# **GCG ASSOCIATES, INC.**

# CIVIL ENGINEERING AND LAND SURVEYING 84 Main Street Wilmington, Massachusetts 01887

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May 24, 2016

Mr. Nathaniel Strosberg, Town Planner 101 Main Street Town of Ashland Ashland, MA 01721

RE: Site Plan Review and Special Permit and Variance 125 Union Street (May 5, 2016 Submittal)

#### Dear Mr. Strosberg:

GCG Associates, Inc. has reviewed the following information for Season's Corner Market, Site Improvement Plans, at 125 Union Street in Ashland, MA.

#### Documents:

- 1. Response letter prepared by Ayoub Engineering dated May 5, 2016.
- 2. Stormwater Operation and Maintenance Plan for Season's Corner Market dated May 03, 2015.
- 3. Stormwater report prepared by Ayoub Engineering, Inc. dated May 3, 2015.

#### Plan References:

"Season's Corner Market, Site Improvement Plans, 125 Union Street, Ashland" Prepared by: Ayoub Engineering, Inc., Dated: 03/10/16. Last revised 05/03/16, Sheet index as follows:

## Sheet No.

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The subject purpose for this Planning Board Application is a Site Plan Review as required by Ashland Zoning under Chapter 282-9.4, and Special Permit under Chapter 9.3. The application and plans are prepared and submitted by Ayoub Engineering, Inc. on behalf of Colbea Enterprises, LLC.

The applicant, Colbea Enterprises, LLC, seeks to demolish the existing gas station, car wash, canopy, fueling islands and underground storage tanks and rebuild a new 2,940 square feet retail convenience store, with accompanying self-service fuel sales and drive-thru window at 123 Union Street. The subject parcel consists of approximately 0.7 acres with frontage on Union Street and Homer Avenue. The property is zoned Industrial, with a floodplain overlay (at elevation 108.0 per FIRM Map number 25017C0514F, dated July 7, 2014) and does not fall within a Wellhead Protection Zone. There is no wetlands and watercourses resource area on site or immediately adjacent to the property.

This site re-development requires a Stormwater Management Permit (SMP) per Chapter 247. The proposed site work area is less than one acre and does not meet the NPDES General Permit for Stormwater Discharges from Construction Activity threshold. The proposed fuel sale is subject to Land Uses with Higher Potential Pollutant Loads (LUHPPL) and regulated by the NPDES Multi-Sector General Permit Program.

Based upon our review of the above information, we offer the following comments with respect to compliance with Town of Ashland Zoning Bylaws. The numerical section of the regulations is referenced at the beginning of each comment unless it is a general comment. GCG's latest comments show in **(bold)** text.

#### **GENERAL COMMENTS:**

#### Plan

#### Plan Sheet D-1 – Site Demolition Plan

- 1. The limit of Homer Avenue asphalt sidewalk to be removed should be specified on the plan. (Resolved.)
- 2. The 'existing concrete *curb* to be replaced' label along Union Street should be verified. (Resolved.)

