allowed connection for the discharge of wastewater to the Riverside Street sewer system. We understand that it is the PWD's intent to make a positive recommendation on this request. We also understand that the Lot 6 development was granted conditional approval by the Planning Authority based on similar circumstances.

Our responses to the peer review comments are provided as they were presented in the summary section of Mr. Sheff's memorandum.

We offer the following responses to comments provided by Barry Sheff of Woodard and Curran regarding the proposed project at 400 Riverside Street. As you are aware, the Rist/Brunet Family Trust is no longer proposing development activity at Lot 6 of the McAlister Farm Drive Subdivision since they propose to transfer the property to Rio-Tierra LLC. On behalf of Rio-Tierra LLC, Mohr & Serein has recently received Planning Board approval for development activity on the Lot 6 property. Therefore, the applicant is now only seeking Planning Board approval for the proposed 23,140 SF office/warehouse building on Lot 4 of the 400 Riverside Street Properties. Amended Site Plan drawings detailing the Lot 4 development activities are included with this submission package.

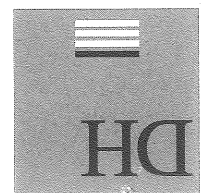
Dear Kandi:

**Subject: Response to Peer Review Comments of November 22, 2004
Lot 4 of the 400 Riverside Street Properties
Applicant, Rist/Brunet Family Trust**

Ms. Kandi Talbot
City of Portland
389 Congress Street
Portland, Maine 04101

June 20, 2005

DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207 775 1121
FAX 207 879 0896



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

Att. 1



MEMORANDUM

TO: Kandil Talbot, Planner, City of Portland
FROM: Barry Sheff, P.E., Project Manager, Kenneth Volock, Engineer

DATE: September 27, 2005

RE: Peer Review: Application for Major Site Plan Review and Site Location of Development
400 Riverside Properties - Lot 4

Woodard & Curran has performed a review of the Major Site Plan Application and its attached statements, drawings and figures for Lot 4 of 400 Riverside Properties. The project includes a one story, 23,140 square foot office/warehouse building with associated parking, utilities. The documents reviewed were submitted by the Applicant's Engineer to the City of Portland for site plan approval and for site location of development approval per the City's delegated authority.

Woodard & Curran originally reviewed the application and provided comment on August 18, 2004. The project has twice previously been reviewed as part of an application in conjunction with Lot 6 of the McAlister Farm Subdivision. The Applicant's Engineer provided responses to comments on October 7, 2004 and most recently on June 20, 2005. The most recent response represents the first time the 400 Riverside Street Lot 4 site has been presented separately from McAlister Farms Lot 6. The purpose of this review is to determine whether the proposed project meets the City's Ordinance criteria and the State's Site Location of Development Standards. This memorandum does not address any responses to staff comments.

Documents Reviewed

- Cover letter and Application for Major Site Plan Review, McAlister Farm Subdivision - Lot 6, McAlister Farm Drive & 400 Riverside Properties - Lot 4, 400 Riverside Street, prepared by Deluca-Hoffman Associates, Inc. to the City of Portland Planning Authority, on behalf of Rist/Brunet Family Trust, dated April 2004, with associated drawings and figures.

- Response to Staff and Peer Review Comments, from Deluca-Hoffman Associates, Inc. to the City of Portland Planning Authority, dated October 7, 2004, with the following attachments: Plan sheets Revision 2 dated October 4, 2004; Maine Department of Environmental Protection Approval Letter for NRPA Tier 1 Permit for Lot 4; Geotechnical Investigation performed by R.W. Gillespie & Associates, Inc.; Inspection and Maintenance Manual for Stormwater Management System and Common Facilities prepared by Deluca-Hoffman Associates, Inc.; and Lighting catalogue sheets.

- Response to Peer Review Comments of November 22, 2004, from Deluca-Hoffman Associates, Inc. to the City of Portland Planning Authority, dated June 20, 2005, with the following attachments: Plan sheets Revision 3 dated June 2005; Letter from Portland Public Works concerning the Inter-municipal Service Area; Amended hydrologic computations and supporting documentation; Hydrologic computations and supporting documentation for stormwater treatment units and level lip spreaders; and Inspection and Maintenance Manual for Stormwater Management System and Common Facilities prepared by Deluca-Hoffman Associates, Inc.

- Additional Modeling calculations provided by Applicant's Engineer pursuant to our phone conversation of September 22, 2005.
- City of Portland Code of Ordinances, Chapter 14 Land Use.

- City of Portland, Maine, Technical and Design Standards and Guidelines.

Major Site Plan Review

Wastewater (City Site Plan, Sec 14-526, (a)(5); Site Law, Sec. 17)

The Applicant has requested conditional approval based on the property being accepted by the Portland Department of Public Works into the Westbrook Intermunicipal Sewer Service Area. At the time of the response, it appeared likely that Public Works acceptance would be granted, but wastewater generated would be limited to flows listed in their capacity request letter. Based on this and the fact that McAlister Farm Lot 6 was granted the same conditional approval, the conditional approval seems appropriate.

Stormwater (City Site Plan, Sec 14-526, (a)(8); Site Law, Sec. 12)

In reviewing the Redevelopment and Postdevelopment Watershed Plans, we questioned a few aspects of the stormwater model and discussed them with the Applicant's Engineer. After slightly modifying and then returning the model, the Applicant's Engineer provided Woodard & Curran with updated modeling results. These results indicated that the peak runoff discharged from the site is reduced due to detention within the tributary swale. We recommend these revised calculations (dated September 23, 2005) be included in the Applicant's formal application. The previously requested variance from the peak discharge standard is not necessary.

Based upon the model results for sizing, the Level Lip Spreaders appear to be sized correctly. It should be noted that Section 5, Paragraph A(3) of the soon-to-be-adopted MeDEP Chapter 500 Stormwater Management states "level spreader length may not be more than 25 feet unless approved by the department." Level Lip Spreader #2 is 29 feet long; the Applicant's Engineer may want to revisit.

The water quality units have been sized based on MeDEP sizing requirements using the one-year storm. The Applicant's Engineer should also consult with the manufacturer about whether a bypass is warranted to ensure the proper function of the unit in meeting its design intent.

Historic Sites (City Site Plan, Sec 14-526, (a)(18); Site Law, Sec. 9)

In the original application, a Phase 1 Prehistoric Archaeological Survey was requested by the Maine Historic Preservation Commission (MHPC). As additional information, the MHPC requested photos of any buildings over 50 years old that are on, adjacent to, or across the road from the proposed development. In the October 7, 2004 response to comments, the Applicant's Engineer indicated that the Phase 1 Prehistoric Archaeological Survey would be performed.

In the most recent response to comments, the Applicant's Engineer states that the MHPC recently signed off on the McAlister Farm Lot 6 development and that should be sufficient for 400 Riverside Lot 4 as well. However, it is unclear from any provided correspondence to or from the MHPC where their initial concern lay or what was done to alleviate their concerns. The Applicant should provide evidence specific to 400 Riverside Lot 4 indicating MHPC acceptance.

Site Location of Development Review

Maintenance and Inspection of Facilities (Site Law, Sec. 13)

The Inspection and Maintenance Manual for Stormwater Management System and Common Facilities was revised by the Applicant's Engineer and resubmitted with the most recent response. The following items require additional information and/or clarification.

- The manual identifies the 400 Riverside Street Property Manager as the party responsible for the administration the inspection and maintenance program. This person should be identified. If a property manager has not yet been identified, a condition of approval should be the hiring of a qualified individual to fill this role.
- The revised manual contains inspection and maintenance information for the natural buffers as requested. However, the information is not listed in the table of contents. In order for the manual to be easier to use, and so that vital information is not lost, the table of contents should be updated to include the natural buffers.

Summary

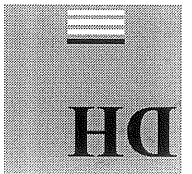
The proposed project appears to be nearing a level of development that meets the standards set forth in the Site Plan Article of the City's Land Use Ordinance. Remaining issues to be resolved include:

- Wastewater – It appears that the development is on the verge of being accepted into the Westbrook Inter-municipal Sewer Service Area, but with a restriction on the amount of wastewater that may be discharged.
- Stormwater – It appears as though the previously requested variance from the peak discharge standard is not necessary; however, the Applicant's Engineer should provide revised stormwater calculations to the planning department to be included as part of the Applicant's formal application. The Applicant's Engineer may want to revisit the size of Level Lip Spreader #2. Some clarification of the design of the Stormwater Treatment units is still required.
- Historic Sites – Additional information still needs to be provided to the MHPC and their approval of the project should be obtained.
- Maintenance and Inspection of Facilities – The natural buffers should be called out in the inspection and maintenance manual table of contents. The property manager for the site should be identified or one should be hired.

The Applicant should be able to resolve these issues within the basic design of the project without major revision. We hope this information is useful to the City during the processing of this application. Please contact me if you have any questions regarding our comments.

BSS/KRV/
203591.01

cc: File



DELUCA-HOFFMAN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 778 MAIN STREET
 SUITE 8
 SOUTH PORTLAND, MAINE 04106
 TEL. 207 775 1121
 FAX 207 879 0896

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

MEMORANDUM

DATE: October 19, 2005
TO: Kandi Talbot, Portland Planning
FROM: Stephen R. Bushey, P.E.
SUBJECT: Public Information Meeting
 Rist/Brunet Family Trust
 Proposed Site Development
 Lot 4 of the 400 Riverside Street Properties

Kandi,

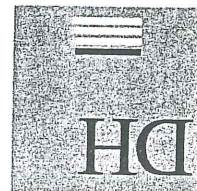
In Accordance with the Planning Authority requirements pertaining to Site Plan Review, a Public Information meeting was held at 5:30 PM, October 18, 2005 at the office of Deluca-Hoffman Associates, Inc. One member of the public attended:

Name	Nan Cumming
Owns	Executive Director Portland Trails
Address	305 Commercial St. Portland, ME 04101
Telephone	207-775-2411

A brief overview of the project was presented and discussed. The attendee had no specific questions pertaining to the project. The attendee did inquiry about the potential for the conveyance of an easement to the organization along the back of the property and proximate to the river.

Cc: Nan Cumming

SRB/jn2314/talbot10-19-05



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS
778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207 775 1121
FAX 207 879 0896

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

October 7, 2005

Alex Landry
PO Box 7625
Portland, ME 04112

**Subject: Public Information Meeting
Rist/Brunet Family Trust
Proposed Site Development at Lot 4 of the 400 Riverside Street Properties**

Dear Sir:

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information Meeting to be held on Tuesday, October 18, 2005 at 5:30 p.m. The meeting will be held at the Deluca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board on October 25, 2005.

Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/sq/JN2314/10-13-05 PublicMeeting(10-7-05)

c: ~~Kandi Talbot - City of Portland~~
Marty Rist

Alex Landry P.O. Box 7625 Portland, ME 04112	Alexander Jaegerman 398 Spring Street Portland, ME 04102	Alfred Waxler PO Box 6681 Portland, ME 04103
--	--	--

Anne Weigel 92 Hamblet Avenue Portland, ME 04103	Barb Wood 125 Emery Street Portland, ME 04102	Betsy Sawyer-Manter 34 Wellstone Drive Portland, ME 04103
--	---	---

Brendan Reilly Caldwell Banker 34 Chelmsford Street Chelmsford, MA 01824	Bruce Campbell East Dering Neighborhood Association 17 Graystone Lane Portland, ME 04103	Catherine Martin 114 West Commonwealth Drive Portland, ME 04103
---	---	---

Cheryl Leeman, City Councilor Portland City Hall 389 Congress Street Portland, ME 04101	Chris Busby 11 Cushman Street Portland, ME 04102	Connie Clifford West End Neighborhood Assoc. 15 Dow Street Portland, ME 04102
--	--	--

Crystal Canney WGME TV 1335 Washington Avenue Portland, ME 04103	Dan & Victoria Burke 90 Huntington Avenue Portland, ME 04103	Dave Geister P.O. Box 2222 South Portland, ME 04116-2222
---	--	--

David A. Marshall 41 Pine Street Portland, ME 04102	David Very Back Cove Neighborhood Association 67 Codman Street Portland, ME 04103	Dawn Carrigan, Principal Longfellow School 432 Stevens Avenue Portland, ME 04101
---	--	---

Deb Keenan 28 Dorothy Street Portland, ME 04101	Donna Carr, City Councilor Portland City Hall 389 Congress Street Portland, ME 04101	Ed. Democracy P.O. Box 4189 Portland, ME 04101-0398
---	---	---

Edward Kearney Deering Highlands Neighborhood Assoc. 67 Highland Street Portland, ME 04103	Elizabeth Hoglund Stroudwater Neighborhood Assoc. 138 Stroudwater Road Portland, ME 04102	Ethan Strimling 211 Spring Street Portland, ME 04102
---	--	--

Fred Dillon Libbytown Neighborhood 18 Davis Street Portland, ME 04102	Gary Marcisso Munjoy Hill Neighborhood Association 69 Vesper Street Portland, ME 04101	Greater Portland Council of Governments 68 Marginal Way Portland, ME 04101
--	---	--

Henry Leclair 209 Range Road Windham, NH 03087	Jaime Parker 73 Atlantic Street Portland, ME 04101	James Cloutier, City Councilor Portland City Hall 389 Congress Street Portland, ME 04101
--	--	---

James Cohen, City Councilor	Portland, ME 04101	389 Congress Street	Portland, ME 04101
Jill Duson, Mayor	Portland, ME 04101	389 Congress Street	Portland, ME 04101
Joe Kane	Peaks Island, ME 04108	72 Torrington Avenue	Peaks Island, ME 04108
Peaks Island Neighborhood Association	Portland, ME 04101	389 Congress Street	Portland, ME 04101
Karen Geraghty, City Councilor	Portland, ME 04101	Portland City Hall	Portland, ME 04101
Lynn Clarkson	Portland, ME 04103	191 Marborough Road	Portland, ME 04103
Mark Sengelmann	Portland, ME 04101-2211	43 Deering Street	Portland, ME 04101-2211
Port City Design	Portland, ME 04101	17 Atlantic Street	Portland, ME 04101
Meredith Springer	Peaks Island, ME 04108	39 Maple Street	Peaks Island, ME 04108
Michael Pizzo	North Deering Neighborhood Housing	88 Christy Road	Portland, ME 04103
Mrs. Kimmel	Brookside Neighborhood	31 Brookside Road	Portland, ME 04103
Nan Cumming	Portland Trails	305 Commercial Street	Portland, ME 04101
Janice Carpenter, Vice President	Portland, ME 04103	9 West Commonwealth Drive	Portland, ME 04103
Riverton Community Association	Portland, ME 04101	Portland City Hall, 4th Floor	Portland, ME 04101
Jennifer Dorr	Portland, ME 04101	389 Congress Street	Portland, ME 04101
Jo Coyne, President	West End Neighborhood Association	36 Salem Street	Portland, ME 04102
John Leavitt	NE Regional Council of Carpenters	60 Industrial Drive	Augusta, ME 04330
Kathleen Spahn	Boulevard Park Association	95 Deerfield Road	Portland, ME 04101
Linda Kokemueller	Maine DEP	312 Canco Road	Portland, ME 04103
Marc Foster	29 Taylor Street #1	Portland, ME 04102	Portland, ME 04102
Mark Reilly	24 Ashmont Street	Portland, ME 04103	Portland, ME 04103
Mary Griffith	6 Eastern Promenade, Unit #2	Portland, ME 04101	Portland, ME 04101
Michael Patterson	Parkside Neighborhood Association	42 Deering Street	Portland, ME 04101
Mike Morse	Maine DEP	312 Canco Road	Portland, ME 04103
Mike and Sandy Conroy	63 Plymouth Street	Portland, ME 04103	Portland, ME 04103
Michael Carey	89 Auburn Street, Box 1080	Portland, ME 04103	Portland, ME 04103
Michael Patterson	Parkside Neighborhood Association	42 Deering Street	Portland, ME 04101
Nancy Bartlett	12 Bryant Street	Portland, ME 04103	Portland, ME 04103

Nicholas Mavodones, Jr., City Councilor
Portland City Hall
389 Congress Street
Portland, ME 04101

Fam Burnside
64 Lester Drive
Portland, ME 04103
Western Prom Neighborhood Assoc.
6 Bowdoin Street
Portland, ME 04102

Paul Oueltte
Woodfords/Oakdale Neighborhood
83 Noyes Street
Portland, ME 04103

Peaks Island Land Preserve
PO Box 99
Peaks Island, ME 04108
Peggy Morn
66 Farnham Street
Portland, ME 04101

Peter O'Donnell, City Councilor
Portland City Hall
389 Congress Street
Portland, ME 04101

Portland West Neigh. Planning Council
Liz Webber
181 Brackett Street
Portland, ME 04102

REP Benjamin Dudley III
District 30
9 Ponce Street
Portland, ME 04101

REP Edward J. Suslovic
District 32
46 Kenwood Street
Portland, ME 04102

REP Glenn Cummings
District 37
24 Nevens Street
Portland, ME 04103

REP Joseph Brannigan
District 35
168 Concord Street
Portland, ME 04103

Ron Spinella
Bayside Neighborhood Association
377 Cumberland Avenue
Portland, ME 04101

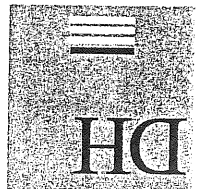
Stephen Parazone
47 Bolton Street
Portland, ME 04102
Steven Scharf
P.O. Box 4135
Portland, ME 04101

The Forecaster
Chris Busby
PO Box 66797
Falmouth, ME 04105

Tom Ainsworth
Stroudwater Neighborhood Association
12 Garrison Street
Portland, ME 04102
Vinal Thompson
Bolton Street Neighborhood Association
130 Bolton Street
Portland, ME 04103

William Meridian
105 Stoncrest Drive
Portland, ME 04103

William R. Gorham, City Councilor
Portland City Hall
389 Congress Street
Portland, ME 04101



DeLUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207 775 1121
FAX 207 829 0896

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

October 7, 2005

Edwin J. Ahearn
18 Grove Street
Portland, ME 04103

Subject: Public Information Meeting

Rist/Brunet Family Trust

Proposed Site Development at Lot 4 of the 400 Riverside Street Properties

Dear Sir:

On behalf of the Rist/Brunet Family Trust, DeLuca-Hoffman Associates, Inc. is inviting you to a Public Information Meeting to be held on Tuesday, October 18, 2005 at 5:30 p.m. The meeting will be held at the DeLuca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board on October 25, 2005.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/sq/JN2314/10-18-05 PublicMeeting(10-7-05)

c: Kandi Talbot - City of Portland
Marty Rist

ALLEN & PIZZO ASSOCIATES INC
21 FOX RUN RD
FALMOUTH, ME 04105

AHEARN EDWIN J WWII VET
18 GROVE ST
PORTLAND, ME 04103

AHEARN EDWIN J
18 GROVE ST
PORTLAND, ME 04103

BATSON ARTHUR W JR
PO BOX 958
PORTLAND, ME 04104

BAILEY ROBERT H & PATRICIA A JTS
5 LEIGHTON AVE
PORTLAND, ME 04103

ANDRE REBECCA W
286 SOUTH GREAT RD
LINCOLN, MA 01773

BLACKWELDER ADAM P
10 MAYFLOWER DR
OLD ORCHARD BEACH, ME 04064

BERZINIS REALTY LIMITED LIABILITY
COMPANY
152 BRUSHCREEK DR
SANFORD, FL 32771

BENWELL JOHN H
21 LEIGHTON AVE
PORTLAND, ME 04103

CP & S ASSOCIATES LLC
583 WARREN AVE
PORTLAND, ME 04103

CLARK ROY & ELAINE CLARK JTS
68 LITTLE RIVER DR
GORHAM, ME 04038

CASEY & PAIGE LLC
583 WARREN AVE
PORTLAND, ME 04103

DIRIGO DRYWALL ASSOCIATES
101 MCALLISTER FARM RD
PORTLAND, ME 04103

DIPETRANTONIO H DIANE
20 CONTINENTAL DR
PORTLAND, ME 04103

CROCKETT RIVERSIDE LLC
39 GRAYSTONE LN
PORTLAND, ME 04103

HARVEY INDUSTRIES INC
1400 MAIN ST
WALTHAM, MA 02451

FISHER GREGORY J & ANN M
FONTAINE-FISHER JTS
10 BELMEADE RD
PORTLAND, ME 04101

DRAKE FRANCIS P
PO BOX 1378
PORTLAND, ME 04104

HOPKINS SCOTT W
537 RIVERSIDE ST
PORTLAND, ME 04103

HAWKES GERALD A WWII VET &
CARLITA E JTS
427 RIVERSIDE ST
PORTLAND, ME 04103

HATT CLINTON JR
84 EASTMAN RD
CAPE ELIZABETH, ME 04107

INGRAHAM BRIAN S & SANDRA J
109 ELMWOOD AVE
WESTBROOK, ME 04092

INGALLS DONALD R & JEAN C JTS
419 RIVERSIDE ST
PORTLAND, ME 04103

HOUSE WARMERS COAL COMPANY
7 PENWOOD CIR
CAPE ELIZABETH, ME 04107

KNOWLES ELLEN MARY
PO BOX 1307
STANDISH, ME 04084

KIMCO REALTY LLC
65 GRAY RD BOX 4
FALMOUTH, ME 04105

JACOBSKY LYNN M
14 GROVE ST
PORTLAND, ME 04103

MAINELY INVESTMENTS
587 RIVERSIDE ST
PORTLAND, ME 04103

MAINE TURNPIKE AUTHORITY
430 RIVERSIDE ST
PORTLAND, ME 04103

LUCAS TREE EXPERT CO INC
PO BOX 958
PORTLAND, ME 04104

NECOMM PROPERTIES INC 480 RIVERSIDE ST PORTLAND, ME 04103	NEWTON SHARON M 577 RIVERSIDE ST PORTLAND, ME 04103	NORTHERN N E DISTRICT COUNCILS ASSEMBLIES OF GOD PO BOX 3775 PORTLAND, ME 04104
NORTHERN NE DIST COUNCIL OF ASSEMBLIES OF GOD PO BOX 611 PORTLAND, ME 04104	NORTHERN NEW ENGLAND DIST COUNCIL ASSEMBLIES OF GOD PO BOX 611 PORTLAND, ME 04104	NORTHERN NEW ENGLAND DISTRICT COUNCIL ASSEMBLIES OF GOD PO BOX 611 PORTLAND, ME 04104
PATTLE CAROL A 423 RIVERSIDE ST PORTLAND, ME 04103	PENDE ASSOCIATES INC 42 SOUTH ST YARMOUTH, ME 04096	PERRY BARBARA C BLIND LIFE INT 12 GROVE ST PORTLAND, ME 04103
PINE TREE PAPER CO INC 633 WARREN AVE PORTLAND, ME 04102	PIRONE JOSEPH D & ETALS JTS ONE PARTRIDGE CIRCLE PORTLAND, ME 04102	PORTLAND PIPE LINE CORP PO BOX 2590 SOUTH PORTLAND, ME 04116
PORTLAND WATER DISTRICT 225 DOUGLASS ST PORTLAND, ME 04102	PTC DEVELOPMENT CORP 1400 JAMES ST SYRACUSE, NY 13200	REGISTE MCMORRIS 212 FISKE ST PORTLAND, ME 04103
REYNOLDS MARIANNE M PO BOX 99 GORHAM, ME 04038	RIST MARTIN & BARNESYUE BRUNET 400 RIVERSIDE ST # A7 PORTLAND, ME 04103	RIST MARTIN & BARNYSUE J BRUNET TRUSTEES 201 US ROUTE 1 SCARBOROUGH, ME 04074
RIST MARTIN & BARNYSUE J BRUNET TRUSTEES 201 US RTE 1 PMB 205 SCARBOROUGH, ME 04074	RIVERSIDE SPIRITS LLC 396 FORE ST PORTLAND, ME 04101	RIVERSIDE WELDERS LIMITED LIABILITY COMPANY 557 RIVERSIDE ST PORTLAND, ME 04103
SCAIA JAMES F TRUSTEE 27 NORMAC RD WOBURN, MA 01801	THERIO EUGENE & GEORGIA M THERIO JTS 457 RIVERSIDE ST PORTLAND, ME 04103	THERIO EUGENE & GEORGIA M JTS 457 RIVERSIDE ST PORTLAND, ME 04103
THERIO EUGENE W & GEORGIA M 457 RIVERSIDE ST PORTLAND, ME 04103	THERIO W EUGENE AND GEORGIA M OR SURV 457 RIVERSIDE ST PORTLAND, ME 04103	THERIO W EUGENE KW VET & GEORGIA M JTS 457 RIVERSIDE ST PORTLAND, ME 04103

10/06/2005

20040074 OFFICE/WAREHOUSE

2:16 PM

TOPSPIN LLC
470 RIVERSIDE ST
PORTLAND, ME 04103

TROTT STEPHANIE M & JOHN B TROTT
JTS
16 GROVE ST
PORTLAND, ME 04103

U S POSTAL SERVICE USPS FACILITIES
SERVICE OFFICE
6 GRIFFIN RD NORTH
WINDSOR, CT 06006

WATSON BRADFORD M & LYNN W
COUSINS ETAL
357 RIVERSIDE ST
PORTLAND, ME 04103

WENDY'S OLD FASHIONED
HAMBURGERS OF NEW YORK INC
PO BOX 256
DUBLIN, OH 43017

WHITAKER REAL ESTATE
INVESTMENTS LLC
84 BROOK RD
FALMOUTH, ME 04105

WHITSON LYLE F WWII VET &
LORRAINE M JTS
525 RIVERSIDE ST
PORTLAND, ME 04103

WORCESTER ALTHEA M HEIRS
144 GROVE ST
PORTLAND, ME 04103

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

DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

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



October 5, 2005

M. Kandi Talbot
Portland Planning Department
389 Congress Street
Portland, ME 04101

**Subject: Lot 4 – 400 Riverside Street Properties
Site Plan Application**

Dear Kandi:

On behalf of the Rist/Brunet Family Trust, DeLuca-Hoffman Associates, Inc. scheduled and conducted a Public Information Meeting on October 4, 2005 at our office in South Portland. The meeting was noticed to abutters as evidenced by the accompanying copy. No members of the public attended the meeting.

