## DINDEN Engineering Partners, LLC

December 2, 2020

100 TradeCenter, Suite G700 Woburn, MA 01801-1851 Tel: (781) 933-3711 Fax: (781) 287-1277 Email:lep@lindeneng.com

Lynnfield Conservation Commission c/o Ms. Emilie Cademartori, Director of Planning and Conservation Lynnfield Town Hall, 55 Summer Street Lynnfield, MA 01940-1861

Re: Review of Request for a Certificate of Compliance, MADEP File No. 209-0413 2 Broadway, Lynnfield, MA

Dear Commissioners:

This correspondence is in response to the request from the Lynnfield Conservation Commission (LCC) for our firm to review the Request for a Certificate of Compliance (COC) for the above referenced project. The Certificate of Compliance request package is dated November 9, 2020 and was received by our firm on Monday, November 16, 2020. PDF files for the filing were received from the LCC office.

In response to the receipt of the COC Request Package we visited the site on Tuesday, November 24, 2020 to view the as-built conditions. The following are our observations and comments on the Request for a Certificate of Compliance and our recent site inspection:

## CERTIFICATE OF COMPLIANCE REVIEW COMMENTS AND CONCERNS

- On the COC Request Form (WPA Form 8), Items 2 and 4 reference the original Order of Conditions (OOC) but neglect to mention the Insignificant Change Letter issued by the LCC on August 25, 2016, the Amended OOC dated September 16, 2019 and the building change approved by the LCC. This portion of the form should be revised to include all this information and the different Applicant(s)/Owner(s) along with the recording information for the Amended OOC.
- 2. On the COC Request Form (WPA Form 8) under Item 5 the second box is checked but no description is provided. This should be completed.
- The information on the As-Built plan in the COC Request package was very light and very difficult to read. Some of the printing was small and appears to be green in color making it difficult to read. A more legible plan should be provided with the linework and text darker in color and black on the white background.
- 4. Condition 82b of the final Amended Order of Conditions issued by the LCC for the project states in part, "Upon completion of the project the applicant shall request in writing a Certificate of Compliance from the Conservation Commission and shall submit the following information with the request:... two sets of field surveyed as-built site plans prepared, signed and stamped by a Commonwealth of Massachusetts Registered Land Surveyor or registered Professional Engineer. The as-built plan shall include, at a minimum, and as applicable to the project, elevations of all pipe inverts and outlets, pipe sizes, materials, and slopes; all other drainage structures, limits of clearing, grading and fill; all structures, pavement and spot elevations and 2 foot contour elevations within 100 feet of wetlands boundaries; locations of wetlands boundaries; all alterations within wetland resource areas; all wetland replication

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Re: Review of Request for a Certificate of Compliance, MADEP File No. 209-0413

2 Broadway, Lynnfield, MA

December 2, 2020, Page 2 of 4

*areas; and all dates of fieldwork*". The plan submitted with the COC Request does not show all pipe slopes as required and does not show any detail on the infiltration system located at the western end of the building. We could not locate the dates of the fieldwork on the plan. We note that the contours and spot elevations on the plan are on the binder course pavement and not on the finished course.

- 5. Condition 82c of the final Amended Order of Conditions issued by the LCC for the project states the following with respect to the required As-Built Plans, "*The as-built plans shall locate a control point and benchmark*". We could not locate any control points or benchmarks on the plan.
- 6. Condition 82d of the final Amended Order of Conditions issued by the LCC for the project states the following shall be submitted, "*Post-construction photographs demonstrating compliance with this Order, including established vegetation where required*". No photographs were contained in the materials we received.
- 7. Condition 87 of the Amended OOC requires, "Permanent boundary markers shall be installed at 50 foot intervals along the edge of the 50 foot buffer zone or at the limit of construction whichever is nearer to the wetland edge. The type of permanent markers shall be approved by the Lynnfield Conservation Commission or its agent. These shall be shown on the as-built plan and clearly marked on the plan with a note indicating no work shall be performed beyond this point without permission from the Lynnfield Conservation. Marker locations shall be included on the As-Built plan". We found no evidence of any markers on the plan or in the field. Has the LCC waived compliance with this Condition? If not, the markers should be installed and noted on the As-Built Plan.
- 8. During our site inspection we noted that the perimeter erosion controls remain in place. We also noted that in some locations loam or fill material has been pushed up against the silt fence. We recommend that the silt fence (except at the southwest corner of the site and at the level spreader) be removed next spring during the growing season and that any loam be smoothed out and seeded to establish grass where the silt fencing has been removed.
- 9. There is an area of exposed earth at the base of the retaining wall at the southwest corner of the site. This area needs to be stabilized with loam and vegetation (such as meadow mix).
- 10. During our site inspection we noted that a small number of the newly planted evergreen shrubs appear to be dead (all brown foliage) and a few more of the newly planted evergreen shrubs appear to be in poor health (some brown foliage). The dead shrubs need to be replaced and the sickly shrubs need to be monitored and replaced if their health does not improve. Due to the dormant season we could not assess the condition of the newly planted deciduous trees and shrubs at the site.
- 11. The grassed areas around the perimeter of the site are generally in good condition, Looking straight down at the grass, it is questionable as to whether the grass meets the 80% ground coverage requirement of Condition 69a of the Amended OOC. We suggest that the lawns be lightly fertilized in the spring and they should flourish into >80% coverage.

