



September 21, 2018

Ref: 29466.00

Mr. Joseph LaCivita  
Town of Colonie Planning Department  
Public Operation Center  
347 Old Niskayuna Road  
Latham, NY 12110-2289

Re: The Summit at Forts Ferry

Dear Mr. LaCivita,

We have received comments from general reviewing departments each is listed below, along with our responses following the comments.

Included with this response letter are the following documents:

- 1 check for \$250 for stormwater review
- 7 copies of the revised site plans
- 7 copies of the building and garage renderings
- 3 copies of the SWPPP
- 3 copies of the Geotechnical Report
- 3 copies of the Engineers Report for the Water District Extension

### **Division of Latham Water**

#### **Extension Map**

*The existing parcels are only partially within the Latham Water District. As such, a water district extension map and description must be prepared for this project for our review. The design professional must contract Latham Water District before preparing the map and description to obtain copies of the existing district boundaries and to discuss the limits of the proposed district extension.*

**A water district extension map and description has been added to the Engineers Report.**

**Engineers | Scientists | Planners | Designers**

100 Great Oaks Boulevard  
Suite 118  
Albany, New York 12203  
P 518.389.3600  
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## **Extension Description**

*The extension description must be revised to reflect the comments listed above.*

**The district extension has been written to comply with the Latham Water District Guidelines.**

## **Engineer's Report**

1. *The engineer's report does not conform to the Latham Water District's Guidelines for Expansion of Water Distribution System. Please contact our office to obtain a copy of our guidelines and revise the report accordingly. Please note Appendix A in the current report includes copies of the Utility Plans. This is not required in our guidelines and they can be removed. If the design professional elects to keep them in the report, they must ensure that they are always kept up to date with all utility plan revisions.*

**The Engineers Report has been updated to comply with the Latham Water District Guidelines.**

2. *As indicated above, the parcels are only partially in the Latham Water District, so the Existing Site Description must be revised accordingly; and the proposed water district extension map and description must be included in the engineer's report.*

**A water district extension map and description has been added to the Engineers Report.**

3. *If the applicant is going to use water use data from an identical project, please use the minimum of a three-year average and include water use data and calculation of this average in the appendix. Please then refer to this as the average daily demand versus the design flow. In addition, please replace all discussions of peak flow with a maximum daily demand using a 2.0 multiplier.*

**Appendix B includes the water usage bills from a similar project and calculation determining the average daily use.**

## **Plans**

1. *The plans must be signed and stamped by a NYS licensed professional engineer.*

**The Site Plans are stamped by the professional engineer.**

2. *Latham Water District will require that the cut-in connection on Forts Ferry Road be revised to callout an eight-inch foster adapter between the branch of the tee and the eight-inch gate valve.*

**The cut-in connection has been revised to call for an 8" Foster Adapter between the tee and the**



**valve.**

- Latham Water District will require that the cut-in connection on Forts Ferry Road be revised to callout for a test pit to verify depth and OD of the main to ensure that the proper solid sleeves are ordered for this project.*

**A note has been added to the Utility Plan calling for a test pit to verify water main size and depth.**

- Latham Water District will require a test pit to verify the depth of the existing 16-inch cast iron main where the proposed sanitary sewer crosses between MH#1 and the existing manhole on Forts Ferry Road. If the sanitary sewer main will be below the existing 16-inch cast iron main, please revise the plans to callout that flowable fill will be required from the bottom of the sewer trench to the centerline of the existing 16-inch water main for a length of 10 feet centered on the crossing.*

**A note has been added to the Utility Plan calling for a test pit to verify water main size and depth, and to place flowable fill on the crossing.**

- The Utility Plan must be revised to call out all fittings including tees, bends, valves, hydrant valves, reducers, etc.*

**All water main fittings have been called out on the Utility Plan.**

- Latham Water District is concerned with the number of fire hydrants proposed for this project and will require a meeting with the design professional and Fire Services to discuss fire hydrant placement on this site prior to resubmission of plans.*

