

**US 6/Wadsworth**



**Environmental  
Assessment**

# **US 6 and Wadsworth Finding of No Significant Impact and Final Section 4(f) Evaluation**

CDOT Project STU 0062-019 (15215)



March 2010

STU 0062-019  
**US 6 and Wadsworth Finding of No Significant Impact  
and Final Section 4(f) Evaluation**

Submitted Pursuant to:  
42 U.S.C. 4332(2)(c), 49 U.S.C. 303, and 23 U.S.C. 138

by the  
U.S. Department of Transportation  
Federal Highway Administration  
and the  
Colorado Department of Transportation

FHWA has determined that the Build Alternative, described in Chapter 2 of this document, will have no significant impact on the environment. This Finding of No Significant Impact (FONSI) is based on the analysis presented in the US 6/Wadsworth Environmental Assessment (EA) and consideration of public and agency comments on the EA. The EA is contained on the attached disk in Appendix A, and responses to public and agency comments are presented in Chapter 4 of the FONSI. After evaluation of the EA and public and agency comments, FHWA and CDOT determined that the EA adequately and accurately describes the proposed action and discusses the purpose and need for the project, environmental issues and impacts of the proposed project, and the appropriate mitigation measures as summarized in Appendix B to this FONSI. The EA provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. FHWA and CDOT take full responsibility for the accuracy, scope, and content of the attached EA and the information provided in this FONSI.

Submitted By:

  
\_\_\_\_\_  
Reza Akhavan  
Region 6 Transportation Director  
Colorado Department of Transportation

*March 12, 2010*  
\_\_\_\_\_  
Date

Concurred By:

  
\_\_\_\_\_  
Pamela A. Hutton, P.E.  
Chief Engineer  
Colorado Department of Transportation

*3-12-10*  
\_\_\_\_\_  
Date

Approved By:

  
\_\_\_\_\_  
FOR Karla S. Petty, P.E.  
Colorado Division Administrator  
Federal Highway Administration

*3/12/10*  
\_\_\_\_\_  
Date



# Table of Contents

| Chapter  |   | Page       |
|----------|---|------------|
| <b>1</b> | <b>Introduction .....</b>   | <b>1-1</b> |
|          | 1.1 Project Overview .....  | 1-1        |
|          | 1.2 Purpose and Need .....  | 1-2        |
| <b>2</b> | <b>Description of the Build Alternative.....</b>                  | <b>2-1</b> |
|          | 2.1 Elements of the Build Alternative .....                       | 2-1        |
|          | 2.1.1 Traffic Operations .....                                    | 2-1        |
|          | 2.1.2 Pedestrian and Bicycle Facilities .....                     | 2-3        |
|          | 2.1.3 Transit Operations .....                                    | 2-3        |
|          | 2.1.4 Drainage and Water Quality Treatment.....                   | 2-3        |
|          | 2.1.5 Bridge Structures .....                                     | 2-4        |
|          | 2.1.6 Noise Walls .....   | 2-4        |
|          | 2.2 Funding Plan and Project Completion Schedule .....            | 2-4        |
| <b>3</b> | <b>Impacts, Mitigation Measures, and Permit Requirements.....</b> | <b>3-1</b> |
|          | 3.1 Summary of Impacts and Mitigation .....                       | 3-1        |
|          | 3.2 Permit Requirements .....                                     | 3-1        |
| <b>4</b> | <b>Coordination and Response to Comments.....</b>                 | <b>4-1</b> |
|          | 4.1 Public Coordination.....                                      | 4-1        |
|          | 4.2 Agency Coordination.....                                      | 4-1        |
|          | 4.3 Comments and Responses .....                                  | 4-2        |
|          | 4.4 Clarifications to the Environmental Assessment .....          | 4-37       |
| <b>5</b> | <b>Final Section 4(f) Evaluation.....</b>                         | <b>5-1</b> |
|          | 5.1 Introduction .....  | 5-1        |
|          | 5.2 Section 4(f).....   | 5-2        |
|          | 5.2.1 Direct Uses .....   | 5-2        |
|          | 5.2.2 <i>De Minimis</i> Impacts .....                             | 5-2        |
|          | 5.3 Purpose and Need .....  | 5-2        |
|          | 5.4 Feasible and Prudent Alternatives.....                        | 5-3        |
|          | 5.5 Parks and Recreation Resources .....                          | 5-5        |
|          | 5.5.1 Description of 4(f) Resources .....                         | 5-5        |
|          | 5.5.2 <i>De Minimis</i> Impacts .....                             | 5-5        |
|          | 5.5.3 Consultation and Coordination .....                         | 5-6        |
|          | 5.6 Historic Resources.....                                       | 5-6        |
|          | 5.6.1 <i>De Minimis</i> Impacts .....                             | 5-6        |
|          | 5.6.2 Direct Uses .....   | 5-7        |
|          | 5.6.3 Least Harm Analysis.....                                    | 5-8        |
|          | 5.6.4 Measures to Minimize Harm .....                             | 5-10       |
|          | 5.7 Section 4(f) Finding.....                                     | 5-10       |
| <b>6</b> | <b>References.....</b>  | <b>6-1</b> |

**Appendices**

- A EA, Draft Section 4(f) Evaluation, and Other Documentation
- B Mitigation and Monitoring Commitments
- C Correspondence

**Exhibits**

- 1-1 US 6 and Wadsworth Boulevard Study Area
- 2-1 Build Alternative – US 6 and Wadsworth Boulevard Interchange
- 2-2 Build Alternative – Wadsworth Boulevard Typical Cross-Section
- 3-1 Permit Requirements for the Build Alternative
- 4-1 Agencies Consulted on US 6/Wadsworth Study
- 4-2 US 6/Wadsworth – Summary of Comments
- 4-3 Comments and Responses to US 6/Wadsworth EA
- 5-1 Project Location
- 5-2 Summary of Feasible and Prudent Interchange Alternatives
- 5-3 Boundaries of Two Creeks Park
- 5-4 Dry Gulch Culvert
- 5-5 Historic Properties with *De Minimis* Impacts
- 5-6 Summary of *De Minimis* Impacts for Section 4(f) Historic Resources
- 5-7 Section 4(f) Historic Properties with Direct Use
- 5-8 Summary of Direct Uses of Section 4(f) Historic Resources
- 5-9 Least Harm Analysis
- 5-10 Design Features of the Tight Diamond with Loop Interchange and Consideration of Impacts to Section 4(f) Resources

|          |  |                  |  |
|----------|--|------------------|--|
| AASHTO   | American Association of State Highway and Transportation Officials | NRHP             | National Register of Historic Places   |
| ADA      | Americans with Disabilities Act                                    | NWP              | Nationwide Permit  |
| APEN     | Air Pollution Emission Notice                                      | O <sub>3</sub>   | ozone  |
| ARRA     | American Recovery and Reinvestment Act                             | OAHP             | Office of Archaeology and Historic Preservation                                  |
| ASTM     | American Society for Testing and Materials                         | OSHA             | U.S. Occupational Safety and Health Administration                               |
| Ave.     | Avenue   | Pl.              | Place  |
| Blvd.    | Boulevard  | PM <sub>10</sub> | particulate matter less than 10 microns in diameter                              |
| BMP      | best management practice   | ROW              | right-of-way   |
| CDOT     | Colorado Department of Transportation                              | RTD              | Regional Transportation District   |
| CDPHE    | Colorado Department of Public Health and Environment               | SCP              | Stormwater Construction Permit   |
| CDPS     | Colorado Discharge Permit System                                   | Section 106      | Section 106 of the National Historic Preservation Act of 1966                    |
| CFR      | Code of Federal Regulations  | Section 4(f)     | Section 4(f) of the Department of Transportation Act of 1966                     |
| dBA      | A-weighted decibel(s)  | SHPO             | State Historic Preservation Office   |
| DOI      | Department of the Interior   | SPUI             | single-point urban interchange   |
| Dr.      | Drive  | St.              | Street   |
| DRCOG    | Denver Regional Council of Governments                             | T&E              | threatened and endangered  |
| EA       | Environmental Assessment   | U.S.C.           | United States Code   |
| EPA      | U.S. Environmental Protection Agency                               | UDFCD            | Urban Drainage and Flood Control District  |
| ESA      | Environmental Site Assessment                                      | Uniform Act      | Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 |
| FHWA     | Federal Highway Administration                                     | USACE            | U.S. Army Corps of Engineers   |
| FONSI    | Finding of No Significant Impact                                   | USFWS            | U.S. Fish and Wildlife Service   |
| HUD      | U.S. Department of Housing and Urban Development                   | VMT              | vehicle miles traveled   |
| Lakewood | City of Lakewood   | Wadsworth        | Wadsworth Boulevard  |
| Ln.      | Lane   | WB               | Westbound  |
| LRT      | light rail transit   | WQCD             | Water Quality Control Division   |
| MOA      | Memorandum of Agreement  | WQCV             | water quality capture volume   |
| MSAT     | mobile source air toxics   | WUS              | waters of the United States  |
| NEPA     | National Environmental Policy Act                                  |                  |  |
| NPDES    | National Pollutant Discharge Elimination System                    |                  |  |



# CHAPTER 1

## Introduction

1 The Colorado Department of Transportation (CDOT),  
2 in cooperation with the Federal Highway Administration  
3 (FHWA) and other stakeholders, prepared the  
4 US 6/Wadsworth Environmental Assessment (EA) and  
5 Draft Section 4(f) Evaluation to identify and assess  
6 potential transportation improvements at the  
7 interchange of US 6 (also referred to as 6th Avenue)  
8 and Wadsworth Boulevard (Wadsworth), and along  
9 Wadsworth from 4th to 14th Avenues. CDOT  
10 considered a number of alternatives for improvements,  
11 as described in Chapter 2 of the EA. Two of these  
12 alternatives were selected for detailed evaluation: a  
13 Build Alternative and a No Build Alternative. The Build  
14 Alternative would reconstruct the interchange as a tight  
15 diamond with a loop in the northwest quadrant and  
16 widen Wadsworth to add a travel lane in each  
17 direction, multi-use paths, and a raised median. The  
18 No Build Alternative would not include any major  
19 reconstruction of the roadways, intersections, or  
20 sidewalks.

21 In June 2009, the EA was completed and released for  
22 review and comment. The following environmental  
23 issues or resources were evaluated in detail in the EA:  
24 transportation, pedestrian and bicycle facilities, noise,  
25 right-of-way (ROW) and relocations, socioeconomics,  
26 environmental justice, land use, historic properties,  
27 hazardous substances, floodplains, water resources,  
28 and wetlands. FHWA and CDOT have considered the  
29 EA analysis and public and agency comments in the  
30 preparation of this Finding of No Significant Impact  
31 (FONSI). The FONSI also includes a number of  
32 mitigation measures that CDOT and FHWA have  
33 committed to include in the implementation of the Build  
34 Alternative to minimize environmental and social  
35 impacts.

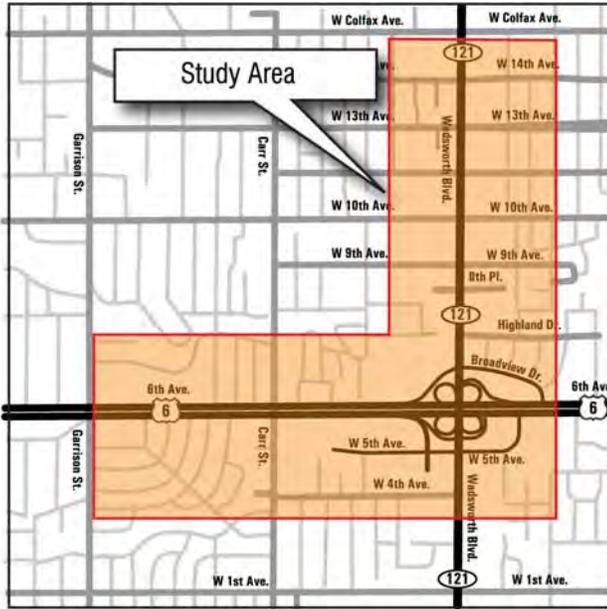
36 This document is organized into six chapters that  
37 contain the following information:

- 38 ♦ **Chapter 1** provides an overview of the study area  
39 and the project's purpose and need.
- 40 ♦ **Chapter 2** describes the Build Alternative.
- 41 ♦ **Chapter 3** summarizes the environmental impacts  
42 of and proposed mitigation for the Build  
43 Alternative.
- 44 ♦ **Chapter 4** provides clarifications to the EA  
45 analysis and addresses public and agency  
46 comments on the EA.
- 47 ♦ **Chapter 5** is the Final Section 4(f) Evaluation.
- 48 ♦ **Chapter 6** provides a list of references.

49 There are three appendices to the FONSI. Appendix A  
50 is presented on CD-ROM and contains the EA, Draft  
51 Section 4(f) Evaluation, and other documentation.  
52 Appendix B lists the mitigation measures that CDOT  
53 has committed to during design and construction of the  
54 Build Alternative. Appendix C presents  
55 correspondence received since the publication of the  
56 EA, including all comments received on the document.

### 1.1 PROJECT OVERVIEW

58 The US 6/Wadsworth project centers around the US 6  
59 and Wadsworth interchange in the heart of the City of  
60 Lakewood (Lakewood). The study area includes both  
61 US 6 and Wadsworth. Both roadways serve a broad  
62 cross section of local and regional travelers. As shown  
63 in Exhibit 1-1, the east-west limits along US 6 are from  
64 the eastern interchange ramps with Wadsworth west to  
65 Garrison Street. On Wadsworth, the project limits are  
66 4th Avenue to 14th Avenue.



1

2 EXHIBIT 1-1: US 6 AND WADSWORTH BOULEVARD STUDY AREA

3 US 6 is a primary east-west six-lane freeway that  
 4 traverses Denver, Lakewood, and Golden. Located in  
 5 central Lakewood, the US 6 and Wadsworth  
 6 interchange is a full cloverleaf configuration that was  
 7 originally constructed in the 1950s. Intersections are  
 8 spaced closely to the interchange both north and south  
 9 of US 6. The Carr/Garrison Street slip ramps to the  
 10 west are in close proximity to the Wadsworth  
 11 interchange.

12 Wadsworth is a regionally important highway and is the  
 13 longest continuous north-south roadway connecting  
 14 communities across the western Denver metropolitan  
 15 area. Wadsworth links northern Lakewood with  
 16 Lakewood's City Commons at Alameda Avenue south  
 17 of the project area, provides regional access to large  
 18 commercial developments at Wadsworth and Colfax  
 19 Avenue, and will soon provide access to the West  
 20 Corridor light rail station at Wadsworth and  
 21 13th Avenue, currently being constructed by the  
 22 Regional Transportation District (RTD).

## 23 1.2 PURPOSE AND NEED

24 The purpose of the US 6/Wadsworth project is to  
 25 improve traffic flow and safety, accommodate high  
 26 traffic volumes, and increase multi-modal travel options  
 27 and connections at the US 6 and Wadsworth  
 28 interchange and along Wadsworth between 4th  
 29 Avenue and 14th Avenue. The existing design and  
 30 configuration of the interchange and roadway within  
 31 the project limits are deficient to meet growing traffic  
 32 and multi-modal travel demands. Improvements are  
 33 needed to:

- 34 ◆ Improve safety for motorists, pedestrians, and bicyclists
- 35
- 36 ◆ Improve operational efficiency of the interchange and on Wadsworth
- 37
- 38 ◆ Meet current and future traffic demands
- 39 ◆ Support multi-modal connections

40 Additional details on the purpose and need can be  
 41 found in Chapter 1 of the EA.





# CHAPTER 2

## Description of the Build Alternative

1 The Build Alternative will replace the existing  
2 US 6/Wadsworth interchange and widen Wadsworth  
3 between 4th and 14th Avenues. The existing  
4 cloverleaf will be replaced with a tight diamond with  
5 loop design, consisting of a diamond interchange with  
6 a loop ramp in the northwest quadrant. Exhibit 2-1  
7 illustrates the operation of the new interchange. The  
8 structurally deficient bridge over Wadsworth will be  
9 replaced, and all entrance and exit ramps will be  
10 lengthened. Along Wadsworth, the Build Alternative  
11 will add a travel lane in each direction and a multi-use  
12 sidewalk on both sides of Wadsworth. A raised  
13 median will be added to the center of the roadway to  
14 direct left turns and U-turns. The typical cross-section  
15 for Wadsworth under the Build Alternative is shown in  
16 Exhibit 2-2.

### 17 **2.1 ELEMENTS OF THE BUILD** 18 **ALTERNATIVE**

---

19 The section below discusses the primary elements of  
20 the Build Alternative design: traffic operations,  
21 pedestrian and bicycle facilities, transit operations,  
22 drainage and water quality treatment, bridge  
23 structures, and noise walls.

#### 24 **2.1.1 TRAFFIC OPERATIONS**

25 The tight diamond with loop configuration of the  
26 interchange will improve operational efficiency of the  
27 interchange, provide better interchange capacity,  
28 address safety needs, and support multi-modal  
29 connections in the project area. Three of the  
30 interchange ramps will operate as intersections with  
31 Wadsworth. The loop ramp in the northwest quadrant  
32 of the interchange will allow traffic traveling west on

33 US 6 to exit to southbound Wadsworth without  
34 stopping at a signal or yielding to through traffic. All of  
35 the ramps in the interchange area will be lengthened  
36 to provide adequate acceleration and deceleration  
37 distances for vehicles entering and exiting US 6.  
38 Merging conflicts between traffic entering and exiting  
39 US 6 will be eliminated.

40 US 6 will remain a six-lane freeway corridor. The  
41 existing on-/off-ramps at Carr and Garrison Streets will  
42 remain, but auxiliary lanes will be added between  
43 those ramps and the west Wadsworth on-/off-ramps to  
44 provide safer weaving distances between the two sets  
45 of ramps.

46 Improvements to Wadsworth between 4th and  
47 14th Avenues will improve operational efficiency, meet  
48 current and future traffic demands, address safety  
49 needs, and support multi-modal connections along  
50 Wadsworth. The Build Alternative will feature an  
51 additional travel lane in each direction, a raised  
52 median, and a multi-use sidewalk on both sides of  
53 Wadsworth. The additional travel lanes will reduce  
54 congestion for vehicles traveling through the study  
55 area. The median will direct left turns and U-turns to  
56 intersections with cross streets and prevent mid-block  
57 turns. By limiting left turns to and from cross streets,  
58 there will be fewer locations along Wadsworth where  
59 left-turning vehicles conflict with through-traffic or  
60 pedestrians/bicyclists. In addition, an Access  
61 Management Plan will be developed and implemented  
62 to consolidate driveways, limit the number of locations  
63 where cars enter Wadsworth to improve traffic  
64 operations, and address safety needs along  
65 Wadsworth

Exhibit 2-1: Build Alternative – US 6 and Wadsworth Boulevard Interchange

### Northwest Quadrant

#### Interchange

- 1 Reconstructed loop off-ramp from westbound US 6 to southbound Wadsworth.
- 2 A grade-separated or at-grade pedestrian crossing at on-ramp and loop ramp will be determined at final design.
- 3 New longer on-ramp from northbound and southbound Wadsworth to westbound US 6 provides adequate acceleration and merge distances for vehicles entering US 6.
- 4 Continuous lane on US 6 between on-ramp and Carr St. off-ramp provides safer merging conditions.

#### Frontage Road

- 5 Frontage road access is shifted north and changed to two-way traffic between the 6th Ave. Business Center and Wadsworth.
- 6 Channel improvements to Lakewood Gulch to reduce floodplain.

### Northeast Quadrant

#### Interchange

- 10 New longer off-ramp from westbound US 6 to northbound Wadsworth provides adequate deceleration and vehicle queue distances for vehicles accessing Wadsworth. Free flow movement onto Wadsworth.

#### Frontage Road

- 11 Frontage road is reconfigured to provide access directly to Wadsworth. Provides two-way operation that reduces neighborhood cut-through traffic.
- 12 New noise walls next to the frontage road.



### Southwest Quadrant

#### Interchange

- 7 Continuous lane on US 6 between Carr St. on-ramp and Wadsworth off-ramp provides safer merging conditions.
- 8 New longer off-ramp from eastbound US 6 to northbound and southbound Wadsworth feeds into a multi-lane intersection that accommodates expected vehicle queues. Exiting vehicles wanting to travel east at the 5th Ave. intersection utilize the signalized intersection to make a hard right and vehicles destined farther south can use the adjacent right-turn yield lane to merge onto southbound Wadsworth.

#### Frontage Road

- 9 Frontage road remains one-way and continues to connect to 5th Ave. at Yukon St.

### Southeast Quadrant

#### Interchange

- 13 New longer on-ramp from northbound and southbound Wadsworth to eastbound US 6 provides adequate acceleration and merge distance for vehicles entering US 6.

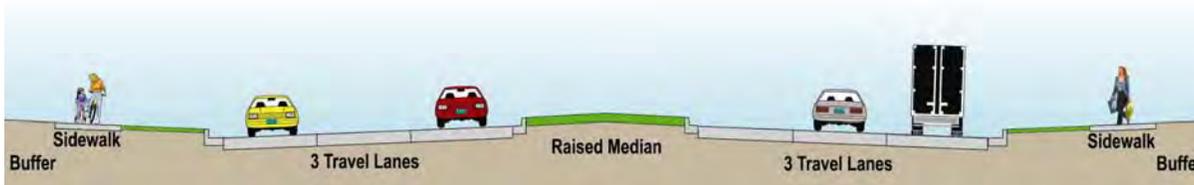
#### Frontage Road

- 14 Frontage road remains two-way and connects to 5th Ave. on Vance St. instead of Webster St.

#### Project Wide

- 15 New noise walls between the frontage roads and US 6, west of Wadsworth.
- 16 Detached multi-use sidewalk along both sides of Wadsworth.

Exhibit 2-2: Build Alternative – Wadsworth Boulevard Typical Cross-Section



## 2.1.2 PEDESTRIAN AND BICYCLE FACILITIES

1 The Build Alternative includes continuous 8-foot  
2 sidewalks on both sides of Wadsworth between 4th  
3 and 14th Avenues. Sidewalks will be separated from  
4 the road in most places by a 10-foot buffer. The  
5 Lakewood Gulch box culvert at 8th Avenue will be  
6 reconstructed and replaced with a wider structure that  
7 will include accommodations for a pedestrian/bicycle  
8 crossing. The new box culvert will provide an  
9 opportunity for a future east-west pedestrian and  
10 bicycle crossing between 5th and 10th Avenues  
11 (although connections between the box culvert and the  
12 paths along Wadsworth would need to be constructed  
13 by others).

15 The Build Alternative will provide new sidewalks on  
16 both sides of Wadsworth through the interchange area.  
17 Although the crossing will be greatly improved from the  
18 existing condition, free-flow ramp crossings and the  
19 loop ramp crossing still present challenges for  
20 pedestrians and bicycles. Additional mitigation  
21 measures will be considered during final design to  
22 improve the visibility and safety of free-flow ramp  
23 crossings, as described in Appendix B, Mitigation  
24 Commitments. An underpass of the loop ramp in the  
25 northwest quadrant will also be further evaluated in  
26 final design.

## 2.1.3 TRANSIT OPERATIONS

27 New sidewalks on each side of Wadsworth will improve  
28 access to and the condition of bus stops, improving  
29 connections to bus service on Wadsworth. Increased  
30 capacity on Wadsworth will improve bus operations on  
31 Wadsworth by accommodating the planned increase in  
32 bus frequency, improving the timeliness of bus service,  
33 and facilitating timely transfers between buses and  
34 light rail transit (LRT). The bridge on US 6 over  
35 Wadsworth will be long enough to accommodate future  
36 transit options on Wadsworth, such as a dedicated  
37 LRT or street car, without the need for reconstruction.  
38

## 2.1.4 DRAINAGE AND WATER QUALITY TREATMENT

39  
40  
41 McIntyre, Lakewood, and Dry Gulches will be widened  
42 and realigned at their crossings with US 6 and  
43 Wadsworth to remove the roadways from the  
44 floodplains and improve drainage. The Build  
45 Alternative will also include water quality basins to treat  
46 stormwater runoff and comply with federal and state  
47 water quality regulations. Approximately seven basins  
48 will be located in the study area. Locations, sizes, and  
49 configurations of planned basins were designed to  
50 minimize property acquisition and take advantage of  
51 property remnants that would result from the right-of-  
52 way acquisition process. The basins will be adequately  
53 sized to filter roadway runoff from existing and  
54 expanded paved areas. In some cases, the water  
55 quality basins will also treat stormwater from non-  
56 roadway development that enters the roadways. The  
57 basins will typically be dry except during and shortly  
58 after storm events.

## 2.1.5 BRIDGE STRUCTURES

59 The US 6 bridge over Wadsworth will be replaced,  
60 addressing the structural deficiency of the bridge deck.  
61

1 The bridge span will be long enough to accommodate  
2 future transit options on Wadsworth.

### 3 **2.1.6 NOISE WALLS**

4 Noise walls will be installed between US 6 and its  
5 frontage roads from the interchange west to near  
6 Garrison Street. Approximately 1,500 linear feet of  
7 noise walls are included on the north side of US 6, and  
8 approximately 1,700 linear feet of noise walls are  
9 included on the south side of US 6, between  
10 Wadsworth and Garrison Street. As noted in Appendix  
11 B, Mitigation Commitments, final height, design, and  
12 configuration of noise barriers will be confirmed in final  
13 design. Planned noise walls along US 6 would be  
14 approximately 15 feet high. Noise barriers also will  
15 extend along the reconstructed frontage road in the  
16 northeast quadrant of the interchange; these barriers  
17 will be approximately 10 feet high. Existing walls east  
18 of Wadsworth, and within the limits of the proposed  
19 improvements disturbed during construction, would be  
20 reconstructed and extended farther west toward  
21 Wadsworth to improve noise mitigation for residents in  
22 the interchange area. The reconstructed walls would  
23 be approximately 15 feet high, which is taller than the  
24 existing walls.

## 25 **2.2 FUNDING PLAN AND PROJECT** 26 **COMPLETION SCHEDULE**

27 The US 6/Wadsworth project is included in the Denver  
28 Regional Council of Government's (DRCOG's) 2035  
29 Metro Vision Regional Transportation Plan (DRCOG,  
30 2007). Approximately \$81 million (in adjusted 2010  
31 dollars) has been identified for this project in the  
32 fiscally constrained plan. Due to declining tax revenue  
33 and the current economic downturn, CDOT has not set  
34 the schedule for design, ROW acquisition, or  
35 construction at this time. Completion of the EA and the  
36 signing of the FONSI will allow CDOT to pursue  
37 funding for the implementation phases of the project.



# CHAPTER 3

## Impacts, Mitigation Measures, and Permit Requirements

### 3.1 SUMMARY OF IMPACTS AND MITIGATION

---

Impacts and mitigation measures for the Build Alternative are detailed in Chapter 3 of the EA. The majority of impacts associated with the Build Alternative will be beneficial. Traffic congestion will be reduced and general safety will improve for local and regional travelers, access to and from the numerous businesses along Wadsworth will be safer to navigate, and the safety and convenience of travel for pedestrians and bicyclists will be greatly improved.

Improving drainage channels within the study area will reduce flooding hazards, enhance riparian habitat and wildlife migration, and provide an opportunity for wetlands to establish naturally. Water quality will be improved because stormwater runoff will be treated to reduce sediment before being discharged into the South Platte River basin.

