



Midpeninsula Regional
Open Space District

R-19-136
Meeting 19-27
October 23, 2019

AGENDA ITEM 5

AGENDA ITEM

Highway 17 Crossings Alternatives, Caltrans Project Study Report, Environmental Review, Public Outreach and Funding

GENERAL MANAGER'S RECOMMENDATIONS

1. Authorize the General Manager to approve the final Caltrans Project Study Report - Project Development Support document.
2. Approve the proposed approach for project environmental review pursuant to the California Environmental Quality Act and the National Environmental Policy Act to evaluate highway crossing alternatives for wildlife and trail use.
3. Adopt a Resolution authorizing the General Manager to enter into a Cooperative Agreement with Caltrans to begin the Caltrans Project Approval and Environmental Document for the proposed project.

SUMMARY

The Highway 17 Crossings Project (Project) supports the Midpeninsula Regional Open Space District's (District) goal of providing safe, regional wildlife and trail access across Highway 17 near the Lexington Reservoir just south of the towns of Monte Sereno and Los Gatos. The Project is a top priority action identified by District constituents as part of the 2014 Open Space Vision Plan and voter-approved Measure AA (MAA) bond funding. Based on work completed to date, two separate crossings are recommended: one dedicated for safe *wildlife* passage (mountain lions, deer, small mammals, snakes, amphibians) and one dedicated for safe *trail* passage.

The next phase of Caltrans review is known as the Project Approval and Environmental Document (PA&ED) phase (environmental review). For this next phase of review, two wildlife crossings and two recreational crossings are proposed. District staff has worked with Caltrans to determine the most suitable California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) approach for the Project. The District would be the lead agency for CEQA and Caltrans would be the lead agency for NEPA. A single consultant may be retained to prepare both documents. The District would need to enter into a Cooperative Agreement with Caltrans to complete the environmental analysis. The Fiscal Year (FY) 2019-20 budget includes \$162,149 for the Project. A future FY2019-20 budget adjustment may be needed to set aside sufficient funds for a CEQA/NEPA consultant contract.

DISCUSSION

Early Project feasibility studies originally identified eight crossing options (for wildlife only, trail only, or shared-use) at five separate locations (Attachment 1). On June 27, 2018, District staff presented the crossing alternatives to the Board of Directors (Board) who authorized that all eight alternatives advance to the Caltrans Project Study Report - Project Development Support (PSR-PDS) process (R-18-66). None of the eight options were eliminated by Caltrans during analysis of this report. Since June 2018, staff and the consultant team have completed the following key project tasks:

1. Hosted two public meetings;
2. Held numerous ongoing stakeholder/partner meetings;
3. Prepared a final Revised Alternatives Report (RAR);
4. Draft Regional Trail Connections Study;
5. Completed the Final Draft Caltrans PSR-PDS document;
6. Presented the Project to the Planning and Natural Resources (PNR) Committee; and
7. Promoted the project in a poster session at the International Conference on Ecology and Transportation in Sacramento with over 500 participants in attendance.

Project Phasing

There are four main phases of any Caltrans Project:

- 1) Project Initiation - includes Midpen Board and Caltrans approval of the final PSR-PDS
- 2) PA&ED – begins once the District and Caltrans sign the Cooperative Agreement
- 3) Plans Specifications and Estimate (Design)
- 4) Construction

Two Separate Crossings:

While wildlife and trail crossings share the same goal (to safely cross the highway), they fulfill different objectives: one to facilitate use by wildlife to connect 30,600 acres of protected public lands and habitat, and the other to facilitate use by regional trail users as a critical element to closing a four-to-nine-mile trail gap that would link 50 miles of existing Ridge Trail.

