

Community Planning and Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930 • Fax: 303.441.4856 Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.gov

BOARD OF COUNTY COMMISSIONERS Hybrid Public Hearing

February 14, 2023 – 1:00 P.M.

All Board of County Commissioners public hearings and meetings will be offered in a hybrid format where attendees can join through Zoom or in-person at the Boulder County Courthouse, 3rd Floor, 1325 Pearl Street, Boulder

PUBLIC HEARING

STAFF PLANNER: Jonathan Tardif

STAFF RECOMMENDATION REGARDING:

Docket LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence

Proposal:	Limited Impact Special Use Review to allow for 3,005 cubic yards of grading
-	for driveway and site improvements, and Site Plan Review for the
	construction of a 4,559-square-foot residence on a vacant parcel where the
	Presumptive Size Maximum is 3,878 square feet at 672 Wagonwheel Gap
	Road
Location:	672 Wagonwheel Gap Road, located approximately 1.48 miles west of the
	intersection of Wagonwheel Gap Road and Lee Hill Drive on Section 11,
	Township 1N, Range 71
Zoning:	Forestry (F) Zoning District
Applicants:	Jeremy Smith
Property:	Luis Riviere & Maria Barbenza
Owner	

STAFF RECOMMENDATION: Staff recommends that the Board of County Commissioners conditionally approve docket LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence.

PACKET CONTENTS:

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0	Staff Recommendation	1 – 29
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SUMMARY AND RECOMMENDATION:

The applicant requests Limited Impact Special Review for 3,005 cubic yards of non-foundational earthwork for driveway grading and site improvements around the residence and Site Plan Review for construction of a 4,559-square-foot residence at 672 Wagonwheel Gap Road. Limited Impact Special Review is required grading over 500 cubic yards, and this earthwork is analyzed pursuant to the Special Use Standards outlined in Boulder County Land Use Code (Code) Art. 4-601. Site Plan Review is required for the proposed residence because it will require a building permit on a property that is currently vacant (Art. 4-802.A.1). The proposed residence is analyzed pursuant to the Site Plan Review standards outlined in Code Art. 4-806.

Staff recommends conditional approval of the proposal because, with the recommended conditions of approval, staff finds the earthwork can meet the Limited Impact Special Review Criteria and the residential construction can meet the Site Plan Review Standards in the Code.

DISCUSSION:

The subject parcel is approximately 1.07 acres in size, located on the north side of Wagonwheel Gap Road, approximately 1.48 miles west of the intersection of Wagonwheel Gap Road and Lee Hill Drive as shown in Figure 1 below. It is a platted lot in the Bow Mountain Subdivision



Figure 1: Vicinity Map showing location of the subject parcel

As established through a Replat in 1963 and confirmed by the county through a legal building lot determination (BLD-20-0084), the subject parcel is a legal building lot. Lot 8C is shown with a green outline on the plat map below (Figure 2).



Figure 2: Cropped image of the Bow Mountain Replat, with Lot 8C outlined in green

The applicant requests Limited Impact Special Review for 3,005 cubic yards of non-foundational earthwork. 2,895 cubic yards of which is for driveway grading plus road improvements and 110 cubic yards of in order for the site to tie-in to the slope around the residence, provide proper slopes for revegetation, and blend the proposal into the existing hillside.

The earthwork is comprised of three main parts: 1) creation of a 175-foot long 12-foot wide driveway in the ROW, 2) an emergency turnaround hammerhead, driveway extension to carport, and parking area, and 3) on-site grading surrounding the house.

The applicants are proposing to create a 12-foot wide driveway in the ROW along Wagonwheel Gap Road, an emergency turnaround hammerhead on the eastern side of the proposed driveway which leads to the location of the proposed 20-foot wide carport and parking area.

Driveway Earthwork	1,010 cubic yards of cut and 1,885 cubic yards of fill
Other Earthwork	110 cubic yards of cut

Wagonwheel Gap Road has a U-shaped configuration with an east-west orientation. The lower (southern) portion of the ROW has been improved and contains an existing county-maintained road (referred to as the paved ROW). The upper (northern) portion of the ROW has not been improved to county standards but contains private driveway accesses at different portions of the ROW (referred to as the existing road). Lot 8C is accessed on the upper portion of Wagonwheel Gap Road via an existing road in an access easement that is depicted on the Bow Mountain Replat (see Figure 3 below). As the existing road in the access easement intersects with the upper portion of the Wagonwheel Gap ROW, it turns east to serve additional properties beyond Lot 8C (see where red line in Figure 3 continues towards lot 6A and 6B). The subject property, Lot 8C, is adjacent to the upper portion of the ROW and just north of the existing road within the platted access easement. This alignment requires that approximately 175 feet of the driveway leading to the subject property itself.



Figure 3: Cropped image of the Bow Mountain Replat, with the existing road in the access easement outlined in red

The applicant proposes to construct a 4,559-square-foot residence roughly centered in between the hammerhead and carport location as shown in Figure 4 below. Five retaining walls are proposed along the western exterior of the residence, approximately five feet in height. One retaining wall is proposed along the western exterior of the carport. The height of the carport retaining wall is not informed on the application materials. These retaining walls are proposed to connect the structures back into existing contours without severe modification to the existing topography and limit the amount of disturbance on the steeper slopes (as shown in Attachment A, page A38).



Figure 4: Aerial photo of subject parcel, with proposed driveway shown in yellow and approximate location of residence indicated with a blue star

Lot 8C slopes from the northeast to southwest. The residence is proposed on the southwestern facing slope in order to obtain southern solar exposure. Figure 5 illustrates the site topography and shows 40-foot contour lines.



Figure 5: Topographic contour map of 672 Wagonwheel Gap Road

The County Comprehensive Plan identifies the property as an Archaeologically Sensitive Area (see Figure 6, below), which is discussed as part of SPR review standard 13 later in this recommendation.



Figure 6: Comprehensive Plan map of 672 Wagonwheel Gap Road

Given the slope, a portion of the parcel is identified as having debris flow susceptibility, as shown in Figure 7 below. Both the existing public ROW and the proposed new driveway and residence are partially located in these identified areas.



Figure 7: Geological hazards located on the subject parcel.

REFERRALS:

This application was referred to the typical agencies, departments, and nearby property owners. All responses received are attached and summarized below.

<u>Boulder County Building Safety and Inspection Services Team</u>: Boulder County Building Safety and Inspection Services reviewed the proposal and had no conflicts. Separate building permits are required for the residence, pool, and outside fireplace. The pool will also require on- or off-site renewable energy offsets if it is heated. The outside fireplace will also require on- or off-site renewable energy offsets. The proposed residence will be required to meet the county's BuildSmart requirements and must have an automated fire sprinkler system installed and be constructed with ignition-resistant materials and defensible space for wildfire mitigation. A more detailed plan review will be performed at the time of permit application, when full details are available, to assure that the proposal will meet all applicable minimum requirements.

<u>Boulder County Development Review Team – Access & Engineering</u>: Boulder County Development Review Team – Access & Engineering (DRT A&E) reviewed the proposal and found that legal access to the property has been demonstrated, with physical access provided by the proposed driveway within an existing access easement. DRT A&E indicated that the new driveway appeared to be designed to meet the Multimodal Transportation Standards (MMTS) and must be actually constructed to meet them. They also noted the number of residences served by this section of ROW, and the requirement to widen the existing two-lane driveway (discussed under LU criteria 7, below), required additional details for the proposed drainage and erosion control measures be submitted for permitting, included several requirements for plans and conditions designed to limit traffic impacts during construction, and finally noted that an Access Improvement and Maintenance Agreement (AIMA) will be issued for the shared private access road as part of the permitting process.

<u>Boulder County Public Health Department:</u> The Public Health Department reviewed the proposal and found that an onsite wastewater treatment system (OWTS) permit has not been issued for this property. The OWTS permit must be applied for and issued prior to installation and before a building permit can be obtained. The OWTS must be installed, inspected, and approved before issuance of a Certificate of Occupancy. Boulder County Public Health must conduct an onsite investigation and review percolation rates, soil conditions and any design plans and specifications prior to OWTS permit issuance. The OWTS absorption field must be located a minimum distance of 100' from all wells, 25' from waterlines, 50' from waterways and 10' from property lines.

<u>Boulder County Wildfire Mitigation Team</u>: The Wildfire Mitigation Team reviewed the proposal and noted that wildfire mitigation will be required for the proposed driveway and residence, including site location, ignition-resistant materials and defensible space, emergency water supply, and emergency vehicle access & clearance.

<u>Boulder County Parks & Open Space (BCPOS)</u>: BCPOS reviewed the proposal and found that it was unlikely to cause significant natural resource impacts as long as adequate erosion control is used during construction. Staff also recommended conditions of approval outlining requirements for a revegetation plan.

<u>*Xcel Energy:*</u> Xcel noted that additional easements may need to be acquired and encouraged the applicant to contact an Xcel Right-of-Way & Permits agent.

<u>Adjacent Property Owners:</u> 60 application notices were mailed to nearby property owners, and CP&P staff received no public comments regarding the limited impact special review or site plan review process.

Agencies that sent a response indicating no conflicts include: Boulder County Historic Review, City of Boulder Open Space & Mountain Parks

<u>Agencies that did not respond include:</u> Boulder County Conservation Easement team, City of Boulder Planning & Development Services, Boulder Valley Longmont Conservation Districts, Boulder Mountain FPD

LIMITED IMPACT SPECIAL REVIEW SUMMARY:

The Community Planning & Permitting (CP&P) staff reviewed the conditions and standards for approval of a Limited Impact Special Review. Staff has reviewed these standards as they apply the proposed 3,005 cubic yards of non-foundational earthwork per Article 4-601 of the Code and finds the following:

(1) Complies with the minimum zoning requirements of the zoning district in which the use is to be established, and will also comply with all other applicable requirements;

The subject parcel is zoned Forestry and is a legal building lot. Earthwork in excess of 500 cubic yards can be permitted as an accessory use (Article 4-516) to the residence, pending approval through Limited Impact Special Review. The Site Plan Review (SPR) regulations (evaluated for the proposed residence) require that driveways or grading have a demonstrated associated Principal Use (Art. 4-806.A.11); consequently, this driveway must be reviewed in combination with the proposed SPR. Staff finds this criterion can be met.

(2) Will be compatible with the surrounding area. In determining compatibility, the Board

should consider the location of structures and other improvements on the site; the size, height and massing of the structures; the number and arrangement of structures; the design of structures and other site features; the proposed removal or addition of vegetation; the extent of site disturbance, including, but not limited to, any grading and changes to natural topography; and the nature and intensity of the activities that will take place on the site. In determining the surrounding area, the Board should consider the unique location and environment of the proposed use; assess the relevant area that the use is expected to impact; and take note of important features in the area including, but not limited to, scenic vistas, historic townsites and rural communities, mountainous terrain, agricultural lands and activities, sensitive environmental areas, and the characteristics of nearby development and neighborhoods;

From the existing road within the access easement, an approximately 175-foot long, 12-foot wide driveway is proposed to be constructed in the ROW. This driveway follows the contours of the parcel reduce the amount of earthwork required to construct the driveway. A profile view of the existing and proposed grades for the driveway are displayed in Figure 8, below.

At the property boundary for Lot 8C, earthwork is proposed to create the driveway hammerhead turnaround up to the location of the carport. The cut and fill proposed is required to establish an emergency turnaround area and driveway grade that complies with the MMTS.

Two culverts are proposed to facilitate drainage along the driveway and deposit the outfall to the natural drainage pattern of the site (displayed in greater detail in Attachment A, page A50). Access & Engineering staff has required additional details for the proposed drainage and erosion control measures be submitted for permitting (discussed further in LU criteria 13).



Figure 8: Profile view of the existing grade (dashed line) and proposed grade (solid line) for the driveway.

1,010 cubic yards of cut and 1,885 cubic yards of fill will be used for the construction of the driveway access. Because the proposed driveway and earthwork around the house connect back into existing contours without severe modification to the existing topography, staff finds the earthwork is compatible with the surrounding area.

Therefore, staff finds that this criterion can be met.

(3) The use will be in accordance with the Comprehensive Plan;

The Comprehensive Plan indicates that the entirety of the subject parcel may be an Archaeologically Sensitive Area. However, a letter from History Colorado's Office of Archaeology and Historic Preservation indicated that there were no historic sites or surveys in the area of the parcel, and the county Historic Review Team indicated no concerns with the proposed earthwork in their referral response.

The proposed driveway is in the area identified as being susceptible to debris flow, but the majority of the house site is not. The entirety of the parcel is susceptible to debris flow due to the surrounding slope to the west. A retaining wall is proposed along the western edge of the driveway and carport that will protect this area from debris flow. Erosion control and revegetation is also required on-site (discussed in LU criteria 4, below).

Staff finds that this criterion can be met.

(4) Will not result in an over-intensive use of land or excessive depletion of natural resources. In evaluating the intensity of the use, the Board should consider the extent of the proposed development in relation to parcel size and the natural landscape/topography; the area of impermeable surface; the amount of blasting, grading or other alteration of the natural topography; the elimination or disruption of agricultural lands; the effect on significant natural areas and environmental resources; the disturbance of plant and animal habitat, and wildlife migration corridors; the relationship of the proposed development to natural hazards; and available mitigation measures such as the preservation of open lands, the addition or restoration of natural features and screening, the reduction or arrangement of structures and land disturbance, and the use of sustainable construction techniques, resource use, and transportation management.

The earthwork proposed is for the creation of a 175-foot long 12-foot wide driveway in the ROW, an emergency turnaround hammerhead & parking area, and on-site grading to tie-in to the slope around the residence, provide proper slopes for revegetation, and blend the proposal into the existing hillside. The earthwork proposed will not alter the natural topography severely.

The build area is constrained by the slope of the parcel. Lot 8C is a characterized primarily by a consistent and steep grade from the northeast to southwest. The proposed location for the residence is on the southwestern facing slope and is rotated in a fashion to match the existing contour lines of the parcel. The proposed driveway design uses the shortest possible connection for the driveway, while preserving the existing drainage flow lines for site drainage and using culverts to facilitate the movement of outfall to its natural drainage pattern. No significant natural areas or environmental resources of concern have been identified on the property, and staff does not find that the proposed earthwork would constitute over-intensive use of the land.

