

**CITY OF LEWISTON
PLANNING BOARD MEETING**
Monday, October 27, 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 Denis Theriault to amend the Zoning and Land Use Code to conditionally rezone the property at 239 Bartlett Street from the Highway Business (HB) district to the Downtown Residential (DR) district.
- b) An application submitted by Sheridan Corporation on behalf of Federal Distributors for the construction of a 6,300 square foot warehouse addition to the existing building at 2019 Lisbon Street.

V. OTHER BUSINESS:

- a) Recommendation on the disposition of 10 College Street.
- b) Recommendation on the disposition of 154 Blake Street.
- c) Discussion with staff about real estate negotiations.
- d) Update on the Riverfront Master Plan and Wayfinding Signs.
- e) Any other business Planning Board Members may have relating to the duties of the Lewiston Planning Board.

VI. OLD BUSINESS:

- Off street parking
- Form based code
- Comprehensive plan

VI. READING OF THE MINUTES: Motion to adopt the September 22, 2014 and October 20, 2014 draft minutes

VII. ADJOURNMENT



CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: October 23, 2014
RE: October 27, 2014 Planning Board Agenda Item IV(a)

A request by Denis Theriault to amend the Zoning and Land Use Code to conditionally rezone the property at 239 Bartlett Street from the Highway Business (HB) district to the Downtown Residential (DR) district.

Denis Theriault has submitted a petition pursuant to Article XVII, Section 5 of the Zoning and Land Use Code to amend the zoning and land use map for the property at 239 Bartlett Street to be conditionally rezoned from the Highway Business (HB) district to the Downtown Residential (DR) district.

This property of approximately .9 acres consists of an 8,864+/- SF single story structure last occupied by a daycare and religious facility. With the space now vacant, the petitioner is interested in converting the structure into single family attached dwellings while maintaining the ability to create a mixed use structure in the future. The petitioner believes there is a solid market for mixed use structures where quality housing units can co-exist with existing uses found in the HB district. This type of mixed use neighborhood currently exists for this section of Bartlett Street zoned HB which has consisted of multifamily dwellings and nonresidential uses for over 50 years. The conditional zoning request would build upon existing land use patterns in this neighborhood and provide the ability for redevelopment of a structure into dwelling units meeting today's modern standards. To do so, the proponent would like to have the property conditionally rezoned to the DR zoning district to allow for the creation and establishment of residential developments, including single family attached dwellings and multifamily dwellings in addition to those uses currently allowed in the HB. Allowing these additional uses provides the petitioner more options of utilizing the property.

It should be noted that upon a successful rezoning of the property, the applicant will need to pursue development review approval from the staff review committee for a change of use for the creation of dwelling units.

ACTIONS NECESSARY

1. Make a motion to consider a petition submitted by Denis Theriault to amend Zoning and Land Use Code to conditionally rezone the property a 239 Bartlett Street from the Highway Business (HB) district to the Downtown Residential (DR);
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 a 239 Bartlett Street from the Highway

Business (HB) district to the Downtown Residential (DR) (subject to any concerns raised by the Planning Board or staff).

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 property at 239 Bartlett Street from the Highway Business (HB) zoning district to the Downtown Residential (DR) zoning district as described in the exhibits attached hereto:

	SIGNATURE	PRINTED NAME	PHYSICAL STREET ADDRESS (No PO Boxes)	DATE
1		DENIS L. THERIAULT	21 Marguerette St, Lewiston	9/16/14
2		STEVEN N DUBOIS	215 Sciurus Blvd	9-16-14
3		CLAIRE D. BOSSE	59 CHARLES ST. LEWISTON	9-17-14
4		AURELE J. BOSSE	59 CHARLES ST. LEWISTON	9-17-14
5		Marc Mailhot	258 Bartlett St Lewiston Me 04240	9-17-14
6		Nelson Peters, Jr	10 McKinley Dr Lewiston	9-20-14
7		George J. Simones	115 Wellman St. Lewiston	09-20-14
8		BRUCE R. OUELLETTE	33 Jeannette Ave Lewiston, ME	9/20/14
9		Hewellyn A Turcotte	22 Orleans St.	9-20/14
10		ROBERT E MCDONALD	6 JOLIET ST	9/23/14
11		Donald Jordan	158 N. Temple St	9/24/14
12		JOHN D. CLIFFORD JR	14 WARE ST	9/26/14

13	Heather M. Gatlin	Heather M. Gatlin	243 Bartlett St. Apt 1 Lewiston, ME	9/26/14
14	Matthew R. Theriault	MATTHEW R. THERIAULT	243 BARTLETT ST. APT 1 LEWISTON, ME	9/26/14
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.

Heather M. Gatlin

Demi L. Theriault
9/26/2014

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: 13

Total Invalid: 1

Erica Smith

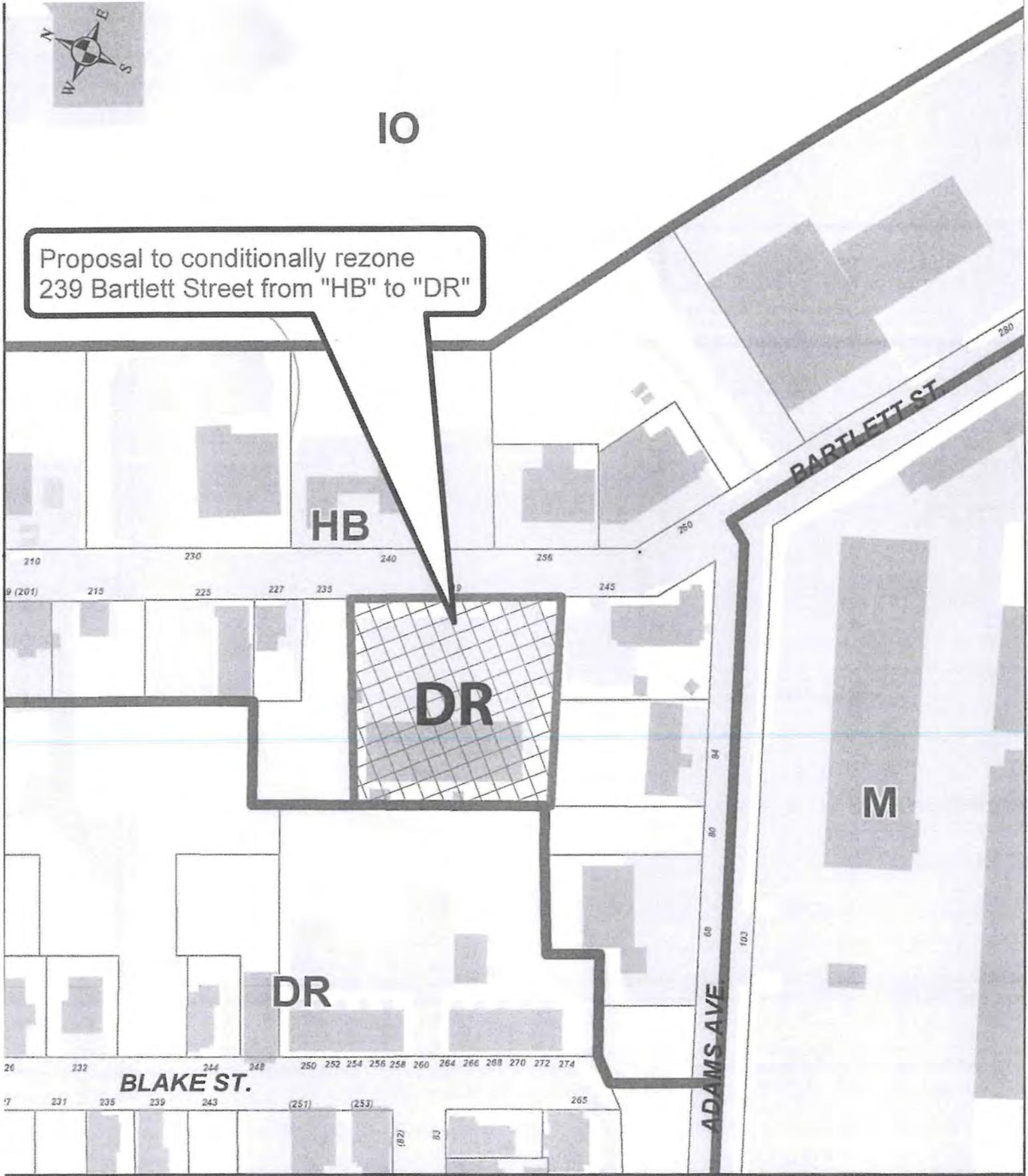
9/26/14 Date:

Signature of Registrar/Deputy Registrar



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Proposal to conditionally rezone
239 Bartlett Street from "HB" to "DR"



**Proposed Conditional Rezoning
239 Bartlett Street**

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 parcel more fully described in Exhibit "A" attached hereto, and as shown on Exhibit "B," said parcel being located at 239 Bartlett Street, Lewiston, Maine, from the Highway Business (HB) zoning district to the Downtown Residential (DR) zoning district.

REASONS FOR THE PROPOSED AMENDMENT

The reasons for the proposed conditional rezoning of 239 Bartlett Street is that there is a solid market for mixed use structures where quality housing units can co-exist with supporting Highway Business uses where applicable. The Bartlett Street Highway Business area currently has existed with Housing units within the current area for over 50 years. The conditional zoning request would only reinforce an already existing working use and encourage modern standards in requested new development plans. Specifically, proponent would like to have the property, which is currently zoned for the Highway Business (HB) zoning district, conditionally rezoned to the Downtown Residential (DR) zoning district to allow for the creation and establishment of residential developments, including multifamily dwellings in addition to those uses currently allowed in the HB.

CONFORMANCE WITH COMPREHENSIVE PLAN

1. Stimulate and maintain vital business investment in the Downtown area (Downtown Goals #1, page 22).
2. Attract new investors to purchase, redevelop and whenever possible utilize the buildings within the Downtown Area (Downtown Policy #7, page 32).
3. 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).

4. 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 Highway Business (HB) zoning district and conditionally rezone the subject premises to the Downtown Residential (DR) 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 Highway Business (HB) zoning district, and the following uses: “Multifamily dwellings”....as listed below and subject to the conditions contained herein.

Land Use Table: All Zoning Districts 6.27.14	Conditional Rezoning -(DR) 239 Bartlett Street
USES(15)(33)	
Accessory use or structure	P
Commercial-Service	
Veterinary facilities excluding kennel and humane societies	P
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
Restaurants	P(26)

Drinking places	C
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	P
Personal Services	P
Retail stores	P
Neighborhood retail stores	
Lumber and building materials dealer	P
Gasoline service stations	P
Gasoline service stations which are a part of and subordinate to a retail use	P
New and used car dealers	P
Recreational vehicle, mobile home dealers	P
Equipment dealers and equipment repair	C
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	C
Industrial	
Light industrial uses	P(9)
Industrial uses	
Building and construction contractors	P(6)
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)	P

Transportation	
Airports or heliports	
Commercial parking facilities	P
Transit and ground transportation facilities	C
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
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 roadway	
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,	P
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	P
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	C
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 of 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.

Denis Theriault, Proponent

On _____, 20____, personally appeared the above named Denis Theriault and acknowledged the foregoing to be of his free act and deed.

Notary Public
Commission Expires:

I, RAYMOND L. THERIAULT of Lewiston, County of Androscoggin and State of Maine, for consideration paid, grant to DENIS L. THERIAULT of Lewiston, County of Androscoggin and State of Maine, with WARRANTY COVENANTS, the land in Lewiston, County of Androscoggin and State of Maine, bounded and described as follows:

TWO CERTAIN LOTS OR PARCELS OF LAND situated in said Lewiston, bounded and described as follows:

PARCEL #1: BEGINNING on the westerly line of Bartlett Street at the northeasterly corner of land conveyed by the Franklin Company to J. Nazaire Theriault by deed #1973, dated October 29, 1957; thence in a northerly direction by line of Bartlett Street about one hundred two and ninety-five hundredths (102.95) feet to the southeasterly corner of land conveyed by the Franklin Company to John N. Jutras, March 26, 1962; thence westerly by said land of Jutras one hundred (100) feet to other land of the Franklin Company; thence southerly about ninety-seven and forty-eight hundredths (97.48) feet to the northwesterly corner of said land of Theriault; thence easterly to the point of beginning.

SUBJECT to the restriction that no building shall be placed nearer the line of Bartlett Street than twelve (12) feet.

PARCEL #2: BEGINNING in the easterly line of Pierce Street at the northwesterly corner of land conveyed by Franklin Company to George Caron by deed #1846, dated April 19, 1947; thence in an easterly direction by line of Caron land one hundred (100) feet; thence in a northerly direction by land conveyed by Franklin Company to J. Nazaire Theriault by deed #1913 dated October 22, 1952 and by deed #1973 dated October 29, 1957, and by Parcel #1, one hundred ninety-seven and forty-eight hundredths (197.48) feet to land conveyed by Franklin Company to John N. Jutras, March 26, 1962; thence in a westerly direction by line of said Jutras one hundred (100) feet to the easterly line of Pierce Street; thence southerly one hundred ninety-two and one hundredths (192.01) feet to the point of beginning.

SUBJECT to a sewer easement conveyed by the Franklin Company to Joseph Houle et al by deed #1968 dated July 16, 1957.

BOTH PARCEL #1 AND PARCEL #2 are subject to a sewer easement conveyed by Franklin Company to the City of Lewiston by deed dated June 10, 1936 and subject to sewer easements granted the City of Lewiston by Jeanne M. Theriault and Roland A. Theriault, Trustees under the Will of J. Nazaire Theriault by deed dated January 22, 1975 and recorded in Book 1139, Page 204 of the Androscoggin County Registry of Deeds.

BEING THE SAME PREMISES conveyed to Raymond L. Theriault by deed of Jeanne M. Theriault and Roland A. Theriault, Trustees under the Will of J. Nazaire Theriault dated August 27, 1980 and recorded in Book 1481, Page 315 of the Androscoggin County Registry of Deeds.

MARSHALL, RAYMOND,
BELLEVILLE, DOMINIQUE
& BOURGEOIS
ATTORNEYS AT LAW
75 PARK STREET
LEWISTON, MAINE 04240

BOOK 1562 PAGE 237

CARMEN B. THERIAULT, wife of the above-named grantor, joins as grantor and releases all rights by descent and all other rights.

WITNESS our hands and seals this 1st day of January, 1982.

[Handwritten signature]

[Handwritten signature]
RAYMOND L. THERIAULT
[Handwritten signature]
CARMEN B. THERIAULT



STATE OF MAINE
ANDROSCOGGIN, SS

January 1, 1982

Personally appeared the above-named Raymond L. Theriault and acknowledged the foregoing instrument to be his free act and deed.

Before me,

[Handwritten signature]

Notary Public



ANDROSCOGGIN, SS
RECEIVED EB 17 1982
AT 9 H - M. P. M.
and recorded from original

MARSHALL, BAYBOND,
DEJYEAU, DIONNE
& BONEAU
ATTORNEYS AT LAW
75 PARK STREET
LEWISTON, MAINE 04240

Land Use Table: All Zoning Districts 6.27.14	Downtown Residential (DR)	Highway Business (HB)	Conditional Rezoning - (DR) 239 Bartlett Street
USES(15)(33)			
Accessory use or structure	P	P	P
Commercial-Service			
Veterinary facilities excluding kennels and humane societies		P	P
Veterinary facilities including kennels and humane societies			
Small day care facilities	P	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	P
Restaurants	P(1)	P(26)	P(26)
Drinking places		C	C
Adult business establishments			
Hotels, motels, inns	C	P	P
Movie theaters except drive-in theaters	P	P	P
Places of indoor assembly, amusement or culture		P	P
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		P	P
Gasoline service stations		P	P
Gasoline service stations which are a part of and subordinate to a retail use		P	P
New and used car dealers		P	P
Recreational vehicle, mobile home dealers		P	P
Equipment dealers and equipment repair		C	C
Automotive services including repair		P	P
Registered dispensary(27)		C	C
Registered primary caregivers engaged in the cultivations of medical marijuana for two to five registered patients.		P	P
Tattoo Establishments		C	C
Industrial			
Light industrial uses		P(9)	P(9)
Industrial uses			
Building and construction contractors		P(6)	P(6)
Fuel oil dealers and related facilities			
Wholesale sales, warehousing and distribution facilities and self-storage facilities		P	P
Self storage facilities			
Commercial solid waste disposal facilities			
Junkyards and auto graveyards			
Recycling and reprocessing facilities			
Private industrial/commercial developments(23)		P	P
Transportation			
Airports or heliports			
Commercial parking facilities	C(3)	P	P
Transit and ground transportation facilities	C		C
Transportation facilities		P	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	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	P
Museums, libraries, and non-profit art galleries and theaters	P		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	P	P
Civic and social organizations			
Public community meeting and civic function buildings including auditoriums	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(14)	P(11)
Multifamily dwellings in accordance with the standards of Article XIII	P(11)		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
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		P	P
Earth material removal			
Community gardens(20)	P	P	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		C
Commercial outdoor recreation and drive-in theaters		C	C
Fitness and recreational sports centers as listed under NAICS Code 713940			

Land Use Table: All Zoning Districts 6.27.14	Conditional Rezoning -(DR) 239 Bartlett Street
USES(15)(33)	
Accessory use or structure	P
Commercial-Service	
Veterinary facilities excluding kennels and humane societies	P
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
Restaurants	P(26)
Drinking places	C
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	P
Personal Services	P
Retail stores	P
Neighborhood retail stores	
Lumber and building materials dealer	P
Gasoline service stations	P
Gasoline service stations which are a part of and subordinate to a retail use	P
New and used car dealers	P
Recreational vehicle, mobile home dealers	P
Equipment dealers and equipment repair	C
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	C
Industrial	
Light industrial uses	P(9)
Industrial uses	
Building and construction contractors	P(6)
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)	P
Transportation	
Airports or heliports	
Commercial parking facilities	P
Transit and ground transportation facilities	C
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
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,	P
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	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	P
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	C
Fitness and recreational sports centers as listed under NAICS Code 713940	



CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: October 23, 2014
RE: October 27, 2014 Planning Board Agenda Item IV(b)

An application submitted by Sheridan Corporation on behalf of Federal Distributors for the construction of a 6,300 square foot warehouse addition to the existing building at 2019 Lisbon Street.

Sheridan Corporation on behalf of Federal Distributors has submitted an application for the construction of a 6,300 square foot warehouse addition to the existing building at 2019 Lisbon Street. This property of approximately 22.9 acres in the Highway Business (HB) consists of 59,914 square foot warehouse and distribution facility for Federal Distributors which is an allowed as a permitted use. While a relatively small addition Article XIII, Section 3 requires projects over 5,000 square to obtain development review approval.

Staff has been working closely with the applicant's representative to address concerns and questions. The applicant has since provided revised plans and documentation addressing staff comments. 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.
- The existing structure was developed in 1987/1988 with a total impervious area just under three acres. This was presumably done to keep the project under DEP's Site Law review threshold. The current conditions of the site show a total impervious area of 3.25 acres and the proposed addition would increase that to 3.4 acres. In effort to bring the property back under the three acre threshold, the applicant has shown on the site plan the removal of 17,360 square feet of paved area determined to be unnecessary for the site to function. This will result in 2.9 acres of total impervious area.
- The removal of pavement will result in six fewer parking spaces for a total of 52 spaces. Based upon the parking requirements of Article XII, Section 17, a total of 89 spaces should be provided today; 96 spaces with the proposed addition. Federal Distributors has indicated they use 38 to 44 spaces daily. Article XII, Section 17(d) provides the Planning Board the ability to deviate from the prescribed requirements upon a differing need be demonstrated. Staff supports the reduction in parking based upon the actual parking demand of the site along with their effort to reduce impervious area.
- The applicant has provided stormwater design revisions that have been reviewed the satisfaction of Public Works.
- The applicant has noted on the site plan that no certificate of occupancy will 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.

No other concerns have been raised by City staff. Approval is recommended pursuant to Article XIII, Section 4 Zoning and Land Use Code.

ACTIONS NECESSARY

1. Make a motion to consider an application submitted by Sheridan Corporation on behalf of Federal Distributors for the construction of a 6,300 square foot warehouse addition to the existing building at 2019 Lisbon 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 Federal Distributors for the construction of a 6,300 square foot warehouse addition to the existing building at 2019 Lisbon Street (subject to any concerns raised by the Planning Board or staff).



