

City of Biddeford
Planning Board
April 19, 2023 6:00 PM City Hall
Council Chambers, & Zoom
<https://biddeford.zoom.us/j/98838755556?pwd=L2c1cVhLdjYrbGpSZWRxYjVjQWN0UT09>
Webinar ID 988 3875 5556; Passcode 956116

STATUS: Planning Board Meeting, April 19, 2023, 6:00 PM, Council Chambers & Zoom

1. PLEDGE OF ALLEGIANCE

2. DECLARATION OF QUORUM/VOTING MEMBERS

3. ADJUSTMENTS TO THE AGENDA

4. PLANNER'S BUSINESS

4.A. Discussion of proposed Back Lot Ordinance

4.B. Inform Board on 208 Graham Street, Conditional Use

5. CONSENT AGENDA

5.A. Approval of Meeting Minutes from 3-15-23 and 4-5-23

[PB Minutes 31523-DRAFT.pdf](#)

[PB Minutes 4523-DRAFT.pdf](#)

6. UNFINISHED BUSINESS

7. NEW BUSINESS

7.A. 2023.14 Final approval for proposed changes to address three ordinance changes required by the General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems (MS4s).

The changes include:

1. adoption of specific erosion and sedimentation control standards for proposed developments,
2. requiring timely maintenance of private stormwater infrastructure after construction, and
3. requiring timely removal of non-stormwater discharges from the City's separated storm drain system.

The changes affect Part II Code of Ordinances, Chapter 34 Environment and Chapter 70 Utilities, and Part III Code of Ordinances, Land Development Regulations.

[PBLetterMS4OrdChangesBidd2023_04_11.pdf](#)

[CleanMS4OrdChangesBidd2023_04_11.pdf](#)

7.B. ITEM POSTPONED WILL APPEAR IN MAY OR JUNE. 2023.05 Public meeting and take comments regarding a Final Site Plan Review Application for Take Five Maine, LLC. The property is located at 394 Elm Street (Tax Map 20, Lot 10) in the B2 Zone. The proposed project is to demolish the existing structure and construct a 2-bay garage for oil changes.

[2023.05 Take 5 Oil Change FINAL Site Plan 394 Elm Street 4-19-2023.pdf](#)

[FINAL PLAN REVIEW ENGINEERING COMMENTS and COA.pdf](#)

[2023.05 Take 5 FINAL Approval FOF and COA.pdf](#)
[Biddeford Planning Board Letter_20230330.pdf](#)
[Planning Application.pdf](#)
[Biddeford Waiver Request Letter_20230330.pdf](#)
[A-100.pdf](#)
[A-200.pdf](#)
[TAKE 5 BIDDEFORD CIVIL PLANS_20230329.pdf](#)
[FES-2209005 Drainage Report 4-3-23.pdf](#)
[Letter from Mulkern 1-26-23.pdf](#)
[Letter from Prompto Representative 1-25-23.pdf](#)
[Letter from Wratten 1-26-23.pdf](#)

- 7.C. 2023.17 Public meeting and take comments regarding the UNE Master Plan.

[UNE Master Plan_MEMO_4_12_23.pdf](#)
[UNE Application for Master Plan 02.27.2023 with cover letter.pdf](#)
[Complete UNE Master Plan 2022 Binder 3-1-23.pdf](#)

- 7.D. 2023.18 Biddeford Planning Board will have a public meeting and take comments regarding dimensional standards for the IN rezone for the University of New England. The rezone dimensions will affect 1 Hills Beach Road, Map 51, Lot 11: 583 Pool Street, Map 51, Lot 10 and 590 Pool Street, Map 51, Lot 18-1 in the IN zone.

[UNE Master Plan_DIMENSIONAL_STANDARDS_MEMO_4_11_23.pdf](#)
[UNE IN Dimensional Standards review application 03.01.2023 with Cover letter.pdf](#)

8. ADJOURN

The Board reserves the right to halt official business at 9:30 p.m. Items not heard at tonight's meeting shall be rescheduled to the next meeting of the Board. All materials pertaining to items on the agenda are available for public review at the Biddeford Planning Department, second floor, Biddeford City Hall during normal business hours.



CITY OF BIDDEFORD

Planning and Development Department

205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

Planning Board Meeting Minutes

DRAFT

Date: March 15, 2023
Time: 6:00 PM
Location: Council Chambers & Zoom

1. Pledge of Allegiance
2. Declaration of Quorum/Voting Members
Quorum Present: Michael Cantara (Vice Chair), Sean Tarpey, Alexa Plotkin, Susan Deschambault (Associate Member) & Stephen Beaudette (Associate Member)
Ms. Deschambault will be voting due to the absence of Mr. Patoine
Mr. Beaudette will be voting due to the absence of Mr. Angers
Staff Present: Greg Mitchell, David Galbraith, Eric Freeman & Nan Whitten
Mr. Cantara opened the meeting at 6:00 PM
3. Adjustments to the Agenda-none
4. Planner's Business
 - Mr. Galbraith updated the Board on a Minor Modification for the Pepperell Mill which was approved by the Planner. This was discussed by the Board and Planner. This approval was consistent with the ordinance. The Board would like the Planner to tell them about these instances prior to approving.
 - iPads for Planning Board are ready. Training will be April 5, 2023 at 5:30 PM sharp.
5. Consent Agenda
Approval of Meeting Minutes for February 15, 2023
MOTION: 6:24 PM
Deschambault-Motion-to approve the Meeting Minutes for February 15, 2023
Beaudette-Second
Motion passed unanimously 4-0 (Tarpey, Plotkin, Deschambault & Beaudette in favor)
6. New Business
6.A. 2023.05 Public hearing and to take comments concerning a Preliminary Site Plan Review application from Take 5 Maine, LLC to demolish existing structure and rebuild new 2 bay oil change center. The location of the project is 394 Elm Street (Tax Map 20, Lot 10) in the B-2 Zone. This project was tabled at the Planning Board Meeting of January 25, 2023.
 - Mr. Galbraith introduced the project. He mentioned that he has been working with the applicants to modify their plans to address concerns previously mentioned by staff & Board members.

- Mr. Galbraith is pleased with the outcome.
- If the applicant received Preliminary Approval tonight, they will apply for Final Approval for the meeting of 4-19-23.
- Ashton Fritz of Fritz Engineering represented the applicant.
- Mr. Fritz explained that the site is the site of a former gas station.
- They will be tearing the existing building down and building a 2-bay garage for performing quick oil changes.
- There will be no customer parking, customers remain in their cars.
- No vehicles will be stored on the site.

Public Comments

Richard Rhames-10 West Loop Road

- The applicant is requesting a parking waiver. The ordinance requires 10 spaces, the applicant only needs 5 for employees only.
- Snow removal procedures are unknown at this time but will be researched and have an answer before the submittal for Final Approval goes in.

MOTIONS: 6:42 PM

Beaudette-Motion-To approve the Preliminary Site Plan application from Take 5 Maine, LLC to demolish existing structure and rebuild new 2 bay oil change center. The location of the project is 394 Elm Street (Tax Map 20, Lot 10) in the B-2 Zone.

Plotkin-Second

Motion passed unanimously 4-0 (Tarpey, Plotkin, Deschambault & Beaudette in favor)

Beaudette-Motion- motion to APPROVE the requested parking waiver to reduce the required on-site parking from ten (10) stalls to five (5) stalls

Motion passed unanimously 4-0 (Tarpey, Plotkin, Deschambault & Beaudette in favor)

Deschambault-Second

Motion passed unanimously 4-0 (Tarpey, Plotkin, Deschambault & Beaudette in favor)

6. B. 2023.14 WORKSHOP ITEM**

Proposed changes to address three ordinance changes required by the General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems (MS4s).

The changes include:

1. adoption of specific erosion and sedimentation control standards for proposed developments,
2. requiring timely maintenance of private stormwater infrastructure after construction, and
3. requiring timely removal of non-stormwater discharges from the City's separated storm drain system. The changes affect Part II Code of Ordinances, Chapter 34 Environment and Chapter 70 Utilities, and Part III Code of Ordinances, Land Development Regulations.

- Kristie Rabasca-Environmental Engineer made a presentation and took questions regarding the upcoming changes.

- Any changes or comments regarding this material should come to either David Galbraith or Nan Whitten as soon as possible.
- A public hearing is scheduled for this item for the 19th prior to going to City Council.
- The adoption date is no later than June 30, 2023.

6. C. WORKSHOP ITEM---- Eric Freeman to present the AG Forest Resources Chapter of The Comprehensive Plan.

- Eric Freeman presented the last chapter (Agriculture & Forestry) of the Comprehensive Plan.
- The Board discussed the chapter with Eric and gave him input.

Public Comments

Richard Rhames-10 West Loop Road

- Entire Comprehensive Plan to be presented to the Planning Board on April 5th at Public Hearing.

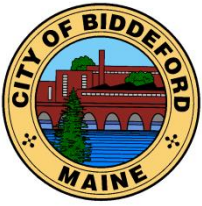
7. Adjourn

Meeting adjourned at 8:12 PM

Planning Board Chair/Vice Chair

Date

These minutes are summary and are not intended to be verbatim. Archived meetings are viewable on the City's website: www.biddefordmaine.org.



CITY OF BIDDEFORD

Planning and Development Department

205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

Planning Board Meeting Minutes

DRAFT

Date: April 5, 2023
Time: 6:00 PM
Location: Council Chambers & Zoom

1. Pledge of Allegiance
2. Declaration of Quorum/Voting Members
Quorum Present: Larry Patoine (Chair), Michael Cantara (Vice Chair), Sean Tarpey, Alexa Plotkin, & Susan Deschambault (Associate Member)
Deschambault is voting in the absence of Angers
Staff Present: Greg Mitchell, David Galbraith, Eric Freeman & Nan Whitten
Mr. Patoine opened the meeting at 6:00 PM
3. Adjustments to the Agenda-The Planner will conduct some announcements after the Comp Plan presentation.
 - Other Business:
 - Eric Freeman presented the complete Comprehensive Plan to the Planning Board in order to obtain a recommendation to send to the City Council.
 - Public Commenters:
Alex White-475 South Street
Peter Robbins-Conservation Commission & Resident of 38 Newtown Road
Erik Heumiller-Conservation Commission & Resident of 81 Clifford Street
Denis Rioux-Conservation Commission & Resident of 677 South Street
Richard Rhames-Conservation Commission & Resident of 10 West Loop Road
Public Comment Session closed
MOTIONS: 7:22 pm
Tarpey-Motion-To postpone taking any action until the meeting for May 2 to ensure all requested changes have taken place,
Cantara-Second
Vote 2/3 Motion Fails
(Cantara & Tarpey in favor; Patoine, Plotkin & Deschambault against)
The Board discussed having the formatting and other corrections/changes and to review the Comp Plan every 2 years. Keep it as a living document going through sections continuously to initiate change.
Cantara-Motion-To approve the plan and forward it to the City Council after corrections have been made.
Deschambault-Second
Vote 3/1 Motion Passes
(Cantara, Plotkin & Deschambault in favor; Tarpey against)

- **Planner's Business:**
- **The Environmental Review RFP for Hidden Hills was discussed as the Board did not feel the RFP correctly laid out the Scope of Services. It was determined that the original RFP will be withdrawn and rewritten as originally requested.**
- **On April 11 the City Council & Planners will workshop LD2003 and the Back Lot Ordinance.**
- **Greg Mitchell the Board that City Council instituted an Emergency Moratorium on Inclusionary Zoning (IZ) for 120 days to allow staff to create the standards for IZ. The exception will be if anyone applies for a subdivision with 10 units or more and will make 10% of them as affordable housing with 80% Area Median Income this will be for 50 years. If an applicant applies for a subdivision and there is no IZ policy after 120 days the applicant is not required to be liable for any of this policy. Any application that is already in the pipeline will be exempt as well.**

4. Adjourn

Meeting adjourned at 8:18 PM

Planning Board Chair/Vice Chair

Date

These minutes are summary and are not intended to be verbatim. Archived meetings are viewable on the City's website: www.biddefordmaine.org.



Mr. Craig Chekan, Biddeford City Engineer
And Mr. Dave Galbraith, Biddeford City Planner
PO Box 586
Biddeford, ME 04005

April 11, 2023

Subject: Ordinance Changes Required by the General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s) for Planning Board consideration.

Dear Mr. Chekan and Mr. Galbraith:

This letter provides an overview and proposed redline ordinance changes that were presented to the Planning Board in a workshop on 3/15/2023. At the workshop, the Planning Board did not request any changes, but indicated they might provide some comments on the changes before the Public Hearing. I understand that no additional comments have been received, so the attached redline is unchanged from the version reviewed at the workshop. This letter is being provided for the Planning Board hearing scheduled for 4/19/2023.

The proposed changes address three ordinance changes required by the General Permit for Stormwater Discharges from the Municipal Separate Storm Sewer Systems (MS4s). The changes include:

1. Incorporation of state erosion and sedimentation control standards for proposed developments,
2. Updating the Post Construction stormwater maintenance inspection and certification system for private stormwater infrastructure, and
3. Updating requirements to correct illegal discharges into the City's separated storm drain system within 60 days of identification of the illegal discharge.

To address the MS4 General Permit Requirements, the changes will affect Part II Code of Ordinances, Chapter 34 Environment and Chapter 70 Utilities, and Part III Code of Ordinances, Land Development Regulations. The attachment to this letter provides an introductory overview of each of the three requirements as well as proposed redline/strike out changes to the City's Code.

The MS4 General Permit requires that the changes be codified by 6/30/2023. I plan to attend the 4/19/2023 Planning Board meeting to assist in their understanding of the changes and answer any questions they might have.

If you have any questions about this information or need changes in advance of the meetings, please let me know. I can be reached at 207-415-5830 or via email at krabasca@integratedenv.com.

Sincerely,

Integrated Environmental Engineering, Inc.

A handwritten signature in cursive script that reads "Kristie L. Rabasca".

Kristie L. Rabasca, P.E.

cc. Jeff Demers, Public Works Director

Attachments: Redline Strikeout proposed changes to address MS4 General Permit requirements.

3/1/2023 Proposed Changes to Biddeford Ordinances to address MS4 Requirements by 6/30/2023

OVERVIEW OF EROSION AND SEDIMENTATION CONTROL CHANGES

Affected Sections: Part III Land Development Regulations Article II Definitions, and Article VI Performance Standards

The MS4 General Permit requires that specific Erosion and Sedimentation Control (ESC) standards be incorporated into the City's ordinances for any proposed development that disturbs one or more acres of land in the City's Urbanized Area (see attached map). The ESC standards required by the MS4 General Permit are the same as the Maine DEP Chapter 500 standards for ESC and both are triggered at the same 1-acre disturbance threshold. As such, developers have been conforming to these standards for many years in all areas of the state.

The impact of incorporating these into the Biddeford Code is that Biddeford Staff will now have enforcement authority over the standards.

The current Biddeford standards for ESC are as follows:

- a. For projects triggering Site Plan Review, performance standards identified in Part III Land Development Regulations Article VI Performance Standards, Section 26 Erosion Control apply. The standards listed in this Section have not been updated since 1996. The standards in Section 26 Erosion Control are proposed to be updated, but no changes are needed to Article IX Site Plan Review Section 5 Site design and development criteria.
- b. For subdivisions (Part II Code of Ordinances Chapter 66 Subdivisions), no specific standards are identified, rather there is a general statement that any subdivision must comply with the standards identified for the zone the subdivision is located in. Because subdivisions must comply with the Erosion Control Standards as for Site Plan Review (see item a. above), no changes to Chapter 66 are proposed.
- c. Part III Land Development Regulations, Article VI Performance Standards lists several types of developments that require an erosion and sedimentation control plan. Most of these sections are not explicitly being updated because the Performance Standards of Section 26 erosion control, will automatically apply to these sites. However, upon review, one section has a reference to an obsolete guidance document which is proposed to be corrected.
 - a. Section 13 Campgrounds and tenting grounds of Part III Land Development Regulations requires an erosion and sedimentation control plan "meeting the standards of the York County Soil and Water Conservation District and the Maine soil and Water Conservation Commission...". This reference is proposed to be updated.
 - b. Section 30 Extractive Industry – no changes needed
 - c. Section 51 Private ways and roads – no changes needed
 - d. Section 64 Timber harvesting – no changes needed
 - e. Section 73 Planned Unit Developments – no changes needed

To meet the MS4 General Permit requirements, Engineering Staff recommend incorporating the Chapter 500 standards by reference in Part III Land Development Regulations Article VI Performance

Standards, Section 26 Erosion Control. Incorporating the Chapter 500 standards by reference will facilitate design for developers and review by the City.

Planning Board should be aware that although the MS4 General Permit requires these standards only be applicable to projects that disturb one or more acres of land, Engineering Staff recommend that the standards apply to all sites that require a Subdivision or Site Plan Review even if it disturbs less than an acre of land.

In addition, staff also recommend that the City adopt the standards City-wide, rather than only within the Urbanized Area (which is all that is required by the MS4 General Permit).

Adoption of the standards by reference to Chapter 500, adoption City-wide, and applying this single set of standards to all sites that trigger Site Plan or Subdivision review by Planning Board will facilitate design for developers and review by the City, as well as providing good protection of the City's natural resources from the adverse impacts of sedimentation from construction sites.

Recommended changes to the City's Code are provided below as underline (for new text)-
strikethrough (for deleted text):

Part III Land Development Regulations

Article VI Performance Standards

Section 13 Campgrounds and tenting grounds

1. A soil erosion and sedimentation control plan meeting the standards of Section 26 of this Article ~~the York County Soil and Water Conservation District and the Maine soil and Water Conservation Commission~~ shall be submitted. In addition to data on soils, slopes and drainage, a vegetation map showing the following items may be required:
 - (a) The major types of vegetation should be identified and described (as to age, height, openness or density, and pattern, either natural or re-forested).
 - (b) New planting should be selected to provide screening and shelter, to tolerate existing and proposed site conditions, and to blend compatibly with existing natural vegetation.
 - (c) All vegetative clearing should avoid creating straight line edges between open land and surviving stands.
 - (d) Areas of activity and/or traffic should be sited to avoid wildlife areas (such as thickets for birds and small mammals, or deer yards and trails).

Section 26 Erosion Control

[Ord. of 5-7-1996]

Erosion of soil and sedimentation of watercourses and water bodies shall be minimized by employing the ~~following best management practices as specified by the Soil Conservation Service~~ requirements of Maine Department of Environmental Protection Chapter 500 Stormwater Appendices A, B and C for sites that disturb one or more acres of land. An erosion and sedimentation control plan meeting the standards in this section shall be prepared by a qualified erosion and sedimentation control professional. In addition, the following items may be required for all sites:

- A. Stripping of vegetation, soil removal, and regrading or other development shall be accomplished in such a way as to minimize erosion.
 - B. The duration of exposure of the disturbed area shall be kept to a practical minimum.
 - C. Temporary vegetation and/or mulching shall be used to protect exposed areas during development.
 - D. Permanent (final) vegetation and mechanical erosion control measures, ~~in accordance with the standards of the York County Soil and Water Conservation District and the Maine Soil and Water Conservation Commission,~~ shall be installed as soon as possible after construction ends.
 - E. Until a disturbed area is stabilized, sediment in runoff water shall be trapped by the use of debris basins, sediment basins, silt traps, or other acceptable methods as determined by the Planning Board or Building Inspector, whichever has the authority to make such decisions on the project. ~~York County Soil Conservation Service may be consulted to review plans and actual installation of sediment control devices.~~
 - F. The top of a cut or the bottom of a fill section shall not be closer than 10 feet to an adjoining property, nor shall said cut or fill exceed the three-to-one slope unless the Planning Board waives either or both requirements upon the applicant's demonstration, certified by a Maine licensed professional engineer (P.E.), that a steeper slope, whether or not closer than 10 feet to the adjoining property, is stable, will not result in excessive downstream erosion or sedimentation, nor cause any additional adverse impact on the adjoining property.
 - G. During grading operations, methods of dust control shall be employed wherever practicable.
 - H. On slopes greater than 25% there shall be no grading or filling within 100 feet of the saltwater wetland except to protect the shoreline and prevent erosion.^[1]
- [1] Editor's Note: Former Subsection I, Erosion and sedimentation control in shoreland areas, which immediately followed, was repealed 2-2-2010 by Ord. No. 2009.98.

OVERVIEW OF POST CONSTRUCTION STORMWATER MANAGEMENT CHANGES

Affected Section: Part II Code of Ordinances – Chapter 34 Environment Article VI Post-Construction Stormwater Discharge

This Article has been part of the City's code since 2009 to ensure that stormwater infrastructure that is owned by private developments is inspected and maintained. This portion of the City's code requires maintenance in accordance with a Post Construction Stormwater Plan (submitted during development review), annual inspections on the stormwater infrastructure and certification annually to the City that the system has been maintained, inspected and is functioning as intended.

The 2022 MS4 General Permit requires that:

- a. the annual inspector be a Qualified Inspector (already defined in the Biddeford Ordinances),
- b. a copy of the inspection report be provided to the City, and
- c. any maintenance identified by the owner or inspector is corrected within 60 days of identification or if that is not possible, in accordance with a schedule that is approved by the enforcement authority (the Code Enforcement Officer or other person(s) or department designated by the City).

In addition, Staff is also making the following recommendations:

- Definitions Update: corrected the definition of Urbanized Area (the MS4 regulated area) to reflect the definition in the MS4 general permit.
- Remove requirement to prepare and file a Maintenance Agreement with the Registry of Deeds – in application, this requirement to have a signed Maintenance Agreement (Sec. 34-481) has not been enforced. Instead, applicants are required by the Planning Board Findings of Fact and/or Notices of Decision to comply with the ordinance requirements after review by the Engineering Department.
- Update the Annual Stormwater Management Facilities Certification Form to reflect the changes made to the ordinance and remove the requirement to have the form notarized. No significant benefit comes from having this document notarized.

Changes proposed to address the MS4 General Permit requirements and to incorporate the recommendations from Staff are provided below:

Sec. 34-479 Definitions

URBANIZED AREA (UA)

The cumulative areas of the State of Maine so defined by the ~~latest~~ 2000 and 2010 decennial censuses by the United States Bureau of the Census.

Sec. 34-481 Performance Standards.

~~(c) Where the applicant proposes to retain ownership of the stormwater management facilities shown in its post-construction stormwater management plan, the applicant shall submit to the City documentation, approved as to legal sufficiency by the City's attorney, that the applicant, its successors, heirs and assigns shall have the legal obligation and the resources available to operate,~~

~~repair, maintain and replace the stormwater management facilities. Applications for new development or redevelopment requiring stormwater management facilities that will not be dedicated to the City shall enter into a maintenance agreement with the City. A sample of this maintenance agreement is attached as Appendix 1 to this article.~~¹

Sec. 34-482 Demonstration of Compliance

Any person owning, operating, leasing or having control over stormwater management facilities required by a post-construction stormwater management plan approved under this article shall demonstrate compliance with that Plan as follows:

- (1) That person or a ~~Q~~ualified ~~P~~ost-construction ~~S~~tormwater ~~I~~nspector hired by that person shall, ~~at least annually,~~ inspect and maintain the stormwater management facilities, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.
- (2) If the stormwater management Facilities require maintenance to function as intended by the approved post-construction stormwater management plan, that person shall take corrective action(s) to address the deficiency or deficiencies within 60 days of identification of the deficiency. If it is not possible to correct the deficiency within 60 days, that person shall coordinate with the enforcement authority to establish a schedule to correct the deficiency.
- (3) That person shall employ a ~~Q~~ualified ~~P~~ost-construction ~~S~~tormwater ~~I~~nspector to conduct an annual inspection and provide, on or by March 1 of each year, a copy of the inspection report and a completed and signed certification to the enforcement authority in a form identical to that attached as Appendix 1 to this article or in a similar form approved by the City Engineer, certifying that the stormwater management facilities have been inspected, and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they require maintenance or repair, describing any required maintenance and any deficiencies found during inspection of the stormwater management facilities. If the stormwater management facilities require, maintenance or repair of deficiencies in order to function as intended by the approved post-construction stormwater management plan, the person shall provide a record of the required maintenance or deficiency and corrective action(s) taken with the annual report and certification.

034b Appendix 1 Maintenance Agreement

ENVIRONMENT

34 Attachment 2

City of Biddeford

**Appendix 1
Maintenance Agreement for Stormwater Management Facilities**

This Maintenance Agreement is made this day of _____ 20__ by and between _____ and the City of Biddeford, Maine.

The project name is _____.

The location is: _____, Biddeford, Maine.

The project's Tax Map and Lot Numbers are Tax Map Lot _____

The project is shown on a plan entitled "_____" dated _____ and most recently revised on _____, approved by the _____ [Municipal Permitting Board] on _____ and recorded in the _____ County Registry of Deeds in Plan Book _____ Page _____ (the "Project").

WHEREAS, the approval of the Project includes Stormwater Management Facilities which requires periodic maintenance; and

WHEREAS, in consideration of the approval of the Project the City of Biddeford requires that periodic maintenance be performed on the Stormwater Management Facilities;

NOW, THEREFORE, in consideration of the mutual benefits accruing from the approval of the Project by the City and the agreement of _____ to maintain the Stormwater Management Facilities, the parties hereby agree as follows:

1. _____, for itself, and its successors and assigns, agrees to the following:
 - (a) To inspect, clean, maintain, and repair the Stormwater Management Facilities, which includes, to the extent they exist, parking areas, catch basins, detention basins or ponds, drainage swales, pipes and related structures, at least annually, to prevent the build up and storage of sediment and debris in the system;
 - (b) To repair any deficiencies in the Stormwater Management Facilities noted during the annual inspection;
 - (c) To provide a summary report on the inspection, maintenance, and repair activities performed annually on the Stormwater Management Facilities to the City Enforcement Authority;
 - (d) To allow access by City personnel or the City's designee for inspecting the Stormwater Management Facilities for conformance with these requirements.
 - (e) To create a homeowners' association for the purpose of maintaining the Stormwater Management Facilities.

34 Attachment 2:1

09 - 01 - 2011

BIDDEFORD CODE

2. Upon creation of the homeowners' association, the homeowners' association shall become responsible for compliance with the terms of this Agreement.
3. This Agreement shall constitute a covenant running with the land, and _____ shall reference this Agreement in all deeds to lots and/or units within the Project.

Witness By: _____
Its: _____

CITY OF BIDDEFORD

Witness By: _____
Its: _____

STATE OF MAINE

_____, ss. _____, 20__

Personally appeared the above-named _____,
the _____ of _____, and
acknowledged the foregoing Agreement to be said person's free act and deed in said capacity.

Before me,

Notary Public/Attorney at Law

Print Name: _____

STATE OF MAINE

_____, ss. _____, 20__

Personally appeared the above-named _____,
the _____ of the City of Biddeford, and acknowledged the foregoing
Agreement to be said his/her free act and deed in said capacity.

Before me,

Notary Public/Attorney at Law

Print Name: _____

034c Appendix 2 Management Facility Certification to become Appendix 1, with the following changes:

City of Biddeford

Appendix-2 1
Annual Stormwater Management Facilities Certification
(to be sent to City's Enforcement Authority)

I, _____ (print or type name), certify the following:

1. I am making this Annual Stormwater Management Facilities Certification for the following property: _____ (print or type name of subdivision, condominium or other development) located at _____ (print or type address), (the "Property");

2. The owner, operator, tenant, lessee or homeowners' association of the Property is: _____ (name(s) of owner, operator, tenant, lessee, homeowners' association or other party having control over the Property);

3. I am (check one)

a. _____ the owner, operator, tenant, lessee or president of the homeowners' association, and have hired a Qualified Post Construction Stormwater Inspector, or

b. _____ am a Qualified Post-Construction Stormwater Inspector hired by the person identified in item 2 of this form ~~same~~ (circle one);

4. I have knowledge of erosion and stormwater control and have reviewed the approved Post-Construction Stormwater Management Plan for the Property;

5. On _____, 20__, I inspected or had inspected by a Qualified Post-Construction Stormwater Inspector, the Stormwater Management Facilities, including but not limited to parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures required by the approved Post-Construction Stormwater Management Plan for the Property;

~~6. At the time of my inspection of the Stormwater Management Facilities on the Property, I or the Qualified Post-Construction Stormwater Inspector identified the following need(s) for routine maintenance or deficiencies in the Stormwater Management Facilities:~~

6. I have attached a copy of the Annual Inspection Report. At the time of the inspection (check one and complete any required information):

- a. The Stormwater Management Facilities were adequately maintained and functioning as intended, or
- b. The Stormwater Management Facilities required maintenance, which was completed within the required 60-day time period, and were functioning as intended after maintenance was completed, or
- c. The Stormwater Management Facilities required maintenance which was not completed within the required 60-day time period. (Attach additional sheets as necessary to describe the maintenance required, proposed schedule for completion, and an appropriate contact person. The City will contact them to confirm or adjust the schedule to complete the maintenance and any needed further course of action. You will be required to show proof of final maintenance.)

7. On _____, 20__ I took or had taken the following routine maintenance or the following corrective action(s) to address the deficiencies in the Stormwater Management Facilities stated in 6. above: _____

8. As of the date of this certification, the Stormwater Management Facilities are functioning as intended by the approved Post-Construction Stormwater Management Plan for the Property.

Date: _____, 20__ . By: _____
Signature

Print Name

STATE OF MAINE _____, ss. _____, 20__ Personally
appeared the above-named _____, the
_____ of _____, and acknowledged the
foregoing Annual Certification to be said person's free act and deed in said capacity. Before me,

Notary Public/Attorney at Law Print Name:

Mail this certification to the City's Enforcement Authority at the following address [to be completed by the municipality]: _____

OVERVIEW OF NONSTORMWATER DISCHARGE CHANGES

Affected Section: Part II Code of Ordinances – Chapter 70 Utilities Section 70-31 Enforcement of article; violations and penalties

Chapter 70 Utilities pertains primarily to discharges to the Wastewater System, requiring that all sanitary systems be connected to the sanitary sewer. A portion of this Chapter, Section 70-73, states that only stormwater be discharged into the separated storm drain system through a connection approved by the Director of Public Works.

The MS4 General Permit requires that if any illegal connection is identified into the storm drain system, or if any dumping or discharges into the storm drain system occur, the discharge or connection must be corrected within 60 days of identification of the source.

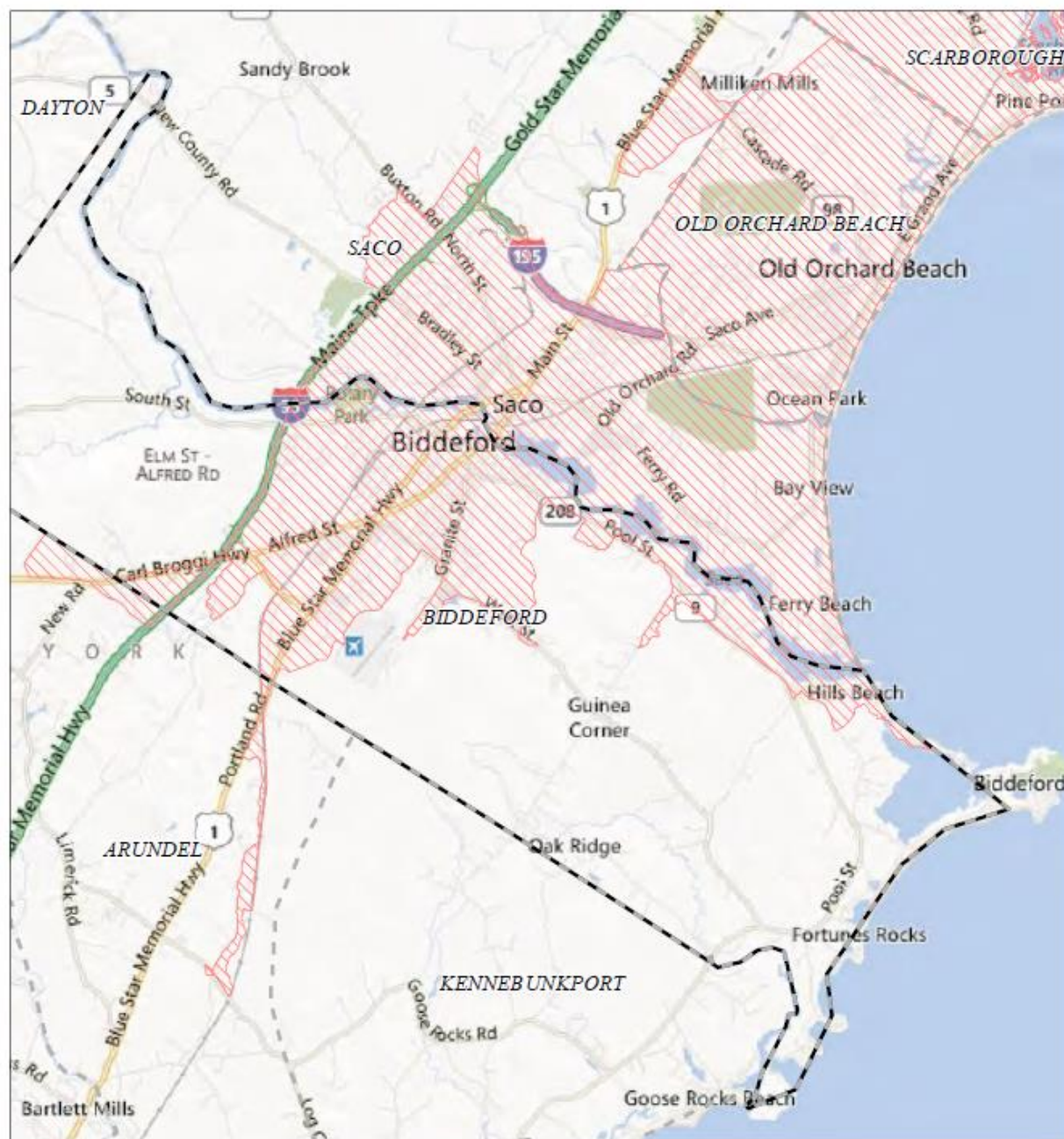
As such, the following proposed change to Section 70-31 Enforcement of article; violations and penalties is proposed:

§ 70-31 Enforcement of article; violations and penalties

In addition to any other enforcement methods provided for in this article, the provisions of this article may be enforced as follows:

- (1) The Director or his designee may issue a written administrative complaint if there are reasonable grounds to believe that the person to whom the complaint is directed has violated:
[Amended 10-5-2010 by Ord. No. 2010.100]
 - a. This article;
 - b. Any rule or regulation adopted under this article; or
 - c. Any order or permit issued under this article.
- (2) The administrative complaint shall specify the provision that allegedly was violated, and state the alleged facts that constitute the violation.
- (3) After or concurrently with service of a complaint issued under Subsection (1) of this section, the Director or his designee may:
[Amended 10-5-2010 by Ord. No. 2010.100]
 - a. Issue an order that requires the person to whom the order is directed to take corrective action within a time set in the order, including 60 days to correct any pollutant discharge to the storm drain system unless the Director determines an alternate schedule for correction is needed;
 - b. Send a written notice that requires the person to whom the notice is directed to file a written report about the alleged violation; or
 - c. Send a written notice that requires the person to whom the notice is directed to:
 1. Appear at a hearing, at a time and place scheduled, in order to answer the charges in the complaint.
 2. File a written report and also appear at a hearing at a time and place set to answer to charges in the complaint.

Biddeford Urbanized Area Map (Areas regulated by the MS4 General Permit are shown in pink hashing)



NPDES Phase II Stormwater Program Automatically Designated MS4 Areas

Biddeford ME

 Regulated Area (2000 + 2010 Urbanized Area)



Town Population: **21057**
Regulated Population: **17187**
(Populations estimated from 2010 Census)



Urbanized Areas, Town Boundaries:
US Census (2000, 2010)
Base map © 2010 Microsoft Corporation
and its data suppliers

US EPA Region 1 GIS Center Map #8824, 11/19/2012

**3/1/2023 Proposed Changes to Biddeford Ordinances to address MS4 Requirements by
6/30/2023**

“Clean” copy (No redline shown) Prepared for 4/19/2023 Planning Board

OVERVIEW OF EROSION AND SEDIMENTATION CONTROL CHANGES

Part III Land Development Regulations

Article VI Performance Standards

Section 13 Campgrounds and tenting grounds

1. A soil erosion and sedimentation control plan meeting the standards of Section 26 of this Article shall be submitted. In addition to data on soils, slopes and drainage, a vegetation map showing the following items may be required:

- (a)** The major types of vegetation should be identified and described (as to age, height, openness or density, and pattern, either natural or re-forested).
- (b)** New planting should be selected to provide screening and shelter, to tolerate existing and proposed site conditions, and to blend compatibly with existing natural vegetation.
- (c)** All vegetative clearing should avoid creating straight line edges between open land and surviving stands.
- (d)** Areas of activity and/or traffic should be sited to avoid wildlife areas (such as thickets for birds and small mammals, or deer yards and trails).

Section 26 Erosion Control

[Ord. of 5-7-1996]

Erosion of soil and sedimentation of watercourses and water bodies shall be minimized by employing the requirements of Maine Department of Environmental Protection Chapter 500 Stormwater Appendices A, B and C for sites that disturb one or more acres of land. An erosion and sedimentation control plan meeting the standards in this section shall be prepared by a qualified erosion and sedimentation control professional. In addition, the following items may be required for all sites:

- A. Stripping of vegetation, soil removal, and regrading or other development shall be accomplished in such a way as to minimize erosion.
- B. The duration of exposure of the disturbed area shall be kept to a practical minimum.
- C. Temporary vegetation and/or mulching shall be used to protect exposed areas during development.
- D. Permanent (final) vegetation and mechanical erosion control measures shall be installed as soon as possible after construction ends.
- E. Until a disturbed area is stabilized, sediment in runoff water shall be trapped by the use of debris basins, sediment basins, silt traps, or other acceptable methods as determined by the Planning Board or Building Inspector, whichever has the authority to make such decisions on the project.

F. The top of a cut or the bottom of a fill section shall not be closer than 10 feet to an adjoining property, nor shall said cut or fill exceed the three-to-one slope unless the Planning Board waives either or both requirements upon the applicant's demonstration, certified by a Maine licensed professional engineer (P.E.), that a steeper slope, whether or not closer than 10 feet to the adjoining property, is stable, will not result in excessive downstream erosion or sedimentation, nor cause any additional adverse impact on the adjoining property.

G. During grading operations, methods of dust control shall be employed wherever practicable.

H. On slopes greater than 25% there shall be no grading or filling within 100 feet of the saltwater wetland except to protect the shoreline and prevent erosion.^[1]

[1] Editor's Note: Former Subsection I, Erosion and sedimentation control in shoreland areas, which immediately followed, was repealed 2-2-2010 by Ord. No. 2009.98.

POST CONSTRUCTION STORMWATER MANAGEMENT CHANGES

Affected Section: Part II Code of Ordinances – Chapter 34 Environment Article VI Post-Construction Stormwater Discharge

Sec. 34-479 Definitions

URBANIZED AREA (UA)

The cumulative areas of the State of Maine so defined by the 2000 and 2010 decennial censuses by the United States Bureau of the Census.

Sec. 34-482 Demonstration of Compliance

Any person owning, operating, leasing or having control over stormwater management facilities required by a post-construction stormwater management plan approved under this article shall demonstrate compliance with that Plan as follows:

- (1) That person or a Qualified Post-construction Stormwater Inspector hired by that person shall inspect and maintain the stormwater management facilities, including but not limited to any parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.
- (2) If the stormwater management Facilities require maintenance to function as intended by the approved post-construction stormwater management plan, that person shall take corrective action(s) to address the deficiency or deficiencies within 60 days of identification of the deficiency. If it is not possible to correct the deficiency within 60 days, that person shall coordinate with the enforcement authority to establish a schedule to correct the deficiency.
- (3) That person shall employ a Qualified Post-construction Stormwater Inspector to conduct an annual inspection and provide, on or by March 1 of each year, a copy of the inspection report and a completed and signed certification to the enforcement authority in a form identical to that attached as Appendix 1 to this article or in a similar form approved by the City Engineer, certifying that the stormwater management facilities have been inspected, and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they require maintenance or repair, describing any required maintenance and any deficiencies found during inspection of the stormwater management facilities. If the stormwater management facilities require, maintenance or repair of deficiencies in order to function as intended by the approved post-construction stormwater management plan, the person shall provide a record of the required maintenance or deficiency and corrective action(s) taken with the annual report and certification.

City of Biddeford

Appendix-1

**Annual Stormwater Management Facilities Certification
(to be sent to City's Enforcement Authority)**

I, _____ (print or type name), certify the following:

1. I am making this Annual Stormwater Management Facilities Certification for the following property: _____ (print or type name of subdivision, condominium or other development) located at _____ (print or type address), (the "Property");

2. The owner, operator, tenant, lessee or homeowners' association of the Property is: _____ (name(s) of owner, operator, tenant, lessee, homeowners' association or other party having control over the Property);

3. I am (check one)

a. _____ the owner, operator, tenant, lessee or president of the homeowners' association, and have hired a Qualified Post Construction Stormwater Inspector, or

b. _____ am a Qualified Post-Construction Stormwater Inspector hired by the person identified in item 2 of this form

4. I have knowledge of erosion and stormwater control and have reviewed the approved Post-Construction Stormwater Management Plan for the Property;

5. On _____, 20__, I inspected or had inspected by a Qualified Post-Construction Stormwater Inspector, the Stormwater Management Facilities, including but not limited to parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures required by the approved Post-Construction Stormwater Management Plan for the Property;

6. I have attached a copy of the Annual Inspection Report. At the time of the inspection (check one and complete any required information):

a. _____ The Stormwater Management Facilities were adequately maintained and functioning as intended, or

b. _____ The Stormwater Management Facilities required maintenance, which was completed within the required 60-day time period, and were functioning as intended after maintenance was completed, or

c. _____ The Stormwater Management Facilities required maintenance which was not completed within the required 60-day time period. (Attach additional sheets as necessary to describe the maintenance required, proposed schedule for completion,

and an appropriate contact person. The City will contact them to confirm or adjust the schedule to complete the maintenance and any needed further course of action. You will be required to show proof of final maintenance.)

Date: _____, 20__ By: _____
Signature

Print Name

Mail this certification to the City’s Enforcement Authority at the following address [to be completed by the municipality]: _____

NONSTORMWATER DISCHARGE CHANGES

Affected Section: Part II Code of Ordinances – Chapter 70 Utilities Section 70-31 Enforcement of article; violations and penalties

§ 70-31 Enforcement of article; violations and penalties

In addition to any other enforcement methods provided for in this article, the provisions of this article may be enforced as follows:

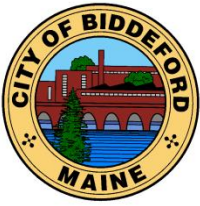
- (1)** The Director or his designee may issue a written administrative complaint if there are reasonable grounds to believe that the person to whom the complaint is directed has violated:

[Amended 10-5-2010 by Ord. No. 2010.100]

 - a.** This article;
 - b.** Any rule or regulation adopted under this article; or
 - c.** Any order or permit issued under this article.
- (2)** The administrative complaint shall specify the provision that allegedly was violated, and state the alleged facts that constitute the violation.
- (3)** After or concurrently with service of a complaint issued under Subsection **(1)** of this section, the Director or his designee may:

[Amended 10-5-2010 by Ord. No. 2010.100]

 - a.** Issue an order that requires the person to whom the order is directed to take corrective action within a time set in the order, including 60 days to correct any pollutant discharge to the storm drain system unless the Director determines an alternate schedule for correction is needed;
 - b.** Send a written notice that requires the person to whom the notice is directed to file a written report about the alleged violation; or
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 - 1.** Appear at a hearing, at a time and place scheduled, in order to answer the charges in the complaint.
 - 2.** File a written report and also appear at a hearing at a time and place set to answer to charges in the complaint.



CITY OF BIDDEFORD

Planning and Development Department

David C.M. Galbraith
Deputy Director/City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

David.Galbraith@biddefordmaine.org

PLANNING BOARD STAFF REPORT

TO: Chair Patoine and Members of the Biddeford Planning Board

FROM: David C.M. Galbraith, Deputy Director/City Planner

DATE: April 12, 2023

RE: **2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).**

MEETING DATE: April 19, 2023 at 6:00 PM

1. INTRODUCTION

This Application was first before the Planning Board on January 25, 2023 for Preliminary Site Plan review. At that time the Planning Board reviewed and deliberated the Application, but ultimately the project was "Tabled" due to Staff concerns raised related to on-site vehicle stacking and the safety at the two (2) proposed curb-openings. Since that time, the Applicant has been working with Staff to resolve the stacking and safety concerns and they have submitted a revised site plan and submitted information related to on-site vehicle stacking at similar sized stores at some of their currently operating facilities. These items addressed said areas of concern. The case was last heard by the Planning Board on March 15, 2023 where the Board granted Preliminary Approval of the project and also granted the requested parking waiver. Included within this report are images of the original site plan and the proposed revised site plan.



ORIGINAL Proposed Preliminary Site Design – 394 Elm Street

2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

Planning Board Hearing date: April 19, 2023.

The Applicant, CN Brown Co. (DBA Take Five Maine LLC) and their project engineer / Agent, Ashton Fritz the Principal of Fritz Engineering are seeking Preliminary Site Plan approval of a Take 5 Oil Change with a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10). This application involves redevelopment of a 15,000 square foot property at 394 Elm Street, located within the B-2 Highway Business (B-2 HB) District and a parking waiver request.



Existing Conditions – 394 Elm Street – as viewed from the Alfred / Elm Intersection

The Applicants proposed construction start date was February 1, 2023 with an anticipated construction end date of November 1, 2023. This schedule has obviously been pushed back due to the review time necessary to resolve the identified Staff issues.

As outlined within the submittal, the Applicant plans to remove the existing building (former gas station and convenience store). As proposed;

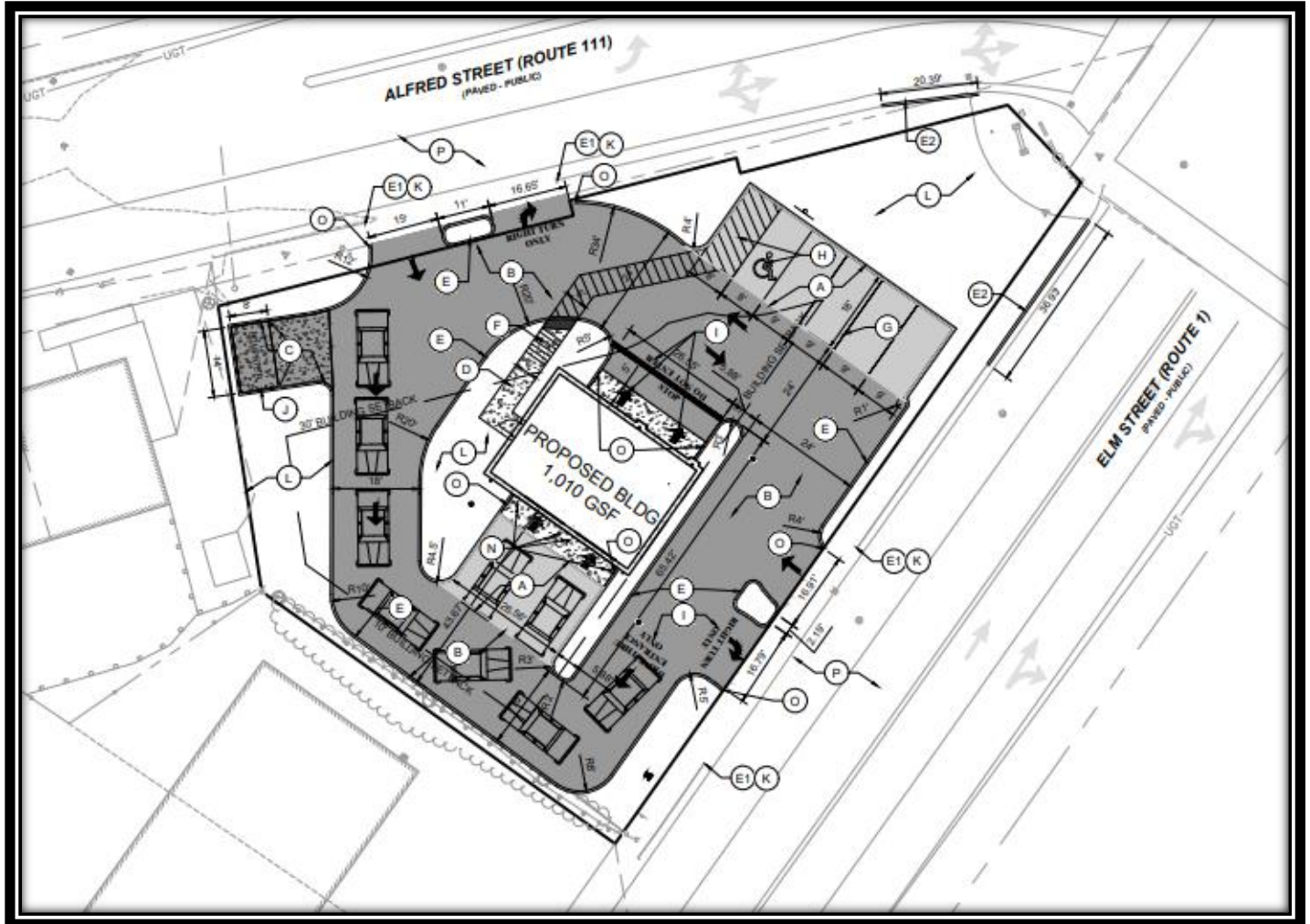
“The new building is approximately 1,010 SF and includes two drive-in service bays. Take 5 Oil Change is a national franchised oil change company that offers in-car services including oil change, filter replacement, wiper blade replacement and other minor repair/services. Take 5 does not offer tire service or sales nor any major mechanical services on engines or transmissions. Guests drive into the building, remain in their vehicles throughout the service and then drive out of the building upon completion of the service. There is no waiting room for guests and therefore, onsite parking is generally for employees only. A waiver request is accompanying this petition to allow 5 onsite parking spaces rather than the 10 spaces required by the code for a 2-bay automobile service use. Please refer to included Waiver Request letter for more detail”.

SITE ACCESS: The existing site has four vehicular drives accessing the site with two from Alfred Street and two from Elm Street. The two curb-cuts closest to the intersection (one on Alfred Street and one on Elm Street) will be removed and the new improvements will utilize the other two remaining existing drives to serve the site. The revised site plan illustrates modifications to the proposed curb-openings so that both curb-cuts will have limited access as both will be restricted to right-in / right-out only. Pavement markings and directional signage have also been provided as requested by the Board. The revised site plan is shown below and a full size (24”x36”) plan has been included in the Board’s meeting packets. The City’s Staff Review Committee (SRC) has reviewed the proposed site modifications and is supportive of the proposed changes. During the last review of the project the SRC requested that the Applicant modify the

2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

Planning Board Hearing date: April 19, 2023.

plan to extend the Alfred Street non-mountable median approximately 40 feet to the west to further prevent exiting vehicles from trying to make a left turn out of the facility. This safety element has been included in the final plan designs.



Proposed Site Plan 394 Elm Street (Tax Map 20, Lots 10) – Note: Vehicle Stacking Lanes

UTILITY SERVICES: The existing site has electric, power, gas, water and sanitary sewer services to the existing building. The proposed building will be served by reuse of the existing water service, though with a smaller service size. The sanitary sewer lateral will also be reutilized with the proposed connection to the existing lateral along Elm Street. A new gas and electric service will be required, and the developer/contractor will work with those service providers for those services. Stormwater drainage will follow existing patterns and direct runoff from the proposed improved site to the road drainage systems in Alfred and Elm Streets. Due to the redevelopment, the impervious surfaces onsite will be significantly reduced from current conditions onsite which are nearly entirely pavement and rooftop. No new onsite stormwater inlets, pipes or other drainage facilities are proposed.

APPLICANT SUMMARY: Please accept this letter in support of the proposed redevelopment. Included with the Minor Site Plan review package are the civil plans, architectural floor plans and building elevations, stormwater drainage technical report, and the aforementioned Waiver Request.

2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

Planning Board Hearing date: April 19, 2023.

2. PROJECT DATA/INFORMATION

1.	Applicant:	Take 5 Maine, LLC c/o Andy Morrison 10884 Gresham Place Noblesville, IN 46060
2.	Owner of Property:	CN Brown Co. c/o Ken Cannell PO Box 200 South Paris, ME 04281
3.	Agent:	Fritz Engineering c/o Ashton Fritz 14020 Mississinewa Drive Carmel, IN 46033
4.	Surveyor:	Same as Agent
5.	Project Location:	394 Elm Street
6.	Project Tax Map #/Lot #:	Tax Map 20, Lot 10
7.	Lot Size:	15,000 SF
8.	Base Zoning:	B-2
9.	Overlay Zoning:	N/A
10.	Existing Use:	Parking Lots/Existing Commercial Buildings
11.	Proposed Use:	Vacant previously gas station
12.	Approvals Required:	Site Plan Review
13.	Uses in the Vicinity:	Five Points Shopping Center, Cemetery, Mixed Use
14.	Waivers Needed:	a. Reduction of parking from 10 to 5
18.	Waivers Granted:	a. March 15, 2023: Reduction of parking from 10 to 5 - Granted
22.	Other Non-City Permits Required:	N/A
23.	LDR Attachment A: Fees Paid:	Not Yet
25.	Planning Board Review History:	Preliminary 1-25-23; Preliminary 3-15-23 & Final 4-19-23

3. REVIEW PROCESS

Per City ordinance, this application is subject to Site Plan (Land Development Regulations, Article XI) review and approval by the Planning Board.

4. Planning Review Comments:

- A. The existing pole sign shall be removed and replaced with a new ground sign that complies with the City's signage requirements.
- B. All service vehicles, including waste haulers, shall be scheduled during non-business hours.

5. Engineering Review Comments: Included in this review is an attachment (Attachment #1) which includes internal and peer review engineering review comments which will be included in the Conditions of Approval (COA). It should be noted that both review engineers agree that the comments are technical in nature and can be addressed as a Planning Board Condition of Approval (COA).

2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

Planning Board Hearing date: April 19, 2023.

1. STAFF REVIEW

- **APPLICATION COMPLETENESS:** The applicant has submitted a complete application, featuring all required elements as specified under Section 66-35 (Required Information for Final Plan Submissions).
- **ZONING:** respect to applicable dimensional requirements, the project would comply with all applicable requirements, including building height, building setback, frontage, and lot coverage requirements.

WAIVERS: During the March 15, 2023 Planning Board meeting, where preliminary review was granted, the requested parking waiver was granted. The Application includes a waiver request, from Ashton Fritz, PE and Principal of Fritz Engineering Services, dated December 6, 2022, which is included and shown in *italics* in its entirety:

Please accept this letter related to the Take 5 Oil Change project as support of the Waiver Request accompanying the Site Plan Review petition filed. The following provides more detail on the requested Waiver.

CODE REFERENCE: *A waiver of the Minimum Required Parking required for an Automobile Service use per Table 6-49B of the City of Biddeford Code of Ordinances, Part III, Article VI, Section 49, Subsection C(3)(l). The table lists an Automobile Repair/Service use shall provide 5 spaces for each bay. The proposed oil change facility will include two service bays, which would require 10 total parking spaces. WAIVER REQUEST: The request is to allow 5 onsite parking spaces rather than the 10 spaces required by the code for a 2-bay automobile service use.*

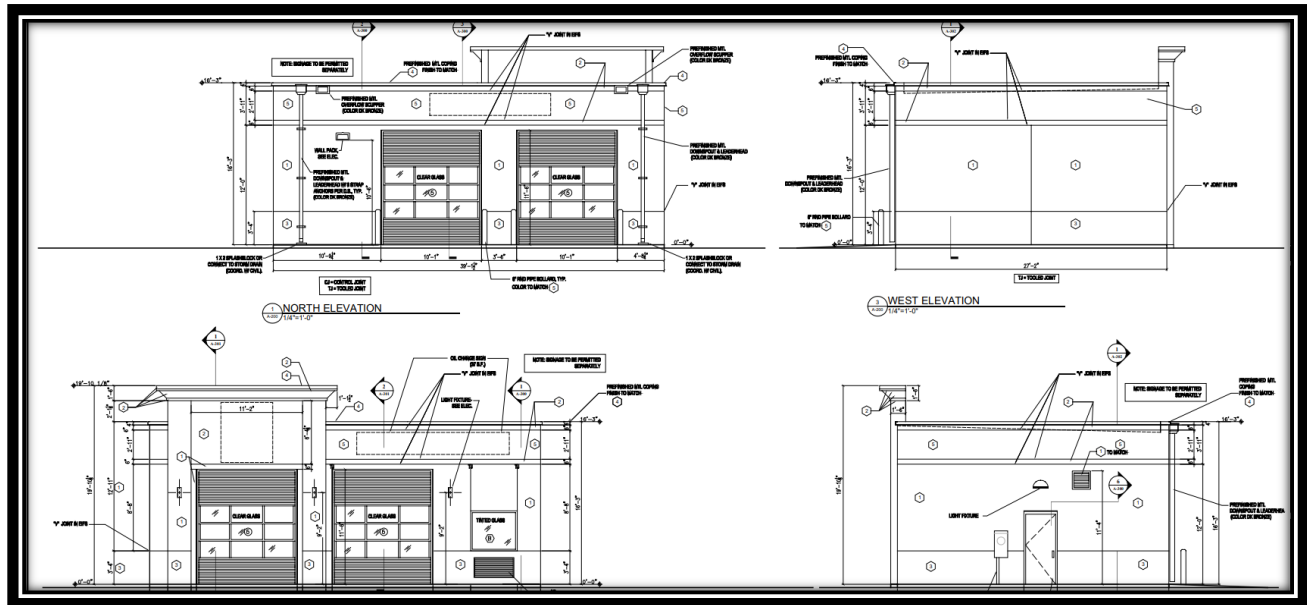
SUPPORTING FACTS: *The Take 5 Oil Change facility provides drive-in services such as motor oil changes, air filter replacements, wiper blade replacements and a few other minor services. There are no tire sales, tire rotations, major mechanical services, brake services, etc. Customers do not exit their vehicles before, during or after services are performed. The building does not provide a customer entrance or waiting area. As a result, parking provided onsite is generally for employees only. The proposed Take 5 includes two service bays. For this facility, the anticipated maximum number of employees at a given time is 4. Therefore, the corresponding number of parking spaces provided onsite is proposed to be 5, including an ADA accessible space as required by law.*

Due to the limited developable space on this uniquely acute triangular shaped lot, providing the code required 10 parking spaces requires significantly more, hard surface and less than ideal functionality for onsite maneuvering. Included in this request is an exhibit showing a site layout with 10 parking spaces as well as the proposed site plan providing the requested 5 parking spaces and a waiver request for the 5 additional spaces required under City's parking standards. A comparison of the illustrations shows the advantages of the proposed 5 parking spaces layout including increased green space, reduced hard surface, better defined parking spaces and access, better onsite vehicular circulation, and reduced impact to adjoining properties from parking.

SUMMARY: *Please accept this Waiver Request to allow the proposed 5 parking spaces onsite rather than the code required 10 parking spaces. There are no negative anticipated impacts to the site, the proposed business use or the general public's safety that would result from the granting of this Waiver. As stated above the parking waiver was granted by the Board at their march 15, 2023 meeting.*

The Application includes building elevations which are shown below. If roof-top mechanical equipment is being proposed it should be screened by the parapet wall or an alternative screening method.

**2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).
Planning Board Hearing date: April 19, 2023.**



Take 5 Oil Change - Proposed Building Elevations

2. STAFF RECOMMENDATION:

As noted in the Application, the property is 15,000 square feet in area and has “limited developable space on this uniquely acute triangular shaped lot”. Staff is supportive of the redevelopment plans at this time and the Applicant has been exceptionally cooperative in addressing Staff’s concerns and has revised their submittal to eliminate our design concerns.

3. SAMPLE MOTIONS:

A. Motion to Approve: I motion to APPROVE the Final Site Plan approval for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10), within the B-2 Highway Business (B-2 HB) District, with the following conditions / submittals:

- 1) Staff Recommended COA: Engineering Review Comments and Peer Review Comments, dated April 11, 2023 and included in “Attachment #1” shall be resolved to the satisfaction of the Director of Engineering prior to scheduling of the required pre-construction meeting.
- 2) The existing pole sign shall be removed and replaced with a new ground sign that complies with the City’s signage requirements.
- 3) All service vehicles, including waste haulers, shall be scheduled during non-business hours.
- 4) _____.
- 5) _____.

**2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).
Planning Board Hearing date: April 19, 2023.**

B. Motion to Deny I motion to DENY the Preliminary Site Plan approval for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10), within the B-2 Highway Business (B-2 HB) District, for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

C. Motion to Table: I motion to TABLE the Preliminary Site Plan approval for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10), within the B-2 Highway Business (B-2 HB) District, for the following reasons:

- 1) _____.
- 2) _____.
- 3) _____.

2023.05 Site Plan (SP) Preliminary Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

ENGINEERING COMMENTS & PEER REVIEW COMMENTS

April 11, 2023

ATTACHMENT # 1

Engineering Comments: Craig Chekan, Director of Engineering: Review comments of the final submittal and have the following comments, which can be a condition of approval.

1. C104 – Demolition Plan
 - a. The plan calls out the existing tree line along the southern property line to remain; applicant should confirm this is realistic with the proposed grading/curbline
2. C201 – Site Plan
 - a. Traffic striping for inbound curb cuts should clearly indicate right-turn-in only
 - b. Per my previous comment, a 'No Left Turn' sign should be installed on Elm Street sidewalk, angled at northbound traffic to deter left-turns-in
 - c. Radial dimensions should be provided for entry curb cuts
 - d. Show extent of adjacent right-of-way sidewalks that:
 - i. Will need to be replaced (i.e. along filled in E2 curbcuts)
 - ii. Should be replaced (i.e. are in existing poor condition)
 - e. Proposed asphalt at curbcuts should extend to existing travelway; any asphalt within the right-of-way needs to meet the City's Chapter 62 – Table A pavement/gravel depths
 - f. Recommend landscape hatching be added
 - g. No property signage is indicated
 - h. No 'drive thru entrance only' traffic striping provided for cars entering from Alfred Street
 - i. What site lighting or plantings are proposed? Photometric plan?
3. C301 – Grading Plan
 - a. Additional existing spot grades needed for: curb tie-ins, right-of-way sidewalks, along southern and western property lines
 - b. ADA slope arrows should be two-point, not one-point, to clearly indicate cross & longitudinal slopes along accessible routes
 - c. The 5% sidewalk longitudinal slope provides no construction tolerance for ADA compliance (i.e. 5.1% becomes a ramp); recommend revising proposed grades and/or lengthening ADA curb ramp
 - d. Applicant should confirm there will be no negative downstream runoff to the western and southern neighboring properties
4. C401 – Utility Plan
 - a. Insufficient electrical information provided; underground vs. aboveground, conduit size, tie-in location/info
 - b. Insufficient water information provided; tie-in connection info, valve/tee/fitting locations; water line is curved
 - c. Confirm no site lighting, telecom, gas lines proposed; if proposed, linework should be shown/annotated
 - d. No proposed sewer flow information provided; no ability-to-serve letter requested
5. C501 – E&S
 - a. A construction entrance off of Elm Street is called out, but no riprap extent is shown
 - b. Temporary 'right-in, right-out only' & 'no left turn' signage needs to be provided at Elm Street for construction traffic
 - c. If construction traffic will only use Elm Street, temporary 'no entrance' signage needs to be provided at Alfred Street

2023.05 Site Plan (SP) Preliminary Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

ENGINEERING COMMENTS & PEER REVIEW COMMENTS

April 11, 2023

ATTACHMENT # 1

- d. Confirm silt sock will be placed on the neighbor-side of the southern vegetation, as-shown
- 6. C801 – Details
 - a. Asphalt section needed for asphalt within the right-of-way; section needs to meet the City's Chapter 62 – Table A pavement/gravel depths
- 7. SWM report
 - a. Should clearly state the amount of impervious cover square footage being removed
 - b. This project is within the Thatcher Brook Watershed; CFUP contribution should be clarified/coordinated with the Planning Department

Engineering Comments: Tom Saucier, P.E., Site Design Associates (City Peer Reviewer):

We have undertaken a review of the plans and supporting documentation prior to reviewing Craig's comments. Upon review, we concur with Craig's comments and will not duplicate them within our own review comments. Based on our review we offer the additional comments below:

- 1) As previously suggested, we should request an Autoturn analysis of the on-site circulation. I assume they have tested it to make sure it works, but we should verify that. The plan shows 16 ft. long autos which are mid-size similar to a Camry. Will the site and operation in the building accommodate larger vehicles?
- 2) Are there floor drains in the building? What happens to snow melt and rain water from vehicles dripping into the bays and lube trench areas?
- 3) Drawing C104 – Existing Conditions and Demolition Plan
 - A. Details for the D1 inlet grate replacement should be provided.
 - B. More sawcuts than the two shown will be necessary, in the areas of the new islands and where new curbing is to be installed within the right of way.
 - C. Why is there a diagonal pavement removal section along the Elm Street sidewalk? This should be a removal of pavement for the full width of the walk to a perpendicular joint. The Applicant needs to provide more detail on what sidewalk replacements are necessary. As all of the adjacent sidewalks in this area are asphalt, proposed asphalt sidewalks should be installed.

5) C201 – Site Plan

- Details for the dumpster enclosure should be provided on the site drawings.
- New sidewalk construction should be shown at the entrances to be closed.
- Shorter radii at the Elm Street entrances should be provided per the attached sketch previously provided.
- It appears that the new walks in the islands between the exits and entrances are proposed as concrete. The city should confirm that is acceptable, given that the exiting walks are bituminous pavement.
- It appears ramps and granite tipdowns will be required at the new walks in the entrance/exit islands.
- A no left turn sign should be provided at the Elm Street exit.

6) C301 – Grading Plan

2023.05 Site Plan (SP) Preliminary Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

ENGINEERING COMMENTS & PEER REVIEW COMMENTS

April 11, 2023

ATTACHMENT # 1

- Detailed grading for the walks in the entrance/exit islands should be provided.

7) C401 – Utility Plan

- Why is electrical service proposed from the opposite side of Alfred Street rather than from Elm Street in the southeast corner of the site where the existing building service is located (according to the survey)?

8) Details

- A typical section for the sidewalk and curb replacement in the right of way should be provided, showing dimensions, sawcuts, sidewalk buildup and Type 1 curb and tipdown details.
- All pavement sawcuts should include butt joints, these should be called out on the site plan, and a detail provided.
- A detail for the full depth drive construction within the right of way should be provided.

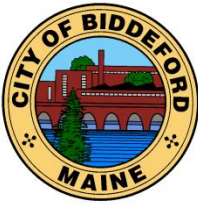
9) Is a salt management plan required for this site, given the location in the Thatcher Book watershed?

As Craig indicated, it seems these comments are generally technical in nature and could be addressed as a planning board condition of approval if the board is so inclined. Please let me know of any questions relative to our comments.

Thanks

Tom

Tom Saucier, P.E.
Site Design Associates
23 Whitney Way
Topsham, Maine 04086
207-449-4275



CITY OF BIDDEFORD

Planning and Development Department

205 Main Street
P.O. Box 586
Biddeford, ME 04005
(207) 284-9115

FINDINGS OF FACT AND CONCLUSIONS OF LAW

Take 5 MAIN LLC (dba Take 5 Oil Change)

Final Site Plan Approval

RE: 2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

Pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations, Article XI (Site Plan Review), and Article VI (Performance Standards), the Biddeford Planning Board has considered the application of Based on its review, including supportive data, public hearing testimony and related materials contained in the record, the Planning Board makes the following Findings of Fact and Conclusions of Law:

FINDINGS OF FACT:

1.	Applicant:	Take 5 Maine, LLC c/o Andy Morrison 10884 Gresham Place Noblesville, IN 46060
2.	Owner of Property:	CN Brown Co. c/o Ken Cannell PO Box 200 South Paris, ME 04281
3.	Agent:	Fritz Engineering c/o Ashton Fritz 14020 Mississinewa Drive Carmel, IN 46033
4.	Surveyor:	Same as Agent
5.	Project Location:	394 Elm Street
6.	Project Tax Map #/Lot #:	Tax Map 20, Lot 10
7.	Lot Size:	15,000 SF
8.	Base Zoning:	B-2
9.	Overlay Zoning:	N/A
10.	Existing Use:	Parking Lots/Existing Commercial Buildings
11.	Proposed Use:	Vacant previously gas station
12.	Approvals Required:	Site Plan Review
13.	Uses in the Vicinity:	Five Points Shopping Center, Cemetery, Mixed Use
14.	Waivers Needed:	a. Reduction of parking from 10 to 5
18.	Waivers Granted:	a. March 15, 2023: Reduction of parking from 10 to 5 - Granted
22.	Other Non-City Permits Required:	N/A
23.	LDR Attachment A: Fees Paid:	Yes

FINDINGS OF FACT AND CONCLUSIONS OF LAW

RE: 2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

Date: April 19, 2023

25.	Planning Board Review History: Preliminary 1-25-23; Preliminary 3-15-23 & Final 4-19-23
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CONCLUSIONS OF LAW:

1. The proposed use meets specific requirements set forth in this ordinance and would be in compliance with applicable state or federal laws;
2. The proposed use would not create fire safety hazards by providing adequate access to the site, or to the buildings on the site, for emergency vehicles and would not create hazards through the storage of chemicals and wastes;
3. The proposed exterior lighting, where allowed, would not create hazards to motorists traveling on adjacent public streets or is adequate for the safety of occupants or users of the site or would not damage the value and diminish the usability of adjacent properties;
4. The provisions for buffers and on-site landscaping provide adequate protection to neighboring properties from detrimental or unsightly features of the development;
5. The proposed use would not have a significant, detrimental effect on the use and peaceful enjoyment of abutting property as the result of noise, vibrations, fumes, odor, dust, glare, hours of operation, or other causes;
6. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets would not create hazards to public safety or traffic congestion;
7. The proposed use would generate a volume of traffic that can reasonably be accommodated by the existing road network, or would not create unreasonable traffic hazards or would not exacerbate an existing traffic hazard, or would not create unreasonable traffic congestion;
8. The proposed use would not have a significant, detrimental effect on the value of adjacent properties which could be avoided by reasonable modification of the proposal;
9. The proposed use would not have an adverse impact on the privacy of the residents of the immediate area (within 500 feet) which could be avoided by reasonable modification of the proposal;
10. The proposed use would be in compliance with Biddeford's Comprehensive Plan;
11. The proposed use would not have an adverse impact on the immediate neighborhood or the community relative to architectural design, scale, bulk and building height, identity and

FINDINGS OF FACT AND CONCLUSIONS OF LAW

RE: 2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

Date: April 19, 2023

historical character, or visual integrity, which could be avoided by reasonable modification of the proposal;

12. The design of the site would not result in significant flood hazards or flood damage or would be in conformance with applicable flood hazard protection requirements;
13. Adequate provision has been made for disposal of wastewater or solid waste or for the prevention of ground or surface water contamination;
14. Adequate provision has been made to control erosion or sedimentation;
15. Adequate provision has been made to handle stormwater runoff or other drainage problems on the site; and the proposed development will not unduly burden off-site surface water systems;
16. The proposed water supply would meet the demands of the proposed use for fire protection purposes;
17. Adequate provision has been made for the transportation, storage, and disposal of hazardous substances and materials as defined by state law;
18. The proposed use would not have an adverse impact on scenic vistas or on significant wildlife habitat or wetland areas and water bodies which could be avoided by reasonable modification of the proposal;
19. When located in the Shoreland Zone, the proposed use would meet the purposes of Shoreland Zoning as identified in Article XIV, Section 1 (Purposes) of this ordinance.

APPROVAL GRANTED:

Based on the evidence available and the conclusions above, the Biddeford Planning Board approves the proposed project summarized within the attached Staff report and pursuant to the provisions of the City of Biddeford Code of Ordinances Land Development Regulations, Article XI (Site Plan Review), and Article VI (Performance Standards). The Biddeford Planning Board has approved the application for Site Plan review for a Take 5 Oil Change facility with a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10). This application involves redevelopment of a 15,000 square foot property at 394 Elm Street, located within the B-2 Highway Business (B-2 HB) District and the Board approval of a parking waiver request which was granted at the Board's March 15, 2023 meeting. The Planning Board approves the project subject to these Findings of Fact (FOF) with the adoption of the following Conditions of Approval (COA):

1. Standard Conditions of Approval apply.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

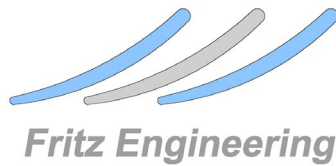
RE: 2023.05 Site Plan (SP) Final Plan Review for Take 5 MAIN LLC (dba Take 5 Oil Change) to locate a two (2) bay oil change facility proposed to be located at 394 Elm Street (Tax Map 20, Lots 10).

Date: April 19, 2023

2. Prior to the scheduling of the required Pre-construction meeting, the Applicant shall address all items in "Attachment #1" and make any required changes to the project Civil Plans, to the satisfaction of the Director of Engineering. Resolution of these matters are hereby included as Conditions of Approval (COA).
3. The existing ground/pole sign shall be removed. All signage shall be in full compliance with the City's Sign Ordinance.
4. All service vehicles, including waste haulers, shall be scheduled during non-business hours.

Larry Patoine
Planning Board Chair

Date



14020 Mississinewa Drive
Carmel, IN 46033
P: 317-324-8695
www.Fritz-Eng.com

March 30, 2023

Mr. David Galbraith, Interim City Planner
City of Biddeford
205 Main Street
Biddeford, ME 04005

**RE: Take 5 Oil Change
394 Elm Street
FES Project # 2209005**

Dear Mr. Galbraith,

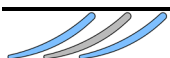
Please accept this letter in support of the Take 5 Oil Change project and the accompanying Final Site Plan Review petition to be reviewed by the Staff Review Committee and the Planning Board at the upcoming April 19th Planning Board Meeting.

SITE LOCATION: The proposed redevelopment is of the property at 394 Elm Street in Biddeford, Maine. The site is currently unoccupied but was formerly a gas station and convenience store.

PROPOSED IMPROVEMENTS: The Minor Site Plan review petition is for the demolition of the existing building and onsite pavement for the construction of a new Take 5 Oil Change facility. The new building is approximately 1,010 SF and includes two drive-in service bays. Take 5 Oil Change is a national franchised oil change company that offers in-car services including oil change, filter replacement, wiper blade replacement and other minor repair/services. Take 5 does not offer tire service or sales nor any major mechanical services on engines or transmissions. Guests drive into the building, remain in their vehicles throughout the service and then drive out of the building upon completion of the service. There is no waiting room for guests and therefore, onsite parking is generally for employees only. A waiver request is accompanying this petition to allow 5 onsite parking spaces rather than the 10 spaces required by the code for a 2-bay automobile service use. The Planning Board granted Preliminary Approval of the parking waiver on March 15, 2023. Please refer to included Waiver Request letter for more detail.

SITE ACCESS: The existing site has four vehicular drives accessing the site with two from Alfred Street and two from Elm Street. Each of the drives closest to the intersection will be removed and the new improvements will utilize the other two remaining existing drives to serve the site. In accordance with the Preliminary Site Plan review, each of the two accesses will be right in/right out only. The raised median along Alfred Street will be extended further westerly to more clearly define the access restrictions. "No Left Turn" signs will be installed at each exit to further instruct customers to make right turns when exiting.

ONSITE VEHICLE STACKING: As noted, Take 5 Oil Change is a national brand with almost 800 locations in the US and Canada. Mature (open for more than 2 years) stores average 40-50 oil changes per day with a morning and late afternoon peak of 5-6 and 7-8 per hour, respectively. Take 5 Oil Change is open 7am-7pm Monday-Saturday and 10am-5pm on Sunday. Two separate trip generation reports are included in the appendix of this letter. The average service time per vehicle is approximately 9 minutes. Therefore, each bay could serve up to 6 vehicles per hour without any stacking. A two bay facility as proposed can service up to 12 vehicles per

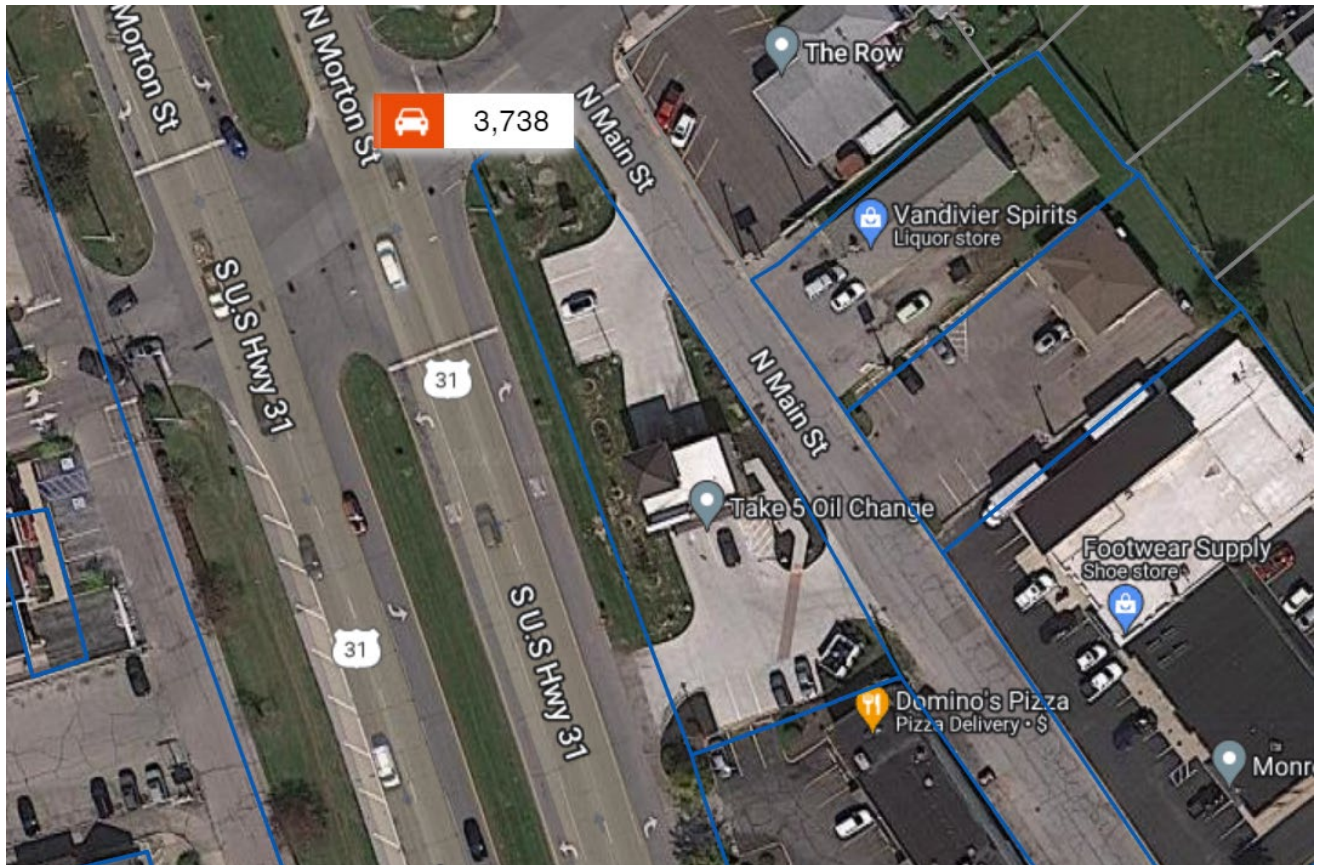


hour. Even with only one bay operating, the peak afternoon service of 8 vehicles per hour would result in only 2 vehicles stacking onsite. The proposed site plan provides 9 onsite stacking spaces without affecting internal traffic maneuvering. This business is different that of a coffee or quick serve restaurant, which see mealtime rushes and overall significantly more traffic.

Biddeford has a population density of approximately 760 residents per square mile. The average population density for many of Take 5's existing stores is greater than that of Biddeford, ME.

Below are two images of existing Take 5 stores with associated addresses and traffic counts and population density that show similar or less stacking capacity and have been operating successfully without any issues.

[1795 N Morton St Franklin, IN](#). On 0.36 AC. INDOT traffic count markers within 0.1 miles to the North and South are at 27k and 24k vehicles per day, respectively. Stacking occurs on the south side of the site below and only 6 total stacking spaces are provided (3 per bay). The population density of Franklin, Indiana is 1,700 residents per square mile which is more than twice that of Biddeford.



[5235 E 64th St Indianapolis, IN](#) on 0.3 AC. You can see the INDOT traffic marker below at 29k. Stacking takes place on the North side of this site and stacking provided is for 2 spaces per bay max (in addition to 2 inside). The population density for Indianapolis, Indiana is more than 2,500 residents per square mile which is more than 3 times that of Biddeford.



UTILITY SERVICES: The existing site has electric, power, gas, water and sanitary sewer services to the existing building. The proposed building will be served by reuse of the existing water service, though with a smaller service size. The sanitary sewer lateral will also be reutilized with the proposed connection to the existing lateral along Elm Street. A new gas and electric service will be required, and the developer/contractor will work with those service providers for those services. Stormwater drainage will follow existing patterns and direct runoff from the proposed improved site to the road drainage systems in Alfred and Elm Streets. Due to the redevelopment, the impervious surfaces onsite will be significantly reduced from current conditions onsite which are nearly entirely pavement and rooftop. No new onsite stormwater inlets, pipes or other drainage facilities are proposed.

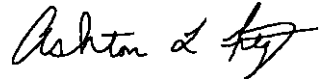
SNOW REMOVAL: During the Planning Board meeting on March 15th, the Board requested that the project review and provide snow storage locations on the site. Sheet C201 has been updated to designate more than 1,100 sf of space onsite for snow storage. The locations area east of the onsite parking and south of the proposed dumpster location.

ABUTTER ENCROACHMENTS: The project site survey identified material storage and vehicle parking encroachments from an abutting property owner. Both have been removed through coordination with the abutter. The survey also noted a 10 inch encroachment of the abutter's fence into the subject property. This encroachment does not effect the proposed site improvements or use. The encroachment has been deemed non-invasive by the project developer and no further action is anticipated at this time.

SUMMARY: Please accept this letter in support of the proposed redevelopment. Included with the Minor Site Plan review package are the civil plans, architectural floor plans and building elevations, stormwater drainage technical report, and the aforementioned Waiver Request.

Please review the above and let me know if any additional information is required to complete the Final Site Plan application and recommendation for approval.

Best Regards,
Fritz Engineering Services, LLC



Ashton L. Fritz, PE, CFM, CPESC
Principal

Enclosures: Trip Generation Reports (examples from other sites)

MEMORANDUM

Ref: 2213A

To: Andy Morrison

From: Stephen G. Pernaw, P.E., PTOE

Subject: Proposed Redevelopment – 115 Daniel Webster Highway
Nashua, New Hampshire

Date: May 12, 2022

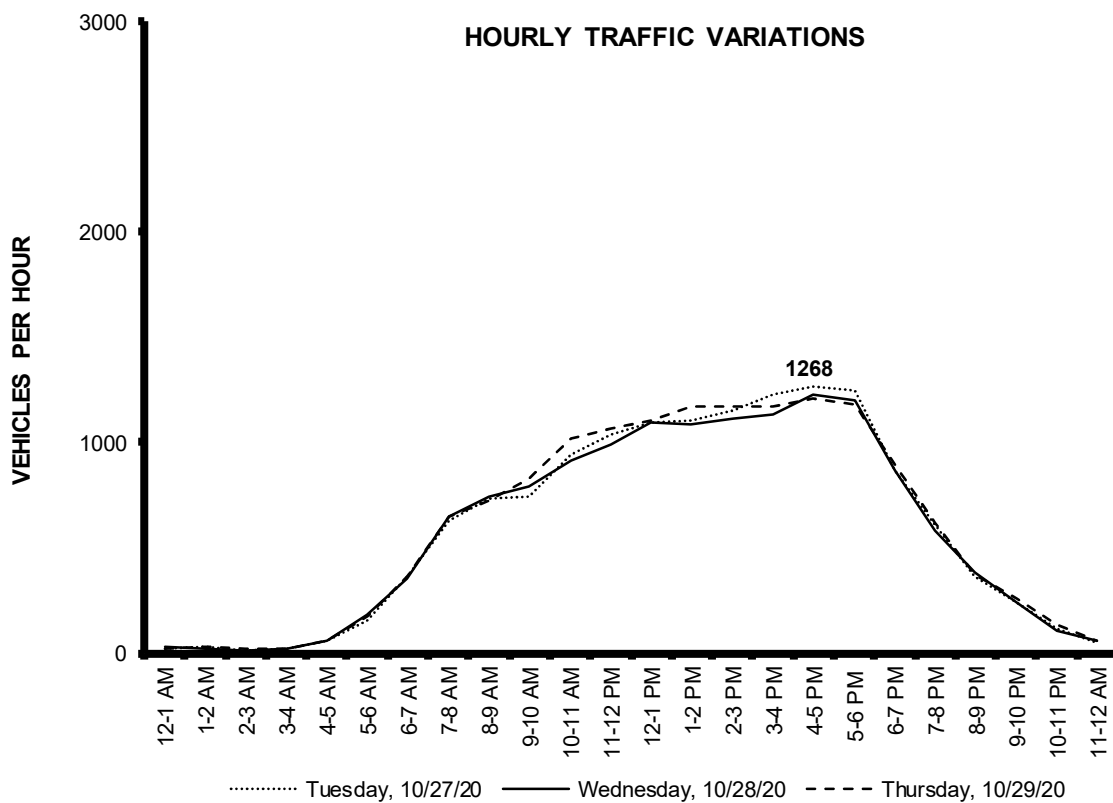
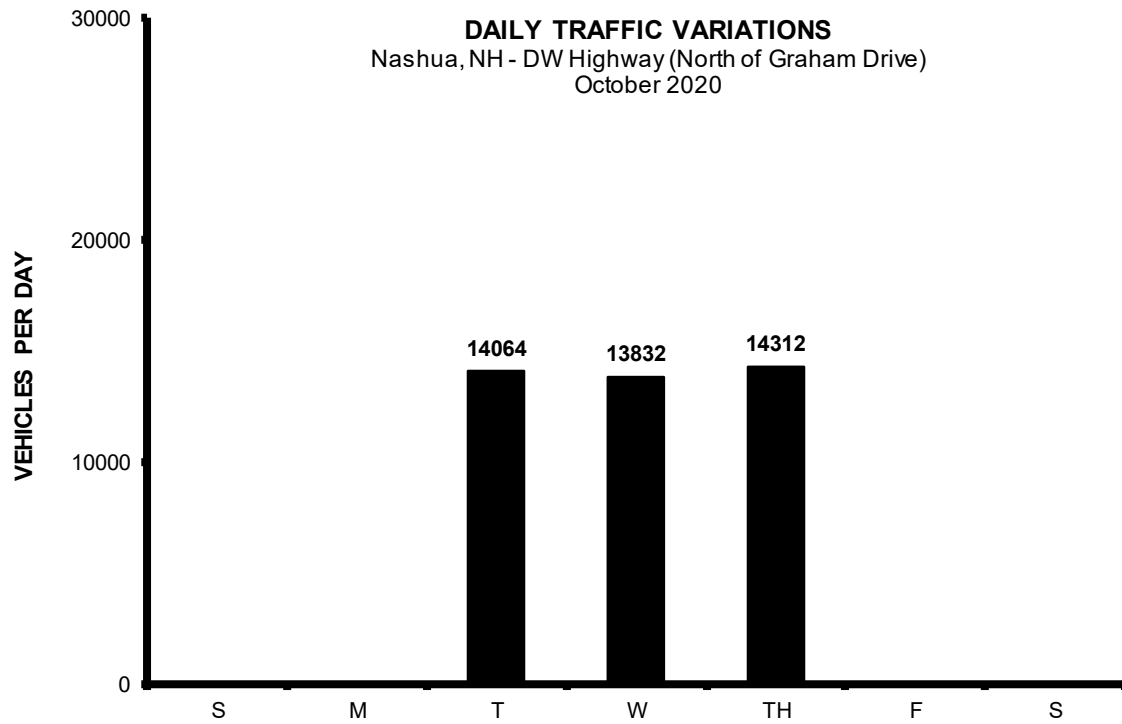
Introduction - As requested, our office has conducted a trip generation analysis and prepared the “Traffic Impact Report (TIR) Threshold Worksheet” for the proposed redevelopment project at 115 Daniel Webster Highway in Nashua, New Hampshire. The traffic projections contained herein demonstrate that a formal “Traffic Impact Report” is not required for a project of this size and type.

Proposed Development – This project involves razing the former drive-in bank building and constructing a new “Take 5 Oil Change” building (1,500 sf). Access to the site will continue to be provided via the existing “right-in/right-out” driveway that is shared with the Cumberland Farms store on the west side of Daniel Webster Highway. There is an existing median on Daniel Webster Highway that separates the northbound and southbound travel lanes.

Take 5 Oil Changes operates from 7:00 AM to 7:00 PM on Mondays thru Saturdays, and from 10:00 AM to 5:00 PM on Sundays. As an aside, the former Bar Harbor Bank & Trust building (2,200 sf) included drive-up tellers and a 24-hr ATM machine (see Attachment 2).

Existing Traffic Volumes – Research at the NHDOT revealed that a short-term Automatic Traffic Recorder count was conducted on Daniel Webster Highway (north of Graham Drive) approximately 825-feet north of the site in October 2020. According to the NHDOT reports, this section of Daniel Webster Highway carried an estimated Annual Average Daily Traffic (AADT) volume of 13,617 vehicles per day (vpd) in 2021, up from 12,279 vpd in 2020 (see Attachment 3).

This data demonstrates that weekday traffic volumes in the area typically reach peak levels from 4:00 to 5:00 PM, thus corresponding to the typical evening commuter period. The diagrams on Page 2 summarize the daily and hourly variations in traffic demand along the Daniel Webster Highway corridor in October 2020. The detail sheet pertaining to this count is attached (see Attachment 4).



Trip Generation – The trip generation calculations are summarized in Table 1 and are based on the latest trip generation rates and equations published by the Institute of Transportation Engineers (ITE)¹ for the former Drive-In Bank and a Quick Lubrication Vehicle Shop. Based on the gross floor area the former bank, and the number of serving positions in the proposed oil change facility, it is reasonable to expect that the proposed building will generate approximately -13 (AM) and -31 (PM) fewer vehicle-trips during the street peak hour periods. The computations are attached (see Attachments 5-10).

Table 1		Trip Generation Summary / Comparison		
		Proposed Take 5 Oil Change	Former Bank	Net Change
Weekday (24 hours)				
	Entering	60 veh	111 veh	-51 trips
	Exiting	<u>60 veh</u>	<u>111 veh</u>	<u>-51 trips</u>
	Total	120 trips	222 trips	-102 trips
AM Street Peak Hour				
	Entering	6 veh	13 veh	-7 trips
	Exiting	<u>3 veh</u>	<u>9 veh</u>	<u>-6 trips</u>
	Total	9 trips	22 trips	-13 trips
PM Street Peak Hour				
	Entering	8 veh	23 veh	-15 trips
	Exiting	<u>7 veh</u>	<u>23 veh</u>	<u>-16 trips</u>
	Total	15 trips	46 trips	-31 trips

¹ ITE Land Use Code 941- Quick Lubrication Vehicle Shop (3 Bays) (Trip Rate Method)

² ITE Land Use Code 912 - Drive-In Bank (2,200 sf) (Trip Rate Method)

TIR Worksheet – A “*TIR Threshold Worksheet*” is also attached (see Attachments 11 & 12) and it demonstrates that a formal Traffic Impact Report is not required since the daily and peak hour trips decrease as a result of the proposed redevelopment project, and are well below the TIR threshold values.



¹ Institute of Transportation Engineers, *Trip Generation*, 11th edition (Washington, D.C., 2021).

A T T A C H M E N T S

Fritz Engineering Services, LLC
 1820 Main Street
 P.O. Box 317
 P. 317 321 1000 F. 317 324 1117
 www.fritzeng.com

PRELIMINARY
 NOT FOR CONSTRUCTION

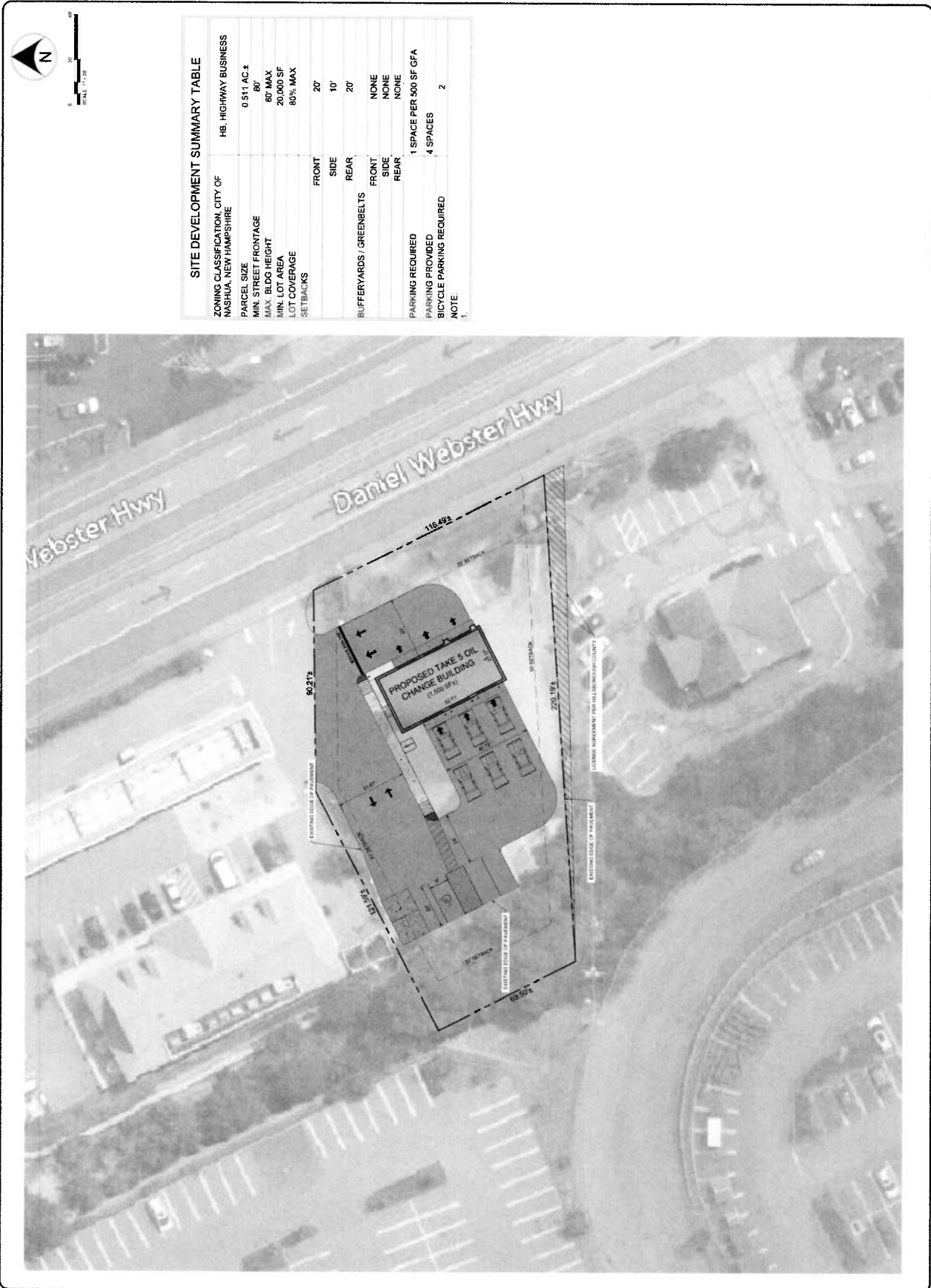
DATE	1/20/22
BY	1/20/22

IT'S THE LAW
 811
 BEFORE YOU DIG
 CALL 811

TAKE 5 OIL CHANGE
 NASHUA, NH
 115 DANIEL WEBSTER HWY
 NASHUA, NH 03060
 SUTTON, NEW HAMPSHIRE
 10000

TAKE 5 INDIANA
 10000 GRESHAM PLACE
 NOBLESVILLE, IN 46060

DATE: 1/20/22
 PROJECT: TAKE 5 OIL CHANGE
 PROJECT NO: P220103
 SHEET: CONCEPTUAL SITE PLAN
 EXH-1



Unofficial Property Record Card - Nashua, NH

General Property Data

Parcel ID 0000A-00982
 Prior Parcel ID
 Property Owner RKDW, LLC

Mailing Address 1617 SOUTHWOOD DR

City NASHUA
 Mailing State NH Zip 03063
 ParcelZoning HB

Account Number 49567

Property Location 115 DANIEL WEBSTER HWY
 Property Use STORE/SHOP

Most Recent Sale Date 10/27/2010

Legal Reference 8256-0362

Grantor LG HOLDINGS LLC

Sale Price 375,000

Land Area 0.511 - Acres

Current Property Assessment

Card 1 Value Building Value 527,100

Xtra Features
 Value 42,400

Land Value 271,100

Total Value 840,600

Building Description

Building Style BRANCH BANK
 # of Living Units 1
 Year Built 1999
 Building Grade AVERAGE
 Building Condition N/A
 Finished Area (SF) 2200
 Number Rooms 0
 # of 3/4 Baths 0

Foundation Type SLAB
 Frame Type WOOD
 Roof Structure GABLE
 Roof Cover ASPHALT
 Siding CONC.PANEL
 Interior Walls DRYWALL
 # of Bedrooms 0
 # of 1/2 Baths 0

Flooring Type CARPET
 Basement Floor N/A
 Heating Type FORCED H/A
 Heating Fuel GAS
 Air Conditioning 100%
 # of Bsmt Garages 0
 # of Full Baths 0
 # of Other Fixtures 0

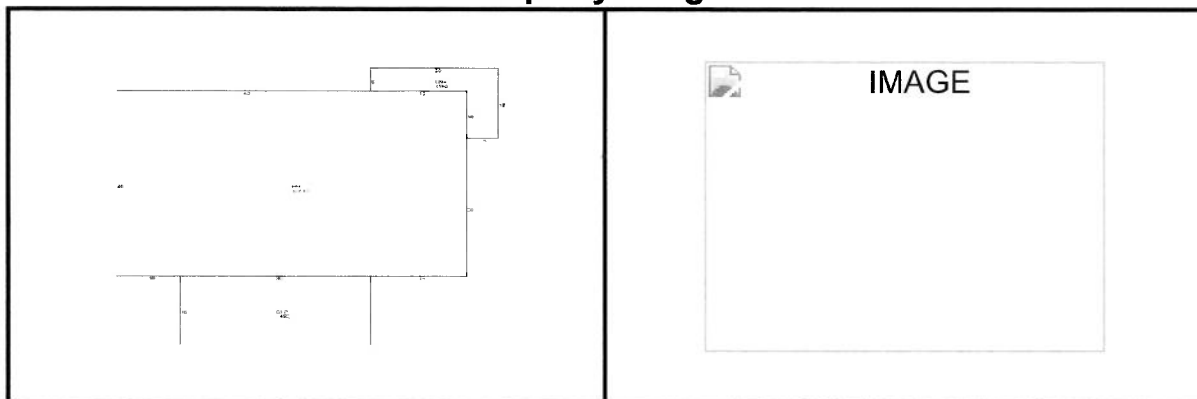
Legal Description

Desc:

Narrative Description of Property

This property contains 0.511 - Acres of land mainly classified as STORE/SHOP with a(n) BRANCH BANK style building, built about 1999 , having CONC.PANEL exterior and ASPHALT roof cover, with 0 commercial unit(s) and 1 residential unit(s), 0 room(s), 0 bedroom(s), 0 bath(s), 0 half bath(s).

