



TOWN OF FREEPORT, MAINE

Planning Department

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TO: FREEPORT PROJECT REVIEW BOARD
FROM: CAROLINE PELLETIER, INTERIM TOWN PLANNER
RE: STAFF REPORT
DATE: WEDNESDAY, JULY 17, 2019

Landmark Freeport LLC – Design Review Certificate	
Property Location:	Tax Assessor Map 11, Lot 83
Zoning Information:	Design Review District I – Class A, Village Commercial I (VC-I).
Review Type(s):	Design Review Certificate
Waivers Requested:	None

Background: This parcel is in Design Review District I and per Section V.A.5 of the Freeport Design Review Ordinance, a Design Review Certificate is required for “Any material change in existing walks, walls, fences, signs, driveways and parking areas or construction of new walls, fences, driveways, and parking areas if subject to view from a public street or public right of way within the Districts...”

The applicant is seeking approval of a Design Review Certificate to replace existing stairs, a walkway and a railing system on the front of the property at 115 Main Street. The location of these items will remain unchanged. The new handrail (1.25 inch, graspable, stainless) will be located on both sides of the stairs. The existing stairs (from Main Street) are currently eight feet in width at the bottom and narrow to six feet in width at the top step; the replacement steps will all be 8 feet in width. The stairs will be supported by concrete sonotubes which will not be visible. The replacement stairs and walkway will be “Woodbury” granite. No other changes are proposed.

The Superintendent of Freeport Public Works has reviewed the proposal and the existing and replacement stairs and walkway will be located partially within the public right of way. His comments are included in a memo dated 07/09/19 (attached). A condition of approval will be that the applicant comply with these conditions one which includes agreeing to sign an encroachment certificate to permit the improvements which are partially within the public right-of-way.

Design Review Ordinance: Chapter 22 Section VII.C.

1. Scale of the Building. The scale of a building depends on its overall size, the mass of it in relationship to the open space around it, and the sizes of its doors, windows, porches and balconies. The scale gives a building "presence"; that is, it makes it seem big or small, awkward or graceful, overpowering or unimportant. The scale of a building should be visually compatible with its site and with its neighborhood.

No changes to the scale of the building are proposed. Based upon this information, the Board finds that this standard has been met.

- 2. Height.** A sudden dramatic change in building height can have a jarring effect on the streetscape, i.e., the way the whole street looks. A tall building can shade its neighbors and/or the street. The height or buildings should be visually compatible with the heights of the buildings in the neighborhood.

The height of the overall structure will not be altered. Based upon this information, the Board finds that this standard has been met.

- 3. Proportion of Building's Front Facade.** The "first impression" a building gives is that of its front facade, the side of the building, which faces the most frequently used public way. The relationship of the width to the height of the front facade should be visually compatible with that of its neighbors.

No changes to the proportion of the building's front façade are proposed. Based upon this information, the Board finds that this standard has been met.

- 4. Rhythm of Solids to Voids in Front Facades.** When you look at any facade of a building, you see openings such as doors or windows (voids) in the wall surface (solid). Usually the voids appear as dark areas, almost holes, in the solid and they are quite noticeable, setting up a pattern or rhythm. The pattern of solids and voids in the front facade of a new or altered building should be visually compatible with that of its neighbors.

The rhythm of solids to voids in the front façade will not be altered. Based upon this information, the Board finds that this standard has been met.

- 5. Proportions of Opening within the Facility.** Windows and doors come in a variety of shapes and sizes; even rectangular window and door openings can appear quite different depending on their dimensions. The relationship of the height of windows and doors to their width should be visually compatible with the architectural style of the building and with that of its neighbors.

The proportions of openings within the facility will not be altered. Based upon this information, the Board finds that this standard has been met.

- 6. Roof Shapes.** A roof can have a dramatic impact on the appearance of a building. The shape and proportion of the roof should be visually compatible with the architectural style of the building and with those of neighboring buildings.

No changes to the roof shape are proposed. Based upon this information, the Board finds that this standard has been met.

- 7. Relationship of Facade Materials.** The facades of a building are what give it character, and the character varies depending on the materials of which the facades are made and their texture. In Freeport, many different materials are used on facades - clapboards, shingles, patterned shingles, brick - depending on the architectural style of the building. The facades of a building, particularly the front facade, should be visually compatible with those of other buildings around it.

No changes to the building façade are proposed. Based upon this information, the Board finds that this standard has been met.

- 8. Rhythm of Spaces to Building on Streets.** The building itself is not the only thing you see when you look at it; you are also aware of the space where the building is not, i.e., the open space which is around the building. Looking along a street, the buildings and open spaces set up a rhythm. The rhythm of spaces to buildings should be considered when determining visual compatibility, whether it is between buildings or between buildings and the street (setback).

The rhythm of spaces to building on the streets will not be altered. Based upon this information, the Board finds that this standard has been met.

- 9. Site Features.** The size, placement and materials of walks, walls, fences, signs, driveways and parking areas may have a visual impact on a building. These features should be visually compatible with the building and neighboring buildings.

The applicant is seeking approval to replace existing stairs, a walkway and a railing system on the front of the property at 115 Main Street. The location of these items will remain unchanged. The new handrail (1.25 inch, graspable, stainless) will be located on both sides of the stairs. The existing stairs (from Main Street) are currently eight feet in width at the bottom and narrow to six feet in width at the top step; the replacement steps will all be 8 feet in width. The stairs will be supported by concrete sonotubes which will not be visible. The replacement stairs and walkway will be "Woodbury" granite. Based upon this information, the Board finds that this standard has been met.

- 10. In addition to the requirements of the Freeport Sign Ordinance, signs in the Freeport Design Review District shall be reviewed for the following: materials, illumination, colors, lettering style, location on site or building, size and scale. Minor changes that do not alter the dimensions or lettering style of an existing sign need not be reviewed, i.e. personal name changes for professional offices, or changes in hours of operation. See Special Publication: "Sign Application Requirements".**

No new signs are proposed. Based upon this information, the Board finds that this standard has been met.

Conclusion: Based on these facts the Board finds that this project meets the criteria and standards of the Design Review Ordinance.

Proposed Motion: Be it ordered that the Freeport Project Review Board approve the printed Findings of Fact and Design Review Certificate for Landmark Freeport LLC (Tax Assessor Map 11, Lot 83), for replacement stairs, railing and walkway in front of the existing structure, to be substantially as proposed, application dated 06/26/19, finding that it meets the standards of the Freeport Design Review Ordinance, with the following Conditions of Approval:

- 1) This approval incorporates by reference all supporting plans that amend the previously approved plans submitted by the applicant and his/her representatives at Project Review Board meetings and hearings on the subject application to the extent that they are not in conflict with other stated conditions.

- 2) Prior to any work on the building, the applicant obtain any applicable permits from the Freeport Codes Enforcement Officer.
- 3) The applicant comply with the conditions outlined in a memo dated 07/09/19 from Earl Gibson, Superintendent of Public Works, with proposed conditions for the project since a portion of the proposed improvements are within the public right of way.

LL Bean – Corporate Campus Renovations	
Property Location:	Tax Assessor Map 20, Lots 98-ETC & 101
Zoning Information:	Design Review District I – Class C, Commercial III (C-III) & Industrial I (I-I)
Review Type(s):	Design Review Certificate and Site Plan Amendment
Waivers Requested:	None

Background: The applicant is seeking approval for a for site alterations and exterior building alterations at their property on Casco Street. The building is currently used for office and storage and the proposal would convert some of the exiting storage space into additional office space (with other employee amenities), all within the existing building footprint. This change will increase capacity of 300 employees working at the site. The existing loading dock areas will be converted into an outdoor terrace and a new main entrance.

