NOTES:

1. ALL TUBES SHALL BE FABRICATED FROM ASTM A500 GRADE B STEEL. ALL POSTS, BASE PLATES, AND ANCHOR BOLTS SHALL
   BE FABRICATED FROM ASTM A36 STEEL. ALL SPACES AND EXPANSION DEVICES FOR TUBES SHALL BE FABRICATED
   FROM ASTM A615, GRADE 50 STEEL. THE ABOVE MATERIAL DOWELS, ALL ANCHOR BOLTS AND MISCELLANEOUS BOLTS,
   NUTS, AND WASHERS SHALL BE GALVANIZED AND POWDER COATED
   AFTER FABRICATION IN ACCORDANCE WITH SECTION 508 AND 608.
   CONCRETE, REINFORCING STEEL, AND STRUCTURAL STEEL
   ELEMENTS SHALL COMPLY TO THE REQUIREMENTS OF SECTIONS
   601, 602, AND 509 RESPECTIVE.

2. POST ANCHORS, ENCASED IN CONCRETE, SHALL BE ASTM A36
   STEEL AND MEET ALL SPECIFICATIONS.

3. POLES, POST ANCHORS, BASE PLATES, ANCHOR BOLTS,
   MISCELLANEOUS BOLTS, NUTS, WASHERS, TUBES, TUBE
   EXPANSION DEVICES, TUBE SPACER, ENCLOSED, W-TEAR,
   STEEL EXPANSION DEVICES, CONCRETE PLAINS (CS),
   AND CURB REINFORCING STEEL SHALL BE INCLUDED
   IN ITEM NO. 508 BRIDGE RAIL TYPE 3.

4. THE WALLS SUCH AS HOLLOW CONCRETE, SHALL HAVE A CURVED
   SHAPED CURVES HERTER THAN THE RADIUS IS LESS THAN
   1,500 FEET.

5. POSTS SHALL BE CONTINUOUS OVER NO LESS THAN A
   POSTS. NO HELD BOLT SPACES WILL BE ALLOWED IN THE
   POST SECTIONS.

6. POSTS SHALL BE PERPENDICULAR TO THE LONGITUDINAL
   ROADWAY CURVE.

7. CONTRACTOR SHALL PROVIDE TERMINAL SECTION (FLARED)
   WHEN NO APPROACH GUARDRAIL IS INSTALLED.

8. FOR ADDITIONAL DETAILS, SEE STANDARD PLAN NO. 508-6.

9. PRIOR TO FABRICATION OF THIS ITEM, THREE SETS OF
   WORKING DRAWINGS WHICH COMPLY WITH THE
   REQUIREMENTS OF SECTION 508 SHALL BE SUBMITTED
   TO THE ENGINEER FOR INFORMATION ONLY.

10. TERMINAL AND TRANSITION INCLUDED WITH ROADWAY QUANTITIES.
CONSTRUCTION PHASING AND TRAFFIC CONTROL GENERAL NOTES

1. This is the phasing plan to be used in the construction of the project. The cost and quantity items and their quantities reflect utilization of this phasing. The contractor may submit an alternate phasing plan for approval by the engineer after award of the project.

2. The suggested construction phasing plans are intended to be a guide and suggestion for the contractor to follow; they are not all inclusive and may not represent all of the work activity required to construct the proposed improvements. The layout shown in the suggested construction phasing plans follows traffic control design criteria as indicated on this sheet.

3. It is the intent of the suggested construction phasing plans to convey to the contractor, the general, and essential design elements required to construct the project. Zones, mind-roads, not indicated in the plans are to be constructed with temporary protective devices.

4. All construction traffic control shall conform to the applicable standards in the manual on uniform traffic control devices, the Colorado Department of Transportation standard specifications for roads and bridges construction, and Colorado Department of Transportation standards. Traffic control devices shall be placed in accordance with the manual on uniform traffic control devices.

5. Appropriate advance warning signs shall be placed as needed. These shall be shown in the plan to be approved by Boulder County.

6. The number and type of lanes shown in the suggested construction phasing plans shall be maintained at all times and shown in the contracts. Without permission of the engineer.

7. A minimum travel lane width of 10 feet shall be maintained at all times unless approved by the engineer.

8. A minimum shoulder width of 1 foot shall be provided between the paving edge and concrete barriers or edge of travel lane at all times.

9. Minimum slope adjacent to traveled way shall be 30 degrees unless protected by concrete barriers (temporary). Concrete barriers (temporary) shall be used adjacent to traveled way with drop-offs greater than 3 feet.

10. If the end of concrete barrier (temporary) is within clear zone, it shall be shielded by existing guardrail, protected by an impact attenuator (temporary) or fenced to outside of clear zone in the manner of (temporary) design guide.

11. Concrete barriers (temporary) may require multiple resets for the duration of the project. Multiple resets will not be paid for separately. See specification 525, concrete barriers (temporary) will be paid only once.

12. Temporary pavement markings will not be allowed on final pavement surfaces. Channelizing devices shall be used to delineate temporary lanes through the construction zone on final pavement.

13. Removal of pavement markings for temporary lanes will not be paid for separately but shall be included in the cost of the work. Paint restripes must be disposed of properly off-site.

14. The contractor shall bear all responsibility and expense for providing temporary patches and roughs for the construction zones, and the contractor is responsible for ensuring that the temporary paving meets the specifications. The contractor shall not be responsible for any damage to the permanent pavement.

15. The contractor shall separately prepare an individual plan for the superintendent. To be the traffic control supervisor for the project at all times. The contractor shall be responsible for snow removal and pavement maintenance (slitting, patching, etc.) within the construction zone.

16. The contractor shall maintain safe and reasonable access to private properties at all times. Unless otherwise approved by writing by the property owner and Boulder County, all roadways closures shall be pre-approved by Boulder County and advance notice given to the public.

