



CITY COUNCIL ACTION FORM

DEPARTMENT Parks and Recreation	PRESENTED BY Diesel Post - Parks and Recreation Director	DATE 12/19/23
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ITEM

Consent Agenda

Council Action - Approve entering into a contract with Lowry Contracting Inc. for River Park maintenance upon legal team review.

BACKGROUND

The River corridor master plan sets a timeline for improvement and maintenance projects. Based on the master plan, the Scout wave was rebuilt in 2022. After the reconstruction, the feature performed as expected until high water. At high water, the wave evolved into a more significant foam pile, and many rafts had difficulty navigating it. After many discussions with Council, community, and staff, the Scout Wave improvement project became a part of the 2024 budget and work plan.

Screenshot of River Corridor master plan capital improvement timeline:

Whitewater Park Capital Improvements				
Proposed Timeline				
	2022	2023	2024	2025
TASK				
Scout Wave Rework	Final Design/Permit-Construction			
Boat Ramp Beach		Design/Permit-Construction		
Bank Improvements		Design/Permit-Construction	Construction	
Bridge Hole Rework			Design/Permit	Construction
Slalom Course		Design/Construction		
Raft Tie Off Anchors		Install		
Signage	Planning/Install			
Memorials		Ongoing		

FISCAL NOTE

Construction Contract total:	-\$199,914.00
Construction oversight:	-\$19,795.00
Contingency (20%)	-\$43,941.80
Project Total:	
	-\$263,650.80
Budget:	
	\$275,000.00



CITY COUNCIL ACTION FORM

DEPARTMENT Parks and Recreation	PRESENTED BY Diesel Post - Parks and Recreation Director	DATE 12/19/23
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STAFF RECOMMENDATION

To approve a project total of \$263,650 and to enter into contract with the Lowry Contracting Inc. for construction services for the amount of \$199,914.

SUGGESTED MOTION

A Councilperson should move to “combine and approve the items on the consent agenda.”

**AGREEMENT
BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

THIS AGREEMENT is by and between City of Salida (“Owner”) and
Lowry Contracting, Inc. (“Contractor”).

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

1.1 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows: 2023 – 15 Salida Whitewater Park Maintenance – Scout wave.

ARTICLE 2 – THE PROJECT

2.1 The Project, of which the Work under the Contract Documents is a part, is generally described as follows: 2023 – 15 Salida Whitewater Park Maintenance – Scout wave

ARTICLE 3 – ENGINEER

- 3.1 The part of the Project that pertains to the Work has been designed by Recreation Engineering and Planning.
- 3.2 The Owner has retained Recreation Engineering and Planning (“Engineer”) to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.1 *Time of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.2 *Contract Times: Dates*

- A. The Work will begin no later than January 30, 2024
- B. The Work will be substantially completed on or before April 1, 2023, and completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before April 30, 2023.

4.3 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the

delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

1. Substantial Completion: Contractor shall pay Owner \$(0.1% of Base Bid Amount) for each day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.02.A above for Substantial Completion until the Work is substantially complete.

4.4 *Special Damages*

- A. In addition to the amount provided for liquidated damages, Contractor shall reimburse Owner (1) for any fines or penalties imposed on Owner as a direct result of the Contractor's failure to attain Substantial Completion according to the Contract Times, and (2) for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Substantial Completion (as duly adjusted pursuant to the Contract), until the Work is substantially complete.
- B. After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.02 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.

ARTICLE 5 – CONTRACT PRICE

- 5.1 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:
 - A. For all Work, at the unit prices stated in Contractor's Bid, attached hereto as an exhibit.

ARTICLE 6 – PAYMENT PROCEDURES

6.1 *Submittal and Processing of Payments*

- A. Contractor shall submit Applications for Payment in accordance with Article 15 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions.

6.2 *Progress Payments; Retainage*

- A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the 10th day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established as provided in the General Conditions (and in the case of Unit Price Work based

on the number of units completed) or, in the event, there is no Schedule of Values, as provided elsewhere in the Contract.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract

a. 90 percent of Work completed (with the balance being retainage).

B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100 percent of the Work completed.

6.3 *Final Payment*

A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price as recommended by Engineer.

ARTICLE 7 – INTEREST

7.1 All amounts not paid when due shall bear interest at the rate of 3 percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

8.1 In order to induce Owner to enter into this Contract, Contractor makes the following representations:

A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.

B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.

- F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 – CONTRACT DOCUMENTS

9.1 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement
 - 2. Drawings
 - 3. Addenda(s)
- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.1 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.2 Assignment of Contract

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.3 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.4 *Severability*

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.5 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

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IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement.

This Agreement will be effective on _____ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

By: _____

By: _____

Title: _____

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

Attest: _____

Title: _____

Title: _____

Address for giving notices:

Address for giving notices:

License No.: _____

(where applicable)

OPINION OF PROBABLE CONSTRUCTION QUANTITIES

SALIDA SCOUT WAVE MAINTENANCE IMPROVEMENTS 2024

Bid Item No.	Item	Description	Quantity	Unit	Unit Price	Cost
1	MOBILIZATION	Equipment access and staging.	1	LS	\$ 1,000	\$1,000
2	TREE REMOVAL	Remove and haul off approx 20 trees. Trees are on both banks of the river.	1	LS	\$ 4,800	\$4,800
3	EARTHWORK (EXCAVATION)	Regrade the river left bank. Regrade river right trail and side-slope. Excavated material to be hauled-off or responsibly deposited on site.	900	CY	\$ 15.10	\$13,590
4	WATER CONTROL AND DEWATERING	Cofferdams. Water diversion around various work sites. Pumping. Care of water.	1	LS	\$ 18,450	\$18,450
5	REINFORCED CONCRETE WALLS	Formed and reinforced wall tied into existing wall adjacent to wave structure. Dowel rebar into existing.	14	CY	\$ 1,059	\$14,826
6	IMPORTED 3-4' BOULDERS, SET AND GROUT	Grouted wing boulders set on top of existing grouted rock.	180	CY	\$ 243	\$43,740
7	RESET EXISTING FISH PASSAGE/WING BOULDERS	Reset existing ungrouted boulders in the river left wing to new elevations and positions.	75	CY	\$ 22.00	\$1,650
8	IMPORTED 3-4' BOULDERS, SET (UNGROUTED)	UngROUTED boulders set at the upstream boat ramp to enhance the existing current deflector.	10	CY	\$ 180	\$1,800
9	IMPORTED 3-4' BOULDERS, SET (UNGROUTED)	UngROUTED terraced boulders set at the toe of the river left bank. Bottom boulder set deep. Assume suitable subgrade.	218	CY	\$ 180.00	\$39,240
10	RESET EXISTING BOULDERS AND GROUT	Reset existing ungrouted trail-side instream boulders to new elevations and positions. Grout. Assume suitable subgrade.	105	CY	\$ 94.00	\$9,870
11	RESET EXISTING BOULDERS (UNGROUTED)	Reset existing ungrouted uphill trail-side boulders to new elevations and positions. UngROUTED. Assume suitable subgrade.	110	CY	\$ 22.00	\$2,420
12	CONCRETE DEMOLITION AND REMOVAL	Demo existing riverside concrete trail. Dispose of concrete material off-site.	20	CY	\$ 102.50	\$2,088

13	REINFORCED CONCRETE TRAIL	6" thick reinforced concrete riverside trail. Width varies. Pour directly on existing large cobble.	120	SY	\$ 110.00	\$13,200
14	IMPORTED 3-4' BOULDERS, SET (UNGROUTED)	UngROUTED upland boulder terracing uphill of the new river right trail.	118	CY	\$ 180.00	\$21,240
15	DREDGING AND RIVERBED RE-GRADING	Dredge and remove riverbed material in the area shown on the plans as directed by the engineer. Re-grade riverbed after dredging.	1	LS	\$ 5,000.00	\$5,000
16	MODIFY GRADE CONTROL	Install large material as directed by engineer to adjust the tailwater control.	1	LS	\$ 2,000.00	\$2,000
17	MISCELLANEOUS EQUIPMENT HOURS		20	HR	\$ 250.00	\$5,000

GRAND TOTAL	\$199,914
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Notes:

1. This estimate assumes the City of Salida will complete the revegetation and tree planting tasks.
2. Engineer construction oversight will be required and is not included in this cost estimate.

CITY OF SALIDA COLORADO

ARKANSAS RIVER WW PARK MAINTENANCE

NOVEMBER 10, 2023

PROPOSED MAINTENANCE DATES: JANUARY-FEBRUARY 2024



COLORADO ONE-CALL IS THE UNDERGROUND UTILITY NOTIFICATION CENTER FOR THE STATE OF COLORADO. THROUGH THIS FACILITY, CONTRACTORS CAN NOTIFY OPERATORS OF UNDERGROUND FACILITIES OF PROPOSED EXCAVATIONS TO REQUEST THAT THE UNDERGROUND FACILITIES BE MARKED BEFORE YOU DIG. CONTRACTORS WHO ENGAGES IN ANY TYPE OF EXCAVATION ARE REQUIRED TO CONTACT COLORADO ONE-CALL AND PROVIDE ADVANCED NOTICE.

CONTRACTOR MUST CALL THE 811 HOTLINE OR 800-922-1987 AT LEAST TWO WORKING DAYS PRIOR TO BEGINNING EXCAVATION. THE HOTLINE OPERATOR WILL NOTIFY LOCAL UTILITIES OF THE DIG LOCATION, AND UTILITY REPRESENTATIVES WILL MARK UNDERGROUND UTILITIES WITH PAINT OR FLAGS. PRIVATE PROPERTY UTILITY LINES WILL NOT BE LOCATED BY THE REPRESENTATIVE. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES FROM DAMAGE.