Access: No changes to the existing site entrances from Route One are proposed. A traffic study was included with the original submission, with traffic counts conducted in October 2018. The traffic study notes that although there is a proposed increase to the number of employees on the site, the overall number will still be lower than what the site and original permitting were designed for as the employee capacity was actually higher in the past. In the submission, the applicant clarifies the past permitting for the project, and noted that at the time of original development, traffic was reviewed as part of the DEP Site Location Process and not separately by the Maine Department of Transportation (MDOT) under a traffic movement permit as it would be today. The applicant did contact MDOT regarding permitting; a response from MDOT has not been submitted. The applicant does not feel that the proposal before the Board would trigger the need for a Traffic Movement Permit due to the amount increase in trip generation.

In an email dated 07/09/2019, Police Chief Susan Nourse noted concerns for potential traffic and circulation congestion issues from the project. Her email noted the importance of the Board considering traffic and circulation issues as there have been many changes in traffic patterns, striping of roads, signage, and usage since the original permitting. The applicant notes that the most recent road striping in the area was completed in 2018 as a result of a project between the Town of Freeport and the MDOT.

The Town Engineer did raise some questions/concerns prior to the last meeting (see email to Caroline Pelletier, dated 06/19/19 from Adam Bliss). His concerns were about the peak hour trips (he recommended that Maine DOT review the application), the timing of the applicant’s traffic study, and, the issue of intersection improvements/signals. These comments were addressed at the last meeting and further in the current submission. One of his concerns was for traffic and requiring a peer review of the traffic study, however at the last meeting, the Board decided that was not necessary.

The email also referenced a previous request by LL Bean for a crosswalk across Main Street at the Double L Street Intersection. This is something that came up on the Project Review Board’s sitewalk, however Chief Nourse suggests if this is something that the applicant still wants to consider, the request should be

brought back to the Traffic and Parking Committee to see if it is still appropriate. This is something the applicant is in agreement with.

Her email also notes some turning concerns for traffic to and from Double L Street and for pedestrian traffic on both sides of Main Street (noting there is only a sidewalk on one side). In response, the applicant agrees to replace the “No left Turn” sign at the Double L Street and Main Street Intersection.

Parking: This change will increase capacity of 300 employees working at the site, for a total of 1,200. The proposed site changes include adding an additional 41 parking spaces. A revised plan sheet has been submitted to show that the spaces will comply with the dimensional parking stall requirements of Section 514 of the Freeport Zoning Ordinance. In total on the Casco Street Campus, there will be 1,194 spaces; 1,107 are required. This is shown on the proposed parking summary included in the submission.

One important thing to note is that this does not include the square footage of the Taylor Building as the intent is that all of the employees from the Taylor Building will be moved into the renovated building once this project is complete (the Taylor Building may be removed but that is not part of this application). A proposed condition of approval has been added that prior to the scheduling of a Certificate of Occupancy for the final phase of building renovations associated with this project, the applicant either apply to the Town for any required permits for the removal of the Taylor Building, or make application to return to the Board to address the parking requirements due to the building remaining.

Stormwater: The site is within the watershed of Concord Gully, which is an Urban Impaired Stream. The site is subject to an existing Site Location of Development Permit from the Maine Department of Environmental Protection (DEP) and the applicant is seeking an amendment to this permit; this has been added as a proposed condition of approval. Furthermore, the applicant is requesting that they be permitted to move forward with the building improvements while they are awaiting the amended permit from the DEP; this has also been added as a proposed condition of approval and would not include any of the sitework starting.

The Town Engineer did review the project in regards to the Section 529. Stormwater Management (Freeport Zoning Ordinance) and the Town of Freeport – Chapter 53 Post-Construction Stormwater Management Ordinance based upon the stormwater management plan submitted (dated June 26, 2019) and the assumption that the DEP grants approval for the Site Location of Development Permit Amendment. His comments are included in a memo dated 07/10/19. His conclusion is that the proposal meets the standards of municipal ordinances however he does note some future considerations for the applicant due to the property location within the watershed of an urban impaired stream. He also suggests that a proposed condition of approval should be that the applicant enters into a Maintenance Agreement for a Stormwater Management System with the Town of Freeport and to be recorded in the Cumberland County Registry of Deeds. Annual reporting to the Town of Freeport will be required as part of this agreement.

Utilities: The building will remain connected to public utilities. The submission did include a capacity letter from the Freeport Sewer District (dated May 7, 2019) and a letter from MaineWater (dated April 15, 2019).

Signs: No new signs are proposed.

Lighting: The location of lighting fixtures are shown on the plan and a photometrics plan has been submitted. All fixtures will be LED and full cut-off.

Special Standards: Section 409.D.2 of the Freeport Zoning Ordinance has standards for buffering in the front and side setbacks. Much of the existing landscaping in the front setback from Lower Main Street will be retained and additional plantings for the site are proposed.

Design Review – The building is partially within Freeport Design Review District I (the district boundary extends 600 feet from the centerline of Lower Main Street). The project includes removing and replacing the existing facade and installing a “treehouse” on the Route One façade. A portion of the building is within the Color Overlay District, however the visible façade facing Main Street will not actually be painted, as the materials of the façade will consist of a glass curtain wall accented with a wood-look vertical metal slat system and a stacked bluestone base. The wood look aluminum slats, will overlay the glass curtain wall and will add visual interest to the façade and almost create a sense of rolling hills. The combination of the materials and the 100’ long tree house (which will project out 12 feet and be used for meeting space and an outdoor balcony) will help minimize the expanse of the building façade. The tree house will be supported by angled wood columns.

Design Review Ordinance: Chapter 22 Section VII.C.

- 1. Scale of the Building.** The scale of a building depends on its overall size, the mass of it in relationship to the open space around it, and the sizes of its doors, windows, porches and balconies. The scale gives a building "presence"; that is, it makes it seem big or small, awkward or graceful, overpowering or unimportant. The scale of a building should be visually compatible with its site and with its neighborhood.

The building is existing and the overall dimensions will not be altered. The façade facing Main Street consists of mostly brick and metal with some windows and an open area outdoor on the second level. The existing façade will be removed and the materials of the new façade will consist of a glass curtain wall accented with a wood-look vertical metal slat system and a stacked bluestone base. The combination of the materials and the 100’ long tree house (which will project out 12 feet) will help minimize the expanse of the building façade. The tree house will be supported by angled wood columns. The wood look aluminum slats, will add visual interest to the façade and almost create a sense of rolling hills. Based upon this information, the Board finds that this standard has been met.

- 2. Height.** A sudden dramatic change in building height can have a jarring effect on the streetscape, i.e., the way the whole street looks. A tall building can shade its neighbors and/or the street. The height or buildings should be visually compatible with the heights of the buildings in the neighborhood.

The overall height of the building will not be altered. Based upon this information, the Board finds that this standard has been met.

- 3. Proportion of Building's Front Facade.** The "first impression" a building gives is that of its front facade, the side of the building, which faces the most frequently used public way. The relationship of the width to the height of the front facade should be visually compatible with that of its neighbors.

The façade facing Main Street consists of mostly brick and metal with some windows and an open area outdoor on the second level. The existing façade will be removed and the materials of the new façade will consist of a glass curtain wall accented with a wood-look vertical metal slat system and a stacked bluestone base. The overall relationship of the width to the height of the façade will not be altered. Based upon this information, the Board finds that this standard has been met.

- 4. Rhythm of Solids to Voids in Front Facades.** When you look at any facade of a building, you see openings such as doors or windows (voids) in the wall surface (solid). Usually the voids appear as dark areas, almost holes, in the solid and they are quite noticeable, setting up a pattern or rhythm. The pattern of solids and voids in the front facade of a new or altered building should be visually compatible with that of its neighbors.

