GCG ASSOCIATES, INC.

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September 19, 2022

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

RE: Site Plan Review & Special Permit, Proposed Coffee Shop for Starbucks. (Restaurant, Fast food with Drive-Through)
399 Union Street (Assessor's Map 20, Lot 9)

Dear Mr. Matchak:

GCG Associates, Inc. has reviewed the following information for the Site Plan Review at 399 Union Street in Ashland, MA.

Document References:

Zoning Board of Appeals Special Permit Application, prepared by the Law Office of Jerry C. Effren, dated July 13, 2022.

Planning Board Approval/Permit Application, prepared by the Law Office of Jerry C. Effren, dated August 02, 2022.

Traffic Impact Study & Appendix for Traffic Impact Study, prepared by McMahon Associates, Inc., dated July 2022.

Typical Starbucks Photograph not dated.

Plan References:

"Site Development Plans, Proposed Coffee Shop, 399 Union Street, Ashland, Middlesex County, Massachusetts for Starbucks", prepared by J.K. Holmgren Engineering, Inc. dated June 01, 2022, consists of ten sheets, (C-1, C-2, C-3, C-3A, C-4, C-5, C-6, C-7, C-8, C-9)

Lighting Proposal plan, one sheet, prepared by LSI, dated 6/29/2022.

Architectural plan set prepared by BKA Architects, dated 5/17/2022, consists of three sheets (A101, A400, and G002).

Site Rendering Plan, prepared by J.K. Holmgren Engineering, Inc. dated June 01, 2022, consists of one sheet, (C-R).

Proposed Queuing Plan, prepared by J.K. Holmgren Engineering, Inc. dated 03/14/2022, last revised 7-15-2022, consists of one sheet, (C-1).

This Site Plan application requires a Stormwater Management Permit (SMP) per Chapter 247-6 A, B, and C with Ashland Conservation Commission, and compliance with Chapter 343 Stormwater Management. Applicant should provide the total project disturbed area, and if the limit of work exceeded the 1-acre threshold, (project site area 55,324 s.f.) then a NPDES General Permit for Stormwater Discharges from Construction Activity filing would be required. Portion of the project site appears to be in the wetland resource area per MassMapper/MassGIS wetland layer and site record, proposed work is within the 100 feet wetland buffer zone. A Notice of Intent filing with the Ashland Conservation Commission is required.

Based upon our review of the above information, we offer the following comments with respect to compliance with Town of Ashland Zoning Bylaw (Chapter 282), Stormwater Management requirements (Chapters 247 & 343), and Massachusetts Stormwater Handbook (MSH). The numerical section of the regulations is referenced at the beginning of each comment unless it is a general comment.

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.

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.

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.
2. Show Zoning Districts boundary, including overlay district.
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.

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.
2. 9.4.4.2 - Show wetland resource boundary and associated 100-foot buffer zone.
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.
4. 5.4.2.1 – Show Zoning Districts boundary to determine Buffering requirements.
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.
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.
7. 5.2.1 & 5.2.6 – Loading area should be provided.
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.
9. Add additional wheelchair ramp in front of the 5-foot wide no parking strip between handicap accessible parking spaces.
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.
11. The parking schedule calculations were based on restaurant seating capacity, which should be reviewed by the Building Inspector.
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.
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.
14. Add an additional "Do Not Enter" and "No Right Turn" sign at the northerly landscape island next to the eleven spaces parking lot.
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.

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.
17. Call out all existing “Not A Cut-Thru” signs 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.
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.
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.
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.
22. Provide hours of operation, and exterior lighting operation hours.

C-3A – Fire Truck Turn Plan

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

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.
2. Add spot grade to show 2% maximum cross slope within the handicap parking spaces and access path.
3. Add proposed contour 94 between the proposed building’s southeast corner and east side driveway.
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.

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.

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.

C-6 – Landscape Development and Erosion Control Plan

1. Show wetland boundary and install erosion control.
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.
3. Verify erosion control detail numbers called out on the Construction Sequence. Construction entrance detail # should be 609. Detail #607 not found.
4. Call out the fifty feet length construction stone exit location on plan.
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.
6. 5.4.4 – Interior Landscaping in Parking Areas. One tree per eight spaces required. Planning Board determination required under 5.4.4.4.

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.
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.
3. Detail C-118 – Utility Trench. Specify sewer trench and water trench to meet Chapter 326 Sewer and Chapter 334 Water requirements, respectively.

C-8 – Detail Sheet

1. Detail C-20-1 - Bioretention Basin, not recommended.

C-9 – Detail Sheet

1. Detail C-119 – Overflow Riprap Swale Section, not recommended.

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.

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.

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.

If you have any questions regarding this matter, please contact our office.

Respectfully submitted,
GCG ASSOCIATES, INC.

Michael J. Carter

Michael J. Carter, P.E.
Project Manager