

Kathleen Colwell
Planning Division Director
City of Methuen
41 Pleasant Street, Suite 217
Methuen, Massachusetts 01844

May 7, 2021

Re: 125 Merrimack Street – Methuen, Massachusetts
Peer Review

Dear Ms. Colwell and Members of the Community Development Board:

On behalf of the City of Methuen, TEC, Inc. (TEC) has reviewed documents as part of the civil and traffic engineering peer review for the proposed redevelopment of the property located at 125 Merrimack Street. Wan Yan, LLC (“Applicant”) submitted the following documents prepared by Greenman-Pedersen, Inc. (GPI) which were reviewed by TEC for conformance with the City of Methuen Zoning Regulations, and industry standards and best management practices:

- *Application for Site Plan Approval*; prepared by Greenman-Pedersen, Inc., April 7, 2021.
- *Site Plans - Proposed Site Re-Development Plans for Ye’s Table Asian Cuisine*; prepared by Greenman-Pedersen, Inc., April 7, 2021.
- *Trip Generation Letter*; Prepared by Greenman-Pedersen, Inc., April 1, 2021
- *Stormwater Management Report*; Prepared by Greenman-Pedersen, Inc., April 7, 2021.

Upon review of the documents and plans, TEC has compiled the following comments for the Board’s consideration.

Site Plans

1. It is noted that the Applicant shall apply for a Special Permit with the Zoning Board of Appeals under the Table of Use Regulations of a proposed Restaurant in a BH Zone.
2. It is noted that the proposed land alterations within the 100-foot buffer zone will require a Notice of Intent to be filed with the City of Methuen’s Conservation Commission and Massachusetts Department of Environmental Protection.
3. The Applicant should coordinate with the City of Methuen Fire Department on truck accessibility and potential additional fire hydrant locations.
4. The Applicant should provide a vehicular circulation plan which shows that a City of Methuen ladder fire truck can adequately enter, exit, and circulate the site in the event of emergency and ensure designated fire lanes are clearly depicted.
5. The project, as designed, appears to meet the zoning requirements listed within Section VI of the City of Methuen Zoning Ordinance (Frontage, Setbacks, Lot Coverage).
6. The site is proposed to include 95 parking spaces. Per City zoning ordinances, the development only requires 47 parking spaces. The parking supply provided by the Applicant is more than sufficient to support the expected demand of the site.

7. It is noted that the Applicant intends on filling in excess of 15 feet in elevation to support the proposed parking increase. The Applicant should provide cut/fill calculations and a short narrative to describe if the volume of cut and fill has been minimized per Section 12.3.C.(1).
8. It is noted that the Applicant intends on clearing a significant section of wooded area on the site. The Applicant should identify and locate trees greater than 6 inches in diameter within the proposed area to be cleared and provide a short narrative to describe if the number of these trees removed has been minimized per Section 12.3.C.(1).
9. It is noted that the proposed retaining walls are in some areas upwards of 12 feet in height. The retaining walls should be designed by a Licensed Massachusetts Professional Engineer.
10. TEC recommends that a designated limit of grading and limit of clearing be depicted on all sheets, specifically around the proposed retaining walls.
11. TEC recommends that a designated limit of work, erosion control measures, and wetland buffers be shown on Sheet 3 – Demolition Plan.
12. The limits of 6" loam and hydroseed should be shown clearly within a limit of work line.
13. The Applicant should provide a detail for the proposed 'Erosion Control Barrier (Silt Fence and Hay Bales)'.
14. The Applicant should clarify on the curbing material 'BCC" on Sheet 4.
15. The Applicant should provide clarification on the location of flow from proposed DMH-2 on Sheet 5.
16. The Applicant should provide rip rap/outlet protection sizing calculations, and provide a statement confirming down-gradient erosion will not occur along the slope between the outlet and wetlands.
17. The Applicant should provide clarification on fall prevention measures at the top of the proposed retaining walls, and provide a detail if such measures are proposed.
18. The Applicant should confirm on the Site Plans that the sight distance triangles are adequate in both directions from the Merrimack Street driveway. The Site Plans should indicate the areas within those sight triangles where vegetation and signage are to be removed or kept low.
19. The Applicant should provide a vehicular circulation plan which shows that a garbage truck (front-loading) can adequately circulate the site and access the dumpster enclosures. Note that the truck should maintain the same directional flow during pick-up as traditional vehicles.
20. The internal sidewalk provides connection to the pedestrian network along Merrimack Street which is under control of the Massachusetts Department of Transportation (MassDOT). The site plan does not show modifications to the pedestrian curb ramp with exception to the transition down and no modifications to the driveway entrance within the State Highway Layout (SHLO). At a minimum, the Applicant should revise the site plans to reconstruct the ramp to meet Architectural Access Board (AAB) standards.

21. Sheet 9 of the Site Plans depicts an accessible parking ramp construction details with 6' transition length dimensions. Although a 1:12 max note is provided, this does not guarantee a 6' transition. The notation of 6' should be removed. In addition, a maximum of 7.5% should be described for the ramp (approx. 1:13) in order to allow a construction tolerance below the AAB maximum of 1:12 (8.33%). The tolerance should be noted on the plans.
22. Notation should be given on all sidewalk related construction details for a maximum cross-slope of 1.5% with a $\pm 0.5\%$ tolerance.

Trip Generation Letter

23. The change-in-use and modification of driveways will require further permitting with the MassDOT in the form of a Permit to Access State Highway. The Applicant should provide information related to the coordination with MassDOT and an update on state permitting.
24. The Trip Generation Letter assesses new traffic from the restaurant based on building square footage as opposed to number of seats. TEC reviewed trip generation estimates for the land use utilizing number of seats instead of square footage and found that for the given size of the restaurant, the estimates provided by the Applicant are more conservative (higher) using square footage as opposed to number of seats. TEC therefore concurs with the methodology.
25. The Trip Generation Letter provides a summary of the existing and proposed estimates of site generated traffic; including, credit for pass-by trips. TEC agrees with the methodology as presented by GPI. The trip generation for the site, as presented, is expected to decrease during the peak hours with the change in use. TEC concurs with this assessment. Whereas the letter denotes that the daily traffic will increase; TEC notes that this may not be the case depending on the hours of operations as the data provided typically assumes the restaurant's included in the data set at open during breakfast and mid-morning hours. Note the site plan states that the hours of operations will start at 11 AM for the earliest day.
26. Based on the negligible impact of the proposed development on the surrounding traffic and roadways; especially during the given peak periods, TEC concurs that no specific off-site mitigation is warranted.

Please do not hesitate to contact me directly if you have any questions concerning the review at 978-794-1792. Thank you for your consideration.

Sincerely,
TEC, Inc.
"The Engineering Corporation"



Peter F. Ellison, PE
Director of Strategic Land Planning



Samuel W. Gregorio, PE, PTOE, RSP₁
Senior Traffic Engineer