



Peer Review Comment Form

NO.	SHEET NO.	SECTION	GREEN'S COMMENT	Applicant's RESPONSE	CONFIRMED BY	DATE
APPLICATION						
1	6	Special Permit Application Submission Requirements	Existing sewer, gas, and 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.			
2	6	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 why this has been omitted from the summary table.			
TRAFFIC IMPACT STUDY						
3			Traffic counts were conducted in March 2022 and compared to those collected in 2019. As the 2019 volumes were higher, they were used to provide a conservative analysis. This is consistent with the MassDOT directive that considers 2019 to be existing due to COVID-19 pandemic			
4			We concur with the seasonal adjustment rate and annual background growth rate used by the Applicant.			
5			Because the exact future land use is not known, the Applicant evaluated multiple land uses and used LUC 140, Manufacturing, which generated the highest number of trips. We concur that this approach is appropriate and provides the most conservative analysis.			
6			The minimum required stopping sight distance (SSD) is available at the intersection of Taylor Street and Monarch Drive. The Applicant should include desired Intersection Sight Distance (ISD) in the sight distance analysis.			
7			The crash data reviewed was obtained from the MassDOT. We recommend obtaining and reviewing crash records from the Town of Littleton Police Department in addition to the MassDOT crash data.			
8			Trip distribution percentages were estimated using 2011-2015 US Census data. We recommend using the most recently available US Census OnTheMap data for more updated distributions.			
9			As part of Transportation Demand Management (TDM) strategy, the Applicant should commit to implementing a traffic monitoring program following 12 months of full occupancy. This monitoring program should collect traffic count data at the site driveway and the study intersections included in the TIAS. The program should include a report comparing traffic volumes generated by the occupied facility to the ITE trip generation estimates.			
10			We concur that the proposed development is not expected to adversely impact traffic safety or operations within the study area.			
SITE PLAN						
11	2 Notes and Legend plan		The legend has lines types for different resource areas. The legend appears to have more linetypes than are shown on the plans and some the linetypes look very similar. For example the 75' buffer and 100' buffer for wetland has the same linetype in the legend. For clarity, please the label the resource lines on the plans.			
12	3 Existing Condition Plan		There is a cart path shown on the pre and post development drainage plans but is not shown on the existing or proposed site plans. The drainage and site plans should be consistent with features shown. Please revise plans accordingly.			
13	3 Existing Condition Plan/Utility Plan		The existing water line on the plans is not clear. The label pointing to the existing water line is not touching a line and the tapping sleeve and gate is not pointing to a line. Please clearly show the existing water line.			
14	4 Site Plan		Snow storage locations should be identified on the plans.			
15	5 Layout and Material Plan	ADA	It appears that only two of the 6 handicap parking spaces have a curb cut at the access aisle. An accessible route to the entrance should be provided for all handicap parking spaces.			
16	5 Layout and Material Plan		The layout and material plans do not indicate where standard duty vs heavy duty paving will be located. Please clarify.			
17	6 Grading Plan		It appears there is disturbance within the wetland resource areas. This will require a review from the Conservation Commission. Has this been reviewed by the Conservation Commission?			
18	6 Grading Plan	MA Stormwater Handbook Vol 2. Chp. 2.	Per the MA Stormwater Handbook, one soil sample for every 5,000 ft of basin area is recommended, with a minimum of three samples for each infiltration basin. Samples should be taken at the actual location of the proposed infiltration basin so that any localized soil conditions are detected. The test pits aren't shown on the grading plan where the stormwater bmps are located. Please confirm.			



