

Appendix A

REEVALUATION - CDOT FORM 1399

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List of Abbreviations

APE	Area of Potential Effect
BMP	best management practice
CCD	City and County of Denver
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CDPS	Colorado Discharge Permit System
CFR	Code of Federal Regulations
CLMR	Conditional Letter of Map Revision
CO	Carbon Monoxide
CPW	Colorado Parks and Wildlife
CWA	Clean Water Act
DEIS	Draft Environmental Impact Statement
EB	Eastbound
EDB	Extended Detention Basins
EDR	environmental data resources
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
HASP	Health and Safety Plan
I-25	Interstate 25
ISA	Initial Site Assessment
LWCF	Land and Water Conservation Fund
MBTA	Migratory Bird Treaty Act
MESA	Modified Environmental Site Assessment
MMP	Materials Management Plan
MOA	Memorandum of Agreement
MS4	municipal separate storm sewer system
MSAT	mobile source air toxics
NAAQS	National Ambient Air Quality Standard
NAC	Noise Abatement Criteria
NB	Northbound
NDRD	New Development and Redevelopment
NEPA	National Environmental Policy Act
NPS	National Park Service
OSHA	U.S. Department of Labor Occupational Safety and Health Administration
PA	Programmatic Agreement
PM ₁₀	particulate matter less than 10 microns in size
PS&E	Plans, Specifications, and Estimates
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
ROD2	Record of Decision 2
ROW	Right-of-Way
SB	southbound
SB 40	Senate Bill 40
sf	square feet

TNM	Traffic Noise Model
US 6	6 th Avenue, or United States Highway 6
USACE	US Army Corps of Engineers
USFWS	US Fish and Wildlife Service
WB	Westbound

COLORADO DEPARTMENT OF TRANSPORTATION REEVALUATION FORM	Original NEPA Approval Date: July 2007	Reevaluation Date: January 2013	Project Code: BR 0061-083
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Project Name and Location: **US 6 Bridges Design Build Project**

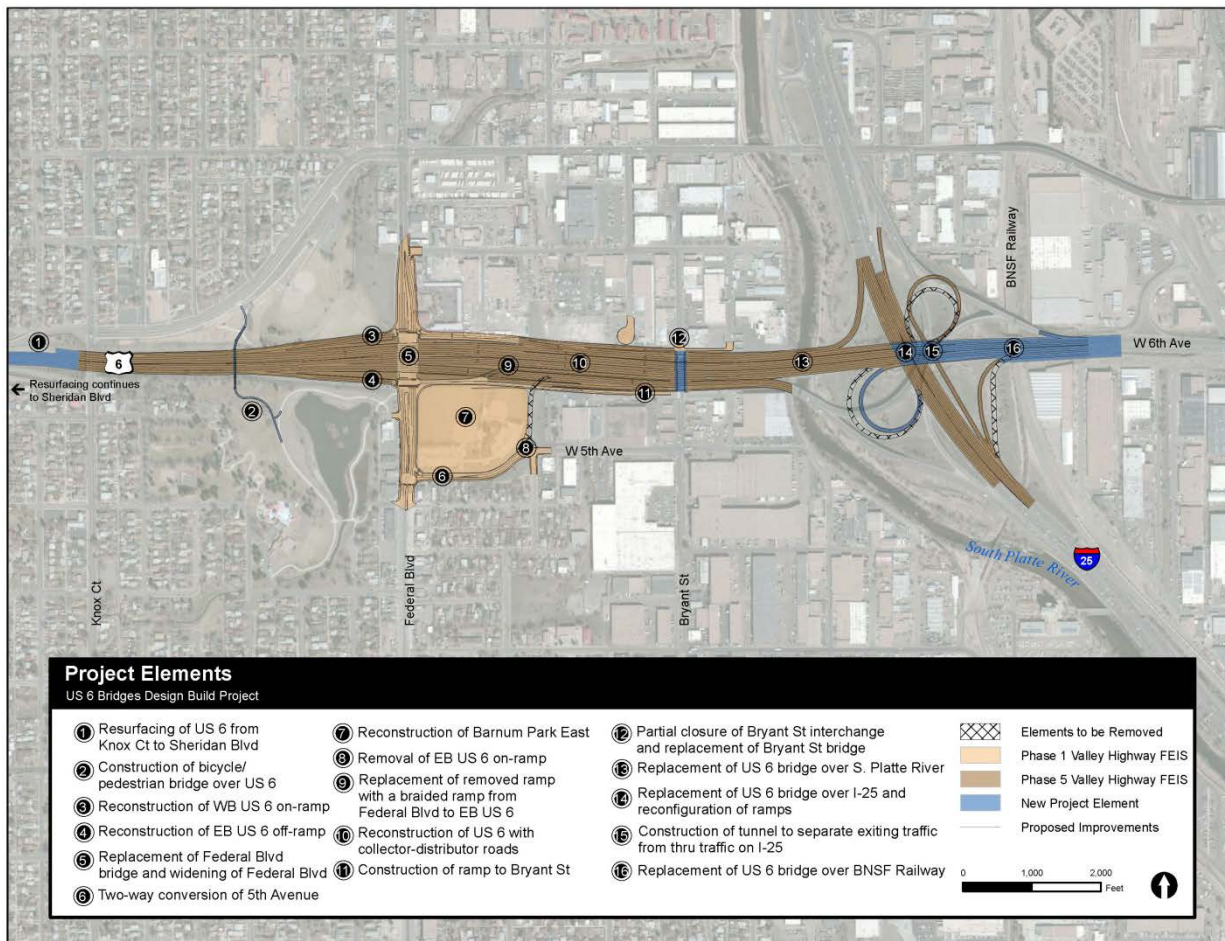
NEPA Document Title: **I-25 Valley Highway Logan to US 6 Final Environmental Impact Statement (2006) and Record of Decision (2007)**

Region/Program/Residency: **CDOT Region 6**

Project Description:

The **US 6 Bridges Design Build Project** (herein referred to as the **Project**) is the next construction phase of the **Interstate 25 (I-25) Valley Highway Logan to US 6 Final Environmental Impact Statement (FEIS) Preferred Alternative** to be implemented. The Project includes modifications to the roadway, interchanges, and bridges along **6th Avenue (US 6)** between **Sheridan Boulevard** and the **BNSF Railway** in **Denver, Colorado**.

