POST DETAIL

SECTION

ANCHOR DETAIL

BACKING TUBE DETAIL

VIEW

W-Beam Expansion Device Detail

SPLICE BOLTS NOT SHOWN

Tube Splice Detail

Traffic

1/4" Plastic Sheet, Full Length and Width of Overlap

#8 Splice Bolts, Nuts And Flat Washers, Sems, Do Not Tighten, Peen Thread.

Tube Splices, Slot All Tubes, Stagger Top And Bottom Splices Into Different Post Spacings Except At Expansion Joint, Place Opposite Ends Of Same Post Space. (Range Of Motion = 1'-0" At Bridge Expansion Device.)

Fabricated From A588 Steel
CONSTRUCTION PHASING AND TRAFFIC CONTROL GENERAL NOTES

1. 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 project. Other approaches may be indicated in the plans or using temporary lane closures. It may be necessary to construct the permanent improvements later shown in the plans. The suggested construction phasing plans follow traffic control design criteria as indicated on this page.

2. It is the intent of the suggested construction phasing plans to convey to the contractor the general but essential design elements required to construct the project. Other approaches may be indicated in the plans using temporary lane closures. The suggested construction phasing plans do not represent the permanent improvement plans that are shown later in the contract documents.

3. All construction traffic control shall conform to the applicable standards in the Manual on Uniform Traffic Control Devices (MUTCD) as revised and Colorado Department of Transportation (CDOT) standards plus standard traffic control devices shall be placed in accordance with MUTCD Standard Plan 5-30-00, and the manual on uniform traffic control devices.

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

5. The number and type of lanes shown in the suggested construction phasing plans shall be maintained at all times and shown in the contracts that are otherwise approved by the Engineer.

6. A minimum travel lane width of 10 feet shall be maintained at all times, unless otherwise approved by the Engineer.

7. A minimum shoulder width of 1 foot shall be provided between the travel lanes and edge of travel lane at all times.

8. Maximum slope adjacent to traveled way shall be 3:1 unless protected by concrete barriers (permanent) or concrete barriers (temporary) shall be used adjacent to travel lanes with drop-offs greater than 3 feet.

9. 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 shielded to outside if clear zone per the applicable design guide.

10. Concrete barriers (temporary) may require multiple resets for the duration of the project. Multiple resets will not be paid separately but shall be included in the cost of the temporary lane closures through the construction zone on final pavement.

11. 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.

12. Removal of pavement markings for temporary lanes will not be paid separately but shall be included in the cost of the work. Temporary signs must be disposed of properly off site.

13. The contractor shall bear all responsibility and expense for providing temporary signals and signs. If not otherwise approved by the respective property owner and Boulder County, temporary signals shall be provided on the job site, and the property owner shall be responsible for the cost of the temporary signals. The signals shall be at the property owner's expense.

14. The contractor shall maintain safe and reasonable access to private properties at all times, unless otherwise approved in writing by the property owner and Boulder County. Use of private property shall be coordinated with the property owner. Masking of existing signs, including the covering of temporary signs and painting devices, shall not be required but may be done at the contractor's expense. The contractor shall be responsible for snow removal and pavement maintenance (clearing, patching, etc.) within the construction zone.

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

16. Existing signs in conflict with the temporary lanes shall be covered or reset as conditions permit. For each construction phase and as approved by Boulder County, marking of existing signs, including the covering of existing signs, and painting devices, shall be at the contractor's expense. The contractor shall bear all responsibility and expense for providing temporary signals and signs. If not otherwise approved by the respective property owner and Boulder County, temporary signals shall be provided on the job site, and the property owner shall be responsible for the cost of the temporary signals. The signals shall be at the property owner's expense.

17. 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 10-foot travel lane plus shoulders shall be maintained, as approved by Boulder County. See the specifications for additional requirements.

18. If temporary signals are used, the contractor shall prepare a detailed temporary signal plan for the construction zones. The contractor shall be responsible for compliance with the applicable construction standards and criteria. The contractor shall be responsible for the design, construction, and operation of the temporary signal equipment. The contractor shall be responsible for the maintenance of the temporary signal equipment.

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21. Schedule of traffic control devices & phasing items:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/22/2018</td>
<td>Detour Pavement (L03) 5Y</td>
</tr>
<tr>
<td>3/22/2018</td>
<td>Flagging (L00)</td>
</tr>
<tr>
<td>3/22/2018</td>
<td>Unsignalized Traffic Control (2)</td>
</tr>
<tr>
<td>3/22/2018</td>
<td>Traffic Control Inspection (2)</td>
</tr>
<tr>
<td>3/22/2018</td>
<td>Traffic Control Management (2)</td>
</tr>
<tr>
<td>3/22/2018</td>
<td>Portable Message Sign Panels (4)</td>
</tr>
<tr>
<td>3/22/2018</td>
<td>Concrete Barriers (2)</td>
</tr>
<tr>
<td>3/22/2018</td>
<td>Traffic Signal (2)</td>
</tr>
<tr>
<td>3/22/2018</td>
<td>Concrete Barriers (2)</td>
</tr>
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<td>3/22/2018</td>
<td>Traffic Signal (2)</td>
</tr>
</tbody>
</table>

