

**CITY OF LEWISTON
PLANNING BOARD MEETING**
Monday, February 10, 2014 – 5:30 P.M.
City Council Chambers – First Floor
Lewiston City Building
27 Pine Street, Lewiston

AGENDA

I. ROLL CALL

II. ADJUSTMENTS TO THE AGENDA

III. CORRESPONDENCE

IV. PUBLIC HEARINGS:

- a) A request by Andrew Knight to conditionally rezone the property a 1Walnut Street – formerly St. Patrick’s Church –from the Downtown Residential (DR) district to the Centreville (CV) district. Allowed uses of the property shall include those uses which are presently permitted and conditional uses in the DR zoning district and the following as conditional uses: “drinking places”, “places of indoor assembly, amusement or culture”. (Tabled from the February 10, 2014 meeting)
- b) A request by Rockingham Electrical Supply Co Inc. to amend the existing conditional rezoning agreement for the property at 170 Summer Street, said property to remain conditionally rezoned from the Neighborhood Conservation “B” (NCB) District to the Urban Enterprise (UE) District, to allow a wholesale sales, warehousing and distribution facility, a neighborhood retail sales business, and business and professional offices.
- c) An application submitted by Northeast Civil Solutions on behalf of Franklin Land Associates, LLC to construct a retail facility –Dollar General - at 1079 Sabattus Street.
- d) Request by the Lewiston School Department for a capital expenditure not included in Lewiston’s FY 2014 annual capital program for Lewiston Middle School auditorium renovations.

V. OTHER BUSINESS:

- a) Any other business Planning Board Members may have relating to the duties of the Lewiston Planning Board.

VI. READING OF THE MINUTES: Motion to adopt the January 27, 2014 and February 10, 2014 draft minutes

VII. ADJOURNMENT



CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: February 20, 2014
RE: February 24, 2014 Planning Board Agenda Item IV(a)

Request by Andrew Knight to conditionally rezone the property a 1Walnut Street – formerly St. Patrick’s Church –from the Downtown Residential (DR) district to the Centreville (CV) district.

Andrew Knight has submitted a petition pursuant to Article XVII, Section 5 of the Zoning and Land Use Code to conditionally rezone the property a 1Walnut Street – formerly St. Patrick’s Church –from the Downtown Residential (DR) district to the Centreville (CV) district. This property of approximately 1.4 acres consists of a vacant church, rectory, and parking lot. The church was constructed in 1886 and held its last mass in October 2009. The structures are located within the Kennedy Park Historic District with any changes to the exterior subject to a Certificate of Appropriateness from the Lewiston Historic Preservation Review Board. Mr. Knight currently has an option to purchase the property from the Roman Catholic Bishop of Portland.

The petitioner’s request to conditionally rezone the property will allow uses of the property which are presently permitted and conditional uses in the DR zoning district and the following as conditional uses: “drinking places”, and “places of indoor assembly, amusement or culture”. The rezoning would allow for the petitioner to utilize the property for commercial purposes; specifically, large events such as wedding and conferences. While these types of events may be considered accessory to a religious facility, the ability to operate a place of indoor assembly, amusement, or culture independently is not an allowed use in the DR district. The proposed rezoning will allow the property to be used for non-religious assemblies and events regulated as conditional uses. The petitioner has suggested the primary clientele will likely consist of corporate, not-for-profit, and government entities seeking mid-size conference space and wedding parties seeking a unique and beautiful ceremony and reception venue.

The rezoning would also allow drinking places as a conditional use. Staff understands the petitioner is not proposing to operate a traditional bar at this location; though, that would be allowed. However, rezoning to allow drinking places as a conditional use provides the ability to have a liquor license at this location instead of catering alcoholic beverages for events.

As noted above, the property will continue to allow all those uses currently permitted in the DR district. Of particular interest to the petitioner is the option of operating a restaurant as a permitted use and a hotel/motel/inn as a conditional use. Staff has provided a table listing all of the allowed uses in the DR and CV in comparison with the proposed conditional rezoning.

Upon a successful rezoning of the property, the applicant will be required to receive development review approval from the Planning Board for a change use/conditional use permit.

ACTIONS NECESSARY

1. Make a motion to consider a petition submitted by Andrew Knight to conditionally rezone the property a 1Walnut Street – formerly St. Patrick’s Church –from the Downtown Residential (DR) district to the Centreville (CV) district;
2. Obtain input on the petition;
3. Make a motion pursuant to Article VII, Section 4 and Article XVII, Section 5 of the Zoning and Land Use Code to send a favorable recommendation for the City Council’s consideration to conditionally rezone the property at 1Walnut Street from the Downtown Residential (DR) district to the Centreville (CV), subject to any concerns raised by the Planning Board or staff.

Land Use Table: pursuant to Article XI, Section 22 et seq. of the Zoning and Land Use Code	Downtown Residential (DR)	Centreville (CV) ⁽³⁶⁾	Proposed Conditional Rezoning-CV: 1 Walnut Street
USES(15)(33)			
Accessory use or structure	P	P	P
Commercial-Service			
Veterinary facilities excluding kennels and humane societies			
Veterinary facilities including kennels and humane societies			
Small day care facilities	P		P
Day care centers	P	P	P
Day care centers accessory to public schools, religious facilities, multifamily or mixed res. developments, and mobile home parks			
Business and professional offices including research, experimental, testing laboratories, engineering, research, management and related services	P(9)	P(9)	P(9)
Restaurants	P(1)	P(1)	P(1)
Drinking places		P	C
Adult business establishments			
Hotels, motels, inns	C	P	C
Movie theaters except drive-in theaters	P	P	P
Places of indoor assembly, amusement or culture		P	C
Art and crafts studios	P	P	P
Personal Services	P	P	P
Retail stores	P	P	P
Neighborhood retail stores			
Lumber and building materials dealer			
Gasoline service stations			
Gasoline service stations which are a part of and subordinate to a retail use			
New and used car dealers			
Recreational vehicle, mobile home dealers			
Equipment dealers and equipment repair			
Automotive services including repair			
Registered dispensary(27)			
Registered primary caregivers engaged in the cultivations of medical marijuana for two to five registered patients.			
Tattoo Establishments			
Industrial			
Light industrial uses			
Industrial uses		P(16)	

Land Use Table: pursuant to Article XI, Section 22 et seq. of the Zoning and Land Use Code	Downtown Residential (DR)	Centreville (CV) ⁽³⁶⁾	Proposed Conditional Rezoning-CV: 1 Walnut Street
Building and construction contractors			
Fuel oil dealers and related facilities			
Wholesale sales, warehousing and distribution facilities and self-storage facilities			
Self storage facilities			
Commercial solid waste disposal facilities			
Junkyards and auto graveyards			
Recycling and reprocessing facilities			
Private industrial/commercial developments(23)			
Transportation			
Airports or heliports			
Commercial parking facilities	G(3)	P	C(3)
Transit and ground transportation facilities	C	P	C
Transportation facilities			
Public and Utility			
Pumping stations, standpipes or other water supply uses involving facilities located on or above the ground surface and towers for municipal use	P	P	P
Power transmission lines, substations, telephone exchanges, microwave towers or other public utility or communications use	C	C	C
Municipal buildings and facilities	P	P	P
Preservation of historic areas; emergency and fire protection activities; bridges and public roadways			
Dams			
Institutional			
Religious facilities	P	P	P
Cemeteries			
Congregate care/assisted living facilities, institutions for the handicapped, nursing or convalescent homes, group care facilities	P	P	P
Hospitals, medical clinics,	C	P	C
Museums, libraries, and non-profit art galleries and theaters	P	P	P

Land Use Table: pursuant to Article XI, Section 22 et seq. of the Zoning and Land Use Code	Downtown Residential (DR)	Centreville (CV) ⁽³⁶⁾	Proposed Conditional Rezoning-CV: 1 Walnut Street
Academic institutions, including buildings or structures for classroom, administrative, laboratory, dormitories, art, theater, dining services, library, bookstores, athletic facilities and student recreational uses, together with buildings accessory to the foregoing permitted principal buildings or structures,	P	P	P
Civic and social organizations		P	
Public community meeting and civic function buildings including auditoriums	P	P	P
Residential(8)			
Single-family detached dwellings on individual residential lots	P(11)		P(11)
Mobile homes on individual residential lots			
Two-family dwellings	P(11)		P(11)
Multifamily dwellings in accordance with the standards of Article XIII	P(11)	P	P(11)
Single-Family attached dwelling in accordance with the standards of Article XIII	P(11)		P(11)
Mixed single-family residential developments in accordance with the standards of Article XIII			
Mixed residential developments in accordance with the standards of Article XIII			
Mixed use structures	P(11)	P	P(11)
Lodging houses	P(11)		P(11)
Home occupations	P		P
Bed and breakfast establishments as a home occupation	P	P	P
In-law apartments in accordance with the standards of Article XII	P	P	P
Single family cluster development			
Family day care home	P	P	P
Shelters	C		C
Natural Resource			
Agriculture			
Farm Stands			
Forest management and timber harvesting activities in accordance with the standards of Article XIII			
Earth material removal			
Community gardens(20)	P	P	P
Water dependent uses, e.g. docks and marinas			

Land Use Table: pursuant to Article XI, Section 22 et seq. of the Zoning and Land Use Code	Downtown Residential (DR)	Centreville (CV) ⁽³⁶⁾	Proposed Conditional Rezoning-CV: 1 Walnut Street
Non-residential structures for educational, scientific or nature interpretation purposes, containing a maximum floor area of not more than ten thousand (10,000) square feet			
Recreation			
Campgrounds			
Public or private facilities for nonintensive outdoor recreation	C		C
Commercial outdoor recreation and drive-in theaters			
Fitness and recreational sports centers as listed under NAICS Code 713940			

ANDREW KNIGHT, J.D.

1/22/2014

David Hediger
City Planner/Deputy Director, Planning and Code Enforcement
City of Lewiston
27 Pine Street
Lewiston, ME 04240-7201

Dear Mr. Hediger:

As part of my submission for a conditional rezoning of property located at 220 Bates Street and 1 Walnut Street (formerly St. Patrick's Church and Rectory), please find the following attachments:

- A proposed amendment to Appendix A, Article IV, of the Zoning and Land Use Code of Lewiston, Maine
- A statement indicating the reasons for the proposed amendment
- A statement indicating how the proposed amendment is in conformance with the comprehensive plan
- A conditional rezoning agreement
- A copy of the ratified Purchase and Sale Agreement from the existing owner to the proponent, which includes Exhibit A, describing the parcels involved in the proposed amendment, and a copy of the existing deed to the parcels involved in the proposed amendment.
- Exhibit B, a black line print of a diagram reflecting the verbal description of the proposed change and the relation of the proposed change to the presently existing district boundaries involved

I am proposing a conditional rezoning of the subject property from the Downtown Residential (DR) zoning district to the Centreville (CV) zoning district to allow the property to be utilized productively and efficiently as a successful commercial property, particularly a large events venue specializing in weddings and conferences. The Centreville zoning will allow the property to be used as a restaurant, drinking place, hotel/motel/inn, and place of indoor assembly/amusement/culture. I will send the signed petition under separate cover.

I look forward to discussing this proposal with you. Please let me know if you have further questions.

Kind regards,



Andrew Knight, J.D.

AN ORDINANCE PERTAINING TO ZONING BOUNDARIES

THE CITY OF LEWISTON HEREBY ORDAINS:

Appendix A of the Code of Ordinances of the City of Lewiston, Maine, is hereby amended as follows:

APPENDIX A ZONING AND LAND USE CODE ARTICLE IV. ESTABLISHMENT OF DISTRICTS

Sec. 1. Zoning Map.

The "Official Zoning Map, City of Lewiston," adopted pursuant to this Section, is hereby amended by conditionally rezoning the parcels more fully described in Exhibit "A" attached hereto, and as shown on a black line print attached hereto as Exhibit "B," said parcels being located at 220 Bates Street and 1 Walnut Street, Lewiston, Maine (formerly known as St. Patrick's Church and Rectory), from the Downtown Residential (DR) zoning district to the Centreville (CV) zoning district.

REASONS FOR THE PROPOSED AMENDMENT

The reasons for the proposed amendment include allowing the former St. Patrick's Church and Rectory (located, respectively, at 220 Bates Street and 1 Walnut Street, Lewiston, Maine) to be run as successful businesses that attract clientele and revenue from within and without the Lewiston-Auburn area, increase revenue to local businesses, improve local property values, and discourage crime in and around Kennedy Park, all while preserving these historic structures. Specifically, proponent would like to have the properties, which are currently zoned for the Downtown Residential (DR) zoning district, conditionally rezoned to the Centreville (CV) zoning district to allow the operation of a large events venue, specializing in weddings and conferences with on-site accommodations, catering, and alcoholic beverage options in addition to those uses currently allowed in the DR.

CONFORMANCE WITH COMPREHENSIVE PLAN

1. To establish a Cultural District in the downtown area (Culture & Arts Policy #5, page 18).
2. Stimulate and maintain vital business investment in the Downtown area (Downtown Goals #1, page 22).
3. Promote preservation of important historic buildings that define the character of the Downtown area (Downtown Goals #4, page 22).

4. Attract new investors to purchase, redevelop and whenever possible utilize the buildings within the Downtown Area (Downtown Policy #7, page 32).
5. Continue to recognize, preserve and protect the visual, architectural, cultural, historical and archeological resources that contribute to and define the unique character of the City (Historic Preservation Goals #1, page 55).
6. Contribute to the vitality and economic development of the City by recapturing under-utilized space for special uses, increasing the real estate tax base, and re-establishing ... other areas to their former status in the region through preservation efforts targeted to enhance the aesthetics and the cultural climate of the City (Historic Preservation Goals #2, page 55).
7. Enhance the image of Lewiston and its proud heritage by ... fostering the continued conversion of vacant space to productive reuses that will contribute to the revitalization of the entire Downtown and City (Historic Preservation Goals #3, page 55).
8. Encourage orderly growth and development in appropriate areas of the City, while protecting the City's rural character, making efficient use of public services and preventing development sprawl (Land Use Goal #1, page 122).
9. Provide incentives for adaptive reuse of building or infill construction (Long Range Planning Policy #3, Strategy A, page 133).

CONDITIONAL REZONING AGREEMENT

The proponent requests that the official zoning map for the City be amended by deleting the subject property from the Downtown Residential (DR) zoning district and conditionally rezone the subject premises to the Centreville (CV) zoning district, subject to the limitations more fully described below.

In compliance with the provisions of the Code, Article XVII, Section 5(g), the proponent hereby proposes the following conditions:

- (a) Allowed uses of the property shall include those uses which are presently permitted and conditional uses in the Downtown Residential (DR) zoning district, and the following as conditional uses: "drinking places", "places of indoor assembly, amusement or culture", as listed below and subject to the conditions contained herein.

Land Use Table: pursuant to Article XI, Section 22 <i>et seq.</i> of the Zoning and Land Use Code, subject to applicable <i>Land Use Table Notes</i> of aforementioned section of code.	Conditional Rezoning-Centreville (CV): 1 Walnut Street/220 Bates Street
USES(15)(33)	
Accessory use or structure	P
Commercial-Service	
Veterinary facilities excluding kennels and humane societies	
Veterinary facilities including kennels and humane societies	
Small day care facilities	P
Day care centers	P
Day care centers accessory to public schools, religious facilities, multifamily or mixed res. developments, and mobile home parks	
Business and professional offices including research, experimental, testing laboratories, engineering, research, management and related services	P(9)
Restaurants	P(1)
Drinking places	C
Adult business establishments	
Hotels, motels, inns	C
Movie theaters except drive-in theaters	P
Places of indoor assembly, amusement or culture	C
Art and crafts studios	P
Personal Services	P
Retail stores	P
Neighborhood retail stores	
Lumber and building materials dealer	
Gasoline service stations	
Gasoline service stations which are a part of and subordinate to a retail use	
New and used car dealers	
Recreational vehicle, mobile home dealers	

Equipment dealers and equipment repair	
Automotive services including repair	
Registered dispensary(27)	
Registered primary caregivers engaged in the cultivations of medical marijuana for two to five registered patients.	
Tattoo Establishments	
Industrial	
Light industrial uses	
Industrial uses	
Building and construction contractors	
Fuel oil dealers and related facilities	
Wholesale sales, warehousing and distribution facilities and self-storage facilities	
Self storage facilities	
Commercial solid waste disposal facilities	
Junkyards and auto graveyards	
Recycling and reprocessing facilities	
Private industrial/commercial developments(23)	
Transportation	
Airports or heliports	
Commercial parking facilities	C(3)
Transit and ground transportation facilities	C
Transportation facilities	
Public and Utility	
Pumping stations, standpipes or other water supply uses involving facilities located on or above the ground surface and towers for municipal use	P
Power transmission lines, substations, telephone exchanges, microwave towers or other public utility or communications use	C
Municipal buildings and facilities	P
Preservation of historic areas; emergency and fire protection activities; bridges and public roadways	
Dams	
Institutional	

Religious facilities	P
Cemeteries	
Congregate care/assisted living facilities, institutions for the handicapped, nursing or convalescent homes, group care facilities	P
Hospitals, medical clinics,	C
Museums, libraries, and non-profit art galleries and theaters	P
Academic institutions, including buildings or structures for classroom, administrative, laboratory, dormitories, art, theater, dining services, library, bookstores, athletic facilities and student recreational uses, together with buildings accessory to the foregoing permitted principal buildings or structures,	P
Civic and social organizations	
Public community meeting and civic function buildings including auditoriums	P
Residential(8)	
Single-family detached dwellings on individual residential lots	P(11)
Mobile homes on individual residential lots	
Two-family dwellings	P(11)
Multifamily dwellings in accordance with the standards of Article XIII	P(11)
Single-Family attached dwelling in accordance with the standards of Article XIII	P(11)
Mixed single-family residential developments in accordance with the standards of Article XIII	
Mixed residential developments in accordance with the standards of Article XIII	
Mixed use structures	P(11)
Lodging houses	P(11)
Home occupations	P
Bed and breakfast establishments as a home occupation	P
In-law apartments in accordance with the standards of Article XII	P
Single family cluster development	
Family day care home	P
Shelters	C

Natural Resource	
Agriculture	
Farm Stands	
Forest management and timber harvesting activities in accordance with the standards of Article XIII	
Earth material removal	
Community gardens(20)	P
Water dependent uses, e.g. docks and marinas	
Non-residential structures for educational, scientific or nature interpretation purposes, containing a maximum floor area of not more than ten thousand (10,000) square feet	
Recreation	
Campgrounds	
Public or private facilities for nonintensive outdoor recreation	C
Commercial outdoor recreation and drive-in theaters	
Fitness and recreational sports centers as listed under NAICS Code 713940	

(b) Violations of any of the conditions herein will constitute a violation of the Code.

(c) The conditions described herein shall bind the proponent, its successors and assigns, and any person in possession or occupant of the subject premises, or any portion thereof, and shall inure to the benefit of and be enforceable by the City.

(d) The proponent shall, at his own expense, record in the Androscoggin County Registry of Deeds a copy of the conditions within thirty (30) days following final approval of this proposal by the City. Such form of recording is to be in a form satisfactory to the City.

(e) The conditions described herein shall run with the subject premises.

(f) In addition to other remedies to which the City may be entitled under applicable provisions of statute or ordinance, if any party in possession or use of the subject premises fails or refuses to comply with any of the conditions imposed, any rezoning approved by the City in accordance with the conditions shall be of no force or effect. In that event, any use of the subject premises and any building or structures developed pursuant to the rezoning shall be immediately abated and brought into compliance with all applicable provisions of the Code with the same effect as if the rezoning had never occurred.

(g) If any of the conditions are found by a court of competent jurisdiction to be invalid, such determination shall not invalidate any of the other conditions.

(h) Any rezoning approved by the City conditionally shall be of no force or effect if the proponent fails or refuses to comply with conditions imposed.

(i) Any allowed proposed use, addition, or expansion of the property deemed applicable to Article XIII, Section 2 of the Zoning and Land Use Code shall be subject to the applicable sections of Article XIII of the Zoning and Land Use Code, Development Review and Standards.

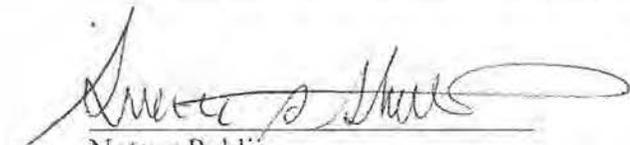
(j) By submitting this proposal, the proponent agrees in writing to the conditions described herein.



Andrew Knight, J.D., Proponent

Fairfax County, Virginia

On 1-22, 2016, Personally appeared the above named Andrew Knight and acknowledged the foregoing to be of his free act and deed.



Notary Public
Commission Expires: June 30, 2016

GRACE G. GHAREEB
NOTARY PUBLIC
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES JUNE 30, 2016
COMMISSION # 238470

Sign Envelope ID: FF68FA9E-7D4C-4575-A51B-3157C9E08133

PURCHASE AND SALE AGREEMENT

("days" means business days unless otherwise noted, see paragraph 23)

November 26, 2013
Offer Date

Effective Date
Effective Date is defined in Paragraph 23 of this Agreement.

1. PARTIES: This Agreement is made between Andrew Knight and or assigns ("Buyer") and Roman Catholic Bishop of , Portland, a corporation sole ("Seller").

2. DESCRIPTION: Subject to the terms and conditions hereinafter set forth, Seller agrees to sell and Buyer agrees to buy (all part of ; If "part of" see para. 26 for explanation) the property situated in municipality of Lewiston, County of Androscoggin, State of Maine, located at 220 Bates St & 1 Walnut St and described in deed(s) recorded at said County's Registry of Deeds. Book(s) 161, Page(s) 261.

3. FIXTURES: The Buyer and Seller agree that all fixtures, including but not limited to existing storm and screen windows, shades and/or blinds, shutters, curtain rods, built-in appliances, heating sources/systems including gas and/or kerosene-fired heaters and wood/pellet stoves, sump pump and electrical fixtures are included with the sale except for the following: no exceptions

Seller represents that all mechanical components of fixtures will be operational at the time of closing except: n/a

4. PERSONAL PROPERTY: The following items of personal property as viewed on November 20, 2013 are included with the sale at no additional cost, in "as is" condition with no warranties: everything shall remain as of 11-20-2013

5. PURCHASE PRICE/EARNEST MONEY: For such Deed and conveyance Buyer agrees to pay the total purchase price of [REDACTED]. Buyer has delivered; or will deliver to the Agency within 3 days of the Offer Date, a deposit of earnest money in the amount [REDACTED]. If said deposit is to be delivered after the submission of this offer and is not delivered by the above deadline, this offer shall be void and any attempted acceptance of this offer in reliance on the deposit being delivered will not result in a binding contract. Buyer agrees that an additional deposit of earnest money in the amount of \$ n/a will be delivered n/a. Failure by Buyer to deliver this additional deposit in compliance with the above terms shall constitute a default under this Agreement. The remainder of the purchase price shall be paid by wire, certified, cashier's or trust account check upon delivery of the Deed.

This Purchase and Sale Agreement is subject to the following conditions:

6. ESCROW AGENT/ACCEPTANCE: Prudential Northeast Properties ("Agency") shall hold said earnest money and act as escrow agent until closing; this offer shall be valid until December 3, 2013 (date) 5:00 AM PM; and, in the event of non-acceptance, this earnest money shall be returned promptly to Buyer. In the event that the Agency is made a party to any lawsuit by virtue of acting as escrow agent, Agency shall be entitled to recover reasonable attorney's fees and costs which shall be assessed as court costs in favor of the prevailing party.

7. TITLE AND CLOSING: A deed, conveying good and merchantable title in accordance with the Standards of Title adopted by the Maine Bar Association shall be delivered to Buyer and this transaction shall be closed and Buyer shall pay the balance due and execute all necessary papers on January 31, 2013 (closing date) or before, if agreed in writing by both parties. If Seller is unable to convey in accordance with the provisions of this paragraph, then Seller shall have a reasonable time period, not to exceed 30 calendar days, from the time Seller is notified of the defect, unless otherwise agreed to in writing by both Buyer and Seller, to remedy the title. Seller hereby agrees to make a good-faith effort to cure any title defect during such period. If, at the later of the closing date set forth above or the expiration of such reasonable time period, Seller is unable to remedy the title, Buyer may close and accept the deed with the title defect or this Agreement shall become null and void in which case the parties shall be relieved of any further obligations hereunder and any earnest money shall be returned to the Buyer.

8. DEED: The property shall be conveyed by a Release Deed deed, and shall be free and clear of all encumbrances except covenants, conditions, easements and restrictions of record which do not materially and adversely affect the continued current use of the property.

9. POSSESSION, OCCUPANCY, AND CONDITION: Unless otherwise agreed in writing, possession and occupancy of premises, free of tenants and occupants, shall be given to Buyer immediately at closing. Said premises shall then be broom clean, free of all possessions and debris, and in substantially the same condition as at present, excepting reasonable use and wear. Buyer shall have the right to view the property within 24 hours prior to closing.

January 2013

Page 1 of 4 - P&S

Buyer(s) Initials AK

Seller(s) Initials [Signature]

10. RISK OF LOSS, DAMAGE, DESTRUCTION AND INSURANCE: Prior to closing, risk of loss, damage, or destruction of premises shall be assumed solely by the Seller. Seller shall keep the premises insured against fire and other extended casualty risks prior to closing. If the premises are damaged or destroyed prior to closing, Buyer may either terminate this Agreement and be refunded the earnest money, or close this transaction and accept the premises "as-is" together with an assignment of the insurance proceeds relating thereto.

11. FUEL/UTILITIES/PRORATIONS: ~~Fuel remaining in tank on day of closing shall be paid by Buyer at cash price as of date of closing of company that last delivered the fuel.~~ Metered utilities such as electricity, water and sewer will be paid through the date of closing by Seller. The following items, where applicable, shall be prorated as of the date of closing: collected rent, association fees, (other) no prorations of fuel. The day of closing is counted as a Seller day. Real estate taxes shall be prorated as of the date of closing (based on municipality's fiscal year). Seller is responsible for any unpaid taxes for prior years. If the amount of said taxes is not known at the time of closing, they shall be apportioned on the basis of the taxes assessed for the preceding year with a reapportionment as soon as the new tax rate and valuation can be ascertained, which latter provision shall survive closing. Buyer and Seller will each pay their transfer tax as required by State of Maine.

12. DUE DILIGENCE: Neither Seller nor Licensee makes any warranties regarding the condition, permitted use or value of Seller's real or personal property, or any representations as to compliance with any federal, state or municipal codes, including, but not limited to, fire, life safety, electrical and plumbing. Buyer is encouraged to seek information from professionals regarding any specific issue or concern. This Agreement is subject to the following investigations, with results being satisfactory to Buyer:

TYPE OF INVESTIGATION			YES	NO	RESULTS REPORTED TO SELLER	TYPE OF INVESTIGATION			YES	NO	RESULTS REPORTED TO SELLER
a. General Building				X	Within _____ days	n. Arsenic Treated Wood			X	Within _____ days	
b. Sewage Disposal				X	Within _____ days	o. Pests			X	Within _____ days	
c. Coastal shoreland/septic				X	Within _____ days	p. Code Conformance			X	Within _____ days	
d. Water Quality				X	Within _____ days	q. Insurance			X	Within _____ days	
e. Water Quantity				X	Within _____ days	r. Environmental Scan			X	Within _____ days	
f. Air Quality				X	Within _____ days	s. Lot size/acreage			X	Within _____ days	
g. Square Footage				X	Within _____ days	t. Survey/MLI			X	Within _____ days	
h. Pool				X	Within _____ days	u. Zoning			X	Within _____ days	
i. Energy Audit				X	Within _____ days	v. Farmland Adjacency			X	Within _____ days	
j. Chimney				X	Within _____ days	w. Habitat Review/Waterfowl			X	Within _____ days	
k. Smoke/CO detectors				X	Within _____ days	x. Flood Plain			X	Within _____ days	
l. Mold				X	Within _____ days	y. Other <u>line 26</u>	X			Within <u>10</u> days	
m. Lead Paint				X	Within _____ days						

All investigations will be done by persons chosen and paid for by Buyer in Buyer's sole discretion. If the result of any investigation or other condition specified herein is unsatisfactory to Buyer, Buyer will declare the Agreement null and void by notifying Seller in writing within the specified number of days, and any earnest money shall be returned to Buyer. If the result of any investigation or other condition specified herein is unsatisfactory to Buyer in Buyer's sole discretion, and Buyer wishes to pursue remedies other than voiding the Agreement, Buyer must do so to full resolution within the time period set forth above; otherwise this contingency is waived. If Buyer does not notify Seller that an investigation is unsatisfactory within the time period set forth above, this contingency is waived by Buyer. In the absence of investigation(s) mentioned above, Buyer is relying completely upon Buyer's own opinion as to the condition of the property.

13. PROPERTY DISCLOSURE FORM: Buyer acknowledges receipt of Seller's Property Disclosure Form and the information developed by the Maine Center for Disease, Control and Prevention regarding arsenic in private water supplies and arsenic in treated wood.

14. FINANCING: This Agreement is is not subject to Financing; If subject to Financing:
a. This Agreement is subject to Buyer obtaining a _____ loan of _____ % of the purchase price, at an interest rate not to exceed _____ % and amortized over a period of _____ years. Buyer is under a good faith obligation to seek and obtain financing on these terms.
b. Buyer to provide Seller with letter from lender showing that Buyer has made application for loan specified in (a) and, subject to verification of information, is qualified for the loan requested within _____ days from the Effective Date of the Agreement. If Buyer fails to provide Seller with such letter within said time period, Seller may terminate this Agreement and the earnest money shall be returned to Buyer.
c. Buyer hereby authorizes, instructs and directs its lender to communicate the status of the Buyer's loan application to Seller, Seller's licensee or Buyer's licensee.
d. After (b) is met, Buyer is obligated to notify Seller in writing if a lender notifies Buyer that it is unable or unwilling to provide said financing. Any failure by Buyer to notify Seller within two days of receipt by Buyer of such notice from a lender shall be a default under this Agreement.
e. Buyer agrees to pay no more than _____ points. Seller agrees to pay up to \$ _____ toward Buyer's actual pre-pays, points and/or closing costs, but no more than allowable by Buyer's lender.
f. Buyer's ability to obtain financing: is is not subject to the sale of another property. See addendum Yes No .
g. Buyer may choose to pay cash instead of obtaining financing. If so, Buyer shall notify Seller in writing including providing proof of funds and the Agreement shall no longer be subject to financing, and Seller's right to terminate pursuant to the provisions of this paragraph shall be void.

Handwritten initials and signatures in the bottom right corner, including a signature that appears to be "AK" and another signature.

DocuSign Envelope ID: FF5BFA9E-7D4C-4575-A51B-3157C9ED8133

15. BROKERAGE DISCLOSURE: Buyer and Seller acknowledge they have been advised of the following relationships:

Dot Fernald (000128) of Prudential Northeast Properties (1063)
Licensee MLS ID Agency MLS ID
is a Seller Agent Buyer Agent Disc Dual Agent Transaction Broker

Scott Robert (013073) of Prudential Northeast Properties (1063)
Licensee MLS ID Agency MLS ID
is a Seller Agent Buyer Agent Disc Dual Agent Transaction Broker

If this transaction involves Disclosed Dual Agency, the Buyer and Seller acknowledge the limited fiduciary duties of the agents and hereby consent to this arrangement. In addition, the Buyer and Seller acknowledge prior receipt and signing of a Disclosed Dual Agency Consent Agreement.

16. DEFAULT/RETURN OF EARNEST MONEY: In the event of default by the Buyer, Seller may employ all legal and equitable remedies, including without limitation, termination of this Agreement and forfeiture by Buyer of the earnest money. In the event of a default by Seller, Buyer may employ all legal and equitable remedies, including without limitation, termination of this Agreement and return to Buyer of the earnest money. Agency acting as escrow agent has the option to require written releases from both parties prior to disbursing the earnest money to either Buyer or Seller.

17. MEDIATION: Earnest money disputes subject to the jurisdiction of small claims court will be handled in that forum. For all other disputes or claims arising out of or relating to this Agreement or the property addressed in this Agreement shall be submitted to mediation in accordance with the Maine Residential Real Estate Mediation Rules. Buyer and Seller are bound to mediate in good faith and pay their respective mediation fees. If a party does not agree first to go to mediation, then that party will be liable for the other party's legal fees in any subsequent litigation regarding that same matter in which the party who refused to go to mediation loses in that subsequent litigation. This clause shall survive the closing of the transaction.

18. PRIOR STATEMENTS: Any representations, statements and agreements are not valid unless contained herein. This Agreement completely expresses the obligations of the parties.

19. HEIRS/ASSIGNS: This Agreement shall extend to and be obligatory upon heirs, personal representatives, successors, and assigns of the Seller and the assigns of the Buyer.

20. COUNTERPARTS: This Agreement may be signed on any number of identical counterparts with the same binding effect as if the signatures were on one instrument. Original or faxed or other electronically transmitted signatures are binding.

21. SHORELAND ZONE/SEPTIC SYSTEM: Seller represents that the property does does not contain a septic system within the Shoreland Zone. If the property does contain a septic system located in the Shoreland Zone, Seller agrees to provide certification at closing indicating whether the system has/had not malfunctioned within 180 calendar days prior to closing.

22. NOTICE: Any notice, communication or document delivery requirements hereunder may be satisfied by providing the required notice, communication or documentation to the party or their licensee. Withdrawals of offers and counteroffers will be effective upon communication, verbally or in writing.

23. EFFECTIVE DATE/BUSINESS DAYS: This Agreement is a binding contract when signed by both Buyer and Seller and when that fact has been communicated which shall be the Effective Date. Licensee is authorized to fill in the Effective Date on Page 1 hereof. Except as expressly set forth to the contrary, the use of the term "days" in this Agreement, including all addenda made a part hereof, shall mean business days defined as excluding Saturdays, Sundays and any observed Maine State/Federal holidays. Deadlines in this Agreement, including all addenda, expressed as "within x days" shall be counted from the Effective Date, unless another starting date is expressly set forth, beginning with the first day after the Effective Date, or such other established starting date, and ending at 5:00 p.m. Eastern Time on the last day counted. Unless expressly stated to the contrary, deadlines in this Agreement, including all addenda, expressed as a specific date shall end at 5:00 p.m. Eastern Time on such date.

24. CONFIDENTIALITY: Buyer and Seller authorize the disclosure of the information herein to the real estate licensees, attorneys, lenders, appraisers, inspectors, investigators and others involved in the transaction necessary for the purpose of closing this transaction. Buyer and Seller authorize the lender and/or closing agent preparing the closing statement to release a copy of the closing statement to the parties and their licensees prior to, at and after the closing.

25. ADDENDA: Lead Paint - Yes No ; Other - Yes No

Explain:
The Property Disclosure Form is not an addendum and not part of this Agreement.

26. OTHER CONDITIONS: Buyer to have 10 calendar days not including weekends or holidays for due diligence. To meet with town etc... and to meet his expectations.

27. GENERAL PROVISIONS:

- a. A copy of this Agreement is to be received by all parties and, by signature, receipt of a copy is hereby acknowledged. If not fully understood, contact an attorney. This is a Maine contract and shall be construed according to the laws of Maine.
- b. Seller acknowledges that State of Maine law requires buyers of property owned by non-resident sellers to withhold a prepayment of capital gains tax unless a waiver has been obtained by Seller from the State of Maine Revenue Services.
- c. Buyer and Seller acknowledge that under Maine law payment of property taxes is the legal responsibility of the person who owns the property on April 1, even if the property is sold before payment is due. If any part of the taxes is not paid when due, the lien will be filed in the name of the owner as of April 1 which could have a negative impact on their credit rating. Buyer and Seller shall agree at closing on their respective obligations regarding actual payment of taxes after closing. Buyer and Seller should make sure they understand their obligations agreed to at closing and what may happen if taxes are not paid as agreed.
- d. Buyer acknowledges that Maine law requires continuing interest in the property and any back up offers to be communicated by the listing agent to the Seller.

Buyer's Mailing address is _____

DocuSigned by:
Andrew Knight 11/21/2013
 BUYER _____ DATE _____ BUYER _____ DATE _____
 Andrew Knight and or assigns

Seller accepts the offer and agrees to deliver the above-described property at the price and upon the terms and conditions set forth and agrees to pay agency a commission for services as specified in the listing agreement.

Seller's Mailing address is _____

~~SELLER Roman Catholic Bishop of _____ DATE _____ SELLER Portland, a corporation sole _____ DATE _____~~

COUNTER-OFFER

Seller agrees to sell on the terms and conditions as detailed herein with the following changes and/or conditions:
See attached Amendment with Exhibit A.

The parties acknowledge that until signed by Buyer, Seller's signature constitutes only an offer to sell on the above terms and the offer will expire unless accepted by Buyer's signature with communication of such signature to Seller by (date) _____ (time) _____ AM _____ PM

~~SELLER *Ronald J Nelson* _____ DATE _____ SELLER _____ DATE _____
 Roman Catholic Bishop of Portland, corporation sole~~

The Buyer hereby accepts the counter-offer set forth above.

DocuSigned by:
Andrew Knight
 BUYER _____ DATE _____ BUYER _____ DATE _____

EXTENSION

The closing date of this Agreement is extended until _____ DATE _____

SELLER _____ DATE _____ SELLER _____ DATE _____

BUYER _____ DATE _____ BUYER _____ DATE _____



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AMENDMENT TO PURCHASE AND SALE AGREEMENT ("AGREEMENT") BETWEEN
ROMAN CATHOLIC BISHOP OF PORTLAND, CORPORATION SOLE, ("SELLER") & ANDREW KNIGHT
("BUYER")
REGARDING 220 BATES STREET & 1 WALNUT STREET, LEWISTON, MAINE
(KNOWN AS ST. PATRICK'S CHURCH AND RECTORY)

Whereas the Seller desires to accept the contract offer offering [REDACTED] purchase price, dated November 26, 2013 (bearing a signature date of November 21, 2013) for the above property but only subject to the below conditions;

Whereas the Seller is signing the contract offer indicating that the Seller is making a counteroffer;

Whereas this Amendment constitutes the counteroffer;

Whereas, upon signature of both parties below, this Amendment shall constitute an amendment to the Agreement, and the Agreement as amended shall be in force;

Therefore, the parties agree as follows:

1. Paragraph 2's description of the property is replaced by the attached Exhibit A, which is the legal description of the property of the Seller at 220 Bates St. and 1 Walnut Street, Lewiston, known as the St. Patrick church and rectory, along with the restrictions subject to which the property will be conveyed.
2. Paragraph 6's reference to the date of December 3, 2013 (as the date by which the Buyer's contract offer may be accepted) is deleted, since that date is moot in light of the fact that the Seller is counter-offering with this Amendment.
3. Paragraph 16 is deleted and replaced with the following: "In the event that Buyer fails to close hereunder for any reason other than (i) a default by Seller or (ii) valid termination of this Agreement by Buyer under Paragraph 7 ("Title and Closing") or Paragraphs 12 y and 26, Seller shall retain the Deposit as full and complete liquidated damages in lieu of any other legal or equitable remedy, whereupon this Agreement will terminate and neither party will be under any further obligation hereunder. In the event of Seller's default hereunder, Buyer shall have as its exclusive and sole remedy either but not both of (i) termination of the Agreement and return of the Deposit (in which case neither party will be under any further obligation hereunder) or (ii) pursuit of any rights it may have to seek specific performance so as to compel sale of the Property in the condition then existing."

DATE: _____

DocuSigned by:
Andrew Knight
Andrew Knight

DATE: _____

ROMAN CATHOLIC BISHOP OF PORTLAND,
corporation sole

Richard J. Malone

Richard J. Malone, Apostolic Administrator of
The Roman Catholic Diocese of Portland

Exhibit A to
AMENDMENT TO PURCHASE AND SALE AGREEMENT ("AGREEMENT") BETWEEN
ROMAN CATHOLIC BISHOP OF PORTLAND, CORPORATION SOLE, ("SELLER") & ANDREW KNIGHT
("BUYER")
REGARDING 220 BATES STREET & 1 WALNUT STREET, LEWISTON, MAINE
(KNOWN AS ST. PATRICK'S CHURCH AND RECTORY)

St. Patrick's Lot

The certain three parcels of land referenced below as Parcels One, Two and Three

Parcel One

A certain lot land situated in said Lewiston, bounded and described as follows, to wit:

Beginning at a point formed by the intersection of the Southerly line of Walnut Street with the Easterly line of Bates Street; thence running Southerly on the Easterly line of Bates Street, one hundred (100) feet to the Northerly line of land, conveyed by the Franklin Company to the Right Rev. James A. Healy, Bishop of Portland, by deed No. 823, dated November 4th, 1886; thence Easterly on said Northerly line two hundred (200) feet to the Westerly line of Blake Street; thence Northerly on said Westerly line of Blake Street, one hundred (100) feet to the Southerly line of Walnut Street; thence Westerly on said Southerly line of Walnut Street two hundred (200) feet to the point of commencement.

FOR SOURCE OF TITLE to Parcel One, reference may be had to deed from Thomas H. Wallace to the Roman Catholic Bishop of Portland, dated December 13, 1892, and recorded in the Androscoggin County Registry of Deeds at Book 161, Page 261. Being the same parcel conveyed to Thomas H. Wallace by the Franklin Company, by deed of Quitclaim No. 896, dated February 28, 1890, and recorded in said registry at Book 75, Page 695.

Parcel Two

A certain lot of land, situated in the City of Lewiston, in the County of Androscoggin and State of Maine, bounded and described as follows, to wit:

Commencing on the Easterly line of Bates Street, at a point one hundred (100) feet Southerly of the Southerly line of Walnut Street; thence Southerly on said Easterly line of Bates Street one hundred (100) feet to the Northerly line of land formerly of the Hill Manufacturing Company; thence Easterly on said Northerly line two hundred (200) feet to the Westerly line of Blake Street; thence Northerly on said

DocuSigned by:
Andrew Knight
13991888E3714B4
Buyer

[Signature]
Seller

Westerly line of Blake Street, one hundred (100) feet; thence Westerly on a line one hundred (100) feet Northerly of and parallel with said Northerly line of said Hill Manufacturing Company's land two hundred (200) feet to the point of commencement.

FOR SOURCE OF TITLE to Parcel Two, reference may be had to the parcel of land in the deed from James Augustine Healey to the Roman Catholic Bishop of Portland, dated February 20, 1891, and recorded in the Androscoggin County Registry of Deeds at Book 143, Page 166, described particularly at Page 169 thereof as the real estate described in the "Deed from the Franklin Company, dated November 4, 1886, and recorded in the Registry of Deeds for said last named County, Book 75, Page 371, conveying real estate in Lewiston in said last named county, known as St. Patrick Church."

Parcel Three

A certain lot or parcel of land situated in said Lewiston and bounded and described as follows:

Commencing on the Easterly side of Bates Street at a point about two hundred (200) feet Southerly from the corner formed by the intersection of the Southerly line of Walnut Street and the Easterly line of Bates Street; thence by said line of Bates Street Southerly one hundred and ten (110) feet to land formerly owned by J. G. Coburn; thence Easterly by the line of said Coburn's land two hundred (200) feet to Blake Street; thence Northerly by said Blake Street one hundred and ten (110) feet to land conveyed to the Right Rev. James A. Healy by the Franklin Company by deed dated November 4th, 1886, and recorded in the Androscoggin County Registry of Deeds, Book 75, Page 371; thence Westerly by said land two hundred (200) feet to point of beginning on Bates Street, also the buildings situated thereon.

FOR SOURCE OF TITLE to Parcel Three, reference may be had to deed from the Hill Manufacturing Company to the Roman Catholic Bishop of Portland, dated September 10, 1897, and recorded in the Androscoggin County Registry of Deeds at Book 176, Page 96.

The above-described premises are conveyed SUBJECT to the restrictions that the Grantee, Grantee's successors and assigns, shall not use the premises in any way relating to: 1) counseling regarding or performance of abortions; 2) sale or distribution of pornographic materials; or 3) erotic displays or activities. The burden of this restriction shall run with the land conveyed hereby to the Grantee. The benefit of this restriction is held by the Roman Catholic Bishop of Portland, corporation sole, its successors and assigns.

DocuSigned by:
Andrew Knight
13991888E571484...
Buyer


Seller

Know all Men by these Presents,

That I, Thomas H. Wallace of Lewiston, in the County of Androscoggin, and State of Maine

in consideration of the sum of One Dollar paid by The Roman Catholic Bishop of Portland, a corporation duly created by the laws of Maine and located at Portland in the County of Cumberland, and State of Maine the receipt whereof I do hereby acknowledge, do hereby give, grant, bargain, sell, and convey unto the said Roman Catholic Bishop of Portland, his successors, heirs and assigns forever,

a certain lot of land situated in said Lewiston bounded north described as follows to wit, beginning at a point formed by the intersection of the westerly line of Walnut Street with the westerly line of Blake Street, the northerly line on the easterly line of Blake Street one hundred and forty feet to the westerly line of land conveyed by the Franklin Company to the Right Reverend A. M. Dubois, Bishop of Portland, by deed No. 203, dated March 18th 1886, thence easterly on said westerly line one hundred and forty feet to the westerly line of Blake Street, thence southerly on said westerly line of Blake Street one hundred and forty feet to the southerly line of Walnut Street, thence southerly on said southerly line of Walnut Street two hundred and twenty feet to the point of commencement, and being the same premises conveyed to me by the Franklin Company by deed of Deed Class, No. 576, dated February 28th 1888.



To Have and to Hold the abovegranted and bargained premises, with all the privileges and appurtenances therout to the said Roman Catholic Bishop of Portland, his heirs and assigns, to their use and behoof forever. And I do covenant with the said Roman Catholic Bishop of Portland, his heirs and assigns, that I do lawfully seized in fee of the premises, that they are free of all incumbrances, that I have good right to sell and convey the same to the said Roman Catholic Bishop of Portland, to hold as aforesaid; and that I, and my heirs shall and will warrant and defend the same to the said Roman Catholic Bishop of Portland, his heirs, and assigns forever, against the lawful claims and demands of all persons.

In Witness Whereof, I the said Thomas H. Wallace, and my wife of the said

in testimony of which I have hereunto set my hand and seal this 16th day of December in the year of our Lord one thousand eight hundred and

Witness my hand and seal this 16th day of December 1892. Thomas H. Wallace

Androscoggin, ss. December 16th 1892. Personally appeared the above-named Thomas H. Wallace and acknowledged the above instrument to be his free act and deed.

Before me, Notary Public, Juno of the Peace. Received May 29 1895 at Lewiston, Me. M. P. M. and recorded from the original. Attest: J. P. Piquet, Notary.

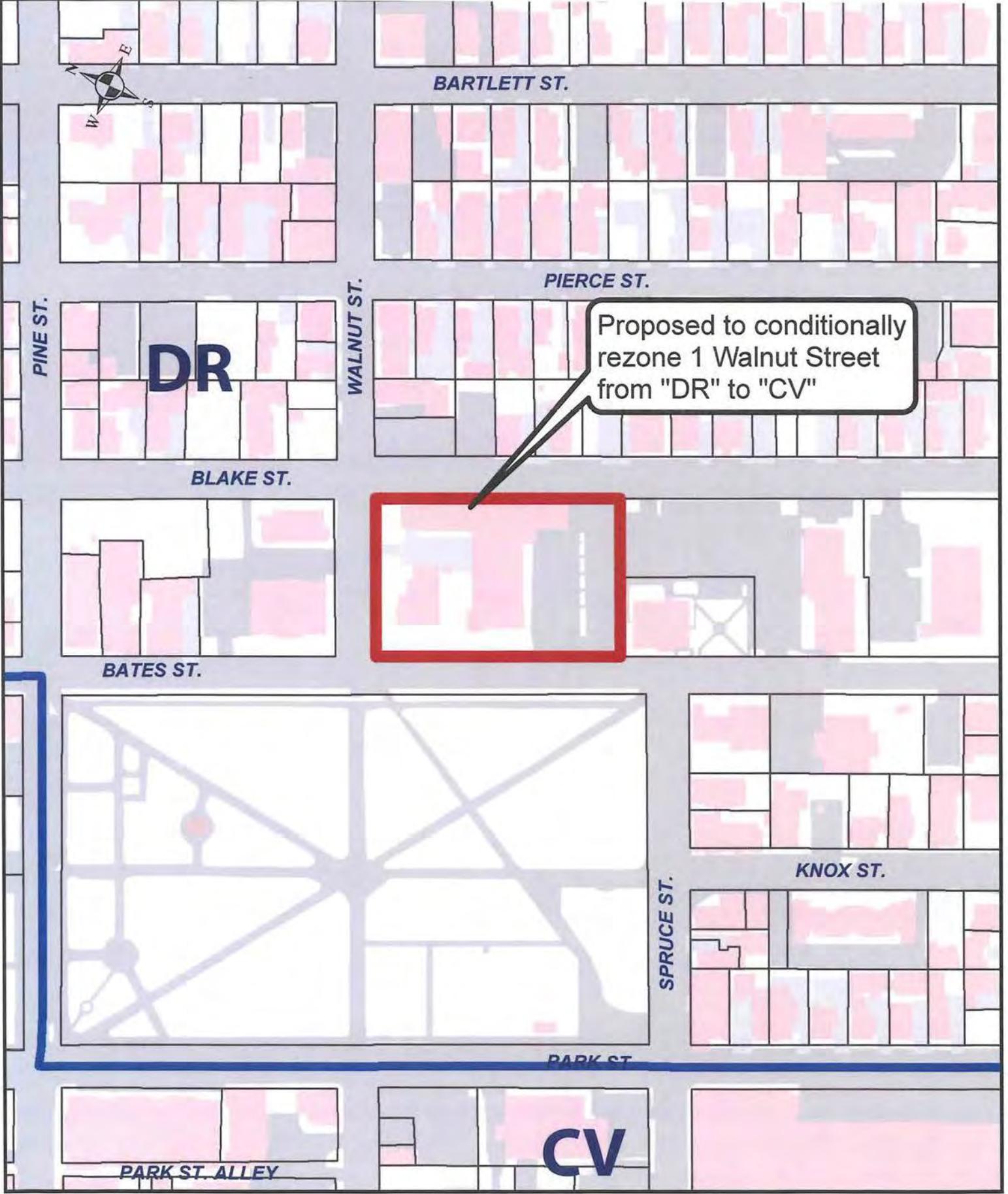


Exhibit B

January 2014
Not to Scale

**PETITION TO AMEND THE CITY OF LEWISTON
ZONING AND LAND USE CODE**

Pursuant to Appendix A, Article XVII, Section 5 A Amendments@ of the City of Lewiston Zoning and Land Use Code, we the undersigned residents of the City of Lewiston, being eighteen (18) year of age or older, do hereby petition the City of Lewiston to conditionally rezone the parcels being located at 220 Bates Street and 1 Walnut Street, Lewiston, Maine (formerly known as St. Patrick's Church and Rectory), from the Downtown Residential (DR) zoning district to the Centreville (CV) zoning district as described in the exhibits attached hereto:

	SIGNATURE	PRINTED NAME	PHYSICAL STREET ADDRESS (No PO Boxes)	DATE
1		Laurie Ouellette	10 Bobby St Lew	1/28/14
2		Ray Ouellette	10 Bobby St	1/28/14
3		ANDRE GAGNE	7 ADELE ST	1/28/14
4		MONIQUE G. GAGNE	7 ADELE ST.	1/28/14
5		Guy St. Jean	13 Steeles	1/28/14
6		Deborah Carroll	36 CHESTNUT #4/19	1/28/14
7				
8		49 Lisbon St 3B	Tamara Francon	1/28/14
9		Richard Charest Richard Charest	87 Pond Rd Lewiston	1/28/14
10		Christine Charest	87 Pond Rd Lewiston	1/28/14
11		Christy Rivu	42 HOJAN RD	1/29/14
12		Leon Francon	40 FRANKLIN	1/28/14
13		J PARDON	84 LISBON ST	1/28/14
14		Spencer Ouellette	10 Bobby Street	1-28-14
15				
16				
17				
18				
19				
20				

CIRCULATOR'S VERIFICATION

I hereby verify that I am the Circulator of this petition that all the signatures to this petition were made in my presence, and to the best of my knowledge and belief, each signature is that of the person it purports to be, and each person is a resident of the City of Lewiston.

Signature of Circulator

Laurie Anne Ouellette
Printed N.

REGISTRAR'S CERTIFICATION

I hereby certify and verify that the names of all of the petitioners listed as valid appear on the voting list as registered voters in the City of Lewiston.

Total Valid: 12 Total Invalid: 2

Signature of Registrar/Deputy Registrar

Date: 1/28/14

BUSINESS PLAN

The Agora Grand Wedding and Conference Center

Andrew Knight, J.D., Owner

Created on December 26, 2013

1. EXECUTIVE SUMMARY

1.1 Product

The Agora Grand will provide high-end facilities and services for weddings, conferences, and social events.

1.2 Customers

The primary clientele for The Agora Grand during the week consists of corporate, not-for-profit, and government entities seeking mid-size conference space. The primary clientele for weekends consists of wedding parties seeking a unique and beautiful wedding ceremony and reception venue.

1.3 What Drives Us

The Agora Grand aims to evolve into the must-have wedding venue of central Maine, specializing in upscale events with a gorgeous and memorable backdrop. With 50-foot ceilings, Neogothic architecture, and a custom bar area overlooking the sanctuary, The Agora Grand aspires to be the venue-of-choice for young couples.

Further, for midweek events, The Agora Grand will fill the existing need for mid-size conference space for both private and government entities.

2. COMPANY DESCRIPTION

2.1 Mission Statement

To provide a unique and high-end venue for for hosting successful conferences, memorable weddings, and classy social events.

2.2 Principal Members

Andrew F. Knight, J.D. - owner, designer, and general manager

A wide range of potential employees, contractors, and partnership opportunities in the L-A area has been identified, including potential event managers, florists, photographers, caterers, architects, general contractors, marketers, attorneys, and accountants.

2.3 Legal Structure

The company will be a Maine limited liability company.

3. MARKET RESEARCH

3.1 Industry

The Agora Grand Wedding and Conference Center, located in the former St. Patrick's Church in Lewiston, Maine, will provide event hosting facilities and services, available to private and governmental entities for midweek conferences as well as private gatherings for weekend weddings and social events.

Maine currently has many options for wedding venues, both within cities (especially Portland) and along the Maine coast, often in the form of "barn" weddings in natural settings. With the legalization of gay marriage in Maine and the growing popularity of Maine as a wedding destination, the industry continues to boom. While every venue differs in its offerings, setting, and uniqueness, the majority of Maine wedding venues charge between \$1000 and \$4000 for the venue rental and provide in-house catering and alcohol service (or exclusive catering partnerships) from which the venues further profit. Market research suggests that while most available venues in Maine are booked for all or most Saturdays during the six-month wedding season of 2014, there is significant availability for Fridays and Sundays. Many venues solve the problem of vacancy by offering weekend-long exclusive use of the facilities while charging a premium for this benefit. A market study of the Maine and New England wedding markets, performed by an independent market research company, is attached.

Further, Maine has a variety of convention and conference venues throughout the state, mostly in hotels, resorts, and colleges. However, there seems to be a shortage of mid-size conference centers capable of seating more than 200 people in banquet style. A typical price point for conference space is around 10 cents per square foot, although many venues charge no venue rental fee, relying solely on minimum food and beverage (F&B) purchase requirements for revenue. A typical F&B minimum ranges from \$4000 to \$10000 per day to avoid avoid the venue rental fee. A market study of mid-size conference venues has not yet been performed; however, a market study regarding the use of Bates Mill 5 (Lewiston) as a convention center was performed in 2003, with an update in 2008, indicating a need for conference space in central Maine. This study is attached.

3.2 Customers

The Agora Grand will be marketed with equal effort (initially) as a wedding and social events venue as well as a conference venue. As a wedding venue, our customers will include high-end clients who seek the charm of a traditional church wedding without the need for church affiliation, as well as those who are enchanted by the reception hall itself (50-foot ceilings, ornate columns, Neogothic architecture, a remodeled balcony overlooking the church, etc.). Initially, the customers are likely to come from L-A and surrounding communities. However, as the venue gets known as a beautiful and unique venue, the client base may extend to larger metropolitan areas. The availability of lodging in the attached inn, coupled with the "one-stop shop" feature of The Agora Grand, may help attract clientele from Boston and Quebec, where comparable amenities would cost twice as much.

As a conference center, we will market to corporate, not-for-profit, and governmental entities that require conference space for up to 400 people seated together in banquet style. Customers will mostly likely consist of Maine entities, although regional conferences and shows may be attracted to the low cost of central Maine, given a venue large enough to accommodate them.

3.3 Competitors

A market study of Maine and New England wedding venues is attached. With few exceptions, competitors consist of mixed use venues for which weddings are a secondary source of income, such as hotels/inns, resorts, farms, restaurants, colleges, and cultural centers, with the most unique and expensive venues being buildings with grand architectural elements, such as The Boston Symphony Hall, the Castle at Boston University, and Grace Restaurant in Portland. Wedding venues range drastically from 4-hour rentals in public cultural centers to weekend (or even week-long) rentals of bed-and-breakfast inns with renovated barns.

In the L-A area, a wide range of small or low-end reception venues exists. The most closely related venues, in terms of architecture, size, and amenities, are The Franco Center and The Royal Oak Room. The Franco Center, a beautifully restored stone church, has a 428-seat performance hall and a basement allowing for a maximum reception seating of 250. It charges \$1200 for the use of both rooms and profits from alcohol sales and an exclusive partnership with DaVinci's. The Royal Oak

Room, a tastefully renovated room in a former train station, can seat up to 150 people for a wedding and reception (with a cocktail hour for repurposing the room). It charges a \$1800 rental fee and profits from in-house catering and liquor sales.

Regarding conference venues, there are fewer than a dozen mid-size venues throughout Maine having a single room greater than 6,000 square feet, able to accommodate more than about 200 guests in a banquet style. While there are a few in Portland (such as the Holiday Inn By the Bay), there are no mid-size venues in the L-A area capable of comfortably seating more than 250 guests in banquet style or more than 450 guests in reception style.

3.4 Competitive Advantage

This property is (and will be) unique in a variety of ways.

First, as a repurposed Roman Catholic Church, it has aesthetic and architectural elements that are absolutely unsurpassed and which would be prohibitively expensive to build today, including: 50-foot ceilings, intricate woodwork and columns, Neogothic architecture and brick bell towers, a remodeled balcony overlooking the church, even stained glass windows. Unlike The Franco Center, receptions can be held in the most interesting, vast, and picturesque area of the property. The word "agora" is taken from its Greek origin: a large, open gathering place.

Second, the choir balcony will be repurposed to include a luxury bar area and private suite (such as a bridal suite for wedding preparation). This does not appear to exist anywhere in the United States or world.

Third, the venue size allows for large weddings and social events as well as mid-size conferences, for which there is currently a dearth of available venues.

Fourth, with a chapel, reception hall, rentals, and inn on premises, the property offers an all-in-one wedding or conference package that is currently unavailable in the L-A area. The inn may or may not be available initially; the decision will depend on financing and demand. Allowing clients the option of a "one-stop shop" with straightforward pricing will provide ease and simplicity in the otherwise stressful process of wedding or large event planning.

3.5 Regulations

The property will need to be rezoned to an appropriate land use so that large public gatherings are allowed. The business will seek a liquor license and possibly a food service license. The property will also be subject to change-of-use regulations, including possible renovations to comply with fire code and other regulations. Parking and traffic issues will need to be addressed; luckily, the property includes a sizeable parking lot, and public parking garages are within walking distance.

4. PRODUCT/SERVICE LINE

4.1 Product or Service

The Agora Grand will offer facilities and services for weekday conferences and weekend weddings and social events.

4.2 Pricing Structure

Pricing and specific offerings are still on the table. The following represents one possible offering and price structure.

Agora Grand - midweek: No rental fee. Exclusive use of the venue with minimum \$4000 in food/beverage purchases. In-house catering or exclusive catering partnerships are likely to provide more than \$1000 in revenue per day.

Agora Grand - weekend: Rental fee of \$2000 for 3pm until 11am the next day. Per-person beverage charges, as well as catering partnerships, are likely to provide an additional \$2000 per wedding in revenue.

4.3 Product/Service Life Cycle

n/a

4.4 Intellectual Property Rights

Agora Grand will be an asserted trade name. The company owns AgoraGrand.com. The name of the business may or may not change. No other IP rights are asserted.

4.5 Research & Development

n/a

5. MARKETING & SALES

5.1 Growth Strategy

To grow the company, The Agora Grand will:

- * Provide a very high-end, custom-tailored service product to wedding parties and conference organizers for a reasonable price
- * Be responsive to the market to provide desired facilities and services and to discontinue undesired services
- * Maintain a strong, modern Internet presence and ensure that The Agora Grand appears prominently and favorably on relevant websites and web searches
- * Host regular gatherings to generate media interest and positive word-of-mouth
- * Spend significant resources on creating and maintaining a "wow" factor in a unique venue that has no analog

5.2 Communication

The Agora Grand will contact and maintain communication with clients in a variety of ways, including:

- * A strong, modern Internet presence that conveys the beauty, uniqueness, and amenities of the venue
- * An aggressive Internet marketing campaign, including targeted listings, in which couples searching for a Maine wedding will have the opportunity to consider The Agora Grand
- * An aggressive Internet marketing campaign, including targeted listings, in which conference organizers will have the opportunity to consider The Agora Grand
- * Attendance at relevant wedding conferences

- * Engagement of the local and regional press to showcase unique and interesting features of the venue
- * Targeted Google(tm) and Facebook(tm) advertisements
- * Email or phone follow-up with all clients to build goodwill and determine areas for improvement

5.3 Prospects

A marketing firm, independent marketer, and/or in-house professional with marketing expertise will be engaged. The owner, Andrew Knight, will oversee sales and marketing.



CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: February 20, 2014
RE: February 24, 2014 Planning Board Agenda Item IV(b)

To consider a request by Rockingham Electrical Supply Co Inc. to amend the existing conditional rezoning agreement for the property at 170 Summer Street.

Rockingham Electrical Supply Co Inc., has submitted a petition pursuant to Article XVII, Section 5 of the Zoning and Land Use Code to amend the existing conditional rezoning agreement for the property at 170 Summer Street, said property to remain conditionally rezoned from the Neighborhood Conservation "B" (NCB) District to the Urban Enterprise (UE) District, and to allow a wholesale sales, warehousing and distribution facility, a neighborhood retail sales business, and business and professional offices.

This property of approximately 1.7 acres consists of a 17,500+ SF office/warehouse structure built in 1986 by Tufts Printing, later renamed One-Right Systems, Inc., and now One Source Printing. At that time, printing facility was allowed as a permitted use with the property located in the Commercial zoning district. In 1988 the zoning of the property changed to Neighborhood Conservation "B" (NCB) and use of the facility became legally nonconforming. In 2002, One Source President Mark Hartnett successfully petitioned to conditionally rezone the property to the Urban Enterprise (UE) district to allow the facility to become legally conforming with the ability to make future planned expansions and other improvements. That conditional rezoning was limited to "light industrial uses and accessory buildings and uses".

The petitioner, Rockingham Electrical Supply Co Inc., has an option to lease and purchase this property from One Source. They are an electrical wholesaler and with nine locations in Massachusetts, New Hampshire, and Maine. They also have a small retail component – a lighting showroom – at one of their locations. The petitioner is requesting an amendment to the existing conditional rezoning agreement for the property at 170 Summer Street to allow a wholesale sales, warehousing and distribution facility, a neighborhood retail sales business, and business and professional offices in addition to the previously approved light industrial uses and accessory buildings and uses. Allowing these additional uses provides both the petitioner and the current owner of 170 Summer Street more options of utilizing a property that became legally nonconforming.

Staff suggested to the petitioner that they consider including as part of their request allowing all the underlying uses permitted in the NCB district. However, the petitioner desires to limit the allowed uses to those specifically listed in the request. Staff has provided a table listing all of the allowed uses in the NCB and UE in comparison with the proposed conditional rezoning.

Upon a successful rezoning of the property, staff is of the opinion the petitioner will not likely need to receive development review approval for a change of use of the property, as staff does not anticipate Rockingham to be an intensification of the currently permitted light industrial use. It should also be noted, the petitioner has requested retail limited specifically to that of “neighborhood stores” defined as a retail store that occupies less than five thousand (5,000) square feet of total floor space and within which no alcoholic beverages are consumed.

ACTIONS NECESSARY

1. Make a motion to consider a petition submitted by Rockingham Electrical Supply Co Inc. to amend the existing conditional rezoning agreement for the property at 170 Summer Street;
2. Obtain input on the petition;
3. Make a motion pursuant to Article VII, Section 4 and Article XVII, Section 5 of the Zoning and Land Use Code to send a favorable recommendation for the City Council’s consideration to amend the existing conditional rezoning agreement for the property at 170 Summer Street to allow a wholesale sales, warehousing and distribution facility, a neighborhood retail sales business, and business and professional offices, in addition to the previously approved light industrial uses and accessory uses, subject to any concerns raised by the Planning Board or staff.

Land Use Table: pursuant to Article XI, Section 22 et seq. of the Zoning and Land Use Code	Neighborhood Conservation "B" (NCB)	Urban Enterprise (UE)	Existing Conditional Rezoning to UE-170 Summer Street	Proposed Amended Conditional Rezoning to UE-170 Summer Street
USES(15)(33)				
Accessory use or structure	P	P	P	P
Commercial-Service				
Veterinary facilities excluding kennels and humane societies				
Veterinary facilities including kennels and humane societies		P		
Small day care facilities	P	P		
Day care centers		P		
Day care centers accessory to public schools, religious facilities, multifamily or mixed res. developments, and mobile home parks	C(22)			
Business and professional offices including research, experimental, testing laboratories, engineering, research, management and related services	C(31)	P		P
Restaurants		P		
Drinking places				
Adult business establishments				
Hotels, motels, inns		P		
Movie theaters except drive-in theaters		P		
Places of indoor assembly, amusement or culture		P		
Art and crafts studios	C	P		
Personal Services	P	P		
Retail stores		P		
Neighborhood retail stores	P			P
Lumber and building materials dealer		P		
Gasoline service stations		P		
Gasoline service stations which are a part of and subordinate to a retail use				
New and used car dealers		P (8,17)		
Recreational vehicle, mobile home dealers		P		
Equipment dealers and equipment repair		P		
Automotive services including repair		P		
Registered dispensary(27)		C		
Registered primary caregivers engaged in the cultivations of medical marijuana for two to five registered patients.		P		
Tattoo Establishments				
Industrial				
Light industrial uses		P	P	P

Land Use Table: pursuant to Article XI, Section 22 et seq. of the Zoning and Land Use Code	Neighborhood Conservation "B" (NCB)	Urban Enterprise (UE)	Existing Conditional Rezoning to UE-170 Summer Street	Proposed Amended Conditional Rezoning to UE-170 Summer Street
Industrial uses		C		
Building and construction contractors		P(6,7)		
Fuel oil dealers and related facilities		P(6,7)		
Wholesale sales, warehousing and distribution facilities and self-storage facilities		P		P
Self storage facilities		P		
Commercial solid waste disposal facilities				
Junkyards and auto graveyards				
Recycling and reprocessing facilities		C		
Private industrial/commercial developments(23)		P		
Transportation				
Airports or heliports				
Commercial parking facilities	C	P		
Transit and ground transportation facilities				
Transportation facilities		P		
Public and Utility				
Pumping stations, standpipes or other water supply uses involving facilities located on or above the ground surface and towers for municipal use	P	P		
Power transmission lines, substations, telephone exchanges, microwave towers or other public utility or communications use	C	C		
Municipal buildings and facilities	C	P		
Preservation of historic areas; emergency and fire protection activities; bridges and public roadways				
Dams				
Institutional				
Religious facilities	P	P		
Cemeteries	P			
Congregate care/assisted living facilities, institutions for the handicapped, nursing or convalescent homes, group care facilities	C	P		
Hospitals, medical clinics,	C	P		
Museums, libraries, and non-profit art galleries and theaters				

Land Use Table: pursuant to Article XI, Section 22 et seq. of the Zoning and Land Use Code	Neighborhood Conservation "B" (NCB)	Urban Enterprise (UE)	Existing Conditional Rezoning to UE-170 Summer Street	Proposed Amended Conditional Rezoning to UE-170 Summer Street
Academic institutions, including buildings or structures for classroom, administrative, laboratory, dormitories, art, theater, dining services, library, bookstores, athletic facilities and student recreational uses, together with buildings accessory to the foregoing permitted principal buildings or structures,	C(13)	P		
Civic and social organizations	C			
Public community meeting and civic function buildings including auditoriums				
Residential(8)				
Single-family detached dwellings on individual residential lots	P(2)			
Mobile homes on individual residential lots				
Two-family dwellings	P			
Multifamily dwellings in accordance with the standards of Article XIII	P	P		
Single-Family attached dwelling in accordance with the standards of Article XIII	P			
Mixed single-family residential developments in accordance with the standards of Article XIII	P			
Mixed residential developments in accordance with the standards of Article XIII	P			
Mixed use structures	P	P		
Lodging houses	P			
Home occupations	P	C		
Bed and breakfast establishments as a home occupation	P	P		
In-law apartments in accordance with the standards of Article XII	P			
Single family cluster development				
Family day care home	P	P		
Shelters	C			
Natural Resource				
Agriculture				
Farm Stands				
Forest management and timber harvesting activities in accordance with the standards of Article XIII	P	P		
Earth material removal				
Community gardens(20)	P	P		

Land Use Table: pursuant to Article XI, Section 22 et seq. of the Zoning and Land Use Code	Neighborhood Conservation "B" (NCB)	Urban Enterprise (UE)	Existing Conditional Rezoning to UE-170 Summer Street	Proposed Amended Conditional Rezoning to UE-170 Summer Street
Water dependent uses, e.g. docks and marinas				
Non-residential structures for educational, scientific or nature interpretation purposes, containing a maximum floor area of not more than ten thousand (10,000) square feet				
Recreation				
Campgrounds				
Public or private facilities for nonintensive outdoor recreation	C			
Commercial outdoor recreation and drive-in theaters				
Fitness and recreational sports centers as listed under NAICS Code 713940				



ROCKINGHAM ELECTRICAL SUPPLY COMPANY

Corporate Offices

437 Shattuck Way • Newington, NH 03801
(603) 436-7731 • Fax: (603) 436-7807

2/19/2014

Planning Board
City of Lewiston
27 Pine Street
Lewiston, ME 04240

Dear Ladies and Gentlemen,

Rockingham Electrical Supply is a family owned electrical supply distributor that has been in business for over 50 years. We currently have nine locations including two in the state of Maine (Portland and Augusta). It is our hope to expand with a location in city of Lewiston. In our endeavor to do so we located a location on 170 Summer Street.

While reviewing the zoning regulations for 170 Summer Street we became aware that the location is currently zoned for light industrial use. Our proposed amendment is to allow the premises to operate as a wholesale sales, warehousing and distribution facility, a neighborhood retail sales business, business and professional offices.

We humbly request that you hear our request in hopes of approving fore mentioned changes.

Respectfully,

James Pender,
President

AN ORDINANCE PERTAINING TO ZONING BOUNDARIES

THE CITY OF LEWISTON HEREBY ORDAINS:

Appendix A of the Code of Ordinances of the City of Lewiston, Maine is hereby amended as follows:

APPENDIX A

ZONING AND LAND USE CODE

ARTICLE IV. ESTABLISHMENT OF DISTRICTS

Sec. 1. Zoning Map

The City of Lewiston hereby ordains that the Official Zoning Map of the City of Lewiston be amended by modifying the existing conditional rezoning agreements as recorded in the Androscoggin Registry of Deeds Book 5206 Page 167 for the property at 170 Summer Street depicted on Exhibit "A" and more fully described in Exhibit "B", both of which are attached hereto as follows, said property to remain conditionally rezoned from the Neighborhood Conservation "B" (NCB) District and to the Urban Enterprise (UE) District.

REASONS FOR THE PROPOSAL AMENDMENT

The reasons for the proposed amendment include allowing the premises situated in the municipality of Lewiston County of Androscoggin County, State of Maine, located at 170 Summer Street (see Exhibit A, Registry of Deeds Book 4443, Page 199) be allowed to operate a wholesale sales, warehousing and distribution facility, a neighborhood retail sales business and business and professional offices. The property (see Exhibit B) contains a structure built in 1986 by Tufts Printing. The current use is a printing company. The tenant Rockingham Electrical Supply Co Inc. proposes to operate an electrical supply wholesale business which will originally employ 4-6 employees.

CONFORMANCE WITH COMPREHENSIVE PLAN

The City Council of the City of Lewiston hereby determines that the change to the Zoning maps is in conformance with the Comprehensive Plan for the following reasons:

- (1.) Study the mixed-use area west of Main Street between the Longley Bridge and the Veterans Bridge for potential re-zonings that will deal with issues ranging from commercial expansion, neighborhood protection, and increased utilization of the Maine Central Railroad line. (Land Use Issue #9, page 124.)
- (2.)in order to assure that there is sufficient industrial land to meet the future

industrial needs of the City, the city should explore where there are areas that are appropriate for future industrial uses and to rezone them accordingly. (Industrial Development, page 121.)

- (3.) Build on the strengths of manufacturing and service industries as source of quality jobs. (See Economy, Goal 3, page 37.)
- (4.) Ensure that there is adequate land / buildings for expanding firms and entrepreneurial start-ups within Lewiston by working with local developers. (See Economy, Policy (4), Strategy A, page 40.)

CONDITIONAL REZONING AGREEMENT

The proponent requests that the official zoning map for the City be amended by modifying the existing conditional rezoning agreement with the subject property remaining conditionally rezoned Urban Enterprise (UE), subject to the limitations more fully described below.

In compliance with the provisions of the Code, Article XVII, Section 5(g), the proponent hereby proposes the following conditions:

- (a) Allowed uses of the property shall include those uses which are presently permitted under the existing conditional rezoning agreements as recorded in the Androscoggin Registry of Deeds Book 5206 Page 167 for the property at 170 Summer Street and the following uses: wholesale sales, warehousing and distribution facilities and self-storage facilities, neighborhood retail sales, and business and professional offices, as listed below and subject to the conditions contained herein.

Land Use Table: pursuant to Article XI, Section 22 <i>et seq.</i> of the Zoning and Land Use Code, subject to applicable <i>Land Use Table Notes</i> of aforementioned section of code.	Proposed Amended Conditional Rezoning to UE-170 Summer Street
USES(15)(33)	
Accessory use or structure	P
Commercial-Service	
Veterinary facilities excluding kennels and humane societies	

Veterinary facilities including kennels and humane societies	
Small day care facilities	
Day care centers	
Day care centers accessory to public schools, religious facilities, multifamily or mixed res. developments, and mobile home parks	
Business and professional offices including research, experimental, testing laboratories, engineering, research, management and related services	P
Restaurants	
Drinking places	
Adult business establishments	
Hotels, motels, inns	
Movie theaters except drive-in theaters	
Places of indoor assembly, amusement or culture	
Art and crafts studios	
Personal Services	
Retail stores	
Neighborhood retail stores	P
Lumber and building materials dealer	
Gasoline service stations	
Gasoline service stations which are a part of and subordinate to a retail use	
New and used car dealers	
Recreational vehicle, mobile home dealers	
Equipment dealers and equipment repair	
Automotive services including repair	
Registered dispensary(27)	
Registered primary caregivers engaged in the cultivations of medical marijuana for two to five registered patients.	
Tattoo Establishments	
Industrial	
Light industrial uses	P
Industrial uses	
Building and construction contractors	
Fuel oil dealers and related facilities	
Wholesale sales, warehousing and distribution facilities and self-storage facilities	P

Self storage facilities	
Commercial solid waste disposal facilities	
Junkyards and auto graveyards	
Recycling and reprocessing facilities	
Private industrial/commercial developments(23)	
Transportation	
Airports or heliports	
Commercial parking facilities	
Transit and ground transportation facilities	
Transportation facilities	
Public and Utility	
Pumping stations, standpipes or other water supply uses involving facilities located on or above the ground surface and towers for municipal use	
Power transmission lines, substations, telephone exchanges, microwave towers or other public utility or communications use	
Municipal buildings and facilities	
Preservation of historic areas; emergency and fire protection activities; bridges and public roadways	
Dams	
Institutional	
Religious facilities	
Cemeteries	
Congregate care/assisted living facilities, institutions for the handicapped, nursing or convalescent homes, group care facilities	
Hospitals, medical clinics,	
Museums, libraries, and non-profit art galleries and theaters	
Academic institutions, including buildings or structures for classroom, administrative, laboratory, dormitories, art, theater, dining services, library, bookstores, athletic facilities and student recreational uses, together with buildings accessory to the foregoing permitted principal buildings or structures,	
Civic and social organizations	

Public community meeting and civic function buildings including auditoriums	
Residential(8)	
Single-family detached dwellings on individual residential lots	
Mobile homes on individual residential lots	
Two-family dwellings	
Multifamily dwellings in accordance with the standards of Article XIII	
Single-Family attached dwelling in accordance with the standards of Article XIII	
Mixed single-family residential developments in accordance with the standards of Article XIII	
Mixed residential developments in accordance with the standards of Article XIII	
Mixed use structures	
Lodging houses	
Home occupations	
Bed and breakfast establishments as a home occupation	
In-law apartments in accordance with the standards of Article XII	
Single family cluster development	
Family day care home	
Shelters	
Natural Resource	
Agriculture	
Farm Stands	
Forest management and timber harvesting activities in accordance with the standards of Article XIII	
Earth material removal	
Community gardens(20)	
Water dependent uses, e.g. docks and marinas	
Non-residential structures for educational, scientific or nature interpretation purposes, containing a maximum floor area of not more than ten thousand (10,000) square feet	
Recreation	

Campgrounds	
Public or private facilities for nonintensive outdoor recreation	
Commercial outdoor recreation and drive-in theaters	
Fitness and recreational sports centers as listed under NAICS Code 713940	

(b) Violations of any of the conditions herein will constitute a violation of the Code.

(c) The conditions described herein shall bind the proponent, its successors and assigns, and any person in possession or occupant of the subject premises, or any portion thereof, and shall inure to the benefit of and be enforceable by the City.

(d) The proponent shall, at his own expense, record in the Androscoggin County Registry of Deeds a copy of the conditions within thirty (30) days following final approval of this proposal by the City. Such form of recording is to be in a form satisfactory to the City.

(e) The conditions described herein shall run with the subject premises.

(f) In addition to other remedies to which the City may be entitled under applicable provisions of statute or ordinance, if any party in possession or use of the subject premises fails or refuses to comply with any of the conditions imposed, any rezoning approved by the City in accordance with the conditions shall be of no force or effect. In that event, any use of the subject premises and any building or structures developed pursuant to the rezoning shall be immediately abated and brought into compliance with all applicable provisions of the Code with the same effect as if the rezoning had never occurred.

