

CITY OF LEWISTON
PLANNING BOARD MEETING
Monday, August 27, 2012 – 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) An application submitted by Sebago Technics, Inc. on behalf of Central Maine Medical Center to consolidate and pave their existing parking areas located at the intersections of Main Street, High Street and Holland Street.
- b) An application submitted by Sebago Technics on behalf of Val's Root Beer Restaurant for the construction of four new coin operated batting cages.

V. OTHER BUSINESS:

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

VI. READING OF THE MINUTES: Motion to adopt the draft minutes from the August 13, 2012 meeting.

VII. ADJOURNMENT



CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: August 23, 2012
RE: August 27, 2012 Planning Board Agenda Item IV(A)

An application submitted by Sebago Technics, Inc. on behalf of Central Maine Medical Center to consolidate and pave their existing parking areas located at the intersections of Main Street, High Street and Holland Street.

Sebago Technics on behalf of Central Maine Medical Center (CMMC) has submitted an application for the construction of an 88 space parking area on approximately 1.33 acres at 121 Holland Street. This area is bounded by Main Street, Holland Street, and High Street. The area currently accommodates approximately 50-55 vehicles on unimproved gravel lots. The proposed improvements will replace the gravel lots resulting in approximately 11,004 square feet of new paved impervious area with a net increase of approximately 33-38 spaces. This property is located in the Centreville district in which hospitals are a permitted use.

The City of Lewiston has been reviewing expansions at the CMMC campus in Lewiston pursuant to the provisions for delegated site law review authority under Title 38 MRSA, Section 489-A. The most recent expansion of the campus was for the emergency and laboratory department and that application was approved by the City in August 2009. In that review process, the City was granted jurisdiction from Maine Department of Environmental Protection (DEP) for site law review. CMMC is now proposing parking lot improvements that will result in approximately 11,004 square feet of new impervious area. This additional impervious along with the 2009 emergency and laboratory department will result in approximately 4.4 acres of impervious area since 1971. Therefore, this project is being considered pursuant to Article XIII, Section 4 of the Zoning and Land Use Code subject to delegated review from DEP.

Staff has worked closely with the applicant in effort to address the applicable review criteria of which Sebago Technics has addressed (see August 22, 2012 letter from Sebago to David Hediger). Staff notes the following:

- Site improvements will result in the elimination of four curb cuts: two on Main Street and two on Holland Street. Access to the parking area will be from an existing adjacent parking lot on the CMMC campus. Elimination of curb cuts is always encouraged in effort to improve traffic safety.
- Stormwater from the site must be treated for quality because this is an amendment to a site law regulated project. The proposed improvements have been reviewed to the satisfaction of Public Works. Staff recommends as a condition of approval to be noted on the plan that written verification by a professional engineer is provided to the city that all stormwater improvements have been completed in accordance with the approved plan.

- In addition to the DEP stormwater requirements, this project is disturbing an area greater than one acre located in an urbanized area. Therefore, the project is subject to additional post construction stormwater management standards contained in Article XIII, Section 15 of the Zoning and Land Use Code. Specifically, the applicant is required to provide a performance guarantee with respect to the ongoing maintenance, repair, or replacement of the sites stormwater system. Staff recommends as a condition of approval to be noted on the plan that prior to completion and/or use of the proposed parking area a performance guarantee must be provided to the city's satisfaction in accordance with Article XIII, Section 15(e)(3) of the Zoning and Land Use Code.
- Article XIII, Section 4(t) requires a statement referencing financial capacity to complete the project. Staff is confident CMMC has funding to complete the project as proposed and the applicant has requested that evidence of financial capacity be considered as a condition of approval for this project. Staff supports this request.

Police and Fire have expressed no concerns. Planning and Code Enforcement recommend approval, finding the applicant has addressed the applicable review criteria of the Zoning and Land Use Code, including Article XIII, Section 4 with the following conditions:

1. Upon completion and/or prior to use of the proposed parking area, written verification by professional engineer is provided to the city that all stormwater improvements have been completed in accordance with the approved plan. This must be noted on the plan.
2. Upon completion and/or prior to use of the proposed parking area a performance guarantee must be provided to the city's satisfaction in accordance with Article XIII, Section 15(e)(3) of the Zoning and Land Use Code. This must be noted on the plan.
3. Prior the issuance of any permits to commence construction, evidence of financial capacity must be provided to the city.
4. Prior the issuance of any permits to commence construction, final authority from DEP granting site law review jurisdiction to the City must be provided.

ACTIONS NECESSARY

1. Make a motion to consider an application submitted by Sebago Technics, Inc. on behalf of Central Maine Medical Center to consolidate and pave their existing parking areas located at the intersections of Main Street, High Street and Holland Street.;
2. Make a determination that the application is complete;
3. Make a motion 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 Central Maine Medical Center for the construction of an 88 space parking area on approximately 1.33 acres at 121 Holland Street, subject to any concerns raised by the Planning Board or staff.



August 22, 2012
06456

Mr. David Hediger
City Planner/Deputy Director, Planning and Code Enforcement
City of Lewiston
27 Pine Street
Lewiston, Maine 04240

Site Plan Application: Central Maine Medical Center
Parking Lot Expansion: High Street, Main Street, and Holland Street

Dear Dave:

On behalf of Central Maine Medical Center (CMMC), Sebago Technics, Inc. (STI) is pleased to submit the attached Site Plan Application for proposed improvements to the CMMC parking area bounded by Main Street, High Street, and Holland Street. This area is currently a mix of paved, gravel and lawn parking areas. CMMC would like to improve the appearance and function of this area and is preparing to reconfigure and pave the area into a formal parking area with curbing, striping, drainage infrastructure, and landscaping. As part of the project, two curb cuts on Main Street and two curb cuts on Holland Street will be closed off. All traffic will be directed to access the parking area from High Street and from the Holland Street curb cut alongside the existing parking garage.

The area proposed for re-development occupies approximately 1.33 acres of land bounded by Main Street, High Street, and Holland Street. The area of anticipated site improvements is developed with paved parking areas, gravel parking areas, and lawn areas with underground utilities including, storm drainage, underground electrical utilities, site lighting and underground telecommunication utilities.

This area currently provides parking for approximately 50-55 vehicles. The existing gravel parking, located along Main Street, is un-striped and vehicles park perpendicular to Main Street, creating their own drive aisle. A portion of the existing southern paved parking area will be reconfigured to provide access and circulation through the proposed parking configuration. Recently, the northwestern portion of this area has been utilized for parking by contractors working on the CMMC expansion project. The proposed project will provide for an 88 space paved parking area, resulting in a net increase of approximately 33-38 spaces in this area.

In order to close off the curb cuts on Holland and Main Streets while not dead ending the proposed parking area, an access loop was provided to ensure circulation through the proposed parking area. As a result of this layout, there is the opportunity to construct additional spaces. Additionally, this increase in parking is anticipated to help elevate parking issues in the winter when plowing results in the loss of spaces.

As part of the 2009 CMMC expansion project, a traffic assessment was prepared by STI to evaluate the anticipated traffic from the expansion. This expansion did not create any significant new patient traffic or any significant increases in hospital staff, patient beds or parking demand. The report indicated that there would be no overall expected increase in new hospital trips and a Maine Department of Transportation (MaineDOT) Traffic Movement Permit (TMP) would not be required. The current project is intended to upgrade an existing parking area to City standards and will not generate any new trips.

Proposed site improvements will include the construction of an 88-space paved parking area with associated drainage infrastructure and landscaping. The majority of the existing parking area will be re-graded, paved and striped, and will include new bituminous curbing and bituminous sidewalks. The existing retaining wall and concrete stairs situated along Main Street will be removed and replaced with sloped grassed areas. Street trees will be provided along the Main Street and Holland Street frontages. Access to the proposed parking area will be provided through the existing parking access points (adjacent to the parking garage) along High Street and Holland Street. As previously mentioned, two curb cuts on Holland Street and two curb cuts on Main Street will be closed off with curbing and sidewalk improvements.

As you are aware, this section of Main Street was resurfaced in the summer of 2009 and is subject to a moratorium. Closing off the two existing curb cuts on Main Street, will require work within the right-of-way (ROW) in order to install new granite curbing. This will most likely require saw cutting the pavement to install the curbing. Based on staff review comments we received on August 15, 2012, it is our understanding that the City will allow CMMC to close off the curb cuts in Main Street.

Development on the CMMC campus is subject to Maine Department of Environmental Protection (Maine DEP) Site Location Permits issued for the High Street / parking garage improvements in 1996 (Maine DEP Orders # L-18380-26-B-D, L-18380-26-C-D) and the High Street Parking Lots in 1999 (Maine DEP # L-18380-19-D-D). All previous drainage design and Site Location Applications have been reviewed by the City of Lewiston under their delegated review. Based on staff review comments, it is our understanding that the City will review the stormwater design under their delegated review authority.

The proposed project creates approximately 11,004 square feet of new impervious surface that requires stormwater quality treatment under Maine DEP Chapter 500 Stormwater Management Rules. In order to satisfy the Chapter 500 requirements, a small underdrained filtration basin has been designed in the northern portion of the proposed parking area to provide both water quality and quantity treatment. Runoff from the site is tributary to the City's drainage/sewer infrastructure located in either Main Street or Holland Street. A stormwater narrative is included within this submission.

We have included our staff review comment response letter with this submission. We would respectfully request that the evidence of financial capacity, as well as the requirements of Article XIII, Section 15 of the Zoning and Land Use Code, related to the Post-Construction Stormwater Management Plan, be added as condition of approval.

We look forward to discussing this project with the Planning Board at their next meeting. If you have any questions or require any additional information, please let me know.

Sincerely,

SEBAGO TECHNICS, INC.



Anthony P. Panciocco, P.E.
Senior Project Engineer

APP:app/kn
Enc.

cc: Daniel Bickford, Central Maine Medical Center

August 22, 2012
06456

Mr. David Hediger, City Planner/Deputy Director
Planning and Code Enforcement
City of Lewiston
27 Pine Street
Lewiston, ME 07240

Site Plan Application: Central Maine Medical Center
Parking Lot Expansion: High Street, Main Street, and Holland Street
Response to Review Comments dated August 15, 2012

Dear David:

We are writing on behalf of Central Maine Medical Center (CMMC) to address review comments related to our July 18, 2012 application for improvements to the CMMC parking area bounded by Main Street, High Street, and Holland Street. Included in this letter are responses to the review comments that we have received to date via email on August 16, 2012. The review comments include the following:

- Planning and Code Enforcement comments from David Hediger dated August 15, 2012.
- Lewiston Department of Public Services comments from Ryan Barnes, P.E. Project Engineer dated August 6, 2012.

Our plans have been revised to address the City's comments. The following items present the text of the latest plan review comments in italics, followed by our response.

Department of Planning and Code Enforcement Review Comments:
Mr. David Hediger dated August 15, 2012

1. *Sheet 4: consideration should be given to landscaping parking lot islands that are currently proposed to be striped for no parking in effort to reduce impervious area.*

In order to facilitate snow removal from the proposed parking area, the applicant intends to stripe the islands as proposed in the plan set.

2. *Sheet 4: light poles: detail and/or note should be provided for pole height (recommended not to exceed 25' high) with cut off fixtures.*

A note has been added to Sheet 4 indicating that all light poles shall not exceed 25' in height and must also utilize cut off fixtures.

3. *Evidences of technical and financial capacity must be provided.*

We have included a technical capacity narrative in the attached application. We would respectfully request that the evidence of financial capacity requirement be considered as a condition of approval for this project.

4. *Application must speak to requirements to Article XIII, Section 15 of the Zoning and Land Use Code. Note the performance guarantee section and staff's recommendation of option 1, said document to be recorded upon development review approval. Requirements of this section should be noted on appropriate plans and within the stormwater report.*

We would respectfully request that this requirement also be considered as a condition of approval for the project.

5. *Prior to a certificate of occupancy being issued, written verification by a professional engineer must be provided to the city that all stormwater water improvements have been completed in accordance with the approved plan.*

Noted.

6. *Cover sheet must contain signature block and expiration language of Article XIII, Section 11.*

The requested signature block and notes have been added to the cover sheet.

7. *Staff will be processing application for delegated review authority from DEP.*

Noted.

Lewiston Department of Public Services Comments

Ryan Barnes, P.E. dated August 6, 2012

1. *The City will allow CMMC to close the existing curb cuts on Main Street, the work shall be kept to 24" from the face of curb.*

Noted.

2. *Please provide an erosion control plan, one is referenced in the Stormwater Management Plan but was not included in the plan set.*

The Erosion Control Plan and Winter Erosion Control Plan are indicated on Sheet 6 of the plan set.

3. *Where will snow be stockpiled on the site? Snow shall not be placed in the Under Filter Pond.*

The applicant is aware that snow shall not be placed in the filter pond. CMMC typically hauls snow off-site in an effort to maintain their parking areas.

4. *Please provide a plan indicating the increase in impervious area, based on the survey plan and proposed plan it appears that the increase is greater than the 11,004 s.f. indicated.*

A plan summarizing the impervious area calculation is attached for review.

5. *The slope of the stormdrain between CB 3 and the existing CB is 0.95% not 0.5%.*

The slope of storm drain has been updated on Sheet 5 of the plan set.

6. *The bottom of curb elevation in the north east corner of the parking lot is 244.0 which is the same elevation as the proposed catchbasin with a high spot between them. This area needs to be regraded to avoid a puddle in the parking stall.*

The area has been revised to provide positive drainage from the northeast corner of the parking lot to CB-1.

7. *The bottom of curb elevation at CB2 is listed as 245.0 and the rim elevation is listed as 244.0 at the same location. Please revise the plan to indicate the correct elevation.*

The bottom of curb elevation at CB-2 has been revised to reflect a bottom of curb elevation of 244.0 and a top of curb elevation of 244.50.

8. *Sheet 7 - Revise typical trench section to include crushed stone backfill over all pipes in the City Right of Way.*

The typical trench section has been revised to reflect crushed stone backfill over pipes in the City Right-of-Way. Additionally, a note has been added to this detail indicating the requirement for crushed stone backfill.

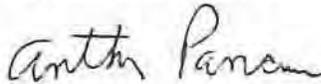
9. *Sheet 7 - Revise the vertical granite curb detail to include concrete fill around the curb within the City Right of Way.*

The vertical granite curb detail has been revised to reflect concrete fill around the curb within the City Right-of-Way.

We are hopeful that these responses and the revised plans address the comments received to date. We look forward to meeting with the Planning Board on August 27, 2012 to discuss the proposed parking area improvements in detail. Please contact me if you have any questions or require additional information.

Sincerely,

SEBAGO TECHNICS, INC.



Anthony P. Panciocco, PE
Sr. Project Engineer

APP:app/kn

Enc.

cc: Daniel Bickford, Director of Facilities, Central Maine Medical Center

SEBAGO

T E C H N I C S

DEVELOPMENT REVIEW APPLICATION

for the

Central Maine Medical Center
Parking Expansion
Main Street, High Street, and Holland
Street
Lewiston, Maine

on behalf of

Central Maine Medical Center
300 Main Street
Lewiston Maine

August 2012

Table of Contents

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- Exhibit 2 Project Maps
- Exhibit 3 Right, Title, Interest
- Exhibit 4 Stormwater Management Plan
- Exhibit 5 Technical and Financial Capacity

Exhibit 1

Application for Development Review



Development Review Application

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



PROJECT NAME: Main Street, High Street, Holland Street Parking Area

PROPOSED DEVELOPMENT ADDRESS: 370, 374, 376 Main St., 89, 117, 121 Holland St.

PARCEL ID#: 194-10, 194-12, 194-13, 194-14, 194-16, 194-17, 194-18

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

PROJECT DESCRIPTION: Central Maine Medical Center is proposing to consolidate and pave their existing parking areas located at the intersections of Main Street, High Street and Holland Street.

CONTACT INFORMATION:

Applicant

Name: Central Maine Medical Center
c/o Daniel Bickford, Regional Director of
Engineering and Facilities
Address: 300 Main Street, Lewiston, ME
Zip Code
Work #: 207-795-7973
Cell #: N/A
Fax #:
Home #: N/A
Email: BickfoDa@cmhc.org

Property Owner

Name: SAME

Address:
Zip Code
Work #:
Cell #:
Fax #:
Home #:
Email:

Project Representative

Name: SAME

Address:

Zip Code
Work #:
Cell #:
Fax #:
Home #:
Email:

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

Name: Anthony Panciocco
c/o Sebago Technics, Inc.
Address: 75 John Roberts Rd., Suite 1A
South Portland, Maine
Zip Code: 04106-6963
Work #: 207-200-2078 (direct)
Cell #: N/A
Fax #: 207-856-2206
Home #: N/A
Email: tpanciocco@sebagotechnics.com

PROJECT DATA

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

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	26,946	sq. ft.
Proposed Total Paved Area	37,950	sq. ft.
Proposed Total Impervious Area	37,950	sq. ft.
Proposed Impervious Net Change	11,004	sq. ft.
Impervious surface ratio existing	46	% of lot area
Impervious surface ratio proposed	65	% of lot area

BUILDING AREA/LOT

COVERAGE

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

ZONING

Existing	Centerville District (CV)
Proposed, if applicable	n/a

LAND USE

Existing	parking area/landscaping
Proposed	parking area/landscaping

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units	n/a
Proposed Number of Residential Units	n/a
Subdivision, Proposed Number of Lots	n/a

PARKING SPACES

Existing Number of Parking Spaces	50-55
Proposed Number of Parking Spaces	88
Required Number of Parking Spaces	n/a
Number of Handicapped Parking Spaces	n/a

ESTIMATED COST OF PROJECT

\$165,000

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	174,240	sq. ft.
Proposed Disturbed Area	58,250	sq. ft.
Proposed Impervious Area	11,004	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 (Since July 1, 1997) n/a passenger car equivalents (PCE)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) n/a 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 Centerville (CL) zoning district.

2. Parcel Area: 1.33 acres / 58,250 square feet(sf).

Regulations Required/Allowed Provided

Min Lot Area	<u>none / n/a</u>	
Street Frontage	<u>25 / n/a</u>	
Min Front Yard	<u>none / n/a</u>	
Min Rear Yard	<u>none / n/a</u>	
Min Side Yard	<u>none / n/a</u>	
Max. Building Height	<u>150 / n/a</u>	
Use Designation	<u>parking / parking</u>	
Parking Requirement	<u>1 space/ per - square feet of floor area</u>	
Total Parking:	<u>- / -</u>	
Overlay zoning districts (if any):	<u>n/a / n/a</u>	<u>/</u>
Urban impaired stream watershed?	<u>YES/NO If yes, watershed name <u>no</u></u>	

DEVELOPMENT REVIEW APPLICATION SUBMISSION

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

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

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

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

Auburn: www.auburnmaine.org under City Departments/ Planning and Permitting/Land Use Division/Zoning Ordinance
Lewiston: <http://www.ci.lewiston.me.us/cleris/ordinances.htm> Refer to Appendix A of the Code of Ordinances

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

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

Signature of Applicant: 	Date: <u>7/2/12</u>
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Development Review Checklist

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



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

PROJECT NAME: Main, Street, High Street and Holland Street Parking Area

PROPOSED DEVELOPMENT ADDRESS and PARCEL #: Same

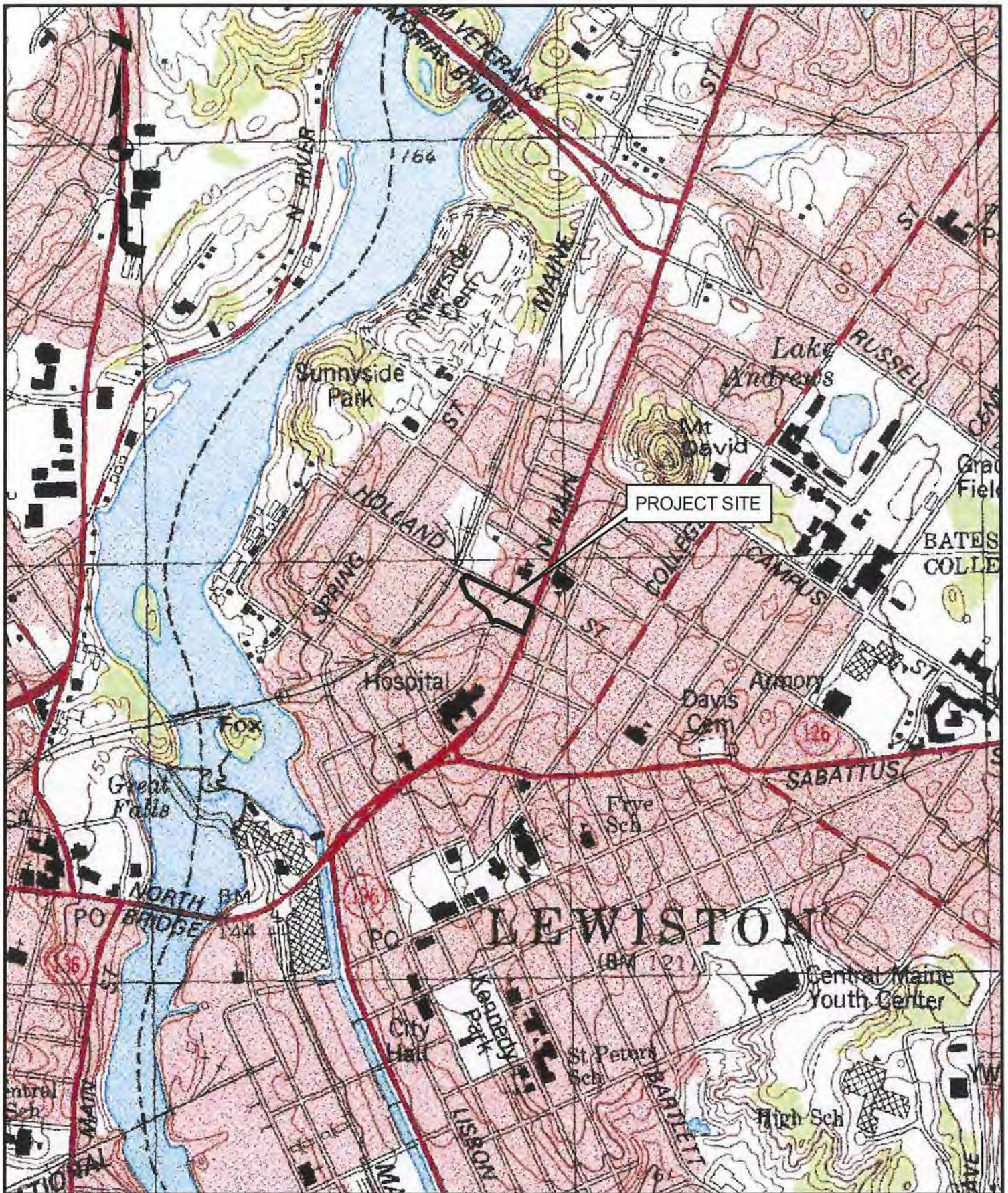
Required Information		Check Submitted		Applicable Ordinance	
		Applicant	Staff	Lewiston	Auburn
Site Plan					
	Owner's Names/Address	✓			
	Names of Development	✓			
	Professionally Prepared Plan	✓			
	Tax Map or Street/Parcel Number	✓			
	Zoning of Property	✓			
	Distance to Property Lines	✓			
	Boundaries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

	Planting Schedule	✓			
Stormwater & Erosion Control Plan					
	Compliance w/ chapter 500	✓			
	Show Existing Surface Drainage	✓			
	Direction of Flow	✓			
	Location of Catch Basins, etc.	✓			
	Drainage Calculations	✓			
	Erosion Control Measures	✓			
	Maine Construction General Permit	✓			
	Bonding and Inspection Fees				
	Post-Construction Stormwater Plan	✓			
	Inspection/monitoring requirements				
	Third Party Inspections (Lewiston only)				
Lighting Plan					
	Full cut-off fixtures				
	Meets Parking Lot Requirements				
Traffic Information					
	Access Management	✓			
	Signage	✓			
	PCE - Trips in Peak Hour	N/A			
	Vehicular Movements	N/A			
	Safety Concerns	N/A			
	Pedestrian Circulation	✓			
	Police Traffic				
	Engineering Traffic				
Utility Plan					
	Water	N/A			
	Adequacy of Water Supply	N/A			
	Water main extension agreement				
	Sewer	N/A			
	Available city capacity	N/A			
	Electric	✓			
	Natural Gas	N/A			
	Cable/Phone	N/A			
Natural Resources					
	Shoreland Zone	N/A			
	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		N/A			
	Verify/Check				
	Covenants/Deed Restrictions				
	Offers of Conveyance to City				
	Association Documents				
	Location of Proposed Streets & Sidewalks				
	Proposed Lot Lines, etc.				
	Data to Determine Lots, etc.				
	Subdivision Lots/Blocks				
	Specified Dedication of Land				
Additional Subdivision Standards		N/A			
	Single-Family Cluster (Lewiston only)				
	Multi-Unit Residential Development (Lewiston only)				
	Mobile Home Parks				
	Private Commercial or Industrial Subdivisions (Lewiston only)				
	PUD (Auburn only)				
A jpeg or pdf of the proposed site plan					
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving					

Exhibit 2

Project Maps



Sebago Technics

Engineering Expertise You Can Build On



One Chabot Street 250 Goddard Road - Suite B
 Westbrook, ME 04098-1339 Lewiston, ME 04240
 Tel (207) 856-0277 Tel (207) 783-5656