Six retaining walls are shown on the proposed site plan. Five are located along the western exterior of the proposed residence, and one is located along the western exterior of the proposed carport. Retaining walls or series of walls greater than four feet in height, as measured from the bottom of the footer to the top of the wall, require building permits for construction. At permitting, the height of the retaining wall must be provided and, if greater than four feet in height, wall details must be designed and stamped by a qualified Colorado-licensed professional engineer. Calculations shall be submitted for all retaining walls over 6 feet in height.

To alleviate the risk of rockfall affecting downslope areas of construction, staff recommends a condition of approval requiring the installation of construction fencing in areas downslope of the construction site for erosion control measures and to prevent construction debris.

In order to restore the disturbed areas created through this project, staff recommends requiring a Revegetation and Erosion Control Plan as a condition of approval.

Staff finds that the earthwork will not result in an over-intensive use of land or alter the natural topography severely; retaining walls are proposed to limit the amount of disturbance on the steeper slopes. Therefore, as conditioned, this criterion can be met.

(5) The use will not have a material adverse effect on community capital improvement programs

There is no evidence that the proposed non-foundational earthwork will have a negative effect on community capital improvement programs, and no referral agency has responded with such a concern.

Therefore, staff finds that this criterion can be met.

(6) The use will not require a level of community facilities and services greater than that which is available;

No referral response was received from the Boulder Mountain Fire Protection District. However, the referral response from the Boulder County Development Review Team – Access & Engineering team indicates that an emergency access pullout is not required per the MMTS, as the proposed drive is approximately 300 feet in length. Staff recommends a condition of approval requiring the applicant to submit a letter form the Boulder Mountain Fire Protection District that the turnaround, as designed, can accommodate its emergency access needs.

Referral responses from Boulder County Public Health and Xcel Energy did not indicate any concerns about the proposal's impact on community facilities and services.

Based on the received referral responses, staff finds that the proposed earthwork will not require a level of community facilities and services greater than that which is available, and therefore that this criterion can be met.

(7) Will support a multimodal transportation system and not result in significant negative impacts to the transportation system or traffic hazards;

The subject property is accessed starting from the paved lower Wagonwheel Gap road, continuing along an existing road within an access easement, and then the proposed driveway through the ROW leading to the house site.

The submitted driveway design must meet the MMTS, and staff recommends a condition of approval that the driveway be constructed to meet those standards as outlined in the conditions at the end of this recommendation. As proposed, the 12-foot wide driveway meets the MMTS and an emergency hammerhead is proposed for emergency access.

Staff recommend a condition of approval requiring that an Access Improvement and Maintenance Agreement (AIMA) be completed for the existing road referred to as

Wagonwheel Gap Road during Building Permit application review. The AIMA will be prepared by county staff, and must be signed by the property owner.

Staff also recommends a requirement that all material and equipment staging occur on the project site (and not on the existing road in the access easement or on Wagonwheel Gap Road), and that all vehicles be parked to one side of the ROW during construction so as to avoid impeding the roadway.

As conditioned, staff finds this criterion can be met.

(8) Will not cause significant air, odor, water, or noise pollution;

There is no indication that the proposal will cause significant air, odor, water, or noise pollution, and no referral agency responded with such a concern. As previously stated under criterion four, staff recommends requiring that erosion control methods be submitted as part of the Revegetation and Erosion Control Plan to ensure no silt, sediment, or debris leaves the construction site.

Therefore, as conditioned, staff finds this criterion can be met.

(9) Will be adequately buffered or screened to mitigate any undue visual impacts of the use;

Although the proposed residence will be visible from Wagonwheel Gap Road, the proposed driveway and grading improvements do not result in any undue visual impacts. The proposed location of the driveway is intended to mitigate the amount of on-site grading improvements required due to the slope that characterizes the property.

Therefore, staff finds this criterion can be met.

(10) The use will not otherwise be detrimental to the health, safety, or welfare of the present or future inhabitants of Boulder County

With the recommended conditions of approval requiring the installation of catch fencing and erosion control measures during construction, staff do not anticipate that the proposed non-foundational earthwork will be detrimental to present or future county inhabitants.

Therefore, staff find this criterion can be met.

(11) The use will establish an appropriate balance between current and future economic, environmental, and societal needs by minimizing the consumption and inefficient use of energy, materials, minerals, water, land, and other finite resources.

The proposed non-foundational earthwork will establish an appropriate balance between current and future societal needs by providing adequate physical access to the property such that a new residence can be constructed, while minimizing the inefficient use of land by using the shortest feasible route to where the proposed residence will be constructed.

Therefore, staff find that this criterion can be met.

(12) The use will not result in unreasonable risk of harm to people or property – both onsite and in the surrounding area – from natural hazards. Development or activity associated with the use must avoid natural hazards, including those on the subject property and those originating off-site with a reasonable likelihood of affecting the subject property. Natural hazards include, without limitation, expansive soils or claystone, subsiding soils, soil creep areas, or questionable soils where the safe-sustaining power of the soils is in doubt; landslides, mudslides, mudfalls, debris fans, unstable slopes, and rockfalls; flash flooding corridors, alluvial fans, floodways, floodplains, and flood-prone areas; and avalanche corridors; all as identified in the Comprehensive Plan Geologic Hazard and Constraint Areas Map or through the Special Review or Limited Impact Special Review process using the best available information. Best available information includes, without limitation, updated topographic or geologic data, Colorado Geologic Survey landslide or earth/debris flow data, interim floodplain mapping data, and creek planning studies.

The proposed driveway will pass through areas identified in the Comprehensive Plan as being susceptible to debris flow susceptibility. However, any driveway route would fall within these areas. Development occurring in these areas is not uncommon in the mountainous areas of the county and staff finds that through the use of effective site engineering (for example: retaining walls, building into the slope, following existing contour lines, etc.), unreasonable risk from natural hazards in relation to the proposed driveway can largely be mitigated.

Therefore, staff find that this criterion can be met.

(13) The proposed use shall not alter historic drainage patterns and/or flow rates unless the associated development includes acceptable mitigation measures to compensate for anticipated drainage impacts. The best available information should be used to evaluate these impacts, including without limitation the Boulder County Storm Drainage Criteria Manual, hydrologic evaluations to determine peak flows, floodplain mapping studies, updated topographic data, Colorado Geologic Survey landslide, earth/debris flow data, and creek planning studies, all as applicable given the context of the subject property and the application.

Two culverts are proposed to facilitate drainage along the driveway and deposit the outfall to the natural drainage pattern of the site (displayed in greater detail in Attachment A, page A50). The Erosion Control & Drainage plans submitted indicate riprap aprons will be placed at the outfall of the two proposed storm drainage culverts. Due to the proposed location of the riprap aprons and the proximity to the southern boundary of the 60-foot wide Wagonwheel Gap ROW, staff is recommending conditions of approval requiring that drainage calculations are submitted with the building permit application to demonstrate how the proposed development impacts existing and proposed drainage both on- and off-site. Drainage impacts related to the proposed development must be mitigated on-site to the extent possible. If off-site mitigation is necessary, it must be included in the Drainage Plan.

As conditioned, staff finds that this criterion can be met.

SITE PLAN REVIEW SUMMARY:

Article 4-806 of the Boulder County Land Use Code states that no Site Plan Review can be approved without compliance with the following standards. All site plan review applications shall be reviewed in accordance with the following standards which the Director has determined to be applicable based on the nature and extent of the proposed development. Only those standards applicable to this project are included in this list. Staff has reviewed these standards as they apply to the proposed residence and finds the following:

- (1) To provide a greater measure of certainty as to the applicable neighborhood relevant for comparison, the following definition of neighborhood shall be used to review proposed Site Plan Review applications:
 - a. For applications inside platted subdivisions, which have seven or more developed lots, the neighborhood is that platted subdivision.

The applicable neighborhood for the subject parcel is the platted subdivision of Bow Mountain.

- (2) The size of the resulting development (residential or nonresidential) must be compatible with the general character of the defined neighborhood.
 - a. In determining size compatibility of residential structures within the defined neighborhood, it is presumed that structures of a size within the <u>larger</u> of a total residential floor area of either (1) 125% of the median residential floor area for that defined neighborhood or (2) of a total residential floor area of 1,500 square feet in the mapped townsites of Allenspark, Eldora, Eldorado Springs, Raymond, and Riverside, or 2,500 square feet for all other areas of the County, are compatible with that neighborhood, subject also to a determination that the resulting size complies with the other Site Plan Review standards in this section 4-806.A.

A. SIZE PRESUMPTION

The presumed compatible size of residential structures within the defined neighborhood (see Standard 1 above for the applicable neighborhood) is 3,855 square feet, which is 125% of the median residential floor area for the Bow Mountain Subdivision.

Median (total residential floor area) in the defined neighborhood*	3,084 square feet
125% of the median residential floor area in the defined neighborhood	3,855 square feet
Total existing residential floor area on the subject parcel*	0 square feet
Total proposed residential floor area	4,559 square feet

*Source: Boulder County Assessor's records, as verified by CPP staff for the subject parcel.

b. Either the applicant or the Director may demonstrate that this presumption does not adequately address the size compatibility of the proposed development with the defined neighborhood.

i. Factors to be considered when determining the adequacy of this presumption and whether it can be overcome include:

- A. The visibility of the proposed development from other private parcels within the defined neighborhood, as well as public roads and open space both within and outside that defined neighborhood.
 - 1. The proposed development must be minimally visible from the above-listed areas. Mitigation of visibility impacts may be achieved by:

(a) the use of natural topography to screen the proposed development, or

(b) underground construction to screen the proposed development; existing underground residential floor area may be considered, or

(c) distance of the proposed development from other private parcels, public roads and open spaces.

B. ABILITY TO OVERCOME THE SIZE PRESUMPTION

Under Article 4-806.A.2.b.(i) of the Land Use Code, the applicant or Director may demonstrate that the presumed compatible size does not adequately address the size compatibility of the proposed development with the defined neighborhood. Article 4-806.A.2.b.(i)(A) states that one factor that can be considered in determining whether the size presumption may be overcome is whether the development is minimally visible from private parcels, public roads or open space. Visual impacts can be mitigated by the use of underground construction to screen the proposed development. In this case, the total proposed residential floor area is 4,559 square feet, which includes a 728-square-foot basement that is fully subterranean and not visible.

Because this 728 square feet is underground, staff finds that the visibility impacts of the proposed development from other private parcels within the defined neighborhood or area are mitigated. Staff also analyzed the visible (i.e., above grade) residential floor area within the defined neighborhood. Many of the other homes in the subdivision have walk-out basements that are visible, so the proposal is consistent with the visible (above-grade) character of the neighborhood. Staff finds that the subject proposal may overcome the size presumption, with the underground basement and since the visible residential floor area is consistent with others in the subdivision.

RESIDENTIAL FLOOR AREA*			
Total existing residential floor area on the subject parcel to remain	0 square feet		
Approved NEW residential floor area	Maximum 4,559 square feet (782 square feet of which is subterranean basement)		
TOTAL approved resulting residential floor area	Maximum 4,559 square feet (782 square feet of which is subterranean basement)		

C. APPROVED SIZE

*Residential Floor Area includes all attached and detached floor area on a parcel including principal and accessory structures used or customarily used for residential purposes, such as garages, studios, pool houses, home offices, and workshops, excluding covered deck. Floor area does not include the area of any covered porch. Gazebos, carports, detached greenhouses and hoophouses up to a total combined size of 400 square feet are also exempt.

The size approved is a 4,559-square-foot residence consisting of a 782-square-foot basement, 2,123-square-foot first floor, and 1,654-square-foot second floor. A 400-square-foot detached carport is also proposed and approved; this floor area is exempt from the definition of residential floor area (Land Use Code Art. 18-189D) and is not counted in the residential floor area totals.

(3) The location of existing or proposed buildings, structures, equipment, grading, or uses shall not impose an undue burden on public services and infrastructure.

Staff do not foresee any undue burdens imposed on public services or infrastructure by this application. As noted in the Limited Impact Special Review analysis, a letter from the Boulder Mountain Fire Protection District is required as a condition of approval to confirm that the emergency turnaround, as designed, can accommodate the district's emergency access needs. As conditioned, find no conflicts with this standard.

(4) The proposed development shall avoid natural hazards, including those on the subject property and those originating off-site with a reasonable likelihood of affecting the subject property. Natural hazards include, without limitation, expansive soils or claystone, subsiding soils, soil creep areas, or questionable soils where the safe-sustaining power of the soils is in doubt; landslides, mudslides, mudfalls, debris fans, unstable slopes, and rockfalls; flash flooding corridors, alluvial fans, floodways, floodplains, and flood-prone areas; and avalanche corridors. Natural hazards may be identified in the Comprehensive Plan Geologic Hazard and Constraint Areas Map or through the Site Plan Review process using the best available information. Best available information includes, without limitation, updated topographic or geologic data, Colorado Geologic Survey landslide or earth/debris flow data, interim floodplain mapping data, and creek planning studies. Development within or affecting such natural hazards may be approved, subject to acceptable measures that will satisfactorily mitigate all significant hazard risk posed by the proposed development to the subject property and surrounding area, only if there is no way to avoid one or more hazards, no other sites on the subject property can be reasonably developed, or if reasonably necessary to avoid significant adverse impacts based upon other applicable Site Plan Review criteria.

As discussed under LU review criteria 12 above, the proposed residence is partially located in an area identified in the Comprehensive Plan susceptible to debris flow. However, there does not appear to be a feasible driveway route or residence location that would avoid any or all of these areas within Lot 8C. Development occurring in these areas is not uncommon in the mountainous areas of the county and staff finds that through the use of effective site engineering (for example: retaining walls, building into the slope, following existing contour lines, etc.) and the required erosion control measures, unreasonable risk from natural hazards in relation to the proposed residence can largely be mitigated.

Therefore, staff find no conflicts with this standard.