17. Reset mailbox structure must require multiple resets for the duration of the project. Multiple resets will not be paid for separately. Mailboxes shall be temporarily relocated adjacent to travel lanes and shall not be located within the work area. The movement of mailboxes shall be approved by the postal service.

18. The contractor shall be responsible for snow removal and pavement maintenance (slitting, patching, etc.) within the construction zone.

19. Existing signs in conflict with the temporary lanes shall be covered or reset as conditions permit for each construction phase and as directed by Boulder County. Masking of existing signs, including the covering of materials and painting of signs, will not be measured and paid for separately but shall be included in the cost of the work.

20. All construction activities are allowed between the hours of 8:00 AM and 4:30 PM. During the hours of non-construction activity, a minimum of one construction activity is allowed between the 10-foot travel lane plus shoulders shall be maintained, as approved by Boulder County. See the specifications for additional requirements.

21. If temporary traffic signals are used, the contractor shall prepare a detailed traffic control plan for review and approval prior to starting construction. Temporary traffic signals shall be approved by Boulder County. Temporary traffic signals shall be used by the contractor shall have 2 spare temporary signals available at all times.

22. All stockpiles and staging areas shall be the responsibility of the contractor. Use of private property shall be coordinated with the respective property owner. Stockpiles and staging areas must comply with all applicable federal, state, and local regulations. Boulder County will not be included in any agreements made between the contractor and property owners.

SCHEDULE OF TRAFFIC CONTROL DEVICES & PHASING ITEMS:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6200000</td>
<td>Detour Pavement, 1000 LF</td>
</tr>
<tr>
<td>6300000</td>
<td>Traffic Control Panel, 100 LF</td>
</tr>
<tr>
<td>6320000</td>
<td>Flagging, 1000 LF</td>
</tr>
<tr>
<td>6320027</td>
<td>Traffic Control Inspection, 100 LF</td>
</tr>
<tr>
<td>6300012</td>
<td>Traffic Control Management, 100 LF</td>
</tr>
<tr>
<td>6300004</td>
<td>Portable Message Sign Panel, 100 LF</td>
</tr>
<tr>
<td>6300070</td>
<td>Concrete Barriers (Temporary), 100 LF</td>
</tr>
</tbody>
</table>
TYPICAL SECTION - PHASES 1.1 & 2.1

TYPICAL SECTION - PHASES 1.2 & 2.2

TYPICAL SECTION - PHASES 1.3 & 2.3

TYPICAL SECTION - PHASES 1.4 & 2.4

NOTES:
1. WALL TYPE VARIES. CANTILEVER RETAINING WALL SHOWN TO REPRESENT TEMPORARY EXCAVATION LIMITS.
2. SHORING NEEDS VARY DEPENDING ON WALL LOCATION AND TYPE.
SUGGESTED CONSTRUCTION PHASING WORK ITEMS - PHASE 1 (NORTH SEGMENT)

PHASE 1:
1. TRAFFIC IN EXISTING CONFIGURATION
2. INITIAL TEMPORARY DESIGN CONTROL NECESSARY FOR PHASE 1 WORK
3. INITIAL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1 WORK
4. UTILITY RELOCATIONS AND PROTECTIONS TO BE PERFORMED AS NECESSARY
5. CONSTRUCTION TRAFFIC CONTROL CHANGES OR MODIFICATIONS
6. CONSTRUCT DETOUR PAVEMENT AND INSTALL TEMPORARY PAVEMENT MARKINGS
7. SET UP TRAFFIC IN EXISTING CONFIGURATION - SOUTHBOUND TRAFFIC REMAINS DETOURED
8. MOVE SOUTHBOUND TRAFFIC TO TEMPORARY 1-WAY CONFIGURATION (PUSHED WEST 8. ROAD CONSTRUCTION COMPLETE)
9. MOVE SOUTHBOUND TRAFFIC TO FINAL SOUTHBOUND CONFIGURATION

PHASE 1.1:
1. TRAFFIC IN TEMPORARY 1-WAY NORTHBOUND CONFIGURATION (ON EAST SIDE)
2. INSTALL TRAFFIC CONTROL DEVICES NECESSARY FOR PHASE 1.1 WORK
3. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.1 WORK
4. UTILITY RELOCATIONS AND PROTECTIONS TO BE PERFORMED AS NECESSARY
5. CONSTRUCT ANY REMAINING DRAINAGE CROSSING ITEMS LEFT OVER FROM PHASE 1 OR 1.2
6. CONSTRUCT SOUTHBOUND ROADWAY, DRIVEWAYS AND PULLOUT WEST OF PROJECT
7. CONSTRUCT ANY REMAINING DRAINAGE CROSSING ITEMS LEFT OVER FROM PHASE 1 OR 1.2
8. CONSTRUCT RETAINING WALLS AND GUARDRAIL/BRIDGE RAIL
9. CONSTRUCT ANY REMAINING DRAINAGE CROSSING ITEMS LEFT OVER FROM PHASES 1.1 OR 1.2
10. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.2 WORK
11. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.2 WORK
12. TRAFFIC IN TEMPORARY 1-WAY NORTHBOUND CONFIGURATION (ON EAST SIDE)
13. MOVE 1-WAY NORTHBOUND TRAFFIC TO FINAL NORTHBOUND CONFIGURATION
14. CONTROL LINE
15. INSTALL FINAL ROADWAY, DRIVEWAYS AND PULLOUT EAST OF PROJECT
16. INSTALL FINAL PAVEMENT MARKINGS
17. INSTALL FINAL SIGNAGE
18. INSTALL PERMANENT EROSION CONTROL
19. REMOVE TEMPORARY EROSION CONTROL
20. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
21. REMOVE CONSTRUCTION TRAFFIC CONTROL DEVICES
22. CLEAN-UP AND DEMOBILIZE
23. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.3 WORK
24. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.3 WORK
25. MOVE SOUTHBOUND TRAFFIC TO TEMPORARY 1-WAY CONFIGURATION (PUSHED EAST 8. ROAD CONSTRUCTION COMPLETE)
26. MOVE SOUTHBOUND TRAFFIC TO FINAL SOUTHBOUND CONFIGURATION
27. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.4 WORK
28. INSTALL FINAL PAVEMENT MARKINGS
29. INSTALL FINAL SIGNAGE
30. INSTALL PERMANENT EROSION CONTROL
31. REMOVE TEMPORARY EROSION CONTROL
32. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
33. REMOVE CONSTRUCTION TRAFFIC CONTROL DEVICES
34. CLEAN-UP AND DEMOBILIZE
35. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.5 WORK
36. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.5 WORK
37. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
38. CLEAN-UP AND DEMOBILIZE
LEGEND
DETUR PAVEMENT
(Temporary Widening)