#### Plan Sheet C-1 – Site Improvement Plan

1. The proposed Homer Avenue concrete sidewalk limit should be specified on the plan. (Resolved.)

- 2. Existing crosswalks and travel lanes/pavement marking for Union Street and Homer Avenue should be shown on the plan. (Resolved.)
- 3. Proposed handicap ramp locations should be specified on the plan, handicap ramp(s) should line up with the existing crosswalks on Union Street and Homer Avenue. Ramp(s) connects to the crosswalk(s) should be equipped with detectable warning panel. (Resolved.)
- 4. 282-3.1.2 the proposed Drive-Through use in Industrial Zoning District requires a Special Permit from the Zoning Board of Appeals (ZBA). The applicant has filed a Special Permit Application for the proposed use and Section 282-4.1.1. Building Setback. (ZBA hearing is scheduled for 5/24/16.)
- 5. 282-4.1.1 The proposed building and canopy setback do not meet the minimum front and sides yards requirements. The applicant has requested a Zoning Board of Appeals Special Permit for the building setback. (ZBA hearing is scheduled for 5/24/16.)
- 6. 282-5.1.2 Parking requirements calculations should include break down calculations for the leasable floor area. The proposed building consists of 2,940 square feet ground floor and 1,470 square feet basement, and the combined gross floor area is 4,410 square feet. The parking calculations were based on 2,080 square feet (47%) leasable floor area, based on retail business parking requirements of 1 spaces per 180 square feet of leasable area the required spaces should be 11.55 spaces. Calculations should be verified, clarification for the 47% leasable floor area should be provided. (The plan stated 2,940 square feet ground floor and 1,470 square feet basement, please justify the 2,080 square feet leasable area for the parking calculation. There is 2,330 square feet of wasted/un-leasable area.)
- 7. 282-5.1.3 the proposed southeasterly parking space is located within the 10 setback of Union Street Right-of-Way. **(Resolved.)**
- 8. 282-5.1.4.2 This section requires not more than one entrance and one from such lots per two hundred feet of street frontage or fraction thereof. There are exiting two entrances and exits located along the frontage on Union Street, and a single entrance exit on Homer Avenue. (Waiver is required.)
- 9. 282-5.1.4.5 Plan should show sufficient stacking space for the drive-thru facility. **(Resolved.)**
- 10. 282-5.1.6.3.b For parking areas of eight cars or more, there shall be not more than one entrance and one exit from such lots per two hundred feet street frontage thereof. The site existing has two entrances and exits along Union Street's 167.5 frontage. The plan proposed to maintain the existing curb cuts. (Waiver is required.)
- 11. 282-5.1.4.6 The plan calls for new Dunkin' Donuts Drive-Thru menu board, and is a fast food drive-thru facility, the plan should show the required minimum four spaces between the pick-up window and order point, at least four spaces provided in advance of the menu board, one space at the order point, and one soave at the menu board. The menu board(s) should match with the proposed Signage Plan SG-2. (Assuming the Order Point is located in the Menu Board, there are sufficient spaces for the queues. Order Point location should be called out on the Plan.)
- 12. 282-5.2 Loading area is required. Loading area should be provided for re-filling the underground fuel storage tanks. Parking spaces on top of the storage tanks are not recommended. (Proposed loading area is only 32 feet in length, 65 feet length is required. Plan should show direction of the loading vehicle path and post restriction for loading vehicle backing onto street. Plan should show loading area for the building uses.)
- 13. 282-5.3.7 The proposed signage exceed the maximum of signs allowed. This is an existing non-conforming situation. The applicant has requested a Zoning Board of

