GREEN INTERNATIONAL AFFILIATES, INC.
100 AMES POND DRIVE, SUITE 200 TEWKSBURY, MA 01876
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PROJECT NAME 234 TAYLOR ST PEER REVIEW
DATE 2/2/2024
UPDATED: 2/9/2024
PROJECT NO. 22015.1606

Peer Review Comment Form

NO.	SHEET NO.	SECTION	GREEN'S COMMENT	Applicant's RESPONSE	CONFIRMED BY	DATE
APPLICATION						
1	7	Special Permit Application Submission Requirements	Existing sewer, gas, and underground electric/telecom are not provided on the plans. The plans should show all existing utilities. Please confirm all existing utilities are included in the existing plan.	The layer management has been adjusted for existing conditions so that the utilities will print darker	SP	2/1/2024
2	7	Special Permit Application Submission Requirements	In the application the summary table is checked indicating all of the information has been provided. The summary table on the plans is missing gross floor area, density, trip generation and open space. Please provide this information or state why this has been omitted from the summary table.	The total building area was shown on the plans. We believe that the density and open space is more appropriate for the Open Space Development Special permit as there is no density or open space requirements for commercial projects	JWT	2/5/2024
3	8	Special Permit Application Submission Requirements	Exterior Lighting Plan is checked but not provided. Please clarify.	There are no proposed changes to the site lighting other than the relocation of light poles as necessary. The proposed addition will have lighting as requried by Building Code at egress doors. No security lighting is requried. Existing lighting is shown.	JWT	2/5/2024
SITE PLAN						
4	General Comment	§38-16.C.2.	The plan set does not have a legend. Please provide a legend.	The legend has been added to the Cover Sheet. (Section 38-16 is the Stormwater By-law which is not triggered with this site plan §38-14)	SP	2/1/2024
5	2 Existing Conditions and Demolition Plan		The facility with inspection ports to the east of the building is not labeled. Please clarify if this is a sewer facility.	The area has been identified as the existing septic area	SP	2/2/2024
6	2 Existing Conditions and Demolition Plan	§38-16.C.7.	Temporary stockpile location is not shown on the plans. Please provide.	Two locations for stock piles have been added to allow flexibility as the building on the site progresses. (Section 38-16 is the Stormwater By-law which is not triggered with this site plan §38-14)	SP	2/2/2024
7	2 Existing Conditions and Demolition Plan		Please clarify which erosion control barrier is being used. The plan calls for erosion control barrier but there are details shown for both silt fence and straw wattles. The callout in the plan should match the detail name for consistency. Please revise.	Either one is sufficient although a note has been added for the use of straw wattles adjacent to the new walkway in the front.	SP	2/2/2024
8	2 Existing Conditions and Demolition Plan	§38-16.C.5.	The plans should have a delineation and number of square feet of the land area to be disturbed. Please revise.	The number of sq.ft. disturbance was on a note within a box on sheet C-1, Existing Conditions and Demolition Plan. The outline of the area has been added to the Drainage Plans.	SP	2/2/2024
9	2 Existing Conditions and Demolition Plan		The existing parking layout is not shown. Please show for clarity.	The layer for existing pavement markings has been made darker on Sheet C-1.	SP	2/2/2024
10	2 Existing Conditions and Demolition Plan	§38-17.C.4.	There is an existing outfall on the south side of the existing building not shown on plans, but observed in field check. Please show all existing drainage outfalls and connections.	The outlets are from the air handlers and condensers and are not drainage discharges. (Section 38-17 is the Stormwater By-law which is not triggered with this site plan)	JWT	2/5/2024
11	2 Existing Conditions and Demolition Plan		There is an existing catch basin in the northwest corner of the site. This appears to have a large pipe entering it from the building then discharging to a catch basin within the property to the north of the site. The pipe size and inverts should be added to the plans. Is this pipe active? Is there an easement or an agreement between the two properties to allow the site to discharge to the neighboring site? How is this maintained?	The existing catchbasin receives roof drainage from the building in a 6" pipe from the building. The catchbasin was installed when the two properties were in common ownership and the parties are currently formalizing the connection with a drainage easement. This catchbasin will be upgraded to have a 4' sump and oil and grease trap hood.	JWT	2/5/2024