The major elements of the Project include the replacement of five bridges, ramp improvements, reconstruction of **US 6** from **Federal Boulevard** to the **BNSF Railway** bridge structure, widening of **Federal Boulevard** from **5th to 7th Avenues**, and a bicycle/pedestrian bridge over **US 6** as mitigation for **Section 4(f)** impacts. All of these elements and many of the smaller Project elements are included in the following figure.



Project Phasing Plan and Portions Completed (if warranted):

As described in the FEIS, the Federal Highway Administration (FHWA) and the Colorado Department of Transportation (CDOT) intend to work toward implementation of the Preferred Alternative in its entirety. Due to funding limitations and the requirements for fiscal constraint, only Phases 1 and 2 were selected for implementation in the 2007 Record of Decision (2007 ROD).

Phase 2 was recently constructed, and a portion of Phase 1 is under construction and is expected to be completed in 2013. These phases include:

- Reconstruction of the I-25/Santa Fe Drive interchange
- Replacement of the southbound (SB) Santa Fe Drive bridge over the South Platte River
- Reconfiguration of Santa Fe Drive and Kalamath Street between I-25 and Alameda Avenue, along with associated access roads in this area
- Replacement of the Alameda Avenue bridge over I-25
- Reconstruction of I-25 mainline from Broadway viaduct to north of Alameda Avenue
- Minor additional improvements to nearby roadways

This form summarizes an environmental reevaluation and supports a new Record of Decision (ROD2) for additional improvements in the Project area. These elements are described in detail in the *Portion of Project Currently Being Advanced* section below.

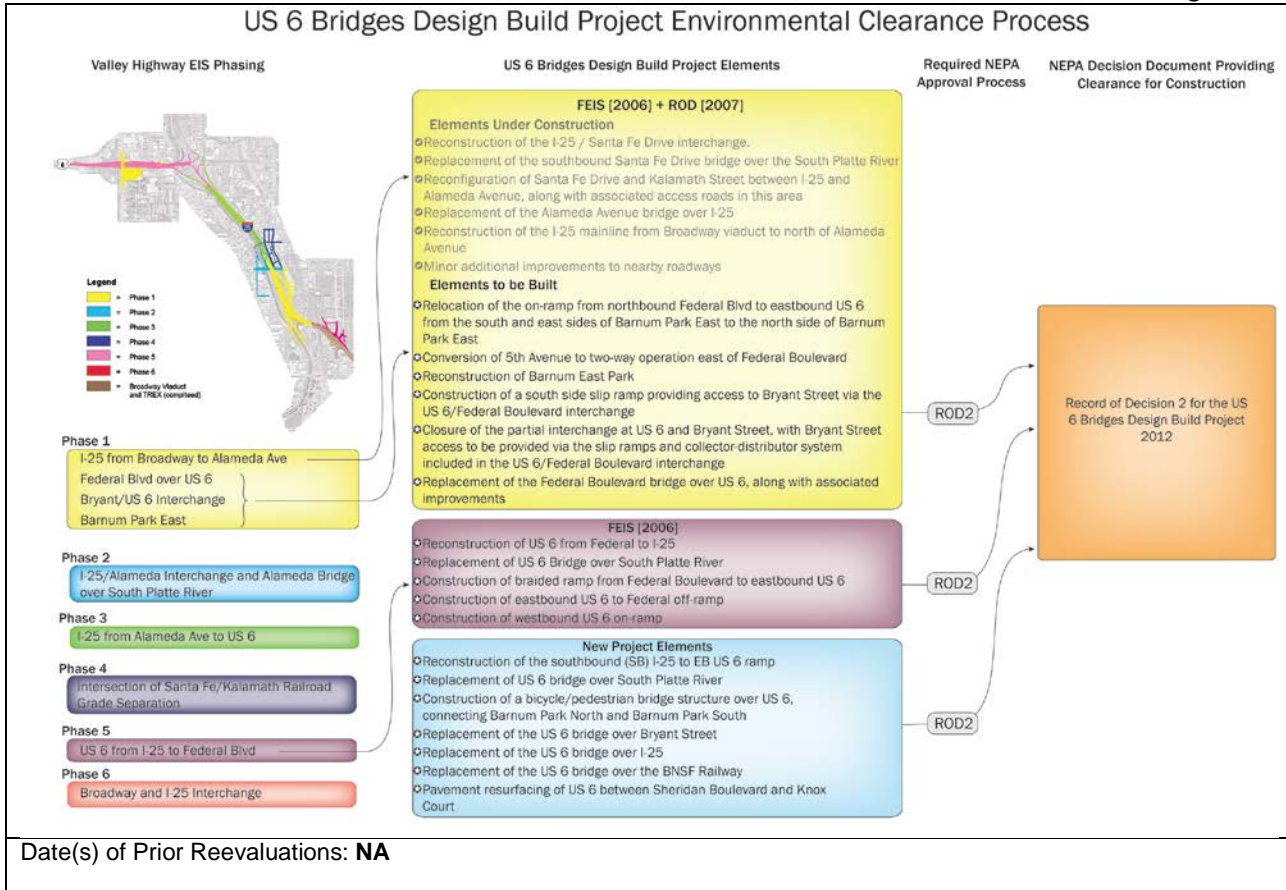
As stated in the 2007 ROD, subsequent project phases will be selected and implemented as additional funding becomes available, enabling FHWA and CDOT to work toward implementation of the entire Preferred Alternative. For each subsequent phase, a new NEPA decision document will be issued. FHWA and CDOT will review the information provided in the FEIS and in previous decision documents in preparing each subsequent decision document.

