

January 11, 2016

Mr. Tim Cain, Planner  
Town of New Castle  
P.O. Box 90  
New Castle, CO 81647

**RE: Final Plan Review  
Riverside RV Park**

Dear Tim,

The purpose of this letter is to provide our review comments, concerns and/or questions regarding our review of the final site plan and construction drawings for the Riverside RV Park located on CR 335 just east of I-70 Exit 105 and/or on Lot 1 of Riverside Park Subdivision. In order to conduct this review, we have been provided the following information:

1. A four (4) sheet set of drawings prepared by Gamba and Associates, Inc. dated December 18, 2015.
2. A December 18, 2015 correspondence from Gamba and Associates to Rob Chatmas regarding EQR calculations and Cost Estimates.
3. A December 16, 2015 Stormwater and Construction Management Plan for the project as prepared by Gamba and Associates.

Relative to our review of the fore stated information, please note the following questions, concerns and comments relative to the information submitted as well as in concert with our prior correspondence regarding review of this project for preliminary plan. Note that these comments, questions and concerns are given from the context of having a set of plans that can be viewed to provide verification that the contractor's work, means, methods and final product are in compliance with the construction documents ultimately approved for the improvements.

#### **PEDESTRIAN TRAIL COMMENTS**

1. For the trail crossing of the emergency access, should not there be an ADA ramp on each side?
2. Spot elevations are needed to confirm the grades, slopes direction of drainage for the main entry and the emergency access.

3. What does the east end of the trail tie to? Is it the end of the existing paved trail? If not, the trail will need to be extended to do so.
4. Is there a lighting plan? Is lighting proposed at the pedestrian crossings of the entrances?
5. A crosswalk striping detail should be provided to assist the contractor in providing such at each of the driveway/access crossings.

#### **SITE AND GRADING PLAN COMMENTS**

1. On the site plan, what does the cross hatched area denote?
2. How does the swale drainage from off of CR 335 and the bike path cross both the emergency access easement and the main entrance? Again, additional spot elevations and detail will help determine the specific design needed to make this occur. Perhaps a concrete valley pan at both locations will be necessary. Will the swale have adequate capacity to transfer flow during the 25-year event without enveloping the adjacent travel lane?
3. How is emergency access handled with the adjacent River Park Condo's. The review and construction of the site planning for River Park required that the lot line common to these two lots be encumbered by an emergency access easement. It appears that the grades on the west end of River View Drive will continue to allow this circumstance to remain. Should a "break away" gate be installed at this location? Is it the intent to continue to provide emergency access for River Park and how is that accommodated?
4. The design of the rock fall protection berm geometrically has been identified with the parameters to mitigate the "temporary" use. The development agreement should assure that any future change in use that places a "permanent" use on the property will need to have the wall design revisited and modified accordingly (as per the HP Geotech letter reviewed during Preliminary Plan Review).
5. Is there a subsequent geotechnical report that defines the geotechnical engineers specifications for subgrade preparation for the roadways?
6. For the rock fall protection berm, what is the type/Model number of uniaxial geogrid? What is the length of embedment? What is the base width of the wall construction from face of wall to end of geogrid at the lowest level of geogrid? Where is the nested basket detail that is referenced? How does the uniaxial geogrid and Sierrascape facing unit tie together? Can a detail be provided that identifies how the separation fabric, uniaxial grid, stone facing, and

locking tail strut are to be configured? Can a visual representation of how the berm will look be provided? How much topsoil is to be provided on top of the berm in order to facilitate vegetation growth”. Specify type of fill material necessary for wall construction, gradation, liquid limit, density, moisture content, etc....

7. Has the Town received any comments from other reviewing agencies, particularly the fire department in relation to the emergency access, accessibility and hydrant locations?

#### **UTILITY COMMENTS**

1. With the given details from the Town’s Public Works Manual, do we have sufficient room to install the fire hydrant in the vicinity of the emergency access, the rock fall berm and the bike path?
2. The yard hydrant with lock shown in the CR 335 right of way, is it in front of the proposed berm or on top? The yard hydrants are identified to be provided for irrigation. However, the EQR rating for the water rights dedication and tap fees do not include such. Do we need to recalculate the fees accordingly? Technically, as the project has been represented, no irrigation is proposed and therefore facilities providing such should not be provided. For those areas needing temporary irrigation, perhaps some other alternatives exist that can be employed.
3. What size and where is the water meter to be located? An easement up to the service shut off and the water meter will need to be dedicated to the Town.
4. The Public Works Director’s comments have been attached to the draft PUD Development Agreement and need to be addressed accordingly.