Department of Public Works

David A. Jones, P.E., Director

DATE: October 20, 2014
TO: David Hediger, Planning Director
FROM: Ryan Barnes, P.E., Project Engineer
SUBJECT: 2075 Lisbon Street
Federal Distributors Expansion

Lewiston Public Works has the following comments at this time upon reviewing the application:

1. Inlet protection should be added to the existing catchbasins in the parking lot down gradient of the proposed disturbed area.
2. Please provide sizing calculations for the Roof Drip Line Filter per chapter 7.6 of the Maine Stormwater Best Management Practices Manual.
3. The post development calculations for subcatchment 3 do not take into account the area where pavement was removed.
4. The post development calculations for subcatchment 4 do not take into account the area where pavement was removed.
5. The rainfall for a 25 year storm should be 5.4 inches not 5.5 inches.
6. Please revise the pre and post development calculations based on the above comments. If the post development volumes are still above the pre development volumes the Roof Drip Line filter should be redirected to drain to point of interest 1 or the Roof Drip Line filter should be sized to accommodate the increase.

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.

From: [Paul Ouellette](#)
To: [David Hediger](#)
Cc: [David Chick](#); [Ryan Barnes](#); [Gildace Arsenault](#); [Bruce McKay](#); [Catherine Lekberg](#)
Subject: 2075 Lisbon St. Expansion
Date: Tuesday, October 14, 2014 3:37:14 PM

Dave,

I have no current issues or concerns with respect to the 6,300 sq. ft. building expansion for the additional warehouse storage.

I would suspect that the current fire alarm system and fire sprinkler system will be extended and continued over into the new addition for proper fire coverage and protection, did not see it in the notes.

Fire Inspector,
Paul Ouellette

Paul Ouellette
NFPA - Certified Fire Inspector /
IAAI - Certified Fire Investigator
Lewiston Fire Department
Fire Prevention Bureau
2 College St.
Lewiston, ME 04240
Phone # (207) 513-3002 ext.3605
Fax # (207) 783-6138
TTY/TDD: (207) 513-3007
pouellette@lewistonme.gov

The City of Lewiston is an EOE. For more information, please visit our website @ www.ci.lewiston.me.us (<http://www.ci.lewiston.me.us/>) and click on the Non-Discrimination Policy.



The Sheridan Corporation

PO Box 359, Fairfield, ME 04937

Phone (207) 453-9311

Fax (207) 453-2820

www.sheridancorp.com

October 09, 2014

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

RE: Federal Distributors Warehouse Expansion
Subject: Application for Development Review Required Information for Minor Amendment

Dear David,

Federal Distributors, the owner of (Tax Map #46 Lot 12) 2075 Lisbon Street in Lewiston Maine, has hired the Sheridan Corporation and appointed Ken Lamoreaux, Sheridan's Director of Permitting, to act as their agent for their permitting needs.

Federal Distributor's current facility was constructed in 1987/1988. The facility is mainly warehousing and distribution business with some corporate office space attached. Parking is located on site as shown on the existing site plan. This plan is based on a field survey done in August of 2014. From this, we have determined the impervious areas on site (see review memo).

The proposal is to add 6,300 sf of warehousing space to the existing west side of the building (currently a well maintained lawn area). This warehousing space will require no expansion of existing utilities. Water usage is limited to fire sprinklers; the system designer states the current service is adequate. Sewer is not expanding as no additional restrooms or employees are planned. The designer states that current electrical and telecom services are adequate for this expansion.

Traffic will be maintained at current levels as the new space is not increasing trucking and no new employees are being added

Additionally, this letter is meant to address all minimum application requirements according to City of Lewiston Appendix A, Article XIII, Section 3 – Procedures.

Application Requirements

1. Application for Development: *Complete application included in submittal package*
2. Maps and Drawings: *Included in the submittal package*
3. Fifteen Copies of Bound Report: *Submitted as required*



General Information

1. Owner Information: *Federal Distributors Inc., 2075 Lisbon Street, Lewiston, ME 04240*
2. Name of Proposed Development: *Warehouse expansion, Federal Distributors*
3. Sketch Map: *See plans*
4. Survey: *See plans*
5. Tax Map Number: *Map 46, Lot 12*
6. Deed: *See submittal package*
7. P.E. / Architect / Surveyor Information: *Dana Sturtevant, P.E. # 3107– The Sheridan Corporation (207) 453-9311, Elwood Ellis P.L.S. #1176 – Downeast Surveying & Development (207) 592-2735, & Curtis Y. Neufeld, P.E. #9779 - Sitelines PA (207) 725-1200*

Existing Conditions

1. Zoning Classification: *Highway Business HB*
2. Bearings of Property Lines: *See plans*
3. Utilities: *All utilities are existing, no new utilities will be required*
4. Existing Streets and R.O.W.: *Current street access location will remain unchanged*
5. Existing Buildings: *Current building is shown on the plans*
6. Existing Site Development: *Current site development is shown on the plans*
7. Road Locations Within 200ft: *Foss Road is 260+/- feet Southeast of the Federal Distributors entry*
8. Location of Drainage: *See plan and Stormwater Review*
9. Direction of Existing Drainage: *See plan and Stormwater Review*
10. Existing Signs: *See plan*
11. Existing Easements: *There are no known easements*

Proposed Development Activity

1. Setbacks, Yards, and Buffers: *See plans*
2. Building Floor Elevations: *See plan*
3. Proposed Site Development: *See plan. The proposal is to add 6,300 sf of additional space to the existing warehouse. To maintain developed site impervious area at less than 3 acres, the applicant proposes to remove existing pavement. This area will be loamed and planted with lawn.*
4. Proposed Utilities: *N/A*
5. Proposed Drainage: *See stormwater review*
6. Proposed Signs: *N/A*
7. Exterior Lighting: *N/A*
8. Proposed Landscaping and Buffering: *Lawn only*
9. Permits: *Development Review & Building permits*
10. Construction Schedule: *See package*
11. Signing Block: *See plan*



Additional Information

- a. Existing and Proposed Topography: *See plan*
- b. Stormwater and Erosion Control Plan: *See plans. The proposed work is limited to the area of the addition. Therefore these items are targeted at this area.*
- c. Groundwater Analysis: *N/A*
- d. Utility Plan: *N/A*
- e. Planting Schedule: *See construction schedule*
- f. Traffic Impact Analysis: *No increase in traffic is projected from this warehouse expansion*
- g. Adequacy of Water Supply: *No additional water will be required for this warehouse expansion*
- h. Site Development Items Proposed: *See plan*
- i. Construction Drawings: *See plan*
- j. Proposed Lot Lines and Required Setbacks: *See plan. No new lot lines are proposed, setback lines are shown on the plan*
- k. Subdivision Lots: *N/A*
- l. Pedestrian Ways / Open Spaces: *N/A*
- m. City GIS Coordinates: *See plan for reference point*
- n. Covenants or Deed Restrictions: *N/A*
- o. Dedication or Conveyance to Municipality: *N/A*
- p. Home Owner's Association Requirements: *N/A*
- q. Performance Guarantee: *N/A*
- r. Cost and Letter of Financial Capacity: *See package*
- s. Parking Review: *Current site has 58 spaces; the applicant is proposing 52 spaces. See detail parking analysis.*

As the Owner's Authorized Agent please direct all questions to me at the following address, The Sheridan Corporation, P.O. Box 359, Fairfield, Maine 04937, or you can contact me at (207) 453-9311 or email at klamoreaux@sheridancorp.com.

Sincerely,

Kenneth S. Lamoreaux
Director of Permitting



Development Review Application

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



PROJECT NAME: _____

PROPOSED DEVELOPMENT ADDRESS: _____

PARCEL ID#: _____

REVIEW TYPE: Site Plan/Special Exception Site Plan Amendment
 Subdivision Subdivision Amendment

PROJECT DESCRIPTION: _____

CONTACT INFORMATION:

Applicant

Name: Peter Gosselin

Address: 2075 Lisbon Street, Lewiston

Zip Code 04240

Work #: (207) 783-1777 ext 131

Cell #:

Fax #:

Home #:

Email:

Project Representative

Name: Ken Lamoreaux - Dir of Permitting

Address: PO Box 359, Fairfield, ME

Zip Code 04937

Work #: (207) 453-9311

Cell #:

Fax #: (207) 453-2820

Home #:

Email: klamoreaux@sheridancorp.com

Property Owner

Name: John Cronin

Address: 2075 Lisbon Street, Lewiston

Zip Code 04240

Work #: (207) 783-1777

Cell #:

Fax #:

Home #:

Email:

Other professional representatives for the project (surveyors, engineers, etc.),

Name: See Cover Letter

Address:

Zip Code

Work #:

Cell #:

Fax #:

Home #:

Email:

PROJECT DATA

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

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area _____ sq. ft.
Proposed Total Paved Area _____ sq. ft.
Proposed Total Impervious Area _____ sq. ft.
Proposed Impervious Net Change _____ sq. ft.
Impervious surface ratio existing _____ % of lot area
Impervious surface ratio proposed _____ % of lot area

BUILDING AREA/LOT COVERAGE

Existing Building Footprint _____ sq. ft.
Proposed Building Footprint _____ sq. ft.
Proposed Building Footprint Net change _____ sq. ft.
Existing Total Building Floor Area _____ sq. ft.
Proposed Total Building Floor Area _____ sq. ft.
Proposed Building Floor Area Net Change _____ sq. ft.
New Building _____ (yes or no)
Building Area/Lot coverage existing _____ % of lot area
Building Area/Lot coverage proposed _____ % of lot area

ZONING

Existing _____
Proposed, if applicable _____

LAND USE

Existing _____
Proposed _____

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

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area _____ sq. ft.
Proposed Disturbed Area _____ sq. ft.
Proposed Impervious Area _____ 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 _____ zoning district.
2. Parcel Area: _____ acres / _____ square feet(sf).

Regulations	<u>Required/Allowed</u>	<u>Provided</u>
Min Lot Area	_____ / _____	
Street Frontage	_____ / _____	
Min Front Yard	_____ / _____	
Min Rear Yard	_____ / _____	
Min Side Yard	_____ / _____	
Max. Building Height	_____ / _____	
Use Designation	_____ / _____	
Parking Requirement	1 space/ per _____ square feet of floor area	
Total Parking:	_____ / _____	
Overlay zoning districts (if any):	_____ / _____	_____ / _____
Urban impaired stream watershed?	YES/NO If yes, watershed name _____	

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:
-------------------------	-------

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: _____

PROPOSED DEVELOPMENT ADDRESS and PARCEL #: _____

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)				
	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)				
	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			Article XIII	
Stormwater & Erosion Control Plan				Article XIII	
	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				Article XIII	
	Full cut-off fixtures				
	Meets Parking Lot Requirements				
Traffic Information				Article XIII	
	Access Management				
	Signage				
	PCE - Trips in Peak Hour				
	Vehicular Movements				
	Safety Concerns				
	Pedestrian Circulation				
	Police Traffic				
	Engineering Traffic				
Utility Plan				Article XIII	
	Water				
	Adequacy of Water Supply				
	Water main extension agreement				
	Sewer				
	Available city capacity				
	Electric				
	Natural Gas				
	Cable/Phone				
Natural Resources				Article XIII	
	Shoreland Zone				
	Flood Plain				
	Wetlands or Streams				
	Urban Impaired Stream				
	Phosphorus Check				
	Aquifer/Groundwater Protection				
	Applicable State Permits				
	No Name Pond Watershed (Lewiston only)				

	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					
	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					
	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		X			
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					

**City of Lewiston
Development Review
Minor Amendment Application
October 22, 2014**



Federal Distributors, Inc
2075 Lisbon Street
Lewiston, ME 04240

Prepared By:



**The Sheridan Corporation
PO Box 359
Fairfield, ME 04937**

City of Lewiston
Development Review
Minor Amendment Application
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- **Cover Letter**

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 - **Application**
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 - **Parking Review Letter**
 - **Utility Verification Letter**
 - **Stormwater Review**

- **Plans**



FEDERAL DISTRIBUTORS, INC.

August 14, 2014

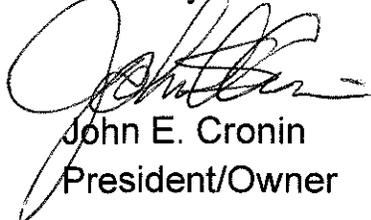
Kenneth Lamoreaux, Director of Permitting
The Sheridan Corporation
P.O. Box 359
Fairfield, ME 04937

RE: Federal Distributors, Inc.

Dear Ken:

This letter will authorize you to represent the interest of Federal Distributors before the City of Lewiston Planning Department, the Maine Department of Environmental Protection, the U.S. Army Corp. of Engineers, and any other municipal, state, or federal agency. You are also authorized to sign any applications required to be presented to the D.E.P., Corp. of Engineers, or any of the other agencies.

Cordially,



John E. Cronin
President/Owner

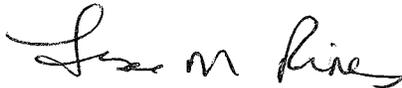
DEED OF SALE BY PERSONAL REPRESENTATIVE
(TESTATE)

PAUL B. CRONIN, duly appointed and acting personal representative of the estate of Joseph S. Cronin, as shown by the probate records of Androscoggin County, Maine, Docket Number 2013-436, and not having given notice to each person succeeding to an interest in the real property described below at least ten (10) days prior to the sale, such notice not being required under the terms of the decedent's will, by the power conferred by the Probate Code, and every other power, for consideration paid grants to **FEDERAL DISTRIBUTORS, INC.**, of Lewiston, Androscoggin County, Maine, two certain lots or parcels of land with the buildings thereon in the City of Lewiston, County of Androscoggin, State of Maine situated on both sides of the Lisbon Road, A.K.A. Route 196, being more particularly described on the attached Exhibit A.

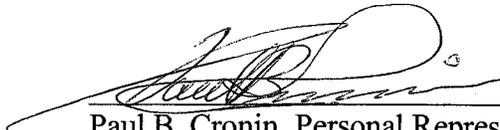
For source of title see deed from Melvin Newendyke and Roger C. Barton, Personal Representatives of the Estate of Harry G. Crowley to Paulette B. Cronin, as life tenant, and Joseph S. Cronin, as remainderman, dated May 26, 1988 and recorded in the Androscoggin County Registry of Deeds in Book 2260, Page 91. Paulette B. Cronin, the named life tenant, died September 9, 2005.

Title not searched; description not verified.

WITNESS my hand and seal this 11th day of June, 2014.



Witness



Paul B. Cronin, Personal Representative of
Estate of Joseph S. Cronin

STATE OF MAINE
ANDROSCOGGIN, ss.

The foregoing instrument was acknowledged before me this 11th day of June, 2014, by Paul B. Cronin, in his said capacity as personal representative of the estate of Joseph S. Cronin.



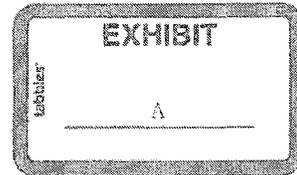
Notary Public

Jill A. Checkoway
Printed Name of Notary Public

My Commission Expires: 3/5/2016

SEAL

MAINE REAL ESTATE
TRANSFER TAX PAID



PARCEL 1

Beginning at an iron rod set on the westerly sideline of Lisbon Road at the northerly corner of land now or formerly of William Hamill (deed reference Book 2014, Page 36), said point being north twenty-four degrees seventeen minutes twenty seconds west (N 24° 17' 20" W) one hundred ninety-four and forty-four hundredths (194.44) feet from a 6" x 6" granite monument found;

Thence north twenty-four degrees seventeen minutes twenty seconds west (N 24° 17' 20" W) along the westerly sideline of Lisbon Road seven hundred ninety-one and eighty-five hundredths (791.85) feet to an iron rod set;

Thence north fifteen degrees zero minutes fifty-two seconds west (N 15° 00' 52" W) continuing along the westerly sideline of Lisbon Road one hundred seven and forty-one hundredths (107.41) feet to an iron rod set;

Thence north twenty-four degrees seventeen minutes twenty seconds west (N 24° 17' 20" W) continuing along the westerly sideline of Lisbon Road one hundred twenty-two (122.00) feet to a 6" x 6" granite monument found;

Thence south sixty-five degrees forty-one minutes fifty-three seconds west (S 65° 41' 53" W) continuing along the Westerly sideline of Lisbon Road seventeen and thirty-one hundredths (17.31) feet to a 6" x 6" granite monument found;

Thence north twenty-four degrees seventeen minutes twenty seconds west (N 24° 17' 20" W) continuing along the westerly sideline of Lisbon Road five hundred ninety-three and eighty-seven hundredths (593.87) feet to an iron rod set at the intersection of the westerly sideline of Lisbon Road and the southeasterly sideline of Dyer Road;

Thence south forty-six degrees twenty-two minutes fifty-seven seconds west (S 46° 22' 57" W) along the southeasterly sideline of Dyer Road six hundred two and thirteen hundredths (602.13) feet to an iron rod set;

Thence south forty-four degrees fifty-two minutes fifty-six seconds west (S 44° 52' 56" W) continuing along the southeasterly sideline of Dyer Road six hundred seventy-nine and eight hundredths (679.08) feet to an iron rod set;

Thence south forty-two degrees forty-two minutes forty-eight seconds west (S 42° 42' 48" W) continuing along the southeasterly sideline of Dyer Road two hundred fifty-five and ten hundredths (255.10) feet to an iron rod set;

Thence south twenty-six degrees seventeen minutes eleven seconds west (S 26° 17' 11" W) continuing along the southeasterly sideline of Dyer Road one hundred eighty-five and sixty-nine hundredths (165.69) feet to an iron rod set;

Thence south fifteen degrees five minutes forty-four seconds west (S 15° 05' 44" W) continuing along the southeasterly sideline of Dyer Road one hundred seventy-three and fifty-three hundredths (173.53) feet to an iron rod set at the northerly corner of land now or formerly of Nagui and Theresa Akladiss (deed reference Book 2026, Page 17);

Thence south fifty-three degrees six minutes eighteen seconds east (S 53° 06' 18" E) along the northeasterly line of land of said Akladiss one thousand two hundred eleven and ninety-five hundredths (1211.95) feet to an iron rod set at the easterly corner of land of said Akladiss, said point being on the northwesterly line of land of said Hamill;

Thence north fifty-three degrees twenty-six minutes fifty-six seconds east (N 53° 26' 56" E) along the northwesterly line of land of said Hamill one thousand one hundred thirty-two and ninety-four hundredths (1132.94) feet to the point of beginning.

Said parcel containing 49.47 acres.

FARCEL 2

Beginning at an iron rod set on the easterly sideline of South Lisbon Road at the southwesterly corner of land now or formerly of Lucien and Yolande Asselin (deed reference Book 1024, Page 572) said point being south five degrees twenty-six minutes twenty-one seconds east (S 05° 26' 21" E) six hundred forty and ninety hundredths (640.90) feet from a 6" x 6" concrete road monument found;

Thence north eighty-five degrees thirty-seven minutes twenty-eight seconds east (N 85° 37' 28" E) along the southerly line of said Asselin four hundred ten (410.00) feet to an iron rod set;

Thence continuing north eighty-five degrees thirty-seven minutes twenty-eight seconds east (N 85° 37' 28" E) along the southerly line of land of said Asselin thirty (30) feet more or less to No Name Brook;

Thence southerly along the westerly side of No Name Brook two thousand five hundred five (2505) feet more or less to a point on the northwesterly sideline of Foss Road;

Thence south fifty-three degrees thirty-three minutes forty-six seconds west (S 53° 33' 46" W) along the northwesterly sideline of Foss Road (30) feet (more

or lease) to an iron rod set. Said iron rod being south twenty degrees two minutes sixteen seconds east ($S 20^{\circ} 02' 16'' E$) one thousand two hundred ninety-three and forty-two hundredths (1293.42) feet from the last mentioned iron rod;

Thence south fifty-three degrees thirty-three minutes forty-six seconds west ($S 53^{\circ} 33' 46'' W$) continuing along the northwesterly sideline of Foss Road one hundred fifty-six and fifteen hundredths (156.15) feet to an iron rod set;

Thence south sixty-four degrees six minutes fifty-three seconds west ($S 64^{\circ} 06' 53'' W$) continuing along the northwesterly sideline of Foss Road one hundred twenty-seven and fifty-one hundredths (127.51) feet to an iron rod set at the center of Old Lisbon Road;

Thence north thirty-six degrees forty-one minutes fifty-four seconds west ($N 36^{\circ} 41' 54'' W$) along the center line of the Old Lisbon Road thirty-nine and thirty-five hundredths (39.35) feet to an iron rod set on the northwesterly sideline of Foss Road;

Thence south sixty-five degrees forty-two minutes forty seconds west ($S 65^{\circ} 42' 40'' W$) along the northwesterly sideline of Foss Road one hundred three and sixty-one hundredths (103.61) feet to an iron rod set on the easterly sideline of Lisbon Road as shown on a Maine State Highway Commission Right-of-Way map entitled "State Highway 2", Sheet Number 3 and 4 of S.H.C. File No. 1-44, and recorded in Plan Book 13, Page 659 and 660;

Thence north twenty-four degrees seventeen minutes twenty seconds west ($N 24^{\circ} 17' 20'' W$) along the easterly sideline of Lisbon Road nine hundred fourteen and thirty-six hundredths (914.36) feet to an iron rod set;

Thence south sixty-five degrees forty-two minutes forty seconds west ($S 65^{\circ} 42' 40'' W$) continuing along the easterly sideline of Lisbon Road sixteen and sixty-four hundredths (16.64) feet to a 6" x 6" granite monument found;

Thence north twenty-four degrees seventeen minutes twenty seconds west ($N 24^{\circ} 17' 20'' W$) continuing along the easterly sideline of Lisbon Road one hundred sixty-three and ninety-eight hundredths (163.98) feet to an iron rod set at the intersection of the easterly sideline of South Lisbon Road;

Thence north five degrees twenty-six minutes twenty-one seconds west ($N 5^{\circ} 26' 21'' W$) along the easterly sideline of South Lisbon Road three hundred seventeen and forty-four hundredths (317.44) feet to the point of beginning;

Said parcel containing 15 acres.