We look forward to the public hearing on October 11, 2005 and a favorable recommendation from staff for approval.

If you have any questions please call.

Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Tim Michaud

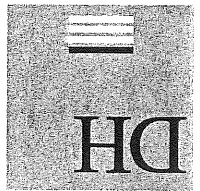
Project Engineer

TJM/sq/JN2314/Talbot-10-05-05

Attachments

C: Marty Rist

DELUCA-HOFFMAN ASSOCIATES, INC.
 CONSULTING ENGINEERS
 78 MAIN STREET
 SUITE 8
 SOUTH PORTLAND, MAINE 04106
 TEL 207 775 1171
 FAX 207 879 0896



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

September 23, 2005

Dirigo Drywall Associates
 225 Riverside Street
 Portland, ME 04103

Subject: Public Information Meeting

Rist/Brunet Family Trust

Proposed Site Development at Lot 4 of the 400 Riverside Street Properties

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the Deluca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

Sincerely,

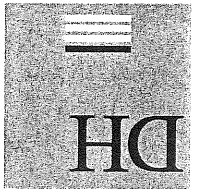
DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
 Stephen R. Bushey, P.E.
 Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

Kandi Talbot – City of Portland
 Marty Rist

23/14/05



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

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

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

September 23, 2005

Maine Turnpike Authority
430 Riverside Street
Portland, ME 04103

Subject: Public Information Meeting

Rist/Brunet Family Trust

Proposed Site Development at Lot 4 of the 400 Riverside Street Properties

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, DeLuca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the DeLuca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

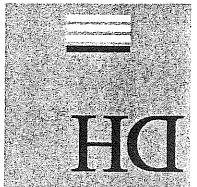
Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMitgNotice-9-23-05

c: Kandi Talbot - City of Portland
Marty Rist



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

778 MAIN STREET
SUITE 8
SOUTH PORTLAND, MAINE 04106
TEL. 207 775 1171
FAX 207 879 0896

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

September 23, 2005

Crockett Riverside LLC
35 Graystone Lane
Portland, ME 04103

**Subject: Public Information Meeting
Rist/Brunet Family Trust
Proposed Site Development at Lot 4 of the 400 Riverside Street Properties**

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, DeLuca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the DeLuca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

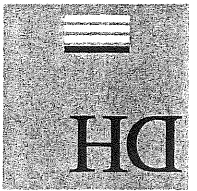
Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

c: Kandi Talbot – City of Portland
Marty Rist



DELUCA-HOFFMAN ASSOCIATES, INC.
CONSULTING ENGINEERS

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

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

September 23, 2005

Pende Associates, Inc.
42 South Street
Yarmouth, ME 04096

Subject: Public Information Meeting

Rist/Brunet Family Trust

Proposed Site Development at Lot 4 of the 400 Riverside Street Properties

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the Deluca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

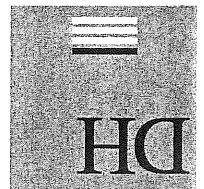
Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

c: Kandi Talbot - City of Portland
Marty Rist



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

September 23, 2005

Lucas Tree Expert Co., Inc.
636 Riverside Street
Portland, ME 04103

Subject: Public Information Meeting

Rist/Brunet Family Trust

Proposed Site Development at Lot 4 of the 400 Riverside Street Properties

Dear Sir or Madam:

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information meeting to be held on October 3, 2005 at 5:30 pm. The meeting will be held at the Deluca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board in October 2005.

Sincerely,

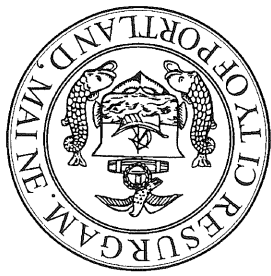
DELUCA-HOFFMAN ASSOCIATES, INC.

Stephen R. Bushey, P.E.
Senior Engineer

SRB/smk/JN2314/PublicMtgNotice-9-23-05

c: Kandi Talbot – City of Portland
Marty Rist

Memorandum
Department of Planning and Development
Planning Division



To: Chair Lowry and Members of the Portland Planning Board

From: Kandice Talbot, Planner

Date: July 22, 2005

Re: July 26, 2005 Planning Board Workshop
Lot 4 of 400 Riverside Street Properties
Rist/Brunet Family Trust, Applicant

Introduction

Rist/Brunet Family Trust is requesting major site plan review of a proposal to develop a 23,140 sq. ft. office/warehouse building on Lot 4 of the 400 Riverside Street Properties, formerly the Donald D. Butler Subdivision, at 400 Riverside Street. Lot 4 of the 400 Riverside Street Properties is zoned I-M Industrial Moderate and is approximately 14.5 acres in size.

The applicant is proposing to construct a one (1) story, 23,140 sq. ft. office building/warehouse on Lot 4 of the 400 Riverside Street Properties. The site is currently developed and includes an existing 26-foot-wide paved access drive from Riverside Street, a two (2) story, 20,000 sq. ft. office building/warehouse, and a two (2) story 35,250 sq. ft. office building/warehouse.

The proposal is to be reviewed for compliance with the site plan standards of the land use code and is subject to Site Location of Development review.

Access/Parking

Lot 4 contains an existing 26 ft. wide paved access drive from Riverside Street. No changes are planned for this existing drive. Access to the site will be provided from an existing 30 ft. wide paved access drive within the development.

The site currently has 89 parking spaces. The applicant is proposing 45 new parking spaces for a total of 126 parking spaces. The Zoning Administrator is currently reviewing the parking.

Since the Presumpscot River borders Lot 4, staff is recommending that the applicant provide a pedestrian easement along the river.

Utilities

The utility service for water to the proposed development will come from Riverside Street. Two existing 2-inch domestic water service lines extend along the existing access drive to the 400 Riverside Street Properties from the 12-inch water main in Riverside Street. A water capacity letter has been submitted.

The applicant has requested that the Westbrook/Portland interlocal sewer agreement be amended to allow Lot 4 to connect into the sewer within Riverside Street. Wastewater flows from the existing and proposed buildings on Lot 4 will be conveyed by 8-inch gravity sewer laterals to a proposed private pump station. Discharge will be via a proposed 3-inch force main to the municipal sewer system on Riverside Street. Alternatively, each existing and proposed building may be serviced by individual low pressure pump systems that each connect to the 3-inch force main to be installed and connected to the municipal sewer system on Riverside Street.

To amend the Westbrook/Portland interlocal agreement, Public Works must hold a public hearing to redefine the Westbrook Intermunicipal Sewer Service Area. Public Works will be recommending at this public hearing that Lot 4 be included within the Intermunicipal Sewer Service Area on Riverside Street. This service area has a total capacity of 150,000 gallons of wastewater that may be discharged to the City of Westbrook's Bridge Street Pump Station. However, due to the capacity limitation, Public Works is recommending that they be included in this service area with the condition that the wastewater generation be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge.

Electrical service will include the installation of underground electric service.

Drainage

A stormwater collection system will serve the planned development and will collect stormwater runoff from the site's impervious surfaces and convey it into two water quality treatment units prior to discharge to trap plunge pools. The first trap plunge pool will discharge adjacent to a natural emergency marsh and the second will discharge to a natural tributary swale to the north. Both swales are tributary to the Presumpscot River.

The applicant is requesting a variance from the regulatory stormwater quantity standard based on the planned development being located in the lower region of the overall watershed area comprising the Presumpscot River, and in the region proximate to where the Presumpscot River experiences tidal effects and ultimately discharges to Casco. The

variance request is also based on previously submitted stormwater calculations that demonstrated that the existing tributary swale has sufficient capacity in the post development conditions to sufficiently handle the slight increase in flow and the fact that no downstream properties will be negatively impacted as a result of this proposal.

The Review Engineer is currently reviewing the plans.

Lighting

The applicant is proposing pole-mounted shoebox fixtures and wall-pack units. Lighting catalogue cuts and a photometric plan shall be submitted to determine that the lighting is in compliance with the City's technical standards.

Landscaping

The applicant is proposing that landscaping will be minimal and the existing mature trees will be maintained along the property lines of the project site to the extent practicable. Tree plantings and shrubs are being proposed adjacent to some of the paved area. The City Arborist is currently reviewing the plan.

Building Design

The proposed structure will be typical metal-framed buildings similar in design to nearby buildings. Elevations of the building shall be submitted prior to public hearing.

Fire

Sprinkler service will be provided by the development. There is also a hydrant proposed in the vicinity of the proposed building. The hydrant location will have to be shown on the plan and approved by the Fire Department.

Issues to Resolved Prior to Public Hearing

1. DRC's Memo
2. Landscaping
3. Lighting
4. Building Elevations
5. Fire Hydrant

Attachments:

1. Applicant's Submittal Letter dated June 20, 2005
2. Letter from Public Works regarding Riverside Street Sewer Service Area
3. Amended Hydrologic Computations
4. Stormwater Management System Inspection and Maintenance Manual
5. Plans



Corporation Counsel
Gary C. Wood

August 20, 2004

Barry Scheff
Woodard & Curran, Inc.
41 Hutchins Drive
Portland, ME 04102

RE: Agreement with the City of Portland

Dear Sirs:

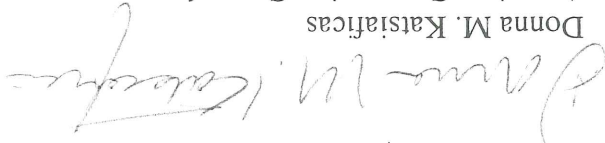
Enclosed for review and signature are three copies of the proposed agreement for peer review services related to a project at 400 Riverside Street.

After all three copies of the agreement have been signed, they should be returned to me for final execution by the City of Portland. At that time, you should return the required certificate of insurance, **naming the City of Portland as an additional insured.**

I will need to receive the insurance certificate from you or your insurance agent before I can process the agreement.

A fully executed agreement will be returned to you for your files.

Sincerely,

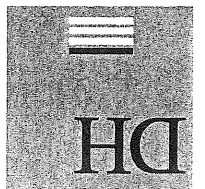

Donna M. Katsistaficas
Associate Corporation Counsel

DMK:tib

Enclosures

Cc: Mathew Fitzgerald, Purchasing Agent
Sarah Hopkins, Planning

O:\OFFICE\CONTRACT\LETTER\Woodard & Curran 8.2.04



September 22, 2004

Mr. Stephen Harris
Assistant Engineer
Portland Industrial Pretreatment Program
Portland Public Works
55 Portland Street
Portland, ME 04101

Subject: Request for Amendment to the Portland-Westbrook Inter-municipal Sewer Service Agreement

On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. (DHAI) is requesting that the administrators of the Portland Industrial Pretreatment Program consider amending the Riverside Street sewer service area established in the Portland-Westbrook Inter-municipal Sewer Service Agreement to include additional development sites located within the Riverside Street vicinity. It is our understanding that the Portland-Westbrook Inter-municipal Sewer Service Agreement was established to alleviate the significant need for public sewerage collection and treatment in the Riverside/Warren Avenue/Forest Avenue vicinity and is to be administered by the Portland Industrial Pretreatment Program.

Specifically, DHAI is requesting that the Riverside Street sewer service area be expanded to include the following:

- The planned development at Lot 6 of the McAlister Farm Subdivision located on McAlister Farm Drive. This existing lot is approximately 451,136 sq. ft. (10.6 acres) and is identified on City of Portland Tax Map 320 as Block A, Lot 1.
- The existing and planned developments at Lot 4 of the 400 Riverside Street Properties located at 400 Riverside Street. This existing lot is approximately 583,072 sq. ft. (13.7 acres) and is identified on City of Portland Tax Map 320 as Block A, Lot 2.
- The existing developments at Lot 5 of the 400 Riverside Street Properties located at 400 Riverside Street. This existing lot is approximately 113,256 sq. ft. (2.6 acres) and is identified on City of Portland Tax Map 320 as Block A, Lot 4.

These properties are located in the City of Portland Industrial-Moderate zoning district and about the proposed Riverside Street sewer service area to the south. Refer to the Riverside Street Sewer Service Area Map and the Location Map for the development sites attached to this letter for further explanation of these site locations.

Mr. Stephen Harris
September 22, 2004
Page 2

The request to expand the Riverside Street sewer service area for the above-mentioned lots would include providing public sewerage collection and treatment to existing and planned developments that include the following:

- Planned development for Lot 6 of the McAlister Farm Subdivision that will include one (1) unit of multiple-tenant space consisting of a one (1) story, 41,255 square foot (sq. ft.) office building/warehouse.

- The planned development at Lot 4 of the 400 Riverside Street Properties will include one (1) unit of multiple tenant space consisting of a one (1) story, 23,400 sq. ft. office building/warehouse.

- The existing developments at Lot 4 of the 400 Riverside Street Properties include a two (2) story, 20,000 sq. ft. office building/warehouse and a two (2) story, 35,250 sq. ft. office building/warehouse.

- The existing developments at Lot 5 of the 400 Riverside Street Properties include a two (2) story, 16,000 sq. ft. office building/warehouse, a two (2) story, 3,500 sq. ft. office building/warehouse, and a two (2) story, 2,400 sq. ft. office building/warehouse.

The sites under consideration comprise three adjoining lots located off McAlister Farm Drive and 400 Riverside Street. The planned developments are currently under regulatory review by the Portland Planning Authority as part of a Major Site Plan submission package. The submission package has included off-site wastewater disposal for each of the three (3) development sites into the municipal sewer system on Riverside Street pending approval of the modification to the service area presented with this submission.

A summary of the anticipated wastewater flows is provided below:

- The anticipated wastewater design flows at Lot 6 and at 400 Riverside Street have been calculated for the following capacities using the requirements contained in the Maine Subsurface Wastewater Disposal Rules (MSWDR) and are based on our assumptions for potential occupancies and include the following:

Lot 6 - McAlister Farm Subdivision (currently undeveloped)

(1) Proposed Building:

Number of Tenants for Proposed Building:
Employees per Tenant:
Design Flow per MSWDR Table 901.2:

4 Tenants
8 Employees
15gpd/employee

Design Flow:

480 GPD

Lot 4 - 400 Riverside Street Properties (Lots 4 & 5)

- A review of water use records obtained from the Portland Water District for the 400 Riverside Street properties shows approximately 2,000 GPD of water usage for the period from September 2002 to October 2003. It is our understanding that these flows are for the existing buildings on the site. Per MSWDR Section 903.2.2, monthly water use records include a multiplier of 1.5 to establish an anticipated design flow and include:

Water Use Records for (5) Existing Buildings: $2,000\text{gpd} \times 1.5 = 3,000 \text{ GPD}$
(1) Proposed Building:

Number of Tenants for Proposed Building:

4 Tenants

Employees per Tenant:

8 Employees

Design Flow per MSWDR Table 901.2:

15gpd/employee

Subtotal:

480 GPD

Design Flow:

$3,000\text{gpd} + 480\text{gpd} = 3,480 \text{ GPD}$

Total Combined Design Flow:

$480 \text{ GPD} + 3,480 \text{ GPD} = 3,960 \text{ GPD}$

The existing developments on Lot 4 and Lot 5 are served by on-site wastewater disposal systems. It is the owner's intent to discontinue these on-site systems and discharge wastewater flows from the existing buildings as well as the proposed buildings to the soon-to-be-activated Riverside Street Sewer. As part of our services for the owner, we have evaluated options to continue on-site subsurface wastewater disposal. The on-site sewerage disposal concepts were developed to meet the requirements included in the MSWDR and were based on our understanding of the existing site constraints, sizing, physical setbacks, approximate groundwater table elevation, and fate of effluent. The conclusions resulting from the site layout concepts for on-site subsurface sewerage disposal include the following:

- The Lot 6 development site on McAlister Farm Drive is severely limited as to the placement of an on-site wastewater disposal system. The limitations are principally due to on-site wetlands and natural topographic constraints associated with a ravine containing a regulated stream and floodplain wetland.

- The Lot 4 development site at 400 Riverside Street Properties is also severely limited as to the placement of a new on-site subsurface wastewater disposal system or expansion to the existing disposal field. The existing site footprint area is abutted by wetlands to the north, east and west and contains a natural drainage way to the northwest of the site. Due to these site constraints, the planned development at Lot 4 includes the placement of the proposed 23,400 sq. ft. office building/warehouse in the approximate vicinity of the existing subsurface disposal field; therefore, the existing subsurface disposal system would need to be taken out of service if the new building is to be constructed.

Mr. Stephen Harris
September 22, 2004
Page 4

- The existing developments at Lots 4 and 5 at the 400 Riverside Street Properties include existing on-site subsurface wastewater disposal systems that may be nearing their design capacities and appear to have operating conditions that are worsening over time. On this basis, the owner is seeking approval to discharge to the new municipal sewer once it is activated.

The design intent developed for connection to the Riverside Street sewer includes the following:

- Sanitary sewerage generated on the Lot 6 site would be collected from the proposed building by a 6" PVC gravity sewer lateral conveying wastewater to a proposed private, low-pressure sewer pump system that discharges via a 3-inch force main to either a proposed private on-site pump station at the adjacent Lot 4 development site prior to discharge to the municipal sewer system on Riverside Street, or directly via a 3-inch force main to the municipal sewer system on Riverside Street.

- Sanitary sewerage generated on the Lot 4 site would be collected from the proposed building and existing buildings by 6" PVC gravity sewer laterals conveying wastewater to a proposed private on-site pump station at Lot 4. The pump station would discharge via a 3-inch force main to the last sewer manhole in Riverside Street in front of the Turnpike Authority.

- In all cases, a 3-inch force main would be installed along the existing 400 Riverside Street access drive to convey sanitary sewer flows from the on-site pump stations to the Riverside Street sewer.

- The existing facilities at Lot 5 would tie-in to the force main prior to tie-in to the municipal sewer system on Riverside Street and may also require an independent pump and force main configuration.

The overall plan is to consolidate these flows into one discharge connection to the municipal sewer system on Riverside Street that ultimately discharges to the Presumpscot North Main Interceptor Sewer. The force main may need to be installed along the frontage of the Maine Turnpike Authority property along Riverside Street in order to tie-in to the existing sewer main on Riverside Street. Utility easements would be established for these infrastructure routes. All work would be performed in accordance with the City of Portland Technical standards; however, all force mains and pump stations will be privately maintained by the owner. Please find Utility Plans 4A and 4B for proposed off-site sewer disposal layout attached to this letter.

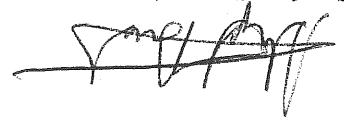
It is our understanding that the Portland Water District is currently installing the cross-country sewer line that will convey flows from the Riverside Street sewer service area to the Presumpscot River Pumping Station. We acknowledge that this cross-country sewer line will need to be completed prior to the activation of the remaining inactive portion of sewer main on Riverside Street and that this sewer main would need to be activated prior to the acceptance of sewer flows from the planned developments.

Mr. Stephen Harris
September 22, 2004
Page 5

We look forward to your timely response to our request for consideration to amend the proposed Riverside Street sewer service area to include the development sites at Lot 6 of the McAlister Farm Subdivision and Lots 4 and 5 of the 400 Riverside Street Properties at 400 Riverside Street. Please call this office with any questions.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.



Stephen R. Bushey, PE
Senior Engineer

SRB/sq/JN2314/Harris-PPW-9-21-04

Enclosures: Riverside Street Sewer Service Area Map
Location Map
Site Utility Plans, 4A and 4B

C: Martin Rist, Rist/Brunet Family Trust
Kandi Talbot, Portland Planning Department

Memorandum
Department of Planning and Development
Planning Division



To: Chair Lowry and Members of the Portland Planning Board

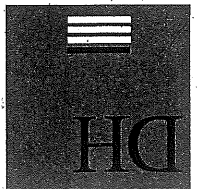
From: Kandice Talbot, Planner

Date: October 6, 2005

Re: October 11, 2005 Planning Board Public Hearing
Lot 4 of 400 Riverside Street Properties
Rist/Brunet Family Trust, Applicant

Introduction

The Rist/Brunet Family Trust is requesting that their proposal be tabled to the public hearing on October 25th, 2005 at 7:30 p.m. Unfortunately, the neighborhood meeting was not noticed correctly and another neighborhood meeting will have to be held to meet the noticing criteria for neighborhood meetings.



October 7, 2005

Jennifer Dorr
Portland City Hall, 4th Floor
389 Congress Street
Portland, ME 04101

Subject: Public Information Meeting

Rist/Brunet Family Trust

Proposed Site Development at Lot 4 of the 400 Riverside Street Properties

Dear Madam:

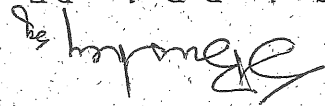
On behalf of the Rist/Brunet Family Trust, Deluca-Hoffman Associates, Inc. is inviting you to a Public Information Meeting to be held on Tuesday, October 18, 2005 at 5:30 p.m. The meeting will be held at the Deluca-Hoffman Associates, Inc. office located at 778 Main Street, Suite 8, in South Portland, Maine.

The Rist/Brunet Family Trust has submitted a Site Plan Application to the City of Portland Planning Authority for the construction of approximately 23,140 square feet of new office/warehouse building space on the existing 13.7-acre parcel containing Lot 4 of the 400 Riverside Street Properties and represented on Portland Tax Map 320 as Block A, Lot 2. The development site is located within the Industrial I-M zoning district. The project requires Site Plan approval by the Portland Planning Authority and Planning Board.

The project is tentatively scheduled for a Public Hearing at the City of Portland Planning Board on October 25, 2005.

Sincerely,

DELUCA-HOFFMAN ASSOCIATES, INC.


Stephen R. Bushey, P.E.
Senior Engineer

SRB/sq/JN2314/10-13-05 PublicMeeting(10-7-05)

c: Kandi Talbot - City of Portland
Marty Rist

Kandi

From: "Tim Michaud" <tmichaud@DelucaHoffman.com>
To: "Kandi Talbot" <KCOTE@portlandmaine.gov>
Date: 11/04/2004 9:31:59 AM
Subject: RE: Lot 4 & Lot 6

Due to our inability to complete the soils survey in time of the public hearing we are requesting that the site plan review for 400 Riverside Street be postponed to the next regularly scheduled public hearing.