Portion of Project Currently Being Advanced:

The Project includes the following elements (also identified in the *US 6 Design Build Project Phasing* graphic on the next page):

1. Pavement resurfacing of US 6 from Knox Court to Sheridan Boulevard (*New Project Element*)
2. A bicycle/pedestrian bridge over US 6, connecting Barnum Park North and Barnum Park (also known as Barnum Park South, and herein referred to as Barnum Park South), which is included to mitigate Section 4(f) impacts (*New Project Element*)
3. Reconstruction of the Federal Boulevard to westbound (WB) US 6 on-ramp as part of a diamond interchange (*Phase 5*)
4. Reconstruction of the eastbound (EB) US 6 to Federal Boulevard off-ramp (*Phase 5*)
5. Replacement of the functionally obsolete Federal Boulevard Bridge over US 6 and widening of Federal Boulevard, from five to six lanes, from 5th to 7th Avenues (*Phase 1*)
6. Conversion of 5th Avenue to two-way traffic from Federal Boulevard to Decatur Street (*Phase 1*)
7. Reconstruction of Barnum Park East to include in-kind replacement of impacted facilities, which is included to mitigate Section 4(f) impacts (*Phase 1*)
8. Removal of the Federal Boulevard/5th Avenue ramp to EB US 6 (*Phase 1*)
9. Replacement of removed ramp with a braided ramp from Federal Boulevard to EB US 6 (*Phase 5*)
10. Reconstruction of US 6 with collector-distributor roads/auxiliary lanes from Federal Boulevard to the BNSF Railway bridge structure (*Phase 5*)
11. Construction of ramp from EB US 6 to Bryant Street (*Phase 1*)
12. Closure of the WB US 6 to Bryant Street ramp (*Phase 1*) and replacement of the structurally deficient Bryant Street Bridge over US 6 (*New Project Element*)
13. Replacement of the structurally deficient US 6 bridge over the South Platte River (*Phase 5*)
14. Replacement of the functionally obsolete US 6 bridge over I-25 (*New Project Element*) and reconfiguration of ramps (*Phase 5*)
15. Construction of a tunnel along the east side of I-25, under US 6, to separate traffic on northbound (NB) I-25 from traffic exiting the interstate to travel west on US 6 (*Phase 5*)
16. Replacement of the structurally deficient US 6 bridge over the BNSF Railway (*New Project Element*)

US 6 Bridges Design Build Project Environmental Clearance Process



I. Document Type

- Categorical Exclusion (CE)
- Environmental Assessment (EA)
- Finding of No Significant Impacts (FONSI)
- Draft Environmental Impact Statement (DEIS)
- Final Environmental Impact Statement (FEIS)
- Supplemental Environmental Impact Statement (SEIS)
- Record of Decision (ROD)
- Other (such as: local funding, etc.) _____

II. Reason for Reevaluation

- Project is proceeding to the next major approval or action [23 CFR 771.129(c)]
 - Project changes such as laws, policies, guidelines, design, environmental setting, impacts or mitigation (describe) **Project changes are described in Section IV below**
 - Greater than three years have elapsed since FHWA's approval of the DEIS [23 CFR 771.129(a)] or FHWA's last major approval action for the FEIS [23 CFR 771.129(b)]
 - Other:
-

III. Conclusion and Recommendation

- The above environmental document has been reevaluated as required by 23 CFR 771.129 and it was determined that no substantial changes have occurred in the social, economic, or environmental impacts of the proposed action that would substantially impact the quality of the human, socio-economic, or natural environment. Therefore, the original environmental document or CE designation remains valid for the proposed action. It is recommended that the project identified herein be advanced to the next phase of project development. A summary of the review is documented in Section IV.
- The above environmental document has been reevaluated as required by 23 CFR 771.129 and it was determined that the environmental document or CE designation is no longer valid or more information is required. Additional required documentation is identified in Section VII.

Approval of this Form 1399 shall be confirmed by the FHWA signature on the Record of Decision 2 for the US 6 Bridges Design Build Project

Regional Planning Environmental Manager or Designee

Date

Federal Highway Administration Division Administrator or Designee

Date

IV. Evaluation

- Level 1: Less than three years since last major step to advance the action (e.g. approval of NEPA document, authority to undertake final design, authority to acquire significant portion of ROW, approval of PS&E) and there are no changes in project scope, environmental conditions, environmental impacts or regulations and guidelines.- OR - The document being re-evaluated is a programmatic Categorical Exclusion regardless of time since the last major step to advance the action (as long as the project would still be covered by a programmatic Categorical Exclusion). All decisions in the prior NEPA document remain valid. No FHWA concurrence is required. Note to file and to distribution below.
- Level 2: Less than three years since last major step to advance action and there are only minor changes in the project scope and/or updates or explanation needed for one or more resource areas. FHWA concurrence is required.
- Level 3: More than three years since last major step to advance action and there are only minor changes in the project scope and/or updates or explanation needed for one or more resource areas. FHWA concurrence is required.
- Level 4: Major changes in project scope or environmental commitments, or for EISs when greater than three years have elapsed since the last major project action. Updates or new studies maybe required. A Level 4 Reevaluation may require a separate document. FHWA concurrence is required.

ENVIRONMENT SETTING, AFFECTED ENVIRONMENT, AND ENVIRONMENTAL IMPACT ASSESSMENT:
 Document changes to human, socio economic, or natural environment for environmental setting or circumstances. Document changes in impact status. Place check-mark or description where relevant. Note: this list may be expanded or adjusted to match the headings in the original environmental document reviewed.

Setting/Resource/Circumstance	Change in Affected Environment or Setting		Change in Environmental Impact		Date Reviewed	Highlight Section VI Additional Studies Required or Section IX Attachments
	Yes	No	Yes	No		
Air Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	Air Quality Technical Report
Geologic Resources and Soils	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Water Quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Water Quality Plan
Floodplains	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Water Quality Plan
Wetlands/Waters of U.S.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Biological Resources Report
Vegetation and Noxious Weeds	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Biological Resources Report
Fish and Wildlife	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Biological Resources Report
Threatened/Endangered Species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Biological Resources Report
Historic Resource (includes bridges)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Cultural Resources Technical Report/Memorandum
Archaeological Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	Archaeology and Paleontology Technical Report
Paleontological Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	Archaeology and Paleontology Technical Report
Land Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	See "Other"
Social Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	See "Other"
Economic Resources	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	See "Other"

Environmental Justice	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	See "Other"
Residential/Business Right-of-Way Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Reevaluation, Section 5.1
Transportation Resources (roadway, rail, bus, bike, pedestrian, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Transportation Technical Report
Utilities and Railroads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	
Section 4(f)/6(f)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Section 4(f) and 6(f) Technical Report
Farmlands	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	See "Other"
Noise	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Noise and Vibration Technical Report
Visual Resources/Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	Aesthetics and Urban Design Technical Report
Energy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	See "Other"
Hazardous Materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Oct 2012	Hazardous Material Technical Report
Cumulative Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	See "Other"
Other(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Oct 2012	Technical Memorandum Summarizing Changes From FEIS and Impacts for Land Use, Social and Economic Resources, Environmental Justice, Farmlands, Energy, and Cumulative Effects

DESIGN ALTERATIONS:

Document changes to project scope and or design criteria:

The 2006 FEIS scope and design addressed a much larger area including US 6 from the US 6 and Federal Boulevard interchange to I-25 and I-25 south to Broadway. The Project, described in detail above in *Portion of Project Currently Being Advanced* adds scope for roadway improvements east and west of the original US 6 project area limits, provides for additional structural replacements and changes to the ramps and adjacent property impacts. If there are resource-specific scope and design criteria alterations, other than the changed study area, they are listed below.