All bearings refer to magnetic north as shown on a plan entitled "Plan of Land of Gayton Road, Leviston and Lisbon, Maine" dated August 8, 1984 and recorded in the Androscoggin County Registry of Deeds in Plan Book 31, Page 14.

Parcels 1 and 2 are subject to setback lines as delineated on said State Highway Plans.



The Sheridan Corporation

739 Warren Ave. Portland, ME 04103

Phone (207)774-6138

Fax (207)774-2885

www.sheridancorp.com

October 6, 2014

Federal Distributors
Lewiston, Maine

Building Addition
Opinion of Probable Construction Costs

Engineering/Design/General Conditions	\$79,000
Site work for pavement removal/lawn replace	26,000
Site work for building addition	36,600
Concrete	58,400
Metal Building, Roofing, Siding, Erection	201,100
Sprinkler	19,700
Total	420,800



The Sheridan Corporation

PO Box 359, Fairfield, ME 04937

Phone (207) 453-9311

Fax (207) 453-2820

www.sheridancorp.com

October 09, 2014

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

RE: Federal Distributors Warehouse Expansion
Subject: Application for Development, Review of Impervious Area

Dear David,

Federal Distributors, the owner of (Tax Map #46 Lot 12) 2075 Lisbon Street in Lewiston Maine, has hired the Sheridan Corporation and appointed Ken Lamoreaux, Sheridan's Director of Permitting, to act as their agent for their permitting needs. Federal Distributor's proposal is to add 6,300 sf of additional space to the existing warehouse. As of the 8-19-14 survey the site has a building footprint of 59,914 sf with other impervious area of 81,796 sf. This equals a total impervious area of 141,710 sf or 3.25 acres. To maintain the required developed site impervious area of less than 3 acres, the applicant proposes to remove a portion of existing pavement. This area will be loamed and planted with lawn.

- Existing impervious area of 141,710 sf plus new bldg of 6,300 sf = 148,010 sf
- 3 acres is 130,680 sf
- 148,010 - 17,360 sf of pavement to be removed = 130,650 sf < 3 acres

The site plan highlights the pavement that Federal Distributors has chosen to remove which totals 17,360 sf. When the pavement is removed and the area is re-vegetated the site will be under the 3 acre limit. This is the approach we discussed at the 9-5-14 date meeting in City Hall. Therefore, we are presenting it to the board for consideration. The final plan reflects this proposal.

As the Owner's Authorized Agent please direct all questions to me at the following address, The Sheridan Corporation, P.O. Box 359, Fairfield, Maine 04937, or you can contact me at (207) 453-9311 or email at kamoreaux@sheridancorp.com.

Sincerely,

Kenneth S. Lamoreaux
Director of Permitting



The Sheridan Corporation

PO Box 359, Fairfield, ME 04937

Phone (207) 453-9311

Fax (207) 453-2820

www.sheridancorp.com

October 09, 2014

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

RE: Federal Distributors Warehouse Expansion
Subject: Application for Development, Parking Review

Dear David,

Federal Distributors, the owner of (Tax Map #46 Lot 12) 2075 Lisbon Street in Lewiston Maine, has hired the Sheridan Corporation and appointed Ken Lamoreaux, Sheridan's Director of Permitting, to act as their agent for their permitting needs.

The City ordinance calls for business office space to have 1 space per 300 sf gross floor area, warehousing / distribution requires 1 space per 500 sf gross floor area for first 3,000 sf then 1 space per each additional 1,000 sf gross floor area.

The existing building has 9,143 sf of office space on two floors, and 54,989 sf of warehousing (note: of this area, 11,000 sf is an indoor truck dock/parking area).

- Office $9,143 / 300 = 31$ spaces
- Warehouse $3,000 / 500 = 6$ and $51,989 / 1000 = 52$ (total 58)
- Total for both is 89 spaces
- The proposed 6,300 sf warehousing addition would require an added 7 spaces

The current site has 58 striped spaces. Federal Distributors uses 38 to 44 of them daily. The applicant is proposing to stripe the site for 52 spaces and seeks the board's approval of the reduced number based on actual need for this business.

As the Owner's Authorized Agent please direct all questions to me at the following address, The Sheridan Corporation, P.O. Box 359, Fairfield, Maine 04937, or you can contact me at (207) 453-9311 or email at klamoreaux@sheridancorp.com.

Sincerely,

Kenneth S. Lamoreaux
Director of Permitting



The Sheridan Corporation

PO Box 359, Fairfield, ME 04937

Phone (207) 453-9311

Fax (207) 453-2820

www.sheridancorp.com

September 30, 2014

Lewiston Public Works – Water & Sewer Division
Kevin Gagne, P.E. - Superintendent
103 Adams Avenue
Lewiston, ME 04240

RE: Federal Distributors Warehouse Expansion
Subject: Application for Development, Verification of Service

Dear Mr. Gagne,

Federal Distributors, the owner of (Tax Map #46 Lot 12) 2075 Lisbon Street in Lewiston Maine, has hired the Sheridan Corporation and appointed Ken Lamoreaux, Sheridan's Director of Permitting, to act as their agent for their permitting needs.

The proposal is to add 6,300 sf of warehousing space to the existing west side of the building (currently a well maintained lawn area). This warehousing space will require no expansion of existing utilities. Water usage is limited to fire sprinklers; the system designer states the current service is adequate. Sewer is not expanding as no additional restrooms are planned and no additional employees. The designer states that current electrical and telecom services are adequate for this expansion.

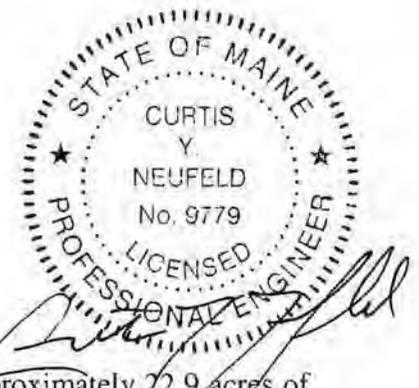
A letter from you confirming that current services are adequate would be appreciated.

As the Owner's Authorized Agent please direct all questions to me at the following address, The Sheridan Corporation, P.O. Box 359, Fairfield, Maine 04937, or you can contact me at (207) 453-9311 or email at klamoreaux@sheridancorp.com.

Sincerely,

Kenneth S. Lamoreaux
Director of Permitting

**FEDERAL DISTRIBUTORS
LEWISTON, MAINE
STORMWATER ANALYSIS**



Introduction

Federal Distributors, Inc. (herein referred to as Applicant) owns approximately 22.9 acres of land in Lewiston and is proposing a 6,300 s.f. building addition. This addition will be offset by the removal of 17,360 s.f. of pavement, resulting in a net reduction and maintaining the total site impervious area under 3.0 acres.

The site is accessed from Lisbon Street by an existing curb cut. The building is currently served by public water and sewer systems from Lisbon Streets.

This study is intended to assess the changes in the stormwater runoff rates, if any, due to the proposed development of the Applicant's lot. There are no waterbodies on or abutting the site. There are no known areas of significant flooding on or abutting the site, however, the site has a seasonally high groundwater table which has created nuisance ponding of stormwater. No natural drainageways will be altered as a result of this project.

Study Methodology

In this study, the National Resources Conservation Service Urban Hydrology for Small Watersheds, Technical Release 55 (SCS-TR55) was utilized to model the surface water drainage patterns for existing and proposed drainage conditions. The HydroCAD Stormwater Modeling System software (Version 7.10) was used for SCS-TR55 calculations. The results of the HydroCAD were used to size the infiltrations basins. The HydroCAD output presents the curve number and time-of-concentration computations for each subcatchment. Modeling was conducted using 24-hour rainfall amounts for the 2, 10, and 25-year storm events (3.0, 4.7 and 5.5 inches, respectively for Cumberland County).

Topographic data was collected via on-the-ground survey, and supplemented with 2-foot contours available from the State of Maine GIS data catalog. Hydrologic boundaries were generated using the topographic mapping and GIS data, and the drainage patterns were verified by site reconnaissance.

The following assumptions were applied to the analysis. Existing land cover was typically assumed to be Forest: Dense undergrowth or Woodland for time-of-concentration calculations in wooded areas, and grass cover in proposed open areas. The minimum time-of-concentration used for runoff calculations is 5 minutes.

Surficial soils located in the vicinity of the site were obtained from the Natural Resources Conservation Service's web-site. Soils units found in the vicinity of the project area include:

SOILS TYPES IN LOCAL STUDY AREA

Soils Series	Symbol(s)	Hydrologic Group (HSG) **
Adams	AaB	B
Elmwood	EmB	C
Ninigret	NgB	B
Charlton	ChC	B
Scantic	Sc	C/D

** Hydrologic Soils Group taken from SCS TR-55 Manual

For the hydrology analysis hydrologic soils group (HSG) C was used for all calculations to provide a conservative estimate.

Flooding

The project area is located in Zone C (Areas of Minimal Flooding) of the Flood Insurance Rate Maps (FIRMs) for the Town of Lewiston. The project area is located on Panel 342 of 470 (Community Panels 23001C0342 E, Effective, July 8, 2013). An excerpt of the applicable FIRM is included in this report.

Off-Site Watersheds

The undeveloped land to the north and west (Subcatchment 1 & 6) drain toward the project area, but not through it. The large (49 acre) wooded area to the west drains to a wetland complex before continuing to the south. The smaller (6.5 acre) area to the north drains to a 36" culvert under Lisbon Street. Therefore, there are no significant off-site areas that drain to or through the Applicant's parcel.

On-Site Subcatchments

The site is relatively flat and generally drains toward Lisbon Street to the east. There are no man-made or natural lakes on or abutting the site. There are no known areas that are prone to flooding on or adjacent to the site.

Pre-Development Conditions

The entire site is currently developed and occupied by a 59,914 s.f. footprint building and associated parking and vehicle maneuvering areas (81,796 s.f.) for a total of 141,710 s.f. The site is relatively flat, and drainage within the site is conveyed to catch basins and storm drain pipe. The front of the parcel is a well maintained lawn area. The study area was divided into six (6) subcatchments that are shown on Drawing DR1.

Subcatchment 1 represents a 49.9 acre area westerly of the building, which drains to a wetland area before going south (Analysis Point 1).

Subcatchment 2 represents the existing building. This 59,914 s.f. (1.48) area drains via a roof drain that discharges to the grass swale and 24" culvert out front and ultimately to the 36" culvert under Lisbon Street (Analysis Point 2).

Subcatchment 3 is represent 32.346 s.f. of paved area for truck loading and maneuvering. This area is collected by catch basins and storm drain that discharge to the east and Lisbon Street. Runoff continues to AP 2.

Subcatchment 4 includes the entrance drive and small parking area. This 47,237 s.f. area drains overland to a swale directed to Lisbon Street and ultimately to AP 2.

Subcatchment 5 represents the lawn area in front of the building and areas to the north. This area is also conveyed to AP 2.

Subcatchment 6 represents the that area between the site and the Butler Building to the north. This 281,567 s.f. area is mostly wooded and drains to a wetland/stream before going to the 36" culvert

Post-Development Conditions

Under post-development conditions a small area (6,300 s.f.) on the northerly side of the existing building will be converted to impervious area (roof). Approximately .2 acres will be disturbed at full development. Runoff from the new roof area will be collected in a drip line BMP. The stone drip edge will discharge via an underdrain as shown. The building addition has been modeled separately and was established by deducting its area from Subcatchment 5. The new subcatchment is modeled as tributary to the 24" diameter culvert under the former drive way location.

Subcatchment 1 was modified by the reduction of the impervious area to be removed from the existing pavement.

Results

A comparison of pre- and post-development peak runoff rates is not applicable for this project, since very little drainage occurs over property lines under pre- or post-development conditions.

The total estimated peak rate of runoff at the Analysis Points is presented in the following table. Peak runoff rates were estimated for the 2, 10, and 25-year, 24-hour storm events.

Proposed Peak Runoff Rates

Analysis Point	Peak Rate of Runoff into Town Storm Sewer (cfs)		
	Pre-development/Post-development		
	2-Year	10-Year	25-Year
36" culvert	9.63/9.98	18.20/18.56	23.45/23.79
Southerly PL	16.98/15.64	44.63/42.55	62.37/59.98

As noted in the above table, the proposed building addition results in a slight increase in the peak rate of runoff at the 36" culvert, whereas the removal of impervious area lowers the estimated peak rates westerly of the site. The minor increase in peak rate is insignificant less than the sensitivity of the accepted modeling methods for hydrology. Given the inherent assumptions necessary to model large watersheds, variations of flow of less than 5% cannot be considered accurate. In addition, the effects of the stone drip edge are not accounted for in the results. The 2-year event will mostly be contained within the drip edge eliminating the minor increase for the most frequent storm events.

Water Quality

Water quality enhancement for the addition will be achieved by means of a drip edge filter BMP designed in accordance with DEP criteria. The drip edge will include an underdrain that will convey the filter runoff westerly from the building.

This BMP will lower the peak rate of runoff from the development, but no attempt to quantify the reduction was included in the analysis, adding to the conservative nature of the peak rates estimated.

Conclusion

Runoff from the roof of the 6,300 s.f. addition will be collected in a stone drip edge filter BMP, which will filter and cool the runoff or allow it to infiltrate into the soil. The drip edge filter will contain the first 1-inch of rain, which will significantly reduce the peak rate of runoff from the roof. Given the small size of the drip edge and limitations of the HydroCAD software, the drip edge was not modeled and its impact on the rate of runoff is not reflected in the results.

The proposed development will contribute an increase in peak flow rates in the municipal storm drains in the adjacent streets.

Best Management Practices

Stabilized construction entrance(s), silt fence or sediment barrier, stone check dams, erosion control blanket and/or erosion control mix, riprap outlet control, seeding, and mulching practices will be used in accordance with the Maine Department of Environmental Best Management Practices (BMP) manual during construction and until a stabilized condition exists.

Maintenance of Drainage Facilities

The Contractor will be responsible for maintaining the drainage improvements until the current phase of the project is complete. After the phase is complete, the Home Owners Association will be responsible for maintaining the swales, infiltration basins and outlet pipes as shown on the plan. Notwithstanding any other schedule noted below, general inspections should be conducted monthly during wet weather conditions from March to November.

Inspection and Maintenance Plan

Vegetated Drainage Areas

Vegetated buffers and drainage areas shall be inspected on a monthly basis or after a major rainfall event to assure that debris and/or sediments do not reduce the effectiveness of the system. Debris shall be removed at that time. Any sign of erosion or blockage shall be immediately repaired to assure a vigorous growth of vegetation for the stability of the structure and proper function. Maintenance shall include, but not be limited to, mowing, trimming and removal of vegetation in the ditches as required to prevent vegetation from blocking or diverting storm flows.

Storm Drain Pipes

Piped drainage systems shall be inspected in spring and late fall, and after heavy rains to remove any obstructions to flow; remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit; and to repair any erosion damage at the culvert's inlet and outlet. Sediment should be removed when its level exceeds 20% of the pipe diameter. Hydraulic flushing or any mechanical means may accomplish sediment removal. Care shall be taken to contain the sediment at the pipe outlet.

Paved Surfaces

Accumulations of winter sand along impervious areas shall be cleared at least once a year, preferably in the spring. Accumulations on pavement may be removed by pavement sweeping. Accumulations of sand along the edge of paved areas may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader.

Vegetation Maintenance: Grass should be mowed on a regular basis so that grass height does not exceed 6 inches. Any erosion rills, gullies, or bare spots on the filter area's side slopes and floor should be seeded or sodded to re-establish the turf cover.

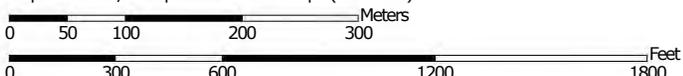
Catch Basins

The maintenance of catch basins shall be performed monthly to ensure proper function. Debris and trash shall be removed from the catch basin sump when present. Sediment build-up in the sump should be removed when accumulation within 1 foot of the outlet pipe and/or snout hood is observed.

Soil Map—Androscoggin and Sagadahoc Counties, Maine
(Federal Distributors Soils)



Map Scale: 1:6,460 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



Soil Map—Androscoggin and Sagadahoc Counties, Maine
(Federal Distributors Soils)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Androscoggin and Sagadahoc Counties, Maine
Survey Area Data: Version 14, Dec 3, 2013

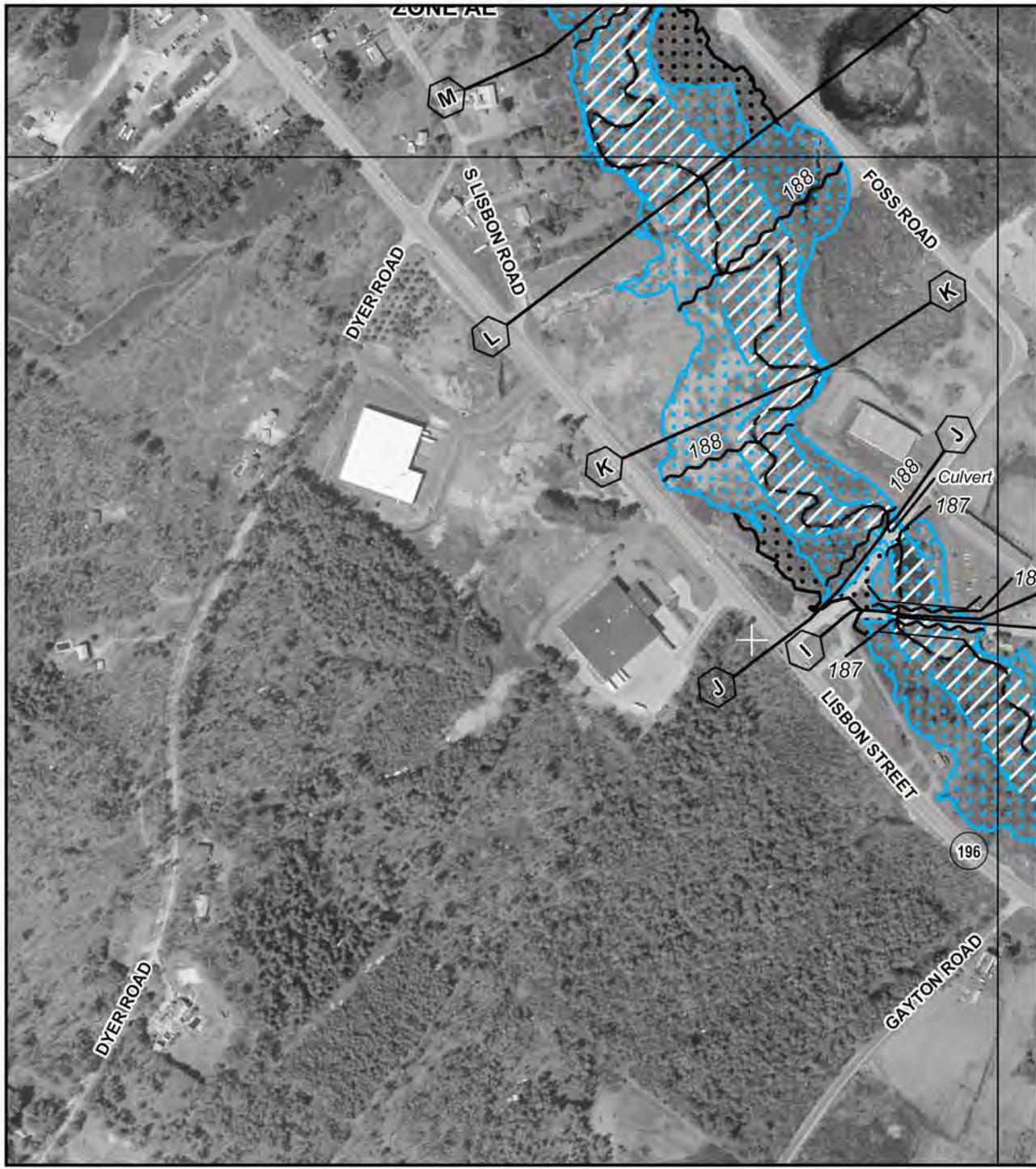
Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 20, 2010—Aug 31, 2010