**Two hydrants were removed from the plans based on the request of Fire Services.**

- The Utility Plan must be revised to callout the size of the water service to all three of the buildings. If the services are ductile iron, please callout the appropriately sized anchor tee and show and callout a resilient wedge gate valve at the anchor tee. If the maintenance shed's water service is a copper line less than two-inches in diameter, please show the water service curb stop at the right-of-way line and label the sizes accordingly.*

**Water main and water services sizes have been added to the plans.**

- Latham Water District will require a minimum of 10 feet of horizontal separation between the proposed public water main and all private utilities such as gas and electric. As an example, please see the area near the maintenance shed.*

**10' of utility separation from the water main has been provided and noted on the plans.**



9. *The design professional must revise the Landscaping Plan to provide a minimum of 10 feet of horizontal separation from the proposed public water main and any deciduous trees.*

**10' of separation from the water main to any trees has been provided and noted on the plans.**

10. *A profile of all public water mains must be included in the plan set. Please note that the design professional must ensure a minimum of 18-inches of vertical separation at each storm and sanitary sewer crossing. If this is not feasible, Latham Water District will require that the storm and or sanitary sewer pipe be called out as a water pressure rated pipe material with a minimum of six-inches of vertical separation for maintenance purposes.*

**A profile of the proposed water mains and applicable notes have been added to the plans set.**

11. *Latham Water District does not like the routing of the eight-inch public water main under the proposed dumpster and dumpster enclosure. Please reroute the water main to provide a minimum of ten feet of horizontal separation or relocate the dumpster and dumpster enclosure accordingly.*

**The water main has been relocated to avoid the dumpster.**

12. *Latham Water District will require a Hold Harmless Agreement for all private utilities and structures within the Town of Colonie Utility Easement.*

**The owner will enter into a hold harmless agreement with the Town.**

13. *Latham Water District does not like the long-skewed crossings between the proposed public water main and the storm sewer system between CB3 and CB8 and between STMH#2 and STMH #3. Please review these crossings and redesign the storm sewer system to avoid the skewed crossings.*

**The skewed crossing in the rear has been redesigned to cross perpendicular to the water.**

14. *All proposed fire hydrant leads must be 10 feet in length or less. Please revise the plans accordingly.*

**All hydrant leads are now less than 10' long.**

15. *The existing water main at the end of Catalina Drive must be shown correctly (i.e. show the existing 8-inch gate valve and 8 x 6-inch reducer before the existing fire hydrant). Since the existing gate valve is almost 30 years old, Latham Water District will require that the contractor replace the existing eight-inch gate valve with an eight-inch resilient wedge gate valve and install new main from that point into the project site. Please callout an 8 x 8 x 6-inch anchor tee, hydrant valve and a new fire hydrant for the Catalina Drive cul-de-sac. Please add a note to turn over the existing fire hydrant, and eight-inch gate*



*valve to Latham Water District.*

**The existing water main termination has been shown as constructed on the existing condition plans and notes have been added to the Utility plans for the replacement of the hydrant and valve.**

### **Comments from Pure Waters (Sheet 2)**

1. *Show the existing public sewer mains accurately and in their entirety and label with pipe diameter, type, and flow direction (see DCC comments).*

**All existing public sewer mains have been shown and labeled in the Plan Set.**

2. *Label the existing public sewer manholes utilizing Pure Waters numbering convention (see DCC comments).*

**All existing public sewer manholes have been shown and labeled in the Plan Set.**

3. *Show the existing sewer services for all adjoining properties (see DCC comments).*

**All existing sewer services for adjoiners have been shown and labeled in the Plan Set.**

4. *Show and label the existing 16-inch diameter watermain in Forts Ferry Road in the area of the crossing of the proposed 6-inch sanitary sewer lateral.*

**All existing public water mains have been shown and labeled in the Plan Set.**

### **Comments from Pure Waters (Sheet 5)**

1. *Identify the location of manhole steps and barrel seams and provide field surveyed inverts for all manholes to which this project proposes to connect (see DCC comments).*

