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November 14, 2022

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

RE: Site Plan Peer Review
399 Union Street, Ashland, Massachusetts
Peer Review Response

Dear Mr. Matchak and Planning Board members,

The latest set of Revised Plans dated October 27, 2022, included additional minor plan adjustments as follows:
The drive-thru queuing lanes were straightened.
The eastern most Union Street curb cut was revised to be an "Exit only" driveway.
The drive-thru exit was revised to include an additional area of landscaped island and a stop sign and stop bar in order to provide a more channelized, safe intersection.

On behalf of our client, Retail Ashland, LLC, please find the responses addressing the comments from the GCG Associates, Inc. review, performed on September 19, 2022. Our responses are below the comments in italics. Revisions to the plans are as follows:

GENERAL COMMENTS:

This is a re-development project. The developed 1.274+/- acres parcel (Map 20, Lot 9) was built in 2003 (per Assessors record), with a single one-story Commercial Retail - (Walgreen) Pharmacy building and associated paved parking lot with a single drive-through lane and services window.

The site is in Industrial (I) Zoning District and Photovoltaic Installation Overlay District (PIOD). Zoning By-y-laws 3.1.2. - The proposed Restaurant – fast food and drive-through uses in (I) Zone require Board of Appeals (ZBA) Special Permit approval and Section 9.4 Planning Board Site Plan Review.

Based on the MassMapper/MassGIS wetland layer and record. There is wetland resource area located at the east side of the parcel (north of the dumpster pad). Resource area boundary and the 100-foot buffer zone should be identified on the plan. Site record also referenced the wetland as Isolated Land Subject to Flooding, (ILSF), (Technical Review Committee Meeting, March 27, 2002). Applicant should provide calculations to justify the ILSF compliance.

An NOI is being filed with Conservation Commission.

Subject site is in Zone 'X' – Area of minimal flood hazard per current Flood Insurance Rate Maps (FIRM). There is no NHESP priority habitats of rare species or estimated habitats of rare wildlife identified in the site vicinity per MassMapper (formerly MassGIS).

SITE PLAN

C-1 - Cover Sheet

1. No comments.
   No action required

C-2 – Existing Conditions Plan

1. Section 9.4.4.2 - Show and identify wetland resource area (possible ILSF) boundary and associated 100-foot buffer.
   Resource area has been identified, as requested. The request for a Certificate of Compliance was filed and a Notice of Intent will be filed soon.

2. Show Zoning Districts boundary, including overlay district.
   The Zoning districts have been added to the plan, as requested.

3. Remove the 160'-12" HDPE, S=0.005 label next to the 36" drain line at the east side of the existing building. Label appeared to be for the proposed roof drainpipe.
   The notation regarding the 12" drain line has been removed, as requested.

C-3 – Layout and Materials Plan

1. Verify provided lot area 55,504 s.f. shown on the Zoning Table, area should match with Existing Conditions Plan, which stated 55,324 s.f.
   The lot area has been corrected, as requested.
2. 9.4.4.2 - Show wetland resource boundary and associated 100-foot buffer zone.
   The resource area has been identified, as requested
3. Chapter 280 – Wetland Protection, Section 7 – Proposed work (drive-through lane) appears to be within the "no work or disturbance zone" 25 feet of resource area, (subject to wetland resource area boundary delineation). The driveway is an existing non-conforming condition, Ashland Conservation Commission approval is required.
   The request for a Certificate of Compliance was filed and a Notice of Intent will be filed soon.
4. 5.4.2.1 – Show Zoning Districts boundary to determine Buffering requirements.
   The Zoning districts have been added to the plan, as requested.
5. Site Legend 'B' called for Trash Enclosure Area to see Architectural Plans. Architectural Floor and Elevation plan set did not provide detail for dumpster(s) pad enclosure. Re-align dumpster pad and enclosure to match driveway curve layout, as necessary.
   The trash enclosure is existing and will be re-used.
6. Site Legend 'P' indicated for the sign to see Architectural Plans. Standalone sign detail should be provided per 9.4.4.7. Sign should be analyzed to verify the access drive has adequate sight distance based on the sign location.
   The sign is existing and will only be re-faced. A sign plan will be filed with the Building Department at a later date.
7. 5.2.1 & 5.2.6 – Loading area should be provided.
   A loading space has been shown, as requested.
8. 10.0 – Definitions, Parking Space – Proposed parking spaces, (except for the five employee parking spaces), do not meet the 9' x 20' parking space dimension requirements. Parking stall should be measured from the face of the curb. Angled parking spaces should be measured perpendicular to the stall length. Current Ashland Zoning By-laws do not have compact parking spaces policy.
   The parking area has been improved to accommodate 9'x20' spaces. An additional area of pavement has been removed from the site design.

