AGENDA

Open Space and Trails Advisory Board Meeting Microsoft Teams Meeting ID: 233 198 578 575 Passcode: P9cV2W Meeting Dial-in Number (Audio Only): 719-569-5048 Conference ID: 194 048 958# April 1, 2024 5:30-6:15 p.m.

Call to Order

Roll Call

General Discussion

- Funding for High Line Canal Natural Resource Management Plan (A)
- Funding Increase for Kiowa Creek Open Space Construction (A)

Upcoming Events

- April 13: 17 Mile House Open House -- Pollinator-Friendly Gardening
- April 23: Recognition of Open Spaces 20th Anniversary Proclamation will be issued during BOCC Business Meeting at Admin @ 9:30 a.m.
- May 11: 17 Mile House Open House Discover Our History: Cherry Creek Valley
- May 18-19: Chalk Lines & Vines
- June 8: 17 Mile House Open House Wool Spinning
- June 22 & 29: Pictures on the Plains
- June 25: Recognition of Parks and Recreation Month Proclamation will be issued during BOCC Business Meeting at Admin @ 9:30 a.m.
- June 26: Bike to Work Day
- July 25-28: Arapahoe County Fair
- CSU Extension events added regularly (see link for details), including:
 - March 30: Creating Pollinator Habitat
 - April 20: Native Plants for Birds and Pollinators
 - April 25: Food Preservation | Kimchi
 - April 27: Container Gardening
 - April 30: Composting
 - May 1: The Buzz on Bees
 - o May 9: Native Plant Master Wildflower Walk
 - May 15: Food Preservation | Yogurt
 - June 6: Food Preservation | Ginger Ale

Board Member Comments

Adjournment (A)

(A) Action Item (I) Information Item



STAFF REPORT

Date: April 1, 2024

To: Open Space and Trails Advisory Board (OSTAB)

Through: Gini Pingenot, Open Spaces Director

From: Glen Poole, Open Space Operations Manager

Subject: Funding Request: High Line Canal Natural Resource Management Plan

Purpose and Action Requested: Arapahoe County and the Open Spaces Department anticipate acquiring portions of the High Line Canal property in June 2024 from Denver Water. Open Space Operations, the High Line Canal Conservancy (Conservancy), and a small team of Canal Collaborative members have selected Biohabitats and Dig Studio to facilitate and develop a Natural Resource Management Plan (NRM Plan) for the High Line Canal. The NRM Plan will serve to guide future management and stewardship of the entire property. The Open Space Manager along with Conservancy staff will present a joint project request for \$162,000 to assist in funding the NRM Plan. The total cost for the NRP Plan is expected to be \$355,000, Arapahoe County's \$162,000 share represents 45% of the total cost of the NRM Plan.

Background: Denver Water has reduced its use of the Canal for irrigation water delivery to its historic customers. The Canal is a landscape in transition, with the corridor's riparian like ecosystem now relying on stormwater inputs to sustain vegetation and trees. Arapahoe County will be taking ownership of 47 miles of the 71-mile-long Canal (66% of the total trail length).

Denver Water has agreed to support a transition process after the County acquires the property, with the transition period ending at the close of 2026. Denver Water will continue to fulfill its existing maintenance responsibilities during this transition period and will support County staff in learning Denver Water management processes and protocols for the Canal. During this transition period, Denver Water and the Conservancy are making significant investments in natural resource restoration, large-scale hazard tree mitigation, debris removal, invasive species mitigation, and management of ash trees. These investments in supporting Canal maintenance and restoration will ensure a smooth transition at the end of 2026 for Arapahoe County and its partners.

The NRM Plan will guide the County's management relationships with the local agencies responsible for operating and maintaining the Canal within the County's ownership. The NRM Plan will establish overarching recommendations for the management of vegetation, the tree canopy, local wildlife, habitat restoration, and noxious weed management.

The NRM Plan scope was developed with input from Canal Collaborative partners and consists of six primary focus areas:

- Assessment of Existing Conditions
- Formalizing Goals, Defining Subareas, and Setting Targets
- Maintenance of Existing Resources
- Landscape Enhancement Strategies
- Operations and Management Structure Recommendations
- Public Communications Planning

Discussion and Analysis: The Conservancy is leading the procurement process for the NRM Plan and will also be facilitating the project management of the NRM Plan. A Steering Committee was formed to assist the Conservancy in leading the development of the NRM Plan, which includes representatives from Arapahoe County Open Spaces, Denver Parks and Recreation, Douglas County, and the Mile High Flood District. The Conservancy advertised a Request for Proposals (RFP) to hire a consultant to develop the NRM Plan in January and received responses to the RFP in mid-February. The Steering Committee reviewed the RFP submittals, interviewed the top two consultants, and selected the partnership of Biohabitats and Dig Studio as the consultant for the project. The consultant team has scheduled 14 months to complete the NRM Plan and its associated engagement process.

The Conservancy has requested funds from the Steering Committee members and other Collaborative partners to support the project. The following partners have or are anticipated to contribute a combined total of \$193,000 toward the project. As a future owner of most of the Canal, Arapahoe County would provide a large portion of the funding to support the NRM Plan. The total project cost is expected to be \$355,000 with Arapahoe County contributing \$162,000 dollars (45% of the budget).

The County has been a strong proponent for the development of a canal wide NRM Plan. When the property transfers, the County will take over management of recreational leases and stormwater agreements that govern the County's portion of the Canal. The NRM Plan will serve as a guide for the County and its recreational / stormwater partners in the sustainable management of the Canal moving forward. It also will provide guidance for the County in establishing minimum levels of care, creating operating plans, centralizing Canal maintenance contracts, and negotiating future leases. These are all outcomes the County hopes to complete during the transition period, setting the County up for success as Denver Water formally shifts its focus to be limited to only water works purposes on the Canal.

Staff Recommendation: Staff recommends that OSTAB forward for BoCC consideration the joint project funding request of \$162,000 from the \$4 million-dollar Highline Canal Working Group pledge within the Open Space Acquisition and Development Fund to support the High Line Canal Natural Resource Management Plan.