The existing façade will be removed and the materials of the new façade will consist of a glass curtain wall accented with a wood-look vertical metal slat system and a stacked bluestone base. The wood look aluminum slats, will overlay the glass curtain wall and will add visual interest to the façade and almost create a sense of rolling hills. There will be an 100' long tree house (which will project out 12 feet) on the Main Street façade. The tree house will be supported by angled wood columns. Based upon this information, the Board finds that this standard has been met.

- 5. Proportions of Opening within the Facility.** Windows and doors come in a variety of shapes and sizes; even rectangular window and door openings can appear quite different depending on their dimensions. The relationship of the height of windows and doors to their width should be visually compatible with the architectural style of the building and with that of its neighbors.

The existing façade will be removed and the materials of the new façade will consist of a glass curtain wall accented with a wood-look vertical metal slat system and a stacked bluestone base. The wood look aluminum slats, will overlay the glass curtain wall and help minimize the appearance of a mostly glass building. The proportions of openings are sized in relation to the large size of both the overall building and the long façade. Based upon this information, the Board finds that this standard has been met.

- 6. Roof Shapes.** A roof can have a dramatic impact on the appearance of a building. The shape and proportion of the roof should be visually compatible with the architectural style of the building and with those of neighboring buildings.

The roof is currently flat and will remain unchanged. Based upon this information, the Board finds that this standard has been met.

- 7. Relationship of Facade Materials.** The facades of a building are what give it character, and the character varies depending on the materials of which the facades are made and their texture. In Freeport, many different materials are used on facades - clapboards, shingles, patterned shingles, brick - depending on the architectural style of the building. The facades of a building, particularly the front facade, should be visually compatible with those of other buildings around it.

The façade facing Main Street consists of mostly brick and metal with some windows and an open area outdoor on the second level. The existing façade will be removed and the materials of the new façade will consist of a glass curtain wall accented with a wood-look vertical metal slat system and a stacked bluestone base. The wood look aluminum slats, will overlay the glass curtain wall. The combination of the materials and the 100' long tree house (which will project out 12 feet) will help minimize the expanse of the building façade. The tree house will be supported by angled wood columns. A portion of the building is within the Color Overlay District, however the visible façade facing Main Street will not actually be painted. Based upon this information, the Board finds that this standard has been met.

- 8. Rhythm of Spaces to Building on Streets.** The building itself is not the only thing you see when you look at it; you are also aware of the space where the building is not, i.e., the open space which is around the building. Looking along a street, the buildings and open spaces set up a rhythm. The rhythm of spaces to buildings should be considered when determining visual compatibility, whether it is between buildings or between buildings and the street (setback).

The location of the building is existing. The footprint of the façade along Main Street will remain relatively unchanged, with the exception of the 100 foot long tree house which will project 12 feet off of the building. Based upon this information, the Board finds that this standard has been met.

- 9. Site Features.** The size, placement and materials of walks, walls, fences, signs, driveways and parking areas may have a visual impact on a building. These features should be visually compatible with the building and neighboring buildings.

The project involves significant site work throughout the campus. Existing vegetation will be retained where possible. The existing ball field on the Main Street side of the building will be removed. The area in front of the building will have a berm, and a new walkway and landscaping is proposed. The project complies with buffering requirements of the Freeport Zoning Ordinance. Based upon this information, the Board finds that this standard has been met.

- 10. In addition to the requirements of the Freeport Sign Ordinance, signs in the Freeport Design Review District shall be reviewed for the following: materials, illumination, colors, lettering style, location on site or building, size and scale. Minor changes that do not alter the dimensions or lettering style of an existing sign need not be reviewed, i.e. personal name changes for professional offices, or changes in hours of operation. See Special Publication: "Sign Application Requirements".**

No new signs are proposed at this time. Based upon this information, the Board finds that this standard has been met.

Conclusion: Based on these facts the Board finds that this project meets the criteria and standards of the Design Review Ordinance.

Proposed Findings of Fact: (Section 602.F. of the Freeport Zoning Ordinance)

- a. Preservation of Landscape:** The landscape shall be developed in such a manner as to be in keeping with the character of the surrounding neighborhoods and in accordance with good development

practice by minimizing tree and soil removal, retaining existing vegetation where desirable, and keeping any grade changes in character with the general appearance of neighboring areas. If a site includes a ridge or ridges above the surrounding areas and provides scenic vistas for surrounding areas, special attempts shall be made to preserve the natural environment of the skyline of the ridge. Existing vegetation and buffering landscaping are potential methods of preserving the scenic vista.

The site is already developed with buildings and site features used as the corporate headquarters for LL Bean. The project involves significant site work throughout the campus. Existing vegetation will be retained where possible. The existing ball field on the Main Street side of the building will be removed. The area in front of the building will have a berm, and a new walkway and landscaping is proposed. The project complies with buffering requirements of the Freeport Zoning Ordinance. The project is in the Industrial I and Commercial III Zoning Districts and complies with the space and bulk standards of Sections 411 & 421 of the Freeport Zoning Ordinance. Most of the site alterations are within the Industrial I District portion of the property and therefore the Performance Standards for Commercial District (Section 527 of the Freeport Zoning Ordinance) are not applicable. Based upon this information, the Board finds that this standard has been met.

- b. Relation of Proposed Buildings to the Environment:** The design and layout of the buildings and/or other development areas shall encourage safety, including fire protection. Proposed structures shall be related harmoniously to the terrain and to existing buildings and land uses in the vicinity which have a visual relationship to the proposed buildings. Visual compatibility, not uniformity with the surrounding area, shall be emphasized. Special attention shall be paid to the scale (mass), height and bulk, proportions of the proposed buildings, the nature of the open spaces (setbacks, landscaping) around the buildings, the design of the buildings (including roof style, facade openings, architectural style and details), building materials and signs.

If the structure is in the Design Review District, the Project Review Board shall incorporate the findings of the standards or the Design Review Ordinance in its Site Plan Review findings.

The building is partially within Freeport Design Review District I (the district boundary extends 600 feet from the centerline of Lower Main Street) and partially within the Color Overlay District. The building is Class C. Review and approval of a Design Review Certificate is required and the Board has determined that the standards of the Freeport Design Review Ordinance have been met.

The project includes removing and replacing the existing facade and installing a “treehouse” on the Route One facade. The materials of the new facade will consist of a glass curtain wall accented with a wood-look vertical metal slat system and a stacked bluestone base. The wood look aluminum slats, will overlay the glass curtain wall and will add visual interest to the facade and almost create a sense of rolling hills. The combination of the materials and the 100’ long tree house will help minimize the expanse of the building facade. The tree house will be supported by angled wood columns. The applicant did have a pre-application meeting with Town staff, including the Fire Chief and the Codes Enforcement Officer to ensure that the layout of the site will provide for public safety and address any applicable building and fire codes related to the new use of the building. Based upon this information, the Board finds that this standard has been met.

- c. **Vehicular Access:** The proposed layout of access points shall be designed so as to avoid unnecessary adverse impacts on existing vehicular and pedestrian traffic patterns. Special consideration shall be given to the location, number, and control of access points, adequacy of adjacent streets, traffic flow, sight distances, turning lanes, and existing or proposed traffic signalization and pedestrian-vehicular contacts. The entrance to the site shall meet the minimum sight distance according to MDOT standards to the greatest extent possible

There are currently two vehicular accesses to the site: Casco Street, which is a signaled intersection, and Double L Street. No changes to the existing site entrances from Route One are proposed. No changes to existing road striping is proposed as the most recent road striping in the area was completed in 2018 as a result of a project between the Town of Freeport and the MDOT.