11a	2 Existing Conditions and Demolition Plan		Pipe inverts are still not shown. But, there is a callout for the contractor to verify existing invert. Therefore, the comment is closed.		JWT	2/5/2024
12	2 Existing Conditions and Demolition Plan/Site Plan		The silt fence appears to not wrap around the assumed septic system area. There are no proposed sewer lines shown on the plans. Please confirm there will be no new sewer lines and no construction disturbance in this area.	The plumbng from bathrooms in the new addition will require a septic tank which will connect to the existing distribution box at the leaching area installed early 2023. The limit of work was adjusted to accommodate this connection.	SP	2/2/2024
13	3 Layout and Material Plan		It is very difficult to tell what is new and what is existing. There are dark bold lines that appear to be existing and remain existing but are bold as if they are proposed or replaced. For example the water lines appear to be proposed based on line color and thickness but they are in the same location as existing. It is unclear if these are being replaced. Please revise the plans to clearly show all of the proposed work.	The layers have been adjusted to show the final layout and materials being proposed with this expansion. Existing features to remain have been grayed out to facilitate legibility.	SP	2/2/2024
14	3 Layout and Material Plan		The plan is missing callouts to locate where the details are being used. Please add callouts to the plan to identify where the details are being used such as bituminous conc. sidewalk, cape cod berm, concrete walk and pads, typical site signs etc..	Notes have been added to the layout plan for new construction items.	SP	2/2/2024
15	3 Layout and Material Plan	ADA	Grading elevations for the handicap spaces, curb cuts and ramps are not shown on the plans. An accessible route to the entrance should be provided for all handicap parking spaces. Please revise.	Two of the handicap spaces are existing- a third space has been added. It it the intent for the sidewalk to remain but be better defined at the junction with the parking area. A note regarding the maximum slope and cross slope have been added to the plan for the contractor to verify.	SP	2/2/2024

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16	3 Layout and Material Plan	ADA	The accessible parking spaces detail does not resemble the accessible parking shown on the plans. The plans do not have a ramp for the access aisle and the three accessible spaces are not next to each other. Please revise detail to be site specific.	The accessible parking detail is a generic detail providing the basic dimensional requirements for both the standard and van accessible spaces. There is no need for a site specific detail as the site plan provides the configuration.	JWT	2/5/2024
16a	3 Layout and Material Plan		Showing typicals is acceptable for permitting however, we recommend site specific or additional detail for final design to confirm ADA compliance.		JWT	2/5/2024
17	3 Layout and Material Plan	ADA	There are no details or callouts for detectable warning panels. Will the walkway leading to the parking lot have a detectable warning panel? Will the walkway crossing the driveway have detectable warning panels?	Tactile warning panels have been added to Sheet C-2, Layout and Materials Plan.	SP	2/2/2024
18	3 Layout and Material Plan		It appears there are two new dumpster locations across from each other. These are right next to new parking that is not protected. Has an autoturn analysis been done for the dump truck to confirm the turning movements will work and not intrude on the parking spaces next to the dumpsters? Will the same dump truck pick up both dumpsters?	There is one large existing dumpster near the loading area (layer adjusted) and one new one. There is 67' between the dumpsters which is sufficient for a a dump truck. As this is a private site, Sanctuary controls activity by the dumpsters avoid obstacles.	SP	2/2/2024
19	3 Layout and Material Plan		It appears there are two new dumpster locations but the detail appears to only be applicable to one of the two based on the shape. Will both dumpsters have enclosures?	It applies to the new dumpster.	SP	2/2/2024
20	3 Layout and Material Plan		The front parking lot has a dimension of 21' width for the roadway at the entrance. Two way traffic should have min of 24' width roadway. Also, the entrance is off-centered from the driving aisle between the parking. Please revise to have the entrance centered and provide a 24' min roadway width.	This is the existing condition and the intent is to retain the same configurations with the exception of the handicap space and walkway	JWT	2/5/2024
