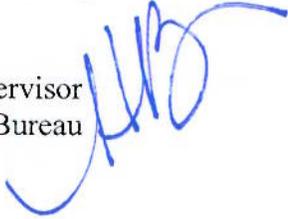




*Environmental Services*  
MONTANA DEPARTMENT OF TRANSPORTATION  
Helena, Montana 59620

**Memorandum**

To: Lisa Hurley  
Fiscal Programming Section Supervisor

From: Heidi Bruner, P.E.  
Engineering Section Supervisor  
Environmental Services Bureau 

Date: October 29, 2015

Subject: Categorical Exclusion (c)(3)  
Elem School Bike Ped - Bozeman  
TA 1299(38)  
Control Number: 8688000

Environmental Services Bureau has reviewed the proposed project and concluded that it will not involve unusual circumstances as described under 23 CFR 771.117(b). As a result, the project qualifies as a Categorical Exclusion under the provisions of 23 CFR 771.117(c), part (3), which describes installation of bicycle and pedestrian facilities. The proposed action also qualifies as a Categorical Exclusion under the provisions of ARM 18.2.261 (Sections 75-1-103 and 75-1-201, MCA).

In accordance with the Federal Highway Administration (FHWA) letter of March 29, 1999, please notify FHWA that the proposed action is being processed in accordance with 23 CFR 771.117(c).

e-copies: Jeff Ebert, Butte District Administrator  
Ryan Dahlke, P.E., Consultant Design Engineer  
Dave Holien, P.E., CTEP/TA Project Engineer  
Robert Stapley, Right-of-Way Bureau Chief  
Suzy Price, Contract Plans Bureau Chief  
Tom Martin, P.E., Environmental Services Bureau Chief  
Barry Brosten, P.E., Environmental Services Project Development Engineer  
Jeff Patten, P.E., FHWA Operations Engineer  
Tom Erving, Fiscal Programming  
Montana Legislative Branch Environmental Quality Council

copy: Environmental Services Bureau File



**Memorandum**

To: Ryan Dahlke, P.E.  
 Consultant Design Engineer

From: Mike Wherley, P.E. *MJW*  
 CTEP/TA Engineer

Date: August 28, 2015

Subject: TA 1299(38)  
 Elem School Bike Ped - Bozeman  
 UPN 8688000  
 Project Work Type 620 – Pedestrian and Bicycle Facilities

Please approve the attached Preliminary Field Review Report.

Approved *Ryan Dahlke* Date *9-4-2015*  
 Ryan Dahlke, P.E.  
 Consultant Design Engineer

We are requesting comments from those on the distribution list. We will assume their concurrence if we receive no comments within two weeks of the approval date.

**Distribution:**

- |   |  |
|---|--|
| Jeff Ebert, District Administrator        | Tom Martin, Environmental Services Bureau Chief              |
| Kent Barnes, Bridge Engineer              | Lynn Zanto, Rail, Transit, & Planning Division Administrator |
| Lesly Tribelhorn, Highways Engineer       | Jake Goettle, Construction Engineering Services Bureau       |
| Roy Peterson, Traffic and Safety Engineer | Matt Strizich, Materials Engineer                            |
| Robert Stapley, Right-of-Way Bureau Chief | Jon Swartz, Maintenance Division Administrator               |
| Mike Wherley, CTEP/TA Engineer            |  |

**cc:**

- |  |   |
|--|---|
| Dave Holien, Project Design Manager, TA/CTEP   | Dawn Stratton, Fiscal Programming Section                   |
| Julie Verellen, Gaston Engineering & Surveying | Todd Swinehart, Bozeman School District Facilities Director |

