BRUCE SALUK & ASSOCIATES, INC

CIVIL ENGINEERING & LAND SURVEYING

July 25, 2022

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

RE: Site Plan Review and Special Permit—Mixed Use Development
501 Pond Street
BSA File #2874

Dear Mr. Matchak:

We have received the Peer Review comments from GCG Associates, Inc., dated June 22, 2022. Below are the Peer Review comments in bold; followed by our responses, in italics.

SITE PLAN

A – Cover Sheet

1. **No comments.**
   A response to this comment is not required.

B – Existing Conditions Preliminary (Sheet C0.1)

1. **Zoning districts boundary should be shown on the plan.**
   The zoning districts are now shown on the plan.

2. **Oxbow Associates letter dated 09-21-2022, stated that there is no wetland resource area within the property. However, there appears to be potential wetland resource area(s) in the adjacent properties along the Hopkinton Town Line, which may affect this development. Resource areas should be approved by the Ashland Conservation Commission. Any wetland buffer should be shown on the plan set as applicable.**
   The wetland buffer has been added to the Existing Conditions Plan (Sheet C0.1).

3. **Provide Converse Way right-of-way distance at the Meeting House Path and Pond Street intersections.**
   The Converse Way right-of-way distance has been added between the Meeting House Path and Pond Street intersections.

4. **Provide legal opinion for the applicant's right to include the private road, "Converse Way," in the development.**
   Refer to the legal opinion by Mark Kablack, Esq., under a separate cover.

C – Layout Plan (Sheet C1)

1. **8.8.6.3, 8.8.6.7.2, and 8.8.7.1.b. - Proposed 120 residential dwelling units are based on 8.8.6.3 Density - 90 units at one residential dwelling unit per 2,000 sf. of "buildable lot area" and additional 30 bonus units under 8.8.6.7.2 or 8.8.7.1.b. The Converse Way 22,286 sf. as "buildable lot area" should be clarified by legal opinion(s). Common Open Land area should be calculated and defined on the plan, if used for density bonus. Density Bonus units require SPGA approval.**

Refer to the legal opinion by Mark Kablack, Esq., for the use of the 22,286 SF as buildable lot area. The additional affordable density bonus was used, as allowed under Section 8.8.7.1.b.

2. **5.2.1 – Loading area for <u>non-residential</u> building or use is required. Loading area should comply with Sections 5.2.6 and 5.2.7. Unless approved by the SPGA through Section 5.2.8.**
   It is our understanding that a loading area is not required by the Planning Board.

3. **The proposed standard and compact parking stalls dimensions are 9' x 18' with 24' wide driving aisle and 8.5' x 16' with 22' wide driving aisle, respectively which do not meet the standard parking space dimensions requirements. Ashland Zoning By-laws currently do not have a compact parking space policy. Section 10 - Parking Space definition requires minimum 9' x 20' parking stall dimensions. Parallel parking space as shown scaled between 17' to 20' length by 8' wide, also not complying with the parking space definition. In addition, GCG recommends parallel parking space should have a minimum length of 22'.**
   Refer to the legal opinion by Mark Kablack, Esq., for the legal right to develop Converse Way parking spaces. The parallel parking spaces adjacent to the crosswalks have been changed to 9' x 22'; the 8.5' x 16' compact spaces at the south parking lot have been changed to 9' x 18' standard spaces; and the 22' wide parking aisle has been changed to a 24' width.

4. **Converse Way is a private way with rights granted to the abutting parcels. It appears to be the only obtainable frontage for the Ronald A. Golz property, Map 30 Lot 0001. The proposed parking layout and retaining wall is within the Converse Way right-of-way will affect Map 30 Lot 0001. The right to develop the proposed parking spaces in front of the Meeting House Path edge of pavement and within the Converse Way right-of-way should be clarified by legal opinion(s). Layout, building setback, and parking space setback to street (Converse Way) requirements should be determined by the legal interpretations. Legal process of discontinuance of Converse Way and owner should be determined.**
   Refer to the legal opinion by Mark Kablack, Esq., for the proposed development of Converse Way, as shown.

5. **5.4.4. (1) & (3). – Interior Landscaping in Parking Areas. Parking areas shall be broken into 25 space cells, landscape island and buffer shall have a minimum area of 150 sf. and minimum width of 8' and contain 1 tree per 100 sf.**
   Landscape islands are provided for every 25-parking space cell. Size of islands comply with the required dimensions stated above. Trees are shown on each island (refer to Landscape Plan).

6. **The proposed retaining walls (north and south) are up to 5' in height and should be equipped with safety fence.**
   Safety fence was already proposed (See Note #5b on Sheet C2 (Grading Plan)).

