



Staff Report

To: Development Review Board
From: Michael Giguere, City Planner
Date: September 19th, 2024
Subject: Essex High School, 2 Educational Drive – Site plan amendment for stormwater improvements
File: SP# 4.2024

EXISTING CONDITIONS AND GENERAL INFORMATION

Project Location: 2 Educational Drive, Essex Junction, VT 05452

Project Area Size: 30.60 acres

Total Parcel Size: 84.75 acres

Existing Land Use: Educational

Surrounding Land Use: Residential

Zoning District: Residential 1 (R1)

Minimum Lot Size: 15,000 square feet

Lot Coverage: 22.89%

Project Description:

The State of Vermont requires that properties with three (3) or more acres of impervious surfaces that were never previously permitted or were permitted without incorporating stormwater treatments to come into compliance with current state stormwater management requirements. These requirements involve the addition of green and grey stormwater infrastructure to slow, hold, and treat stormwater before it is released into public waterways. On-site stormwater management improves water quality and reduces downstream flood risk. Essex High School has 19.4 acres of impervious surface and was notified by the State of its obligation to comply. This report evaluates the proposed improvements in relation to the requirements of the Essex Junction Land Development Code (LDC).

SECTION 513: APPROVAL OF ACTIVITIES INVOLVING THE CONSTRUCTION OF A STORMWATER SYSTEM

A. Review Requirement

Activities involving construction of a stormwater system other than the public storm drainage system, or connection to any such system, shall require review in accordance with the procedures of this section. Applicants are also required to meet the standards set in Section 713.

SECTION 514: APPROVAL OF ACTIVITIES INVOLVING THE DISTURBANCE OF MORE THAN 0.5 ACRE OF LAND

Construction activities on sites larger than 0.5 acres require that the applicant conform to State of Vermont Best Site Management Practices for erosion and sediment control. The proposed project site is 30.6 acres in size and is thus subject to these standards.

B. Review Standards

General requirements [of this subsection] may be waived by the Public Works Superintendent or Water Quality Superintendent or their designee if the applicant conforms to the State of Vermont Best Site Management practices as outlined in: “The Low Risk Site Handbook for Erosion Prevention and Sediment Control” (as amended) or in the “Vermont Erosion Prevention and Sediment Control Field Guide” (as amended).

Since the proposed project is state-permitted, the Water Quality Superintendent defers to the construction erosion control requirements of the state permit.

SECTION 515: APPROVAL OF ACTIVITIES INVOLVING THE DISTURBANCE OF EQUAL TO OR GREATER THAN ONE (1) ACRE AND/OR THE CREATION OF MORE THAN 0.5 ACRE OF IMPERVIOUS SURFACE

A. Review Requirement

Activities involving clearing, grading, construction or land development of one (1) acre or more of land and/or creating a total resulting impervious surface equal to or greater than half an acre (0.5) acre shall require review in accordance with the procedures of the State of Vermont Construction General Permit 3-9020 and General Permit 3-9050 or other applicable state permits governing erosion and stormwater control of large construction sites. Evidence of compliance with this provision of Vermont State requirements must be provided to receive local approval to proceed. Projects with more than half an acre (0.5) acre of impervious surface shall also conform with the general standards.

The applicant has obtained coverage under General Permit 3-9050. No additional impervious surface is being created as a part of this project; thus, no further action is required.

SECTION 516: APPROVAL OF ACTIVITIES INVOLVING DEVELOPMENT WITHIN 200 FEET OF A WATERWAY, FLOODPLAIN OR WETLAND

A. Review Requirement

Activities involving development within 200 feet of a waterway, floodplain or wetland shall require review in accordance with the procedures of this section. The property shall maintain a fifteen (15) foot or more undisturbed buffer to adjacent streams. The buffer may be required to be extended based on flood plain profile, slope of the land or other conditions where further setback is warranted for protection of the stream. A set back of fifty (50) feet above high water mark of the floodplain will be considered for impact of stream meandering, streambank crossing, flooding or other natural stream processes that may have an impact on developed land. Development activity in the area of a wetland will require state and federal regulatory review, and setbacks will be the same as required by those authorities and permits.

Stormwater management equipment such as “jellyfish filters”, underground stormwater retention chambers, and gravel wetlands are being proposed within 200 ft of the Indian Brook waterway.

H. Riparian Buffer Landscaping Requirements

Section 516.H includes standards to promote the establishment and protection of heavily vegetated areas of native vegetation and trees along waterways to reduce the impact of stormwater runoff, prevent soil erosion, protect wildlife, fish habitat and maintain water quality. The proposed subsurface stormwater improvements are being installed within or in proximity of the riparian buffer of a waterway.

