



**Engineering Alliance, Inc.**

Civil Engineering & Land Planning Consultants

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October 20, 2023

Mr. Peter Matchak  
Town Planner/Director  
Town of Ashland  
101 Main Street  
Ashland, MA 01721

Re: EAI Project #: 21-58508  
9-49 Homer Avenue  
Tax Map 14 Lots 352,353 & 354

Dear Peter:

Engineering Alliance, Inc. is in receipt of the peer review letter dated October 12, 2023 and prepared by GCG Associates. Included for your review please find the following:

- One (1) copy of site plans entitled "Proposed Site Plan 9-49 Homer Avenue (Tax map 14 Lots 352-354) Ashland, Massachusetts" dated June 17, 2002 and revised through October 20, 2023
- One (1) copy of the Drainage Calculations and Storm Water Management Report dated April 22, 2021 and revised through October 20, 2023.

Below are our responses to the comments (comment in italics and response in bold).

C-3 Site Layout Plan

1. *c.) Unit #2 exterior walkway width remains 3 feet wide, 4 feet minimum width required, per ADA/AAB requirements*

**Response: The proposed walk has been widened to a minimum width of 4-ft.**

*d.) The proposed wheelchair ramp appeared to align with the existing crosswalk (not shown on plan). Crosswalk stripping disturbed during construction should be re-stripped by the applicant.*

**Response: The cross walk has been shown on the drawings along with an note requiring re-stripping to the cross walk as required.**

2. *The landscape plan called for a row of 10 H.M. Eddie yews (Mature height 18-20 feet) are proposed between the proposed loading and seating area, snow storage would be restricted.*

**Response: The snow storage area has been adjusted. Snow storage is only expected for small snow events. Snow will be removed from the site in large storm events. The language in the O&M Plan reads "...Snow removal and storage - Plowed snow shall be placed in the pervious area located along the parking lot, where it can slowly infiltrate. Sediments shall be removed from this area every spring. When the amount of snow exceeds the capacity of the snow storage areas, it shall be removed from the site and disposed of properly immediately after each storm at the owner's expense...."**

12. *The plan has called out a proposed 5' wide sidewalk with easement. The Alden Street exit sidewalk through driveway should be specified (or shown like the Homer Avenue sidewalk through driveway entrance). GCG recommends replacing the 2' curb corner with radius curb or transition curb ramp. As shown, the Homer Avenue entrance would not fit a SU30 vehicle turning without encroaching the loading area or riding over the curb corner.*

**Response: The 2-ft curb corner has been replaced with a 10-ft radius as suggested.**

16. a.) *MUTCD Section B.10.01 - the proposed R1-1 'Stop' sign shall be installed on the right-hand side of the approached vehicle to which it applied.*

**Response: The R1-1 Stop Sign has been moved to the right hand side of the approached vehicle as requested.**

*b.) The plan should show sidewalk through the driveway at the Alden Street exit, the R1-1 stop sign should be installed in advance of the sidewalk crossing.*

**Response: The R1-1 Stop Sign has been moved such that it is in advance of the sidewalk crossing as requested.**

*c.) MUTCD Section 2B.37.02 - R5-1 'Do Not Enter' signs should be installed at both sides of the Alden Street exit driveway, rotated to facing the northbound and southbound Alden Street approaching traffic.*

**Response: R1-1 do not enter signs have been added at both sides of the Alden Street exit driveway.**

*d.) Proposed R3-26, (U and Left Turns) per MUTCD, at the subsurface garage exit should be replaced with R3-5 (Left Turn Arrow with ONLY wording sign). An additional R3-5 sign, or R3-1 (No Right Turn Arrow sign) should be installed at the right-hand side of the garage south exit lane, (southerly ground level building column.) and the landscape island on the east side of the three 90-degree angle parking spaces facing the garage southern exit.*

**Response: The R3-26 signs have been replaced with R3-5 signs as requested.**

*e.) R5-1 signs should be installed at the subsurface garage southern exit, facing the driveway. An additional set of R5-1 signs should be installed next to the transformer and on the southerly building column facing the three 90-degree angle parking spaces.*

**Response: Additional R5-1 signs have been added as requested.**

*f.) R-6-1 or R6-2 'One Way' signs should be installed in front of the angle parking areas and along the driveway to warn the "one way" status.*

**Response: R6-1 signs have been added along the angle parking spaces as suggested.**

*g.) Applicant should design the one-way traffic signage for the surface and subsurface parking levels according to the MUTCD requirements.*

**Response: The Architectural drawings will be updated accordingly.**

17. *A wheelchair ramp should be provided at the concrete sidewalk ended at the handicap no parking stripping.*

**Response: A wheelchair ramp has been provided as the concrete sidewalk which terminates at the handicap accessible route striping.**

#### C-4 Grading, Drainage & Utility Plan

3. *The grading plan called for adjusting existing catch basin (at the Homer Avenue and Alden Street southwestern intersection corner) rim to 184.50, which is 0.25 feet lower than the existing rim grade. Where is adjacent to the proposed Homer Avenue sawcut line. Regarding is required.*

**Response: The saw cut line has been moved so as to create a transition between the lowered catch basin and the existing grade.**