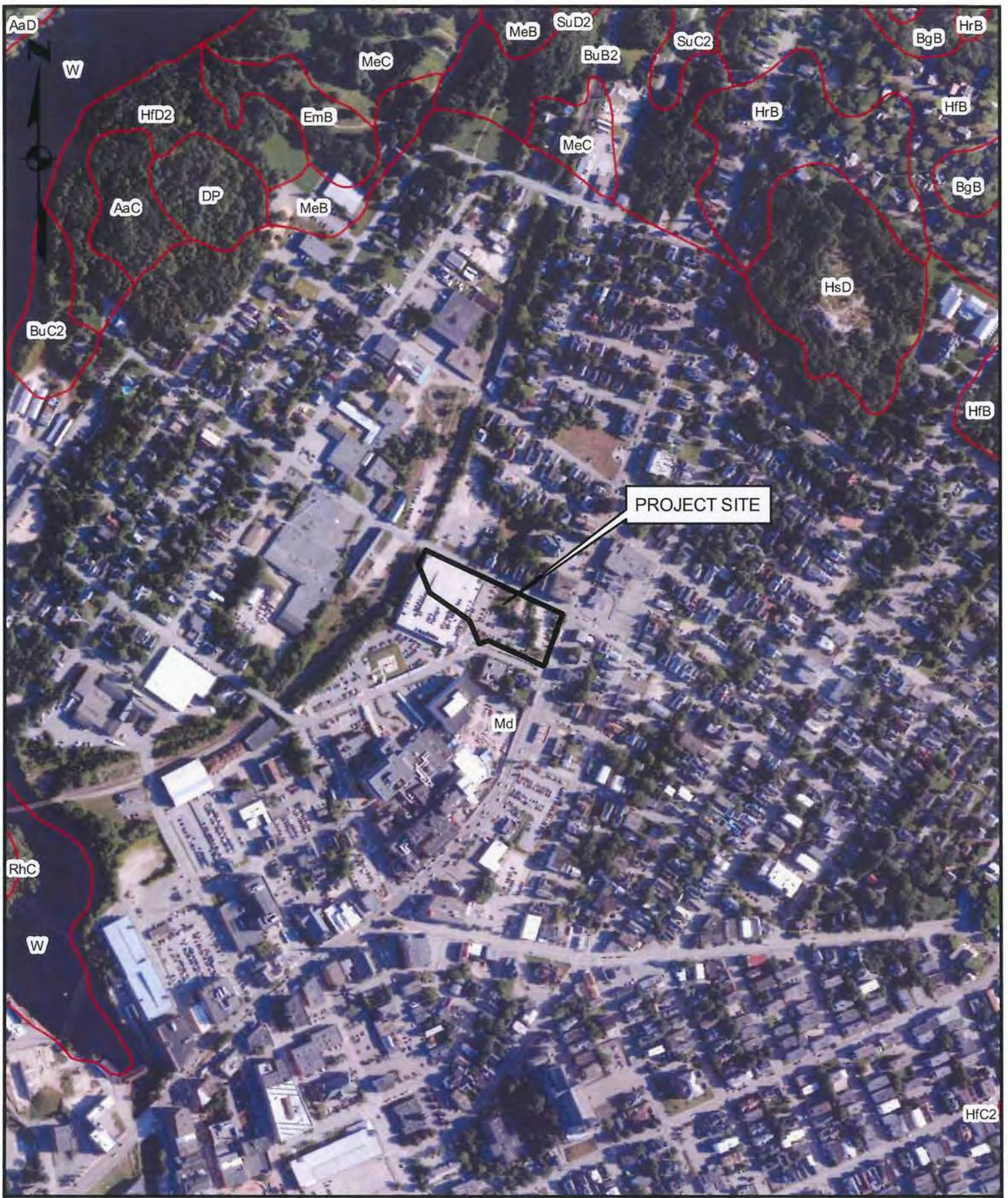
WWW.SEBAGOTECHNICS.COM

SITE LOCATION MAP OF CMMC PARKING LOT EXPANSION

LOCATION:
 MAIN STREET & HOLLAND STREET
 LEWISTON, MAINE

INFORMATION:
 USGS QUADRANGLE
 (LEWISTON)
 PROJECT BOUNDARY FROM CITY OF LEWISTON

SCALE: 1" = 1,000'
 DATE: 03/07/12



Sebago Technics

Engineering Expertise You Can Build On

One Chabot Street 250 Goddard Road - Suite B
 Westbrook, ME 04098-1339 Lewiston, ME 04240
 Tel (207) 856-0277 Tel (207) 783-5656

WWW.SEBAGOTECHNICS.COM



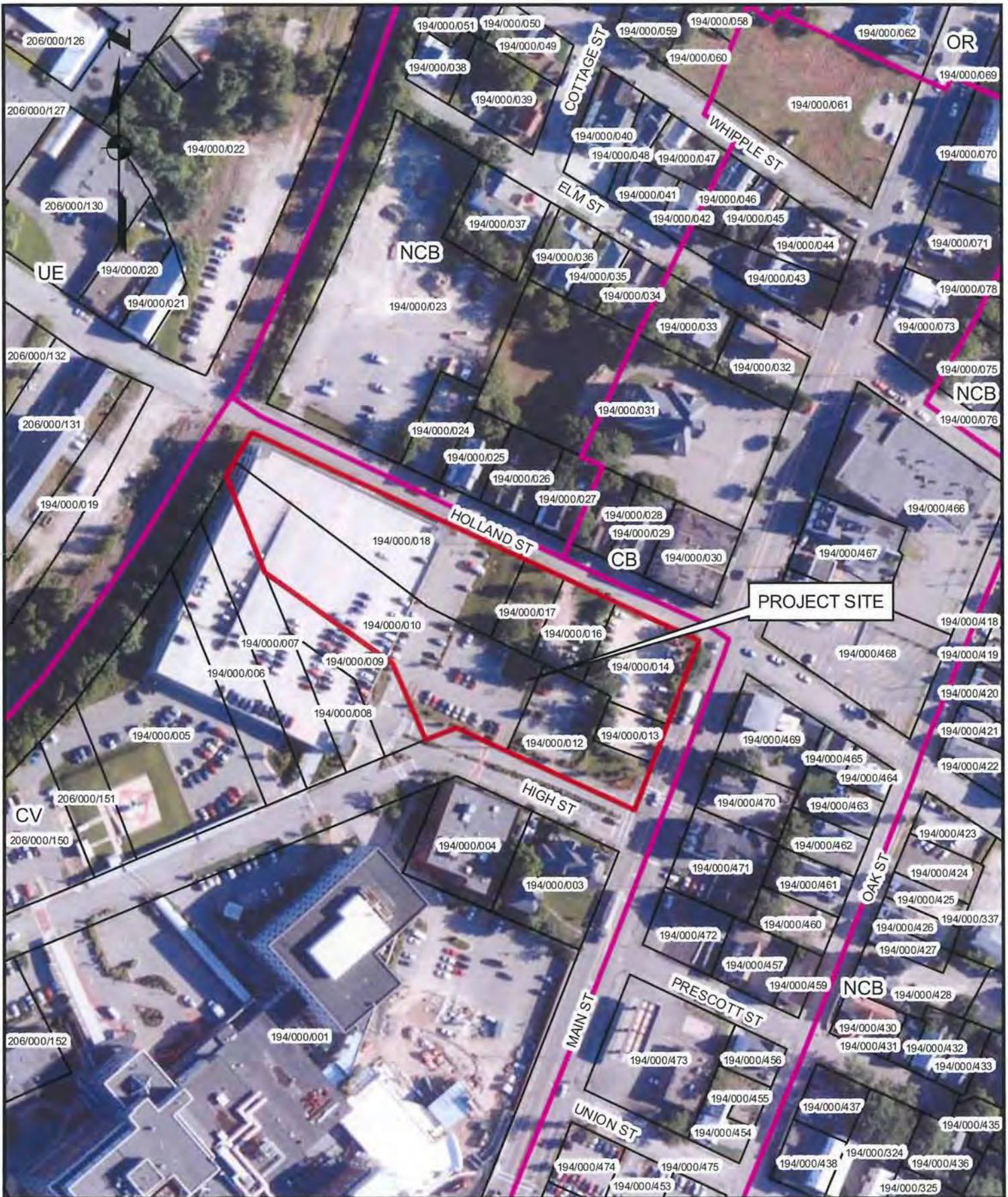
SOILS MAP OF CMMC PARKING LOT EXPANSION

LOCATION:
MAIN STREET & HOLLAND STREET
LEWISTON, MAINE

INFORMATION:
IMAGERY ACQUIRED SUMMER 2010
SOURCE: BING IMAGERY
SOILS DATA FROM NRCS DATABASE

SCALE: 1" = 500'

DATE: 03/07/12



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One Chabot Street 250 Goddard Road - Suite B
 Westbrook, ME 04098-1339 Lewiston, ME 04240
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TAX/ZONING MAP OF CMMC PARKING LOT EXPANSION

LOCATION:
 MAIN STREET & HOLLAND STREET
 LEWISTON, MAINE

INFORMATION:
 IMAGERY ACQUIRED SUMMER 2010
 SOURCE: BING IMAGERY
 MAPPING DATA FROM CITY OF LEWISTON

SCALE: 1" = 153.36'

DATE: 03/07/12

Exhibit 3

Right, Title, Interest

DEED

CENTRAL MAINE HEALTHCARE CORPORATION, a Maine non-profit corporation with an office in the City of Lewiston, Androscoggin County and State of Maine, for consideration paid, hereby grants to CENTRAL MAINE MEDICAL CENTER, a Maine non-profit corporation with a mailing address of 300 Main Street, Lewiston, Maine 04240, with QUITCLAIM COVENANT, the following described property:

Beginning at the southerly corner of the High Street Parking Condominium as depicted on the Leasehold Condominium Plat and Plan prepared by A.R.C.C. Land Surveyors Inc. dated March 27, 2003, and recorded in the Androscoggin County Registry of Deeds on March 27, 2003, in Plan Book 42, Page 194 (said corner being located at the terminus of a "walkway" leading from High Street to said condominium);

THENCE South 38° 6' 43" West to a point in the northerly sideline of High Street to the TRUE POINT OF BEGINNING;

THENCE North 51° 54' 5" West along other land of this Grantor to land now or formerly of Maine Central Railroad;

THENCE running northeasterly along the land now or formerly of Maine Central Railroad to a capped iron rod set in the assumed southwesterly sideline of Holland Street;

THENCE South 51° 54' 5" East along the southwesterly sideline of Holland Street to a point;

THENCE running South 36° 29' 19" West along other land of this Grantor to a corner in the northwesterly sideline of High Street;

THENCE following said course along the northwesterly sideline of High Street 91 feet to a corner in the sideline of High Street;

THENCE South 80° 20' 22" West along the northerly sideline of High Street to the point of beginning.

IN WITNESS WHEREOF, Central Maine Real Estate Management Corporation has caused this instrument to be signed in its name and behalf and by Charles T. Orne, its Treasurer, thereunto duly authorized, this 26 day of June, 2008.

Signed, Sealed and Delivered

CENTRAL MAINE
HEALTHCARE CORPORATION

By: 
Charles T. Orne, Treasurer

Witness

NO MAINE R.E.
TRANSFER TAX PAID

STATE OF MAINE
ANDROSCOGGIN, ss.

Personally appeared before me this 26 day of June, 2008, the above-named Charles T. Orne, Treasurer of Central Maine Healthcare Corporation, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said corporation.

Sandra Magnusson

Notary Public/Attorney-at-Law

Print/type name: _____

My commission expires: _____

SEAL

SANDRA MAGNUSSON
Notary Public, Maine *2014*
My Commission Expires December 21, ~~2007~~

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ANDROSCOGGIN COUNTY
Tina K. Chaurand
REGISTER OF DEEDS

MAINE SHORT FORM WARRANTY DEED

We **RODOLPHE G. LAVERDIERE** and **CARMEL M. LAVERDIERE**, both of Lewiston, Androscoggin County, Maine, for consideration paid, hereby grant to **CENTRAL MAINE HEALTHCARE CORPORATION** of 300 Main Street, Lewiston, Androscoggin County, Maine 04240, with **WARRANTY COVENANTS**, a certain lot or parcel of land situated in Lewiston, Androscoggin County, Maine, being more particularly described on the attached Exhibit A.

ALSO HEREBY conveying all rights, easements and privileges pertaining thereto.

Being the same premises described in the deed of Margaret M. Theberge et al. to Rodolphe G. Laverdiere and Carmel M. Laverdiere dated August 17, 1964, and recorded in the Androscoggin County Registry of Deeds in Book 922, Page 260 (121 Holland Street), and the deed of Rodolphe G. Laverdiere to Rodolphe G. Laverdiere and Carmel M. Laverdiere dated March 2, 1981, and recorded in Book 1507, Page 131 (117 Holland Street).

IN WITNESS whereof, the said Carmel and Rodolphe G. Laverdiere have caused this instrument to be signed and sealed this 13 day of May, 2004.

MAINE REAL ESTATE
TRANSFER TAX PAID

Witness

Rodolphe G. Laverdiere
Rodolphe G. Laverdiere

CARMEL M. LAVERDIERE

Witness

By: Rodolphe G. Laverdiere
Rodolphe G. Laverdiere,
as Attorney-in-Fact pursuant to Power of
Attorney dated August 6, 2001

STATE OF MAINE
COUNTY OF ANDROSCOGGIN, SS.

Personally appeared before me this 13 day of May, 2004, the above-named Rodolphe G. Laverdiere, Individually and as Attorney-in-Fact for Carmel M. Laverdiere, acknowledged the foregoing instrument to be his free act and deed and free act and deed in said capacity.

M. J. Rattey
Notary Public/Attorney-at-Law

N. J. Rattey
Type or Print Name

My commission expires: _____

Exhibit A
(117 Holland Street)

A certain lot or parcel of land, in Lewiston, Androscoggin County, Maine, together with the buildings thereon, on the southwesterly side of Holland Street,

Commencing at the most northerly corner of land now or formerly owned by L. W. Gilman;

THENCE north thirty-one and one-half (31-1/2) degrees east on line of land formerly owned by a widow Millett, one hundred and one (101) feet, more or less, to the southerly line of said Holland Street;

THENCE south fifty-two (52) degrees east on line of said Street, fifty (50) feet;

THENCE south thirty four and one-half (34-1/2) degrees west, one hundred (100) feet, more or less, to land formerly owned by Abiel M. Jones;

THENCE north fifty-two (52) degrees west, fifty (50) feet to the point of beginning.

Being the same premises described in the deed of Rodolphe G. Laverdiere to Rodolphe G. Laverdiere and Carmel M. Laverdiere dated March 2, 1981, and recorded in the Androscoggin County Registry of Deeds in Book 1507, Page 131.

Exhibit A
(121 Holland Street)

A certain lot or parcel of land, with the buildings thereon, situated in Lewiston, County of Androscoggin, State of Maine, bounded and described as follows:

Commencing on the westerly side of Holland Street at the southeasterly corner of the lot of land now or formerly owned by J. B. Sawyer;

THENCE running westerly on said Sawyer lot one hundred (100) feet to land now or formerly of C. W. Curtis;

THENCE southerly at nearly a right angle by said Curtis land, by land now or formerly owned by the heirs of Daniel Garcelon, and by land now or formerly of J. L. H. Cobb about sixty-eight (68) feet to land now or formerly of the heirs of Hezekiah Chase;

THENCE at nearly a right angle easterly by said Chase lot one hundred (100) feet to Holland Street;

THENCE northerly by said Holland Street sixty-four (64) feet to the point begun at.

Being the same premises described in the deed of Margaret M. Theberge and Mary L. Goodridge to Rodolphe G. Laverdiere and Carmel Laverdiere, dated August 17, 1964, recorded in Book 922, Page 260 of the Androscoggin County Registry of Deeds.

ATC File No. 04-0575
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ANDROSCOGGIN COUNTY
REGISTER OF DEEDS
P O Box 3500
Lewiston, Maine 04240

ANDROSCOGGIN COUNTY
Tina M. Chausard
REGISTER OF DEEDS

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, THAT SWEETSER-CHILDREN'S HOME, a Maine corporation ("Grantor"), in consideration of one dollar and other valuable consideration paid by CENTRAL MAINE HEALTHCARE CORPORATION, a Maine corporation with a mailing address of 76 High Street, P.O. Box 98, Lewiston, Maine 04240, the receipt whereof it does hereby acknowledge, does hereby give, grant, bargain, sell and convey unto said Central Maine Healthcare Corporation, its successors and assigns forever, a certain lot or parcel of land situated in Lewiston, County of Androscoggin, State of Maine, bounded and described as follows:

MAINE REAL ESTATE
TRANSFER TAX PAID

Beginning at a granite monument set in the ground at the intersection of the northwesterly line of Main Street with the northeasterly line of High Street and thence the line runs in a northwesterly direction along said line of High Street a distance of ninety (90) feet to an iron pin set in the ground; thence the line runs in a northeasterly direction a distance of fifty-nine (59) feet, more or less, to an iron pin set in the ground; thence the line runs in a southeasterly direction a distance of eighty-eight and five hundredths (88.05) feet, more or less, to a granite monument set in the ground in said line of Main Street; thence the line runs in a southeasterly direction along said line of Main Street fifty-nine (59) feet to the point of beginning.

Meaning and intending to convey and hereby conveying the same premises conveyed by Merton N. Flanders to the Grantor herein by deed dated June 30, 1977 and recorded in the Androscoggin County Registry of Deeds in Book 1280, Page 42.

ALSO hereby conveying all rights, easements, privileges, and appurtenances belonging to the premises hereinabove described.

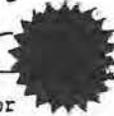
BX 2336 PG006

WITNESS my hand and seal this 4th day of November, 1988

Magale C. P. Hunt

SWEETSER-CHILDREN'S HOME, a
Maine corporation

By: *Aubrey C. Thomas*
Aubrey C. Thomas
Its Executive Director



STATE OF MAINE
COUNTY OF ANDROSCOGGIN, SS.

November 4, 1988

Then personally appeared the above-named Aubrey C. Thomas as Executive Director of Sweetser-Children's Home and acknowledged the foregoing instrument to be his free act and deed in said capacity and the free act and deed of said corporation.

Before me,

Norman J. Rathey
Notary Public/Attorney-at-Law

Norman J. Rathey
Printed Name

9680P

ANDROSCOGGIN, SS
RECEIVED NOV -7 1988
AT 9 H. - M. A. M.

ATTEST:

REGISTER

Skellon, T. O. Rathey

MAINE SHORT FORM WARRANTY DEED

JOHN D. GRIFFIN and NANCY GRIFFIN, being husband and wife, both of Lewiston, Androscoggin County, Maine, for consideration paid, hereby grant to CENTRAL MAINE HEALTHCARE CORPORATION, a Maine non-profit corporation with a principal place of business in Lewiston, Androscoggin County, Maine, with WARRANTY COVENANTS, a certain lot or parcel of land situated in Lewiston, Androscoggin County, Maine, being more particularly described on the attached Exhibit A.

Also hereby conveying all rights, easements, privileges and appurtenances pertaining thereto.

Being the same premises described in the deed of Laurence Marie Fortier to John D. Griffin and Nancy Griffin dated October 16, 1972, and recorded in the Androscoggin County Registry of Deeds in Book 1063, Page 70.

WITNESS our hands and seals this 22 day of December, 2006.

MAINE REAL ESTATE
TRANSFER TAX PAID

Paula King
Witness

John D. Griffin
John D. Griffin

Witness

Nancy Griffin
Nancy Griffin

STATE OF MAINE
COUNTY OF ANDROSCOGGIN, SS.

Personally appeared before me this 22 day of December, 2006, the above-named Nancy Griffin and acknowledged the foregoing instrument to be her free act and deed.

N. J. Rattey
Notary Public/Attorney-at-Law

N. J. Rattey
Type or Print Name

My commission expires: _____

EXHIBIT A

A certain lot or parcel of land with the buildings thereon situated in Lewiston, in the County of Androscoggin, bounded and described as follows:

Commencing on the westerly side of Main Street at the southeasterly corner of land now or formerly owned by Julia A. Ambrose;

THENCE southerly on the westerly line of Main Street fifty (50) feet;

THENCE westerly on a line parallel with the northerly line of High Street to land of J. L. H. Cobb;

THENCE northerly on the line of said Cobb's land to now or formerly land of Julia A. Ambrose;

THENCE easterly on line of said Ambrose land to the point begun at.

Being the same premises described in the deed of Laurence Marie Fortier to John D. Griffin and Nancy Griffin dated October 16, 1972, and recorded in the Androscoggin County Registry of Deeds in Book 1063, Page 70.

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ANDROSCOGGIN COUNTY
Tina K. Chouard
REGISTER OF DEEDS

WARRANTY DEED
(Maine Short Form)

J. NORMAN ALLEN and DIANE L. ALLEN, being husband and wife, of Lewiston, Androscoggin County, Maine, for consideration paid, hereby grant to CENTRAL MAINE REAL ESTATE MANAGEMENT CORPORATION, a Maine corporation with a place of business at 364 Main Street, Lewiston, Maine, with WARRANTY COVENANTS, two (2) certain lots or parcels of land with the buildings thereon situated in Lewiston, Androscoggin County, Maine, being more particularly described on the attached Exhibit A.

Also hereby conveying all rights, easements, privileges and appurtenances belonging to the premises described herein.

WITNESS our hands and seals this 5 day of October, 1999.

MAINE REAL ESTATE
TRANSFER TAX PAID

Witness

J. Norman Allen
J. Norman Allen

Witness

Diane L. Allen
Diane L. Allen

STATE OF MAINE
ANDROSCOGGIN, ss.

Personally appeared before me, this 5 day of October, 1999, the above named J. Norman Allen and Diane L. Allen, and acknowledged the foregoing instrument to be their free act and deed.

N. S. Rattey
Notary Public Attorney-at-Law

Type or Print Name

H:\DOCS\RATTEY\CMHC\ALLEN-WD.WPD

all

4327/273

EXHIBIT A

Parcel One:

A certain lot or parcel of land with the buildings thereon situated in Lewiston, Androscoggin County, Maine, bounded and described as follows:

BEGINNING at the intersection of the southwesterly line of Holland Street, with the northwesterly line of Main Street; thence running northwesterly by the said southwesterly line of Holland Street, a distance of one hundred seventeen and eight tenths (117.8) feet to land now or formerly of Clarence Ward; thence southwesterly at an internal angle of 86 degrees and 11 minutes, a distance of one hundred and one (101) feet to land now or formerly of Henry Free; thence southeasterly at an internal angle of 94 degrees and 47 minutes, a distance of thirty-eight (38) feet to land now or formerly of Honora Curran; thence northeasterly at an internal angle of 85 degrees and 15 minutes, a distance of fifty (50) feet to the northwesterly corner of said Curran land; thence southeasterly at an internal angle of 271 degrees, a distance of seventy-nine and six tenths (79.6) feet to the said northwesterly line of Main Street; thence northeasterly by the said northwesterly line of Main Street and at an internal angle of 89 degrees and 12 minutes, a distance of forty-seven and five tenths (47.5) feet to the POINT OF BEGINNING.

Being the same premises described in the deed of Louis Collet and Rita L. Collet to J. Norman Allen and Diane L. Allen dated November 20, 1964 and recorded in the Androscoggin County Registry of Deeds in Book 931, Page 182.

Parcel Two:

A certain lot or parcel of land with the buildings thereon situated in Lewiston, Androscoggin County, Maine, bounded and described as follows:

BEGINNING on the northwesterly line of Main Street at the southerly corner of land now or formerly owned by Thomas J. and John W. Higgins; thence northwesterly by said Higgins land a distance of seventy-nine and six tenths (79.6) feet; thence southwesterly by said Higgins land a distance of fifty (50) feet to land now or formerly of Henry A. Free; thence southeasterly by said Free's land a distance of five and ninety-two hundredths (5.92) feet; thence southwesterly by said Free's land a distance of ten (10) feet to land formerly owned by one Stevens; thence southeasterly by said Stevens land, a distance of seventy-four and thirty-three hundredths (74.33) feet to the said northwesterly line of Main Street; thence northeasterly by the said northwesterly line of Main Street, a distance of sixty (60) feet to the POINT OF BEGINNING.

Being the same premises described in the deed from Mechanics Savings Bank to J. Norman Allen and Diane L. Allen dated November 12, 1980 and recorded in the Androscoggin County Registry of deeds in Book 1493, Page 59.

H:\DOCS\RATTEY\CMHC\ALLEN-EX.WPD

ANDROSCOGGIN COUNTY
REGISTER OF DEEDS
Jeanne A. Stangor

MAINE SHORT FORM WARRANTY DEED

We RODOLPHE G. LAVERDIERE and CARMEL M. LAVERDIERE, both of Lewiston, Androscoggin County, Maine, for consideration paid, hereby grant to CENTRAL MAINE HEALTHCARE CORPORATION of 300 Main Street, Lewiston, Androscoggin County, Maine 04240, with WARRANTY COVENANTS, a certain lot or parcel of land situated in Lewiston, Androscoggin County, Maine, being more particularly described on the attached Exhibit A.

ALSO HEREBY conveying all rights, easements and privileges pertaining thereto.

Being the same premises described in the deed of Margaret M. Theberge et al. to Rodolphe G. Laverdiere and Carmel M. Laverdiere dated August 17, 1964, and recorded in the Androscoggin County Registry of Deeds in Book 922, Page 260 (121 Holland Street), and the deed of Rodolphe G. Laverdiere to Rodolphe G. Laverdiere and Carmel M. Laverdiere dated March 2, 1981, and recorded in Book 1507, Page 131 (117 Holland Street).

IN WITNESS whereof, the said Carmel and Rodolphe G. Laverdiere have caused this instrument to be signed and sealed this 13 day of May, 2004.

MAINE REAL ESTATE
TRANSFER TAX PAID

Witness

Rodolphe G. Laverdiere
Rodolphe G. Laverdiere

CARMEL M. LAVERDIERE

Witness

By: Rodolphe G. Laverdiere
Rodolphe G. Laverdiere,
as Attorney-in-Fact pursuant to Power of Attorney dated August 6, 2001

STATE OF MAINE
COUNTY OF ANDROSCOGGIN, SS.

Personally appeared before me this 13 day of May, 2004, the above-named Rodolphe G. Laverdiere, individually and as Attorney-in-Fact for Carmel M. Laverdiere, acknowledged the foregoing instrument to be his free act and deed and free act and deed in said capacity.

N.J. Rattey
Notary Public/Attorney-at-Law

N.J. Rattey
Type or Print Name

My commission expires: _____

Exhibit A
(117 Holland Street)

A certain lot or parcel of land, in Lewiston, Androscoggin County, Maine, together with the buildings thereon, on the southwesterly side of Holland Street,

Commencing at the most northerly corner of land now or formerly owned by L. W. Gilman;

THENCE north thirty-one and one-half (31-1/2) degrees east on line of land formerly owned by a widow Millett, one hundred and one (101) feet, more or less, to the southerly line of said Holland Street;

THENCE south fifty-two (52) degrees east on line of said Street, fifty (50) feet;

THENCE south thirty four and one-half (34-1/2) degrees west, one hundred (100) feet, more or less, to land formerly owned by Abiel M. Jones;

THENCE north fifty-two (52) degrees west, fifty (50) feet to the point of beginning.

Being the same premises described in the deed of Rodolphe G. Laverdiere to Rodolphe G. Laverdiere and Carmel M. Laverdiere dated March 2, 1981, and recorded in the Androscoggin County Registry of Deeds in Book 1507, Page 131.

Exhibit A
(121 Holland Street)

A certain lot or parcel of land, with the buildings thereon, situated in Lewiston, County of Androscoggin, State of Maine, bounded and described as follows:

Commencing on the westerly side of Holland Street at the southeasterly corner of the lot of land now or formerly owned by J. B. Sawyer;

THENCE running westerly on said Sawyer lot one hundred (100) feet to land now or formerly of C. W. Curtis;

THENCE southerly at nearly a right angle by said Curtis land, by land now or formerly owned by the heirs of Daniel Garcelon, and by land now or formerly of J. L. H. Cobb about sixty-eight (68) feet to land now or formerly of the heirs of Hezekiah Chase;

THENCE at nearly a right angle easterly by said Chase lot one hundred (100) feet to Holland Street;

THENCE northerly by said Holland Street sixty-four (64) feet to the point begun at.

