SECTION 7

Clarifications to the EA

This section contains clarifications to the I-25 Environmental Assessment, based on comments received during the review process. Clarifications are being made in three cases. The first clarification addresses water quality impacts. The second clarification corrects the description of boundaries for one historic resource. The third clarification provides a previously missing graphic that shows modifications needed to the I-25 easement on the U.S. Air Force Academy.

Water Quality Clarification

The U.S. Environmental Protection Agency and others expressed concern that the Water Quality text on pages 3-88 and 3-89 of the EA indicated water quality standards could be exceeded due to the Proposed Action. FHWA has determined that the statement that "[t]he results of the FHWA model analysis show that pollutant loadings under the Proposed Action could cause acute and chronic standards to be exceeded for lead, copper and zinc" was incorrect. That conclusion reflected only an intermediate step in the water quality modeling process, not the actual final result of the analysis.

The full analytical process includes entering as model inputs the expected reduction of pollutant discharge that would be achieved by the use of water quality Best Management Practices (for which implementation is legally required under CDOT's Municipal Separate Storm Sewer Systems Permit from the Colorado Department of Public Health and Environment).

To clarify this issue, new text has been prepared to replace the inaccurate information on pages 3-88 and 3-89 of the EA. The clarifying text is presented in this Section by providing the two original pages 3-88 and 3-89, followed by three new pages, 3-88 through 3-90. The header on each page indicates whether it is the original, incorrect version or the new, corrected one.

Historic Resources Clarification #1

It was determined that the discussion of proposed modifications in the vicinity of the Bijou Street Entrance Gate to Monument Valley Park would be more complete if it more fully described the effects on the pedestrian experience, including the issue of wheelchair accessibility to the historic park. Therefore a new paragraph addressing this matter has been added to page 3-118 of the EA.

Historic Resources Clarification #2

A submittal of comments from a representative of the Old North End neighborhood included a map of the North End Historic District that differs slightly from the general description of boundaries for that resource as presented in Table 3-32 on EA page 3-122. Under the location column, the location for resource 5EP333 is specified as, "Uintah to Monroe, west side of Wood." The correct northern boundary of the district is Madison Street, not Monroe Street. Thus the EA suggested that the resource is slightly larger than it actually is. Since the determination of effects to this northernmost block (and to the entire historic district) was "no historic properties affected," this change does not change any EA findings. Also, the "Old" should not have been included in the name of the historic district, although it is part of the name of the neighborhood. The same language occurs in the text on page 27 of Appendix 6, Historic Resources Survey Report, Volume II, which was the source of the information presented in the EA. For clarification, a revised EA page 3-122 has been included in this decision document.

U.S. Air Force Academy Clarification

The U.S. Air Force Academy commented that the text on page 3-141 of the EA makes reference to two different figures, both designated as Figure 3-24. The EA first states that Figure 3-24 depicts the Air Force Academy easement expansion that would be needed in the vicinity of the North Gate/Powers Interchange. Then, in the next paragraph, the EA states that Figure 3-24 illustrates the existing and proposed sites of the Ackerman Overlook.

The first figure was inadvertently omitted. The omitted figure has been added and is designate as Figure 3-24A. The second figure, originally labeled Figure 3-24, has been renumbered as 3-24B. A corresponding change to the text on page 3-141 has been made.

The clarifying text is presented in this Section by providing the two original pages 3-141 and 3-142, followed by three new pages, 3-141, 3-142A and 3-142B. The header on each page indicates whether it is the original, incorrect version or the new, corrected one.

TABLE 3-24
Summary of Annual Pollutant Mass Loadings along I-25

Pollutant	Existing Annual Mass Loading (kg/yr)	Proposed Annual Mass Loading (kg/yr)	Percent Increase of Annual Load
Total Suspended Solids	26,056	46,038	57
Nitrate +Nitrite	140	246	57
Phosphorous (as PO4)	73	130	57
Total Copper	10	17.5	57
Total Lead	73	130	57
Total Zinc	60	107	57

The annual mass loading values were measured against the acute and chronic criteria for the protection of freshwater aquatic life as documented in CDPHE Water Quality Control Commission Regulation No. 32, the Classification and Numeric Standards for the Arkansas River Basin.

Nutrient water quality trends were also observed in the existing USGS water quality data for both Monument and Fountain Creeks. The data showed that the existing concentrations of dissolved nitrite plus nitrate consistently increased from upstream to downstream. In addition, total phosphorous concentrations ranged from 0.23 to 1.70 mg/L, with the highest concentration observed near Bijou and I-25.

Water quality trends for heavy metals were also observed from the USGS data and showed generally higher levels of zinc and dissolved copper downstream of the confluence of Monument and Fountain Creeks. One likely source of the increased levels of metals is the Gold Hill Mesa tailing pile along Segment 1 of Upper Fountain Creek.

Impacts of No-Action Alternative

The No-Action Alternative would likely result in negative impacts to water quality. These include impacts due to increased contaminant concentrations in highway runoff that result from increased traffic congestion and growth in traffic volumes. As the traffic congestion increases, speeds are reduced and pollutant concentrations increase on the roadway surface. These pollutants are washed from the roadway surface during rainstorms and enter receiving waters in Fountain Creek, Monument Creek and their tributaries.

The No-Action Alternative would also include impacts to water quality due to lack of improved water quality treatment facilities for existing roadways. The existing infrastructure is aging and facilities for water quality treatment and permanent best management practices generally are not present.