SUGGESTED CONSTRUCTION PHASING WORK ITEMS - PHASE 2 (SOUTH SEGMENT)

PHASE 2.1:
1. TRAFFIC IN EXISTING CONFIGURATION
2. INSTALL TEMPORARY TRAFFIC CONTROL NECESSARY FOR PHASE 2.1 WORK
3. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 2.1 WORK
4. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 2.1 WORK
5. INSTALL PERMANENT TRAFFIC CONTROL NECESSARY FOR PHASE 2.1 WORK
6. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 2.2 WORK
7. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 2.2 WORK
8. TRAFFIC IN TEMPORARY 1-WAY CONFIGURATION (ON EAST SIDE)
9. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 2.3 WORK
10. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 2.3 WORK
11. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL

PHASE 2.2:
1. TRAFFIC IN TEMPORARY 1-WAY CONFIGURATION ON NEW SOUTHBOUND PAVEMENT - SOUTHBOUND TRAFFIC REMAINS DETOURED AROUND PROJECT
2. INSTALL TEMPORARY TRAFFIC CONTROL NECESSARY FOR PHASE 2.2 WORK
3. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 2.2 WORK
4. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 2.2 WORK
5. INSTALL PERMANENT TRAFFIC CONTROL NECESSARY FOR PHASE 2.2 WORK
6. TRAFFIC IN TEMPORARY 1-WAY NORTHBOUND CONFIGURATION (ON EAST SIDE)
7. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 2.3 WORK
8. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 2.3 WORK
9. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
10. REMOVE TEMPORARY EROSION CONTROL
11. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL

PHASE 2.3:
1. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
2. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 2.3 WORK
3. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 2.3 WORK
4. INSTALL PERMANENT TRAFFIC CONTROL NECESSARY FOR PHASE 2.3 WORK
5. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
6. REMOVE TEMPORARY EROSION CONTROL
7. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
8. INSTALL FINAL PAVEMENT MARKINGS
9. INSTALL FINAL SIGNAGE
10. INSTALL TEMPORARY EROSION CONTROL
11. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL

PHASE 2.4:
1. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
2. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 2.4 WORK
3. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 2.4 WORK
4. INSTALL PERMANENT TRAFFIC CONTROL NECESSARY FOR PHASE 2.4 WORK
5. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
6. REMOVE CONSTRUCTION TRAFFIC CONTROL DEVICES
7. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL
8. INSTALL FINAL PAVEMENT MARKINGS
9. INSTALL FINAL SIGNAGE
10. INSTALL TEMPORARY EROSION CONTROL
11. TRAFFIC IN FINAL CONFIGURATION WITH CONSTRUCTION TRAFFIC CONTROL

SUGGESTED CONSTRUCTION PHASING WORK ITEMS - PHASE 2 (SOUTH SEGMENT)
1. SITE DESCRIPTION
The Contractor shall comply with all CDOT contractual requirements and all requirements associated with the CDPS-SCP on this project. The SWMP Administrator shall update to reflect current project site conditions.

A. PROJECT SITE LOCATION: The Fourmile Canyon Drive South section (approximately 3600 feet long) starts a mile west of Boulder Canyon Road and extends to Paorman Road. The Fourmile North section (approximately 3,000 feet long) begins at approximately 40°02'24" N, 105°21'54" W and ends just south of Salina Junction. The proposed project limits will be between Sections 17, 21, and 28 Township 1 North, Range 71 West of the 4th Principal Meridian.

B. PROJECT SITE DESCRIPTION: The proposed construction activities would resurface and improve the roadway and drainage along Fourmile Canyon Drive resulting in increased safety for vehicle and area home owners in the area. Lower Fourmile Canyon Drive project limits extend along Fourmile Canyon Drive (CR 118) from the CR 118 Intersection with County Road 119 to Salina Junction, Fourmile Canyon Drive (CR 118) is approximately 5 miles in length with a paved 20 foot wide roadway width located in a narrow mountain valley characterized by residential development along Fourmile Creek. The roadway improvements will include a 27-foot wide typical section consisting of (2) 11 foot lanes with a 4 foot unlight shoulder and a 1-foot downlight shoulder. In addition, there will be several walls constructed to retain the roadway above Fourmile Creek. Roadside drainage design will be incorporated as well, conveying runoff into ditches and culverts/storm sewer systems that outfall into Fourmile Creek. Drainage project improvements will include adding, replacing and resizing the existing drainage culverts with slope protection.

C. PROPOSED SEQUENCING FOR MAJOR CONSTRUCTION ACTIVITIES: Construction of the project will come in phases, as laid out by the contractor. Sequencing for the construction of the project shall include the following: road clearing and grubbing, retaining wall, culverts, roadway, grading, and stabilization with seeding and planting native plants. All traffic phasing and planning before, during and after the completion of the project shall be coordinated with Boulder County and managed by the contractor. Activities throughout the construction will be determined by the contractor and are subject to change.

