



Colorado State University
Alternative Transportation Fee Advisory Board
2021-2022 Project Proposal Form



Project Name/Location: Phemister Trail

Estimated Initial Cost: \$869,534.00 Estimated Recurring Cost (if applicable): _____

Funding Request from ATFAB: \$73,907.00 Matching Funds (if applicable): Potential CDOT Grant and Donor Match

Please Attach the Full Budget: Include total cost, amount requested from ATFAB, breakdown of all expenses, funding from other sources, etc. Please be thorough and specific.

Submitting Unit:

Name: David Hansen

Telephone: 970.567.0031

Email Address: david.hansen@colostate.edu

Department: Facilities Management

College or Division: University Operations

Approvals (Signatures):

Provost/VP: Lynn Johnson Signature/Date:  Jan 18, 2022

Department Head/Director *

Name: Thomas Satterly Signature/Date:  Jan 18, 2022

*Whoever oversees the areas affected by the proposed project. For example, if the proposal was to add covered bike parking near the LSC, you need to contact the Director/Department Head in charge of the LSC. Please contact ATFAB with any questions.

Facilities Management Approval of Estimated Budget/Schedule

Name: 

Signature/Date: 01/14/2022

Fill out and return proposal documents via email to ATFAB_CSU@colostate.edu and Aaron.Fodge@colostate.edu **Deadline for final submissions – Friday January 21st, 2022**

If project involves infrastructure construction, *CSU Facilities must review cost estimates and proposal schedule. Facilities Deadline – Friday December 10th, 2021* Please email to David Hansen at David.Hansen@colostate.edu

If accepted, you will be asked to give a 30-minute formal presentation to the ATFAB.

As an attached document, please answer the following questions:

1. Description of the project (limit to ½ page):

The Phemister trail would provide a direct connection from the Prospect Road underpass to the Spring Creek Trail on CSU land resulting in a safer route for cyclists to consider along Centre Avenue. The project is further described in two distinct segments below.

Trail - Prospect Road Underpass to CSU Horticulture Center

The northern trail segment connects the City of Fort Collins Center Bikeway from CSU's Main Campus to the Horticultural Center utilizing the new Prospect Road Underpass. This project will construct a trail extension from the underpass along the west side of Centre Avenue by expanding an existing sidewalk into a short shared-use trail segment.

A 12ft concrete trail will leverage a previously graded corridor constructed along the south-eastern extent of a water quality pond project under permanent easement between the City of Fort Collins and the Board of Governors of the Colorado State University system. The corridor leaves from Center Avenue into the CSU Horticulture Center grounds before crossing into the City of Fort Collins' Lilac Park.

Bridge - Lilac Park to the Gardens at Spring Creek

The southern segment of the trail consists of a pedestrian bridge from the City's Lilac Park over Spring Creek to a newly-constructed entrance to the Great Lawn of the City's Gardens at Spring Creek. A 12 foot-wide concrete trail section will connect the bridge with the Spring Creek Trail and the remaining segments of the trail. The proposed bridge specs shall meet City of Fort Collins Trail standards:

- Pre-manufactured Bridge - Underhung floor beam style by Big R or approved manufacturer
- Steel frame and railing would be left natural to weather and minimize maintenance that occurs with painted structures
- Deck of bridge 1 ½" thick of naturally durable IPE with a bridge decking width of 12'
- Bridge span: 65'-75' dictated by abutment design and selected location along Spring Creek
- 10,000 lb vehicle load limit to allow for snow removal processes

2. Approximate timeline for the project (have you contacted Facilities for a bid and proposed schedule, if applicable?):

It should be noted that this project has the potential to be a match toward a grant being offered by CDOT. We are approaching ATFAB to consider being a co-match partner toward the grant application which requires a 20% match by CSU and are not requesting full funding of the project. This funding request if awarded could be the catalyst to realize the larger goal of an off street trail segment with supplemental funding by CDOT.

Proposed schedule If this project was awarded funding from CDOT Revitalizing Main Streets Grant Program:

- *Project award from CDOT: Summer 2022*
- *Project Design development: Fall 2022*
- *Project Construction: Winter - Summer 2023*

CSU Facilities Management has been involved with the proposed costs and schedule proposed above.