In that time we will provide the Planning Authority with the necessary information for onsite sewer disposal for review and to be included as part of our submission package for site plan approval

Please respond with any questions or if additional information is required

Tim Michaud
 Project Engineer
 Deluca Hoffman Associates, Inc.
 778 Main Street, Suite 8
 South Portland, ME 04106
 Tel 207 775 1121
 Fax 207 879 0896

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

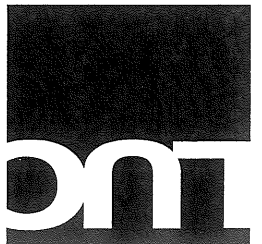
From: Kandi Talbot [mailto:KCOTE@portlandmaine.gov]
Sent: Wednesday, October 06, 2004 2:35 PM
To: Tim Michaud
Cc: srbushey@maine.rr.com; SH@portlandmaine.gov
Subject: Lot 4 & Lot 6

Tim,

I talked to Penny Littlell regarding the conservation/buffer easement. She feels that this area could be used for a trail, if Portland Trails or the City wanted to install one. What the city would need from the owner of the property would be an executed public access easement for that area.

Any questions, please let me know. Thanks.

Kandi



Land Use Consultants, Inc.

April 9, 2004

1423.1

David A. Kamila PE
Frederic J. Licht PE
Thomas N. Emery RLA
J. David Haynes RLA

Kandice Talbot, City Planner
Department of Planning & Urban Development
389 Congress Street
Portland, Maine 04101

Sani-Clean Distributors – Revisions per Design Review Comments

Dear Ms. Talbot:

We have modified the March 24, 2004 plan set based on your telephone conversation with our office on April 7, 2004. Enclosed along with this response letter please find 7 full sets and 1 reduced set of revised plans dated April 9, 2004.

The plan revisions are minor in nature and do not affect the overall presentation of the project.

City of Portland

The following comments from our phone conversation are listed below along with responses:

Comment 1: The city wants seven white pine trees, 5-6' tall behind the proposed Sani-Clean Distributors building.

Response 1: Seven additional white pines have been added to the Revised Site Layout Sheet of the plan set.

Comment 2: The city would like the clearing limits to be depicted on the plan set.

Response 2: The clearing limits have been added to the Site Layout Sheet of the revised plan set.

Comment 3: The city would like the applicant to provide an easement for a walking trail along river to connect to Lucas Tree.

Response 3: The applicant and Allied-Cook Construction have been notified and will notify the city of their decision.

966 RIVERSIDE STREET
PORTLAND, MAINE 04103

voice (207) 878 3313
fax (207) 878 0201
www.landuse@gwi.net

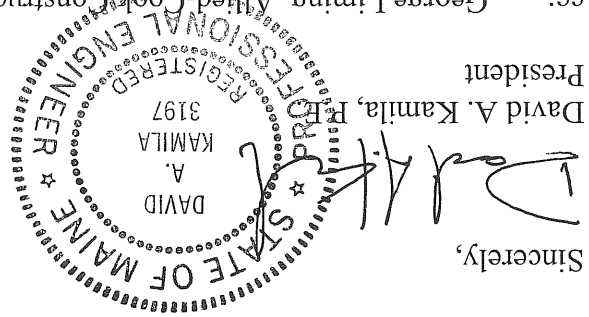


Comment 4: The proposed wall pack light for the proposed project does not meet city standards. A cut-off fixture must be provided for the proposed light.

Response 4: The detail on sheet 8 of 9 of the revised plan set has been modified to include a detail of the proposed PVLV cut-off visor for the proposed wall pack light.

We trust this submission addresses all the design review comments. Should you have any questions, comments or require additional documentation please give us a call.

Sincerely,



David A. Kamila,
President

cc: George Liming, Allied-Cook Construction
Jim Russell, Sani-Clean Distributors

Ms. Kandi Talbot
June 20, 2005
Page 2

2. Stormwater – DeLuca-Hoffman Associates, Inc. (DHAI) continues to request a variance from the regulatory stormwater quantity standard based on the planned development being located in the lower region of the overall watershed area comprising the Presumpscot River, and in the region proximate to where the Presumpscot River experiences tidal effects and ultimately discharges to Casco Bay. Our variance request is also based on previously submitted stormwater calculations that demonstrated that the existing tributary swale has sufficient capacity in the postdevelopment conditions to sufficiently handle the slight increase in flow and the fact that no downstream properties will be negatively impacted as a result of this proposal. In our opinion this waiver request is consistent with previous City reviews and approvals.

We have also reviewed the drainage computations and specifically the subcatchment areas and made minor modifications to the hydrologic model to clarify the pre and postdevelopment data. Accompanying this letter, please find hydraulic computations and supporting documentation for the predevelopment and postdevelopment conditions in support of the analysis.

Finally, we have reviewed the previously submitted Level Lip Spreader design computations and confirmed that the 10-year, 4.7-inch peak runoff rates used to size the BMP measures do, in fact, reflect the anticipated peak runoff rates discharging to the two (2) Level Lip Spreaders planned within the development site. Simply stated, the Level Lip Spreaders were sized based on the peak discharge rates generated from the portions of the existing and proposed impervious surfaces within the subcatchment areas that are actually tributary to the Level Lip Spreaders. Accompanying this letter, please find hydrologic computations and supporting documentation for the Level Lip Spreaders. Also enclosed, please find hydrologic computations and vendor sizing worksheets for the two (2) planned Water Quality Units tributary to the Level Lip Spreaders. We note that the Level Lip Spreaders were sized based on the 10-year, 4.7-inch storm event, while the Water Quality Units were sized based on vendor sizing criteria that included the 1-year, 2.5-inch storm event.

In accordance with the design criteria for Level Lip Spreaders provided in the Maine Erosion and Sediment Control BMP Manual, we have included the previously submitted design calculations for the proposed Level Lip Spreaders. The calculations are as follows:

Summary of Level Lip Spreader Design Calculations		
Estimated Design Flow (10-yr, 24-hr storm)	Length (0.25 CFS/LF)	Upstream Flow Area (4 X CFS)
WQU No. 1 - 4.48 cfs	18.0 ft	18.0 sq. ft.
WQU No. 2 - 7.23 cfs	29.0 ft	29.0 sq. ft.

Ms. Kandi Talbot
June 20, 2005
Page 3

Additionally, DHAI has revised Sheet 10 – Erosion Control Details by replacing the reference for a 25-foot long Level Lip Spreader with “Refer to Sheet 5 – Grading, Drainage and Erosion Control Plan for Level Lip Spreader design information”.

3. Historic Sites – We understand that the Maine Historic Preservation Commission has previously signed off on the Lot 6 property as part of the Rio-Tierra LLC application materials supplied by Mohr & Seredin. We assume no further action is necessary on this issue, since the Commission’s concerns largely pertained to the undeveloped Lot 6 parcel and the applicant is only requesting approval on the partly developed Lot 4 parcel.
4. Existing Natural Resources – This 100’ setback issue pertains to Lot 6 and is no longer applicable to the current proposal on Lot 4.
5. Maintenance and Inspection of Facilities – DHAI has modified the Maintenance Manual for Stormwater Management System and Common Facilities with the following specific measures:
 - a. During construction, the general contractor will be responsible for regular inspection and monitoring of the stormwater facilities. Upon substantial completion of the construction and acceptance by the owner, these responsibilities will be transferred to the owner and their property management personnel. The Rist/Brunet Family Trust has managed the existing properties for several years and has the staff and contracted services currently in place to handle these responsibilities.
 - b. A statement regarding the yearly inspection and maintenance for the buffer setbacks has been added to the manual.
 - c. An Inspection and Maintenance log has been added to the manual for use as each site element is routinely inspected.
 - d. The owner will maintain copies of any permits granted for the project within the manual with the intent that the Contractor will maintain the manual during construction and the owner and their property management personnel will maintain it after construction.
6. Grading – The planned development was located and sized to mitigate disturbances to natural resources found within the site. Several design considerations have been incorporated in the site development to mitigate the limits of disturbances to wetlands. These considerations included grading the slope to the north of the proposed building to minimize the encroachment into the nearby wetland. Turf reinforcement will be replaced by riprap on this slope and all slopes greater than 3:1.

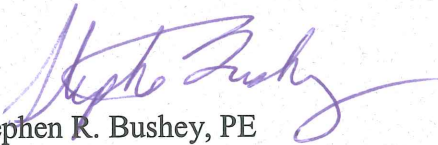
Ms. Kandi Talbot
June 20, 2005
Page 4

7. Utilities – The lot 6 utilities layout has been revised based on the design drawings prepared by Mohr & Seredin on behalf of Rio-Tierra LLC; therefore, the concern regarding pipe cover no longer applies. DHAI will review the location of the pump station on Lot 4 with the owner/applicant.

We trust these responses will satisfy the Planning Authority and the project may be placed on the next available Planning Board Agenda for consideration of Final Approval. If you have any further questions, please call this office.

Sincerely,

DeLUCA-HOFFMAN ASSOCIATES, INC.



Stephen R. Bushey, PE
Senior Engineer

SRB/sq/JN2314/Talbot-6-8-05

- Attachments:
- Amended Lot 4 Site Plans
 - Letter from Portland Public Works concerning scheduling of a Public Hearing on the applicant's request that the 400 Riverside Street Properties be included within the Riverside Street sewer service area
 - Amended Hydrologic Computations & Support Documentation
 - Hydrologic Computations and Supporting Documentation for the Level Lip Spreaders and Hydrologic Computations and Water Quality Unit Vendor Sizing Worksheets and Supporting Documentation
 - Stormwater Management System Inspection and Maintenance Manual for Stormwater Management Systems and Common Facilities

c: Marty Rist

ATT. 2
2314/24

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
ENVIRONMENTAL ENGINEERING
MEMORANDUM

Att. 2

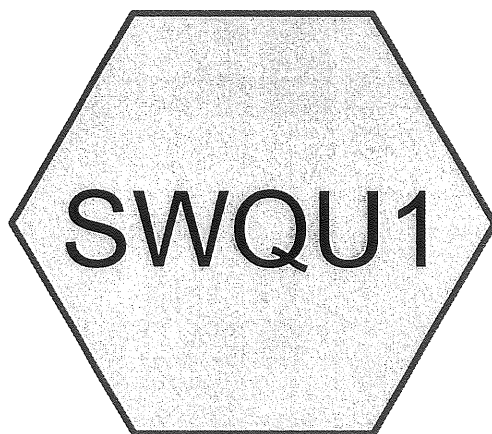
TO: Kandice Talbot, Planner
FROM: Stephen K. Harris, Assistant Engineer
DATE: April 28, 2005
SUBJECT: Rc: Pctition for inclusion of Lots 4, 5 & 6 in Intermunicipal Service Area

In order to accommodate the Pctition Request from the Rist/Brunet Family Trust for Lot 6 of McAlister Farm Drive and Lots 4 & 5 of 400 Riverside Street Properties to be included within the Intermunicipal Sewer Service Area on Riverside Street, Public Works will be conducting a Public Hearing to redcfine the Westbrook Intermunicipal Sewer Service Area as defined by the plan sheet labeled Attachment "A" in the City of Portland's Rules and Regulations for the Use of the Wastewater System. The Public Hearing will be conducted in the near future and the changes should be in place by mid-Summer barring adverse Public Comment.

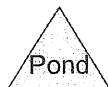
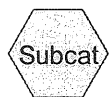
Environmental Engineering is recommending that Lot 6 of McAlister Farm Drive (on an interim basis) and Lots 4 & 5 of 400 Riverside Street Properties be included within the Intermunicipal Sewer Service Area on Riverside Street. A a result of an Intermunicipal Agreement this service arca has a total capacity of 150,000 gallons of wastewater that may be discharged to the City of Westbrook's Bridge Street Pump Station.

Due to the capacity limitation we would recommend that they be included in this Service Area with the condition that the wastewater generation be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge. We also shall recommend at the Public Hearing that as Lot 6 in the McAlister Farm Subdivision is in a distinctly diffrent watershed, that when the McAlister Farm Subdivision is appropriately sewered in the future that Lot 6 be directed into the new sewer constructed to accommodate McAlister Farm Subdivision.

pc: Eric Labelle, PE, City Engineer
Bradley A. Roland, P.E., Project Engineer



WQU #1
SUBCATCHMENT
AREA



LOT 4-400 Riverside Street PropertiesWQU#1

Type III 24-hr Rainfall=4.70"

Prepared by {enter your company name here}

Page 2

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

5/26/2005

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment SWQU1: WQU #1 SUBCATCHMENT AREA

Runoff Area=1.000 ac Runoff Depth=4.35"

Flow Length=466' Tc=5.7 min CN=97 Runoff=4.48 cfs 0.362 af

Total Runoff Area = 1.000 ac Runoff Volume = 0.362 af Average Runoff Depth = 4.35"

Subcatchment SWQU1: WQU #1 SUBCATCHMENT AREA

Runoff = 4.48 cfs @ 12.08 hrs, Volume= 0.362 af, Depth= 4.35"

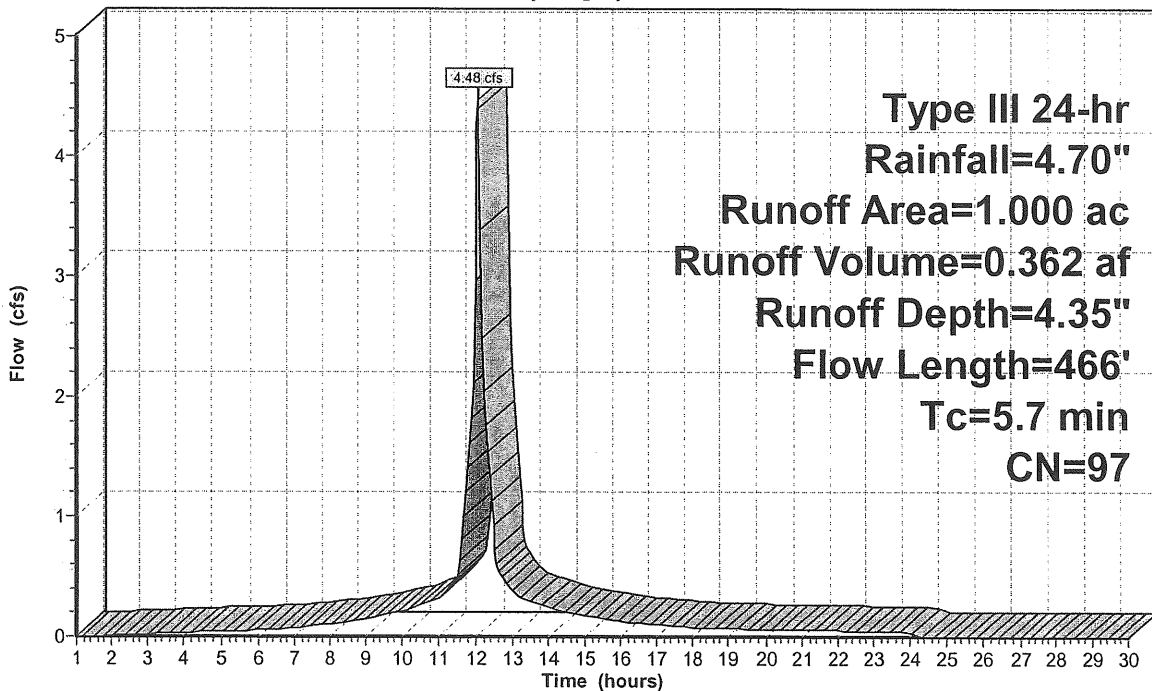
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.900	98	IMPERVIOUS
0.100	84	Grassland HSG D
1.000	97	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	70	0.1000	0.3		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
0.9	160	0.0230	3.1		Shallow Concentrated Flow, Shallow Concentrated B to C Paved Kv= 20.3 fps
0.7	186	0.0035	4.2	7.34	Circular Channel (pipe), Channel C to D Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.011
0.1	50	0.0058	6.5	20.36	Circular Channel (pipe), Channel D to E Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
5.7	466	Total			

Subcatchment SWQU1: WQU #1 SUBCATCHMENT AREA

Hydrograph



Runoff

Type III 24-hr
Rainfall=4.70"
Runoff Area=1.000 ac
Runoff Volume=0.362 af
Runoff Depth=4.35"
Flow Length=466'
Tc=5.7 min
CN=97



400 Riverside Street – Portland, ME (Continued)

Vortechs Stormwater Treatment System Design Confirmation and Sizing Calculations

WOU #1

Site and System Specifics

$Q_{1\text{-year}} = 2.31$ cfs
Specified System – Vortechs Model 4000
Treatment Capacity = 6.00 cfs
Grit Chamber Diameter = 6.00 ft

Vortechs System Swirl Chamber Surface Area Calculation

$$\begin{aligned}\text{Surface Area} &= (\pi)r^2 &= (3.14)(3.00 \text{ ft})^2 \\ & &= 28.27 \text{ sqft}\end{aligned}$$

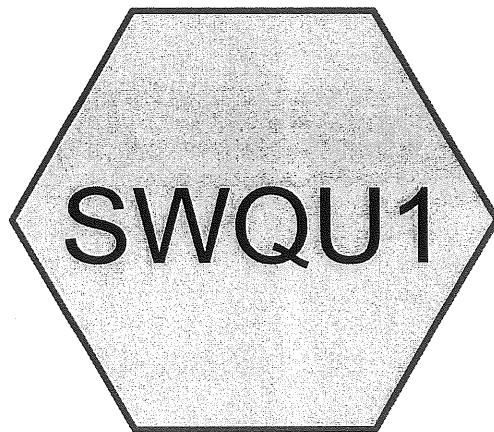
$Q_{1\text{-year}}$ Water Loading Rate Calculation

$$\begin{aligned}Q_{1\text{-year}} \text{ Operating Rate} &= Q_{1\text{-year}} / \text{Grit Chamber Surface Area} \\ &= (2.31 \text{ cfs} * 448.83 \text{ gpm/cfs}) / 28.27 \text{ sqft} \\ &= 36.67 \text{ gpm/sqft}\end{aligned}$$

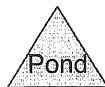
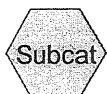
60% ME DEP Total Suspended Solids Removal Rating Verification

As stated in the attached letter from the ME DEP dated June 5, 2002, a removal rating of 60% will apply to Vortechs Systems, provided that the projected one year peak flow does not exceed a water loading rate of 36.8 gpm/sqft within the Vortechs System.

Since the calculated water loading rate 36.67 gpm/sqft for a one year flow does not exceed the upper limit of 36.8 gpm/sqft as set by the ME DEP, the Vortechs Model 4000 is sized appropriately for a 60% TSS removal rating.



**WQU #1
SUBCATCHMENT
AREA**



Drainage Diagram for LOT 4-400 Riverside Street PropertiesWQU#1
Prepared by {enter your company name here} 5/26/2005
HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

LOT 4-400 Riverside Street PropertiesWQU#1

Type III 24-hr Rainfall=2.50"

Prepared by {enter your company name here}

Page 2

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

5/26/2005

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment SWQU1: WQU #1 SUBCATCHMENT AREA

Runoff Area=1.000 ac Runoff Depth=2.16"

Flow Length=466' Tc=5.7 min CN=97 Runoff=2.31 cfs 0.180 af

Total Runoff Area = 1.000 ac Runoff Volume = 0.180 af Average Runoff Depth = 2.16"

Subcatchment SWQU1: WQU #1 SUBCATCHMENT AREA

Runoff = 2.31 cfs @ 12.08 hrs, Volume= 0.180 af, Depth= 2.16"

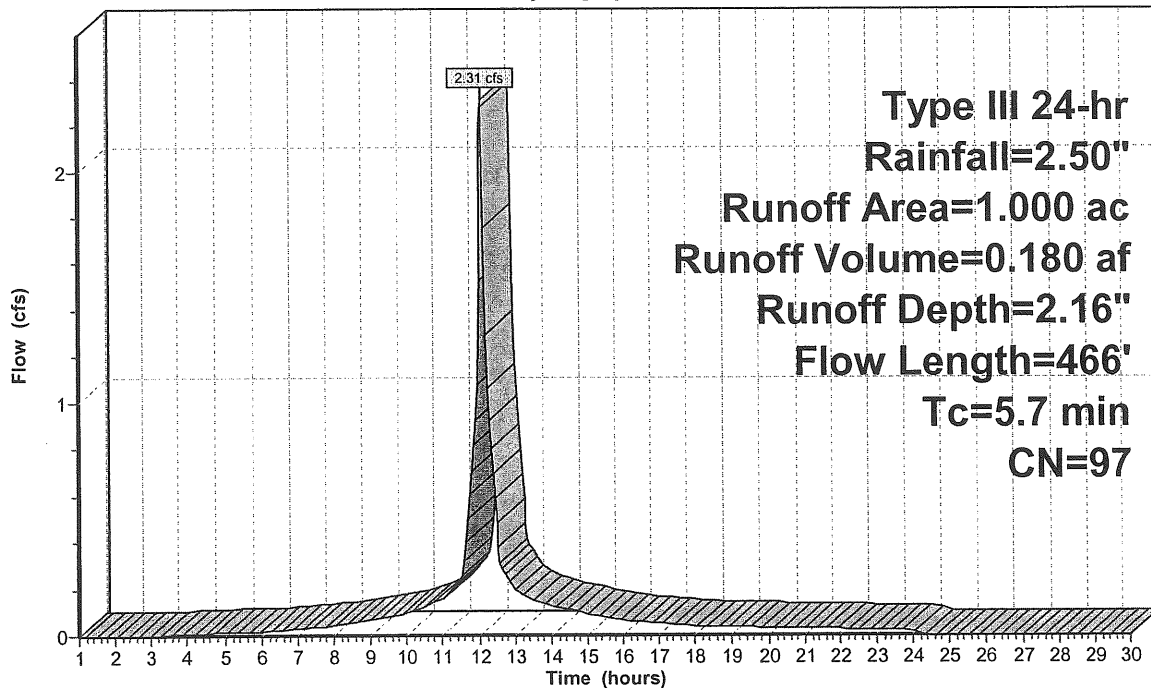
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=2.50"

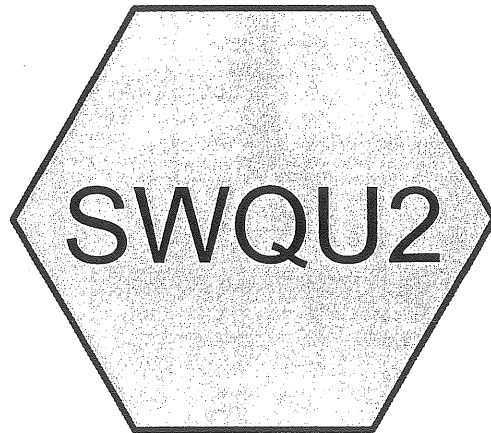
Area (ac)	CN	Description
0.900	98	IMPERVIOUS
0.100	84	Grassland HSG D
1.000	97	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	70	0.1000	0.3		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
0.9	160	0.0230	3.1		Shallow Concentrated Flow, Shallow Concentrated B to C Paved Kv= 20.3 fps
0.7	186	0.0035	4.2	7.34	Circular Channel (pipe), Channel C to D Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.011
0.1	50	0.0058	6.5	20.36	Circular Channel (pipe), Channel D to E Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
5.7	466	Total			

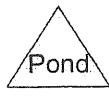
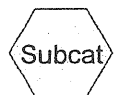
Subcatchment SWQU1: WQU #1 SUBCATCHMENT AREA

Hydrograph





**WQU #2
SUBCATCHMENT
AREA**



LOT 4-400 Riverside Street Properties WQU#2

Type III 24-hr Rainfall=4.70"

Prepared by {enter your company name here}

Page 2

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

5/24/2005

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 3S: SUBCATCHMENT 3

Runoff Area=1.450 ac Runoff Depth=4.46"

Flow Length=280' Tc=2.7 min CN=98 Runoff=7.23 cfs 0.539 af

Total Runoff Area = 1.450 ac Runoff Volume = 0.539 af Average Runoff Depth = 4.46"

Subcatchment 3S: SUBCATCHMENT 3

Runoff = 7.23 cfs @ 12.04 hrs, Volume= 0.539 af, Depth= 4.46"

