January 30, 2014

Brian Patterson, P.E.

Bohannan Huston Inc.

7500 Jefferson NE

Albuquerque, NM 87107

**Re: Drainage Master Plan and Grading Plan for Del Webb Phase 1 and 2**

**Engineer’s Stamp Date –no stamp (H09D017C)**

Dear Mr. Patterson,

Based upon the information provided in your submittal received 12-27-13, the above referenced report and plan cannot be approved for Preliminary Plat action by the DRB until the following comments are addressed:

1. The report and grading plan are required to be signed and dated.
2. Proposed Basin A-1-A does not include all of Basin A-1 from the DMP in the area south of Iron Creek Lane. This will increase flows in the fully developed condition that should be accounted for.
3. On page 4, paragraph 2, the first sentence lists Basin A-1 as a contributing basin to Outfall B. Hydrology could not locate Basin A-1 and if it is an “A” basin why doesn’t it drain to Outfall A?
4. Why is the 5 foot diversion channel proposed with vertical walls? A trapezoidal section would avoid having to construct retaining walls. Provide a detail for this channel as it will be constructed with the grading plan.
5. As previously discussed, an agreement is required for an annual inspection of this channel to verify it has not filled with sand and still has the required hydraulic capacity.
6. Offsite Basin D will be graded per the proposed grading and hopefully landscaped. The land treatment to be used on the landscaped area is Land Treatment “C” or “B”. Is the trail to be paved? Update all relevant sections (e.g. Basin Summary Table, Basin Map, Storm Drain Network) of the drainage report.
7. Flows that bypass inlet 4 will drain north in Cebola Creek Way. The report reads that bypass flows will drain down Del Webb Blvd.
8. Where is Basin A-2 and A-1 shown on p. B-1? Shouldn’t Basins A-1-A and A-2-A be named A-1 and A-2, respectively?
9. Stations are provided on the street capacity sheets, but not provided anywhere in the report or on the grading plan. Should lots be used instead?
10. The storm drain should be extended up Cebola Creek Way from Del Webb Blvd to upstream of the 90 degree bend. This should prevent stormwater from leaving the street as it tries to round the corner.
11. There are two street flow calculations for Coyote Creek Trail. The one on page B-7 appears to be erroneous.

The following comments apply to the grading plan.

1. On Sheet 2 and 8 it is not apparent the grading plan is in compliance with the approved Site Plan for Subdivision concerning grading and walls near the monument boundary. Provide sections that are in the same locations as Sections 1 through 4 on the Site Plan for Subdivision.
2. Show the 5’ wide channel on Sheet 2 with inverts.
3. Show the property line where this project abuts the monument and the grading perimeter.
4. 5 foot contours labels and contour lines should be bolder than the 1 foot labels and contour lines.
5. On Sheet 8, provide grades so it is evident the pond at the end of Cebola Creek Way is a pond. Include the required volume from the drainage report and label the pond.
6. It appears a culvert should be proposed under the trail in the break in the retaining wall on Sheet 8 and Sheet 6.
7. Show the storm drain and inlets on the grading plan.
8. Include the proposed 56 and 57 contours on Sheet 3.
9. An area inlet should be added in Basin B near the storm drain.
10. On Sheet 6, there is an area south of the lots with a 1:1 slope. A wall should be proposed or the area regraded.
11. Provide the sheets from the Mirehaven Work Order (half-size?), to help with the evaluation of comparing proposed grades between the arroyo and this grading plan.
12. The double retaining walls proposed behind lots 41 through 46 will create an area between the walls that cannot be maintained.
13. Label the lots with lot numbers.
14. At the north end of Cave Creek Lane, there are a 52 and 51.15 flow line elevations very close together.
15. Should there be a swale in the open space behind lots 19 through 24 to prevent flows from running along the wall?
16. The retaining wall appears to be located in the pad of Lot 1.
17. An area inlet should be proposed in the low point near the intersection of Willow Canyon Trail and the Mirehaven Arroyo.
18. The Basin map shows a basin divide on Willow Creek Trl south of Del Webb Blvd, but the grading plan shows this area straight-graded.
19. How will the north end of Willow Canyon Road be treated prior to proposing a crossing?
20. Most of the lots don’t show a graded pad area.
21. It would be helpful if the lot lines were more prevalent.
22. The volume for Temporary Pond 2 appears to have been calculated for the 100yr-6 hour storm. Temporary ponds should be designed for the 100 yr-10 day storm.
23. Label Temporary ponds 1 and 3.
24. Provide an additional Sheet 3 (Sheet 3Temp?) that shows the grading required for the temporary pond as shown on the Interim basin Map. This will be part of the certification for this subdivision.

If you have any questions or would like to meet, you can contact me at 924-3986.

Sincerely,

Curtis Cherne, P.E.

Principal Engineer, Planning Dept.

Development Review Services

C: e-mail - Brian Patterson, P.E.