SVR3 EWP Stream Restoration  
Project Weekly Construction Notes: 2/12 to 2/16/2018

Date: 2/19/2018  
By: Sharla Lovern – Boulder County  
Location: St. Vrain Reach 3 – multiple work sites  
Project Sponsor: Boulder County

Work in Progress/Completed:
1. Soil amendment, upper riparian and lower riparian seed installation, and erosion control blanket installation begun at Sta. 22+00 (just upstream of Hygiene Road bridge) on Friday 2-16-18, delayed both before and after due to adverse site conditions (wind, wet, and cold);  
2. Breach 1 embankment replacement/repair: finished riprap placement and embankment placement;  
3. Breach 1 clearing and grubbing and mass grading for in-stream work and bank stabilization.  
4. Breach 6 embankment repair: clay core installation one-half complete and Type H riprap placement along clay core ~ one-third complete;  
5. Punch list review for in-stream and bank stabilization work between Sta. 28+00 and Sta. 34+60;  
6. Mass grading for bank stabilization and in-stream work between Sta. 49+00 and Sta. 62+00;  
7. Breach 2 construction staking of LOD and clay core alignment, discussions to ensure clay core location is accurate with adjustments made to staked alignment;  
8. Bank stabilization work started at Sta. 51+20 to Sta. 54+20; what appears to be a shale layer caused a water quality concern/investigation and ACC moved upstream to work the next bank stabilization location at Sta. 59+00.  

2-12-18 Breach 1: Type M riprap placement on both sides of clay core of breach repair embankment.

2-13-18 Breach 1: Embankment material compacted over riprap and clay core.
Upcoming Work:
1. Breach 1 in-stream and bank stabilization work;
2. Delivery of root wads to complete bank stabilization structures;
3. Breach 6 repair: clay, riprap, and embankment;
4. All work at Breach 2 Repair and the in-stream work downstream of Breach 2 (Sta. 126+00 to Sta. 109+00);
5. Finish streambank stabilization locations and stream channel work between Hygiene Road bridge and 63rd Street bridge;
6. Continue material sorting as needed;
7. Willow plantings and placement of amended topsoil/seed/mulch or erosion control blanket placement at completed locations;
8. Continue development of punch lists for finished sections of work;
9. Continue surveys for migratory birds/raptor nesting; transfer of responsibility from BCPOS to Contractor once Sensitive Data Agreement signed;
10. Finalize/update work change directives and update schedule related to grant extension from 2/27/18 to 5/25/18;
11. Maintenance of access/erosion/pollution prevention measures.

Notes:
1. Modified Type C bank stabilization detail was developed to alter the use of wood in the attainment of natural variability, and given to ACC in Work Change Directive 8 to start the process of discussion, review, revision. This design will also be sent to NRCS for review.
2. The 2-14-18 water quality concern/investigation was primarily resolved the morning of 2-15-18 when the pH sample was found to be 7.4, close to neutral and not a concern for fish impairment. The contractor took measures prior to work activity to prevent release of turbidity downstream, and then further measures to minimize release when the groundwater flow through the ponded work area could not be stopped. The turbid water in the off-line ponded area seems to have been caused by breaking through a shale layer to obtain the necessary elevations. A sample of the gray layer was taken for further testing, final results are expected on 2/20/18.
SVR3 EWP Stream Restoration
Project Weekly Construction Notes: 2/12 to 2/16/2018

02-15-18 Breach 6 repair: clay core, view looking SE.

2-16-18: Amendment incorporation, lower and upper riparian seeding and erosion control blanket installation north of the Hygiene Rd. bridge.

02-16-18 Breach 6 repair: geotextile and riprap installed along the clay core, view looking SE towards the Hygiene Rd. bridge.