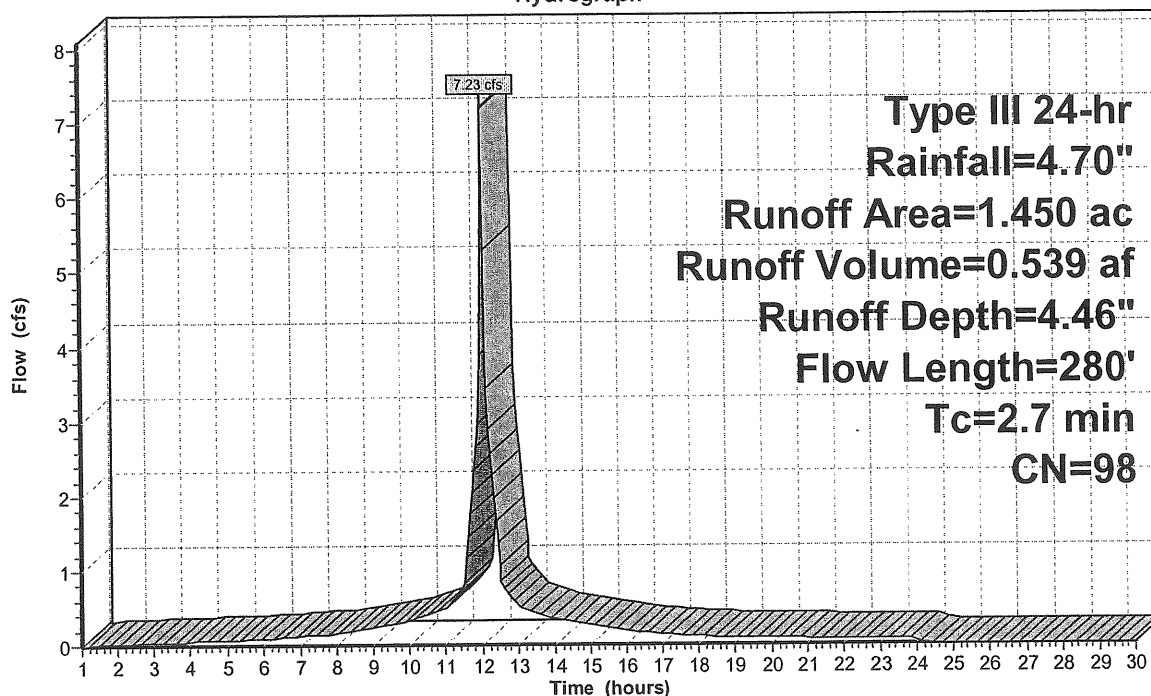
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
1.450	98	IMPERVIOUS

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	30	0.0010	0.3		Sheet Flow, SHEET FLOW A-B Smooth surfaces n= 0.011 P2= 3.00"
0.5	70	0.0140	2.4		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Paved Kv= 20.3 fps
0.1	52	0.0115	7.5	13.31	Circular Channel (pipe), Pipe C to D Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.011
0.1	33	0.0030	4.7	14.64	Circular Channel (pipe), Pipe D to E Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
0.2	45	0.0030	4.7	14.64	Circular Channel (pipe), Pipe E to F Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
0.2	50	0.0030	4.7	14.64	Circular Channel (pipe), Pipe F to G Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
2.7	280	Total			

Subcatchment 3S: SUBCATCHMENT 3

Hydrograph





400 Riverside Street – Portland, ME (Continued)

Vortechs Stormwater Treatment System Design Confirmation and Sizing Calculations

WOU #2

Site and System Specifics

$Q_{1\text{-year}} = 3.79 \text{ cfs}$
Specified System – Vortechs Model 7000
Treatment Capacity = 11.00 cfs
Grit Chamber Diameter = 8.00 ft

Vortechs System Swirl Chamber Surface Area Calculation

$$\begin{aligned} \text{Surface Area} &= (\pi)r^2 &= (3.14)(4.00 \text{ ft})^2 \\ & &= 50.27 \text{ sqft} \end{aligned}$$

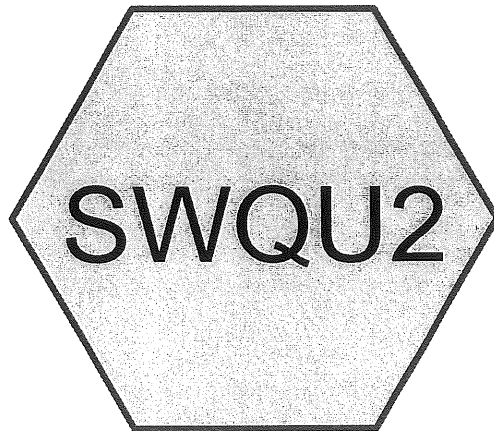
$Q_{1\text{-year}}$ Water Loading Rate Calculation

$$\begin{aligned} Q_{1\text{-year}} \text{ Operating Rate} &= Q_{1\text{-year}} / \text{Grit Chamber Surface Area} \\ &= (3.79 \text{ cfs} * 448.83 \text{ gpm/cfs}) / 50.27 \text{ sqft} \\ &= 33.84 \text{ gpm/sqft} \end{aligned}$$

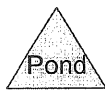
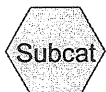
60% ME DEP Total Suspended Solids Removal Rating Verification

As stated in the attached letter from the ME DEP dated June 5, 2002, a removal rating of 60% will apply to Vortechs Systems, provided that the projected one year peak flow does not exceed a water loading rate of 36.8 gpm/sqft within the Vortechs System.

Since the calculated water loading rate 33.84 gpm/sqft for a one year flow does not exceed the upper limit of 36.8 gpm/sqft as set by the ME DEP, the Vortechs Model 7000 is sized appropriately for a 60% TSS removal rating.



WQU #2
SUBCATCHMENT
AREA



Drainage Diagram for LOT 4-400 Riverside Street Properties WQU#2
Prepared by {enter your company name here} 5/26/2005
HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

LOT 4-400 Riverside Street Properties WQU#2

Type III 24-hr Rainfall=2.50"

Prepared by {enter your company name here}

Page 2

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

5/26/2005

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment SWQU2: WQU #2 SUBCATCHMENT AREA

Runoff Area=1.450 ac Runoff Depth=2.27"

Flow Length=280' Tc=2.7 min CN=98 Runoff=3.79 cfs 0.274 af

Total Runoff Area = 1.450 ac Runoff Volume = 0.274 af Average Runoff Depth = 2.27"

Subcatchment SWQU2: WQU #2 SUBCATCHMENT AREA

Runoff = 3.79 cfs @ 12.04 hrs, Volume= 0.274 af, Depth= 2.27"

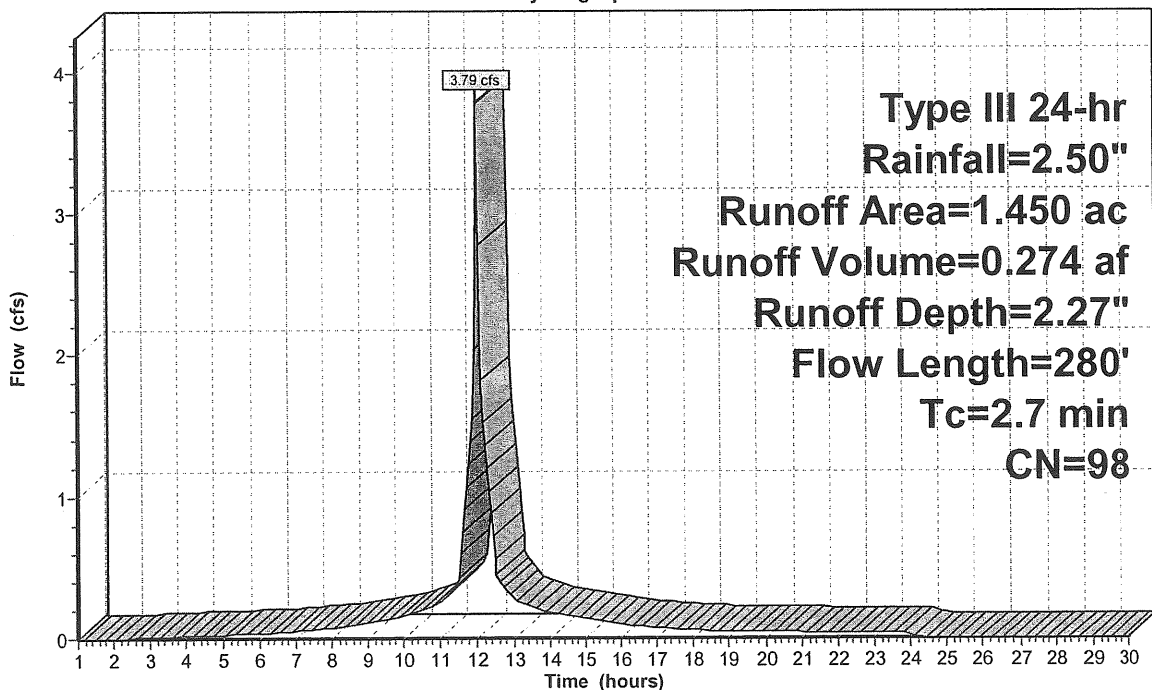
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
 Type III 24-hr Rainfall=2.50"

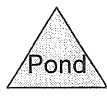
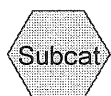
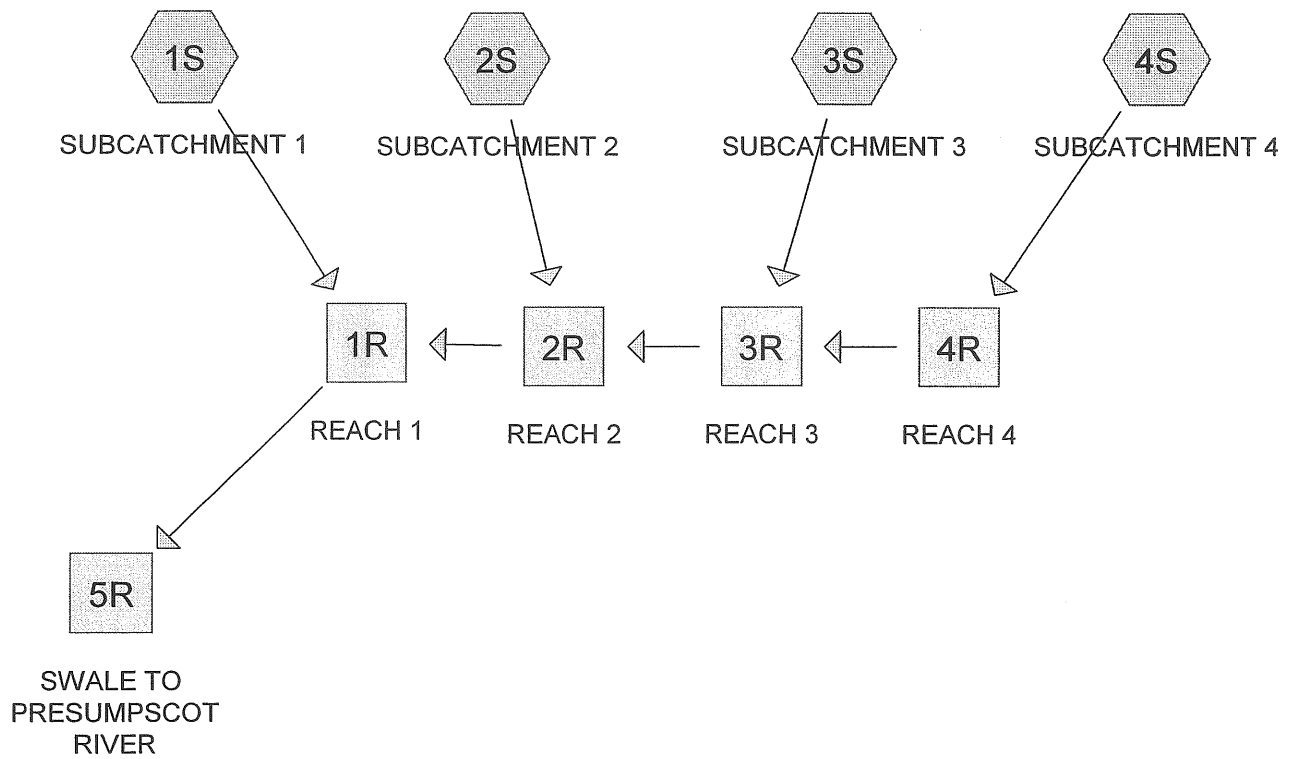
Area (ac)	CN	Description
1.450	98	IMPERVIOUS

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	30	0.0010	0.3		Sheet Flow, SHEET FLOW A-B Smooth surfaces n= 0.011 P2= 3.00"
0.5	70	0.0140	2.4		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Paved Kv= 20.3 fps
0.1	52	0.0115	7.5	13.31	Circular Channel (pipe), Pipe C to D Diam= 18.0" Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.011
0.1	33	0.0030	4.7	14.64	Circular Channel (pipe), Pipe D to E Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
0.2	45	0.0030	4.7	14.64	Circular Channel (pipe), Pipe E to F Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
0.2	50	0.0030	4.7	14.64	Circular Channel (pipe), Pipe F to G Diam= 24.0" Area= 3.1 sf Perim= 6.3' r= 0.50' n= 0.011
2.7	280	Total			

Subcatchment SWQU2: WQU #2 SUBCATCHMENT AREA

Hydrograph





Drainage Diagram for LOT 4-400 Riverside Street Properties
 Prepared by DeLuca-Hoffman Associates, Inc. 3/29/2004
 HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=3.00"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 2

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1S: SUBCATCHMENT 1 Runoff Area=3.000 ac Runoff Depth=1.31"
Flow Length=680' Tc=12.4 min CN=81 Runoff=3.65 cfs 0.328 af

Subcatchment 2S: SUBCATCHMENT 2 Runoff Area=0.750 ac Runoff Depth=0.76"
Flow Length=160' Tc=5.3 min CN=71 Runoff=0.60 cfs 0.048 af

Subcatchment 3S: SUBCATCHMENT 3 Runoff Area=4.250 ac Runoff Depth=1.38"
Flow Length=780' Tc=11.6 min CN=82 Runoff=5.63 cfs 0.488 af

Subcatchment 4S: SUBCATCHMENT 4 Runoff Area=2.000 ac Runoff Depth=0.33"
Flow Length=420' Tc=8.5 min CN=60 Runoff=0.35 cfs 0.056 af

Reach 1R: REACH 1 Peak Depth=1.00' Max Vel=0.8 fps Inflow=6.63 cfs 0.920 af
n=0.400 L=200.0' S=0.0750 '/ Capacity=1,058.98 cfs Outflow=6.44 cfs 0.920 af

Reach 2R: REACH 2 Peak Depth=0.99' Max Vel=0.6 fps Inflow=5.22 cfs 0.591 af
n=0.400 L=200.0' S=0.0450 '/ Capacity=820.28 cfs Outflow=4.85 cfs 0.591 af

Reach 3R: REACH 3 Peak Depth=1.13' Max Vel=0.6 fps Inflow=5.63 cfs 0.544 af
n=0.400 L=200.0' S=0.0300 '/ Capacity=570.91 cfs Outflow=4.93 cfs 0.544 af

Reach 4R: REACH 4 Peak Depth=0.02' Max Vel=0.2 fps Inflow=0.35 cfs 0.056 af
n=0.130 L=250.0' S=0.0020 '/ Capacity=9,723.14 cfs Outflow=0.22 cfs 0.056 af

Reach 5R: SWALE TO PRESUMPCOT RIVE Peak Depth=1.38' Max Vel=0.5 fps Inflow=6.44 cfs 0.920 af
n=0.400 L=150.0' S=0.0200 '/ Capacity=1,511.09 cfs Outflow=6.26 cfs 0.920 af

Total Runoff Area = 10.000 ac Runoff Volume = 0.920 af Average Runoff Depth = 1.10"

LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=3.00"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 3

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Subcatchment 1S: SUBCATCHMENT 1

Runoff = 3.65 cfs @ 12.18 hrs, Volume= 0.328 af, Depth= 1.31"

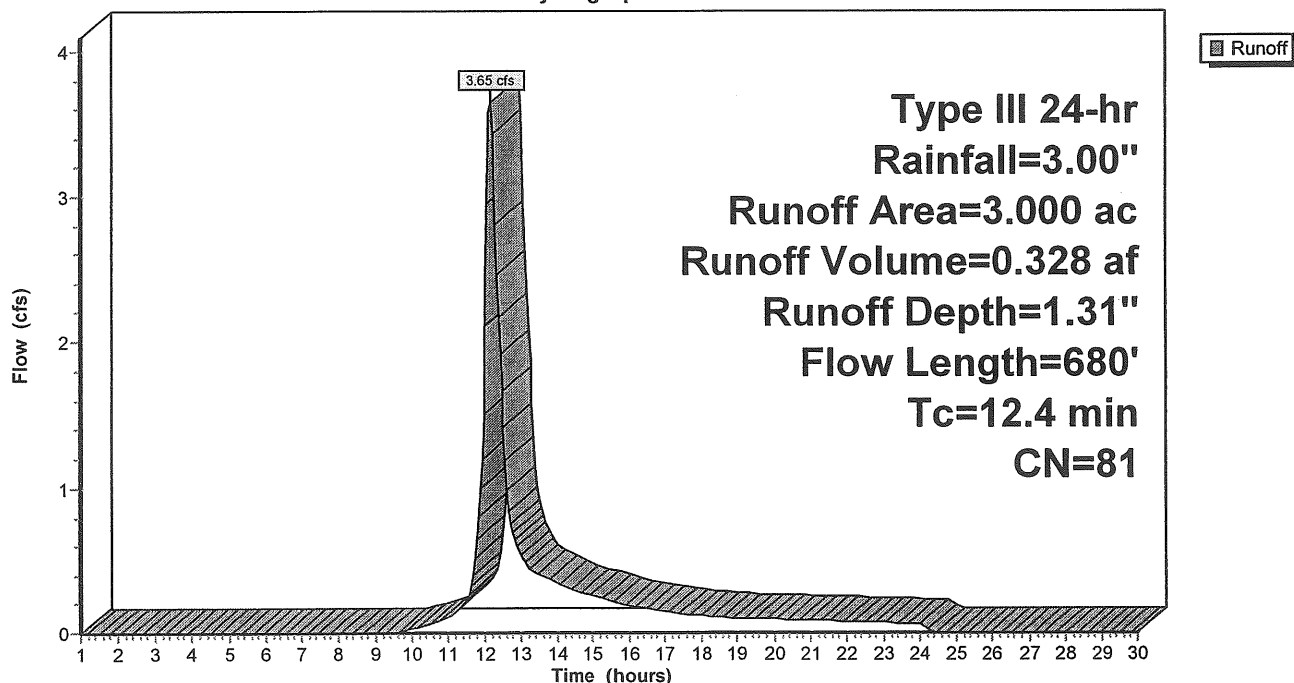
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
0.750	98	IMPERVIOUS
0.750	77	WEEDS, LOW BRUSH, FAIR, HSG D
0.750	78	CONTINUOUS GRASS, HSG D
0.750	71	CONTINUOUS GRASS, HSG C
3.000	81	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0400	0.2		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
0.7	120	0.1670	2.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
0.5	260	0.0380	9.0	8,142.85	Channel Flow, CHANNEL FLOW C-D Area= 900.0 sf Perim= 110.0' r= 8.18' n= 0.130
3.5	200	0.0180	0.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED D TO Short Grass Pasture Kv= 7.0 fps
12.4	680	Total			

Subcatchment 1S: SUBCATCHMENT 1

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=3.00"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 4

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Subcatchment 2S: SUBCATCHMENT 2

Runoff = 0.60 cfs @ 12.10 hrs, Volume= 0.048 af, Depth= 0.76"

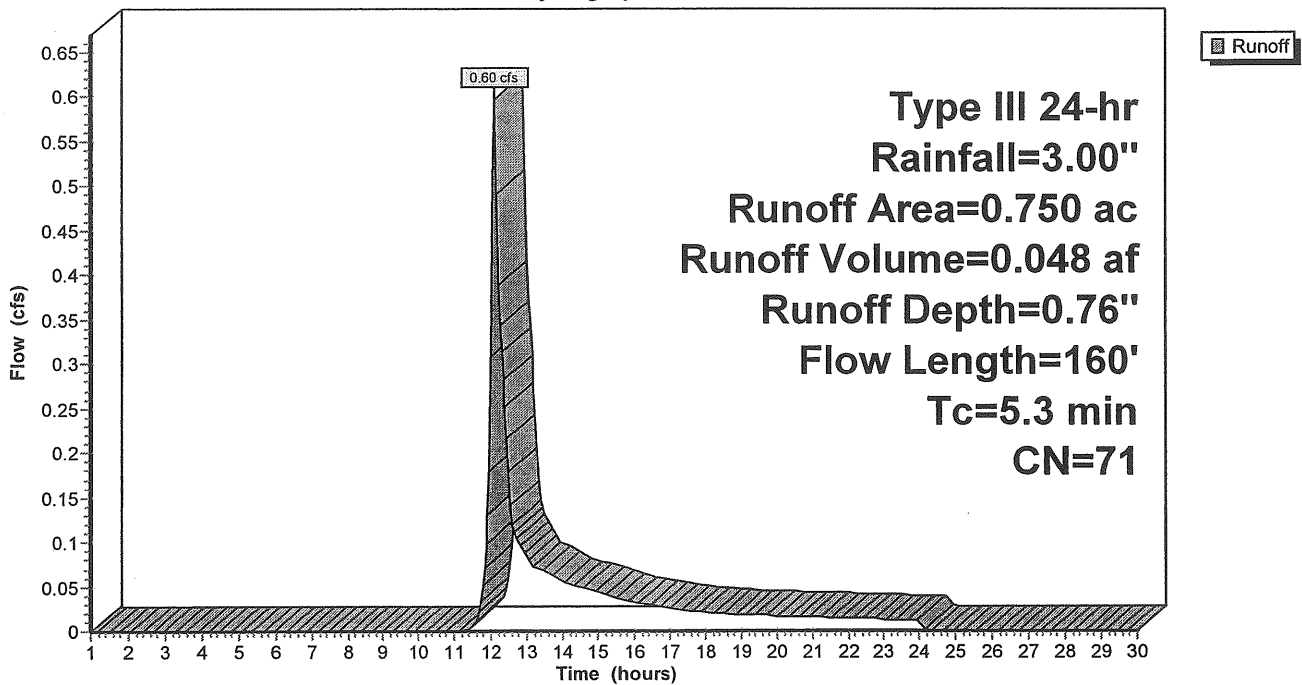
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
0.150	56	BRUSH, WEEDS, FAIR, HSG B
0.150	58	CONTINUOUS GRASS, HSG B
0.150	71	CONTINUOUS GRASS, HSG C
0.300	84	GRASSLAND, FAIR, HSG D
0.750	71	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	100	0.1200	0.3		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
0.4	60	0.1080	2.3		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
5.3	160	Total			

Subcatchment 2S: SUBCATCHMENT 2

Hydrograph



Subcatchment 3S: SUBCATCHMENT 3

Runoff = 5.63 cfs @ 12.17 hrs, Volume= 0.488 af, Depth= 1.38"

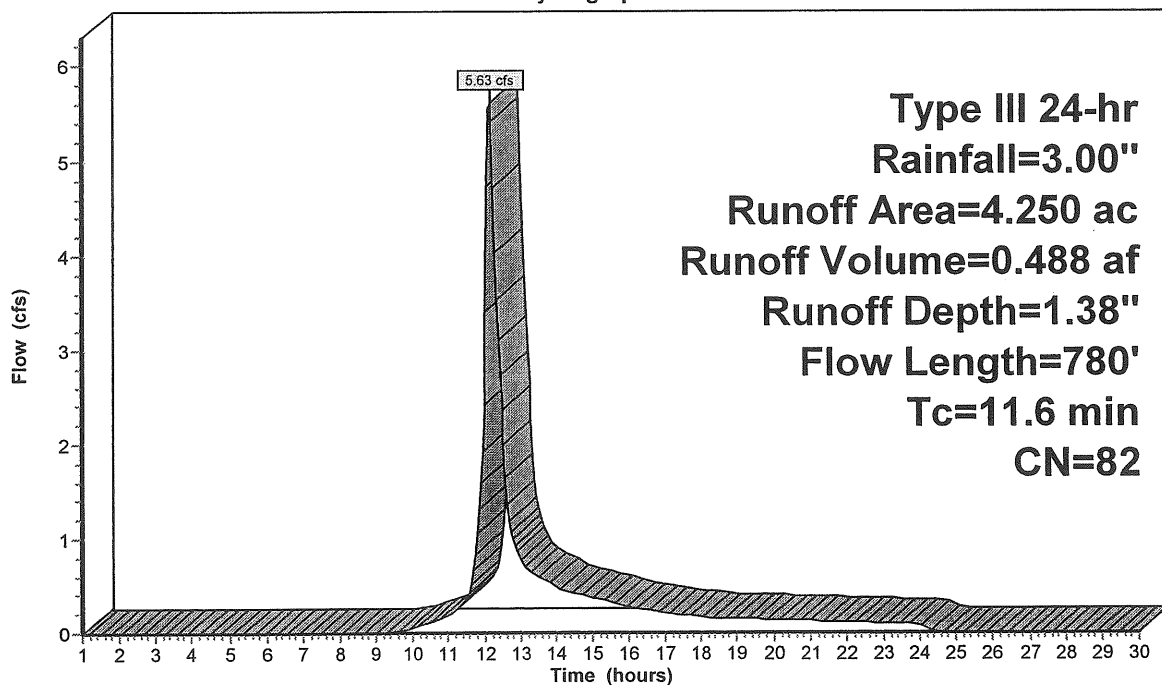
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
 Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
2.250	98	IMPERVIOUS
1.000	56	WEEDS, LOW BRUSH, FAIR, HSG B
1.000	71	CONTINUOUS GRASS, HSG C
4.250	82	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	100	0.1700	0.4		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
2.7	200	0.0300	1.2		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
3.1	255	0.0078	1.4	169.13	Channel Flow, CHANNEL FLOW C-D Area= 125.0 sf Perim= 65.0' r= 1.92' n= 0.150
1.5	225	0.0580	2.5	569.17	Channel Flow, CHANNEL FLOW D TO E Area= 230.0 sf Perim= 50.0' r= 4.60' n= 0.400
11.6	780	Total			