With or without I-25 capacity improvements, continued development within the watersheds would likely lead to additional water quality degradation both during construction of new developments and in the long term. Further water quality degradation would be anticipated in both Monument Creek and Fountain Creek as the wetlands adjacent to these streams are overloaded by increased pollutant concentrations from increased impervious areas and the runoff from these areas.

Impacts of Proposed Action

Runoff from impervious surfaces can affect both the water quality and water quantity of surface drainages. It is estimated that the Proposed Action will increase the amount of I-25 paved surface area in the study area by 128 acres, from 235 acres today to 363 acres, an increase of slightly more than 50 percent. This amount of total impervious roadway surface is the equivalent to approximately 0.6 square miles. For comparison, there are about 170 square miles of impervious surface in the combined Fountain Creek and Monument Creek drainage basin (collectively called the Fountain Creek watershed). The amount of additional I-25 paved surface is therefore negligible (about one half of one percent) compared to the amount of impervious surface area in the region today. Furthermore, the amount of impervious surface area in the region generally can be expected to increase over the next several decades in proportion to the 40 percent projected population increase, resulting in an even smaller percentage contribution from I-25.

The amount of impervious surface is one of the important factors used in the FHWA water quality model to calculate the effects of roadway runoff. The results of the FHWA model analysis show that pollutant loadings under the Proposed Action could cause the acute and chronic standards to be

exceeded for lead, copper, and zinc. As shown in Table 3-24, the projected percent increase in annual mass loading for pollutants from the highway is 57 percent.

There is also the potential for water quality impacts to receiving waters from roadway deicing activities.

It is anticipated that with the increased traffic volumes due to future growth and the increased highway surface area resulting from the Proposed Action, an increase in the application of deicing materials will occur on the I-25 corridor. Use of liquid deicers, such as magnesium chloride, is expected to increase in the future. It is also anticipated that the suspended solids loading from use of sand will also increase in the receiving waters in Monument and Fountain Creek.

If adequate temporary and permanent stormwater quality treatment facilities and best management practices are not provided during the construction of the Proposed Action, water quality in Fountain Creek and Monument Creek would be negatively impacted from increases in the amount of runoff and the associated increased levels of transported sediments. In addition, other pollutants such as nutrients, petroleum products, and heavy metals washed from the increased areas of impervious surfaces would result in negative impacts to water quality.

Mitigation

Mitigation for the impacts identified above will be accomplished through design of drainage facilities that maintain, and where practicable, enhance water quality. Temporary erosion control and sediment collection facilities will be included to provide interception of transported sediments from construction areas. Project specifications will direct the procedures and frequency for the maintenance of temporary sediment collection facilities.

In addition, where practical, permanent channel stabilization and sediment collection facilities will be included in the designs to assure that sediments are not transported into receiving waters, especially during the period of vegetation establishment after construction is completed.

Other elements of the Proposed Action that will reduce or prevent impacts to water quality include:

- Adhering to the requirements of CDOT's CDPS Stormwater Permit and MS4 Discharge Permit
- Conforming with CDOT Standard Specifications for Road and Bridge Construction (Section 107.25) and the CDOT Erosion Control and Stormwater Quality Guide (2002)
- Developing and complying with a project-specific Stormwater Management Plan (SWMP) to address temporary construction impacts
- Using and maintaining temporary and permanent BMPs, such as controlled construction accesses, controlled concrete washout areas, silt fences, check dams, and sedimentation ponds
- Designing and constructing permanent BMPs such as roadside detention basins and vegetated ditches, channel grade stabilization structures, and stream bank protection
- Improving existing stream side wetlands and riparian habitats
- Using non-structural Best Management Practices such as street sweeping and public awareness programs

Storm drainage systems for the proposed improvements will be designed in accordance with applicable criteria and where practicable will alleviate existing drainage problems throughout the project area. These facilities will be designed to prevent sediment and pollutants from being carried into the adjacent wetlands and directly into Monument and Fountain Creeks and their tributaries.

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Impacts of No-Action Alternative

The No-Action Alternative would likely result in negative impacts to water quality. These include impacts due to increased contaminant concentrations in highway runoff that result from increased traffic congestion and growth in traffic volumes. As the traffic congestion increases, speeds are reduced and pollutant concentrations increase on the roadway surface. These pollutants are washed from the roadway surface during rainstorms and enter receiving waters in Fountain Creek, Monument Creek and their tributaries.

The No-Action Alternative would also include impacts to water quality due to lack of improved water quality treatment facilities for existing roadways. The existing infrastructure is aging and facilities for water quality treatment and permanent best management practices generally are not present.

With or without I-25 capacity improvements, continued development within the watersheds would likely lead to additional water quality degradation both during construction of new developments and in the long term. Further water quality degradation would be anticipated in both Monument Creek and Fountain Creek as the wetlands adjacent to these streams are overloaded by increased pollutant concentrations from increased impervious areas and the runoff from these areas.

Impacts of Proposed Action

Runoff from impervious surfaces can affect both the water quality and water quantity of surface drainages. It is estimated that the Proposed Action will increase the amount of I-25 paved surface area in the study area by 128 acres, from 235 acres today to 363 acres, an increase of slightly more than 50 percent. This amount of total impervious roadway surface is the equivalent to approximately 0.6 square miles. For comparison, there are about 170 square miles of impervious surface in the combined Fountain Creek and Monument Creek drainage basin (collectively called the Fountain Creek watershed). The amount of additional I-25 paved surface is therefore negligible (about one half of one percent) compared to the amount of impervious surface area in the region today. Furthermore, the amount of impervious surface area in the region generally can be expected to increase over the next several decades in proportion to the 40 percent projected population increase, resulting in an even smaller percentage contribution from I-25.