7. **Driveway aprons at sidewalk crossing should be constructed with ADA compliant continuous sidewalk to match the proposed 8' wide sidewalk along Pond Street.**
   ADA compliant sidewalks are proposed and match the proposed sidewalk along Pond Street.

8. **Handicap parking spaces should be equipped MUTCD compliant R7-8 and R7-8P signs and pavement marking.**
   The sign details for these spaces have been added to Sheet C7 (Details).

9. **EV charging spaces may be used by anyone and must not be reserved for persons with disabilities. Therefore, do not install markings or signage restricting the space to ADA accessibility only. Per "MassEVIP Direct Current Fast Charging (DCFC) Program Requirements" Accessibility section. The two HC/EV spaces would not qualify for the required six (6) handicap accessible spaces. Two additional HC spaces should be provided.**

The charging stations have been removed from the Handicap spaces.

10. **Stop sign and stop line at curb opening are recommended by the MDM traffic report.**
Stop signs and lines have been added to the Site Plan (see Sheet C1).

11. **Bicycle parking is recommended by the MDM Traffic Report.**
A bike rack has been added to the Site Plan (see Sheet C1).

D – Grading Plan (Sheet C2)

1. **Silt sacks should be installed at the existing downstream catch basins on Pond Street.**
Silt sacks have been added to the existing catch basins on Pond Street.

2. **Proposed curb openings require a MassDOT State Highway Access Permit. Additional drainage improvements may be required by MassDOT.**
MassDOT has been contacted and additional improvements will be provided, if needed.

3. **The 260 contour should be provided at the easterly parking area (in front of proposed building).**
The 260 contour is now shown on the Site Plan (Sheet C1).

4. **The 258 contour should be provided near WQI #3. Applicant may consider showing one foot contour to clarify the intent of the grading especially at the northerly parking lot.**
The 258 contour has been added to Sheet C2 (Grading Plan), and additional proposed spot grades have also been added to said plan.

5. **Even though the parking areas are relatively flat. GCG recommends calling out the handicap accessible parking space and access path should have a maximum 2% slope at any direction requirements.**
This has been achieved with the addition of note 8b on Sheet C2 (Grading Plan).

6. **The proposed walkway at the southeasterly building corner toward south has a 6.7% slope in front of a wheelchair ramp and should be addressed.**
The grading in that area has been revised.

7. **Verify the southerly access to the Ronald A Golz parcel (Map 30, Lot 0001), the spot grade as shown creates a 9+/- percent slope driveway connection. Provide transitional curve to avoid abrupt grade changes.**
The grading in that area has been modified.

8. **Provide top of curb and bottom of curb spot grades to indicate wheelchair ramp locations.**
All wheel chair curb cuts are indicated on the Plan. The reveal of the concrete and bituminous curbing is 0.5' and 0.4,' respectively. See Plan legend for locations of both curb types.

E – Drainage Plan (Sheet C3)

1. **MassDEP – Standard Design Guidelines for Shallow UIC Class V Injection Wells – proposed subsurface structures (chambers) system is classified as Shallow UIC Class V Injection Wells and should be registered to MassDEP prior to construction.**
Note #14 on Sheet C3 (Drainage Plan) was added requiring registration of the chamber system as a shallow UIC Class V injection Well.

2. **The proposed subsurface chambers system does not meet the minimum 10 feet separation to the existing and proposed water supply lines.**

The water main alignment has now been positioned to meet the 10 FT separation from the Chamber system.

3. **The proposed retaining wall should be equipped with impervious barrier to prevent infiltration chambers break out.**
   Note #12 was added on Sheet C3 (Grading Plan) requiring 30 Mil PVC membranes at the retaining walls.

4. **Determine off-site wetland resource areas. Infiltration chambers/UIC Class V injection well should be located with a minimum 50' setback.**
   All chamber systems are further than 50 FT from the wetlands.

5. **Label the number of Cultech FC-24 Feed Connector units per each system according to the HydroCAD calculations.**
   The number of Cultec feed connectors proposed between the chambers have been added to sheet C3 (Grading Plan).

F – Water, Sewer, and Utilities (Sheet C4)

1. **Provide minimum 10' horizontal separation between subsurface drainage chambers system to water supply line.**
   The watermain alignment has now been positioned to meet the 10 FT separation from the Chamber system.

2. **Label sewer pipe length and slope between SMH #2 and building sewer service.**
   The above requested information has been provided.

G – Truck Access Plan (Sheet C5)

1. **Show sight distances for both curb openings. MDM Traffic Memo stated that the sight distance at the Converse Way location meets the safety sight distance requirements. Analysis for the north access required.**
   No response to the above comment is required.

H – Details (Formerly Sheet C6 now C7)

1. **Verify the Standpipe Filter detail applicable to this project. This detail shows a discharge to a forebay.**
   This detail has been revised.