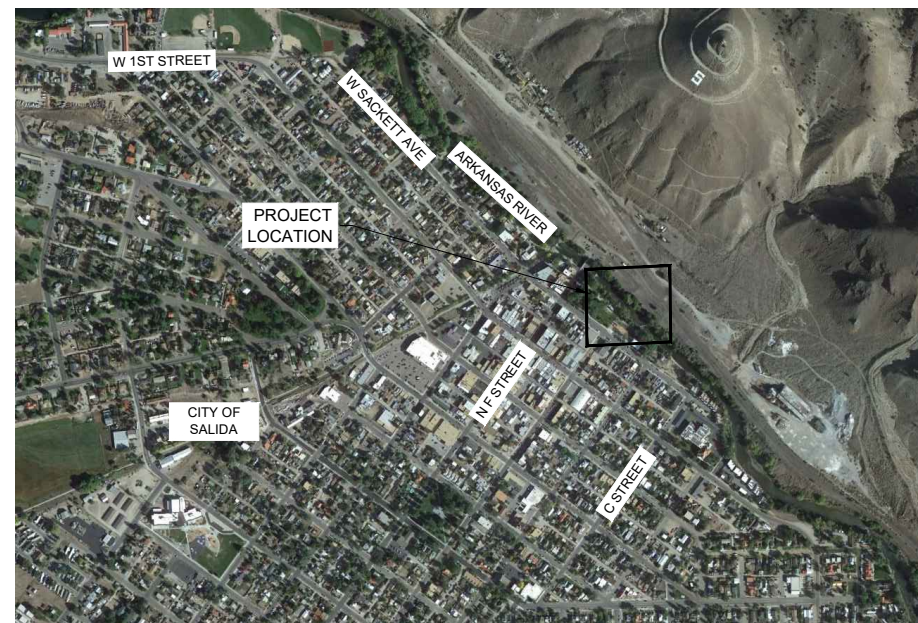
PROJECT:

THE SCOPE OF WORK FOR THIS PROJECT INCLUDES BUT IS NOT LIMITED TO THE REMOVAL AND REPLACEMENT OF LARGE GROUTED BOULDERS, CONCRETE, AND NATIVE COBBLE ARMORING AT, ADJACENT TO, AND APPURTENANT TO AN EXISTING RIVER STRUCTURE. THIS RIVER STRUCTURE IS A POPULAR TAKE-OUT AND DESTINATION FOR RIVER RECREATIONALISTS IN THE CITY OF SALIDA AND IS SCHEDULED FOR REPAIR/MAINTENANCE/MODIFICATION/IMPROVEMENT. CHANNEL GRADING, BANK STABILIZATION AND GREENWAY TRAIL MAINTENANCE/MODIFICATION IS ALSO PROPOSED AS PART OF THIS STRUCTURE MAINTENANCE PROJECT. THE EXISTING STRUCTURE WILL BE REPAIRED AND MODIFIED AT THE SAME LOCATION AS EXISTING WITH THE SAME MATERIALS.

PROJECT LOCATION:

LATITUDE: 38°32'11.7"N
LONGITUDE: 105°59'20.0"W

CHAFFEE COUNTY



VICINITY MAP



SCOUT WAVE SITE PLAN



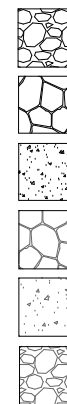
SHEET INDEX:

- 01 COVER SHEET
- 02 EXISTING CONDITIONS
- 03 STAGING, ACCESS, WATER CONTROL
- 04 PROPOSED STRUCTURE MAINTENANCE
- 05 STRUCTURE PLAN VIEW
- 06 STRUCTURE PROFILES
- 07 STRUCTURE CROSS SECTIONS
- 08 STRUCTURE PROFILES
- 09 BANK TRAIL DETAILS
- 10 WATER CONTROL TYPICAL
- 11 TYPICAL BMPs

PROJECT OWNER:

CITY OF SALIDA COLORADO
448 E. FIRST STREET, SUITE 112
SALIDA, COLORADO 81201

LEGEND:



- RIPRAP
- GROUTED BOULDER STRUCTURE
- CONCRETE STRUCTURES
- EXISTING GROUTED BOULDER STRUCTURES
- EXISTING CONCRETE STRUCTURES
- EXISTING 18" SCOUR PROTECTION AND/OR NATIVE ARMOR MATERIALS

ABBREVIATIONS:

- AVG AVERAGE
- DTL DETAIL
- E EAST
- ELEV ELEVATION
- FT FEET
- IN INCHES
- MAX MAXIMUM
- MIN MINIMUM
- N NORTH
- NTS NOT TO SCALE
- OC ON CENTER
- OHWM ORDINARY HIGH WATER MARK
- SHT SHEET
- STA STATION
- STD STANDARD
- TYP TYPICAL

**PERMIT SET FOR REVIEW
NOT FOR CONSTRUCTION**

RECREATION ENGINEERING AND PLANNING
485 ARAPAHOE AVE.
BOULDER, CO 80302
WWW.BOATERPARKS.COM

DRAFT

PROJECT OWNER:
CITY OF SALIDA
448 E. FIRST STREET
SUITE 112
SALIDA, CO 81201

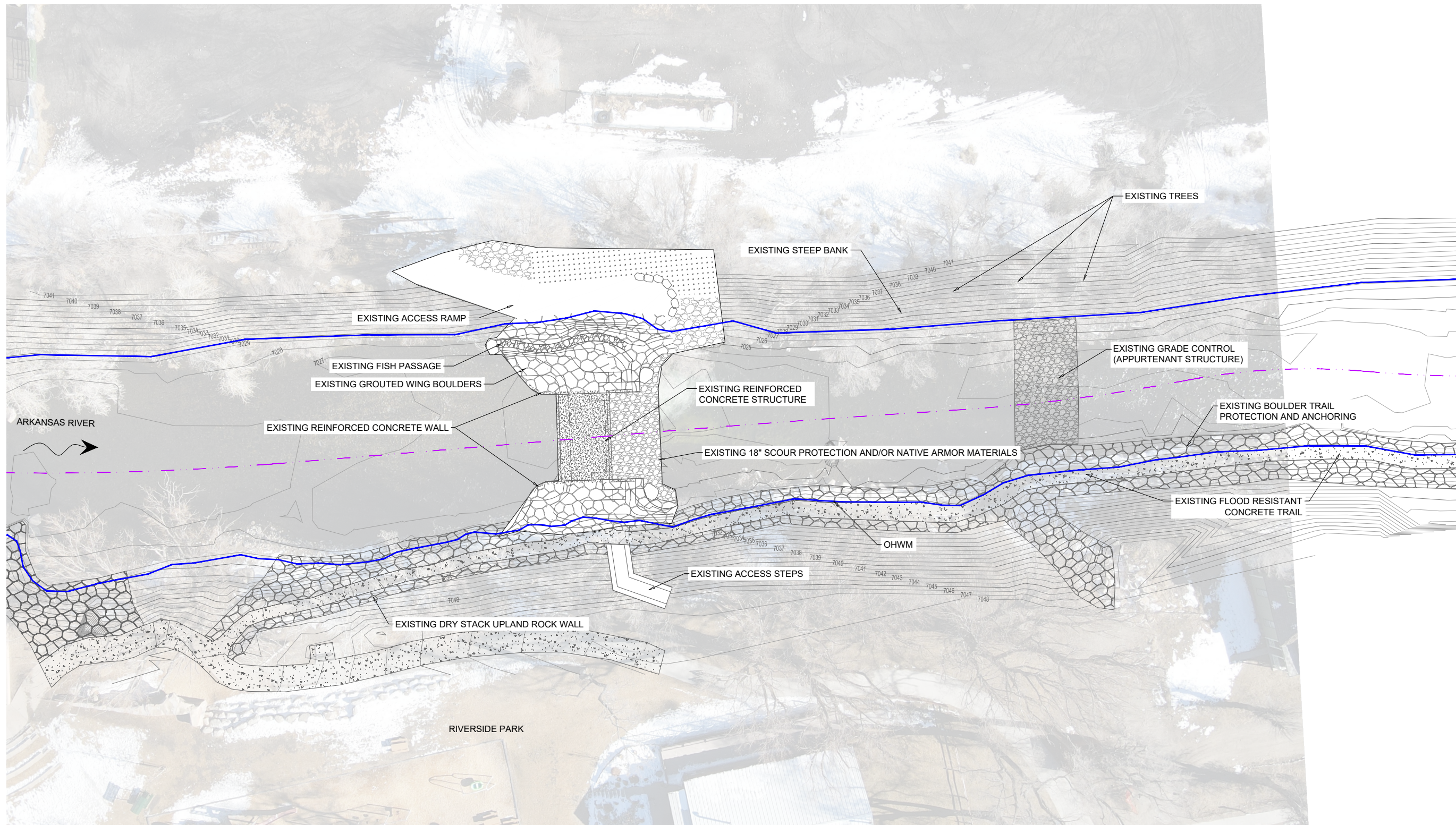
ARKANSAS RIVER WW PARK MAINTENANCE
SALIDA, COLORADO
ARKANSAS RIVER
90% DESIGN SET
COVER & TOC

REVISIONS:

NO.	DATE

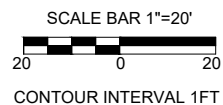
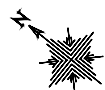
DESIGNED: SL DRAFTED: RG
CHECKED: ML
PLOT DATE: 11/10/2023

DRAWING NO.
1
SHEET 1 OF 12





EXISTING SCOUT WAVE PLAN VIEW

- - - - - WATERWAY CENTERLINE (THALWEG)
- ORDINARY HIGH WATER MARK (OHWM)



HATCH LEGEND

-  EXISTING GROUDED BOULDER STRUCTURES
-  EXISTING CONCRETE STRUCTURES
- EXISTING 18" SCOUR PROTECTION AND/OR NATIVE ARMOR MATERIALS

NOTE:

NO PARCEL BOUNDARIES ARE SHOWN ON ANY SHEETS FOR CLARITY. ALL PROPOSED WORK WILL TAKE PLACE ON CITY OF SALIDA PROPERTY OR TRAIL & MAINTENANCE EASEMENT AGREEMENTS WITH THE CITY.