Suggested Motion: I move that OSTAB recommend to the BoCC approval of \$162,000 from the \$4 million-dollar Highline Canal Working Group pledge within the Open Space Acquisition and Development Fund to support the High Line Canal Natural Resource Management Plan.

Alternatives: Approve, modify, or deny the funding request.

Fiscal Impact: The Open Space Acquisition and Development Fund would support the \$162,000 request. The fund balance is sufficient to sustainably support this joint project request.

Attachments: Joint Project Funding Request Presentation



Natural Resource Management Plan **Funding Request**

OSTAB Presentation, April 2024



Consultant Selection

Agenda

Funding Request

Questions

Natural Resource Management Plan **Consultant Selection**



NRM Plan Project Management Structure

- Steering Committee
- The leadership team guiding the planning process
- Douglas County Parks, Trails, and Building Grounds, High Line Canal Arapahoe County Open Spaces, Denver Parks & Recreation, Conservancy, and the Mile High Flood District
- Project Team
- Subject matter experts from all agencies in the Canal Collaborative
- Provide input on key decisions & Canal-wide recommendations
- Sub-Area Teams
- Subject matter experts from all agencies in the Canal Collaborative
- Develop and refine region-specific recommendations
- Anticipated sub-areas:
- Douglas County
- Southern Arapahoe County
- Denver & Unincorporated Arapahoe County
- Aurora & Adams County



Scope of Work Overview

- 1. Formalizing Goals, Defining Subareas and Setting Targets
- 2. Maintenance of Existing Resources
- 3. Natural Resource Enhancement Strategies
- Operations and Management Structure Recommendations
- 5. Public Communications Planning



Consultant Selection

- 1. RFP Proposal Review & Scoring
- Qualifications of the firm
- Proposed project approach
- Capacity to complete project successfully and on schedule
- Pricing
- Consultant Interviews with Steering Committee (top two consultants)
- Interviews and follow up questions. Documented with notes.
- Steering Committee, each member provided a recommendation on top consultant and runner up.
- Committee met with top consultant to finalize project scope and pricing. Staff from the HLC Conservancy and key members of the Steering
- High Line Canal Conservancy facilitates contract award and associated joint project funding request to Arapahoe County. က



Natural Resource Management Plan **Funding Request**



NRM Plan Funding Partners

contributing the following funds to support the total cost of the Natural Resource The High Line Canal Conservancy and its Canal Collaborative partners are Management Plan.

Funding Request	Requested	Confirmed
Douglas County	\$15,000	
HRMD	\$15,000	
City of Littleton		\$15,000
SEMSWA		\$15,000
SSPRD		\$15,000
Greenwood Village		\$15,000
Cherry Hills Village		\$15,000
Arapahoe County	\$162,000	
City & County of Denver		\$15,000
City of Aurora		\$15,000
Adams County	\$43,000	
MHFD		\$15,000
Total	1 \$235,000	\$120,000



NRM Plan Funding Request

requesting \$162,000 from Arapahoe County Open Spaces to support the NR The High Line Canal Conservancy and its Canal Collaborative partners are Management Plan.

Funding Source / Partner	Join Project Request	Cash Match	Total Funds
Arapahoe County Open Spaces	\$162,000		\$162,000
Highline Canal Conservancy		In-Kind, \$25,000	\$0
Secured Partner Match's (Littleton, SSPRD, SEMSWA, GV, CHV, Aurora, Denver Existing Conditions)		\$120,000	\$120,000
County Requests in Progress (Douglas County, Adams County)		\$58,000	\$58,000
Request Pending (Highlands Ranch)		\$15,000	\$15,000
Project Totals:	\$162,000	\$193,000	\$355,000



NRM Plan Joint Project Funding

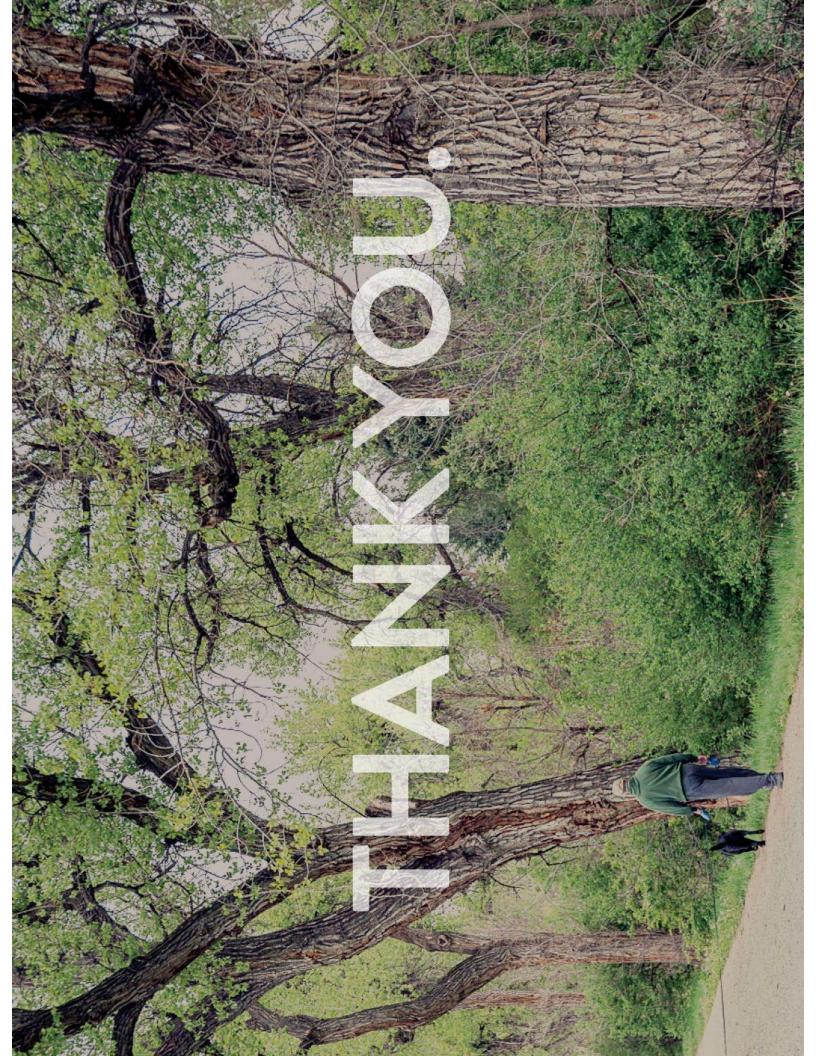
Staff Recommendation:

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Suggested Motion:

I move that OSTAB recommend to the BoCC approval of \$162,000 from the \$4 million-dollar Highline Canal Working Group pledge within the Open Space Acquisition and Development Fund to support the High Line Canal Natural Resource Management Plan.