Noise walls included in the Build Alternative will decrease noise levels at residences near US 6. Improved capacity on the major roadway network and reconfiguration of the frontage roads surrounding the interchange will reduce neighborhood cut-through traffic, improve business and neighborhood access, and improve air quality around intersections.

Other impacts associated with the Build Alternative include ROW needs, which require the acquisition of property and displacement of businesses and residences. Four historic properties will be acquired and demolished, and three jurisdictional wetland areas totaling 0.02 acre in gulches will be lost.

Detailed mitigation commitments are included as Appendix B to the FONSI. These mitigation commitments were detailed in Appendix B to the EA

and have been updated to include clarifications and additional commitments resulting from the review of public and agency comments received on the EA.

### 3.2 PERMIT REQUIREMENTS

---

The permits, approvals, and certifications described in Exhibit 3-1 will be required for implementation of the Build Alternative. Additional permits could be identified during final design and required during construction.

Detailed mitigation commitments, including the schedules for obtaining the permits listed in Exhibit 3-1, are included as Appendix B.

EXHIBIT 3-1: PERMIT REQUIREMENTS FOR THE BUILD ALTERNATIVE

| Permit   | Applicability   | Permitting Agency  |
|--|---|--|
| <b>Federal</b>   |   |  |
| Clean Water Act Section 404 Permit – Nationwide Permit 14 and/or 27          | Required for impacts to wetlands and waters of the United States. The U.S. Army Corps of Engineers has confirmed informally that a Nationwide Permit would be applicable.   | U.S. Army Corps of Engineers   |
| Incidental Take Permit <sup>1</sup>  | Required when active nests of migratory birds covered by the Migratory Bird Treaty Act are disturbed. <sup>1</sup>  | U.S. Fish and Wildlife Service   |
| <b>State</b>   |   |  |
| Colorado Discharge Permit System (CDPS) Stormwater Construction Permit (SCP) | The CDPS program issues, monitors, and enforces permits for direct discharge of pollutants to the nation's waters. Construction stormwater discharge permits are required to assure the quality of stormwater runoff for projects where more than 1 acre of land is disturbed by construction.  | Colorado Department of Public Health and Environment, Water Quality Control Division |
| CDPS Construction Dewatering Permit  | Required for dewatering of construction areas, if necessary. The Contractor shall obtain the appropriate CDPS general permit for management of groundwater from CDPHE Water Quality Control Division.   | Colorado Department of Public Health and Environment, Water Quality Control Division |
| Air Pollution Emission Notice (APEN)   | Required for projects where more than 25 acres of land are impacted and/or the project duration is longer than 6 months.  | Colorado Department of Public Health and Environment, Air Pollution Control Division |
| Demolition Permit  | Required for the abatement of friable asbestos in an area of public access. Applies to the removal of all structures, including buildings and bridges.  | Colorado Department of Public Health and Environment, Air Pollution Control Division |
| Form 137 Access Permit   | Required for construction, relocation, modification, or closure of access(es) to a State Highway. Modifications to access points along Wadsworth Boulevard will require a Form 137 Access Permit application. During final design, access points will be identified in a formal access control plan prepared by CDOT. All access points would be constructed in accordance with Lakewood and Americans with Disabilities Act (ADA) standards. | Colorado Department of Transportation  |
| Colorado Senate Bill 40 Certification  | Required for construction activities within riparian corridors.   | Colorado Division of Wildlife  |
| <b>Local</b>   |   |  |
| Floodplain Development Permit  | Required for projects where construction is located in a mapped 100-year floodplain.  | Lakewood Floodplain Administrator  |
| Other Local Permits or Approvals   | May be required for utility relocates, land survey, local roadway access, retaining walls, and grading.   | Lakewood Department of Public Works  |

<sup>1</sup>Permit is not anticipated but surveys during non-nesting periods will be conducted to remove inactive nests before construction begins. The project area will be monitored to discourage nesting.



# CHAPTER 4

## Coordination and Response to Comments

1 CDOT published the EA and Draft Section 4(f)  
2 Evaluation on July 13, 2009, and initiated the 45-day  
3 formal review period, which concluded on August 26,  
4 2009. During this time, comments were accepted from  
5 agencies and the public.

### 6 4.1 PUBLIC COORDINATION

7 CDOT conducted extensive public involvement and  
8 outreach during the course of the EA, as summarized  
9 in Chapter 5 of the EA. Publication of the EA was  
10 announced through a mass mailing to surrounding  
11 residents and property owners, mass e-mails to  
12 Lakewood residents and businesses, website  
13 announcements, coordination with neighborhood and  
14 business groups, and advertisements in local  
15 newspapers and on public access television (Channel  
16 8).

17 A public hearing was held at the Lakewood City  
18 Council Chambers on Wednesday, July 22, 2009, to  
19 collect comments on the EA. The hearing was  
20 advertised through the same channels as the EA, as  
21 well as through flyers posted at local community  
22 centers, businesses, churches, schools, and libraries.  
23 The hearing was held in open house format and  
24 included a 30-minute informational presentation  
25 provided by CDOT and consultant staff in the Council  
26 Chambers. Following the presentation, members of the  
27 public were given an opportunity to make oral  
28 comments about the EA. The meeting was attended by  
29 members of the public, City of Lakewood staff, CDOT  
30 staff, FHWA staff, local business owners, and property  
31 owners. Approximately 96 people attended the  
32 meeting, not including CDOT, FHWA, consultant, or  
33 Lakewood staff. Two court reporters were present to  
34 record oral comments on the EA, one in the open  
35 house area and one in the Council Chambers after the  
36 presentation.

### 37 4.2 AGENCY COORDINATION

38 The EA was sent to local, state, and federal agencies  
39 for review on July 8, 2009 (Exhibit 4-1). As  
40 summarized in Chapter 5 of the EA, these agencies  
41 were consulted throughout the NEPA process and  
42 received progress updates at major milestones:  
43 scoping, purpose and need, alternatives, identification  
44 of the Build Alternative, and publication of the EA.

#### EXHIBIT 4-1: AGENCIES CONSULTED ON US 6/WADSWORTH STUDY

##### Local Agencies

City of Lakewood

Denver Regional Council of Governments

Jefferson County Administration

Jefferson County Department of Health and Environment

Jefferson County Division of Highways and Transportation

Jefferson Economic Council

Regional Air Quality Council

Regional Transportation District

Urban Drainage and Flood Control District

##### State Agencies

Colorado Department of Public Health and Environment (CDPHE),  
Air Pollution Control Division (APCD)

CDPHE, Hazardous Materials and Waste Management Division  
CDPHE, Water Quality Control Division

Colorado Division of Local Government

Colorado Division of Wildlife

Colorado State Parks

State Historic Preservation Office

##### Federal Agencies

Department of Interior, Office of Environmental Policy and  
Compliance

Department of Housing and Urban Development

Federal Emergency Management Agency

Federal Transit Administration

U.S. Army Corps of Engineers

U.S. Environmental Protection Agency

U.S. Fish and Wildlife Service

### 4.3 COMMENTS AND RESPONSES

Thirty comment documents were received during the review period. No impacts to the environment were identified in the comments received that were not addressed fully in the EA. Nine comments required minor revisions and clarifications to the EA; these revisions are noted in the comment responses and identified as a group in Section 4.3. Exhibit 4-2 summarizes the comments received.

EXHIBIT 4-2: US 6/WADSWORTH – SUMMARY OF COMMENTS

| ID | Format              | Subject Matter   |
|----|---------------------|--|
| 1  | E-mail              | Noise levels on Wadsworth  |
| 2  | Project Website     | Pedestrian access across interchange                                 |
| 3  | Comment Form        | Signage for business access during construction                      |
| 4  | Comment Form        | Noise wall and property impacts                                      |
| 5  | Comment Form        | Traffic operations on Wadsworth                                      |
| 6  | Comment Form        | Neighborhood circulator buses  |
| 7  | Verbal <sup>1</sup> | Noise impacts and mitigation   |
| 8  | Verbal <sup>1</sup> | Drainage improvements  |
| 9  | Verbal <sup>1</sup> | Drainage improvements  |
| 10 | Verbal <sup>1</sup> | Noise wall locations   |
| 11 | Verbal <sup>1</sup> | Construction noise impacts   |
| 12 | Verbal <sup>1</sup> | Pedestrian access across interchange                                 |
| 13 | Verbal <sup>1</sup> | Noise impacts and mitigation   |
| 14 | Verbal <sup>1</sup> | Noise levels in northwest quadrant                                   |
| 15 | Comment Form        | Support for proposed improvements                                    |
| 16 | Comment Form        | Support for proposed improvements, and pedestrian and bicycle safety |
| 17 | E-mail              | Noise and construction impacts                                       |
| 18 | E-mail              | Noise and construction impacts                                       |
| 19 | E-mail              | Noise and construction impacts, and public outreach                  |
| 20 | Letter              | Water quality pond placement and property impacts                    |

EXHIBIT 4-2: US 6/WADSWORTH – SUMMARY OF COMMENTS

| ID | Format          | Subject Matter   |
|----|-----------------|--|
| 21 | Comment Form    | Support for No Build Alternative   |
| 22 | Letter          | Construction impacts, long-term noise impacts, and public outreach                               |
| 23 | Letter          | Noise study methodology and results  |
| 24 | Letter          | Lakewood response to proposed project, and support for improvements                              |
| 25 | Project Website | Noise walls  |
| 26 | Letter          | Property acquisition and cost  |
| 27 | Project Website | Support for proposed improvements and noise walls  |
| 28 | Letter          | RTD station parking and property acquisition   |
| 29 | Letter          | Section 4(f) and wildlife  |
| 30 | E-mail          | Property acquisition, water quality basin placement and impacts, and redevelopment opportunities |

<sup>1</sup> Verbal comments were made to the transcriber at the public hearing.

After the comment period ended, each comment document was assigned a unique ID number and was delineated by topic to address multiple comments provided by each commenter, resulting in 156 discrete comments.

Responses to all comments received are presented in Exhibit 4-3. The table is organized by comment ID, as noted in Exhibit 4-2, with the comment reproduced from original comment documents presented next to the corresponding response. Copies of the responses also were provided to each commenter in a separate mailing. The original comment documents are presented in Appendix C in the form in which they were received, with the exception that delineation of each comment is handwritten on the documents to correspond to the comment numbers presented in Exhibit 4-3.

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name             | Organization    | No. | Comment   | Response   |
|------------------|-----------------|-----|---|--|
| Coffman, Jill    | Private citizen | 1-1 | I would like to complain that noise levels at Wadsworth is very loud, so additional lanes do not help my cause.   | The noise analysis conducted for the EA indicates that traffic noise at residences near Wadsworth would not increase perceptibly with the additional travel lanes proposed under the Build Alternative. With the exception of the single residential property located along Wadsworth (1215 Wadsworth), all other residences within the study area are located one or more lots back from the roadway. The existing noise levels for these residences are not high enough to warrant mitigation under CDOT and FHWA's noise mitigation policies. Consideration of noise mitigation is warranted when noise levels reach or exceed 66 A-weighted (dBA) or increase more than 10 dBA. If these criteria are met, mitigation is included if it is feasible and reasonable according to the FHWA and CDOT guidelines. Please refer to the <i>Noise Technical Memorandum</i> included in Appendix C to the EA for additional details on the predicted noise levels and mitigation considered. |
| Banker, Pat      | Private citizen | 2-1 | I took a look at the proposed design and my only concern is that it doesn't appear to improve the pedestrian situation. With light rail going in just a few blocks north this is an opportunity to provide safe pedestrian and bicycle access and should be looked at carefully. We live near this intersection and would like to see a pedestrian/bicycle bridge over 6th Avenue. There is no safe walking or bicycling access across 6th Avenue from Perry Street to Simms. Please consider this request in your plans. | The addition of sidewalks and reconfiguration of the US 6 interchange ramps will significantly improve pedestrian and bicycle travel north to south through the interchange area. Please refer to Sections 1.2.1.2, 1.2.3.1, and 3.2 of the EA for a discussion of pedestrian and bicycle facilities and impacts. See also response to Comment 12-1 for a discussion of the overpass and underpass options considered.   |
| Moritzky, Bonnie | Private citizen | 3-1 | Given that Lakewood has very strict signage/advertising regulations for businesses, how will business access be affected during construction? Will business in the area be allowed signage (directional) during construction that they would not normally be allowed?   | CDOT will provide for all-weather access and detours to minimize disruptions for businesses during construction. CDOT uses signs to mark detours and general business access appropriately. (Signs are provided for businesses in general but not for individual businesses.) Additionally, CDOT will develop a traffic control plan and make that plan available to Lakewood and the CDOT public relations office prior to construction, which will relay additional notifications for lane closures. A construction newsletter will be prepared and distributed as needed to keep businesses, residences, and travelers up to date. These commitments have been included in Section 4.4 of the FONSI.<br><br>Lakewood is committed to maintaining a vibrant community for businesses and is willing to discuss additional signage or other measures to help businesses during construction of the US 6/Wadsworth project.  |
| Moritzky, Bonnie | Private citizen | 3-2 | Will sections of Wadsworth be blocked off that will adversely affect business access? How will this issue be addressed?   | Lane closures during construction will comply with CDOT's Region 6 Lane Closure Strategy (CDOT, 2005). In the project area, the lane closure strategy generally allows one lane of Wadsworth to be closed in the evening (after 7 or 8 p.m.) and for 1 or more hours during daytime non-peak travel times. In addition to maintaining through-lanes, CDOT policy also requires access to adjacent properties be provided during construction, as noted in response to Comment 3-1. The locations and times of closures are determined based on traffic patterns and are planned to minimize traffic disruptions. Information regarding lane closures and business access during construction has been added to Section 4.4 of the FONSI. See also response to Comment 3-1.   |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name            | Organization    | No. | Comment   | Response  |
|-----------------|-----------------|-----|---|---|
| Leiby, Marianne | Private citizen | 4-1 | Sound walls are a blessing to the property next to them; however, they create a wind tunnel affect [sic] which brings trash in large quantities to the adjacent properties. Any possibility the engineers can prevent this trash problem? Perhaps being on the north edge of the frontage road? Or find the trash source and enforce existing fine structure. | The walls will be located next to the highway to allow properties along the frontage road to maintain their access. In cases where access is not a concern, the noise walls will be located next to the property boundary, which may reduce trash problems. CDOT is responsible for maintaining the frontage road and would be open to discussing opportunities for Adopt-a-Highway partnerships with the community for trash collection.   |
| Leiby, Marianne | Private citizen | 4-2 | 7373 W 6th Ave. Could the driveway be reconfigured to allow for a solid south edge sound wall on the property? Perhaps a joint driveway to the west for this and the property to the east? Then the sound wall could be totally on the north side of the two-way frontage road all the way to Crescent Lane.  | Both 7373 W. 6th Ave. and 7393 W. 6th Ave. would remain under the Build Alternative. The primary access to these houses is from the frontage road, and there is no alternative access that could be provided to these properties. (Specifically, a wall in front of 7373 W. 6th Ave. would block access to 7393 W. 6th Ave, and the locations of garages for these properties do not lend themselves to shared access.) The four residences west of 7393 W. 6th Ave. would be acquired to reconstruct the ramp and frontage road in the northeast quadrant. As a result of these acquisitions, the noise wall can and does switch to the north side of the frontage road in this location.  |
| Turner, Michael | Private citizen | 5-1 | I am very concerned with the possible U-turn for people turning north from 6th Ave to Wadsworth. I am concerned about traffic backing up and causing the possibility of rear end collisions. Need to be very observant about traffic flow in the 9th Ave area.  | Left-turn lanes have been designed to accommodate the expected future 2035 traffic, including U-turn movements where permitted. According to the traffic analysis and modeling conducted for the EA, vehicle queues are not expected to exceed the storage length provided in the left-turn lanes.  |
| Brown, Coraline | Private citizen | 6-1 | Seniors over 80 would be more willing to give up driving if circulator buses will circulate around neighborhoods and to [...]points as to light rail points, Red Rocks, Lakewood's Belmar, etc. Others would find this helpful.   | In the Denver metro area, the Regional Transportation District (RTD) is responsible for planning and operating bus service. RTD operates two express bus services from the US 6/Wadsworth project area to downtown during the peak hours. Route 87X, South Wadsworth Express, provides express bus service from US 6 and Wadsworth to Civic Center Station downtown (16th and Broadway). Route 93X, Green Mountain Express, provides express service from Wadsworth and 1st Avenue directly to Civic Center Station. RTD also plans to increase the frequency of area bus service to serve the new West Corridor Light Rail (anticipated to be operational in 2013), which will provide rail service from the project area to downtown Denver. RTD also operates a service for seniors called seniorRide (303-299-6503).    |
| Brown, Coraline | Private citizen | 6-2 | I would favor a ballot to push up date for 6th Avenue to Downtown, especially express service to Downtown.  | Thank you for your comment. At this time, the project has been included in the Denver region's long-range transportation plan and is expected to be funded through CDOT's standard budgeting process. No ballot initiative is proposed. (The US 6/Wadsworth project is not expected to improve service to downtown Denver, although travel times for cars and buses on US 6 may improve somewhat based on better operational efficiency of the interchange. The new RTD light rail, which includes a station at 13th Avenue and Wadsworth, would provide new rail service to downtown. Additional information on the West Corridor light rail line and stations is available from RTD [ <a href="http://www.rtd-fastracks.com/wc_1">http://www.rtd-fastracks.com/wc_1</a> ].) Please also refer to response to Comment 6-1. |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name          | Organization    | No. | Comment   | Response   |
|---------------|-----------------|-----|---|--|
| Seal, Michael | Private citizen | 7-1 | I live at 8230 West Eight Avenue. This is two blocks from Sixth Avenue and it's a slightly higher elevation. I am concerned about the construction of the new sound wall as I think it might make the noise pollution at my house worse. The current proposal calls for building two walls out of concrete on either side of Sixth Avenue. If they do this, I will receive both direct sound and the reflected sound from the far wall at my house. | In its publication, Keeping the Noise Down: Highway Traffic Noise Barriers ( <a href="http://www.fhwa.dot.gov/environment/keepdown.htm">http://www.fhwa.dot.gov/environment/keepdown.htm</a> ), FHWA addresses this issue. "Residents adjacent to a highway sometimes feel that their noise levels have increased substantially, because of the construction of a noise barrier on the opposite side of the highway. However, field studies have shown that this is not true. If all the noise striking a noise barrier were reflected back to the other side of a highway, the increase would be theoretically limited to 3 dB. In practice, not all of the acoustical energy is reflected back to the other side. Some of the energy goes over the barrier, some is reflected to points other than the homes on the opposite side, some is scattered by ground coverings (for example, grass and shrubs), and some is blocked by the vehicles on the highway. Additionally, some of the reflected energy is lost due to the longer path that it must travel. Measurements made to quantify this reflective increase have never shown an increase of greater than 1-2 dB an increase that is not perceptible to the average human ear." CDOT policy does recommend, however, that in cases where the width-to-height ratio of a roadway section to parallel barriers is less than 10:1 (as is the case under the Build Alternative), sound absorptive materials be considered to reduce reflective noise, and use of sound absorptive materials or equivalent will be considered in final design. |
| Seal, Michael | Private citizen | 7-2 | I am suggesting that CDOT spend approximately 3 percent more money to build sound-absorbent sound walls so that it will actually reduce the sound at my house and other peoples' houses at this [higher] elevation. There would only be a 3 percent cost difference, and I think it is worth it for the long-term benefit of these residents.   | The use of absorptive materials or other techniques to reduce noise reflection will be considered during final design of the project. The City of Lakewood will also have the opportunity to provide input on design elements related to noise mitigation, including the grading, landscaping, color, and material of any noise walls. The consideration of sound-absorptive materials for noise walls has been included in Section 4.4 of the FONSI.  |
| Green, David  | Private citizen | 8-1 | Lakewood City was going to improve [McIntyre] gulch – stabilize the gulch, the banks of the gulch and this was to be done between Carr and Wadsworth where all the property owners are losing 2 to 3 feet of property every year into the gulch. The gulch is going deeper, wider. What impact is working on Sixth Avenue going to have on this project?  | As part of the US 6/Wadsworth project, McIntyre Gulch would be widened to improve conveyance of 100-year flows through the project corridor. The existing culvert for McIntyre Gulch under US 6 would be replaced with a larger structure to convey the 100-year flows under the roadway and prevent US 6 from flooding during 100-year flood events. The proposed design would significantly improve drainage, reduce erosion, and reduce flooding within the improved area. The City of Lakewood, which was a partner agency in preparation of the EA and development of the Build Alternative, is in the process of adding McIntyre Gulch to its 5-year capital improvement plan and is working to secure funding to address flooding concerns elsewhere along the gulch. The earliest Lakewood's construction on McIntyre Gulch would begin is 2012, and the timing of the CDOT US 6/Wadsworth project is uncertain but likely after 2012. CDOT and Lakewood will continue to work together to ensure that the project designs do not conflict. Your comment also has been passed along to Lakewood.   |
| Green, David  | Private citizen | 8-2 | All other problems [on McIntyre Gulch] have been fixed over the past year. Now it is time for this section to be fixed, according to Lakewood. The funding should come from the Colorado water people and Lakewood. This section is probably the last section of the gulch that is eroding.   | See response to Comment 8-1. Your comment also has been passed along to Lakewood. Please contact Lakewood's Stormwater Management Utility with any additional questions regarding the City of Lakewood's drainage or floodplain improvement projects.  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name            | Organization    | No.  | Comment   | Response  |
|-----------------|-----------------|------|---|---|
| Sherman, George | Private citizen | 9-1  | They are going to increase the size of the culvert where it goes under Wadsworth and it goes into that new Two Creeks Park north of Tenth Avenue. Where the water goes through that park, it then goes back underground into another culvert for approximately 1 to 1 ½ blocks along Tenth Avenue. Since they are increasing the culvert leading into Two Creeks Park, are they going to increase the size of the culvert that leads out? Because that is a real flood problem. Every time we have a moderate rain, the water goes over the top of that culvert along Tenth Avenue, especially where it crosses Teller. | <p>The new culvert under Wadsworth is designed to carry 100-year flows and prevent flows from overtopping the roadway. The project is not intended to address downstream flooding, except to ensure that the flooding does not worsen. That is, the amount of water entering the culvert under 10th Avenue will not change. If there is a flooding problem in this location, the US 6/Wadsworth project will not affect it, neither making it better nor worse.</p> <p>Lakewood has developed some upstream flood detention at Ritchie Park, which has reduced flows considerably through Dry Gulch. Lakewood would also be responsible for addressing flooding described at 10th Avenue if that flooding persists. Your comment also has been passed along to Lakewood. Please contact Lakewood’s Stormwater Management Utility, which is responsible for programming drainage projects for the city, to report and/or discuss this problem.</p>   |
| Lamke, Brian    | Business owner  | 10-1 | I own a building that is on Sixth Avenue at 7727 West Sixth Avenue. On the proposed site you have a noise wall that starts at the beginning of the building. It’s going to block all of the signage; it’s a commercial building. What I would like them to do is move that wall to the back of the building – at least behind the building. It’s supposed to be 15 feet, and it’s too tall. It will block all the signage – moving the beginning of the wall westward to the building or to the back of the property. This would allow the signage to be unobstructed.  | <p>Your concern is understood. To provide significant noise reduction for the homes along Allison Street, the noise wall was proposed to extend east of Allison Street and in front of your commercial building. A design option may be possible to change the alignment of the noise wall to accommodate both the commercial needs for visibility and residential needs for noise reduction. Specifically, it may be possible to change the alignment of the noise wall between Allison and Ammons Streets to the north side of the frontage road and wrap the wall around the west side of your property. The noise wall could extend along the highway just east of Ammons Street and continue as described in the EA. This design modification will be investigated in final design and included if feasible. The commitment to consider the alternative alignment is reflected in Section 4.4 of the FONSI.</p>  |
| Frazer, Kim     | Private citizen | 11-1 | My concern is the noise during construction. I live on Fifth Avenue, so not far at all from where the construction will be taking place. And I imagine it will be a long construction period; one to two years, something like that. So I’m just curious if they have taken that into consideration at all. Do they have any plans to at least contain the hours or the noise levels, anything that would improve the whole situation during that timeframe?  | <p>Construction noise is generally a function of the nearest one or two pieces of equipment. At any one residence, equipment use will vary from day to day. For example, near bridge abutments there may be pile driving for a few days, then earthwork, then concrete forming, with many days of no active work. For a typical roadway construction project, there are often weeks of little to no construction activity near any one residence, then perhaps a few weeks with activity. Some activity is relatively quiet, such as some utility work, while other activities are relatively loud, such as jack hammering. As stated in Appendix B to the EA, mitigation for construction noise includes limiting work to daytime hours when possible and requiring contractors to use well-maintained equipment, including muffler systems. Noise during construction must comply with state and local requirements. CDOT may, if feasible, construct proposed permanent noise walls early in the overall construction schedule to provide noise mitigation for the temporary construction noise as well as the long-term operational noise from US 6 traffic. The commitment to construct permanent noise walls early in the overall construction schedule, if feasible, is reflected in Section 4.4 of the FONSI.</p> |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name           | Organization    | No.  | Comment   | Response  |
|----------------|-----------------|------|---|---|
| Nichols, Randy | Private citizen | 12-1 | ...my primary concern is I would like to see some method for pedestrians and bicyclists to go over – or under – 6th Avenue without having to deal with traffic. There are a couple of examples where this has been done. One is on Kipling where the Clear Creek does under Kipling – I think it's about 39th or so. And there's another one on I-70 – again, about 38th or so – that's an overpass. And I don't know how effective that is. But anyway, that may be nice to have | CDOT recognizes that US 6 is a barrier to north-south pedestrian and bicycle travel through Lakewood, and providing for better pedestrian and bicycle mobility through the Wadsworth interchange area was a primary need identified for the US 6/Wadsworth project. The addition of sidewalks and reconfiguration of the US 6 interchange ramps will significantly improve pedestrian and bicycle travel north to south through the interchange area. A complete grade-separated crossing of US 6 was considered but not included in the Build Alternative due to site constraints, property acquisition needs, limited effectiveness because of out-of-direction travel, maintenance considerations, steep grades and/or long tunnels, and cost. An underpass of the loop ramp in the northwest quadrant is under consideration. As described in Section 3.2.3 (page 3-8) of the EA, an underpass option for the loop ramp crossing will be evaluated in final design and included in the Build Alternative if a suitable solution to groundwater conflicts can be designed. An overpass of the loop ramp also was considered but not included because elevations required to get over the loop ramp (and maintain a vertical separation with traffic below) would be steep, the bridge could be difficult to maintain due to icing of the bridge, and it would cost an estimated \$1 million to construct (in comparison to the underpass, which would be approximately \$200,000 to construct). In all other quadrants of the interchange, crossings would remain at grade. Additional measures to improve safety of at-grade crossings, such as pavement markings, warning lights, signing, or other measures, will be included in the final design of the Build Alternative, as stated in Appendix B, Mitigation Commitments, to the EA. |
| Nichols, Randy | Private citizen | 12-2 | There is one minor problem with underpasses. And if anybody here was here on Monday, sometimes when you get pretty dramatic weather —and two years ago, I worked down in the vicinity of 11th and Decatur. And the Lakewood Gulch used to have a bike path through there. About two years ago, a lady was pushing her baby through there. And we had a humongous storm, and this big surge of water came through and she lost her child. So that's the downside of underpasses.   | The potential underpass of the US 6 loop ramp would not be within the Lakewood Gulch channel, and therefore, would not be subject to flooding during storm events as in the example provided. The bottom of the underpass would be located near groundwater levels, however, which could pose some problems to maintaining the underpass, such as potentially requiring pumping of groundwater. The underpass of Wadsworth at Lakewood Gulch (at approximately 8th Avenue) would be located within the channel and could be subject to flooding during storm events. If a path is constructed along Lakewood Gulch (by Lakewood or others) to take advantage of this undercrossing of Wadsworth, appropriate signage, stormflow indicators, gates, or similar measures would need to be installed along the path to warn or protect against flooding dangers.   |
| Nichols, Randy | Private citizen | 12-3 | It would be nice not to have to deal with the traffic to get from south – from north of 6th Avenue south. I have a lot of friends that ride bikes. And I can tell you for sure, we don't ever use Sheridan because there's always the chance a big chunk of concrete is going to fall down on your head. And Wadsworth is a little safer, but not as convenient. That's my wish.  | Pedestrian and bicycle underpass crossing of US 6 would be improved on both sides of Wadsworth. See response to Comment 12-1. (Although unrelated to the US 6/Wadsworth project, CDOT is aware of the problems with the US 6/Sheridan interchange. Funding has recently been identified to reconstruct the US 6/Sheridan bridge. CDOT's tentative schedule is to begin construction in 2011. Interim maintenance repairs should happen sometime in the near future.)  |

## EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name             | Organization    | No.  | Comment  | Response  |
|------------------|-----------------|------|--|---|
| Greenman, Celia  | Private citizen | 13-1 | When you were speaking of noise impacts, you said that there had been other options considered beside the noise walls. Could you tell me what those were?  | The <i>Noise Technical Memorandum</i> included in Appendix C to the EA (pages 29-30) describes other noise abatement measures considered but deemed infeasible. These included: restricting access to heavy trucks, acquisition of property to form a buffer zone, alteration of the horizontal or vertical alignments of the Build Alternative design, reducing speed limits, noise insulation of buildings, earth berms, and using a low-noise pavement. (Using a low-noise pavement is not infeasible but is not proven to be effective over the long term. CDOT continues to study pavement types and their noise effects.) Given the geographical constraints of this project, noise barriers were the most reasonable and feasible mitigation option to construct. As noted in Appendix B, however, the final height and configuration of noise barriers or equivalent will be confirmed during final design. |
| Greenman, Celia  | Private citizen | 13-2 | My concern is that we live behind – we live north of the 6th Avenue area, and we're in a – topographically, we're a little bit higher. So we get quite a lot of the noise from 6th Avenue right there. With the noise walls, as they're proposed, we're thinking that if – that that will just channel more noise up into that area. So my question would be – I guess that's more a question than a comment – would be to consider having some material that is more noise absorbent than just concerned, because that is just a noise reflector, particularly with – when you would have the – the two walls on either side of 6th Avenue reflecting all that noise. So it could get quite loud. | The use of absorptive materials for noise walls will be considered during final design of the project. See also responses to Comments 7-1 and 7-2.  |
| Fleming, Glennis | Private citizen | 14-1 | I live at 7865 West 8th Avenue. And as we were looking to see about all the noise barriers, we were told that there would be no noise barriers on the northwest side of the exchange, because all the homes are too far back. I would like to know what myself and my neighbors could do to have somebody come and check the noise decibels in our backyards. Because the overpass is quite high on – on 6th' and it throws the noise over – even in the summer, the trees don't cut the noise. And it comes into our yards. And I'd like to know what we could do to have somebody come and check it.   | As discussed with you and your neighbors at our August 2009 meeting, existing and predicted noise levels at residences in this area are not high enough to warrant mitigation under CDOT and FHWA noise mitigation policies. Consideration of noise mitigation is warranted when noise levels reach or exceed 66 dBA or increase more than 10 dBA as a result of the project. The model, which included the proposed elevation of the highway, indicated that the project would not produce sound levels meeting either of these conditions at residences in this area; neither existing nor future noise levels (which include the Build Alternative and traffic volumes projected for year 2035) would exceed the 66 dBA Noise Abatement Criteria threshold.  |
| Choi, Richard    | Private citizen | 15-1 | The proposed improvements at 6th and Wadsworth represent the best solution to our existing traffic problems. Especially for the residential zone at the N.E. quadrant. The encroachment of commercial and through traffic should be greatly diminished.  | Thank you for your support.   |
| Choi, Richard    | Private citizen | 15-2 | The new sound wall should not only reduce the noise but will also visually define the boundaries of the separation.  | Thank you for your support.   |
| Choi, Richard    | Private citizen | 15-3 | Once the service [frontage] road [in the NE quadrant] is re-configured and the sound wall installed, prominent new signage will be needed to aid in the establishment of new patterns of use   | Signage and striping will be included in the final design package for the Build Alternative. Proper design should encourage new patterns of use, but should problems develop, CDOT or Lakewood would evaluate additional signage.   |
| Koop, Scott      | Private citizen | 16-1 | I agree the 6th Ave. and Wadsworth Blvd. interchange needs to be updated to safely handle the ever increasing amount of automobile traffic.  | Thank you for your support.   |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name         | Organization    | No.  | Comment  | Response   |
|--------------|-----------------|------|--|--|
| Koop, Scott  | Private citizen | 16-2 | I hope there will be an elevated sense of importance given to the design for maximum pedestrian and bicycle safety. Alternate modes of transportation will increase on Wadsworth Blvd. with the completion of the RTD Wadsworth light rail station, and as our society and economy changes.  | Pedestrian and bicycle mobility was one of the most important issues raised by the community, and the Build Alternative was developed to improve safety, access, and comfort of multi-modal transportation. See response to Comment 12-1 for a discussion of additional options that will be refined in final design.  |
| Koop, Scott  | Private citizen | 16-3 | These two very large public transportation projects being developed within close proximity to each other offers and extraordinary opportunity to set an example of how alternate modes of transportation can be supported in conjunction with more traditional automobile traffic. Please give pedestrians and bicyclists your full attention in the building of this public project.  | CDOT has worked with RTD and Lakewood throughout the project to coordinate the design of the Build Alternative with the design of the West Corridor project, and is committed to continuing this coordination throughout final design and project implementation. As noted in response to Comment 12-1, pedestrian and bicycle improvements were primary needs identified by the project, and the Build Alternative has been developed to meet these needs.  |
| Hurst, Susan | Private citizen | 17-1 | I reviewed your EIS and did not see a photo of our townhomes. We are right off 6th and VANCE; and we will be greatly impacted by this project. Noise, added dust of everyday traffic - before, during and after the project - the Webster street apartments provide some buffer and the homes directly south of the frontage road as well. With these gone the sound on the second floor where our bedrooms are will be unbearably loud. It's loud now, I just CAN'T imagine how LOUD it will be with backed up traffic, demolition, constant noise of heavy trucks, earth moving. | As indicated in Section 3.4 of the EA, four single-family residences adjacent to the frontage road southeast of the interchange have been identified as total acquisitions. The apartment complex along Webster Street would remain and does not need to be acquired for the Build Alternative. The residence directly north of your townhome (between your property and the frontage road and highway) also would remain. The traffic noise model created for this project indicated that existing noise levels at your townhome are 65 dBA (which includes the buffer effect of the surrounding residences and the existing noise wall). Under the Build Alternative (with the proposed reconstructed wall in place and the acquired residences not in place), the predicted noise level is 62 dBA, which represents a 3 dBA reduction in noise. Noise levels at your townhome were also modeled with a receptor height of 15 feet, which represents a point 5 feet above the elevation of the second-floor balcony. The model indicated that existing noise levels at this height are 67.4 dBA. Under the Build Alternative, the predicted noise level is 65 dBA, which represents a 2.4 dBA reduction in noise. See response to Comment 11-1 for a discussion of noise mitigation during construction and response to Comment 18-1 regarding construction-related dust emissions |
| Hurst, Susan | Private citizen | 17-2 | How is this going to affect the 'settling' of our home? The addition of the sound wall made a bit of settling, but this will be another matter entirely.   | Noise walls will be constructed according to FHWA's <i>Highway Noise Barrier Design Handbook</i> . This handbook recommends that construction of noise walls follow the American Society for Testing and Materials (ASTM) D1557-07 (2007), "Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort," to ensure that soils are properly compacted and any potential for settling near adjacent properties is reduced. This commitment has been reflected in Section 4.4 of the FONSI.  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name         | Organization    | No.  | Comment   | Response  |
|--------------|-----------------|------|---|---|
| Hurst, Susan | Private citizen | 17-3 | I would think that this section of our townhome's [sic] would be considered for relocation - it will be next to impossible to get in or out of our driveways!!  | As noted in Section 3.4.2 (page 3-12) of the EA, properties are identified for acquisition when the proposed construction limits would directly impact the principal building on the property, or the existing use or operation would be altered so greatly (such as through permanent loss of access) that the property would become economically unviable. The townhomes at 6th Avenue and Vance Street are not affected in these ways and would not need to be acquired for the construction of the Build Alternative. Access to the townhome complex will not change because the access from Vance Street to the frontage road would remain in the same location and configuration as the existing condition. None of the townhome driveways is affected by the Build Alternative. Reconfiguration of the frontage road would result in some construction activity at the intersection of Vance Street and the frontage road, but access to the townhomes would be maintained at all times during construction and would be unchanged in the permanent configuration. |
| Hurst, Susan | Private citizen | 18-1 | I have concerns regarding additional indoor dust/pollution health issues; additional buildup on appliances/electronics/furnace/air conditioning units; and possible power surges/spikes.<br>* Will C-DoT regularly clean the exterior of our building?<br>* Provide Uninterrupted Power Backup System's for all of our major appliances and electronics;<br>* 1 (one) Ion Air Cleaner per floor (3 floors) of our home to prevent additional wear from the above (dust/dirt and power surges or outages from this project)? | The potential impact of particulate matter and fugitive dust emissions during construction was evaluated as part of this study (see Section 3.14.4 and the <i>Air Quality Technical Memorandum</i> in Appendix C to the EA). As noted in Appendix B to the EA, CDOT has committed its contractors to reducing emissions through the implementation of best management practices (BMPs), such as watering exposed soils, covering trucks when transporting materials, minimizing mud tracking by vehicles, and stabilizing construction entrances. Contractors will also be required to reduce emissions by limiting the idling time of construction equipment and vehicles, and using newer construction equipment or equipment with add-on emission controls. These measures have been found to be effective at reducing impacts to ambient air and surrounding properties. In addition, contractors are required to follow CDOT's <i>Standard Specifications for Road and Bridge Construction</i> , which governs construction practices near private properties.       |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name         | Organization    | No.  | Comment  | Response  |
|--------------|-----------------|------|--|---|
| Hurst, Susan | Private citizen | 18-2 | I'm at 544 Vance, in our building, 10 families would be affected and possibly 2 from the building directly East of us that's closest to the frontage road. I think you should make a personal visit to check this out yourself. Seriously, I am inviting everyone in this email to call and come out to stand in my second floor bedroom that faces 6th Avenue. Then go out and stand in my bedroom's balcony. Don't bother trying to make phone calls from the patio (even though we have a garage to 'buffer' noise), you can't hear the conversation from the blaring traffic. I will begin taking appointments at 9:00 a.m. 3 days a week starting this week. You will need to make prior arrangements as we have had to 'burglar proof' the exterior of our townhome, so access is limited. After the existing sound wall was built we discovered that the traffic noise drowns out sounds of people trying to break into your home from the back side (North side faces 6th Avenue). I was home during one of these break-in attempts.....I want to make sure you get the 'true affect' of the noise and dirt/dust issues that will be a health issue for MY family. I look forward to hearing from you ~ I really do! | As noted in response to Comment 17-1, noise at your residence, even at the height of the second-floor balcony, is predicted to decrease with the implementation of the Build Alternative. Please see response to Comment 18-1 for a discussion of dust issues during construction.  |
| Hurst, Susan | Private citizen | 18-3 | The sound wall on the frontage road was NOT in place when we purchased our home here; 6th Avenue noise got louder when and after the wall was built. I was told by C-DoT crew (yes, I have this on film) that the EIS only addressed ground floor living space noise; not second floor space.  | See response to Comment 7-1 regarding the potential for noise to increase after noise wall installation.<br>CDOT policy, and that of FHWA and other state departments of transportation, is directed toward achieving significant noise reduction for sensitive receivers, such as residential properties. In general, the primary considerations are the exterior areas of frequent human use. Guidance specific to second floor living can be found in CDOT's <i>Noise Analysis and Abatement Guidelines, Section 4.1</i> . Achieving significant noise reduction at second and higher stories would often be technically infeasible because noise walls would need to be 25 to 35 feet tall. Walls of this height present challenges including shadowing (icing), structural support (need to withstand wind loads), cost, and aesthetics. As discussed in the response to Comment 17-1, with the proposed wall in place, the noise model predicts a reduction in noise at this residence, even at the height of the second-floor balcony. |

## EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.  | Comment   | Response  |
|--|-----------------|------|---|---|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-1 | May I ask WHY you have not sent direct mailings to the maximally exposed population in the Stonebridge Townhomes complex?   | The project team developed the initial direct mailing list from the Jefferson County Assessor's database. The mailing list was expanded several times during the course of the study. The notice of availability of the EA, which is the primary vehicle for official public comment into the proposal, was mailed to approximately 3,700 households and businesses, including 544 Vance Street. In addition to direct mailings, significant public outreach was conducted to inform and gather input on the proposed action and EA. These efforts are summarized in Chapter 5 of the EA and included activities such as meeting advertisements in the <i>Lakewood Sentinel</i> , <i>Denver Post</i> , and Lakewood public access television (Channel 8); flyers posted throughout the community (at churches, schools, and grocery stores); information distributed through neighborhood group and association newsletters, websites, and meetings; updates provided to business association websites and meetings; updates to Lakewood City Council, which were open to the public and broadcast on Lakewood's public access Channel 8; meetings with area school principals and distribution of information in school registration packets; frequent updates on the study progress on the City of Lakewood and project websites; and numerous meetings with individual property and business owners. Although this level of effort is well above the requirements of NEPA, CDOT and FHWA chose to conduct this extensive public outreach to gather public comment and input to help shape the scope of study and improve the alternatives. |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-2 | The issue is more than the noise, its deadly PM <sub>2.5</sub> , VOCs & aldehydes from demolition and earth moving! The large trees have helped buffer noise, filtered some of the air pollution and highway grit. Removing houses and trees will change the character of this neighborhood significantly and in a very negative way. Additional noise and fugitive dust emissions from this project, on top of what we already have had to put up with since the wall was put in, will make this neighborhood undesirable as a residential neighborhood. | As described in the <i>Air Quality Technical Memorandum</i> included in Appendix C to the EA, the Build Alternative would not result in long-term or permanent adverse effects to air quality. See responses to Comments 17-1 and 18-1.<br><br>With the exception of one residence planned for acquisition at the intersection of Vance Street and the existing frontage road (7390 W. 6th Avenue Frontage Road), the trees and buildings near the Stonebridge Townhomes would remain in place, and any buffering benefit those structures and vegetation provide would also remain.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-3 | This was a nice, quiet neighborhood when we purchased our townhome here, until the sound wall was put in, which pushed the highway noise up and over to our property. This created significant noise to the 2nd floor bedrooms in our building, as that highway noise bounced directly to that level.   | As noted in the responses to Comments 7-1 and 7-2, noise does reflect off walls but measured increases in noise levels due to parallel noise walls have been less than can be perceived by normal human hearing, that is, less than 3 dB. As noted in response to Comment 18-3, achieving significant noise reduction at second and higher stories is often technically infeasible, primarily due to the excessive noise wall heights that would likely be required for the mitigation.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-4 | It [the existing sound wall] also caused settling in the area, evidenced by cracks appearing in our driveway, carports, garages, patios, etc. Will CDOT compensate us and/or relocate us for that impact?   | Cracks in concrete happen for a variety of reasons and are widespread throughout the metro area. Some of the causes include changes in temperature or ground moisture that create expansion and contraction, tree roots growing under surfaces, undetected subsurface drainage that washes the soil below the concrete, and so on. These conditions are particularly common in older neighborhoods such as the US 6 and Wadsworth area. Damages that may occur during construction are addressed in CDOT's <i>Standard Specifications for Road and Bridge Construction</i> . See also response to Comment 17-2.   |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment  | Response  |
|--|-----------------|-------|--|---|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-5  | Additional noise adds stress, which impacts quality of life and health. There are plenty of scientific studies that validate this point.   | Comment noted. FHWA and CDOT recognize the potentially adverse human and environmental effects of noise, specifically highway and roadway noise, and their policies are informed by evaluation and ongoing research on the topic.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-6  | Will they be working on this project during night time hours? What about the most sensitive populations, that being the elderly, pregnant women and children? Has your EIS/EA taken that into consideration?   | See response to Comment 11-1 for a discussion of noise mitigation during construction. FHWA and CDOT noise guidelines are designed to protect all populations from the adverse effects of noise during construction.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-7  | Sue has Post Traumatic Stress Syndrome with fibromyalgia, which are severely affected by this kind of noise, pollution, and heavy vibration activity, which will be ongoing for several years. Paula has asthma (pollution reactive), and prior exposure that created hypersensitivity to asphalt/petroleum fumes. Both of us would be greatly negatively impacted by the disruption, vibration, noise and pollution from this project, and in our cases, it could be life threatening. We feel this makes us candidates for relocation, with CDOT purchasing our property and paying to move us to another location.    | Comment noted. See responses to Comments 11-1, 18-1, and 22-10 regarding noise, air emissions, and vibration during construction. See response to Comment 17-3 regarding purchase and/or relocation requirements.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-8  | Does this EIS address noise for second floor living? I couldn't find a reference for it.   | CDOT did consider second-floor living and evaluated noise at your balcony level. See responses to Comment 18-3 regarding challenges to second-floor noise mitigation and 17-1 regarding the second-floor noise reduction at your residence.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-9  | Considering the drastic change of topography will our building of townhomes be considered for relocation? One of the homes directly North of us that faces the frontage road (south side of Sixth Avenue and Vance) looks like it will be removed. That is one of the homes that has been a buffer for noise from traffic for our building.  | See responses to Comments 17-1 and 17-3. Note that the building directly north of your townhome is not proposed for acquisition and will remain in place.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 19-10 | I agree that this much needed interchange would be a wonderful improvement for commuters. Unfortunately, residents in our building will have their quality of life negatively impacted by this project. I hope we can have meaningful exchange in trying to figure out answers to our concerns.  | Thank you for your comment. A primary goal of the project team was to develop a project that is compatible with community and municipal visions for the corridor. CDOT has gone to great efforts to maintain open and frequent communications with residents and business owners in the project area. These efforts are detailed in Chapter 5 of the EA. Public communication will continue as the project moves into final design and construction (after funding is secured).   |
| Mauz, Weston                                   | Business owner  | 20-1  | Within the CDOT construction envelope, 34% of existing parking spaces at the 1395 Wadsworth (Mauz) commercial property will be immediately lost to the Wadsworth widening project (Map 2). The total area of the combined Mauz parcel will be reduced by 12% (5100 sq ft), permanently reducing its commercial value. The likely immediate impact to the Mauz commercial property is loss of income to the tenant, resulting in inability to meet rent, and ultimate loss of the tenant. Reduced parking facility will negatively impact lease potential for the property, resulting in long-term economic loss to Mauz. | The permanent impact to the Mauz property is less than the construction envelope shown in the EA (which includes both permanent impacts and temporary impacts during construction) and in attached mapping provided by the commenter. Although final design for the project has not been completed, the estimated permanent acquisition of property (including a permanent easement) under conceptual design is an approximately 25-foot-wide strip of property adjacent to the 150-foot frontage on Wadsworth, accounting for approximately 3,750 square feet, of which 1,500 square feet is related to roadway widening. The additional property impact shown in the EA and attached mapping provided by the commenter accounts for temporary impacts during construction and is not a permanent right-of-way (ROW) need. (Note that property owners are compensated for temporary construction easements that are required |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name         | Organization   | No.  | Comment   | Response   |
|--------------|----------------|------|---|--|
|              |                |      |   | <p>during construction. Temporary easements remain the property of the property owner after construction is complete.)</p> <p>Appraisers valuing partial acquisitions are required to determine the fair market value of the portion acquired and damages to the remaining unacquired portion, if such damages are supported by credible market evidence. Both the value of the portion acquired and damage to the remaining unacquired portion, if any, are included in the just compensation offer made to the landowner.</p> <p>For the purposes of estimating and considering impacts in the EA, the impacts to this property were determined from review of existing uses; based on that review, CDOT determined the remaining portion of the Mauz parcel could continue to operate in its current use as a restaurant within existing zoning requirements. Lakewood agreed with this determination based on the conceptual design, with the understanding that all final determinations about conforming zoning and land use decisions will be made based on the final design. (The number of parking spaces on this parcel currently totals 29. Construction of the Build Alternative would result in the approximate loss of 9 parking spaces, with 20 remaining. Lakewood zoning specifications indicate parking requirements are 12.5 per 1,000 gross square feet. The existing building is approximately 1940 square feet, which results in a need of about 24 spaces. The parking situation at this location, therefore, appears to meet Lakewood’s allowable nonconforming use, as described in its new ordinance outlined in response to Comment 24-23.)</p> <p>It is important to note that the majority of the permanent acquisition/easement on the Mauz property is for sidewalks. Any redevelopment of this property (or any within the TMU zoning area) would require the property owner/developer to construct a 17-foot sidewalk in front of the property, which is consistent with CDOT’s proposal.</p> |
| Mauz, Weston | Business owner | 20-2 | <p>There are currently no alternative locations that can provide compensatory parking in the proximity of the Mauz commercial property. The configuration of the future parking structure on the east side of Wadsworth is unknown. An allotment of parking spaces in that facility for the businesses on the west side of Wadsworth that will permanently and/or temporarily lose parking area and/or all vehicle access as a result of the reconstruction process should become part of the RTD/City of Lakewood/CDOT planning process.</p> | <p>Parking at the RTD LRT station is being funded by RTD to provide parking for LRT customers. No parking for commercial businesses on either side of Wadsworth is being proposed or will be permitted at this facility. See also response to Comment 20-1 regarding impacts to parking at the Mauz property.</p>  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name         | Organization   | No.  | Comment   | Response   |
|--------------|----------------|------|---|--|
| Mauz, Weston | Business owner | 20-3 | The current location of the proposed CDOT detention pond on the 1355 Wadsworth (Crockett) property, immediately south of the Mauz property, displaces a currently productive business and fragments the southwest quarter of the Station Core (Map 1, Map 2). | <p>CDOT is required by federal law to treat stormwater runoff from any project that increases impervious surfaces.</p> <p>The property at 1355 Wadsworth was identified as a total acquisition due to roadway widening and sidewalks; all parking (and access to parking) would be lost for the property, and it would no longer be viable as a commercial property. Because acquisition of the property and relocation of the business was necessary anyway, the location was considered for water quality treatment. In general, CDOT used the following process to determine appropriate locations for water quality basins. First, the water quality capture volume was determined; that is, how much runoff is CDOT responsible for treating? This determined the capacity of water quality treatment systems, such as the size of basins. Second, the boundaries of existing water basins were considered so that water would be treated and discharged in the same basin; that is, water from one basin would not be discharged to another basin, which would potentially affect water rights. Third, the topography and utilities were considered to determine additional constraints that would make a basin location infeasible. Basins generally need to be close to existing creeks so that the piping connections to collect and discharge water are close to the affected water. Finally, designers looked at properties that would be available based on acquisition needs for other project features. As noted, 1355 Wadsworth was identified as an acquisition because of loss of parking (due to roadway widening and sidewalk needs) and was, therefore, considered available to meet water quality needs. See also responses to Comments 24-20 and 24-21, because these are pertinent to your property as well.</p> <p>The final determination and sizing of the water quality basin will be developed during final design. In addition, CDOT will coordinate this design with the City of Lakewood.</p> |
| Mauz, Weston | Business owner | 20-4 | The pond at its current proposed location would permanently inhibit redevelopment options for the west side of Wadsworth, including Mauz property, that is across from the Station parking facility and within one block of the Light Rail Station.           | <p>As noted in response to Comment 24-20, the sizes and locations of basins have been determined based on existing conditions and preliminary engineering. All redevelopment, including commercial redevelopment, must comply with water quality treatment requirements. The RTD station area also will require permanent water quality treatment; however, plans are still under development, so the type, size, and location for that treatment are uncertain. As noted in response to Comment 24-21, CDOT is willing to consider partnering with a public entity such as Lakewood and/or RTD for joint water quality treatment if such a joint venture would be feasible and practical. CDOT would also consider options for water quality treatment that might complement private development. For instance, if properties were aggregated and a specific development plan was proposed, CDOT would consider an alternative location for a water quality basin as long as another similarly-sized basin could be implemented within the larger development to meet CDOT's water quality treatment requirements. CDOT will work with Lakewood during final design to review any land use changes or development plans that may arise between now and the time the US 6/Wadsworth project is funded and implemented. Should the project be funded and implemented prior to private redevelopment in this area, the basin location would influence the redevelopment scenarios but would not inhibit all redevelopment options</p>  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name         | Organization    | No.  | Comment  | Response   |
|--------------|-----------------|------|--|--|
| Mauz, Weston | Business owner  | 20-5 | The suggested alternative location indicated at the south end of the 7590 W Colfax property (FirstBank of Colorado) places the pond in a currently open greenspace in the northeast quarter of the Station Core. The alternative location is at the corner of a block where business access and land use potential are not immediately or permanently compromised.   | for the parcel.<br>The alternative location is outside the project limits for this project and represents similar redevelopment potential as the parcels on the west side of Wadsworth. See also response to Comment 20-4.   |
| Gurley, J    | Private citizen | 21-1 | Having used the 6th and Wadsworth interchange for several decades without incident my question is: Why change what isn't broken? Every stoplight added increases the likelihood of serious accidents, clogged traffic, and extra pollution from idling vehicles. The cloverleaf design has proven itself over 70 or more years. Adding another signalized intersection within a block of the existing one spells "gridlock." Replacing a cloverleaf with a left turn across heavy traffic invites accidents - accidents cloverleafs [sic] eliminate. | The cloverleaf interchange no longer operates efficiently or meets safety needs, as described in Chapter 1 of the EA. The cloverleaf interchange design did operate well originally with the lower traffic volumes and rural setting of the 1950s. Over the past 50 years, the area around the US 6 and Wadsworth interchange has changed considerably and, consequently, traffic volumes have increased, making this interchange design no longer able to operate effectively. As indicated by the traffic analysis, the Build Alternative (tight diamond with loop) will eliminate the existing critical weaving sections between the loop ramps, which are a source of US 6 congestion and traffic crashes. The signalized intersections introduced are expected to operate without congestion (at level of service C or better during peak hours) and can be integrated into the existing system to maintain progression between adjacent traffic signals. With the elimination of the weaving sections, the high number of side-swipe and rear-end crashes will likely be reduced, and left turns that are introduced at the traffic signals will be operated with red arrow traffic signals, reducing accident potential at these intersections. Air quality analysis conducted for the EA suggests air quality will improve, rather than decline, as a result of the Build Alternative. |
| Gurley, J    | Private citizen | 21-2 | Is this a "stimulated make-work project?"  | No. If the commenter is referring to American Recovery and Reinvestment Act (ARRA) funds, also known as the stimulus package, this project did not meet the requirements to receive money because it was not "shovel ready" at the time that funding was allocated.  |
| Gurley, J    | Private citizen | 21-3 | Leave the existing design alone. Adjust the lane striping and speed limits for on/off traffic but let the proven engineering design do its job. Perhaps you could crack down on the texting, phoning, eating, and drinking drivers instead. (*The "weaving" of traffic is a basic driving skill. People who cannot manage the task can't heed stop signals and turn arrows either.)  | The on- and off-ramp acceleration and deceleration lengths are shorter than required for design speeds and traffic volumes, and adjusting striping will not alleviate the problems with merging or weaving in these short distances. Reconstructing the interchange with a new cloverleaf and adding auxiliary lanes to eliminate weaving was considered but rejected because this design would have substantially higher effects on private property, streams and gulches, and other environmental resources around the interchange and along US 6. A partial cloverleaf interchange with two loops in opposing quadrants (northwest and southeast) was also considered but the environmental and social impacts of this alternative outweighed the traffic benefits. The tight diamond with loop, the Build Alternative, represents the best balance of impacts and operational efficiency. (CDOT is not responsible for enforcing driving behaviors, only for providing and maintaining state highways.)  |
| Gurley, J    | Private citizen | 21-4 | This appears to be an unneeded, unwise, air quality killing, public boondoggle and waste of public funds.  | As described in Chapter 1 of the EA, the US 6/Wadsworth project is needed to improve safety for motorists, pedestrians, and bicyclists; improve operational efficiency of the interchange and along Wadsworth; meet current and future traffic demands; and support multi-modal connections. Many stakeholders consider fixing the problems with the   |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.  | Comment   | Response  |
|--|-----------------|------|---|---|
|  |                 |      |   | US 6/Wadsworth interchange and the Wadsworth corridor between 4th and 14th Avenues to be among the highest priorities of the transportation needs in the western metropolitan area. In addition to addressing transportation needs, the project would improve air quality (please refer to the <i>Air Quality Technical Memorandum</i> included in Appendix C to the EA).   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-1 | This is a project that is very much needed for the city, but it will negatively affect the residents. After reviewing the EA, we feel there are many areas that are too conservative (underestimated) regarding impacts, or does not have proper definition, references, and real time measurements for comparison.   | Comment noted. The EA has been evaluated by FHWA, CDOT, other public agencies, and the public, and has been determined to adequately and accurately discuss the need, environmental issues, impacts of the proposed project, and appropriate mitigation measures. Based on consideration of the EA analysis, and public and agency comments, FHWA has made a decision to issue a FONSI and proceed with implementation of the Build Alternative.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-2 | This project would be better served by having a full Environmental Impact Statement (EIS) done. We would urge the US EPA to review this EA pursuant to Section 309 of the Clean Air Act (CAA) due to fugitive dust emissions and no apparent plans for effective dust control. At a minimum, appropriate monitoring should be utilized, including PM-10 monitors. The EPA should also evaluate the short and long term effects of the demolition and construction for excess noise and environmental release of pollutants to local environs and residents. | An EA is conducted to determine whether there will be a significant environmental impact. Because this study resulted in a finding of no significant impact, further analysis in the form of an EIS is not required. The EPA, while not required by law or regulation to review EAs but rather only EISs, was invited to participate in scoping and was provided a review copy of the EA. EPA did not identify any environmental or other concerns associated with the US 6/Wadsworth project or the NEPA process followed by CDOT, and did not provide any official comments to the EA. See responses to Comments 11-1 and 18-1 for responses regarding construction-related noise and air pollution, respectively. Appendix B provides mitigation measures to control dust emissions.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-3 | The CDOT Noise Analysis Procedure Sound Pressure Levels graphic from public meetings appears to equate expected construction noise at 50 feet to being between 70 to 90 decibels ( <i>this will damage hearing</i> ). We took our calibrated digital noise meter, and found just sitting at the intersection at 5th and Wadsworth during a light traffic time (no construction), captured readings of 65 to 70 decibels. CDOT's document compares their expected 70-90 decibel range noise from construction to a motorcycle or semi truck driving by.      | As explained in response to Comment 11-1, construction noise would be intermittent and would occasionally but not consistently reach levels of 70 to 90 dBA during the construction period. As noted in Appendix B to the FONSI, CDOT will comply with all local and state noise requirements for limiting construction noise.<br><br>Regarding damage to hearing, the U.S. Occupational Safety and Health Administration (OSHA) recommends hearing protection for workers who will be exposed to noise levels in excess of 85 dBA for 8 hours. OSHA's regulation states that a worker's exposure to noise should not be more than 90 dBA for an 8 hour day. The exposure can be increased by 5 dBA for each halving of time exposed. For example, a worker could be exposed to 95 dBA for 4 hours, 100 dBA for 2 hours, etc. Therefore, construction noise levels of 90 dBA are not expected to cause hearing damage to residents because a) they will not be exposed for 8 hours a day, and b) the levels will not always be this high; in fact, there will often be no significant construction noise (see response to Comment 11-1).<br><br>As for the readings of 65 to 70 dBA at 5th and Wadsworth, these are consistent with the EA analysis that measured 71 dBA along Wadsworth. All local and state construction noise ordinances will be followed. |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.  | Comment   | Response   |
|--|-----------------|------|---|--|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-4 | The State of Colorado allowable noise levels are cited as 55 decibels during the daytime hours of 7:00 a.m. to 7:00 p.m., and 50 dBA between the hours of 7:00 p.m. and 7:00 a.m. Our ambient background noise at our home location outdoor patio is already at 55 dBA from local/US 6 traffic. The World Health Organization defines noise annoyance levels to be between 50 to 55 decibels, and hearing impairment levels start at 70 decibels.   | The State of Colorado's noise statute (Article 12, Noise Abatement), section 25-12-103, paragraph 5 states that, "Construction projects shall be subject to the maximum permissible noise levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project." The limit for industrial zones is 80 dBA during the daytime. FHWA and CDOT, however, recognize the potentially adverse human and environmental effects of noise, specifically highway and roadway noise, and their policies are informed by evaluation and research on the topic. FHWA has extensive information on its website about highway noise, methodologies for measuring noise and its effects, and procedures for noise abatement or mitigation. Please refer to <a href="http://www.fhwa.dot.gov/environment/probresp.htm">http://www.fhwa.dot.gov/environment/probresp.htm</a> . See also responses to Comment 22-3 regarding hearing impairment and Comment 22-15 regarding intermittent exposure. |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-5 | We are particularly interested in the anticipated hours of operation for this project. Will CDOT be doing construction work overnight to lessen the impact on commuter traffic? What about significant impacts to local residents located around this construction activity? We feel CDOT's analysis has made wrong assumptions based on flawed data or information. This requires further analysis and remedies.   | As stated in Appendix B to the EA, CDOT has committed to limiting work to daytime hours when possible. While there may be times when nighttime construction is necessary, noise during construction must comply with state and local requirements. Please consider that disturbances during construction (mostly related to the realignment of frontage road at this location), will vary from day to day, often with weeks of little to no construction activity near any one residence. As noted in response to Comment 22-1, the EA has been evaluated by FHWA, CDOT, other public agencies, and the public, and has been determined to adequately and accurately discuss the need, environmental issues, impacts of the proposed project, and appropriate mitigation measures. It is not clear what data or assumptions are being questioned.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-6 | The previous CDOT project that was adjacent to our property at Stonebridge Townhomes B Building (most NW building) was the construction of the US 6 Noise Wall, about 5 years or so ago. The workers on this wall construction told us that the noise impact study did not take into consideration 2nd floor living, which applies to our building. Because the wall is not tall enough to be effective, it merely pushes the sound up and over to our building. This is a major flaw with highway projects. The noise and vibration estimates are too conservative, as our topography causes the noise and vibration to be funneled, or to flow in our direction through "city canyons" created by the buildings and fences. | See responses to Comments 7-1, 17-1, 18-2, 18-3, and 19-8 for responses about noise walls increasing noise levels, reflection from noise walls, and procedures related to second-floor noise. Response to Comment 22-10 addresses vibration from traffic operations.   |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment  | Response  |
|--|-----------------|-------|--|---|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-7  | The heavy equipment traffic 50 feet north of us was definitely felt in the vibrations conducted to our home, including the “back up” safety alarms, which are extremely loud and disruptive, as they are designed to be. Example: A Pile Driver at 50 feet is listed in other environmental documents as a noise source generating 110 decibels, and that does not include the impact vibrations being conducted. No amount of white noise, ear plugs, or other mitigation can help alleviate impacts like this. Even trying to sleep, the construction vibrations were felt in our building. The US 6/Wadsworth project will be 50-100 feet west of us, certainly close enough to “feel” the vibrations of the heavy equipment, construction activity, and backed up traffic. | Construction noise will be audible and some vibration may be felt, but these conditions will not be persistent in any one location (as explained in responses to Comment 11-1 and 22-16). Noise levels will be required to meet State and local regulations, and vibration levels will be required to remain below building damage thresholds. (Note that although a construction schedule and plan of activities has not been developed at this point, construction activities are not anticipated within 100 feet of your residence.)   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-8  | This CDOT EA specifies under Noise Mitigation that the current plan is to extend the noise wall along US 6 west from Wadsworth, all the way to Garrison Street. This is completely unnecessary, and a waste of the taxpayers money, that could be put to better use in this project.   | Typically, noise walls are considered only in the immediate vicinity of a project. Although on this project, construction is not anticipated west of the slip ramps near Brentwood. CDOT decided it would be prudent to continue noise walls west to the east side of the Garrison Street bridge to provide continuous noise abatement for residences along US 6 between Wadsworth and Garrison Street. This decision was based on the following factors: <ol style="list-style-type: none"> <li>1. The noise model indicated that noise levels were equal to or exceeded CDOT’s 66 dBA Noise Abatement Criterion at the majority of residences adjacent to US 6, and many experience severe noise impacts (defined as 75 dBA or greater).</li> <li>2. CDOT has received numerous complaints and comments over the years regarding noise from residents in this area, and the public has requested that CDOT provide noise mitigation.</li> <li>3. Per CDOT practice, noise mitigation generally extends to a logical end point so that barriers do not end in the middle of a neighborhood or block. In this case, CDOT determined that Garrison Street was a logical termination for the wall.</li> </ol> |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-9  | The installation [of noise walls] itself is highly disruptive to residents and to local structures. If it is not high enough, it merely concentrates and pushes the noise up and out to 2nd floor and higher structures.   | See responses to Comments 17-1, 18-3, and 19-8.<br>Note that the proposed reconstructed noise wall is 3 feet higher than the existing wall.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-10 | The construction [of noise walls] itself inserts support pylons that act like tuning forks to conduct more vibrations from the highway to local homes and businesses, which is more disruptive than leaving it alone. In this case, the current configuration allows the highway noise to naturally disperse without creating a noise bellows so to speak.   | The proposed reconstructed walls would operate very similarly to the current configuration, with the exception that the new walls would be approximately 20 percent higher than the existing walls and would extend farther to the west. It is not clear why this reconfiguration would create the impacts suggested by the commenter.<br><br>In general, ground vibration from roadways is not perceptible inside adjacent residences. Measurements of ground vibration from roadways typically do not approach those from normal household activities and mechanical systems. Research (Wiss, 1981) has found that vibrations from heavy trucks are not even perceptible at distances greater than 12 feet from the source. Instead of enhancing ground vibrations, it is more likely that noise walls would reduce them because the noise walls would block airborne sound that can itself cause vibrations.   |
| Elofson-Hurst,                                 | Private citizen | 22-11 | In our neighborhood, when the section of noise wall was installed  | See responses to Comments 7-1 and 22-10.  |

## EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment   | Response   |
|--|-----------------|-------|---|--|
| Susan and Paula Elofson-Gardine                |                 |       | on the south side of US 6, East of Wadsworth, we found that the noise and vibration situation was much less before the installation. So this has had a negative impact on our quality of life, not an improvement. It did not reduce noise or vibration, it increased it.   |  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-12 | The following sound levels table is an excerpt from the Mission Trails Environmental Impact Statement. It provides more realistic sound level comparisons. [citizen included table of typical noise sources and human perception of noise levels]   | Thank you for the information. CDOT agrees with these typical noise sources and sound levels, which are similar to those shown at project open houses and available on the project website.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-13 | We would like to refer you to the following article(s) regarding the physiological effects of excess noise found at: <a href="http://en.wikipedia.org/wiki/Noise_pollution">http://en.wikipedia.org/wiki/Noise_pollution</a>  | Thank you for the information. See response to Comment 22-4.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-14 | A second article excerpt of interest is regarding physiological effects of excess noise pollution: <a href="http://www.infoplease.com/ce6/sci/A0835810.html">http://www.infoplease.com/ce6/sci/A0835810.html</a>  | Thank you for the information. See response to Comment 22-4.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-15 | There are a few excerpts from the WHO Guidelines for Community Noise document that we feel are directly pertinent to our concerns about prolonged elevated construction noise so close to our residence.[citizen included 2 pages of excerpts from WHO Guidelines for Community Noise and provided the complete 66 page document as an attachment.] | As noted in response to Comment 22-4, FHWA is aware of research regarding negative effects of noise. The WHO report cited does not support the conclusion that intermittent exposure to construction noise over the 2-year construction period proposed by CDOT would result in the magnitude of adverse health or psychological impacts described by commenter. Short-term construction noise resulting from the Build Alternative is not the type of noise exposure that is described in the WHO (and OSHA) guidelines, which is generally related to long-term occupational noise exposure. CDOT has committed to appropriate mitigation measures for construction noise, as reflected in Appendix B to the FONSI.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-16 | We would like to offer you some comparisons from a very helpful source regarding the impacts of vibration: <a href="http://www.consultnet.ie/environmental%20vibration.htm">http://www.consultnet.ie/environmental%20vibration.htm</a>  | Thank you for the information. Please see response to Comment 22-10. As noted in the information provided, vibration can be a concern during construction activities, such as pile driving, bridge demolition, blasting, etc. For construction of the US 6/Wadsworth project, these activities would not occur near enough to residential structures to cause damage from vibration. (Research [Wiss, 1981] finds the threshold for residential building damage from vibratory pile driving to be about 50 feet. (The previous construction used drilled caissons, which creates lower vibrations; research suggests this activity must be within 3 feet of buildings to cause damage.) The construction contractor will be required to comply with CDOT <i>Standard Specifications for Road and Bridge Construction</i> and adhere to industry standard thresholds for building damage. This information has been added to Section 4.4 and Appendix B of the FONSI. |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-17 | Here are the noise limits according to the State of Colorado and the City of Lakewood: Colorado Noise Statute Source: <a href="http://www.nonoise.org/lawlib/states/colorado/colorado.htm">http://www.nonoise.org/lawlib/states/colorado/colorado.htm</a>   | FHWA and CDOT are aware of these regulations and comply with their requirements during construction. See response to Comment 22-4.   |
| Elofson-Hurst, Susan and                       | Private citizen | 22-18 | Short and long term noise and vibration disturbances of this magnitude, and at this close proximity to residents creates  | Vibration from construction activities would be short-term and intermittent during the construction period. Research suggests that vibration may be  |

## EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment  | Response   |
|--|-----------------|-------|--|--|
| Paula Elofson-Gardine                          |                 |       | conditions for greater stress and sleep loss. This impacts people's health and welfare by weakening immune systems and impacting chronic conditions such as: musculo-skeletal disorders such as arthritis, fibromyalgia; asthma, allergies, and post traumatic stress syndrome symptoms, etc.  | perceptible but is unlikely to be disturbing to humans unless construction activities occur close (between 7 and 50 feet) of residences (Wiss, 1981). See responses to Comments 11-1, 22-4, 22-10, 22-15, and 22-16.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-19 | The pylons placed for the US 6 sound wall conducts vibrations that were previously undetected. The highway noise was reasonable before the noise wall was constructed. After completion, the noise wall concentrated (increased) and bounced that noise to our 2nd floor bedrooms and patio areas in such a way that people have to raise their voices to be heard. The highway noise is now heard in the courtyard on the south side of our building, echoing to both bedrooms on front and back side of the building. Since the US 6 sound wall was installed, when heavy trucks, buses, or motorcycles pass by on US 6 that shift their load or use their air brakes, we feel the "clunk" in our building thanks to the vibration conduction by the noise wall supports. This has added stress cracks to our carport, garage, back patio, and north wall in our lower level basement that were not there previous to the installation of new windows in 2004. | See response to Comment 7-1 in regards to changes in noise levels due to installation of noise walls. As noted in response to Comment 22-10, the level of vibration needed to cause building damage is well above that produced by construction activities; airborne and ground-borne vibration from roadway traffic is an even lower threshold (less than 2 feet).  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-20 | This US 6/Wadsworth Project EA does not sufficiently address seismic vibration conducted to our buildings from heavy trucks, equipment, concrete demolition, jackhammers, earthmoving, and other construction activities. This type of project also causes settling in our area, as demonstrated by the construction of the US 6 noise wall.   | See responses to Comments 17-2 and 22-16.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-21 | Building demolition and tree removal will necessitate the use of chainsaws across the street and behind us, so we will be surrounded by inordinate levels of nuisance noise and vibration that can irreversibly damage our hearing.  | Chainsaws are indeed loud, and can produce over 100 dBA at the operator position and 75 dBA at 50 feet. Noise from the use of chainsaws during construction would be governed by local and state regulations. Beyond approximately 50 feet, chainsaws do not produce noise levels capable of hearing damage on a short-term exposure basis.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-22 | Sound decibels of heavy trucks and equipment being started up and driven back and forth are too conservative in this EA. There will be multiple sources with loud or sharp retorts (air brakes, shifting gears, horns, start up idling, etc.), that have not been accounted for in the estimates. We are asking CDOT to address the multiplicative effect of the cumulative noise and vibration from all sources associated with the project, added to existing levels of noise and vibration.   | The noise levels for construction vehicles provided in the EA are average levels. It is correct that there will be events that will create louder levels on a short-term basis. It is important to consider that construction noise will vary from day to day at any one residence, with many days of no active work.<br>As noted in response to Comment 11-1, construction noise is related to the one or two loudest pieces of equipment operating at any given time. CDOT will comply with state and local standards for noise during construction. See also response to Comment 22-16. |

## EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment   | Response   |
|--|-----------------|-------|---|--|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-23 | Instead of hearing and seeing local squirrels, birds, foxes, hawks, etc., we will be hearing the blaring heavy truck horns, back up alarms, and demolition activity for the duration of the project, which could be 2 years. After the project, we will no longer be able to enjoy the changing of the leaf colors on the trees because they will have been removed, and many of the local wildlife may have moved on by then to get away from the project irritants. These are significant impacts, not a FONSI. CDOT needs to do a more realistic comparison of the synergistic effect of these multiple sources of noise and vibration pollution impacts.  | See response to Comment 11-1. As noted in Section 3.14 of the EA and supporting information in Appendix C, the project is located in a highly urbanized area with limited habitat and species that are adapted to urban activities. Vegetation that is removed during construction will be replaced with native vegetation and established as soon as feasible.<br>The EA acknowledges that wildlife may be displaced during the construction period but would return once active construction is complete. While some trees will need to be removed, many will remain and/or be replaced. Neither the long-term or short-term impacts associated with vegetation loss or habitat disruption are significant impacts that will permanently affect the ecological conditions of the project area. |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-24 | It is highly likely that there will be NO public street parking in front of our townhome complex on Vance with the additional traffic flow coming through our neighborhood which will impact our already limited parking available to us inside the complex.  | The Build Alternative does not change the street width of Vance Street and, therefore, would not affect public street parking. Traffic on Vance Street also would not change noticeably under the proposed reconstruction. Vance Street currently carries traffic destined for the frontage road and would continue to do so under the Build Alternative.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-25 | Behind our Building, which is on the north end of the complex, the driveway to our carports and garages is an elevated dead end with steps at the end. Will CDOT open this up so we have options to drive all the way through to the east parking lot so we can reach the other two exits? Either way, ingress and egress will be made more difficult by the increase in local traffic.   | CDOT does not propose any changes to access to your townhome complex. Existing accesses will be maintained. See response to Comment 22-24 regarding local traffic patterns.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-26 | If a second exit is created behind our building to give us another through way, we will lose more parking spaces on the east end of our building. This will also increase noisy traffic attempting to get through our back area – making us more vulnerable to crime as well.   | CDOT does not propose to open up additional access at the east end of your driveway. See also response to Comment 22-25.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-27 | When the US 6 highway is cleaned, it sends clouds of dust covering our cars, balconies and patio, necessitating closure of all windows and doors. It leaves a fine layer of dust in our home on everything (furniture, T.V.'s, lamps, computers, appliances, cabinets, picture frames, plants, flooring...) that needs cleanup the next day. If weather permits, most people want to open their doors and windows to let fresh air and sunshine in. With additional particulate and fugitive dust, that will be a health concern. The particulate from the US 6/Wadsworth project, along with "unknown" hazards potentially to include lead based paint, asbestos, old transformers with PCB's from the older buildings being demolished, and other potential hazardous chemicals/materials expected to be encountered during construction will be greater than what is generated by highway cleaning, especially during demolition and grading activities. | See responses to Comments 18-1 and 22-41.  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment  | Response  |
|--|-----------------|-------|--|---|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-28 | Our neighborhood It [sic] is being changed from a quiet residential community to one with large volumes of cut-through traffic as we will now be situated alongside an on-ramp of a busy highway -- as you are moving it closer to us. There needs to be a relocation option for those local residents desiring relocation from a neighborhood that will have its character substantially and negatively affected and changed by the impacts of this project. We feel an EIS is in order because of the air pollution concerns, as well as local flora and fauna effects.  | Comment noted. The Build Alternative would not markedly change the character of your surroundings. Your townhome complex would continue to be located near the eastbound US 6 on-ramp and frontage road but would not be located directly along either. The residence between your townhome and the frontage road would remain in place so your property would not be situated along the highway but would be buffered by a residence, frontage road, and noise wall.<br>See responses to Comment 22-2 regarding the need for an EIS, Comment 22-24 regarding traffic on Vance Street, and Comment 22-23 regarding flora and fauna. |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-29 | You did lots of public outreach to many neighborhood communities, including school principals, businesses, Eiber, O’Kane, and Morse Park neighborhood associations, but failed to contact those closest to the US 6/Wadsworth interchange project. We have concerns about the lack of outreach or direct contact with our community, a maximally exposed/impacted population located on Vance Street next to the project. Our neighborhood should have been involved in the 2007 scoping period. Stonebridge Townhomes comprise the addresses from 420 to 582 Vance Street. How could you miss 84 homes adjacent to the project, yet do outreach to these neighborhood associations so much farther removed? The first notice we received was a card announcing the July 2009 public meeting, when we were out of town. After we inadvertently found out about the project from an insert in a free newspaper in Green Mountain, and called to find out why we weren’t informed, we received the Summer 2009 Newsletter. | See response to Comment 19-1.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-30 | Stonebridge residents and the HOA Board appear to have not received any direct mailings until we requested it several months ago. We asked the Homestead Management Representative Michael Boards if Stonebridge Townhomes management or the board had any meetings with CDOT about this project and we were told no, there had been no meetings. There is no substitute for contacting each and every homeowner surrounding a project such as this.   | See response to Comment 19-1.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-31 | Our townhome complex with 84 homes and between 168 to 336 adults and/or children is on Vance Street, between 5th Avenue, and the US 6 Frontage Road. There are seven (7) buildings designated A through G in our complex. Three (3) of these buildings, A, B (ours), and G, will be maximally impacted by the sound, vibration, fugitive dust, and other irritants or pollutants from this project. B Building is the most NW building that is closest to Vance and the 6th Avenue Frontage Road. This building will bear the greatest impact from this project.   | Your townhome complex was within the area of impact studied for the EA, and impacts related to noise, vibration, fugitive dust, and hazardous materials are assessed in the EA. Mitigation measures have been included in the project and are reflected in Appendix B to the EA and Section 4.4 of the FONSI. See also responses to Comments 11-1, 18-1, and 22-16.   |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment   | Response  |
|--|-----------------|-------|---|---|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-32 | “Without noise mitigation, projected noise for residences along US 6 would increase 2 to 7 decibels.” We have reasonable cause to believe that this is an understatement. The simple addition of the noise wall along US 6 actually increased the noise to our building by 10 to 15 decibels (dBA). We have a calibrated Digital Sound Level Meter that we have used periodically that has validated this concern.  | As noted, the Build Alternative does include noise walls as mitigation, and an increase in noise is not expected. The anticipated reduction in noise can be gauged in the project area by comparing existing noise for properties east and west of Wadsworth where noise walls are present or not. Those properties west of Wadsworth where no noise walls exist experience noise levels 10 dBA or more higher than those properties, like yours, located east of Wadsworth, indicating that noise walls are effective at reducing traffic noise, particularly for properties closest to the traffic source.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-33 | “Construction equipment and activities would intermittently generate loud noise.” This is another understatement that needs to be defined more completely. Our references indicate that the intermittent loud noise can spike from 70 (moderately loud, defined by WHO has already damaging to hearing) to 110 decibels (equivalent to a Pile Driver at 50 feet away, or a Commercial jet taking off at 200 feet). This is not MINOR disruptive noise, but would be considered to be very loud nuisance noise that can be damaging to resident’s health and hearing. This does not include impact vibration and multiple sources. For night time construction activity, the City of New Jersey adds 10 dBA to noise estimates to account for what should be “quiet” residential sleep times, and how much more disruptive construction activity would be. | See responses to Comments 22-3, 22-5, 22-16, 22-21, 22-22, and 22-23.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-34 | “Approximately 31.1 acres of property would be required from 96 ownerships; acquisitions would range from small slivers of property to entire parcels.” Is this an underestimate of property acquisition?   | No. Estimates of ROW acquisition were carefully analyzed and discussed with property owners based on preliminary design. Impacts were determined based on the methods described in response to Comment 17-3. All efforts will be made during final design to reduce the estimated amount of ROW required for the Build Alternative.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-35 | “14 residences and 28 businesses would be displaced.” We feel this is a misrepresentation. Consider the 84 residences at Stonebridge, containing 168-336 individuals, and the two large apartment buildings that sit between Webster and Vance Streets. These two neighborhood complexes are sitting adjacent to the construction zone. Those residents that express an interest to be relocated that live in these extremely close residences should be given the option to be relocated with property acquired from owners, and relocation expenses provided.   | Section 3.4.2 of the EA describes the estimated residential and business displacements. Efforts will be made during final design to reduce the number of displacements from those identified in the EA. The Stonebridge townhomes are not identified in this list because they do not meet the requirements for relocation under CDOT’s ROW acquisition policies and procedures. The only persons that are eligible to receive ROW acquisition and relocation benefits are those whose property is acquired for the project. Since no acquisition from this property is contemplated, none of the owners, tenants, or other interested parties is eligible to receive ROW acquisition and relocation benefits. See also response to Comment 17-3.                               |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-36 | “Construction could disrupt access and travel through the project area for residents, businesses, and emergency service providers.” This is a major issue that is unacceptable. CDOT needs to come up with solutions. How are residents supposed to have ingress and egress from their homes during this project, which could last between 1 to 2 years? How are people going to go out, get groceries, and get them back into their homes, especially in inclement weather? What about at-risk children, adults, and medical responders? How about the disabled, such as one of our family members? Like any other neighborhood, we too have emergencies.  | Access to and from residences and businesses will be maintained at all times. As noted in Appendix B to the EA, Summary of Mitigation and Monitoring Commitments, CDOT is committed to maintaining access for local residents and coordinating with emergency service providers throughout construction. Although overall construction of the Build Alternative could take as long as 2 years, each access point will be affected only during the period that construction occurs at or near that location; even during active construction at a particular location, access would not be continually disrupted, an alternative access will be provided, and permanent access will be restored as soon as construction is complete. See also responses to Comments 3-1 and 3-2. |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment   | Response  |
|--|-----------------|-------|---|---|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-37 | <p>"No disproportionately high and adverse impacts would occur in areas of minority or low-income populations." Are you kidding? This is a wrong hypothesis/assertion. There is a mix of population from mid-level income to low-level income in this neighborhood. In particular, we would bring your attention to the "Near [sic] Belmar Apartments", previously known as the "Webster Street Apartments" located between Webster and Vance, just south of the buildings slated to be removed along the current US 6 Avenue Frontage Road. This particular set of two (2) buildings is known for their high numbers of LOW INCOME Section 8 Housing residents. They will be right there, within 20 feet of the construction. Our Stonebridge Townhomes Building B, is on Vance, adjacent to the buildings slated to be removed in your EA. It is about 50 to 100 feet from the construction zone. There is a mix of rentals and individually owned property at Stonebridge Townhomes. The homes that have low income people in them are marked by greater numbers of individuals living in those homes to contribute to the overhead.</p> | <p>Adverse effects are considered disproportionate if they are predominantly borne by a minority or low-income population or would be appreciably more severe or greater in magnitude to minority or low-income populations compared to the effects on non-minority and non-low-income populations. As explained in the EA, this is not the case for either of the locations noted. The EA followed FHWA and CDOT approved methodology for assessing potential impacts to minority or low-income populations. The southeast quadrant of the interchange does not, according to census records and consultation with the U.S. Department of Housing and Urban Development (HUD) and other sources, contain higher-than-average numbers of low-income residents compared with Lakewood as a whole. (Environmental justice guidelines require assessment of low-income populations, not individual households that might be located within a mixed-income area.)</p> <p>The EA acknowledges that construction will have some temporary adverse impacts to surrounding residences and commits to implementing mitigation measures to minimize those impacts. Please refer to the <i>Environmental Justice Technical Memorandum</i> included in Appendix C to the EA for a more detailed discussion and explanation of the methodologies and analysis conducted to support environmental justice impact conclusions.</p> |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-38 | <p>Environmental Justice guidelines should tell you that there is an inequity here, especially considering that CDOT has done active outreach to neighborhood associations farther removed from this construction site at US 6/Wadsworth than for residents at Stonebridge and the Near Belmar Apartments. You did outreach to those property owners that would be directly displaced, but failed to do direct outreach to residents RIGHT at and surrounding the construction zone that would be maximally impacted by the disruption and pollution of dismantling buildings, heavy truck traffic, earthmoving and the like.</p>   | <p>See response to Comment 19-1 regarding outreach efforts for the EA. Specialized outreach to minority and low-income populations is described in Chapter 5 of the EA and the <i>Environmental Justice Technical Memorandum</i> included in Appendix C to the EA. See also response to Comment 22-37.</p>  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-39 | <p>The EA also mentions: "Noise walls will be constructed to reduce noise noticeably at approximately 380 residences." In our case, the noise wall installation did not reduce noise, in fact it INCREASED it significantly by 10 to 15 dBA more than before. It did not address 2nd floor living, as the sound walls bounce the noise around even more so because they are not high enough to shield nearby residences. The conduction of highway vibrations was an additional unexpected "bonus" impact of the US 6 noise wall. You underestimated the number of residences affected, since you appeared to have overlooked the communities of people south and east of the US 6/Wadsworth project.</p>   | <p>See responses to Comments 7-1, 17-1, and 22-10.</p>  |

## EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment   | Response   |
|--|-----------------|-------|---|--|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-40 | We are sisters that have lived at our current location for over ten years. In that time, we have remodeled our home extensively, including enclosing the patio, installing a back access door to the garage, replacing all of the windows (bay window, kitchen garden window, energy efficient front window, two energy efficient windows downstairs), security storm doors front and back, remodeled three (2 full & 1 ½ bath) bathrooms twice, including installing a whirlpool tub in one, and putting in French Doors downstairs in preparation for an additional bathroom and bedroom installation. We also have recently replaced the furnace and hot water heater. We were preparing to replace sliding glass balcony doors with French Doors to the two balconies; add another full bathroom and moving laundry facilities to the lower level (basement), replacing carpeting with bamboo flooring in preparation to remodel the kitchen and dining area. Now that we have become aware of the severe impacts of this project, we are NOT moving forward with improvements to our property, as we recognize it may be better to be relocated, due to excessive construction impacts of sound, vibration, vehicular traffic including heavy equipment backup alarms (ear piercing), air brakes, rumbling startups, fugitive dust, structural building issues (plumbing pipes, settling/roofing). | Comment noted. Your property does not qualify for acquisition or relocation, as noted in responses to Comments 17-3, 19-7, 19-9, 22-35, 22-44, 22-45, and 22-46. The EA analysis does not support your conclusion that impacts would be severe, either during or after construction.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-41 | The “unknown” contamination is also of concern with the age of the properties slated for demolition. This poses serious negative impacts to our stress levels and health via noise, vibration, and air contamination.   | See responses to Comments 11-1, 18-1, and 22-16. Contamination is a concern in locations where property acquisition and ground disturbance is anticipated. CDOT conducted a broad review of hazardous material handling and waste sites in the project area in accordance with professionally accepted standards for this type of analysis. The review revealed 17 sites of potential concern (as described in Section 3.9 of the EA), none of which is located near your residence. Ground disturbance will comply with all applicable requirements for the handling of hazardous materials including the completion of a Phase I Environmental Site Assessment (ESA) prior to any total property acquisition. A Phase II ESA will then be conducted to characterize, manage, and remediate contaminated properties identified as a concern in Phase I ESAs. A <i>Materials Handling Plan</i> will also be prepared to address contaminated soil and groundwater that may be encountered. An asbestos survey will be conducted and a demolition permit will be obtained prior to the demolition of bridges or buildings. Any asbestos-containing material that is friable or will be friable during construction and demolition activities will be removed prior to demolition. |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-42 | The anticipated difficult logistics of daily coming and going from our location with construction and traffic impeding our only outlet, with the severe health impacts, daily quality of life issues combined with loss of sleep, makes it now a very undesirable location. We will no longer have trees to look at which have acted as noise & pollution buffers, or the Webster to Vance 6th Avenue Frontage Road buildings acting as similar buffers. You will be substantially changing the character of our neighborhood, and quality of life in a negative way.   | Comment noted. See responses to Comments 17-3, 18-3, 19-2, 22-23, 22-25, and 22-26.  |

## EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name   | Organization    | No.   | Comment   | Response  |
|--|-----------------|-------|---|---|
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-43 | An asthmatic since childhood, one family member has had several lung injury incidents involving particulate, asphalt, roofing tar, and diesel fumes from projects. An extreme hypersensitivity reaction closed her lungs down, putting her in critical condition for over 3 months. Some of this treatment necessitated leaving town for a period of time to get out of the local ozone levels for recovery. She is now highly sensitive to environmental pollutants including cigarette smoke, particulates, fugitive dust, asphalt, tar, and diesel fumes. Her critical care pulmonologist advised her that further exposure to these types of pollutants in any significant quantity or chronic exposure could be fatal to her. The impacts of this project pose undue burden to health and welfare. | Comment noted. The Build Alternative includes numerous mitigation measures to limit the emission of environmental pollutants during construction. Air quality is projected to improve in the long term over the existing condition with the implementation of the project, as described in the <i>Air Quality Technical Memorandum</i> included in Appendix C to the EA.  |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-44 | Another close member of our family is disabled. She is very sensitive to environmental pollutants and excess noise and vibration levels, due to musculo-skeletal disease and other debilitating conditions. The drastic negative change in daily quality of life with the noise and vibration increases would be overly burdensome for her condition. The Americans with Disabilities Act (ADA) would apply for accommodation by relocation of this individual.   | See response to Comment 22-45 (and to previous comments regarding noise and vibration effects).<br>The ADA requires public facilities to be accessible to disabled persons but does not provide any provisions to relocate persons from their residences.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-45 | Because of the their pre-existing medical conditions, and the anticipated impacts of noise, vibration, fugitive dust, and other contaminants from this project, we feel it gives us reasonable cause to point out they are candidates for property acquisition and relocation as soon as possible, before this project commences.   | Your property does not qualify for acquisition or relocation, as noted in responses to Comments 17-3 and 22-35.   |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-46 | We are therefore requesting CDOT to acquire our property and relocate us per the "Uniform, Relocation Assistance, and Real Property Acquisition Policies Act of 1970, as amended." Our neighbors on Webster Street were already notified that their property will be acquired when funding comes through. They received the relocation packet and booklet from CDOT. We are requesting a relocation packet and booklet from CDOT be sent out to us.   | All properties identified for either partial or total acquisition were mailed information about the Build Alternative designs and CDOT's ROW acquisition process. This information was not mailed to your residence because CDOT does not require any part of your property to implement the Build Alternative. See responses to Comment 17-3 and 22-35 for a description of how decisions relating to property acquisition are made. Information about CDOT's ROW process is available to all citizens on the project website (US 6Wadsworth.com, Right of Way tab). |
| Elofson-Hurst, Susan and Paula Elofson-Gardine | Private citizen | 22-47 | Should CDOT be inclined to relocate us away from this project, we would consider our personal concerns about the project to no longer be valid.   | Comment noted. See response to Comment 22-40.   |
| Greenman, Celia                                | Private citizen | 23-1  | I have read through the Noise Technical Memorandum and feel that the report is incomplete on grounds of the locations where measurement was performed and the mitigation that is proposed.  | Comment noted. The noise analysis was conducted according to CDOT's <i>Noise Analysis and Abatement Guidelines</i> (December 2002). Noise modeling for this project was extensive and many walls are recommended to reduce noise levels at residences throughout the project area.  |

## EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name            | Organization    | No.  | Comment  | Response   |
|-----------------|-----------------|------|--|--|
| Greenman, Celia | Private citizen | 23-2 | The effect of sound is not only a function of the linear distance from the source, but of topography. At our home, 8230 W. 8th Ave, during the morning (generally 6:00 a.m. to about 9 a.m.) we hear sound that is equally as loud as that within 50 ft of 6th Ave. The noise typically subsides during the day, as indicated in your report, and increases again around the time of the evening rush hour. The loudness is due to the fact that the house sits topographically higher (about 30 ft, based on GPS data) than the highway, and it exceeds COOT's 66 dBA [sic] Noise Abatement Criteria.   | To address the effect of topography on noise, the noise model takes into account the elevation of both the road and the residences. As described in the <i>Noise Technical Memorandum</i> included in Appendix A to the EA, the noise model predicted existing noise levels at the properties east of this residence in the same general topographic location (and closer to both US 6 and Wadsworth) to be between 57 and 59 dBA. Noise levels for properties south of this residence, closer to US 6 but at a lower elevation were predicted to be 57 dBA. These noise levels are audible but fall below CDOT's 66 dBA Noise Abatement Criteria. Existing noise levels would be expected to be lower than this for residences farther removed from US 6 and Wadsworth. |
| Greenman, Celia | Private citizen | 23-3 | We invite you to measure the sound in the backyard at our house or any of the houses along the street, or we would be happy to furnish you with the supporting data. CDOT's guidelines state that noise mitigation should be considered for any receptor or group of receptors where predicted traffic noise levels, using future traffic volumes and roadway conditions, equal or exceed COOT's Noise Abatement Criteria. My address falls into this category.  | See response to Comment 23-2. With the project, noise levels at residences closest to yours (and closer to US 6 and Wadsworth) are predicted to be 59 and 60 dBA, which is below CDOT's 66-dBA Noise Abatement Criteria.   |
| Greenman, Celia | Private citizen | 23-4 | We welcome the implementation of noise walls along 6th Ave, but not if their construction exacerbates the decibel level at our location. Under Noise FAQs, which was part of the Summer 2009 Newsletter of the US 6/Wadsworth Environmental Assessment, Q-15 asks, "How are noise reflections from buildings and barrier walls considered?- the answer was that "some of the sound is diffracted over the barrier. In the case of parallel barriers, however, studies have shown that if two walls are constructed very close together, there is a potential for multiple reflections that may perceptibly increase noise levels." The two sound walls on either side of 6th Ave could act as parallel reflectors. | See responses to Comments 7-1 and 7-2. Because of the distance between the barriers, the use of absorptive materials for noise walls will be considered during final design of the project.  |
| Greenman, Celia | Private citizen | 23-5 | To better ensure that sound at even higher decibel level than at present is not transmitted to nearby residences, I ask that construction material other than concrete be considered for the noise barriers. Concrete is a strong reflector of sound.  | See response to Comment 7-2. The use of absorptive materials for noise walls will be considered during final design of the project.  |
| Greenman, Celia | Private citizen | 23-6 | The cost benefit paragraph in the EA does not discuss the construction material of the noise barrier walls, but I suggest that recycled tires be evaluated, similar to that which has been constructed along 6th Ave between Alkire and Coors streets. It has been called attractive and effective by local residents (Looking at Lakewood, vol. 24, issue 6, December 2008).  | As described in the <i>Noise Technical Memorandum</i> , cost-benefit is calculated using a standard unit cost of \$30 per square foot. The effectiveness, durability, and practicality of using recycled tires is still being evaluated, and CDOT is participating with the Colorado Department of Public Health and the Environment (CDPHE) and others in the evaluation of the pilot project that you described along US 6. Please also see Comment 25-2 and its response.   |
| Greenman, Celia | Private citizen | 23-7 | The objective of mitigation is to provide benefit to a population, but also to not worsen a bad situation for a portion of the population. I suggest that modeling and field tests be performed to determine how rubber would perform with regard to sound absorption, sound reflection, and cost. It could prove a win-win situation and also be highlighted as a "green" project.  | Your concern is understood. See responses to Comments 7-2 and 23-6.  |
| Murphy, Bob     | City of         | 24-1 | The City believes that improvements to Wadsworth and the   | Thank you for your support.  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name                | Organization     | No.  | Comment  | Response  |
|---------------------|------------------|------|--|---|
| (Mayor)             | Lakewood         |      | Wadsworth/US 6 interchange are greatly needed and appreciates the work to date by the team led by CDOT.  |   |
| Murphy, Bob (Mayor) | City of Lakewood | 24-2 | Three through lanes in each direction combined with controlled median access will provide significant congestion reduction on Wadsworth.   | Thank you for your support.   |
| Murphy, Bob (Mayor) | City of Lakewood | 24-3 | The US 6/Wadsworth interchange has been identified by DRCOG as one of 18 "chokepoints" on the regional freeway system. The proposed layout is expected to relieve congestion on US 6 traffic flow.   | Comment noted.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-4 | Controlled median access management on Wadsworth greatly reduces the number of left turn conflicts to/from businesses and side streets.  | Comment noted.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-5 | Interchange layout eliminates weaving conflicts. On and off ramps include longer acceleration/deceleration merge lanes making it safer to transition between speeds of the interchange ramps, US 6, and Wadsworth.   | Comment noted.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-6 | Throughout the EA process, citizens identified pedestrian and bicycle safety as one of the most important issues to address (as identified in the Purpose and Need statements on Page 1-1 and the public comment on Page 1-5). The North Wadsworth Boulevard Corridor Plan and other adopted Lakewood plans also identify the need to improve conditions for pedestrians, bicyclists, and transit users along and across the Wadsworth Boulevard corridor and the Build Alternative provides an excellent opportunity to do so.  | Agreed. Pedestrian and bicycle mobility was one of the most important issues raised by the community, and the Build Alternative was developed to significantly improve safety, access, and comfort of multi-modal transportation. |
| Murphy, Bob (Mayor) | City of Lakewood | 24-7 | On Page 1-5, Wadsworth Boulevard is identified as "...an important component of bicycle mobility in Lakewood because it offers the only opportunity for bicycles to cross US 6 in the 2.5 mile stretch between Sheridan Boulevard and Garrison Street." Wadsworth Boulevard is a critical link in the Lakewood bicycle system for this reason and it is important to capitalize on the opportunity to provide a safe, convenient crossing of US 6 at Wadsworth Boulevard. With the future light rail station at 13th Avenue and Wadsworth Boulevard, this crossing will become even more important with the expected increase in pedestrians and bicyclists accessing the station from Belmar and other areas south of US 6. | Agreed. The EA acknowledges on page 3-7 that the future light rail station will likely increase pedestrian and bicycle travel along Wadsworth.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-8 | On Page 3-7 of the EA, concern is raised about out-of-direction travel or unsafe mid-block crossings by pedestrians on Wadsworth if the pedestrian/bicycle crossing at Lakewood Gulch is not constructed. The proposed new Lakewood Gulch drainage culvert under Wadsworth will include an additional section for a trail crossing. Future plans for trail system along Lakewood Gulch can connect to this new crossing. A future connection from the new Wadsworth sidewalks could also provide a grade separated crossing for pedestrians/bicyclist could eventually be constructed (by others). We support the installation of the widened box culvert during project construction and future completion of this          | Thank you for your support.   |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name                | Organization     | No.   | Comment  | Response   |
|---------------------|------------------|-------|--|--|
|                     |                  |       | crossing.  |  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-9  | The EA acknowledges that visibility for pedestrians and bicyclists at the interchange ramps, while slightly improved over existing conditions, would remain poor with the Build Alternative (page 3-7). The EA addresses measures that will be considered during final design to improve visibility and safety of these crossings (Pages 3-7 and 3-8). We strongly support inclusion of these proposed mitigation options. | As noted, additional measures to improve pedestrian and bicycle safety around the interchange (pages 3-7 and 3-8) will be considered and implemented in the final design of the Build Alternative.   |
| Murphy, Bob (Mayor) | City of Lakewood | 24-10 | Continue sidewalks along Wadsworth (on both the east and west sides) and through the interchange area. Detached sidewalk provides a safer and more comfortable buffer between pedestrians and vehicle traffic  | Agreed. The Build Alternative includes detached sidewalks throughout the corridor, except in select locations where detaching the sidewalk would require a residence or business to be relocated. In those locations, an attached sidewalk is proposed to allow the residence or business to remain. |
| Murphy, Bob (Mayor) | City of Lakewood | 24-11 | Safer controlled crossings through the interchange area. Potential to incorporate a grade separated (underpass) of the loop ramp in the NW quadrant (determination of feasibility during final design).  | Agreed. Please see response to Comment 24-9.   |
| Murphy, Bob (Mayor) | City of Lakewood | 24-12 | Revised configuration proposed by the neighborhood and adopted as a study recommendation reduces neighborhood cut through traffic in northeast quadrant.   | Thank you for your support.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-13 | [Improved frontage road] Improves access to adjacent businesses in the northwest quadrant of the interchange.  | Thank you for your support.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-14 | Three through lanes in each direction on Wadsworth provides for bus stop sites without need for additional turn-out lanes.   | Thank you for your support.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-15 | Interchange bridge carrying U.S. 6 is long enough to accommodate future transit needs along Wadsworth should they be developed.  | Thank you for your support.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-16 | Over 2 miles of proposed new noise walls would mitigate noise levels along US 6 between Garrison and Wadsworth. Includes extended noise mitigation around the interchange area.  | Thank you for your support.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-17 | The City of Lakewood appreciates the opportunity to work with area residents and CDOT to provide input on design elements related to noise mitigation (Page 3-11) during final design.   | Thank you for your comment. As noted, CDOT has committed to working with Lakewood on noise wall aesthetics, and this commitment also is reflected in the FONSI.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-18 | Drainage culverts and channels will accommodate the look-year [100-year] storm events, reducing the probability of flooding and overtopping of Wadsworth and adjacent properties.  | Thank you for your support.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-19 | Permanent water quality features provide treatment for surface water runoff  | Thank you for your support.  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name                | Organization     | No.   | Comment   | Response   |
|---------------------|------------------|-------|---|--|
| Murphy, Bob (Mayor) | City of Lakewood | 24-20 | The EA proposes a water quality pond at 1355 Wadsworth Boulevard. This parcel is zoned Transit Mixed Use-Station Core and is less than one block from the future light rail station at 13th Avenue and Wadsworth Boulevard. A great deal of planning has been done for this area with substantial effort from the City and area citizens. The area was rezoned by the City of Lakewood in 2007 to allow for higher-density transit oriented development (Station Core Area). Future aggregation of parcels is very likely because of the proximity to the Wadsworth major light rail station. Locating a water quality pond on this parcel is not conducive to implementing the long-term vision of the adopted plans and adopted zoning. | As part of the EA, CDOT conducted analysis of water quality treatment requirements and determined locations that would be suitable for water quality treatment facilities, such as the basin proposed at 1355 Wadsworth. The sizes and locations of basins have been determined based on existing conditions and preliminary engineering of the Build Alternative. Another key criterion to siting water quality basins for the Build Alternative was to look for opportunities to use "remainder" parcels that were identified as total acquisitions based on other roadway requirements. This parcel met those requirements and, therefore, was identified as a water quality basin location. Water quality treatment is a requirement for the Build Alternative, which is consistent with Lakewood's plans and zoning. Water quality treatment also would be required for any future redevelopment within the Station Area Core. For these reasons, the basin would be consistent with adopted plans and zoning. As noted in the response to the next comment (Comment 24-21), CDOT is open to cooperating with public entities to find alternative methods or locations for achieving water quality treatment. See also responses to Comments 20-3 through 20-5. |
| Murphy, Bob (Mayor) | City of Lakewood | 24-21 | We understand that detention / water quality facilities in this area are necessary for the Build Alternative and based on current conditions, the identified parcel may be an appropriate location for a water quality pond. However, during final design we would support CDOT in considering locally regionalized detention water quality possibilities and/or coordinating these efforts with private development in the area to design a combined water quality detention feature that would be an amenity to the Station Core area.  | CDOT is open to working with Lakewood or another public entity, such as RTD, to consider joint or regional water quality treatment. Joint private-public water quality treatment is not feasible due to permit conditions, maintenance requirements, and other logistical considerations. CDOT would also consider options for water quality treatment that might complement private development. For instance, if properties were aggregated and a specific development plan was proposed, CDOT would consider an alternative location for a water quality basin as long as another similarly sized basin could be implemented within the larger development to meet CDOT's water quality treatment requirements. CDOT will work with Lakewood during final design to review any land use changes or development plans that may arise between now and the time the US 6/Wadsworth project is funded and implemented.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-22 | Final design and right-of-way negotiations by CDOT will coordinate with Lakewood to address compatibility with land-use plans and potential allowances for nonconforming properties that may result from right-of-way acquisition   | Thank you for your comment. CDOT appreciates the opportunity to work cooperatively with Lakewood to minimize disruption to residents and businesses from the ROW acquisition process.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-23 | Throughout the EA, references are made to zoning nonconformance that could occur as a result of a construction project. On July 13, 2009 the City of Lakewood adopted an ordinance amending Article 17-16 of the Lakewood Municipal Code. The amendment related to the effects of acquisitions for, or construction of, public projects on individual properties. The ordinance amendment ensures that existing parcels and structures remain conforming, when appropriate. A copy of the ordinance is enclosed.  | Clarification of the new ordinance and its requirements has been added to Section 4.4 and Appendix B of the FONSI.<br>Lakewood's non-conforming use ordinance clarifies options for property owners with non-conforming uses that result from acquisition of private property for public projects (such as the US 6/Wadsworth project). The revised ordinance now allows a permanent variance for a parcel or structure to be legally non-conforming if the variance is not more than 20 percent. If the property acquisition causes a variance of more than 20 percent and creates a hazardous or otherwise unreasonable situation, the parcel or structure would be considered non-conforming and subject to the City's non-conforming standards.  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name                | Organization     | No.   | Comment   | Response   |
|---------------------|------------------|-------|---|--|
| Murphy, Bob (Mayor) | City of Lakewood | 24-24 | On Page 3-23, the EA states that Lakewood is "...considering rezoning Colfax Avenue to promote pedestrian- and bicycle-oriented development." The Colfax Avenue rezoning process occurred concurrently with the EA project. On May 11, 2009, the Lakewood City Council approved the legislative rezoning of properties along Colfax Avenue within the Lakewood Reinvestment Authority boundaries to the new Colfax Mixed Use Zone District. The zoning became effective on June 29, 2009. | Thank you for the clarification. This information has been added to Section 4.4 of the FONSI.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-25 | Also on Page 3-23, the EA references the Wadsworth Boulevard Strategic Plan. This Plan was repealed on June 22, 2009 and the North Wadsworth Boulevard Corridor Plan was adopted on this date. The Plan envisions Wadsworth Boulevard as a pedestrian, bicycle, and transit friendly corridor.  | Thank you for the clarification. This information has been added to Section 4.4 of the FONSI.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-26 | The City of Lakewood appreciates the opportunity to work closely with CDOT during the final design phase on the aesthetics of project design elements. The EA recognizes that the new interchange has the potential to establish visual distinction and to be a gateway and a positive image for Lakewood (Page 3-45).  | CDOT looks forward to continuing the cooperative partnership with Lakewood in the design and construction of the Build Alternative.  |
| Murphy, Bob (Mayor) | City of Lakewood | 24-27 | Environmental assessment document completed in two years (compared to the typical 3 to 4 year schedule).  | Comment noted.   |
| Murphy, Bob (Mayor) | City of Lakewood | 24-28 | Document and streamlined process being recognized by CDOT and FHWA as a model for future EA studies.  | Comment noted.   |
| Murphy, Bob (Mayor) | City of Lakewood | 24-29 | Efficient and effective public outreach effort. Received numerous compliments on the team's ability to keep stakeholders informed and up-to-date on progress of the study, issues of concern, and decisions made throughout the study schedule.   | Thank you for your support. Community input has been important in shaping the Build Alternative.   |
| Murphy, Bob (Mayor) | City of Lakewood | 24-30 | Agency charter with key participants provided structured guidelines for coordination, review, and approval roles for primary team members.  | CDOT agrees that the charter was helpful and appreciates the partnership with Lakewood established and followed in this charter.   |
| Murphy, Bob (Mayor) | City of Lakewood | 24-31 | I reiterate the appreciation the City has for the project team's work with the community during the development of the environmental assessment. We look forward to continued progress toward fully implementing the improvements.  | Thank you for your support. CDOT looks forward to continuing to work with Lakewood and community members in the design and construction of this important project.   |
| Villano, Michael    | Private citizen  | 25-1  | When you construct the US 6 soundwall, it would be nice if you extended it along the highway all the way to the west side of the Garrison Street overpass, like the soundwalls on the elevated portion of I-70 over the 20th Avenue overpass. For those of us not immediately adjacent to the highway, the worst noise comes from the elevated portion of US 6.   | As noted in response to Comment 22-8, extending the noise wall to Garrison Street was included based on a logical end point rather than project effects or requirements for noise mitigation. As described in the <i>Noise Technical Memorandum</i> (included in Appendix A), the noise model did show a benefit to residential receptors northeast of Garrison interchange (east of the commercial businesses near the interchange) from the proposed 15-foot wall without a wall over the Garrison Street bridge. Further, extending the noise walls to the west side of the Garrison Street overpass is not feasible at this time because the bridge was not designed to handle the load of the wall and the bridge is not slated for reconstruction at this time. See response to Comment 22-8 for a discussion of the terminus for the noise walls. |
| Villano, Michael    | Private citizen  | 25-2  | Please, please, please construct the soundwall out of something like the tan block construction of the existing soundwall east of   | Your preferences are noted. The City of Lakewood will have the opportunity to provide input on design elements related to noise  |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name                   | Organization        | No.  | Comment   | Response  |
|------------------------|---------------------|------|---|---|
|                        |                     |      | Wadsworth, and not the horrible pink demonstration soundwalls between Simms Street and Indiana. The adobe/stucco/used tire demonstration soundwall is perhaps the ugliest thing I've ever seen. Even grey patterned concrete would be better than the pink stuff.   | mitigation, including grading, landscaping, color, and material of any noise walls. Please also see Comment 23-6 and its response.  |
| Villano, Michael       | Private citizen     | 25-3 | Finally, I assume the soundwall is going between the frontage road and highway, rather than outside the frontage road like it is east of Sheridan. The piecemeal approach east of Sheridan is nearly worthless.   | Yes, because of the need to tie side streets and driveways into the frontage roads, the walls proposed west of Wadsworth would be located along the highway.  |
| Koclanes, George Peter | Olympia Investments | 26-1 | ...from the Proposed Project presentations at the public meetings, it is clear that the Proposed Project would have a significant and material negative impact on the Olympia Property. We stand to lose the entire Olympia Property.   | Comment noted. You are correct that this property has been identified as a total acquisition. See response to Comment 17-3 for a description of the methodology utilized to determine property acquisitions. All property acquisition and relocation will comply fully with federal and state requirements, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act). As described in Section 3.4 of the EA, the Uniform Act provides protections, compensation, and assistance for property acquisitions and relocations.  |
| Koclanes, George Peter | Olympia Investments | 26-2 | ...we are not the only ones who stand to lose our property. According to the Executive Summary for the Proposed Project, "[approximately 31.1 acres of property would need to be acquired from 96 property owners through 114 acquisition parcels, including 45 residential, 65 commercial, and 4 publicly owned parcels." The Proposed Project is adversely affecting a whole lot of people. | Comment noted. ROW acquisition was similar for all of the alternatives considered by the project team. The project is located in a developed urban area, with private property surrounding state-owned ROW. As such, there is little area within CDOT's existing ROW to expand its facilities.  |
| Koclanes, George Peter | Olympia Investments | 26-3 | ...there are other alternatives for the US 6 and Wadsworth Blvd. project that would <u>not</u> result in us losing all the Olympia Property and would not result in other negative affects [sic]. These alternatives have been identified at the public meetings we have previously attended.   | Two of the four interchange alternatives that met the purpose and need for the project (tight diamond and single-point urban interchange [SPUI]) would affect only one of the two Olympia properties, while the Build Alternative (and the partial cloverleaf) would require acquisition of both properties. As explained in the <i>Alternatives Development and Selection Technical Memorandum</i> included in Appendix C to the EA, the tight diamond with loop was selected as the preferred alternative over the tight diamond, SPUI, and partial cloverleaf because it has better traffic performance than the tight diamond and SPUI and required less ROW than the partial cloverleaf. Additionally, the reconfiguration of the frontage road and improvements (widening of) to Lakewood Gulch, which were design features that were refined and included after the identification of the tight diamond with loop as the Build Alternative, would require acquisition of both Olympia properties regardless of the interchange alternative selected. That is, both properties would be considered total acquisitions under all final interchange alternatives. As noted in response to Comment 26-2, property acquisitions are required for any reconstruction of the interchange. |