DRAFT

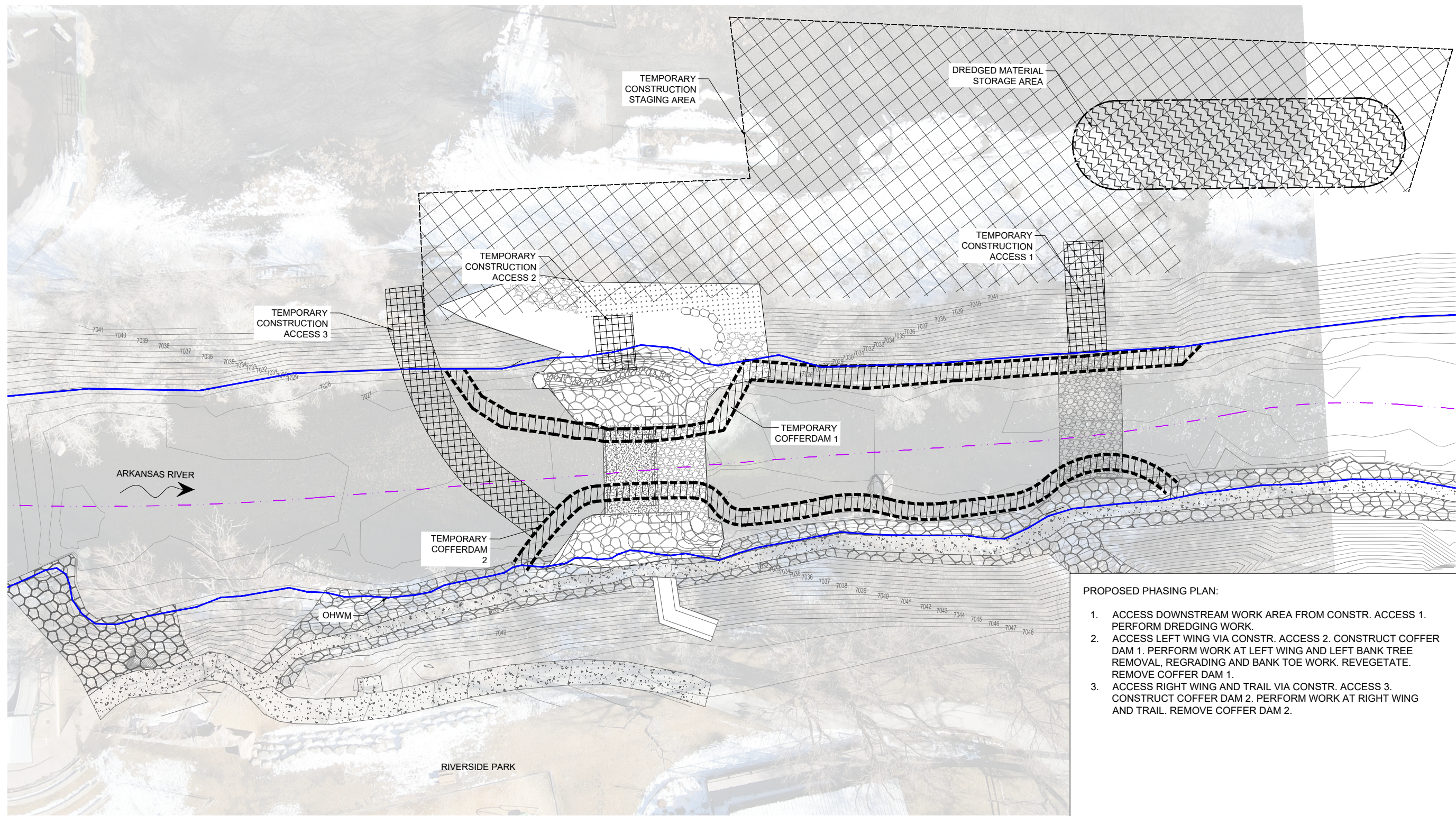
PROJECT OWNER:
CITY OF SALIDA
448 E. FIRST STREET
SUITE 112
SALIDA, CO 81201

ARKANSAS RIVER WW PARK MAINTENANCE
ARKANSAS RIVER SALIDA, COLORADO
90% DESIGN SET
EXISTING SCOUT WAVE STRUCTURE

REVISIONS:	
NO.	DATE

DESIGNED: SL	DRAFTED: RG
CHECKED: ML	
PLOT DATE: 11/10/2023	

DRAWING NO.
2
SHEET 2 OF 12



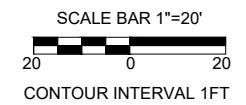
- PROPOSED PHASING PLAN:**
1. ACCESS DOWNSTREAM WORK AREA FROM CONSTR. ACCESS 1. PERFORM DREDGING WORK.
 2. ACCESS LEFT WING VIA CONSTR. ACCESS 2. CONSTRUCT COFFER DAM 1. PERFORM WORK AT LEFT WING AND LEFT BANK TREE REMOVAL, REGRADING AND BANK TOE WORK. REVEGETATE. REMOVE COFFER DAM 1.
 3. ACCESS RIGHT WING AND TRAIL VIA CONSTR. ACCESS 3. CONSTRUCT COFFER DAM 2. PERFORM WORK AT RIGHT WING AND TRAIL. REMOVE COFFER DAM 2.

NOTE:
 THE WATER CONTROL AND CONSTRUCTION PHASING PLAN SHOWN HERE IS PRELIMINARY AND INTENDED TO DEMONSTRATE ONE POSSIBLE PHASING APPROACH THAT IS FEASIBLE. FINAL WATER CONTROL AND PHASING PLAN TO BE DEVELOPED BY SELECTED CONSTRUCTION CONTRACTOR, AND SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL.

LEGEND

- CONSTRUCTION STAGING
- ORDINARY HIGH WATER MARK (OHWM)
- TEMPORARY COFFERDAM
- [Hatched Box] TEMPORARY CONSTRUCTION STAGING
- [Cross-hatched Box] TEMPORARY CONSTRUCTION ACCESS
- [Wavy-hatched Box] DREDGED MATERIAL STORAGE AREA
- [Diagonal-hatched Box] TEMPORARY COFFER DAM

STAGING, ACCESS, WATER CONTROL AND MATERIAL STORAGE



DRAFT

PROJECT OWNER:
 CITY OF SALIDA
 448 E. FIRST STREET
 SUITE 112
 SALIDA, CO 81201

ARKANSAS RIVER WW PARK MAINTENANCE
 ARKANSAS RIVER SALIDA, COLORADO
 90% DESIGN SET
 STAGING ACCESS WATER CONTROL

REVISIONS:

NO.	DATE

DESIGNED: SL DRAFTED: RG
 CHECKED: ML
 PLOT DATE: 11/10/2023

DRAWING NO.
3
 SHEET 3 OF 12



RECREATION ENGINEERING
AND PLANNING
485 ARAPAHOE AVE.
BOULDER, CO 80302
WWW.BOATERPARKS.COM

DRAFT

PROJECT OWNER:

CITY OF SALIDA
448 E. FIRST STREET
SUITE 112
SALIDA, CO 81201

ARKANSAS RIVER WW PARK MAINTENANCE

ARKANSAS RIVER SALIDA, COLORADO

90% DESIGN SET
PLAN VIEW STRUCTURE MODIFICATIONS

REVISIONS:

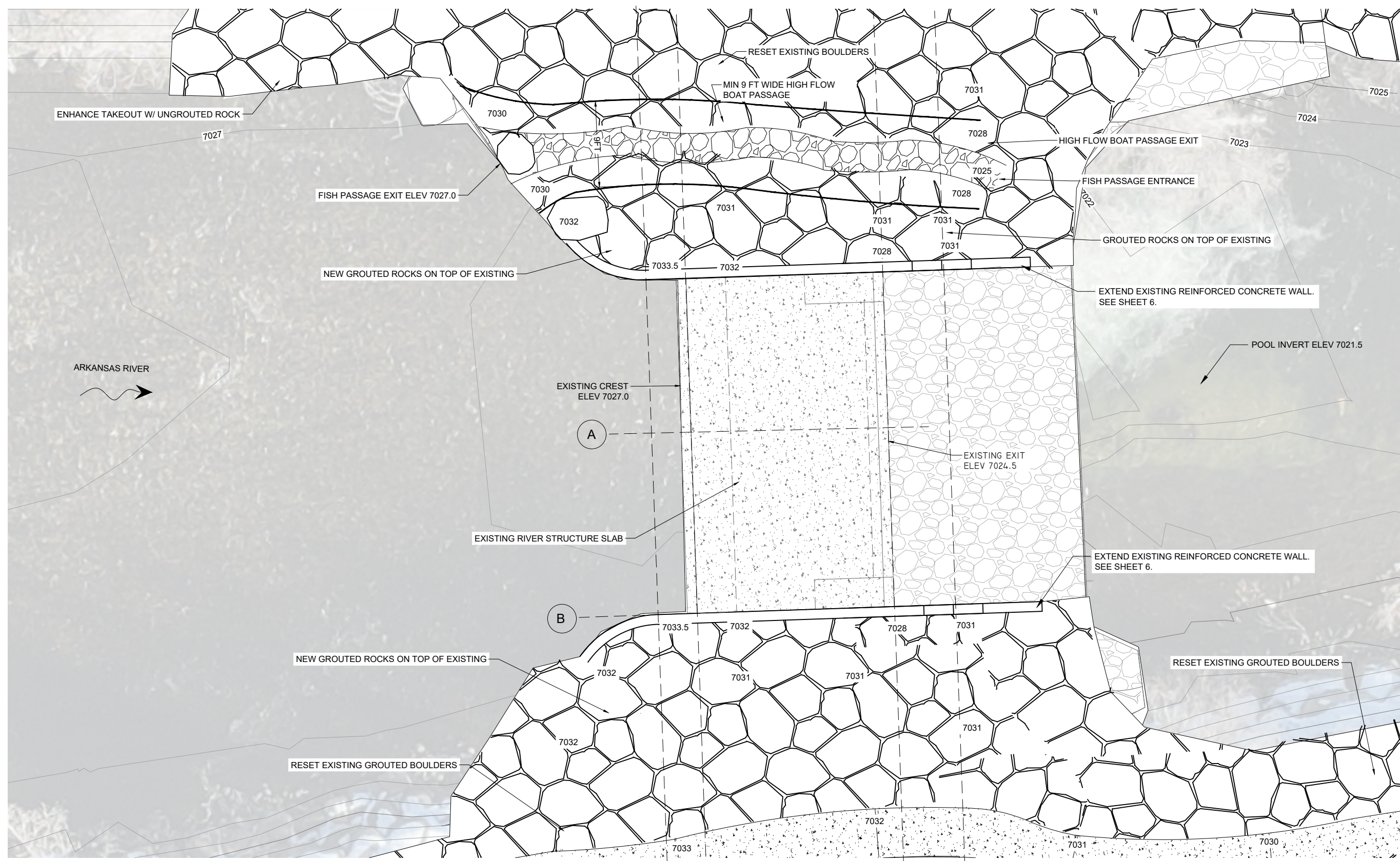
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PLOT DATE: 11/10/2023

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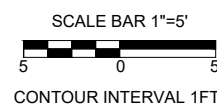
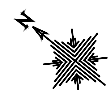
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SHEET 5 OF 12









SCOUT WAVE STRUCTURE MAINTENANCE MODIFICATIONS PLAN VIEW

NOTE:
CONCRETE WALL AND GROUTED ROCK WINGS ON BOTH SIDES OF THE DROP STRUCTURE MIRROR ONE ANOTHER WITH THE SAME ELEVATIONS AND GEOMETRY. DIMENSIONS AND GEOMETRY LABELED ON ONE SIDE ONLY FOR CLARITY IN SOME INSTANCES.