3. Please provide a discussion of how users will be supported (limit to ¼ page):

Safety of users is paramount when developing new infrastructure. Given the safety concern of users along Centre Avenue mentioned throughout this proposal, this trail alignment is recognized as a prioritized infrastructure investment by CSU's Vision Zero Task Force. The trail impacts safety in the following manner:

1. Provides trail route for commuting and recreation separated from the congested Centre Avenue
2. Supports "interested, but concerned" cyclists choosing to ride on risky sidewalk with multiple driveway crossings instead of bike lane on high-speed Center Avenue
3. Provides safe detour route for Spring Creek underpass of Center Avenue when flooded seasonally
4. Connects to Prospect Underpass to avoid high-crash intersection of Prospect and Center Avenue

Universal access is an additional key parameter for users and all means of mobility must be considered. The trail would provide a more generous access route to the Spring Creek Trail with more manageable grades than exist today at the Centre Avenue underpass. Proposed in the design are our standard trail symbols and signage that users have become familiar with elsewhere on campus. These signs and symbols will also meet MUTCD standards that are recognized nationally.

4. Please describe the benefits to students in accordance with ATFAB By-Laws (see Article VII, Funding Rules). Website: <https://atfab.colostate.edu/atfab-bylaws/>

The Phemister Trail completes a critical missing link for safe connectivity that would directly benefit students of CSU.

1. The trail would provide a safer connection to the Veterinary Teaching Hospital Campus - This grant application will be matched by a former professor of CSU's Veterinary Teaching Hospital (VTH) south of CSU's main campus along with a large Federal Center. His match will support the shared-use trail connection between the campuses. It was his desire to see a connection for Veterinary Students from the Main to south campus. Class loads are shifting in many Veterinary programs from the Main to South Campus requiring students to travel more frequently between the two areas.
2. Extensive student housing exists along Centre Avenue at The Grove. Today student residents often perceive the sidewalk along Centre Avenue as a safer alternative to bike lanes in the street. This results in bikes making dangerous crossings at several street and parking access points along the roadway as they attempt to access the Prospect Road Underpass to the North. This trail would provide trail access on the west side of the Gardens of Spring Creek directly to the Grove allowing cyclists and pedestrians to circumnavigate these dangerous crossing points.

- 5. Please provide any evidence that there is student support for the following proposal (i.e. petitioning, letters of support, requests for proposal by students, ASCSU Resolutions, College Council approvals, etc.) It is highly recommended that proposals reach out to students; the level of student support for your proposal will likely affect the board's decision to fund it.**

Open House at The Grove (high-density student housing) – (April 17, 2018) – Student residents are often under-represented because they fall into census categories for low-income households and lack of vehicle ownership while they don't live in the City year-round to represent themselves. CSU, the City of Fort Collins, and Bike Fort Collins conducted an Open House to vet the trail corridor. The event included education regarding sidewalk and wrong-way riding (in the absence of a trail connection). The Phemister trail was well-received by the residents as a safer route than what they are forced to navigate daily.