(5) The site plan shall satisfactorily mitigate the risk of wildfire both to the subject property and those posed to neighboring properties in the surrounding area by the proposed development. In assessing the applicable wildfire risk and appropriate mitigation measures, the Director shall consider the referral comments of the County Wildfire Mitigation Coordinator and the applicable fire district, and may also consult accepted national standards as amended, such as the Urban-Wildland Interface Code; National Fire Protection Association (NFPA); International Fire Code; and the International Building Code.

The proposed project is in Wildfire Zone 1 (the foothills or mountains—approximately west of highways 7, 36, or 93) of the unincorporated portion of Boulder County. The Boulder County Wildfire Mitigation Team reviewed the proposal and noted that wildfire mitigation will be required, including, ignition-resistant materials and defensible space, emergency water supply, and emergency vehicle access & clearance.

The following is required:

IGNITION-RESISTANT MATERIALS AND CONSTRUCTION

Since the proposed development is located within a potentially hazardous area, all exterior building materials (including any proposed decking) must be ignition-resistant construction or better. Because of the wildfire mitigation risks associated with the site location, the following more restrictive increased ignition-resistant exterior materials are required:

- Dual pane tempered glass windows are required within at least 50 feet of the property lines.
- Wood and fire-retardant-treated wood are not allowed.
- Heavy timber (IBC Section 602.4) and log wall construction (see definition in R327) are allowed.
- Deck surface must be an ASTM E84 (UL 723) flame-spread index no greater than 75.

All adjacent exterior materials and wall and roof/ceiling assemblies on and within 25 feet of the carport must be constructed of a 1-hour fire-rated (on the carport side) noncombustible assembly. Specifically, this requires:

- Exterior materials adjacent to the carport must be noncombustible as defined in R327 of the Boulder County Building Code Amendments.
- Wall and roof/ceiling assemblies adjacent to the carport require:
 - o Metal framing
 - o Type X drywall (facing the carport)
- Rock wool insulation is required if insulation is to be used

All exterior materials must be clearly noted on the building plans and must be reviewed and approved as "ignition resistant" by the Building Safety & Inspection Services Team.

DEFENSIBLE SPACE

Adequate defensible space is required to prevent the spread of fire to and from the structure. This requires limbing and/or removal of trees and shrubs to provide necessary vertical and horizontal fuel separation within a minimum of 100 ft. from the home and within 30 ft. along both sides of a driveway. Where the property boundary limits Zone 2 (at least 100 feet from structures), Zone 1 (a buffer of at least 30 feet free of conifer trees and other highly combustible vegetation immediately surrounding the home, including all attachments and accessory structures within 30 feet) may need to begin at the home's dripline.

EMERGENCY WATER SUPPLY

An emergency water supply is required to aid in the defense of the structures from a wildfire and assist in firefighting efforts. This may include, but is not limited to, a hydrant on a public water system, a dry hydrant in a local water source, a community cistern, or an individual cistern. Contact Chief John Benson of the Boulder Mountain Fire Protection District for their requirements at 303-440-0235 and <u>chief@bouldermountainfire.org</u>. If installing an individual cistern and the Fire Protection District does not have its own installation requirements follow the Boulder County publication: Emergency Water Supply for Firefighting.

(6) The proposed development shall not alter historic drainage patterns and/or flow rates or shall include acceptable mitigation measures to compensate for anticipated drainage impacts. The best available information should be used to evaluate these impacts, including without limitation the Boulder County Storm Drainage Criteria Manual, hydrologic evaluations to determine peak flows, floodplain mapping studies, updated topographic data, Colorado Geologic Survey landslide, earth/debris flow data, and creek planning studies, all as applicable given the context of the subject property and the application.

The drainage impacts and conditions of approval associated with the proposed driveway are discussed under LU review criteria 13 above. Staff finds that the submitted Grading, Drainage, and Erosion Control Plan adequately addresses the treatment of drainage on the site in relation to the proposed residence.

Therefore, as conditioned, staff finds no conflicts with this standard.

(7) The development shall avoid significant natural ecosystems or environmental features, including but not necessarily limited to riparian corridors and wetland areas, plant communities, and wildlife habitat and migration corridors, as identified in the Comprehensive Plan or through the Site Plan Review process. Development within or affecting such areas may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable Site Plan Review criteria.

There are not any natural ecosystems or environmental features on Lot 8C.

Therefore, staff finds no conflicts with this standard.

(8) The development shall avoid agricultural lands of local, state or national significance as identified in the Comprehensive Plan or through the site plan review process. Development within or affecting such lands may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

There are not agricultural lands of local, state, or national significance on Lot 8C.

Therefore, staff finds no conflicts with this standard.

(9) The development shall avoid significant historic or archaeological resources as identified in the Comprehensive Plan or the Historic Sites Survey of Boulder County, or through the site plan review process. Development within or affecting such resources may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

The Comprehensive Plan indicates that the entire parcel is encompassed by Archaeologically Sensitive Areas. However, History Colorado indicated that no historical sites or surveys were found in the project area, and the County Historic Review referral response expressed no conflicts with the proposal.

Therefore, staff find no conflicts with this standard.

(10) The development shall not have a significant negative visual impact on the natural features or neighborhood character of surrounding area. Development shall avoid prominent, steeply sloped, or visually exposed portions of the property. Particular consideration shall be given to protecting views from public lands and rights-of-way, although impacts on views of or from private properties shall also be considered. Development within or affecting features or areas of visual significance may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the

subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

a. For development anywhere in the unincorporated areas of the county, mitigation of visual impact may include changing structure location, reducing or relocating windows and glazing to minimize visibility, reducing structure height, changing structure orientation, requiring exterior color and materials that blend into the natural environment, and/or lighting requirements to reduce visibility at night.

Location	As shown in the site plan dated 10/17/2022 and staked in the field			
Elevations	As shown on the elevations dated 10/17/2022			
Height	28'2" from existing grade			
Exterior Materials	Concrete & wood siding and metal roofing			
Exterior Colors	Grey & natural/brown siding and green or black roofing			

The application materials indicate that the proposed residence will be constructed using black and gray, concrete and metal siding. Staff have limited concerns related to the visual impacts of the proposed residence, as described in SPR criteria 2. The area surrounding the build site is characterized by highly visible residential development similar in nature and design to the proposed residence.

Staff recommend conditions of approval that the elevations and height for the residence be approved as proposed in the application materials.

A. EXTERIOR COLORS AND MATERIALS

The application materials indicate that the proposed residence will have a grey and natural/brown siding made of concrete and wood, and a green or black metal roof. Staff recommend approving the materials and color of the siding roof as proposed.

Several retaining walls are also proposed as part of the application, but no proposed colors or materials were provided. Staff recommend that the proposed materials for the residence exterior be approved as proposed, but also recommend a condition requiring the submittal of proposed exterior colors for the residence and proposed colors and materials for all retaining walls that will match the approved colors for the siding of the residence.

B. EXTERIOR LIGHTING

The locations and types of exterior lighting fixtures were not provided in the application. Given the visible position in the landscape and the rural character of the area, lighting has the potential to cause negative visual impacts. In order to minimize adverse visual impacts, staff recommends a condition of approval requiring the submittal of a proposed lighting plan prior to the issuance of any building or grading permits. Lighting on site should be limited to one fixture for each exterior entrance and the use of landscape or driveway lighting is discouraged.

(11) The location of the development shall be compatible with the natural topography and existing vegetation and the development shall not cause unnecessary or excessive site disturbance. Such disturbance may include but is not limited to long driveways, over-sized parking areas, or severe alteration of a site's topography. Driveways or grading shall have a demonstrated associated principal use.

A. LOCATION

The proposed location for the residence is compatible with the natural topography, as discussed in LU criteria 2.

Therefore, staff recommends approval of the location of the residence as shown on the site plan dated 10/17/2022.

B. EARTHWORK AND GRADING

The proposed non-foundational earthwork exceeds that which is allowed under the Site Plan Review Standards and is therefore addressed under the Limited Impact Special Use Review Standards above. The following foundational earthwork is approved:

Foundational Earthwork	1,100 cubic yards cut and 105 cubic yards backfill
(exempt from 500 cubic yards	(230 cubic yards excess foundation cut to be
threshold)	transported offsite)

The application materials indicate that construction of the residence will require 1,100 cubic yards of foundation cut and 105 cubic yards of backfill, with the excess cut to be removed from the property. Staff recommends a condition of approval requiring that a receipt for transport of excess cut to an off-site location is provided.

C. UTILITIES

To minimize disturbances to the site, staff recommends a condition requiring all utility service lines be routed underground (see <u>Article 7-1200</u> of the Land Use Code) and located in areas already disturbed or proposed to be disturbed (e.g., along driveway).

(12) Runoff, erosion, and/or sedimentation from the development shall not have a significant adverse impact on the surrounding area

In order to limit the potential for runoff, erosion, or sedimentation to cause adverse impacts to the surrounding area, staff recommend construction fencing downslope of all construction areas. This construction fencing must also be protected by a catch fence installed between the construction area of disturbance and the construction fence. The location of the required construction fencing must be included on the erosion control plan submitted for permitting.

As conditioned, staff find no conflict with this standard.

(13) The development shall avoid Natural Landmarks and Natural Areas as designated in the Goals, Policies & Maps Element of the Comprehensive Plan and shown on the Zoning District Maps of Boulder County. The protection of Natural Landmarks and Natural Areas shall also be extended to their associated buffer zones. Development within or affecting such Landmarks or Areas may be approved, subject to acceptable mitigation measures and in the discretion of the Director, only if no other sites on the subject property can be reasonably developed, or only if reasonably necessary to avoid significant adverse impacts based upon other applicable site plan review criteria.

There are no Natural Landmarks, Natural Areas, or associated buffer zones on the subject parcel.

Therefore, staff find no conflicts with this standard.

(14) Where an existing principal structure is proposed to be replaced by a new principal structure, construction or subsequent enlargement of the new structure shall not cause significantly greater impact (with regard to the standards set forth in this Section 4-806) than the original structure.

Lot 8C is a vacant parcel and does not have any existing principal structures on the site.

Therefore, staff find no conflicts with this standard.

(15) The proposal shall be consistent with the Comprehensive Plan, any applicable intergovernmental agreement affecting land use or development, and this Code.

As conditioned, staff find no conflict with this standard.

RECOMMENDATION:

Staff has determined that, as conditioned, the proposal can meet all the applicable criteria of the Boulder County Land Use Code for Limited Impact Special Review and for Site Plan Review. Therefore, staff recommend that the Board of County Commissioners **CONDITIONALLY APPROVE** Docket LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence, subject to the following conditions:

- 1. The development is subject to the requirements of the Boulder County Building Safety and Inspection Services Team and adopted County Building Codes, as outlined in the referral comments, including, but not limited to required sprinklering, ignition resistant materials and defensible space, and the BuildSmart energy efficiency and sustainability requirements.
- 2. At building or grading permit submittal, a Revegetation and Erosion Control Plan must be submitted for approval. This plan should include native grass species to be used, an explanation of how topsoils will be stockpiled and reused, mapped delineation of all disturbance areas (this includes construction staging areas, driveway, utility lines, and septic system), locations of silt fence or erosion control logs down slope of all disturbed areas, and matting requirements. New horticultural plantings should emphasize xeriscaping principles (Article 7-200-B-8, Land Use Code). The location of the required construction fencing must be included on the erosion control plan submitted for permitting.
 - a. *Prior to any grading or site disturbance,* the construction fencing and silt barrier location and materials must be installed as required per the approved plans.

Prior to issuance of a Certificate of Occupancy, the full installation of the approved Revegetation and Erosion Control plan must be inspected and approved by the Community Planning & Permitting Department. If weather is not conducive to seeding or if adequate revegetation efforts have not occurred and vegetation is not adequately established at the time of final inspection request, an irrevocable letter of credit or monies deposited into a County Treasurer account will be required to assure the success of revegetation. The applicant should consider the following well in advance of their revegetation inspection:

- a. Whether applying for a Certificate of Occupancy, final inspection, or the return of funds held in escrow for completion of revegetation, some level of germination and growth of grass seed is required.
- b. Keep in mind that the steeper the slopes and dryer the soil, the greater the attention needed to establish a level of germination adequate to obtain revegetation approval.

c. Areas of disturbance found at inspection not included on the revegetation plan are still subject to reseeding and matting.

Incomplete revegetation is the leading cause for delays in obtaining a Certificate of Occupancy.

- 3. Prior to issuance of a Certificate of Occupancy, the Community Planning & Permitting Department must verify that the access and driveway has been constructed to comply with the approved plans as well as the Standards for residential development in the mountains, including without limitation:
 - a. Table 5.5.1 Parcel Access Design Standards (1-Lane Mountains Access)
 - b. Standard Drawings 11-13 Private Access
 - c. Standard Drawing 15 Access Profiles Detail
 - d. Standard Drawing 16 Access & Grade Clearance
 - e. Standard Drawing 18 Access Turnaround
 - f. Standard Drawing 19 Typical Turnaround & Pullout Locations
- 4. At building permit, provide a letter from the Boulder Mountain Fire Protection District confirming the turnaround, as designed, can accommodate its emergency access needs.
- 5. At building permit, the height of all proposed retaining walls must be provided and, if greater than four feet in height, wall details must be designed and stamped by a qualified Coloradolicensed professional engineer. Calculations shall be submitted for all retaining walls over 6 feet in height.
- 6. A Boulder County Hauler License is required for hauling of material off site, regardless of where the material is deposited. This applies to the prime contractor as well as any subcontractors that collect, transport or dispose of any materials (dirt, gravel, garbage, recyclables, or compostables, construction and demolition waste, or landscaping materials) anywhere except within the project site, including locations outside unincorporated Boulder County. Additional information can be found here: https://www.bouldercounty.org/environment/trash/hauler-license/

Prior to issuance of a Certificate of Occupancy, the location and receipt for transport and dumping of excess cut must be submitted to the Community Planning & Permitting Department so that receipt of fill materials may be verified.