HATCH LEGEND

-  GROUTED BOULDER STRUCTURES
-  CONCRETE STRUCTURES
-  RIPRAP
-  EXISTING GROUTED BOULDER STRUCTURES
-  EXISTING CONCRETE STRUCTURES
-  EXISTING 18" SCOUR PROTECTION AND/OR NATIVE ARMOR MATERIALS

DRAFT

PROJECT OWNER:

CITY OF SALIDA
448 E FIRST STREET
SUITE 112
SALIDA, CO 81201

ARKANSAS RIVER WW PARK MAINTENANCE

ARKANSAS RIVER SALIDA, COLORADO

90% DESIGN SET

STRUCTURE PROFILE

REVISIONS:

NO.	DATE

DESIGNED: SL DRAFTED: RG

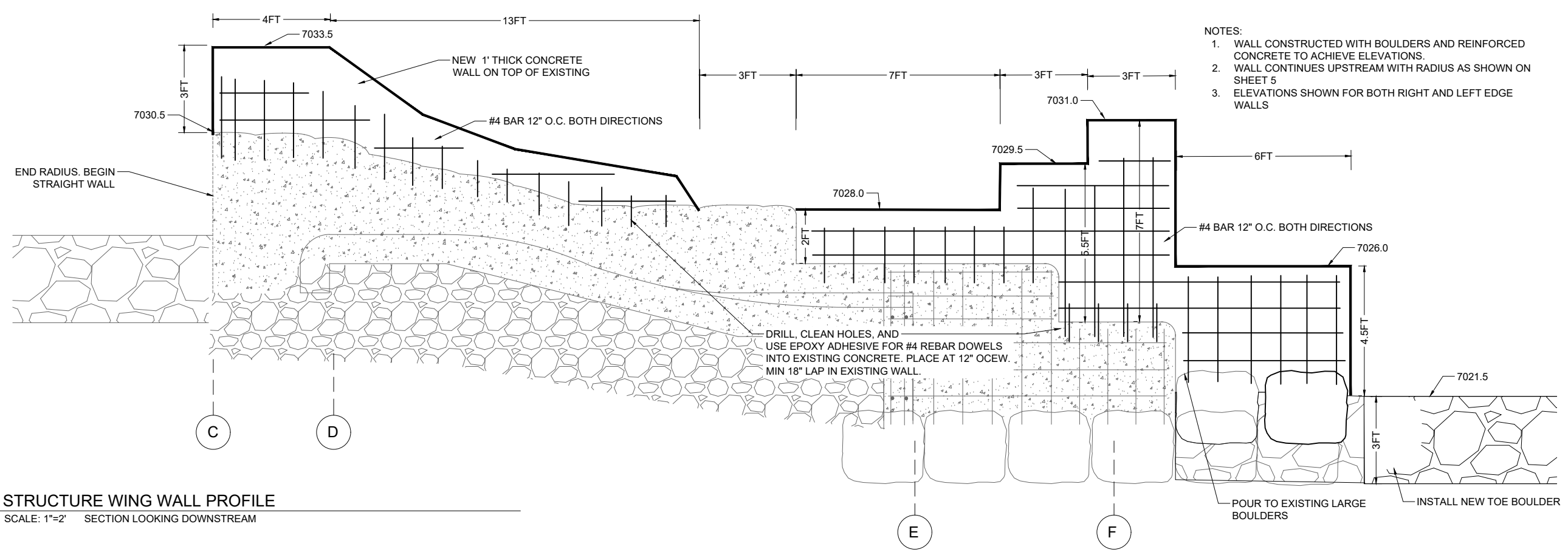
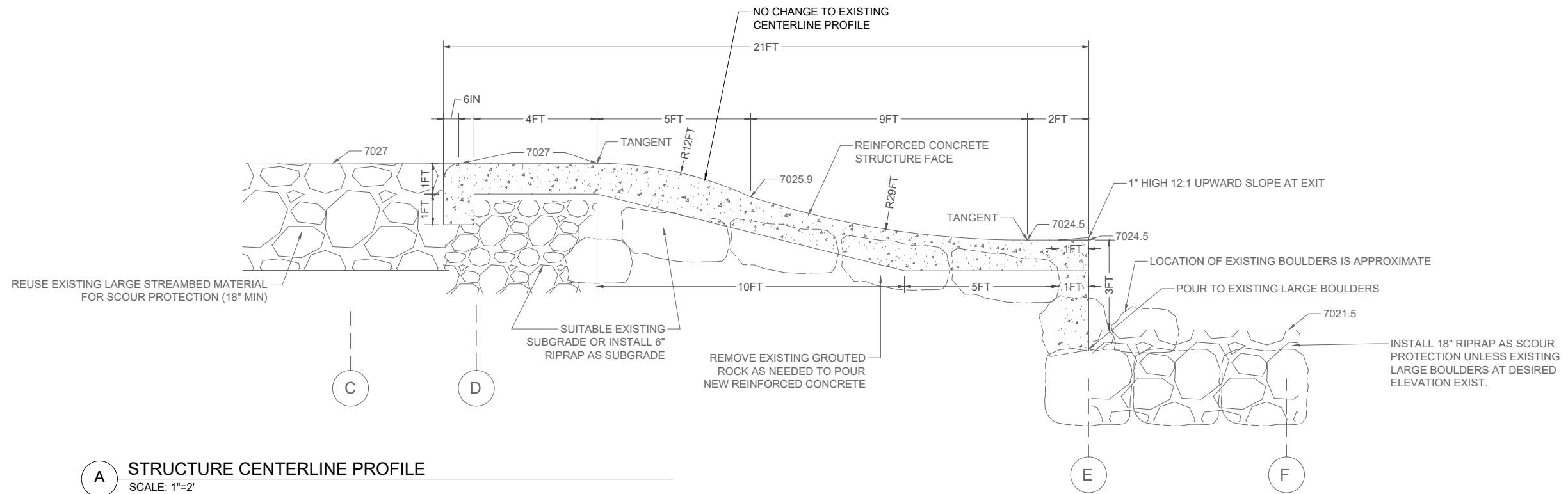
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PLOT DATE: 11/10/2023

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SHEET 6 OF 12



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PROJECT OWNER:
CITY OF SALIDA
448 E FIRST STREET
SUITE 112
SALIDA, CO 81201

ARKANSAS RIVER WW PARK MAINTENANCE
ARKANSAS RIVER SALIDA, COLORADO

90% DESIGN SET

STRUCTURE CROSS SECTIONS

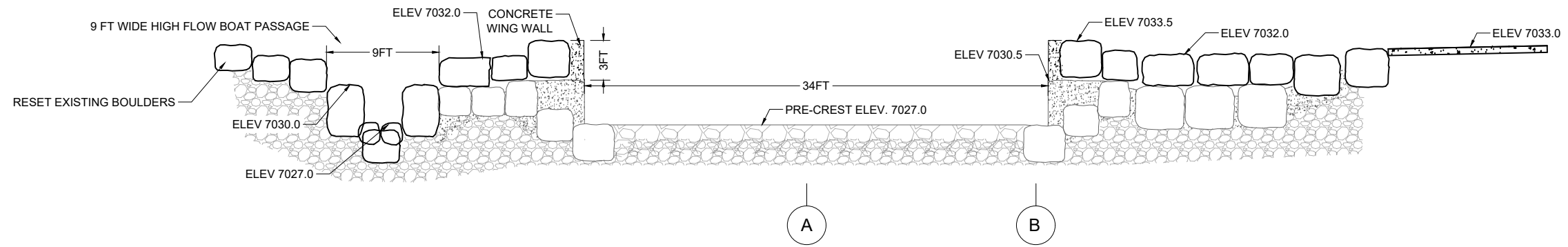
REVISIONS:

NO.	DATE

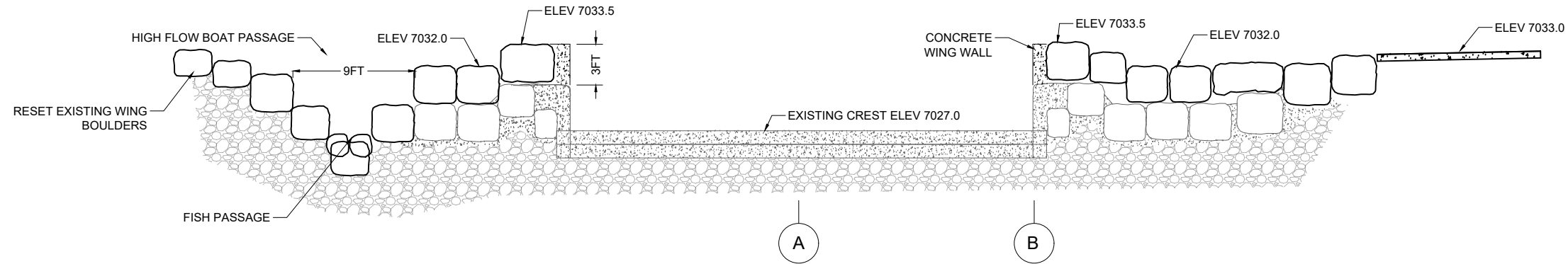
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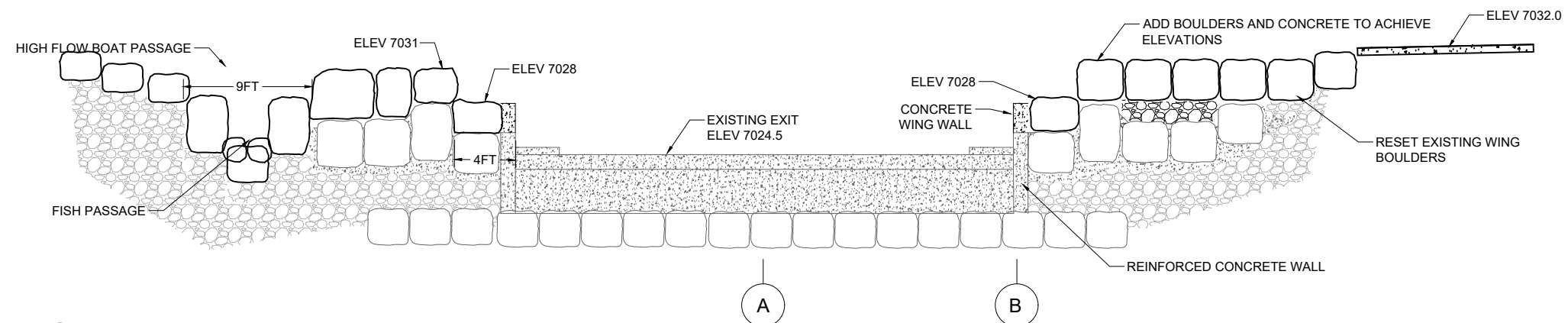
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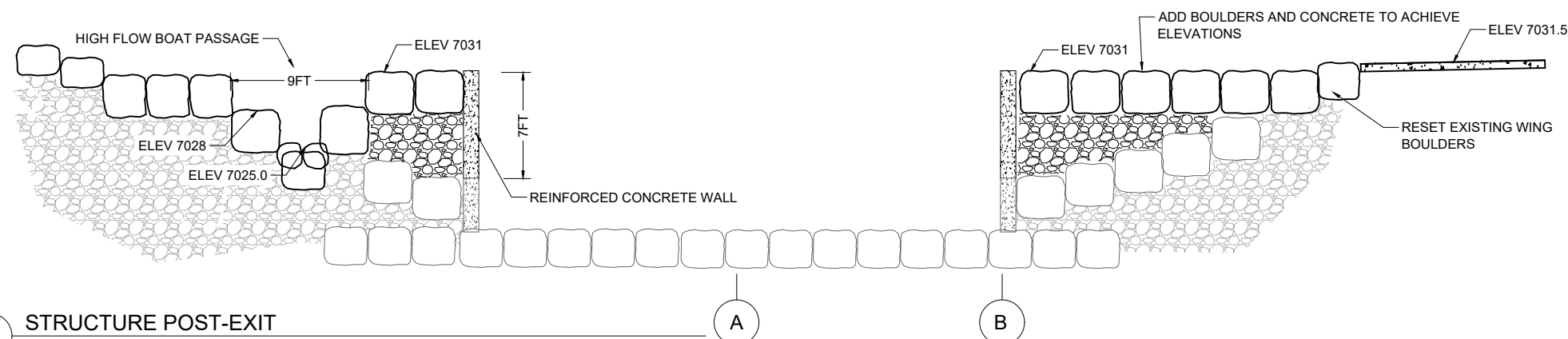
C STRUCTURE PRE-CREST
SCALE: 1"=5'



D STRUCTURE CREST
SCALE: 1"=5' SECTION LOOKING DOWNSTREAM



E STRUCTURE EXIT
SCALE: 1"=5' SECTION LOOKING DOWNSTREAM



F STRUCTURE POST-EXIT
SCALE: 1"=5' SECTION LOOKING DOWNSTREAM

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ARKANSAS RIVER WW PARK MAINTENANCE

ARKANSAS RIVER SALIDA, COLORADO

90% DESIGN SET

STRUCTURE PROFILE WING FISH

REVISIONS:

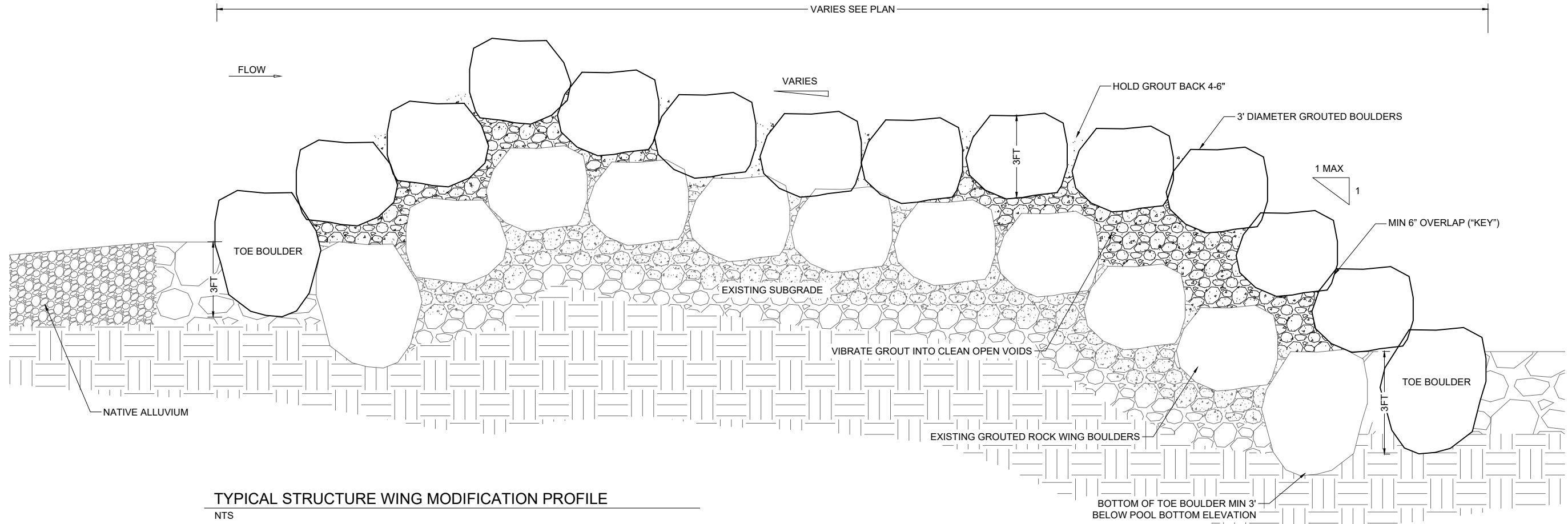
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PLOT DATE:	11/10/2023		

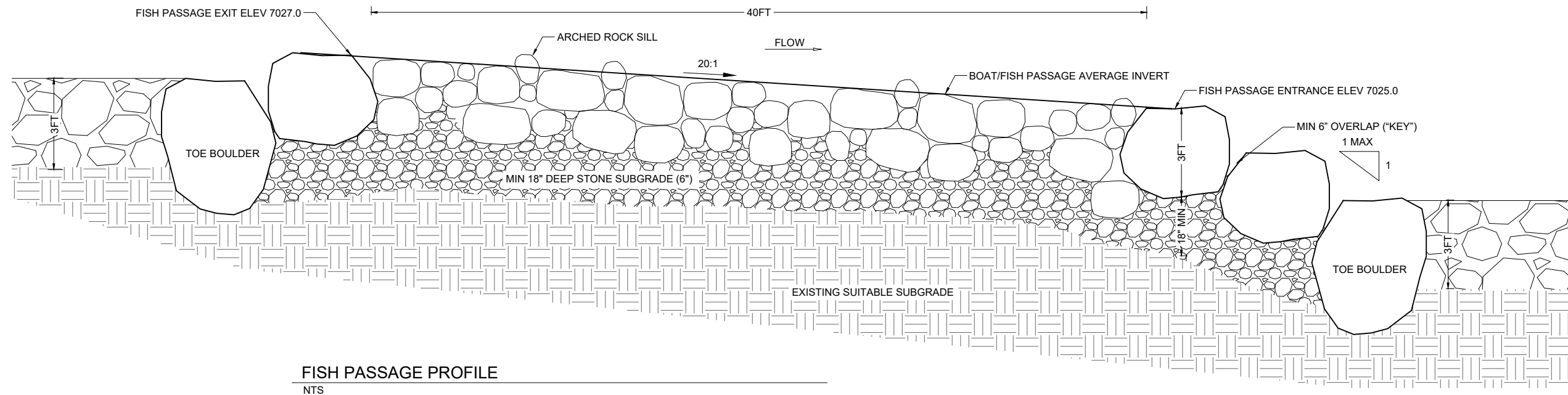
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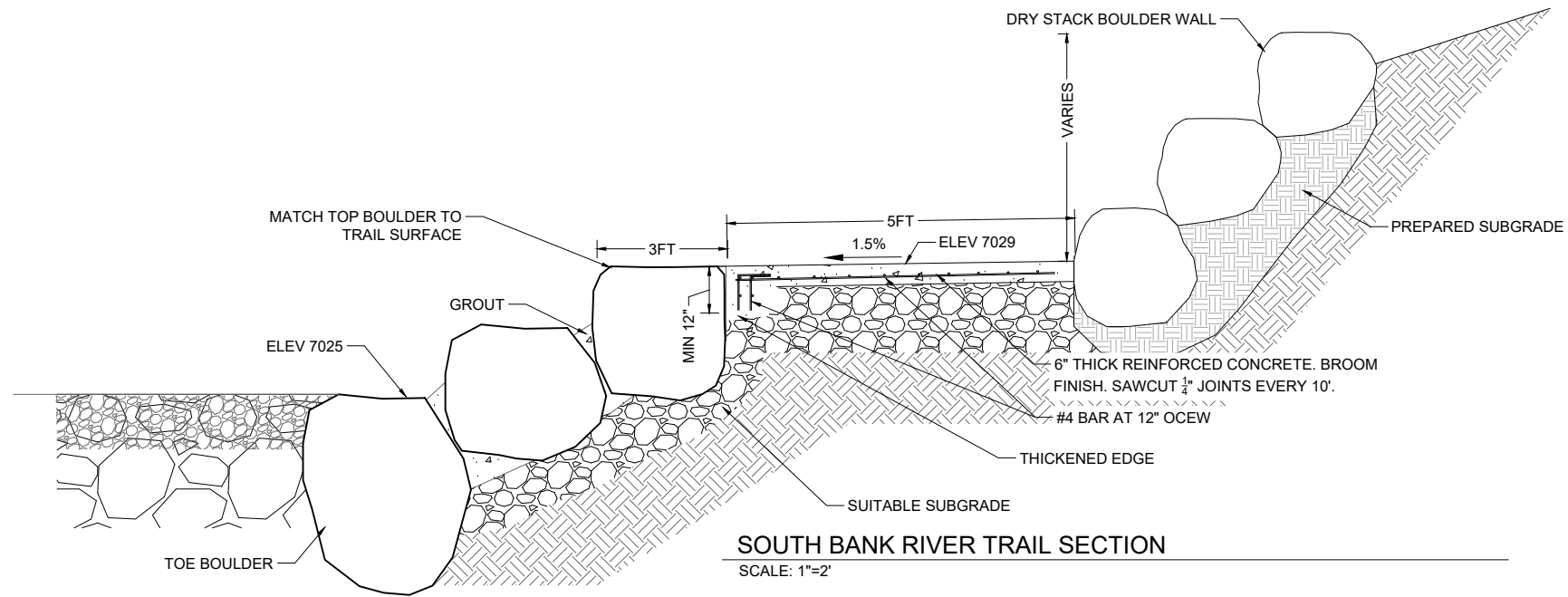
SHEET 8 OF 12



