

Parks, Recreation & Cultural Services

PR&CS Administration, 1401 Recreation Way, Colorado Springs, CO 80905



Agenda TOPS Working Committee

Wednesday, January 10, 2024

7:30 a.m.

1401 Recreation Way

How to call in to the meeting for citizens:

Please dial +1 (720) 617-3426 Conference ID: 494 055 957#

How to comment:

- *For Citizen Discussion concerning items that are not on the agenda please email your comments to PRCS-TOPSWorkingCommittee-SMB@coloradosprings.gov in advance of the meeting.*
- *For Agenda Items - Before the meeting, those who wish to comment should submit their name, telephone number, and the topic or agenda item for comment to PRCS-TOPSWorkingCommittee-SMB@coloradosprings.gov. If you are a participant in Microsoft TEAMS please use the chat function to indicate you would like to comment. If you have joined the meeting via conference call, please listen for your opportunity to comment. You will be called upon to comment using the last four digits of your telephone number. Please limit your comment to three minutes.*

Agenda Preview

Board Chair

Announcements

Staff and Committee

Approval of Minutes

Committee

Citizen Discussion

Citizens

Action Items

Bluestem Prairie Open Space Project

Lonna Thelen

Presentation Items

Natural Resources Update

Cody Bear-Sutton

Ranger Team Update

Scott Abbott

Citizen Discussion

Citizens

Adjournment

BLUESTEM PRAIRIE OPEN SPACE

Drainage Improvements



1/10/24

Lonna Thelen – TOPS Manager

SITE LOCATION

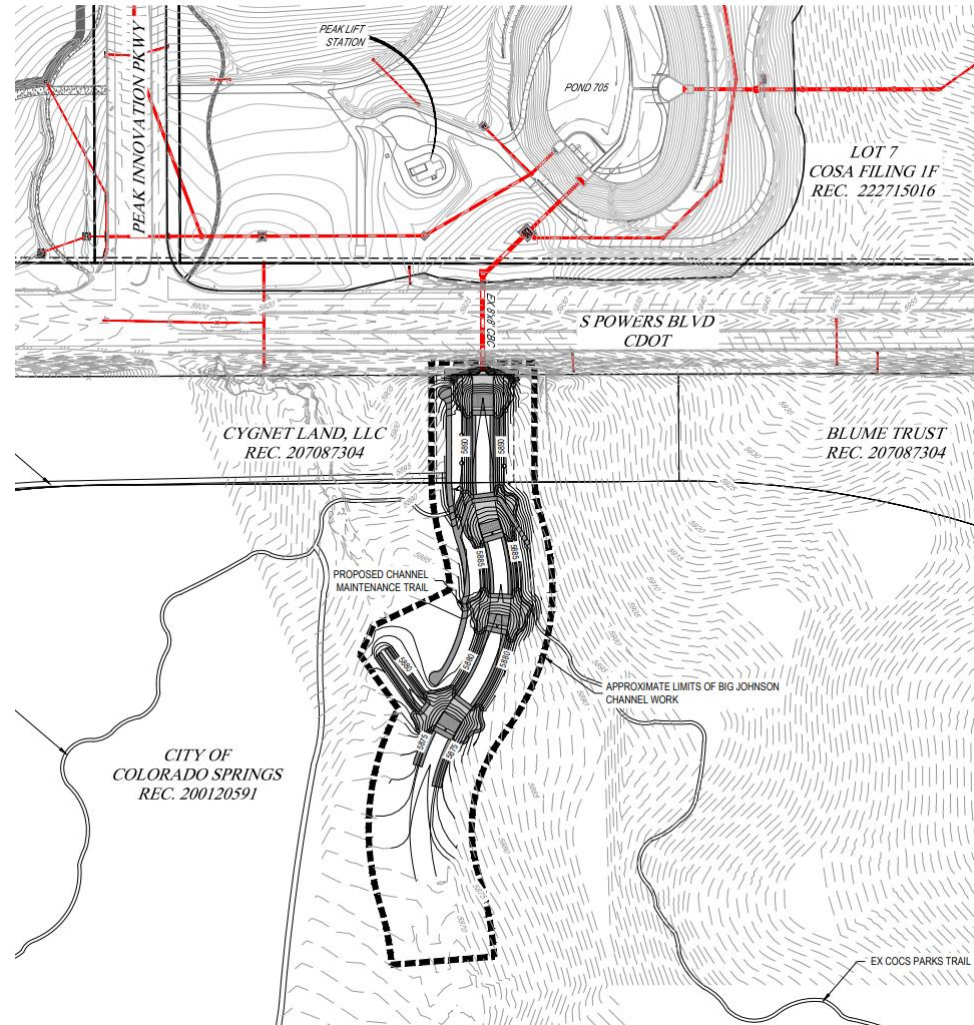


EXISTING CONDITIONS



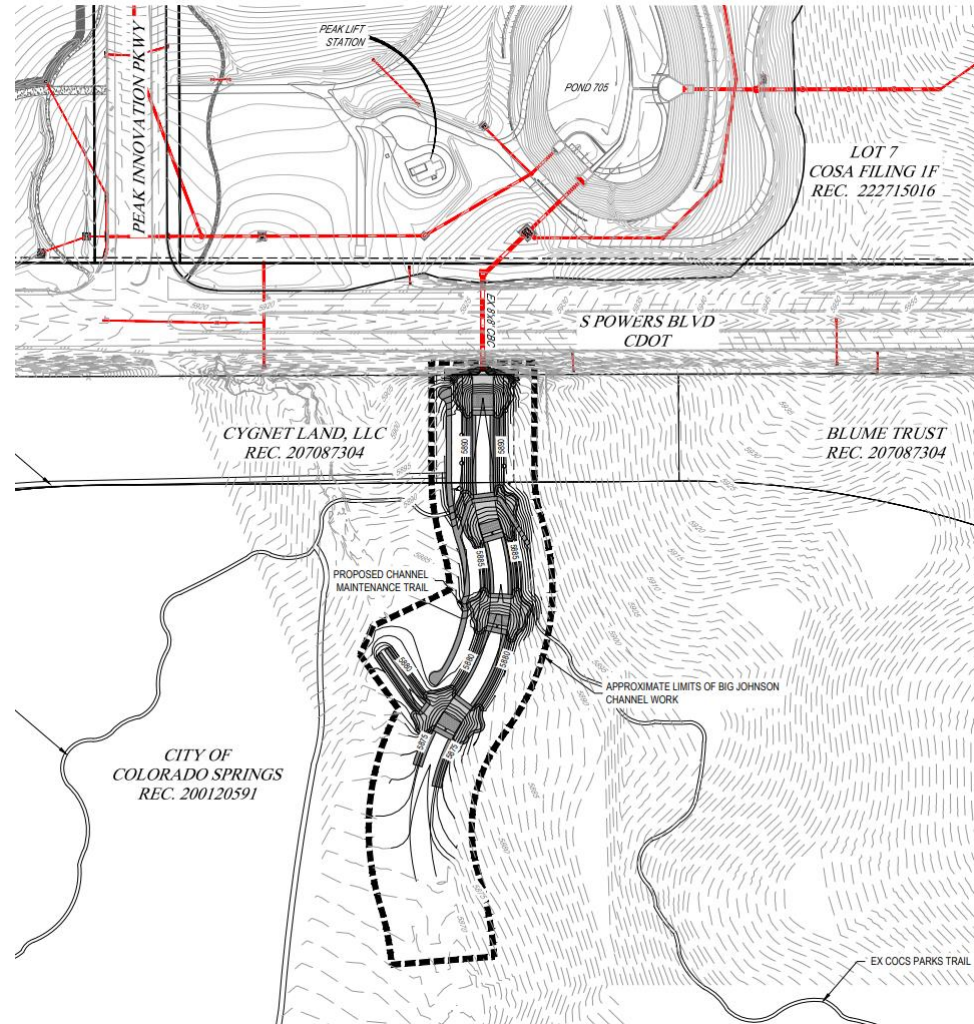
PROPOSAL

- Drainage improvements for the drainage channel.
- Re-grade and stabilize channel
- Create a flattened low slope
- Wider channel bottom
- Multiple sculpted concrete drop structures



REVIEW CONCERNS

- Preserve the resource