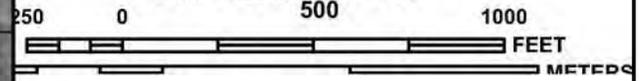
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Androscoggin and Sagadahoc Counties, Maine (ME606)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AaB	Adams loamy sand, 0 to 8 percent slopes	12.7	7.5%
AaC	Adams loamy sand, 8 to 15 percent slopes	11.0	6.5%
BgB	Belgrade very fine sandy loam, 2 to 8 percent slopes	7.6	4.5%
ChB	Charlton very stony fine sandy loam, 0 to 8 percent slopes	2.0	1.2%
ChC	Charlton very stony fine sandy loam, 8 to 15 percent slopes	17.9	10.6%
EmB	Elmwood fine sandy loam, 2 to 8 percent slopes	25.2	15.0%
EmC2	Elmwood fine sandy loam, 8 to 15 percent slopes, eroded	11.7	6.9%
HkD	Hinckley gravelly sandy loam, 15 to 25 percent slopes	1.2	0.7%
HrC	Hollis fine sandy loam, 8 to 15 percent slopes	0.6	0.4%
Lk	Charles silt loam, 0 to 2 percent slopes, occasionally flooded	24.4	14.4%
MeB	Melrose fine sandy loam, 0 to 8 percent slopes	3.4	2.0%
MeC	Melrose fine sandy loam, 8 to 20 percent slopes	3.0	1.8%
NgB	Ninigret fine sandy loam, 0 to 8 percent slopes	13.8	8.2%
PbC	Paxton loam, 8 to 15 percent slopes	0.6	0.4%
PfC	Paxton very stony loam, 8 to 15 percent slopes	5.2	3.1%
ScA	Scantic silt loam, 0 to 3 percent slopes	28.5	16.9%
Totals for Area of Interest		168.8	100.0%



MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0342E

FIRM
FLOOD INSURANCE RATE MAP
ANDROSCOGGIN
COUNTY, MAINE
 (ALL JURISDICTIONS)

PANEL 342 OF 470
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
LEWISTON, CITY OF	230004	0342	E
LISBON, TOWN OF	230005	0342	E

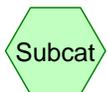
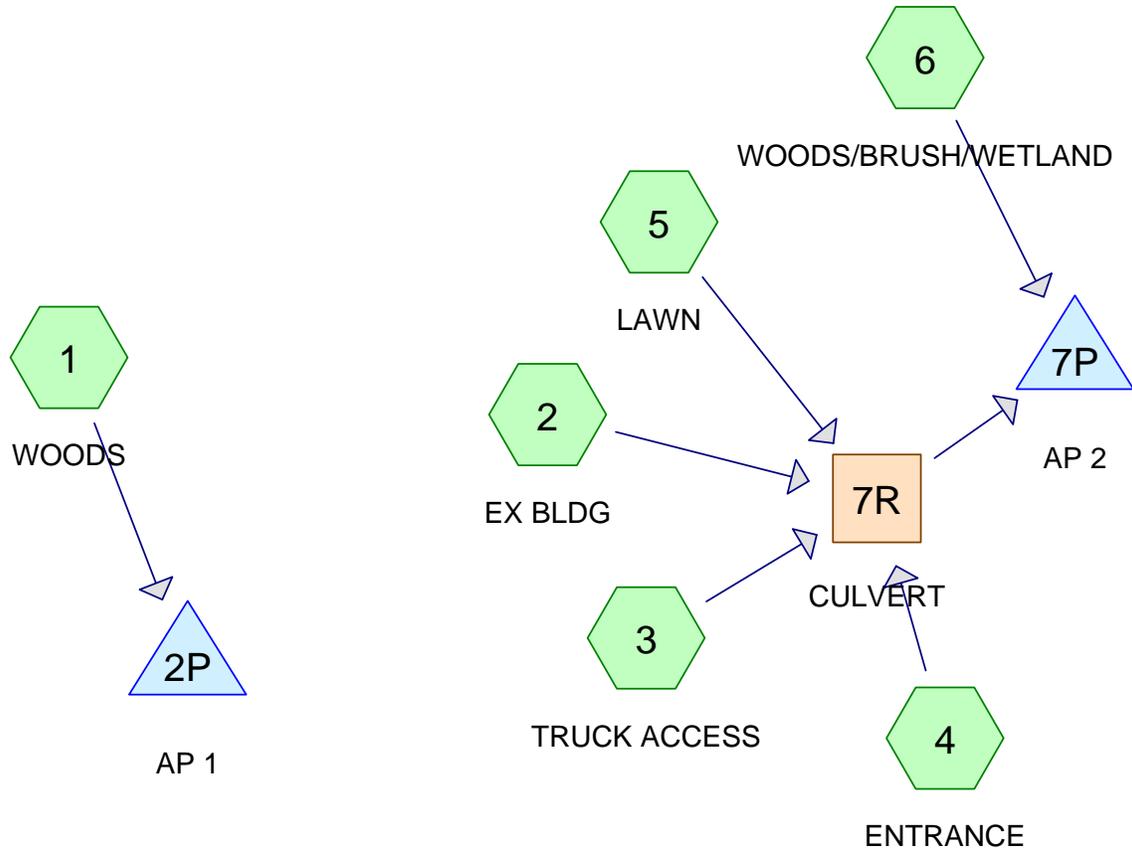
Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
23001C0342E
EFFECTIVE DATE
JULY 8, 2013

Federal Emergency Management Agency

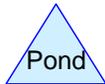
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



Subcat



Reach



Pond



Link

2714-Pre

Prepared by Sitelines PA

HydroCAD® 7.10 s/n 001100 © 2005 HydroCAD Software Solutions LLC

Submitted 10-09-14

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

Page 2

10/9/2014

Time span=0.00-36.00 hrs, dt=0.04 hrs, 901 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1: WOODS

Runoff Area=2,173,471 sf Runoff Depth=0.76"
Flow Length=1,595' Tc=51.2 min CN=71 Runoff=16.98 cfs 3.162 af

Subcatchment 2: EX BLDG

Runoff Area=59,921 sf Runoff Depth=2.77"
Flow Length=639' Tc=5.0 min CN=98 Runoff=4.08 cfs 0.317 af

Subcatchment 3: TRUCK ACCESS

Runoff Area=32,346 sf Runoff Depth=2.77"
Flow Length=833' Tc=5.0 min CN=98 Runoff=2.20 cfs 0.171 af

Subcatchment 4: ENTRANCE

Runoff Area=47,237 sf Runoff Depth=1.45"
Flow Length=732' Tc=5.0 min CN=83 Runoff=1.88 cfs 0.131 af

Subcatchment 5: LAWN

Runoff Area=120,762 sf Runoff Depth=1.07"
Flow Length=576' Tc=16.1 min CN=77 Runoff=2.45 cfs 0.247 af

Subcatchment 6: WOODS/BRUSH/WETLAND

Runoff Area=281,567 sf Runoff Depth=0.54"
Flow Length=843' Tc=31.5 min CN=66 Runoff=1.79 cfs 0.293 af

Reach 7R: CULVERT

Peak Depth=0.75' Max Vel=8.9 fps Inflow=9.49 cfs 0.867 af
D=24.0" n=0.013 L=30.0' S=0.0200 '/' Capacity=31.99 cfs Outflow=9.47 cfs 0.867 af

Pond 2P: AP 1

Inflow=16.98 cfs 3.162 af
Primary=16.98 cfs 3.162 af

Pond 7P: AP 2

Inflow=9.63 cfs 1.160 af
Primary=9.63 cfs 1.160 af

Total Runoff Area = 62.335 ac Runoff Volume = 4.322 af Average Runoff Depth = 0.83"

2714-Pre

Prepared by Sitelines PA

HydroCAD® 7.10 s/n 001100 © 2005 HydroCAD Software Solutions LLC

Submitted 10-09-14

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

Page 3

10/9/2014

Subcatchment 1: WOODS

Runoff = 16.98 cfs @ 12.79 hrs, Volume= 3.162 af, Depth= 0.76"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
31,038	98	Parking Lot
19,280	98	Dyer Road
2,123,153	70	Woods, Good, HSG C
2,173,471	71	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	75	0.0750	0.1		Sheet Flow, A-B Woods: Dense underbrush n= 0.800 P2= 3.00"
14.5	1,020	0.0550	1.2		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
18.6	500	0.0080	0.4		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
51.2	1,595	Total			

Subcatchment 2: EX BLDG

Runoff = 4.08 cfs @ 12.07 hrs, Volume= 0.317 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
59,921	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	184	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.0	371	0.0200	6.4	2.22	Circular Channel (pipe), B-C Diam= 8.0" Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.3	84	0.0200	5.3	106.71	Parabolic Channel, C-D W=30.00' D=1.00' Area=20.0 sf Perim=30.1' n= 0.030 Earth, grassed & winding
3.3	639	Total, Increased to minimum Tc = 5.0 min			

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

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Subcatchment 3: TRUCK ACCESS

Runoff = 2.20 cfs @ 12.07 hrs, Volume= 0.171 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
32,346	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	83	0.0200	1.3		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.1	188	0.0200	2.9		Shallow Concentrated Flow, B-C Paved Kv= 20.3 fps
1.3	176	0.0230	2.3		Shallow Concentrated Flow, C-D Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), D-E Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, E-F W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
4.7	833	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 4: ENTRANCE

Runoff = 1.88 cfs @ 12.08 hrs, Volume= 0.131 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
17,530	98	Paved parking & roofs
29,707	74	>75% Grass cover, Good, HSG C
47,237	83	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	170	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.3	176	0.0230	2.3		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), C-D Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, D-E W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding

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4.4 732 Total, Increased to minimum Tc = 5.0 min

Subcatchment 5: LAWN

Runoff = 2.45 cfs @ 12.24 hrs, Volume= 0.247 af, Depth= 1.07"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
15,975	98	Paved parking & roofs
104,787	74	>75% Grass cover, Good, HSG C
120,762	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	98	0.0500	0.2		Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00"
5.8	417	0.0290	1.2		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
0.2	61	0.0200	5.3	70.97	Parabolic Channel, C-D W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
16.1	576	Total			

Subcatchment 6: WOODS/BRUSH/WETLAND

Runoff = 1.79 cfs @ 12.54 hrs, Volume= 0.293 af, Depth= 0.54"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
256,879	65	Brush, Good, HSG C
7,615	98	Paved parking & roofs
17,073	74	>75% Grass cover, Good, HSG C
281,567	66	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	75	0.0670	0.1		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.00"
4.9	320	0.0470	1.1		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
15.7	448	0.0090	0.5		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
31.5	843	Total			

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

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Reach 7R: CULVERT

[52] Hint: Inlet conditions not evaluated

Inflow Area = 5.975 ac, Inflow Depth = 1.74" for 2-YEAR event
 Inflow = 9.49 cfs @ 12.08 hrs, Volume= 0.867 af
 Outflow = 9.47 cfs @ 12.08 hrs, Volume= 0.867 af, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
 Max. Velocity= 8.9 fps, Min. Travel Time= 0.1 min
 Avg. Velocity = 3.0 fps, Avg. Travel Time= 0.2 min

Peak Depth= 0.75' @ 12.08 hrs
 Capacity at bank full= 31.99 cfs
 Inlet Invert= 100.00', Outlet Invert= 99.40'
 24.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
 Length= 30.0' Slope= 0.0200 '/'

Pond 2P: AP 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 49.896 ac, Inflow Depth = 0.76" for 2-YEAR event
 Inflow = 16.98 cfs @ 12.79 hrs, Volume= 3.162 af
 Primary = 16.98 cfs @ 12.79 hrs, Volume= 3.162 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs

Pond 7P: AP 2

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 12.439 ac, Inflow Depth = 1.12" for 2-YEAR event
 Inflow = 9.63 cfs @ 12.09 hrs, Volume= 1.160 af
 Primary = 9.63 cfs @ 12.09 hrs, Volume= 1.160 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs

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

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Time span=0.00-36.00 hrs, dt=0.04 hrs, 901 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1: WOODSRunoff Area=2,173,471 sf Runoff Depth=1.82"
Flow Length=1,595' Tc=51.2 min CN=71 Runoff=44.63 cfs 7.564 af**Subcatchment 2: EX BLDG**Runoff Area=59,921 sf Runoff Depth=4.36"
Flow Length=639' Tc=5.0 min CN=98 Runoff=6.31 cfs 0.500 af**Subcatchment 3: TRUCK ACCESS**Runoff Area=32,346 sf Runoff Depth=4.36"
Flow Length=833' Tc=5.0 min CN=98 Runoff=3.41 cfs 0.270 af**Subcatchment 4: ENTRANCE**Runoff Area=47,237 sf Runoff Depth=2.81"
Flow Length=732' Tc=5.0 min CN=83 Runoff=3.65 cfs 0.254 af**Subcatchment 5: LAWN**Runoff Area=120,762 sf Runoff Depth=2.29"
Flow Length=576' Tc=16.1 min CN=77 Runoff=5.44 cfs 0.530 af**Subcatchment 6: WOODS/BRUSH/WETLAND**Runoff Area=281,567 sf Runoff Depth=1.46"
Flow Length=843' Tc=31.5 min CN=66 Runoff=5.76 cfs 0.787 af**Reach 7R: CULVERT**Peak Depth=1.02' Max Vel=10.3 fps Inflow=16.64 cfs 1.554 af
D=24.0" n=0.013 L=30.0' S=0.0200 '/ Capacity=31.99 cfs Outflow=16.62 cfs 1.554 af**Pond 2P: AP 1**Inflow=44.63 cfs 7.564 af
Primary=44.63 cfs 7.564 af**Pond 7P: AP 2**Inflow=18.20 cfs 2.341 af
Primary=18.20 cfs 2.341 af**Total Runoff Area = 62.335 ac Runoff Volume = 9.905 af Average Runoff Depth = 1.91"**

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Subcatchment 1: WOODS

Runoff = 44.63 cfs @ 12.73 hrs, Volume= 7.564 af, Depth= 1.82"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
31,038	98	Parking Lot
19,280	98	Dyer Road
2,123,153	70	Woods, Good, HSG C
2,173,471	71	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	75	0.0750	0.1		Sheet Flow, A-B Woods: Dense underbrush n= 0.800 P2= 3.00"
14.5	1,020	0.0550	1.2		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
18.6	500	0.0080	0.4		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
51.2	1,595	Total			

Subcatchment 2: EX BLDG

Runoff = 6.31 cfs @ 12.07 hrs, Volume= 0.500 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
59,921	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	184	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.0	371	0.0200	6.4	2.22	Circular Channel (pipe), B-C Diam= 8.0" Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.3	84	0.0200	5.3	106.71	Parabolic Channel, C-D W=30.00' D=1.00' Area=20.0 sf Perim=30.1' n= 0.030 Earth, grassed & winding
3.3	639	Total, Increased to minimum Tc = 5.0 min			

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Subcatchment 3: TRUCK ACCESS

Runoff = 3.41 cfs @ 12.07 hrs, Volume= 0.270 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
32,346	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	83	0.0200	1.3		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.1	188	0.0200	2.9		Shallow Concentrated Flow, B-C Paved Kv= 20.3 fps
1.3	176	0.0230	2.3		Shallow Concentrated Flow, C-D Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), D-E Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, E-F W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
4.7	833	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 4: ENTRANCE

Runoff = 3.65 cfs @ 12.08 hrs, Volume= 0.254 af, Depth= 2.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
17,530	98	Paved parking & roofs
29,707	74	>75% Grass cover, Good, HSG C
47,237	83	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	170	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.3	176	0.0230	2.3		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), C-D Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, D-E W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding

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4.4 732 Total, Increased to minimum Tc = 5.0 min

Subcatchment 5: LAWN

Runoff = 5.44 cfs @ 12.23 hrs, Volume= 0.530 af, Depth= 2.29"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
15,975	98	Paved parking & roofs
104,787	74	>75% Grass cover, Good, HSG C
120,762	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	98	0.0500	0.2		Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00"
5.8	417	0.0290	1.2		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
0.2	61	0.0200	5.3	70.97	Parabolic Channel, C-D W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
16.1	576	Total			

Subcatchment 6: WOODS/BRUSH/WETLAND

Runoff = 5.76 cfs @ 12.48 hrs, Volume= 0.787 af, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
256,879	65	Brush, Good, HSG C
7,615	98	Paved parking & roofs
17,073	74	>75% Grass cover, Good, HSG C
281,567	66	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	75	0.0670	0.1		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.00"
4.9	320	0.0470	1.1		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
15.7	448	0.0090	0.5		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
31.5	843	Total			

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

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Reach 7R: CULVERT

[52] Hint: Inlet conditions not evaluated

Inflow Area = 5.975 ac, Inflow Depth = 3.12" for 10-YEAR event
Inflow = 16.64 cfs @ 12.08 hrs, Volume= 1.554 af
Outflow = 16.62 cfs @ 12.09 hrs, Volume= 1.554 af, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Max. Velocity= 10.3 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 3.5 fps, Avg. Travel Time= 0.1 min

Peak Depth= 1.02' @ 12.08 hrs
Capacity at bank full= 31.99 cfs
Inlet Invert= 100.00', Outlet Invert= 99.40'
24.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
Length= 30.0' Slope= 0.0200 '/'

Pond 2P: AP 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 49.896 ac, Inflow Depth = 1.82" for 10-YEAR event
Inflow = 44.63 cfs @ 12.73 hrs, Volume= 7.564 af
Primary = 44.63 cfs @ 12.73 hrs, Volume= 7.564 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs

Pond 7P: AP 2

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 12.439 ac, Inflow Depth = 2.26" for 10-YEAR event
Inflow = 18.20 cfs @ 12.09 hrs, Volume= 2.341 af
Primary = 18.20 cfs @ 12.09 hrs, Volume= 2.341 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs

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

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Time span=0.00-36.00 hrs, dt=0.04 hrs, 901 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1: WOODS

Runoff Area=2,173,471 sf Runoff Depth=2.50"
Flow Length=1,595' Tc=51.2 min CN=71 Runoff=62.37 cfs 10.401 af

Subcatchment 2: EX BLDG

Runoff Area=59,921 sf Runoff Depth=5.26"
Flow Length=639' Tc=5.0 min CN=98 Runoff=7.56 cfs 0.603 af

Subcatchment 3: TRUCK ACCESS

Runoff Area=32,346 sf Runoff Depth=5.26"
Flow Length=833' Tc=5.0 min CN=98 Runoff=4.08 cfs 0.326 af

Subcatchment 4: ENTRANCE

Runoff Area=47,237 sf Runoff Depth=3.63"
Flow Length=732' Tc=5.0 min CN=83 Runoff=4.68 cfs 0.328 af

Subcatchment 5: LAWN

Runoff Area=120,762 sf Runoff Depth=3.05"
Flow Length=576' Tc=16.1 min CN=77 Runoff=7.26 cfs 0.704 af

Subcatchment 6: WOODS/BRUSH/WETLAND

Runoff Area=281,567 sf Runoff Depth=2.08"
Flow Length=843' Tc=31.5 min CN=66 Runoff=8.43 cfs 1.119 af

Reach 7R: CULVERT

Peak Depth=1.18' Max Vel=10.8 fps Inflow=20.81 cfs 1.961 af
D=24.0" n=0.013 L=30.0' S=0.0200 '/ Capacity=31.99 cfs Outflow=20.78 cfs 1.961 af

Pond 2P: AP 1

Inflow=62.37 cfs 10.401 af
Primary=62.37 cfs 10.401 af

Pond 7P: AP 2

Inflow=23.45 cfs 3.079 af
Primary=23.45 cfs 3.079 af

Total Runoff Area = 62.335 ac Runoff Volume = 13.480 af Average Runoff Depth = 2.60"