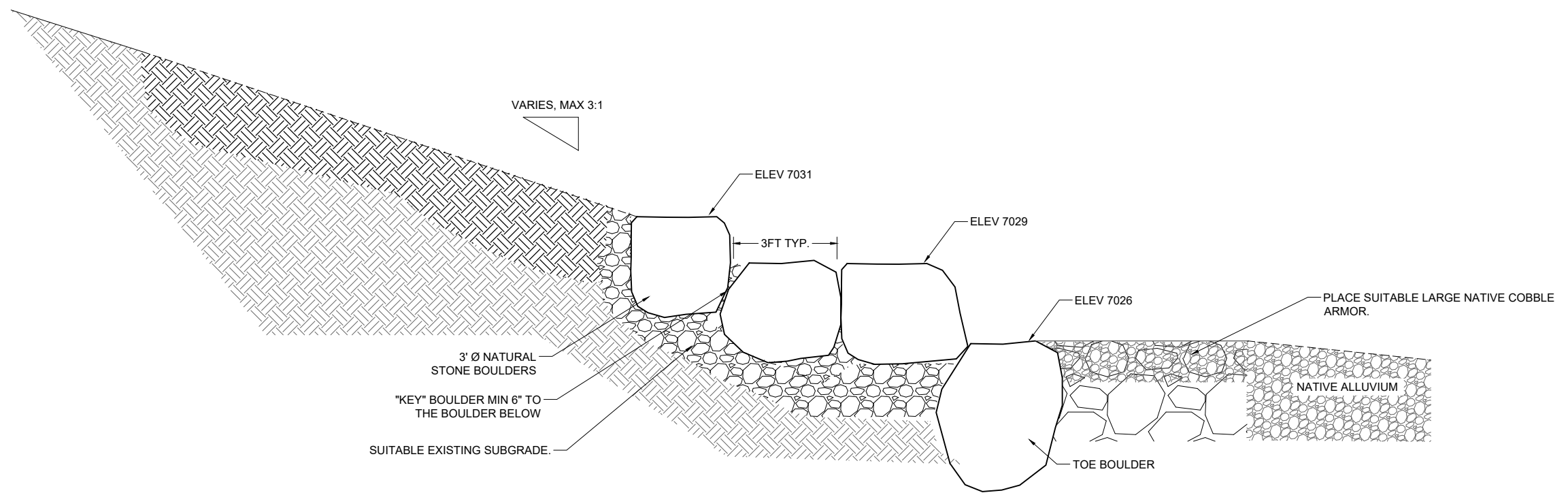
TYPICAL STRUCTURE WING MODIFICATION PROFILE
NTS



FISH PASSAGE PROFILE
NTS



SOUTH BANK RIVER TRAIL SECTION
SCALE: 1"=2'



STONE BANK SECTION
SCALE: 1"=2'



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ARKANSAS RIVER WW PARK MAINTENANCE

ARKANSAS RIVER SALIDA, COLORADO

90% DESIGN SET

BANK TRAIL DETAILS

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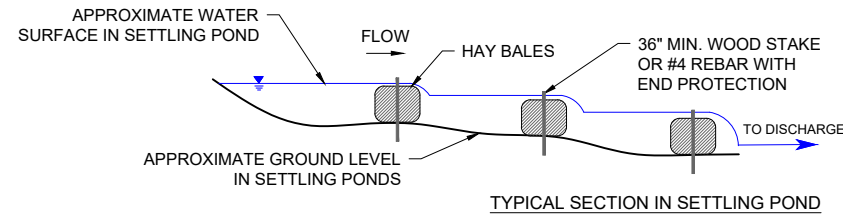
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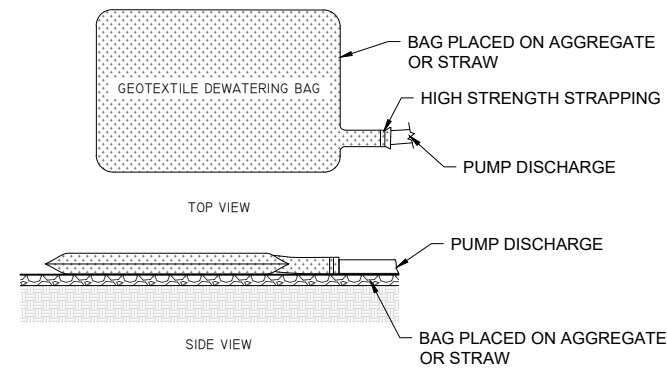
SHEET 9 OF 12

CARE OF PUMPED WATER OPTIONS



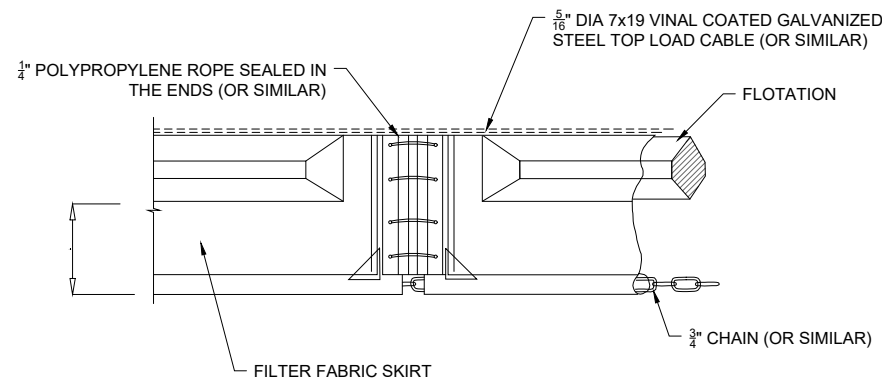
NOTE: SCHEMATIC LAYOUT TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL LAYOUT TO BE DETERMINED BY CONTRACTOR, PER PERMIT CONDITIONS.

SETTLING POND OPTION



NOTE: SCHEMATIC LAYOUT TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL LAYOUT AND BAG SIZING TO BE DETERMINED BY CONTRACTOR, PER PERMIT CONDITIONS.

GEOTEXTILE BAG OPTION

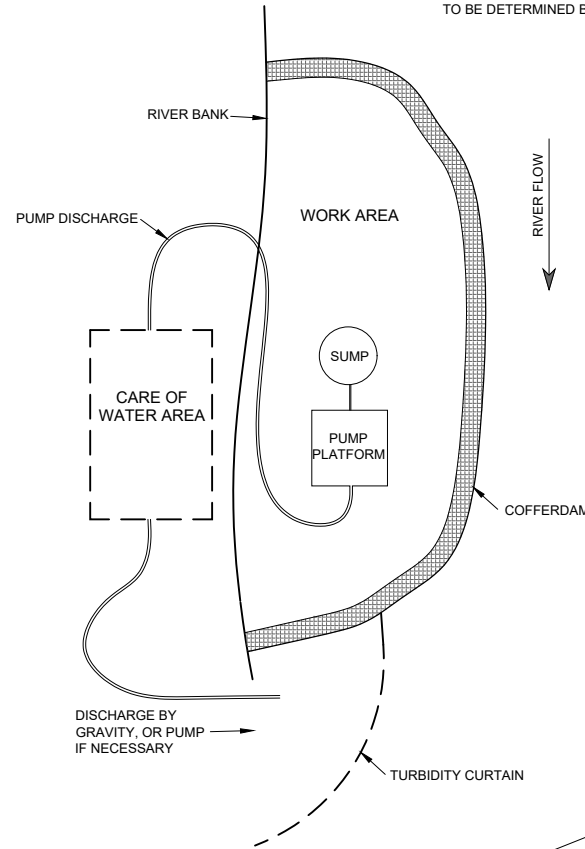


NOTE: SCHEMATIC DETAIL TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL DETAIL AND SIZING TO BE DETERMINED BY CONTRACTOR, PER PERMIT CONDITIONS.

TURBIDITY CURTAIN OPTION

TYPICAL LAYOUT DEWATERING AREA

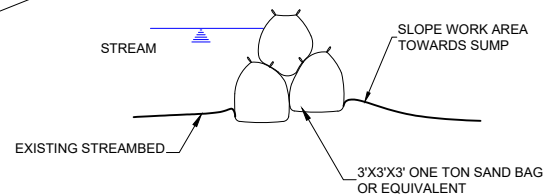
NOTE: SCHEMATIC LAYOUT TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL LAYOUT TO BE DETERMINED BY QUALIFIED CONTRACTOR, PER PERMIT CONDITIONS.