STAFF REPORT



Date: April 1, 2024

To: Open Space and Trails Advisory Board (OSTAB)

Through: Gini Pingenot, Open Spaces Director

From: Ray Winn, Open Spaces Planner II / County Bike and Pedestrian Planner

Subject: Funding Increase for Kiowa Creek Open Space Construction.

Purpose and Action Requested:

Staff will present the Kiowa Creek Open Space project to obtain a recommendation from OSTAB to the Board of County Commissioners (BoCC) to approve the allocation to expend \$7.5M from the Open Spaces Acquisitions and Development Fund for the construction of the Kiowa Creek Open Space Park and the Bennett Regional Trail Bridge.

Background:

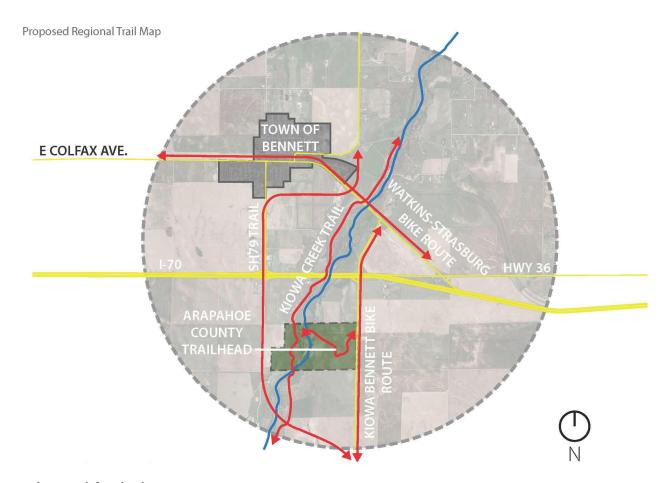
In summer of 2022 staff completed the Kiowa Creek Master Plan that was approved by OSTAB on April 25th, 2022. During this meeting, OSTAB also approved funding of \$4.5M based on the Master Plan cost estimate of \$4,396,249.08 that included a crossing of Kiowa Creek. However, most of the construction for the park is going to take place in the floodplain including a bridge over Kiowa Creek that requires a significant engineering exercise and requires a Conditional Letter of Map Revision (CLOMR) from the Army Corps of Engineers. These items and level of detail are not really addressed in a Master Plan level of analysis but instead happen in the design phase that we are currently conducting. Therefore, Staff did not have a lot of confidence in the cost estimate from the Master Plan. For this reason, Staff elected to not bring the funding request to the BoCC on 6/28/2022 but instead got the BoCC's adoption of the Mater Plan essentially approving the uses and amenities in the Master Plan but not funding approval.

Staff recently completed the 60% design which includes an engineered crossing of Kiowa Creek and a much more refined cost estimate (see below) of \$6,070,253.25 for the park and \$1,225,900.00 for a north boardwalk crossing in 2024 dollars. The 60% design has taken a long time to complete since the project construction is primarily in the floodplain requiring complex engineering work to determine a crossing of Kiowa Creek in the form of an engineered boardwalk. It has also been confirmed that a CLOMR will be required to construct the park.