EXHIBIT 4-3: COMMENTS AND RESPONSES TO US 6/WADSWORTH EA

| Name                   | Organization        | No.  | Comment   | Response   |
|------------------------|---------------------|------|---|--|
| Koclanes, George Peter | Olympia Investments | 26-4 | ...the Proposed Project is already way over budget. Significantly, we have been told that the budget for this project is approximately \$70 million and the estimated cost for the Proposed Project is more than \$90 million. These estimated costs likely have increased over time. We cannot understand how anyone would consider this project when, among other things, (a) the project is \$20 million over budget, (b) the project will materially and negatively affect a large number of property owners in the area, and (c) the federal, state, and local governments, as well as the citizens, are now facing severe financial and economic hardships. There simply is no justifiable reason to embark on a project of the grandiose scale at this time. In our opinion, there are far more important public improvement matters that would be better served with these financial resources. | Comment noted. In 1996, the Colorado Transportation Commission officially identified the US 6/Wadsworth interchange as one of 28 strategic high-priority projects by CDOT. Currently, it is one of the last of the remaining strategic projects to be funded. DRCOG has also identified the US 6/Wadsworth interchange as one of the top 20 “bottleneck points” in the Denver metro area. As described in Chapter 1 of the EA, the US 6/Wadsworth project is needed to improve safety for motorists, pedestrians, and bicyclists (the existing interchange has the highest number of accident reports in Lakewood), improve operational efficiency of the interchange and along Wadsworth, meet current and future traffic demands, and support multi-modal connections. |
| Schmidt, Philip        | Private citizen     | 27-1 | I am a homeowner in Green Acres, very close to the proposed new frontage road route. My wife and I support the proposed interchange design and feel the frontage road changes will be beneficial to our neighborhood, primarily because it should reduce non-resident travel through the neighborhood, from those trying to travel east from Wadsworth on the frontage road.  | Thank you for your support.  |
| Schmidt, Philip        | Private citizen     | 27-2 | we do feel that the noise walls along the frontage road (as they appear in the proposed interchange graphic) are absolutely necessary to minimize the impact of the increased travel on the Wadsworth end of the frontage road.   | Thank you for your comment. As noted, noise walls are included in the Build Alternative.   |
| Schmidt, Philip        | Private citizen     | 27-3 | we strongly support the current design proposal   | Thank you for your support.  |
| Crockett, Olin         | Private citizen     | 28-1 | My property is on the west side at 1355, 1345 Wadsworth, including 1340 and 1360 Yukon. I believe you are going to need these properties with light rail going through there.   | The Build Alternative would require the total acquisition of 1355 Wadsworth and the partial acquisition of 1345 Wadsworth. The properties on Yukon Street do not need to be acquired in part or in full for the Build Alternative. The US 6 and Wadsworth project is not responsible for property acquisition related to RTD’s West Corridor light rail line or station; properties acquired for the West Corridor project are being acquired by RTD.  |

**CHAPTER 4: COORDINATION AND RESPONSE TO COMMENTS**

US 6/Wadsworth Finding of No Significant Impact and Final Section 4(f) Evaluation

|                   |   |      |   |  |
|-------------------|---|------|---|--|
| Crockett, Olin    | Private citizen   | 28-2 | <p>An example of not planning ahead was for parking on the light rail down Santa Fe near Quincey [sic] Ave. Their parking lot had to be expanded several times at a higher cost each time. You could possibly combine this project with a developer to help keep costs down. The longer you wait, costs will keep going up.</p>   | <p>CDOT has worked with RTD and Lakewood throughout the project to coordinate the design of the Build Alternative with the design of the West Corridor project and is committed to continuing this coordination throughout final design and project implementation. CDOT is not involved in the station area plan or parking for the Wadsworth light rail station, only in the traffic circulation around the property.</p> <p>For information on the RTD West Corridor project, please contact the RTD West Corridor project hotline or public information manager.<br/> RTD FasTracks West Corridor Team Project Hotline: 303-299-2000<br/> Brenda Tierney<br/> Public Information Manager, West Corridor<br/> RTD FasTracks Team<br/> 10455 W. 6th Avenue<br/> Lakewood, CO 80215<br/> Office: (303) 299-2401<br/> Fax: (303) 299-2425</p> <p>For more specific construction information, please contact the construction contractor's public information manager:<br/> Kathy Berumen<br/> Public Information Manager<br/> Denver Transit Construction Group<br/> 10455 W. 6th Avenue<br/> Lakewood, CO 80215<br/> Office: 303) 626-6762<br/> Fax: (303) 238-2244</p> |
| Taylor, Willie R. | Department of Interior, Office of Environmental Policy and Compliance | 29-1 | <p>The third bullet of the Fish and Wildlife Resource column in Appendix B, page B-2, states that trees will not be removed between April 1 and August 15 to avoid impacts to migratory birds. The Department is now recommending that the window be extended to August 31.</p>   | <p>Thank you for the clarification. The revised timeframe has been included in Section 4.4 of the FONSI.</p>   |
| Taylor, Willie R. | Department of Interior, Office of Environmental Policy and Compliance | 29-2 | <p>Following our review of the Section 4(f) Evaluation, the Department concurs that there is no feasible or prudent alternative to the Preferred Alternative selected in the document and that all measures to minimize harm to these resources has been taken. The Department acknowledges your consultation with the Colorado State Historic Preservation Office and that a Memorandum of Agreement to minimize adverse effects to historic properties will be prepared.</p>  | <p>Thank you for your concurrence, which also is reflected in the Final Section 4(f) Evaluation in Section 5 of the FONSI.</p>   |
| Clark, Rebecca    | Lakewood Reinvestment Authority Director                              | 30-1 | <p>[In assisting a property owner relocation on behalf of Lakewood and RTD]...I do have knowledge that 1190 Wadsworth will potentially be affected by the proposed highway widening. The affect on 1190 Wadsworth would be caused by acquiring and dedicating additional travel lane(s) and right-of-way, as well as an illustrated detention pond on CDOT's 15% design drawings.</p> <p>As you and I both know, by way of a legislative rezoning, 1190 Wadsworth has been rezoned to TMU-MDR (Transit Mixed Use-Medium Density Residential) due to its proximity to the Wadsworth/13th elevated Light Rail Station. Which the City has taken extraordinary measures to improve upon the RTD design</p> | <p>After reviewing the comments received on the EA, we had three primary comments about the water quality basins: two opposing the location of the water quality basin at 1355 Wadsworth (see Comments 20-3 and 24-20) and one (yours) requesting consideration of an alternative location for the basin at 1190 Wadsworth. After reviewing options for water quality basins, CDOT has confirmed the need for a basin at 1190 Wadsworth. Suitable locations for water quality basins on the north side of the project area are sparse; CDOT wishes to minimize disruptions to property owners in the corridor and, therefore, sited basins in locations that were already affected by other project improvements. In the case of the basin at 1190 Wadsworth, the location has an additional benefit of enhancing the</p>  |

**CHAPTER 4: COORDINATION AND RESPONSE TO COMMENTS**

US 6/Wadsworth Finding of No Significant Impact and Final Section 4(f) Evaluation

|                |  |      |   |   |
|----------------|--|------|---|---|
|                |  |      | and the Reinvestment Authority will be providing additional funding to design and construct betterments on the elevated station. It has always been the intention and now through a variety of actions and approvals by the City Council and Reinvestment Authority, to develop and redevelop the properties within the TMU zone districts. | planned Two Creek park by providing a compatible green space that acts as a frontage to Wadsworth and provides visibility to the park entrance on 12th Avenue.<br>In short, we have reviewed the basin locations again, and based on current information, this location is a prime location for a water quality basin. Final engineering design will determine the final size and location of the basin; for now, it is CDOT's intention to acquire 1190 Wadsworth and put a water quality basin at this location when the US 6/Wadsworth project is approved and constructed. The timing of that acquisition is uncertain due to funding shortfalls. Please see also response to Comment 24-21.  |
| Clark, Rebecca | Lakewood Reinvestment Authority Director | 30-2 | Are the proposed layouts for WQ basins based on current situations only?  | Yes. Although CDOT is aware that rezoning has occurred and redevelopment is desired and likely, the analysis of impacts is based on current situations (except in the area of the RTD station, where CDOT has coordinated with RTD because RTD has a specific plan and funding for development of that parcel).   |
| Clark, Rebecca | Lakewood Reinvestment Authority Director | 30-3 | If this area (the site with the proposed WQ basin) were to be redeveloped due to the TOD, would the 6/WW plan consider alternative sites?   | It is unlikely that the preferred location of the basin at 1190 Wadsworth would change even if the area were redeveloped, particularly because redevelopment has the potential to affect numerous properties in the corridor. At this point, CDOT is not aware of a specific redevelopment proposed for the Enterprise (car rental) site (and the property owner has confirmed that there is no interest in selling the property at this time). Under current circumstances, CDOT would already acquire this commercial property and displace the active business. However, as noted in response to Comments 20-1 through 20-5, CDOT is open to investigating joint or regional water quality treatment with another public entity, such as RTD or Lakewood, which could change the options for water quality treatment. Changes to the development landscape would be evaluated in final design along with other site constraints, such as utility locations, etc. |
| Clark, Rebecca | Lakewood Reinvestment Authority Director | 30-4 | Is CDOT/consultant in the process of investigating contingent designs for WQ facilities in the area?  | CDOT confirmed the basin locations and requirements in response to comments. At this point, more suitable locations do not seem to be present, especially for the 1190 Wadsworth location. The sizes and locations of the basins are, however, based on conceptual-level design and will be confirmed during final design. Please see also responses to Comments 30-3 and 24-21.  |

## 4.4 CLARIFICATIONS TO THE ENVIRONMENTAL ASSESSMENT

There are two clarifications to Section 3.7, Land Use, of the EA. Page 3-23 of the EA states that Lakewood is "...considering rezoning Colfax Avenue to promote pedestrian- and bicycle-oriented development." The Colfax Avenue rezoning process occurred concurrently with the EA project, was approved by the Lakewood City Council, and became effective on June 29, 2009. On the same page (3-23), the EA references the Wadsworth Boulevard Strategic Plan. This plan was repealed and replaced with the North Wadsworth Boulevard Corridor Plan, which was adopted on June 22, 2009.

In analysis of both Land Use and ROW, the EA references discussions with Lakewood regarding non-conforming uses that may result from ROW acquisition. Reference to non-conformance in the EA is found in the Executive Summary; Sections 2.2.3, 3.7, and 3.8; Exhibit 3-26; and Appendix B. Since publication of the EA, Lakewood's non-conforming use ordinance has been revised to clarify options for property owners with non-conforming uses that result from acquisition of private property for public projects (such as the US 6/Wadsworth project). The revised ordinance now allows a permanent variance for a parcel or structure to be legally non-conforming if the variance is not more than 20 percent. If the property acquisition causes a variance of more than 20 percent and creates a hazardous or otherwise unreasonable situation, the parcel or structure would be considered non-conforming and subject to the City's non-conforming standards. The revised ordinance does not affect the analysis in the EA, but it does clarify the process that Lakewood will follow in working with CDOT through the ROW process to determine if variances for non-conforming uses are appropriate. A copy of the ordinance was enclosed with Mayor Murphy's comments on the EA, which are included in Appendix C to the FONSI.

There are two additional clarifications to the body of the EA related to historic properties and floodplains. First, Exhibit 3-13, Historic Properties Located within the Study Area, illustrates the location of the Jefferson

County Open School Historic District incorrectly. The district is bounded by 10th and 12th Avenues, rather than 9th and 10th Avenues as shown by the shading in the exhibit. The boundaries are correctly described in Exhibit 3-14 in the EA, and the analysis of effects to the district also is accurately portrayed in the EA. The second technical clarification relates to a sentence in Section 3.10.2, specifically lines 40 to 45 on page 3-34, which imply that all culverts under US 6 and Wadsworth will be replaced. The culvert under US 6 to the east of the interchange (at South Lakewood Gulch) would not be replaced; the other three culverts would be replaced as described in the EA. Replacing the culvert at South Lakewood Gulch is not necessary and not included in the Build Alternative.

The air quality conformity statement in Section 6.0 of the air quality technical memorandum (CH2M HILL, 2009e) is revised as follows:

Because the project is not expected to create any new violations or increase the frequency of an existing violation of air quality standards, it is determined to conform with the purpose of the current State Implementation Plan (SIP) and the requirements of the Clean Air Act. The proposed project is included in the Regional Transportation Plan (RTP), the *2035 Metro Vision Regional Transportation Plan* (DRCOG, 2007), and in the outlying years of the 2008-2013 State Transportation Improvement Program (STIP). The 2035 fiscally constrained RTP meets the conformity requirements identified by federal and state regulations for CO, PM<sub>10</sub>, and O<sub>3</sub>, and by including the project in DRCOG air quality conformity modeling, the project also meets these requirements. Air quality conformity modeling predicts future pollutant emissions to ascertain the likelihood of pollutants exceeding of SIP emissions budgets allocated for 5-year incremental interim years, or staging years, within the 2035 planning horizon.

In fulfilling air quality conformity analyses completed for the 2035 RTP, the US6/Wadsworth interchange reconstruction has been included in the 2015 staging year of the air

1 quality conformity modeling run. Widening along  
2 Wadsworth Boulevard has been included in the  
3 2020 staging year of the air quality conformity  
4 modeling run. This project will be implemented  
5 consistent with the staging years in the  
6 conformity analysis for the STIP and RTP.

7 This revision replaces the entire paragraph of the  
8 Section 6.0 of the air quality technical memorandum  
9 included in Appendix A to the EA. Correspondence  
10 between CDOT and APCD since the publication of the  
11 EA is included in Appendix C to the FONSI.

12 The remaining clarifications to the EA relate to  
13 mitigation commitments, which were presented in  
14 Exhibit 3-26 and Appendix B to the EA. The following  
15 represent the additional mitigations reflected in  
16 Appendix B. Appendix B to the FONSI now includes  
17 these measures as well as those presented in the EA.  
18 As such, it contains the comprehensive list of  
19 mitigation measures that will be included in the design  
20 and construction of the Build Alternative.

- 21 ◆ The construction contractor will be required to  
22 follow CDOT's *Standard Specifications for Road  
23 and Bridge Construction*, which governs  
24 construction practices near private properties.
- 25 ◆ Trees will not be removed between April 1 and  
26 August 31 to avoid impacts to migratory birds. This  
27 timeframe represents an extension from the  
28 August 15 end date published in the EA.
- 29 ◆ Noise walls will be constructed according to  
30 FHWA's *Highway Noise Barrier Design Handbook*  
31 and in accordance with the requirements of ASTM  
32 Standard D1557-91 (2007), "Test Method for  
33 Laboratory Compaction Characteristics of Soil  
34 Using Modified Effort," to ensure that soils are  
35 properly compacted and reduce the potential for  
36 settling near adjacent properties.
- 37 ◆ The use of absorptive materials for noise walls will  
38 be considered during final design of the project.
- 39 ◆ During final design, CDOT will consider adjusting  
40 the noise wall configuration along the north side of  
41 US 6 at its eastern terminus to provide better  
42 visibility to the commercial property at the 6th  
43 Avenue Business Center. If feasible, the wall will  
44 wrap around the west side of the 6th Avenue  
45 Business Park and continue adjacent to residential  
46 properties west to Ammons Street. West of

47 Ammons Street, the wall will continue between the  
48 frontage road and highway as described in the EA.

- 49 ◆ CDOT will construct permanent noise walls early in  
50 the construction schedule, if feasible, to provide for  
51 additional noise mitigation during construction.
- 52 ◆ The construction contractor will comply with state  
53 and local noise regulations, and will adhere to  
54 industry standard thresholds for building damage  
55 from vibration. Contractors will be required to  
56 follow requirements outlined in CDOT's *Standard  
57 Specifications for Road and Bridge Construction*.
- 58 ◆ CDOT will provide for all-weather access and  
59 detours to minimize disruptions for businesses  
60 during construction.
- 61 ◆ Lane closures during construction will comply with  
62 CDOT's Region 6 Lane Closure Strategy.
- 63 ◆ CDOT will develop a traffic control plan and, prior  
64 to construction, make that plan available to  
65 Lakewood and the CDOT public relations office,  
66 which will relay additional notifications for lane  
67 closures.
- 68 ◆ A construction newsletter will be prepared and  
69 distributed as needed to keep businesses,  
70 residences, and travelers up to date.





# CHAPTER 5

## Final Section 4(f) Evaluation

### 5.1 INTRODUCTION

---

2 This evaluation assesses impacts of the proposed  
3 US 6/Wadsworth project on parks and historic  
4 properties. It was prepared in compliance with  
5 Section 4(f) of the U.S. Department of Transportation  
6 Act and is supported by the following documents  
7 available in Appendix A: *Alternatives Development and*  
8 *Screening Technical Memorandum* (CH2M HILL,  
9 2008a), *Historic Resources Survey* (TEC, 2008), and  
10 *Determination of Effects to Historic Properties*  
11 (CH2M HILL et al., 2008b).

12 A draft Section 4(f) Evaluation prepared by CDOT and  
13 FHWA was published for public and agency review on  
14 July 13, 2009. FHWA also forwarded the evaluation to  
15 the Department of the Interior for review in  
16 accordance with Section 4(f) requirements. The  
17 Department of the Interior concurred with the findings  
18 of the draft Section 4(f) Evaluation in correspondence  
19 dated September 14, 2009 (see Appendix C to the  
20 FONSI). Lakewood Department of Parks and  
21 Recreation formally concurred that the project will not  
22 adversely affect the proposed Two Creeks Park in  
23 correspondence dated October 29, 2009. That  
24 correspondence also is included in Appendix C to the  
25 FONSI. No comments related to the Section 4(f)  
26 evaluation were received from the public during the  
27 45-day review period.

### 5.2 SECTION 4(f)

---

29 Section 4(f) of the U.S. Department of Transportation  
30 Act of 1966, as amended, and codified in 49 United  
31 States Code (U.S.C.) § 303, declares that “[i]t is the  
32 policy of the United States Government that special  
33 effort should be made to preserve the natural beauty  
34 of the countryside and public park and recreation  
35 lands, wildlife and waterfowl refuges, and historic  
36 sites.” FHWA has adopted regulations to ensure its  
37 compliance with Section 4(f) (23 CFR 774).

38 Section 4(f) prohibits FHWA from approving the use of  
39 a publicly owned land of a public park, recreation  
40 area, or wildlife and waterfowl refuge of national,  
41 state, or local significance, or land of a historic site of  
42 national, state, or local significance unless:

- 43 ♦ A determination is made that 1) there is no  
44 feasible and prudent avoidance alternative to use  
45 of land from the property, AND 2) the action  
46 includes all possible planning to minimize harm to  
47 the property resulting from such use, OR
- 48 ♦ The use of the property, including any measures  
49 to minimize harm, will have a *de minimis* impact  
50 on the property.

51 The three types of Section 4(f) uses are: direct use,  
52 temporary use, and constructive use. Because this  
53 project would not result in any temporary or  
54 constructive uses, they are not discussed further.  
55 Direct uses are discussed below.

### 5.2.1 DIRECT USES

A direct use takes place when the Section 4(f) land is permanently incorporated into a transportation facility.

### 5.2.2 DE MINIMIS IMPACTS

Certain uses of Section 4(f) land may have a minimal or *de minimis* impact on the protected resource. When this is the case, FHWA can make a *de minimis* impact determination. Properties with a *de minimis* determination do not require an analysis of avoidance alternatives or a least harm analysis (23 CFR 774.17[4, 5]; FHWA, 2005a).

The *de minimis* criteria and associated determination are different for historic sites than for parks, recreation areas, and wildlife and waterfowl refuges.

For publicly owned parks, recreation areas, and wildlife and waterfowl refuges, *de minimis* impacts are defined as those that do not “adversely affect the activities, features and attributes” of the Section 4(f) resource. The public must be afforded an opportunity to review and comment on the findings.

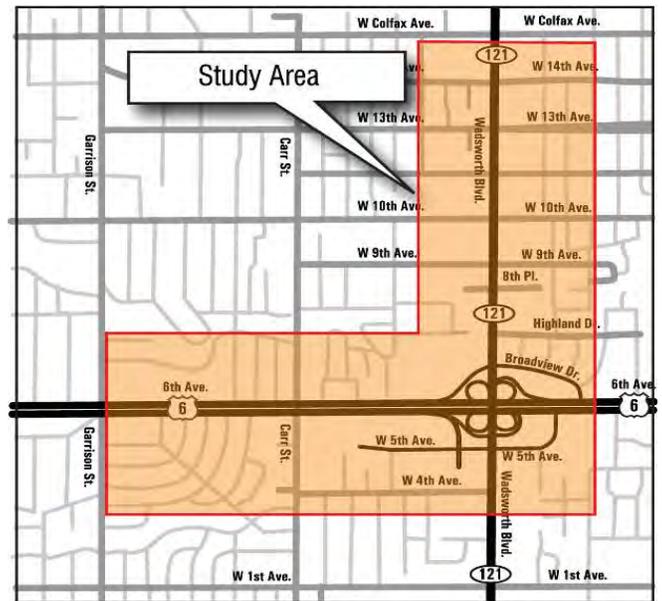
For historic sites, *de minimis* impacts are based on the determination that no historic property is affected by the project or that the project will have no adverse effect on the historic property in accordance with Section 106 of the National Historic Preservation Act. FHWA must notify the SHPO of its intent to make a *de minimis* finding.

FHWA has concluded that the Build Alternative would result in *de minimis* impacts to historic properties and to a planned park. This document serves as FHWA's final *de minimis* determination.

### 5.3 PURPOSE AND NEED

The purpose of the US 6/Wadsworth project is to improve traffic flow and safety, accommodate high traffic volumes, and increase multi-modal travel options and connections at the US 6 and Wadsworth interchange and along Wadsworth between 4th Avenue and 14th Avenue. The project is located entirely within central Lakewood in Jefferson County, Colorado (see Exhibit 5-1).

EXHIBIT 5-1: PROJECT LOCATION



Improvements are needed to:

- ◆ Improve safety for motorists, pedestrians, and bicyclists
- ◆ Improve the operational efficiency of the interchange and on Wadsworth
- ◆ Meet current and future traffic demands
- ◆ Support multi-modal connections

Chapter 1 of the EA provides additional details about the purpose and need for this project.

## 5.4 FEASIBLE AND PRUDENT ALTERNATIVES

The first test under Section 4(f) is to determine which alternatives are feasible and prudent. An alternative is feasible if it is technically possible to design and build. According to FHWA regulations (23 CFR 774.17), an alternative may be rejected as not prudent for the following reasons:

- i) It compromises the project to a degree that it is unreasonable to proceed with the project in light of its stated purpose and need;
- ii) It results in unacceptable safety or operational problems;
- iii) After reasonable mitigation, it still causes:
  - a) Severe social, economic, or environmental impacts;
  - b) Severe disruption to established communities;
  - c) Severe disproportionate impacts to minority or low-income populations; or
  - d) Severe impacts to environmental resources protected under other federal statutes;
- iv) It results in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- v) It causes other unique problems or unusual factors; or
- vi) It involves multiple factors described above, that while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

Where sufficient analysis demonstrates that a particular alternative is not feasible and prudent, the consideration of that alternative as a viable alternative comes to an end. If an alternative is identified that is feasible and prudent and avoids the use of Section 4(f) properties, it must be selected. No prudent and feasible avoidance alternatives were identified for this project.

The US 6/Wadsworth project initially considered nine interchange alternatives (including the No Build Alternative). Three additional alternatives were developed as Section 4(f) avoidance options. Exhibit 5-2 summarizes the Section 4(f) use and avoidance for all of twelve of these alternatives. Five were determined to be feasible and prudent, but none of these five feasible and prudent alternatives avoided Section 4(f) resources. Three alternatives (one of which is the No Build alternative) avoided or may have avoided Section 4(f) resources but were not feasible and prudent. The remaining four alternatives were neither feasible and prudent nor avoided Section 4(f) resources. Additional details on these alternatives are available in reference documents included in Appendix A (CH2M HILL, 2008a; CH2M HILL et al., 2008b; CH2M HILL, 2009a).