**A detail of each of the sewer manholes being collected by the surveyor and will be coordinated with proposed connections to avoid existing piping and access.**

2. *Provide a profile drawing of the proposed building sewers as per Pure Waters Requirements for Commercial Sewer Connection.*



**Sanitary sewer profiles have been added to the Site Plan set.**

3. *Label building sewers with pipe class (such as LF of six-inch PVC SDR26 at two percent) as per Pure Waters Requirements for Commercial Sewer Connection.*

**Sanitary sewer labels have been added to the Utility Plan.**

4. *Relocate proposed MH's 2, 3, 4, and 5 outside of the proposed utility easement as the sanitary is private and the water is public.*

**Sanitary sewer manholes 2, 3, 4 and 5 have been moved to the outer edge of the easement but are still mostly within the easement. The owner has been directed to remove as few trees as possible in the protected buffer area.**

5. *Revise the design of the pipe between MH5 and MH6 to Pure Waters minimum slope of two percent.*

**All sanitary sewer runs now meet the minimum 2 percent slope.**

6. *Consider a connection to MH4151 for the office building; an insertion manhole will not be approved.*

**The connection from the office building to the sewer in Forts Ferry has been revised to connect to MH4151.**

7. *Revise the three proposed building drain inverts for the apartment building to provide a minimum of four feet of pipe cover.*

**Four feet of cover is provided on all sewers.**

8. *Show and label all exterior cleanouts within five feet of the foundation wall for the building sewer drains.*

**Exterior cleanouts have been added to the Utility Plan.**

9. *Revise all building drains to exit perpendicular from the foundation wall.*

**All building drains exit perpendicular to the foundation.**

**Comments from Pure Waters (Sheet 8)**

1. *Revise the sewer manhole detail to reflect Pure Waters minimum requirements; contact David Saxe of our office for additional information or typical detail.*



**The standard Town details for sewers have been added to the plans.**

**Comments from Pure Waters (Sheet 9)**

1. *Provide sewer details pertinent to this project; contact David Saxe of our office for additional information or typical detail.*

**The standard Town details for sewers have been added to the plans.**

2. *Remove the interior drop sewer manhole detail as it is not applicable to this project.*

**The drop manhole has been removed from the plans.**

**Comments from Pure Waters (Sheet 14)**

1. *Locate all trees a minimum of ten feet away for any sanitary sewer (see DCC comments).*

**10' of separation from the sewer main to any trees has been provided.**

**Comments from Storm Water**

*A Stormwater Maintenance Agreement must be executed prior to the issuance of a C.O.*

**A Stormwater Maintenance Agreement will be executed prior to the issuance of a C.O**

*A preconstruction meeting with the site contractor, SWPPP inspector and the Stormwater Management Office must take place prior to any earth disturbance.*

**A preconstruction meeting with the site contractor, SWPPP inspector and the Stormwater Management Office will take place prior to any earth disturbance.**

*Submit a check for \$250 for the SWPPP review fee.*

**A check for \$250 for the SWPPP review fee included with this submission.**

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*Provide a detail and show a location for signage in conformance with Chapter 3 of the Design Manual.*

**Details and locations for signage in conformance with Chapter 3 of the Design Manual has been added to the plans.**

*Number the stormwater management areas on the grading and drainage plan sheet (4 of 15).*

**The stormwater management area designations have been added to the Grading & Drainage Plan to match the HydroCAD model.**

*Show the required storage volume elevations on the profile for the underground detention basin (sheet 3 of 15).*

**The required storage volume elevations have been added to the profile for the underground detention basin (sheet 3 of 15).**

*Show all existing storm sewer adjacent to the site. Including pipe diameter and material with direction of flow arrows.*

**All existing storm sewer adjacent to the site have been added to the plans. Including pipe diameter and material with direction of flow arrows.**