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

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Subcatchment 1: WOODS

Runoff = 62.37 cfs @ 12.71 hrs, Volume= 10.401 af, Depth= 2.50"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
31,038	98	Parking Lot
19,280	98	Dyer Road
2,123,153	70	Woods, Good, HSG C
2,173,471	71	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	75	0.0750	0.1		Sheet Flow, A-B Woods: Dense underbrush n= 0.800 P2= 3.00"
14.5	1,020	0.0550	1.2		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
18.6	500	0.0080	0.4		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
51.2	1,595	Total			

Subcatchment 2: EX BLDG

Runoff = 7.56 cfs @ 12.07 hrs, Volume= 0.603 af, Depth= 5.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
59,921	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	184	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.0	371	0.0200	6.4	2.22	Circular Channel (pipe), B-C Diam= 8.0" Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.3	84	0.0200	5.3	106.71	Parabolic Channel, C-D W=30.00' D=1.00' Area=20.0 sf Perim=30.1' n= 0.030 Earth, grassed & winding
3.3	639	Total, Increased to minimum Tc = 5.0 min			

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

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Subcatchment 3: TRUCK ACCESS

Runoff = 4.08 cfs @ 12.07 hrs, Volume= 0.326 af, Depth= 5.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
32,346	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	83	0.0200	1.3		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.1	188	0.0200	2.9		Shallow Concentrated Flow, B-C Paved Kv= 20.3 fps
1.3	176	0.0230	2.3		Shallow Concentrated Flow, C-D Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), D-E Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, E-F W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
4.7	833	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 4: ENTRANCE

Runoff = 4.68 cfs @ 12.08 hrs, Volume= 0.328 af, Depth= 3.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
17,530	98	Paved parking & roofs
29,707	74	>75% Grass cover, Good, HSG C
47,237	83	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	170	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.3	176	0.0230	2.3		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), C-D Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, D-E W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding

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4.4 732 Total, Increased to minimum Tc = 5.0 min

Subcatchment 5: LAWN

Runoff = 7.26 cfs @ 12.22 hrs, Volume= 0.704 af, Depth= 3.05"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
15,975	98	Paved parking & roofs
104,787	74	>75% Grass cover, Good, HSG C
120,762	77	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	98	0.0500	0.2		Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00"
5.8	417	0.0290	1.2		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
0.2	61	0.0200	5.3	70.97	Parabolic Channel, C-D W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
16.1	576	Total			

Subcatchment 6: WOODS/BRUSH/WETLAND

Runoff = 8.43 cfs @ 12.46 hrs, Volume= 1.119 af, Depth= 2.08"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
256,879	65	Brush, Good, HSG C
7,615	98	Paved parking & roofs
17,073	74	>75% Grass cover, Good, HSG C
281,567	66	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	75	0.0670	0.1		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.00"
4.9	320	0.0470	1.1		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
15.7	448	0.0090	0.5		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
31.5	843	Total			

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

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Reach 7R: CULVERT

[52] Hint: Inlet conditions not evaluated

Inflow Area = 5.975 ac, Inflow Depth = 3.94" for 25-YEAR event
Inflow = 20.81 cfs @ 12.08 hrs, Volume= 1.961 af
Outflow = 20.78 cfs @ 12.09 hrs, Volume= 1.961 af, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Max. Velocity= 10.8 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 3.7 fps, Avg. Travel Time= 0.1 min

Peak Depth= 1.18' @ 12.09 hrs
Capacity at bank full= 31.99 cfs
Inlet Invert= 100.00', Outlet Invert= 99.40'
24.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
Length= 30.0' Slope= 0.0200 '/'

Pond 2P: AP 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 49.896 ac, Inflow Depth = 2.50" for 25-YEAR event
Inflow = 62.37 cfs @ 12.71 hrs, Volume= 10.401 af
Primary = 62.37 cfs @ 12.71 hrs, Volume= 10.401 af, Atten= 0%, Lag= 0.0 min

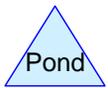
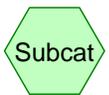
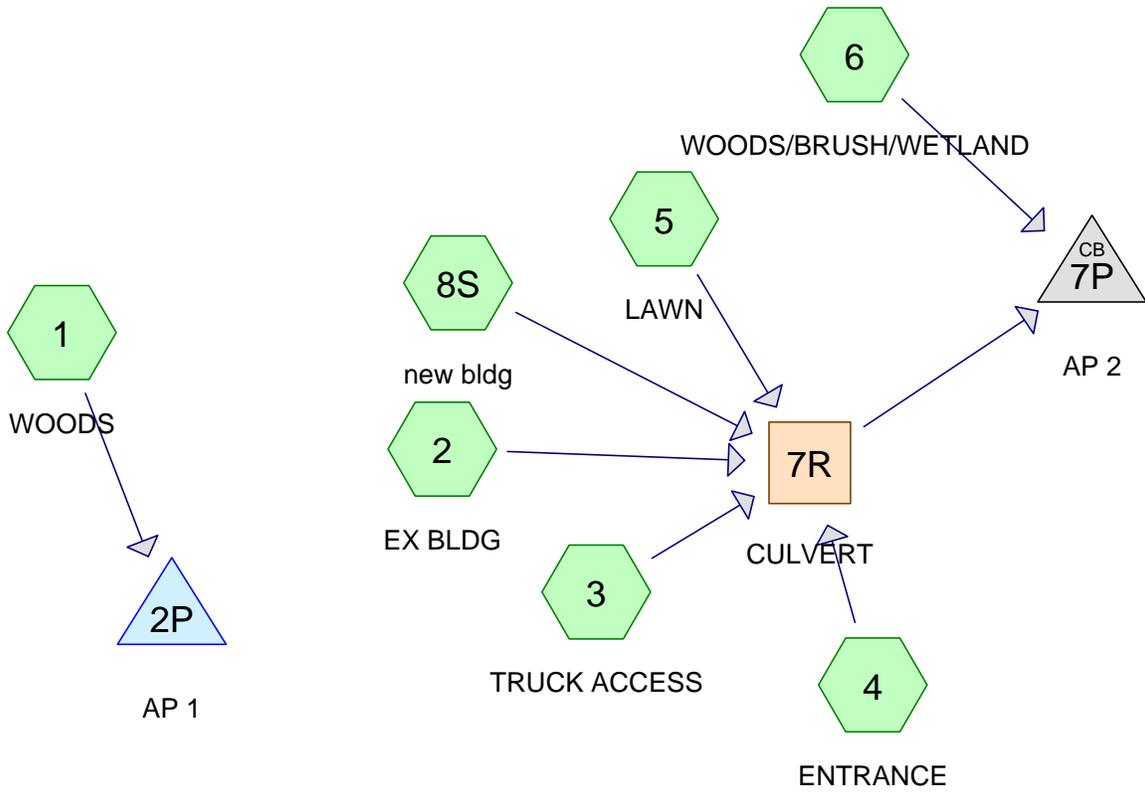
Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs

Pond 7P: AP 2

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 12.439 ac, Inflow Depth = 2.97" for 25-YEAR event
Inflow = 23.45 cfs @ 12.09 hrs, Volume= 3.079 af
Primary = 23.45 cfs @ 12.09 hrs, Volume= 3.079 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs



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

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Time span=0.00-36.00 hrs, dt=0.04 hrs, 901 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1: WOODSRunoff Area=2,173,471 sf Runoff Depth=0.71"
Flow Length=1,595' Tc=51.2 min CN=70 Runoff=15.64 cfs 2.970 af**Subcatchment 2: EX BLDG**Runoff Area=59,921 sf Runoff Depth=2.77"
Flow Length=639' Tc=5.0 min CN=98 Runoff=4.08 cfs 0.317 af**Subcatchment 3: TRUCK ACCESS**Runoff Area=32,346 sf Runoff Depth=2.77"
Flow Length=833' Tc=5.0 min CN=98 Runoff=2.20 cfs 0.171 af**Subcatchment 4: ENTRANCE**Runoff Area=47,237 sf Runoff Depth=1.45"
Flow Length=732' Tc=5.0 min CN=83 Runoff=1.88 cfs 0.131 af**Subcatchment 5: LAWN**Runoff Area=105,710 sf Runoff Depth=1.13"
Flow Length=576' Tc=16.1 min CN=78 Runoff=2.28 cfs 0.228 af**Subcatchment 6: WOODS/BRUSH/WETLAND**Runoff Area=281,567 sf Runoff Depth=0.54"
Flow Length=843' Tc=31.5 min CN=66 Runoff=1.79 cfs 0.293 af**Subcatchment 8S: new bldg**Runoff Area=6,300 sf Runoff Depth=2.77"
Tc=5.0 min CN=98 Runoff=0.43 cfs 0.033 af**Reach 7R: CULVERT**Peak Depth=0.76' Max Vel=9.0 fps Inflow=9.85 cfs 0.881 af
D=24.0" n=0.013 L=30.0' S=0.0200 '/ Capacity=31.99 cfs Outflow=9.83 cfs 0.881 af**Pond 2P: AP 1**Inflow=15.64 cfs 2.970 af
Primary=15.64 cfs 2.970 af**Pond 7P: AP 2**Peak Elev=103.38' Inflow=9.98 cfs 1.174 af
36.0" x 80.0' Culvert Outflow=9.98 cfs 1.174 af**Total Runoff Area = 62.134 ac Runoff Volume = 4.144 af Average Runoff Depth = 0.80"**

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

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Subcatchment 1: WOODS

Runoff = 15.64 cfs @ 12.79 hrs, Volume= 2.970 af, Depth= 0.71"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
16,709	98	Parking Lot
19,280	98	Dyer Road
2,123,153	70	Woods, Good, HSG C
14,329	74	>75% Grass cover, Good, HSG C
2,173,471	70	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	75	0.0750	0.1		Sheet Flow, A-B Woods: Dense underbrush n= 0.800 P2= 3.00"
14.5	1,020	0.0550	1.2		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
18.6	500	0.0080	0.4		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
51.2	1,595	Total			

Subcatchment 2: EX BLDG

Runoff = 4.08 cfs @ 12.07 hrs, Volume= 0.317 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
59,921	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	184	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.0	371	0.0200	6.4	2.22	Circular Channel (pipe), B-C Diam= 8.0" Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.3	84	0.0200	5.3	106.71	Parabolic Channel, C-D W=30.00' D=1.00' Area=20.0 sf Perim=30.1' n= 0.030 Earth, grassed & winding
3.3	639	Total, Increased to minimum Tc = 5.0 min			

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

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Subcatchment 3: TRUCK ACCESS

Runoff = 2.20 cfs @ 12.07 hrs, Volume= 0.171 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
32,346	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	83	0.0200	1.3		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.1	188	0.0200	2.9		Shallow Concentrated Flow, B-C Paved Kv= 20.3 fps
1.3	176	0.0230	2.3		Shallow Concentrated Flow, C-D Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), D-E Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, E-F W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
4.7	833	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 4: ENTRANCE

Runoff = 1.88 cfs @ 12.08 hrs, Volume= 0.131 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
17,530	98	Paved parking & roofs
29,707	74	>75% Grass cover, Good, HSG C
47,237	83	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	170	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.3	176	0.0230	2.3		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), C-D Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, D-E W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding

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

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4.4 732 Total, Increased to minimum Tc = 5.0 min

Subcatchment 5: LAWN

Runoff = 2.28 cfs @ 12.24 hrs, Volume= 0.228 af, Depth= 1.13"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
15,975	98	Paved parking & roofs
89,735	74	>75% Grass cover, Good, HSG C
105,710	78	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	98	0.0500	0.2		Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00"
5.8	417	0.0290	1.2		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
0.2	61	0.0200	5.3	70.97	Parabolic Channel, C-D W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
16.1	576	Total			

Subcatchment 6: WOODS/BRUSH/WETLAND

Runoff = 1.79 cfs @ 12.54 hrs, Volume= 0.293 af, Depth= 0.54"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
256,879	65	Brush, Good, HSG C
7,615	98	Paved parking & roofs
17,073	74	>75% Grass cover, Good, HSG C
281,567	66	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	75	0.0670	0.1		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.00"
4.9	320	0.0470	1.1		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
15.7	448	0.0090	0.5		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
31.5	843	Total			

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

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Subcatchment 8S: new bldg

Runoff = 0.43 cfs @ 12.07 hrs, Volume= 0.033 af, Depth= 2.77"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

Area (sf)	CN	Description
6,300	98	Paved parking & roofs

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

Reach 7R: CULVERT

[52] Hint: Inlet conditions not evaluated

Inflow Area = 5.774 ac, Inflow Depth = 1.83" for 2-YEAR event
 Inflow = 9.85 cfs @ 12.08 hrs, Volume= 0.881 af
 Outflow = 9.83 cfs @ 12.08 hrs, Volume= 0.881 af, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
 Max. Velocity= 9.0 fps, Min. Travel Time= 0.1 min
 Avg. Velocity= 3.0 fps, Avg. Travel Time= 0.2 min

Peak Depth= 0.76' @ 12.08 hrs
 Capacity at bank full= 31.99 cfs
 Inlet Invert= 100.00', Outlet Invert= 99.40'
 24.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
 Length= 30.0' Slope= 0.0200 '/'

Pond 2P: AP 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 49.896 ac, Inflow Depth = 0.71" for 2-YEAR event
 Inflow = 15.64 cfs @ 12.79 hrs, Volume= 2.970 af
 Primary = 15.64 cfs @ 12.79 hrs, Volume= 2.970 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs

Pond 7P: AP 2

[57] Hint: Peaked at 103.38' (Flood elevation advised)

[63] Warning: Exceeded Reach 7R inflow depth by 2.61' @ 12.08 hrs

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Inflow Area = 12.238 ac, Inflow Depth = 1.15" for 2-YEAR event
 Inflow = 9.98 cfs @ 12.08 hrs, Volume= 1.174 af
 Outflow = 9.98 cfs @ 12.08 hrs, Volume= 1.174 af, Atten= 0%, Lag= 0.0 min
 Primary = 9.98 cfs @ 12.08 hrs, Volume= 1.174 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
 Peak Elev= 103.38' @ 12.08 hrs
 Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 0.0 min (827.2 - 827.2)

Device	Routing	Invert	Outlet Devices
#1	Primary	102.00'	36.0" x 80.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 100.00' S= 0.0250 '/' Cc= 0.900 n= 0.022

Primary OutFlow Max=9.89 cfs @ 12.08 hrs HW=103.37' (Free Discharge)
 ↑**1=Culvert** (Inlet Controls 9.89 cfs @ 3.1 fps)

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

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Time span=0.00-36.00 hrs, dt=0.04 hrs, 901 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1: WOODSRunoff Area=2,173,471 sf Runoff Depth=1.74"
Flow Length=1,595' Tc=51.2 min CN=70 Runoff=42.55 cfs 7.255 af**Subcatchment 2: EX BLDG**Runoff Area=59,921 sf Runoff Depth=4.36"
Flow Length=639' Tc=5.0 min CN=98 Runoff=6.31 cfs 0.500 af**Subcatchment 3: TRUCK ACCESS**Runoff Area=32,346 sf Runoff Depth=4.36"
Flow Length=833' Tc=5.0 min CN=98 Runoff=3.41 cfs 0.270 af**Subcatchment 4: ENTRANCE**Runoff Area=47,237 sf Runoff Depth=2.81"
Flow Length=732' Tc=5.0 min CN=83 Runoff=3.65 cfs 0.254 af**Subcatchment 5: LAWN**Runoff Area=105,710 sf Runoff Depth=2.38"
Flow Length=576' Tc=16.1 min CN=78 Runoff=4.95 cfs 0.480 af**Subcatchment 6: WOODS/BRUSH/WETLAND**Runoff Area=281,567 sf Runoff Depth=1.46"
Flow Length=843' Tc=31.5 min CN=66 Runoff=5.76 cfs 0.787 af**Subcatchment 8S: new bldg**Runoff Area=6,300 sf Runoff Depth=4.36"
Tc=5.0 min CN=98 Runoff=0.66 cfs 0.053 af**Reach 7R: CULVERT**Peak Depth=1.04' Max Vel=10.3 fps Inflow=17.02 cfs 1.558 af
D=24.0" n=0.013 L=30.0' S=0.0200 '/ Capacity=31.99 cfs Outflow=16.99 cfs 1.558 af**Pond 2P: AP 1**Inflow=42.55 cfs 7.255 af
Primary=42.55 cfs 7.255 af**Pond 7P: AP 2**Peak Elev=103.97' Inflow=18.56 cfs 2.345 af
36.0" x 80.0' Culvert Outflow=18.56 cfs 2.345 af**Total Runoff Area = 62.134 ac Runoff Volume = 9.600 af Average Runoff Depth = 1.85"**

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

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Subcatchment 1: WOODS

Runoff = 42.55 cfs @ 12.73 hrs, Volume= 7.255 af, Depth= 1.74"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
16,709	98	Parking Lot
19,280	98	Dyer Road
2,123,153	70	Woods, Good, HSG C
14,329	74	>75% Grass cover, Good, HSG C
2,173,471	70	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	75	0.0750	0.1		Sheet Flow, A-B Woods: Dense underbrush n= 0.800 P2= 3.00"
14.5	1,020	0.0550	1.2		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
18.6	500	0.0080	0.4		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
51.2	1,595	Total			

Subcatchment 2: EX BLDG

Runoff = 6.31 cfs @ 12.07 hrs, Volume= 0.500 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
59,921	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	184	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.0	371	0.0200	6.4	2.22	Circular Channel (pipe), B-C Diam= 8.0" Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.3	84	0.0200	5.3	106.71	Parabolic Channel, C-D W=30.00' D=1.00' Area=20.0 sf Perim=30.1' n= 0.030 Earth, grassed & winding
3.3	639	Total, Increased to minimum Tc = 5.0 min			

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Subcatchment 3: TRUCK ACCESS

Runoff = 3.41 cfs @ 12.07 hrs, Volume= 0.270 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
32,346	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	83	0.0200	1.3		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.1	188	0.0200	2.9		Shallow Concentrated Flow, B-C Paved Kv= 20.3 fps
1.3	176	0.0230	2.3		Shallow Concentrated Flow, C-D Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), D-E Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, E-F W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
4.7	833	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 4: ENTRANCE

Runoff = 3.65 cfs @ 12.08 hrs, Volume= 0.254 af, Depth= 2.81"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
17,530	98	Paved parking & roofs
29,707	74	>75% Grass cover, Good, HSG C
47,237	83	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	170	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.3	176	0.0230	2.3		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), C-D Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, D-E W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding

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4.4 732 Total, Increased to minimum Tc = 5.0 min

Subcatchment 5: LAWN

Runoff = 4.95 cfs @ 12.22 hrs, Volume= 0.480 af, Depth= 2.38"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
15,975	98	Paved parking & roofs
89,735	74	>75% Grass cover, Good, HSG C
105,710	78	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	98	0.0500	0.2		Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00"
5.8	417	0.0290	1.2		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
0.2	61	0.0200	5.3	70.97	Parabolic Channel, C-D W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
16.1	576	Total			

Subcatchment 6: WOODS/BRUSH/WETLAND

Runoff = 5.76 cfs @ 12.48 hrs, Volume= 0.787 af, Depth= 1.46"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
256,879	65	Brush, Good, HSG C
7,615	98	Paved parking & roofs
17,073	74	>75% Grass cover, Good, HSG C
281,567	66	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	75	0.0670	0.1		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.00"
4.9	320	0.0470	1.1		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
15.7	448	0.0090	0.5		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
31.5	843	Total			

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

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Subcatchment 8S: new bldg

Runoff = 0.66 cfs @ 12.07 hrs, Volume= 0.053 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 10-YEAR Rainfall=4.60"

Area (sf)	CN	Description
6,300	98	Paved parking & roofs

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

Reach 7R: CULVERT

[52] Hint: Inlet conditions not evaluated

Inflow Area = 5.774 ac, Inflow Depth = 3.24" for 10-YEAR event
 Inflow = 17.02 cfs @ 12.08 hrs, Volume= 1.558 af
 Outflow = 16.99 cfs @ 12.08 hrs, Volume= 1.558 af, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
 Max. Velocity= 10.3 fps, Min. Travel Time= 0.0 min
 Avg. Velocity= 3.5 fps, Avg. Travel Time= 0.1 min

Peak Depth= 1.04' @ 12.08 hrs
 Capacity at bank full= 31.99 cfs
 Inlet Invert= 100.00', Outlet Invert= 99.40'
 24.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
 Length= 30.0' Slope= 0.0200 '/

Pond 2P: AP 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 49.896 ac, Inflow Depth = 1.74" for 10-YEAR event
 Inflow = 42.55 cfs @ 12.73 hrs, Volume= 7.255 af
 Primary = 42.55 cfs @ 12.73 hrs, Volume= 7.255 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs

Pond 7P: AP 2

[57] Hint: Peaked at 103.97' (Flood elevation advised)

[63] Warning: Exceeded Reach 7R inflow depth by 2.94' @ 12.36 hrs

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Inflow Area = 12.238 ac, Inflow Depth = 2.30" for 10-YEAR event
 Inflow = 18.56 cfs @ 12.09 hrs, Volume= 2.345 af
 Outflow = 18.56 cfs @ 12.09 hrs, Volume= 2.345 af, Atten= 0%, Lag= 0.0 min
 Primary = 18.56 cfs @ 12.09 hrs, Volume= 2.345 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
 Peak Elev= 103.97' @ 12.09 hrs
 Plug-Flow detention time= 0.0 min calculated for 2.345 af (100% of inflow)
 Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Device	Routing	Invert	Outlet Devices
#1	Primary	102.00'	36.0" x 80.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 100.00' S= 0.0250 '/' Cc= 0.900 n= 0.022

Primary OutFlow Max=18.30 cfs @ 12.09 hrs HW=103.95' (Free Discharge)
 ↑**1=Culvert** (Inlet Controls 18.30 cfs @ 3.8 fps)

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

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Time span=0.00-36.00 hrs, dt=0.04 hrs, 901 points

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1: WOODSRunoff Area=2,173,471 sf Runoff Depth=2.41"
Flow Length=1,595' Tc=51.2 min CN=70 Runoff=59.98 cfs 10.039 af**Subcatchment 2: EX BLDG**Runoff Area=59,921 sf Runoff Depth=5.26"
Flow Length=639' Tc=5.0 min CN=98 Runoff=7.56 cfs 0.603 af**Subcatchment 3: TRUCK ACCESS**Runoff Area=32,346 sf Runoff Depth=5.26"
Flow Length=833' Tc=5.0 min CN=98 Runoff=4.08 cfs 0.326 af**Subcatchment 4: ENTRANCE**Runoff Area=47,237 sf Runoff Depth=3.63"
Flow Length=732' Tc=5.0 min CN=83 Runoff=4.68 cfs 0.328 af**Subcatchment 5: LAWN**Runoff Area=105,710 sf Runoff Depth=3.14"
Flow Length=576' Tc=16.1 min CN=78 Runoff=6.55 cfs 0.635 af**Subcatchment 6: WOODS/BRUSH/WETLAND**Runoff Area=281,567 sf Runoff Depth=2.08"
Flow Length=843' Tc=31.5 min CN=66 Runoff=8.43 cfs 1.119 af**Subcatchment 8S: new bldg**Runoff Area=6,300 sf Runoff Depth=5.26"
Tc=5.0 min CN=98 Runoff=0.79 cfs 0.063 af**Reach 7R: CULVERT**Peak Depth=1.19' Max Vel=10.9 fps Inflow=21.17 cfs 1.956 af
D=24.0" n=0.013 L=30.0' S=0.0200 '/ Capacity=31.99 cfs Outflow=21.14 cfs 1.956 af**Pond 2P: AP 1**Inflow=59.98 cfs 10.039 af
Primary=59.98 cfs 10.039 af**Pond 7P: AP 2**Peak Elev=104.31' Inflow=23.79 cfs 3.074 af
36.0" x 80.0' Culvert Outflow=23.79 cfs 3.074 af**Total Runoff Area = 62.134 ac Runoff Volume = 13.113 af Average Runoff Depth = 2.53"**

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

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Subcatchment 1: WOODS

Runoff = 59.98 cfs @ 12.72 hrs, Volume= 10.039 af, Depth= 2.41"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
16,709	98	Parking Lot
19,280	98	Dyer Road
2,123,153	70	Woods, Good, HSG C
14,329	74	>75% Grass cover, Good, HSG C
2,173,471	70	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.1	75	0.0750	0.1		Sheet Flow, A-B Woods: Dense underbrush n= 0.800 P2= 3.00"
14.5	1,020	0.0550	1.2		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
18.6	500	0.0080	0.4		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
51.2	1,595	Total			

Subcatchment 2: EX BLDG

Runoff = 7.56 cfs @ 12.07 hrs, Volume= 0.603 af, Depth= 5.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
59,921	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	184	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.0	371	0.0200	6.4	2.22	Circular Channel (pipe), B-C Diam= 8.0" Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.010 PVC, smooth interior
0.3	84	0.0200	5.3	106.71	Parabolic Channel, C-D W=30.00' D=1.00' Area=20.0 sf Perim=30.1' n= 0.030 Earth, grassed & winding
3.3	639	Total, Increased to minimum Tc = 5.0 min			

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

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Subcatchment 3: TRUCK ACCESS

Runoff = 4.08 cfs @ 12.07 hrs, Volume= 0.326 af, Depth= 5.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
32,346	98	Paved parking & roofs

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	83	0.0200	1.3		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.1	188	0.0200	2.9		Shallow Concentrated Flow, B-C Paved Kv= 20.3 fps
1.3	176	0.0230	2.3		Shallow Concentrated Flow, C-D Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), D-E Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, E-F W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
4.7	833	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 4: ENTRANCE

Runoff = 4.68 cfs @ 12.08 hrs, Volume= 0.328 af, Depth= 3.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
17,530	98	Paved parking & roofs
29,707	74	>75% Grass cover, Good, HSG C
47,237	83	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.9	170	0.0200	1.5		Sheet Flow, A-B Smooth surfaces n= 0.011 P2= 3.00"
1.3	176	0.0230	2.3		Shallow Concentrated Flow, B-C Grassed Waterway Kv= 15.0 fps
0.3	108	0.0200	6.4	5.04	Circular Channel (pipe), C-D Diam= 12.0" Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
0.9	278	0.0200	5.3	70.97	Parabolic Channel, D-E W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding

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

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4.4 732 Total, Increased to minimum Tc = 5.0 min

Subcatchment 5: LAWN

Runoff = 6.55 cfs @ 12.22 hrs, Volume= 0.635 af, Depth= 3.14"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
15,975	98	Paved parking & roofs
89,735	74	>75% Grass cover, Good, HSG C
105,710	78	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	98	0.0500	0.2		Sheet Flow, A-B Grass: Dense n= 0.240 P2= 3.00"
5.8	417	0.0290	1.2		Shallow Concentrated Flow, B-C Short Grass Pasture Kv= 7.0 fps
0.2	61	0.0200	5.3	70.97	Parabolic Channel, C-D W=20.00' D=1.00' Area=13.3 sf Perim=20.1' n= 0.030 Earth, grassed & winding
16.1	576	Total			

Subcatchment 6: WOODS/BRUSH/WETLAND

Runoff = 8.43 cfs @ 12.46 hrs, Volume= 1.119 af, Depth= 2.08"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
256,879	65	Brush, Good, HSG C
7,615	98	Paved parking & roofs
17,073	74	>75% Grass cover, Good, HSG C
281,567	66	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.9	75	0.0670	0.1		Sheet Flow, A-B Woods: Light underbrush n= 0.400 P2= 3.00"
4.9	320	0.0470	1.1		Shallow Concentrated Flow, B-C Woodland Kv= 5.0 fps
15.7	448	0.0090	0.5		Shallow Concentrated Flow, C-D Woodland Kv= 5.0 fps
31.5	843	Total			

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

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Subcatchment 8S: new bldg

Runoff = 0.79 cfs @ 12.07 hrs, Volume= 0.063 af, Depth= 5.26"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
Type III 24-hr 25-YEAR Rainfall=5.50"

Area (sf)	CN	Description
6,300	98	Paved parking & roofs

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

Reach 7R: CULVERT

[52] Hint: Inlet conditions not evaluated

Inflow Area = 5.774 ac, Inflow Depth = 4.06" for 25-YEAR event
 Inflow = 21.17 cfs @ 12.08 hrs, Volume= 1.956 af
 Outflow = 21.14 cfs @ 12.08 hrs, Volume= 1.956 af, Atten= 0%, Lag= 0.1 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
 Max. Velocity= 10.9 fps, Min. Travel Time= 0.0 min
 Avg. Velocity = 3.7 fps, Avg. Travel Time= 0.1 min

Peak Depth= 1.19' @ 12.08 hrs
 Capacity at bank full= 31.99 cfs
 Inlet Invert= 100.00', Outlet Invert= 99.40'
 24.0" Diameter Pipe, n= 0.013 Corrugated PE, smooth interior
 Length= 30.0' Slope= 0.0200 '/'

Pond 2P: AP 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 49.896 ac, Inflow Depth = 2.41" for 25-YEAR event
 Inflow = 59.98 cfs @ 12.72 hrs, Volume= 10.039 af
 Primary = 59.98 cfs @ 12.72 hrs, Volume= 10.039 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs

Pond 7P: AP 2

[57] Hint: Peaked at 104.31' (Flood elevation advised)

[63] Warning: Exceeded Reach 7R inflow depth by 3.17' @ 12.36 hrs

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Inflow Area = 12.238 ac, Inflow Depth = 3.01" for 25-YEAR event
 Inflow = 23.79 cfs @ 12.09 hrs, Volume= 3.074 af
 Outflow = 23.79 cfs @ 12.09 hrs, Volume= 3.074 af, Atten= 0%, Lag= 0.0 min
 Primary = 23.79 cfs @ 12.09 hrs, Volume= 3.074 af

Routing by Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.04 hrs
 Peak Elev= 104.31' @ 12.09 hrs
 Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 0.0 min (817.8 - 817.8)

Device	Routing	Invert	Outlet Devices
#1	Primary	102.00'	36.0" x 80.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 100.00' S= 0.0250 '/' Cc= 0.900 n= 0.022

Primary OutFlow Max=23.44 cfs @ 12.09 hrs HW=104.28' (Free Discharge)
 ↑**1=Culvert** (Inlet Controls 23.44 cfs @ 4.1 fps)

City of Lewiston
Development Review
Minor Amendment Application
PLAN LIST

C0.0 Existing Site Conditions	8/19/14
C1.0 Proposed Site Plan	10/17/14
DR1 Existing Conditions Drainage Plan	10/07/14
DR2 Developed Conditions Drainage Plan	10/07/14

Earthwork and General Construction Requirements:
1-5-10

Upon award of contract, the applicable contractor / subcontractor shall make all necessary construction notifications and apply for and obtain all necessary permits, pay all fees and post all bonds associated with the work indicated on the drawings and adhere to the following requirements:

1. Pre-construction safety. The contractor shall pre-mark the boundaries of the planned excavation with white paint, flags, or stakes, so utility crews know where to mark their lines: Call Dig Safe toll free at 1-888-DIGSAFE, at least 3 business days, but no more than 30 calendar days before construction. At that time, be ready with all important information such as City/Town, Street/Road, location description, extent and type of work, contact person with phone number, and the contractor's name with phone number. If blasting is needed, contact dig-safe at least three business days in advance.
2. Contractor / subcontractor shall install all erosion control measures prior to earthwork operation and maintain all erosion control measures and seeded embankments during construction. Erosion control shall be removed only upon the establishment of all landscaped areas. All work shall comply with the environmental quality handbook for erosion and sediment control, latest edition, as adopted by the Maine Department of Environmental Protection.
3. See Engineering drawings for exact building dimensions and all details contiguous to the building, including sidewalks, ramps, building entrances, stairways, utility penetrations, concrete door pads, compactor pad, loading docks, bollards etc. All existing utilities are depicted in their most likely locations based on the best information available to this date. It is the sole responsibility of the contractor/subcontractor to verify locations and provide proposals based on verified information. The Sheridan Corporation is not liable for contractor/subcontractor's errors due to unverified facts.
4. Underground utilities are shown where records indicate. The possibility of other unknown utilities in any location is highly likely. All contractors are to use extreme caution so as to not damage these utilities. This is the sole responsibility of each contractor.
5. All subcontractors shall obtain and pay for any permits necessary for their scope of work. They are also responsible for scheduling and attending all inspections of work, and supplying written proof of acceptance of work by the governing inspectors and shall make all arrangements and pay any fees for necessary pole relocation; alteration or adjustment of gas, electric, telephone, fire alarm and any other private utilities by the utility companies.
6. The location, size, depth, and specifications for construction of proposed private utility services shall be installed according to the requirements provided by, and approved by the respective utility company (gas, telephone, electric, and fire alarm, etc.). The contractor shall field verify the location, size, inverts, and types of existing pipes at all proposed points of connection prior to ordering materials. Where an existing utility is found to conflict with the proposed work, the location, elevation, and size of the utility shall be accurately determined without delay by the contractor, and the information furnished in writing to the owner's representative for the resolution of the conflict. Final design loads and locations to be coordinated with owner and architect. All utility work will be executed per the rule and/or regulations of the appropriate governing authority.
7. Rim elevations of proposed drainage and sanitary sewer manholes and associated structures are approximate. Final elevations are to be set flush and consistent with the grading plans. Adjust all other rim elevations of manholes, water gates, gas gates and other utilities to finish grade within limits of work. Offsets to catch basins and manholes are to the center of the frame. Pipe lengths shown are measured from center-to-center distances between catch basins and/or manholes minus one-half the diameter of each catch basin or manhole.
8. All areas outside the limit of work that are disturbed shall be restored by the contractor to their original condition as the contractor's expense. All areas disturbed during construction not covered with buildings, structures, or pavement shall receive a minimum of 4 inches of loam, seed and binder mulch.
9. Boundary information on layout plan is for reference only; refer to appropriate plan if information required. All property "monumentation" disturbed during construction shall be reset to their original location by a Maine registered professional land surveyor (PLS) at the contractor's expense. The contractor shall prepare "Record Plan Survey" showing locations of all surface features and subsurface utility systems including the location type, size, and inverts.
10. Contractor shall be solely responsible for site security and job safety. All construction activity shall be in accordance with OSHA standards and local requirements.
11. All materials and construction methods used for vehicle and pedestrian traffic and within the public right-of-way shall conform to all local municipal standards and the current edition of the "Maine Department of Transportation Highway Specifications". All remaining work will be executed in accordance with the current published technical design standards and guidelines as adopted by local city or town officials. All sanitary sewer, storm sewer, and water crossings shall be done in accordance with all applicable state and city standards.
12. All handicap accessible parking spaces, ramps, and sidewalks shall be constructed in conformance with the Americans with Disabilities Act (ADA).
13. All site signage and pavement markings shall conform to the current "Manual of Uniform Traffic Control Devices".

Dig Safe/Utility Locations

The Sheridan Corporation has made a diligent effort to ascertain the location of all underground utility facilities within the work zone of this project. The utility locations shown on the plans are for information purposes only and do not relieve the contractor / subcontractor from the requirements of the "Dig Safe" law and from locating and marking all underground utilities before commencement of work.

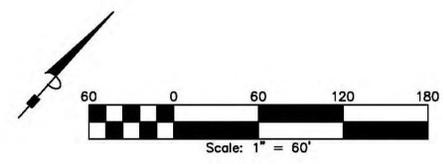
Those contractors / subcontractors responsible for site excavation and other below grade work, are charged with "Dig Safe" protocol. It is the sole responsibility of the contractor / subcontractor to notify DIG SAFE at 1-888-344-7233 at least 72 hours in advance, excluding Saturdays, Sundays and legal Maine holidays, but not more than 30 days in advance of commencement of excavation to field verify and mark all underground utility locations. Additionally, the contractor / subcontractor shall notify all remaining utility companies that are not members of "Dig Safe" to locate their facilities prior to commencement of excavation work.

The Sheridan Corporation shall not be held liable for the contractor / subcontractor's / Dig Safe location errors.

CONTRACTOR / SUBCONTRACTOR CONSTRUCTION RESPONSIBILITY NOTES:
1-5-10

- 1) ALL WORK WILL BE EXECUTED IN ACCORDANCE WITH THE LATEST CODES, REGULATIONS, TECHNICAL DESIGN STANDARDS AND GUIDELINES AS APPLICABLE TO THE APPROPRIATE GOVERNING AUTHORITY.
- 2) ALL UTILITY WORK WILL BE EXECUTED PER THE RULES AND/OR REGULATIONS OF THE APPROPRIATE GOVERNING AUTHORITY.
- 3) ALL SUBCONTRACTORS ARE RESPONSIBLE FOR OBTAINING ANY PERMITS NECESSARY FOR THEIR SCOPE OF WORK. THEY ARE ALSO RESPONSIBLE FOR SCHEDULING AND ATTENDING ALL INSPECTIONS OF WORK, AND SUPPLYING WRITTEN PROOF OF ACCEPTANCE OF WORK BY INSPECTOR.
- 4) ALL SANITARY SEWER, STORM SEWER, AND WATER CROSSINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE STATE, CITY / TOWN OR DISTRICT STANDARDS.
- 5) CONTRACTORS / SUBCONTRACTORS ARE TO USE EXTREME CAUTION TO NOT DAMAGE UTILITIES. THIS IS THE SOLE RESPONSIBILITY OF EACH CONTRACTOR / SUBCONTRACTOR.

NOTE:
1-5-10
SUBSURFACE PREPARATION WILL INCLUDE THE REMOVAL OF TOPSOIL, ALL UNSUITABLE MATERIALS, STUMPS, TRASH, ETC. THEN IT WILL BE PROOF ROLLED. STRUCTURAL FILL PLACED IN 12" MAX. LIFTS AND COMPACTED TO 95% DRY DENSITY. THIS APPLIES TO ALL BUILDING PAD AREAS. GRADING OF SUBGRADE WILL BE MINUS THE DEPTH OF ALL SUBBASE, BASE AND FRESH MATERIALS, WITH ALLOWABLE GRADE DEVIATION OF +/- 1/32 OF ONE FOOT. ALL MATERIAL PLACEMENT, COMPACTATION AND GRADING SHALL BE IN ACCORDANCE WITH MA007 2002 STANDARD SPECIFICATIONS. THE MAXIMUM DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH AASHTO T180, METHOD C OR D.