**e-copies:**

- |  |   |
|--|---|
| Jim Walther, Engineering, Preconstruction Engineer   | Jake Goettle, Construction Bureau – VA Engineer   |
| Dustin Rouse, Highways Design Engineer               | District Preconstruction Engineer                 |
| Dave Hedstrom, Acting Hydraulics Engineer            | Joe Walsh, District Projects Engineer             |
| Walt Ludlow, District Hydraulics Engineer            | Mike Walsh, District Materials Lab                |
| Bryce Larsen, Supervisor, Photogrammetry & Survey    | Kyle DeMars, District Maintenance Chief           |
| Deb Wambach, Butte District Biologist                | Therese Iwaniak, District Right of Way Supervisor |
| Barry Brosten, District Project Development Engineer | Phillip Inman, Utilities Engineering Manager      |
| Danielle Bolan, Traffic Operations Engineer          | David Hoerning, Lands Section Supervisor          |
| Ivan Ulberg, Traffic Design Engineer                 | Greg Pizzini, Acquisition Section Supervisor      |
| Lee Alt, District Traffic Project Engineer           | Joe Zody, R/W Access Management Section Manager   |
| Kraig McLeod, Safety Engineer                        | Matt Strizich, Materials Engineer                 |
| Nathan Haddick, Bridge Area Engineer, Butte District | Jim Davies, Pavement Analysis Engineer            |
| Chad Richards, Engineering Cost Analyst              | Darin Reynolds, Surfacing Design Supervisor       |
| John Pirre, Engineering Information Services         | Jeff Jackson, Geotechnical Engineer               |
| Jan Nessel, Public Involvement Officer               | Pat McCann, District Geotechnical Manager         |
| Sue Sillick, Research Section Supervisor             | Paul Johnson, Project Analysis Bureau             |
| Suzy Price, Contract Plans Bureau Chief              | Jean Riley, Planner                               |
| Alyce Fisher, Fiscal Programming Section             | Dawn Stratton, Fiscal Programming Section         |
| Kuris Miros, Engineering Division                    |   |
| Bicycle/Pedestrian Coordinator                       |   |
| Matt Maze, ADA Coordinator                           |   |

## Preliminary Field Review Report

TA 1299(38), Elem School Bike Ped – Bozeman, UPN 8688000

Project Manager: Dave Holien, P.E.

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### **Introduction**

A scoping meeting for the subject project was held March 24, 2015 at the Bozeman School District No. 7 Facilities Director's Office with an associated field review. The formal meeting began at approximately 10:30 a.m. with the following people in attendance:

Dave Holien	MDT Consultant Design, Helena
Matt Maze	MDT Consultant Design, Helena
Todd Swinehart	Bozeman School District
Julie Verellen	Gaston Engineering & Surveying
Brent Miller	Gaston Engineering & Surveying

### **Proposed Scope of Work**

The proposed project will include survey and design for upgraded pedestrian ramps, trails, and crosswalk improvements at various school locations throughout Bozeman. The project includes work at five schools: Chief Joseph Middle School, Hyalite Elementary School, Morning Star Elementary School, Whittier Elementary School, and Hawthorne Elementary School.

The project will include removing and replacing curb ramps and adjacent curb and gutter to meet Americans with Disabilities Act (ADA) standards at Whittier Elementary School along the east side of 6<sup>th</sup> Street between Peach Street and Short Street and at the southwest corner of the intersection of 5<sup>th</sup> and Peach Street (total quantity of 5 curb ramps and associated curb and gutter). Curb ramps and adjacent curb and gutter will also be upgraded at Hawthorne Elementary School at the southwest corner of the intersection of Mendenhall Street and Lamme Avenue and at the northwest corner of the intersection of Church Street and Lamme Avenue (total quantity of 2 curb ramps and associated curb and gutter). An upgraded drive approach will be installed at Whittier Elementary School along 6<sup>th</sup> Avenue due to the sidewalk being out of compliance and badly deteriorated. The trail improvements will include asphalt pavement for trails at Morning Star Elementary School, Hyalite Elementary School, and Chief Joseph Middle School. Crosswalk improvements will involve installing a Rectangular Rapid Flashing Beacon (RRFB) at Hyalite Elementary School along Babcock Avenue and a Speed Indication (Your Speed Is) sign at Morning Star Elementary School along Arnold Street. In addition, two new concrete bike pads and bike racks will be installed at Chief Joseph Middle School and new bike racks on an existing concrete pad at Hawthorne Elementary School. In the original application, there were also two sidewalk in-fill sections near Chief Joseph Middle School, but these sidewalks sections have recently been installed so they are no longer included as part of this proposed scope of work. The project will include plans, cross sections, special provisions, and environmental document preparation.