*Show the test pit locations and information on the plans.*

**The test pit locations and information are now shown on the plans.**

*Provide an NOI for review and approval.*

**The NOI has been provided in the revised SWPPP.**

*Put a note on the plans that the stormwater management areas will not be used for snow storage. Remove all notes on the plans that call out that the stormwater management areas will be used for snow storage.*

**Plan notes have been revised to note that stormwater management areas cannot be used for snow storage.**





*Show all adjacent lot addresses on the plans with property owners labeled.*

**All adjacent lot addresses are now shown on the plans with property owners labeled.**

*Investigate the possibility of discharging the stormwater to the Southeast corner of this site.*

**Additional topography was collected and added to the plans showing that discharge is possible to the southeast corner of the project that would feed to the adjacent wetland complex. Plans and SWPPP have been revised to reflect this change.**

*Show the required pond buffer on the plans.*

**A 25' vegetated pond buffer cannot be provided around the pocket pond. The area around the pond is mostly curbed preventing direct sheet flow into the pond, a series of catch basins and piping ensure that the runoff flows directly to the forebay for pretreatment. Where the area around the pond is not curbed (mainly around the forebay) a gravel diaphragm has been added for additional pretreatment. As designed no runoff enters the pocket pond forebay without pretreatment**

*Show a plan and profile for each stormwater management area on the Site Detail sheets.*

**A plan and profile for each stormwater management area is included on the Site Detail sheets.**

*The plan view for the pocket pond does not show the required forebay (sheet 4 of 15) and the profile (sheet 11 of 15) does. Please clarify.*

**The forebay is now shown on the plans view.**

*Label bio-retention area 2JP as such on the Grading and Drainage plan (sheet 4 of 15).*

**The stormwater management area designations have been added to the Grading & Drainage Plan to match the HydroCAD model.**

*Call out the aquatic bench in the pocket pond on the plan view*

**The aquatic bench in the pocket pond is now labeled on the plan view.**



*Provide pond drains for both the forebay and micro-pool.*

**The pocket pond will require pumping to dewater as the pond design requires that it be in ground water.**

*Clearly show how stormwater will be directed into and out of all the proposed stormwater planters.*

**Gutters and stormwater planter piping locations and details have been added to the plan set.**

*Provide a detail with elevations for the proposed stormwater planters.*

**A detail with elevations for the proposed stormwater planters has been added to the plans.**

*The inlet pipes to the pocket pond are shown at elevation 317.00' (sheet 12 of 15) and the permanent pool elevation is shown at elevation 318.00' (sheet 11 of 15). Is the intent to have the inlet pipes permanently one foot under water?*

**The permanent pool elevation has been lowered so that inlet pipes now discharge at the permanent pool elevation as recommended in the NYSSWMDM.**

*The modeling for the pocket pond and the profile (sheet 11 of 15) call out an emergency overflow weir at elevation 322.00'. No weir is shown on the plan view. Please clarify.*

**The emergency overflow has been removed from the HydroCAD model.**

*Provide a phasing plan clearly showing how no more than five acres will be disturbed at one time.*

**A Phasing Plan has been added to the plan set.**

*Provide written copies of all applicable approvals including ACOE and SHPO.*

**The ACOE jurisdictional determination is included in Appendix of the SWPPP, a copy of the SHPO "no effect" letter will be provided once received.**

*Provide the DEC RRv work sheets clearly showing how that volume will be met.*

**RRv worksheets are provided and summarized in the SWPPP narrative.**



*The Operations and Maintenance Plan in the SWPPP should include the long-term maintenance requirements for all chosen practices including the pocket pond and the stormwater planters.*

**The Operations & Maintenance Plan includes the maintenance for the pocket pond and stormwater planters.**

*It does not appear that pretreatment is provided for any of the bio-retention areas as required by section 6.4.3 of the Design Manual.*

**Pretreatment has been added to the bio-retention areas using gravel diaphragms.**

*Provide a landscaping plan for the aquatic bench in the pocket pond and the bio- retention areas.*

