



West Side Coalition of Neighborhood Associations

TO: Robert Lucero, Development Hearing Officer, City of Albuquerque
FROM: Michael T. Voorhees, Vice President, WSCONA

DATE: February 20, 2026

RE: Supplemental Materials Concerning Natural Grade Topography
PR-2025-020092

Please find attached WSCONA's supplementary material regarding the natural grade of the subject site of the property in the above referenced application. This includes the Topographic Analysis and Comparison of high-resolution 2010 and 2018 LiDAR Data, Field Validation and Verification via Site Inspection, and the supporting Geologic and Volcanologic Assessment of the plot identified by Dr. Larry S. Crumpler, Volcanology and Planetary Geology Researcher, New Mexico Museum of Natural History & Science. These analyses demonstrate that the current topography of the site which features slopes of 9% grade or steeper on large portions of the property have existed on this site for the better part of 200,000 years and are not due to the unpermitted vegetative clearing activity of the 2014-2015 time frame or other anthropogenic activity.

Of note, I reviewed the submission from Modulus Architects on February 19, 2026, and find it to be absurdly inaccurate and misleading. Modulus directs the DHO to a topographic survey from 1990, with contour intervals of 10 feet elevation, which lacks sufficient resolution to establish either the presence or absence of the significant variation in slope on the subject site, and then makes the following false claims:

The historic terrain reflects a gentle, rolling mesa edge condition — not a steep, intact natural landform.

This confirms that the original natural topography did not meet the IDO steep slope threshold.

These assertions are textbook examples of the following logical fallacies: Slothful Induction, Hasty Generalization, Cherry-Picking, and Argument from Ignorance.

Slothful Induction (Appeal to Lack of Evidence): Ignoring relevant evidence by failing to look closely enough, leading to the conclusion that no signal exists simply because it is not immediately apparent in low-resolution data.

Hasty Generalization (Fallacy of Insufficient Statistics): Drawing a broad conclusion that a signal is non-existent based on a sample size or resolution that is too small or coarse to detect it.

Cherry-Picking (Suppressed Evidence): Using only the low-resolution datasets that show no signal while ignoring high-resolution data that might reveal it.

Argument from Ignorance (Appeal to Ignorance): Asserting that because a signal has not been proven to exist (in the low-res data), it must not exist.

An apt comparison would be to say a black and white photograph of a spruce tree shows no evidence of the tree being green, and therefore the tree in question is not green.

High resolution data regarding the subject site was available and easily obtained even during the short time allowed for supplementing the record in this case. This attempt by the agent for the applicant to corrupt the record and insert false and misleading evidence is fundamentally dishonest, and especially so since the agent was sworn in under penalty of perjury. Going forward, the DHO would be wise to disregard it, and to treat all statements and assertions of the agent for the applicant with suspicion, rather than extending a presumption of good faith.

We thank you for the opportunity to supplement the record in this case with evidence showing that the subject site is currently, and has been for the past 200,000 years, a site of undulating steep slopes unsuitable for development.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael T. Voorhees", with a stylized, flowing script.

Michael T. Voorhees
Vice President
WSCONA

Topographic Analysis and Comparison of 2010 and 2018 LiDAR Data

2010 LiDAR Slope Analysis overlaid on 11/2009 Imagery



2018 LiDAR Slope Analysis overlaid on 2/2018 Imagery



2010 LiDAR Project

In 2010, a Regional LiDAR Project was a cooperatively funded project of the U.S. Geological Survey (USGS), the U.S. Army Corps of Engineers (USACE), Albuquerque District, and the MRCOG. The project acquired high resolution LiDAR data in Spring 2010 for an area of approximately 1,233 square miles in Sandoval, Bernalillo and Valencia Counties, New Mexico. The Project focused on acquisition of 2-foot contour equivalent elevation data suitable for input into the National Elevation Dataset (NED) at 1/9 arc second resolution.

2018 LiDAR Project

In 2018, MRCOG again partnered with multiple regional agencies to acquire aerial LiDAR of USGS Quality Level 2 (QL2) standards for approximately 2,349 square miles of the Albuquerque metro area to include urban, suburban, and rural landscapes in Bernalillo, Sandoval, Tarrant, and Valencia Counties.

Comparison

LiDAR slope variation between different datasets is a critical factor in change detection and geomorphological mapping, often resulting from differences in sensor technology, flight parameters, point density, and environmental conditions at the time of collection. Differences in the scanning angle, flight altitude, and swath overlap between different data sets can also introduce systemic, long-wavelength errors, often appearing as stripe-shaped artifacts in the difference analysis. Nevertheless, for the area analyzed, and accounting for the greater point density in data collection for the 2018 data set, areas of red in the LiDAR Data overlay indicate a slope of 9% or greater. As can be seen, significant corresponding portions of the subject site in both the 2010 and 2018 LiDAR show a slope of 9% or greater. While a few of the features appear to be less prominent, ***the vast majority of the topography remains consistent and intact*** both prior to and after the non-permitted vegetative clearing and scraping activity that was conducted between the 3/2014 and 11/2015 satellite remote sensing imagery acquisition events. (See below.)

