CASTLE ROCK WATER

RESOLUTION APPROVING A SERVICES AGREEMENT WITH DEWBERRY ENGINEERS, INC. FOR THE PLUM CREEK DIVERSION UPGRADES PROJECT

JUNE 17, 2025

TOWN OF CASTLE ROCK COLORADO

SERVICES AGREEMENT

BACKGROUND PLUM CREEK DIVERSION

- CR Water purchased Plum Creek diversion in Sedalia in 2017 from United Water
- Existing permitted structure
- Design capacity to capture up to 25.8 MGD
  - Unreliable due to sediment loads
  - Maintenance and operations problems
  - Long shut down periods
  - Actual infrastructure performance has been maximum of 7-8 MGD
- Strategic Plan Tactic 1.2.18
  - Critical for ensuring long-term water
- Preliminary Engineering to design new structure completed by Verdantas for $195k in 2024

SERVICES AGREEMENT

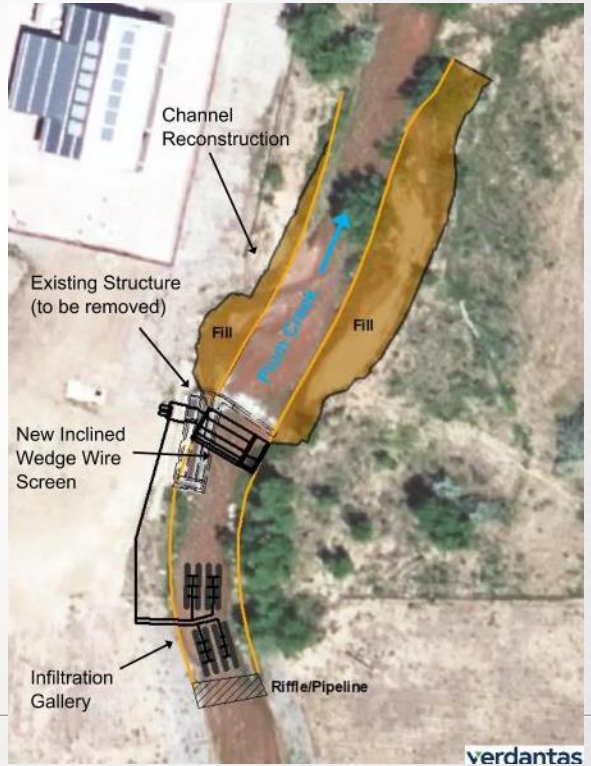
ALTERNATIVES ANALYSIS FOR PLUM CREEK DIVERSION

#	Type	Description	ROM Cost Estimate
1	Channel Modifications	Downstream Channel Narrowing	$350k
2	Channel Modifications	Upstream In-line Settling Basin	$650k
3	Channel Modifications	Spur Dikes/Rock Vanes	$70k
4	Structural Modifications	Obermeyer Weir, Overshot Gate, Increased Freeboard, Sluiceway Improvements	$1.0M
5	Structural Modifications	Obermeyer Weir, Vertical Plate Screen, Increased Freeboard	$880k
6	Alternative Diversion Methods	In-line Sloped Screen	$730k
7	Alternative Diversion Methods	In-line & Side Screen Combo	$1.1M
8	Alternative Diversion Methods	Infiltration Gallery / Sand Filter	$665k
9	Operational Recommendations	Lowering of Wet Well	$0
10	Operational Recommendations	Sediment Sluicing	$0
11	Operational Recommendations	Wet Well Draining	$0

