

TOWN OF LYNNFIELD

DEPARTMENT OF PUBLIC WORKS

JOHN M. TOMASZ DIRECTOR

CHARLES L. RICHTER, P.E. TOWN ENGINEER

55 SUMMER STREET

LYNNFIELD, MA 01940

Tel: 781-334-9500

FAX: 781-334-9509

WWW.TOWN.LYNNFIELD.MA.US

MEMORANDUM

DATE: June 16, 2021

TO: Brian Charville, Planning Board Chairman FROM: Charles Richter, P.E., Town Engineer

CC: John Tomasz, Director of Public Works

RE: Drainage Review for Planning Board Site Plan Review of the Lynnfield

Elementary School Expansion Project

The Department of Public Works has reviewed the recently revised stormwater designs by Nitsch Engineering for the elementary school expansion project for compliance with the Stormwater Management Bylaw regulations. Below are our findings:

Huckleberry Hill School

The Department's review of the bid set titled Huckleberry Hill School dated May 28, 2021 along with stormwater calculations dated May 14, 2021 shows that the proposed system meets the Stormwater Management Bylaw regulations. With the proposed design, the peak rates for the runoff off from the site will be reduced in comparison to

existing conditions, the required infiltration is accomplished and all other Stormwater Management Bylaw requirements are met. The Town has also committed to addressing a water issue on Melch Road that may have been caused by a prior renovation of the Huckleberry Hill School. The proposed stormwater design and the work we committed to on Melch Road will address the additional runoff generated by the proposed expansion of the school and an issue that may have been created by prior work.

Summer Street School

The Department's review of the bid set titled Summer Street School dated May 28, 2021 along with stormwater calculations dated May 14, 2021 shows that the proposed system meets the Stormwater Management Bylaw regulations. The proposed peak rates for the runoff off from the site are reduced, the necessary infiltration is accomplished and all other Stormwater Management Bylaw requirements are met.

In addition to compliance with the Stormwater Management Bylaw, the proposed stormwater design for the Summer Street School mitigates stormwater issues created by earlier projects at the school. During heavy rain events the existing stormwater system can become surcharged causing catchbasins located in the parking lot and playground area to overflow on to adjacent properties. Also, previously wooded areas that had been converted to grass or paved were graded to drain toward abutting properties causing flooding damage for adjacent properties. To address these problems, Nitsch Engineering carefully graded the disturbed portion of the site away from adjacent properties, added several catch basins to capture the runoff, and provided significant underground stormwater storage and infiltration to the system. The sizable increase in underground storage allows the stormwater to be stored on site during major rain events allowing the runoff to either infiltrate into the ground and/or slowly released downstream to Summer Street.

On June 4, 2021 the Department of Public Works met with the abutters to the northern side of the school to go over their concerns with stormwater and provide them with the revised site plan. The plan appeared to be well received. Since that meeting we have received only minor questions on unrelated issues with the project. After thoroughly working on this design with Nitsch and the peer review, the Department is confident that Nitsch has designed a stormwater management system for this project that not only meets the requirements of the Stormwater Management Bylaw but addresses longstanding stormwater issues abutters have faced.