Being the same premises described in the deed of Margaret M. Theberge and Mary L. Goodridge to Rodolphe G. Laverdiere and Carmel Laverdiere, dated August 17, 1964, recorded in Book 922, Page 260 of the Androscoggin County Registry of Deeds.

ATC File No. 04-0575
H:\DOCS\RATTEY\CMHC\117-123 Holland\Exhibit A - 123 Holland.wpd

ANDROSCOGGIN COUNTY
Skilton, Taintor & Abbott
P. O. Box 3500
Lewiston, Maine 04243-3500

ANDROSCOGGIN COUNTY
Tina M. Chouard
REGISTER OF DEEDS

Exhibit 4

Stormwater Management Plan

SIBAGO

ENGINEERS

ARCHITECTS

STORMWATER MANAGEMENT PLAN

for the

Central Maine Medical Center
Parking Expansion

Main Street, High Street, and Holland Street
Lewiston, Maine

on behalf of

Central Maine Medical Center
300 Main Street
Lewiston Maine

August 2012

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EXECUTIVE SUMMARY

On behalf of Central Maine Medical Center (CMMC), Sebago Technics, Inc. has prepared this Stormwater Management Plan to address the expansion of the parking area located on the land situated between Main Street, High Street, and Holland Street in Lewiston, Maine.

The project is comprised of the expansion and re-configuration of an existing parking area. The project will include new bituminous pavement, bituminous curbing and drainage infrastructure. The area proposed for re-development occupies approximately 58,250 square feet of land fronting on Main Street, High Street, and Holland Street in Lewiston. The area of anticipated site improvements is developed with paved parking areas, gravel parking areas and landscaping/lawn areas. The project will result in a new bituminous parking area for approximately 88 vehicles. Access to the new lot will be provided by the existing curb cuts on High Street and Main Street.

As part of the stormwater management for the project, a proposed underdrained filter basin will be installed to treat the runoff from the projects new impervious surfaces in accordance with the City of Lewiston's Land Use Ordinance requirements and the Maine Department of Environmental Protection (Maine DEP) Chapter 500 stormwater management rules.

STORMWATER MANAGEMENT PLAN

Central Maine Medical Center Parking Lot Expansion Lewiston, Maine

I. Introduction

This Stormwater Management Plan has been prepared to address the potential impacts associated with this project due to the proposed modification of stormwater runoff characteristics. The stormwater management controls that are outlined in this plan have been designed to best suit the proposed development and to comply with applicable regulatory requirements.

II. Existing Conditions

Central Maine Medical Center's (CMMC's) existing parking areas and landscaping areas occupies approximately 58,250 square feet (s.f.) of land fronting on Main Street, High Street, and Holland Street in Lewiston, Maine. This portion of the hospital campus is entirely developed, and is the area proposed for re-development.

A. Land Cover

The project site is completely developed with paved parking, gravel parking and landscaping. The redevelopment of the existing parking areas and landscaping areas will result in an increase in impervious land cover. In general existing drainage patterns are maintained.

B. Site Topography

Slopes on the site are generally flat to moderate, with slopes ranging from 2% to 5% within the existing parking areas. There is a retaining wall and two curb cuts along the Main Street frontage, as well as two existing curb cuts along the Holland Street frontage. These curb cuts will be closed off as part of this project.

C. Surface Water Features

Runoff from the project site is tributary to the drainage infrastructure located in Main Street, High Street, and Holland Street. Drainage tributary to Holland Street is first directed to an existing catch basin on the CMMC property which includes a 36" storage piping with an 8" outlet pipe to the Holland Street System. The Holland Street System is a combined stormwater/sewer system.

D. Soils

Soil characteristics were obtained from the Soil Conservation Service (SCS) Medium Intensity Soil Survey of Androscoggin County. Soils identified on the site (or within close proximity) are identified below in Table 1. The soils consist entirely of Made Land. For stormwater modeling purposes, we have assumed a Hydrologic Soil Group (HSG) of "C" for both the pre- and post-development models.

Soil Type	Symbol	HSG	K Factor
Made Land	Md	C	—

The hydrologic soil group (HSG) designation is based on a rating of the relative permeability of a soil, with group "A" being extremely permeable such as coarse sand, to group "D" having low permeability such as clay.

E. Historic Flooding

There are no apparent flooding problems associated with this site. The Federal Emergency Management Agency (FEMA) does not identify a flood hazard area on the project site (FEMA Community Panel Number 230004 0010 B, dated September 28, 1979, City of Lewiston, Maine, Androscoggin County Panel 10 of 15.

III. Proposed Development

The area of anticipated site improvements is developed with paved parking lots, gravel parking areas, landscaping, driveways, and underground utilities including, storm drainage, underground electrical utilities, and site lighting.

The project will expand the footprint of the existing paved parking area to the north/northwest, encompassing some areas that are currently lawn covered.

The project will collect runoff from the proposed paved areas and direct the runoff to the existing drainage infrastructure located in Main Street, High Street, and Holland Street.

The project will generally maintain the existing drainage patterns of the site.

A. Alterations to Land Cover

The development will increase the site impervious area coverage by approximately 11,004 s.f. (0.25 acres). This net increase in impervious area is a result of various alterations of land cover (pervious landscape/lawn area converted to impervious paved surface area and impervious paved areas converted to pervious landscaped/lawn areas).

The entire project site is currently developed; approximately 58,250 (1.33) acres of land will be disturbed during the construction of this development, of which 1.33 acres will still be considered "Developed Area" as defined by the Maine DEP Chapter 500 Stormwater Rules.

IV. Downstream Ponds and Waterbodies

Stormwater from the existing site area is tributary to the drainage system located within Main Street, High Street, and Holland Street. Once stormwater enters this system, it travels westerly where it connects to the municipal stormwater infrastructure in High Street. The runoff is then conveyed, via the municipal system, along Hammond Street, Lowell Street and Chapel Street and discharges to the Androscoggin River. Currently, there are no stormwater treatment measures in place to provide water quality treatment for stormwater exiting the site.

Stormwater from Holland Street is collected and enters the City's combined sewer system at this location.

V. Regulatory Requirements

A. City of Lewiston, Maine

Article XIII, Appendix A, paragraph 4f of the City of Lewiston Code of Ordinances discusses the performance standards required for Stormwater Management for New Development. As stated in this section, "All projects including one (1) acre or more of disturbed land shall meet the requirements of the Maine Stormwater Management Law, 38 M.R.S.A. Section 420-D, or its successor, and regulations promulgated there under, as amended." This ultimately refers to Maine DEP Chapter 500 regulations. These requirements are outlined below in Section B.

The current CMMC campus has Maine DEP Site Location Permits issued for High Street/parking garage improvements in 1996 (Maine DEP Orders # L-18380-26-B-D, L-18380-26-C-D) and High Street Parking Lots in 1999 (Maine DEP # L-18380-19-D-D). All previous drainage design and Site Location applications have been reviewed by the City of Lewiston under its delegated review. We anticipate this project will be reviewed under the City's delegated review authority.

B. Maine Department of Environmental Protection (Maine DEP)

Maine DEP Rule Chapters 500 and 502 describe stormwater management requirements for new development projects. These rules describe performance standards divided into five major categories: Basic Standards, General Standards, Phosphorous Standards, Urban Impaired Stream Standards, and Flooding Standards. The following sections describe how this project will address these stormwater management performance standards.

Basic Standards: A project must meet basic standards if it disturbs an area greater than one (1) acre. As this development has an existing Site Location Permit, it is required to meet the basic standards. These standards include various erosion and sedimentation controls, inspection and maintenance procedures, and general housekeeping requirements. These performance standards have been addressed in the "Inspection, Maintenance, and Housekeeping Plan" (Attachment A), and the Erosion Control Plan on Sheet 6 of the plan set. Please refer to these plans for more detailed information.

General Standards: A project is subject to the general standards if it results in the creation of one (1) or more acres of impervious area or developed areas greater than five (5) acres. Though this project will create only 11,004 s.f. of new impervious area it is subject to general standards as it is a modification of an existing Site Location Permit. The General standards require that a minimum of 95% of all impervious areas and at least 80% of the proposed developed areas are designed to be tributary to stormwater Best Management Practices (BMPs). Standard BMPs have been defined by the Maine DEP and are described thoroughly in their publication Stormwater Management for Maine: Best Management Practices manual as revised in January of 2006. Section VI - Stormwater Management BMPs of this Stormwater Management Plan describes the BMPs to be utilized on this project and specific design information for each BMP. Because this is an existing site that was permitted prior to the current water quality standards the project is required to provide stormwater quality treatment for the 11,004 s.f. of new impervious area associated with the project.

Phosphorous Standards: Stormwater from this project is not tributary to a lake watershed and, therefore, is not subject to the phosphorus standards.

Urban Impaired Stream Standards: Stormwater from this project is not tributary to an "Urban Impaired Stream" as defined by Maine DEP Chapter 502 and, therefore, is not subject to the urban impaired stream standards.

Flooding Standards: The Maine DEP requires that projects creating impervious areas greater than three (3) acres, or developed areas greater than twenty (20) acres, address various flooding standards. As this project is a modification of an existing Site Location Permit the project is required to meet the flooding standard. The flooding standard requires that the stormwater management system for a project must detain, retain, or result in the infiltration of stormwater from the 24-hour storms of the 2-year, 10-year, and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project.

VI. Stormwater Management BMPs

The project has selected one BMP to be utilized on the project. This BMP has been designed based upon the criteria in the current edition of the Maine DEP publication, "Stormwater Management for Maine."

A. Underdrained Filtration Basin

A delineation of the watershed area associated with the underdrain filtration basin is shown on the attached Post-Development watershed plan. Indicated as Subcatchment 31 on the watershed map, the area tributary to the filter includes a total of 11,807 s.f. of impervious surface area and 2,676 s.f. of landscaped area.

The Maine DEP General Standards require that a soil filter must detain and filter a runoff volume of at least 1.0" over the tributary impervious areas and 0.4" of runoff from the tributary non-impervious developed area. Using the increase in impervious area as a basis for the calculation (11,004 s.f.) and applying these depths to calculate the corresponding volume, results in a minimum required treatment volume of 1,072 cubic feet.

The underdrained filtration basin is designed to store water within the pond embankment area and slowly release the treatment volume through the filter media.

VII. Peak Flow Analysis

The City of Lewiston of Ordinances requires that stormwater infrastructure to be designed to manage the 25-year design storm." The Maine DEP flooding standard requires that infrastructure manage the 2-year, 10-year, and 25-year design storms. This section has been prepared to discuss the proposed modifications to peak flow rates as a result of the development and proposed BMPs.

A. Modeling Technique

The SCS TR-20 methodology was used to analyze pre-development and post-development conditions. A 24-hour, SCS Type III storm distribution for the 2, 10, and 25-year storm frequencies were used for analysis.

Land use cover, watershed delineations and hydrologic soils data were obtained using the following sources:

1. Topographic survey with 1' contour intervals.
2. State of Maine, Office of GIS data.
3. Aerial photography.
4. Field reconnaissance.
5. Soil Conservation Service Medium Intensity Soil Survey for Androscoggin County.

The 24-hour rainfall values utilized in the hydrologic model are as follows.

Storm Frequency Precipitation (in./24 hr)	
2-year	3.0
10-year	4.6
25-year	5.4

B. Points of Interest

Three Watershed Study Points (SP-1, SP-2, SP-3,) were established to evaluate pre-development and post-development runoff conditions.

Study Point SP-1 represents the location where stormwater Runoff collected in the existing drainage system in the site parking lots is directed to a manhole located in Holland Street. Prior to entering this manhole runoff is stored in existing 36" pipes located on the CMMC property and released via a 8" outlet pipe to the combined system in Holland Street. Subcatchments 1, 2, 3, 4, 5, and 6 (pre-development) and Subcatchments 10, 20, 30, 31, 40, 50, and 60 (post-development) are tributary to this Study Point in the model.

Study Point SP-2 represents the location where runoff from the northeastern portion of the site enters an existing catch basin in the eastern end of Holland Street. This basin directs runoff into the drainage infrastructure which conveys runoff southerly down Main Street. Subcatchment 7 (pre-development) and Subcatchments 70 and 71 (post-development) are tributary to this Study Point in the model.

Study Point SP-3 represents the location where runoff from the southeastern portion of the site enters an existing drainage infrastructure located in Main Street. Runoff is directed southerly down Main Street. Subcatchment 8 and 9 (pre-development) and Subcatchments 80, 90, 91 and 92 (post-development) are tributary to this Study Point in the model.

C. Pre- and Post-Development Analysis

The watershed areas and times of concentration of the post-development watersheds vary from the existing conditions based on the proposed site development and grading.

Table-1 summarizes the results of the hydrologic analysis of the project under pre-development and post-development conditions.

Table 1 - Stormwater Runoff Summary Table Pre-Development vs. Post-Development										
Study Point	Total Watershed Area (Ac)		Avg. Weighted Curve No. (Cn)		Peak Rates of Runoff (cfs)					
					2-Year		10-Year		25-Year	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
SP-1	1.25	1.35	81	93	2.82	2.61	4.84	4.39	5.86	5.84
SP-2	0.26	0.21	91	95	0.62	0.55	1.05	0.88	1.26	1.05
SP-3	0.73	0.68	91	92	1.76	1.69	2.97	2.81	3.58	3.37

D. Comparison

The results of the stormwater modeling at Study Points SP-1, SP-2 and SP-3 indicate that the peak rate of runoff in the developed condition will be less than or equal to the pre-developed condition for the 2-year, 10-year, and 25-year storm events.

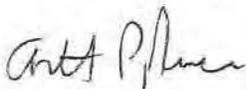
The project's water quality requirements are met through treating the runoff from an area of impervious area which exceeds the new impervious area for the project. The project creates 11,002 s.f. of new impervious area and 11,807 s.f. of new impervious is tributary to the underdrained filtration basin proposed for the site.

VIII. Conclusions

The proposed development has been designed to manage stormwater runoff through BMPs approved by the Maine DEP. Post-development peak flow rates to the municipal infrastructure in Main Street, High Street and Hammond Street have been maintained or reduced from their corresponding pre-development levels. Additionally, erosion and sedimentation controls along with associated maintenance and housekeeping methodology have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

Prepared by,

SEBAGO TECHNICS, INC.



Anthony P. Panciocco, P.E.
Senior Project Engineer

APP/DLR:app/kn
August 22, 2012




Attachment A

INSPECTION, MAINTENANCE AND HOUSEKEEPING PLAN

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

Attachment A

Central Maine Medical Center
Parking Lot Expansion
Main Street, High Street, Holland Street
Lewiston, Maine

Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation controls as well as stormwater management devices for the project site. Also, this plan outlines several housekeeping requirements that shall be followed during and after construction. These procedures should be followed in order to ensure the intended function of the designed measures and to prevent unreasonable adverse impacts to the surrounding environment.

The procedures outlined in this plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (Maine DEP).

During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.
2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (rainfall).
3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access.

points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event. They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

C. Temporary Storm Drain Inlet Protection:

- The inlet protection structure shall be inspected before each rain event and repaired as necessary.
- Sediment shall be removed and the storm drain sediment barrier restored to its original dimensions when the sediment has accumulated to half of the design depth of the trap.
- Structures shall be removed upon permanent stabilization of the tributary area.
- Upon removal of the structure, all accumulated sediments downstream of the structure shall be cleaned from the storm drain system.

D. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public right-of-ways.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

E. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

F. Permanent Measures:

- As areas become permanently stabilized and permanent stormwater management measures are completed (catch basins, underground filter, stabilized slopes) the Specific Inspection and Maintenance Tasks outlined in the "After Construction" section of this plan shall be performed until all construction operations are completed and the project is turned over to the owner or assigned heirs.

After Construction

1. **Inspection:** After construction, it is the responsibility of the owner to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. A person with knowledge of erosion and stormwater control, including the standards and conditions in all applicable permits, shall conduct the inspections.
2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction.

A. Vegetated Areas:

- Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems.

- Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

B. Catch Basins and Piping:

- Inspect and clean-out catch basins at least once a year, preferably in early spring.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.
- If the basin outlet is designed to trap floatable materials, then remove the floating debris and any floating oils (using oil-absorptive pads). Inspect and clean all pipe hoods for potential obstructions and proper function.

C. Winter Sanding:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

D. Underdrained Filtration Pond:

- The soil filter should be inspected after every major storm in the first few months to ensure proper function. Thereafter, the filter should be inspected at least once every six months to ensure that it is draining within 24-36 hours.
- The top several inches of the filter shall be replaced with fresh material when water ponds on the surface of the bed for more than 72 hours.
- The filter bed vegetations shall be mowed once or twice per year to a grass height no less than six (6) inches.
- Fertilization of the under drained filter area should be avoided unless absolutely necessary to establish vegetation.
- Harvesting and pruning of excessive growth will need to be done occasionally. Weeding to control unwanted or invasive plants may also be necessary.
- Inspect embankment for erosion, settling, and structural failure.

1. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

2. **Recertification:** A certification of the following shall be submitted to the Maine DEP within three months of the expiration of each five year interval from the date of issuance of Maine DEP permits.
 - A. Identification and repair of erosion problems. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - B. Inspection and repair of stormwater control system. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.
 - C. The Inspection, Maintenance, and Housekeeping Plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the Maine DEP, and the maintenance log is being maintained.

3. **Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the Maine DEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with Maine DEP standards. Upon such assumption of responsibility, and approval by the Maine DEP, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

4. **Housekeeping:** The following general performance standards apply to the proposed project both during and after construction.
 - A. Spill prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.

 - B. Groundwater protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.

 - C. Fugitive sediment and dust: Actions must be taken to insure that activities do not result in

noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.

- D. Debris and other materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- E. Trench or foundation dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

Attachments

Attachment 1 – Sample Stormwater Inspection and Maintenance Form

Attachment B

STORMWATER QUALITY CALCULATIONS

SEBAGO TECHNICS, INC.

1 Chabot Street

P.O. Box 1339

WESTBROOK, MAINE 04098

(207) 856-0277 FAX (207) 856-2206

JOB 06456 CMMC EXPANSION

SHEET NO. 1 OF 1

CALCULATED BY APP DATE 6/26/2012

CHECKED BY DATE

FILE NAME 06456.WQC.xls PRINT DATE 8/17/2012

Treatment Calculations:

New Impervious Area = 11,004 sf
Requiring Treatment

Area Tributary to Underdrained Sand Filter = 11,807 sf of Impervious WS-31
2,657 sf of Landscape WS-31

11,807 sf x 1 inch → 984 ft³

2,657 sf x 0.4 inches → 89 ft³

1072 ft³

Treatment Volume Required = 1072 ft³

06456 POST-PARKING EXPANSION

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

Prepared by {enter your company name here}

Printed 6/26/2012

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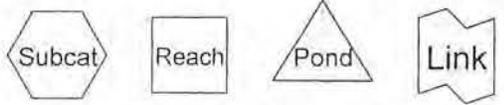
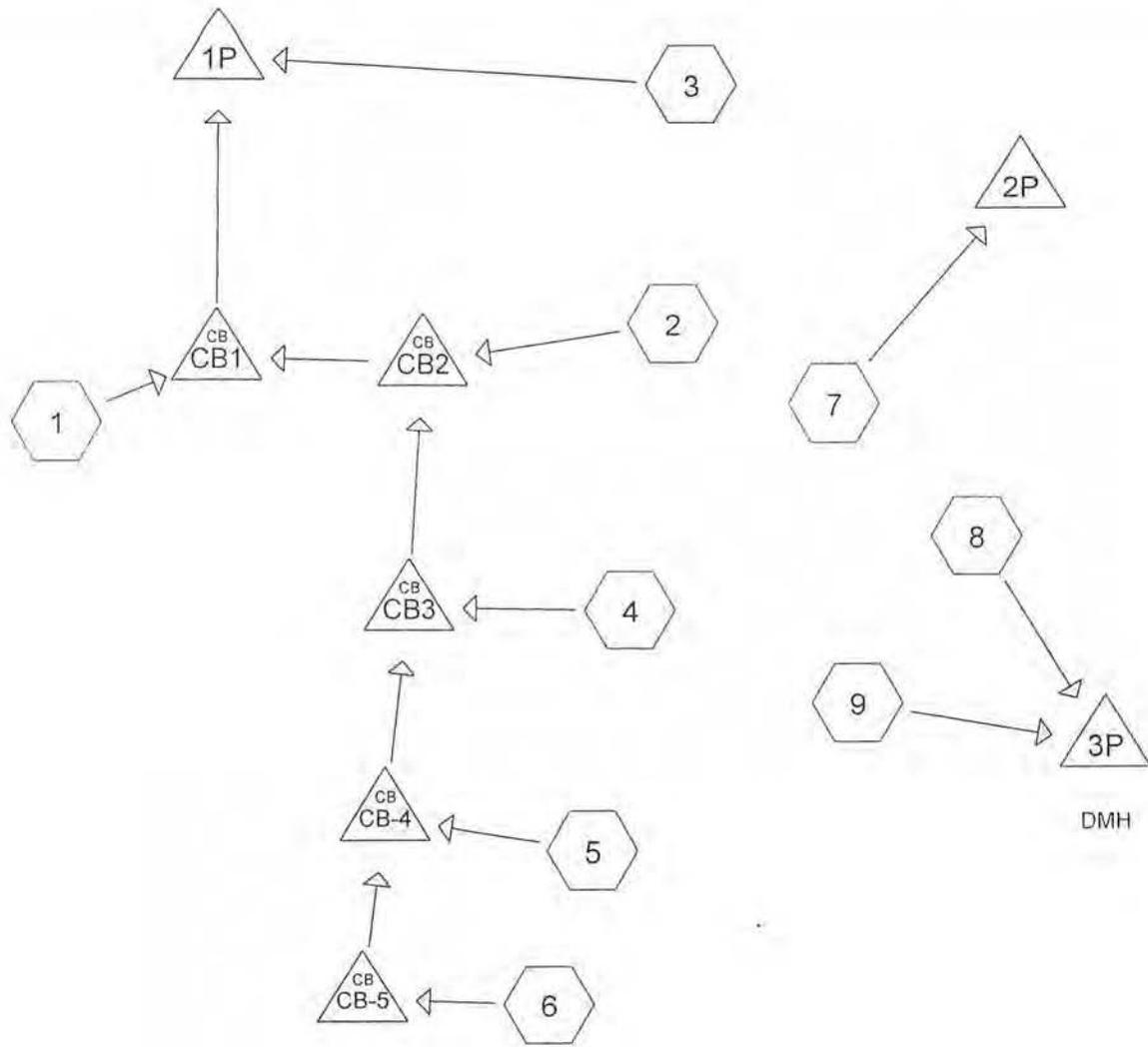
Stage-Area-Storage for Pond UDP-1:

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
241.00	646	0	242.04	1,122	918
241.02	655	13	242.06	1,131	941
241.04	664	26	242.08	1,141	964
241.06	673	40	242.10	1,151	987
241.08	682	53	242.12	1,161	1,010
241.10	692	67	242.14	1,170	1,033
241.12	701	81	242.16	1,180	1,057
241.14	710	95	242.18	1,190	1,080
241.16	719	109	242.20	1,200	1,104
241.18	728	124	242.22	1,209	1,128
241.20	737	138	242.24	1,219	1,153
241.22	746	153	242.26	1,229	1,177
241.24	755	168	242.28	1,239	1,202
241.26	765	183	242.30	1,248	1,227
241.28	774	199	242.32	1,258	1,252
241.30	783	214	242.34	1,268	1,277
241.32	792	230	242.36	1,278	1,302
241.34	801	246	242.38	1,287	1,328
241.36	810	262	242.40	1,297	1,354
241.38	819	278	242.42	1,307	1,380
241.40	828	295	242.44	1,317	1,406
241.42	838	312	242.46	1,326	1,433
241.44	847	328	242.48	1,336	1,459
241.46	856	345	242.50	1,346	1,486
241.48	865	363	242.52	1,356	1,513
241.50	874	380	242.54	1,366	1,540
241.52	883	398	242.56	1,375	1,568
241.54	892	415	242.58	1,385	1,595
241.56	901	433	242.60	1,395	1,623
241.58	910	451	242.62	1,405	1,651
241.60	920	470	242.64	1,414	1,679
241.62	929	488	242.66	1,424	1,708
241.64	938	507	242.68	1,434	1,736
241.66	947	526	242.70	1,444	1,765
241.68	956	545	242.72	1,453	1,794
241.70	965	564	242.74	1,463	1,823
241.72	974	583	242.76	1,473	1,852
241.74	983	603	242.78	1,483	1,882
241.76	993	623	242.80	1,492	1,912
241.78	1,002	643	242.82	1,502	1,942
241.80	1,011	663	242.84	1,512	1,972
241.82	1,020	683	242.86	1,522	2,002
241.84	1,029	704	242.88	1,531	2,033
241.86	1,038	724	242.90	1,541	2,063
241.88	1,047	745	242.92	1,551	2,094
241.90	1,056	766	242.94	1,561	2,125
241.92	1,066	787	242.96	1,570	2,157
241.94	1,075	809	242.98	1,580	2,188
241.96	1,084	830	243.00	1,590	2,220
241.98	1,093	852			
242.00	1,102	874			
242.02	1,112	896			

W/E/V

Attachment C

STORMWATER MODELING



Drainage Diagram for 06456 PRE-PARKING EXPANSION
 Prepared by {enter your company name here}, Printed 8/17/2012
 HydroCAD® 8.50 s/n 001856 © 2007 HydroCAD Software Solutions LLC

06456 PRE-PARKING EXPANSION

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

Prepared by {enter your company name here}

Printed 8/17/2012

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Page 5

Peak Elev= 234.35' @ 12.07 hrs

Flood Elev= 240.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	233.95'	12.0" x 118.0' long Culvert CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 232.17' S= 0.0151 '/' Cc= 0.900 n= 0.012

Primary OutFlow Max=0.48 cfs @ 12.07 hrs HW=234.34' (Free Discharge)

↑1=Culvert (Inlet Controls 0.48 cfs @ 1.68 fps)

Summary for Pond CB-5:

Inflow Area = 0.088 ac, 79.55% Impervious, Inflow Depth > 2.13" for 2-year event
 Inflow = 0.23 cfs @ 12.07 hrs, Volume= 0.016 af
 Outflow = 0.23 cfs @ 12.07 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.23 cfs @ 12.07 hrs, Volume= 0.016 af

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

Peak Elev= 234.47' @ 12.07 hrs

Flood Elev= 240.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	234.20'	12.0" x 45.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 233.95' S= 0.0056 '/' Cc= 0.900 n= 0.012

Primary OutFlow Max=0.22 cfs @ 12.07 hrs HW=234.46' (Free Discharge)

↑1=Culvert (Barrel Controls 0.22 cfs @ 1.99 fps)

Summary for Pond CB1:

Inflow Area = 1.074 ac, 61.92% Impervious, Inflow Depth > 1.86" for 2-year event
 Inflow = 2.44 cfs @ 12.07 hrs, Volume= 0.167 af
 Outflow = 2.44 cfs @ 12.07 hrs, Volume= 0.167 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.44 cfs @ 12.07 hrs, Volume= 0.167 af