9. Add additional wheelchair ramp in front of the 5-foot wide no parking strip between handicap accessible parking spaces.

Two (2) additional ADA ramps have been added in this area, as requested.

10. Update Proposed Queuing Plan C-1 to match C-3, replacing the raised speed shelf with landscape island. Queuing plan should be shown on full scale plan (suitable for scale accuracy). Queuing spaces should be based on 9' x 20' stall dimensions per parking space definition.

A new Queuing Plan has been created with the new parking area design.

11. The parking schedule calculations were based on restaurant seating capacity, which should be reviewed by the Building Inspector.

Duly noted, the Building Inspector will be reviewing the plans.

12.Add "Do Not Enter" signs at the Union Street westerly site entrance facing Union Street. (Or call out existing "Do Not Enter" signs to remain.

The existing "Do not enter" signs at the westerly Union Street entrance are to remain, and notations have been added, as requested.

13. The proposed Summer Street ingress right turn arrow pavement marking should be clarified. This sign directing the traffic to a one-way drive aisle. The one-way aisle at the east side of the six existing angled parking spaces will make these spaces for back-up parking only.

The Summer Street ingress arrow has been revised, as requested.

14. Add an additional "Do Not Enter" and "No Right Turn" sign at the northerly landscape island next to the eleven spaces parking lot.

This area of the parking lot have been re-designed and are now in a two-way condition. This comment is no longer applicable.

15. Clarify the 'Do NOT Enter' (Site Legend - J) proposed at the Union Street east site driveway ingress. 'Do Not Enter' signs should be installed at the eastbound one-way drive-through and by-pass lanes at the east side driveway intersection.

The "Do not enter" sign has been removed from the Union St. east driveway and new signs have been added as well, as requested.

16. Clarify the intent of accessing the eleven spaces (including all handicap accessible spaces) and nine spaces parking lots. As shown, these two parking areas are accessible through the by-pass lane around the building only since the Summer Street ingress is restricted to right turn only.

The Summer Street entrance has been changed to not restrict incoming traffic.

17. Call out all existing "Not A Cut-Thru" signs to remain.

The existing "Not a Cut Thru" sign has been labeled as "to remain"

18. Parking layout as shown provided 220% of the required parking spaces, (19 spaces required, forty-two spaces provided). GCG recommends increasing the parking stall length to twenty feet to comply with the parking space standard dimensions and maintaining the 24-foot driveway aisle width between the double loaded 90-degree angled parking spaces.

The parking area has been improved to accommodate 9'x20' spaces. An additional area of pavement has been removed from the site design.

19. As shown, if the queueing vehicle extends beyond the southbound one-way aisle between the 6 and 5 parking spaces, (opposite from the Union Street westerly driveway exit) the entire parking lot will be blocked.

It should be noted that the Traffic Review engineer has stated that 11-13 cars are adequate for stacking. Car #13 does not block traffic. Additional cars 14, 15 & 16 are merely shown to demonstrate no issues with cars blocking entrances, curb cuts, etc.

20. Traffic impact report estimated the 2029 Weekday Morning Build conditions at the east side driveway southbound egress, left turn onto Union Street will have a LOS 'C" with 24.5 second delay. The report shown a 95th percentile queue length of 10-feet. However, there is only one queue space at the south bound east side driveway exit, an additional queue vehicle will block the bypass lane.

