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August 1<sup>st</sup>, 2019

Catherine Trotter, Town of Fraser Planner  
153 Fraser Ave.  
Fraser, CO. 80442

[www.jvajva.com](http://www.jvajva.com)

RE: Riverview Townhomes – Preliminary Plat Submittal Review Response  
JVA Job No. 3087c

Dear Catherine:

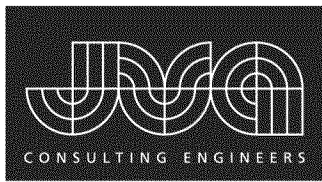
JVA, Inc. has reviewed the comments provided by Bowman Engineering dated Jul. 03, 2019 and the design team has taken all of the comments into account as we prepare the latest revision of our plans. Please see our responses to the comments below.

### **General**

1. As discussed in meetings with town staff we will prepare a variance request to waive the detention requirement.
2. See Landscaping plans and lighting plans.
3. See landscaping plan for path locations. The path layout and surfacing is currently in development but will meet the requirements of the Section 14-3-8.
4. Access will be blocked by gate or chain and bollard, we are working with GCFPD #1 to find an agreeable solution.
5. Noted, the design team is in negotiations currently with Grand County No. 1.
6. Trail connections are being considered by the design team and will be coordinated with the Town. An access point on the existing commercial property to the west of the site might be more feasible.

### **Construction Plans**

7. Plans are at a preliminary Plat level to demonstrate compliance with Town of Fraser Standards. These items will be added for Final Plat submittal.
  - e. Shallow utilities will be designed and installed by utility providers. Approximate locations will be shown in future submittals once information is available.
  - g. No concrete pans or ribbon curbs are currently proposed for private shared drive. Design team will add concrete pan on north/east side of road to convey drainage more easily to pond.
8. See below
  - a. Water main will be changed to 8".
  - b. JVA will look at revising drawings to make lines more visible. JVA CAD standards and lineweights are based on US National CAD Standard.
  - c. The site sits on a fill platform of free draining soils from previous projects in the area. The geotechnical investigations was done during a period of high groundwater and checked several days later, in the borehole closest to the pond area (TH-3) Groundwater was encountered lower than the bottom of pond elevation.
  - d. Noted
  - e. Noted
  - f. JVA will look at revising drawings to make more legible.



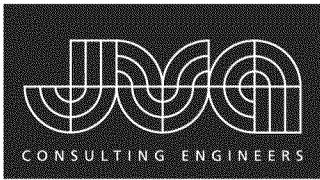
- g. Pavement of new drive will drain to the water quality pond, new paved parking spots to west of the building will be re-graded to flow north to eventual outfall in existing water quality pond.
- h. Detail will be provided in future submittals. Design team is currently reviewing options including drainage chases and small pipe crossings.
- i. A fire hydrant is located near the termination of the new water main, and a stub is provided for a future connection similar to the existing condition.
- j. Cleanout location will be revised.
- k. Design team is coordinating with GCFPD #1 to ensure the emergency access will meet their requirements.
- l. Inverts will be revised.
- m. As discussed in meetings with town staff we will prepare a variance request to match the existing easement width of 30'.
- n. Sanitary sewer mains and services will be insulated per Town of Fraser Standards where required. A minimum burial depth of 5' will be maintained and grades revised if required.
- o. Units are not sprinklered.
- p. The retaining wall will be designed by a licensed structural engineer and a full design will be provided in future submittals. Currently the design team is pursuing large block wall type construction.
- q. JVA will verify 10' separation is maintained between water and sewer mains for future submittals.
- r. See sheet C3.0 for where gravel emergency access drive begins. All parking is asphalt paved.
- s. One van accessible ADA parking space will be added to the parking layout.
- t. Swale capacities are adequate and will be provided in future drainage report submittals.
- u. All building FFE's are a minimum 20" above grade, and swales will carry surface drainage away from the units as required in the geotechnical report. JVA will verify geotechnical requirements have been met for grades around all buildings.
- v. Noted, further detail will be provided in future submittals.
- w. Noted, further detail will be provided in future submittals.

### **Preliminary Plat**

- 9. Minimum snow storage requirement will be satisfied and depicted properly on future Plat submittals.
- 10. Future snow storage calculations shall take hard surface walks into account

### **Drainage Report**

- 11. Drainage report is at a preliminary Plat level to demonstrate compliance with Town of Fraser. Major and Minor Storm flows are shown on Figure 1 and 2, further detailed calculations will be provided in future submittals.
- 12. Basin OS1 does not include the wetland mitigation/detention areas of Grand Park that flow via culverts under the Fraser river trail. Those flows will be allowed to pass through the system following existing drainage patterns. Further detail will be added in future drainage report submittals.
- 13. Proposed walks will be added to impervious calculations. Pervious surfaces are being evaluated for use for walks.
- 14. Swale capacity is adequate in all areas, detailed calculations will be added to future drainage report submittals.



Thank you for your comments and please feel free to contact us with any questions.

Sincerely,  
JVA, INCORPORATED

By: *Sam Redfield*  
Sam Redfield, P.E.  
Project Engineer