(g) If any of the conditions are found by a court of competent jurisdiction to be invalid, such determination shall not invalidate any of the other conditions.

(h) Any rezoning approved by the City conditionally shall be of no force or effect if the proponent fails or refuses to comply with conditions imposed.

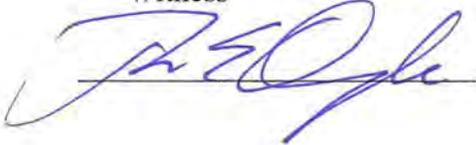
(i) Any allowed proposed use, addition, or expansion of the property deemed applicable to Article XIII, Section 2 of the Zoning and Land Use Code shall be subject to the applicable sections of Article XIII of the Zoning and Land Use Code, Development Review and Standards.

(j) By submitting this proposal, the proponent agrees in writing to the conditions described herein.

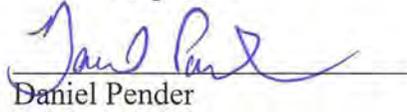
The Proponent hereby respectfully submits this Proposal as of the 11th day of February, 2014.

Rockingham Electrical Supply Co Inc/Daniel Pender

Witness



Proponent



Daniel Pender

Androscoggin, SS
Lewiston, Maine

February 11, 2014

Personally appeared the above named James Pender Jr and acknowledged the foregoing to be his free act and deed.



Notary Public
Commission Expires:

ORONOTA DEJONG, Notary Public
My Commission Expires February 15, 2015

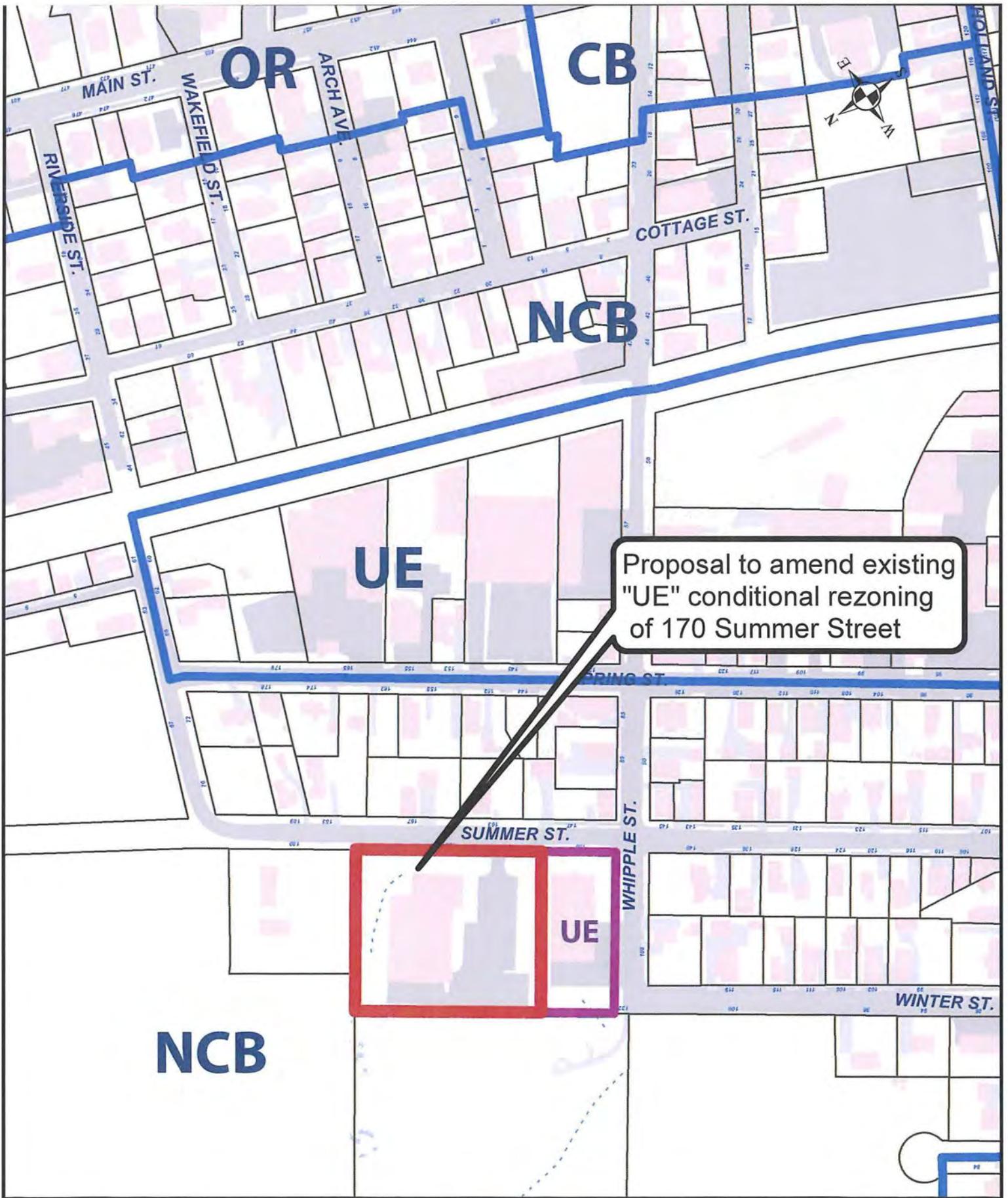


Exhibit B

January 2014
Not to Scale



One Canal Plaza
Portland, ME 04101

T 207 772 1333
F 207 871 1288

www.boulos.com

December 12, 2013

Mark Hartnett
One Source Printing
170 Summer Street
Lewiston, Maine

Re: Letter of Intent
170 Summer St
Lewiston, ME

Dear Mark,

This letter sets forth the terms and conditions under which "Rockingham Electrical Supply Company, Inc." is willing to enter into a lease agreement with One Source (hereinafter referred to as "Landlord") for space at the above-referenced location.

Property: 170 Summer St, Lewiston, Maine

Tenant: Rockingham Electrical Supply Company, Inc.

Landlord: One Source Printing

Demised Premises: The demised premises shall be deemed to contain 6,000±SF of leased space plus outdoor yard area for parking and storage in common with the Landlord. Notwithstanding the foregoing, Landlord shall have access through the leased premises to and from the loading dock located in the demised premises during Landlord's normal business hours (8 am to 5 pm)

Lease Term: Five (5) years

Option Term: One (1), five (5) year option, provided six (6) months prior written notice from Tenant.

Possession Date: Upon lease execution

Occupancy Date: Thirty (30) days from lease execution and receipt of Occupancy Permit

Rent Commencement Date: Sixty (60) days from Occupancy Date
~~Thirty (30) days from Occupancy Date~~

Landlord's Work: Landlord to build tenant a half bath for demised premises. Landlord shall provide Tenant with quotes for installing a half bath. Upon acceptance of quote, Tenant shall pay contractor directly upon presentation of periodic

THE RIGHT WAY TO DO REAL ESTATE

invoices from the Landlord or the contractor. Any under slab drain plumbing shall be at the Landlord's cost.

Tenant's Work:

Any and all additional modifications to the building by Tenant or Tenant's agent shall be completed in compliance with all applicable state and municipal building codes and ordinances.

Lease Rate:

Years 1: \$30,000/Yr Mod Grs (\$ 2,500/Mo. MG)

2% annual increases to base rent.

The above rent is quoted Modified Gross basis. Therefore, Tenant is responsible for its pro-rata share of heating cost, and will pay increases in real estate taxes, property insurance and outdoor maintenance, over base year (first 12 months of occupancy)

Option Rent:

Option rent to be at market rates each year, but not to exceed a 15% increase over previous year. There shall be no rent decrease from prior year.

Electricity:

To be billed to tenant monthly, at a rate of \$1.00/sf ^{AT} /per year. JS

Use:

Tenant will use the demised premises for showroom, warehousing and distribution activities associated with the electrical supply company.

Deposit:

Upon full execution of this letter tenant to provide a deposit equal to one months rent payable to CBRE/The Boulos Company which will be held in escrow pending lease execution and then credited to tenants rent.

Security Deposit:

Upon full execution of a Lease Agreement, Tenant will deposit with Landlord an additional one months rent. This sum represents the security deposit due under the lease. Said deposit will be returned to Tenant at the end of the lease term, provided the premises are left in good repair, "broom clean," and provided Tenant has not been in default of lease. Interest will not be paid on said deposit.

Signage:

Signage will be at Tenant's sole expense subject to Landlord's approval. Said approval not to be unreasonably withheld or delayed.

Parking:

Parking is available on-site in common with owner.

Brokerage Commission:

Landlord's responsibility in accordance with CBRE/The Boulos Company's standard commission schedule.

Sublease:

Tenant shall be permitted to sublet space, but only with the prior written approval of the Landlord, said Landlord consent not to be unreasonably withheld or delayed.

Zoning:

It is the responsibility of Tenant to determine all zoning information and secure all necessary or required permits and approvals for its proposed use of the subject premises. Landlord and CBRE/The Boulos Company make no representations or warranties as to the suitability of, or the ability to obtain regulatory approval for, the subject premises for Tenant's intended use.

Fax Copies:

The undersigned jointly and severally agree to accept fax copies of the documents which have been sent by either party to the other, or to any other party or agent to this transaction, as original documents, with the exception of the final lease document.

Lease Agreement:

Landlord agrees to forward its proposed lease to Tenant within ten (10) days of the full execution of this Letter of Intent. In the event Landlord and Tenant have not executed a lease within 14 days of receipt, then either party may cancel this agreement and any deposit will be returned to Tenant.

Option to Purchase:

Landlord agrees to grant Tenant option to purchase property during Years 4 and 5 of the initial lease term. Option Purchase Price for Year 4 shall be \$680,000. Option Purchase Price for Year 5 shall be \$690,000. ~~In the event Tenant exercises their Option to Purchase, Landlord shall have the right to lease back the space Landlord occupies for a term of up to twelve (12) months at a lease rate per square foot equal to price Tenant was currently paying at the time Option to Purchase is exercised~~ *Jep* *

It is agreed that this Letter of Intent is subject to the formal execution of a mutually agreeable lease and until all parties sign such lease, this Letter of Intent will be non-binding. All parties agree to negotiate in "good faith".

Sincerely,

Daniel Greenstein
Broker/Partner

DG/hjn

* In the event that Tenant exercises its option to purchase, it shall provide Landlord with not less than 60 days notice of its exercise, and Landlord shall have 90 days subsequent to closing to relocate. *Jep*
During said 90 day period, Landlord shall pay rent at a lease rate per square foot equal to the price that Tenant was paying at the time the option is exercised.

SEEN AND AGREED TO:

ROCKINGHAM ELECTRICAL SUPPLY COMPANY, INC.

By: James Elender Date: 12/17/13
It: GEO/CFO

ONE SOURCE PRINTING Mark C. Nantmett Date: 12/13/13
Its: President

PETITION TO AMEND THE CITY OF LEWISTON
ZONING AND LAND USE CODE

Pursuant to Appendix A, Article XVII, Section 5 AAmendments@ of the City of Lewiston Zoning and Land Use Code, we the undersigned residents of the City of Lewiston, being eighteen (18) year of age or older, do hereby petition the City of Lewiston to amend Zoning and Land Use Code to include allowing the premises situated in the municipality of Lewiston County of Androscoggin County, State of Maine, located at 170 Summer Street (see Exhibit A, Registry of Deeds Book 4443, Page 199) be allowed to operate a wholesale sales, warehousing and distribution facility, a neighborhood retail sales business and business and professional offices. The property (see Exhibit B) contains a structure built in 1986 by Tufts Printing. The current use is a printing company. The tenant Rockingham Electrical Supply Co Inc. proposes to operate an electrical supply wholesale business which will originally employ 4-6 employees. As described in the exhibits attached hereto:

	SIGNATURE	PRINTED NAME	PHYSICAL STREET ADDRESS (No PO Boxes)	DATE
①	<i>Michael E Blais</i>	Michael E Blais	9 Tremont Drive	2/6/14
②	<i>Ronald Obermeyer</i>	Ronald Obermeyer	576 MAIN	2-7-14
③	<i>Donald Obermeyer</i>	Donald Obermeyer	12 Riverside Place	2/7/14
④	<i>Gary Dubois</i>	GARY DUBOIS	688 Webster St	2/8/14
⑤	<i>Carmen Kirwan</i>	CARMEN KIRWAN	4 Orchard Circle	2/8/14
⑥	<i>Danny Cote</i>	Danny Cote	4 Orchard Circle	2/8/14
⑦	<i>Denise L Theriault</i>	Denise L Theriault	6 Acorn Lane	2-8-14
⑧	<i>Susan Fowler</i>	SUSAN Fowler	76 Gagne St	2-8-14
⑨	<i>James S Theriault</i>	James S. Theriault	6 Acorn Ln	2-8-14
⑩	<i>Richard Breau</i>	RICHARD BREAU	310 OLD GREENE RD.	2/10/14
⑪	<i>Gertrude S Breau</i>	Gertrude S. Breau	310 Old Greene Rd	2-10-14
⑫	<i>Daniel R. Pelletier</i>	Daniel R. Pelletier	82 No Temple St.	2/10/14
13				
14				
15				
16				
17				
18				
19				
20				

CIRCULATOR=S VERIFICATION

I hereby verify that I am the Circulator of this petition that all the signatures to this petition were made in my presene, and to the best of my knowledge and belief, each signature is that of the person it purports to be, and each person is a resident of the City of Lewiston.

Mark D. Hartnett Mark D. Hartnett 2/10/14
Signature of Circulator Printed Name of Circulator Date

REGISTRAR=S CERTIFICATION

I hereby certify and verify that the names of all of the petitioners listed as valid appear on the voting list as registered voters in the City of Lewiston.

Total Valid: 12 Total Invalid: 0

Debra Pease Rep.
Signature of Registrar/Deputy Registrar

Date: 2/10/14



CITY OF LEWISTON



Department of Planning & Code Enforcement

TO: Planning Board
FROM: David Hediger, City Planner
DATE: February 20, 2014
RE: February 24 Planning Board Agenda Item IV(c)

An application submitted by Northeast Civil Solutions on behalf of Franklin Land Associates, LLC to construct a retail facility –Dollar General - at 1079 Sabattus Street.

Northeast Civil Solutions on behalf of Franklin Land Associates, LLC has submitted an application to construct a Dollar General retail store with a 30 space parking lot at 1079 Sabattus Street. The project is proposed to be located across the street from Drillen Hardware on 1.4 acres being divided from 20.2 acre parcel owned by Eric Veilleux. The majority of the remaining land is vacant with the exception of approximately 1.3 acres of land to the west of the proposed site at containing an existing automobile repair/used car dealership (located at 1073 Sabattus Street). Site improvements include the construction of 9,100 square foot retail facility/Dollar General with 30 parking spaces. The property is zoned Highway Business (HB).

Staff has been working closely with the applicant's representative to address concerns and questions. The applicant has since provided revised plans and documentation referencing most of staff comments (see February 13, 2014 letter from Northeast Civil Solutions). Staff notes the following with respect to the proposed development:

- The applicant has referenced all of the applicable sections of the Zoning and Land Use Code including Article XIII, Section 4.
- Prior to a certificate of occupancy being issued, staff is recommending an as-built site plan is provided by a professional engineer or surveyor as being in conformance with the approved site plan. The applicant has made reference to this on Sheet 5.
- The applicant has demonstrated that traffic from the proposed development will not require a traffic movement permit. The project is estimated to generate 65 trips ends during a peak hour (the recently approved Family Dollar at 8,320 SF was estimated to generate 57 trips). It has also been determined a left turn lane on Sabattus Street is not warranted. In effort to reduce the number of turning movements along this section of Sabattus Street, the applicant will be eliminating two existing curb cuts to the west of the development site at 1073 Sabattus Street resulting in a single curb cut for that site (currently developed with an automobile repair/used car dealership) and a single curb cut for Dollar General.
- Staff and the applicant have discussed the ability to establish cross access easements and shared access through this site to abutting land that potentially may be developed. Staff continues to recommend that cross access easements be recorded and the site plan note that the proposed access to the retail site may be used in the future to accommodate additional development of land to the east of the project site. In addition, cross

easements and access rights to the property at 1073 Sabattus Street – west of the site - should also be in place to encourage interconnectivity of development sites in the future. Both easements would assist with traffic management of this site and future development along Sabattus Street by preserving mobility and economic productivity related to roadway transportation, and potentially avoid long-term costs of constructing new roadway capacity. Article XIII, Section 4(d)(6) states: “where a development abuts . . . an existing . . . arterial street, the board may require marginal access streets (street parallel to arterial street providing access to adjacent lots) . . . to afford separation of through and local traffic.” While this site is not proposing - nor is staff recommending - a marginal access “street” in the sense of a city accepted travel way, staff continues to recommend that cross easements be included to provide access to adjacent lots in effort to ensure public safety while the practicality and feasibility to do so easily exists today. Said easements may reduce the need for future curb cuts and improve access management. Staff suggests the Board may want to consider a condition of approval that prior to a certificate of occupancy being issued, evidence is provided to the City that cross easements have been established and recorded so future development of the remaining land abutting the Dollar General will have the ability to use their site for access. The developer has expressed concerns with staff’s recommendation for easements and plans on discussing the matter at the meeting with the Board.

- The applicant is requesting a waiver from the parking requirements of Article XII, Section 17(d) which provides the applicant the ability to demonstrate a differing parking need (either fewer or greater) than otherwise required. Based upon a retail establishment of 9,100 SF the code requires 36 spaces. The applicant is proposing 30 spaces. The code states that “. . . sufficient spaces to accommodate the normal parking demand of the use (must be provided) without requiring on-street parking. The number of required spaces shall be determined by the planning board for major project development review. . .’ The applicant has provided a parking assessment based upon a proposed peak traffic generation of 65 trips and the assumption that the average shopper is in the store for 20 minutes that 12 to 15 spaces will be used at any given time during the peak hour. The applicant has further noted they are comfortable with the 30 spaces proposed, in part modeled after more than 11,000 stores in 40 states. Staff believes this request is reasonable in that the applicant is familiar with the parking demand of their stores and that typically the amount of parking provided is excessive.
- The applicant has noted on Sheet 5 that no certificate of occupancy be issued for this development until written verification by a professional engineer is provided to the city that all stormwater improvements have been completed in accordance with the approved plan.
- Total site disturbance will exceed one acre and is located within an area of the city subject to municipal stormwater regulations (MS4). Therefore, staff recommends as a condition of approval that prior to a certificate of occupancy being issued that documentation regarding the maintenance and upkeep of the stormwater system pursuant to Lewiston MS4 stormwater requirement contained in Article XII, Section 15e(3) be provided to the City.
- Planning and Code Enforcement and Public Works provided additional review comments to the applicant on February 18, 2014 based upon the latest revisions provided by the applicant (see memorandums from David Hediger and Ryan Barnes dated February 18, 2014). Staff will provide an update at the meeting upon receipt of a response from the

applicant and advise whether any concerns remain or conditions of approval are recommended.

No other concerns have been raised by city staff. Therefore, approval is recommended pursuant to Article XIII, Section 4 Zoning and Land Use Code with the following conditions to be noted on the plan:

1. Prior to a certificate of occupancy being issued, documentation regarding the maintenance and upkeep of the stormwater system pursuant to Lewiston MS4 stormwater requirement contain in Article XII, Section 15e(3) must be provided to the City.
2. Prior to a certification of occupancy being issued, evidence is provided to the City that cross easements have been established and recorded so future development of the remaining land abutting the Dollar General will have the ability to use their site for access.

ACTIONS NECESSARY

1. Make a motion to consider an application submitted by Northeast Civil Solutions on behalf of Franklin Land Associates, LLC to construct a retail facility –Dollar General - at 1079 Sabattus Street.
2. Obtain input on the application;
3. Make a determination that the application is complete;
4. Make finding that the application meets all of the necessary criteria contained in the Zoning and Land Use Code, including Article XIII, Section 4 of the Zoning and Land Use Code and to grant approval to Franklin Land Associates, LLC to construct a retail facility –Dollar General - at 1079 Sabattus Street (subject to any concerns raised by the Planning Board or staff).



City of Lewiston
Planning & Code Enforcement

TO: Northeast Civil Solutions
FROM: David Hediger, City Planner
DATE: February 18, 2014
RE: General Dollar, 1079 Sabattus Street

Planning and Code Enforcement offer the following comments and concerns with respect to the above referenced project and the applicant's revised application and plan set dated 2/13/14:

- Sheet 4:
 - a. A raised landscaped island adjacent to front of building has been added to prevent vehicles from parking in this area, reduce impervious, etc. However, this island is not shown on the landscaping plan L101. This must be updated.
- Traffic assessment:
 - a. Staff recommends cross access easements be recorded and the site plan note that the proposed access to the retail site may be used in the future to accommodate additional development of land to the east of the project site. In addition, cross easements and access rights to the property at 1073 Sabattus Street – west of the site - should also be in place in encourage interconnectivity of development sites in the future. Both easements will assist with traffic management of this site and future development along Sabattus Street by preserving mobility and economic productivity related to roadway transportation, and potentially avoid long-term costs of constructing new roadway capacity. Staff understands this is a concern of the applicant's to be discussed at the meeting. It should be noted that Article XIII, Section 4(d)(6) states: "where a development abuts . . . an existing . . . arterial street, the board may require marginal access streets (street parallel to arterial street providing access to adjacent lots) . . . to afford separation of through and local traffic." While this site is not proposing - nor is staff recommending - a marginal access "street" in the sense of a city accepted travel way, staff continues to recommend that cross easements be included to provide access to adjacent lots in effort ensure public safely while the practicality and feasibility to do so easily exists today.
- Dumpster must be screened on all sides.
- Landscaping plan:
 - a. Additional landscaping has been provided at staff's request. As noted above, the raised landscaped island adjacent to front of building is not shown on the landscaping plan L101. This must be updated.
 - b. An additional street tree should be considered; guidelines reference plantings ever 30' to 50'.
- Lighting plan:

- a. Plans included by Harris Lighting differ from lighting shown on sheet AO2. Please revise.
- Sheet AO2 shows flood lights on roof of building. Site plans show light poles. Please verify. All lighting must be full 90 degree cut-off fixtures.
- Sheet AO2: the elevation keyed notes reference that the color of the metal wall panels and matching concrete masonry will be based upon exterior finished schedule for color. While not an ordinance requirement, the Board may appreciate the ability to view what pallet of colors may be available with respect to this location.

Additional comments may be provided upon further review. Please contact me with any questions.

Thank you.



DATE: February 18, 2014
TO: David Hediger, Planning Director
FROM: Ryan Barnes, P.E., Project Engineer
SUBJECT: 1073 Sabattus Street #2
 Dollar General

(RSB)

Lewiston Public Works has the following comments at this time upon reviewing the application, previous comments and responses have been repeated for clarity:

Plans:

- c. Sheet 4 – CB3 and CB4 should be designed with depressions at the gutter to prevent site water from traveling down the driveway. **A detail has been added to show depressions at these catch basins.**

A detail for gutter depressions was not included with the revised plan set; please provide a detail showing gutter depression.

Stormwater:

- e. Please provide calculations showing that the emergency spillway can independently convey the 25 year storm with one foot of freeboard. **The attached calculations show the emergency spillway can independently handle the 25-year storm event with one foot of freeboard. The peak elevation in the pond reaches 214.42' and the crest height of the pond is elevation 215.50.**

Calculations for the overflow were not included in the revised submission package; please provide the calculations.

- f. Please provide calculations showing that the emergency spill way can independently convey the 100 year storm without overtopping the embankment. **The attached calculations show the peak elevation of the pond in the 100-year event is 214.52', well below the crest height of the pond at 215.50 and therefore will not overtop.**

Calculations for the overflow were not included in the revised submission package; please provide the calculations. At the meeting that was held to discuss the project it was also mentioned that a catchbasin grate would be used for the OCS instead of a manhole cover. The detail still shows a manhole cover.

The City of Lewiston does not discriminate against or exclude individuals from its municipal facilities, and/or in the delivery of its programs, activities and services based on an individual person's ethnic origin, color, religion, sex, age, physical or mental disability, veteran status, or inability to speak English. For more information about this policy, contact or call Compliance Officer Mike Paradis at (V) 207-513-3003, (TTY) 207-513-3007, or email mparadis@ci.lewiston.me.us.

**LEWISTON FIRE DEPARTMENT
Certified Fire Inspector \
Certified Fire Investigator
Paul Ouellette
Fire Prevention Bureau
Central Fire Station
2 College Street
Lewiston, ME 04240
(207) 513-3002 ext. 3605
Fax # (207) 784-6138
pouellette@ci.lewiston.me.us**

Plans Review

Date: 2-14-2014

Project: **Dollar General Retail Store**

Address: **1079 Sabattus St.**

Project Concerns:

I have no current issues or concerns with the "site plans". I have not seen or reviewed any building plans to date.



SURVEYING ENGINEERING LAND PLANNING

Northeast Civil Solutions
INCORPORATED

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155 U.S. Route 1

Scarborough

Maine 04074

tel

207.883.1000

800.882.2227

fax

207.883.1000

February 13, 2014

David Hediger, City Planner
27 Pine Street
3rd Floor
Lewiston, Maine 04240

RE: Development Review Application – Dollar General Retail Store, 1073 Sabattus Street:

Dear Mr. Hediger,

Please find the requested number of copies for a completed Development Review Application and all associated attachments for a proposed Dollar General Retail store located on a 1.44 acre lot at 1073 Sabattus Street in Lewiston.

Please also find the project narrative, that address the approval criteria discussed in Article XIII, Section 4 of the Zoning and Land Use Code, and a letter that addresses comments from your initial review.

Please feel free to contact me at any time if you have any additional questions or comments about this application.

Sincerely,
Northeast Civil Solutions

Travis Letellier, EIT
Project Engineer

cc: Lee Allen. P.E., NCS

February 13, 2014

David Hediger, City Planner
27 Pine Street
3rd Floor
Lewiston, Maine 04240

RE: Response to preliminary comments – Dollar General Retail Store, 1073 Sabattus Street:

Dear Mr. Hediger,

The following comments and concerns with respect to the above referenced project: **NCS responses can be found in bold type immediately following each comment.**

Planning and Code Enforcement

- The application/narrative should reference each of the development review criteria contain in Article XIII, Section 4. Doing so will address many of the comments that follow. **Please find the attached Project narrative; NCS has addressed the review criteria as requested.**
- Evidence of “right, title, interest” must be provided. This includes grading *and drainage* easements. **Evidence of right title and interest is attached in the form of a purchase and sales agreement.**
- It’s unclear why a proposed lot split keeps a 10’ swath along the rear property line being retained by the current owners. Refer to Article V, Section 3(c)(2). **The 10’ swath has been removed from the plan.**
- As discussed on 11/26/13 the HB district requires a conceptual master plan as part of the lot split. See Article XI, Section 23, Space and Bulk Note 18. **A conceptual master plan has been attached.**
- Sheet 4:
 - a. The lot split will result in side yard violations for the parent lot at 1073 Sabattus Street. These needs to be addressed. **The pavement for the adjacent lot will be cut back to provide 10 feet of vegetative side yard as required in the HB district, see the site plan for details.**
 - b. Staff questions the need to build the elevation of the lot and suggests utilizing existing grades where possible. This may be accommodated by moving the building closer to the front property line. Lower portions of the site versus elevating the site will potentially lessen erosion during construction, create less of a visual impact to residential properties on Ellis Street, and potentially result in less overall site disturbance. Article XIII, 4(k) references the need to avoid extensive grading and filling when possible and minimize compaction of soils. **The elevation of the building has been dropped by 3 feet and correspondingly the site grades have been dropped to ensure that driveway grades meet town ordinances.**
 - c. Consideration should be given to placing the building closer to the road with parking along the side and rear of the structure. **The location of the building must be**

maintained in order to provide adequate stormwater control in the front of the building.

- Sheet 5:
 - a. Consideration should be given to reducing the sites impervious area. Code requirements for parking are 9' x 18' with 22' aisle widths. This may also provide for the site improvements to shift forward. **The wide aisles are needed for delivery truck movements within the property. The site is designed for a WB-67 truck and leaves no need for the truck to be backed into the site from Sabattus Street. (see the attached 8½" x 11" Preliminary Site Plan with AutoTurn truck movements)**
 - b. Pavement striping detail/island adjacent to front of building: this should be a curbed landscaped island to prevent vehicles from parking in this area, reduce impervious, etc. **This area is needed for the tuck movements, the striped area cannot be eliminated from the design without adding extra pavement elsewhere to allow the truck to turn around. (see the attached 8½" x 11" Preliminary Site Plan with AutoTurn truck movements)**
 - c. Consideration should be given to necking down the width of the access drive once beyond the turning lanes. Additional width not necessary; again, possible reduction in impervious area. **The wide access is needed for truck movements in and out of the site. (see the attached 8½" x 11" Preliminary Site Plan with AutoTurn truck movements)**
 - d. Curb cut closures on abutting property at 1073 Sabattus Street must be completed prior to occupancy of the new retail establishment. **A note to this effect has been added to the Site Plan. (note #1)**
- Sheet 7:
 - a. Erosion control measures should be shown along front property line if the site is to remain elevated from Sabattus Street. **Silt fence will be provided along the front property line to prevent sediment from flowing onto Sabattus Street.**
- Traffic assessment:
 - a. Report notes a left turn lane is not needed on Sabattus Street; however, analysis was limited. Peer review by City's traffic engineer being considered. If deemed necessary, plans will be needed with respect to the offsite improvements. **Noted**
 - b. As noted above with respect to a master plan required for division of lots in the HB, staff recommends cross easements be recorded and the site plan note that the proposed access to the site may be used in the future to accommodate additional development of land to the east of the project site. In addition, cross easements and access rights to the property at 1073 Sabattus Street – west of the site - should also be in place in encourage interconnectivity of development sites in the future. Both easements will assist with traffic management of this site and future development along Sabattus Street. These were discussed at the November meeting. **The developer of the site has concerns regarding the definition of the cross easements and would like to pursue a discussion of the issues surrounding the cross easements with staff and the board at the Planning Board meeting.**
 - c. Site must be able to accommodate deliveries without trucks backing into the site from

Sabattus Street. **The design of the access drive and parking areas accommodate delivery from a WB-67 truck without the need to back in from Sabattus Street. (see the attached 8½" x 11" Preliminary Site Plan with AutoTurn truck movements)**

- Parking assessment
 - a. It appears adequate parking may be available based upon the examples of other stores provided. However, the average number of spaces shown is 33 spaces and it's not known what hour or day of the week the photo was taken. Also, these stores appear to be out of state and it's not clear what type of traffic or population is in proximity to said stores. Regardless, on street parking is prohibited on Sabattus Street and the applicant should know what to expect for parking demand. **The applicant is comfortable with 30 spaces as proposed and does not anticipate any problems. Adding more spaces will only increase the need for additional pavement and increase stormwater flows.**
- Landscaping plan:
 - a. An additional street tree should be considered; guidelines reference plantings ever 30' to 50'. **The Landscape Plan has been redesigned to show 5 street trees along the front of the property.**
 - b. Given the elevation of the site the applicant should consider whether additional evergreen planting are needed to be an effective buffer to the residential property. **The site has been lowered. The existing trees and elevation difference will provide buffering between the development and the abutting residential properties. The Landscape Plan identifies additional plantings in the rear of the building.**
- Lighting plan: staff recommends light poles not exceed 20' in height. Detail should be provided. **Details for mounting height has been provided, please see the revised lighting plan.**
- Cover sheet: must contain a signature block for Planning Board chairman and expiration of approval language per Article XIII, Section 11. **A signature block and approval language has been added to the cover sheet.**
- Prior to a certificate of occupancy being issued a professional engineer must provide a stamped statement indicating all stormwater improvements have been completed in accordance with the approved plan. A note to this effect should be added to the plans. **A note to this effect has been added to the Site Plan. (note #2)**
- Prior to a certificate of occupancy being issued, an as-built site plan must be provided by a professional surveyor or engineer. **A note to this effect has been added to the Site Plan. (note #3)**

Lewiston Public Works

- Plans:
 - a. Sheet 4 – The site driveway is designed with grades of 4-5% for the first forty feet with 8% for the remainder of the driveway. The driveway shall be designed with a maximum grade of 3% for the first 100 feet. **The driveway has been designed to 3 percent for the first 100 feet.**

- b. Sheet 4 – Due to the location of the existing catch basin in the middle of the driveway there is concern that the existing catch basin could have puddles around it and could cause the tracking of water from the site onto the roadway resulting in icing in the winter months. The applicant shall install a new basin located in a depression in the new curb line of the driveway to prevent water from collecting around the existing basin in the street. **A new catch basin has been proposed in the gutter line of the entrance to intersect the existing drain line. The existing catch basin (eCB1) in the middle of the entrance will be converted to a drain manhole.**
 - c. Sheet 4 – CB3 and CB4 should be designed with depressions at the gutter to prevent site water from traveling down the driveway. **A detail has been added to show depressions at these catch basins.**
 - d. How does the applicant intend to handle snow removal at this site? The detention pond should not be used for snow storage as this could cause failure of the detention system and possible street flooding. **Snow removal areas have been added to the site plan labeled.**
 - e. Sheet 6 – The connection to the existing sewer main shall be made using an inserta tee with an approved hole saw to insure a watertight connection. **This change has been reflected on the sewer service detail.**
 - f. Sheet 9 – The Precast Concrete Curb detail shall be revised to including concrete bedding as well as backfill. **The concrete curb detail has been revised to indicate concrete bedding.**
 - g. Sheet 9 – The Sawcut and Pavement Match detail shall be revised to reflect a minimum of 24” of gravel and 6” of asphalt. **The pavement match detail has been revised to indicate 24” gravel and 6” asphalt.**
 - h. Sheet 10 – The Catch Basin Frame and Grate detail shall be revised to require cascade grates be installed on catch basins within the City right of way. **A cascade grate has been called out for the new CB in the public right of way.**
 - i. The Sewer Trench detail shall be revised to include ¾” crushed stone 6” below the pipe to 6” above the pipe within the City right of way. **The sewer trench detail has been revised to indicate ¾” crushed stone 6” above and below the pipe.**
- Traffic:
 - a. LPW concurs that the left turn lane is marginally warranted and should not be constructed at this time, however, if the adjacent lots are developed shared access should be considered and left turn warrants revised at that time. **Noted**
 - Stormwater:
 - a. As discussed at the pre application meeting the existing parcel was almost entirely wooded with fairly dense underbrush except for the gravel areas until it was cleared a few months ago. Please submit revised calculations for the precondition to reflect this ground cover for the drainage areas and time of concentration calculations. This will likely result in lower precondition volumes and may require modifications to be made to the proposed pond. **The existing conditions have been revised to reflect a forested condition. The results of the existing flows are summarized in the Stormwater Narrative.**
 - b. The time of concentration for sub catchment S3 in the precondition is 15.9 minutes in S2 of the post condition a smaller portion of this area is 18.9 minutes. Shouldn't the time of

concentration go down with the reduced area, or at least stay the same? **The time of concentration has been revised to reflect more accurately the lengths and slopes of the pre and post conditions. The Tc has decreased, rather than increase in the post-condition calculations. The results of the existing flows are summarized in the Stormwater Narrative.**

- c. The detention pond shall be designed per the Stormwater Management for Maine Volume III BMPs Technical Design Manual, latest revision. **The detention pond has been redesigned per the Maine DEP technical manual.**
- d. The detention pond needs to have a six foot crest width and have an emergency spillway that will convey the water away from the roadway, so as not to cause flooding of the street. **The crest width has been revised to 6 feet. The emergency spillway has been designed into the outlet control structure (OCS) as a 8" high by 30" wide opening. The OCS has been designed to control the 2-, 10-, and 25-year storm events without utilizing this opening**
- e. Please provide calculations showing that the emergency spillway can independently convey the 25 year storm with one foot of freeboard. **The attached calculations show the emergency spillway can independently handle the 25-year storm event with one foot of freeboard. The peak elevation in the pond reaches 214.42' and the crest height of the pond is at elevation 215.50'**
- f. Please provide calculations showing that the emergency spill way can independently convey the 100 year storm without overtopping the embankment. **The attached calculations show the peak elevation of the pond in the 100-year event is 214.52', well below the crest height of the pond at 215.50' and therefore will not overtop.**

If you have any further questions for comments please contact me.

Sincerely,
Northeast Civil Solutions



Travis Letellier, EIT
Project Engineer

cc: Lee Allen, P.E., NCS

PROJECT DATA

The following information is required where applicable, in order to complete the application

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	9,625	sq. ft.
Proposed Total Paved Area	21,927	sq. ft.
Proposed Total Impervious Area	31,115	sq. ft.
Proposed Impervious Net Change	21,490	sq. ft.
Impervious surface ratio existing	15.3	% of lot area
Impervious surface ratio proposed	49.5	% of lot area

BUILDING AREA/LOT

COVERAGE

Existing Building Footprint	0	sq. ft.
Proposed Building Footprint	9,188	sq. ft.
Proposed Building Footprint Net change	+ 9,188	sq. ft.
Existing Total Building Floor Area	0	sq. ft.
Proposed Total Building Floor Area	9,100	sq. ft.
Proposed Building Floor Area Net Change	+ 9,100	sq. ft.
New Building	YES	(yes or no)
Building Area/Lot coverage existing	0.0	% of lot area
Building Area/Lot coverage proposed	14.6	% of lot area

ZONING

Existing _____

Proposed, if applicable (HB) HIGHWAY BUSINESS

LAND USE

Existing _____

Proposed EMPTY

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units _____

Proposed Number of Residential Units _____

Subdivision, Proposed Number of Lots _____

PARKING SPACES

Existing Number of Parking Spaces _____

Proposed Number of Parking Spaces _____

Required Number of Parking Spaces _____

Number of Handicapped Parking Spaces _____

ESTIMATED COST OF PROJECT

\$ 750,000

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area 9,625 sq. ft.

Proposed Disturbed Area 58,110 sq. ft.

Proposed Impervious Area 31,115 sq. ft.

1. *If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.*
2. *If the proposed impervious area is greater than one acre including any impervious area created since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.*
3. *If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.*
4. *If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.*

TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing _____ passenger car equivalents (PCE)
(Since July 1, 1997)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) _____ passenger car equivalents (PCE)
If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

Zoning Summary

1. Property is located in the (HB) HIGHWAY BUSINESS zoning district.
2. Parcel Area: 1.44 acres / 62,864 square feet(sf).

Regulations	Required/Allowed	Provided
Min Lot Area	N/A	62,864
Street Frontage	150	175
Min Front Yard	15	20
Min Rear Yard	10	20
Min Side Yard	10	20
Max. Building Height	65	18
Use Designation	/	
Parking Requirement	1 space/ per <u>250</u> square feet of floor area	
Total Parking:	37	30
Overlay zoning districts (if any):	<u>SHORELAND</u> / /	
Urban impaired stream watershed?	YES/NO If yes, watershed name <u>NO</u>	

DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submission shall include payment of fee and fifteen (15) complete packets containing the following materials:

1. Full size plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed.
3. Cover letter stating the nature of the project.
4. All written submittals including evidence of right, title and interest.
5. Copy of the checklist completed for the proposal listing the material contained in the submitted application.

Refer to the application checklist for a detailed list of submittal requirements.

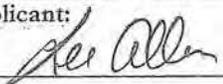
L/A's development review process and requirements have been made similar for convenience and to encourage development. Each City's ordinances are available online at their prospective websites:

Auburn: www.auburnmaine.org under City Departments/ Planning and Permitting/Land Use Division/Zoning Ordinance

Lewiston: <http://www.ci.lewiston.me.us/clerk/ordinances.htm> Refer to Appendix A of the Code of Ordinances

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

This application is for development review only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant: 	Date: <u>1/29/2014</u>
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Development Review Checklist

City of Auburn Planning and Permitting Department
City of Lewiston Department of Planning and Code Enforcement



THE FOLLOWING INFORMATION IS REQUIRED WHERE APPLICABLE TO BE SUBMITTED FOR AN APPLICATION TO BE COMPLETE

PROJECT NAME: DOLLAR GENERAL RETAIL STORE

PROPOSED DEVELOPMENT ADDRESS and PARCEL #: RE00006465

Required Information		Check Submitted		Applicable Ordinance	
		Applicant	Staff	Lewiston	Auburn
Site Plan					
	Owner's Names/Address	✓			
	Names of Development	✓			
	Professionally Prepared Plan	✓			
	Tax Map or Street/Parcel Number	✓			
	Zoning of Property	✓			
	Distance to Property Lines	✓			
	Boundaries of Abutting land	✓			
	Show Setbacks, Yards and Buffers	✓			
	Airport Area of Influence (Auburn only)	N/A			
	Parking Space Calcs	✓			
	Drive Openings/Locations	✓			
	Subdivision Restrictions	—			
	Proposed Use	✓			
	PB/BOA/Other Restrictions				
	Fire Department Review				
	Open Space/Lot Coverage	✓			
	Lot Layout (Lewiston only)				
	Existing Building (s)	N/A			
	Existing Streets, etc.	✓			
	Existing Driveways, etc.	✓			
	Proposed Building(s)	✓			
	Proposed Driveways	✓			
Landscape Plan					
	Greenspace Requirements	✓			
	Setbacks to Parking	✓			
	Buffer Requirements	✓			
	Street Tree Requirements	✓			
	Screened Dumpsters	✓			

	Additional Design Guidelines				
	Planting Schedule	✓			
Stormwater & Erosion Control Plan					
	Compliance w/ chapter 500	✓			
	Show Existing Surface Drainage	✓			
	Direction of Flow	✓			
	Location of Catch Basins, etc.	✓			
	Drainage Calculations	✓			
	Erosion Control Measures	✓			
	Maine Construction General Permit				
	Bonding and Inspection Fees				
	Post-Construction Stormwater Plan	✓			
	Inspection/monitoring requirements	✓			
	Third Party Inspections (Lewiston only)				
Lighting Plan					
	Full cut-off fixtures	✓			
	Meets Parking Lot Requirements	✓			
Traffic Information					
	Access Management	✓			
	Signage	✓			
	PCE - Trips in Peak Hour	✓			
	Vehicular Movements	✓			
	Safety Concerns	✓			
	Pedestrian Circulation				
	Police Traffic				
	Engineering Traffic				
Utility Plan					
	Water	✓			
	Adequacy of Water Supply				
	Water main extension agreement				
	Sewer	✓			
	Available city capacity				
	Electric	✓			
	Natural Gas	N/A			
	Cable/Phone	✓			
Natural Resources					
	Shoreland Zone	✓			
	Flood Plain	N/A			
	Wetlands or Streams	N/A			
	Urban Impaired Stream	N/A			
	Phosphorus Check				
	Aquifer/Groundwater Protection				
	Applicable State Permits				

	No Name Pond Watershed (Lewiston only)	N/A			
	Lake Auburn Watershed (Auburn only)	✓			
	Taylor Pond Watershed (Auburn only)	✓			
Right Title or Interest					
	Verify	✓			
	Document Existing Easements, Covenants, etc.	✓			
Technical & Financial Capacity					
	Cost Est./Financial Capacity	✓			
	Performance Guarantee	✓			
State Subdivision Law		N/A			
	Verify/Check				
	Covenants/Deed Restrictions				
	Offers of Conveyance to City				
	Association Documents				
	Location of Proposed Streets & Sidewalks				
	Proposed Lot Lines, etc.				
	Data to Determine Lots, etc.				
	Subdivision Lots/Blocks				
	Specified Dedication of Land				
Additional Subdivision Standards		N/A			
	Single-Family Cluster (Lewiston only)				
	Multi-Unit Residential Development (Lewiston only)				
	Mobile Home Parks				
	Private Commercial or Industrial Subdivisions (Lewiston only)				
	PUD (Auburn only)				
A jpeg or pdf of the proposed site plan		✓			
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving		✓			

THIS DOCUMENT HAS A COLORED BACKGROUND AND MICROPRINTING. THE REVERSE SIDE INCLUDES AN ARTIFICIAL WATERMARK.

GBT INVESTMENTS, INC.

9010 Overlook Boulevard
Brentwood, TN 37027

Capstar

201 4th Avenue North, Suite 950
Nashville, TN 37219
87-938/640

015203

DATE 01/03/2014

AMOUNT

\$700.00

Pay Seven Hundred Dollars And 00 Cents

to the Order of:

City of Lewiston



Rex Edmets

Void after 90 days

⑈015203⑈ ⑆064009380⑆ 7600041888⑈

Article XIII, Section 4 – Approval Criteria

(a) Utilization of the site:

The site will be utilized for a 9,100 square foot retail facility with associated parking and access drive. No wetlands are located on the site and no unique natural features exist.

(b) Traffic Movements:

Traffic movements are addressed in the Traffic assessment attached to this application. The applicant will assume responsibility for improvements shown within the right of way.

(c) Access to the site:

Access to the site is through a new driveway, 36 feet wide that allows an entrance lane, and a right and left turning exit lane onto Sabattus Street. The wide access and aisles allow for delivery truck movements within the parking lot and access drive and will remove any need for the trucks to back into the site from Sabattus Street. Site access is also addressed in the Traffic Assessment.

The grade of the access drive is designed to 3% per the City of Lewiston's Policy for the Design and Construction of Streets and Sidewalks

(d) Internal Vehicular circulation:

The site is designed for a WB-67 delivery truck to enter, turn around and exit the site without impacting any parking areas, see site plan with AutoTurn template. Painted islands are necessary for this movement to be possible and cannot be eliminated from the design. The access is wide enough for any emergency vehicle to access the site.

(e) Pedestrian Circulation:

The site is designed with a raised sidewalk around the building where parking is provided. The wheelchair ramps meet ADA standards and are located adjacent to the buildings main entrance and the assessable parking areas.

(f) Stormwater Management:

Stormwater management is addressed in the attached stormwater management report.

(g) Erosion Control:

Erosion control measures are required during construction as shown on the erosion control plan attached. The dimensions of the site require that in many places the top of a cut or bottom of a fill will be within ten feet of the property line, and cannot be avoided. Along the eastern side of the property a grading easement is needed, and will be provided by the adjacent property owner.

(h) Water supply:

The site will be served by public water; the nearest water main is located under Sabattus Street. A 1" water service is proposed. Installation details are provided in the attached plans.

(i) Sewerage disposal:

The site will be served by public sewer; the nearest sewer main is located under Sabattus Street. A 6" sewer service is proposed to tie into the sewer.

(j) Utilities:

Electric and telephone will be provided by overhead wires and the addition of two new service poles located on the site. Please see the attached Utility Plan for details.

(k) Natural features:

No significant natural resources are located on the site. The site has been designed to limit as much as possible the impact to the elevated terrain in the back of the site. However, a significant cut will be required to make the site viable for the proposed facility and associated parking. A wooded buffer of trees and an elevation difference will remain to the southerly edge of the site between the new development and the adjacent residential area. Also new trees will be added to the back of the site create additional buffer with the residential area.

(l) Groundwater Protection:

The development will not change the natural flow, quantity or quality of stormwater from the site. The site will be served by public sewer and water and will not pose a threat to groundwater availability or quality.

(m) Water and air pollution:

The site will be served by public water and sewer and the site will be heated and cooled by electricity and therefore will not result in any undue water or air pollution.

(n) Exterior lighting:

The attached lighting plan adequately addresses lighting for safe use of the site and also limits adverse impacts (light trespass) on neighboring properties.

(o) Waste disposal:

Solid waste will be disposed of in dumpsters near the rear of the building. The dumpsters will be screened from view by stockade style wood fences. An agreement with a local disposal company is underway and will be in place before final approval of the site.

(p) Lot layout:

The lot is arranged to best suit the retail facility's needs for access, parking, and truck movements. Due to the proximity of the site to the intersection of Sabattus Street and Pond Road, the access driveway was placed as far away as possible to avoid traffic problems. The prototypical store would not be viable if it was rotated 90 degrees as the site is not wide enough. The layout of the building dictated the location of the parking and loading/unloading area.

(q) Landscaping:

See the attached landscape plan. The plan complies with the city's guidelines.

(r) Shoreland relationship:

The southeasterly corner of the lot is located in the Shoreland Zone as shown on the City of Lewiston GIS. Minimal grading is proposed within this zone located on the property.

(s) Open Space:

No public open space is proposed for this development.

(t) Technical and financial capacity:

Technical capacity is provided by Northeast Civil Solutions, Inc., a survey and engineering firm specializing in Land Development and Permitting for over 20 years. Financial capacity is provided by First Tennessee Bank, as shown in the attached statement.

(u) Buffering:

Buffering of the solid waste disposal areas will be provided by stockade fence and an undisturbed forested buffer will remain at southern property line to buffer views from the adjacent residential area. An elevation change will also help shield the views from the residential area to the new development. Street trees will be provided, as shown on the attached Landscape Plan, to buffer views from Sabattus Street and other landscaping will help buffer the adjacent properties.

(v) Compliance with district regulations:

The lot size, setbacks and other regulations are being met for this site design.

Zone: Highway Business (HB)

<u>Regulations</u>	<u>Allowed</u>	<u>Provided</u>
Min. Lot Area:	n/a	62,684 sf
Street Frontage:	150'	175'
Min. Front Yard:	15'	20'
Min. Rear Yard:	10'	20'
Min. Side Yard:	10'	20'
Max. Bldg. Height:	65'	18'
Total Parking:	37	30*

*see the attached Parking Assessment.

(w) Design consistent with performance standards:

The design is consistent with the performance standards as outlined in Article XII of the Zoning and Land Use Code for the city of Lewiston.

REAL ESTATE PURCHASE CONTRACT

THIS REAL ESTATE PURCHASE CONTRACT (the "Agreement") is made and entered into as of the date of full execution of this Agreement (the "Effective Date") by and between ERIC VEILLEUX ("Seller") and FRANKLIN LAND ASSOCIATES, L.L.C., a Tennessee limited liability company ("Buyer").

WITNESSETH

For and in consideration of Ten Dollars (\$10.00), the agreements made herein, and other good and valuable considerations, the receipt and legal sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

1. Property. Seller hereby agrees to sell and Buyer hereby agrees to purchase, upon and subject to the terms and conditions herein set forth, that certain tract or parcel of land described as approximately 1.5 acres near the west end of parcel number 63-83 located in the City of Lewiston, Androscoggin County, Maine with the frontage starting 200' from the existing northwest corner and extending to the east by 175' of frontage along Sabattus Street and approximately 325' of depth from the right-of-way along the proposed western edge maintaining 175' of width for the entire depth (the "Property"), which is further depicted on **Exhibit "A"** attached hereto and incorporated herein.

2. Earnest Money. _____, to be deposited with Monument Title Company, as agent for First American Title Insurance Company (hereinafter "Escrow Agent") within five (5) business days after the Effective Date, paid in accordance with the terms and provisions of this Agreement. All interest earned on the Earnest Money shall be the property of Buyer. Buyer and Seller shall defend, indemnify and hold the Escrow Agent harmless from all damages, costs, claims and expenses arising from performance of its duties as Escrow Agent including reasonable attorneys' fees, except for those damages, costs, claims and expenses directly resulting from the gross negligence or willful misconduct of the Escrow Agent. In the event of a dispute between Buyer and Seller as to the disposition of the Earnest Money, Escrow Agent shall have the right to continue to hold in escrow the Earnest Money pending receipt of joint written instructions from Buyer and Seller or deposit the Earnest Money with a court to be held until the dispute is resolved. By way of disclosure, Escrow Agent is a wholly-owned subsidiary of the law firm of Bernstein Shur, Buyer's local counsel.

3. Purchase Price.

4. Closing. _____ after the end of the Inspection Period (the "Closing Date").

5. Obligations at Closing. At Closing, Seller shall deliver to Buyer, or Buyer's designee, a quitclaim deed with covenant conveying to Buyer or its designee good and marketable title in fee simple to the Property, subject only to exceptions acceptable pursuant to Paragraph 6 below, and all other documents required by the Escrow Agent for closing, pay for Seller's attorney's fees and all other cost incurred by Seller or required to be paid by Seller pursuant to any other provision of this Agreement, and surrender the Property to Buyer. At Closing, Buyer shall pay the Purchase Price, as adjusted, pay for Buyer's attorney's fees, costs of recording the deed, transfer taxes, title, survey, and any costs associated with financing the purchase of the Property, and all other cost incurred by Buyer or required to be paid by Buyer pursuant to any other provision of this Agreement. Real property taxes will be prorated as of the Closing Date.

6. Inspection Period. Buyer's agents, employees and independent contractors shall have a period of _____ after the Effective Date (the "Inspection Period") in which to conduct, at Buyer's sole expense, such physical, environmental, engineering and feasibility reports, inspections, examinations, tests and studies as Buyer deems appropriate. Seller shall provide Buyer copies of all reasonable materials pertaining to the Property to Buyer within ten (10) days after the Effective Date such as title policy, environmental reports, survey, or geotech analysis. By signature below, Seller hereby authorizes Buyer and designates Buyer as agent for Seller in order to facilitate all applications for any and all governmental approvals and permits and to act on behalf of Seller to facilitate Buyer's intended development. Buyer and/or Buyer's agents shall promptly repair any damage to the Property and shall indemnify, hold harmless and defend Seller from and against any and all claims, losses or expenses due to property damage or personal injury resulting from Buyer's inspections.

If Buyer terminates this Agreement within _____ from the Effective Date, all Earnest Money, except for _____, shall be returned to Buyer; provided, however, if the Property is found to be environmentally contaminated, does not have clean title which prevents the Buyer from Closing, or if the Buyer does not receive Real Estate Committee approval from its prospective tenant, Buyer may terminate this Agreement within one hundred and twenty days from the Effective Date, at which time all Earnest Money, except for _____, which is paid as independent consideration to Seller, shall be returned to Buyer. If Buyer terminates this Agreement after _____, _____ shall be sent to Seller, unless Seller defaults under this Agreement, in which case the Earnest Money shall be returned to Buyer. Upon the termination of this Agreement pursuant to this subparagraph, the parties shall be relieved of any further obligations hereunder.

If Buyer intends to proceed with the Closing of its purchase of the Property, then Buyer shall, on or before the expiration of the Inspection Period, notify the Seller and/or Escrow Agent in writing as provided in this Agreement of Buyer's Intent to proceed with the Closing of its purchase of the Property, subject to all of the other terms and conditions hereof.

Buyer may extend the Inspection Period for _____ upon the payment to the Escrow Agent on or before the date of the expiration of the original time period of the Inspection Period, or extension thereof, of an amount of _____ per extension period required, held in escrow per the terms and conditions described herein and shall be applicable to the Purchase Price at Closing.

7. Survey and Title. Buyer shall be responsible for obtaining an updated survey of the Property and a title policy commitment. Upon receipt of notice of any objections to title or survey, Seller shall have fifteen (15) days after receipt of such notice to satisfy or cure such objections to Buyer's satisfaction. If Seller fails or in its sole discretion, declines to satisfy the same within such period, the Buyer, at Buyer's option, may either: a) accept such title as Seller can convey or b) terminate the Agreement and all earnest money shall be returned to Buyer. Seller acknowledges that Seller is responsible for the removal of any tenant of the Property, and that any tenant must have vacated the property with sufficient notice under any applicable lease prior to the end of the Inspection Period, and Seller must provide Buyer with copies of all leases and all notices sent to tenants.

8. Commissions. Seller and Buyer warrant and represent to each other that they have not employed or dealt with any real estate agent or broker relative to the sale and purchase of the Property. Each party hereby agrees to indemnify and hold harmless the other from and against any liability (including costs and reasonable attorneys' fees) incurred in the defense thereof to any other agents or brokers with whom such party may have dealt.

9. Representations and Warranties and Covenants of Seller. Seller warrants and represents and covenants to Buyer that there are no actions, suits or proceedings pending or threatened against, by or affecting Seller or the Property; Seller has the authority to convey the Property to Buyer without the joinder of any other person or entity; other than as disclosed to Buyer, to the best of the Seller's knowledge there are no environmental hazards on the Property; on the Closing Date, Seller will not be indebted to any contractor, laborer, mechanic, materialmen, architect or engineer for work, labor or services performed or rendered, or for materials supplied

or furnished, in connection with the Property for which any person could claim a lien against the Property; and the Property will be delivered to Buyer at Closing free and clear from any leases, contracts and tenants in possession. Each representation and warranty of Seller contained in this Agreement shall be true and accurate as of the date hereof and shall be deemed to have been made again at and as of Closing and shall be then true and accurate in all material respects.

10. Damage and Condemnation. Seller shall notify Buyer promptly upon the occurrence of any damage, destruction, taking or threat of taking affecting the Property.

11. Default. If Buyer defaults, Seller may terminate this Agreement by written notice to Buyer, whereupon the Earnest Money, and any other deposits, if any, hereunder shall be paid to Seller as full and complete liquidated damages for the default of Buyer, in which event neither party shall have any further rights, obligations, or liabilities under this Agreement. If Seller defaults, Buyer may avail itself of the remedy of specific performance or terminate this Agreement by written notice to Seller, whereupon the Earnest Money shall be refunded to Buyer as full and complete liquidated damages for such default and Seller shall reimburse Buyer for all out-of-pocket expenses.

12. Assignment. Buyer may at any time assign or transfer its interest in this Agreement, with notice to Seller. This Agreement shall be binding upon and enforceable against, and shall inure to the benefit of, the parties and their respective legal representatives, successors and assigns.

13. Applicable Law. This Agreement shall be governed by and construed and enforced in accordance with the laws of the state in which the Property is located.

14. Miscellaneous. Time shall be of essence in the performance of the terms and conditions of this Agreement. In the event any time period specified in this Agreement expires on a Saturday, Sunday or bank holiday on which national banks are closed for business, then the time period shall be extended so as to expire on the next business day immediately succeeding such Saturday, Sunday or bank holiday. For purposes of this Agreement, business days shall be Monday through Friday, excluding any Federal holidays. All captions, headings, paragraph and subparagraph numbers and letters and other reference numbers or letters are solely for the purpose of facilitating reference to this Agreement and shall not supplement, limit or otherwise vary in any respect the text of this Agreement. All references to particular paragraphs and subparagraphs by number refer to the paragraph or subparagraph so numbered in this Agreement. This Agreement supersedes all prior discussions and agreements between Seller and Buyer with respect to the purchase and sale of the Property. This Agreement contains the sole and entire understanding between Seller and Buyer with respect to the transactions contemplated by this Agreement, and all promise, inducements, offers, solicitations, agreements, representations and warranties heretofore made between the parties are merged into this Agreement. This Agreement shall not be modified or amended in any respect unless by a written Agreement executed by or on behalf of the parties to this Agreement in the same manner as this Agreement is executed. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original and all of which, collectively, shall be one and the same instrument. In addition, this Agreement may be transmitted between the parties via facsimile, and signatures transmitted by facsimile shall be deemed originals and shall be binding upon the parties. Seller agrees that the terms of this Agreement shall be deemed confidential in nature and shall not be disclosed to any third parties by Seller without the prior written consent of Buyer. In the event of any litigation arising out of this Agreement, the party prevailing in obtaining the relief sought, in addition to all other sums that it may be entitled to recover, shall be entitled to recover from the other party its reasonable attorneys' fees and expenses incurred as a result of a litigation.

15. In addition to the above, and for no additional consideration:

A. At Closing, Buyer and Seller shall execute a Restriction and Easement Agreement ("REA"), in which Seller shall grant to Buyer at Closing a twenty (20) foot temporary construction and grading easement along the shared property line between the Property and Seller's adjacent property, which shall expire one hundred eighty (180) days from the Closing Date.

B. In addition to the above easements, in the REA Seller shall agree to place certain use restrictions on Seller's adjacent property:

i) Not to lease, rent or occupy, or allow to be leased, rented or occupied, any part of Seller's Property for the purpose of conducting business as, or for use as, a

ii) In addition to the above restrictions, Seller shall burden the Seller Property (a) for any unlawful purpose or in any way which would constitute a legal nuisance to an adjoining owner or occupant; (b) as a discotheque, dance hall or night club; (c) as a massage parlor; (d) funeral parlor; (e) bingo parlor; (f) car wash; (g) any use which emits an obnoxious odor, fumes, dust or vapors; (h) any assembling, manufacturing, distilling, refining, smelting, agricultural, or mining operation; (i) any "second hand" store or liquidation outlet; (j) any labor camp, junk yard, recycling facility or stock yard; (k) any dumping, disposing, incineration or reduction of garbage (exclusive of garbage compactors located near the rear of any building); (l) any dry cleaners performing on-site cleaning services; (m) any veterinary hospital or animal raising facilities (except this provision shall not prohibit pet shops and shall not prohibit the provision of veterinary services in connection with pet shops or pet supplies business); (n) any establishment selling or exhibiting paraphernalia for use with illicit drugs, and establishment selling or exhibiting materials or devices which are adjudicated to be pornographic by a court of competent jurisdiction, and any adult bookstore, adult video store or adult movie theater; (o) any bar or tavern; provided, however, a bar within a restaurant shall be permitted; (p) any pool or billiard hall, gun range or shooting gallery, or amusement or video arcade; and (q) any use which creates fire, explosives or other hazards.

C. Buyer and Seller shall agree on the form and substance of the above agreements and execute prior to or at Closing.

16. Notice. All notices shall be in writing, and shall be deemed to have been duly given at the time and on the date when personally delivered, or upon being deposited with a nationally recognized commercial courier for next day delivery, to the addresses below, or upon delivery via pdf format sent by electronic mail. Rejection or other refusal to accept or inability to deliver because of changed address of which no notice was given shall be deemed to be in receipt of such communication. By giving prior notice to all other parties, any party may designate a different address for receiving notices.

Buyer: Franklin Land Associates, L.L.C.
c/o GBT Realty Corporation
9010 Overlook Boulevard
Brentwood, TN 37027
Attn: George B. Tomlin

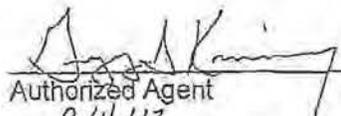
Seller: Eric Veilleux
1073 Sabattus St.
Lewiston, ME 04240
(207) 576-6293

IN WITNESS WHEREOF, the parties have executed and sealed this Real Estate Purchase Contract, as of the day and year first above written.

BUYER:

FRANKLIN LAND ASSOCIATES, L.L.C.

By:
Its:
Date:


Authorized Agent
9/4/13

SELLER:

ERIC VEILLEUX

By:
Date:

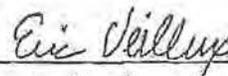
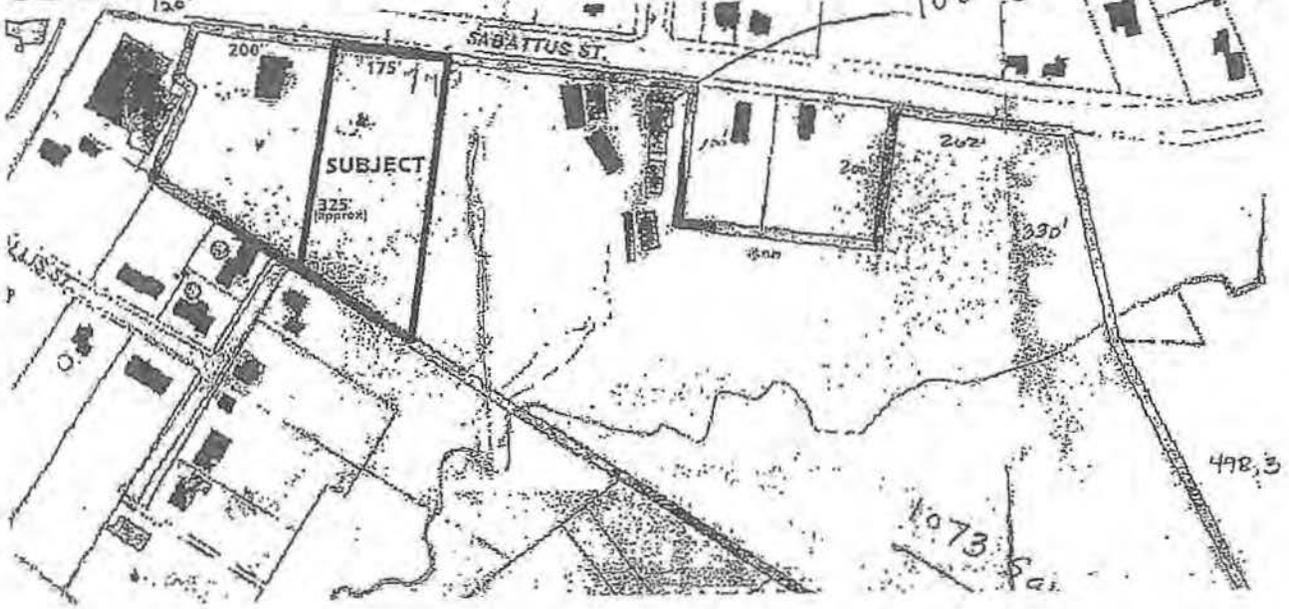

9/4/13

EXHIBIT A

63 Lot 83
120'

108' Sabarus





Commercial Real Estate Lending
1214 Murfreesboro Road, Suite 110
Franklin, TN 37064

December 23, 2013

Re: GBT Realty Corporation's \$40,000,000 Dollar General BTS Construction Facility

To Whom It May Concern:

First Tennessee Bank has a committed \$40,000,000 construction line of credit for the purpose of developing Dollar General Stores across the country. We have financed numerous Dollar General Stores under this facility and GBT has performed in a very satisfactory manner.

If you have any questions regarding GBT's financial capacity, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads 'Eric Sullenger'.

Eric Sullenger
Senior Vice President
Commercial Real Estate
615-791-5236
egsullenger@firsttennessee.com

William J. Bray, P.E.
235 Bancroft Street
Portland, Maine 04102
Phone (207) 774-3603
trafficsolutions@maine.rr.com

January 4, 2014

Traffic Assessment
Proposed
Franklin Land Associates, LLC
9,100 SF Variety Store

INTRODUCTION

Franklin Land Associates, LLC is proposing a retail facility along Sabattus Street (Route 126) in Lewiston, Maine. The site is currently undeveloped and consists of a sloped undeveloped lot, and graveled access off Sabattus Street.

Franklin Land Associates, LLC will access the property from a new driveway entrance. Immediately abutting the property is a vehicle maintenance garage with no defined curb cut. As part of the site improvements for the retail store this curb cut will be defined with an asphalt sidewalk and raised curb.

This document provides a summary of existing traffic conditions for the section of Sabattus Street (Route 126) adjacent to the project site including an estimate of 2014 peak traffic volumes and a review of current roadway safety conditions; an estimate of peak hour trip generation for the proposed "variety" store project; evaluates the need for a separate left-turn entry lane on Sabattus Street for left-turning traffic into the proposed site driveway and lastly, conducts a review of vehicle sight distance at the proposed driveway entrance.

EXISTING CONDITIONS

Existing 2013 Traffic: A manual turning movement count was conducted at the signalized intersection of State Route 126 Sabattus Street and Pond Road on Wednesday, December 12, 2013 to determine existing PM "peak" roadway traffic volumes. All vehicular traffic entering the intersection was recorded in 15-minute intervals between the hours of 3:00 and 6:00 PM (A copy of the field data summary sheet is attached). From a summary of the data, it was determined that the peak hour occurs between 5:00 and 6:00 PM.

Traffic data collected during the month of December requires an adjustment to reflect "peak" travel conditions during the summer months. MaineDOT provides factors for adjusting traffic data collected during other periods of time. MaineDOT utilizes highway classifications of I, II, or III for all State and Local roadways. Type I roadways are defined as urban roadways, or those roads that typically see commuter traffic and experience little fluctuation from week to week throughout the year. Type II roadways, or arterial roads are those that see a combination of commuter and recreational traffic and; therefore, experience moderate fluctuations during the year. Type III roads, or recreational roadways are typically used for recreational purposes and experience significant seasonal fluctuations. MaineDOT has designated both the noted section of Sabattus Street and Pond Road a Type I road, which requires the traffic data collected to be adjusted by a factor of approximately 1.15. Figure 1 illustratively depicts the estimated 2013 PM design hour traffic condition for the study intersection.

Applicable peak traffic values were appropriately extrapolated from Figure 1 (refer to traffic values highlighted in yellow) to provide a forecast of 2013 directional traffic on Sabattus Street (Route 126) at the entrance to the proposed “variety” store project. Approximately 642 vehicles travel westbound and 603 vehicles eastbound on Sabattus Street (Route 126) at the commercial property entrance.

Existing Safety Trends: The Maine Department of Transportation’s (MaineDOT) Accident Records Section provided the latest three-year (2010 through 2012) crash data for the section of Route 126 between the signalized intersection at Pond Road and the unsignalized intersection of Chadbourne Road, a distance of approximately 1.16 miles. Their report is summarized as follows and attached as an appendix to the report:

2010 -2012 Traffic Accident Summary

<u>Location</u>	<u>Total Crashes</u>	<u>Critical Rate Factor</u>
1. Sabattus Street @ Pond Road	9	0.56
2. Sabattus Street and Golder Road	1	0.25
3. Sabattus Street @ Riley Street	1	0.25
4. Sabattus Street @ Chadbourne Road	2	0.53
5. Sabattus Street btw. Pond Road and Golder Road	6	0.41
6. Sabattus Street btw. Golder Road and Riley Street	2	0.21
7. Sabattus Street btw. pt. 0.06 miles east of Riley Street and Chadbourne Road	4	0.23

The MaineDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- **8 or more accidents**
- **A Critical Rate Factor greater than 1.00**

As the data presented in the table shows, the incidence of traffic crashes occurring on the section of Sabattus Street is below MaineDOT’s threshold criteria for identification of a high crash location.

SITE TRAFFIC

Site Trip Generation: An estimate of trip generation for the proposed 9,100 square foot “variety” store was developed based upon recent data collected at three similar stores in New Hampshire and Maine, a methodology approved by MaineDOT when applicable ITE data isn’t available.

Manual traffic counts were conducted at: (1) the Dollar General Store, Nashua, New Hampshire; (2) Family Dollar Store, Waterboro, Maine and; (3) Family Dollar Store, Portland, Maine. All vehicle trips entering and exiting each of the three stores were recorded in 15-minute intervals between the hours of 3:00 and 6:00 PM. The following tables summarize the collected data for each location:

Existing Dollar General Store
Vehicle Trip Generation
Nashua, New Hampshire
(7,560 sf store)

Time Period	Entering Trips	Existing Trips	Total Trips
3.00pm to 3:15pm	3	10	13
3:15pm to 3:30pm	7	7	14
3:30pm to 3:45pm	8	6	14
3:45pm to 4:00pm	10	11	21
4:00pm to 4:15pm	8	9	17
4:15pm to 4:30pm	7	10	17
4:30pm to 4:45pm	6	6	12
4:45pm to 5:00pm	8	7	15
5:00pm to 5:15pm	4	6	10
5:15pm to 5:30pm	6	8	14
5:30pm to 5:45pm	5	7	12
5:45pm to 6:00pm	5	6	11
Peak Hour:	33	36	69
3:30pm to 4:30pm			

Trip Rate Nashua, NH Store = 69 trips ÷ 7,560/1,000 = 9.13 trips/1,000 sf

Existing Family Dollar Store
Vehicle Trip Generation
Waterboro, Maine
(8,750 sf store)

Time Period	Entering Trips	Existing Trips	Total Trips
3.00pm to 3:15pm	3	1	4
3:15pm to 3:30pm	0	2	2
3:30pm to 3:45pm	1	3	4
3:45pm to 4:00pm	5	3	8
4:00pm to 4:15pm	2	1	3
4:15pm to 4:30pm	2	0	2
4:30pm to 4:45pm	6	0	6
4:45pm to 5:00pm	4	1	5
5:00pm to 5:15pm	7	5	12
5:15pm to 5:30pm	7	5	12
5:30pm to 5:45pm	9	3	12
5:45pm to 6:00pm	7	2	9
Peak Hour:	30	15	45
5:00pm to 6:00pm			

Trip Rate Waterboro Store = 45 trips ÷ 8,750/1,000 = 5.14 trips/1,000 sf

Existing Family Dollar Store
Vehicle Trip Generation
Portland, Maine
(8,000 sf)

Time Period	Entering Trips	Existing Trips	Total Trips
3:00pm to 3:15pm	5	1	6
3:15pm to 3:30pm	4	0	4
3:30pm to 3:45pm	0	7	7
3:45pm to 4:00pm	9	2	11
4:00pm to 4:15pm	2	5	7
4:15pm to 4:30pm	11	3	14
4:30pm to 4:45pm	7	0	7
4:45pm to 5:00pm	2	12	14
5:00pm to 5:15pm	0	3	3
5:15pm to 5:30pm	13	4	17
5:30pm to 5:45pm	15	7	22
5:45pm to 6:00pm	10	0	10
Peak Hour: 4:45pm to 5:45pm	30	26	56

Trip Rate Portland Store = 56 trips ÷ 8,000/1,000 = 7.00 trips/1,000 sf

Based upon a summary of the data collected at the three variety store sites, an average of 7.09 trips per 1,000 square feet of floor area are generated during the PM peak hour time period. Accordingly, the proposed 9,100 square foot “variety” store can be expected to generate a total of 65 vehicle trips in the evening peak hour.

Vehicle Trip Distribution: This report utilizes a site trip distribution pattern of 55% entering trips and 45% exiting trips, which replicates the average distribution patterns found at the three “variety” store sites. Based upon these projected trip distribution patterns, 36 of the 65 total trips generated in the evening peak hour will enter and 29 trips will exit the proposed “variety” store during the same time period.

Vehicle Trip Composition: Based upon national survey data, retail stores generate a high percentage of trips already on the roadway system generally referred to as “pass-by” trips. This report has assumed a modest estimate of 30% of the trips generated by the proposed store are, in fact, “pass-by” trips, with the remaining trips classified as “new” or primary trips. Accordingly, the proposed project can be expected to generate a total of 20 “pass-by” trips and 45 primary trips.

Vehicle Trip Assignment: A trip assignment model that generally mirrors existing travel patterns found on Sabattus Street (Route 126) was applied in determining the directional distribution of the site traffic. Approximately 50% of the vehicle trips will arrive/depart the proposed “variety” store in either direction on Sabattus Street. The attached Figure 2 illustratively presents the assignment of the site trips to the existing roadway system.

FUTURE TRAFFIC

Annual Growth: It is anticipated that the proposed “variety” store will be constructed and fully operational in 2014. Based upon a review of MaineDOT’s traffic data for the Sabattus Street corridor, very little traffic growth has occurred in the corridor; however, to present a conservative assessment the report has used a 1% adjustment to the 2013 traffic. The forecast 2014 through traffic volumes for Sabattus Street are:

EB = 609 vehicles

WB = 648 vehicles

Other Development Traffic: Generally, traffic generated by projects that have been approved by the Local Planning Board and/or the MaineDOT, yet are not opened, must be included in the estimate of pre-development traffic. Gorrill Palmer, Consulting Engineers, recently (November 2013) conducted a traffic impact study for a proposed Family Dollar Store on Sabattus Street at the corner of Temple Street. Vehicle trips generated by this project projected to travel east through the Sabattus Street/Pond Road intersection will directly impact traffic conditions at the proposed “variety” store site. Accordingly, this report has added (3) eastbound and (6) westbound trips to the estimate of pre-development travel conditions.

2014 Pre-Development Traffic: The estimated 2014 traffic projections for through traffic on Sabattus Street were combined with the noted Other Development Traffic projections to establish estimated 2014 pre-development traffic forecast for Sabattus Street (Route 126) at the proposed “variety” store site. The revised directional forecasts are:

EB = 615 vehicles

WB = 651 vehicles

2014 Post-Development Traffic: The projected 2014 pre-development traffic forecast for Sabattus Street was combined with the site trips anticipated to be generated by the proposed “variety” store site, as depicted on Figure 2, to create expected 2014 post-development travel conditions at the project site. Figure 3 is a “stick” diagram that illustratively presents the projected 2014 “build” traffic condition.

SIGHT DISTANCE

The Maine Department of Transportation’s Highway Entrance and Driveway Rules require the following sight distances for Sabattus Street (Route 126):

Sight Distance Standards

<u>Speed Limit</u>	<u>Sight Distance</u>
25 mph	200 feet
30	250
35	305
40	360
45	425
50	495
55	570

Sabattus Street is currently posted at 40mph, which requires an unobstructed sightline of 360 feet. Sight distance “looking” in both directions from the proposed commercial entrance exceeds 500 feet, well in excess of MaineDOT’s sight distance standard.

AUXILIARY LANE WARRANT ANALYSIS

The Maine Department of Transportation has published a warrant for auxiliary left-turn lanes in their December 2004 Highway Design Manual. The warrants are predicated upon the volume of two-way traffic traveling on the designated highway and the volume of left-turning vehicles. Figure 8-19 from MaineDOT’s referenced design manual was used in conducting the analysis (A copy of the chart with the superimposed traffic values is attached as an appendix to the report). The forecast 2014 post-development volumes, presented on Figure 3, were used to complete the assessment. The values used in the analysis are noted as follows:

V_a = 664

V_o = 628

Lt % = 2.7%

The analysis suggests that an exclusive left-turn entry lane on the westbound approach of Sabattus Street (Route 126), at the proposed site entrance, is very marginally warranted based upon the forecast 2014 Post-Development traffic assignment.

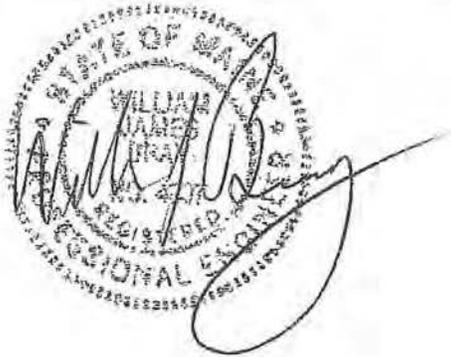
SUMMARY

1. A total of 65 vehicle trips will be generated by the proposed “variety” store during the PM peak hour, with 36 trips entering and the remaining 29 trips exiting the site.

2. MaineDOT’s Traffic Safety Bureau’s latest three-year safety report for the section of Sabattus Street (Route 126) between Pond Road and Chadbourne Road shows that all roadway segments and intersections within the defined area experience fewer traffic crashes than the threshold criteria for identification of a high crash location.

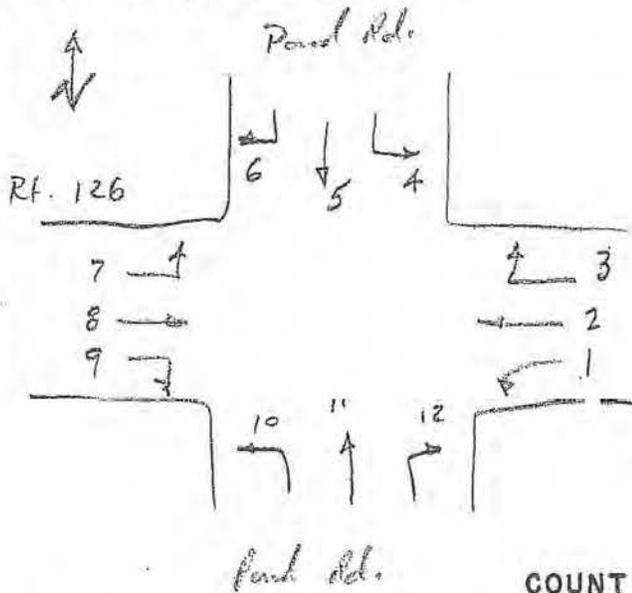
3. Sightline measurements recorded at the centerline of the proposed driveway entrance with Sabattus Street (Route 126) exceed the required standard for a posted speed limit of 40mph, which reflects the current posted speed limit of Sabattus Street.