- 7. During construction (i.e. during the day while work is being performed), all vehicles shall be parked on site or to one side of the ROW so as to not impede the travel way.
- 8. *Prior to final inspection*, an Access Improvement and Maintenance Agreement (AIMA) signed and notarized by the property owner must be submitted to Community Planning and Permitting. The AIMA will be prepared by staff and issued for the existing road referred to as Wagonwheel Gap Road during building permit.
- 9. The approved size for the development is a maximum of 4,559 square feet of residential floor area.
- 10. After applying for, but prior to issuance of any permits, a Boulder County Wildfire Mitigation Specialist will contact you to schedule a Wildfire Partners or Regulatory Wildfire Mitigation assessment and defensible space marking. Based upon the compliance path

selected, either a Wildfire Partners Assessment report or a Wildfire Mitigation Plan will be created to describe the wildfire mitigation requirements.

Before scheduling rough framing inspections, the plan's defensible space and water supply portion must be implemented and inspected by the Community Planning & Permitting Department. All trees marked for removal must be cut, and all slash, cuttings, and debris must be removed and/or properly disposed of. The Fire Sprinkler or Fire Cistern Approval Form must be submitted to the Boulder County Building Safety & Inspection Services at ezbp@bouldercounty.org (or P.O. Box 471, Boulder, Colorado, 80306) after the fire protection district completes the applicable portion of the form. If an individual cistern was required, it must be located on-site in an appropriate location (subject to approval by the fire protection district), fitted with an appropriate dry hydrant connection, and be filled, and tested by the local fire protection district.

At the time of final inspection, all remaining required items in the Wildfire Partners Assessment report or the Wildfire Mitigation Plan are to be fully implemented and inspected. Ground surfaces within three feet of both existing and new structures, and at least 2 feet beyond the driplines of decks, bay windows, and other eaves and overhangs, must be covered with an allowable non-combustible ground cover over a weed barrier material. The driveway vertical and horizontal vegetation clearance must be in place and conform to the Parcel Access Design Standards in the Boulder County Multimodal Transportation Standards.

Please refer to Section R327 of the Boulder County Building Code for Ignition-Resistant Construction requirements. See the referral from the Wildfire Mitigation Team for more information on the County's wildfire mitigation requirements, including: site location, emergency water supply, and emergency vehicle access. See the referral from the Building Safety & Inspection Services Team for more information on the County's Automatic Fire Sprinkler System requirement.

Wildfire mitigation shall take place as outlined in the conditions listed in the Boulder County Wildfire Mitigation team referral response (Attachment B, pages B18-B21).

- 11. *At building permit*, submit drainage calculations that demonstrate how the proposed development impacts existing and proposed drainage both on and off the site. Calculations must show that the proposed drainage ditches, culverts, and rip-rap aprons are sized appropriately to accommodate the runoff from the slope above.
- 12. The elevations dated 10/17/2022 are approved as proposed.
- 13. The approved height for the residence is a maximum of 28 feet 2 inches feet above existing grade.
- 14. The proposed materials for the roofing (metal) and siding (concrete and wood) are approved as proposed.

The proposed roofing color (green or black) and proposed colors for the siding (grey and natural/brown) are approved as proposed.

Prior to issuance of building permits, submit to the Community Planning & Permitting Department for review and approval, one set of exterior color samples (color chips, brochure, or catalog page) and material samples to be used including roof, siding and trim. Please note that due to COVID-19 distancing restrictions samples may be provided electronically. Samples should be included as part of the building plan set required at the time of permit application.

Samples of the exterior colors and metallic materials shall be provided to ensure visual impacts of the development are minimized and that the development blends in with the natural environment and neighborhood character of surrounding area. Colors should have a matte finish.

- 15. *Prior to issuance of a Certificate of Occupancy/At the time of final inspection*, the Community Planning & Permitting Department must inspect and verify that the approved color samples are used on the new structure
- 16. *Prior to issuance of building permits,* the applicant shall submit proposed exterior colors for the retaining walls for review and approval by the Community Planning & Permitting Department. Retaining walls must match the approved colors for the siding of the residence.
- 17. *At building permit submittal*, one copy of a proposed lighting plan must be submitted to the Community Planning & Permitting Department for review and approval. The lighting plan shall be included as part of the building plan set required at the time of permit application.

NOTE: <u>Down lighting</u> is required, meaning that all bulbs must be fully shielded to prevent light emissions above a horizontal plane drawn from the bottom of the fixture. All exterior light fixtures must be in conformance with <u>Article 7-1600</u> and <u>Article 18-162A</u> of the Boulder County Land Use Code.

Prior to issuance of a Certificate of Occupancy, the full installation of the approved lighting plan must be inspected and approved by the Community Planning & Permitting Department.

- 18. The locations of the residence and driveway shown on the site plan dated 10/17/2022 and staked in the field are approved as proposed.
- 19. *Prior to issuance of building and grading permits,* submit to the Community Planning and Permitting Department for review and approval a plan depicting the routing of all utility services. The utility routing plan shall be included as part of the building plan set required at the time of permit application. To minimize disturbances to the site, all utility service lines shall be routed underground (see Article 7-1200 of the Land Use Code) and should be located in areas already disturbed or proposed to be disturbed (e.g., along driveway).
 - a. *At the time of building inspections,* full installation of the utilities per the approved plan must be inspected and confirmed by the Community Planning and Permitting Department.
- 20. *Prior to issuance of building permits,* an Onsite Wastewater Treatment System (OWTS) permit must be applied for and issued by Boulder County Public Health.
- 21. The Applicants shall be subject to the terms, conditions, and commitments of record and in the file for Docket LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence.

Boulder Countv

Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930 Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.org

MEMO TO:	Agencies and Adjacent Property Owners
FROM:	Jonathan Tardif, Staff Planner
DATE:	January 10, 2023
RE:	Docket LU-22-0025/SPR-22-0111

Docket LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence

Request:	Limited Impact Special Use Review to allow for
-	3,005 cubic yards of grading for driveway and site
	improvements, and Site Plan Review for the
	construction of a 4,559-square-foot residence on a
	vacant parcel where the Presumptive Size Maximum
	is 3,878 square feet.
Location:	672 Wagonwheel Gap Road, located approximately
	1.48 miles west of the intersection of Wagonwheel
	Gap Road and Lee Hill Drive on Section 11,
	Township 1N, Range 71W.
Zoning:	Forestry (F)
Applicants/Property Owners:	Lucas Pichon Riviere & Maria Barbenza
Agent:	Jeremy Smith, J Creative
-	

Limited Impact Special Review is required of proposed uses that may have greater impacts on services, neighborhoods, or the environment than those allowed by right under the Boulder County Land Use Code. This process will review conformance of the proposed use with the Boulder County Comprehensive Plan and the Land Use Code.

Site Plan Review by the Boulder County Land Use Director is required for new building/grading/access or floodplain development permits in the plain and mountainous areas of unincorporated Boulder County. The Review considers potential significant impact to the ecosystem, surrounding land uses and infrastructure, and safety concerns due to natural hazards.

This process includes a public hearing before the Board of County Commissioners. Adjacent property owners and holders of liens, mortgages, easements or other rights in the subject property are notified of this hearing.

The Community Planning & Permitting staff and County Commissioners value comments from individuals and referral agencies. Please check the appropriate response below or send a letter to the Community Planning & Permitting Department at P.O. Box 471, Boulder, Colorado 80306 or via email to planner@bouldercounty.org. All comments will be made part of the public record and given to the applicant. Only a portion of the submitted documents may have been enclosed; you are welcome to call the Community Planning & Permitting Department at 303-441-3930 or email planner@bouldercounty.org to request more information. If you have any questions regarding this application, please contact me at : 303-441-1352 or jtardif@bouldercounty.org .

Please return responses by January 25, 2023.

(Please note that due to circumstances surrounding COVID-19, application timelines and deadlines may need to be modified as explained in the CPP Notice of Emergency Actions issued March 23, 2020 (see https://boco.org/covid-19-cpp-notice-20200323).

Claire Levy County Commissioner Marta Loachamin County Commissioner Ashley Stolzmann County Commissioner

We have reviewed the proposal and have no conflicts. Letter is enclosed.

Signed	PRINTED Name
C	

Agency or Address _____

Date_____



Boulder County Land Use Department

Courthouse Annex Building

Tuesday 10 a.m. to 4:30 p.m.

Phone: 303-441-3930

2045 13th Street • PO Box 471 • Boulder,

Email: planner@bouldercounty.org

Web: www.bouldercounty.org/lu Office Hours: Mon., Wed., Thurs., Fri. 8 a

Department	Shaded Areas for Staff Use Only	
Colorado 80302	Intake Stamp	
m. to 4:30 p.m.		

Planning Application Form

The Land Use Department maintains a submittal schedule for accepting applications. Planning applications are accepted on Mondays, by appointment only. Please call 303-441-3930 to schedule a submittal appointment.

Project Number		Project Name					
 Appeal Correction Plat Exemption Plat Final Plat Limited Impact Special Use Limited Impact Special Use Waiver Location and Extent 		 Modification of Site Plan Review Modification of Special Use Preliminary Plan Resubdivision (Replat) Rezoning 		 Road Name Change Road/Easement Vacation Site Plan Review Site Plan Review Waiver Sketch Plan Special Use/SSDP 		Sp de St Su Va Ot	pecial Use (Oil & Gas evelopment) ate Interest Review (1041) Ibdivision Exemption Iriance ther:
Location(s)/Street Address(es) 672 Wagonwheel Gap Road							
(Legal Description = Lot 8C Bo			w Mountain R	eplat)			
Subdivision Name Pine Brook Hills							
Lot(s) 8C	Block(s)		Section(s) 11		Township(s) 1N		Range(s) 71
Area in Acres 0.97	Existing Zoning	(F) Forestry	Existing Use of P	roperty Vacan	t/Undisturbed		Number of Proposed Lots 1
Proposed Water Supply Well			Proposed Sewag	posed Sewage Disposal Method Septic/OWTS			

Applicants:

Applicant/Property Owner Lucas Pic	hon Riviere a	nd Maria Barbenza	Email lucaspichonr@gmail.com					
Mailing Address 2120 Junction Pl, Unit 4126								
^{City} Boulder	State CO	Zip Code 80301	Phone					
Applicant/Property Owner/Agent/Consultant			Email					
Mailing Address								
City	State	Zip Code	Phone					
Agent/Consultant Jeremy Smith (J Creative)			Email jeremy@j-creative.org					
Mailing Address 2500 17th Street, Unit 411								
City Denver	State CO	Zip Code 80211	Phone 404-401-1089					

Certification (Please refer to the Regulations and Application Submittal Package for complete application requirements.)

I certify that I am signing this Application Form as an owner of record of the property included in the Application. I certify that the information and exhibits I have submitted are true and correct to the best of my knowledge. I understand that all materials required by Boulder County must be submitted prior to having this matter processed. I understand that public hearings or meetings may be required. I understand that I must sign an Agreement of Payment for Application processing fees, and that additional fees or materials may be required as a result of considerations which may arise in the processing of this docket. I understand that the road, school, and park dedications may be required as a condition of approval.

I understand that I am consenting to allow the County Staff involved in this application or their designees to enter onto and inspect the subject property at any reasonable time, without obtaining any prior consent.

All landowners are required to sign application. If additional space is needed, attach additional sheet signed and dated.

		/				
Signature of Property Owner	X	Uled	Printed Name	Lucas Pichon	Date	7/13/22
Signature of Property Owner	A F	3 ordrang in	Printed Name	Maria Barbenza	Date	7/13/22

The Land Use Director may waive the landowner signature requirement for good cause, under the applicable provisions of the Land Use Code.

Form: P/01 • Rev. 07.23.18 • g:/publications/planning/p01-planning-application-form.pdf

Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org



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Boulder

County

672 WAGONWHEEL GAP RD

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Community Planning & Permitting Elevation Contours Boulder County 2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org 672 WAGONWHEEL GAP RD Subject Parcel Contours 40' 280-6240 6480 5560 Lion Point Pond 5960 00 6000 ountile-Canyon Cres 6280 6200 5880 6000 0.05 0.1 Ω Miles VAGONWHEEL GAP Area of Detail Date: 10/27/2022 6280 3200 Lyons Longmont 6280 Jamestown NAGONWHEEL GAP RD Frie Ward C Boulder Nederland Louisville and the second s The user agrees to all Terms of Use set forth by Boulder County. For Terms of Use, please visit: www.bouldercounty.org/mapdisclaimer

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Community Planning & Permitting

2045 13th Street, Boulder, CO 80302 303-441-3930 www.bouldercounty.org

Geologic Hazards 672 WAGONWHEEL GAP RD

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Boulder County


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Site Plan Review Fact Sheet

The applicant(s) is/are required to complete each section of this Site Plan Review (SPR) Fact Sheet even if the information is duplicated elsewhere in the SPR application. Completed Fact Sheets reduce the application review time which helps expedite the Director's Determination. Please make duplicates of this SPR Fact Sheet if the project involves more than two structures.