Property Images



Disclaimer: This information is believed to be correct but is subject to change and is not warranted.



Transportation Data Management System

List View

All DIRs

Record			1			of 1	Goto Record	go
Location ID	82315180					MPO ID		
Type	SPOT					HPMS ID		
On NHS	No					On HPMS	Yes	
LRS ID	N3150008					LRS Loc Pt.		
SF Group	04					Route Type		
AF Group	04					Route		
GF Group	E					Active	Yes	
Class Dist Grp	Default					Category	3	
Seas Clss Grp	Default							
WIM Group	Default							
QC Group	Default							
Funct'l Class	Minor Arterial					Milepost		
Located On	Daniel Webster Hwy							
Loc On Alias	DW HWY NORTH OF GRAHAM DR (SB-NB) (81315191-81315192)							
More Detail								
STATION DATA								

 Directions:

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2021	13,617 ³		10	52	12,378 (91%)	1,239 (9%)	Grown from 2020
2020	12,279	1,268	10	52	11,173 (91%)	1,106 (9%)	
2019	15,516 ³		10	52	14,213 (92%)	1,303 (8%)	Grown from 2018
2018	15,332 ³		10	52	14,135 (92%)	1,197 (8%)	Grown from 2017
2017	15,031	1,474	10	52	13,950 (93%)	1,081 (7%)	

1-5 of 17

Travel Demand Model

Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV
------------	------------	--------	--------	--------	--------	--------	--------	--------	--------

VOLUME COUNT

Date	Int	Total
Thu 10/29/2020	60	14,312
Wed 10/28/2020	60	13,832
Tue 10/27/2020	60	14,064
Thu 6/15/2017	60	17,634
Wed 6/14/2017	60	17,760
Tue 6/13/2017	60	16,858
Sat 7/19/2014	60	16,002
Fri 7/18/2014	60	18,023
Thu 7/17/2014	60	17,168

VOLUME TREND

Year	Annual Growth
2021	11%
2020	-21%
2019	1%
2018	2%
2017	2%
2016	2%
2015	3%
2014	-4%



Transportation Data Management System



Excel Version

Weekly Volume Report			
Location ID:	82315180	Type:	SPOT
Located On:	Daniel Webster Hwy	:	
Direction:	2-WAY		
Community:	NASHUA	Period:	Mon 10/26/2020 - Sun 11/1/2020
AADT:	12279		

Start Time	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Avg	Graph
12:00 AM		23	32	22				26	0.2%
1:00 AM		25	19	27				24	0.2%
2:00 AM		10	15	23				16	0.1%
3:00 AM		17	21	22				20	0.1%
4:00 AM		60	58	55				58	0.4%
5:00 AM		149	179	175				168	1.2%
6:00 AM		363	349	364				359	2.5%
7:00 AM		633	652	643				643	4.6%
8:00 AM		734	742	723				733	5.2%
9:00 AM		743	788	828				786	5.6%
10:00 AM		946	918	1020				961	6.8%
11:00 AM		1039	986	1069				1,031	7.3%
12:00 PM		1093	1093	1106				1,097	7.8%
1:00 PM		1105	1084	1171				1,120	8.0%
2:00 PM		1152	1112	1170				1,145	8.1%
3:00 PM		1230	1134	1167				1,177	8.4%
4:00 PM		1268	1223	1209				1,233	8.8%
5:00 PM		1243	1196	1180				1,206	8.6%
6:00 PM		862	866	899				876	6.2%
7:00 PM		609	580	615				601	4.3%
8:00 PM		359	378	374				370	2.6%
9:00 PM		236	240	259				245	1.7%
10:00 PM		119	109	133				120	0.9%
11:00 PM		46	58	58				54	0.4%
Total	0	14,064	13,832	14,312	0	0	0		
24hr Total		14064	13832	14312				14,069	
AM Pk Hr		11:00	11:00	11:00					
AM Peak		1039	986	1069				1,031	
PM Pk Hr		4:00	4:00	4:00					
PM Peak		1268	1223	1209				1,233	
% Pk Hr		9.02%	8.84%	8.45%				8.77%	

Graph Look Up



Query

Filter

DATA SOURCE:

Trip Generation Manual 11th Ed

SEARCH BY LAND USE CODE:

941

LAND USE GROUP:

(900-999) Services

LAND USE :

941 - Quick Lubrication Vehicle Shop

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

Servicing Positions

TIME PERIOD:

Weekday

TRIP TYPE:

Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

3

Calculate

Data Plot and Equation

Caution - Small Sample Size

DATA STATISTICS

Land Use:

Quick Lubrication Vehicle Shop (941) Click for

Description and Data Plots

Independent Variable:

Servicing Positions

Time Period:

Weekday

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

1

Avg. Num. of Servicing Positions

2

Average Rate

40.00

Range of Rates

40.00 - 40.00

Standard Deviation:

0.000

Fitted Curve Equation:

Not Given

R²:

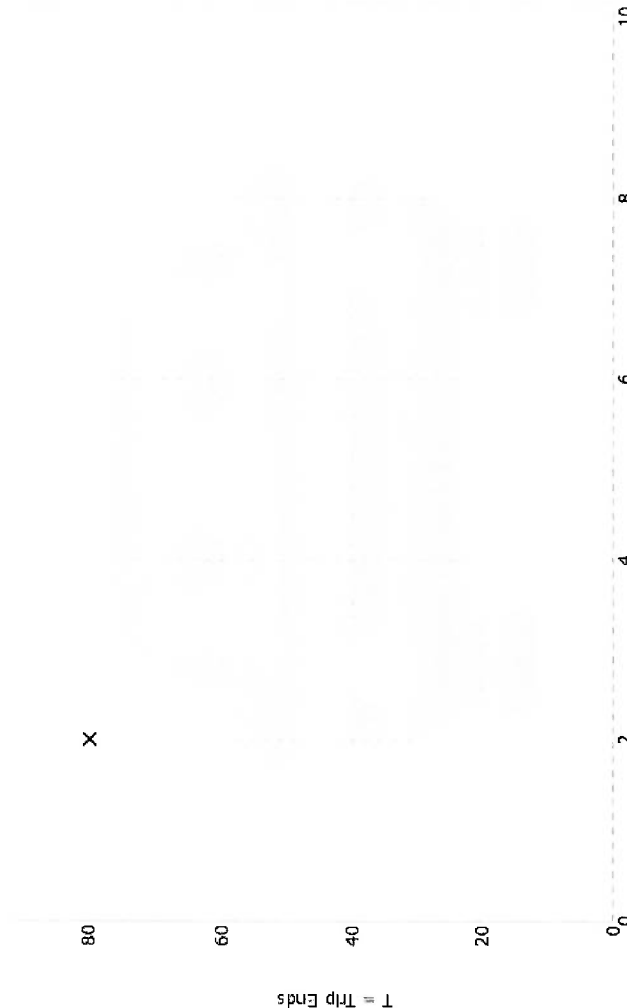
0.000

Directional Distribution:

50% entering, 50% exiting

Calculated Trip Ends:

Average Rate 120 (Total: 60 (Entry), 60 (Exit))



X = Number of Servicing Positions

Reset Zoom

Restore

X Study Site

--- Average Rate

Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.



Data Plot and Equation

Query

Filter

DATA SOURCE: Trip Generation Manual 11th Ed

SEARCH BY LAND USE CODE: 941

LAND USE GROUP: (900-999) Services

LAND USE: 941 - Quick Lubrication Vehicle Shop

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

INDEPENDENT VARIABLE (IV): Servicing Positions

TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 3 Calculate

Caution – Small Sample Size

DATA STATISTICS

Land Use:

Quick Lubrication Vehicle Shop (941) [Click for Description and Data Plot](#)

Independent Variable:

Servicing Positions

Time Period:

Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 7 and 9 a.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

1

Avg. Num. of Servicing Positions

2

Average Rate

3.00

Range of Rates

3.00 - 3.00

Standard Deviation

0.000

10

8

6

4

2

0

0

0

0

0

X = Number of Servicing Positions

Reset Zoom Restore

X Study Site

--- Average Rate

Fitted Curve Equation:
Not Given

R²:

0.000

Directional Distribution:
67% entering, 33% exiting

Calculated Trip Ends:

Average Rate 9 (Total) 6 (Entry), 3 (Exit)

Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

Graph Look Up

Query

Filter

DATA SOURCE: Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE: 941

LAND USE GROUP: (900-999) Services

LAND USE: 941 - Quick Lubrication Vehicle Shop

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

INDEPENDENT VARIABLE (IV): Servicing Positions

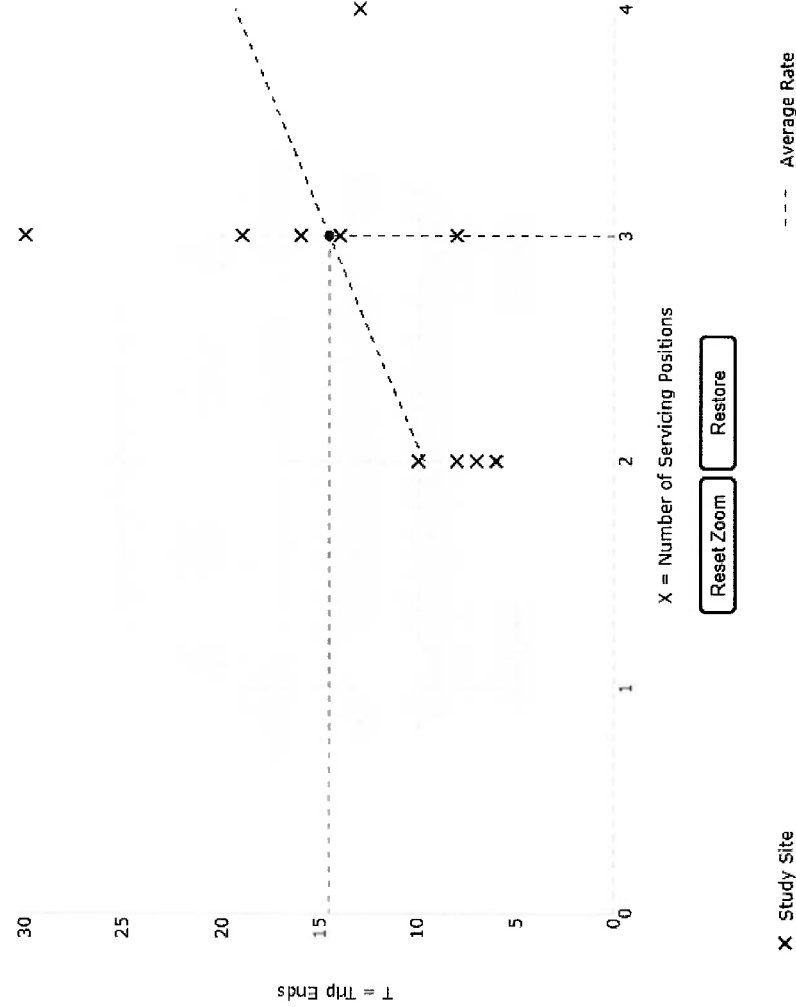
TIME PERIOD: Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 3

Calculate

Data Plot and Equation



DATA STATISTICS

Land Use:

Quick Lubrication Vehicle Shop (941) Click for Description and Data Plot

Independent Variable:

Servicing Positions

Time Period:

Weekday
Peak Hour of Adjacent Street Traffic
One Hour Between 4 and 6 p.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

10

Avg. Num. of Servicing Positions:

3

Average Rate

4.95

Range of Rates

2.67 - 10.00

Standard Deviation

2.25

Fitted Curve Equation:

Not Given

R²

....

Directional Distribution:

56% entering, 44% exiting

Calculated Trip Ends:

Average Rate 15 (Total), 8 (Entry), 7 (Exit)

Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and Y values.

Graph Look Up



Query **Filter**

DATA SOURCE: Trip Generation Manual 11th Ed

SEARCH BY LAND USE CODE: 912

LAND USE GROUP: (900-999) Services

LAND USE: 912 - Drive-in Bank

LAND USE SUBCATEGORY: All Sites

SETTING/LOCATION: General Urban/Suburban

INDEPENDENT VARIABLE (IV): 1000 Sq. Ft. GFA

TIME PERIOD: Weekday

TRIP TYPE: Vehicle

ENTER IV VALUE TO CALCULATE TRIPS: 22 **Calculate**

Data Plot and Equation

DATA STATISTICS

Land Use: Drive-in Bank (912) [Click for Description and Data Files](#)

Independent Variable: 1000 Sq. Ft. GFA

Time Period: Weekday

Setting/Location: General Urban/Suburban

Trip Type: Vehicle

Number of Studies: 19

Avg. 1000 Sq. Ft. GFA: 6

Average Rate: 100.35

Range of Rates: 32.67 - 408.42

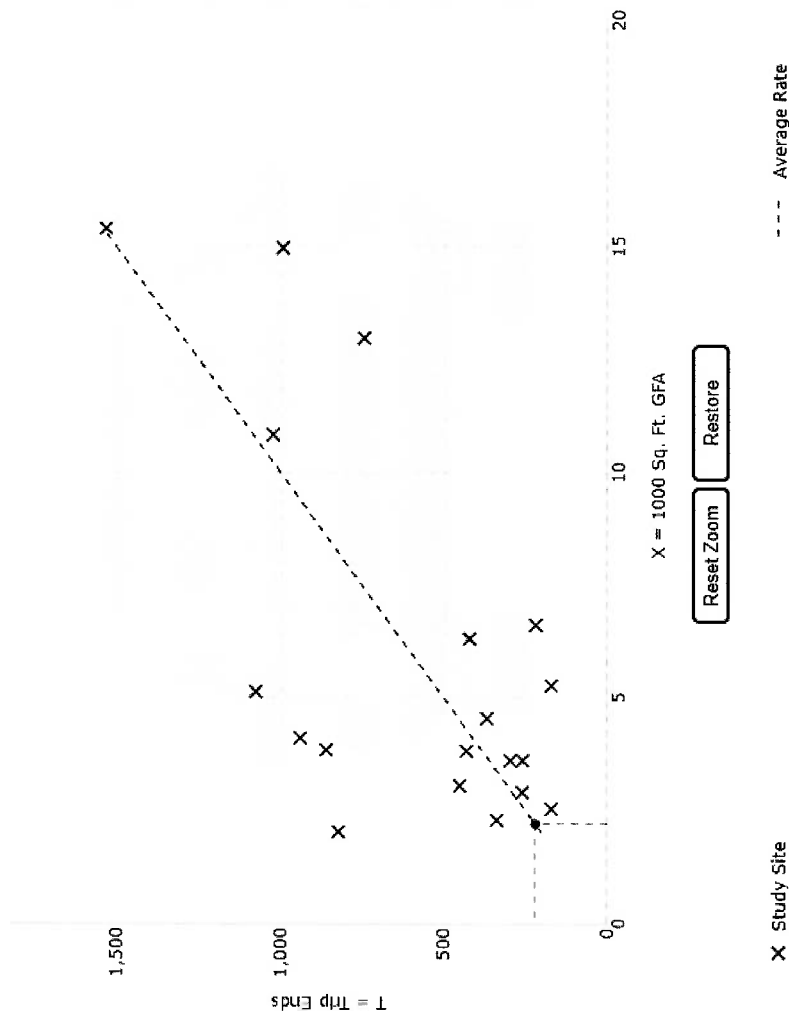
Standard Deviation: 68.62

Fitted Curve Equation: Not Given

R²: *****

Directional Distribution: 50% entering, 50% exiting

Calculated Trip Ends: Average Rate 221 (Total), 110 (Entry), 111 (Exit)



Reset Zoom **Restore**

Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.



Query

DATA SOURCE:
Trip Generation Manual, 11th Ed

SEARCH BY LAND USE CODE:

LAND USE GROUP:
(900-999) Services

LAND USE:
912 - Drive-in Bank

LAND USE SUBCATEGORY:
All Sites

SETTING/LOCATION:
General Urban/Suburban

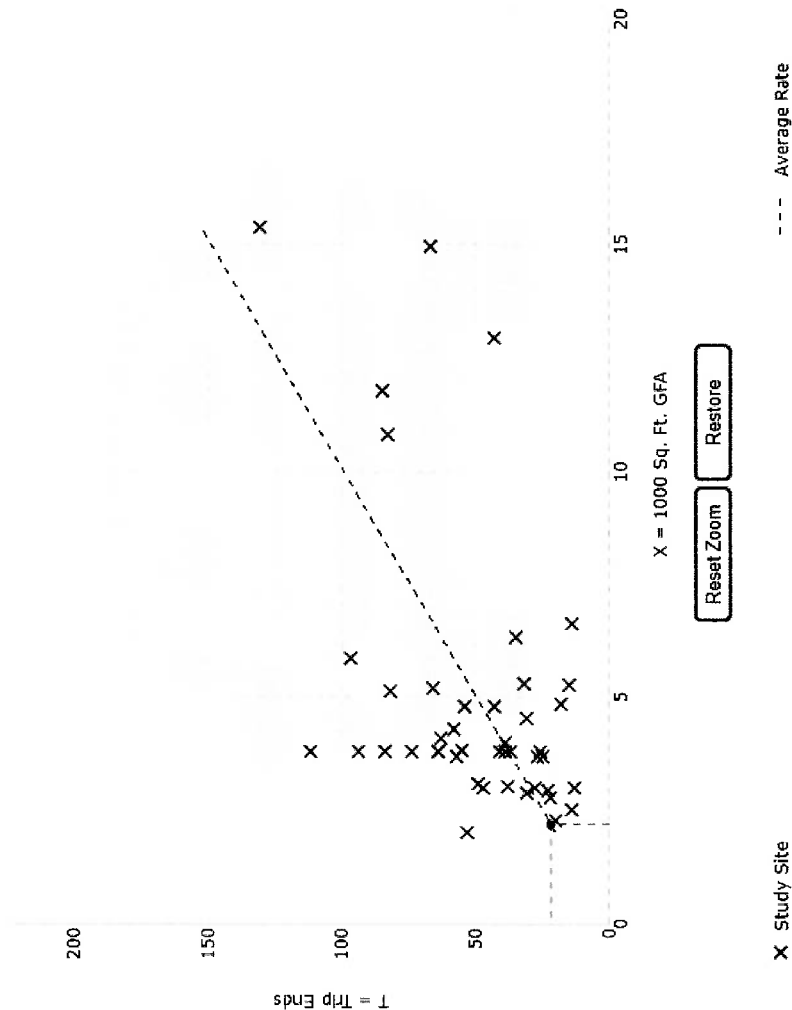
INDEPENDENT VARIABLE (IV):
1000 Sq. Ft. GFA

TIME PERIOD:
Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

Data Plot and Equation



DATA STATISTICS

Land Use:

Drive-in Bank (912) [Click for Description and Data](#)

Plots

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Weekday

Peak Hour of Adjacent Street Traffic

One Hour Between 7 and 9 a.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

44

Avg. 1000 Sq. Ft. GFA:

5

Average Rate

9.95

Range of Rates

2.12 - 29.47

Standard Deviation

6.00

Fitted Curve Equation:

Not Given

 R^2

Directional Distribution:

58% entering, 42% exiting

Calculated Trip Ends:

Average Rate 22 (Total), 13 (Entry), 9 (Exit)

Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.



Query

Filter

DATA SOURCE:

Trip Generation Manual 11th Ed

SEARCH BY LAND USE CODE:

912

LAND USE GROUP:

(900-999) Services

LAND USE:

912 - Drive-in Bank

LAND USE SUBCATEGORY:

All Sites

SETTING/LOCATION:

General Urban/Suburban

INDEPENDENT VARIABLE (IV):

1000 Sq. Ft. GFA

TIME PERIOD:

Weekday, Peak Hour of Adjacent Street Traffic

TRIP TYPE:

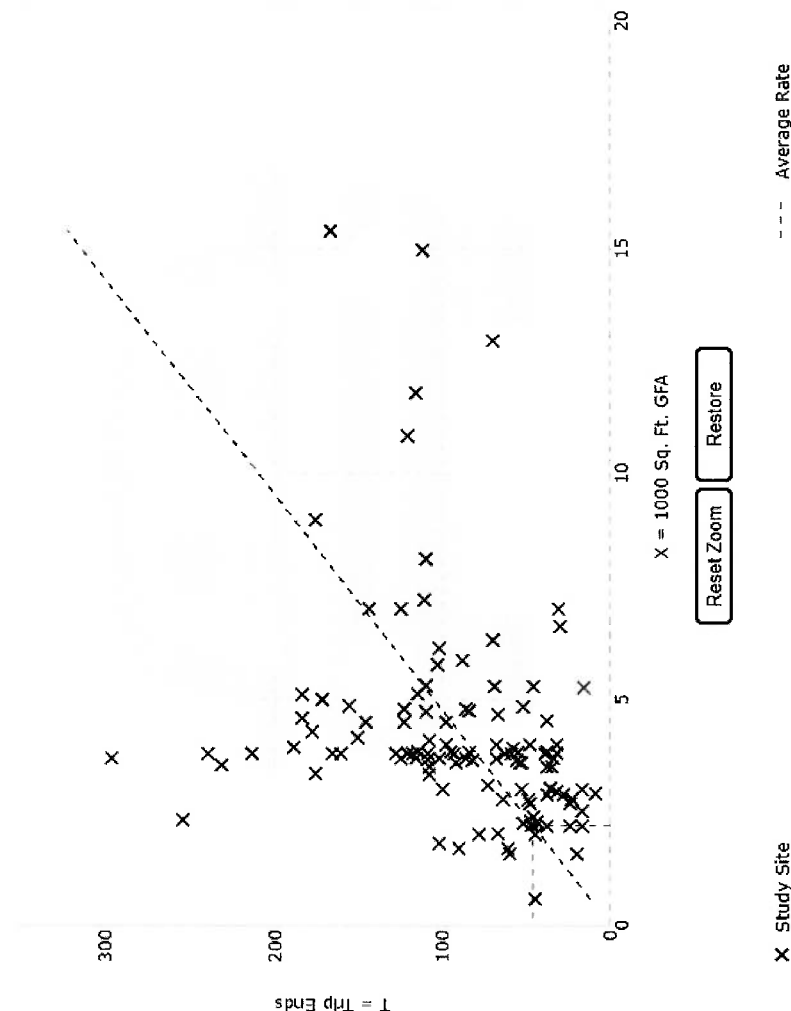
Vehicle

ENTER IV VALUE TO CALCULATE TRIPS:

2.2

Calculate

Data Plot and Equation



Reset Zoom

Restore

DATA STATISTICS

Land Use:

Drive-in Bank (912) [Click for Definition and Data Files](#)

Independent Variable:

1000 Sq. Ft. GFA

Time Period:

Weekday

Peak Hour of Adjacent Street Traffic

One Hour Between 4 and 6 p.m.

Setting/Location:

General Urban/Suburban

Trip Type:

Vehicle

Number of Studies:

114

Avg. 1000 Sq. Ft. GFA

4

Average Rate:

21.01

Range of Rates:

3.04 - 109.91

Standard Deviation:

15.13

Fitted Curve Equation:

Not Given

R²

Directional Distribution:

50% entering, 50% exiting

Calculated Trip Ends:

Average Rate 46 (Total), 23 (Entry), 23 (Exit)

Use the mouse wheel to Zoom Out or Zoom In.
Hover the mouse pointer on data points to view X and T values.

FILE NO. _____

CITY OF NASHUA, NH**Traffic Impact Report (TIR) Threshold Worksheet**

Complete this form to determine if your project requires a Traffic Impact Report, as per City Code, Section

Project Name: Proposed Change of Use (Drive-In Bank to Take 5 Oil Change)

Type of Development: Services

Applicant: Take 5 Indiana Owner ☐ Agent ☐

Location: 115 Daniel Webster Highway

Address: Nashua, New Hampshire 03060 Phone Number: _____

Roadway(s) Where Site Access Drives Shall Be Located: No changes to access configuration

RESIDENTIAL DEVELOPMENT - Does not apply.

Anticipated Land Use	Acreage to be Developed	Number of Units

CBD

NON-CBD

Development Peak Hour and Maximum Number of Generated Trips:

Trip Rate Source

ITE Code:

Other:

NON-RESIDENTIAL DEVELOPMENT

Anticipated Land Use	Project Size (Acres, Employees, GFA, Unit, Other)
Take 5 Oil Change	Drive-In Bank – 2,200 sf to Oil Change Facility – 1,500 sf

CBD

Non-CBD

Development Peak Hour and Maximum Number of Generated Trips:

Trip Rate Source

ITE Code: 941 & 912 Other:

PLEASE COMPLETE THE TABLE BELOW:

CONDITION	HOUR	ANTICIPATED GENERATED TRAFFIC (TRIP ENDS)	TIR THRESHOLD (TRIP ENDS)	TIR REQUIRED
ADJACENT ROADWAY PEAK HOUR	AM	-13 trip decrease	75/HOURS	NO
	PM	-31 trip decrease		NO
DEVELOPMENT PEAK HOUR	PM	-31 trip decrease	100/HOURS	NO
24-HOUR PERIOD	N.A.	-102 trip decrease	1,200/24 HOURS	NO
PERMANENT ROADWAY CLOSURE	N.A.	N.A.	N.A.	YES
TEMPORARY ROADWAY CLOSURE GREATER THAN 14 DAYS	N.A.	N.A.	N.A.	YES
OTHER CONDITIONS			N.A.	

STEVEN J. FEHRIBACH, P.E.
PRESIDENT

R. MATTHEW BROWN, P.E.
VICE PRESIDENT

KAREN K. COLLINS, P.E.
VICE PRESIDENT

JOSEPH T. RENGEL, P.E.
VICE PRESIDENT

REGISTRATION

INDIANA
ILLINOIS
KENTUCKY
MICHIGAN
OHIO
MISSOURI
TEXAS

November 5, 2020

Mr. Andy Morrison
Take 5 Oil Change

Re: Take 5 Oil Change
Merrillville, Indiana

Dear Mr. Morrison,

At the request of the Town of Merrillville, I have reviewed the proposed Take 5 Oil Change site with respect to the number of trips generated at the location's access point and its effect on the traffic that will move to and from the existing street system.

The proposed Take 5 Oil Change site will be approximately 1500 square feet along with 3 oil change bays. As presently planned, the proposed development will have one access located on the existing driveway between 81st Street and the existing ring road for the retail center.

The existing driveway where the access point will be located, is a one-way southbound driveway with two inbound lanes. The proposed access point to the oil change will be the only access to the Take 5 site.

The following table summarizes the number of trips that can be anticipated during the weekday peak hours as well as the Saturday and Sunday peak hours.

Trip Generation Summary								
Land Use	Weekday				Saturday		Sunday	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting
Take 5 Oil Change	6	6	8	6	7	7	8	6

Based on the fact that the access drive to the retail center is 1-way southbound, all of the traffic to the site will be required to make a southbound left turn to enter the oil change bays. Likewise, as the vehicles exit the oil change bays, they will be required to make a left turn onto the southbound access drive.

Based on our review of the trip generation calculations, the surrounding street system, and the proposed access point, the following conclusions can be made:

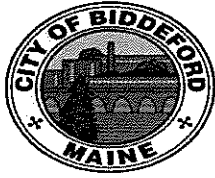
- Based on the number of trips generated during the weekday peak hours, Saturday peak hour, and Sunday peak hour, this development will not have a negative effect on the surrounding street system.
- Due to the fact the access road is a one-way southbound with two lanes, traffic entering the Take 5 Oil Change can enter safely without impeding any additional traffic entering the retail site.
- The fact that the Take 5 Oil Change is located on an internal roadway system to a retail area, the traffic entering and exiting the business will have minimal effect on 81st Street or US 30.

If you have any questions, please contact me.

Sincerely,
A&F Engineering Co., LLC

A handwritten signature in blue ink, appearing to read 'S. J. Fehribach', written in a cursive style.

Steven J. Fehribach, P.E.
President

**City of Biddeford – Planning Department****Planning Board Application**

P.O. Box 586, 205 Main Street Biddeford, Maine 04005
207-284-9115

Type of Application:

☐ Shoreland Zoning Permit ☒ Site Plan Review ☐ Extraction
☐ Conditional Use Permit ☐ Subdivision ☐ Private Way
☐ Other: _____

Applicant Information:

Name: TAKE 5 MAINE, LLC C/O ANDY MORRISON
Mailing Address: 10884 GRESHAM PLACE NOBLESVILLE, IN 46060
Telephone: 574-361-7501
Email: ANDY@REALTY-BALDWIN.COM

What is your legal interest in the property?

☐ Owner ☒ Potential Buyer with Contract ☐ Lease/Rental Agreement

Owner's Information:

Name: CN BROWN CO., C/O KEN CANNELL
Mailing Address: PO BOX 200 SOUTH PARIS, ME 04281
Telephone: 207-739-6419
Email: KENC@CNBROWN.COM

Agent's Information:

Name: _____
Mailing Address: _____
Telephone: _____
Email: _____

Engineer/Surveyor's Information:

Name: FRITZ ENGINEERING C/O ASHTON FRITZ
Mailing Address: 14020 MISSISSINAWA DRIVE CARMEL, IN 46033
Telephone: 317-324-8695
Email: ASHTON@FRITZ-ENG.COM

Project Location and Lot Information:

Street Address: 394 ELM STREET Drainage Watershed: THATCHER BROOK
Tax Map: 20 Lot: 10
Current Zoning: B-2 HIGHWAY BUSINESS Shoreland Zoning: _____
Size of Lot: 15,000 () acres (X)s.f. Lot Frontage: 169' ON ELM, 170' ON ALFRED
Existing Use of Property: PREVIOUS GAS STATION, CURRENTLY VACANT BUILDING

Property currently serviced by:

☒ City Road ☒ Public Sewer ☒ Public Water ☐ Public Trash
☐ Private Road ☐ Septic System ☐ Private Well ☒ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☒ Flat (0-3% slope) ☐ Rolling (3-8% slope) ☐ Hilly (8-15% slope) ☐ Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? ☐ (Yes) ☒ (No) if yes attach information

Is the project within the 100-year floodplain? ☐ (Yes) ☒ (No) if yes attach information

Do you plan to bring fill onto the lot? ☐ (Yes) ☒ (No) if yes attach information

Description of proposed use of property:

Project/Proposed Use:

DEMOLITION OF EX. STRUCTURE AND PARKING AREAS. CONSTRUCTION OF A NEW TWO
BAY DRIVE IN OIL CHANGE BUILDING, 1,010 SF. ONSITE PARKING AND DRIVES TO BE PROVIDED.
USE OF TWO EX. DRIVE ENTRANCES PROPOSED. ONE ACCESS FROM ALFRED ST AND ONE
FROM ELM ST.

Property to be Serviced by:

☒ City Road ☒ Public Sewer ☒ Public Water ☐ Public Trash
☐ Private Road ☐ Septic System ☐ Private Well ☒ Private Hauler

Limits of Disturbance: 15,000 () acres (X)s.f.

Net change in impervious cover: REDUCTION OF 5,160 () acres (X)s.f.

Is this project part of a larger project? ☐ (Yes) ☒ (No)

Is the project proposing a new Private or Public Road? ☐ (Yes, Private) ☐ (Yes, Public) ☒ (No)

Is this project within the Urbanized Area/MS4 (see City Drainage Map) ☒ (Yes) ☐ (No)

Is the project proposing any Stormwater facilities/BMPs? ☐ (Yes) ☒ (No)

Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)

~~**If in a Shoreland Zone:**~~

~~Percent of residential lot coverage (Max 20%): _____~~

~~Percent of structure expansion (Max 30%): _____~~

~~**If Subdivision Review, number of lots proposed:** _____~~

~~**If a Private Way is proposed, number of lots served:** _____~~

If Site Plan Review, you must provide the following information:

Total new square feet footprint of structure: 1,010 SF

Total new square feet paving/parking: 8,315 SF

Waiver Requests (attach details):

1. WAIVER TO REQUEST ALLOWANCE OF 5 ONSITE PARKING SPACES. SEE ATTACHED.
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

- A. Letters of Approval TO BE PROVIDED SEPARATELY
☐ Fire Department – Contact Chief or Deputy Chief – 282-9986
☐ Ability to Serve for Water Service – Maine Water – 282-1543
☐ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
☐ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
- B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.
- C. Photographs of Site.
- D. Architectural renderings/drawings of proposed buildings, as required.
- E. Engineering Plans, as required.
- F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: (Yes) X (No)

- If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.

Signature of Applicant:  Date 3/30/2023

Signature of Property Owner: _____ Date _____

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

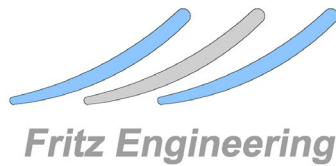
DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVIDUAL DRAWING NAME.pdf'
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)
- All drawings & CAD reference files must be to-scale and within the following coordinate systems:
- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION



14020 Mississinewa Drive
Carmel, IN 46033
P: 317-324-8695
www.Fritz-Eng.com

March 30, 2023

Mr. David Galbraith, Interim City Planner
City of Biddeford
205 Main Street
Biddeford, ME 04005

**RE: Take 5 Oil Change
394 Elm Street
FES Project # 2209005**

Dear Mr. Galbraith,

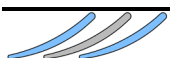
Please accept this letter related to the Take 5 Oil Change project as support of the Waiver Request accompanying the Final Site Plan Review petition filed. This waiver received Preliminary Approval at the March 15, 2023 Planning Board Meeting. The following provides more detail on the requested Waiver.

CODE REFERENCE: A waiver of the Minimum Required Parking required for an Automobile Service use per Table 6-49B of the City of Biddeford Code of Ordinances, Part III, Article VI, Section 49, Subsection C(3)(I). The table lists an Automobile Repair/Service use shall provide 5 spaces for each bay. The proposed oil change facility will include two service bays, which would require 10 total parking spaces.

WAIVER REQUEST: The request is to allow 5 onsite parking spaces rather than the 10 spaces required by the code for a 2-bay automobile service use.

SUPPORTING FACTS: The Take 5 Oil Change facility provides drive-in services such as motor oil changes, air filter replacements, wiper blade replacements and a few other minor services. There are no tire sales, tire rotations, major mechanical services, brake services, etc. Customers do not exit their vehicles before, during or after services are performed. The building does not provide a customer entrance or waiting area. As a result, parking provided onsite is generally for employees only. The proposed Take 5 includes two service bays. For this facility, the anticipated maximum number of employees at a given time is 4. Therefore, the corresponding number of parking spaces provided onsite is proposed to be 5, including an ADA accessible space as required by law.

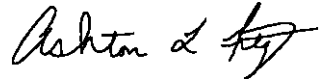
Due to the limited developable space on this uniquely acute triangular shaped lot, providing the code required 10 parking spaces requires significantly more hard surface and less than ideal functionality for onsite maneuvering. Included in this request is an exhibit showing a site layout with 10 parking spaces as well as the proposed site plan providing the requested 5 parking spaces. A comparison of the illustrations shows the advantages of the proposed 5 parking spaces layout including increased green space, reduced hard surface, better defined parking spaces and access, better onsite vehicular circulation, and reduced impact to adjoining properties from parking.



SUMMARY: Please accept this Waiver Request to allow the proposed 5 parking spaces onsite rather than the code required 10 parking spaces. There are no negative anticipated impacts to the site, the proposed business use or the general public's safety that would result from the granting of this Waiver.

Please review the above requests and let me know if any additional information is required to complete your review and recommendation for approval of this Waiver.

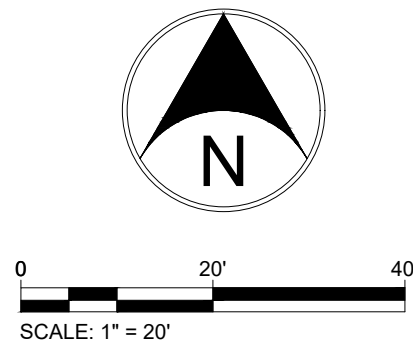
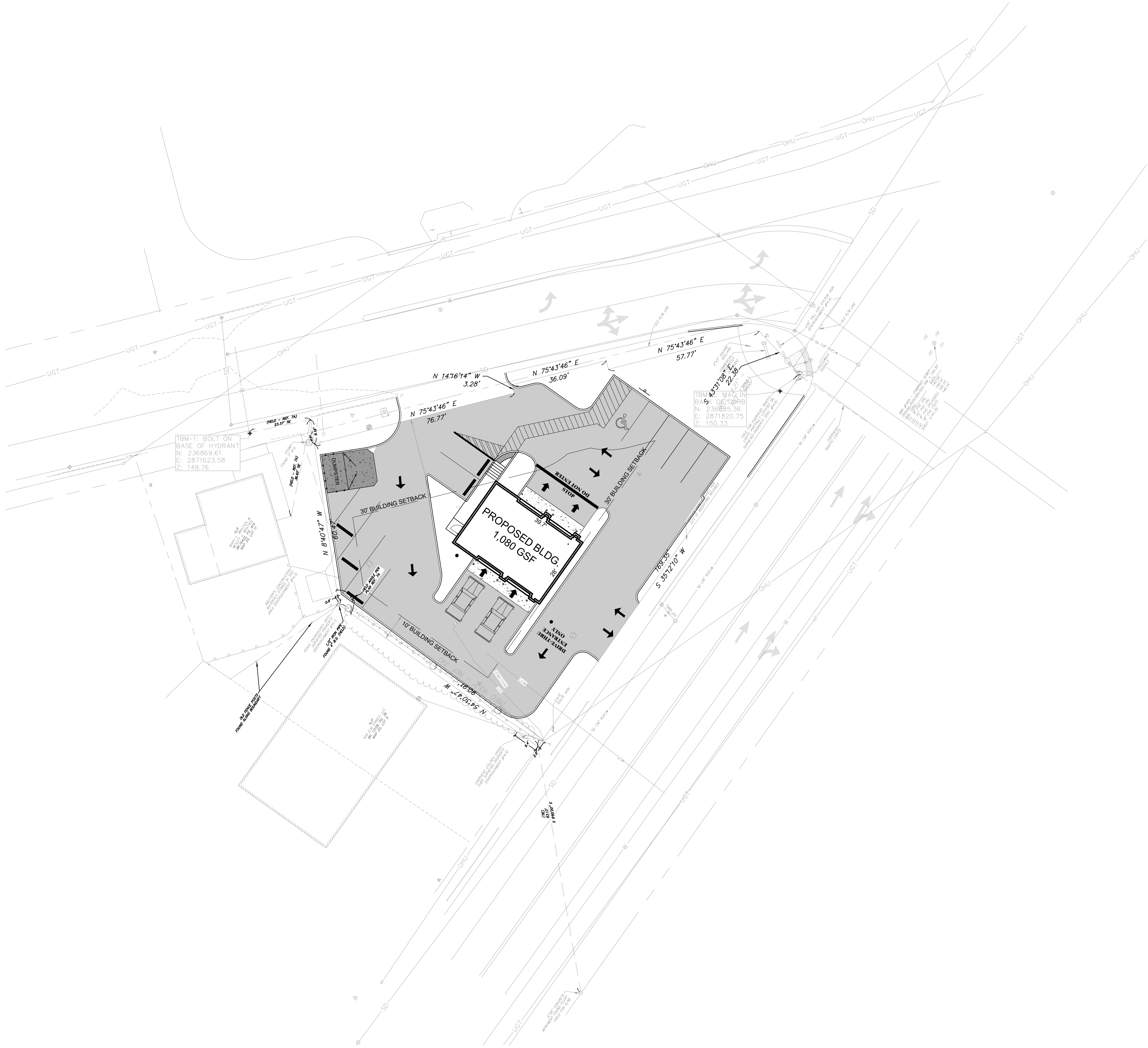
Best Regards,
Fritz Engineering Services, LLC



Ashton L. Fritz, PE, CFM, CPESC
Principal

Enclosures: EXH-A, Site Plan-10 Onsite Parking Spaces
C201 – Proposed Site Plan (5 onsite parking spaces)

DATE: 9/6/2022 10:34 AM
DRAWN: KG
CHECK: AF
DESIGN: AF
PROJECT: 2209005
SHEET: 1 OF 1
FILE NAME: F:\2022\209005\TAKE 5 BIDDEFORD\10 ONSITE PARKING SPACES.dwg
PLOT DATE: 9/6/2022 10:34 AM
PLOT BY: KG



Fritz Engineering Services, LLC
14020 Mississinewa Drive
Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

STATE OF MAINE
ASHLEY K. KIRBY
PRELIMINARY
NOT FOR
CONSTRUCTION
LICENSED
PROFESSIONAL ENGINEER
Ashley K. Kirby

REVISIONS AND ISSUES	DATE	BY

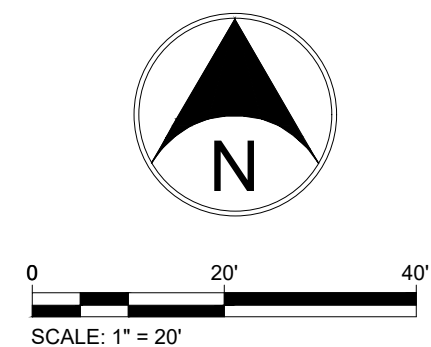
GENERAL NOTES / LEGEND:

811 DigSafe
MA-ME-NH-RI-VT

PROJECT: **TAKE 5 OIL CHANGE BIDDEFORD**
PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY
TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 10

CLIENT: **TAKE 5 MAINE, LLC**
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

PLAN DATE: 9/6/2022
DESIGN: AF CHECK: AF DRAWN: KG
PROJECT NO. 2209005
SHEET NAME: **SITE PLAN - 10 ONSITE PARKING SPACES**
SHEET NO. **EXH-A**



**Fritz Engineering
Services, LLC**
14020 Mississinewa Drive
Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

STATE OF MAINE
 ASHTON L.
 FRITZ
 No. PE17376
 LICENSED
 PROFESSIONAL ENGINEER
 3/27/2023

3.REV PER CITY	3/27/2023	AF
2.EXTEND ALFRED ST MEDIAN	3/7/2023	AF
1.REV DRIVE ENTRANCES	2/22/2023	AF
REVISIONS AND ISSUES	DATE	BY

GENERAL NOTES / LEGEND:



PROJECT:

**TAKE 5 OIL
CHANGE
BIDDEFORD**

PROJECT LOCATION:

**394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY**

TAX MAP & LOT

PORTION OF TAX MAP 20, LOT 10

CLIENT:
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

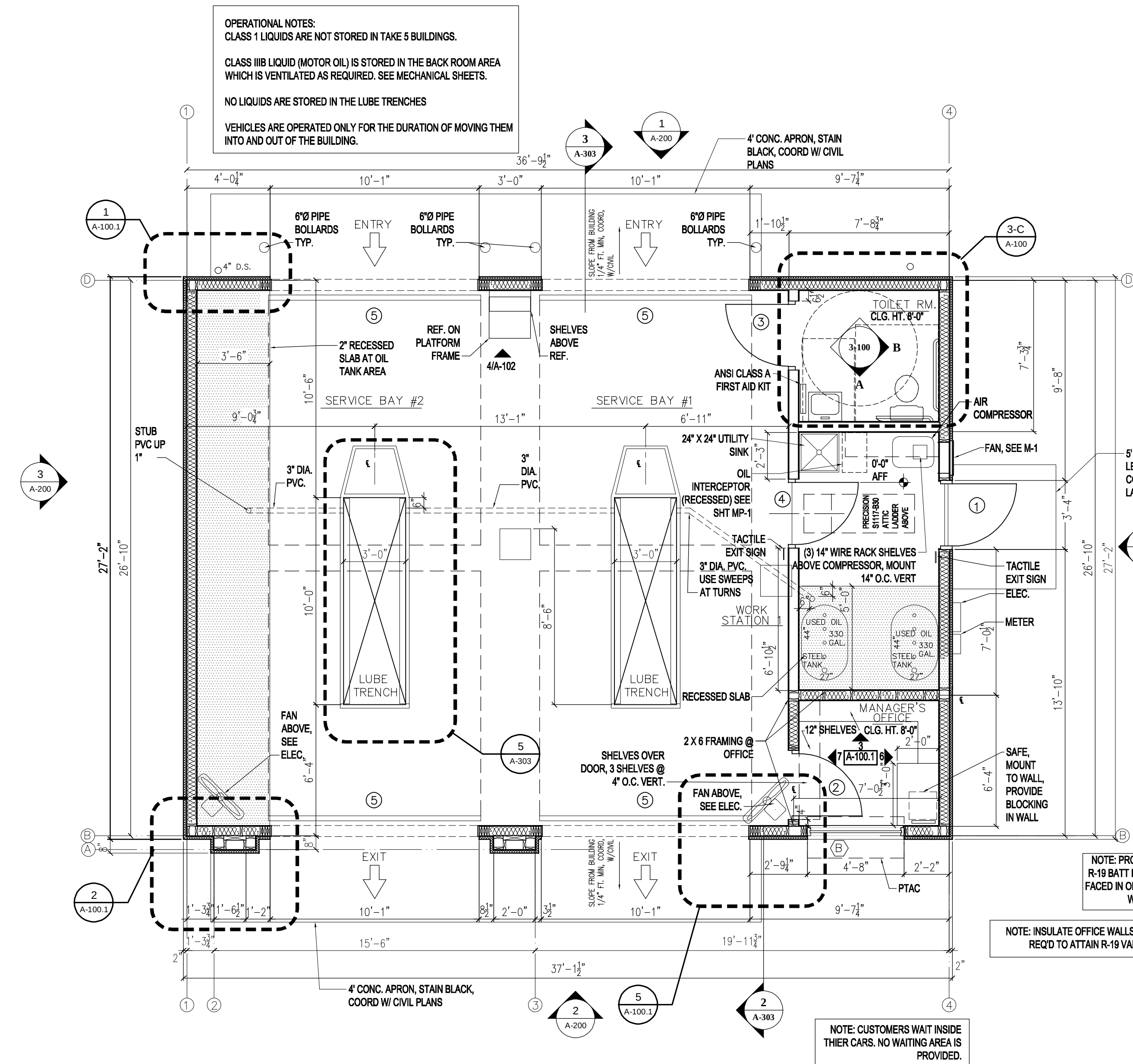
PLAN DATE:		
12/6/2022		
DESIGN: AF	CHECK: AF	DRAWN: KG
PROJECT NO.		
2209005		
SHEET NAME		
SITE PLAN		
SHEET NO.		
C201		

SITE DEVELOPMENT SUMMARY TABLE		
ZONING CLASSIFICATION, CITY OF BIDDEFORD, MAINE		B2, AUTOMOBILE SERVICE IS A PERMITTED USE
PARCEL SIZE		0.34 AC.±
MIN. STREET FRONTAGE		150'
MAX. BLDG HEIGHT		35' MAX
MIN. LOT AREA		N/A
BUILDING COVERAGE		N/A
SETBACKS		
	FRONT	30' (MAJOR RD. R/W)
	SIDE	10'
	REAR	10'
BUFFERYARDS / GREENBELTS		
	FRONT	NONE
	SIDE	NONE
	REAR	NONE
PARKING REQUIRED, AUTOMOBILE REPAIR/SALES		5 SPACES PER BAY = 10 SPACES
PARKING PROVIDED		5 * WAIVER REQUEST
BICYCLE PARKING REQUIRED		N/A
NOTE:		
1.		

PRINTED BY: Ashton Fritz
DATE: 3/28/2023 3:19 PM
SHEET SIZE, SCALE: ANSI FULL BLEED D (34.00 X 22.00 INCHES), 1:1
FILE NAME: E:\329292\000005_ TAKE 5 REDUCE FOR NEWS\02 COLLOR AN\SC001 DWG_LAYOUT_C001

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PLAN CHUCK TAKE 5 BIDDEFORD ME PHOTO BASE 2 032723.DWG



OPERATIONAL NOTES:
CLASS 1 LIQUIDS ARE NOT STORED IN TAKE 5 BUILDINGS.
CLASS IIIB LIQUID (MOTOR OIL) IS STORED IN THE BACK ROOM AREA WHICH IS VENTILATED AS REQUIRED. SEE MECHANICAL SHEETS.
NO LIQUIDS ARE STORED IN THE LUBE TRENCHES
VEHICLES ARE OPERATED ONLY FOR THE DURATION OF MOVING THEM INTO AND OUT OF THE BUILDING.

WIRE SHELVING:
12" WIRE SHELVING TO BE "CLOSETMAID - SUPERSLIDE" OR EQUAL, ON ADJUSTABLE MOUNT HARDWARE W/ VERT. STANDARDS AT 24" O.C. MAX. SPACING.
18" WIRE SHELVING TO BE "CLOSETMAID - MAX LOAD" OR EQUAL, ON HEAVY DUTY "MAX LOAD" ADJUSTABLE MOUNT HARDWARE W/ VERT STANDARDS AT 24" O.C. MAX. SPACING.
CLOSET ROD TO BE "CLOSETMAID" EPOXY COATED STEEL "SUPER SLIDE SYSTEM W/ CORNER ROUNDER BAR. SUPPORTS TO BE HEAVY DUTY METAL "I" BRACKETS. PROVIDE CLOSET ROD END CAPS AT EACH END.
ALL FINISHES TO BE BRUSHED CHROME.

TRENCH FINISH
(2) COATS OF EPOXY AT WALLS AND FLOOR OF TRENCHES.
RUST-OLEUM 2-PART EPOXY 6500 SYSTEM. COLOR: NAVY GRAY

NOTE:
PIT FRAMES AND ROLLING DRAIN PANS TO BE PROVIDED BY G.C.
G.C. IS TO COORDINATE MANUFACTURE OF PIT RAILS AND TO CONTACT MANUFACTURER OF OIL DRAIN PANS AND SCHEDULE DELIVERY. G.C. IS TO TAKE DELIVERY AND INSTALL FRAMES AND ROLLING PANS PRIOR TO SUBSTANTIAL COMPLETION.
OIL DRAIN PAN MANUFACTURER CONTACT INFORMATION:
JEFF JOHNSON,
JEFF@OFAB.NET
(352)427-1713

NOTE: PROVIDE R-19 BATT INSUL FACED IN OFFICE WALLS

NOTE: SLOPE FLOOR IN SERVICE AREA 1/4" PER FT MIN. TO LUBE TRENCHES

NOTE: CUSTOMERS WAIT INSIDE THEIR CARS. NO WAITING AREA IS PROVIDED.

1 PLAN
A-100 1/4"=1'-0"

FINISH SCHEDULE

AREA	FLOOR	BASE	WALLS	CEILING	CLG. HT.	REMARKS
SERVICE BAYS	CONC., SEALED *		1/2" PLYWD.	NONE	OPEN (13'-4" TRUSS HT)	* SMOOTH FINISH. STAINED B-C PLYWD. NOTE 1,2,3,4,8,9,10
MANAGER'S OFFICE	CONC., SEALED *	VINYL	1/2" PLYWD.	1/2" PLYWD.	8'-0"	* SMOOTH FINISH. STAINED B-C PLYWD. NOTE 1,2,3,4,8,9,10
TOILET RM.	CONC., SEALED *	VINYL	1/2" PLYWD.	1/2" PLYWD.	8'-0"	* SMOOTH FINISH. STAINED B-C PLYWD. NOTE 1,2,3,4,8,9,10,11
WASTE OIL	CONC., SEALED *	CONC. 2" DEPRESSIONED SLAB @ OIL TANK AREAS	1/2" PLYWD.	NONE	OPEN (13'-4" TRUSS HT)	* SMOOTH FINISH. STAINED B-C PLYWD. NOTE 1,2,3,4,8,9,10

NOTE 1: PAINT EXPOSED WALL SURFACE (GWB OR PWD)
NOTE 2: PAINT EXPOSED CEILING
NOTE 3: ALL INTERIOR FINISHES ARE TO MEET TABLE 803.5 OF THE NCBC.
NOTE 4: INTERIOR PAINT COLOR TO BE SEMI GLOSS ENAMEL WHITE (SW 7006 "EXTRA WHITE") EXCEPT WHERE NOTED.
NOTE 5: DARK BRONZE PAINT COLOR TO BE (SW 6076 "TURKISH COFFEE")
NOTE 6: EXTERIOR DOOR WHEN INDICATED ON PLAN 1/A-100

NOTE 7: SEE STRUCTURAL DWGS FOR DEPRESSIONED SLAB DETAILS
NOTE 8: STAIN - H&C INFUSION REACTIVE CONC. STAIN (SIENNA RED 40.002084)
NOTE 9: SEALER - H&C PRO SERIES SOLVENT BASED DECORATIVE CONC. SEALER (CLEAR)

NOTE 10: ALL INTERIOR TRIM TO BE "INDUSTRIAL GRAY" (SW 7017 "DORIAN GRAY")
NOTE 11: ALL INTERIOR WALL PAINT AT TOILET ROOM TO BE ACRYLIC WASHABLE SEMI-GLOSS ENAMEL PAINT

DOOR SCHEDULE

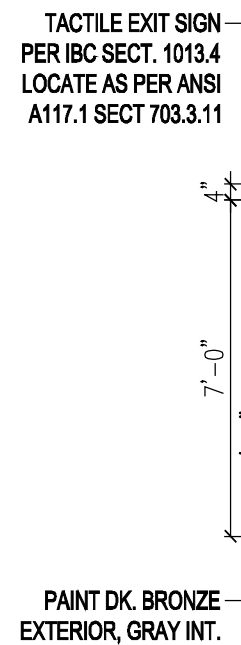
MARK	SIZE	DOOR TYPE	DOOR FINISH	FRAME	FRAME FINISH	HARDWARE	ELEV.	REMARKS
1	3' x 7'-4"	FLUSH H.M.	PAINT DK BRONZE EXT GRAY INT	H.M.	PAINT DK BRONZE EXT GRAY INT	SET 1	1	CLOSER, LOCKSET, THRESHOLD. NOTE 1,2,5
2	3' x 7'	FLUSH H.M.	PAINT GRAY EXT GRAY INT	H.M.	PAINT GRAY EXT GRAY INT	SET 2	2	LOCKSET, HALF GLASS (TINTED), CLOSER NOTE 1,2,4
3	3' x 7'	FLUSH H.M.	PAINT GRAY EXT GRAY INT	H.M.	PAINT GRAY EXT GRAY INT	SET 3	3	LOCKSET, CLOSER. NOTE 1,2, 6
4	3' x 7'	FLUSH H.M.	PAINT GRAY EXT GRAY INT	H.M.	PAINT GRAY EXT GRAY INT	SET 4	4	LOCKSET, CLOSER. NOTE 1,2
5	10' x 11'-6"	UPWARD ACTING	FACTORY FINISH CLOPAY "CHOCOLATE"	H.M.	FACTORY FINISH CLOPAY "CHOCOLATE"	-	5	3 CENTER SECTIONS GLASS NOTE 3,4

WINDOW SCHEDULE

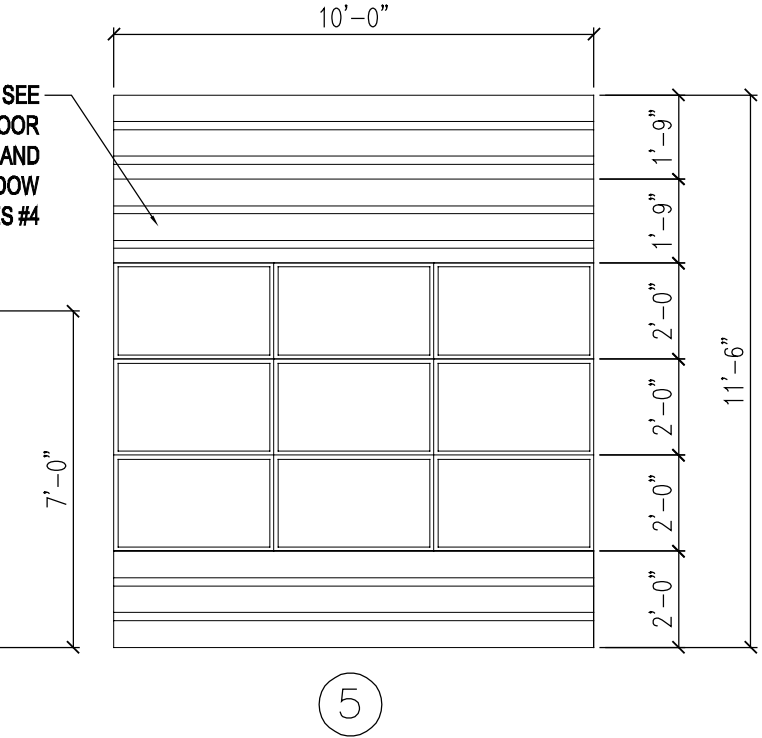
MARK	SIZE	FIXED GLASS	DOUBLE PANE, LOW-E GLASS, TINTED	ALUM.	ANODIZED / DARK BRONZE EXT - PAINT GRAY INT	REMARKS
B	4'-8" x 4'-0"	FIXED GLASS	DOUBLE PANE, LOW-E GLASS, TINTED	-	ALUM.	ANODIZED / DARK BRONZE EXT - PAINT GRAY INT NOTE 4

DOOR AND WINDOW NOTES:
NOTE 1: HARDWARE TO BE LEVER ACTION AND MEET ALL ADA REQUIREMENTS
NOTE 2: HARDWARE TO BE COMMERCIAL GRADE
NOTE 3: HARDWARE PER MANUF. REQUIREMENTS
NOTE 4: SAFETY GLAZING TO MEET ANSI Z97.1 CLASS A
NOTE 5: DARK BRONZE PAINT COLOR TO BE (SW 6076 "TURKISH COFFEE")
NOTE 6: EXTERIOR DOOR WHEN INDICATED ON PLAN 1/A-100

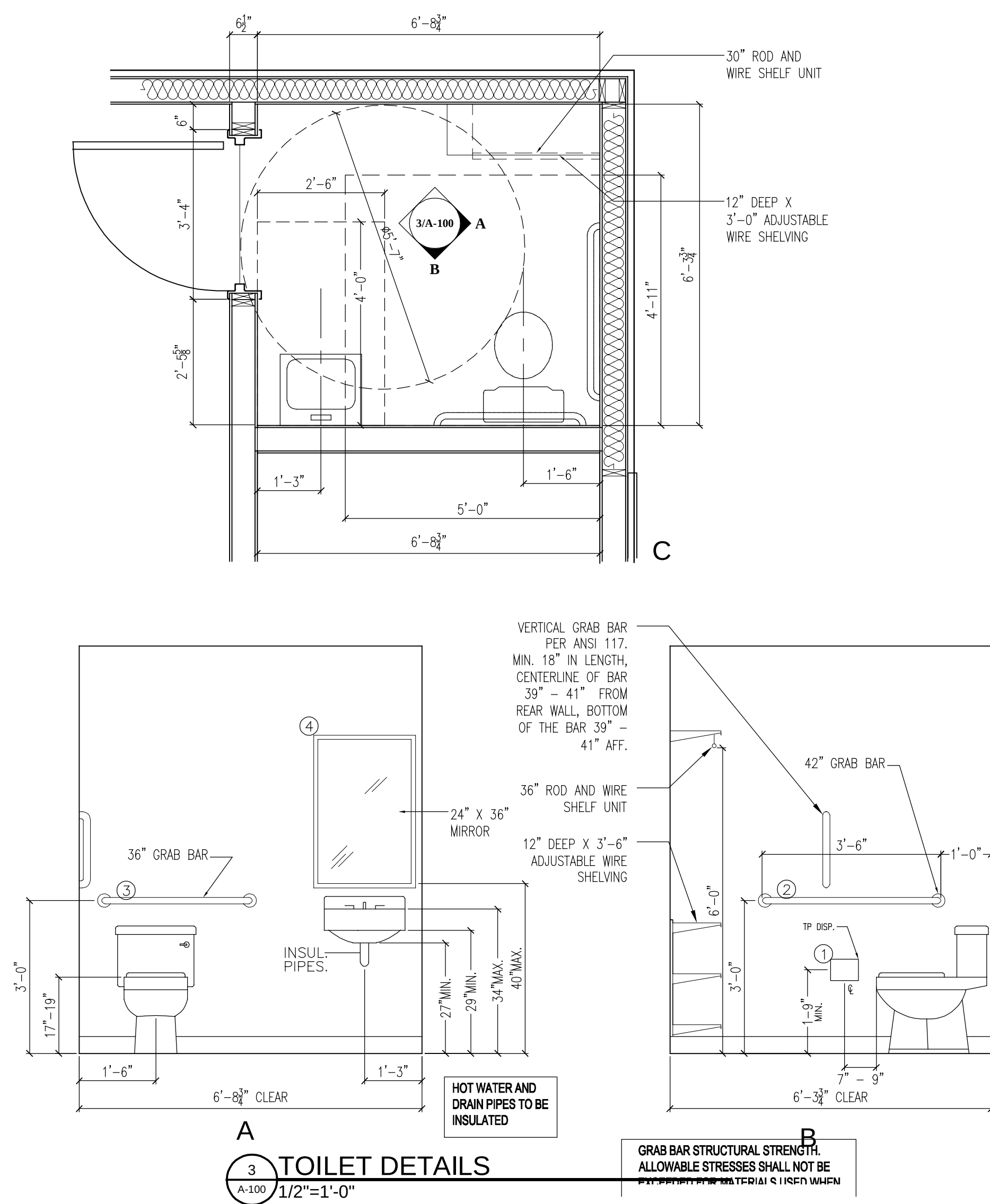
2 SCHEDULES
A-100 NTS



3 DOOR ELEVATIONS
A-100 1/4"=1'-0"



4 WINDOW ELEVATIONS
A-100 1/4"=1'-0"



MARK	LOCATION	DESCRIPTION	MOUNTING HEIGHT
1	TOILET ROOM	TOILET PAPER DISPENSER	22" A.F.F. TO OPERABLE PARTS
2	TOILET ROOM	42" GRAB BAR	36" A.F.F. TO TOP
3	TOILET ROOM	36" GRAB BAR	36" A.F.F. TO TOP
4	TOILET ROOM	18" x 30" MIRROR	40" A.F.F. TO BOTTOM OF REFLECTIVE SURFACE
5	TOILET ROOM	VERTICAL GRAB BAR	SEE 3/A100
6	TOILET ROOM	PAPER TOWEL DISPENSER	48" A.F.F. TO OPERABLE PARTS
8	TOILET ROOM	UNDER LAVATORY GUARD	LAVATORY SUPPLY & DRAIN PIPES

NOTES:
1. ALL TOILET ACCESSORIES SHALL BE LOCATED AND MOUNTED TO MEET ALL REQUIREMENTS OF THE ADA AND ALL LOCAL ACCESSIBILITY CODE REQUIREMENTS.
2. ALL TOILET ACCESSORIES SHALL BE BY BOBRICK OR EQUAL.
3. PROVIDE BLOCKING PER MANUFACTURER'S RECOMMENDATIONS.

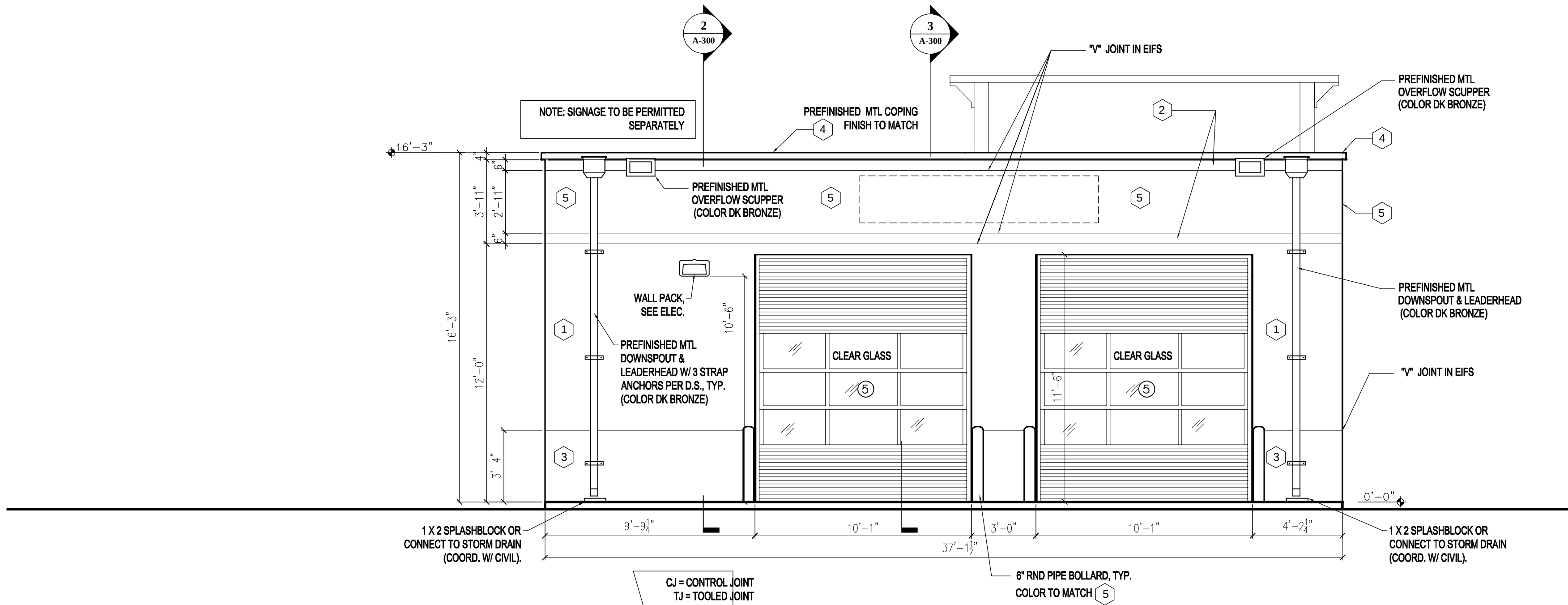
TAKE 5 / 5 MINUTE OIL CHANGE
394 ELM STREET
BIDDEFORD, ME 04005
FOR: T5 MAINE, LLC

W L R
ARCHITECTURE
WILLIAM LEE ROBINSON ARCHITECTURE
1212 KENILWORTH AVE
CHARLOTTE, NC 28204
PHONE: 704-370-6000

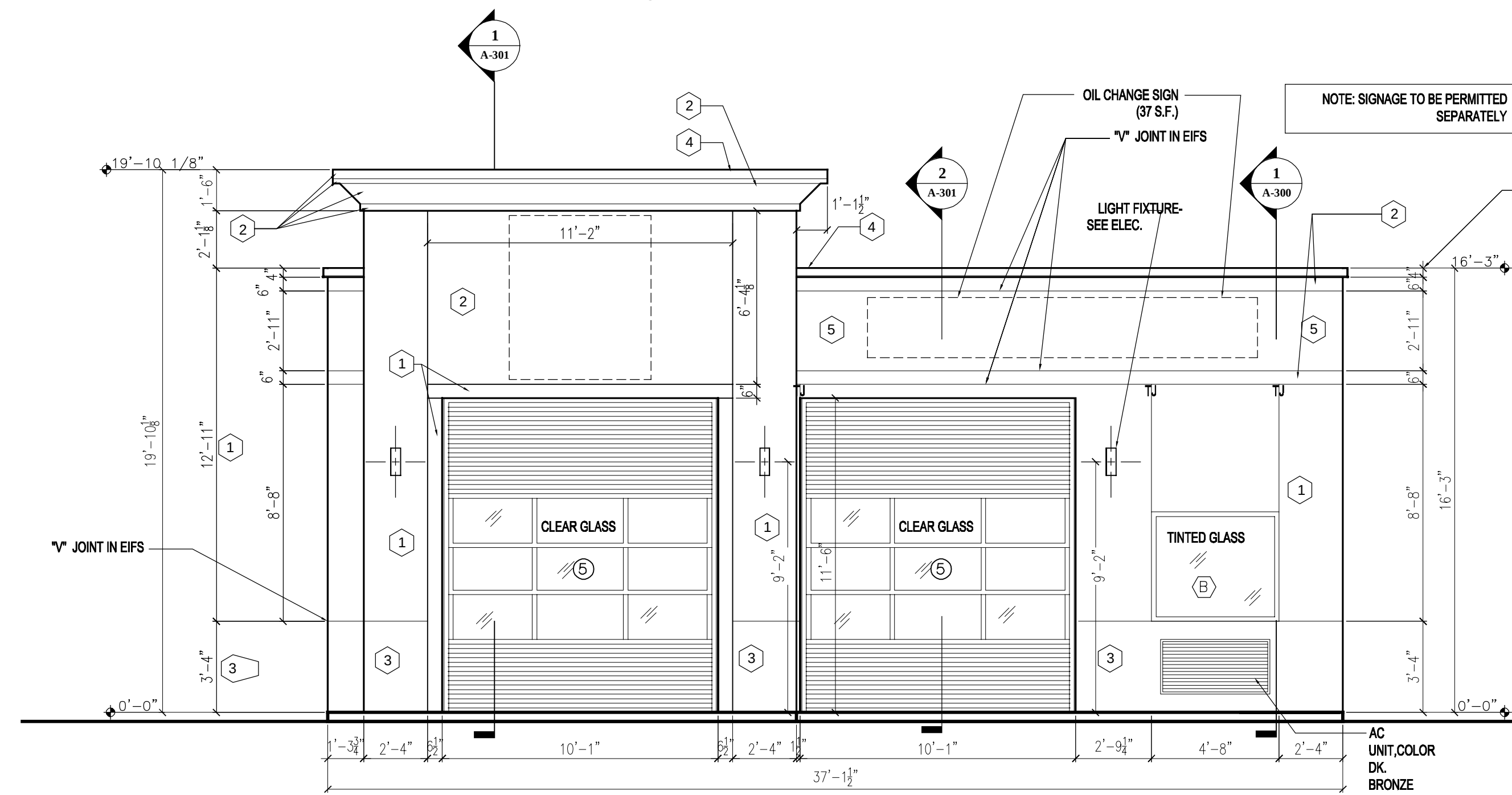
REVISIONS
REV. DESCRIPTION
DATE
09-9-2022
SHEET NAME
PLAN AND SCHEDULES
SHEET NUMBER
A-100

REVISIONS
REV. DESCRIPTION
DATE
09-9-2022
SHEET NAME
PLAN AND SCHEDULES
SHEET NUMBER
A-100

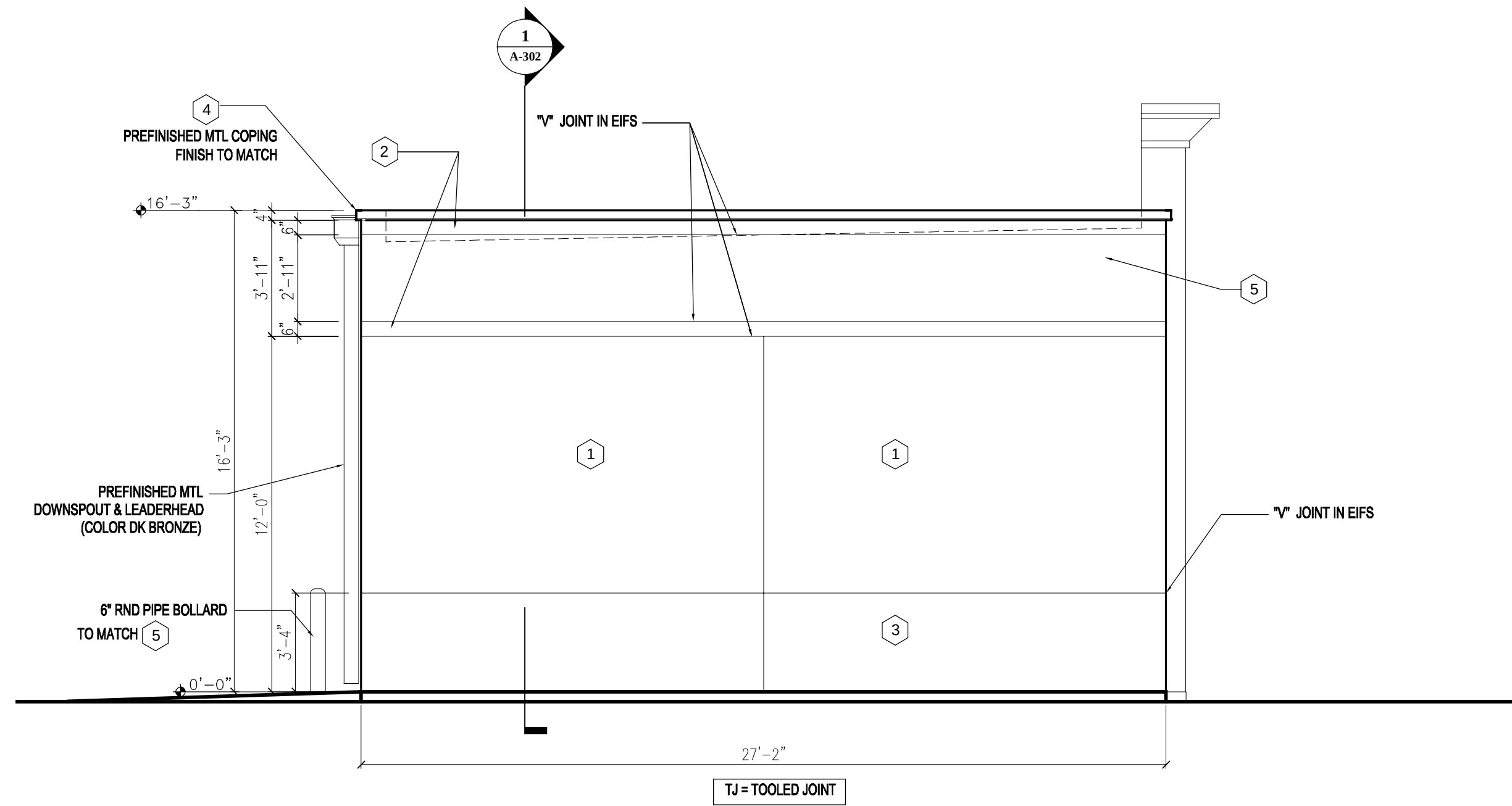
D:\CHUCK\TAKE 5 BIDDEFORD ME PHOTO BASE 2 032723.DWG



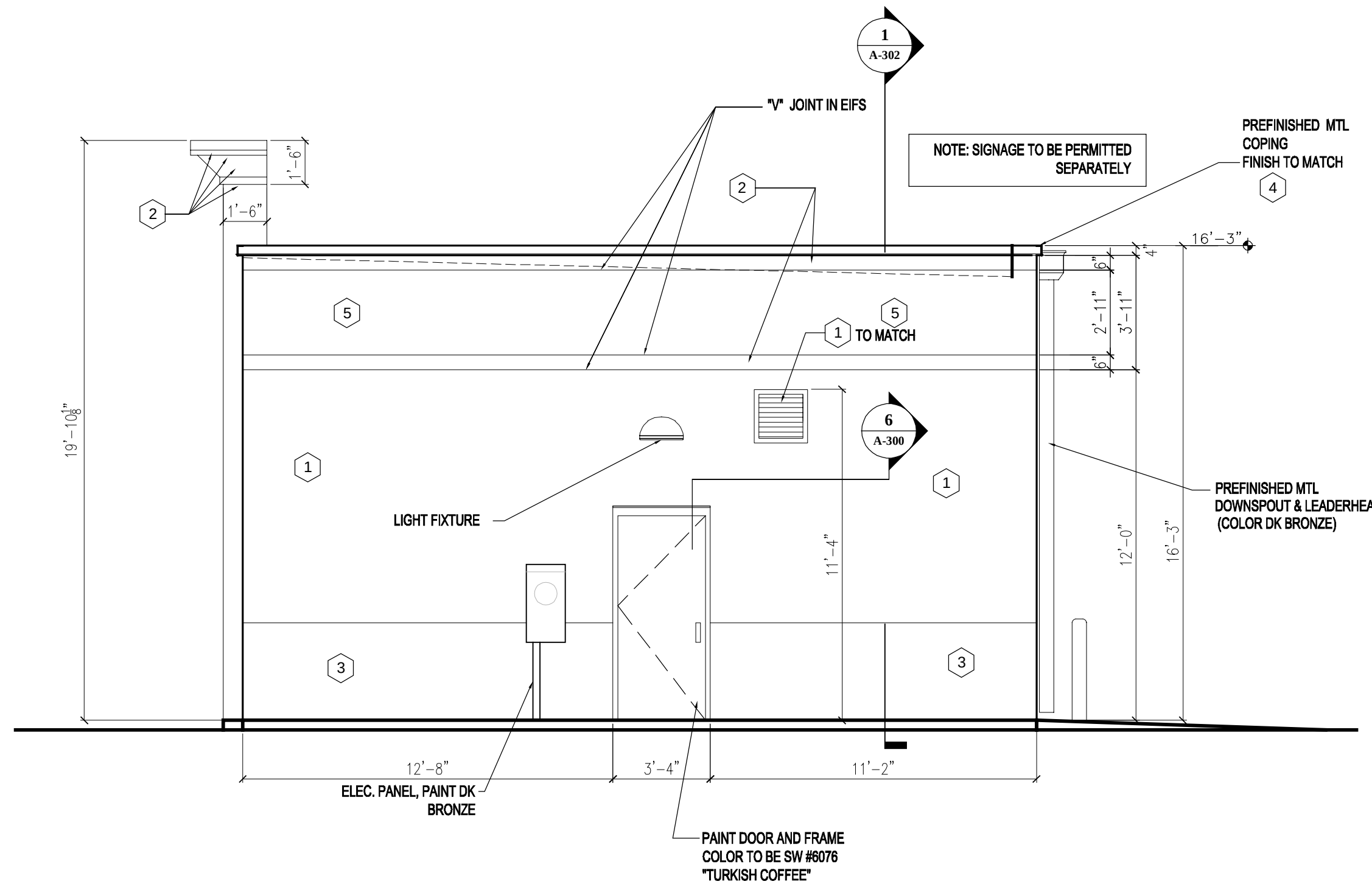
1 SOUTH ELEVATION
A-200 1/4"=1'-0"



2 NORTH ELEVATION
A-200 1/4"=1'-0"



3 EAST ELEVATION
A-200 1/4"=1'-0"



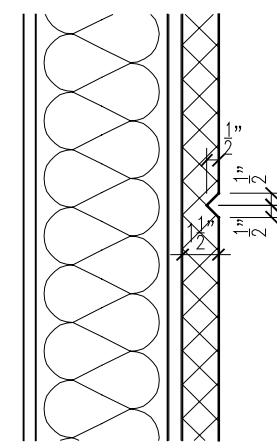
4 WEST ELEVATION
A-200 1/4"=1'-0"

EXTERIOR FINISH SCHEDULE

NO.	AREA	COATS	COLOR	FINISH
1	EIFS OR STUCCO MAIN COLOR	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #7693, STONEBRIAR	FINISH TO MATCH STO "MEDIUM SAND" OR DRYWIT "SANDPEBBLE FINE"
2	EIFS OR STUCCO ACCENT BAND AND FACE EIFS OR STUCCO CORNICE	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #7678, COTTAGE CREAM	FINISH TO MATCH STO "FINE SAND" OR DRYWIT "SANDBLAST"
3	EIFS OR STUCCO WAINSCOT	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6097, STURDY BROWN	FINISH TO MATCH STO "MEDIUM SAND" OR DRYWIT "SANDPEBBLE"
4	COPING	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6871, POSITIVE RED	FINISH TO BE KYNAR 500 PREFINISHED
5	EIFS OR STUCCO SECONDARY COLOR	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6871, POSITIVE RED	FINISH TO MATCH STO "MEDIUM SAND" OR DRYWIT "SANDPEBBLE FINE"
6	TOWER PREFINISHED STANDING SEAM ROOF	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6871, POSITIVE RED	FINISH TO BE KYNAR 500 PREFINISHED
7	BOLLARDS	SEE SPECIFICATION AND MANUFACTURER'S REQ'MENTS	MATCH SW COLOR #6871, POSITIVE RED	-----

EXTERIOR FINISH NOTES:

- EIFS TO BE STO THERM CI CLASSIC, DRYWIT OUTSULATION PLUS MD OR APPROVED EQUAL.
- EIFS TO HAVE ULTRA-HIGH IMPACT MESH TO 4'-0" AFF.
- EIFS TO HAVE HIGH IMPACT MESH FROM 4'-0" AFF TO 8'-0" AFF.
- EIFS TO HAVE STANDARRD IMPACT MESH ABOVE 8'-0" AFF.
- METAL ROOF TO BE ATAS DUTCH SEAM OR BERRIDGE MANUF. WITH DEEP VEE PANELS AND 2" BATTEN CAPS.
- METAL ROOF PANELS TO BE 24 GA. GALVALUME WITH KYNAR 500, 2.0 MILS THICK FLOUROCARBON FINISH..
- METAL COPING TO BE PREFINISHED, 24 GA. GALVALUME WITH KYNAR 500, 2.0 MILS THICK FLOUROCARBON FINISH..



5 EIFS V-JOINT DETAIL
A-200 1 1/2"=1'-0"

TAKE 5 / 5 MINUTE OIL CHANGE
394 ELM STREET
BIDDEFORD, ME 04005
FOR: T5 MAINE, LLC

1212 KENILWORTH AVE
CHARLOTTE, NC 28204
PHONE: 704-370-6000

W L R
ARCHITECTURE

WILLIAM LEE ROBINSON ARCHITECTURE

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9/9/22

REVISIONS

REV. DESCRIPTION

DATE

09-9-2022

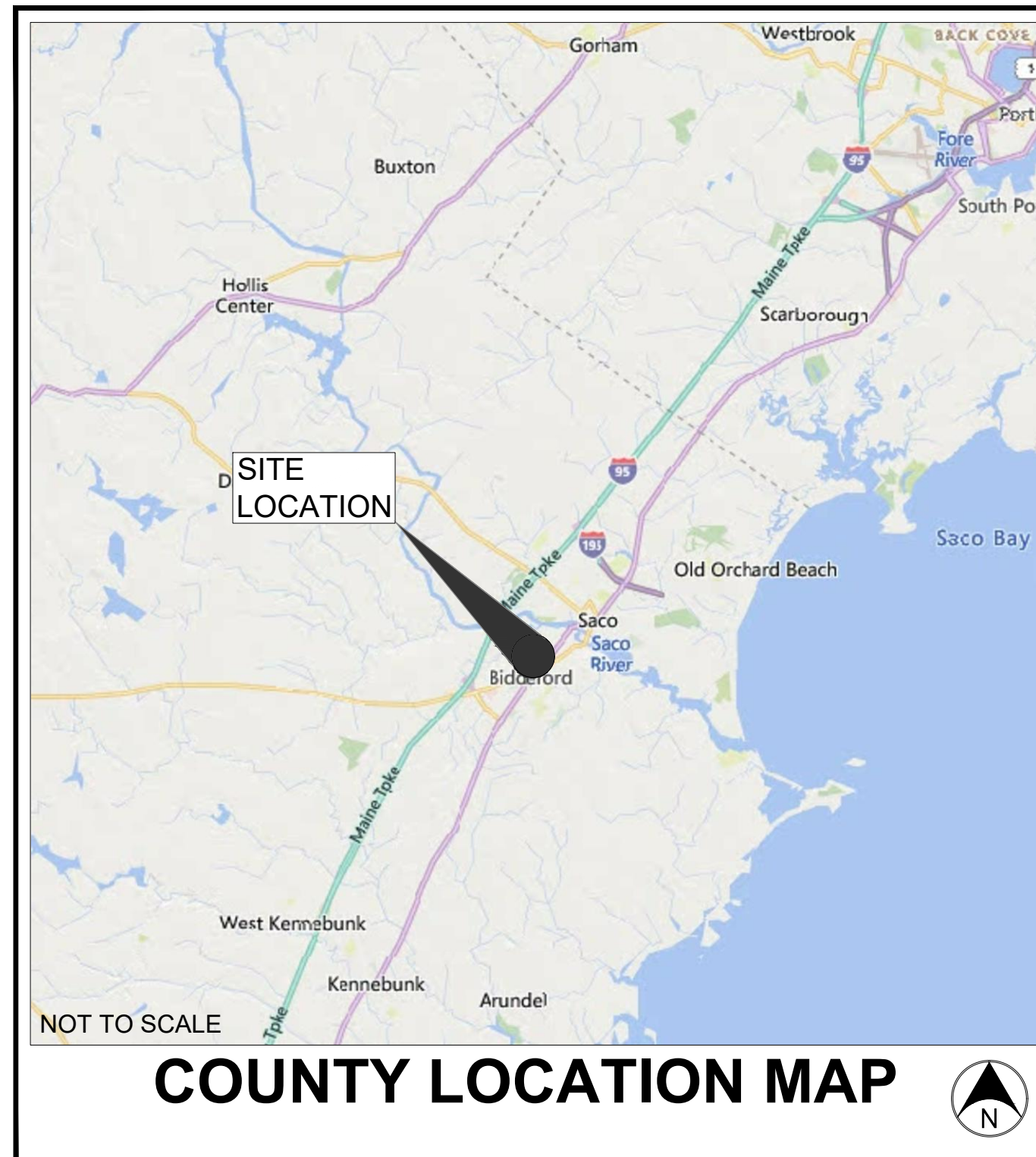
SHEET NAME

ELEVATIONS

SHEET NUMBER

A-200

CONSTRUCTION PLANS FOR:
TAKE 5 OIL CHANGE
BIDDEFORD
394 ELM STREET
CITY OF BIDDEFORD, YORK COUNTY, MAINE

**PLANS PREPARED FOR:**

TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060
Contact Person: ANDY MORRISON
574-361-7501
ANDY@TAKE5INDIANA.COM

OPERATING AUTHORITIES:

<u>BIDDEFORD ENGINEERING</u> 205 MAIN STREET BIDDEFORD, ME 04005 Tel: 207-284-9118	<u>BIDDEFORD PLANNING</u> 205 MAIN STREET BIDDEFORD, ME 04005 Tel: 207-284-9115	<u>BIDDEFORD WASTEWATER</u> 205 MAIN ST #3, BIDDEFORD, ME 04005 Tel: 207-286-9387	<u>YORK COUNTY</u> <u>SOIL&WATER</u> CONSERVATION DISTRICT 21 BRADEEN ST #104, SPRINGVALE, ME 04083 Tel: 207-324-0888
<u>BIDDEFORD PUBLIC WORKS</u> 371 HILL STREET BIDDEFORD, ME 04005 Tel: 207-282-1579	<u>BIDDEFORD WATER COMPANY</u> 93 INDUSTRIAL PARK RD SACO, ME 04072 Tel: 207-287-1643	<u>MAINE NATURAL GAS COMPANY</u> 9 INDUSTRIAL PKWY BRUNSWICK, ME 04011 Tel: 207-729-0420	<u>DUKE ENERGY</u> 40 MAIN ST BIDDEFORD, ME 04005 Tel: 207-283-3589

GENERAL NOTES:

1. THE CONSTRUCTION PLANS SHALL GOVERN OVER ANY OTHER FORM OF MEDIA, WHICH INCLUDES DIGITAL FILES OF THIS PROJECT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING OR VERIFYING THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, STATE & FEDERAL AGENCIES PRIOR TO STARTING CONSTRUCTION.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES IN THE VICINITY OF THE CONSTRUCTION AREA PRIOR TO STARTING CONSTRUCTION. ONCE ALL UTILITIES HAVE BEEN LOCATED, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN IN SERVICE ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION DRAWINGS.
4. BEFORE WORKING WITH OR AROUND EXISTING UTILITIES, THE APPLICABLE UTILITY COMPANY SHALL BE CONTACTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY AND COORDINATE CONSTRUCTION WITH ALL RESPECTIVE UTILITIES.
5. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS FOR THE GOVERNING MUNICIPALITY REQUIREMENTS.
6. MAINTENANCE OF TRAFFIC NEEDED FOR THIS PROJECT SHALL BE INSTALLED AND MAINTAINED PER INDOT SPECIFICATIONS AND THE INDIANA MUTCD MANUAL.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND SHALL VERIFY ALL DIMENSIONS ON THE SITE PRIOR TO START OF CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND IN THESE PLANS FROM ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
8. ALL QUANTITIES GIVEN ON THESE CONSTRUCTION PLANS OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTORS.
9. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THIS PROJECT.
10. BEARINGS, DIMENSIONS, AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. SEE RECORD SURVEYS AND PLATS FOR EXACT INFORMATION.

SITE DATA:

TOTAL SITE ACREAGE - 0.34 AC
TOTAL ACREAGE OF DISTURBANCE - 0.3 AC
GROSS SQUARE FOOTAGE OF PROPOSED BUILDING - 1,010 SF
PROPOSED CONSTRUCTION START - FEBRUARY 1, 2023
PROPOSED CONSTRUCTION END - NOVEMBER 1, 2023
WORK TO BE COMPLETED IN ONE CONTINUOUS CONSTRUCTION PHASE

SURVEY CONTROL & BENCHMARK DATA:

COORDINATE SYSTEM: DERIVED FROM GPS OBSERVATIONS

VERTICAL DATUM: NAVD 88
ZONE: MAINE NAD83 WEST

DISTANCE UNITS US SURVEY FEET
HEIGHT UNITS US SURVEY FEET

TBM - TBM -

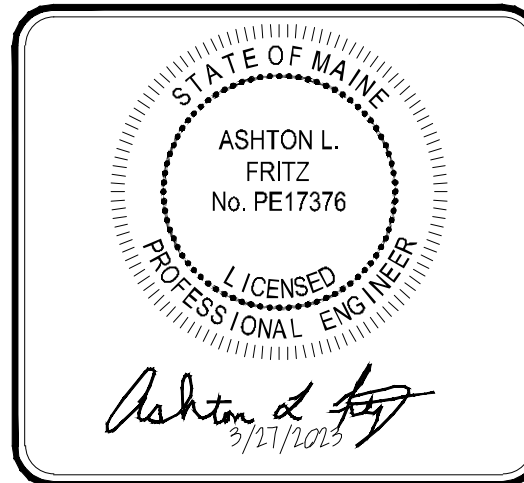
- NORTHERN SURVEYING ENGINEERING PROVIDED SURVEY AND EXISTING CONDITIONS INFORMATION, JOB #22005445A

FLOOD ZONE:

THE PROJECT SITE IS LOCATED WITHIN THE FEMA COMMUNITY PANEL MAP #2301450003B DATED MAY 15, 1984. REVIEW OF THE MAP INDICATES THE SITE IS LOCATED WITHIN THE FLOOD DESIGNATIONS 'ZONE C' (UNSHADED). THE PROPOSED BUILDINGS AND IMPROVEMENTS ARE LOCATED IN ZONE C UNSHADED AND ARE THEREFORE NOT SUBJECT TO FLOOD CONTROL ORDINANCE REQUIREMENTS.

PLAN SHEET INDEX

SHEET NUMBER	SHEET TITLE
C100	COVER SHEET
C101	GENERAL INFORMATION PLAN
C102	SURVEY SHEET 1 OF 2
C103	SURVEY SHEET 2 OF 2
C102	EXISTING CONDITIONS & SITE DEMOLITION PLAN
C201	SITE PLAN
C301	GRADING PLAN
C401	UTILITY PLAN
C501	INITIAL CONTROLS SWPPP
C502	MASS GRADING & CONSTRUCTION SWPPP
C503	POST CONSTRUCTION SWPPP
C504	EROSION CONTROL NOTES
C505	EROSION CONTROL DETAILS & SPECS
C506	EROSION CONTROL DETAILS & SPECS
C801	GENERAL DETAILS
C802	GENERAL DETAILS
C901	GENERAL SPECIFICATIONS
L101	LANDSCAPE PLAN



1.REV PER CITY	3/27/2023	AF
REVISIONS AND ISSUES	DATE	BY

GENERAL NOTES / LEGEND:



PROJECT:
**TAKE 5 OIL
CHANGE
BIDDEFORD**

BIDDEFORD
PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY
TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 10

CLIENT:
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

PLAN DATE:			12/6/2022		
DESIGN: AF		CHECK: AF		DRAWN: KG	
PROJECT NO. 2209005					
SHEET NAME COVER SHEET SHEET NO. C100					

CITY OF BIDDEFORD DEVELOPMENT STANDARD SPECIFICATIONS, LATEST EDITION, TO BE USED AS SUPPLEMENTAL INFORMATION WITH THESE PLANS.

MAINE STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION, TO BE USED AS SUPPLEMENTAL INFORMATION WITH THESE PLANS.

DATE: 10/20/2022 3:11 PM
FILE: 10222-00001-1.DWG
PROJECT: 10222-00001-1.DWG
DRAWN: ASHTON L. FRITZ
CHECKED: ASHTON L. FRITZ
DATE: 10/20/2022 3:11 PM



Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgB	Adams-Urban land complex, 0 to 8 percent slopes	0.2	33.6%
Ur	Urban land	0.3	66.4%
Totals for Area of Interest		0.5	100.0%

SOIL MAP

ABBREVIATIONS AND TERMS

IE/INV	= INVERT ELEVATION
TC	= TOP OF CURB
RIM	= RIM / TOP OF CASTING
GUT	= GUTTER
RCP	= REINFORCED CONCRETE PIPE
HDPE	= HIGH DENSITY POLYETHYLENE PIPE
SSD	= SUB-SURFACE DRAIN
UD	= UNDERDRAIN
MH	= MANHOLE
STR	= STRUCTURE
RD&UE	= REGULATED DRAIN AND UTILITY EASEMENT
D&UE	= DRAINAGE AND UTILITY EASEMENT
SD&UE	= SANITARY, DRAINAGE, AND UTILITY EASEMENT
W&UE	= WATER AND UTILITY EASEMENT
SE	= SANITARY EASEMENT
SAN	= SANITARY SEWER
HC	= HANDICAP RAMP
ME	= MATCH EXISTING
STM	= STORM SEWER
MPE	= MINIMUM PAD ELEVATION
NP	= NORMAL POOL
ELEV	= ELEVATION
TYP	= TYPICAL
PR	= PROPOSED
EX	= EXISTING
R	= RADIUS
B-B	= BACK TO BACK
ROW	= RIGHT OF WAY
LF	= LINEAR FEET

PROPOSED LEGEND

	HYDRANT		FLOW LINE, PAVEMENT
	VALVE		FLOW LINE, SWALE (GRASS)
	TEE		FOUNDATION DRAIN
	ADAPTER		CABLE TV LINE**
	BEND		ELECTRIC LINE**
	TEMP. FLUSH HYDRANT		FIBER OPTIC LINE
	BLOW-OFF		SUB-SURFACE DRAIN
	THRUST BLOCK		STORM UNDERDRAIN
	PLUG		STORM SEWER
	REDUCER		SANITARY SEWER
	M.J. SLEEVE		SANITARY LATERAL
	CROSS		FORCE MAIN
	WATER METER		GAS LINE
	POST INDICATOR VALVE		TELEPHONE LINE**
	FIRE CONNECTION		WATER LINE
	TRANSFORMER PAD		8\"/>
	RELOCATED ELECTRIC/TELEPHONE POLE		
	SIGN		
	HANDICAP PARKING		FLOW ARROW
	CLEAN OUT		EXISTING CONTOURS
	STORMTECH STORM CHAMBER		PROPOSED CONTOURS
	SANITARY MANHOLE		FLOW LINE ELEVATION
	STORM MANHOLE		SPOT ELEVATION
	STORM COMBINATION INLET		HIGH POINT ELEVATION
	STORM GRATE INLET		LOW POINT ELEVATION
	STORM BEEHIVE/YARD DRAIN		TOP/BOTTOM CURB ELEVATION
	STORM END SECTION		TOP/BOTTOM WALL ELEVATION
	BMP/AQUA-SWIRL		ME - MATCH EXISTING GRADE
	STORM STRUCTURE NUMBER		

SURVEY NOTES:

- The utilities indicated on these construction plans and on the survey may not be a complete inventory of all existing utilities currently on or near the site. The size and location of these utilities may be approximate. The engineer shall not be held liable for any inaccurate utility information indicated, or not indicated on this survey.
- Boundary & Topographic Survey information provided herein was obtained by research and field work performed by others. Fritz Engineering Services, LLC shall not be responsible for any existing conditions shown or not shown within this set of plans.