FIND YOUR SPACE

Bid Item #	<u>Item</u>	Quantity	<u>Unit</u>	Unit Cost	<u>Total</u>	Comments/Assumptions
Base Bid:	Project Start-Up		1.0	Subtotal:	8 1,053,209.39	
	Project Start-Up and Preparation (10%) Mobilization	1	LS	\$ 738,509.39	S 738,509.39	
	Permits Vehicle Tracking					
	Dust Control (Water)					
	Potholing Utilities (Non-Destructive) Erosion Control & Stormwater Management	5	EA LS			
	Construction Staking / Surveying		LS			Allowance - Revise with further detail
	Site Preparation			Subtotal:	8 145,000.00	
	Tree Protection - Orange Fencing Riparian Corridor Minor Restoration/Stabilization	15,000	LF LS	\$ 3.00 \$ 100,000.00	\$ 45,000.00 \$ 100.000.00	Allowance - Includes 150 trees within LOW MP Allowance - Revise with further detail - Permits, BMP's, etc.
	Repartan Correct Minor Restoration/Stabilization		Lo			and Anowance - Nevise with future dean - Ferrings, Divil 5, vic.
	Earthwork & Drainage Clear & Grub	55	AC	Subtotal: \$ 1,800.00	\$ 1,599,000.00 \$ 99,000.00	Area of disturbance within LOW
	Cut/Fill - Complete in Place	65,000	CY	\$ 10.00	\$ 650,000.00	Earthwork needed to cut, and fill on-site
	Strip and Stockpile Existing Topsoil Misc. Engineered Drainage Improvements	55,000	LS			Includes 6* of topsoil stockpile from areas of disturbance Allowance - Storm culverts under roads and trails.
	Sitework & Hardscape Concrete Paving	13,000	SF	\$ subtotal: \$ 12.00	\$ 3,513,534.00 \$ 156,000.00	
	Gravel Paving - West Parking Lot	19,688	SF	\$ 3.50	\$ 68,908.00	
	Gravel Paving - East Parking Lot Gravel Paving - Horse Trailer Parking Lot	11,785 58,128	SF SF			
	Gravel Paving - Entrance Drive Mowed Vegetation (non-trail)	51,808 77,217				Main Drive from entrance to West Parking West trailhead, overlooks, and archery range
	Mowed Vegetation (Holledan) Mowed Vegetation - Equestrian Trail - 10' Width	147,485			\$ 221,227.50	Equestrian trail - Mow and remove large rocks and miscellaneous obstructions
	Gravel Paving - Multi-Use Trail - East of Creek - 6' Width Gravel Paving - Multi-Use Trail - West of Creek - 6' Width	46,856 43,491	SF SF			6" depth class 6 6" depth class 6
	Single-Track Trail - East of Creek - 4' Width	47,780	SF	\$ 2.50	\$ 119,450.00	Single Track Bike Trail - Clear & Grub only, minor grading
-	Single-Track Trail - West of Creek - 4' Width Low Water Crossing - North (Boardwalk)	14,614 1	SF		\$ 36,535.00 \$ 1,225,900.00	Single Track Bike Trail - Clear & Grub only, minor grading Muller Crossing Memo - 12' Wide Vehicular Rated
	Low Water Crossing - South (Boardwalk)	1			\$ 827,450.00	
	Site Structures, Elements & Site Furniture			Subtotal:	S 1,669,185.00	
	Irrigation Improvements		LS	\$ 72,723.00	S 72,723.00	
	Well Renovations Shrub & Tree Drip Irrigation	1	LS	\$ 10,723.00	\$ 10,723.00	Includes demo of existing and upgrades for new system Includes hose bib at equestrian wash rack
	Drinking Fountain Structures	1	EA LS	\$ 10,500.00		Murdock GYQ84-PF SS DF w/ Pet Fountain
	Maintenance Shed (30'x30')	1	EA	\$ 95,000.00	\$ 95,000.00	Tuff Shed - Premier Pro Ranch Garage
	Shelter (20'x30') Shelter (12'x16')	2	EA EA			ICON Shelter System includes installation and freight ICON Shelter System includes installation and freight
	Portable Toilet Enclosure	1	EA	\$ 51,000.00	S 51,000.00	ICON Shelter System includes installation and freight
	Vault Toilet Furnishings		EA LS			CXT Precast Concrete Products: Double Rocky Mountain 11'-11"x14'-4"
	Boulder Seating	7	EA	\$ 850.00	\$ 5,950.00	Unit price from similar project bid received Feb. 2024
	In-Ground Log Bench (not including archery range qty) Entry Gate	6 2				Unit price from similar project bid received Feb. 2024. Log material to be collected on site from demo'd trees. Hach entry gate has (2) "barrier gates" and (4) posts/footings
	Post & Rail Fence (everywhere but archery) Bench	1,700 2				Post and Rail Fence (D4) - ACOS Trailhead and Trail Design Standards Pilot Rock
	Picinic Table	18	EA	\$ 3,800.00	\$ 68,400.00	Pilot Rock
-	Bike Rack Trash Receptacle	6 10	EA EA		\$ 5,700.00 \$ 17,400.00	
	Bike Repair Station	1	EA	\$ 5,550.00	\$ 5,550.00	Dero Fixit w/ Air Kit
	Wheel Stop Interpretive Signage		EA LS			Wheel Stop (D7) w/ modifications - ACOS Trailhead and Trail Design Standards
	Sign Kiosk	3	EA	\$ 30,000.00	\$ 90,000.00	Includes structure & signage
	Trailside Interpretive Sign (2 Post Stanchion) Exploratory Prompt Sign (1 Post Stanchion)	4	EA EA	\$ 2,250.00 \$ 1,550.00		Includes structure & signage Includes structure & signage
	Site Wayfinding Wayfinding Sign Post		LS EA			
	Trail Marker	100	EA	\$ 150.00	\$ 15,000.00	(1) Marker every 1000 minimum and key intersections
	Road Sign Entrance Sign		EA EA			MUTCD Signage *Park* Sign - Schlosser quote
	Outdoor Classroom	1	LS	\$ 39,150.00	S 39,150.00	
	Boulder Seating Concrete Paying	2,000	EA SF			Unit price from similar project bid received Feb. 2024
	Raised Log Bench	8	EA			Log material to be collected on site from demo'd trees.
	Archery Range Archery Post	1 10	LS EA			Includes 2 bow hangers and 2 quivers per post, wood post, and concrete footing
	Archery Target	26 2	EA		\$ 16,900.00	Includes wood posts, concrete footings, and target
	Boulder Seating Earthwork	1		\$ 6,327.00	\$ 6,327.00	
	Fire Line Marker Gravel Paving	21 10,000	EA SF			Class-6 road base
	In-Ground Log Bench	7	EA	\$ 550.00	\$ 3,850.00	Unit price from similar project bid received Feb. 2024. Log material to be collected on site from demo'd trees.
	Picnic Table Post & Rail Fence	1,300	EA LF			Filot Rock Two-rail wood fence
	Safety Signage	1	LS	\$ 1,000.00	\$ 1,000.00	Allowance for signs along fence
	Shelter (20'x20') Horse Challenge Area	1	EA LS	\$ 276,285.00	S 276,285.00	
	Cobble Swale Equestrian Wash Station	1				Cobble rock mulch only (no landscape boulders included) Includes concrete pad & curb, and tie-rails (Hydrant included in irrigation costs)
	Hitching Posts	10	EA	\$ 1,550.00	\$ 15,500.00	Hitching Rail (D5) w/ modifications - ACOS Trailhead and Trail Design Standards
-	Landscape Boulder Level 1 Step-Over		EA EA			Unit price from similar project bid received Feb. 2024.
	Level 2 Step-Over	1	EA	\$ 3,500.00	\$ 3,500.00	
	Stacked Log Step-Over Turning Step Over	1	EA EA		\$ 3,885.00 \$ 5,000.00	
	Pyramid Stepper	1	EA	\$ 31,000.00	\$ 31,000.00	
	Rock Drainage Crossing Round Pen	2	EA EA	\$ 11,500.00		Based on scale of boardwalk at Cheyenne-Arapaho Park. Potential to have one of these as Boardwalk "mock up". 50' Diameter Steel Tubing Round Pen: (19) - 8' Panels, (1) - 4' Panel, (1) - Walk-Thru Gate. Priefert
	Sand Pit Crossing Shelter (20'x30')	1	EA	\$ 9,000.00	\$ 9,000.00	Includes 80 LF concrete edger and salvaged sand
	Green Equestrian Trail Obstacles	800	LF	\$ 35.00	\$ 28,000.00	
	Blue Equestrian Trail Obstacles	300	LF	\$ 55.00	\$ 16,500.00	
	Planting			Subtotal:	8 143,674.87	
	Upland Seed Mix Upland Short-Grass Seed Mix	31.95 2.57				Unit price from similar project bid received Feb. 2024. Unit price from similar project bid received Feb. 2024.
	Riparian Seed Mix	0.29	AC	\$ 5,000.00	\$ 1,433.54	Unit price from similar project bid received Feb. 2024.
	Water-Quality Seed Mix Deciduous Tree - Cottonwood Pole	2.20 15	AC EA			Unit price from similar project bid received Feb. 2024. Unit price from similar project bid received Feb. 2024.
	Deciduous Tree - Deep Bury		EA			Unit price from similar project bid received Feb. 2024.
	Project Construction Sub-Total			Subtotal:	8 8,123,603.25	ALL INCLUSIVE
	25% Design & Construction Contingency	D., .		otmustis = = :	\$ 2,030,900.81	
		Projec	Con	struction Total:	8 10,154,504.07	MP Budget: \$4,221,649.08
	Project Construction Sub-Total			Subtotal:		BOARDWALKS REMOVED
	25% Design & Construction Contingency	Proiec	t Con	struction Total:	\$ 1,517,563.31 \$ 7,587,816.57	MP Budget: \$4,221,649.08
		,			,	