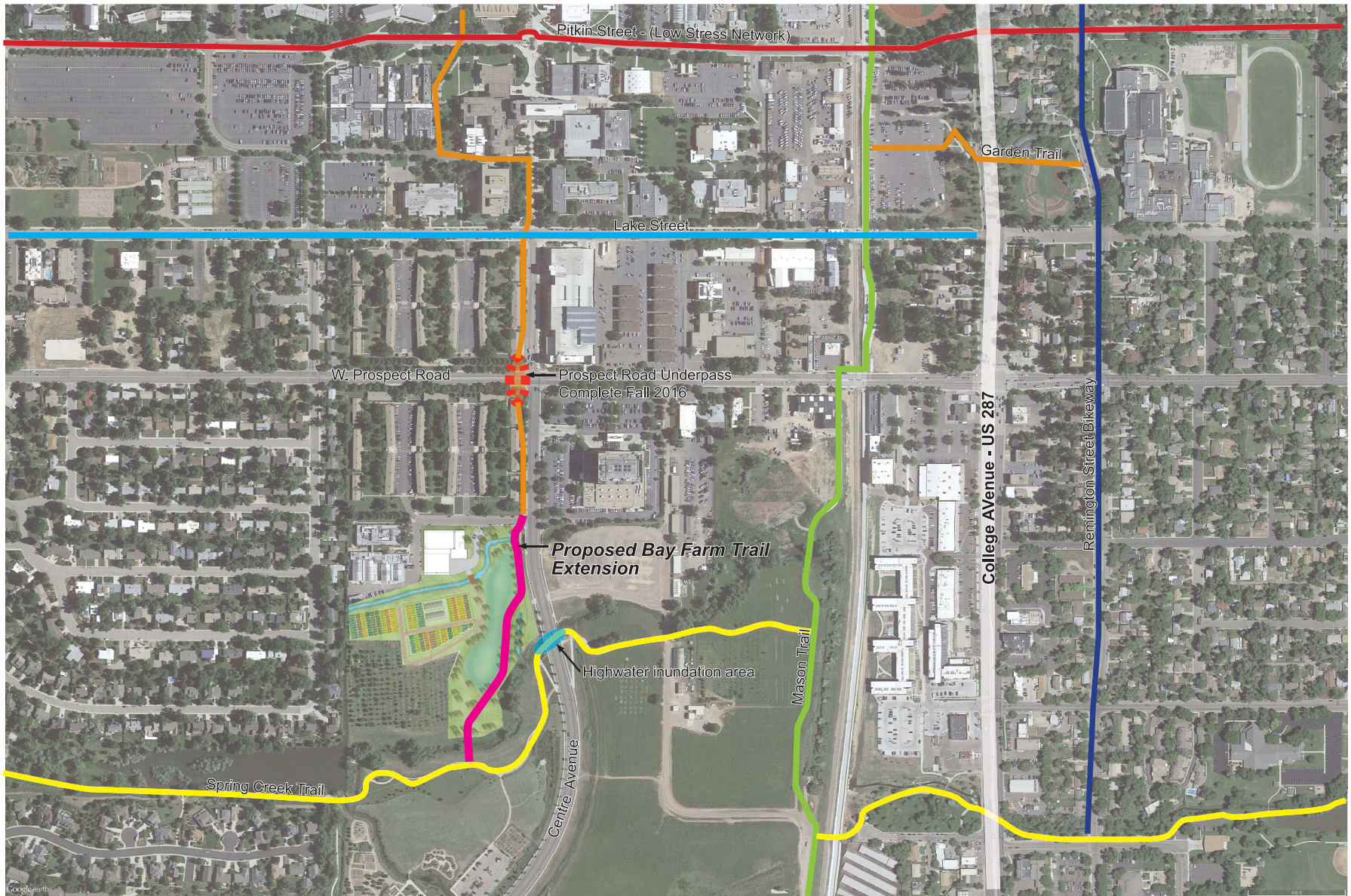
- 6. Is your project mentioned in any of the CSU Campus Master Plan documents? Have any campus advisory committees discussed this project? It is recommended that you consult an applicable planning or advisory committee for letters of support and advice regarding your proposal. Please attach any documents if applicable.**

The Phemister Trail was identified in the approved master plan for the Horticulture Center when it was developed in 2016. The plan was further supported through the planning and construction of the water quality pond that is shared by CSU and the City of Fort Collins. During construction of the pond, the trail alignment was rough graded on the site setting forward a plan toward ultimately constructing it at a later point. The Campus Bicycle Advisory Committee has reviewed the project. ASCSU has student representation on the Physical Development Committee, the President's Safety Task Force, and the Campus Bicycle Advisory Committee which have all evaluated and supported this trail alignment.

Bicycle Master Plan - (2014) The City of Fort Collins and CSU crafted parallel bicycle plans that preserved a Low Stress Bike Network of trails and roadways in the City. CSU participated in numerous public open houses with the City to craft the network. We distributed a citywide survey and WikiMap to help identify Low-Stress networks along with mapping exercises in the Pedestrian Mall of our campus. The Center Bikeway rose in priority including connections and wayfinding to the corridor. To date, the bikeway is delineated and signed absent the Phemister Trail.