The by-pass lane permits vehicles to exit the east site driveway without being obstructed by vehicles waiting in the drive-through queue. Based on the analysis results, the 95th percentile queue would not extend do a second vehicle; however, the by-pass lane could

service the queue for a second vehicle without preventing drive-through circulation or the ability to turn right out of the west site driveway.

21. Demonstrate adequate sight distance for all curb openings and provide improvements, as necessary. There appears to be existing vegetation affecting the sight distance at the easterly driveway.

The existing vegetation on the eastern perimeter of the site was trimmed to provide additional sight distance looking left from of the east sight driveway. The measured sight distance at each site driveway is summarized in the table below. The available sight distance was evaluated based on guidance provided by the American Association of State Highway and Transportation Officials (AASHTO).

Sight Distance Evaluation

Site Driveway Location	Looking	Speed Limit (mph)	85th % Speed (mph)	SSD[1] Required	ISD[2] Recommended	Sight Distance Measured	Meets Required SSD?	Meets Recommended ISD?
Summer Street at	Left (West)	25	-	155	280	450	Yes	Yes
North Site Driveway	Right (East)	25	-	155	280	500+	Yes	Yes
Union Street (Route 135) at	Left (East)	30	33	230	365	500+	Yes	Yes
West Site Driveway	Right (West)	35	34	250	390	500+	Yes	Yes
Union Street (Route 135) at	Left (East)	30	33	230	365	390	Yes	Yes
East Site Driveway	Right (West)	35	34	250	390	500+	Yes	Yes

1 Stopping sight distance (see AASHTO equations 3-2 and 3-3) based on highest value between the posted and measured 85th percentile speeds.

2 Intersection sight distance (see AASHTO equations 9-1 and 9-2) based on highest value between the posted and measured 85th percentile speeds.

22. Provide hours of operation, and exterior lighting operation hours.

This has not been finalized, but tentatively we anticipate hours of operation by be from 6:00am to 8:00 pm. Again, this is preliminary only

C-3A – Fire Truck Turn Plan

1. Union Street westerly driveway exit should be right turn exit only.

We are conferring with the Fire Department on the turning movements. We have also provided an additional plan that allows fire truck access around the rear of the building.

2. Plan should show fire truck maneuvering path entering site from Summer Street (north side driveway) and/or Union Street (east side driveway), through the by-pass lane around the building, existing neatest hydrant is located at the proposed northwest building corner next to Summer Street. Fire truck should be able to connect the nearby hydrant to the building fire sprinkler system (mechanical room).

See above. Also, we are working with the Team Architect and the Plumbing Engineer to Confirm that we are not, in fact, required to have a Sprinkler system :

MA State Building Code, 9th ed, Table 903.2. The building is less than 5,000 SF and the occupant load is less than and not equal to 100 occupants therefore sprinklers are not required.

MA State Building Code, 9th ed [F] 903.2 Where required: M.G.L. c. 148,§ 26G: certain non-residential structures that exceed 7,500 square feet. The building is less than 7,500 square feet therefore sprinklers are not required.