#### **REVIEW OF COST ESTIMATES**

For our review of the cost estimates, for those items that have been identified, we concur with the estimate. However, we feel the following should be incorporated:

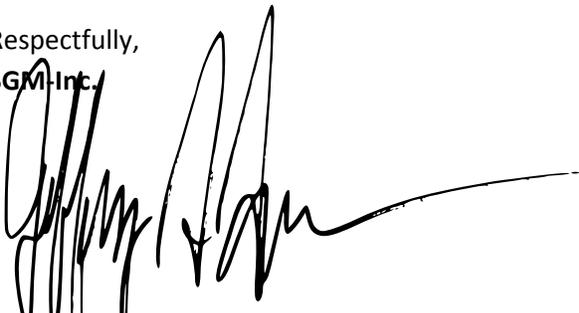
1. Traffic Control for construction of the access points tying onto CR 335. Traffic control necessary for the construction of the bike path.
2. Two additional handicap ramps may be needed at the emergency access road depending upon specify grades.
3. Cross walk striping at the driveway crossings.

4. Grading and drainage improvement between bike path and edge of existing roadway. This may mean adding costs to cross the access ways (ie., valley pans)
5. Sewer tie (manhole) onto the Town's collection system.
6. Survey, construction management and testing.
7. Appropriate contingency for this project (10%) and this level of estimate.

Based upon our review, we feel confident that the project is technically feasible as proposed to be constructed. A variety of questions and clarifications to the construction drawings have been noted that need to be addressed prior to second reading of an ordinance for approval or at least prior to commencement of construction or release of a grading permit.

Upon your receipt and review, if you have any questions, please don't hesitate to contact me.

Respectfully,  
SGM Inc.



Jeffrey S. Simonson, PE, CFM  
Town Engineer

## **MEMORANDUM**

**TO:** Tim Cain, Tom baker, Jeff Simonson, Daniel Becker, Dave Gray  
**FROM:** John Wenzel  
**DATE:** December 21, 2015  
**SUBJECT:** Riverside RV Park

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The Public Works Department has reviewed the Riverside RV Park application and has the following comments:

**Right –of – Way Permit**

Work in or directly adjacent to the roadway will require a right-of-way permit, specifically for the proposed sidewalk and Rock Mitigation Berm improvements. The applicant can pick up a right-of-way permit from the Town Clerk.

**Utility Services:**

Fire Hydrant type to be Kennedy. Fire hydrants must be set at proper elevation, with a 3 inch minimum clearance between breakaway flange and finished grade. Mega lug fittings shall be used for fire hydrants and fire hydrant isolation valves.

It's recommended that a tracer wire be placed with all water and sewer service lines.

The final site plan shall clearly identified all water and sewer service lines as private and being maintained by the property owner. Private service lines line shall begin at the connection point of the main lines, nearest to the property boundary.

A manhole shall be placed at the connection point of the six inch sewer service line and the 8 inch sewer main line.

An isolation valve shall be placed near the hot tap of the 3 inch potable water service line.

It is recommended that sewer manholes be placed at a maximum of 300 feet separation and at sewer line junctions.

Developer shall be responsible for disinfection, testing, sampling, and reporting of potable water and sewer lines. A Public Works representative shall be contacted to observe the disinfection, testing, sampling, and reporting process.

Developer shall be responsible for properly incasing sewer lines, when necessary, at potable water and sewer line crossings.

### **Rock Mitigation Berm**

Public Works is concerned about the aesthetic appearance of the Sierrascape facing proposed for the Rock Mitigation Berm. Weed management is also a concern with the Sierrascape facing. We recommend CMU facing (or similar) to match existing at pedestrian bridge abutments.

### **Drainage**

The Towns engineer should verify that the proper drainage exist between 335 Road and the Rock Mitigation Berm. We feel that sheet flows should be carried around the berm and away from the pavement.

### **Street Lights**

We recommend that street lights be place at intersections for pedestrian safety.

### **Landscape Plan**

A landscape plan was not provided.

October 9, 2015

Mr. Tim Cain, Planner  
Town of New Castle  
P.O. Box 90  
New Castle, CO 81647

**RE: Riverside RV Park  
Final PUD Development Plan**

Dear Tim,

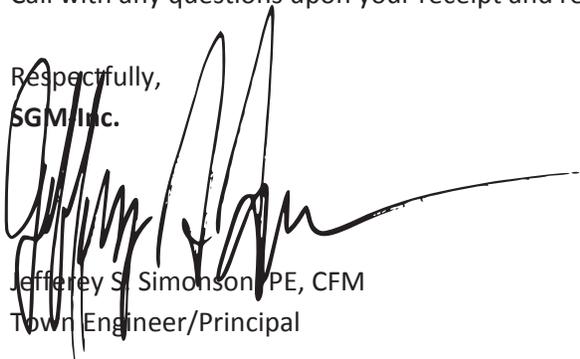
Per our prior phone conversation on this matter, I wanted to follow up with our discussions and recommendations for review of this project. As you are aware, we were able to have a meeting with Mr. Chatmas between our last report for Preliminary Plan Review and this Final Plan Review. The focus of my discussions with Mr. Chatmas was to settle in on a recommendation for the EQR rating for this project coupled with providing an understanding of each of the issues and concerns of our September 1, 2015 letter to you regarding the Preliminary Plan review. As a result, we have re-attached our September 1, 2015 correspondence noting that each issue/concern needs to be addressed with construction drawings prior to any construction commencing and that our recommendation for an EQR rating for this proposed use is as follows:

There will be no RV dump station or an RV potable water fill station and no irrigation will be provided from the potable water system. Given such, the EQR rating for each RV site would be 0.1 EQR. This would be used as a value for assessing the EQR rating for the project. In year two of the project, the EQR rating would be re-assessed based upon actual use and adjusted accordingly.