Structure #1 Information

Type of Structure: (e.g. residence studio barn etc.)			Residence		
(Finished + Unf	(Finished + Unfinished square feet including		N/A	Deconstruction:	N/A
Are now floor area	garag s baing propo	je if attached.) sod whore don	sq. ft.	cur?	sq. ft.
	nclude the nev	v floor area squ	lare footage in	the table below)	
Proposed F	loor Area (Nev	v Construction	Only)	🖾 Residential	
	Finished	Unfinished	Total	Non-Resident	tial
Basement:	653 sq. ft.	129 sq. ft.	782 sq. ft.	Height (above existing grade)	28'-2"
First Floor:	2,123 sq. ft.	sq. ft.	2,123 sq. ft.	Exterior Wall Material	Concrete = Gray; Wood Siding = Natural/Brown
Second Floor:	1,654 sq. ft.	sq. ft.	1,654 sq. ft.	Exterior Wall Color	Concrete = Gray; Wood Siding = Natural/Brown
Garage: Detached Attached	sq. ft.	sq. ft.	sq. ft.	Roofing Material	Flat Roof = Green Roof Metal = Black
*Covered Porch:	sq. ft.	sq. ft.	sq. ft.	Roofing Color	Flat Roof = Green Roof Metal = Black
Total:	4,430 sq. ft.	129 sq. ft.	4,559 sq. ft.	Total Bedrooms	4

Structure #2 Information

Type of Structure: (e.g. residence, studio, barn, etc.)			Carport (Exempt)		
Total Existing Floor Area:		N/A	Deconstruction:	N/A	
	garag	e if attached.)	sq. ft.		sq. ft.
Are new floor area	s being propos	sed where den	nolition will oc	cur?	
🖾 No 🗳 Yes (i	nclude the nev	v floor area squ	are footage in	the table below)	
Proposed F	loor Area (New	Construction	Only)	🛛 Residential	
	Finished	Unfinished	Total	Non-Resident	ial
				Height	
Basement:	sq. ft.	sq. ft.	sq. ft.	(above existing grade)	
			400 (roof)	Frata da u	N/A
First Floor:	sq. ft.	sq. ft.	400 (1001) sq. ft.	Wall Material	
					N/A
Second Floor:	sq. ft.	sq. ft.	sq. ft.	Exterior Wall Color	
Garage:					(Metal Roof;
Detached Attached	sa. ft.	sa. ft.	sa. ft.	Roofing Material	Match House
					Match House
*Covered Porch	sa ft	sa ft	sa ft	Roofing	
	39.11.	34.10.	34.11.	20101	
			400		0
Total:	sq. ft.	sq. ft.	sq. ft.	Total Bedrooms	

*See Article 18-131A for definition of covered porch.

Project Identification:

Project Name: Casa	a Pichon
Property Address/Locat	ion: 672 Wagonwheel
	Gap Road
Current Owner:	Lucas Pichon Rivierre
	Maria Barbenza
Size of Property in Acres	^{s:} 0.97 Acres (42,263 SF)

Determining Floor Area

Floor Area is measured in terms of square feet. The total square footage is as everything within the exterior face of the exterior walls including garages and basements. **Covered porch area that is attached to the principal structure is not included (see Article 18-131A).** The shaded area on the diagram indicates the area counted as square feet.



Residential vs. Non-Residential Floor Area

Residential Floor Area includes all attached and detached floor area (as defined in Article 18-162) on a parcel, including principal and accessory structures used or customarily used for residential purposes, such as garages, studies, pool houses, home offices and workshops. Gazebos and carports up to a total combined size of 400 square feet are exempt. Barns used for agricultural purposed are not considered residential floor area.

Note: If an existing wall(s) and/or roof(s) are removed and a new wall(s)/roof(s) are constructed, the associated floor area due to the new wall(s)/roof(s) are considered new construction and must be included in the calculation of floor area for the Site Plan Review and shown on this Fact Sheet.

If a Limited Impact Special Review is required, then call 303-441-3930 and ask for a new Pre-Application conference for the Limited Impact Special Review.

Pichon Residence - 10/13/2022

230

Grading Calculation

Cut and fill calculations are necessary to evaluate the disturbance of a project and to verify whether or not a Limited Impact Special Use Review (LISR) is required. A Limited Impact Special Use Review is required when grading for a project involves more than 500 cubic yards (minus normal cut/fill and backfill contained within the foundation footprint).

If grading totals are close to the 500 yard trigger, additional information may be required, such as a grading plan stamped by a Colorado Registered Professional Engineer.

Earth Work and Grading

This worksheet is to help you accurately determine the amount of grading for the property in accordance with the Boulder County Land Use Code. Please fill in all applicable boxes.

Note: Applicant(s) must fill in the shaded boxes even though foundation work does not contribute toward the 500 cubic yard trigger requiring Limited Impact Special Use Review. Also, all areas of earthwork must be represented on the site plan.

Earth Work and Grading Worksheet:

	Cut	Fill	Subtotal	
Driveway and Parking Areas	1,010	1,885	2,895	
Berm(s)	0	0	0	
Other Grading slope tie-in	110	0	110	
Subtotal	1,120	1,885	3,005 Box 1	
* If the total in Box 1 is greater than 500 cubic yards, then a Limited Impact Special Review is required.				
	Cut	Fill	Total	
Foundation	1,100	105	1,205	

Material cut from foundation excavation that will be removed from the property

Excess Material will be Transported to the Following Location:

Excess Materials Transport Location:

Foothill Landfill or another permitted legal fill site to be determined (Contractor is not selected at this time, so transport details to be provided at permit)

Is Your Property Gated and Locked?

Note: If county personnel cannot access the property, it could cause delays in reviewing your application.

Certification

I certify that the information submitted is complete and correct. I agree to clearly identify the property (if not already addressed) and stake the location of the improvements on the site within four days of submitting this application. I understand that the intent of the Site Plan Review process is to address the impacts of location and type of structures, and that modifications may be required. Site work will not be done prior to issuance of a Grading or Building Permit.

Signature Jeumy Mith	Date 10/13/22
	10/10/22



10/14/22

Boulder County Community Planning and Permitting

Re: Overall Project Narrative

PAC-20-0257

SPR:

Casa Pichon

672 Wagonwheel Gap Road

Project Narrative

- I. Project Information and Brief
- II. Site Description and Analysis
- III. Proposed Structure
- IV. Proposed Site Work
- V. Visual Impact
- VI. Overcoming the Maximum Narrative*

*Separate Document



I - Project Information and Brief

Project Information

Address:	672 Wagonwheel Gap Road	
	Boulder, Colorado 80302	
Parcel Number:	146111004003	
Account Number:	R0085259	
Section-Township-Range:	11-1N-71	
Subdivision:	Pine Brook Hills	
Zoning:	F (Forestry)	
Flood Zone:	No / X	
Wildfire Zone:	Yes	
Lot Size:	42,263 SF (Per Parcel Report)	

PSM:

3,832 SF

Total Residential Floor Area:	4,559 SF
Second Floor Area:	1,654 SF
First Floor Area:	2,123 SF
Unfinished:	129 SF
Finished:	653 SF
Basement Area:	782 SF*
(Detached) Carport Area:	400 SF (Exempt)

*Proposing an Overcoming the Maximum



Project Brief

New Single Family Residence with detached Carport located on a vacant mountain lot, located at 672 Wagonwheel Gap Road. This project includes new utilities at the Site as well as a new Driveway and Access at Wagonwheel Gap Road.

Project Use

The Proposed Development will be for Residential Use.

Transportation Impact

There will not be any significant transportation impact on the local roads due to this new residence. Only one Owner works within an office and works remotely two days a work-week. The other Owner fully works remotely from home.

Owner Narrative

Message from the Owners:

This is the house where we would love our kids to grow up, surrounded by nature, and become kind, independent and respectful members of the community.

Since we're from Argentina and most of our relatives and friends live abroad, we would love this home to be the place where we can host our family and friends from around the world and show them what a wonderful place Boulder is and everything it has to offer.

II - Site Description and Analysis

Location

The Property is located just northwest of the dirt section of Wagonwheel Gap Road, which is part of the first turn-off along the paved section of Wagonwheel Gap Road. The Property has no direct Road Access as there is a vacant 60-foot Right-of-Way along the Southern Property Line. The main access to the site would be along Wagonwheel Gap Road, intersecting from Lee Hill Drive, South of the intersection at Old stage Road.



Legal Description

The Property is part of the Pine Brook Hills Neighborhood and is Lot 8C of the Bow Mountain Replat, thus the Legal Description is thus Lot 8C Bow Mountain Replat. It is recorded as the Parcel Number of 146111004003 and is a legal defined Building Lot with Boulder County.

Jurisdiction

The property is located within Unincorporated Boulder County Jurisdiction and within the Boulder Mountain Fire District.

Utilities and Water

The Electric Utility Provider is Xcel Energy. Gas would be handled on site via Propane (buried) and Sewage would be handled on site with an Onsite Wastewater Treatment System. Water will be supplied via on-site drilled well and cistern. All Utilities will be installed and provided per County Standards.

Lot Description

The Lot orientation is that of a left-justified arrowhead with steep grade sloping towards the Middle of the Lot (generally North to South) with approximately 6,160 ft at the highest point, and 6,035 ft at its lowest point South.

There is a 6' Easement located at the property line boundary in addition to the Setbacks which apply to the Setbacks which apply to the Forestry Zoning.

The Property has a Lot Size of approximately 42,263 SF, as defined by the Boulder County Parcel Report.

The property is located within Wildfire Zone No. 1 and does not reside within any Flood Zone.

Site Description

As mentioned above, the lot is sloped along North-to-South. Due to the orientation of the grade, there is a significant Drainage Flow Line which divides the property, collecting water from the higher elevations.



There are scattered conifer trees on site in various clusters with exposed rock in some locations. An initial Soils Investigation provided a mix of sandy silt with gravel rock pieces and weathered bedrock with no groundwater encountered within 8' of ground surface (per a Percolation Test Report, dated 11/15/20)

Cultural and Historical Significance

A Cultural Research Survey was conducted with no sites nor surveys located in the designated area. The Lot is vacant with no structure on site therefore any Historic Preservation does not apply.

III - Proposed Structure

Structure Description

The structure is designed to fit within the existing landscape as much as possible while meeting the challenges of the site (listed above). The structure is comprised of 2-3 Levels with a modest ceiling height (under 12'), and a flat roof which keeps the structure low to the terrain as compared to a traditional pitch-roof design.

The structure contains 4 Bedrooms, Living and Dining Areas, and 3.5-4.5 Baths.

Outdoor spaces will be provided. Landscaped or concrete patios are located at the north side of the structure and hidden from Wagonwheel Gap Road. Balconies and Decks are provided which follow the house footprint, thus limiting the site disturbance.

The Detached Carport is intended solely for vehicle storage. The structure is intended as minimal and will match the look of the house, thus reducing visual impact.

Multiple Iterations

The current design is the result of multiple iterations which were made to reduce the site disturbance and impact on the site. A few of the changes that were incorporated include rotating the house, revising floor plans, raising the house, and relocating at grade patios to be roof decks.

These iterations have allowed us to present the best design which works with the Site, County Standards, and the Owner's Goals.



Materials

The materials were selected for their neutral colors, low-maintenance aspect, and wildfire-mitigation friendly materials. Materials are to be comprised of metal, textured concrete, stones, and composites. Any proposed wood materials will either be fire-retardant or similarly meeting ignition resistant construction.

These neutral colors of grays and browns will help the structure blend into the landscape which is comprised of darker tree trunks and mix of grays and light browns for exposed rock.

The roof will be a Green Roof, with selected vegetation to be determined.

Energy Efficiency and Performance

The structure will be meeting Boulder County Build Smart requirements with the HERS path, ensuring that the structure is specifically tailored to be designed as energy efficient. Additional systems will be provided, including (but not limited to), Radon Mitigation, Perimeter Drainage, and an energy efficient Heating, Cooling, and Ventilation System.

Roof Mounted Solar (Photovoltaics) will be used for Renewable Energy Offsetting, for both the House Performance and small Pool.

Fire Protection

The structure will be provided with Fire Suppression meeting NFPA guidelines and all will be provided with code compliant fire blocking (framing) and fire protection.

<u>Glazing</u>

All Glazing will be designed to meet necessary wind and seismic loads as well as any performance standards established by the HERS Report, typically a U-Factor rating of 0.30 or better.

Glazing is to be provided with Low-E Coatings as well as metal shutters/screens which will help to reduce any lantern-effect come nightfall.



IV - Proposed Site Work

Challenges with the Siting Location

The available house locations are severely limited on this Lot due to its orientation and grade. These factors include:

- Attempt to maintain a Southern Solar Orientation (for passive solar design), as well as to aid with snow melt during colder months.
- Rotating the structure to remain parallel to contour lines.
- The Triangular shaped lot which "pinches" the setbacks towards the higher points of the property, thus limiting the house to the middle of the Lot.
- Preserving the existing Drainage Flow Line during Flood events, which requires a maintained separation between the Carport and House.
- Providing a driveway and emergency turn-around which meets Boulder County's Multi-modal standards which has slope and distance limits.
- Maintaining balance of the clearances to water, septic, structure, and utility systems.

Driveway Design (Refer to Civil Engineering)

Due to the topography, our Driveway and Access was designed to follow the contour lines along the Southern Property line while increasing in grade. The Driveway then turns North and connects to the Detached Carport. This allowed us to place the Carport on the Western side of the Drainage Flow Line and place the Emergency Turn-around on the East Side, in proximity to the House. The driveway could then be provided with appropriate methods (bridge) for preserving the site drainage.

Utilities

New underground electric will be provided from existing Xcel infrastructure on Wagonwheel Gap Road to the proposed structure. The path is to be determined but is anticipated to follow along the driveway to limit disturbance.

Propane is to be provided and buried on site at the Southwestern Side near the driveway, providing for easy access in tank maintenance and re-filling.

The OSWT/Septic is estimated to go towards the Southeastern Side, with the potable water being provided via a drilled well and cistern at the Southwestern Side, thus maintaining the required clearances from septic field.

A Well Permit (326744) was applied for and approved with the State of Colorado Department of Natural Resources.



Roof Mounted Solar (Photovoltaics) will be provided onto the roof of the house, thus further limiting any disturbance the site may otherwise face.

Wildfire Mitigation

All Wildfire Mitigation measures will be met for this project, including the use of Ignition Resistant Materials as well as meeting the necessary Wildfire Protection Zones, which will be conducted with Wildfire Partners.

This includes de-limbing trees, clearing debris and fuel, and maintaining gravel protected areas.

The Emergency Access Turnaround will be provided with a water cistern per County Multimodal Standards.

Civil Engineering: Drainage, Grading, Driveway

Refer to Civil Engineering Drawings for more information on Grading, Drainage, and Driveway Design.

V - Visual Impact

Due to the nature of the topography in-and-around the site, the lot resides in a valley which limits its exposure to the surrounding neighbors and neighborhood. As such the site exposure remains limited to those in a certain proximity.

The area is also dense with Conifers which would also cause this site to remain hidden. The main visual impact would thus only be the properties in the immediate proximity.

As mentioned under <u>Materials</u>, the colors used are all earth-neutral tones of browns, blacks, and grays. This further helps the structure blend in as it's following the area's color palette.