Air Quality

The air quality analysis was conducted to estimate the changes of emission levels under the 2035 No Build (without the Project) and 2035 Build (with the Project) scenarios and to assess whether impacts of these changes could cause or exacerbate a violation of the National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO). In addition, as requested by CDOT, the following additional analyses were conducted: a qualitative analysis of particulate matter smaller than 10 microns in diameter (PM₁₀) and a mobile source air toxics (MSAT) analysis. This Project meets air quality conformity requirements.

Water Quality

Two new water quality ponds are required for the Project: the 6th Avenue Interchange Water Quality Pond (which was identified in the FEIS) and the US 6 Water Quality Pond. Section 4 of the ROD2 outlines what mitigation is required for water quality impacts.

Floodplains

The reconstruction of the I-25/US 6 interchange and associated regrading is a modified Project element. Impacts to the floodplain elevation are not anticipated. Section 4 of the ROD2 outlines requirements for potential floodplain impacts.

Historic Resources

A new Area of Potential Effect (APE) was developed in coordination with the State Historic Preservation Office (SHPO) and revised as the Project limits were further defined. The Project would adversely affect one resource determined to be eligible for listing in the National Register of Historic Places. A portion of historically significant brick-lined sewer would be impacted by modifications to the bridge that carries US 6 over the South Platte River. A 240-foot segment of

the sewer would be removed and replaced by concrete piping. The West and Southside Interceptor Sewer was not identified in the FEIS/2007 ROD

Residential/Business Right-of-Way Impacts

Existing right-of-way (ROW) information for the Project was collected from CDOT and the City and County of Denver (CCD) assessor's records. Existing publicly owned ROW along the Proposed Project Area varies from 300 feet in width (along US 6) to 500 feet in width (at major interchanges). As part of the US 6 Bridges Design Build Project one business (Parcel No. 200) will be displaced. In addition, there will be sixteen permanent easements or partial acquisitions and eight temporary easements.

Transportation Resources

This transportation analysis of the Project includes traffic projections to 2035, traffic operations updates to the FEIS, an assessment of bicycle and pedestrian impacts, and an assessment of safety impacts.

Utilities and Railroads

The Project includes the replacement of the US 6 bridge over the BNSF Railway; the FEIS Preferred Alternative did not.

Section 4(f)

The Project has Section 4(f) impacts that are different from the FEIS Preferred Alternative because of design refinements made since the FEIS and 2007 ROD. Two parks (Barnum Park North and Barnum Park East) and one historic resource (West and Southside Interceptor Sewer, which is described in Section 4.5) are subject to a Section 4(f) use with implementation of the Project.

Section 6(f)

The FEIS documented no Section 6(f) conversions under the Preferred Alternative. The current Project has 6(f) impacts that are different from the FEIS Preferred Alternative because of design refinements made since the FEIS and 2007 ROD. One park (Barnum Park North) is subject to a Section 6(f) conversion with implementation of the Project. One recreation area (the South Platte River Greenway, which includes the South Platte River Trail) is subject to a temporary impact during construction activities.

Noise

The noise levels along the current roadways were measured using 2035 traffic projections at 19 locations, and existing and future No Build Alternative and Project peak noise levels were modeled for 31 locations using FHWA's Traffic Noise Model (TNM[®]).

Visual Resources and Aesthetics

The Aesthetics Addendum from October 2006 contains the "Kit of Parts" and urban design guidelines for the Phase 1 and Phase 2 portions of the Valley Highway FEIS and ROD. The Project will apply recommendation from the 2012 Aesthetics Technical Report, Appendix D, during final design and construction.

Hazardous Materials

Updated ROW plans and a new Environmental First Search Summary Report were used to determine properties with proposed or recognized environmental conditions.

REGULATORY CHANGES:

Document changes to laws, regulations, and/or guidelines:

Air Quality

- 2007: US Environmental Protection Agency (EPA) rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007)
- 2008: EPA designated the Denver/North Front Range region as nonattainment for the 8-hour ozone standard
- 2008: EPA modified NAAQS for PM10
- 2009: New PM2.5/10 Guidance from FHWA/EPA
- 2010: New EPA regulation from May 2004 called "Clean Air Nonroad Diesel Rule" calling for the use of ultra-low sulfur diesel for most non-road diesel equipment, including construction equipment, beginning in 2010

Water Quality

The CDOT Municipal Separate Storm Sewer Systems (MS4) permit and New Development and Redevelopment (NDRD) Stormwater Management Program require that best management practices (BMPs) be provided for significant highway redevelopment construction that will disturb more than 1 acre.

Threatened and Endangered Species

Since the 2006 FEIS and 2007 ROD, a US Fish and Wildlife Service (USFWS) Block Clearance Zone (2008) was established for Ute ladies tresses orchid, Preble's meadow jumping mouse and the Colorado butterfly plant. The Project Area falls completely within this Block Clearance Zone; therefore, no additional coordination was required. No suitable habitat for any federally listed threatened or endangered species occurs within the Project Area.

Historic Resources

There have been no systemic regulatory changes to the Section 106 process between the FEIS, 2007 ROD, and this 2012 reevaluation. New historical resources were identified due to the maturation of their age to over 50 years between 2007 and 2012.

Section 4(f)

- Nationwide Programmatic Evaluation for net benefit to 4(f) resources approved
- *De minimis* finding available. When the resource owner or the agency with jurisdiction agree that the proposed project will result in minimal impacts to the resource, a *de minimis* finding can be issued, allowing projects to move forward without additional Section 4(f) evaluation.
- The regulations have been updated so that when evaluating the various avoidance alternatives that are part of full Section 4(f) analysis, other resources beyond Section 4(f) resources can be considered as part of the decisions.