D. ACRES OF DISTURBANCE: The total area of disturbance includes areas of grading and stabilization, storage of fill material, demolition of roads, excavation, areas with heavy equipment vehicle traffic and staging areas. The sum of the areas include both sections (north and south) of Fourmile Canyon Drive.
1. Total acre of construction site (LOC ['PERMITTED AREA']): 12.7 acres
2. Total acre of proposed disturbance ['DATA']: 11.5 acres
3. Total acre of seeding: 5.1 acres
4. Total acre of impervious surface: 5.7 acres
5. Total acre of NEW impervious surface: 4.7 acres

E. EXISTING SOIL DATA: According to the Soil Survey of Boulder County, Colorado the site consists of 7 soil types. The information was collected from the JSOA (http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx). The soil types are:
1. Jujeck-Rock outcrop complex
2. Ympic Haplustolls-Cathedral family-Rock outcrop complex
3. Pachic Aquultolls-Aquic Argultolls complex

F. EXISTING VEGETATION, INCLUDING PERCEN COVER:
During design the SWMP Administrator for Design in consultation with the Engineer will determine if the SWMP Administrator for Design or the SWMP Administrator will conduct the Vegetation Transsects as outlined in Chapter 4.11.2 of the Erosion Control and Stormwater Quality Guide.

Design Date of Survey: December 22, 2015 Percent of Density: 40

Description of existing vegetation: Elevations within the project area range from 6,590 ft to 7,723 ft msl. Dominant trees and shrubs within the project area includes Ponderosa pine (Pinus ponderosa), Douglas fir (Pseudotsuga menziesii), Rocky Mountain Juniper (Juniperus scopulorum), aspen (Populus tremuloides), mountain alder (Alnus tenuifolia), and several species of willow

(Soilsp): Common herbaceous vegetation within the project area included downy brone (Bromus tectorum), western wheatgrass (Pascopyrum smithii), bull thistle (Cirsium vulgare), common muleine (Verbasum thapsus), yucca, smooth brone (Bromus inermis), and woods rose (Rosa woodsii). Existing vegetation takes up approximately 40% of the existing ground cover within the project area.

Pre-Construction Date of survey: %Density:
Description of existing vegetation: Map or table showing transect locations in SWMP notebook tab 17:
Post-Construction Date of survey: %Density:
Description of existing vegetation: Map or table showing transect locations in SWMP notebook tab 17:

G. POTENTIAL POLLUTANTS SOURCES: See First Construction Activities under Potential Pollutant Sources. The SWMP Administrator shall prepare a list of all potential pollutants and their locations in accordance with subsection 07.25.

H. RECEIVING WATER:
1. Outfall locations:

<table>
<thead>
<tr>
<th>Drainage System</th>
<th>Size</th>
<th>Type</th>
<th>Location</th>
<th>Ultimate Receiving Waters</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-S-100</td>
<td>24&quot; RCP</td>
<td>Culvert</td>
<td>52+52</td>
<td>St. Vrain Creek</td>
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<tr>
<td>A-S-101</td>
<td>30&quot; x 9&quot; RCP</td>
<td>Culvert</td>
<td>56+46</td>
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<tr>
<td>A-S-104</td>
<td>30&quot; x 9&quot; RCP</td>
<td>Culvert</td>
<td>62+49</td>
<td>St. Vrain Creek</td>
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<td>18&quot; RCP</td>
<td>Culvert</td>
<td>66+23</td>
<td>St. Vrain Creek</td>
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<tr>
<td>A-S-107</td>
<td>30&quot; x 9&quot; RCP</td>
<td>Culvert</td>
<td>68+63</td>
<td>St. Vrain Creek</td>
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<tr>
<td>A-S-110</td>
<td>24&quot; RCP</td>
<td>Culvert</td>
<td>77+91</td>
<td>St. Vrain Creek</td>
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<tr>
<td>A-S-111</td>
<td>23&quot; x 4&quot; RCP</td>
<td>Culvert</td>
<td>79+66</td>
<td>St. Vrain Creek</td>
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<tr>
<td>A-S-113</td>
<td>42&quot; RCP</td>
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<td>St. Vrain Creek</td>
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<td>A-N-100</td>
<td>18&quot; RCP</td>
<td>Culvert</td>
<td>21+75</td>
<td>St. Vrain Creek</td>
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<td>A-N-103</td>
<td>18&quot; RCP</td>
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<td>22+86</td>
<td>St. Vrain Creek</td>
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<tr>
<td>A-N-104</td>
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<td>Culvert</td>
<td>22+88</td>
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<tr>
<td>A-N-117</td>
<td>24&quot; RCP</td>
<td>Culvert</td>
<td>25+86</td>
<td>St. Vrain Creek</td>
</tr>
</tbody>
</table>

2. Names of receiving water(s) on site: Fourmile Canyon Creek
3. Ultimate receiving water: St. Vrain Creek
4. Horizontal distance nearest water of the site is from project approximately 0.1 miles

I. NON-STORMWATER DISCHARGES: Potential non-stormwater discharges for this site include potable water used for grading, dust suppression and erosion control seeding (permanent and temporary) within the entire site.
1. ALLOWABLE:
   1. Groundwater and stormwater dewatering: Discharges to the ground water from construction
dewatering activities may be authorized provided that:
   a. The source is ground water and/or ground water combined with storm water that does
      not contain pollutants
   b. The source and BMP/CP/control measures are identified in the SWMP
   c. Discharges do not leave the site as surface runoff or to surface waters
   d. The contractor shall protect all works and facilities from water at all times. Areas and
      facilities subject to flooding, regardless of the source of water, shall be promptly dewatered
      and restored at no cost to the owner. This shall include removal of any debris caused by
      flooding. Any dewatering shall be done in accordance with subsection 107.25
   CONTAMINATED:
   2. If discharges do not meet the above criteria a separate CDPS permit shall be obtained by
      the Contractor from the CDPH. See standard specia provision 250 Hazardous Waste and
      Contaminated Water.

