

Hazardous Waste Sites Technical Memorandum

I-25 Improvements Through the Colorado Springs Urbanized Area Project

CDOT Project No. IM 0252-316

Project Control No. 12210

Colorado Department of Transportation

February 2003
(Updated December 2003)

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1.0 Project Description (Proposed Action)

The Proposed Action would widen Interstate 25 (I-25) from South Academy Boulevard (Exit 135) to State Highway 105 (Exit 161, Monument), a distance of approximately 26 miles. Within these limits, a six-lane cross-section (three through-lanes in each direction) would be built south of the U.S. Highway 24 Bypass to South Academy and north of Briargate to SH 105. Additionally, for the 12-mile central portion from the US 24 Bypass (Exit 139) to Briargate Parkway (Exit 151), the Proposed Action consists of an eight-lane cross section (four through-lanes in each direction).

In the eight-lane cross-section, the inside (left-most) lane in each direction would be open to general traffic during off-peak hours; during morning and evening peak hours, this lane would be reserved for use by carpools and buses only. To accommodate this flexible use, the high-occupancy-vehicle (HOV) lane would not be barrier-separated from the general-purpose lanes, but would be demarcated by appropriate signage and striping.

The non-barrier HOV treatment also allows for decommissioning of the lanes back to general-purpose operation in the event that the lanes do not result in adequate peak-period usage to justify HOV operations. This will depend in part upon public willingness to fund expanded transit operations that would use the HOV lanes. The HOV lanes are projected to be marginally successful without transit system expansion, but could become solidly successful if used by buses on hypothetical future routes (currently unfunded). Express bus service between Colorado Springs and Monument began in 2002 as a 3-year “demonstration project.”

In conjunction with the additional laneage, the Proposed Action includes interchange reconstruction at several locations. These include major reconstruction of existing interchanges at:

- Exit 141 – Cimarron (U.S. Highway 24)
- Exit 142 – Bijou Street
- Exit 145 – Fillmore
- Exit 147/148 – North Nevada Avenue and Rockrimmon Boulevard (consolidated)
- Exit 156 – North Gate Road, plus freeway-to-freeway ramps for Powers Boulevard
- Exit 158 – Baptist Road

For each of the interchange reconstruction projects, numerous design alternatives were considered and evaluated. These alternatives were presented for review and input at advertised public meetings.

Additionally, minor geometric changes will be made at Exit 146, Garden of the Gods Road. The existing southbound-only ramps at Exit 147 A (Corporate Centre Drive) will be closed, with access via a local street connection to the reconfigured Nevada/Rockrimmon interchange. In conjunction with freeway widening on U.S. Air Force Academy property, the Ackerman Overlook will be relocated to a safer location.

2.0 Existing Conditions

Most of the areas of environmental concern identified in the MESA are related to leaking underground storage tanks and associated subsurface piping. The principal contaminants associated with these areas are petroleum hydrocarbons (e.g., gasoline and diesel fuels, waste motor oils, and other petroleum-based lubricating oils).

Public records were also reviewed for the presence of Superfund or Resource Conservation and Recovery Act sites. None were identified that would impact the project area.

An important consideration in the identification of relevant areas of potential environmental concern is the location of these areas, both horizontally and vertically, relative to the project area.

Surface drainage from areas located uphill of the project area could carry contaminants toward CDOT property. In addition, shallow groundwater tends to flow locally in the same general direction as surface drainage. Areas with groundwater contamination that are in close proximity and uphill of the project area, therefore, need to be identified as part of the planning process for this project.

2.1 Areas of Potential Environmental Concern

The following nine sites are within or immediately adjacent to the project area and are shown in Figure 1. These sites were identified in the MESA report as being areas of potential environmental concern.