4. Based upon a projected maximum left-turn volume to the site of 18 vehicles per hour and an opposing through volume of 633 vehicles per hour traveling east on Sabattus Street, a left-turn storage lane should be considered. It is the opinion of this report that a number of factors should be considered in making a final decision on whether a left-turn lane should be installed. First, and most importantly the background thru traffic volumes for Sabattus Street were forecast based upon data collected during the month of December and adjusted by statewide seasonal factors to approximate “peak” summer travel conditions. A process that typically and routinely overstates “peak” summer traffic conditions when compared with actual field data collected during the months of July and August. Secondly, this report applied an 1% adjustment to the base 2013 traffic values in estimating 2014 travel conditions even though historical traffic data would support no increase in traffic growth for the Sabattus Street corridor. A third consideration is that the left-turn lane warrant is very marginally met most likely only once during a typical 24-hour time period. It is the opinion of this report based upon the stated reasons that a formal left-turn lane for entry site traffic is not required.



JOB NO. _____

**INTERSECTION PLAN
WITH NUMBERED MOVEMENTS:**



INTERSECTION Rt. 126 @ Pinedale Road

DATE 12-10-2013

DAY OF WEEK Tuesday

WEATHER _____

REMARKS: _____

**COUNT SUMMARY
MOVEMENT**

	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
3:00													
3:15	3	57	0	0	11	7	1	63	5	0	3	13	160
3:30	9	63	1	0	9	8	1	71	9	0	1	17	189
3:45	0	74	1	1	16	11	2	69	0	1	4	11	190
4:00	7	69	0	0	13	5	3	78	2	3	1	9	190
4:15	3	78	2	0	12	13	0	83	0	0	5	12	208
4:30	6	88	6	1	15	16	6	91	3	6	9	16	263
4:45	5	101	9	3	8	9	9	90	4	0	6	13	257
5:00	7	104	13	1	7	12	5	105	1	3	11	17	286
5:15	3	121	13	4	17	11	7	119	2	9	13	14	333
5:30	9	123	11	1	19	13	6	117	6	11	15	14	345
5:45	11	109	15	3	15	9	11	99	3	4	18	18	315
6:00	9	117	17	2	13	15	3	112	9	7	19	21	344

Conversion Factor = 1.15

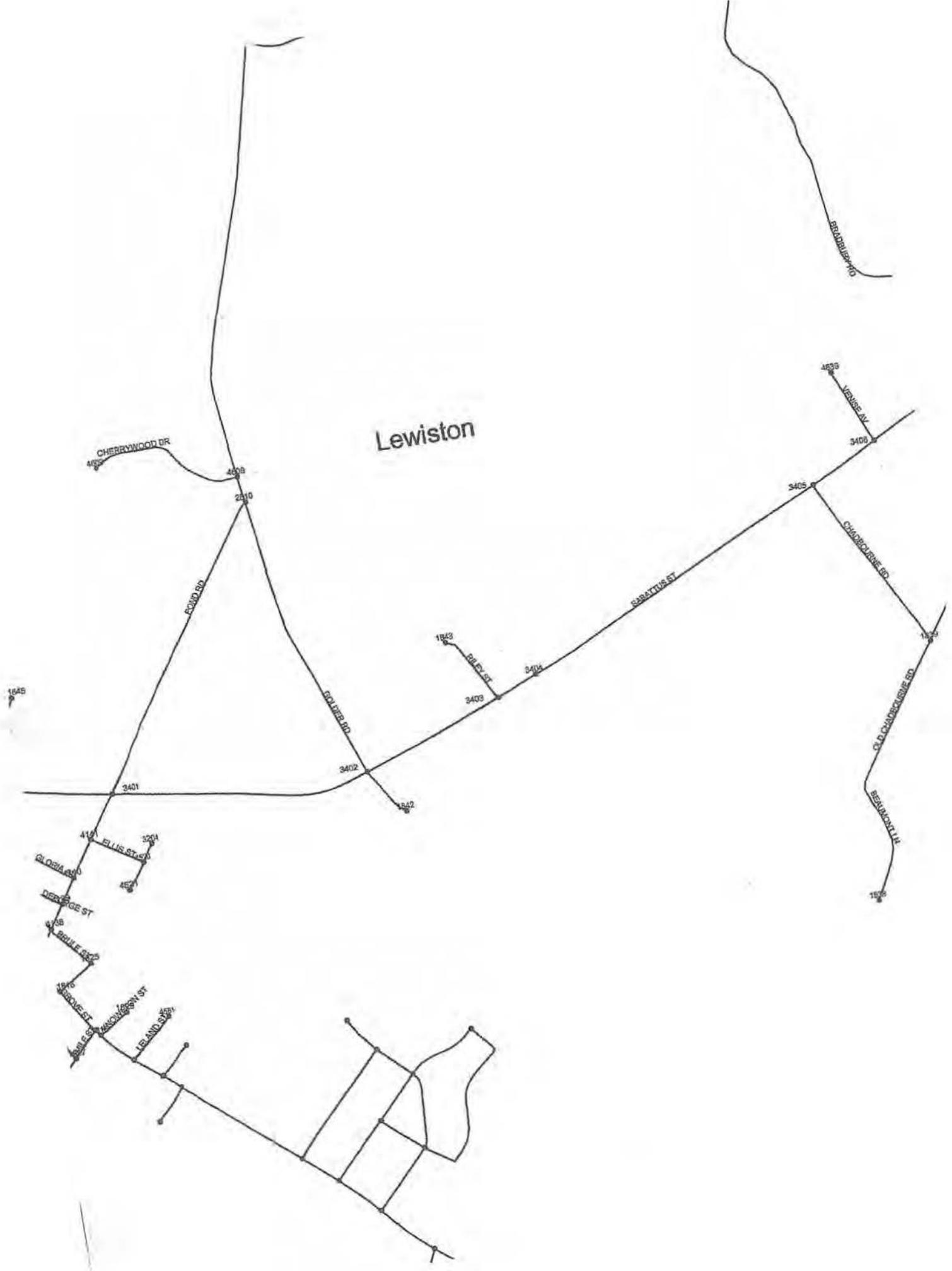
PEAK HOUR COUNT

TIME: 5:00 TO: 6:00

32	470	56	10	64	48	27	447	20	31	65	67
----	-----	----	----	----	----	----	-----	----	----	----	----

2013 DNV	37	524	64	12	74	55	31	514	23	36	75	77
-------------	----	-----	----	----	----	----	----	-----	----	----	----	----

Lewiston



Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

Crash Summary I Section Detail Crash Summary II 1320 Public 1320 Private 1320 Summary

REPORT DESCRIPTION

Rte 126 from Pond Rd to Chadbourn Rd in Lewiston

REPORT PARAMETERS

Year 2010, Start Month 1 through Year 2012 End Month: 12

Route: 0126X

Start Node: 3401

Start Offset: 0

Exclude First Node

End Node: 3405

End Offset: 0

Exclude Last Node

Crash Summary I

Sections																		
Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	K	Injury Crashes				Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF	
3401	3402	3103865	0 - 0.38	0126X - 3.11 ST RTE 126	0.38	2	6	0	1	0	1	4	33.3	0.01560	128.23	311.95	0.00	
															Statewide Crash Rate: 168.19			
3402	3403	3129164	0 - 0.22	0126X - 3.49 ST RTE 126	0.22	2	2	0	0	1	0	1	50.0	0.00895	74.49	353.45	0.00	
															Statewide Crash Rate: 168.19			
3403	3404	3103866	0 - 0.06	0126X - 3.71 ST RTE 126	0.06	2	0	0	0	0	0	0	0.0	0.00239	0.00	493.08	0.00	
															Statewide Crash Rate: 168.19			
3404	3405	3103867	0 - 0.50	0126X - 3.77 ST RTE 126	0.50	2	4	0	0	1	2	1	75.0	0.01947	68.49	297.87	0.00	
															Statewide Crash Rate: 168.19			
Study Years: 3.00					Section Totals:		1.16	12	0	1	2	3	6	50.0	0.04640	86.20	254.14	0.34
					Grand Totals:		1.16	25	0	2	6	8	9	64.0	0.04640	179.59	368.14	0.49

Maine Department Of Transportation - Traffic Engineering, Crash Records Section

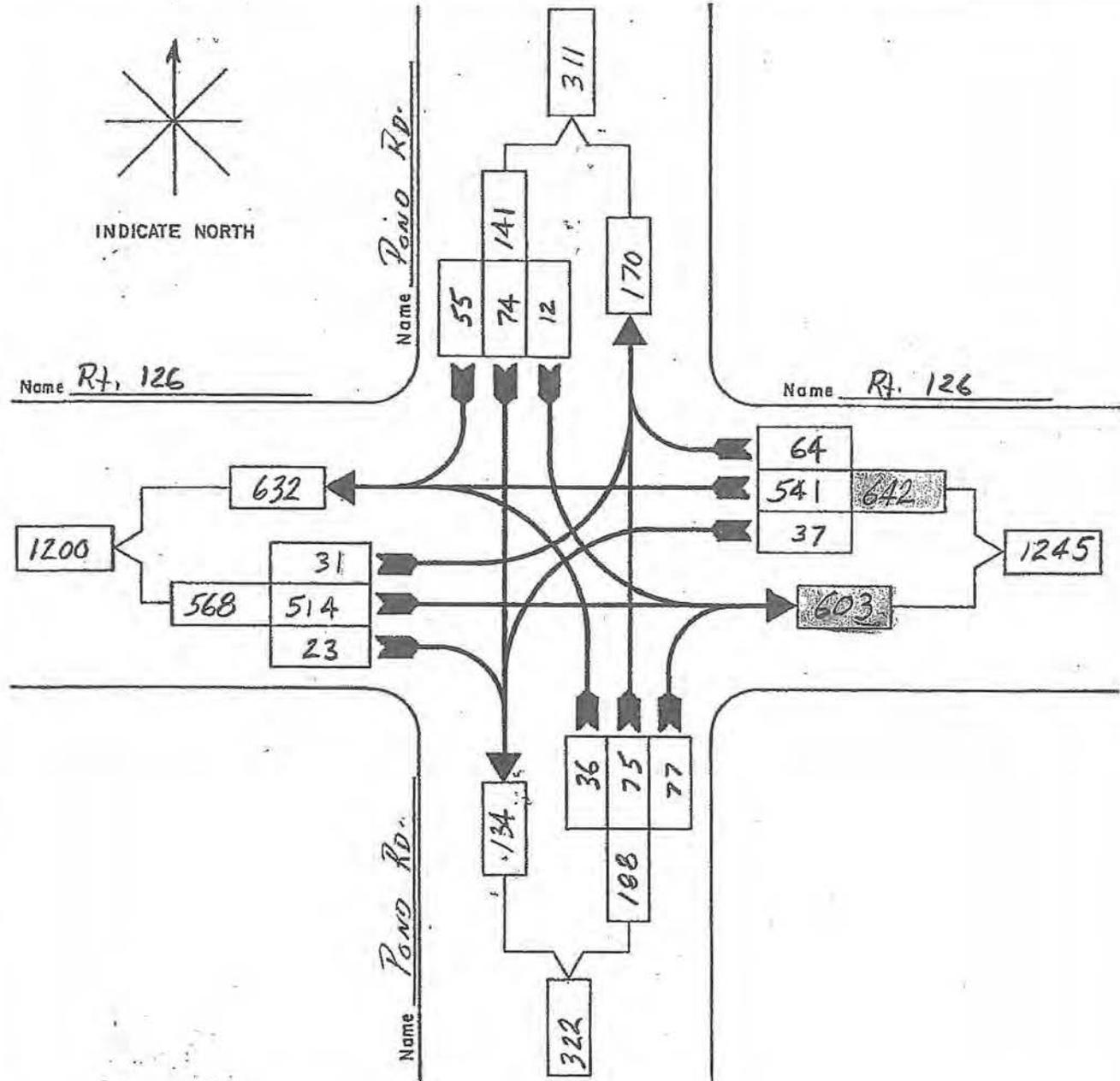
Crash Summary I

Node	Route - MP	Node Description	U/R	Nodes						Percent Annual M Injury	Ent-Veh	Crash Rate	Critical Rate	CRF		
				Total Crashes	K	A	B	C	PD							
3401	0126X - 3.11	Int of POND RD SABATTUS ST	9	9	0	1	3	4	1	88.9	4.648	0.65	1.16	0.00		
											Statewide Crash Rate: 0.64					
3402	0126X - 3.49	Int of GOLDER RD SABATTUS ST	2	1	0	0	0	1	0	100.0	4.135	0.08	0.31	0.00		
											Statewide Crash Rate: 0.11					
3403	0126X - 3.71	Int of RILEY ST SABATTUS ST	2	1	0	0	1	0	0	100.0	4.041	0.08	0.31	0.00		
											Statewide Crash Rate: 0.11					
3404	0126X - 3.77	Non Int SABATTUS ST	2	0	0	0	0	0	0	0.0	3.937	0.00	0.32	0.00		
											Statewide Crash Rate: 0.11					
3405	0126X - 4.27	Int of CHADBOURNE RD SABATTUS ST	2	2	0	0	0	0	2	0.0	3.886	0.17	0.32	0.00		
											Statewide Crash Rate: 0.11					
Study Years: 3.00			NODE TOTALS:			13	0	1	4	5	3	76.9	20.647	0.21	0.38	0.56

VEHICLE VOLUME COUNT GRAPHIC SUMMARY SHEET

Intersection of Rt. 126 = Pond Rd. Date _____

Weather _____ Road Surface Condition _____ Time 5:00 PM to 6:00 PM



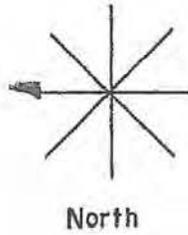
Remarks:

FIGURE 1: 2013 Design Hour Traffic – PM Peak Hour

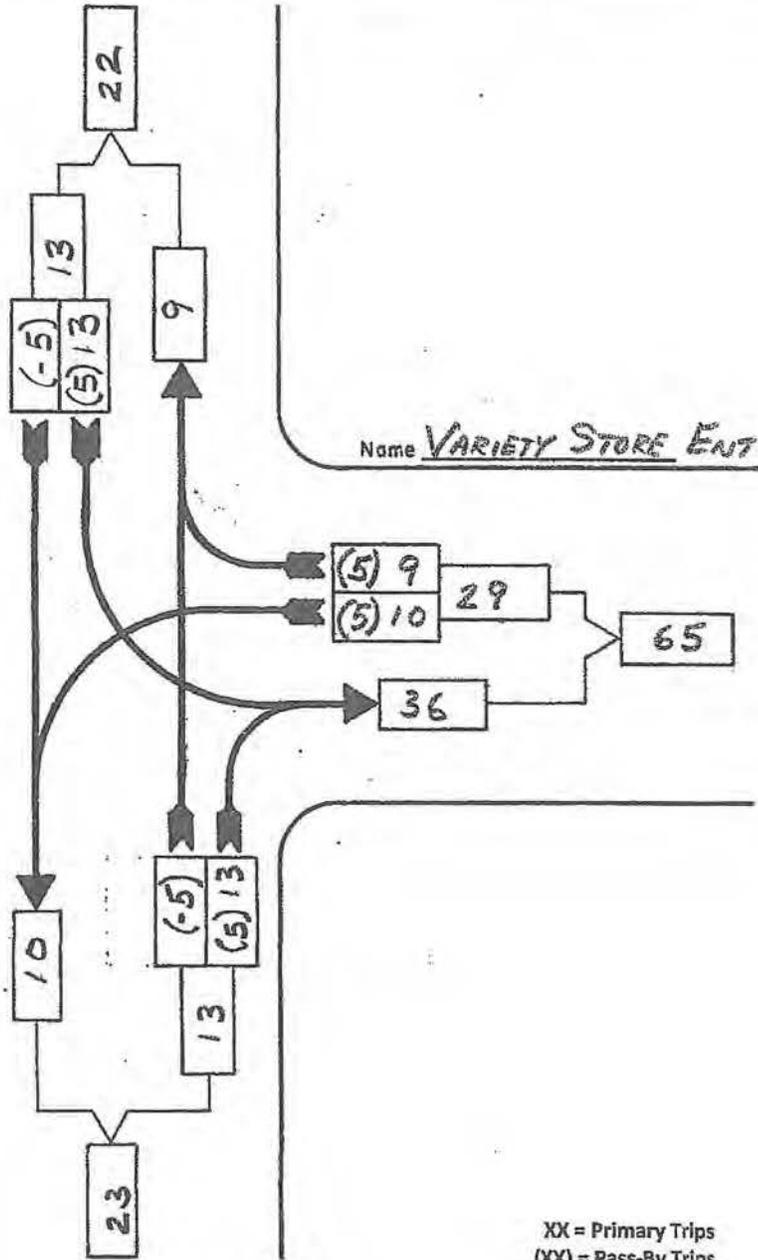
VEHICLE VOLUME COUNT GRAPHIC SUMMARY SHEET

Intersection of SABATTUS STREET @ VARIETY STORE ENT. Date _____

Weather _____ Road Surface Condition _____ Time _____ to _____



Name SABATTUS ST.



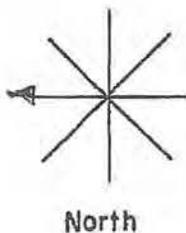
XX = Primary Trips
(XX) = Pass-By Trips

FIGURE 2: Site Traffic Assignment – PM Peak Hour

VEHICLE VOLUME COUNT GRAPHIC SUMMARY SHEET

Intersection of SABATTUS ST. @ VARIETY STORE ENT. Date _____

Weather _____ Road Surface Condition _____ Time _____ to _____



Name SABATTUS ST.

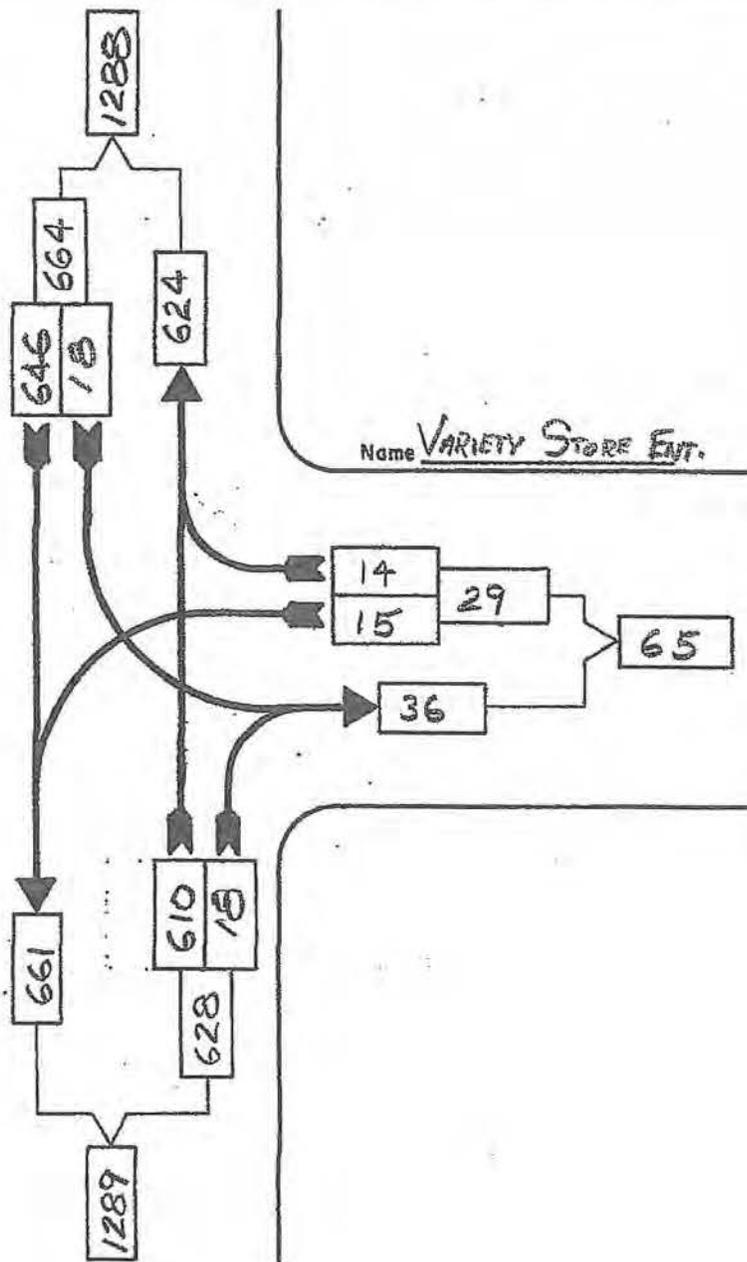
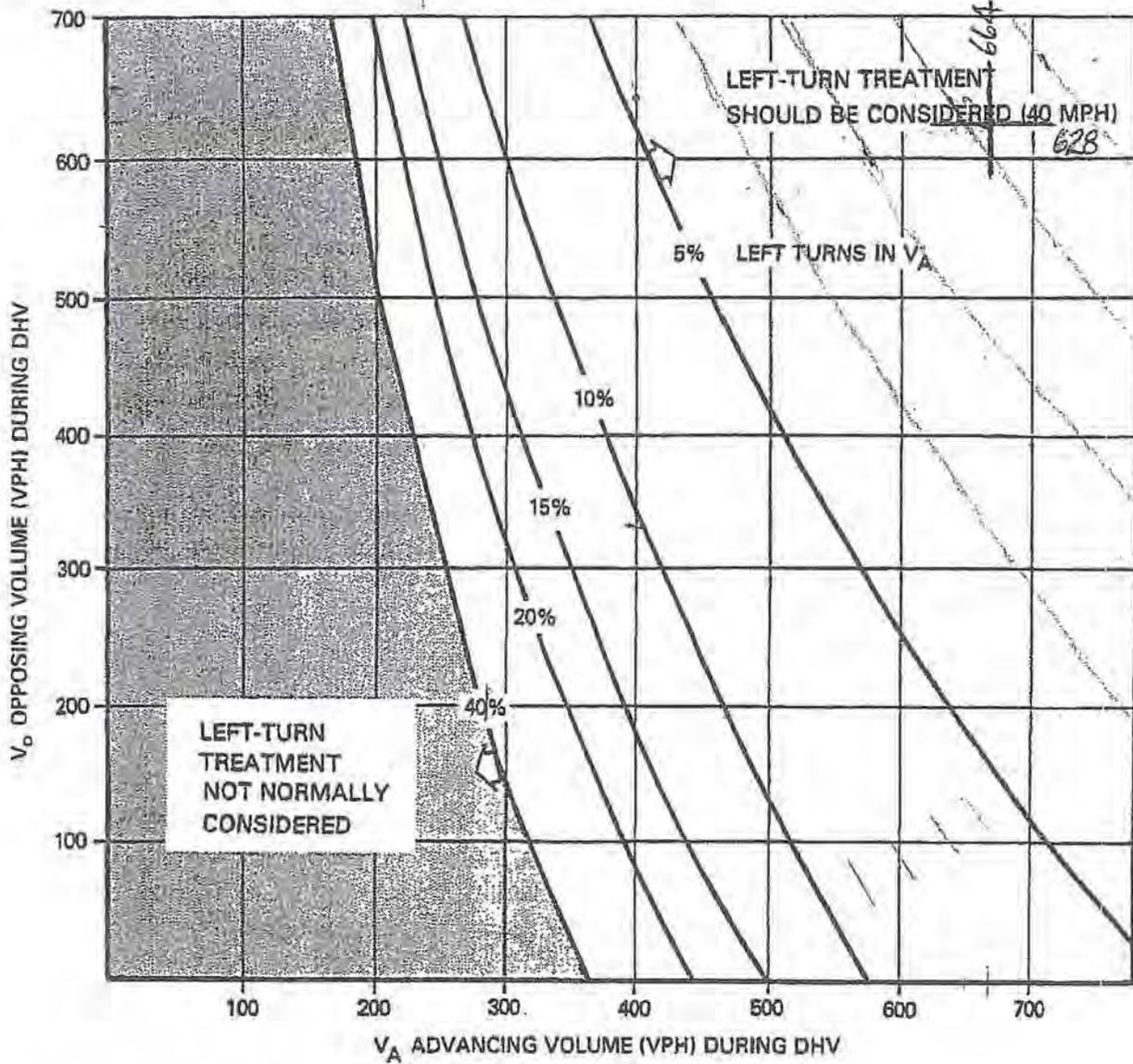


FIGURE 3: 2014 Post-Development Traffic – PM Peak Hour



- Instructions:**
1. The family of curves represent the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.
 4. Read V_A and V_O into the chart and locate the intersection of the two volumes.
 5. Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.

**VOLUME WARRANTS FOR LEFT-TURN LANES
AT UNSIGNALIZED INTERSECTIONS ON 2-LANE HIGHWAYS
(40 mph)**

Figure 8-19

STORMWATER MANAGEMENT REPORT

Retail Facility

Sabattus Street
Tax Map 63, Lot 83
Lewiston, Maine

Prepared For:
Franklin Land Associates, LLC
9010 Overlook Blvd.
Brentwood, TN 37027

January 2014

Prepared by:



Northeast Civil Solutions, Inc.
153 U.S. Route 1
Scarborough, ME 04074

34125.2

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4.0 Post-Development Conditions	2
5.0 Maintenance	4
6.0 Conclusion	5

APPENDICES

Appendix A	Pre-Development Drainage Calculations
Appendix B	Post-Development Drainage Calculations
Appendix C	Emergency Spillway Calculations

1. INTRODUCTION

Franklin Land Associates, LLC is proposing a retail facility along Sabattus Street in Lewiston, Maine. The site is currently undeveloped and consists of a sloped undeveloped lot, and graveled access off Sabattus Street. Northeast Civil Solutions (NCS) is designing the site to comply with the current City of Lewiston Site Plan Regulations.

The stormwater runoff from this site sheet flows across the parcel to an existing drainage channel.

2. STUDY METHODOLOGY

In this study, the Soil Conservation Services Urban Hydrology for Small watersheds, Technical Release 20 (also known as SCS-TR20) was utilized to model the surface water drainage patterns for the pre- and post-development drainage conditions. HydroCAD Stormwater Modeling System Software (Version 10.0) was used for the SCS TR20 calculations. The SCS TR-55 method was used to estimate the Time of Concentration (Tc). This method involves estimating the length of sheet flow, shallow concentrated flow and channel flow that occurs within each subcatchment. Each Tc Path and corresponding length and slope is identified on the Drainage Development Area Plans. From this information, the time of concentration is determined for each watershed. Modeling was conducted using the 2, 10, and 25-year storm events. The HydroCAD results for the pre- and post-development are displayed in Appendix B.

The soils on the site were classified using the Natural Resources Conservation Service's Web Soil Survey. The following soil(s) and conditions were reported:

Hs	Hollis	Hydrological Group C/D
BuB	Buxton	Hydrological Group C
Sc	Scantic	Hydrological Group D

The curve numbers (CN) used in this analysis relate to the ground cover observed and proposed on the site. The curve numbers in Table 1 below were used in this analysis.

Description	HSG A
Grass, Poor	84
Woods, Poor	79
Gravel Surface	96

3. PRE-DEVELOPMENT CONDITIONS

The existing site consists of woods, cleared land, gravel driveway, and grass areas. Under pre-development conditions, the site is modeled as three drainage areas, draining to two points of study. (See Plan Set for Pre-Development Drainage Area Plan).

Pre-Development Drainage Area S1

This area encompasses approximately 0.92 acres and consists of cleared land, grassed areas, and gravel and paved access. Stormwater flows northeasterly to an existing catch basin on Sabattus Street that discharges immediately to an existing drainage channel labeled Study Point #1 (SP-1).

Pre-Development Drainage Area S2

This area encompasses approximately 0.74 acres and consists of cleared land, grassed areas, and gravel and paved access. Stormwater flows northeasterly to an existing drainage channel labeled Study Point #1 (SP-1).

Pre-Development Drainage Area S3

This area encompasses approximately 0.49 acres and consists of cleared land, grassed areas, and woods. Stormwater flows southeasterly to the back of the property labeled Study Point #2 (SP-2)

Table 2 – Pre-Development Discharges

Return Period	Study Point #1 Pre Flows (cfs)	Study Point #2 Pre Flows (cfs)
2	2.2	0.6
10	4.1	1.2
25	5.1	1.5

4. POST-DEVELOPMENT CONDITIONS

The project will include the construction of a 9,100 s.f. retail facility associated parking, landscaped areas, stormwater infrastructure, and paved access driveway to Sabattus Street. The stormwater runoff will be captured by new and existing catch basins located in the paved parking areas. Runoff captured by the new catch basins will be transferred into a shallow detention basin with an outlet control structure to control peak stormwater flows. The building roof runoff will be collected and also transferred to the detention basin.

Upon completion of the project, the total new impervious area is 31,115 s.f. / 0.71 acre. Total disturbed area is 58,110 s.f. is greater than acre which triggers a DEP stormwater permit by rule (PBR).

Under post-development conditions, the site is modeled as eight drainage areas flowing to two points of study. (See Plan Set for Post-Development Drainage Area Plan).

Post-Development Drainage Area S1

This area encompasses approximately 0.39 acres and consists of offsite cleared land and onsite developed grassed areas. Stormwater flows northeasterly into the proposed detention pond and ultimately to Study Point #1 (SP-1).

Post-Development Drainage Area S2

This area encompasses approximately 0.26 acres and consists of cleared land, woods and grass. Stormwater flows southerly through offsite to Study Point #2 (SP-2).

Post-Development Drainage Area S3

This area encompasses approximately 0.29 acres and consists of developed land to the rear of the proposed building. A drainage swale intercepts stormwater and channels it into a proposed catch basin (CB1) and ultimately to Study Point #1 (SP-1).

Post-Development Drainage Area B1

This area consists of the roof area of the proposed building totaling 0.21 acre. Stormwater flows through the roof drain to the adjacent catch basin and eventually to Study Point #1 (SP-1).

Post-Development Drainage Area P1

This area consists of the easterly access drive and landscaped road edge totaling 0.29 acre. Stormwater flows through catch basins through the proposed detention pond and eventually to Study Point #1 (SP-1).

Post-Development Drainage Area P2

This area consists of the northerly parking area and landscaped road edge totaling 0.15 acre. Stormwater flows through catch basins through the proposed detention pond and eventually to Study Point #1 (SP-1).

Post-Development Drainage Area P3

This area consists of the proposed access drive and developed grassed area and existing paved roadway totaling 0.33 acre. Stormwater flows to an existing catch basin that discharges directly to Study Point #1 (SP-1).

Table 3 – Post-Development Discharges

Return Period	Study Point #1 Post Flows (cfs)	Study Point #2 Post Flows (cfs)
2	2.6	0.3
10	3.9	0.6
25	4.6	0.8

Table 4 – Comparison of Pre- and Post-Development Discharges for Study Point #1 and Study Point #2

Return Period (yr)	SP-1 Pre Flows (cfs)	SP-1 Post Flows (cfs)	Diff. (cfs)
2	2.2	2.6	+0.4
10	4.1	3.9	-0.2
25	5.1	4.6	-0.5

Return Period (yr)	SP-2 Pre Flows (cfs)	SP-2 Post Flows (cfs)	Diff. (cfs)
2	0.6	0.3	-0.3
10	1.2	0.6	-0.6
25	1.5	0.8	-0.7

5. MAINTENANCE PLAN

Franklin Land Associates, LLC shall be responsible for the maintenance of the stormwater infrastructure. At a minimum, the appropriate and relevant activities for each of the stormwater management facilities will be performed on the prescribed schedule.

Other Stormwater Maintenance Items

Sweeping

Paved surfaces shall be swept or vacuumed at least twice annually in the spring to remove all winter sand, and periodically during the year on an as-needed basis to minimize transportation of sediment during rainfall events.

Catch Basin Weir Structure

If sediment in culverts or piped drainage systems exceeds 20% of the diameter of the pipe, it should be removed. This may be accomplished by hydraulic flushing or any mechanical means; however, care should be taken as to not flush the sediment into the pond as it will reduce the

capacity and hasten the time when it must be cleaned. All pipes should be inspected on an annual basis.

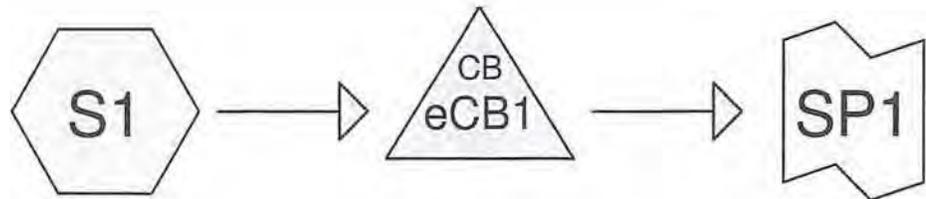
Catch Basin sumps should be cleaned in the spring to remove the winter sand and periodically during the year on an as-needed basis to remove sediment build up. This may be accomplished by a vacuum truck or any mechanical means; however, care should be taken as to not flush the sediment into the pond as it will reduce the capacity and hasten the time when it must be cleaned.

6. CONCLUSION

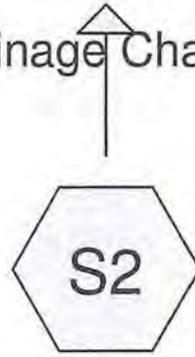
By inspection the 2-year storm event increases slightly at Study Point #1 due to the development of the site. This is an insignificant increase and will not cause any downstream disturbances. For the remaining storm events evaluated, no increase in the stormwater runoff was calculated.

**APPENDIX A
PRE-DEVELOPMENT DRAINAGE CALCULATIONS**

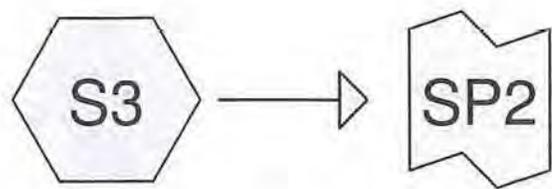
HydroCAD
2-yr, 10-yr & 25-yr Storm Results



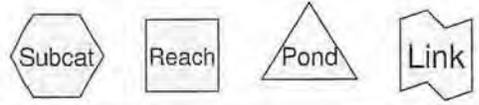
Meadow/Gravel/Pave Catch Basin Drainage Channel



Meadow/Gravel



Meadow/Woods



Existing Conditions

Prepared by Microsoft

HydroCAD® 10.00 s/n 02173 © 2012 HydroCAD Software Solutions LLC

Printed 1/28/2014

Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.366	84	50-75% Grass cover, Fair, HSG D (S3)
0.484	96	Gravel surface, HSG D (S1, S2)
1.295	79	Woods, Fair, HSG D (S1, S2, S3)
2.145	84	TOTAL AREA

Existing Conditions

Prepared by Microsoft

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
2.145	HSG D	S1, S2, S3
0.000	Other	
2.145		TOTAL AREA

Existing Conditions

Prepared by Microsoft

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.000	0.366	0.000	0.366	50-75% Grass cover, Fair	S3
0.000	0.000	0.000	0.484	0.000	0.484	Gravel surface	S1, S2
0.000	0.000	0.000	1.295	0.000	1.295	Woods, Fair	S1, S2, S3
0.000	0.000	0.000	2.145	0.000	2.145	TOTAL AREA	

Existing Conditions

Prepared by Microsoft

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Printed 1/28/2014

Page 5

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	eCB1	205.21	205.20	51.3	0.0002	0.012	12.0	0.0	0.0

Existing Conditions

Prepared by Microsoft

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

Printed 1/28/2014

Page 7

Summary for Subcatchment S1: Meadow/Gravel/Pave

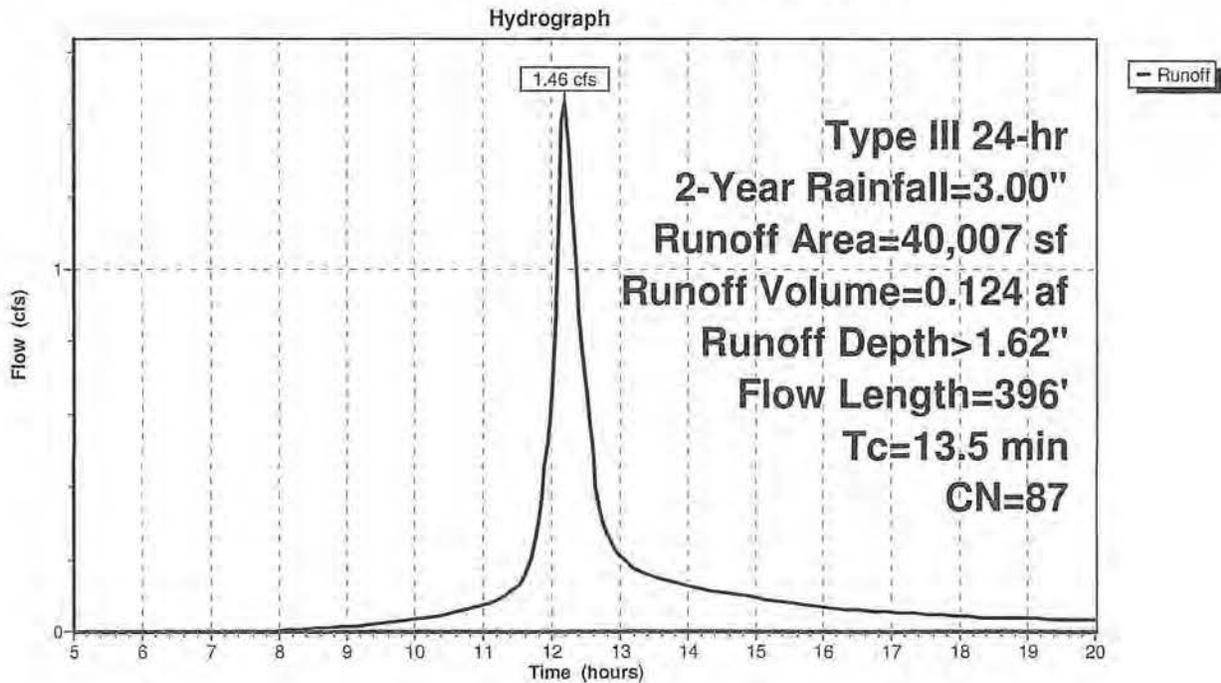
Runoff = 1.46 cfs @ 12.19 hrs, Volume= 0.124 af, Depth> 1.62"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
19,501	96	Gravel surface, HSG D
20,506	79	Woods, Fair, HSG D
40,007	87	Weighted Average
40,007		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.1	68	0.0073	0.10		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.7	85	0.0941	2.15		Shallow Concentrated Flow, B-C SHALLOW Short Grass Pasture Kv= 7.0 fps
1.3	182	0.0206	2.31		Shallow Concentrated Flow, C-D SHALLOW Unpaved Kv= 16.1 fps
0.4	61	0.0163	2.59		Shallow Concentrated Flow, D-E SHALLOW Paved Kv= 20.3 fps
13.5	396	Total			

Subcatchment S1: Meadow/Gravel/Pave



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

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Summary for Subcatchment S2: Meadow/Gravel

Runoff = 0.74 cfs @ 12.26 hrs, Volume= 0.070 af, Depth> 1.15"

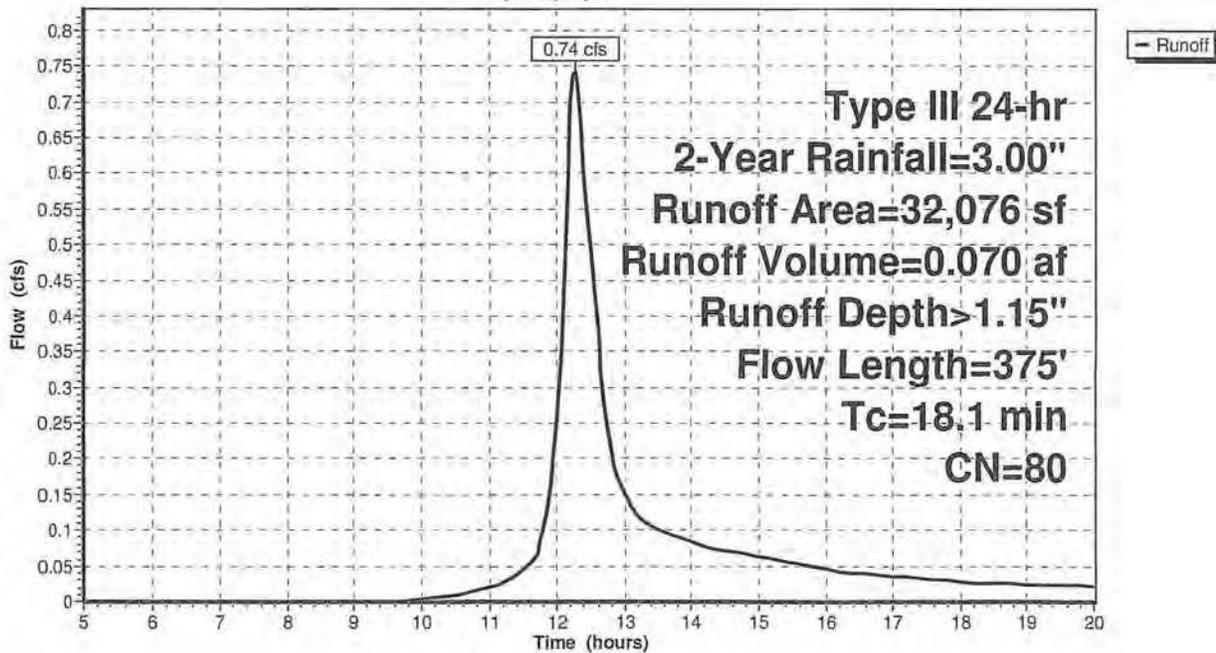
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
1,587	96	Gravel surface, HSG D
30,489	79	Woods, Fair, HSG D
32,076	80	Weighted Average
32,076		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	104	0.0072	0.11		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.6	45	0.0168	1.30		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.5	92	0.0983	3.14		Shallow Concentrated Flow, C-D SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
1.3	119	0.0231	1.52		Shallow Concentrated Flow, D-E SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.0	15	0.4223	9.75		Shallow Concentrated Flow, E-F SHALLOW Grassed Waterway Kv= 15.0 fps
18.1	375	Total			

Subcatchment S2: Meadow/Gravel

Hydrograph



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

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Summary for Subcatchment S3: Meadow/Woods

Runoff = 0.60 cfs @ 12.24 hrs, Volume= 0.055 af, Depth> 1.34"

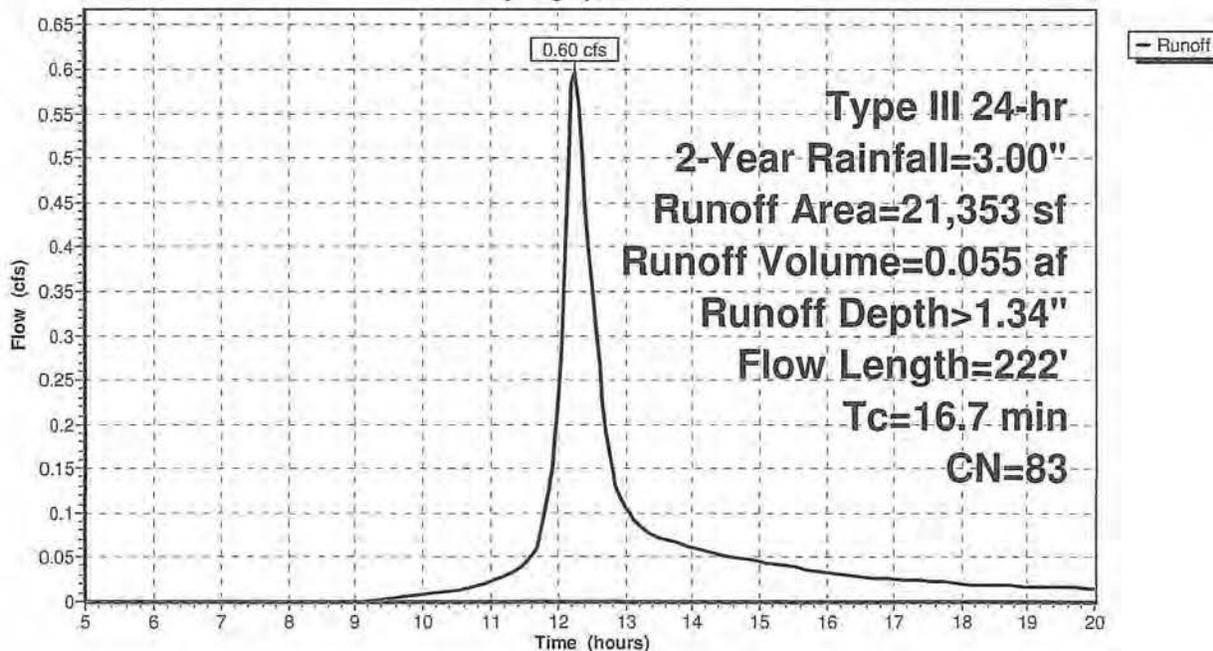
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
15,949	84	50-75% Grass cover, Fair, HSG D
5,404	79	Woods, Fair, HSG D
21,353	83	Weighted Average
21,353		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	110	0.0091	0.12		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
1.5	80	0.0314	0.89		Shallow Concentrated Flow, B-C SHALLOW Woodland Kv= 5.0 fps
0.2	32	0.2194	2.34		Shallow Concentrated Flow, C-D SHALLOW Woodland Kv= 5.0 fps
16.7	222	Total			

Subcatchment S3: Meadow/Woods

Hydrograph



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

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Summary for Pond eCB1: Catch Basin

Inflow Area = 0.918 ac, 0.00% Impervious, Inflow Depth > 1.62" for 2-Year event
 Inflow = 1.46 cfs @ 12.19 hrs, Volume= 0.124 af
 Outflow = 1.46 cfs @ 12.19 hrs, Volume= 0.124 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.46 cfs @ 12.19 hrs, Volume= 0.124 af

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

Peak Elev= 206.15' @ 12.19 hrs

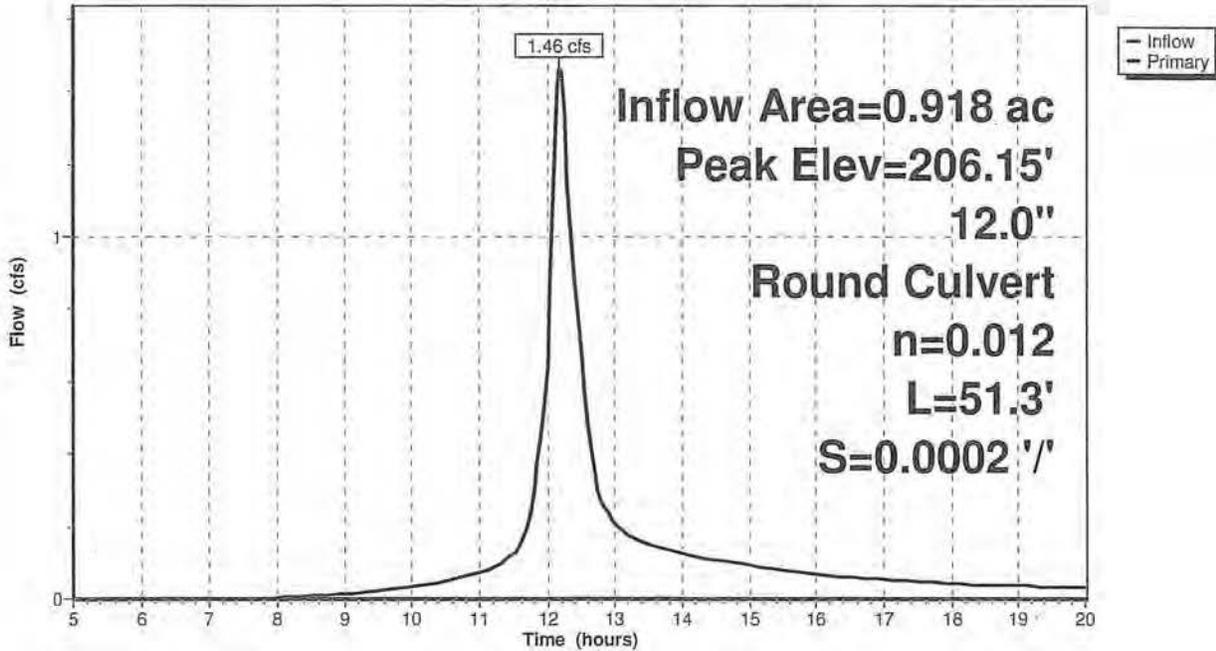
Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	12.0" Round Culvert L= 51.3' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.20' S= 0.0002'/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf

Primary OutFlow Max=1.45 cfs @ 12.19 hrs HW=206.14' (Free Discharge)

↑ 1=Culvert (Barrel Controls 1.45 cfs @ 2.46 fps)

Pond eCB1: Catch Basin

Hydrograph



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

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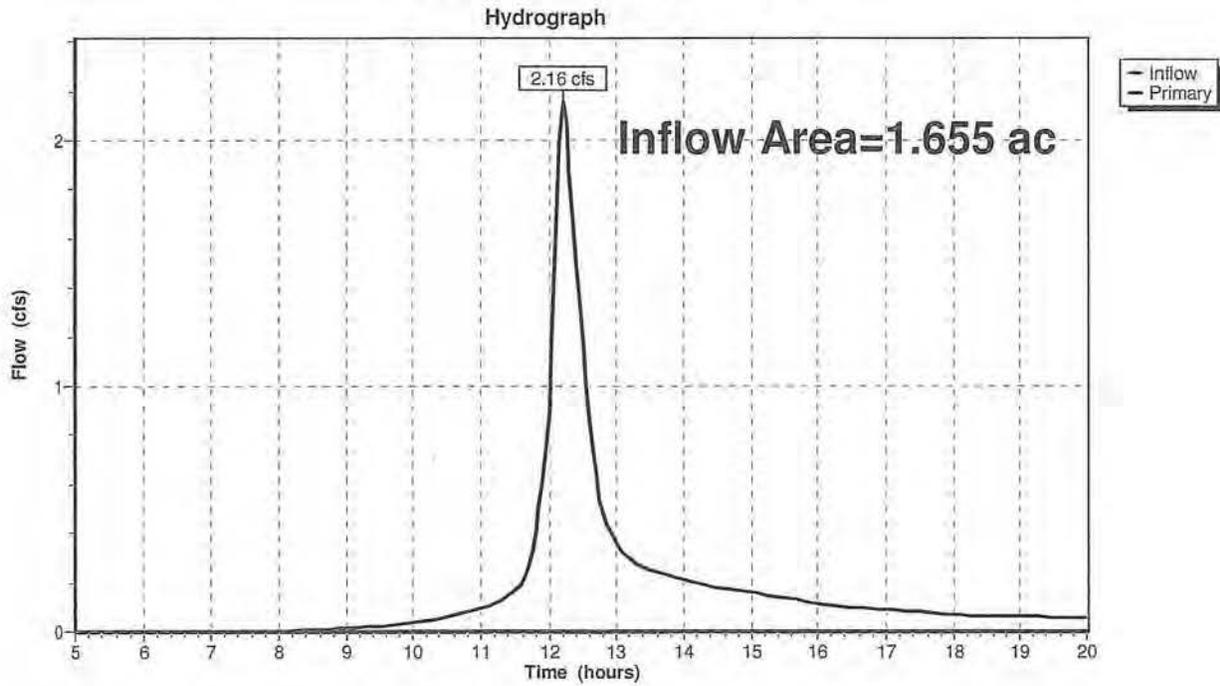
Page 11

Summary for Link SP1: Drainage Channel

Inflow Area = 1.655 ac, 0.00% Impervious, Inflow Depth > 1.41" for 2-Year event
Inflow = 2.16 cfs @ 12.21 hrs, Volume= 0.194 af
Primary = 2.16 cfs @ 12.21 hrs, Volume= 0.194 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP1: Drainage Channel



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

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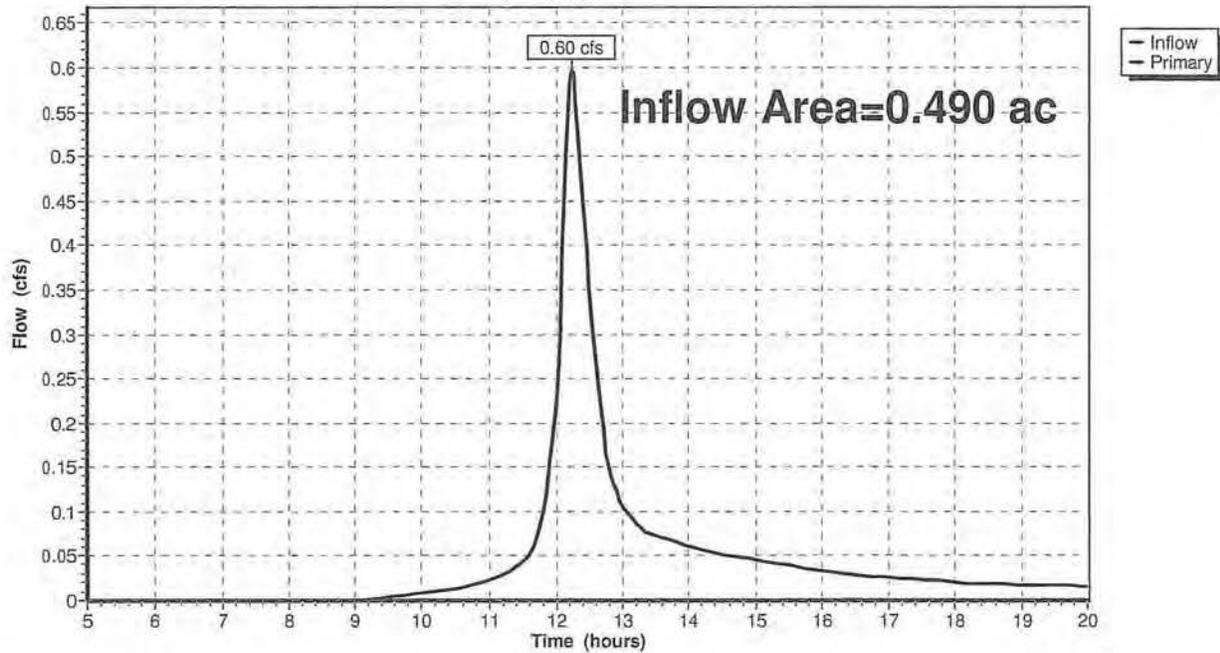
Summary for Link SP2:

Inflow Area = 0.490 ac, 0.00% Impervious, Inflow Depth > 1.34" for 2-Year event
Inflow = 0.60 cfs @ 12.24 hrs, Volume= 0.055 af
Primary = 0.60 cfs @ 12.24 hrs, Volume= 0.055 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP2:

Hydrograph



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Type III 24-hr 10-Year Rainfall=4.60"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment S1: Meadow/Gravel/Pave Runoff Area=40,007 sf 0.00% Impervious Runoff Depth>3.00"
Flow Length=396' Tc=13.5 min CN=87 Runoff=2.65 cfs 0.229 af

Subcatchment S2: Meadow/Gravel Runoff Area=32,076 sf 0.00% Impervious Runoff Depth>2.37"
Flow Length=375' Tc=18.1 min CN=80 Runoff=1.54 cfs 0.145 af

Subcatchment S3: Meadow/Woods Runoff Area=21,353 sf 0.00% Impervious Runoff Depth>2.63"
Flow Length=222' Tc=16.7 min CN=83 Runoff=1.17 cfs 0.107 af

Pond eCB1: Catch Basin Peak Elev=206.71' Inflow=2.65 cfs 0.229 af
12.0" Round Culvert n=0.012 L=51.3' S=0.0002 '/' Outflow=2.65 cfs 0.229 af

Link SP1: Drainage Channel Inflow=4.11 cfs 0.375 af
Primary=4.11 cfs 0.375 af

Link SP2: Inflow=1.17 cfs 0.107 af
Primary=1.17 cfs 0.107 af

Total Runoff Area = 2.145 ac Runoff Volume = 0.482 af Average Runoff Depth = 2.70"
100.00% Pervious = 2.145 ac 0.00% Impervious = 0.000 ac

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Type III 24-hr 10-Year Rainfall=4.60"

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Summary for Subcatchment S1: Meadow/Gravel/Pave

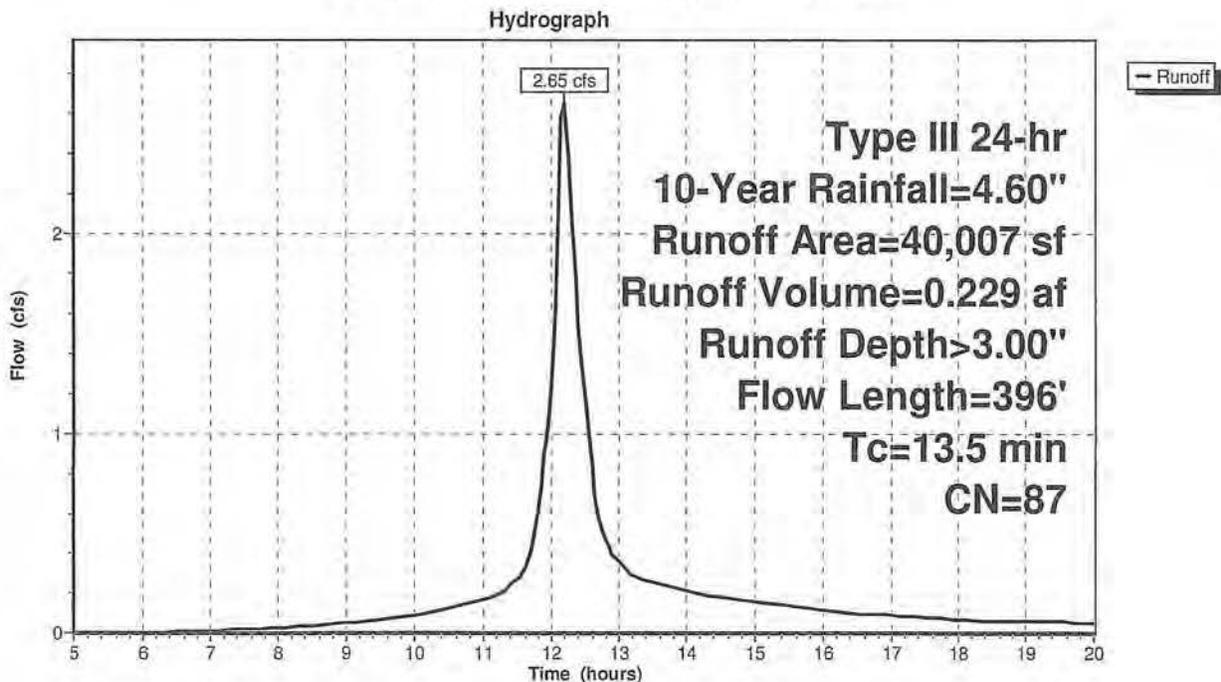
Runoff = 2.65 cfs @ 12.18 hrs, Volume= 0.229 af, Depth> 3.00"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
19,501	96	Gravel surface, HSG D
20,506	79	Woods, Fair, HSG D
40,007	87	Weighted Average
40,007		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.1	68	0.0073	0.10		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.7	85	0.0941	2.15		Shallow Concentrated Flow, B-C SHALLOW Short Grass Pasture Kv= 7.0 fps
1.3	182	0.0206	2.31		Shallow Concentrated Flow, C-D SHALLOW Unpaved Kv= 16.1 fps
0.4	61	0.0163	2.59		Shallow Concentrated Flow, D-E SHALLOW Paved Kv= 20.3 fps
13.5	396	Total			

Subcatchment S1: Meadow/Gravel/Pave



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Type III 24-hr 10-Year Rainfall=4.60"

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Summary for Subcatchment S2: Meadow/Gravel

Runoff = 1.54 cfs @ 12.25 hrs, Volume= 0.145 af, Depth> 2.37"

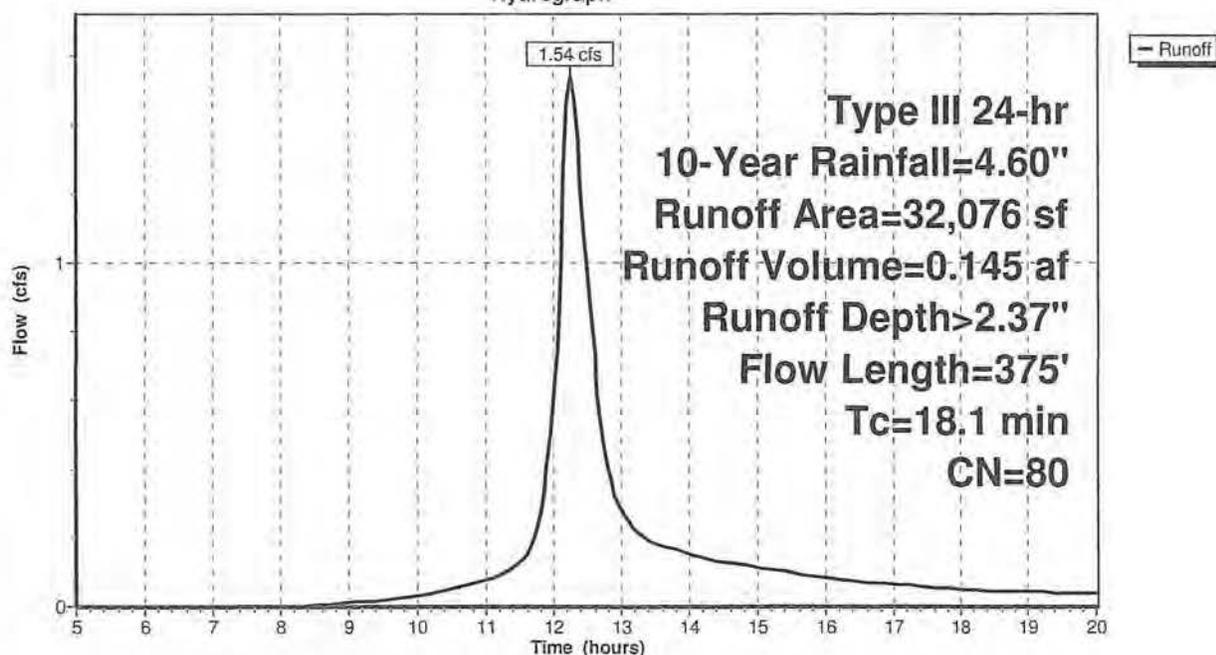
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
1,587	96	Gravel surface, HSG D
30,489	79	Woods, Fair, HSG D
32,076	80	Weighted Average
32,076		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	104	0.0072	0.11		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.6	45	0.0168	1.30		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.5	92	0.0983	3.14		Shallow Concentrated Flow, C-D SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
1.3	119	0.0231	1.52		Shallow Concentrated Flow, D-E SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.0	15	0.4223	9.75		Shallow Concentrated Flow, E-F SHALLOW Grassed Waterway Kv= 15.0 fps
18.1	375	Total			

Subcatchment S2: Meadow/Gravel

Hydrograph



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Type III 24-hr 10-Year Rainfall=4.60"

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Summary for Subcatchment S3: Meadow/Woods

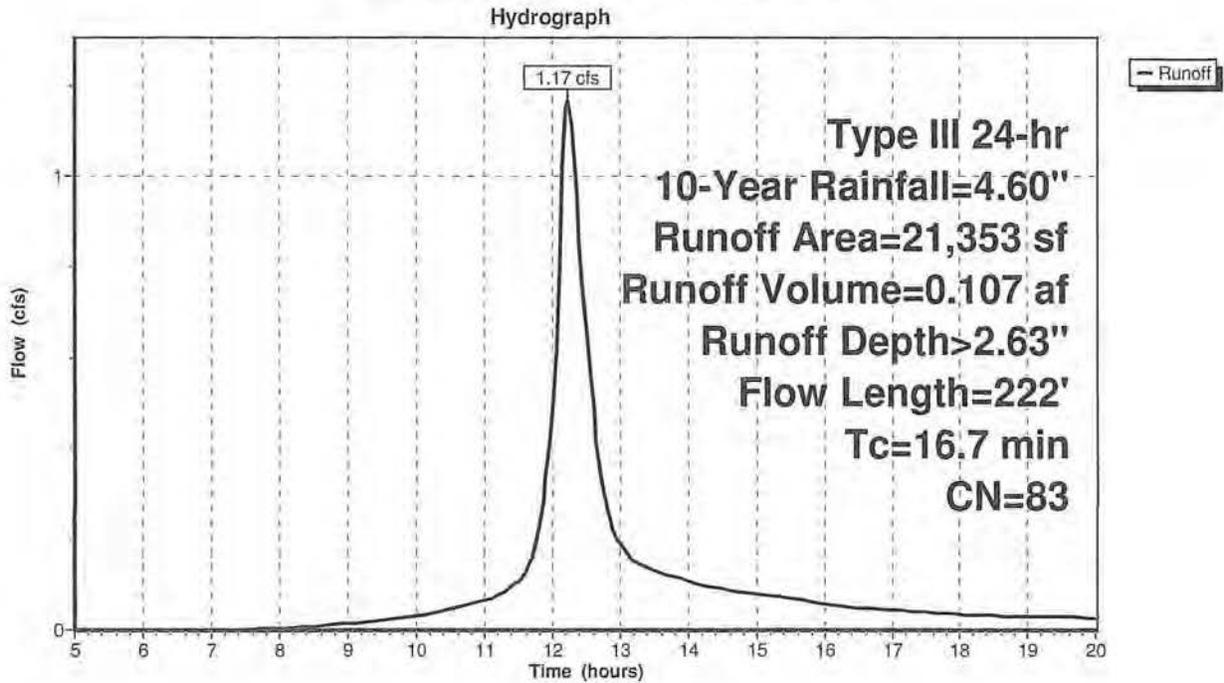
Runoff = 1.17 cfs @ 12.23 hrs, Volume= 0.107 af, Depth> 2.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
15,949	84	50-75% Grass cover, Fair, HSG D
5,404	79	Woods, Fair, HSG D
21,353	83	Weighted Average
21,353		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	110	0.0091	0.12		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
1.5	80	0.0314	0.89		Shallow Concentrated Flow, B-C SHALLOW Woodland Kv= 5.0 fps
0.2	32	0.2194	2.34		Shallow Concentrated Flow, C-D SHALLOW Woodland Kv= 5.0 fps
16.7	222	Total			

Subcatchment S3: Meadow/Woods



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Type III 24-hr 10-Year Rainfall=4.60"

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Summary for Pond eCB1: Catch Basin

Inflow Area = 0.918 ac, 0.00% Impervious, Inflow Depth > 3.00" for 10-Year event
Inflow = 2.65 cfs @ 12.18 hrs, Volume= 0.229 af
Outflow = 2.65 cfs @ 12.18 hrs, Volume= 0.229 af, Atten= 0%, Lag= 0.0 min
Primary = 2.65 cfs @ 12.18 hrs, Volume= 0.229 af

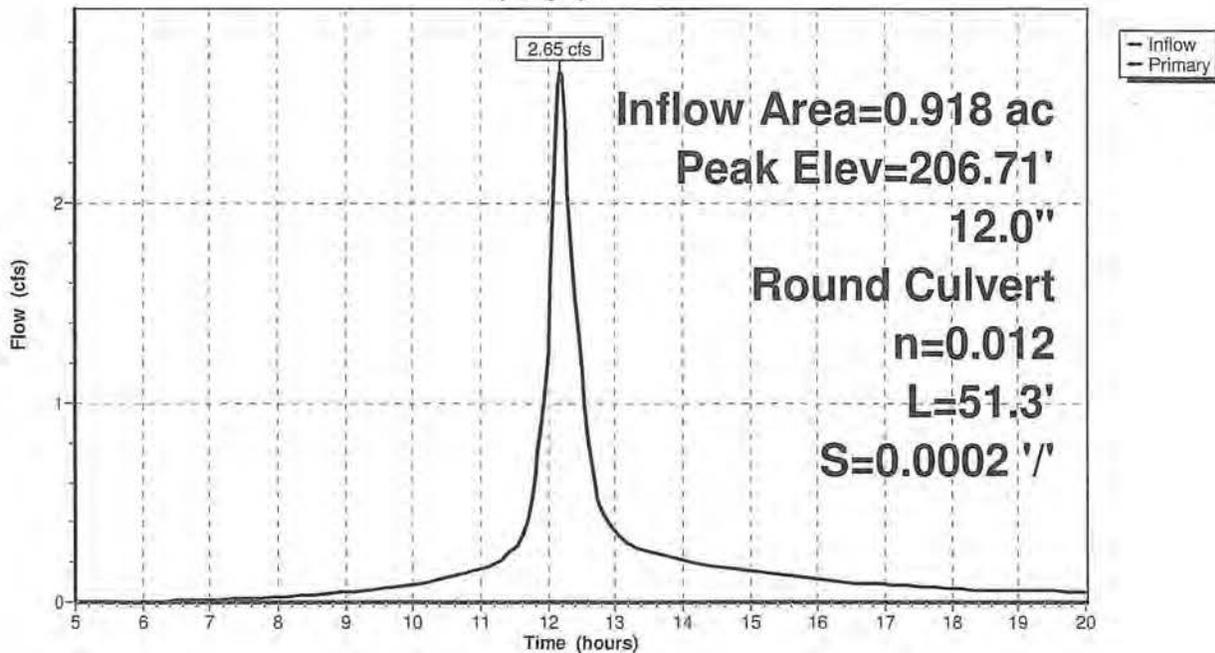
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 206.71' @ 12.19 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	12.0" Round Culvert L= 51.3' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.20' S= 0.0002' /' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf

Primary OutFlow Max=2.62 cfs @ 12.18 hrs HW=206.70' (Free Discharge)
←**1=Culvert** (Barrel Controls 2.62 cfs @ 3.34 fps)

Pond eCB1: Catch Basin

Hydrograph



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Type III 24-hr 10-Year Rainfall=4.60"

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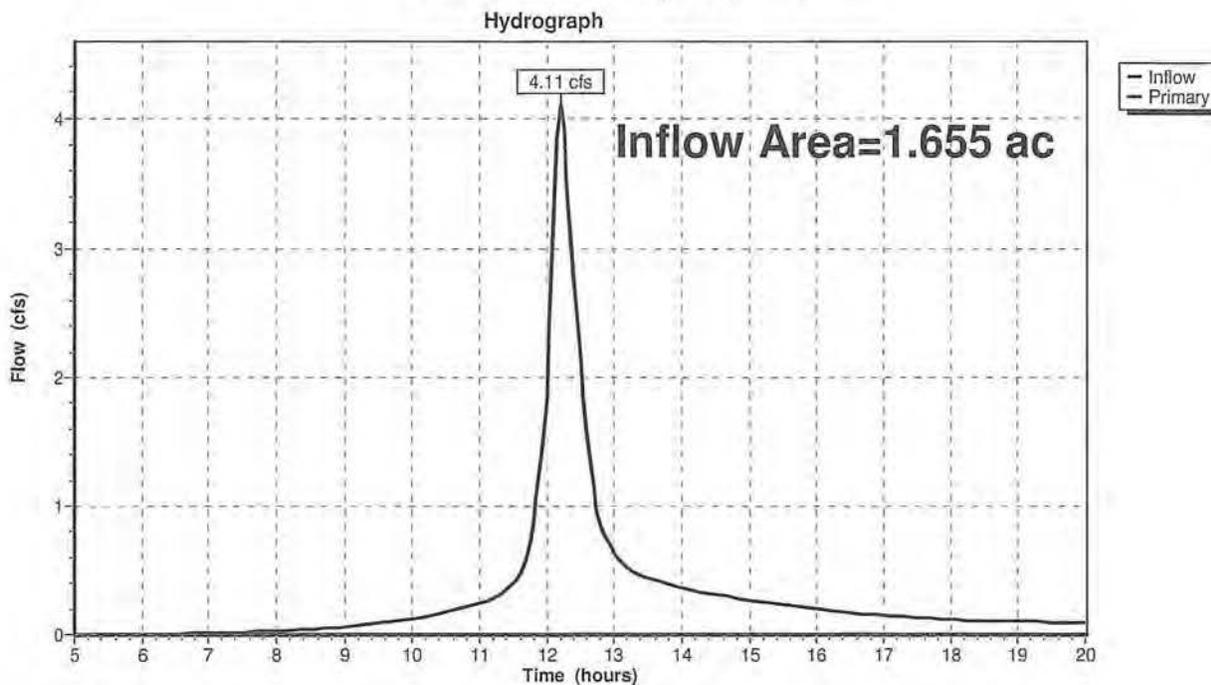
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Summary for Link SP1: Drainage Channel

Inflow Area = 1.655 ac, 0.00% Impervious, Inflow Depth > 2.72" for 10-Year event
Inflow = 4.11 cfs @ 12.21 hrs, Volume= 0.375 af
Primary = 4.11 cfs @ 12.21 hrs, Volume= 0.375 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP1: Drainage Channel



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Type III 24-hr 10-Year Rainfall=4.60"

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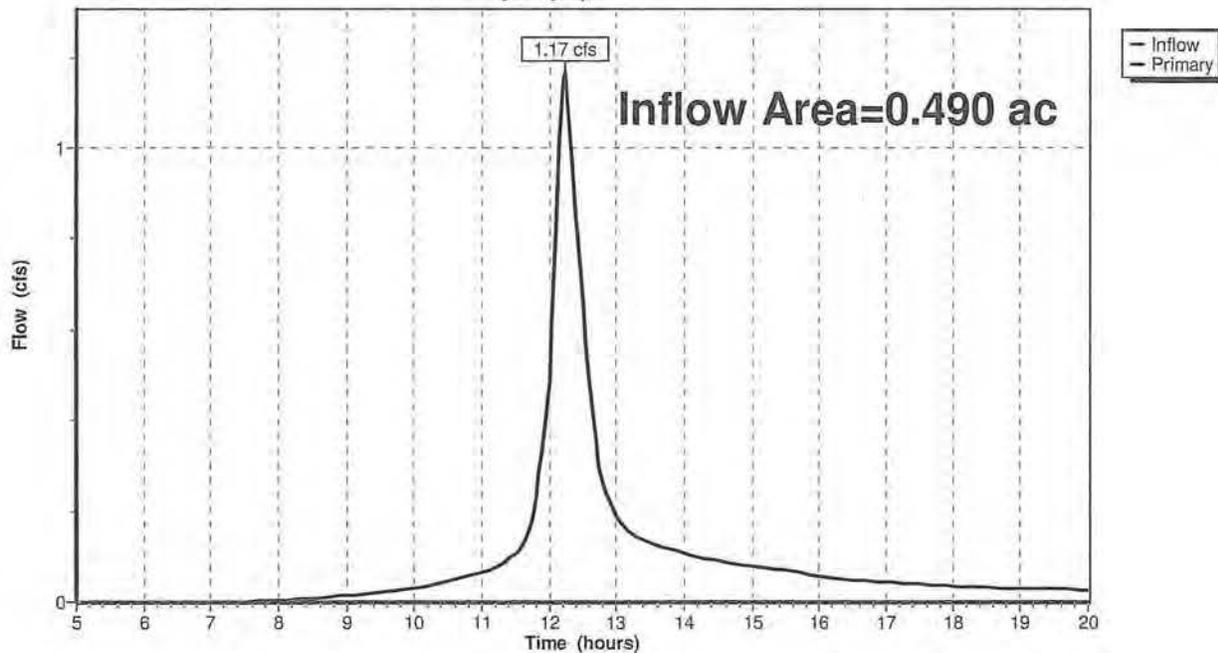
Summary for Link SP2:

Inflow Area = 0.490 ac, 0.00% Impervious, Inflow Depth > 2.63" for 10-Year event
Inflow = 1.17 cfs @ 12.23 hrs, Volume= 0.107 af
Primary = 1.17 cfs @ 12.23 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP2:

Hydrograph



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Type III 24-hr 25-Year Rainfall=5.40"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment S1: Meadow/Gravel/Pave Runoff Area=40,007 sf 0.00% Impervious Runoff Depth>3.71"
Flow Length=396' Tc=13.5 min CN=87 Runoff=3.25 cfs 0.284 af

Subcatchment S2: Meadow/Gravel Runoff Area=32,076 sf 0.00% Impervious Runoff Depth>3.02"
Flow Length=375' Tc=18.1 min CN=80 Runoff=1.96 cfs 0.186 af

Subcatchment S3: Meadow/Woods Runoff Area=21,353 sf 0.00% Impervious Runoff Depth>3.31"
Flow Length=222' Tc=16.7 min CN=83 Runoff=1.46 cfs 0.135 af

Pond eCB1: Catch Basin Peak Elev=206.96' Inflow=3.25 cfs 0.284 af
12.0" Round Culvert n=0.012 L=51.3' S=0.0002 '/ Outflow=3.25 cfs 0.284 af

Link SP1: Drainage Channel Inflow=5.11 cfs 0.470 af
Primary=5.11 cfs 0.470 af

Link SP2: Inflow=1.46 cfs 0.135 af
Primary=1.46 cfs 0.135 af

Total Runoff Area = 2.145 ac Runoff Volume = 0.605 af Average Runoff Depth = 3.38"
100.00% Pervious = 2.145 ac 0.00% Impervious = 0.000 ac

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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Subcatchment S1: Meadow/Gravel/Pave