Analysis completed for the Revised Alternatives Report (RAR) (openspace.org/hwy-17) concluded that two separate wildlife and trail crossing structures are preferable to a shared crossing to “provide the most opportunity for unimpaired wildlife passage across the landscape with limited human interaction.” Results from public feedback indicate that separate crossings are also preferred as they are perceived to be safer, more effective, and less of an impact on wildlife. Current research (Smith 2017)¹ shows that mountain lions flee when exposed to human voices, indicating that a crossing structure shared with recreational trail users may deter wildlife

¹ Smith JA, Suraci JP, Clinchy M, Crawford A, Roberts D, Zanette LY, Wilmers CC. 2017 Fear of the human ‘super predator’ reduces feeding time in large carnivores. Proc. R. Soc. B 284: 20170433. <http://dx.doi.org/10.1098/rspb.2017.0433>

²Gaston KJ, Bennie, J. 2014. Demographic effects of artificial nighttime lighting on animal populations. Environ Rev22: 323 – 30 <http://kevingaston.com/wp-content/uploads/2017/05/Gaston-Bennie-2014-Demographic-effects-of-AL-on-animal-populations.pdf>

use. Additionally, artificial lighting required on a structure designed for use by humans can cause individual wildlife to leave an illuminated area for a darker refuge² further deterring wildlife use of a shared structure even when humans are not present. Finally, there is a high likelihood that dogs will accompany humans, regardless of approved and/or posted use, whose presence or scent may have a detrimental impact on the effectiveness of the crossing for wildlife.

Cost for two separate structures is comparable to the cost for a single shared crossing given the width, landscaping, and extensive ramping needed to appropriately accommodate both wildlife and people. For these reasons, **the General Manager recommends constructing two separate structures, one for wildlife and one for recreational uses.** This two-crossing approach is supported by Project partners, including Caltrans, California Department of Fish and Wildlife, Bay Area Ridge Trail Council, Santa Clara County Parks (SCC Parks) and the public, based on extensive agency review and public input.

Wildlife and Regional Trail Crossing Alternatives

Eight alternatives were originally evaluated during the Caltrans PSR-PDS process, and separately against criteria identified in the RAR (Attachment 2). The consultant team reviewed this preliminary evaluation and provided their expert opinion to determine the constructability of the alternatives (e.g. ease of design, permitting, and/or construction), and ranked each alternative relative to one another. **The General Manager recommends advancing the following top four alternatives (two wildlife crossings and two regional trail crossings) into the Caltrans PA&ED.**

Wildlife crossing:

- Trout Creek– Alternative 2 on Figure 3
- Ravine Creek– Alternative 1 on Figure 3

Regional trail crossing:

- Northern Overcrossing – Alternative 5a on Figure 3 and
- Southern Overcrossing – Alternative 3a on Figure 3

Trail Connections

Thirteen (13) trail segments were evaluated to ensure each regional trail crossing alternative could be linked to the existing Ridge Trail alignments west and east of Highway 17. Of these 13 trail segments, four were determined to be infeasible and too impracticable to construct and maintain due to existing conditions, including steepness, unstable slopes, and multiple major stream crossings. The remaining nine feasible trail segments were consolidated into trail routes that connect the existing Ridge Trail alignments to the two recommended regional trail crossing alternatives (Figure 3, Attachment 1).

At full build-out the trail crossing and associated trail connections would complete critical regional trail gaps in the Bay Area Ridge Trail (Ridge Trail) and the Juan Bautista de Anza National Historic Trail (Anza Trail). These new trail connections would also complete a regional trails priority in the Santa Clara County Countywide Trails Master Plan, which the Santa Clara County Board of Supervisors adopted in 1995 as part of the Santa Clara County General Plan.

Public Outreach and Funding Approach

To date, District staff has conducted extensive public and stakeholder outreach, and explored potential funding sources. Efforts include: 1) creation of the project website: www.openspace.org/hwy17, 2) multiple public and stakeholder meetings, and 3) identification of grant and legislative funding opportunities.

In addition to available MAA funding, the Project will require strategic partnerships and additional funding to fully implement. The General Manager recommends partnering with the following two organizations for fundraising and outreach support:

- 1) National Wildlife Federation (NWF) - to lead outreach and fundraising for the wildlife crossing portion of the Project. NWF currently leads outreach and funding efforts in support of the widely known Highway 101 Liberty Canyon Wildlife Crossing Project in southern California. Building on their experience with that project, the District determined NWF to be best suited with the knowledge and capacity to support the Highway 17 Crossings Project.
- 2) Bay Area Ridge Trail Council - to lead outreach and fundraising specific to the regional trail crossing and connecting trails by engaging longstanding trail partners at Recreational Equipment Incorporated (REI) and other important regional conservation partners. District staff presented the Project to the Ridge Trail Board in March 2019, which was well received. At that presentation, District staff requested the assistance of the Ridge Trail to take a primary fundraising and outreach role in support of the Project. The Ridge Trail Board enthusiastically agreed to lead these efforts for the recreational crossing and trail connections.