- Sculpted concrete drop structure to blend into surroundings
- Accommodate existing trail crossing
- Limited impact for construction and long term maintenance



PALMER LAND CONSERVANCY



- The property contains a conservation easement held by Palmer Land Conservancy
- Palmer Land Conservancy is supportive of the project to improve the existing drainage conditions.

MOTION



- Approval of the City of Colorado Springs Airport's request for improvements to the drainage infrastructure on the 646.94-acre Bluestem Prairie Open Space TOPS property. The proposed improvements include re-grading the existing channel downstream of the City of Colorado Springs Airport to a full width low slope constructed channel lined with soil riprap and four full width sculpted concrete drop structures vegetated to reduce future erosion potential.

QUESTIONS?



COLORADO SPRINGS PARKS, RECREATION AND CULTURAL SERVICES

TOPS Working Committee

Date: January 10, 2024
Item Number: Action Item #1
Item Name: Bluestem Prairie Drainage Improvements

SUMMARY:

The City of Colorado Springs Airport is requesting approval to proceed with a proposed project to improve the drainage conditions for the downstream drainage channel southeast of Peak Innovation Parkway and Powers Boulevard. The Colorado Springs Airport Pond 705 is north of Powers Boulevard and connects to Bluestem Prairie Open Space via a downstream outlet culvert. The existing drainage channel south of Powers Boulevard in Bluestem Prairie Open Space has experienced severe erosion due to the lack of drainage infrastructure and channel stabilization. The City of Colorado Springs Airport proposes to improve the existing drainage infrastructure on the Bluestem Prairie Open Space to create a stabilized channel, this improvement includes a flattened low slope, wider channel bottom with soil riprap and multiple concrete drop structures.