The Green Roof will help the structure to blend into the landscape, where the structure is able to be viewed from higher elevations.





Map Overlay with Major Contours, showing topography of Site and Area with Flowline.



Views of Site from various points along Wagonwheel Gap Road





Views of Site Continued...



Visible Corridor is up Flow Line

A24



Neighbor Views

The Proposed Structures are not located invasively towards the Neighbor's View Corridors:



746 Wagonwheel Gap Road: Our Proposed Structure is at a lower elevation (rough at 6090') then the neighbor (roughly 6,180'), and due to the steep grade and trees between would not be visible.

1695 Wagonwheel Gap Road: Our Proposed Structure is located North of the neighbor's Eastern view corridor and is not in their line of sight.





738 Wagonwheel Gap Road: Our Proposed Structure is nestled into a west-facing ridge and is therefore not visible to this neighbor.



724 Wagonwheel Gap Road: Our Proposed Structure is at a higher elevation and is therefore not visible to this neighbor.



10/14/22

Boulder County Community Planning and Permitting

Re: Overcoming the Maximum

PAC-20-0257

SPR:

Casa Pichon

672 Wagonwheel Gap Road

VI - Overcoming the Maximum

This subject property of 672 Wagonwheel Gap Road has a Presumptive Size Maximum (PSM) of 3,832 SF (from 01/21/22). This project is proposing the following:

Second Floor Area:	1,654 SF
First Floor Area:	2,123 SF
Basement Area:	782 SF
 Area being used to Overcome the Maximum 	
Detached Carport:	400 SF
 Up to 400 SF is exempt from Residential Floor Area 	
Total Proposed Residential Floor Area:	4,559 SF

Therefore, with a Proposed Residential Floor Area of 4,559 SF, this project aims to overcome the Presumptive Size Maximum with the following facts as outlined by the 4 Items described on the following pages.

Item 1 - The lack of Visibility to the House to adjacent Homes and nearby Public Roads. Section 4-806.2.b.(A)(1)(a).

Due to the topography and siting of the subject parcel, the Proposed Structure would be minimally visible to surrounding neighbors and from public roads.

- The Site has limited visibility from a small section of the paved Wagonwheel Gap Road.
- No other Public Road would have visibility to the Site or the Proposed Development.
- While only one neighbor has clear visibility to the Proposed Development (from the West, 1695 Wagonwheel Gap); this property is not a parcel within the defined neighborhood, as per the Neighborhood Size Analysis Parcel Report.
- The neighboring parcels create an "island" for 672 Wagonwheel where it's shielded from visibility.

Views of Site from various points along Wagonwheel Gap Road





Views of Site from various points along Wagonwheel Gap Road



746 Wagonwheel Gap Road: Our Proposed Structure is at a lower elevation (rough at 6090') then the neighbor (roughly 6,180'), and due to the steep grade and trees between would not be visible.

1695 Wagonwheel Gap Road: Our Proposed Structure is located North of the neighbor's Eastern view corridor and is not in their line of sight.





738 Wagonwheel Gap Road: Our Proposed Structure is nestled into a west-facing ridge and is therefore not visible to this neighbor.

724 Wagonwheel Gap Road: Our Proposed Structure is at a higher elevation and is therefore not visible to this neighbor.



Item 2 – The use of underground construction and natural topography to screen the Proposed Development. Section 4-806.2.b.(A)(1)(b).



Part of the Proposed Structure (Basement Area) would be fully subterranean and therefore the structure's size would be fully screened by topography.

Item 3 – Distance of the proposed development from other private parcels, public roads, and open spaces. Section 4-806.2.b.(A)(1)(c).

The proposed development is distanced and buffered from other private parcels, public roads, and open spaces.

 Nearest Open Space Park is Fourmile Canyon Creek (Anne U White Park Group), which is about 1500 ft SW of Lot – Due to terrain of the Canyon and protruding Surrey Ridge and trees, our site wouldn't be visible from this Park

- There are Conservation Easements Southeast of the Subject Property, however it would be on the South Side of the Paved Wagonwheel Gap Road. Therefore the Subject Property would not be visible.
- Due to the terrain, only two Parcels have viewing to the Subject Property; 1695 Wagonwheel (to the West) and 612 Wagonwheel (to the South)

Google Map Overlay with Site compared to Major Roads

Boulder County Map with Site (Red Dot) compared to Open Space Parks





Zoomed in Site Map showing Wagonwheel Gap Road; Paved and Dirt Road

Item 4 – The Proposed Development is avoiding natural hazards, including those on the subject property and those originating off-site with a reasonable likelihood of affecting the subject property. Section 4-806.2.b.(D) – Standards 4 and 6.

The Proposed Development is limited in order to preserve the historic drainage patterns by maintaining the existing Drainage Flow Line, thus further limiting where development on site can occur.

Diagram of Flowline



A34

Civil Engineering Solutions



16 October 2022

Boulder County Land Use Department 2045 13th Street Boulder, CO 80302

Re: 672 Wagonwheel Gap Rd – The Pichon Residence Lot 8C – Bow Mountain Replat Proposed Single Family Residence Limited Impact Special Use Review – Earthwork Narrative

File: B1422

To Whom It May Concern,

On behalf of Lucas and Maria Pichon, the property owners of 672 Wagonwheel Gap (Lot 8C – Bow Mountain Replat), The Sanitas Group, LLC has prepared a preliminary grading design for the proposed single-family residence and performed an earthwork analysis of the proposed design as required by Boulder County. The earthwork analysis was performed using AutoCad Civil 3D software and 3D surface models of the existing and proposed condition contours. The existing site topography and surface model is based on a field survey prepared by Flagstaff Survey and provided to The Sanitas Group in CAD format as well as aerial GIS contour data for the area.

The proposed grading on the project was designed based on a few key project goals:

- Numerous driveway alignment alternatives were analyzed in order to provide a driveway design that met emergency access requirements and placed the emergency turn-around in front of the proposed residence. Ultimately, the existing site slopes dictated the proposed alignment best followed the existing slopes and reduced the required depth of cut at the while meeting emergency access requirements.
- Set the proposed residence into the hillside to reduce visual impacts and to follow the existing site contours.
- Utilize cut from the foundation excavation in the driveway design to reduce the required amount of export and the associated impacts to be neighborhood that would result from heavy trucking of larger amounts of export.
- We utilized 2:1 fill slopes to allow for proper revegetation and therefore reducing long term visual impacts.
- Storm drainage culverts have been strategically placed based on flow patterns and sizing of culverts was based on recent detailed design efforts by The Sanitas Group on the property immediate to the south.

The results of our earthwork analysis are as follows:

Foundations:

Cut: 1,100 CY Fill: 105 CY

The Sanitas Group, LLC

ATTACHMENT A

Boulder County Land Use Department Proposed Single Family Residence – 672 Wagonwheel Gap Rd Earthwork Analysis Page 2 of 2

Driveways:

Cut: 1,010 CY Fill: 1,885 CY

Other (slope tie-in around residence to provide proper slopes and associated revegetation, and blend overall project grading into existing hillside):

Cut: 110 CY Fill: 0 CY

Total Project Earthwork (Including Foundations)

Cut: 2,220 CY

Fill: 1,990 CY

Net: 230 CY Cut (Export)

Please do not hesitate to contact me with any questions or concerns at 720.346.1656 or email me at <u>cstevens@thesanitasgroup.com</u>.

Sincerely, The Sanitas Group, LLC

Curtis C. Stevens, P.E., CFM Principal/Civil Engineer Colorado Registered Professional Engineer No. 40337

ATTACHMENT A

PROJECT INFORMATION

ADDRESS

PARCEL NUMBER
ACCOUNT NUMBER
SECTION-TOWNSHIP-RANGE
SUBDIVISION
ZONING
FLOOD ZONE
WILDIFRE ZONE
LOT SIZE
PSM

672 Wagonwheel Gap Road Boulder, Colorado 80302 146111004003 R0085259 11-1N-71 Pine Brook Hills F (Forestry) No / X Yes 42,263 SF (Per Parcel Report) 3,832 SF

BUILDING AREAS

PSM

3,832 SF

(DETACHED) CARPOT AREA400 SF (EXEMPT)TOTAL BASEMENT AREA782 SF-FINISHED653 SF-UNFINISHED129 SFTOTAL FIRST FLOOR AREA2,123 SFTOTAL SECOND FLOOR AREA1,654 SF

TOTAL RESIDENTIAL FLOOR AREA 4,559 SF

UTILITIES

Proposed OWTS/Septic Proposed Well Proposed underground electric (Xcel) Proposed LP Gas (underground tank)



VICINITY MAP - NOT TO SCALE



192'

CASA PICHON RESIDENCE 672 WAGONWHEEL GAP ROAD BOULDER, CO 80302

ARCHITECTURE DRAWINGS SITE PLAN REVIEW SUBMITTAL OCTOBER 17, 2022



BASEMENT



CASA PICHON RESIDENCE 672 WAGONWHEEL GAP ROAD BOULDER, CO 80302

ARCHITECTURE DRAWINGS SITE PLAN REVIEW SUBMITTAL OCTOBER 17, 2022





ATTACHMENT A



ATTACHMENT A



ROOF

7	SCALE 1/8" = 1'0"				
•)	0'	6'	12'	18'	24'
~			1		









CASA PICHON RESIDENCE 672 WAGONWHEEL GAP ROAD BOULDER, CO 80302

ARCHITECTURE DRAWINGS SITE PLAN REVIEW SUBMITTAL OCTOBER 17, 2022



CASA PICHON RESIDENCE 672 WAGONWHEEL GAP ROAD BOULDER, CO 80302

ARCHITECTURE DRAWINGS SITE PLAN REVIEW SUBMITTAL OCTOBER 17, 2022



SOUTH-WEST ELEVATION

0'

ATTACHMENT A




6065					
6060					
6055					
6050					
6045					
6040					
6035	EXISTIN				
6030	E INTO RAVEL I				15
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6020	- 6%	8%	Q		
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EXISTIN	G GRADE								AREA				/	6050
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SITE CROSS SECTION "1"

SEE SHEET C1.0 FOR LOCATION









	PREPARED BY: The stanitas Group 901 FRONT ST, SUITE 350 LOUISVILLE, CO 80027 303-481-2710						
	CURTIS C. STEVENS, P.E. PREPARED FOR:						
N LU	/ARIA BARBENZA & CAS PICHON RIVIERE						
SPR/LISR DOCUMENTS FOR:	THE PICHON RESIDENCE 672 WAGONWHEEL GAP RD UNINCORPORATED BOULDER COUNTY, STATE OF COLORADO						
SP.	ISSUE DATE R/LISR REVIEW 10/17/2022						
	DESIGNED BY:CCSDRAWN BY:CCSCHECKED BY:TSG						
	$\frac{\text{DRAWING SCALE:}}{\text{HORIZONTAL: } 1'' = 20'}$ VERTICAL: 1'' = 20'						
	SITE CROSS						
P	SECTIONS PROJECT NO. B1422						
	C3.0						
	SHEET: 3 OF 4						

B1422XS



PERCENT OF MIX BROADCAST (LBS/ACRE) BLUE

10	3.03
25	5.58
25	5.48
10	0.15
10	0.38
L00	15.46 LBS/ACRE



LOT TA BOW MOUNTAIN REPLAT A

B1422RP

SHEET: 4 OF 4

ATTACHMENT B



Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 303-441-3930 • www.BoulderCounty.gov

February 7, 2023

TO:	Jonathan Tardif,, Planner II; Community Planning & Permitting, Development Review
FROM:	Ian Brighton, Planner II; Community Planning & Permitting, Access & Engineering
SUBJECT:	LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence
	672 Wagonwheel Gap Road

The Development Review Team – Access & Engineering staff has reviewed the above referenced docket and has the following comments:

- 1. The subject property is accessed from Wagonwheel Gap road, an unpaved Boulder County owned but not maintained right-of-way (ROW) with a functional classification of Local via a private gravel-surfaced drive within a 60-foot access easement shown on the Bow Mountain Replat dated December 23rd, 1963 (attached).
- 2. *Prior to final inspection*, an Access Improvement and Maintenance Agreement (AIMA) signed and notarized by the property owner must be submitted to Community Planning and Permitting. The AIMA will be prepared by staff and issued for the private drive referred to as Wagonwheel Gap Road during building permit.
- 3. The proposed access drive is 12 feet in width, which is in compliance with the <u>Boulder County</u> <u>Multimodal Transportation Standards ("the Standards").</u>
- 4. The proposed access drive measures approximately 300 feet in length. An emergency access pullout is not required per the Standards.
- 5. The application materials indicate 1,885 cubic yards of fill will be used along the driveway. The improved driveway must comply with the Standards for residential development in the mountains, including without limitation:
 - a. Table 5.5.1 Parcel Access Design Standards (1-Lane Mountain Access)
 - b. Standard Drawing 11 Private Access
 - c. Standard Drawing 15 Access Profiles Detail
 - d. Standard Drawing 16 Access Grade & Clearance
 - e. Standard Drawing 18 Access Turnaround
 - f. Standard Drawing 19 Typical Turnaround & Pullout Locations

6. The proposed emergency turnaround appears to comply with the standards. Fire Protection Districts (FPDs), however, often have concerns about the stability of a turnarounds constructed with fill material. The turnaround and access drive must be adequately compacted to support the weight of emergency vehicles.

At building permit, provide a letter from the Boulder Mountain Fire Protection District confirming the turnaround, as designed, can accommodate its emergency access needs.

- 7. As a part of Boulder County's water quality protection program, a stormwater quality permit (SWQP) is required if the area of disturbance on the subject property exceeds one acre in size. The plans submitted for permitting must identify the area to be disturbed. *Note: if a SWQP is required, a SWQP application must be submitted at the time of grading permit and obtained prior to any work beginning on this project.*
- 8. Preliminary Erosion Control & Revegetation plans dated 10/17/2022 indicate riprap aprons placed at the outfall of the two proposed storm drainage culverts.