Although total roadway runoff will increase due to increased impervious surface on I-25, this additional runoff will not likely result in impacts on the quality of water in Monument or Fountain Creeks or their tributaries or contribute to a

violation of Federal or State water quality standards for these streams. This conclusion is reached after a thorough technical evaluation and water quality modeling process.

As discussed on page 3-86, none of these streams are listed as Impaired Waters. However, Monument Creek has elevated levels of selenium and Total Suspended Solids. Also, Fountain Creek, below its confluence with Monument Creek, has elevated levels of copper and zinc. Selenium is not a constituent of roadway runoff, but copper, lead, zinc and suspended solids are. As noted on page 3-87, the Driscoll model was used to determine if pollutants from I-25 runoff would likely contribute to reduced water quality.

The results of the FHWA model showed that for all stream segments in the study area only three locations, all in northern El Paso County, would potentially experience lower water quality from copper, lead, and zinc than what exists today. These locations are on Monument Creek tributaries near the following interchanges:

- State Highway 105 (Exit 161)
- Baptist Road (Exit 158)
- North Gate/Powers (Exit 156)

The potential for lower water quality at these locations is based upon the model's prediction of how much copper, lead, and zinc contained in roadway runoff would reach these tributaries and how much would then be diluted by the receiving stream. The predicted values exceeded EPA threshold levels from the Nationwide Urban Runoff Program; therefore, additional modeling was required for the three locations.

Since Federal water quality law requires the capture and treatment of roadway runoff, the three locations were then modeled to reflect pollution reduction measures (i.e., Best Management Practices) that must be incorporated into highway improvements. An average pollution reduction value of 50 percent was used based upon data from the Denver Urban Drainage District, which reflects state-of-the-art knowledge for pollution reduction. With mandated BMPs in place, the FHWA model showed that no receiving water would likely exceed Federal or State water quality standards for copper, lead, and zinc as a result of the Proposed Action. To achieve a 50 percent pollution reduction, the design of the Proposed Action must incorporate BMPs such as extended detention basins, constructed wetlands, retention ponds, and sand filter-extended detention basins in conformance with the CDOT Drainage Criteria Manual and in compliance with its MS4 Discharge Permit.

While the FHWA model is useful for determining the relative probability of a water quality impact, it is based upon data from the 1980's and tends to over-predict potential pollutants from roadway runoff. For example, it assumes that all pollutants from the road reach a receiving water without being mechanically trapped or chemically altered, and it is based upon leaded fuel and outdated automotive technologies and materials.

There is also the potential for water quality impacts to receiving waters from roadway deicing activities.

It is anticipated that with the increased traffic volumes due to future growth and the increased highway surface area resulting from the Proposed Action, an increase in the application of deicing materials will occur on the I-25 corridor. Use of liquid deicers, such as magnesium chloride, is expected to increase in the future. It is also anticipated that the suspended solids loading from use of sand will also increase in the receiving waters in Monument and Fountain Creek.

If adequate temporary and permanent stormwater quality treatment facilities and best management practices are not provided during the construction of the Proposed Action, water quality in Fountain Creek and Monument Creek would be negatively impacted from increases in the amount of runoff and the associated increased levels of transported sediments. In addition, other pollutants such as nutrients, petroleum products, and heavy metals washed from the increased areas of impervious surfaces would result in negative impacts to water quality.

Mitigation

Mitigation for the impacts identified above will be accomplished through design of drainage facilities

that maintain, and where practicable, enhance water quality. Temporary erosion control and sediment collection facilities will be included to provide interception of transported sediments from construction areas. Project specifications will direct the procedures and frequency for the maintenance of temporary sediment collection facilities.

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- Conforming with CDOT Standard Specifications for Road and Bridge Construction (Section 107.25) and the CDOT Erosion Control and Stormwater Quality Guide (2002)
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analysis was conducted in April 2003 by A-E Design Associates. They found the structural integrity to be good and not susceptible to structural damage to the point where its integrity would be at risk during construction.

The landscaping for the entrance area of the arch will match the current landscaping, including the location of the beds and the types of vegetation.

The raising of Bijou Street, the introduction of a retaining wall, and the addition of a safety railing atop the wall would change the feeling, function, and design of this portion of the park. The wall and railing would create a visual and physical barrier where none existed before (and where none was planned to exist). The resulting determination of effect is that the Proposed Action would result in an adverse effect to this resource.

WPA Flood Wall, Monument Creek (5EP3856)

A major flood occurred in Colorado Springs in 1935, during America's economic Great Depression. The flooding caused four deaths and destroyed five of the city's six bridges across Monument Creek, and also caused property damage in Monument Valley Park. Subsequently, flood walls were built along both sides of the creek, as a public works project under the Roosevelt Administration's Works Progress Administration (WPA).

The WPA Flood Wall on Monument Creek, eligible under Criteria (a) and (c) for association with the Works Progress Administration and for craftsmanship, is found on the east and west sides of the creek from north of Uintah Street to south of Colorado Avenue. Over the years, segments of the WPA wall have been determined eligible for the NRHP.

