CITY OF ALBUQUERQUE



May 26, 2015

Doug Hughes, P.E. Mark Goodwin and Associates, PA PO Box 90606 Albuquerque, NM 87199

Re: Juan tabo Hills Estates Onsite Drainage Analysis Report and Grading Plan Engineer's Stamp Date Report 8/20/14 and Grading Plan 2-24-15 and later submittal showing floodplains and floodway-no stamp-(M21D018)

Dear Mr. Hughes,

Based upon the information provided in your submittal received 2-25-15, the above referenced plan and report cannot be approved for Preliminary Plat action by the DRB until the following conditions are met/comments addressed:

- 1. Due to the extensive fill proposed in flood zones adjacent to a floodway and possible fill in floodway near Juan Tabo Blvd, an approved CLOMR is required prior to approval of the drainage report and grading plan as FEMA requirements may change these documents. In addition, getting a CLOMR approved by FEMA allows more flexibility in the design; the site will receive preapproval of the construction plans prior to construction, should take any mystery out of what is required and will negate the possibility of a potential violation of the NFIP.
- 2. Prior to resubmitting the CLOMR, the conditions/comments that are related to the CLOMR are to be addressed.
- 3. A photo of the 66 inch storm drains that outfall from the water quality pond is attached. As one can see the arroyo bank has eroded and the last few sticks have fallen off and the storm drain is no longer sealed. An erosion setback line could not be located in the previous report or grading plan as well in the report and plan provided for this development for the arroyo bank upstream of the proposed scour wall. Provide an erosion setback line on the grading plan and a discussion why erosion protection is not required between the proposed scour wall and the scour wall at the bridge.
- 4. How was the floodway georeferenced onto the grading plan? From the FIRM it appears the floodway is nearer to Rocky Top Dr near Juan Tabo Blvd than shown.
- 5. This plan shows proposed fill in the existing water quality pond. What is the purpose and required volume of this pond? How is this to be mitigated?
- 6. The grading plan was referred to regularly during the walk up the arroyo last week. It was difficult to follow the grading from Sheet 1 to Sheet 4 and back.

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- It is also not clear if pieces are missing upstream of Sheet 4. Provide a more continuous view of the grading next to the arroyo.
- 7. Provide the 100 year and 500 year water surface elevations on the grading plan.
- 8. The benchmark on the grading plan is NAD 1927. NAVD 88 is to be used for the vertical datum. Once this is provided, a comparison to the FIS can be made.
- 9. Provide FIS cross-section AM through AP on the grading plan. It was difficult to verify elevations and WSE between the grading plan and the FIS.
- 10. On Sheet 1, the Typical Lot layout and the "See Sheet 4 of 8" details obscure important parts of the grading plan. The existing and proposed grades are to be evident in this area and possibly further north depending on the response to comment 2 above.
- 11. 5 foot contours should be labeled in the arroyo. In cases where the surface undulates, additional labeling may be required.
- 12. Provide existing spot elevation along the southern/eastern floodway line where the bank elevation has changed 5 feet.
- 13. Provide existing spot elevations every 5 vertical feet along the southern boundary as well as proposed spot elevations at the top and bottom of slopes. Additional retaining walls may be required.
- 14. Provide proposed spot elevations at the toe of the slope at the water quality pond (Sheet 1).
- 15. Provide proposed spot elevations at the slope toe (some locations there are two and three slope toes) along the eastern boundary.
- 16. Steep tie slopes down to KAFB will not be approved.
- 17. The road bed at the west end of Blue Ribbon Road has been eroded by drainage to the point where there is no soil underneath the curb and gutter at the south terminus of the road. A portion of the street and curb and gutter will have to be replaced and curb is to be built around the west end and the drainage accommodated. Show proposed improvements on the grading plan and include on the infrastructure list.
- 18. 10 foot grade changes are shown between double retaining walls on some lots. Grades may have to be adjusted or a variance obtained through zoning as in general 8 feet is the maximum height of rear yard walls, including the garden wall on top of the retaining wall.
- 19. In the southeast corner near Pocono Road, an existing grade of 80 is shown in the location of a proposed 72. It appears a retaining wall is required in this area.
- 20. Provide proposed spot elevations on Pocono Road near Silver Dollar St, so the grading in this area can be evaluated.
- 21. Label the lots with lot numbers and provide block numbers.
- 22. Provide street slopes.
- 23. Do the two lines close to each other near the trail along the eastern boundary represent a swale? If so, provide a cross-section and capacity calculations at/near the downstream end(s).

- 24. The tie slope on the south side of Rock Top Dr. near Juan Tabo Blvd appears backwards.
- 25. The proposed fill-and- spill water quality pond will not remove floatables and debris. The primary outlet from the pond should include a design that will remove floatables and debris. A possible solution is a trash rack or inverted pipes with storm drain pipes through the scour wall into the arroyo.
- 26. Grading of the arroyo bed should not be proposed in the floodway in the area near the stormwater quality pond. The cutting of the bed shown will accelerate erosion of the arroyo bed.
- 27. Provide calculations for the length of energy dissipation required for the outlet into the arroyo.
- 28. The grading plan showing the floodplains and floodway was not stamped and sealed.
- 29. Once the above comments are addressed, on-lot grading will be reviewed.
- 30. Provide an analysis point at the west end of Blue Ribbon and Pocono Roads that show existing bypass flows.
- 31. Provide ground cover percentages for onsite basins.
- 32. Why aren't Basins 400a and 400B combined?
- 33. The grading plan should show obvious water blocks on the north-south streets so the intent of draining these streets to the north is clear.
- 34. Adding the flows from Basins 400A, 400B and 400C the total is about 33 cfs, wherein the Summary Table shows 27.4 cfs.
- 35. The bypass for Basin 400B should be 21 cfs not 30 cfs.
- 36. Why does basin 400BB produce 9.4 cfs? There isn't any impervious area.
- 37. The bypass at basin 400 DD is 21.4 cfs. When added to the flows form basin 400 FF equals 39 cfs. Inlets 13 and 14 each accept 8 cfs (16 total). This leaves 23 cfs bypass. Zero bypass is shown in the table.
- 38. It is not obvious that values in the Hydrology Summary Table have been adequately reviewed so the City's review was terminated. Thoroughly review the Hydrology Summary Table and provide additional inlets and adequate storm drains where required.
- 39. When reviewing a plan and report of this magnitude, it is possible that something was overlooked. The City reserves the right to provide additional comments with future submittals.

If you have any questions, you can contact me at 924-3420.

Sincerely,

Curtis Cherne, P.E.

Principal Engineer, Stormwater Quality for Hydrology Planning Dept.

C: e-mail