District staff have discussed this approach with other partners, including Peninsula Open Space Trust, Committee for Green Foothills, and Santa Clara County Parks to determine their capacity, interest, and/or resources to lead outreach or fundraising efforts. While all agencies are supportive of the Project, they do not have the capacity to be the primary lead for outreach and/or fundraising efforts. Each of these organizations identified opportunities in which they can continue to support the Project under the umbrella of a larger outreach and fundraising effort led by the District, NWF, and Ridge Trail. District staff are working to develop separate nonbinding letters of intent with both NWF and Ridge Trail to lead public outreach and funding efforts within the General Manager's signing authority. However, if future outreach or fundraising efforts elevate to a level that requires compensation or otherwise need Board approval, these item(s) would be brought before the Board at that time.

FISCAL IMPACT

The Highway 17 Project encompasses two portfolios covered by the MAA Expenditure Plan. Portfolio 19 (El Sereno: Dog Trails and Connections) allocates \$2,254,000 for the westernmost future trail connections from Sanborn County Park to El Sereno Open Space Preserve. Portfolio 20 (South Bay Foothills: Wildlife Passage and Ridge Trail Improvements) allocates \$13,966,000 for the wildlife and trail crossings and connections covered by the Project. Between these two portfolios, a total of \$16,220,000 of MAA funds are allocated.

The funds allocated in MAA portfolios 19 and 20 are anticipated to bring the Project through environmental review, design and permitting. It is anticipated that remaining portfolio funds at

the completion of the design phase would be applied toward construction or other appropriate Project needs.

Additional funding will be required to complete the construction of the crossings and connecting trails. Potential funding sources have already been identified and include Caltrans (Roadside Safety Improvement Program), Santa Clara Valley Transportation Authority, Wildlife Conservation Board, Prop 68, private donors, and/or a combination of the above.

The rough order of magnitude costs currently associated with Project implementation is summarized in the table below. Project components include:

- 1) Implementing two separate crossings (one each for wildlife and regional trail use);
- 2) Installing wildlife directional fencing to the crossing structures;
- 3) Constructing connecting trails; and
- 4) Improving Alma Bridge Road (owned by the County of Santa Clara) to accommodate trail connections from the proposed crossings to the regional trail network, if supported by project partners and cost-share funding is available.

Costs will continue to be refined and updated as new information arises.

Project Component	Low Cost Estimate*	High Cost Estimate*
Wildlife and Trail Crossings	\$20.1	\$21.3
Directional Fencing	\$2.0	\$2.0
Trail Connections	\$9.0	\$16.5
Subtotal	\$31.1 million	\$39.8 million
Alma Bridge Road Improvements	\$3.0	\$5.5
Total	\$34.1 million	\$45.3 million

*Shown in millions; values calculated in 2024 dollars.

The Project is associated with two active MAA projects within Portfolio 20 South Bay Foothills: Wildlife Passage and Ridge Trail Improvements: *MAA20-001 Wildlife Corridor: Highway 17 Crossing* (MAA20-001) and *MAA20-002 Bay Area Ridge Trail Highway 17 Crossing* (MAA20-002).

For efficiency in tracking overall project milestones, deliverables, and costs, the District will streamline tracking for the Project by merging the Vision Plan *VP20-001 Highway 17 Area Regional Trail Connections* (VP20-001) scope with MAA20-002. Both projects are included in the adopted Fiscal Year (FY) 2019-20 Budget and Capital Improvement Action Plan (CIAP). With the completion of the assessment of regional trail connections, we now have a well-defined scope for environmental review under MAA20-002.

The FY2019-20 adopted budget includes a total of \$162,149 for the Project. A future FY2019-20 budget adjustment may be recommended to provide funds for a CEQA/NEPA consultant to prepare the required environmental documents. It is anticipated that expenditures for preparation of environmental documents will be split evenly between MAA20-001 and MAA20-002.