Subcatchment 3S: SUBCATCHMENT 3

Hydrograph



Subcatchment 4S: SUBCATCHMENT 4

Runoff = 0.35 cfs @ 12.22 hrs, Volume= 0.056 af, Depth= 0.33"

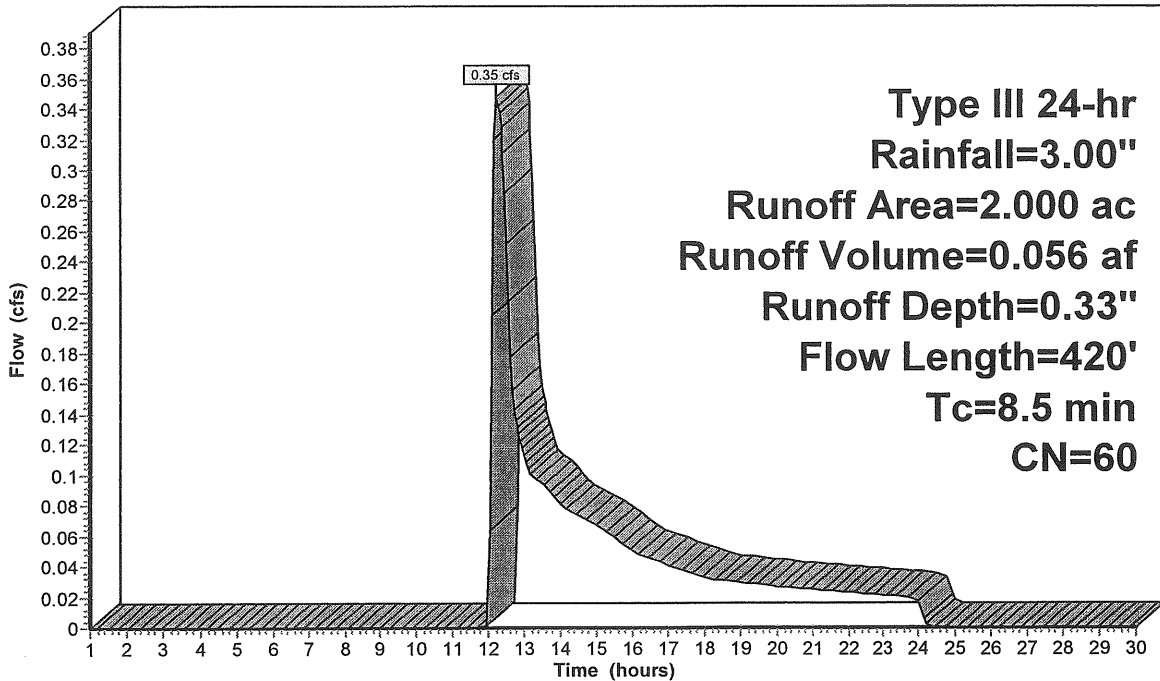
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
 Type III 24-hr Rainfall=3.00"

Area (ac)	CN	Description
0.150	98	IMPERVIOUS
1.680	56	WEEDS, LOW BRUSH, FAIR, HSG B
0.170	71	CONTINUOUS GRASS. HSG C
2.000	60	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1400	0.4		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
3.0	200	0.0500	1.1		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Woodland Kv= 5.0 fps
0.9	120	0.0500	2.2	388.87	Channel Flow, CHANNEL FLOW C-D Area= 175.0 sf Perim= 40.0' r= 4.38' n= 0.400
8.5	420	Total			

Subcatchment 4S: SUBCATCHMENT 4

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=3.00"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 7

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 1R: REACH 1

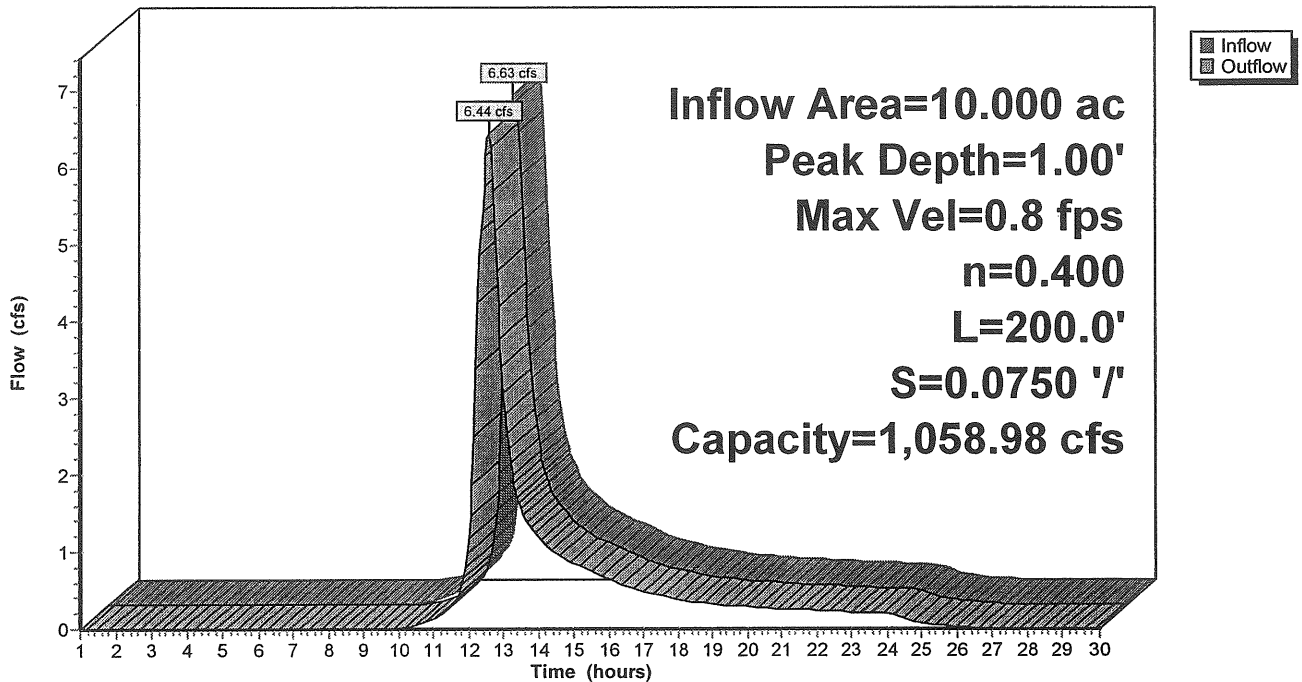
Inflow Area = 10.000 ac, Inflow Depth = 1.10"
Inflow = 6.63 cfs @ 12.46 hrs, Volume= 0.920 af
Outflow = 6.44 cfs @ 12.58 hrs, Volume= 0.920 af, Atten= 3%, Lag= 6.9 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.8 fps, Min. Travel Time= 4.1 min
Avg. Velocity = 0.3 fps, Avg. Travel Time= 10.3 min

Peak Depth= 1.00' @ 12.51 hrs
Capacity at bank full= 1,058.98 cfs
Inlet Invert= 35.00', Outlet Invert= 20.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0750 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: REACH 1

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=3.00"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 8

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 2R: REACH 2

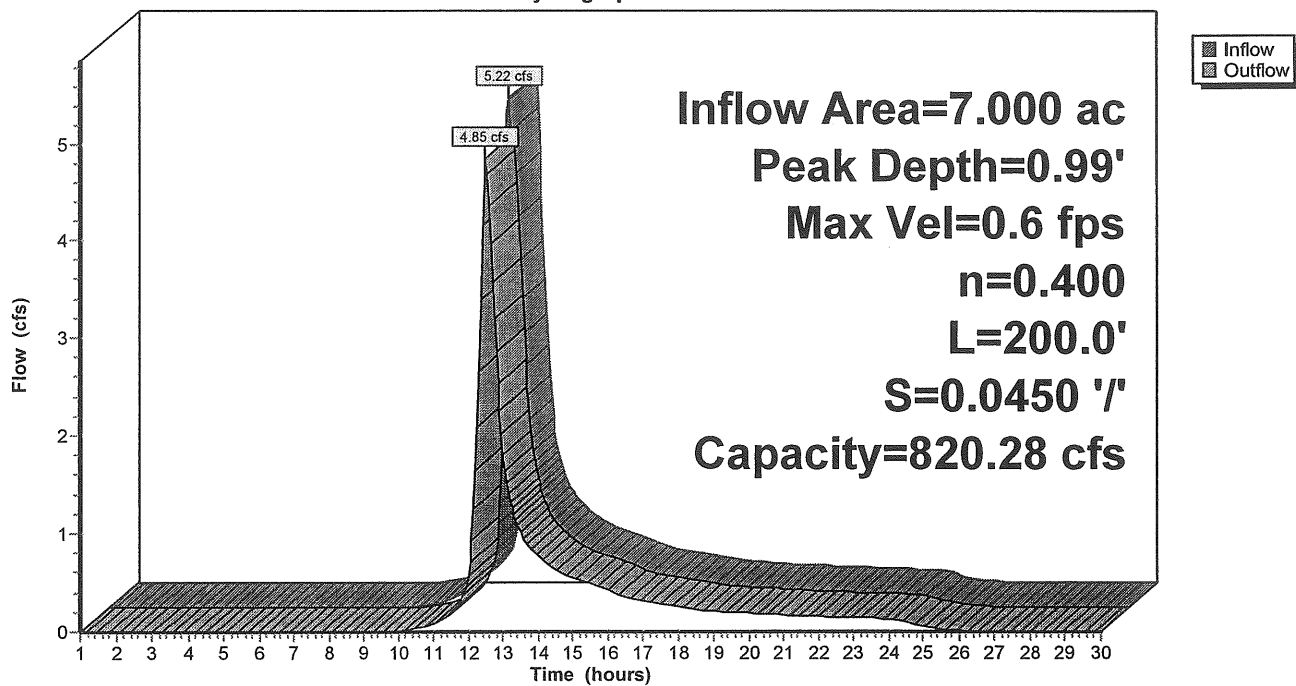
Inflow Area = 7.000 ac, Inflow Depth = 1.01"
Inflow = 5.22 cfs @ 12.34 hrs, Volume= 0.591 af
Outflow = 4.85 cfs @ 12.50 hrs, Volume= 0.591 af, Atten= 7%, Lag= 9.7 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.6 fps, Min. Travel Time= 5.4 min
Avg. Velocity = 0.2 fps, Avg. Travel Time= 13.9 min

Peak Depth= 0.99' @ 12.41 hrs
Capacity at bank full= 820.28 cfs
Inlet Invert= 29.00', Outlet Invert= 20.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0450 '/'
Side Slope Z-value= 3.0 '/'

Reach 2R: REACH 2

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=3.00"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 9

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 3R: REACH 3

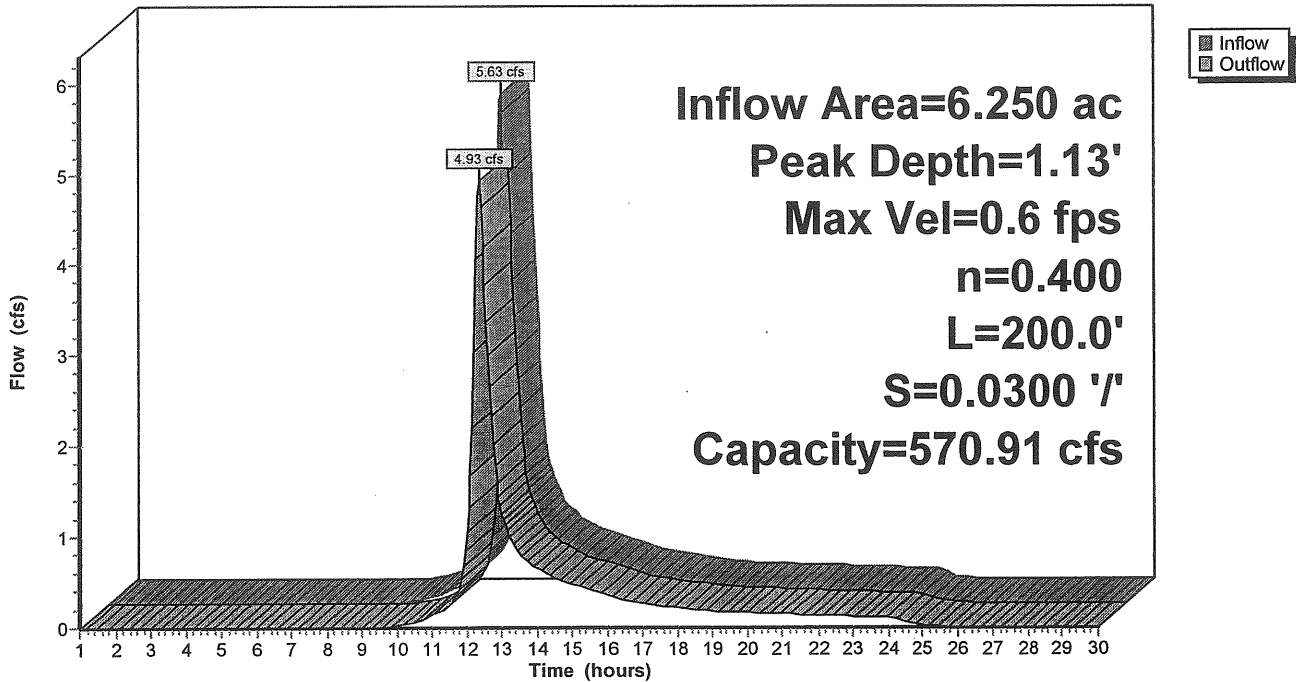
Inflow Area = 6.250 ac, Inflow Depth = 1.04"
Inflow = 5.63 cfs @ 12.17 hrs, Volume= 0.544 af
Outflow = 4.93 cfs @ 12.34 hrs, Volume= 0.544 af, Atten= 12%, Lag= 10.5 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.6 fps, Min. Travel Time= 6.0 min
Avg. Velocity= 0.2 fps, Avg. Travel Time= 16.2 min

Peak Depth= 1.13' @ 12.24 hrs
Capacity at bank full= 570.91 cfs
Inlet Invert= 35.00', Outlet Invert= 29.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0300 '/'
Side Slope Z-value= 2.0 3.0 '/'

Reach 3R: REACH 3

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=3.00"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 10

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 4R: REACH 4

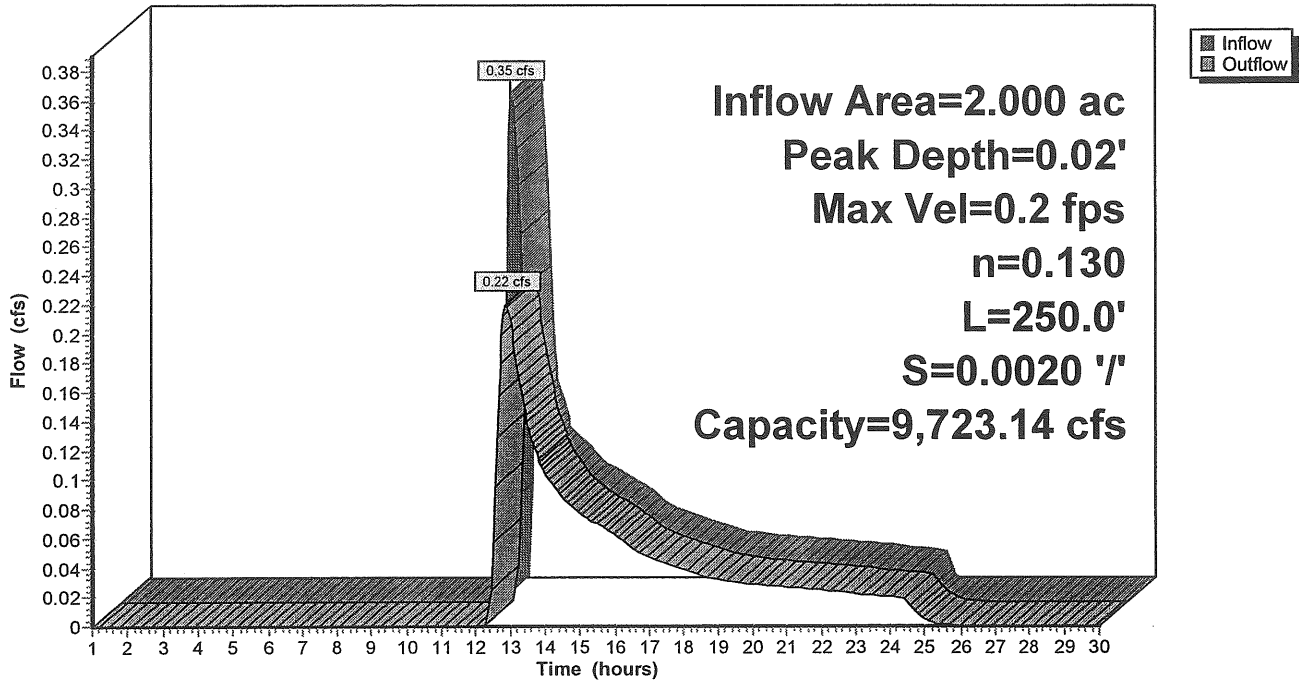
Inflow Area = 2.000 ac, Inflow Depth = 0.33"
Inflow = 0.35 cfs @ 12.22 hrs, Volume= 0.056 af
Outflow = 0.22 cfs @ 12.89 hrs, Volume= 0.056 af, Atten= 37%, Lag= 40.2 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.2 fps, Min. Travel Time= 20.8 min
Avg. Velocity = 0.2 fps, Avg. Travel Time= 20.8 min

Peak Depth= 0.02' @ 12.54 hrs
Capacity at bank full= 9,723.14 cfs
Inlet Invert= 35.50', Outlet Invert= 35.00'
50.00' x 25.00' deep channel, n= 0.130 Length= 250.0' Slope= 0.0020 '/'
Side Slope Z-value= 3.0 '/'

Reach 4R: REACH 4

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=3.00"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 11

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 5R: SWALE TO PRESUMPCOT RIVER

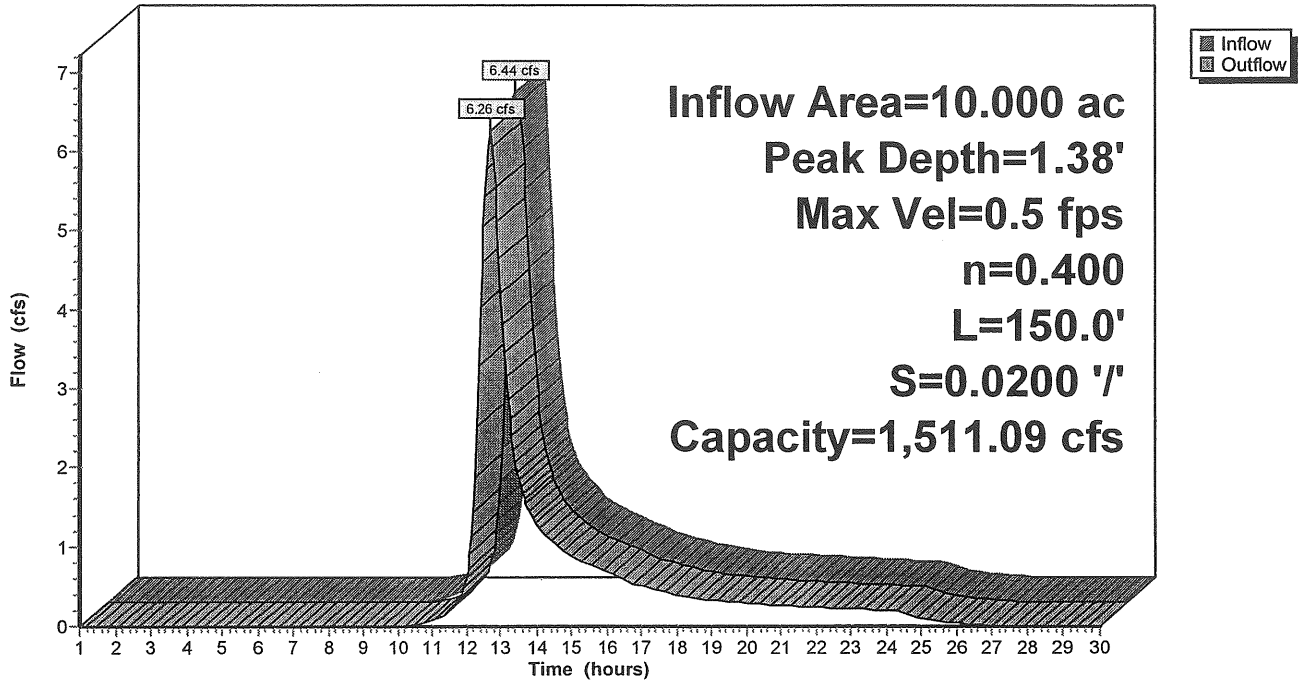
Inflow Area = 10.000 ac, Inflow Depth = 1.10"
Inflow = 6.44 cfs @ 12.58 hrs, Volume= 0.920 af
Outflow = 6.26 cfs @ 12.71 hrs, Volume= 0.920 af, Atten= 3%, Lag= 8.2 min

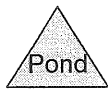
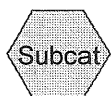
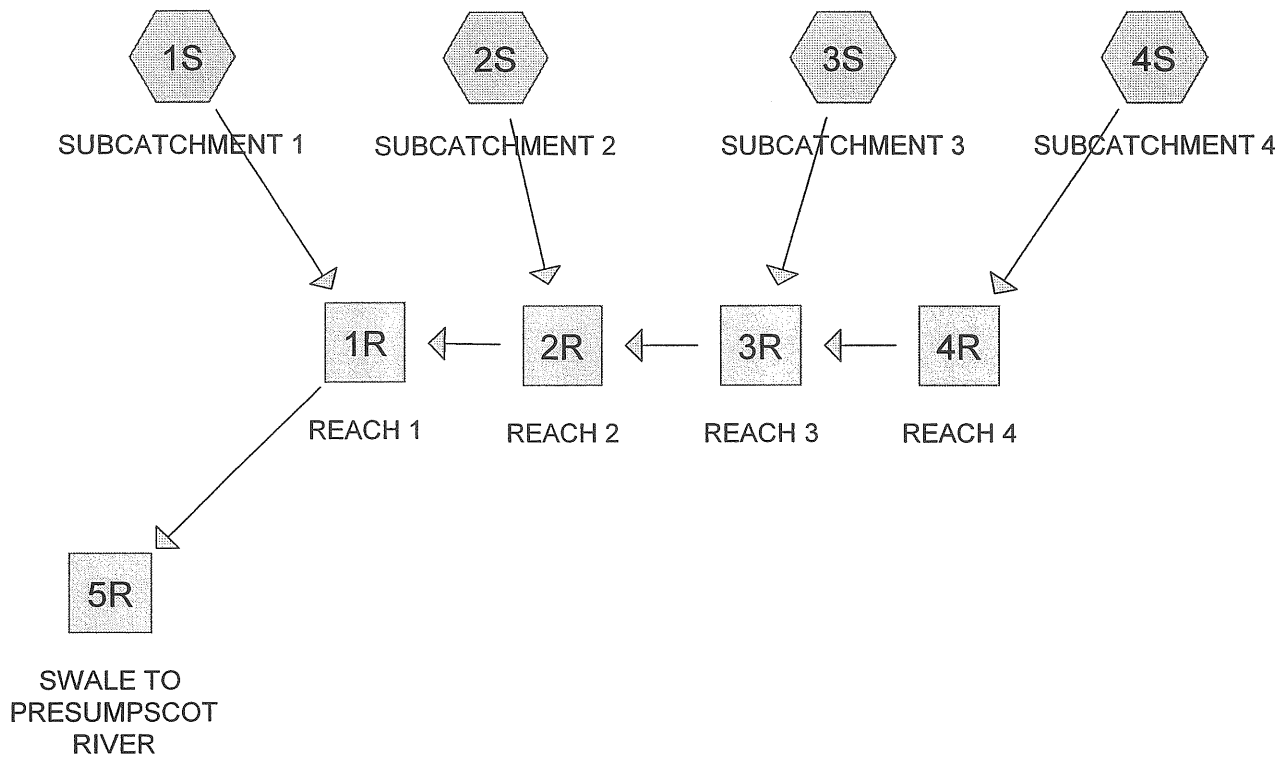
Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.5 fps, Min. Travel Time= 5.0 min
Avg. Velocity = 0.2 fps, Avg. Travel Time= 12.1 min