- 1. Diamond Shamrock Service Station, 1310 West Baptist Road.** This is a currently active leaking underground storage tank site located 0.06 miles west of the project area. This site has both groundwater and soil contamination that are currently under remediation. Groundwater flow is not considered to be toward the project area, however, this site could impact the project area because of its close proximity.
- 2. Total Service Station, 3115 Sinton Road.** There is currently an active leaking underground storage tank at this site, which is located within the project area. The planned current Sinton Road alignment at the I-25/Fillmore Street Interchange will require a total acquisition of this property.
- 3. Conoco Service Station, 3006 North Chestnut Street.** This site is located within the project area. The Chestnut Street alternatives and the proposed widening of Fillmore Street would involve a total acquisition of this property. Although this site is currently considered inactive, soil and groundwater have been contaminated with gasoline and diesel oil.
- 4. Texaco Service Station, 2930 North Chestnut Street.** This site is located within the project area. The Chestnut Street alternatives and the proposed widening of Fillmore Street would involve a total acquisition of this property. Although the leaking underground storage tank at this site is currently considered inactive, the MESA concluded that soil and groundwater contamination may still be present.

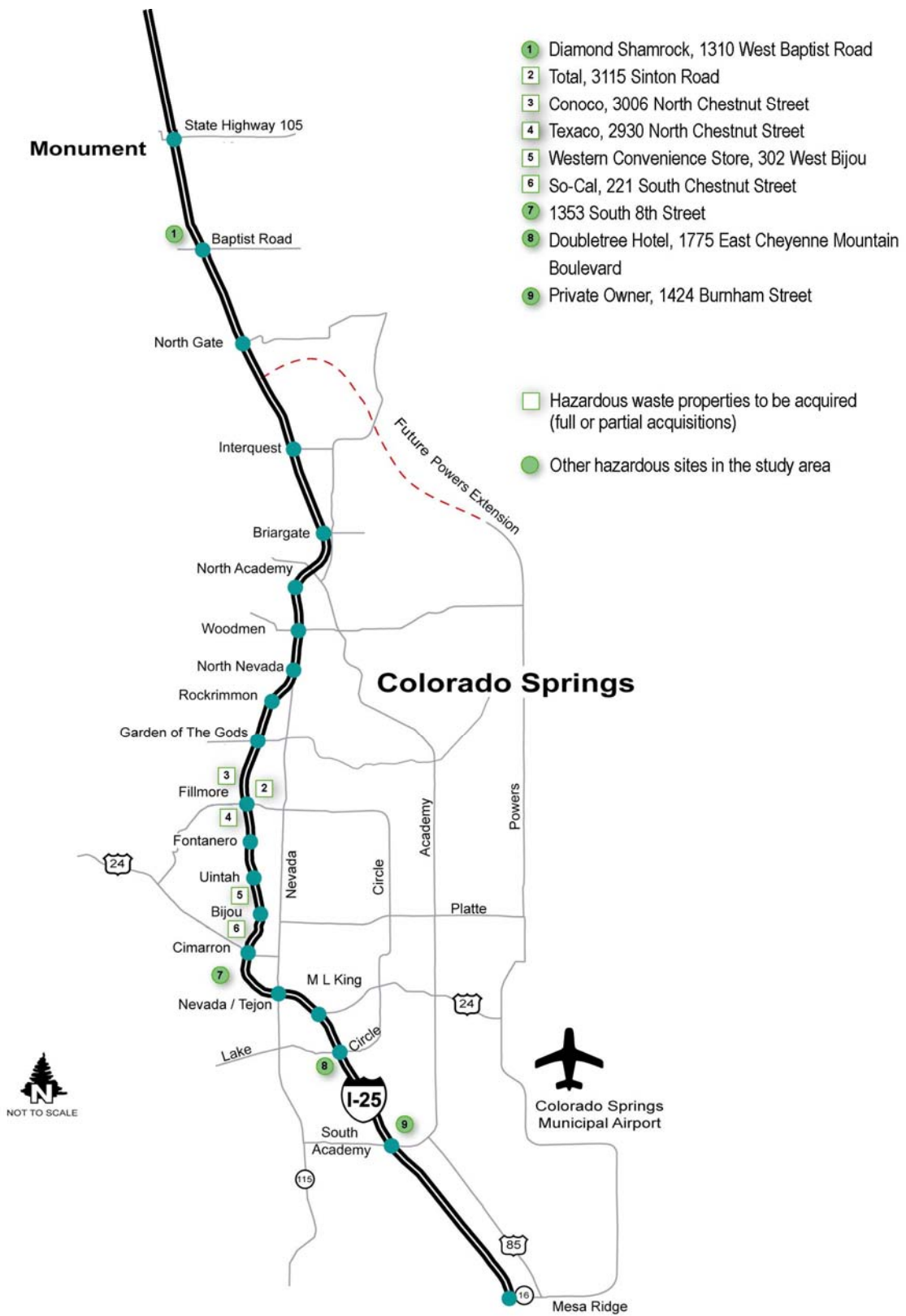


FIGURE 1
Hazardous Material Areas of Potential Environmental Concern

5. **Western Convenience Store, 302 West Bijou Street.** This currently active leaking underground storage tank is located adjacent to Bijou Street overpass. Currently, contaminated groundwater is under remediation at the site. The contaminated groundwater is migrating southeast toward additional areas of the project.
6. **So-Cal, 221 South Chestnut Street.** This site is an auto-restoration facility located within the project area. The proposed southbound off-ramp from I-25 onto Cimarron Street would involve at least a partial acquisition of this property. Although the leaking underground storage tank at this site is currently considered inactive, the MESA report concluded that soil and groundwater contamination may still be present, particularly given the nature of the surrounding land use (salvage yards).
7. **1353 South 8th Street.** Located approximately 0.3 miles southwest and uphill of the project area, this site is a possible former landfill site or public dumping area, based on a review of historic photographs, current land use and county records. Although no soil or groundwater contamination is currently known to exist, the MESA concluded that contamination may be present given the potential past uses of the site.