Noise

The CDOT Noise Manual was revised to comply with the June 2010 update to 23 Code of Federal Regulations (CFR) 772 (CDOT 2011). CDOT implements FHWA noise regulations in accordance with Analysis and Abatement Guidelines (CDOT 2011) which have been updated since the 2006 FEIS. According to the updated manual, a noise impact occurs when the future noise level for one or more build alternative results in a substantial increase in the noise level (defined as a 10 dBA or more increase over the existing noise levels) or when the future noise level for one or more Build Alternative reaches or exceeds the Noise Abatement Criteria (NAC).

IMPACTS ASSESSMENT:

For items checked as changed above: assess the affected natural and socio-economic environment, impacts and new issues/concerns which may now exist.

Air Quality

Following guidance set forth in 40 CFR 93.123(b)(1)(i), the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division, EPA and FHWA determined on August 22, 2012 that the Project is not considered a project of air quality concern regarding PM₁₀ emissions. In addition, the Project has demonstrated local and regional air quality conformity requirements. CDOT and FHWA have concluded that construction of the Project will not create long-term regional or local air quality impacts, and the Project has demonstrated local and regional air quality conformity.

Construction

Excavation, grading, and fill activities could increase local fugitive dust emissions. Fugitive dust is airborne particulate matter, generally of a relatively large particle size (greater than 100 microns in diameter). Because of the large size, these particles typically settle within 30 feet of their source. Smaller particles could travel as much as several hundred feet depending on wind speed. Through the use of mitigation measures, fugitive dust emissions will be effectively controlled.

Water Quality

In addition to the BMPs required for the MS4 permit and NDRD program, the Master Water Quality Report (Appendix M) identified the need for additional water quality measures which could be provided by two new water quality ponds; in addition to the Decatur water quality ponds used to mitigate the additional area, imperviousness, and/or runoff in this area. The US 6 Water Quality Pond and the 6th Avenue Interchange Water Quality Pond are proposed extended detention basins (EDB) that will be used to comply with water quality standards for the Project Area. An EDB is similar

to a dry detention basin; however, they maintain a permanent pool in dry weather.

Construction

During construction, stormwater runoff could present the potential for violations of water quality standards in adjacent waterways and groundwater. Without mitigation measures, stormwater runoff could cause erosion and sedimentation, and transport of spilled fuels or other hazardous materials. The majority of the Project area would drain into the South Platte River. Groundwater could be encountered during relocation of deep utilities, excavation, and construction of tunnels and below-grade roadways. Dewatering and treatment would likely be required where groundwater is present. Mitigation measures for contaminated groundwater potentially encountered during construction are discussed in Section 4 of ROD2.

Floodplains

Impacts to the floodplain elevation due to construction of the Project are not anticipated. Section 4 of the ROD2 outlines requirements for potential floodplain impacts.

Wetlands and Waters of the US

A new wetland was delineated north of the US 6 structures over the South Platte River. This wetland is 100 square feet (sf) in size.

Vegetation and Noxious Weeds

There will be impacts to urban and riparian vegetation as a result of this Project.

Fish and Wildlife

MBTA rules will still apply. The Project will still require the replacement of the structures over the South Platte River and the removal of trees throughout the Project area. There is potential to disturb migratory bird nests as a result of tree removal and potential to disturb nesting Cliff Swallow during demolition or construction activities of the structures over the South Platte River.

There will be minor impacts to the northern leopard frog and the common garter snake. Impacts to habitat to the northern leopard frog and the common garter snake will be mitigated by erosion control to keep sediment out of the South Platte River during construction and 1:1 replacement of all riparian vegetation as required by Senate Bill (SB) 40. Measures will be outlined in provisions of the Senate Bill 40 (SB 40) Wildlife Certification and BMPs associated with the Clean Water Act (CWA) 404 Permit. These species were not previously addressed in the FEIS and 2007 ROD.

Threatened and Endangered Species

The Project will result in a water depletion to the South Platte River; therefore there is a potential to impact the following federally listed threatened or endangered species: Least Tern, pallid sturgeon, Piping Plover, western prairie fringe orchid, and the Whooping Crane. Impacts to these species as a result of a water depletion to the South Platte River are addressed by the April 24, 2012 Biological Opinion issued by the USFWS addressing depletions and impacts to those species. The Project will be required to report the amount of water used from the South Platte River to USFWS.

Historic Resources

On August 23, 2012, SHPO provided a finding of concurrence with CDOT's cultural analysis findings. One historically significant resource was identified. A portion of historically significant brick-lined sewer is impacted by US 6 improvements and will be removed and replaced by concrete piping. This sewer segment composes a small portion (0.10 percent) of a seven mile stretch of historically significant functioning brick sewer. CDOT has determined and SHPO concurred that the removal of this segment can be considered an *adverse effect*. CDOT, FHWA, SHPO, CCD, and Metro Wastewater intend to develop a Programmatic Agreement (PA) which will provide for mitigation of this adverse effect and will apply to the entire seven mile stretch of sewer. The first steps of this PA have begun with the development of a report on the history of Denver's brick sewers. Mitigation for this resource will be handled through this separate PA and with SHPO's concurrence.

Residential/Business Right-of-Way Impacts

The Project will require displacement of one business (Parcel No. 200); full purchase of one property (Parcel No. 200); acquisition of sixteen permanent easements or partial acquisitions and eight temporary easements.

Transportation Resources

The Project would not have any adverse impacts on traffic operations and would result in overall traffic operations improvements. These impacts are similar to those disclosed in the FEIS for the Preferred Alternative.

Construction

Construction detours would be expected to create short-term impacts on local traffic circulation and congestion. For this Project, these impacts would be substantial. Delays to the traveling public and inconvenience to corridor residents would occur. A primary goal of CDOT during construction of the Project would be to minimize inconvenience to the public. The construction impact BMPs are:

- The contractor shall maintain two through lanes at all times on EB and WB US6 from the South Platte River to the east Project limit.
- The contractor shall maintain three through lanes at all times on EB and WB US6 from the west Project limit to the South Platter River.
- All lane closures on I25 shall be consistent with the Region Six Lane Closure Strategy.

