FISHING IS FUN
CLEAR CREEK ACCESS PROJECT

PREPARED FOR
CLEAR CREEK WATERSHED FOUNDATION

JUNE 2014

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<tr>
<td>11</td>
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</tr>
<tr>
<td>12</td>
<td>SITE #12 COX50W #4</td>
</tr>
</tbody>
</table>

PREPARED BY:

FISHING IS FUN - CLEAR CREEK COUNTY
PROSPECTIVE STAIR SITES

[Map Image]
EROSION AND SEDIMENT CONTROL NOTES

1. All grading, erosion, and sediment control must conform to approved plans.

2. The landowner and/or contractor is responsible for obtaining a permit for Stormwater Discharges Associated with Construction Activity from the Colorado Department of Public Health and Environment, at least 10 days prior the start of construction activities for land disturbance areas of one acre or greater. The permit must be kept current throughout the construction duration. State stormwater permit applications are available at this address: http://www.codphe.state.co.us/wq/PermitsUnit/wqcompl.html

3. Erosion control best management practices (BMPs) must be installed prior to grading activities, to the maximum extent practicable. Two-phased (Initial & Final) erosion control plans must be submitted for sites disturbing 2 acres or more.

4. All temporary and permanent soil erosion and sediment control practices must be maintained and repaired as needed to assure continued performance of their intended function. For example, erosion control blankets, sediment control logs, or silt fences may require periodic replacement. Sediment traps and basins will require periodic sediment removal.

5. All topsoil, where physically practicable, must be salvaged and no topsoil shall be removed from the site except as set forth in the approved plans. Topsoil and overburden must be segregated and stockpiled separately. Topsoil and overburden must be redistributed within the graded area after rough grading to provide a suitable base for areas that must be seeded and planted. Runoff from the stockpiled area must be controlled to prevent erosion and sedimentation of receiving waters.

6. The landowner and/or contractor must immediately take all necessary steps to control sediment discharge.

7. The landowner and/or contractor is responsible for clean up and removal of all sediment and debris from all drainage infrastructure and other public facilities.

8. The landowner and/or contractor must take reasonable precautions to ensure that vehicles do not track or spill earth materials on to streets/roads and must immediately remove such materials if this occurs.

9. The landowner and/or contractor is responsible for controlling "litter such as discarded building materials, concrete truck washout, chemicals, and sanitary waste, as applicable. In addition, spills prevention and containment BMPs for construction materials, waste, and fuel must be provided, as applicable. Locations of stockpiles, concrete washout areas, and trash receptacles must be clearly shown on the plans. *Littering is defined and enforced by CRS 18-4-511.

10. The stormwater volume capacity of detention ponds must be restored and storm sewer lines will be cleaned upon completion of the project.

11. Seeding and mulching shall be completed within 30 days of initial exposure or 7 days after grading is substantially completed in a given area (as defined by the county). This may require multiple mobilizations for seeding and mulching.

12. Fugitive dust emissions resulting from grading activities and/or wind shall be controlled using the best available control technology, as defined by the Colorado Department of Public Health and Environment, at the time of grading. During grading, applying a combination of water, tackifier and silt fence to break up wind surface velocities may control dust. If wind speeds exceed the ability of BMPs to control fugitive dust, grading activities must cease.

13. All disturbed fill slopes greater than or equal to 30%, flowlines of swales, gutter downsputs, or additional areas at the discretion of county staff, shall be protected with an erosion blanket.

ADDITIONAL NOTES

1. Contractor shall minimize removal of vegetation from the project reach.

2. Construction should be performed from the bank and not the active stream channel.

3. Boulders shall be a minimum of 12” in the vertical axis, durable, hard, non-weathered granite.

4. The Contractor shall call Utility Notification Center of Colorado to have all utilities located prior to construction.

5. Aerial photo is for illustrative purposes only.

ENVIRONMENTAL NOTES

1. If paleontological resources are uncovered during project construction, Nicole Peavey (NPeavey@state.co.us and 303-757-9832) should be notified immediately and CDOT Specification 107.23 Archaeological and Paleontological Discoveries followed.

