

January 5, 2017

Mr. Tim Wales, PE
City Engineer
City of Saratoga Springs
474 Broadway, Saratoga Springs, New York 12866

*Re: City Designated Engineer Services for Technical Review of SWPPP and Site Plans – 1st Submittal
Henry Street Condominiums Site Plan
120/128 Henry Street
City of Saratoga Springs, Saratoga County, New York
City Project No. 17.080
Chazen Project No. 31704.18*

Dear Tim:

The Chazen Companies (Chazen) have completed our review of the following materials received:

- Site Plan application packages containing:
 - Application for Site Plan Review (Including PUD), unsigned and undated
 - Site Plan Review Submittal Checklist, prepared by The LA Group, dated December 5, 2017.
 - Complete Streets Checklist, dated April 20, 2017.
 - Cost Estimate prepared by The LA Group, dated December 7, 2017.
 - SEQRA Full Environmental Assessment Form – Part-1, signed by Robert Bucher, dated July 27, 2017
- New Water Service Connection Agreement & Application Form, unsigned, dated April 20, 2017
- Water & Sanitary Sewer Engineering Report prepared by The LA Group, dated December 11, 2017.
- Stormwater Pollution Prevention Plan, prepared by The LA Group, dated December 11, 2017.
- Site drawings entitled “Henry Street Condominiums - 120 Henry Street”, dated December 11, 2017, prepared by The LA Group (unless noted otherwise), consisting of the following 10 sheets:
 - Cover Sheet
 - Survey Map, entitled “Subdivision Plat – 120 Henry Street” prepared by ABD Engineers LLP, last revised April 11, 2017.
 - L-1 Site Demolition and Preparation Plan
 - L-2 Site Layout and Materials Plan
 - L-3 Site Grading Plan
 - L-4 Site Utility Plans

- L-5 Site Details
- L-6 Site Details
- L-7 Storm Details & Utility Profiles
- L-8 Utility Details

The following additional materials were not included in the original package but were sent to us separately by the Project Engineer:

- Sheet UT1.0 Utility Plan Garage Level, prepared by Design Logic Architects, PC and dated November 7, 2017.
- Sheet A1.0 First Floor Plan, prepared by Design Logic Architects, PC and dated November 7, 2017.
- Sheet A1.4 Penthouse Green Roof Plan, prepared by Design Logic Architects, PC and dated November 7, 2017.
- Sheet A1.5 Upper Roof Plan, prepared by Design Logic Architects, PC and dated November 7, 2017.
- Sheet GR1.0 Stormwater Green Roof Plan, prepared by Design Logic Architects, PC and dated November 7, 2017.

Following are our observations / comments:

General:

1. The City's project number of 17.080 should be added to all site plan application documents.

Site Plans:

2. Please provide a signed and sealed copy of the boundary, topographic and utility survey prepared by ABD Engineers LLP.
3. Please indicate the proposed height of the building and include this information in the site statistics table on the cover sheet to verify compliance with zoning requirements.
4. The SWPPP identifies that inlet protection measures will be employed for the project however none are shown on the site plans. Please add these to the plan to protect the public storm sewer system near the project site.
5. Parking calculations have not been provided; please submit. It appears as if the number of parking spaces may exceed the maximum allowed by the City Code – please confirm.
6. Please indicate proposed dimensions of the modified parking spaces on the north side of the Four Seasons lot and confirm that they will meet parking space dimensions required by City Code.
 - a. The parking spaces appear to be less than 18'.

- b. Also, the two-way drive is only 19' when 24' is required.
 - c. Please provide a maneuvering plan showing how the reduction in the drive width allows delivery trucks to access the existing loading dock.
7. It appears as if the sidewalk proposed along the Four Seasons property will prevent stormwater from flowing into the Henry Street storm system and may create a ponding situation in the parking lot. Please provide spot elevations and if required, catch basins should be provided to collect and convey the stormwater.
 8. The installation of the sidewalk restricts the drive lane serving the Four Season lot to 20' where 24' is required by City code. Please revise accordingly.
 9. The proposed relocated utility pole does not appear to provide adequate ADA clearance to the face of curb. Please confirm.
 10. The proposed street trees along the Four Seasons lot are located in the middle of the sidewalk – it is unclear if this is supposed to be a concrete island. If not, the trees will block pedestrian movement. Please clarify or revise accordingly.
 11. Existing signs will need to be relocated to accommodate pedestrian movement along the sidewalk – please clearly indicate those relocations and show required dimensions.
 12. Please show dimensions of the sidewalk and planter/bench areas along Henry Street and confirm there is adequate room for pedestrian movement.
 13. The southernmost curb cut proposed appears to be 12.5' wide and is too narrow for a commercial drive. Please revise accordingly.
 14. Two drainage swales are proposed to convey stormwater on the north and east sides of the proposed building, however, there are no means to safely dissipate the channelized flows into sheet flows where the swales discharge onto the public ROW or Four Seasons property. These locations may be prone to erosion, icing during the winter, and damage to pavement and sidewalks. Please consider inclusion of means to safely transition from channelized flow to sheet flow or collect with catch basins/yard drains.
 15. Please show and quantify the limits of disturbance on the site plans and ensure consistency with the FEA and SWPPP. The FEA indicates 0.47 acres of disturbance and the SWPPP indicates 0.85 acres of disturbance.
 16. It appears that construction easements will be necessary to accommodate grading on the neighboring property owned by McTygue (to the north). Please provide.
 17. Sheet UT1.0 shows six (6) stormwater discharges at the east corner of the building while Sheet L-3 shows only one 12" stormwater pipe connecting to the new stormwater manhole. Please

provide detailing to show how the six stormwater discharges combine at or prior to the new manhole and verify that the 12" pipe is adequate.