The wall system is not entirely intact as originally constructed, due to prior infrastructure projects including the reconstruction of the City's Colorado Avenue bridge.

The Proposed Action minimizes impacts to the WPA wall, but nevertheless would impact one WPA wall segment. The Proposed Action includes constructing a five-foot cantilevered roadway slab and retaining wall above the WPA wall to minimize the amount of wall that would be impacted with a traditional retaining wall design.

WPA Flood Wall Along Monument Creek

Project impacts would total 5,910 square feet, all occurring on the west side of the creek between Cimarron and Bijou. Impacts would result due to physical alteration of the retaining wall, a storm sewer outfall pipe, and the Bijou Street bridge abutment (see Figure 3-22).

The total impact of 5,910 square feet amounts to slightly over one percent of the entire WPA wall system. However, the portion south of Bijou Street (both sides of the creek) comprises approximately 83,000 square feet. The 5,910 square foot impact represents about 7 percent of this portion.

The resulting determination of effect is adverse for the WPA Flood Wall on the west side of the creek. There are no impacts to the wall on the east side of the creek.

Sites That Will Experience No Adverse Effect

Six additional NRHP-eligible properties will be affected by the Proposed Action in a manner or to an extent so limited that the historic impact determination is concluded to be no adverse effect.

These sites are in close proximity to Interstate 25 and thus the Proposed Action will affect the setting of these properties, primarily in respect to noise and/or visual aspects. These sites are listed in Table 3-31, and are discussed individually below.

analysis was conducted in April 2003 by A-E Design Associates. They found the structural integrity to be good and not susceptible to structural damage to the point where its integrity would be at risk during construction.

The landscaping for the entrance area of the arch will match the current landscaping, including the location of the beds and the types of vegetation.

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Although there would be an adverse effect on the entrance gate area, the change in feeling, function and design would not be so great as to constitute a constructive use of an historic property or a substantial impairment of park uses. The addition of a retaining wall, steps and handrail would introduce a new design element that does not exist today, but this minor change would not have such an effect on the historic setting as to effect the eligibility of the entrance gate area or the park itself. Regarding park accessibility, the entrance gate would remain wheelchair-accessible from both Bijou Street and Westview Place via three other at-grade sidewalks nearby. Since the park entrance would remain open for pedestrian use and would continue to be wheelchair-accessible, the function of the park entrance gate and its adjacent park land would not be substantially impaired.

WPA Flood Wall, Monument Creek (5EP3856)

A major flood occurred in Colorado Springs in 1935, during America's economic Great Depression. The flooding caused four deaths and destroyed five of the city's six bridges across Monument Creek, and also caused property damage in Monument Valley Park. Subsequently, flood walls were built along both sides of the creek, as a public works project under the Roosevelt Administration's Works Progress Administration (WPA).

The WPA Flood Wall on Monument Creek, eligible under Criteria (a) and (c) for association with the Works Progress Administration and for crafts-manship, is found on the east and west sides of the creek from north of Uintah Street to south of Colorado Avenue. Over the years, segments of the WPA wall have been determined eligible for the NRHP.

WPA Flood Wall Along Monument Creek

The wall system is not entirely intact as originally constructed, due to prior infrastructure projects including the reconstruction of the City's Colorado Avenue bridge.

The Proposed Action minimizes impacts to the WPA wall, but nevertheless would impact one WPA wall segment. The Proposed Action includes constructing a five-foot cantilevered roadway slab and retaining wall above the WPA wall to minimize the amount of wall that would be impacted with a traditional retaining wall design.

Project impacts would total 5,910 square feet, all occurring on the west side of the creek between Cimarron and Bijou. Impacts would result due to physical alteration of the retaining wall, a storm sewer outfall pipe, and the Bijou Street bridge abutment (see Figure 3-22).

The total impact of 5,910 square feet amounts to slightly over one percent of the entire WPA wall system. However, the portion south of Bijou Street (both sides of the creek) comprises approximately 83,000 square feet. The 5,910 square foot impact represents about 7 percent of this portion.

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Sites That Will Experience No Adverse Effect

Six additional NRHP-eligible properties will be affected by the Proposed Action in a manner or to an extent so limited that the historic impact determination is concluded to be no adverse effect.

These sites are in close proximity to Interstate 25 and thus the Proposed Action will affect the setting of these properties, primarily in respect to noise and/or visual aspects. These sites are listed in Table 3-31, and are discussed individually below.