BACKGROUND:

The existing Big Johnson Channel serves as the downstream drainage way for a large portion the Colorado Springs Airport Business Park. The channel is located between Powers Boulevard and Big Johnson Reservoir. The channel currently collects stormwater from an 8'x8' box culvert that runs under Powers Boulevard with no dissipation or stabilization. The lack of existing infrastructure to handle stormwater has caused erosion and cuts of six feet through the property and damaged the existing park trail system.

The subject parcel is 646.94 acres of land that was acquired with TOPS funds in 2000. The parcel consists of open space with a trail system. The existing drainage channel runs north to south where it eventually flattens out and opens to a spread-out drainageway before entering the Big Johnson Reservoir.

The current concern is erosion at the outfall of the box culvert is significant and if left alone it will worsen without improvements to stabilize this area. Recently, the channel has experienced cuts of four to six feet approximately 900' downstream of the culvert. The cuts will continue to erode and migrate due to the sandy soils in this area if not addressed.

The Peak Innovation Park is currently developing upstream of the existing drainage channel. Pond 705 is a part of the Peak Innovation Park COSA Filing 1F, Lot 7 and is currently under development. The pond was designed to capture and treat stormwater from future development in Peak Innovation Park in this drainage basin. The new pond will release stormwater through the existing 8'x8 box culvert at an equal or lesser rate than historic conditions.

To ensure a stable drainage channel on the Bluestem Prairie Open Space the City of Colorado Springs Airport is proposing to improve the drainage channel. The proposed improvements include re-grading the existing channel downstream of the City of Colorado Springs Airport to a full width low slope constructed channel lined with soil riprap and four full width sculpted concrete drop structures vegetated to reduce future erosion potential. Per Chapter 12, Section 1.6.2.2 and Table 12-1 of the Colorado Springs Drainage Criteria Manual, a constructed channel is to provide flood flow conveyance and shall be used when upstream drainage basins have already been

significantly altered or are expected to be in the future and should utilize revegetation with stabilized linings and full width drop structures. In addition to the proposed drainage improvements, maintenance access will be required along the stabilized channel for access and maintenance to be completed following completion of construction. The maintenance access will be provided by a combination of the existing park trail system and the proposed trails associated with the channel improvements along the west side of channel. Access will be controlled and minimal to ensure limited disruption of the open space.

During the initial planning phases of the project the staff made recommendations to enhance the natural aesthetics and improve the open space trail system connectivity by including the use of sculpted concrete for all drop structures and creating a trail crossing of the channel over the top of one of the drop structures. Both recommendations were followed as the drop structures have been changed from boulder drop structures to be sculpted concrete and trail improvements have been proposed in addition to providing a channel crossing over the top of one of the drop structures.

The Bluestem Prairie Open Space has a conservation easement held by the Palmer Land Conservancy. Staff coordinated the review of the proposed drainage improvements with the Palmer Land Conservancy to ensure that their conservation principles were met with the improvements. A letter has been provided from the Palmer Land Conservancy and is included as Exhibit A.

FINANCIAL IMPLICATIONS:

The City of Colorado Springs Airport through Peak Metro District Number 2 will provide the funds necessary to design, permit and construct the proposed improvements.

BOARD/COMMISSION RECOMMENDATION:

ALTERNATIVE:

Deny the request for drainage improvements, on the 646.94-acre TOPS Open Space parcel in Bluestem Open Space.

RECOMMENDATION:

Approval of the City of Colorado Springs Airport's request for improvements to the drainage infrastructure on the 646.94-acre Bluestem Prairie Open Space TOPS property. The proposed improvements include re-grading the existing channel downstream of the City of Colorado Springs Airport to a full width low slope constructed channel lined with soil riprap and four full width sculpted concrete drop structures vegetated to reduce future erosion potential.

PROPOSED MOTION:

Approval of the City of Colorado Springs Airport's request for improvements to the drainage infrastructure on the 646.94-acre Bluestem Prairie Open Space TOPS property. The proposed improvements include re-grading the existing channel downstream of the City of Colorado Springs Airport to a full width low slope constructed channel lined with soil riprap and four full width sculpted concrete drop structures vegetated to reduce future erosion potential.

Attachments:

Power Point Presentation

Link to Natural Resources Presentation:

<https://storymaps.arcgis.com/collections/9dc2d8a13f7747058f6067c01e695575>

Link to Ranger Update Presentation:

<https://storymaps.arcgis.com/stories/45e759c6de974cfbdc40affe5114c3e>