SERVICES AGREEMENT

SCOPE FOR PLUM CREEK DIVERSION

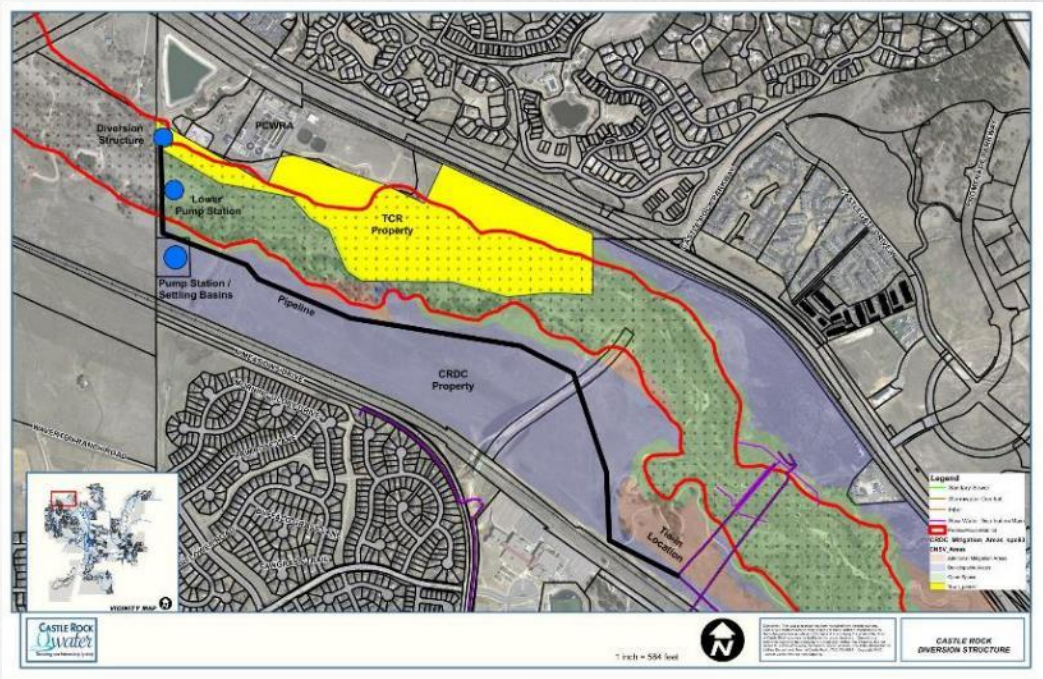
- Design
- Hydraulic analysis
- Natural Resources Assessment
- Permitting
  - USACE
  - CDPHE
  - FEMA
  - USFWS
  - DC Habitat Conservation



SERVICES AGREEMENT

BACKGROUND FOR CR2 DIVERSION

- CRW completed analysis of surface water diversion options – 2011-2015
- Identified local option near PCWRA effluent
- Help meet renewable water goals by 2050
- Benefits
  - ➢Recover reuse water
  - ➢Direct Potable Reuse without permitting
  - ➢Free-river flows
  - ➢Native Plum Creek rights
  - ➢Lawn irrigation return flows (LIRFs)
  - ➢Exchange to diversion
  - ➢Diversion on Town property
  - ➢Minimizes pipeline distance
  - ➢One property owner (CRDC) to partner



SERVICES AGREEMENT

SCOPE FOR CR2 DIVERSION

- Site Investigation
- Conceptual Design
- Initial permit coordination
  - CDPHE
  - USACE

