

CITY OF ALBUQUERQUE



November 7, 2013

Brian Patterson, P.E.
Bohannon Huston Inc.
7500 Jefferson NE
Albuquerque, NM 87107

Re: Drainage Master Plan for the Mirehaven Master Planned Community and Pulte@ Mirehaven Phase 1 Drainage Report and Grading and Drainage Plan Engineer's Stamp Date 10-11-13 (H09D017B)

Dear Mr. Patterson,

Based upon the information provided in your submittal received 10-11-13, the above referenced report cannot be approved for drainage master plan until the following comments are addressed:

1. The drainage master plan should be submitted separately from the drainage plan for the subdivision so that it can be approved without the detailed review required for the subdivision. In addition, City Legal has informed Hydrology that they are requiring an approved drainage report to reference in the maintenance agreement for the Mirehaven Arroyo. Therefore, if we combine the analysis for the Mirehaven Arroyo with the DMP, that document can be referenced in the maintenance agreement.
2. Provide an analysis point immediately upstream of Tierra Pintada for the Mirehaven Arroyo.
3. Hydrology recently visited the site. It appears that a significant portion (half?) of Basin 12.18 drains through the northwest corner of the site. Please adjust this basin to reflect field conditions.
4. The contour labels are too small to read.
5. Reference the appropriate drainage report and provide the allowable flows for outfalls E and C and the Mirehaven Arroyo.
6. Some of the contours appear to be existing and some appear to be proposed. Provide proposed contours for the site. This will aid in the determination of the storm drain network. The colored shading may have to be lightened so they are visible.
7. How will flows from offsite basins 1, 2, and 3 be handled in the developed condition. Isn't a channel proposed for Offsite Basin 1 and 12.18?
8. Basin 12.18 should be added to the "Basin Summary for Overall" table.
9. The offsite basins for the Drainage Master Plan will be different than the offsite basins for Pulte@Mirehaven Phase 1. This is another reason to separate the reports.
10. Basin 3 should have a storm drain penetration into the Mirehaven Arroyo

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11. Offsite Basin 4 should be subdivided to split the flows that enter Basin F and Basin G.
12. Outfall "C" is the existing low point and an existing storm drain is day-lighted in this location. Why are you proposing to create a low point south and west of this location? In addition, the storm drain is proposed in the side yard of a residential lot, which should be avoided.
13. The storm drain network plan appears to only support Pulte@Mirehaven Phase 1. As a drainage master plan for the site, it should show the storm drain in Basin A as well as the channel on the west side of the project.
14. There are 4 or 5 existing small arroyos that drain to the Mirehaven Arroyo from the north side. How will these arroyos be accommodated with the construction of the Mirehaven Arroyo? If grading is required, a separate grading plan should be approved by Hydrology prior to submitting plans to DRC.
15. The channel walls should not be constructed of CMU (p.7) and the vertical concrete portion of the channel should provide a minimum of 1' of freeboard.
16. The report discusses details for channel construction. These details are better left to the construction drawings where a water surface elevation is shown in the profile. Approval of this section of the report will be embodied in the signing of the construction plans.
17. On Exhibit 8, the plan view shows a berm in the channel, whereas the typical section does not. This comment can be addressed with #16 above.
18. Why are two HEC-RAS tables provided; one is named WS_MIX and the other is WS_SUB?
19. At this point in the process, Hydrology needs to determine the appropriate easement/right of entry width of the channel. Since a plan view exhibit showing river stations was not provided, Provide HEC-RAS sections at the following station locations from Exhibit 7: 41+75, 32+50, 32+00 (grade control structure), 30+00, 23+75 (just upstream of crossing), 23+50 (crossing), 22+00, 20+00, 13+00, 12+00, 11+50 and 11+00. It is acceptable to provide sections at a close River Station (e.g. 1301.528 for 13+00)
20. Hydrology will provide a separate letter for its approval/comments for Pulte@Mirehaven Phase 1. Payment of the review fee is required for approval.

will be
addressed

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If you have any questions, you can contact me at 924-3986.

Sincerely,

Curtis Cherne, P.E.

Principal Engineer, Planning Dept.

Development Review Services

C: e-mail