- Appeals variance relief, the applicant has proposed 10 signs with total area of 251.9 square feet (currently there are seven signs on site with total sign area of 129.7 square feet.) (**ZBA hearing is scheduled for 5/24/16.)**
- 14. 282-5.4.1.2 Landscape screening is required along front lot line (six feet minimum required), existing non-conforming condition. (A 3 feet width island including curbing on both sides has been proposed. Curbing material should be specified on the plan. There is no screening features proposed in the 2 feet wide green strip. Reducing the un-leasable building area should be considered. Waiver is required.)
- 15. 282-5.4.2.3 Verify the existing uses for the abutting property 14-423 (East side abutter), if the property is currently in residential uses, than a six feet wide landscape buffer is required. There is currently no landscape buffer at the southerly portion of the property line between Lot 14-423, this is an existing non-conforming situation. (A 6 feet high stockade fence has been proposed. Waiver is required.)
- 16. 282-5.4.3.31 Buffer area along Union Street street line is required. This is an existing non-conforming situation. However, the existing fuel pump traffic is parallel to the Union Street sidewalk and the proposed pump station is perpendicular (head on) to the sidewalk, protection to the sidewalk pedestrian should be provided. Landscape feature should be incorporated to minimize headlight glare onto Union Street. (A 3 feet width island buffer has been proposed. Waiver is required.)
- 17. 282-5.4.4 Parking areas containing eight or more spaces shall contain or bordered by at least one tree per eight spaces. Such trees shall be in any case not further than five feet from the parking cell. (Reducing the un-leasable building area should be considered. Waiver is required.)
- 18. 282-6.2.1 Driveway(s) sight distance in each travel direction should be provided, the driveways are existing and may not meet the 400 feet of visibility requirements. The westerly Union Street driveway is located within ten feet of a side lot line. The easterly Union Street driveway is located within fifty feet of the intersection of side lines of intersecting streets. The two curb openings occupied more than forty percent of the lot frontage on Union Street. The driveways and curb cuts are existing non-conforming situations. (Sight distance should be shown for the Homer Avenue access.)
- 19. 282-6.2.2 Plan should show the required off street queues space (two spaces per filling station) for each pump. The proposed pumps are located within forty feet of a street line. The existing pumps do not meet the forty feet setback. (There is insufficient space for traffic maneuvering the pumps, a traffic study is recommended.)
- 20. 282-8.1.4 The proposed basement is below the 180 floodplain elevation. The proposed first floor finish elevation is at elevation 180.15', 0.15 feet above the 100-year flood elevation. Basement should be flood proved and electrical and furnace system should be set above the flood elevation for safety. (Asphalt damp proofing will not prevent flood water entering from the first floor and create an electrical hazard during 100-year flood event.)
- 21. The eight parking spaces at the fuel dispensing island should be shown on the plan, parking aisle dimensions should be included on the plan. Aisle width for the three southeasterly parking spaces is approximately twenty feet. Plan should show and prove adequate maneuver spaces for parked vehicle. (There are no queues space provide on the plan.)

Plan Sheet C-2 – Site Grading Plan.

- 1. The proposed infiltration basin should equipped with an emergency overflow with erosion protection (rip-rap lined). Maintenance access path should be provide around the basin. (Resolved.)
- 2. There appears to be filling in the easterly portion of the proposed building with existing grade below 180. The fill volume should be included in the Cut and Fill calculations. (Resolved.)
- 3. The southerly pavement area (south of the canopy) is graded with surface runoff sheet flow to Union Street, this area should be graded to drain to an oil/grit separator for treatment. This area is next to the fuel tanks refill/loading area, any chemical spill within this area would drain directly to the street catch basin. (A 1,470 square feet area remain untreated and drains toward Union Street, new catch basin #4 should be connected to the oil/grit separator for treatment. GCG recommends re-grading the 1,470 square feet area and direct the surface runoff to catch basin #4.)
- 4. Catch Basin #1 connects directly to Catch Basin #2, MassDEP requires catch basins be designed as off line system in order to qualify for 25% TSS removal, a drainage manhole should be added to meet the requirements. (Resolved.)
- 5. The SC-740 Chamber System does not meet the two feet separation to the estimated seasonal high ground water. (Please verify the seasonal high water table separation to Chamber System #2, there is no soil test pit to verify the seasonal high water table for Chamber System #1.)
- 6. The two Chamber infiltration systems are Shallow UIC Class V Injection Wells (310 CMR 27.00), MassDEP registration is required. A 10' minimum setback to the property line is required for the Chambers and Oil Separator unit. (Reference Standard Design Guidelines for Shallow UIC Class V Injection Wells). (Resolved.)
- 7. Clean out/inspection port for each chamber system and isolator row should be specified on the plan. (Clean out should be provide in the main chamber systems for cleaning and maintenance purposes.)

## Plan Sheet C-3 – Site Utility Plan

- 1. Sewer service and grease trap inverts should be shown on the plan, grease trap outlet pipe diameter should be called out on the plan. (**Resolved.**)
- Drain pipe diameter, length and slope should be labelled on the plan. Inverts for the roof drain flared end section and the forebay inlet pipe from oil/grit separator should be specified on the plan. (6 inches diameter roof drain collection pipe slope should be called out, calculations showing the pipe has capacity to handle the roof runoff should be provided.)