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Re: Review of Request for a Certificate of Compliance, MADEP File No. 209-0413

2 Broadway, Lynnfield, MA December 2, 2020, Page 3 of 4

- 12. The retaining wall at the northwest corner of the parking area is much different than the wall shown on the approved plans and it is located closer to the wetland than approved. Was this change approved by the LCC under the requirements of Conditions 14 & 31 of the Amended OOC?
- 13. The level spreader located near the northwest corner of the driveway is different than what was shown on the approved plan. We question if this is serving its intended purpose as it appears visually that runoff flows around the curbing rather than over it. Also, there is an extensive area of riprap located around and below this area that was not shown on the approved plan and it is closer to the wetland than what was shown on the approved plan. Was this change approved by the LCC under the requirements of Conditions 14 & 31 of the Amended OOC?
- 14. The pipe bridge over the stream has been constructed much differently from what was shown on the approved plan. The concrete abutments shown on the approved plan were not constructed on either end of the pipe. Rather, the beam was placed on large rocks at either side and shimmed with smaller rocks. Also, the beam appears to be much smaller than the wide flanged beam shown on the approved plans and the pipe attachments at 4 foot intervals appear to be missing. We are concerned with movement of the HDPE drain pipe with the dynamic force of water flowing through it, the potential frost heaving of the boulder supports (are they founded 4 feet below grade?) and the long term settlement of the beam. Was this change approved by the LCC under the requirements of Conditions 14 & 31 of the Amended OOC?
- 15. We note that it appears that work was done over the property lines of the site where the site abuts the gas station (eastern portion of the site on the north side). Some of this work is outside the Buffer Zone but some of the work in within the Buffer Zone. Was this change approved by the LCC under the requirements of Conditions 14 & 31 of the Amended OOC?
- 16. During our site visit we noted that the twin 24 inch corrugated metal pipes the stream flows into (just to the west of the apartment construction area) are exposed for about 10 to 12 feet, We do not know if these pipes were always like this or if they have been exposed by erosion.
- 17. Is the well that was drilled on the site for temporary use being retained for irrigation use? If so, the well location should be added to the As-Built Plan.
- 18. Has the easement required by Condition 37 of the Amended OOC (for vehicular access to and all portions of the drainage system for maintenance and repair) been provided to and approved by the LCC?
- 19. Have the easements and agreements required by Condition 38 a, f & g of the Amended OOC been provided to the LCC?
- 20. Has the cleaning, video inspection and repair of the dual 24 inch diameter drain lines receiving runoff from the on-site wetlands been completed as required by Condition 51 of the Amended OOC?

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Re: Review of Request for a Certificate of Compliance, MADEP File No. 209-0413

2 Broadway, Lynnfield, MA December 2, 2020, Page 4 of 4

- 21. Have the Stormwater Maintenance Reports required by Conditions 92 and 96 of the Amended OOC been filed with the LCC?
- 22. As required by Condition 93 of the Amended OOC, has the Owner provided the Conservation Commission with the contact name and telephone number for the person responsible for implementation of the Operation and Maintenance Plan for the drainage systems?
- 23. Has all the stormwater system maintenance, including the maintenance of the off-site forebay and detention basin been performed at the intervals required by the O&M and noted in the annual Stormwater Maintenance Report filed with the LCC?
- 24. Any COC issued for the project should refer to the perpetual conditions in the Amended OOC that survive the issuance of a COC.

Please feel free to contact us if you have any questions regarding our review and comments.

Very truly yours,

## LINDEN ENGINEERING PARTNERS, LLC

William A. Jones, Sr. Partner

Richard G. Cutts, P.E., President

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