

17 June 2021

Town of Charlton Planning Board
c/o: Mr. Randy Benson, Planning Director
37 Main Street
Charlton, MA 01507

**Re: Site Plan and Special Permit Application
Proposed Warehouse Sortation Facility
53 Sturbridge Road
Charlton, MA 01507**

Dear Mr. Benson and members of the Planning Board:

On behalf of the Applicant, Bluewater Bay Development LLC (Bluewater), Langan is submitting the enclosed site plan and special permit application for a proposed project at 53 Sturbridge Road in Charlton, MA. The application includes; the town's Special Permit Application form and Business Enterprise Park (BEP) Special Permit Application, Site Plan and Special Permit Plans dated 17 June, 2021 and Stormwater Management Report dated June 2021. Application fees and certified abutter mailings will be submitted separately from the applicant's attorney, Fletcher Tilton, PC.

The site consists of three adjacent parcels, one parcel located at 53 Sturbridge Rd. (27-D-1), and the other two located at 0 Southbridge Rd. (33-A-2 and 33-A-3). Together, the three parcels constitute the 97.6 acre project site, referred to as 53 Sturbridge Rd. The project site is bound by Route 20 (Sturbridge Road) to the north, Capen Hill Nature Sanctuary to the west, a perennial stream to the northeast, Route 169 (Southbridge Road) and residential properties to the east, and undeveloped wooded area to the south. The site is currently a farm with fields, dwelling and barn structures, undeveloped wooded areas, and wetlands. There is a drumlin with the high point in the central part of the site. Elevations range from 780 feet in the center of the property at the high point, to 670, 620, 742, and 730 feet in the northern, eastern, southern, and western ends of the property, respectively.

The proposed project entails the construction of a state of the art 2,855,000± gross square foot industrial warehouse building with a 650,000± square foot building footprint. The building will be approximately 100 feet in height, but no more than 110 feet in height as measured in accordance with the town's zoning bylaws. The building will also have 49 loading docks, 265 trailer parking stalls, and 1,250 car parking stalls in three surface lots. Existing site grades will be modified to accommodate the proposed development and retaining walls will be required in multiple locations to support the operational needs for this type of facility, such as parking for employees, circulation roads, associated landscaping, and site utility and stormwater management improvements.

The main site access point is proposed along Route 20. The main circulation road diverts truck traffic to loading bays and trailer parking stalls. The remaining two surface lots are for passenger vehicle traffic. A secondary site access point is proposed along Route 169. This access point would also serve as an extension of the WRTA 29 bus route, with a bus stop along the front of the proposed building.

A transportation impact assessment was conducted by Vanasse & Associates, Inc. (enclosed with this submission) and found that there will be an expected increase of 4,000± vehicle trips on an average weekday. The Route 20 access to the site is expected to meet the necessary criteria for the installation of the traffic control signal as specified in the Manual on Uniform Traffic Control Devices (MUTCD) and will include the following geometry at the intersection:

- Route 20 Eastbound: two through travel lanes and one right-turn lane
- Route 20 Westbound: one left-turn lane and two through travel lanes
- Project Site Driveway: one travel lane

The Route 169 access to the Project site will be designed to accommodate the installation of a traffic control signal in the future if warranted, and will be placed under STOP-sign control in the interim. The following geometry will be provided at the intersection:

- Route 169 Northbound: one left-turn lane and one through travel lane
- Route 169 Southbound: one travel lane
- Project Site Driveway: one travel lane

Water requirements for the project will be met by connecting to the 10" water main along Route 20 that is managed by the Town of Southbridge Water Department. The connection will be made with a 10" CLDI water line into the site. The new water line will run under the primary access drive and connect to two fire protection tanks with individual fire pumps at the northwest corner of the proposed building. A 10" fire loop will come from the fire pumps and will run underground along the perimeter of the warehouse, supplying the interior fire suppression system and exterior hydrants. The 10" CLDI into the site will reduce to a 4" CLDI downstream of the fire tanks. The 4" CLDI will provide the domestic water service to the building. Both guard shacks will be serviced by a 1.5" HDPE water service originating from the warehouse building. At the recommendation of the town of Charlton Water and Sewer Department we have engaged Dewberry to complete an evaluation of the project impacts on the municipal water systems. Their evaluation will be provided to the Planning Board and Water and Sewer Department upon completion. Based on Dewberry's initial investigation, it appears that a booster pump may be necessary on the downhill end of the site's proposed water service.