This crossing of Kiowa Creek is a very important multimodal connection allowing the Town of Bennett to move forward with a planned regional trail connection (see map below). This regional trail moves through the park and connects the community of Antelope Hills to the Town of Bennett and provides connections to the Adams County multimodal trail system. In anticipation of this regional connection, Staff are using this construction opportunity to seamlessly facilitate a regional trail through the park including grading in larger trail sections that can easily be converted to concrete and of course the boardwalk crossing of the Kiowa Creek. These actions taken during construction, will seamlessly allow a regional trail conversion to happen at a significantly reduced cost to the Town of Bennett.



Discussion and Analysis:

Staff has determined that a boardwalk crossing will be the most cost-effective way to cross Kiowa Creek at a cost of \$1.5M. For comparison, The Master Plan estimated this cost of a boardwalk crossing to be \$174,600.00. There are many more examples of large cost discrepancies like this throughout the Master Plan cost estimate when compared to the 60% design cost estimate above. This confirms Staff's actions to not bring a funding request to the BoCC on 6/22/2022. Staff has recently received approval from the BoCC to move forward with several grant opportunities to help alleviate some of these increased costs, but these grants are just a drop in the bucket.

Inflation index calculations indicate that \$4.5M in 2022 dollars equates to \$5.5M in 2024 dollars. Using Staff's experience and expertise in construction, Staff believes that we can refine this 60% cost estimate even more to a manageable amount of \$6M for the park construction and \$1.5M for the regional trail crossing. For example, Staff suggested utilizing a different grading technique that saved \$1M from the prior cost estimate. Staff understands that \$7.5M does not give a lot of room for contingency so we are currently revising the 60% cost

estimate further to allow for contingency costs which may include phasing some amenities to a second phase. The consultants and engineers agree that \$7.5M is an achievable amount to construct the boardwalk crossing and provide the amenities outlined in the adopted Master Plan in either this phase or a subsequent phase.

Staff Recommendation: Staff recommends making a formal recommendation to the BoCC to approve the allocation of \$7,500,000.00 from OS Acquisition and Development Fund for the construction of the Kiowa Creek Open Space Park and the Bennett Regional Trail bridge crossing.

Suggested Motion: I move we recommend to the BoCC approval of the proposed \$7,500,000.00 from OS Acquisition and Development Fund for the construction of the Kiowa Creek Open Space Park and the Bennett Regional Trail bridge crossing.

Alternatives: Recommend approval, approval with changes, or denial.

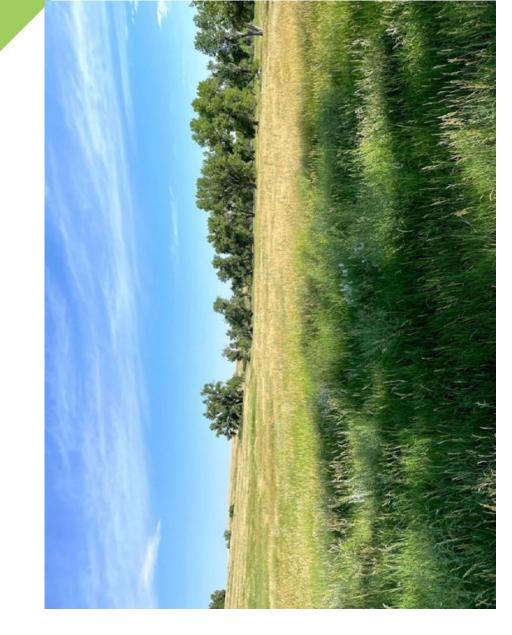
Fiscal Impact: \$7,500,000.00. The fund balance exceeds the amount requested.