C-4 – Grading and Drainage Plan

1. Add additional wheelchair ramp at the east side of the 5-foot wide no parking strip between the handicap accessible spaces.
   Two (2) additional ADA ramps have been added in this area, as requested.
2. Add spot grade to show 2% maximum cross slope within the handicap parking spaces and access path.
   Additional spot grades and a note regarding the maximum slope have been added to the plans, as requested.
3. Add proposed contour 94 between the proposed building's southeast corner and east side driveway.
   The additional 94 contour has been added, as requested.
4. The March 2002 Technical Review Committee Meeting referenced the drainage design "was prepared using an assumption that all of the site runoff must be contained on the site, for all storms up to and including the 100-year storm event." The intent was to decrease the flow of stormwater to the east wetland and ILSF area. Based on this the existing 36" drain, appeared oversized for roof drain conveyance, which was sized for roof runoff storage and infiltration/retention. Therefore, the proposed new roof drain and bioretention system contradicts the original drainage design. The roof runoff is considered clean water per Massachusetts Stormwater Handbook (MSH), bioretention BMP treatment is not necessary. This proposed bioretention basin has a depth of 4.1 feet, (basin bottom elevation 89.0 with emergency overflow at 93.1, Bioretention basin should be designed within 6" to 12" ponding depth), which would indicate the basin is considered an infiltration basin. The basin is within ten feet of the property line, sixty feet upgradient of the abutter's building foundation and possibly within the 50 feet wetland setback and designed with an emergency rip-rap overflow toward the abutter's dwelling without an easement.
   The Bioretention basin has been removed from the design. The overall impervious area was decreased in the first set of plans and has since been reduced on the current revised set of drawings.
5. Existing drainage system components (underground location and type) should be identified on the plan, system should be inspected and evaluated. Failing components should be replaced or updated. Maintenance should be up to date per existing Stormwater Management System Operation and Maintenance Schedule referenced by the Vollmer Associates, LLP., peer review letter dated March 20, 2002. The Operation and Maintenance (O&M) plan should be updated and transferred to the new operator, who will responsible and continue the operate and maintain the drainage system, as part of the approval conditions.
   The existing stormwater management system has been cleaned and sediment has been removed from the existing catch basins. The existing Vortechnics unit was also cleaned with a "Vac truck". The system has been operational and will show additional improvements with both the decrease in rates and volumes contributing to it, as well as the cleaning and flushing of the system.

C-5 – Utility Plan

1. Plan shows elimination of the fire service by cutting and capping existing fire main and no new fire service connection. Fire service is required. ***It is not required, see explanation above.***

C-6 – Landscape Development and Erosion Control Plan

1. Show wetland boundary and install erosion control.
   The resource area has been identified, as requested.
2. Replace catch basin inlet filter fabric with silt sack (Detail # 624). Existing catch basins on Union Street and Summer Street adjacent and downstream of the site should also be protected with erosion control silt sack.
   The notation was revised for the silt sack. Additional silt sacks have been added, as requested.

3. Verify erosion control detail numbers called out on the Construction Sequence. Construction entrance detail # should be 609. Detail #607 not found.
   The Construction exit detail number was corrected in the notes, as requested.
4. Call out the fifty feet length construction stone exit location on plan.
   The Construction exit was revised to show a label.
5. 5.4.3.1 – requires one tree with lower-level elements per 30' of street frontage. Existing non-conforming conditions, need Planning Board approval.
   The site is an existing non-conforming site. Additional trees have been added to the latest set. This is being reviewed with the Design Review Commission as well as the Planning Board.
6. 5.4.4 – Interior Landscaping in Parking Areas. One tree per eight spaces required. Planning Board determination required under 5.4.4.4.
   The site is an existing non-conforming site. Additional trees have been added to the latest set. This is being reviewed with the Design Review Commission as well as the Planning Board.

C-7 – Detail Sheet

1. Detail C-442 - Handicap Parking Stall Layout called for twenty feet parking stall length, Plan C-3 shows 17.5 feet, twenty feet length is required.
   No action required. The parking space sizes have been increased to match this.
2. Detail C-827 - Foot Base Mounted Light Pole detail called for twenty-eight feet pole. Lighting Proposal plan luminaire schedule were based on twenty feet pole. Detail note called for Metal Halide Vertical Burn Fixture, which should be replaced by LED lighting fixture per lighting plan cut sheet.
   The lighting detail has been revised to reflect the 20' pole height and the use of LED lights.
3. Detail C-118 – Utility Trench. Specify sewer trench and water trench to meet Chapter 326 Sewer and Chapter 334 Water requirements, respectively.
   The trench detail has been revised to include the Sewer and Water Chapter notations, as requested.

C-8 – Detail Sheet

1. Detail C-20-1 - Bioretention Basin, not recommended.
   These details were removed, as this has been eliminated from the design.

