

STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION

Region 2 – North Program
P.O. Box 536
Pueblo, Colorado 81002
(719)546-5730 Fax (719)546-5414



August 6, 2009

Mr. Dan Prenzlow
Colorado Division of Wildlife
4255 Sinton Rd
Colorado Springs, Colorado 80907

RE: Individual SB40 Certification

Subject and Project Name: BR 069A-022, Bridge over Turkey Creek Bridge SH 69
(15772)

Dear Mr. Prenzlow:

The Colorado Department of Transportation (CDOT) has initiated Project BR 069A-022, Bridge over Turkey Creek to replace structure N-16-L on SH 69 at MP 19.04 in Huerfano County, and is requesting an Individual SB40 Certification from the Colorado Division of Wildlife (CDOW).

This project consists of replacing the existing single span bridge and realigning 2100 linear feet of SH 69 between MP 18.68 and MP 19.32 in order to improve roadway geometrics. The new highway segment will be shifted approximately 120 feet to the south of the current alignment and will require a new crossing of Turkey Creek, which is a small perennial tributary of the Huerfano River (See Figure 1). The existing bridge and highway segment will be obliterated once the new alignment is open to the public. This project is located in Sections 35 & 36 of T 26 S, R 69 W of the 6th Principal Meridian, Colorado.

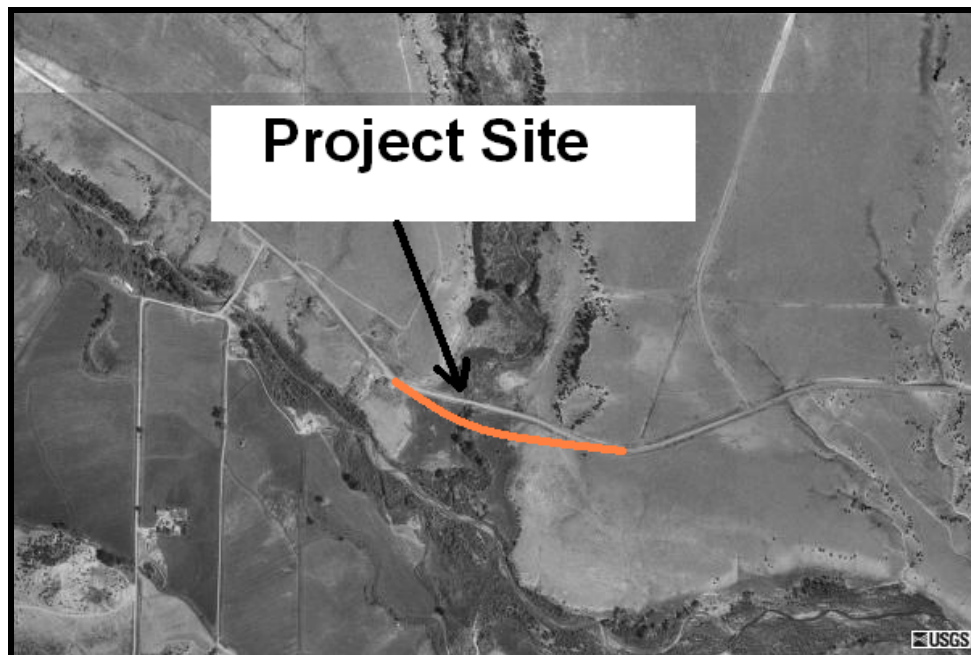


Figure 1: Project Site showing SH 69 Realignment over Turkey Creek

The purpose of this project is two fold. The first is to improve the roadway geometrics in order to increase public roadway safety and to meet standard roadway specifications. The second is to replace the existing bridge structure (N-16-L) which is structurally deficient and functionally obsolete. The narrow bridge lacks shoulders and has a very low sufficiency rating of 22.4 out of 100. The steel truss bridge has considerable structural deterioration on nearly all structural elements. Additionally, the east bridge abutment is exposed and susceptible to scouring.

In order to improve the roadway geometrics, the highway will be realigned to the south. There are no practical alternatives to the proposed realignment. However, three bridge design alternatives were considered with two being eliminated. A three celled concrete box culvert (10' high by 20' wide) section was considered. However, it was eliminated because of the increase risk for storm runoff impacts during construction; extended construction time, stream diversion, excessive fill depth and barrel length, elevated potential for snagging debris, and environmental impacts to the primary channel when compared with a bridge. A two-span bridge with a total length of 108'6" was also considered. This bridge would have required substructure work for a pier in the middle of the existing channel. This pier also increases the potential for scour and snagging debris as well as impacts to the stream.

Based on these impacts, a single span, pre-stressed, concrete box girder bridge, 108.5' long by 43' wide, was chosen for this project. This will replace the existing structure which has a total length of 62' and a width of 27'1". The new bridge avoids work from occurring within the stream channel, eliminates scouring from a pier, and prevents debris from obstructing the bridge opening. The banks will be armored with rip-rap to protect the bridge abutments (see attached plan sheets).

A willow fringe wetland occurs along Turkey Creek extending approximately 2-5 feet from its banks. Impacts to these wetlands from the new bridge alignment are expect to total 300 square feet of a willow carr. An additional 200 square feet of willows will be impacted although these impacts are outside of the wetland boundaries. Impacts will be permanent and caused indirectly from shading that will occur under the bridge once constructed (see attached Wetland Determination Report). To mitigate for these impacts 500 square feet of willow sprigging will be done at the current bridge location once the bridge has been removed and the slopes flattened to a natural contour. There will be additional riparian loss due to the new highway alignment and disturbance during construction. The native vegetation (trees and shrubs) that will be impacted were inventoried and will be replaced with in-kind nursery stock on a 1:1 ratio. While not native, Russian olive trees were also inventoried. Due to their wildlife value, Russian olive will be replaced with chokecherry at a 1:1 ratio (see attached Wetland and Riparian Mitigation Plan sheet). Orange plastic fencing will be used to define no-work areas to protect adjacent wetlands and riparian areas. Mitigation of the loss of wetlands and riparian vegetation will be accomplished by the planting of nursery stock, the sprigging of willows harvested on site, and the planting of native grass and forb seed on all disturbed surfaces. Soil retention blankets used on this project will be biodegradable and wildlife friendly. Additionally, a project special provision will be added to protect nesting migratory birds. The native seed mix is included in the Stormwater Management Plan (SWMP). The SWMP and specs have been included with this submittal.

This project is scheduled for advertisement in October 2009, with construction occurring over an approximate six month period between November 2009 and April 2010. The construction period will take advantage of low-flow conditions within the channel to minimize disturbance. Traffic will utilize the existing bridge structure during construction.

CDOT has coordinated with the Corps office during pre-application consultations to determine Corps 404 permit requirements (see attached letter to Corps dated August 4, 2009).

CDOT is requesting an Individual SB40 Certification for this work. Feel free to contact Rob Frei at 719.546.5749 or Judy Dehaven at 719.546.5409 if you have any questions.

Sincerely,

Richard Annand
Region 2 Environmental Manager

cc: Casey Cooley, CDOW Wildlife

Attachments: SB40 Certification Form
Bridge Plan Profile and Cross Sections
Wetland Delineation
Wetland Mitigation Plan Sheets
USACE 404 Permit Letter (August 6, 2009)
SWMP
MBTA Spec
Revised Soil Retention Blanket Spec