2. All solid or hazardous waste generated by the project activities of entities entering CDOT Right of Way (ROW) must be removed from the ROW and disposed of at a permitted facility or designated collection point (e.g. for solid waste, a utility or construction company's own dumpster). If pre-existing solid waste or hazardous materials contamination (including oil or petroleum contaminated soil, asbestos, chemicals, mine tailings, etc.) is encountered during the performance of work, the permittee shall halt the work in the affected area and immediately contact Andy Flurkey, CDOT Property Management, at 303-512-5520.

3. No work will occur from the creek channel.
SITE NOTES:

- TWO TIERS OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 150 SF
- APPROXIMATE DISTURBED AREA = 350 SF
- COORDINATES IN DD = 39.696250, -105.750456
Fishing is Fun
Prospective Stair Sites

Approximate Milepost 235.7

Site: # 2

Clear Creek County
Rodeo Grounds

Clear Creek County
Sportsman's Club

CDOT - CAD ROW Survey Data
- Other Cad Lines
- Landscaping Lines
- Waterway Lines
- A-Line's (ROW)
- ROW Lines

A-Line Crossing
- Fishing is Fun Site
- Fishing is Fun Parking Site
- County Parcel Lines

Site Notes:
- A single tier of steps will be constructed
- Field fit to site conditions
- Nominally 4 - 6 feet wide
- Approximate constructed area = 108 SF
- Approximate disturbed area = 250 SF
- Coordinates in DD = 39.763444, -105.585111

18 feet
SITE NOTES:

- A SINGLE TIER OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 168 SF
- APPROXIMATE DISTURBED AREA = 280 SF
- COORDINATES IN DD:
  - 39.762098, -106.577125
- CDOT Sign Shop to make custom sign, install by CDOT Maintenance
SITE NOTES:

- A SINGLE TIER OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 210 SF
- APPROXIMATE DISTURBED AREA = 460 SF
- COORDINATES IN DD = 39.756894, -105.566622
SITE NOTES:

- A SINGLE TIER OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 168 SF
- APPROXIMATE DISTURBED AREA = 380 SF
- COORDINATES IN DD = 39.739003, -105.427069
SITE #7 NOTES:
- A SINGLE TIER OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 156 SF
- APPROXIMATE DISTURBED AREA = 360 SF
- COORDINATES IN DD = 39.736611, -105.418419

SITE #8 NOTES:
- THREE TIERs OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 204 SF
- APPROXIMATE DISTURBED AREA = 500 SF
- COORDINATES IN DD = 39.737219, -105.417000
SITE NOTES:

- A SINGLE TIER OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 72 SF
- APPROXIMATE DISTURBED AREA = 250 SF
- COORDINATES IN DD = 39.742108, -105.403244
Fishing is Fun
Prospective Stair Sites

Site # 12
Site # 11
Site # 10
Site # 9

APPROXIMATE Milepost 259.5

CDOT - CAD ROW Survey Data
- Other Cad Lines
- Landscaping Lines
- Waterway Lines
- A-Lines (ROW)
- ROW Lines

This map is visual representation only, do not use for legal purpose. Map is not survey accurate and may not comply with National Mapping Accuracy Standards. Map is based on best available data as of 2012.

SITE NOTES:
- A SINGLE TIER OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 108 SF
- APPROXIMATE DISTURBED AREA = 280 SF
- COORDINATES IN DD =
  39.743303, -105.401453

18 FEET

DETAILED BOULDER STEPS
NOT TO SCALE
Fishing is Fun
Prospective Stair Sites

Site #12
Site #11
Site #10
Site #9

SITE NOTES:

- A SINGLE TIER OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 90 SF
- APPROXIMATE DISTURBED AREA = 250 SF
- COORDINATES IN DD = 39.743475, -105.401467

15 FEET
SITE NOTES:

- A SINGLE TIER OF STEPS WILL BE CONSTRUCTED
- FIELD FIT TO SITE CONDITIONS
- NOMINALLY 4 - 6 FEET WIDE
- APPROXIMATE CONSTRUCTED AREA = 108 SF
- APPROXIMATE DISTURBED AREA = 280 SF
- COORDINATES IN DD = 39.744181, -105.403033
STORMWATER MANAGEMENT AND WATER QUALITY PROTECTION PLAN

