CITY OF ALBUQUERQUE

Planning Department Brennon Williams, Director



Mayor Timothy M. Keller

November 14, 2019

Mark Burak, P.E. Burak Consulting 1512 Sagebrush Trail SE. Albuquerque, NM 87122

RE: Eagle's Perch Estates Oakland Ave NE Grading Plan Stamp Date: 10/29/19 & 3/12/19 Hydrology File: C20D083

Dear Mr. Burak:

Based on the submittal received on 10/28/19, this project cannot be approved until the following corrections are made:

Prior to Preliminary Plat and Grading Permit:

- Albuquerque 1. This project must demonstrate compliance with the North Albuquerque Acres Master Drainage Plan (RTI, 1998) and include the construction of the 48" storm drain and inlets across your frontage and connecting to the existing stub in the Oakland South Subdivision.
- NM 87103

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- 2. Provide street capacity calculations based on the proposed conditions for the flows in Oakland and the proposed cul-de-sac road. Provide inlets necessary to contain the 100-yr HGL below the top of curb (generally 0.67') and the 100-yr EGL below the elevation at the ROW line (generally 0.87'). Capacity needs to be determined at the next downstream inlets and include the cross section, contributing flow, flow capacity at top of curb, and EGL. Because the road is steeply sloped, EGL will most likely govern.
- 3. Provide inlet calculations, including 2x capacity (50% clogging factor) for inlets in a sump. For orifice calculations, the open area (or void space) for the new bike-friendly Albuquerque grate (Dwg 2220) is 3.72sf.
- 4. Provide hydraulic calculations for the proposed storm drain system, calculated along the Energy Grade Line; include both the HGL and EGLs in the table.
- 5. Use the <u>current DTIS version</u> (11/2018) when resubmitting.
- 6. Update project benchmark and datum; all existing survey, proposed grades, and benchmarks must be provided in NAVD 88.

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- 7. A digital (.pdf) submittal, emailed to <u>PLNDRS@cabq.gov</u> is required.
- 8. Provide sections through all external boundaries showing proposed retaining walls, garden walls, property/ROW lines, existing and proposed grades. In accordance with DPM Ch.22, section 5 part B, grading and wall construction near the property line may not endanger adjacent property or constrain its use.
- 9. If the proposed retaining wall will create such an encroachment, written agreement from both landowners must be provided for such work. Written permission must include: signature of the property owner or owners representative, statement that undersigned is the owner or authorized representative, permission to construct the encroachment with a brief description of the encroachment.
- 10. Provide written and signed permission from the adjoining property owner (Lot 13) for grading on their property. The proposed swale will need to discharge onto the road, not terminate behind the curb.
- PO Box 1293
- Albuquerque
- 11. Provide a detail for the wall opening behind Lot 2. This should include 2x capacity as it will be very susceptible to clogging. If the wall is expected to hold water behind it or be subjected to moving water/scour forces/ saturated footers, it'll need to be designed by a structural engineer.
- 12. The swale behind lots 3 and 4, needs to include capacity calculations, armoring, and a drainage easement annotated with the Plat Drainage Easement Note as found on the Hydrology website. If garden walls are proposed between lots, provides openings with capacity for the 100-yr flow.
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- 13. The outfall from the SW corner pond needs to be sized for 2x the 100-yr inflow, or provide and overland flow path. Be sure to include the onsite contributing basins. The overland flow path to the cul-de-sac needs to be clearly shown on the plan along with supporting grades, sections and spot elevations. Another option may be to place a swale in the rear yards of lots 5 and 6 and discharge to Oakland.
 - 14. If pond routing is being used to attenuate flows, the storage-discharge tables and routed hydrographs need to be provided. Please number the ponds and include a label on each with the SWQV and elevation, the 100-year volume and elevation, the peak 100 year inflow and outflow, the spillway crest elevation, the spillway flow depth, and the dam top elevation.
 - 15. Sidewalk culvert capacity needs to be reassessed to ensure the 100-yr flow is passed: maximum slope is 2.0%, 1.5% preferred (ADA requirement), onsite contributing basins and routing (if used) needs to be considered, each culvert may be 2' wide maximum. Most importantly, how will supercritical flow be maintained from the pipe into the culverts? Since

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storm drain is required in Oakland, it probably makes more sense to tie the pipe directly into a back of inlet or manhole; ensure RCP is used in the ROW.

- 16. On the Plat, provide a drainage easement over the ponds and drainage ways and annotate using the <u>Plat Drainage Easement Note</u>. This note replaces the need for a separate drainage covenant.
- 17. Please show Cross Lot Drainage Easements on both the Plat and the Grading & Drainage Plan specifying the beneficiary and maintenance agreement.
- 18. Provide management onsite for the Stormwater Quality Volume (SWQV) in accordance with the new drainage ordinance, § 14-5-2-6 (H) enacted 10/2/18 (Council Bill C/S O-18-2). Runoff from all new impervious areas, not just the back halves of the lots, must be captured and the pond needs to be sized for the area drainage to it.
- 19. As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.
- Albuquerque If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

NM 87103

PO Box 1293

Sincerely,

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Dana Peterson, P.E. Senior Engineer, Planning Dept. Development Review Services