DEMOLITION NOTES:

- It shall be the responsibility of the contractor to remove any materials and/or structures not located on this survey.
- It shall be the responsibility of the contractor to verify all existing utilities and their locations pertaining to their phase of work, and to verify which utilities will be removed by the utility company. Any and all utilities not removed by the utility company shall be removed by the contractor.
- Utility locations shown are approximate and shall be relocated and/or capped at the Right-Of-Way line and abandoned before construction at no additional cost to the owner.
- The owner gets the first right of salvage.
- All demolition material not being salvage shall be properly disposed of offsite by the contractor.
- The contractor shall obtain all demolition permits required by the local and state agencies.
- The contractor shall maintain streets and shared drives free and clear of sediment and debris.
- The contractor is responsible for the protection of all existing utility lines unless otherwise stated.
- Contractor shall coordinate all temporary shut down of existing utility services with the appropriate utility department, owner, authority, etc.
- Contractor shall coordinate any necessary street or drive closures required.

SITE/LAYOUT NOTES:

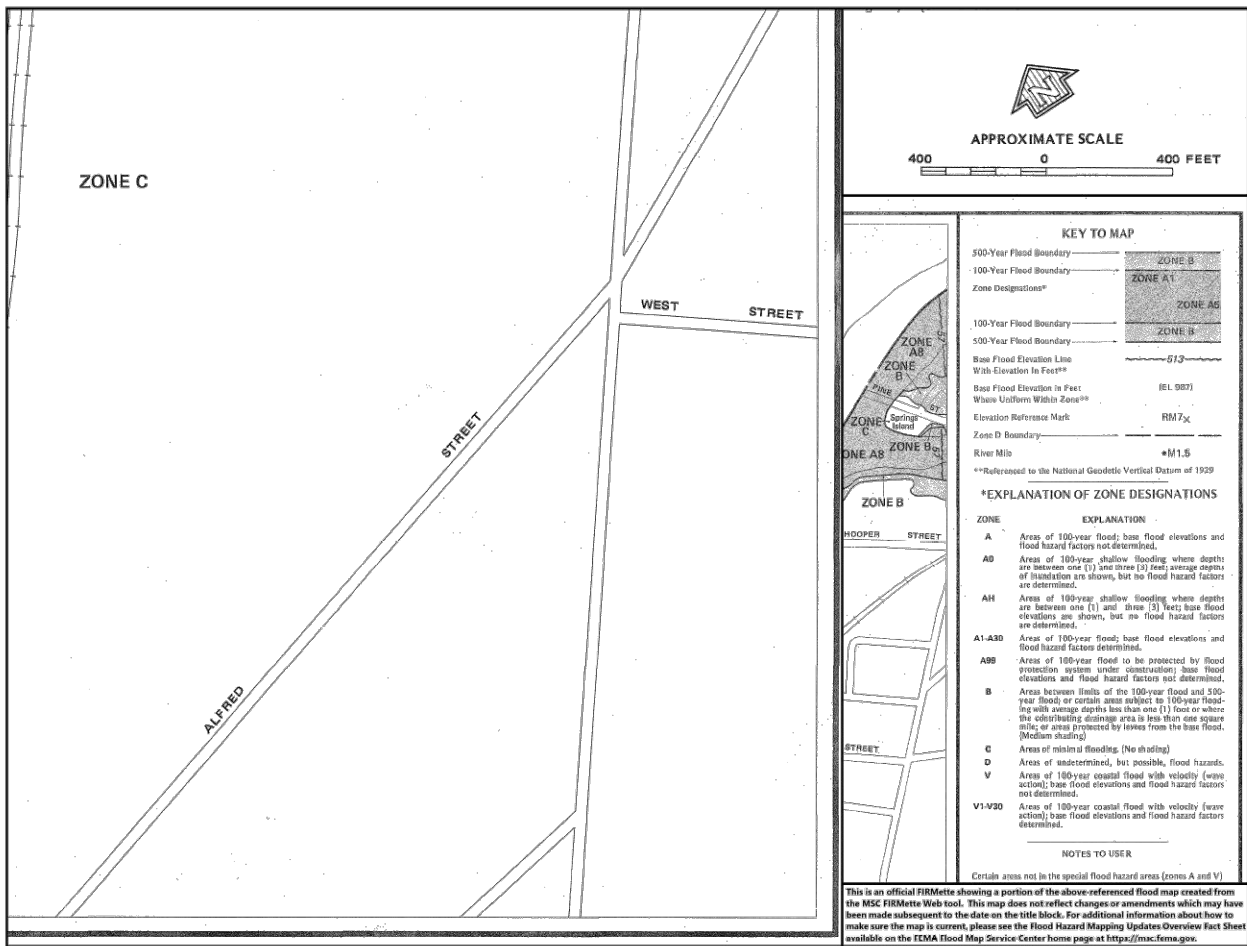
- All dimensions are to edge of pavement or face of curb, unless noted otherwise.
- All dimensions are to face of brick or facing material, unless noted otherwise.
- All parking area stripes are to be 4 inch white paint. Handicapped parking areas and access aisles shall be 4 inch blue paint.
- Provide smooth transitions from new areas to existing features as appropriate.
- The edge of existing asphalt pavement shall be properly sealed with a tack coat material in all areas where new asphalt pavement is indicated to join existing pavement.
- Provide chamfer ends at curbs.
- Verify sign locations & sign requirements with local governing municipality. Signs shall meet Indiana MUTCD Manual and specifications.

GRADING NOTES:

- Earthwork & grading shall not start until erosion control measures have been properly installed.
- Occupational safety and health administration (OSHA) standards for excavations; Final Rule 29 CFR Part 1926, subpart "P" applies to all excavations exceeding five (5) feet in depth.
- Provide positive drainage that assures no ponding in all areas. After installation, contractor to test for, and correct, if any, standing water conditions are present.
- All proposed spot elevations are the final pavement and grade elevations. See appropriate details and specifications to determine the subgrade elevations below finish grade elevations for construction.
- The maximum slope to be used in non-paved areas shall be 3:1 unless specifically noted otherwise.
- Minimum swale slopes are 1.0% unless noted or graded otherwise.
- All A.D.A. parking spaces & access aisles shall be level with surface slopes not to exceed 2% (1:50) in any direction as which to comply with A.D.A requirements.
- ADA sidewalk ramps shall meet ADA requirements and MaineDOT standard drawings and specifications.
- All sidewalks cross slopes shall not exceed 2% (1:50) unless noted otherwise.
- Provide smooth transitions from new areas to existing features as appropriate.
- All grades shall match existing grades at the project property lines / limits.

UTILITY NOTES:

- For viewing clarity of these construction plans, the pipes, structures, and appurtenances may not be drawn to scale.
- The contractor is responsible with coordinating with the utility companies for connection of the proposed utility lines for this project site.
- The underdrains depicted on these plans for the storm structures located within the pavement are 15 to 20 liner feet of 6 inch diameter perforated HDPE pipe. All underdrains shall maintain 18 inches of vertical and 10 feet of horizontal separation from all water and sanitary lines as measured from the outside of pipe walls.
- Underdrains shall have a minimum slope of 1.0% and inverts shall be set a minimum of 6 inches above the outlet pipe, unless noted otherwise.
- All storm HDPE pipe (except for underdrains or underground storage facilities) shall be N-12 (smooth walled) pipe, unless noted otherwise.
- The location and orientation of the lids/castings as shown in respect to the structures and alignments as depicted on the plans represents the final and correct position of the lids / castings. Orienting the lids / castings to no particular direction and / or location could result in poor drainage or cause future construction issues. Contact engineer if discrepancies are found.
- A minimum of 54 inches of cover over the entire water line shall be provided unless the water service utility company requires more stringent (deeper) specifications, and if so, the contractor shall meet those water company specifications.
- All proposed water lines and sanitary lines / laterals shall have a minimum of 18 inches of vertical separation be maintained when crossing under or over each other, any other utilities, and storm sewer pipes and appurtenances.
- All proposed water lines and sanitary lines / laterals shall have a minimum horizontal separation from pipe exterior to pipe exterior of 10 linear feet from each other and from storm sewers and appurtenances.
- Full depth granular backfill required for all storm sewers under and within 5 feet of pavement.
- When connections are to be made to existing piping and structures, or where construction is in the vicinity of existing piping, structures, or appurtenances, the exact locations and elevations of the existing piping, structures and / or appurtenances shall be field verified onsite by the contractor prior to construction. If any discrepancies are found, then the engineer shall be notified immediately. Fritz Engineering Services, LLC shall not be responsible for any discrepancies that may arise between the plan information and actual field verified information as determined from any final onsite investigation from the contractor.



FLOOD ZONE:

THE PROJECT SITE IS LOCATED WITHIN THE FEMA COMMUNITY PANEL MAP #2301450003B DATED MAY 15, 1984. REVIEW OF THE MAP INDICATES THE SITE IS LOCATED WITHIN THE FLOOD DESIGNATIONS 'ZONE C' (UNSHADED) 'AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN'.

FIRM MAP



1 REV PER CITY	3/27/2023	AF
REVISIONS AND ISSUES	DATE	BY

GENERAL NOTES / LEGEND:



PROJECT:
TAKE 5 OIL CHANGE BIDDEFORD
PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY
TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 10

CLIENT:
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

PLAN DATE:
12/6/2022
DESIGN: AF CHECK: AF DRAWN: KG
PROJECT NO:
2209005
SHEET NAME:
GENERAL INFORMATION PLAN
SHEET NO.
C101

THIS SHEET IS INCLUDED FOR REFERENCE ONLY AND MAY BE NOT TO BE SCALE AS LISTED. PLEASE REFER TO ORIGINAL SURVEY DOCUMENT.



1 REV PER CITY	3/27/2023	AF
REVISIONS AND ISSUES	DATE	BY

GENERAL NOTES / LEGEND



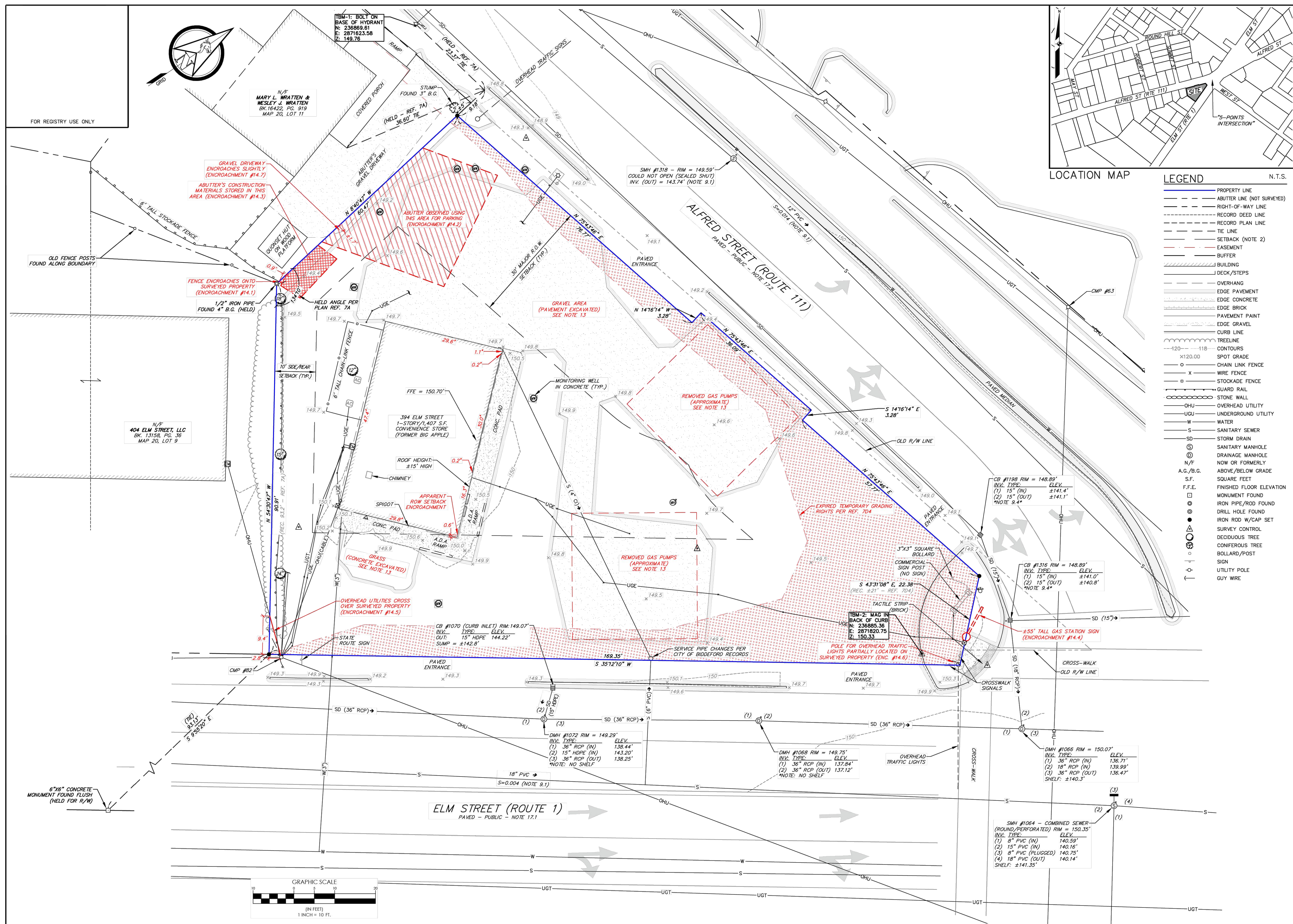
PROJECT:
**TAKE 5 OIL
CHANGE
BIDDEFORD**

PROJECT LOCATION:
**394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY**

TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 1

CLIENT:
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

PLAN DATE:			12/6/2022		
DESIGN: AF		CHECK: AF		DRAWN: KG	
PROJECT NO.			2209005		
SHEET NAME					
SURVEY SHEET 1 OF 2					
SHEET NO.			C103		



DEVON J. HURLEY, PLS. 2584



PPL

[illegible]

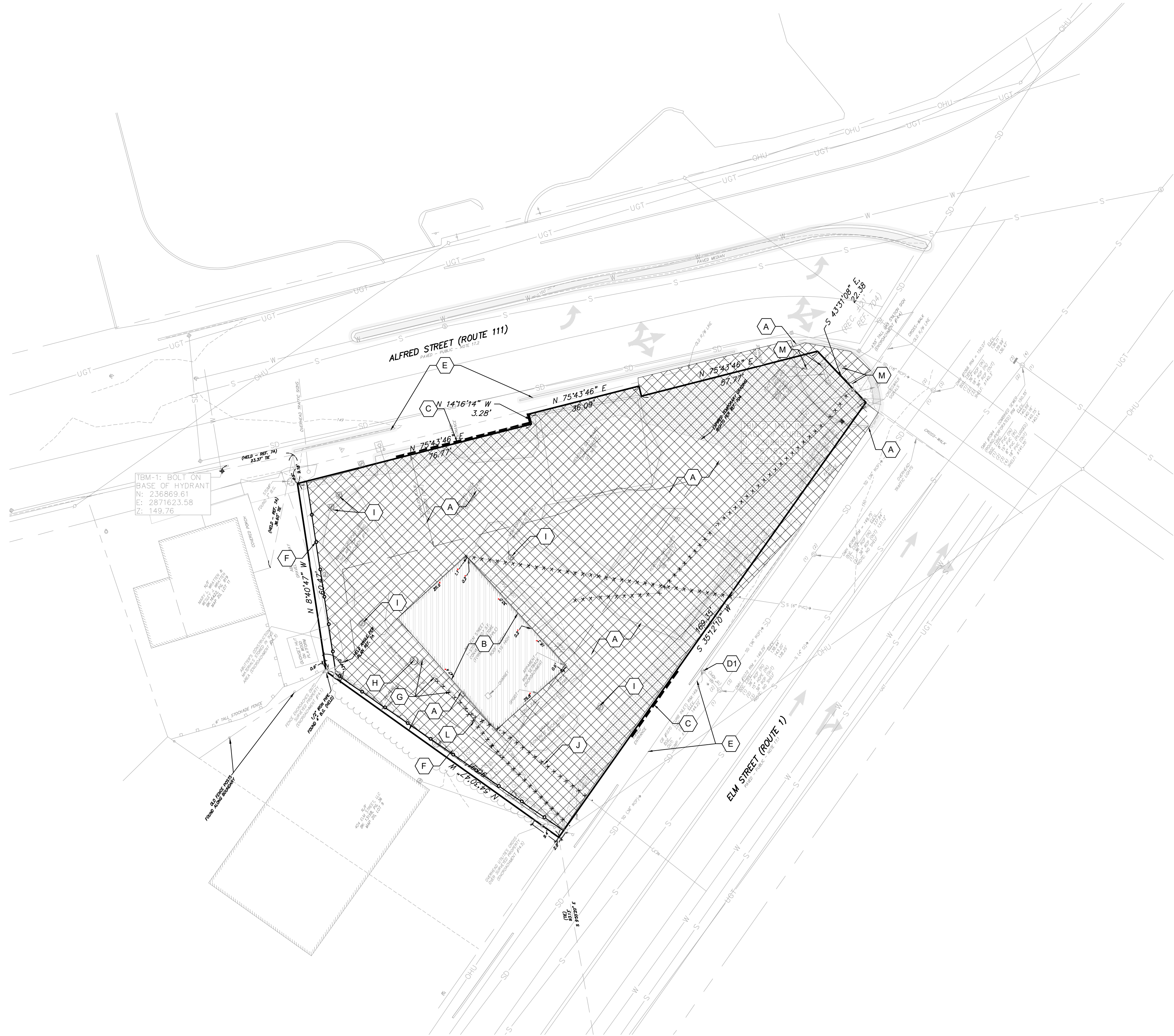
RECORD OWNER:
C.N. BROWN COMPANY

ALTA/NSPS LAND TITLE SURVEY
OF:
C.N. BROWN CO. PROPERTY (FORMERLY BROWN CO. PROPERTY)
394 ELM STREET
BIDDEFORD, MAINE 04005
FOR:
BALDWIN REALTY
880 MONON GREEN BOULEVARD

DRAWN	CHECKED
DJH	TMM
PROJECT NO.	DATE
22005445A	08/23/20
SHEET SIZE	SCALE
24" X 36"	1" = 10'

SHEET 1 OF 2

DATE: 12/06/2022 3:11 PM
BY: ASHTON L. FRITZ
PROJECT: 10884 GRESHAM PLACE, BIDDEFORD, MAINE 04005
SHEET: 1 OF 1

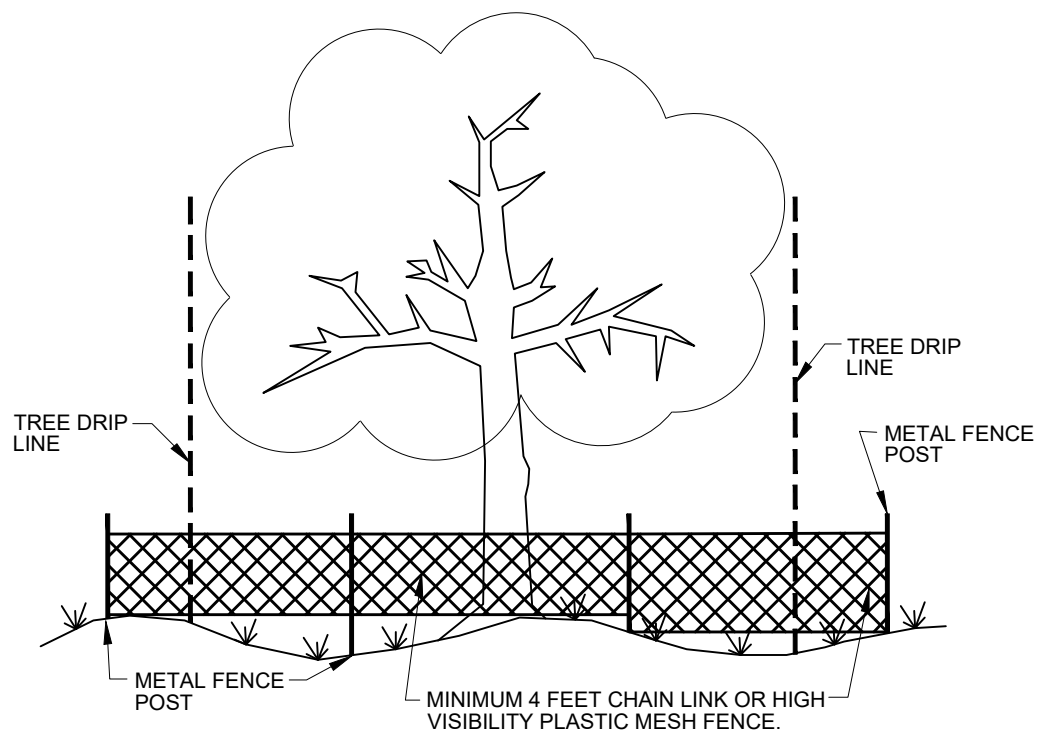
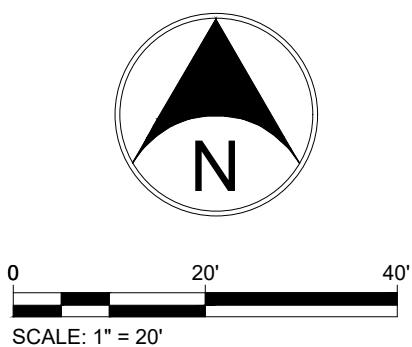


KEY NOTES:

- A REMOVE EXISTING ASPHALT/CONCRETE PAVEMENT/ CURB
- B REMOVE EXISTING BUILDING, COMPLETE
- C SAW CUT CURB / PAVEMENT.
- D PROTECT STORM STRUCTURE AND / OR SEWER DURING CONSTRUCTION.
- D1 REPLACE EX. STORM CURB INLET WITH AREA INLET GRATE. MATCH EXISTING RIM ELEVATION FOR POSITIVE FLOW TO GRATE.
- E EXISTING PAVEMENT / CURB TO REMAIN.
- F EXISTING TREE LINE TO REMAIN. TREE PROTECTION REQ'D. DURING CONSTRUCTION. REMOVE EX. GUARDRAIL.
- G HVAC UNITS TO BE REMOVED, COMPLETE.
- H EXISTING TREE TO BE REMOVED
- I MONITORING WELL TO BE REMOVED
- J EXISTING WATER SERVICE TO BE REMOVED. CONTRACTOR TO COORDINATE WITH LOCAL WATER COMPANY
- K EXISTING SANITARY SERVICE LATERAL TO BE REMOVED.
- L EXISTING TELEPHONE/ELECTRIC SERVICE TO BE REMOVED. CONTRACTOR TO COORDINATE WITH LOCAL UTILITY COMPANIES.
- M REMOVE EX. SIGN, COLUMNS, SUPPORTS COMPLETE. REMOVE EX. ELECTRICAL SERVICE TO SIGNS

NOTES:

- EXISTING PAVEMENT SHALL BE PROTECTED THROUGHOUT CONSTRUCTION.
- FIELD VERIFY ALL EXISTING CONDITIONS AND UTILITIES PRIOR TO CONSTRUCTION. NOTIFY OWNER AND ENGINEER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND PLANS.
- REFER TO EROSION CONTROL/SWPP PLANS FOR INITIAL EROSION CONTROL REQUIREMENTS.



GUIDELINES AND NOTES:

- TREE PROTECTION FENCES SHALL BE 4 FEET HIGH MINIMUM CHAIN LINK FENCE OR HIGH VISIBILITY PLASTIC MESH CONSTRUCTION FENCING.
- ERECT FENCE BARRIERS AROUND ALL "SAVED" TREES NEAR THE CONSTRUCTION ACTIVITY.
- FENCE BARRIERS SHALL BE PLACED OUTSIDE THE DRIP LINE AS FAR FROM THE TREE AS CONSTRUCTION PERMITS.
- FENCE POSTS SHALL BE PLACED NO FURTHER THAN 15 FEET APART.
- NO STAGING OF MATERIALS OR GRADING SHALL OCCUR WITHIN THE FENCED TREE PROTECTION AREA.

TREE PRESERVATION / PROTECTION

DETAIL

NOT TO SCALE

EXISTING UTILITY & SEWER DISCLAIMER:

UTILITY CROSSINGS, INFORMATION AND LOCATIONS ARE APPROXIMATELY SHOWN. THIS INCLUDES ALL SEWER (SANITARY, STORM, AND COMBINE) LOCATIONS AND MEASURE DOWN INFORMATION. LOCATIONS ARE SHOWN PER MAINE 811 MARKINGS AS LOCATED BY THE SURVEYOR (BY OTHERS), PREVIOUS CONSTRUCTION PLANS AS RECEIVED BY CLIENT OR MUNICIPALITY, G.I.S. DATA (IF AVAILABLE), AND UTILITY COMPANY CORRESPONDENCE (IF ANY). ALL UTILITY LOCATIONS, SIZES, MATERIALS, INVERT, LENGTHS, ETC. ARE CONSIDERED APPROXIMATE AND MAY BE SKEPTICAL IN NATURE.

THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL EXISTING UTILITIES CURRENTLY ON OR NEAR THE SITE. THE PATH, SIZE AND LOCATION OF THESE UTILITIES MAY BE APPROXIMATE UNTIL THEY ARE EITHER RELOCATED, BY CALLING MAINE 811 AND OTHER UTILITY LOCATE COMPANIES, OR UNTIL THEY ARE EXCAVATED TO VERIFY THE LOCATION, DEPTH, AND PATH OF THE UTILITY LINES. LOCATIONS ARE SHOWN PER MAINE 811 MARKINGS AS LOCATED BY THE SURVEYOR (BY OTHERS), G.I.S. DATA (IF AVAILABLE), AND UTILITY COMPANY CORRESPONDENCE (IF ANY).

NO ASSUMPTIONS WERE MADE CONNECTING UTILITIES OBSERVED AND LOCATED TO OTHER APPURTENANCES OR HOW THEY ENTER OR CONNECT INTO ADJOINING HOUSES OR BUILDINGS UNLESS IDENTIFIED BY THE SURVEYOR PER ONSITE UTILITY MARKINGS OR AS INDICATED BASED ON G.I.S. / UTILITY PLAN DATA. FRITZ ENGINEERING SERVICES, LLC DID NOT ADD, INTERPOLATE, ASSUME, OR DEPICT ANY UTILITY LINE DIRECTIONS OR CONNECTIONS OUTSIDE WHAT WAS PROVIDED. NO ATTEMPT WAS MADE AS PART OF THIS PROJECT TO OBTAIN OR SHOW DATA CONCERNING EXISTENCE, SIZE, DEPTH, CONDITION, CAPACITY, OR LOCATION OF ANY UTILITY, PUBLIC SERVICE FACILITY, OR UTILITY SERVICE LINES TO THE PROPERTY. NO EXCAVATIONS WERE MADE DURING THE COURSE OF THIS PROJECT TO LOCATE UNDERGROUND UTILITIES AND/OR SEWER STRUCTURES.

NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS MADE TO THE ACCURACY AND/OR COMPLETENESS OF INFORMATION PRESENTED ON UNDERGROUND UTILITIES AND SEWERS, OR AS TO ITS FITNESS FOR ANY PARTICULAR PURPOSE OR USE. IN NO EVENT WILL FRITZ ENGINEERING SERVICES, LLC, ITS EMPLOYEES, AGENTS, AND/OR ASSIGNS BE LIABLE FOR ANY DAMAGES ARISING OUT OF THE FURNISHING AND/OR USE OF SUCH INFORMATION.

CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS OF ALL EXISTING UTILITIES WITHIN AREA OF WORK PRIOR TO CONSTRUCTION. ENGINEER SHALL BE NOTIFIED OF ANY POTENTIAL CONFLICTS FOUND.

Fritz Engineering Services, LLC
14020 Mississinewa Drive
Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

STATE OF MAINE
ASHTON L. FRITZ
No. PE17376
LICENSED PROFESSIONAL ENGINEER
Ashton L. Fritz
5/11/2023

1 REV PER CITY	3/27/2023	AF
REVISIONS AND ISSUES	DATE	BY

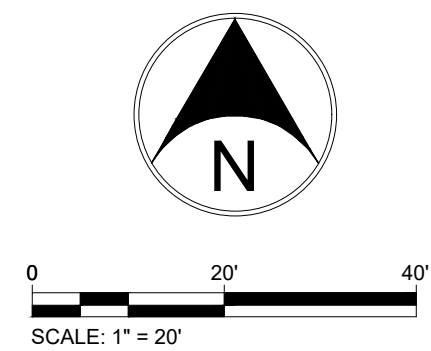
GENERAL NOTES / LEGEND:

811 DigSafe
MA-ME-NH-RI-VT

PROJECT:
TAKE 5 OIL CHANGE
BIDDEFORD
PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY
TAX MAP & LOT:
PORTION OF TAX MAP 20, LOT 10

CLIENT:
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

PLAN DATE:
12/6/2022
DESIGN: AF CHECK: AF DRAWN: KG
PROJECT NO:
2209005
SHEET NAME:
EXISTING CONDITIONS & SITE DEMOLITION PLAN
SHEET NO.
C104

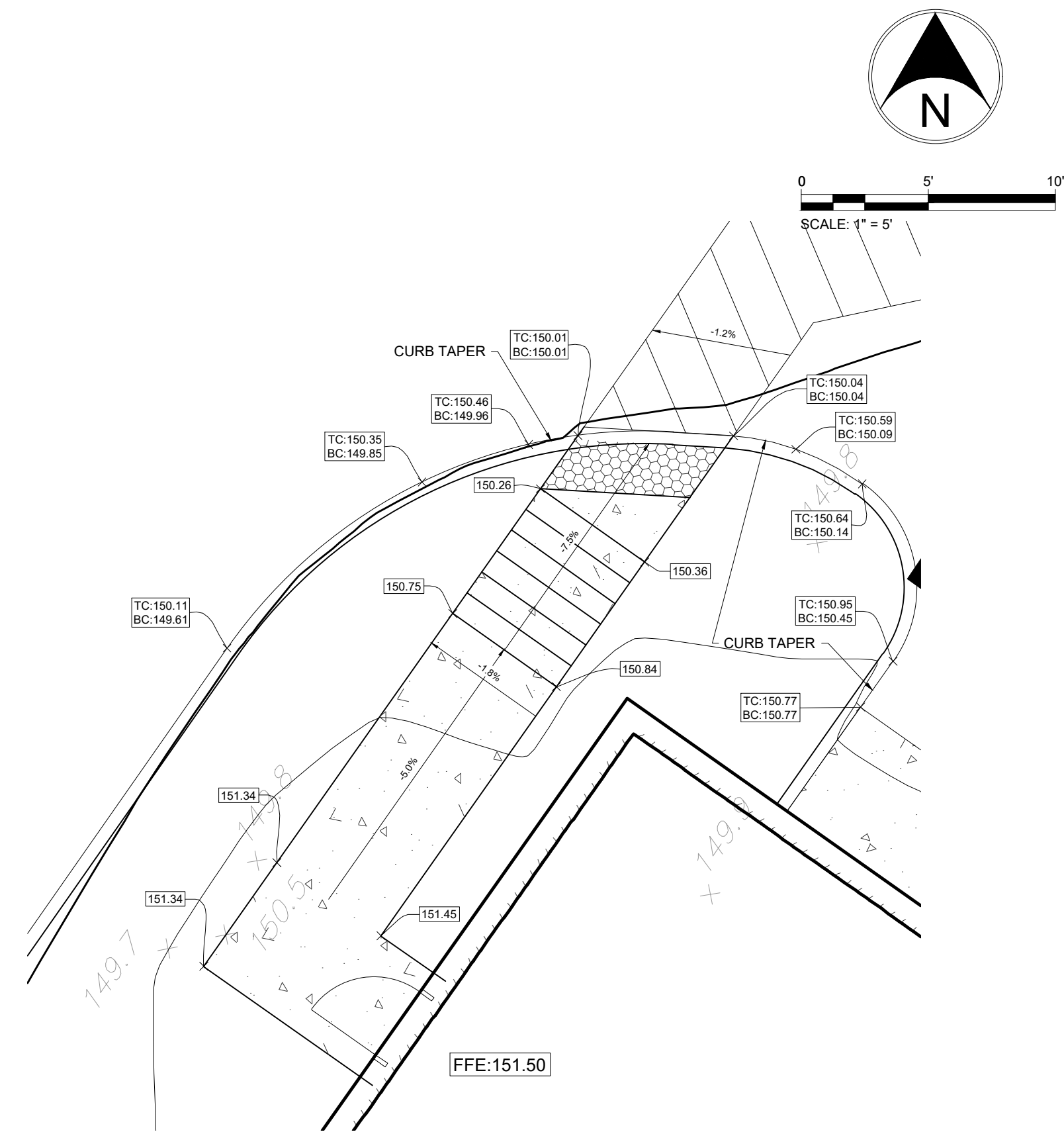
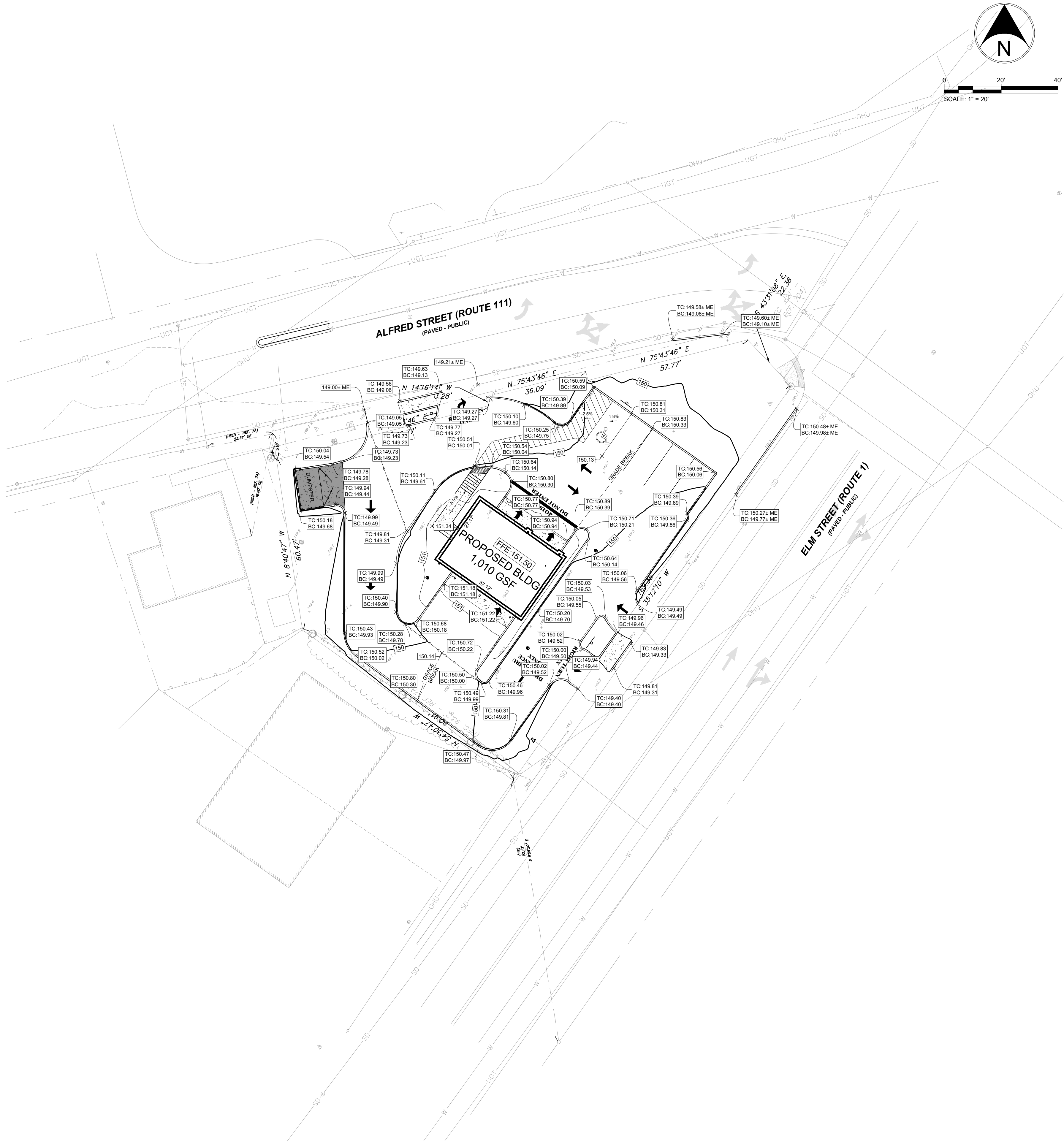


PLAN DATE: 12/6/2022		
DESIGN: AF	CHECK: AF	DRAWN: KG
PROJECT NO. 2209005		
SHEET NAME SITE PLAN		
SHEET NO. C201		

SITE DEVELOPMENT SUMMARY TABLE		
ZONING CLASSIFICATION, CITY OF BIDDEFORD, MAINE		B2, AUTOMOBILE SERVICE IS A PERMITTED USE
PARCEL SIZE		0.34 AC.±
MIN. STREET FRONTAGE		150'
MAX. BLDG HEIGHT		35' MAX
MIN. LOT AREA		N/A
BUILDING COVERAGE		N/A
SETBACKS		
	FRONT	30' (MAJOR RD. R/W)
	SIDE	10'
	REAR	10'
BUFFERYARDS / GREENBELTS		
	FRONT	NONE
	SIDE	NONE
	REAR	NONE
PARKING REQUIRED, AUTOMOBILE REPAIR/SALES		5 SPACES PER BAY = 10 SPACES
PARKING PROVIDED		5 * WAIVER REQUEST
BICYCLE PARKING REQUIRED		N/A
NOTE:		
1.		

PLAN DATE: 12/6/2022		
DESIGN: AF	CHECK: AF	DRAWN: KG
PROJECT NO. 2209005		
SHEET NAME SITE PLAN		
SHEET NO. C201		

DATE: 12/06/2022 3:11 PM
FILE: TAKE 5 OIL CHANGE.dwg
PROJECT: TAKE 5 OIL CHANGE
DRAWN: KG
CHECK: AF
DESIGN: AF
SCALE: 1" = 20'



ADA PARKING RAMP GRADING DETAIL

GRADING LEGEND:

- STORM MANHOLE
- STORM COMBINATION/CURB INLET
- STORM AREA INLET
- STORM BEEHIVE/YARD INLET
- STORM FLARED END SECTION
- STORM MECHANICAL SEPARATOR (REF. PLAN FOR SIZE/TYPE)
- ### STORM STRUCTURE NUMBER
- FLOW LINE, SWALE / GRASS
- FLOW LINE, PAVEMENT
- XX% SLOPE / RAMP SLOPE
- SURFACE DRAINAGE FLOW ARROW DIRECTION
- 785--- EXISTING CONTOUR AND LABEL
- 785--- PROPOSED CONTOUR AND LABEL
- GRADE BREAK
- [E.XXX.XX] FLOW LINE / SWALE SPOT ELEVATION
- [XXX.XX] SPOT ELEVATION
- [XXX.XX H.P.] SPOT ELEVATION, HIGH POINT
- [XXX.XX L.P.] SPOT ELEVATION, LOW POINT
- [TC:XXX.XX] TC - TOP OF CURB ELEVATION
- [BC:XXX.XX] BC - BOTTOM OF CURB/GUTTER ELEVATION
- [TW:XXX.XX] TW - TOP OF WALL ELEVATION
- [BW:XXX.XX] BW - BOTTOM OF WALL ELEVATION
- ME MATCH EXISTING ELEVATION

NOTES:
1. REF. C101 FOR ABBREVIATIONS AND ADDITIONAL LEGEND INFORMATION.

Fritz Engineering Services, LLC
14020 Mississinewa Drive
Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

STATE OF MAINE
ASHTON L. FRITZ
No. PE17376
LICENSED PROFESSIONAL ENGINEER
9/11/2023

1 REV PER CITY	3/27/2023	AF
REVISIONS AND ISSUES	DATE	BY

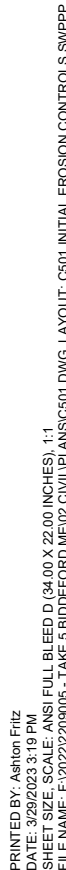
GENERAL NOTES / LEGEND:

811 DigSafe
MA-ME-NH-RI-VT

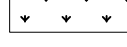
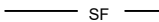
PROJECT: **TAKE 5 OIL CHANGE BIDDEFORD**
PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY
TAX MAP & LOT:
PORTION OF TAX MAP 20, LOT 10

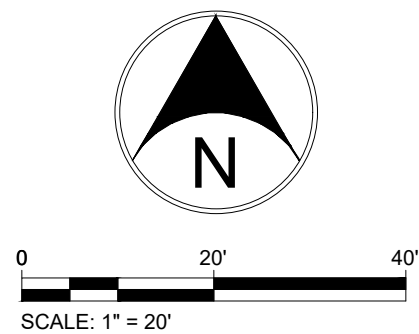
CLIENT: **TAKE 5 MAINE, LLC**
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

PLAN DATE: 12/6/2022
DESIGN: AF CHECK: AF DRAWN: KG
PROJECT NO: 2209005
SHEET NAME: **GRADING PLAN**
SHEET NO: **C301**



KEY NOTES:

IP	INLET PROTECTION	
CE	CONSTRUCTION ENTRANCE	
PS	PERMANENT SEEDING	
TS	TEMPORARY SEEDING	
EB	EROSION CONTROL BLANKET WITH PERMANENT SEEDING	
SP	SILT PERIMETER PROTECTION (SILT SOCK)	 SP
SL	SILT FENCE	 SF
CF	EROSION CONTROL LIMITS	
CW	CONCRETE WASHOUT	
SUB	PAVEMENT SUBBASE	
LA	LANDSCAPE PLANTING AREA SEE SHEET L101 FOR PERMANENT E.C. MEASURE	
RP	OUTLET RIP-RAP PROTECTION	
CD	ROCK CHECK DAM	



**Fritz Engineering
Services, LLC**
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Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

1 REV PER CITY	3/27/2023	AF
REVISIONS AND ISSUES	DATE	BY

GENERAL NOTES / LEGEND:



The logo consists of a red circle with a diagonal slash through it, superimposed over a black shovel. Above the shovel is the number '811' in green with a black outline. Below the shovel, the words 'Dig Safe' are written in a large, bold, black font. At the bottom, the text 'MA-ME-NH-RI-VT' is written in a smaller, black, sans-serif font.

PROJECT:

**TAKE 5 OIL
CHANGE
BIDDEFORD**

PROJECT LOCATION:

**394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY**

TAX MAP & LOT

PORTION OF TAX MAP 20, LOT 10

CLIENT:
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

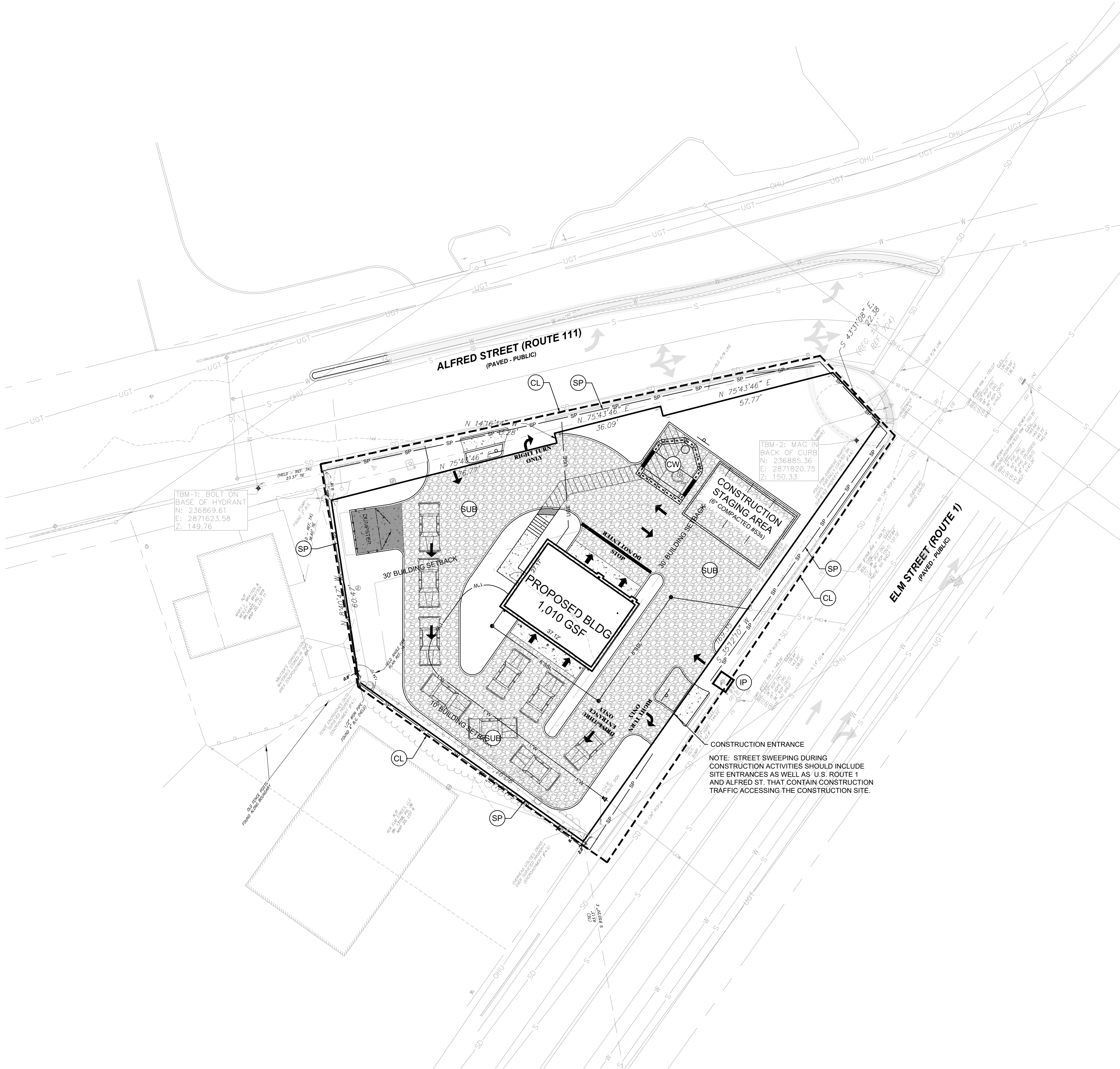
PLAN DATE:			12/6/2022		
DESIGN: AF		CHECK: AF		DRAWN: KG	
PROJECT NO. 2209005					
SHEET NAME INITIAL EROSION CONTROLS SWPPP					
SHEET NO. C501					

EROSION CONTROL MAINTENANCE SCHEDULE		
EROSION CONTROL MEASURE	*MAINTENANCE	INSTALLATION SEQUENCE
SILT PERIMETER PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
EXISTING INLET PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
TREE PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
TEMPORARY SEEDING	WATER AS NEEDED	AFTER ROUGH GRADING
PERMANENT SEEDING	WATER AS NEEDED	AFTER FINISH GRADING
SEED, SOO & LANDSCAPE AROUND UNITS FINISHED	WATER AS NEEDED	AFTER FINISHED GRADING AROUND FINISHED UNITS
REMOVAL OF INLET PROTECTION	N/A	AFTER ALL AREAS DRAINING TO THESE AREAS ARE STABILIZED
REMOVAL OF SILT PERIMETER	N/A	AFTER ALL AREAS DRAINING TO THESE AREAS ARE STABILIZED

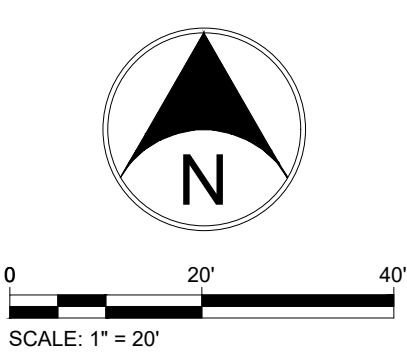
* - SEE CHART, NOTES AND DETAILS FOR MAINTENANCE REQUIREMENTS

**FOR ADDITIONAL EROSION CONTROL INFORMATION AND NOTES, SEE SHEETS C504,C505 & C506.

DATE: 12/06/2022 3:11 PM
BY: ASHTON L. FRITZ
FILE NAME: F:\2022\20005-TAKE 5 MAINE-MASS GRADING & CONSTRUCTION SWPPP



KEY NOTES: (XX)		
IP	INLET PROTECTION	
CE	CONSTRUCTION ENTRANCE	
PS	PERMANENT SEEDING	
TS	TEMPORARY SEEDING	
EB	EROSION CONTROL BLANKET WITH PERMANENT SEEDING	
SP	SILT PERIMETER PROTECTION (SILT SOCK)	
SF	SILT FENCE	
CL	EROSION CONTROL LIMITS	
CW	CONCRETE WASHOUT	
SUB	PAVEMENT SUBBASE	
LA	LANDSCAPE PLANTING AREA SEE SHEET L101 FOR PERMANENT E.C. MEASURE	
RP	OUTLET RIP-RAP PROTECTION	
CD	ROCK CHECK DAM	



THE CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION AND MAINTENANCE OF EROSION CONTROL AND STORM WATER POLLUTION PREVENTION FOR THE PROJECT AREA:

NAME: TBD C/O TBD
ADDRESS: TBD
PHONE: TBD
EMAIL: TBD

LIST OF QUALIFICATIONS:
CONTRACTOR IS TO INFORM CITY OF BIDDEFORD OF WHOM THIS STORMWATER POLLUTION PREVENTION INDIVIDUAL IS AT THE PRE-CONSTRUCTION MEETING, PRIOR TO ANY EARTH DISTURBING & CONSTRUCTION ACTIVITIES.

THE MAINE STORM WATER QUALITY MANUAL AND CITY OF BIDDEFORD STANDARDS SHALL BE USED IN CONJUNCTION WITH THIS SET OF EROSION CONTROL PLANS.

EROSION CONTROL MAINTENANCE SCHEDULE

EROSION CONTROL MEASURE	*MAINTENANCE	INSTALLATION SEQUENCE
SILT PERIMETER PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
EXISTING INLET PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
TREE PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
TEMPORARY SEEDING	WATER AS NEEDED	AFTER ROUGH GRADING
PERMANENT SEEDING	WATER AS NEEDED	AFTER FINISH GRADING
INLET PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	AFTER EACH INLET IS PLACED
SEED, SOD & LANDSCAPE AROUND UNITS FINISHED	WATER AS NEEDED	AFTER FINISHED GRADING AROUND FINISHED UNITS
REMOVAL OF INLET PROTECTION	N/A	AFTER ALL AREAS DRAINING TO THESE AREAS ARE STABILIZED
REMOVAL OF SILT PERIMETER	N/A	AFTER ALL AREAS DRAINING TO THESE AREAS ARE STABILIZED

*. SEE CHART, NOTES AND DETAILS FOR MAINTENANCE REQUIREMENTS

**FOR ADDITIONAL EROSION CONTROL INFORMATION AND NOTES, SEE SHEETS C504,C505 & C506.

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STATE OF MAINE
ASHTON L. FRITZ
No. PE17376
LICENSED PROFESSIONAL ENGINEER
Ashton L. Fritz
5/11/2023

1 REV PER CITY	3/27/2023	AF
REVISIONS AND ISSUES	DATE	BY

GENERAL NOTES / LEGEND:

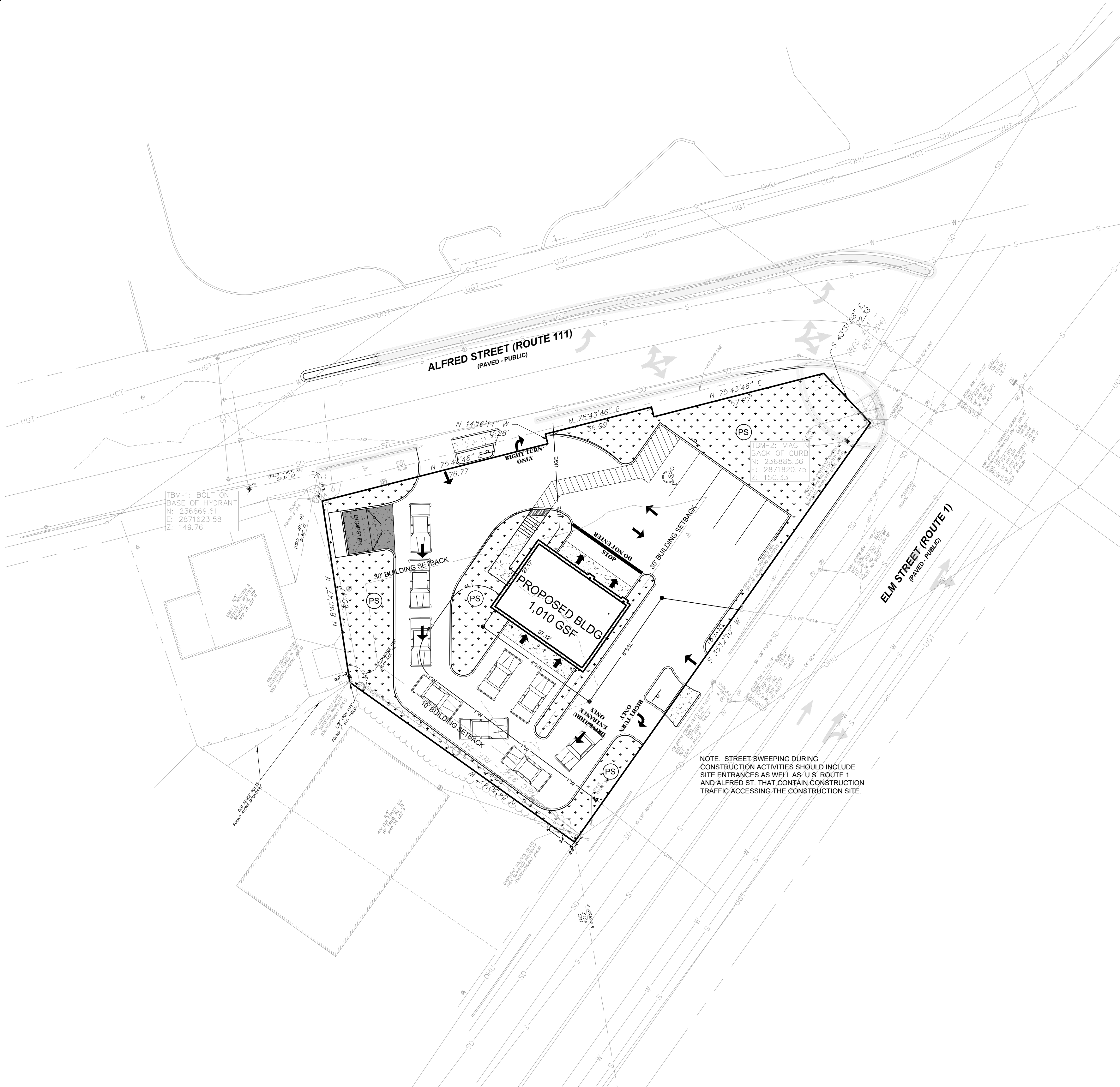


PROJECT: **TAKE 5 OIL CHANGE BIDDEFORD**
PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY
TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 10

CLIENT: **TAKE 5 MAINE, LLC**
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

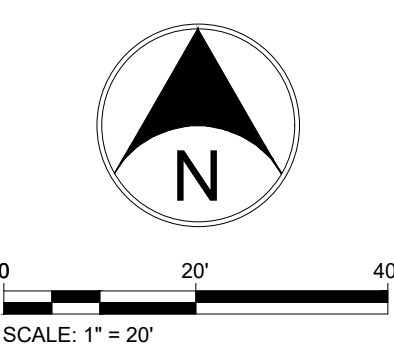
PLAN DATE: 12/6/2022
DESIGN: AF CHECK: AF DRAWN: KG
PROJECT NO: 2209005
SHEET NAME: **MASS GRADING & CONSTRUCTION SWPPP**
SHEET NO: **C502**

DATE: 12/06/2022 3:11 PM
FILE: C503 - POST CONSTRUCTION SWPPP
PROJECT: TAKE 5 MAINE, LLC
DRAWN: KG
CHECK: AF
DESIGN: AF



NOTE: STREET SWEEPING DURING CONSTRUCTION ACTIVITIES SHOULD INCLUDE SITE ENTRANCES AS WELL AS U.S. ROUTE 1 AND ALFRED ST. THAT CONTAIN CONSTRUCTION TRAFFIC ACCESSING THE CONSTRUCTION SITE.

KEY NOTES: (XX)		
IP	INLET PROTECTION	
CE	CONSTRUCTION ENTRANCE	
PS	PERMANENT SEEDING	
TS	TEMPORARY SEEDING	
EB	EROSION CONTROL BLANKET WITH PERMANENT SEEDING	
SP	SILT PERIMETER PROTECTION (SILT SOCK)	
SF	SILT FENCE	
CL	EROSION CONTROL LIMITS	
CW	CONCRETE WASHOUT	
SUB	PAVEMENT SUBBASE	
LA	LANDSCAPE PLANTING AREA SEE SHEET L101 FOR PERMANENT E.C. MEASURE	
RP	OUTLET RIP-RAP PROTECTION	
CD	ROCK CHECK DAM	



THE CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION AND MAINTENANCE OF EROSION CONTROL AND STORM WATER POLLUTION PREVENTION FOR THE PROJECT AREA:

NAME: TBD C/O TBD
ADDRESS: TBD
PHONE: TBD
EMAIL: TBD

LIST OF QUALIFICATIONS:
CONTRACTOR IS TO INFORM CITY OF BIDDEFORD OF WHOM THIS STORMWATER POLLUTION PREVENTION INDIVIDUAL IS AT THE PRE-CONSTRUCTION MEETING, PRIOR TO ANY EARTH DISTURBING & CONSTRUCTION ACTIVITIES.

THE MAINE STORM WATER QUALITY MANUAL AND CITY OF BIDDEFORD STANDARDS SHALL BE USED IN CONJUNCTION WITH THIS SET OF EROSION CONTROL PLANS.

EROSION CONTROL MAINTENANCE SCHEDULE

EROSION CONTROL MEASURE	*MAINTENANCE	INSTALLATION SEQUENCE
SILT PERIMETER PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
EXISTING INLET PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
TREE PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	PRIOR TO CLEARING AND GRADING
TEMPORARY SEEDING	WATER AS NEEDED	AFTER ROUGH GRADING
PERMANENT SEEDING	WATER AS NEEDED	AFTER FINISH GRADING
INLET PROTECTION	WEEKLY, AFTER STORM EVENTS AND AS NEEDED	AFTER EACH INLET IS PLACED
SEED, SOD & LANDSCAPE AROUND UNITS FINISHED	WATER AS NEEDED	AFTER FINISHED GRADING AROUND FINISHED UNITS
REMOVAL OF INLET PROTECTION	N/A	AFTER ALL AREAS DRAINING TO THESE AREAS ARE STABILIZED
REMOVAL OF SILT PERIMETER	N/A	AFTER ALL AREAS DRAINING TO THESE AREAS ARE STABILIZED

*. SEE CHART, NOTES AND DETAILS FOR MAINTENANCE REQUIREMENTS

**FOR ADDITIONAL EROSION CONTROL INFORMATION AND NOTES, SEE SHEETS C504,C505 & C506.

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www.Fritz-Eng.com

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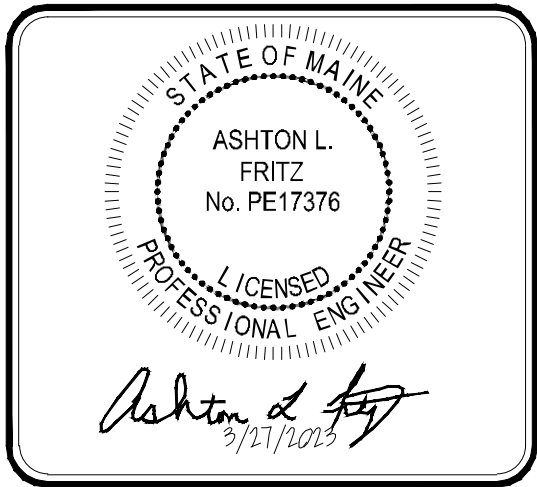
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*THESE EROSION CONTROL MEASURES, SEQUENCES AND PROCEDURES SHALL APPLY TO ALL PHASES OF THE PROJECT INCLUDING THE INITIAL / PRE-CONSTRUCTION PHASE, DURING CONSTRUCTION PHASE, AND POST CONSTRUCTION PHASE.

2. Contractor shall schedule a Construction Meeting with the City of IDBDEFORD Stormwater Management Dept.)
2. The following erosion control measures shall be in place prior to any land disturbing activities:
 - 2.1. Create a stabilized construction entrance.
 - 2.2. Install Temporary Inlet Protection Measures on existing storm inlets.
 - 2.3. Install Temporary Silt Fence and/or Silt Sock Protection as shown on approved plans.
 - 2.4. Install Temporary Construction Washout as required.
 - 2.5. Install Temporary check dams and sediment basins as required.
3. Contractor shall contact the CITY OF IDBDEFORD for an initial Erosion Control Inspection to obtain full sign off on the Improvement Location Permit prior to earthwork activities.
4. The contractor shall control waste, garbage, debris, wastewater, and other substances on the site so they will not be transported from the site by the action of wind, storm water runoff, or other forces. Proper disposal or management of all wastes and unused building material appropriate to the nature of the waste or material is required.
5. Public or private roadways shall be kept clear of accumulated sediment. All sediment that is cleared must be returned to the likely point of origin or other suitable location. Clearing of large amounts of sediment shall not include flushing the area with water.
6. Minimize the exposure of bare earth by limiting the work area to that necessary to perform the work, and by proper scheduling of manpower and equipment.
7. All erosion and sediment control measures shall be inspected, cleaned, and maintained following each storm event.
8. Wherever possible, maintain existing vegetative cover. Use non-vegetative material including mulch, erosion blankets, or stone to control erosion from disturbed areas.
9. A log shall be maintained of all inspections (weekly, and following storm events), maintenance and repair of erosion and sediment control measures. The log shall be maintained on site and be available upon request to the owners representatives and the operating authorities having jurisdiction over the site.
10. Once land disturbing activities begin, the following practices shall be provided:
 - 10.1. The Trained Individual shall make weekly site inspections and after every rainfall event of 0.5 inches and greater.
 - 10.2. Positive drainage shall be maintained at all times. Contractor shall ensure the downstream drainage system and adjacent properties are not receiving sediment/debris land runoff. If additional measures are necessary to protect adjacent properties or the downstream drainage system, the Contractor shall notify the Engineer and implement the necessary measures immediately.
 - 10.3. Once earth disturbing activities begin, the adjacent roadways, adjacent drives and parking lots shall be continuously monitored for sediment tracking. If sediment is found, immediate action is required to clean the offsite areas and the current erosion control practices will need to be inspected and modified accordingly to prevent any further sediment from leaving the project site.
 - 10.4. Once the new storm structures/pipes are in place, the appropriate type of inlet protection measures shall be placed.
 - 10.5. As surface types change, perimeter silt protection may need to be modified or replaced with a different perimeter protection. Update and replace perimeter silt protection as needed and required per these plans and site conditions / restraints.
 - 10.6. Continued monitoring of all prevent debris and sediment from being performed in order to verify the surrounding areas are not becoming sediment laden from construction activities onsite.
 - 10.7. As the construction occurs, disturbed areas shall be stabilized as soon as they are at finished grade or will be left bare for more than 15 days.
 - 10.8. Provide final grade stabilization upon final grading of all areas including erosion control blanketing, seeding and sodding as appropriate.
 - 10.9. Storm sewers that become silted due to construction activities shall be cleaned with a jet vacuum and the material properly disposed of.
 - 10.10. As the existing swales and ditches are removed or graded away, the temporary check dams, filter dams, and sediment basins may be removed (unless noted otherwise on the plans) along with their retained debris, pollutants, and sediment. All materials shall be disposed of off site at an approved location.
11. After site preparation, demolition, clearing and mass earthwork phases are complete and prior to infrastructure, building, and final grading construction begin:
 - 11.1. The perimeter erosion control practices (silt fence, construction entrance, check filter dams, temp. sediment basins, etc.) shall be examined, cleaned, and reinstalled if damaged. Some practices may need to be relocated or changed for the proposed site layout or per construction plans. (See Erosion Control Plans).
 - 11.2. Relocate staging area if needed due to site configuration.
 - 11.3. Install a Temporary Concrete Washout if not done already.
 - 11.4. Once the new storm structures/pipes are in place, the appropriate type of inlet protection measures shall be placed.
 - 11.5. Continued monitoring of all exposed areas shall be performed in order to verify the surrounding areas are not becoming sediment laden from construction activities onsite.
 - 11.6. As the construction occurs, disturbed areas shall be stabilized as soon as they are at finished grade or will be left bare for more than 15 days.
 - 11.7. Provide final grade stabilization upon final grading of all areas including erosion control blanketing, seeding and sodding as appropriate.
 - 11.8. Storm sewers that become silted due to construction activities shall be cleaned with a jet vacuum and the material properly disposed of.
 - 11.9. Temporary silt fence to be installed around pond and maintained until upon areas contributing to direct sheet flow to ponds have been stabilized. Only once these open areas are properly and permanently stabilized can this temporary silt fence be removed and disposed of properly.
 - 11.10. Minimize erosion from exposed areas by providing and maintaining temporary or permanent stabilization measures. Erosion control measures shall be installed at the end of the day's work or within 24 hours of the completion of the day disturbing activity, as applicable for the type of measure.
 - 11.11. All disturbed areas shall be seeded and/or stabilized upon completion of the earth disturbing activity.
12. All graded areas (lawns, banks, mounds, etc.) with slopes equal to or steeper than 6h:1v shall be stabilized with an erosion control blanket unless noted otherwise. All constructed swales channels shall be stabilized with an erosion control blanket to the top of the bank. Silt protection measures shall be seeded and mulched to minimize erosion.
13. All other lawn and planting areas shall be seeded and stabilized with an anchored, crimped or tacked mulch and seed mixture.
14. Areas to be paved shall be stabilized with a temporary stone cover. The temporary stone stabilization shall be equivalent to the proposed stone sub-base material. Adequate sub-base depths shall be maintained during construction, verified and restored, if necessary, prior to final paving. Stone stabilization shall be installed per the paving specifications and details.
15. Install pipe and grate inlet protection measures and pipe outlet protection as new pipes or pipe extensions are installed. Limit excavation to the work that can be performed that day. Trenches shall be seeded and mulched as part of the backfill operation.
16. Install silt protection measures to prevent debris and sediment from entering storm system. Check weekly and after each storm event for debris and sediment. Clear blockages as identified. Torn, damaged or ineffective measures shall be replaced.
17. Soil stockpiles shall have appropriate perimeter protection to prevent sedimentation of the surrounding areas. Any stock pile that will not be disturbed for 15 days or longer shall be seeded and protected with mulch or erosion control blanket.
18. All disturbed areas where work will potentially cease for 15 days or longer shall be seeded and stabilized immediately upon completion of the activity.
19. Erosion and sediment control measures shall be maintained until the site is 95% stabilized.
20. Construction Phase BMP's shall remain in place and continue to be inspected until the entire site has reached the minimum vegetative cover, 70% established.
21. Once construction is complete and prior to the contractor handing over the project to the owner, the contractor shall clean all debris, pollutants, and sediment from the storm sewers.
22. Once construction is complete and prior to the contractor handing over the project to the owner, the contractor shall clean all debris, pollutants, and sediment from the detention pond and remove the outlet structure rock check dam. Contractor to stabilize wet detention pond after clean out.
23. Upon the site reaching the required minimum established vegetative cover, the IDEM Rule 5 Notice of Termination shall be submitted to the MS4 Department for approval prior to submitting it to IDEM if required.

1. All disturbed areas shall be restored to initial / pre-construction conditions and grades. All flow lines shall be re-established and vegetative cover restored. Contractor may be required to expedite restoration period to warmer months to ensure seed germination.
2. All erosion control practices shall be in accordance with the "Maine Storm Water Quality Manual" and the SCS "Field Office Technical Guide".
3. The governing municipality has the right to require additional erosion control measures in the field as conditions warrant.
4. The storm water quality unit shown on these plans shall be the unit installed during the development of this property. No substitutions shall be permitted.
5. No soil will be removed or disposed of from the grading site.
6. There shall be no dirt, debris, or storage of materials in the street or alleyways.
5. Additional erosion and sediment control measures may be required by the inspector.
5. Copies of the letter of intent and response from CITY OF BIDDEFORD office for General Permit compliance, when required.
6. All erosion control materials shall be approved by CITY OF BIDDEFORD prior to installation.
7. All proposed erosion and sediment control shall be in conformance with the CITY OF BIDDEFORD Stormwater Design and Specifications Manual, latest edition. Discrepancies between the plans and the manual shall not alleviate the contractor from adhering to the requirements set forth in the manual.

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHOULD BE LIMITED TO THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT
4. CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEEDDED AT A RATE OF 200-300#S HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
7. MULCHING REQUIREMENTS:
 - 7.1. BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER
 - 7.2. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGEWAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
 - 7.3. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
8. AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY
9. DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
10. STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST EROSION RUNOFF.
11. EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.



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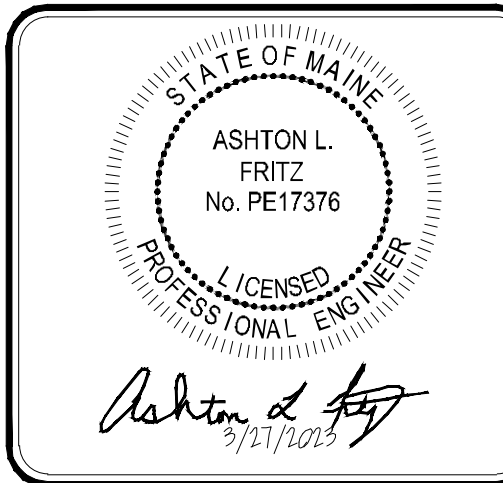


PROJECT:
**TAKE 5 OIL
CHANGE
BIDDEFORD**

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TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 11

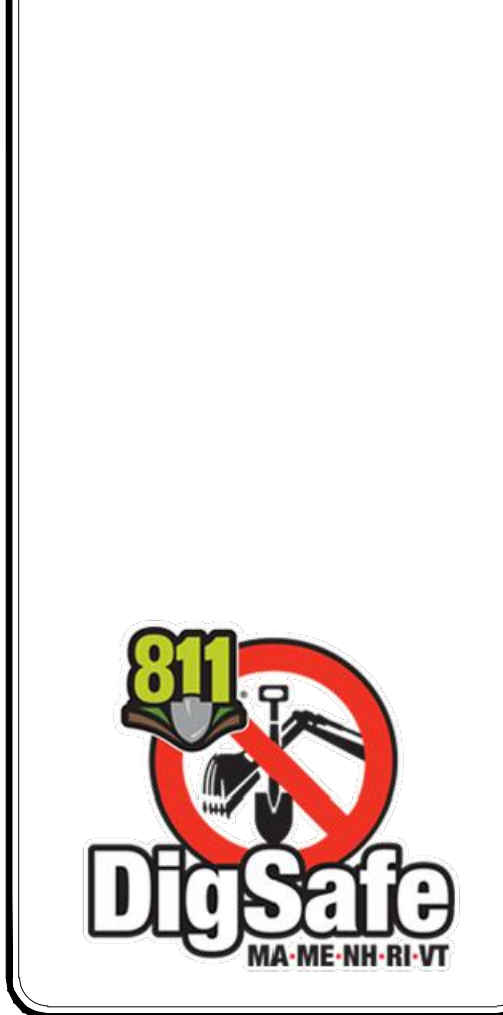
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SHEET NAME					
EROSION CONTROL NOTES					
SHEET NO.			C504		



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SHEET NAME: **EROSION CONTROL DETAILS**
SHEET NO: **C505**

MAINE EROSION AND SEDIMENT CONTROL BMPs – 10/2016

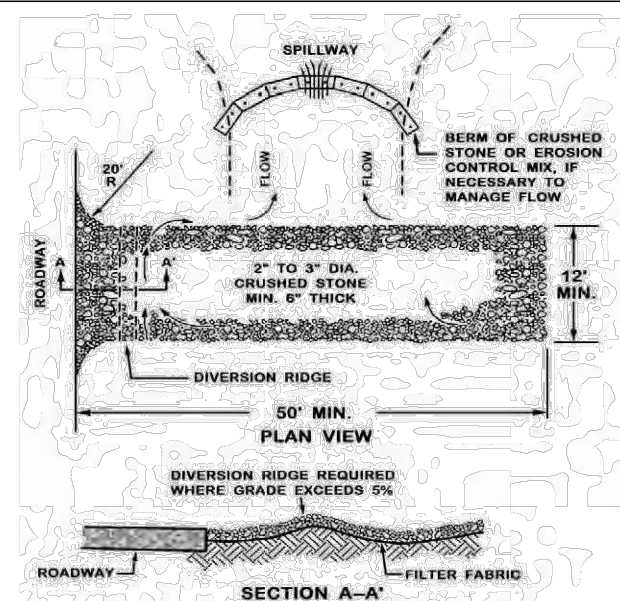
2. CONSTRUCTION ENTRANCE / EXIT

A pad of coarse aggregate at the construction entrance/exit will reduce the tracking of soil from construction traffic onto a public street. Sediments from the tire treads are knocked loose by the angular stones and are trapped in the voids between the stones.

COMPANION BMPs: Sediment Traps, Sediment Controls

CONSTRUCTION SPECIFICATIONS

- The entrance/exit pad should have a length of 50 feet or more and a 12-foot minimum width (or as appropriate to contain the wheel base of construction vehicles plus 3 feet on either side).
- The pad should be 6 inches or more thick with angular aggregate (2-3 inch diameter). Appropriate reclaimed concrete material may be used.
- The aggregate should be placed over a geotextile filter to prevent the stones from pushing into the native soil.
- At the bottom of slopes, a diversion ridge should be provided to intercept runoff.
- Berms may be necessary to divert water around any exposed soil, and runoff should be directed to a sediment trap.
- The wheels of construction equipment may be washed prior to exiting the site. Washing should be performed in an area that drains to a sediment trap or basin.
- The pad should be inspected weekly, and before and after each storm. The pad may have to be replaced if the voids become filled with sediment. Street sweeping may be necessary.



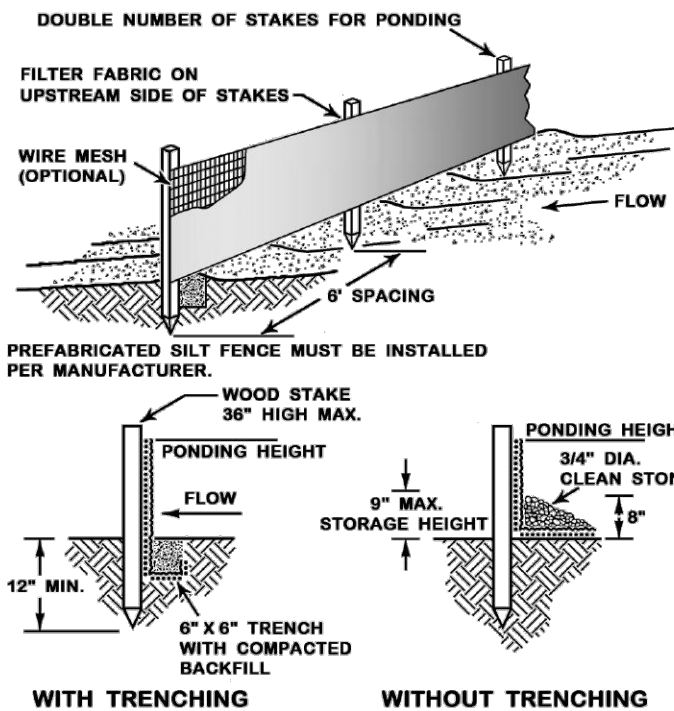
MAINE EROSION AND SEDIMENT CONTROL BMPs – 10/2016

1. SILT FENCE

Silt fence is a permeable geotextile fabric which intercepts overland runoff, reduces flow velocity, and promotes the settlement of sediments. The geotextile fabric will degrade due to sun exposure and its life span is approximately one field season. Pre-manufactured silt fencing with attached posts is used in most situations.

CONSTRUCTION SPECIFICATIONS

- The fence should be anchored to resist pull-out, and be stretched tightly between stakes to prevent sagging.
- A 6-inch wide and 6-inch deep trench should be excavated upgradient of the fence line to key the "lap" of the fabric. The trench is backfilled and compacted.
- When joints are necessary, filter cloth should be spliced by wrapping and stakes together.
- In areas where the flag cannot be keyed properly (due to frozen ground, bedrock, stony soil, roots, near a protected natural resource, etc.), the silt fence should be anchored with aggregate, crushed stone, erosion control mix, or other material.



MAINE EROSION AND SEDIMENT CONTROL BMPs – 10/2016

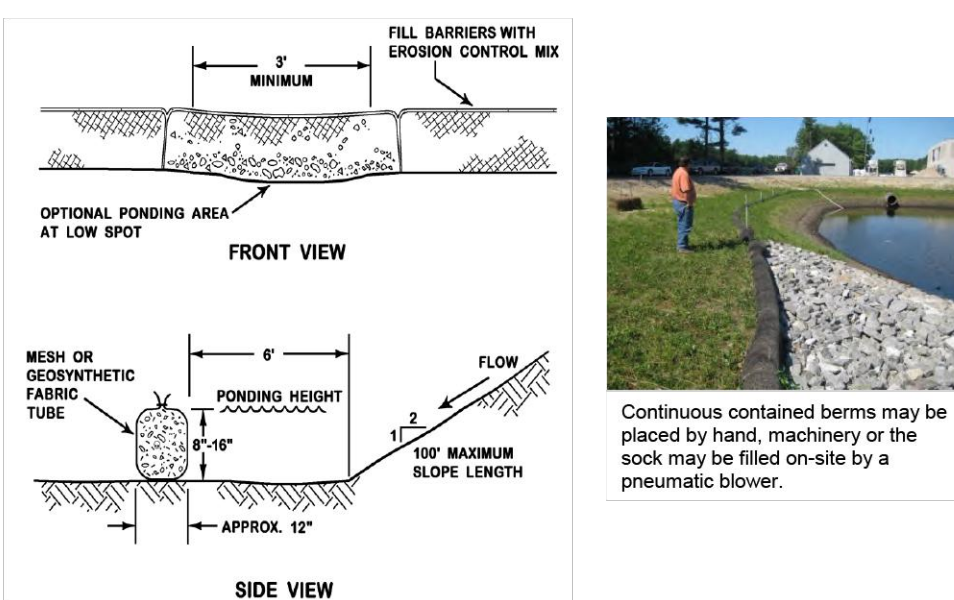
3. FILTER SOCKS

A continuous contained berm or filter sock is a manufactured synthetic netting tube that is filled with erosion control mix, or other finely shredded organic material (i.e. coconut fiber or other). The netting prevents the displacement and loss of the organic filter material. Continuous contained berms work well in areas where trenching for a silt fence is not feasible, such as on frozen ground or over pavement. A filter sock can be reshaped (if a vehicle drives over it).

Seeds may be added to the filter material for a permanent vegetation cover. Various manufactured products are available and installation should follow the manufacturer's specifications.

CONSTRUCTION SPECIFICATIONS

- A filter sock is most effective use for small disturbed areas, as a perimeter protection around a soil stockpile, as a sediment barrier in low flow drainage swales or around drainage outlets and catch basins.
- Full contact with the ground is critical to prevent short circuiting under the tube - the ground surface should be smooth and level. In wooded areas, protruding roots and debris may need to be removed. In grassed areas, the grass needs to be either moved or compressed down.
- Staking may be necessary on steep slopes.
- Upon final stabilization, the tube can be cut open and the material spread out onto the ground. The mesh material should be removed.



Continuous contained berms may be placed by hand, machinery or the sock may be filled on-site by a pneumatic blower.

MAINE EROSION AND SEDIMENT CONTROL BMPs – 10/2016

5. STORM DRAIN INLET PROTECTION

An inlet protection (storm drain drop inlet or curb inlet) captures sediment before runoff enters a catch basin. It is not effective for silts and clays. Various types of off-the-shelf devices are acceptable if installed, used, and maintained as specified by the manufacturer.

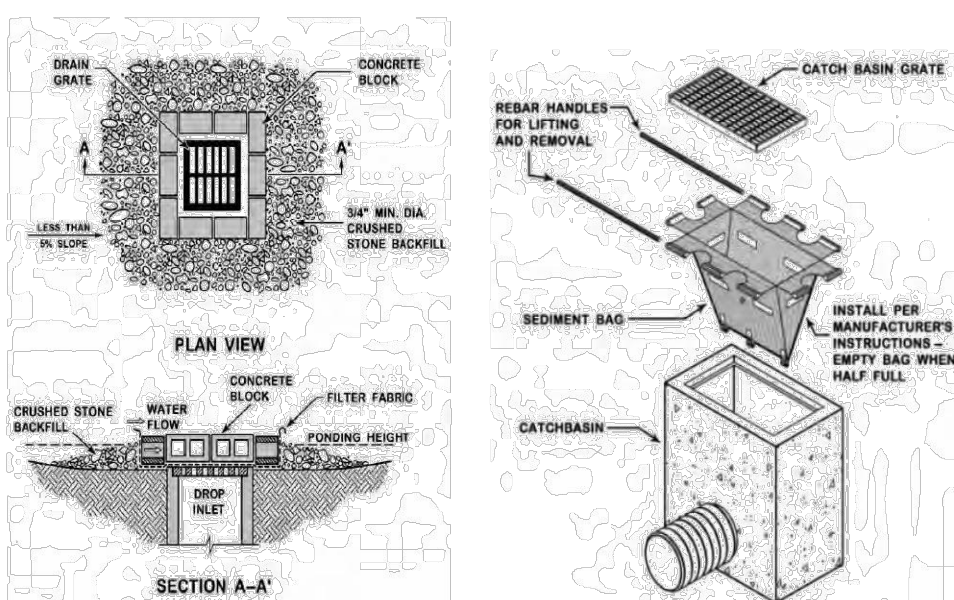


CATCH BASIN INSERTS or filter socks made of woven geotextile are reusable. Use should follow the manufacturer's guidelines. They are suspended below the grate and have a built-in overflow for large storm flows. The insert should be removed and the catch basin cleaned at the end of the construction project.

CONCRETE BLOCKS placed on their side around the inlet and wrapped in geotextile fabric should be surrounded with crushed stone (1-2 inch diameter and clean).

SAND-FILLED BAGS butted together around the perimeter of a storm drain may be used if the bags are staggered to make a stable barrier. The berm should have a minimum height of 12 inches.

SILT FENCE WITH GRAVEL may be placed around the perimeter of a catch basin and surrounded with gravel.



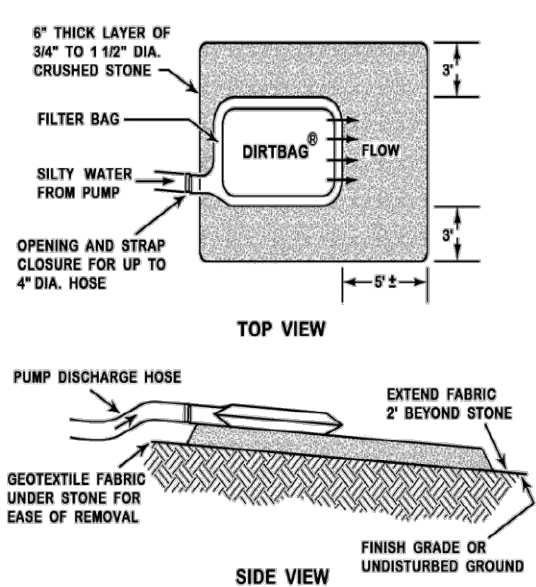
MAINE EROSION AND SEDIMENT CONTROL BMPs – 10/2016

3. GEOTEXTILE FILTER BAG

A geotextile filter bag is a prefabricated sack that is used to filter sediments from dewatering activities. A filter bag should be used in accordance with the manufacturer's recommended guidelines. Consult the DEP if the structure will be within 75 feet of a protected natural resource or if secondary containment is required.

CONSTRUCTION SPECIFICATIONS

- Install the filter bag prior to initiating any activities which will require dewatering.
- The type of fabric should be based on the size of soil particles to be trapped (i.e. a woven material for coarse particles and a nonwoven material for finer particles).
- A filter bag should be located in an area mostly level (with less than 5% slope). A pad of crushed gravel may be provided.
- Avoid discharging to an area that is bare of vegetation or newly vegetated. Any sign of erosion or channelization from the discharged water requires immediately correction.
- Filter bags have a finite capacity for sediment collection and may be prone to plugging. Avoid over-pressurizing the bag or it may burst.
- If a sediment discharge is observed, inspect the filter bag for tears or other malfunctions.



MAINE EROSION AND SEDIMENT CONTROL BMPs – 10/2016



Areas which cannot be revegetated before winter must be mulched at the winter rate with double the mulch and with dormant seeding for spring growth if the site is ready to be permanently stabilized.



Inspect the mulch cover weekly and prior to, during and after any storm event until full vegetation uptake. New mulch should be applied if the soil becomes exposed and before washouts occur.

MULCH	APPLICATION RATE	BENEFITS	LIMITATIONS
Straw or Hay	2 bales (70-90 lbs)/1000 sq. ft for over 75% coverage <i>Twice that rate for overwinter stabilization</i>	Available and inexpensive <i>It can be applied via blower on larger sites</i>	Anchoring or tackifier is needed on steep slopes or in windy areas, or must be crimped <i>Hay imports weed seeds</i>
Erosion Control Mix	2 inches for slopes flatter than 3:1 or 4 inches for slopes greater than 3:1 <i>The mix must contain some soil</i>	Low cost if available <i>Effective on up to 45% slopes</i>	Will not revegetate very quickly <i>Elongated and fibrous woody parts</i>
Hydraulic mulches and soil binders	<i>Can include seeds, fertilizer or soil binders</i> Paper mulch: 5 lbs/1000 sq. ft Cellulose fiber: 40 lbs/1000 sq. ft	Easily and rapidly applied with sprayer equipment.	May be too expensive for a small or remote site and more protection needed on steep slopes <i>Should dry at least 24 hours before rainfall</i>
Erosion Control Blankets	Staple per manufacturer's specifications	Effective for grassed ditches or steep slopes. <i>Great for overwinter stabilization</i>	May be expensive for large sites <i>Needs good soil contact</i>
Wood Chips and Bark Mulch	3 inches or more for flat areas or on short 4:1 slopes	Available from construction site <i>Low cost</i>	Will wash away <i>Will revegetate very slowly</i>

MAINE EROSION AND SEDIMENT CONTROL BMPs – 10/2016

3. VEGETATION APPLICATION

If possible, seeding should occur no later than 45 days before the first killing frost or the seeds are likely to germinate but not survive. Different Maine areas have different frost dates; refer to the following map for the final seeding date of your area.

PERMANENT VEGETATION should be established with a seed mixture that is appropriate for the site's soil type, moisture content, sun exposure, use (frequency of mowing), etc. The application should follow the supplier's guidelines for the seed type. Maine DOT or Soil and Water Conservation Districts seed mixtures are recommended.

DORMANT SEEDING should be applied at double the rate of normal seeding between the first killing frost and before snowfall because of their poor survival rate. To improve germination, cover the seedbed with mulch that is well anchored and fully covering the ground surface.

TEMPORARY VEGETATION should be established on an area that will not be worked for 30 days and until it can be permanently stabilized. Annual grasses and legumes are most effective; but they will not reproduce for a second growing season. Inoculate all legume seeds with the correct type and amount of inoculant.

INSPECTION of newly seeded beds should be occur regularly. Any sign of rill or gully erosion should be repaired as soon as possible.

TEMPORARY SEED APPLICATION GUIDELINES				
SEED	Lb / Acre	Lb / 1,000 SF	Seeding Dates	Notes
Winter Rye	112	2.6	8/15 - 10/1	Select hardy species such as Aroostook Rye.
Oats	80	1.8	4/1 - 7/1 8/15 - 9/15	Best for spring seeding. Fall seeding will die over the winter.
Annual Rye Grass	40	0.9	4/1 - 7/1	Grows quickly but is of short duration. With mulch, seeding may be done throughout growing season.
Sudangrass	40	0.9	5/15 - 8/15	Good growth during periods of hot weather.
Perennial Rye Grass	40	0.9	8/15 - 9/15	Good cover, longer lasting than annual rye grass. Mulching will allow seeding throughout growing season.

