




Midpeninsula Regional
Open Space District

Memorandum

DATE: April 6, 2020

MEMO TO: Board of Directors

THROUGH: Ana Ruiz, General Manager 

FROM: Bryan Apple, Capital Projects Field Manager

SUBJECT: Bear Creek Redwoods Multi-Use Trail Alignment

In January 2017, the Board of Directors (Board) approved the Bear Creek Redwoods Preserve Plan (Preserve Plan) and certified the Environmental Impact Report. The Preserve Plan identified a phased implementation of the trail network. Phase II projects include the construction of new trails, improvements to existing roads and trails, and new stream crossings. The Phase II trail network includes a significant segment of the proposed multi-use trail alignment, as shown in Figure 3-1 from the Preserve Plan (Attachment 1). The intent of the multi-use trail is to provide a connection from the Lexington Basin through the Preserve to the Skyline/Summit area. The Preserve Plan envisioned the multi-use trail as fronting the east side of Bear Creek Road between Highway 17 and the Alma College area to potentially reduce user conflicts between mountain bicyclists and equestrians originating from Bear Creek Stables.

In Fall 2018, District staff and field crew investigated the proposed alignment and expressed concern about the constructability of a potential new segment of trail that crossed through steep and heavily constrained topography. Additionally, staff raised concerns regarding ongoing maintenance of this route. In May 2019 the District retained Questa Engineering, along with their subconsultants Sequoia Ecological and Basin Research, to design, engineer, and permit the Phase II trail network project. Questa evaluated the multi-use trail as originally proposed in the Preserve Plan. Questa found that significant segments (shown in red on Attachment 2) of the proposed trail were infeasible due to required slope stabilization efforts, numerous tree removals, construction of two long span bridges, and additional impacts on the environment.

Questa proposed two alternative alignments for the multi-use trail in consultation with District staff. Alignment 1 follows a similar route as proposed in the Preserve Plan and would require new trail construction. Alignment 2 follows existing routes where trail improvements are already planned as part of the greater Phase II trail network. Due to various factors discussed below, Alignment 2 was selected as the preferred multi-use trail alignment.

Alignment 1 – Not Preferred

Although this alignment (shown in yellow on Attachment 2) is technically feasible, current estimates suggest that construction of this new 2,500-foot long, 10 to 12-foot wide multi-use trail would cost approximately \$1.6 million. Additionally, higher operational and maintenance costs would be required due to steep slopes and unstable underlying geology. The alignment would

need to follow the Bear Creek Stables driveway for approximately 200 linear feet to avoid an infeasible crossing over Briggs Creek. Due to these factors, this alignment was rejected in favor of Alignment 2, which uses existing roads and trails to accommodate the multi-use trail.

Alignment 2 – Preferred Alignment

The preferred alignment (shown in green on Attachment 2) utilizes existing road and trail routes that range from eight to 12 feet wide. This route significantly reduces construction costs by eliminating bridge crossings and utilizing existing roads and trails that will already be improved as part of the Phase II Trails scope (i.e. no new trail construction). Operational and maintenance requirements, along with environmental impacts are minimized since existing roads and trail routes will be used (no new construction = no additional large vegetation removal). Staff will continue to develop the design of the multi-use trail along this alignment.

Conformance with the Bear Creek Redwoods Preserve Plan

The Preserve Plan recognized that the multi-use trail alignment was subject to change during the design process as stated below:

The northeastern segment of the multi-use trail, beginning at the intersection of Bear Creek Road and the HWY 17 interchange, will be designed and constructed to avoid established equestrian trails, neighboring properties, unstable geologic features, and other topographic constraints to the greatest extent possible. The conceptual alignment shown on Figure 3-1 is therefore subject to change during the design and engineering process (Preserve Plan 03-12).

The trail will incorporate the following design guidelines per the Preserve Plan:

- Width and alignment should allow for safe and adequate visibility and safety for all users to the maximum extent possible, including horses and novice equestrians, and be accessible to patrol vehicles;
- Alignment minimizes intersections with other trails, particularly those in the immediate vicinity of the Stables or otherwise frequently used by equestrians; and
- Grade should be gentle (generally less than 10%) where possible to enable efficient drainage, or drainage improvements should be made to minimize erosion and allow year-round use.

Alignment 2 for the multi-use trail meets the intent of the Preserve Plan and adheres to these listed design guidelines.