A traffic study was included with the original submission, with traffic counts conducted in October 2018. The traffic study notes that the overall number of employees will be lower than what the site and original permitting were designed. At the time of the original development, traffic was reviewed as part of the DEP Site Location Process and not separately by the Maine Department of Transportation (MDOT). The applicant has stated that the proposal before the Board would not trigger the need for a Traffic Movement Permit.

The Town Engineer did raise some questions/concerns prior to the last meeting (see email to Caroline Pelletier, dated 06/19/19 from Adam Bliss). These comments were addressed at the last meeting and further in the current submission. One of his concerns was for traffic and requiring a peer review of the traffic study, however at the last meeting, the Board decided at the June meeting that this is something that they would not require.

In an email dated 07/09/2019, Police Chief Susan Nourse noted concerns for potential traffic and circulation congestion issues from the project. She suggests if the applicant still wants to consider a crosswalk across Main Street (at Double L Street) the request should be brought back to the Traffic and Parking Committee to see if it is still appropriate. In response to concerns about traffic at Double L Street, the applicant noted agrees to replace the "No left Turn" sign at the Double L Street and Main Street Intersection.

Based upon this information, the Board finds that this standard has been met.

- d. **Parking and Circulation:** The layout and design of all means of vehicular and pedestrian circulation, including walkways, interior drives, and parking areas shall be safe and convenient and, insofar as practical, shall not detract from the proposed buildings and neighboring properties. General interior circulation, separation of pedestrian and vehicular traffic, service traffic, drive-up facilities, loading areas, and the arrangement and use of parking areas shall be considered.

This proposal will increase capacity of 300 employees working at the site, for a total of 1,200. The proposed site changes include adding an additional 41 parking spaces. The new parking spaces will comply with the dimensional parking stall requirements of Section 514 of the Freeport Zoning Ordinance. In total on the Casco Street Campus, there will be 1,194 spaces; 1,107 are required. The parking calculation submitted by the applicant does not include the square footage of the Taylor Building as the intent is that all of the employees from the Taylor Building will be moved into the renovated building once this project is complete (the Taylor Building may be removed but that is not

part of this application). A proposed condition of approval has been added that prior to the scheduling of a Certificate of Occupancy for the final phase of building renovations associated with this project, the applicant either apply to the Town for any required permits for the removal of the Taylor Building, or make application to return to the Board to address the parking requirements due to the building no longer being removed. Based upon this information, the Board finds that this standard has been met.

- e. **Surface Water Drainage:** Adequate provisions shall be made for surface drainage so that removal of surface waters will not adversely affect neighboring properties, down-stream conditions, or the public storm drainage system. The increase in rate of runoff in the post development condition shall be held to a zero or less percent of the predevelopment condition unless an engineering study has been performed as described in Section 529.2 above. On-site absorption shall be utilized to minimize discharges whenever possible. All drainage calculations shall be based on a two year, ten year and twenty-five year storm frequency. Emphasis shall be placed on the protection of floodplains; reservation of stream corridors; establishment of drainage rights-of-way and the adequacy of the existing system; and the need for improvements, both on-site and off-site, to adequately control the rate, volume and velocity of storm drainage and the quality of the stormwater leaving the site. Maintenance responsibilities shall be reviewed to determine their adequacy.

The property is within a watershed of an Urban Impaired Stream and an amendment to the existing Site Location of Development Permit from the Maine Department of Environmental Protection will be required. The submission was reviewed by the Town Engineer for its compliance with Section 529 Stormwater Management (of the Freeport Zoning Ordinance). His review comments are included in a memo dated 07/10/19. His conclusion is that the proposal meets the standards of municipal ordinances however he does note some future considerations for the applicant due to the property location within the watershed of an urban impaired stream. It is recommended that the applicant enters into a Maintenance Agreement for a Stormwater Management System with the Town of Freeport and to be recorded in the Cumberland County Registry of Deeds. This has been added as conditions of approval. Based upon this information, the Board finds that this standard has been met.

- f. **Utilities:** All utilities included in the site plan shall be reviewed as to their adequacy, safety, and impact on the property under review and surrounding properties. The site plan shall show what provisions are being proposed for water supply, wastewater, solid waste disposal and storm drainage. Whenever feasible, as determined by the Project Review Board, all electric, telephone and other utility lines shall be installed underground. Any utility installations above ground shall be located so as to have a harmonious relationship with neighboring properties and the site.

The building will remain connected to public utilities. The submission did include a capacity letter from the Freeport Sewer District (dated May 7, 2019) and a letter from MaineWater (dated April 15, 2019). Based upon this information, the Board finds that this standard has been met.

- g. **Advertising Features:** The size, location, texture and lighting of all exterior signs and outdoor advertising structures or features shall not detract from the layout of the property and the design of proposed buildings and structures and the surrounding properties, and shall not constitute hazards to vehicles and pedestrians.

No new signage is proposed. Based upon this information, the Board finds that this standard has been met.

- h. **Special Features:** Exposed storage areas, exposed machinery installations, service areas, truck loading areas, utility buildings and structures, similar accessory areas and structures, shall be subject to such setbacks, screen plantings or other screening methods as shall reasonably be required to prevent their being incongruous with the existing or contemplated environment and the surrounding properties.

Due to the layout of the site, the grade changes in relation to the overall campus and in relation to Main Street and the amount of screening (existing and proposed), service and truck areas will not be that visible from the right-of-way. Based upon this information, the Board finds that this standard has been met.

- i. **Exterior Lighting:** All exterior lighting shall be designed to encourage energy efficiency, to ensure safe movement of people and vehicles, and to minimize adverse impact on neighboring properties and public ways. Adverse impact is to be judged in terms of hazards to people and vehicular traffic and potential damage to the value of adjacent properties. Lighting shall be arranged to minimize glare and reflection on adjacent properties and the traveling public. For all proposed lighting, the source of the light shall be shielded and the light should be directed to the ground, except in the case of ground sign lighting. In the Village Commercial 1 and 2 Districts, lighting for pedestrian walkways and adjacent public sidewalks shall also be provided.

The location of lighting fixtures are shown on the plan and a photometrics plan has been submitted. All fixtures will be LED and full cut-off. Based upon this information, the Board finds that this standard has been met.

- j. **Emergency Vehicle Access:** Provisions shall be made for providing and maintaining convenient and safe emergency vehicle access to all buildings and structures at all times.

All public safety department heads have reviewed the plans. Based upon this information, the Board finds that this standard has been met.

- k. **Landscaping:** Landscaping shall be designed and installed to define, soften, or screen the appearance of off-street parking areas from the public right(s)-of-way and abutting properties, to enhance the physical design of the building(s) and site, and to minimize the encroachment of the proposed use on neighboring land uses. Particular attention should be paid to the use of planting to break up parking areas. The landscape shall be preserved in its natural state, insofar as practical, by minimizing tree and soil removal, retaining existing vegetation where desirable, and keeping any grade changes in character with the general appearance of neighboring areas. Landscaping shall be provided as part of the overall site plan design and integrated into building arrangements, topography, parking and buffering requirements. Landscaping may include trees, bushes, shrubs, ground cover, perennials, annuals, plants, grading and the use of building and paving materials in an imaginative manner.

Existing vegetation will be retained where possible and many of the large trees between the front building façade and road will remain. The existing ball field on the Main Street side of the building will be removed. The area in front of the building will have a berm, and a new walkway and landscaping is proposed. The project complies with buffering requirements of the applicable Sections of the Freeport Zoning Ordinance. Based upon this information, the Board finds that this standard has been met.