The following tables outline the MAA allocations and costs-to-date related to Portfolio 19 and Portfolio 20. Portfolio 19 does not have an active project related to the Highway 17 project at this time; table below is shown for reference.

MAA Portfolio 19 El Sereno: Dog Trails and Connections	\$2,254,000
Life-to-Date Spent (as of 10/02/2019):	(\$480,241)
Encumbrances (as of 10/02/2019):	\$0
Balance Remaining:	\$1,773,759

MAA Portfolio 20 South Bay Foothills: Wildlife Passage and Ridge Trail Improvements	\$13,966,000
Life-to-Date Spent (as of 10/02/2019):	\$451,375
Encumbrances (as of 10/02/2019):	(\$11,657)
Balance Remaining:	\$13,502,968

BOARD COMMITTEE REVIEW

The first PNR Committee Meeting for the Project was held on August 2, 2016 (R-16-95) in conjunction with a public meeting. The Committee reviewed the Preliminary Alternatives Report and four preliminary crossing alternatives. The PNR Committee also received public feedback and engaged with regional partners and stakeholder agencies. On June 27, 2018, District staff presented eight crossing alternatives to the Board who authorized that all eight alternatives advance to Caltrans PSR-PDS (R-18-66).

On September 17, 2019, the PNR Committee reviewed the General Manager's recommendations included in this report (R-19-124). At this meeting, a representative from the Center for Biological Diversity spoke in support of the wildlife connectivity and genetic diversity benefits of a wildlife crossing and a trails advocate spoke in favor of the north-south trail connection benefits of the Southern Overcrossing (Crossing 3a). The PNR Committee inquired about Caltrans funding support and the monitoring and maintenance of the Project's wildlife fencing component. District staff reported that Caltrans cannot allocate funding until the environmental review is complete and the wildlife fencing responsibility has not yet been determined. However, funding opportunities through Caltrans and potential fencing monitoring and maintenance partners have been identified and will be explored further as the Project progresses. At this meeting, the PNR Committee approved forwarding the recommended actions to the full Board for their consideration.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act. Public Notice was sent to the Project interested parties list on October 17, 2019 and is posted on the District webpage.

CEQA COMPLIANCE

Caltrans has the authority delegated by Federal Highways to act as a lead agency for NEPA (which the District does not) and have offered to be the lead agency under NEPA for the entire project, including the trail connections. NEPA is the federal equivalent of CEQA and is required for the Project to seek federal funding. In this scenario, the District would take the lead role under CEQA. If authorized, District staff will issue a Request for Proposals to solicit an environmental consultant. As part of their commitment to providing ongoing technical support, Caltrans would assist in consultant selection and review all documents (at no cost to the District) to ensure that the environmental documents meet Caltrans standards. If authorized by the Board,

approval of the Caltrans PSR-PDS document and Cooperative Agreement for Caltrans PA&ED will initiate environmental review. Environmental review is anticipated to begin in 2020 and take 18-24 months to complete.

NEXT STEPS

Following Board authorization, the General Manager will: 1) sign the final Caltrans PSR-PDS document, 2) forward four crossing alternatives (two dedicated for wildlife, two for recreational trails) to the Caltrans PA&ED and 3) sign a Cooperative Agreement to begin the Caltrans PA&ED phase. District staff will continue to develop nonbinding letters of intent with NWF and Ridge Trail for authorization by the General Manager.

A Request for Qualifications and Proposals will be released to competitively select a consultant, whose contract will be brought before the Board for consideration. This consultant will assist staff in developing the CEQA/NEPA Project Description, which following Board approval will initiate the environmental review process.

Attachments

1. Project Maps
2. List of Project Alternatives and Project Evaluation Criteria
3. Draft Resolution

Responsible Department Head:

Kirk Lenington, Natural Resources Manager and
Jane Mark, AICP, Planning Manager

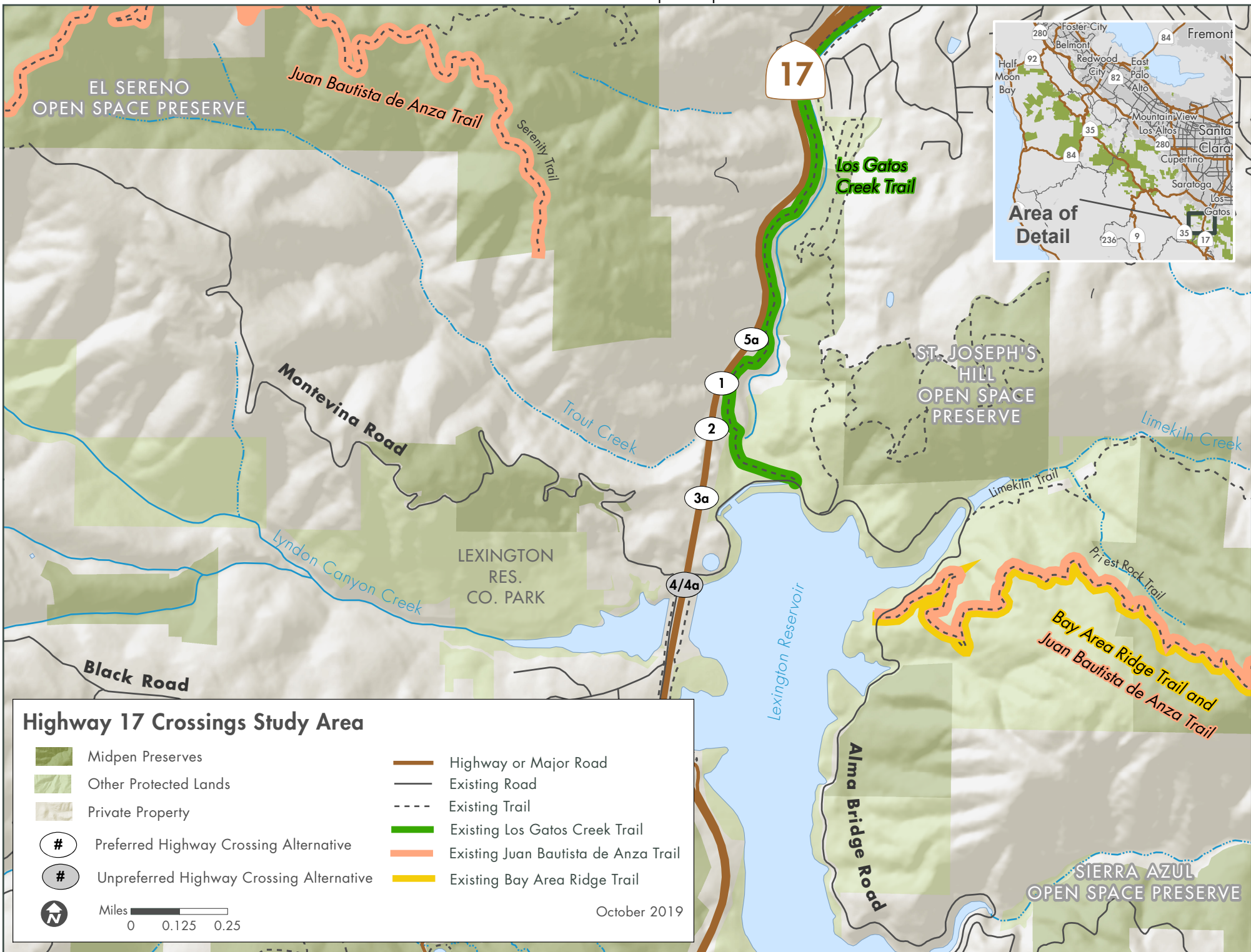
Prepared by:

Julie Andersen, Senior Resource Management Specialist
Meredith Manning, Senior Planner
Aaron Peth, Planner III

