

Memo

To: Breckenridge Town Council Members
From: Shannon Haynes, Town Manager
Date: 4/5/2024
Subject: Joint Meeting Agenda with BOSAC

During the April 9th Council work session there will be a joint meeting with the Breckenridge Open Space Advisory Commission. The agenda includes the following discussion topics:

- Cucumber Gulch Preserve
- Multi-Year Trail Planning
- Trail Use & Etiquette
- ADA Trails and Inclusivity
- Larium Trailhead Changes

Attached you will find:

- A timeline capturing the key management decisions and guiding documents since Cucumber Gulch Preserve was first established and includes daily trail counts from July to September 2009-2023.
- A recommendation on the Larium trailhead

Cucumber Gulch Preserve History of Management Actions

TIMELINE

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| 1997 - 2000 | <ul style="list-style-type: none"> • Start of the Open Space Program in 1997. • Colorado State University Natural Heritage Assessment of Wetlands and Riparian Areas in Summit County, Colorado in 1997. • Designation of Cucumber Gulch Preserve as: <ol style="list-style-type: none"> 1) Special Aquatic Site under the Guidelines for Specification of Disposal Sites for Dredged or Fill Material of the Clean Water Act; 2) Aquatic Resource of National Significance (ARNI) by the EPA; 3) Resource Category 1 under USFWS Region 6 Policy on Protection of Fens; 4) Endangered Species Habitat by Colorado Division of Wildlife; and 5) Protection Urgency Rank P1 and Management Urgency Rank M1 by the Colorado Natural Heritage Program. |
| 1998 | <ul style="list-style-type: none"> • TOB hired Science Applications International Corporation (SAIC), an environmental consulting firm, to study the ecology of the area. |
| 2000 | <ul style="list-style-type: none"> • As a result of SAIC report, Town Council adopts the Cucumber Gulch Overlay Protection District (Ordinance 9, Series 2000). This ordinance prevents any human disturbance within the most ecologically sensitive areas of the CGP and encourages the use of Best Management Practices in the surrounding buffer areas. The purpose of the OPD is: <ol style="list-style-type: none"> 1) Limit human disturbance of Cucumber Gulch insofar as possible and to thereby keep the impacts associated with human intrusion as minimal as possible. 2) Establish a stewardship program which will be applied in a consistent, fair and area wide fashion in order to provide appropriate maintenance of the special resources in Cucumber Gulch. 3) Establish a buffer area around the important natural resources portions of Cucumber Gulch, to be known as the “Preventive Management Area” or “PMA”, where development and other activities are prohibited in order to maintain and enhance the aesthetics and bio-diversity of the area and to enable the natural resources of the area to function without being compromised. 4) Commit the Town to undertake, complete and consider further studies of the boreal toad habitat, wildlife corridors in upland areas, hydrology, and fen wetlands of Cucumber Gulch in order to better understand the existing conditions of Cucumber Gulch and to allow for the subsequent refinement of these Regulations pursuant to Paragraph 9 hereof. 5) Prohibit activities that could have a major or irreversible impact within the PMA. 6) Provide for the establishment and enforcement of wildlife movement corridors in upland areas of Cucumber Gulch. 7) Promote Best Management Practices (as hereafter defined) to provide a framework that ensures, insofar as possible, that activities in and around Cucumber Gulch are compatible with the protection of its resources. |