I. Environmental Considerations: A site plan shall not be approved unless it meets the following criteria:

- (1) The project will not result in water pollution, erosion or sedimentation to surface waters;**
- (2) The project will not result in damage to spawning grounds, fish, aquatic life, bird and other wildlife habitat;**
- (3) The project will conserve shoreland vegetation;**
- (4) The project will conserve points of public access to waters;**
- (5) The project will adequately provide for the disposal of all wastewater;**
- (6) The project will protect archaeological and historic resources;**
- (7) The project will not adversely affect existing commercial fishing or maritime activities in the Marine Waterfront District.**

This parcel is not within the Marine Waterfront District or the Shoreland Zone. The building will remain connected to the public water and sewer systems and capacity letters from both Districts have been included in the submission. The property is within a watershed of an Urban Impaired Stream and an amendment to the existing Site Location of Development Permit from the Maine Department of Environmental Protection will be required. In a letter dated April 5, 2019, Kirk Mohney from the Maine Historic Preservation Commission states that there will be no historic properties affected by the project. Based upon this information, the Board finds that this standard has been met.

Conclusion: Based on these facts the Board finds that this project meets the criteria and standards of the Freeport Zoning Ordinance.

Proposed Motion: Be it ordered that the Freeport Project Review Board approve the printed Findings of Fact, Design Review Certificate, and Site Plan Amendment for the LL Bean Corporate Headquarter Renovations on Casco Street (Tax Assessor Map 20, Lots 98-ETC & 101), for a building and site alterations, to be substantially as proposed, plan set dated 06-26-19, finding that it meets the standards of the Freeport Design Review Ordinance and the Freeport Zoning Ordinance, with the following Conditions of Approval:

- 1) This approval incorporates by reference all supporting plans that amend the previously approved plans submitted by the applicant and his/her representatives at Project Review Board meetings and hearings on the subject application to the extent that they are not in conflict with other stated conditions.
- 2) Prior to any work on the building, the applicant obtain a building permit from the Freeport Codes Enforcement Officer.
- 3) Prior to any site work, or a building permit being applied for, the applicant do the following:
 - A. Enter into a Maintenance Agreement for a Stormwater Management System with the Town of Freeport, to be recorded in the Cumberland County Registry of Deeds, with yearly stormwater reporting to the Town of Freeport being required.
 - B. Establish a performance guarantee in the amount to cover the cost of all site work associated with the project, to be reviewed and approved by the Town Engineer and in a form acceptable to the Town Attorney. The performance guarantee shall cover the cost of all site work, including the road, landscaping, erosion control, and stormwater management etc. Along with the performance guarantee, a non-refundable

administrative fee of 2% of the performance guarantee, in the amount to be determined by the Town Engineer, be paid.

- D. Establish an inspection account, in the amount of \$TBD, for inspection of the site improvements by the Town Engineer.
 - E. The developer have a pre-construction meeting with the Town Engineer.
- 4) Prior to starting work on the proposed site changes, the applicant obtain approval from the Maine Department of Environmental Protection for an amendment to the existing Site Location of Development Permit. The applicant may proceed with the building improvements while they are awaiting the amended permit from the DEP, however this will be doing so at their own risk.
 - 5) Prior to the scheduling of a Certificate of Occupancy for the final phase of building renovations associated with this project, the applicant either apply to the Town for any required permits for the removal of the Taylor Building, or make application to return to the Board to address the parking requirements due to the building no longer being removed



Department of Public Works
Office (207) 865-4461
Fax (207) 865-0244

Facility & Mailing Address:
7 Hunter Road
Freeport, ME 04032

July 9, 2019

Jameson Tavern stairs

Requirements:

1. Obtain a Highway Opening Permit from the Public Works Department.
2. Contractor performing the work must have a current Excavator License Permit from the Public Works Department.
3. Owner of the Jameson Tavern to enter into an encroachment agreement with the Town of Freeport for the handrails and stairs within the Town's right-of-way.

Please feel free to contact me if you have any questions.

Earl Gibson
Superintendent of Public Works

From: [Adam Bliss](#)
To: [Caroline Pelletier](#)
Subject: LL Bean Project Comments
Date: Wednesday, June 19, 2019 12:50:02 PM

Hi Caroline,

Here are some comments for the Project Review Board to consider with respect to LL Bean's Traffic Impact Study report.

The change in operations by moving the call center from Stonewood Drive will add 300 additional employees to the Casco Street site. The Traffic Impact Study reports that 100 additional peak hour trips will be generated. This number is the threshold for a Traffic Movement Permit from Maine DOT. I am requesting that Maine DOT review the application and it should also be peer reviewed given the development scope.

I note that the traffic counts utilized in the study were conducted on October 30, 2018. This time of year is not reflective of higher traffic volumes on Route 1 during the busy summer or fall seasons. I feel the counts should be reassessed during June or July of 2019 and these volumes be referenced in the report and traffic simulation models.

The report states that the development was permitted for 1,860 employees. Who was the permitting authority and what was the period of time? The applicant should state whether a traffic movement permit was ever issued by Maine DOT for the development.

I note that the report states that LL Street will have a failing level of service as a result of the proposed project. Is LL Bean proposing a new signal at this intersection?

I feel the Project Review Board should give serious consideration to intersection improvements if a high number of call center employees were to leave the facility at the end of a shift.

I feel that the Police Chief and Fire Chief should be included in the traffic impact study discussions and review.

I draw attention to the last paragraph on page 7 of the report concerning vehicles exiting LL Street during the peak pm time period.

Please keep me apprised of the PRB's concerns and LL Bean's position on the traffic issues.

Thank you,

Adam

From: [Sue Nourse](#)
To: [Caroline Pelletier](#)
Subject: LL Bean
Date: Tuesday, July 09, 2019 5:27:34 PM

I have reviewed the plans concerning the LL Bean property south of downtown Freeport with the safety of motorists, bicyclists, and pedestrians in mind. I have focused my review on Main Street traffic moving in and around Double L Street and Casco Street. Here are my comments:

- The plans submitted for this project refer to documents that were created years ago. There have been many changes in traffic patterns, striping of roads, signage, and usage of those roads in the 45 years since the surveys were completed. This may not drive the formal requirement for another survey, however it is cause for more scrutiny of the plan.
- A request for a crosswalk with flashing lights and signs was submitted to the Traffic and Parking Committee. I don't have the exact date in front of me, but I know that it was documented in the records of the T&P Committee meetings. This request was granted by the committee, as long as LL Bean bore the brunt of the expense for installation and maintenance. No action was taken by LL Bean on this project after the committee granted that request. What are the plans for that crosswalk? Is that part of this plan? Is there still any interest from LL Bean to install that crosswalk and associated signs? If so, that request needs to be reviewed by the T&P Committee in conjunction with the current plan under review.
- In the past, there was signage prohibiting left turns from Main Street onto Double L Street. Those signs were removed once the center lane was striped. The center lane is oriented more to the south of that intersection. To the north, there is room for two or three vehicles to queue in that center lane to turn left from Main Street onto Double L Street. Once vehicles crest the hill (railroad overpass), heading south on Main Street, their speeds increase. Congestion at the intersection with Double L Street is inevitable with left turns and pedestrian crossings in the mix. I am concerned about all that activity at an unmarked intersection. The road to the right (Independence Drive) is lightly travelled, but does intersect with Main Street opposite Double L Street.
- There is a sidewalk on the west side of Main Street at this location. There is not any sidewalk on the east side, however there is a white stripe delineating a space for pedestrians or bicyclists. Pedestrians use both sides of the road, whether there is a sidewalk or not.
- Vehicles turning left from Main Street onto Double L Street and from Double L Street onto Main Street are not regulated. There is a tipping point for how long drivers will wait for a break in traffic before making a left turn in desperation. Left turning drivers on Double L Street would have to gauge the traffic coming through the light at Casco Street with the traffic coming south over the crest of a hill out of downtown Freeport.
- I am comfortable with traffic controls at Main Street and Casco Street. These traffic lights are designed to adjust for traffic congestion in that area.