Peak Depth= 1.38' @ 12.63 hrs
Capacity at bank full= 1,511.09 cfs
Inlet Invert= 20.00', Outlet Invert= 17.00'
5.00' x 15.00' deep channel, n= 0.400 Length= 150.0' Slope= 0.0200 '/'
Side Slope Z-value= 3.0 '/'

Reach 5R: SWALE TO PRESUMPCOT RIVER

Hydrograph





Drainage Diagram for LOT 4-400 Riverside Street Properties
 Prepared by DeLuca-Hoffman Associates, Inc. 3/29/2004
 HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points
Runoff by SCS TR-20 method, UH=SCS
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: SUBCATCHMENT 1 Runoff Area=3.000 ac Runoff Depth=2.72"
Flow Length=680' Tc=12.4 min CN=81 Runoff=7.73 cfs 0.680 af

Subcatchment 2S: SUBCATCHMENT 2 Runoff Area=0.750 ac Runoff Depth=1.89"
Flow Length=160' Tc=5.3 min CN=71 Runoff=1.63 cfs 0.118 af

Subcatchment 3S: SUBCATCHMENT 3 Runoff Area=4.250 ac Runoff Depth=2.81"
Flow Length=780' Tc=11.6 min CN=82 Runoff=11.57 cfs 0.996 af

Subcatchment 4S: SUBCATCHMENT 4 Runoff Area=2.000 ac Runoff Depth=1.13"
Flow Length=420' Tc=8.5 min CN=60 Runoff=2.07 cfs 0.188 af

Reach 1R: REACH 1 Peak Depth=1.51' Max Vel=1.0 fps Inflow=14.67 cfs 1.983 af
n=0.400 L=200.0' S=0.0750 '/' Capacity=1,058.98 cfs Outflow=14.45 cfs 1.983 af

Reach 2R: REACH 2 Peak Depth=1.47' Max Vel=0.8 fps Inflow=11.16 cfs 1.303 af
n=0.400 L=200.0' S=0.0450 '/' Capacity=820.28 cfs Outflow=10.50 cfs 1.303 af

Reach 3R: REACH 3 Peak Depth=1.68' Max Vel=0.7 fps Inflow=11.62 cfs 1.184 af
n=0.400 L=200.0' S=0.0300 '/' Capacity=570.91 cfs Outflow=10.42 cfs 1.184 af

Reach 4R: REACH 4 Peak Depth=0.11' Max Vel=0.2 fps Inflow=2.07 cfs 0.188 af
n=0.130 L=250.0' S=0.0020 '/' Capacity=9,723.14 cfs Outflow=1.09 cfs 0.188 af

Reach 5R: SWALE TO PRESUMPCOT RIVE Peak Depth=2.06' Max Vel=0.6 fps Inflow=14.45 cfs 1.983 af
n=0.400 L=150.0' S=0.0200 '/' Capacity=1,511.09 cfs Outflow=14.17 cfs 1.983 af

Total Runoff Area = 10.000 ac Runoff Volume = 1.983 af Average Runoff Depth = 2.38"

Subcatchment 1S: SUBCATCHMENT 1

Runoff = 7.73 cfs @ 12.17 hrs, Volume= 0.680 af, Depth= 2.72"

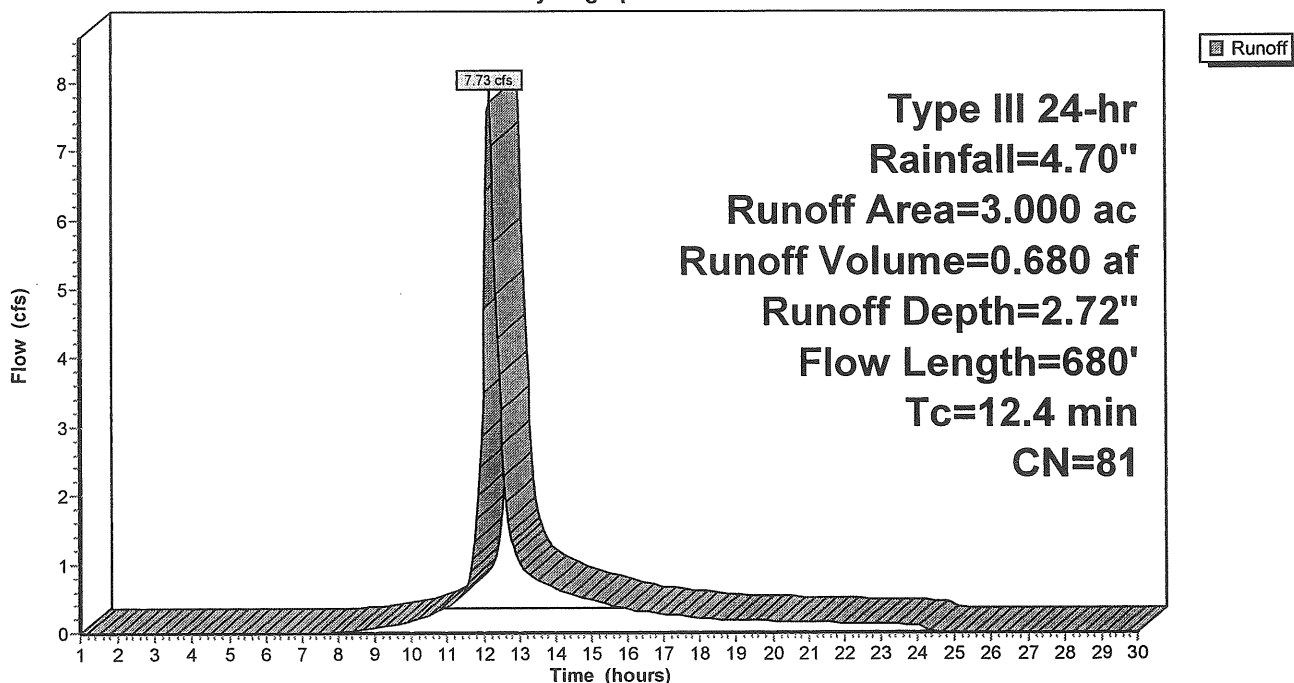
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.750	98	IMPERVIOUS
0.750	77	WEEDS, LOW BRUSH, FAIR, HSG D
0.750	78	CONTINUOUS GRASS, HSG D
0.750	71	CONTINUOUS GRASS, HSG C
3.000	81	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0400	0.2		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
0.7	120	0.1670	2.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
0.5	260	0.0380	9.0	8,142.85	Channel Flow, CHANNEL FLOW C-D Area= 900.0 sf Perim= 110.0' r= 8.18' n= 0.130
3.5	200	0.0180	0.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED D TO Short Grass Pasture Kv= 7.0 fps
12.4	680	Total			

Subcatchment 1S: SUBCATCHMENT 1

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=4.70"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 4

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Subcatchment 2S: SUBCATCHMENT 2

Runoff = 1.63 cfs @ 12.09 hrs, Volume= 0.118 af, Depth= 1.89"

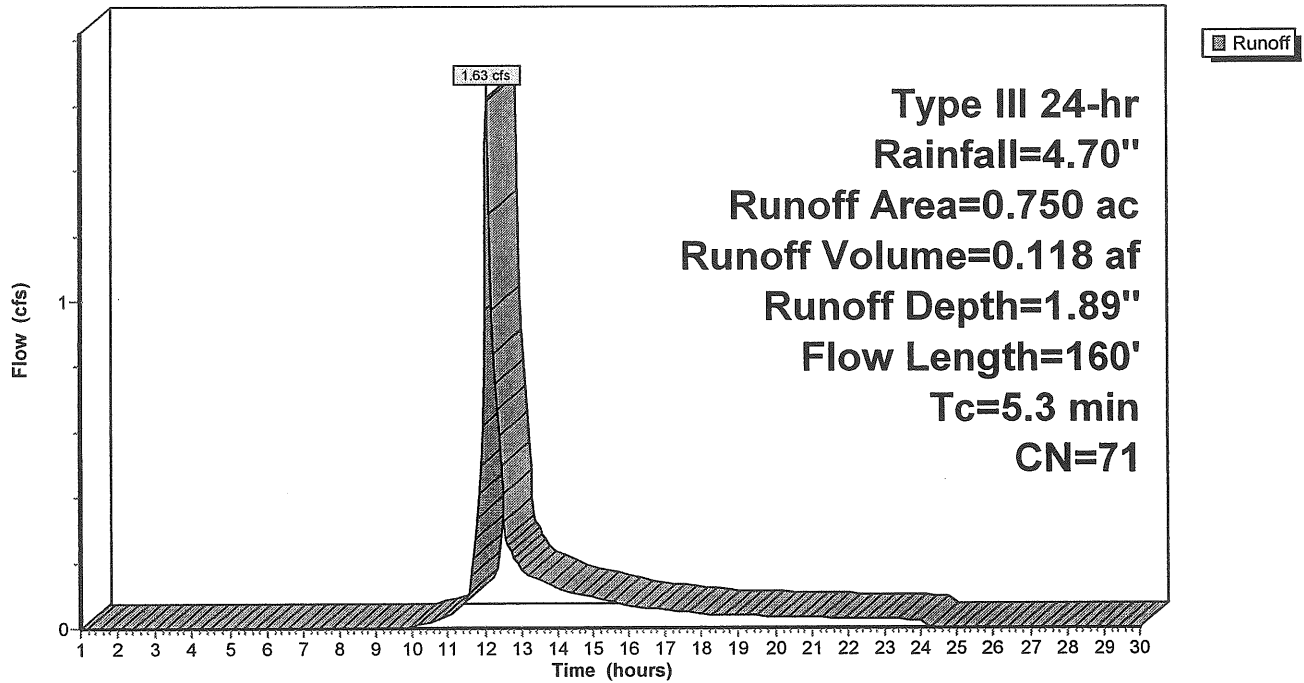
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.150	56	BRUSH, WEEDS, FAIR, HSG B
0.150	58	CONTINUOUS GRASS, HSG B
0.150	71	CONTINUOUS GRASS, HSG C
0.300	84	GRASSLAND, FAIR, HSG D
0.750	71	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	100	0.1200	0.3		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
0.4	60	0.1080	2.3		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
5.3	160	Total			

Subcatchment 2S: SUBCATCHMENT 2

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=4.70"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 5

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Subcatchment 3S: SUBCATCHMENT 3

Runoff = 11.57 cfs @ 12.16 hrs, Volume= 0.996 af, Depth= 2.81"

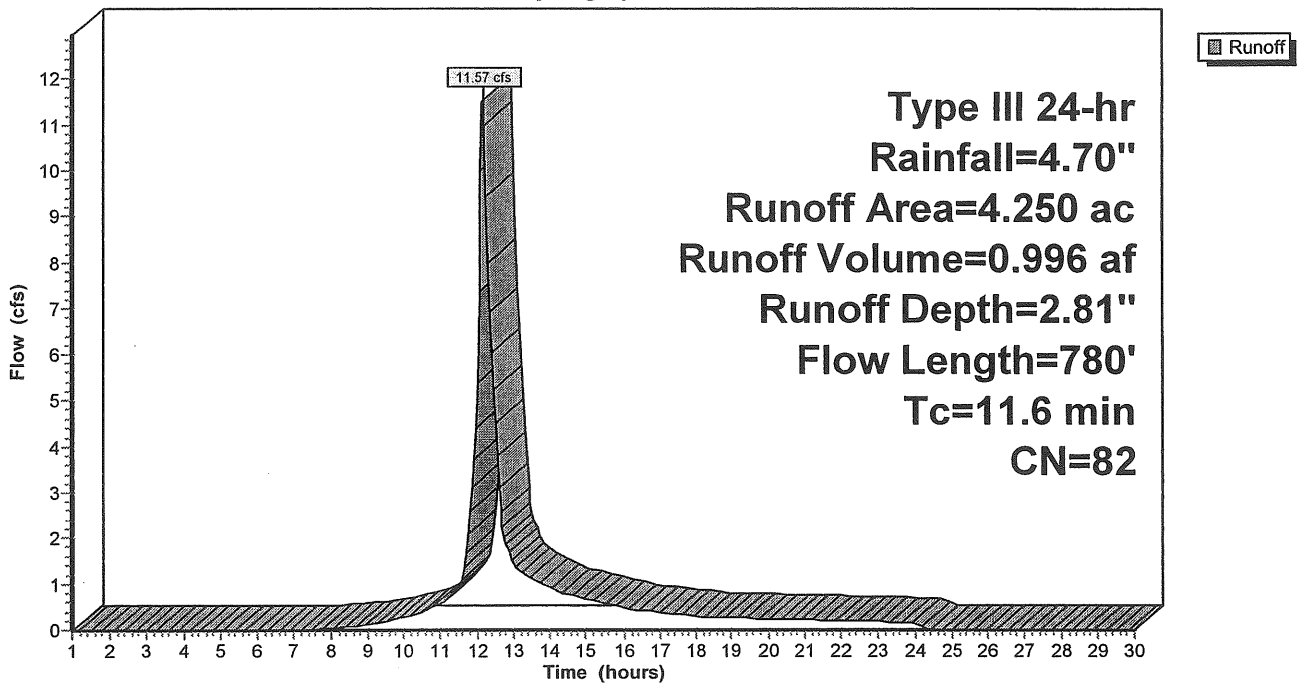
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
2.250	98	IMPERVIOUS
1.000	56	WEEDS, LOW BRUSH, FAIR, HSG B
1.000	71	CONTINUOUS GRASS, HSG C
4.250	82	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	100	0.1700	0.4		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
2.7	200	0.0300	1.2		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
3.1	255	0.0078	1.4	169.13	Channel Flow, CHANNEL FLOW C-D Area= 125.0 sf Perim= 65.0' r= 1.92' n= 0.150
1.5	225	0.0580	2.5	569.17	Channel Flow, CHANNEL FLOW D TO E Area= 230.0 sf Perim= 50.0' r= 4.60' n= 0.400
11.6	780	Total			

Subcatchment 3S: SUBCATCHMENT 3

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=4.70"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 6

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Subcatchment 4S: SUBCATCHMENT 4

Runoff = 2.07 cfs @ 12.14 hrs, Volume= 0.188 af, Depth= 1.13"

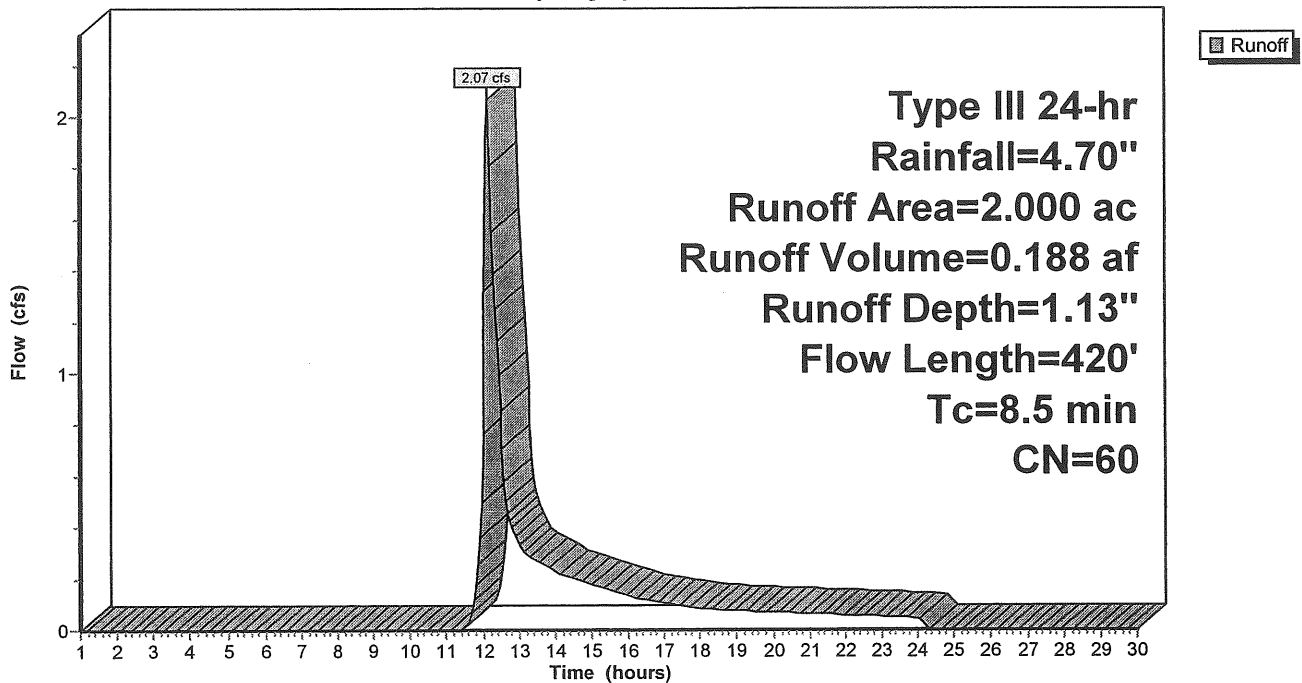
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=4.70"

Area (ac)	CN	Description
0.150	98	IMPERVIOUS
1.680	56	WEEDS, LOW BRUSH, FAIR, HSG B
0.170	71	CONTINUOUS GRASS. HSG C
2.000	60	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1400	0.4		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
3.0	200	0.0500	1.1		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Woodland Kv= 5.0 fps
0.9	120	0.0500	2.2	388.87	Channel Flow, CHANNEL FLOW C-D Area= 175.0 sf Perim= 40.0' r= 4.38' n= 0.400
8.5	420	Total			

Subcatchment 4S: SUBCATCHMENT 4

Hydrograph



Reach 1R: REACH 1

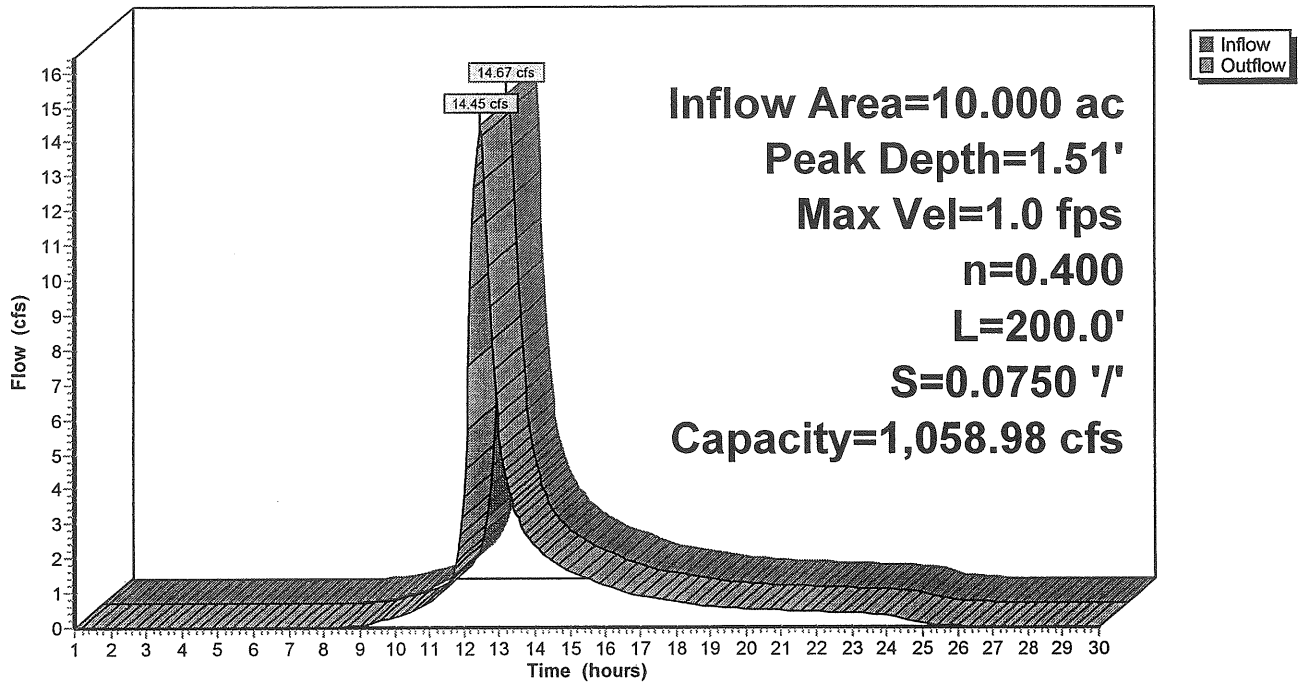
Inflow Area = 10.000 ac, Inflow Depth = 2.38"
Inflow = 14.67 cfs @ 12.39 hrs, Volume= 1.983 af
Outflow = 14.45 cfs @ 12.48 hrs, Volume= 1.983 af, Atten= 2%, Lag= 5.3 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.0 fps, Min. Travel Time= 3.3 min
Avg. Velocity = 0.4 fps, Avg. Travel Time= 8.8 min

Peak Depth= 1.51' @ 12.43 hrs
Capacity at bank full= 1,058.98 cfs
Inlet Invert= 35.00', Outlet Invert= 20.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0750 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: REACH 1

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=4.70"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 8

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 2R: REACH 2

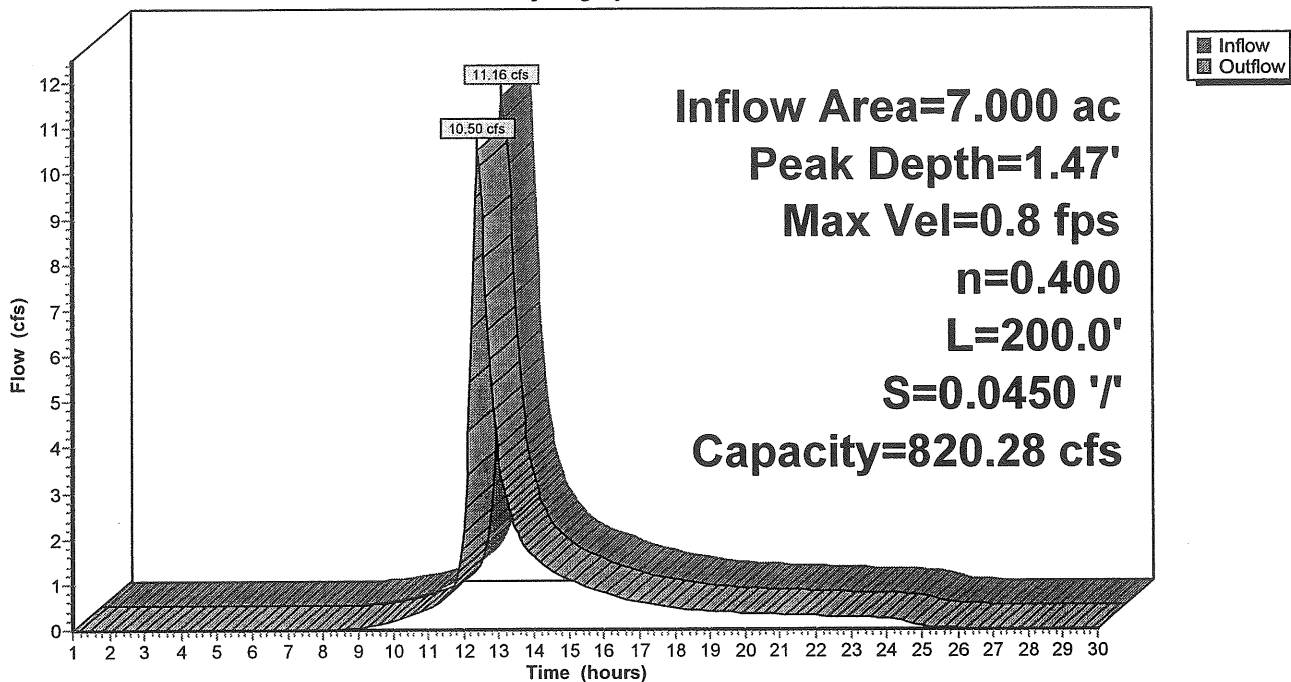
Inflow Area = 7.000 ac, Inflow Depth = 2.23"
Inflow = 11.16 cfs @ 12.30 hrs, Volume= 1.303 af
Outflow = 10.50 cfs @ 12.43 hrs, Volume= 1.303 af, Atten= 6%, Lag= 7.7 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.8 fps, Min. Travel Time= 4.3 min
Avg. Velocity = 0.3 fps, Avg. Travel Time= 11.8 min