21	4 Site Plan		The proposed and existing contours labels are not clearly shown and the existing contours should be shown grey. It seems like proposed contour 349 does not tie into existing contour 349. Please clarify.	corrected.	JWT	2/5/2024
21a	4 Site Plan		It appears proposed contour 349 still does not tie into existing contour 349. This is a minor comment and can be updated in final design. Therefore, this comment is closed.		JWT	2/5/2024
22	4 Site Plan		Snow storage locations should be identified on the plans. Please revise.	Added along the shoulder of parking and grass areas. Added to the Layout Plan C-2	SP	2/2/2024
23	4 Site Plan		The new tree line is not shown on the site plan. Please provide.	Layer turned on.	JWT	2/5/2024
23a	4 Site Plan		The new tree line isn't shown on the plans. It is assumed that the new tree line extends to the limit of work line. Therefore, this comment is closed.		JWT	2/5/2024
24	4 Site Plan		There are four pipes connected to the OCS on one half of the structure and the OCS structure is only 4' inside diameter. Please confirm the size of the OCS and pipe angles to make sure it is constructable.	Detail added, and inlet separated from outlet	SP	2/2/2024
25	4 Site Plan	§38-17.C.2.	The site plan doesn't have a scale bar. Please provide scale bar.	?? Sheet C-1 upper left corner, Sheet C-2 below viewport, Sheet C-3 next to title box (Section 38-17 is the Stormwater By-law which is not triggered with this site plan §38-14)	SP	2/2/2024
26	4 Site Plan		The OCS is shown right next to the stormwater infiltration system, there should be a pipe shown connecting the two structures. Please revise.	Detail added, and inlet separated from outlet	JWT	2/5/2024
26a	4 Site Plan		OCS is still shown right next to the stormwater infiltration system and the pipe connection between two is still not shown. It is understood that there is a piped connection between the suburface system and the OCS based on the OCS descriptions and OCS detail. Therefore this comment is closed.		JWT	2/5/2024
27	4 Site Plan		Are the RD lines surrounding the proposed building underground or are they above ground (roof gutter)? If they are underground, consider providing cleanouts at the bends.	The final design of the building is not yet completed and the roof collection has not been determined. The drainage plans show the clear intent on all roof drainage being collected and directed to the infiltration area.	JWT	2/5/2024
28	4 Site Plan		The callout for the water quality unit mentions CB2. Is there a CB1? The invert mentions 12" IN indicating it is an inlet pipe but the plan indicates it is an outlet pipe. Please revise.	It is the second catchbasin on site. (the first is labelled as exsiting)	SP	2/2/2024

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29	4 Site Plan		The stormwater report mentions that the WQU has a grate but the detail doesn't note it. Please label grated inlet cover in the WQU detail.	Detail adjusted.	SP	2/2/2024
30	4 Site Plan		The OCS structure is the inlet and outlet for the stormwater infiltration system. Consider providing a separate structure for the inlet, preferably on the opposite side of the stormwater infiltration system.	Changed as recommended	SP	2/2/2024
31	4 Site Plan		The OCS detail should have a plan view detail to show the orientation of the weir with respect to the incoming and outgoing pipes. Please revise.	Standard detail added	JWT	2/5/2024
32	4 Site Plan		The OCS detail should have a detail for the weir. Are the 4"x6" and 4" x4" orifices side by side on the weir?	Standard detail added	JWT	2/5/2024
33	4 Site Plan		The inspection ports for the recharge area/cultec system are not labeled on the plan. Please include location of inspection ports for maintenance.	Changes as recommended	SP	2/2/2024
34	4 Site Plan		Hydrants are not provided. Please confirm this is acceptable with the Littleton Water and Fire department.	The Littleton Fire Department comment indicated that they had no issues at this point and that they will provide comment on the Building Permit with respect to fire code regulations as we submit more detailed plans for the addition.	JWT	2/5/2024
35	4 Site Plan		There are no water services shown for the proposed building. Please confirm there are no additional water services for the proposed building.	The water service is into the front of the building and the addtion will be served through the building	SP	2/2/2024
36	4 Site Plan		Please specify materials for drainage pipes connecting WQU to OCS and Roof leaders to OCS.	Added.	SP	2/2/2024