Fishing Is Fun- Clear Creek Stairway Access Project

1. PROJECT DESCRIPTION -
The Clear Creek Watershed Foundation has received a grant from the USFWS through the Colorado Department of Parks and Wildlife to construct boulder-stair fishing access at 11 points along Clear Creek in Clear Creek County Colorado. The entire project including all 11 sites involves a maximum disturbance of under 0.1 acre (actually 3,640 ft²). Therefore a construction stormwater permit is not required. Nonetheless, the following stormwater management and water quality protection plan is provided to assure all concerned that the environment will be protected during the course of the proposed work.

Each of the staircases has been carefully designed to provide easy access to the water for fishermen and other recreationists while blending with the natural setting. To do so, each staircase is planned to follow existing slope fall line and consist of irregular, rectangular rock blocks embedded in the ground. Each block will be flat face up for stair treads ranging from 8” to 18” in depth, with similar rises. The staircases could range from 3’ to 6’ in width and be as long as the slope fall, beginning on the nearest easily accessible flat area and descending to a landing at water’s edge. The locations of the proposed 11 staircases were based on several criteria. First, the land must be public; second, the locations need to be near acceptable and safe parking such as broad pullouts; third, the top landing areas have to be easily approached from parking; and fourth, the stream bank itself must be compatible with construction methods.

The construction work at each site will last a maximum of 3 days. Generally, the construction will be done from terrace areas above relatively steep riprap stream banks. The riprap consists of boulder sized rock material. A typical project site involves a total disturbance of 330 ft².

A. PROJECT SITE DESCRIPTIONS –
1. Access site 1 is located west of Silver Plume, CO at approximate I-70 mile marker 224.4. Two tiers of steps will be constructed nominally 4-6 ft wide. The total disturbance area is 350 SF.
2. Access site 2 is located east of Dumont, CO at approximate mile marker 235.7 A single tier of steps will be constructed for a total disturbance of 250 SF.
3. Access site 3 is located east of Dumont, CO at approximate mile marker 236.3, at North Spring Gulch. A single tier of steps will be constructed for a total disturbance of 280 SF.
4. Access site 4 is located east of Dumont, CO at approximate mile marker 236.9 near Turkey Gulch. A single tier of steps will be constructed for a total disturbance of 460 SF.
5. Site 5 will not be constructed. It was sited near the ARGO Mill.
6. Access site 6 is located east of Hidden Valley, CO at approximate mile marker 258.2 on US HWY 6. A single tier of steps will be constructed for a total disturbance of 380 SF.
7. The seventh project site is located west of Tunnel 6 on US Hwy 6 at approximate mile marker 258.8. A single tier of steps will be constructed for a total disturbance of 360 SF.
8. The seventh project site is located west of Tunnel 6 on US Hwy 6 at approximate mile marker 258.9. A single tier of steps will be constructed for a total disturbance of 500 SF.

Sites 9-12 are all located in the oxbow at Tunnel 5 on US Hwy 6 at approximate mile marker 259.5. The sites will be accessed along the old railroad grade on the right from US 6 and on the right descending bank. These sites average 265 SF of disturbance area.
B. **RECEIVING WATER** – At all sites, runoff from the construction area flows directly to Clear Creek.

2. **STORMWATER MANAGEMENT CONTROLS FIRST CONSTRUCTION ACTIVITIES**

A. **POTENTIAL POLLUTANT SOURCES** - Qualified consultants and appropriate representatives from jurisdictional agencies have carefully evaluated all proposed project sites as reflected in project submittals and extensive electronic and written correspondence. There is no evidence of potential pollutant sources at any of the 11 sites.

B. **OFFSITE DRAINAGE (RUN ON WATER)** - Generally, the sites proposed for construction of stair access ways are located on the stream bank of Clear Creek below natural or already constructed terraces that route upland runoff to the Creek in well defined natural rundown channels. The stairways are not being constructed in areas where upland drainage currently discharges to Clear Creek. However, if it appears that there is any likelihood that upland runoff could enter the small construction footprint-area, such water will be diverted with temporary berms in accordance with subsection 208.03.