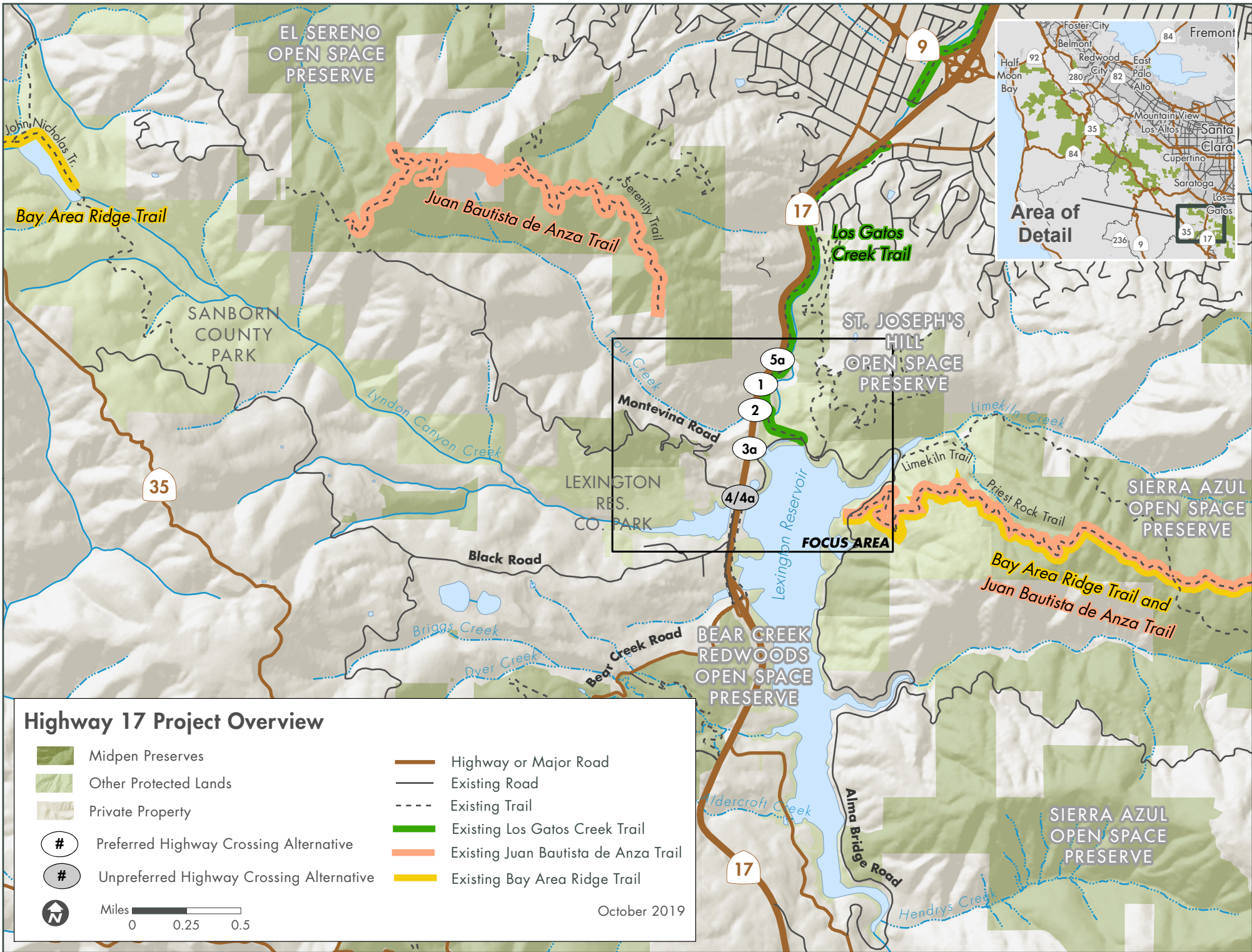
Contact person:

Julie Andersen, Senior Resource Management Specialist

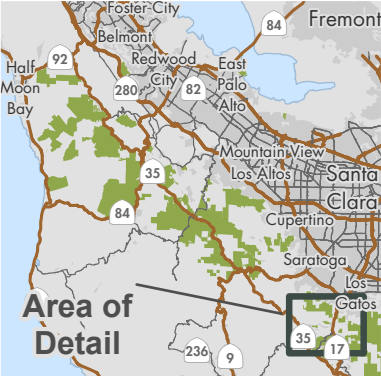
Path: G:\Projects\Districtwide\Hwy17_Wildlife_Crossing_Maps\Board Meeting 20191023\Hwy17_Project_Study_Area_20191016.mxd
 Created By: apeth



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.



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.



Crossing 3a: Potentially Complete Feasible Trail Route Map

Midpen Preserves	Potential East-West Trail Routes
Other Protected Lands	Option 1
Private Property	Existing Trail New Trail
Preferred Highway Crossing Location	Option 2
Unpreferred Highway Crossing Location	Existing Trail New Trail
Highway or Major Road	Potential North-South Trail Routes
Existing Road	Existing Trail New Trail
Existing Trail	

Miles 0 0.25 0.5 October 2019

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.