In this email, I have highlighted some thoughts and concerns that I have about the increase in use, however slight, at the LL Bean property abutting Main Street on the south side of the downtown area. A comprehensive view of all elements that affect the area would be advised. In isolation, one element may not seem that alarming. Combining all the parts would give a significantly different

perspective.

If you have any questions about this email, please contact me.

Thanks

Susan B. Nourse
Chief
Freeport Police Department
16 Main Street
Freeport, ME 04032
207-865-4800/202
207-865-2901 (fax)
FBI NAA 225



MEMORANDUM

TO: Caroline Pelletier, Assistant Town Planner
FROM: Adam S. Bliss, P.E., Town Engineer *ASB*
DATE: July 10, 2019
SUBJECT: L.L. Bean, Corporate Headquarters Renovations
U.S. Route One, Lower Main Street
Map 8, Lots 13-ETC and 20
Map 20, Lots 98-ETC and 101

Sebago Technics, Inc. submitted application materials and plans on behalf of L.L. Bean for renovations to the Corporate Headquarters Building off Casco Street and Double L Street. The application and plans were well presented and professionally developed. I have reviewed the application information and site plans dated June 26, 2019. I do not have any requested changes to the plans and submitted documents. I note that the proposal will need approval from the Maine Department of Environmental Protection (MEDEP) for an amendment to the applicant's Site Location of Development Permit. I am relying on the Maine DEP to provide substantial review of the proposal. My comments below pertain to this proposal and any future redevelopment plans that L.L. Bean may propose as they relate to improving water quality within the watershed.

2019 Renovation Proposal

I would like clarification on why the pre-development stormwater model includes 19.6 acres of developed, impervious area. In theory, the pre-development model should have not developed areas such as roofs and parking lots. I assume the applicant is comparing areas that exist today with the redevelopment plan, but nothing is provided in the Stormwater Management Plan that justifies this approach. I will rely on the Maine DEP to approve the drainage models and assuming they concur, then the proposed redevelopment plan follows Section 529 of the Town's Zoning Ordinance which requires that the post development rate of stormwater runoff from the site not exceed the pre-development rate for the 2-, 10-, and 25-year storm events. The applicant meets the Maine DEP's Flooding Standard if this approach is approved.

The Maine DEP's Basic Standards require an erosion and sedimentation control plan, an inspection and maintenance plan, and a good housekeeping plan for the project. The applicant has addressed these standards as provided on the Erosion Control Notes and Details (Sheet CE701) and in Attachment D of the Stormwater Management Plan.

The Maine DEP's General Standard requires treatment of 95% of the impervious cover and 80% of the developed area. The applicant stated that this standard only applies to those areas created after development of Chapter 500 Stormwater Management Law in 2005/ 2006. It is assumed that the Maine DEP concurs with the proposed redevelopment plan, but I have not received any communication to confirm this statement. I will rely on the Maine DEP's issuance of the Site Location Permit as approval.

The existing development does not include any stormwater quality treatment, but the redevelopment plan proposes to treat a total of 7 percent after redevelopment.

I note that newly developed areas will be treated for water quality which follows Section 529. The applicant has selected innovative approaches to treating new and existing impervious areas through a meadow basin, porous asphalt, and permeable pavers along with other Best Management Practices (BMPs). Construction details and maintenance specifications were provided with the application materials for these measures.

The Maine DEP's Urban Impaired Stream Standard applies to this project because the site is in the watershed of Concord Gully Brook, an impaired stream due to urban development. The redevelopment plan requires compensation or mitigation according to standards set in Chapter 501, Stormwater Management Compensation Fees and Mitigation Credit. The applicant reported they have exceeded the Maine DEP's mitigation credits for the redeveloped portion of the property, but I have not received any communication from the Maine DEP to confirm that standard has been met.

I note that the project is located within the Federal Urbanized area, and the project areas drain to Concord Gully Brook, an Urban Impaired Stream watershed. Since the project is part of a common scheme of development that has over 1.0 acres of impervious area, I believe that the entire Corporate Headquarters should now be regulated under the Town's Post Construction Stormwater Ordinance (Chapter 53). This Ordinance requires inspections and maintenance of the stormwater systems, specifies qualifications for the system inspector, and requires a report to be submitted to the Town by May 31 of each year. In lieu of the Maine DEP requirement for a 5-year recertification of the stormwater BMPs, the applicant will be required to annually certify the stormwater BMPs in a Stormwater Maintenance Agreement executed with the Town and recorded in the Cumberland County Registry of Deeds.

My review of the proposed renovation project design confirms that the stormwater management system has been designed in compliance with local and state regulations pending any additional review comments provided by the Maine DEP. I request that the Town Engineer receive a copy of all review comments as I have not received any communication to date.

Future Considerations

I have several clarifying comments and requests as they relate to the 2019 renovation submittal. These comments are provided as guidance for future redevelopment plans and serve as a summary of concerns identified during development of the following plans.

- Concord Gully Brook Watershed Management Plan
 - Municipal Separate Storm Sewer System (MS4) Permit issued by the Maine DEP
 - Impaired waterbody status of Concord Gully and Frost Gully Brook watersheds
 - Maine Impervious Cover (IC) Total Maximum Daily Load (TMDL) for Impaired Streams listed under Section 303d of the Clean Water Act
1. The applicant states they comply with Section 529 of the Town's Zoning Ordinance which requires that the post development rate of stormwater runoff from the site not exceed the pre-development rate. This requirement applies to the 2-, 10-, and 25-year storm events; however, these storms represent low frequency events (50%, 10%, and 4% exceedance probability in any given year, respectively). However, the higher frequency events (below 1-year or less than 1" depth) contribute more to stream erosion because of minimal detention time from parking lot runoff directed into receiving waterbodies. I request that Low Impact Development (LID) and

BMP retrofits be implemented to the maximum extent practicable on existing impervious cover areas with all future development plans.

2. Concord Gully Brook Watershed is an impaired waterbody due to causes from impervious cover, chloride application during wintertime deicing, and bacteria. The applicant has or will meet the Maine DEP's standard for new impervious and developed areas, but very little will be done for large areas of existing impervious cover which were permitted and constructed prior to stormwater management law developed in 2005 and 2006. It is my hope that LID measures, BMP retrofits, and chloride management will be implemented on future development plans and with additional drainage maintenance projects.
3. The 2019 application reports that 282 percent of the impervious area will be treated for water quality management. This number is qualified in the report as exceeding 100 percent since it includes existing areas that predate 2005/ 2006 stormwater law. I would like to clarify or put into context the amount of treated impervious area relative to the full development as it relates to geomorphological changes to downstream receiving waters. Again, the proposal follows state and local standards but does not address efforts to meet an IC TMDL goal within the watershed (see attachment A). The Town is burdened with meeting the IC TMDL goal associated mostly with commercial development in Concord Gully Brook watershed. It is my hope that runoff reduction occurs through LID and BMP retrofits with future development plans and with drainage maintenance projects. It is also my hope the Town can develop a public-private partnership in reducing effective impervious cover within the watershed.