#### Plan Sheet L-1 – Site Landscape Plan

1. 282-5.4.5 – The proposed landscape plan does not meet the screening and planting requirements. There is no landscape buffer along Union Street, Interior landscaping area is required in parking areas containing eight or more spaces. This is an existing non-conforming conditions. (There is no landscaping screening provided along Union Street, Waiver is required.)

#### Plan Sheet ER-1 – Soil Erosion and Sediment Control Plan

1. The minimum length for temporary gravel construction entrance exit should be fifty feet. (Resolved.)

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- 2. Silt sack should be specified to protect the on-site catch basins during construction. The double catch basin inlet for the northerly oil/grit separator should be shown on the plan with temporary silt sack protection. (Resolved.)
- 3. The existing catch basin located at the northwest corner of Homer Avenue and Union Street intersection should be protected with silt sack during construction, silt sack details and specification should be specified on the plan. (Resolved.)
- 4. Post Construction Phase Note#8, snow storage location is not specified in the plan. A separate long term Operation and Maintenance Plan should be required. (Please verify any conflicts between the snow storage area and the landscape plan.)

### Plan Sheet 1 – Lighting Plan

- 1. 282-8.6.10.3 The photometric lighting plan shows illumination spilled over onto Lot 14-423 (west side abutter), some illumination over the Homer Avenue and Union Street sidewalks are acceptable. (Illuminated spill remains onto Lot 14-423.)
- 2. 282-8.6.10.7 The proposed light fixture should be mounted no higher than fifteen feet. (Site Light detail, Plan sheet SD-1, specified 18' mounted height). **(Resolved.)**

# Plan Sheet SG-1 & SG-2 – Existing Signage Plan and Proposed Signage Plan, respectively

1. 282-8.5.3.7 - The existing and proposed number of signs exceeded the maximum number of signs regulated in this section. This is an existing non-conforming situation. The applicant has requested a Zoning Board of Appeals variance relief, the applicant has proposed 10 signs with total area of 251.9 square feet (currently there are seven signs on site with total sign area of 129.7 square feet.) (ZBA hearing is scheduled for 5/24/16.)

## Plan Sheet SD-1 – Site Detail Sheet

- 1. 282-8.6.10.7 The proposed Site Light detail exceeded the fifteen feet maximum mounting height. (Resolved.)
- 2. Handicap curb ramp detail with detectable warning panel in front of the existing crosswalk for Homer Avenue and Union Street sidewalk should be included on the plan. (Resolved.)
- 3. Roadway sidewalk detail with existing granite curbing for the Homer Avenue and Union Street sidewalk should be included on the plan. (A sidewalk detail with granite curb should be provided for the sidewalks within the Streets Right-of-Way, sidewalk should be in compliance with the ADA and Ashland Department of Public Works requirements.)

# Plan Sheet SD-3 – Site Detail Sheet

- 1. Oil/Grit Separator outlet pipe diameter should be specified on this detail drawing or called out on the utility plan. (Outlet pipe diameter for Oil/Grit Separator #2 should be specified.)
- 2. Oil/Grit Separator access ports should be equipped with manhole frame and cover and raised to the finish grade. (DMH frame and grate for Oil/Grit Separator #2 should be specified.)
- 3. There is no sewer manhole proposed on this site, drainage manhole detail should be added. (Resolved.)

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# Plan Sheet Q-1 – Drive Thru Queue Plan

- 1. (282-5.2.3 Loading vehicle travel direction should be provided to assure no backing onto street.)
- 2. (282-6.2.2 Queues space for gas pumps is required)
- 3. GCG recommends a traffic study to show sufficient maneuvering space for the site layout.