Erosion Control Blankets should be used on slopes where hay would be disturbed by wind or water. The matting should be installed, anchored and stapled in accordance with the manufacturer's

[illegible]

GENERAL NOTES / LEGEND:

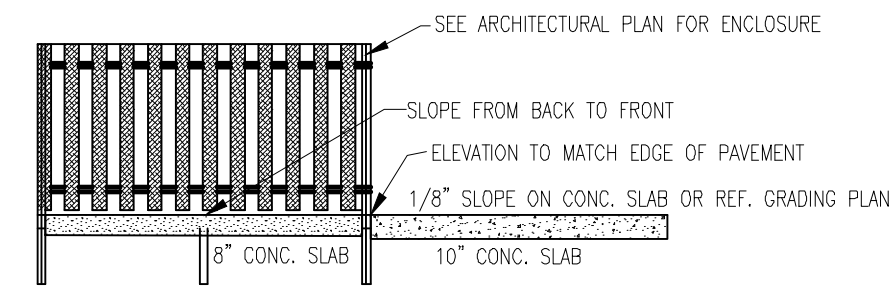
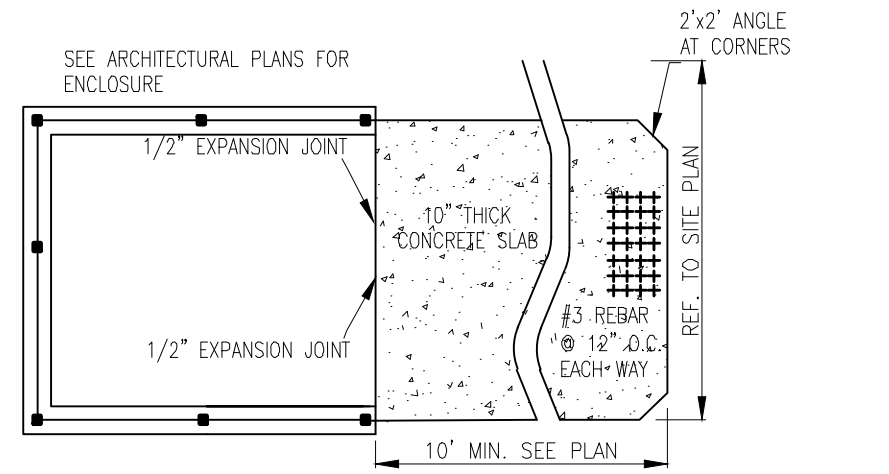


PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY

TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 10

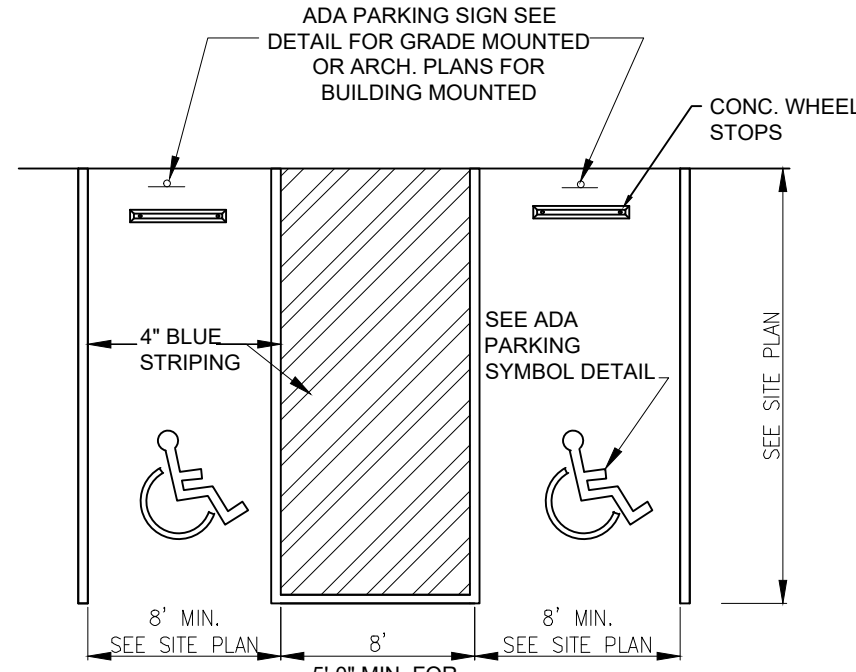
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

C506



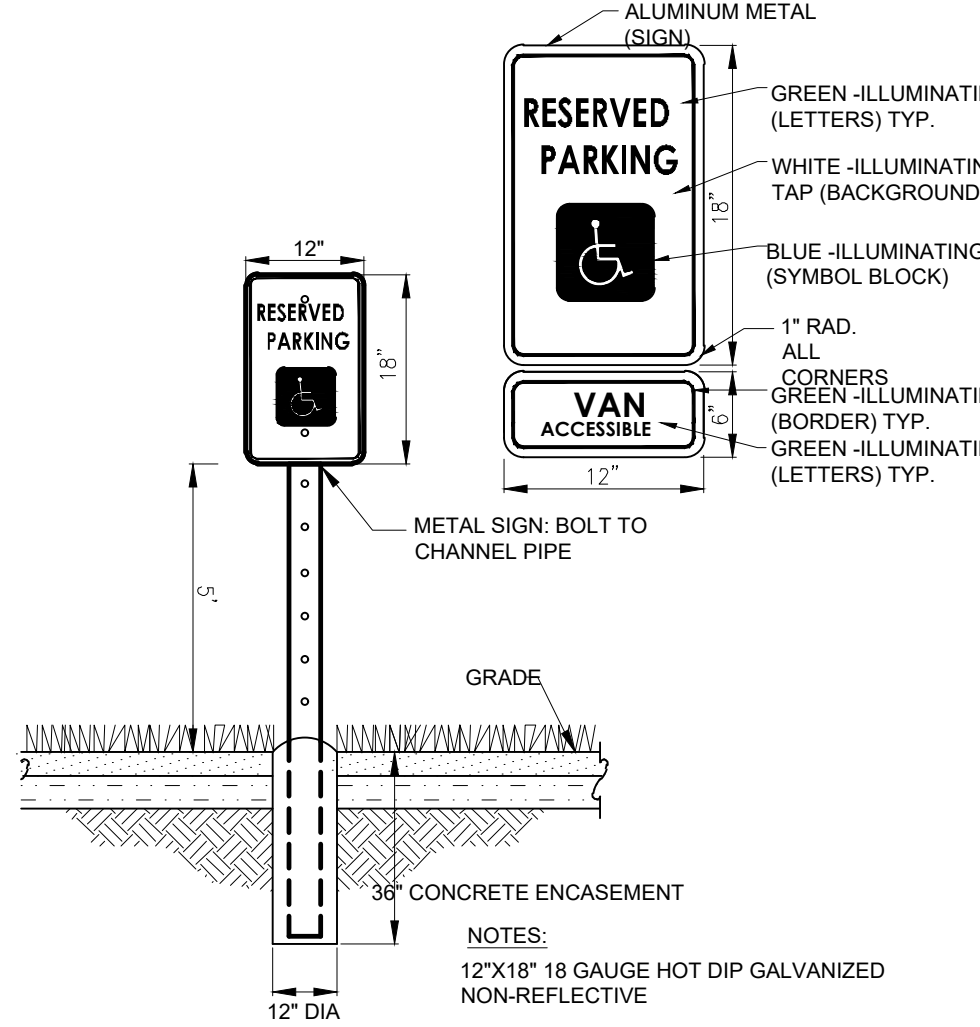
NOTE:
REFER TO PAVEMENT SPECIFICATIONS FOR
CONCRETE REQUIREMENTS

TRASH PAD (TYP)
NOT TO SCALE

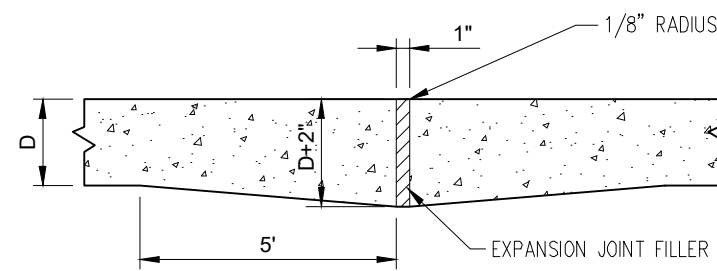


NOTE:
MAX. 2% SLOPE ANY DIRECTION

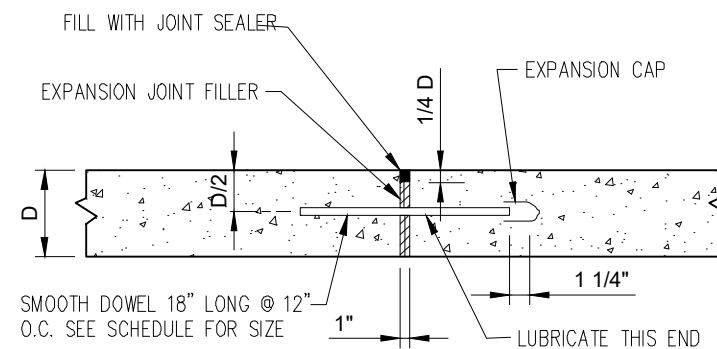
ADA PARKING STALLS
NOT TO SCALE



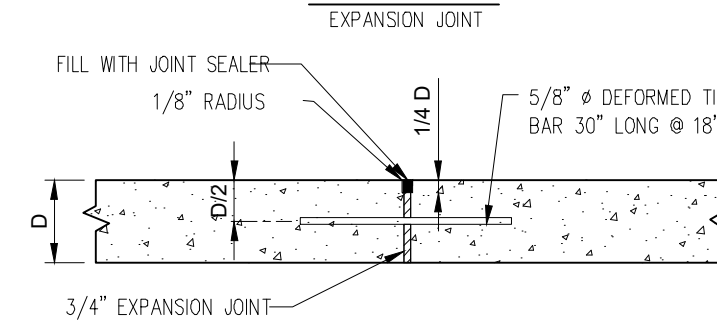
ADA PARKING SIGN
NOT TO SCALE



TYPE "A"
EXPANSION JOINT



TYPE "A" ALTERNATE
EXPANSION JOINT

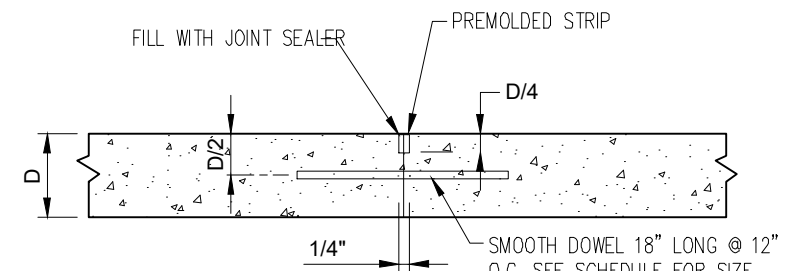


TYPE "B"
LONGITUDINAL CONSTRUCTION JOINT

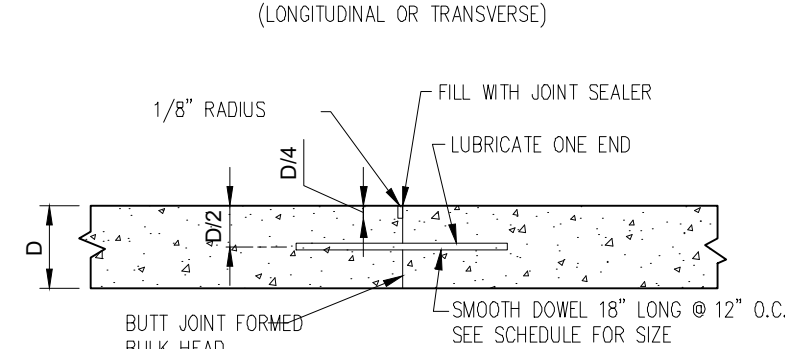
DOWEL SCHEDULE

PAVEMENT THICKNESS "D"	SMOOTH DOWEL SIZE
6"	3/4" Ø
7"	7/8" Ø
8"	1" Ø
9"	1-1/8" Ø

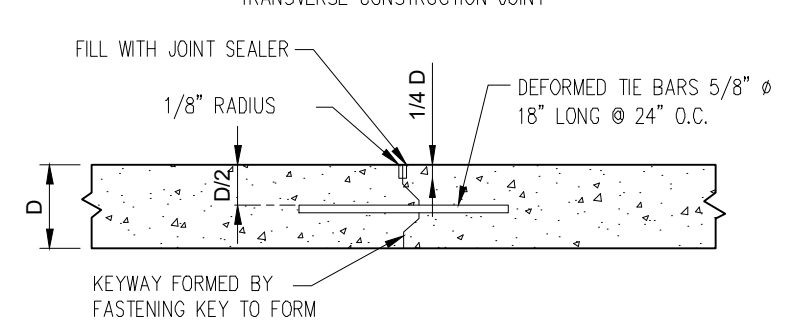
JOINT DETAILS
NOT TO SCALE



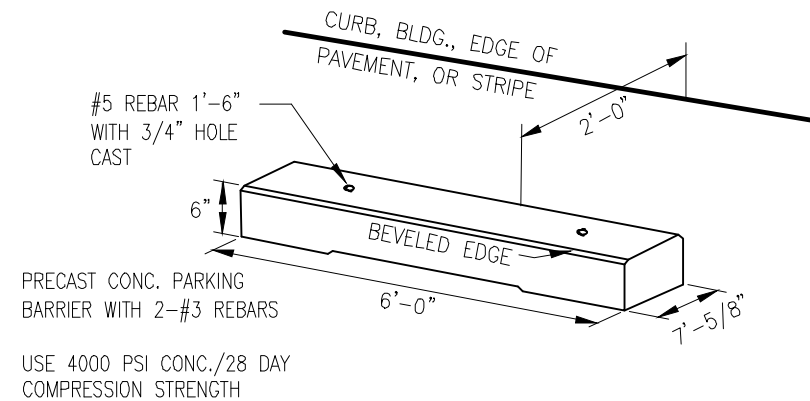
TYPE "C"
SAVED JOINT
(LONGITUDINAL OR TRANSVERSE)



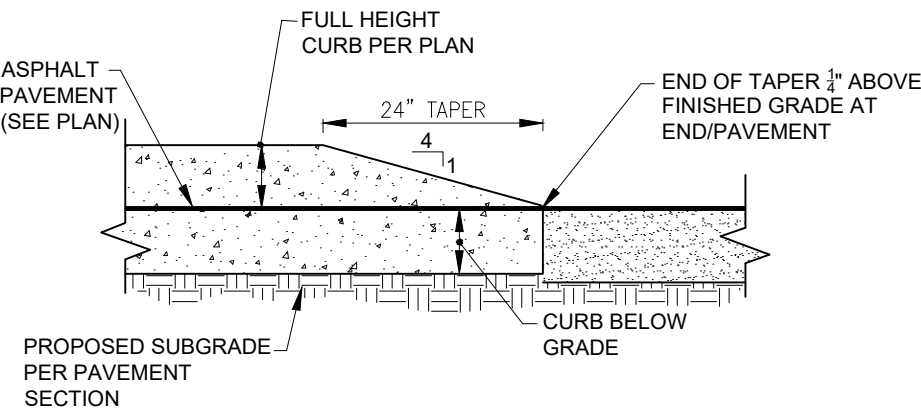
TYPE "D"
TRANSVERSE CONSTRUCTION JOINT



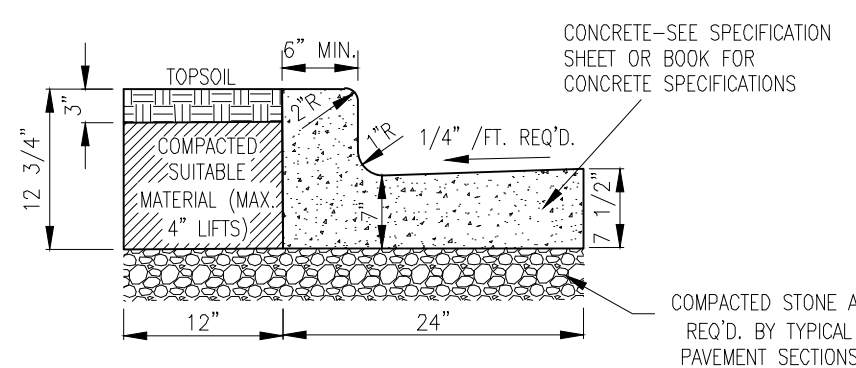
TYPE "E"
TIED TRANSVERSE CONSTRUCTION JOINT



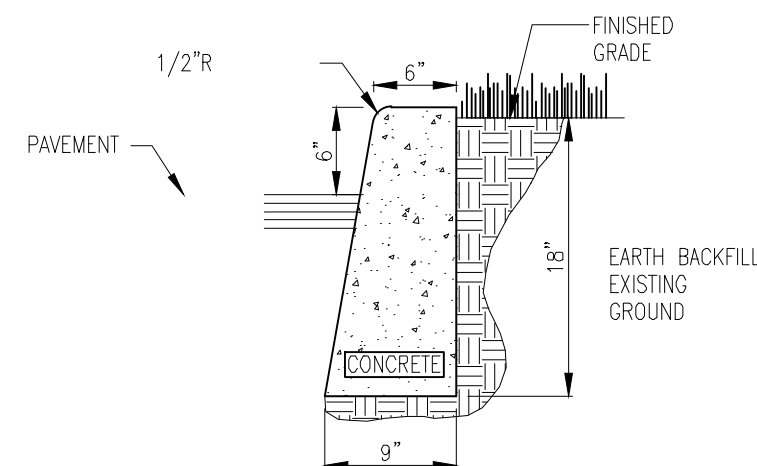
PRECAST CONCRETE PARKING BARRIER
NOT TO SCALE



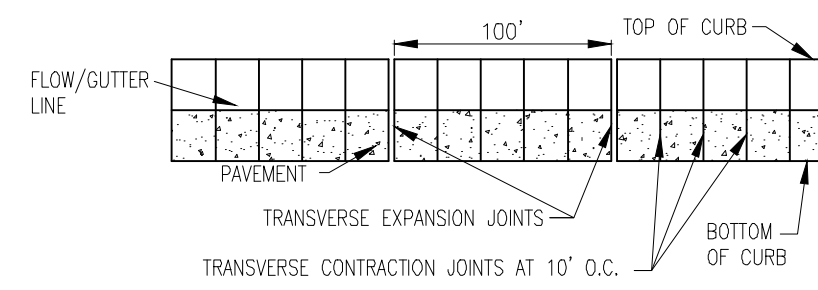
CONCRETE CURB TAPER DETAIL
NOT TO SCALE



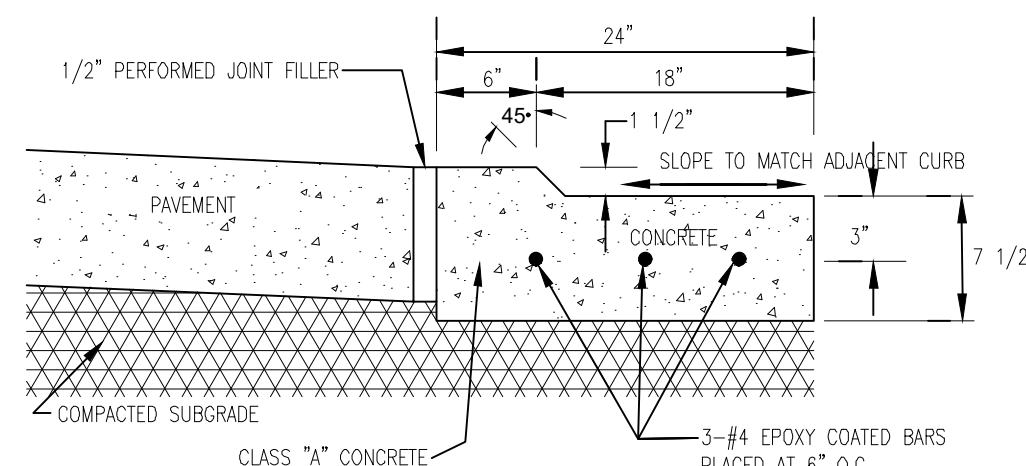
CONCRETE CURB & GUTTER
NOT TO SCALE



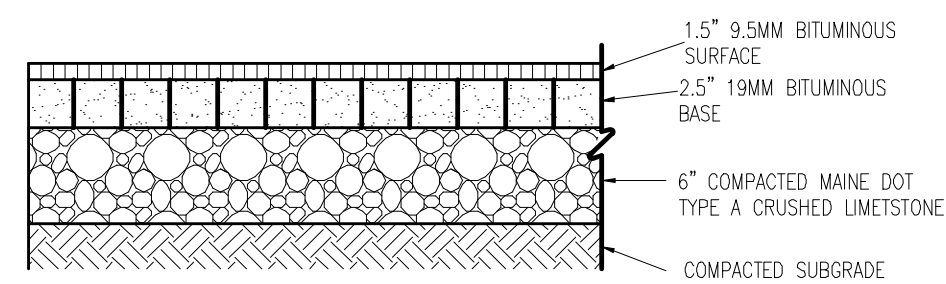
6' X 18' MONOLITHIC CURB DETAIL
NOT TO SCALE



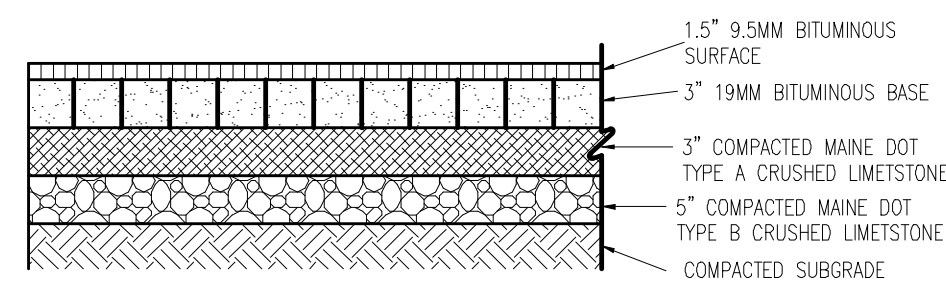
CURB JOINT DETAIL
NOT TO SCALE



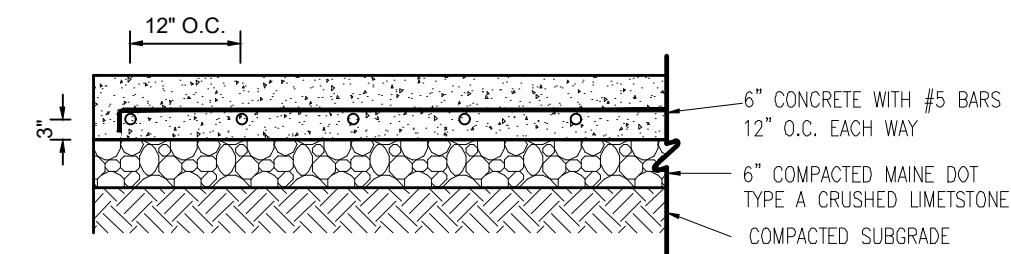
VALLEY CURB AND GUTTER
NOT TO SCALE



LIGHT DUTY ASPHALT
NOT TO SCALE



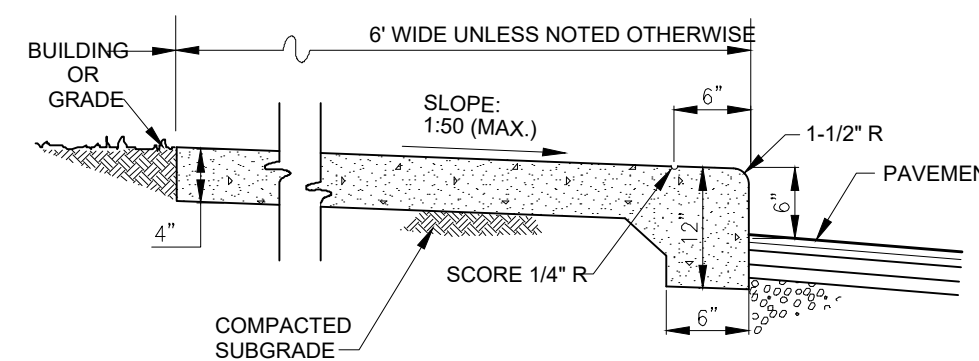
HEAVY DUTY ASPHALT
NOT TO SCALE



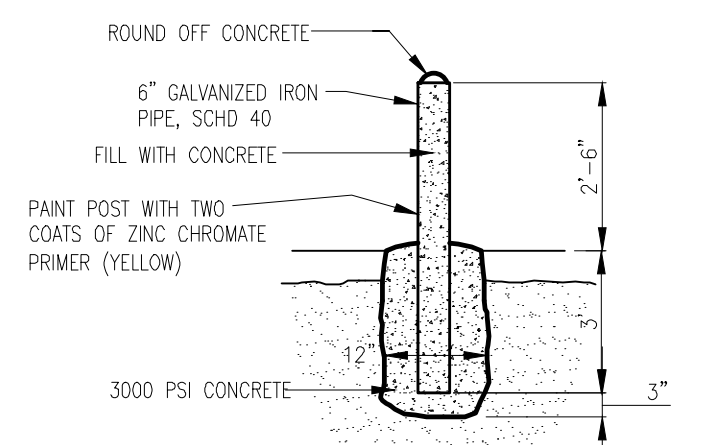
CONCRETE PAVEMENT - TYPE I
NOT TO SCALE

NOTES:
1. SUBGRADE SHALL BE PREPARED PER MAINE DOT STANDARD SPECIFICATIONS.
2. ADD TACK COAT BETWEEN ASPHALT LIFTS.
3. CONTRACTOR SHALL COORDINATE AND VERIFY PAVEMENT SECTIONS SHOWN W/ OWNER'S GEOTECHNICAL CONSULTANT.

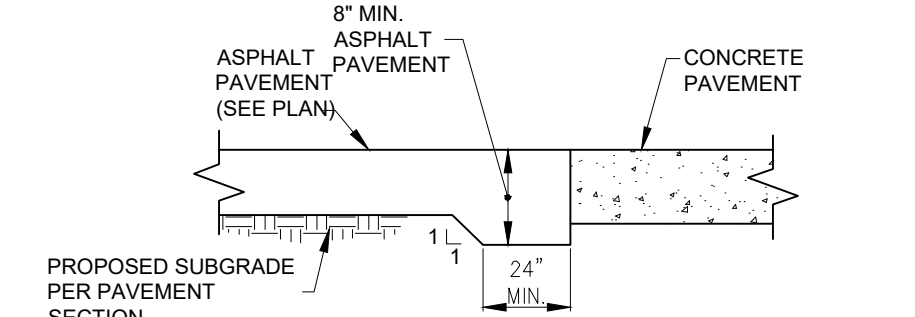
TYPICAL PAVEMENT SECTION DETAILS
NOT TO SCALE



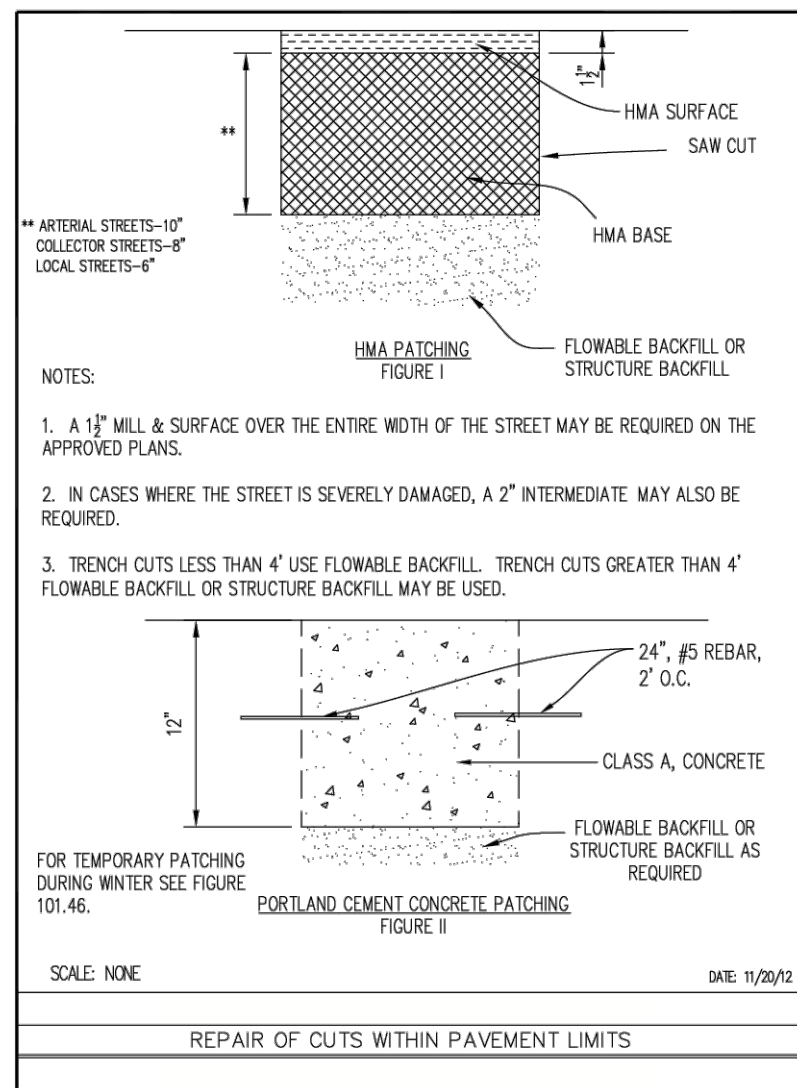
CONCRETE CURB AND WALK
NOT TO SCALE



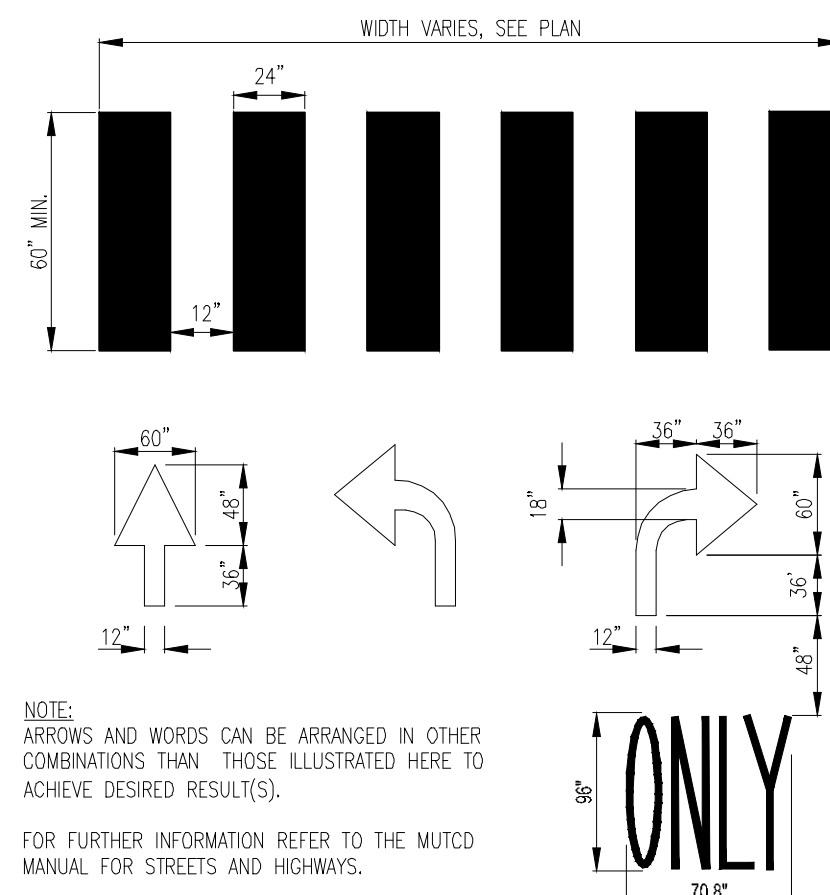
TYPICAL PIPE BOLLARD / GUARD POST DETAIL
NOT TO SCALE



THICKENED EDGE ASPHALT/CONCRETE PAVEMENT JOINT DETAIL
NOT TO SCALE



TYPICAL SIDEWALK SECTION
NOT TO SCALE



PAVEMENT MARKINGS
NOT TO SCALE

Fritz Engineering Services, LLC
14020 Mississinewa Drive
Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

STATE OF MAINE
ASHTON L. FRITZ
No. PE17376
PROFESSIONAL ENGINEER
Ashton L. Fritz
5/11/2022

1 REV PER CITY	3/27/2023	AF
REVISIONS AND ISSUES	DATE	BY

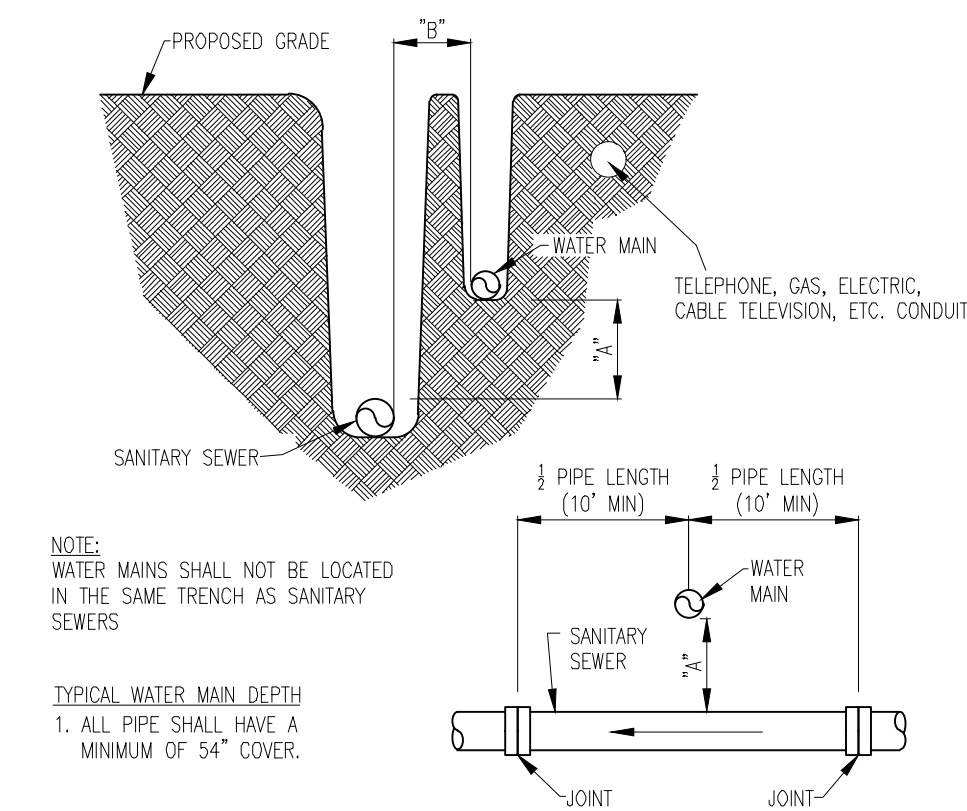
GENERAL NOTES / LEGEND:

811 DigSafe
MA-ME-NH-VT

PROJECT:
TAKE 5 OIL CHANGE
BIDDEFORD
PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY
TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 10

CLIENT:
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

PLAN DATE:
12/6/2022
DESIGN: AF CHECK: AF DRAWN: KG
PROJECT NO:
2209005
SHEET NAME:
GENERAL DETAILS
SHEET NO.
C801



IF "A" IS	IF "B" IS	THEN SANITARY SEWER PIPE SEGMENT SHALL BE
18 IN. OR MORE	10 FT. OR MORE	NO SPECIAL MATERIAL OR GRADE REQUIREMENTS
LESS THAN 18 IN.	LESS THAN 10 FT	CONSTRUCTED OF WATER WORKS GRADE DUCTILE IRON PIPE, MECHANICAL JOINTS AND FITTINGS - SEE SANITARY SPECIFICATIONS FOR ADDITIONAL INFORMATION

NOTE: DIMENSIONS ARE TAKEN FROM THE OUTER DIAMETER WALL OF THE PIPES

WATER AND SEWER CROSSING DETAIL

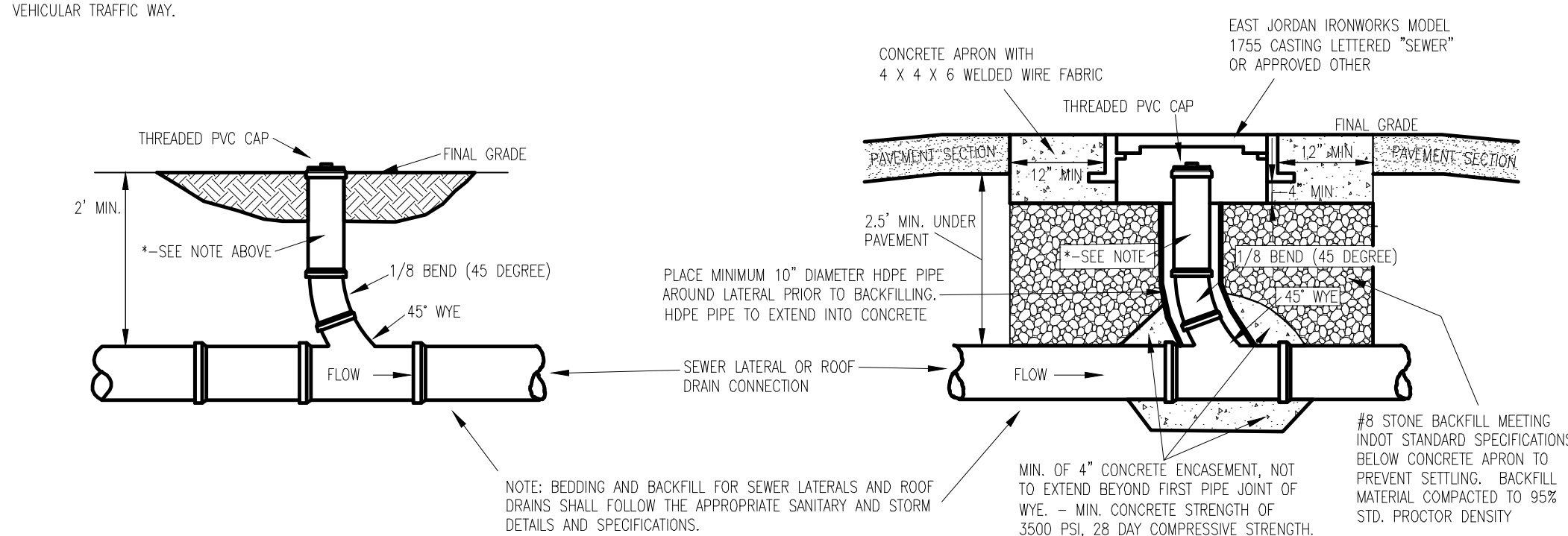
NOT TO SCALE

GENERAL NOTES:
MAXIMUM CLEANOUT SPACING IS 100 LF BETWEEN CLEANOUTS

CONCRETE APRON AND CASTING SHALL BE INSTALLED SO THAT THEY DO NOT CONTACT THE LATERAL OR LATERAL CAP.

TOP OF CASTING OR CAP SHALL EXTEND 0.20" MIN. ABOVE FINISHED GRADE UNLESS CONSTRUCTED WITHIN PEDESTRIAN OR VEHICULAR TRAFFIC WAY.

- * NOTE: FOR SEWER LATERALS, THE CLEANOUT PIPE AND FITTING MATERIAL SHALL BE PVC SDR-40, WITH A MINIMUM PIPE SIZE OF 4 INCHES.
- * FOR ROOF DRAIN CONNECTION CLEANOUTS, THE MATERIAL SHALL BE PVC SDR-40 OR HDPE 11-12, UNLESS SPECIFIED OTHERWISE. THE CLEANOUT PIPE SIZE SHALL BE ONE SIZE SMALLER THAN THE ROOF DRAIN LINE ITS CONNECTING INTO UNLESS OTHERWISE SPECIFIED ON THE PLANS

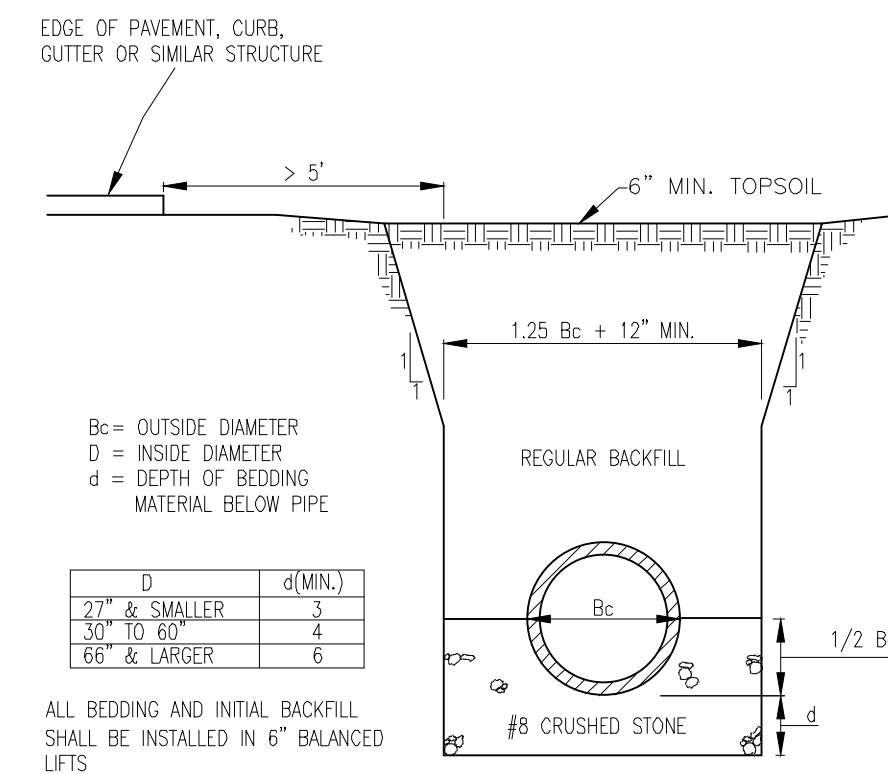


CLEANOUT TYPE 1
FOR LANDSCAPED/GRASS SURFACES

TYPICAL CLEANOUT SECTION

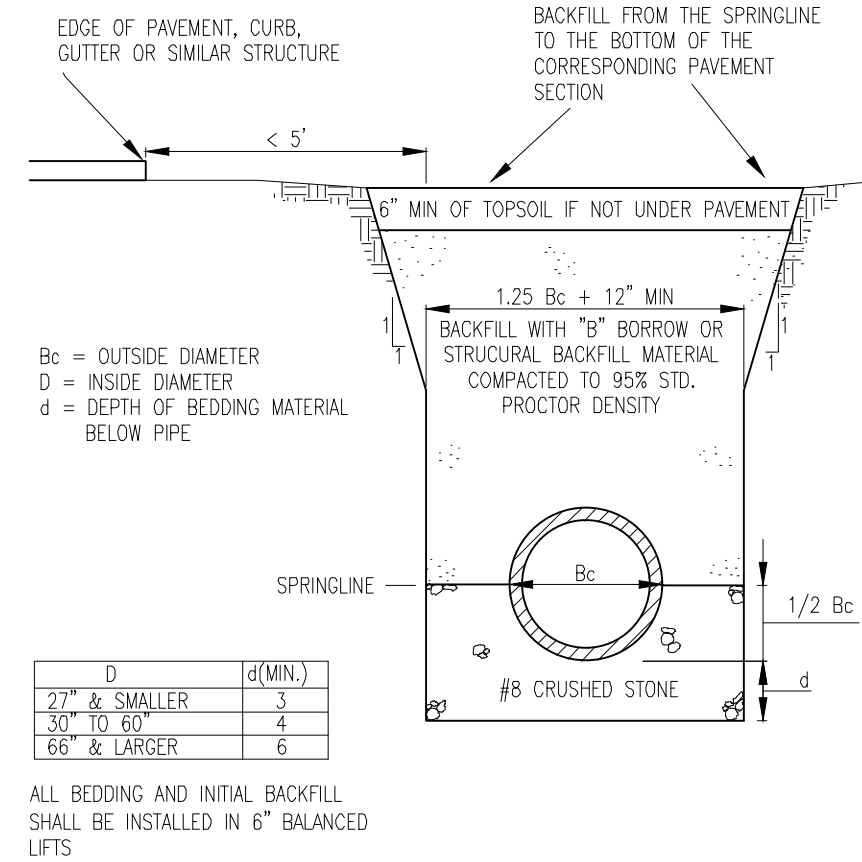
NOT TO SCALE

CLEANOUT TYPE 2
FOR HARDCAPE/RIGID SURFACES



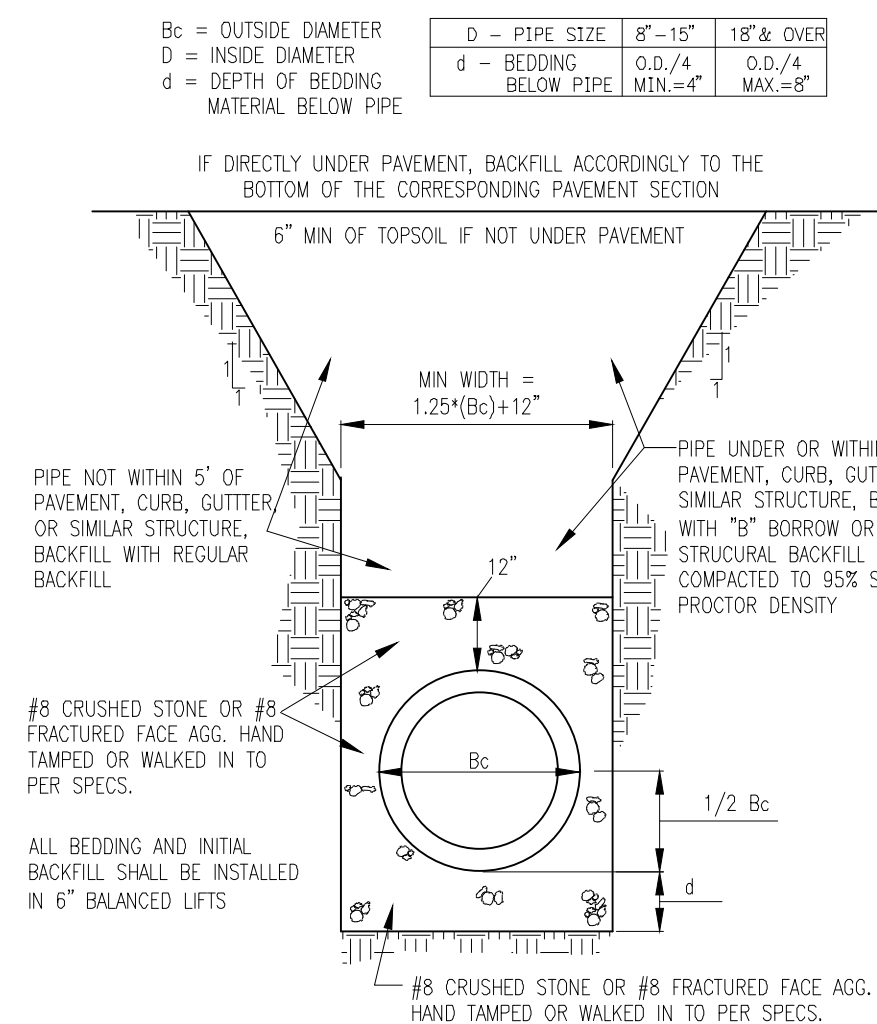
RCP BEDDING SECTION > 5' FROM EDGE OF PAVEMENT

NOT TO SCALE



RCP BEDDING SECTION < 5' FROM EDGE OF PAVEMENT

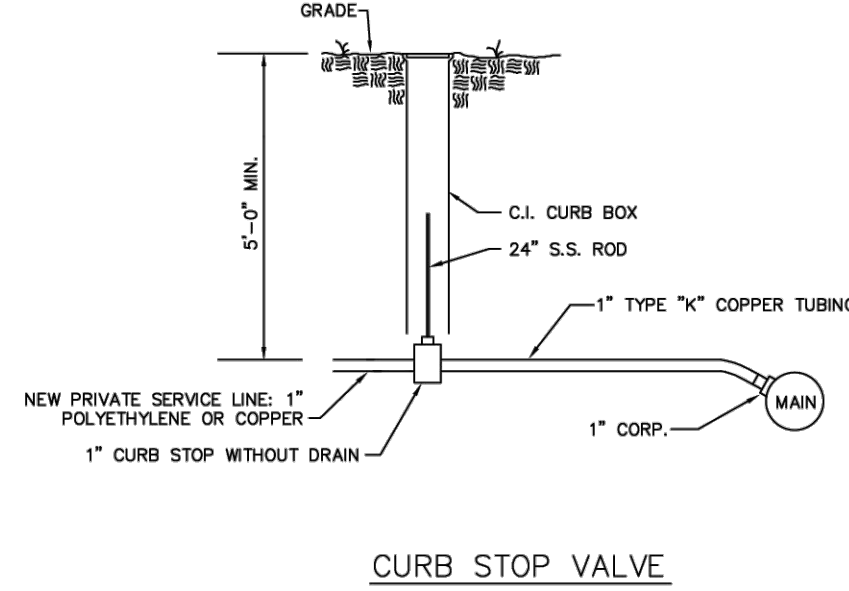
NOT TO SCALE



HDPE BEDDING SECTION DETAIL

NOT TO SCALE

ALSO FOR PVC/FLEXIBLE PIPE AND SERVICE LATERALS



CURB STOP VALVE

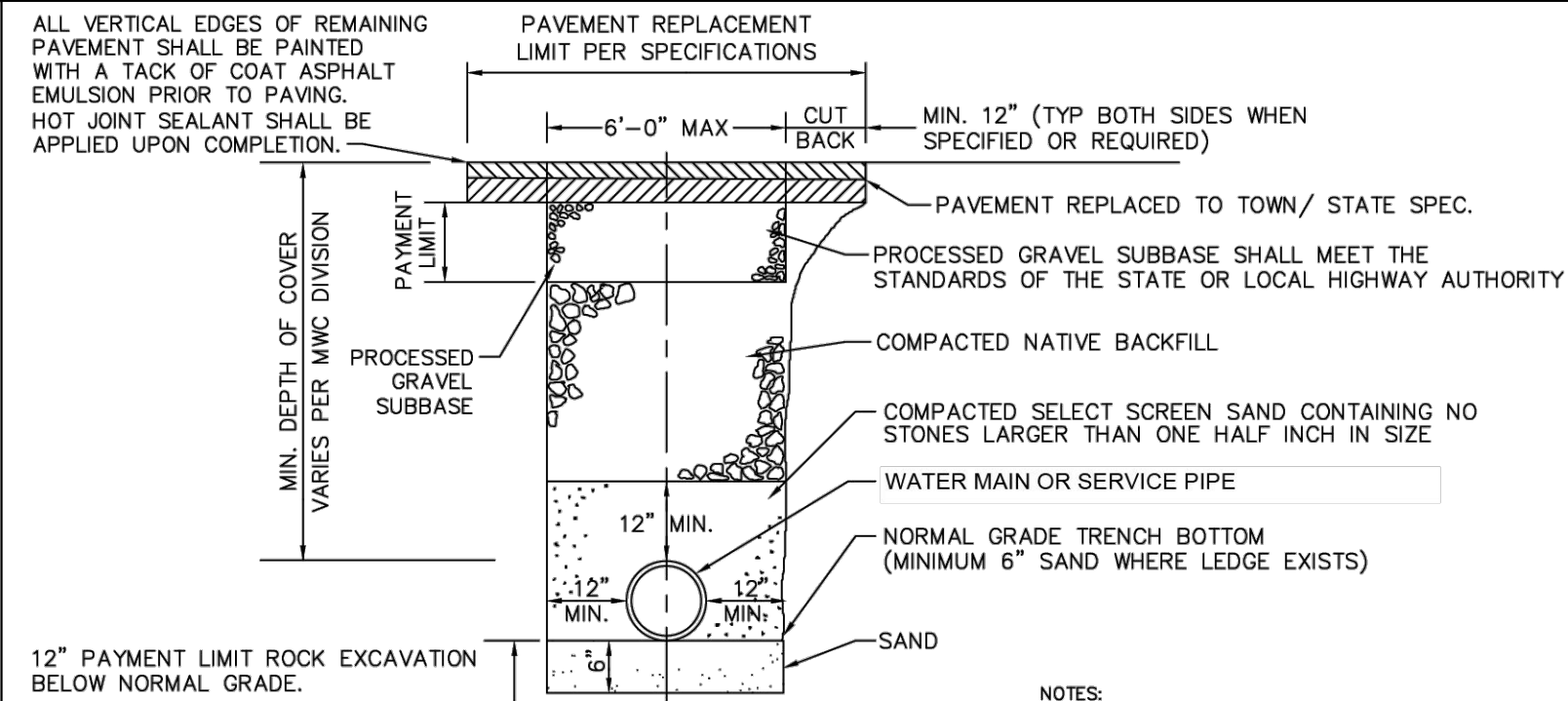
- NOTE:
- 1) CURB BOXES IN PAVEMENT OR IN GRAVEL PRONE TO MOTOR VEHICLE TRAFFIC SHALL BE PROTECTED BY A VALVE BOX TOP.
 - 2) RECONNECT NEW SERVICE PIPE TO EXISTING 3/4\"/>

Drawn By: LMM
Date: 3/10/16
Approved by:
THE CHIEF OF ENGINEERING

93 INDUSTRIAL PARK RD. SACO, ME 04072 PH: (207) 282-1543 FAX: (207) 282-1544 www.maineewater.com
--

SERVICE LINE AND CURB STOP VALVE DETAIL

Scale: NTS
Drawing Number
MWC SD-1
BU Number -
Sheet 1 of 1



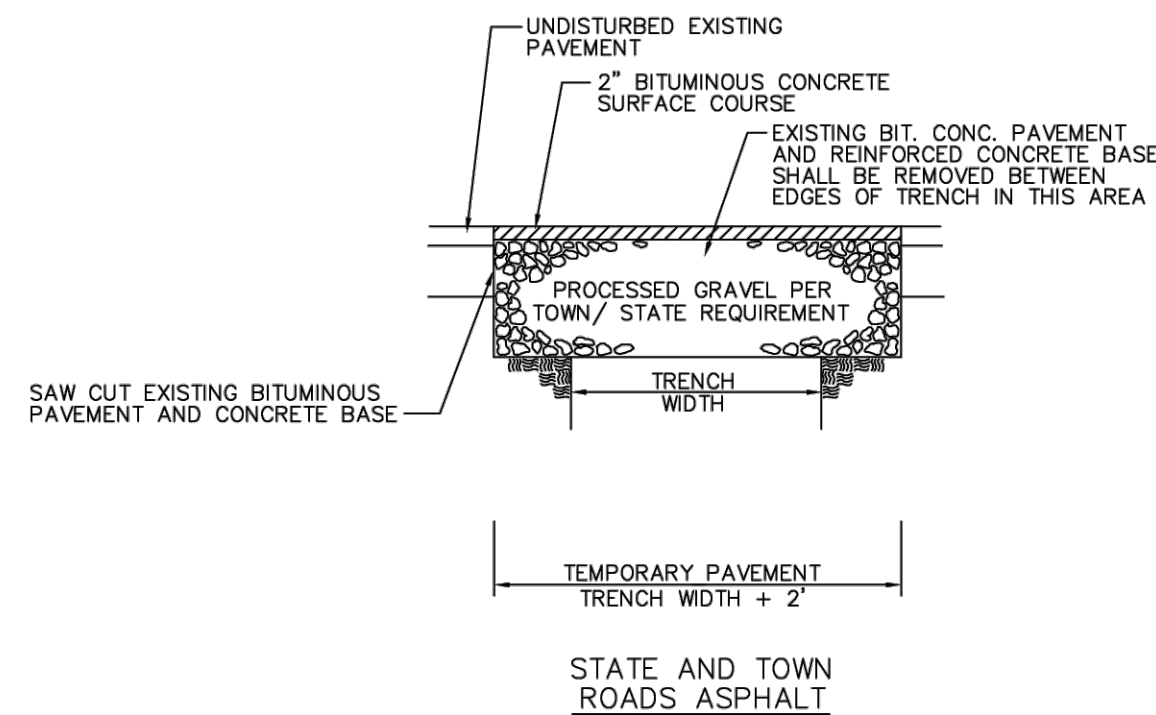
- NOTES:
- 1) ALL DUCTILE IRON PIPE SHALL HAVE A MINIMUM OF 2 BRONZE WEDGES AT EVERY JOINT AND 3 FOR PIPE 6\"/>

Drawn By: LRS/LMM
Date: 3/9/16
Approved by:
THE CHIEF OF ENGINEERING

93 INDUSTRIAL PARK RD. SACO, ME 04072 PH: (207) 282-1543 FAX: (207) 282-1544 www.maineewater.com
--

WATER MAIN TRENCH DETAIL

Scale: NTS
Drawing Number
MWC SD-4
BU Number -
Sheet 1 of 1



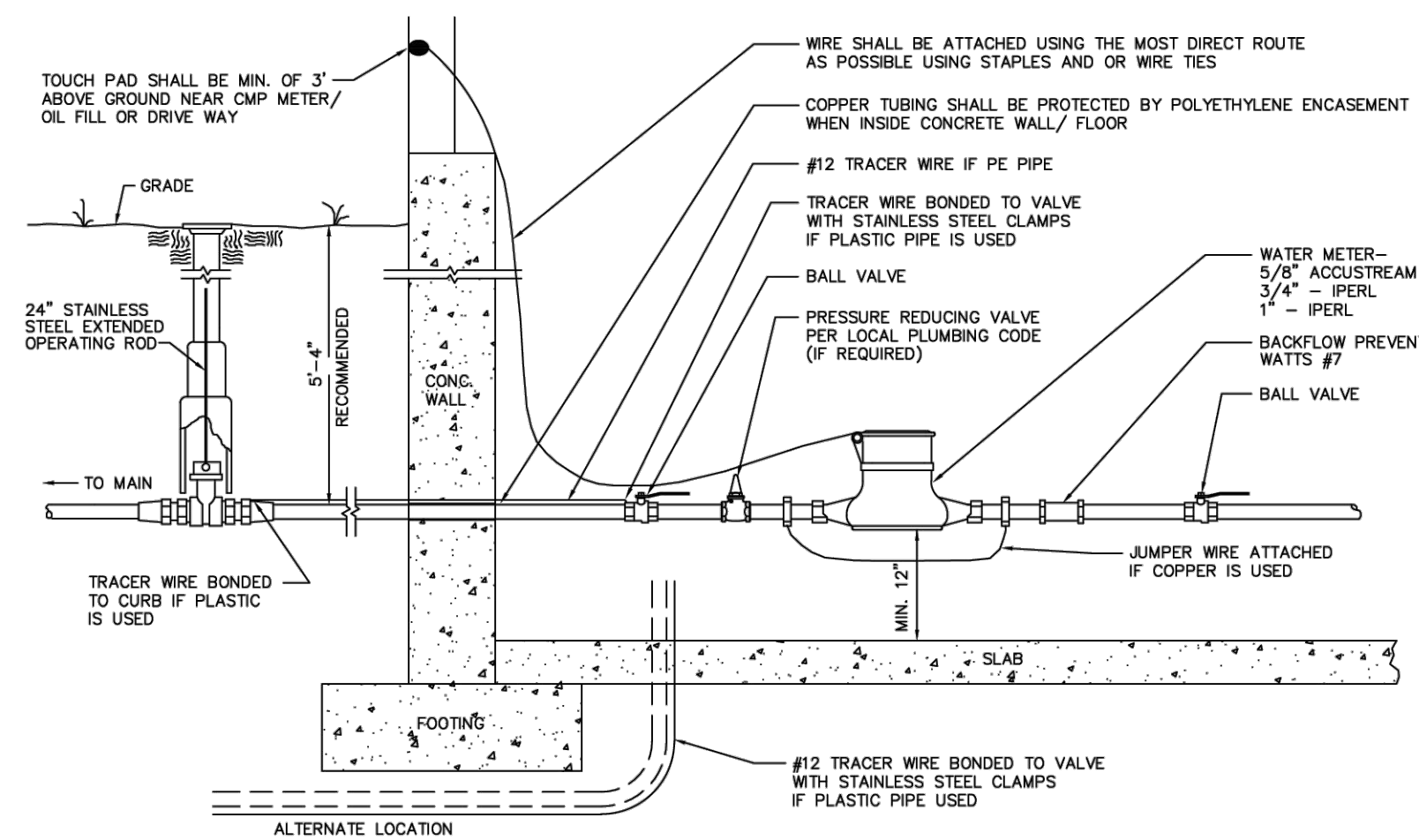
- NOTES:
- 1) DETAIL VARIES DUE TO INDIVIDUAL TOWN SPECIFICATIONS. DIMENSIONS MAY BE ALTERED DUE TO SPECIFIC REQUIREMENTS OF TOWN IN WHICH PROJECT IS LOCATED.

Drawn By: LRS/LMM
Date: 3/14/16
Approved by:
THE CHIEF OF ENGINEERING

93 INDUSTRIAL PARK RD. SACO, ME 04072 PH: (207) 282-1543 FAX: (207) 282-1544 www.maineewater.com
--

TEMPORARY TRENCH PAVEMENT DETAIL

Scale: NTS
Drawing Number
MWC SD-11
BU Number -
Sheet 1 of 1



NOTE: ALL GROUND CLAMPS SHALL NOT BE CLAMPED TO METER OR METER COUPLINGS				
Revision	Description	Date	By	Approved By
Drawn By: LRS	 93 INDUSTRIAL PARK RD. SACON, ME 04072 PH: (202) 282-1543 FAX: (202) 282-1544 www.maine-water.com	Scale: NTS		
Date: 3/14/16		Drawing Number: MWC SMS-1		
Approved by:		1" SERVICE LINE INSTALLATION DETAILS		
File:		Bl Number -		
File:		Sheet of		

93 INDUSTRIAL PARK RD. SACO, ME 04072 PH: (207) 282-1543 FAX: (207) 282-1544 www.maineewater.com
--

1\"/>

Scale: NTS
Drawing Number
MWC SMS-1
BU Number -
Sheet of

Fritz Engineering Services, LLC
14020 Mississinewa Drive
Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

STATE OF MAINE
ASHTON L. FRITZ
No. PE17376
LICENSED PROFESSIONAL ENGINEER
Ashton L. Fritz
3/11/2013

REVISIONS AND ISSUES	DATE	BY
1 REV PER CITY	3/27/2023	AF

GENERAL NOTES / LEGEND:

811 DigSafe
MA-ME-NH-VT

PROJECT:
TAKE 5 OIL CHANGE
BIDDEFORD
PROJECT LOCATION:
394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY
TAX MAP & LOT
PORTION OF TAX MAP 20, LOT 10

CLIENT:
TAKE 5 MAINE, LLC
10884 GRESHAM PLACE
NOBLESVILLE, IN 46060

PLAN DATE:
12/6/2022
DESIGN: AF CHECK: AF DRAWN: KG
PROJECT NO:
2209005
SHEET NAME:
GENERAL DETAILS
SHEET NO.
C802

STORMWATER TECHNICAL INFORMATION REPORT

TAKE 5 OIL CHANGE - BIDDEFORD

Project Location:

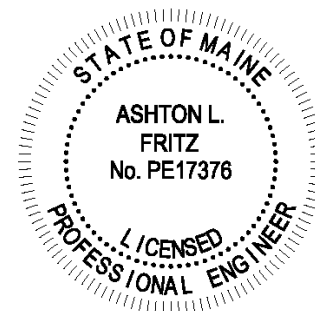
394 ELM STREET
BIDDEFORD, ME 04405

Prepared For:

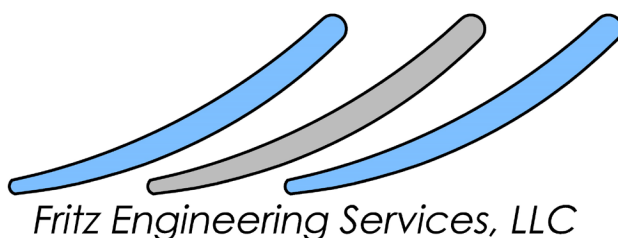
TAKE 5 MAINE, LLC
10884 Gresham Place
Noblesville, IN 46060

Date:

December 6, 2022
Last Revised:



A handwritten signature in black ink, appearing to read "Ashton L. Fritz".



- CIVIL ENGINEERS
- LAND DEVELOPMENT CONSULTANTS
- DRAINAGE CONSULTANTS
- CERTIFIED FLOODPLAIN MANAGER

14020 Mississinewa Drive ■ Carmel, Indiana 46033 ■ Phone: 317.324.8695 ■ www.Fritz-Eng.com

TABLE OF CONTENTS

TABLE OF CONTENTS	2
PROJECT DESCRIPTION	3
FEMA MAP OVERVIEW	3
WATERSHED DESCRIPTION	3
SOILS OVERVIEW	3
TABLE 1 – PROJECT SOILS	3
ZONING INFORMATION	3
DEVELOPMENT STANDARDS	4
EXISTING CONDITIONS	4
TABLE 2 – EXISTING PEAK DISCHARGE RATES	4
PROPOSED CONDITIONS.....	4
TABLE 3 – PROPOSED PEAK DISCHARGE RATES	5
STORMWATER DETENTION.....	5
STORMWATER QUALITY	5
STORMWATER PIPE DESIGN.....	5
SUMMARY.....	5
REFERENCES.....	6
APPENDICES	6

APPENDIX A – LOCATION MAP

APPENDIX B – FEMA MAP

APPENDIX C – SOILS DATA & MAP

APPENDIX D – EXISTING DRAINAGE ANALYSIS

APPENDIX E – PROPOSED DRAINAGE ANALYSIS

APPENDIX F –DESIGN SUPPORT DATA

PROJECT DESCRIPTION

Take 5 Maine is proposing a new commercial Take 5 Oil Change facility as part of the redevelopment of 394 Elm Street in Biddeford, Maine. The lot is proposed as Lot 10 and is a portion of Tax Map 20. The facility will consist of approximately 0.34 acres with a new building of approximately 1,010 sf, single story, with associated parking and utility service improvements. Access to the site will be provided from two of the existing drive entrances on the north and south sides of the site.

For reference, the project site is located at approximately latitude 43.48269° N and longitude 70.472024° W.

FEMA MAP OVERVIEW

The project site is located within the FEMA Community Panel Map #2301450003B dated May 15, 1984. Review of the map indicates the site is located within the Flood Designation 'Zone C' (unshaded). Therefore, the site is not subject to Flood Control Ordinance requirements. The FEMA Map is included in Appendix B.

WATERSHED DESCRIPTION

The project site is located within the 'Thatcher Brook' watershed as provided on the Maine GIS system.

SOILS OVERVIEW

The project site contains the soils listed in the following **Table**. The Hydrologic Soil Group (HSG) for each soil is also provided. The appropriate limits of each soil type are depicted in the Soils Map provided in Appendix C.

TABLE 1 – PROJECT SOILS

Soil Symbol	Soil Name, Description	HSG
AgB	Adams-Urban Land	A
Ur	Urban Land	n/a

ZONING INFORMATION

The site is within the corporate limits of the City of Biddeford. The underlying Zoning Classification is B-2, Highway Business. The proposed use is permitted in the Zoning District.

DEVELOPMENT STANDARDS

The project site is located within the City of Biddeford, York County, Maine. Therefore, the proposed drainage improvements are subject to the standards of design and construction of the City of Biddeford and Maine Dept of Environmental Protection. Runoff will be modeled using Rational Method and HydroCAD version 10.00-24 utilizing the Type III rainfall distribution and rainfall depths from the NOAA Atlas 14 website.

EXISTING CONDITIONS

The proposed development site is currently fully developed with nearly entirely hard surface including the existing building rooftop, onsite pavement, onsite gravel remaining from previous pump stations/canopies and a small landscape area on the west side of the site.

The existing site is gently sloping and has no onsite stormwater inlets or pipes. Runoff is conveyed to the existing road drainage systems of Alfred Street and Elm Street. The exact limits of areas drainage to each is difficult to ascertain due to the limited available slopes. As a result, the site is considered a single drainage basin for this analysis.

EX1 - sheet drains the majority of the site to the existing perimeter road drainage systems.

TABLE 2 – EXISTING PEAK DISCHARGE RATES

	Peak Runoff Rate, cfs			
Basin Name	2-yr	10-yr	25-yr	100-yr
EX1	1.10	1.75	2.15	2.77
TOTAL	1.10	1.75	2.15	2.77

For clarity, a map of the existing drainage sheds and infrastructure is illustrated in Appendix D.

PROPOSED CONDITIONS

This project is proposing a new 1,010 SF Take 5 Oil Change facility with onsite parking, drives and utility services. The project site disturbs less than 1 acre in total and will reduce the runoff to the downstream drainage systems.

PR1 - sheet drains the majority of the site to the existing perimeter road drainage systems as in existing conditions.

TABLE 3 – PROPOSED PEAK DISCHARGE RATES

	Peak Runoff Rate, cfs			
Basin Name	2-yr	10-yr	25-yr	100-yr
PR1	0.89	1.57	1.99	2.63
TOTAL	0.89	1.57	1.99	2.63

For clarity, a map of the proposed drainage sheds and infrastructure is illustrated in Appendix E.

The proposed improvements are consistent with the City of Biddeford and Maine DEP stormwater management standards. Runoff calculations for the proposed conditions are computed in Appendix using the minimum 5-minute Time of Concentration. A map of the proposed basins is provided in Appendix E.

STORMWATER DETENTION

As noted above, this project will significantly reduce the runoff from the site in proposed conditions and therefore, stormwater detention is not required.

STORMWATER QUALITY

The proposed site improvements disturb 0.34 acres. Therefore, no further stormwater quality is required.

STORMWATER PIPE DESIGN

The proposed site will sheet drain runoff as in existing conditions to the downstream drainage systems. Therefore, there are no onsite storm sewers, inlets, etc. proposed with this project.

SUMMARY

Take 5 Maine is proposing the construction of a new 1,010 SF Take 5 Oil Change building with associated parking, drives and utility services. Proposed conditions will reduce peak runoff from the site and the total land disturbance will not require any additional onsite stormwater detention or water quality measures.

As a result of the onsite drainage analysis, the proposed improvements are not anticipated to have adverse impacts on the surrounding or downstream drainage systems.

REFERENCES

1. York County Soils Map (Web Soil Survey)
2. FEMA Flood Insurance Rate Maps, FEMA Website
3. Maine DEP Stormwater Management Design Manual

APPENDICES

APPENDIX A – LOCATION MAP

APPENDIX B – FEMA MAP

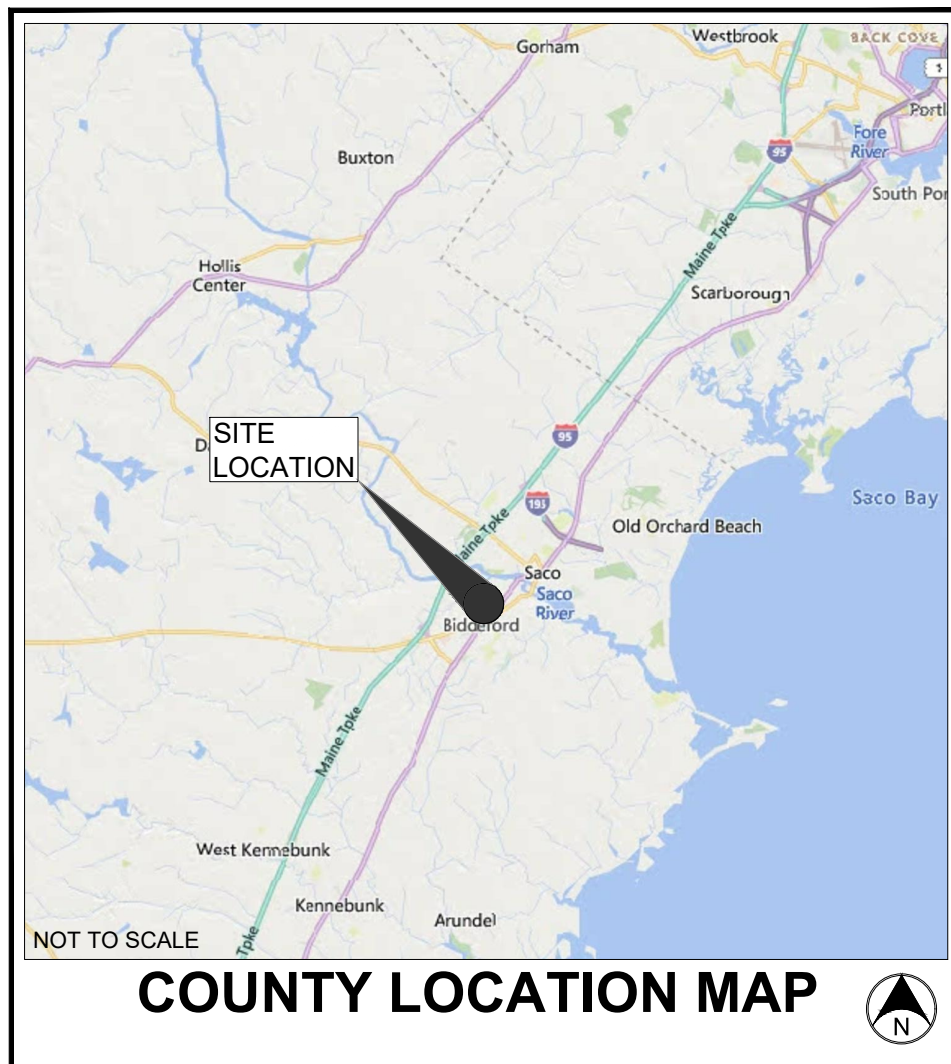
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APPENDIX F –DESIGN SUPPORT DATA

APPENDIX A – LOCATION MAP



APPENDIX B – FEMA MAP

Program, at (800) 638-6620.



APPROXIMATE SCALE



NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
BIDDEFORD,
MAINE
YORK COUNTY

PANEL 3 OF 11
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230145 0003 B

EFFECTIVE DATE:
MAY 15, 1984



Federal Emergency Management Agency

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.

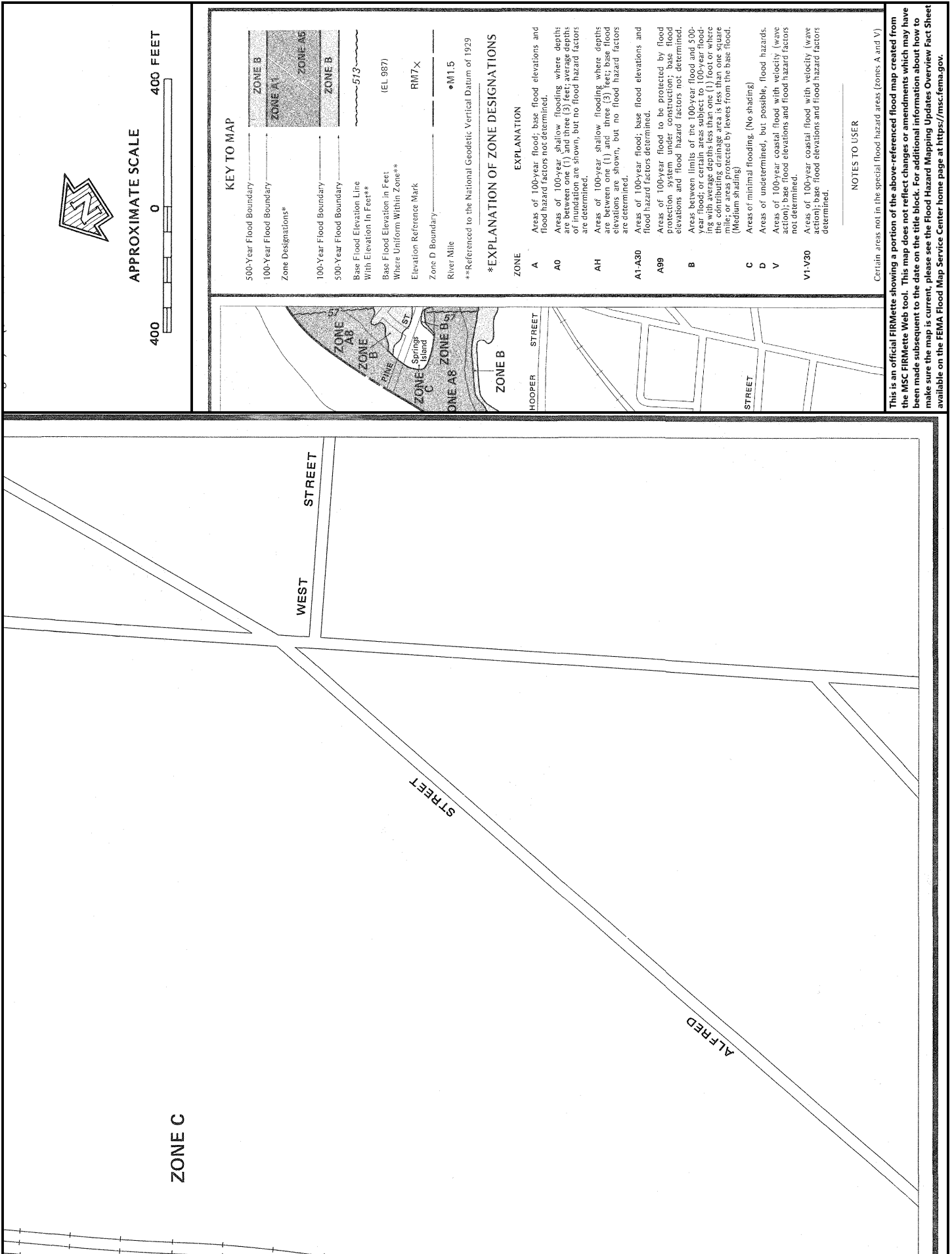
ZONE C

WEST STREET

WEST STREET

STREET

ALFRED



APPENDIX C – SOILS DATA & MAP



MAP LEGEND

Area of Interest (AOI)		Area of Interest (AOI)		Spoil Area
Soils		Soil Map Unit Polygons		Stony Spot
		Soil Map Unit Lines		Very Stony Spot
		Soil Map Unit Points		Wet Spot
Special Point Features				Other
				Special Line Features
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AgB	Adams-Urban land complex, 0 to 8 percent slopes	0.2	33.6%
Ur	Urban land	0.3	66.4%
Totals for Area of Interest		0.5	100.0%

APPENDIX D – EXISTING DRAINAGE ANALYSIS

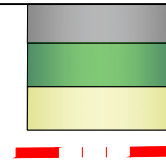


0 60' 120'

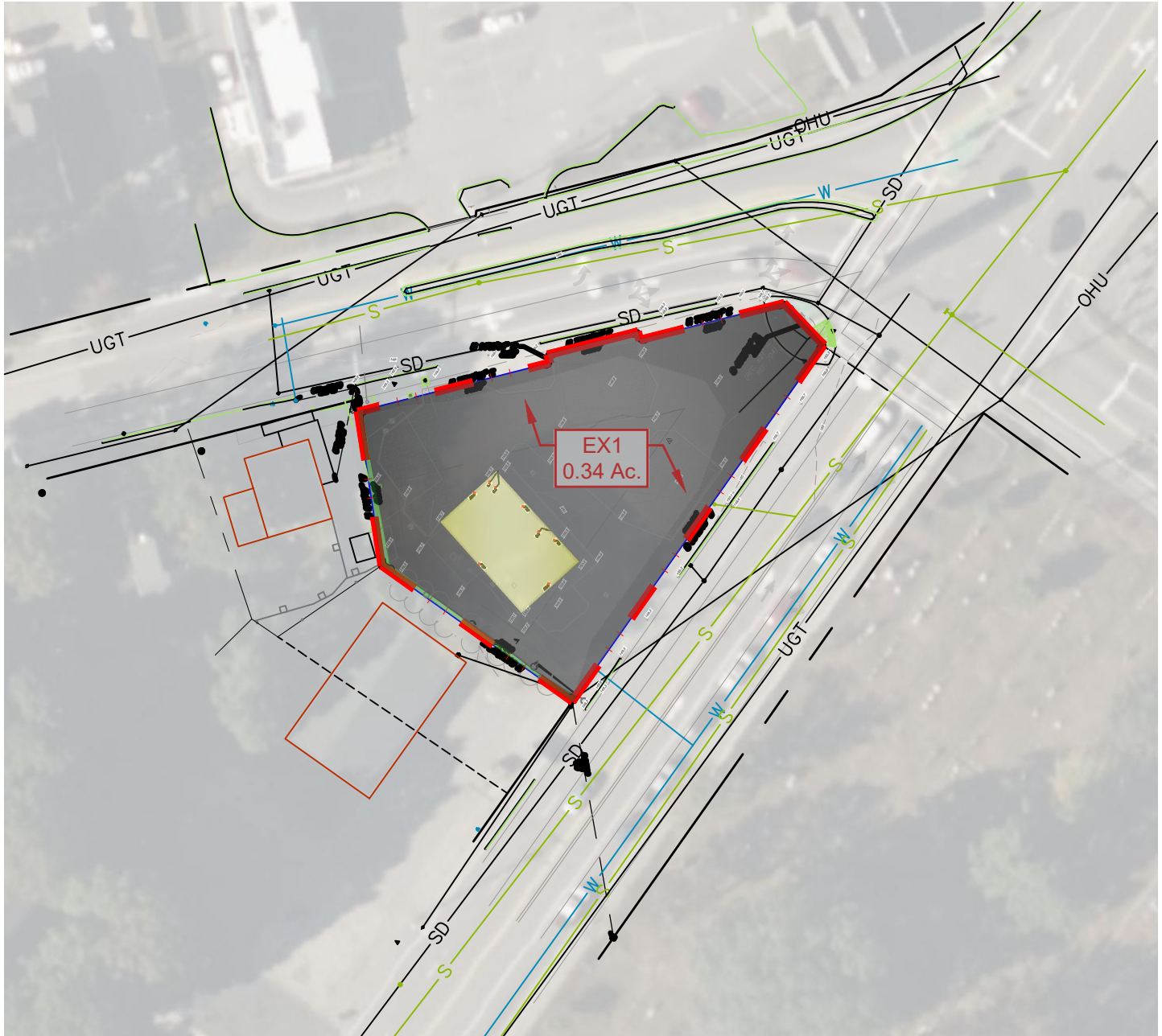
SCALE: 1" = 60'

LEGEND:

PAVEMENT/GRAVEL
GRASS/LANDSCAPE AREA
BUILDING
BASIN LIMITS



December 6, 2022
Page 17 of 50



**Fritz Engineering
Services, LLC**

14020 Mississinewa Drive
Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

PLAN DATE:

12/6/2022

DESIGN:

AF

CHECK:

AF

DRAWN:

KG

PROJECT NO.

2209005

SHEET NAME

EXISTING BASIN MAP

SHEET NO.

EXH-1

PROJECT:

**TAKE 5 OIL
CHANGE**

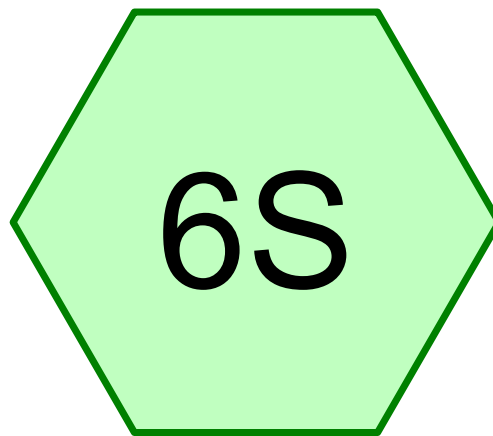
PROJECT LOCATION:

394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY

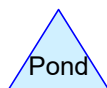
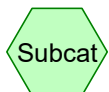
SECTION, TOWNSHIP, RANGE:

S----, T----, R----

106



EX SITE



Routing Diagram for Existing-Proposed Conditions
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TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Existing-Proposed Conditions

Prepared by Fritz Engineering

Printed 12/6/2022

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Page 2

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	002yr-24hr	Type III 24-hr		Default	24.00	1	3.24	2
2	010yr-24hr	Type III 24-hr		Default	24.00	1	5.11	2
3	025yr-24hr	Type III 24-hr		Default	24.00	1	6.28	2
4	100yr-24hr	Type III 24-hr		Default	24.00	1	8.07	2

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Existing-Proposed Conditions

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Page 3

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.344	HSG C	6S
0.000	HSG D	
0.000	Other	
0.344		TOTAL AREA

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Existing-Proposed Conditions

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Page 4

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.007	0.000	0.000	0.007	>75% Grass cover, Good	6S
0.000	0.000	0.305	0.000	0.000	0.305	Paved parking	6S
0.000	0.000	0.033	0.000	0.000	0.033	Roofs	6S
0.000	0.000	0.344	0.000	0.000	0.344	TOTAL AREA	

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL
Type III 24-hr 002yr-24hr Rainfall=3.24"

Existing-Proposed Conditions

Prepared by Fritz Engineering

Printed 12/6/2022

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Page 5

Time span=0.01-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 6S: EX SITE

Runoff Area=15,003 sf 98.07% Impervious Runoff Depth=3.01"
Flow Length=150' Slope=0.0100 '/' Tc=5.0 min CN=98 Runoff=1.10 cfs 0.086 af

Total Runoff Area = 0.344 ac Runoff Volume = 0.086 af Average Runoff Depth = 3.01"
1.93% Pervious = 0.007 ac 98.07% Impervious = 0.338 ac

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 002yr-24hr Rainfall=3.24"

Existing-Proposed Conditions

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Page 6

Summary for Subcatchment 6S: EX SITE

Runoff = 1.10 cfs @ 12.07 hrs, Volume= 0.086 af, Depth= 3.01"

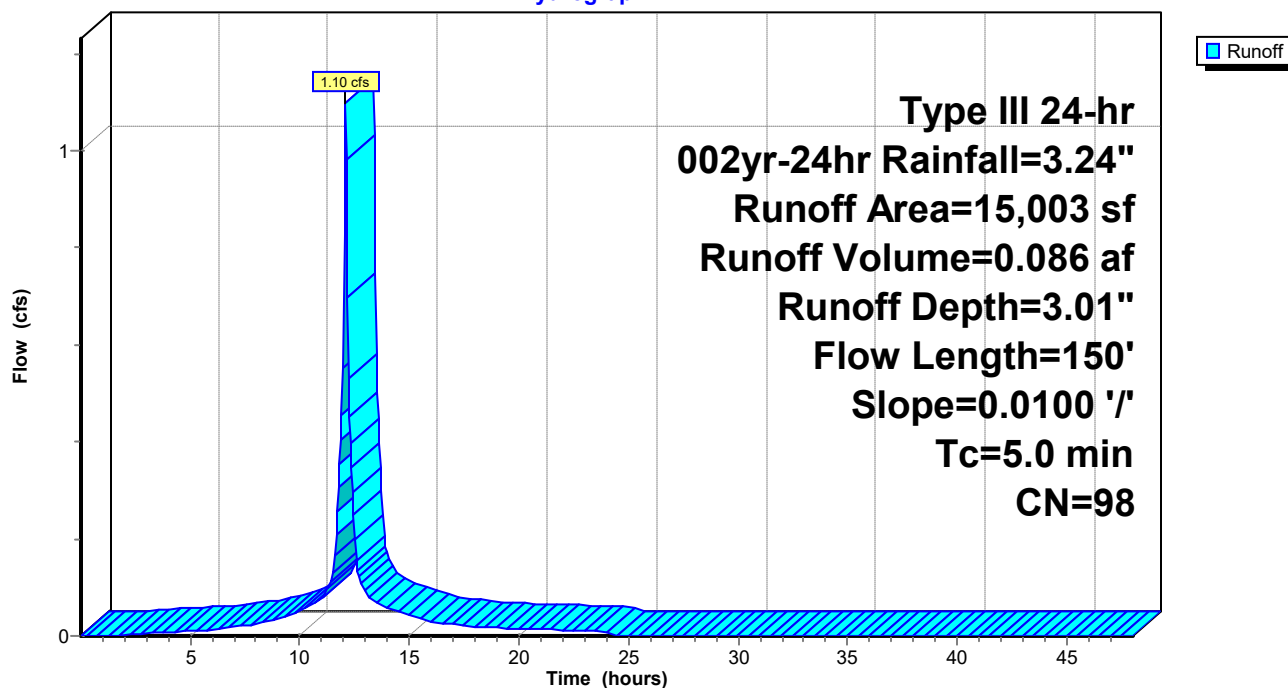
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-48.01 hrs, dt= 0.05 hrs
Type III 24-hr 002yr-24hr Rainfall=3.24"

Area (sf)	CN	Description
1,420	98	Roofs, HSG C
290	74	>75% Grass cover, Good, HSG C
13,293	98	Paved parking, HSG C
15,003	98	Weighted Average
290		1.93% Pervious Area
14,713		98.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow, Sheet Flow
					Smooth surfaces n= 0.011 P2= 3.24"
0.4	50	0.0100	2.03		Shallow Concentrated Flow, Shallow Conc Flow
					Paved Kv= 20.3 fps
2.0	150	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 6S: EX SITE

Hydrograph



TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 010yr-24hr Rainfall=5.11"

Existing-Proposed Conditions

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Page 7

Time span=0.01-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 6S: EX SITE

Runoff Area=15,003 sf 98.07% Impervious Runoff Depth=4.87"

Flow Length=150' Slope=0.0100 '/' Tc=5.0 min CN=98 Runoff=1.75 cfs 0.140 af

Total Runoff Area = 0.344 ac Runoff Volume = 0.140 af Average Runoff Depth = 4.87"
1.93% Pervious = 0.007 ac 98.07% Impervious = 0.338 ac

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL
Type III 24-hr 010yr-24hr Rainfall=5.11"

Existing-Proposed Conditions

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Page 8

Summary for Subcatchment 6S: EX SITE

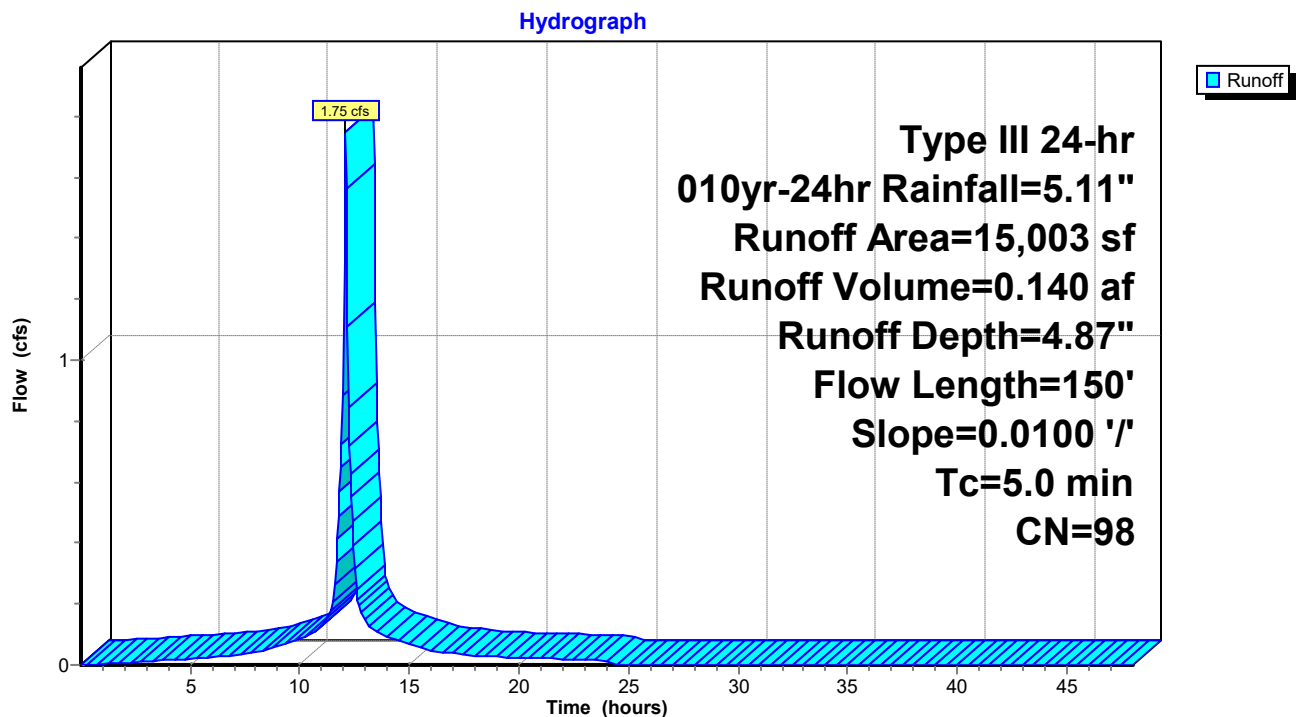
Runoff = 1.75 cfs @ 12.07 hrs, Volume= 0.140 af, Depth= 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-48.01 hrs, dt= 0.05 hrs
Type III 24-hr 010yr-24hr Rainfall=5.11"

Area (sf)	CN	Description
1,420	98	Roofs, HSG C
290	74	>75% Grass cover, Good, HSG C
13,293	98	Paved parking, HSG C
15,003	98	Weighted Average
290		1.93% Pervious Area
14,713		98.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow, Sheet Flow
					Smooth surfaces n= 0.011 P2= 3.24"
0.4	50	0.0100	2.03		Shallow Concentrated Flow, Shallow Conc Flow
					Paved Kv= 20.3 fps
2.0	150	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 6S: EX SITE



TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 025yr-24hr Rainfall=6.28"

Existing-Proposed Conditions

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Page 9

Time span=0.01-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 6S: EX SITE

Runoff Area=15,003 sf 98.07% Impervious Runoff Depth=6.04"

Flow Length=150' Slope=0.0100 '/' Tc=5.0 min CN=98 Runoff=2.15 cfs 0.173 af

Total Runoff Area = 0.344 ac Runoff Volume = 0.173 af Average Runoff Depth = 6.04"
1.93% Pervious = 0.007 ac 98.07% Impervious = 0.338 ac

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL
Type III 24-hr 025yr-24hr Rainfall=6.28"

Existing-Proposed Conditions

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Page 10

Summary for Subcatchment 6S: EX SITE

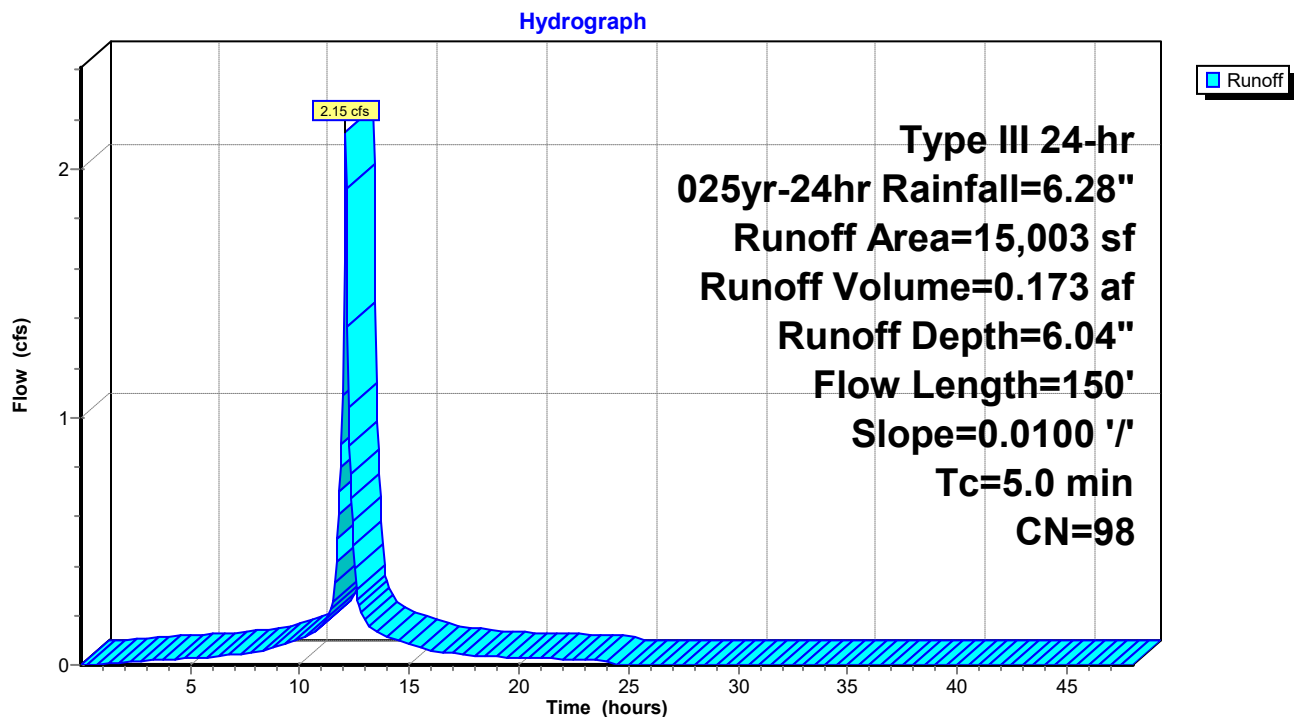
Runoff = 2.15 cfs @ 12.07 hrs, Volume= 0.173 af, Depth= 6.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-48.01 hrs, dt= 0.05 hrs
Type III 24-hr 025yr-24hr Rainfall=6.28"

Area (sf)	CN	Description
1,420	98	Roofs, HSG C
290	74	>75% Grass cover, Good, HSG C
13,293	98	Paved parking, HSG C
15,003	98	Weighted Average
290		1.93% Pervious Area
14,713		98.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow, Sheet Flow
					Smooth surfaces n= 0.011 P2= 3.24"
0.4	50	0.0100	2.03		Shallow Concentrated Flow, Shallow Conc Flow
					Paved Kv= 20.3 fps
2.0	150	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 6S: EX SITE



TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 100yr-24hr Rainfall=8.07"

Existing-Proposed Conditions

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Time span=0.01-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 6S: EX SITE

Runoff Area=15,003 sf 98.07% Impervious Runoff Depth=7.83"

Flow Length=150' Slope=0.0100 '/' Tc=5.0 min CN=98 Runoff=2.77 cfs 0.225 af

Total Runoff Area = 0.344 ac Runoff Volume = 0.225 af Average Runoff Depth = 7.83"
1.93% Pervious = 0.007 ac 98.07% Impervious = 0.338 ac

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL
Type III 24-hr 100yr-24hr Rainfall=8.07"

Existing-Proposed Conditions

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Page 12

Summary for Subcatchment 6S: EX SITE

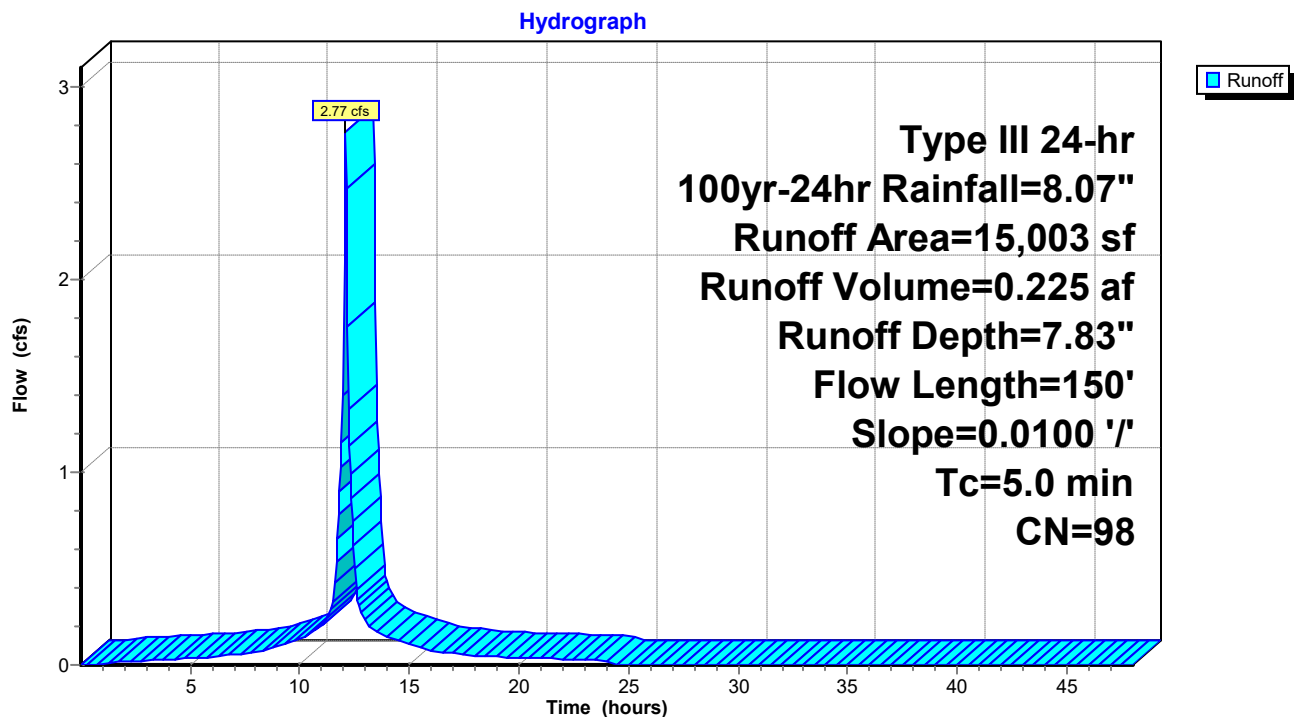
Runoff = 2.77 cfs @ 12.07 hrs, Volume= 0.225 af, Depth= 7.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-48.01 hrs, dt= 0.05 hrs
Type III 24-hr 100yr-24hr Rainfall=8.07"

Area (sf)	CN	Description
1,420	98	Roofs, HSG C
290	74	>75% Grass cover, Good, HSG C
13,293	98	Paved parking, HSG C
15,003	98	Weighted Average
290		1.93% Pervious Area
14,713		98.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow, Sheet Flow
					Smooth surfaces n= 0.011 P2= 3.24"
0.4	50	0.0100	2.03		Shallow Concentrated Flow, Shallow Conc Flow
					Paved Kv= 20.3 fps
2.0	150	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 6S: EX SITE



TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Existing-Proposed Conditions

Multi-Event Tables

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Page 13

Events for Subcatchment 6S: EX SITE

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
002yr-24hr	3.24	1.10	0.086	3.01
010yr-24hr	5.11	1.75	0.140	4.87
025yr-24hr	6.28	2.15	0.173	6.04
100yr-24hr	8.07	2.77	0.225	7.83

APPENDIX E – PROPOSED DRAINAGE ANALYSIS



0 60' 120'

SCALE: 1" = 60'

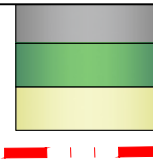
LEGEND:

PAVEMENT/GRAVEL

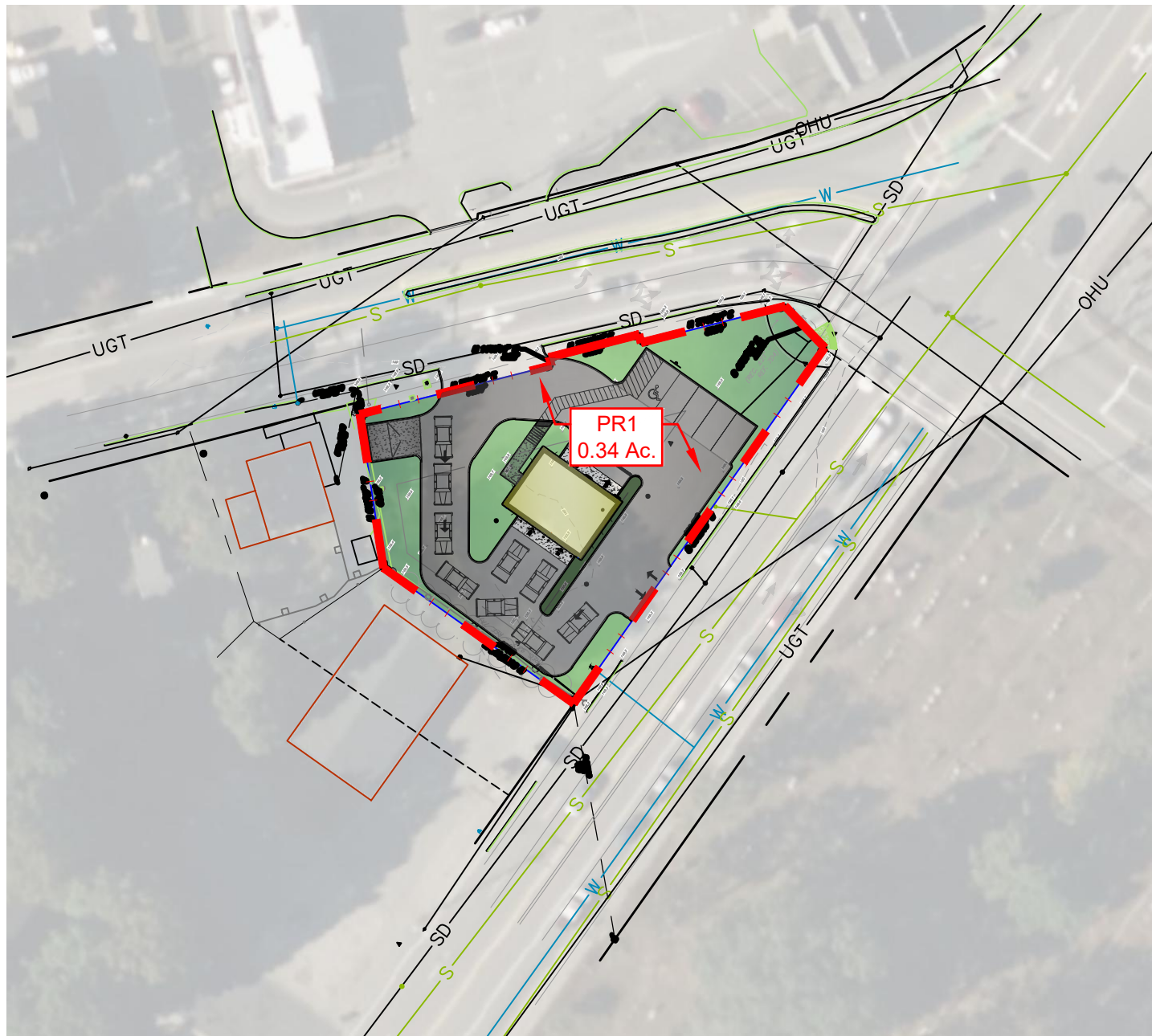
GRASS/LANDSCAPE AREA

BUILDING

BASIN LIMITS



December 6, 2022
Page 32 of 50



**Fritz Engineering
Services, LLC**

14020 Mississinewa Drive
Carmel, Indiana 46033
P: 317.324.8695 F: 317.324.8717
www.Fritz-Eng.com

PLAN DATE:

12/6/2022

DESIGN:
AF

CHECK:
AF

DRAWN:
KG

PROJECT NO.

