



Stantec

Stantec Consulting Services Inc.

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July 8, 2021
File: 179410991

Attention: Mr. Richard Gosselin, Chairman

MILLBURY PLANNING BOARD
Municipal Office Building
127 Elm Street
Millbury, Massachusetts 01527

Dear Mr. Gosselin,

**Reference: Proposed Site Development Plan
19 Canal Street**

Subsequent to our letter report of June 10, 2021 and pursuant to the Board's request, Stantec Consulting Services Inc. (Stantec) has reviewed the *Revised Site Development Plan for 19 Canal Street*, a proposed multi-family building located in Millbury. The following materials were received via email on June 28, 2021.

- Site Development Plan for 19 Canal Street, Millbury, Massachusetts, 01527 (10 Sheets), revised June 25, 2021; Response to Stantec's comments letter, dated June 25, 2021; Response to Planner Director's comments letter, dated June 25, 2021; Site Drainage Maps, revised June 25, 2021; Phase II Limited Subsurface Investigation, dated November 25, 2020 and supporting documentation each as submitted by as prepared by J.M. Grenier Associates, Inc. (JMGA)

The Revised Site Plan submittal was reviewed for conformance with the Board's Design Standards, the Town's Zoning Bylaws, and generally accepted engineering practice. We offer the following comments and recommendations regarding the *Revised Site Development Plan for 19 Canal Street* submittal for the Board's consideration.

In general, the revised site development plan submission adequately addresses Stantec's previous comments. We offer the following comments and recommendations on the remaining items in bold text which are cross-referenced to our June 10, 2021 letter report for the Board's consideration.

SITE PLAN

The Millbury B-1 Zoning District requires a minimum lot area as per Section 32.8 Special Density Provision for dwelling units more than two. We note the parcel of land contains 120,550 square feet and question if the provided lot area complies with Section 32.8 Special Density Provision.

Stantec (06/10/2021) Comment Remains - We note sheet 2 of 9 stamped by a professional land surveyor shows an area of 120,550 square feet and the summary table on sheet 3 of 10 identifies an area of 125,500 square feet.

Design with community in mind



July 8, 2021
Mr. Richard Gosselin, Chairman
Page 2 of 9

**Reference: Proposed Site Development Plan
19 Canal Street**

Stantec (07/08/2021) Comment Remains. We request area of project be confirmed by JMGA.

Section 12.4 - Site Plan Review, Subsection 12.44 – Contents and Scope of Application of the Town's Zoning Bylaws requires specific information be shown on the Site Development Plan. Stantec has performed a technical review of these requirements with the understanding the Town Planner will perform an independent review of the Site Plan for conformance with the site plan review zoning bylaw. In general, the site plan conforms to the Town's Zoning Bylaws, with the following exceptions. The following list refers to the Millbury Planning Board Submission of Site Plan Review Checklist:

- c) We recommend the applicant provide additional documentation regarding the monitor wells located on-site.

Stantec (06/10/2021) Comment Remains – See Stantec's response under Environmental Impact Assessment.

Stantec (07/08/2021) Comment Remains – See Stantec's response under Environmental Impact Assessment.

- f) Construction of the two 16-foot-wide paved drives off Canal Street will require reconstruction of the existing sidewalk and curbing. We recommend these improvements be further identified on the site plan.

Stantec (06/10/2021) Proposed sidewalk reconstruction/improvements are shown on sheet 3 of 10. We note the fire truck turning radius at the intersection with Canal Street appears to indicate the fire truck will traverse the sloped granite curb and grass island at the driveway entrance. We recommend this issue be addressed by JMGA.

Stantec (07/08/2021) Comment addressed by revised site development plan submission.

- m) Stantec recommends existing topography along the easterly property line and abutting Town of Millbury Athletic Field be shown on the site plan. at two-foot (2') intervals. We note a 4-foot retaining wall is proposed along the easterly property line.

Stantec (06/10/2021) The additional topography has been provided on sheet 4 of 10 which identifies a 4-foot retaining wall is proposed approximately 2 feet off the easterly property line. We recommend the provisions for fencing and temporary construction easement on the abutting property be addressed by JMGA

Stantec (07/08/2021) As noted by JMGA the existing chain link fence will remain and it is anticipated retaining wall design will not result in disturbance on the Town property.