C. **EQUIPMENT CLEANING AND WORKER PROTOCOL** - To prevent the spread of noxious weeds and nuisance aquatic species, PRIOR to coming onsite, ALL equipment shall be cleaned to remove any mud or plant material. The project construction team will follow proper decontamination protocols for aquatic nuisance species when working in riparian/aquatic areas of the project. The reaches of Clear Creek affected by the proposed constructed are known to contain trout impacted by Whirling Disease, but not other aquatic nuisance species.

D. **CONSTRUCTION DEWATERING** - There will be no need for construction dewatering at any of the 11 proposed stair access sites.

E. **BEST MANAGEMENT PRACTICES (BMPs) FOR STORMWATER POLLUTION PREVENTION**

**BMP NARRATIVE** - This project has a very small environmental footprint. The disturbance at each site consists of a narrow rectangular area along a steep rocky slope. The existing riprap serves as rock mulch, preventing mobilization of fines during construction. This inherent site attribute provides a real and very beneficial erosion control benefit. The need for stormwater run-on control will be evaluated at each location. The stair access sites are not natural rundown areas for stormwater runoff to Clear Creek.

1. **VEHICLE TRACKING**
   Construction vehicles will only enter each construction site once and then egress only once when all site work is complete. Equipment will not operate in stream, but rather on surfaces that have already been established for vehicular operation, until they are within the narrow riprap project construction areas. Tracking pads will not be needed.

2. **PERIMETER CONTROL**
   a. Perimeter control shall be established as the first item on the SWMP to prevent the potential for pollutants leaving the construction site boundaries, entering the stormwater drainage system (e.g. inlet protection), or discharging to state waters.
   b. Perimeter control will consist of 12” erosion log placed just above the ordinary high water mark and immediately downgradient of each excavation disturbance area.
   c. Perimeter control shall be in accordance with subsection 208.04.
3. DURING CONSTRUCTION

RESPONSIBILITIES OF THE SWMP ADMINISTRATOR/EROSION CONTROL SUPERVISOR DURING CONSTRUCTION
The SWMP should be considered a “living document” that is continuously reviewed and modified. During construction, the following items shall be added, updated, or amended as needed by the Contractor in accordance with Section 208

A. MATERIALS HANDLING AND SPILL PREVENTION - prior to construction commencing the Contractor shall submit a Spill Prevention, Control and Countermeasure Plan, which shall be available at all times at the construction sites. Spill containment/countermeasures that are identified in the plan shall be available at all times at the construction sites.

B. STOCKPILE MANAGEMENT – rock to be used for stairway construction shall be stockpiled in accordance with subsection 107.25 and 208.07

C. CONCRETE WASHOUT – No concrete will be utilized as part of this construction effort.

D. SAW CUTTING - No saw cutting will be utilized as part of this construction effort.

E. STREET CLEANING – All Equipment used for this project will be off loaded and utilized in shoulder areas, or entirely off of roadways. No need for street cleaning is anticipated. If it should become necessary, it shall be done in accordance with subsection 208.04.

F. TREE CUTTING – There shall be no tree cutting as part of this construction effort.

4. INSPECTIONS

Thorough inspections of the project and the adequacy of storm water management and water quality protection system will be performed at each project site during construction by the Erosion Control Supervisor, who shall be the same person as the CCWF Project Manager. All inspections shall be documented by the project Erosion Control Supervisor.

5. INTERIM AND FINAL STABILIZATION

A. SEEDING PLAN

Seed will be broadcast over very small, steep existing riprap areas as will humate and biosol applications. Weed free mulch will be hand crimped. (~130 SF will be revegetated at each site, or half of the total disturbed area, since stairways will not be vegetated)

Soil preparation, soil conditioning, seeding (native), and mulching (weed free) will be required for an estimated 1320 SF of disturbed area spread over 11 different sites:

<table>
<thead>
<tr>
<th>Species</th>
<th>Scientific Name</th>
<th>Variety</th>
<th>lbs/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grasses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western wheatgrass</td>
<td>Pascopyrum smithii</td>
<td>Arriba</td>
<td>13</td>
</tr>
<tr>
<td>Slender wheatgrass</td>
<td>Elymus trachyaulus</td>
<td>San Luis</td>
<td>2.0</td>
</tr>
<tr>
<td>Mountain brome</td>
<td>Bromus marginatus</td>
<td>Bromar</td>
<td>8.0</td>
</tr>
<tr>
<td>Arizona fescue</td>
<td>Festuca arizonica</td>
<td>Redondo</td>
<td>2.0</td>
</tr>
<tr>
<td>Hard fescue</td>
<td>Festuca ovina</td>
<td>Durar</td>
<td>1.2</td>
</tr>
<tr>
<td>Indian ricegrass</td>
<td>Oryzopsis hymenoides</td>
<td>Nezpar</td>
<td>2.0</td>
</tr>
<tr>
<td>Sandberg bluegrass</td>
<td>Poa secunda ssp. sandbergii</td>
<td></td>
<td>0.4</td>
</tr>
</tbody>
</table>
Camby bluegrass | *Poa canbyi* | Canbar | 0.6
---|---|---|---
Green needlegrass | *Stipa viridula* | Lodorm | 2.0
**Nurse/Annual cove crop**
Oats | *Avena sativa* | 6.0
**Forbs**
Blue flax | *Linum lewisii* | 0.2
Rocky Mountain penstemon | *Penstemon strictus* | 2.0
Total pls lbs./acre (broadcast) | | | 39.4

B. **SEEDING APPLICATION**: We will be revegetating very small areas not accessible to a drill. We will hand broadcast at double the rate required for drill seeding (as shown above) and rake 0.25 inch to 0.5 inch into the soil.

C. **MULCHING APPLICATION**: We will apply a minimum of 1 ½ tons of certified weed free hay per acre and hand crimp it into the soil.

E. **SOIL CONDITIONING AND FERTILIZER REQUIREMENTS**:

<table>
<thead>
<tr>
<th>Humate (lbs/acre)</th>
<th>Biosol (lbs/acre)</th>
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<tbody>
<tr>
<td>200</td>
<td>600</td>
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**6. TABULATION OF STORMWATER QUANTITIES**

<table>
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<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>203</td>
<td>Excavator</td>
<td>Hour</td>
<td>Available onsite</td>
</tr>
<tr>
<td>203</td>
<td>Combination Loader</td>
<td>Hour</td>
<td>Available onsite</td>
</tr>
<tr>
<td>208</td>
<td>Rock Mulch-Steps</td>
<td>SF</td>
<td>3,200*</td>
</tr>
<tr>
<td>208</td>
<td>12” erosion log</td>
<td>LF</td>
<td>100LF</td>
</tr>
<tr>
<td>208</td>
<td>Temporary Diversion</td>
<td>LF</td>
<td>**</td>
</tr>
<tr>
<td>208</td>
<td>Erosion Control Supervisor</td>
<td>Hour</td>
<td>30</td>
</tr>
<tr>
<td>208</td>
<td>Removal of Trash</td>
<td>Hour</td>
<td>5</td>
</tr>
<tr>
<td>212</td>
<td>Seeding (Native)</td>
<td>Acre</td>
<td>0.1</td>
</tr>
<tr>
<td>212</td>
<td>Soil Conditioning</td>
<td>Acre</td>
<td>0.1</td>
</tr>
<tr>
<td>213</td>
<td>Mulching (Weed Free Hay)</td>
<td>Acre</td>
<td>0.1</td>
</tr>
</tbody>
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*Rock mulch is an inherent feature of each project site where construction will be in riprap/stream bank areas.
**As discussed, temporary diversion will be constructed under the direction the Erosion Control Supervisor, if site conditions (e.g., a potential for run-on to the project area during storm events) warrant such a measure.
NO ACCESS BEYOND THIS POINT
DEPARTMENT OF TRANSPORTATION
SIGN NUMBER—01

Station/MP—Approximately 236.3, see Sheet 5 for location at Site #3

Quantities:

One 614-00013 Sign Panel (CUI) 5 SF

One 614-01583 Steel Sign Support (2 ¼ inch round) (Post and Spipbase)