2209005

SHEET NAME

PROPOSED BASIN MAP

SHEET NO.

EXH-2

PROJECT:

**TAKE 5 OIL
CHANGE**

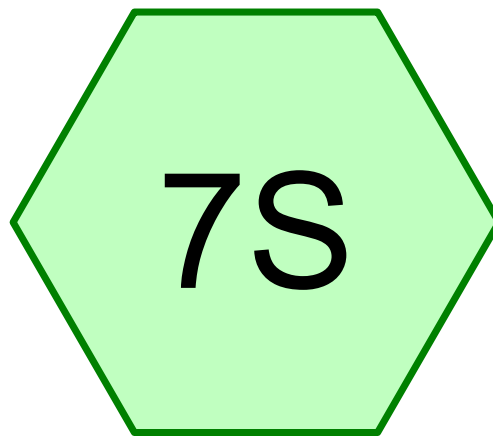
PROJECT LOCATION:

394 ELM STREET
BIDDEFORD, MAINE 04005
YORK COUNTY

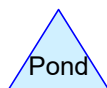
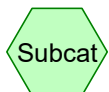
SECTION, TOWNSHIP, RANGE:

S----, T----, R----

121



PR SITE



Routing Diagram for Existing-Proposed Conditions
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TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Existing-Proposed Conditions

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Page 2

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	002yr-24hr	Type III 24-hr		Default	24.00	1	3.24	2
2	010yr-24hr	Type III 24-hr		Default	24.00	1	5.11	2
3	025yr-24hr	Type III 24-hr		Default	24.00	1	6.28	2
4	100yr-24hr	Type III 24-hr		Default	24.00	1	8.07	2

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Existing-Proposed Conditions

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Page 3

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.344	HSG C	7S
0.000	HSG D	
0.000	Other	
0.344		TOTAL AREA

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Existing-Proposed Conditions

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Page 4

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.117	0.000	0.000	0.117	>75% Grass cover, Good	7S
0.000	0.000	0.204	0.000	0.000	0.204	Paved parking	7S
0.000	0.000	0.023	0.000	0.000	0.023	Roofs	7S
0.000	0.000	0.344	0.000	0.000	0.344	TOTAL AREA	

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 002yr-24hr Rainfall=3.24"

Existing-Proposed Conditions

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Page 5

Time span=0.01-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 7S: PR SITE

Runoff Area=15,003 sf 65.95% Impervious Runoff Depth=2.21"

Flow Length=150' Slope=0.0100 '/' Tc=5.0 min CN=90 Runoff=0.89 cfs 0.063 af

Total Runoff Area = 0.344 ac Runoff Volume = 0.063 af Average Runoff Depth = 2.21"
34.05% Pervious = 0.117 ac 65.95% Impervious = 0.227 ac

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL
Type III 24-hr 002yr-24hr Rainfall=3.24"

Existing-Proposed Conditions

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Page 6

Summary for Subcatchment 7S: PR SITE

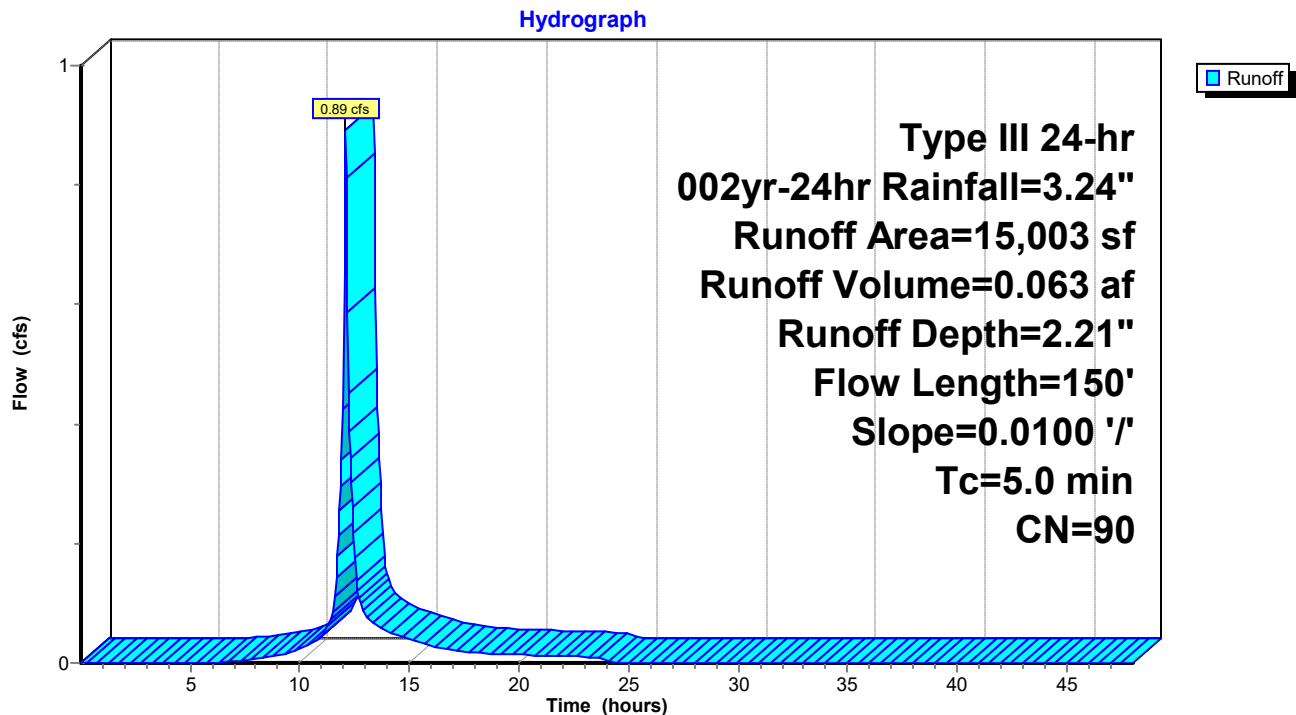
Runoff = 0.89 cfs @ 12.07 hrs, Volume= 0.063 af, Depth= 2.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-48.01 hrs, dt= 0.05 hrs
Type III 24-hr 002yr-24hr Rainfall=3.24"

Area (sf)	CN	Description
1,010	98	Roofs, HSG C
5,108	74	>75% Grass cover, Good, HSG C
8,885	98	Paved parking, HSG C
15,003	90	Weighted Average
5,108		34.05% Pervious Area
9,895		65.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow, Sheet Flow
					Smooth surfaces n= 0.011 P2= 3.24"
0.4	50	0.0100	2.03		Shallow Concentrated Flow, Shallow Conc Flow
					Paved Kv= 20.3 fps
2.0	150	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 7S: PR SITE



TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 010yr-24hr Rainfall=5.11"

Existing-Proposed Conditions

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Page 7

Time span=0.01-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 7S: PR SITE

Runoff Area=15,003 sf 65.95% Impervious Runoff Depth=3.98"

Flow Length=150' Slope=0.0100 '/' Tc=5.0 min CN=90 Runoff=1.57 cfs 0.114 af

Total Runoff Area = 0.344 ac Runoff Volume = 0.114 af Average Runoff Depth = 3.98"
34.05% Pervious = 0.117 ac 65.95% Impervious = 0.227 ac

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 010yr-24hr Rainfall=5.11"

Existing-Proposed Conditions

Prepared by Fritz Engineering

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Page 8

Summary for Subcatchment 7S: PR SITE

Runoff = 1.57 cfs @ 12.07 hrs, Volume= 0.114 af, Depth= 3.98"

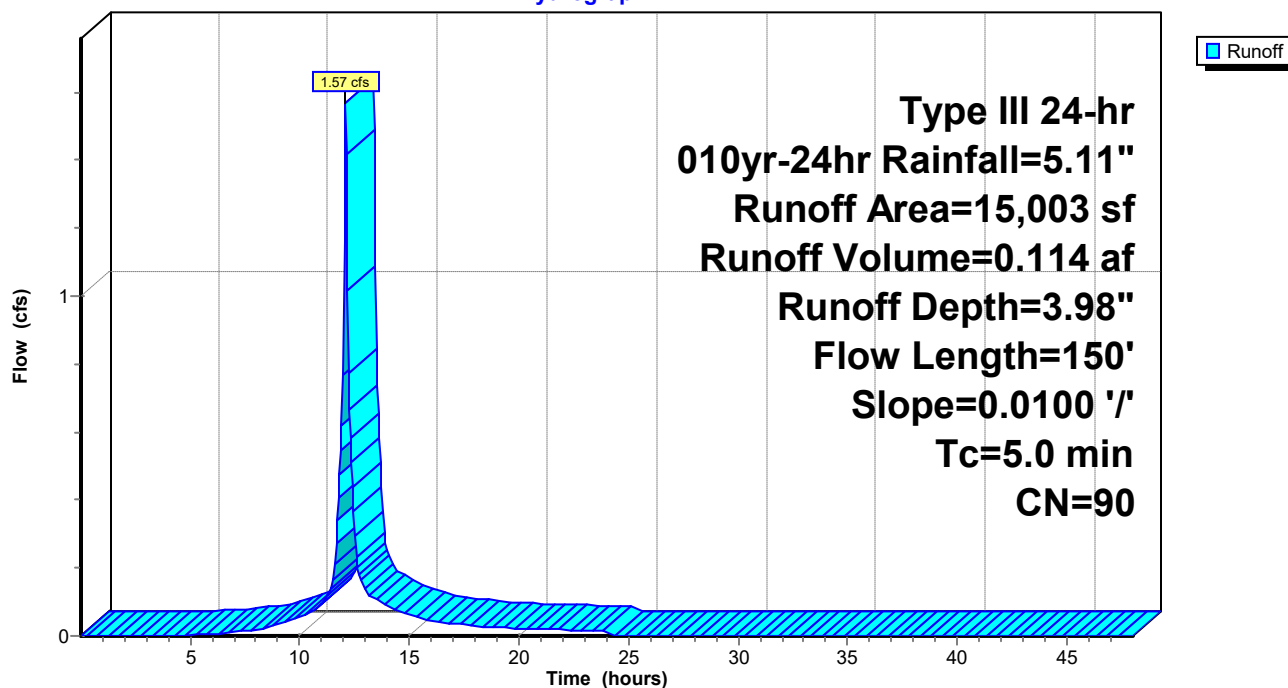
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-48.01 hrs, dt= 0.05 hrs
Type III 24-hr 010yr-24hr Rainfall=5.11"

Area (sf)	CN	Description
1,010	98	Roofs, HSG C
5,108	74	>75% Grass cover, Good, HSG C
8,885	98	Paved parking, HSG C
15,003	90	Weighted Average
5,108		34.05% Pervious Area
9,895		65.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow, Sheet Flow
					Smooth surfaces n= 0.011 P2= 3.24"
0.4	50	0.0100	2.03		Shallow Concentrated Flow, Shallow Conc Flow
					Paved Kv= 20.3 fps
2.0	150	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 7S: PR SITE

Hydrograph



TAKE 5 BIDDEFORD - HYDROLOGIC MODEL
Type III 24-hr 025yr-24hr Rainfall=6.28"

Existing-Proposed Conditions

Prepared by Fritz Engineering

Printed 12/6/2022

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Page 9

Time span=0.01-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 7S: PR SITE

Runoff Area=15,003 sf 65.95% Impervious Runoff Depth=5.12"
Flow Length=150' Slope=0.0100 '/' Tc=5.0 min CN=90 Runoff=1.99 cfs 0.147 af

Total Runoff Area = 0.344 ac Runoff Volume = 0.147 af Average Runoff Depth = 5.12"
34.05% Pervious = 0.117 ac 65.95% Impervious = 0.227 ac

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 025yr-24hr Rainfall=6.28"

Existing-Proposed Conditions

Prepared by Fritz Engineering

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Page 10

Summary for Subcatchment 7S: PR SITE

Runoff = 1.99 cfs @ 12.07 hrs, Volume= 0.147 af, Depth= 5.12"

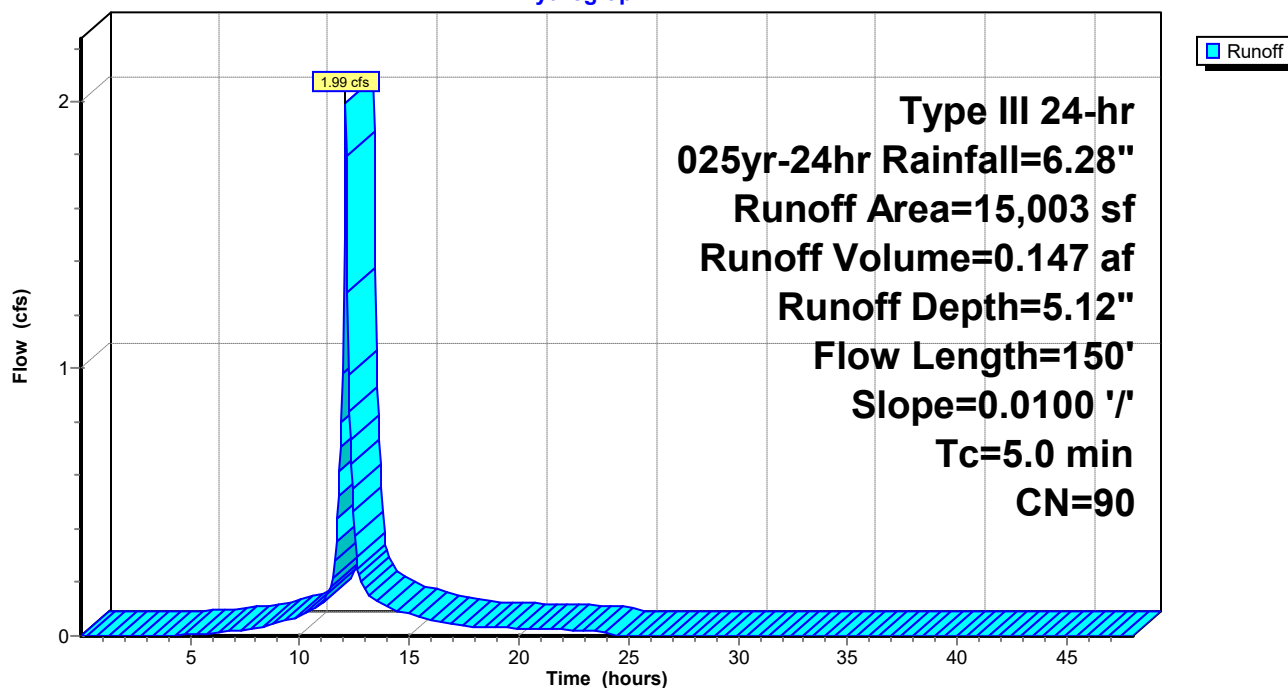
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-48.01 hrs, dt= 0.05 hrs
Type III 24-hr 025yr-24hr Rainfall=6.28"

Area (sf)	CN	Description
1,010	98	Roofs, HSG C
5,108	74	>75% Grass cover, Good, HSG C
8,885	98	Paved parking, HSG C
15,003	90	Weighted Average
5,108		34.05% Pervious Area
9,895		65.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow, Sheet Flow
					Smooth surfaces n= 0.011 P2= 3.24"
0.4	50	0.0100	2.03		Shallow Concentrated Flow, Shallow Conc Flow
					Paved Kv= 20.3 fps
2.0	150	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 7S: PR SITE

Hydrograph



TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 100yr-24hr Rainfall=8.07"

Existing-Proposed Conditions

Prepared by Fritz Engineering

Printed 12/6/2022

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Page 11

Time span=0.01-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 7S: PR SITE

Runoff Area=15,003 sf 65.95% Impervious Runoff Depth=6.87"

Flow Length=150' Slope=0.0100 '/' Tc=5.0 min CN=90 Runoff=2.63 cfs 0.197 af

Total Runoff Area = 0.344 ac Runoff Volume = 0.197 af Average Runoff Depth = 6.87"
34.05% Pervious = 0.117 ac 65.95% Impervious = 0.227 ac

TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Type III 24-hr 100yr-24hr Rainfall=8.07"

Existing-Proposed Conditions

Prepared by Fritz Engineering

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Page 12

Summary for Subcatchment 7S: PR SITE

Runoff = 2.63 cfs @ 12.07 hrs, Volume= 0.197 af, Depth= 6.87"

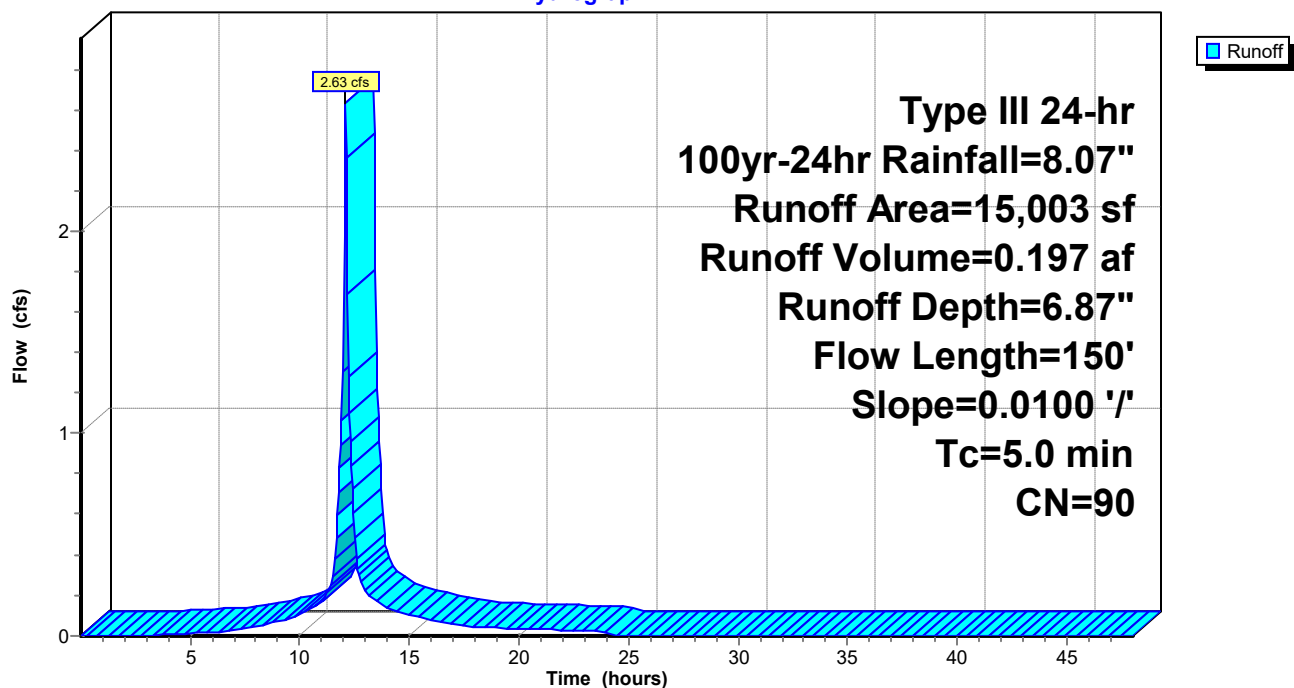
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.01-48.01 hrs, dt= 0.05 hrs
Type III 24-hr 100yr-24hr Rainfall=8.07"

Area (sf)	CN	Description
1,010	98	Roofs, HSG C
5,108	74	>75% Grass cover, Good, HSG C
8,885	98	Paved parking, HSG C
15,003	90	Weighted Average
5,108		34.05% Pervious Area
9,895		65.95% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.6	100	0.0100	1.05		Sheet Flow, Sheet Flow
					Smooth surfaces n= 0.011 P2= 3.24"
0.4	50	0.0100	2.03		Shallow Concentrated Flow, Shallow Conc Flow
					Paved Kv= 20.3 fps
2.0	150	Total, Increased to minimum Tc = 5.0 min			

Subcatchment 7S: PR SITE

Hydrograph



TAKE 5 BIDDEFORD - HYDROLOGIC MODEL

Existing-Proposed Conditions

Multi-Event Tables

Prepared by Fritz Engineering

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Page 13

Events for Subcatchment 7S: PR SITE

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
002yr-24hr	3.24	0.89	0.063	2.21
010yr-24hr	5.11	1.57	0.114	3.98
025yr-24hr	6.28	1.99	0.147	5.12
100yr-24hr	8.07	2.63	0.197	6.87

APPENDIX F – DESIGN SUPPORT DATA



NOAA Atlas 14, Volume 10, Version 3
Location name: City of Biddeford, Maine, USA*
Latitude: 43.4803°, Longitude: -70.4786°
Elevation: 158.38 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sandra Pavlovic, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Orlan Wilhite

NOAA, National Weather Service, Silver Spring, Maryland

[PF tabular](#) | [PF graphical](#) | [Maps & aerals](#)

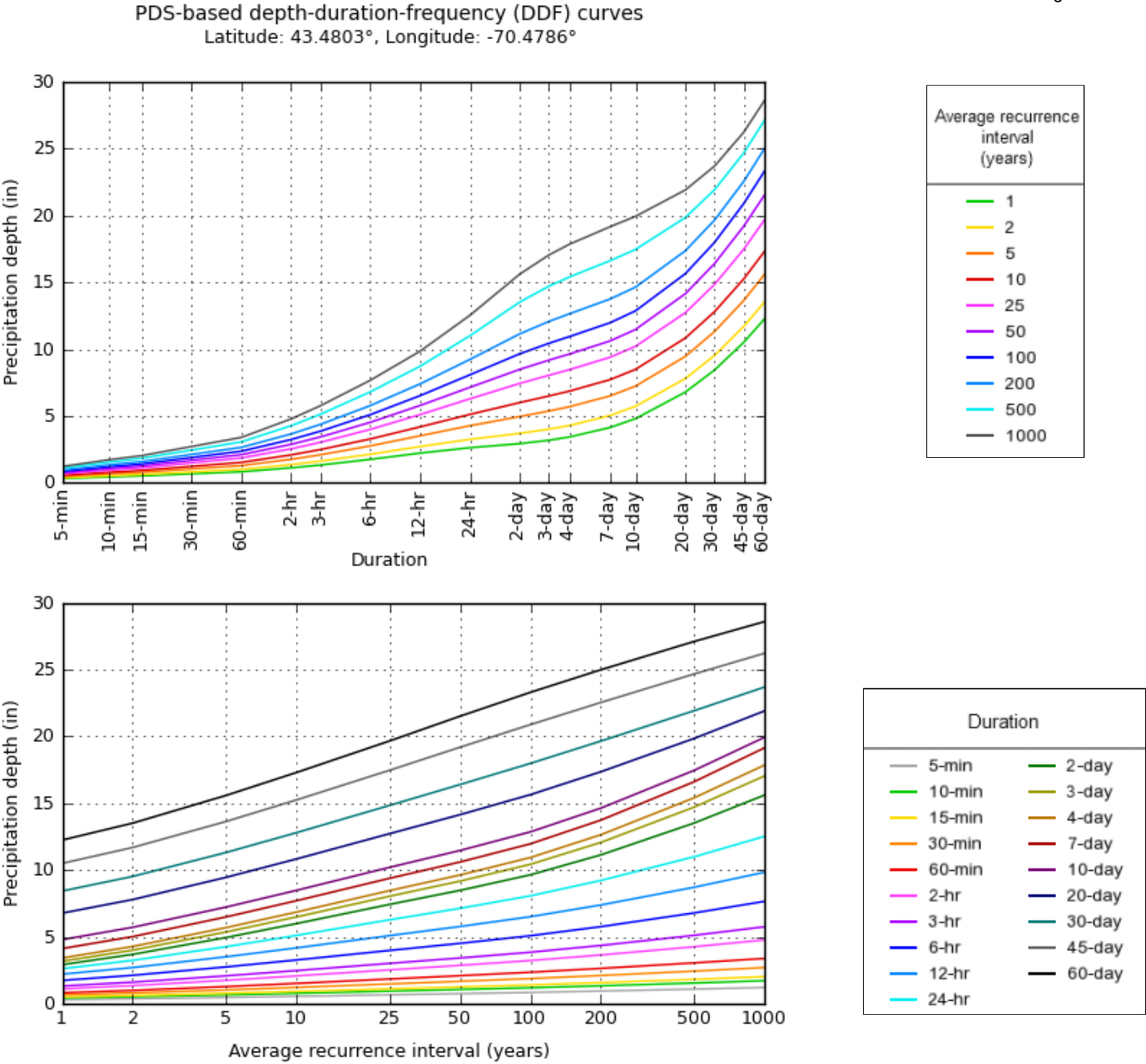
PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.307 (0.237-0.397)	0.368 (0.284-0.477)	0.468 (0.360-0.609)	0.552 (0.422-0.722)	0.667 (0.495-0.907)	0.753 (0.548-1.04)	0.844 (0.597-1.21)	0.946 (0.635-1.38)	1.09 (0.708-1.65)	1.21 (0.769-1.86)
10-min	0.435 (0.335-0.563)	0.522 (0.402-0.676)	0.664 (0.510-0.864)	0.782 (0.598-1.02)	0.945 (0.701-1.29)	1.07 (0.776-1.48)	1.20 (0.846-1.71)	1.34 (0.900-1.96)	1.55 (1.00-2.33)	1.72 (1.09-2.64)
15-min	0.512 (0.395-0.662)	0.614 (0.473-0.796)	0.781 (0.600-1.01)	0.920 (0.703-1.20)	1.11 (0.824-1.51)	1.26 (0.913-1.74)	1.41 (0.996-2.02)	1.58 (1.06-2.30)	1.82 (1.18-2.75)	2.02 (1.28-3.10)
30-min	0.665 (0.513-0.861)	0.804 (0.620-1.04)	1.03 (0.793-1.34)	1.22 (0.933-1.60)	1.48 (1.10-2.01)	1.68 (1.22-2.32)	1.88 (1.33-2.69)	2.11 (1.42-3.08)	2.44 (1.58-3.67)	2.71 (1.71-4.15)
60-min	0.818 (0.631-1.06)	0.994 (0.766-1.29)	1.28 (0.985-1.67)	1.52 (1.16-1.99)	1.85 (1.37-2.51)	2.10 (1.52-2.90)	2.36 (1.67-3.37)	2.64 (1.78-3.86)	3.05 (1.98-4.60)	3.39 (2.14-5.20)
2-hr	1.11 (0.862-1.43)	1.35 (1.05-1.75)	1.75 (1.35-2.26)	2.08 (1.60-2.70)	2.53 (1.89-3.43)	2.87 (2.10-3.97)	3.23 (2.30-4.63)	3.65 (2.46-5.30)	4.26 (2.77-6.38)	4.78 (3.03-7.28)
3-hr	1.32 (1.03-1.70)	1.61 (1.25-2.07)	2.09 (1.62-2.69)	2.48 (1.91-3.21)	3.02 (2.26-4.08)	3.42 (2.51-4.72)	3.85 (2.76-5.51)	4.36 (2.94-6.31)	5.12 (3.33-7.63)	5.76 (3.66-8.74)
6-hr	1.74 (1.36-2.23)	2.13 (1.66-2.72)	2.75 (2.14-3.53)	3.27 (2.53-4.21)	3.99 (3.00-5.36)	4.52 (3.33-6.20)	5.09 (3.66-7.25)	5.77 (3.91-8.29)	6.79 (4.43-10.1)	7.66 (4.89-11.5)
12-hr	2.21 (1.74-2.81)	2.71 (2.12-3.44)	3.51 (2.74-4.48)	4.18 (3.25-5.35)	5.10 (3.85-6.82)	5.78 (4.28-7.89)	6.51 (4.71-9.22)	7.39 (5.02-10.6)	8.71 (5.70-12.8)	9.84 (6.30-14.7)
24-hr	2.62 (2.07-3.31)	3.24 (2.56-4.10)	4.26 (3.35-5.41)	5.11 (3.99-6.51)	6.28 (4.77-8.37)	7.14 (5.33-9.72)	8.07 (5.89-11.4)	9.23 (6.29-13.1)	11.0 (7.22-16.1)	12.5 (8.04-18.6)
2-day	2.92 (2.32-3.67)	3.69 (2.93-4.64)	4.95 (3.91-6.25)	6.00 (4.71-7.60)	7.43 (5.68-9.89)	8.48 (6.38-11.5)	9.65 (7.11-13.7)	11.1 (7.61-15.7)	13.5 (8.89-19.7)	15.6 (10.1-23.1)
3-day	3.18 (2.53-3.98)	4.01 (3.18-5.02)	5.37 (4.25-6.75)	6.49 (5.11-8.20)	8.04 (6.17-10.7)	9.17 (6.93-12.5)	10.4 (7.73-14.8)	12.1 (8.26-17.0)	14.7 (9.69-21.3)	17.0 (11.0-25.1)
4-day	3.42 (2.73-4.28)	4.29 (3.41-5.36)	5.69 (4.52-7.14)	6.86 (5.41-8.64)	8.46 (6.51-11.2)	9.63 (7.29-13.1)	10.9 (8.12-15.5)	12.6 (8.67-17.7)	15.4 (10.2-22.3)	17.9 (11.5-26.2)
7-day	4.13 (3.30-5.14)	5.02 (4.02-6.26)	6.49 (5.17-8.11)	7.71 (6.11-9.67)	9.38 (7.24-12.3)	10.6 (8.05-14.3)	12.0 (8.90-16.8)	13.7 (9.45-19.2)	16.6 (11.0-23.9)	19.2 (12.4-27.9)
10-day	4.80 (3.85-5.95)	5.72 (4.59-7.10)	7.23 (5.78-9.00)	8.48 (6.74-10.6)	10.2 (7.88-13.3)	11.5 (8.70-15.3)	12.9 (9.54-17.9)	14.6 (10.1-20.3)	17.5 (11.6-25.0)	19.9 (12.9-29.0)
20-day	6.78 (5.47-8.37)	7.80 (6.28-9.63)	9.46 (7.59-11.7)	10.8 (8.65-13.5)	12.7 (9.83-16.4)	14.1 (10.7-18.6)	15.6 (11.5-21.2)	17.4 (12.0-23.9)	19.9 (13.2-28.2)	21.9 (14.3-31.6)
30-day	8.44 (6.83-10.4)	9.53 (7.70-11.7)	11.3 (9.11-14.0)	12.8 (10.2-15.9)	14.8 (11.5-19.0)	16.4 (12.4-21.3)	18.0 (13.1-24.1)	19.7 (13.7-27.0)	21.9 (14.7-31.0)	23.7 (15.4-34.1)
45-day	10.5 (8.53-12.9)	11.7 (9.48-14.4)	13.6 (11.0-16.8)	15.3 (12.2-18.9)	17.5 (13.5-22.2)	19.2 (14.5-24.8)	20.9 (15.2-27.6)	22.5 (15.8-30.8)	24.7 (16.6-34.7)	26.2 (17.1-37.6)
60-day	12.3 (9.96-15.0)	13.5 (11.0-16.6)	15.6 (12.6-19.1)	17.3 (13.9-21.3)	19.7 (15.2-24.9)	21.5 (16.3-27.7)	23.3 (17.0-30.7)	25.0 (17.5-34.0)	27.1 (18.2-38.0)	28.6 (18.7-40.8)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

[Back to Top](#)

PF graphical



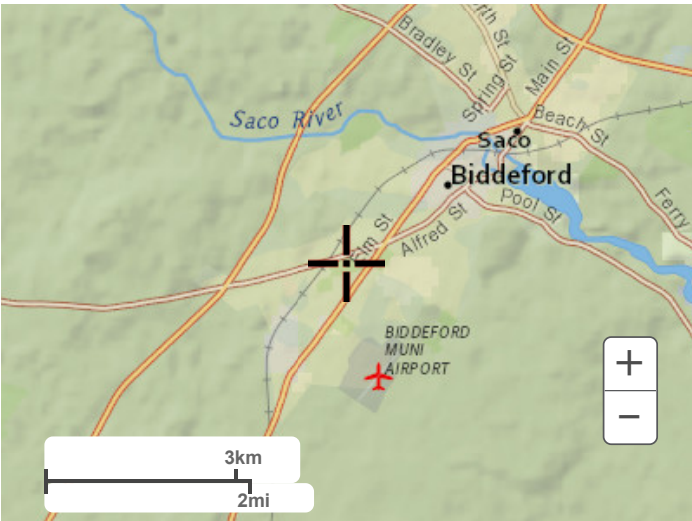
NOAA Atlas 14, Volume 10, Version 3

Created (GMT): Tue Dec 6 14:44:03 2022

[Back to Top](#)

Maps & aerals

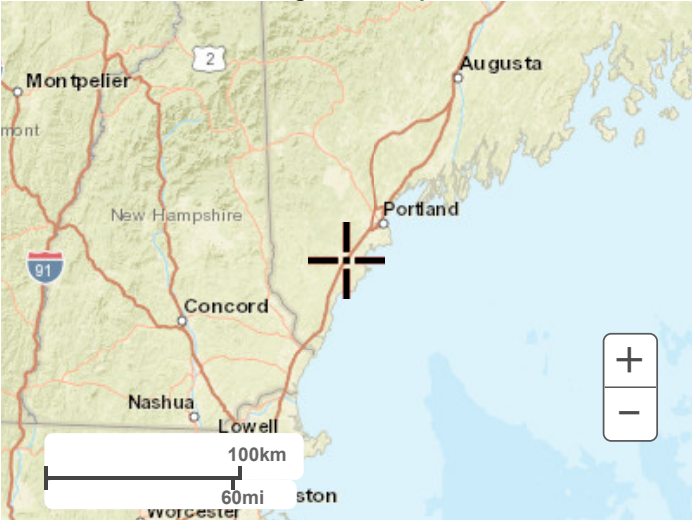
Small scale terrain



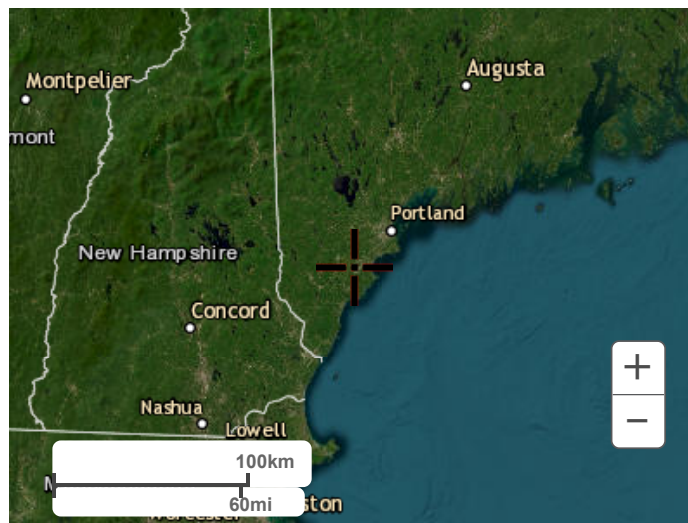
Large scale terrain



Large scale map



Large scale aerial

[Back to Top](#)

[US Department of Commerce](#)
[National Oceanic and Atmospheric Administration](#)
[National Weather Service](#)
[National Water Center](#)
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

[Disclaimer](#)

Samntha S Mulkern
363 Alfred Street
Biddeford Maine 04005

As a resident and tax payer of Biddeford Maine I would like to voice the following concerns about the building propositions wanted for the B2 location of 394 Alfred Street.

I have reviewed the blueprints for the purposed

Take 5 Oil center and believe that it is not a proper business for this location.

Environmental concerns.

Safety Concerns for the storage of the oil-Fire from the oils used

Idling cars and exhaust fumes idling-

Traffic-It will only add to the aggressive traffic in the intersection much more accidents will

Pedestrians,Strollers, cyclinsist and thousands of car will not benefit-Cemetery is a popular outdoor landmark and having another oil change business dosent make sense on an economic or community development level!

After researching I found that this business is an investment company an LLC and I believe that investment wisethis lot could be better utilized with an accommodating food/beverage establishment. This isnot a Maine business nor are the investors even in state.

Having a food/beverage operation is the best option.

Another Oil Change shop is not going to help our community only pollute it!

Is the town able to see how dangerous this could be?

Here are the 2 other competitors who are within 1 mile of this plan.

Prompto Oil

392 Elm St

Jiffy Lube

460 Alfred Road

Please take this letter as a formal complant and disapproval for this plan.

Thank you for your time!

Samantha Mulkern

January 25, 2023

Gregory Mitchell, Planner
Roby Fecteau, Code Enforcement
Biddeford, Maine

HAND DELIVERED 1/25/23

CC.

<u>Patoine, Larry</u>	Chair-Regular Member
<u>Angers, Roch</u>	Regular Member
<u>Tarpey, Sean</u>	Regular Member
<u>Plotkin, Alexa</u>	Regular Member
<u>Cantara, Michael</u>	Regular Member
<u>Deschambault, Susan</u>	Associate Member
<u>Beaudette, Stephen</u>	

To Whom it may concern:

:I am with Prompto 10 Minute Oil Change. I want to thank Biddeford, it's representatives and the residents for the many years of support they have given us. We have benefited greatly from being in Biddeford.

Many years ago, the intersection known as Five Points was changed to improve AM and PM traffic. Prompto made many changes to our site to work with the MDOT and Biddeford. Our immediate abutters made changes as well so that now are 'Q' lane goes through McDonalds parking lot.

I have reviewed the Site Plan as offered by Take 5. I think the Planning Department's assessment of changes to that site plan are correct. My larger concern is the building. While the engineers may be licensed in Maine, they don't seem to have addressed Maine DEP and OSHA regulations as to Secondary Oil Containment, Vehicle Fumes and the Safety of an Employee who is 100% under a vehicle with no means of escape incase of fire, etc. It is not my intent to interfere with any new vendor coming to market, however, both Prompto, Jiffy Lube, Mr. Quick's and others do follow regulations and common-sense safety.

I would hope that the Engineering Company representing Take 5 would present Biddeford with the AST Above Ground Storage),

License, SPCC, (Spill Prevent Control and Countermeasure filings), and other regulatory filings as required by OSHA, the Maine DEP and the State Fire Marshals office.

I have enclosed their building plan as outlined in their application, however with my notes.

- The Blue Circle notes on the Plan the Basement Employee is in a trench, 100% covered by a car, (I added a car to the other pit to demonstrate the issue).
- The Red Letters note Oil Storage areas that under OSHA/DEP rules may require secondary containment.
- My concerns about and entrance on Alfred Street (Rt 111) and traffic on the site were addressed by the Planning Department.

I apologize for not being able to make the Planning Board Meeting. I leave the decision on the site plan and the building to the capable hands of Biddeford City Employees. Please feel free to contact me in reference to this matter.

Respectfully,

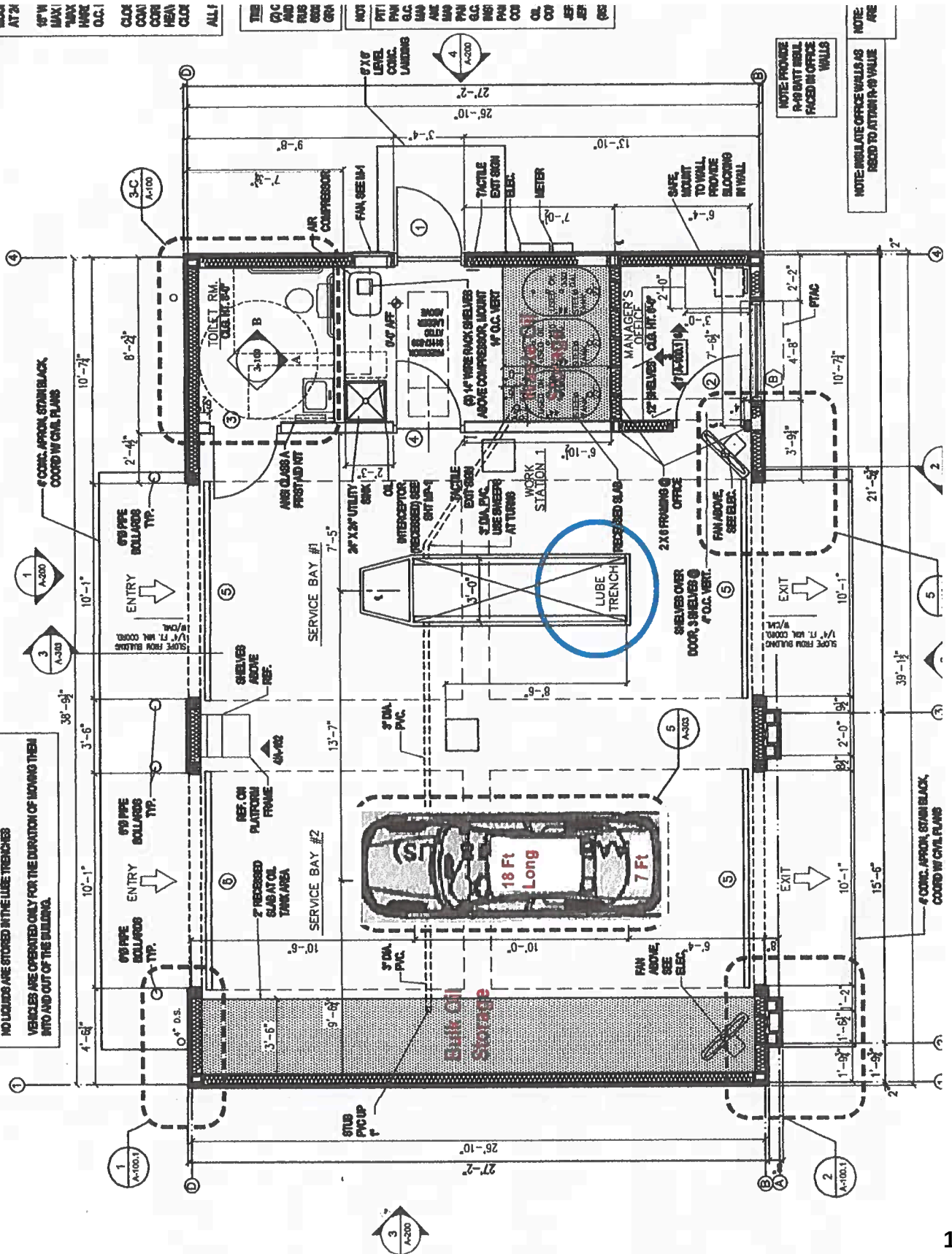
Kevin A. King

Kevin A. King
Operations Manager
kevink@promptoiloil.com
Cell 207-318-7568

Exhibit A – Building Layout – Biddeford Take 5

Take 5 in Biddeford, Maine

OPERATIONAL NOTES:
 CLASS 1 LIQUIDS ARE NOT STORED IN TAKE 5 BUILDINGS.
 CLASS 2B LIQUID (MOTOR OIL) IS STORED IN THE BACK ROOM AREA WHICH IS VENTILATED AS REQUIRED. SEE MECHANICAL SHEETS.
 NO LIQUIDS ARE STORED IN THE LUBE TRENCHES.
 VEHICLES ARE OPERATED ONLY FOR THE DURATION OF MOVING THEM INTO AND OUT OF THE BUILDING.

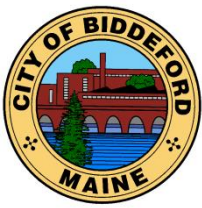


Whitten, Nan

From: Mary Wratten <marylibertywratten@gmail.com>
Sent: Thursday, January 26, 2023 12:35 PM
To: Whitten, Nan
Subject: Meeting date

EXTERNAL: This email originated from outside of the City of Biddeford email system. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Could you pls tell me when the new meeting. For the planning at 2023.05 plan review. I [watched.it](#) via zoom last night I have major concerns for this project. I am not in favor. of this several reasons why 1. It proves risk to me medical issues being the air emissions and smell such as fumes and exhaust from cars. I am a senior that has COPD and asthma and take an inhaler a few times a day. 2. This project is too close to my house and property which would effect the air such as pollution and water and my sewage. I have no fence on this side of my house. Several trees on the side I had removed on that side. This project would affect an underline pipe as well under my porch. 2. There is no room for cars to exit without more room. 3. This project would effect traffic and people walking through the area. 3. The boundaries of my house are affects as well as my privacy. 4. In my back yard I have garden beds which would be affected due to soil and oil fumes as well as my sewage and water. fumes would be affected. I would appreciate hearing from you when the next meeting would be held. Sincerely. Mary wratten. Owner at 363 Alfred St. Biddeford me. 2074630632.
marylibertywratten@gmail.com



CITY OF BIDDEFORD

Planning and Development Department

Eric Freeman
Assistant City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
eric.freeman@biddefordmaine.org

PLANNING BOARD MEMO

TO: Larry Patoine, Chair & Members of the Biddeford Planning Board

FROM: Eric Freeman, Assistant City Planner

DATE: April 12th, 2023

RE: **University of New England Institutional Master Plan**

I. BACKGROUND:

The University of New England has developed a new “Institutional Zone Master Plan” as required by the City of Biddeford’s Land Development Regulations (Institutional Zone (IN). Art. V, Sec 10, E). This five-year Master Plan will guide growth, investment and development at the University’s campus on Hills Beach Road through 2027. The Master Plan focuses primarily on building renovations and expansions, improvements to pedestrian mobility and changes to campus-wide signage.

As part of the development of the “Institutional Zone Master Plan” the University of New England conducted assessments of wetlands, vernal pools, wildlife, archaeological resources, and shore land impacts.

The assessment concluded that the majority of development included in the scope of the 2023-2027 Institutional Master Plan is occurring in areas that have already been impacted by development or have previously been screened by the Maine DEP as part of the Site Location of Development Act permit process. Since the 2023-2027 Institutional Master Plan is almost entirely focused building expansions and infill of the existing campus, no additional significant impact to wetlands or critical resources are anticipated as a result of the Master Plan.

A traffic analysis was also conducted as part of the Institutional Master Plan. The analysis found no notable high-crash locations within the study area and that no significant traffic impacts would be anticipated as part of the Institutional Master Plan. Several factors including relatively flat student enrollment and a shift to remote learning impacted the results of this study. The University has also included its parking and transportation demand management plan as part of its Master Plan.

It is the University’s ambition to gradually transform the Biddeford campus into a “walking campus” that is safe for both pedestrians, bicyclists and motorists. The University intends to continue the dialogue with its immediate neighbors, as well as with Biddeford City officials and other stakeholders in the community to discuss any ongoing vehicular/pedestrian safety issues that might arise.

II. FINDINGS OF FACT

	<u>SUBJECT</u>	<u>INFORMATION</u>
1.	Applicant / Property Owner	Alan Thibaut - University of New England
2.	Owner	University of New England 11 Hills Beach Rd. Biddeford, ME 04005 207-602-2253
3.	Project Location	11 Hills Beach Rd. Biddeford, ME 04005
4.	Map/Lot	Multiple
5.	Size of Lot	580 Acres
6.	City Approvals Required	Institutional Master Plan Approval
7.	Existing Zoning	Institutional (IN)
8.	Overlay Zoning	N/A
9.	Existing Use	Institutional
10.	Limits of Disturbance	N/A
11.	New private or public road?	No
12.	Proposed Use	Institutional
13.	Uses in the Vicinity	Single-family residential, Resource Protection
14.	Water Supply	Public water
15.	Sewerage Disposal	Private septic
16.	Solid Waste Disposal	Private Hauler
17.	Fire Protection	City of Biddeford
18.	Ownership of Road	Public road , Private Road
19.	Waivers Needed/Requested	None
20.	Waivers Granted	None
21.	Fees Paid (LDR Attachment A)	All fees paid
22.	Traffic Movement Permit Required	Yes

III. CONCEPTUAL DEVELOPMENT PROGRAM

The Institutional Master Plan outlines a series of projects identified as priorities for investment and University's continued ability to grow and meet the needs of its students. The 2023-2027 Master Plan focuses almost exclusively on building additions and renovations within the existing campus environment. Additionally, the Conceptual Development program identifies changes to internal pedestrian circulation, landscaping, athletic facilities and signage to improve the campus experience.

As implied by the name, the CDP is conceptual only and represents the University's best efforts at outlining a direction for the physical development of the Biddeford campus, and may well require adjustment over the next several years as the University's needs continue to evolve. In addition, it is unlikely that each and every potential building and facility identified in this plan will actually be developed within the five-year time frame.

Housing:

- H1: New Residence Hall (~100,000 sq. ft.)

Academics:

- A1: Morgane Hall Addition
- Marine Science Patio Enclosure
- Marine Science Addition
- Creative and Fine Arts Addition
- Marcil Hall Addition

Support:

- S1: Storage Facility
- S2: Campus Center Additions and Renovations
- Waterfront Access for Recreation
- Waterfront Access for Research
- Petts Center Addition
- Pickus Center Addition
- Wastewater Treatment Facility Addition

Athletics:

- F1: Track / Field
- F2: Athletic Storage
- F3: Tennis Courts
- F4: Athletic Field
- F5: Athletic Storage

Each of these locations are identified in further detail Campus Development Program.

IV. NEIGHBORHOOD AND COMMUNITY ENGAGEMENT

In addition to regularly scheduled University events and lectures open to the public, the University of New England engaged with leaders from the Hills Beach Association to discuss goals and objectives for the evolution of the campus. In addition, an annual Friends and Neighbors reception is held on campus every summer to gather and share information with our neighbors in the coastal area.

V. SAMPLE MOTIONS

I. Motion to APPROVE the Preliminary 2023-2027 Institutional Master Plan as presented

II. Motion to APPROVE the Preliminary 2023-2027 Institutional Master Plan, with the following amendments;

- A. _____.
- B. _____.
- C. _____.
- D. _____.

III. Motion to POSTPONE Board action on the 2023-2027 Institutional Master Plan, to _____ for the following reasons:

- A. _____.
- B. _____.
- C. _____.
- D. _____.



Biddeford Campus
 11 Hills Beach Road
 Biddeford, ME 04005
 (207) 283-0171 T

Portland Campus
 716 Stevens Avenue
 Portland, ME 04103
 (207) 797-7261 T

March 1, 2023

Carmen J. Morris, City Clerk
 City of Biddeford
 P.O. Box 586
 Biddeford, Maine, 04005

RE: Review of University of New England Master Plan Submission

Dear Carmen,

The University is pleased to submit an application to the Planning Board to review the *University of New England Master Plan Submission 2023-2027*.

As part of the application is a binder of documents in support of the Institutional Zoning Master Plan requirements.

We look forward to reviewing this with the Planning Board soon.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Thibeault", written over a large, stylized flourish.

Alan Thibeault,
 Vice President for University Operations

Cc: David Galbraith, City Planner
 William Emhiser, City Councilor, Ward 1
 Betsy Martin, Hills Beach Association
 Andrew Phillippe, UNE Director for Campus Planning
 Tom Saucier, Site Design Associates

Revised: May 17, 2022

**City of Biddeford – Planning Department****Planning Board Application**

P.O. Box 586, 205 Main Street Biddeford, Maine 04005

207-284-9115

Type of Application:☐ Shoreland Zoning Permit☐ Site Plan Review☐ Extraction☐ Conditional Use Permit☐ Subdivision☐ Private Way☒ Other: Institutional Zone - Master Plan Submission**Applicant Information:**Name: Alan ThibeaultMailing Address: Univ. of New England, 11 Hills Beach Road, Biddeford, ME 04005Telephone: 207-602-2253Email: athibeault@une.edu

What is your legal interest in the property?

☒ Owner ☐ Potential Buyer with Contract ☐ Lease/Rental Agreement**Owner's Information:**Name: University of New EnglandMailing Address: 11 Hills Beach Road, Biddeford, ME 04005Telephone: 207-602-2253Email: athibeault@une.edu**Agent's Information:**

Name: _____

Mailing Address: _____

Telephone: _____

Email: _____

Engineer/Surveyor's Information:

Name: _____

Mailing Address: _____

Telephone: _____

Email: _____

Project Location and Lot Information:Street Address: 11 Hills Beach Rd Drainage Watershed: _____Tax Map: variesLot: numerousCurrent Zoning: IN

Shoreland Zoning: _____

Size of Lot: 580 (x) acres () s.f.

Lot Frontage: _____

Existing Use of Property: Institutional**Property currently serviced by:**☒ City Road ☐ Public Sewer ☒ Public Water ☐ Public Trash☒ Private Road ☒ Septic System ☐ Private Well ☒ Private Hauler**Slope Conditions in Area of Construction (if applicable):**☐ Flat (0-3% slope) ☐ Rolling (3-8% slope) ☐ Hilly (8-15% slope) ☐ Steep (15%+ Slope)Are there any wetlands or waterbodies on the site? ☒ (Yes) ☐ (No) if yes attach informationIs the project within the 100-year floodplain? ☐ (Yes) ☒ (No) if yes attach informationDo you plan to bring fill onto the lot? ☐ (Yes) ☒ (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

Intituional/Higher Education**Property to be Serviced by:**

☒ City Road ☐ Public Sewer ☒ Public Water ☐ Public Trash
☒ Private Road ☒ Septic System ☐ Private Well ☒ Private Hauler

Limits of Disturbance: NA () acres () s.f.Net change in impervious cover: NA () acres () s.f.Is this project part of a larger project? ☐ (Yes) ☒ (No)Is the project proposing a new Private or Public Road? ☐ (Yes, Private) ☐ (Yes, Public) ☒ (No)Is this project within the Urbanized Area/MS4 (see [City Drainage Map](#)) ☐ (Yes) ☐ (No)Is the project proposing any Stormwater facilities/BMPs? ☐ (Yes) ☒ (No)Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)**☒ If in a Shoreland Zone:**Percent of residential lot coverage (Max 20%): variesPercent of structure expansion (Max 30%): NA☐ If Subdivision Review, number of lots proposed: _____☐ If a Private Way is proposed, number of lots served: _____**If Site Plan Review, you must provide the following information:**

Total new square feet footprint of structure: _____

Total new square feet paving/parking: _____

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

A. Letters of Approval

☐ Fire Department – Contact Chief or Deputy Chief – 282-9986☒ Ability to Serve for Water Service – Maine Water – 282-1543☐ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118☐ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127

B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.

C. Photographs of Site.

D. Architectural renderings/drawings of proposed buildings, as required.

E. Engineering Plans, as required.

F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: __ (Yes) X (No)

- If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.

Signature of Applicant: _____

Date 02/27/23

Signature of Property Owner: _____

Date _____

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- A) PDF OF SIGNED APPLICATION
- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
 - Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVIDUAL DRAWING NAME.pdf'
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)
 - All drawings & CAD reference files must be to-scale and within the following coordinate systems:
 - MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
- B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

UNIVERSITY OF NEW ENGLAND
INSTITUTIONAL ZONE
MASTER PLAN SUBMISSION
2023-2027

Biddeford, Maine

February 27, 2023

Table of Contents

Section

- 0 Introduction
- 1 Mission Statement and Institutional Objectives
- 2 Existing Physical Conditions
- 3 Programs and Activities
- 4 Educational, Research, Residential, Support and Athletic Facilities
- 5 Parking and Traffic
- 6 Water and Sewer Services
- 7 Municipal and Community Services
- 8 Neighborhood Impact
- 9 Community Outreach
- 10 Conceptual Development Program

Appendix A Development and Design Standards

Section

- 1 Landscaping Design Standards
- 2 Exterior Lighting Standards
- 3 Signage Standards
- 4 Pedestrian and Bicycle Facilities
- 5 Noise
- 6 Architectural Design and Details
- 7 Protection of Scenic Views

Appendix B Plans and Drawings (Full Size)

Institutional Zone Ordinance

0 -Introduction

The University of New England is submitting the following “Institutional Zone Master Plan” as required by the City of Biddeford’s Land Development Regulations, Institutional Zone (IN) Art. V, Sec 10, E. A copy of this zoning ordinance is included at the rear of the Appendix of this the submission.

For the ease of the reader, each item in the Institutional Zone Master Plan Submission requirements appears in italics, exactly as it is printed in the actual zoning ordinance, and is followed by the University’s response. This format has been chosen to allow the reader to know what the requirements are as they read each section of the report. All plans and drawings are located at the rear of each relevant section of the report, in a reduced 11” x 17” format, or a note has been provided to direct the reader to the appropriate location of the relevant plan or drawing. Full sized plans are located in Appendix B.

The information presented in this five-year development strategy plan is conceptual only and represents the University’s best efforts at outlining a direction for the physical development of the Biddeford campus, and may well require adjustment over the next several years as the University’s needs continue to evolve. In addition, it is unlikely that each and every potential building and facility identified in the Campus Master Plan – Five Year Development Strategy plan will actually be developed within the five year time frame. The actual implementation of the building program will be driven by ongoing and continuously developing institutional needs and financial resources to initiate each individual building project.

1-Mission Statement and Institutional Objectives

(a) *Present UNE Mission Statement*

Mission, Vision and Core Values

The University of New England is directed by its Mission, Vision Statement and Core Values. These were utilized to create the Strategic Plan 2018-2023, ***Our World, Our Future.***

Mission

The University of New England prepares students to thrive in a rapidly changing world and, in so doing, to improve the health of people, communities, and our planet.

Vision

We will realize this mission by committing to a distinctive approach to education that will make UNE among the most experientially driven institutions of higher education in the nation. We will provide teaching and learning that conjoins problem-based and hands-on learning, liberal education, and professional training to immerse students in an educational experience that prepares them with:

- Habits of mind, such as cultural, quantitative, and information literacy, critical thinking, tolerance for ambiguity, and problem solving;
- Discipline-based knowledge in their chosen programs of study; and
- Professional competencies, including emotional intelligence, the ability to collaborate in diverse teams, communicate persuasively, and be a thoughtful leader.

We will be an institution that challenges students to learn broadly, master their professional skills, and ask probing questions. In this way, they will prepare themselves for further study and successful careers, deeply rewarding lives, and meaningful contributions to their communities and the world.

Core Values

We are guided by the following values, essential to the culture of the UNE community.

Student Centeredness - We put the aspirations, needs, and success of our students at the center of all we do. Diversity, Inclusion, Connection We believe the benefits of a richly varied campus community arise not only from the diversity of its people but also from a sense of belonging and the context this creates to explore and celebrate differences in backgrounds, experiences, and perspectives, underpinned by a sense of cultural humility and a commitment to ethical ideals.

Relentless Inquiry - We take nothing for granted and view thoughtful—even uncomfortable—questioning as essential to the pursuit of knowledge, contribution to society, and a life worth living. Our commitment to University-wide academic freedom is fundamental to this value.

Boundary Crossing - Solutions to the complex and varied challenges we face in our personal and professional lives, our communities, and society will not be found in any single discipline, college, physical location, or individual. Thus, our ability to move easily across such boundaries in order to collaborate with colleagues makes us better problem solvers and more likely of success in whatever ventures we undertake.

Learning Everywhere - We believe that teaching and learning should occur beyond traditional classrooms and laboratories—in any place ripe for inquiry and experimentation, including clinics, environmental and field-study sites, online forums, libraries, museums, theaters, and places of civic engagement, among many others.

Progressive Change - We are not afraid to take thoughtful risks in the pursuit of our shared goals.

Stewardship of Our Planet - We recognize that the health of individuals, communities, and the natural environment is essential to the survival of the planet and its inhabitants and to a well-functioning society.

UNE is at an enviable point in our evolution, a point from which we are poised to leap to ever greater heights.

At the center of our new strategic plan, ***Our World, Our Vision***, is a daring and expansive perspective on “health”: **We will establish UNE among the premier providers of education, expertise, and innovation for sustaining the health of our world’s people, communities, and natural environment.**

We are ready. Even a short list of our achievements demonstrates the force that UNE has become:

- We offer an exceptional return on our students’ educational investment. More than 93 percent of UNE undergraduates start a job or enter a graduate program within six months of receiving their diploma. The Brookings Institute ranks us number one among all of Maine’s colleges and universities for our ability to increase students’ career earnings.
- We prepare students to be culturally fluent members of an increasingly global workforce. UNE undergraduates study abroad at five-times the national average, spending semesters at UNE’s very own campus in Tangier, Morocco, as well as at affiliated campuses in Spain, France, and Iceland.

- We are Maine's leading provider of health professionals. Offering our state's only medical school and Northern New England's only dental school, as well as programs in pharmacy, nursing, and a range of other health professions, UNE plays a leading role in meeting the health care needs of underserved communities throughout the Northeast and beyond.
- We are a national leader in interprofessional health care education (IPE). Research clearly demonstrates improved health outcomes when patients are cared for by teams of health care professionals—doctors, nurses, physician assistants, physical therapists, and social workers working side by side. UNE prepares aspiring health professionals for such collaborations by having them learn and work beside other students representing the full range of health professions programs.
- We engage in important research and scholarship. The work of UNE researchers has improved breast cancer detection, led to better understanding of how the Zika virus spreads, demonstrated how dehumanizing speech leads to violence and discrimination, uncovered how psychiatric medications can cause diabetes and bone fractures in children, and even unlocked the secret life of sharks. Our success is demonstrated by 800 percent growth in external funding over the past decade. More importantly, UNE students benefit, too. Just under half of all our undergraduates work with faculty on research projects (compared to 23 percent nationwide).
- We graduate students who possess real world experience. Virtually all UNE students engage in some form of hands-on experiential learning, gaining invaluable disciplinary knowledge and interpersonal skills through internships, clinical rotations, service learning, and countless other opportunities to apply classroom knowledge in community organizations, businesses, government offices, and many other work settings.
- We are committed to fostering a robust marketplace of ideas. In an era when society has found itself increasingly divided along partisan ideological lines, we foster an environment in which the hard conversations essential to a true education still occur, challenging members of our community to reach beyond their intellectual comfort zones. Our Center for Global Humanities, George and Barbara Bush Lecture Series, P.D. Merrill Business Ethics Lecture, and President's Forum, among many other events, offer venues where a diversity of ideas can thrive through civil and respectful discourse.

We are ambitious and restless—an institution that is of the world. Look around, and you will find our students, faculty, and professional staff in places as diverse as Morocco and Iceland, and in clinics and field sites across our nation's cities, villages, forests, and oceans. You will see us learning from experiences in communities representing every form of human difference. These cultural, personal, and geographic connections reflect

the profound respect and concern that the UNE community holds for the health of our world—its people, its communities, and its physical environment. We couple this concern with our nimbleness, flexibility, creativity, and sense of urgency to make UNE a powerful source of innovation for a healthier planet.

We have a strong legacy and a prestigious set of programs in the health sciences. But we are a comprehensive university, and creating a healthier planet requires more than talented health professionals. It requires leaders from all disciplines, including the natural and social sciences, humanities and arts, business, policy and more—bringing their diverse and complementary skills to bear on the most pressing challenges of our world.

We are seizing on our foundational strengths to:

- Expand active and collaborative teaching and learning through pedagogical innovation and enhanced technologies;
- Enhance our commitment to experiential learning;
- Create even more opportunities for students, faculty, and professional staff to work together across academic disciplines and professional programs; and
- Adapt and scale up the solutions we find working on problems in local communities in order to address similar challenges around the globe.

These steps chart a bold new course for UNE:

We will be one of the nation’s top providers of education, expertise, and innovation for sustaining the health of our world’s natural environment, people, and communities.

This broad perspective on health requires us to focus on interactions among individuals, communities, and the environment. Moreover, it demands that we look for solutions to our world’s pressing challenges by drawing knowledge and expertise from many academic disciplines. This means exposing students to discipline-based knowledge, cross disciplinary habits of mind, and professional competencies that are discussed in this strategic plan. With these skills, UNE students will be ready to bring the fullest breadth of understanding and expertise to bear on improving the condition of people, society, and our planet.

Inspired by this vision and guided by this plan, UNE will empower students to anticipate and meet the challenges of this new world and to become active leaders in creating its future.

UNE—for the health of our world.

- (b) *A statement of any anticipated changes in the institution's mission over the next five (5) years.*

There are no anticipated changes to the University's mission over the next five years.

The University is a private, non-profit corporation with recognized tax exempt status under IRS Code Section 501(c)(3), and must abide by the rules of tax exempt status in order to maintain that standing. Accordingly, only those uses permitted by that code would be pursued.

- (c) *The institution's objective with respect to growth and changes over the next five (5) years include:*

1. Provide additional student support facilities and services. This would help to further develop the sense of "Campus Community".
2. Integrating the medical college into an academic healthcare campus in Portland will then allow for the full transformation of the Biddeford Campus as the undergraduate residential campus, allowing for the growth of marine programs, business and entrepreneurship, digital sciences, criminal justice, the arts and others. The spaces vacated by the relocation of the medical college will be transformed, retrofitted and repurposed to support UNE's undergraduate programs that will address critical workforce needs in the state and region.
3. The University of New England will be nationally recognized with programs of excellence and innovation in health professions and the arts and sciences. The University will have well developed centers of excellence in research, and will have integrated educational, research, and science programs that are based on collaborative, interdisciplinary partnerships.
4. Cocurricular programs are central to the mission of the University for educating students and supporting the personal growth of all members of the university community. Athletic programs will achieve demonstrable success enriching the University and aiding in the recruitment, retention and overall satisfaction of the student body.
5. Increase diversity in national and international populations.
6. UNE will have a strong program of service at all levels of our society and be a leader in environmental stewardship.
7. The planning and integration of our academic, residence life and support facilities will be viewed as a model for building interdisciplinary, team based learning and scholarly communities.

See sections 3 and 4 for detailed information on growth projections

2-Existing Physical Conditions

a. A scaled plan at a scale of not more than 1" = 200' showing the location of all existing buildings, structures, athletic fields and facilities, parking, walkways, service areas, and other impervious surfaces and the height of all buildings and structures referenced to the National Geodetic Vertical Datum (NGVD).

Drawings MP-101, Existing Conditions Plan and MP-105, Existing Conditions Plan reflect the information requested under this section. Existing building heights (NGVD) are noted on those plans, which are located at the rear of this section.

b. A scaled plan at the same scale as the existing conditions plan showing the location of all existing utilities, sewer and water systems, and storm water drainage facilities.

Drawing MP-102, Existing Utility Plan, located at the rear of this section, shows existing utility information on the campus.

c. A natural resources inventory and analysis showing the location of all significant natural resources within those areas of the campus that are already developed or where development activities including clearing or filling are proposed or that will be potentially impacted by proposed development activities. The analysis shall assess the significance of these resources and the issues they raise with respect to the Master Plan. This shall include a plan at the same scale as the existing conditions plan showing the locations of the significant resources.

For locations of potential areas to be developed, please refer to the Campus Master Plan - Five Year Development Strategy plan in the back of section 10. Several areas of forested wetlands are located on the undeveloped portions of the campus. None of these are remarkable, nor, other than portions of wetlands located within 25 feet of streams, are they deemed to be of special significance by Maine Department of Environmental Protection, MeDEP.

Based upon information obtained from previous projects on the campus, wetland mapping and delineation, and field observations by the University's wetland scientists, it was determined that there are no significant natural resources located in developed areas of the campus or that would be impacted by the proposed development. Please see the summary of this review that was prepared by Site Design Associates, which is included at the rear of this section.

There are two drainage courses meeting the Maine Department of Environmental Protection's (MeDEP) definition of streams located on the campus as shown on Drawing MP-103, Topographic and Natural Resources Plan.

There were 7 vernal pools identified, by Joe Noel, a wetland scientist, on the undeveloped portion of the campus, located between Route 9 and the Old Pool Road.

The approximate locations of these are shown on drawing *MP-103, Topographic and Natural Resources Plan*. These are labeled Vernal pools A-E, 1, and 2. There are three additional vernal pools, identified as F, H, and I located on the recently developed parcel, which is southerly of Newtown Road and westerly of Route 9.

All of the vernal pools southerly of Newtown Road and Westerly of Route 9 were deemed by the Army Corp of Engineers to have been “impacted”, during the development of this parcel, and the required mitigation was completed. These “impacted” vernal pools are monitored annually by UNE environmental studies classes and vernal pool H continues to be a viable as vernal pool, with its level of viability consistent with the annual variability of comparative vernal pools on campus.

Activities in and/or adjacent to the vernal pools are regulated by the MeDEP under the Natural Resources Protection Act (NRPA) and by the Army Corps of Engineers (ACOE). While it appears that no significant impacts will arise from the proposed development, permits or amendments will be sought from each of these agencies, as required.

The Saco River and associated wetlands are located northerly of the campus. There are several potential projects within 500’ of the Saco River. These include an addition to the existing Marine Science Research Center in support of the ongoing research activities, a new waterfront access research pier facility to allow research related activities to year round, converting the temporary recreational waterfront access facility to a permanent facility in support UNE’s crew and sailing programs, recreational waterfront access from 1 Hills beach Road, ADA compliant trails along the waterfront, an addition to the wastewater treatment facility, an addition to Decary Hall, an addition to the Petts Center, and addition(s) to the Campus Center. Development of these projects will require compliance with the regulations of and approval from the Saco River Corridor Commission, as well as the other requisite permitting agencies.

Short Nosed Sturgeon and Atlantic Sturgeon, endangered and threatened species, have been located by University researchers in the Saco River adjacent to the campus, and were the subject of several research initiatives at the University of New England. State records indicate that the imperiled Hollow Joe-Pye Weed has been observed in the vicinity of, but not on University properties proposed for development. Spotted Turtles, a threatened species in State of Maine, have been observed on the University’s undeveloped land parcel, north of the main campus. No rare or endangered species were observed in any areas of existing development nor in areas proposed for development under this Master Plan Submission.

The University will comply with all applicable permitting provisions at the time of any new development, including any applicable City of Biddeford, MeDEP Site Location of Development Act (SLODA), MeDEP Natural Resources Protection Act (NRPA), and the U.S. Army Corps of Engineers (ACOE) regulations.

If there are specific questions or concerns related to a particular wetland or wildlife impact connected with any proposed development in this area, those detailed questions must and will be addressed during the site plan review process.

d. An historic and archeological resources inventory and analysis showing the location of any known historic or archeological resources and any area with potential as an area of historic or archeological significance within those areas of the campus that are already developed or where development activities including clearing or filling are proposed or that will be potentially impacted by proposed development activities. This shall include a plan at the same scale as the existing conditions plan.

The University of New England has conducted several historical and archeological surveys on the Biddeford campus in conjunction with prior development activities. Drawing MP-104, Archaeological Survey Plan, located at the rear of this section, depicts the locations of phase III archaeological surveys undertaken during the site selection process for the Marine Science and Research Center in 2000. The studies, conducted by Archaeological Research Consultants, Inc. studied the undeveloped area overlooking the Saco River between the river and Hills Beach Road. The investigations revealed a number of positive test pits within the band of undeveloped land along the river. During the construction of the Marine Science and Research Center, a number of sites were monitored during excavation and artifacts were recovered. The potential work proposed in and around the Marine Science Center may require additional inspections and monitoring.

The rest of the potential 5-year development northerly of Hills Beach Road will occur in areas that have already been significantly disturbed, as a consequence of previous construction and earthmoving activities. Therefore, the development as proposed on the Campus Master Plan - Five Year Development Strategy plan in the back of section 10, is unlikely to impact areas of historical or archeological significance.

In 1993, Emerson W. Baker undertook a study of the Alford Center for Health Sciences site. His investigation determined most of the area had undergone significant disturbance in the past. No prehistoric artifacts were recovered during this investigation, although Baker did note that original ground surface is present close to Stella Maris.

In reviewing the 2003 Master Plan the Maine Historic Preservation Commission had suggested that a Phase I Archaeological Survey of the area within 200 feet of Stella Maris Hall should also be undertaken prior to ground disturbance in that area. In August 2003, Emerson Baker, a Maine certified Level 2 Historical Archaeologist, conducted a Phase 1 survey of this area and found no significant remains in the test excavations. He concluded that “there would appear to be virtually no undisturbed land left within 200 feet of Stella Maris” and that “no further testing within 200 feet of Stella Maris is needed”.

Also, in review of the 2003 Master Plan the Maine Historic Preservation Commission has suggested that a prehistoric archeologist should be present during the ground disturbing activities associated with the construction of Featherman Hall, to monitor these activities.

The Commission reviewed the monitoring report prepared by Rebecca Cole-Will of TRC which concluded “Archaeologist monitored ground disturbing activities on the ball field at the University of New England during a project to construct a new residence hall. Much of the area, if not all of the previous ball field, had been extensively disturbed in the past by installation of utility infrastructure. No cultural materials or features were identified.”

Understanding the archeological significance of the area, a UNE Archeology course is taught each summer, to further our knowledge of the past and to provide students field experience in archeology.

Much of the proposed development will be located southerly of Hills Beach and Old Pool Roads, and southerly of the Newtown Road and westerly of Route 9. These areas consist of ledge outcroppings with substantial slopes in some areas. These areas are located a considerable distance from the Saco River. In conjunction with previous projects (Facilities Management Building, Marcil Hall, and previous master plans), the University’s consultants and the Maine Historic Preservation Commission have found that there are no significant resources (historic, architectural, or archaeological) affected in these areas.

None of these aforementioned studies or results should preclude construction of facilities as envisioned in the Master Plan.

Several cemeteries are also located on or near the campus; these are shown on Drawing MP-101, Existing Conditions Plan. The creation of the waterfront access storage facility is near an unmarked gravesite location. However, the existing structure, which is to be expanded, is located in an existing parking lot, so should not impact the unmarked gravesite location. No other development is proposed proximal to these areas.

e. Data on the existing lot coverage and lot coverage ratio

Lot coverage information is shown on the Restrictions on Developable Areas Plan, which can be found at the back of this section.

Site Design Associates

Consulting Engineering and Land Planning

December 19, 2022

Mr. Alan Thibeault
University of New England
11 Hills Beach Road
Biddeford, Maine 04005

RE: 2022 Master Plan

Dear Alan:

We are writing to comment on Section 2.c., of the Master Plan, which requires a natural resources inventory and analysis and an assessment of issues raised with respect to the master plan. Drawings MP-103 and MP-105 show the wetlands and vernal pools currently located on the existing campus. We have reviewed the Campus Master Plan - Five Year Development Strategy plan, and the narrative you have prepared in fulfillment of the requirements for this section.

We note that the majority of proposed development will be located in areas previously screened by the Maine DEP as part of the Site Location of Development Act permit process. The screening included historical, wetland, vernal pools, and wildlife habitat impacts in areas proposed for development, and in other areas of the campus with the potential for development.

As noted on Drawing C-103, there are 7 vernal pool areas located on the undeveloped portion of the campus between Old Pool Road and Route 9. Since the last initial mapping, vernal pools C and D have merged into one complex. Based upon our monitoring, vernal pool system C/D and vernal pool 1 both continue to meet the criteria for being designated as a significant vernal pool under the Natural Resources Protection Act. Development within 250 ft of these areas is regulated by the Maine DEP. A very small portion of F3, Tennis Courts, may be located in the outer limit of the 250 ft regulatory area, similarly to the existing tennis courts. This will be reviewed with the regulators during the permitting process.

The majority of the development shown on the master plan westerly of Route 9 and southerly of Newtown Road, would occur in areas where natural resource impacts were reviewed and approved by the Maine DEP and Army Corps of Engineers in 2009, and no additional significant impact is anticipated as a result of the master plan.

Several of the proposals involve waterfront development, including S4, the Waterfront Access for Research. This area was investigated extensively when planning was undertaken for the Marine Science Center. The waterfront development will require permits from the Maine DEP in order to proceed with construction. No significant impacts to natural resources are anticipated as a result of the waterfront development programs.

23 Whitney Way Topsham, Maine 04086
Phone: (207) 449-4275 email: info@sitedesignassociates.biz

Mr. Alan Thibeault

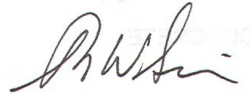
2/27/2023

Page 2 of 2

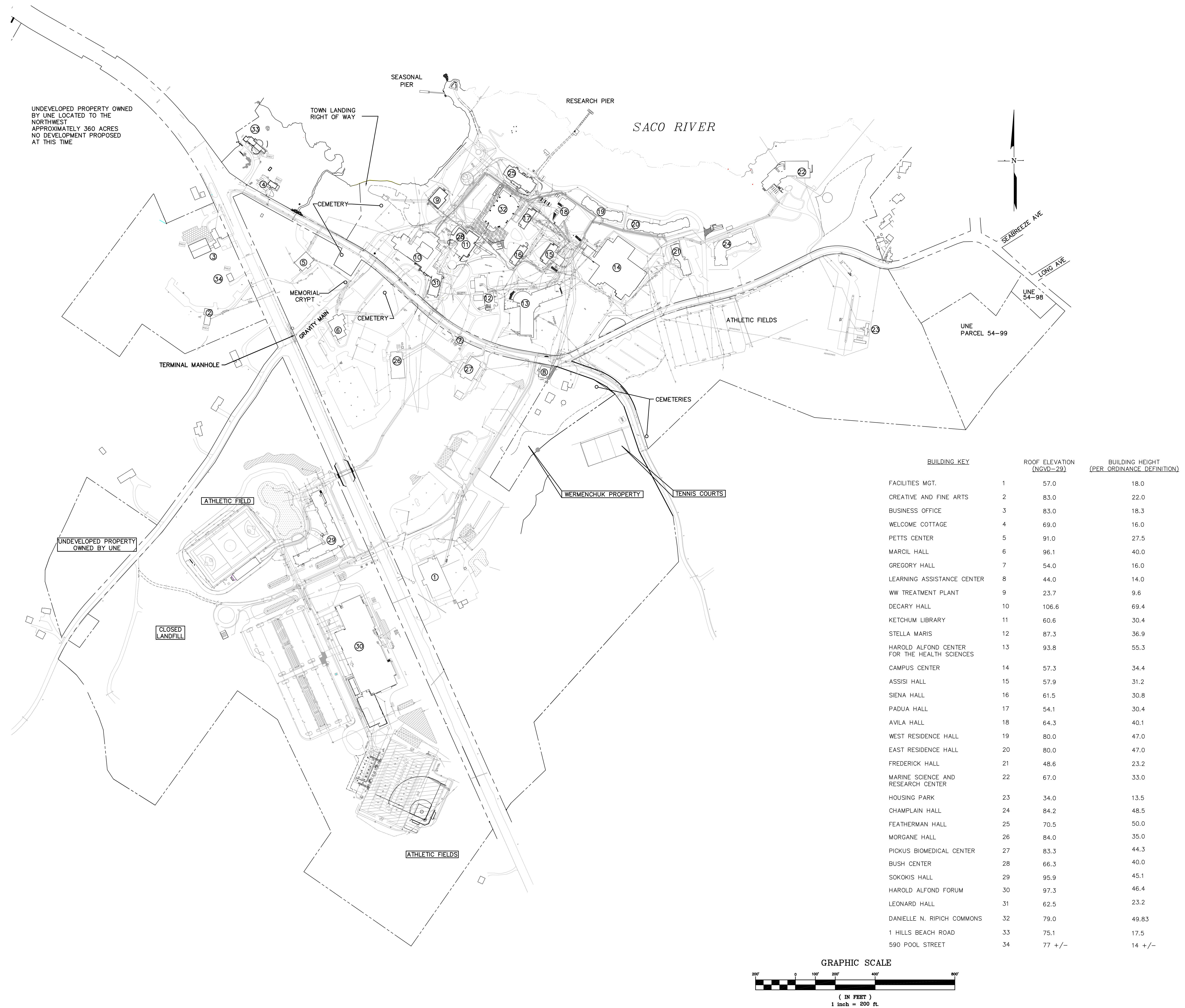
Based on the development plan, the remaining development would occur in the central portions of the campus, and would primarily consist of building additions and infill development. There are no significant natural resources that will be impacted by the development proposed between Hills Beach Road and the waterfront, nor by the development proposed between Hills Beach Road and Route 9.

Please let me know if you require additional information relative to this topic.

Sincerely,
Site Design Associates

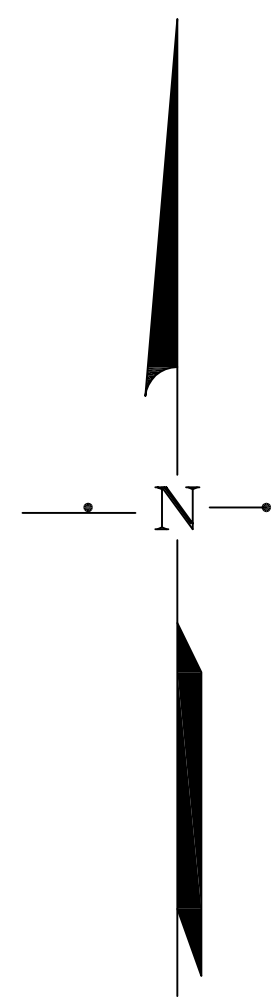
A handwritten signature in black ink, appearing to read 'Tom Saucier', with a stylized flourish at the end.

Tom Saucier, P.E.
President



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[illegible]



UNE CONTRACTED WITH A PRE HISTORIC ARCHAEOLOGIST TO MONITOR EARTHWORK DURING CONSTRUCTION OF FEATHERMAN HALL IN 2006. THE RESULTS WERE NEGATIVE

ARCHAEOLOGICAL SURVEY BY ARC, INC. OF ELLSWORTH, MAINE.

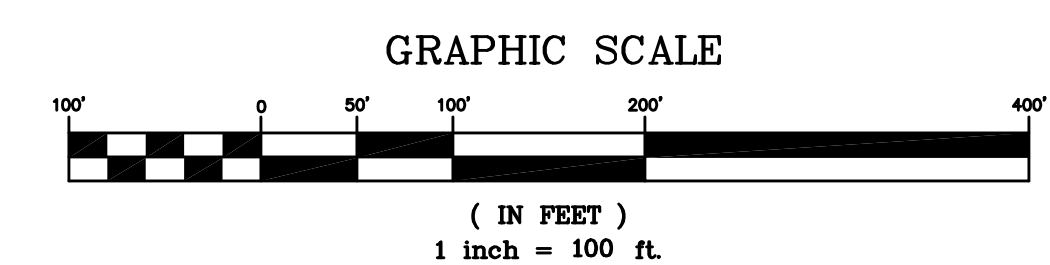
- POSITIVE TEST PIT (TYP)
- NEGATIVE TEST PIT (TYP)
- TEST PIT IDENTIFICATION (TYP)
- APPROXIMATE TREE LOCATION

SACO RIVER

<u>BUILDING KEY</u>		<u>ROOF ELEVATION (NGVD-29)</u>	<u>BUILDING HEIGHT (PER ORDINANCE DEFINITION)</u>
FACILITIES MGT.	1	57.0	18.0
CREATIVE AND FINE ARTS	2	83.0	22.0
BUSINESS OFFICE	3	83.0	18.3
WELCOME COTTAGE	4	69.0	16.0
PETTS CENTER	5	91.0	27.5
MARCIL HALL	6	96.1	40.0
GREGORY HALL	7	54.0	16.0
LEARNING ASSISTANCE CENTER	8	44.0	14.0
WW TREATMENT PLANT	9	23.7	9.6
DECARY HALL	10	106.6	69.4
KETCHUM LIBRARY	11	60.6	30.4
STELLA MARIS	12	87.3	36.9
HAROLD ALFOND CENTER FOR THE HEALTH SCIENCES	13	93.8	55.3
CAMPUS CENTER	14	57.3	34.4
ASSISSI HALL	15	57.9	31.2
SIENA HALL	16	61.5	30.8
PADUA HALL	17	54.1	30.4
AVILA HALL	18	64.3	40.1
WEST RESIDENCE HALL	19	80.0	47.0
EAST RESIDENCE HALL	20	80.0	47.0
FREDERICK HALL	21	48.6	23.2
MARINE SCIENCE AND RESEARCH CENTER	22	67.0	33.0
HOUSING PARK	23	34.0	13.5
CHAMPLAIN HALL	24	84.2	48.5
FEATHERMAN HALL	25	70.5	50.0
MORGANE HALL	26	84.0	35.0
PICKUS BIOMEDICAL CENTER	27	83.3	44.3
BUSH CENTER	28	66.3	40.0
SOKOKIS HALL	29	95.9	45.1
HAROLD ALFOND FORUM	30	97.3	46.4
LEONARD HALL	31	62.5	23.2
DANIELLE N. RIPICH COMMONS	32	79.0	49.83
1 HILLS BEACH ROAD	33	75.1	17.5
590 POOL STREET	34	77 +/-	14 +/-

— EXISTING FOUNDATION
AND DUG WELL

- A PHASE 1 ARCHAEOLOGICAL SURVEY WAS PERFORMED IN 2003 WITHIN A 200' RADIUS OF STELLA MARIS HALL. THE RESULTS WERE NEGATIVE



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[illegible]

3-Programs and Activities

a.1 Current Educational Programs and Degree Offerings –

Undergraduate Programs

Majors

Animal Behavior
Applied Exercise Science
Applied Mathematics
Applied Social and Cultural Studies
Aquaculture and Aquarium Sciences
Art & Design Media
Art Education K-12
Athletic Training 3+2 Program
Biochemistry
Biological Sciences
Business Administration
Chemistry
Communications
Criminology
Data Science
Dental Hygiene (4-Year B.S.)
Educational Studies
Elementary Education
English
Environmental Science
Environmental Studies
Global Studies
Health, Wellness and Occupational Studies
History
Interdisciplinary Studies in the Humanities
Laboratory Science
Marine Affairs
Marine Entrepreneurship
Marine Sciences (Marine Biology Track)
Marine Sciences (Oceanography Track)
Marine Sciences (Medical Sciences)
Medical Biology (Pre-Physician Assistant Track – MPA)
Neuroscience
Nursing (4 Year B.S.N. Program)
Nursing (Accelerated B.S.N. – 16 Months)
Nutrition
Political Science
Pre-Pharmacy
Psychology
Public Health
Secondary Education
Social Work
Sociology

Special Education
Sport and Recreation Management
Sustainability and Business
Undeclared: GUST (Guided Undergraduate Studies)

Minors

Animal Behavior
Anthropology
Applied Mathematics
Aquaculture and Aquarium Sciences
Art
Art Therapy
Biochemistry
Biological Sciences
Biophysics
Business Administration
Chemistry
Climate Change Studies
Coaching
Communications
Computer Science
Economics
Education
English
Environmental Studies
Geographic Information Systems
Health, Law & Policy
Health, Medicine and Society
History
Latin American Studies
Marine Affairs
Marine Science
Medical Biology
Mental Health Rehabilitation
Neuroscience
Nutrition
Philosophy
Political Science
Psychology
Public Health
Social Innovation and Entrepreneurship
Social Work
Sociology
Special Education
Sport and Recreation Management
Women's and Gender Studies
Writing

Graduate Programs

Athletic Training (M.S.)
Biological Sciences (M.S.)
Marine Sciences (M.S.)
Professional Science Master's (PSM) in Ocean Food Systems
Osteopathic Medicine (D.O.)

a.2 Other regularly scheduled programs or activities offered or hosted by the institution:

Conferences and Events

Office of University Events & Conference Services

The Office of University Events & Conference Services hosts a wide range of seminars, workshops, training programs, meetings, summer camps, alumni events and many other special programs and events on both the Biddeford and Portland Campuses. These events are scheduled throughout the academic year and summer term. The following is an illustrative, but by no means complete list of University client organizations who regularly seek the assistance of University staff and facilities and are expected to contract with the University in the future for more programs.

Health

American Diabetes Association
Autism Society of Maine
Multiple nursing associations across Maine
Epilepsy New England
Multiple Sclerosis Great Maine Getaway
Narrative Informed Research on Aging

University Events/Education

Educate Maine
UArtic Events
Homecoming and Alumni Events
Deborah Morton Society
Sexual Assault Forensic Nursing Training
UNE Healthcare Exploration Camps
Social Security and Retirement Seminars

Government and Service

Biddeford City Council
Center for Excellence in Public Health events
Biddeford Cultural Heritage Center
Hills Beach Association Events
Junior League
Rotary Club

Sports

Team Envision
Zero Gravity
Seacoast United
Maine Mussels
Biddeford Youth Lacrosse
Maine Lacrosse Coaches Alliance
Southern Maine Middle School Hockey
New England Offensive Line Clinic
BobCat Big Man's Camp
Biddeford HS Hockey Boosters
Casco Bay Youth Hockey
New England Beach Bash Hockey
Adult Hockey leagues
207 Volleyball
HS Hockey
Maine Lightning Soccer
Biddeford Youth Hockey

Camps/Social Events

Semester at Sea Reunion
Biddeford class reunion
Memorial Reception
BYU Youth Summer Camp
Camp Pals

Corporate

Volk Packaging
ATX Advisory
Colby Engineering
SMRT Strategic Planning
Navadise Media

a.3 Current and Projected Enrollment of Full-Time and Part-Time students by head count based upon the most recent IPEDS Report

The base line year used for this report was the 2022-2023 academic year, which runs September through August. The 5-year projections are for the 2023-2024 through the 2027-2028 academic years.

The following clarifications are important to understand when reviewing the information related to enrollment baseline data. The most recent IPEDS (Integrated Post-Secondary Education Data Survey) was used as the source for this information. It was then adjusted as follows:

- The official IPEDS submitted by the University to the United States Department of Education includes both campuses. This information can be found at the following website:
<https://nces.ed.gov/ipeds/datacenter/institutionprofile.aspx?unitId=acb1acafb0b2>
- For the purposes of this document, all data was adjusted to include the Biddeford campus only, unless specifically indicated otherwise.
- Enrollment data is by head count (i.e., all full time and part time students.)
- The enrollment data excludes duplicated headcounts. Thus, it excludes summer students already included in the fall semester.
- Enrollment data is adjusted for on-campus students only. It does not include off-campus enrollment – (i.e., 3rd and 4th year medical students, Masters in Education, Teacher Certification, Continuing Education, certificate programs, etc.) Off-campus is defined as spending less than 10 hours per week on campus, or less than one trip per week to campus.

Enrollment Projections - Biddeford campus only for Fall of:						
	2022	2023	2024	2025	2027	2027
Residential	1505	1410	1420	1440	1475	1515
Commuter	897	1095	745	750	760	775
Total	2402	2505	2165	2190	2235	2290

a.4 Current Employment by Type of Positions and Full-Time/Part-Time Status based upon the most recent IPEDS Report

The base line year used for this report was the 2022-2023 academic year, which runs September through August. The 5-year projections are for the 2023-2024 through the 2027-2028 academic years.

The following clarifications are important to keep in mind when reviewing the data related to employee baseline data. The most recent IPEDS (Integrated Post-Secondary Education Data Survey) was used as the source for this information. It was then adjusted as follows:

- The official IPEDS submitted by the University to the United States Department of Education includes all UNE campuses. For the purposes of this document, all data was adjusted to include the Biddeford campus only, unless specifically indicated otherwise.
- UNE Employee data is by head count. Full time (FT) equates to 40 hours per week. Part time (PT) equates to less than 40 hours per week. Employees who work less than 20 hours are considered temporary but are required to be included in the IPEDS report as part time employees. The PT employees represented in the chart below are comprised primarily of adjunct faculty and staff who are classified as temporary employees. Non-University contract employees (dining services, bookstore, etc.) regularly scheduled to work on the University Campus are not included in these numbers, but are included in the parking demand calculations.

Employee Projections - Biddeford campus only for Fall of:												
	2022		2023		2024		2025		2026		2027	
Status	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT	FT	PT
FACULTY	178	72	183	44	110	44	120	44	130	44	140	44
STAFF	378	23	381	18	328	18	338	18	348	18	348	18
SUBTOTAL	556	95	564	62	438	62	458	62	478	62	488	62
TOTAL	651		626		500		520		540		550	

a.5 Number of Persons Living on Campus

Residential and Commuter Student Projections - Biddeford campus only for Fall of:						
	2022	2023	2024	2025	2026	2027
RESIDENTIAL STUDENTS	1505	1410	1420	1440	1475	1515
COMMUTER STUDENTS	897	1095	745	750	760	775
TOTAL	2402	2505	2165	2190	2235	2290

b. Narrative describing how the programs and activities and the number of students and employees, campus residents and program participants are anticipated to change over the next five years.

The University of New England values student-centered, multi- disciplinary and interdisciplinary programs that meet the highest ethical standards to achieve excellence in

support of an integrative approach to the liberal arts, health and the environment, as well as scholarship and research.

The University of New England recognizes that as a comprehensive University, it must continually upgrade and diversify its curriculum, degrees offered and its facilities in order to remain competitive and attract the best students and faculty. Anticipated changes in programs will be partially driven by demographics and challenges linked to industry. Program expansion and changes will also respond to the need to educate an older population, while preparing traditional students to participate in life-long learning experiences. With the changing pedagogy resulting from the rapidly changing technological advances, the University has put significant effort into its On-line offerings. These programs are integrated into the existing programs, as well as those entirely On-line, affording the campus students additional opportunities as well as the ability to complete their degrees in a shorter time period. Additionally, these On-line offerings allow for a greater percentage of UNE students to study abroad while maintaining their curriculum requirements.

With the push towards On-line learning, the on-campus Undergraduate population is anticipated to have relatively insignificant growth over the next five years, as indicated in the tables above. However, the overall campus population will reduce significantly in the 2024-2025 academic year, with the relocation of the College of Osteopathic Medicine to the Portland Campus.

The University may also have to adjust programs over time. As a university recognized for its strength in the health professions, we foresee a need to participate in improving the quality of life for people in remote or rural areas of the State. The College of Osteopathic Medicine (COM) health program will assess its academic role in preparing students to work and provide health care for the elderly, Native American, and immigrant populations of the State.

UNE's unique role as the largest educator of health professionals for Maine, its select and comprehensive breadth of health professions degree programs, and its documented leadership in team-based health professions education have made the University an enviable institution in New England and the nation. Relocating the College of Osteopathic Medicine to Portland in July 2024 will "close the loop," creating a comprehensive, fully integrated health sciences campus that can efficiently and effectively tackle Maine's deepest health problems through systemic, coordinated education and clinical practice.

The relocation of the College of Osteopathic Medicine to UNE's Portland Campus will result in a decrease in campus population, bringing the totals to pre-2010 numbers. This move will also afford the opportunity to repurpose the Alfond Center for Health Sciences building on the Biddeford campus to expand existing academic programs and develop new programs to address the critical workforce needs for the state.

The University will also have to evaluate its role in:

- Multimedia pedagogy and multicultural education
- Dual enrollment in institutions
- Providing broad-based resources for distance education
- Developing Competency Based programs to allow for students to opt out of courses by demonstrating competency in those areas
- Developing additional master's degree programs
- Developing nontraditional learning programs

Like many other colleges and universities, the University of New England relies heavily on the income generated from its numerous conferences and continuing education programs to fund a significant portion of the University's operating costs. In doing so, the University avoids passing on those costs to its students in the form of increased tuition. Therefore, the University is able to remain competitive with other educational institutions. Towards that end, new opportunities are continually being explored as a way of operating year-round conferences and continuing education programs. During this vetting process the University considers its physical resources, including parking, and only accepts programs that can fit within the resources available. Thus, any large programs accepted during the academic year would typically be conducted during non-peak academic times.

The University projects the majority of future events and activities in this area will be similar to those listed in section 3.a.2 of this report, and the Office of University Events & Conference Services will continue to expand the current client listing. The COVID Pandemic has had a significant impact on the visitation to campus. UNE expects to increase the number of participants by approximately 25% in the first year of the Master Plan and approximately 5% per year thereafter. This will return the visitation numbers to be closer to the pre-COVID summers.

Below is a table that shows the current daily average and peak number of Office of University Events & Conference Services participants.

<i>Current Total, Average and Peak Conferences Participants for 2021-2022 Biddeford campus only</i>			
	Total	Daily Peak	Daily Average
Fall Months (Sept-May)	4769	530	17.5
Summer Months (June-Aug)	1472	491	16

4- Educational, Research, Residential, Support and Athletic Facilities

- a. *A description and plan identifying what buildings and facilities are currently used for these purposes.*

A campus plan illustrating the location of all the University Facilities, drawing MP-101, Existing Conditions Plan, is located at the rear of Section 2.

1 Hills Beach Road – This 4800sf residential style structure is a residence of the President of UNE. In 2012 it was renovated to allow it to serve as a function space for more intimate gatherings of students, trustees and special guests.

590 Pool St – This 864sf residential style facility is currently vacant. It was constructed in 1981.

Alfond Center for Health Sciences - This 72,372 SF four-story masonry building provides classroom, office, research, and laboratory space for the COM and CAS. It was built in 1996. An Osteopathic Medicine and Manipulation Clinic is located on the third floor where faculty and medical fellows see patients on a limited basis. A café is located on the first floor.

Alumni Cottage (3 Hills Beach Rd) - This 2-story wooden building is used as an office complex.

Assisi Hall - This 16,293 SF three-story brick building is a residence hall that was built in 1962. Rooms are double occupancy throughout with shared restrooms on each floor. A boiler plant is attached to this building.

Athletic Fields/Courts - Two adjacent grass fields, located along Hills Beach Road, are used as intercollegiate fields for soccer, rugby and some organized intramural programs. The artificial turf, Blue Storm Stadium is home to UNE's football and softball teams and is located west of Route 9. The artificial turf, Blue Bolt Field is utilized for the "stick" sports, lacrosse and field hockey, as well as for intramurals. Four tennis courts and a 1/3 mile recreational track are also located on campus.

Avila Hall - This 18,620 SF four-story brick building is a residence hall that was built in 1970. Rooms are typically double occupancy with shared restrooms on each floor. A 2,140 SF lounge is attached for a total of 20,760 SF.

Campus Center - This 58,579 SF masonry building houses recreational facilities, gymnasium, swimming pool, athletic offices, a snack bar/lounge, campus store, and three multi-purpose meeting rooms. It was built in 1989. A 2,675 SF chiller plant was added in 1996 to provide cooling for portions of the campus.

Champlain Hall – This 64,122 SF, four-story masonry structure, was opened in 2005. It is used to house students in double bedroom, suite style accommodations. A staff apartment is located on the main floor.