- 7. Please provide any additional information below.**

Please see attached graphics and cost opinion for additional information.



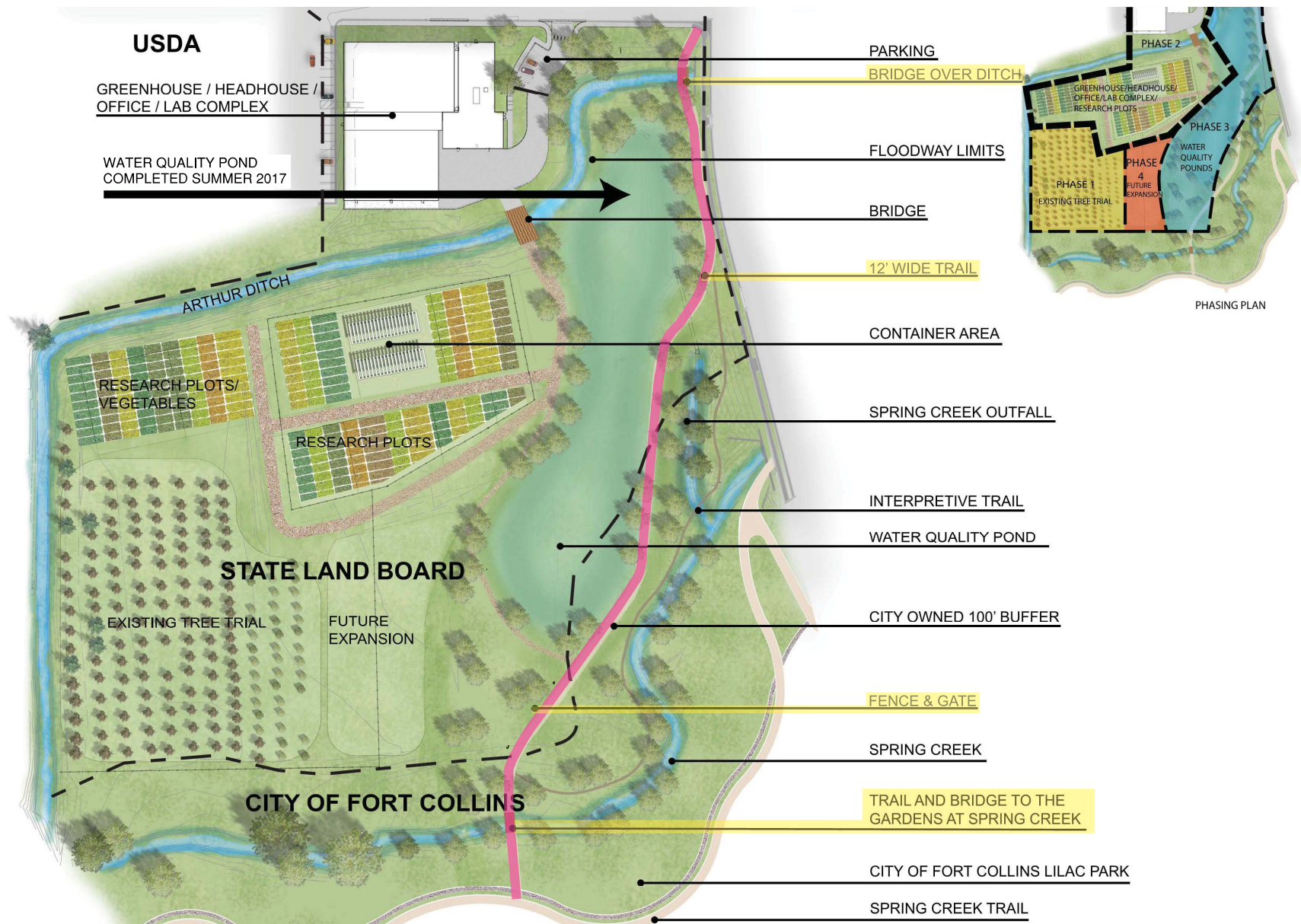
July 27, 2016

Phemister Trail Connectivity Map



Colorado State University
FACILITIES MANAGEMENT
AT COLORADO STATE UNIVERSITY





Phemister Trail Contextual Master Plan

July 27, 2016



Colorado State University
FACILITIES MANAGEMENT
AT COLORADO STATE UNIVERSITY



2285 McWhinney Boulevard, Suite 160

NOTE
THIS DOCUMENT HAS BEEN
RELEASED BY OLSSON
ASSOCIATES ONLY FOR
REVIEW BY REGULATORY
AGENCIES AND OTHER
PROFESSIONALS, AND IS
SUBJECT TO CHANGE. THIS
DOCUMENT IS NOT TO BE
USED FOR CONSTRUCTION

OLSSON ASSOCIATES ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS (HORIZONTAL OR VERTICAL). THE EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS HOWEVER THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

[illegible]

CT 13	COLORADO STATE UNIVERSITY CENTER OUTFALL WATER QUALITY POND SITE PLAN	2016
-------	---	------

drawn by:	CH
checked by:	AK
approved by:	AK
QA/QC by:	ENTER QA/QC
project no.:	015-2343
drawing no.:	C SITE 62343.dwg
date:	08/15/2016



Colorado State University
FACILITIES MANAGEMENT
AT COLORADO STATE UNIVERSITY



Figure C-4 - Center Avenue - Looking North towards Prospect Underpass @ Bay Farm Road



Figure C-5 - Center Avenue - Looking South at Ditch Crossing along East side of newly-constructed Water Quality pond.



Figure C-6 - Center Avenue - Looking North to Phemister Road - Phemister Trail on the Center Bikeway will run along East side of newly-constructed Water Quality pond.



Figure C-7 - Looking SW towards newly-constructed Water Quality Pond - Phemister Trail on Center Bikeway would run along East side of pond.



Figure C-8 - CSU Horticultural Center Greenhouses - Decorative Growing Lighting Along Trail



Figure C-9 Graded Surface at Horticultural Center - Looking North along newly-constructed Water Quality Pond - Phemister Trail on Center Bikeway will run along East side of Pond



Figure C-10 - Graded Surface at Horticultural Center - Looking South along newly-constructed Water Quality Pond - Phemister Trail on Center Bikeway will run along East side of Pond



Figure C-11 - Graded Surface at Horticultural Center - Looking South along newly-constructed Water Quality Pond - Phemister Trail on Center Bikeway will run a long East side of Pond