July 8, 2021
Mr. Richard Gosselin, Chairman
Page 3 of 9

**Reference: Proposed Site Development Plan
19 Canal Street**

- o) The applicant has indicated the site will be serviced by municipal water and sewer. We note a segment of the existing on-site sewer line will be removed and question if the applicant has received approval from the Town DPW and Aquarion Water Company regarding these service connections.

Stantec (06/10/2021) We recommend status of review from the Town DPW and Aquarion Water Company be addressed by JMGA.

Stantec (07/08/2021) As noted by JMGA the plans have been submitted to the Town DPW and Aquarion Water Company for review and comment.

- 7. Development Impact Statements are to be prepared by the applicant to identify all significant positive or adverse impacts and propose an acceptable program to prevent or mitigate adverse impacts. We offer the following comments:

- a. Traffic Impact Assessment: Stantec reviewed the Traffic Impact Statement submitted for the proposed development under separate letter report dated May 4, 2021

Stantec (06/10/2021) Comment Remains – Stantec has not received a formal response from JMGA.

Stantec (07/08/2021) Comment remains to be addressed.

- b. Environmental Impact Assessment: Stantec requests the applicant provide additional documentation regarding the monitor wells located on-site. We have reviewed the online Massachusetts Department of Environmental Protection (MassDEP) eDEP files for 19 Canal Street and surrounding properties in Millbury MA and reviewed some of the material provided to Stantec regarding site history.

The site has a history as a freight depot associated with an extensive railroad yard dating back to the 1890's. This historical use represents the potential for soil and groundwater impacts related to railway use and associated contaminants of concern including petroleum hydrocarbons, pesticides, herbicides and coal and wood ash which contains petroleum hydrocarbons and metals.

Future redevelopment of the site should anticipate the need for soil management and analytical testing of soils to evaluate soil quality and the need for offsite disposal. Additionally, soil analytical testing should be considered if future use of the property could include residential use, gardening and other activities that could result in exposure to soils based upon intensity and frequency of use. Groundwater quality should also be assessed if construction dewatering may be necessary or if there is a potential for use of groundwater for drinking or irrigation purposes.



July 8, 2021
Mr. Richard Gosselin, Chairman
Page 4 of 9

**Reference: Proposed Site Development Plan
19 Canal Street**

The 19 Canal Street address is not listed by the MassDEP as being a waste site or having had a reportable release of oil and/or hazardous material (OHM). There are four closed waste sites along Howe Ave west and north of the site. There are five closed waste sites south and southeast of the site. Although all waste sites are closed indicating a condition of no significant risk has been achieved, the potential exists that residual impacts from these disposal sites could have potentially impacted soil and groundwater at the site. This suggests that soil and groundwater management as referenced above may need to be incorporated into site redevelopment.

Stantec (06/10/2021) JMGA has provided a copy of a November 5, 2020 Phase II Limited Subsurface Investigation (PH II) as prepared by Corporate Environmental Advisors (CEA) for Map 45 Lot 207A, Millbury, MA

As concluded by CEA, the metals arsenic and lead were identified in soils from one PH II location at concentrations above their respective RCS-1 Reportable Concentrations pursuant to the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000. CEA recommended 120-day notification of these results to Massachusetts Department of Environmental Protection (MassDEP). CEA also recommended additional soil investigation with analytical testing to estimate the volume of soil impacted by arsenic and lead.

Stantec found no indication on the MassDEP web site that notification had been made as recommended by CEA. Based upon the November 5, 2020 date of the CEA report, MassDEP notification should have been provided by March 5, 2020. The presence of the metals in excess of reportable concentrations suggest the potential for exposures to construction workers during site development and future occupants of the property that could pose a risk without additional assessment and regulatory compliance. Until regulatory compliance is attained, there are implications that future owners of the property may be responsible for addressing the reportable concentrations identified. The data available also support the need for soil management during construction and any potential off site soil disposal. Stantec would recommend the status of the Site regarding regulatory compliance and additional assessment as recommended by CEA be provided by the applicant.