8. **The Doubletree Hotel, 1775 East Cheyenne Mountain Boulevard.** This currently active leaking underground storage tank is located 0.03 miles west and uphill of the project area, specifically at the I-25/Circle/Lake Interchange. A release from a leaking underground storage tank was reported in 1996. Remediation of the site has not occurred, therefore, soil and/or groundwater contamination may be present.
9. **Private Owner, 1424 Burnham Street.** This is a currently active leaking underground storage tank site located 0.15 miles east and uphill of the project area. Although the leaking underground storage tank at this site is currently considered inactive, the MESA report concluded that soil and groundwater contamination could be present.

In addition to the nine known sites listed above, several areas of potential environmental concern were identified in the MESA report primarily based on land use and/or type of business, or based on records of emergency response actions. Because there are no significant public records on these sites, they are not considered to be of environmental concern at this time.

2.2 Hazardous Materials in Bridge Paint

The results of a paint survey on specific bridges in the project corridor were presented in the MESA. A total of 31 paint samples were collected from ten bridges. The results indicate that lead was detected in paint samples from two bridges, and detectable concentrations of other regulated metals (arsenic, barium, cadmium, chromium, selenium and silver) were also found in some of the paint samples from these bridges.

The following bridges that cross I-25 in the project area had detectable metals concentrations in their paint:

- Railroad bridge, at milepost 136
- US 85/87 overpass, at milepost 136

3.0 Methodology

Areas of potential environmental concern must be identified so that they can be avoided, if reasonably possible. If they cannot be avoided, then it is important that these areas are identified so that appropriate corrective actions can be taken to protect the health and safety of the public and workers during construction and maintenance. In addition, it is important to protect CDOT from liability for existing or future contamination as a result of this project.

Areas of potential environmental concern within the corridor are important because contaminants in groundwater could potentially migrate onto CDOT property or property that CDOT acquires as part of this project.

To identify the locations of permitted and non-regulated hazardous waste sites within the project area, a modified Phase I Environmental Site Assessment (MESA) was conducted in accordance with the requirements of CDOT and the American Society of Testing and Materials. The MESA involved a review of public records and field inspection.

Specifically, the MESA report identified areas where public records indicate the presence of currently or historically active hazardous waste sites or petroleum releases that are either within or immediately adjacent to the proposed I-25 improvements.