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

Peak Elev= 229.35' @ 12.07 hrs

Flood Elev= 233.26'

Device	Routing	Invert	Outlet Devices
#1	Primary	227.90'	8.0" x 20.0' long Culvert RCP, rounded edge headwall, Ke= 0.100 Outlet Invert= 226.60' S= 0.0650 '/' Cc= 0.900 n= 0.012

Primary OutFlow Max=2.35 cfs @ 12.07 hrs HW=229.28' (Free Discharge)

↑1=Culvert (Inlet Controls 2.35 cfs @ 6.73 fps)

06456 PRE-PARKING EXPANSION

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

Prepared by {enter your company name here}

Printed 8/17/2012

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Page 6

Summary for Pond CB2:

Inflow Area = 0.628 ac, 52.39% Impervious, Inflow Depth > 1.74" for 2-year event
 Inflow = 1.32 cfs @ 12.07 hrs, Volume= 0.091 af
 Outflow = 1.32 cfs @ 12.07 hrs, Volume= 0.091 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.32 cfs @ 12.07 hrs, Volume= 0.091 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 228.52' @ 12.07 hrs
 Flood Elev= 234.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	227.90'	36.0" x 40.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 227.90' S= 0.0000 '/ Cc= 0.900 n= 0.012

Primary OutFlow Max=1.27 cfs @ 12.07 hrs HW=228.51' (Free Discharge)

↑1=Culvert (Barrel Controls 1.27 cfs @ 1.87 fps)

Summary for Pond CB3:

Inflow Area = 0.440 ac, 73.18% Impervious, Inflow Depth > 2.11" for 2-year event
 Inflow = 1.13 cfs @ 12.07 hrs, Volume= 0.077 af
 Outflow = 1.13 cfs @ 12.07 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.13 cfs @ 12.07 hrs, Volume= 0.077 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 228.75' @ 12.07 hrs
 Flood Elev= 237.42'

Device	Routing	Invert	Outlet Devices
#1	Primary	228.30'	36.0" x 96.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 227.90' S= 0.0042 '/ Cc= 0.900 n= 0.012

Primary OutFlow Max=1.08 cfs @ 12.07 hrs HW=228.74' (Free Discharge)

↑1=Culvert (Barrel Controls 1.08 cfs @ 2.53 fps)

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

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

Runoff by SCS TR-20 method, UH=SCS

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

Subcatchment 1:	Runoff Area=0.446 ac 75.34% Impervious Runoff Depth>4.23" Tc=5.0 min CN=92 Runoff=2.23 cfs 0.157 af
Subcatchment 2:	Runoff Area=0.188 ac 3.72% Impervious Runoff Depth>2.58" Tc=5.0 min CN=75 Runoff=0.61 cfs 0.040 af
Subcatchment 3:	Runoff Area=0.170 ac 50.00% Impervious Runoff Depth>3.93" Tc=5.0 min CN=89 Runoff=0.81 cfs 0.056 af
Subcatchment 4:	Runoff Area=0.236 ac 77.54% Impervious Runoff Depth>4.43" Tc=5.0 min CN=94 Runoff=1.21 cfs 0.087 af
Subcatchment 5:	Runoff Area=0.116 ac 59.48% Impervious Runoff Depth>4.03" Tc=5.0 min CN=90 Runoff=0.56 cfs 0.039 af
Subcatchment 6:	Runoff Area=0.088 ac 79.55% Impervious Runoff Depth>4.33" Tc=5.0 min CN=93 Runoff=0.45 cfs 0.032 af
Subcatchment 7:	Runoff Area=0.257 ac 60.70% Impervious Runoff Depth>4.13" Tc=5.0 min CN=91 Runoff=1.26 cfs 0.088 af
Subcatchment 8:	Runoff Area=0.367 ac 82.83% Impervious Runoff Depth>4.43" Tc=5.0 min CN=94 Runoff=1.88 cfs 0.136 af
Subcatchment 9:	Runoff Area=0.365 ac 59.73% Impervious Runoff Depth>3.82" Tc=5.0 min CN=88 Runoff=1.70 cfs 0.116 af
Pond 1P:	Inflow=5.86 cfs 0.411 af Primary=5.86 cfs 0.411 af
Pond 2P:	Inflow=1.26 cfs 0.088 af Primary=1.26 cfs 0.088 af
Pond 3P: DMH	Inflow=3.58 cfs 0.252 af Primary=3.58 cfs 0.252 af
Pond CB-4:	Peak Elev=234.54' Inflow=1.01 cfs 0.071 af 12.0" x 118.0' Culvert Outflow=1.01 cfs 0.071 af
Pond CB-5:	Peak Elev=234.59' Inflow=0.45 cfs 0.032 af 12.0" x 45.0' Culvert Outflow=0.45 cfs 0.032 af
Pond CB1:	Peak Elev=233.75' Inflow=5.06 cfs 0.356 af 8.0" x 20.0' Culvert Outflow=5.06 cfs 0.356 af
Pond CB2:	Peak Elev=228.79' Inflow=2.83 cfs 0.198 af 36.0" x 40.0' Culvert Outflow=2.83 cfs 0.198 af

06456 PRE-PARKING EXPANSION

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

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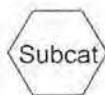
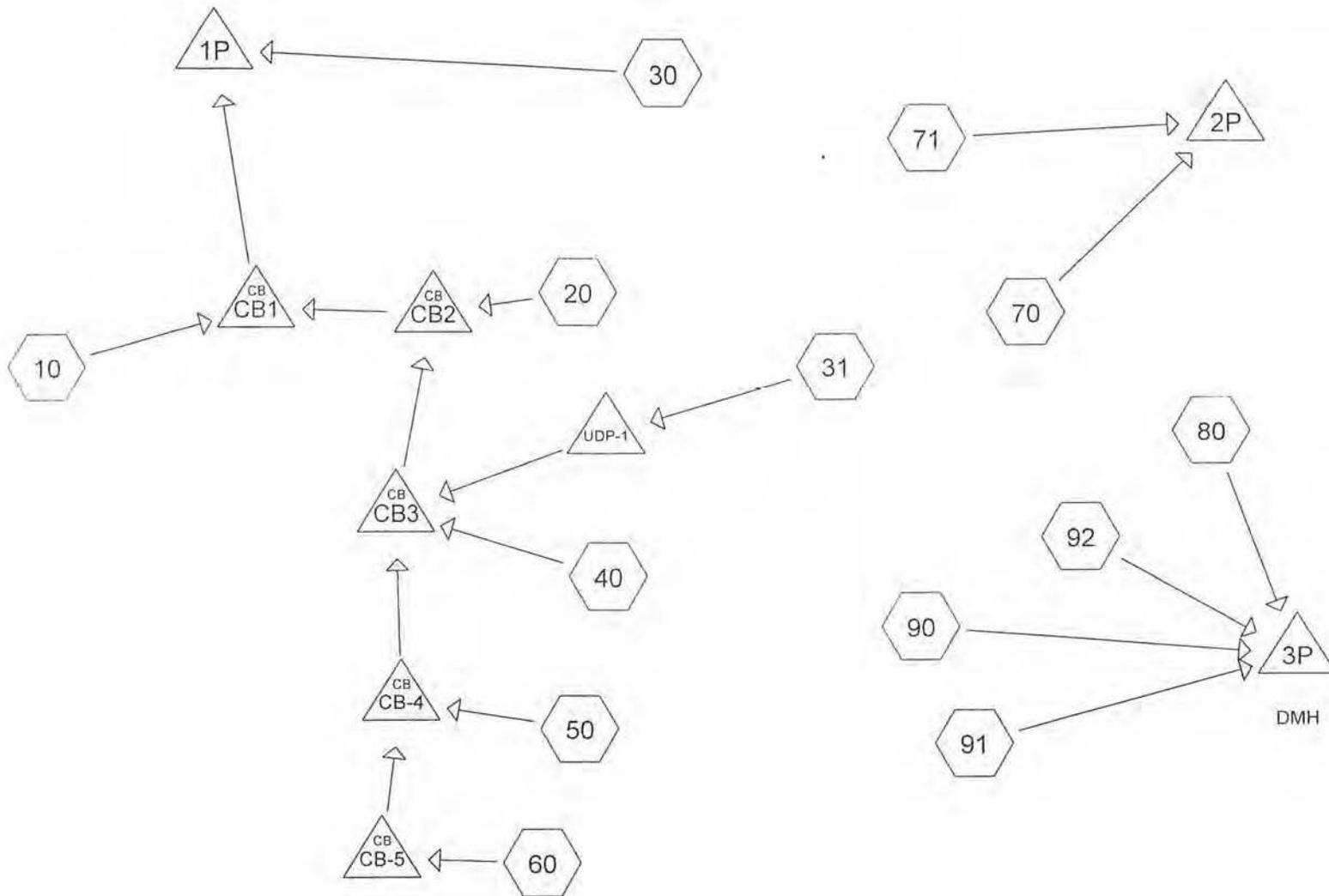
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Pond CB3:

Peak Elev=228.94' Inflow=2.22 cfs 0.158 af
36.0" x 96.0' Culvert Outflow=2.22 cfs 0.158 af

Total Runoff Area = 2.233 ac Runoff Volume = 0.752 af Average Runoff Depth = 4.04"
36.05% Pervious = 0.805 ac 63.95% Impervious = 1.428 ac



Drainage Diagram for 06456 POST-PARKING EXPANSION
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06456 POST-PARKING EXPANSION

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

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Summary for Subcatchment 10:

Runoff = 1.08 cfs @ 12.07 hrs, Volume= 0.075 af, Depth> 2.22"

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

Area (ac)	CN	Description
* 0.336	98	EXISTING IMPERVIOUS
0.070	74	>75% Grass cover, Good, HSG C
0.406	94	Weighted Average
0.070		Pervious Area
0.336		Impervious Area

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

Summary for Subcatchment 20:

Runoff = 0.08 cfs @ 12.09 hrs, Volume= 0.005 af, Depth> 0.98"

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

Area (ac)	CN	Description
0.007	98	Paved roads w/curbs & sewers
0.059	74	>75% Grass cover, Good, HSG C
0.066	77	Weighted Average
0.059		Pervious Area
0.007		Impervious Area

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

Summary for Subcatchment 30:

Runoff = 0.33 cfs @ 12.07 hrs, Volume= 0.022 af, Depth> 1.95"

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

Area (ac)	CN	Description
* 0.085	98	EXISTING IMPERVIOUS
0.051	79	50-75% Grass cover, Fair, HSG C
0.136	91	Weighted Average
0.051		Pervious Area
0.085		Impervious Area

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

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

Summary for Subcatchment 31:

Runoff = 0.89 cfs @ 12.07 hrs, Volume= 0.061 af, Depth> 2.22"

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

Area (ac)	CN	Description
0.061	74	>75% Grass cover, Good, HSG C
0.271	98	Paved parking & roofs
0.332	94	Weighted Average
0.061		Pervious Area
0.271		Impervious Area

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

Summary for Subcatchment 40:

Runoff = 0.54 cfs @ 12.07 hrs, Volume= 0.038 af, Depth> 2.32"

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

Area (ac)	CN	Description
* 0.168	98	EXISTING IMPERVIOUS
0.028	79	50-75% Grass cover, Fair, HSG C
0.196	95	Weighted Average
0.028		Pervious Area
0.168		Impervious Area

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

Summary for Subcatchment 50:

Runoff = 0.30 cfs @ 12.07 hrs, Volume= 0.020 af, Depth> 1.95"

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

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

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Area (ac)	CN	Description
* 0.078	98	EXISTING IMPERVIOUS
0.047	79	50-75% Grass cover, Fair, HSG C
0.125	91	Weighted Average
0.047		Pervious Area
0.078		Impervious Area

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

Summary for Subcatchment 60:

Runoff = 0.23 cfs @ 12.07 hrs, Volume= 0.016 af, Depth> 2.13"

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

Area (ac)	CN	Description
0.070	98	Paved parking & roofs
0.018	74	>75% Grass cover, Good, HSG C
0.088	93	Weighted Average
0.018		Pervious Area
0.070		Impervious Area

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

Summary for Subcatchment 70:

Runoff = 0.35 cfs @ 12.07 hrs, Volume= 0.026 af, Depth> 2.59"

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

Area (ac)	CN	Description
* 0.119	98	EXISTING IMPERVIOUS
0.119		Impervious Area

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

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

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Summary for Subcatchment 71:

Runoff = 0.20 cfs @ 12.07 hrs, Volume= 0.013 af, Depth> 1.86"

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

Area (ac)	CN	Description
0.038	79	50-75% Grass cover, Fair, HSG C
0.048	98	Paved roads w/curbs & sewers
0.086	90	Weighted Average
0.038		Pervious Area
0.048		Impervious Area

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

Summary for Subcatchment 80:

Runoff = 0.66 cfs @ 12.07 hrs, Volume= 0.044 af, Depth> 1.86"

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

Area (ac)	CN	Description
* 0.190	98	EXISTING IMPERVIOUS
0.094	74	>75% Grass cover, Good, HSG C
0.284	90	Weighted Average
0.094		Pervious Area
0.190		Impervious Area

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

Summary for Subcatchment 90:

Runoff = 0.34 cfs @ 12.07 hrs, Volume= 0.025 af, Depth> 2.59"

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

Area (ac)	CN	Description
0.116	98	Paved parking & roofs
0.116		Impervious Area

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

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

Summary for Subcatchment 91:

Runoff = 0.32 cfs @ 12.08 hrs, Volume= 0.022 af, Depth> 1.70"

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

Area (ac)	CN	Description
0.062	74	>75% Grass cover, Good, HSG C
0.090	98	Paved roads w/curbs & sewers
0.152	88	Weighted Average
0.062		Pervious Area
0.090		Impervious Area

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

Summary for Subcatchment 92:

Runoff = 0.37 cfs @ 12.07 hrs, Volume= 0.027 af, Depth> 2.59"

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

Area (ac)	CN	Description
0.127	98	Paved roads w/curbs & sewers
0.127		Impervious Area

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

Summary for Pond 1P:

Inflow Area = 1.349 ac, 75.24% Impervious, Inflow Depth > 2.03" for 2-year event

Inflow = 2.61 cfs @ 12.07 hrs, Volume= 0.228 af

Primary = 2.61 cfs @ 12.07 hrs, Volume= 0.228 af, Atten= 0%, Lag= 0.0 min

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

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

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Summary for Pond 2P:

Inflow Area = 0.205 ac, 81.46% Impervious, Inflow Depth > 2.29" for 2-year event
 Inflow = 0.55 cfs @ 12.07 hrs, Volume= 0.039 af
 Primary = 0.55 cfs @ 12.07 hrs, Volume= 0.039 af, Atten= 0%, Lag= 0.0 min

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

Summary for Pond 3P: DMH

Inflow Area = 0.679 ac, 77.03% Impervious, Inflow Depth > 2.09" for 2-year event
 Inflow = 1.69 cfs @ 12.07 hrs, Volume= 0.118 af
 Primary = 1.69 cfs @ 12.07 hrs, Volume= 0.118 af, Atten= 0%, Lag= 0.0 min

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

Summary for Pond CB-4:

Inflow Area = 0.213 ac, 69.48% Impervious, Inflow Depth > 2.02" for 2-year event
 Inflow = 0.53 cfs @ 12.07 hrs, Volume= 0.036 af
 Outflow = 0.53 cfs @ 12.07 hrs, Volume= 0.036 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.53 cfs @ 12.07 hrs, Volume= 0.036 af

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

Peak Elev= 234.36' @ 12.07 hrs

Flood Elev= 240.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	233.95'	12.0" x 118.0' long Culvert CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 232.17' S= 0.0151 '/' Cc= 0.900 n= 0.012

Primary OutFlow Max=0.51 cfs @ 12.07 hrs HW=234.35' (Free Discharge)

↑1=Culvert (Inlet Controls 0.51 cfs @ 1.71 fps)

Summary for Pond CB-5:

Inflow Area = 0.088 ac, 79.55% Impervious, Inflow Depth > 2.13" for 2-year event
 Inflow = 0.23 cfs @ 12.07 hrs, Volume= 0.016 af
 Outflow = 0.23 cfs @ 12.07 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.23 cfs @ 12.07 hrs, Volume= 0.016 af

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

Peak Elev= 234.47' @ 12.07 hrs

Flood Elev= 240.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	234.20'	12.0" x 45.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 233.95' S= 0.0056 '/' Cc= 0.900 n= 0.012

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

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Primary OutFlow Max=0.22 cfs @ 12.07 hrs HW=234.46' (Free Discharge)↑**1=Culvert** (Barrel Controls 0.22 cfs @ 1.99 fps)**Summary for Pond CB1:**

Inflow Area = 1.213 ac, 76.67% Impervious, Inflow Depth > 2.04" for 2-year event
 Inflow = 2.28 cfs @ 12.07 hrs, Volume= 0.206 af
 Outflow = 2.28 cfs @ 12.07 hrs, Volume= 0.206 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.28 cfs @ 12.07 hrs, Volume= 0.206 af

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

Peak Elev= 229.22' @ 12.07 hrs

Flood Elev= 233.26'

Device	Routing	Invert	Outlet Devices
#1	Primary	227.90'	8.0" x 20.0' long Culvert RCP, rounded edge headwall, Ke= 0.100 Outlet Invert= 226.60' S= 0.0650 '/' Cc= 0.900 n= 0.012

Primary OutFlow Max=2.20 cfs @ 12.07 hrs HW=229.16' (Free Discharge)↑**1=Culvert** (Inlet Controls 2.20 cfs @ 6.31 fps)**Summary for Pond CB2:**

Inflow Area = 0.807 ac, 73.61% Impervious, Inflow Depth > 1.95" for 2-year event
 Inflow = 1.20 cfs @ 12.07 hrs, Volume= 0.131 af
 Outflow = 1.20 cfs @ 12.07 hrs, Volume= 0.131 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.20 cfs @ 12.07 hrs, Volume= 0.131 af

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

Peak Elev= 228.49' @ 12.07 hrs

Flood Elev= 234.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	227.90'	36.0" x 40.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 227.90' S= 0.0000 '/' Cc= 0.900 n= 0.012

Primary OutFlow Max=1.16 cfs @ 12.07 hrs HW=228.48' (Free Discharge)↑**1=Culvert** (Barrel Controls 1.16 cfs @ 1.81 fps)**Summary for Pond CB3:**

Inflow Area = 0.741 ac, 79.22% Impervious, Inflow Depth > 2.04" for 2-year event
 Inflow = 1.12 cfs @ 12.07 hrs, Volume= 0.126 af
 Outflow = 1.12 cfs @ 12.07 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.12 cfs @ 12.07 hrs, Volume= 0.126 af

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

Peak Elev= 228.75' @ 12.07 hrs

Flood Elev= 237.42'

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

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Device	Routing	Invert	Outlet Devices
#1	Primary	228.30'	36.0" x 96.0' long Culvert CMP, projecting, no headwall, Ke= 0.900 Outlet Invert= 227.90' S= 0.0042 '/ Cc= 0.900 n= 0.012

Primary OutFlow Max=1.08 cfs @ 12.07 hrs HW=228.74' (Free Discharge)

↑1=Culvert (Barrel Controls 1.08 cfs @ 2.53 fps)

Summary for Pond UDP-1:

Inflow Area = 0.332 ac, 81.63% Impervious, Inflow Depth > 2.22" for 2-year event
 Inflow = 0.89 cfs @ 12.07 hrs, Volume= 0.061 af
 Outflow = 0.08 cfs @ 13.00 hrs, Volume= 0.052 af, Atten= 91%, Lag= 55.7 min
 Primary = 0.08 cfs @ 13.00 hrs, Volume= 0.052 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 242.31' @ 13.00 hrs Surf.Area= 1,252 sf Storage= 1,235 cf

Plug-Flow detention time= 162.2 min calculated for 0.052 af (85% of inflow)
 Center-of-Mass det. time= 117.3 min (876.1 - 758.8)

Volume	Invert	Avail.Storage	Storage Description
#1	241.00'	2,220 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
241.00	646	0	0
242.00	1,102	874	874
243.00	1,590	1,346	2,220

Device	Routing	Invert	Outlet Devices
#1	Primary	233.00'	8.0" x 53.0' long Culvert CPP, projecting, no headwall, Ke= 0.900 Outlet Invert= 232.20' S= 0.0151 '/ Cc= 0.900 n= 0.012
#2	Device 1	241.00'	2.410 in/hr Exfiltration over Surface area
#3	Device 1	242.30'	8.0" Horiz. Orifice/Grate Limited to weir flow C= 0.600

Primary OutFlow Max=0.07 cfs @ 13.00 hrs HW=242.31' (Free Discharge)

↑1=Culvert (Passes 0.07 cfs of 3.97 cfs potential flow)

↑2=Exfiltration (Exfiltration Controls 0.07 cfs)

↑3=Orifice/Grate (Weir Controls 0.00 cfs @ 0.27 fps)

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

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
 Runoff by SCS TR-20 method, UH=SCS
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10:	Runoff Area=0.406 ac 82.76% Impervious Runoff Depth>3.70" Tc=5.0 min CN=94 Runoff=1.75 cfs 0.125 af
Subcatchment 20:	Runoff Area=0.066 ac 10.61% Impervious Runoff Depth>2.13" Tc=5.0 min CN=77 Runoff=0.18 cfs 0.012 af
Subcatchment 30:	Runoff Area=0.136 ac 62.50% Impervious Runoff Depth>3.40" Tc=5.0 min CN=91 Runoff=0.55 cfs 0.039 af
Subcatchment 31:	Runoff Area=0.332 ac 81.63% Impervious Runoff Depth>3.70" Tc=5.0 min CN=94 Runoff=1.43 cfs 0.102 af
Subcatchment 40:	Runoff Area=0.196 ac 85.71% Impervious Runoff Depth>3.79" Tc=5.0 min CN=95 Runoff=0.86 cfs 0.062 af
Subcatchment 50:	Runoff Area=0.125 ac 62.40% Impervious Runoff Depth>3.40" Tc=5.0 min CN=91 Runoff=0.51 cfs 0.035 af
Subcatchment 60:	Runoff Area=0.088 ac 79.55% Impervious Runoff Depth>3.60" Tc=5.0 min CN=93 Runoff=0.37 cfs 0.026 af
Subcatchment 70:	Runoff Area=0.119 ac 100.00% Impervious Runoff Depth>4.05" Tc=5.0 min CN=98 Runoff=0.54 cfs 0.040 af
Subcatchment 71:	Runoff Area=0.086 ac 55.81% Impervious Runoff Depth>3.30" Tc=5.0 min CN=90 Runoff=0.34 cfs 0.024 af
Subcatchment 80:	Runoff Area=0.284 ac 66.90% Impervious Runoff Depth>3.30" Tc=5.0 min CN=90 Runoff=1.13 cfs 0.078 af
Subcatchment 90:	Runoff Area=0.116 ac 100.00% Impervious Runoff Depth>4.05" Tc=5.0 min CN=98 Runoff=0.52 cfs 0.039 af
Subcatchment 91:	Runoff Area=0.152 ac 59.21% Impervious Runoff Depth>3.10" Tc=5.0 min CN=88 Runoff=0.58 cfs 0.039 af
Subcatchment 92:	Runoff Area=0.127 ac 100.00% Impervious Runoff Depth>4.05" Tc=5.0 min CN=98 Runoff=0.57 cfs 0.043 af
Pond 1P:	Inflow=4.39 cfs 0.386 af Primary=4.39 cfs 0.386 af
Pond 2P:	Inflow=0.88 cfs 0.064 af Primary=0.88 cfs 0.064 af
Pond 3P: DMH	Inflow=2.81 cfs 0.199 af Primary=2.81 cfs 0.199 af

06456 POST-PARKING EXPANSION

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

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Page 2

Pond CB-4:	Peak Elev=234.50' Inflow=0.88 cfs 0.062 af 12.0" x 118.0' Culvert Outflow=0.88 cfs 0.062 af
Pond CB-5:	Peak Elev=234.55' Inflow=0.37 cfs 0.026 af 12.0" x 45.0' Culvert Outflow=0.37 cfs 0.026 af
Pond CB1:	Peak Elev=231.05' Inflow=3.84 cfs 0.348 af 8.0" x 20.0' Culvert Outflow=3.84 cfs 0.348 af
Pond CB2:	Peak Elev=228.68' Inflow=2.16 cfs 0.223 af 36.0" x 40.0' Culvert Outflow=2.16 cfs 0.223 af
Pond CB3:	Peak Elev=228.91' Inflow=1.99 cfs 0.211 af 36.0" x 96.0' Culvert Outflow=1.99 cfs 0.211 af
Pond UDP-1:	Peak Elev=242.52' Storage=1,511 cf Inflow=1.43 cfs 0.102 af Outflow=0.78 cfs 0.088 af

Total Runoff Area = 2.233 ac Runoff Volume = 0.664 af Average Runoff Depth = 3.57"
23.65% Pervious = 0.528 ac 76.35% Impervious = 1.705 ac

06456 POST-PARKING EXPANSION

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

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
 Runoff by SCS TR-20 method, UH=SCS
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 10:	Runoff Area=0.406 ac 82.76% Impervious Runoff Depth>4.43" Tc=5.0 min CN=94 Runoff=2.08 cfs 0.150 af
Subcatchment 20:	Runoff Area=0.066 ac 10.61% Impervious Runoff Depth>2.76" Tc=5.0 min CN=77 Runoff=0.23 cfs 0.015 af
Subcatchment 30:	Runoff Area=0.136 ac 62.50% Impervious Runoff Depth>4.13" Tc=5.0 min CN=91 Runoff=0.67 cfs 0.047 af
Subcatchment 31:	Runoff Area=0.332 ac 81.63% Impervious Runoff Depth>4.43" Tc=5.0 min CN=94 Runoff=1.70 cfs 0.123 af
Subcatchment 40:	Runoff Area=0.196 ac 85.71% Impervious Runoff Depth>4.53" Tc=5.0 min CN=95 Runoff=1.02 cfs 0.074 af
Subcatchment 50:	Runoff Area=0.125 ac 62.40% Impervious Runoff Depth>4.13" Tc=5.0 min CN=91 Runoff=0.61 cfs 0.043 af
Subcatchment 60:	Runoff Area=0.088 ac 79.55% Impervious Runoff Depth>4.33" Tc=5.0 min CN=93 Runoff=0.45 cfs 0.032 af
Subcatchment 70:	Runoff Area=0.119 ac 100.00% Impervious Runoff Depth>4.78" Tc=5.0 min CN=98 Runoff=0.63 cfs 0.047 af
Subcatchment 71:	Runoff Area=0.086 ac 55.81% Impervious Runoff Depth>4.03" Tc=5.0 min CN=90 Runoff=0.42 cfs 0.029 af
Subcatchment 80:	Runoff Area=0.284 ac 66.90% Impervious Runoff Depth>4.03" Tc=5.0 min CN=90 Runoff=1.37 cfs 0.095 af
Subcatchment 90:	Runoff Area=0.116 ac 100.00% Impervious Runoff Depth>4.78" Tc=5.0 min CN=98 Runoff=0.62 cfs 0.046 af
Subcatchment 91:	Runoff Area=0.152 ac 59.21% Impervious Runoff Depth>3.82" Tc=5.0 min CN=88 Runoff=0.71 cfs 0.048 af
Subcatchment 92:	Runoff Area=0.127 ac 100.00% Impervious Runoff Depth>4.78" Tc=5.0 min CN=98 Runoff=0.68 cfs 0.051 af
Pond 1P:	Inflow=5.84 cfs 0.467 af Primary=5.84 cfs 0.467 af
Pond 2P:	Inflow=1.05 cfs 0.076 af Primary=1.05 cfs 0.076 af
Pond 3P: DMH	Inflow=3.37 cfs 0.241 af Primary=3.37 cfs 0.241 af

06456 POST-PARKING EXPANSION

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

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Pond CB-4:	Peak Elev=234.56' Inflow=1.06 cfs 0.075 af 12.0" x 118.0' Culvert Outflow=1.06 cfs 0.075 af
Pond CB-5:	Peak Elev=234.59' Inflow=0.45 cfs 0.032 af 12.0" x 45.0' Culvert Outflow=0.45 cfs 0.032 af
Pond CB1:	Peak Elev=234.16' Inflow=5.18 cfs 0.420 af 8.0" x 20.0' Culvert Outflow=5.18 cfs 0.420 af
Pond CB2:	Peak Elev=228.84' Inflow=3.16 cfs 0.270 af 36.0" x 40.0' Culvert Outflow=3.16 cfs 0.270 af
Pond CB3:	Peak Elev=229.04' Inflow=2.94 cfs 0.255 af 36.0" x 96.0' Culvert Outflow=2.94 cfs 0.255 af
Pond UDP-1:	Peak Elev=242.64' Storage=1,673 cf Inflow=1.70 cfs 0.123 af Outflow=1.05 cfs 0.106 af

Total Runoff Area = 2.233 ac Runoff Volume = 0.801 af Average Runoff Depth = 4.30"
23.65% Pervious = 0.528 ac 76.35% Impervious = 1.705 ac

Exhibit 5

Technical and Financial Capacity

Technical Ability

Sebago Technics, Inc. (STI) has been retained to perform the survey, civil engineering, stormwater management, and sediment and erosion control design for the proposed project. The project has been designed to meet the Maine Department of Environmental Protection (Maine DEP) Chapter 500 requirements. The technical phase of this project includes the preparation of a detailed Grading Design, Site Plan and Stormwater Management Plans. The permitting phase of this project consists of the preparation of all local application packages and coordination throughout the entire review process from initial submission to final approval. Contact information for the consultant involved is indicated below.