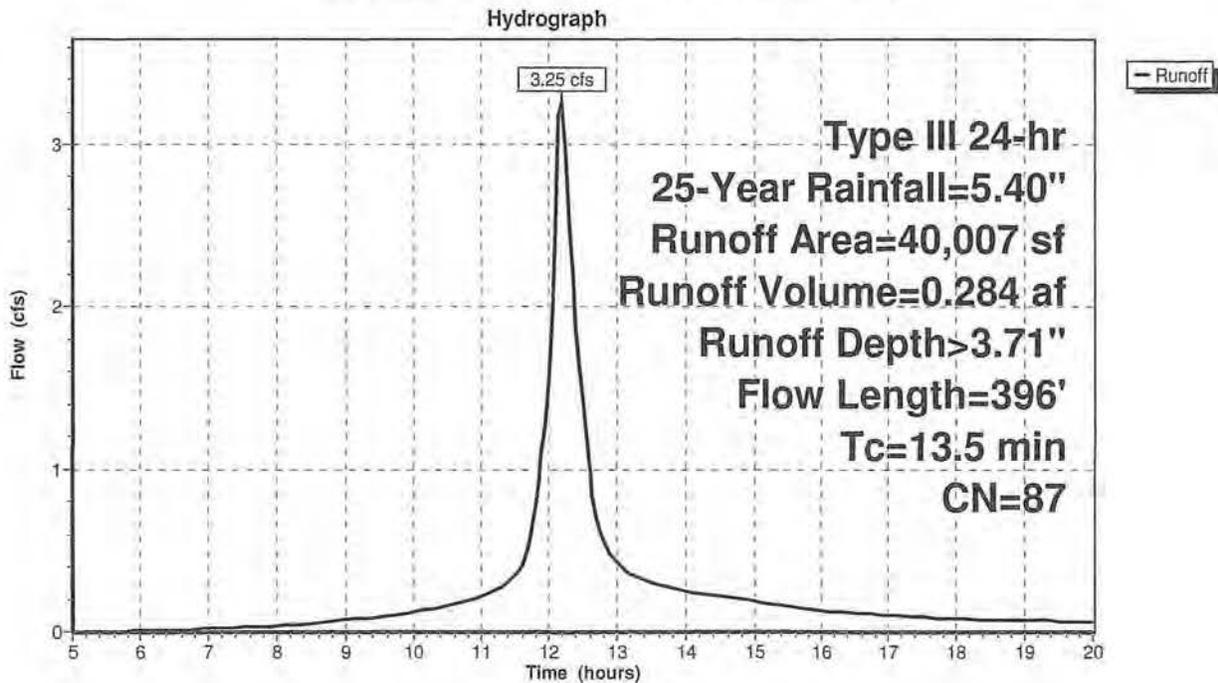
Runoff = 3.25 cfs @ 12.18 hrs, Volume= 0.284 af, Depth> 3.71"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
19,501	96	Gravel surface, HSG D
20,506	79	Woods, Fair, HSG D
40,007	87	Weighted Average
40,007		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.1	68	0.0073	0.10		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.7	85	0.0941	2.15		Shallow Concentrated Flow, B-C SHALLOW Short Grass Pasture Kv= 7.0 fps
1.3	182	0.0206	2.31		Shallow Concentrated Flow, C-D SHALLOW Unpaved Kv= 16.1 fps
0.4	61	0.0163	2.59		Shallow Concentrated Flow, D-E SHALLOW Paved Kv= 20.3 fps
13.5	396	Total			

Subcatchment S1: Meadow/Gravel/Pave



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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Subcatchment S2: Meadow/Gravel

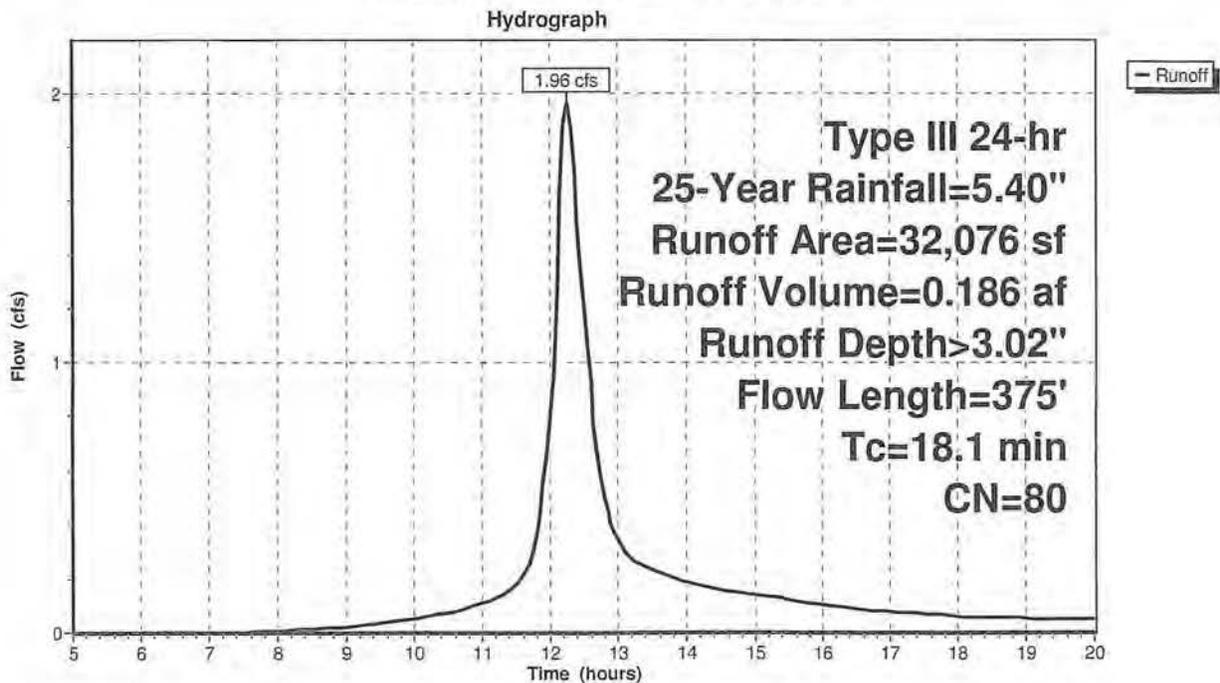
Runoff = 1.96 cfs @ 12.25 hrs, Volume= 0.186 af, Depth> 3.02"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
1,587	96	Gravel surface, HSG D
30,489	79	Woods, Fair, HSG D
32,076	80	Weighted Average
32,076		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.7	104	0.0072	0.11		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.6	45	0.0168	1.30		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.5	92	0.0983	3.14		Shallow Concentrated Flow, C-D SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
1.3	119	0.0231	1.52		Shallow Concentrated Flow, D-E SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.0	15	0.4223	9.75		Shallow Concentrated Flow, E-F SHALLOW Grassed Waterway Kv= 15.0 fps
18.1	375	Total			

Subcatchment S2: Meadow/Gravel



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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Subcatchment S3: Meadow/Woods

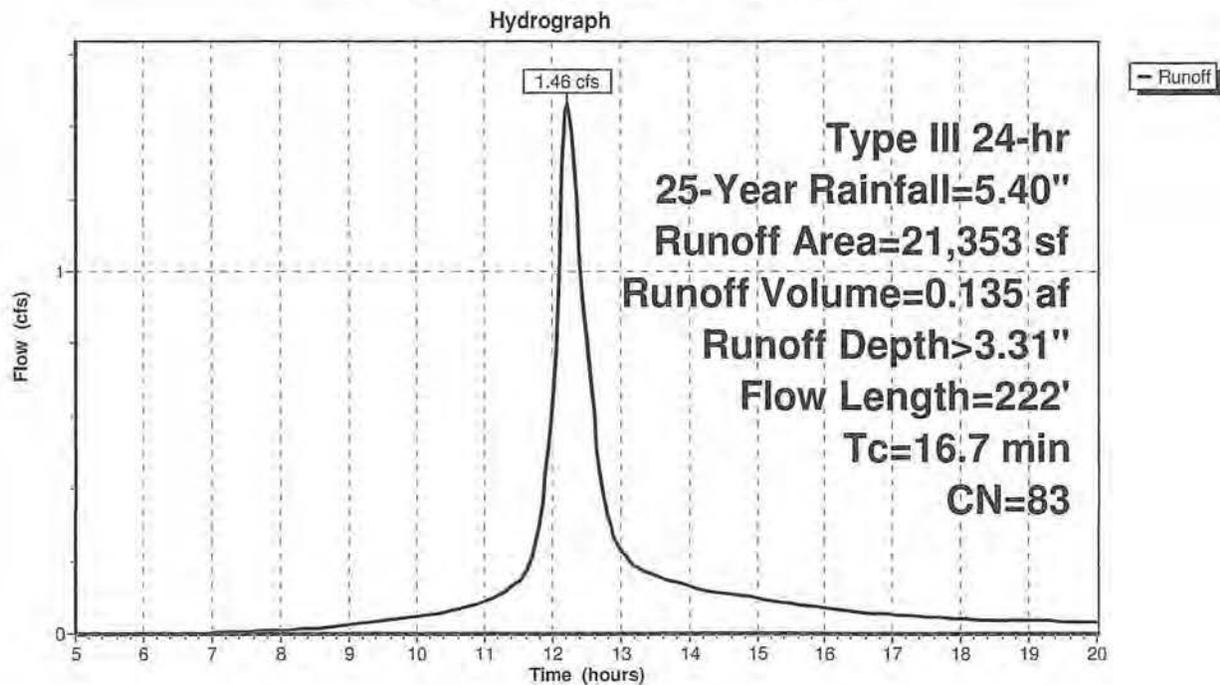
Runoff = 1.46 cfs @ 12.23 hrs, Volume= 0.135 af, Depth> 3.31"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
15,949	84	50-75% Grass cover, Fair, HSG D
5,404	79	Woods, Fair, HSG D
21,353	83	Weighted Average
21,353		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0	110	0.0091	0.12		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
1.5	80	0.0314	0.89		Shallow Concentrated Flow, B-C SHALLOW Woodland Kv= 5.0 fps
0.2	32	0.2194	2.34		Shallow Concentrated Flow, C-D SHALLOW Woodland Kv= 5.0 fps
16.7	222	Total			

Subcatchment S3: Meadow/Woods



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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Pond eCB1: Catch Basin

Inflow Area = 0.918 ac, 0.00% Impervious, Inflow Depth > 3.71" for 25-Year event
Inflow = 3.25 cfs @ 12.18 hrs, Volume= 0.284 af
Outflow = 3.25 cfs @ 12.18 hrs, Volume= 0.284 af, Atten= 0%, Lag= 0.0 min
Primary = 3.25 cfs @ 12.18 hrs, Volume= 0.284 af

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

Peak Elev= 206.96' @ 12.18 hrs

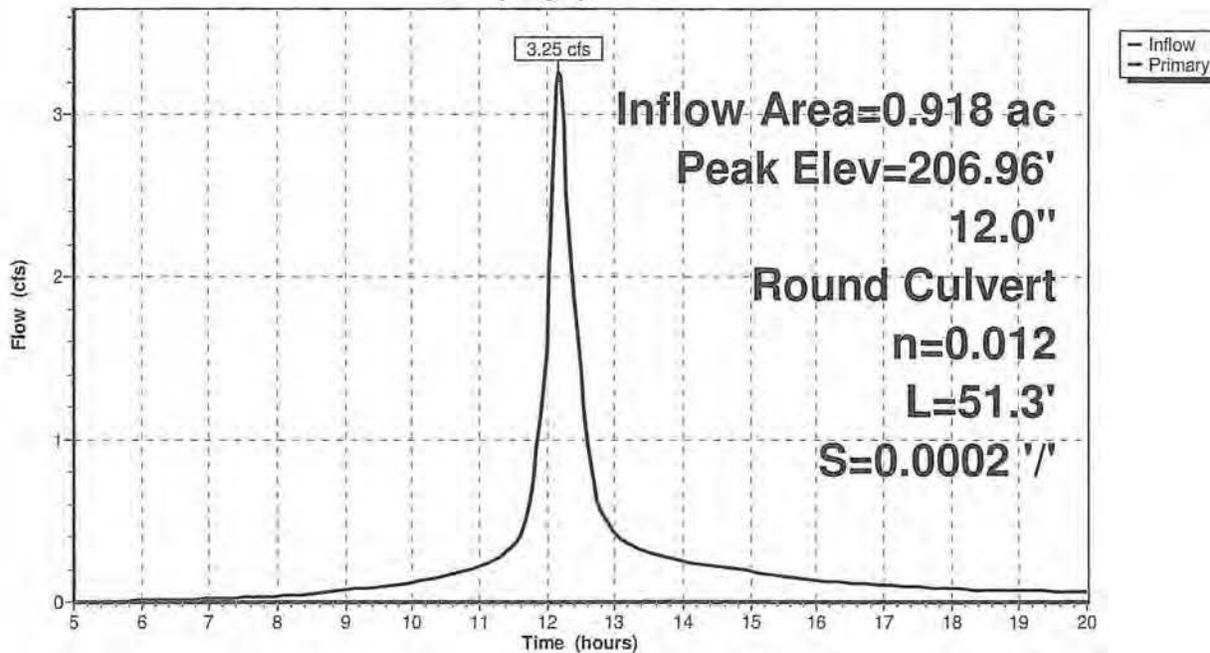
Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	12.0" Round Culvert L= 51.3' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.20' S= 0.0002'/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf

Primary OutFlow Max=3.21 cfs @ 12.18 hrs HW=206.95' (Free Discharge)

1=Culvert (Barrel Controls 3.21 cfs @ 4.09 fps)

Pond eCB1: Catch Basin

Hydrograph



Existing Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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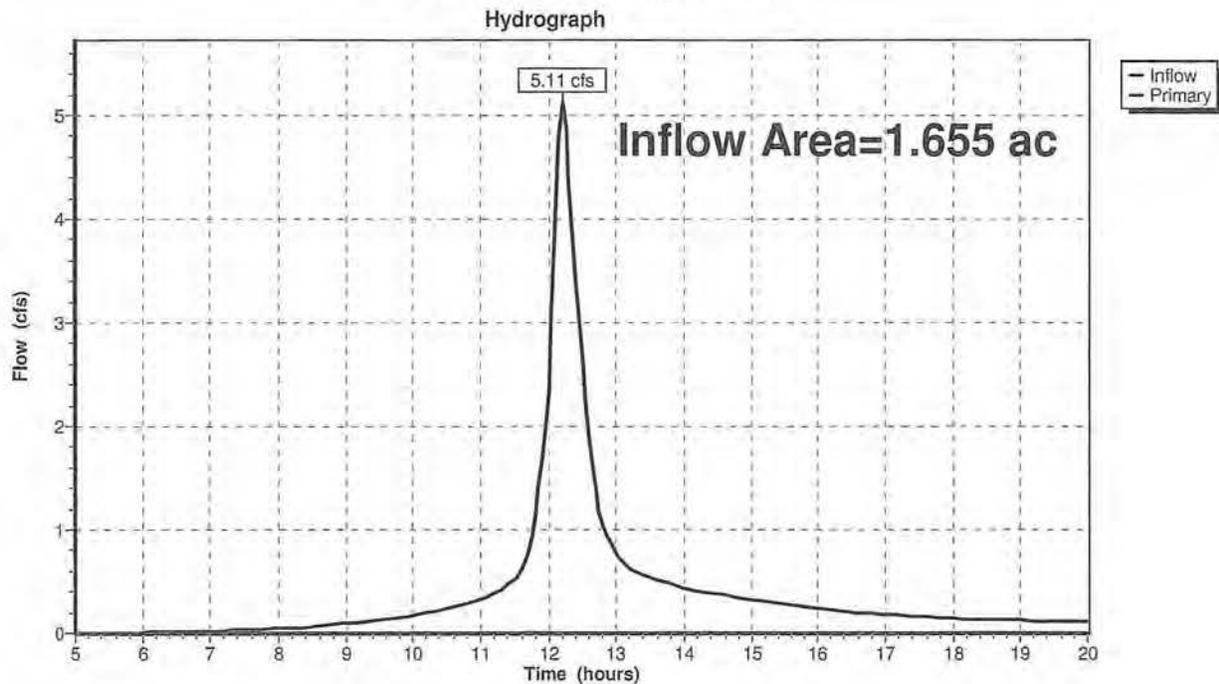
Page 25

Summary for Link SP1: Drainage Channel

Inflow Area = 1.655 ac, 0.00% Impervious, Inflow Depth > 3.41" for 25-Year event
Inflow = 5.11 cfs @ 12.20 hrs, Volume= 0.470 af
Primary = 5.11 cfs @ 12.20 hrs, Volume= 0.470 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP1: Drainage Channel



Existing Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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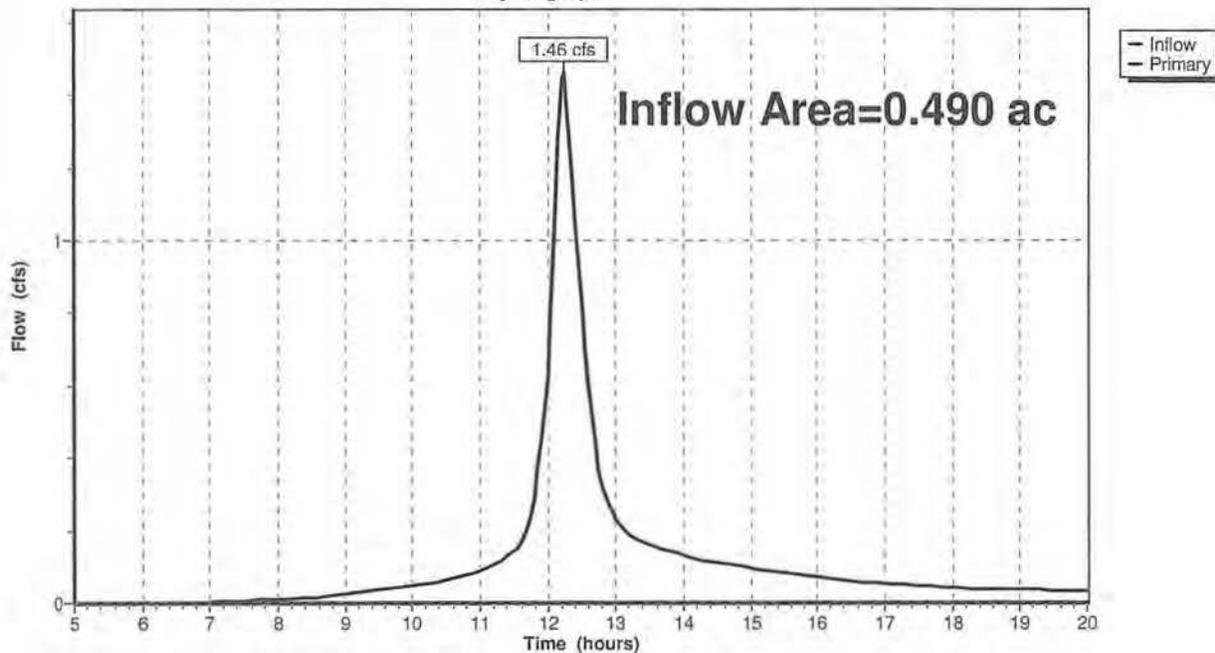
Summary for Link SP2:

Inflow Area = 0.490 ac, 0.00% Impervious, Inflow Depth > 3.31" for 25-Year event
Inflow = 1.46 cfs @ 12.23 hrs, Volume= 0.135 af
Primary = 1.46 cfs @ 12.23 hrs, Volume= 0.135 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

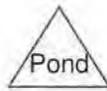
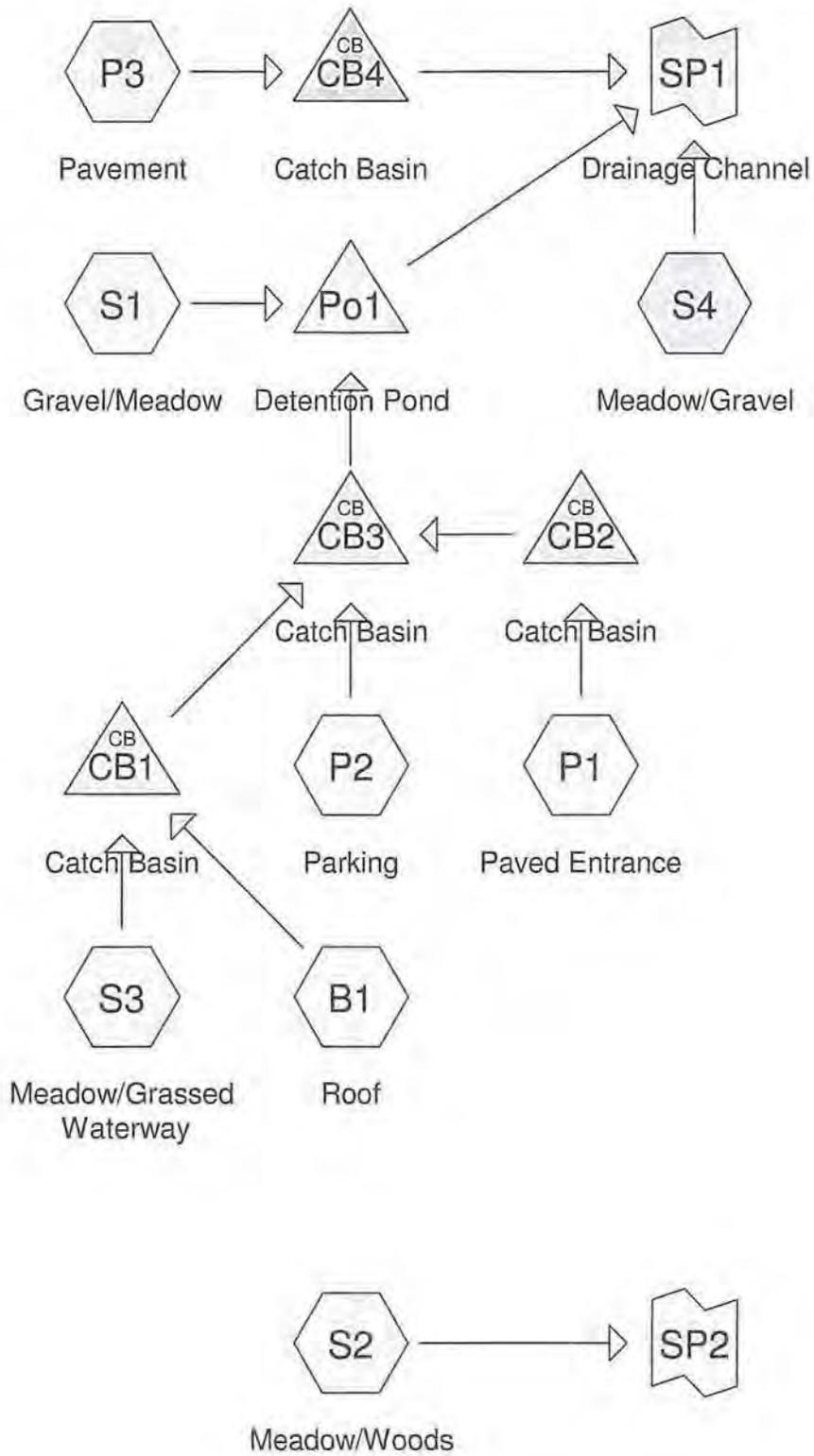
Link SP2:

Hydrograph



**APPENDIX B
POST-DEVELOPMENT DRAINAGE CALCULATIONS**

HydroCAD
2-yr, 10-yr & 25-yr Storm Results



Proposed Conditions

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.708	84	50-75% Grass cover, Fair, HSG D (S1, S2, S4)
0.343	80	>75% Grass cover, Good, HSG D (P3, S3)
0.085	96	Gravel surface, HSG D (S1)
0.431	98	Paved parking, HSG D (P1, P2)
0.254	98	Paved roads w/curbs & sewers, HSG D (P3)
0.211	98	Roofs, HSG D (B1)
0.029	79	Woods, Fair, HSG D (S3)
0.083	82	Woods/grass comb., Fair, HSG D (S2)

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Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	CB1	214.40	213.40	100.0	0.0100	0.011	12.0	0.0	0.0
2	CB2	214.40	213.40	100.0	0.0100	0.011	12.0	0.0	0.0
3	CB3	213.30	213.00	30.0	0.0100	0.011	12.0	0.0	0.0
4	CB4	205.21	205.20	51.3	0.0002	0.012	12.0	0.0	0.0
5	Po1	212.00	206.00	120.0	0.0500	0.011	16.0	0.0	0.0

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

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment B1: Roof	Runoff Area=9,188 sf 100.00% Impervious Runoff Depth>2.59"
Flow Length=160'	Slope=0.0100 '/' Tc=2.2 min CN=98 Runoff=0.67 cfs 0.046 af
Subcatchment P1: Paved Entrance	Runoff Area=0.285 ac 100.00% Impervious Runoff Depth>2.59"
Flow Length=243'	Tc=1.8 min CN=98 Runoff=0.90 cfs 0.062 af
Subcatchment P2: Parking	Runoff Area=6,367 sf 100.00% Impervious Runoff Depth>2.59"
Flow Length=82'	Slope=0.0243 '/' Tc=1.0 min CN=98 Runoff=0.47 cfs 0.032 af
Subcatchment P3: Pavement	Runoff Area=14,338 sf 77.21% Impervious Runoff Depth>2.22"
Flow Length=191'	Tc=2.3 min CN=94 Runoff=0.95 cfs 0.061 af
Subcatchment S1: Gravel/Meadow	Runoff Area=16,931 sf 0.00% Impervious Runoff Depth>1.62"
Flow Length=296'	Tc=8.7 min CN=87 Runoff=0.71 cfs 0.053 af
Subcatchment S2: Meadow/Woods	Runoff Area=11,286 sf 0.00% Impervious Runoff Depth>1.34"
Flow Length=200'	Tc=14.6 min CN=83 Runoff=0.33 cfs 0.029 af
Subcatchment S3: Meadow/Grassed	Runoff Area=12,944 sf 0.00% Impervious Runoff Depth>1.15"
Flow Length=362'	Tc=21.0 min CN=80 Runoff=0.28 cfs 0.028 af
Subcatchment S4: Meadow/Gravel	Runoff Area=9,951 sf 0.00% Impervious Runoff Depth>1.41"
Flow Length=227'	Tc=6.5 min CN=84 Runoff=0.39 cfs 0.027 af
Pond CB1: Catch Basin	Peak Elev=214.85' Inflow=0.77 cfs 0.074 af
12.0" Round Culvert n=0.011 L=100.0' S=0.0100 '/'	Outflow=0.77 cfs 0.074 af
Pond CB2: Catch Basin	Peak Elev=214.89' Inflow=0.90 cfs 0.062 af
12.0" Round Culvert n=0.011 L=100.0' S=0.0100 '/'	Outflow=0.90 cfs 0.062 af
Pond CB3: Catch Basin	Peak Elev=214.15' Inflow=2.11 cfs 0.167 af
12.0" Round Culvert n=0.011 L=30.0' S=0.0100 '/'	Outflow=2.11 cfs 0.167 af
Pond CB4: Catch Basin	Peak Elev=205.95' Inflow=0.95 cfs 0.061 af
12.0" Round Culvert n=0.012 L=51.3' S=0.0002 '/'	Outflow=0.95 cfs 0.061 af
Pond Po1: Detention Pond	Peak Elev=212.87' Storage=1,343 cf Inflow=2.60 cfs 0.220 af
	Outflow=1.49 cfs 0.217 af
Link SP1: Drainage Channel	Inflow=2.59 cfs 0.305 af
	Primary=2.59 cfs 0.305 af
Link SP2:	Inflow=0.33 cfs 0.029 af
	Primary=0.33 cfs 0.029 af

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

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Summary for Subcatchment B1: Roof

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.67 cfs @ 12.04 hrs, Volume= 0.046 af, Depth > 2.59"

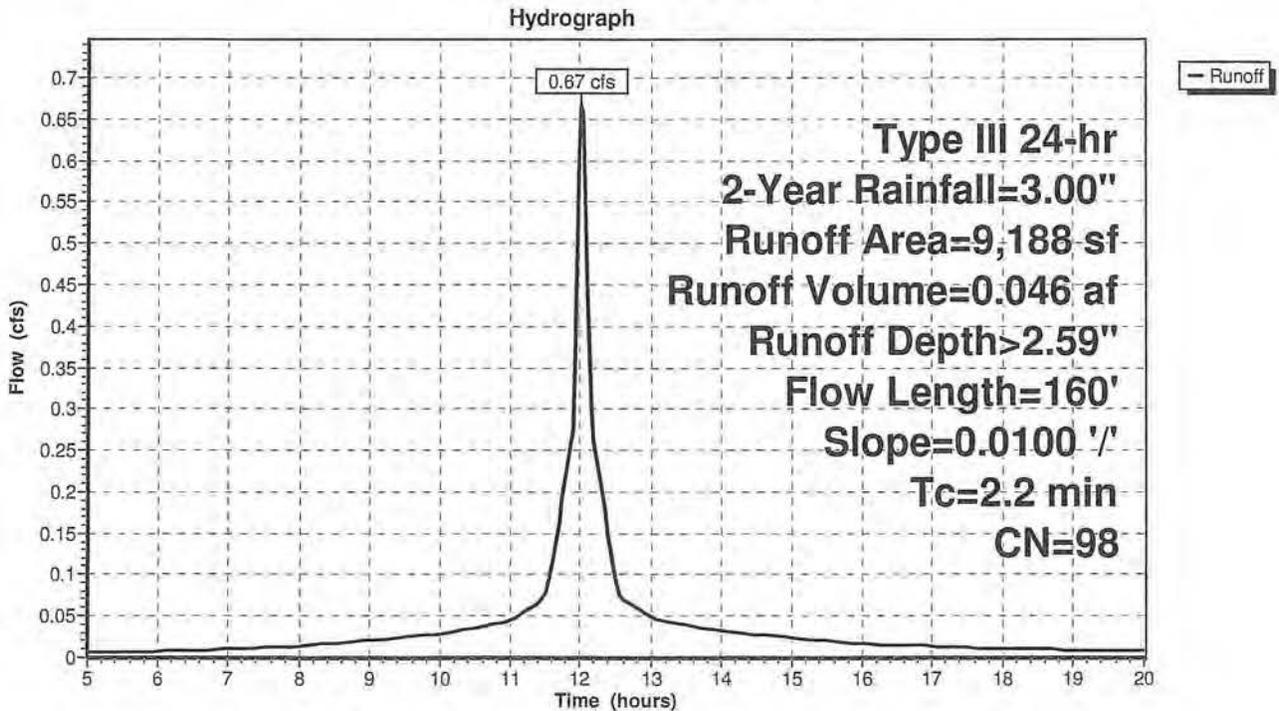
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, $dt=0.05$ hrs

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

Area (sf)	CN	Description
9,188	98	Roofs, HSG D
9,188		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	83	0.0100	0.97		Sheet Flow, A-B Sheet Smooth surfaces $n=0.011$ $P2=3.00"$
0.8	77	0.0100	1.61		Shallow Concentrated Flow, B-C Shallow Unpaved $K_v=16.1$ fps
2.2	160	Total			

Subcatchment B1: Roof



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Summary for Subcatchment P1: Paved Entrance

[49] Hint: Tc<2dt may require smaller dt

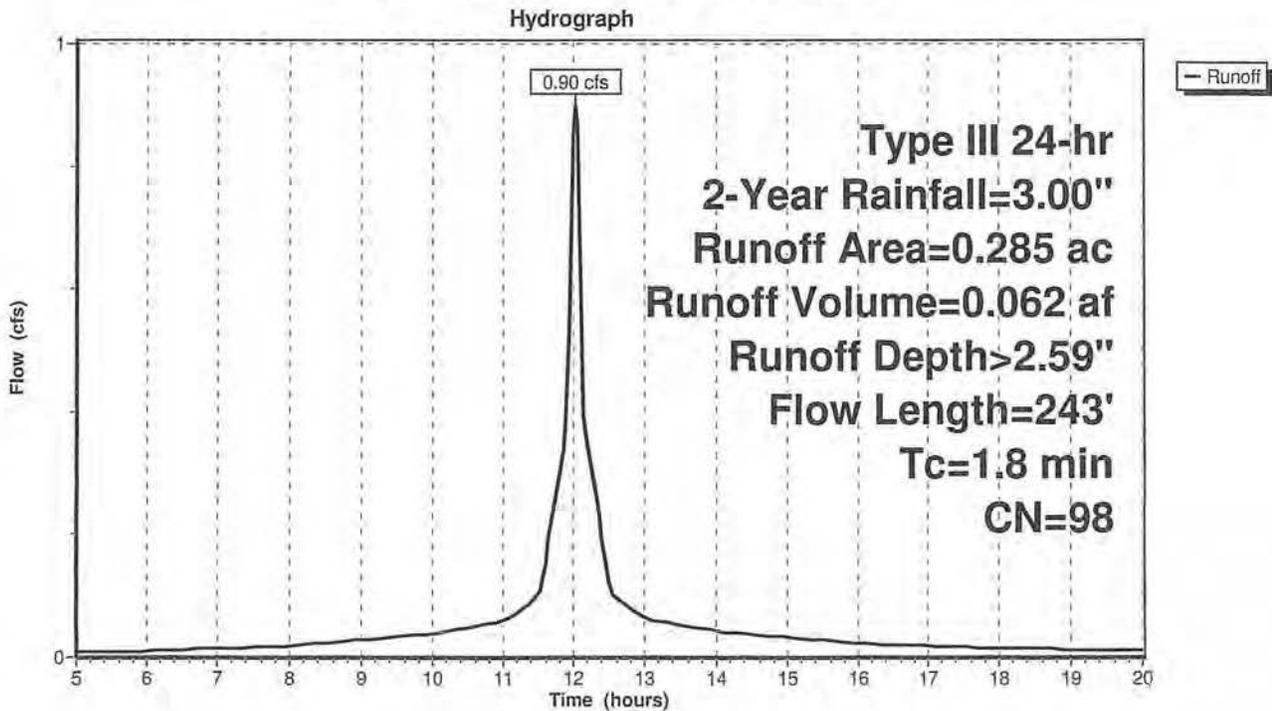
Runoff = 0.90 cfs @ 12.03 hrs, Volume= 0.062 af, Depth> 2.59"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.00"

Area (ac)	CN	Description
0.285	98	Paved parking, HSG D
0.285		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	60	0.0249	1.31		Sheet Flow, A-B Sheet Smooth surfaces n= 0.011 P2= 3.00"
0.4	83	0.0364	3.87		Shallow Concentrated Flow, B-C Shallow Paved Kv= 20.3 fps
0.6	100	0.0200	2.87		Shallow Concentrated Flow, Shallow C-D Paved Kv= 20.3 fps
1.8	243	Total			

Subcatchment P1: Paved Entrance



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Summary for Subcatchment P2: Parking

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.47 cfs @ 12.01 hrs, Volume= 0.032 af, Depth > 2.59"

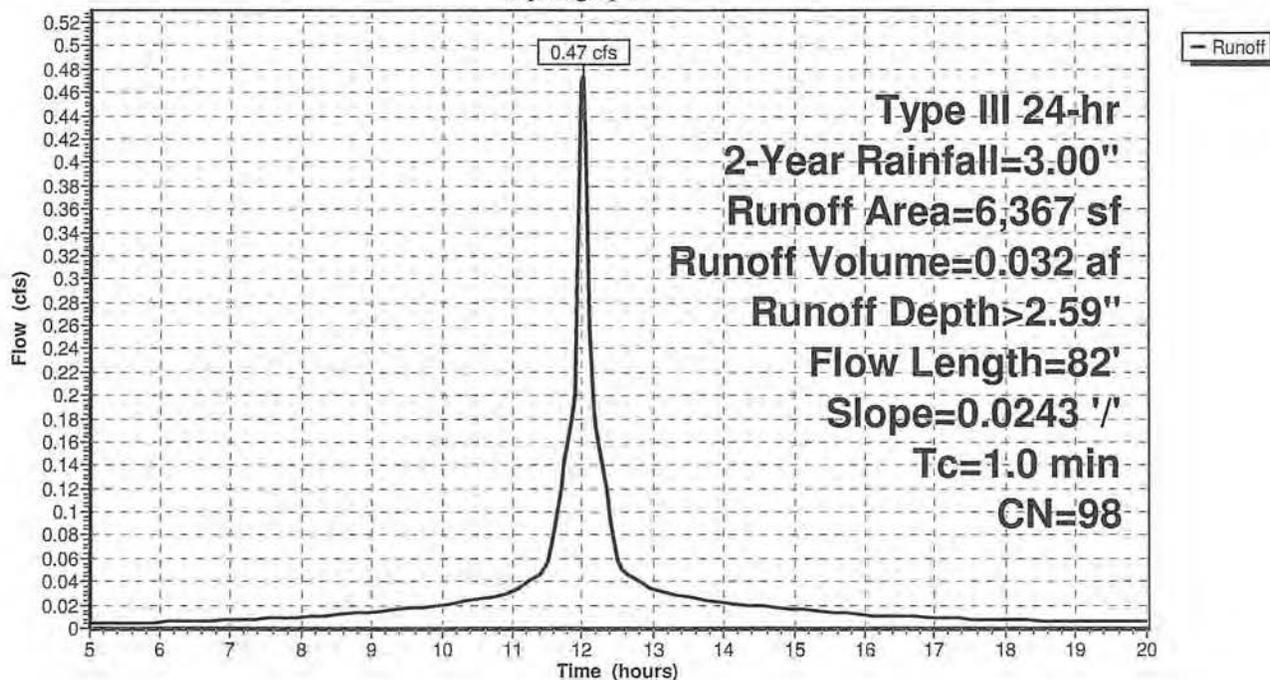
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, $dt = 0.05$ hrs
 Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
6,367	98	Paved parking, HSG D
6,367		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	82	0.0243	1.38		Sheet Flow, A-B Sheet Smooth surfaces n= 0.011 P2= 3.00"

Subcatchment P2: Parking

Hydrograph



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

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Summary for Subcatchment P3: Pavement

[49] Hint: $T_c < 2dt$ may require smaller dt

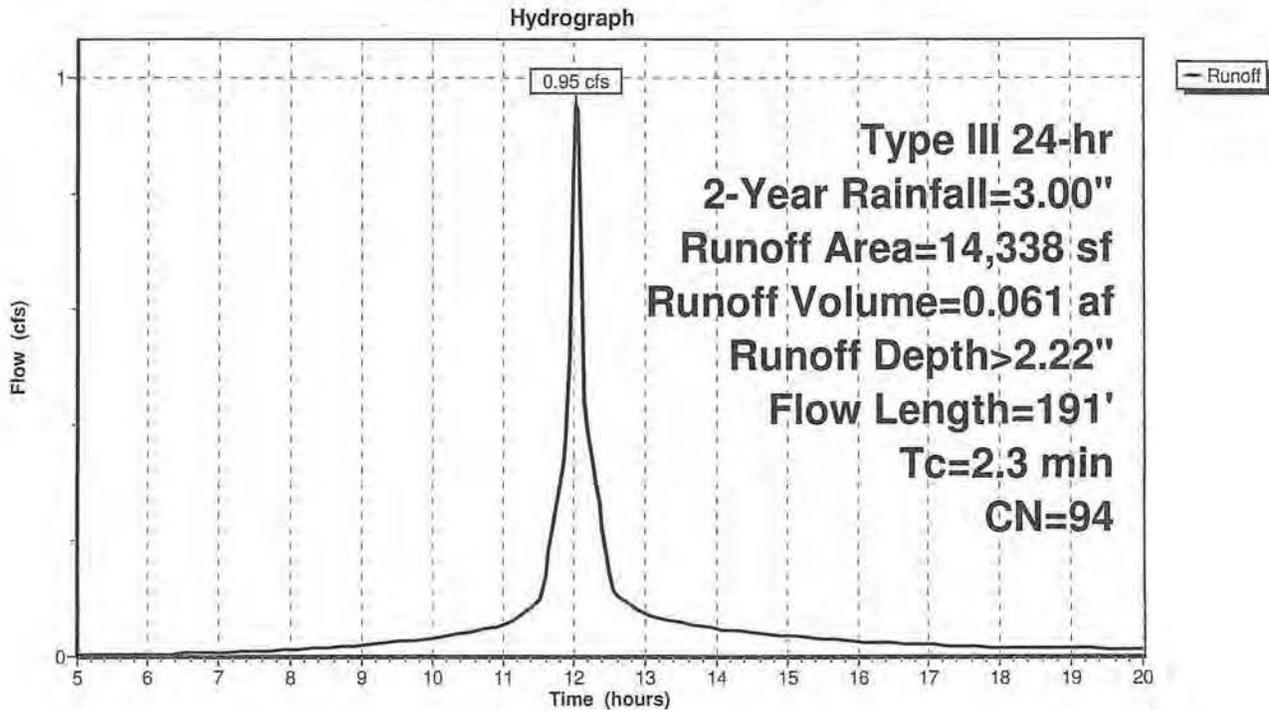
Runoff = 0.95 cfs @ 12.04 hrs, Volume= 0.061 af, Depth> 2.22"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
11,071	98	Paved roads w/curbs & sewers, HSG D
3,267	80	>75% Grass cover, Good, HSG D
14,338	94	Weighted Average
3,267		22.79% Pervious Area
11,071		77.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	104	0.0144	1.18		Sheet Flow, A-B SHEET Smooth surfaces n= 0.011 P2= 3.00"
0.8	87	0.0086	1.88		Shallow Concentrated Flow, B-C SHALLOW Paved Kv= 20.3 fps
2.3	191	Total			

Subcatchment P3: Pavement



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

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Summary for Subcatchment S1: Gravel/Meadow

Runoff = 0.71 cfs @ 12.12 hrs, Volume= 0.053 af, Depth> 1.62"

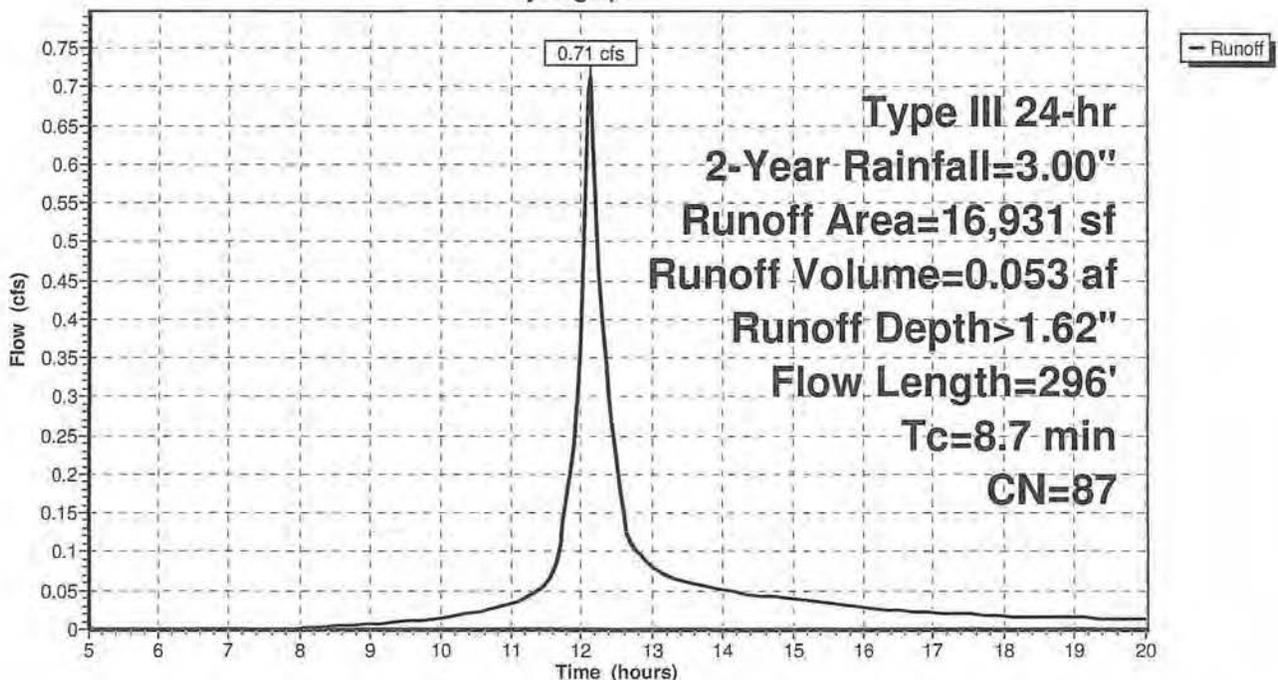
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
13,223	84	50-75% Grass cover, Fair, HSG D
3,708	96	Gravel surface, HSG D
16,931	87	Weighted Average
16,931		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	100	0.0651	0.26		Sheet Flow, A-B Sheet Grass: Short n= 0.150 P2= 3.00"
0.1	25	0.0813	2.85		Shallow Concentrated Flow, B-C Shallow Nearly Bare & Untilled Kv= 10.0 fps
0.8	81	0.0123	1.79		Shallow Concentrated Flow, C-D Shallow Unpaved Kv= 16.1 fps
1.5	90	0.0200	0.99		Shallow Concentrated Flow, D-E Shallow Short Grass Pasture Kv= 7.0 fps
8.7	296	Total			

Subcatchment S1: Gravel/Meadow

Hydrograph



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Summary for Subcatchment S2: Meadow/Woods

Runoff = 0.33 cfs @ 12.21 hrs, Volume= 0.029 af, Depth> 1.34"

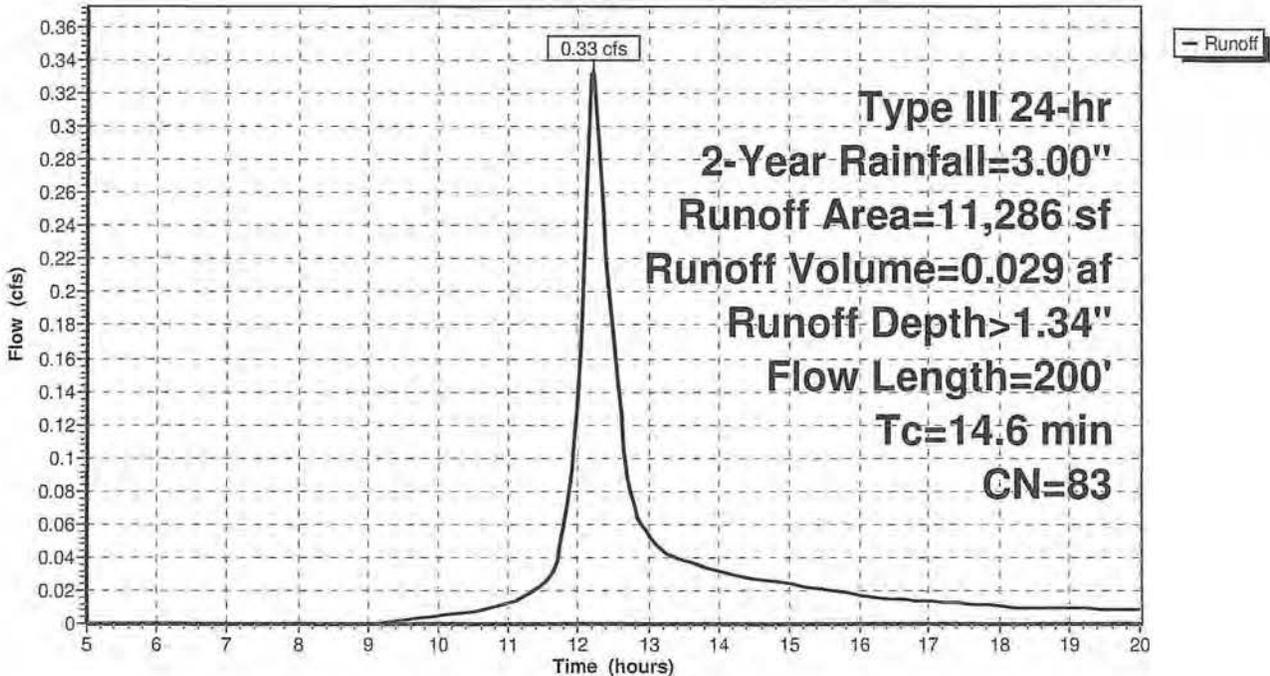
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
7,684	84	50-75% Grass cover, Fair, HSG D
3,602	82	Woods/grass comb., Fair, HSG D
11,286	83	Weighted Average
11,286		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0090	0.12		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.6	65	0.0340	1.84		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.1	35	0.2194	4.68		Shallow Concentrated Flow, C-D SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
14.6	200	Total			

Subcatchment S2: Meadow/Woods

Hydrograph



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Summary for Subcatchment S3: Meadow/Grassed Waterway

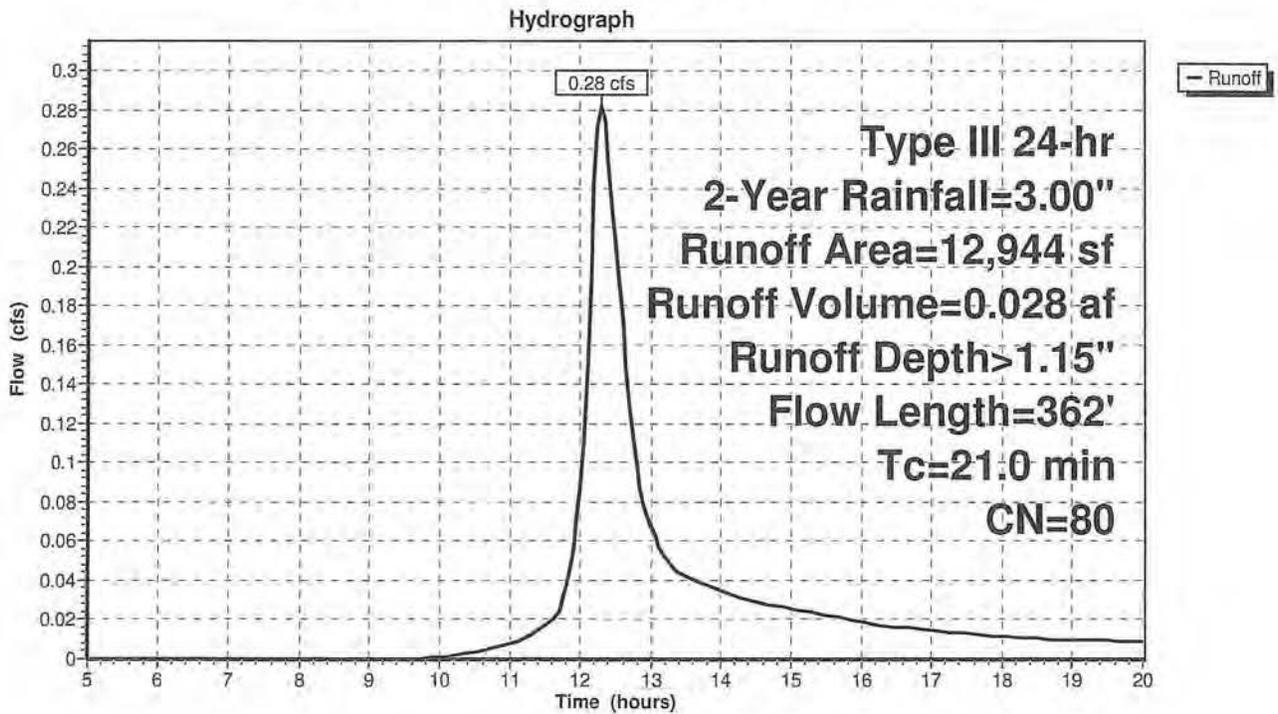
Runoff = 0.28 cfs @ 12.30 hrs, Volume= 0.028 af, Depth> 1.15"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
1,282	79	Woods, Fair, HSG D
11,662	80	>75% Grass cover, Good, HSG D
12,944	80	Weighted Average
12,944		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6	125	0.0200	0.12		Sheet Flow, A-B Sheet Grass: Dense n= 0.240 P2= 3.00"
3.4	237	0.0059	1.15		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
21.0	362	Total			

Subcatchment S3: Meadow/Grassed Waterway



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

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Summary for Subcatchment S4: Meadow/Gravel

Runoff = 0.39 cfs @ 12.10 hrs, Volume= 0.027 af, Depth> 1.41"

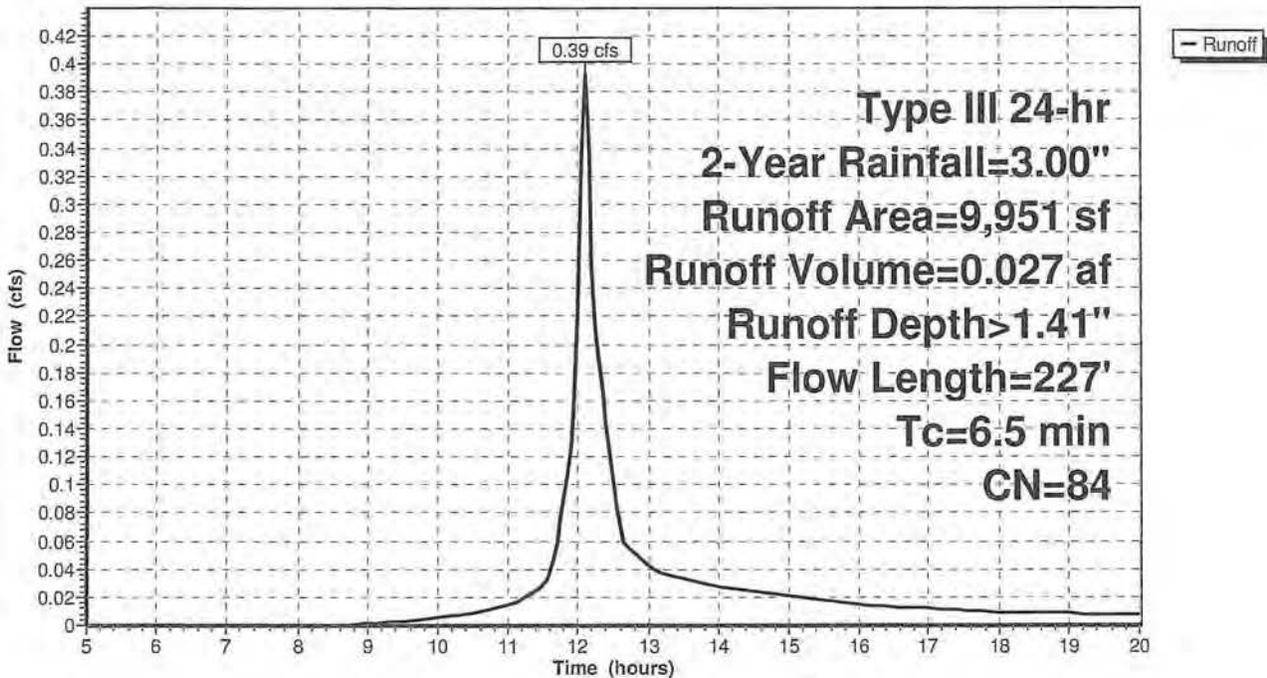
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-Year Rainfall=3.00"

Area (sf)	CN	Description
9,951	84	50-75% Grass cover, Fair, HSG D
9,951		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	100	0.1052	0.32		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
1.3	114	0.0220	1.48		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.0	13	0.5169	10.78		Shallow Concentrated Flow, C-D SHALLOW Grassed Waterway Kv= 15.0 fps
6.5	227	Total			

Subcatchment S4: Meadow/Gravel

Hydrograph



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Summary for Pond CB1: Catch Basin

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 214.85' (Flood elevation advised)

Inflow Area = 0.508 ac, 41.51% Impervious, Inflow Depth > 1.75" for 2-Year event
Inflow = 0.77 cfs @ 12.04 hrs, Volume= 0.074 af
Outflow = 0.77 cfs @ 12.04 hrs, Volume= 0.074 af, Atten= 0%, Lag= 0.0 min
Primary = 0.77 cfs @ 12.04 hrs, Volume= 0.074 af

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

Peak Elev= 214.85' @ 12.04 hrs

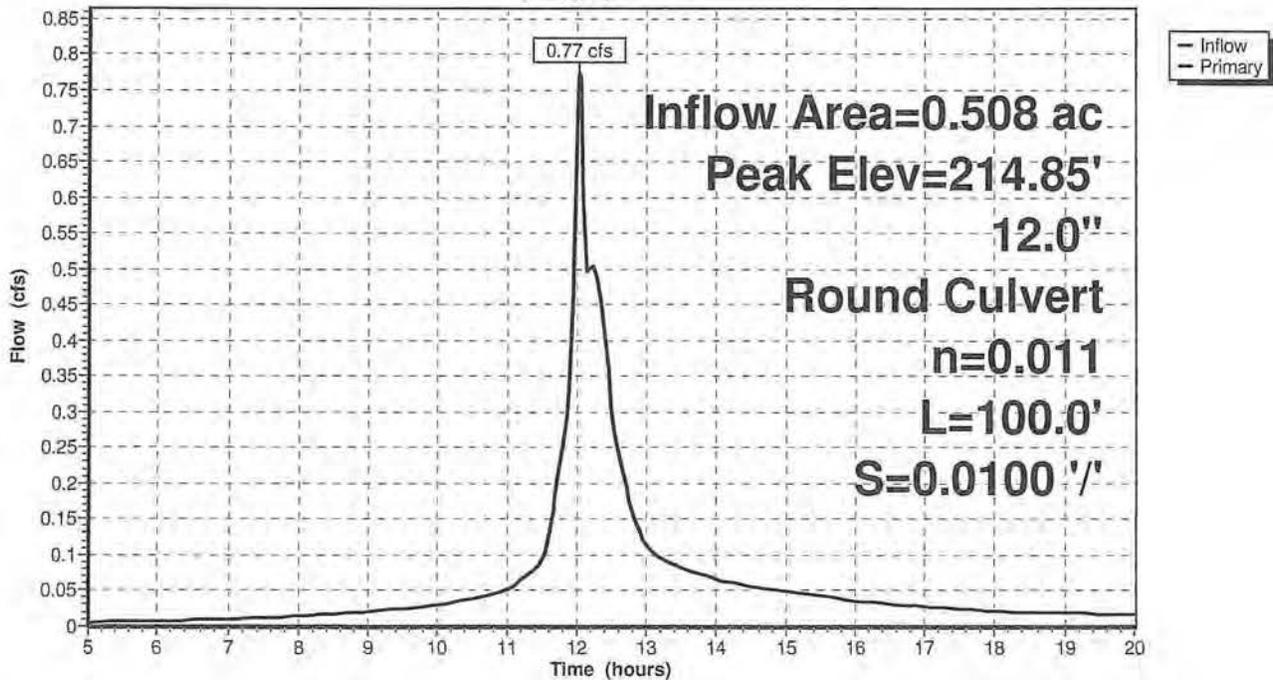
Device	Routing	Invert	Outlet Devices
#1	Primary	214.40'	12.0" Round Culvert L= 100.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 214.40' / 213.40' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=0.75 cfs @ 12.04 hrs HW=214.84' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 0.75 cfs @ 2.26 fps)

Pond CB1: Catch Basin

Hydrograph



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

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Summary for Pond CB2: Catch Basin

[82] Warning: Early inflow requires earlier time span
[57] Hint: Peaked at 214.89' (Flood elevation advised)

Inflow Area = 0.285 ac, 100.00% Impervious, Inflow Depth > 2.59" for 2-Year event
Inflow = 0.90 cfs @ 12.03 hrs, Volume= 0.062 af
Outflow = 0.90 cfs @ 12.03 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.0 min
Primary = 0.90 cfs @ 12.03 hrs, Volume= 0.062 af

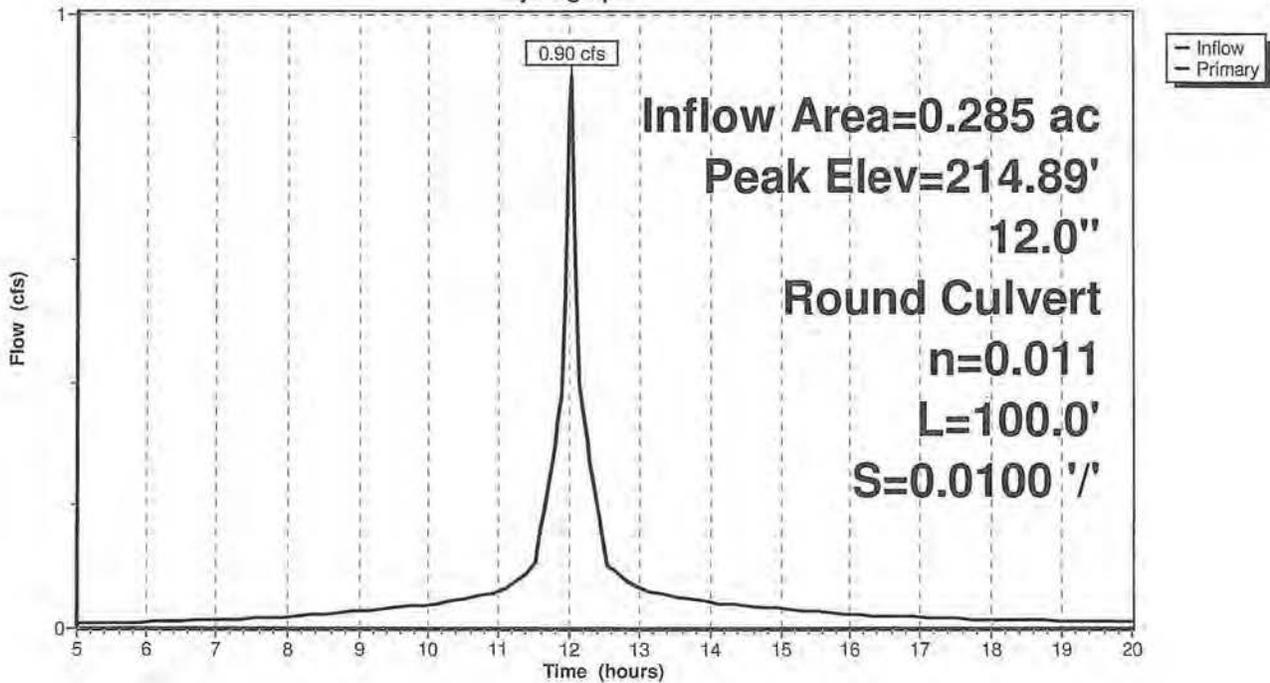
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 214.89' @ 12.03 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	214.40'	12.0" Round Culvert L= 100.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 214.40' / 213.40' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=0.86 cfs @ 12.03 hrs HW=214.87' (Free Discharge)
↑-1=Culvert (Inlet Controls 0.86 cfs @ 2.34 fps)

Pond CB2: Catch Basin

Hydrograph



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

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Summary for Pond CB3: Catch Basin

- [82] Warning: Early inflow requires earlier time span
- [57] Hint: Peaked at 214.15' (Flood elevation advised)
- [79] Warning: Submerged Pond CB1 Primary device # 1 OUTLET by 0.73'
- [79] Warning: Submerged Pond CB2 Primary device # 1 OUTLET by 0.73'

Inflow Area = 0.939 ac, 68.36% Impervious, Inflow Depth > 2.13" for 2-Year event
 Inflow = 2.11 cfs @ 12.03 hrs, Volume= 0.167 af
 Outflow = 2.11 cfs @ 12.03 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.11 cfs @ 12.03 hrs, Volume= 0.167 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 214.15' @ 12.03 hrs

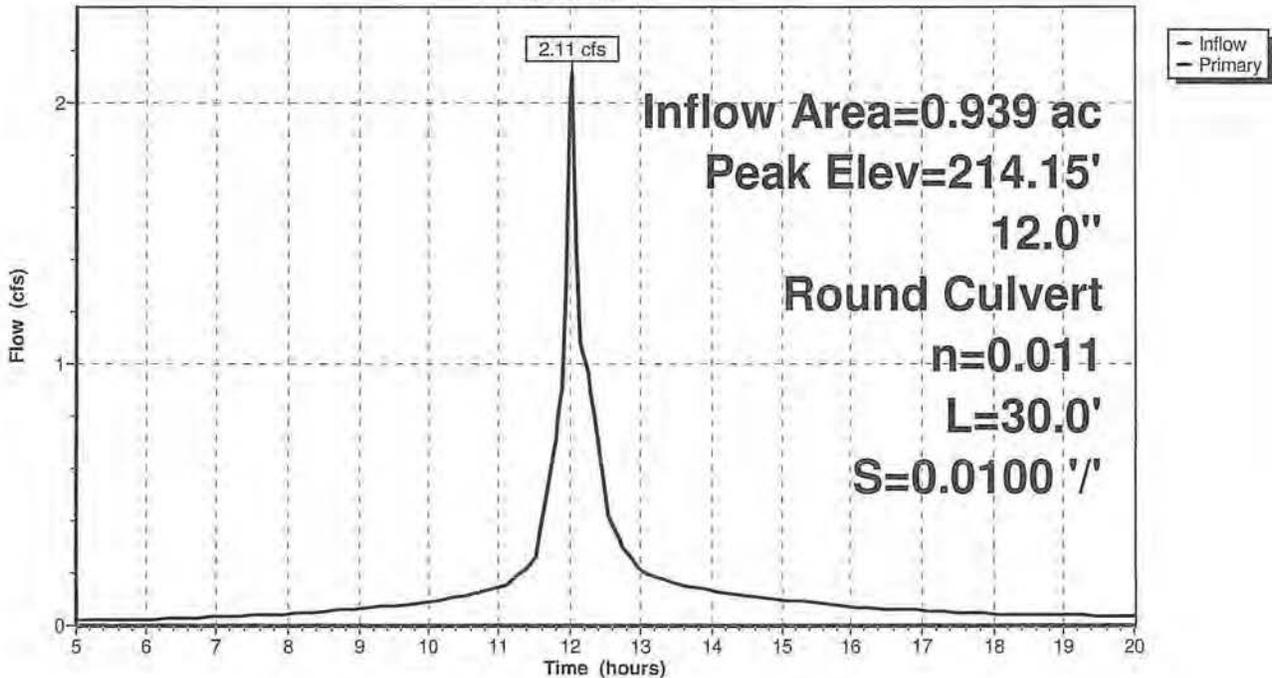
Device	Routing	Invert	Outlet Devices
#1	Primary	213.30'	12.0" Round Culvert L= 30.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 213.30' / 213.00' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=2.03 cfs @ 12.03 hrs HW=214.13' (Free Discharge)

↑1=Culvert (Barrel Controls 2.03 cfs @ 3.97 fps)

Pond CB3: Catch Basin

Hydrograph



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

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Summary for Pond CB4: Catch Basin

[82] Warning: Early inflow requires earlier time span
[57] Hint: Peaked at 205.95' (Flood elevation advised)

Inflow Area = 0.329 ac, 77.21% Impervious, Inflow Depth > 2.22" for 2-Year event
Inflow = 0.95 cfs @ 12.04 hrs, Volume= 0.061 af
Outflow = 0.95 cfs @ 12.04 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min
Primary = 0.95 cfs @ 12.04 hrs, Volume= 0.061 af

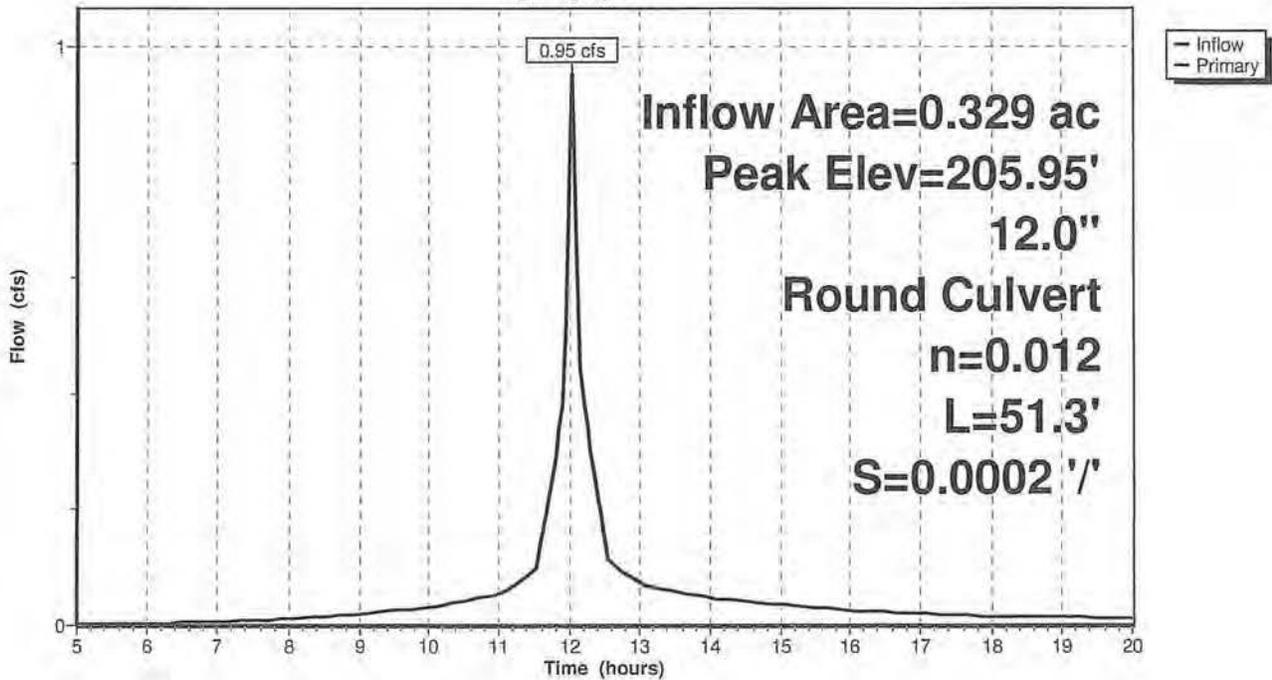
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 205.95' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	12.0" Round Culvert L= 51.3' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.20' S= 0.0002 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf

Primary OutFlow Max=0.92 cfs @ 12.04 hrs HW=205.93' (Free Discharge)
↑=Culvert (Barrel Controls 0.92 cfs @ 2.10 fps)

Pond CB4: Catch Basin

Hydrograph



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

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Summary for Pond Po1: Detention Pond

[82] Warning: Early inflow requires earlier time span

Inflow Area = 1.328 ac, 48.35% Impervious, Inflow Depth > 1.98" for 2-Year event
Inflow = 2.60 cfs @ 12.04 hrs, Volume= 0.220 af
Outflow = 1.49 cfs @ 12.23 hrs, Volume= 0.217 af, Atten= 43%, Lag= 11.5 min
Primary = 1.49 cfs @ 12.23 hrs, Volume= 0.217 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 212.87' @ 12.23 hrs Surf.Area= 2,161 sf Storage= 1,343 cf
Flood Elev= 215.50' Surf.Area= 5,000 sf Storage= 10,971 cf

Plug-Flow detention time= 17.7 min calculated for 0.217 af (99% of inflow)
Center-of-Mass det. time= 13.3 min (772.6 - 759.3)

Volume	Invert	Avail.Storage	Storage Description
#1	212.00'	10,971 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.00	920	0	0
213.00	2,344	1,632	1,632
214.00	3,423	2,884	4,516
215.00	4,659	4,041	8,557
215.50	5,000	2,415	10,971

Device	Routing	Invert	Outlet Devices
#1	Primary	212.00'	16.0" Round Culvert L= 120.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 212.00' / 206.00' S= 0.0500 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.40 sf
#2	Device 1	212.00'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600
#3	Device 1	213.80'	30.0" W x 8.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=1.49 cfs @ 12.23 hrs HW=212.87' (Free Discharge)

- 1=Culvert (Passes 1.49 cfs of 3.07 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 1.49 cfs @ 3.79 fps)
- 3=Orifice/Grate (Controls 0.00 cfs)

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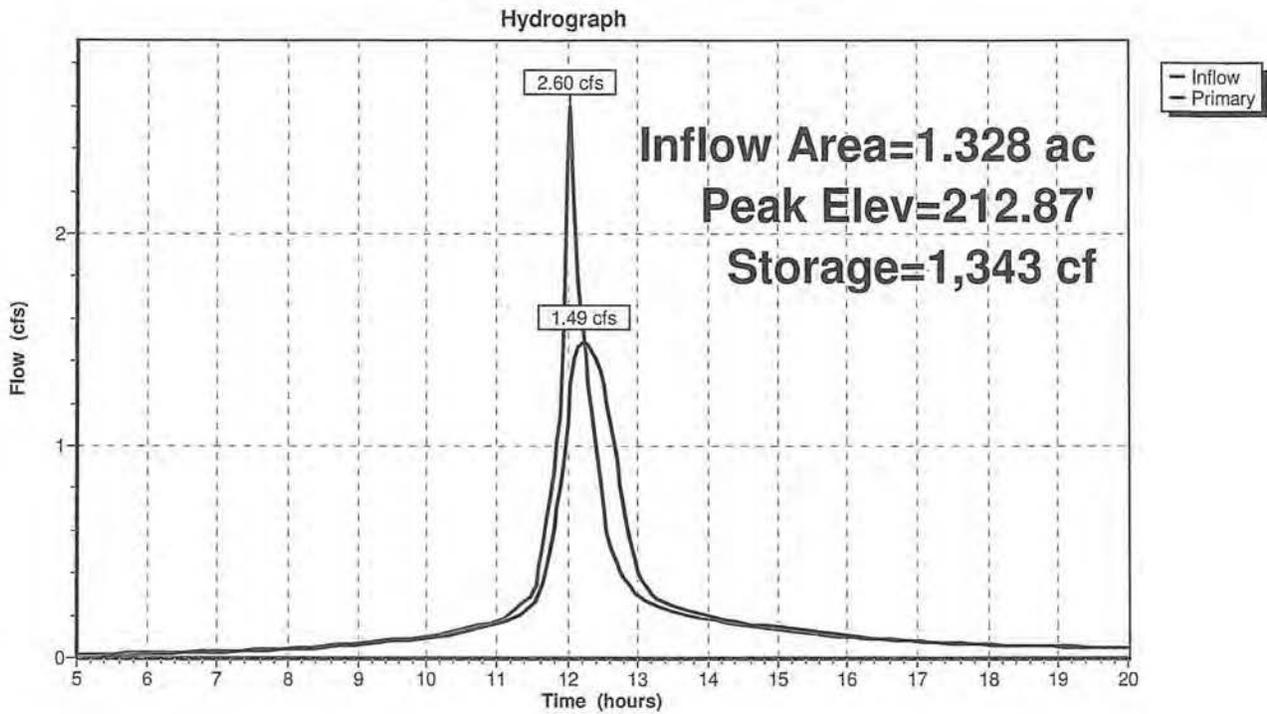
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Pond Po1: Detention Pond



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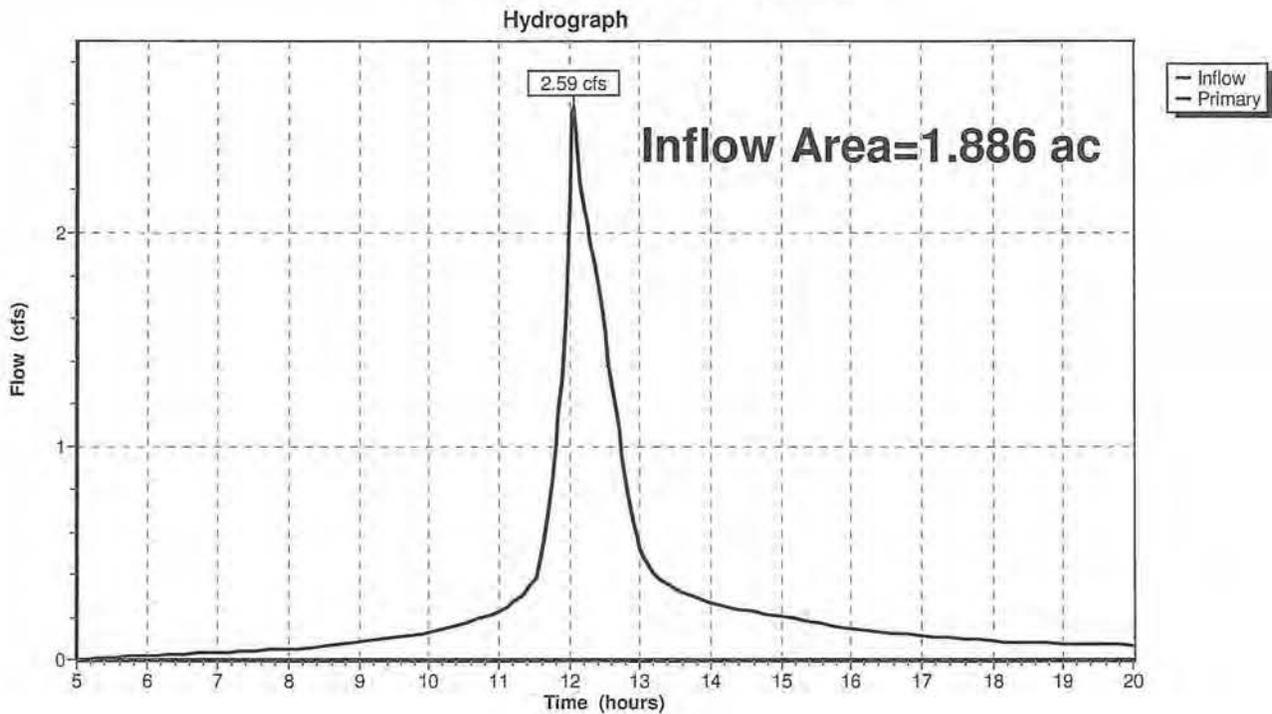
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Summary for Link SP1: Drainage Channel

Inflow Area = 1.886 ac, 47.53% Impervious, Inflow Depth > 1.94" for 2-Year event
Inflow = 2.59 cfs @ 12.07 hrs, Volume= 0.305 af
Primary = 2.59 cfs @ 12.07 hrs, Volume= 0.305 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP1: Drainage Channel



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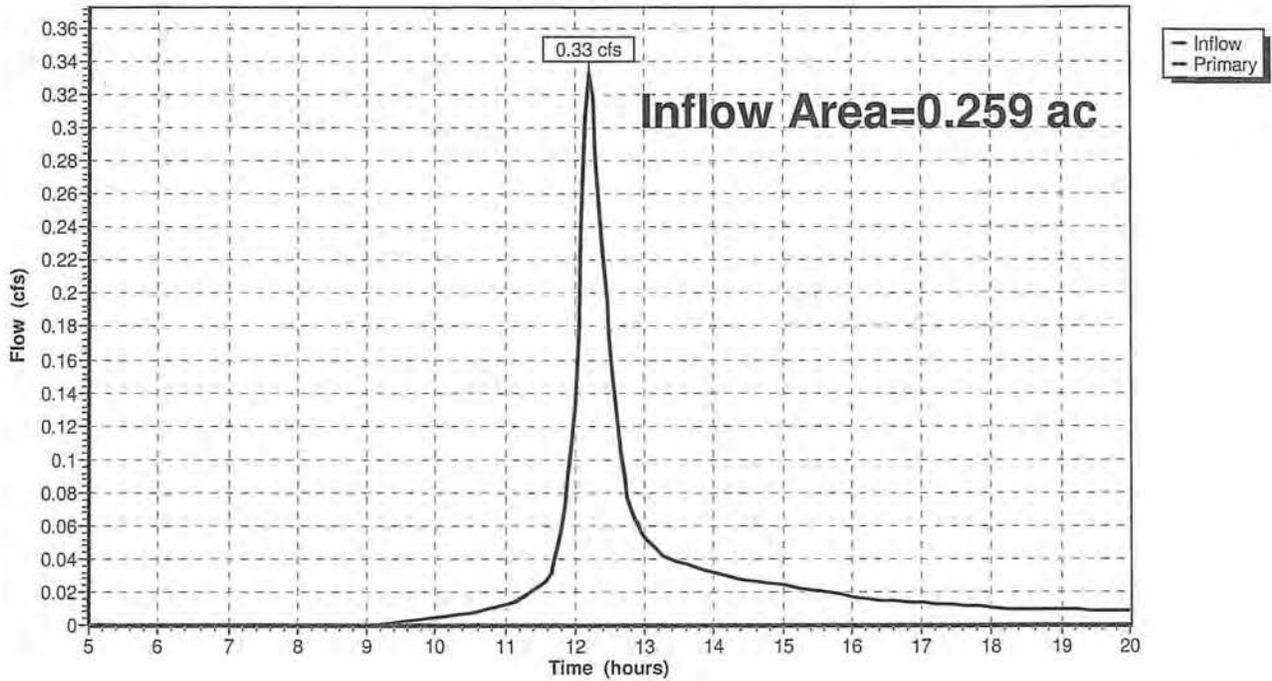
Summary for Link SP2:

Inflow Area = 0.259 ac, 0.00% Impervious, Inflow Depth > 1.34" for 2-Year event
Inflow = 0.33 cfs @ 12.21 hrs, Volume= 0.029 af
Primary = 0.33 cfs @ 12.21 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP2:

Hydrograph



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Type III 24-hr 10-Year Rainfall=4.60"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment B1: Roof	Runoff Area=9,188 sf 100.00% Impervious Runoff Depth>4.05" Flow Length=160' Slope=0.0100 '/ Tc=2.2 min CN=98 Runoff=1.03 cfs 0.071 af
Subcatchment P1: Paved Entrance	Runoff Area=0.285 ac 100.00% Impervious Runoff Depth>4.05" Flow Length=243' Tc=1.8 min CN=98 Runoff=1.39 cfs 0.096 af
Subcatchment P2: Parking	Runoff Area=6,367 sf 100.00% Impervious Runoff Depth>4.05" Flow Length=82' Slope=0.0243 '/ Tc=1.0 min CN=98 Runoff=0.73 cfs 0.049 af
Subcatchment P3: Pavement	Runoff Area=14,338 sf 77.21% Impervious Runoff Depth>3.70" Flow Length=191' Tc=2.3 min CN=94 Runoff=1.54 cfs 0.101 af
Subcatchment S1: Gravel/Meadow	Runoff Area=16,931 sf 0.00% Impervious Runoff Depth>3.00" Flow Length=296' Tc=8.7 min CN=87 Runoff=1.29 cfs 0.097 af
Subcatchment S2: Meadow/Woods	Runoff Area=11,286 sf 0.00% Impervious Runoff Depth>2.63" Flow Length=200' Tc=14.6 min CN=83 Runoff=0.65 cfs 0.057 af
Subcatchment S3: Meadow/Grassed	Runoff Area=12,944 sf 0.00% Impervious Runoff Depth>2.36" Flow Length=362' Tc=21.0 min CN=80 Runoff=0.58 cfs 0.059 af
Subcatchment S4: Meadow/Gravel	Runoff Area=9,951 sf 0.00% Impervious Runoff Depth>2.72" Flow Length=227' Tc=6.5 min CN=84 Runoff=0.75 cfs 0.052 af
Pond CB1: Catch Basin	Peak Elev=215.00' Inflow=1.28 cfs 0.130 af 12.0" Round Culvert n=0.011 L=100.0' S=0.0100 '/ Outflow=1.28 cfs 0.130 af
Pond CB2: Catch Basin	Peak Elev=215.03' Inflow=1.39 cfs 0.096 af 12.0" Round Culvert n=0.011 L=100.0' S=0.0100 '/ Outflow=1.39 cfs 0.096 af
Pond CB3: Catch Basin	Peak Elev=214.57' Inflow=3.35 cfs 0.275 af 12.0" Round Culvert n=0.011 L=30.0' S=0.0100 '/ Outflow=3.35 cfs 0.275 af
Pond CB4: Catch Basin	Peak Elev=206.18' Inflow=1.54 cfs 0.101 af 12.0" Round Culvert n=0.012 L=51.3' S=0.0002 '/ Outflow=1.54 cfs 0.101 af
Pond Po1: Detention Pond	Peak Elev=213.45' Storage=2,789 cf Inflow=4.26 cfs 0.373 af Outflow=2.07 cfs 0.370 af
Link SP1: Drainage Channel	Inflow=3.92 cfs 0.523 af Primary=3.92 cfs 0.523 af
Link SP2:	Inflow=0.65 cfs 0.057 af Primary=0.65 cfs 0.057 af

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Type III 24-hr 10-Year Rainfall=4.60"

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Summary for Subcatchment B1: Roof

[49] Hint: $T_c < 2dt$ may require smaller dt

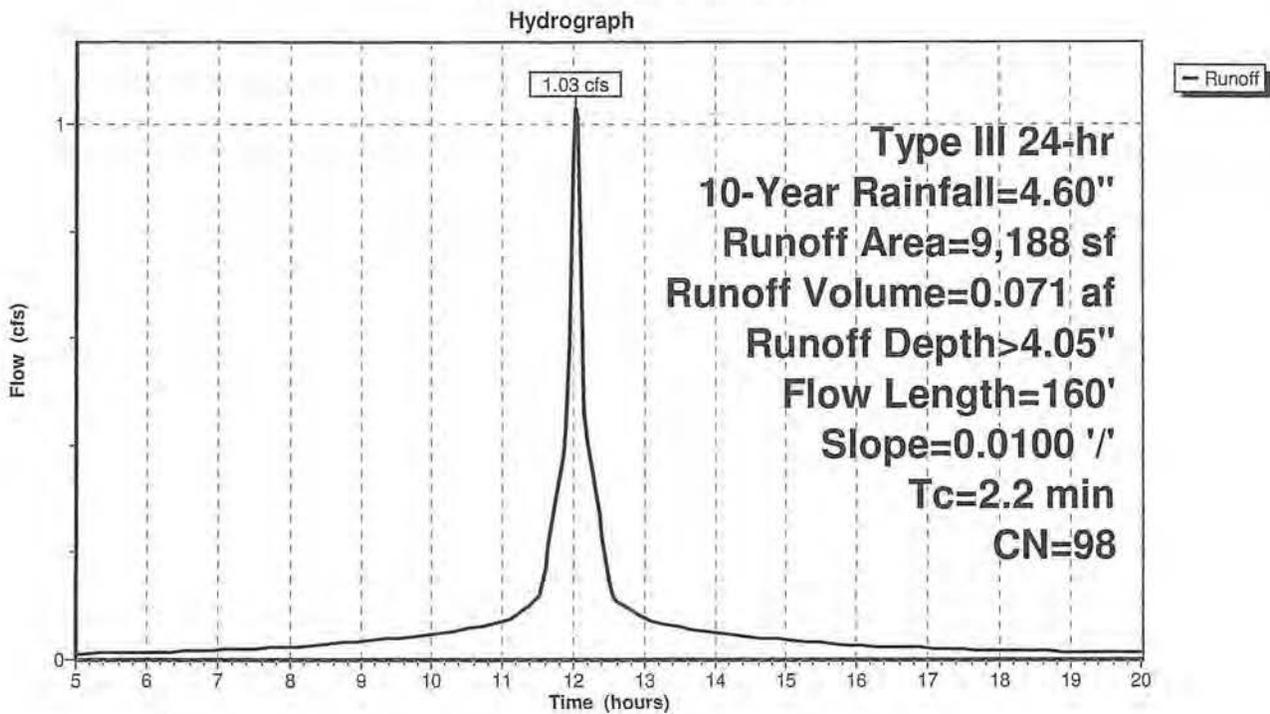
Runoff = 1.03 cfs @ 12.04 hrs, Volume= 0.071 af, Depth > 4.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
9,188	98	Roofs, HSG D
9,188		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	83	0.0100	0.97		Sheet Flow, A-B Sheet Smooth surfaces n= 0.011 P2= 3.00"
0.8	77	0.0100	1.61		Shallow Concentrated Flow, B-C Shallow Unpaved Kv= 16.1 fps
2.2	160	Total			

Subcatchment B1: Roof



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Summary for Subcatchment P1: Paved Entrance

[49] Hint: $T_c < 2dt$ may require smaller dt

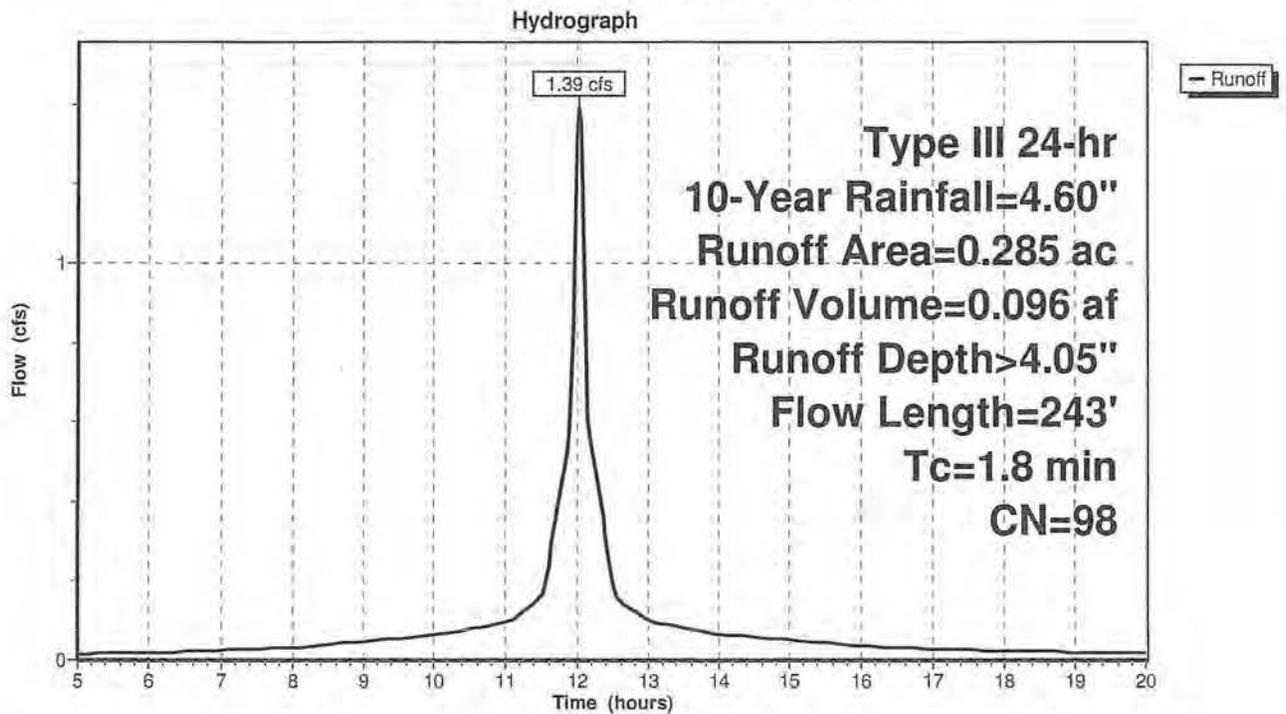
Runoff = 1.39 cfs @ 12.03 hrs, Volume= 0.096 af, Depth > 4.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, $dt= 0.05$ hrs
 Type III 24-hr 10-Year Rainfall=4.60"

Area (ac)	CN	Description
0.285	98	Paved parking, HSG D
0.285		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	60	0.0249	1.31		Sheet Flow, A-B Sheet Smooth surfaces $n= 0.011$ $P2= 3.00"$
0.4	83	0.0364	3.87		Shallow Concentrated Flow, B-C Shallow Paved $K_v= 20.3$ fps
0.6	100	0.0200	2.87		Shallow Concentrated Flow, Shallow C-D Paved $K_v= 20.3$ fps
1.8	243	Total			

Subcatchment P1: Paved Entrance



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Summary for Subcatchment P2: Parking

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.73 cfs @ 12.01 hrs, Volume= 0.049 af, Depth> 4.05"

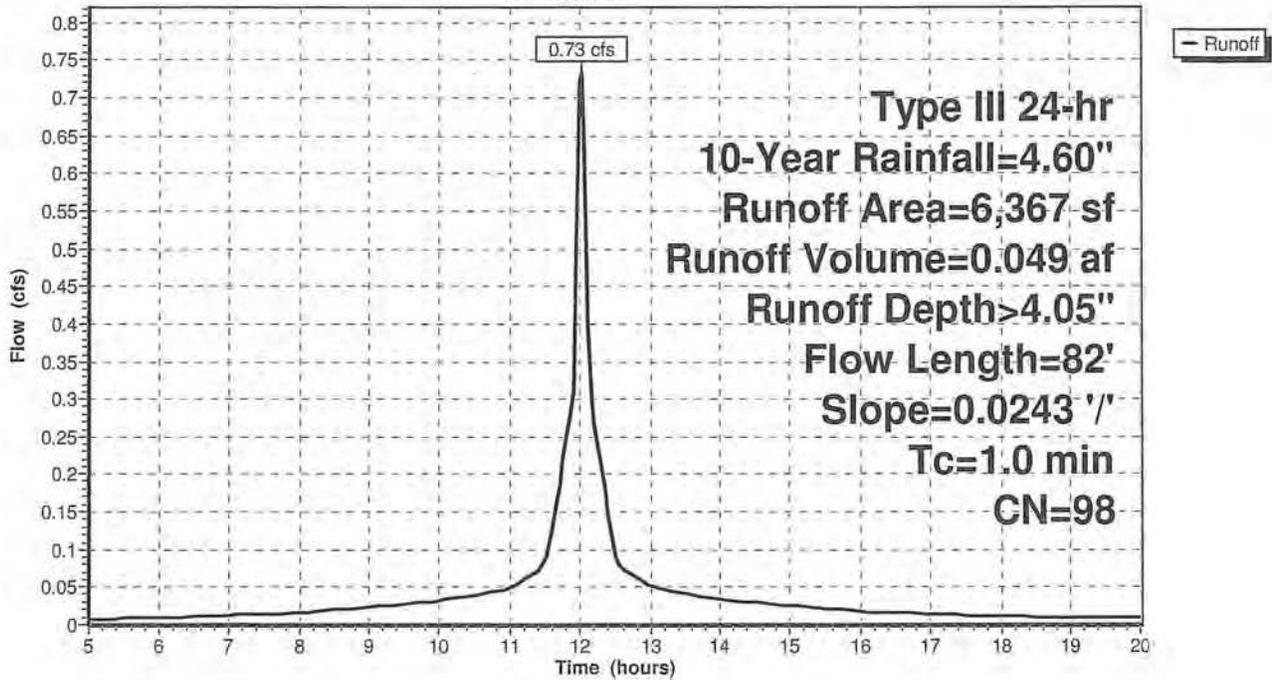
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
6,367	98	Paved parking, HSG D
6,367		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	82	0.0243	1.38		Sheet Flow, A-B Sheet Smooth surfaces n= 0.011 P2= 3.00"

Subcatchment P2: Parking

Hydrograph



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Type III 24-hr 10-Year Rainfall=4.60"

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Summary for Subcatchment P3: Pavement

[49] Hint: $T_c < 2dt$ may require smaller dt

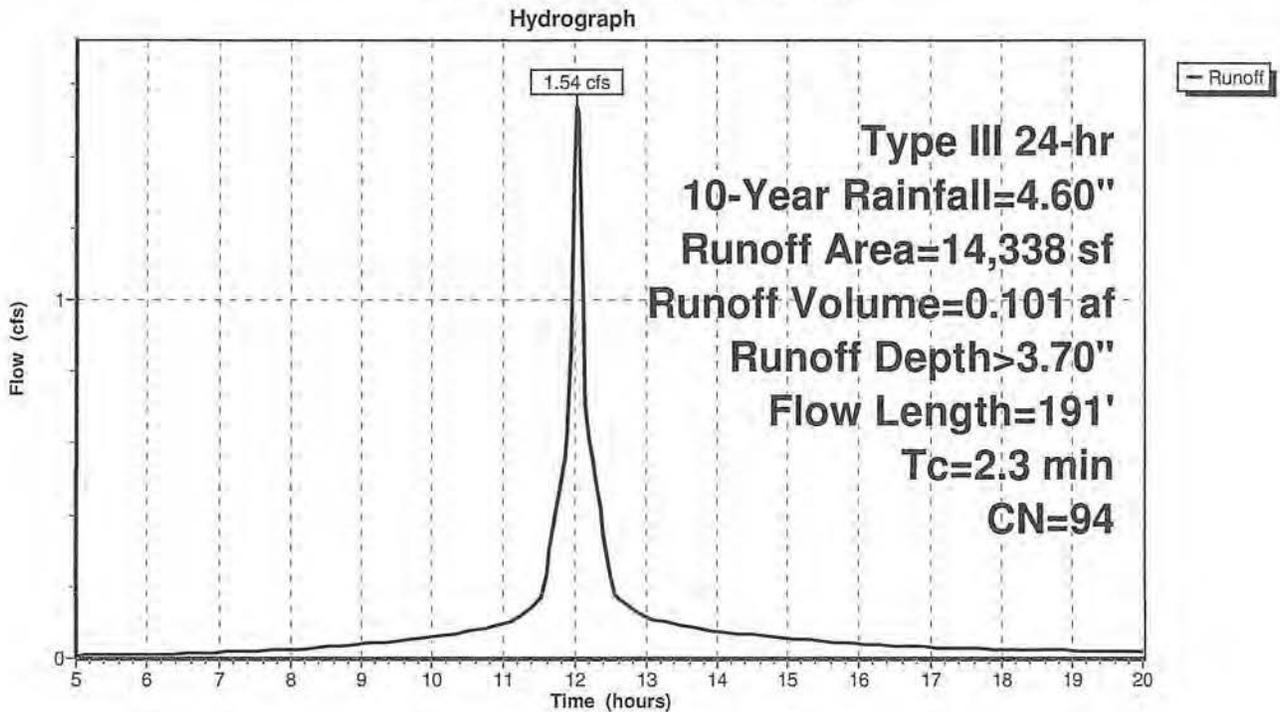
Runoff = 1.54 cfs @ 12.04 hrs, Volume= 0.101 af, Depth > 3.70"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, $dt= 0.05$ hrs
Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
11,071	98	Paved roads w/curbs & sewers, HSG D
3,267	80	>75% Grass cover, Good, HSG D
14,338	94	Weighted Average
3,267		22.79% Pervious Area
11,071		77.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	104	0.0144	1.18		Sheet Flow, A-B SHEET Smooth surfaces $n= 0.011$ $P2= 3.00"$
0.8	87	0.0086	1.88		Shallow Concentrated Flow, B-C SHALLOW Paved $K_v= 20.3$ fps
2.3	191	Total			

Subcatchment P3: Pavement



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Summary for Subcatchment S1: Gravel/Meadow

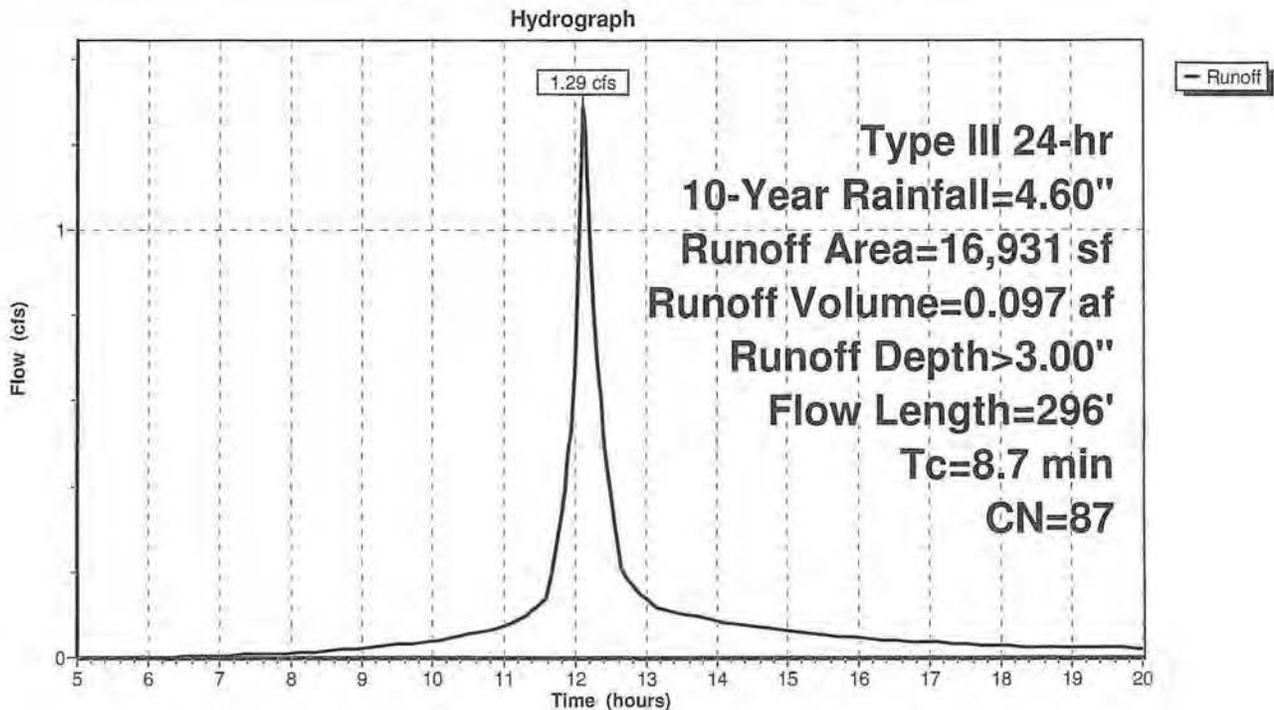
Runoff = 1.29 cfs @ 12.12 hrs, Volume= 0.097 af, Depth> 3.00"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
13,223	84	50-75% Grass cover, Fair, HSG D
3,708	96	Gravel surface, HSG D
16,931	87	Weighted Average
16,931		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	100	0.0651	0.26		Sheet Flow, A-B Sheet Grass: Short n= 0.150 P2= 3.00"
0.1	25	0.0813	2.85		Shallow Concentrated Flow, B-C Shallow Nearly Bare & Untilled Kv= 10.0 fps
0.8	81	0.0123	1.79		Shallow Concentrated Flow, C-D Shallow Unpaved Kv= 16.1 fps
1.5	90	0.0200	0.99		Shallow Concentrated Flow, D-E Shallow Short Grass Pasture Kv= 7.0 fps
8.7	296	Total			

Subcatchment S1: Gravel/Meadow



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Summary for Subcatchment S2: Meadow/Woods

Runoff = 0.65 cfs @ 12.20 hrs, Volume= 0.057 af, Depth> 2.63"

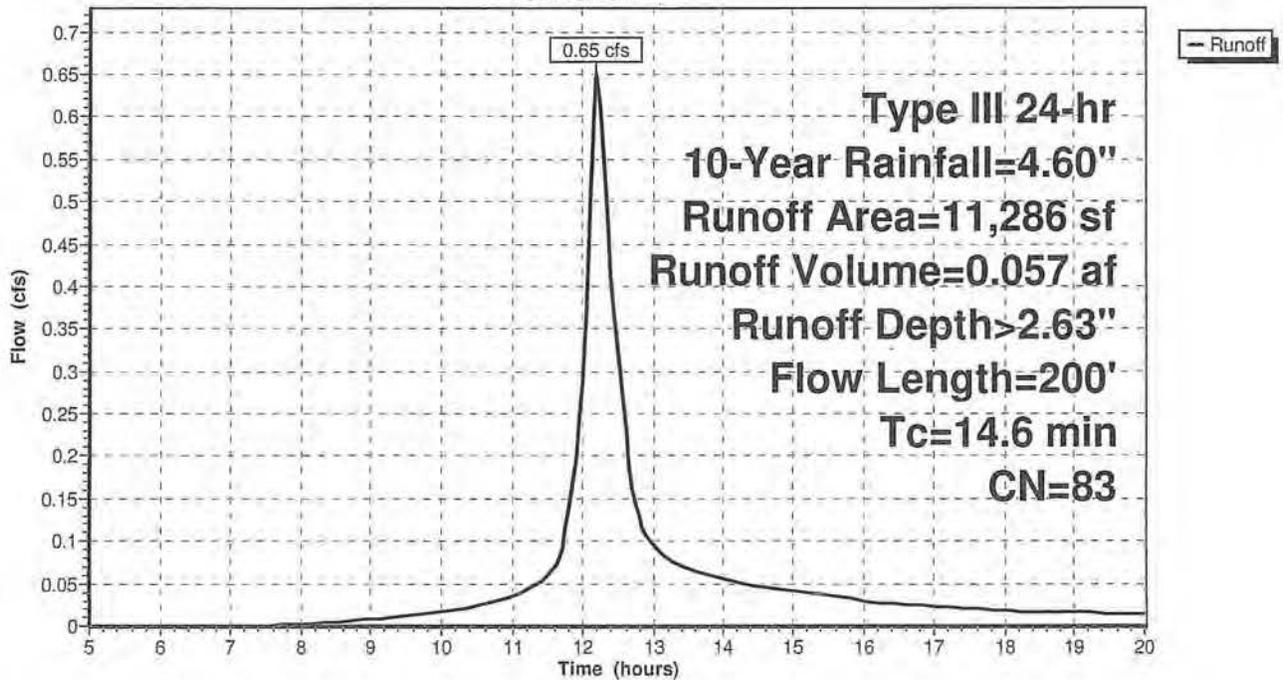
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
7,684	84	50-75% Grass cover, Fair, HSG D
3,602	82	Woods/grass comb., Fair, HSG D
11,286	83	Weighted Average
11,286		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0090	0.12		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.6	65	0.0340	1.84		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.1	35	0.2194	4.68		Shallow Concentrated Flow, C-D SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
14.6	200	Total			

Subcatchment S2: Meadow/Woods

Hydrograph



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Summary for Subcatchment S3: Meadow/Grassed Waterway

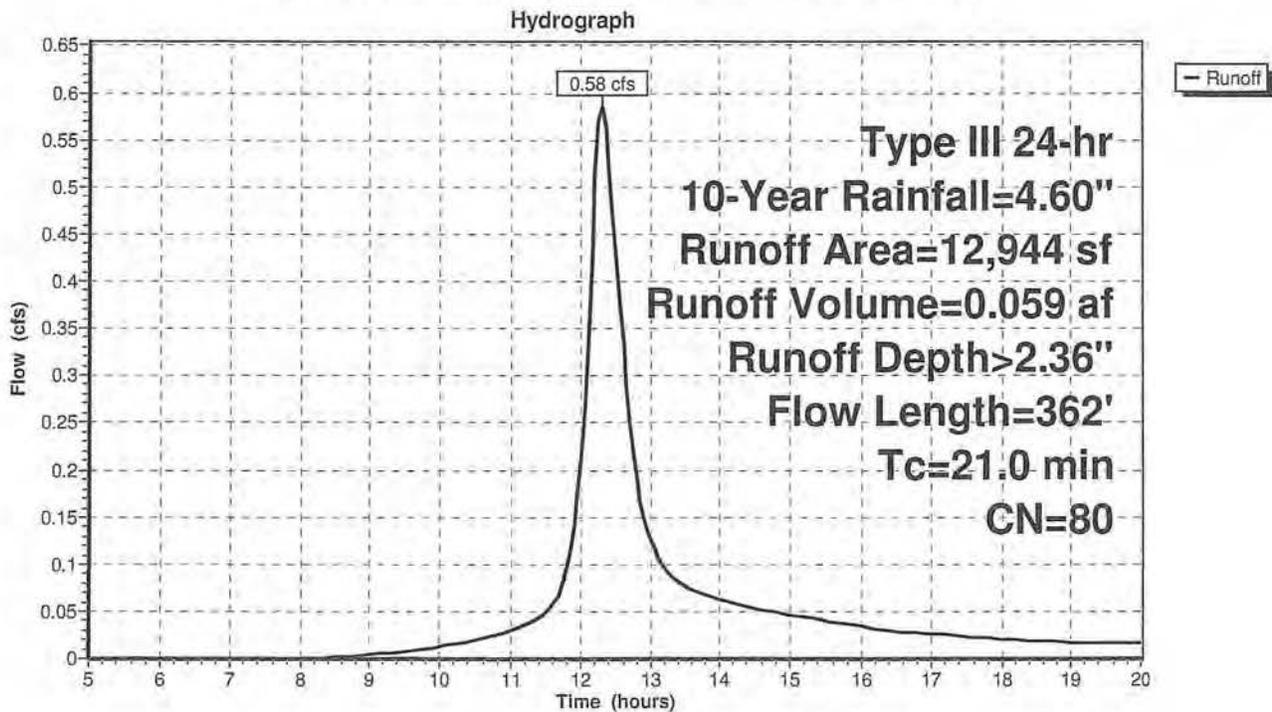
Runoff = 0.58 cfs @ 12.29 hrs, Volume= 0.059 af, Depth> 2.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
1,282	79	Woods, Fair, HSG D
11,662	80	>75% Grass cover, Good, HSG D
12,944	80	Weighted Average
12,944		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6	125	0.0200	0.12		Sheet Flow, A-B Sheet Grass: Dense n= 0.240 P2= 3.00"
3.4	237	0.0059	1.15		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
21.0	362	Total			

Subcatchment S3: Meadow/Grassed Waterway



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Summary for Subcatchment S4: Meadow/Gravel

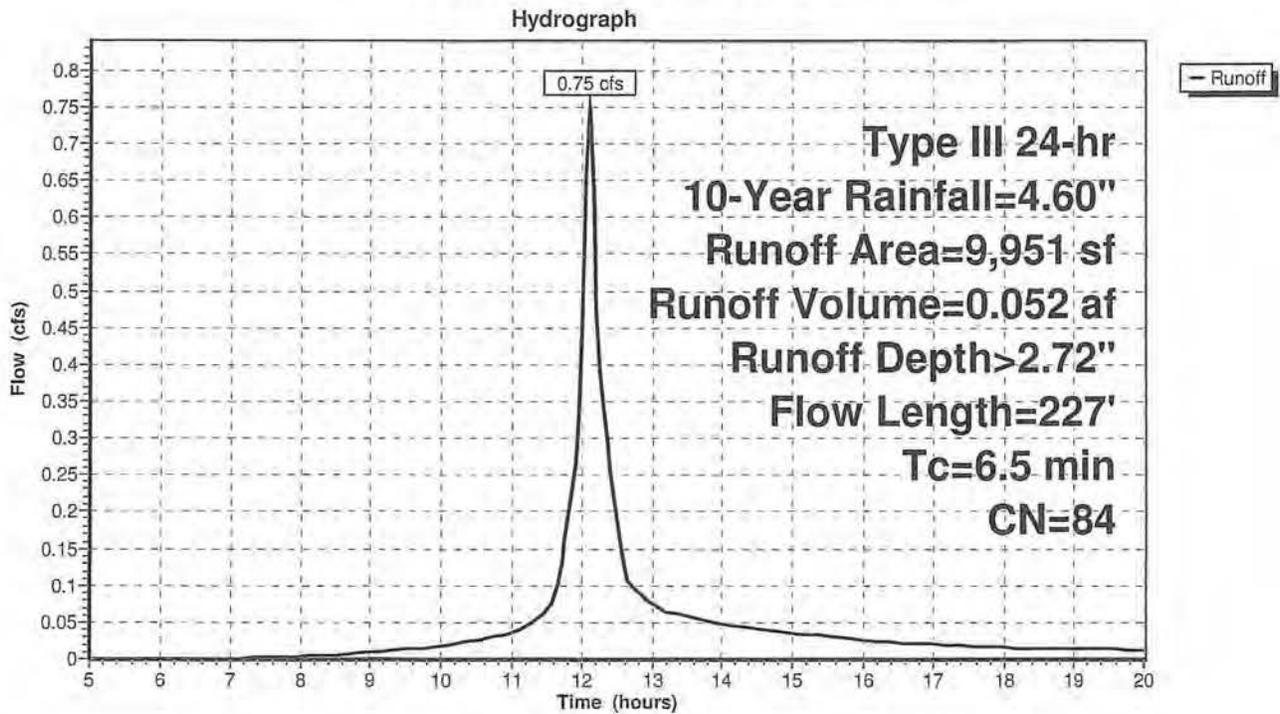
Runoff = 0.75 cfs @ 12.10 hrs, Volume= 0.052 af, Depth> 2.72"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.60"

Area (sf)	CN	Description
9,951	84	50-75% Grass cover, Fair, HSG D
9,951		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	100	0.1052	0.32		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
1.3	114	0.0220	1.48		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.0	13	0.5169	10.78		Shallow Concentrated Flow, C-D SHALLOW Grassed Waterway Kv= 15.0 fps
6.5	227	Total			

Subcatchment S4: Meadow/Gravel



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Summary for Pond CB1: Catch Basin

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 215.00' (Flood elevation advised)

Inflow Area = 0.508 ac, 41.51% Impervious, Inflow Depth > 3.07" for 10-Year event
Inflow = 1.28 cfs @ 12.04 hrs, Volume= 0.130 af
Outflow = 1.28 cfs @ 12.04 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min
Primary = 1.28 cfs @ 12.04 hrs, Volume= 0.130 af

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

Peak Elev= 215.00' @ 12.04 hrs

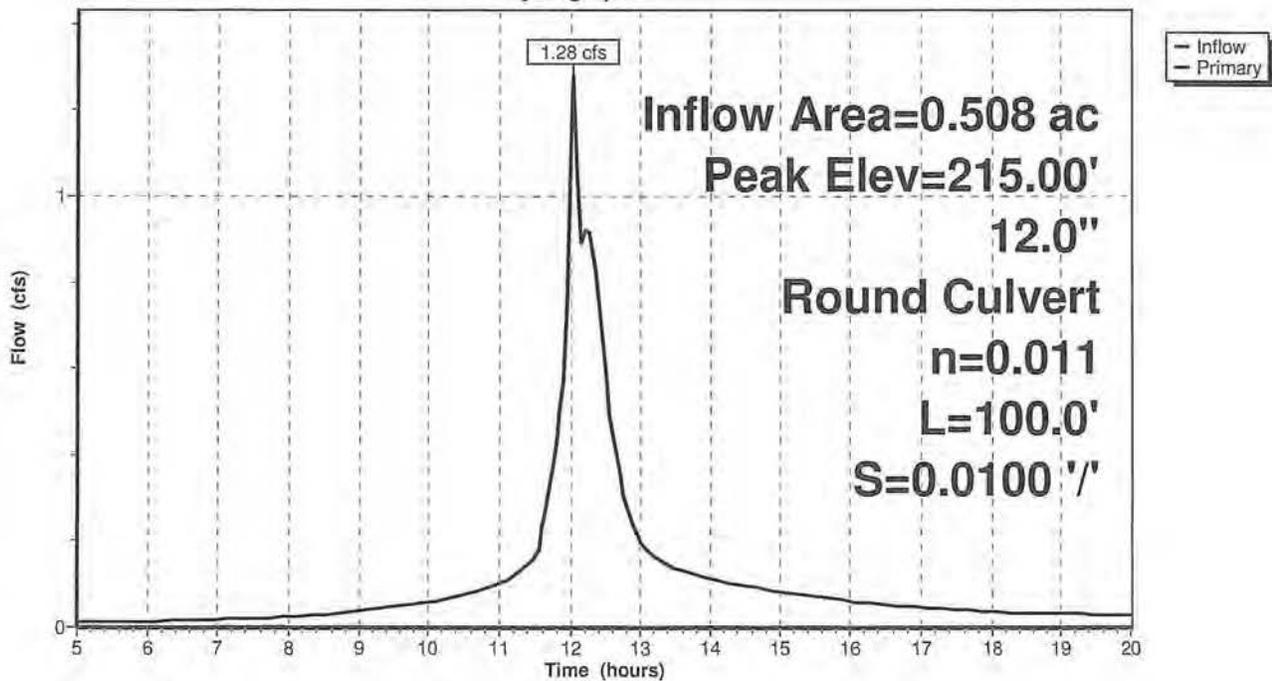
Device	Routing	Invert	Outlet Devices
#1	Primary	214.40'	12.0" Round Culvert L= 100.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 214.40' / 213.40' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=1.26 cfs @ 12.04 hrs HW=214.99' (Free Discharge)

↑ 1=Culvert (Inlet Controls 1.26 cfs @ 2.61 fps)

Pond CB1: Catch Basin

Hydrograph



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Summary for Pond CB2: Catch Basin

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 215.03' (Flood elevation advised)

Inflow Area = 0.285 ac, 100.00% Impervious, Inflow Depth > 4.05" for 10-Year event
 Inflow = 1.39 cfs @ 12.03 hrs, Volume= 0.096 af
 Outflow = 1.39 cfs @ 12.03 hrs, Volume= 0.096 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.39 cfs @ 12.03 hrs, Volume= 0.096 af

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

Peak Elev= 215.03' @ 12.03 hrs

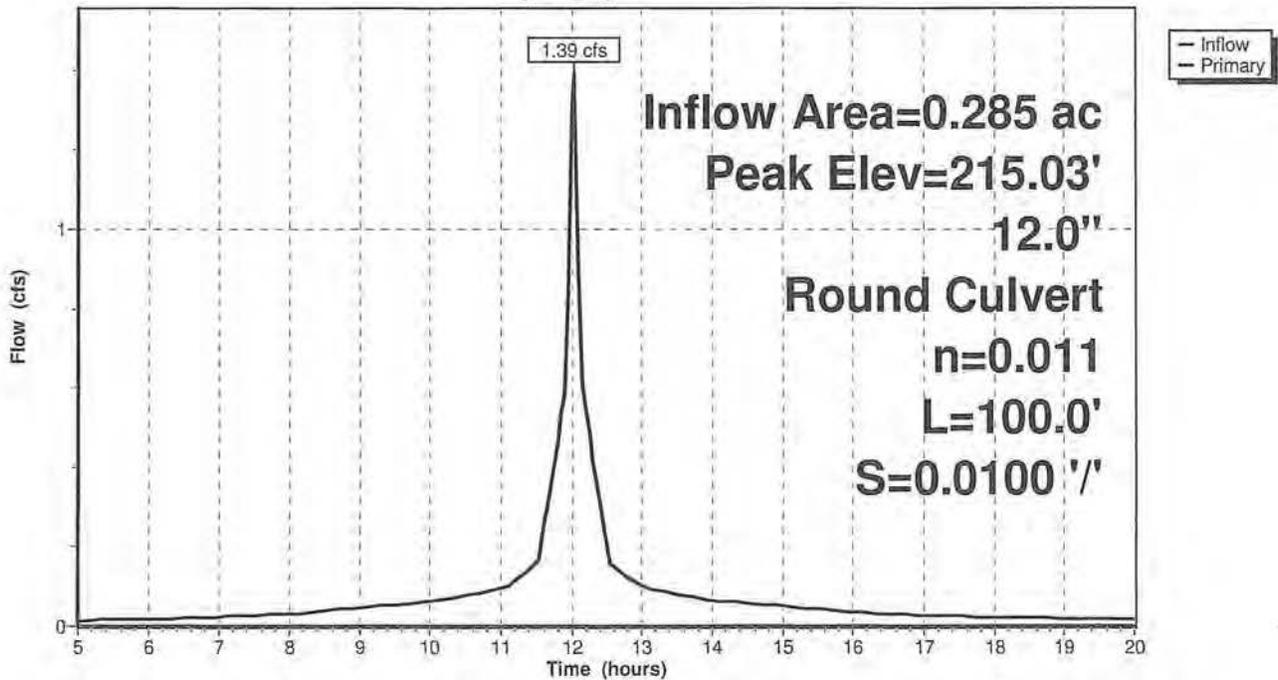
Device	Routing	Invert	Outlet Devices
#1	Primary	214.40'	12.0" Round Culvert L= 100.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 214.40' / 213.40' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=1.33 cfs @ 12.03 hrs HW=215.01' (Free Discharge)

↑1=Culvert (Inlet Controls 1.33 cfs @ 2.66 fps)

Pond CB2: Catch Basin

Hydrograph



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Summary for Pond CB3: Catch Basin

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 214.57' (Flood elevation advised)

[79] Warning: Submerged Pond CB1 Primary device # 1 INLET by 0.14'

[79] Warning: Submerged Pond CB2 Primary device # 1 INLET by 0.14'

Inflow Area = 0.939 ac, 68.36% Impervious, Inflow Depth > 3.52" for 10-Year event
Inflow = 3.35 cfs @ 12.03 hrs, Volume= 0.275 af
Outflow = 3.35 cfs @ 12.03 hrs, Volume= 0.275 af, Atten= 0%, Lag= 0.0 min
Primary = 3.35 cfs @ 12.03 hrs, Volume= 0.275 af

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

Peak Elev= 214.57' @ 12.03 hrs

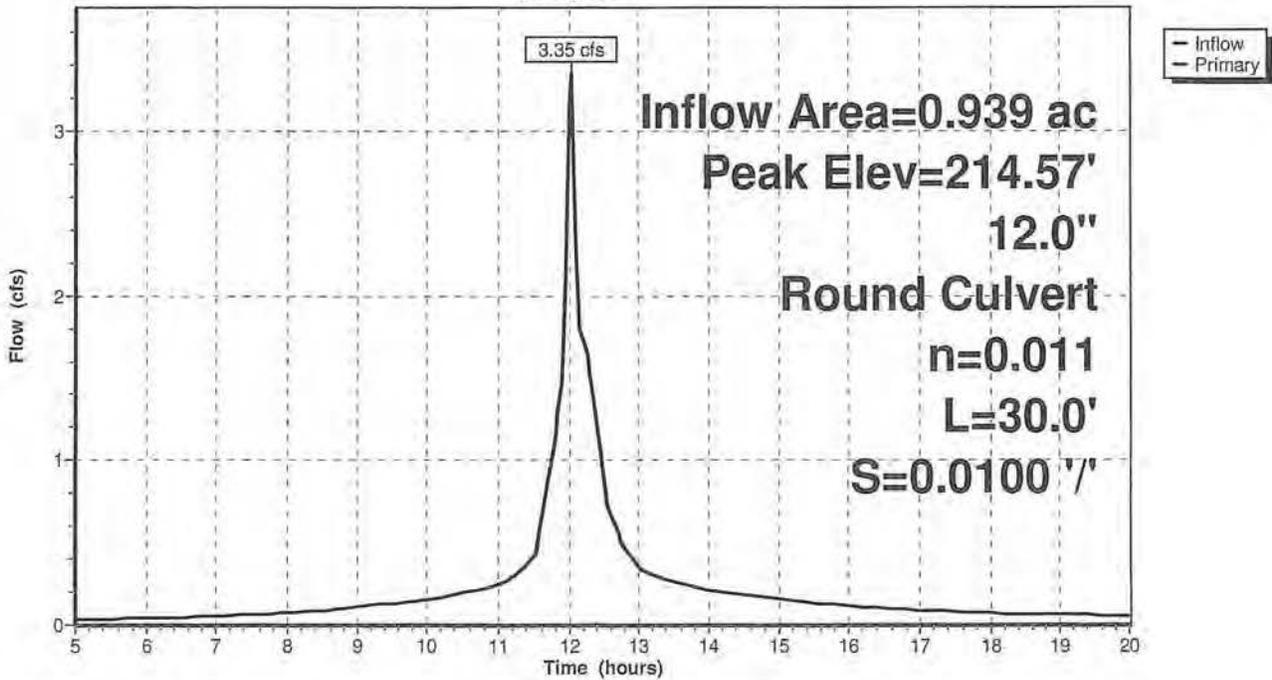
Device	Routing	Invert	Outlet Devices
#1	Primary	213.30'	12.0" Round Culvert L= 30.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 213.30' / 213.00' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=3.23 cfs @ 12.03 hrs HW=214.53' (Free Discharge)

↑1=Culvert (Inlet Controls 3.23 cfs @ 4.11 fps)

Pond CB3: Catch Basin

Hydrograph



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Type III 24-hr 10-Year Rainfall=4.60"

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Summary for Pond CB4: Catch Basin

[82] Warning: Early inflow requires earlier time span
[57] Hint: Peaked at 206.18' (Flood elevation advised)

Inflow Area = 0.329 ac, 77.21% Impervious, Inflow Depth > 3.70" for 10-Year event
Inflow = 1.54 cfs @ 12.04 hrs, Volume= 0.101 af
Outflow = 1.54 cfs @ 12.04 hrs, Volume= 0.101 af, Atten= 0%, Lag= 0.0 min
Primary = 1.54 cfs @ 12.04 hrs, Volume= 0.101 af

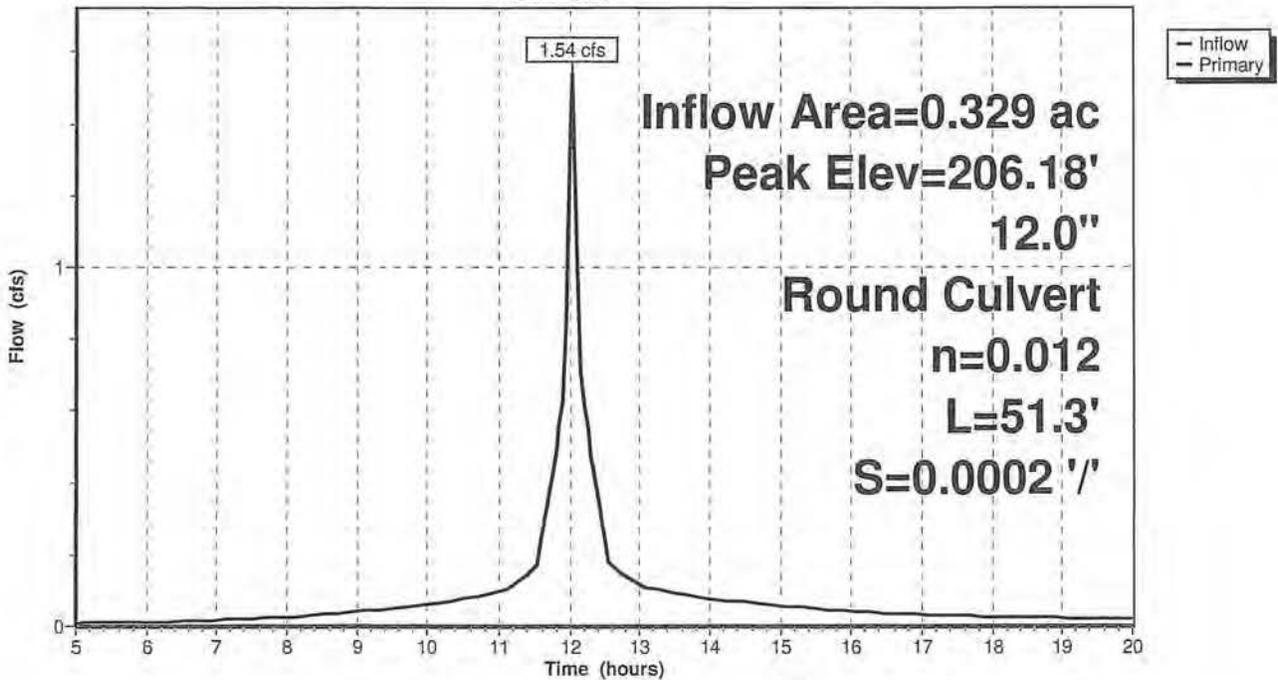
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 206.18' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	12.0" Round Culvert L= 51.3' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.20' S= 0.0002 1/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf

Primary OutFlow Max=1.48 cfs @ 12.04 hrs HW=206.16' (Free Discharge)
↳ **1=Culvert** (Barrel Controls 1.48 cfs @ 2.48 fps)

Pond CB4: Catch Basin

Hydrograph



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Type III 24-hr 10-Year Rainfall=4.60"

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Summary for Pond Po1: Detention Pond

[82] Warning: Early inflow requires earlier time span

[79] Warning: Submerged Pond CB3 Primary device # 1 INLET by 0.15'

Inflow Area = 1.328 ac, 48.35% Impervious, Inflow Depth > 3.37" for 10-Year event
 Inflow = 4.26 cfs @ 12.04 hrs, Volume= 0.373 af
 Outflow = 2.07 cfs @ 12.33 hrs, Volume= 0.370 af, Atten= 51%, Lag= 17.3 min
 Primary = 2.07 cfs @ 12.33 hrs, Volume= 0.370 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 213.45' @ 12.33 hrs Surf.Area= 2,827 sf Storage= 2,789 cf
 Flood Elev= 215.50' Surf.Area= 5,000 sf Storage= 10,971 cf

Plug-Flow detention time= 18.1 min calculated for 0.370 af (99% of inflow)
 Center-of-Mass det. time= 14.6 min (768.9 - 754.4)

Volume	Invert	Avail.Storage	Storage Description
#1	212.00'	10,971 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.00	920	0	0
213.00	2,344	1,632	1,632
214.00	3,423	2,884	4,516
215.00	4,659	4,041	8,557
215.50	5,000	2,415	10,971

Device	Routing	Invert	Outlet Devices
#1	Primary	212.00'	16.0" Round Culvert L= 120.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 212.00' / 206.00' S= 0.0500 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.40 sf
#2	Device 1	212.00'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600
#3	Device 1	213.80'	30.0" W x 8.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.07 cfs @ 12.33 hrs HW=213.45' (Free Discharge)

↑ **1=Culvert** (Passes 2.07 cfs of 5.93 cfs potential flow)
 ↑ **2=Orifice/Grate** (Orifice Controls 2.07 cfs @ 5.27 fps)
 ↓ **3=Orifice/Grate** (Controls 0.00 cfs)

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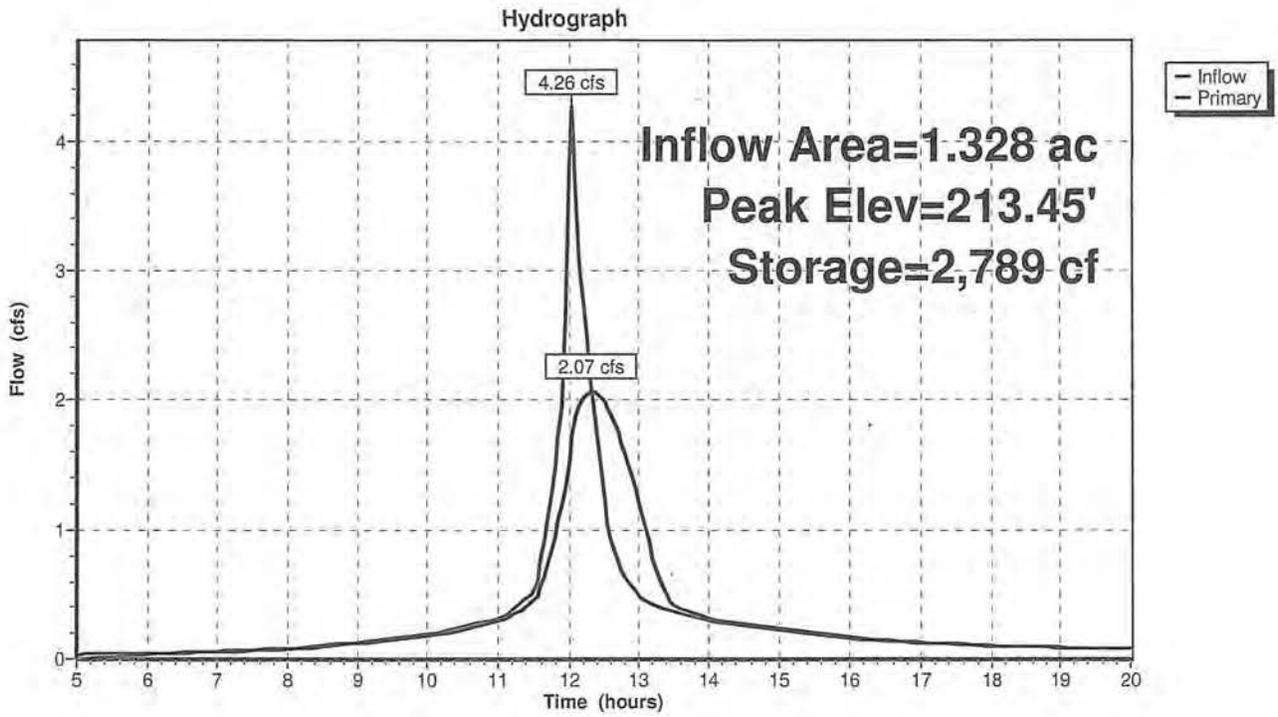
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Type III 24-hr 10-Year Rainfall=4.60"

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Pond Po1: Detention Pond



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Type III 24-hr 10-Year Rainfall=4.60"

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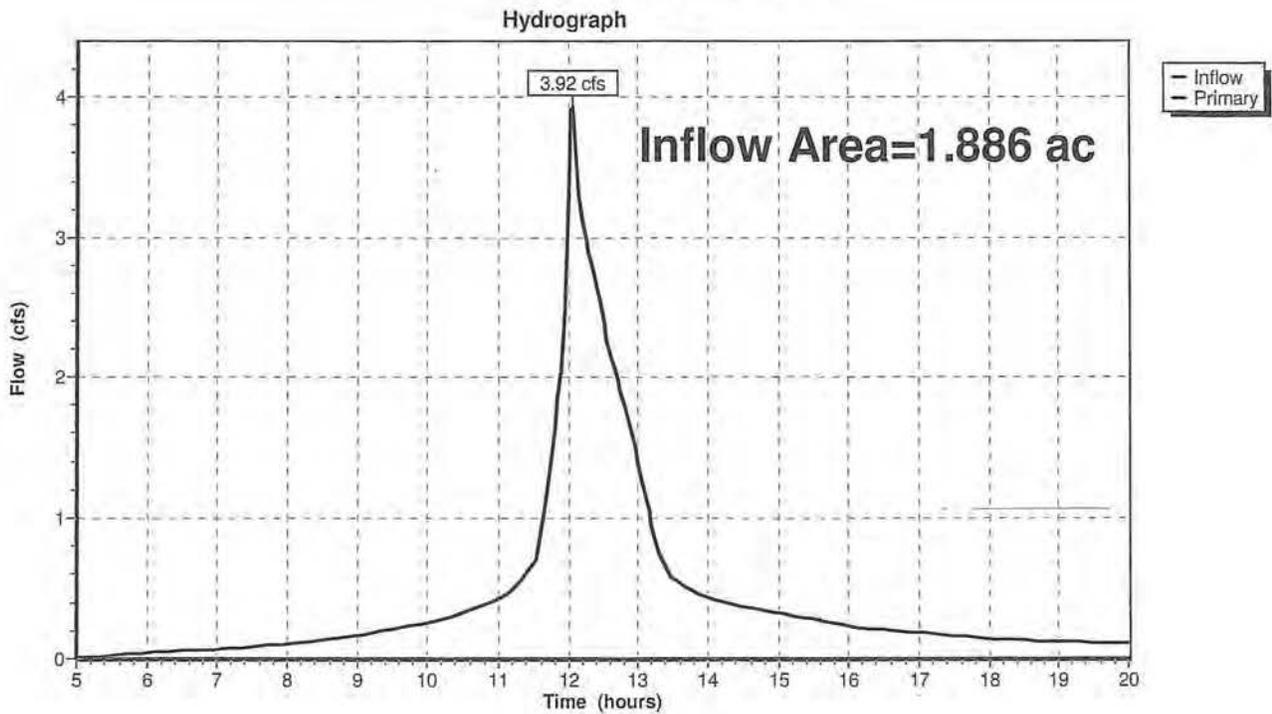
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Summary for Link SP1: Drainage Channel

Inflow Area = 1.886 ac, 47.53% Impervious, Inflow Depth > 3.33" for 10-Year event
Inflow = 3.92 cfs @ 12.06 hrs, Volume= 0.523 af
Primary = 3.92 cfs @ 12.06 hrs, Volume= 0.523 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP1: Drainage Channel



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Type III 24-hr 10-Year Rainfall=4.60"

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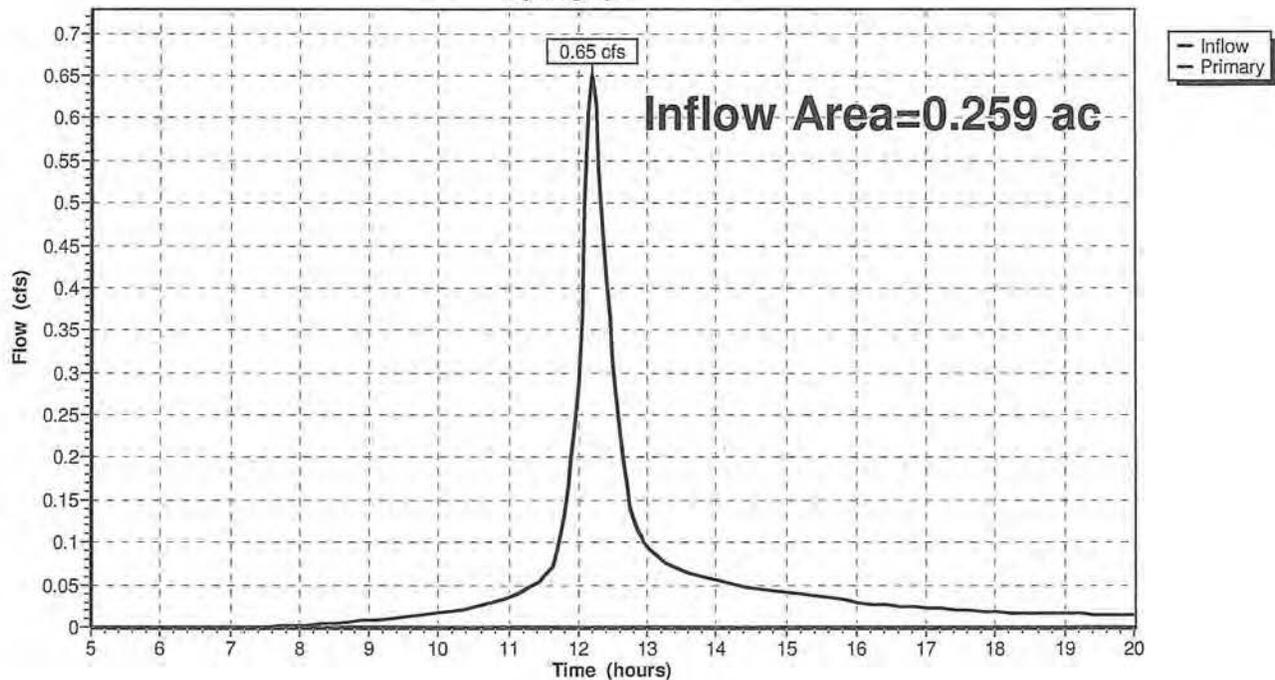
Summary for Link SP2:

Inflow Area = 0.259 ac, 0.00% Impervious, Inflow Depth > 2.63" for 10-Year event
Inflow = 0.65 cfs @ 12.20 hrs, Volume= 0.057 af
Primary = 0.65 cfs @ 12.20 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP2:

Hydrograph



Proposed Conditions

Type III 24-hr 25-Year Rainfall=5.40"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment B1: Roof	Runoff Area=9,188 sf 100.00% Impervious Runoff Depth>4.78" Flow Length=160' Slope=0.0100 '/' Tc=2.2 min CN=98 Runoff=1.21 cfs 0.084 af
Subcatchment P1: Paved Entrance	Runoff Area=0.285 ac 100.00% Impervious Runoff Depth>4.78" Flow Length=243' Tc=1.8 min CN=98 Runoff=1.63 cfs 0.114 af
Subcatchment P2: Parking	Runoff Area=6,367 sf 100.00% Impervious Runoff Depth>4.78" Flow Length=82' Slope=0.0243 '/' Tc=1.0 min CN=98 Runoff=0.86 cfs 0.058 af
Subcatchment P3: Pavement	Runoff Area=14,338 sf 77.21% Impervious Runoff Depth>4.44" Flow Length=191' Tc=2.3 min CN=94 Runoff=1.83 cfs 0.122 af
Subcatchment S1: Gravel/Meadow	Runoff Area=16,931 sf 0.00% Impervious Runoff Depth>3.72" Flow Length=296' Tc=8.7 min CN=87 Runoff=1.58 cfs 0.120 af
Subcatchment S2: Meadow/Woods	Runoff Area=11,286 sf 0.00% Impervious Runoff Depth>3.31" Flow Length=200' Tc=14.6 min CN=83 Runoff=0.81 cfs 0.072 af
Subcatchment S3: Meadow/Grassed	Runoff Area=12,944 sf 0.00% Impervious Runoff Depth>3.02" Flow Length=362' Tc=21.0 min CN=80 Runoff=0.74 cfs 0.075 af
Subcatchment S4: Meadow/Gravel	Runoff Area=9,951 sf 0.00% Impervious Runoff Depth>3.42" Flow Length=227' Tc=6.5 min CN=84 Runoff=0.93 cfs 0.065 af
Pond CB1: Catch Basin	Peak Elev=215.06' Inflow=1.54 cfs 0.159 af 12.0" Round Culvert n=0.011 L=100.0' S=0.0100 '/' Outflow=1.54 cfs 0.159 af
Pond CB2: Catch Basin	Peak Elev=215.09' Inflow=1.63 cfs 0.114 af 12.0" Round Culvert n=0.011 L=100.0' S=0.0100 '/' Outflow=1.63 cfs 0.114 af
Pond CB3: Catch Basin	Peak Elev=214.89' Inflow=3.97 cfs 0.331 af 12.0" Round Culvert n=0.011 L=30.0' S=0.0100 '/' Outflow=3.97 cfs 0.331 af
Pond CB4: Catch Basin	Peak Elev=206.30' Inflow=1.83 cfs 0.122 af 12.0" Round Culvert n=0.012 L=51.3' S=0.0002 '/' Outflow=1.83 cfs 0.122 af
Pond Po1: Detention Pond	Peak Elev=213.74' Storage=3,667 cf Inflow=5.10 cfs 0.451 af Outflow=2.31 cfs 0.448 af
Link SP1: Drainage Channel	Inflow=4.55 cfs 0.635 af Primary=4.55 cfs 0.635 af
Link SP2:	Inflow=0.81 cfs 0.072 af Primary=0.81 cfs 0.072 af

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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Subcatchment B1: Roof

[49] Hint: $T_c < 2dt$ may require smaller dt

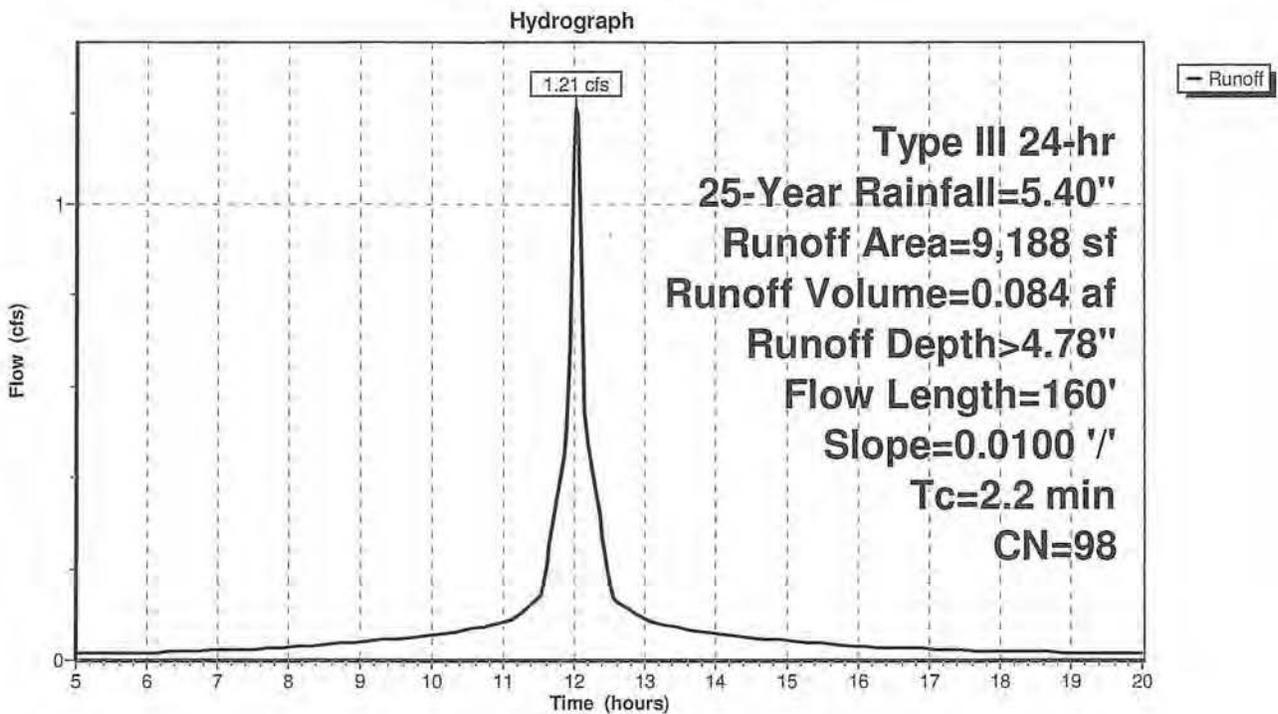
Runoff = 1.21 cfs @ 12.04 hrs, Volume= 0.084 af, Depth > 4.78"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
9,188	98	Roofs, HSG D
9,188		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	83	0.0100	0.97		Sheet Flow, A-B Sheet Smooth surfaces n= 0.011 P2= 3.00"
0.8	77	0.0100	1.61		Shallow Concentrated Flow, B-C Shallow Unpaved Kv= 16.1 fps
2.2	160	Total			

Subcatchment B1: Roof



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Summary for Subcatchment P1: Paved Entrance

[49] Hint: $T_c < 2dt$ may require smaller dt

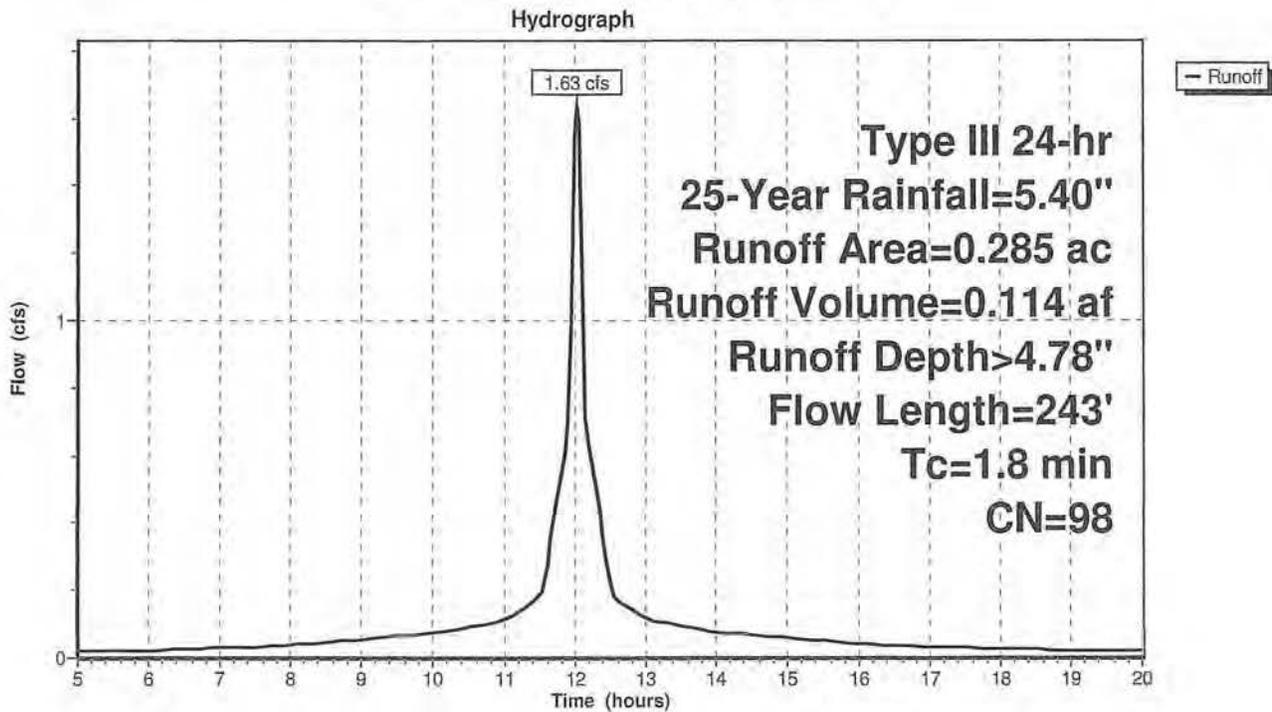
Runoff = 1.63 cfs @ 12.03 hrs, Volume= 0.114 af, Depth> 4.78"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, $dt= 0.05$ hrs
 Type III 24-hr 25-Year Rainfall=5.40"

Area (ac)	CN	Description
0.285	98	Paved parking, HSG D
0.285		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	60	0.0249	1.31		Sheet Flow, A-B Sheet Smooth surfaces $n= 0.011$ $P2= 3.00"$
0.4	83	0.0364	3.87		Shallow Concentrated Flow, B-C Shallow Paved $K_v= 20.3$ fps
0.6	100	0.0200	2.87		Shallow Concentrated Flow, Shallow C-D Paved $K_v= 20.3$ fps
1.8	243	Total			

Subcatchment P1: Paved Entrance



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Summary for Subcatchment P2: Parking

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.86 cfs @ 12.01 hrs, Volume= 0.058 af, Depth> 4.78"

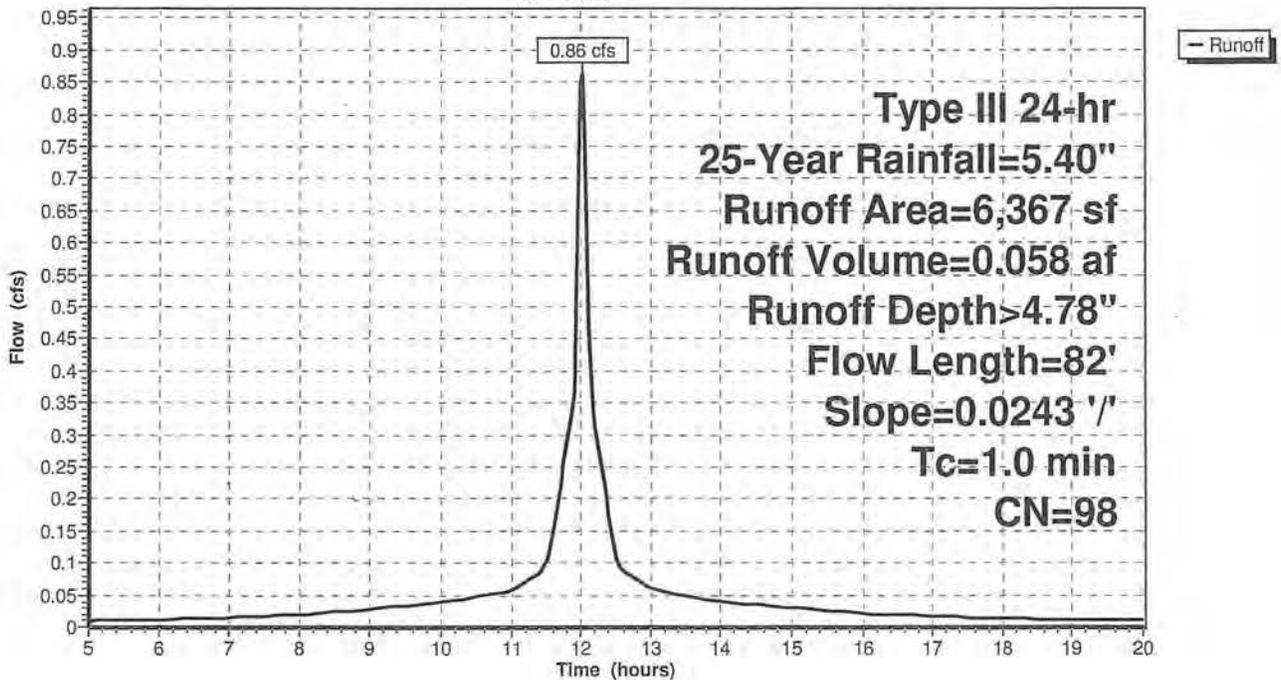
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
6,367	98	Paved parking, HSG D
6,367		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	82	0.0243	1.38		Sheet Flow, A-B Sheet Smooth surfaces n= 0.011 P2= 3.00"

Subcatchment P2: Parking

Hydrograph



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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Subcatchment P3: Pavement

[49] Hint: $T_c < 2dt$ may require smaller dt

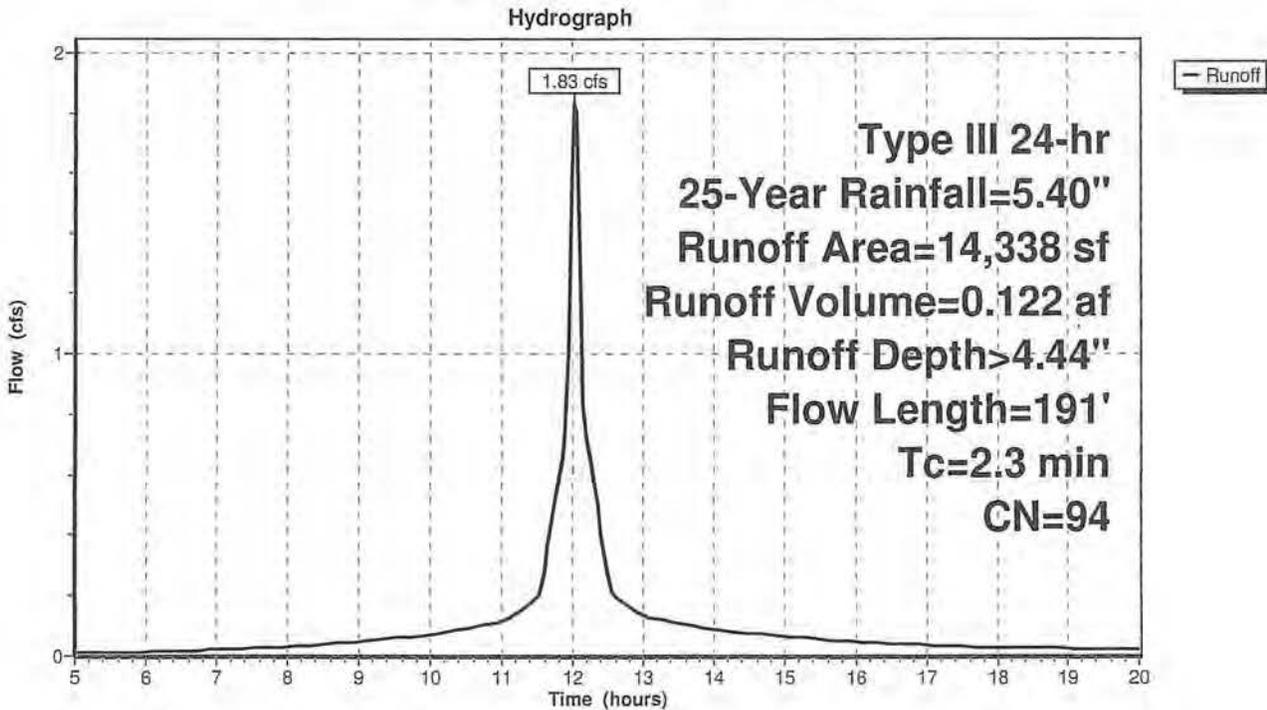
Runoff = 1.83 cfs @ 12.04 hrs, Volume= 0.122 af, Depth> 4.44"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
11,071	98	Paved roads w/curbs & sewers, HSG D
3,267	80	>75% Grass cover, Good, HSG D
14,338	94	Weighted Average
3,267		22.79% Pervious Area
11,071		77.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.5	104	0.0144	1.18		Sheet Flow, A-B SHEET Smooth surfaces n= 0.011 P2= 3.00"
0.8	87	0.0086	1.88		Shallow Concentrated Flow, B-C SHALLOW Paved Kv= 20.3 fps
2.3	191	Total			

Subcatchment P3: Pavement



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Summary for Subcatchment S1: Gravel/Meadow

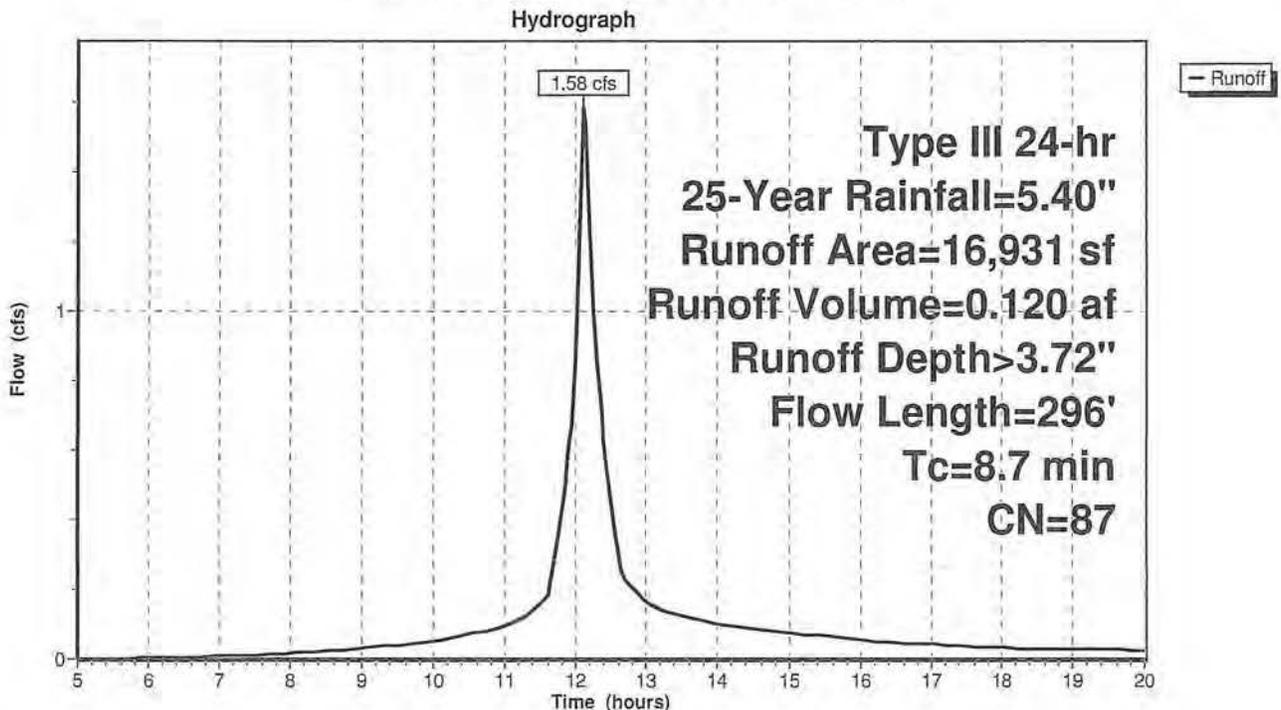
Runoff = 1.58 cfs @ 12.12 hrs, Volume= 0.120 af, Depth> 3.72"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
13,223	84	50-75% Grass cover, Fair, HSG D
3,708	96	Gravel surface, HSG D
16,931	87	Weighted Average
16,931		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.3	100	0.0651	0.26		Sheet Flow, A-B Sheet Grass: Short n= 0.150 P2= 3.00"
0.1	25	0.0813	2.85		Shallow Concentrated Flow, B-C Shallow Nearly Bare & Untilled Kv= 10.0 fps
0.8	81	0.0123	1.79		Shallow Concentrated Flow, C-D Shallow Unpaved Kv= 16.1 fps
1.5	90	0.0200	0.99		Shallow Concentrated Flow, D-E Shallow Short Grass Pasture Kv= 7.0 fps
8.7	296	Total			