We have not been in receipt of any other documents submitted since the original submittal of review per our September 1, 2015 letter. If any pertinent information has been submitted we would request subsequent review as applicable.

Call with any questions upon your receipt and review of this letter.

Respectfully,  
SGM/Inc.



Jeffrey S. Simonson, PE, CFM  
Town Engineer/Principal

September 1, 2015

Mr. Tim Cain, Planner  
Town of New Castle  
P.O. Box 90  
New Castle, CO 81647

**RE: Riverside RV Park  
Preliminary PUD Plan Review**

Dear Tim,

The purpose of this letter is to provide you a report or our questions, concerns or need for additional data based upon on our review of the submittal data provided for the Preliminary PUD Plan Application for the Riverside RV Park. The submittal data provided to us to conduct this review is summarized as follows:

1. Introduction letter authored by Mr. Chatmas
2. Completed Town of New Castle Development Application for the proposed action
3. Proof of legal ownership
4. Existing topography map with property lines and easements identified as prepared by Tuttle Survey Services
5. Site Plan with Emergency Vehicle Circulation as prepared by Gamba and Associates
6. Utility infrastructure plan prepared by Gamba and Associates
7. Traffic study prepared by Gamba and Associates
8. Geological hazards report prepared by H-P Geotech
9. Waste Engineering (Phase 1 follow up) no further action report
10. Stormwater analysis report prepared by Gamba and Associates
11. Irrigation supply report by Ashley Moffatt
12. Report on miscellaneous data for the project prepared by Mr. Chatmas.

Based upon our review of the aforementioned submittal data and previous meetings with the applicant and his engineer, we have developed the following comments, concerns and/or questions regarding this project:

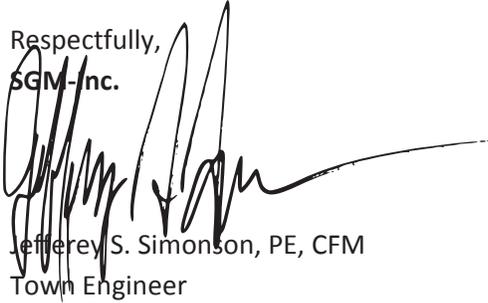
1. As this is a preliminary plan set of drawings, it is anticipated that as the project moves to final approval, construction drawings and cost estimates will be provided for review and approval which define, in specificity, the construction of all improvements and in particular the public improvements. Those improvements identified as public Improvements related to this project are:

- a. The bike path/sidewalk construction from River Park Condominiums throughout the frontage of this property. The path will need to match the existing path construction related to the River Park Condominium project.
  - b. Handicap ramps and that portion of the driveway(s) that will exist in CR 335 right of way.
  - c. Fire Hydrant construction for the new hydrant near the proposed emergency access easement.
  - d. Any ties to the Town's utilities (water and sewer ties).
2. For final approval, we anticipate that a storm water management plan will be presented for subsequent review and approval which will detail all BMP's that will be installed to mitigate erosion, mitigate dust and encourage revegetation of disturbed areas. Likewise, as the site exceeds 1 acre in size, the BMP's necessary for the contractor to follow during construction shall be identified along with submittal of the CDPHE approved SWMP permit.
3. Prior to final approval, EQR calculations for both water and sewer will need to be prepared, presented to and approved by the Town in order to accurately determine the water rights dedication fees, tap fees and tap fee surcharges for the River Park sewage lift station. It should be noted that the design of the River Park sewage pump station included the development of this property as part of the service area for the lift station thus capacity of the lift station is not a concern.
4. A letter of concurrence to the proposed emergency access for this project will need to be provided. Any identified improvements will need to be implemented with the final design.
5. HP Geotech has identified that the rockfall mitigation berm provided with their design is for a higher exceedance value for the "temporary" land use protecting an RV Park. HP also notes that a lower exceedance value should be used if/when permanent housing (ie., future hotel) will be proposed. Any approval should link this recommendation to the conditions of approval or the design and construction of the rockfall protection berm should be constructed originally with the lower exceedance value used.
6. Again, as this is a preliminary plan and construction details for the improvements have not been provided, we anticipate that the applicant will provide complete construction details for the paved accessways, driveways, utility construction and irrigation system construction proposed. As well, we anticipate that the applicant will provide lighting and landscape plans accordingly.

With this review, and given the applicants ability to provide the information identified above at Final PUD Plan submittal, we do not see specific concerns with this application and the proposed use applied for.

Upon your receipt and review, if you have any questions, please don't hesitate to call.

Respectfully,  
**SGM-inc.**



Jefferey S. Simonson, PE, CFM  
Town Engineer