Sebago Technics, Inc.
75 John Roberts Road, Suite 1A
South Portland, Maine 04106
PH: 207-200-2100

Central Maine Medical Center (CMMC) has developed numerous projects on their campus at 300 Main Street. The most recent project is the Emergency Department/Lab Addition project. As such, CMMC has the technical capacity to complete this project.

Financial Capacity

We would request that the Requirement of Evidence of Financial Capacity be considered as a condition of approval for this project.

06456 PRE-PARKING EXPANSION

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

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Page 1

Summary for Subcatchment 1:

Runoff = 1.11 cfs @ 12.07 hrs, Volume= 0.076 af, Depth> 2.04"

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

Area (ac)	CN	Description
* 0.336	98	EXISTING IMPERVIOUS
0.110	74	>75% Grass cover, Good, HSG C
0.446	92	Weighted Average
0.110		Pervious Area
0.336		Impervious Area

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

Summary for Subcatchment 2:

Runoff = 0.20 cfs @ 12.09 hrs, Volume= 0.014 af, Depth> 0.88"

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

Area (ac)	CN	Description
0.007	98	Paved roads w/curbs & sewers
0.181	74	>75% Grass cover, Good, HSG C
0.188	75	Weighted Average
0.181		Pervious Area
0.007		Impervious Area

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

Summary for Subcatchment 3:

Runoff = 0.38 cfs @ 12.08 hrs, Volume= 0.025 af, Depth> 1.78"

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

Area (ac)	CN	Description
* 0.085	98	EXISTING IMPERVIOUS
0.085	79	50-75% Grass cover, Fair, HSG C
0.170	89	Weighted Average
0.085		Pervious Area
0.085		Impervious Area

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

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

Summary for Subcatchment 4:

Runoff = 0.63 cfs @ 12.07 hrs, Volume= 0.044 af, Depth> 2.22"

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

Area (ac)	CN	Description
* 0.183	98	EXISTING IMPERVIOUS
0.053	79	50-75% Grass cover, Fair, HSG C
0.236	94	Weighted Average
0.053		Pervious Area
0.183		Impervious Area

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

Summary for Subcatchment 5:

Runoff = 0.27 cfs @ 12.07 hrs, Volume= 0.018 af, Depth> 1.86"

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

Area (ac)	CN	Description
* 0.069	98	EXISTING IMPERVIOUS
0.047	79	50-75% Grass cover, Fair, HSG C
0.116	90	Weighted Average
0.047		Pervious Area
0.069		Impervious Area

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

Summary for Subcatchment 6:

Runoff = 0.23 cfs @ 12.07 hrs, Volume= 0.016 af, Depth> 2.13"

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

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

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Area (ac)	CN	Description
0.070	98	Paved parking & roofs
0.018	74	>75% Grass cover, Good, HSG C
0.088	93	Weighted Average
0.018		Pervious Area
0.070		Impervious Area

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

Summary for Subcatchment 7:

Runoff = 0.62 cfs @ 12.07 hrs, Volume= 0.042 af, Depth> 1.95"

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

Area (ac)	CN	Description
* 0.156	98	EXISTING IMPERVIOUS
0.101	79	50-75% Grass cover, Fair, HSG C
0.257	91	Weighted Average
0.101		Pervious Area
0.156		Impervious Area

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

Summary for Subcatchment 8:

Runoff = 0.98 cfs @ 12.07 hrs, Volume= 0.068 af, Depth> 2.22"

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

Area (ac)	CN	Description
* 0.304	98	EXISTING IMPERVIOUS
0.063	74	>75% Grass cover, Good, HSG C
0.367	94	Weighted Average
0.063		Pervious Area
0.304		Impervious Area

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

06456 PRE-PARKING EXPANSION

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

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Summary for Subcatchment 9:

Runoff = 0.78 cfs @ 12.08 hrs, Volume= 0.052 af, Depth> 1.70"

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

Area (ac)	CN	Description
* 0.218	98	EXISTING IMPERVIOUS
0.147	74	>75% Grass cover, Good, HSG C
0.365	88	Weighted Average
0.147		Pervious Area
0.218		Impervious Area

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

Summary for Pond 1P:

Inflow Area = 1.244 ac, 60.29% Impervious, Inflow Depth > 1.85" for 2-year event
 Inflow = 2.82 cfs @ 12.07 hrs, Volume= 0.192 af
 Primary = 2.82 cfs @ 12.07 hrs, Volume= 0.192 af, Atten= 0%, Lag= 0.0 min

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

Summary for Pond 2P:

Inflow Area = 0.257 ac, 60.70% Impervious, Inflow Depth > 1.95" for 2-year event
 Inflow = 0.62 cfs @ 12.07 hrs, Volume= 0.042 af
 Primary = 0.62 cfs @ 12.07 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min

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

Summary for Pond 3P: DMH

Inflow Area = 0.732 ac, 71.31% Impervious, Inflow Depth > 1.96" for 2-year event
 Inflow = 1.76 cfs @ 12.07 hrs, Volume= 0.120 af
 Primary = 1.76 cfs @ 12.07 hrs, Volume= 0.120 af, Atten= 0%, Lag= 0.0 min

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

Summary for Pond CB-4:

Inflow Area = 0.204 ac, 68.14% Impervious, Inflow Depth > 1.98" for 2-year event
 Inflow = 0.50 cfs @ 12.07 hrs, Volume= 0.034 af
 Outflow = 0.50 cfs @ 12.07 hrs, Volume= 0.034 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.50 cfs @ 12.07 hrs, Volume= 0.034 af

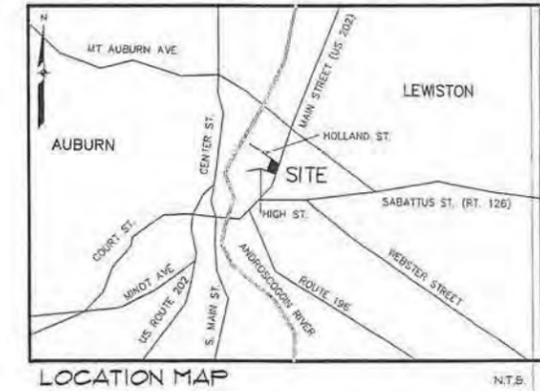
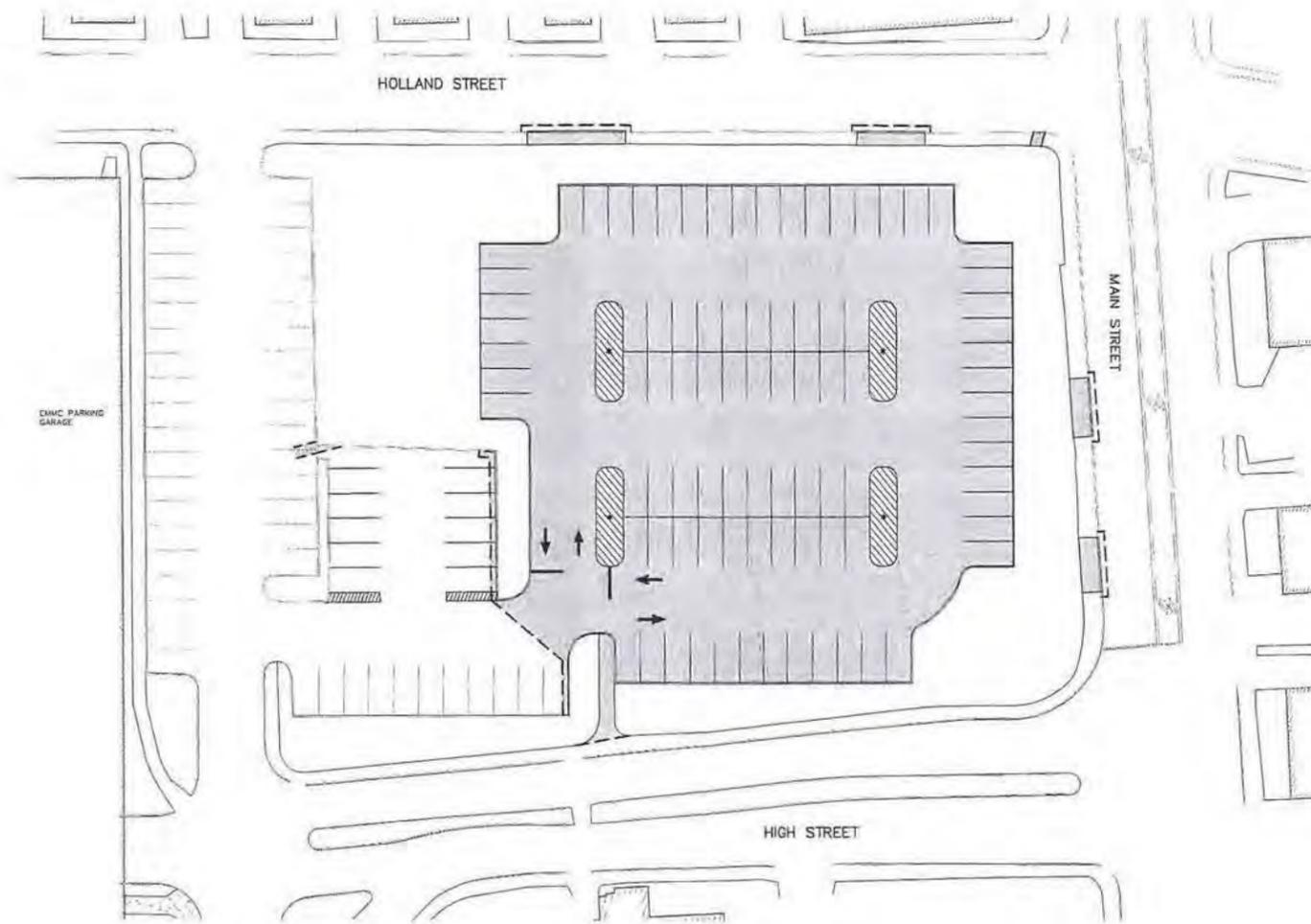
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

CENTRAL MAINE MEDICAL CENTER PARKING LOT EXPANSION

HIGH, HOLLAND, AND MAIN STREETS
LEWISTON, MAINE



APPLICANT:
**CENTRAL MAINE
MEDICAL CENTER**
300 MAIN STREET
LEWISTON, ME



ENGINEER / SURVEYOR:

SEBAGO
TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

WWW.SEBOGOTECHNICS.COM

76 John Roberts Rd. - Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

250 Goddard Rd. - Suite B
Lewiston, ME 04240
Tel. 207-783-5656

SHEET INDEX:

SHEET	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	DEMO PLAN
4	SITE/LANDSCAPE PLAN
5	GRADING AND UTILITIES PLAN
6	DETAILS
7	DETAILS
8	DETAILS

APPROVAL

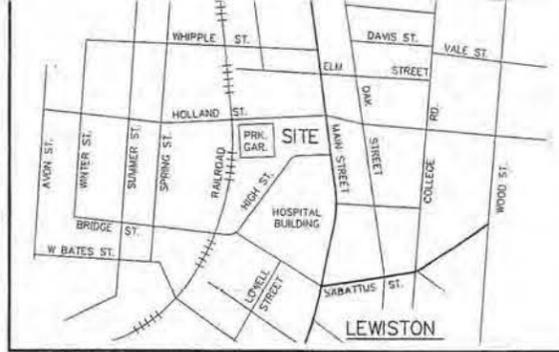
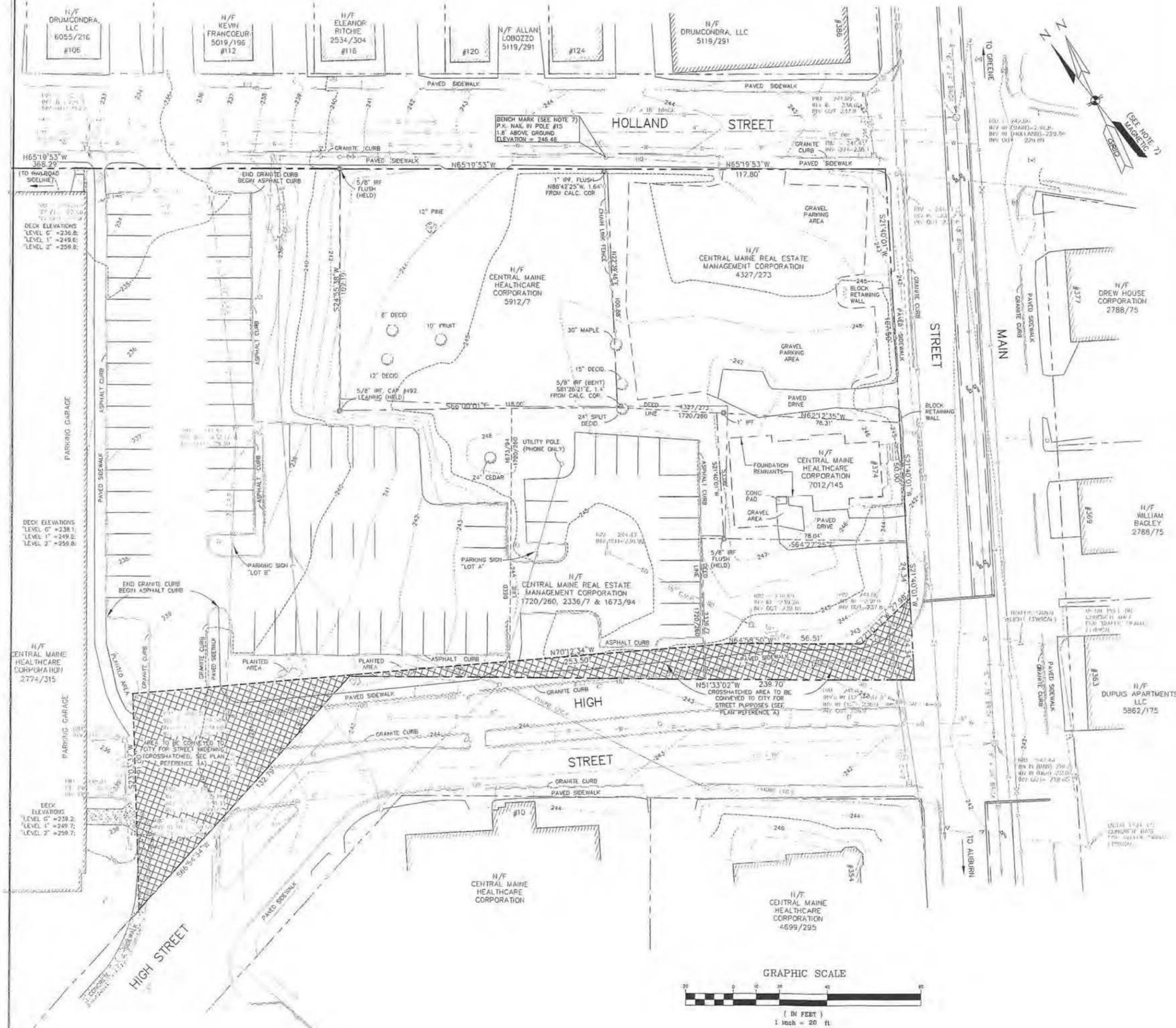
APPROVED BY THE CITY OF LEWISTON PLANNING BOARD

CHAIRPERSON _____ DATE _____

NOTES

- IF DEVELOPMENT HAS NOT OCCURRED AS DEFINED WITHIN THE SCOPE OF THIS CODE WITHIN TWO YEARS, DEVELOPMENT REVIEW APPROVAL SHALL EXPIRE.
- AN EXTENSION OF DEVELOPMENT REVIEW APPROVAL MUST BE MADE WITHIN TWO YEARS OF THE INITIAL GRANTING OF APPROVAL.
- IF THE APPROVED DEVELOPMENT IS NOT COMPLETED WITHIN FIVE YEARS FROM THE DATE OF GRANTING OF APPROVAL OR EXTENSION OF APPROVAL, SAID APPROVAL SHALL EXPIRE AND THE APPLICANT SHALL REAPPLY FOR A NEW APPROVAL.

SCALE: 1"=30'



GENERAL NOTES

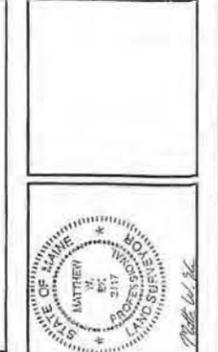
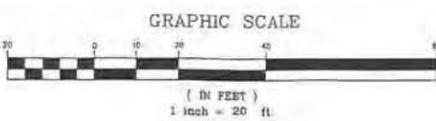
- RECORD OWNERS OF THE PROPERTIES ARE:
 - A - CENTRAL MAINE HEALTHCARE CORPORATION (DEED REFERENCES BOOK 5912, PAGE 7 AND BOOK 7012, PAGE 145)
 - B - CENTRAL MAINE REAL ESTATE MANAGEMENT CORPORATION (DEED REFERENCES BOOK 4327, PAGE 273 AND BOOK 2336, PAGE 7 AND BOOK 1720, PAGE 260 AND BOOK 1673, PAGE 94)
 - * ALL DEEDS AND PLANS REFERENCED HEREON AS RECORDED ARE ON FILE AT THE ANDROSCOGGIN COUNTY REGISTRY OF DEEDS (ACRD).
- THE PROPERTY IS SHOWN AS LOTS 10, 12, 13, 14, 16, 17, & 18 ON THE CITY OF LEWISTON TAX MAP 194, AND ARE LOCATED IN THE CENTREVILLE ZONING DISTRICT.
- SPACE AND BULK CRITERIA FOR THE CENTREVILLE ZONING DISTRICT ARE AS FOLLOWS:

MIN. LOT SIZE:	NONE
MIN. STREET FRONTAGE:	25 FEET
MIN. FRONT YARD:	NONE
MIN. SIDE YARD:	NONE
MIN. REAR YARD:	NONE
MAX. BUILDING HEIGHT:	150 FEET
MAX. LOT COVERAGE:	100.0

 * SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
- THE SURVEYED PREMISES IS NOT LOCATED WITHIN A 100-YEAR FLOOD HAZARD AREA AS DELINEATED ON FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 230004 0010 B, DATED SEPTEMBER 28, 1979.
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON AN ON THE GROUND SURVEY BY KEVIN FARRAR OF SEBAGO TECHNIQS, INC. PERFORMED IN JANUARY OF 2007. MATTHEW W. EK OF SEBAGO TECHNIQS, INC. IS STAMPING FOR SUBMISSION PURPOSES AND HAS NOT REVIEWED THE BOUNDARY DECISIONS.
 - A. "HIGH STREET REALIGNMENT - RIGHT OF WAY", DATED JULY 22, 2002, PREPARED BY TAYLOR ENGINEERING ASSOCIATES.
 - B. "STANDARD BOUNDARY SURVEY, CENTRAL MAINE MEDICAL CENTER", DATED OCTOBER 23, 1992, PREPARED BY A.R.C.C. LAND SURVEYORS
 - C. "TOPOGRAPHICAL PLAN OF EXISTING CONDITIONS AND PROPERTY PLAN", DATED DECEMBER 11, 2000, PREPARED BY A.R.C.C. LAND SURVEYORS, INC.
- THE BEARINGS AND ELEVATIONS SHOWN HEREON ARE BASED UPON THE MAINE STATE PLANE COORDINATE GRID, WEST ZONE 1802 ON NAD 83 AND NGVD29 IN US FEET. GRID NORTH IS 13 DEGREES 14 MINUTES OFF THE MAGNETIC NORTH SHOWN ON A PLAN REFERENCE C.
- THE LOCATION, SIZE, DEPTH AND/OR EXISTENCE OF ALL UNDERGROUND UTILITY PIPES, TANKS AND/OR STRUCTURES WAS NOT VERIFIED BY THIS SURVEY. LOCATIONS SHOWN ARE BASED UPON FIELD LOCATED STRUCTURES AND AVAILABLE PLAN INFORMATION. CONTRACTOR SHALL CONTACT DIGSAFE/ON-TARGET TO VERIFY THE LOCATION OF ALL UNDERGROUND PUBLIC AND PRIVATE UTILITIES PRIOR TO EXCAVATION.

LEGEND

EXISTING	DESCRIPTION	EXISTING	DESCRIPTION
---	BOUNDARY LINE/R.O.W.	---	DIAPHRAM
---	SETBACK LINE/R.O.W.	---	GAS
---	SETBACK	---	WATER
---	EASEMENT	---	GATE VALVE
---	MONUMENT	---	HYDRANT
---	IRON PIPE/ROD	---	POTABLE WELL
---	DRILLHOLE	---	SEWER
---	C/L/L	---	FORCE MAIN
---	BENCHMARK	---	SEWER MH
---	BUILDING	---	STORM DRAIN
---	SIGN	---	UNDERDRAIN
---	EDGE PAVEMENT	---	CATCH BASIN
---	PAVEMENT PAINT	---	DRAINAGE MH
---	GRAVEL ROAD	---	CULVERT
---	CURBLINE	---	ELEC. & TEL. UNDERGROUND
---	CONTOURS	---	ELEC. & TEL.
---	SPOT GRADE	---	TRANSFORMER PAD
---	CHAIN LINK FENCE	---	ELECTRICAL MANHOLE
---	DECIDUOUS TREE	---	TELEPHONE MANHOLE
---	CONIFEROUS TREE	---	LIGHT POLE/WALL
---		---	UTILITY POLE
---		---	GUY



REV.	DATE	STATUS	REVISION
C	8-22-2012	REVISED PER CITY REVIEW COMMENTS	
B	6-21-2012	ISSUED FOR SITE PLAN REVIEW	
A	3-16-2012	ISSUED FOR PRELIMINARY PRICING	

SEBAGO TECHNICALS
 WWW.SEBAGOTECHNICALS.COM
 15 John Peabody Dr., Suite 1A, Lewiston, ME 04201
 Phone: 207-252-2100 Fax: 207-763-5858
 PROJECT NO. FIELD BOOK DESIGN CHKO DRAWN MWE KRF
 08/565EC ELEC

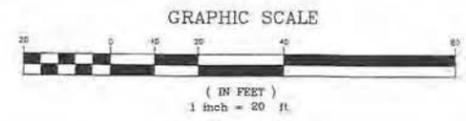
EXISTING CONDITIONS PLAN
 OF:
 PARKING LOT EXPANSION
 HIGH ST, MAIN ST, & HOLLAND STREET
 LEWISTON, MAINE
 FOR:
 CENTRAL MAINE MEDICAL CENTER
 300 MAIN STREET
 LEWISTON, MAINE 04210

DATE	SCALE
1/29/07	1"=20'

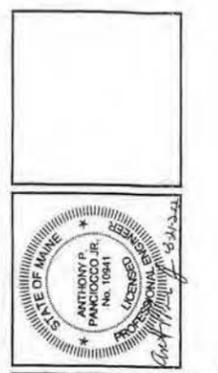


- 1 PAVEMENT SAUCUT (COORDINATE WITH SITE PLAN)
- 2 REMOVE LIGHT FIXTURE
- 3 REMOVE TREE
- 4 REMOVE BITUMINOUS CURB
- 5 REMOVE PAINT STRIPING
- 6 REMOVE CONCRETE STAIRS AND REPAIR ANY DAMAGE TO SIDEWALK DUE TO REMOVAL
- 7 CATCH BASIN TO REMAIN. SEE GRADING & UTILITIES SHEET FOR MODIFICATIONS
- 8 STORM DRAIN TO REMAIN
- 9 REMOVE LIGHT POLE AND RETAIN ONSITE FOR REUSE
- 10 REMOVE FENCE
- 11 REMOVE BITUMINOUS PAVEMENT
- 12 REMOVE SIGN AND RETAIN ONSITE FOR REUSE
- 13 REMOVE EXISTING RETAINING WALL AND BACKFILL WITH COMMON BORROW. REPAIR ANY DAMAGE TO SIDEWALK AS A RESULT OF WALL REMOVAL
- 14 REMOVE UTILITY POLE AND OVERHEAD ELECTRIC COORDINATE WITH CHIC AND CENTRAL MAINE POWER PRIOR TO CONSTRUCTION

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	SIGN	
	EDGE PAVEMENT	
	PAVEMENT PAINT	
	GRAVEL ROAD	
	CURBLINE	
	CONTOURS	124
	SPOT GRADE	+30.2R
	RETAINING WALL	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	MULCH LINE	
	WATER GATE VALVE	
	HYDRANT	
	SEWER MH	
	STORM DRAIN	
	CATCH BASIN	
	DRAINAGE MH	
	CULVERT	
	ELECTRICAL MANHOLE	
	TELEPHONE MANHOLE	
	LIGHT POLE/WALL	
	UTILITY POLE	



GENERAL NOTES:
 1. THIS PROPERTY WAS ONCE OCCUPIED BY RESIDENTIAL STRUCTURES. THE PRESENCE OF ABANDONED FOUNDATIONS IS UNKNOWN. IF ENCOUNTERED, FOUNDATIONS ARE TO BE REMOVED TO 1 FOOT BELOW SUBBASE ELEVATION. BACKFILL WITH COMMON BORROW COMPACTED TO 95% OF MAXIMUM DRY DENSITY.