The Development Review Board may authorize the following as uses within stream buffers subject to the standards and conditions enumerated for each use:

6. Stormwater treatment facilities meeting the stormwater treatment practices and sizing criteria set forth in the *Vermont Stormwater Management Manual Rule and Design Guidance* (as most recently amended). Evidence of an approved permit from the Vermont Agency of Natural Resources for coverage under the applicable permitting requirements shall be required to meet this criterion for encroachment into a stream buffer.

With the exception of stormwater outfalls, the proposed infrastructure is located outside of the 15-foot stream buffer.

SECTION 713: STORM WATER MANAGEMENT

B. Intent

The intent of this Section is to allow no increase in stormwater runoff as a result of any land development activity. The proposal is specifically for the addition of stormwater management infrastructure, thus it meets the intent of this Section.

D. Construction Site Stormwater Runoff Control

2. State Permits.

- (a) The City shall accept a State of Vermont General Permit for construction site runoff as evidence of meeting City erosion and sediment control permit requirements for those projects that fall under the jurisdiction of the State requirements.

F. Operation and Maintenance of Stormwater Systems

1. All stormwater systems shall have a written, and approved, enforceable operation and maintenance agreement, duly recorded in the City land records with a copy sent to the City Water Quality Superintendent, to ensure the system functions as designed. The maintenance agreement shall include a schedule for when and how often maintenance will occur and plans for annual report inspections by a qualified individual to ensure proper performance of the facility between scheduled cleanouts. Where required, the annual report, which certifies the system has been inspected and maintained in accordance with submitted plans, must be submitted to the City

Water Quality Superintendent by September 1st of each year. Staff may elect to audit some of the permits annually.

SECTION 719: LANDSCAPE AND TREE PLANTING REQUIREMENTS

A. Purpose and Intent

Section 719 outlines regulations aimed at protecting and improving the community's environmental, economic, and aesthetic quality to promote public health, safety, and welfare.

B. Low Impact Design approaches and Green Stormwater Best Management Practices

To promote and provide incentives for use of LID/GSI practices (i.e. bioretention areas, vegetated swales, planter boxes, rainwater harvesting systems, and other vegetated practices), these practices may be used to meet landscaping, parking lot landscaping, buffering, streetscape, and tree preservation requirements of this section. These practices may be constructed in the designated landscape, buffering, streetscape and tree preservation area if they are part of an approved stormwater management plan for the site; and if they are reviewed favorably by the Tree Advisory Committee and/or the Essex Junction Tree Warden.

C. Tree Protection

Any application for development approval by the Development Review Board shall submit a plan, which indicates the location of existing mature trees, or tree groupings, and shall indicate on the plan those trees or tree groupings which are proposed to be saved. If removal of trees or shrubs in the City right of way is necessary for the proposed development, replacement trees equal to or better than shall be planted in coordination with and approval from the City Tree Advisory Committee.

There are twelve (12) existing deciduous trees identified for removal as a part of this project. Ten (10) are located on drawing C-3, northeast of the baseball field. Two (2) are located on drawing C-7, north of Essex Rescue. None are located in the City Right-of-Way, thus the requirement of 719.C to replace the trees do not apply. However, a requirement to replace these trees on site may be considered through Section 719.E below.

E. Landscaping

Section 719.E requires a minimum of 2% of the total construction cost to be allocated to landscaping for new construction projects above \$250,000. Since the proposed project does not involve new construction or the re-construction of the school buildings, this requirement does not apply.

With a new use on existing development or renovation on existing property, the applicant must provide landscaping adequate to provide screening and environmental enhancement to the satisfaction of the Development Review Board. The Development Review Board may modify the planting requirements to more fully implement the purpose and intent of this section.

Notably, while some features of the proposal are underground, certain aspects, such as the gravel wetlands, will be visible above ground, providing a more natural aesthetic than the lawn surface it replaces.

The DRB should determine whether the proposal provides sufficient “screening and environmental enhancement” to meet the requirements of Section 719.E, particularly given the proposed removal of twelve existing trees without replacement.

Recommendations:

Staff recommends that the Development Review Board approve the proposed development pending a determination of the following item:

- The DRB should determine whether the proposal provides sufficient “screening and environmental enhancement” to meet the requirements of Section 719.E

Proposed Conditions

1. All staff comments shall be addressed to the satisfaction of City staff.
2. Applicant shall provide copies of drainage computations and modeling, including the HydroCAD file if used, prior to the issuance of a zoning permit.
3. Applicant shall provide the municipality with a copy of the relevant State stormwater Permit when available.
4. Applicant shall provide a copy of the maintenance agreement for the stormwater management system that meets the requirements of Section 713.F, prior to the issuance of a zoning permit. This agreement shall be recorded in the City land records with a copy sent to the City Water Quality Superintendent, to ensure the system functions as designed.
5. Applicant shall provide the City with a copy of the annual inspection report by September 1st of each year as required under Section 713.F