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| | <ol style="list-style-type: none"> 8) Allow and promote recreational access to Cucumber Gulch to the extent that it is in keeping with study results, and the goals and purposes of these Regulations. 9) Establish the Town as the lead entity and as such the Town will work cooperatively with landowners in the District, government agencies and others to further the purposes of these Regulations. 10) Commit the Town to adopt Water Quality Protection Standards based on those developed by the Northwest Colorado Council of Governments for use in connection with any development which occurs within the drainage which feeds Cucumber Gulch. |
| 2003 | <ul style="list-style-type: none"> • Annual beaver lodge survey and regular beaver monitoring studies commence. • SAIC completes Breeding Bird Survey in Cucumber Gulch Preserve. • Town Council adopts Cucumber Gulch Recreation Master Plan to establish a conceptual framework for setting management priorities and to provide specific management direction for recreational resources within the Cucumber Gulch Overlay Protection District (OPD). Goals of the Master Plan include: <ol style="list-style-type: none"> 1) Ensure the protection of natural resources within Cucumber Gulch. 2) Balance recreational access with the preservation and enhancement of the natural resources. 3) Provide recommendations for sustainable trail design, alignments, and interpretation that minimize impact to the sensitive resources included in Cucumber Gulch. 4) Identify approved recreation activities and trail alignments consistent with the Cucumber Gulch OPD. 5) Maintain and enhance opportunities for approved recreation activities in Cucumber Gulch. 6) Identify recreational and interpretive activities and facilities that are consistent with establishing a “stewardship presence” in Cucumber Gulch. 7) Encourage responsible use of the area by providing limited, non-obtrusive, durable, and attractive trail signage to orient and inform trail users about sensitive resources in Cucumber Gulch. 8) Make Cucumber Gulch a centerpiece for environmental education and interpretation. 9) The existing Miner’s Cabin provides opportunities for education and interpretation. 10) Maintain a sense of solitude for visitors and users of Cucumber Gulch. |
| 2004 | <ul style="list-style-type: none"> • Annual avian studies of Cucumber Gulch Preserve commence. • Land and Water Conservation Fund grant award for accessible trail at Cucumber Gulch Preserve. |
| 2007 | <ul style="list-style-type: none"> • Forest Health and Mountain Pine Beetle Analysis in the Cucumber Gulch Preserve • TOB prohibits dogs in Cucumber Gulch Preserve (Town Code 11-2-6 C). • TOB adopts Open Space Plan, which includes references to the Preserve: <ol style="list-style-type: none"> 1) Devise measures to protect environmental quality and recreation. 2) Strive to acquire additional parcels in the Cucumber Gulch area to further protect the sensitive wetland area. |
| 2008 | <ul style="list-style-type: none"> • Breckenridge Nordic Center License Agreement for winter operations. |

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| <p>2009</p> | <ul style="list-style-type: none"> • TOB adopts group size limitation of 8 people maximum in Cucumber Gulch Preserve. • TOB starts collecting trail counter data. In 2009, there was an average of 116 counts each day on the trails and a total of 14,184 counts over the summer season. • TOB adopts Trail Plan, with references to the Preserve: <ol style="list-style-type: none"> 1) Continue to implement the tasks outlined in the Cucumber Gulch Recreation Master Plan. Monitor trail conditions and use within the Cucumber Gulch Preserve and adjust trail alignment and management accordingly. 2) Work cooperatively with Nordic area concessionaires to ensure appropriate winter management of Cucumber Gulch Preserve. 3) Designate specific access points to the Cucumber Gulch Preserve and work to secure other potential, undesirable, social accesses to ensure strong protection of the Preserve’s natural values. |
| <p>2010</p> | <ul style="list-style-type: none"> • Annual spring closure for trails is implemented. • Non-winter special events are prohibited. • Summer gondola operations restricted days/times of day for wildlife. |
| <p>2011</p> | <ul style="list-style-type: none"> • Discussion with Breck Ski Resort regarding new trail and bridge over the Alpine Slide to discourage use in Cucumber Gulch Preserve, particularly with Peak 7 Grand Lodge development. The trail and bridge project was deemed expensive and it was dropped. • Catastrophic flooding event and erosion in Cucumber Gulch Preserve with extensive restoration efforts that followed. Wetland delineation and mapping completed following US Army Corps of Engineers procedures. |
| <p>2012</p> | <ul style="list-style-type: none"> • Avian study completed on the effects of springtime gondola operation on avian populations in Cucumber Gulch. • Town Council adopts Cucumber Gulch Preserve Management Plan (Resolution 3, Series 2012). “In 2003, to further address problems arising from unregulated recreational access, a recreation plan was developed for the Preserve. In subsequent years, additional plans and analytical documents pertaining to the Town’s Open Space program and the Preserve have been developed. Due to the abundance of planning recommendations and analytical information contained in a variety of documents, it is the intent of this plan to consolidate the findings, descriptions and policies into a single resource document and establish clear policy direction for managing the Preserve.” <ol style="list-style-type: none"> 1) Resolution 3 states, “WHEREAS, the purpose of the “Cucumber Gulch Preserve Management Plan (February 2012)” are to; and <ol style="list-style-type: none"> i) Protect sensitive natural areas of the Cucumber Gulch Preserve that may need additional conservation; ii) Provide for limited, managed public access to Cucumber Gulch; and iii) Monitor the resource values of the Cucumber Gulch Preserve to determine if management objectives are being achieved, • Cucumber Gulch Preserve Management Plan includes action items with specific Town Council directives in four main categories: <ol style="list-style-type: none"> 1) Land Management: <ol style="list-style-type: none"> i) Prioritize resource protection in the Preserve. ii) Demonstrate a visible management presence. iii) Strictly enforce regulations, particularly regarding pets. |