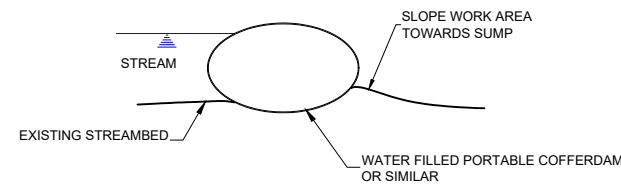
DEWATERING NOTES:

- SUMPS CAN BE MADE FROM DIGGING A HOLE AND INSERTING A PERFORATED PIPE AND BACKFILLING WITH CLEAN DRAIN ROCK OR OTHER APPROVED METHOD.
- CARE OF PUMPED WATER SHALL BE BASED UPON SITE SPECIFICS AND QUALITY OF WATER. METHODS OF TURBIDITY CONTROL SHALL BE DETERMINED BY THE CONTRACTOR. SCHEMATIC ALTERNATIVES ARE IDENTIFIED BELOW. THE CONTRACTOR SHALL REDUCE THE TURBIDITY OF DISCHARGED WATER TO THE MAXIMUM EXTENT PRACTICABLE.
- UPON COMPLETION, GEOTEXTILE BAGS, VISQUENE, SETTLED FINES, AND ANY OTHER CARE OF WATER MATERIALS SHALL BE REMOVED AND DISPOSED OF OFFSITE BY THE CONTRACTOR.
- PUMP STATION SHALL BE ELEVATED. FUEL CONTAINMENT BMP'S SHALL BE ONSITE AT ALL TIMES.
- PUMP REMAINING WATER IN CONSTRUCTION AREA AS NECESSARY TO MANAGE GROUNDWATER AND LEAKAGE. ALL DISCHARGED WATER MUST BE ROUTED TO THE CARE OF WATER AREA AS NECESSARY PER PERMIT CONDITIONS.
- CONTRACTOR IS RESPONSIBLE FOR OWN SECURITY DURING CONSTRUCTION. ANY VANDALISM WILL BE CORRECTED AT CONTRACTOR'S OWN EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CARE OF ALL WATER DURING CONSTRUCTION INCLUDING MAINTENANCE OF ALL DITCHES, COFFERDAMS, LEVEES, DIVERSIONS AND PUMPS TO KEEP THE WORK AREA FREE FROM WATER.
- DEWATERING PLAN DETAILS SHOWN HERE ARE ILLUSTRATIVE. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR IS TO COMPLETE AND SUBMIT A DEWATERING PLAN APPLICABLE TO THIS PROJECT.
- CONTRACTOR IS RESPONSIBLE FOR LAYOUT AND DESIGN OF COFFERDAM. CONTRACTOR SHALL SUBMIT A PLAN FOR COFFERDAM INSTALLATION, RIVER DIVERSION AND EROSION CONTROL INCLUDING LOCATION, SIZE, HEIGHT, SEQUENCING AND TIMING OF EACH COMPONENT. COFFERDAMS OR FILLS FOR ACCESS AND PIPE EXTENSIONS AND MATTING AT END OF BYPASS PIPE EXTENSIONS AND CARE OF PUMPED WATER SHALL BE PLACED AND REMOVED IN A MANNER THAT PREVENTS EROSION OR RELEASE OF SEDIMENT.
- ALL COFFER DAM PLANS AND PIPE EXTENSIONS AND MATTING AT END OF BYPASS PIPE EXTENSIONS AND CARE OF PUMPED WATER SHALL BE PROVIDED DIRECTLY TO REP AND WILL BE REVIEWED BY THE ENGINEER AND APPROPRIATE PERMITTING AGENCIES.
- ALTERNATE COFFER DAM METHODS PRESENTED TO DESCRIBE FUNCTIONALITY ONLY. ACTUAL METHOD TO BE DETERMINED BY QUALIFIED CONTRACTOR, PER PERMIT CONDITIONS, IN ORDER TO ACHIEVE DRY WORK AREA.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL DEWATERING AND COFFERDAMS DURING CONSTRUCTION. REPAIRS AND REPLACEMENTS DUE TO NATURAL CAUSES ARE AT THE SOLE EXPENSE OF THE CONTRACTOR.
- AFTER COMPLETION OF CONSTRUCTION, COFFERDAMS AND PIPE EXTENSIONS AND MATTING AT END OF BYPASS PIPE EXTENSIONS MUST BE COMPLETELY REMOVED AND RIVER BANK AREAS STABILIZED AND RESTORED.

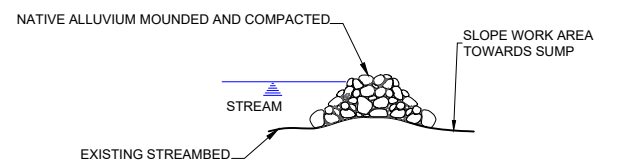
COFFERDAM OPTIONS



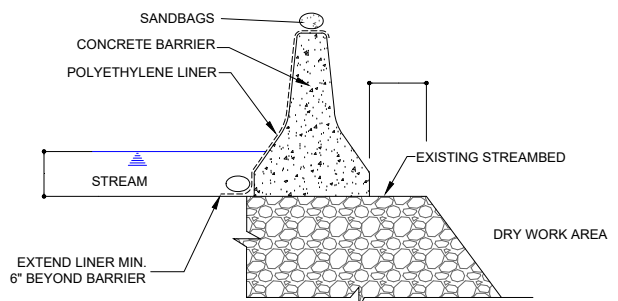
SUPERSACK OPTION



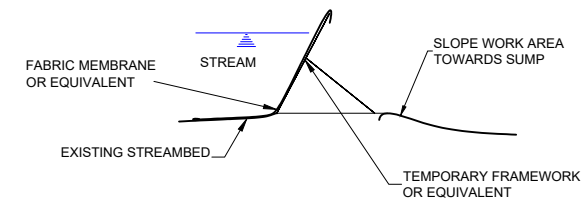
WATER FILLED OPTION



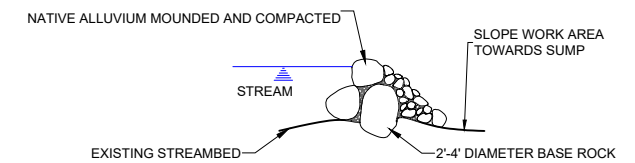
TYPICAL COFFER DAM CROSS SECTION



CONCRETE BARRIER OPTION



"PORTADAM" OPTION



TYPICAL COFFER DAM CROSS SECTION



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ARKANSAS RIVER WW PARK MAINTENANCE

ARKANSAS RIVER

SALIDA, COLORADO
90% DESIGN SET

DEWATERING TYPICAL

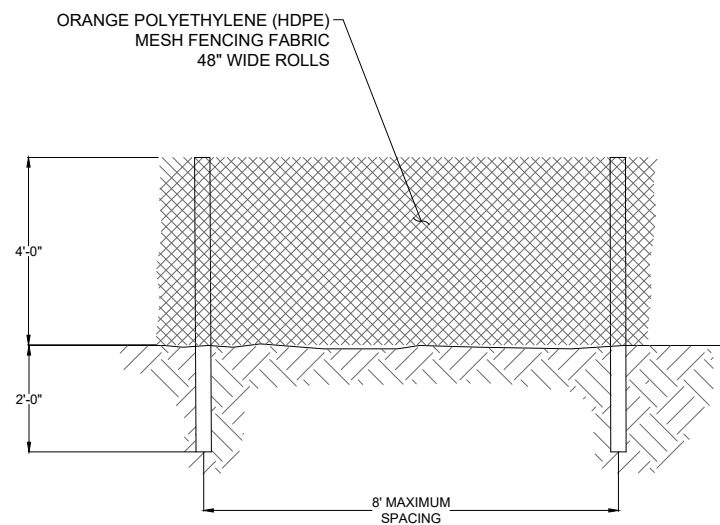
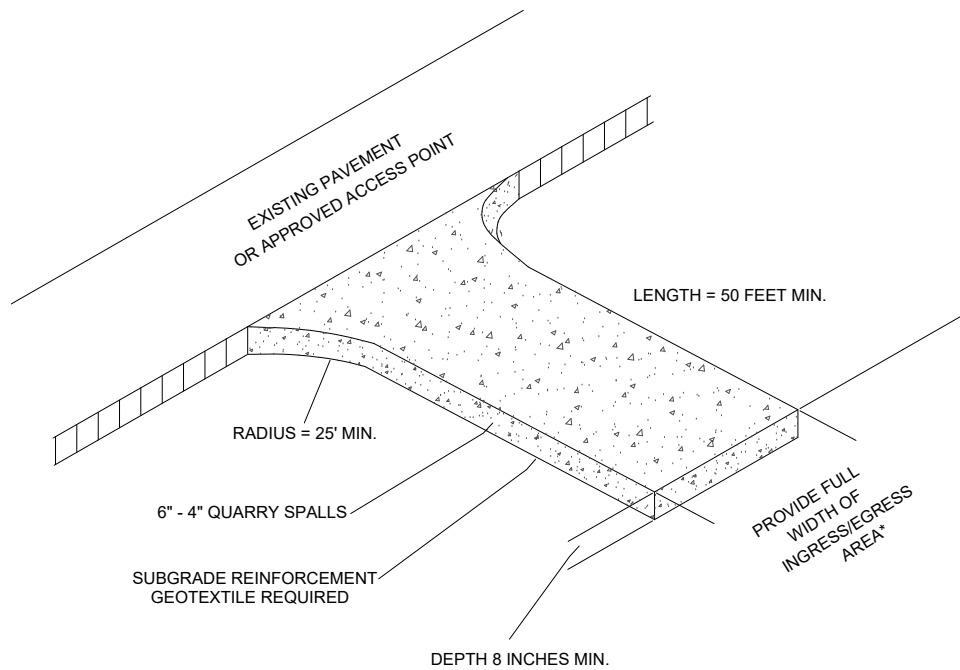
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- NOTES:**
- 2"x 2"x 6" STEEL FENCE POSTS. INSTALL AROUND TREE DRIP LINE WHERE APPLICABLE.
 - FASTEN FABRIC TO FENCE PER MANUFACTURERS RECOMMENDATION.
 - INSURE ALL POST ARE SET FIRM AND STABLE INTO GROUND MIN. 2'-0" DEPTH.