37	4 Site Plan		The cultec chamber system has a dimension for the chamber size and it is noted that it varies. Please clarify why the chamber varies, it appears only one chamber size is being used.	Details clarified and corrected	JWT	2/5/2024
37a			The cultec chamber system still has "varies" as a dimension for the chamber size and should be fixed for final design. The plans do have the Cultec R-280HD Chamber called out on the plans and the same unit is being used in HydroCAD. Therefore, it is understood that the chamber size does not vary and Cultec R-280HD Chamber will be used. This comment is closed.		JWT	2/5/2024
38	4 Site Plan		The cultec chamber system detail indicates 9 chambers by 5 rows but the plans indicate 4 x 12. Please revise amount of chambers and overall size to be consistent between the plans, detail, and HydroCAD calcs.	Details clarified and corrected	SP	2/2/2024
ZONING BYLAWS						
39		§173-18.C.	The proposed work requires major topographic changes and removal of existing trees . We defer to the board if there are any issues with the tree removal proposed.	Site is Zoned IA - Industrial wher up to 80% lot coverage is allowed and the Water Resourse Protection District where 50% impervious coverage is allowed. This site proposes 33%.	SP	2/2/2024
40		§173-18.D.	Adequate access to each structure for fire and service equipment shall be provided. Confirm this has been reviewed and coordinated with the Littleton Fire Department.	The Littleton Fire Department comment indicated that they had no issues at this point and that they will provide comment on the Building Permit with respect to fire code regulations as we submit more detailed plans for the addition.	JWT	2/5/2024

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41		§173-32.B.	The project narrative mentions there are total 44 parking spaces plus 30 leased parking spaces for 90 employees over two shifts. It is unclear how many employees work in the largest shift. So, the requirement of one space per 1.25 employees on the largest shift couldn't be verified. Also, the plan set mentions total proposed spaces is 67 which doesn't match with the narrative of 74 spaces. Please clarify.	The existing parking is 44 spaces on site and 30 offsite (77 total). The proposed parking is 67 spaces with 30 offsite (97). There are a max of 110employees so if all were on the same shift, the maximum number required by Zoning at 1.25 spaces per employee is 88.	SP	2/2/2024
Aquifer and Water Resource District Special Permit						
42		§ 173-63.E	Monitoring wells shall be constructed onsite; a monitoring schedule will be determined by the Planning Board in consultation with the Littleton Water Department. We recommend that the number and location of these monitoring wells be coordinated with the Town of Littleton Water Department.	Santuary is in discussion with LWD for the location of the monitoring wells.	SP	2/2/2024
STORMWATER REPORT						
43		§38-17.B	The stormwater shall be designed to meet Massachusetts Stormwater Management Standards. The report does not go through each standard stating how the standard has been met. Please explain how each standard has been met with supporting calculations.	A list of the Standards and the documentation has been added to the Drainage Analysis (Section 38-17 is the Stormwater By-law which is not triggered with this site plan §38-14)	SP	2/2/2024
44	Pre and Post Development Drainage Plan	§38-17.C.2.	The pre development drainage plan doesn't have a north arrow and scale bar. Please revise.	The view port was adjusted to show the north arrow (it is the same orientation as the Post Development drainage plan. (Section 38-17 is the Stormwater By-law which is not triggered with this site plan §38-14)	SP	2/2/2024
45	Peak Rate table		The peak rate table for existing conditions shows 1.62 cfs for 2-year storm, 3.74 for 10-year storm, 5.53 for 25-year storm and 8.57 cfs for 100-year storm but the HydroCAD model shows 1.81, 4.27, 5.95 and 8.63 cfs for subcatchment 5S for respective storms. Please clarify.	Chart has been updated (design initially used TP 40 but was updated to Altas 14 prior to submittal and Pre-development was missed)	SP	2/2/2024
46	Peak Rate table		The peak rate table only summarizes one discharge point. The HydroCAD calcs and watershed plans indicate 5 discharge points. All discharge points should be summarized in the table to confirm no increase in peak rates. Please provide.	Subcatchment 2/20 has been added to the chart to indicate that ther is no increase in the rate of runoff. For other subcatchments, no work is proposed and they are shown to address drainage for the total lot area.	SP	2/2/2024