TABLE 3-32
Historic Sites Experiencing No Effect from the Proposed Action

Site Number	Site Name	Location	NRHP Eligibility
5EP1003.9	Santa Fe Railroad Grade	Baptist – N. Academy	Contributing, officially eligible
5EP1003.1	Santa Fe Railroad	Baptist – N. Academy	Contributing, officially eligible
5EP972	Cottonwood Creek Bridge	Vincent Drive	Officially eligible (determination in 2000) Listed, National Register
5EP2179.1	Colorado Springs & Interurban Car 59	2233 Steel Drive	Listed, State Register
5EP2181.11	Denver & Rio Grande Railroad	Fillmore to Colorado	Contributing, eligible
5EP333	Old North End Historic District	Uintah to Monroe, west side of Wood	Listed, National Register
5EP4138	International Style House	205 W. Fontanero	Eligible
5EP4139	Phillip Loomis House	1414 Culebra Avenue	Eligible
5EP4140	Willis Armstrong House	1432 Culebra Avenue	Eligible
5EP4146	Jess Lewis House	1722 Culebra Place	Eligible
5EP614	Van Briggle Tile & Pottery Co.	1125 Glen Avenue	Officially Eligible
5EP612.9 5EP4201 5EP4202	Zuyder Zee Historic District	Mesa Road at Monument Valley Park 615 Zuyder Zee 611 Zuyder Zee 609 Zuyder Zee	Eligible
5EP622	Colorado Springs Fine Arts Center	30 W. Dale Street	Listed, National Register
5EP321	Emmanuel Presbyterian Church	N. Cascade and Boulder	Listed, National Register
5EP1063	Boulder Crescent Place Historic District	West View Place	Officially Eligible
5EP4208	Queen Anne House	422 W. Bijou	Eligible
5EP634	Knights of Columbus	25 W. Kiowa	Eligible
5EP646	Colorado Springs Public Library/ Carnegie Building	21 W. Kiowa	Listed, National Register
5EP618	Denver & Rio Grande Railroad Depot	10 S. Sierra Madre	Eligible
5EP643	Chadbourn Spanish Gospel Mission	302 S. Conejos Street	Eligible

Interchange that minimizes impacts, including impacts to the visitor entry experience, on the Air Force Academy property. The charette conclusions were based on a balance of the original intent of the Academy design and the realities of the landscape today with the visual intrusion of urban development along the eastern boundary of the installation. CDOT will carry out the design as agreed to with the Air Force Academy at the design charette.

Strategies to mitigate adverse effects on this site include keeping the North Gate/Powers Interchange at or below the existing centerline grade to lessen the possibility of seeing it from high vantage points within the Air Force Academy, including the Cadet and Academic areas. The North Gate/Powers Interchange will be built at or below grade to minimize the intrusion of the interchange structures in this sensitive natural environment. New slopes needed for the interchange will be designed by a landscape designer to avoid a harshly engineered appearance. Vegetation removed for the construction of frontage roads and ramps, including scrub oak, trees, and riparian species, will be replaced with similar species after construction.

Air Force Academy representatives will be included in the design process to ensure that the project design is compatible with Air Force Academy aesthetic expectations. Final designs will be developed as part of the plans prior to construction. When final drawings of the interchanges and plans for the surrounding landscape are prepared, they will be forwarded to the SHPO and Air Force Academy for comment.

In addition, a detailed narrative history on the Air Force Academy and archival photographs of the present appearance of the seven miles of I-25 through Air Force Academy property will be provided to the SHPO in the form of Level II documentation. CDOT and FHWA will ensure

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5EP333	North End Historic District	Uintah to Madison, Nevada to Wood Avenue	Listed, National Register
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5EP614	Van Briggle Tile & Pottery Co.	1125 Glen Avenue	Officially Eligible
	Zuyder Zee Historic District	Mesa Road at Monument Valley Park	Eligible
5EP612.9		615 Zuyder Zee	
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5EP4202		609 Zuyder Zee	
5EP622	Colorado Springs Fine Arts Center	30 W. Dale Street	Listed, National Register
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In addition, a detailed narrative history on the Air Force Academy and archival photographs of the present appearance of the seven miles of I-25 through Air Force Academy property will be provided to the SHPO in the form of Level II documentation. CDOT and FHWA will ensure

each direction north of Briargate and four lanes including a peak-period high-occupancy vehicle lane south of Briargate. These capacity improvements would benefit motorists on Colorado's primary north-south roadway. Improved mobility on I-25 would be of direct benefit to the Air Force Academy, including its commuter population, suppliers, and visitors.

Second, the Proposed Action would modernize the North Gate Interchange, also providing direct freeway-to-freeway connections between I-25 and Powers Boulevard as part of the North Gate Interchange complex. The connection of Powers Boulevard to I-25 would also improve mobility between the Air Force Academy and the greater Colorado Springs community.

Implementing the Proposed Action would require the use of additional Air Force Academy land for added highway lanes and for the extensive new ramp system planned for the North Gate/Powers Interchange. The existing I-25 easement comprises approximately 658 acres for the entire seven miles of I-25 on Air Force Academy lands. This easement would need to be expanded to include an additional 48.4 acres for the North Gate/Powers Interchange. This needed expansion is depicted in Figure 3-24.

The Proposed Action would require an additional 5.2 acres of expanded easement to replace the existing Ackerman Overlook with an improved overlook about 2,300 feet to the north of the existing facility. Figure 3-24 illustrates the existing and proposed sites of the Ackerman Overlook.

Apart from these two modifications (for the North Gate Interchange and the new Ackerman Overlook), no other easement modifications will be needed.

Airspace Issues

In discussions with Air Force Academy representatives, it has been determined that the selected alternative for the North Gate/Powers Interchange would not encroach on clear zones for the Academy's airfields. The Proposed Action does not create new structures or ramps above the elevation of the existing interchange.

Security Concerns

In discussions with Air Force Academy representatives, it has been determined that the Proposed Action would not cause adverse effects with respect to Air Force Academy security. An important factor contributing to lack of impact is the fact that the Proposed Action minimizes any westward encroachment into the Academy at Air Force Academy's north and south gates. Maintaining distance between the base entrances and key base activity areas provides important reaction time for security forces in the unlikely event of an unauthorized vehicle at either gate.