2. SITE MAP COMPONENTS:
   Pre-construction
   A. PROJECT CONSTRUCTION POTENTIAL SITE BOUNDARIES - See Stormwater Management Plan
   B. ALL AREAS OF GROUND SURFACE DISTURBANCE - See Stormwater Management Plan
   C. AREAS OF CUI AND HIL - See Stormwater Management Plan
   D. LOCATION OF ALL STRUCTURAL BMP/C CONTROL MEASURES IDENTIFIED IN THE SWMP - See
      Stormwater Management Plan
   E. LOCATION OF NON-STRUCTURAL BMP/C CONTROL MEASURES AS APPLICABLE IN THE SWMP - See
      Stormwater Management Plan
   F. SPRINGS, STREAMS, WETLANDS AND OTHER SURFACE WATER - See Stormwater Management Plan
   G. PROTECTION OF TREES, SHRUBS, CULTURAL RESOURCES AND NATURAL VEGETATION - See
      Stormwater Management Plan
   H. AREAS USED FOR STORING AND STOCKPILING OF MATERIALS, STAGING AREAS (field trailer,
      fueling, etc.) and BATCH PLANTS - See Stormwater Management Plan

3. SWMP ADMINISTRATOR:
   A. SWMP ADMINISTRATOR FOR DESIGNING:
      Name/Title | Contact Information
      Jd Ann Murray, P.E. | Michael Baker International (720) 479-3167
      joann.murray@mbkernli.com
   B. SWMP ADMINISTRATOR FOR CONSTRUCTION (as defined in Subsection 208): The Contractor shall
      designate a SWMP Administrator for Construction upon utilization of the SWMP. The SWMP
      Administrator shall become the owner/operator and assume responsibility for all design changes to
      the SWMP implementation and maintenance in accordance to 208.03. The SWMP Administrator shall
      be responsible for implementing, maintaining and revising SWMP, including the title and contact
      information. The activities and responsibilities of the SWMP administrator shall address all aspects of the
      projects SWMP. (Update the information below for each new SWMP Administrator) (Copy of
      TECS Certification must also be included in the SWMP Notebook.)

4. STORMWATER MANAGEMENT CONTROLS FIRST CONSTRUCTION ACTIVITIES
   THE CONTRACTOR SHALL PERFORM THE FOLLOWING:
   A. POTENTIAL POLLUTANT SOURCES
      Evaluate, identify, locate and describe all potential sources of pollutants at the site in accordance
      with subsection 107.25, CDPS-SCP and place in the SWMP notebook. All BMP/CP/control measures
      related to potential pollunants shall be shown on the SWMP site map by the Contractor’s SWMP
      Administrator.
   B. OFFSITE DRAINAGE (RUN ON WATER)
      1. Describe and record BMP/CP/control measures on the SWMP site map that have been implemented
         to address off site run-on water in accordance with subsection 208.03.
   C. VEHICLE TRACKING PAD/VEHICLE TRACKING CONTROL
      1. BMP/CP/Control Measures implemented in accordance with subsection 208.04.
   D. PERIMETER CONTROL
      1. 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, or
         discharging to surface water.
      2. Perimeter control may consist of vegetation buffers, berms, silt fence, erosion logs, existing
         drainage, or other BMP/CP/control measures as approved.
      3. Perimeter control shall be in accordance with subsection 208.04

5. DURING CONSTRUCTION
   RESPONSIBILITIES OF THE SWMP ADMINISTRATOR 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 SWMP Administrator
   in accordance with subsection 208. During construction, indicate how items that have not been addressed are
   being handled in construction. If items are covered in the template or other sections of this SWMP
   notebook indicate below what section the discussion takes place.
   A. STORMWATER MANAGEMENT: Shall be done in accordance with subsection 107.25 and 208.07
   B. CONCRETE WASHOUT: Concrete wash out water or water from field laboratories and paving
      equipment shall be contained in accordance with subsection 208.05.
UTILITIES OF UNDERGROUND MEMBER OR EXCAVATE FOR THE MARKING
ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE.
CALL 2-BUSINESS DAYS IN ADVANCE TO CALL UTILITY NOTIFICATION CENTER OF COLORADO.

REVISIONS:

B. SEEDING APPLICATION: Drill seed 0.25 inch to 0.5 inch into the soil. In small areas not accessible to a drill, hand broadcast or hydroseeded at double the rate and rake 0.25 inch to 0.5 inch into the soil per subsection 212.

C. MULCHING APPLICATION: Apply a minimum of 2 tons of certified weed free straw per acre and in accordance with Section 213, and mechanically clip it into the soil in combination with an organic mulch tackifier.

1. Prior to winter shutdown or the summer seeding window closure: Uncompleted slopes shall be mulched with 2 tons of mulching (weed free) per acre, mechanically clipped into the topsoil in combination with an organic mulch tackifier per subsections 208 and 213.

D. SPECIAL REQUIREMENTS:
1. Due to steep slopes (≥2:1), hydroseding will be allowed on this project for permanent stabilization. Hydroseding rate shall be at double the seeding rate. Hydrosed shall be applied in two applications. The first application is a slurry which contains seed, organic amendment and tackifier. The second application is a slurry of mulch and tackifier. Both slurry applications shall be applied from top of slope downward, in 50’ vertical lifts, unless otherwise approved by the Engineer.