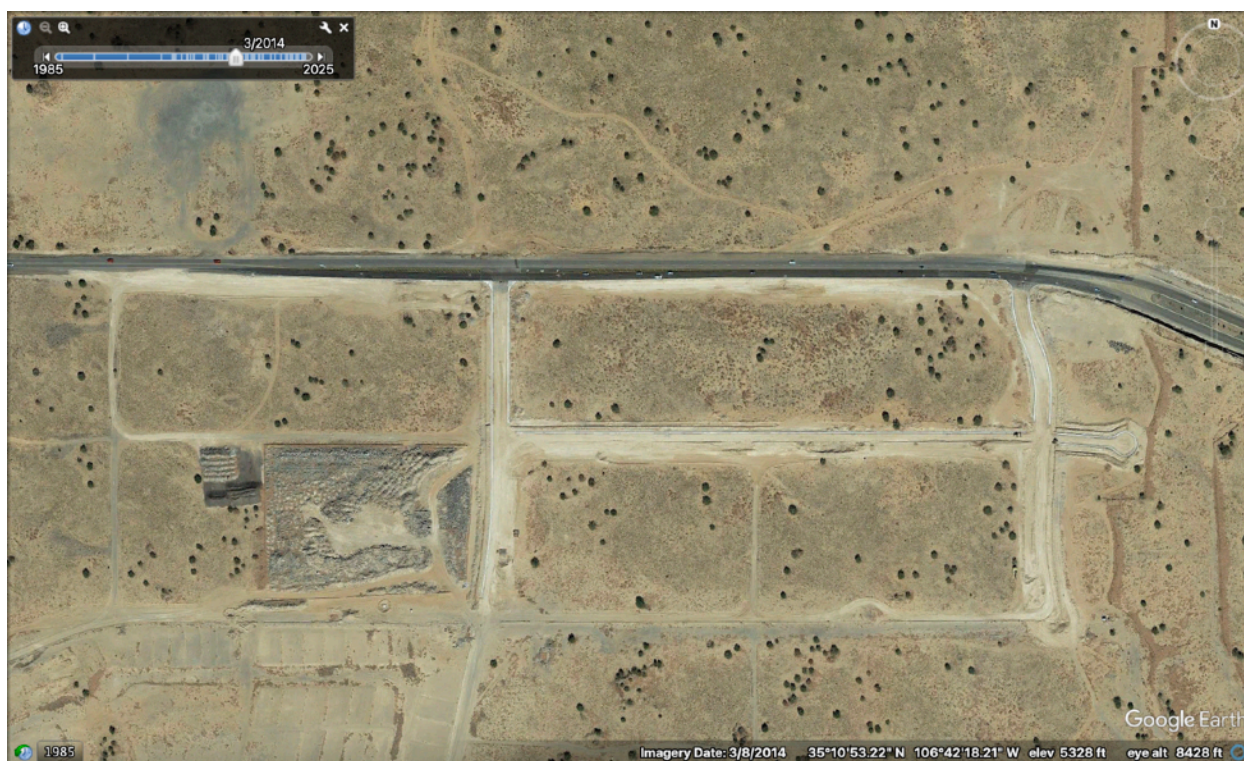
Commentary

As the non-permitted activity coincides with expansion of the footprint of Guzman Construction Services crushing, sorting, and storage activities west of Kimmick from the subject site, and does not occur on other property in the vicinity, and given the fact that Rudy Guzman was a managing member of at least one of the LLCs co-owned by the applicant/property owners of the subject site, it defies credulity that the non-permitted activity was not done at the request of or without the permission of the applicant/property owners, given that such clearing activity costs thousands of dollars in equipment and personnel time. Moreover, the testimony of Angela M. Piarowski regarding applicant/property owners alleged denial of knowledge of who performed the non-permitted vegetative clearing and scraping activity must be disregarded as hearsay, as under the DEVELOPMENT HEARING OFFICER RULES OF PROCEDURE, which in item 6 require Testimony Under Oath. "All testimony at the DHO hearings shall be under oath or affirmation." As the applicant/property owners were not under oath when communicating with their agent, nor were they available for cross-examination, such hearsay is impermissible. Given the above information, the statement by the DHO expressing relief in the hearing that the applicant/property owners had not deliberately obliterated the previously documented archeological site in order to avoid scrutiny or delay for future development seems to be unfounded.