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| | <ul style="list-style-type: none"> iv) Better utilize fencing to secure sensitive areas and define a perimeter boundary to adjacent residential properties. v) Implement limited forest health intervention. 2) Recreational Access: <ul style="list-style-type: none"> i) Allow existing Nordic trail system to continue. ii) Prevent the proliferation of additional snowshoe trails. iii) Lower the intensity of non-winter recreation. 3) Educational Efforts: <ul style="list-style-type: none"> i) Educate adjacent residents about the Preserve’s valuable natural resources and vulnerability to human impacts. ii) Work with front-line lodging staff of neighboring properties to educate guests about the Preserve’s valuable natural resources and vulnerability to human impacts. iii) Educate the public in a way that does not attract additional recreational visitors to the Preserve. 4) Development Restrictions: <ul style="list-style-type: none"> i) Minimize disturbance to the Preserve from adjacent development. |
| 2012-present | <ul style="list-style-type: none"> • Staff work with BTO and Welcome Center to deemphasize visitation to Cucumber Gulch Preserve and share rules and regulations. |
| 2013-2018 | <ul style="list-style-type: none"> • Contractor hires summer docents to provide presence and environmental education in Cucumber Gulch Preserve to further goals of the 2012 management plan. |
| 2015 | <ul style="list-style-type: none"> • State Wildlife Action Plan identifies Cucumber Gulch Preserve as HIGHEST Crucial Habitat on the CHAT: The Crucial Habitat Assessment Tool (CHAT), developed by the Western Governors’ Association and multiple conservation partners, prioritizes habitats by importance to vulnerable wildlife species. • Start of a 5-year Weed Monitoring and Control Program. |
| 2016 | <ul style="list-style-type: none"> • Summer gondola agreement allowing operating weekends in September and allowing bikes on the gondola. |
| 2018 | <ul style="list-style-type: none"> • Trail counts in 2018 more than doubled since 2009, with an average of 345 counts per day and grand total of 29,155 counts over the three-month summer season. • Wetland delineation and mapping completed following US Army Corps of Engineers procedures. |
| 2019 | <ul style="list-style-type: none"> • Joint working group established with Breck Ski Area regarding gondola operations. • Interim summer gondola agreement approved with 45-day “dark period” in the spring for wildlife calving, fawning, and nesting and set hours of operations to avoid dawn/dusk when animals are most active. • Last observed Boreal Toad in Cucumber Gulch Preserve (not collected or swabbed). • Wetland delineation and mapping completed following US Army Corps of Engineers procedures, including fen and mire mapping with fen habitat diversity mapping. • TOB creates two summer seasonal Naturalist positions to further education goals of 2012 management. Previous docents were hired by contractor in 2013-2018. Naturalists work with Welcome Center and area businesses and lodging to educate about Cucumber Gulch Preserve. |
| 2020 | <ul style="list-style-type: none"> • TOB starts targeted written neighbor and lodging communication about Cucumber Gulch Preserve. • TOB starts guided Naturalist tours. |