Historic Resources

The Proposed Action would alter the original appearance of the eastern boundary of the Air Force Academy. While there are no historic buildings in this part of the property (e.g., the Cadet Area is approximately two miles away from I-25), this eastern edge of the area contributes to the Historic Cultural Landscape by preserving the natural beauty of this property and an element of the original Academy plan and landscape design. The widening of I-25 and the reconfigured North Gate Interchange with the Powers Boulevard connection would change the rural feel of the Academy. It would also change the vista to and from the installation.

The Proposed Action would continue an ongoing trend of change to the appearance of the historic landscape at the Academy boundary. In addition to the Proposed Action, the Briargate and Interquest interchanges that were built on Academy property (in 1987 and 2000, respectively) also transformed the eastern edge of the property with their urban designs. There have also been cumulative effects from the clusters of development that occurred before and after the construction of these interchanges.

Although the Proposed Action would adversely affect one of the features (i.e., the historic cultural landscape) that contributes to the Air Force Academy as an historic resource, it would not affect the overall eligibility of the Air Force Academy for listing on the National Register of Historic Places nor its proposed status as a National Landmark.

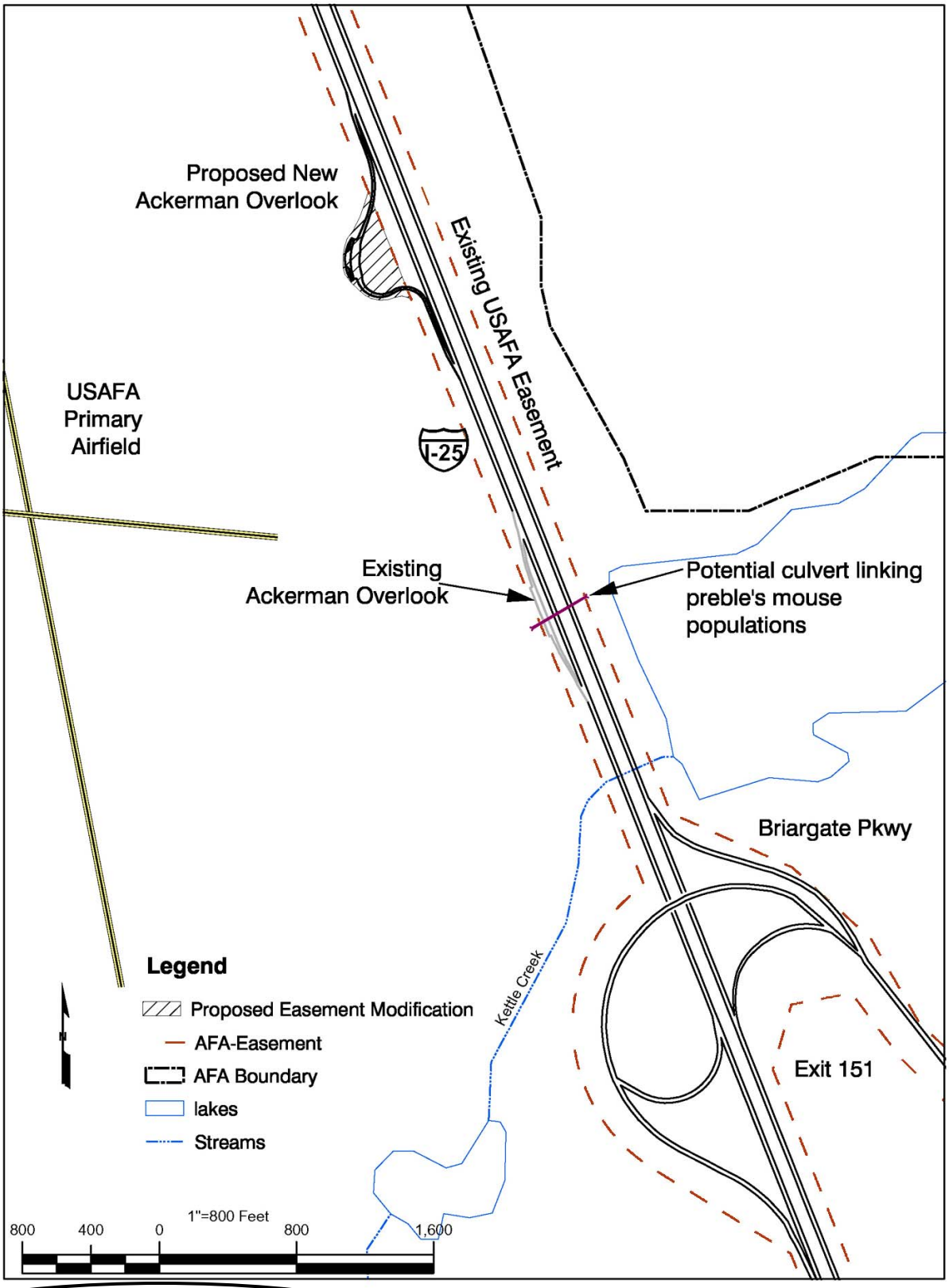

FIGURE 3-24
United States Air Force Academy Easement Modification
Area at North Gate/Powers Interchange

each direction north of Briargate and four lanes including a peak-period high-occupancy vehicle lane south of Briargate. These capacity improvements would benefit motorists on Colorado's primary north-south roadway. Improved mobility on I-25 would be of direct benefit to the Air Force Academy, including its commuter population, suppliers, and visitors.