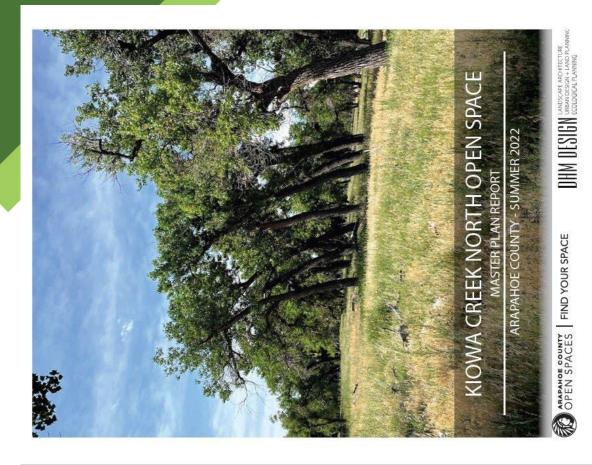
KCOS Property History

- approximately 265 acres of unimproved open space
- property was purchased in 2009 to be maintained as an open space, for future passive use recreation
- The site is unique because of its matrix of ecological communities and intact riparian corridor splitting the site.



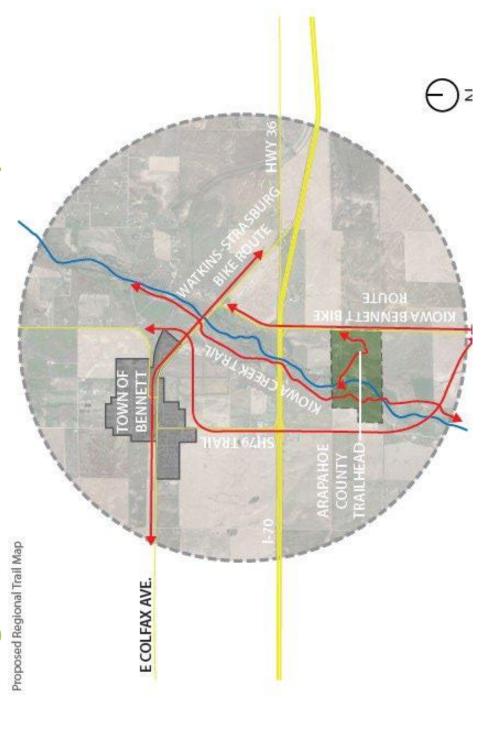
KCOS Master Plan Adoption and Funding History

- MP Completed in Summer 2022
- OSTAB Approved MP on April 25th 2022 and \$4.5M for construction funding based on MP cost estimate
- BoCC adopted MP on June 28th 2022
- funding request to BoCC due to uncertainty of building in the floodplain.





KCOS Regional Multimodal Connectivity



- community of Antelope Hills to the Town of Bennett and the Adams County KCNOS will serve as a major regional multimodal route connecting the Multimodal System.
- implement the regional trail at a significant cost savings to the Town of Bennett. Construction will include a boardwalk crossing and wide graded trails to easily