Peak Depth= 1.47' @ 12.36 hrs
Capacity at bank full= 820.28 cfs
Inlet Invert= 29.00', Outlet Invert= 20.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0450 '/'
Side Slope Z-value= 3.0 '/'

Reach 2R: REACH 2

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=4.70"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 9

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 3R: REACH 3

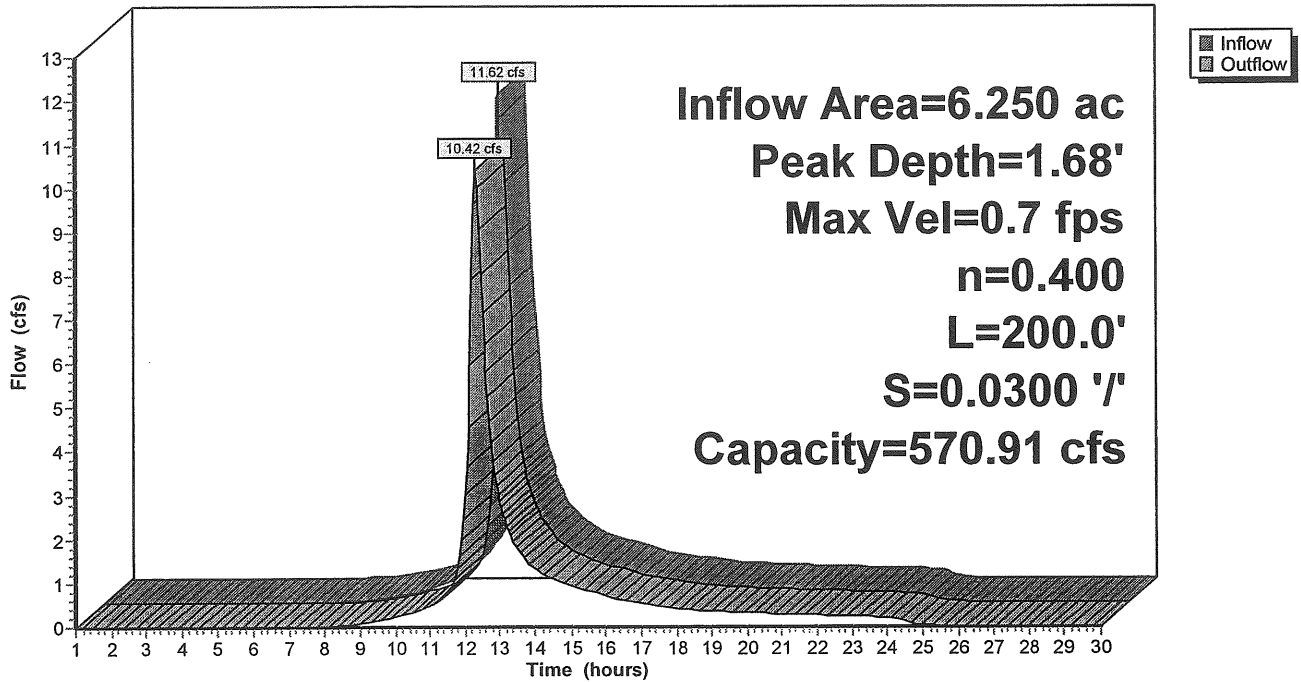
Inflow Area = 6.250 ac, Inflow Depth = 2.27"
Inflow = 11.62 cfs @ 12.16 hrs, Volume= 1.184 af
Outflow = 10.42 cfs @ 12.31 hrs, Volume= 1.184 af, Atten= 10%, Lag= 8.7 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.7 fps, Min. Travel Time= 4.9 min
Avg. Velocity = 0.2 fps, Avg. Travel Time= 13.7 min

Peak Depth= 1.68' @ 12.22 hrs
Capacity at bank full= 570.91 cfs
Inlet Invert= 35.00', Outlet Invert= 29.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0300 '/'
Side Slope Z-value= 2.0 3.0 '/'

Reach 3R: REACH 3

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=4.70"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 10

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 4R: REACH 4

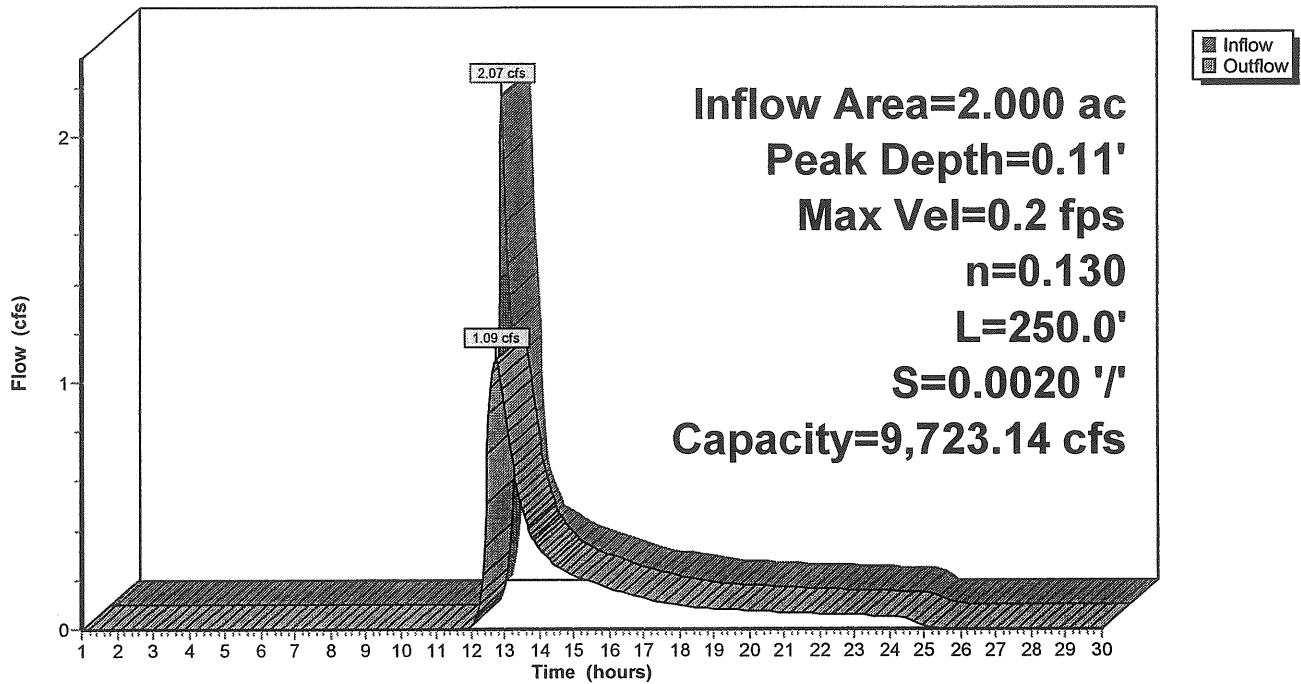
Inflow Area = 2.000 ac, Inflow Depth = 1.13"
Inflow = 2.07 cfs @ 12.14 hrs, Volume= 0.188 af
Outflow = 1.09 cfs @ 12.76 hrs, Volume= 0.188 af, Atten= 47%, Lag= 37.0 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.2 fps, Min. Travel Time= 20.8 min
Avg. Velocity = 0.2 fps, Avg. Travel Time= 20.8 min

Peak Depth= 0.11' @ 12.41 hrs
Capacity at bank full= 9,723.14 cfs
Inlet Invert= 35.50', Outlet Invert= 35.00'
50.00' x 25.00' deep channel, n= 0.130 Length= 250.0' Slope= 0.0020 '/
Side Slope Z-value= 3.0 '/

Reach 4R: REACH 4

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=4.70"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 11

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 5R: SWALE TO PRESUMPCOT RIVER

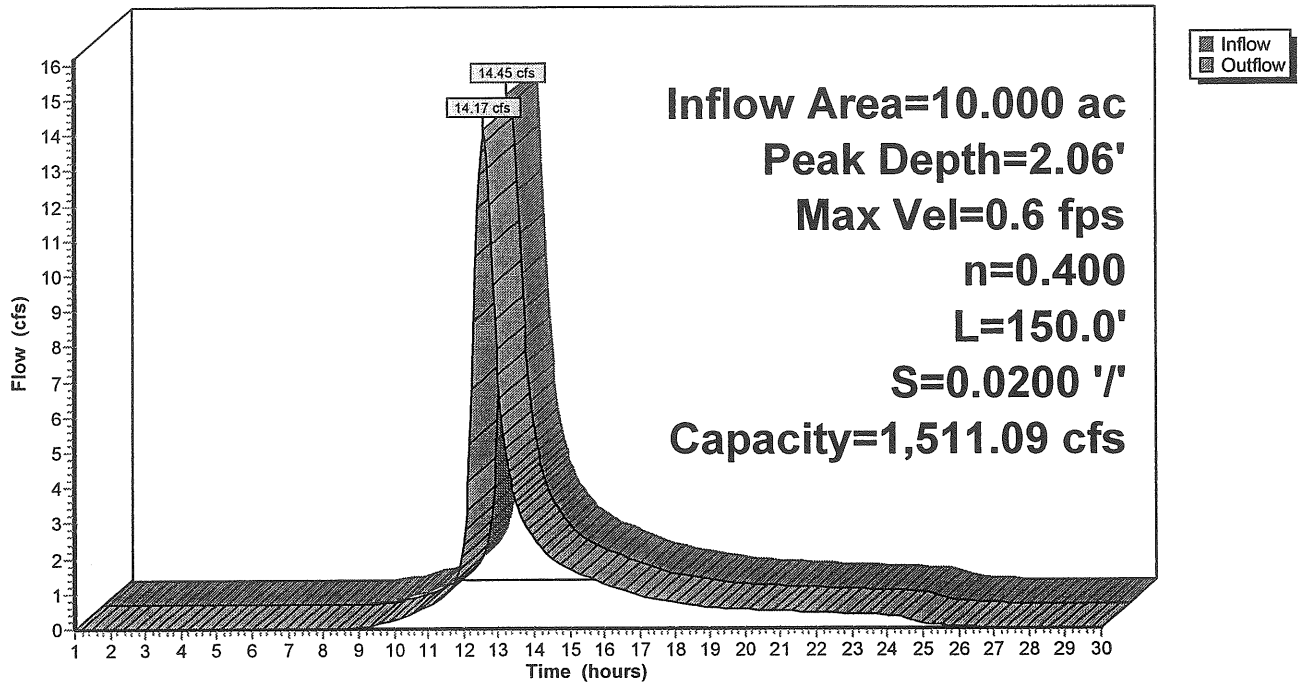
Inflow Area = 10.000 ac, Inflow Depth = 2.38"
Inflow = 14.45 cfs @ 12.48 hrs, Volume= 1.983 af
Outflow = 14.17 cfs @ 12.59 hrs, Volume= 1.983 af, Atten= 2%, Lag= 6.4 min

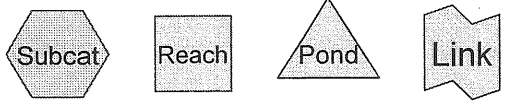
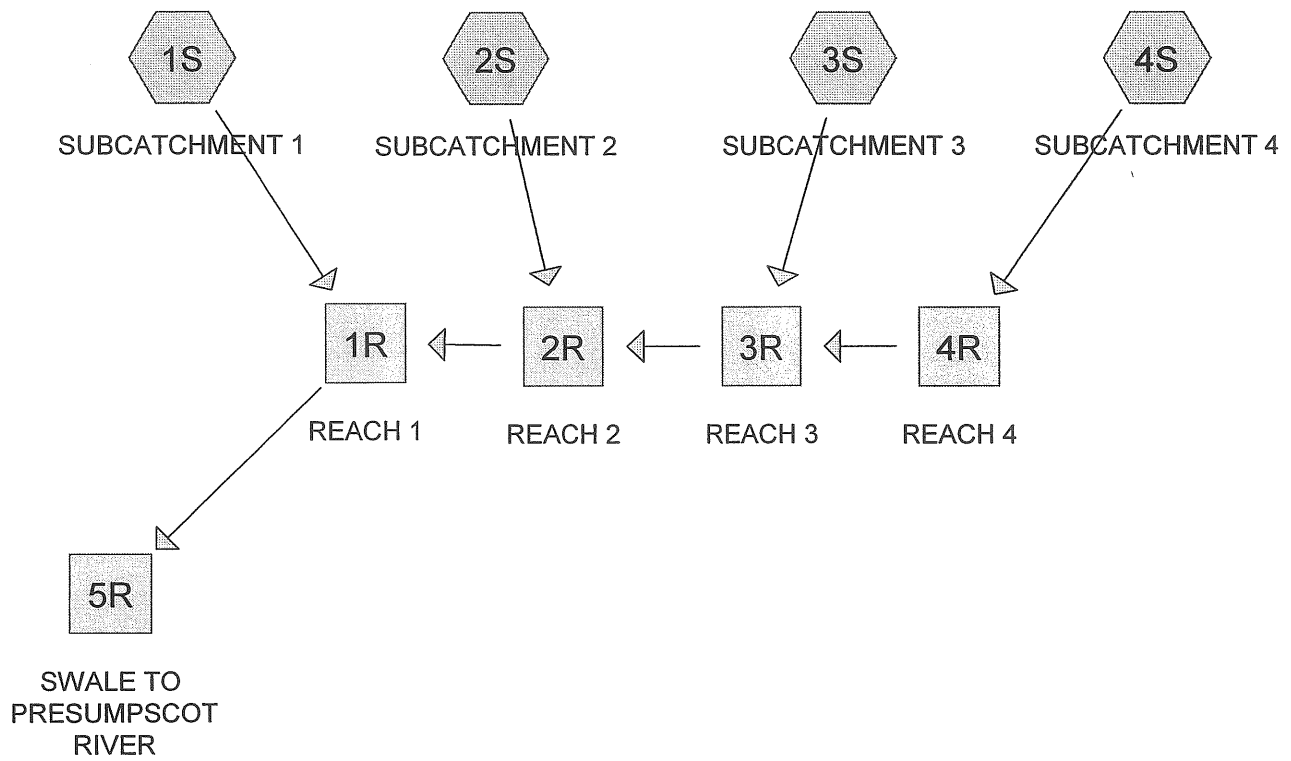
Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.6 fps, Min. Travel Time= 4.0 min
Avg. Velocity = 0.2 fps, Avg. Travel Time= 10.3 min

Peak Depth= 2.06' @ 12.53 hrs
Capacity at bank full= 1,511.09 cfs
Inlet Invert= 20.00', Outlet Invert= 17.00'
5.00' x 15.00' deep channel, n= 0.400 Length= 150.0' Slope= 0.0200 '/'
Side Slope Z-value= 3.0 '/'

Reach 5R: SWALE TO PRESUMPCOT RIVER

Hydrograph





Drainage Diagram for LOT 4-400 Riverside Street Properties
 Prepared by DeLuca-Hoffman Associates, Inc. 3/29/2004
 HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=5.50"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 2

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Time span=1.00-30.00 hrs, dt=0.05 hrs, 581 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1S: SUBCATCHMENT 1

Runoff Area=3.000 ac Runoff Depth=3.43"

Flow Length=680' Tc=12.4 min CN=81 Runoff=9.72 cfs 0.858 af

Subcatchment 2S: SUBCATCHMENT 2

Runoff Area=0.750 ac Runoff Depth=2.50"

Flow Length=160' Tc=5.3 min CN=71 Runoff=2.18 cfs 0.156 af

Subcatchment 3S: SUBCATCHMENT 3

Runoff Area=4.250 ac Runoff Depth=3.53"

Flow Length=780' Tc=11.6 min CN=82 Runoff=14.48 cfs 1.250 af

Subcatchment 4S: SUBCATCHMENT 4

Runoff Area=2.000 ac Runoff Depth=1.60"

Flow Length=420' Tc=8.5 min CN=60 Runoff=3.11 cfs 0.267 af

Reach 1R: REACH 1

Peak Depth=1.71' Max Vel=1.1 fps Inflow=18.85 cfs 2.531 af

n=0.400 L=200.0' S=0.0750 '/' Capacity=1,058.98 cfs Outflow=18.62 cfs 2.531 af

Reach 2R: REACH 2

Peak Depth=1.65' Max Vel=0.8 fps Inflow=14.17 cfs 1.674 af

n=0.400 L=200.0' S=0.0450 '/' Capacity=820.28 cfs Outflow=13.45 cfs 1.674 af

Reach 3R: REACH 3

Peak Depth=1.89' Max Vel=0.7 fps Inflow=14.62 cfs 1.517 af

n=0.400 L=200.0' S=0.0300 '/' Capacity=570.91 cfs Outflow=13.19 cfs 1.517 af

Reach 4R: REACH 4

Peak Depth=0.16' Max Vel=0.2 fps Inflow=3.11 cfs 0.267 af

n=0.130 L=250.0' S=0.0020 '/' Capacity=9,723.14 cfs Outflow=1.65 cfs 0.267 af

Reach 5R: SWALE TO PRESUMPSCOT RIVE Peak Depth=2.32' Max Vel=0.7 fps Inflow=18.62 cfs 2.531 af

n=0.400 L=150.0' S=0.0200 '/' Capacity=1,511.09 cfs Outflow=18.31 cfs 2.531 af

Total Runoff Area = 10.000 ac Runoff Volume = 2.531 af Average Runoff Depth = 3.04"

LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=5.50"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 3

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Subcatchment 1S: SUBCATCHMENT 1

Runoff = 9.72 cfs @ 12.17 hrs, Volume= 0.858 af, Depth= 3.43"

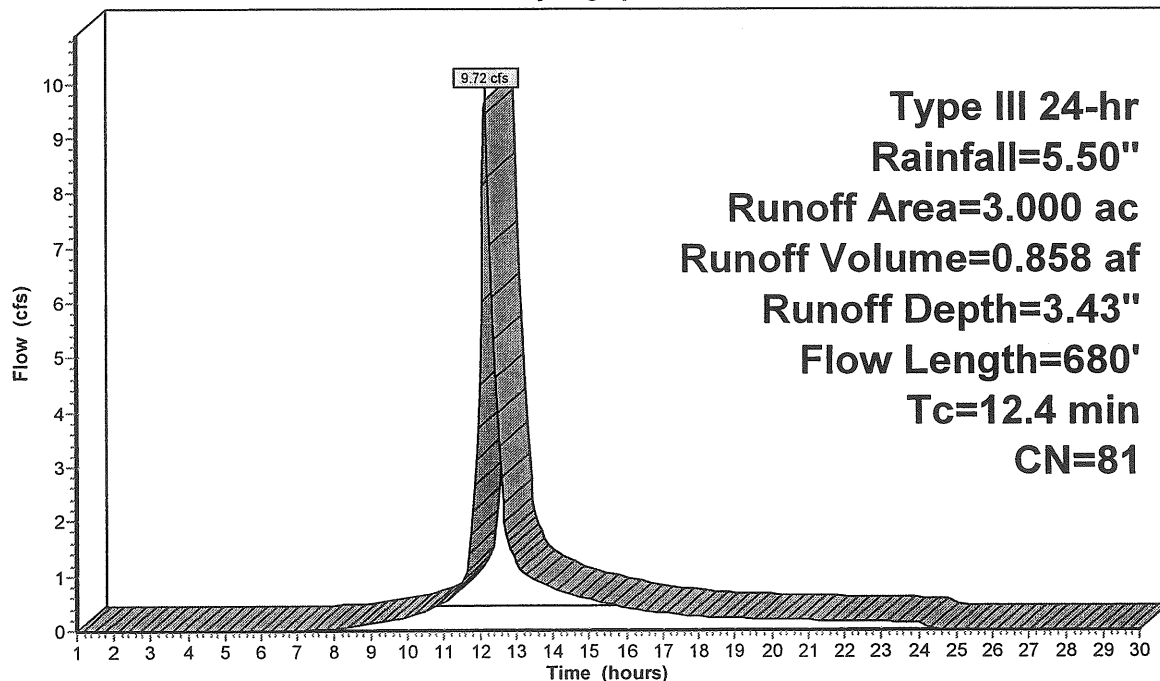
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.750	98	IMPERVIOUS
0.750	77	WEEDS, LOW BRUSH, FAIR, HSG D
0.750	78	CONTINUOUS GRASS, HSG D
0.750	71	CONTINUOUS GRASS, HSG C
3.000	81	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.7	100	0.0400	0.2		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
0.7	120	0.1670	2.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
0.5	260	0.0380	9.0	8,142.85	Channel Flow, CHANNEL FLOW C-D Area= 900.0 sf Perim= 110.0' r= 8.18' n= 0.130
3.5	200	0.0180	0.9		Shallow Concentrated Flow, SHALLOW CONCENTRATED D TO Short Grass Pasture Kv= 7.0 fps
12.4	680	Total			

Subcatchment 1S: SUBCATCHMENT 1

Hydrograph



Subcatchment 2S: SUBCATCHMENT 2

Runoff = 2.18 cfs @ 12.09 hrs, Volume= 0.156 af, Depth= 2.50"

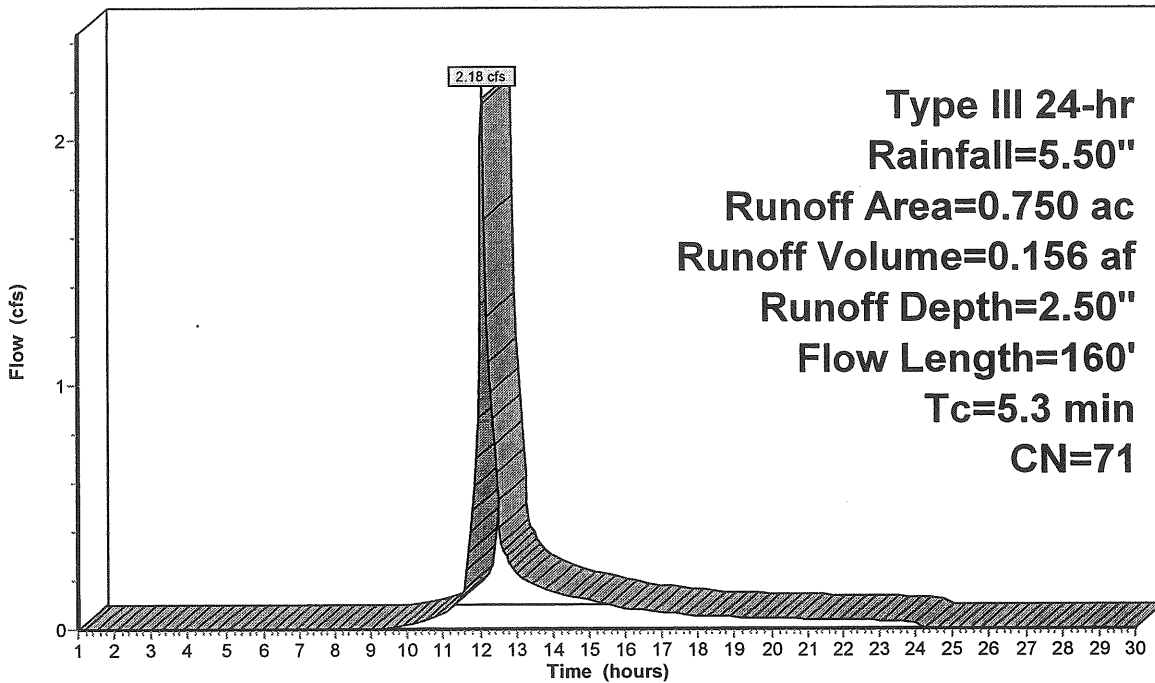
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
 Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.150	56	BRUSH, WEEDS, FAIR, HSG B
0.150	58	CONTINUOUS GRASS, HSG B
0.150	71	CONTINUOUS GRASS, HSG C
0.300	84	GRASSLAND, FAIR, HSG D
0.750	71	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.9	100	0.1200	0.3		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
0.4	60	0.1080	2.3		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
5.3	160	Total			