Creative and Fine Arts (592 Pool Rd) - This 5,120 SF, 2.5 story wooden structure is used as an academic support space and houses art studios and faculty offices. It was built in 1988 as a residence.

Decary Hall - This 77,502 SF masonry structure was built in 1939 with a major addition in 1949. It houses classrooms, research labs, skill development labs, computer labs, and offices.

East Hall - The East Hall opened in the fall of 2002 and is 58,410 SF. It is a masonry building with suites that accommodate four students sharing a living room, kitchenette, and two bathrooms with a private bedroom for each student. A lounge is included in East Hall, as well as support offices for housing staff. A faculty apartment is also included in the building to facilitate a learning community.

Facilities Management Building - This 18,547 SF steel frame building with metal panel walls includes office space for Facilities Management, the Department of Campus Services, and the Department of Safety and Security, central receiving and warehousing for the campus, maintenance shops for the trades and Copy/Mail Services. It opened in the Fall 2002.

Featherman Hall - This 42,018 SF four-story brick building is a residence hall that was built in 2007. Rooms are typically double occupancy with communal restrooms on each floor. There are two classrooms located on the first floor, which serve to assist in promoting a Living and Learning Community environment.

Finance and Administration/Business Office – This 6,960 SF metal building was constructed in 2017, and provides office and support space for the Finance and Administration functions.

Frederick Hall - This two-story 12,156 SF brick-veneer, wood framed building is a residence hall that was built in 1964. Rooms are typically double occupancy with shared restrooms on each floor and wing.

George and Barbara Bush Center - This three-story, 12,422 SF brick building was built in 2008. It houses a café, special collections, meeting and executive office space.

Gregory Hall - This 478 SF single story wood building built in early 1900's is used as an office building.

Harold Alfond Forum – This 143,392 SF, pre-engineered facility, houses an ice area, performance courts, locker rooms, concessions/snackbar, fitness and training centers, offices, classroom and laboratory spaces to support the university's athletic and academic programs. It was originally constructed in 2012, and was added onto in 2018.

Housing Park - The University built twenty one-story and two-story wood units in 1970 to house students. These were removed in the Spring of 2005. One residential unit, re-built in 1993, remains at this site.

Human Resources (588 Pool Rd) - This 4,393 SF wooden structure is used as an office building

Ketchum Library - This three-story 23,688 SF masonry building is the campus library. It was constructed in 1970 with an 8,000 SF addition constructed in 1991.

Kiosk - This canopy structure is located on the waterfront at Jordan Point.

Leonard Hall – This 5,798 SF masonry structure was renovated in 2013 and serves as a large interactive classroom facility. It is attached to Decary Hall.

Marcil Hall - This 21,420 SF steel frame unit block veneer building built in 1994 is primarily a classroom building with administrative office space for faculty.

Girard Marine Science Education and Research Center - This 26,744 SF steel frame building with brick veneer was built in 2001. It is used as a marine mammal rehabilitation and research center. Marine laboratories, classroom, and faculty offices are provided. A pump house, situated near the waterfront, pumps seawater to the saltwater storage tank on the site, which in turn is utilized in the Marine Science Education and Research Center.

Morgane Hall - This 25,800 SF brick building academic building, house sciences labs, classrooms and offices. It was constructed in 2008.

Padua Hall - This 13,368 SF three-story brick building is a residence hall that was built in 1962. Rooms are typically double occupancy with shared restrooms on each floor.

Petts Center – This 9,040 SF two-story wood frame building built in 1984 serves as a student health clinic, as well as an academic and administrative support facility.

Pickus Center for Biomedical Research - This 22,086 SF brick structure house labs and office in support of biomedical research. It was completed in 2008.

Ripich Commons – This 60,340 SF, four story student center was constructed in 2017 and houses student support services and the main dining facility.

Siena Hall - This 13,368 SF three-story brick building is a residence hall that was built in 1962. Rooms are typically double occupancy with shared restrooms on each floor.

Sokokis Hall – This four-story, 104,813 SF residence hall was constructed in 2010. Students reside in single and double bedroom suites.

Staging and Storage area - This area is used for staging of landscaping and surplus materials, and a staging area for construction projects. Soils for construction projects are often processed in this area before being transported to the actual project site. This use is approved by both the DEP and City of Biddeford. Several containers are also located at

the former landfill area and are used to store surplus property and new furniture during construction projects.

Stella Maris - This 32,450 SF, 4-story wood frame building was built in the mid 1700's. In 1978, half of the building was removed and a concrete block addition was added to support the College of Osteopathic Medicine. The building provides administrative offices, classrooms, research labs and faculty offices.

Storage sheds - A sand and salt storage facility and storage shed are located to the rear of the Facilities Management building. Other sheds are located on campus for storage of materials and equipment.

Student Academic Success Center - This 3,100 SF wooden building was built in 1940's. The facility is used as a Learning Center for Math and Writing Skills in support of all academic programs.

Waste Water Treatment Plant - This 4,300 SF masonry building was built in 1988 and expanded in 1993 and serves most of the buildings on campus.

Waterfront Activities Storage Facility/Docks - These structures support the waterfront and research programs and were built in 2001 and 2015.

West Hall - The West Hall opened in the fall of 2002 and is 40,339 SF. It is a masonry building with suites that accommodate four students sharing a living room, kitchenette, and two bathrooms with a private bedroom for each student. A faculty apartment is also included in the building to facilitate a learning community.

- b. *The current bed capacity of all residence buildings and anticipated change in the total bed capacity.*

Occupancy	
Assisi Hall	75
Avila Hall	102
Champlain Hall	206
East Hall	179
Featherman Hall	226
Frederick Hall	71
Housing Park	2
Padua Hall	70
Siena Hall	73
Sokokis Hall	299
West Hall	127
Total	1430

The counts represented above reflect current bed capacity based on double occupancy in rooms designed for double occupancy and single occupancy in rooms designed for single occupancy. Featherman Hall is listed as triples. At times the University has more demand

for housing than can be made available utilizing double occupancy, and will “triple” double occupancy rooms to accommodate the extra demand. The actual number of residential students is provided in section 3. While “tripling” is common practice at most institutions of higher education, it is not the preferred situation. The University’s goal in respect to residential housing capacity is to increase the capacity to meet its three-year residency requirement and minimize “tripling”. Housing projects will be completed as the actual numbers of potential residential students warrant them. The Conceptual Development Plan, located in section 10, includes the potential of adding 300 beds.

- c. *A description of any significant changes in the type of use made of existing buildings, significant expansions of existing buildings, or new buildings and facilities that are to be needed over the next five years.*

See text below.

- d. *A description of how the anticipated changes in facilities relate to program changes and the institution’s mission.*

See text below.

Overview of section 4c and d

Over the next five years, we may create new space for: additional housing, additional athletic venues, improved athletic facilities, expansions to our academic and research buildings, and student support services facilities. These essential improvements are critical to the health and viability of the University. The potential projects listed are all possible options for the University. However, the University does not intend to complete all of these projects within the period of this Master Plan.

The new buildings, renovations and sports facilities/venues support the mission of the University. The improvements enable delivery of quality instruction, as well as improved extracurricular and community outreach programs, all of which will enhance teaching and learning. For locations of potential areas to be developed, please refer to the Concept Campus Plan-Five Year Development Strategy plan in the back of section 10.

The University is developing a stronger reputation as a research university to meet accreditation requirements and to attract outstanding scholars and funding agencies. This goal requires additional research, teaching and meeting facilities, which will lead to a greater success by faculty and student researchers.

Below is an outline of the potential projects over the next 5 years. These projects will be prioritized based on ability to finance and actual programmatic need. Each building may include a combination of the needs as listed below.

Academic, Research and Administration Facilities

Research is a strategic goal of all of the University and is an integral component of our Mission Statement. Expansions of our research facilities will enable the University to continue to grow in this strategic area.

Classrooms, laboratories, and offices may need to be added as enrollment increases or to meet pedagogical changes. Space may be added by combining with an existing research, residential, or support building complex.

Housing, Student Services, and Athletic Facilities

Additional new **Student Housing** may be added based on the projection for residential students. These may be similar in style and scale as the residence halls recently constructed and will be located on the west side of Route 9.

Athletic field(s)/Courts/Track may be constructed to extend the playing season and to better compete with other peer institutions. These projects may have associated storage/press box facilities constructed with them.

Campus Center addition(s) may be necessary to provide for additional recreational space, meeting/activities spaces, offices, and/or an expansion to the natatorium.

Waterfront Access for Research and Recreation - increasing use of the waterfront for academic and research activities has resulted in a demand for year-round dock facilities. The current seasonal research facility limits the access to the water, thus a more permanent pier is required for the extensive programming being conducted. The ideal location for this year-round facility would be adjacent to the Girard Marine Science and Education Center.

The University has initiated crew and sailing programs, resulting in an increased demand for access to the waterfront for recreational and intercollegiate activities as well, and thus is looking to make the existing seasonal dock a permanent installation, with only the floats being removed annually.

Support Facilities

Parking is required by local and state regulatory agencies as a condition of granting building permits to meet anticipated needs of programs. A combination of on grade and structured parking is being considered. In addition to the construction of new lots shown, an effort will be made to re-configure existing lots throughout the campus to increase capacity and accessibility.

Miscellaneous Roadway and Walkway Improvements and Additions will be needed to improve pedestrian access on campus and reduce pedestrian vehicular conflicts. This may also include handicap accessible access to the trail system along the shoreline and to Freddy Beach.

Storage/Recycling Facilities may need to be constructed to replace the storage trailers being used for this purpose. Additional storage facilities may be required to support other activities, such as recreation, athletics and research. These would need to be appropriately located, dependent on their use.

Additional **heating and cooling facilities** may be needed to support the new facilities. These may be added through a combination of central and decentralized heating and cooling facilities similar to those attached to Assisi Hall and the Campus Center.

An addition to the **Wastewater Treatment Facility** may be required if the projected water usage is greater than anticipated.

Temporary Facilities

As with most educational facilities, some **temporary facilities** may be needed to provide space during construction of new buildings as well as to accommodate unanticipated needs on short notice. This will likely be modular units, which might be used for **support, office, teaching and research, and/or housing**. Final locations will be determined based on need, access to parking and utilities and relevant site plan review criteria.

5- Parking and Traffic

a. Information on current traffic volumes and conditions including Levels of Service on the principal public streets and intersections of public streets within the Zone and on the primary access routes to the campus.

Please see the attached University of New England, Biddeford Maine Master Plan Traffic Analysis prepared by Sewall.

b. A description of anticipated changes in traffic volumes over the next five years resulting from the changes in programs and facilities included in the Master Plan.

Please see the attached University of New England, Biddeford Maine Master Plan Traffic Analysis prepared by Sewall.

c. An analysis of the impact of these changes on traffic flow and vehicular and pedestrian safety on public streets within the Zone and that provide access to the campus.

Please see the attached University of New England, Biddeford Maine Master Plan Traffic Analysis prepared by Sewall.

d. A proposed program of improvements to address any unacceptable impacts resulting from changes in traffic volumes including activities that will be undertaken to mitigate any adverse impacts on adjacent residential neighborhoods.

Please see the attached University of New England, Biddeford Maine Master Plan Traffic Analysis prepared by Sewall.

e. Information on the number and location of existing parking spaces.

Please refer to Drawing P-100, Existing Parking Plan, which is located at the rear of this section.

f. An analysis of the adequacy of the existing parking to meet anticipated changes in programs and facilities over the next five years.

Please refer to the Parking and Transportation Demand Management - 2022 report at the rear of this section.

g. An assessment of pedestrian and bicycle movements and safety related to the parking supply and locations.

All existing primary pedestrian/bike paths are 8' wide, and all secondary pedestrian/bike paths are 6' wide. The existing path network is satisfactory to meet the needs of both pedestrians and bicyclists. Dedicated bike lanes are not required as there is adequate

width to the existing walkway and roadway system. Furthermore, these dual use paths are more than sufficient, given the relatively limited biking season during student residence periods (arriving approximately mid-September and leaving early to mid May).

The Director of the Safety and Security Department was contacted in regards to concerns related to the increased use of bicycles on campus. He indicated that annually, all residential students were required to participate in an educational session in regards to bicycle safety and the Maine laws related to bicycling. This session was presented to the students by the Biddeford Police Department. He stated that there have been no significant issues raised to date in regards to bicycle and vehicular interactions.

h. A proposed program of parking improvements to meet any identified deficiencies.

Please refer to the Parking and Transportation Demand Management - 2022 report at the rear of this section.

To insure a more precise analysis, all University and non-University contract employees regularly scheduled to work on the University Campus were included in this study.

The proposed parking facilities are illustrated on the Campus Master Plan -Five Year Development Strategy plan in the back of section 10.

UNIVERSITY OF NEW ENGLAND BIDDEFORD, MAINE MASTER PLAN TRAFFIC ANALYSIS

INTRODUCTION

This memorandum is written to summarize traffic assessment performed for the update of the University of New England (UNE) Master Plan for their Biddeford, Maine campus. The City of Biddeford's requirements for the plan related to traffic are outlined below:

- a. Information on current traffic volumes and conditions including levels of service on the principal public streets and intersections of public streets within the zone and on the primary access routes to the campus.
- b. A description of anticipated changes in traffic volumes over the next five years resulting from the changes in programs and facilities included in the master plan.
- c. An analysis of the impact of these changes on traffic flow and vehicular and pedestrian safety on public streets within the zone and that provide access to the campus.
- d. A proposed program of improvements to address any unacceptable impacts resulting from changes in traffic volumes including activities that will be undertaken to mitigate any adverse impacts on adjacent residential neighborhoods.

EXISTING TRAFFIC VOLUMES

Access to the Biddeford campus is provided by Pool Street (Route 9/208). Average annual daily traffic (AADT) data for the vicinity of the campus was obtained from the Maine Department of Transportation's (MaineDOT's) 2014 and 2019 Traffic Count Books as well as their Interactive Traffic Map. This data is summarized in the following table:

<u>Location</u>	Average Annual Daily Traffic			
	<u>2010</u>	<u>2013</u>	<u>2016</u>	<u>2019</u>
Pool Street, southeast of Meetinghouse Road	6730	5010	---	5950
Pool Street, northwest of Hills Beach Road	---	5990	5860	---
Pool Street, south of Hills Beach Road	3650	3430	3300	---
Pool Street, south of Newtown Road	---	3310	---	---
Hills Beach Road, northeast of Old Pool Road	---	1920	1510	---
Hills Beach Road, southeast of Pool Street	--	---	1990	---

As seen above, traffic volumes in the vicinity of the campus have declined from 2010 to 2019.

Turning movement counts were performed by Sewall at key intersections to determine existing volumes for capacity and level of service analysis purposes. The counts were conducted during the PM peak hour period (3:00 – 6:00), typically the highest volume hours of the day on Maine roadways. The count dates and peak hours are as follows:

<u>Intersection</u>	<u>Count Date</u>	<u>Peak Hour</u>
Pool Street and Hills Beach Road	11/4/21	3:15 – 4:15
Pool Street and Newtown Road	11/3/21	4:30 – 5:30
Pool Street, Hedley Reynolds Way and UNE drive	11/10/21	4:00 – 5:00
Pool Street and easterly Parking Lot	11/17/21	4:00 – 5:00

The above counts were factored to peak school year conditions, which occur in September, using MainDOT group mean factors. The UNE drive volumes were not seasonally adjusted since they are expected to be consistent during the fall and spring semesters. The resulting September 2021 volumes are shown in Figure 1. Given that volumes have been declining, based upon the historical count data, a 2 % growth rate was utilized to project the 2021 to 2022 conditions to be conservative. The results are shown in Figure 2.

EXISTING CONDITIONS ANALYSIS

Traffic operations are evaluated in terms of level of service (LOS). Level of service is a qualitative measure that describes operations by letter designation. The levels range from A - very little delay to F - extreme delays. Level of service "D" is generally considered acceptable in urban locations while LOS "E" is generally considered the capacity of a facility and the minimum tolerable level. The level of service for unsignalized intersections is based upon average control delay per vehicle for each minor, opposed movement, as defined below:

Unsignalized Intersection Level of Service

<u>LOS</u>	<u>Delay Range</u>
A	< = 10.0 seconds
B	> 10.0 and <= 15.0
C	> 15.0 and <= 25.0
D	> 25.0 and <= 35.0
E	> 35.0 and <= 50.0
F	> 50.0

Level of service was determined for the primary campus intersections utilizing Synchro 11 and SimTraffic under the September 2022 volumes. The results for the PM peak hour analysis period, with the LOS followed by the delay in seconds, are summarized in the following tables:

Pool Street, Hills Beach Road & Seastar Market PM Peak Hour Level of Service

<u>Approach/Movement</u>	<u>Existing 2022</u>
Eastbound Market Drive	A (7.3)
Westbound Hills Beach Road	A (6.7)
Northbound Lefts into Market	A (2.0)
Northbound Throughs/Rights	A (1.2)
Northbound Pool Street Overall	A (1.3)
South Lefts onto Hills Beach Road	A (3.0)
Southbound Throughs/Rights	A (1.4)
Southbound Pool Street Overall	A (2.1)
Overall Intersection	A (3.3)

**Pool Street & Newtown Road
PM Peak Hour Level of Service**

<u>Approach/Movement</u>	<u>Existing 2022</u>
Eastbound Newtown Road	A (5.6)
Westbound Newtown Road	A (5.4)
Northbound Pool Street	A (0.9)
Southbound Pool Street	A (0.8)
Overall Intersection	A (1.8)

**Pool Street, Hedley Reynolds Way & UNE Drive
PM Peak Hour Level of Service**

<u>Approach/Movement</u>	<u>Existing 2022</u>
Eastbound Hedley Reynolds Way Lefts	A (5.8)
Eastbound Hedley Reynolds Way Throughs/Rights	A (6.6)
Eastbound Hedley Reynolds Way Overall	A (6.4)
Westbound UNE Drive	A (5.5)
Northbound Pool Street	A (0.6)
Southbound Pool Street	A (1.0)
Overall Intersection	A (2.0)

As seen in the preceding tables, the level of service is currently “A” under peak September volumes for all movements at all primary access intersections. There are no capacity concerns at any of the primary access intersections and the results demonstrate that Pool Street has capacity to accommodate additional UNE trips.

SAFETY AND ACCIDENT REVIEW

The Maine Department of Transportation uses two criteria to determine high crash locations (HCLs). The first is the critical rate factor (CRF), which is a measure of the accident rate. A CRF greater than one indicates a location which has a higher than expected crash rate. The expected rate is calculated as a statewide average of similar facilities.

The second criterion, which must also be met, is based upon the number of accidents that occur at a particular location. Eight or more accidents must occur over the three-year study period for the location to be considered a high crash location. Accident data was obtained from MaineDOT for the vicinity of the campus for the most recent 3-year period, 2019 to 2021. The data is attached to this memorandum. There are no high crash locations (meeting both high crash criteria) within the following study area:

- Pool Street between Kennebunkport Town Line and Alfred Street (Route 111)
- Hills Beach Road between Pool Street and Long Avenue
- Old Pool Road between Hills Beach Road and Day's Landing

As a result, no safety deficiencies or concerns were identified, and no additional accident evaluation is necessary.

PROJECTED UNIVERSITY VOLUMES AND IMPACTS

Trip generation analysis was performed for the existing enrollment and projected enrollment at the end of the five-year plan period. Land use code (LUC) 550 – University/College was utilized from the most recent Institute of Transportation Engineers (ITE) “Trip Generation, 11th Edition”. The calculations were performed on the basis of the 2,402 current students and projected 2,290 students in fall of 2027. The results are summarized in the table on the following page:

<u>Time Period</u>	ITE TRIP GENERATION		
	<u>Existing</u>	<u>Projected</u>	<u>Change</u>
Weekday	5,424	5,270	- 154
AM Peak Hour – Adjacent Steet + Gen.	360	344	-16
Entering	281	268	-13
Exiting	79	76	-3
PM Peak Hour – Adjacent Steet + Gen.	360	344	-16
Entering	115	110	-5
Exiting	245	234	-11

As seen above, based upon the ITE data, the existing campus generates approximately 360 one-way trips during both the AM and PM peak hours. At the end of the five-year plan period, with the projected decline in enrollment, there will be 344 one-way trips in peak hours. Given the small decrease in peak hour trip generation, no off-site impact on traffic operations would be expected. Additionally, since all primary intersections are currently operating at a good level of service “A”, and since the Pool Street volumes have not been increasing historically, and since university enrollments are projected to drop over the five-year plan period all intersections would be expected to remain at level of service “A”.

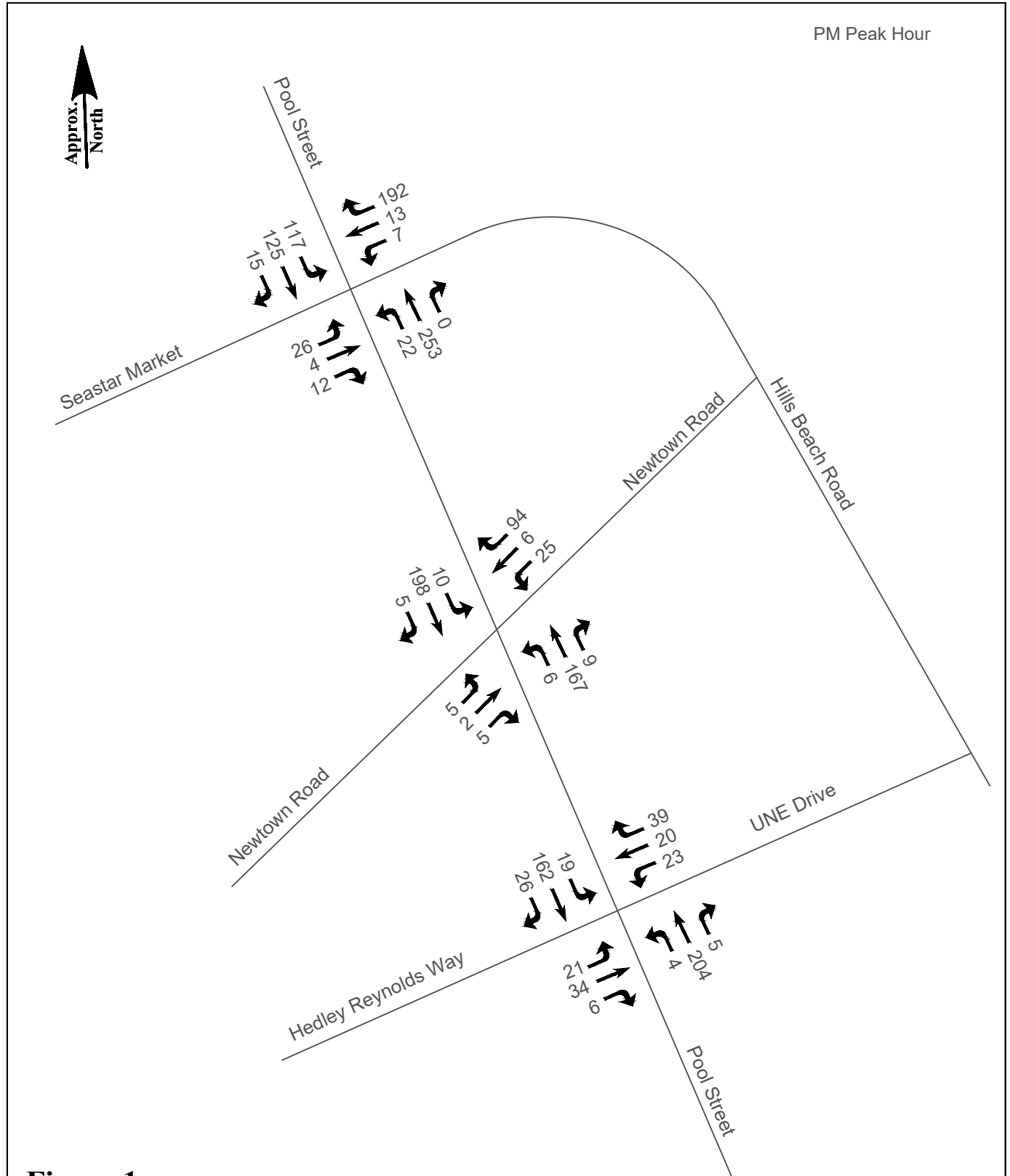


Figure 1

Existing 2021 Peak Hour Volumes
UNE, Biddeford
Biddeford, Maine



Lanes, Volumes, Timings
3: Pool Street & Newtown Road

01/04/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	2	5	25	6	94	6	167	9	10	198	5
Future Volume (vph)	5	2	5	25	6	94	6	167	9	10	198	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.943			0.899			0.993			0.997	
Flt Protected		0.979			0.990			0.998			0.998	
Satd. Flow (prot)	0	1624	0	0	1674	0	0	1828	0	0	1853	0
Flt Permitted		0.979			0.990			0.998			0.998	
Satd. Flow (perm)	0	1624	0	0	1674	0	0	1828	0	0	1853	0
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		1134			440			1148			848	
Travel Time (s)		30.9			12.0			22.4			16.5	
Confl. Peds. (#/hr)	1		1	19		19	4		4	1		1
Confl. Bikes (#/hr)									1			
Peak Hour Factor	0.47	0.47	0.47	0.86	0.86	0.86	0.93	0.93	0.93	0.87	0.87	0.87
Heavy Vehicles (%)	8%	8%	8%	1%	1%	1%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	11	4	11	29	7	109	6	180	10	11	228	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	26	0	0	145	0	0	196	0	0	245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	32.9%											
Analysis Period (min)	15											
ICU Level of Service A												

Lanes, Volumes, Timings

6: Pool Street & Seastar Market/Hills Beach Road

01/04/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	4	12	7	13	192	22	253	0	117	125	15
Future Volume (vph)	26	4	12	7	13	192	22	253	0	117	125	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	300		0	200		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.962			0.878						0.984	
Flt Protected		0.970			0.998		0.950			0.950		
Satd. Flow (prot)	0	1721	0	0	1616	0	1736	1827	0	1752	1815	0
Flt Permitted		0.970			0.998		0.950			0.950		
Satd. Flow (perm)	0	1721	0	0	1616	0	1736	1827	0	1752	1815	0
Link Speed (mph)		30			25			35			35	
Link Distance (ft)		97			1075			848			1355	
Travel Time (s)		2.2			29.3			16.5			26.4	
Confl. Peds. (#/hr)	1		1				3		3			
Peak Hour Factor	0.83	0.83	0.83	0.82	0.82	0.82	0.85	0.85	0.85	0.74	0.74	0.74
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	4%	4%	4%	3%	3%	3%
Adj. Flow (vph)	31	5	14	9	16	234	26	298	0	158	169	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	50	0	0	259	0	26	298	0	158	189	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization 45.7%	ICU Level of Service A											
Analysis Period (min) 15												

Lanes, Volumes, Timings

9: Pool Street & Hedley Reynolds Way/UNE Driveway

01/04/2022

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	34	6	23	20	39	4	204	5	19	162	26
Future Volume (vph)	21	34	6	23	20	39	4	204	5	19	162	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		0	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.978			0.936			0.997			0.983	
Flt Protected	0.950				0.986			0.999			0.995	
Satd. Flow (prot)	1736	1787	0	0	1736	0	0	1802	0	0	1770	0
Flt Permitted	0.950				0.986			0.999			0.995	
Satd. Flow (perm)	1736	1787	0	0	1736	0	0	1802	0	0	1770	0
Link Speed (mph)		25			25			35			35	
Link Distance (ft)		662			749			1070			1148	
Travel Time (s)		18.1			20.4			20.8			22.4	
Peak Hour Factor	0.59	0.59	0.59	0.73	0.73	0.73	0.76	0.76	0.76	0.86	0.86	0.86
Heavy Vehicles (%)	4%	4%	4%	1%	1%	1%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	36	58	10	32	27	53	5	268	7	22	188	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	68	0	0	112	0	0	280	0	0	240	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	38.8%											
Analysis Period (min)	15											
	ICU Level of Service A											

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:50	3:50	3:50	3:50	3:50	3:50
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1090	1142	1078	1078	1054	1088
Vehs Exited	1094	1141	1076	1084	1056	1090
Starting Vehs	17	18	13	23	21	13
Ending Vehs	13	19	15	17	19	16
Travel Distance (mi)	567	592	543	567	533	560
Travel Time (hr)	20.4	21.6	19.8	20.3	19.3	20.2
Total Delay (hr)	1.8	2.1	1.8	1.8	1.7	1.9
Total Stops	583	612	593	567	561	582
Fuel Used (gal)	18.6	19.7	17.9	18.7	17.5	18.5

Interval #0 Information Seeding

Start Time	3:50
End Time	4:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1090	1142	1078	1078	1054	1088
Vehs Exited	1094	1141	1076	1084	1056	1090
Starting Vehs	17	18	13	23	21	13
Ending Vehs	13	19	15	17	19	16
Travel Distance (mi)	567	592	543	567	533	560
Travel Time (hr)	20.4	21.6	19.8	20.3	19.3	20.2
Total Delay (hr)	1.8	2.1	1.8	1.8	1.7	1.9
Total Stops	583	612	593	567	561	582
Fuel Used (gal)	18.6	19.7	17.9	18.7	17.5	18.5

3: Pool Street & Newtown Road Performance by lane

Lane	EB	WB	NB	SB	All
Movements Served	LTR	LTR	LTR	LTR	
Denied Del/Veh (s)					0.1
Total Del/Veh (s)	6.6	6.3	0.9	0.8	2.1

6: Pool Street & Seastar Market/Hills Beach Road Performance by lane

Lane	EB	WB	NB	NB	SB	SB	All
Movements Served	LTR	LTR	L	TR	L	TR	
Denied Del/Veh (s)							0.6
Total Del/Veh (s)	7.1	6.9	1.8	1.2	2.9	1.4	3.3

9: Pool Street & Hedley Reynolds Way/UNE Driveway Performance by lane

Lane	EB	EB	WB	NB	SB	All
Movements Served	L	TR	LTR	LTR	LTR	
Denied Del/Veh (s)						0.2
Total Del/Veh (s)	5.4	6.5	5.5	0.5	1.1	1.9

Total Network Performance

Denied Del/Veh (s)	0.6
Total Del/Veh (s)	5.5

Intersection: 3: Pool Street & Newtown Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	29	93	17	24
Average Queue (ft)	8	39	1	3
95th Queue (ft)	26	68	9	13
Link Distance (ft)	1073	393	1059	762
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Pool Street & Seastar Market/Hills Beach Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	60	124	22	4	55	4
Average Queue (ft)	21	48	2	0	21	0
95th Queue (ft)	49	89	13	3	47	3
Link Distance (ft)	55	1025		762		1318
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			300		200	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Pool Street & Hedley Reynolds Way/UNE Driveway

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	53	69	58	10	40
Average Queue (ft)	14	27	31	0	5
95th Queue (ft)	42	55	53	5	24
Link Distance (ft)		634	721	1036	1059
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:50	3:50	3:50	3:50	3:50	3:50
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	70	70	70	70	70	70
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	1090	1142	1078	1078	1054	1088
Vehs Exited	1094	1141	1076	1084	1056	1090
Starting Vehs	17	18	13	23	21	13
Ending Vehs	13	19	15	17	19	16
Travel Distance (mi)	567	592	543	567	533	560
Travel Time (hr)	20.4	21.6	19.8	20.3	19.3	20.2
Total Delay (hr)	1.8	2.1	1.8	1.8	1.7	1.9
Total Stops	583	612	593	567	561	582
Fuel Used (gal)	18.6	19.7	17.9	18.7	17.5	18.5

Interval #0 Information Seeding

Start Time	3:50
End Time	4:00
Total Time (min)	10
Volumes adjusted by Growth Factors.	
No data recorded this interval.	

Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60
Volumes adjusted by Growth Factors.	

Run Number	1	2	3	4	5	Avg
Vehs Entered	1090	1142	1078	1078	1054	1088
Vehs Exited	1094	1141	1076	1084	1056	1090
Starting Vehs	17	18	13	23	21	13
Ending Vehs	13	19	15	17	19	16
Travel Distance (mi)	567	592	543	567	533	560
Travel Time (hr)	20.4	21.6	19.8	20.3	19.3	20.2
Total Delay (hr)	1.8	2.1	1.8	1.8	1.7	1.9
Total Stops	583	612	593	567	561	582
Fuel Used (gal)	18.6	19.7	17.9	18.7	17.5	18.5

3: Pool Street & Newtown Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.1	0.1
Total Del/Veh (s)	6.6	6.3	0.9	0.7	2.1

6: Pool Street & Seastar Market/Hills Beach Road Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	0.1	0.2	0.0	1.6	0.6
Total Del/Veh (s)	7.1	6.9	1.3	2.1	3.3

9: Pool Street & Hedley Reynolds Way/UNE Driveway Performance by approach

Approach	EB	WB	NB	SB	All
Denied Del/Veh (s)	1.3	0.1	0.2	0.0	0.2
Total Del/Veh (s)	6.2	5.5	0.5	1.1	1.9

Total Network Performance

Denied Del/Veh (s)			0.6		
Total Del/Veh (s)			5.5		

Intersection: 3: Pool Street & Newtown Road

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	29	93	17	24
Average Queue (ft)	8	39	1	3
95th Queue (ft)	26	68	9	13
Link Distance (ft)	1073	393	1059	762
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Pool Street & Seastar Market/Hills Beach Road

Movement	EB	WB	NB	NB	SB	SB
Directions Served	LTR	LTR	L	TR	L	TR
Maximum Queue (ft)	60	124	22	4	55	4
Average Queue (ft)	21	48	2	0	21	0
95th Queue (ft)	49	89	13	3	47	3
Link Distance (ft)	55	1025		762		1318
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)			300		200	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Pool Street & Hedley Reynolds Way/UNE Driveway

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LTR	LTR	LTR
Maximum Queue (ft)	53	69	58	10	40
Average Queue (ft)	14	27	31	0	5
95th Queue (ft)	42	55	53	5	24
Link Distance (ft)		634	721	1036	1059
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	100				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

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

REPORT DESCRIPTION

Biddeford
UNE Master Plan

REPORT PARAMETERS

Year 2018, Start Month 1 through Year 2020 End Month: 12

Route: 0009X	Start Node: 54694 End Node: 54740	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node
Route: 3111398	Start Node: 53380 End Node: 54703	Start Offset: 0 End Offset: 0	☒ Exclude First Node ☒ Exclude Last Node
Route: 3110079	Start Node: 53560 End Node: 53380	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☒ Exclude Last Node
Route: 3101398	Start Node: 59177 End Node: 53380	Start Offset: 0 End Offset: 0	☐ Exclude First Node ☐ Exclude Last Node

Maine Department Of Transportation - Office of Safety, Crash Records Section

Crash Summary I

Nodes														
Node	Route - MP	Node Description	U/R	Total Crashes	K	Injury A	Crashes B	Crashes C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
54694	0009X - 29.51	TL Biddeford Kennebunkport	1	0	0	0	0	0	0	0.0	0.400	0.00	0.60	0.00
												Statewide Crash Rate: 0.14		
54695	0009X - 29.60	Int of OAK RIDGE RD POOL ST	1	1	0	0	0	1	0	100.0	0.901	0.37	0.54	0.00
												Statewide Crash Rate: 0.14		
54880	0009X - 29.65	Int of POOL ST SCADLOCK MILL RD	1	0	0	0	0	0	0	0.0	0.891	0.00	0.54	0.00
												Statewide Crash Rate: 0.14		
54881	0009X - 30.02	Int of POOL ST SCADLOCK MILL RD	1	0	0	0	0	0	0	0.0	0.854	0.00	0.55	0.00
												Statewide Crash Rate: 0.14		
54696	0009X - 30.14	Int of POOL ST WEST ST	2	1	0	0	0	0	1	0.0	1.126	0.30	0.54	0.00
												Statewide Crash Rate: 0.15		
54697	0009X - 30.53	Int of GRANITE POINT RD POOL ST	1	2	0	0	1	0	1	50.0	1.043	0.64	0.53	1.22
												Statewide Crash Rate: 0.14		
54698	0009X - 30.61	Int of FORTUNES ROCKS RD POOL ST	1	0	0	0	0	0	0	0.0	0.948	0.00	0.54	0.00
												Statewide Crash Rate: 0.14		
54699	0009X - 30.83	Int of ELIZABETH RD POOL ST	1	0	0	0	0	0	0	0.0	0.679	0.00	0.57	0.00
												Statewide Crash Rate: 0.14		
58277	0009X - 31.50	Int of MADDOX POND RD POOL ST	1	1	0	0	1	0	0	100.0	0.703	0.47	0.57	0.00
												Statewide Crash Rate: 0.14		
54882	0009X - 31.85	Int of POOL ST WATER TOWER WY	1	0	0	0	0	0	0	0.0	0.701	0.00	0.57	0.00
												Statewide Crash Rate: 0.14		
59000	0009X - 31.91	Int of BRIDGE RD POOL ST	2	1	0	0	0	0	1	0.0	0.720	0.46	0.60	0.00
												Statewide Crash Rate: 0.15		
54701	0009X - 31.96	Int of BRIDGE RD POOL ST	2	1	0	0	0	0	1	0.0	1.250	0.27	0.53	0.00
												Statewide Crash Rate: 0.15		
54702	0009X - 33.18	Int of NEWTOWN RD POOL ST	2	1	0	0	0	0	1	0.0	1.218	0.27	0.54	0.00
												Statewide Crash Rate: 0.15		
54703	0009X - 33.35	Int of OLD POOL RD POOL ST	2	4	0	0	0	1	3	25.0	2.234	0.60	0.46	1.30
												Statewide Crash Rate: 0.15		
54704	0009X - 33.96	Int of POOL ST SOKOKIS RD	2	0	0	0	0	0	0	0.0	2.551	0.00	0.45	0.00
												Statewide Crash Rate: 0.15		
57515	0009X - 34.06	Non Int POOL ST	2	0	0	0	0	0	0	0.0	2.446	0.00	0.45	0.00
												Statewide Crash Rate: 0.15		
54705	0009X - 34.43	Int of MEETINGHOUSE RD POOL ST SOKOKIS RD	2	0	0	0	0	0	0	0.0	2.334	0.00	0.46	0.00
												Statewide Crash Rate: 0.15		
54517	0009X - 34.68	Int of NO NAME RD POOL ST	2	0	0	0	0	0	0	0.0	1.989	0.00	0.47	0.00
												Statewide Crash Rate: 0.15		
54706	0009X - 34.74	Int of MARBLEHEAD LN POOL ST	2	0	0	0	0	0	0	0.0	2.028	0.00	0.47	0.00
												Statewide Crash Rate: 0.15		
54707	0009X - 35.05	Int of MEETING HOUSE RD POOL ST	2	3	0	1	1	0	1	66.7	2.342	0.43	0.46	0.00
												Statewide Crash Rate: 0.15		
59238	0009X - 35.18	Int of HIDDEN FARM RD POOL ST	2	1	0	0	0	0	1	0.0	2.392	0.14	0.45	0.00
												Statewide Crash Rate: 0.15		
59237	0009X - 35.27	Int of HIDDEN FARM RD POOL ST	2	0	0	0	0	0	0	0.0	2.402	0.00	0.45	0.00
												Statewide Crash Rate: 0.15		

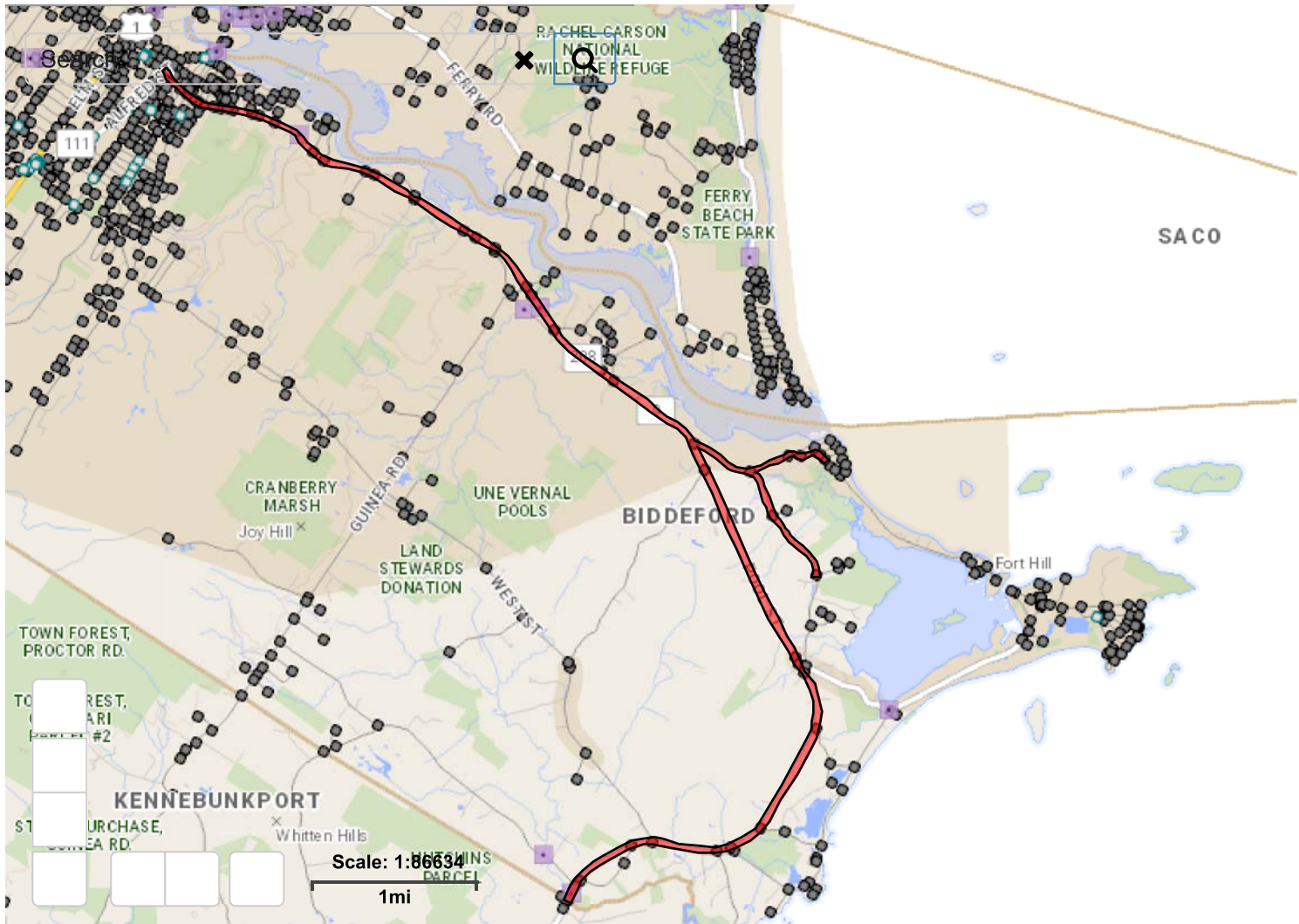
Maine Department Of Transportation - Office of Safety, Crash Records Section

Crash Summary I

Nodes															
Node	Route - MP	Node Description	U/R	Total Crashes	K	Injury A	Crashes B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF	
54708	0009X - 35.61	Int of DECARY RD POOL ST	2	0	0	0	0	0	0	0.0	2.408	0.00	0.45	0.00	
												Statewide Crash Rate:	0.15		
54709	0009X - 35.89	Int of DECARY RD POOL ST	2	2	0	0	0	0	2	0.0	2.482	0.27	0.45	0.00	
												Statewide Crash Rate:	0.15		
58537	0009X - 35.94	Int of LEDGEMERE DR POOL ST	2	0	0	0	0	0	0	0.0	2.617	0.00	0.44	0.00	
												Statewide Crash Rate:	0.15		
58538	0009X - 36.20	Int of LIBBY DR POOL ST	2	2	0	0	1	0	1	50.0	2.655	0.25	0.44	0.00	
												Statewide Crash Rate:	0.15		
54710	0009X - 36.29	Int of MARIAL AV, POOL ST	2	0	0	0	0	0	0	0.0	2.850	0.00	0.43	0.00	
												Statewide Crash Rate:	0.15		
54711	0009X - 36.58	Int of LAFAYETTE ST POOL ST	2	2	0	0	0	1	1	50.0	3.134	0.21	0.42	0.00	
												Statewide Crash Rate:	0.15		
54712	0009X - 36.68	Int of POOL ST SIMARD AV	2	1	0	0	0	0	1	0.0	3.355	0.10	0.41	0.00	
												Statewide Crash Rate:	0.15		
54713	0009X - 36.73	Int of CLIFFORD ST POOL ST	2	4	0	0	0	0	4	0.0	3.478	0.38	0.41	0.00	
												Statewide Crash Rate:	0.15		
54714	0009X - 36.85	Int of GEORGE ST POOL ST	2	1	0	0	0	0	1	0.0	2.011	0.17	0.47	0.00	
												Statewide Crash Rate:	0.15		
54715	0009X - 36.89	Int of PARENT AV POOL ST	2	0	0	0	0	0	0	0.0	1.772	0.00	0.49	0.00	
												Statewide Crash Rate:	0.15		
54716	0009X - 36.93	Non-Int POOL ST	2	0	0	0	0	0	0	0.0	1.775	0.00	0.49	0.00	
												Statewide Crash Rate:	0.15		
54717	0009X - 36.98	Int of BRISTOL ST POOL ST	2	0	0	0	0	0	0	0.0	1.796	0.00	0.49	0.00	
												Statewide Crash Rate:	0.15		
54718	0009X - 37.04	Int of PIKE ST PIKE ST EXT POOL ST	2	5	0	0	0	3	2	60.0	1.859	0.90	0.48	1.86	
												Statewide Crash Rate:	0.15		
58539	0009X - 37.07	Int of POOL ST SCHOOL ST	2	0	0	0	0	0	0	0.0	1.838	0.00	0.48	0.00	
												Statewide Crash Rate:	0.15		
54719	0009X - 37.08	Int of HIGH ST POOL ST	2	1	0	0	0	0	1	0.0	2.005	0.17	0.47	0.00	
												Statewide Crash Rate:	0.15		
54720	0009X - 37.11	Int of OAK ST POOL ST	2	2	0	0	0	1	1	50.0	2.219	0.30	0.46	0.00	
												Statewide Crash Rate:	0.15		
54721	0009X - 37.15	Int of MIDDLE ST POOL ST	2	0	0	0	0	0	0	0.0	2.266	0.00	0.46	0.00	
												Statewide Crash Rate:	0.15		
58540	0009X - 37.16	Int of PHILLIPS LN POOL ST	2	0	0	0	0	0	0	0.0	2.287	0.00	0.46	0.00	
												Statewide Crash Rate:	0.15		
54722	0009X - 37.20	Int of HILL ST, POOL ST	9	12	0	0	0	4	8	33.3	4.745	0.84	1.33	0.63	
												Statewide Crash Rate:	0.77		
54723	0009X - 37.28	Int of FOSS ST POOL ST	2	3	0	0	0	1	2	33.3	2.659	0.38	0.44	0.00	
												Statewide Crash Rate:	0.15		
54740	0009X - 37.34	Int of ALFRED ST JEFFERSON ST POOL ST	9	17	0	0	0	8	9	47.1	5.419	1.05	1.30	0.80	
												Statewide Crash Rate:	0.77		
53560	3110079 - 1.31	3103157 BID,HILLS BEACH RD, LONG AVE	2	0	0	0	0	0	0	0.0	0.447	0.00	0.64	0.00	
												Statewide Crash Rate:	0.15		

Crash Summary I

Nodes														
Node	Route - MP	Node Description	U/R	Total Crashes	K	Injury A	Crashes B	Crashes C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
57374	3110079 - 1.36	Int of HILLS BEACH RD SEABREEZE AV	2	0	0	0	0	0	0	0.0	0.498	0.00	0.63	0.00
57372	3110079 - 1.38	Int of BREAKWATER AV HILLS BEACH RD	2	1	0	0	0	0	1	0.0	0.571	0.58	0.62	0.00
59220	3110079 - 1.48	Int of HILLS BEACH RD RED OAK LN	2	0	0	0	0	0	0	0.0	0.604	0.00	0.62	0.00
57039	3110079 - 1.55	Non Int HILLS BEACH RD	2	0	0	0	0	0	0	0.0	0.300	0.00	0.65	0.00
53380	3101398 - 1.36	Int of HILLS BEACH RD OLD POOL RD	2	0	0	0	0	0	0	0.0	0.798	0.00	0.59	0.00
59177	3101398 - 0.60	Int of DAYS LNDG, OLD POOL RD	1	0	0	0	0	0	0	0.0	0.177	0.00	0.52	0.00
63672	3101398 - 1.05	Int of MARSH VIEW DR OLD POOL RD	2	0	0	0	0	0	0	0.0	0.194	0.00	0.60	0.00
Study Years: 3.00		NODE TOTALS:		69	0	1	4	20	44	36.2	91.371	0.25	0.29	0.87



University of New England

Parking and Transportation Demand Management - 2022

The previous Master Plan parking demands were based upon data in a publication entitled *Parking for Institutions and Special Events*¹. This specific source is cited in many later studies and appears to be in current use in evaluating university/college parking needs. The study itself does not cite a specific parking supply standard, but reports on the standards used at a number of institutions throughout the country. The most conservative rate cited is one space for each full time faculty and staff member and 0.5 spaces per enrolled student. For the previously approved master plan, these calculations include non-UNE employees who regularly report to work on campus (Dining Services and Bookstore contract employees). Based on that formula, the projected 2022 parking demand was 1952 spaces. A total of 2029 parking spaces are available on the campus. Annually in October and April, UNE conducts actual vacant parking space counts to confirm these calculations. Utilization of the October 2022 data indicates that during average peak demand, typically between 12:00 noon and 1:00PM, there were 167 spaces available on campus, thus confirming the relative accuracy and conservativeness of the formula.

UNE has an ongoing Transportation Demand Management plan (TDM) since 2010, to address the parking issues on campus, as well as reducing vehicular traffic on campus and in the vicinity of the campus. Specifically, the actions include:

- Residential Student parking permit fee of \$300.
- \$300 incentives to freshman to leave cars at home.
- Free on campus shuttle service.
- Subsidizing the shuttle bus service to downtown Biddeford, including all local routes as well as the ZOOM to Portland. The use of which is free to all UNE Community members.
- Providing free utilization of the South Portland Bus Service and the Portland Metro Bus system, including the Metro Breeze to Brunswick. The use of which is free to all UNE Community members.
- Providing free bicycles, helmets and locks for travel on and around campus.
- Car Pool Program that allows for free parking on campus.
- UNE utilizes the GoMaine service to encourage “greener commuting” to each campus as

¹ Edward M. Whitlock, P.E., Eno Foundation for Transportation, Westport, CT, 1982

well as between campuses when required. UNE has its own landing page on the [GoMaine website](#), which helps users find carpool partners, map out alternative transportation methods with transit, walking and biking routes, incentivizes users with rewards, and offers emergency “ride home guarantee” for regular users. Additionally, UNE takes advantage of the expertise of GoMaine staff for educational and promotional events with informational tabling, swag give-aways, and educational presentations.

- During the last Way-2-Go, GoMaine competition in 2019, UNE won two awards: Most New Members in the XXL Company Category and the Team Spirit Awards. There was significant momentum developing in the alternative transportation realm and the university is eager to return to this pre-pandemic activity and progress. The TTT committee plans to participate in and support future Way-2-Go competitions.
- In addition to this, UNE has an extensive videoconferencing system to minimize the commuting needs of faculty and staff as a result of intercampus meetings.

The University’s TDM program has had a significant impact on parking demand. The Freshman incentives are highly utilized and reduce on campus vehicles by approximately 250 each year.

In the previous academic year only 2796 passengers used the Biddeford shuttle bus. Students, faculty and staff ride free on both the shuttle and the Zoom system, as well as the South Portland and Portland bus systems. This is down considerably from the previously reported ridership rates, due primarily to COVID. UNE is working towards re-establishing a greater use of mass transit. The use of mass transportation has been proven to significantly reduce the traffic volumes on the local road system, minimizes the need to bring a vehicle to campus, and decreases the University’s carbon footprint.

For Freshman students not requesting a parking permit, LYFT vouchers are available as incentives. Eligible students receive, at no cost, an annual credit against these rentals that can be used while on campus or at home. Additionally, for Freshman students not requesting a parking permit, they can also choose to receive a \$300 credit at the UNE bookstore or at the UNE retail food service venues.

The University also has a Car Pool Program to encourage persons to ride share. This program allows for free parking on campus to faculty and staff, and requires a minimum of two persons commuting together to be eligible. Car Pool parking is designated and centrally located on campus.

As previously indicated, the existing supply of parking on the Biddeford Campus is 2029 spaces. Based upon projected student, faculty, and UNE and contracted staff statistics in the Master Plan (2023- 2027), parking demand is summarized below:

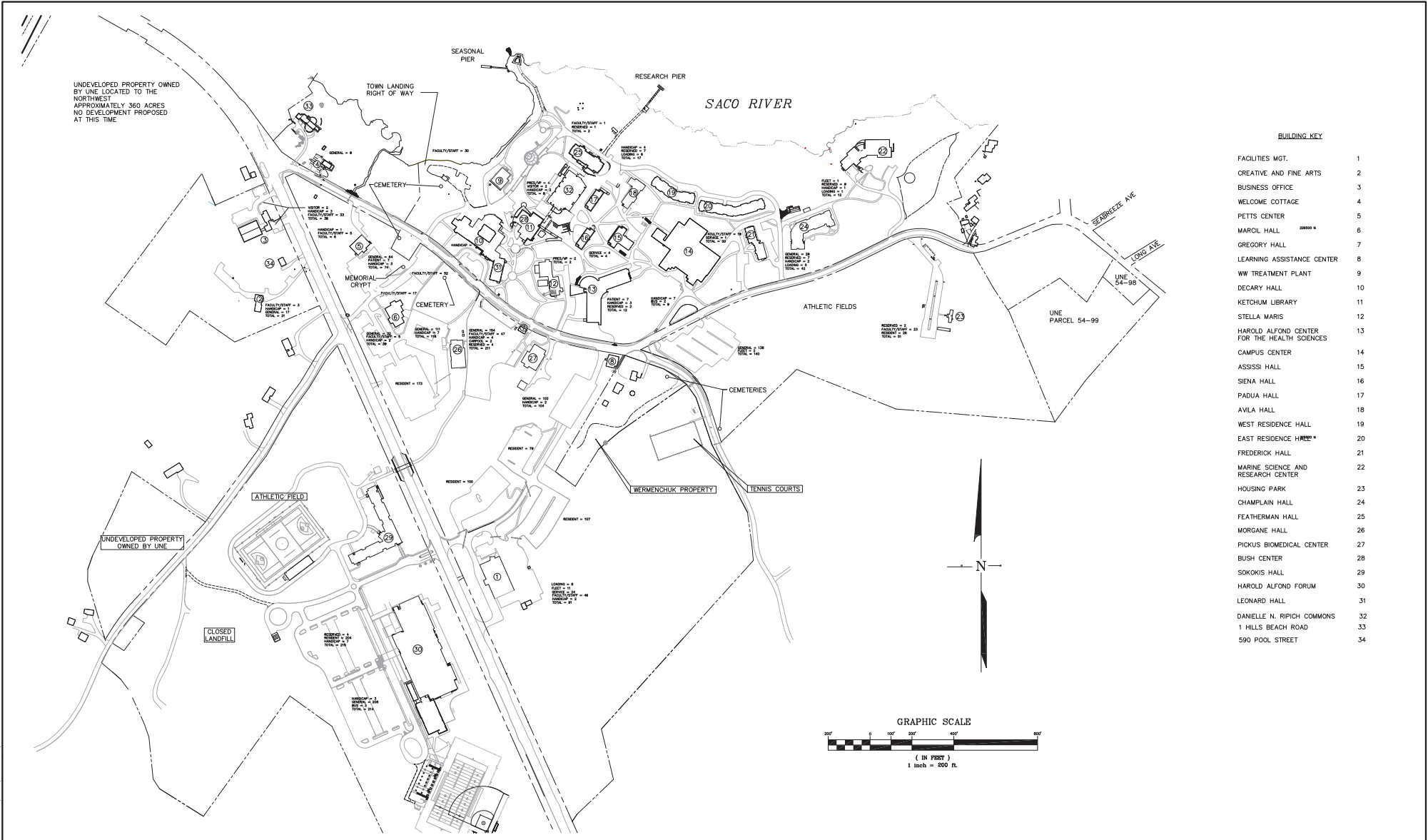
Year	2022	2023	2024	2025	2026	2027
Students	2402	2505	2165	2190	2235	2290
Faculty/Staff	751	726	600	620	640	650
Student Parking Demand	1201	1253	1083	1095	1118	1145
Faculty/Staff Parking Demand	751	726	600	620	640	650
Total Parking Demand	1952	1979	1683	1715	1758	1795
Projected Surplus/Deficit*	77	50	346	314	271	234
Actual Surplus+	167					

* Based upon existing supply of 2029 spaces

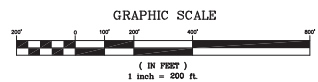
+ Based on actual vacant space counts, October 2022

Potential additional parking on campus is envisioned in the 2023 - 2027 Master Plan at locations on the west side of Route 9 near the Harold Alfond Forum and some new parking may be provided on the main campus near the Pickus Biomedical Center addition.

The University is now participating in intercollegiate football. These games are held during non-peak academic periods, thus parking that would typically be used by commuter students or faculty and staff is available for use during these events. This is similar to other large sporting events and programs. The University staffs all home games and major events on campus with Safety and Security Officers to assist with crowd control and pedestrian safety. For events that are determined to have a potentially significant impact on the community, notices are sent out to neighbors in advance to alert them and to solicit feedback prior to the event occurring. For example, the University had to host its Commencement on campus in 2014 as a result of the construction at the Cumberland County Civic Center. This resulted in a large number of vehicles coming to and from the campus during a limited amount of time. This event was coordinated with the local public safety officials and the community was notified well in advance, in order to minimize the impact of this event.



BUILDING KEY	
FACILITIES MGT.	1
CREATIVE AND FINE ARTS	2
BUSINESS OFFICE	3
WELCOME COTTAGE	4
PETTS CENTER	5
MARCEL HALL	6
GREGORY HALL	7
LEARNING ASSISTANCE CENTER	8
WW TREATMENT PLANT	9
DECARY HALL	10
KETCHUM LIBRARY	11
STELLA MARIS	12
HAROLD ALFORD CENTER FOR THE HEALTH SCIENCES	13
CAMPUS CENTER	14
ASSISSI HALL	15
SIENA HALL	16
PADUA HALL	17
AVILA HALL	18
WEST RESIDENCE HALL	19
EAST RESIDENCE HALL	20
FREDERICK HALL	21
MARINE SCIENCE AND RESEARCH CENTER	22
HOUSING PARK	23
CHAMPLAIN HALL	24
FEATHERMAN HALL	25
MORGANE HALL	26
PICKUS BIOMEDICAL CENTER	27
BUSH CENTER	28
SOKOKIS HALL	29
HAROLD ALFORD FORUM	30
LEONARD HALL	31
DANIELLE N. RUPCH COMMONS	32
1 HILLS BEACH ROAD	33
590 POOL STREET	34



THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

										Site Design Associates Consulting Engineering & Land Planning 22 Whitney Way Topsham, Maine 04086 Tel: (207) 449-4373										DESIGN: TWS DRAWN: DEPT. CHKD: TWS		PROJECT: UNE CAMPUS MASTER PLAN 11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005	
										UNIVERSITY OF NEW ENGLAND 11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005										EXISTING PARKING PLAN			
B 2/08/23 FOR SUBMISSION										DEPT		DEPT		TWS									
A 1/20/23 FOR CITY OF BIDDEFORD REVIEW										DEPT		DEPT		TWS									
REV. DATE STATUS										BY		CHKD		APPD		REV.		DATE		STATUS			
																				BY CHKD APPD			

6 – Water and Sewer Service

a. A description of current provisions for water supply and sewage disposal including capacities, current utilization rates, and conformance with any permit or other legal standards.

b. An analysis of the change in demand for water supply and sewage disposal resulting from anticipated changes in programs and facilities over the next five years and the adequacy of the existing systems to meet this demand.

c. A proposed program of improvements to address any identified deficiencies

Water Service

Water service is generally available to the main campus area from the existing 8” main in Hills Beach Road owned by Maine Water. The 8” main branches at the intersection of the Hills Beach and Old Pool Roads and continues along both roads. The main along Hills Beach Road ends at a hydrant at the end of Hills Beach Road. The 8” main in Old Pool Road continues to a tie in with the Kennebunk Water District to provide a looped system. This connection was made in 1998, and water company personnel have indicated that this has improved the flow characteristics in the system. If a significant reduction in water pressure is experienced in the water system serving the campus and Hills Beach Community for any reason, a valve at the intersection of Old Pool and Bridge Roads can be opened, which will increase the pressure and flows in the system.

Two of the smaller residential style facilities have private wells. These include 590 Pool Street and the Creative and Fine Arts Building.

Please refer to the Campus Plan-Five Year Development Strategy plan in the back of section 10, for the locations of potential projects to be developed.

Water service to the proposed development will be provided from the existing distribution systems.

The Campus Plan-Five Year Development Strategy plan has been provided to the Maine Water for the proposed development. As noted in the attached letter from Maine Water, they have indicated they have the capacity to serve the future needs of UNE.

Sewerage Treatment Plant

The University currently operates a wastewater treatment plant licensed to discharge 150,000 gallons per day (gpd) to the Saco River. During 2022 the discharge rates averaged 59,096 gallons per day and the peak monthly average for 2022 was 86,679 gpd in February, with lower rates during other months. All University owned buildings on campus discharge wastewater to the campus system, excepting the Welcome Cottage, 590 Pool Street, the Creative and Fine Arts Building, 1 unit at the former housing park,

the president's residence at 1 Hills Beach Road, and the Business Office, which all have subsurface wastewater disposal systems.

The wastewater treatment plant is functioning properly and no problem areas are evident. The University has had only two violations of its effluent quality in the last 20 years.

The wastewater collection system is completely separated from the campus storm water collection systems, and the manholes sealed, thus there is no possibility of any overflows at the treatment plant due to storm water.

The total maximum projected daily discharge based upon 300 additional beds and all proposed projects is estimated to be 101,100 gpd. Based on the analysis of the current flow data at the treatment plant and the projected flows, it does not appear that expansion of the treatment facility to accommodate additional flow will be required at build out, and the plant will operate within its licensed capacity. This does not preclude expansions dictated by changes in local, state or federal regulations pertaining to treatment plant discharges.

d. A statement as to how water supply and sewer disposal improvements are or will be coordinated with City programs and the needs of neighboring residential areas.

Any water service improvements necessary will benefit the surrounding community through the increased capacity and added reliability of upgraded infrastructure.



The Maine Water Company
93 Industrial Park Road
Saco, ME 04072

T: 207.282.1543
F: 207.282.1544
www.mainewater.com

December 27, 2022

Site Design Associates
Attn: Thomas Saucier, PE
23 Whitney Way
Topsham, ME 04086

Re: University of New England Capital Plan Update

Dear Tom:

Thank you for forwarding the updated 2022 Capital Plan for the University of New England Biddeford Campus. It remains important for our Engineering and Service Delivery staff to become familiar with the recent construction and growth plans on campus and continue a relationship such that our goals remain aligned.

Based on the revised capital plan, we are comfortable that the water system has capacity for the projected growth and uses you have indicated. We also understand that we will have to opportunity to review individual projects in conjunction with the City of Biddeford and other applicable utilities and agencies.

We look forward to our continued relationship with you and the University and please do not hesitate to reach out to discuss specific projects

Sincerely,

Jon Earle

Jon Earle, PE
Manager of Engineering □ Technical Services

7- Municipal and Community Services

a. A description of all municipal and community services (police, fire, recreation, etc.) currently utilized by the institution and data on the current level of usage.

Emergency Services

The University employs Safety and Security Officers, who provide 24-hour coverage on a year-round basis. These officers are trained as first responders. The University also supports a student led Emergency Medical Services, EMS, team of 83 volunteers providing emergency medical coverage 7pm to 7am seven days a week when classes are in session. Twenty-five of these volunteers are licensed EMT's. The University has its own Student Health Center on campus as well as a full array of counselling services available to our students.

In addition, the University of New England receives Police, Fire, and Emergency Medical Services (EMS) from the City of Biddeford. The University's Fire Alarm systems are monitored by UNE Safety & Security Dispatch and reported to the Biddeford Fire Department. These following statistics were prepared utilizing records provided to the University by JoAnne Fisk, Deputy Chief, Biddeford Police Department, and the City's published annual reports.

The total calls for service from the University for the calendar year 2021 were two hundred and thirty-six (236), or 0.17 calls per resident student. Fire/EMS calls make up 98 of the total calls, and Police dispatch calls represent the other 138 calls. This is a decrease of 10 calls of service, or -4% from the previous submitted 2016- 2021 Master Plan, which had estimated an increase of 20 calls per year for the facilities that were actually constructed. **If** UNE realized a **full build out** of the 2023-2027 Master Plan, it is anticipated that an additional 54 calls for service may be generated per year.

Comparatively, the total number of calls for emergency service to the City of Biddeford's Communication Center, in 2021, was 51,374 or the equivalent of 2.28 calls per resident of Biddeford. In 2014 the total number of calls for emergency service to the the City of Biddeford's Communication Center was 48,103, or 2.25 calls per resident. This represents an increase of 6.8% from 2014 to 2021. In 2021, the calls to the University represented 0.46% of all calls for service.

While the University's calls for service was relatively insignificant in comparison to the overall call load, it is important to note that the small number of calls does not diminish, the critical role and the outstanding performance of duty by the Biddeford Police and Fire Departments. Their quick response, excellent level and quality of care, and the professional manner in which difficult situations were addressed and resolved were greatly appreciated by the University faculty, staff, and students.

The University occasionally contracts with the Biddeford Fire and Police departments to provide coverage at home football games or other significant events held on campus. The

University allows the Biddeford Fire Department to conduct training in the unoccupied Residence halls during the summer months.

In the event of a Fire Alarm being activated, the City Fire Department is notified by UNE Safety & Security Dispatch, and a response is initiated. If the University is aware that the alarm is a “false alarm”, the City is notified of such and only one vehicle responds to reset the system. All other vehicles return to the station, minimizing the impact of the “false alarm”.

It is important to note that the information received from the City may vary from similar data elements found in the University’s Compliance Document for Crime Awareness and Campus Security Act of 1990, which statistics track University student code violations as well as crimes.

Please see the *Estimates of Impact* document at the rear of this section.

Solid Waste

The University contracts for its waste disposal services. There is no impact to the City services.

The University actively recycles all of its waste streams, including cardboard, paper and returnable bottles and cans, in all of its facilities. Approximately 40% of all waste is recycled.

All electronics are re-furbished and/or recycled. All Universal Waste is managed and disposed in accordance with State and Federal Regulations.

All hazardous materials are inventoried upon arrival, and stored and managed in accordance with State and Federal Regulations. Any unused chemicals are offered to other users, or if deemed waste, then they are disposed of through licensed vendors and manifested per regulations.

UNE started "SWOOP Days" in 2007 which is a collection drive during "move-out" week. The program has evolved to include a thrift shop event on campus in August to resell and gift gently used and curated items to students. Remaining items are brought to Goodwill for donation. The Sustainability Office, Residential Life and student environmental club collaborate to collect gently used clothes, furniture, small appliances, decorations and household accessories and store them over the summer for reuse in the fall, significantly reducing the waste generated from move-out. Unopened non-perishable food items are also collected, and donated to local food pantries.

Lightly used furniture is donated annually to homeless shelters and other organizations supporting those in need.

Recreation

The University has used the City of Biddeford's Saint Louis Field for its Club Baseball practices, scrimmages and games for the last ten years or so, and intends to continue utilizing the field. The games take place during September and October.

The University's Cross Country teams have and will continue to utilize Rotary Park for its home meets (one or two a year) and some practices. Additionally, the women's outdoor track & field team regularly practices during the months of March and April at the Biddeford High School track.

b. An analysis of the change in demand for municipal and community services and the adequacy of the existing services to meet this demand.

Based on current data, **IF** UNE realized a **full build out** of the proposed Master Plan, it is anticipated that an additional 54 calls of service would be generated per year. Assuming no other increases in Biddeford emergency service calls, these additional calls would increase the total calls for emergency services by 0.11%. It would be logical to assume that this increase would have a relatively insignificant impact on the adequacy of the existing emergency services.

In an effort to further minimize the impact of the increased level of calls for service to these entities, the University will continue to expand its education of its community on fire awareness, safety and health issues, offer additional health and wellness programs, and to continue to provide on-site health and counseling services to its community. The University maintains and inspects its safety systems on a regular basis to ensure that they are operating correctly, and imposes sanctions to the residents for any tampering of these systems, minimizing the potential for false alarms.

c. A proposed program of improvements to meet the identified deficiencies including proposed funding mechanisms.

The University has not identified any deficiencies in City or Community Services. However, UNE continues to work with the city to explore options for a remote Biddeford Fire substation in the coastal region of the city, proximal to the UNE campus.

University of New England - Biddeford Campus
Campus Master Plan - Five Year Projections (2021- 2026)

Estimates of Impact

1/2/2023

HOUSING								
Description					Water Demand (Peak Gallons per Minute)	Waste Water (Gallons per day)	Parking Demand (Spaces)	Police/Fire/EMS Service (Calls per year)
H1	New Residence Hall				33	6,000	150	26
ACADEMICS								
Description					Water Demand (Peak Gallons per Minute)	Waste Water (Gallons per day)	Parking Demand (Spaces)	Fire/EMS Service (Calls per year)
A1	Morgane Hall Addition				10	400	4	3
A2	Marine Science Patio Enclosure				5	100	0	0
A3	Marine Science Addition				10	800	5	2
A4	Creative and Fine Arts Addition				NA	NA	0	1
A5	Marcil Hall Addition				10	400	4	2
SUPPORT								
Description					Water Demand (Peak Gallons per Minute)	Waste Water (Gallons per day)	Parking Demand (Spaces)	Fire/EMS Service (Calls per year)
S1	Storage Facility				NA	NA	0	0
S2	Campus Center				10	300	2	5
S3	Waterfront Access for Recreation				NA	NA	0	1
S4	Waterfront Access for Research				NA	NA	1 (ADA)	1
S5	Storage Facility				NA	NA	0	0
S6	Petts Center Addition				5	200	6	7
S7	Pickus Center Addition				10	300	0	1
S8	Wastewater Treatment Facility Addition				NA	NA	0	0
ATHLETICS								
Description					Water Demand (Peak Gallons per Minute)	Waste Water (Gallons per day)	Parking Demand (Spaces)	Fire/EMS Service (Calls per year)
F1	Athletic Track/Field				NA	NA	2 (ADA)	2
F2	Athletic Storage				NA	NA	0	0
F3	Tennis Courts/Pressbox/Storage				NA	NA	1 (ADA)	1
F4	Athletic Field				NA	NA	2 (ADA)	2
F5	Athletic Storage				NA	NA	0	0

8- Neighborhood Impact

a. An assessment of how current campus activities impact neighboring residential areas including, but not limited to, traffic, noise, and visual intrusions. This assessment shall consider conformity to current City and state standards with respect to these items as well as documented evidence of any community or neighborhood concerns relative to these issues.

b. An evaluation of current efforts to mitigate these impacts.

Traffic

Consistent with the requirements of the Institutional Zone Master Plan and during Site Plan review processes, the University has had traffic engineering consultants conduct studies to assess the traffic situation around the campus and identify any problems, their causes, and potential mitigation opportunities (See detailed traffic report in Section 5 Parking and Traffic).

Hills Beach Road is the primary road that runs through the heart of the campus core. It is the primary access road for the Hills Beach residents to use while traveling to and from their homes and surrounding community. Both the University community and Hills Beach community also access the campus from Old Pool Road.

In response to concerns raised by the residents of the Hills Beach community in 2005, the University initiated a policy, that states “*No University of New England employee, office or department, student or student group shall sponsor or schedule any event, be it University related or one contracted by UNE with an outside group or organization, that would allow participants of that event to walk or run down Hills Beach Road*”, into the Hills Beach Community. This policy has been successfully adhered to and is still in place.

During the period of time that the Institutional Zone was being created, the City, the University, and the abutting neighborhood of Hills Beach held numerous discussions about the need for a by-pass road to eliminate the need for through traffic within the campus. A survey conducted by a Mayor’s Ad Hoc Commission, circa 2001, indicated that at that time, the majority of residents in the Hills Beach area did not support construction of a by-pass road. The Traffic Study located in Section 5 also concludes that the University’s growth plans for the next five years do not warrant construction of a bypass road. However, the City may determine that it wishes to pursue construction of a bypass road or other traffic improvements, for economic development and anticipated residential growth of the neighborhood. UNE’s conclusion that a bypass road is not required by the University’s five-year growth plan is a separate issue from any City determination that a bypass road is desired to address other neighborhood needs.

With the development that has occurred on the westerly side of Route 9, there was the need to install pedestrian safety improvements on Route 9. The plan was fully

implemented and has resulted in a much safer environment for pedestrians and vehicles. A request was received in the Fall of 2015 to trim overhanging branches that were obstructing the pedestrian crossing lights. This work was completed shortly after the call was received. Several reports of pedestrians crossing Route 9 without activating the pedestrian crossing lights have been received. In response to this concern, the University's Safety and Security Department focus on this topic, and general pedestrian/vehicular safety, during their mandatory annual training sessions conducted with all resident students at the beginning of each year.

The University was issued a Traffic Movement Permit, TMP, from the Maine Department of Transportation in 2009. This was based on its development and projected student growth to 2623 students on its Biddeford Campus. This projection was never realized and the newest projection for 2027 is set at 2290 students. The existing TMP, and the improvements made as a result of that permit, more than adequately addresses the projected growth contained within this Master Plan update.

It is the University's plan to gradually transform the Biddeford campus into a "walking campus" that is safe for both pedestrians and motorists. The University intends to continue the dialogue with its most immediate neighbors, as well as with Biddeford City officials and other stakeholders in the community to discuss any ongoing vehicular/pedestrian safety issues that might arise.

The University staffs all home games and major events on campus with Safety and Security Officers to assist with crowd control and pedestrian safety. For events that are determined to have a potentially significant impact on the community, notices are sent out to neighbors in advance to alert them and to solicit feedback prior to the event occurring. For example, the University had to host its Commencement on campus in 2014 as a result of the ongoing construction at the Cumberland County Civic Center. This resulted in a large number of vehicles coming to and from the campus during a limited amount of time, and was coordinated with the local public safety officials and the community was notified well in advance, in order to minimize the impact of this event.

Concerns recently discussed at the University's Institutional Zone – Master Plan Submission Community Workshop, held on November 2, 2015, included pedestrian crossings at Decary Hall and lighting levels at the crosswalks along Hills Beach Road. The University has included the pedestrian crossing at Decary Hall on its Conceptual Development Plan, but will need to work with the City and local community to identify an acceptable plan that would address this concern. The lighting issue will be evaluated and solutions implemented as the University continues with its landscaping enhancement program.

Noise

During the development on the westerly side of Route 9, the University received several calls related to noise. These were a result of contractors starting work earlier than 7am or later into the evening. The calls were evaluated and addressed on a case by case basis.

The university attempts to provide notice to its neighbors when it anticipates louder than normal activities, such as the bi-annual cleaning of the seawater tank at the Marine Science Center and when construction activities, including increased vehicular traffic, may occur near their property.

To mitigate concerns about noise from construction activities, the University will continue to follow the model used during the construction of the last several projects, which includes making the contractors aware of the City noise ordinance and related times, and require that they notify the City Code Enforcement Office of any work activities before 7:00a.m and after 10:00p.m. The University has also maintained its waste pick up schedule to limit trash hauling before 7:00a.m. The University feels that these efforts will further reduce any real or perceived impacts from noise generated by on campus activities.

Visual Intrusions

The University believes its current campus does not cause any visual intrusions on the adjacent neighborhood. The University will continue to incorporate appropriate landscape design elements in all future projects. (See *Appendix A - Landscape Design Standards*)

Air Emissions

The University is signatory of the American College & University Presidents Climate Commitment (ACUPCC). Signing the ACUPCC is an affirmation of UNE's sustainability efforts already under way. The University has been working to reduce its air emissions through the use of cleaner burning fuels. For the past decade the University has been utilizing liquid propane in its central heating plant and has begun to utilize Bio-fuel in its other heating plants. The use of Bio-fuel and propane has resulted in a significant reduction of carbon dioxide emissions. The University conducts an annual, university-wide greenhouse gas inventory and reports this metric to its Board of Trustees on an annual basis since 2010. For each of these years, the University has been successful in reducing its Metric Tons of Carbon Dioxide Equivalent, MTCDE, from its emissions, even while increasing its population and/or square footage of buildings.

The University has had no violations of its Air Emissions license in the past ten years. In 2008 the DEP conducted a site inspection of the University Campus and found no issues with the University's heating plants or recordkeeping.

c. An assessment of any changes in these impacts resulting from the changes in programs or facilities included in the Master Plan.

In each and every instance where the University has identified either a realistic or perceived impact, the University will be proactive in its approach to communicate and collaborate with its neighbors and City officials. Early problem identification and frank

and open communication are cornerstones of the foundation that must be built in order to effectively and successfully build bridges of understanding and cooperation between the University, its immediate neighbors, and the City. Only then, the University believes, can the elusive common ground be sought and found together for the benefit of all parties involved.

d. A program for mitigating the adverse impacts of proposed changes or improvements on surrounding residential neighborhoods.

The detailed design process for any new structure on campus, which is a normal part of project development, will include assessments of traffic, landscaping, lighting, noise and foot traffic, and the University will be obliged to conform to the then-controlling federal, state, regional and local requirements for land use development site plan review. The design process for each project must, by law, address the requirements of these laws to assure that the levels of traffic, landscaping, lighting, and noise do not exceed lawful levels. But the precise standards may vary through time, and the University must address the specific requirements through the Site Plan review procedure, along with any required mitigation efforts.

In an effort to minimize the vehicles parking and traveling to and on campus the University has successfully implemented several programs. These Traffic Demand Management strategies and their effectiveness are outlined in detail in Section 6.

9- Community Outreach

a. Description of current community outreach activities.

The University of New England believes itself to be a good neighbor and active participant in the community. We have strong relationships and partnerships with many community and neighborhood organizations, as well as civic and local government entities. The following is just a brief sampling of the outreach the UNE conducts. Additional information can be found on the University's website.

<http://www.une.edu/>

University representatives meet regularly with leaders from the Hills Beach Association to share information and identify, discuss and address any challenges. In addition, an annual Friends and Neighbors reception is held on campus every summer to gather and share information with our neighbors in the coastal area.

As the University of New England continues to broaden its profile in the region and beyond, ongoing engagement with citizens in the communities where we live and work is increasingly important.

Lecture Series and Public Events

President's Forum Lecture Series

The President's Forum is an event series consisting of moderated panel discussions, debates, or other highly interactive presentations on controversial issues. Underscoring the academy's unique role as the ultimate marketplace of ideas, the forum allows for open and robust discourse on timely topics, presenting diverse perspectives in a fair and balanced manner. The goal is not to privilege any particular ideology but, rather, to promote habits of mind and argumentation that enlighten students and the public and that promote a deeper understanding of critical issues facing our society.

George and Barbara Bush Distinguished Lecture Series

The George and Barbara Bush Distinguished Lecture Series is an annual event honoring the legacy of President and Mrs. Bush as political and community leaders.

The Center for Global Humanities Lecture Series

The Center for Global Humanities hosts speakers and films from around the globe and across the spectrum of the humanities.

For additional event and lecture opportunities please see the UNE website.

<http://www.une.edu/>

Public Service and Volunteerism

Numerous members of the university hold volunteer leadership positions with local civic organizations.

The university continues to value its long-standing relationships with community groups by providing meeting space for events such as meetings of the Biddeford City Council, the Biddeford/Saco Chamber of Commerce, the City of Biddeford's Volunteer Recognition Dinner, as well as for the local Rotary clubs.

Within the City of Biddeford and throughout the state, University faculty, staff, and students provide thousands of hours of community service, both as volunteers and as part of their clinical training and grant-funded projects. It is estimated that UNE students volunteer about 10,000 hours to more than 150 Maine organizations each year. Here are *just a few* of the *hundreds of ways* that UNE reaches out into the community:

The University of New England supports the **Maine Area Health Education Center** (AHEC) Network's mission to alleviate health workforce shortages in rural and underserved areas of the state. AHEC supports that effort by working with academic and community partners to:

- **Provide** rural, community-based clinical training experiences for medical and other health professions students
- **Encourage** Maine youth and mid-career professionals to explore health careers
- **Support** practicing health professionals with continuing education and distance learning opportunities

Citizenship is a permanent part of the core curriculum at the University. Through the College of Arts and Sciences Citizenship Learning class, students provide more than 4,000 hours of community service each year at 16 sites in six communities. This outreach is largely focused in one-on-one mentoring projects at area schools. A Citizenship Service Learning Coordinator oversees these service experiences and strengthens the University's ties with the local community.

UNE's freshman orientation **Trailblazer program** engages new students to volunteer at soup kitchens, paint and maintain area homes for the elderly, enhance the YMCA camp facilities, and assist with special needs adults. Our Athletic program organizes fundraisers and holds clinics for area students. The faculty and students of the Department of Environmental Studies volunteer to teach in local schools, operate in planning offices, perform environmental clean-ups, manage preserved lands, and design environmentally sensitive projects.

UNE's College Community Mentoring Program (CCMP) is a volunteer mentoring program that seeks to engage UNE students in the community by serving as consistent, reliable adult role models for local children and teens.

Mentors build a structured and trusting relationship with their mentees by offering guidance, support, encouragement and academic assistance. Through the CCMP mentoring relationship, UNE mentors help young people develop into confident, competent and contributing members of society. In turn, student-mentors strengthen their dedication to the community and thoughtfully enhance their college experience.

Through the CCMP, the University of New England partners with the following schools and organizations: Biddeford Head Start, Biddeford Primary School, Biddeford Middle School, Kennebunkport Consolidated School, Sea Road School of Kennebunk, the Middle School of the Kennebunks, Jameson School of Old Orchard Beach and the Northern York County YMCA.

UNE students participate in numerous academic and research initiatives, many of which have significant local impact. While the research being conducted at the university is too expansive to detail in this document, from the study of the endangered short nose sturgeon, to the study of opioids on pain, and everything in between...UNE is committed to making the community in which we live better. See the attached link for an in-depth sampling of the research at UNE.

<http://www.une.edu/research>

UNE is proud to sponsor **Educate Maine** and work together to fulfill our common goal of increasing the number of Mainers earning post-secondary degrees and credentials that will serve them as members of a talented, globally competitive workforce. Educate Maine and UNE share the beliefs that education is the catalyst and foundation for individual success, engaged citizenship and sustainable economic growth and that all learners, traditional and adult, should have equal access to high quality educational opportunities and the resources to make a successful transition to post-secondary education. By working together with Educate Maine's network of educators, industry leaders and workforce development organizations, UNE gains further insight into the needs of Maine learners and employers.

The University of New England is addressing the region's need for **health informatics specialists** through a pilot initiative to create new models of education with funding from the Bill and Melinda Gates Foundation.

Health care is changing dramatically with physicians, hospitals and patients expecting decisions to be made on data, evidence and best practices. The challenge is turning the huge number of data points into meaningful information that can be used for improved outcomes. Health informatics professionals review the data sets to find trends and communicate results to guide those making decisions that affect the health of the people in our communities.

The University of New England (UNE) and **Biddeford High School** signed an agreement between the two institutions that will enable high performing Biddeford High students who matriculate at UNE to earn college transfer credits, potentially enabling the students to earn a bachelor's degree in just three years.

The agreement will give Biddeford high graduates the opportunity to receive course credit at UNE if accepted to the university, provided that their scores on Advanced Placement (AP) exams meet specific cut-offs. If students are able to transfer a minimum of 30 credits, they may enroll at UNE with sophomore standing.

The University of New England became is a local performance site of the **New England Public Health Training Center (NEPHTC)** with funding from Health Resources and Services Administration (HRSA). The NEPHTC is administratively housed at Boston University School of Public Health (BUSPH), and encompasses all six states in the region. In addition to UNE, other local performance sites include BUSPH, Dartmouth College, University of Massachusetts Amherst and Yale School of Public Health. The NEPHTC is one of 10 regional centers and one national coordinating center selected and funded by HRSA to address training needs of state and local public state practitioners nationwide. The goal of the NEPHTC is to strengthen the technical, scientific, managerial and leadership competencies of the current and future public health workforce in New England to ensure regional capacity to deliver high quality essential public health services

From sponsoring blood drives to student mentoring in area elementary schools to volunteering their talents on town committees, UNE faculty, staff and students volunteer thousands of hours of their time in important projects benefiting the southern Maine communities in which they serve and live. Additional examples of ways this is accomplished include the following:

- **Community Engagement**

- The annual Brain Fair engages with local community in a science fair exploration of the brain
- UNE faculty, professional staff and students involving 5-10 volunteers visit k-12 schools in the Biddeford system to run interactive lesson/modules about neuroscience including brain anatomy, function, and injury.
- Southern Maine Brain Bee an international campaign organized by the Society of Neuroscience host the regional portion of the competition with local participants from the Biddeford High School. The participants of the brain bee are tutored by UNE students prior to the event.
- Maine Science Festival brings science to the public. UNE faculty, professional staff and students involving 5-10 volunteers typically participate
- Admission Leadership team

- Providing practice college interviews for Biddeford High School juniors
 - Adding application review days for the junior year
- Over the past five years, UNE has received an average of 25 applications / year from Biddeford High School students, and enrolled an average of 7 Biddeford students / year.
- UNE admissions visits Biddeford High School at least twice per year – one for a traditional high school “UNE information” visit, the other for an on-spot review day of applicants. If Biddeford High School holds a general college fair, we will also attend. Other offerings have included a “transition to college” seminar for Biddeford high school seniors – offered in collaboration with UNE Affairs in 2018 – and an admissions essay writing workshop.
- UNE has an articulation agreement with Biddeford High school, developed through our CAS Dean’s office, recognizing students who have taken a significant number of Advanced Placement courses and exams with advanced standing at UNE.
- We have employee and student discounts with business located in Biddeford.
- UNE’s residential meal plans have Nor’easter Dollars that can be spend at participating local restaurants.
- UNE Athletic Events
 - From September 2019 to March 2020 welcomed 24,000 fans to varsity home games, many from our local community
 - From May 2019 – March 2020 we hosted just under 1,100 children age 4-18 at through our camps and clinics, again – many of were from our local community
 - We agreed to an MOU with the Biddeford Youth Hockey Association in March 2020, where UNE has given them permission to use “Junior Nor’easters” as their nickname. UNE recognizes that the roots of its ice hockey program began at Biddeford Ice Arena and recognizes the unique connection between the local youth hockey community, the Biddeford Ice Arena and UNE, UNE agrees to grant BYHA permission to use the Trademark, in the United States, under the terms provided herein.
- Ketchum Library welcomes local community as a make shift coffee house.
- The Ketchum Library participates with the MaineCAT system that allows anyone with a valid library card to borrow books from our library if they have a valid McArthur Library card.
- Ketchum Library historical collections that are shared with the public
 - St. Francis High School and College Collection/ St. Francis Francophone Collection
 - The George & Barbara Bush Legacy collection

- The Art gallery
- Westbrook College history collection
- Maine Women Writers collection

- **Clinic**

- Cardiovascular Health Intervention Program for 100 students at Biddeford Intermediate School through UNE Department of Exercise and Sport Performance
- Internship with Four Applied Exercise Science students at follow locations
 - Seacoast PT
 - Biddeford PT
 - Malon Chiropractic
 - Southern Maine Health Care
- Internship with 5-7 students from UNE Athletic Training program intern at the Biddeford High School Athletics program
- Laurie Cyr-Martel, UNE faculty, was recently called on by the Maine Association of Psychiatric Physicians and the Maine Department of Health and Human Services to assist with a new Frontline Warmline, designed to lend support to first responders and health care workers dealing with the coronavirus pandemic. She is part of the faculty who support the team of 90 volunteers made up of physicians, nurses, counselors, and social workers who staff the phone line from 8 a.m. until 8 p.m. each day. They offer what is known as psychological first-aid (PFA).
- UNE Students volunteer to administer COVID-19 vaccinations to health care workers.
- Five students in the College of Osteopathic Medicine formed the Maine COVID Sitters, a group of health professions students providing child care, pet care, and household services to health care families.
- Their clinical studies on hold, UNE COM students take lead in COVID-19 testing efforts
- UNE faculty providing vaccination training to help address public health emergency
- UNE donates fit testing solution for N95 masks to Maine counties and Maine CDC
- In remote Deer Isle, UNE COM students assist virus-stricken nursing home
- UNE participates with City of Biddeford proclaiming March 15th -21st as Brain Awareness week.
- UNE participates with City of Biddeford proclaiming the month of September as Chronic Pain Awareness month.
 - UNE schedules seminars through the UNE's Excellence in Collaborative Education (CECE & CEN) program to bring awareness of Chronic Pain

- UNE Library & CEN created the Pain Chronicles at UNE with patient images and stories which were shared with the community about the research done at UNE.

- **Service**

- UNE Student provide teachers as full-time educators in public school system
 - 3-current students are UNE Football players
- Saco River Clean up: Sarae Sager (D.O.'21) is part of a group of scuba divers helping to remediate a portion of the Saco River which has been littered with beer bottles and other debris by inconsiderate parties
- UNE students, faculty and staff participate annually in Coastal Clean ups in Biddeford, Saco, and Old Orchard Beach
- Biddeford Pool Water Quality sampling project. Over the past year, several UNE researchers, both faculty and student, and our Planning Office have been collaborating with the City of Biddeford and the Department of Marine Resources, DMR, on a testing protocol to continue and augment the work that the City and DMR have already done in this area. Along these lines, the University is committing research labor and \$5000 towards the actual testing expenses.
- West Brook Skating Rink; UNE Department of Campus Services staff have volunteered to work with the West Brook Rink volunteers to repair site lighting and snow removal equipment and to review the maintenance needs of the facility. UNE has offered the use of its bucket truck and assisted in obtaining donations of light fixtures.
- Has provided space to host city events, like retirement parties
- Donations of furniture to Biddeford schools and Public Works
- Subsidizes the BSOOB Silver Line, and provides all faculty, staff and students free mass transit on BSOOB Transit, Portland Metro, South Portland City Bus Service, ZOOM and Metro Breeze
- Provides ongoing maintenance of the Town Burial Grounds, including removal of downed trees this past winter
- Provides maintenance of city sidewalks adjacent to campus
- Has partnered with the Rachel Carson Wildlife Refuge to preserve approximately 5.79 acres of the Biddeford Pool Marshland.
- Has partnered with Saco Valley Land Trust to preserve approximately 160 acres of UNE land, in its natural state.
- UNE researchers have and are working on projects that effect the local environment and economy.
 - Green Crab
 - Kelp farming/Aquaculture
 - Salmon
 - Sturgeon

- Sustaining the Saco Estuary
- Saco River Water Quality
- Biddeford Pool Water Quality
- Assessment of the bird community that uses the Saco River's tidal marshes

- **Philanthropic**

- 7-10 Students from UNE Applied Exercise Science program organize a 5k race to raise money and/or donations for the Biddeford Food Pantry
- Annual Teddy Bear toss events at the UNE men's and women's hockey games, where after the first goals scored by UNE's teams, fans in attendance toss thousands of stuffed animals onto the ice. Those, and more, are then donated to the Southern Maine Health Center as well as the Seeds of Hope Neighborhood Center in Biddeford. This year, more than 3,400 stuffed animals were collected for donation, bringing the event's six-year total north of 18,000. The Forum Student Building Managers also raised \$8,000 for the United Way of Southern Maine.
- The University of New England lacrosse programs hosts the Annual Lax-4-Life event, with all the proceeds, benefiting The Barbara Bush Children's Hospital at Maine Medical Center in Portland
- The University annually donates lightly used classroom furnishings to several agencies for repurposing in schools and recreational facilities. Residential furniture is donated annually to homeless shelters and other organizations supporting those in need.

b. An analysis of anticipated changes in outreach activities over the next five years.

The University will continue to provide an important service-related role in the community. Now more than ever, access to quality, free medical care is vital, and we recognize our commitment to providing this and other social service programs in the region. With cutbacks in budgets at area schools and in other programs, UNE understands the positive, important impact our student mentors and volunteers have, and will continue to build on those programs.

It is important to recognize that outside of UNE's significant volunteer and public service contributions to the region, UNE's economic impact is substantial. As of 2017 UNE's current direct sales impact on the Maine economy was over \$145 million, supporting over 3800 jobs and providing income of over \$172 million to the households who hold these jobs – many right here in the local community. UNE is the 5th largest employer in York County and 20th largest in the state. These sales filter through to the local economy and provide **a total economic impact on the state of over \$1 billion**. Please see the attached 2016 report entitled "*The Economic & Fiscal Impact on Maine of The University*

of New England, Academic Year 2016”.

This analysis estimates the UNE attracts over 24,000 visitors to Maine each year, generating \$22 million in sales to local businesses and that UNE student spending drives another \$42 million in sales.

Our ability to continue to positively impact the community through public service and volunteerism will increase exponentially with each new employee and student relationship we establish.

10 - Conceptual Development Program

a. A conceptual Site Plan at the same scale as the existing conditions plan showing the approximate size and location of proposed changes to buildings, structures, parking lots, pedestrian facilities, bicycle facilities, athletic fields and facilities, roads, and similar facilities proposed in the Master Plan. This should show new facilities, modifications or enlargements of existing facilities, and the planned removal of facilities.

Please refer to the Campus Master Plan – University Properties plan and the Campus Master Plan - Five Year Development Strategy plan, located in the back of this section.

b. An accompanying narrative or tables detailing the scale or size of the proposed improvements including the approximate height of buildings, the approximate peak elevation of buildings and structures referenced to NGVD, approximate floor area, approximate size of parking areas, or approximate occupancy.

Please refer to the Campus Master Plan 5-year Projections table, located at the back of this section.

c. A description of all development and design standards or provisions that will apply to the proposed improvements in accordance with subsection I.

See Appendix A, Development and Design Standards.

d. A schedule setting out when the improvements included in the conceptual development program are anticipated to be completed.

Please refer to the Campus Master Plan 5-year Projections table, located at the back of this section.



364 ACRE PARCEL

Legend :

- Housing Facility
- Academic Facility
- Support Facility
- Athletic Facility
- Athletic Field
- Addition
- Vehicular Circulation
- Pedestrian Circulation
- Parking Facility
- University of New England Property (Cleared-Wooded)

Note:
Graphic symbols are representative of approximate building size (footprint) but are not representative of building shape or height.

January 18 2023

January 18, 2023

University of New England - Biddeford Campus
Campus Master Plan - Five Year Projections (2023-2027)

Programming Building Blocks

12/7/2022

HOUSING							
Description	PRIORITY	APPROXIMATE FOOTPRINT (SQ. FT.)	STORIES	APPROXIMATE TOTAL (SQ. FT.)	ESTIMATED OCCUPANCY	HEIGHT**	NGVD**
H1 Residence Hall	3	25,000	4	100,000	300 (b)	50'	108
ACADEMICS							
Description	PRIORITY	APPROXIMATE FOOTPRINT (SQ. FT.)	STORIES	APPROXIMATE TOTAL (SQ. FT.)	ESTIMATED OCCUPANCY	HEIGHT**	NGVD
A1 Morgane Hall Addition	2	15,000	3	45,000	6 (o)	65'	107'
A2 Marine Science Patio Enclosure	1	1,100	1	1,100	0 (o)	35'	70
A3 Marine Science Addition	1	10,000	2	20,000	5 (o)	35'	70'
A4 Creative and Fine Arts Addition	2	5,000	2	10,000	0 (o)	35'	90'
A5 Marcil Hall Addition	3	7,000	3	21,000	6 (o)	50'	112'
SUPPORT							
Description	PRIORITY	APPROXIMATE FOOTPRINT (SQ. FT.)	STORIES	APPROXIMATE TOTAL (SQ. FT.)	ESTIMATED OCCUPANCY	HEIGHT**	NGVD
S1 Storage Facility	2	8,000	1	8,000	na	35'	55
S2 Campus Center	3	12,000	2	24,000	2 (o)	50'	80'
S3 Waterfront Access for Recreation	1	na	na	na	na	na	na
S4 Waterfront Access for Research	1	na	na	na	na	na	na
S5 Storage Facility	2	2,000	1	2,000	na	35'	75
S6 Petts Center Addition	2	5,000	2	10,000	7 (o)	35'	85'
S7 Pickus Center Addition	3	5,000	3	15,000	6 (o)	65'	89'
S8 Wastewater Treatment Facility Addition	3	6,000	1	6,000	0 (o)	35'	47'
ATHLETICS							
Description	PRIORITY	APPROXIMATE FOOTPRINT (SQ. FT.)	STORIES	APPROXIMATE TOTAL (SQ. FT.)	ESTIMATED OCCUPANCY	HEIGHT**	NGVD
F1 Athletic Track/Field	1	na	na	na	na	na	na
F2 Athletic Storage	2	2,500	1	2,500	0 (o)	35'	100
F3 Tennis Courts/Pressbox/Storage	1	160	2	240	na	35'	60
F4 Athletic Field	1	na	na	na	na	na	na
F5 Athletic Storage	2	2,500	1	2,500	0 (o)	35'	85

Occupancy Key:

- (b) = Beds
- (o) = Offices

** All building heights are approximates

Priority Key:

- 1. = 1-3 years
- 2. = 2-4 years
- 3. = 3-5 years

APPENDIX A

UNIVERSITY OF NEW ENGLAND INSTITUTIONAL ZONE MASTER PLAN SUBMISSION 2023-2027

Appendix Section 1 - Landscaping

I. Development and Design Standards

The Institutional Master Plan shall establish development and design standards that shall apply to all development proposals and other improvements within the Institutional Zone. These development and design standards will apply to individual projects that are submitted for site plan review. These standards shall foster the development of a visually and architecturally integrated campus that is safe, environmentally sensitive, and that minimizes the adverse impact of the campus on neighboring residential areas. At a minimum, these development and design standards shall address the following areas:

1. Landscaping - The standards shall establish a general pattern for all campus landscaping including the typical size and type of plantings and shall detail how landscaping will be used to enhance the visual environment of the campus, shield and soften service and parking areas, and minimize impacts on surrounding residential areas and the users of public streets through the campus.