Utilities and Railroads**Construction**

The Project corridor ROW is crossed by various utilities, some of which would be relocated during construction by CDOT's contractor or by others. Impacts to existing utilities located within the new ROW were evaluated based on information found in the FEIS. Utilities in the Project corridor to be considered during the design-build process are electrical and cable TV, communication cables, natural gas, sanitary sewer storm sewer, water lines, and fiber optic lines.

Section 4(f)/Section 6(f)**Section 4(f)**

Section 4(f) uses due to the Project as compared to the FEIS/2007 ROD:

Section 4(f) Resource	Use by 2007 ROD Preferred Alternative (acres)	Use by Project (acres)
Barnum Park South	0.01	No use (temporary occupancy)
Barnum Park North	0.42	0.63
Barnum Park East	2.1	1.64
Frog Hollow Park	No use	No use
South Platte River Trail	No use (temporary occupancy)	No use (temporary occupancy)
Milstein Park	Not identified	No use
West and Southside Interceptor Sewer	Not identified	240 linear feet

Barnum Park North Impacts

In Barnum Park North, the FEIS identified small uses of parkland on the east side of the park (0.02-acre) associated with a redesigned WB on-ramp to US 6 from Federal Boulevard and on the south side of the park (0.03-acre) for the US 6 ramp. The 2007 ROD confirmed the use on the east side of the park, but the use on the south side increased to 0.4-acre. The Project will convert 0.63-acres of Barnum Park North to transportation use as a result of a reconstructed WB Federal Boulevard to US 6 ramp and Federal Boulevard ROW widening. The improvement at this location is the same as in the FEIS and 2007 ROD, and those prior Section 4(f) analyses still apply. The change in impact area is the result of an updated ROW boundary for the park provided by CCD Department of Parks and Recreation, and is not due to roadway widening or design changes. As determined in the FEIS and 2007 ROD, there is no prudent and feasible alternative to the use of Barnum Park North; this finding still applies. In addition to the 0.63-acre use, a 0.27-acre licensed access area associated with the maintenance of a retaining wall along the reconstructed ramp will be required. This area is not considered a use under Section 4(f).

Barnum Park East Impacts

The 2007 ROD documented a 2.1-acre conversion of Barnum Park East to transportation use (this updated what was documented in the FEIS). This would occur on the northern and western park edges due to the widening of Federal Boulevard and the new EB on-ramp from Federal Boulevard to US 6. The Project has less impact (1.64-acres) because the footprint of the US 6/Federal Boulevard interchange has been compressed.

West and Southside Interceptor Sewer Impacts

Replacement of the US 6 bridge over the South Platte River will require removal of a segment of the West and Southside Interceptor Sewer, located west of the river. The West and Southside Interceptor Sewer is a Section 4(f) resource because it is a historic resource for which the State Historic Preservation Officer (SHPO) found an adverse effect which is discussed in more detail in Appendix I of the ROD2. The sewer was not identified as a historic or

Section 4(f) resource in the FEIS or 2007 ROD. A 240-foot portion of the seven-mile-long brick-lined sewer segment needs to be removed because it could sustain damage during construction due to pile driving and drilling. Preservation in place is not prudent due to potential damage. The sewer will be replaced with a new concrete pipe. For the West and Southside Interceptor, the SHPO determined that the Project met the criteria in order to use the Section 4(f) Evaluation and Approval for Transportation Projects That Have a Net Benefit to a Section 4(f) Property, and that there are no feasible and prudent alternatives to the relocation and reconstruction of the sanitary sewer. The letters between CDOT and SHPO regarding this determination can be found in Appendix B of the ROD2.

Section 4(f) Finding

At the time of the FEIS, FHWA found that there were no prudent and feasible alternatives that met the purpose and need of the project and avoided the use of Barnum Park North and Barnum Park East. Because the impacts of the Project are within the same general footprint and of the same general scale as the FEIS Preferred Alternative and 2007 ROD Selected Alternative, these findings are still valid.

For the West and Southside Interceptor Sewer, the SHPO determined that the Project met the criteria in order to use the Section 4(f) Evaluation and Approval for Transportation Projects That Have a Net Benefit to a Section 4(f) Property and that there are no feasible and prudent alternatives to the relocation and reconstruction of the sanitary sewer. FHWA also finds that there are no prudent and feasible alternatives to the use of the West and Southside Interceptor Sewer, and the Project includes all possible planning to minimize harm resulting from such use.

Section 6(f)

Construction of the new WB on-ramp at Federal Boulevard will result in a 0.63-acre encroachment into Barnum Park North, and constitutes a Section 6(f) resource conversion to a transportation facility. This conversion would cover the same area that is being documented as a Section 4(f) use.

A portion of the South Platte River floodplain contains improvements made with Land and Water Conservation Fund (LWCF) grants. This area is called the South Platte River Greenway, and it includes Denver-owned lands in the floodplain, according to information provided by Colorado Parks and Wildlife (CPW). At this time, there is no assumed need for conversion of the South Platte River Greenway; however, because this Project will be constructed as a design/build project, it is possible that the final design may include a small conversion such as new bridge piers or water quality structures. As such, CDOT is working on the assumption that as much as five acres (but likely much less) may be converted from the South Platte River Greenway. A Section 6(f) conversion less than five acres is considered a *de minimis* conversion.

The table below shows the Section 6(f) conversion due to the Project as compared to the FEIS/2007 ROD.

Section 6(f) Resource	Conversion of Valley Highway Project FEIS/ROD Preferred Alternative (acres)	Conversion of Project (acres)
Barnum Park South	No conversion; Section 6(f) resources are located on opposite side of park, away from US 6 improvements	No conversion; Section 6(f) resources are located on opposite side of park, away from US 6 improvements
Barnum Park North	No conversion	0.63
South Platte River Greenway	No conversion	Up to five acres, to be determined by the design/build contractor

Section 6(f) Finding

CDOT will assure that the mitigation plan for the Project will include replacement of land for land at a one to one ration and equivalent value. The official conversion request will occur post-construction when the value of the land will be assessed prior to NPS final approval. There will be an equal value exchange for all Section 6(f) properties acquired. Such exchange will be valued according to the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 for both the property acquired and for any properties used as part of the payment. In all situations where the valuation of the property acquired exceeds the value of the property to be used as payment, the

difference shall be paid as cash, and that cash shall be used in a manner consistent with Section 6(f) principles. Appraisals are conducted as part of CDOT's ROW process, which occurs once design is more complete and project funds have been identified.