Conclusion

Regardless, the subject site consists currently of significant portions with a slope of 9% or greater, and the subject site previously consisted of significant portions with a slope of 9% or greater, and under the plain language of the IDO definitions, such land is considered sensitive land under both "Steep Slope" and "Escarpment".

3/2014 Google Earth Satellite Imagery



11/2015 Google Earth Satellite Imagery



Field Validation and Verification via Site Inspection

Geographic best practices necessitate coupling any GIS and remote sensing analysis with field validation and verification via site inspection. To that end, the photos below were taken from a site inspection on February 16, 2026, in order to further establish whether the current grade is consistent with the natural grade of the land prior to the unauthorized mechanical clearing of vegetation on the property. The site inspection revealed extant subaerial basalt found across the site indicative that the natural grade topography has been only minimally disturbed. The clearly exposed patina, with occasional fragmentation from recent blade contact indicates that the site was not actually graded, but merely stripped of surface vegetation. Variations in relief, consistent with the analyzed LiDAR data, and other topographic surveys, coupled with the subaerial exposed geologic surfaces indicate that the terrain remains largely unaltered from its natural grade, with significant portions having a slope of 9% or greater. Even near road cuts, exposed basalt formations remain, with the original subaerial surface intact.



As you consider the duties of the DHO in this matter, consistent with the IDO, I refer you to following:

Relevant IDO provisions:

14-16-5-4(A) PURPOSE

This Section 14-16-5-4 is intended to promote the public health, safety, and general welfare of the current and future inhabitants of the City by ensuring that development sites:

14-16-5-4(A)(1) Are consistent with the land use planning objectives of the adopted ABC Comp Plan, as amended, and other plans, policies, and ordinances adopted by the City Council.

14-16-5-4(A)(4) Avoid development of sensitive lands.

14-16-5-4(C)(1) All lots created by a subdivision shall comply with applicable standards in Part 14-16-3 (Overlay Zones)...

14-16-5-4(C)(2) No land shall be subdivided that is found to be unsuitable for subdividing by reason of flooding, ponding, poor drainage, adverse soil conditions, adverse geological formations, ***unsatisfactory topography***, limitations of water quantity, and/or quality, lack of access or restrictions on accessibility, or ***other conditions likely to be harmful to the public health, safety, or general welfare***, unless such unsuitable conditions are corrected or mitigated to the satisfaction of the City. ***The Development Hearing Officer (DHO) is responsible for making determinations regarding unsuitability of land for subdivision.***

14-16-5-4(C)(4) Each subdivision shall comply with the provisions of Subsection 14-16-5-2(C) (Site Design to Avoid Sensitive Lands) unless encroachment into those sensitive lands is corrected or mitigated to the satisfaction of the City.

14-16-1-3(D) Protect all communities, especially those that have been historically underserved.

14-16-1-3(E) Protect the quality and character of residential neighborhoods.

14-16-1-3(L) Protect the abundant natural resources that characterize Albuquerque, including but not limited to Major Public Open Space, Sensitive Lands, the Rio Grande, and the waterways that lead to the river.

14-16-1-3(R) Provide processes for development decisions that balance the interests of the City, property owners, residents, and developers and ensure opportunities for input by affected parties.

Relevant Comp Plan provisions:

The Albuquerque Comprehensive Plan, in Chapter 11, discusses extensively the importance of Heritage Conservation.

If we work to preserve and protect our unique cultural resources, we have an opportunity to leverage the area's distinctive culture and history to strengthen our economy and compete successfully as a region for the growth and development we want.

Under section 11.1.2.3, it describes cultural landscapes. This description is useful and informative in guiding any decision on development in or near sensitive areas, and states:

The volcanoes, escarpment, and volcanic rock outcroppings on the Northwest Mesa have been used for thousands of years – and continue to be used – for sacred pilgrimages by Native American pueblos. Arroyo corridors through this area provide the historic spine of trails connecting sacred sites from the Rio Grande, up the escarpment, past petroglyphs and other shrines, to the volcanic cones.

Cultural landscapes can also include views to important natural or built features. Along many corridors, views to the Sandia Mountains, the Bosque, the volcanoes, and the valley become cultural corridors to those walking, driving, or biking. Views into and from Open Space can also become cultural landscapes. Open Space inherently operates as a cultural landscape, since it includes natural areas used by humans, while also serving as a home to wildlife and plants.

