



12/27/2021

Alex Stedman
Rvi Planning
120 S Ash Ave
Tempe, AZ 85281

RE: **1-MP-2021**
Fiesta Ranch
3380C (Key Code)

Dear Alex Stedman:

The Planning & Development Services Division has completed the review of the above referenced development application submitted on 12/2/2021. The following **2nd Review Comments** represent the review performed by our team and is intended to provide you with guidance for compliance with city codes, policies, and guidelines related to this application.

Zoning Ordinance and Scottsdale Revise Code Significant Issues

The following code and ordinance related issues have been identified in the second review of this application and shall be addressed in the resubmittal of the revised application material. Addressing these items is critical to scheduling the application for public hearing and may affect the City Staff's recommendation. Please address the following:

Drainage:

1. Please submit the revised Drainage Report with the rest of the resubmittal material identified in Attachment A.

Water and Wastewater:

2. Per DSPM 6-1.400 and SRC Sec. 49-219 the developer/owner will be required to install waterlines along all property frontages (E Rio Verde Drive and N 136th Street) at their expense.
 - a. The Developer/Owner shall install a minimum of 12-inch water line across the entire E Rio Verde Drive frontage of the project. This line will not be eligible for any reimbursement agreement and shall be at sole cost of the Developer/Owner.
 - b. The Developer/Owner shall install a minimum of 12-inch water line along N 136th Street frontage of the project providing future extension to the south. The Developer/Owner may request a water line payback agreement for partial reimbursement per SRC.
3. If development of this project precedes Reata Ranch, the following off-site water line extensions are required:

- a. The Developer/Owner shall install a 16-inch water line along E Rio Verde Drive from N 122nd Street to N 128th Street along with a PRV and vault just east of N 128th Street. This water line may be credit eligible compliant to SRC.
 - b. The Developer/Owner shall install a 12-inch water line along E Rio Verde Drive from N 128th Street to N 136th Street. The Developer/Owner may request a water line payback agreement for full reimbursement per SRC.
4. Please submit revised Water and Wastewater Design Reports with the rest of the resubmittal material identified in Attachment A.

Water:

- a. Add demands for Reata Ranch plus any other off-site demands and update modeling per DSPM 6-1.202. The Water BOD does not show any calculation if any off-site demand has been incorporated in the analysis. Since it is a phased development, modeling is required for each phase including build out scenario. Specify number of dwelling units and associated demands for Phase 1-4 per DSPM 6-1.200.
- b. Per DSPM 6-1.202.H, the Network Diagram does not match with proposed Water Line Improvements. Therefore, the water modeling is invalid. Water Resources did not review the invalid modeling data. Update Network Diagram per proposed water line improvements and redo Hydraulic Analysis.
- c. Incorporate hydraulic model result summary tables per DSPM 6-1.202: build out and phased scenario.
- d. Provide PRV diameter. This was included on previous submittal. Include pressure setting information in the report. See DSPM Ch. 6.
- e. Fire flow analyses do not show fire flow demands through PRVs – Revise hydraulic modeling per DSPM 6-1.202.
- f. Figure 2 piping does not match with Figures 2 and 5A.
- g. PDF page 50: Fire flow of 1,500 gpm is missing.
- h. The later Phases should include demands of the previously constructed Phase(s) in hydraulic modeling.

Sewer:

- a. Include original and all subsequent revision dates. See DSPM 7-1.202C.
- b. Show sewer generation calculation per DSPM 7-1.403 (Fiesta & Reata).
 - i. PDF page 26: Incorrect calculation. Calculate per DSPM 7-1.403 and update analysis.
- c. Per DSPM 7-1.400 the developer will be required to design, construct, and upgrade any on-site and/or off-site sewer infrastructure, at their expense, necessary to provide services to the site. The developer shall be financially responsible for the modifications to the existing Lift stations, particularly, SNGC, dual force mains/valves and downstream gravity sewer along E Rio Verde Dr/E Dynamite Blvd (up to Alma School Rd) that will be impacted by this development.
 - i. If Fiesta Ranch precedes Reata Ranch, Fiesta Ranch needs to secure Reata Ranch lift station lot from the Reata Ranch Developer.

