## CITY OF ALBUQUERQUE

Planning Department Alan Varela, Interim Director



Mayor Timothy M. Keller

February 18, 2022

Mark Burak, P.E. Burak Consulting 1512 Sagebrush Tr SE Albuquerque, NM, 87123

RE: 14508 Sierra Ct. NE 14508 Sierra Ct. NE Grading and Drainage Plan Engineer's Stamp Date: 02/01/2022 (check this) Hydrology File: L23D037

Dear Mr. Burak:

Based upon the information provided in your submittal received 01/31/2022, the Grading & Drainage Plan **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

## SHEET C1

Albuquerque

PO Box 1293

NM 87103

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- Review the grade at the back of the home. It appears a stem wall will be needed there as well as there is a 10 ft grade difference. Please ensure there is a detail for these stem walls appropriately.
  - a. Review any other grading issues where a retaining/stem wall may be needed.
- 2. Prior to approving this, we will need written approval and allowance for the work being completed on adjacent property.

3. If there is drainage crossing the lots, a cross lot drainage easement will be required (platting?)

- 4. Discussion with Shahab, he mentioned it seems unlikely that basin C will be undisturbed. If any disturbance to that area, you will need to provide a pond.
  - a. It would benefit the project to simply place another pond to avoid having to not touch that area. Simply driving over, it with backhoe etc... could cause enough disturbance when we go out there to seem like it is disturbed and may result in denying a CO.
- 5. Remove the aerial photo in the background. It clutters up the linework/design.
- 6. Provide a detail of the overflow and how it will discharge into the proposed swale to the roadway.
  - a. This needs to be clearly shown with a cross section.
- 7. Please note that the approved G & D must be followed and not doing so will result in the site not receiving a CO.

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

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Stormwater Quality Engineer (Doug Hughes, PE, <u>jhughes@cabq.gov</u>, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3965 or dggutierrez@cabq.gov

Sincerely,

Die Gut

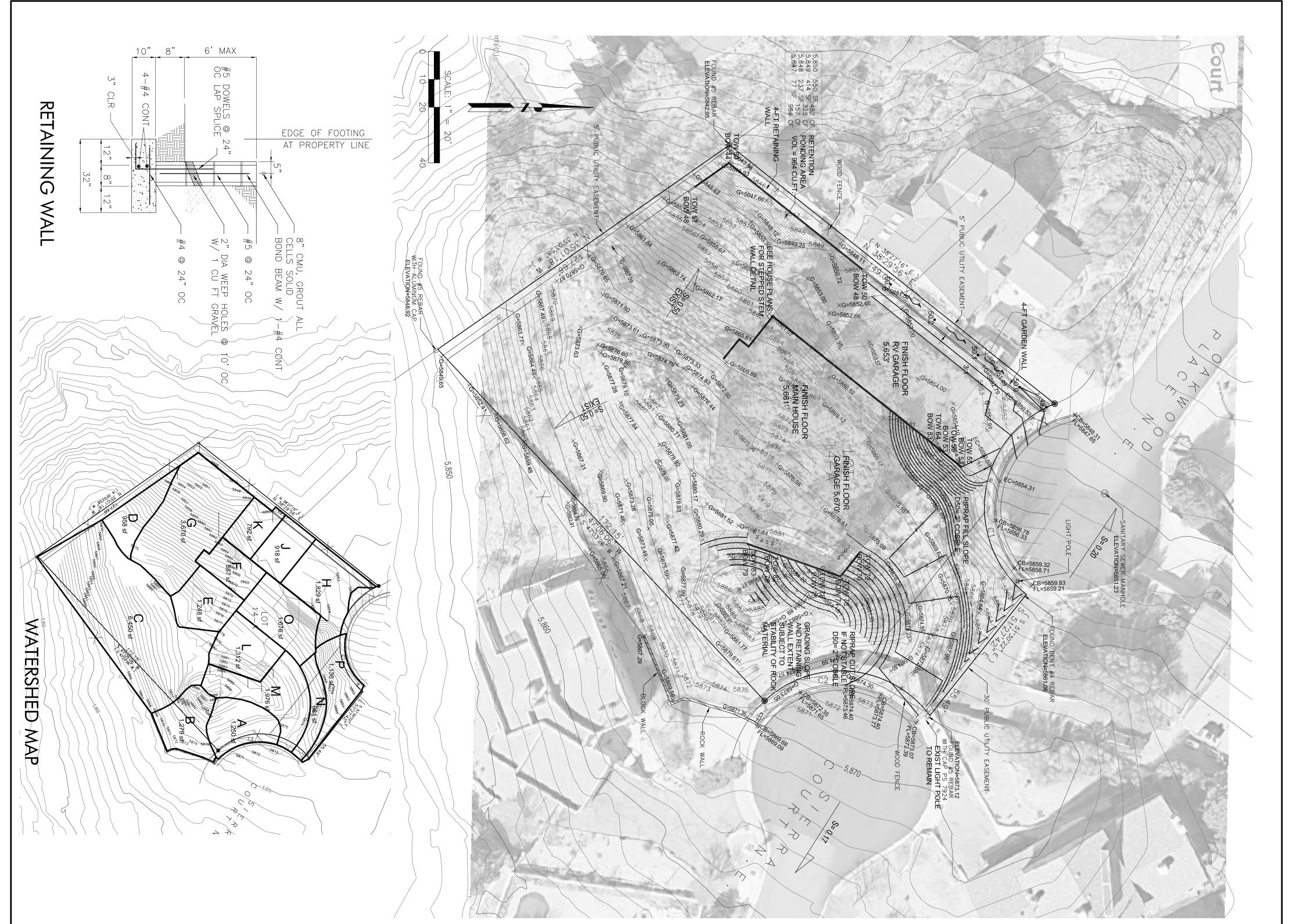
David G. Gutierrez, P.E. Senior Engineer, Hydrology Planning Departmen