*Preserving, enhancing, and leveraging these cultural landscapes can be accomplished through zoning and regulatory standards for development within or adjacent to these areas. **Controls related to the built environment often regulate** access; sensitive edge treatments; materials; **building height**, massing, and placement; walls and fences; signs; and utilities.*

The Comprehensive Plan also describes Petroglyph National Monument as follows:

For Native American Pueblos, the site encompasses the entire lava bed, the volcanoes' caves and shafts, the petroglyphs, and additional features of importance in meaning and use. In many native cultural and spiritual beliefs, places where underground forces erupt above ground hold tremendous spiritual power. Pilgrimages to and through these sacred sites provide opportunities to direct prayers where they can pass through multiple dimensions. The volcanoes, petroglyphs, escarpment, rock outcrops of basalt (especially those containing petroglyphs), lava tubes and caves, the Sandia Mountains, and other locations are sacred places for many Native Americans, functioning together as an interlocking system of spiritual communication connected to ceremonial practices.

By attempting to circumvent the VPO-2 Height Restriction Subarea through unlawful subdivision, and insisting upon the right to build tall structures that block the site lines above the lava bed of the West Mesa used in these spiritual practices, the Applicant demonstrates an ignorance of the importance of this place to the 29 Pueblos and Tribes recognized by both the City and the National Park Service for their connection to this land, and is willing to inflict harm on the community for which these sacred views are most important.

For the above data, analysis, and reasons, we respectfully request that you, as DHO, make a determination under 14-16-5-4(C)(2) that the subject site is unsuitable for subdivision.



Michael T. Voorhees
Vice President
WSCONA

February 19, 2026

To: Michael T. Voorhees, WSCONA

From: Dr. Larry S. Crumpler, Volcanology and Planetary Geology Researcher, NMMNH&S

Subject: Geologic and volcanologic assessment of the plot identified

I have over 50 years of experience in the study of volcanic geology and the landscapes associated with recent volcanic activity. This includes over 120 peer-reviewed professional publications ranging from basaltic volcanology and geologic mapping, including lava flows in the Southwest and planetary missions (Mars rovers, current and Venus synthetic aperture radar). I have also authored books and popular articles, including several devoted to the volcanoes of New Mexico. My expertise is lava flow structure and the physics of volcanic emplacement processes and geologic mapping of volcanic terrains.

I have visited the lot in question and the following is my professional assessment of the characteristics that I observed. The area lies within a series of two meter high and up to 20 meters wide lava flow lobes sourced from the Albuquerque Volcanoes fissure eruption dated at approximately 200,000 years old. The surface relief is much as it appeared at the end of the eruptions. It is an unusual volcanic landscape preserved from 200,000 years ago, quite unique for any urban landscape on the continent. The area in question is part of a large lava fan that spreads from a point near the current intersection of Unser and Paseo del Norte. These lava flows are narrow lobes that diverge and anastomose locally and are populated by unusual domical swells known as “tumuli” that form as part of the lava flow emplacement process. Similar swells are only known from recent volcanic eruption sites in places like Iceland and Hawaii where fissure eruptions like the Albuquerque Volcanoes fissure are common.

The grade of the general surface from west to east is the natural gradient of the flows as they moved from the fissure towards the Rio Grande. The local relief reflects the height and width of individual lava flow lobes. It has been modified through minimal erosion by removal of 2 to 3 cm of the upper crust by effects of weathering and by local infilling of inter-flow areas between flows by wind-blown silt. This means that the swells and lows are the expression of small lava lobes near their terminal end points, the complex relief arising from the anastomosing character of small lava flows. Some of the flows in the area exhibit pronounced hills or nobs that are a volcanic phenomenon known as “tumuli” that arise from inflation of the lava into “blisters” during their final stages of emplacement. In the plot in question, the low areas between at least two the lobes of lava contain abundant rounded alluvial cobbles and pebbles that are likely exposed “windows” to the underlying substrate of rift fill over which the lavas were emplaced.

In conclusion, the relief in the lot is original and a largely undisturbed lava flow surface, smoothed at meter horizontal scales and centimeter vertical scales along the crests of rises by small amounts of erosion and local infilling with natural alluvial materials and wind-blown silt. The topographic relief from west to east is the natural relief of the lava and north-south swells at scales of 10s of meters is the natural relief arising from individual lobes of lava flows. This is a preserved geologic and volcanologic surface from 200,000 years ago and is relatively undisturbed since that time. To be more specific, the steep slopes of 9% grade or greater which occur on the undulating surface between the tumuli and between the tumuli and the exposed geologic windows at numerous locations across the subject site are the result of natural geologic processes, and not anthropogenic disturbance, and also predate the vegetative clearance activity of the 2014-2015 time frame.

The conclusions and interpretations may not be those of the Museum or State of New Mexico and only represent my professional geological conclusions.

Larry S. Crumpler, Ph.D.
Research Volcanologist/Geologist

A handwritten signature in black ink, appearing to read "J.S. Crumpler". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.