Noise

A traffic noise analysis has been completed for the Project because it includes multiple capacity improvements that meet the definition of a Type I Project. The noise study describes the existing noise environment, predicts future noise levels, evaluates potential noise abatement, and evaluates construction noise effects.

The noise levels along the current roadways were measured at 19 locations, and existing and future No Build Alternative and Project peak noise levels were modeled for 31 locations using FHWA's Traffic Noise Model (TNM[®]). Modeled noise levels range from 62 dBA $L_{eq(h)}$ to 75 dBA $L_{eq(h)}$ for the existing peak noise conditions. For the No Build Alternative and the Project, modeled noise levels ranged from 63 dBA $L_{eq(h)}$ to 76 dBA $L_{eq(h)}$ and 62 dBA $L_{eq(h)}$ to 77 dBA $L_{eq(h)}$, respectively. .

A system of existing noise barriers are located north of and south of US 6 from Knox Court to Sheridan Boulevard. Noise levels for receptors located behind the barriers range from 62 to 74 dBA under existing conditions, and 63 to 75 dBA for future conditions with the Project.

Existing traffic noise levels at 84 residences, six park uses, and two trails meet or exceed the CDOT NAC (i.e., 66 dBA $L_{eq(h)}$ for residences and parks). Residences located nearest to US 6 make up most of the impacted sites along with several parks that currently experience noise levels above the NAC. Future year 2035 No Build traffic noise levels are predicted to meet or exceed the CDOT NAC at 113 residences, 10 park uses, and two trails and the Project's 2035 traffic noise levels are predicted to meet or exceed the noise abatement criteria at 107 residences, 10 park uses, and two trails.

Noise mitigation measures, including the placement of noise barriers have been evaluated to reduce traffic noise levels at noise impacted receptors. Mitigation measures were evaluated and not recommended as they did not meet CDOT's updated 2011 Criteria.

Construction

Construction noise would present the potential for short-term impacts to those receptors located along the corridor and along the designated construction access routes. The primary source of construction noise is expected to be diesel-powered equipment, such as trucks and earth moving equipment.

During Project construction, areas adjacent would be exposed to construction noise in addition to the traffic-related noise. Noise from construction equipment can be mitigated using a variety of techniques including, but not limited to, restrictions on the times during the day construction can take place, proximity of construction equipment to sensitive receptors, use of alternative quieter equipment and techniques, and use of temporary noise control barriers and enclosures.

Section 36-6(b)(7) of the Denver code, from the Department of Environmental Health, states that the maximum permissible sound pressure levels specified in the code do not apply to sound emitted from construction equipment operated between the hours of 7:00 a.m. and 9:00 p.m. (CCD, 1973). However, operation of construction equipment between the hours of 9:00 p.m. and 7:00 a.m. may not exceed the following maximum sound pressure levels or the ambient sound levels when they are equal to or exceed the noted sound levels, unless a noise variance has been granted, as per Section 3-6(2) specified as follows:

- 50 dB at the property line of a residential premise
- 60 dB at the property line of a commercial premise
- 75 dB at the property line of an industrial premise
- 70 dB anywhere on a public premise

Demolition and pile driving could be the loudest construction operations. Demolition of structures, such as existing bridges, is generally conducted at night because of safety issues requiring full or partial closure of the highway and local streets. Piles could be required at most major bridge installations. Alternative construction methods could replace pile driving in noise sensitive locations. The majority of noise receptors are located greater than 50 feet from areas where pile driving, or other high-noise activities, are expected. Noise impacts are expected to occur only in isolated areas along the Project corridor.

Visual Resources and Aesthetics**Construction**

Short-term construction-related visual impacts would likely occur as a result of this Project. These impacts would include the presence of construction equipment and materials, temporary barriers, guardrail, detour pavement and signs, temporary shoring and retaining walls, lighting for night construction, and removal of vegetative cover.

Hazardous Materials

Based on the review of the 2005 Modified Environmental Site Assessment (MESA), FEIS, as well as a 2011 initial site assessment (ISA), new information presented in the 2012 Environmental Data Resources (EDR) and various other agency databases, the findings of the 2012 site reconnaissance, and the limited subsurface investigations conducted in December 2011, July 2012, October 2012, and December 2012; there is a potential to encounter contaminated soil and groundwater throughout the Project area. Appendix H details the data sources and methodologies of these investigations.

Based on the Project design and the ROD2 evaluation, six properties with potential or recognized environmental conditions will be partially or completely acquired for the Project. Appendix H describes these properties, including their relative risk level. Only one site demonstrated a high risk ranking and it is located at 450 Federal Boulevard. Because the Project only requires a temporary easement on this site and not permanent acquisition, no additional investigation is required.

The July and October 2012 subsurface investigations indicated that Resource Conservation and Recovery Act (RCRA) metals are most likely present in soil and groundwater throughout the Project area. Due to this finding, as well as known and suspected contamination, a Materials Management Plan (MMP) will be developed and implemented on the entire Project area. Additionally, CDOT shall follow Section 250, Environmental, Health, and Safety Management, of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 2011) and relevant Occupational Safety and Health Administration (OSHA) and other state and federal regulatory requirements. Part of the applicable requirements of Section 250 will be the completion of a Health and Safety Plan (HASP). Appendix C details the mitigation measures required for construction of the Project.

MITIGATION:

- All mitigation commitment(s) from NEPA document remain the same (discuss status and compliance):
- Mitigation commitment(s) have changed from NEPA document. **See Mitigation table in Appendix C.**

V. Public/Agency Involvement (optional)

If any, document public meetings, notices, & websites, and/or document agency coordination. For each provide dates, and coordination, where applicable:

CDOT has created a public Project website at the link below where it has posted Project materials including information presented at the one public open house that was held on September 12, 2012 at the Barnum Recreation Center. The open house was attended by more than 60 stakeholders. Pre-meeting publicity included two e-newsletters sent to more than 200 stakeholders. A news release also was distributed to the Denver area news media.