Second, the Proposed Action would modernize the North Gate Interchange, also providing direct freeway-to-freeway connections between I-25 and Powers Boulevard as part of the North Gate Interchange complex. The connection of Powers Boulevard to I-25 would also improve mobility between the Air Force Academy and the greater Colorado Springs community.

Implementing the Proposed Action would require the use of additional Air Force Academy land for added highway lanes and for the extensive new ramp system planned for the North Gate/Powers Interchange. The existing I-25 easement comprises approximately 658 acres for the entire seven miles of I-25 on Air Force Academy lands. This easement would need to be expanded to include an additional 48.4 acres for the North Gate/Powers Interchange. This needed expansion is depicted in Figure 3-24a.

The Proposed Action would require an additional 5.2 acres of expanded easement to replace the existing Ackerman Overlook with an improved overlook about 2,300 feet to the north of the existing facility. Figure 3-24b illustrates the existing and proposed sites of the Ackerman Overlook.

Apart from these two modifications (for the North Gate Interchange and the new Ackerman Overlook), no other easement modifications will be needed.

Airspace Issues

In discussions with Air Force Academy representatives, it has been determined that the selected alternative for the North Gate/Powers Interchange would not encroach on clear zones for the Academy's airfields. The Proposed Action does not create new structures or ramps above the elevation of the existing interchange.

Security Concerns

In discussions with Air Force Academy representatives, it has been determined that the Proposed Action would not cause adverse effects with respect to Air Force Academy security. An important factor contributing to lack of impact is the fact that the Proposed Action minimizes any westward encroachment into the Academy at Air Force Academy's north and south gates. Maintaining distance between the base entrances and key base activity areas provides important reaction time for security forces in the unlikely event of an unauthorized vehicle at either gate.

Historic Resources

The Proposed Action would alter the original appearance of the eastern boundary of the Air Force Academy. While there are no historic buildings in this part of the property (e.g., the Cadet Area is approximately two miles away from I-25), this eastern edge of the area contributes to the Historic Cultural Landscape by preserving the natural beauty of this property and an element of the original Academy plan and landscape design. The widening of I-25 and the reconfigured North Gate Interchange with the Powers Boulevard connection would change the rural feel of the Academy. It would also change the vista to and from the installation.

The Proposed Action would continue an ongoing trend of change to the appearance of the historic landscape at the Academy boundary. In addition to the Proposed Action, the Briargate and Interquest interchanges that were built on Academy property (in 1987 and 2000, respectively) also transformed the eastern edge of the property with their urban designs. There have also been cumulative effects from the clusters of development that occurred before and after the construction of these interchanges.

Although the Proposed Action would adversely affect one of the features (i.e., the historic cultural landscape) that contributes to the Air Force Academy as an historic resource, it would not affect the overall eligibility of the Air Force Academy for listing on the National Register of Historic Places nor its proposed status as a National Landmark.