EXHIBIT 5-2: SUMMARY OF FEASIBLE AND PRUDENT INTERCHANGE ALTERNATIVES

| Alternative  | Feasible and Prudent? <sup>1</sup>   | Avoids 4(f) Use?  |
|--|--|---|
| <b>No Build Alternative;</b> no reconstruction of interchange.   | <b>No.</b> Not prudent (i). Does not meet purpose and need to improve safety, capacity, interchange operations, multi-modal connections.   | <b>Yes</b>  |
| <b>Tight Diamond with Loop Interchange (Build Alternative):</b> Similar to the Tight Diamond (see below) except it maintains a loop ramp in the NW quadrant of the interchange, and there would be no traffic signal at the intersection of the loop ramp with Wadsworth; maintains off-ramp and frontage road in NE quadrant. | <b>Yes</b>   | <b>No.</b> Requires use of four historic properties (5JF4536, 5JF4542, 5JF3549, and 5JF3548).                     |
| <b>Traditional Diamond Interchange:</b> Most common interchange type with one entrance and one exit in each direction; on- and off-ramps meet at two signalized intersections; ramps form a diamond shape when viewed from the air; maintains off-ramp and frontage road in NE quadrant.                                       | <b>Yes</b>   | <b>No.</b> Requires use of four historic properties (5JF4536, 5JF4542, 5JF3549, and 5JF3548).                     |
| <b>Tight Diamond Interchange:</b> Like a traditional diamond, except entrance and exit ramps are shifted closer to the freeway; maintains off-ramp and frontage road in NE quadrant.   | <b>Yes</b>   | <b>No.</b> Requires use of four historic properties (5JF4536, 5JF4542, 5JF3549, and 5JF3548).                     |
| <b>Single Point Urban Interchange:</b> Similar to a diamond interchange but with all ramps controlled by a single set of traffic signals; maintains off-ramp and frontage road in NE quadrant.   | <b>Yes</b>   | <b>No.</b> Requires use of four historic properties (5JF4536, 5JF4542, 5JF3549, and 5JF3548).                     |
| <b>Partial Cloverleaf Interchange:</b> Uses loop ramps for two of the left-turn movements and straight ramps to handle the other two left-turn movements; maintains off-ramp and frontage road in NE quadrant.   | <b>Yes</b>   | <b>No.</b> Requires use of four historic properties (5JF4536, 5JF4542, 5JF3549, and 5JF3548).                     |
| <b>Partial Cloverleaf with Flyover Ramp Interchange:</b> Like the partial cloverleaf except the highest-volume traffic movement (in NW quadrant) is handled on an elevated ramp; maintains off-ramp and frontage road in NE quadrant.  | <b>No.</b> Not prudent (iii). Would result in cumulatively severe impacts. Would result in unacceptable social impact from increased noise in a community already severely affected by traffic noise. Would result in increased community disruption from nearly twice as many relocations as compared with other alternatives. Would increase construction costs by more than 20 percent, which would be excessive given transportation budget constraints.   | <b>No</b>   |
| <b>Full Cloverleaf Interchange with Collector-Distributor Roads:</b> Enlarges the four loop ramps to meet current design standards and expands the frontage road system between ramps to eliminate weaving conflicts on mainline US 6; maintains off-ramp and expands frontage road in NE quadrant.                            | <b>No.</b> Not prudent (i). Does not meet purpose and need to improve pedestrian and bicycle safety because pedestrians and bicycles would still need to cross free-flow loop ramps in all quadrants of the interchange. Would result in highest number of relocations and greatest cost of the options considered.  | <b>No</b>   |
| <b>Diverging Diamond Interchange:</b> Rare interchange type that would remove left turns in the intersection by requiring Wadsworth drivers to briefly cross opposite lanes of traffic at two crossover intersections; maintains off-ramp and frontage road in NE quadrant.  | <b>No.</b> Not prudent (i). Does not meet purpose and need for improved capacity on Wadsworth. Drivers are not accustomed to crossing opposing traffic, and they would likely slow down due to their uncertainty. Crossing in front of opposing traffic (even though opposing traffic is stopped) violates drivers' expectations.  | <b>No</b>   |
| <b>Folded Diamond Interchange:</b> Folds westbound US 6 to northbound Wadsworth onto loop ramp in NW quadrant for westbound US 6 to southbound Wadsworth traffic; maintains existing frontage road but removes off-ramp in NE quadrant.  | <b>No.</b> Not prudent (i). Does not meet purpose and need. Would increase congestion along US 6 and at the US 6/Wadsworth interchange because all northbound and southbound Wadsworth traffic from westbound US 6 would exit at one location, and the deceleration lane would not be long enough to handle queues. Operational efficiency of the consolidated loop ramp exit would be compromised to the point that the loop ramp would not function as a free-flow ramp. A signal would be required for northbound Wadsworth, and a double-lane exit ramp would be inefficient and potentially confusing to drivers. | <b>Yes</b>  |
| <b>Close Frontage Road in NE Quadrant and Reconstruct Interchange:</b> Maintains an off-ramp in the NE quadrant but removes the frontage road and uses the frontage road area for off-ramp.  | <b>No.</b> Not prudent (iii). Would result in severe community disruption because all properties along the frontage road, including historic properties, would need to be acquired since they would have no access.  | <b>No</b>   |
| <b>Improve Kipling and/or Sheridan Interchanges to Divert Wadsworth Traffic:</b> Maintains existing Wadsworth interchange and focuses capacity improvements on the adjacent US 6 interchanges.   | <b>No.</b> Not prudent (i). Does not meet purpose and need for safety improvements at the Wadsworth interchange. Would not address traffic demands for access to destinations along Wadsworth or for north-south regional travel.  | <b>Yes (however, historic surveys were not conducted to identify historic properties near these interchanges)</b> |

<sup>1</sup> As noted in Section 5.4, alternatives are defined as not prudent based on standards contained in 23 CFR 774.17. Where an alternative is deemed not prudent in Exhibit 5-2, the standard is noted. For instance, if an alternative does not meet purpose and need, it is presented as "Not prudent (i)."

1 Because all feasible and prudent alternatives use land  
 2 from Section 4(f) resources, the next step in the  
 3 evaluation is to determine which one of the five  
 4 feasible and prudent alternatives results in the least  
 5 overall harm to the 4(f) resources. The discussion of  
 6 least harm is presented in Section 5.6.3.

7 **5.5 PARKS AND RECREATION RESOURCES**

8 **5.5.1 DESCRIPTION OF 4(f) RESOURCES**

9 One Section 4(f) park resource is located within the  
 10 construction limits of the Build Alternative. Two Creeks  
 11 Park is a planned 3.35-acre recreational facility located  
 12 east of Wadsworth between 10th and 12th Avenues,  
 13 which is owned and planned to be operated by  
 14 Lakewood. Only a small “finger” of the property  
 15 associated with the confined Dry Gulch drainage  
 16 channel is adjacent to Wadsworth. Dry Gulch runs  
 17 through the southern portion of the property. The  
 18 boundaries of the proposed park are outlined in black  
 19 in Exhibit 5-3.

20 EXHIBIT 5-3: BOUNDARIES OF TWO CREEKS PARK



21 The City of Lakewood acquired the Two Creeks Park  
 22 property in 2007. The acquisition was funded by  
 23 Jefferson County Open Space for the express use as a  
 24 park. The City Parks Manager identifies the planned  
 25 park as a significant recreation resource and envisions  
 26 developing trails and providing picnic tables to support  
 27 recreational use of the property (CH2M HILL, 2009b).

28 The property is not currently used for recreation or park  
 29 purposes, and Lakewood has neither a specific plan  
 30 nor funds to develop the property in the next 5 years.  
 31 The park is not reflected either in Lakewood’s  
 32 Comprehensive Plan or the adopted Neighborhood

33 Plan, yet both plans identify the need for a park in the  
 34 area. Although not formally designated in planning  
 35 documents as a park, FHWA determined that the Two  
 36 Creeks Park does qualify as a Section 4(f) recreation  
 37 resource because the property acquisition is recent,  
 38 the need for a park in the area is documented in land  
 39 use plans, the acquisition is expressly for a park, and  
 40 budgetary limitations, not intent, require development  
 41 of the park to be phased.

42 **5.5.2 DE MINIMIS IMPACTS**

43 Impacts to the proposed park area are associated with  
 44 replacing the Dry Gulch box culvert under Wadsworth.  
 45 The existing culvert (Exhibit 5-4), which is an elliptical  
 46 91” x 58” pipe, is undersized to carry a 100-year flood  
 47 and would be enlarged to a 16’ x 6’ concrete box  
 48 culvert; it must also be lengthened to accommodate  
 49 the widened Wadsworth roadway section. (The  
 50 dimensions of the improved culvert are subject to final  
 51 engineering design.)

52 EXHIBIT 5-4: DRY GULCH CULVERT



53 The new culvert would extend farther into the park  
 54 property, incorporating an additional 0.11 acre of the  
 55 drainage channel, resulting in a Section 4(f) use.  
 56 These impacts would not adversely affect the future  
 57 activities, features, or attributes of the planned Two  
 58 Creeks Park. The affected land could not support  
 59 active recreation because of the confined channel.

60 This document serves as FHWA's final *de minimis*  
 61 determination.

5.5.3 DE MINIMIS CONSULTATION AND COORDINATION

The project team coordinated with Lakewood and the Urban Drainage and Flood Control District. Each contributed to the design of the Build Alternative and recommended drainage improvements in the area of the planned Two Creeks Park.

Lakewood formally concurred that expansion of the culvert would not adversely affect the activities, features, and attributes that qualify Two Creeks Park for protection under Section 4(f) in correspondence dated October 29, 2009 (see Appendix C to the FONSI). Comments on the EA were solicited from the public during the 45-day formal review period (July 13, 2009, to August 26, 2009). No comments were received from the public on the impacts to Two Creeks Park or the intent to make a *de minimis* finding.

5.6 HISTORIC RESOURCES

The US 6/Wadsworth project would require use of property from eight Section 4(f) historic resources. Four additional historic properties are present within the area of potential effect but have no Section 4(f) use. Section 3.8 of the EA contains additional information on all historic resources.

5.6.1 DE MINIMIS IMPACTS

The Build Alternative would result in *de minimis* impacts to two individual historic properties and two historic districts. The properties are illustrated in Exhibit 5-5, and impacts are summarized in Exhibit 5-6. FHWA received concurrence from SHPO on December 19, 2008 regarding the determinations of No Adverse Effect for these four Section 4(f) resources. FHWA informed SHPO of its intent to make *de minimis* impact determinations. SHPO did not object to the *de minimis* determinations.

EXHIBIT 5-5: HISTORIC PROPERTIES WITH DE MINIMIS IMPACTS



5JF4511



5JF4513



Lakewood School Historic District (contributing building)



Green Acres Historic District (contributing building)

EXHIBIT 5-6: SUMMARY OF DE MINIMIS IMPACTS FOR SECTION 4(F) HISTORIC RESOURCES

| Site Number                       | Address   | Date                      | Description  | NRHP Eligibility   | Impact  |
|-----------------------------------|---|---------------------------|--|--|---|
| 5JF4511                           | 1215 Wadsworth Blvd.  | 1918, 1948/1949           | Dutch Colonial Revival single-family residence         | Officially eligible, Criterion A, association with Lakewood's agricultural history   | Partial acquisition (0.08 acre) of historic property frontage   |
| 5JF4513                           | 1230 Wadsworth Blvd.  | 1928                      | Craftsman Bungalow residence converted into a business | Officially eligible, Criterion C, representative architecture  | Acquisition of portion of property (0.03 acre) that does not contribute to historic significance  |
| Lakewood School Historic District | West of Wadsworth to Allison Street between 10th and 12th Avenues | 1927 to 1977              | Public school complex                                  | Officially Eligible Historic District, Criteria A and C as early public school campus in Jefferson County, association with community development, period architecture | Acquisition of a portion of property (0.20 acre) adjacent to Wadsworth that does not contribute to historic significance; no buildings or contributing landscape features affected  |
| Green Acres Historic District     | North of US 6 to 9th Place between Emerald Lane and Reed Street   | Late 1940s to early 1960s | Post-World War II residential subdivision              | Officially Eligible Historic District, Criteria A and C for association with the development of Lakewood and as a representative post-World War II subdivision         | Construction of noise wall near south and west boundaries of the district; permanent easement required from corner of one contributing property; beneficial effects of restoration of neighborhood roads and reduction in traffic noise |

5.6.2 DIRECT USES

Of the 12 interchange alternatives initially considered, only five of the alternatives were determined to be feasible and prudent. All five feasible and prudent alternatives would require total acquisition and demolition of four historic homes, resulting in direct use of the four historic homes. Photographs of these resources are presented in Exhibit 5-7. They are described briefly below, with additional details available in the *Historic Resources Survey* (TEC, 2008), included in Appendix A.

Property 5JF3548 (7395 W. 6th Ave. Frontage Road) is a one-story, single-family house built in 1946. It is eligible for listing in the National Register of Historic Places (NRHP) under Criterion C for its representative English Norman Cottage architecture.

Property 5JF3549 (7423 W. 6th Ave. Frontage Road) is a one-story, single-family residence built in 1939. It is eligible for listing in the NRHP under Criterion C because it is representative of the Mediterranean Revival architectural style.

Property 5JF4542 (7433 W. 6th Ave. Frontage Road) is a one-story, single-family house built in 1940. It is eligible for listing in the NRHP under Criterion C because it is representative of the Minimal Traditional architectural style.

Property 5JF4536 (700 Wadsworth Blvd.) is a one-story residence that has been converted to commercial use. It was constructed in 1947 and is eligible for listing in the NRHP under Criterion C

because it is a good example of a late 1940s residence that blends the Ranch and Usonian architectural styles.

EXHIBIT 5-7: SECTION 4(f) HISTORIC PROPERTIES WITH DIRECT USE



5JF3548



5JF3549



5JF4542



5JF4536

As summarized in Exhibit 5-8, all feasible and prudent interchange design concepts require use of these four historic properties, which are located in the northeast quadrant of the US 6/Wadsworth interchange. The use is the same for all four properties because they share two primary features: the need for a longer deceleration lane for the westbound off-ramp on US 6 and the need for an improved frontage road connection to Wadsworth in the northeast quadrant of the interchange.

EXHIBIT 5-8: SUMMARY OF DIRECT USES OF SECTION 4(f) HISTORIC RESOURCES

| Historic Property | No Build <sup>1</sup> | Tight Diamond with Loop                      | Traditional Diamond                          | Tight Diamond                                | SPUI   | Partial Cloverleaf                           | Relative Net Harm |
|-------------------|-----------------------|--|--|--|--|--|-------------------|
| 5JF3548           | No direct use         | Total acquisition and demolition of building | Equal             |
| 5JF3549           | No direct use         | Total acquisition and demolition of building | Equal             |
| 5JF4542           | No direct use         | Total acquisition and demolition of building | Equal             |
| 5JF4536           | No direct use         | Total acquisition and demolition of building | Equal             |

Notes: <sup>1</sup> No Build Alternative is not feasible and prudent but is analyzed for comparison with the build alternatives.

### 5.6.3 LEAST HARM ANALYSIS

The Section 4(f) regulation states that, if there is no feasible and prudent alternative that avoids use of Section 4(f) properties, FHWA “may approve only the alternative that causes the least overall harm in light of the statute’s preservation purpose.” In determining the alternative that causes the overall least harm, the following factors must be balanced (23 CFR 774.3):

- i) The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property);
- ii) The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
- iii) The relative significance of each Section 4(f) property;
- iv) The views of the official(s) with jurisdiction over each Section 4(f) property;
- v) The degree to which each alternative meets the purpose and need for the project;
- vi) After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
- vii) Substantial differences in costs among the alternatives.

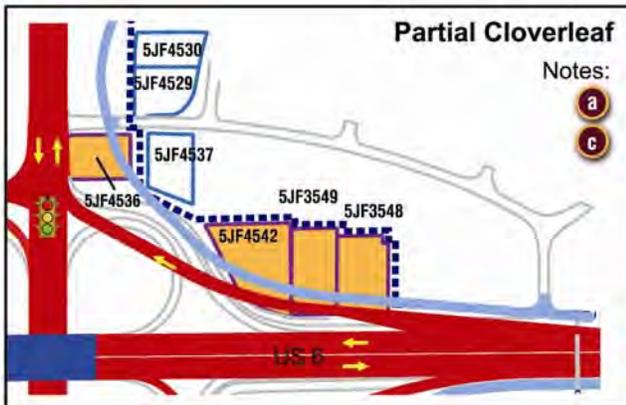
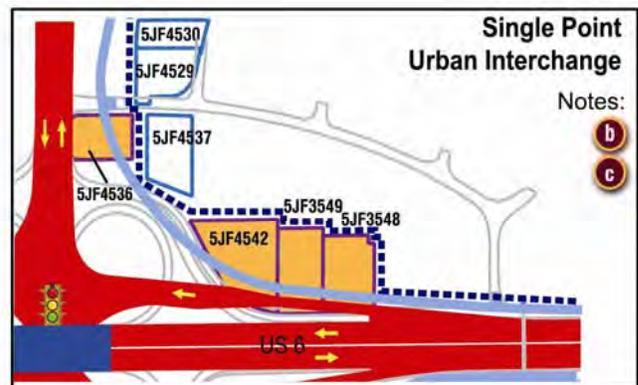
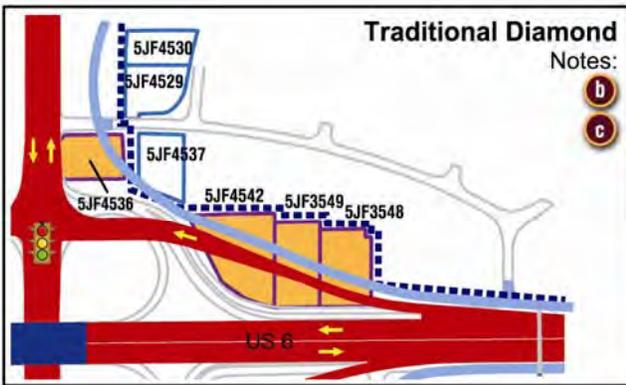
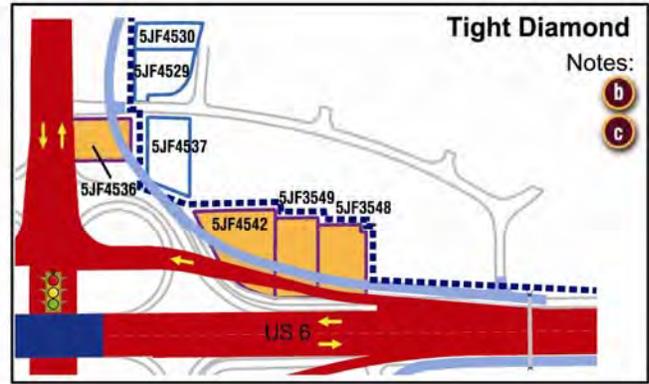
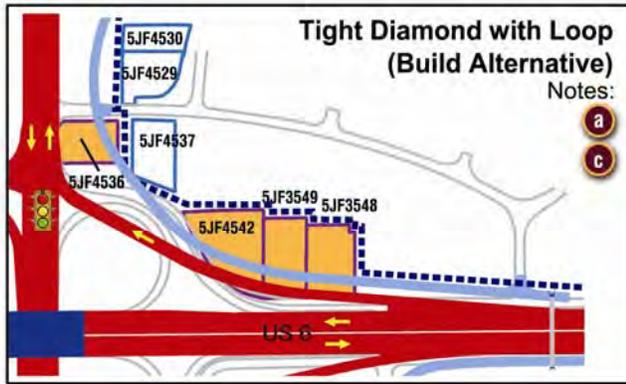
Exhibit 5-8 summarizes the uses associated with the feasible and prudent alternatives. Each requires total acquisition and demolition of the same four historic properties.

As illustrated in Exhibit 5-9, the off-ramp design requires acquisition of the three historic properties currently located on the frontage road (5JF3548, 5JF3549, and 5JF4542) under each of the five options considered. The traditional diamond has the greatest encroachment into the historic properties because it shifts the ramp intersection with Wadsworth farther north. Despite slight differences in the design footprints, all alternatives require relocation of the primary residence. The tight diamond and single-point urban interchange (SPUI) alternatives intersect Wadsworth closer to US 6 but require a signal at Wadsworth and, therefore, need a wider, multi-lane intersection for vehicle storage on the ramp. The partial cloverleaf and tight diamond with loop alternatives require only a single-lane intersection with Wadsworth but intersect Wadsworth farther north.

Site 5JF4536 (at the intersection of the frontage road and Wadsworth) would need to be acquired to widen Wadsworth and add an auxiliary lane for merging, which are features common to all of the alternatives.

Because the direct use is similar, many of the factors for least harm do not apply to the project (that is, factors i through iv). The Tight Diamond with Loop is determined to be the least harm alternative based on factors v, vi, and vii. It best meets the project’s purpose and need, does not result in significant adverse impacts to other resources not protected by Section 4(f), and is not substantially more expensive than the other alternatives.

EXHIBIT 5-9: LEAST HARM ANALYSIS



LEGEND

|                         |                                    |
|-------------------------|------------------------------------|
| New Structure           | Contributing to Historic District  |
| Existing Structure/Road | Individually Eligible for the NRHP |
| Interchange             | Total Acquisition                  |
| New Frontage Road       | Historic District Boundary         |
| New Traffic Signal      |                                    |

- a** Left turns for southbound traffic are handled through the loop ramp, and the auxiliary lane allows free-flow right turns for northbound traffic. The free-flow turn requires only a single lane to the intersection, resulting in a narrower footprint in the vicinity of historic properties.
- b** Multi-lane intersection required for vehicle queuing at Wadsworth traffic signal has larger footprint and encroaches farther into Section 4(f) properties. Need for wider intersection (more lanes) and proper intersection geometry (perpendicular rather than skewed) pushes frontage road through properties.
- c** Widening of Wadsworth to add northbound auxiliary merging lane for off-ramp requires acquisition of 5JF4536 regardless of frontage road configuration.

## 5.6.4 MEASURES TO MINIMIZE HARM

Before approving an action requiring use of any Section 4(f) property, FHWA is required to “include all possible planning to minimize harm” in that action. According to 23 CFR 774.17, “all possible planning means that all reasonable measures identified in the Section 4(f) evaluation to minimize harm or mitigate for adverse impacts and effects must be included in the project.” For historic sites, “all possible planning to minimize harm” is often accomplished through the mitigation measures identified through the Section 106 consultation process and Memorandum of Agreement (MOA) (36 CFR 800). This is the case here.

The project team carefully considered interchange design elements of the Build Alternative to determine if impacts could be avoided, minimized, or reduced while still maintaining a design that meets safety, capacity, and multi-modal needs. As illustrated in Exhibit 5-10, the following design elements (presented counter-clockwise from the top left) were evaluated:

- ◆ Inclusion of an auxiliary or add lane on Wadsworth associated with the northeast off-ramp.
- ◆ Radius of the loop ramp;
- ◆ Distance of separation between the off-ramp and frontage road and of the off-ramp and highway;
- ◆ Location of the gore area (the area needed for cars to recover if they miss the exit) for the westbound US 6 off-ramp; and
- ◆ Location of the taper area (speed-change transition area where pavement width increases or decreases as cars enter or exit a traffic stream) for the westbound US 6 off-ramp.

As described in Exhibit 5-10, none of these design elements could be modified enough to avoid impacts to historic properties without compromising the purpose and need for the project.

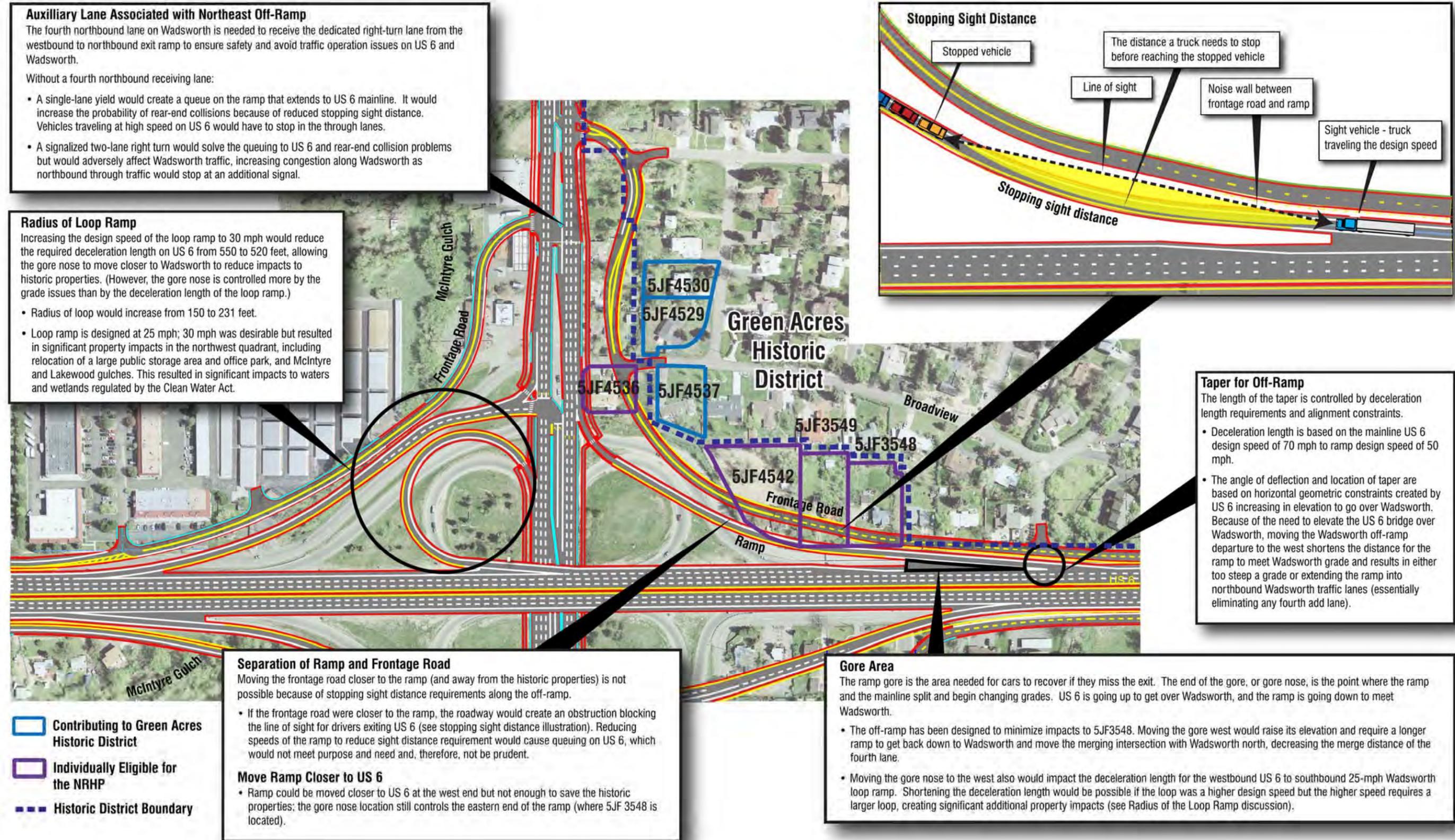
In addition to modifying design elements, the project team evaluated moving the houses at historic properties 5JF3548, 5JF3549, and 5JF4542 farther back on their existing lots and maintaining the properties as residential uses rather than demolishing the buildings. After evaluating this option, CDOT determined that moving the houses is not a practicable avoidance or minimization measure. Moving the properties would diminish the historic integrity of the resources to the point that they would no longer be eligible for listing in the NRHP (and thus, the properties would no longer qualify for Section 4(f) protection) and, therefore, would not minimize harm to these properties.