<http://www.coloradodot.info/projects/US6Bridges>

More than 100 businesses in the Project area were visited July 3, 2012 and July 5, 2012 to share Project information, to gather contact information and to collect questions and talk about concerns business and property owners had about the Project. Outreach to business owners also was conducted along Federal Boulevard in late August to ensure their concerns and questions were addressed and to collect their contact information for ongoing communications. The Project fact sheet was translated to Spanish for this outreach and a Spanish-speaking member of the Project team was present for the meetings. Most of the concerns and questions from all stakeholders dealt with property and construction impacts and access issues.

CDOT has also coordinated with several agencies as described below.

CDOT worked with the CCD's Department of Public Works regarding general roadway and bridge design as well as construction procedures and traffic control. CDOT has coordinated with the CCD's Department of Parks and Recreation regarding the Project's Section 4(f) and Section 6(f) impacts. (See correspondence in Appendix B).

CDOT met with the Urban Drainage and Flood Control District on December 21, 2011 regarding the South Platte River Master Plan and the design of the new South Platte River Bridge.

CDOT coordinated with the State Historic Preservation Office regarding the Section 106 review of the Project's APE, eligibility determinations and final determinations of effect. (See Agency Correspondence in Appendix B).

CDOT met with the Colorado Department of Health and Environment's Air Pollution Control Division on August 7, 2012 to determine the necessary air quality modeling assumptions and process.

CDOT has also coordinated through Colorado Parks and Wildlife with the National Park Service to confirm the Section 6(f) impacts and mitigations.

VI. Additional Studies Required for Proposed Action

NA

VII. Additional Requirements for Proposed Action

- An SEIS is required, because the changes to the proposed action will result in significant impacts not evaluated in the EIS.
- An SEIS is required, because new information or circumstances will result in significant environmental impacts not evaluated in the EIS.
- A revised ROD is required, because an alternative is recommended that was fully evaluated in an approved FEIS but was not identified as the preferred alternative.
- Appropriate environmental study or an EA is required, because the significance of new impacts is uncertain.
- A revised FONSI is required, because an alternative is recommended that was fully evaluated in an approved EA but was not identified as the preferred alternative.
- Other _____
- None

VIII. Permits Updated (optional)

This section is only required when the next stage of a project is going to construction.

List permits:

Permits required for the Project will be coordinated with the appropriate jurisdiction and obtained prior to construction. Required permits and approvals for the Project are likely to include those shown in the table below. Additional permits may be required in concert with activities such as:

- Erosion control/grading
- Utility access, relocation, or surveying
- Construction, slope, and utility easements
- Access and authorizations

Agency	Regulated Activity	Permit/Approval
US Army Corps of Engineers (USACE)	Impacts to jurisdictional wetlands and Waters of the US	CWA Section 404 Permit
Federal Emergency Management Agency (FEMA)	Floodplain encroachment	Conditional Letter of Map Revision (CLMR); Letter of Map Revision
CDPHE – Water Quality Control Division	MS4 Phase I and II Areas – New Development and Redevelopment Programs	Follow the requirements of the CCD and CDOT MS4 discharge permits
CDPHE – Water Quality Control Division	Required to assess the quality of stormwater runoff during construction	CDPHE Colorado Discharge Permit System (CDPS) stormwater permit associated with construction activity
CDPHE – Water Quality Control Division	Dewatering of construction areas	CWA Section 402 Construction Dewatering Permit, or Individual Construction Dewatering Permit if contaminated groundwater is expected to be encountered
CDPHE – Hazardous Materials and Waste Management Division	Classification of construction waste material and transportation of solid or hazardous wastes generated	May require facility approval and permits for storage, transportation, and disposal of solid or hazardous waste

Agency	Regulated Activity	Permit/Approval
CDPHE – Hazardous Materials and Waste Management Division	Generation of contaminated materials during construction	Coordination and approval for handling and management plan
CDPHE – Air Pollution Control Division	Emissions from portable units, such as rock crushers, generators, asphalt plants, and cement plants, used during construction.	Stationary Source Air Quality Permit
CDPHE – Air Pollution Control Division	Bridge demolition and asbestos abatement.	Demolition Notification Application Form/Asbestos Abatement
CDPHE – Air Pollution Control Division	Fugitive dust emissions due to construction activities and bridge demolition	Fugitive Dust Permit
CDOT	Generation of contaminated materials during construction	Development of MMP with approval by the Regional Planning and Environmental Manager
CPW	Impacts to stream banks, stream channels, and riparian areas	Senate Bill 40 Certification
CCD	Occupancy of ROW	Street Occupancy Permit
CCD	Construction of structures	Construction Permit
CCD	Traffic control during construction	Construction Access Permits Traffic Control Plan
CCD	Noise generation during construction	Noise Variance
CCD	Generation of contaminated materials during construction	Coordination and approval for handling and management plan
CCD	Discharge of wastewater generated during construction activities to the treatment works (if needed)	Wastewater Discharge Permit
CCD	Design and construction associated with City-maintained streets, parks, and sewers	Design and construction plan review
CCD Wastewater Management Division	Discharge of groundwater to a City storm sewer	Discharge Permit
CCD Parks and Recreation Department	Work in dedicated parks including the South Platte River Greenway and Trail	Occupancy Permit
CCD Forester	Tree removal	Coordination and approval

IX. Attachments Listed

List permits, studies, background data, etc.

APPENDIX B	AGENCY COORDINATION LETTERS
APPENDIX C	CDOT MITIGATION TRACKING FORM
APPENDIX D	AESTHETICS AND URBAN DESIGN TECHNICAL REPORT
APPENDIX E	AIR QUALITY TECHNICAL REPORT
APPENDIX F	ARCHAEOLOGY AND PALEONTOLOGY TECHNICAL REPORT
APPENDIX G	BIOLOGICAL RESOURCES REPORT
APPENDIX H	HAZARDOUS MATERIALS TECHNICAL REPORT
APPENDIX I	CULTURAL RESOURCES TECHNICAL REPORT
APPENDIX J	NOISE AND VIBRATION TECHNICAL REPORT
APPENDIX K	SECTION 4(F) AND SECTION 6(F) TECHNICAL REPORT
APPENDIX L	TRANSPORTATION ANALYSIS TECHNICAL REPORT
APPENDIX M	WATER QUALITY REPORT
APPENDIX N	OTHER ENVIRONMENTAL CONSIDERATIONS TECHNICAL MEMORANDUM