**Landscaping for the aquatic bench in the pocket pond and the bio- retention areas have been added to the plans.**

*Show the proposed underdrain in the bio-retention areas on the planview.*

**The proposed underdrain in the bio-retention areas is now shown on the planview.**

*The modeling for bio-retention area 2HP uses a primary routing as an 18" round pipe with an invert elevation of 320.00'. The plans show a 12" pipe with an invert elevation of 320.65'. Please clarify.*

**The bio-retention areas have been remodeled to show the exfiltration through the bio-media to the underdrains and is now shown on the plans as modelled.**

*The modeling for bio-retention area 2JP uses a 12" invert elevation of 318.50' and the plans show an invert elevation of 318.80'. Please clarify.*

**The bio-retention areas have been remodeled to show the exfiltration through the bio-media to the underdrains and is now shown on the plans as modelled.**

*The modeling for bio-retention area 2DP uses an 18" round culvert for routing device #1 and the plans show a 12" pipe. Please clarify.*

**The bio-retention areas have been remodeled to show the exfiltration through the bio-media to the underdrains and is now shown on the plans as modelled.**

*Show the required storage volume elevations on the profile for the underground detention system.*



**The required storage volume elevations are shown on the profile for the underground detention system.**

*The second invert into STMH#3 should call out that it comes from OCS#2 not STMH#4.*

**The HydroCAD model and plans have been adjusted and now agree.**

*The invert elevations out of STMH#3 do not match between sheet 4 of 15 and sheet 13 of 15. Please clarify.*

**The HydroCAD model and plans have been adjusted and now agree.**

*The detail for the plan view (sheet 15 of 15) for the underground detention basin should accurately show the pipe configuration.*

**The pipe configuration for the underground detention is shown in and called out the plan view of the detail.**

*Clearly show how stormwater will be directed into and out of the stormwater planters.*

**A note requiring gutters and downspouts discharging to the stormwater planter has been added to the plans.**

**Other changes made to the Site Plans and Reports based on conversations with the TDE are as follows:**

- 1. Additional landscaping has been added between the office building's parking lot and Forts Ferry Road and behind the garages.*
- 2. An internal sidewalk connection has been provided within the site from the apartment building to the sidewalk along Forts Ferry Road.*
- 3. Detailed grading information has been added to the plans.*
- 4. Test pits and infiltration test locations have been added to the plans.*
- 5. Sight distance and stopping sight distance dimensions have been added to the plans.*



6. *A plan/profile of the proposed watermain and sanitary sewer has been added to the plan set, as well as labeling all proposed water bends and fittings.*
7. *The proposed watermain below the office dumpster enclosure has been relocated outside the limits of the concrete pad.*
8. *The proposed hydrant at the southwest corner of the apartment building has been removed per fire services.*
9. *The size and material of the proposed water services and force main have been depicted on the plans.*
10. *The elevation of the proposed sanitary sewer connections within Forts Ferry Road and Catalina Drive have been indicated on the plan.*
11. *A site lighting/photometric plan has been provided for review. Details of the proposed light fixtures and mounting heights has been provided.*
12. *Details of the proposed dumpster enclosures has been provided.*
13. *An Engineer's Report for the proposed public watermain has been provided in standard Latham Water District format.*
14. *The Phasing Plan depicts 8.1 acres of disturbance, and describes how the construction will limit disturbances to less than 5 acres at one time.*
15. *Rip rap outlet protection has been provided at the outlet of the stormwater management system.*
16. *The Phasing Plan depicts the location and sizing of temporary sediment traps to be utilized during construction.*
17. *Detailed planting plans of the proposed stormwater management features have been provided.*
18. *Details of the proposed planters are provided.*

We look forward to meeting with the Planning Board in the near future. In the meantime, please let us know if you have any questions or need any additional information.

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Sincerely,

VHB Engineering, Surveying and Landscape Architecture and Geology, P.C.

A handwritten signature in blue ink that reads "Patrick Mitchell".

Patrick Mitchell  
Project Manager  
pmitchell@vhb.com