At building permit, submit drainage calculations that demonstrate how the proposed development impacts existing and proposed drainage both on and off the site. Calculations must show that the proposed drainage ditches, culverts, and rip-rap aprons are sized appropriately to accommodate the runoff from the hillslope above.

The County has an interest in the volume and velocity of stormwater runoff at the property boundary as well as impacts to adjacent properties. Drainage impacts related to the proposed development must be mitigated on-site to the extent possible. If off-site mitigation is necessary, it must be included in the Drainage Plan.

- 9. Appropriate erosion control measures such as silt fences and erosion control logs must be installed downslope and parallel to contours for all disturbed areas including staging areas. The location and types of erosion control shall be shown on site plans submitted for building permit approval.
- 10. Due to the location of residential units and a public ROW below the proposed development, a construction fence must be installed downslope of the construction site (upslope of the erosion control measures) to prevent construction related debris and material from falling downslope.
- 11. Final grade cuts and fills shall not be steeper than a 1-½ to 1 slope. Grades steeper than a 1-½ to 1 slope will need to be supported by a retaining wall. Retaining walls or series of walls greater than four feet in height, as measured from the bottom of the footer to the top of the wall, require building permits for construction. Steep sloped areas of stable exposed bedrock are acceptable in lieu of constructing a retaining wall. At permitting, the height of the retaining wall must be provided and, if greater than four feet in height, wall details must be designed and stamped by a qualified Colorado-licensed professional engineer. Calculations shall be submitted for all retaining walls over 6 feet in height.
- 12. During construction (i.e. during the day while work is being performed), all vehicles shall be parked on-site or to one side of Wagonwheel Gap road so as to not impede the travel way.
- 13. Applicants indicate excess cut will be removed from the property to Foothills Landfill or a site tobe-determined by the project contractor. *Note: transporting fill in excess of 50 cubic yards to a separate parcel within Boulder County may require additional County review including Site Plan Review or Limited Impact Special Use review.*

Prior to final inspection, a receipt specifying the amount and location of excess cut transported off-site must be submitted to Community Planning and Permitting staff.

14. A Boulder County Hauler License is required for hauling of material off site, regardless of where the material is deposited. This applies to the prime contractor as well as any subcontractors that collect, transport or dispose of any materials (dirt, gravel, garbage, recyclables, or compostables, construction and demolition waste, or landscaping materials) anywhere except within the project site, including locations outside unincorporated Boulder County. Additional information can be found here: https://www.bouldercounty.org/environment/trash/hauler-license/.

This concludes our comments at this time.



ATTACHMENT B

S8994910"F 233370 EAST WEST CENTERLINE SECTION 2233.50 _S89°47'30"E-480 80 503.70 748 6B 7 B NOTE 5 20 6A WAGON- WHEEL -85%1 54-3 184⁰³⁶45[°] E 736 19 SEE REPLAT 2 GO'ACLE N86°33'49'E EASEMENT 17 18 16 15 1 / K 14 13 400 0 175.0 185 0 09.84 N89°38'W 901.0' N 89°49 'W 1314.40 PLANNING COMMISSION CERTIFICATE APPROVED THIS 20th DAY OF Decomber A. D. 1963, COUNTY PLANNING COMMISSION, BOULDER COUNTY, COLORADO. Stillion A. Gelle COMMISSIONERS CERTIFICATE APPROVED THIS 23 M DAY OF DE AD 1963, BOARD OF COUNTY COMMISSIONERS, BOULDER COUNTY, COLORADO W.D. Mc Carlin ATTEST _____ CLERK OF BOARD SURVEYOR'S CERTIFICATE I, FRANK R. DREXEL, DO HEREBY CERTIFY THAT THE SURVEY OF BOW MOUNTAIN REPLAT WAS MADE UNDER. My supervision and that the accompanying plat accurately represents said survey. CLERK AND RECORDER'S CERTIFICATE STATE OF GOLORADO) <u>\$</u>\$ COUNTY OF BOULDER) I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED IN MY OFFICE AT 1:47 PMOCLOCK DEC. 24 A.D. 1963, AND IS DULY RECORDED IN PLAT BOOK 9 AT PAGE 69 FEES 720 PAID MILTON E. ISCHICHE-BOULDER RECORDER Elma C. Duri



Boulder County Multimodal Transportation Standards

Table 5.5.1	Parcel	Access	Design	Standards
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	One-Lan	e Access	Two-Lane Access		
	Plains Mountains		Plains Mountair		
# of units	1 -	5	6 -	15	
Travelway Width (8' turnouts 8'x 55' incl. tapers - required every 400')	10'	12'	18'	18'	
Surface Course	Per geotechi	nical report ¹	Per geotechnical report		
ROW/Easement Width (min.)	20 28' w/tu)' urnouts	30'		
Centerline Radius (min.)	4()'	4()'	
Max. Grade (%)	12	12 or up to 14 for 200' max. ²	12	12 or up to 14 for 200' max.	
Max. Grade through curve	6%	6 ³	6%		
Clearance Vertical/ Horizontal	13'-6" / 14' 13'-6" / 16'		13'-6" / 22'		
Roadside Ditches	Designed and constructed to Standard Drawings. See BCSDCM and USDCM for permanent erosion control practices.		Designed and constructed to Standard Drawings. See BCSDCM and USDCM for permanent erosion control practices.		
Slope Stability	Per geothechnical to design stabili reveget	Per geothechnical recommendations to design stability and facilitate revegetation ⁴		Per geothechnical recommendations to design stability and facilitate revegetation ⁴	
Signs and Traffic Control Devices	Traffic Devices Required signs and traffic control devices must conform with the MUTCD, latest edition		Required signs and traffic control devices must conform with the MUTCD, latest edition		
Culverts	Min. 18" or equiv. capacity RCP or CMP in public ROW per Standard Drawing Cross-culverts outside of ROW sized to maintain historic flow		Min. 18" or equiv. capacity RCP or CMP in public ROW per Standard Drawing Cross-culverts outside of ROW sized to maintain historic flow		
Sight Distances	per AASHTO recommendations		per AASHTO recommendations		
Approach to Highway	90° to centerline of highway with max. 30° variation		90° to centerline of highway with max. 30° variation		
Standard Drawings	11, 12, 13, 14, 1	5, 16, 17, 18, 19	11, 12, 13, 14, 1	5, 16, 17, 18, 19	
Overall Design Principles	See Sec	tion 5.1	See Section 5.1		

¹ Accesses serving one dwelling unit shall use 4" ABC (Class 6) or other suitable material as approved by the Transportation Department.

² Accesses serving one dwelling unit may use 16% for 200' max.

- ³ Accesses serving one dwelling unit may use up to 8% w/ 2' additional width.
- ⁴ Accesses serving one dwelling unit may use 1 ½ : 1 max. cut and fill slopes or per geothechnical recommendations to design stability and facilitate revegetation.

Boulder County Multimodal Transportation Standards

Standard Drawing 11



A-16

July 1, 2012

A-20

Boulder County Multimodal Transportation Standards

Standard Drawing 15



July 1, 2012

Boulder County Multimodal Transportation Standards

Standard Drawing 16



July 1, 2012

Boulder County Multimodal Transportation Standards

Standard Drawing 18



July 1, 2012

A-24

Boulder County Multimodal Transportation Standards

Standard Drawing 19



July 1, 2012



Community Planning & Permitting

Courthouse Annex • 2045 13th Street • Boulder, Colorado 80302 • Tel: 303.441.3930 • Fax: 303.441.4856 Mailing Address: P.O. Box 471 • Boulder, Colorado 80306 • www.bouldercounty.org

Building Safety & Inspection Services Team

<u>M E M O</u>

TO: FROM: DATE:	Jonathan Tardif, Staff Planner Michelle Huebner, Plans Examiner Supervisor January 12, 2023		
RE: Referral Response, LU-22-0025/SPR-22-0111: Riviere-Barbenza Drivewa Residence. Limited Impact Special Use Review to allow for 3,005 cubic y grading for driveway and site improvements, and Site Plan Review for th construction of a 4,559-square-foot residence on a vacant parcel where Presumptive Size Maximum is 3,878 square feet.			
	Location: 672 Wagonwheel Gap Road		
Thank	you for the referral. We have the following comments for the applicants:		
1.	Building Permit. A building permit, plan review, inspection approvals, and a Certificate of Occupancy ("C.O.") are required for the proposed dwelling. Separate building permits, plan review, and inspection approvals are required for the; pool, and outside fireplace.		
	Note: The Basement is required to have egress. 2015 IRC - R310.1 Emergency escape and rescue opening required. <i>Basements, habitable attics</i> and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where <i>basements</i> contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. Emergency escape and rescue openings shall open directly into a public way, or to a <i>yard</i> or court that opens to a public way.		
	If the pool is heated, it must be offset with on-site or off-site renewable energy per section N1103.10.6 of the Boulder County Building Code Amendments.		
	Outdoor Fireplaces and fire pit must be offset with on-site or off-site renewable energy per section N1103.14 of the Boulder County Building Code Amendments.		
	Please refer to the county's <u>adopted 2015 editions of the International Codes and</u> <u>code amendments</u> , which can be found via the internet under the link:		
	2015 Building Code Adoption & Amendments, at the following URL:		

Claire Levy County Commissioner Marta Loachamin County Commissioner Ashley Stolzmann County Commissioner

https://assets.bouldercounty.org/wp-content/uploads/2017/03/building-code-2015.pdf

- 2. Automatic Fire Sprinkler System. Under the 2015 International Residential Code ("IRC") as adopted by Boulder County, all new one- and two-family dwellings and townhouses are required to be equipped with an automatic fire sprinkler system that is designed and installed in accordance with NFPA 13D or IRC Section P2904.
- 3. **BuildSmart.** Please refer to the county's adoption and amendments to Chapter 11 of the IRC, the county's "BuildSmart" program, for the applicable requirements for energy conservation and sustainability for residential additions and new residential buildings. Please be aware that there are energy related requirements of this code that may require the use of renewable energy systems (such as rooftop solar systems) that will also need to be approved by your electric utility provider. In some cases, there may be limitations on the size of on-site systems allowed by your utility provider that could constrain the project design. We strongly encourage discussions between the design team and the utility company as early in the process as possible in order to identify these constraints.
- 4. **Design Wind and Snow Loads.** The design wind and ground snow loads for the property are 165 mph (Vult) and 50 psf, respectively.
- 5. **Ignition-Resistant Construction and Defensible Space.** Please refer to Section R327 of the Boulder County Building Code for wildfire hazard mitigation requirements, including ignition-resistant construction and defensible space. A separate referral response will be forthcoming from one of the county's wildfire mitigation specialists.
- 6. Plan Review. The items listed above are a general summary of some of the county's building code requirements. A much more detailed plan review will be performed at the time of building permit application, when full details are available for review, to assure that all applicable minimum building codes requirements are to be met. Our <u>Residential Plan Check List</u> and other Building Safety publications can be found at: <u>https://assets.bouldercounty.org/wp-content/uploads/2017/03/b24-residential-plan-check-list.pdf</u>

If the applicants should have questions or need additional information, we'd be happy to work with them toward solutions that meet minimum building code requirements. Please call (720) 564-2640 or contact us via e-mail at <u>building@bouldercounty.org</u>



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MEMO TO:	Agencies and Adjacent Property Owners
FROM:	Jonathan Tardif, Staff Planner
DATE:	January 10, 2023
RE:	Docket LU-22-0025/SPR-22-0111

Docket LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence

Request:	Limited Impact Special Use Review to allow for
-	3,005 cubic yards of grading for driveway and site
	improvements, and Site Plan Review for the
	construction of a 4,559-square-foot residence on a
	vacant parcel where the Presumptive Size Maximum
	is 3,878 square feet.
Location:	672 Wagonwheel Gap Road, located approximately
	1.48 miles west of the intersection of Wagonwheel
	Gap Road and Lee Hill Drive on Section 11,
	Township 1N, Range 71W.
Zoning:	Forestry (F)
Applicants/Property Owners:	Lucas Pichon Riviere & Maria Barbenza
Agent:	Jeremy Smith, J Creative

Limited Impact Special Review is required of proposed uses that may have greater impacts on services, neighborhoods, or the environment than those allowed by right under the Boulder County Land Use Code. This process will review conformance of the proposed use with the Boulder County Comprehensive Plan and the Land Use Code.

Site Plan Review by the Boulder County Land Use Director is required for new building/grading/access or floodplain development permits in the plain and mountainous areas of unincorporated Boulder County. The Review considers potential significant impact to the ecosystem, surrounding land uses and infrastructure, and safety concerns due to natural hazards.

This process includes a public hearing before the Board of County Commissioners. Adjacent property owners and holders of liens, mortgages, easements or other rights in the subject property are notified of this hearing.

The Community Planning & Permitting staff and County Commissioners value comments from individuals and referral agencies. Please check the appropriate response below or send a letter to the Community Planning & Permitting Department at P.O. Box 471, Boulder, Colorado 80306 or via email to planner@bouldercounty.org. All comments will be made part of the public record and given to the applicant. Only a portion of the submitted documents may have been enclosed; you are welcome to call the Community Planning & Permitting Department at 303-441-3930 or email planner@bouldercounty.org to request more information. If you have any questions regarding this application, please contact me at : 303-441-1352 or jtardif@bouldercounty.org .

Please return responses by January 25, 2023.

(Please note that due to circumstances surrounding COVID-19, application timelines and deadlines may need to be modified as explained in the CPP Notice of Emergency Actions issued March 23, 2020 (see https://boco.org/covid-19-cpp-notice-20200323).

× We have reviewed the proposal and have no conflicts. ______Letter is enclosed.

Signed PRINTED Name Jessica Fasick

Agency or Address CP&P Historic Review

Date 1/10/23



Parks & Open Space 5201 St. Vrain Road • Longmont, CO 80503 303-678-6200 • POSinfo@bouldercounty.org www.BoulderCountyOpenSpace.org

TO:	Jonathan Tardiff, Land Use Department
FROM:	Ron West, Natural Resource Planner
DATE:	January 27, 2023
SUBJECT:	Docket LU-22-0025/SPR-22-0111, Riviere-Barbenza, 672 Wagonwheel Gap Road

Site Conditions

Staff has reviewed the submitted materials, and has visited neighboring parcels in the past. The small (one acre) lot is dominated by south-facing, ponderosa pine woodland, and a bifurcated drainage/gulch bisects the site.

