Alfred Benesch & Company
120 Hebron Avenue, Floor 2
Glastonbury, CT 06033
www.benesch.com
P 860-633-8341
F 860-633-1068

August 18, 2021
Revised September 21, 2021

Inland Wetlands and Watercourse Agency
Town of Enfield
820 Enfield Street
Enfield, CT 06082

RE: **Development Narrative**
Enfield Site Plan
30-32 Bacon Road

Dear Commission Members:

Attached please find the application and associated plan set for the above proposed site plan. Following is a development narrative that provides detail additional to the application and plans.

The property is situated at 30-32 Bacon Road (Zone I-1). It consists of approximately 4 acres of wooded lot with approximately 2.6 acres of wetlands. The project proposes three (3) buildings, a 2,400-sf office and two (2) 4,800-sf warehouse building, with associated drives, parking, utilities and other amenities.

Lot Layout and Use

The layout of the buildings and site drives has been designed to avoid as much direct impact as possible. There is a corridor of upland area extending from the right-of-way directly into the property, where it opens up in the middle portion of the site. There is also an area of uplands on the northwest portion of the site. The three (3) buildings have been situated in the upland areas. The office building will be the closest building to Bacon Road.

The project is in conformance with all applicable bulk and dimensional requirements of the zoning regulations. The warehouse use is allowed in the I-1 zone per the zoning regulations.

Utilities

Public water, sanitary and primary power is available in Bacon Road and will be served as follows:

- Public water – a single lateral will connect to the main in the right-of-way and the first two (2) buildings will be served by the single lateral. The building located in the back corner of the lot will be utilized as a warehouse and will not be served by water.
- Public sanitary – an existing lateral serves the site and the first two (2) buildings will connect via gravity flow. The building located in the back corner of the lot will be utilized as a warehouse and will not be served by sewer.
- Electric power – overhead electric power is available on the opposite side of Bacon Road. We are proposing to cross the road with overhead wire, to a new utility pole adjacent the site, from which primary power will go underground to a new site transformer. The transformer will feed each of the three (3) buildings with dedicated secondary conduits.

Wetlands

Wetlands were flagged by MBI, Inc. The site was designed to achieve the programmatic requirements in a way that minimized impacts to the functions and values of the wetlands. The project proposes a disturbance of approximately 4,200 sf of wetlands and a replication of approximately 4,300 sf of wetlands. The wetlands replication will consist of five (5) bioretention areas that are designed to capture and treat stormwater prior to discharge to the adjacent wetlands. Site design was performed with much interaction and input from the soil scientist, including the location/sizing of bioretention basins and types of seed cover and landscape plantings within the bioretention areas. The wetlands report is included in the application and following are conclusions from the report:

- "The area of filled wetlands does not contain any seasonal or permanent standing water areas or otherwise specialized wetlands habitat."
- "The basins will be planted with a wetland seed mix and numerous shade-tolerant, native wetland shrubs which will enhance the wetland diversity of the site as well as provide stormwater treatment functions."
- "Given the size of the wetland/watershed, the relatively non-intensive proposed use of the site and relatively small impervious area, overall stormwater-related impacts are expected to be nominal at best."
- "Given the lack of wetland-related habitat, no impacts to overall, existing wetland functions and values are expected."

The site design was performed in a responsible manner that minimizes potential impacts to the wetlands and is in keeping with CT DEEP criteria for stormwater treatment.

Stormwater

The site is situated in part of a vast, wooded open space and associated wetlands system located between Bacon Road to the north and east, Shaker Road to east and south, and a number of small residential lots on the east site of North Maple Street. This large swath of undeveloped, open space/wetlands is approximately 110 acres and is tributary to Freshwater Brook, which flows north-south behind the residential lots located on the west side of Shaker Road. The construction of the driveway through the wetlands to the rear building results in a naturally occurring, very shallow and large, detention basin. We have modelled pre-and post-development peak flows and the result of the construction is a decrease in peak flows offsite for the 2- through 100-year design storms. Computations have been provided in the Stormwater Memorandum.

Site stormwater runoff is proposed to be managed as follows:

- Short-Term Protection of Resources: During construction erosion and sediment control devices will be utilized to prevent sediment-laden water from entering the wetlands area. Erosion control has been designed per the 2002 CT DEEP Guidelines for Soil Erosion and Sediment Control and include construction entrances, silt fence, hay bales, temporary sediment traps, and concrete washout provisions. Perimeter erosion controls will not be removed until the site is stabilized.
- Long-Term Water Quality: The largest contributor to water quality impairment is the discharge of pollutants associated with vehicular exhaust, such as sediment, pathogens, hydrocarbons, metals, and synthetic organic chemicals. The proposed use on the site is non-intensive, as it is anticipated to accommodate several employees in the office building and 1 or 2 each in the warehouse buildings. Additionally, the warehouses are anticipated to be serviced by 1 or 2 box trucks each, per day. Given the low use, it is anticipated that the pollutant generation will be very low. Best management measures have been designed including biofiltration areas (rain gardens) in several locations that are designed to receive the bulk of runoff from the site pavement. Above-ground biofiltration is considered primary treatment

by CT DEEP. The paved drive that crosses the wetlands to access the rear building will be sloped and a rip rap filter strip will be placed on the downgradient side so the sheet flow water runoff will be filtered and sediments removed, prior to discharge to the wetlands. Additionally, the project proposed mitigation of all disturbed wetlands.

Traffic

Based on the ITE Trip Generation Manual, 9th edition, the development is the following uses:

- Land Use 152: Warehouse Distribution Center (4 employees, 9,600 sf)
- Land Use 710: General Office Building (4 employees, 2,400 sf)

The following table indicates weekday total trips and peak hour trips, anticipated by the proposed development.

Average Vehicle Trips per Dwelling Unit

Time Period	Average Rate	Anticipated Trips
LU 152 Weekday – Total Trips	1.68 daily trips per 1,000 sf	16
LU 152 Weekday – AM Peak Hour Trips	0.11	1
LU 152 Weekday – PM Peak Hour Trips	0.12	1
LU 710 Weekday – Total Trips	3.32 per employee	13
LU 710: Weekday – AM Peak Hour Trips	0.48	2
LU 710: Weekday – PM Peak Hour Trips	0.46	2
Total Weekday – Total Trips	**-**	**29**
Total Weekday – AM Peak Hour Trips	**-**	**3**
Total Weekday – PM Peak Hour Trips	**-**	**3**

It can be seen from the above table that the maximum number of anticipated daily trips is 29, which is an insignificant volume for Bacon Road. Therefore, no traffic mitigation is proposed.

We look forward to working with the Commission to ensure a successful project that meets required town regulations.

Sincerely,

Will Walter, PE, LEED AP
Alfred Benesch & Company