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| | <ul style="list-style-type: none"> Detailed habitat study regarding the genesis, development, diversity and natural history of Cucumber Gulch Preserve. EcoMetrics Report to BOSAC that, "The recent mapping shows the Preserve has some of the most unique, diverse, and concentrated level of fen wetlands anywhere in the county and the state." BOSAC discusses problems with dogs and increasing numbers of people in the Preserve. BOSAC suggested shutting down trails in the Preserve and getting more help from CSO in enforcement, but thought that more education was warranted first. |
| 2021 | <ul style="list-style-type: none"> 5-year gondola agreement signed. BOSAC discusses the 2020 Cucumber Gulch Preserve monitoring reports, which highlighted a dramatic increase in human use and increased recreational use at all access points. Staff introduced rerouting the trail to minimize impacts of human use and prevent fragmentation of habitat, which BOSAC supported. BOSAC also suggested improving the bike ability of Ski Hill Road to keep people out of the Preserve, but still maintain a connection from Town to the base area. 2021 EcoMetrics Monitoring Report recommends rerouting the trail to improve wetland health. |
| 2022 | <ul style="list-style-type: none"> BOSAC asks about rerouting the trail through Cucumber Gulch Preserve; staff indicate they'd like to explore the route from the former trail to Peak 8 as a way to avoid wetland impacts and habitat fragmentation. Hagan Family Foundation films Beaver Documentary in Cucumber Gulch Preserve; expected release in 2024 – 2025 and will be submitted to environmental film festivals. Forest Health project in the area of Cucumber Gulch Preserve nearest White Wolf to address a small but extensive area of downed lodgepole along the trail. |
| 2023 | <ul style="list-style-type: none"> BOSAC discusses open space topics and talking points, including rerouting the trail through Cucumber Gulch Preserve to avoid habitat fragmentation and impacts from human use. Town Council adopts Open Space & Trails Master Plan, which includes Cucumber Gulch Preserve as a Strategic Initiative for Stewardship. <ol style="list-style-type: none"> Considering the importance to the ecosystem, community, and OST program, Cucumber Gulch Preserve should be managed as its own Stewardship program. Stewardship efforts should include ongoing monitoring and research of wildlife; wetlands, groundwater monitoring; human disturbance; outreach and education programs; and management of trail users and visitors to reduce human impacts. Annual Open House highlighted the plan to reroute the trail in Cucumber Gulch Preserve along the perimeter. BOSAC conducts site visits to explore current trail, an alternative to realign a small portion near the Peaks trailhead, and the staff recommended reroute along the perimeter. 2023 EcoMetrics Report tracks ecological condition of wetlands in the Preserve. Trail counts in 2023 have more than tripled since 2009, with an average of 588 counts per day and grand total of 50,765 counts over the three-month summer season. See Figure 1. |