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19	7 Drainage plan		The drainage plans has a detail for flared end rip rap inlet/outlet. This is not labeled on the plan. Please clarify where this is being used.			
20	7 Drainage plan	§38-17.C.2.	The drainage plan and landscape plan doesn't have a north arrow and scale bar. Please provide scale bar and north arrow.			
21	7 Drainage plan	MA Stormwater Handbook Vol 2. Chp. 2.	The bump out in the building on the east side appears to be at a similar elevation to the natural overflow nearby. Are there concerns with stormwater backing up to the building?			
22	7 Drainage plan	MA Stormwater Handbook Vol 2. Chp. 2.	The setback requirements of a infiltration basin to any building foundation including slab foundations without basements is a minimum of 10 feet down slope. Please confirm this has been met with Pond 300.			
23	7,11 Drainage plan, Detail Plan		The detail page has details for leaching trench, catch basin, drain manhole, and trench drain but these are not called out on the drainage plans. Please show and label the structures on drainage plan.			
24	7,11 Drainage plan, Detail Plan		The drainage plans call for CTB with solid cover and eliminator hood. The detail for the catch basin has a grate and no hood. Please revise detail to be consistent with plans.			
25	7,11 Drainage plan, Detail Plan		The drainage plans call for infiltration trench but there are no details for infiltration trench. Is the leaching trench the infiltration trench? Please use consistent naming.			
26	7,11 Drainage plan, Detail Plan		The drainage plans call for an outlet control structure but no detail is provided. Please provide a detail.			
27	7,11 Drainage plan, Detail Plan		The inspection ports for the recharge area/cultec system are not labeled. Please include inspection ports for maintenance.			
28	8 Utility Plan		The utility plan does not have a scale bar. Please add.			
29	8 Utility Plan		The plans call for installing the building within the LELWD electrical main easement. The plans call to relocate the electrical main around the building. Has this been coordinated with LELWD? Will there be a new easement following the new electrical route?			
30	8 Utility Plan		Plans call for relocating septic field for lot 1. Has this been coordinated with lot 1? Will there be a utility easement for maintenance for lot 1?			
31	8 Utility Plan		Hydrants are not provided on all sides of the building. Please confirm this is acceptable with the Littleton Water and Fire department.			
32	11 Detail Plan		The Vortsentry has been discontinued by Contech. Please revise detail to include a water quality structure that is available.			
33	11 Detail Plan		The Vortsentry details show all different sizes and models. This should be revised to show the exact model/size being proposed for the project.			



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34	11 Detail Plan		The detail for the recharge area notes that the chamber size varies. Please clarify.			
35	11 Detail Plan	H-20 Loading	The detail for the trench drain does not indicate loading requirement. Will the trench drain be sized for H-20 loading?			
36	11 Detail Plan		There is a detail for standard duty paving and heavy duty paving. They appear to be the same detail please clarify.			
37	12 Erosion and Sediment Plan		The silt fence appears to not wrap around the reserved septic areas. Please confirm there will be no construction disturbance in this area.			
38	12 Erosion and Sediment Plan	§38-17.C.5.	A delineation and number of square feet of the land area to be disturbed shall be added to the plans.			
ZONING BYLAWS						
39			The project narrative doesn't mention type of use for the proposed building and there is no secured tenant yet. We defer to the board whether the defining the use of building will be used as a condition of approval.			
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.			
41		§173-32.B.	Parking calculations do not include gross floor area or number of employees for the largest shift. Please clarify to determine if parking requirement have been met.			
Aquifer and Water Resource District Special Permit						
42		§ 173-63.A	Provision shall be made to protect against toxic or hazardous materials discharge or loss through corrosion, accidental damage, spillage or vandalism through such measures as provision for spill control in the vicinity of chemical or fuel delivery points, secure storage areas for toxic or hazardous materials and indoor storage provisions for corrodible or dissolvable materials. There is no current tenant but this requirement shall be met once a tenant is secured. It is recommended that this is a condition of approval.			
43		§ 173-63.C	Provisions shall be made to assure that any waste containing toxic or hazardous materials disposed on the site is within quantities specified in and in accordance with 310 CMR 30.353, regarding insignificant waste, or subsequent equivalent regulation(s) currently in effect. There is no current tenant but this requirement shall be met once a tenant is secured. It is recommended that this is a condition of approval.			
44		§ 173-63.D/§173-32.C.5	Aquifer District 173-63: Where dry wells or leaching basins are used, they shall be preceded by oil, grease and sediment traps. Parking Requirements 173-32: Parking areas for eight or more vehicles shall be drained through catch basins equipped with oil and grease traps and sediment traps unless the topography of the site prevents their use. The infiltration basins are being preceded by tree filters not oil and grease traps which are designed to infiltrate. Can the applicant provide information on how the tree filters will handle oil and grease?			
45		§ 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.			
STORMWATER REPORT						
46			The narrative notes the proposed site is comprised of Lots 2A and 2B containing ??? acres of land. The applicant should provide the area of land.			