2019 Corporate Headquarters Renovations
Impervious Cover Treatment Summary

Total Impervious Area (Ac)	Treated Area (Ac)	Total Percent Treated (%)
18.6	1.3	7%

4. The Town completed 800 linear feet of stream restoration work in 2018 located at the end of Concord Road and continuing beyond the arch culvert underneath Casco Street. The Town requests that this work would not be jeopardized and preferably be complemented with runoff reduction measures within Fitz and Cricket's parking lots associated with future redevelopment plans. Two drainage outfalls were observed as requiring maintenance during the stream restoration work in 2018. These two failing outfalls contribute to embankment erosion and stream degradation which was communicated during a pre-application meeting with the Town.
5. Please include the Town in all communication with the Maine DEP regarding redevelopment plans. My intent is not to create duplicate reviews, but I would like the Town to be involved in implementation of LID measures, mimicking pre-development hydrology, stormwater runoff reduction, and impervious cover reduction which are all good strategies towards meeting the IC TMDL goal and attaining a favorable water quality status that supports aquatic organism habitat within the stream corridor.



TMDL Assessment Summary

Concord Gully

Watershed Description

This **TMDL** assessment summary applies to Concord Gully, a 2.47-mile stream located in the City of Freeport, Maine. Concord Gully begins near Stagecoach Road. The stream flows northeast, parallel to Route 1A through a mostly forested area. Just downstream of where it crosses Varney Road, Concord Gully joins with two other streams. The stream continues through a predominately forested area, and flows southeast parallel to Saltbrook Road, before flowing into the Harraseeket River just below Cove Road. The Concord Gully watershed covers 704 acres in the City of Freeport.

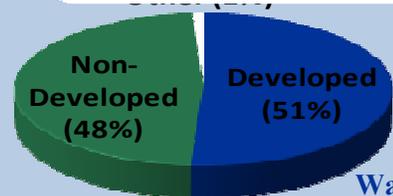
- Stormwater runoff from **impervious cover (IC)**, particularly in the developed area in the upper portion of the watershed, is likely the largest source of pollution to Concord Gully. Stormwater falling on roads, roofs and parking lots in developed areas flows quickly off impervious surfaces, carrying dirt, oils, metals, and other pollutants, and sending high volumes of flow to the nearest section of the stream.
- The Concord Gully watershed is predominately developed (51%), particularly near the upper portion of the watershed. This area is characterized by low intensity development.
- Approximately 48% of the watershed is non-developed. Most of Concord Gully flows through a large forested area. This area absorbs and filters stormwater pollutants, and helps protect both water quality in the stream and stream channel stability.
- Concord Gully is on the list of Maine's Urban Impaired Streams (DEP, 2010).

Definitions

- **TMDL** is an acronym for **Total Maximum Daily Load**, representing the total amount of a pollutant that a water body can receive and still meet water quality standards.
- **Impervious cover** refers to landscape surfaces (e.g. roads, sidewalks, driveways, parking lots, and rooftops) that no longer absorb rain and may direct large volumes of stormwater runoff into the stream.

Waterbody Facts

- **Segment ID:**
ME0106000106_602R03
- **City:** Freeport, ME
- **County:** Cumberland
- **Impaired Segment Length:** 2.47 miles
- **Classification:** Class B
- **Direct Watershed:** 1.1 mi² (704 acres)
- **Watershed Impervious Cover:** 22%
- **Major Drainage Basin:**
Presumpscot River and Casco Bay Watershed



Watershed Land Uses

Why is a TMDL Assessment Needed?

Concord Gully, a Class B freshwater stream, has been assessed by Maine DEP as not meeting water quality standards for aquatic life use, and has been listed on the 303(d) list of impaired waters. The Clean Water Act requires that all 303(d)-listed waters undergo a TMDL assessment that describes the impairments and establishes a target to guide the measures needed to restore water quality. The goal is for all waterbodies to comply with state water quality standards.



*Concord Gully downstream of Station 496.
(Photo: DEP Biomonitoring Program)*

Concord Gully has also been listed as impaired for bacteria since 2008. The impervious cover TMDL assessment for Concord Gully addresses the water quality impairments to aquatic life use (benthic-macroinvertebrate, stream habitat, and nutrient/eutrophication assessments) and dissolved oxygen. These impairments are associated with a variety of pollutants in urban stormwater as well as erosion, habitat loss and unstable stream banks caused by excessive amounts of runoff.

Sampling Results & Pollutant Sources

Sampling Station	Sample Date	Statutory Class	Model Results
S-496	8/24/2001	B	I
S-497	8/24/2001	B	I
S-498	8/24/2001	B	I
S-498	8/11/2010	B	NA

DEP makes aquatic life use determinations using a statistical model that incorporates 30 variables of data collected from rivers and streams, including the richness and abundance of streambed organisms, to determine the probability of a sample meeting Class A, B, or C conditions. Biologists use the model results and supporting information to determine if samples comply with standards of the class assigned to the stream or river (Davies and Tsomides, 2002).

Concord Gully impairment is based on data collected by DEP in 2001 and 2010 at three sampling stations (496, 497, and 498) near its confluence with two other small streams. Data collected at these stations in 2001 indicated Class B Concord Gully status was “indeterminate” (I), meaning too few organisms were collected to meet the minimum needed to statistically determine classification. Analysis of data collected in 2010 indicate that Concord Gully is “non attaining” (NA), meaning it does not meet Class B or C standards and water quality problems continue to persist.

Impervious Cover Analysis

Increasing the percentage of impervious cover (%IC) in a watershed is linked to decreasing stream health (CWP, 2003). Because Concord Gully’s impairment is not caused by a single pollutant, %IC is used for

8% IC represents an approximate 64% reduction in stormwater runoff volume and associated pollutants when compared to existing pollutant loads.

this TMDL to represent the mix of pollutants and other impacts associated with excessive stormwater runoff. The Concord Gully watershed has an estimated impervious surface area of **22%** (Figure 1), which is based on available public information. DEP has found that in order to support Class B

Impervious Cover GIS Calculations

The Impervious Cover Calculations are based on analysis of GIS coverage’s presented in Figure 1. The impervious area is derived from 2007 1 meter satellite imagery and the watershed boundary is an estimation based on contours and digital elevation models.

aquatic life use, the Concord Gully watershed may require the characteristics of a watershed with **8%** impervious cover. This WLA & LA target is intended to guide the application of Best Management Practices (BMP) and Low Impact Development (LID) techniques to reduce the *impact* of impervious surfaces. These estimates may be refined in the future based on new information that becomes available either through the development of a watershed management plan or other watershed studies. Ultimate success of the TMDL will be Concord Gully's compliance with Maine's water quality criteria for dissolved oxygen and aquatic life.

Since 2005, all commercial development in Freeport has been required to comply with the LID practices specified in the Maine Chapter 500 Stormwater Management Rules, even on sites smaller than 20,000 square feet of impervious area. In addition, many of the commercial projects built prior to 2005 included stormwater management features that reduced the impact of stormwater on Concord Gully.

Next Steps

Because Concord Gully is an impaired water, specific sources of stormwater runoff in the watershed should be considered during the development of a watershed management plan to:

- Encourage greater citizen involvement through the development of a watershed coalition to ensure the long term protection of Concord Gully;
- Address existing stormwater problems in the Concord Gully watershed by installing structural and applying non-structural best management practices (BMPs); and
- Prevent future degradation of Concord Gully through the implementation and enforcement of Freeport's special local stormwater control ordinances.