E. SOIL CONDITIONING AND FERTILIZER REQUIREMENTS: Minimum requirements for all disturbances to receive seeding (native). Table 2. Soil conditioner paid for as Item 212: Soil Conditioning (Acre):

<table>
<thead>
<tr>
<th>Soil conditioner paid for as Item 212: Soil Conditioning (Acre)</th>
<th>Hume rate (lbs/acre)</th>
<th>Compost (lbs/acre)</th>
<th>1/2 inch depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>All areas &lt;2.1, &gt;2.1 slopes only</td>
<td>300</td>
<td>200</td>
<td>65</td>
</tr>
</tbody>
</table>

*Biological nutrient shall not exceed 8-8-8 (N-P-K).

F. SOIL RETENTION COVERING: On slopes and ditches requiring a blanket or turf replacement mat (Tm), the blanket/Tm shall be placed in lieu of mulch and mulch tackifier and placed after seeding (native). See SWMP site map for blanket/Tm locations.

G. RESEEDING OPERATIONS/CORRECTIVE STABILIZATION Prior to partial acceptance.
1. All seedbed areas shall be reviewed during the 14-day inspections by the SWMP Administrator and or Erosion Control inspector for bare areas caused by surface erosion, blown away mulch, etc. Shall be re-seeded, seeded, and have the designated mulching applied as necessary, at no additional cost to the project.
2. The Contractor shall maintain seedbed/mulch/tackifier/blanket/Tm, mow to control weeds or apply herbicide in control weeds in the seeded areas until Partial Acceptance of the stormwater construction work.

H. PRIOR TO PROJECT FINAL ACCEPTANCE

A. Partial Acceptance shall be in accordance with subsection 107.25 (d), 208.10 and 214.04 of the Partial Acceptance of the project, it shall be determined by the SWMP Administrator and the Engineer which temporary BMPs/Control Measures shall remain until 70% revegetation is established or which shall be removed.

B. At the end of the project, all ditch checks shall either consist of temporary erosion logo (or equivalent) or permanent rip-rap.
C. All storm drains shall be cleaned prior to the Final Acceptance of the project. Work shall be included in 202 Clean Culvert.

11. NARRATIVES

A. ADDITIONAL BMPS/CONTROL MEASURES AND NARRATIVES:
BMP/Control Measure details and narratives not covered by the SWMP or Standard Plan M-208, M-216 shall be added to the SWMP notebook by the SWMP Administrator.
**BMP Matrix:**

1. M-Standards have been included along with standard BMP narratives. If a non-Standard BMP will be used or the standard narrative does not apply, the SWMP Administrator will write a Non-Standard BMP narrative and place an "X" in the column and complete a Non-Standard BMP Specification and Narrative for the SWMP notebook.

2. The SWMP Administrator shall place an "X" in the column Use On Site when the BMP/Control Measure has been installed.

3. Place an "X" in the column BMP/Control Measure to be located by SWMP Administrator if the SWMP Administrator shall locate the BMP/Control Measure during construction. These BMP/Control Measures are not currently located on SWMP Plans but are anticipated to be used during construction (i.e., Vehicle Tracking Tool, Batch Plants, etc.). The SWMP Administrator shall locate these prior to or during construction and reflect on SWMP Map.

4. Place an "X" in the column Installation BMP/Control Measure Pre-Construction if the BMP/Control Measure is to be installed prior to construction activity.

---

**Structural BMPs/Control Measures** that may be potentially used on the project for erosion and sediment control; practices may include, but are not limited to:

<table>
<thead>
<tr>
<th>APPLICATION, BMP/CONTROL MEASURE</th>
<th>NARRATIVE</th>
<th>M-STANDARD NON-STANDARD</th>
<th>IN USE ON SITE</th>
<th>BMP/CONTROL MEASURE TO BE LOCATED BY SWMP ADMINISTRATOR</th>
<th>INSTALLATION BMP/CONTROL MEASURE PRE-CONSTRUCTION</th>
<th>FIRST/INITIAL CONSTRUCTION ACTIVITIES</th>
<th>IN-REDEMPTION CONSTRUCTION ACTIVITIES</th>
<th>PERMANENT STABILIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROTECTION OF EXISTING WETLANDS</strong></td>
<td>Fence (plastic) and erosion logs</td>
<td>Fence (plastic) shall be placed in combination with erosion bags to prevent encroachment of construction traffic and sediment into state waters prior to start of construction disturbances. Fence (plastic) shall be placed adjacent to the wetlands; erosion logs shall be placed between the plastic fence and disturbance area. Logs shall be placed to direct flows away from or filter water running into wetlands from disurban areas.</td>
<td></td>
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</tr>
<tr>
<td><strong>PROTECTION OF EXISTING TREES/LANDSCAPING</strong></td>
<td>Fence (plastic)</td>
<td>Fence (plastic) shall be used in areas indicated in the plans to prevent encroachment of construction traffic and sediment for the protection of mature trees and/or existing landscaping prior to start of construction disturbances.</td>
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</tr>
<tr>
<td><strong>CHECK DAM/DITCH-CHECK</strong></td>
<td>Erosion logs, silt fence, silt dikes, rock check dam</td>
<td>Erosion logs placed in ditches immediately upon completion of ditch grading to reduce velocity of runoff in ditch. For existing ditches, place prior to start of construction disturbances.</td>
<td>M-208</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>TYPE C AND TYPE D INLET PROTECTION</strong></td>
<td>Storm drain inlet protection (Type 1, 2 and 3)</td>
<td>Placed prior to start of construction disturbances as detailed in M-208-1, to protect existing inlets or immediately upon completion of new inlets to prevent sediment from entering the inlet throughout construction.</td>
<td>M-208</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>CULVERT INLET/OUTLET PROTECTION</strong></td>
<td>Erosion logs, aggregate bags</td>
<td>Placed at mouth of culvert inlets and over top of culvert at inlet and outlet where disturbance may be occurring adjacent to pipe to prevent sediment laden water from entering pipe or drainage. Place prior to start of construction disturbances.</td>
<td>M-208</td>
<td></td>
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</tr>
<tr>
<td><strong>TYPE C, TYPE D AND TYPE 13 PROTECTION</strong></td>
<td>Erosion logs, aggregate bags, erosion bales</td>
<td>Placed around inlet grate or slope and ditch paving to prevent sediment from entering inlet. Place prior to start of construction disturbances.</td>
<td>M-208</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STOCKPILE PROTECTION</strong></td>
<td>Temporary berm, erosion bags, aggregate bags*</td>
<td>Placed within specified distance, in accordance with subsection 208.16, from toe to contain sediment around stockpile. Aggregate bags are easily moved and replaced for access during the work day. Place prior to start of stockpile, increase control as stockpile increases size.</td>
<td>M-208</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>TOE OF FILL PROTECTION</strong></td>
<td>Erosion logs, temporary berm, silt fence, topsoil window*</td>
<td>Place prior to toe/embankment work to capture sediment and protect and delineate disturbed areas. *Can be used to stockpile topsoil for salvage.</td>
<td>M-208</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PERIMETER CONTROL</strong></td>
<td>Erosion logs, silt fence, temporary berm, topsoil window*</td>
<td>Place prior to construction commencing to address potential run-off waaters from site and to divert around disturbed area. *Can be used to stockpile topsoil for salvage.</td>
<td>M-208</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>SEDIMENT CONTROL / SLOPE CONTROL</strong></td>
<td>Silt fence, erosion bags</td>
<td>Placed on the contour of a slope to contain and slow down construction runoff. Place prior to start of construction disturbances.</td>
<td>M-208</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Temporary Sediment Trap</td>
<td>Used to capture sediment laden runoff from disturbed areas &lt; 5 acres during construction. Place prior to start of construction disturbances.</td>
<td>M-208</td>
<td></td>
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</tr>
<tr>
<td>Permanent Sediment Basin</td>
<td>Constructed early in project, prior to storm sewer/ditches to capture storm flow as a temporary sediment trap. Outlet structure shall be modified for contaminants of construction runoff if a non-standard detail is needed.</td>
<td>M-208</td>
<td></td>
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</tr>
<tr>
<td>Embankment Protection or Temporary Slope Drain</td>
<td>Placed as a cradle or chute to drain runoff down slope and prevent erosion of slope.</td>
<td>M-208</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Outlet Protection</td>
<td>Material placed as energy dissipater to prevent erosion at outlet structure.</td>
<td>x x x</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Concrete Washout</td>
<td>Construction control, used for waste management of concrete and concrete equipment: cleaning, placed prior to start of concrete activities.</td>
<td>M-208 x x x x</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Vehicle Tracking Pad</td>
<td>Source control to prevent tracking of sediment from disturbed area to offsite surface. Place prior to start of construction disturbances.</td>
<td>M-208 x x x x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweeping</td>
<td>Source control used to remove sediment tracked onto paved surfaces and to prevent sediment from entering drainage system. Sweep daily and at the end of the construction shift as needed. Kick brooms shall not be permitted.</td>
<td>x x x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>De-watering</td>
<td>Shall be done in such a manner to prevent potential pollutants from entering state waters.</td>
<td>x x x x</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Temporary Stream Crossing</td>
<td>Constructed over stream or drainage to prevent discharge of pollutants from construction equipment into water.</td>
<td>x x x x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean Water Diversion</td>
<td>Placed to divert clean surface or ground water around disturbance area to prevent it from mixing with construction runoff.</td>
<td>x x x x</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
### NON-STRUCTURAL BMPs/Control Measures

*that may be potentially used on the project for erosion and sediment control practices may include, but are not limited to:*

1. **Sediment control devices** are designed to capture sediment on the project site.
2. **Construction controls** are BMPs/Control Measures related to construction access and staging. BMP/Control Measure locations are indicated on the SWMP site map.

### Application, BMP/Control Measure

<table>
<thead>
<tr>
<th>Application, BMP/Control Measure</th>
<th>Narrative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vegetative Buffer Strip</strong></td>
<td>Filter sediment laden runoff from disturbance area. Area to be identified on SWMP prior to construction starting.</td>
</tr>
<tr>
<td><strong>Landform (SWMP Administrator shall add locations to SWMP site maps)</strong></td>
<td>Existing landform may be used as a BMP/Control Measure if they prevent sediment from entering or leaving the disturbance area. If a landform directs flow of water to a concentrated area, the area shall be protected to prevent erosion. Area to be identified on SWMP prior to construction starting.</td>
</tr>
<tr>
<td><strong>Topsoil Management</strong></td>
<td>Prior to embankment work commencing, existing topsoil shall be scraped to a depth of 4 inches, and placed in stockpiles or windows. Upon completion of slope work/finish grading (less than 4 inches), topsoil shall be evenly distributed over embankment to a depth of 4 inches.</td>
</tr>
<tr>
<td><strong>Surface Roughtening/Grading Techniques</strong></td>
<td>Temporary stabilization of disturbance to minimize wind and erosion.</td>
</tr>
<tr>
<td><strong>Seeding (Temporary)</strong></td>
<td>Temporary stabilization used for overwintering of disturbance or used to control erosion for areas scheduled for future construction.</td>
</tr>
<tr>
<td><strong>Bonded Fiber Matrix/Hydraulic Mulch</strong></td>
<td>Not to be used in areas of concentrated flows, i.e., ditch lines. To be used in combination with surface roughening for temporary stabilization of disturbed areas when work is temporarily halted and as approved by the Engineer. May be used as surface cover for temporary topsoil stockpiles.</td>
</tr>
<tr>
<td><strong>Mulch/Mulch Tackifier</strong></td>
<td>Temporarily or Final Stabilization placed as a surface cover for erosion control and/or seeding establishment. To be installed as temporary surface cover when work is temporarily halted and as approved by the Engineer.</td>
</tr>
<tr>
<td><strong>Spray-on Mulch Blanket</strong></td>
<td>Temporarily or Final Stabilization placed as a surface cover for erosion control and/or seeding establishment. To be installed as temporary surface cover when work is temporarily halted and as approved by the Engineer.</td>
</tr>
<tr>
<td><strong>Seeding Permanent (Native)</strong></td>
<td>Final Stabilization of disturbance to reduce runoff and control erosion on disturbed areas.</td>
</tr>
<tr>
<td><strong>Soil Retention Blanket (SRB)</strong></td>
<td>Final Stabilization of disturbance to reduce runoff and control erosion on disturbed areas.</td>
</tr>
<tr>
<td><strong>Turf Reinforcement Mats (TRM)</strong></td>
<td>Final Stabilization of disturbance to reduce runoff and control erosion on disturbed areas. Placed in channels or on slopes for erosion control, channel liner and seeding establishment.</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
</tr>
</tbody>
</table>