AD SET

Revised Date: 05/04/18

BOULDER COUNTY TRANSPORTATION DEPARTMENT

FOURMILE CANYON DR

SUGGESTED CONSTRUCTION PHASING NOTES
NOTES:
1. WALL TYPE VARIES. CANTILEVER RETAINING WALL SHOWN TO REPRESENT POSSIBLE TEMPORARY EXCAVATION LIMITS.
2. SMOKING NEEDS VARY DEPENDING ON WALL LOCATION AND TYPE, SEE WALL PLANS FOR LOCATION AND LIMITS OF SMOKING.
SUGGESTED CONSTRUCTION PHASING WORK ITEMS - PHASE 2 (SOUTH SEGMENT)

PHASE 2A:
1. Traffic in temporary 1-way northbound configuration in eastbound
2. Install temporary traffic control necessary for Phase 2A work
3. Install construction traffic control necessary for Phase 2A work
4. Utility relocations and protections to be performed as necessary
5. Construct pavement of drainage crossings on southbound side
6. Construct temporary walls and guiderails, if required
7. Construct southbound roadway and shoulders west of project control line
8. Move existing pavement to temporary westbound configuration and drain
9. Move existing temporary westbound configuration across project
10. Move existing pavement to final southbound configuration

PHASE 2B:
1. Traffic in temporary 1-way northbound configuration in eastbound
2. Install temporary traffic control necessary for Phase 2B work
3. Install construction traffic control necessary for Phase 2B work
4. Utility relocations and protections to be performed as necessary
5. Construct pavement of drainage crossings on northbound side
6. Construct permanent drainage and culverts east of project control line
7. Construct shoulders and shoulders on northbound side
8. Move existing pavement to final northbound configuration
9. Remove southbound detour
10. Move existing pavement to final southbound configuration

PHASE 2C:
1. Traffic in final configuration with construction traffic control
2. Remove temporary traffic control
3. Install permanent traffic control
4. Install final traffic control
5. Install final pavement edgers
6. Return construction traffic control devices
7. Clear and sod

SUGGESTED CONSTRUCTION PHASING WORK ITEMS - PHASE 3 (SOUTH SEGMENT)

PHASE 3A:
1. Traffic in final configuration with construction traffic control
2. Remove construction traffic control
3. Install permanent traffic control
4. Install final traffic control
5. Install final pavement edgers
6. Return construction traffic control devices
7. Clear and sod

LEGEND
- APPROXIMATE DETOUR PAVEMENT (TEMPORARY WIDENING)
- PHASE 2.2 CONSTRUCTION AREA
- PHASE 2.3 CONSTRUCTION AREA

PROJECT NO: 4043.SEPT12C36
DATE: 05/04/18
CHECKED:
SUGGESTED CONSTRUCTION PHASING WORK ITEMS - PHASE 1 (NORTH SEGMENT)

1. PHASE 1.1:
   - TRAFFIC IN EXISTING CONFIGURATION
   - INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.1 WORK
   - INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.1 WORK

2. PHASE 1.2:
   - TRAFFIC IN TEMPORARY 1-WAY NORTHBOUND CONFIGURATION (ON WEST SIDE)
   - INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.2 WORK
   - INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.2 WORK

3. PHASE 1.3:
   - TRAFFIC IN TEMPORARY 1-WAY NORTHBOUND CONFIGURATION (ON EAST SIDE)
   - INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.3 WORK
   - INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.3 WORK

4. INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.4 WORK

5. INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.4 WORK

6. INSTALL FINAL PAVEMENT MARKINGS

7. REMOVE TEMPORARY EROSION CONTROL

8. INSTALL FINAL SIGNAGE

9. CLEAN-UP AND DEMOBILIZE

LEGEND

PHASE I CONSTRUCTION AREA
PHASE 1.1 CONSTRUCTION AREA
PHASE 1.2 CONSTRUCTION AREA
PHASE 1.3 CONSTRUCTION AREA
APPROXIMATE DETOUR PAVEMENT
CONSTRUCT SOUTHBOUND ROADWAY, DRIVEWAYS AND PULLOUT WEST OF PROJECT
CONSTRUCT NORTHBOUND ROADWAY, DRIVEWAYS AND PULLOUT EAST OF PROJECT
CONSTRUCT PORTIONS OF DRAINAGE CROSSINGS ON NORTHBOUND SIDE INCLUDING DRIVEWAY CULVERTS
CONSTRUCT PORTIONS OF DRAINAGE CROSSING ON SOUTHBOULD SIDE
UTILITY RELOCATIONS AND PROTECTIONS TO BE PERFORMED AS NECESSARY
INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.2 WORK
INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.3 WORK
INSTALL CONSTRUCTION TRAFFIC CONTROL NECESSARY FOR PHASE 1.4 WORK
INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.2 WORK
INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.3 WORK
INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.4 WORK
INSTALL TEMPORARY EROSION CONTROL NECESSARY FOR PHASE 1.4 WORK

ADVANCE BEFORE YOU DIG, GRADE, UTILITIES OF UNDERGROUND MEMBER OR EXCAVATE FOR THE MARKING CALL 2 BUSINESS DAYS IN CALL UTILITY NOTIFICATION CENTER OF COLORADO.