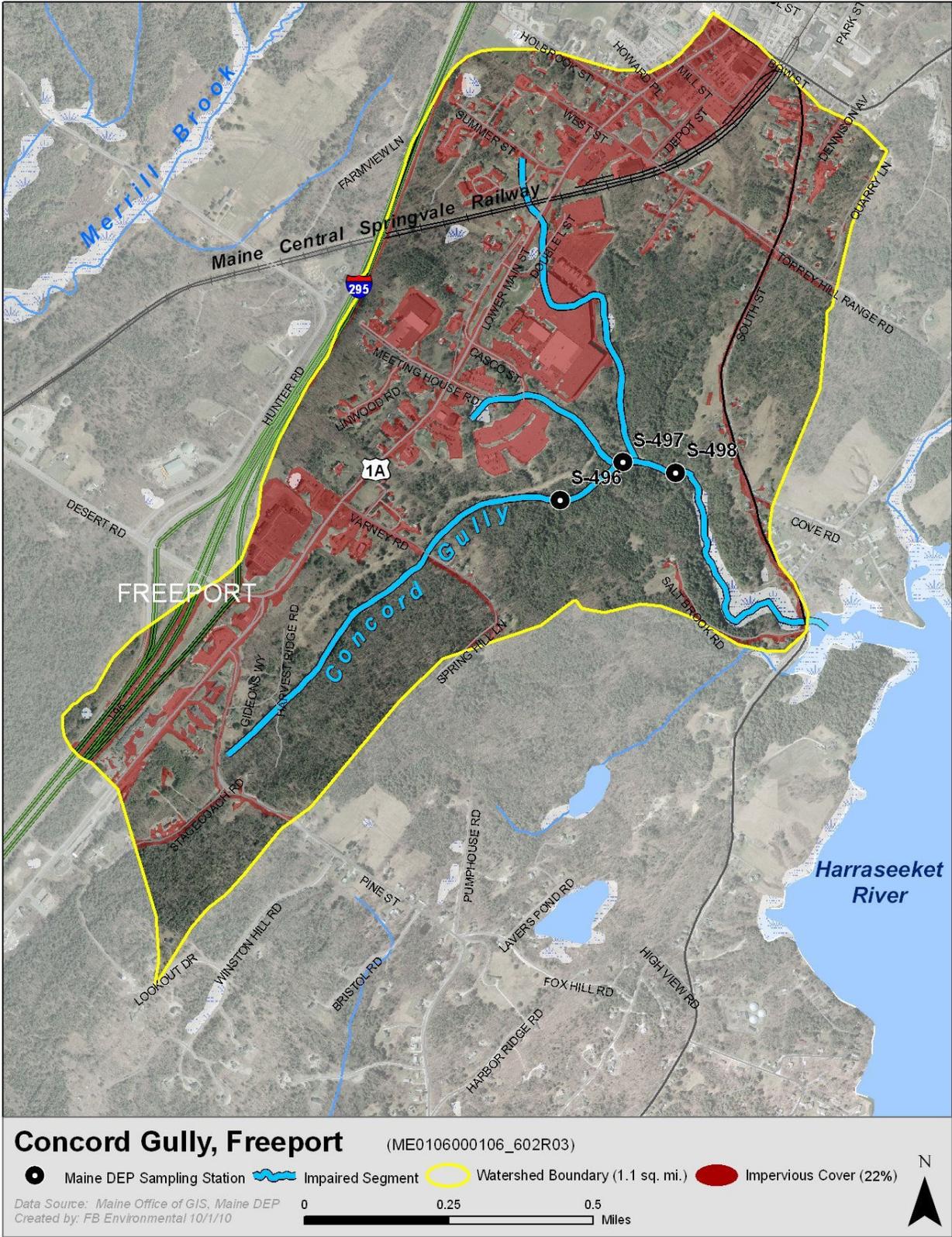


Figure 1: Map of Concord Gully watershed impervious cover.

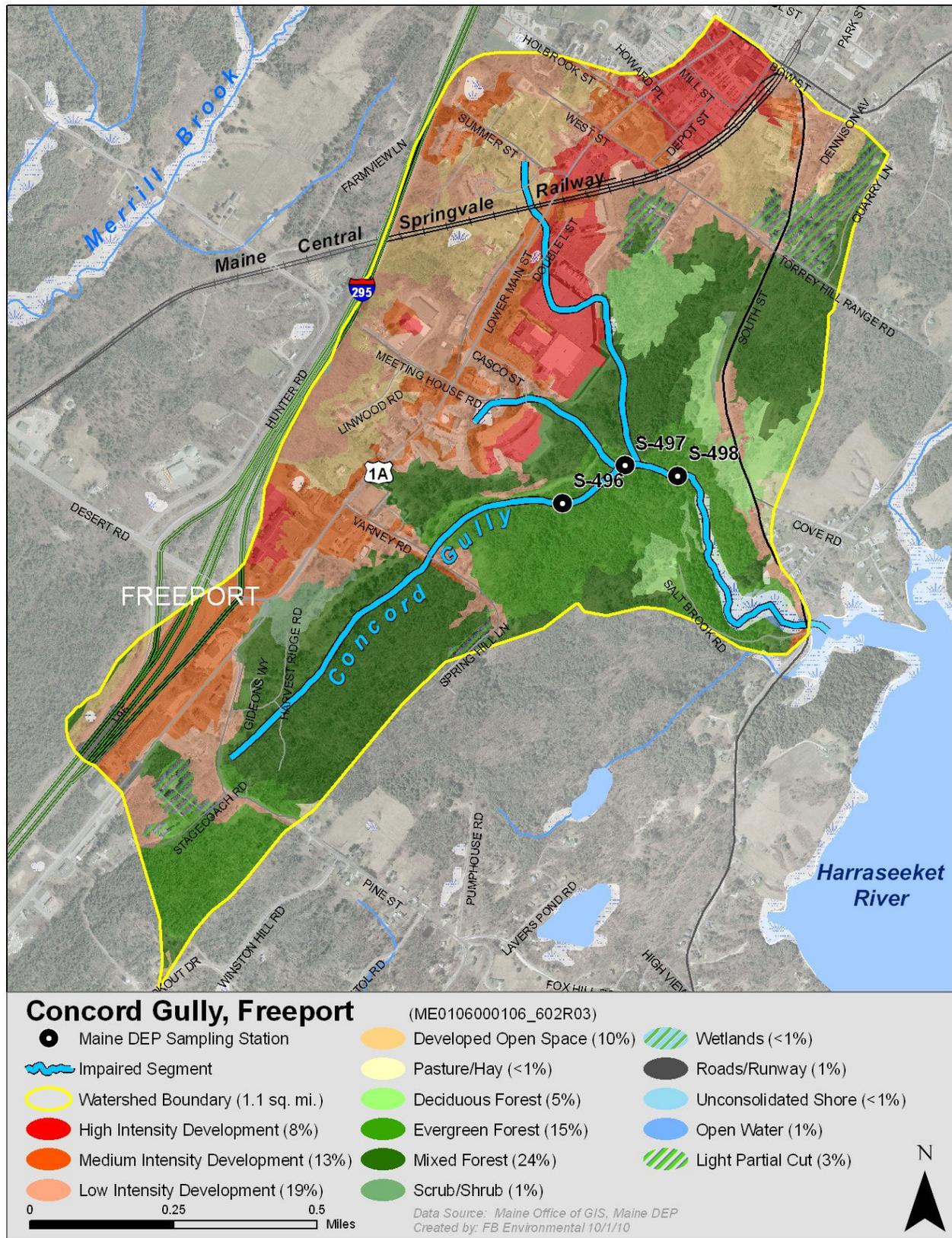


Figure 2: Map of Concord Gully watershed land cover.

References

- Center for Watershed Protection (CWP). 2003. Impacts of Impervious Cover on Aquatic Systems. Watershed Protection Research Monograph No. 1. Center for Watershed Protection, Ellicott City, MD. 142 pp.
- Davies, Susan P. and Leonidas Tsomides. 2002. Methods for Biological Sampling and Analysis of Maine's Rivers and Streams. Maine Department of Environmental Protection. Revised August, 2002. DEP LW0387-B2002.
- Maine Department of Environmental Protection (DEP). 2010. Assessment Database Detail Report for Concord Gully. Bureau of Land and Water Quality, Augusta, ME.