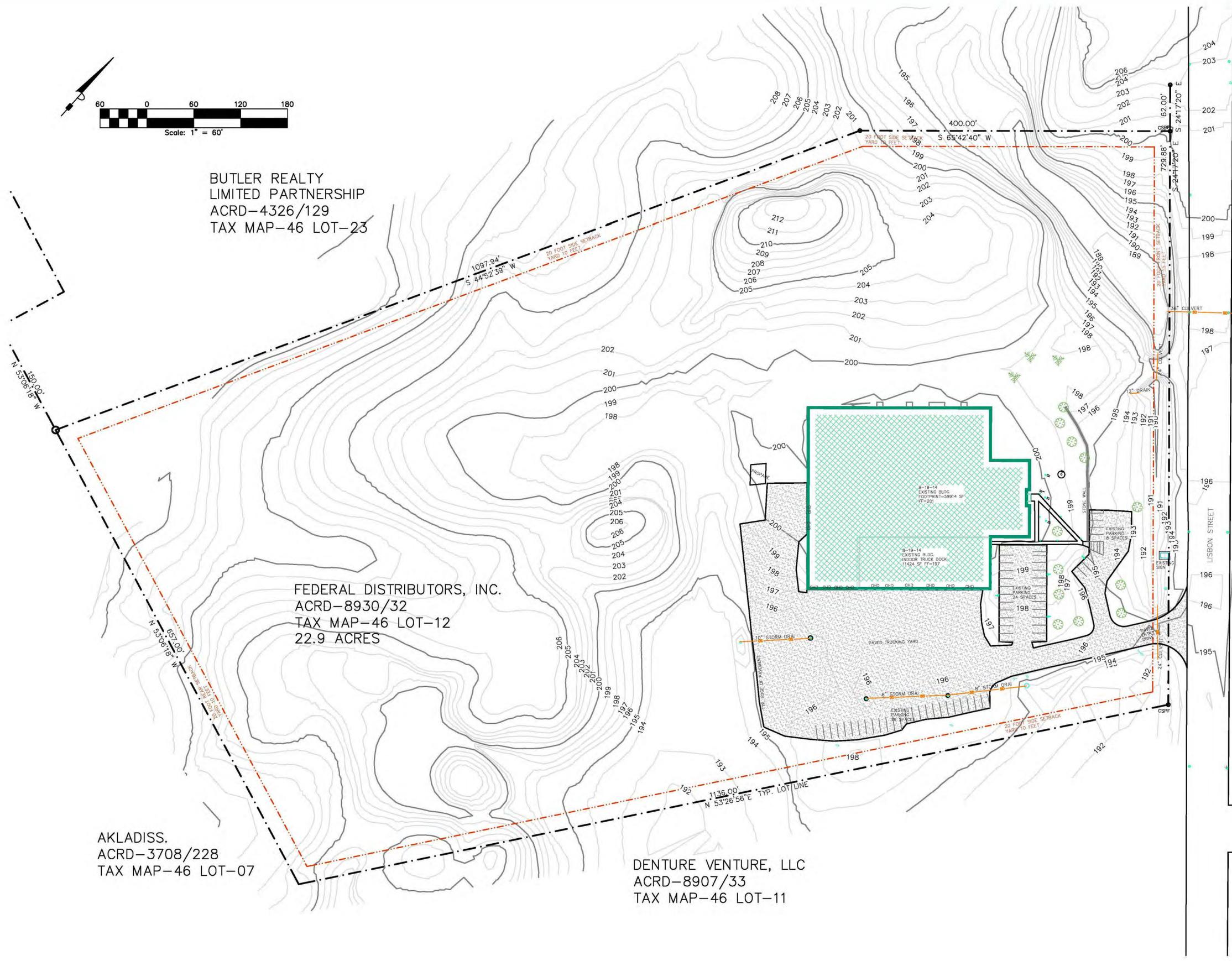


BUTLER REALTY LIMITED PARTNERSHIP
ACRD-4326/129
TAX MAP-46 LOT-23

FEDERAL DISTRIBUTORS, INC.
ACRD-8930/32
TAX MAP-46 LOT-12
22.9 ACRES

AKLADISS.
ACRD-3708/228
TAX MAP-46 LOT-07

DENTURE VENTURE, LLC
ACRD-8907/33
TAX MAP-46 LOT-11



LEGEND:

EXISTING	PROPOSED
PROP. PIN	PROP. PIN
GRANITE MONUMENT	GRANITE MONUMENT
UTILITY POLE	UTILITY POLE
LIGHT POLE	LIGHT POLE
LIGHT POLE CUTOFF	LIGHT POLE CUTOFF
CLIP ANCHOR	CLIP ANCHOR
WALL ANCHORED NEW	WALL ANCHORED NEW
LIGHT ON POLE NEW	LIGHT ON POLE NEW
HYDRANT	HYDRANT
WATER VALVE	WATER VALVE
GAS VALVE	GAS VALVE
CATCH BASIN	CATCH BASIN
SANITARY MH	SANITARY MH
DRAINAGE MH	DRAINAGE MH
CONIFEROUS TREE	CONIFEROUS TREE
DECIDUOUS TREE	DECIDUOUS TREE
EXISTING CONTOUR	EXISTING CONTOUR
FINISH CONTOUR	FINISH CONTOUR
SPOT FINISH GRADE	SPOT FINISH GRADE
PROPERTY LINE	PROPERTY LINE
EROSION FENCE	EROSION FENCE
EXISTING CURBING	EXISTING CURBING
TYPE BY LABEL	TYPE BY LABEL
EXISTING DRIVE	EXISTING DRIVE
PAVEMENT EDGE	PAVEMENT EDGE
TYPE BY LABEL	TYPE BY LABEL
NEW PAVEMENT EDGE	NEW PAVEMENT EDGE

PROJECT INFORMATION
OWNER / DEVELOPER
FEDERAL DISTRIBUTORS, INC.
2075 LISBON STREET
LEWISTON, ME 04240
207-783-1777

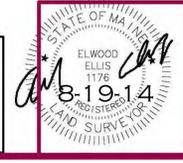
OWNER'S AGENT
THE SHERIDAN CORP.
P.O. BOX 359
FAIRFIELD, ME. 04937
CONTACT:
KENNETH S. LAMOREAUX
DIRECTOR OF PERMITTING
PHONE: 207 453-9311
FAX: 207 453-2820

CURRENT ZONING:
HIGHWAY BUSINESS (HB)

USE: WAREHOUSING / OFFICE
LOT SIZE: 22.9 AC +/-
EXISTING DEVELOPED AREA
BUILDING: 59,914 SF
IMPERVIOUS AREA: 81,796 SF

GIS CONTROL CB
N=445048.48
E=2965073.37
ELEV.=194.1

SURVEYOR REVIEW BY:
D. S. D.
Downtown Surveying & Development, Inc.
18000 ELLIS, P.O. BOX 1175
P.O. BOX 8234
SHAW WILDE, WILDE SHAW
(207) 868-2827
MEMBER MAINE SOCIETY OF LAND SURVEYORS



SURVEYORS NOTE:
THIS SURVEY IS COORDINATED WITH THE CITY OF LEWISTON GIS SYSTEM. USING THE CATCH BASIN JUST NORTH OF FOSS ROAD ON LISBON STREET

FAIRFIELD MAINE PORTLAND SHERIDAN

DESIGN BUILDER

EXISTING SITE CONDITION
2075 LISBON STREET, LEWISTON, MAINE

DATE: 8-19-14

JOB NO. 141206
ENGINEERING SWG NO. CO.0

Dig Safe/Utility Locations

The Sheridan Corporation has made a diligent effort to ascertain the location of all underground utility facilities within the work zone of this project. The utility locations shown on the plans are for information purposes only and do not relieve the contractor / subcontractor from the requirements of the "Dig Safe" law and from locating and marking all underground utilities before commencement of work.

Those contractors / subcontractors responsible for site excavation and other below grade work, are charged with "Dig Safe" protocol. It is the sole responsibility of the contractor / subcontractor to notify DIG SAFE at 1-888-344-7233 at least 72 hours in advance, excluding Saturdays, Sundays and legal Maine holidays, but not more than 30 days in advance of commencement of excavation to field verify and mark all underground utility locations. Additionally, the contractor / subcontractor shall notify all remaining utility companies that are not members of "Dig Safe" to locate their facilities prior to commencement of excavation work.

The Sheridan Corporation shall not be held liable for the contractor / subcontractor's / Dig Safe location errors.

CONTRACTOR / SUBCONTRACTOR CONSTRUCTION RESPONSIBILITY NOTES:

1) ALL WORK WILL BE EXECUTED IN ACCORDANCE WITH THE LATEST CODES, REGULATIONS, TECHNICAL DESIGN STANDARDS AND GUIDELINES AS APPLICABLE TO THE APPROPRIATE GOVERNING AUTHORITY.

2) ALL UTILITY WORK WILL BE EXECUTED PER THE RULES AND/OR REGULATIONS OF THE APPROPRIATE GOVERNING AUTHORITY.

3) ALL SUBCONTRACTORS ARE RESPONSIBLE FOR OBTAINING ANY PERMITS NECESSARY FOR THEIR SCOPE OF WORK. THEY ARE ALSO RESPONSIBLE FOR SCHEDULING AND ATTENDING ALL INSPECTIONS OF WORK AND SUPPLYING WRITTEN PROOF OF ACCEPTANCE OF WORK BY INSPECTOR.

4) ALL SANITARY SEWER, STORM DRAIN AND WATER CROSSINGS SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE STATE, CITY / TOWN OR DISTRICT STANDARDS.

5) CONTRACTORS / SUBCONTRACTORS ARE TO USE EXTREME CAUTION TO NOT DAMAGE UTILITIES. THIS IS THE SOLE RESPONSIBILITY OF EACH CONTRACTOR FOR SUBCONTRACTOR.

NOTE:

1.5-10 SURFACE PREPARATION WILL INCLUDE THE REMOVAL OF TOPSOIL, ALL UNSUITABLE MATERIALS, STUMPS, TRASH, ETC. THEN IT WILL BE PROOF ROLLED. STRUCTURAL FILL PLACED IN 12" MAX LIFTS AND COMPACTED TO 95% DRY DENSITY. THIS APPLIES TO ALL BUILDING PAVED AREAS. GRADING OF SUBGRADE WILL BE MINUS THE DEPTH OF ALL SURFACE BASE AND FINISH MATERIALS. WITH ALLOWABLE GRADE DEVIATION OF +/- 1/10 OF ONE FOOT. ALL MATERIAL PLACEMENT, COMPACTION AND GRADING SHALL BE IN ACCORDANCE WITH M8007 2003 STANDARD SPECIFICATIONS. THE MAXIMUM DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH AASHTO T198, METHOD C OR D.

Site Fill Materials:

Foundation Fill Materials:

A. Structural Fill:
Structural fill shall be used for the following purposes:
1. To provide a minimum 12 inch base below the building floor slab.
2. To backfill interior footings and over excavated wall and interior footing excavations.
This material shall meet the following gradations:
Sieve Size Percent Passing
6 inch 100
3 inch 70-100
No. 4 35-70
No. 40 5-35
No. 200 0-5

Structural fill shall consist of a well graded gravelly sand to sandy gravel. It shall be free of organic material, loam, trash, snow, ice, frozen soil or other deleterious material and conform to the gradation indicated in the table above. Boulders of greater than the placed fill thickness shall be removed prior to compaction.

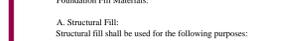
Structural fill shall be placed in layers not exceeding 12 in. (loose measure) and compacted with heavy operator-driven compaction equipment and in 6 in. layers utilizing hand guided or small remote controlled vibratory equipment. Lift thickness may require to be reduced if difficulty in achieving the required compaction.

Structural fill shall be compacted at approximately optimum moisture content (plus 1 to minus 2 percent) to 95 percent of maximum dry density as determined by ASTM D1557 (modified density).

B. Granular Borrow:
Granular borrow or structural fill may be used as a backfill material as follows:
1. For backfilling exterior footings, foundation and frost walls and retaining wall excavations.
2. For raising building interior site grades to subgrade grade; frost free backfill to subbase below access drives and parking area pavement.
Granular borrow shall consist of sand or gravel of hard durable particles free from vegetable matter, lumps or balls of clay and other deleterious substances. The gradation of that portion passing a 3 inch sieve shall meet the following gradation requirements:
Sieve Size Percent Passing
No. 40 0-70
No. 200 0-20

Surface tolerance of 3/8 in. above or below the required cross sectional shape shall be maintained.

General Site Fill Materials:
Common Borrow:
Common borrow may be used as a non-building site fill material to raise site grades to subbase level. This material and installation shall follow the Maine Dept. of Transportation Specifications Revision of 1995. The utilization of this material is subject to the review of the Engineer prior to its use.



STRUCTURAL FILL DETAILS

EROSION CONTROL NOTES

A. SILT FENCE MUST BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY AND MUST BE MAINTAINED AS PER THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION - BEST MANAGEMENT PRACTICES" PUBLISHED BY THE MAINE D.E.P. MARCH, 1991 EDITION.

B. EROSION CONTROL WILL BE SCHEDULED AS FOLLOWS: SILT FENCING WILL BE INSTALLED PRIOR TO COMMENCEMENT OF WORK. ALL AREAS TO BE SEEDED WILL BE TEMPORARILY STABILIZED WITHIN 7 DAYS OF DISTURBANCE. AREAS WILL BE INSPECTED ONCE A WEEK OR AFTER EVERY RAIN/SNOW OF 1/2" OR MORE OF WATER. ALL ERODED AREAS OF THE NEW GRASS WILL BE REPAIRED WITHIN 1 WEEK OF OCCURRENCE, WEATHER PERMITTING. ROUTINE MAINTENANCE WILL CONTINUE UNTIL THE GRASS AREAS ARE WELL ESTABLISHED.

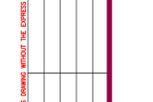
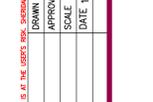
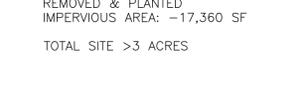
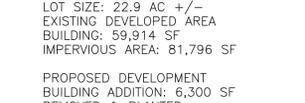
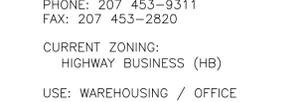
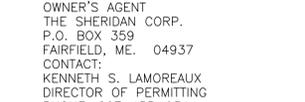
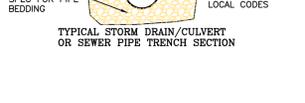
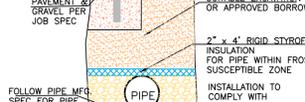
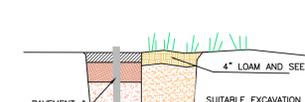
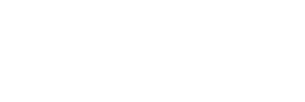
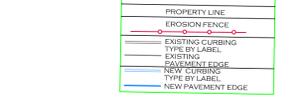
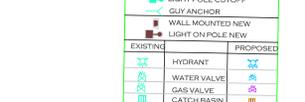
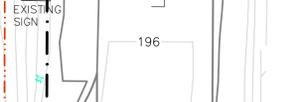
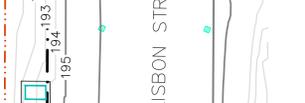
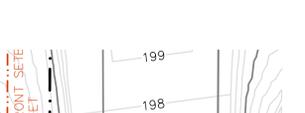
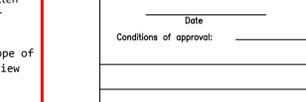
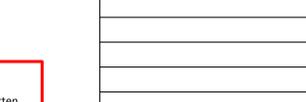
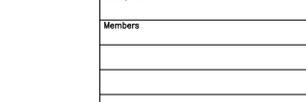
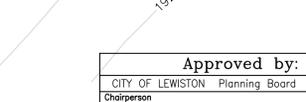
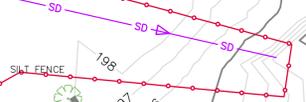
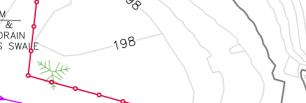
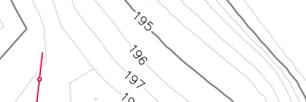
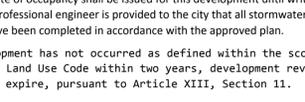
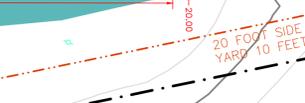
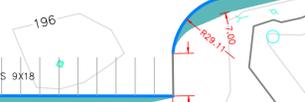
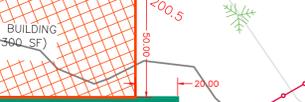
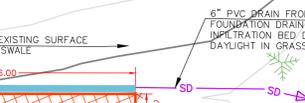
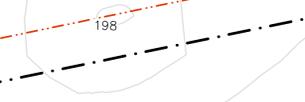
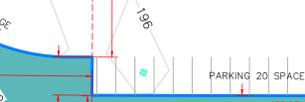
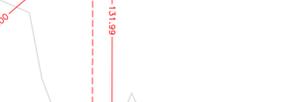
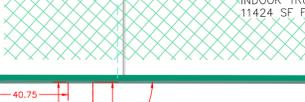
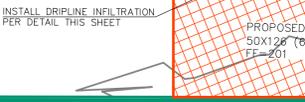
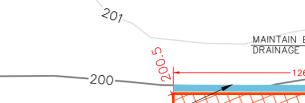
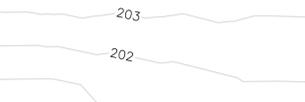
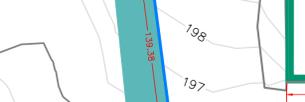
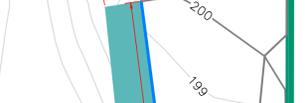
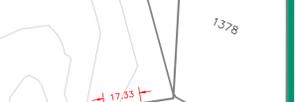
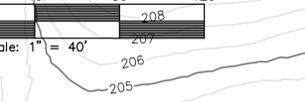
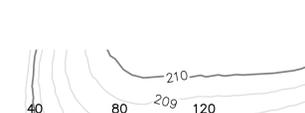
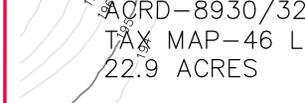
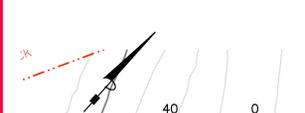
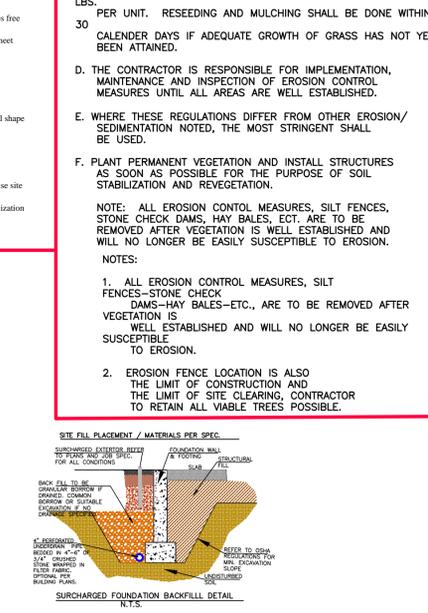
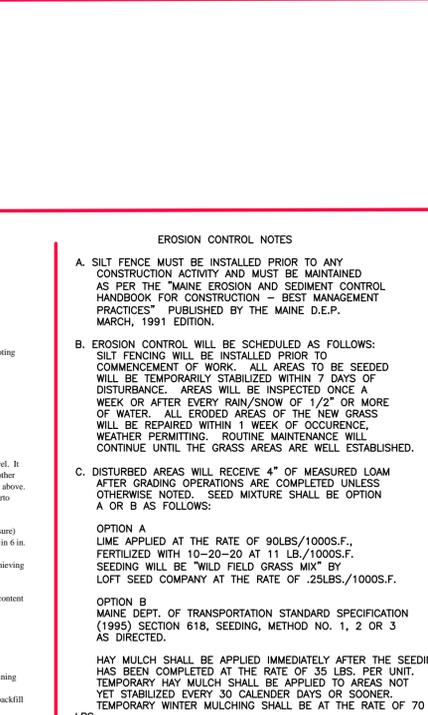
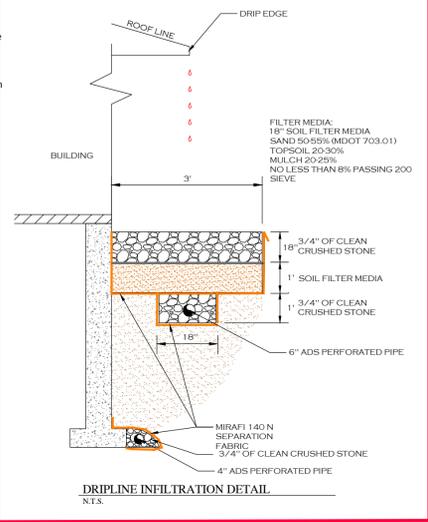
C. DISTURBED AREAS WILL RECEIVE 4" OF MEASURED LOAM AFTER GRADING OPERATIONS ARE COMPLETED UNLESS OTHERWISE NOTED. SEED MIXTURE SHALL BE OPTION A OR B AS FOLLOWS:
OPTION A
LIME APPLIED AT THE RATE OF 90LBS./1000S.F., FERTILIZED WITH 10-20-20 AT 11 LB./1000S.F., SEEDING WILL BE "WILD FIELD GRASS MIX" BY LOFT SEED COMPANY AT THE RATE OF 25LBS./1000S.F.
OPTION B
MAINE DEPT. OF TRANSPORTATION STANDARD SPECIFICATION (1995) SECTION 618, SEEDING, METHOD NO. 1, 2 OR 3 AS DIRECTED.
HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER THE SEEDING HAS BEEN COMPLETED AT THE RATE OF 35 LBS. PER UNIT. TEMPORARY HAY MULCH SHALL BE APPLIED TO AREAS NOT YET STABILIZED EVERY 30 CALENDAR DAYS OR SOONER. TEMPORARY WINTER MULCHING SHALL BE AT THE RATE OF 70 LBS. PER UNIT. RESEEDING AND MULCHING SHALL BE DONE WITHIN 30 CALENDAR DAYS IF ADEQUATE GROWTH OF GRASS HAS NOT YET BEEN ATTAINED.