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.

Highway 17 Project Alternatives and Evaluation Criteria

Table 1. Project Alternatives

Wildlife Only Crossing Alternatives:
1) Ravine Creek Under
2) Trout Creek Under
Combined Wildlife and Regional Trail Crossing Alternatives:
3) Southern Over
4) Montevina Under
5) Northern Over
Regional Trail Only Crossing Alternatives:
3a) Southern Over
4a) Montevina Under
5a) Northern Over

Table 2. Project Evaluation Criteria

Wildlife Crossing Criteria:
<ul style="list-style-type: none"> • Proximity to the identified wildlife corridor • Appropriate dimensions and design features • Provides habitat connectivity • Adequate Line of sight • Less human exposure • Accommodate Special Status Species
Regional Trails Crossing Criteria:
<ul style="list-style-type: none"> • Accommodate the full range of potential regional trail users • Provide as direct a connection as possible to the existing regional trail alignments • Provide a safe and enjoyable trail • Provide connection to a feasible trail route • Provide emergency vehicle access (near to, but not necessarily on structure)
Feasibility Criteria:
<ul style="list-style-type: none"> • Right of way needs • Location with fill or cut embankments • Environmental impact – avoid or minimize impact on natural or cultural resources • Soils and geology feasible for construction (includes landslide potential) • Can be designed to meet Caltrans standards • Feasible construction staging and traffic impacts • Impact on existing facilities (includes utilities) and operations • Groundwater/runoff/Drainage concerns • Public Support

RESOLUTION 19-__

RESOLUTION OF THE BOARD OF DIRECTORS OF THE MIDPENINSULA REGIONAL OPEN SPACE DISTRICT AUTHORIZING THE GENERAL MANAGER TO EXECUTE A COOPERATIVE AGREEMENT WITH THE CALIFORNIA DEPARTMENT OF TRANSPORTATION FOR PREPARATION OF PROJECT APPROVAL AND ENVIRONMENTAL DOCUMENTATION FOR WILDLIFE AND RECREATIONAL TRAIL CROSSINGS ON HIGHWAY 17

WHEREAS, the Midpeninsula Regional Open Space District (“District”) has been coordinating with the California Department of Transportation (“Caltrans”) to evaluate options for a Highway 17 crossing project with the goal of providing safe, regional wildlife and trail access across Highway 17 near the Lexington Reservoir south of Los Gatos; and

WHEREAS, Caltrans has determined the constructability of numerous alternatives for crossings of Highway 17; and

WHEREAS, two alternatives for a wildlife crossing and two alternatives for the regional trail crossing have been identified through this process and are recommended to advance to the next phase, known as the Caltrans Project Approval and Environmental Document (“PA&ED”); and

WHEREAS, the proposed approach for project environmental review includes evaluating four highway crossing alternatives (two for wildlife, two for trail use); and

WHEREAS, the District and Caltrans intend to enter into a cooperative agreement in order to complete the PA&ED for the proposed project.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Midpeninsula Regional Open Space District (“Board”) as follows:

1. The General Manager is authorized to execute a Cooperative Agreement with the California Department of Transportation for preparation of project approval and environmental documentation for wildlife and trail crossings on Highway 17.
2. The General Manager is authorized to execute any related documents on behalf of the District and to approve any technical revisions to the Agreement or related documents which are necessary or appropriate to effectuate the purposes of the Agreement.

PASSED AND ADOPTED by the Board of Directors of the Midpeninsula Regional Open Space District on _____, 2019, at a regular meeting thereof, by the following vote:

* * * * *

AYES:
NOES:
ABSTAIN:

ABSENT:

ATTEST:

APPROVED:

Secretary
Board of Directors

President
Board of Directors

APPROVED AS TO FORM:

General Counsel

I, the District Clerk of the Midpeninsula Regional Open Space District, hereby certify that the above is a true and correct copy of a resolution duly adopted by the Board of Directors of the Midpeninsula Regional Open Space District by the above vote at a meeting thereof duly held and called on the above day.

District Clerk