Landscape and Planting Guidelines

Introduction

The campus contains an arrangement of buildings sited on an undulating landform within the confines of a wooded landscape.

These improvements shall consist of aesthetic planting designs that provide identity to site-specific areas, such as a specimen tree set in a corner of a quad or specialty plantings of native flowering trees at a building entrance. Specific street tree species may be planted along the primary vehicular routes to establish a 'spine' across the campus while other varieties are used along pedestrian ways. As well, improvements may consist of planting designs that provide identity and character to the campus as a whole. This will be generally be achieved with the use of native varieties present in the surrounding woodlands and reaffirming the rural character of the campus with preservation of the natural topography and existing native vegetation.

In addition to these general planting concepts and guidelines, the University seeks to begin the creation of a campus arboretum. The arboretum would serve to integrate the natural environment into the academic classroom. Areas of development would be selected based on their existing unique characteristics, or potential for enhancement. These areas would be developed with plantings (native and non-native specimen species) and hardscapes, in an effort to provide educational opportunities in an enhanced exterior setting.

Areas of consideration include the following:

The University will look to enhance the Main Entrance at Hills Beach Road and Route 9 to make it more welcoming and visible to drivers that are headed northbound. This work could include a new stone wall with institutional signage, gateway signage, landscaping elements and new planting beds.

A series of nature trails exist along much of the University of New England's shoreline. These trails provide an exceptional opportunity to experience the coastal environment, and connect the campus community to the Saco River and Atlantic Ocean. The University would like to expand this connectivity and would like to extend this trail system along its entire shoreline, connecting the Welcome Cottage to Jordan Point, and then on to the University's beach. This would enhance the connectivity to the Saco River and provide for many new educational opportunities, as there are several microhabitats in that area that do not exist anywhere else on campus. This new trail will require a bridge to cross over the stream in this area. This trail would be coordinated with the Maine DEP, Saco River Corridor Commission and the City. Handicap accessibility will be considered in this enhancement.

The vision of a campus wide arboretum is one that is shared by many in the Campus Community. Thus, the University may work towards developing landscaped areas specifically to utilize them to enhance the academic environment of the campus as a whole. These areas could have complimenting hardscaped areas (walks, patios, courtyards, seating or retaining walls, etc.) to allow for a more intense use, while protecting the adjacent, highlighted vegetative areas

Overview

Historically, a simple vocabulary of lawns and canopy trees defined the development of most American campus landscapes. The University of New England's Biddeford Campus contains the beginnings of such a vocabulary: mature trees among expanses of lawn. The purpose of the planting guidelines is to reinforce the positive elements of the existing planting vocabulary while accentuating the rural quality that currently defines the campus landscape character.

The planting guidelines are organized in nine categories of simple planting design intent that may bring individual identity to specific site locations or add continuity to the campus as a whole. Intrinsic to these guidelines are the following principals:

- Native plant species should be utilized, except in areas where it is advantageous to create pockets of non-native species in an effort to provide exposures to species that might not normally be found in the area.
- Sensitivity to natural ecosystems shall be enforced.
- Plant material with low maintenance and water use requirements should be specified.
- Proper arboricultural practices should be utilized for future tree planting.

- Existing mature trees should be protected in areas of defined open space.
- Landscaping designs and maintenance should consider the safety of the University community.

Guidelines

Street Trees

The planting of street trees is recommended in order to help establish a visual hierarchy across the campus relative to circulation, delineating between primary, secondary, and tertiary vehicular routes. A rhythm and pattern of street trees, mirrored along a road's centerline, provides a sense of perspective, channels views, establishes scale, and sets order across a longer distance. Tree species with similar growth habits should be used along Hills Beach Road to create definition of a campus edge along the primary vehicular route that bisects the campus. A different street variety should then be used along campus streets that branch off of Hills Beach Road in order to establish a hierarchical order to proposed street tree patterns.

The use of various species with similar growth habits on a longer road such as Hill Beach is to reduce susceptibility of disease and pest that may arise when a single species is used. Changes to the plant variety should be coordinated with breaks in tree rows due to sidewalk crossings, driveway curb cuts, and underground utilities.

Shade Trees

The rural character of the campus allows for shade trees to be planted in most locations, either individually or in groups. In turn, this will allow for an increase in the variety of native species and bio-diversity of the campus ecosystem.

Informal gathering places along pedestrian circulation routes should be planted with shade trees to provide shade and to act as a 'place marker' from a distance. Pedestrians looking for a place to rest or relax will have a visual cue of shaded lawn areas established by large shade trees. Additionally, intermittent plantings of a shade tree should be made along the edge of passive-use space to provide shade and rest from activities.

Multiple shade trees should be planted close together in various campus locations to create groves. This solid vegetative form may be formal or informal, but the result is that no individual tree stands out; instead the trees have a collective presence within the landscape. This type of planting should be encouraged because it is representative of the native vegetation found along the campus periphery.

Flowering Trees

The use of flowering trees creates an intimate scale due to the low height of the tree's canopy and with the tree's flowers and foliage commonly at pedestrian eye level.

Flowering trees should be used in various campus locations including campus gateways and building entrances. Designs for these site-specific locations create a spatial design individual to a location while adding continuity across the campus. For instance, a formal design at an academic building entrance can be made with pink flowering trees while the same trees are planted in an informal manner at residential buildings.

While a planting of flowering trees directs focus to an area, the planting design needs to be sensitive to the unique qualities and character of that area. Considerations should be made to site-specific soil conditions and other environmental constraints such as solar exposure.

Evergreen Trees

Low branching coniferous trees that are dense in their leafing pattern are often best utilized as visual and physical barriers. Plantings of evergreens should be used primarily to direct views away from or screen building service areas or other visually unattractive campus elements such as trash dumpsters.

Although evergreen trees and shrubs are useful as visual or circulation buffers, careful consideration should be made so that plantings do not interrupt desired view corridors, open space or pose a public safety concern by providing too much of a visual screen. Additionally, similar to all the other plant types, the long-term growth habits of particular species needs to be incorporated into the design process in order for the best suited plant material to be selected.

Specimen Trees

Certain specimen trees should be considered for selection because of some unique quality that a specific tree may offer. Such trees are usually planted individually, to create a point of reference or focal point within a particular spatial context. For instance, a mature specimen tree may be located close to building to create a sense of scale or a planted alone so that its growth habit can be observed from a set distance.

Spatial character of a campus location can be well defined with a specimen tree. As new buildings are erected and the dynamics of the surrounding space changes, strategic plantings of specimen trees is encouraged to establish new visual connections. This is achieved by locating a specimen tree at terminal ends of an open space quadrangle. Special consideration should be paid to the selected species of tree, with the ultimate aim of increasing bio-diversity on campus. Species should be selected and matched for particular locations through criteria such as seasonal interest and mature height of the tree, setting and backdrop of the tree from distant views, and environmental constraints similar to flowering trees.

Future development should be sensitive to the location and condition of applicable trees from early design stages. As well, the current maintenance program, which incorporates arboricultural practices, should continue in order to preserve and protect the existing trees.

Foundation Plantings

Historically, foundation plantings were very limited in use around American campus buildings. This planting design treatment should be a limited practice across the Biddeford campus. Where foundation plantings are used, the design shall consist of shrubs, groundcovers, flowering trees and specimen trees used in limited numbers to highlight building entrances or unique features of architecture. Additionally, foundation plantings consisting of mostly evergreen plant material shall be used in locations to screen building appurtenances such as air conditioning units and trash dumpsters.

Shrub and Groundcovers

This planting guideline is the only category to include both deciduous and coniferous plants. Recommended shrubs have a mature height of approximately two feet, seasonal interests of foliage, and may have horizontal growth habit. The recommended groundcovers will add color, uniformity, and texture to the ground plane, help prevent erosion, and provide an alternate to lawn plantings.

Use will be in limited locations to provide definition of space and control of pedestrian circulation. Supplement shade, flowering tree plantings and foundation plantings at campus gateways and building entries to establish campus identity and continuity. The use of native species will reinforce the rural campus character by bringing the character of the bordering existing woodlands into the campus interior.

Special Zones

Special zones incorporate all the previous planting guidelines. For example, a special zone may incorporate a design of flowering trees and evergreens to note a campus marker, such as sign or information board for prospective and new students to find their way across campus. In particular locations, planting designs of groundcovers and specimen trees connected with native grasses may create a visual corridor and links between academic buildings or informal seating areas along pedestrian routes. In particular, special zones are to be used to establish or supplement planting designs to reinforce a campus wide identity, such as enhancing campus entry areas into campus gateways.

Plant Species Guidelines

Plant species need to be appropriate to the particular landscape and its scale, land use, circulation and gathering character, topography, and views. Species selected should reinforce the strengths of the landscape area and relationship to similar landscapes around the campus. This will work to add individual identity of each zone while uniting the campus landscape.

All plant material has been selected for seasonal and visual interest, mature height relative to location, desired growth habit and structure, visual tolerance, and specific soil conditions found across the campus. All the listed plant material is native to the New England landscape and will work to ensure a sustainable campus landscape. (Non-native

species may be selected and utilized, particularly in areas designated as part of the proposed campus arboretum.)

Street Trees

<u>Scientific Name</u>	<u>Common Name</u>	<u>Remarks</u>
<i>Acer rubrum</i>	Red Maple	Salt tolerant
<i>Acer saccharum</i>	Sugar Maple	
<i>Fraxinus americana</i>	White Ash	
<i>Fraxinus pensylvanica</i>	Green Ash	
<i>Nyssa sylvatica</i>	Black Gum	Salt tolerant
<i>Platanus occidentalis</i>	American Sycamore	
<i>Quercus alba</i>	White Oak	Salt tolerant
<i>Quercus macrocarpa</i>	Bur Oak	Salt tolerant
<i>Quercus borealis</i>	Red Oak	Salt tolerant
<i>Tilia americana</i>	American Linden	

Shade Trees

<u>Scientific Name</u>	<u>Common Name</u>	<u>Remarks</u>
<i>Acer rubrum</i>	Red Maple	Salt tolerant
<i>Acer saccharum</i>	Sugar Maple	
<i>Betula alleghaniensis</i>	Yellow Birch	
<i>Betula lenta</i>	Sweet Birch	
<i>Betula papyrifera</i>	Paper Birch	
<i>Carya ovata</i>	Shagbark Hickory	Salt tolerant
<i>Fagus grandifolia</i>	American Beech	
<i>Fraxinus americana</i>	White Ash	
<i>Fraxinus pensylvanica</i>	Green Ash	
<i>Nyssa sylvatica</i>	Black Gum	Salt tolerant
<i>Platanus occidentalis</i>	American Sycamore	
<i>Quercus alba</i>	White Oak	Salt tolerant
<i>Quercus macrocarpa</i>	Bur Oak	Salt tolerant
<i>Quercus rubra</i>	Red Oak	Salt tolerant
<i>Quercus palustris</i>	Pin Oak	
<i>Tilia americana</i>	American Linden	

Flowering Trees

<u>Scientific Name</u>	<u>Common Name</u>	<u>Remarks</u>
<i>Acer pensylvanicum</i>	Striped Maple	Salt tolerant
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	Salt tolerant
<i>Amelanchier laevis</i>	Allegheny Serviceberry	
<i>Aronia arbutifolia</i>	Red chokeberry	Salt tolerant
<i>Aronia melanocarpa</i>	Black Chokeberry	

Cornus alternifolia Pagoda Dogwood
Sorbus americana American Mountain Ash

Evergreen Trees

<u>Scientific Name</u>	<u>Common Name</u>	<u>Remarks</u>
<i>Abies balsamea</i>	Balsam Fir	
<i>Chamaecyparis thyoides</i>	Atlantic Whitecedar	
<i>Juniperus virginiana</i>	Eastern Red Cedar	Salt tolerant
<i>Picea glauca</i>	White Spruce	Salt tolerant
<i>Pinus banksiana</i>	Jack Pine	Salt tolerant
<i>Pinus resinosa</i>	Red Pine	
<i>Pinus strobus</i>	Eastern White Pine	
<i>Thuja occidentalis</i>	American Arbor-vitae	Salt tolerant
<i>Tsuga canadensis</i>	Canada Hemlock	

Specimen Trees

<u>Scientific Name</u>	<u>Common Name</u>	<u>Remarks</u>
<i>Acer rubrum</i>	Red Maple	Salt tolerant
<i>Arctostaphylos uva-ursi</i>	Bearberry	Evergreen
<i>Aronia arbutifolia</i>	Red Chokeberry	
<i>Aronia melanocarpa</i>	Black Chokeberry	
<i>Betula alleghaniensis</i>	Yellow Birch	
<i>Betula papyrifera</i>	Paper Birch	
<i>Betula populifera</i>	Gray Birch	
<i>Carya ovata</i>	Shagbark Hickory	Salt tolerant
<i>Carpinus caroliniana</i>	American Hornbeam	
<i>Castanea dentata</i>	American Chestnut	
<i>Crataegus crusgalli</i>	Cockspur Hawthorn	
<i>Crataegus viridis</i>	Green Hawthorn	
<i>Fagus grandifolia</i>	American Beech	
<i>Fraxinus americana</i>	White Ash	
<i>Fraxinus pensylvanica</i>	Green Ash	
<i>Nyssa sylvatica</i>	Black Gum	Salt tolerant
<i>Populus grandidentata</i>	Bigtooth Aspen	
<i>Populus tremuloides</i>	Quaking Aspen	
<i>Quercus alba</i>	White Oak	Salt tolerant
<i>Quercus macrocarpa</i>	Bur Oak	Salt tolerant
<i>Quercus rubra</i>	Red Oak	Salt tolerant

Foundation Plantings

Scientific Name	Common Name	Remarks
<i>Amelanchier arborea</i>	Downy Serviceberry	
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	Salt tolerant
<i>Amelanchier laevis</i>	Allegheny Serviceberry	
<i>Amelanchier polifolia</i>	Bog Rosemary	Evergreen
<i>Arctostaphylos uva-ursi</i>	Bearberry	Evergreen
<i>Aronia arbutifolia</i>	Red Chokeberry	
<i>Aronia melanocarpa</i>	Black Chokeberry	
<i>Bouteloua gracilis</i>	Misquito Grass	
<i>Cornus sericea</i>	Red-osier Dogwood	Salt tolerant
<i>Deschampsia caespitosa</i>	Tufted Hair Grass	Salt tolerant
<i>Hamamelis virginiana</i>	Common Witchhazel	
<i>Ilex glabra</i>	Inkberry	Salt tolerant
<i>Ilex verticillata</i>	Winterberry	
<i>Kalmia latifolia</i>	Mountainlaurel	Evergreen
<i>Myrica pensylvanica</i>	Bayberry	Salt tolerant
<i>Festuca amethystina</i>	Large Blue Fescue	
<i>Gaultheria procumbens</i>	Checkerberry	
<i>Geranium sanguineum</i>	Blood-red Cranesbill	
<i>Helictotrichon sempervirens</i>	Blue Oat Grass	Salt tolerant
<i>Kalmia latifolia</i>	Mountainlaurel	
<i>Koeleria glauca</i>	Blue Hair Grass	
<i>Panicum virgatum</i>	Switch Grass	Salt tolerant
<i>Pennisetum alopecuroides</i>	Fountain Grass	Salt tolerant
<i>Phalaris arundinacea picta</i>	Ribbon Grass	
<i>Phlox subulata</i>	Moss Pink	Salt tolerant
<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	Salt tolerant
<i>Rhododendron maximum</i>	Rosebay Rhododendron	
<i>Rhododendron prinophyllum</i>	Roseshell Azalea	Evergreen
<i>Rhododendron viscosum</i>	Swamp Azalea	Evergreen
<i>Rosa rugosa</i>	Rugosa Rose	
<i>Rosa virginiana</i>	Virginia Rose	
<i>Symphoricarpos alba</i>	Common Snowberry	
<i>Symphoricarpos orbiculatus</i>	Coralberry	
<i>Vaccinium corymbosum</i>	Highbush Blueberry	
<i>Viburnum dentatum</i>	Arrowwood	Salt tolerant
<i>Vaccinium macrocarpon</i>	American Cranberry	
<i>Viburnum prunifolium</i>	Blackhaw	Salt tolerant

Shrub and Groundcovers

Scientific Name	Common Name	Remarks
<i>Bouteloua gracilis</i>	Misquito Grass	
<i>Casmanthium latifolium</i>	Northern Sea Oats	Salt tolerant
<i>Cornus sericea</i>	Red-osier Dogwood	Salt tolerant
<i>Deschampsia caespitosa</i>	Tufted Hair Grass	Salt tolerant
<i>Festuca amethystina</i>	Large Blue Fescue	
<i>Gaultheria procumbens</i>	Checkerberry	
<i>Geranium sanguineum</i>	Blood-red Cranesbill	
<i>Hamamelis virginiana</i>	Common Witchhazel	
<i>Helictotrichon sempervirens</i>	Blue Oat Grass	Salt tolerant
<i>Kalmia latifolia</i>	Mountainlaurel	
<i>Koeleria glauca</i>	Blue Hair Grass	
<i>Panicum virgatum</i>	Switch Grass	Salt tolerant
<i>Pennisetum alopecuroides</i>	Fountain Grass	Salt tolerant
<i>Phalaris arundinacea picta</i>	Ribbon Grass	
<i>Phlox subulata</i>	Moss Pink	Salt tolerant
<i>Potentilla fruticosa</i> var. <i>arbuscula</i>		Shrubby Cinquefoil
	Salt tolerant	
<i>Rhododendron prinophyllum</i>	Roseshell Azalea	Evergreen
<i>Rhododendron viscosum</i>	Swamp Azalea	Evergreen
<i>Rosa rugosa</i>	Rugosa Rose	
<i>Rosa virginiana</i>	Virginia Rose	
<i>Symphoricarpos alba</i>	Common Snowberry	
<i>Symphoricarpos orbiculatus</i>	Coralberry	
<i>Vaccinium macrocarpon</i>	American Cranberry	

Special Zones

Scientific Name	Common Name	Remarks
<i>Amelanchier arborea</i>	Downy Serviceberry	
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	Salt tolerant
<i>Amelanchier laevis</i>	Allegheny Serviceberry	
<i>Amelanchier polifolia</i>	Bog Rosemary	Evergreen
<i>Arctostaphylos uva-ursi</i>	Bearberry	Salt tolerant
<i>Aronia arbutifolia</i>	Red Chokeberry	
<i>Aronia melanocarpa</i>	Black Chokeberry	
<i>Bergenia cordifolia</i>	Heartleaf Bergenia	Evergreen

<i>Betula populifera</i>	Gray Birch	
<i>Bouteloua gracilis</i>	Misquito Grass	
<i>Cornus sericea</i>	Red-oiser Dogwood	Salt tolerant
<i>Deschampsia caespitosa</i>	Tufted Hair Grass	Salt tolerant
<i>Festuca amethystina</i>	Large Blue Fescue	
<i>Gaultheria procumbens</i>	Checkerberry	
<i>Geranium sanguineum</i>	Blood-red Cranesbill	
<i>Hamamelis virginiana</i>	Common Witchhazel	
<i>Helictotrichon sempervirens</i>	Blue Oat Grass	Salt tolerant
<i>Kalmia latifolia</i>	Mountainlaurel	
<i>Koeleria glauca</i>	Blue Hair Grass	
<i>Panicum virgatum</i>	Switch Grass	Salt tolerant
<i>Pennisetum alopecuroides</i>	Fountain Grass	Salt tolerant
<i>Phalaris arundinacea picta</i>	Ribbon Grass	
<i>Phlox subulata</i>	Moss Pink	Salt tolerant
<i>Potentilla fruticosa</i>	Shrubby Cinquefoil	Salt tolerant
<i>Rhododendron prinophyllum</i>	Roseshell Azalea	Evergreen
<i>Rhododendron viscosum</i>	Swamp Azalea	Evergreen
<i>Rosa rugosa</i>	Rugosa Rose	
<i>Rosa virginiana</i>	Virginia Rose	
<i>Sorbus Americana</i>	American Mountain Ash	
<i>Symphoricarpos alba</i>	Common Snowberry	
<i>Symphoricarpos orbiculatus</i>	Coralberry	
<i>Vaccinium macrocarpon</i>	American Cranberry	

Appendix Section 2 – Exterior Lighting

I. Development and Design Standards

The Institutional Master Plan shall establish development and design standards that shall apply to all development proposals and other improvements within the Institutional Zone. These development and design standards will apply to individual projects that are submitted for site plan review. These standards shall foster the development of a visually and architecturally integrated campus that is safe, environmentally sensitive, and that minimizes the adverse impact of the campus on neighboring residential areas. At a minimum, these development and design standards shall address the following areas:

2. *Exterior Lighting - The standards shall establish a general lighting theme for the campus and shall identify the appropriate maximum, average, or minimum illumination levels and uniformity ratios for various areas and facilities, the typical type of lighting fixtures and poles that will be used, and shall detail how nighttime sky glow and light intrusion on neighboring residential areas will be minimized.*

Exterior Lighting – General Site

The purpose of this document is to provide recommendations for exterior lighting master plan standards in the Biddeford **IN Zone**. Included are lighting standards for parking lots, roadways, walkways, and landscape accent areas.

References are made in this document to lighting standards published by the *Illuminating Engineering Society of North America (IESNA)*.

- The Lighting Handbook, 9th Edition
- RP-33-99 Lighting for Exterior Environments
- RP-6-01 Sports and Recreational Area Lighting
- RP-8-00 Roadway Lighting
- DG-5-94 Recommended Lighting for Walkways and Class 1 Bikeways
- RP-33-99 Lighting for Exterior Environments
- RP-6-01 Sports and Recreational Area Lighting

Lighting Fixture Distribution Classifications

The primary components of a light fixture that determine its performance are the lamp, reflector/refractor system, and ballast. The *IESNA* classifies exterior lighting fixtures by their performance characteristics relating to optical control: full cutoff, cutoff, semicutoff and noncutoff:

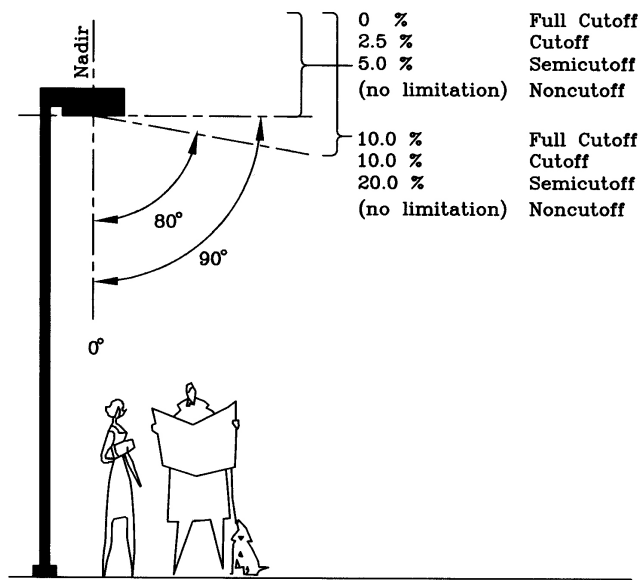


Fig. 1 IESNA Luminaire Cutoff Classifications

Full Cutoff

A luminaire light distribution where zero candela intensity occurs at an angle of 90° above nadir, and at all greater angles from nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

Cutoff

A luminaire light distribution where the candela per 1000 lamp lumens does not numerically exceed 25 (2 1/2 percent) at a vertical angle of 90° above nadir and 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

Semicutoff

A luminaire light distribution where the candela per 1000 lamp lumens does not numerically exceed 50 (5 percent) at a vertical angle of 90° above nadir and 200 (20 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

Noncutoff

A luminaire light distribution where there is no candela limitation in the zone above maximum candela.

Exterior Lighting Performance Standards

Roadways

Exterior illuminance levels for roadways in the **IN Zone** should conform to the following criteria listed in **Table 1**. For the **IN Zone**, there are two roadway use classifications that apply: *Collector* and *Local*. In each case, the classification for pedestrian/vehicle conflict would be a *High* rating.

Collector Roadway: Roadways servicing traffic between major and local streets. These are streets used mainly for traffic movements within residential, commercial and industrial areas. They do not handle long, through trips. Collector streets may be used for truck or bus movements and give direct service to abutting properties.

Local Roadway: Local streets are used primarily for direct access to residential, commercial, industrial, or other abutting property. They make up a large percentage of the total street system, but carry a small proportion of vehicular traffic.

High Pedestrian Conflict Areas: Areas with significant numbers of pedestrians expected to be on the sidewalks or crossing the streets during darkness. Examples are downtown retail areas, near theaters, concert halls, stadiums, and transit terminals.

IESNA RP-8-00 Roadway Lighting

**MAINTAINED ILLUMINANCE
VALUES FOR ROADWAYS IN FOOTCANDLES
TABLE 1**

	<i><u>Pedestrian Conflict Area</u></i>	<i><u>Ave. Illuminance (Footcandles)</u></i>	<i><u>Illuminance Uniformity Ratio (Average-to-Minimum)</u></i>
Collector	High	1.2	4.0 to 1
Local	High	0.8	6.0 to 1

Parking Areas

Exterior illuminance levels for outdoor parking lots in the **IN Zone** should conform to the following criteria listed in **Table 2**.

**MAINTAINED ILLUMINANCE
VALUES FOR OPEN PARKING LOTS
TABLE 2**

	<i>Basic</i>	<i>Enhanced Security¹</i>
Minimum Horizontal Illuminance	0.2 footcandles ²	0.5 footcandles ²
Maximum Horizontal Illuminance	7.5 footcandles ²	10.0 footcandles ²
Average Horizontal Illuminance	1.5 – 2.0 footcandles	2.0 – 2.5 footcandles
Uniformity Ratio, Maximum to Minimum	20:1	15:1

¹ If personal security or vandalism is a likely and/or severe problem, an increase of the basic level may be appropriate.

² Measured on the parking surface, without any shadowing effect from parked vehicles or trees at points of measurement.

Walkways and Bikeways

Exterior illuminance levels for outdoor walkways and bikeways that are remote from streets in the **IN Zone** should conform to the following criteria listed in **Table 3**. The recommendations are based on classification of walkway locations. For the **IN Zone**, the walkway use classifications that best applies, is that of *Intermediate*.

Intermediate Walkway: Those areas of a municipality often characterized by moderately heavy nighttime pedestrian activity such as in blocks having libraries, community recreation centers, large apartment buildings, industrial buildings, or neighborhood retail stores.

**MAINTAINED ILLUMINANCE
VALUES FOR WALKWAYS
TABLE 3**

	<i>Average Horizontal (footcandles)¹</i>	<i>Average Hor. Uniformity (Ave.-to-Min.)</i>	<i>Average Vertical (footcandles)²</i>	<i>Average Vert. Uniformity (Ave.-to-Min.)</i>
Intermediate (Average Conditions)	0.5	4:1		
Intermediate (Special Conditions)			1.0	5:1

¹ Values measured or calculated at ground level.

² Values measured or calculated at 5 feet above pavement, in both directions, parallel to the direction of travel on the walkway.

Exterior Lighting Control Standards

Light Trespass

Exterior lighting in the **IN Zone** should be selected and arranged such that not more than 0.1 footcandles are allowed to extend beyond property lines.

Glare Control

Exterior lighting fixtures shall include proper shielding and aiming such that excessive brightness is not seen from neighboring properties or along adjacent roadways.

Light Pollution

Exterior lighting fixtures used for the lighting of parking lots, walkways, and roadways shall not direct light at angles higher than 90 degrees above the horizontal. Directional accent lighting fixtures for accent of landscaping, signage and buildings shall include shielding as required to prevent light from being directed beyond the surfaces intended to be lighted.

Exterior Lighting Equipment Selection Standards

For the purposes of establishing a sense of visual consistency, and to assure that glare and fixture brightness are properly controlled, the following lighting equipment standards in **Table 4** should be followed.

EXTERIOR LIGHTING EQUIPMENT REQUIREMENTS TABLE 4

Roadways

<u>Luminaires:</u>	<i>IESNA</i> full cutoff distribution classification with flush, flat lenses.
<u>Lamps:</u>	Metal Halide, 250 to 400 watt, or the equivalent in LED.
<u>Controls:</u>	Integral photocell.
<u>Lighting Poles:</u>	Pole heights between 12 and 20 feet.

Parking Areas

<u>Luminaires:</u>	<i>IESNA</i> full cutoff distribution classification with flush, flat lenses.
<u>Lamps:</u>	Metal Halide, 250 to 400 watt, or the equivalent in LED.
<u>Controls:</u>	Integral photocell.
<u>Lighting Poles:</u>	Pole heights between 16 and 24 feet.

Walkways

<u>Luminaires:</u>	<i>IESNA</i> full cutoff distribution classification with flush, flat lenses.
<u>Lamps:</u>	Metal Halide, 100 to 250 watt, or the equivalent in LED.
<u>Controls:</u>	Integral photocell.
<u>Lighting Poles:</u>	Pole heights between 10 and 12 feet.

Building Entryways

<u>Luminaires:</u>	<i>IESNA</i> full cutoff, cutoff, or semi-cutoff distribution classification.
<u>Lamps:</u>	Metal Halide, 35 to 150 watt. Compact fluorescent 13 to 42 watts, or the equivalent in LED.
<u>Controls:</u>	Integral photocell and/or local switching.
<u>Mounting Heights:</u>	Between 10 and 16 feet

Building Entry Plazas

<u>Luminaires:</u>	36 inch high bollard lights with louver shields.
<u>Lamps:</u>	Metal halide 35 to 150 watts, or the equivalent in LED.
<u>Controls:</u>	Local switching.

Building and Landscape Accent Lighting

<u>Luminaires:</u>	Ground mounted floodlights with front face louvers or top/side shields.
<u>Lamps:</u>	Metal halide 35 to 150 watts, or the equivalent in LED.
<u>Controls:</u>	Integral photocell.

Exterior Lighting – Athletic Field Lighting

Class of Play

The *Illuminating Engineering Society of North America (IESNA)* publishes recommendations for sports lighting applications. Included in the *IESNA* publication *RP-6* is information pertaining to general outdoor sports lighting practices as well as specific suggestions for equipment layout and illuminance levels. Illuminance recommendations are organized in terms of need given the sport being lighted and the anticipated class of play. The *IESNA* has identified four general classes for consideration:

- Class I For competition play before a large group of spectators (over 5000). Included in this classification are facilities for professional, college, semi-professional and sports club levels of play.
- Class II For competition play with less than 5000 spectators. Included in this classification are facilities for college, semi-professional, sports club, amateur league, and high school levels of play.
- Class III For competition play with some provisions for spectators. Included in this classification are facilities for sports club, high school, and training facilities levels of play.
- Class IV Facilities with no provisions for spectators. Included in this classification are facilities for amateur leagues, high schools, training facilities, elementary schools, recreational events, and social events level of play.

Each of these classes requires different levels of illumination given the corresponding purpose of play, skill levels of players, and spectator/broadcasting needs.

Soccer Field Lighting

Soccer is considered a multi-directional aerial sport since it involves the playing of a ball in the air as well as on the ground. Accordingly, it is important that soccer field lighting provide both adequate levels of horizontal illuminance to light the playing field, as well as vertical illuminance to light the ball in flight. The degree to which a lighting solution can provide both high levels of horizontal and vertical illuminance is largely dependant upon the location of luminaires with respect to the playing field. Luminaires that are mounted on tall poles aimed in a sharp downward direction can easily provide high levels of horizontal illuminance at the field below. Lighting the sides of a ball in flight, however, is made difficult when a vast majority of the light is delivered from overhead at great mounting heights. Vertical illuminance is more easily achieved from luminaires that are located at lower mounting heights, allowing for light to be directed from the sides. A successful athletic field lighting solution is one that achieves a balance between horizontal and vertical illuminance needs. Lighting pole heights and setback locations play a critical role in achieving this balance. As a design guide, the relationship of the pole height to the pole setback dimension from the soccer field should be as follows: pole height = (setback dimension plus 1/3 the width of the playing field) times the tangent of 30 degrees.

$$PH = (SB + 1/3W)(\tan 30^\circ)$$

As the setback dimension increases, so too does the pole height. At sites where there is a limitation of space available for pole setback, the pole heights become shorter. Ideally, the setback distance should not be less than about fifteen feet. This would result in a pole height of about fifty feet for the average size soccer field. Poles that are less than 50 feet in height significantly increase the chance for unacceptable glare seen from areas that are adjacent to the field due to the resulting high aiming angles of the sports lights.

Softball Field Lighting

Softball is also considered a multi-directional aerial sport since it involves the playing of a ball in the air as well as on the ground. Like soccer, it is important that softball field lighting provide both adequate levels of horizontal illuminance to light the playing field, as well as vertical illuminance to light the ball in flight. Lighting poles are generally located parallel to the base lines to light the infield, and along the outfield fence to light the outfield. Pole heights must be selected to not only provide proper coverage of the playing field, but also to assure that the top of the lighting beam from floodlights forms an angle with the horizontal of at least 10 degrees.

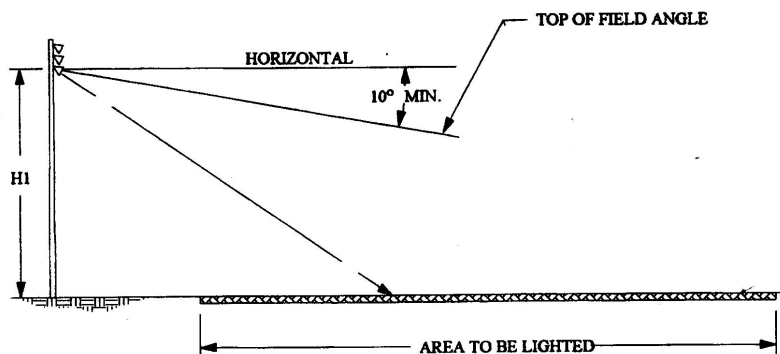


Fig. 1 Softball Floodlight

Athletic Field Lighting Performance Standards

Illuminance Standards

Maintained illuminance levels for athletic fields should be as listed in **Table 1** and **Table 2**, below. Illuminance criteria is listed in footcandles, measured at the playing surface.

MAINTAINED ILLUMINANCE VALUES FOR SOCCER FIELDS

TABLE 1

	<i>Max. to Min.</i>
<i>Illuminance</i>	<i>Uniformity</i>
Class I	75 FC
Class II	50 FC
Class III	30 FC
Class IV	20 FC

MAINTAINED ILLUMINANCE VALUES FOR SOFTBALL FIELDS

TABLE 2

	<i>Infield</i>	<i>Outfield</i>
	<i>Max. to Min.</i>	<i>Max. to Min.</i>
<i>Infield</i>	<i>Uniformity</i>	<i>Uniformity</i>
<i>Illuminance</i>	<i>Illuminance</i>	<i>Illuminance</i>
Class I	150 FC	100 FC
Class II	100 FC	70 FC
Class III	50 FC	30 FC
Class IV	30 FC	20 FC

Athletic Field Lighting Control Standards

Light Trespass

Exterior lighting from athletic fields should be selected and arranged such that not more than 0.1 footcandles is allowed to extend beyond property lines.

Glare Control

Exterior lighting fixtures shall include proper shielding and aiming such that excessive brightness is not seen from neighboring properties or along adjacent roadways.

Light Pollution

Exterior lighting fixtures used for the lighting of athletic fields shall be positioned such that the top of the field angle of the selected luminaires is 10 degrees, or greater.

Appendix Section 3 - Signage

I. Development and Design Standards

The Institutional Master Plan shall establish development and design standards that shall apply to all development proposals and other improvements within the Institutional Zone. These development and design standards will apply to individual projects that are submitted for site plan review. These standards shall foster the development of a visually and architecturally integrated campus that is safe, environmentally sensitive, and that minimizes the adverse impact of the campus on neighboring residential areas. At a minimum, these development and design standards shall address the following areas:

Signage

The standards shall establish a consistent design theme for all campus signs that enhances the visual environment of the campus and shall identify the general design, sizes, and locations for various types of campus signs.

In the IN Zone, the following signs shall be permitted provided that no individual sign shall be larger than thirty-two (32) square feet and that all signs shall be consistent with the design standards set forth in the approved Institutional Master Plan:

- (a) Institution Sign - One (1) sign identifying the institution in the center of the campus or at a key location within the campus. This sign shall be ground mounted, located within a landscape area, or attached to a landscape feature such as a wall, boulder or similar object. An institution sign may be externally lit with a shielded light source.*
- (b) Gateway Signs - One (1) sign identifying the institution located at each principal entrance to the campus from the major road network. Gateway signs shall be ground mounted, located within a landscape area, or attached to a landscape feature such as a wall, boulder or similar object. Gateway signs may be externally lit with a shielded light source.*
- (c) Building and Facility Signs - Each building or facility may be identified by a sign at the principal entrance and at each additional major entrance to the building or facility. Building or facility signs shall be attached to the building or facility or shall be ground mounted or attached to a landscape feature. Building and facility signs may be externally lit with a shielded light source.*
- (d) Directional Signs - Signs providing directions to buildings or facilities may be placed at appropriate locations within the campus in accordance with the sign standards contained in the Institutional Master Plan. Directional signs may be externally lit with a shielded light source.*

- (e) Public Safety and Regulatory Signs - Signs setting forth public safety regulations, parking regulations, or other public informational signs may be placed at appropriate locations within the campus in accordance with the sign standards contained in the Institutional Master Plan. Safety and regulatory signs may be externally lit with a shielded light source.
- (f) Informational Kiosks – Facilities for the posting of temporary notices or campus information such as kiosks and bulletin boards may be placed at appropriate locations within the campus in accordance with the sign standards contained in the Institutional Master Plan. Kiosks and bulletin boards may be externally lit with a shielded light source.
- (g) Temporary Signs and Banners - Temporary signs and banners related to campus events may be placed at appropriate locations within the campus in accordance with the sign standards contained in the Institutional Master Plan provided that such signs and banners do not remain in place for more than ten (10) days.”



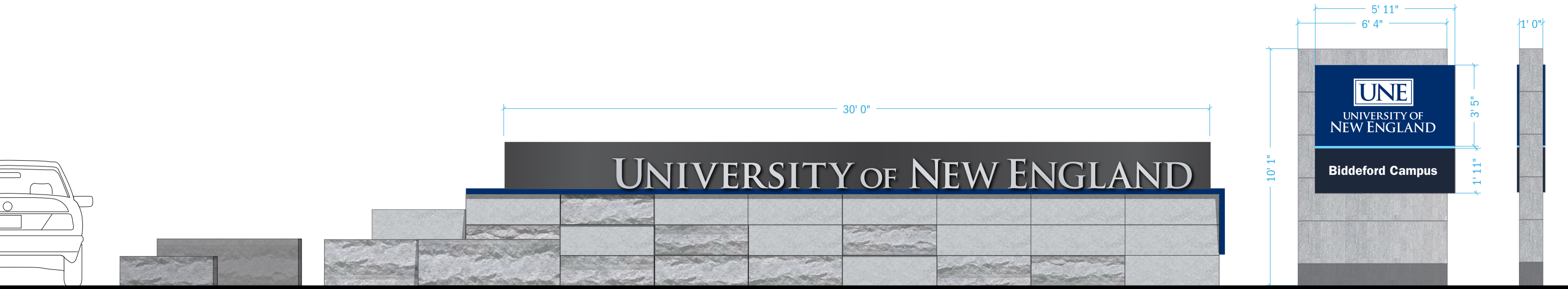
INNOVATION FOR A HEALTHIER PLANET

Biddeford Campus

Signage Standards

January 31, 2023

BIDDEFORD SIGN TYPE LINE-UP

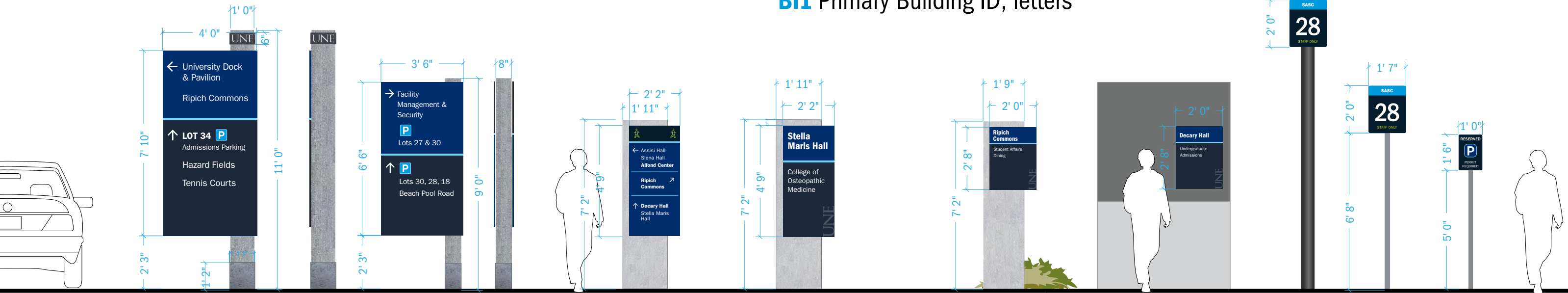


ID1 Primary Campus ID/Entry Sign

ID2 Secondary Campus ID/Entry Sign

DECARY HALL
DECARY HALL

BI1 Primary Building ID, letters



scale: 1/4" = 1'-0"

VD1
Primary Vehicular
Directional

VD2
Secondary
Vehicular Directional

PD
Pedestrian
Directional

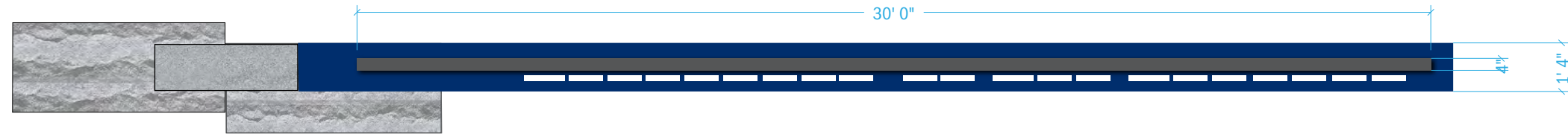
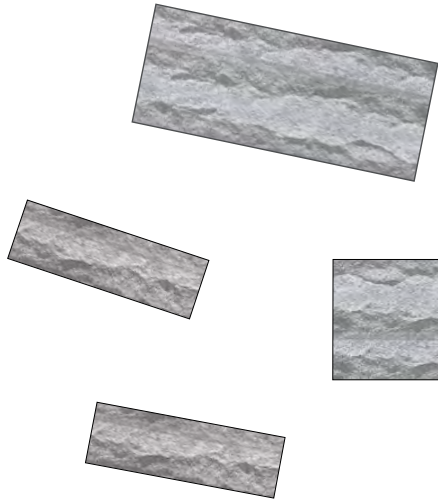
BI2
Primary Building ID,
freestanding

BD1
Building ID/Directory,
freestanding/wall mounted

BD2

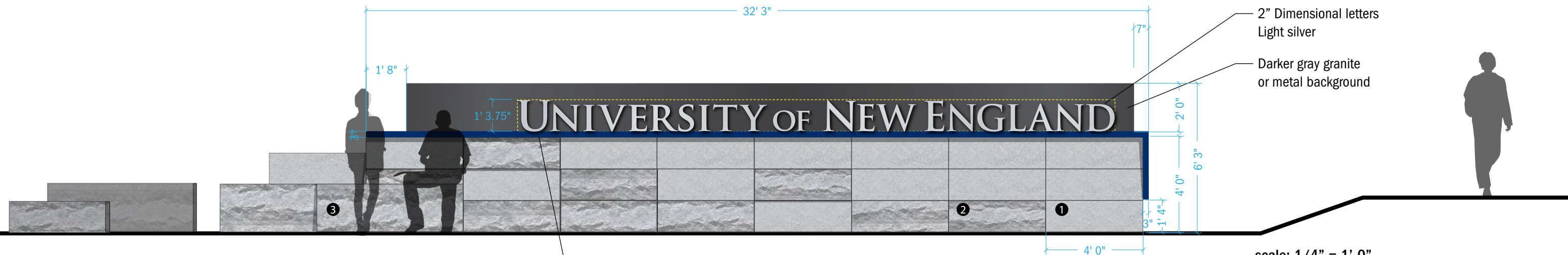
PL
Parking Lot/space IDs

A grayscale micrograph showing a granular texture. The grains are irregular in shape and size, with some appearing more rounded than others. The overall appearance is somewhat mottled and heterogeneous.

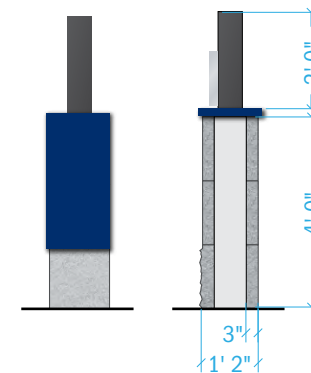


- 1 4'-0" x 1'-4", depth 1'-4"
honed or thermal finish TBD
- 2 4'-0" x 1'-4", depth 1'-4"
rough/rockface finish
- 3 6'-0" x 2'-0", depth 2'-6"
rough/rockface finish

- NOTE:** granite can be cladding over internal sign cabinet.
All seems need to be shown in fabrication drawings front/rear seams as per elevation. Side elevation can show seam edge.

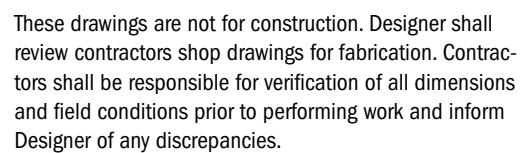


- Illumination (preferred)
 - Edge-illuminated ledge
 - Wash-illuminate granite behind letterforms
 - Ground illumination, per sign code directed at wall
 - by others



10. External illumination. In all zones where externally lit signs are allowed the illumination shall be by steady, stationary, shielded light sources directed solely on the sign in such a manner as to not cause glare for motorists, pedestrians, or neighboring premises.

- a. Institution sign: one sign identifying the institution in the center of the campus or at a key location within the campus. This sign shall be ground mounted, located within a landscape area, or attached to a landscape feature such as a wall, boulder or similar object. An institution sign may be externally lit with a shielded light source.



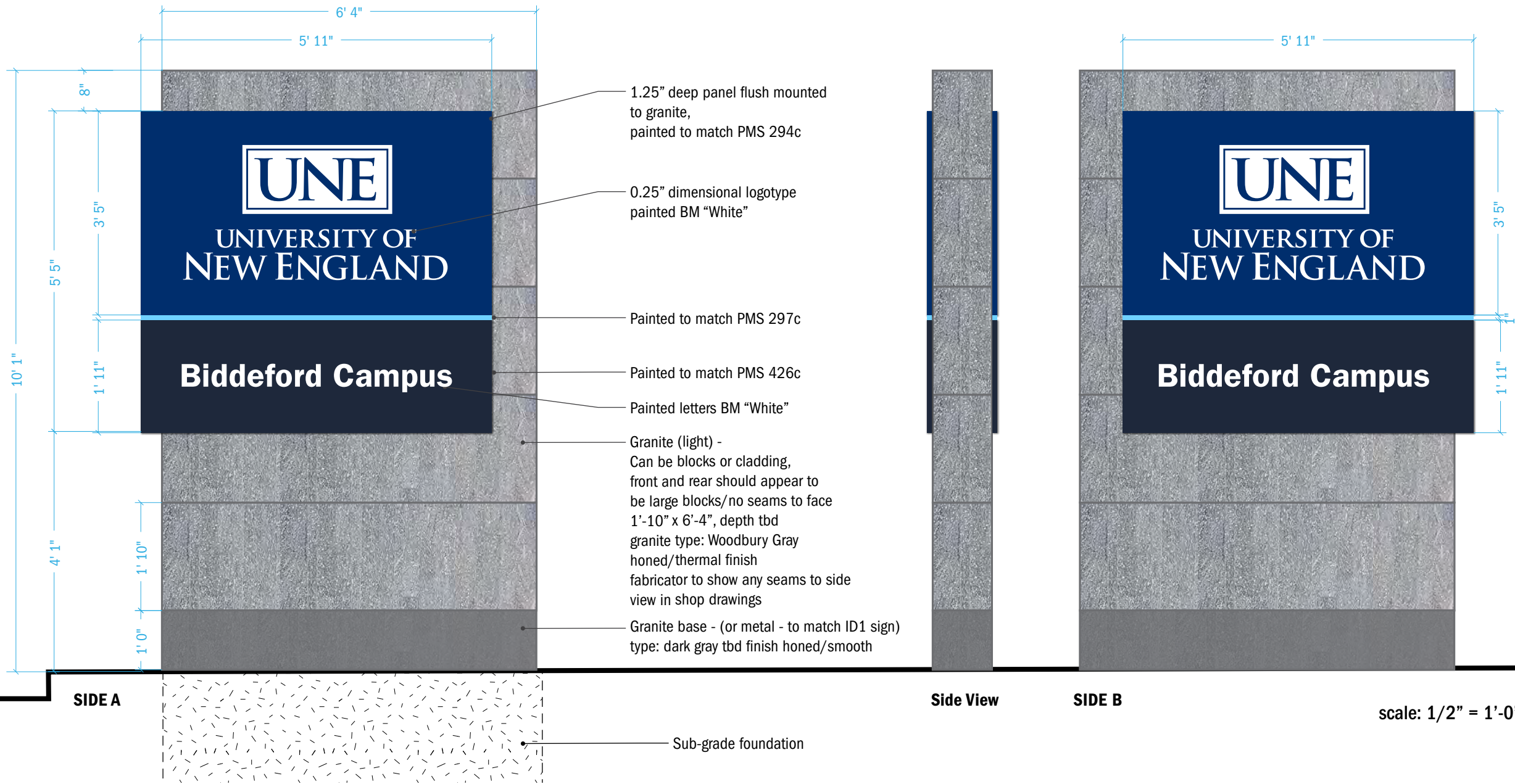
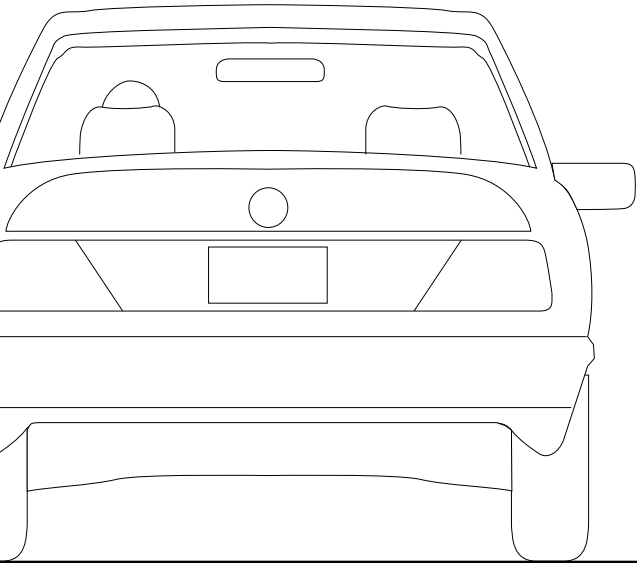
Architecture + Design
7 Wallingford Square Unit 209-9 Kittery, ME 03904
O: 207.994.3104 | winterholben.com

ID1

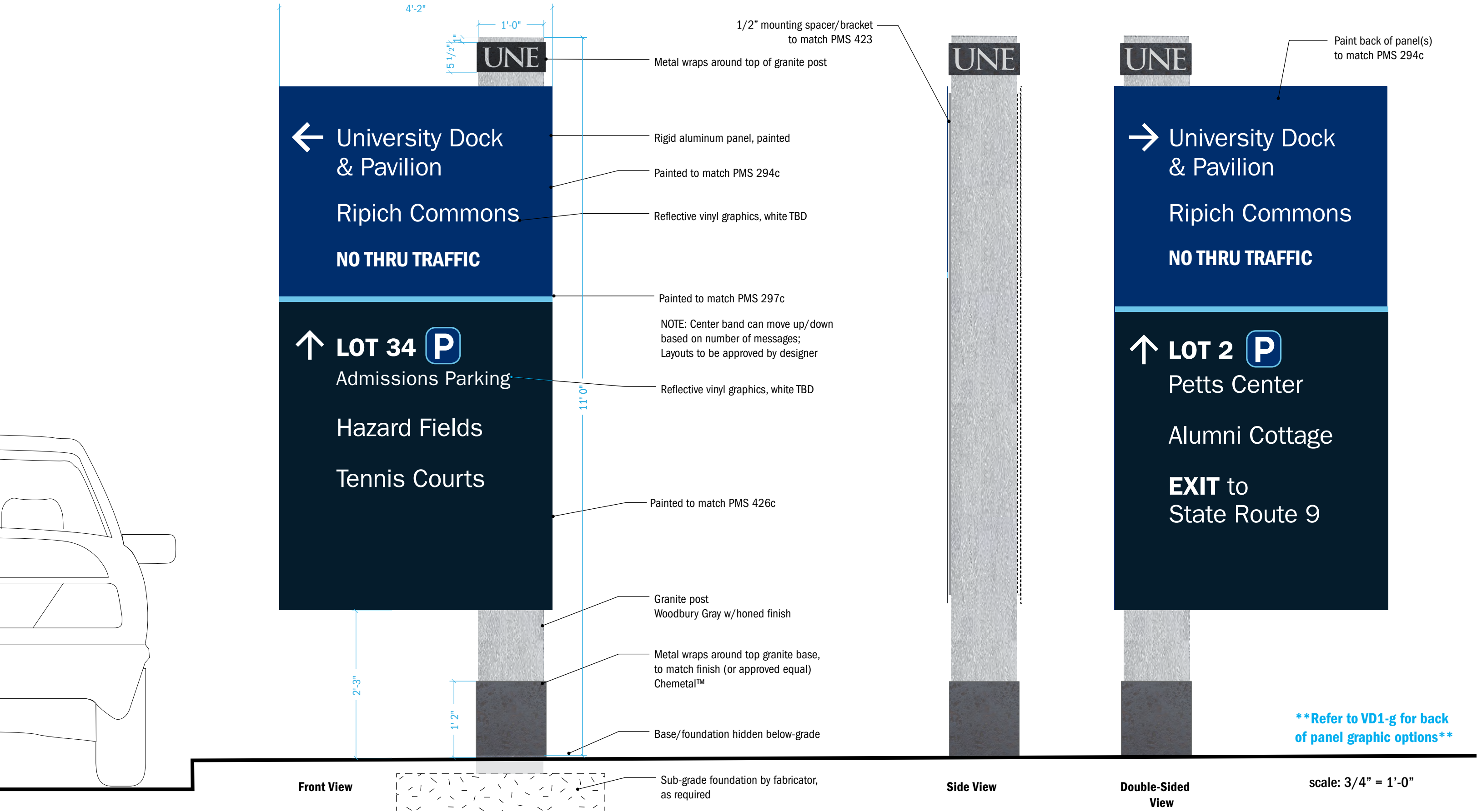
SECONDARY CAMPUS ID



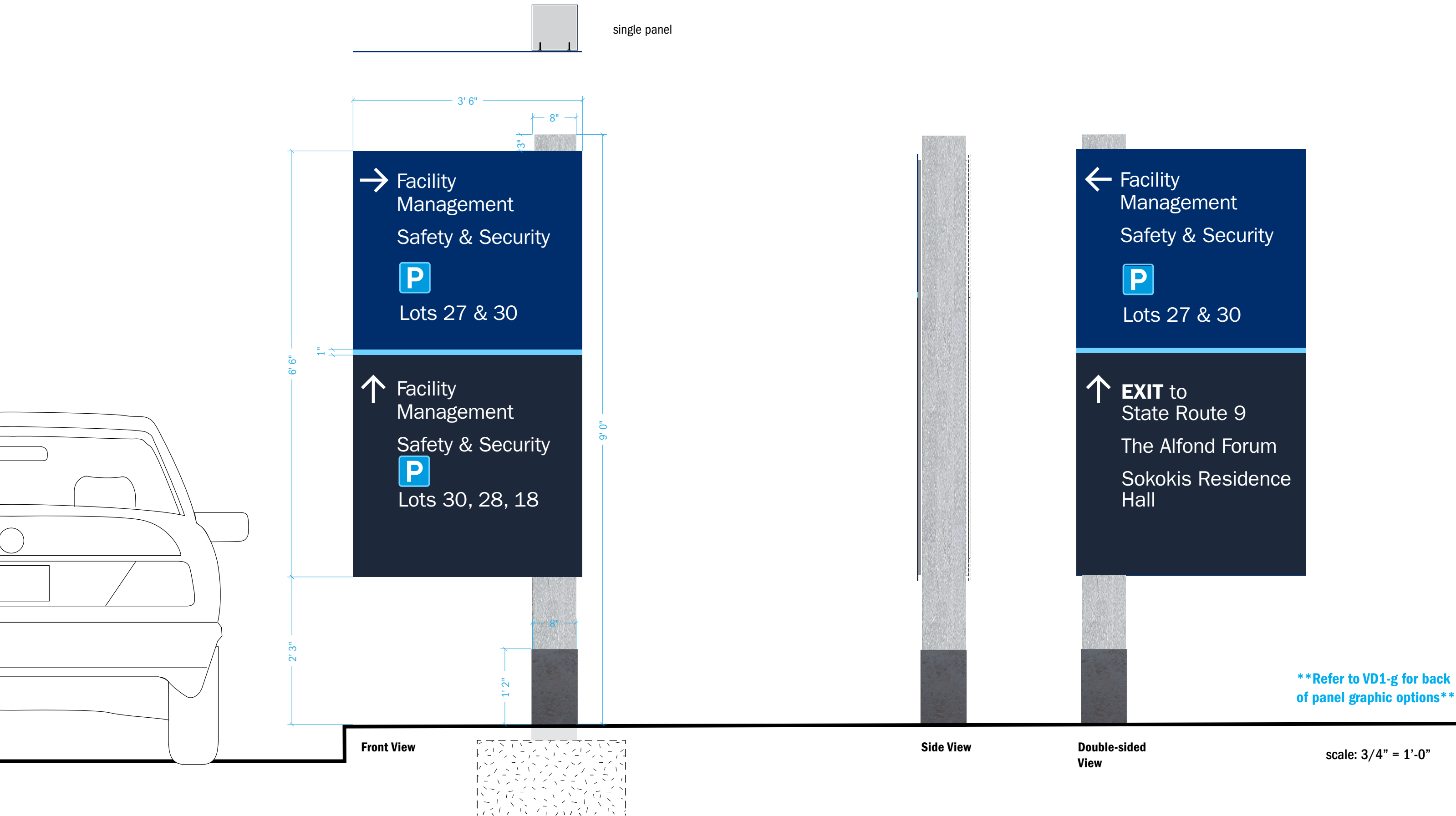
Context Image



PRIMARY VEHICULAR DIRECTIONAL



SECONDARY VEHICULAR DIRECTIONAL



PRIMARY BUILDING IDENTIFICATION

VARIES
DECARY HALL

1" dimensional letters, 5"-10" height letters are custom sized to entrance/placement on building.
Pin mounted to existing building or overlay panel where required.

Material finish to match M6
(dark on light background)

VARIES
DECARY HALL

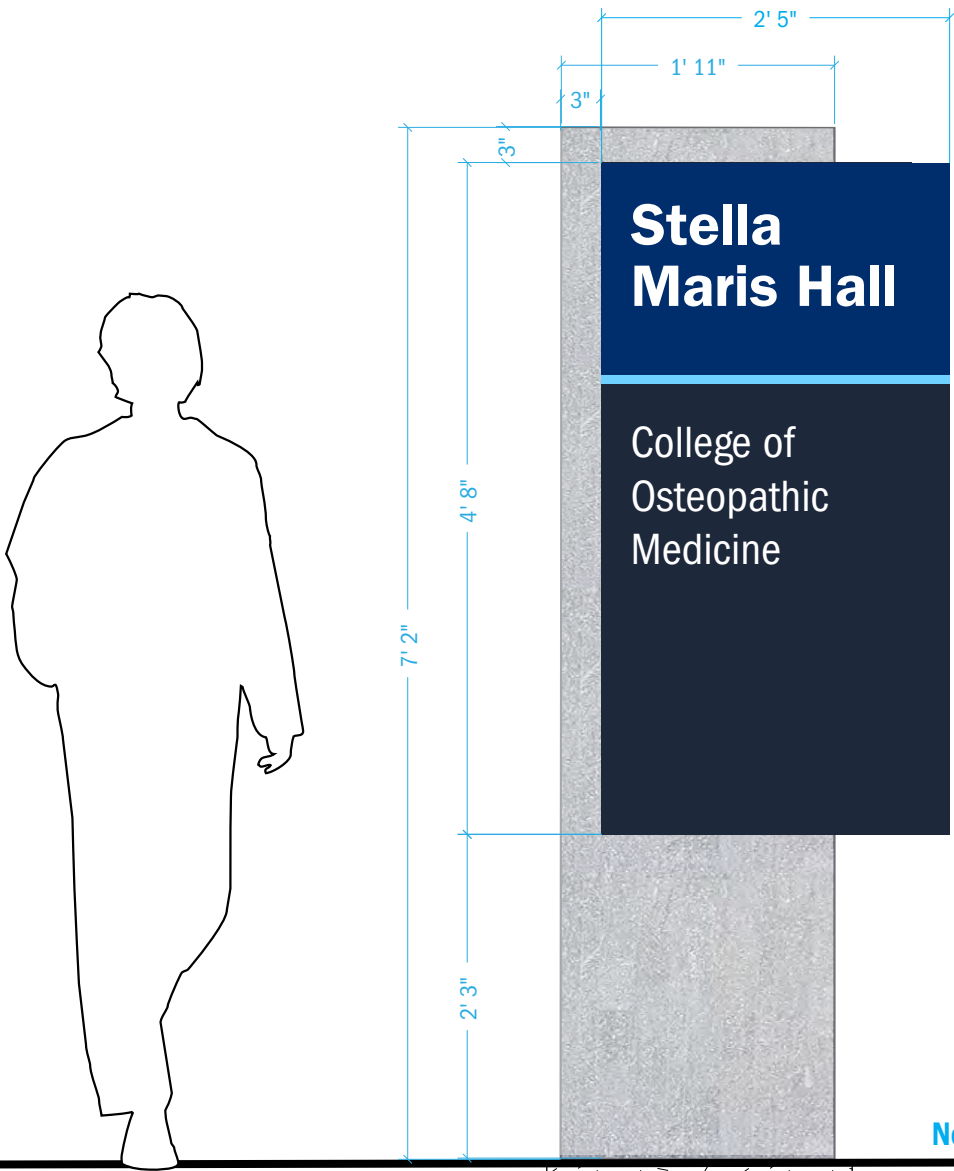
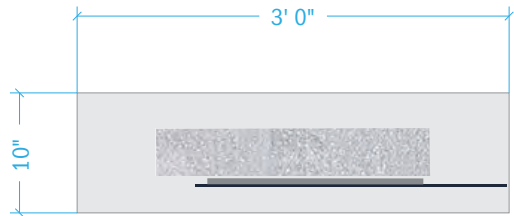
Material finish to match M4
(light on dark background)

ITC Franklin Gothic Std Medium, tracking 150pt

scale: 1/2" = 1'-0"



PRIMARY BUILDING ID - FREESTANDING



Note: Final panel size TBD

SIDE A



Side View

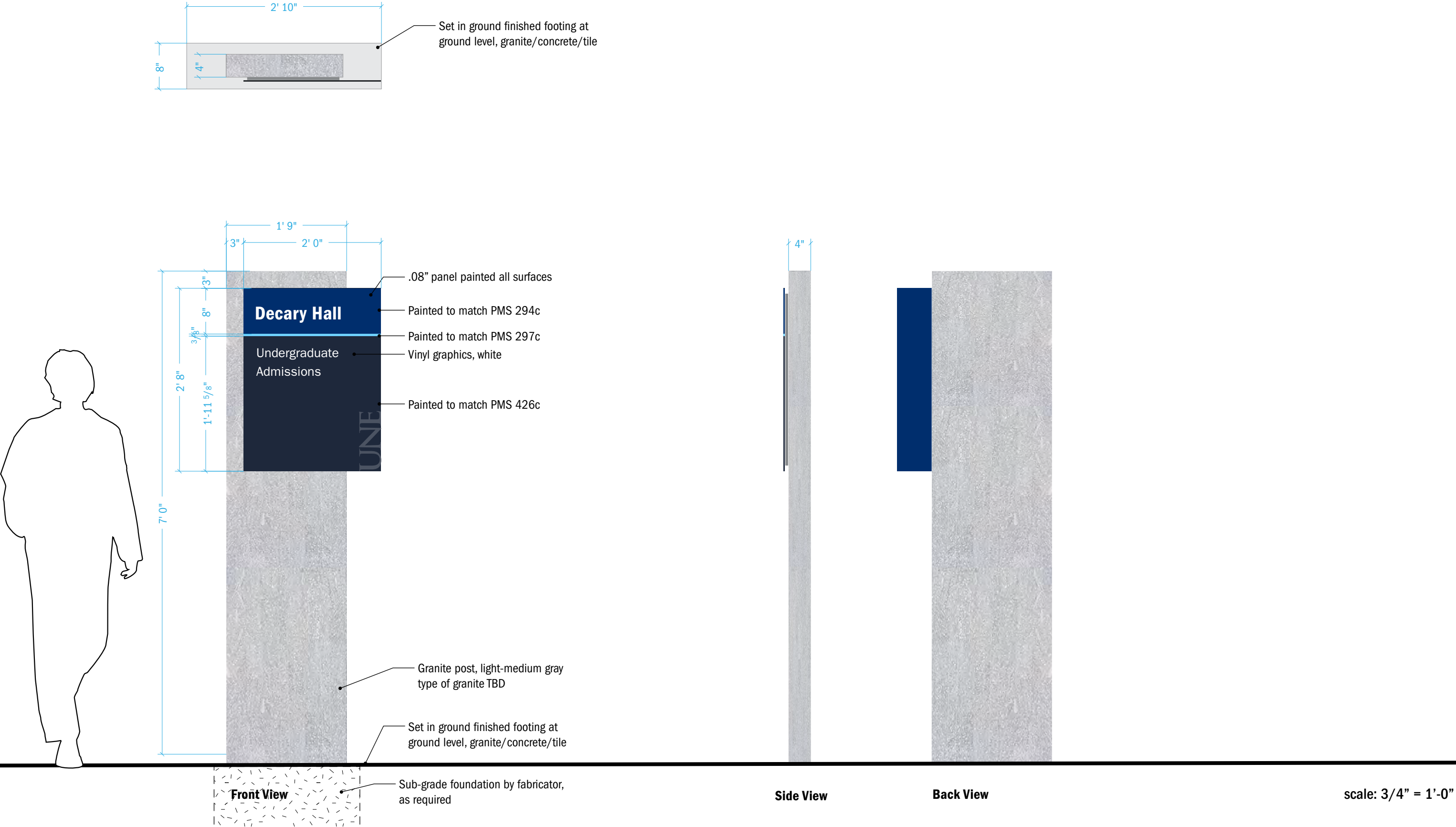


Back View

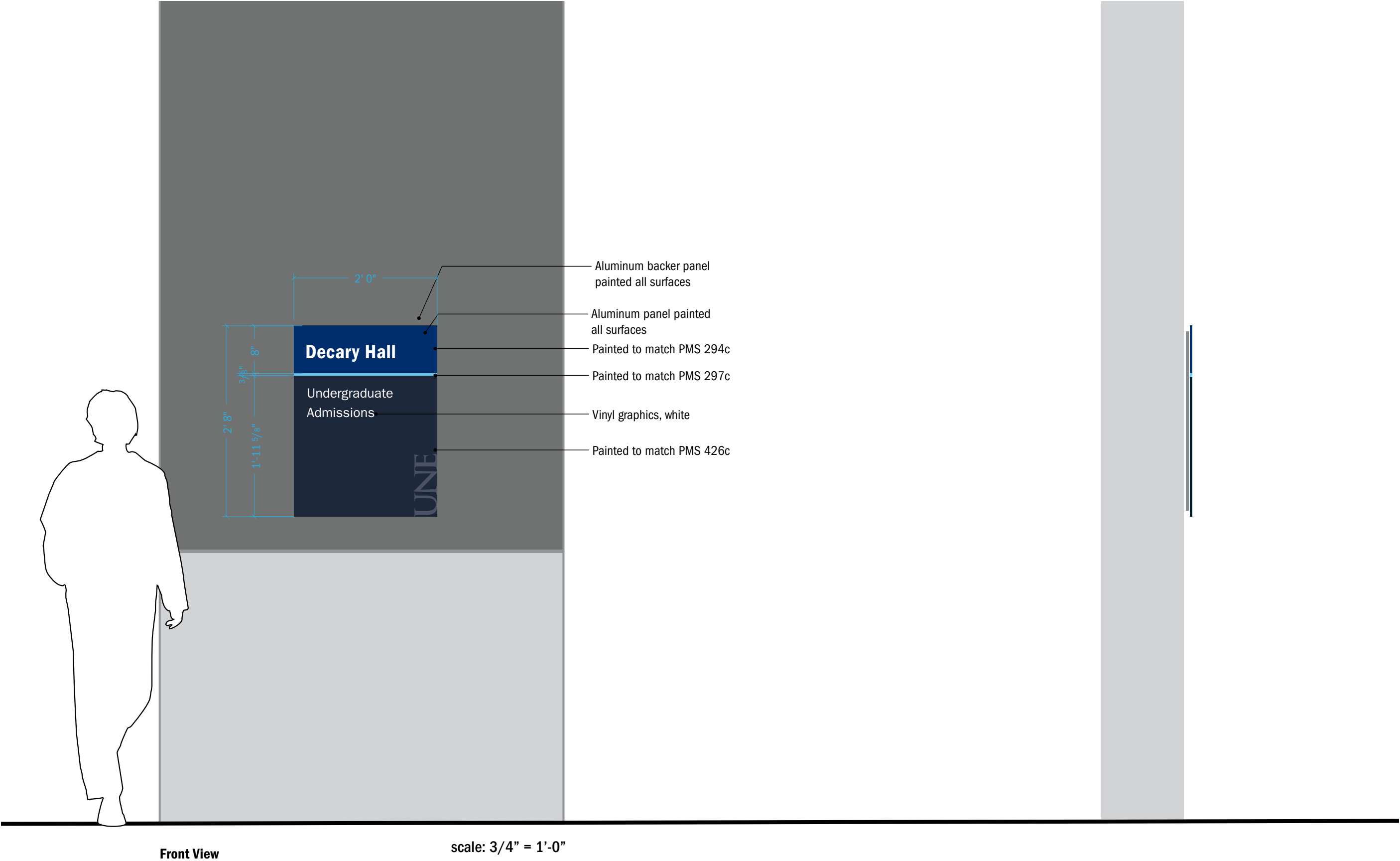


scale: 3/4" = 1'-0"

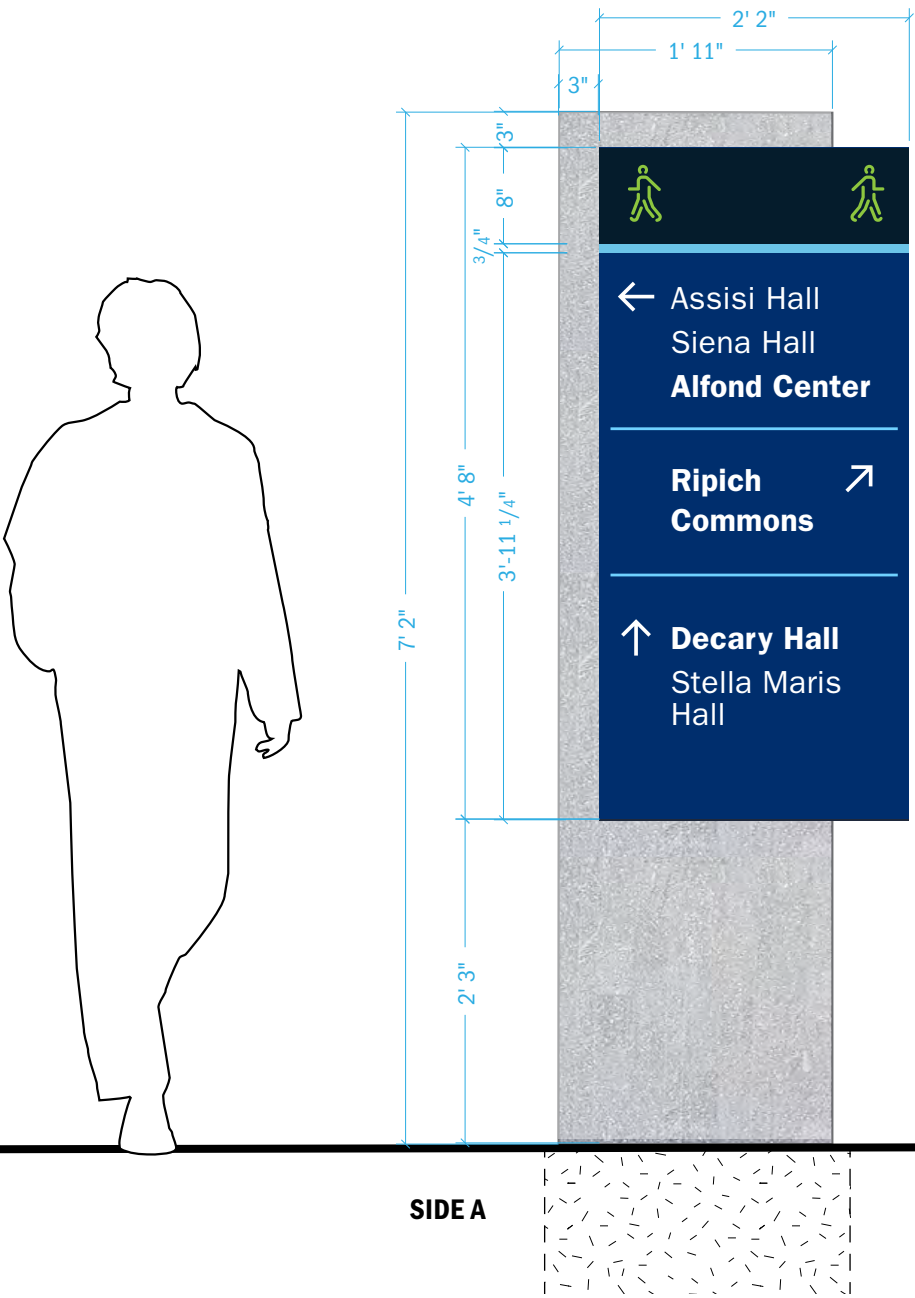
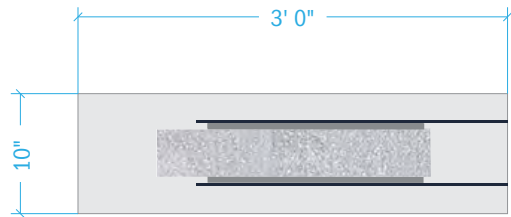
SECONDARY BUILDING ID/DIRECTORY - FREESTANDING



SECONDARY BUILDING ID/DIRECTORY - WALL MOUNTED



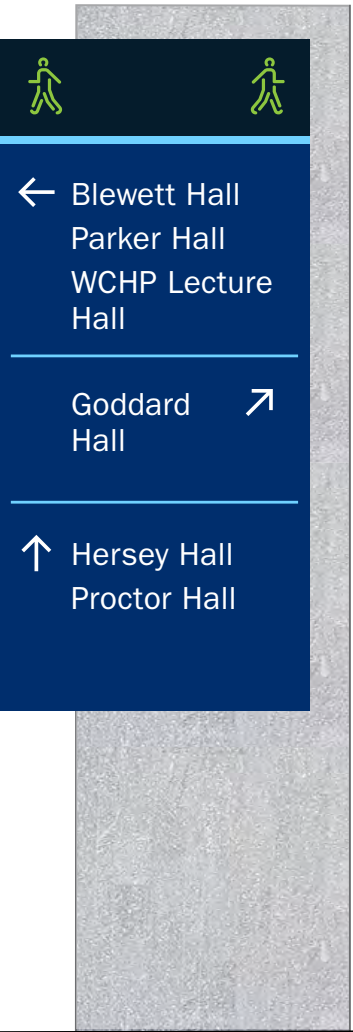
PEDESTRIAN DIRECTIONAL



SIDE A

Back of Panel

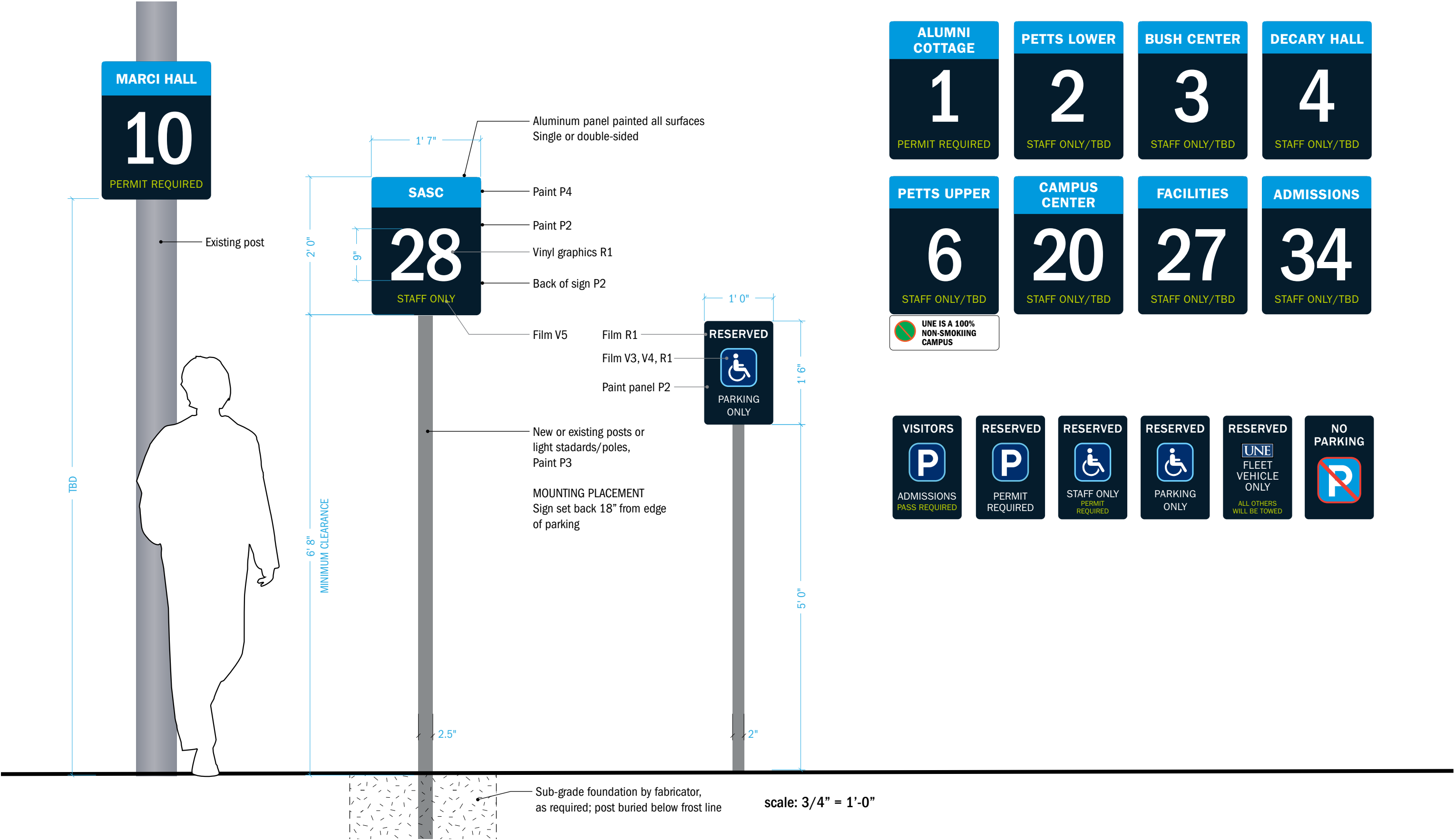
Side View



SIDE B

scale: 3/4" = 1'-0"

PARKING LOT ID



Appendix Section 4 – Pedestrian and Bicycle Facilities

I. Development and Design Standards

The Institutional Master Plan shall establish development and design standards that shall apply to all development proposals and other improvements within the Institutional Zone. These development and design standards will apply to individual projects that are submitted for site plan review. These standards shall foster the development of a visually and architecturally integrated campus that is safe, environmentally sensitive, and that minimizes the adverse impact of the campus on neighboring residential areas. At a minimum, these development and design standards shall address the following areas:

4. Pedestrian and Bicycle Facilities - The standards shall establish an integrated program for accommodating pedestrians and bicyclists safely while promoting a campus environment that is pedestrian focused. The standards shall identify the types, general location, and typical design of various pedestrian and bicycle facilities.

Pedestrian and Bicycle Facilities

The following standards will be used to accommodate pedestrians and cyclist's safety while promoting a campus environment that is pedestrian focused:

The University provides bike racks at or near the main entrance of academic and residential buildings (see specification sheet on the following page). It is expected that pedestrians and cyclists will share common walkways following the normal "rules of the road" thus avoiding the need for specific bike paths or lanes.

The University also offers a Bike Share program for community members without bicycles. This is a cellphone app based program and members can "rent" a bike for free, to use to get across campus or out into the community.

Pedestrians and all campus visitors have access to exterior emergency phones, which are located in strategic locations throughout the campus (see specification sheet on the following page). These emergency call boxes are easily identifiable by the blue lights located adjacent to them. They allow the users to contact the University Safety and Security Staff at any time. The University provides Safety and Security coverage 24 hours a day, and these highly trained Officers respond to all emergency calls.

In addition to the above information, the University has developed specific standards for pedestrian and cyclist safety which have been incorporated into the University's landscaping (see [Appendix A-Section 1](#)), exterior lighting (see [Appendix A-Section 2](#)) and architectural design standards (see [Appendix A-Section 6](#)).

Emergency Call Box



Model 294AL Wall Mount

- One button call for help.
- Housing: Die-Cast Aluminum.
- Polyurethane finish for enhanced durability.
- Sealed metal keypad ideal for access control or similar local calls. Calls can be limited to avoid toll charges.
- Front panel design maximizes useability, simplifies maintenance, and allows customization.
- Microphone and speaker located for optimal performance.
- Large "Palm" activation button standard on all phones.
- Telephone line powered.
- Remote programming.
- Auto answer.
- Auxiliary output activates peripheral equipment.
- ADA Compliance features standard on all models. Features include Braille Help tag and "Call Received" LED.
- Custom colors and silkscreening available.

S.M.A.R.T.

Also available in S.M.A.R.T.
294ALS

See S.M.A.R.T. info located on page 3

Bike Storage Rack



UNE Bike Share Program



Appendix Section 5 - Noise

I. Development and Design Standards

The Institutional Master Plan shall establish development and design standards that shall apply to all development proposals and other improvements within the Institutional Zone. These development and design standards will apply to individual projects that are submitted for site plan review. These standards shall foster the development of a visually and architecturally integrated campus that is safe, environmentally sensitive, and that minimizes the adverse impact of the campus on neighboring residential areas. At a minimum, these development and design standards shall address the following areas:

5. *Noise - The standards shall establish an overall program for minimizing the impact of campus noise on adjacent residential areas. The standards shall identify measures that will be employed to control noise at the source as well as to mitigate the impacts of noise on adjacent property.*

Noise

The MDEP and the City have detailed noise regulations. Because Biddeford has a local noise ordinance that is more restrictive than the MDEP regulations, this Master Plan focuses compliance with the City's standard. The City noise ordinance includes the following requirements:

- Excessive noise between 9:00 pm and 7:00 am shall be muffled so as not to be objectionable due to intermittence, beat frequency, shrillness or volume.
- The maximum permissible sound pressure level of any continuance (continuing), regular or frequent source of sound produced activity regulated by this ordinance shall be as established by the time period and type of land use district listed below. Sound pressure levels shall be measured at the lot lines at a height of at least four feet above the ground.

	7:00 a.m.-10:00 p.m.		10:00 p.m.-7:00 a.m.	
	db(A)	db(C)	db(A)	db(C)
Industrial districts	70	82	60	72
Business districts	60	72	50	62
Other districts	55	67	45	57

- No person shall engage in construction activities on a site abutting any residential use between the hours of 9:00 p.m. and 7:00 a.m., which exceed those limits established for residential districts. Otherwise the following activities shall be exempt from these regulations.

1. Noises created by construction and maintenance activities between 7:00 a.m. and 6:00 p.m.
2. The noises of safety signals, warning devices, and emergency pressure relief valves and any other emergency activities.
3. Traffic noise on existing public roads, and railways.

The City noise standards will be adopted as the University's Noise Standard.

As for minimization of existing noise, see section 8 of this report.

Appendix Section 6 – Architectural Design and Details

I. Development and Design Standards

The Institutional Master Plan shall establish development and design standards that shall apply to all development proposals and other improvements within the Institutional Zone. These development and design standards will apply to individual projects that are submitted for site plan review. These standards shall foster the development of a visually and architecturally integrated campus that is safe, environmentally sensitive, and that minimizes the adverse impact of the campus on neighboring residential areas. At a minimum, these development and design standards shall address the following areas:

6. Architectural Design and Details - The standards shall establish an integrated design theme for campus buildings that is harmonious with existing buildings while promoting a high level of design for new buildings. The standards shall address the scale and massing of buildings, appropriate materials and colors, rooflines, locations of building entrances, architectural detailing, and similar features to create a visually attractive campus while minimizing impacts on surrounding residential areas.

Architectural Design and Details

ARCHITECTURAL DESIGN OVERVIEW

Introduction

An educational institution's quality is reflected in its buildings and campuses. To enrich and to provide architectural continuity to both of the University of New England's campuses in Biddeford and Portland, the following Architectural Design Guidelines have been established. These guidelines will preserve and enhance the image of the University's quality, beauty, consistency and permanence.

The University of New England has developed a Master Plan and guidelines to enhance its campuses and help it fulfill its greatest potential. The Master Plan locates potential future building sites within similar use groupings, allows for a fairly dense development of the campuses while creating / reinforcing outdoor spaces, and creates functional linkages with surrounding facilities. The Architectural Design Guidelines are to be used in conjunction with the Master Plan to help reinforce its ideas and give consistency to each campus in order that one would be able to identify buildings at a glance while still allowing for individual design. The Master Plan and the Architectural Design Guidelines incorporate several concepts to give the University a visual identity through building location, mass and consistent use of materials.

The first important step is to hire a qualified architectural and engineering team that is able to deliver a structure within the budget, meet the desirable parameters identified during programming and adhere to the University's established Architectural Design

Guidelines. In order to facilitate these requirements, it is important that the design team be familiar with the campus on which they are working. The design team will need to preserve and enhance the architectural concepts, which serve as the basis for design while meeting the goals of University's Master Plan.

Accessibility

All new building designs and major renovations need to be in accordance with the American with Disabilities Act. The University is committed to making its spaces accessible to the public.

Quality of Material

The American Society for Testing and Materials (ASTM) is recognized as the industry standard for establishing the performance requirements for various building materials. It is recognized that adherence to ASTM standards for design criteria, material performance and construction made available through the various building trade guidelines, will do much to control quality levels while eliminating untested / unproven materials, products and systems from consideration on future projects. No asbestos material is to be used in any facility.

Energy Efficiency

The focus on energy-efficient design will continue to influence the delivery of new and renovated buildings well into the next century. The University has adopted the Maine Energy Code. Whenever economically feasible, new and renovated buildings will be designed with approaches targeting energy conservation and energy efficiency at the LEED Silver Level of certification.

Sustainability

Whenever possible and economically feasible, the University practices sustainable design follows the criteria set forth by the United States Green Building Council.

Life Cycle Costs

Life Cycle Costing (LCC) is a process used to select the most appropriate and durable material based upon the owner's ability to initially purchase it, evaluate the materials' longevity, and its expected maintenance costs. LCC systems principally address mechanical, electrical and plumbing. Analysis of architectural, civil and structural materials is more of a "judgment" call based upon past performance, life, history and/or environmental factors that change from location to location. The University's life cycle expectations are based on a 50-year building.

Scale and Proportion

The concept of scale and proportion is composed of many separate elements, most notably the personal scale, pedestrian orientation of circulation and frequent placement of open spaces and places to congregate on campus. The perceived proportion of both individual and collective buildings needs to be well balanced, with deliberate designer efforts to avoid architectural competition between neighboring exterior elevations. The Architectural Design Guidelines offer some well-known aids to create and reinforce the concept of human scale on any new building or addition.

Graphics and Signage

The University currently has a comprehensive and consistent interior/exterior signage system on campus. Please see Appendix Section 3. All signs need to comply with ADA Guidelines.

Safety Standards

The safety standards identified in the Architectural Design Guidelines reflect the most recent safety guidelines established for materials and building systems. They also recognize and reference the importance of adhering to building code requirements in the design and construction of campus facilities.

Building Siting and Linkages

The Master Plan identifies potential building sites and maintained open areas. The design team should follow Architectural Design Guidelines to reinforce the University's Master Plan while creating a cohesive campus. Access for emergency and maintenance vehicles, ADA issues, the relationship of new facilities with respect to adjacent facilities and the surrounding natural environment must all be considered and maintained by the individual design teams.

Building sites should carefully maintain the concept of the Master Plan and work to maintain a relationship to existing buildings, as well as, creating systems of pedestrian pathways, which are a part of the University

Temporary Buildings

Temporary buildings are defined as structures that provide program support space in anticipation of the construction of new buildings. Temporary structures should be sited so as to minimize view from public streets, to the extent reasonably practical.

Lightning Protection

A UL Master Label lightning protection system will be installed when practical or whenever economically feasible,

ARCHITECTURAL DESIGN GUIDELINES

The Architectural Design Guidelines (ADG) were developed to address the following requirements and needs of the University of New England. These guidelines are intended to provide general guidance and direction and are not intended to supersede any local, state, or federal codes. It is the architect's responsibility to comply with all applicable codes.

1. Building Siting:

The first consideration in building design is the building siting including locations for entrances. While each building will have a primary entrance(s), all entrances should consider connections with neighboring buildings, the orientation to views and protection from inclement weather. The University requires coordination with its Master Plan and a site matrix analysis for new building sites.

- ☐ **Building Linkages:** New structures should respond to connections to existing buildings and to paths. Ideally, buildings serving the needs of similar departments or colleges should be located in close proximity to one another with paths linking them to reinforce the concept of the pedestrian campus.
- ☐ **Enhance Pedestrian Activity Areas:** Main entrances of new buildings should be oriented toward pedestrian-oriented activity areas including parking areas to facilitate safe and barrier free access.
- ☐ **Out door spaces:** Buildings should reinforce the existing exterior space.
- ☐ **Respect Pedestrian Circulation Routes:** New buildings should be sited to provide convenient connections for pedestrians. As much as possible, buildings should not be located in such a way as to block pedestrian corridors or compromise the ability to provide safe pedestrian corridors.
- ☐ **Orient Buildings to Take Advantage of Views:** Ideally, buildings should be sited to take advantage of views.
- ☐ **Consider Placement of Parking Garages:** Parking garages should not detract from the overall visual quality of the campus. As much as possible, garages should be visually incorporated as part of a

mixed-use facility, or sited to help diminish their visual impact from a public way.

- ☐ **Utility Lines, Connections and Ancillary Equipment:** Utility connections, including electric and tele-communications, should be located underground. Ideally, the location of transformers or meters should not be placed on exterior power poles or hung on the outside of a new building located in highly visible locations. Preferably, transformers, pump stations and other utility structures should be placed at grade and screened from view.
- ☐ **Location of Utilities:** The University requires a site matrix analysis for new building sites that includes the availability and proximity of utilities. Potential structure locations may not be feasible due to their distance from existing utilities.
- ☐ **Service and Material Storage Areas:** Ideally, service and material storage areas should be located at the side or rear of buildings in order to be screened from public view. Consideration for the movement of traffic, access to drives and parking areas should be evaluated.
- ☐ **Loading Docks:** Loading docks, where required, should, if practical, be recessed entirely within the building or appropriately screened.
- ☐ **Existing Trees:** Existing trees and existing tree canopy that have either historical or sentimental importance to the campus should be respected whenever possible.
- ☐ **Topography:** The site selection matrix requires the designer to evaluate the local topography of a site including the presence of ledge. In some cases, it will not be feasible to build on existing topography, while other locations may be suited for taking advantage of topography to enhance the building and allow two different levels of entrance.
- ☐ **Soils and Wetland Constraints:** Soil and Wetland conditions need to be assessed for every building site in order to comply with State and Local regulations. Under the Maine Natural Resources Protection Act there are provisions that permit the mitigation of wetlands by preserving or mitigating other lands.
- ☐ **Site Features:** There are many existing natural and manmade site features including existing open space that should be retained or reinforced by new structures, if possible, without comprising functional sites that are essential to programs.
- ☐ **Snow Removal Areas:** Care needs to be taken with the design to allow for easy snow removal and adequate space must be provided for the containment of excess snow.

2. Materials:

The materials standards are created to help designers choose acceptable materials for any new or renovated building as they relate to adjacent buildings. In its assessment of any materials the design team will consider the durability, maintainability, and uniformity to the adjacent structures.

- ☐ **Color and Texture:** A material's color and texture can affect a person's perception of a building or of a working environment. Care should be used when selecting finishes to aid in the person's interaction with the space. Colors should also be used to denote similar uses and enhance entries and special features.
- ☐ **Detailing:** All new or renovated building exteriors should relate to neighboring buildings in the level of detailing while considering current materials and technologies. Detailing may include brick pilasters, high water lines, dentils, and window trim. The following decorative elements should be incorporated where appropriate: brickwork patterning, coursing, window opening and entry rhythms, as well as medallions and reliefs.
- ☐ **Durability:** Materials exposed to weather, harsh cleaning, and traffic must be given special consideration and need to be detailed carefully. The design team should review the potential for fading or bleaching by UV exposure and salt air, resistance to acid rain, runoff from staining or corrosive materials, contraction/expansion, as well as vehicular, and pedestrian traffic.
- ☐ **Maintenance and Cleaning:** Consideration should be given where possible to the maintenance and cleaning of materials and fixtures incorporated in a design. For example, wall hung toilets and minimal horizontal surfaces make cleaning more efficient for janitorial staff.
- ☐ **Materials should remain honest.** There are many imitations of various materials. The substitution of materials must be disclosed and supported by a cost benefit analysis showing the rationale for a diminution of quality and substance.
- ☐ **Energy Efficiency:** Lighter, more reflective materials can reduce the heat load of the building. Additionally, lighter colored materials can be used in association with light shelves to bring indirect day lighting into the interior of the building, thereby reducing lighting loads.
- ☐ **Lights:** New or renovated buildings should have adequate exterior lighting to insure that entrances and surrounding areas are safe. See campus lighting standards.
- ☐ **Standardized interior materials:** Standardize interior materials with those that are currently used throughout the campus.

3. Massing:

While each building has its own functional program demands, it must also be sensitive to its neighboring context. Massing, fenestration and entries should be used to create interest and shall be sympathetic to adjoining structures. Building mass should be articulated both horizontally and vertically as much as possible. Fenestration and detailing should emphasize human scale and help to define the use and levels of the building.

- ☐ **Massing:** Building mass should have a ‘base’, ‘building’ and ‘top’. The scale of materials usually diminishes as it is used at each of these points. Changes in material, coursing and fenestration help to define various levels of buildings. Cornices, roof forms, parapets, gables and crenellation add interest to building tops by drawing the eye upward.
- ☐ **Proportion:** New projects, in context with existing buildings, should strive to improve the relationship of fenestration, facades, coursing lines and materials. Buildings and other exterior elements should be scaled and proportioned to human dimension to help to impart a sense of comfort and well-being.
- ☐ **Height:** Where heights are much different than the context, care should be taken to match important horizontal building elements as bases, fenestration, cornices and parapet lines. On the University Campus the maximum allowable heights of buildings start at thirty-five feet on the perimeter and get taller towards the center and must meet the conditions of the City of Biddeford’s Institutional Zone. Any future buildings should also take into consideration the scale of adjacent buildings.
- ☐ **Roofs:** Unless justified by a cost analysis, roofs should be sheathed with forty-year asphalt shingles, EPDM, slate or approved metal roofing.
- ☐ **Spaces Characteristics:** The relationships and the character of spaces should begin from the exterior and move to the interior with similar spaces flowing into each other. The exterior of a building should allude to interior spaces by reinforcing building functions on the facades. Most inhabited spaces should have natural light. Windows are preferred but in some cases, skylights can be substituted. As much as possible, formal and shared spaces should have windows that look out on the nicer local features and not at the back of other buildings or parking lots. There should be a hierarchy of spaces that should begin at the entrance and flow down hallways to any space. Formal and informal meeting spaces should be sited in quiet contemplative locations.