Stantec (07/08/2021) JMGA has provided a copy of a November 25, 2020 Supplemental Assessment Report (SAR) prepared by Corporate Environmental Advisors (CEA) for Map 45 Lot 207A, Millbury, MA (inferred to be the Site). As concluded by CEA in the November 5, 2020 Phase II Limited Subsurface Investigation (PH II), the metals arsenic and lead were identified in soils from one PH II location at concentrations above their respective RCS-1 Reportable Concentrations pursuant to the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000. CEA recommended 120-day notification of these results to



July 8, 2021
Mr. Richard Gosselin, Chairman
Page 5 of 9

**Reference: Proposed Site Development Plan
19 Canal Street**

Massachusetts Department of Environmental Protection (MassDEP). CEA also recommended additional soil investigation with analytical testing to estimate the volume of soil impacted by arsenic and lead.

The SAR included the advancement of 12 test pits with soil samples collected for analysis of lead and arsenic. Based on the soil analytical results, CEA estimated a volume of 19 cubic yards of soil with lead/arsenic over the MCP RCS-1 Reportable Concentrations. CEA recommended excavation of these soils within the 120-notification period. CEA also indicated that if this work was not conducted, additional response actions would be required by the MCP.

Stantec found no indication on the MassDEP web site that notification had been made as recommended by CEA. Based upon the November 5, 2020 date of the CEA report, MassDEP notification should have been provided by March 5, 2020. There is no information to suggest that the soil excavation recommended by CEA was conducted. The presence of the metals in excess of reportable concentrations suggest the potential for exposures to construction workers during site development and future occupants of the property that could pose a risk without additional assessment and regulatory compliance. Until regulatory compliance is attained, there are implications that future owners of the property may be responsible for addressing the reportable concentrations identified. The data available also support the need for soil management during construction and any potential off site soil disposal. Stantec would recommend that the status of the Site with regard to regulatory compliance and additional assessment as recommended by CEA be provided by the applicant.

Section 12.4 - *Site Plan Review*, Subsection 12.45 – *Design Standards* of the Town's *Zoning Bylaws* requires applicant to adhere to general principles regarding site design. **In general, the Project Site Plan appears to conform to the Town's *Design Standards*, with the following exceptions:**

1. Landscaping: As shown on sheet 4 of 9, proposed grading includes fills between 2 and 5 feet within the site. As such, retaining walls are proposed along the easterly and westerly property line in varied height between 2 and 6 feet. We recommend the applicant provide final designed stamp drawings of the proposed retaining walls and evaluate the need for fencing at these locations. We note proposed retaining walls are approximately 2 feet off the property line and question the need for temporary construction easements from the abutting properties.

Stantec (06/10/2021) As previously noted, Stantec recommends provisions for fencing and temporary construction easement on the abutting properties be addressed by JMGA. We also recommend the applicant provide final designed stamp drawings of the proposed retaining walls.



July 8, 2021
Mr. Richard Gosselin, Chairman
Page 6 of 9

**Reference: Proposed Site Development Plan
19 Canal Street**

Stantec (07/08/2021) It is our understanding retaining wall design plans will be submitted prior to construction.

2. Circulation: Proposed parking area internal circulation and traffic signage be identified on the site plan. We note proposed parking area location is not in compliance with the recommended location of on the side or rear of the building.

Stantec (06/10/2021) Comment Remains – We question if the applicant has requested a waiver from the Board.

Stantec (07/08/2021) As noted by JMGA this item will be discussed with the Board.

Stantec recommends the proposed parking area consider one-way traffic circulation with diagonal parking and appropriate signage.

Stantec (06/10/2021) One-way signage has been provided on sheet 3 of 10. We recommend pavement markings and additional one-way signage be provided on the plan.

Stantec (07/08/2021) Comment addressed by revised site development plan submission.

3. The provided Architectural plans do not indicate the proposed signage along Canal Street.

Stantec (06/10/2021) Comment Remains - The provided Architectural plans do not indicate the proposed signage along Canal Street.

Stantec (07/08/2021) As noted by JMGA, proposed signage will be provided to the Board for review.

STORMWATER MANAGEMENT

The Stormwater Management Report is included under a separate cover of the same name with the Site Plan submission. The report includes a narrative with attachments that address the Town's General Bylaws for Stormwater Management, which includes Municipal Code Chapter 13.15 Post-Construction Stormwater Management of New Developments and Redevelopments which identifies information required for the Board to evaluate the environmental impact, effectiveness, and acceptability of the proposed measures, as well as meet the Massachusetts Stormwater Management Standards as set by the Department of Environmental Protection (DEP).