Subcatchment S1: Gravel/Meadow



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Summary for Subcatchment S2: Meadow/Woods

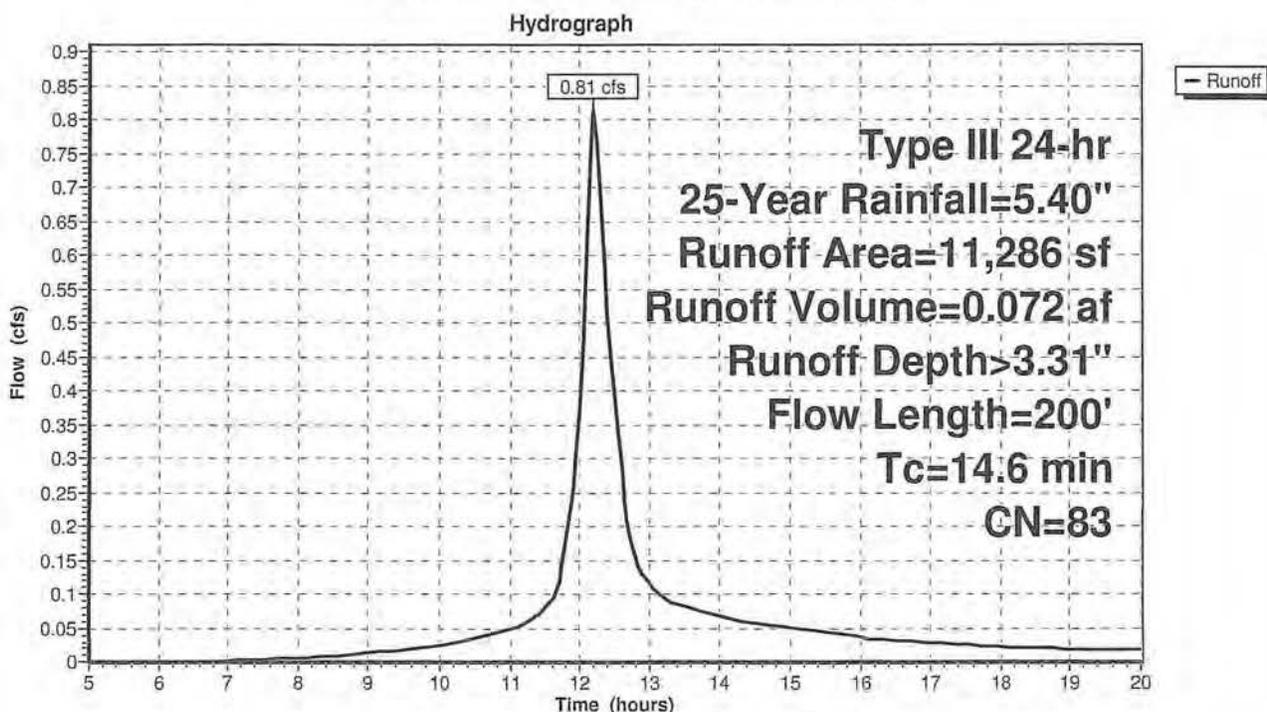
Runoff = 0.81 cfs @ 12.20 hrs, Volume= 0.072 af, Depth> 3.31"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
7,684	84	50-75% Grass cover, Fair, HSG D
3,602	82	Woods/grass comb., Fair, HSG D
11,286	83	Weighted Average
11,286		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.9	100	0.0090	0.12		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
0.6	65	0.0340	1.84		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.1	35	0.2194	4.68		Shallow Concentrated Flow, C-D SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
14.6	200	Total			

Subcatchment S2: Meadow/Woods



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Summary for Subcatchment S3: Meadow/Grassed Waterway

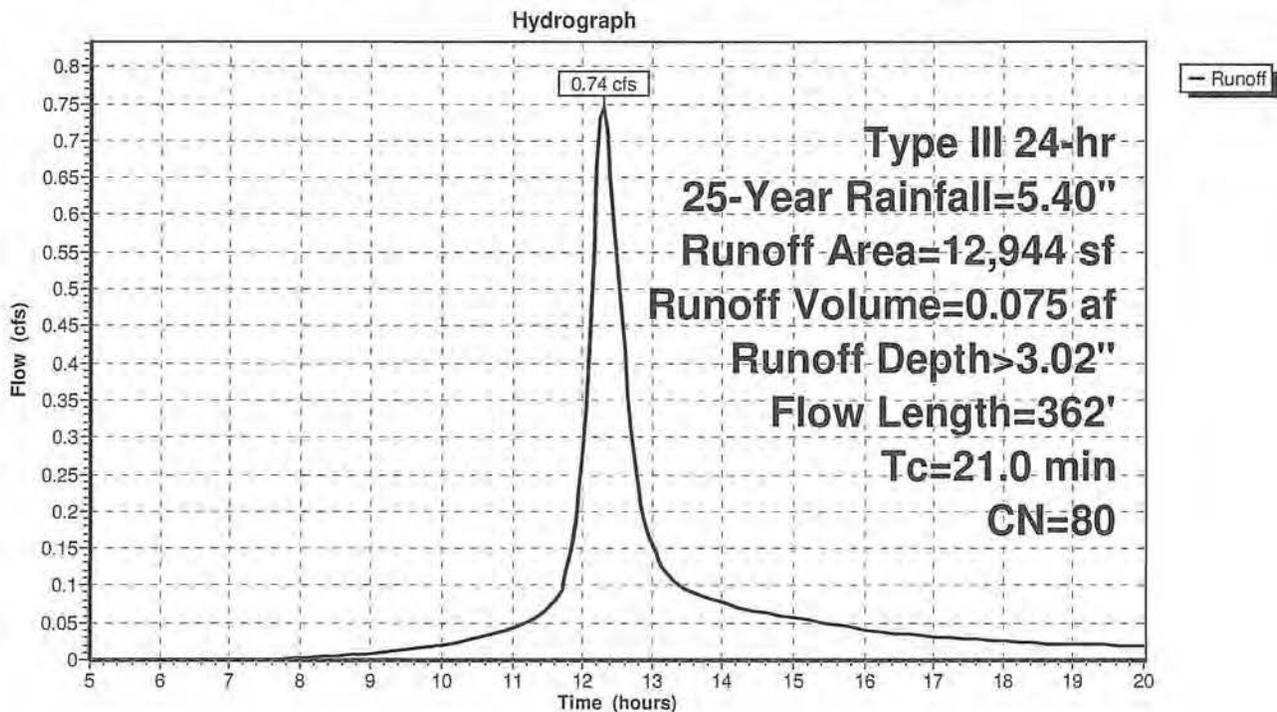
Runoff = 0.74 cfs @ 12.29 hrs, Volume= 0.075 af, Depth> 3.02"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
1,282	79	Woods, Fair, HSG D
11,662	80	>75% Grass cover, Good, HSG D
12,944	80	Weighted Average
12,944		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
17.6	125	0.0200	0.12		Sheet Flow, A-B Sheet Grass: Dense n= 0.240 P2= 3.00"
3.4	237	0.0059	1.15		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
21.0	362	Total			

Subcatchment S3: Meadow/Grassed Waterway



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Summary for Subcatchment S4: Meadow/Gravel

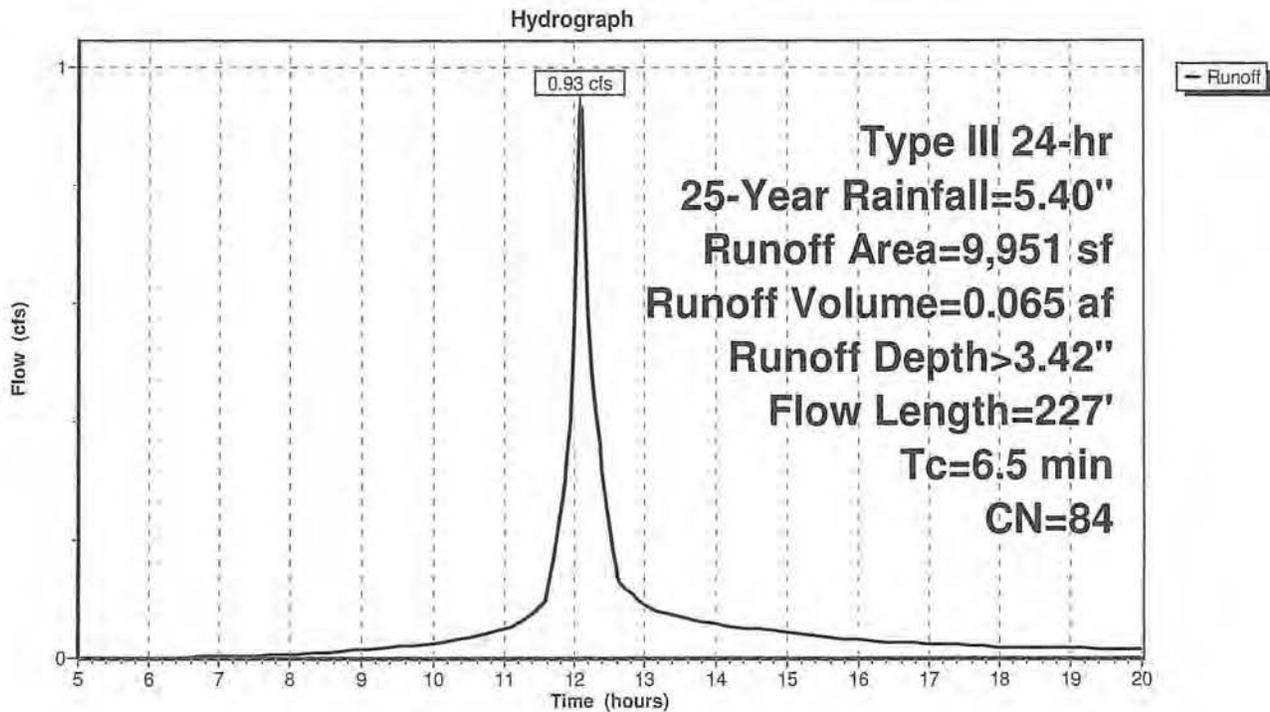
Runoff = 0.93 cfs @ 12.10 hrs, Volume= 0.065 af, Depth> 3.42"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 25-Year Rainfall=5.40"

Area (sf)	CN	Description
9,951	84	50-75% Grass cover, Fair, HSG D
9,951		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.2	100	0.1052	0.32		Sheet Flow, A-B SHEET Grass: Short n= 0.150 P2= 3.00"
1.3	114	0.0220	1.48		Shallow Concentrated Flow, B-C SHALLOW Nearly Bare & Untilled Kv= 10.0 fps
0.0	13	0.5169	10.78		Shallow Concentrated Flow, C-D SHALLOW Grassed Waterway Kv= 15.0 fps
6.5	227	Total			

Subcatchment S4: Meadow/Gravel



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Summary for Pond CB1: Catch Basin

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 215.06' (Flood elevation advised)

Inflow Area = 0.508 ac, 41.51% Impervious, Inflow Depth > 3.75" for 25-Year event
Inflow = 1.54 cfs @ 12.04 hrs, Volume= 0.159 af
Outflow = 1.54 cfs @ 12.04 hrs, Volume= 0.159 af, Atten= 0%, Lag= 0.0 min
Primary = 1.54 cfs @ 12.04 hrs, Volume= 0.159 af

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

Peak Elev= 215.06' @ 12.04 hrs

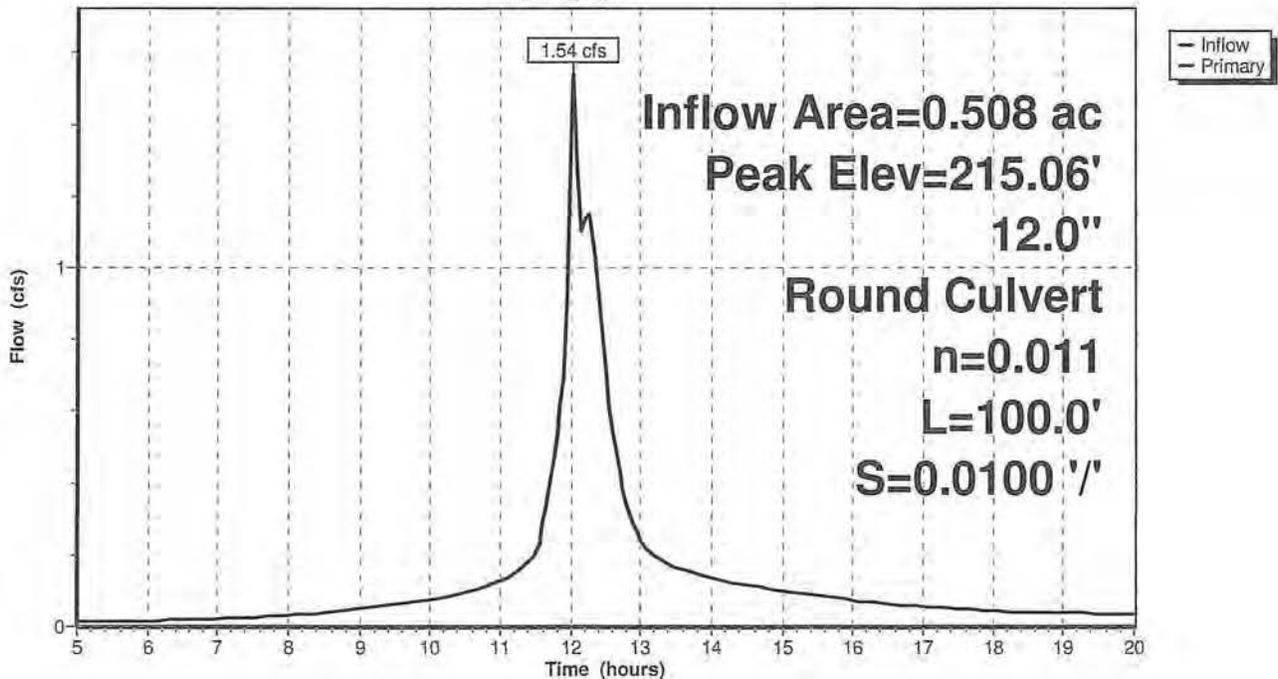
Device #	Routing	Invert	Outlet Devices
#1	Primary	214.40'	12.0" Round Culvert L= 100.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 214.40' / 213.40' S= 0.0100 '/ Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=1.52 cfs @ 12.04 hrs HW=215.06' (Free Discharge)

↑1=Culvert (Inlet Controls 1.52 cfs @ 2.76 fps)

Pond CB1: Catch Basin

Hydrograph



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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Pond CB2: Catch Basin

[82] Warning: Early inflow requires earlier time span
[57] Hint: Peaked at 215.09' (Flood elevation advised)

Inflow Area = 0.285 ac, 100.00% Impervious, Inflow Depth > 4.78" for 25-Year event
Inflow = 1.63 cfs @ 12.03 hrs, Volume= 0.114 af
Outflow = 1.63 cfs @ 12.03 hrs, Volume= 0.114 af, Atten= 0%, Lag= 0.0 min
Primary = 1.63 cfs @ 12.03 hrs, Volume= 0.114 af

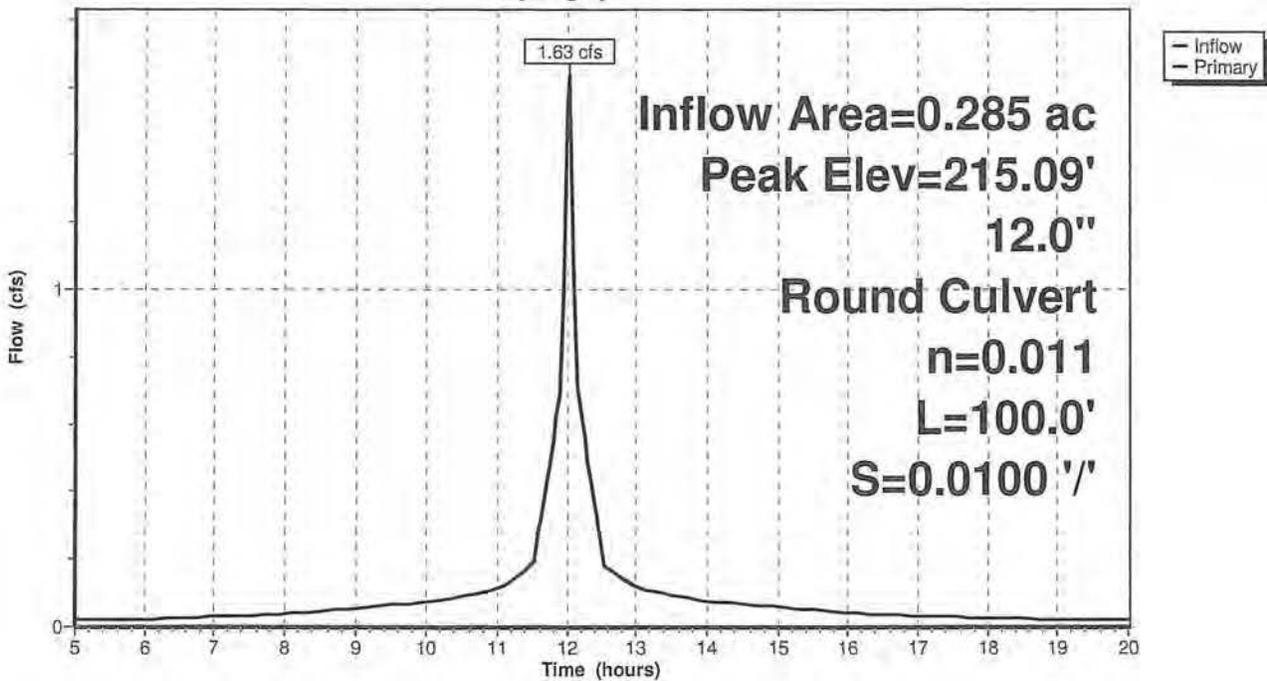
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 215.09' @ 12.03 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	214.40'	12.0" Round Culvert L= 100.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 214.40' / 213.40' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=1.56 cfs @ 12.03 hrs HW=215.07' (Free Discharge)
↑ 1=Culvert (Inlet Controls 1.56 cfs @ 2.79 fps)

Pond CB2: Catch Basin

Hydrograph



Proposed Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Pond CB3: Catch Basin

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 214.89' (Flood elevation advised)

[79] Warning: Submerged Pond CB1 Primary device # 1 INLET by 0.45'

[79] Warning: Submerged Pond CB2 Primary device # 1 INLET by 0.45'

Inflow Area = 0.939 ac, 68.36% Impervious, Inflow Depth > 4.23" for 25-Year event
 Inflow = 3.97 cfs @ 12.03 hrs, Volume= 0.331 af
 Outflow = 3.97 cfs @ 12.03 hrs, Volume= 0.331 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.97 cfs @ 12.03 hrs, Volume= 0.331 af

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

Peak Elev= 214.89' @ 12.03 hrs

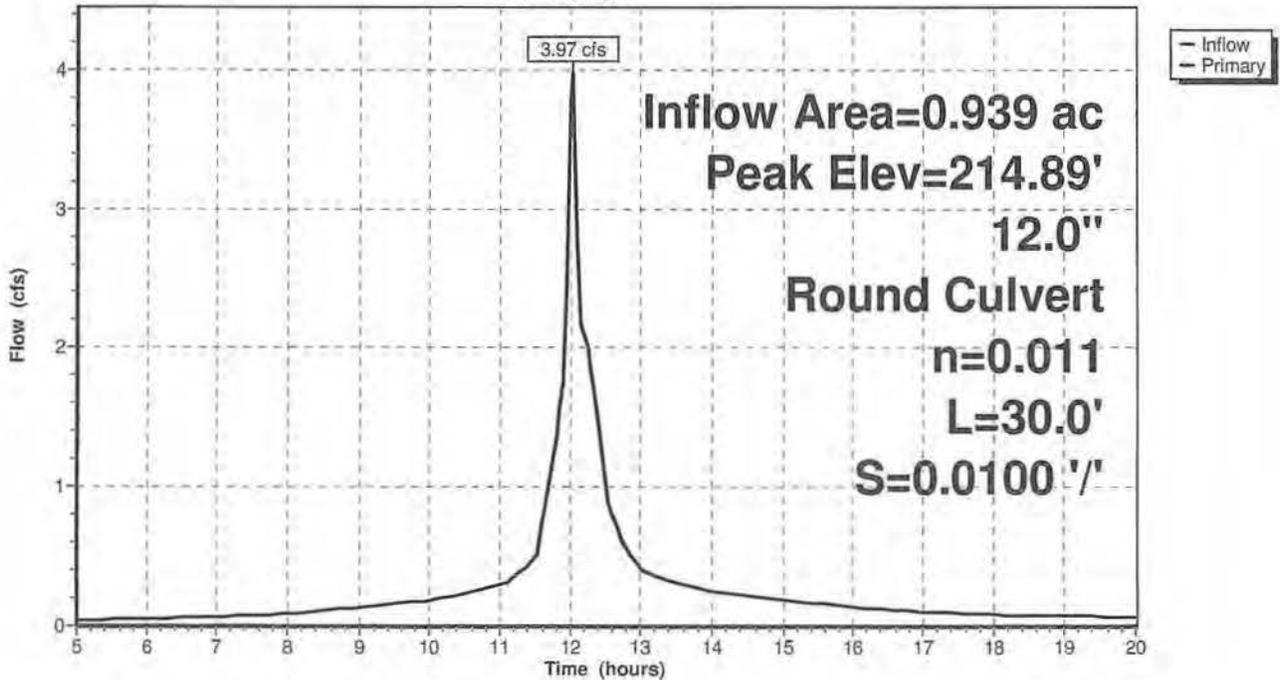
Device #	Routing	Invert	Outlet Devices
#1	Primary	213.30'	12.0" Round Culvert L= 30.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 213.30' / 213.00' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=3.83 cfs @ 12.03 hrs HW=214.82' (Free Discharge)

←1=Culvert (Inlet Controls 3.83 cfs @ 4.87 fps)

Pond CB3: Catch Basin

Hydrograph



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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Pond CB4: Catch Basin

[82] Warning: Early inflow requires earlier time span
[57] Hint: Peaked at 206.30' (Flood elevation advised)

Inflow Area = 0.329 ac, 77.21% Impervious, Inflow Depth > 4.44" for 25-Year event
Inflow = 1.83 cfs @ 12.04 hrs, Volume= 0.122 af
Outflow = 1.83 cfs @ 12.04 hrs, Volume= 0.122 af, Atten= 0%, Lag= 0.0 min
Primary = 1.83 cfs @ 12.04 hrs, Volume= 0.122 af

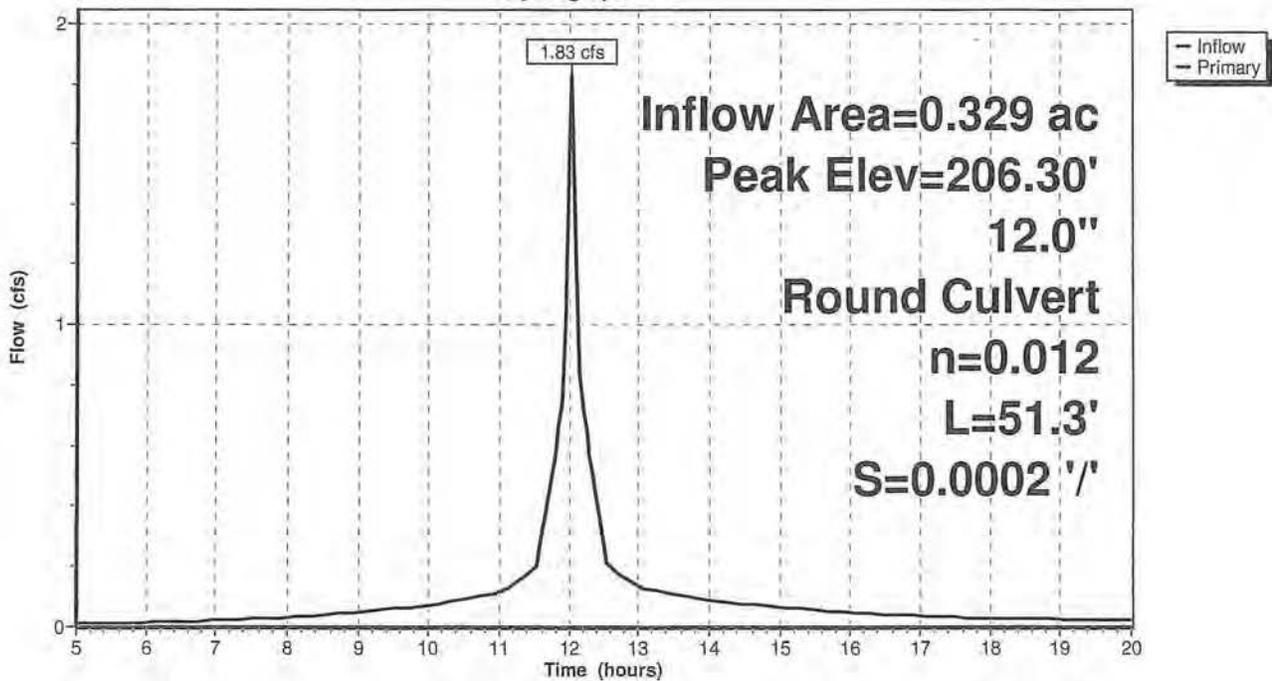
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 206.30' @ 12.04 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	12.0" Round Culvert L= 51.3' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.20' S= 0.0002 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf

Primary OutFlow Max=1.76 cfs @ 12.04 hrs HW=206.27' (Free Discharge)
↳ **1=Culvert** (Barrel Controls 1.76 cfs @ 2.63 fps)

Pond CB4: Catch Basin

Hydrograph



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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Pond Po1: Detention Pond

[82] Warning: Early inflow requires earlier time span

[79] Warning: Submerged Pond CB3 Primary device # 1 INLET by 0.44'

Inflow Area = 1.328 ac, 48.35% Impervious, Inflow Depth > 4.08" for 25-Year event
Inflow = 5.10 cfs @ 12.04 hrs, Volume= 0.451 af
Outflow = 2.31 cfs @ 12.36 hrs, Volume= 0.448 af, Atten= 55%, Lag= 19.2 min
Primary = 2.31 cfs @ 12.36 hrs, Volume= 0.448 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 213.74' @ 12.36 hrs Surf.Area= 3,144 sf Storage= 3,667 cf
Flood Elev= 215.50' Surf.Area= 5,000 sf Storage= 10,971 cf

Plug-Flow detention time= 18.9 min calculated for 0.448 af (99% of inflow)
Center-of-Mass det. time= 15.7 min (768.1 - 752.4)

Volume	Invert	Avail.Storage	Storage Description
#1	212.00'	10,971 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.00	920	0	0
213.00	2,344	1,632	1,632
214.00	3,423	2,884	4,516
215.00	4,659	4,041	8,557
215.50	5,000	2,415	10,971

Device	Routing	Invert	Outlet Devices
#1	Primary	212.00'	16.0" Round Culvert L= 120.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 212.00' / 206.00' S= 0.0500 1' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.40 sf
#2	Device 1	212.00'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600
#3	Device 1	213.80'	30.0" W x 8.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.31 cfs @ 12.36 hrs HW=213.74' (Free Discharge)

↑ **1=Culvert** (Passes 2.31 cfs of 6.96 cfs potential flow)
↑ **2=Orifice/Grate** (Orifice Controls 2.31 cfs @ 5.88 fps)
↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Proposed Conditions

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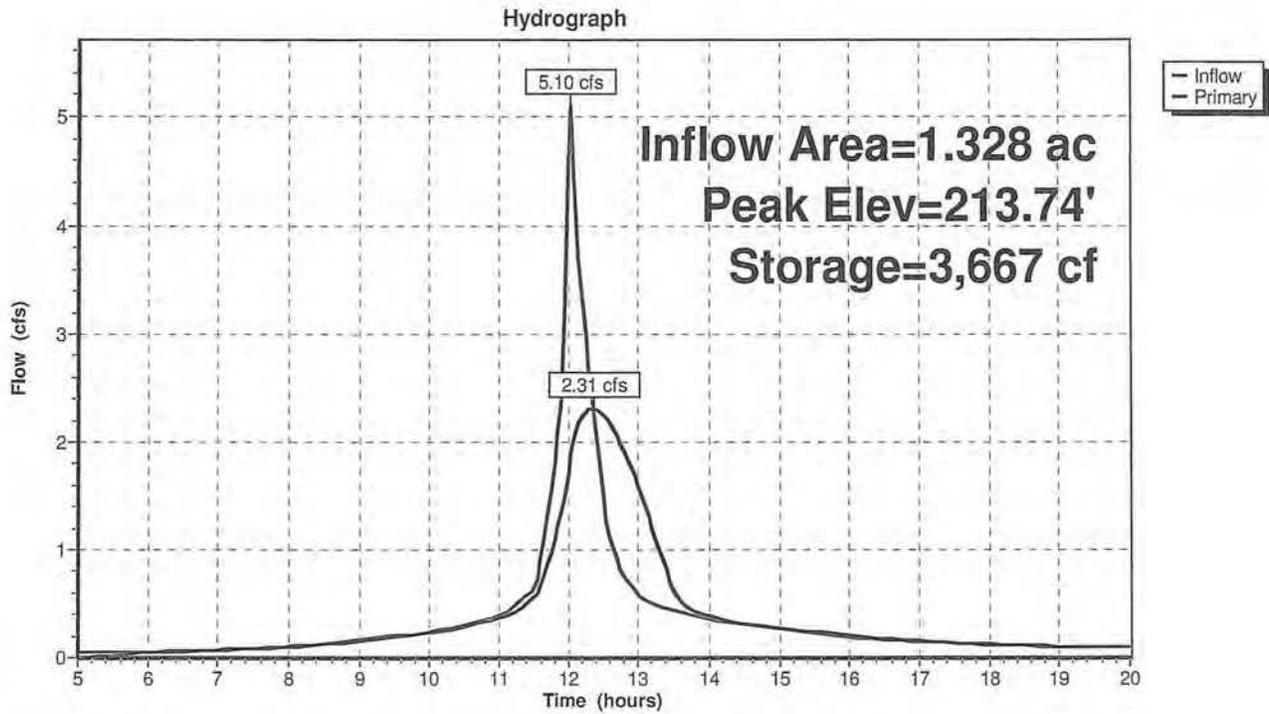
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Type III 24-hr 25-Year Rainfall=5.40"

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Pond Po1: Detention Pond



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Type III 24-hr 25-Year Rainfall=5.40"

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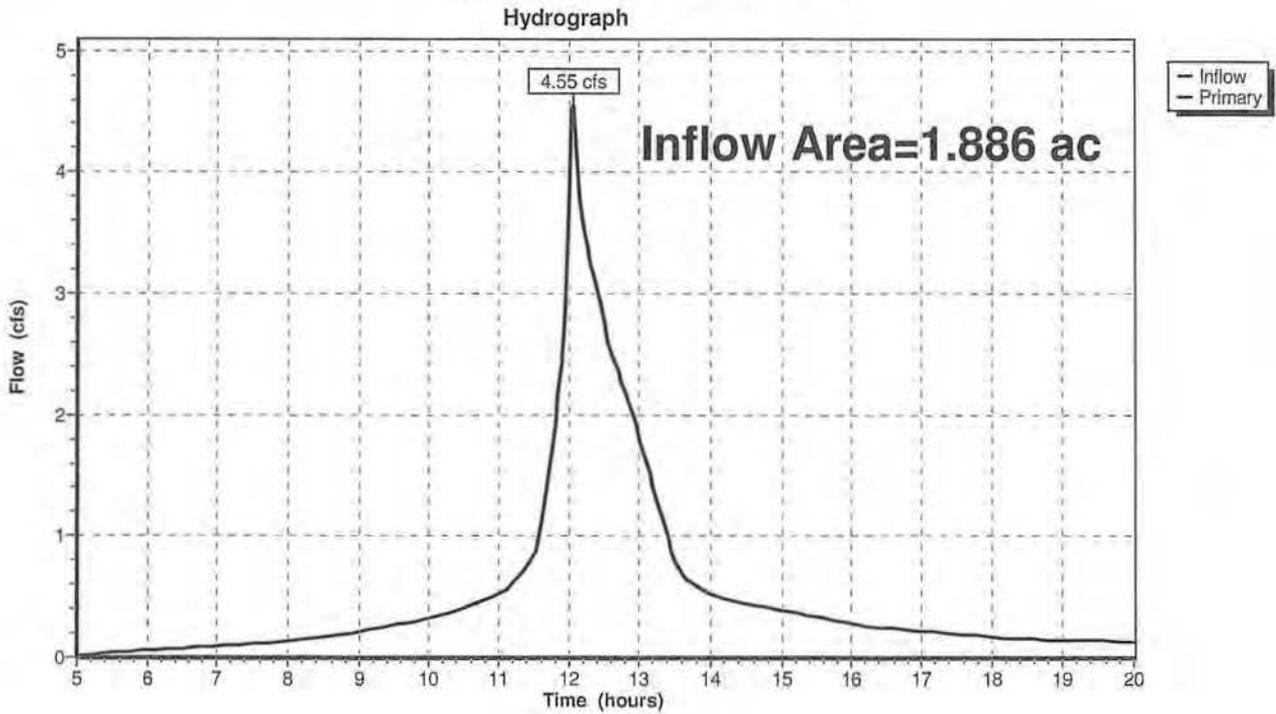
Page 53

Summary for Link SP1: Drainage Channel

Inflow Area = 1.886 ac, 47.53% Impervious, Inflow Depth > 4.04" for 25-Year event
Inflow = 4.55 cfs @ 12.06 hrs, Volume= 0.635 af
Primary = 4.55 cfs @ 12.06 hrs, Volume= 0.635 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP1: Drainage Channel



Proposed Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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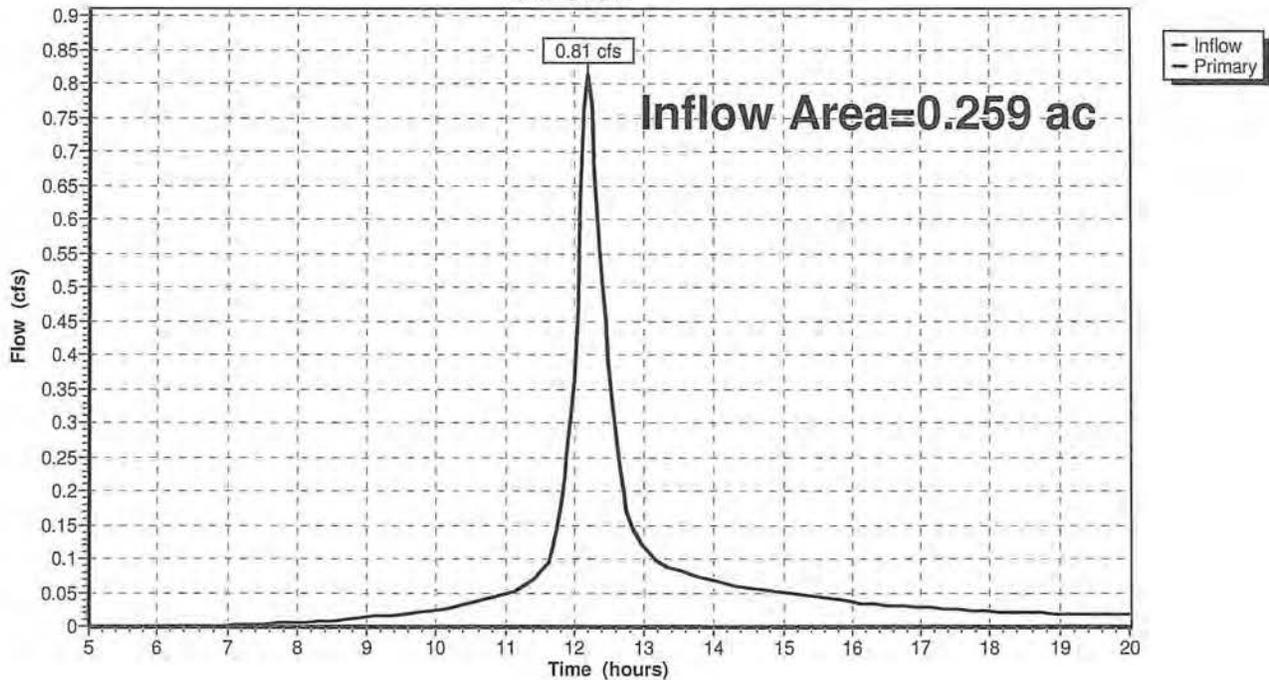
Summary for Link SP2:

Inflow Area = 0.259 ac, 0.00% Impervious, Inflow Depth > 3.31" for 25-Year event
Inflow = 0.81 cfs @ 12.20 hrs, Volume= 0.072 af
Primary = 0.81 cfs @ 12.20 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP2:

Hydrograph



Proposed Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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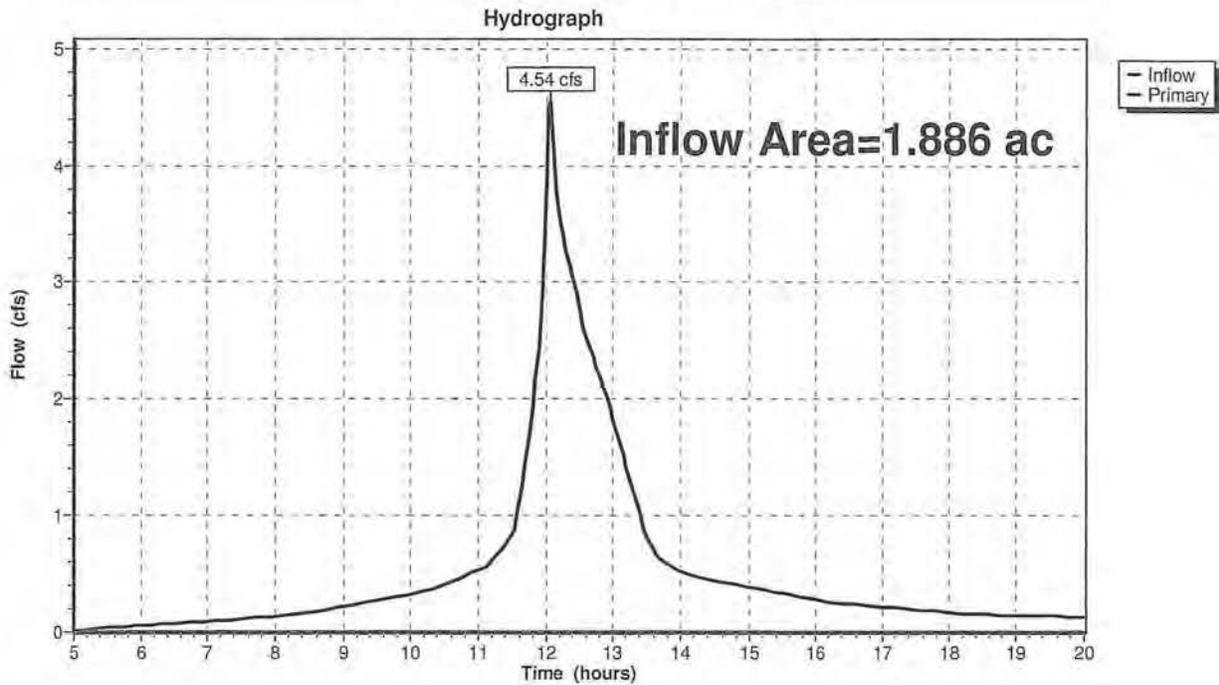
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Summary for Link SP1: Drainage Channel

Inflow Area = 1.886 ac, 48.19% Impervious, Inflow Depth > 4.05" for 25-Year event
Inflow = 4.54 cfs @ 12.06 hrs, Volume= 0.636 af
Primary = 4.54 cfs @ 12.06 hrs, Volume= 0.636 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP1: Drainage Channel



Proposed Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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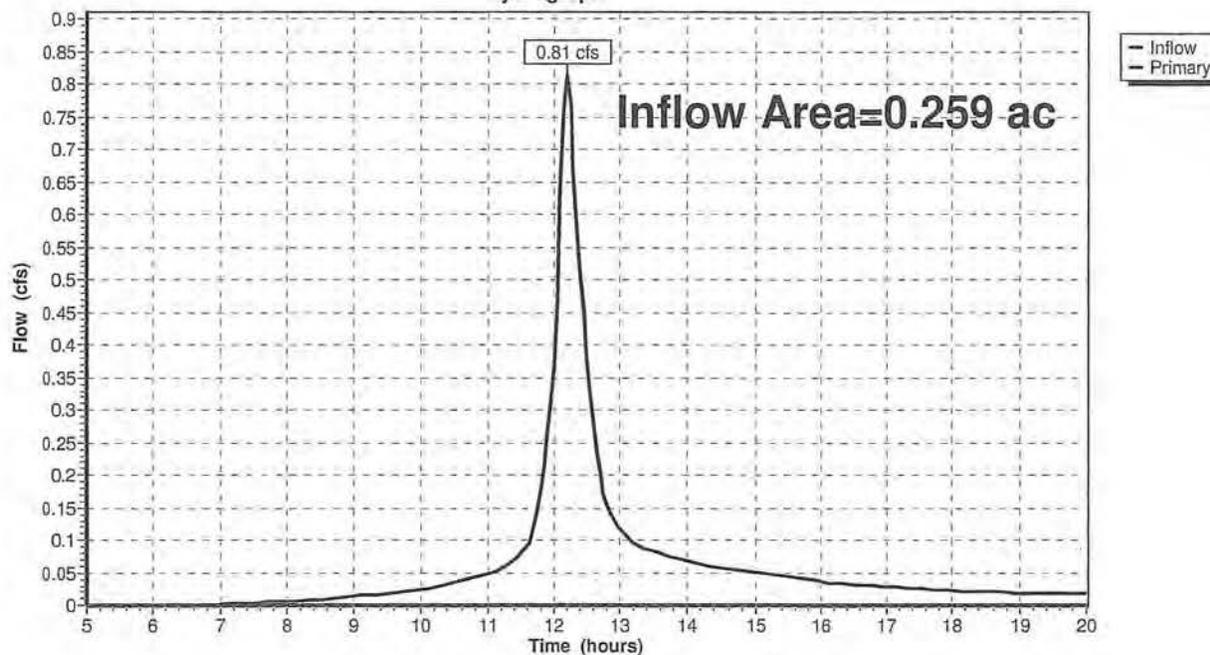
Summary for Link SP2:

Inflow Area = 0.259 ac, 0.00% Impervious, Inflow Depth > 3.31" for 25-Year event
Inflow = 0.81 cfs @ 12.20 hrs, Volume= 0.072 af
Primary = 0.81 cfs @ 12.20 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link SP2:

Hydrograph



**APPENDIX C
EMERGENCY SPILLWAY CALCULATIONS**

HydroCAD
25-yr & 100-yr Storm Results

Proposed Conditions - ESW

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Page 1

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	Po1	212.00	206.00	120.0	0.0500	0.011	16.0	0.0	0.0

Proposed Conditions - ESW

Type III 24-hr 25-Year Rainfall=5.40"

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Page 2

Summary for Pond Po1: Detention Pond

Inflow Area = 1.335 ac, 49.02% Impervious, Inflow Depth > 4.09" for 25-Year event
 Inflow = 5.15 cfs @ 12.04 hrs, Volume= 0.455 af
 Outflow = 3.92 cfs @ 12.14 hrs, Volume= 0.363 af, Atten= 24%, Lag= 5.8 min
 Primary = 3.92 cfs @ 12.14 hrs, Volume= 0.363 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 214.42' @ 12.14 hrs Surf.Area= 3,943 sf Storage= 6,064 cf
 Flood Elev= 215.50' Surf.Area= 5,000 sf Storage= 10,971 cf

Plug-Flow detention time= 108.2 min calculated for 0.361 af (79% of inflow)
 Center-of-Mass det. time= 54.1 min (806.1 - 752.0)

Volume	Invert	Avail.Storage	Storage Description
#1	212.00'	10,971 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

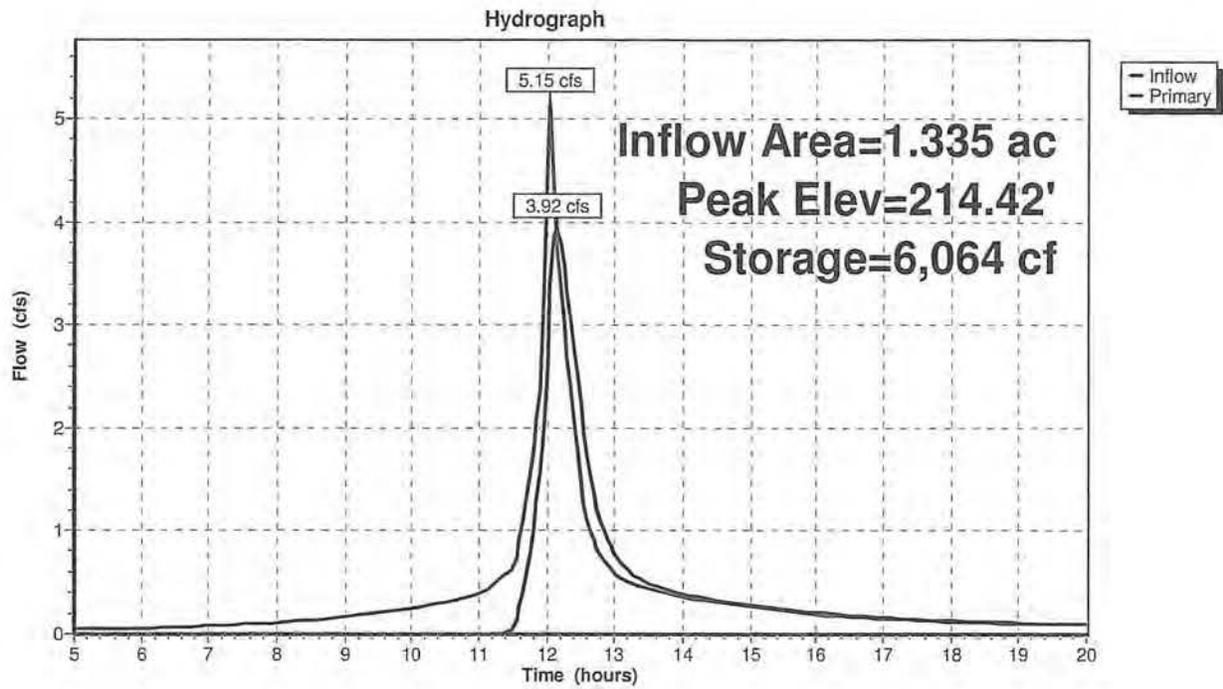
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.00	920	0	0
213.00	2,344	1,632	1,632
214.00	3,423	2,884	4,516
215.00	4,659	4,041	8,557
215.50	5,000	2,415	10,971

Device	Routing	Invert	Outlet Devices
#1	Primary	212.00'	16.0" Round Culvert L= 120.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 212.00' / 206.00' S= 0.0500 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.40 sf
#2	Device 1	213.80'	30.0" W x 8.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=3.91 cfs @ 12.14 hrs HW=214.42' (Free Discharge)

- ↑ 1=Culvert (Passes 3.91 cfs of 8.90 cfs potential flow)
- ↑ 2=Orifice/Grate (Orifice Controls 3.91 cfs @ 2.52 fps)

Pond Po1: Detention Pond



Proposed Conditions - ESW

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Page 1

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	Po1	212.00	206.00	120.0	0.0500	0.011	16.0	0.0	0.0

Proposed Conditions - ESW

Type III 24-hr 100-Year Rainfall=6.50"

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Page 2

Summary for Pond Po1: Detention Pond

Inflow Area = 1.335 ac, 49.02% Impervious, Inflow Depth > 5.07" for 100-Year event
 Inflow = 6.31 cfs @ 12.04 hrs, Volume= 0.565 af
 Outflow = 4.84 cfs @ 12.14 hrs, Volume= 0.472 af, Atten= 23%, Lag= 5.8 min
 Primary = 4.84 cfs @ 12.14 hrs, Volume= 0.472 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 214.52' @ 12.14 hrs Surf.Area= 4,071 sf Storage= 6,481 cf
 Flood Elev= 215.50' Surf.Area= 5,000 sf Storage= 10,971 cf

Plug-Flow detention time= 97.1 min calculated for 0.472 af (84% of inflow)
 Center-of-Mass det. time= 49.0 min (798.7 - 749.8)

Volume	Invert	Avail.Storage	Storage Description
#1	212.00'	10,971 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

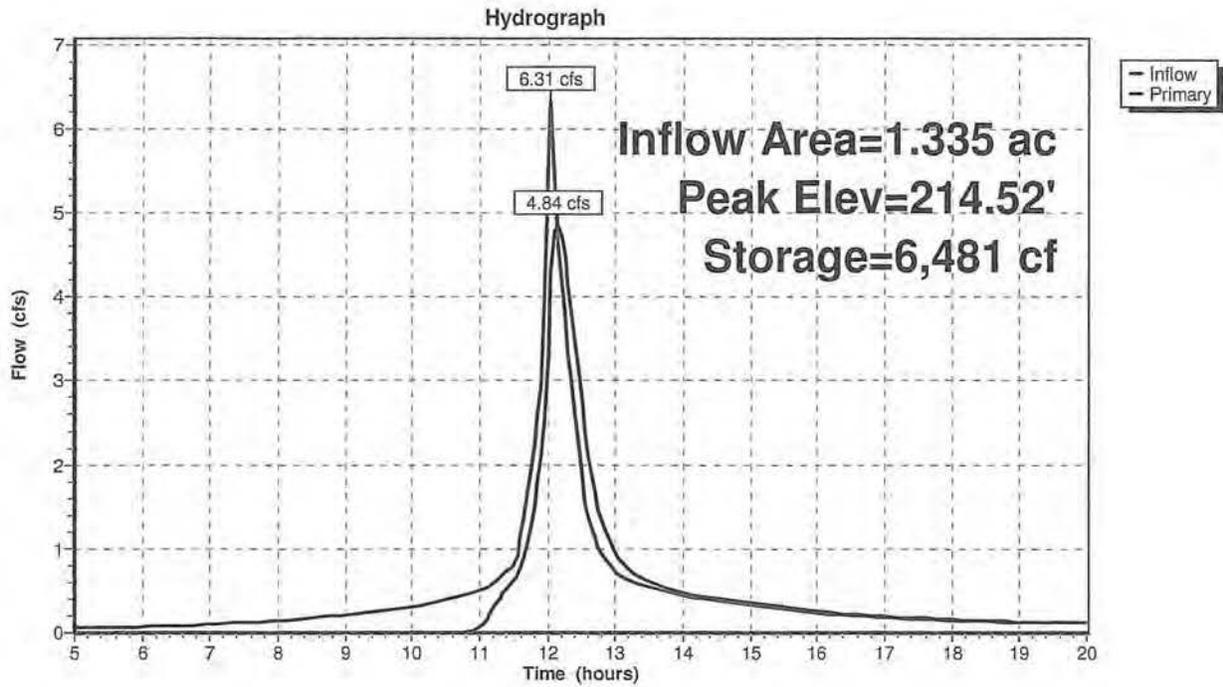
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.00	920	0	0
213.00	2,344	1,632	1,632
214.00	3,423	2,884	4,516
215.00	4,659	4,041	8,557
215.50	5,000	2,415	10,971

Device	Routing	Invert	Outlet Devices
#1	Primary	212.00'	16.0" Round Culvert L= 120.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 212.00' / 206.00' S= 0.0500 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.40 sf
#2	Device 1	213.80'	30.0" W x 8.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=4.82 cfs @ 12.14 hrs HW=214.52' (Free Discharge)

- ↑ 1=Culvert (Passes 4.82 cfs of 9.16 cfs potential flow)
- ↑ 2=Orifice/Grate (Orifice Controls 4.82 cfs @ 2.89 fps)

Pond Po1: Detention Pond



Proposed Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Pond CB3: Catch Basin

Inflow Area = 0.947 ac, 69.14% Impervious, Inflow Depth > 4.24" for 25-Year event
 Inflow = 4.04 cfs @ 12.03 hrs, Volume= 0.335 af
 Outflow = 4.04 cfs @ 12.03 hrs, Volume= 0.335 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.04 cfs @ 12.03 hrs, Volume= 0.335 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 214.93' @ 12.03 hrs

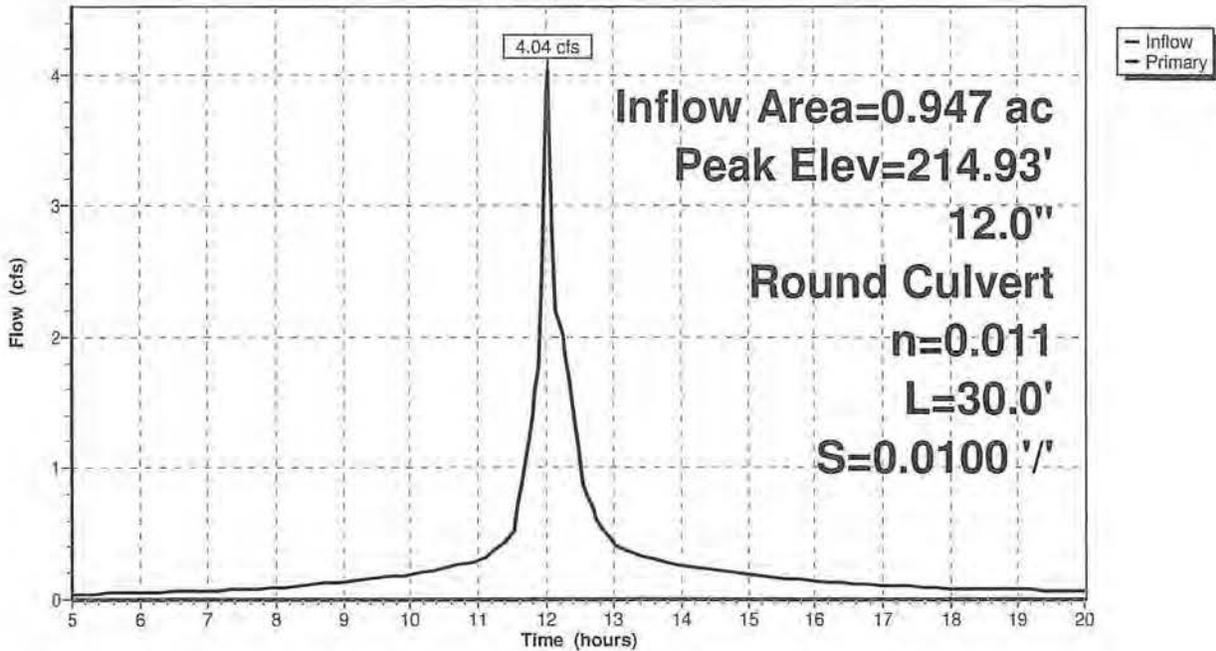
Device	Routing	Invert	Outlet Devices
#1	Primary	213.30'	12.0" Round Culvert L= 30.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 213.30' / 213.00' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf

Primary OutFlow Max=3.89 cfs @ 12.03 hrs HW=214.86' (Free Discharge)

←1=Culvert (Inlet Controls 3.89 cfs @ 4.95 fps)

Pond CB3: Catch Basin

Hydrograph



Proposed Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Pond CB4: Catch Basin

Inflow Area = 0.329 ac, 77.21% Impervious, Inflow Depth > 4.44" for 25-Year event
Inflow = 1.83 cfs @ 12.04 hrs, Volume= 0.122 af
Outflow = 1.83 cfs @ 12.04 hrs, Volume= 0.122 af, Atten= 0%, Lag= 0.0 min
Primary = 1.83 cfs @ 12.04 hrs, Volume= 0.122 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 206.30' @ 12.04 hrs

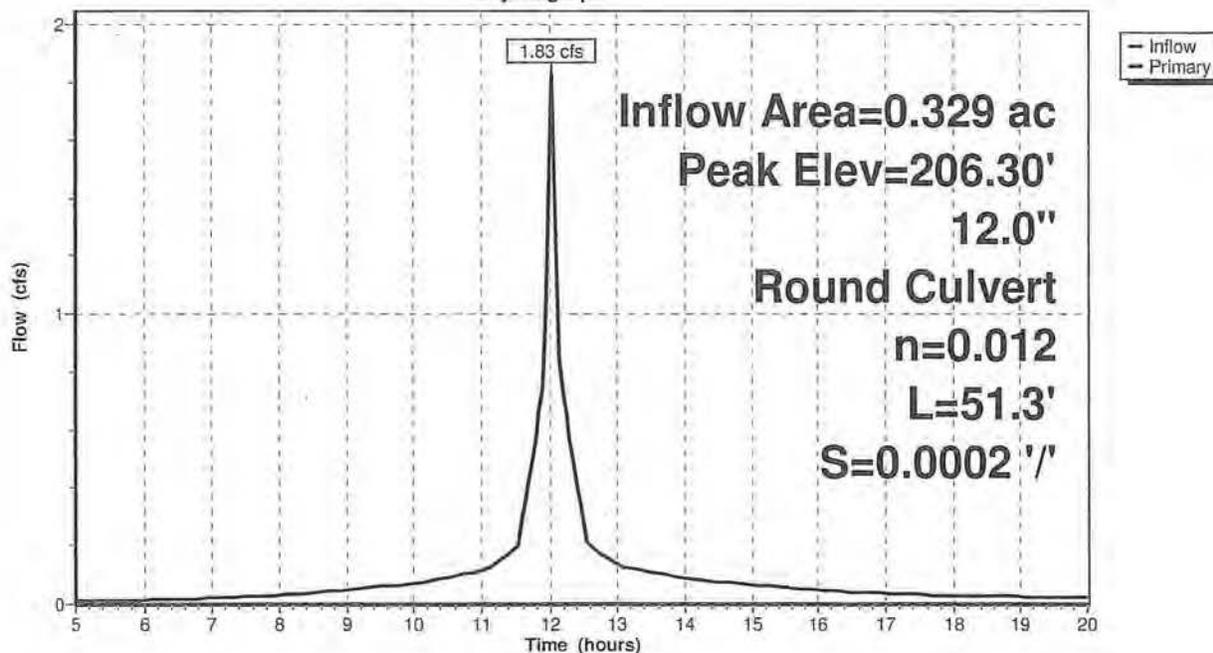
Device	Routing	Invert	Outlet Devices
#1	Primary	205.21'	12.0" Round Culvert L= 51.3' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 205.21' / 205.20' S= 0.0002 '/' Cc= 0.900 n= 0.012 Concrete pipe, finished, Flow Area= 0.79 sf

Primary OutFlow Max=1.76 cfs @ 12.04 hrs HW=206.27' (Free Discharge)

↑1=Culvert (Barrel Controls 1.76 cfs @ 2.63 fps)

Pond CB4: Catch Basin

Hydrograph



Proposed Conditions

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Type III 24-hr 25-Year Rainfall=5.40"

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Summary for Pond Po1: Detention Pond

Inflow Area = 1.335 ac, 49.02% Impervious, Inflow Depth > 4.09" for 25-Year event
 Inflow = 5.17 cfs @ 12.04 hrs, Volume= 0.455 af
 Outflow = 2.32 cfs @ 12.36 hrs, Volume= 0.452 af, Atten= 55%, Lag= 19.2 min
 Primary = 2.32 cfs @ 12.36 hrs, Volume= 0.452 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 213.76' @ 12.36 hrs Surf.Area= 3,160 sf Storage= 3,714 cf
 Flood Elev= 215.50' Surf.Area= 5,000 sf Storage= 10,971 cf

Plug-Flow detention time= 18.9 min calculated for 0.450 af (99% of inflow)
 Center-of-Mass det. time= 15.7 min (767.8 - 752.0)

Volume	Invert	Avail.Storage	Storage Description
#1	212.00'	10,971 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
212.00	920	0	0
213.00	2,344	1,632	1,632
214.00	3,423	2,884	4,516
215.00	4,659	4,041	8,557
215.50	5,000	2,415	10,971

Device	Routing	Invert	Outlet Devices
#1	Primary	212.00'	16.0" Round Culvert L= 120.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 212.00' / 206.00' S= 0.0500 ' ' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 1.40 sf
#2	Device 1	212.00'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600
#3	Device 1	213.80'	30.0" W x 8.0" H Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=2.32 cfs @ 12.36 hrs HW=213.75' (Free Discharge)

- ↑ 1=Culvert (Passes 2.32 cfs of 7.01 cfs potential flow)
- ↑ 2=Orifice/Grate (Orifice Controls 2.32 cfs @ 5.91 fps)
- ↑ 3=Orifice/Grate (Controls 0.00 cfs)

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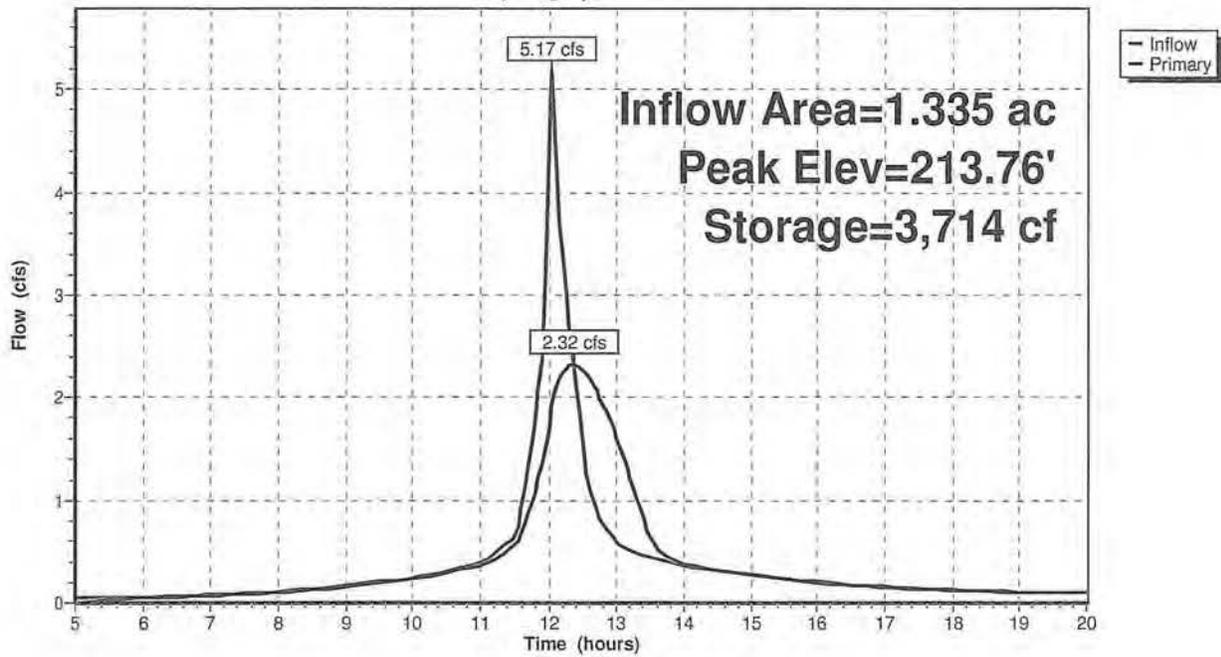
Type III 24-hr 25-Year Rainfall=5.40"

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Pond Po1: Detention Pond

Hydrograph





SURVEYING ENGINEERING LAND PLANNING

Northeast Civil Solutions

INCORPORATED

www.northeastcivilsolutions.com

153 U.S. Route 1

Scarborough

Maine 04074

tel

207.883.1000

800.882.2227

fax

207.883.1001

Parking Assessment – 1073 Sabattus Street

Article 12, Sec. 17, of the zoning and land use code requires a retail establishment to have one space per two hundred fifty square feet of gross floor area.

For the proposed development, a retail establishment of 9,100 gross square feet, 37 parking spots are required:

$$9,100\text{sf} \times 1 \text{ spot per } 250\text{sf} = 36.25 \text{ spots or } \mathbf{37 \text{ spots}}$$

Section 17 also states:

“Uses not specifically listed or able to be placed into one of the above categories, or listed uses which can be clearly shown to have a differing parking need (either fewer or greater) than otherwise required:

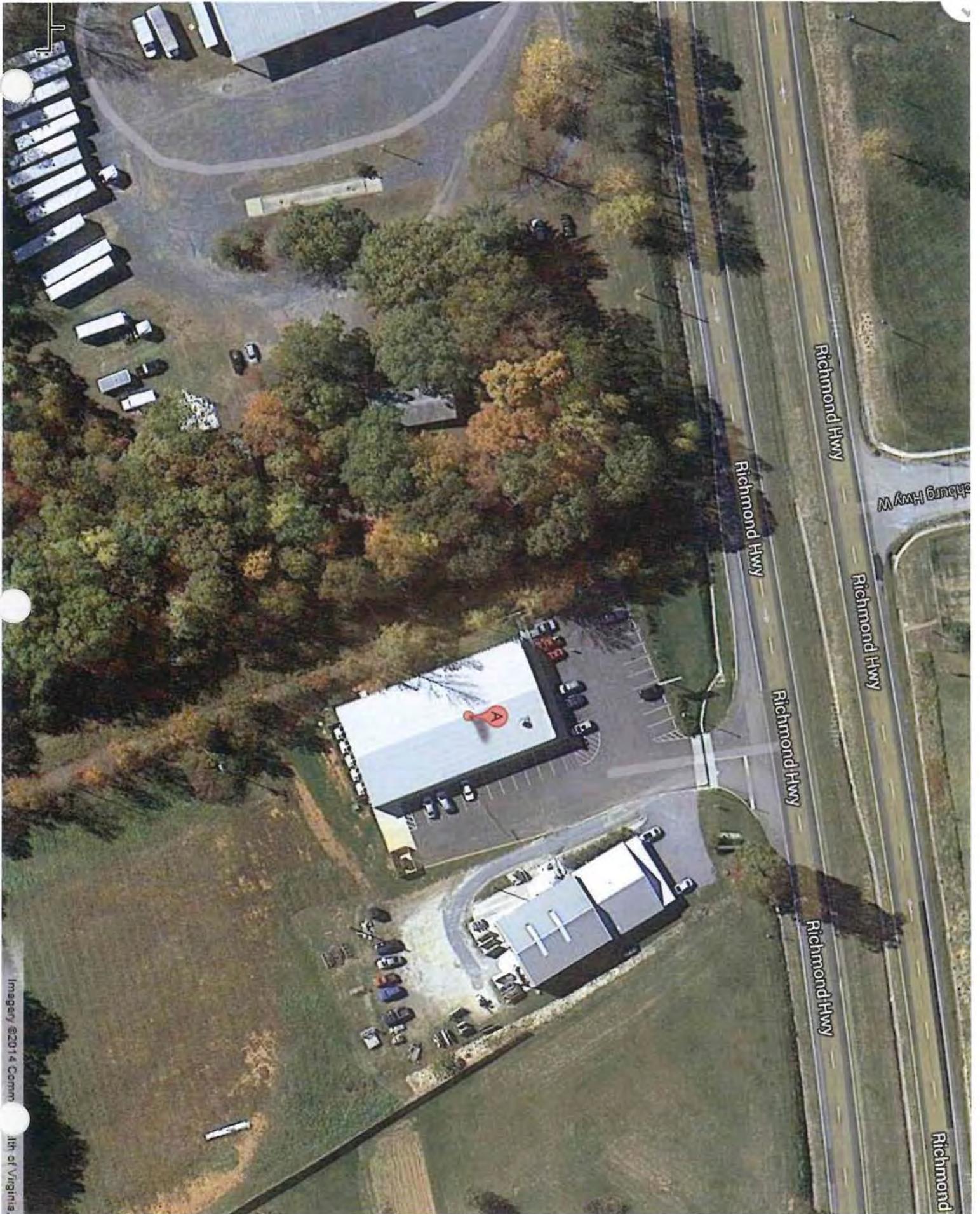
Sufficient spaces to accommodate the normal parking demand of the use without requiring on-street parking. The number of required spaces shall be determined by the planning board for major project development review”

The proposed development is a Dollar General store. We have attached Google Earth images of 4 Dollar General Stores from across the country, presumably during normal business hours, with similar layouts and varying number of parking spots, ranging from 30 to 34. What they all show is that there is adequate parking for this type of retail store with many open spots at each location.

Per the traffic study, this store should generate 65 trips in its peak hour. Using an assumption that the average shopper is in the store for twenty minutes, it translates to 12-15 spots being used at any given time during the peak hour. With 30 available parking spots there is adequate space for employees, maximum 4, and customers at any given time without any on street parking.

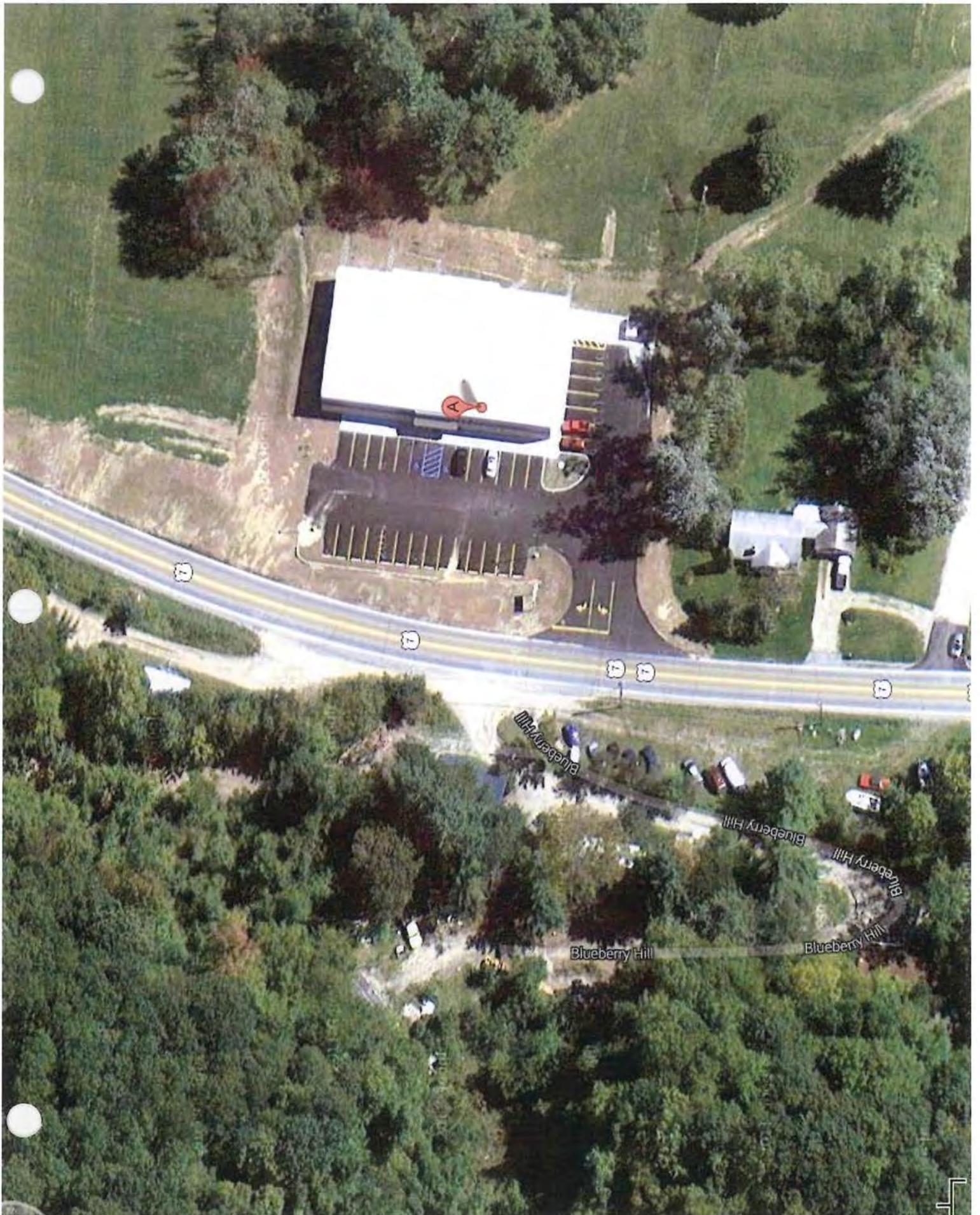
The development is not connected to adjacent sites and will not lose parking from non Dollar General customers. The applicant is comfortable with the number of parking spaces proposed.

We request that the number of required parking spots for this site be reduced to 30.

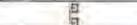








Luminaire Schedule

Symbol	Qty	Label	Description	Arrangement	Lumens	LLF
	5	Canopy Strips	Strip	SINGLE	2900	0.940
	3	MFHID-PLL-400MH SBL Twin	Twin 400W Parking Lot Lighting w. SBL	TWIN	40000	0.720
	5	MFHID-WPF-150PMH 12in	150W Full Cutoff Wall Pack	SINGLE	13300	0.720
	2	MFHID-WPF-400MH	400W Full Cutoff Wall Pack	SINGLE	44000	0.720

Calculation Summary

Label	CalcType	Units	Avg	Max	Min
Parking Lot CalcPts	Illuminance	Fc	7.01	30.8	0.1
Site CalcPts	Illuminance	Fc	0.75	18.8	0.0

BOM Schedule

Qty	Part Number	Description
5	MFHID-WPF-150PMH	150W Full Cutoff Wall Packs
2	MFHID-WPF-400MH	400W Full Cutoff Wall Packs
6	MFHID-PLL-400MH	400W Parking Lot Lighting ***NOTE: DO NOT tilt fixtures up, keep at 0 degree horizontal plane.
3	HW-HID-20POLE4	20' Parking Lot Pole
3	HW-HID-PLL-MB	Twin Tenon Mounting Bracket
6	HW-HID-PLL-SBL16	16" Housing Backlight Shield

Dollar General

Lewiston, ME

CONFIDENTIAL INFORMATION Please Note: This data is based upon certain specific assumed reflectances and characteristics of the proposed environment. Any deviation from these reflectances or assumed characteristics may affect the actual performance of the luminaries. Based on the factors, Harris Manufacturing, Inc. can not guarantee these results.