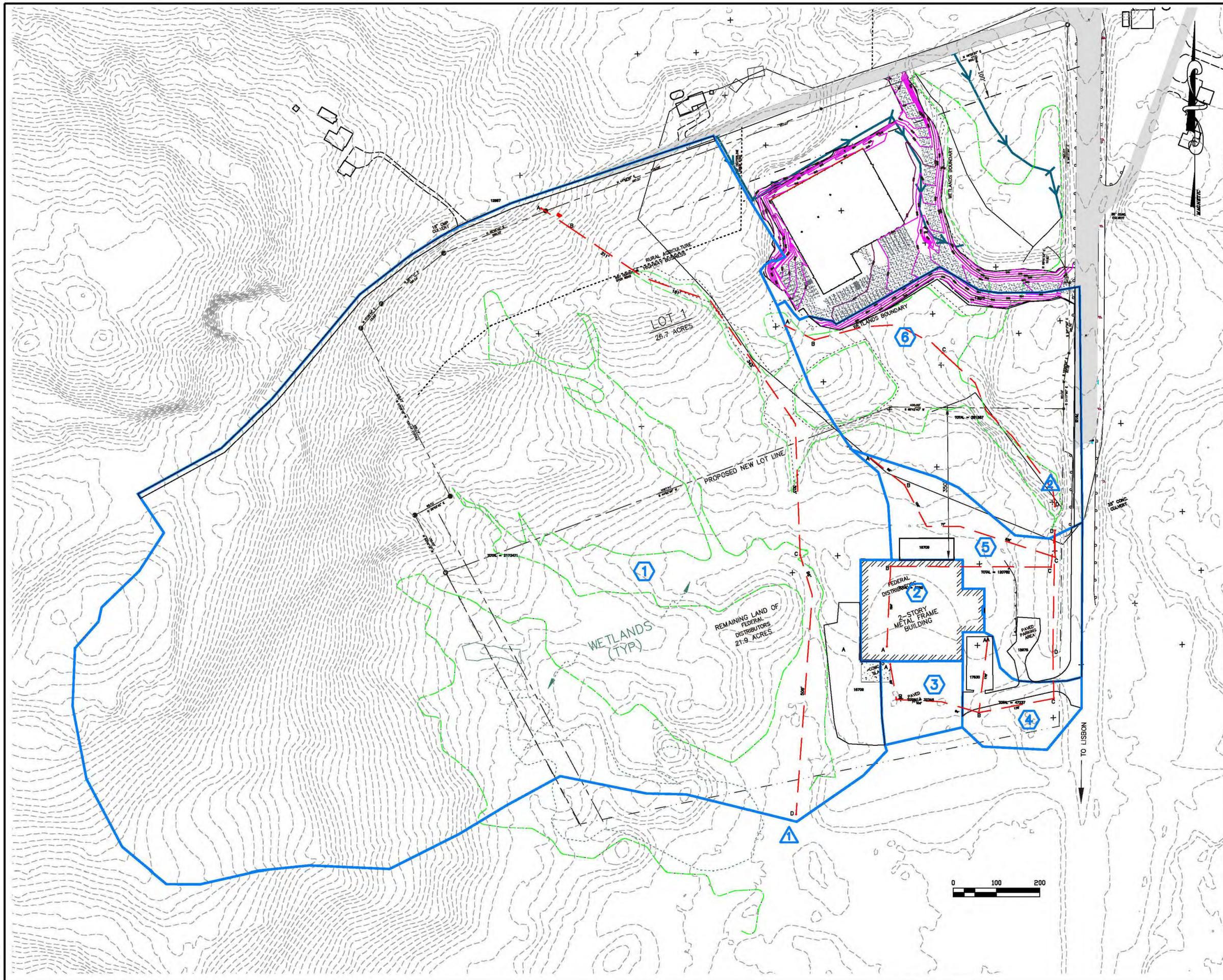
D. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION, MAINTENANCE AND INSPECTION OF EROSION CONTROL MEASURES UNTIL ALL AREAS ARE WELL ESTABLISHED.

E. WHERE THESE REGULATIONS DIFFER FROM OTHER EROSION/SEDIMENTATION NOTED, THE MOST STRINGENT SHALL BE USED.

F. PLANT PERMANENT VEGETATION AND INSTALL STRUCTURES AS SOON AS POSSIBLE FOR THE PURPOSE OF SOIL STABILIZATION AND REVEGETATION.
NOTE: ALL EROSION CONTROL MEASURES, SILT FENCES, STONE CHECK DAMS, HAY BALES, ETC., ARE TO BE REMOVED AFTER VEGETATION IS WELL ESTABLISHED AND WILL NO LONGER BE EASILY SUSCEPTIBLE TO EROSION.
NOTES:
1. ALL EROSION CONTROL MEASURES, SILT FENCES-STONE CHECK DAMS-HAY BALES-ETC., ARE TO BE REMOVED AFTER VEGETATION IS WELL ESTABLISHED AND WILL NO LONGER BE EASILY SUSCEPTIBLE TO EROSION.
2. EROSION FENCE LOCATION IS ALSO THE LIMIT OF CONSTRUCTION AND THE LIMIT OF SITE CLEARING, CONTRACTOR TO RETAIN ALL VIABLE TREES POSSIBLE.

FOUNDATION FILL MATERIALS PER SPEC:





LEGEND:

- SUBAREA OUTLINE
- TC FLOW PATH
- REACH
- SUBCATCHMENT ID
- CULVERT / ANALYSIS POINT



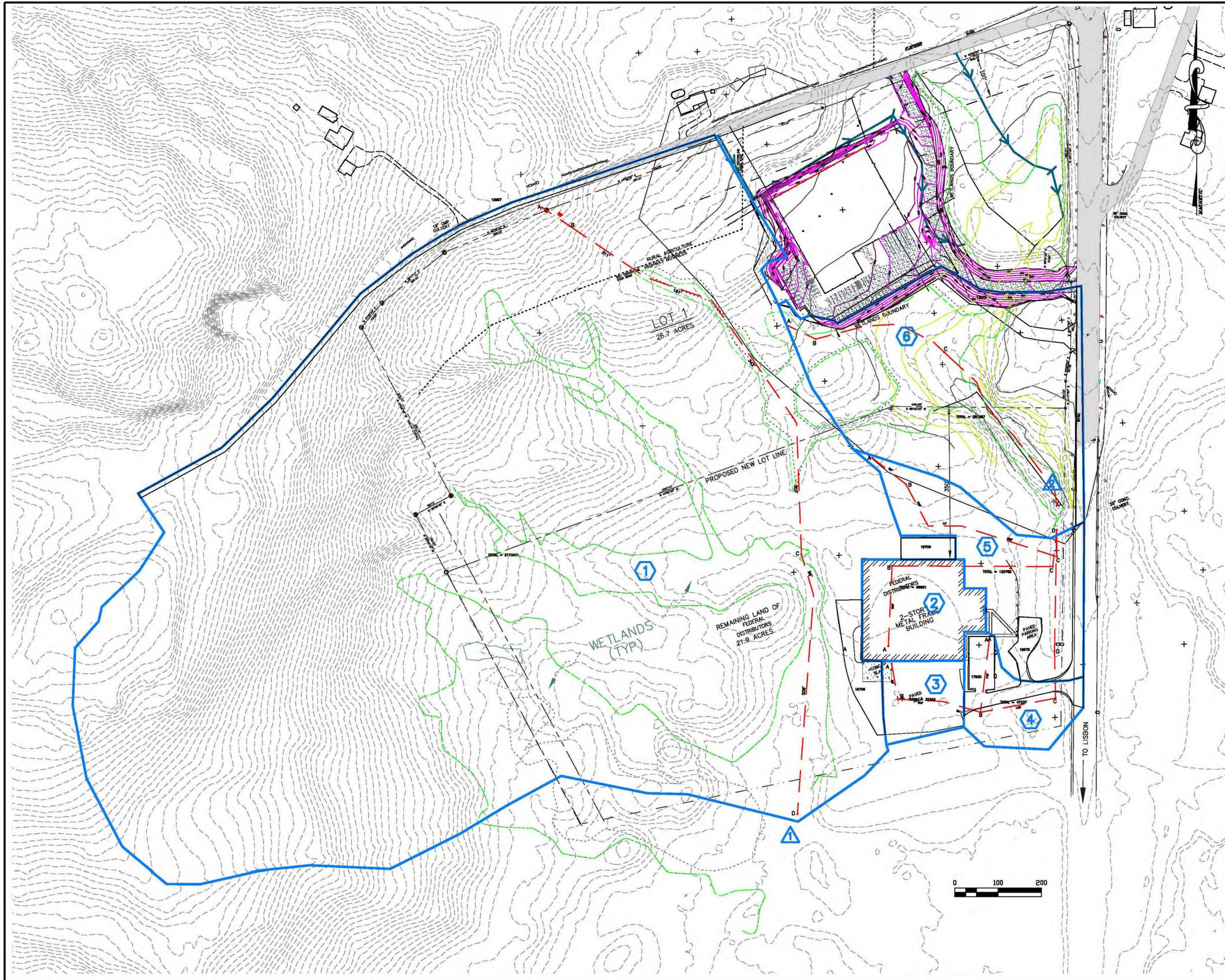
1. 10-08-14 SUBMITTED TO CLIENT CYN

EXISTING CONDITIONS DRAINAGE PLAN

FEDERAL DISTRIBUTORS SITE EXPANSION

SITELINES, PA
 ENGINEERS • PLANNERS • SURVEYORS
 LANDSCAPE ARCHITECTS
 8 CUMBERLAND STREET, BRUNSWICK, ME 04011
 207.725.1200 www.sitelinespa.com

FIELD WK:	SCALE: 1"=100'	SHEET:
DRN BY: DEPT	JOB #: 2714	DR1
CH'D BY: CYN	MAP/LOT:	
DATE: 10-7-14	FILE: 2714-DRAINAGE	



LEGEND:

- SUBAREA OUTLINE
- TC FLOW PATH
- REACH
- SUBCATCHMENT ID
- CULVERT / ANALYSIS POINT



1. 10-08-14 SUBMITTED TO CLIENT CYN

**DEVELOPED CONDITIONS
DRAINAGE PLAN**

FEDERAL DISTRIBUTORS SITE EXPANSION

SITELINES, PA
 ENGINEERS • PLANNERS • SURVEYORS
 LANDSCAPE ARCHITECTS
 8 CUMBERLAND STREET, BRUNSWICK, ME 04011
 207.725.1200 www.sitelinespa.com

FIELD WK:	SCALE: 1"=100'	SHEET:
DRN BY: DEPT	JOB #: 2714	DR2
CH'D BY: CYN	MAP/LOT:	
DATE: 10-7-14	FILE: 2714-DRAINAGE	



CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: October, 2014
RE: October 27, 2014 Planning Board Agenda Item V(a)

Disposition of 10 College Street

Pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code, the board shall review and make a recommendation to the city council with regard to the acquisition and disposition of all public ways, lands, buildings and other municipal facilities.

The Board may recall at their June 9, 2014 meeting voting unanimously to send a favorable recommendation to City Council for the acquisition of 10 College Street for one dollar (\$1.00). They also voted 5-1 not to sell the property at that time, in part due to the City's need for a sewer easement across the property, along with possible consideration of land banking the property to support future development in this area. The City Council followed with a vote to acquire the property. The City now owns the property as of September 18, 2014.

Staff is now requesting a recommendation from the Board to sell the property. It is a vacant lot of approximately 3,920 square feet with 55' of frontage located in the Downtown Residential (DR) district. The property is nonconforming with respect to the minimum lot size of 5,000 SF in the DR district; therefore, it is undevelopable as single lot (without obtaining a variance from the Board of Appeals, an unlikely outcome). As a result, this lot is of most value to an abutting property. In addition, Public Works has noted there is an 1865 document that identifies a sewer line crossing the property, but it does not identify a width or exact location. They believe it is likely an old brick sewer, but they do not have a good description of the type or size. Public Works recommendation is to have a general easement that indicates a sewer line crosses the property which would need to be located and avoided before improvements are located and constructed on the property. This will likely limit the use of the parcel to surface parking or green space to immediate abutters. Therefore, upon a favorable action and per city policy, the City will offer for sale or lease the property to abutting property owners.

ACTIONS NECESSARY:

- Make a motion pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code to send a favorable recommendation to the City Council for the disposition of the 10 College Street.



City of Lewiston
Planning & Code Enforcement
Gil Arsenault, Director



MEMORANDUM

To: Ed Barrett, City Administrator
City Clerk's Office
City Council Members
Mayor Robert E. Macdonald

From: David Hediger

Date: June 12, 2014

Subject: Planning Board Action: 10 College Street

The Planning Board took the following action at their public meeting held on June 9, 2014 regarding the acquisition and disposition of property at 10 College Street.

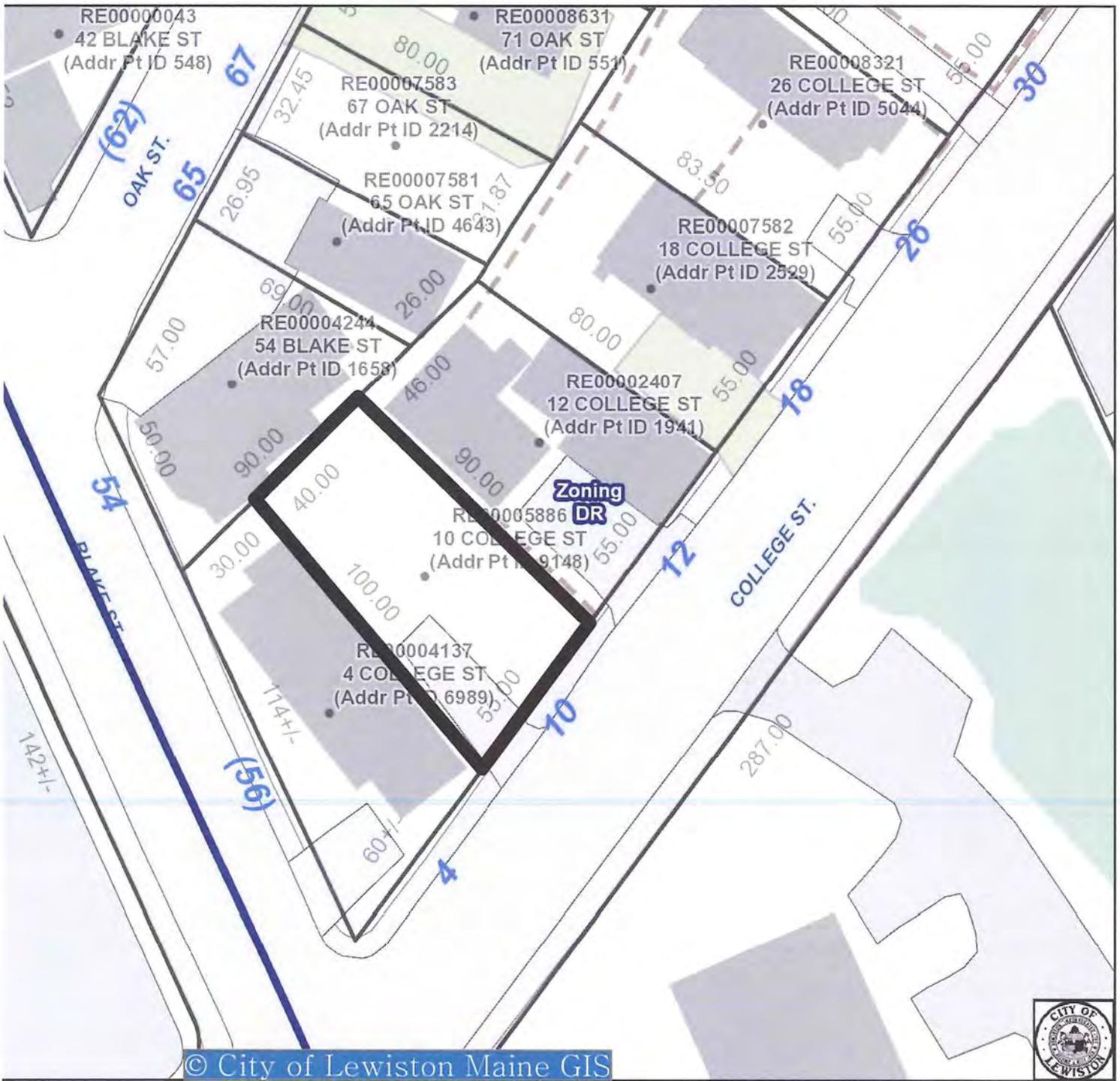
The following motions were made:

MOTION: by **Walter Hill** to send a favorable recommendation to City Council for the acquisition of 10 College Street for one dollar (\$1.00). Second by **Kevin Morissette**.
VOTED: 6-0 (Passed).

MOTION: by **Michael Marcotte** to send a negative recommendation to City Council for the disposition (sale of) 10 College Street. Second by **Walter Hill**.
VOTED: 5-1 (Passed; Bruce Damon Opposed). The motion by the Board is a recommendation not to sell the property at this time, in part due to the City's need for a sewer easement across the property and possible consideration of land banking the property to support future development in this area.

c: Planning Board Members

The City of Lewiston is an EOE. For more information, please visit our website at www.ci.lewiston.me.us and click on the Non-Discrimination Policy.







CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: October 23, 2014
RE: October 27, 2014 Planning Board Agenda Item V(b)

Disposition of 154 Blake Street

Pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code, the board shall review and make a recommendation to the city council with regard to the acquisition and disposition of all public ways, lands, buildings and other municipal facilities.

Staff has been directed to request a recommendation from the Planning Board for the disposition of 154 Blake Street. This vacant lot of 5,000 square feet with 50' frontage is located in the Downtown Residential (DR) district. The lot is developable upon meeting the space and bulk requirements of the DR district. The site previously contained a four story, eight unit structure that the city acquired and demolished 1994 through a tax lien foreclosure.

A request was made in December 2010 from the abutter at 158 Blake Street to acquire the property. At that time, Administration decided not to sell the property. That same abutter has again asked to acquire the property and Administration has now directed staff to ask the Planning Board and City Council as to whether the city should dispose of the property. Should it be determined that the property be sold, Administration is recommending the sale of the property be subject to a "Request For Proposal" (RFP) per the City Policy. This process would require that the bidder identify what they are willing to pay, what the property would be used for, and what improvements will be made. This will allow the city to evaluate factors other than price and potentially negotiate a tradeoff between what we would be paid and the improvements that would be made.

ACTIONS NECESSARY:

1. Make a motion pursuant to Article VII, Section 4(h) of the Zoning and Land Use Code to send a favorable recommendation to the City Council for the disposition of the 154 Blake Street.

1:360

20

WALNUT ST.

21

RE00009985

29 WALNUT ST
(Addr Pt ID 22013)

RE00009985
93 PIERCE ST
(Addr Pt ID 7736)

17

50.00

50.00

50.00

RE00007418

21 WALNUT ST
(Addr Pt ID 7855)

RE00005376
97 PIERCE ST
(Addr Pt ID 8258)

100.00

RE00005249
17 WALNUT ST
(Addr Pt ID 5419)

50.00

RE00005802
101 PIERCE ST
(Addr Pt ID 8248)

50.00

50.00

100.00

100.00

RE00008716
154 BLAKE ST
(Addr Pt ID 2139)

154

50.00

RE00007342
158 BLAKE ST
(Addr Pt ID 5272)

300.00

BLAKE ST.

158

50.00

65.00

166

65.00

RE00003124
166 BLAKE ST
(Addr Pt ID 1612)

100.00





David Hediger

Subject: FW: City owned land lot at 154 Blake St in Lewiston
Attachments: Abasheikh Letter to City of Lewiston.tif

From: saciidciise258@aol.com [<mailto:saciidciise258@aol.com>]

Sent: Wednesday, September 24, 2014 10:41 PM

To: Phil Nadeau

Subject: City owned land lot at 154 Blake St in Lewiston

Dear Mr. Nadeau,

Attached please find a copy of the letter to the City of Lewiston. In 2010 my family asked the city of Lewiston to purchase an unused land owned by the city which is next to our building in 158 Blake St. I was busy with my election campaign in Somalia, but Mr. Barrett verbally suggested me at that time to use the land and pay an affordable rent. It was not an option for us because we want to invest the land and make it suitable for a garage, that is to pave the land and fence it. Mr. Phil, we are kindly asking you through your personal recommendation to intervene this matter. Thank you very much for your consideration.

With kind regards,

Said Mohamud

Shukri Abasheikh
240 Lisbon Street
Lewiston, ME 04240
(207) 786-8754

December 29, 2010

Edward A. Barrett
City Administrator
Office of the City Administrator
27 Pine Street, Lewiston ME 04240

Re: Purchase of City Land owned lot at 154 Blake Street in Lewiston

Dear City Administrator Mr. Barrett,

I recently purchased a four unit building at 158 Blake Street in Lewiston. I am planning to move my family into one apartment and to rent the remaining apartments. This building doesn't offer much space for parking. I know that it will be much difficult to rent an apartment without offering parking space for tenants. There is unused land at 154 Blake Street next to my building. I was informed that this empty land is owned by the city of Lewiston.

Mr. Barrett, I am requesting that the city of Lewiston to allow me to purchase the land at 154 Blake Street in Lewiston. I would like to offer the city \$9000 for that land. I think it is a fair price when considering today's real estate market. I want to use this land for parking and storage purposes.

I look forward to your response and thank you for considering my request. For more information, please feel free to contact me on the number mentioned above.

Thank you very much for your time, efforts, and consideration. I wish you good health, prosperity, and happy New Year.

Sincerely,

Shukri Abasheikh