- ☐ **Mechanical equipment:** As much a practical or economically feasible, equipment on roofs should be hidden from view from the ground by centering on the roof or hidden by canted parapets or screening as appropriate. Exhaust stacks should be minimized consistent with safety requirements and integrated into the architecture.
- ☐ **Façade Treatment:** Due to the very public nature of most campus buildings, it is important to give the same quality of design effort to all of a project's facades. There should not be a 'rear' elevation per se. New projects should also endeavor to invite the public into the University at all major entrances of the building.
- ☐ **Lighting:** All new exterior lighting should comply with University of New England's Exterior Lighting Standards.
- ☐ **Public Safety:** Public spaces should be designed to facilitate building evacuation and maximize accessibility by fire, police and other emergency personnel and equipment. Consideration needs to be made for emergency equipment such as emergency phones.
- ☐ **Security:** All design concepts should be directed to keeping people easily observable. To do this, any structure or feature should not limit visibility of people, parking areas and building entrances, doors and windows should look out on to paths and parking areas; pedestrian-friendly sidewalks and streets; the provision for emergency call boxes; and finally, all these spaces require adequate nighttime lighting.
- ☐ **Sight Distance:** New construction should not be located in areas that will obstruct sight distance clear zones essential for safe vehicular and pedestrian movement. Landscaping and entrance signage should be setback and kept clear of these zones especially at intersections.

4. Sustainable Design:

Whenever possible and economically feasible, the University practices Sustainable Design by Reduce Reuse Recycle. The design team should consider: energy efficiency, the removal and replacement of trees, and the use of materials that conserve natural resources during their production and usage. The guidelines also encourage the incorporation of the building siting with respect to the orientation to the sun, wind and the coast to minimize energy use. The University, where possible, follows the criteria set forth by the United States Green Building Council (USGBC).

- ☐ **Sustainable Materials:** Materials should be chosen for their value in energy cost savings and renewable ability.

- ☐ Orientation: Building orientation, when it can, should be done in such a way as to make the most out of the site in order to gain solar benefits while also considering other issues such as building and pathway relationships etc.
- ☐ Building Envelope: A tight building envelope allows for increased energy efficiency and thereby decreases the impact on the environment.
- ☐ Proper Insulation: Maintain a standard set of R-values to prevent energy loss and meet Maine energy codes.
- ☐ Recycle Materials: Whenever possible or economically feasible, existing materials should be recycled or reused within the renovation.

5. External circulation:

Internal circulation needs to be coordinated with external access and egress points in order that main entrances to buildings relate to the campus Master Plan.

- ☐ Vehicular Circulation and Access: When possible coordinate vehicular access points to individual building sites with existing or proposed median breaks and/or curb cuts on the opposite side of the roadway. Shared access drives between adjacent sites are encouraged.
- ☐ Drop-Off Zones and Parking: Drop-off zone and parking should be located near main entrances.
- ☐ Parking: Parking areas should be arranged in a logical, efficient manner to minimize the land area dedicated to parking.
- ☐ Curbs and Pavement: All driveways, surface parking and other vehicular use areas should be paved in asphalt concrete in conformance with the University's Construction Standards. Care should be given in the design and layout of curbs to facilitate snow removal.
- ☐ Dimensions and Striping: Parking lot dimensions will meet local code.
- ☐ Handicap Parking: All parking lots must conform to federal handicapped accessibility requirements (ADA) Standards. Slopes in the handicap spaces should be 2% maximum in all directions. All handicap spaces must have adequate signage. Handicap spaces should be located near accessible entrances in renovated buildings and the main entrance on new structures.

- ☐ **Parking Structures:** The development of parking structures may be necessary as part of campus growth and should be carefully assessed as to impact, land ordinances and safety. Where proposed, special attention should be given to the exterior design and scale of the structure so that it is compatible with the surrounding context area. Screening at the perimeter of the structure should be provided for buffering and minimization of the visual impact on the landscape.
- ☐ **Outdoor Uses:** Outdoor spaces include intercollegiate sports, intramural sports, picnic areas, etc. Such areas should be located in areas relatively free of conflicting activities such as deliveries, service areas, major access routes and vehicular use areas.
- ☐ **Outdoor Spaces:** Building designs should strive to include a variety of open spaces and activities ranging from small intimate courtyards for contemplative study to open lawn areas for informal recreation and outdoor classes. Where applicable, provision should be made during the programming and conceptual design of new facilities to provide opportunities for outdoor use of open space as part of the site and for integration within the larger open space/conservation network.
- ☐ **Natural features:** A variety of natural features ranging from conservation areas, passive open space and vegetative areas should be retained as much as practicable on any future development site. Federal and State law currently protects many such areas and encroachment is highly regulated. In the case of jurisdictional wetlands and the Saco River, a setback buffer area is required around these areas. Site criteria for proposed new construction should provide early assessments to minimize potential impact and unnecessary work.

7. **Buffering:**

Various methods of separation may be used to foster compatibility between differing land and building uses within the campus as well as on the perimeter to form separation from the neighbors.

- ☐ **Visual Separation:** Maintain visual separation from neighbors and roadways by means of landscaping and topography.
- ☐ **Tree Removal:** Existing trees and existing tree canopy that have either historical or sentimental importance to the campuses should be respected whenever possible. For more information about which trees need to be preserved, see facilities management. Tree removal must be disclosed as part of any site evaluation process.

- ☐ Physical Separation: Maintain physical separation, where possible, between non-compatible buildings or areas.
- ☐ Screening of Service and Utility Areas and Waste Containers: Service areas and waste container locations should be located out of public view and in an inconspicuous but accessible location.

Architectural Design and Details

EXISTING CHARACTER/REQUIRED CHARACTER

The Architectural Design Guidelines for the color and texture of new and renovated / expanded facilities have been established to provide continuity between the new and existing facilities. In addition to providing aesthetic harmony in the campus' appearance, this approach allows more cost-efficient maintenance of all University facilities. The recommended guidelines for materials are included within the Architectural Design Guidelines.

Characteristics to strive for:

- ☐ Safe and healthy buildings for the users.
- ☐ Comfortable building for the users.
- ☐ Durable buildings both in details and materials.
- ☐ Ease in maintaining buildings and facilities.
- ☐ Resource efficient including energy, water, materials and capital.
- ☐ Adaptable use (includes chases from the lowest floor to the highest floor and adequate ceiling space for future electrical or mechanical upgrades).
- ☐ User friendly spaces / buildings from faculty, staff and students
- ☐ Buildings should support the academic and ancillary functions that dwell within and allude to such functions on the exterior.
- ☐ Natural lighting at all occupied spaces.
- ☐ Produce buildings that people love and they will take care of them.
- ☐ Meet ADA guidelines.
- ☐ Use ASTM approved materials.
- ☐ Provide safe and friendly outdoor space.
- ☐ Foster the living/learning committee approach throughout the campus to encourage interaction between residential and commuting students, faculty, and staff.

Existing Character – University Campus

The current campus is a mix of building types and materials. Not all current buildings on campus are in keeping with the intentions of the Master Plan buildings and they do not provide as timeless a look or have historical precedent. Many of these building should not be emulated. The character of the main campus can be generalized in the following way:

Site:

- ☐ Major public road through campus.
- ☐ Asphalt paths.
- ☐ Woodland landscape - shaded areas and shade perennials.

Building Characteristics:

- ☐ Brick buildings with lead coated copper accents.
- ☐ Aluminum windows.
- ☐ Flat roofs prevalent.

User:

- ☐ Predominantly residential campus.

Desired Character - University Campus

The following are goals to strive for in order to enrich the existing campus.

Site:

- ☐ Provide spaces within the landscape to promote gathering.
- ☐ The “heart of the campus” needs to be created as illustrated in the Master Plan and then maintained.
- ☐ The paths should be asphalt, masonry, or asphalt with masonry accents with concrete or masonry pads at all doors.
- ☐ Perennial gardens, with seating nodes throughout the campus when practical or economically feasible
- ☐ Exterior benches and seating.

Buildings:

- ☐ Exterior building materials should be compatible/complimentary to adjacent buildings.
- ☐ Shingle, slate, or metal roofing is encouraged.
- ☐ Peaked roofs with gable ends are preferred when appropriate to surrounding buildings and existing adjacent architecture. Provide canopies or snow guards at entrances and near pathways.
- ☐ All equipment should be out of sight or as inconspicuous as possible.

- ☐ When brick is selected as exterior treatment for an addition, Brick should match existing.
- ☐ Coated Copper accents are preferred.
- ☐ Granite, pre-cast concrete, cementitious composite panels, or architectural rubbed concrete should be used at the base of buildings.

Materials:

Major Approved Materials

- EIFS - accents should be at 8'-0" or above.
- Granite, pre-cast concrete, cementitious composite panels, or architectural rubbed concrete,
- Aluminum or fiberglass windows with finish-

Minor Approved Materials

- Lead-coated Copper
- Spandrel glass.
- Concrete with either architectural rubbed surface or coating / split-face CMU in limited quantities and in less prominent places.
- Painted exposed steel

Restricted Materials - Requiring Approval from the University

- Vinyl siding.
- Large quantities of cement block.

Appendix Section 7 – Protection of Scenic Views

I. Development and Design Standards

The Institutional Master Plan shall establish development and design standards that shall apply to all development proposals and other improvements within the Institutional Zone. These development and design standards will apply to individual projects that are submitted for site plan review. These standards shall foster the development of a visually and architecturally integrated campus that is safe, environmentally sensitive, and that minimizes the adverse impact of the campus on neighboring residential areas. At a minimum, these development and design standards shall address the following areas:

7. Protection of Identified Scenic Views - The standards shall establish a standard approach for protecting scenic views within or from the campus that have been formally identified and approved by the City Council.

Protection of Identified Scenic Views

The basic scenic view values are already addressed through a comprehensive array of state, regional and City land use protections. Therefore, this Master Plan process and the guiding framework of the City's Institutional Zone Ordinance, have required careful consideration of scenic view values throughout our Master Plan process.

The University must work within the confines of several laws and regulations that are fully protective of scenic values in fashioning its Master Plan:

State of Maine Site Location of Development Act, 38 MRSA section 484(3) and implementing regulations DEP Regulations Chapter 375(14) (providing that a proposed development may not have an unreasonable adverse effect on the scenic character of the surrounding area).

State of Maine Shoreland Protection Act, 38 MRSA section 435 "Shoreland Areas" and City of Biddeford implementing Shoreland Zoning Ordinance (providing for conservation of shore cover and visual access to inland and coastal waters in shoreland areas within 250 feet of the Saco River).

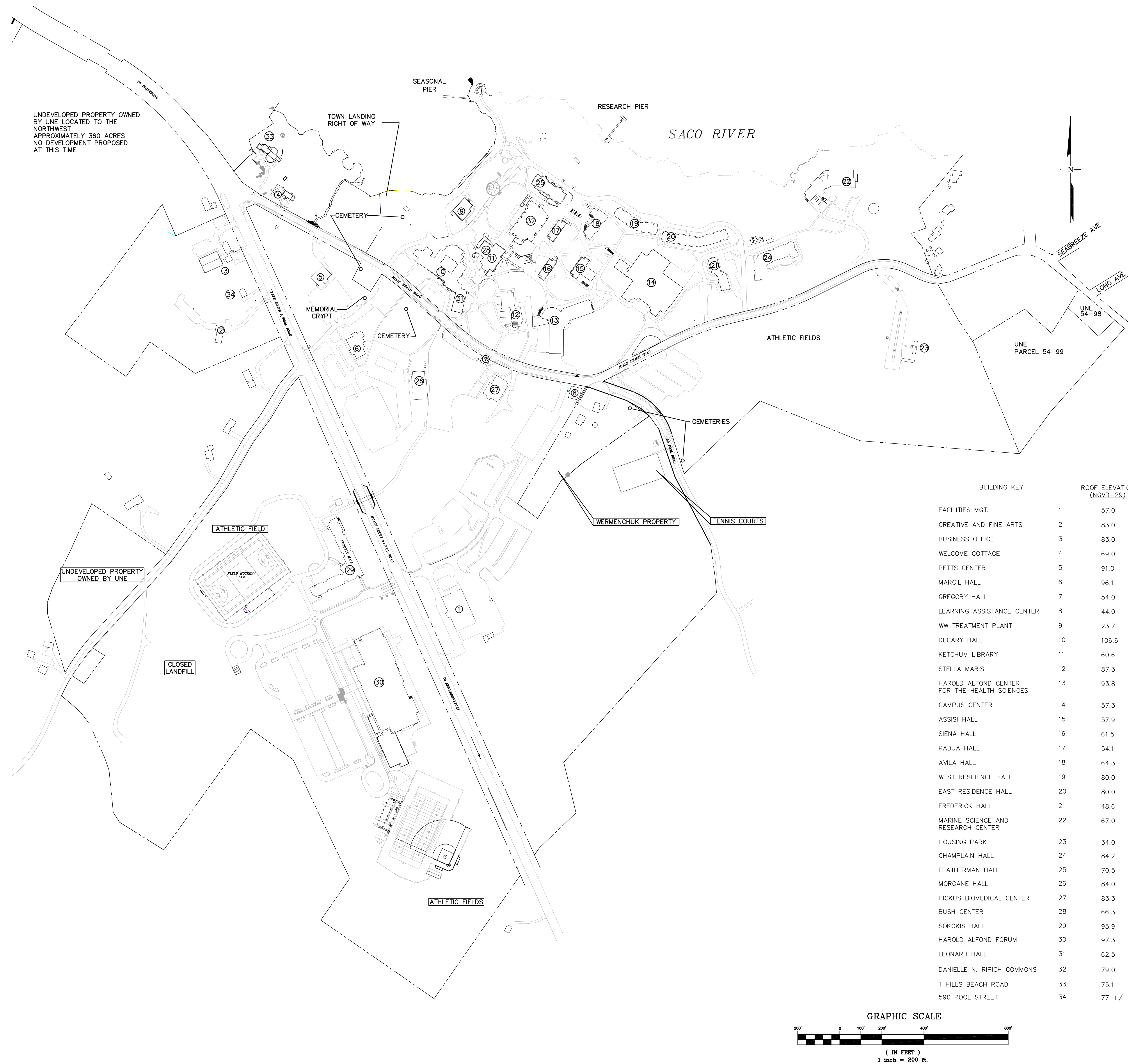
Saco River Corridor Commission law, 38 MRSA section 954, and implementing regulations (protecting against despoliation of scenic areas in the Saco River Corridor, an area extending at least 500 feet from the Saco River).

City of Biddeford Institutional Zone, creating “No Build” Zones within UNE campus, and requiring creation of a Master Plan incorporating a number of development and design standards, including: landscaping; exterior lighting; architectural design standards; and scenic view standards. Some performance standards, such as landscaping, even require that the Master Plan detail how landscaping will enhance the visual environment of the campus.

In response, this Master Plan encompasses the protection of scenic view values in its Architectural Design and Landscape designs standards.

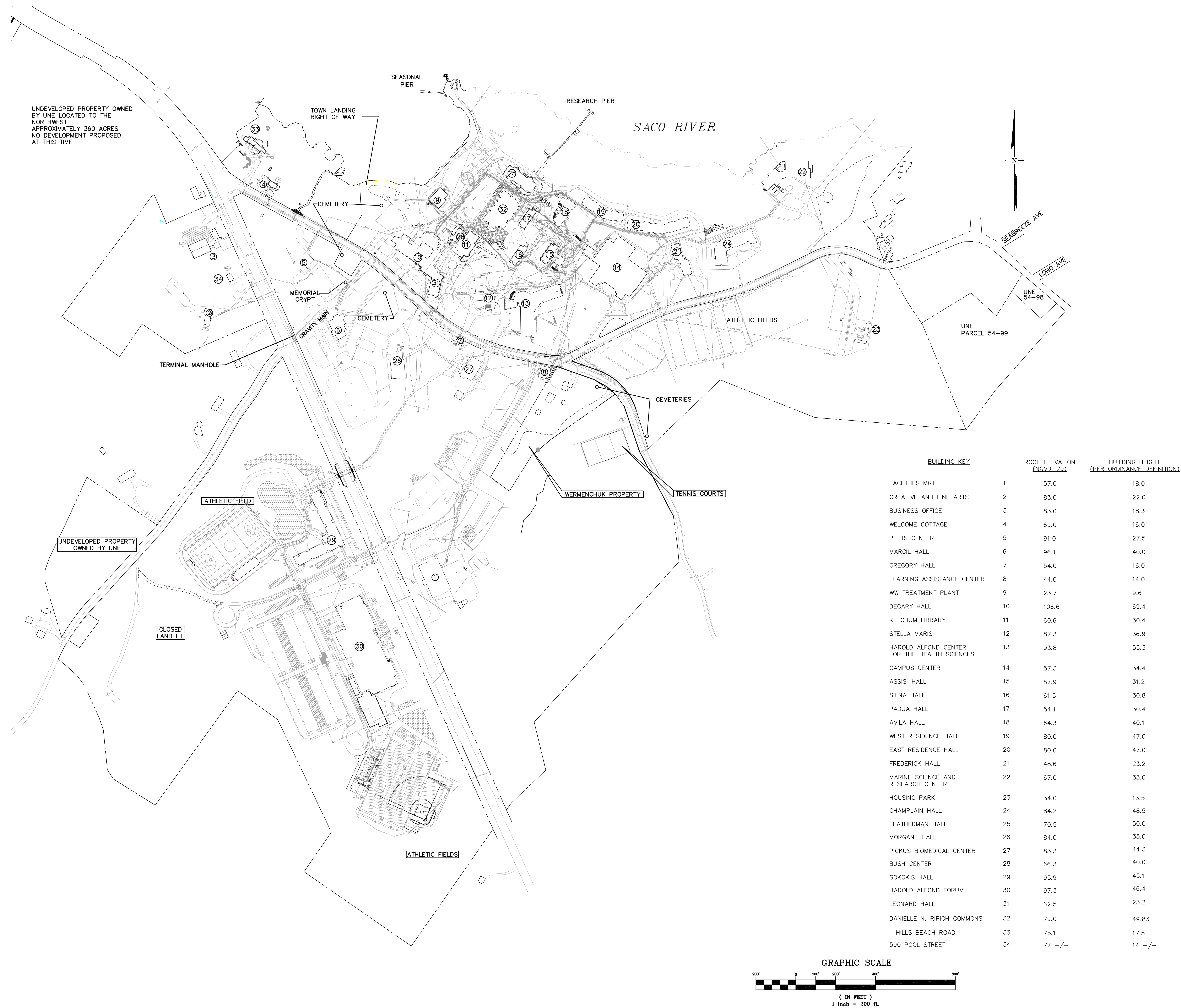
APPENDIX B

UNIVERSITY OF NEW ENGLAND INSTITUTIONAL ZONE MASTER PLAN SUBMISSION 2023-2027



THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

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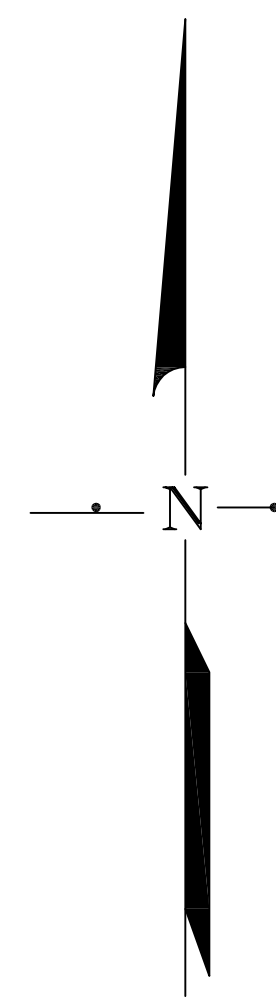
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UNE CONTRACTED WITH A PRE HISTORIC ARCHAEOLOGIST TO MONITOR EARTHWORK DURING CONSTRUCTION OF FEATHERMAN HALL IN 2006. THE RESULTS WERE NEGATIVE

ARCHAEOLOGICAL SURVEY BY ARC, INC. OF ELLSWORTH, MAINE.

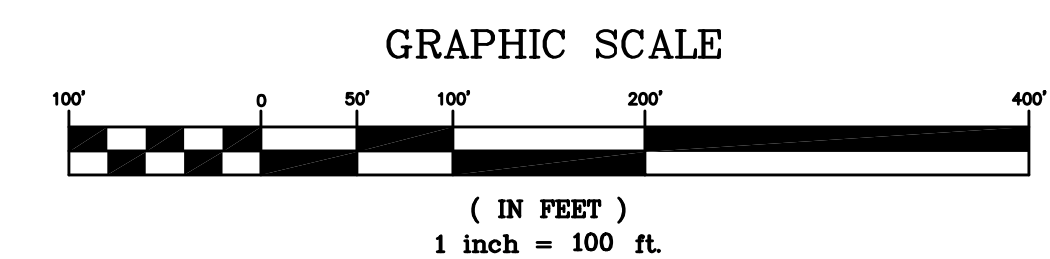
- POSITIVE TEST PIT (TYP)
- NEGATIVE TEST PIT (TYP)
- TEST PIT IDENTIFICATION (TYP)
- APPROXIMATE TREE LOCATION

SACO RIVER

<u>BUILDING KEY</u>		<u>ROOF ELEVATION (NGVD-29)</u>	<u>BUILDING HEIGHT (PER ORDINANCE DEFINITION)</u>
FACILITIES MGT.	1	57.0	18.0
CREATIVE AND FINE ARTS	2	83.0	22.0
BUSINESS OFFICE	3	83.0	18.3
WELCOME COTTAGE	4	69.0	16.0
PETTS CENTER	5	91.0	27.5
MARCIL HALL 228500 N	6	96.1	40.0
GREGORY HALL	7	54.0	16.0
LEARNING ASSISTANCE CENTER	8	44.0	14.0
WW TREATMENT PLANT	9	23.7	9.6
DECARY HALL	10	106.6	69.4
KETCHUM LIBRARY	11	60.6	30.4
STELLA MARIS	12	87.3	36.9
HAROLD ALFOND CENTER FOR THE HEALTH SCIENCES	13	93.8	55.3
CAMPUS CENTER	14	57.3	34.4
ASSISSI HALL	15	57.9	31.2
SIENA HALL	16	61.5	30.8
PADUA HALL	17	54.1	30.4
AVILA HALL	18	64.3	40.1
WEST RESIDENCE HALL	19	80.0	47.0
EAST RESIDENCE HALL 228500 N	20	80.0	47.0
FREDERICK HALL	21	48.6	23.2
MARINE SCIENCE AND RESEARCH CENTER	22	67.0	33.0
HOUSING PARK	23	34.0	13.5
CHAMPLAIN HALL	24	84.2	48.5
FEATHERMAN HALL	25	70.5	50.0
MORGANE HALL	26	84.0	35.0
PICKUS BIOMEDICAL CENTER	27	83.3	44.3
BUSH CENTER	28	66.3	40.0
SOKOKIS HALL	29	95.9	45.1
HAROLD ALFOND FORUM	30	97.3	46.4
LEONARD HALL	31	62.5	23.2
DANIELLE N. RIPICH COMMONS	32	79.0	49.83
1 HILLS BEACH ROAD	33	75.1	17.5
590 POOL STREET	34	77 +/-	14 +/-

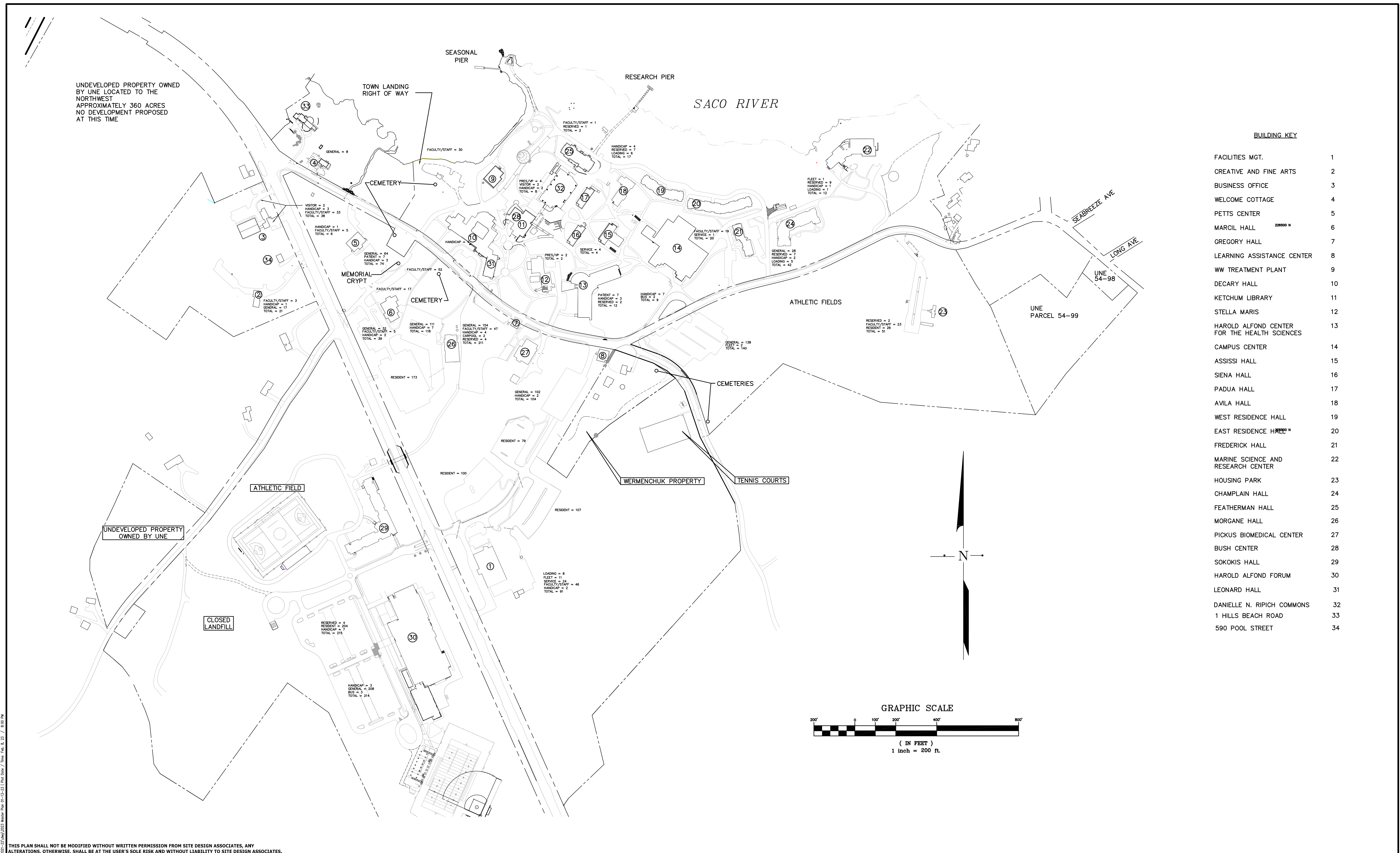
— EXISTING FOUNDATION
AND DUG WELL

- A PHASE 1 ARCHAEOLOGICAL SURVEY WAS PERFORMED IN 2003 WITHIN A 200' RADIUS OF STELLA MARIS HALL. THE RESULTS WERE NEGATIVE

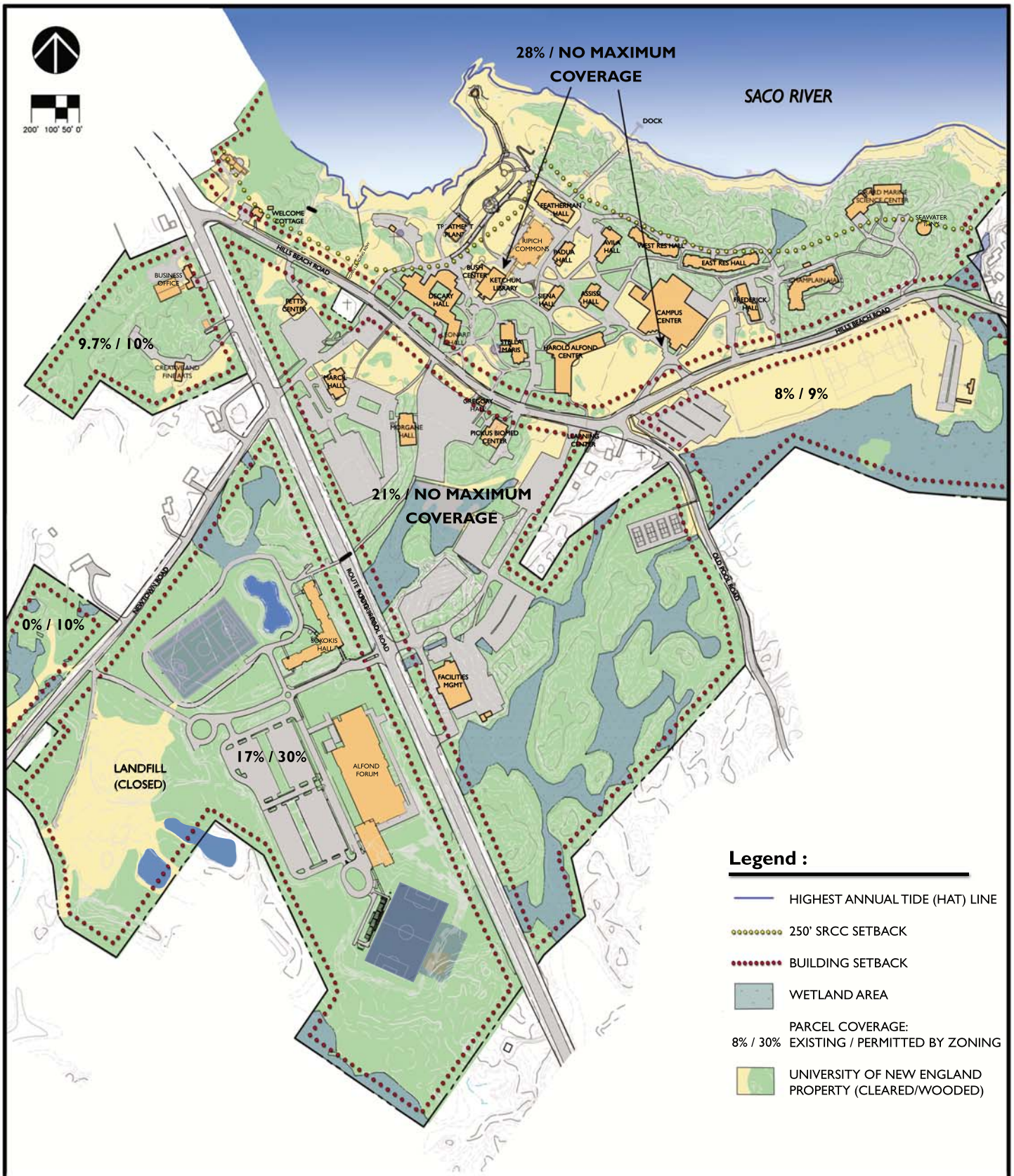


THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SITE DESIGN ASSOCIATES, ANY ALTERATIONS, OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SITE DESIGN ASSOCIATES.

[illegible]



										Site Design Associates		DESIGN: TWS	PROJECT: UNE CAMPUS MASTER PLAN	
										Consulting Engineering & Land		DRAWN: DEPT.	11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005	
										Planning		CHKD: TWS	EXISTING PARKING PLAN	
										23 Whitney Way				
										Topsham, Maine 04086				
										Tel: (207) 449-4275				
										CLIENT: UNIVERSITY OF NEW ENGLAND		DATE: JANUARY 2023	PROJ. NO.	REV.
										11 HILLS BEACH ROAD BIDDEFORD, MAINE 04005		SCALE: 1"=200 FT±	DWG. NO.	B
B	2/08/23	FOR SUBMISSION			DEPT	DEPT	TWS							
A	1/20/23	FOR CITY OF BIDDEFORD REVIEW			DEPT	DEPT	TWS							
REV.	DATE	STATUS			BY	CHKD	APPD.	REV.	DATE	STATUS				

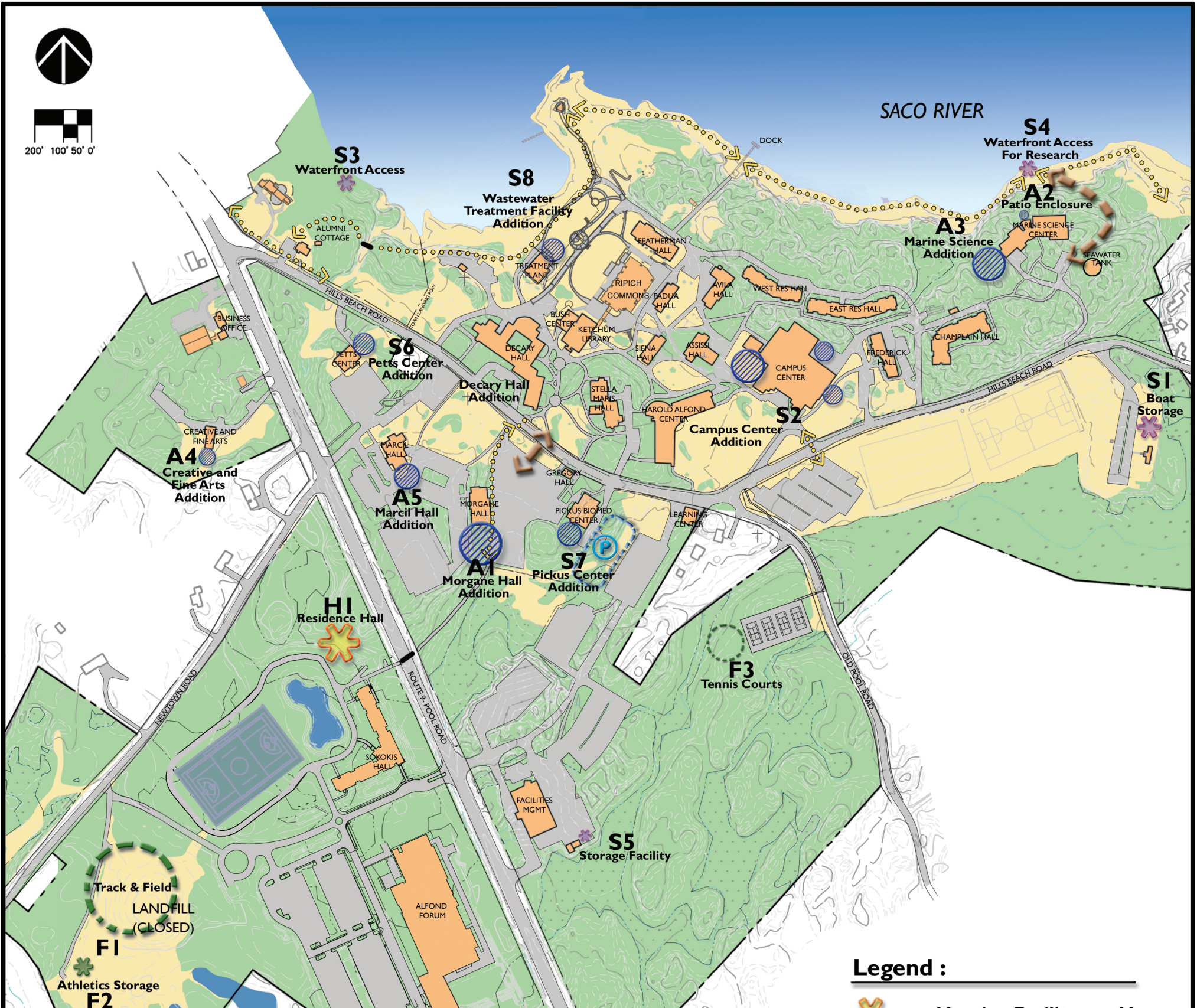


November 10, 2022



University of New England - Biddeford Campus
Campus Master Plan
Restrictions on Developable Areas

Site Design Associates
Civil Engineering and Land Planning





364 ACRE PARCEL

- Legend :**
- Housing Facility
 - Academic Facility
 - Support Facility
 - Athletic Facility
 - Athletic Field
 - Addition
 - Vehicular Circulation
 - Pedestrian Circulation
 - Parking Facility
 - University of New England Property (Cleared-Wooded)

Note:
Graphic symbols are representative of approximate building size (footprint) but are not representative of building shape or height.

January 18 2023

January 18, 2023

APPENDIX

Institutional Zone

Ordinance

UNIVERSITY OF NEW ENGLAND
INSTITUTIONAL ZONE
MASTER PLAN SUBMISSION
2023-2027

Section 11. Institutional master plan. [Ord. No. 2001.90, § 7, 10-16-2001]

- A. Applicability. Any university use or other use conducted by a college or university in an institutional zone shall be consistent with an institutional master plan approved by the Planning Board in accordance with this section. Any site plan approval or other approval for such uses shall be consistent with the approved institutional master plan.
- B. Transition provisions.
 - 1. Following the adoption of this section, the City shall continue to process any pending applications for site plan approval in the institutional zone and shall issue the required permits for these projects if approved and for any other approved but unbuilt projects. This shall include only the following University of New England projects:
 - a. Construction of two approved residence halls;
 - b. Expansion of the cafeteria;
 - c. Construction of a facilities management building;
 - d. Installation of lighting at the existing athletic fields.
 - 2. The Planning Board shall not approve site plans for any other new or expanded buildings and structures, including parking lots, in the institutional zone not addressed in 1. until an institutional master plan has been approved for the college or university. Similarly, the City shall not issue building, plumbing, electrical, or other permits for any other new or expanded buildings or structures in the institutional zone not addressed in 1. until an institutional master plan is approved.
- C. Coordination with site plan review. All projects in the institutional zone that require site plan review in accordance with Article XI of this Code shall continue to require site plan review and approval. In reviewing site plans for university uses or other uses conducted by a college or university in an institutional zone, the Planning Board shall consider the conformance of the proposed activities with the approved institutional master plan and shall approve the project only if it finds that the activities are consistent with the institutional master plan as well as the other standards of Article XI and the provisions of the institutional zone.

In its review of projects in the institutional zone, the Planning Board shall be guided by the approved institutional master plan and shall not impose conditions or requirements on an applicant that are in conflict with the approved institutional master plan. In those areas where the master plan addresses issues that are also covered by site plan review, the Planning Board shall be guided by the overall direction provided in the approved institutional master plan and shall limit the scope of its review under the site plan provisions to how the projects contained in the master plan are designed and constructed to conform to the standards of Section B of Article XI. The following chart outlines the respective areas of concern for the review of an institutional master plan and the site plans for individual projects contained in the master plan for those areas covered in both reviews:

Review Topic	Institutional Master Plan Review Focus	Site Plan Review Focus
Buildings, athletic facilities, and supporting structures	The need for the facilities is related to program growth and changes supported in the master plan, and the general sizes and locations are appropriate based upon those needs	The buildings and/or facilities generally conform to the approved master plan and meet the specific zoning and site plan review standards
Road network and traffic	The primary road network providing access to the campus and within the campus will be adequate to handle the anticipated increase in traffic safely and efficiently while minimizing the impact on other users as a result of the identified improvements	Any road or traffic improvements that are identified in the overall traffic management program in the master plan that are needed to support the specific development project will be built and will meet the technical standards set out in the ordinance
Parking	The amount of parking and general parking locations will be adequate to accommodate the anticipated increase in parking demand resulting from the growth and changes anticipated in the master plan	Any parking improvements that are identified in the overall parking program in the master plan that are needed to support the specific development project will be built and will meet the technical standards set out in the ordinance

Review Topic	Institutional Master Plan Review Focus	Site Plan Review Focus
Water and sewer	The water and sewer systems will be adequate to accommodate the anticipated increase in demand resulting from the growth and changes anticipated in the master plan	The location and design of the water and sewer facilities associated with the specific development proposal are consistent with the master plan and meet the technical standards set out in the ordinance
Landscaping, lighting, signs, noise, scenic views	The master plan establishes appropriate standards for the design of these elements and to minimize the impact on surrounding neighborhoods	The location and design of these elements are consistent with the standards set out in the master plan and meet any other applicable technical standards set out in the ordinance
Pedestrian and bicycle facilities	The pedestrian and bicycle facilities will be adequate to accommodate the anticipated increase in demand resulting from the growth and changes anticipated in the master plan and standards are established for the design of these elements	The location and design of these elements are consistent with the master plan, meet the standards set out in the master plan, and any other technical standards set out in ordinance

- D. Variances. Notwithstanding the provisions of Section 4 of Article IX of this Code, the Zoning Board of Appeals shall not grant variances with respect to the dimensional standards of the institutional zone unless the need for such variation is identified in an approved institutional master plan and such variation is explicitly endorsed by the Planning Board in its approval of the master plan.
- E. Timing of the initial master plan submission. Any college or university located within an institutional zone shall submit an institutional master plan meeting the requirements of this section to the Planning Board for review within two years of the adoption of this section.
- F. Amendment of an approved master plan. A college or university may submit a request to amend the approved institutional master plan at any time provided that no request for an amendment shall be considered within three months of the date of the previous approval of the institutional master plan. The process, procedures, and standards for amending a master plan shall be the same as for the initial approval, however, the applicant may submit an application containing only those items that have been changed from the prior master plan.

- G. Submission and review procedures. The institutional master plan shall contain the information and exhibits set forth in Subsection H. Upon receipt of the initial submission of an institutional master plan or a proposed amended master plan, the application shall be processed and reviewed in accordance with the procedures for reviewing site plan applications with the following additional provisions:
1. Upon receipt of an institutional master plan or an amendment to an approved master plan, the City planning staff shall have 14 days to review the plan for completeness. If the staff finds that the master plan provides all of the information set forth in Subsection H, the staff shall find the plan to be complete, shall notify the applicant, in writing, of this determination, and shall place the master plan on the agenda of the next regularly scheduled Planning Board meeting. The applicant will forward 10 copies of the proposed master plan for Planning Board review. If the staff finds the master plan to be incomplete, it shall notify the applicant, in writing, of this determination and shall indicate the additional information required.
 2. Upon receipt of an institutional master plan, the planning department shall notify all agencies and departments regularly notified of site plan applications as well as the Biddeford Conservation Commission and any neighborhood organization that has requested to be notified of the submission of the master plan.
 3. Prior to the approval of an institutional master plan or an amended institutional master plan, the Planning Board shall hold a public hearing.
 4. The Planning Board shall review the institutional master plan at a regularly scheduled meeting of the Board. The Board shall have 30 days following its initial consideration of the plan to approve, approve with conditions, or deny the master plan.
 5. A copy of any approved institutional master plan or an amendment to a master plan shall be filed with the City Clerk. **[Amended 3-5-2019 by Ord. No. 2019.14]**
- H. Contents of the institutional master plan. An institutional master plan shall provide the City and abutting neighborhoods with a clear outline of the anticipated growth and changes of the institution over the next five to 10 years and the potential impact of those changes on the City and areas surrounding the institution. The master plan should, therefore, contain a description of the current programs and facilities of the college or university, a description of anticipated changes in programs and facilities over the next five years, an analysis of the potential impacts of the anticipated changes on the facilities and the surrounding neighborhoods, an assessment of actions proposed to mitigate any adverse impacts resulting from the anticipated changes, and a conceptual plan showing the approximate size and location of proposed facility improvements.

The institutional master plan shall contain at least the following information and exhibits:

1. Mission statement and institutional objectives.
 - a. The institution's adopted mission statement.
 - b. A statement of any anticipated changes in the institution's mission over the next five years.
 - c. A statement of the institution's objectives with respect to growth and change over the next five years.
2. Existing physical conditions.
 - a. A scaled plan at a scale of not more than one inch equals 200 feet showing the location of all existing buildings, structures, athletic fields and facilities, parking, walkways, service areas, and other impervious surfaces and the height of all buildings and structures referenced to the National Geodetic Vertical Datum (NGVD).
 - b. A scaled plan at the same scale as the existing conditions plan showing the location of all existing utilities, sewer and water systems, and stormwater drainage facilities.
 - c. A natural resources inventory and analysis showing the location of all significant natural resources within those areas of the campus that are already developed or where development activities including clearing or filling are proposed or that will be potentially impacted by proposed development activities. The analysis shall assess the significance of these resources and the issues they raise with respect to the master plan. This shall include a plan at the same scale as the existing conditions plan showing the locations of the significant resources.
 - d. An historic and archeological resources inventory and analysis showing the location of any known historic or archeological resources and any area with potential as an area of historic or archeological significance within those areas of the campus that are already developed or where development activities including clearing or filling are proposed or that will be potentially impacted by proposed development activities. This shall include a plan at the same scale as the existing conditions plan.
 - e. Data on the existing lot coverage and lot coverage ratio.
3. Programs and activities.
 - a. A narrative providing at least the following information about current programs and activities:
 - (1) The current educational programs and degree offerings.
 - (2) Other regularly scheduled programs or activities offered or hosted by the institution.

- (3) Current enrollment of full time and part time students by head count based upon the most recent integrated postsecondary data survey (IPDS) report.
 - (4) Current employment by type of positions and full time/part time status by head count based upon the most recent IPDS report.
 - (5) The number of people living on campus.
- b. A narrative describing how the programs and activities and the number of students, employees, campus residents, and program participants are anticipated to change over the next five years.
- 4. Educational, research, residential, support and athletic facilities.
 - a. A description and plan identifying what buildings and facilities are currently used for these purposes.
 - b. The current bed capacity of all residential buildings and the anticipated change in the total bed capacity.
 - c. A description of any significant changes in the type of use made of existing buildings, significant expansions of existing buildings, or new buildings and facilities that are anticipated to be needed in the next five years.
 - d. A description of how the anticipated changes in facilities relate to program changes and the institution's mission.
- 5. Parking and traffic.
 - a. Information on current traffic volumes and conditions including levels of service on the principal public streets and intersections of public streets within the zone and on the primary access routes to the campus.
 - b. A description of anticipated changes in traffic volumes over the next five years resulting from the changes in programs and facilities included in the master plan.
 - c. An analysis of the impact of these changes on traffic flow and vehicular and pedestrian safety on public streets within the zone and that provide access to the campus.
 - d. A proposed program of improvements to address any unacceptable impacts resulting from changes in traffic volumes including activities that will be undertaken to mitigate any adverse impacts on adjacent residential neighborhoods.
 - e. Information on the number and location of existing parking spaces.
 - f. An analysis of the adequacy of the existing parking to meet anticipated changes in programs and facilities over the next five years.

- g. An assessment of pedestrian and bicycle movements and safety related to the parking supply and locations.
 - h. A proposed program of parking improvements to meet any identified deficiencies.
- 6. Water and sewer service.
 - a. A description of current provisions for water supply and sewage disposal including capacities, current utilization rates, and conformance with any permit or other legal standards.
 - b. An analysis of the change in demand for water supply and sewage disposal resulting from anticipated changes in programs and facilities over the next five years and the adequacy of the existing systems to meet this demand.
 - c. A proposed program of improvements to address any identified deficiencies.
 - d. A statement as to how water supply and sewer disposal improvements are or will be coordinated with City programs and the needs of neighboring residential areas.
- 7. Municipal and community services.
 - a. A description of all municipal and community services (police, fire, rescue, recreation, etc.) currently utilized by the institution and data on the current level of usage.
 - b. An analysis of the change in demand for municipal and community services and the adequacy of the existing services to meet this demand.
 - c. A proposed program of improvements to meet the identified deficiencies including proposed funding mechanisms.
- 8. Neighborhood impacts.
 - a. An assessment of how current campus activities impact neighboring residential areas including, but not limited to, traffic, noise, and visual intrusions. This assessment shall consider conformity to current City and state standards with respect to these items as well as documented evidence of any community or neighborhood concerns relative to these issues.
 - b. An evaluation of current efforts to mitigate these impacts.
 - c. An assessment of any changes in these impacts resulting from the changes in programs or facilities included in the master plan.
 - d. A program for mitigating the adverse impacts of proposed changes or improvements on surrounding residential neighborhoods.

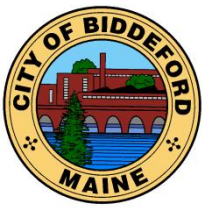
9. Community outreach.
 - a. A description of current community outreach activities.
 - b. An analysis of anticipated changes in outreach activities over the next five years.
10. Conceptual development program.
 - a. A conceptual site plan at the same scale as the existing conditions plan showing the approximate size and location of proposed changes to buildings, structures, parking lots, pedestrian facilities, bicycle facilities, athletic fields and facilities, roads, and similar facilities proposed in the master plan. This should show new facilities, modifications or enlargements of existing facilities, and the planned removal of facilities.
 - b. An accompanying narrative or tables detailing the scale or size of the proposed improvements including the approximate height of buildings, the approximate peak elevation of buildings and structures referenced to NGVD, approximate floor area, approximate size of parking areas, or approximate occupancy.
 - c. A description of all development and design standards or provisions that will apply to the proposed improvements in accordance with Subsection I.
 - d. A schedule setting out when the improvements included in the conceptual development program are anticipated to be completed.
- I. Development and design standards. The institutional master plan shall establish development and design standards that shall apply to all development proposals and other improvements within the institutional zone. These development and design standards will apply to individual projects that are submitted for site plan review. These standards shall foster the development of a visually and architecturally integrated campus that is safe, environmentally sensitive, and that minimizes the adverse impact of the campus on neighboring residential areas. At a minimum, these development and design standards shall address the following areas:
 1. Landscaping. The standards shall establish a general pattern for all campus landscaping including the typical size and type of plantings and shall detail how landscaping will be used to enhance the visual environment of the campus, shield and soften service and parking areas, and minimize impacts on surrounding residential areas and the users of public streets through the campus.
 2. Exterior lighting. The standards shall establish a general lighting theme for the campus and shall identify the appropriate maximum, average, or minimum illumination levels and uniformity ratios for various areas and facilities, the typical type of lighting fixtures and poles that will be used, and shall detail how night-time sky glow and light intrusion on neighboring residential areas

will be minimized.

3. Signage. The standards shall establish a consistent design theme for all campus signs that enhances the visual environment of the campus and shall identify the general design, sizes, and locations for various types of campus signs.
 4. Pedestrian and bicycle facilities. The standards shall establish an integrated program for accommodating pedestrians and bicyclists safely while promoting a campus environment that is pedestrian focused. The standards shall identify the types, general location, and typical design of various pedestrian and bicycle facilities.
 5. Noise. The standards shall establish an overall program for minimizing the impact of campus noise on adjacent residential areas. The standards shall identify measures that will be employed to control noise at the source as well as to mitigate the impacts of noise on adjacent property.
 6. Architectural design and details. The standards shall establish an integrated design theme for campus buildings that is harmonious with existing buildings while promoting a high level of design for new buildings. The standards shall address the scale and massing of buildings, appropriate materials and colors, rooflines, locations of building entrances, architectural detailing, and similar features to create a visually attractive campus while minimizing impacts on surrounding residential areas.
 7. Protection of identified scenic views. The standards shall establish a standard approach for protecting scenic views within or from the campus that have been formally identified and approved by the City Council.
- J. Approval standards. In reviewing an institutional master plan, the Planning Board shall approve the master plan if it finds that:
1. The activities and facilities proposed in the master plan are consistent with the institution's mission statement.
 2. The facilities conform to the requirements of the institutional zone and other applicable provisions of the zoning ordinance.
 3. There is a reasonable expectation that individual projects carried out in accordance with the institutional master plan will be able to be designed so that they comply with the site plan review standards of Article XI.
 4. The activities and facilities will be designed in a manner that will not unreasonably increase adverse impacts on adjacent residential neighborhoods or the facilities or services of the City of Biddeford.
 5. The City Council and UNE shall establish a scholarship and community grant program, within the first six months of the acceptance of the university's master plan.
- K. Appeals of Planning Board action. Appeals of the actions of the Planning Board in

reviewing and approving institutional master plans under this section shall be to the City of Biddeford's Zoning Board of Appeals. The applicant and any party to the review of the institutional master plan may appeal any action of the Planning Board within 30 days of such action by providing written notice to the Board of Appeals setting forth the action being appealed and the specific basis for the appeal. Appeals of Planning Board actions in the review of an institutional master plan shall be processed in accordance with the procedures set out in Section 5 of Article IX of this ordinance.¹

1. Editor's Note: The provisions of former Section 12, Medical marijuana dispensary moratorium, added 3-16-2010 by Ord. No. 2010.23, have expired and therefore are not included in the Code.



CITY OF BIDDEFORD

Planning and Development Department

Eric Freeman
Assistant City Planner
205 Main Street
P.O. Box 586
Biddeford, ME 04005
eric.freeman@biddefordmaine.org

PLANNING BOARD MEMO

TO: Larry Patoine, Chair & Members of the Biddeford Planning Board

FROM: Eric Freeman, Assistant City Planner

DATE: April 12th, 2023

RE: **University of New England Plan – Dimensional Standards for Parcels Added to (IN) Zone**

I. BACKGROUND:

As part of the development of its “Institutional Zone Master Plan” The University of New England proposes to rezone three university-acquired parcels to be included in the Institutional (IN) zone. All three parcels are currently zoned Suburban Residential (SR1) Two of the tree parcels are occupied by single-family home structures owned and used by the University.

II. PARCELS PROPOSED TO BE ADDED TO THE INSTITUTIONAL ZONE

The following parcels are proposed to be included in the Institutional Zone.

- 1 Hills Beach Road (Tax Map 51, Lot 11)
- 583 Pool St. (Tax Map 51, Lot 10)
- 590 Pool St. (Tax Map 51, Lot 18-1)

As part of the proposed zoning change, the University of New England has developed dimensional standards for each of these parcels. These standards will be a framework for any future redevelopment of these parcels.

Given their proximity to existing residential areas, All three parcels are proposed to have a height limit of 35 feet. This is in line with the overall massing and dimensional standards of the campus complex, which emphasizes a gradual decrease in building height and massing moving from the “core” of the campus to the outer edges abutting residential neighborhoods.

III. FINDINGS OF FACT

	<u>SUBJECT</u>	<u>INFORMATION</u>
1.	Applicant / Property Owner	Alan Thibaut - University of New England
2.	Owner	University of New England 11 Hills Beach Rd. Biddeford, ME 04005 207-602-2253
3.	Project Location	1 Hills Beach Rd. (Tax Map 51, Lot 11) 583 Pool St. (Tax Map 51, Lot 10) 590 Pool St. (Tax Map 51, Lot 18-1)
4.	Map/Lot	Multiple
5.	Size of Lot	1 Hills Beach Rd- 2.0 acres 583 Pool St. – 0.3 acres 590 Pool St. – 1.0 acres
6.	City Approvals Required	Institutional Master Plan Approval
7.	Existing Zoning	Suburban Residential (SR1)
8.	Overlay Zoning	N/A
9.	Shoreland Zoning	1 Hills Beach Rd (Tax Map 51, Lot 11)
10.	Existing Use	Institutional
11.	Limits of Disturbance	N/A
12.	New private or public road?	No
13.	Proposed Use	Institutional
14.	Uses in the Vicinity	Single-family residential, Resource Protection
15.	Water Supply	Private Well
16.	Sewerage Disposal	Private septic
17.	Solid Waste Disposal	Private Hauler
18.	Fire Protection	City of Biddeford
19.	Ownership of Road	Public road
20.	Waivers Needed/Requested	None
21.	Waivers Granted	None
22.	Fees Paid (LDR Attachment A)	All fees paid
23.	Traffic Movement Permit Required	No

IV. Sample Motions

- I. Motion to APPROVE the Preliminary University of New England Dimensional Standards as presented
- II. Motion to APPROVE the Preliminary University of New England Dimensional Standards, with the following amendments;
 - A. _____.
 - B. _____.
 - C. _____.
 - D. _____.

III. Motion to POSTPONE the final Board action on Preliminary University of New England Dimensional Standards, to _____ (should be a date certain- PB scheduled meetings: May 2nd, May 16th, June 7th), for the following reasons:

- A. _____.
- B. _____.
- C. _____.
- D. _____.



UNIVERSITY OF
NEW ENGLAND

Biddeford Campus
11 Hills Beach Road
Biddeford, ME 04005
(207) 283-0171 T

Portland Campus
716 Stevens Avenue
Portland, ME 04103
(207) 797-7261 T

December 13, 2022

Carmen J. Morris, City Clerk
City of Biddeford
P.O. Box 586
Biddeford, Maine, 04005

RE: Review of Dimensional Standards for parcels rezoned to IN

Dear Carmen,

The University is pleased to submit an application to the Planning Board to review the proposed dimensional standards for the three parcels rezoned to IN on July 19, 2022. These properties are as follows:

- 1 Hills Beach Road, Map 51, Lot 11
- 583 Pool Street, Map 51, Lot 10
- 590 Pool Street, Map 51, Lot 18-1

Please find attached, the revised *Restrictions on Developable Areas* maps, dated November 10, 2022, identifying the proposed Setbacks and Lot Coverages, as well as the Maximum Building Heights. The proposed dimensional standards for each of the rezoned parcels is consistent with the previously approved standards of the abutting IN parcels. The lot coverages have been revised to reflect the current development on campus.

Additionally attached are the revised parcel boundary descriptions, which now include the three rezoned parcels. The text modifications are found in the 35' HT/Parcel 1 and 35' HT/Parcel 3 descriptions.

Sincerely,

Alan Thibeault,
Vice President for University Operations

Cc: David Galbraith, City Planner
William Emhiser, City Councilor, Ward 1
Betsy Martin, Hills Beach Association
Andrew Phillippe, UNE Director for Campus Planning
Tom Saucier, Site Design Associates



City of Biddeford – Planning Department

Planning Board Application

P.O. Box 586, 205 Main Street Biddeford, Maine 04005

207-284-9115

Type of Application:

☐ Shoreland Zoning Permit ☐ Site Plan Review ☐ Extraction
☐ Conditional Use Permit ☐ Subdivision ☐ Private Way
☒ Other: Review of Dimensional Standards for 3 Parcels Rezoned to IN

Applicant Information:

Name: Alan Thibeault
 Mailing Address: 11 Hills Beach Road
 Telephone: 207.602.2253
 Email: athibeault@une.edu

What is your legal interest in the property?

☒ Owner ☐ Potential Buyer with Contract ☐ Lease/Rental Agreement

Owner's Information:

Name: University of New England
 Mailing Address: 11 Hills Beach Road
 Telephone: 207.602.2253
 Email: athibeault@une.edu

Agent's Information:

Name: _____
 Mailing Address: _____
 Telephone: _____
 Email: _____

Engineer/Surveyor's Information:

Name: Site Design Associates
 Mailing Address: 23 Whitney Way, Topsham, ME
 Telephone: 207.449.4275
 Email: _____

Project Location and Lot Information:

Street Address: 1 Hills Beach, 583 and 590 Pool St. Drainage Watershed: _____
Tax Map: 51 Lot: 10, 11 and 18-1
Current Zoning: IN Shoreland Zoning: 1 Hills Beach, Map 51, Lot 11
 Size of Lot: 2.0, 0.3, 1.0 (x) acres () s.f. Lot Frontage: 70', 144', 161'
 Existing Use of Property: Institutional

Property currently serviced by:

☒ City Road ☐ Public Sewer ☐ Public Water ☐ Public Trash
☐ Private Road ☒ Septic System ☒ Private Well ☒ Private Hauler

Slope Conditions in Area of Construction (if applicable):

☒ Flat (0-3% slope) ☐ Rolling (3-8% slope) ☐ Hilly (8-15% slope) ☐ Steep (15%+ Slope)

Are there any wetlands or waterbodies on the site? ____ (Yes) ☒ (No) if yes attach information

Is the project within the 100-year floodplain? ____ (Yes) ☒ (No) if yes attach information

Do you plan to bring fill onto the lot? ____ (Yes) ☒ (No) If yes attach information

Description of proposed use of property:

Project/Proposed Use:

Institutional**Property to be Serviced by:**

☒ City Road ☐ Public Sewer ☐ Public Water ☐ Public Trash
☐ Private Road ☒ Septic System ☒ Private Well ☒ Private Hauler

Limits of Disturbance: 0 (☒) acres () s.f.Net change in impervious cover: 0 (☒) acres () s.f.Is this project part of a larger project? ☐ (Yes) ☒ (No)Is the project proposing a new Private or Public Road? ☐ (Yes, Private) ☐ (Yes, Public) ☒ (No)Is this project within the Urbanized Area/MS4 (see [City Drainage Map](#)) ☐ (Yes) ☒ (No)Is the project proposing any Stormwater facilities/BMPs? ☐ (Yes) ☒ (No)Will a Traffic Movement Permit (TMP) be required?: ☐ (Yes) ☒ (No)**☒ If in a Shoreland Zone:**Percent of residential lot coverage (Max 20%): 2%Percent of structure expansion (Max 30%): 0%☐ If Subdivision Review, number of lots proposed: _____☐ If a Private Way is proposed, number of lots served: _____**If Site Plan Review, you must provide the following information:**

Total new square feet footprint of structure: _____

Total new square feet paving/parking: _____

Waiver Requests (attach details):

1. _____
2. _____
3. _____
4. _____
5. _____

Required Submittal Attachments:

- A. Letters of Approval
 - ☐ Fire Department – Contact Chief or Deputy Chief – 282-9986
 - ☐ Ability to Serve for Water Service – Maine Water – 282-1543
 - ☐ Ability to Serve for Sewer Service – Engineering Department – Tom Milligan 284-9118
 - ☐ Police Department – e-911 Road Name Designation – Contact Joanne Fisk 282-5127
- B. Letter to Planning Board describing project, Waiver requests, proposed improvements, addressing permit requirements, etc.
- C. Photographs of Site.
- D. Architectural renderings/drawings of proposed buildings, as required.
- E. Engineering Plans, as required.
- F. Stormwater Management Report, as required.

Fees (Due at time of Submission):

- \$75 Nonrefundable Administration Fee is required for every application.
- Refer to "Attachment A Fees and Charges" of the Land Development Regulations for more information. Consult with Planning Staff if you have questions.

Required Signatures:

By signing this application, as the foresaid applicant or authorized agent:

- I certify that I have read and completely understand the application;
- I certify that the information contained in this application and its attachments are true and correct;
- I understand that all information provided on this form and all other documents submitted as part of my proposal is a matter of public record;
- I understand that copies of this information may be supplied upon request to an interested party.
- I understand that additional funds may be required through the course of the review for special studies, legal review costs, and/or engineering review.
- I understand that by submitting an application I am not guaranteed a place on any particular agenda. I further understand that the City Planner will place me on an agenda for review when the application is deemed substantially complete.

Will the proposed project cause 1 acre or more of site disturbance?: __ (Yes) __ (No)

- If Yes, applicant is responsible for any required Maine Construction General Permits and shall comply with the requirements of DEP Chapter 500 Stormwater Regulations, as they apply.

Signature of Applicant: _____

Date

2/27/23

Signature of Property Owner: _____

Date

DIGITAL SUBMITTAL REQUIREMENTS FOR ALL SUBMITTALS:

- A) PDF OF SIGNED APPLICATION
- B) PDFs OF ALL DRAWING SETS AND OTHER REQUIRED SUBMITTAL ATTACHMENTS NOTED ABOVE

HARD-COPY SUBMITTAL REQUIREMENTS FOR PLANNING BOARD APPLICATIONS:

- A) SEVEN (7) FULL-SIZE PAPER COPIES OF DRAWING SETS

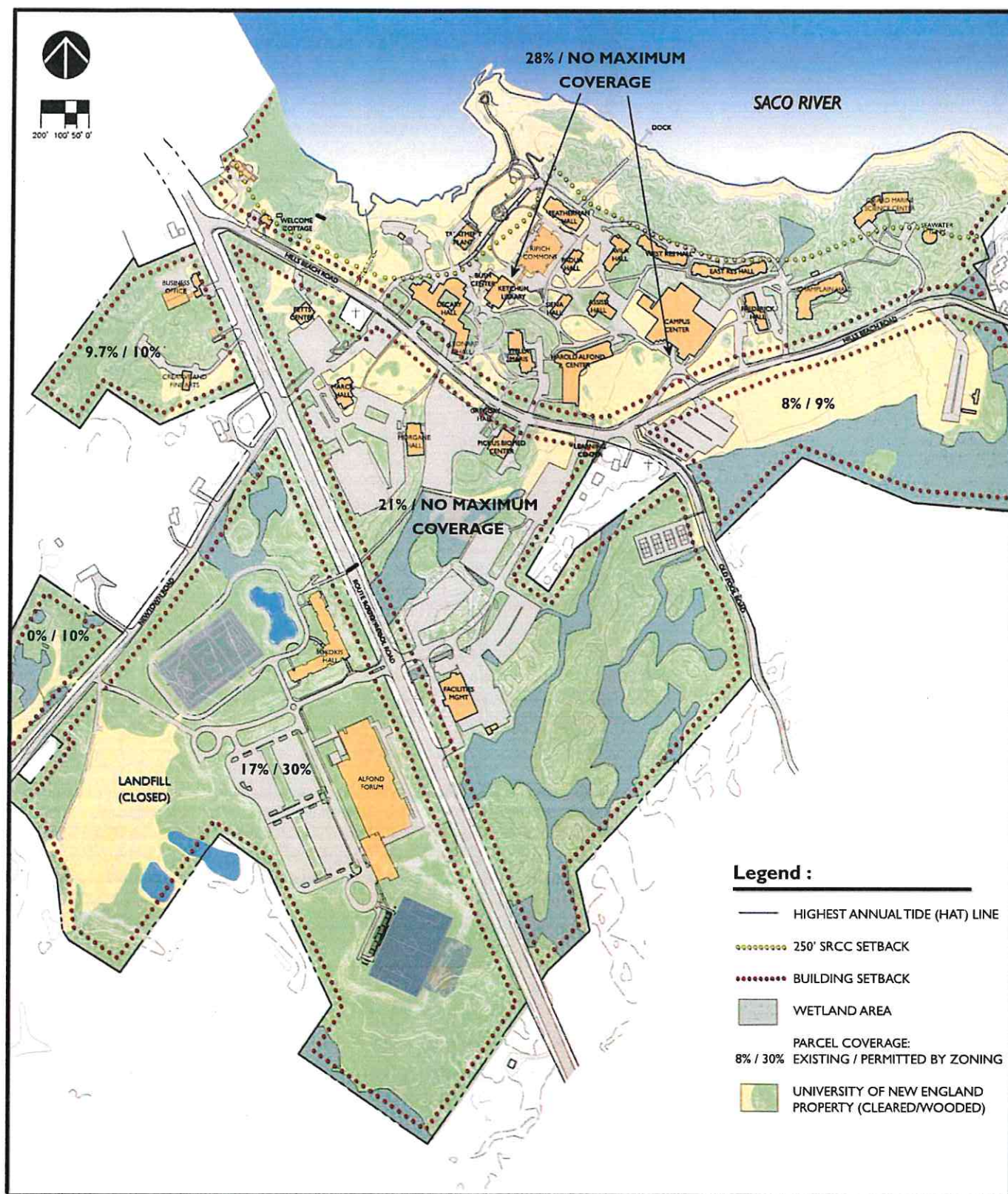
DIGITAL SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) INDIVIDUALLY NAMED PDFs OF EACH DRAWING (NOT A COMBINED PDF SET)
- Individual Drawing PDF Naming Format: 'PROJECT/SHEETSET NAME_INDIVIDUAL DRAWING NAME.pdf'
- B) PDF COPIES OF ALL PERMIT APPROVALS, APPLICATIONS, REPORTS, NARRATIVES, LETTERS, ETC.
- C) FINAL CAD REFERENCE FILES IN DWG FORMAT (SURVEY & PROPOSED DESIGN LINEWORK)
- All drawings & CAD reference files must be to-scale and within the following coordinate systems:
- MAINE STATE PLANE WEST NAD83 (Horizontal Datum) & NAVD88 (Vertical Datum)

HARD-COPY SUBMITTAL REQUIREMENTS FOR FINAL APPROVAL:

- A) THREE (3) FULL-SIZE PAPER COPIES OF INDIVIDUAL DRAWINGS REQUIRING BOARD SIGNATURE
- B) ONE (1) FULL-SIZE PAPER COPY OF ENTIRE DRAWING SET FOR ENGINEERING RECORDS

PLEASE CONFIRM WITH PLANNING STAFF FOR CLARIFICATION

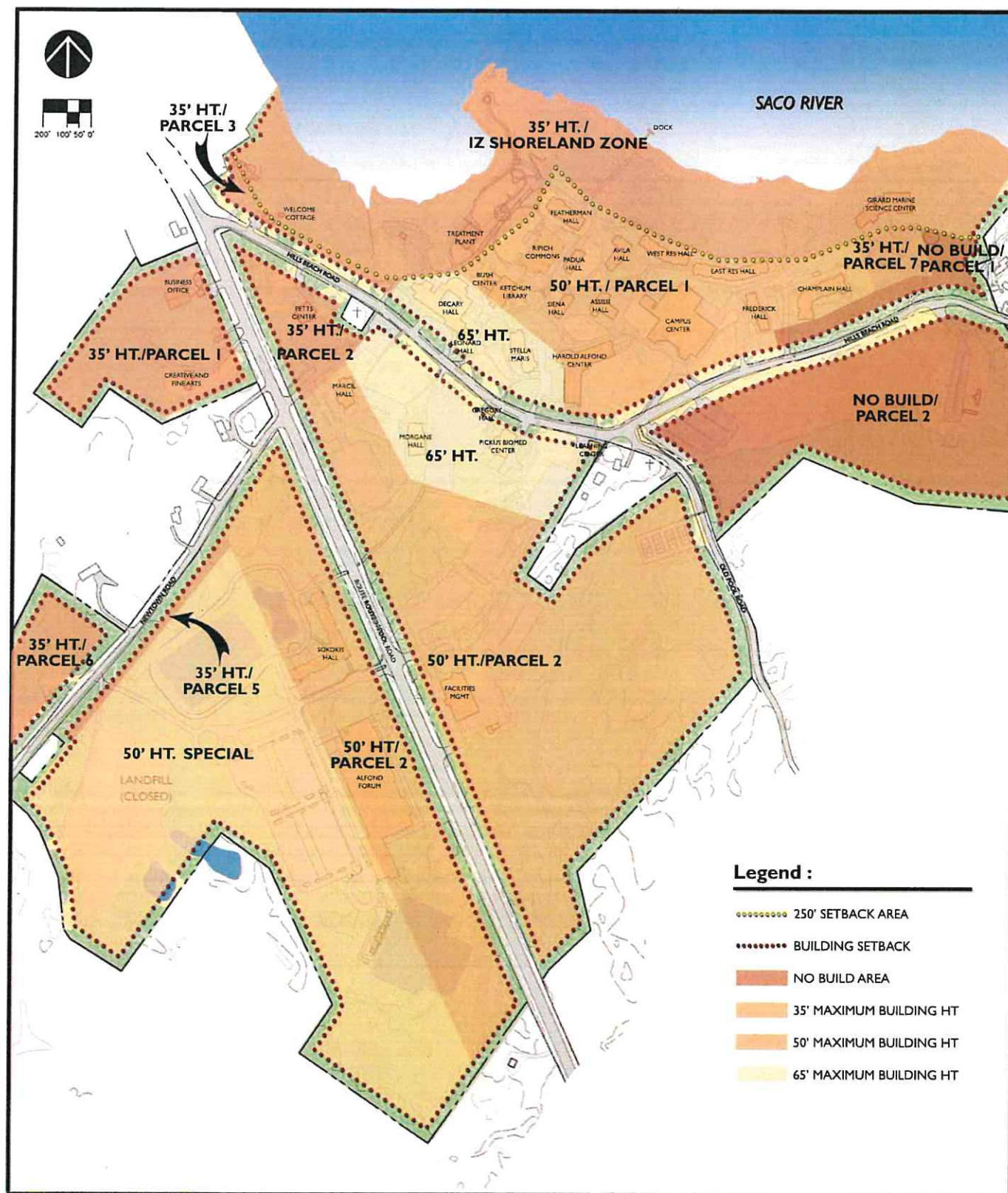


November 10, 2022



University of New England - Biddeford Campus
Campus Master Plan
Restrictions on Developable Areas

Site Design Associates
Civil Engineering and Land Planning



November 10, 2022



University of New England - Biddeford Campus
Campus Master Plan
 Restrictions on Developable Areas

Site Design Associates
 Civil Engineering and Land Planning

XXXX.XX IN BOARD OF CITY COUNCIL...XX/XX/XXXX

BE IT ORDAINED, by the City Council of the City of Biddeford that the Code of Ordinances, Land Development Regulations, Article III Official Zoning Map adopt the proposed boundary descriptions necessary to apply performance standards, dimensional requirements, use limitations and all requirements set forth in the Institutional Zone as follows:

35-FT - PARCEL ONE

A certain lot or parcel of land, situated on the southwesterly side of Route 9, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point on the centerline of the right-of-way of State Route 9, so-called, approximately 55 feet southeasterly of the intersection of the right-of-way centerlines of Hills Beach Road and State Route 9, said point of beginning being located at the intersection of the northeasterly prolongation of the southerly sideline of lot 18-2, as shown on Map 51 of the Property Map of the City of Biddeford and the centerline of the Route 9 right-of-way;

THENCE: westerly along the prolongation of, and along the southerly sideline of Lot 18-2, as shown on Map 51 of the Property Map of the City of Biddeford a distance of 315 feet more or less to a point that marks the southwesterly corner of said Lot 18-2, as shown on said Map 51;

THENCE: northwesterly along the westerly line of said Lot 18-2, as shown on Map 51 of the Property Map of the City of Biddeford a distance of 36 (45 per tax map) feet more or less to a point on the southerly line of Lot 22, as shown on Map 9 of the Property Map of the City of Biddeford;

THENCE: southwesterly along the southerly line of said Lot 22, a distance of 707(750 per tax map) feet more or less to the northeasterly corner of Lot 21-3, as shown on Map 9 of the Property Map of the City of Biddeford;

THENCE: southeasterly along said Lot 21-3, a distance of 248(200 per tax map) feet more or less to the northwesterly corner of Lot 21-4, as shown on Map 9 of the Property Map of the City of Biddeford;

THENCE: northeasterly along said Lot 21-4, a distance of 200 feet more or less to the northeasterly corner of said Lot 21-4;

THENCE: southeasterly along said Lot 21-4, a distance of 262(280 per tax map) feet more or less to the northwesterly corner of Lot 21, as shown on Map 9 of the Property Map of the City of Biddeford;

THENCE: easterly along said Lot 21, and its prolongation, a distance of 490 (540 per tax map) feet more or less, to the centerline of the right-of-way of said State Route 9;

THENCE: northerly along said centerline a distance of 692 feet more or less, to the point of beginning.

Meaning and intending to encompass Lots 18 and 18-1, as shown on Map 51 of the Property Map of the City of Biddeford and Lot 21-5, as shown on Map 9 of the Property Map of the City of Biddeford and as being depicted on the official zoning map of the city of Biddeford.

35-FT - PARCEL TWO

A certain lot or parcel of land, situated on the easterly side of Route 9, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point on the centerline of the right-of-way of State Route 9, so-called, at its intersection with the centerline of the right-of-way of Newtown Road Extension;

THENCE: northerly along the centerline of said State Route 9 right-of-way, a distance of 830 feet more or less to the intersection of the right-of-way centerlines of State Route 9 and Hills Beach Road;

THENCE: southeasterly along the right-of-way centerline of Hills Beach Road, a distance of 870 feet more or less to the intersection of the right-of-way centerlines of Hills Beach Road and Newtown Road Extension;

THENCE: westerly along the easterly prolongation of the centerline of the right-of-way of said Newtown Road Extension and along the centerline of Newtown Road and the westerly prolongation thereof a distance of 590 feet more or less, to the point of BEGINNING.

Meaning and intending to encompass and include a portion of Lot 2, as shown on Map 52 of the Property Map of the City of Biddeford and a portion of lot shown on map 51 of the Property Map of the City of Biddeford, and being as depicted on the official zoning map of the city of Biddeford.

35-FT - PARCEL THREE

A certain lot or parcel of land, situated on the northeasterly side of Hills Beach Road, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point located on the centerline of the right-of-way of State Route 9, at the intersection of the centerline of the right of way of State Route 9 and the southwesterly prolongation of the northwesterly property line of lot 10 as shown on Map 51 of the Property Maps of the City of Biddeford;

THENCE: along the centerline of the right of way of State Route 9 a distance of 110 feet more or less to the centerline of the right of way of Hills Beach Road;

THENCE: southeasterly along the centerline of the right-of-way of said Hills Beach Road, a distance of 845 feet more or less to a point;

THENCE: easterly along a line perpendicular to the centerline of the right-of-way of said Hills Beach Road, a distance of 160 feet more or less to its intersection with the City of Biddeford Shoreland Protection Limited Residential (LR) Zone boundary, which is defined as a distance of 250 feet from the normal high-water line of the Saco River;

THENCE: north, northwesterly, and northerly along the said LR Zone boundary, a distance of 921 feet, more or less to its intersection with the northwesterly property line of Lot 10, as shown on Map 51 of the Property Map of the City of Biddeford;

THENCE: along the northwesterly property line of Lot 10 a distance of 96 feet more or less to the State Route 9 right of way;

THENCE: along the southwesterly prolongation of the sideline of Lot 10 a distance of 72 feet, more or less, to the center of the right of way of State Route 9 and the point of BEGINNING;

Meaning and intending to encompass portions of Lots 10, 11, 12 and Lot 13, as shown on Map 51 of the Property Map of the City of Biddeford, and a portion of Lot 4, as shown on Map 52 of the Property Map of the City of Biddeford.

35-FT - PARCEL FOUR

A certain lot or parcel of land, situated on the westerly side of Route 9 and on the easterly side of West Street, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

Bounded generally on the north by Lot 3-1, as shown on Map 4 of the Property Map of the City of Biddeford, and Lots 36, 33-1, 51, 52-1, 30-1, 28-2, 26-1 and 28-1, as shown on Map 9 of the Property Map of the City of Biddeford, generally on the east by Pool Street, generally on the west by Lots 5, 6, 7, 15-2, and West Street as shown on Map 4 of the Property Map of the City of Biddeford, and generally on the south by Lots 21 and 22, as shown on Map 4 of the Property Map of the City of Biddeford, and by Lots 19, 23-2, 24 and 25-1, as shown on Map 9 of the Property Map of the City of Biddeford;

Meaning and intending to include the contiguous area identified on the following City of Biddeford Assessor's maps: Map 4, Lot 4, and Map 9, Lots 53-1, 53-2, 53-3, and as being depicted on the official zoning map of the City of Biddeford.

35-FT - PARCEL FIVE

A certain lot or parcel of land, situated on the southerly side of Newtown Road, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point on the centerline of the right-of-way of Newtown Road, so called, 350 feet more or less westerly from the intersection of the right-of-way centerlines of State Route 9 and Newtown Road;

THENCE: southwesterly along the centerline of the right-of-way of said Newtown Road, a distance of 1608 feet more or less to a point, said point marking the intersection of the prolongation of the westerly sideline of Parcel 5 as shown on Plan entitled Plan Showing Boundary Survey for University of New England, by Middle Branch Land Surveyors, dated September 26, 1989, and the center of the Newtown Road right-of-way;

THENCE: southeasterly along the prolongation of and westerly sideline of said Parcel 5, a distance of 115 feet more or less to a point;

THENCE: northeasterly parallel to the centerline of the right-of-way of said Newtown Road, a distance of 1575 feet more or less to a point;

THENCE: northerly perpendicular to the centerline of the right-of-way of said Newtown Road, distance of 115 feet more or less to the point of BEGINNING.

Meaning and intending to encompass a portion of Lot 15 as shown on Map 9 of the Property Map of the City of Biddeford and being as depicted on the official zoning map of the city of Biddeford.

35-FT - PARCEL SIX

A certain lot or parcel of land, situated on the northerly side of Newtown Road in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

Bounded generally to north and west by Lot 19, as shown on Map 9 of the Property Map of the City of Biddeford, generally to the south by Newtown Road, so called, and generally to the east by Lot 21-1, as shown on Map 9 of the Property Map of the City of Biddeford.

Meaning and intending to encompass Lot 20 as shown on Map 9 of the Property Map of the City of Biddeford and being as depicted on the official zoning map of the city of Biddeford.

35-FT - PARCEL SEVEN

A certain lot or parcel of land, situated on the northerly side of Hills Beach Road but not adjacent thereto, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point on the centerline of the right-of-way of said Hills Beach Road approximately 1277 feet more or less easterly of the intersection of the right-of-way centerlines of Old Pool Road and Hills Beach Road;

THENCE: northwesterly along a line perpendicular to the centerline of Hills Beach Road, a distance of 120 feet more or less to the TRUE point of BEGINNING of the herein described parcel;

THENCE: northwesterly along said perpendicular line, distance of 155 feet more or less to a point on the City of Biddeford Shoreland Protection (SP) Zone boundary, which is defined as a distance of 250 feet from the normal high-water line of the Saco River;

THENCE: continuing easterly along the SP boundary 415 feet more or less to a point,

THENCE: southerly along a line perpendicular to the centerline of Hills Beach Road a distance 206 feet more or less to a point located 100 feet from the northerly right-of-way line of said Hills Beach Road;

THENCE: westerly along a line located 100 feet northerly of and parallel to the northerly right-of-way line of said Hills Beach Road a distance of 282 feet more or less to the point of BEGINNING.

Meaning and intending to encompass a portion of Lot 4, as shown on Map 52 of the Property Map of the City of Biddeford and as being depicted on the official zoning map of the city of Biddeford.

NO BUILD - PARCEL ONE

A certain lot or parcel of land, situated on the northerly side of Hills Beach Road, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point located on the centerline of the right-of-way of Hills Beach Road, so called, 830 feet easterly of the intersection of the right-of-way centerlines of Old Pool Road and Hills Beach Road;

THENCE: in a northerly direction along a line perpendicular to the centerline of the right-of-way of said Hills Beach Road, a distance of 120 feet more or less to a point;

THENCE: easterly along a line located 100 feet northerly of and parallel to the northerly right-of-way line of said Hills Beach Road a distance of 710 feet more or less to a point, said point marking the southwesterly corner of the 35 ft zone described herein as "35 FT - Parcel No. 7";

THENCE: northerly along the northerly prolongation of the line perpendicular to the right-of-way said Hills Beach Rd, said line being the easterly sideline of the 35-ft zone described herein as "35 FT. - Parcel No. 7, a distance of 206 feet more or less to a point on the City of Biddeford Shoreland Protection (SP) Zone boundary, which is defined as a distance of 250 feet from the normal high-water line of the Saco River;

THENCE: continuing easterly along the SP Zone boundary, a distance of 200 feet more or less to a point on the westerly line of Lot 16, as shown on Map 53 of the Property Map of the City of Biddeford;

THENCE: southerly along the westerly line of said Lot 16, southerly along the westerly line of a reserved right-of-way and Lot 15, southeasterly along the northerly line of lot 11 and southerly along the westerly lines of Lots 11, 10 and 1, all as shown on said Map 53, and the southerly prolongation of said Lot 1, to the centerline of the right-of-way of said Hills Beach Road;

THENCE: westerly and southwesterly along the centerline of the right-of-way of said Hills Beach Road, a distance of 940 feet more or less to the point of BEGINNING.

Meaning and intending to encompass a portion of Lot 4, as shown on Map 52 of the Property Map of the City of Biddeford and being as depicted on the official zoning map of the city of Biddeford.

NO BUILD – PARCEL TWO

A certain lot or parcel of land, situated on the southerly side of Hills Beach Road, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

Bounded generally to north by Hills Beach Road, so called, generally to the south by Lot 2, as shown on Map 9 of the Property Map of the City of Biddeford, generally to the east by Lots 97 and 99, as shown on Map 54 of the Property Map of the City of Biddeford, and generally to the west by Old Pool Road, so called.

Meaning and intending to encompass all of Lot 1, as shown on Map 9 of the Property Map of the City of Biddeford and as being depicted on the official zoning map of the city of Biddeford.

50-FT – PARCEL ONE

A certain lot or parcel of land, situated on the northerly side of Hills Beach Road in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point on the centerline of the right-of-way of Hills Beach Road, so-called, 164 feet more or less northwesterly of the intersection of the right-of-way centerlines of Hills Beach Road and Old Pool Road;

THENCE: along a line to the northeast, a distance of 100 feet more or less to the center of the southeasterly building face of the Harold Alfond Center for Health Sciences so called, as it exists on November 20, 2001;

THENCE: northwesterly along said building face a distance of 30 feet more or less to the southwesterly building corner of said Harold Alfond Center;

THENCE: northeasterly, westerly, and northerly along the building face of said Harold Alfond Center a distance of 240 feet more or less to a point on the northeasterly building face of said Harold Alfond Center;

THENCE: northwesterly along a line abutting and parallel to the westerly face of the Jack S. Ketchum Library, so called, a distance of 540 feet more or less to its intersection with the City of Biddeford Shoreland Protection (SP) Zone boundary which is defined as a distance of 250 feet from the normal high-water line of the Saco River;

THENCE: northeasterly along said SP Zone boundary a distance of 640 feet more or less to a point;

THENCE: in a generally southeasterly direction along said SP Zone boundary, a distance of 1400 feet more or less to a point, said point marking the northwesterly corner of the 35-ft zone described as "35 FT. Parcel No. 7 herein;

THENCE: southerly along a line perpendicular to the centerline of the right-of-way of said Hills Beach Road and along the westerly line of the 35-ft zone described as "35 FT. Parcel No. 7" herein, a distance of 155 feet more or less to a point on the northerly line of the 100-foot no-build zone as described herein as "No-Build, Parcel One" and the southwesterly corner of said "35-ft – Parcel Seven" zone;

THENCE: westerly along the northerly line of the no build zone described herein as "No-Build, Parcel One" parallel to the centerline of the right-of-way of said Hills Beach Road, a distance of 410 feet more or less to a point on a line perpendicular to the centerline of the right-of-way of said Hills Beach Road, said point being the northwesterly corner of the no-build zone described herein as "No-Build Parcel One";

THENCE: southerly along said perpendicular line and the westerly line of the No-Build Parcel One zone, a distance of 120 feet more or less to the point of intersection of said perpendicular line with the centerline of the right-of-way of said Hills Beach Road;

THENCE: westerly along the centerline of Hills Beach Road a distance of 1,000 feet more or less to the point of BEGINNING

Meaning and intending to encompass a portion of Lot 4, as shown on Map 52 of the Property Map of the City of Biddeford and as being depicted on the official zoning map of the city of Biddeford.

50-FT – PARCEL TWO

A certain lot or parcel of land, situated on both sides and adjacent to Route 9 in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at the point of intersection of the right-of-way centerlines of State Route 9 and Newtown Road;

THENCE: westerly along the centerline of the right-of-way of Newtown Road, a distance of 350 feet more or less to a point, said point also being the point of beginning for the "35-FT. – Parcel Five" zone;

THENCE: southerly on a line parallel to and 350 ft. westerly of the centerline of the right-of-way of said Route 9 the westerly right-of-way line of said State Route 9, a distance of 2620 feet, more or less, across Lot 15 and Lot 14, as shown on Map 9 of the Property Map of the City of Biddeford, to a point on the northerly line of Lot 11, as shown on said Map 9;

THENCE: northeasterly along said Lot 11 and its northeasterly prolongation, a distance of 350 feet more or less to a point on the centerline of the right-of-way of said State Route 9;

THENCE: in a northeasterly direction across said State Route 9 a distance of 50 feet more or less to the westerly corner of Lot 12 and the easterly sideline of the Route 9 right-of-way, as shown on Map 9 of the Property Map of the City of Biddeford;

THENCE: northeasterly along the northerly line of Lot 12, northerly and northeasterly along the westerly line of Lot 9, and northeasterly along the northerly line of Lot 9-3, and along the northeasterly prolongation of the northerly sideline of Lot 9-3, as shown on said Map 9, a total distance of 1,635 feet, more or less, to the centerline of the right-of-way of said Old Pool Road;

THENCE: in a generally northerly direction along the centerline of the right-of-way of said Old Pool Road, a distance of 910 feet, more or less, to a point on the northeasterly prolongation of the southerly line of Lot 1, as shown on Map 52 of the Property Map of the City of Biddeford;

THENCE: southwesterly along the said northeasterly prolongation of said Lot 1, a distance of 25 feet more or less to the southeasterly corner of said Lot 1 and land now or formerly of Wermenchuk;

THENCE: southwesterly along the southerly line of said Lot 1 and land of Wermenchuk, a total distance of 720 feet more or less to the southerly most corner of said property;

THENCE: northwesterly along the westerly line of said Lot 1 and land of Wermenchuk, a distance of 125 feet more or less to the westerly most corner of said property;

THENCE: northeasterly along the northerly line of said Lot 1 and land of Wermenchuk, a distance of 193 feet more or less to a point on said northerly property line of said lot 1;

THENCE: in a northwesterly direction a distance of 584 feet more or less to a point, said point being located on the southeasterly prolongation of a line abutting and parallel to the most easterly building face of Marcil Hall, so-called, as it exists on November 20, 2001;

THENCE: along said line referenced herein above running parallel to and abutting the most easterly building face of Marcil Hall, so called, a distance of 700 feet more or less to the centerline of the right-of-way of Newtown Road Extension, so called;

THENCE: southwesterly along the centerline of the right-of-way of said Newtown Road Extension, a distance of 330 feet more or less to its intersection with the centerline of the right-of-way of State Route 9, so called;

THENCE: southeasterly along the centerline of the right-of-way of said State Route 9, a distance of 50 feet more or less to the point of BEGINNING.

Meaning and intending to encompass portions of Lots 14 and 15, and Lot 13 in its entirety, as shown on Map 9 of the Property Map of the City of Biddeford, and a portion of Lot 2, as shown on Map 52 of the Property Map of the City of Biddeford, and as being depicted on the official zoning map of the city of Biddeford.

50-FT SPECIAL

A certain lot or parcel of land, situated westerly of Route 9 but not adjacent thereto, and southerly of Newtown Road but not adjacent thereto, in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point on the centerline of the right-of-way of Newtown Road, approximately 350 feet more or less southwesterly from the intersection of the right-of-way centerlines of State Route 9 and Newtown Road, said point also being the point of beginning of the "35-FT. - Parcel Five" zone, and the westerly most corner of the "50-FT. - Parcel Two" zone;

THENCE: southerly along a line parallel to the southwesterly right-of-way for Route 9, so called, and the westerly line of the "50 FT. Parcel Two" zone, a distance of 100 feet more or less to the TRUE POINT OF BEGINNING, said point being the easterly most corner of the "35-FT - Parcel Five" zone;

THENCE: southerly parallel to the said Route 9 southwesterly right-of-way across Lots 15 and 14, as shown on Map 9 of the Property Map of the City of Biddeford, a distance of 2,520 more or less and along the southwesterly line of the "50-FT Parcel Two" zone to a point on the northerly line of said Lot 11, as shown on said Map 9, last referenced point being the southerly most corner of the "50 FT. - Parcel Two" zone;

THENCE: southwesterly along northerly line of said Lot 11, a distance of 420 feet more or less to a point at a southwesterly corner of Lot 11 and on the northerly line of Lot 10, as shown on Map 9 of the Property Map of the City of Biddeford;

THENCE: northwesterly along Lot 10 and along the westerly line of Lot 14, as shown on Map 9 of the Property Map of the City of Biddeford, a distance of 660 feet more or less to an angle point in the southerly line of land of Lot 18-1, as shown on said Map 9;

THENCE: northeasterly along the southerly line of said Lot 18-1, a distance of 245 feet more or less to the easterly most corner of said Lot 18-1, as shown on said Map 9;

THENCE: northwesterly along the easterly line of said Lot 18-1, a distance of 610 feet more or less to the northerly corner of said Lot 18-1 and the easterly most corner of Lot 18;

THENCE: northwesterly along the easterly line of Lot 18-2, a distance of 245 feet more or less to the northerly corner of Lot 18-2;

THENCE: southwesterly along the northerly line of said Lot 18-2, a distance of 706 feet more or less to a corner and angle point of said northerly property line of Lot 18-2;

THENCE: northwesterly along the easterly line of said Lot 18-2, a distance of 253 feet more or less to the northwesterly corner of Lot 18-2 and the easterly most corner of Lot 18-3;

THENCE: northeasterly along the easterly line of said Lot 18-3 to a point located on a line 100 feet distant and parallel with the southerly right-of-way of Newtown Road, so called, said point also being the southerly most corner of the "35-FT – Parcel Five" zone;

THENCE: northeasterly parallel with and 100 ft distant from the southerly right-of-way of Newtown Road, so called and along the southerly line of the "35 FT. – Parcel Five" zone boundary, a distance of 1575 feet more or less, to the point of BEGINNING.

Meaning and intending to encompass portions of Lots 14 and 15, as shown on Map 9 of the Property Map of the City of Biddeford and as being depicted on the official zoning map of the City of Biddeford.

65-FT ZONE

A certain lot or parcel of land, situated along both sides of Hills Beach Road and adjacent thereto, in the City of Biddeford, County of York, State of Maine, and being more specifically Bounded and described as follows:

BEGINNING at a point on the centerline of the right-of-way of Hills Beach Road so-called, said point being located 164 feet more or less northwesterly of the intersection of the right-of-way centerlines of Hills Beach Road and Old Pool Road, so-called, said point of beginning also being the point of beginning of the "50 FT – Parcel One" zone boundary;

THENCE: along a line to the northeast, a distance of 100 feet more or less and along the westerly boundary of the "50 FT – Parcel One" zone, to the center of the southeasterly building face of the Harold Alfond Center for Health Sciences, so called, as it exists on November 20, 2001;

THENCE: northwesterly along said building face a distance of 30 feet more or less and along the westerly boundary of the "50 FT – Parcel One" zone to the southwesterly building corner of said Harold Alfond Center for Health Sciences;

THENCE: northeasterly, westerly, and northerly along the building faces of said Harold Alfond Center and along the westerly boundary of the "50 FT – Parcel One" zone a distance of 240 feet more or less to a point on the northwesterly building face of said Alfond Center;

THENCE: northwesterly along a line abutting and parallel to the westerly face of the Jack S. Ketchum Library, so called, a distance of 540 feet more or less and along the westerly boundary of the "50 FT – Parcel One" zone to its intersection with the City of Biddeford Shoreland Protection (SP) Zone boundary, which is defined as a distance of 250 feet from the normal high-water line of the Saco River;

THENCE: westerly along said SP Zone boundary, a distance of 230 feet more or less to its intersection with a line perpendicular to the centerline of the right-of-way of said Hills Beach Road, and the southeasterly corner of the "35 FT. – Parcel Three" zone;

THENCE: westerly along the said perpendicular line and along the southerly line of the "35- FT. – Parcel Three" zone boundary, a distance of 160 feet more or less to its intersection with the centerline of the right-of-way of said Hills Beach Road, said point of intersection of perpendicular line to Hills Beach Road being the southerly most corner of "35 FT – Parcel Three" zone,

THENCE: southeasterly along the centerline of the right-of-way of said Hills Beach Road and along the "35 FT Parcel Two" zone boundary, a distance of 50 feet more or less to the intersection of the right-of-way centerlines of said Hills Beach Road and Newtown Road Extension, so-called;

THENCE: westerly along the centerline of the right-of-way of Newtown Road Extension and along the southerly boundary of the "35 FT Parcel Two" zone boundary, a distance of 265 feet more or less to the point of intersection with the northerly prolongation of a line abutting and parallel with the most easterly building face of Marcil Hall, so called, as it exists on November 20, 2001;

THENCE: southeasterly along the northerly prolongation of said line parallel to and abutting the easterly building face of said Marcil Hall, and continuing along said parallel line and along the easterly boundary of the 50-FT Parcel Two zone boundary a distance of 700 feet more or less to a point and an angle point in said "50 FT – Parcel Two" easterly zone boundary;

THENCE: southeasterly along the westerly line of the "50 FT. – Parcel Two" zone boundary a distance of 584 feet more or less to a point on the northerly line of Lot 1, as shown on Map 52 of the Property Map of the City of Biddeford, and property now or formerly of Wermenchuk, said last mentioned point being located 193 feet from the most westerly corner of said Lot 1 and land of Wermenchuk;

THENCE: northeasterly along said northerly line of Lot 1 and land of Wermenchuk, and its northeasterly prolongation, a distance of 480 feet more or less to the centerline of the right-of-way of said Hills Beach Road;

THENCE: in a generally northwesterly direction along the centerline of the right-of-way of said Hills Beach Road, a distance of 164 feet more or less to the point of BEGINNING.

Meaning and intending to encompass all of Lot 3, and portions of Lots 2 and 4, as shown on Map 52 of the Property Map of the City of Biddeford and as being depicted on the official zoning map of the city of Biddeford.

IZ Shoreland Zone

A certain lot or parcel of land, situated on the northerly side of Hills Beach Road but not adjacent thereto, and adjacent to the Saco River in the City of Biddeford, County of York, State of Maine, and being more specifically bounded and described as follows:

BEGINNING at a point where the easterly prolongation of the northwesterly line of Lot 16, as shown on Map 53 of the Property Map of the City of Biddeford, intersects the normal high-water line of the Saco River;

THENCE: following the normal high-water line of the Saco River in a generally northerly direction a distance of 3,490 feet more or less to a point where the normal high-water line intersects the southerly line of Lot 9, as shown on Map 51 of the Property Map of the City of Biddeford;

THENCE: southwesterly along the southerly line of said Lot 9, a distance of 371 feet more or less to the City of Biddeford Shoreland Protection (SP) Zone boundary, which is defined as a distance of 250 feet from the normal high-water line of the Saco River and along the easterly boundary of the "35 FT – Parcel Three zone;

THENCE: southerly, easterly, and southeasterly along said Shoreland Protection Zone boundary line and the easterly boundaries of the "35 FT – Parcel Three", the "65 FT", the "50 FT – Parcel One", the "35 FT – Parcel 7, and the "No-Build – Parcel One" zones, respectively, a distance of 3,788 feet more or less to the intersection with the northwesterly line of Lot 16 as shown on said Map 53;

THENCE: northeasterly along the northwesterly line of Lot 16 a distance of 250 feet, more or less, to the point of BEGINNING.

Meaning and intending to encompass portions of Lots 10, 11, 12 and 13, as shown on Map 51 of the Property Map of the City of Biddeford, and a portion of Lot 4, as shown on Map 52 of the Property Map of the City of Biddeford and as being depicted on the official zoning map of the city of Biddeford.