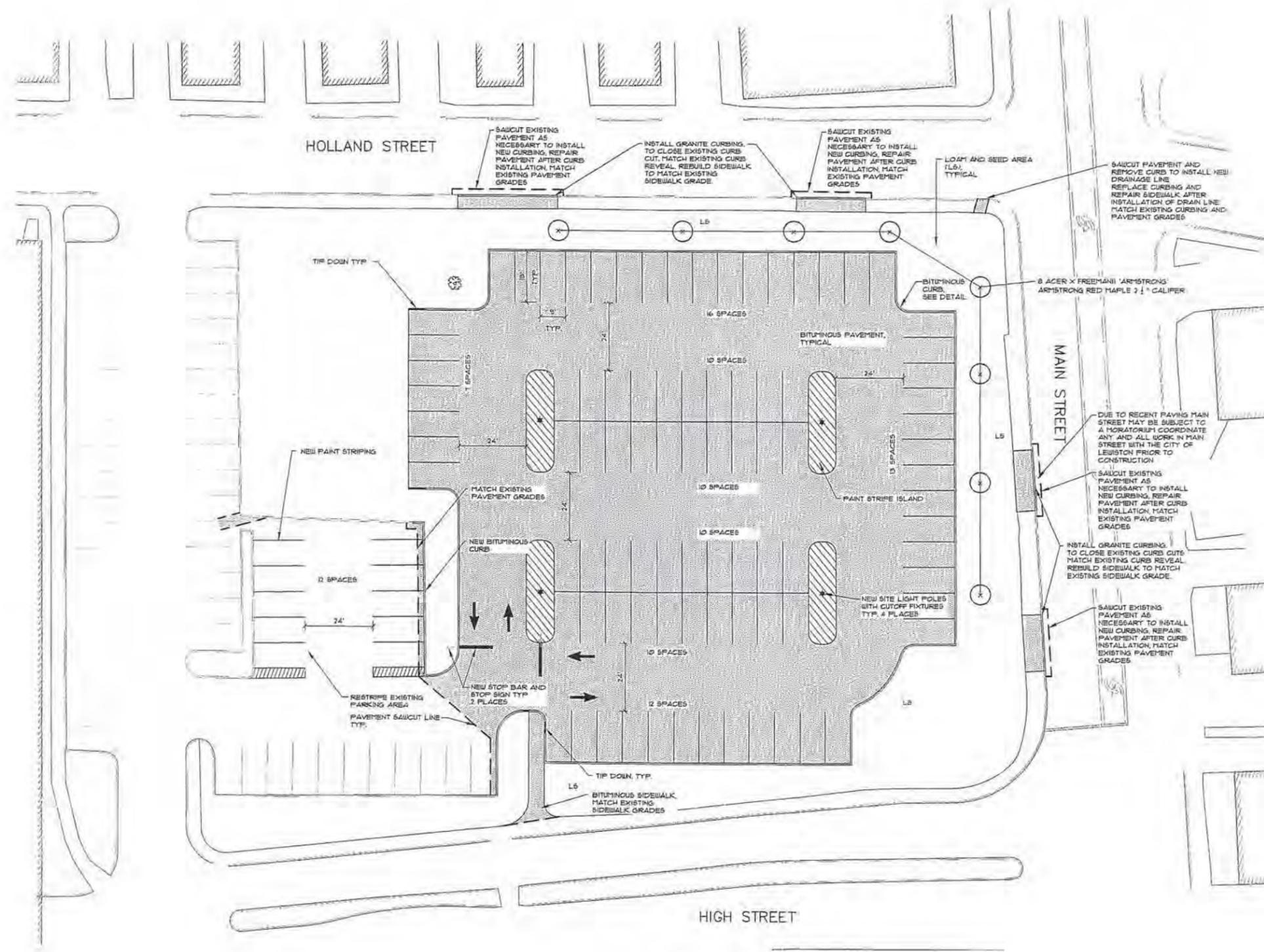
REV.	DATE	BY	STATUS
C	APP	B2212	REVISED PER CITY REVIEW COMMENTS
B	APP	6/29/12	ISSUED FOR SITE PLAN REVIEW
A	APP	3/16/12	ISSUED FOR PRELIMINARY PRICING

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.

SEBAGO
 TECHNICAL SERVICES
 19 John Rowland Pl. Lewiston, ME 04240
 Tel: 207-252-2100

PROJECT NO.	FIELD BOOK	DESIGN	CHKD	DRAWN	APP	ACL
06656	N/A	N/A	APP	APP	APP	ACL

DEMO PLAN
 OF:
 CMMC PARKING LOT EXPANSION
 HIGH, HAMMOND, AND MAIN STREETS
 LEWISTON, MAINE
 FOR:
 CENTRAL MAINE MEDICAL CENTER
 303 MAIN STREET
 LEWISTON, ME

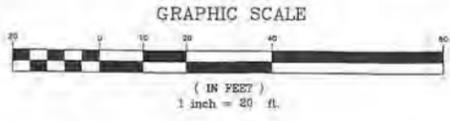


GENERAL NOTES:

1. ALL LITE POLES SHALL NOT EXCEED 25 FEET IN HEIGHT AND SHALL UTILIZE CUT OFF FIXTURES.
2. COORDINATE ALL WORK IN MAIN STREET, HOLLAND STREET AND HIGH STREET WITH LEWISTON PUBLIC WORKS PRIOR TO CONSTRUCTION.

LEGEND

EXISTING	DESCRIPTION	PROPOSED
---	BOUNDARY LINE/ROI	---
---	ABUTTER LINE/ROI	---
⊙	IRON PIPE/ROD	⊙
▭	BUILDING	▭
---	EDGE PAVEMENT	---
---	PAVEMENT PAINT	---
---	GRAVEL ROAD	---
○	DECIDUOUS TREE	○
⊗	CONIFEROUS TREE	⊗
⊕	WATER GATE VALVE	⊕
⊙	HYDRANT	⊙
⊕	POTABLE WELL	⊕
⊙	SEWER FH	⊙
⊕	CATCH BASIN	⊕
⊙	DRAINAGE FH	⊙
⊕	ELECTRICAL MANHOLE	⊕
⊙	TELEPHONE MANHOLE	⊙
⊕	LIGHT POLE/WALL	⊕
⊙	UTILITY POLE	⊙



REV.	BY:	DATE	STATUS
C	APP	8-22-12	REVISED PER CITY REVIEW COMMENTS
B	APP	8/29/12	ISSUED FOR SITE PLAN REVIEW
A	APP	3/16/12	ISSUED FOR PRELIMINARY PRICING

THIS PLAN SHALL NOT BE ADOPTED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICAL SERVICES, INC. ANY ALTERATIONS AUTHORIZED OR CONSENTED, SHALL BE AT THE USER'S RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICAL SERVICES, INC.

SEBAGO TECHNICAL SERVICES

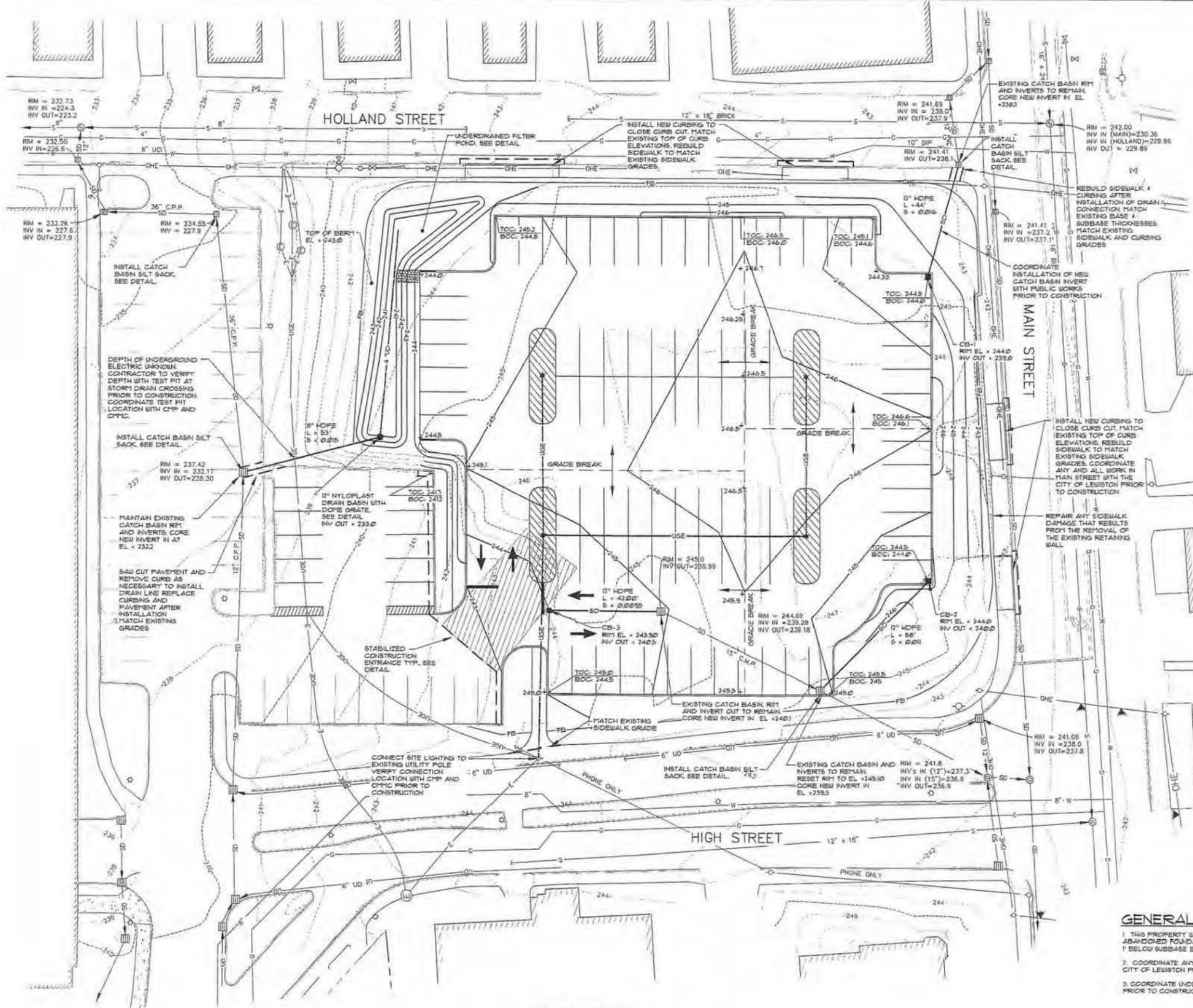
WWW.SEAGOTECHNICALSERVICES.COM
 75 John Hancock Street, 3rd Floor
 South Portland, ME 04106
 Tel: 207-763-3100

PROJECT NO. 08495
 FIELD BOOK
 DESIGN: MA
 CHECK: MA
 DRAWN: APP
 ACL: ACL

SITE / LANDSCAPE PLAN

OF:
 CMMC PARKING LOT EXPANSION
 HIGH, HAMMOND, AND MAIN STREETS
 LEWISTON, MAINE

FOR:
 CENTRAL MAINE MEDICAL CENTER
 300 MAIN STREET
 LEWISTON, ME



LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BUILDING	
	SIGN	
	EDGE PAVEMENT	
	PAVEMENT PAINT	
	GRAVEL ROAD	
	CURBLINE	
	CONTOURS	
	SPOT GRADE	
	RETAINING WALL	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	MULCH LINE	
	WATER GATE VALVE	
	HYDRANT	
	SEWER MH	
	STORM DRAIN	
	CATCH BASIN	
	DRAINAGE MH	
	CULVERT	
	ELECTRICAL MANHOLE	
	TELEPHONE MANHOLE	
	LIGHT POLE/WALL	
	UTILITY POLE	
	FILTER BARRIER	

DEPTH OF UNDERGROUND ELECTRIC UNKNOWN. CONTRACTOR TO VERIFY DEPTH WITH TEST PIT AT STORM DRAIN CROSSING PRIOR TO CONSTRUCTION. COORDINATE TEST PIT LOCATION WITH CMP AND CPMC.

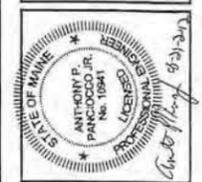
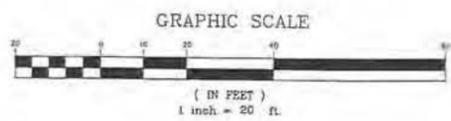
SAW CUT PAVEMENT AND REMOVE CURB AS NECESSARY TO INSTALL DRAIN LINE. REPLACE CURBING AND PAVEMENT AFTER INSTALLATION. MATCH EXISTING GRADES.

STABILIZED CONSTRUCTION ENTRANCE TYP. SEE DETAIL.

CONNECT SITE LIGHTING TO EXISTING UTILITY POLE. VERIFY CONNECTION LOCATION WITH CPM AND CPMC PRIOR TO CONSTRUCTION.

GENERAL NOTES:

- THIS PROPERTY WAS ONCE OCCUPIED BY RESIDENTIAL STRUCTURES. THE PRESENCE OF ABANDONED FOUNDATIONS IS UNKNOWN. IF ENCOUNTERED, FOUNDATIONS ARE TO BE REMOVED TO 1' BELOW SUBBASE ELEVATION.
- COORDINATE ANY WORK WITHIN HOLLAND STREET, MAIN STREET, AND/OR HIGH STREET WITH CITY OF LEWISTON PUBLIC WORKS AND/OR PDOT PRIOR TO CONSTRUCTION.
- COORDINATE UNDERGROUND ELECTRICAL LOCATIONS WITH CPMC AND CENTRAL MAINE POWER PRIOR TO CONSTRUCTION.



REV.	DATE	BY	STATUS
1	3/16/12	A	ISSUED FOR PRELIMINARY PRICING
2	6/29/12	A	ISSUED FOR SITE PLAN REVIEW
3	8-22-12	A	REVISED PER CITY REVIEW COMMENTS

THIS PLAN SHALL BE USED ONLY FOR THE PROJECT DESCRIBED HEREON. ANY REVISIONS FROM SEBAGO TECHNICAL INC. ARE ALTERATIONS. AUTHORIZED CHANGES SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICAL INC.

SEBAGO
 TECHNICAL SERVICES
 15 South Portland, ME 04106
 Tel: 207-260-2100

PROJECT NO.	FIELD BOOK	DESIGN	CHKD	DRAWN	APP	ACL
06456	N/A	N/A	N/A	N/A	N/A	N/A

GRADING AND UTILITIES PLAN
 OF
 CMMC PARKING LOT EXPANSION
 HIGH, HOLLAND, AND MAIN STREETS
 LEWISTON, MAINE
 FOR
 CENTRAL MAINE MEDICAL CENTER
 300 MAIN STREET
 LEWISTON, ME

EROSION CONTROL PLAN

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S) ON THE CONTOUR AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 85-90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY DEMOLITION A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE SITE ENTRANCE AND THE EXISTING PAVEMENT AREA TO PREVENT TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK TO BE COMPLETED AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY MULCHING CONTROL MATS AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN 14-DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100' OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 15TH OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS.

CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS MUST NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE WATER AND/OR SEDIMENT CONTROL PROTECTION.

EROSION CONTROL APPLICATION MEASURES
THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINALLY GRADED WITHIN 14 DAYS SHALL BE MULCHED. ALSO, AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEDIMENTED SHALL BE MULCHED IMMEDIATELY. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRADED WATERWAYS AND ON SLOPES GREATER THAN 15%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (NOT WINTER EROSION CONTROL MATS). TYPES OF MULCH:
HAY OR STRAW: SHALL BE APPLIED AT A RATE OF 15 LBS/1000 SF. (15 TONS PER ACRE)
EROSION CONTROL MATS: SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MATS SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3% OR LESS IS 4 INCHES PLUS 1/2" INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3% AND 7% SHALL BE 4 INCHES PLUS 1/2" INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 7%.

EROSION CONTROL BLANKETS: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 15 LBS/1000 SF. (15 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MAT. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

3. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1. OF THIS SECTION) WITHIN 14 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4. OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S) ON THE CONTOUR, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 85-90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETRIORATION OF THE BARRIERS. BALES SHALL BE INSTALLED WITH A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ADJUTING ONE ANOTHER.

EROSION CONTROL MATS: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE MAT SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF FERTILIZER SIZES AND MUST CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION MUST MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

CONTINUOUS CONTAINED BERRY: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MAT PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD, GROUND OR FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

5. STORMDRAIN INLET PROTECTION

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESIDUAL FLOWING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO EXISTING AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: USE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CORNERED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. STABILIZED CONSTRUCTION ENTRANCE/EXIT

PRIOR TO DEMOLITION A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEEP OR WASHED TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. A STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS.

7. DUST CONTROL

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND FEDERAL REGULATORY AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE.

8. TEMPORARY VEGETATION

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDBED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVED) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 3/00/03 OR LATER. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF PLANTING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

9. PERMANENT VEGETATION

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOADED AND SEEDING. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 15TH AND SEPTEMBER 15TH OF THE CONSTRUCTION YEAR. PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDING PREPARATION

A FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY, LIMES, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.

SOIL TESTS SHALL BE TAKEN AT THE TYPE OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOIL TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P-K) OR EQUAL	84 LBS/1000 SF.
GROUND LIMESTONE (50% CALCIUM / 1% MAGNESIUM) GROUND	85 LBS/1000 SF.

9. CONTINUED
C. WORK LINE AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.
4. APPLICATION OF SEED:
SEEDING SHALL BE CONDUCTED BETWEEN APRIL 15TH AND OCTOBER 15TH OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE THAT BE APPLIED AS FOLLOWS: (MDEP SEED MIX 7) IS DISPLAYED!

SEED TYPE	APPLICATION RATE
CREEPING RED FESCUE	0.46 LBS/1000 SF. (17.5 LBS/ACRE)
REDTOP	0.29 LBS/1000 SF. (12 LBS/ACRE)
TALL FESCUE	0.46 LBS/1000 SF. (17.5 LBS/ACRE)
TOTAL:	0.91 LBS/1000 SF. (47 LBS/ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 3/00/03 OR LATER.

B. HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 7% LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 15% WHEN HYDROSEEDING.

C. MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SEEDING:
FOLLOWING SEEDING PREPARATION SOIL CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL, SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOIL SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOIL SHOULD BE ROLLED OR TAMPORED DOWN TO EVEN OUT THE JOINTS (SEE LAID DOWN WHERE FLOW IS IRRELEVANT THE SOIL MUST BE PROPERLY ANCHORED. IRRIGATE THE SOIL IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOIL CAN BE ESTABLISHED BETWEEN APRIL 15TH AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR. HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 15TH.

1. TRENCH DEWATERING

WATER FROM CONSTRUCTION TRENCH DEWATERING WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

STANDARDS FOR TIMELY STABILIZATION

STANDARDS FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES: -- BY SEPTEMBER 15 THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (75% H) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15 THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

1. STABILIZE THE SOIL WITH TEMPORARY VEGETATION: -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1 THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 7(C) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D) OF THIS STANDARD.

2. STABILIZE THE SLOPE WITH SOIL: -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOIL BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOIL ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOIL TO GUARANTEE CONTACT BETWEEN THE SOIL AND UNDERLYING SOIL, AND WATERING THE SOIL TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOIL INSTALLATION TO STABILIZE SLOPES HAVING GRADES GREATER THAN 33% (75% H).

3. STABILIZE THE SLOPE WITH WOOD WASTE COMPOST: -- THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (75% H) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

4. STABILIZE THE SLOPE WITH STONE RIPRAP: -- THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES: -- BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SLOPES ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SLOPES BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

1. STABILIZE THE SOIL WITH TEMPORARY VEGETATION: -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDING SOIL WITH HAY OR STRAW AT 15 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BY NOVEMBER 1, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 2(C) OF THIS STANDARD.

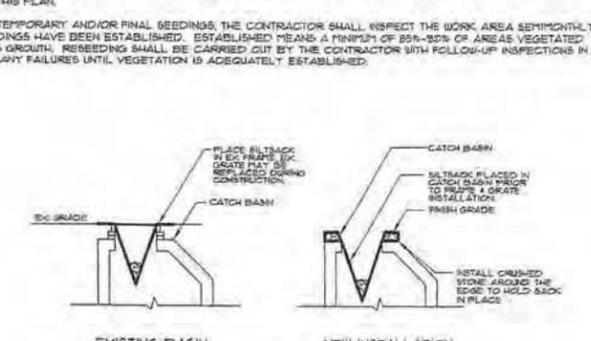
2. STABILIZE THE SOIL WITH SOIL: -- THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOIL BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOIL ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOIL TO GUARANTEE CONTACT BETWEEN THE SOIL AND UNDERLYING SOIL, AND WATERING THE SOIL TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

3. STABILIZE THE SOIL WITH MULCH: -- BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 15 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

INSTRUCTIONS/MONITORING

1. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, OR AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN.

2. FOLLOW-UPS THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMI-RIGHTLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 85%-90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.



CATCH BASIN PROTECTION DETAIL (FOR PAVED AREAS)
NOT TO SCALE

NOTE: PRIOR TO FINAL GRADING AND PAVING OPERATIONS BEGINNING, A CATCH BASIN MUST BE INSTALLED IN EACH BASIN. MANUFACTURER'S INSTALLATION INSTRUCTIONS MAY VARY AND SHOULD BE REVIEWED ONCE MATERIALS ARE INSTALLED.

WINTER EROSION CONTROL PLAN

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT A ROAD GRAVEL BASE, 15% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD.
WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. THE LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS, AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LAID, SEEDING AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 15 LBS/1000 SF. (15 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.
THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS.
CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS MUST NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 30 LBS/1000 SF. (30 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MAT. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.
ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS.
DURING WINTER CONSTRUCTION A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MATS) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 15 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERRIS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.
EROSION CONTROL MATS SHALL BE USED TO STABILIZE SLOPES GREATER THAN 15% (75% H) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15 THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

4. MULCHING

ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDING AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 15 LB. PER 1000 SQUARE FEET OR 15 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 7.5 LBS/1000 SF. OR 7.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED.
MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION.

AFTER EACH POINT OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING.
AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 15 LB. PER 1000 SQUARE FEET (7.5 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

BETWEEN THE DATES OF NOVEMBER 15 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT.
AFTER NOVEMBER 15, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

5. MULCHING ON SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK. SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 30 LBS/1000 SF. ON ALL SLOPES GREATER THAN 15%.

MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 2% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 5%.

EROSION CONTROL MATS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8%.

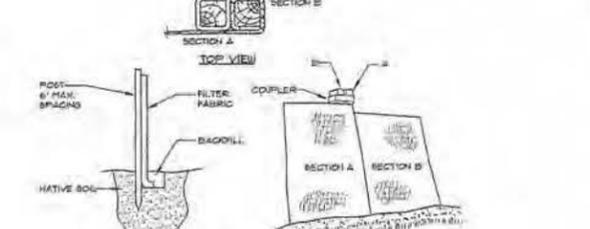
EROSION CONTROL MATS CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 15, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDING AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 15 AND THE EXPOSED AREA HAS BEEN LOOPEL, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDING AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.

DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES.
IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4' OF LOAM AND SEED AT AN APPROPRIATE RATE. ALL AREAS SEEDING DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS SUFFICIENTLY VEGETATED

SHALL BE PROTECTED WITH MULCH OR STRAW AT A RATE OF AT LEAST 15 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.



INSTALLATION

1. EXCAVATE A 6" x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
2. UNROLL A SECTION A AT THE END POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) END OF THE TRENCH.
3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 1" OF FABRIC IS TIGHT ON THE TRENCH BOTTOM.
4. LAY THE TIE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH. THE TRENCH SHOULD BE 100% FULL OF GRAVEL. THE TRENCH SHOULD BE ACCOMPANIED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND TAMPING FILL AT THE BASE. BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
5. JOIN SECTION AS SHOWN ABOVE.
6. BARRIER SHALL BE HIRAP SILT FENCE OR SIGNAL.

FILTER BARRIER
NOT TO SCALE

(LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

7. TRENCH DEWATERING

WATER FROM CONSTRUCTION TRENCH DEWATERING WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE LINED POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

8. INSPECTION AND MONITORING

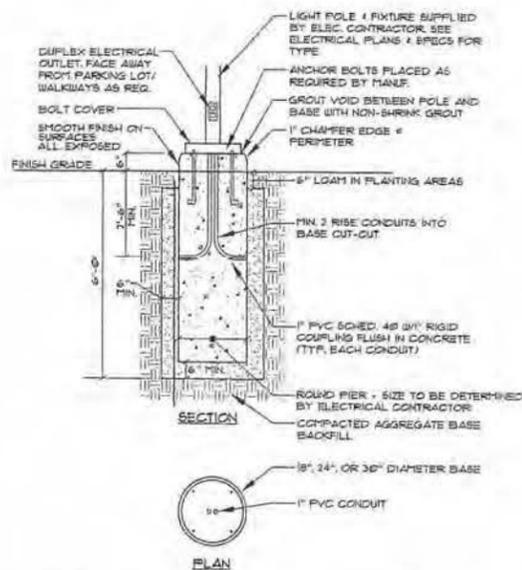
MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INURE THEIR CONTINUOUS FUNCTION. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO INURE THEIR CONTINUOUS FUNCTION. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO INURE THEIR CONTINUOUS FUNCTION. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO INURE THEIR CONTINUOUS FUNCTION.

STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION BITES DURING WINTER

1. STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS -- THE APPLICANT WILL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15. THE APPLICANT WILL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 15. IF THE APPLICANT FAILS TO STABILIZE A DITCH OR CHANNEL BY SEPTEMBER 15 THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.