### **Stormwater Report**

Massachusetts Stormwater management Standards Analysis:

- 1. Standard 4 Proposed catch basins #1 and #2 are connected in line. MassDEP requires Deep Sump Catch Basin to be designed as off-line system for 25% TSS removal credit. (Resolved.)
- 2. Standard 7 The proposed work is considered redevelopment project, a Checklist for Redevelopment Projects should be submitted. (Volume 2 Chapter 3) (Not submitted.)
- 3. Standard 9 A long term Operation and Maintenance (O&M) plan is required, the plan should cover the maintenance of the catch basins, oil/grit separators, underground chamber infiltration system, sediment forebay, infiltration basin, spill prevention, street sweeping, and snow storage location. O&M sample log, cost estimate. O&M responsible party, and signature should be included in the plan. (Maintenance Log attachment is missing.)
- **4.** Standard 10 Illicit discharge should be addressed on the report or by the Applicant. **(Applicant should submit a no illicit discharge statement.)**
- 5. Proposed Watershed Plan the watershed area adjacent to the Union Street labelled drains to CB#1, it appears this area drains to Union Street. (Resolved.)
- 6. Cut and Fill Map there is fill area located at the easterly side of the proposed building should be included in the cut and fill calculations. (**Resolved.**)

#### HydroCAD Report:

- 1. The proposed SC-740 Chamber System does not meet the two feet separation to seasonal high water table requirements. (Please verify the separation for Chamber System #2, additional test pit should be provided for Chamber System #1 location.)
- 2. Coverage over the SC-740 Chamber system should be verify, a minimum of 18 inches plus the proposed pavement thickness is required. **(Resolved.)**
- 3. Both underground Chamber infiltration systems are considered Shallow UIC Class V Injection Well (310 CMR 27.00), please verify the system and oil/water separator setback requirements. (Minimum 10 feet separation to the property line is required, please verify other setback requirements.) (Resolved.)
- 4. Isolator row sizing calculations for the two Chamber systems should be included in the report. (Resolved.)
- 5. Sediment forebay sizing calculations should be submitted for review. (Resolved.)
- 6. Mounding calculations for the chamber systems are required. (Resolved.)
- 7. Oil/Grit Separator sizing calculations should be submitted for review. MassDEP requires the first chamber to provide the pool storage volume for the water quality volume (WQV).

- 8. Catch basin should be designed as off-line system to qualify for 25% TSS removal, catch basin to drainage manhole connection is recommended. (Resolved.)
- 9. Infiltration Basin and Chamber System should be designed to draw down within 72 hours, calculations support should be submitted. (**Resolved.**)
- 10. Infiltration basin should be equipped with an emergency spillway with erosion protection per Stomwater Management Handbook. (Spillway sizing calculations and erosion protection is required.)
- 11. Vehicle access path should be provided for the infiltration basin. (Please verify landscape plan conflicts with the rear access path and accessibility around the pond.)

# **CHAPTER 282 – ZONING**

Note: Zoning is reviewed with respect to sections 8.1 - Floodplain Overlay District (FPOD) and 9.4. - Site Plan Review

The site is located within a FPOD with the 100-year base flood elevation at 108.0 per FIRM Map number 25017C0514F, dated July 7, 2014

282-8.1.1	The proposed cut and fill calculations did not account for the easterly building fill area.
282-8.1.1	Hazard protections - the proposed basement is entirely below the flood elevation 180.0, and the proposed first floor elevation 180.15 is less than two inches above the 100-year flood elevation. The basement floor plan (Plan sheet A1.0) called out electrical panel on the basement wall. The proposed plan should show prevention for flood water entering the basement and safe guard the electrical system.
282-8.1.3	The proposed works is within the 100-year floodplain and requires filing with the Ashland Conservation Commission and MassDEP.
282-9.4.4	The location of the parking spaces at the gas station should be shown on the plan, the travel flow compatibility for the proposed parking spaces and loading area should be demonstrated.
282-9.4.11	A construction timetable should be included in the application.

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

Respectfully Submitted, GCG Associates

Michael I. Carter

Michael J. Carter, P.E. Project Manager