- d. PDF page 13: Capacity of 8" sewer @ 1.57% slope with d/D = 669 gpm and will surcharge at higher flow. The sewer requires to be up sized per the Zoning Stipulations.
- e. PDF page 13: There are multiple 10" sewer segments with a slope of 0.57% or less (MH2 to MH5 and M6 to MH 10) that do not have capacity of a peak flow of 780 gpm. The sewer segments require to be up sized per the Zoning Stipulations.
- f. Required backwater valves per DSPM 7-1.409.G.
- g. Per DSPM 7-1.303, max allowed velocity in force main is 6 fps. With this velocity, max conveyance capacity of a 6" force main is approximately 529 gpm. If the flow from SNGC LS (including flow from Reata & Fiesta LS) exceeds 6 fps velocity criteria within one 6" force main, will require installation of a third larger force main (sized to be determined) at the sole cost of the developer/owner. Please note that 780 gpm flow would result 8.85 fps in 6" existing force main which is not acceptable. VFDs will not help to reduce the velocity during peak discharge. A 6-inch force main not acceptable for 780 gpm of peak discharge per DSPM 7-1.303.
- h. Sewer Report Section 6.1: upgrading interim impellers shall be developer's responsibility Per DSPM 7-1.400.
 - i. However, it is less likely that an interim impeller can be found and later can be changed with a larger impeller as this will impact the motor size. A VFD driven pump would help with lower flow. Please note that all infrastructure and electrical gears need to be designed, sized and installed for built-out condition.
- i. Dual force mains are required for the lift stations.
- j. PDF page 13:
 - i. Site#3 flow monitoring station is the 1st manhole downstream of force main discharge manhole and located at ~500-feet downstream. It is almost impossible that the flow will attenuate from ~250 gpm to 36 gpm over 500 feet. Please note that force main discharge is considered as plug flow for the duration of pumping. For example: Hourly adhok data shows, that the pump(s) ran ~23 minutes between 9:00 am to 10:00 am on 05/22/2021.
 - ii. 780 gpm discharge from lift stations does not include existing gravity flows from the neighboring properties. Therefore, the peak flow would be higher than 780 gpm.
- k. PDF page 14: There is no supporting calculation or evidence that the flow will attenuate. It is City's perception that flow from the gravity sewer segments require up sizing per the Zoning Stipulations.
- l. PDF page 38: Chapter 4 specifies 780 gpm, however, it appears that 710 gpm pump proposed at LS#47.
- m. If Fiesta Ranch precedes Reata Ranch, Fiesta Ranch developer shall be financially responsible for all on-site and off-site sewer infrastructure developments. For Alternatives 3A & 3B, Fiesta Ranch also needs to secure Reata Ranch lift station lot from the Reata Ranch Developer.
- n. Sewer Report: Due to long run of the of the force main, dual force main system, similar to LS#47 would be required for redundancy.

- o. also needs to secure Reata Ranch LS lot from the Reata Ranch Developer.
- p. Sewer Report Section 4.2: The flow monitoring data is questionable. Based on City's SCADA, the discharge from SNGC LS (#47) varies from 250 to 280 gpm. The designed capacity of the LS is 275 gpm. Needs to verify if the LS was down during the monitoring period for maintenance.

5. Site Plan: Provide the location of proposed Fire Hydrants per DSPM Section 6-1.201.

Technical Corrections

The following technical ordinance or policy related corrections have been identified in the second review of the project. While these items are not as critical to scheduling the case for public hearing, they will likely affect a decision on the final plans submittal (construction and improvement documents) and should be addressed as soon as possible. Correcting these items before the hearing may also help clarify questions regarding these plans. Please address the following:

Circulation:

6. In the Master Circulation Plan:

- a. Rio Verde Drive is incorrectly identified as a future Minor Collector – Rural ESL w/Trails. Rio Verde Drive is stipulated as a Minor Arterial – Rural ESL w/Trails.
- b. Please specify on the 136th Street cross-section to include six (6) foot compacted shoulders on the west side of new pavement along site frontage.
- c. Rio Verde Drive is proposed as a Minor Collector in Figure 2, Proposed Cross-Section; Figure 3, Circulation Map. This is partially correct. Improvements constructed to a Minor Collector (one travel lane each direction with center turn lane) but should also be noted that Rio Verde Drive is a Minor Arterial Rural ESL per the adopted Transportation Master Plan and along a scenic corridor. This distinction should be noted on all applicable figures.
- d. The local street cross section should identify 6-foot-wide shoulders along both sides of the street at back of curb. DSPM 5-3.110

Please resubmit the revised application requirements and additional information identified in Attachment A, Resubmittal Checklist, and a written summary response addressing the comments/corrections identified above as soon as possible for further review. The City will then review the revisions to determine if a decision regarding the application may be made, or if additional modifications, corrections, or additional information is necessary.

The Planning & Development Services Division has had this application in review for 38 Staff Review Days since the application was determined to be administratively complete.

These **2nd Review Comments** are valid for a period of 180 days from the date on this letter. The Zoning Administrator may consider an application withdrawn if a revised submittal has not been received within 180 days of the date of this letter (Section 1.305. of the Zoning Ordinance).

If you have any questions, or need further assistance please contact me at 480-312-2376 or at jbarnes@ScottsdaleAZ.gov.

Sincerely,



Jeff Barnes
Senior Planner

ATTACHMENT A
Resubmittal Checklist

Case Number: 1-MP-2021

Key Code: 3380C

Please follow the plan and document submittal requirements below. **All files shall be uploaded in PDF format.** Provide one (1) full-size copy of each required plan document file. Application forms and other written documents or reports should be formatted to 8.5 x 11.

A digital submittal Key Code is required to upload your documents: **3380C**. Files should be uploaded **individually** and in **order** of how they are listed on this checklist.

Submit digitally at: <https://eservices.scottsdaleaz.gov/bldgresources/Cases/DigitalLogin>

Digital submittals shall include one copy of each identified below.

- ☒ COVER LETTER – Respond to all the issues identified in this 2nd Review Comment Letter
- ☒ Revised Narrative for Project
- ☒ Master Site Plan
- ☒ Master Circulation Plan
- ☒ Master Drainage Plan
- ☒ Master Water Design Plan
- ☒ Master Wastewater Design Plan