16 *The proposed exit driveway grading appeared to be lower than the garage ceiling. The proposed garage slab grade at 174.60, with 12 feet height per garage ramp profile. The top of garage ceiling slab grade should be 186.60 plus green roof and/or driveway thickness. Which would create a steep grade approaching the Alden Street curb exit.*

**Response: The architectural drawings will be modified to create the proper separation between the green roof and paved surface and the top of the garage roof slab.**

17. *The 6" stone layer below the infiltration chambers has been removed. The Cultec's manufacturer detail sheet specified a minimum of 6" crushed stone layer underneath the chambers is required. GCG recommends providing Cultec's approval of the chambers system without the base stone layer.*

**Response: Calculations have been provided indicating that the 6-inch stone layer is not required for the system to operate. Filter fabric will be placed at the bottom of the chambers. We will confirm with cultec what foundation is required under the system, however it was not considered in the stormwater calculations.**

18. *Verify spot grades shown on the parking area on top of the garage wall, it appeared lower than the garage ceiling.*

**Response: The architectural drawings will be modified to ensure that the top of the garage ceiling slab will allow the proper clearance to allow for the green roof and pavement section.**

19. *The proposed driveway curb opening at Alden Street is located at the south side of the high point at elevation 184.73+/-, hence, the driveway runoff would drain southward to the existing catch basin located in front of #15 Alden Street driveway and altered the drainage pattern. The applicant should analysis the impacts of the altered drainage path.*

**Response: A catch basin has been added at the end of the driveway at the intersection with Alden Street so as to not alter the drainage path.**

#### Construction Details

3. *Details remain referenced to Lebaron Foundry models.*

**Response: The detail has been modified to be "in accordance with the Town of Ashland DPW Standards"**

6. *Drainage Outlet Control Structure detail should be provided, a standard drainage structure with a specified baffle wall to create a control should be sufficient. The outlet control structure concrete top slab, frame and cover, brick mortar bed should be shown on the detail, weir invert to bottom of slap clearance should be specified to provide sufficient opening to handle the design storm events.*

**Response: The peak elevation over the weir in the 100-year storm event is elevation 184.59. The top of weir is 184 and the rim is 186. The outlet control structure is a standard manhole. There is not a clearance issue with the peak flow and the bottom of the frame and cover.**

#### Autoturn figure Plan

1. *This plan should demonstrate vehicle turning path at the Homer Avenue entrance without encroaching onto the loading area. It appeared that if the loading area is occupied, a single unit 30 feet (SU30) long westbound truck would not be able to turn in to the driveway without riding over the curb corner. The applicant should consider replacing the curb corners (both ingress and egress intersections) with radial curbs suitable for truck traffic.*

**Response: The 2-ft curb corners have been replaced with larger curb returns.**

#### Landscape Plan

1. *The applicant should clarify the Type 2 and Type 3 Paving details, which were proposed along the Homer Avenue seating and patio areas. The plan should also specify the proposed seating area next to building (9-11 Homer Avenue) paving detail, which should be pervious surface.*

**Response: The paved areas in front of the entrances have been labeled on Sheet C-3. They will be comprised of pervious paves. A detail has been added to the detail sheets.**

## Stormwater Report

7. *Re-grade driveway and green roof areas at the south side of the proposed building according to the subsurface garage ceiling, adjust high point and watershed boundary as needed. Green roof on top of the garage should have a CN value of 86, (MSH, Vol. 2, Ch. 2, Pg. 114).*

**Response: The driveway grading has not changed. It would not be appropriate to raise the driveway grade especially given the proximity of the adjacent structure to the property line. Instead, the architectural drawings will be adjusted to accommodate the driveway. The CN Value of the green roof has been adjusted to 86 as suggested.**

8. Green roof, second floor CN value should use 86. The HydroCAD report Pond 1P – Cultec 330XL HD system chambers invert should be 181.76, storage sump should be between elevation 184.00 to 181.76. (calculations used storage between 181.26 to 184.00).

**Response: The green roof CN value has been changed to 86. The chamber invert for Pond 1P has been changed to 181.76.**

9. *The latest plan shows exit driveway drains southward to an existing catch basin in front of 15 Alden Street driveway, existing drainage pattern altered*

**Response: A catch basin has been added at the end of the driveway at the intersection with Alden Street so as to not alter the drainage path.**

10. *GCG rough estimated the two 8" roof drain would require a minimum of 1.3% pipe slope to handle the roof runoff during the 100-year storm design event. The applicant should size and specify the minimum pipe slope on plan*

**Response: The roof drains are located within 10-ft of the building. As a result they will be sized and designed by the mechanical engineer in accordance with the State Plumbing Code as part of the building permit process.**

We are hopeful that the enclosed modifications address the comments of the October 12, 2023 comment letter and we look forward to the opportunity to formally present these changes at the October 26, 2023 continued public hearing.

Very Truly Yours,

**ENGINEERING ALLIANCE, INC.**



Richard A. Salvo, P.E.  
Principal

Copy to: Charlie Zammuto – Applicant  
Attorney Terry Morris  
EAI File #: 21-58508