I – Details (Formerly Sheet C7 now sheet C8)

1. **The storm drain manhole should be equipped with 4,000 psi cement concrete inverts and table, similar to MassDOT construction standards.**
   This detail has been revised showing 4,000 psi concrete.

2. **Chapter 334-57, Trench Section for Water, note #2 - minimum pipe cover should be 5½ feet.**
   The watermain detail now shows 5.5' of cover.

3. **Chapter 326-14B requires a minimum depth of 24" select gravel borrow (no stones larger than 3") above the top of pipe. Placed in 12" layers and compacted by hand tamping.**
   The water detail now shows the above stated material specification.

4. **Chapter 326-14D requires 18" of bank gravel backfill for trench within roadways.**
   This depth requirement has been added to Sheet C8 (Details).

5. **Parking Dimensions–parking spaces should be 20' x 9'; Zoning - Section 10 – Definitions.**
The parking space size will be discussed with the Planning Board.

6. **Signage – should comply with MUTCD standards; use R7-8 and R7-8P signs.**
The R7-8 and R7-8P signs have been added to Sheet C1 (Site Plan) and details are shown on Sheet C7 (Details). All proposed signs have been specified to conform to MUTCD.

7. **Type 2 berm detail – hot mix asphalt curb/berm should be set on top of the binder course.**
The type 2 berm detail is now shown set on top of binder.

J – Details (Formerly Sheet C8 now C9)

1. **Hydrant and water system should comply with Chapter 334.**
Note #3 for the hydrant detail on Sheet C9 now states the above requirement.

K – Details (Formerly Sheet C9 now C10)

1. **Missing Stormceptor STC 450i details, drawing layer appeared to be turned off, majority of the details within the concrete structure are missing.**
The other layers have now been turned on.

L – Details (Formerly Sheet C10 now C11)

1. **Recharger (R150XLHD & R180HD) Chamber System - Plan View calls for Cultech HVLV FC-24 Feed Connector, where specified. The FC-24 chambers were utilized in the HydroCAD report for storage. Plan should show the number of FC-24 unit for each system.**
The number of Cultech HVLV FC-24 Feed Connectors are now included on Sheet C3 (Drainage Plan) and note #6 on Sheet C11 (Details) references the same.

Additional utility requirements - 326-11. A – Provide plans and profiles of the proposed sewer work.
A sewer plan and profile have been completed.

Architectural and Landscape Plan

1. **The landscape plan, shown on the Architectural plan set, and the Schematic Landscape Plan by Copley Wolff Design Group, were without plant and tree counts and species specifications and should be updated.**
Refer to Landscape Planting Plans (Sheets L-201 & L-202) by Copley Wolff Design Group, revised 6/23/22, where this information is shown.

Lighting Plan

1. **9.4.4.8. Lighting Plan (Photometric) is required. The lighting plan should include the pole and lighting fixture details, mounting height, and style. An outdated lighting plan by Grady Consulting, LLC, dated October 26, 2021, was filed. However, the parking layout has been changed and that plan shows proposed lighting on Ronald A Golz's property.**
Refer to Landscape Planting Plans (Sheet L-300) by Copley Wolff Design Group, revised 6/23/22 where the lighting information is shown.

TRAFFIC IMPACT ASSESSMENT (TIA) MEMORANDUM

Refer to responses to comments by MDM Transportation Consultants, Inc. (MDM), under a separate document.

STORMWATER MITIGATION REQUIREMENTS

1. **Pre-development/Existing Conditions HydroCAD calculations - Based on the soil logs, all seven (7) test pits found medium sand and coarse sand below the topsoil and/or fill layers. Furthermore, the post-development exfiltration rate for the infiltration chamber systems were based on sand soil, Hydrologic Soil Group (HSG) 'A'. GCG recommends using the HSG 'A' for both Pre-development and Post-development HydroCAD calculations.**
   The Soil Report in Appendix 'D' of the Stormwater Report includes the soil classification by Natural Resources Conservation Service (NRCS). The soil classification by NRCS is Udorthents, which are soils that have been excavated and / or deposited due to construction operations. The NRCS has no Hydrologic Soil Group (HSG) classification for this soil due to the construction related soil modifications. The Massachusetts Stormwater Handbook (Vol. 3, Chap. 1), Stage 1B Protocol for determining the HSG classification was followed. Several soil test pits were dug, and a soil evaluation and textural analysis was performed at each test hole (Ref. Chapter 7 – Hydrologic Soil Groups, Part 630 Hydrology – National Engineering Handbook, Natural Resources Conservation Service). The NRCS method uses the most restrictive soil horizon to determine the HSG. In this case, the most restrictive layer is the loam fill found throughout the site. When testing was done, the large stockpile of loam was, conservatively, not factored into the determination of the average 36-inch depth of the restrictive coterminous fill and topsoil layers. As stated in the Chapter 7 – Hydrologic Soil Groups referenced above, "The least transmissive layer can be any soil horizon that transmits water at a slower rate relative to those horizons above or below it." Following the Massachusetts Stormwater Handbook and NRCS procedures, the runoff characteristics of the site soils was determined as HSG 'B.' In summary, the HSG is determined by a restrictive layer, if it exists, and not the unrestricted layer.