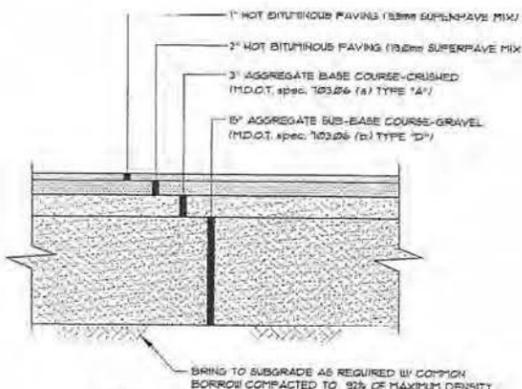
CONSTRUCTION NOTES

- ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES
- CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
- INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
- CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
- CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.
- SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
- ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "TRANS EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CONNECTICUT COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION MARCH 2005 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
- THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (1-888-DIGSAFE) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
- CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SHALL LOCAL UTILITIES, AS WELL AS USGS PUBLIC WORKS SYSTEMS.
- CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRS. 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
- ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
- ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
- NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
- ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE CITY AS APPLICABLE.
- IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
- THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
- ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.
- WHERE THE TERMS "APPROVED EQUAL," "OTHER APPROVED," "EQUAL TO," "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGMENT OF SEBAGO TECHNIC, INC.
- THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
- THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
- THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
- DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
- BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION, CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.
- ALL SUBSURFACE UTILITY LINES SHOWN HEREON ARE BASED SOLELY ON THE FIELD LOCATION OF VISIBLE STRUCTURES, SPANS, CDS, HYDRAULS, ETC. IN CONJUNCTION WITH DESIGN AND ON AS-BUILT PLANS SUPPLIED TO SEBAGO TECHNIC, INC. BY OTHERS. PRIOR TO ANY CONSTRUCTION, EXCAVATION TEST BORINGS, DRILLING, ETC. DIG SAFE MUST BE NOTIFIED AND A SITE IDENTIFICATION NUMBER ALONG WITH A SAFE TO DIG DATE OBTAINED. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION, DEPTH AND MATERIAL OF ALL SUBSURFACE UTILITY LINES SHOWN HEREON AND ANY AND ALL OTHERS LOCATED ON SITE WITHIN THE CONSTRUCTION AREA.



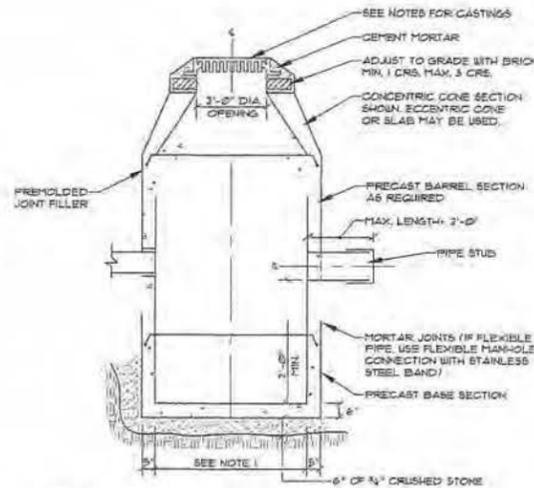
- NOTES:**
- CONCRETE Fc=5,000 psi
 - REIN. STEEL GRADE 60 NEW BARS
 - INSTALL BASE 3'-0" ABOVE FINISH GRADE IN LOCATIONS WHERE POLES ARE IN PARKING LOT PAVEMENT. ADJUST TOTAL HEIGHT OF BASE AS REQUIRED.
 - POLE BASE SHALL BE SUPERIOR CONCRETE MODEL LFB-R0 CONCRETE LIGHT POLE BASE OR APPROVED EQUAL.

PRECAST CONCRETE LIGHT POLE BASE
NOT TO SCALE



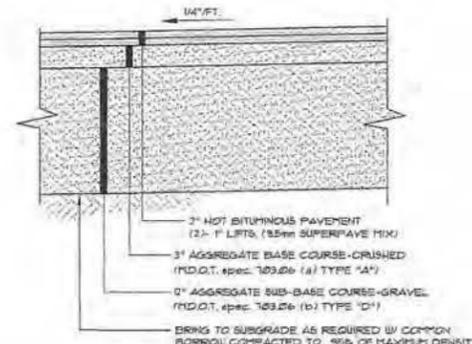
- NOTE:**
- COMPACT GRAVEL SUB-BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
 - CONTRACTOR SHALL SET GRADE STAKES MARKING SUB-BASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

PARKING LOT SECTION
NOT TO SCALE

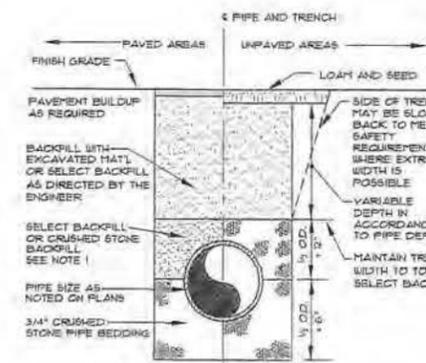


- NOTES:**
- 4'-0\"/>

TYPICAL DRAINAGE STRUCTURE
NOT TO SCALE

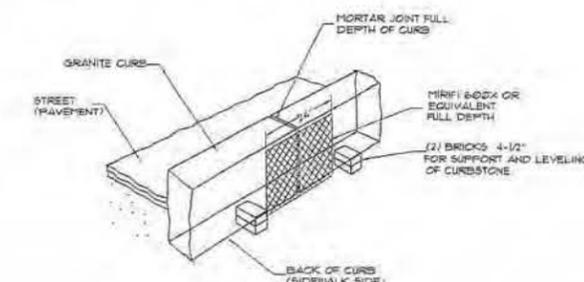


BITUMINOUS SIDEWALK
NOT TO SCALE

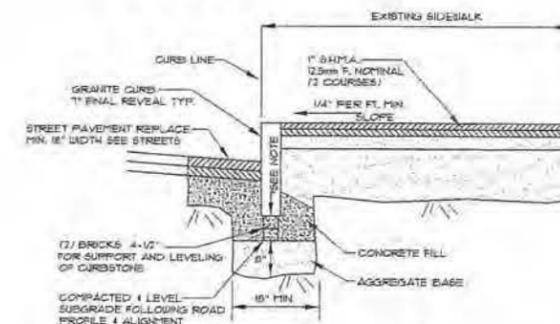


TYPICAL TRENCH SECTION
NOT TO SCALE

- NOTES:**
- ALL PIPE LOCATED WITHIN THE CITY OF LEWISTON RIGHT OF WAY SHALL HAVE CRUSHED STONE BACKFILL OVER THE TOP OF THE PIPE.

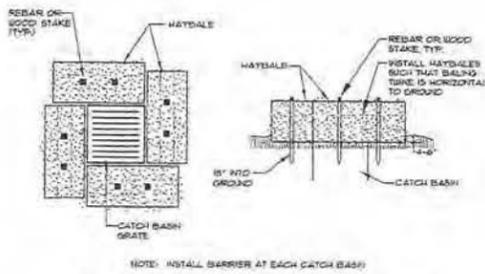


ISOMETRIC VIEW CURB JOINT
NOT TO SCALE

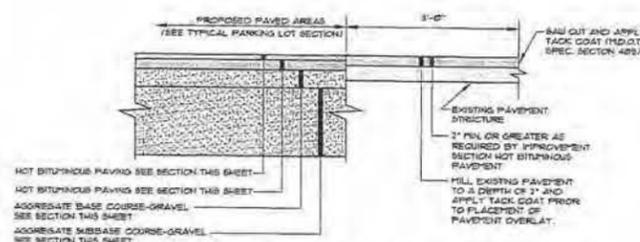


GRANITE CURB INSTALLATION
NOT TO SCALE

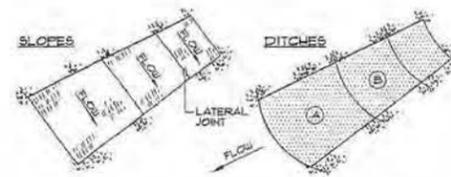
- NOTES:**
- CURBSTONE IS TO BE SET UPON STACKED BRICKS FOR TEMPORARY SUPPORT TO ACHIEVE 4-1/2\"/>



CATCH BASIN HAYBALE BARRIER
NOT TO SCALE

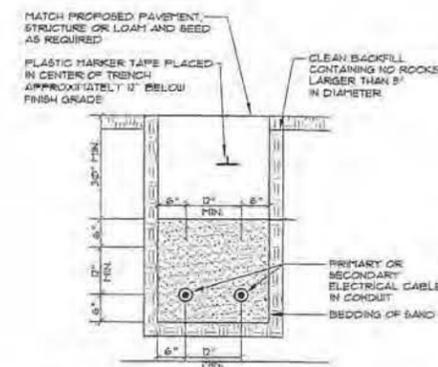


PAVEMENT SAW CUT DETAIL
NOT TO SCALE



- NOTES:**
- BURY THE TOP END OF THE FRESH MATERIAL IN A 6\"/>

EROSION CONTROL BLANKET
NOT TO SCALE



CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT WHEN RUN BENEATH PAVED AREAS

TYPICAL UNDERGROUND CABLE INSTALLATION
NOT TO SCALE



REVISED PER CITY REVIEW COMMENTS	DATE	BY	STATUS
ISSUED FOR SITE PLAN REVIEW	8/22/12	APP	REVISED
ISSUED FOR PRELIMINARY PRICING	8/29/12	APP	REVISED
	3/16/12	APP	REVISED

SEBAGO
TECHNICAL SERVICES, INC.
15 W. BROAD STREET, SUITE 201
LEWISTON, MAINE 04240
Tel: 207-252-1100 Fax: 207-252-1103

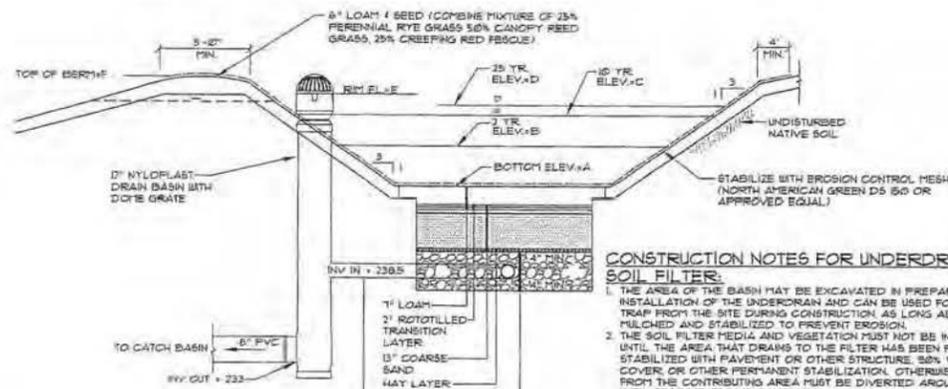
PROJECT NO.: FIELD BOOK 09486

DRAWN: CHD
APP: APP
DESIGN: NA
CHECK: APP
A.C.L.

DETAILS OR
CMC PARKING LOT EXPANSION
HIGH, HAMMOND, AND MAIN STREETS
LEWISTON, MAINE
FOR:
CENTRAL MAINE MEDICAL CENTER
300 MAIN STREET
LEWISTON, ME

DATE	SCALE
3/8/12	AS SHOWN

SHEET 7 OF 8



DOMED
APPROX. DRAIN AREA = 84,000 SQ. IN.
APPROX. WEIGHT = 836 LBS.



NYLOPLAST 12" DOMED GRATE
NOT TO SCALE

CONSTRUCTION NOTES FOR UNDERDRAINED SOIL FILTER:

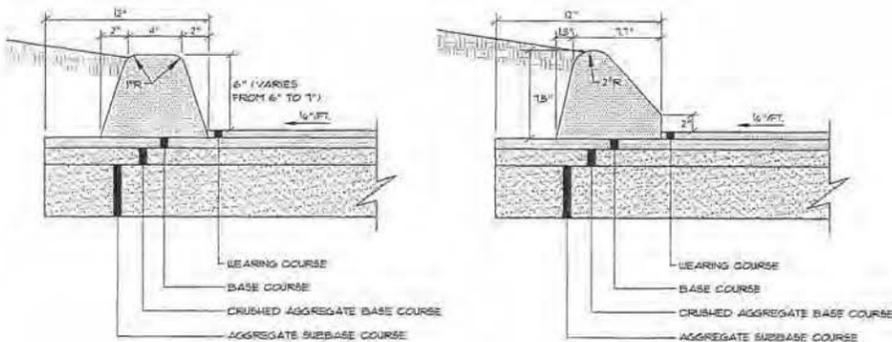
1. THE AREA OF THE BASIN MAY BE EXCAVATED IN PREPARATION OF THE INSTALLATION OF THE UNDERDRAIN AND CAN BE USED FOR A SEDIMENT TRAP FROM THE SITE DURING CONSTRUCTION AS LONG AS THE BASIN IS MULCHED AND STABILIZED TO PREVENT EROSION.
2. THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE. 50% VEGETATION COVER OR OTHER PERMANENT STABILIZATION OTHERWISE THE RUNOFF FROM THE CONTRIBUTING AREA MUST BE DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.
3. IF VEGETATION IS NOT ESTABLISHED WITHIN THE FIRST YEAR THE CONTRACTOR MAY INSTALL A 2-3 INCH LAYER OF SANDY LOAM TOPSOIL (WITH LESS THAN 2% CLAY) ON THE SURFACE OF THE GRASS, FILTER AND REBEDDING MULCH.
4. INSPECTION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER WITH REQUIRED REPORTING TO THE DEP. AT A MINIMUM THE DESIGN ENGINEER SHALL INSPECT THE CONSTRUCTION AT THE FOLLOWING PHASES:
 - A. AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
 - B. AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA.
 - C. AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED.
 - D. AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS, AND
 - E. ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN SHALL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.
5. THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF THE FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:
 - A. SUBMIT SAMPLES OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA AND SAMPLES OF THE UNDERDRAIN BEDDING MATERIAL. SAMPLES MUST BE A COMPOSITE OF THREE GRABS FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
 - B. PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES, 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A CLAY CONTENT OF LESS THAN 2% (DETERMINED BY HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
 - C. PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA CONFORMING TO ASTM D2434 WITH THE MIXTURE COMPACTED TO 90-95% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.
6. UNDERDRAIN PIPES BELOW THE SOIL BED SHALL BE INSTALLED TO PROVIDE POSITIVE DRAINAGE.

FILTRATION BASIN	A	B	C	D	E	F
UDP-1	241.0	242.31	242.52	242.64	242.90	243.0

UNDERDRAINED DETENTION BASIN UDP-1 EMBANKMENT LINER SPECIFICATIONS NOTES

1. THE EMBANKMENT LINER SHALL BE 6 INCHES OF LOAM MIXED WITH SILT OR CLAY CONTENT GREATER THAN THAT OF THE SOIL FILTER BED. SUCH THAT THE PERMEABILITY OF THE EMBANKMENT LINER IS LESS THAN THE FILTER BED MATERIAL.
2. THE EMBANKMENT LINER SHALL BE INSTALLED THROUGHOUT THE ENTIRE INTERIOR SIDE OF THE BASIN AND SHALL EXTEND FROM THE FILTER BED TO THE TOP OF THE BERTH.

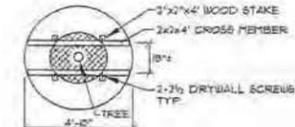
UNDERDRAINED FILTRATION BASIN UDP-1
NOT TO SCALE



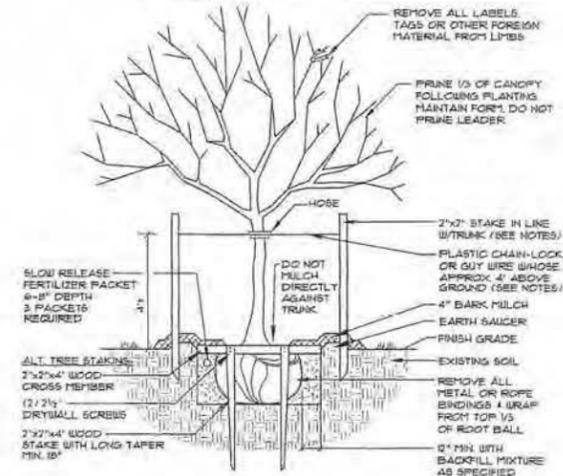
MOLD 1

MOLD 2

BITUMINOUS CURB SECTION
NOT TO SCALE



ALT TREE STAKING PLAN
NOT TO SCALE



NOTES:

1. INSTALL STAKES AND GUTS TO TREES IF THE FOLLOWING APPLY:
 - A. THE TREE IS OF SUBSTANTIAL SIZE.
 - B. THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
 - C. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
 - D. IF STAKES AND GUTS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

DECIDUOUS TREES 2" TO 4" CALIFER
NOT TO SCALE



REV	BY	DATE	STATUS
C	APP	8-22-12	REVISED PER CITY REVIEW COMMENTS
B	APP	8/22/12	ISSUED FOR SITE PLAN REVIEW
A	APP	3/16/12	ISSUED FOR PRELIMINARY PRICING

SEBAGO TECHNICALS
75 John Rollins Rd., Suite 11A, Lewiston, ME 04240
Tel: 207-259-2160 Fax: 207-760-5858
WWW.SEBAGOTECHNICALS.COM

PROJECT NO. 06688 N/A FIELD BOOK DESIGN CHRD DRAWN

DATE 3/6/12 SCALE AS SHOWN

DETAILS OF:
CMC PARKING LOT EXPANSION
HIGH, HAMMOND, AND MAIN STREETS
LEWISTON, MAINE
FOR:
CENTRAL MAINE MEDICAL CENTER
300 MAIN STREET
LEWISTON, ME

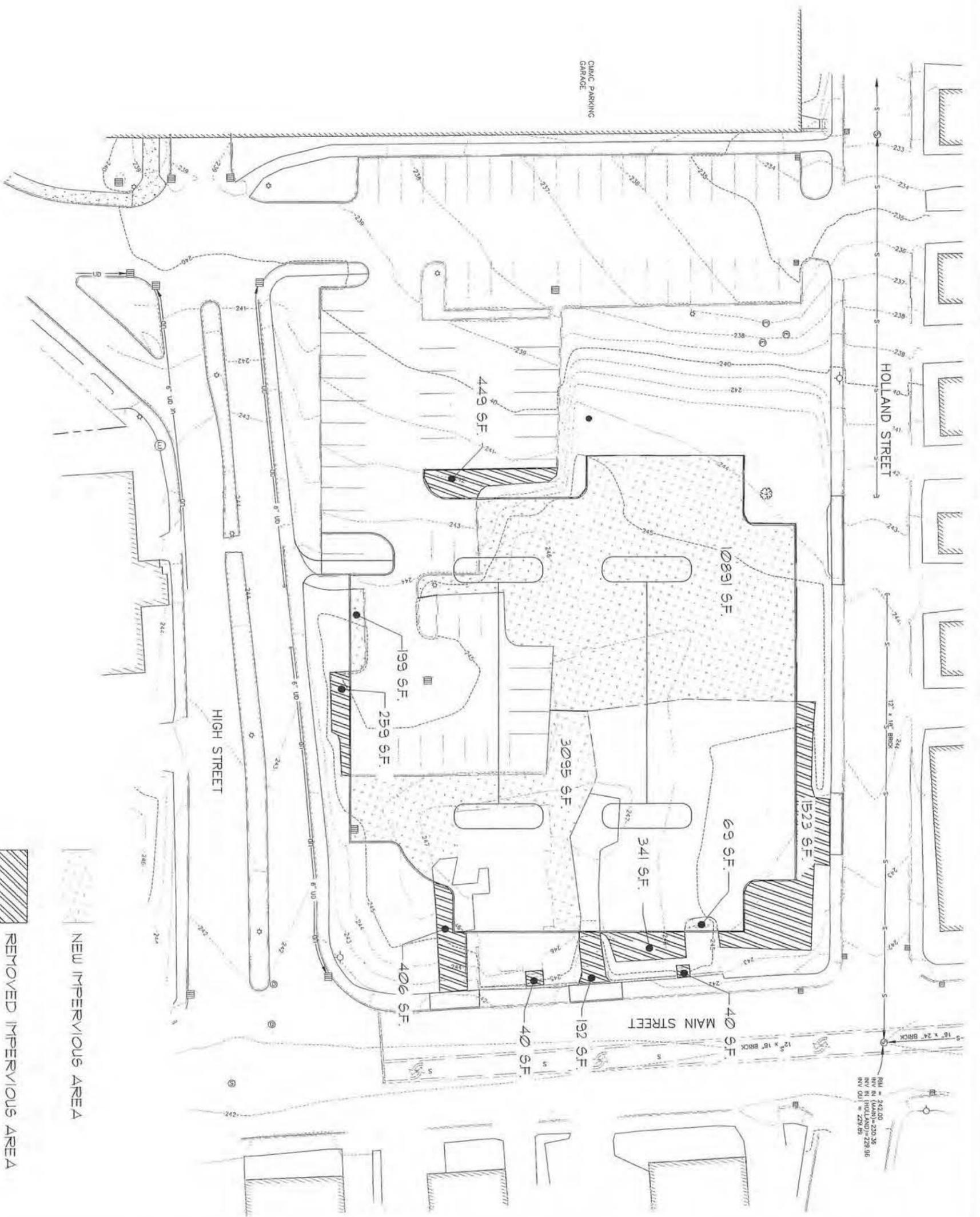
DATE 3/6/12 SCALE AS SHOWN

SHEET 8 OF 8



LEGEND

EXISTING	DESCRIPTION	PROPOSED
---	BOUNDARY LINE/ROAD	---
---	ADJUTANT LINE/ROAD	---
---	SETBACK	---
---	EASEMENT	---
---	HOUSING	---
---	300'	---
---	EDGE PAVEMENT	---
---	EDGE CONCRETE	---
---	PAVEMENT PAINT	---
---	CURBLINE	---
---	RETAINING WALL	---
○	DECIDUOUS TREE	○
○	CONIFEROUS TREE	○
○	QUADRANT	○
○	BOLLARD	○
○	LIGHT POLE/STALL	○
○	PLANTING AREA	○



NEW IMPERVIOUS AREA = 14254 S.F.
 REMOVED IMPERVIOUS AREA = -3250 S.F.
 NET NEW IMPERVIOUS AREA = 11004 S.F.

IMPERVIOUS AREA SUMMARY PLAN

OF:
CMMC PARKING LOT EXPANSION
 HIGH, HAMMOND, AND MAIN STREETS
 LEWISTON, MAINE

FOR:
CENTRAL MAINE MEDICAL CENTER
 300 MAIN STREET
 LEWISTON, ME

DATE	SCALE
3/9/12	1" = 20'

SEBAGO TECHNICS
 WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd. - Suite 1A South Portland, ME 04106 Tel. 207-269-2100

250 Goddard Rd. - Suite B Lewiston, ME 04249 Tel. 207-793-9858

PROJECT NO.	FIELD BOOK	DESIGN	CHKD	DRAWN
06456	N/A	APP	APP	ACL

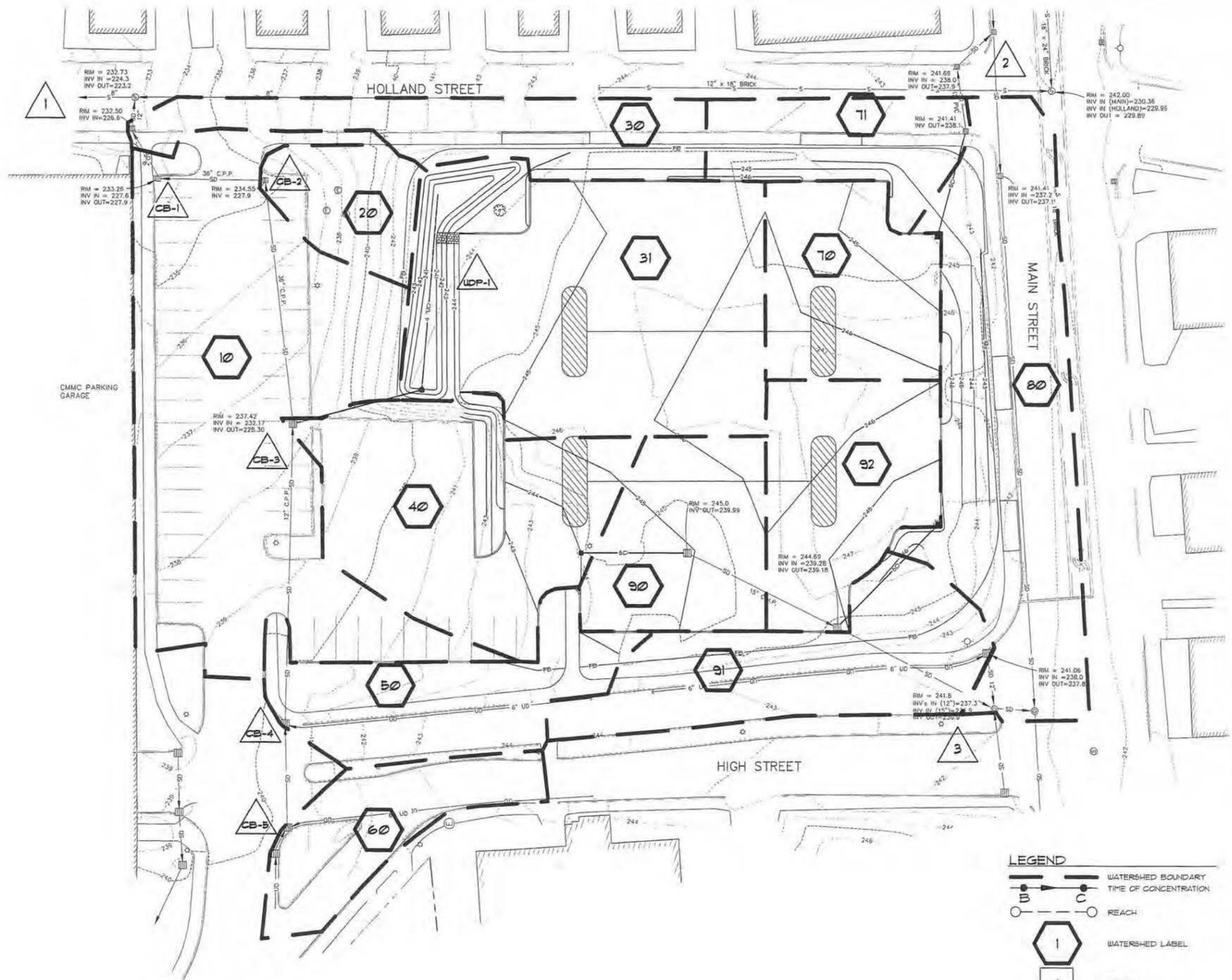
REV.	BY:	DATE:	STATUS:
B	APP	8-22-12	REVISED PER CITY REVIEW COMMENTS
A	APP	6/29/12	ISSUED FOR SITE PLAN REVIEW

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

STATE OF MAINE

ANTHONY P. PANCIKCO JR.
 No. 10941
 LICENSED PROFESSIONAL ENGINEER

Ant May 8-21-2012

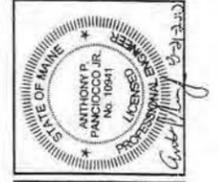
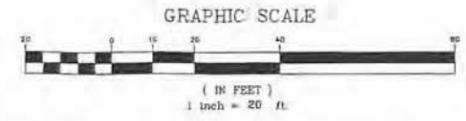


LEGEND

EXISTING	DESCRIPTION	PROPOSED
---	BOUNDARY LINE/ROW	---
---	ABUTTER LINE/ROW	---
---	SETBACK	---
---	EASEMENT	---
---	MONUMENT	---
---	BUILDING	---
---	SIGN	---
---	EDGE PAVEMENT	---
---	EDGE CONCRETE	---
---	PAVEMENT PAINT	---
---	CURELINE	---
---	RETAINING WALL	---
○	DECIDUOUS TREE	○
○	CONIFEROUS TREE	○
---	GUARDRAIL	---
---	BOLLARD	---
---	LIGHT POLE/BALL	---
---	P.A.	---
---	PLANTING AREA	---

LEGEND

---	WATERSHED BOUNDARY
---	TIME OF CONCENTRATION
---	REACH
○	WATERSHED LABEL
---	REACH
△	DETENTION POND
---	SOILS BOUNDARY



REVISIONS

NO.	DATE	BY	REVISION
B	8-22-12	APP	REVISED PER CITY REVIEW COMMENTS
A	8/29/12	APP	ISSUED FOR SITE PLAN REVIEW

STATUS: _____

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SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM
 75 John Bartram Rd., Suite 1A, 250 Quoddy Rd., Suite B
 Lewiston, Maine 04240
 Tel: 207-203-3100 Fax: 207-203-2658

PROJECT NO. | FIELD BOOK | DESIGN | CHKD | DRAWN | APP | APP | APP | ACL

06456 | N/A | APP | APP | APP | APP

POST DEVELOPMENT WATERSHED PLAN

OF:
CMMC PARKING LOT EXPANSION
 HIGH, HANCOCK, AND MAIN STREETS
 LEWISTON, MAINE
 FOR:
CENTRAL MAINE MEDICAL CENTER
 300 MAIN STREET
 LEWISTON, ME

DATE: 3/8/12 SCALE: 1" = 20'

SHEET 2 OF 2

06456(WP-dwg), TAB: POST-PARKING



CITY OF LEWISTON

Department of Planning & Code Enforcement



TO: Planning Board
FROM: David Hediger, City Planner
DATE: August 9, 2012
RE: August 13, 2012 Planning Board Agenda Item IV(B)

An application submitted by Sebago Technics on behalf of Val's Root Beer Restaurant for the construction of four new coin operated batting cages at 925 Sabattus Street.