July 8, 2021
Mr. Richard Gosselin, Chairman
Page 7 of 9

**Reference: Proposed Site Development Plan
19 Canal Street**

Stantec offers the following comments for the Board's consideration.

MassDEP Stormwater Standards

1. No new stormwater conveyances (e.g., outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth.

The project is designed with no untreated discharges and the applicant provided rip-rap sizing calculations to confirm no erosion or scour at outfall FES1. We note however outfall FES1 discharges to the abutting Town of Millbury Athletic Field and question the need for an easement or provide evidence that such discharge is satisfactory to the Town of Millbury.

Stantec (06/10/2021) As previously noted under existing conditions a portion of the site drains toward the north (Auto Body/Hardware Store) and to the northeast (Town's Athletic Field). Proposed conditions will redirect flow from the Town's Athletic Fields to the Auto Body/Hardware Store property. We question the need for an easement or provide evidence that such discharge is satisfactory to the Auto Body/Hardware Store property and Town of Millbury.

Stantec (07/08/2021) Comment addressed by revised site drainage maps which identify an existing drainage swale flowing north along the easterly property line to the Auto Body/Hardware Store property and not the Town's Athletic Fields.

2. Standard 2 – Stormwater management systems must be designed so that post-development peak discharge rates do not exceed pre-development discharge rates. As identified in the summary, the project will not result in an increase in peak flows under post- development conditions for the 2, 10, and 100-yr storm events.

Our review of the drainage calculations is as follows:

- a. The Pre-Development and Post-Development Drainage Area Maps should be revised to include the location and labels of the Drainage Reach 1R and 2R.

Stantec (06/10/2021) Comment Remains – Stantec has not received revised drainage area maps.

Stantec (07/08/2021) Comment addressed by revised site drainage maps.

- b. The Drainage Area Map layouts do not accurately depict the Stormwater model. We recommend Drainage Reach 2R be separated into 2 different reaches, one at the northeast and one at the northwest of the property line. A portion of P5 drains toward the northwest, onto the Auto Body/Hardware Store. Another portion of P5 drains toward the Town's athletic field. We recommend the Applicant to further investigate the



July 8, 2021
Mr. Richard Gosselin, Chairman
Page 8 of 9

**Reference: Proposed Site Development Plan
19 Canal Street**

channel along the wall so that flow is mitigated towards FES1 and does not go over the wall.

Stantec (06/10/2021) Comment Remains – See Stantec response to Standard 1.

Stantec (07/08/2021) Comment addressed by revised site drainage maps.

GENERAL COMMENTS

Stormwater

1. Stantec recommend cross sections of the proposed subsurface infiltration chambers Nos.1 thru 4 identifying items such as existing and proposed grades, refusal and/or seasonal high groundwater be provided on the plans

Stantec (06/10/2021) Recommend cross section of proposed subsurface infiltration chamber Nos 1,3 and 4 as shown on sheet 9 of 10 be resubmitted due to inconsistencies regarding existing/proposed grades; chamber and ESHGW elevations.

Stantec (07/08/2021) Cross section of proposed subsurface infiltration chamber Nos 1,3 and 4 as shown on sheet 9 of 10 have been revised to identify existing/proposed grades; chamber and ESHGW elevations. Review of infiltration chamber Nos 1 and 3 cross sections identify a vertical separation of less than 4 feet from the stone bottom of the chamber system from the ESHGW elevation and therefore requires a mounding analysis as per the MassDEP Stormwater Standards.

2. Infiltration Chamber 2 bottom stone is at elevation 369.70'. The test hole data for TH1 notes that the estimated seasonal high groundwater elevation is at 374.5'. We recommend the Applicant address this issue.

Stantec (06/10/2021) We recommend sheet 2 of 9 be revised with the correct ESHGW Elevation.

Stantec (07/08/2021) Comment addressed by revised site development plan submission.



July 8, 2021
Mr. Richard Gosselin, Chairman
Page 9 of 9

**Reference: Proposed Site Development Plan
19 Canal Street**

If there are any questions regarding our comments and recommendations, please do not hesitate to call at 781-221-1134.

Regards,

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cc.Ms. Laurie Connors, Town Planner