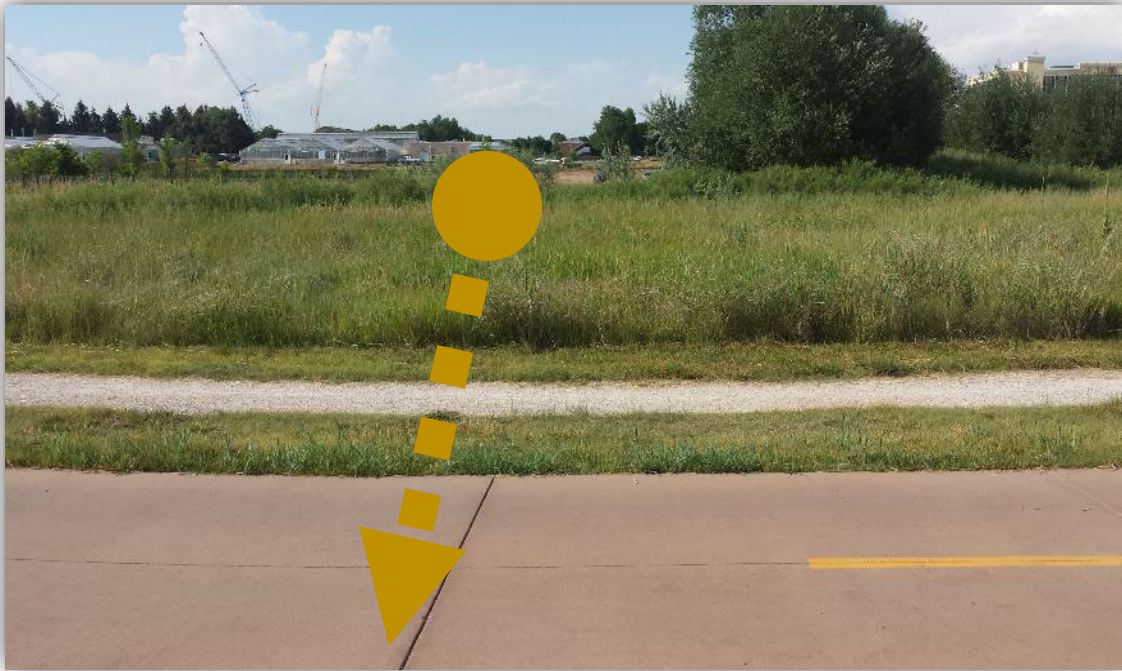


Figure C-12 - Spring Creek Trail @ The Gardens at Spring Creek - Looking North towards Horticultural Center - Phemister Trail will terminate at entrance to The Gardens at Spring Creek Great Lawn.



Figure C-13 - Spring Creek Trail @ The Gardens at Spring Creek - Looking Southwest towards New Entrance and Bicycle Corral - Phemister Trail will terminate here.

CSU Phemister Trail

PROJECT COST ESTIMATE - Revised 1 /14/2022

Complete Project Scope (Prospect Road Underpass to Gardens on Spring Creek)

Item No.	Description	Quantity	Unit	Unit Cost		Total Proj.
1	Prepare site to establish final grade	19,349	SF	\$ 0.75	\$	14,511.75
2	Excavation for balance of needed fill (No Rise Certification)	1	allow	\$ 12,000.00	\$	12,000.00
3	Tree removal/ Replacement	1	allow	\$ 2,450.00	\$	2,450.00
4	Stormwater protection	1	allow	\$ 6,000.00	\$	6,000.00
5	Trail subbase material	52	YD	\$ 85.00	\$	4,420.00
6	Trail subbase compaction	16,154	SF	\$ 1.25	\$	20,192.50
7	12' wide concrete bike path 6" thick	11,560	SF	\$ 15.00	\$	173,400.00
8	4' wide additional concrete sidewalk at ditch	300	SF	\$ 15.00	\$	4,500.00
9	Curb ramp at Bay Road	1	EA	\$ 6,500.00	\$	6,500.00
10	Curb and Gutter - Centre Ave.	100	LF	\$ 15.00	\$	1,500.00
11	Asphalt Patch - Centre Ave.	2,428	SF	\$ 6.00	\$	14,568.00
12	Spring Creek Bridge & abutments	75	LF	\$ 2,500.00	\$	187,500.00
13	Signage/ Striping/ Wayfinding	1	allow	\$ 10,000.00	\$	10,000.00
14	Safety rail on top of walls	265	LF	\$ 125.00	\$	33,125.00
15	Steel Fabricated Access Gate	1	EA	\$ 3,500.00	\$	3,500.00
16	Restoration Seeding	10,000	SF	\$ 0.35	\$	3,500.00
SUBTOTAL					\$	497,667.25
	Mobilization (8%)				\$	39,813.38
	General Conditions (12%)				\$	59,720.07
	Estimating Contingency (20%)				\$	99,533.45
	Estimating Inflation to FY2023 (5%)				\$	24,883.36
SOFT COSTS						
	City of FC Review Fees	1	allow	\$ 2,500.00	\$	2,500.00
	Wetland Delineation	1	allow	\$ 2,500.00	\$	2,500.00
	Site Survey	1	allow	\$ 14,000.00	\$	14,000.00
	Ecological Characterization Study	1	allow	\$ 3,000.00	\$	3,000.00
	CSU Code Review	1	allow	\$ 1,500.00	\$	1,500.00
	Engineering Design (Design + Floodway Modeling) (15% of proj. cost)				\$	74,650.09
	Project Management Fees (10% of proj. cost)				\$	49,766.73
PROJECT TOTAL				Total	\$	869,534.33
	Project Match (20%) - Donor Funding					\$100,000.00
	Project Match (20%) - ATTFAB Colorado State University				\$	73,906.87
TOTAL REQUEST FOR FUNDING***					\$	695,627.46