Gaston Engineering & Surveying, P.C. has been selected by MDT to provide the Preliminary Engineering for this project. The Construction Engineering will be provided by MDT.

### **Needs and Objectives**

The purpose of this project is to provide safe and accessible access to schools throughout Bozeman to include improved, paved trails; crosswalk safety improvements, upgraded ADA compliant curb ramps to current PROWAG design standards; speed indication signs; and concrete bike pads and racks along identified safe routes to schools throughout Bozeman.

### **Project Location and Limits**

The project is located in the City of Bozeman at five different school locations throughout the City. The project work location at each school is as follows:

- Chief Joseph Middle School: 4255 Kimberwicke Street
  - concrete bike pads and bike racks located on the school property
  - trail improvements between Riata Road and Lasso Avenue

## Preliminary Field Review Report

TA 1299(38), Elem School Bike Ped – Bozeman, UPN 8688000

Project Manager: Dave Holien, P.E.

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- Hyalite Elementary School: 3600 W. Babcock Avenue
  - trail improvements from Ravalli Street to the north school parking lot along the east side of the school
  - RRFB installation on Babcock Avenue at the main school parking lot entrance
  
- Whittier Elementary School: 511 N. 5<sup>th</sup> Street
  - Upgrade a total of five pedestrian ramps located along the east side of 6<sup>th</sup> street, at the SW corner of 5<sup>th</sup> and Peach Street; at the SW corner of 6<sup>th</sup> and Short Street; at the SE corner of 6<sup>th</sup> and Peach Street, and two additional ramps along the east side of 6<sup>th</sup> Street.
  - Upgrade the drive approach and concrete area near the dumpster on the east side of the school along 6<sup>th</sup> Street.
  
- Hawthorne Elementary School: 114 N. Rouse
  - Upgrade pedestrian ramps at the SW corner of Church and Lamme Street and at the NW corner of Church and Mendenhall Street
  - Install bike racks at the existing bike pad located on the school property
  
- Morning Star Elementary School: 830 Arnold Street
  - trail improvements from Teslow Drive to the school property boundary
  - Speed Indication sign installation along Arnold Street near the main school parking lot

See attached location map. Each of the linear paved trail segments will have individual alignments, stationing, and profiles; curb ramp ADA upgrades, concrete pads and bike racks, RRFB, and speed indication sign improvements will only have details.

### **Work Zone Safety and Mobility**

At this time, Level III construction zone impacts are anticipated for this project as defined in the Work Zone Safety and Mobility (WZSM) guidance. The plans package will include a Transportation Management Plan (TMP) consisting mainly of a Traffic Control Special Provision in the plans package.

### **Physical Characteristics**

Most of the work is directly adjacent to the School property and on identified safe routes to school within the City of Bozeman. Existing curb ramps and trails do not meet ADA standards. The existing trails are gravel surface with varying width.

### **Traffic Data**

N/A

### **Crash Analysis**

N/A

### **Major Design Features**

- a. **Design Speed.** N/A
- b. **Horizontal Alignment.** N/A
- c. **Vertical Alignment.** N/A
- d. **Typical Sections and Surfacing.** N/A
- e. **Geotechnical Considerations.** A subsoils inventory to determine soils classifications will be conducted at the existing gravel trails. This soils testing will be used to determine if there is adequate soils subbase beneath the existing trails and what type of surfacing section is required for the paved paths.
- f. **Hydraulics.** Hydraulics design is not required for this project. There will be minor hydraulic involvement with some possible changes to inlet elevations adjacent to new curb ramps.

## Preliminary Field Review Report

TA 1299(38), Elem School Bike Ped – Bozeman, UPN 8688000

Project Manager: Dave Holien, P.E.