Harris Lighting

4035 Reynolds Blvd
 Green Cove Springs, FL 32043
 Tel: (904) 284-1220 x262
 Email: bhartt@harrislighting.com



Luminaire Location Summary

Label	Fix. Ht.	Orient	Tilt
Canopy Strips	10	180	0
Canopy Strips	10	180	0
Canopy Strips	10	180	0
Canopy Strips	10	180	0
Canopy Strips	10	180	0
MFHID-WPF-150PMH 12in	12	0	0
MFHID-WPF-150PMH 12in	12	0	0
MFHID-WPF-150PMH 12in	12	0	0
MFHID-WPF-150PMH 12in	12	0	0
MFHID-WPF-150PMH 12in	12	0	0
MFHID-WPF-400MH	16	90	0
MFHID-WPF-400MH	16	90	0
MFHID-PLL-400MH SBL Twin	20	270	0
MFHID-PLL-400MH SBL Twin	20	180	0
MFHID-PLL-400MH SBL Twin	20	0	0

Dollar General

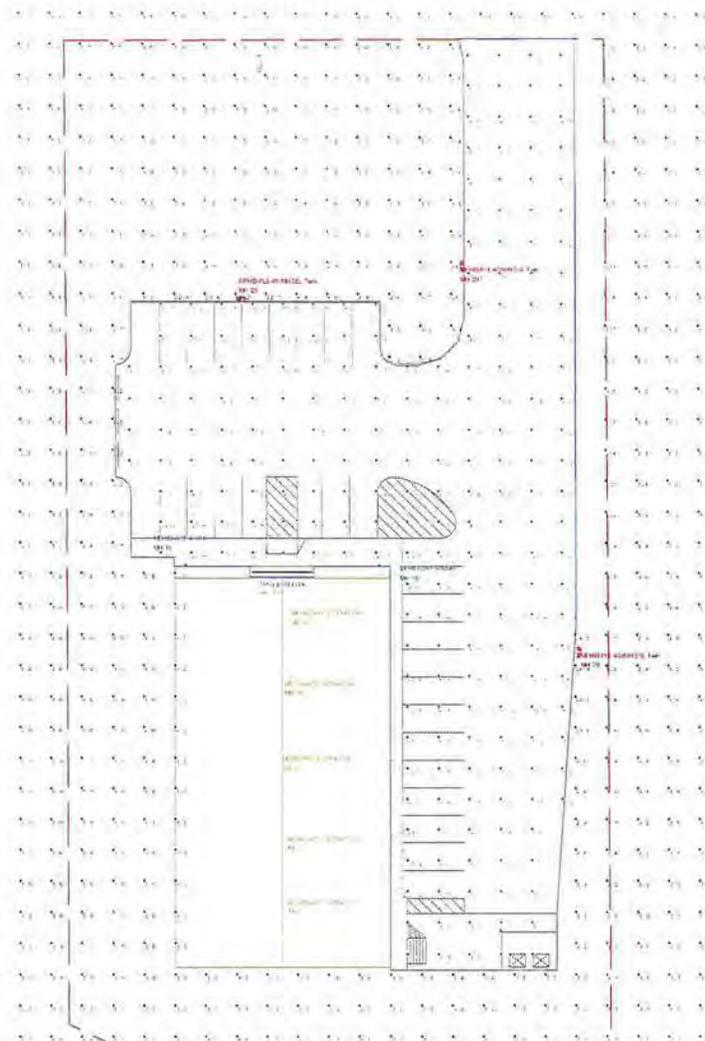
Lewiston, ME

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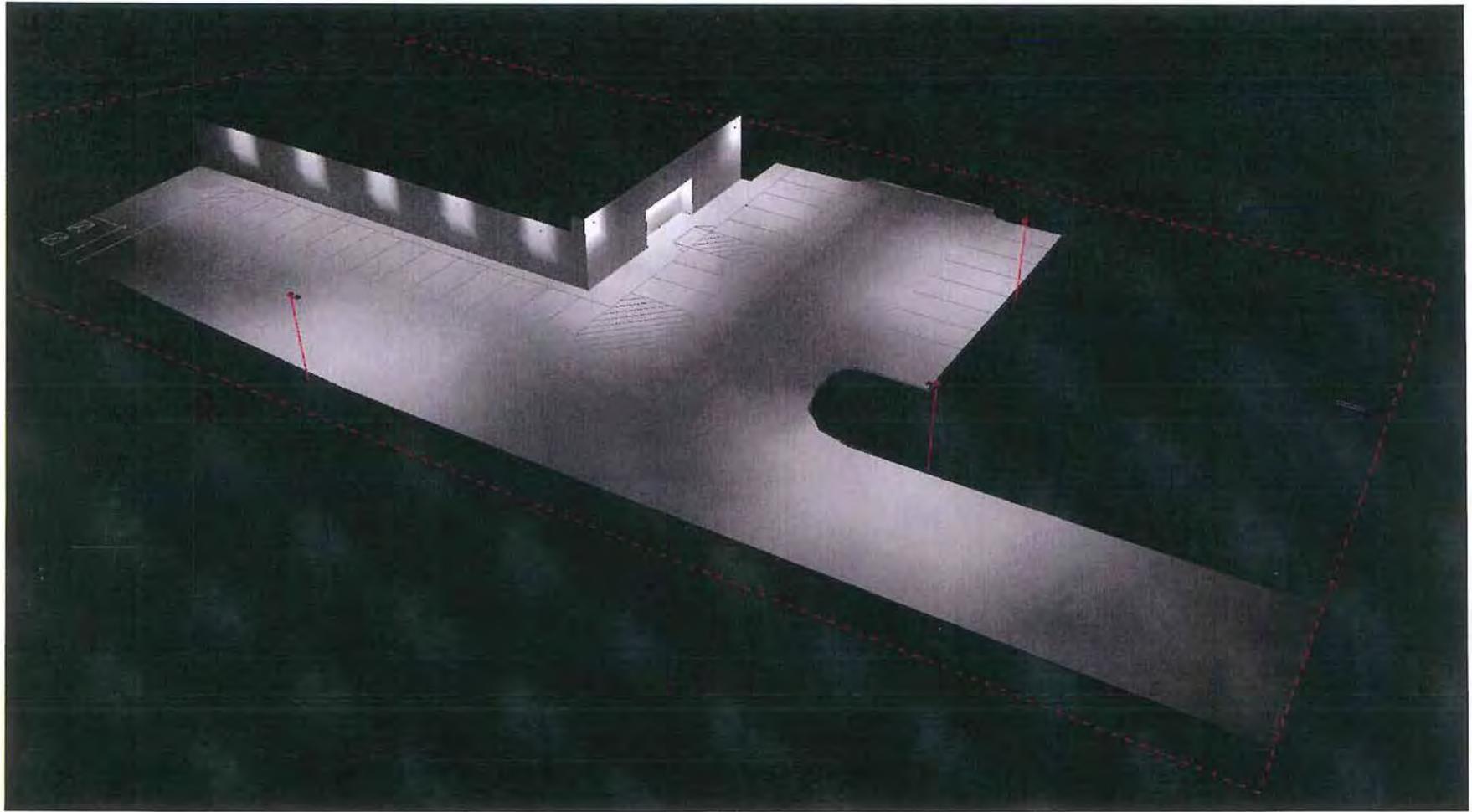
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Dollar General

Lewiston, ME

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Harris Lighting

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Email: bhartt@harrislighting.com



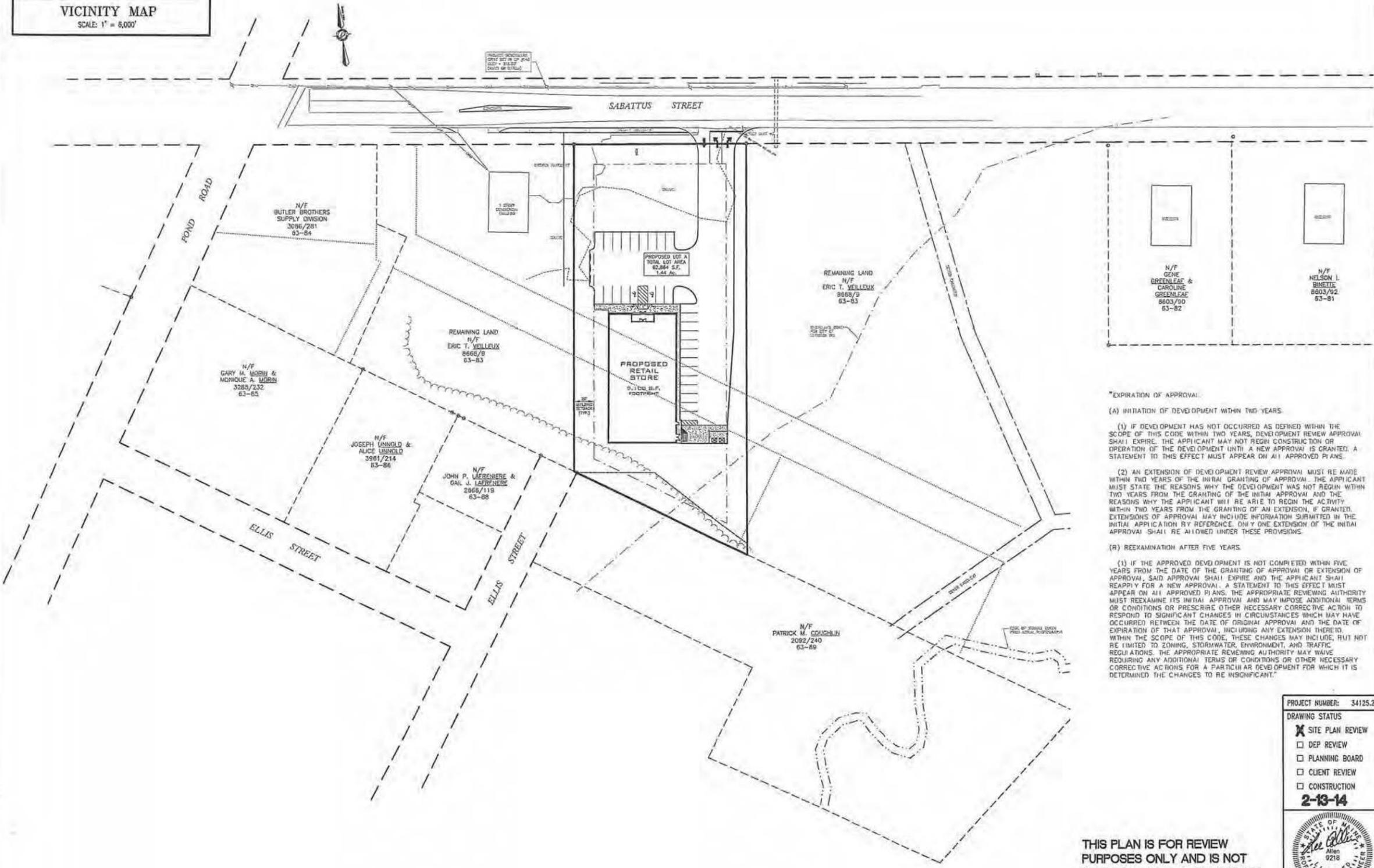
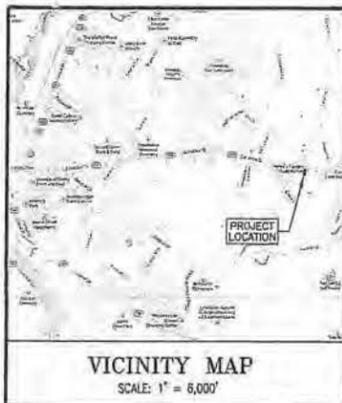
Date: 1/28/2014

Page 4 of 4

PROPOSED RETAIL STORE

1073 SABATTUS STREET

LEWISTON, MAINE



***EXPIRATION OF APPROVAL:**

(A) INITIATION OF DEVELOPMENT WITHIN TWO YEARS

(1) IF DEVELOPMENT HAS NOT OCCURRED AS DEFINED WITHIN THE SCOPE OF THIS CODE WITHIN TWO YEARS, DEVELOPMENT REVIEW APPROVAL SHALL EXPIRE. THE APPLICANT MAY NOT BEGIN CONSTRUCTION OR OPERATION OF THE DEVELOPMENT UNTIL A NEW APPROVAL IS GRANTED. A STATEMENT TO THIS EFFECT MUST APPEAR ON ALL APPROVED PLANS.

(2) AN EXTENSION OF DEVELOPMENT REVIEW APPROVAL MUST BE MADE WITHIN TWO YEARS OF THE INITIAL GRANTING OF APPROVAL. THE APPLICANT MUST STATE THE REASONS WHY THE DEVELOPMENT WAS NOT BEGUN WITHIN TWO YEARS FROM THE GRANTING OF THE INITIAL APPROVAL AND THE REASONS WHY THE APPLICANT WILL BE ABLE TO BEGIN THE ACTIVITY WITHIN TWO YEARS FROM THE GRANTING OF AN EXTENSION, IF GRANTED. EXTENSIONS OF APPROVAL MAY INCLUDE INFORMATION SUBMITTED IN THE INITIAL APPLICATION BY REFERENCE. ONLY ONE EXTENSION OF THE INITIAL APPROVAL SHALL BE ALLOWED UNDER THESE PROVISIONS.

(B) REEXAMINATION AFTER FIVE YEARS

(1) IF THE APPROVED DEVELOPMENT IS NOT COMPLETED WITHIN FIVE YEARS FROM THE DATE OF THE GRANTING OF APPROVAL OR EXTENSION OF APPROVAL, SAID APPROVAL SHALL EXPIRE AND THE APPLICANT SHALL REAPPLY FOR A NEW APPROVAL. A STATEMENT TO THIS EFFECT MUST APPEAR ON ALL APPROVED PLANS. THE APPROPRIATE REVIEWING AUTHORITY MUST REEXAMINE ITS INITIAL APPROVAL AND MAY IMPOSE ADDITIONAL TERMS OR CONDITIONS OR PRESCRIBE OTHER NECESSARY CORRECTIVE ACTION TO RESPOND TO SIGNIFICANT CHANGES IN CIRCUMSTANCES WHICH MAY HAVE OCCURRED BETWEEN THE DATE OF ORIGINAL APPROVAL AND THE DATE OF EXPIRATION OF THAT APPROVAL, INCLUDING ANY EXTENSION THEREOF. WITHIN THE SCOPE OF THIS CODE, THESE CHANGES MAY INCLUDE, BUT NOT BE LIMITED TO ZONING, STORMWATER, ENVIRONMENT, AND TRAFFIC REGULATIONS. THE APPROPRIATE REVIEWING AUTHORITY MAY WAIVE REQUIRING ANY ADDITIONAL TERMS OR CONDITIONS OR OTHER NECESSARY CORRECTIVE ACTIONS FOR A PARTICULAR DEVELOPMENT FOR WHICH IT IS DETERMINED THE CHANGES TO BE INSIGNIFICANT.

INDEX

1. COVER/INDEX/VICINITY MAP
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5. SITE & LAYOUT PLAN
6. UTILITY PLAN
7. EROSION & SEDIMENTATION CONTROL PLAN
8. EROSION & SEDIMENTATION CONTROL NOTES AND DETAILS
9. CONSTRUCTION DETAILS - SHEET 1
10. CONSTRUCTION DETAILS - SHEET 2
11. PRE-DEVELOPMENT DRAINAGE AREA PLAN
12. POST-DEVELOPMENT DRAINAGE AREA PLAN
- L101 LANDSCAPE PLAN
- L201 LANDSCAPE DETAILS & NOTES
- A01 FLOOR PLANS
- A02 ELEVATIONS

ABUTTERS

ASSESSOR'S MAP	PARCEL NUMBER	OWNER'S NAME
38	8	COUNTRY LANE CORPORATION PO BOX 3346, AUBURN, ME 04212 BOOK 1099, PAGE 184
38	9	RICHARD CLOUTIER 112 GOLDER ROAD, LEWISTON, ME 04240 BOOK 2144, PAGE 132
63	80	JEANETTE BAZINET 210 FAIRWAY DRIVE, AUBURN, ME 04212 BOOK 8136, PAGE 184
63	81	NELSON BINETTE 50 ASH-MOUNT STREET, LEWISTON, ME 04240 BOOK 8603, PAGE 92
63	82	CAROL GREENLEAF 1093 SABATTUS STREET, LEWISTON, ME 04240 BOOK 8603, PAGE 90
63	83	PAUL RAYMOND 219 POND ROAD, LEWISTON, ME 04240 BOOK 1806, PAGE 19
63	84	BUTLER BROTHERS SUPPLY DIVISION PO BOX 1375, LEWISTON, ME 04240 BOOK 989, PAGE 261
63	85	GARY M. & MONIQUE MORIN 255 POND ROAD, LEWISTON, ME 04240 BOOK 3285, PAGE 232
63	86	JOSEPH UNNOLD 18 ELLIS STREET, LEWISTON, ME 04240 BOOK 3981, PAGE 214
63	88	JOHN & GAIL LAFRENIERE 44 ELLIS STREET, LEWISTON, ME 04240 BOOK 2866, PAGE 119
63	89	PATRICK COUGHLIN 45 ELLIS STREET, LEWISTON, ME 04240 BOOK 2082, PAGE 240
63	129	CITY OF LEWISTON 27 PINE STREET, LEWISTON, ME 04240 BOOK 645, PAGE 406
63	130	DONALD & SANDRA BUTEAU 6589 SILVERBRIAR COURT, BARTLETT, TN 38135 BOOK 1653, PAGE 338

**APPROVED BY THE CITY OF
LEWISTON PLANNING BOARD**

CHAIRPERSON _____ DATE _____

Revision	By	Date	Change

PROJECT NUMBER: 34125.2 ACAD FILE: 34125-COVER.DWG SCALE: 1" = 50' DATE: FEBRUARY 13, 2014

DRAWING STATUS

SITE PLAN REVIEW

DEP REVIEW

PLANNING BOARD

CLIENT REVIEW

CONSTRUCTION

2-13-14

Project Name: **PROPOSED RETAIL STORE**
1073 SABATTUS STREET, LEWISTON, MAINE 04240

Owner/Applicant: **FRANKLIN LAND ASSOCIATES, LLC**
9010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027

ALLEN ALLEN
11113
MAINE

Northeast Civil Solutions
INCORPORATED

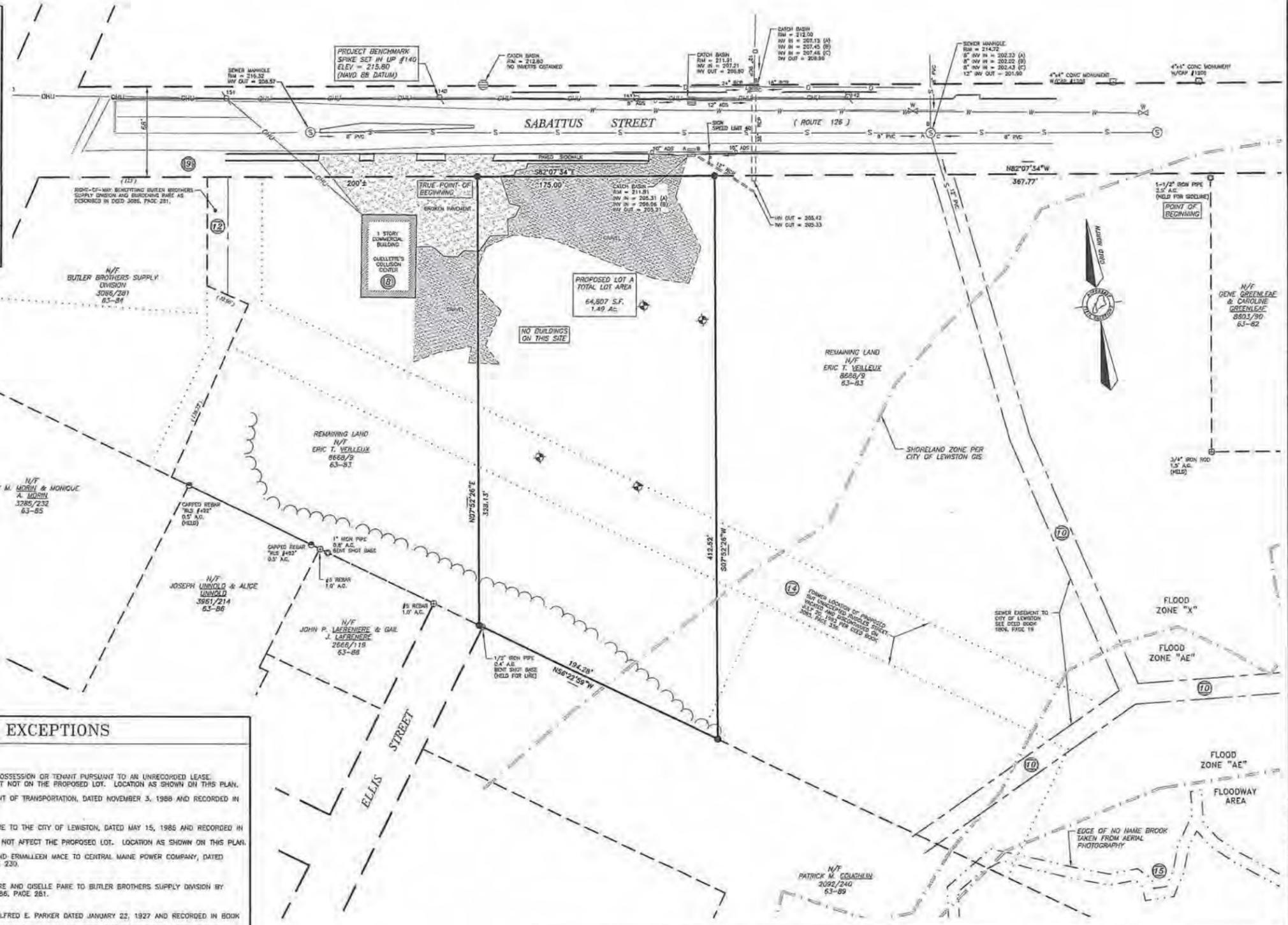
153 US ROUTE 1, SCARBOROUGH, MAINE 04074

tel: 207.883.1000 fax: 207.883.1001 e-mail: info@northeastcivilsolutions.com
800.882.2227

SHEET 1 OF 12

**THIS PLAN IS FOR REVIEW
PURPOSES ONLY AND IS NOT
INTENDED FOR CONSTRUCTION
OR RECORDING**

E:\Users\jmorris\Documents\Projects\34125-COVER.DWG



LEGEND

- #5 REBAR WITH PLASTIC CAP STAMPED
- "NCS, INC. PLS 1314" SET ON
- FOUND IRON PIPE (SIZE & TYPE AS NOTED)
- FOUND IRON ROD
- FOUND CAPPED IRON ROD (NUMBER AS NOTED)
- TEST BORING
- UTILITY POLE (NUMBER AS NOTED)
- SEWER MANHOLE
- CATCH BASIN
- WATER VALVE
- FIRE HYDRANT
- TREE LINE (APPROXIMATE)
- BOUNDARY LINE
- EASEMENT LINE
- EDGE OF GRAVEL
- EDGE OF PAVEMENT
- RIGHT-OF-WAY LINE
- ABUTTER LINE
- OVERHEAD UTILITY
- SEWER LINE
- WATER LINE
- DRAIN LINE
- CULVERT
- N/F NOW OR FORMERLY OWNED BY
- 1234/567 DEED BOOK AND PAGE (ACRD)
- 12-34 TAX MAP--LOT
- (123-45) PARENTHESIS DENOTE RECORD DATA

- ### NOTES
- THE BASIS OF BEARING FOR THIS SURVEY IS THE MAINE STATE COORDINATE SYSTEM, WEST ZONE, GRID NORTH.
 - DEED AND PLAN BOOK REFERENCES ARE TO THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS.
 - RECORD OWNERSHIP OF THE PARCEL SURVEYED CAN BE FOUND IN A DEED FROM RAYMOND PARE TO ERIC T. VEILLEUX DATED MAY 10, 2013 AND RECORDED IN DEED BOOK 8658, PAGE 9.
 - REFERENCE IS MADE TO THE FOLLOWING PLANS:
 - "STRAWBERRY HILL OWNED BY Z.N. RUGGLES, LEWISTON, MAINE" BY CHANDLER H. BARRON, C.E., DATED 1922, RECORDED IN VOLUME 2, PLAN BOOK 4, PAGE 1459.
 - "SUBDIVISION - HARVEY & MAUREEN POUSSARD" BY SPARKS ENGINEERING & SURVEYING, DATED AUGUST 31, 1988, RECORDED IN PLAN BOOK 34, PAGE 80.
 - "GROVE STREET GARDENS, LEWISTON, MAINE" BY A.L. ELIOT, DATED JULY 25, 1920, RECORDED IN VOLUME 2, PLAN BOOK 4, PAGE 110.
 - "EASEMENT OVERLAY 26 PROPERTY BASE MAP, BY LEWISTON ENGINEERING DEPARTMENT, DATED AUGUST, 1972, NOT RECORDED.
 - "RIGHT-OF-WAY MAP, STATE HIGHWAY 153" BY MAINE DEPARTMENT OF TRANSPORTATION, DATED 1988, D.O.T. FILE #1-113.
 - "RIGHT-OF-WAY MAP, STATE HIGHWAY 153" BY MAINE DEPARTMENT OF TRANSPORTATION, DATED JANUARY, 1984, D.O.T. FILE #1-169.
 - THE PARCEL SURVEYED IS IDENTIFIED ON THE CITY OF LEWISTON TAX ASSESSOR'S MAP 63, PARCEL 03.
 - THE PARCEL SURVEYED IS LOCATED IN THE HB ZONE/DISTRICT. PORTIONS OF BULK AND SPACE REQUIREMENTS ARE AS FOLLOWS:
 - MINIMUM LOT AREA =/SEWER = NONE
 - MINIMUM FRONTAGE = 150'
 - SETBACKS:
 - FRONT = 20'
 - SIDE = 20'
 - REAR = 20'
 - MINIMUM LOT COVERAGE = 50%
 - MAXIMUM IMPERVIOUS COVERAGE = 75%
 - *OTHER MUNICIPAL AND STATE OVERLAY ZONES MAY EXIST AND APPLY. BEFORE PROCEEDING ON ANY PROJECT WE RECOMMEND VERIFYING CURRENT ZONING / SETBACKS / RESTRICTIONS WITH THE APPROPRIATE AGENCIES.
 - THE WIDTH AND LAYOUT OF SABATTUS STREET IS BASED ON THE PLAN REFERENCED IN NOTE 4.I. ABOVE. SAID WIDTH IS 66'.
 - REFERENCE IS MADE TO THE FOLLOWING EASEMENTS OF RECORD:
 - A 15' WIDE RIGHT-OF-WAY BENEFITING THE ABUTTER DATED JULY 21, 1993 AND RECORDED IN DEED BOOK 3096, PAGE 201.
 - ELEVATIONS AND CONTOURS ARE BASED ON NAVD 1988 DATUM OBTAINED BY GPS. SEE PLAN FOR TBM DESCRIPTION.
 - THE UTILITIES SHOWN ON THIS PLAN WERE FROM FIELD OBSERVATION ONLY. THERE MAY BE OTHER UTILITIES EXISTING THAT ARE NOT SHOWN. CONTACT DIG-SAFE (888)606-SAFE PRIOR TO ANY EXCAVATION WORK.

Revision	By	Date	Change
1	229	8/29/14	ISSUED SET EXHIBITIONS

PROJECT: 34125 DRAWING NAME: 34125.DWG
 DATE: DECEMBER 10, 2013 SCALE: 1"= 40' FB # 257 E. FB YES
 FIELD BY: MAC / SRM FIELD DATE: 11-13-2013 DRAWN BY: JAP

ALTA / ACSM LAND TITLE SURVEY
 1073 SABATTUS STREET, LEWISTON, MAINE

Eric T. Veilleux
 219 POND ROAD, LEWISTON, MAINE 04240

Surveyed for:
LEWISTON DMEP IX, LLC
 9010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027

Surveying Engineering Land Planning
Northeast Civil Solutions
 INCORPORATED
 153 US ROUTE 1, SCARBOROUGH, MAINE 04074

tel 207.883.1000 fax 207.883.1001 e-mail info@northeastcivilsolutions.com
 800.982.2227

STAMP AND SIGNATURE

7/20/13 11-10-2013
 M. JOHANN BUISMAN
 MAINE PROFESSIONAL LAND SURVEYOR NO. 1314

STATE OF MAINE
 M. JOHANN BUISMAN
 1314
 PROFESSIONAL LAND SURVEYOR

IF THIS PLAN DOES NOT CARRY AN EXPRESSED SEAL, IT IS NOT AN ORIGINAL AND MAY BE VOID. ENCLOSED SEAL ABOVE.

SCHEDULE B EXCEPTIONS

- 1-7 - ITEMS ARE NOT SURVEY MATTERS
- RIGHTS OF OULLETTE'S COLLUSION CENTER AS PARTY IN POSSESSION OR TENANT PURSUANT TO AN UNRECORDED LEASE. - THE COLLUSION CENTER IS ON THE PARENT PARCEL BUT NOT ON THE PROPOSED LOT. LOCATION AS SHOWN ON THIS PLAN.
 - NOTICE OF LAYOUT AND TAKING BY THE MAINE DEPARTMENT OF TRANSPORTATION, DATED NOVEMBER 3, 1988 AND RECORDED IN BOOK 2338, PAGE 231. - AS SHOWN ON SAID PLAN.
 - SEWER EASEMENT FROM RAYMOND PARE AND GISELLE PARE TO THE CITY OF LEWISTON, DATED MAY 15, 1986 AND RECORDED IN BOOK 1816, PAGE 46. - THIS EASEMENT IS ON THE PARENT PARCEL BUT DOES NOT AFFECT THE PROPOSED LOT. LOCATION AS SHOWN ON THIS PLAN.
 - RIGHTS AND EASEMENTS GRANTED BY ROBERT O. MACE AND ERMALDEN MACE TO CENTRAL MAINE POWER COMPANY, DATED NOVEMBER 10, 1964 AND RECORDED IN BOOK 929, PAGE 230. - NO POLE #140.1 WAS FOUND.
 - LAND, RIGHTS AND EASEMENTS GRANTED BY RAYMOND PARE AND GISELLE PARE TO BUTLER BROTHERS SUPPLY DIVISION BY DEED DATED JULY 21, 1993 AND RECORDED IN BOOK 3086, PAGE 281. - LOCATION AS SHOWN ON THIS PLAN.
 - WATERLINE EASEMENT FROM ZEPHANIAH N. RUGGLES TO ALFRED E. PARKER DATED JANUARY 22, 1927 AND RECORDED IN BOOK 364, PAGE 603. - NEITHER THE LOCATION OF THE SPRING NOR THE WATERLINE ARE KNOWN AND THUS CANNOT BE SHOWN ON THIS PLAN.
 - SUCH STATE OF FACTS, INCLUDING NOTES AND RIGHTS ABUTTERS IN AND TO THE PAPER STREET SHOWN AS RUGGLES STREET, ALL AS DEPICTED ON PLAN ENTITLED "STRAWBERRY HILL OWNED BY Z.N. RUGGLES, LEWISTON, MAINE 1922", RECORDED ON OCTOBER 26, 1922 IN PLAN BOOK VOL. 2, PAGE 148 (WITH FURTHER REFERENCE TO PLAN BOOK 4, PAGE 1498) AND PLAN ENTITLED "BERRY HILL PLAN OF LAND OWNED BY Z.N. RUGGLES, LEWISTON, MAINE" RECORDED ON AUGUST 9, 1922 IN PLAN BOOK VOL. 4, PAGE 149A. INFORMATIONAL NOTES: THE CITY OF LEWISTON VACATED AND DISCONTINUED RUGGLES STREET IN INSTRUMENT DATED JULY 20, 1995 AND RECORDED IN BOOK 3095, PAGE 336. - LOCATION AS SHOWN ON THIS PLAN.
 - RIPARIAN RIGHTS OF OTHERS IN AND TO NO NAME BROOK AS IT CROSSES THE PREMISES. - NO NAME BROOK CROSSES THE PARENT PARCEL BUT IT DOES NOT AFFECT THE PROPOSED LOT.
 - POSSIBLE SUBDIVISION VIOLATIONS RESULTING FROM THE CREATION OF THE PARCEL TO BE INSURED. NOTE: THIS EXCEPTION WILL BE MOVED OR DELETED UPON SATISFACTION OF THE REQUIREMENTS SET FORTH HEREIN. - THE PROPOSED LOT IS THE FIRST LOT OUT OF THE PARENT PARCEL IN MORE THAN 5 YEARS THEREFORE ITS CREATION DOES NOT TRIGGER A SUBDIVISION (PER M.R.S. 30A s.s. 4401)
 - SUCH STATE OF FACTS AS SHOWN ON PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY 1073 SABATTUS STREET, LEWISTON, MAINE" DATED NOVEMBER 19, 2013 BY NORTHEAST CIVIL SOLUTIONS, PROJECT NO. 34125. - AS SHOWN ON THIS PLAN.

SURVEY LEGAL DESCRIPTION

A CERTAIN LOT OR PARCEL OF LAND LOCATED ON THE SOUTHERLY SIDE OF SABATTUS STREET, IN THE CITY OF LEWISTON, COUNTY OF ANDROSCOGGIN, STATE OF MAINE, BEING MORE PARTICULARLY BOUND AND DESCRIBED AS FOLLOWS:

STARTING AT A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF SABATTUS STREET AT THE NORTHWESTERLY CORNER OF LAND N/F OF GENE GREENLEAF & CAROLINE GREENLEAF AS RECORDED IN DEED BOOK 8603, PAGE 90, ANDROSCOGGIN COUNTY REGISTRY OF DEEDS (ACRD);

THENCE N 82°07'34" E ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF SABATTUS STREET 542.77' TO A #5 REBAR WITH CAP STAMPED "NCS, INC PLS 1314" AT THE REMAINING LAND N/F OF ERIC T. VEILLEUX AS RECORDED IN DEED BOOK 8669, PAGE 9 AND THE TRUE POINT OF BEGINNING;

THENCE S 82°07'34" E ALONG THE SOUTHERLY RIGHT-OF-WAY LINE OF SABATTUS STREET 175.00' TO A #5 REBAR WITH CAP STAMPED "NCS, INC PLS 1314" AT THE REMAINING LAND OF SAID VEILLEUX;

THENCE S 07°52'26" W ALONG REMAINING LAND OF SAID VEILLEUX 412.52' TO A #5 REBAR WITH CAP STAMPED "NCS, INC PLS 1314" TO LAND N/F OF PATRICK M. DOUGHLIN AS RECORDED IN DEED BOOK 2092, PAGE 240, (ACRD);

THENCE N 56°22'59" W ALONG LAND OF DOUGHLIN 194.28' TO A #5 REBAR W/CAP STAMPED "NCS, INC PLS 1314" TO REMAINING LAND OF VEILLEUX;

THENCE N 07°52'26" E ALONG REMAINING LAND OF SAID VEILLEUX 328.13' TO THE TRUE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 64,807 S.F. OR 1.49 ACRES MORE OR LESS.

FLOOD ZONE CRITERIA

COUNTY: ANDROSCOGGIN
 COMMUNITY: LEWISTON
 COMM NO: 23001C
 PANEL NO: 0332 E
 EFFECTIVE DATE: JULY 8, 2013
 FLOOD ZONE: X

ALTA CERTIFICATION

FIRST AMERICAN TITLE INSURANCE COMPANY
 TITLE NO. 112113-01
 EFFECTIVE DATE: NOVEMBER 18, 2013

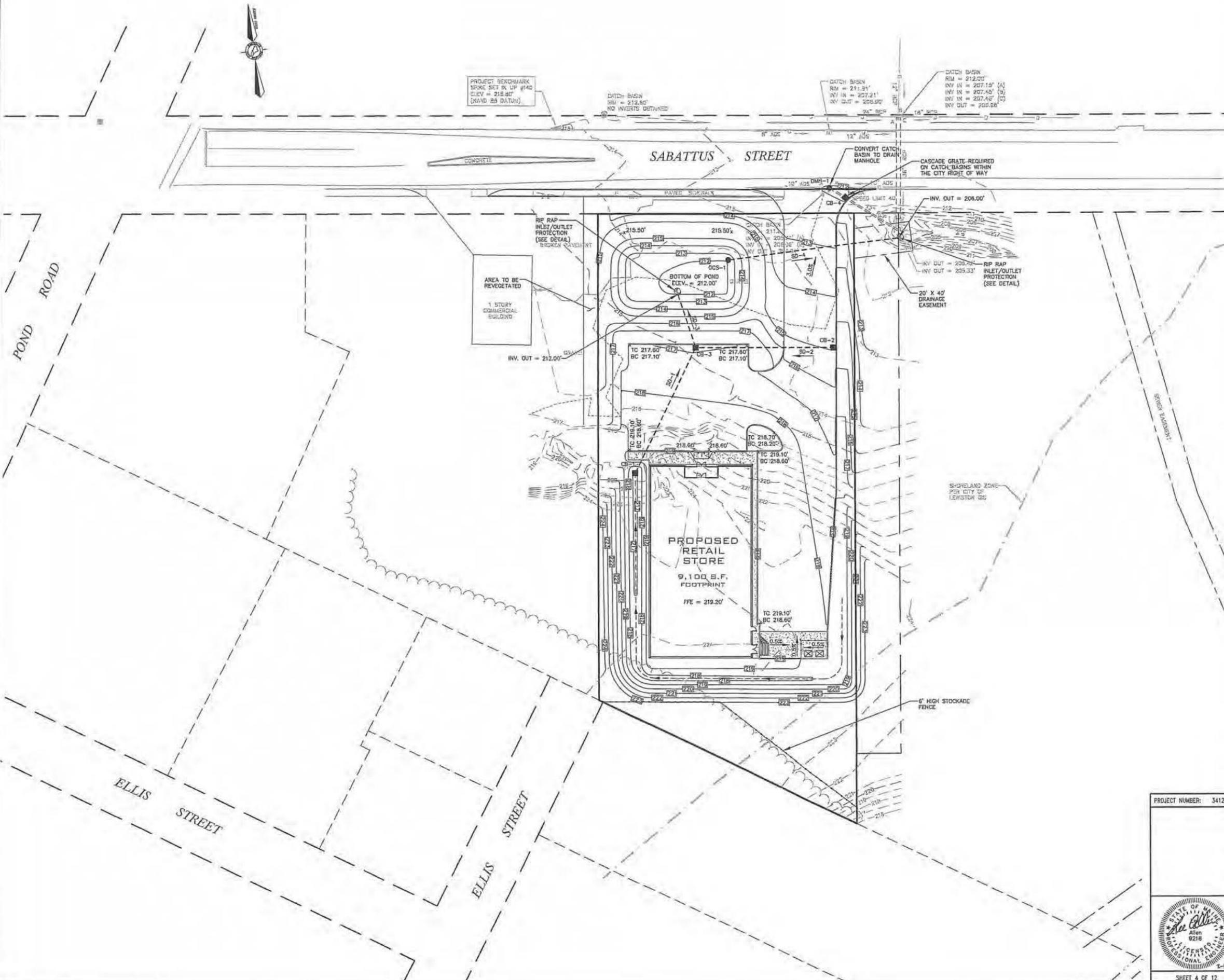
TO: LEWISTON DMEP IX, LLC AND MONUMENT TITLE INSURANCE COMPANY AND THE SUCCESSORS AND ASSIGNS OF EACH;

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16 AND 17 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON OCTOBER 31, 2013.

DATE OF PLAT OR MAP: DECEMBER 10, 2013

M. JOHANN BUISMAN
 MAINE PROFESSIONAL LAND SURVEYOR NO. 1314

SHEET 2 OF 12



LEGEND

- BOUNDARY LINE
- EDGE OF PAVEMENT
- RIGHT-OF-WAY LINE
- ABUTTER
- BUILDING SETBACK
- SEWER EASEMENT
- SHORELAND ZONE
- GRAVEL
- EXISTING CONTOUR
- EXISTING TREE LINE
- EDGE OF STREAM
- EXISTING CATCH BASIN
- EXISTING DRAIN LINE
- EXISTING WATER LINE
- EXISTING HYDRANT
- EXISTING GATE VALVE
- EXISTING SEWER MANHOLE
- EXISTING SEWER LINE
- EXISTING UTILITY POLE
- EXISTING OVERHEAD UTILITY
- PROPOSED CONTOUR
- PROPOSED DRAIN LINE
- PROPOSED CATCH BASIN
- PROPOSED DRAIN MANHOLE

NOTES

STRUCTURE SCHEDULE			
STRUCTURE	RIM	INVERT IN	INVERT OUT
CB-1	216.5'	---	214.00' (SD-1)
CB-2	215.0'	---	212.80' (SD-2)
CB-3	216.8'	213.00' (SD-1) 213.30' (SD-2)	212.00' (SD-3)
CB-4	211.75'	205.20' (EXIST. 12" RCP)	205.33' (EXIST. 12" RCP)
OCS-1	---	212.00' (ORIFICE)	206.00' (SD-4)
DMH-1	211.81'	205.20' (EXIST. 12" RCP)	205.20' (EXIST. 12" RCP)

PIPE SCHEDULE				
PIPE	PIPE DIAMETER	PIPE LENGTH	PIPE SLOPE (FT/FT)	TYPE
SD-1	12"	100'	0.0100	CORRUGATED HOPE (SMOOTH INTERIOR)
SD-2	12"	100'	0.0050	CORRUGATED HOPE (SMOOTH INTERIOR)
SD-3	12"	33'	0.0100	CORRUGATED HOPE (SMOOTH INTERIOR)
SD-4	12"	120'	0.0500	CORRUGATED HOPE (SMOOTH INTERIOR)

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

Revised	By	Date	Change

PROJECT NUMBER: 34125.2 ACAD FILE: 34125-GRADING.DWG SCALE: 1" = 30' DATE: FEBRUARY 13, 2014

Drawing Name: **GRADING & DRAINAGE PLAN**

Project Name: **PROPOSED RETAIL STORE**
1073 SABATTUS STREET, LEWISTON, MAINE 04240

Client: **FRANKLIN LAND ASSOCIATES, LLC**
9010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027

Alan
0218

Northeast Civil Solutions
INCORPORATED

153 US ROUTE 1, SCARBOROUGH, MAINE 04074

tel: 207.883.1000 fax: 207.883.1001 e-mail: info@northeastcivilsolutions.com
800.852.2227

SHEET 4 OF 12

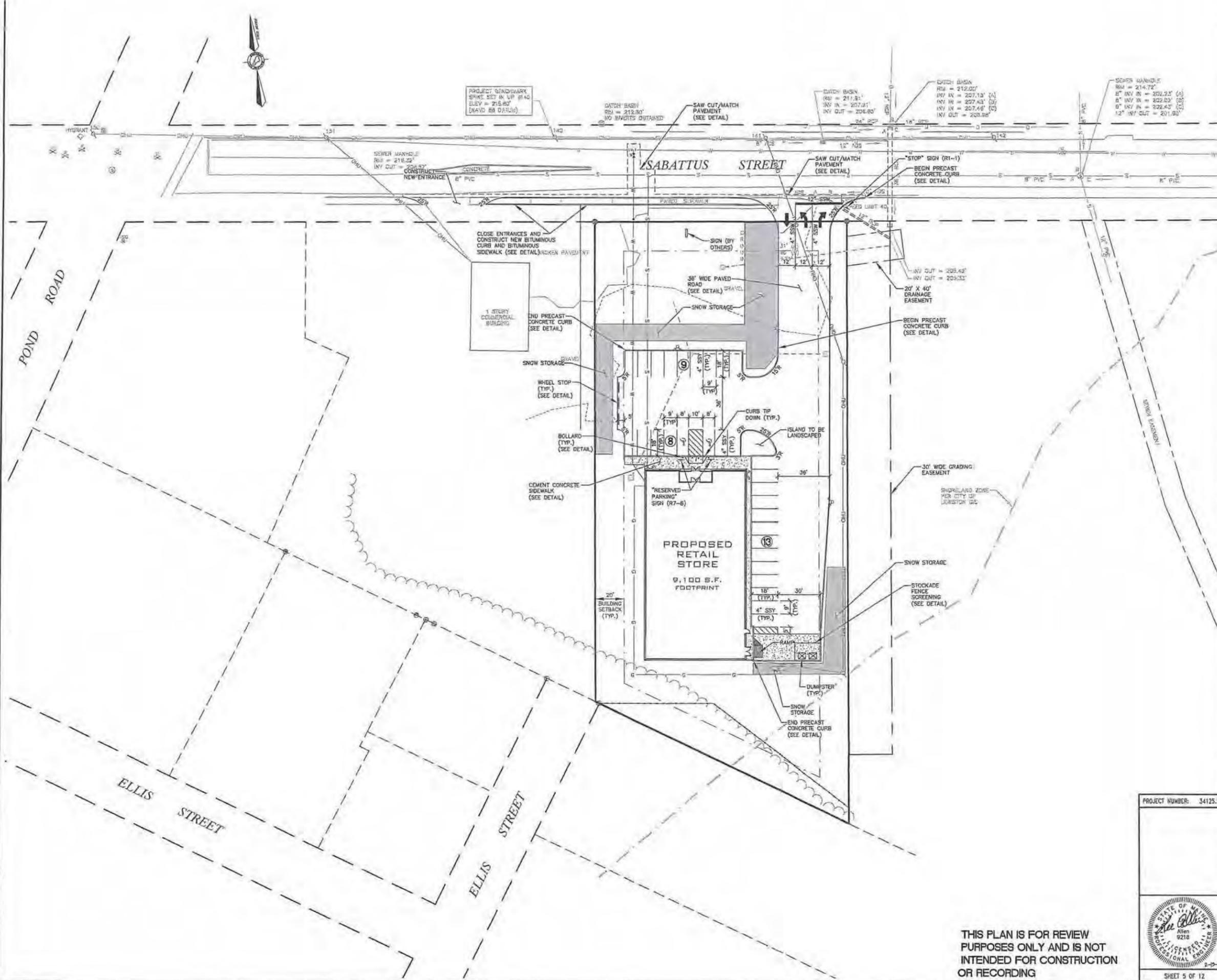
LEGEND

	BOUNDARY LINE
	EDGE OF PAVEMENT
	RIGHT-OF-WAY LINE
	ABUTTER
	BUILDING SETBACK
	SEWER EASEMENT
	SHORELAND ZONE
	GRAVEL
	EXISTING CONTOUR
	EXISTING TREE LINE
	EDGE OF STREAM
	EXISTING CATCH BASIN
	EXISTING DRAIN LINE
	EXISTING WATER LINE
	EXISTING HYDRANT
	EXISTING GATE VALVE
	EXISTING SEWER MANHOLE
	EXISTING SEWER LINE
	EXISTING UTILITY POLE
	EXISTING OVERHEAD UTILITY
	PROPOSED WATER LINE
	PROPOSED SEWER LINE
	PROPOSED OVERHEAD ELEC.
	PROPOSED DRAIN LINE
	PROPOSED CATCH BASIN
	PROPOSED OUTLET CONTROL STRUCTURE

STRIPING KEY:
 SSS = SINGLE SOLID YELLOW
 SSW = SINGLE SOLID WHITE
 * SEE DETAILS FOR ADDITIONAL PAVEMENT MARKINGS

NOTES

1. PRIOR TO A CERTIFICATE OF OCCUPANCY CURB CUT CLOSURES ON ADJUTING PROPERTY AT 1073 SABATTUS STREET MUST BE COMPLETED.
2. PRIOR TO A CERTIFICATE OF OCCUPANCY BEING ISSUED A PROFESSIONAL ENGINEER MUST PROVIDE A STAMPED STATEMENT INDICATING ALL STORMWATER IMPROVEMENTS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLAN.
3. PRIOR TO A CERTIFICATE OF OCCUPANCY BEING ISSUED, AN AS-BUILT SITE PLAN MUST BE PROVIDED BY A PROFESSIONAL SURVEYOR OR ENGINEER.



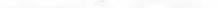
Revised	By	Date	Change

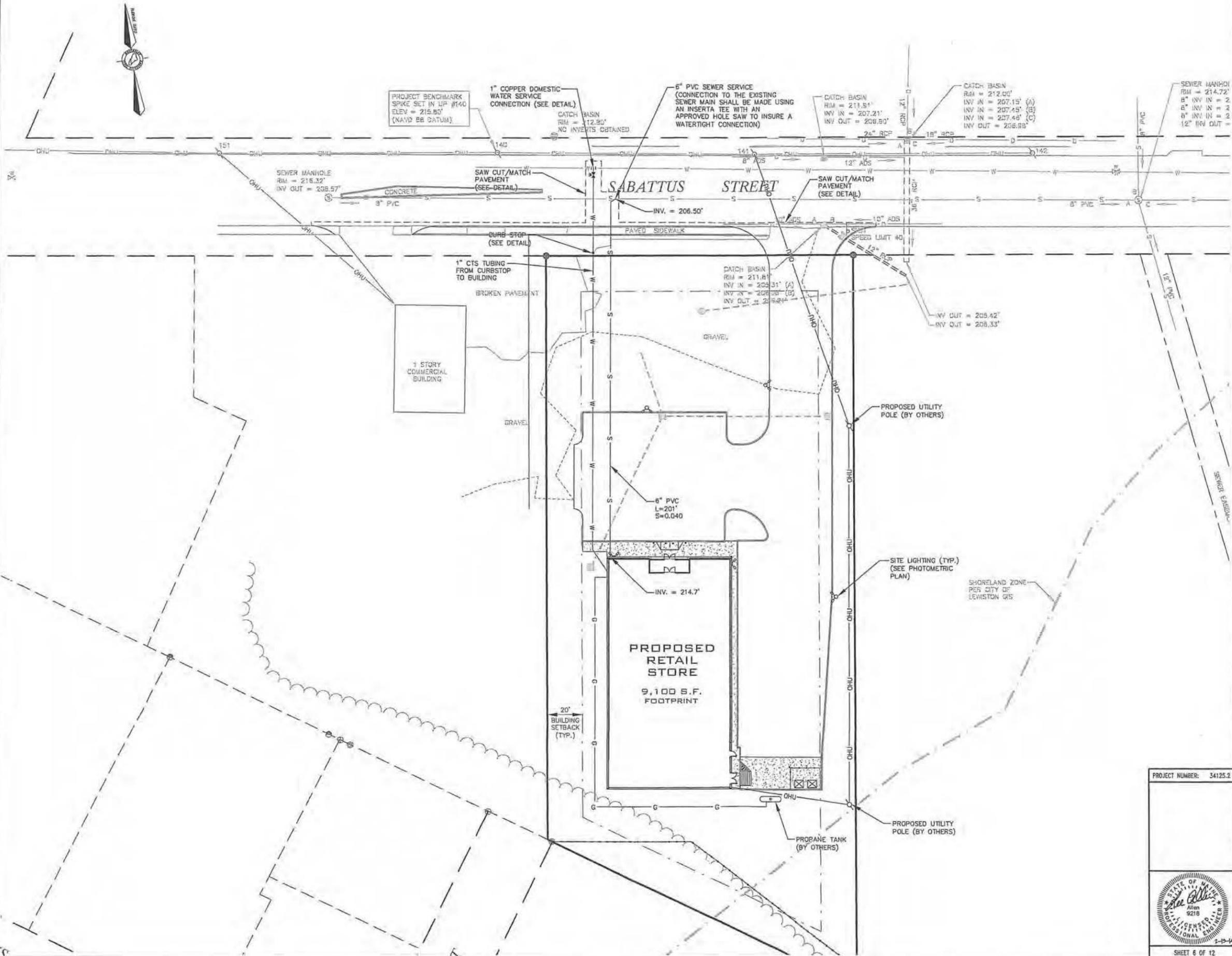
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Drawing Name: SITE & LAYOUT PLAN			
Project Name: PROPOSED RETAIL STORE 1073 SABATTUS STREET, LEWISTON, MAINE 04240			
Design/Client: FRANKLIN LAND ASSOCIATES, LLC 9010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027			
	SURVEYING ENGINEERING LAND PLANNING Northeast Civil Solutions INCORPORATED 153 US ROUTE 1, SCARBOROUGH, MAINE 04074 Tel: 207.883.1000 Fax: 207.883.1001 e-mail: info@northeastcivilsolutions.com 800.682.2227		
SHEET 5 OF 12			

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LEGEND

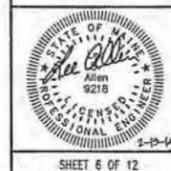
-  BOUNDARY LINE
-  EDGE OF PAVEMENT
-  RIGHT-OF-WAY LINE
-  ABUTTER
-  BUILDING SETBACK
-  SEWER EASEMENT
-  SHORELAND ZONE
-  GRAVEL
-  EXISTING CONTOUR
-  EXISTING TREE LINE
-  EDGE OF STREAM
-  EXISTING CATCH BASIN
-  EXISTING DRAIN LINE
-  EXISTING WATER LINE
-  EXISTING HYDRANT
-  EXISTING GATE VALVE
-  EXISTING SEWER MANHOLE
-  EXISTING SEWER LINE
-  EXISTING UTILITY POLE
-  EXISTING OVERHEAD UTILITY
-  PROPOSED WATER LINE
-  PROPOSED SEWER LINE
-  PROPOSED OVERHEAD ELEC.
-  PROPOSED DRAIN LINE
-  PROPOSED CATCH BASIN
-  PROPOSED OUTLET CONTROL STRUCTURE



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Revision	By	Date	Change

PROJECT NUMBER: 34125.2	ACAD FILE: 34125-UTILITY.DWG	SCALE: 1" = 30'	DATE: FEBRUARY 13, 2014
Drawing Name: UTILITY PLAN			
Project Name: PROPOSED RETAIL STORE 1073 SABATTUS STREET, LEWISTON, MAINE 04240			
Drawn/checked: FRANKLIN LAND ASSOCIATES, LLC 9010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027			

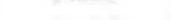


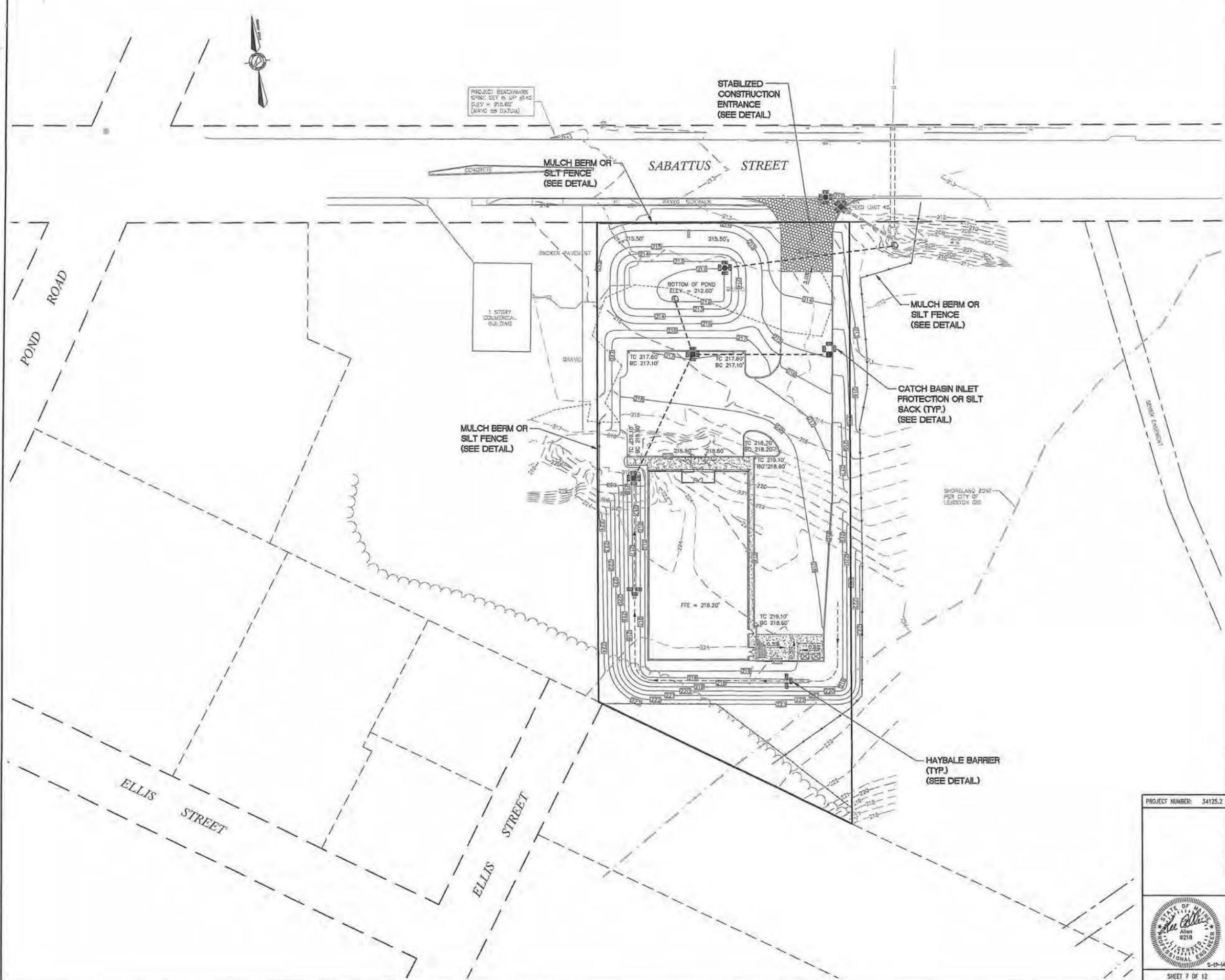
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LEGEND

-  MULCH BERM/EROSION CONTROL MIX OR SILT FENCE
-  STABILIZED CONSTRUCTION ENTRANCE
-  CATCH BASIN INLET PROTECTION
-  HAYBALE BARRIER



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Revised	By	Date	Change

PROJECT NUMBER: 34125.2	ACAD FILE: 34125-EROSION.DWG	SCALE: 1" = 30'	DATE: FEBRUARY 13, 2014
Drawing Name: EROSION & SEDIMENTATION CONTROL PLAN			
Project Name: PROPOSED RETAIL STORE 1073 SABATTUS STREET, LEWISTON, MAINE 04240			
Owner/Applicant: FRANKLIN LAND ASSOCIATES, LLC 8010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027			



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EROSION AND SEDIMENTATION CONTROL PLAN

INTRODUCTION

THE FOLLOWING PLAN FOR CONTROLLING SEDIMENTATION AND EROSION FROM THIS PROJECT IS BASED UPON CONSERVATION PRACTICES, AND ADHERES TO THE STANDARDS DETAILED IN THE MAJOR EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES OF THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION DATED MARCH 2003. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE AFORESAID PUBLICATION AND COMPLY WITH THE PRACTICES PRESENTED THEREIN.

THIS REPORT ADDRESSES THE EROSION CONTROL MEASURES TO BE APPLIED TO THE PROPOSED SITE WORK FOR THE PROJECT. REFERENCE IS MADE TO THE EROSION CONTROL EXHIBITS SHOWING THE LOCATIONS OF PROPOSED MEASURES INCLUDED IN THIS REPORT.

GENERAL EROSION AND SEDIMENTATION CONTROL PRACTICES

1. EROSION/SEDIMENTATION CONTROL DEVICES

THE FOLLOWING EROSION/SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION OF THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.

1.1 SILT FENCE: SILT FENCE WILL BE INSTALLED ALONG THE DOWNGRADIENT EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. IN AREAS WHERE STORMWATER DISCHARGES THE SILT FENCE WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SILT FENCE AND TO PROVIDE ADDITIONAL TREATMENT.

1.2 HAY BALES: PLACE IN DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES.

1.3 RIPRAP: PROVIDE RIPRAP IN AREAS WHERE SLOPES ARE STEEPER THAN 2:1 AND AS SHOWN ON THE PLANS.

1.4 LOAM, SEED, & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION.

1.5 JUTE MESH: STRAW AND HAY MULCH, USED TO COVER DENuded AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE, MULCH CAN BE USED ON SLOPES LESS THAN 3:1. USE JUTE MESH ON SLOPES IN EXCESS OF 3:1.

1.6 INLET PROTECTION: STRAW BALE DRIP INLET STRUCTURE

1.6.1 BALES SHALL BE EITHER WIRE-BOUND OR STRING TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.

1.6.2 BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.

1.6.3 THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED AROUND THE INLET THE WIDTH OF A BALE TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.

1.6.4 EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.

1.6.5 LOOSE STRAW SHALL BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.

1.7 MAINTENANCE

1.7.1 THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE WHICH DRAINS INTO THE APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

2. TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES

PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION OF THE DEVELOPMENT:

2.1 STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO ANY HAIL TO OR FROM THE SITE.

2.2 SILTATION FENCE ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SILTATION FENCE WILL REMAIN IN PLACE UNTIL THE SITE IS REVEGETATED.

2.3 HAY BALES AT KEY LOCATIONS TO SUPPLEMENT THE SILT FENCE.

2.4 PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS:

- SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.
- Avoid placing temporary stockpiles in areas with slopes over 10 percent, or near drainage swales.
- Stabilize stockpiles within 15 days by temporarily seeding with a hydroseeded method containing an emulsified mulch tackifier or by covering the stockpile with mulch.
- Surround stockpile soil with siltation fence.

2.5 ALL DENuded AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATING WITHIN THE BUILDING AND PARKING AREAS SHALL RECEIVE MULCH WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL OR WITHIN 15 DAYS AFTER COMPLETING THE ROUGH GRADING OPERATIONS. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SOIL WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE IS NOT REQUIRED.

2.6 IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENuded AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 15 DAY MAXIMUM.

2.7 TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

3. PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT CONTROL MEASURES ARE REQUIRED BY THIS EROSION/SEDIMENTATION CONTROL PLAN:

3.1 STORMWATER RUNOFF GENERATED BY THE DEVELOPMENT OF THIS SITE WILL BE COLLECTED IN A CLOSED DRAINAGE SYSTEM.

3.2 ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SOODED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.

3.3 SLOPES GREATER THAN 2:1 WILL BE TREATED WITH RIPRAP. THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT.

4.1 ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. IF FINAL GRADING, LOAMING AND SEEDING WILL NOT OCCUR WITHIN 15 DAYS, SEE ITEM NO. 4.4.

4.2 PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC AREA, SILT FENCING AND/OR HAY BALES WILL BE INSTALLED AT THE TOE OF SLOPE AND IN AREAS AS LOCATED ON THE PLANS TO PROTECT AGAINST CONSTRUCTION RELATED EROSION, IMMEDIATELY FOLLOWING CONSTRUCTION OF CULVERTS AND SWALES, RIP RAP APRONS SHALL BE INSTALLED, AS SHOWN ON THE PLANS.

4.3 TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE THE MINIMUM POTENTIAL FOR EROSION AND MUST BE KEPT AS FAR AS POSSIBLE FROM THE EXISTING DRAINAGE COURSE. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 15 DAYS SHALL BE:

- TREATED WITH ANCHORED MULCH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL).
- SEEDING WITH CONSERVATION MIX AND MULCHED IMMEDIATELY.

STOCKPILES EXPECTED TO REMAIN LONGER THAN 7 DAYS SHALL BE ENCLOSED WITH HAY BALES OR SILT FENCE AT THE TOE OF THE FILE.

4.4 ALL DISTURBED AREAS EXPECTED TO REMAIN LONGER THAN 7 DAYS SHALL BE EITHER:

- TREATED WITH ANCHORED MULCH IMMEDIATELY, OR
- SEEDING WITH CONSERVATION MIX OF ANNUAL RYE GRASS (0.9 LBS/1000 SQ. FT) AND MULCHED IMMEDIATELY.

4.5 ALL GRADING WILL BE HELD TO A MAXIMUM 2:1 SLOPE WHERE PRACTICAL. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING, OR WITH STORM WITHIN 5 DAYS AFTER FINAL GRADING IS COMPLETE. (SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION.)

4.6 CONSTRUCTION TRAFFIC WILL BE DIRECTED OVER THE PROPOSED ROADWAY SYSTEM. ANY AREAS SUBJECT TO FITTING WILL BE STABILIZED IMMEDIATELY. THE ENTRANCE WILL BE SWEEP WEEKLY, SHOULD MUD BE TRACKED ON IT.

5. POST-CONSTRUCTION REVEGETATION

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.

5.1 A MINIMUM OF 4" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.

5.2 IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 130 LBS/1000 SQ. FT. AND 10-20-20 FERTILIZER AT A RATE OF 18 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:

LAWNS	SWALES
KENTUCKY BLUEGRASS 0.48 LBS/1000 SF. CREEPING RED FESCUE 0.48 LBS/1000 SF. CREEPING RED FESCUE 0.48 LBS/1000 SF. RED TOP 0.05 LBS/1000 SF. TALL FESCUE 0.48 LBS/1000 SF.	CREEPING RED FESCUE 0.48 LBS/1000 SF. RED TOP 0.05 LBS/1000 SF. TALL FESCUE 0.48 LBS/1000 SF.

5.3 AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IT HAS BEEN SEEDING. MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER.

A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY TRENCH:

- BEING DRIVEN OVER BY TRACK CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
- BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%.

B. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEEDING AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 3/15 AND 4/15.

5.5 CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR RESEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15, THE FOLLOWING PROCEDURE SHALL BE FOLLOWED:

- ONLY UNFROZEN LOAM SHALL BE USED.
- LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
- WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.
- WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
- FERTILIZING, SEEDING AND MULCHING SHALL BE DONE ON LOAM THE DAY THE LOAM IS TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.
- HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING, TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.

5.6 FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 80% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE EXISTING COVER IS INADEQUATE.

6. MONITORING SCHEDULE

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO.

MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

6.1 HAY BALE BARRIERS AND SILT FENCE SHALL BE INSPECTED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL INSTALL SILT FENCE BEHIND THE HAY BALES.

6.2 VISUALLY INSPECT RIP RAP ONCE A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE SEDIMENT TRAPPED BEHIND THESE DEVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RISER. DISTRIBUTE REMOVED SEDIMENT OFF-SITE OR TO AN AREA UNDERGOING FINAL GRADING.

6.3 REVEGETATION OF DISTURBED AREAS WITHIN 25' OF DRAINAGE COURSE/STREAM WILL BE SEEDING WITH THE "MEADOW AREA MIX" AND INSPECTED ON A WEEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEEDED AS NEEDED. EXPOSED AREAS WILL BE RESEED AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT RIPRAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

7. EROSION CONTROL REMOVAL

AN AREA IS CONSIDERED STABLE IF IT IS PAVED, GRAVEL, OR IF 80% GROWTH OF PLANTED SEEDS IS ESTABLISHED. ONCE AN AREA IS CONSIDERED STABLE, THE EROSION CONTROL MEASURES CAN BE REMOVED AS FOLLOWS:

7.1 HAY BALES AND SILT FENCE THE HAY BALES AND SILT FENCE SHALL BE DISPOSED OF LEGALLY AND PROPERLY OFF-SITE. ALL SEDIMENT TRAPPED BEHIND THESE CONTROLS SHALL BE:

- DISTRIBUTED TO AN AREA UNDERGOING FINAL GRADING.
- GRADED IN AN AESTHETIC MANNER TO CONFORM TO THE TOPOGRAPHY, FERTILIZED, SEEDED AND MULCHED IN ACCORDANCE WITH THE RATES PREVIOUSLY STATED.

7.2 MISCELLANEOUS: ONCE ALL THE TRAPPED SEDIMENTS HAVE BEEN REMOVED FROM THE EROSION/SEDIMENTATION DEVICES, THE DISTURBED AREAS MUST BE REGRADED IN AN AESTHETIC MANNER TO CONFORM TO THE SURROUNDING TOPOGRAPHY. ONCE GRADED, THESE DISTURBED AREAS MUST BE LOAMED (IF NECESSARY), FERTILIZED, SEEDED AND MULCHED IN ACCORDANCE WITH THE RATES PREVIOUSLY STATED.

8. WINTER CONSTRUCTION

8.1 WINTER CONSTRUCTION: CONSTRUCTION PERFORMED ANY TIME BETWEEN NOVEMBER 1 AND APRIL 15 OF ANY YEAR SHALL BE CONSIDERED "WINTER CONSTRUCTION," AND SHALL CONFORM TO THE FOLLOWING CRITERIA:

8.2 MAXIMUM AREAS WITHOUT STABILIZATION: WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. EXPOSED AREAS SHALL BE LIMITED TO THE AREA THAT CAN BE MULCHED IN ONE DAY. PRIOR TO ANY SNOW EXISTING, FINAL GRADING OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED WITH EROSION CONTROL PROTECTION.

9. STABILIZATION

9.1 AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 100 LB PER 1,000 SQ. FT. (WITH OR WITHOUT SEEDING), OR DORMANT SEEDING, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE. IN ALL CASES, MULCH SHALL BE APPLIED SUCH THAT THE SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH.

9.2 LOAM OR SEED WILL NOT BE REQUIRED BETWEEN THE DATES OF OCTOBER 15 AND APRIL 15. DURING PERIODS WHEN TEMPERATURES ARE ABOVE FREEZING, EXPOSED SURFACES SHALL BE FINE-GRADED AND PROTECTED WITH MULCH, OR TEMPORARILY SEEDING AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. AFTER NOVEMBER 1, ANY LOAMED, SMOOTH, FINAL GRADED AREAS MAY BE DORMANT SEEDING AT A RATE OF 2000 TO 3000 HIGHER THAN SPECIFIED FOR PERMANENT SEED. AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING TEMPERATURES, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING, AND THE SURFACE SHALL BE PROTECTED TEMPORARILY FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT EXPOSED DURING THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH PERMANENT SURFACE TREATMENT, EROSION CONTROL DEVICES SHALL BE CONTROLLED BY THE INSTALLATION OF HAY BALES OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.

9.3 MULCH ANCHORING: MULCH ANCHORING SHALL BE INSTALLED ACCORDING TO THE FOLLOWING CRITERIA:

- BETWEEN NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, OR TRACK OR WOOD CELLULOSE FIBER.
- MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS, AND FOR ALL OTHER SLOPES GREATER THAN 5%.
- MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 5%.

9.4 DAILY PROTECTION: DURING THE PERIOD OF OCTOBER 1 TO APRIL 15, ALL BARE AND EXPOSED EARTH SHALL BE TREATED WITH A DORMANT SEEDING, MULCHED AND ANCHORED AT THE END OF EACH WORKING DAY.

9.5 SNOW REMOVAL: SNOW SHALL BE REMOVED PRIOR TO THE APPLICATION OF SEED AND MULCH.

10. LIMITS OF CONSTRUCTION

10.1 LIMIT OF CONSTRUCTION: THE LIMIT OF CONSTRUCTION FOR THE SITE SHALL BE AS INDICATED ON THE PLANS. NO DISTURBANCE OF SOILS, VEGETATION, OR WETLANDS WILL BE PERMITTED BEYOND THE LIMIT OF DISTURBANCE, EXCEPT IN THE AREAS OF STORMWATER DITCHES, CULVERTS, AND DISCHARGE APRONS.

10.2 CONSTRUCTION STAGING AREAS: THE CONSTRUCTION AND STAGING AREAS FOR THE SITE SHALL BE LOCATED IN WITHIN THE LIMIT OF DISTURBANCE. SILT FENCING SHALL BE PLACED ALL AROUND THE PERIMETER OF THE STAGING AREAS.

10.3 SCHEDULE: THE ANTICIPATED CONSTRUCTION SCHEDULE IS DURING THE YEAR OF 2014, AND WILL BEGIN WITH THE INSTALLATION OF EROSION CONTROL SYSTEMS TO PROTECT DRAINAGE WAYS AND AREAS OUTSIDE THE CONSTRUCTION LIMITS. SILT FENCING AND DITCH PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE IN THE CONTRIBUTING DRAINAGE AREAS. AS SOON AS CONTROL MEASURES ARE IN PLACE, AND PRIOR TO COMMENCING SOIL DISTURBANCE ACTIVITIES, THE CONSTRUCTION ROAD SHALL BE INSTALLED. IT IS IMPERATIVE THAT DISTURBANCES TO VEGETATION BE LIMITED ONLY TO THOSE AREAS, WHICH ARE NECESSARY TO ACCOMPLISH THE WORK.

10.4 THE FINE AND VERY FINE SANDY LOAMS THAT WILL BE EXPOSED DURING SITE PREPARATION MAY BE SUSCEPTIBLE TO EROSION, AND CAN UNDERGO STRENGTH LOSS WHEN SUBJECT TO CONSTRUCTION TRAFFIC AND EXCAVATION ACTIVITIES, PARTICULARLY DURING PERIODS OF PRECIPITATION AND HIGH GROUND WATER LEVELS. THEREFORE, CARE WILL BE EXERCISED DURING CONSTRUCTION TO MINIMIZE DISTURBANCE OF THE BEARING SOILS. ALL TOPSOIL, ORGANIC AND LOOSE SURFACE SOIL WILL BE STRIPPED AND STORED FOR REUSE LATER. SHOULD THE SUBGRADE BECOME SOFT OR DIFFICULT TO WORK AND/OR WHEREVER SUBSURFACE DRAINAGE CHANGES ARE ENCOUNTERED, THE SUBGRADE WILL BE OVER EXCAVATED AS REQUIRED, AND BACKFILLED WITH GRANULAR FILL OR CRUSHED STONE.

11. HOUSEKEEPING

11.1 SPILL PREVENTION: CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.

11.2 GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF EROSION OR INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN, OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.

11.3 FUGITIVE SEDIMENT AND DUST: ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EMISSIONS OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.

11.4 DEBRIS AND OTHER MATERIALS: LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

11.5 TRENCH OR FOUNDATION DE-WATERING: TRENCH DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COPPER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS WHICH ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COTTERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

11.6 NON-STORMWATER DISCHARGES: IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.

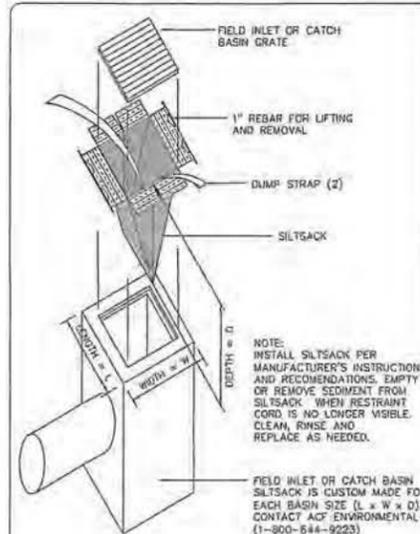
11.7 STREET SWEEPING: ANY SOIL MATERIAL TRACKED ONTO THE PUBLIC ROADWAY SHALL BE SWEEP ON A DAILY BASIS.

11.8 ADDITIONAL REQUIREMENTS: ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

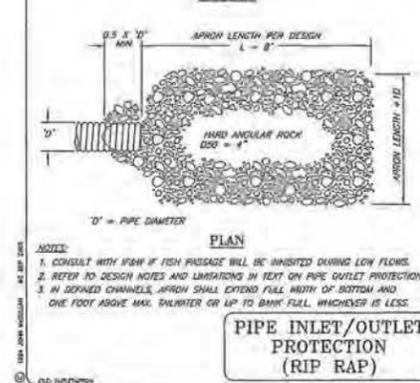
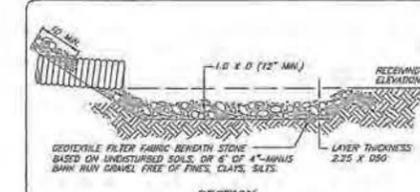
BASIC STANDARDS - EROSION CONTROL MEASURES

MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE.

GENERAL NOTE:
ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET MDOT ITEM 656.



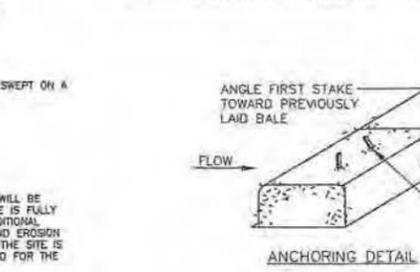
SILT SACK INLET SEDIMENT CONTROL DEVICE (OPTIONAL)



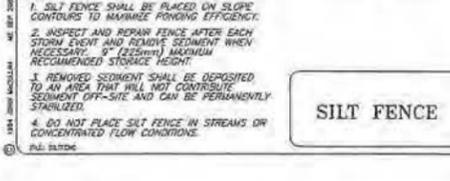
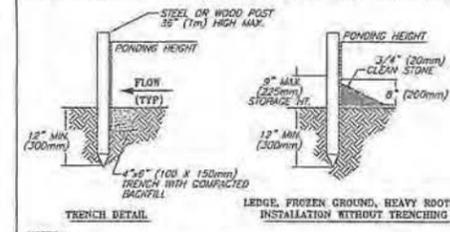
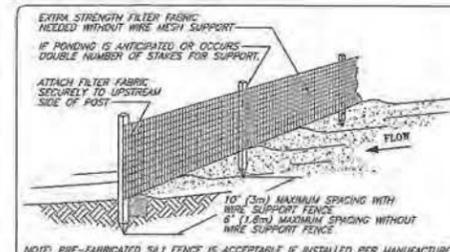
MULCH BERM

NOTES:

- BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
- INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS DIRECTED BY PROJECT ENGINEER.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS AS AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



HAY BALE SEDIMENT BARRIER (NOT TO SCALE)



TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

EROSION CONTROL MIX BERMS

EROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE PROJECT SITE. IT MUST CONSIST PRIMARILY OF GRADING MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STRAW, GUANO, COMPOSTED BARK OR ACCEPTABLE MANUFACTURED PRODUCTS, WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

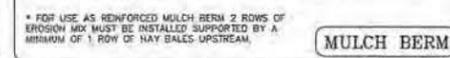
COMPOSITION: EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:

- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 60 AND 100% DRY WEIGHT BASIS.
- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A # 20 AND A MINIMUM OF 70% MAXIMUM OF # 20, PASSING A # 60.
- THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- LARGE PORTIONS OF SILT, CLAY OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
- SOLUBLE SALTS CONTENT SHALL BE < 4.0 MMOS/GAL.
- THE PH SHOULD FALL BETWEEN 6.0 AND 8.0.

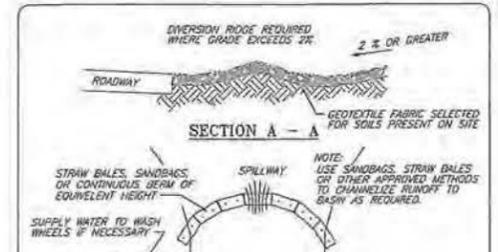
INSTALLATION: THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID OBSTACLES AND BRUSHES THAT WOULD ENABLE FINES TO WASH UNDER THE BARRIER THROUGH THE GRASS BLADES OR PLANT STEMS.

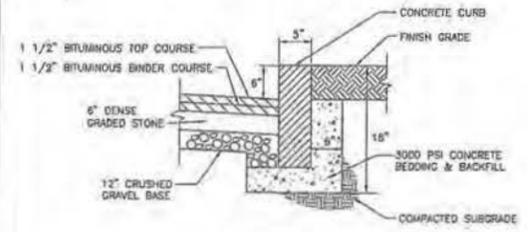
ON SLOPES LESS THAN 5% ON AT THE BOTTOM OF STEEPER SLOPES (4:1) UP TO 25 FEET LONG, THE BARRIER MUST BE A MINIMUM OF 12" HIGH, AS MEASURED ON THE UPDRILL SIDE OF THE BARRIER, AND A MINIMUM OF TWO FEET WIDE, ON LONGER OR STEEPER SLOPES, THE BARRIER SHOULD BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.

OTHER BAYS SHOULD BE USED AT LOW POINTS OF CONCENTRATED RUNOFF, BELIEF CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS, AND AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT ARE MORE THAN 80 FEET FROM TOP TO BOTTOM (IE, A LARGE UP GRADIENT CONTRIBUTING WATERSHED).

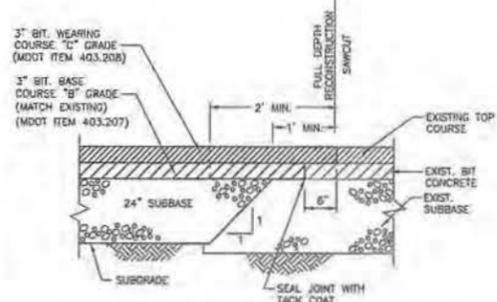


MULCH BERM

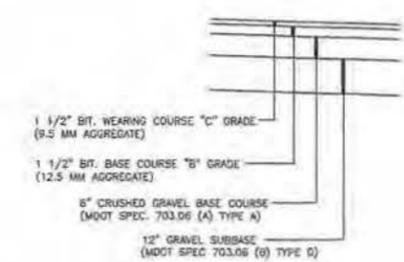




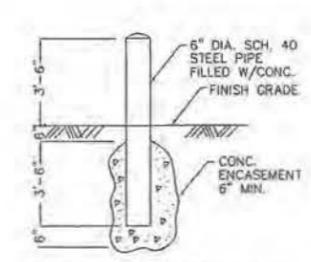
PRECAST CONCRETE CURB DETAIL
NOTE: PER MDOT ITEM 609
N.T.S.



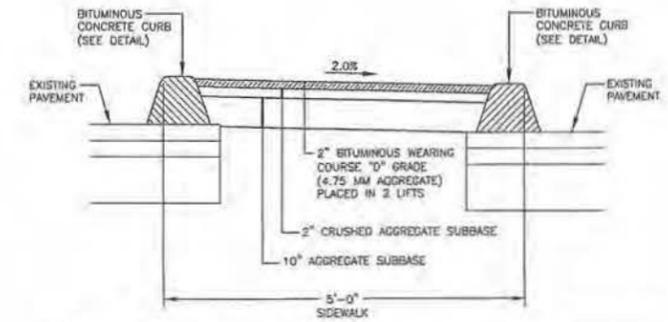
SAWCUT & PAVEMENT MATCH DETAIL
NOTE: PER MDOT ITEM 403
N.T.S.



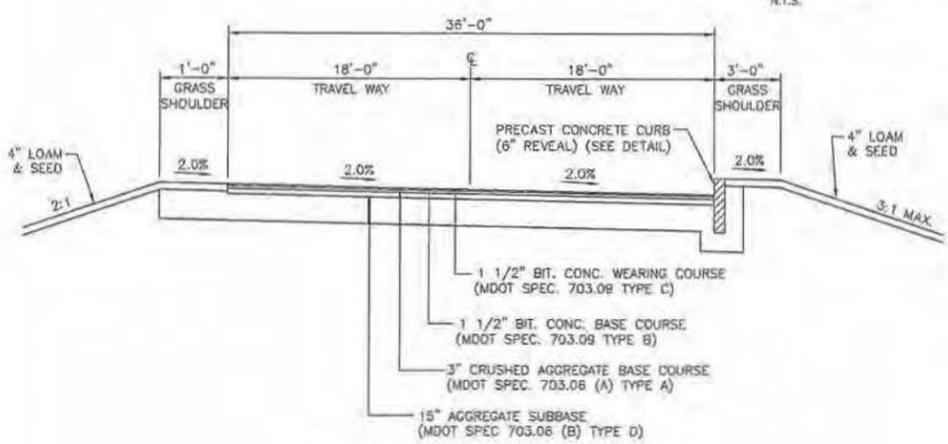
TYP. PAVEMENT SECTION (FULL DEPTH CONSTRUCTION)
NOTE: PER MDOT ITEM 403
NOT TO SCALE



BOLLARD DETAIL
N.T.S.