C-9 – Detail Sheet

1. Detail C-119 – Overflow Riprap Swale Section, not recommended.
   These details were removed, as this has been eliminated from the design.

Lighting Proposal

Photometric plan shows 3.0 foot-candle luminaire overspill onto the northeast abutter property and 1.1 foot-candle overspill onto the southeast abutter. Due to the proximity of the residential uses along the easterly property boundary and long operation hours of the Starbucks facility. GCG recommends adjusting the lighting locations to eliminate overspill onto the residential use properties.
The lighting plan has been revised, to improve the spillover onto neighboring properties.

Traffic Impact Study

GCG concurs that significant portion of the total trips generated by the proposed use are "pass-by" trips, which is already on the adjacent roadways. This report estimated the pass-by volume of 50% weekday AM and 55%

of weekday PM peak hour trips are attributed to pass-by trips. The estimate was based on similar Fast-food restaurant with drive-through window (Land Use Code (LUC) 934), instead of the actual LUC 937 (Coffee/Donut Shop with Drive-Through Window) use, which is not available in the institute of Transportation Engineers (ITE) data base. The assumption of the traffic trips generation from these two similar uses are deemed acceptable. However, the capacity analysis summary shows that the 2029 Build conditions improved the delay and volume to capacity (V/C) ratio from the 2029 No Build conditions from 43.1 seconds to 41.2 seconds and V/C ratio from 0.78 to 0.77, respectively. GCG recommends the applicant to clarify the theories behind this project improving the no build situations on Union Street at Summer Street intersection. Furthermore, Table 4 also indicated the Union Street (Route 135) at East Site Driveway's Level-of-Service (LOS) will be improved from the 2029 No Build - LOS 'D' (28.1 seconds delay) to 2029 Build – LOS 'C' (23.8 seconds delay). GCG recommends additional clarification for the study at this intersection.

The new ingress and egress trips through this site in the weekday morning peak hour are most critical. The existing retail use by Walgreen Pharmacy has an operation hour of 8AM – 9PM Monday through Saturday and 8AM to 7PM on Sunday which counted four ingress and three egress (7 total) vehicle trips during the 7:30 to 8:30 weekday morning peak. Three ingress and three egress trips were through Summer Street (north side driveway) and one ingress trip through Union Street eastbound at the east side driveway. (Figure 4, 2029 No Build Weekday Morning). The proposed use will generate seventy ingress and sixty egress turning trips through Summer Street and forty-seven ingress and 52 egress trips through Union Street. The analysis projected the east side driveway at Union Street egress left turn vehicle delay to be 24.5 seconds. But the Queue Summary report shown 95th Percentile Queue Length of 10 feet, which means two vehicles will be queueing at the east side egress, and it will block the by-pass lane from the parking lot. GCG recommends additional clarification.

The signalized intersection of West Union Street/Union Street (Route 135) at Summer Street is controlled by an actuated traffic signal. Actuated traffic signals prioritize movements based on demand. The project related traffic that was distributed to the eastbound movement at the signalized intersection of West Union Street/Union Street (Route 135) at Summer Street resulted in the actuated signal operations to accommodate the traffic volume increase at that approach, resulting in the Synchro model to reflect a slight improvement to the eastbound operations. Overall, the results indicate that the signalized intersection has capacity to accommodate the additional site related traffic and the proposed project is anticipated to have a minimal impact on the operations at the signalized intersection.

Summary

Proposed parking space dimensions do not meet standard parking space requirements. Interior traffic pattern needs clarification and modification, as necessary. Existing drainage facility conditions should be evaluated and maintained, Stormwater Management Operation and Maintenance plan should be updated, with responsibility transferred to the new user.
The proposed conditions have been revised and analyzed as well. See below under G3.

Please contact our office if you have any questions regarding these revisions.

Respectfully submitted,
J.K. Holmgren Engineering, Inc.

S. Scott Rogers
S. Scott Rogers, ASLA

John K. Holmgren
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