SERVICES AGREEMENT

BUDGET & SCHEDULE

BIDDING RESULTS

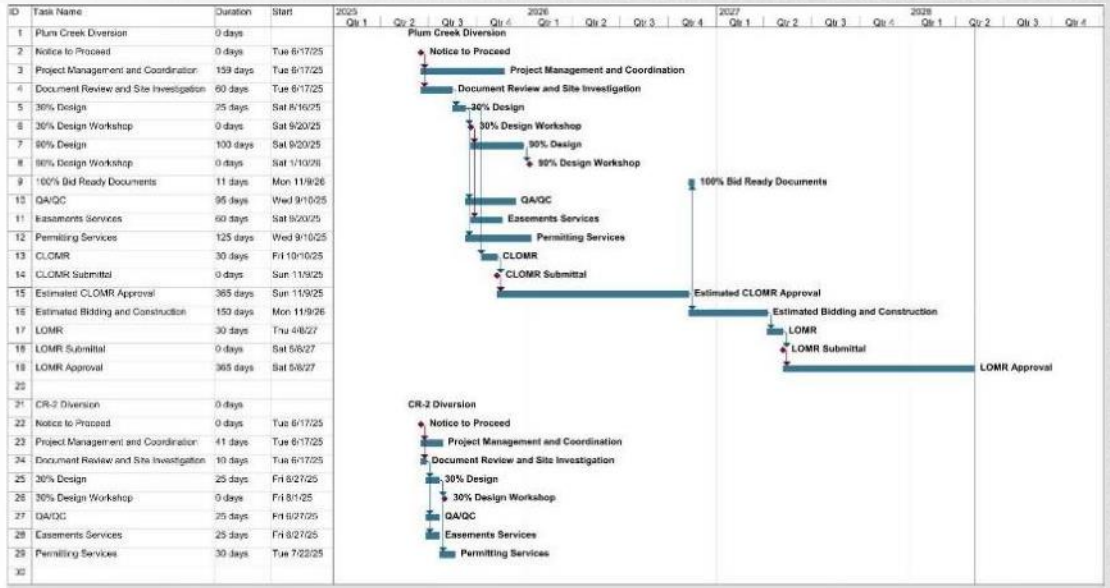
- Carollo – No Proposal
- Burns & McDonnell - No Proposal
- Dewberry - $470,867
- Providence – No Proposal (Subconsultant to Verdantas)
- Verdantas - $740,998

BUDGET

- Authorization of $470,867 + 10% contingency for a total of $517,954
- Adequate funding in 2025 budget

SCHEDULE

- Design/Permitting: June 2025 – November 2026
- Construction: Winter 2026/2027



ID	Task Name	Duration	Start
1	Plum Creek Diversion	0 days	
2	Notice to Proceed	0 days	Tue 6/17/25
3	Project Management and Coordination	159 days	Tue 6/17/25
4	Document Review and Site Investigation	60 days	Tue 6/17/25
5	30% Design	25 days	Sat 8/16/25
6	30% Design Workshop	0 days	Sat 9/20/25
7	90% Design	100 days	Sat 9/20/25
8	90% Design Workshop	0 days	Sat 1/10/26
9	100% Bid Ready Documents	11 days	Mon 11/9/26
10	QA/QC	95 days	Wed 9/10/25
11	Easements Services	60 days	Sat 9/20/25
12	Permitting Services	125 days	Wed 9/10/25
13	CLOMR	30 days	Fri 10/10/25
14	CLOMR Submittal	0 days	Sun 11/9/25
15	Estimated CLOMR Approval	365 days	Sun 11/9/25
16	Estimated Bidding and Construction	150 days	Mon 11/9/26
17	LOMR	30 days	Thu 4/8/27
18	LOMR Submittal	0 days	Sat 5/8/27
19	LOMR Approval	365 days	Sat 5/8/27
20			
21	CR-2 Diversion	0 days	
22	Notice to Proceed	0 days	Tue 6/17/25
23	Project Management and Coordination	41 days	Tue 6/17/25
24	Document Review and Site Investigation	10 days	Tue 6/17/25
25	30% Design	25 days	Fri 8/27/25
26	30% Design Workshop	0 days	Fri 8/1/25
27	QA/QC	25 days	Fri 8/27/25
28	Easements Services	25 days	Fri 8/27/25
29	Permitting Services	30 days	Tue 7/22/25
30			

SERVICES AGREEMENT

RECOMMENDATIONS

- Castle Rock Water Commission
- Staff

Questions

I MOVE TO APPROVE RESOLUTION NO. 2025-073
AS INTRODUCED BY TITLE

I MOVE TO APPROVE THE RESOLUTION AS INTRODUCED BY TITLE,
WITH THE FOLLOWING CONDITIONS: _____

"I MOVE TO CONTINUE THIS ITEM TO THE TOWN COUNCIL MEETING
ON _____ DATE TO ALLOW
ADDITIONAL TIME TO: _____

TOWN OF CASTLE ROCK COLORADO

THANK YOU