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- g. **Bridges.** N/A
- h. **Traffic.** There are no unique traffic or geometric considerations for this project.
- i. **Pedestrian/Bicycle/ADA.** This project will update the existing curb ramps at the identified intersections to ADA/PROWAG standards. The proposed design will utilize the current 2005 Revised Draft PROWAG design standards which are the official ADA design standards adopted by MDT. Curb ramps will be standard 4” unreinforced sidewalk over 2 1/2” of crushed aggregate course. Curb ramp width will match the existing width which varies, but is at least 5’ wide. Curb and gutter will be standard MDT style with a 2’ overall width and a 6” full height curb. No lip will be present at the curb line on the new curb line in accordance with ADA guidance. Cast iron Detectable Warning Devices will be included the full width of the ramps. There are seven curb ramps to be upgraded at the various schools. The existing trails are gravel surface and will be improved with the proper cross section for an 8’ wide asphalt trail section. The cross walk improvements involve installation of a Rectangular Rapid Flashing Beacon (RRFB) along Babcock Avenue at the main Parking lot entrance to Hyalite Elementary School and a speed indication sign installed along Arnold Street near Morning Star Elementary School.
- j. **Miscellaneous Features.** N/A
- k. **Context Sensitive Design Issues.** At this time, no context sensitive design issues have been identified.
- l. **Permanent Erosion and Sediment Control (PESC) Feature.** At the areas where pedestrian ramps are being upgraded, the existing boulevards have grass and landscaping in place. The trail areas have existing grass cover at the shoulders. All of the slopes are flat with the exception of the trail at Hyalite Elementary School. The trail area is flat but beyond the shoulder there is a slope to a drainage ditch that is covered with existing grass cover. All other areas are hardscape with curb and gutter and storm drain inlets in place. No permanent erosion or sediment control features are planned other than perpetuating the grass boulevards adjacent to the curb ramps and grass landscaping next to the trail segments.

### Other Projects

MDT is working with the City of Bozeman and Bozeman School District to widen Rouse Avenue which is adjacent to Hawthorne Elementary School. This TA Project includes new pedestrian ramps for the intersection of Church and Lamme Street and also at the intersection of Church and Mendenhall Street. These ramp replacements are one block east of the Rouse Avenue road widening project, but should not impact this project.

### Location Hydraulics Study Report

The scope of work for this project does not require a Location Hydraulics Study Report.

### Design Exceptions

N/A

### Right-of-Way

No right-of-way acquisition is anticipated for this project. All proposed upgrades will be within the existing City right-of-way, dedicated trail easements, or on Bozeman School District Property. Existing right-of-way will be verified through available City documents.

### Access Control

N/A

### Utilities/Railroads

No utility conflicts are anticipated. A One-Call utility locate will be conducted. If utility conflicts are encountered they will be moved either prior to or during construction. Additionally, if there are ramps

## **Preliminary Field Review Report**

TA 1299(38), Elem School Bike Ped – Bozeman, UPN 8688000

Project Manager: Dave Holien, P.E.

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identified that have utility conflicts they will be given a lower priority for upgrading.

### **Maintenance Items**

Currently, the Bozeman School District maintains school property, the City of Bozeman maintains city right-of-way, and the adjacent landowners maintain the sidewalks. Maintenance responsibilities will not change.

### **Intelligent Transportation Systems (ITS) Features**

There are no ITS solutions planned for this project.

### **Experimental Features**

There are no experimental project features being considered at this time.

### **Survey**

A field survey will be conducted as necessary to establish horizontal and vertical control. Existing MDT survey/datum control will not be utilized for the proposed project, and a local datum/control will be established. A topo survey will be conducted of the existing trail sections and sidewalk corners along the project corridor at a level necessary to perform detailed curb ramp design and trail upgrades. Horizontal and vertical control will be established in such a way to ensure availability at the time of construction, or if destroyed can be easily reproduced.

A One-Call utility locate will be conducted prior to field survey activities. Located utilities within the construction limits will be collected and shown on the plans.

### **Public Involvement**

Level A public involvement is anticipated. Gaston Engineering will provide MDT a draft news release for approval and distribution.