Next Steps

A contract amendment with Questa Engineering is before the Board at this meeting to complete the design, engineering, and permitting for the Phase II trail network. Construction of the Bear Creek Phase II trails is anticipated for summer 2021 through 2022. Staff will also communicate the selection of Alignment 2 to the Bear Creek Stables community.

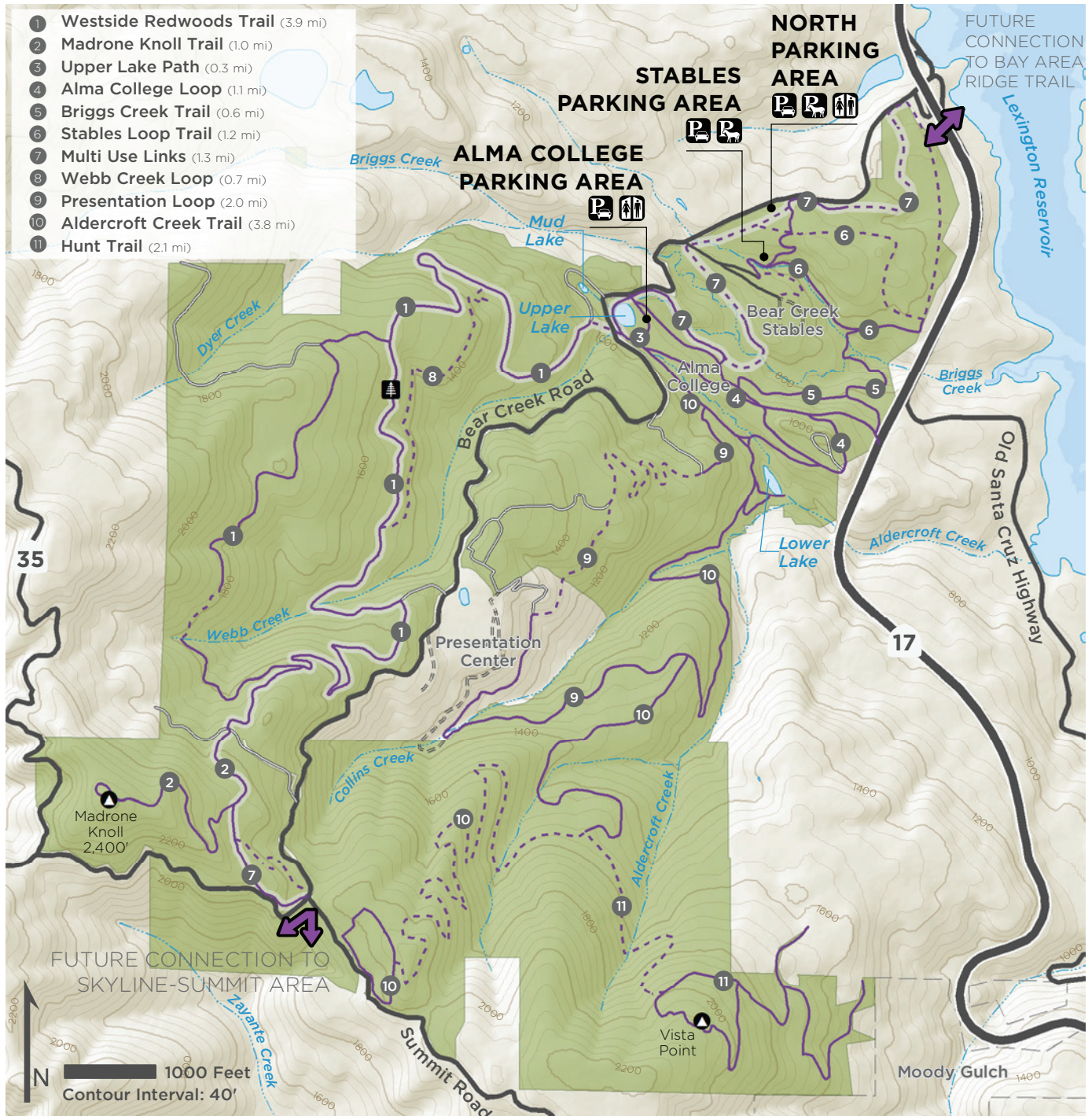


FIGURE 3-1 Public Access Plan

LEGEND

ROADS

- Highway
- Major
- Public
- Private
- Patrol Use Only

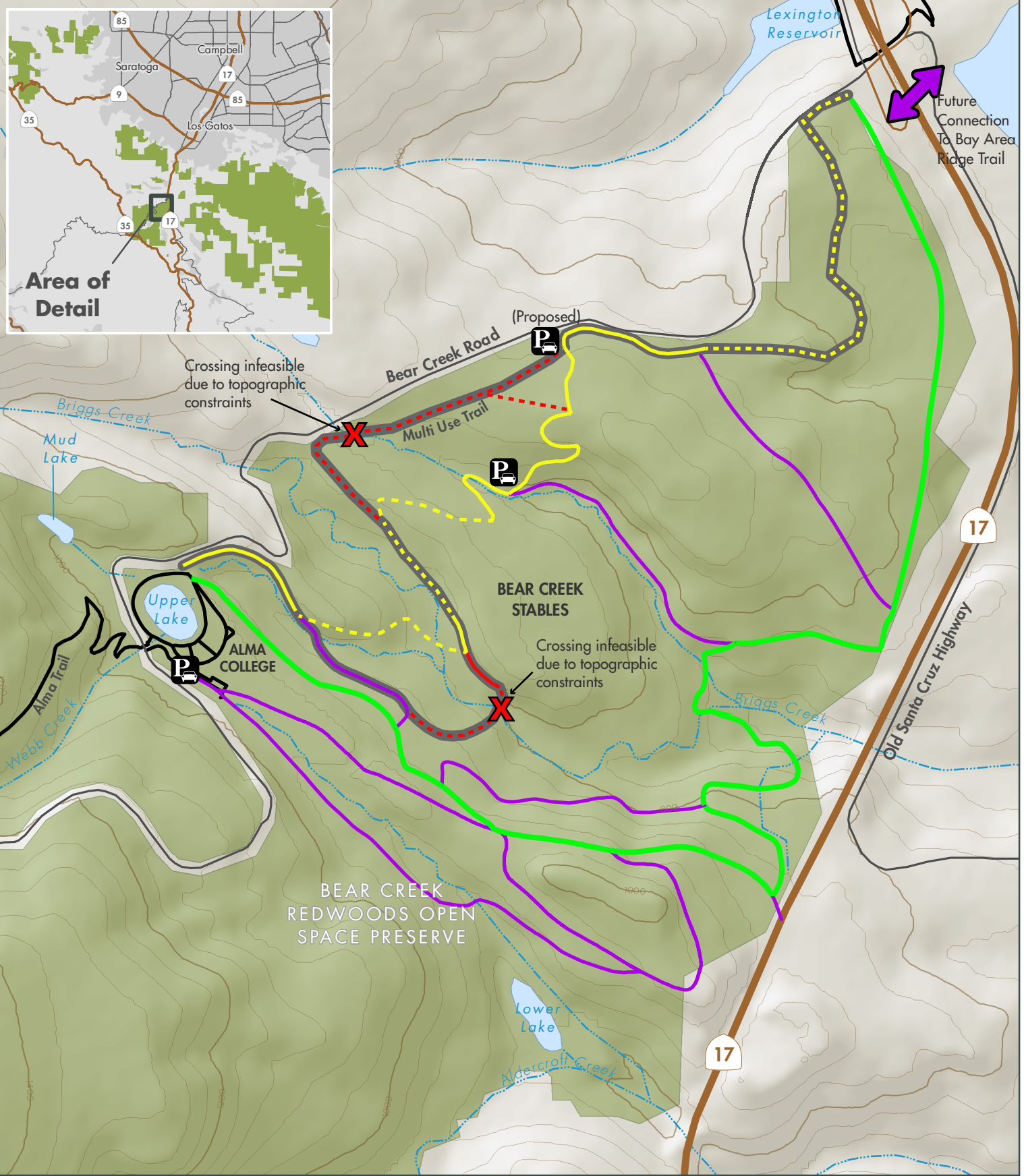
TRAILS

- Improve Existing Road/Trail for Increased Use
- Construct New Trail
- Multi-use

FEATURES

- Point of Interest
- Old Growth Redwoods
- Regional Connection

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Created By: flopez



ATTACHMENT 2: Bear Creek Redwoods Phase II Public Access

- MROSD Preserve
- Proposed Improvements
- Existing Trail
- Existing Road/Trail to be Improved
- Proposed New Trail
- Proposed Multi-use Trail Alignment
- Preferred Multi-Use Trail Alignment
- Alternative - Multi-Use Trail
- Infeasible Multi-Use Trail Segment

Midpeninsula Regional
Open Space District
(MROSD)
February 2020

While the District strives to use the best available digital data, these data do not represent a legal survey and are merely a graphic illustration of geographic features.