BMP'S PLUS TEMPORARY SEDIMENT AND EROSION CONTROLS SHALL BE MAINTAINED TO BE FUNCTIONAL UNTIL THE SITE HAS REACHED FINAL STABILIZATION

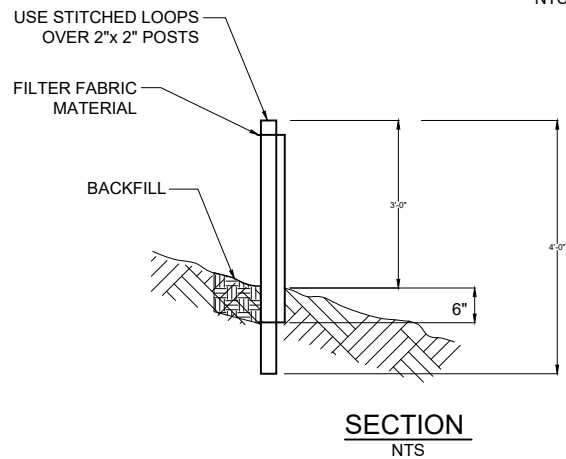
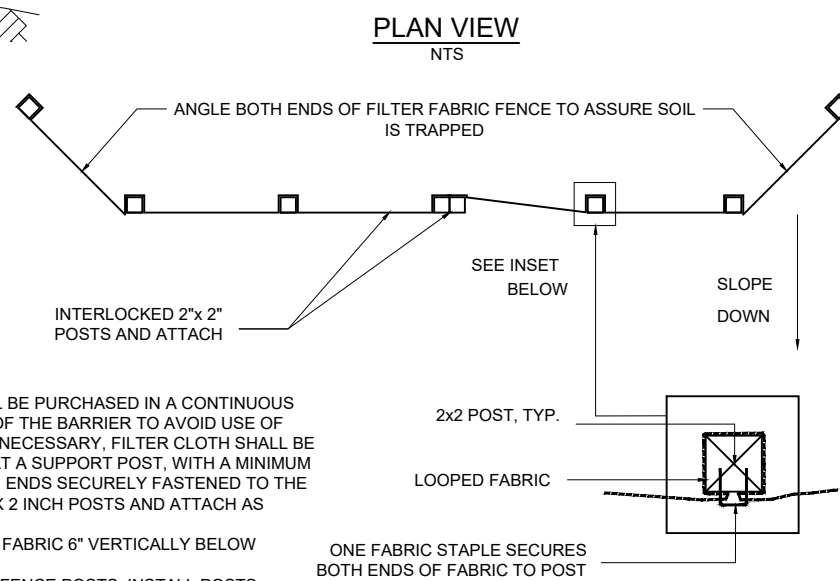
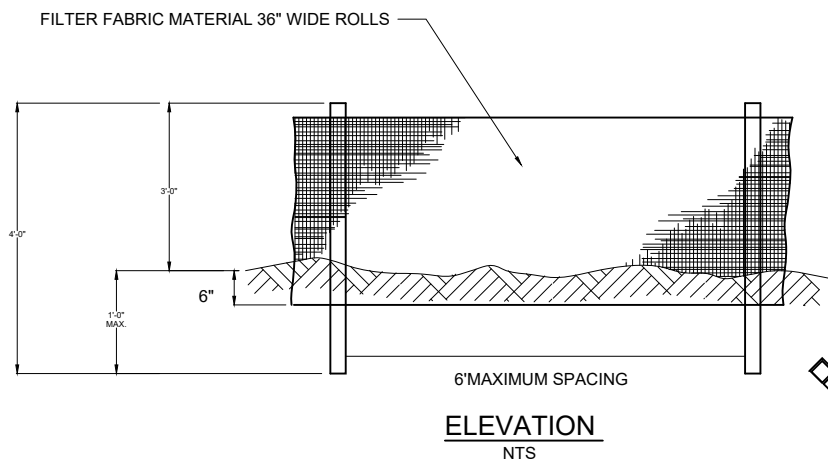
ALL APPROPRIATE SEDIMENT AND POLLUTION CONTROL MEASURES, AND BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE IN PLACE TO MINIMIZE SEDIMENTATION AND RIVERBED IMPACTS PRIOR TO INITIATING IN-RIVER / RIVERBANK WORK

CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR THE DESIGN, IMPLEMENTATION, AND MAINTENANCE OF SEDIMENT AND EROSION CONTROLS IN CONFORMANCE WITH CONSTRUCTION STANDARDS AND THE REQUIREMENTS OF REGULATORY AGENCIES THROUGHOUT THE CONSTRUCTION PERIOD. THE ENGINEER WILL NOT BE ON-SITE TO APPROVE, REVIEW, OR MAINTAIN THE CONTROLS

CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS NECESSARY TO PROVIDE ACCESS TO CONSTRUCTION AREAS FROM ALL EXISTING ROADWAYS AND PATHS TO MINIMIZE GROUND DISTURBANCE AND SEDIMENT TRACKING FROM VEHICLE TIRES. ADJACENT ROADWAYS AND PATHS SHALL BE VISUALLY INSPECTED DAILY TO ENSURE THAT SEDIMENT IS NOT BEING CARRIED OFF-SITE. IF SEDIMENT IS BEING CARRIED OFF-SITE, THE ADJACENT ROADWAYS AND PATHS SHALL BE SWEEPED CLEAN DAILY. THE CONTRACTOR SHALL IMPLEMENT THE NECESSARY SITE EROSION CONTROL MEASURES FOR INHIBITING DUST, WIND, AND AIR SEDIMENT MOVEMENT OFFSITE DURING ALL PHASES OR STAGES OF CONSTRUCTION

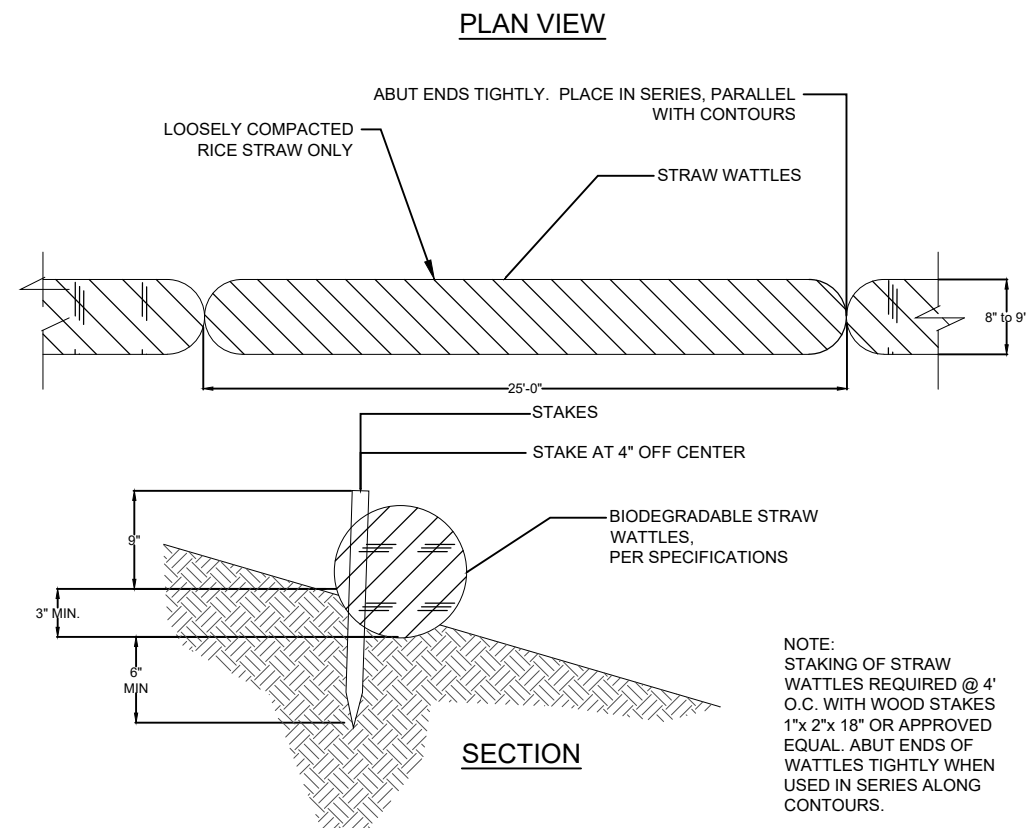
INLET PROTECTION MUST BE INCLUDED AT ALL STORM, SEWER, AND CULVERT LINKS. APPROPRIATE BMP'S INCLUDE ROCK SOCKS, SEDIMENT CONTROL LOGS, OR SIMILAR

CONTRACTOR SHALL NOT STORE EQUIPMENT BELOW THE ORDINARY HIGH-WATER LINE, AND TAKES FULL RESPONSIBILITY FOR ANY MATERIALS VANDALIZED, DAMAGED, BROKEN, OR LOST AS A RESULT OF RIVER EVENTS ALL FUELING OPERATIONS, LUBRICATING, HYDRAULIC TOPPING OFF, FUEL TANK PURGING, AND EQUIPMENT MAINTENANCE/REPAIRS SHALL BE PERFORMED AT AN UPLAND SITE OUTSIDE OF THE BANKS OF ANY SITE WATERWAYS AT A LOCATION TO BE DETERMINED BY THE ENGINEER OR OWNER. THESE ACTIVITIES SHALL TAKE PLACE ON AN APPROVED PAD WITH SPILL CONTROL/ COLLECTION DEVICES IN PLACE



- NOTES:**
- THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST, OR OVERLAP 2 INCH X 2 INCH POSTS AND ATTACH AS SHOWN.
 - BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
 - 2"x 2" FIR, PINE OR STEEL FENCE POSTS. INSTALL POSTS UPHILL OF FILTER FABRIC.
 - STITCHED LOOPS TO BE INSTALLED ON THE UPHILL SIDE OF FABRIC.
 - COMPACT ALL AREAS OF FILTER FABRIC TRENCH.
 - FILTER FABRIC FENCES SHALL BE INSPECTED BY CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

FABRIC ATTACHMENT DETAIL
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ARKANSAS RIVER WW PARK MAINTENANCE

ARKANSAS RIVER SALIDA, COLORADO

90% DESIGN SET
TYPICAL BMP'S

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