### **Environmental Considerations**

Initial review did not identify any significant environmental effects, issues or cumulative effects of the proposed work. It is anticipated that a Categorical Exclusion will provide a sufficient level of documentation for the proposed project in accordance with the guideline of 23 CFR 771.117. The standard MDT Environmental Checklist will accommodate the appropriate environmental documentation for the proposed project.

### **Energy Savings/Eco-Friendly Considerations**

N/A

### **Traffic Control**

At this time there are no traffic issues that will require special consideration. Construction activity will generally be confined to the corners of the intersections and should not adversely impact motorized traffic along Peach Street, Mendenhall Street, Lamme Street, or 5<sup>th</sup> Street. The installation of the RRFB along Babcock Avenue will need to be addressed in the traffic control special plan provided by the contractor to ensure traffic along Babcock Avenue is not affected.

The Plans Package will include a special provision requesting a traffic control plan from the Contractor. The Contractor Traffic Control Plan will be will need to be reviewed and approved by MDT.

### **Project Management**

The CTEP/TA Section will be responsible for managing this project. Dave Holien is the Project Manager and contact information is listed below. Gaston Engineering & Surveying is the contracted Consultant Design Engineer and Julie Verellen is the Consultant's Project Manager and contact info is listed below.

## Preliminary Field Review Report

TA 1299(38), Elem School Bike Ped – Bozeman, UPN 8688000

Project Manager: Dave Holien, P.E.

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Dave Holien, P.E.  
CTEP/TA Project Engineer  
444-6118  
[dholien@mt.gov](mailto:dholien@mt.gov)

Julie Verellen, P.E.  
Gaston Engineering Project Manager  
406-586-0588  
[juliegaston@gastonengineering.com](mailto:juliegaston@gastonengineering.com)

### Preliminary Construction Cost Estimate

	Estimated cost	Inflation (INF) (from PPMS)	TOTAL costs w/INF + IDC (from PPMS)
ADA Ramps, Trails, Bike pads and racks, Crosswalk Improvements	\$164,000		
<b>Subtotal</b>	<b>\$164,000</b>		
Mobilization (10%)	\$18,000		
<b>Subtotal</b>	<b>\$182,000</b>		
Contingencies (10%)	\$20,000		
<b>Total CN</b>	<b><u>\$202,000</u></b>	<b><u>\$34,032</u></b>	<b><u>260,509</u></b>
<b>CE (8%)</b>	<b><u>\$17,000</u></b>	<b><u>\$2,864</u></b>	<b><u>19,864</u></b>
<b>TOTAL CN+CE</b>	<b><u>\$219,000</u></b>	<b><u>\$36,896</u></b>	<b><u>255,896</u></b>

Note: Inflation is calculated in PPMS to the letting date. If there is no letting date, the project is assumed to be inside the current TCP and is given a maximum of 5 years until letting. IDC is calculated at 10.37% as of FY 2016.

### Preliminary Engineering

The Preliminary Engineering will involve the survey, geotechnical investigation, and design of the proposed scope of work to include plan and profile sheets, typical sections, summary sheets, details, specifications, and special provisions as required to provide a comprehensive set of plans for replacement of the curb ramps, trail improvements, concrete pads and bike racks, and crosswalk improvements. The original application estimated the preliminary engineering to be 10% of the construction cost estimate. The final preliminary engineering cost has been estimated based on the actual hours to complete the required activities and will require an additional amount above the original 10% estimate.

### Project and Risk Management

This project is not considered a Project of Division Interest (PoDI) by FHWA and is a low risk project. The one factor that may play a role in the overall project costs are the unit prices from contractors in the area. We have seen rising unit prices and price fluctuations based on the time of year the project is ready for construction. The varying unit prices may affect the overall construction cost on this project.

### Ready Date

The project schedule has a finish date of March 14, 2016. A Ready Date and Letting Date have yet to be assigned. We expect the Ready Date to be April 1, 2016.

### Site Map

Attached

**Preliminary Field Review Report**

TA 1299(38), Elem School Bike Ped – Bozeman, UPN 8688000

Project Manager: Dave Holien, P.E.