KCOS 60% Design Cost Estimate



tem / Henry	Owntity Unit	Unit Cost	Total	Comments/Assam plions
Project Start-Up and Beparation (10%) Modellanders	1 1.8	\$ 738,509	509.39 \$ 738,509.39	
Permits and a second se				
Vehiolo Tracking Dust Canirol (Water)				
Pottoding Utilities (Non-Destructive) Invoicen Control & Stormwater Management	5 FA 1 LS	\$ 1,200.00	00 S 6,000.00 00 S 268,700.00	Area areand well & pump. Alternance - Includes all areaien control related froms. See GESC estimate for detail
Construction Staking / Surveying	1 12	₩.	s	1
Site Preparation	0000		Sahotat \$ 145,000.00	
And A concentration of any and any and a Control of Manager Residential Stability after a Control of Manager Residential Stability after a Control of Manager Residential Stability after a Control of Manager Residential Stability and American Stability	1 L8	\$ 100	n s	MP Allowance - I
Earthwork & Drainage				
Clore & Grab CuPfill - Complete in Place	55 AC 65,000 CY	\$ 1,800,000 S	00 S 650,000.00	Area of d
Strip and Staolopile Evitting Topscoil Misc. Engineered Drainings Improvements.		ایای	- 1 1	Includes of a luptical absolption from means of disturbance. Alternance - Stem outwirt under waste and trails.
Sitework & Hardscape				
Cararte Paving - West Parking Lot	15,000 SF 19,688 SF	* *	12.00 S 156,000.00 3.50 S 68,908.00	
Grove Paving - East Parking Lat. Grove, Paving - Esons Uralise Parking Lot	11,785 SF 58,128 SF			
Converted to the Conver	S1,808 SF	9 49 4	1 1	1212
Mowest Vegetation (turn-tent) Mowest Vegetation - Equestrian Trail - 10 Width	147,485 SF	م م	- 1 - 1	West variated, averticates, and arothery range. Equatrian trail - Move and remove large rocks and misce lancous obstructions.
	46,856 SF 45,491 SF			6° depth class 6 6° depth class 6
Single-Trust Trail - East of Creek - 4 Width Single-Trust Trail - West of Creek - 4' Width	47,780 SF	** **		Single Track Dike Trail - Chen & Grub enly, minor grading. Sinck Track Bike Trail - Chen & Grab enly, minor enading
Low Water Crossing - North (Pearchwell) Low Water Crossing - South (Beardwell)	1 1.8	\$ 1,225,900	00 S 1,225,900,00 00 S 827,450,00	Mailer Crossing Merce - 12 Wide Velvauler Rated Atalar Crossing Merce - 8 Wide Pedestrian Rated
7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				diameter and the second
Site Structures, Elements & Site Furniture Irrigation Improvements	1 1.8	44	e e	
Well Renorations Shrub & Tree Ditp Imagnion	1 1.8		× ×	Includes demo et extisting and urgandes for new system Includes hose bib at equestran wash neck
Drinking Pountain Structures	1 1.8	\$ 10,500.00	on se	Mundook GYQS4-PF 3S DF
or market (30%30)	I EA		900	Tuff Shod - Premier I
Shutter (12x3.67)	2 EA	\$ 45,000.00		ICON Shelter System includ
Portable Toolet Enelceure Vault Toilet	1 EA	e e	e e	ICON Shelter System includ CXT Presast Concrete Produ
Furnishings Boulder Seating	1 LS	44	e 0	Unit price from similar project bid received 1/65, 2024
In-Ground Log Bench (not including archery range 4ky) Entry Gate	6 EA	\$ 5500	s s	Unit price from similar project hid received Peb. 2024. Lag material to be collected on site from demoid frees. Bath onto sate has (2) "Jumier testes" and (4) resolutions:
Post & Rail Fence (everywhere but arehery) Donoth	1,700 LF 2 RA	\$ 95.00	00 S 161,500,00 00 S 4,600,00	Post and Rail Fenes (D4) - ACOS Trailhead and Trail Design Stendards Place Roots
Pictive Table Blye Bank	18 EA	3.800	s s	Påte Rock Bite Rate (176) ov modifications - 2005 Trailboat and Zrail Design Sandards
Tresh Receptable 184a Demonstration	10 EA	\$ 1,740	00 0	m Pilma Roude Plane Bridge and Aude Ro
Wheel Skyr	34 EA	\$ 700.00	00 S 23,800.00	Loco Para v. 2010, se' modifications - ACCOS Trailliead and Trail Design Standards
gnage	3 EA	\$ 30,000	× ×	Includes statemer de signage
Tradiside Interpretive Sign (2 Poet Stanchion) Exploratory Prompt Sign (1 Poet Stanchion)	3 EA	\$ 2,250	00 S 6,750,00 00 S 6,200,00	Includes structure de signage Includes structure de signage
Site Wayfinding Wayfinding Sim Post	1 LS	\$ 64,500.00	e 00	8'v8' Wood Post ov Novelly Street Name Sign
Treat Marter Proel Store	100 EA	\$ 150	00 00 15,000,00	(1) Marker every 1000' minimum and losy intersections
Littune Sign	1 EA \$	\$ 30,000.00		"Park" Sign - Schlasser quota
Cutdoor Classroom Ecutdor Scating	1 LS	- 1 - 1		Link price from sknikar project bid receired Fob. 2024
Consecto Paving Raised Log Beneth	2,000 SF 8 EA	49 49		Log material to be cullected on site from demol trees.
Archery Bange Archery Post	1 LS	44 4	255,377,00	Trestades 2 hove bancares and 3
Archary Target Realthy Septime	26 EA	\$ 650,000 \$	16,900.00	Includes wood poets, constrict footings, and anget. Their review from admittant manifest high received 11th WOOd.
Earthson Earth Co.	87 1		6,327.00	Allowance for grading berms
Pire Line Marker Gravel Paving	21 F.A 10,000 SF	49 44	35,000.00	Class-6 road base
In-Greund Log Bench Picnio Table	7 EA	**	S 3,850.00 S 22,500.00	Link price from similar project bid received 1765, 2024. Log material to be collected on site from demoid trees. Pilot Ruck
Post & Rail Fence Safety Sanaso	F1 006,1		S 123,500.00 S 1,000.00	Two-rail would fonce Allowance for stone along fonce
Shelter (20%20) Have Children Area	1 FV 2	\$ 40,000.00	S 40,000.00	ECON Shelter System includes installation and freight
Cobbie Swale	1 1.8	Ш		Cobbbe rook avulet only (no landscape boulders include)
Pichostrian wash station Hitching Posts	10 EA			Institutes converte pad & turb, and the state (Hydrans metucated in projektom como.) Histolinia Raii (195) w/, an odfisations - ACCOS Trailhend and Trail Dodgin Shandards
Landscape Boulder Level 1 StepsCher	29 IIA			Unit price from similar project this received Feb. 2024.
Lovel 2.Stap-Over Stacked Log Step-Over	I EA		s s	
Turning Step Over Protonial Stepner	1 EA	Ш	20	
Rock Drainage Crossing	2 EA		0.0	Based on scale of burndwalk at Cheyemra-Arapako Park, Potential to have one of these as Boardwalk "mosk up". Sof triansies Start Toking Board Dane (10), e Danak (1), of Danak (1), Mohr, Thu, Che, Boardwalk
Sand Pê Crossing.	1 EA			neliides 80 LF externte edger and salvage
Sheller (1923) Green Equation Trail Obstacles Diver Equation Trail Obstacles	4T 008	\$ 35.00	00 5 28,000,00	ECON Shelker System and locks must be got
Disease the second seco				
Planting Upland Seed Mix	31.95 AC	Subtool: \$ 2,500.00	≠ ∨	Unit price from similar project hid recei
Upland Shutt-Grass Seed Mix Riparian Scot Mix	2.57 AC 0.29 AC	* *	000	Unit price from similar project hid received Feb. 2024. Ent price from similar project hid received Poh. 2024.
Water-Quality Seed Mix Deciduous Tree - Cottamood Pole	2.20 AC 15 EA	\$ 7,000	00 S 15,428.28 00 S 18,000.00	Unit price from similar project tild received I/dh, 2024. Unit price from similar project tild received I/dh, 2024.
Deciduous Tree - Deep Bary		- -	00 S 22,500.00	Unit price from similar project hid receiv
Project Construction Sub-Total		Subt	8,123,6(8,25	ALL INCLUSIVE
,	Project Co	Construction Total:	#	MP Budgst: \$4,221,649.08
Project Construction Sub-Total		Stalk	cal S 6.070.253.25	devoketa szurweganog
Cold Desires & Construction Production			S 1,517,563.31	

MP Cost Estimate : 4,396,249.08

OSTAB Funding Request in 2022: \$4.5M

Inflation Estimate:

\$4.5 in 2022 = \$5.5 in 2024

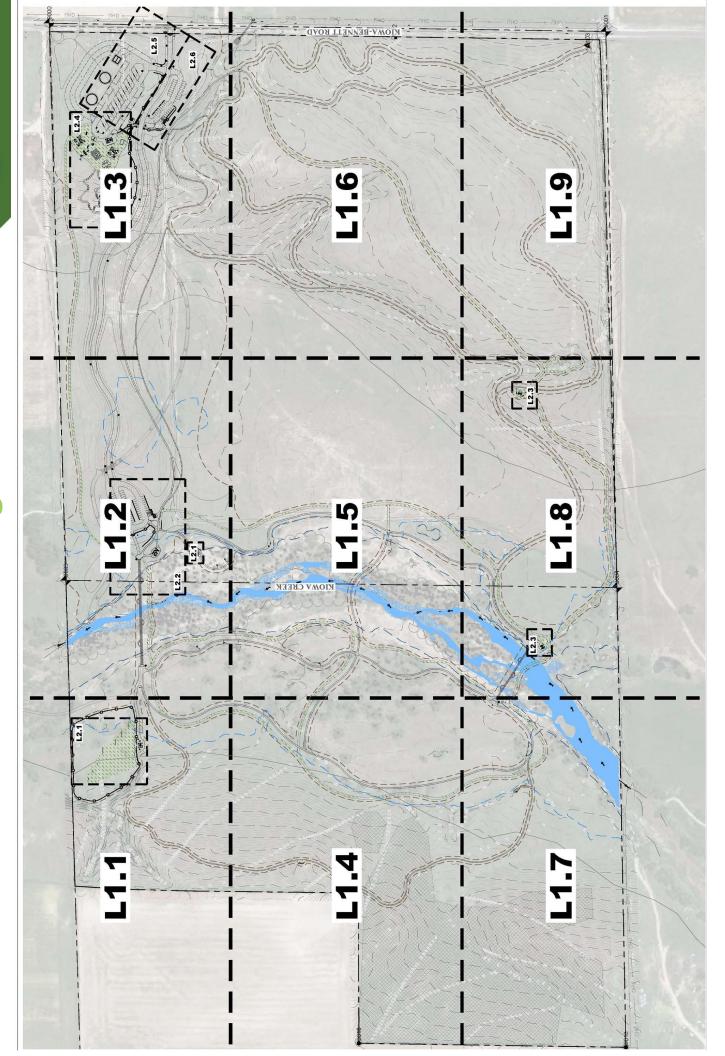
60% Cost Estimate

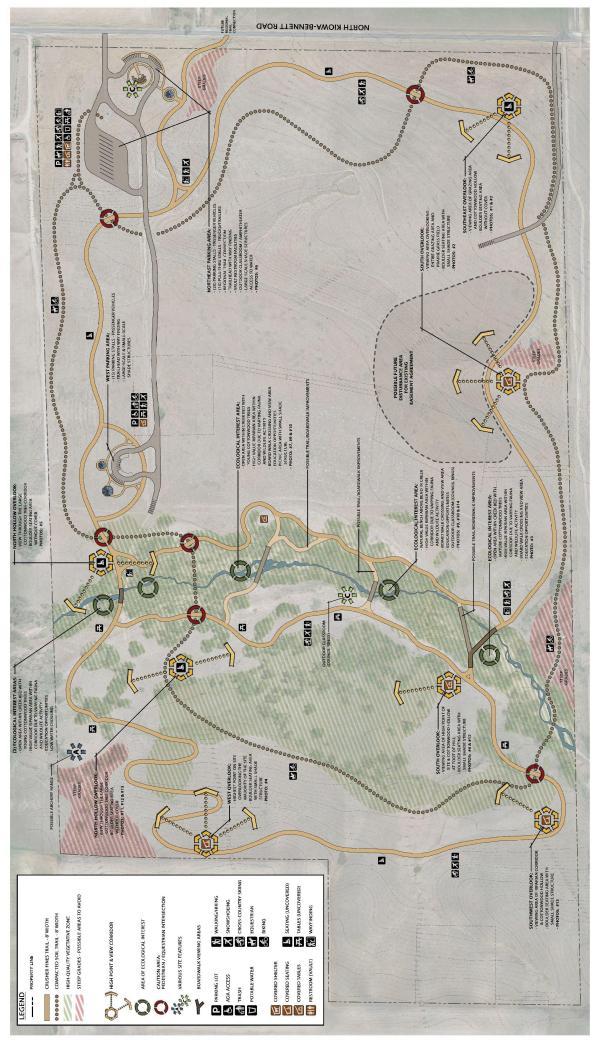
\$6,070,253.25 For Park

\$1,225,900.00 For Boardwalk Crossing

construction contingency for a \$7.5M possible grants will provide room for Estimate, phasing amenities, and Staff and consultant believe with further refinement of 60% Cost budget

KCOS 60% Design





Kiowa Creek North Open Space Arapahoe County

Remove

Possible Phase 2



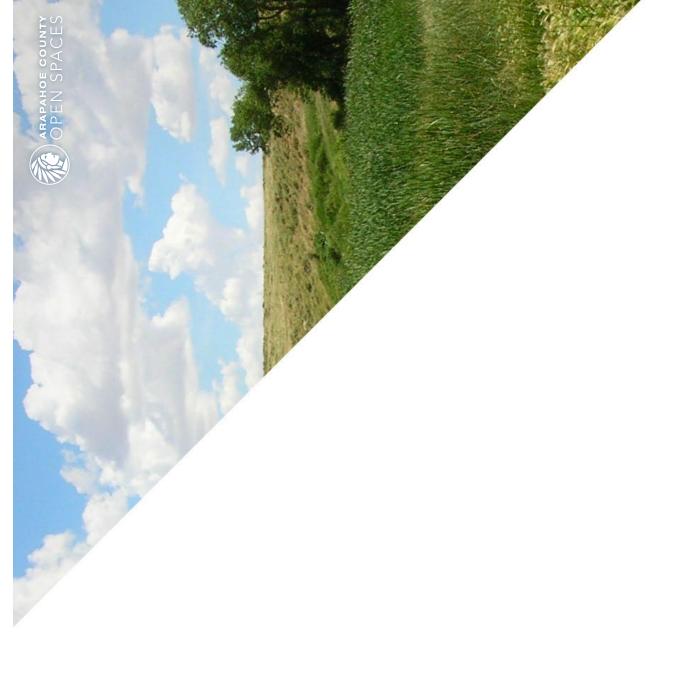






Suggested Motion

\$7,500,000.00 from OS Acquisition and Development Fund for the construction of the Kiowa Creek Open Space Park and he Bennett I move we recommend to the BoCC approval of the proposed Regional Trail bridge crossing.



THANK YOU