Sanitary requirements for the project will be met by connecting a new 8" PVC sewer to the 8" sewer line along Sturbridge Road. The existing sewer is managed by the Town of Charlton Water/Sewer Commission. The new sanitary line will run under the primary access drive and connect to the western side of the building where multiple discharges exit from the building and connect to the site sanitary system.

Electricity requirements will be met by National Grid, who currently services the surrounding areas.

Natural gas is not available in the area. Alternatives to natural gas for heating are being evaluated.

Roof runoff is collected via interior drains conveyed by roof leaders that connect underground to the closed pipe system on the sides of the building. The roof runoff is considered clean and is directed to subsurface detention systems with outlet structures that control the amount of runoff discharged to the surface outfalls, where stormwater exits the pipes. The surface outfalls have preformed scour holes and level spreaders to dissipate flow energy and reduce downstream erosion.

All stormwater management policies and standards for the proposed project are consistent with the Massachusetts Stormwater Standards. The project is also designed to meet the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Management Standards as the closed pipe system is designed for a 25-year storm event. The infiltration basins and subsurface detention systems attenuate peak runoff rates and volumes and water quality units provide pretreatment for infiltration basins. The proposed project is a Land-Use with a Higher Potential Pollutant Load (LUHPPL) as it will generate more than 1,000 vehicle trips per day. LUHPPL sites require the removal of 44% of the total suspended solids before runoff discharge into an infiltration structure. The project uses proprietary water quality units to achieve this level of TSS removal.

Wetland resource areas on the site were delineated by BSC Group in the ANRAD amendment filing dated May 26, 2021. There are five areas of bordering vegetated wetlands on site and two smaller pockets of isolated vegetated wetlands. The majority of the work on site will occur outside of the bordering vegetated wetland limits and the 100' buffer zone. The project will minimize impacts to adjacent wetland resource areas by remaining outside of the 25' no-disturb to the maximum extent practicable. The construction of retaining walls will result in the least impactful alternative to stabilize the site and protect the wetland resources. The circulation road from the secondary access point is proposed within wetland limits and would impact approximately 3,264 SF. A greater than 1:1 wetland replication area of 3,500 SF is proposed to mitigate these impacts. Work areas in the buffer zones largely consist of site grading. A small part of the primary access road is proposed within the 100' buffer zone. An approximate work area of 12,650 SF is proposed within the isolated vegetated wetland limits. The majority of this work is site grading, with a small portion consisting of the paved secondary access road.

A portion of the site is within the 200' Riverfront area. The secondary site access point and a small area of the circulation road are the only paved areas proposed within the riverfront area. Stormwater management ponds are also proposed within the riverfront area.

The majority of the site is located outside of FEMA Flood Zone's. A small portion of the site to the southeast is within Flood Zone X and Flood Zone AE. Approximately 75' of the secondary site access is within Flood Zone X. There are no other proposed developments within Flood Zone X and none within Flood Zone AE.

Construction will be in sequences to protect the wetlands on site. The project will file for a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP).

Sediment and erosion control best management practices will be implemented to minimize potential impacts to adjacent waters during construction. These measures include, but are not limited to:

- Temporary runoff control structures and basins.
- Hay bales and siltation fences.
- Routine sweeping and truck wheel washing.
- Covering of excavated material during truck transportation.
- Protection of stockpiled materials and soils.

Should you have any questions or require any additional information, please contact me at (617) 824-9120 or jperry@langan.com.

Sincerely,
Langan Engineering & Environmental Services, Inc.



John Perry, PE
Senior Project Manager

cc: Bill Locke, Bluewater Bay Development LLC.
Alex Escamilla, Bluewater Bay Development LLC.
Michael Andrade, PE, Graves Engineering