### BMP/Control Measure Phasing

<table>
<thead>
<tr>
<th>Phase</th>
<th>First/Initial Construction Activities</th>
<th>Intermediate Construction Activities</th>
<th>Permanent Stabilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SWMP Notes

- **Upper Fourmile Canyon Drive**
- **Engineering Division**
- **Boulder County Transportation Department**
**12. TABULATION OF STORMWATER QUANTITIES**

A. BMP/Control Measure sediment removal and disposal shall be paid for as: 208 Removal and Disposal of Sediment (Equipment) and 208 Removal and Disposal of Sediment (Labor). All other BMP/Control Measure maintenance shall be included in the cost of the BMP/Control Measure.

B. It is estimated that 100 hours of labor, blading (200 horse power), dozing (104 horse power), combination loader (93 horse power) and/or backhoe (93 horse power) may be required for miscellaneous erosion control work as directed by the Engineer. Work shall be paid for as: 203 Labor, 203 Blading, 203 Dozing, 203 Combination Loader or 203 Backhoe.

C. Establishment of seeded areas shall be paid for as: 212 Seeding (Native). This shall include mowing, weed control, reseeding/mulch/trackfill.

<table>
<thead>
<tr>
<th>Spec.</th>
<th>Pay Item</th>
<th>Description</th>
<th>Pay Unit</th>
<th>Initial Const.</th>
<th>Interim Const.</th>
<th>Permanent Stabilization</th>
<th>*Total Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSP</td>
<td>208-00106</td>
<td>Sweeping (Sediment Removal)</td>
<td>Hr</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>SSP</td>
<td>208-00107</td>
<td>Removal of Trash</td>
<td>Hr</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>SSP</td>
<td>208-00207</td>
<td>Erosion Control Management (ECM)</td>
<td>Day</td>
<td>5</td>
<td>40</td>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td>SSP</td>
<td>208-00301</td>
<td>Temporary Diversion</td>
<td>LF</td>
<td>1250</td>
<td>1250</td>
<td>1250</td>
<td>1250</td>
</tr>
<tr>
<td>SSP</td>
<td>212-00006</td>
<td>Seeding (Native)</td>
<td>Acre</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
</tr>
<tr>
<td>SSP</td>
<td>212-00009</td>
<td>Seeding (Temporary)</td>
<td>Acre</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>SSP</td>
<td>212-00032</td>
<td>Soil Conditioning</td>
<td>Acre</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
</tr>
<tr>
<td>SSP</td>
<td>212-00004</td>
<td>Mulching (Wheat/Tree Shrub)</td>
<td>Acre</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>SSP</td>
<td>211-00012</td>
<td>Sod/soil Mulch Blanket</td>
<td>Acre</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
<td>0.70</td>
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<tr>
<td>SSP</td>
<td>215-00061</td>
<td>Mulch Trackfill</td>
<td>LB</td>
<td>3800</td>
<td>3800</td>
<td>3800</td>
<td>3800</td>
</tr>
<tr>
<td>SSP</td>
<td>211-00201</td>
<td>Soil Retention Blanket (Straw/Coconut)</td>
<td>SY</td>
<td>4800</td>
<td>4800</td>
<td>4800</td>
<td>4800</td>
</tr>
<tr>
<td>SSP</td>
<td>211-00201</td>
<td>Soil Retention Blanket (Biodgradable Class 1)</td>
<td>SY</td>
<td>4800</td>
<td>4800</td>
<td>4800</td>
<td>4800</td>
</tr>
<tr>
<td>SSP</td>
<td>211-00301</td>
<td>Turf Reinforcement Mat (Class1)</td>
<td>SY</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>PSP</td>
<td>213-00000</td>
<td>Herbicide Treatment</td>
<td>SY</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>SSP</td>
<td>607-11525</td>
<td>Fence (Plastic)</td>
<td>LF</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
</tbody>
</table>

**(1) It is anticipated that additional BMPs/Control Measures and BMP/Control Measure quantities not shown on the SWMP Site Maps shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsection 208.03 and 208.04. Quantities for all BMP/Control Measures shown above are estimated, and have been increased for unforeseen conditions and normal BMP/Control Measure life expectancy. Quantities shall be adjusted according to the conditions encountered in the field as directed and approved by the Engineer. Payment shall be for the actual work completed and material used.**

**13. BIOLOGIC IMPACTS**

**A. ENVIRONMENTAL IMPACTS:**

1. Wetland Impacts: NO
2. Stream Impacts: YES
3. Threatened and Endangered Species: NO
4. If YES to any of the above items, are any permits required or additional actions needed (404, etc.) A 404 Permit will be required.

**14. NOTES**