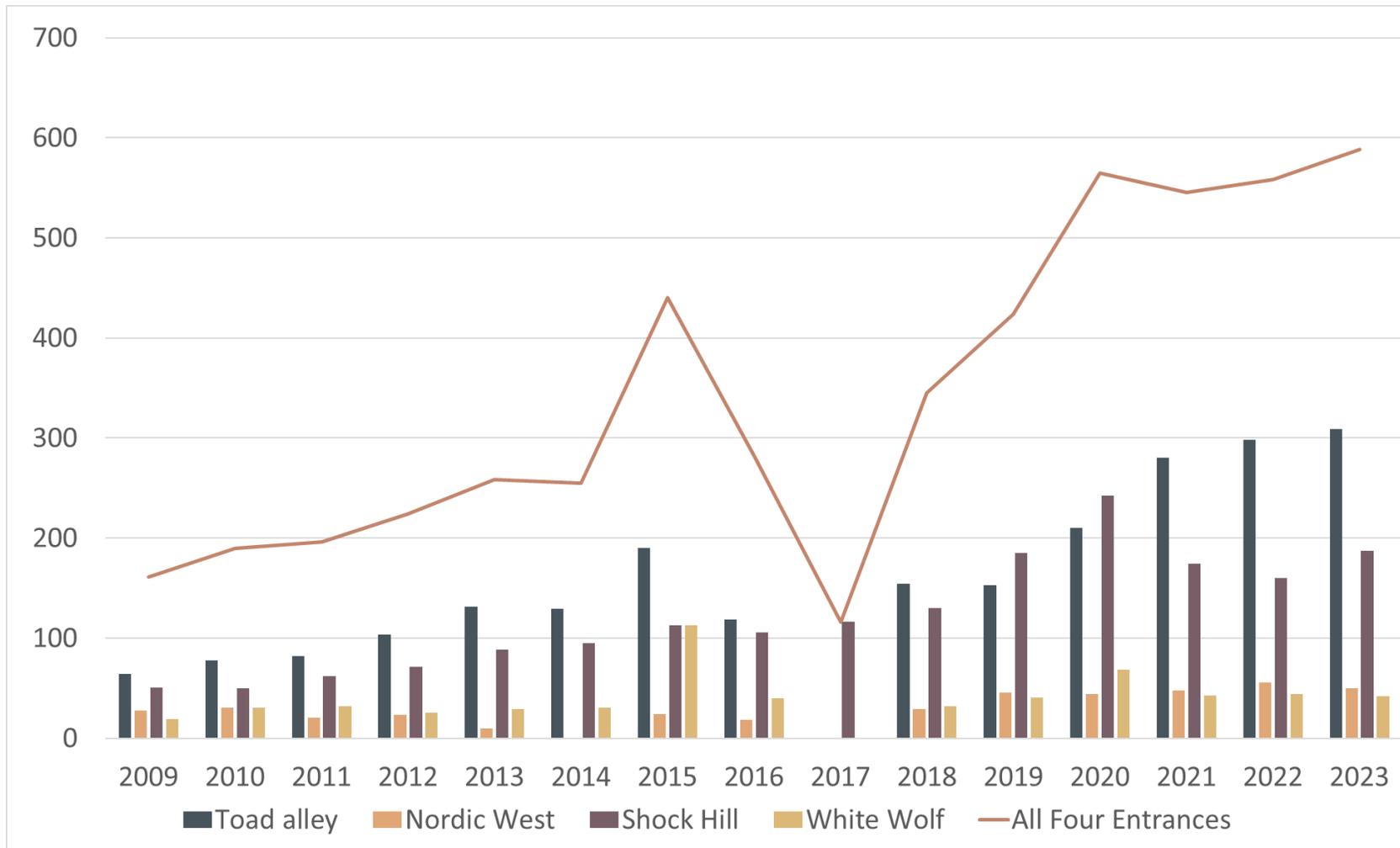


Figure 1. Cucumber Gulch Preserve Average Daily Trail Counts, July-September 2009-2023. Large amounts of data are missing from 2017.

Laurium Trailhead Proposal

Current Issues & Need:

- Parking area has a downhill grade of 14% and the east-west grade of 14 %. Steep grades cause inefficient parking, vehicles getting stuck, and damage to vehicles.
- Current parking in the winter reaches maximum capacity on the weekends, which is approximately 15 spots.
- Safety concerns with trailhead parking adjacent to the County Road.
- Overflow parking is illegally occurring on County Road 528.
- Summit County plow truck drivers have had issues with plowing the current parking area due to the steep grades.

Recommendation:

Following the initial proposals for the Laurium Trailhead presented to BOSAC and Town Council in 2023, staff and its partners at Summit County Staff hired Civil Insight, a local engineering firm, to assess several different options for parking at the Laurium property and along County Road 528. Civil Insight prepared five options. After reviewing the five options, BOSAC recommended moving forward with Option 5 in a phased approach for the number of available parking spots; starting with 15-20 spaces.