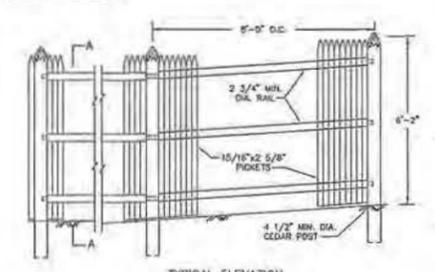


BITUMINOUS SIDEWALK DETAIL
NOT TO SCALE
1. SIDEWALK RECONSTRUCTION TO CONFORM TO MDOT SPECIFICATIONS

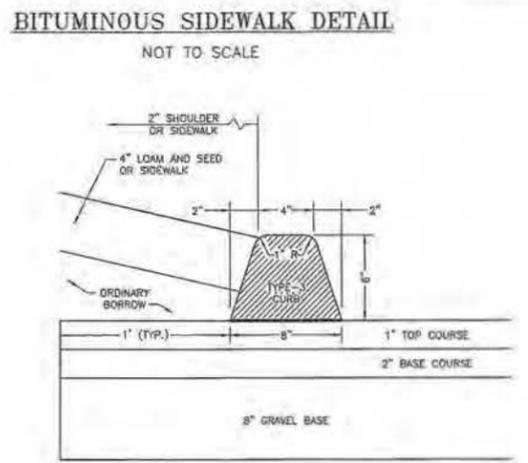
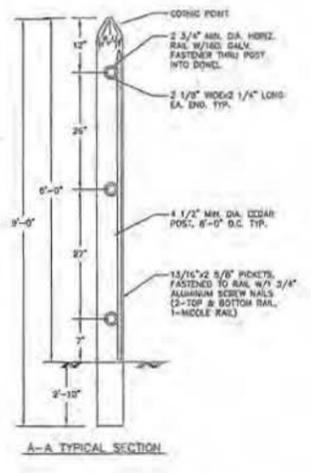


TYPICAL ROAD CROSS SECTION
NOT TO SCALE

- 1) LOAM AND SEED SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS 615 AND 618, METHOD #1.
- 2) AGGREGATE SUBBASE SHALL BE IN ACCORDANCE WITH MDOT SPECIFICATIONS, SECTION 403 AND SHALL NOT CONTAIN PARTICLES OF ROCK EXCEEDING 6" IN ANY DIMENSION. MATERIAL FOR ROAD EMBAZEMENT SHALL BE SUITABLE EXCAVATED MATERIAL APPROVED BY TOWN INSPECTOR AND MUST MEET MDOT SPECIFICATION 703.19 GRANULAR BORROW. SUITABLE GRANULAR FILL MATERIAL SHALL CONSIST OF HARD DURABLE MINERALS LESS VERY FINE SANDS, SILT, CLAY OR ORGANIC MATERIALS. MATERIAL IS TO BE PLACED IN LIFTS NOT TO EXCEED 12 INCHES. COMPACTION SHALL BE ACHIEVED BY MECHANICAL MEANS OF A "DYNAPAC", RIDING ROLLER, OR TRACKING WITH HEAVY EQUIPMENT.
- 3) ENTIRE WIDTH OF ROAD AND SHOULDERS IS TO BE STRIPPED AND GRUBBED OF TOP SOIL, ORGANICS AND ALL DELETERIOUS MATERIAL. ALL STUMPS AND UNSUITABLE MATERIAL (IF ANY) SHALL BE REMOVED IF WITHIN 5 FEET OF FINISHED GRADE UNDER PAVED AREAS.
- 4) SEE GRADING PLAN & PROFILE FOR GRADING INTENT.



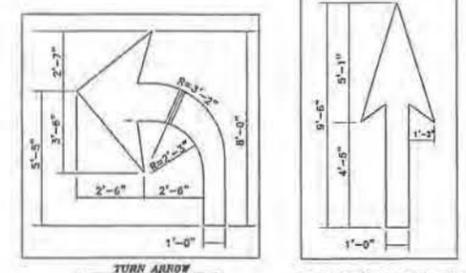
- STOCKADE FENCE DETAIL**
N.T.S.
- NOTES:
1. ALL FENCING MATERIAL SHALL BE NORWEGIAN WHITE CEDAR, SAWN TO THE DIMENSIONS SHOWN ON THE DRAWING.
 2. ALL FENCE POSTS SHALL BE TREATED WITH "CREOSOTE", ALL SIZES FOR A DIMENSION OF 3'-0" FROM BUTT OF POST.
 3. POSTS SHALL MAINTAIN A DEPTH OF 2'-10" IN GROUND AND SHALL BE BACKED TO ACCOMMODATE ANY CHANGES IN GRADE.
 4. LINE OF FENCE TOP & BOTTOM SHALL BE INSTALLED STRAIGHT AND TRUE. ALL POSTS AND FACING BOARDS OR SLATS SHALL BE INSTALLED PARALLEL AND FLUSH. ALL RAILS SHALL BE INSTALLED PARALLEL AND TRUE.
 5. ALL GATE HARDWARE SHALL BE DOUBLE DIP HOT GALVANIZED.



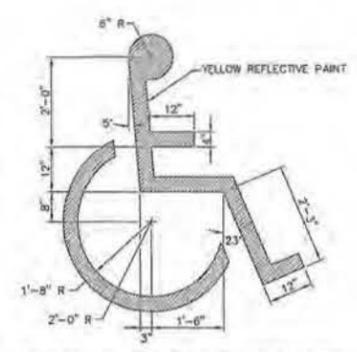
BITUMINOUS CONCRETE CURB DETAIL
N.T.S.

TRAFFIC SIGNS								
IDENTIFICATION NUMBER	SIGN HEIGHT	SIGN WIDTH	POST PER SIGN	TEXT	NUMBER OF SIGNS REQ'D.	SIGN AREA, SQ. FT.		REMARKS
						NOM. AREA	TOTAL AREA	
R1-1	24"	24"	1	STOP	1	4.0	4.0	PER MUTCD
R7-5	18"	12"	1	Handicap symbol	2	1.5	3.0	PER MUTCD

NOTE: ALL SIGNS SHALL CONFORM TO MUTCD STANDARDS AND MDOT ITEM 645



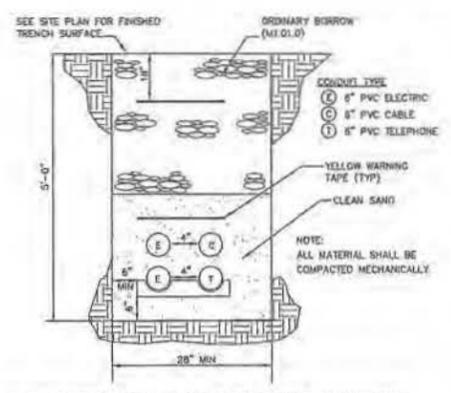
STRIPING ARROWS
NOTE: PER MDOT ITEM 627
N.T.S.



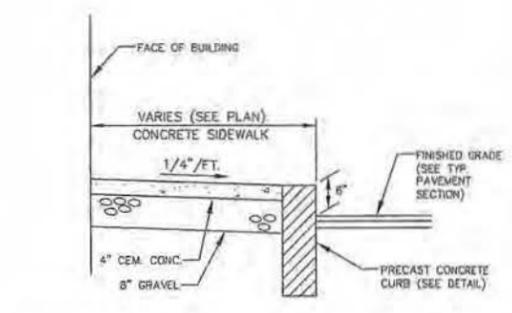
HANDICAPPED PAINTING
N.T.S.
NOTE: PER MDOT ITEM 627

PAVEMENT MARKING NOTES :

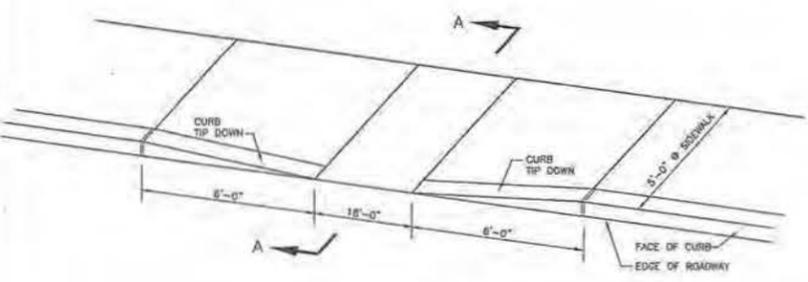
1. ALL PAVEMENT MARKING WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE MUTCD AND MDOT ITEM 627.
2. WORDS AND SYMBOLS SHALL BE CENTERED LATERALLY WITHIN THE LANE. THE LONGITUDINAL DIMENSION SHALL BE PARALLEL TO THE LANE.
3. MULTI-WORD MESSAGES SHALL READ "UP"; THAT IS, THE FIRST WORD SHALL BE NEAREST THE APPROACHING DRIVER.
4. THE WORD "ONLY" SHALL NOT BE USED WITH THROUGH OR COMBINATION ARROWS, AND SHALL NOT BE USED ADJACENT TO A BROKEN LANE LINE. A TURN ARROW SHALL PRECEED THE WORD "ONLY".
5. COMBINATION ARROWS MAY BE COMPRISED OF 2 SINGLE ARROWS (e.g. TURN AND THROUGH ARROWS). HOWEVER, THE SHAFTS OF THE ARROWS SHALL COINCIDE.
6. PREFORMED TAPE WORDS AND SYMBOLS SHALL BE PRE-CUT, EITHER BY THE MANUFACTURER OR THE CONTRACTOR.
7. WRONG-WAY ARROWS SHALL NOT BE SUBSTITUTED FOR THROUGH ARROWS.
8. LONGITUDINAL SPACING BETWEEN SUCCESSIVE WORDS AND/OR SYMBOLS SHOULD BE AT LEAST 4 TIMES THE HEIGHT OF THE LARGEST CHARACTER.



COMMON TRENCH DETAIL
10 ELECTRIC/TELEPHONE/CABLE
NOT TO SCALE

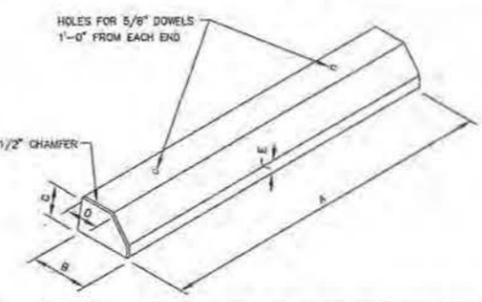


CEMENT CONCRETE SIDEWALK DETAIL
NOT TO SCALE



SECTION A-A

CURB TIP DOWN DETAIL
N.T.S.



PRECAST CONCRETE WHEELSTOP
NOT TO SCALE

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

Revision	By	Date	Change

PROJECT NUMBER: 34125.2 ACAD FILE: 34125-DETAILS.DWG SCALE: AS NOTED DATE: FEBRUARY 13, 2014

Drawing Name:
CONSTRUCTION DETAILS - SHEET 1

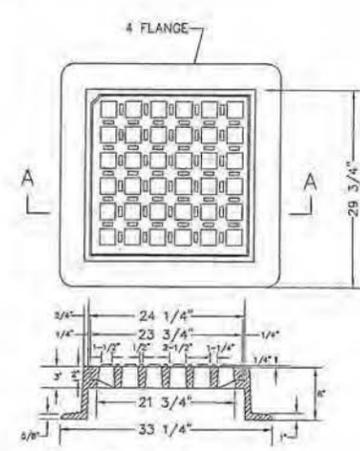
Project Name:
PROPOSED RETAIL STORE
1073 SABATTUS STREET, LEWISTON, MAINE 04240

Owner/Client:
FRANKLIN LAND ASSOCIATES, LLC
9010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027

Professional Engineer:
Northeast Civil Solutions
INCORPORATED
153 US ROUTE 1, SCARBOROUGH, MAINE 04074
Tel: 207.883.1000 Fax: 207.883.1001 e-mail: info@northeastcivilsolutions.com

Professional Engineer:
Lee Collins
Maine 9219
LICENSED PROFESSIONAL ENGINEER
2-D-14

SHEET 9 OF 12

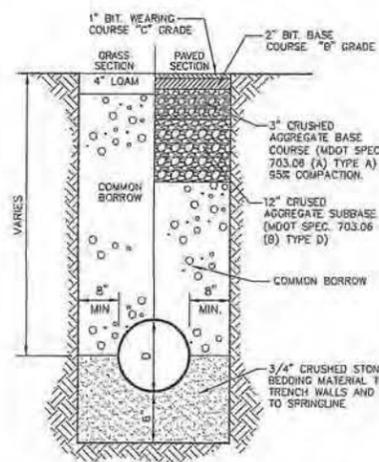


NOTE: FRAME AND GRATE SHALL BE HEAVY DUTY CLASS 30 GRAY IRON PER MAINE DOT 604.03

SECTION A-A

CATCH BASIN FRAME AND GRATE

N.T.S.



NOTE: ALL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM PROCTOR DENSITY (MODIFIED) PER MDOT ITEM 603

TYPICAL STORMWATER TRENCH SECTION

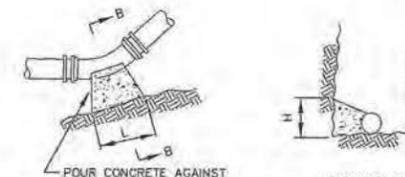
NOT TO SCALE

GENERAL NOTES

- LOCATIONS OF UTILITIES ARE APPROXIMATE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE ALL THE UTILITIES LOCATE THEIR SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING CATCH BASINS, MANHOLES, CONNECTIONS, AND OUTLET PIPING SHALL BE CLEANED AND LEFT IN SATISFACTORY OPERATING CONDITION AFTER CONSTRUCTION HAS BEEN COMPLETED. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
- ALL MANHOLE FRAMES SHALL BE SUPPLIED WITH SOLID MANHOLE COVERS; SEE STANDARD DETAIL.
- ALL GRANITE CATCH BASIN STONES, MANHOLE FRAMES AND COVERS TO BE REMOVED SHALL BE REUSED AS DIRECTED BY THE PROJECT ENGINEER. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
- ALL TERMINAL MANHOLES SHALL HAVE CHANNELS CONSTRUCTED STRAIGHT THROUGH THE MANHOLE.

GENERAL NOTES FOR SEWER PIPES, MANHOLES AND CATCH BASINS

- ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 PSI PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
- PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478-97
- SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-83, GRADE MA AND SA.
- ALL MANHOLES SHALL HAVE A BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE.
- CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35. ALL PARTS OF CASTINGS, EXCEPT FINISHED SURFACE, SHALL RECEIVE A COAT OF COAL TAR PITCH VARNISH OR ASPHALTUM PAINT WHICH SHALL BE SMOOTH AND TOUGH BUT NOT BRITTLE.
- MANHOLES TO BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE.
- ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY LABEL, PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.
- STORM AND SEWER MANHOLES SHALL HAVE CAST IRON COVERS WITH ONE DRILLED PICK HOLE. 26" ETHERIDGE M26TS COVER OR APPROVED EQUAL.
- ALL SEWER PIPES USED SHALL BE SD-35, MEETING THE REQUIREMENTS OF ASTM 3034. PIPES SHALL HAVE GASKETS AND BE INSTALLED WITH BELLS UPBELL.
- THE RUBBER BOOT FOR THE SEWER PIPE PENETRATIONS INTO THE MANHOLES SHALL HAVE AT LEAST 2 STAINLESS STEEL CLAMPS.

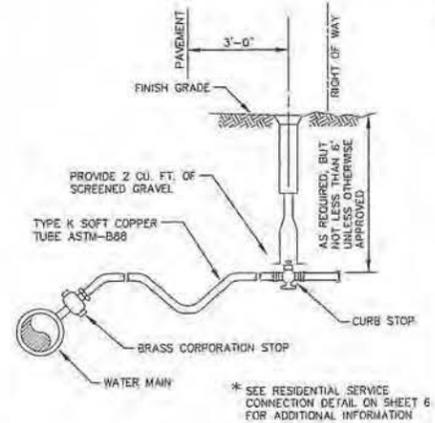


NOMINAL DIAMETER OF FITTING	FITTING			
	DEAD END	BRANCH OF TEE	90° BEND	45° BEND
6"	2	2	3	2
8"	4	4	5	3
10"	6	6	8	4
12"	8	8	10	6
14"	12	12	16	9
16"	12	12	20	10

NOTES:
1. ALL BENDS, TEE HYDRANTS AND DEAD ENDS SHALL BE BRACED WITH CONCRETE THRUST BLOCKS.
2. BEARING AREA IS AREA OF CONCRETE IN CONTACT WITH WALL OF TRENCH=HxL.
3. HEIGHT (H) AND LENGTH (L) AS REQUIRED TO OBTAIN BEARING AREA IN TABLE.

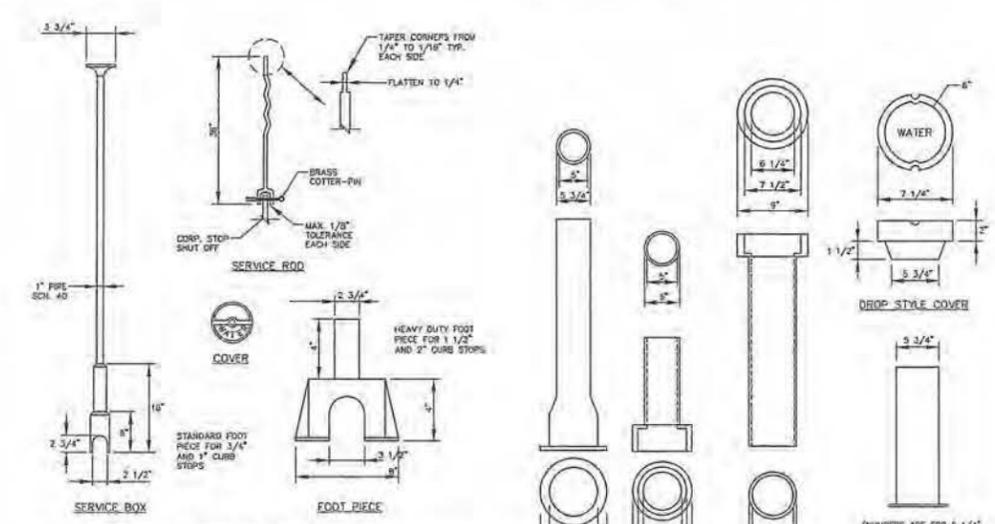
THRUST BLOCK DETAILS

NOT TO SCALE



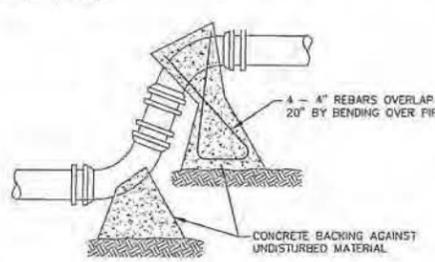
TYPICAL WATER SERVICE CONNECTION

NOT TO SCALE



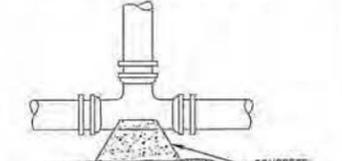
VALVE BOX & COVER

NOT TO SCALE



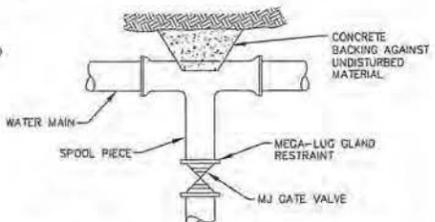
TYPICAL OFF-SET

NOT TO SCALE



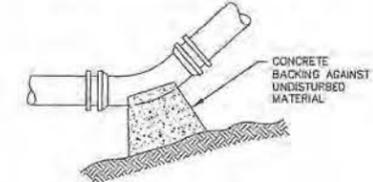
TYPICAL TEE

NOT TO SCALE



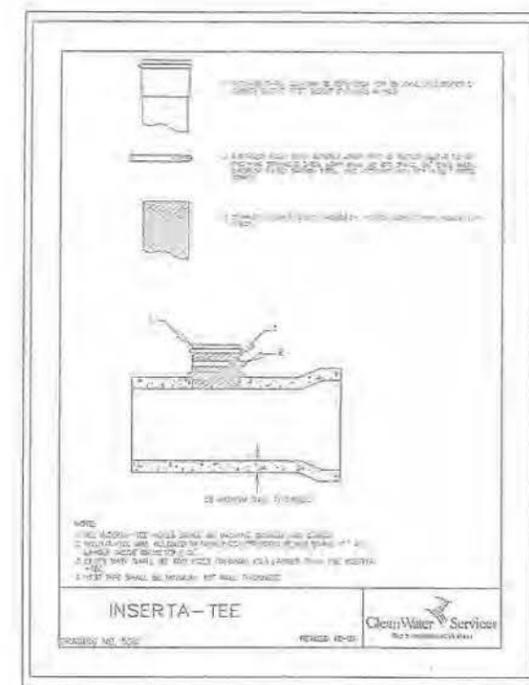
TYPICAL VALVE CONNECTION RESTRAINED JOINT TEE

NOT TO SCALE



TYPICAL BEND

NOT TO SCALE



INSERT-A-TEE

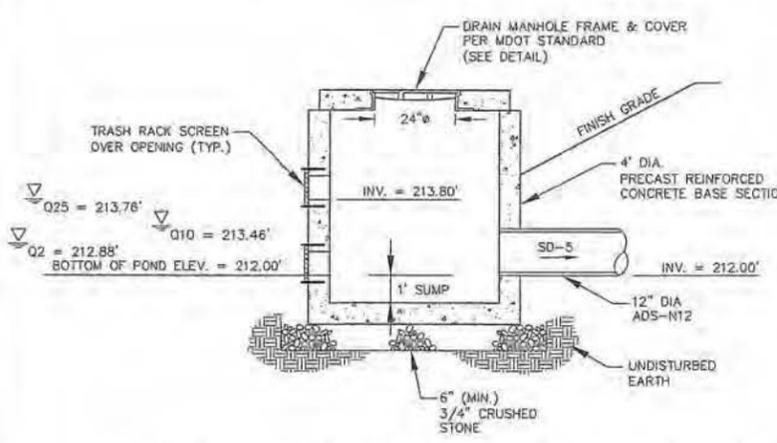
REVISION: 4/20/14

DESIGNED BY: [Signature]

I.D.	WALL WIDTH	FLOOR THICKNESS
4'-0"	5"	6"
6'-0"	6"	6"
8'-0"	8"	6"
10'-0"	10"	6"

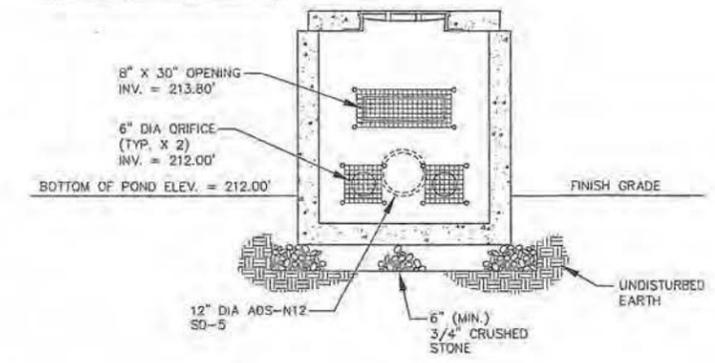
DIAMETER OF PIPE	UNCONFINED	SHIELDED
12" AND SMALLER	2'-0"	2'-0"
15"	3'-0"	2'-6"
18"	3'-6"	3'-0"
21"	4'-0"	3'-6"
24"	4'-6"	4'-0"
27"	5'-0"	4'-6"
30"	5'-6"	5'-0"
36"	6'-0"	5'-6"
42"	6'-6"	6'-0"
48"	7'-0"	6'-6"

TRENCH WIDTH DATA



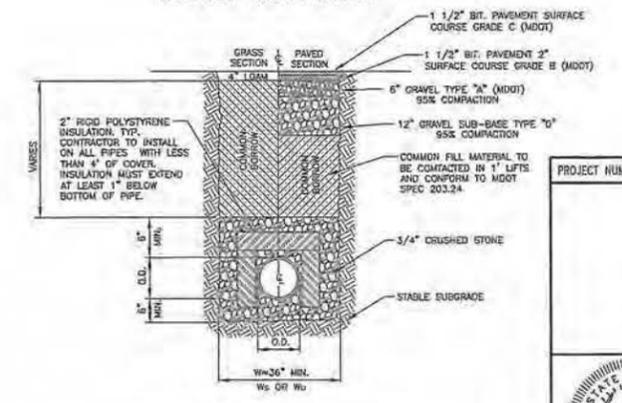
PRECAST CONCRETE OUTLET CONTROL STRUCTURE (OCS-1)

N.T.S.



SEWER TRENCH SECTION

N. T. S.



SEWER TRENCH SECTION

N. T. S.

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

Revised	By	Date	Change

PROJECT NUMBER: 34125.2 ACAD FILE: 34125-DETAILS.DWG SCALE: AS NOTED DATE: FEBRUARY 13, 2014

CONSTRUCTION DETAILS - SHEET 2

PROPOSED RETAIL STORE
1073 SABATTUS STREET, LEWISTON, MAINE 04240

FRANKLIN LAND ASSOCIATES, LLC
8010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027

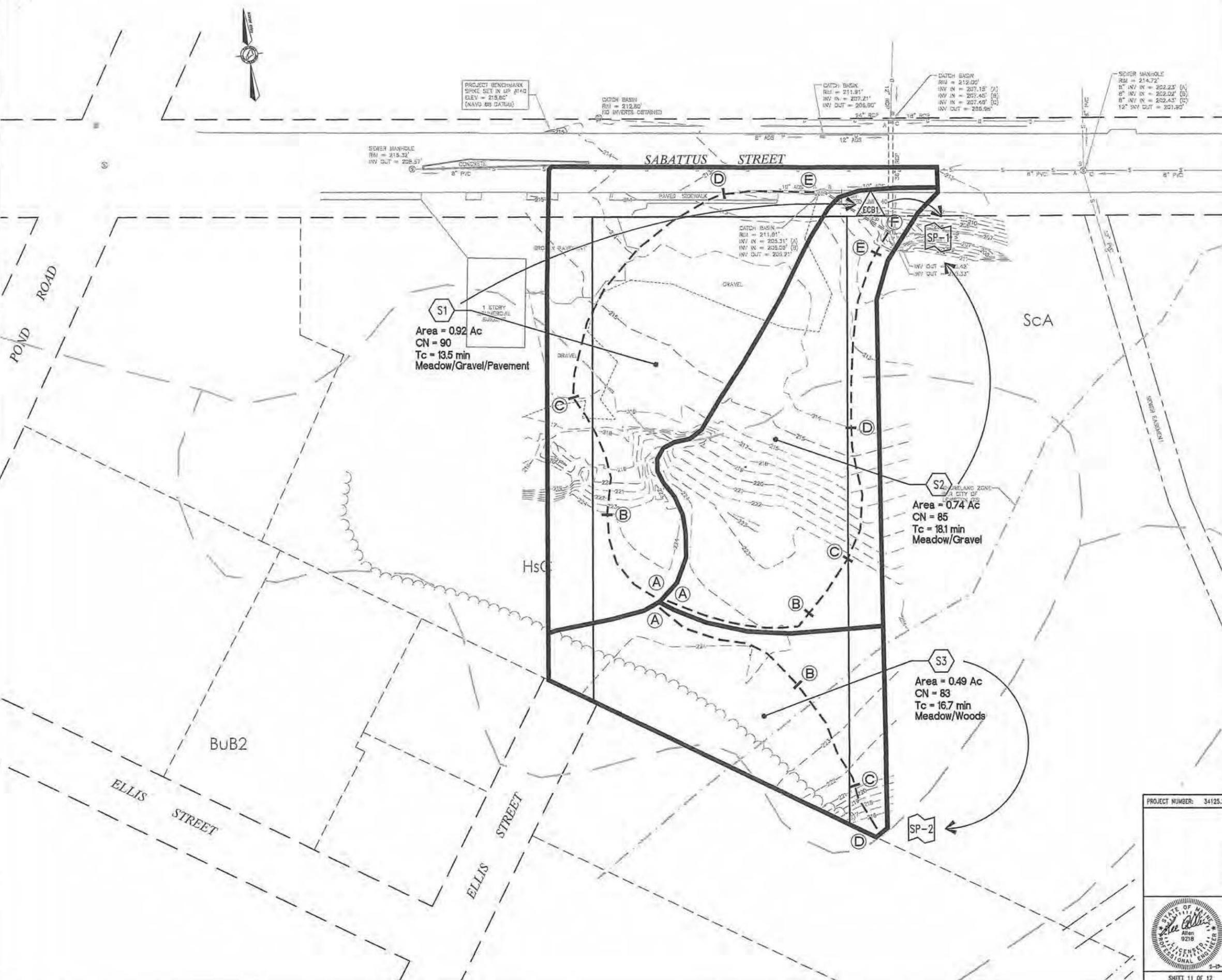
Northeast Civil Solutions
INCORPORATED

153 US ROUTE 1, SCARBOROUGH, MAINE 04074

tel 207.883.1000 fax 207.883.1001 e-mail info@northeastcivilsolutions.com
800.882.2227

Professional Engineer License No. 10000
Professional Surveyor License No. 10000

SHEET 10 OF 12



LEGEND

- LINK
- SUBCATCHMENT
- POND
- PRE-DEVELOPMENT DRAINAGE SUBCATCHMENT
- TIME OF CONCENTRATION PATH

NOTES

Tc PATH TABLE

SUBCAT	Tc PATH	FLOW	LENGTH	SLOPE (FT/FT)
S1	A-B	SHEET	68'	0.0073
	B-C	SHALLOW CONC	85'	0.0941
	C-D	SHALLOW CONC	182'	0.0206
	D-E	SHALLOW CONC	61'	0.0163
S2	A-B	SHEET	104'	0.0072
	B-C	SHALLOW CONC	45'	0.0168
	C-D	SHALLOW CONC	92'	0.0983
	D-E	SHALLOW CONC	119'	0.0231
	E-F	SHALLOW CONC	15'	0.4223
S3	A-B	SHEET	110'	0.0081
	B-C	SHALLOW CONC	80'	0.0314
	C-D	SHALLOW CONC	32'	0.2194

SOILS LEGEND

SYMBOL	SOIL TYPE	HSG
BuB2	BUXTON SILT LOAM, 8%-15% SLOPES, ERODED	C
HsC	HOLLIS VERY ROCKY FINE SANDY LOAM, 8%-15% SLOPES	C/D
Sca	SCANTIC SILT LOAM, 0%-3% SLOPES	D

THE SOURCE OF THE SOIL TYPES AND BOUNDARIES IS THE NATIONAL COOPERATIVE SOIL SURVEY (NCSS).

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

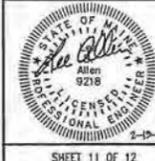
Revised	By	Date	Change

PROJECT NUMBER: 34125.2 ACAD FILE: 34125-EXCONDIT.DWG SCALE: 1" = 30' DATE: FEBRUARY 13, 2014

PRE-DEVELOPMENT DRAINAGE AREA PLAN

Project Name:
PROPOSED RETAIL STORE
1073 SABATTUS STREET, LEWISTON, MAINE 04240

Owner/Client:
FRANKLIN LAND ASSOCIATES, LLC
9010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027

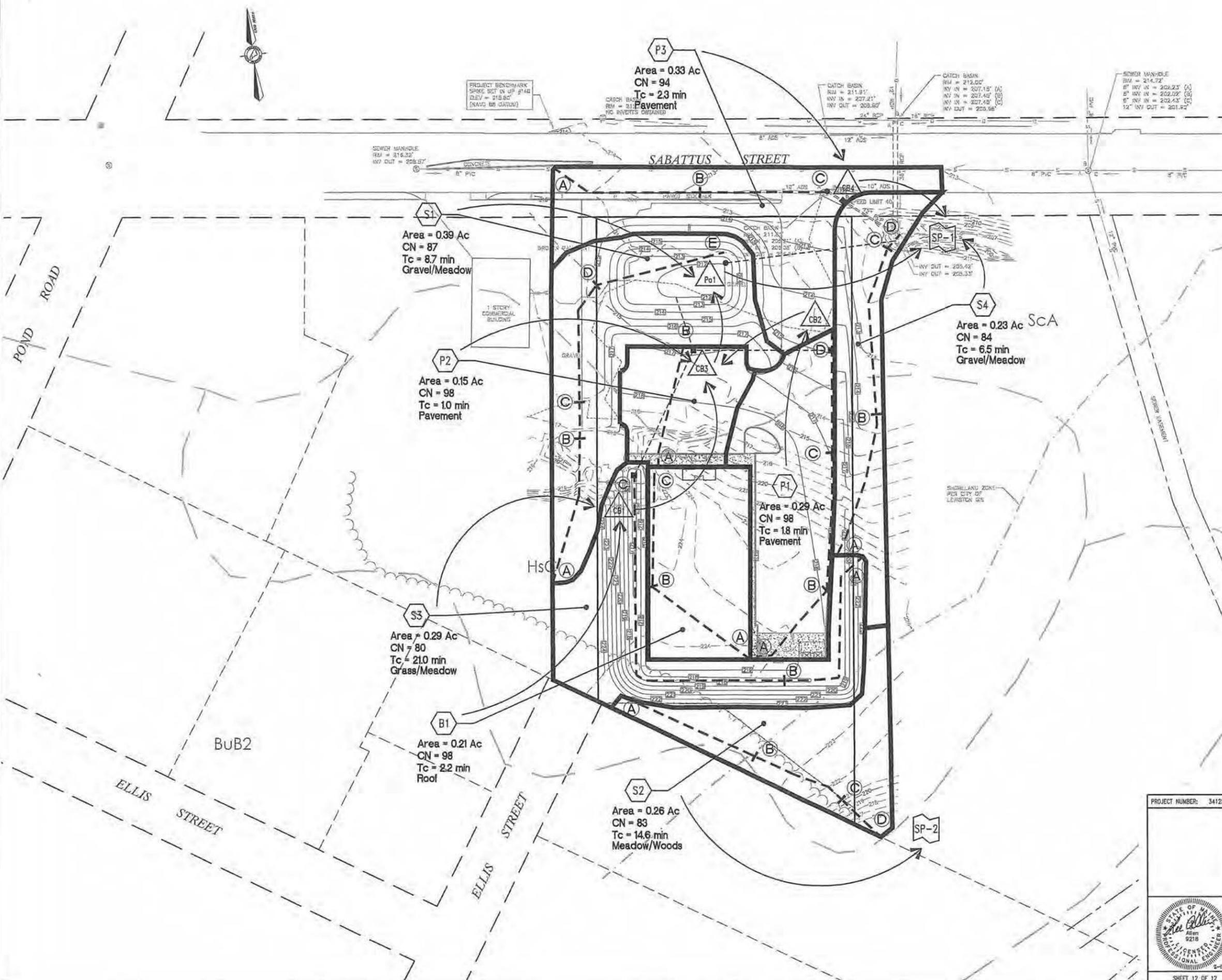


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tel: 207.883.1000 fax: 207.883.1001 e-mail: info@northeastcivilsolutions.com
800.882.2227

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LEGEND

- LINK
- SUBCATCHMENT
- POND
- POST-DEVELOPMENT DRAINAGE SUBCATCHMENT
- TIME OF CONCENTRATION PATH

NOTES

Tc PATH TABLE

SUBCAT	Tc PATH	FLOW	LENGTH	SLOPE (FT/FT)
S1	A-B	SHEET	100'	0.0651
	B-C	SHALLOW CONC	25'	0.0813
	C-D	SHALLOW CONC	81'	0.0123
	D-E	SHALLOW CONC	90'	0.0200
S2	A-B	SHEET	100'	0.0050
	B-C	SHALLOW CONC	66'	0.0380
	C-D	SHALLOW CONC	36'	0.1944
S3	A-B	SHEET	125'	0.0200
	B-C	SHALLOW CONC	237'	0.0059
S4	A-B	SHEET	100'	0.1052
	B-C	SHALLOW CONC	114'	0.0220
	C-D	SHALLOW CONC	13'	0.5169
P1	A-B	SHEET	71'	0.0143
	B-C	SHALLOW CONC	89'	0.0056
	C-D	SHALLOW CONC	80'	0.0250
P2	A-B	SHEET	82'	0.0243
	A-B	SHEET	104'	0.0144
P3	B-C	SHALLOW CONC	87'	0.0086
	A-B	SHEET	83'	0.0100
B1	A-B	SHEET	83'	0.0100
	B-C	SHALLOW CONC	77'	0.0100

SOILS LEGEND

SYMBOL	SOIL TYPE	HSG
BuC2	BUXTON SILT LOAM, 8%-15% SLOPES, ERODED	C
HsC	HOLLIS VERY ROCKY FINE SANDY LOAM, 8%-15% SLOPES	C/D
ScA	SCANTIC SILT LOAM, 0%-3% SLOPES	D

THE SOURCE OF THE SOIL TYPES AND BOUNDARIES IS THE NATIONAL COOPERATIVE SOIL SURVEY (NCSS).

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

PROJECT NUMBER: 34125.2 ACAD FILE: 34125-EXCONDIT.DWG SCALE: 1" = 30' DATE: FEBRUARY 13, 2014

POST-DEVELOPMENT DRAINAGE AREA PLAN

Project Name:
PROPOSED RETAIL STORE
 1073 SABATTUS STREET, LEWISTON, MAINE 04240

Drawn/Checked:
FRANKLIN LAND ASSOCIATES, LLC
 5010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027

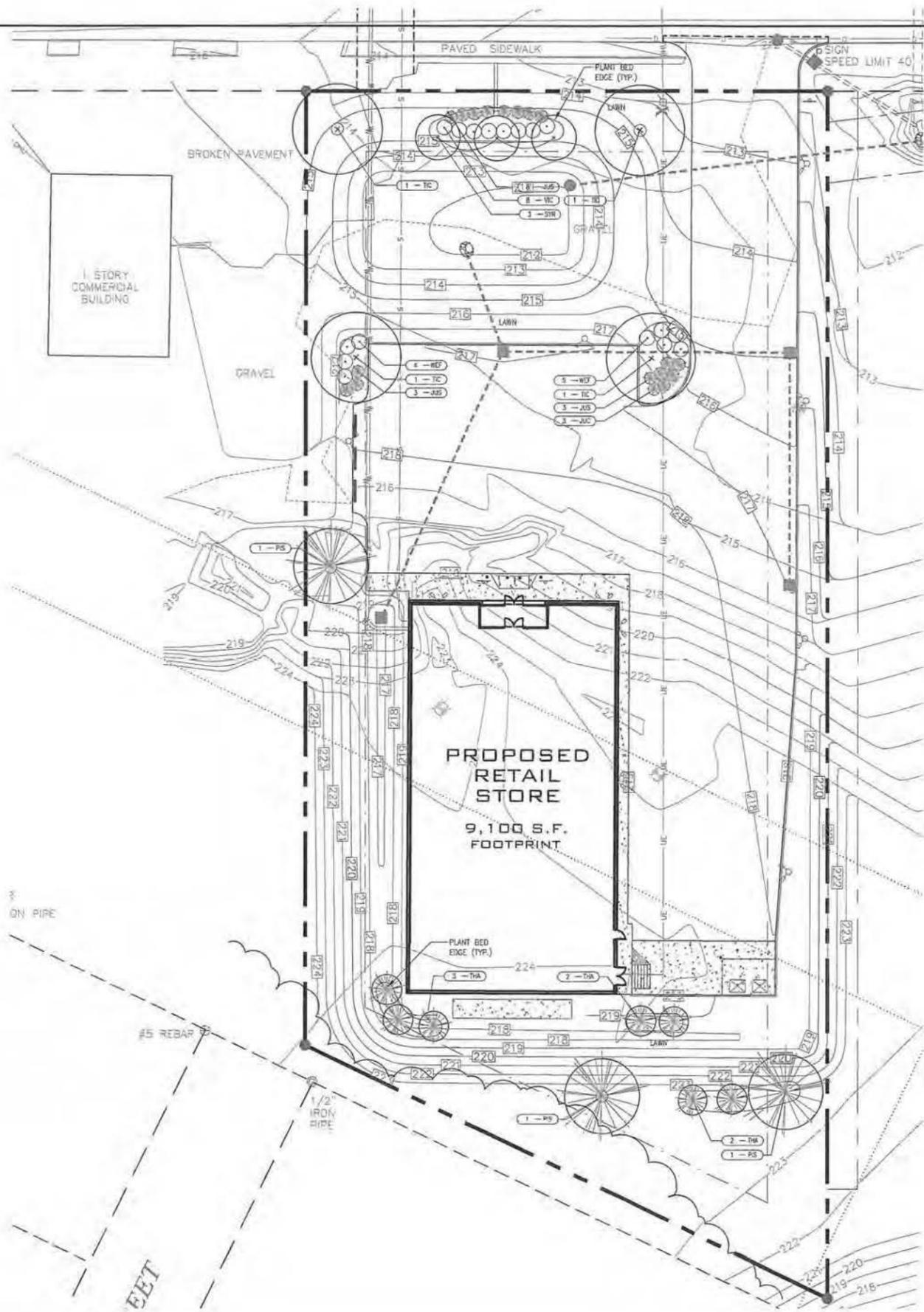


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Northeast Civil Solutions
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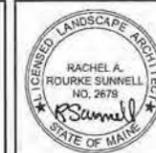
153 US ROUTE 1, SCARBOROUGH, MAINE 04074

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C:\LAND PROJECTS\34000\34125.2 LEWISTON - EXCONDIT.DWG - 34125-EXCONDIT.DWG



PLANT SCHEDULE						
KEY	BOTANICAL NAME	COMMON NAME	SIZE	Count	TYPE	NOTES
PIS	<i>Pinus strobus</i>	White Pine	5-6'	3	Tree	
SYR	<i>Syringa reticulata</i>	Japanese Tree Lilac	1.75" single stem	3	Tree	20 x 18
THA	<i>Thuja o. 'Techny'</i>	Mission Arborvitae	5-6'	7	Tree	18 x 12
TIC	<i>Tilia cordata 'Greenspire'</i>	Littleleaf Linden	2.5' cal	4	Tree	50 X 35,
JUC	<i>Juniperus chinensis var. sargentii</i>	Sargent Juniper	#3 - 2-2.5'	4	shrub	1.5x6
JUS	<i>Juniperus squamata 'Holger'</i>	Holger Juniper	#3 - 2-2.5'	14	shrub	3x4
VIC	<i>Viburnum cassinoides 'Wilderod'</i>	Viburnum Witherod	#5 - 3.5-4'	8	shrub	6x6
WEF	<i>Weigela florica 'Ghost'</i>	Weigela 'Ghost'	#5 - 3'	9	shrub	5x5, light yellow foliage



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ARCHITECTS
29 Black Point Road
Scarborough, Maine 04074
www.gawronturgeon.com
207-883-4307 or 207-883-0341 fax

LEWISTON DOLLAR STORE
Sabattus Street
Lewiston, Maine

REVISIONS	
#	DATE DESCRIPTION
A	01.03.14 Planning Permit
B	01.05.14 Grading Elevation

DATE:	01.28.14
PROJECT #:	010214
DRAWN BY:	KD
CHECKED BY:	RS
DRAWING SCALE:	1" = 20'

SHEET TITLE

LANDSCAPE PLAN

L101

A1 LANDSCAPE PLAN



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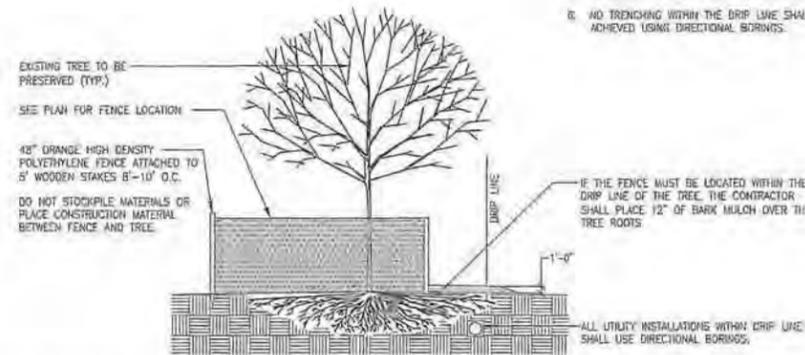
REVISIONS		
#	DATE	DESCRIPTION
A	01.10.14	Planting Notes

DATE	01.10.14
PROJECT #	010214
DRAWN BY	RJD
CHECKED BY	RS
DRAWING SCALE	VARIABLE

SHEET TITLE
 LANDSCAPE DETAILS & NOTES

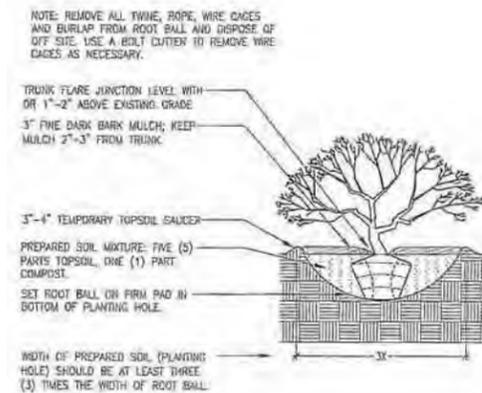
L 201

- GENERAL NOTES:**
- DURING CONSTRUCTION IT IS THE RESPONSIBILITY OF THE CONTRACTOR TAKE THE FOLLOWING MEASURES TO PROTECT THE EXISTING TREES MARKED FOR PROTECTION:
 - FOR ALL OTHER AREAS TO BE PROTECTED ADHERE TO FENCE AND MULCH NOTES IN DETAIL.
 - PRUNE DEAD OR DAMAGED BRANCHES WITH CLEAN CUTS.
 - TREE ROOTS DISTURBED DURING EXCAVATION SHALL BE PRUNED. TREE ROOTS EXPOSED DURING EXCAVATION SHALL BE COVERED WITH WET BURLAP TO PREVENT DRYING. ALL CUTS MUST BE IMPLEMENTED WITHIN 48 HOURS OF EXPOSURE WITH PROPER TOOLS AND IN A CLEAN MANNER.
 - IF TREE IS DAMAGED OR DESTROYED, CONTRACTOR SHALL REMOVE AND REPLACE WITH 3" CAL. TREE.
 - CONTRACTOR SHALL PROVIDE AND INSTALL TREE PROTECTION SIGNS IN ALL TREE PROTECTION ZONES.
 - NO TRENCHING WITHIN THE DRIP LINE SHALL BE ALLOWED. ANY UTILITY INSTALLATIONS SHALL BE ACHIEVED USING DIRECTIONAL BORINGS.



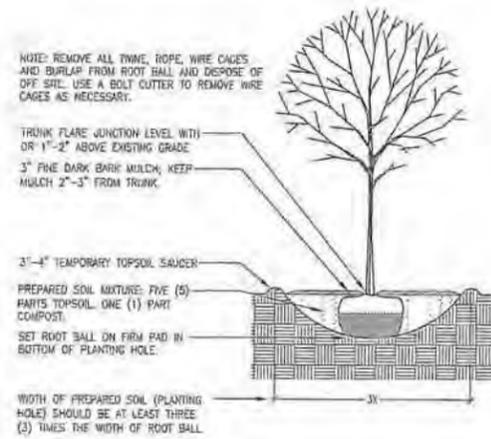
L12 TREE PROTECTION DETAIL

NTS



L6 SHRUB PLANTING SECTION

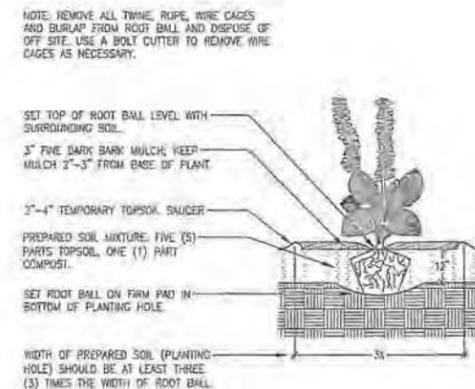
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L1 DECIDUOUS TREE PLANTING SECTION

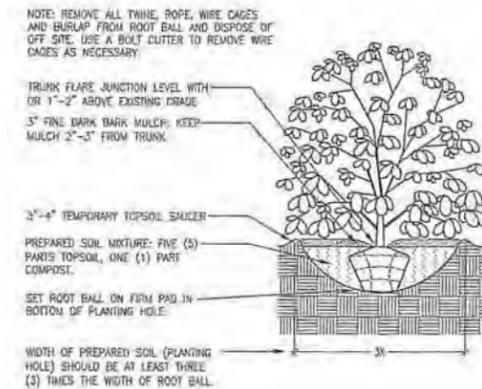
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- PLANTING NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING TOPSOIL, AS NEEDED. ALL TOPSOIL, WHETHER STRIPPED FROM SITE OR SUPPLIED FROM OFF-SITE, SHALL BE LOAN AS DETERMINED BY THE USDA SOIL CONSERVATION SERVICE SOIL CLASSIFICATION SYSTEM. TOPSOIL SHALL HAVE 6-8% ORGANIC MATTER PER WEIGHT.
 - ALL PLANTING BEDS TO RECEIVE 12" OF PREPARED SOIL MIXTURE: FIVE (5) PARTS TOPSOIL ONE (1) PART COMPOST.
 - ALL DISTURBED AREAS TO RECEIVE 6" TOPSOIL AND SEED UNLESS OTHERWISE NOTED.
 - GRASS SEED SHALL BE A COMMERCIAL PRODUCT FROM A REPUTABLE MANUFACTURER AND SHALL BE CERTIFIED TO BE NOT MORE THAN ONE (1) YEAR OLD AND OF THE GENERAL PROPORTIONS BY WEIGHT OF THE FOLLOWING SEED TYPE:
LAWN SEED MIX:
 ALLEN, STUBBING & LOHMEYER "LANDSCAPING/GRASSING MIX"
 40% DREPPING RED FESCUE
 30% TRIFOLIUM PERENNIAL PASTUREGRASS
 20% KENTUCKY BLUEGRASS
 10% CHEWINGS FESCUE
 APPLICATION RATE: 5 LBS PER 1,000 SQUARE FEET
 - PRIOR TO PLANT INSTALLATION, LANDSCAPE CONTRACTOR SHALL MEET WITH LANDSCAPE ARCHITECT ON SITE FOR PRE-CONSTRUCTION WALKTHROUGH.
 - THE LANDSCAPE ARCHITECT SHALL APPROVE PLANT SPACING AND LAYOUT PRIOR TO PLANTING.
 - INSTALLATION OF PLANT MATERIAL: AS SHOWN IN DETAILS. PLANTS SHALL MEET REQUIREMENTS SPECIFIED IN PLANT SCHEDULE ACCORDING TO "AMERICAN STANDARD FOR NURSERY STOCK - MAY 12, 2004"
 - LANDSCAPE CONTRACTOR SHALL STORE ALL TRANSPLANTED PLANT MATERIAL TOGETHER ON SITE IN A SHADY LOCATION AWAY FROM CONSTRUCTION DISTURBANCE. ALL TRANSPLANTED PLANT MATERIAL SHALL BE MULCHED INTO MULCH OR SOIL AND WATERED NO LESS THAN TWICE PER WEEK, DAILY OR EVEN MORE FREQUENT IRRIGATION MAY BE NECESSARY IN SUMMER MONTHS OR TIMES OF EXTREME DROUGHT.
 - ALL PLANT MATERIAL SHALL BE INSTALLED IN MULCHED PLANT BEDS. TREES THAT ARE LOCATED IN LAWN AREA SHALL HAVE A MINIMUM 4" DIAMETER CIRCULAR MULCH BED. MULCH SHALL CONFORM TO "MULCH" SPECIFICATION IN THE "LAWNS AND GRASSES" SECTION OF PROJECT SPECIFICATIONS MANUAL.
 - ALL LABELS, TAGS OR OTHER FOREIGN MATERIAL SHALL BE REMOVED FROM PLANT MATERIAL LIMBS AND STEMS AFTER FINAL INSPECTION AND ACCEPTANCE.
 - LANDSCAPE CONTRACTOR SHALL WATER PLANT MATERIAL. FREQUENCY OF WATERING SHALL BE NO LESS THAN TWICE PER WEEK FROM INSTALLATION DATE TO ACCEPTANCE. WATERING SHALL DELIVER TWENTY GALLONS (20 GALS.) OF WATER OVER A THIRTY MINUTE (30 MIN.) TIME PERIOD FOR ALL TREE PLANTINGS, AND BE THE EQUIVALENT OF ONE INCH (1") OF RAIN PER WEEK FOR ALL OTHER PLANTINGS. DAILY OR EVEN MORE FREQUENT IRRIGATION MAY BE NECESSARY IN SUMMER MONTHS OR TIMES OF EXTREME DROUGHT.
 - LANDSCAPE CONTRACTOR SHALL PROVIDE ONE (1) YEAR REPLACEMENT GUARANTEE FOR ALL NEW PLANT MATERIAL AND SHALL MAINTAIN AND WATER ALL PLANTS (INCLUDING GRASSES AND LAWN) UNTIL ACCEPTANCE.
 - PLANT BED PREPARATION: ALL PLANTING BEDS SHALL BE FILLED OR CULTIVATED TO A DEPTH OF NOT LESS THAN 18" WHERE THERE ARE CONSTRUCTION ACTIVITIES AND COMPACTED SOILS. ALL OTHER PLANTING BEDS SHALL BE CULTIVATED TO A DEPTH OF NOT LESS THAN 12".



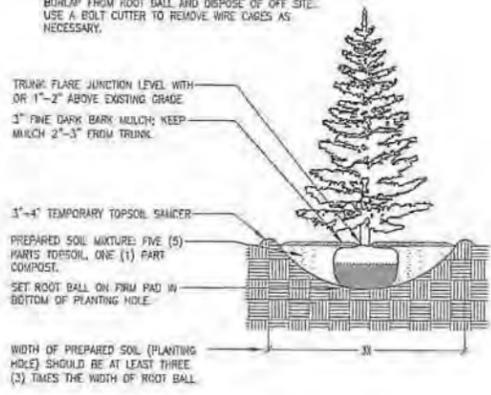
F12 PERENNIAL PLANTING SECTION

NTS



F6 BROADLEAF EVERGREEN PLANTING SECTION

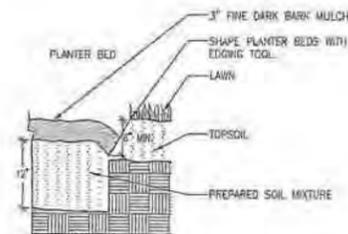
NTS



F1 EVERGREEN TREE PLANTING SECTION

NTS

- GENERAL MAINTENANCE PLAN:**
- FOLLOWING ACCEPTANCE OR MAINTENANCE PERIOD BY CONTRACTOR, THE OWNER OR OWNER'S REP. SHALL EMPLOY THE FOLLOWING GENERAL LANDSCAPE MAINTENANCE PLAN UNTIL A MORE SPECIFIC ONE IS DEVELOPED.
 - SPRING MAINTENANCE - END OF WINTER THROUGH THE END OF MAY
 - DEADHEAD AND PRUNE ALL SHRUBS AS REQUIRED; FERTILIZE (REFER TO SPECIFICATIONS)
 - RAKE/REMOVE DEAD PLANT MATERIAL AND DEBRIS FROM PLANT BEDS AND ADD MULCH WHERE DEPTH HAS BEEN REDUCED TO LESS THAN 3 INCHES
 - WEED ALL PLANT BEDS AND INSPECT PERIMETER EDGE CONDITION; RE-EDGE WHERE NECESSARY
 - MOW LAWN MIN. ONCE PER WEEK (NEVER CUTTING MORE THAN 1/3 OF THE LENGTH IN ONE MOWING) - MULCH MOW SIDE OF ALL MOWINGS; RAKE OUT ANY CLUMPED CLIPPINGS; BAG AND DISPOSE SOIL
 - WATER LAWN AND PLANT MATERIAL ONLY IN CASES OF EXTREME SPRING DRAUGHT (TWO WEEKS WITHOUT SIGNIFICANT RAIN EVENT)
 - SUMMER MAINTENANCE - JUNE THROUGH SEPTEMBER
 - IF FACILITY HAS ONE, ACTIVATE IRRIGATION SYSTEM AND TEST.
 - DEADHEAD AND CUT BACK ANY EARLY FLOWERING SHRUBS AND PERENNIALS.
 - WEED ALL PLANT BEDS MONTHLY
 - MOW LAWN MIN. ONCE PER WEEK (NEVER CUTTING MORE THAN 1/3 OF THE LENGTH IN ONE MOWING) - MULCH MOW ALL MOWINGS; RAKE OUT ANY CLUMPED CLIPPINGS
 - IF FACILITY HAS AN IRRIGATION SYSTEM, IMPLEMENT WATERING SCHEDULE.
 - IF NOT, PLANT MATERIAL AND LAWN AREAS SHALL BE WATERED AS NECESSARY DEPENDING THE WEATHER. AT A MINIMUM, THEY SHALL RECEIVE 3 WATERINGS PER WEEK FOR AT LEAST 20 MINS. OR UNTIL SOIL IS SATURATED. TRY TO WATER IN THE MORNING BEFORE 9 AM. AVOID WATERING WHEN THE TEMPERATURE IS HOT (DURING THE MIDDLE OF THE DAY) OR WITH WARMED WATER. ONE SIGNIFICANT RAIN EVENT COUNTS AS ONE WATERING.
 - FALL MAINTENANCE - OCTOBER THROUGH SNOWFALL
 - DEADHEAD AND CUT BACK ALL FLOWERING SHRUBS AND PERENNIALS; FERTILIZE (REFER TO SPECIFICATIONS)
 - RAKE/REMOVE DEAD PLANT MATERIAL AND DEBRIS FROM PLANT BEDS AND ADD MULCH WHERE DEPTH HAS BEEN REDUCED TO LESS THAN 3 INCHES
 - WEED ALL PLANT BEDS AND INSPECT PERIMETER EDGE CONDITION; RE-EDGE WHERE NECESSARY
 - MOW LAWN MIN. ONCE PER WEEK (NEVER CUTTING MORE THAN 1/3 OF THE LENGTH IN ONE MOWING) - MULCH MOW SIDE OF ALL MOWINGS; RAKE OUT ANY CLUMPED CLIPPINGS; BAG AND DISPOSE SOIL
 - PLANT MATERIAL AND LAWN AREAS SHALL BE WATERED AS NECESSARY DEPENDING THE WEATHER. AT A MINIMUM, THEY SHALL RECEIVE 3 WATERINGS PER WEEK FOR AT LEAST 20 MINS. OR UNTIL SOIL IS SATURATED. TRY TO WATER IN THE MORNING BEFORE 9 AM. AVOID WATERING WHEN THE TEMPERATURE IS HOT (DURING THE MIDDLE OF THE DAY) OR WITH WARMED WATER. ONE SIGNIFICANT RAIN EVENT COUNTS AS ONE WATERING.
 - OVERSEED LAWNS: MOW LAWN, COLLECT AND DISPOSE OF CLIPPINGS; RAKE DITCH FROM ALL THIN AREAS OF LAWN; REFER TO SPECIFICATION FOR LAWN SEED MIXTURE AND APPLY AT THE FOLLOWING RATES: THIN, BARE AREAS - 4-6 LBS PER 1,000 SF AND ALL OTHER AREAS 2-4 LBS PER 1,000 SF; LIGHTLY WATER OVERSEEDED AREAS SEVERAL TIMES A DAY FOR GERMINATION PERIOD (TWO WEEKS)
 - FERTILIZE ALL LAWN AREAS AFTER FINAL MOWING OR OVERSEEDING (REFER TO SPECIFICATIONS)
 - IF FACILITY HAS ONE, PREPARE IRRIGATION SYSTEM FOR WATERIZATION



A1 PLANT BED EDGE SECTION

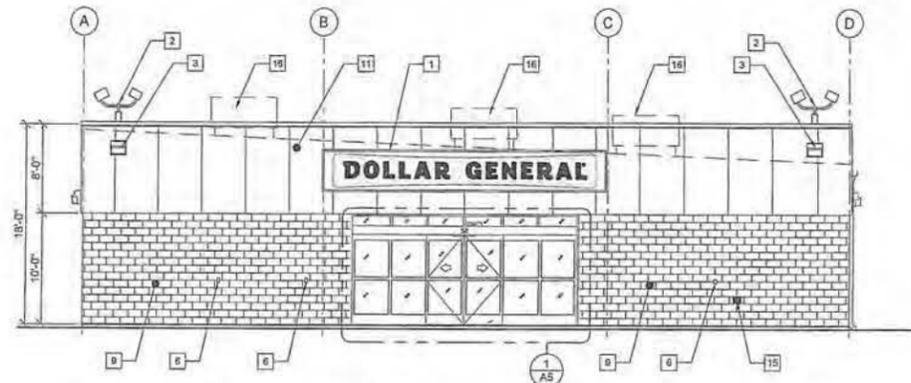
NTS

A6 MAINTENANCE PLAN

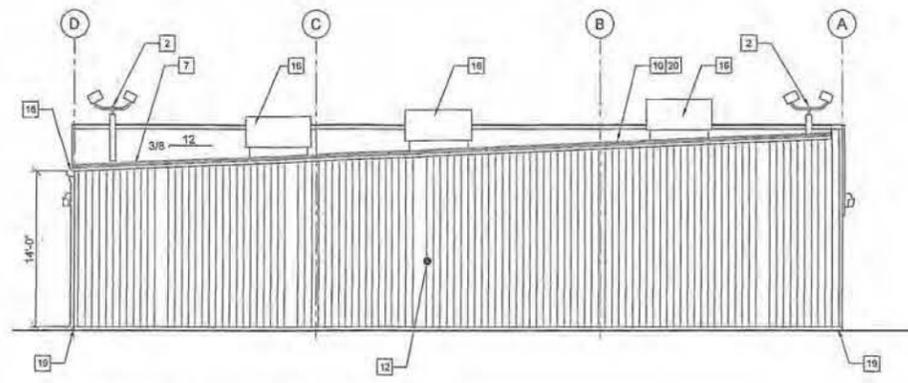
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A16 PLANTING NOTES

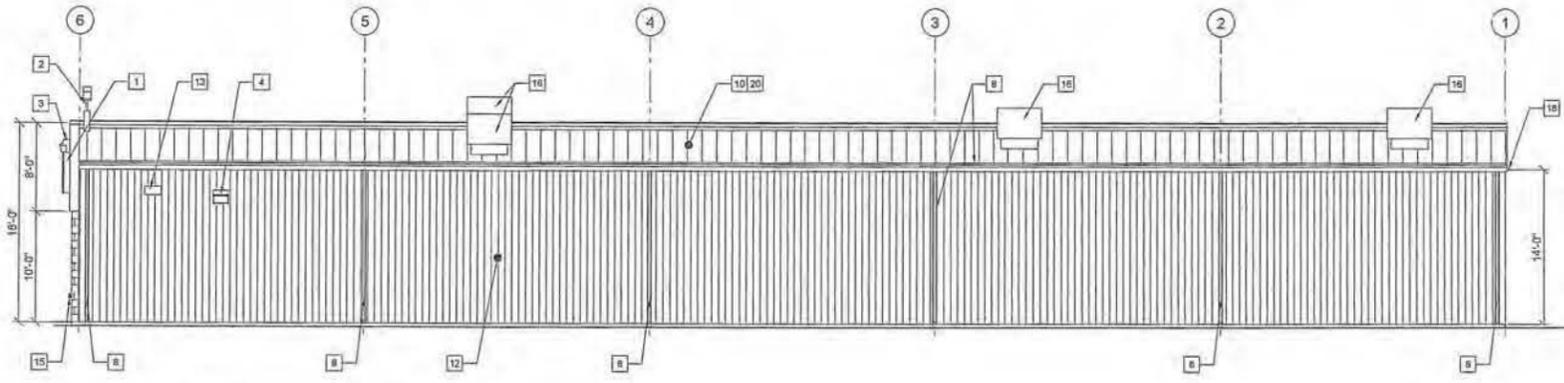
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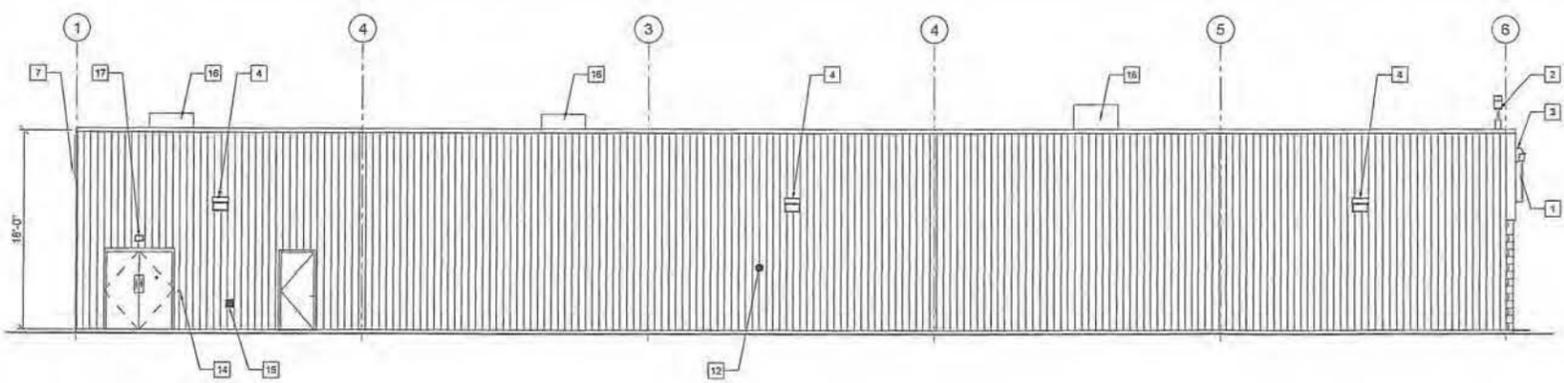
1 FRONT ELEVATION (SABATTUS ST.)
A02 SCALE: 1/8"=1'-0"



2 REAR ELEVATION
A02 SCALE: 1/8"=1'-0"



3 RIGHT ELEVATION
A02 SCALE: 1/8"=1'-0"



4 LEFT ELEVATION (PARKING)
A02 SCALE: 1/8"=1'-0"

- ### ELEVATION KEYED NOTES
- 1 SIGN FURNISHED AND INSTALLED BY DOLLAR GENERAL CORP. WITH CIRCUIT AS NOTED ON ELECTRICAL PLAN. SIGN TO BE CENTERED ON FRONT OF BUILDING. CONTRACTOR IS TO PROVIDE ADEQUATE BLOCKING AS REQUIRED BY SIGN MANUFACTURER TO SUPPORT SIGN WEIGHT OF UP TO 1,400 LBS.
 - 2 BI-DIRECTIONAL SECURITY LIGHT. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - 3 WALL PACK 16'-0" A.F.F. TO TOP OF WALL PACK. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - 4 WALL PACK 12'-0" A.F.F. TO TOP OF WALL PACK. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
 - 5 NOT USED
 - 6 RECEPTACLE. REFER TO E1 FOR ADDITIONAL INFORMATION.
 - 7 TRIM - SEE EXTERIOR FINISH SCHEDULE FOR COLOR.
 - 8 GUTTER AND DOWNSPOUT - SEE EXTERIOR FINISH SCHEDULE FOR COLOR.
 - 9 8" SPLIT FACE CONCRETE MASONRY UNIT, PAINT TO MATCH SIDE WALL PANELS.
 - 10 STANDING SEAM METAL ROOF, GALVALUME FINISH.
 - 11 PRE-FINISHED METAL WALL PANELS, REVERSE RIB PROFILE. SEE EXTERIOR FINISH SCHEDULE FOR COLOR.
 - 12 PRE-FINISHED METAL WALL PANELS, PROVIDE TAMPER-RESISTANT FASTENERS FOR BOTTOM 8'-0", SEE EXTERIOR FINISH SCHEDULE FOR COLOR.
 - 13 VENT FOR BATHROOM EXHAUST. REFER TO M01 FOR ADDITIONAL INFORMATION.
 - 14 DOOR BUZZER. REFER TO E01 FOR ADDITIONAL INFORMATION.
 - 15 WALL HYDRANT. REFER TO P01 FOR ADDITIONAL INFORMATION.
 - 16 HVAC UNITS MOUNTED ON ROOF. REFER TO MECHANICAL SHEET M1 FOR MORE INFORMATION.
 - 17 OUTSIDE AIR TEMP. SENSOR MOUNTED OVER RECEIVING DOORS @ 8'-0" A.F.F.
 - 18 MINIMUM EAVE HEIGHT IS 14'-0" A.F.F.
 - 19 FINISHED GRADE AT EXTERIOR WALLS SHALL BE A MINIMUM OF 6" BELOW FINISHED FLOOR AT ALL NON PAVED AREAS.
 - 20 PROVIDE SNOW GUARDS.
 - 21 NOT USED

bl
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e-mail: bka@bkaarche.com

Revisions	Date

CONSULTANT
SEAL

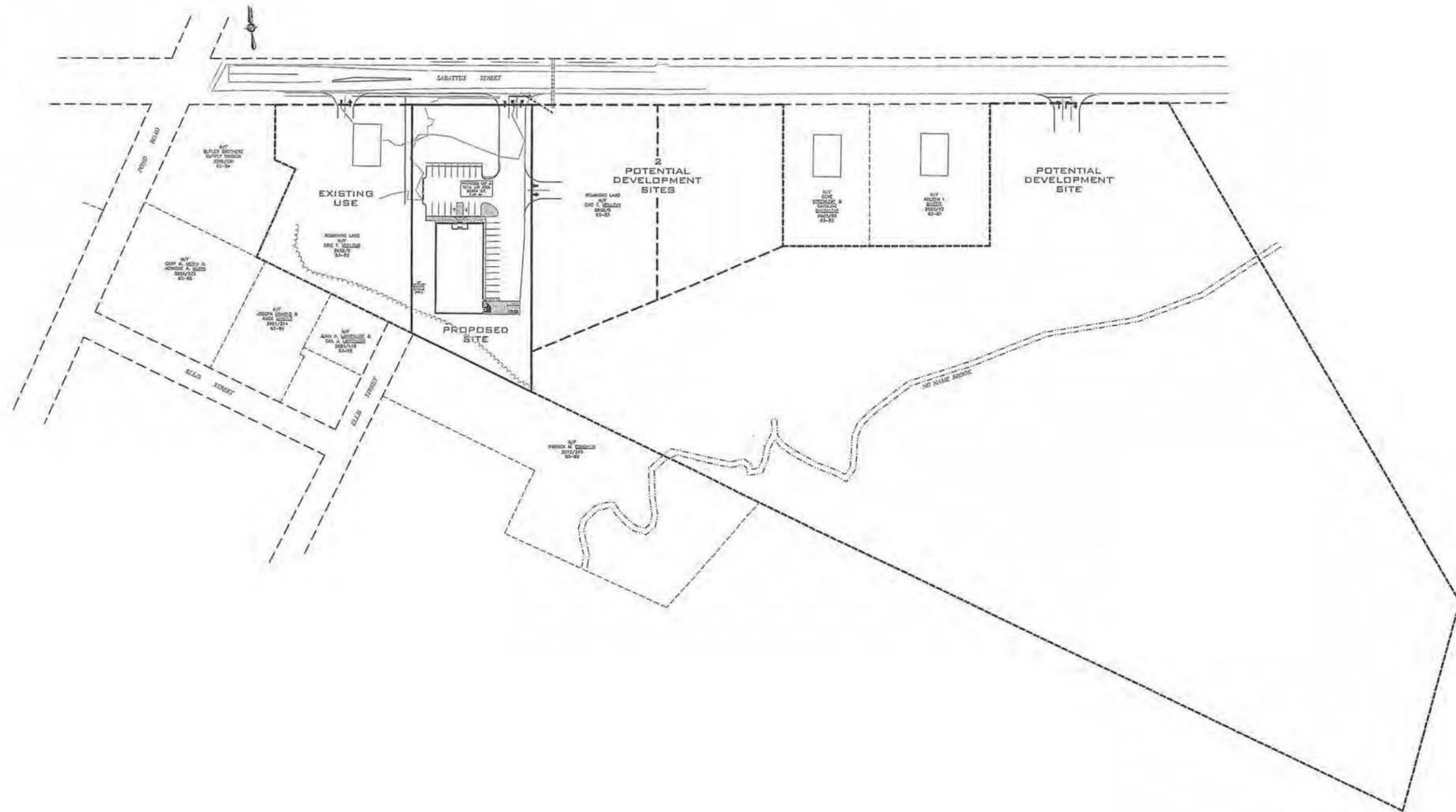
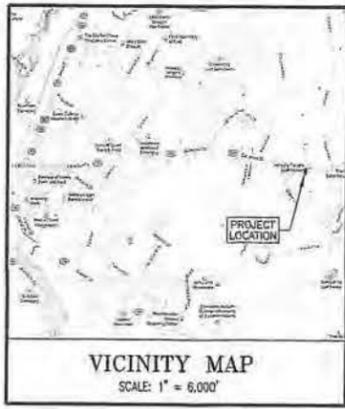
EXTERIOR ELEVATIONS
DOLLAR GENERAL
1073 SABATTUS ST
LEWISTON, ME

Scale: AS NOTED
Date: 1/21/14
Drawn By: KLP
Checked By: KLP
Job Number: 214008

Drawing:
A02

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MASTER PLAN 1073 SABATTUS STREET LEWISTON, MAINE



Station	By	Date	Change

PROJECT NUMBER: 34125.2	ACAD FILE: 34125-MASTER.DWG	SCALE: 1" = 80'	DATE: FEBRUARY 13, 2014
Drawing Name: MASTER PLAN			
Project Name: PROPOSED RETAIL STORE 1073 SABATTUS STREET, LEWISTON, MAINE 04240			
Owner/Client: FRANKLIN LAND ASSOCIATES, LLC 9010 OVERLOOK BOULEVARD, BRENTWOOD, TENNESSEE 37027			
	SURVEYING ENGINEERING LAND PLANNING Northeast Civil Solutions INCORPORATED 153 US ROUTE 1, SCARBOROUGH, MAINE 04074 Tel: 207.883.1000 Fax: 207.883.1001 800.882.2227 e-mail: info@northeastcivilsolutions.com		
SHEET 1 OF 1			

THIS PLAN IS FOR REVIEW
PURPOSES ONLY AND IS NOT
INTENDED FOR CONSTRUCTION
OR RECORDING

D:\Users\Allen\Documents\34125-MASTER.DWG - 10:28:03 AM 2/13/14



CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: February 20, 2014
RE: February 24, 2014 Planning Board Agenda Item IV(d)

Request by the Lewiston School Department for a capital expenditure not included in Lewiston's FY 2014 annual capital program for Lewiston Middle School auditorium renovations.

As the Board will recall, a favorable recommendation was provided to the City Council in February to adopt the FY2014 Lewiston Capital Improvement Plan (LCIP). This recommendation is required by Charter and the Zoning and Land Use Code. This is not to be confused with the FY 2015 recommendation the Board provided at the last meeting.

The Lewiston School Department is now making a request for a capital expenditure that was not included in the adopted FY 2014 LCIP. Article VII, Section 4(f) of the Zoning and Land Use Code requires that the Board review and make a recommendation to the City Council with regard to all capital expenditures costing \$100,000 or more which are not included in the LCIP. This is the case with respect to the School Department's request to use \$95,000 in unexpended funds from the McMahan Elementary improvements to fund improvements for Lewiston Middle School auditorium renovations. However, there is the possibility that the proposed improvements may exceed \$100,000.

At this time, the Board is being asked to provide a favorable recommendation to the City Council for the Lewiston School Department's capital expenditure not included in Lewiston's FY2014 annual capital program for Lewiston Middle School auditorium renovations.

ACTIONS NECESSARY:

1. Make a motion to consider a request by the Lewiston School Department for a capital expenditure not included in Lewiston's annual capital program.
2. Obtain input on the proposed amendment.
3. Make a motion pursuant to Article VII, Section 4(f) of the Zoning and Land Use Code to send a favorable recommendation for the City Council's consideration the Lewiston School Department's capital expenditure not included in Lewiston's FY 2014 annual capital program for Lewiston Middle School auditorium renovations.

memo

To: Bill Webster
cc: Elaine Runyon
From: Joe Perryman
Date: February 18, 2014
Re: LMS Auditorium Renovations



Bill, as you are aware the LMS auditorium will be open to the public again on May 1st. That day is quickly approaching and the auditorium needs some work as the School Committee supported last Spring. I would like to break it down into the following 4 phases:

Phase 1

Upgrade all rigging and piping along with line sets. All hardware will be replaced with safety rated hardware.

Price: \$18,600.00

Funded from unused
McMahon contingency
(See last section)

This item was discussed with the School Committee last spring and is scheduled for completion by May 1st.

Phase 2

Replacement and purchase of new stage lights and dimmer rack. Purchase a new dimmer rack and control panel with a total of 82 new stage lights.

Price: \$63,636.04

Funded from unused
McMahon contingency
(See last section)

This phase is a specialized area and bidding options were limited. After receiving 2 prices to replace our existing stage light dimming system and a quote for new stage lights, I recommend Port Lighting Systems. The new system will replace our existing dimmer rack and give us a new control center panel in the audio/visual booth. My decision was based upon pricing and consulting with Jay Lehrhaupt, a lighting and theatre specialist who has been in the theatre industry for 20 years. He has visited the space and believes it is a great start.

The quote for stage lights can be broken down to a smaller order if desired. When meeting with Port Lighting I asked them to provide us with a good starting package that will complement our existing lights. Port Lighting has a history with us as well as with the customers who have rented our facility, so they were knowledgeable of our needs.

Dimmer rack and control panel:	\$35,875.34
Stage light package:	<u>\$27,760.70</u>
Total:	\$63,636.04

Phase 3

Seating repairs and replacement. Repair and or reupholster all damaged seats.

Price: In process of obtaining pricing; estimated at \$12,500 Funded from unused McMahon Contingency (See last section)

Phase 4

Replace of 52 house lights and power pack. Replace 52 existing 500watt quartz lights with 52 new LED lights and a new power supply with controls on the stage as well as in the control room.

Price: Material \$34,000.00 Labor TBD Likely to be funded from a combination of LMS construction bond and leftover McMahon contingency when finalized.

I am still securing quotes from electricians to complete this work and will have further information and a formal recommendation in March.

Funding

Phases 1, 2 and 3 total an estimated \$94,736. I suggest that we ask the School Committee to consider adopting the following resolution at its February 24, 2014 meeting:

Move to approve the transfer of \$95,000 from the McMahon unused contingency to the LMS auditorium renovation and to authorize acceptance of the quote from Port Lighting Systems.

I should note that Elaine Runyon has confirmed that there will be over \$95,000 in unexpended funds from the McMahon project. A complete accounting will be completed in the near future. Further information on this phase will also be available in March.

Joe Perryman
Facilities Director