A more complete description of the study methodology is included in the MESA, which is included as an attachment to this technical memorandum. It is important to note that the MESA report was completed in February 2002. Since that time, minor adjustments were made with respect to right-of-way needs for the Proposed Action. Therefore some of the sites investigated in the MESA will not be impacted by the Proposed Action. The MESA report is provided for additional information with respect to the impacted sites that are specified in the EA and in this Technical Memorandum.

In addition to identifying areas of potential environmental concern, the MESA report documented the results of chemical analyses of paint samples from highway bridge structures in the project area. For the purpose of determining proper disposal of bridge materials, analyses were conducted to determine the concentration of metals, particularly lead, in the paint.

4.0 Impacts of No-Action Alternative

Under the No-Action Alternative, the various areas of potential environmental concern would be addressed through the appropriate regulatory process by the owner(s) of these areas. In the absence of the highway improvements, there would be no further change to the existing environmental conditions with respect to hazardous waste, petroleum releases, or lead paint on bridges.

5.0 Impacts of Proposed Action

5.1 Areas of Potential Environmental Concern

Under the Proposed Action, there is some possibility that the various areas of potential environmental concern could affect the health and safety of workers during construction, and could enhance CDOT liability for potential risks to human health and the environment in the absence of further investigation and subsequent mitigation, as appropriate.

Specifically, five areas of potential environmental concern would be acquired under the Proposed Action. These areas are the Total station at 3115 Sinton Road, the Conoco at 3006 North Chestnut Street, the Texaco at 2930 North Chestnut Street, the Western Convenience Store at 302 W. Bijou, and the So-Cal at 221 South Chestnut Street. However, with the exception of the Western Convenience Store on Bijou Street, the current presence of hazardous waste and/or a release of petroleum products is unknown at all of these areas. Moreover, if hazardous waste or a petroleum release is present, the nature and extent of the potentially associated soil and groundwater contamination is similarly unknown at these areas.

Four additional areas of potential environmental concern that will not be acquired – the Diamond Shamrock at 1310 West Baptist Road, the property at 1353 South 8th Street, the Doubletree Hotel at 1775 East Cheyenne Mountain Boulevard, and the property at 1424 Burnham Street – are near the project area and may be sources of petroleum-based groundwater contamination that potentially could flow into the project area. Other properties adjacent to the Proposed Action may, because of their past land-use history, have caused soil and groundwater contamination. In all of these areas, further investigation is necessary to reduce the uncertainty concerning the level of risk to human health and the environment under the Proposed Action.

5.2 Hazardous Materials in Bridge Paint

Under the Proposed Action, two existing bridges along the project corridor would be dismantled as part of the proposed improvements. Those bridges that have elevated lead concentrations in their paint – the Railroad Bridge and the US 85/87 overpass, both at milepost 136 – would be re-tested using an appropriate analytical procedure to determine the appropriate disposal requirements for the debris containing the lead-based paint.

There are also several bridges in the corridor that will not be modified or replaced under the Proposed Action. At those locations, no further testing or mitigation is proposed.

6.0 Mitigation

6.1 Areas of Potential Environmental Concern

Site-specific investigations will be performed on the sites listed as having potential environmental concerns to determine the presence, and if necessary the extent of soil and or groundwater contamination. Mitigation will be required if the results of site-specific investigations at the areas of potential environmental concern determine that remediation will be necessary to protect human health and the environment during either construction or operation and maintenance of the Proposed Action.

The level of remediation will be determined in accordance with applicable federal and Colorado law, based on the final project alignment, right-of-way requirements, and degree of subsurface disturbances during construction.

6.2 Hazardous Materials in Bridge Paint

CDOT will undertake further testing as needed to determine proper disposal methods and procedures for the demolition debris.

CDOT will manage the disposal of the demolition debris in compliance with the Occupational Safety and Health (29 Code of Federal Regulations), US Environmental Protection Agency (40 Code of Federal Regulations), and Colorado Department of Public Health and Environment (Colorado Code of Regulations - Air Quality Control Commission [1001] and Hazardous Materials and Waste Management Division [1007]).

7.0 Attachment

Modified Environmental Site Assessment, Interstate 25 Corridor