County Comprehensive Plan Designations

The parcel has the following designations in the Boulder County Comprehensive Plan, and from other resource inventories.

• Archeologically Sensitive Area

Discussion

The site has rather extreme slopes resulting in substantial construction constraints/conditions. Staff does not understand the diagram on page 8 of the application, showing the "flowline." This line does not correspond to the natural drainages on the lot, which appear to converge directly above the house site.

The proposed design, combined with existing steep conditions, appears to "force" very substantial cut and fill slopes, as well as a long, on-site drainage culvert. Cut slopes above the driveway, on the east side of the house, are up to 43 vertical feet in height, while fill slopes below the driveway are up to 26 vertical feet in height. Combined, this is over 70 vertical feet of graded slopes, all needing successful revegetation. Most of the driveway's fill slopes are actually on the platted ROW for Wagonwheel Gap Road (though are not on the as-built road). When combined with the leach field area, over half of the lot will be graded in some manner.

All this said, staff does not foresee significant natural resource impacts as long as adequate erosional BMP's are fully incorporated and maintained during construction. The site is a very "tight," platted lot in an established subdivision, and localized impacts are almost impossible to avoid. The culvert system and its outflow could, however, significantly impact the undeveloped Lot 8B, downstream and across the ROW.

Given the very steep site, archeological resources are not expected.

Recommendations

- Final slope ratios for cut and fill areas are not provided; these should be included in the application.
- A Revegetation Plan is required that includes native grass species to be used, an explanation of how topsoils will be stockpiled and reused, mapped delineation of all disturbance areas (this includes construction staging areas, driveway, utility lines, and septic system), locations of silt fence or erosion control logs down slope of all disturbed areas, and matting requirements. New horticultural plantings should emphasize xeriscaping principles (Article 7-200-B-8, Land Use Code).
- In the Boulder County climate, staff does not consider swimming pools to be a sustainable use of water. This area receives about 13 inches of precipitation annually, and often sees 90 to 100-degree summer days. Water surfaces evaporate at a tremendous rate. Evaporation is so significant that the State Engineer's Office requires even small agricultural storage pond users to calculate, and compensate other water right holders, for evaporation rates from their ponds.
- Staff notes that filling the swimming pool from a newly-drilled well is almost certainly not an allowable use of groundwater under state requirements. The same is true for landscape irrigation. Water for the pool would need to be trucked to the site. Additionally, the roof-mounted solar array may not produce enough power to offset both the house and the pool. A ground-mounted array may be necessary, and a location for such should be part of this application.



Public Health Environmental Health Division

January 18, 2023

TO:	Staff Planner, Land Use Department					
FROM:	Jessica Epstein	Jessica Epstein, Environmental Health Specialist				
SUBJECT:	LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence project					
OWNER:	Riviere-Barber	ıza				
PROPERTY A	DDRESS:	672 Wagonwheel Gap Road				
SEC-TOWN-RANGE: 11-1N-71						
— — — — — — — — — —	N 1 11 XX					

The Boulder County Public Health – Environmental Health division has reviewed the submittals for the above referenced docket and has the following comments.

OWTS Application Needed:

- 1. An onsite wastewater treatment system (OWTS) permit has not been issued by Boulder County Public Health for this property. The owner or their agent (e.g., contractor) must apply for an OWTS permit, and the OWTS permit must be issued prior to installation and before a building permit can be obtained. The OWTS components must be installed, inspected and approved before a Certificate of Occupancy or Final Building Inspection approval will be issued by Community Planning and Permitting (CP&P).
- 2. Boulder County Public Health must conduct an onsite investigation and review percolation rates, soil conditions and any design plans and specifications prior to OWTS permit issuance. The OWTS absorption field must be located a minimum distance of 100' from all wells, 25' from waterlines, 50' from waterways and 10' from property lines.

This concludes comments from the Public Health - Environmental Health division at this time. For additional information on the OWTS application process and regulations, refer to the following website: <u>www.SepticSmart.org</u>. If you have additional questions about OWTS, please do not hesitate to contact Jessica Epstein at (303) 441-1138.

Cc: OWTS file, owner, Community Planning and Permitting



Community Planning & Permitting

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Wildfire Mitigation Team

<u>M E M O</u>

TO:	Jonathan Tardif, Staff Planner		
FROM:	Kyle McCatty, Wildfire Mitigation Specialist		
DATE:	January 25, 2023		
RE:	Referral Packet and Public Notice for Docket LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence project at 672 Wagonwheel		
	Gap Road		

Thank you for the referral. We have the following comments for the applicants:

Decades of catastrophic wildfires, research, and case studies have shown that extreme wildfires are inevitable in the forests of Boulder County and across the Western US. Still, the loss of life and homes does not have to be inevitable. The conditions that principally determine if a house ignites occur within 100 feet of the house, including the house itself. That is why Boulder County has such strong wildfire mitigation requirements in our Land Use and Building Code. Boulder County encourages all homeowners to voluntarily take responsibility to mitigate their own home's risk of igniting in a wildfire through Wildfire Partners.

Wildfire Mitigation is required; the proposed project is in <u>Wildfire Zone 1</u> (the foothills or mountains—approximately west of highways 7, 36, or 93) of the unincorporated portion of Boulder County. The Boulder County Wildfire Mitigation requirements are composed of site location, ignition-resistant materials and construction, defensible space, emergency water supply, and emergency vehicle access.

Site Location

A Boulder County Wildfire Mitigation Specialist has reviewed the site location as part of the Limited Impact and Site Plan Review process. Ideally, all structures should be located as far from property lines as possible to maximize full defensible space—at least 100 feet. Increased ignition-resistant materials will be required because the distance between the structures and the property line is only 33 feet for the residence and 25 feet for the carport.

Also, the Wildfire Mitigation Team strongly recommends **requiring** the carport be removed or converted into a garage because of the site location's wildfire risks and the carport's inherent vulnerability to igniting in a wildfire because of the open nature of the construction.

Ignition-Resistant Materials and Construction

Since the proposed development is located within a potentially hazardous area, all exterior building materials (including any proposed decking) must be ignition-resistant construction or better. Because of the wildfire mitigation risks associated with the site location, the following more restrictive increased ignition-resistant exterior materials are required:

- Dual pane tempered glass windows are required within at least 50 feet of the property lines.
- Wood and fire-retardant-treated wood are not allowed.
- Heavy timber (IBC Section 602.4) and log wall construction (see definition in R327) are allowed.
- Deck surface must be an ASTM E84 (UL 723) flame-spread index no greater than 75.

Also, if the carport is to remain, all adjacent exterior materials and wall and roof/ceiling assemblies <u>on and within 25 feet of the carport</u> must be constructed of a 1-hour firerated (on the carport side) noncombustible assembly. Specifically, this requires:

- Exterior materials adjacent to the carport must be noncombustible as defined in R327 of the Boulder County Building Code Amendments.
- Wall and roof/ceiling assemblies adjacent to the carport require:
 - o Metal framing
 - Type X drywall (facing the carport)
- Rock wool insulation is required if insulation is to be used

For additional ignition-resistant construction information, please contact the Building Safety & Inspection Services Team at 303-441-3926. Refer to the Boulder County publication: <u>Building with Ignition Resistant Materials</u> for specific requirements. All exterior materials must be clearly noted on the building plans and must be reviewed and approved as "ignition resistant" by the Building Safety & Inspection Services Team.

Defensible Space

Adequate defensible space is required to prevent the spread of fire to and from the structure. This requires limbing and/or removal of trees and shrubs to provide necessary vertical and horizontal fuel separation within a minimum of 100 ft. from the home and within 30 ft. along both sides of a driveway. Where the property boundary limits Zone 2 (at least 100 feet from structures), Zone 1 (a buffer of at least 30 feet free of conifer trees and other highly combustible vegetation immediately surrounding the home, including all attachments and accessory structures within 30 feet) may need to begin at the home's dripline. More information can be found by referring to the Colorado State

Forest Service publication <u>Protecting Your Home from Wildfire: Creating Wildfire-</u> <u>Defensible Zones – 2012 Quick Guide</u>.

Follow the Colorado State University <u>FireWise Plant Materials – 6.305</u>, <u>Fire-Resistant</u> <u>Landscaping – 6.303</u>, and Colorado State Forest Service <u>Protecting Your Home from</u> <u>Wildfire: Creating Wildfire-Defensible Zones – 2012 Quick Guide</u> publications when choosing plants and designing revegetation and landscaping.

Emergency Water Supply

An emergency water supply is required to aid in the defense of the structures from a wildfire and assist in firefighting efforts. This may include, but is not limited to, a hydrant on a public water system, a dry hydrant in a local water source, a community cistern, or an individual cistern. Contact Chief John Benson of the Boulder Mountain Fire Protection District for their requirements at 303-440-0235 and <u>chief@bouldermountainfire.org</u>. If installing an individual cistern and the Fire Protection District does not have its own installation requirements follow the Boulder County publication: <u>Emergency Water Supply for Firefighting</u>.

Emergency Vehicle Clearance

Emergency vehicle clearance is required to allow for safe ingress and egress of emergency vehicles. Emergency personnel try their best to respond to calls in a timely manner, often while negotiating difficult terrain. Planning for access by emergency vehicles improves safety for homeowners and their families by providing for a more efficient response by firefighters and other emergency personnel arriving on the scene. This is especially important in rural and mountainous areas where response times may be considerably longer than in cities, where emergency services are closer by. Refer to the Boulder County publication: <u>Driveway Access for Emergency Vehicles</u> for specific clearance-related requirements.

Timeline

After applying for, but prior to issuance of any permits, a Boulder County Wildfire Mitigation Specialist will contact you to schedule a Wildfire Partners or Regulatory Wildfire Mitigation assessment and defensible space marking. Based upon the compliance path selected, either a Wildfire Partners Assessment report or a Wildfire Mitigation Plan will be created to describe the wildfire mitigation requirements.

Before scheduling rough framing inspections, the plan's defensible space and water supply portion must be implemented and inspected by the Community Planning & Permitting Department. All trees marked for removal must be cut, and all slash, cuttings, and debris must be removed and/or properly disposed of. The <u>Fire Sprinkler or Fire</u> <u>Cistern Approval Form</u> must be submitted to the Boulder County Building Safety & Inspection Services at <u>ezbp@bouldercounty.org</u> (or P.O. Box 471, Boulder, Colorado, 80306) after the fire protection district completes the applicable portion of the form. If an individual cistern was required, it must be located on-site in an appropriate location (subject to approval by the fire protection district), fitted with an appropriate dry hydrant connection, and be filled, and tested by the local fire protection district.

At the time of final inspection, all remaining required items in the Wildfire Partners Assessment report or the Wildfire Mitigation Plan are to be fully implemented and inspected. Ground surfaces within three feet of both existing and new structures, and at least 2 feet beyond the driplines of decks, bay windows, and other eaves and overhangs, must be covered with an allowable non-combustible ground cover over a weed barrier material. The driveway vertical and horizontal vegetation clearance must be in place and conform to the Parcel Access Design Standards in the <u>Boulder County Multimodal</u> <u>Transportation Standards</u>.

If the applicants should have questions or need additional information, we'd be happy to work with them toward solutions that meet minimum land use and building code requirements. I can be reached at 720-564-2625 or via e-mail at <u>kmccatty@bouldercounty.org</u>.

ATTACHMENT B



Community Planning & Permitting

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MEMO TO:	Agencies and Adjacent Property Owners
FROM:	Jonathan Tardif, Staff Planner
DATE:	January 10, 2023
RE:	Docket LU-22-0025/SPR-22-0111

Docket LU-22-0025/SPR-22-0111: Riviere-Barbenza Driveway & Residence

Request:		Limited Impact Special Use Review to allow for		
-		3,005 cubic yards of grading for driveway and site		
		improvements, and Site Plan Review for the		
		construction of a 4,559-square-foot residence on a		
		vacant parcel where the Presumptive Size Maximum		
		is 3,878 square feet.		
Loca	ation:	672 Wagonwheel Gap Road, located approximately		
		1.48 miles west of the intersection of Wagonwheel		
		Gap Road and Lee Hill Drive on Section 11,		
		Township 1N, Range 71W.		
Zoni	ng:	Forestry (F)		
App	licants/Property Owners:	Lucas Pichon Riviere & Maria Barbenza		
Agei	nt:	Jeremy Smith, J Creative		
-				

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Please return responses by January 25, 2023.

(Please note that due to circumstances surrounding COVID-19, application timelines and deadlines may need to be modified as explained in the CPP Notice of Emergency Actions issued March 23, 2020 (see https://boco.org/covid-19-cpp-notice-20200323).

____ We have reviewed the proposal and have no conflicts. _____ Letter is enclosed.

Signed	Jacob Ca	assidy	PRINTED Name	Jacob Cassidy	
Agency or Add	lress	City of Bo	ulder Open Space	and Mountain Park	S

Date 1/25/2023



Right of Way & Permits

1123 West 3rd Avenue Denver, Colorado 80223 Telephone: **303.571.3306** Facsimile: 303. 571. 3284 donna.l.george@xcelenergy.com

January 24, 2023

Boulder County Community Planning and Permitting PO Box 471 Boulder, CO 80306

Attn: Jonathan Tardif

Re: Riviere-Barbenza Driveway & Residence Case #s LU-22-0025 and SPR-22-0111

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the site plan and limited impact special use review for **Riviere-Barbenza Driveway & Residence**. The property owner/developer/contractor must complete the application process for any new electric service via <u>xcelenergy.com/InstallAndConnect</u>. It is then the responsibility of the developer to contact the Designer assigned to the project for approval of design details.

Additional easements may need to be acquired by separate document (i.e. transformer) – be sure to ask the Designer to contact a Right-of-Way & Permits Agent in this event.

Donna George Right of Way and Permits Public Service Company of Colorado dba Xcel Energy Office: 303-571-3306 – Email: donna.l.george@xcelenergy.com