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47		Pretreatment Requirements	The stormwater report did not provide any pretreatment calculations for the hydrodynamic separator. Please provide calculations based on the receiving area showing the hydrodynamic separator's TSS removal and the water quality flow rate to confirm the hydrodynamic separator model that is being proposed.			
48		Pretreatment Requirements	The stormwater report did not provide any pretreatment calculation for the tree filter. Please clarify how these were sized to confirm adequate pretreatment is provided.			
49		TSS	Tree filters are not in the MA SW Handbook, please provide supporting documentation that shows it can provide at least 44% TSS removal in an online system (tree filter to tree filter).			
50	SW Checklist	SW Checklist	SW Checklist needs to be signed and stamped by a professional engineer.			
51	SW Checklist	SW Checklist	No disturbance to any wetland resource areas is checked. It appears that there is work within the wetland resource buffers. Please clarify.			
52	SW Checklist	SW Checklist	The illicit discharge statement should be signed.			
53	Test Pits	Seasonal High Groundwater	Test pit information does not include existing ground elevation and test pits are not shown on the plans. Please provide information on how seasonal high groundwater of 224 was determined.			
54	Pre Development Drainage Plan	§38-17.C.2.	The pre development drainage plan doesn't have a north arrow and scale bar. Please revise.			
55	Pre Development Drainage Plan		The HydroCAD model for pre development shows the subcatchment 2 discharging to the wetland 1R. But Tc path indicates it discharges offsite to the east. Please clarify.			
56	Pre/Post Development Drainage Plan		What are green lines in the plan? Please clarify.			
57	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.			
58	Post-Develop/HydroCAD		HydroCAD shows subcatchment area 331 entering pond 300 but in the post development drainage plan there is no pond 300. Also, there are two 301 ponds in the post development drainage area plan. Please clarify.			
59	HydroCAD/Drainage Plan		How does Tree filter 332/TFB2-A outlet to the ditch? The plans do not show an outlet pipe and the detail doesn't show the 8" orifice modelled in HydroCAD.			
60	HydroCAD/Grading Plan		The limits of Pond 300 is not clear. Is this only accounting for area within the proposed grading? Or does this take into account the whole area east of the building?			
61	Plans/HydroCAD		Pond 301 and Pond 300 appear to overflow into an upland area. The overflow weirs for both ponds are set at elevation 228.50 but grading plan notes the area that the ponds discharge to has a natural overflow at 228.65. Please clarify.			
62	HydroCAD		Tree filter calculations indicate 40% voids within the media which seems high. Please provide supporting documentation that the media will have 40% voids.			
63	HydroCAD		Tree filter pond 321 has two outlets in HydroCAD but only one is shown on the plan. Please clarify.			



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64	HydroCAD		There is a subcatchment on the post development plan labeled at 100 and there is no 100 included in the HydroCAD calculations.			
65	HydroCAD/Drainage Plan		The infiltration trench 222 is set to elevation 227 in the plans but is set at elevation 228.50 in HydroCAD. Please clarify.			
66	HydroCAD		Why was the tree filters not modelled in HydroCAD for infiltration trench 222? Why were the infiltration trenches not modelled for the other tree filters?			
67	HydroCAD		On recent past projects the Conservation Commission requested the use of NOAA Atlas 14 rainfall data. The Applicant states that NOAA rainfall data is being used. But, the HydroCAD model appears to use NRCC rainfall data. Please clarify and provide the NOAA rainfall data.			
O&M Plan						
68	O&M/Stormwater Checklist	Stormwater Checklist/§38-18.B.3	Name of the stormwater management system owners and parties responsible for operation and maintenance is not provided in the O&M but is checked. There is no signature on the O&M Plan and the responsible parties are to be determined. We recommend that this is a condition of approval.			
69	O&M/Stormwater Checklist	Stormwater Checklist	Plan showing the location of all stormwater BMPs maintenance access areas is not provided in the O&M but is checked. How will infiltration basin 300 be maintained?			
70			O&M plan is missing maintenance of tree filters, hydrodynamic separators, subsurface infiltration chamber system, 24" culvert, trench drain, infiltration trench, outlet control structure, emergency gate valve, and CTB with solid cover and hood.			
71	O&M/Stormwater Checklist	Stormwater Checklist	O&M budget should be revised to include maintenance of all drainage systems.			
72			Septic systems appear to inaccessible. How will the septic systems be maintained?			
73	LTPPP	LTPPP	Long term pollution prevention plan should describe what needs to be done if there is a spill.			