Sebago Technics on behalf of Val's Root Beer Restaurant has submitted an application to construct four new coin operated batting cages at 925 Sabattus Street. Said property consists of 0.94 acres located in the Highway Business (HB) district and currently contains a drive-in restaurant. The proposed batting cages will be located behind the restaurant at the edge of the exiting paved area. The project includes netting and posts for the ball field enclosure, a 5' x 60' concrete pad for the pitching machine mounts and a 12' x 12' storage shed.

Batting cages are permitted as a conditional use in the HB district as commercial outdoor recreation. Therefore, this project is being considered pursuant to Article X, Section 3 of the Zoning and Land Use Code. The proposed improvements are relatively minor with only 444 square feet of new impervious area. Typically, requests of this nature are reviewed by the Board of Appeals. However, being a project otherwise meeting the minor development classification, but requiring issuance of a conditional use permit as per Article XIII, Section 3(a)(1)(b), the project is being bumped up to the Planning Board's jurisdiction. Therefore, the project is also being considered pursuant to Article XIII, Section 4 of the Zoning and Land Use Code. Staff notes the following:

- The applicant has specifically referenced the conditional use criteria of Article X, Section 3. At staff's request, additional reference has been made to the development review criteria of Article XIII, Section 4 (see August 23, 2012 letter from Sebago Technics to David Hediger).
- The applicant has noted that hours of operation for the batting cages will coincide with that of Val's restaurant, 11:00 AM to 9:00 PM. However, use of the cages will be limited to daylight hours as no lighting is being proposed at this time. If lighting is desired, an amended conditional use permit will be required at which time a photometric plan will need to be provided.
- With notice provided to abutting properties of this project, this office received a complaint regarding noise from the existing speakers at Val's. A copy of this concern has been provided for your review. Apparently, music from Val's can be heard by abutting properties on Ridgewood Avenue. Article XII, Section 19(2) requires the maximum sound level at Val's property line not to exceed 50 decibels when abutting a residential zoning district, 60 decibels when abutting a business district. The applicant has noted that minimal noise will be created from metal bats hitting balls. Staff has

reminded the applicant of the noise limitations and that action must be taken to reduce music noise levels.

- Drainage from the site discharges onto the abutting property at 68 Payne Street. This property and Val's located at 925 Sabattus Street are both owned by Gail and James Lawrence. The site plan should clarify joint ownership of these parcels.
- The property at 68 Payne Street is located in the Neighborhood Conservation "A" (NCA) district. As proposed, fencing associated with the batting cages extends approximately 30' into the NCA zone. Where a zoning district boundary line divides a lot or parcel of land in the same ownership, Article IV, Section 3(b) allows the use regulations applicable to one portion of the lot to extend into the other portion of the lot by not more than 30' provided that the other portion is not a Resource Protection District. Staff believes this provision is being met; however, recommends the plan be amended to clearly show the zoning district boundary and that any improvements not exceed the permitted 30' extension.
- Pursuant to Article X, Section 5, no conditional use permit shall be valid for a period longer than six months from the date of issue, or such other time, up to two years. The applicant has requested the conditional use permit be valid for a period of 24-months from the date of approval to be consistent with the 24-month expiration of development review approved projects.
- Public Work's comments have been addressed. Police and Fire expressed no concerns.

Planning and Code Enforcement recommend approval, finding the applicant has addressed the applicable review criteria of the Zoning and Land Use Code, including Article X, Section 3 and Article XIII, Section 4 with the following conditions:

1. If lighting is desired, an amended conditional use permit will be required at which time a photometric plan must be provided.
2. The maximum sound level at Val's property line where the abutting zoning is residential must not exceed 50 decibels or 60 decibels when abutting a business district
3. The plan is amended to clearly show the zoning district boundaries and that any site improvements not exceed the permitted 30' extension from HB district into the NCA district.
4. The conditional use permit is valid for a period of 24-months from the date of approval to be consistent with the 24-month expiration of development review approved projects. This should be noted on plan as well as the expiration of approval language contained in Article XIII, Section 11.

ACTIONS NECESSARY

1. Make a motion to consider an application submitted by Sebago Technics on behalf of Val's Root Beer Restaurant to construct four new coin operated batting cages at 925 Sabattus Street;
2. Make a determination that the application is complete;
3. Make a motion finding that the application meets all of the necessary criteria contained in the Zoning and Land Use Code, including Article X, Section 3 and Article XIII, Section 4 of the Zoning and Land Use Code and to grant approval to Val's Root Beer Restaurant/Chris Lawrence for the construction of four new coin operated batting cages at 925 Sabattus Street, subject to any concerns raised by the Planning Board or staff.

August 23, 2012
12172

Mr. David Hediger, City Planner/Deputy Director
Planning and Code Enforcement
City of Lewiston
27 Pine Street
Lewiston, ME 07240

Site Plan Application: Val's Root Beer Batting Cagesl - Response to Review Comments dated August 17, 2012 and August 20, 2012:

Dear Mr. Hediger:

We are writing on behalf of Val's Root Beer to address review comments related to our July 30, 2012 application for the addition of batting cages on Sabattus St. associated with the Val's Root Beer. Included in this letter are responses to the review comments that we have received to date, via your email message on August 20, 2012. The review comments include the following:

- Department of Planning and Code Enforcement comments from David Hediger, dated August 20, 2012.
- Lewiston Department of Public Works comments from Ryan Barnes, PE dated August 20, 2012

Our application has been revised to address the City's comments. The following items present the text of the latest plan review comments in italics, followed by our response.

**Department of Planning and Code Enforcement Review Comments:
Mr. David Hediger dated June 5, 2012**

- 1. Project requires development review approval from the Planning Board since it is a minor project requiring a conditional use permit: Projects otherwise meeting the minor development classification, but requiring issuance of a conditional use permit shall be classified as a major project. Please reference approval criteria of Section XIII, Section 4.*

Most of the approval criteria were addressed in the letter dated July 30, 2012, including utilization of the site, traffic movement into and out of the development area, access into the site, internal vehicle circulation, pedestrian circulation, stormwater management, erosion control, natural features, water and air pollution, exterior lighting, lot layout, landscaping, technical and financial capacity, buffering, compliance with district regulations and design consistent with performance standards. Groundwater protection, shoreland relationship and open space are not

applicable to this project. No new water supply will be needed at the batting cages. If water is required, it will be obtained from the existing building. No new sewage disposal will be created due to this project. It is expected a minimum amount of solid waste will be created and it will be disposed of with the current solid waste generated at Val's Root Beer. Electricity will be required at the site and will come from the existing electrical service at the building.

2. *What is the height of the proposed fencing? Design must keep balls from applicant's property.*

The batting area is enclosed with a net to keep the balls contained to the property. We will submit this information as part of the process to obtain a building permit for this work.

3. *At this time, the applicant is not proposing to light the batting cages. If proposed, an amended conditional use permit will be required at which time a photogrammetric plan will need to be submitted.*

This is fine.

4. *Site plan must contain signature block and expiration language of Article XIII, Section 11.*

The signature block has been added to the plan. We will add the expiration language of Article XIII.

5. *Pursuant to Article X, Section 5, no conditional use permit shall be valid for a period longer than 6 months from the date of issue, or such other time up to two years. While the applicant has not made the specific request, staff recommends the conditional use permit be valid for a period of 24 months from the date of approval to be consistent with the 24 month expiration of the development review approved projects.*

We request that the conditional use permit be valid for a period of 24 months from the date of approval.

Department of Public Works Review Comments: Mr. Ryan Barnes, PE dated May 25, 2012

1. *Please provide details of the batting cage enclosure netting and demonstrate that the enclosure shall be adequate to prevent balls from leaving the enclosure.*

We will submit this information as part of the process to obtain a building permit for this work.

2. *An easement should be provided for the drainage outlet.*

The drainage outlet is located on a contiguous parcel of land owned by Val's Root Beer, so no easement is necessary.

We are hopeful that these responses and the revised plans address the comments received to date. We look forward to meeting with the Planning Board on June 25, 2012 to discuss the proposed project in detail. Please contact me if you have any questions or require additional information.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink, appearing to read 'C. Branch', written over the company name.

Christopher C. Branch, PE
Regional Manager

CCB:ccb/

Enc.

cc:

July 30, 2012
12172

David Hediger, Planning Director
City Building
27 Pine Street
Lewiston, ME 04240

Val's Root Beer Batting Cages

Dear Mr. Hediger:

On behalf of the Val's Root Beer, we are pleased to submit this application for the construction of four new coin operated batting cages. The batting cages will be located behind the Val's Root Beer in an existing lawn area.

Val's Root Beer Restaurant is located at 925 Sabattus Street and is in the Highway Business (HB) Zone. The proposed batting cages are permitted under Lewiston Zoning and Land Use Code Article XI, Sec. 12. (HB), (d) Conditional Uses (1) Commercial outdoor recreation.

The project construction will entail a chain link fence backstop for batting cages, netting and posts for the ball field enclosure, and a 60' x 5' concrete pad for pitching machine mounts. In addition the applicant is proposing a 12' x 12' shed for equipment storage. The project will require minimal earthwork for site improvements and will remain mostly as a lawn.

The project will result in the creation of 444 square feet of new impervious surface and about ¼ acre of disturbed land for grading. Based on this, the project does not trigger MDEP permits.

Stormwater runoff patterns and peak flows will remain consistence with the pre-development conditions. A small amount of runoff from inside the ballfield enclosure will be collected in a yard drain and discharge across their adjacent lot to an existing drainage channel.

At this time the applicant isn't sure how or if the facility will be lighted. The hours of operation (11 am to 9 pm) will mimic the restaurant where natural lighting is sufficient most of the time.

The following are our responses to the Section X.3 standards for a conditional use permit.

- (1) Neither the proposed use nor the proposed site upon which the use will be located is of such a character that the use will have significant adverse impact upon the value or quiet possession of surrounding properties greater than would normally occur from such a use in the zoning district. The staff may not find that this standard is satisfied unless it finds that:
 - a. The size of the proposed use is comparable to surrounding uses; and
The batting cages will be located behind Val's Root Beer and there are no proposed changes to the existing parking or building configuration. There are no other batting cages in the city for a comparison to surrounding uses.
 - b. The amount and type of traffic to be generated, hours of operation, expanse of pavement, and the number of parking spaces are comparable to surrounding uses; and
The project will generate 9 new trips during the peak hour; there is existing parking adequate for four new batting cages. The batting hours will coincide with the restaurant 11 am to 9 pm.
 - c. The generation of noise, dust, odor, vibration, glare, smoke, litter and other nuisances is comparable to surrounding uses; and
Once in operation there will minimal amount noise from the metal bats hitting the balls. There will be no dust, vibration, glare, smoke, litter, or other nuisances.
 - d. The impact of the use on the quality and quantity of groundwater available to abutting properties is comparable to surrounding uses; and
The project will not impact the quality or quantity of groundwater
 - e. Unusual physical characteristics of the site, including size of the lot, shape of the lot, topography, and soils, do not aggravate adverse impacts upon surrounding properties.
The project will require minimal earthwork for site improvements which will not aggravate adverse impacts upon surrounding properties.
- (2) Vehicular and pedestrian access to, into and within the site will be safe and will not be overburdened or create hazards because they are inadequate. The board may not find that this standard is satisfied unless it finds that:
 - a. Vehicular access to the site will be on roads, which have adequate capacity to accommodate the additional traffic generated by the development.
 1. Adequate capacity means that:
 - (i) Intersections on major access routes to the site within one-half mile of any entrance road will function after development at a minimum at Level of Service C; or

- (ii) If they are functioning at a Level of Service D or lower prior to the development, the project will not reduce the current level of service.

The existing access will remain the same and is adequate for the 9 new trips.

- 2. The board of appeals or planning board may approve a conditional use permit for an application not meeting this requirement if the applicant demonstrates that:

- (i) A public agency has committed funds to construct the improvements necessary to bring the level of access to said standard, or
- (ii) The applicant will assume financial responsibility for the improvements necessary to bring the level of service to said standard and will guarantee the completion of the improvements within one (1) year of approval of the permit.

Val's Root Beer has sufficient finances to build this project.

- b. The topography of the site shall permit the construction of all driveways, entrances or proposed streets to meet the standards of Article XIII, Section 4(c) of this Code.

Not applicable, no new driveways, entrances or streets are being constructed as part of this project.

- c. Facilities are present to assure the safety of pedestrians passing by or through the site.

There is ample room and visibility for pedestrians passing by or through this site.

- (3) Municipal or other facilities serving the proposed use will not be overburdened or create hazards because they are inadequate. The board may not find that this standard is satisfied unless it finds that:

- a. The capacity of sewerage and water supply systems is adequate to accommodate the proposed use;

Not applicable

- b. The capacity of the storm drainage system is adequate to accommodate the proposed use; and

Only a minor increase in stormwater runoff is anticipated and the discharge from the site is directly to a defined drainage channel

- c. The ability of the fire department to provide necessary protection services to the site and development is adequate.

Access is available off of the existing drives.

- (4) The soils on the proposed site shall have adequate capacity and stability to support all loadings, including fill, developed by the proposed use and the use will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water to the extent that a dangerous or unhealthy condition may result on the site or upon the land of abutters or the environment. In considering whether this standard is satisfied, the board shall take into account the elevation above sea level of the site and surrounding properties, its relation to flood plains, the slope and vegetation of the land and their effects on drainage.

The project will require minimal earthwork for site improvements and will remain mostly as a lawn.

- (5) The scale and design of the proposed structures with respect to materials, scale and massing shall be compatible with existing structures within five hundred (500) feet of the site in areas where the existing structures are of a similar scale and architectural treatment.

The structures are a 12'x12' shed which is common in this area.

The project also satisfies the environmental improvement standards of Section XII.19, as follows:

- (1) Smoke. *Not applicable*
- (2) Noise. *Once in operation there will be a nominal amount of noise from the metal bats hitting the balls. There will also be some equipment noise during construction.*
- (3) Vibration. *Not applicable*
- (4) Odors. *Odors are not expected to be created by the project.*
- (5) Air pollution. *Not applicable*
- (6) Electrical disturbance or interference. *Not applicable.*

We hope you agree that the proposed Val's Root Beer Batting Cages has fully satisfies all applicable standards. Please contact us if you have questions.

Sincerely

SEBAGO, TECHNICS, INC



Christopher C. Branch, P.E.
Regional Manager

CCB:sag/dlf

PROJECT DATA

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

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	18,960	sq. ft.	
Proposed Total Paved Area	N/A	sq. ft.	
Proposed Total Impervious Area	19,404	sq. ft.	Concrete Slab for
Proposed Impervious Net Change	444	sq. ft.	Batting Machine &
Impervious surface ratio existing	43.7	% of lot area	Shed
Impervious surface ratio proposed	44.7	% of lot area	

BUILDING AREA/LOT COVERAGE

Existing Building Footprint	1,140	sq. ft.	
Proposed Building Footprint	144	sq. ft.	Shed 12 x 12
Proposed Building Footprint Net change	N/A	sq. ft.	
Existing Total Building Floor Area	1,140	sq. ft.	
Proposed Total Building Floor Area	144	sq. ft.	
Proposed Building Floor Area Net Change	N/A	sq. ft.	
New Building	Yes	(yes or no)	Shed 12 x 12
Building Area/Lot coverage existing	2.6	% of lot area	
Building Area/Lot coverage proposed	3.6	% of lot area	

ZONING

Existing HB

Proposed, if applicable N/A

LAND USE

Existing Drive-In Restaurant

Proposed With 4 Batting Cage

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units N/A

Proposed Number of Residential Units N/A

Subdivision, Proposed Number of Lots N/A

PARKING SPACES

Existing Number of Parking Spaces 52 Potential None Marked

Proposed Number of Parking Spaces None

Required Number of Parking Spaces 22

Number of Handicapped Parking Spaces None Marked Drive-In Restaurant

ESTIMATED COST OF PROJECT

30,000

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area 18,960 sq. ft.

Proposed Disturbed Area 10,000 sq. ft.

Proposed Impervious Area 19,404 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 20 passenger car equivalents (PCE)
(Since July 1, 1997)

Total traffic estimated in the peak hour-proposed (Since July 1, 1997) 29 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 Highway Business (HB) & (NCA) outfall drainage pipe only zoning district.
2. Parcel Area: 1.48 acres / 64,365 square feet (sf).

Regulations	Required/Allowed	Provided or Existing
Min Lot Area	None /	1.48 ac
Street Frontage	150 /	150
Min Front Yard	30 /	190
Min Rear Yard	20 /	20
Min Side Yard	20 /	20
Max. Building Height	65 /	15
Use Designation	Drive-in Restaurant With Batting Cages /	
Parking Requirement	1 space/ per <u>100</u> square feet of floor area	
Total Parking:	22 /	40+
Overlay zoning districts (if any):	/	/
Urban impaired stream watershed?	YES/NO If yes, watershed name <u>No</u>	

DEVELOPMENT REVIEW APPLICATION SUBMISSION

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

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

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

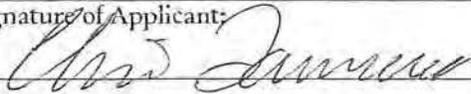
L/A's development review process and requirements have been made similar for convenience and to encourage development. Each City's ordinances are available online at their prospective websites:

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

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

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

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

Signature of Applicant: 	Date: <u>7-27-12</u>
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Development Review Checklist
 City of Auburn Planning and Permitting Department
 City of Lewiston Department of Planning and Code
 Enforcement



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

PROJECT NAME: Val's Root Beer Batting Cages

PROPOSED DEVELOPMENT ADDRESS and PARCEL #: 925 Sabattus St
Tax Map 119, Lot 202 RE0006892

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

	Planting Schedule	N/A		
Stormwater & Erosion Control Plan				
	Compliance w/ chapter 500	N/A		
	Show Existing Surface Drainage	✓		
	Direction of Flow	✓		
	Location of Catch Basins, etc.	N/A		
	Drainage Calculations	N/A		
	Erosion Control Measures	✓		
	Maine Construction General Permit	N/A		
	Bonding and Inspection Fees	N/A		
	Post-Construction Stormwater Plan	N/A		
	Inspection/monitoring requirements	N/A		
	Third Party Inspections (Lewiston only)	N/A		
Lighting Plan				
	Full cut-off fixtures	Will Submit at later Date		
	Meets Parking Lot Requirements	if Applicant Lights Facility		
Traffic Information				
	Access Management	N/A		
	Signage	N/A		
	PCE - Trips in Peak Hour	✓		
	Vehicular Movements	N/A		
	Safety Concerns	Exist Conditions		
	Pedestrian Circulation	Exist Conditions		
	Police Traffic	N/A		
	Engineering Traffic	N/A		
Utility Plan				
	Water	✓		
	Adequacy of Water Supply	✓		
	Water main extension agreement	NA		
	Sewer			
	Available city capacity	N/A		
	Electric	N/A		
	Natural Gas	N/A		
	Cable/Phone	N/A		
Natural Resources				
	Shoreland Zone	N/A		
	Flood Plain	N/A		
	Wetlands or Streams	N/A		
	Urban Impaired Stream	N/A		
	Phosphorus Check	N/A		
	Aquifer/Groundwater Protection	N/A		
	Applicable State Permits	N/A		
	No Name Pond Watershed (Lewiston only)	N/A		

	Lake Auburn Watershed (Auburn only)				
	Taylor Pond Watershed (Auburn only)				
Right Title or Interest					
	Verify				
	Document Existing Easements, Covenants, etc.	✓			
Technical & Financial Capacity					
	Cost Est./Financial Capacity	✓			
	Performance Guarantee	N/A			
State Subdivision Law					
	Verify/Check	N/A			
	Covenants/Deed Restrictions				
	Offers of Conveyance to City				
	Association Documents				
	Location of Proposed Streets & Sidewalks				
	Proposed Lot Lines, etc.				
	Data to Determine Lots, etc.				
	Subdivision Lots/Blocks				
	Specified Dedication of Land				
Additional Subdivision Standards		N/A			
	Single-Family Cluster (Lewiston only)				
	Multi-Unit Residential Development (Lewiston only)				
	Mobile Home Parks				
	Private Commercial or Industrial Subdivisions (Lewiston only)				
	PUD (Auburn only)				
A jpeg or pdf of the proposed site plan					
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving					

WARRANTY DEED

JEANNETTE M. GREGOIRE, of Lewiston, Maine, for consideration paid, grants to **GAIL GREGOIRE LAWRENCE** and **JAMES H. LAWRENCE**, as **JOINT TENANTS**, of Lewiston, Maine, with **WARRANTY COVENANTS**, certain lots or parcels of land, with any buildings thereon, situated in **LEWISTON**, County of **ANDROSCOGGIN**, and State of **MAINE**, bounded and described as follows:

PARCEL ONE: 925 Sabattus Street, Lewiston, Maine:

Three certain lots or parcels of land, with any buildings thereon, in Lewiston, County of Androscoggin and State of Maine, bounded and described as follows:

Being lots numbered ten (10), eleven (11) and twelve (12) as delineated on a plan of Pleasantdale so-called made by J.A. Jones, C.E. and recorded in the Androscoggin County Registry of Deeds, Book of Plans, Volume 2, No. 19, Page 27. Also a triangular lot in the rear of said lots numbered 11 and 12 as shown on said plan; said lot being bounded on the southeasterly side by land now or formerly of Blanche M. Shailer, on the southerly and southwesterly side by land now or formerly of Thomas McNamara and on the northerly side of said lots 11 and 12.

Being the same premises described in the deed from George E. McConaghy to Valmond Gregoire and Jeannette Gregoire dated July 26, 1984 and recorded in the Androscoggin County Registry of Deeds in Book 1744, Page 124.

Excepted from this parcel are the land and rights taken in the Notice of Layout and Taking by the State of Maine against George E. McConaghy dated May 12, 1982 and recorded in said registry in Book 1580, Page 229.

PARCEL TWO: 68 Payne Street, Lewiston, Maine:

Two certain lots in said Lewiston, County of Androscoggin, State of Maine, bounded and described as follows:

Being Lots 301 through 307, inclusive, on a certain Plan entitled "Thorne Corner Heights" and recorded in the Androscoggin County Registry of Deeds, Book of Plans, Volume 2, Book 4, Page 117.

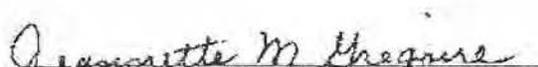
MAINE REAL ESTATE
TRANSFER TAX PAID

This parcel is conveyed subject to the right retained by Albert F. Hutchinson to maintain a drain across Lot Number 301 and any necessary time to enter, dig up, and repair, etc., said drain, as set forth in a deed from Albert F. Hutchinson to Blanche M. Shaller dated August 4, 1920 and recorded in said Registry of Deeds in Book 297, Page 463.

Being the same premises described in the deed from Gary Alexander and Karen Alexander to Valmond J. Gregoire and Jeannette M. Gregoire dated December 31, 1987 and recorded in the Androscoggin County Registry of Deeds in Book 2198, Page 303.

IN WITNESS WHEREOF, the Grantor has executed this instrument on this 1st day of April, 2005.


Witness


Jeannette M. Gregoire

STATE OF MAINE
ANDROSCOGGIN, SS.

April 1, 2005

Then personally appeared the above-named Jeannette M. Gregoire and acknowledged the foregoing instrument to be her free act and deed.

Before me,

Ronald L. Bissonnette, Attorney at Law

From: [Diane Duplissis](#)
To: [David Hediger](#)
Subject: Val's Rootbeer
Date: Wednesday, August 22, 2012 2:24:46 PM

Hi David,

My husband and I received a notification that the Planning Board was considering allowing Val's Rootbeer to have automated batting cages. I am not sure we can make it to the public meeting on Monday, so I thought I'd write to you.

We live on Ridgewood Avenue which, as you know abuts the back side of Val's. I am concerned about more noise. All summer long, we have heard their speakers blast 1950-60's music and could never enjoy our backyard without this noise pollution.. It's annoying to say the least that we can't have some sort of peace and quiet in our gazebo in our beautiful backyard. We have actually been counting down the days when it will close for the summer. With the added attraction of batting cages, we feel the noise level would just increase.

Frankly, if they could turn DOWN the speakers for the music, we would rather hear the cracking of bats than all that music. We have not been able to enjoy our backyard all summer.

Diane Duplissis
Administrative Assistant II
Superintendent's Office
Lewiston Public Schools
36 Oak Street
Lewiston, ME 04240
Tel: 207-795-4100 ext 207
Fax: 207-753-6413