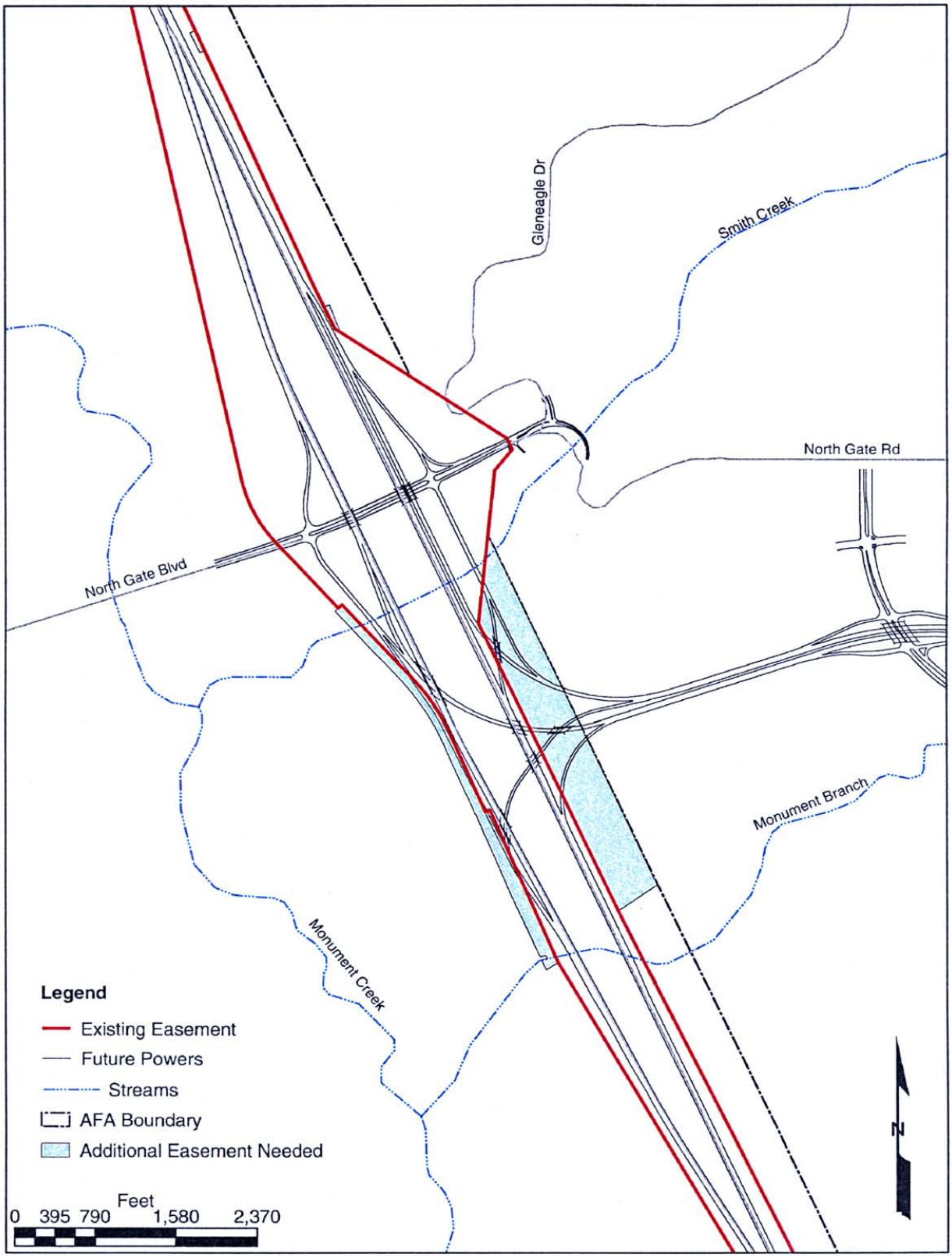

FIGURE 3-24a
United States Air Force Academy Easement Modification
Area at North Gate/Powers Interchange

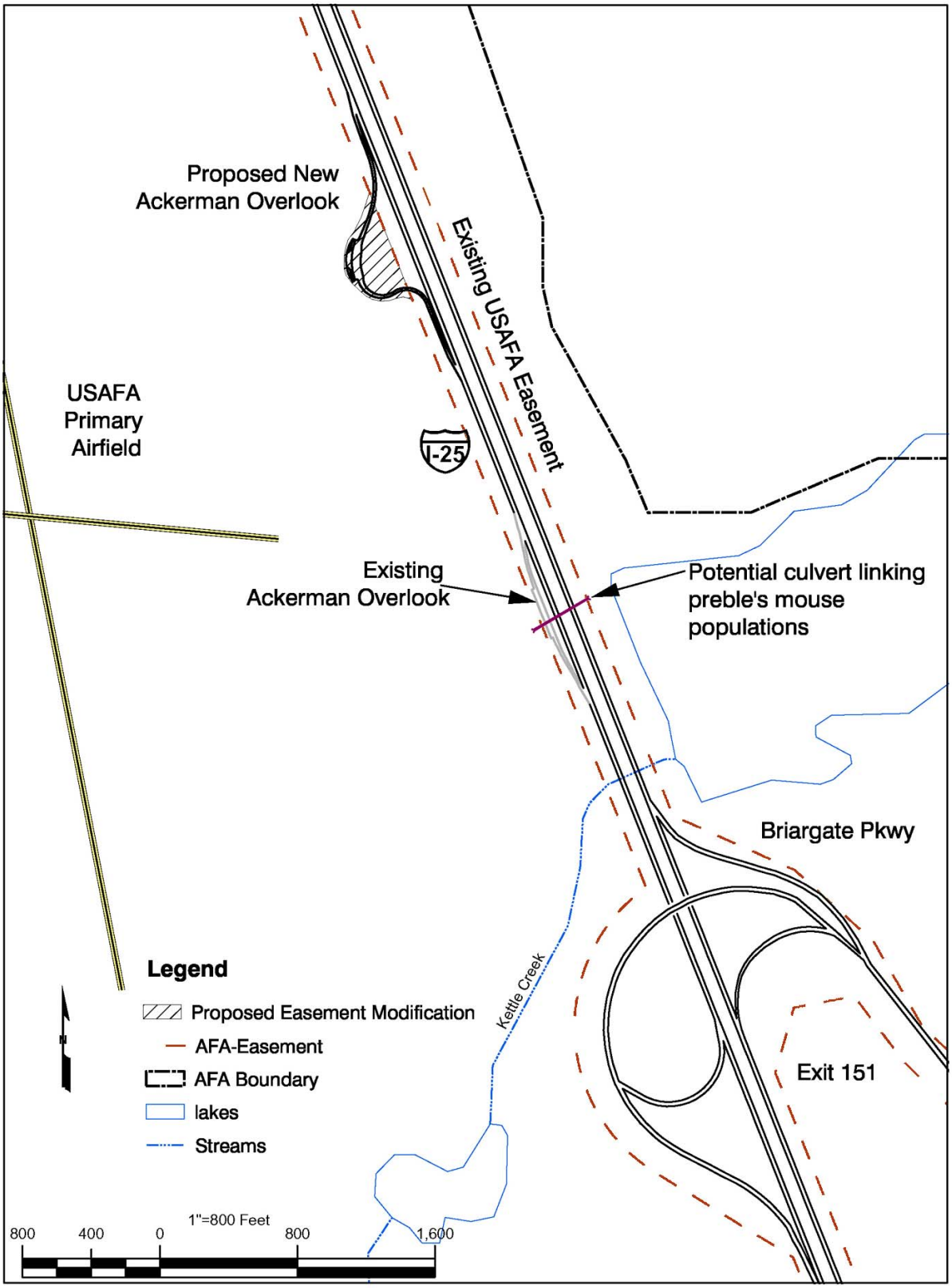

FIGURE 3-24**b**
Existing and Proposed Sites of
The Ackerman Overlook