Option 5 - SCR 532 Widening. Comments from Civil Insight Engineer:

- This was not a part of the Scope of Work; however, we explored the potential for widening SCR 532 above the trailhead, which is similar to Option 1, so we felt was on the table,
- 34 spaces presently shown; however, this could be scaled back-goal would be to place excavation from above the road to the downhill side to create a balanced site,
- Approximate earthwork as shown: excavation to embankment 675 CY (no haul off),
- Design accommodates accessible parking requirements due to existing roadway being flat in the limits,
- Snow removal accommodated in the normal roadway plowing operation with additional passes. Parking has been designed with tapers at either end so plows can sweep in to, and out of the parking fields,
- Some drainage improvements/water quality could be incorporated into the design (see attached sketch), particularly below the fill portion and above existing homes downhill of the project,
- No re-grading of the roadway would be required (this was quicker to design for a preliminary look). Parking could match the existing roadway edges,
- Additional depth from street could be incorporated if there were concerns from road and bridge with all of the on-street parking/backing movements,
- Summary: with the flat nature of the road and Summit County controlling the land, this section of road makes an ideal parking lot. Earthwork can be balanced, and the project can be scaled/phased, maximizes existing infrastructure, a lot of parking could be created.

Option 5 Comments from Summit County:

- Road and Bridge Dept – This is our preferred option, with downhill side only to make snow removal easier and avoid the shaded side of the road.
- Summit County Sheriff - Although there is no platted ROW for this section of the road, it should still be looked at as if there is a platted ROW on this section. If the trailhead is approved, we would like to see the trailhead well signed. There should be signs where the trailhead parking

start and ends and some additional “No Parking on County Rd” signs on the road above and below the trailhead parking area.

Due to the amount of snow up there now it is hard to tell how wide the road would be if you had vehicles parking on each side. It appears as of now there will need to be some major earth removal on the south/east side and a lot of earth added on the north/west side to be able to park vehicles on both sides safely and without them becoming hazards. Has it been discussed to put the trailhead on the south/east side and look at expanding on the north/west side at a later date?

As you can see, the Sheriff likes one side of the road rather than both to ensure that cars don't narrow the road too severely. He suggests the southeast side, but Robert Jacobs (Road and Bridge) likes the northwest for operations. Given both of these pieces of feedback, we are more inclined to limit parking to one side, at least initially. This isn't super cost or resource effective, but it may be our reality. The signage request seems standard.

- OSAC – This is our preferred option, open to both sides for parking as determined by staff.

Estimated Cost:

Depending on site specific recommendations from Summit County Road & Bridge, the total costs will range from \$25,000 to \$50,000, split with the County. Option 5 is estimated to be the least expensive option and it also would disturb the smallest area out of all available options.

Management Plan Considerations:

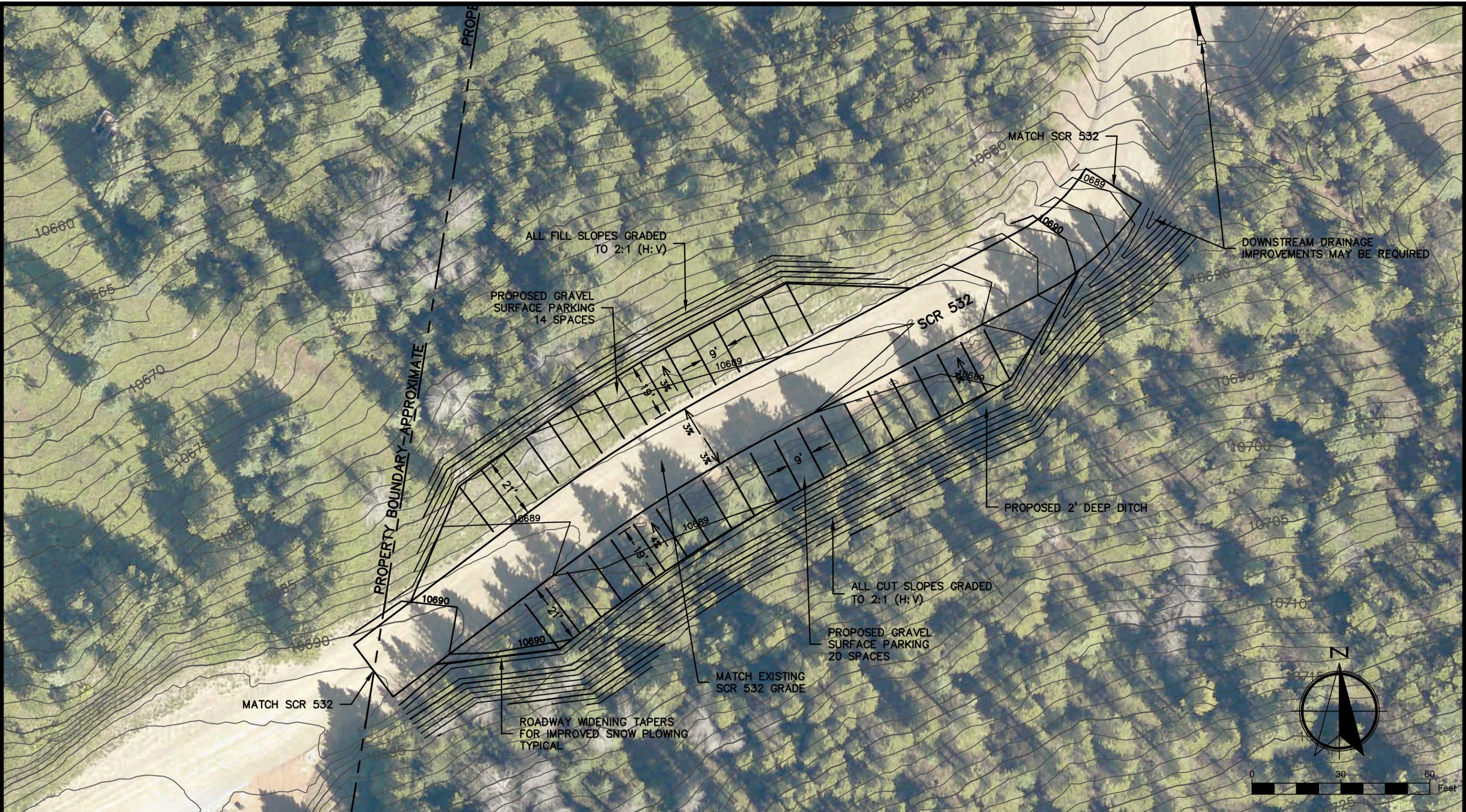
See attached checklist.

The Larium Trailhead - Option 5

| TRAIL/ TRAILHEAD | CONSERVATION | | USER EXPERIENCE | | COMMUNITY CONTEXT | | MANAGEMENT | |
|---|--|---|--|---|--|----------------|--|-------|
| | DOES THE PROPOSED TRAIL: | | DOES THE PROPOSED TRAIL: | | DOES THE PROPOSED TRAIL: | | DOES THE PROPOSED TRAIL: | |
| The Larium Trailhead - Option 5 (Frontcountry Management Zone) | Avoid sensitive habitat and areas of high quality natural resources? | X | Provide new or unique experiences? | | Impact the surrounding area either positively and/or negatively? | X - positively | How feasible is construction? | X |
| | Minimize new fragmentation of habitat blocks? | X | Provide an experience that the differently-abled could benefit from in open space? | | Provide access to underserved communities? | | How intense will the maintenance be? | Minor |
| | Utilize existing roads or disturbance corridors? | X | Provide trail access and open space experiences for all age groups? | X | Create a needed community connection? | | Is the proposed trail compatible with the Management Zone in which it falls? | X |
| | Provide an opportunity to decommission roads or other disturbances? | X | Improve user experience and circulation? | X | | | | |
| | | | Reduce potential for user conflict? | X | | | | |
| | | | Support distribution of users to minimize hot zones? | | | | | |



Laurium Trailhead



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| SCALE: 1"=30' | DATE: MARCH 6, 2024 |
| ISSUE: PRELIMINARY DESIGN | DRAWN: D. LEINWEBER |
| FILE: LTH GRADE.DWG | JOB NO.: 2024-01 |

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Option 5
 SEAL

LAURIUM TRAILHEAD PARKING IMPROVEMENTS

SUMMIT COUNTY, COLORADO
 GRADING PLAN-OPTION 5 SCR 532 WIDENING

SHEET:
 5 OF 9