47	Pre and Post Development Watershed Plan	§38-17.C.6.	The Applicant is required to add the existing and proposed ground surfaces with runoff coefficient for each on a site plan. Please revise.	Added. (Section 38-17 is the Stormwater By-law which is not triggered with this site plan §38-14)	SP	2/2/2024
48	Pre Development Watershed Plan		The predevelopment watershed plan appears to have proposed features. Please revise to show no proposed features in the predevelopment watershed plan.	The layer management has been adjusted for existing conditions	SP	2/2/2024
49			Water quality flow calculations for sizing for the CDS unit were not provided. Please provide back up calculations to confirm the model is correctly sized.	The CDS unit serves less than 0.05 acres of impervious so the smalled unit is being utilized. Sizing added.	JWT	2/9/2024
50	HydroCAD		The summary of areas for 2S: EXCB of the existing watershed plan is the same as 20:EXCB-1 of the proposed watershed plan in HydroCAD. But, there are improvements within this proposed watershed area such as an increase in impervious area along the north edge parking area, there is a new sidewalk along the eastern portion of the site, and the watershed boundaries are different due to the new proposed building. Please revise the areas in HydroCAD to align with what is being shown on the plans.	The watershed calculations have been reviiewed and updated.	SP	2/2/2024
51	HydroCAD		On recent past projects the Conservation Commission requested the use of NOAA Atlas 14 rainfall data. The Applicant states that NOAA TP-40 rainfall data is being used in the narrative. Even though this project is not subject to Conservation Commission review, we recommend using NOAA Atlas 14 rainfall data to provide more accurate results.	NOAA Atlas 14 was utilized (see HydroCAD Rainfall Events listing). Narrative corrected.	SP	2/2/2024
52	HydroCAD		The narrative states that the site has C soils, the recharge calculations are calculated based on C soils, and the HydroCAD land cover is using C soils. But, the HydroCAD model for the cultec system has an exfiltration rate for B soils. Please clarify.	The soil maps indicate C soils. The exfiltration rate was based on the Rawl's Rate for a Sandy Loam which is the description based on on-site testing by Soil Evaluators. The 0.52 in/hr is for loam soils which were not noted on this site. The in situ percolation rates observed in 2022 were 22 and 28 mpi, 1979 and 1994 rates varied from 2-20 mpi. the Soil maps HSG C were used because only the rear of the site was tested and soils near the front of the site were tighter.	SP	2/2/2024
53	HydroCAD		The plans call for a 4"x4" orifice at elevation 345.5 but the HydroCAD calcs indicate the invert is 345.4. Please revise to have consistent inverts.	corrected.	SP	2/2/2024
54	HydroCAD		The HydroCAD model has a 12" vertical orifice/grate routed to the 4"x6" orifice. It is unclear what this orifice is. The plans notes this as "chambers". Is this the pipe connection between the OCS and the chambers? If so, this pipe should not be modeled because it is not actually functioning the way it is modeled. Please clarify and revise.	The outlet structure has been modified in the HydroCAD	JWT	2/9/2024

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55	HydroCAD		Minimum Tc is not 6 minutes. Please revise minimum Tc to be 6 minutes.	Comment not clear. Minium TC of 6 minutes is set in HydroCAD and review of node summary does not show any subcatchment with less than 6 min.	SP	2/2/2024
O&M Plan				it is noted that the requirements for the O&M plan are from the Stormwater By-law §38-14 which is triggered by 1 Ac of alterations and this project does not meet the criterion (39.920 s.f.= 0.91 acres)		
56	O&M		Stormwater Management System Owner and Party Responsible for Maintenance note "Property Owner". The name of the property owner should be listed. Please revise.	revised	SP	2/2/2024
57	O&M	§38-18.B.3	The O&M plan shall include the signature(s) of the owner(s).	(Section 38-18 is the Stormwater By-law which is not triggered with this site plan §38-14)	SP	2/2/2024
58	O&M/LTPPP	§38-18.B.2	The O&M plan should include maintenance of pipes, outfalls, flared end sections, and the outlet control structure.	added. (Section 38-18 is the Stormwater By-law which is not triggered with this site plan §38-14)	SP	2/2/2024
59	O&M/LTPPP		Site specific BMP Maintenance Plan reference MA stormwater handbook and manufacturer's specifications. These maintenance documents should be provided in the O&M plan. The schedule of inspections and maintenance should be listed in the O&M plan. Please include maintenance requirements for stormwater recharge system and water quality unit. Please revise.	revised	SP	2/2/2024