2. **Chapters 247.4.C. & 343 - Stormwater Management requires no increases of stormwater runoff volume for the post-development in comparison with the pre-development conditions. A summary of the pre-development and post-development runoff volume comparison should be provided for all four study storm events. Based on the HydroCAD reports, there were increased post-development runoff volumes during the 10-year, 25-year, and 100-year storm events, net increase of 0.131 acre-feet (AF.), 0.145 AF., and 1.035 AF., respectively.**
   The interpretation in the above comment varies from the accepted practice used by the Town for runoff volume. Please see the attached e-mail.

3. **343-8.1.6. (a.) – Requires BMPs must be designed to remove 80% of the average annual post-development total suspended solid (TSS) and 40% for total phosphorus (TP), and 30% for total nitrogen (TN). The proposed subsurface structures (Chambers with WQI unit pre-treatments) do not have sufficient data for MassDEP to determine nutrients (TP, TN) removal rate. Therefore, the subsurface structures should be sized to capture the prescribed water quality volume (1-inch times the total impervious area for rapid soil site).**
   The prescribed 1-inch water quality volume was used.

4. **The proposed 13 inlets with catch basin open grate meet the required 44% TSS removal prior to discharge to infiltration structures with rapid exfiltration rate.**
   No Response is required to this comment.

5. **The applicant should provide a drainage study to demonstrate compliance with Chapter 247 and 343. Which requires project to meet current MSH requirements and control the post-development runoff volume, not to exceed the pre-development conditions. There was a predetermined discharge flow allowance to the drainage parcel Map 14 Lot 21 for detention. The applicant should provide calculations showing this project meeting the predetermined runoff allowance.**
   The stormwater report includes meets the 10 Stormwater Standards required in the MSH. For volume

of runoff, refer to response under item # 2, on page 7, and the attached e-mail.

6. **343-7.06.17 requires an Operation and Maintenance plan for this project.**
The Operation and Maintenance plan has been provided in the Storm Water Report, revised May 18, 2022. See Appendices B and C, for Long-Term and Construction Stage Operation and Maintenance Plans, respectively.

7. **Sub-catchment and pipe capacity analysis and WQU sizing calculations should be provided.**
The above information has been provided in the Stormwater Report, revised May 18, 2022, as follows:
   a) *Sub-catchments are shown on Sheet DA3 in the Stormwater Report.*
   b) *Pipe capacity analysis has been provided in Section E (Drainage Calculations)*
   c) *WQU sizing calculations have been provided in Appendix A of the Stormwater Report.*

8. **Operation and Maintenance (O & M) Plan, Long Term. – Water Quality Structures/Inlet, (WQI) Structures. There should be a total of 13 units, (9A and 9B) should be counted as two units. O&P plan referenced the WQI units be CDS units manufactured by Contech, but the plan detail and calculations were based on Stormceptor STC450i unit. Both Stormceptor and CDS units are currently under Contech Engineered Solutions, both units are rated with 50% TSS removal with proper maintenance by NJDEP. Since the inflow sub-catchment to each inlet unit is relatively small. The smaller CDS unit would meet the 50% TSS rating as well. However, O&M maintenance references should match with the WQI unit proposed on the plan set and calculations.**
The treatment unit name has been changed to Stormceptor STC 450i in the Operation & Maintenance Plan (Appendix B of the Stormwater Report). The number of treatment units has been changed to 13 in the Operation & Maintenance Plan.

9. **Catch basins maintenance should be merged with WQI units. Inspect and clean the inlet grates four times per year. WQI units sump should be inspected and cleaned per manufacturer's recommendation.**
Catch basin maintenance has been merged with the WQI's.

10. **Pavement should be swept at a minimum, twice per year, early spring and late fall.**
The pavement sweeping frequency has been increased to twice / year.

11. **Dog Park O & M should be specified.**
Dog Park O & M has been added to the Long-Term O & M Plan.

12. **Update inspection log accordingly.**
The Inspection Log has been updated.

Please let me know if there are any questions on the above responses to the Peer Review, or if additional information is required.

Sincerely,

Bruce Saluk

Bruce Saluk, PE, PLS

cc: Ben Stevens