18. The following inconsistencies were noted between the provided details and City standards. Please revise.
 - a. The asphalt pavement section binder and gravel course depths do not match City standards.
 - b. The dimensions for concrete curbs do not match City standards, and the City standard is for precast concrete rather than cast-in-place.
 - c. The length of transition curb shown is less than the City standard.
 - d. Additional information must be added to the detectable warning strip detail for compliance with the City standard (dimensions, orientation, manufacturer, dome spacing, color, etc.).
 - e. The City standard for fire hydrants is to be 4'-6" minimum from the watermain rather than 3'-6" as shown.
 - f. Sanitary sewer manhole covers are to be marked "City of Saratoga Springs Sanitary Sewer" per City standards.
 - g. Sanitary sewer manholes are to have a 2'-6" clear opening per City standards.
19. Please provide a Lighting Illumination Plan.
20. ADA detectable warning strips are not shown where the sidewalks cross the two driveway entrances to the Four Seasons store. Please clarify.
21. Accessible parking space details must be included in the plans and submitted for review (striping, signage, parking and loading zone dimensions, etc.).
22. The ADA loading zones are not compliant with ADA guidelines in that they do not extend the full length of the parking space. Please revise accordingly.
23. Please provide a maneuvering plan for the parking garage for vehicles delivering packages or performing waste pickup.
24. Dimensions must be added to the parking plan shown on Sheet A1.0.

Environmental Assessment Form

25. Please clarify the following potential inconsistencies in the FEA:

- h. Item C.2.b has been answered “no” although the DEC EAF Mapper indicates that the project is within the Mohawk Valley Heritage Corridor and Saratoga Heritage Area.
- i. Item E.2.l has been answered “no” although the DEC EAF Mapper indicates that the project site is located over or immediately adjoining a principle aquifer.
- j. Item E.3.e has been answered “no” although the DEC EAF Mapper indicates that the project site is located in the East Side Historic District.
- k. The water and wastewater demands presented in the FEA are not consistent with the Engineer’s Report.
- l. The area of disturbance presented in the FEA is not consistent with the SWPPP.

Water Services Connection Agreement

26. The estimated water generation for the project must be added to the Water Services Connection Agreement and the agreement must be signed.

SWPPP

27. The applicant is requesting a waiver from providing water quality volume treatment for impervious surfaces other than the building roof (i.e. sidewalks). Given the location/configuration of the sidewalks we do not object to this waiver request. The City should decide if this is acceptable to them.
28. The applicant also requests a waiver from maintaining or reducing 10-year and 100-year storm peak rates of runoff.

The submitted HydroCAD model analyzes the green roof as a subcatchment rather than a storage area, so any storage in this system is not accounted for in the calculations.

The model should be updated to account for the storage afforded by the green roof system. If the green roof system does not adequately attenuate peak flows, a supplemental detention system such as an underground detention system could be constructed within the parking garage or elsewhere. Please revise the SWPPP accordingly.

29. Subcatchment 3 as shown on the post-development watershed delineation map has two distinct discharge locations: one onto the public ROW at the north side of the site and the other across the portion of the original property containing the Four Seasons store before discharging to the public storm sewer system in Henry Street. Subcatchment 3 should be broken into

distinct drainage areas that correspond with these discharge locations and the stormwater model should address the change in runoff rates onto the Four Seasons property and public ROW from predevelopment to post-development conditions.

30. The SWPPP indicates that the green roof will provide 2.16 gal/sf of stormwater retention. Documentation supporting this retention rate were omitted from the SWPPP. Please provide.
31. The SWPPP indicates that 1” of ponding will be provided on the green roof system. Additional details are necessary to indicate how the ponding depth will be maintained or indicate overflow provisions. Similarly, please provide details relationship of the roof drains to the ponding depth and roof surface.
32. Please submit information regarding the green roof soil media composition complying with the design guidance in the NYS Stormwater Management Design Manual (SMDM).
33. Please submit a planting plan for the green roof complying with the design guidance in the SMDM.
34. The maintenance recommendations included in the SWPPP are very limited, and specify only to reseed/replant as necessary and clean trash and debris from the surface as necessary. The SMDM contains more stringent maintenance recommendations, including weeding of invasive species, clearing of clogged roof drains, watering, fertilizing, and more. The maintenance requirements in the SWPPP should be expanded for consistency with the SMDM.
35. The SWPPP includes a screenshot from the Environmental Resources Mapper which indicates that the project area may contain rare plants/animals. The SWPPP contains a statement that the project will not impact any natural communities. Please provide documentation to support this conclusion by a qualified professional.
36. City Code Chapter 242 requires long-term maintenance of the stormwater management practices. The following notes need to be added to each SWPPP under *Post-Construction Operation and Maintenance of Stormwater Control Devices*:
 - m. “All post-construction stormwater management facilities must be inspected annually by a qualified professional, a report prepared and submitted to the City Engineer documenting the inspections as well as the maintenance activities that were completed during the prior year.”
 - n. “The City of Saratoga Springs shall approve a formal maintenance and inspection agreement in accordance with City Code Chapter 242 for stormwater management facilities to ensure the practices will be properly operated and maintained in accordance with the long-term operation and maintenance plans. This agreement shall be binding on all subsequent land owners and recorded in the office of the County Clerk as a deed restriction on the property.”

In order to expedite and simplify the review of revised materials we would appreciate if the next submission be accompanied by a response letter that describes the revised materials and how our comments were/were not integrated.

Sincerely,

A handwritten signature in black ink, appearing to read "James J. Connors". The signature is fluid and cursive, with the first name being the most prominent.

James J. Connors, P.E., Principal
Sr. Director, Engineering Services

cc: Jennifer Nechamen, Chazen
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