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## FEMA MAP

Volume Basin A Basin Basin C Basin B Basin F Basin F Basin H Basin H Basin H Basin M Basin M Basin M Basin M Basin M Basin M	Basin L Basin M Basin O Basin P	Basin D Basin F Basin F Basin H Basin J Basin K	Basin A Basin B Basin C	Volume	Basin L Basin N Basin O Basin P Basin P	Basin D Basin E Basin F Basin H Basin J Basin J Basin K	Basin A Basin B Basin C	Discharge	Basin L Basin M Basin O Basin P Basin P	Basin D Basin E Basin G Basin H Basin J Basin J Basin K	Basin A Basin B Basin C	Drainage Areas	Precipitation Zone 4 Excess Precipitation Peak Discharge
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SURFACE WATER RETENTION DETAIL

4' RETAINING

WAL

RETENTION

ARE/

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2:1

NATURAL

GRAD

Into Retention Basin     140     Basin A       121     Basin B     122       131     Basin C     130       141     Basin C     142       142     Basin C     143       143     Basin C     143       144     Basin C     143       145     Basin C     145       145     Basin C     145       145     Basin C     145       145     Basin C     145       147     Basin C     145       147     Basin C     145       147     Basin C     145       147     Basin C     145       148     Basin C     145       149     Basin C     145 <th>C         Percent C         D         Percent D         Percent D         Area (sf)         Area (sf)</th> <th>Legend         Terrs renorm ruo berucut tatako Awe nota Awe rota run avant. Lawar rus run rus rus rus rus rus rus rus rus rus rus</th>	C         Percent C         D         Percent D         Percent D         Area (sf)	Legend         Terrs renorm ruo berucut tatako Awe nota Awe rota run avant. Lawar rus run rus
<ul> <li>writioul creating a sour locue of print ocurate of stable, it is to be shaped back to a 2:1st investigation of the properties of the southern retention area will be able to retain up to four feet of runoff for an anticipated capacity of 964 cubic feet. Any excess runoff will overlop the ground on the south side of the vall and will discharge into historical flow paths.</li> <li>Hydrologic Methods - The drainage basin map shows 15 separate sub-basins (A-P) within the project area to assess peak flow rates at various points around the project site culminating at either the natural flow path of the retention basin. The calculations which appear hereon analyze both the existing and developed conditions for the 100-year, fo-hour rainfall event. The process outlined in the DPM. Chapter 6 was used to quarify the peak flow rates and volumes. A shown by these calculations, the fully developed improvements will result in a slight increase in runoff generated by the site. When incorporating the proposed ponding, the downstream impact is similar when comparing to existing and/or historical conditions.</li> <li>The proposed improvements will increase the existing peak runoff due to the higher percentage of each land treatment is shown to illustrate the addition of impervious area related to recent sub-basin for existing and proposed discharge rates and volumes. A spreadsheet to proposed restruction. By couting the proposed discharge trates and volumes are related to the proposed restruction basin and existing street, the outfall is to be controlled by incorporating a limited capacity overflow discharge to the southwest.</li> <li>90% Compensatory Volume Management – The water quality retention has been mitigated based on the impervious area of the site multiplied by 0.615-inches or about 54 cubic feet for the ponding and the proposed on the attached spreadsheet. This equates to the total impervious area of the southern pond.</li> </ul>	<ul> <li>Legal Description Lot 14A Block 4 of Wells Sandia Manor Subdivision UPC 1-023-056-352-422-10407</li> <li>14508 Sierra Court, NE</li> <li>Benchmark - Basis of elevation is ACS Station "21-K23" Elevation 5,711.314 NAVD 1988.</li> <li>Flood Zone - As shown by Panels 35001-C0378G of the National Flood Insurance Program Flood Insurance Rate Maps (FIRM) for the City of Albuquerque, New Mexico, dated 09/26/2008 none of this site lies within a designated flood hazard zone.</li> <li>Existing Conditions - Currently, the project site slopes west at about 26% to 50% from the top ridge within the property to the Oakwood Place ROW. The elevation difference across the lot is up to forty feet. The entire property is comprised of exposed granite material with small amounts of decomposed granite near the SW corner. No offsite runoff impacts the property since it is on a ridgeline.</li> <li>Proposed Grading - The Grading and Drainage Plan shows 1) existing and proposed grades indicated by spot elevations and contours; 2) the limit of existing flow paths at the property line and readways. A portion of the site. This ponding will be accomplished by the use of a four foot retaining wall that will block the natural runoff from the site. The topography is too steep to be able to be diverted into the retention area.</li> <li>Cut and or fill slopes along the northern concrete driveway areas were set at a maximum of 2:1 so that cobble armoring will be required to stabilize the fill material. The rock outcop on the south of the driveway and east of the entry walkway is shown to be cut back at a 2:1. It is</li> </ul>	Cone Atlas hree intial across that another on the
1 OF 1 OF 1 OF 1	Mark H. Burak, P.E. Sagebrush Trail SE Albuquerque, New Mexico, 87123 (505) 235-2256 mburak@comcast.net	B DESIGNED BY: M.H.B. DESIGNED BY: M.H.B. DRAWN BY: T.D.S. CHECKED BY: REVISION BY DATE MARK