Subcatchment 2S: SUBCATCHMENT 2

Hydrograph



Subcatchment 3S: SUBCATCHMENT 3

Runoff = 14.48 cfs @ 12.16 hrs, Volume= 1.250 af, Depth= 3.53"

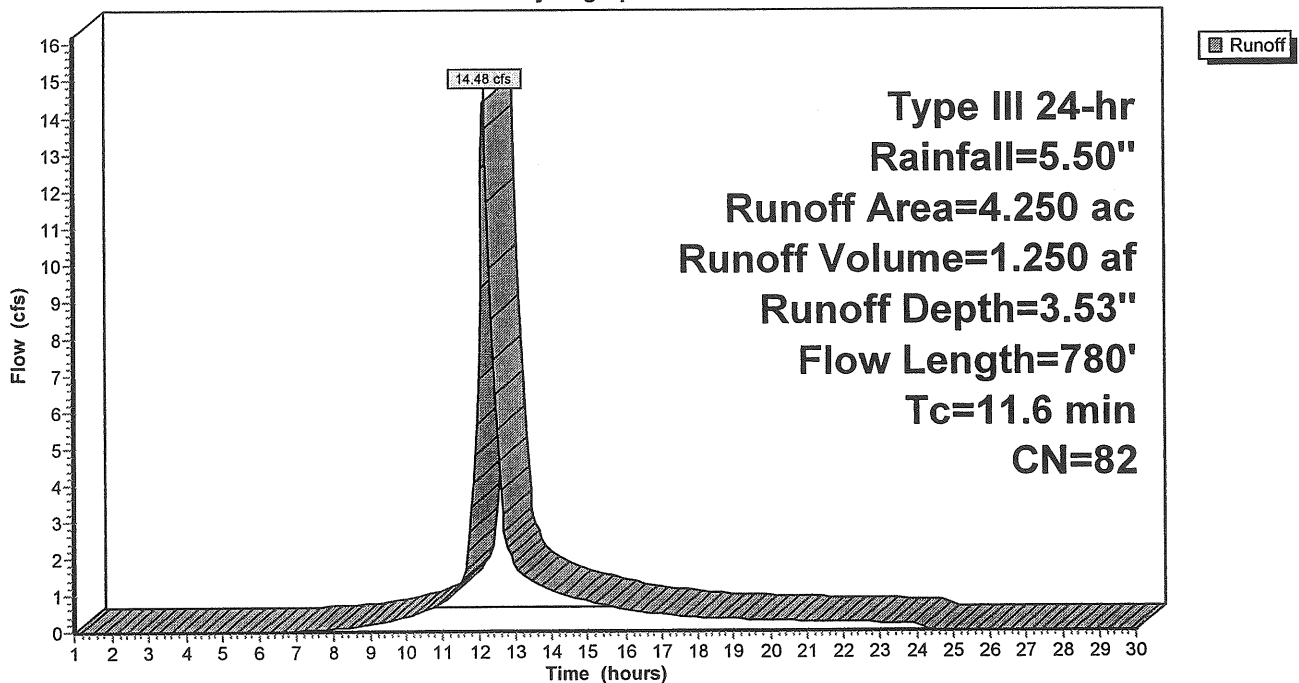
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
 Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
2.250	98	IMPERVIOUS
1.000	56	WEEDS, LOW BRUSH, FAIR, HSG B
1.000	71	CONTINUOUS GRASS, HSG C
4.250	82	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	100	0.1700	0.4		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
2.7	200	0.0300	1.2		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Short Grass Pasture Kv= 7.0 fps
3.1	255	0.0078	1.4	169.13	Channel Flow, CHANNEL FLOW C-D Area= 125.0 sf Perim= 65.0' r= 1.92' n= 0.150
1.5	225	0.0580	2.5	569.17	Channel Flow, CHANNEL FLOW D TO E Area= 230.0 sf Perim= 50.0' r= 4.60' n= 0.400
11.6	780	Total			

Subcatchment 3S: SUBCATCHMENT 3

Hydrograph



Subcatchment 4S: SUBCATCHMENT 4

Runoff = 3.11 cfs @ 12.14 hrs, Volume= 0.267 af, Depth= 1.60"

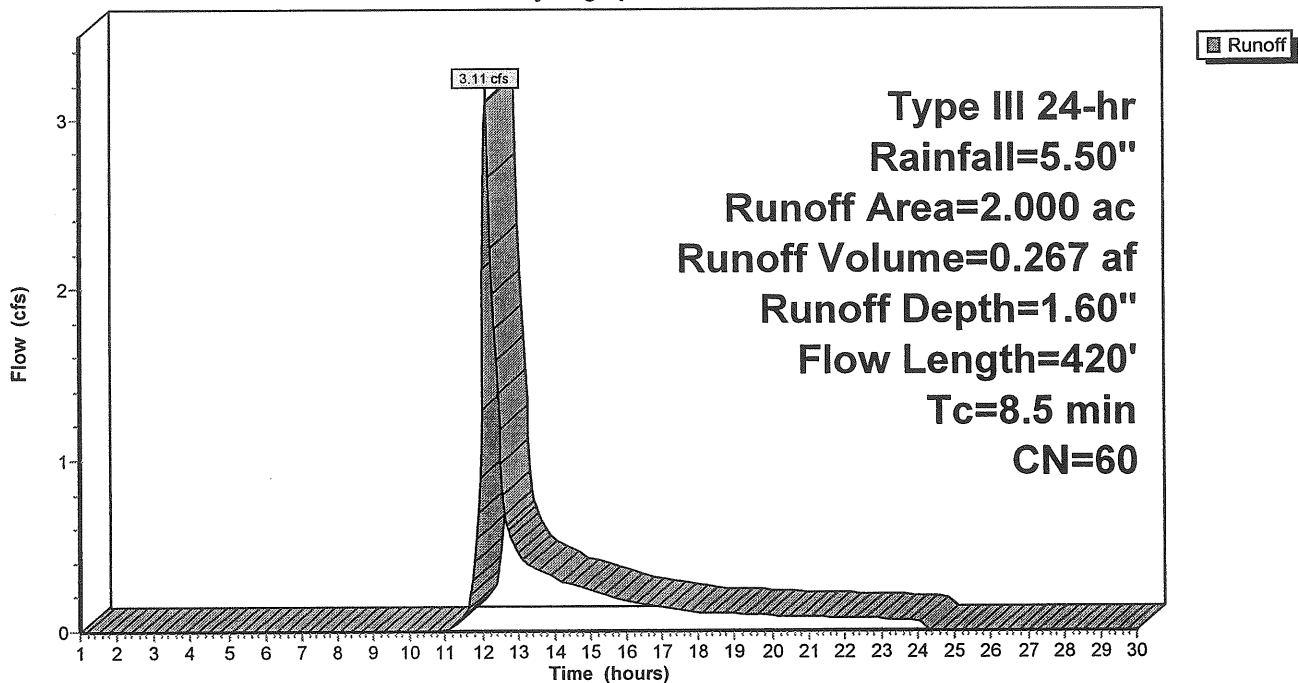
Runoff by SCS TR-20 method, UH=SCS, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
 Type III 24-hr Rainfall=5.50"

Area (ac)	CN	Description
0.150	98	IMPERVIOUS
1.680	56	WEEDS, LOW BRUSH, FAIR, HSG B
0.170	71	CONTINUOUS GRASS. HSG C
2.000	60	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	100	0.1400	0.4		Sheet Flow, SHEET FLOW A-B Grass: Short n= 0.150 P2= 3.00"
3.0	200	0.0500	1.1		Shallow Concentrated Flow, SHALLOW CONCENTRATED B-C Woodland Kv= 5.0 fps
0.9	120	0.0500	2.2	388.87	Channel Flow, CHANNEL FLOW C-D Area= 175.0 sf Perim= 40.0' r= 4.38' n= 0.400
8.5	420	Total			

Subcatchment 4S: SUBCATCHMENT 4

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=5.50"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 7

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 1R: REACH 1

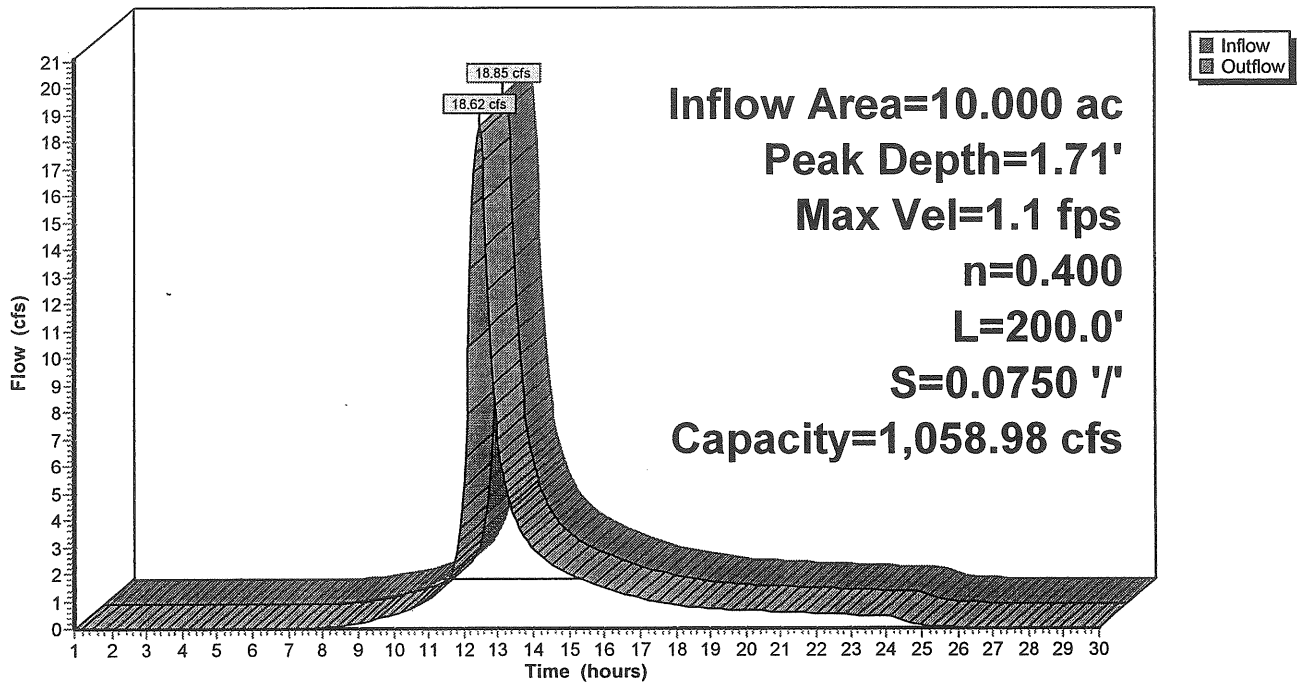
Inflow Area = 10.000 ac, Inflow Depth = 3.04"
Inflow = 18.85 cfs @ 12.38 hrs, Volume= 2.531 af
Outflow = 18.62 cfs @ 12.46 hrs, Volume= 2.531 af, Atten= 1%, Lag= 4.8 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.1 fps, Min. Travel Time= 3.1 min
Avg. Velocity = 0.4 fps, Avg. Travel Time= 8.3 min

Peak Depth= 1.71' @ 12.40 hrs
Capacity at bank full= 1,058.98 cfs
Inlet Invert= 35.00', Outlet Invert= 20.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0750 '/'
Side Slope Z-value= 3.0 '/'

Reach 1R: REACH 1

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=5.50"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 8

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 2R: REACH 2

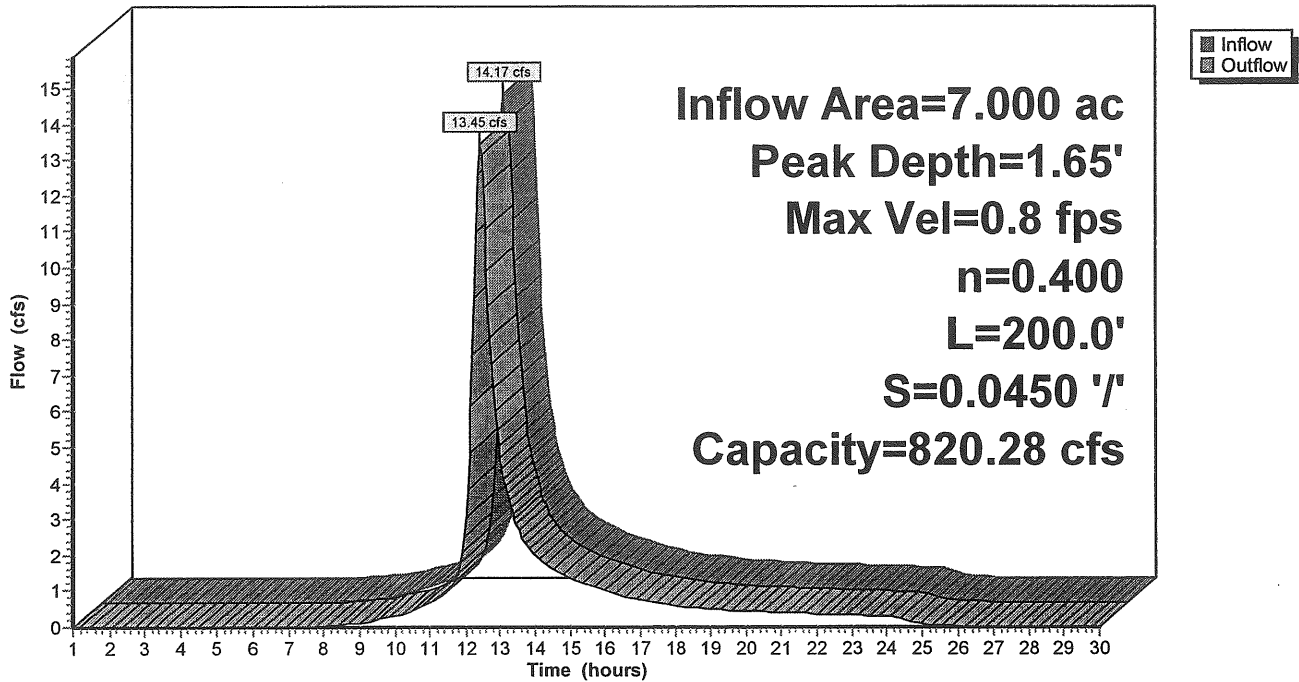
Inflow Area = 7.000 ac, Inflow Depth = 2.87"
Inflow = 14.17 cfs @ 12.29 hrs, Volume= 1.674 af
Outflow = 13.45 cfs @ 12.41 hrs, Volume= 1.674 af, Atten= 5%, Lag= 7.1 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.8 fps, Min. Travel Time= 4.1 min
Avg. Velocity = 0.3 fps, Avg. Travel Time= 11.2 min

Peak Depth= 1.65' @ 12.35 hrs
Capacity at bank full= 820.28 cfs
Inlet Invert= 29.00', Outlet Invert= 20.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0450 '/'
Side Slope Z-value= 3.0 '/'

Reach 2R: REACH 2

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=5.50"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 9

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 3R: REACH 3

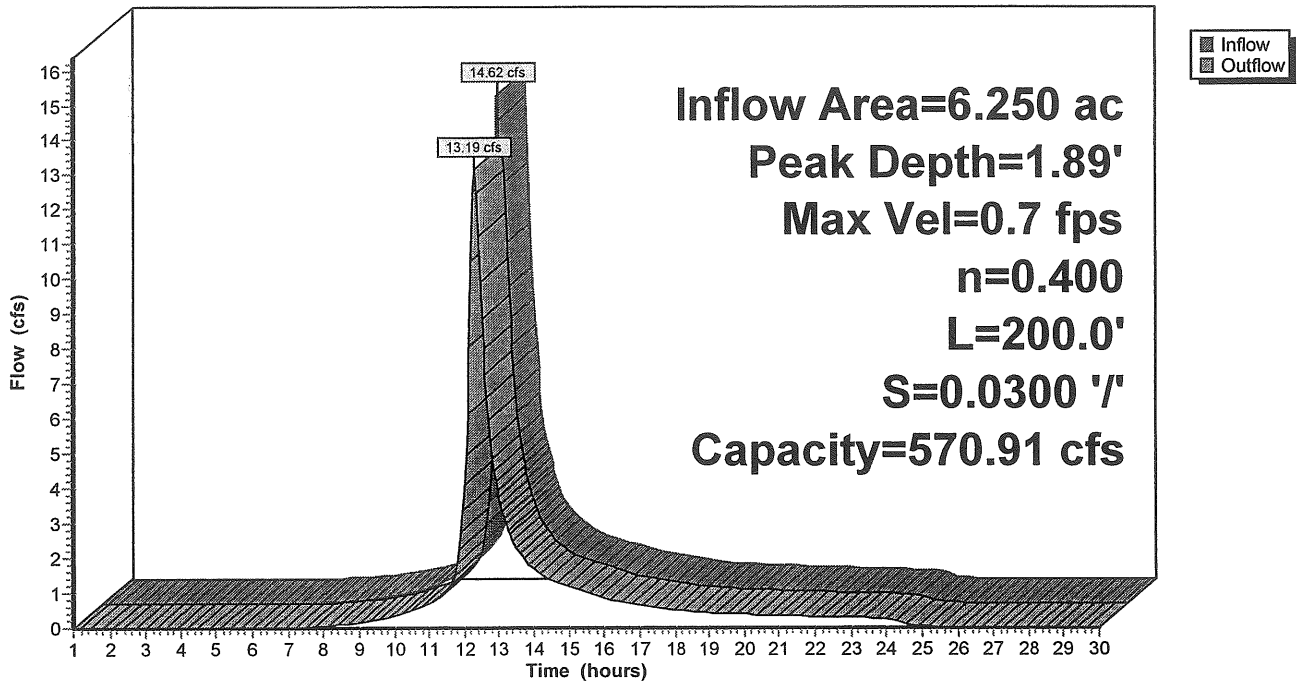
Inflow Area = 6.250 ac, Inflow Depth = 2.91"
Inflow = 14.62 cfs @ 12.16 hrs, Volume= 1.517 af
Outflow = 13.19 cfs @ 12.30 hrs, Volume= 1.517 af, Atten= 10%, Lag= 8.2 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.7 fps, Min. Travel Time= 4.6 min
Avg. Velocity = 0.3 fps, Avg. Travel Time= 12.9 min

Peak Depth= 1.89' @ 12.22 hrs
Capacity at bank full= 570.91 cfs
Inlet Invert= 35.00', Outlet Invert= 29.00'
5.00' x 10.00' deep channel, n= 0.400 Length= 200.0' Slope= 0.0300 '/'
Side Slope Z-value= 2.0 3.0 '/'

Reach 3R: REACH 3

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=5.50"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 10

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 4R: REACH 4

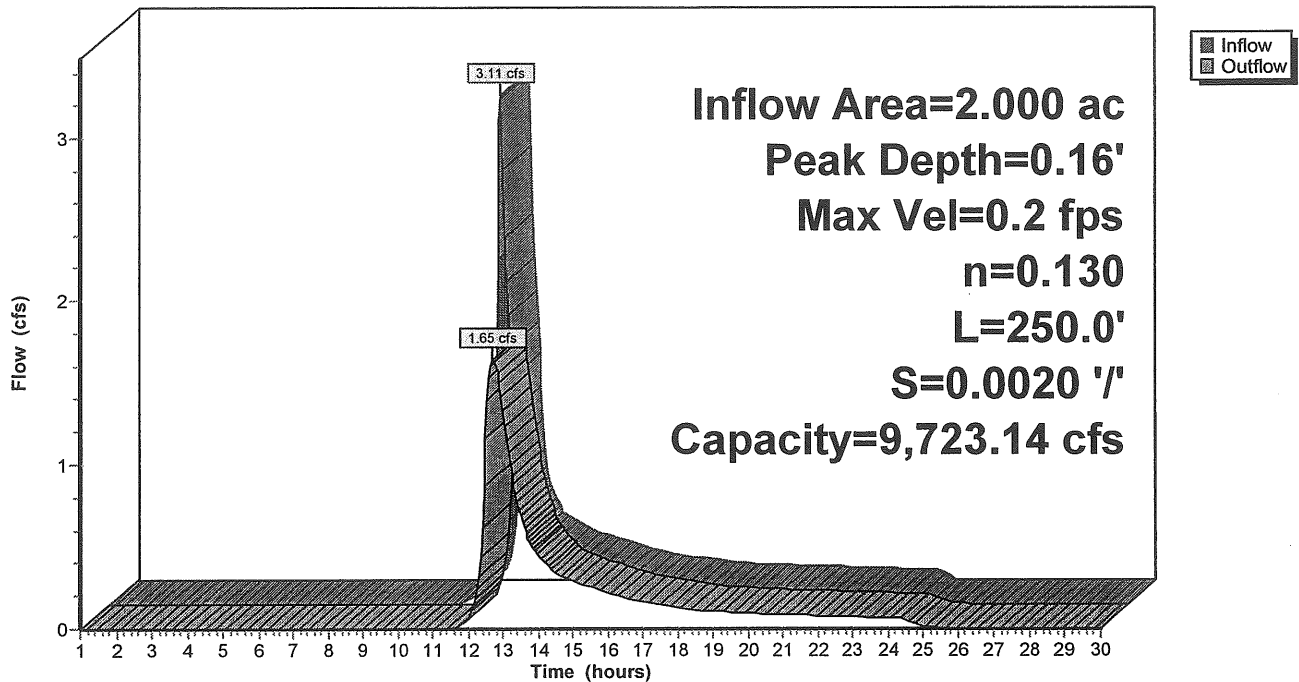
Inflow Area = 2.000 ac, Inflow Depth = 1.60"
Inflow = 3.11 cfs @ 12.14 hrs, Volume= 0.267 af
Outflow = 1.65 cfs @ 12.73 hrs, Volume= 0.267 af, Atten= 47%, Lag= 35.6 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.2 fps, Min. Travel Time= 20.8 min
Avg. Velocity = 0.2 fps, Avg. Travel Time= 20.8 min

Peak Depth= 0.16' @ 12.38 hrs
Capacity at bank full= 9,723.14 cfs
Inlet Invert= 35.50', Outlet Invert= 35.00'
50.00' x 25.00' deep channel, n= 0.130 Length= 250.0' Slope= 0.0020 '/'
Side Slope Z-value= 3.0 '/'

Reach 4R: REACH 4

Hydrograph



LOT 4-400 Riverside Street Properties

Type III 24-hr Rainfall=5.50"

Prepared by DeLuca-Hoffman Associates, Inc.

Page 11

HydroCAD® 7.00 s/n 000734 © 1986-2003 Applied Microcomputer Systems

3/29/2004

Reach 5R: SWALE TO PRESUMPCOT RIVER

Inflow Area = 10.000 ac, Inflow Depth = 3.04"
Inflow = 18.62 cfs @ 12.46 hrs, Volume= 2.531 af
Outflow = 18.31 cfs @ 12.56 hrs, Volume= 2.531 af, Atten= 2%, Lag= 6.0 min

Routing by Stor-Ind+Trans method, Time Span= 1.00-30.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.7 fps, Min. Travel Time= 3.8 min
Avg. Velocity= 0.3 fps, Avg. Travel Time= 9.8 min

Peak Depth= 2.32' @ 12.50 hrs
Capacity at bank full= 1,511.09 cfs
Inlet Invert= 20.00', Outlet Invert= 17.00'
5.00' x 15.00' deep channel, n= 0.400 Length= 150.0' Slope= 0.0200 '/'
Side Slope Z-value= 3.0 '/'

Reach 5R: SWALE TO PRESUMPCOT RIVER

Hydrograph