While measures to avoid, minimize, or reduce impacts to the four historic properties could not be incorporated into the project, compensatory mitigation measures for demolishing the properties have been included in an MOA among CDOT, FHWA, Colorado SHPO, and Lakewood. The MOA was prepared in accordance with the Section 106 consultation process. Mitigation measures include placement of a low-profile interpretive sign on the bike path within the project area and development of an educational website in coordination with Lakewood. The final MOA is included in Appendix C to the FONSI.

## 5.7 SECTION 4(F) FINDING

Based upon the above considerations, there is no feasible and prudent alternative to the use of four Section 4(f) historic properties (5JF3548, 5JF3549, 5JF4542, and 5JF3536), and the proposed action includes all possible planning to minimize harm to these properties resulting from such use.

EXHIBIT 5-10: DESIGN FEATURES OF THE TIGHT DIAMOND WITH LOOP INTERCHANGE AND CONSIDERATION OF IMPACTS TO SECTION 4(f) RESOURCES



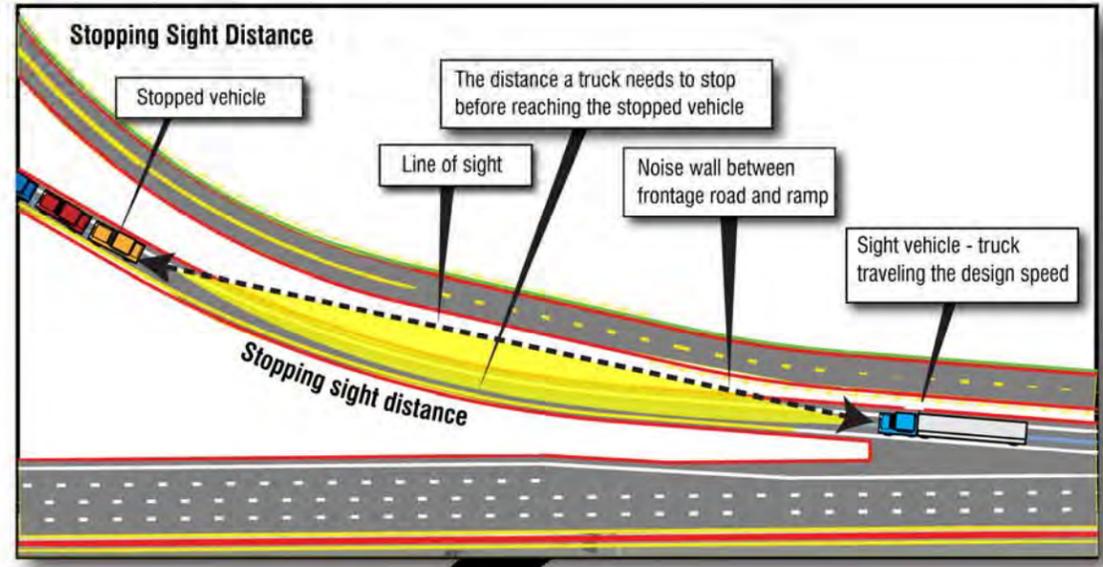
**Auxiliary Lane Associated with Northeast Off-Ramp**  
 The fourth northbound lane on Wadsworth is needed to receive the dedicated right-turn lane from the westbound to northbound exit ramp to ensure safety and avoid traffic operation issues on US 6 and Wadsworth.

Without a fourth northbound receiving lane:

- A single-lane yield would create a queue on the ramp that extends to US 6 mainline. It would increase the probability of rear-end collisions because of reduced stopping sight distance. Vehicles traveling at high speed on US 6 would have to stop in the through lanes.
- A signalized two-lane right turn would solve the queuing to US 6 and rear-end collision problems but would adversely affect Wadsworth traffic, increasing congestion along Wadsworth as northbound through traffic would stop at an additional signal.

**Radius of Loop Ramp**  
 Increasing the design speed of the loop ramp to 30 mph would reduce the required deceleration length on US 6 from 550 to 520 feet, allowing the gore nose to move closer to Wadsworth to reduce impacts to historic properties. (However, the gore nose is controlled more by the grade issues than by the deceleration length of the loop ramp.)

- Radius of loop would increase from 150 to 231 feet.
- Loop ramp is designed at 25 mph; 30 mph was desirable but resulted in significant property impacts in the northwest quadrant, including relocation of a large public storage area and office park, and McIntyre and Lakewood gulches. This resulted in significant impacts to waters and wetlands regulated by the Clean Water Act.



**Taper for Off-Ramp**  
 The length of the taper is controlled by deceleration length requirements and alignment constraints.

- Deceleration length is based on the mainline US 6 design speed of 70 mph to ramp design speed of 50 mph.
- The angle of deflection and location of taper are based on horizontal geometric constraints created by US 6 increasing in elevation to go over Wadsworth. Because of the need to elevate the US 6 bridge over Wadsworth, moving the Wadsworth off-ramp departure to the west shortens the distance for the ramp to meet Wadsworth grade and results in either too steep a grade or extending the ramp into northbound Wadsworth traffic lanes (essentially eliminating any fourth add lane).

**Separation of Ramp and Frontage Road**  
 Moving the frontage road closer to the ramp (and away from the historic properties) is not possible because of stopping sight distance requirements along the off-ramp.

- If the frontage road were closer to the ramp, the roadway would create an obstruction blocking the line of sight for drivers exiting US 6 (see stopping sight distance illustration). Reducing speeds of the ramp to reduce sight distance requirement would cause queuing on US 6, which would not meet purpose and need and, therefore, not be prudent.

**Move Ramp Closer to US 6**

- Ramp could be moved closer to US 6 at the west end but not enough to save the historic properties; the gore nose location still controls the eastern end of the ramp (where 5JF 3548 is located).

**Gore Area**  
 The ramp gore is the area needed for cars to recover if they miss the exit. The end of the gore, or gore nose, is the point where the ramp and the mainline split and begin changing grades. US 6 is going up to get over Wadsworth, and the ramp is going down to meet Wadsworth.

- The off-ramp has been designed to minimize impacts to 5JF3548. Moving the gore west would raise its elevation and require a longer ramp to get back down to Wadsworth and move the merging intersection with Wadsworth north, decreasing the merge distance of the fourth lane.
- Moving the gore nose to the west also would impact the deceleration length for the westbound US 6 to southbound 25-mph Wadsworth loop ramp. Shortening the deceleration length would be possible if the loop was a higher design speed but the higher speed requires a larger loop, creating significant additional property impacts (see Radius of the Loop Ramp discussion).

- Contributing to Green Acres Historic District
- Individually Eligible for the NRHP
- Historic District Boundary





## CHAPTER 6 References

- 1 ASTM International, 2007. *Standard D1557-07, Test*  
2 *Method for Laboratory Compaction Characteristics of*  
3 *Soil Using Modified Effort.*
- 4 CDOT, 2002. *Noise Analysis and Abatement*  
5 *Guidelines.* Denver, Colorado. December.
- 6 CDOT, 2005. *Region 6 Lane Closure Strategy (A*  
7 *Congestion Management Initiative).* Jointly prepared by  
8 Felsburg Holt & Ullevig and CDOT Region 6 Traffic  
9 and Safety Section. July.
- 10 CDOT, 2005. *Standard Specifications for Road and*  
11 *Bridge Construction (2005).* Denver, Colorado.
- 12 CDOT, 2008. *National Environmental Policy Act*  
13 *(NEPA) Manual.* Version 2. Denver, Colorado.  
14 December.
- 15 CDOT, 2009. *US 6 / Wadsworth Environmental*  
16 *Assessment and Draft Section 4(f) Evaluation.* Denver,  
17 Colorado. June.
- 18 CH2M HILL, 2008a. *Alternatives Development and*  
19 *Screening Technical Memorandum.* CDOT Project  
20 STU #0062-019 (15215), CH2M HILL Project No.  
21 358660. Denver, Colorado. August.
- 22 CH2M HILL et al., 2008b. *Determination of Effects to*  
23 *Historic Properties.* CDOT Project STU #0062-019  
24 (15215), CH2M HILL Project No. 358660. Prepared in  
25 conjunction with TEC, Inc. Denver, Colorado.  
26 December.
- 27 CH2M HILL, 2009a. *Alternatives to Avoid Section 4(f)*  
28 *Resources Technical Memorandum.* CDOT Project  
29 STU #0062-019 (15215), CH2M HILL Project No.  
30 358660. Denver, Colorado. March 27.
- 31 CH2M HILL, 2009b. *Summary Memorandum: Planned*  
32 *Two Creeks Park and Section 4(f) Compliance.* CDOT  
33 Project STU #0062-019 (15215), CH2M HILL Project  
34 No. 358660. Denver, Colorado. February.
- 35 CH2M HILL, 2009c. *Air Quality Technical*  
36 *Memorandum.* CDOT Project STU #0062-019 (15215),  
37 CH2M HILL Project No. 358660. Denver, Colorado.  
38 February.
- 39 Denver Regional Council of Governments (DRCOG),  
40 2007. *2035 Metro Vision Regional Transportation Plan.*  
41 *Draft.* Denver, Colorado. October 16.
- 42 Federal Highway Administration (FHWA), 2005a.  
43 *Guidance for Determining De Minimis Impacts to*  
44 *Section 4(f) Resources.* Memorandum. Washington,  
45 D.C. December 13.
- 46 FHWA, 2000. *Highway Noise Barrier Design*  
47 *Handbook.* Washington, DC. August.
- 48 Hankard Environmental, 2008. *Noise Technical*  
49 *Memorandum.* CDOT Project STU #0062-019 (15215),  
50 CH2M HILL Project No. 358660. Prepared for  
51 CH2M HILL. Denver, Colorado. November.
- 52 TEC, Inc. (TEC), 2008. *Historic Resources Survey:*  
53 *US 6 and Wadsworth Boulevard, Lakewood, Colorado.*  
54 *Final.* Prepared for CH2M HILL in association with the  
55 Colorado Department of Transportation, Region 6.  
56 Denver, Colorado. October.
- 57 Wiss, John F. ASCE. "Construction Vibrations: State of  
58 the Art," *Journal of the Geotechnical Engineering*  
59 *Division.* February 1981:167-178.



Appendix A  
Presented on CD only.



APPENDIX B: MITIGATION AND MONITORING COMMITMENTS

| Resource              | Mitigation and Monitoring Commitments   | Where to Include in BID Package | Comments/Status <sup>1</sup> |
|-----------------------|---|---------------------------------|------------------------------|
| Air Quality           | <ul style="list-style-type: none"> <li>Contractors will be required to reduce fugitive dust emissions during construction by implementing best management practices (BMPs), such as spraying exposed soils, covering trucks when transporting materials, minimizing mud tracking by vehicles, controlling vehicle speeds on construction access roads, and stabilizing construction entrances per CDOT M-208-1 requirements.</li> </ul> | Specification                   |                              |
|                       | <ul style="list-style-type: none"> <li>Contractors will be required to comply with BMPs to reduce air emissions from construction vehicles, such as reducing idling time of equipment and vehicles and using newer construction equipment or equipment with add-on emission controls.</li> </ul>  | Specification                   |                              |
|                       | <ul style="list-style-type: none"> <li>Obtain an Air Pollution Emission Notice (APEN) from CDPHE Air Pollution Control Division</li> </ul>  | Permit                          |                              |
|                       | <ul style="list-style-type: none"> <li>Contractors will be required to follow <i>CDOT's Standard Specifications for Road and Bridge Construction</i>.</li> </ul>  | Specification                   |                              |
| Archaeology           | <ul style="list-style-type: none"> <li>In the unlikely event that cultural deposits are discovered during construction, CDOT would follow its standard practice of ceasing work, consulting with the CDOT archaeologist, and evaluating materials in consultation with the State Historic Preservation Office (SHPO) to determine if mitigation is required.</li> </ul>   | Specification                   |                              |
| Cumulative Impacts    | <ul style="list-style-type: none"> <li>No mitigation necessary.</li> </ul>  | NA                              |                              |
| Energy                | <ul style="list-style-type: none"> <li>Measures to reduce energy consumption will include limiting the idling of construction equipment, locating construction staging areas close to the work site, minimizing motorist delays and vehicle idling, and coordinating general maintenance activities during construction to avoid excessive queuing and construction delays during peak hours.</li> </ul>                                | Plan/Specification              |                              |
| Environmental Justice | <ul style="list-style-type: none"> <li>No mitigation measures are necessary.</li> </ul>   | NA                              |                              |
| Farmlands             | <ul style="list-style-type: none"> <li>No mitigation measures are necessary.</li> </ul>   | NA                              |                              |

<sup>1</sup> To be updated as project is implemented.

APPENDIX B: MITIGATION AND MONITORING COMMITMENTS

| Resource                       | Mitigation and Monitoring Commitments   | Where to Include in BID Package | Comments/Status <sup>1</sup> |
|--------------------------------|---|---------------------------------|------------------------------|
| Fish and Wildlife              | <ul style="list-style-type: none"> <li>Obtain Senate Bill 40 Permit from CDOW.</li> </ul>   | Permit/Plan                     |                              |
|                                | <ul style="list-style-type: none"> <li>Conduct surveys for bird nests before April 1 and remove any unoccupied nests in advance of construction.</li> </ul>   | Specification                   |                              |
|                                | <ul style="list-style-type: none"> <li>Trees with active nests will not be removed between April 1 and August 31 to avoid impacts to migratory birds.</li> </ul>  | Permit                          |                              |
| Floodplains                    | <ul style="list-style-type: none"> <li>Sediment traps, check dams, sediment basins, or other best management practices (BMPs) will be installed to control sedimentation during construction of drainage improvements in gulches. Specific BMPs will be determined during final design.</li> </ul>  | Plan/Specification              |                              |
|                                | <ul style="list-style-type: none"> <li>During final design, CDOT will coordinate with the appropriate local and federal agencies to conduct hydraulic analysis and obtain necessary floodplain permits.</li> </ul>  | Plan/Permit                     |                              |
| Geological Resources and Soils | <ul style="list-style-type: none"> <li>Noise walls will be constructed according to FHWA's Highway Noise Barrier Design Handbook. This handbook recommends that construction of noise walls follow the requirements of American Society of Testing and Materials (ASTM) Standard D1557-91 (2007), "Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort," to ensure that soils are properly compacted and reduce the potential for settling near adjacent properties.</li> </ul>                                       | Plan/Specification              |                              |
| Hazardous Materials            | <ul style="list-style-type: none"> <li>Protective measures will be taken before, during, and after construction to minimize the risk of encountering petroleum products and petroleum-contaminated soils. A full Phase I Environmental Site Assessment (ESA) according to American Society of Testing and Materials (ASTM) 2005 standards will be completed prior to any total property acquisition. Phase II ESAs will be conducted to characterize, manage, and remediate contaminated properties identified as concern in Phase I ESAs.</li> </ul> | NA                              |                              |
|                                | <ul style="list-style-type: none"> <li>CDOT will follow Specification 250 from the CDOT <i>Standard Specifications for Road and Bridge Construction</i> (2005) to protect worker health and safety.</li> </ul>  | Plan                            |                              |
|                                | <ul style="list-style-type: none"> <li>A <i>Materials Handling Plan</i> will be prepared to address contaminated soil and groundwater that may be encountered as directed by the findings of Phase I assessments. The plan will be prepared according to CDOT standards.</li> </ul>   |                                 |                              |
|                                | <ul style="list-style-type: none"> <li>Painted surfaces disturbed during construction or demolition and disposed of separately will be tested, handled, and disposed of properly.</li> </ul>  | Plan/Specification              |                              |
|                                | <ul style="list-style-type: none"> <li>An asbestos survey will be conducted and a demolition permit will be obtained prior to the demolition of bridges or buildings. Any asbestos-containing material that is friable or will be friable during construction and demolition activities will be removed prior to demolition by a licensed abatement contractor.</li> </ul>  | Plan/Specification/Permit       |                              |

APPENDIX B: MITIGATION AND MONITORING COMMITMENTS

| Resource            | Mitigation and Monitoring Commitments  | Where to Include in BID Package                  | Comments/Status <sup>1</sup> |
|---------------------|--|--|------------------------------|
| Historic Properties | <ul style="list-style-type: none"> <li>A Memorandum of Agreement (MOA) has been negotiated among CDOT, FHWA, the Colorado SHPO, and Lakewood. CDOT will complete all mitigation stipulations prior to construction of the Build Alternative.</li> </ul>  | NA (Sign, if applicable, to be included in Plan) |                              |
| Land Use            | <ul style="list-style-type: none"> <li>Final design and right-of-way negotiations by CDOT will coordinate with the City of Lakewood to address compatibility with land use plans and the allowance of non-conforming properties that may result from right-of-way acquisition.</li> <li>CDOT will work with Lakewood during the right-of-way process to determine if variance for zoning nonconformance is appropriate in accordance with the revision to Article 17-16-9 of Lakewood's Municipal Code adopted by City Council July 13, 2009 (O-2009-32).</li> </ul>   | NA   |                              |
| Noise               | <ul style="list-style-type: none"> <li>New noise walls will be constructed between the frontage roads and US 6 west of Wadsworth to Garrison Street. Preliminary design and noise modeling indicates that 15-foot walls are required for properties adjacent to US 6, 8-foot barriers are appropriate along the reconfigured frontage road in the NE quadrant (Green Acres neighborhood), and 4-foot safety barriers should be included along the US 6 bridge. Actual heights and configuration of noise barriers or equivalent will be confirmed in final design to achieve noise reductions modeled in the conceptual design.</li> </ul> | Plan   |                              |
|                     | <ul style="list-style-type: none"> <li>Existing walls east of Wadsworth will be reconstructed as necessary.</li> </ul>   | Plan   |                              |
|                     | <ul style="list-style-type: none"> <li>Noise analysis will be conducted during final design to confirm noise wall heights and alignments.</li> </ul>   | NA   |                              |
|                     | <ul style="list-style-type: none"> <li>The use of absorptive materials for noise walls will be considered during final design of the project.</li> </ul>   | NA   |                              |
|                     | <ul style="list-style-type: none"> <li>During final design CDOT will consider adjusting the noise wall configuration to minimize impacts to the commercial property between Allison Street and Ammons Street so that the noise wall is located on the north side of the frontage road and wraps around the west side of the adjacent commercial property. With this configuration, the noise wall along the highway would begin just east of Ammons Street and continue west as currently described in the EA.</li> </ul>  | NA   |                              |
|                     | <ul style="list-style-type: none"> <li>CDOT will consider constructing permanent noise walls early in the overall construction schedule if feasible, to provide noise mitigation for temporary construction noise, as well as the long-term operational noise from US 6 traffic.</li> </ul>  | NA   |                              |
|                     | <ul style="list-style-type: none"> <li>During final design of the project, the City of Lakewood will have the opportunity to provide input on design elements related to noise mitigation, including grading, landscaping, color and material of any noise walls, with the goal of constructing an aesthetically pleasing and economically viable project.</li> </ul>  | Plan   |                              |

APPENDIX B: MITIGATION AND MONITORING COMMITMENTS

| Resource                          | Mitigation and Monitoring Commitments   | Where to Include in BID Package | Comments/Status <sup>1</sup> |
|-----------------------------------|---|---------------------------------|------------------------------|
|                                   | <ul style="list-style-type: none"> <li>Construction noise impacts will be mitigated by limiting work to daytime hours (as described by CDOT and City of Lakewood requirements) when possible and requiring the contractor to use well-maintained equipment, including muffler systems.</li> </ul>   | Specification                   |                              |
|                                   | <ul style="list-style-type: none"> <li>Noise levels will adhere to State and local regulations, and vibration levels will adhere to industry standard thresholds for building damage.</li> </ul>  | Plan/Specification              |                              |
|                                   | <ul style="list-style-type: none"> <li>Contractors will be required to follow <i>CDOT's Standard Specifications for Road and Bridge Construction</i>.</li> </ul>  | Specification                   |                              |
| Paleontology                      | <ul style="list-style-type: none"> <li>The CDOT Staff Paleontologist will examine final plans to determine whether construction monitoring is required.</li> </ul>  | NA                              |                              |
|                                   | <ul style="list-style-type: none"> <li>Prior to construction, the CDOT Staff Paleontologist will examine the existing Denver Formation bedrock exposure that could not be examined previously because of snow cover at the time of original survey. If any scientifically significant fossil localities are discovered during that survey, CDOT will perform mitigation of construction impacts by systematic salvage of a statistically representative sample of the fossils found there, either prior to or during construction.</li> </ul> | N/A                             |                              |
|                                   | <ul style="list-style-type: none"> <li>If sub-surface bones or other potential fossils are found during construction, work will cease. The CDOT Staff Paleontologist will assess the significance and make further recommendations.</li> </ul>  | Specification                   |                              |
| Pedestrian and Bicycle Facilities | <ul style="list-style-type: none"> <li>Intelligent Transportation Systems (ITS) options, such as signing, lighting, and pavement treatments, will be considered in final design to improve safety of pedestrian and bicycle crossings of US 6 ramps on east side of Wadsworth.</li> </ul>   | Plan                            |                              |
|                                   | <ul style="list-style-type: none"> <li>A grade-separated pedestrian/bicycle crossing to remove conflicts between bicycles and pedestrians at the loop ramp on the west side of Wadsworth will be examined further in final design.</li> </ul>   | Plan                            |                              |
|                                   | <ul style="list-style-type: none"> <li>Signage and designated pedestrian and bicycle routes will be provided during construction.</li> </ul>  | Specification                   |                              |
|                                   | <ul style="list-style-type: none"> <li>Sidewalks will be designed to meet Americans with Disabilities Act (ADA) requirements.</li> </ul>  | Specification                   |                              |
| Right-of-Way and Relocations      | <ul style="list-style-type: none"> <li>All acquisitions and relocations will comply fully with federal and state requirements, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.</li> <li>CDOT will work with Lakewood regarding potential property nonconformance that may result from the right-of-way acquisition process in accordance with revised Lakewood Ordinance O-2009-32.</li> </ul>  | NA                              |                              |

APPENDIX B: MITIGATION AND MONITORING COMMITMENTS

| Resource                        | Mitigation and Monitoring Commitments  | Where to Include in BID Package | Comments/Status <sup>1</sup> |
|---------------------------------|--|---------------------------------|------------------------------|
| Section 4(f) and 6(f) Resources | <ul style="list-style-type: none"> <li>No mitigation necessary for Section 6(f) resources (none present)</li> <li>See Historic Resources for Section 4(f) mitigation</li> <li>No mitigation necessary for non-historic Section 4(f) resources</li> </ul>   | NA                              |                              |
| Socioeconomics                  | <ul style="list-style-type: none"> <li>CDOT will coordinate with emergency service providers to identify possible locations for emergency access breaks in the medians.</li> </ul>   | Plan                            |                              |
|                                 | <ul style="list-style-type: none"> <li>CDOT will provide advance notice to emergency service providers, local schools, residents, and local businesses of upcoming construction activities that are likely to result in traffic disruption. This will be accomplished through direct contact, radio and public announcements, flyers, newspaper notices, onsite signage, and the use of the Lakewood and CDOT websites.</li> </ul> | Specification                   |                              |
|                                 | <ul style="list-style-type: none"> <li>CDOT will provide for all-weather access and detours to minimize disruptions for businesses during construction.</li> </ul>   | Specification                   |                              |
|                                 | <ul style="list-style-type: none"> <li>Lane closures during construction will comply with CDOT's Region 6 Lane Closure Strategy (CDOT, 2005); if needed, variances will be requested.</li> </ul>   | Specification                   |                              |
|                                 | <ul style="list-style-type: none"> <li>CDOT will develop a traffic control plan and make that plan available to Lakewood and the CDOT public relations office prior to construction, who will relay additional notifications for lane closures.</li> </ul>   | Plan                            |                              |
|                                 | <ul style="list-style-type: none"> <li>Contractors will be required to follow <i>CDOT's Standard Specifications for Road and Bridge Construction</i>.</li> </ul>   | Specification                   |                              |
|                                 | <ul style="list-style-type: none"> <li>A construction newsletter will be prepared and distributed as needed to keep businesses, residences, and travelers up-to-date regarding construction activities, progress, detours, and lane closures.</li> </ul>   | NA                              |                              |
| Threatened/Endangered Species   | <ul style="list-style-type: none"> <li>No mitigation measures are necessary.</li> </ul>  | NA                              |                              |
| Transportation                  | <ul style="list-style-type: none"> <li>Continue to coordinate with the Regional Transportation District (RTD) and City of Lakewood regarding development plans at and around the 13th Avenue LRT station.</li> </ul>   | NA                              |                              |
|                                 | <ul style="list-style-type: none"> <li>Coordinate with RTD and City of Lakewood on the placement and aesthetics of bus stops and shelters. Bus shelters would be provided by others.</li> </ul>  | Plan                            |                              |
|                                 | <ul style="list-style-type: none"> <li>Coordinate with RTD to ensure access to bus stops during construction.</li> </ul>   | Specification                   |                              |
|                                 | <ul style="list-style-type: none"> <li>Comply with CDOT Lane Closure Strategy for any lane closures during construction. Provide advance notice for extended lane closures, and identify detours with adequate signing to minimize out-of-direction travel.</li> </ul>   | Scope of Work                   |                              |

APPENDIX B: MITIGATION AND MONITORING COMMITMENTS

| Resource                     | Mitigation and Monitoring Commitments  | Where to Include in BID Package | Comments/Status <sup>1</sup> |
|------------------------------|--|---------------------------------|------------------------------|
| Utilities                    | <ul style="list-style-type: none"> <li>Utility impacts will be mitigated through close coordination with CDOT, City of Lakewood, and utility providers.</li> </ul>   | NA                              |                              |
|                              | <ul style="list-style-type: none"> <li>Relocations may be avoided by placing encasement for protection over buried utilities or through design modifications to avoid major utility impacts, such as the use of retaining walls, roadway profile variations, and/or horizontal alignment shifts. For those situations where impacts cannot be avoided, utilities will be relocated.</li> </ul> | Plan                            |                              |
| Vegetation and Noxious Weeds | <ul style="list-style-type: none"> <li>Vegetation removed during construction will be re-established as soon as feasible and reseeded with native vegetation.</li> </ul>   | Specification                   |                              |
|                              | <ul style="list-style-type: none"> <li>Establishment of noxious weeds will be controlled by BMPs such as managing open soil surfaces and topsoil that is stockpiled for reuse.</li> </ul>  | Specification                   |                              |
|                              | <ul style="list-style-type: none"> <li>Prior to construction the impact area will be surveyed for presence of noxious weeds.</li> </ul>  | Specification                   |                              |
|                              | <ul style="list-style-type: none"> <li>An Integrated Noxious Weed Management Plan may be developed and implemented to prevent the spread of noxious weeds during construction.</li> </ul>  | Specification                   |                              |
| Visual/Aesthetics            | <ul style="list-style-type: none"> <li>CDOT will coordinate with Lakewood with regard to the aesthetics of the Build Alternative.</li> </ul>   | NA                              |                              |
|                              | <ul style="list-style-type: none"> <li>City of Lakewood will install, irrigate, and maintain any landscaping in medians or other areas. Landscaping will comply with clear zone requirements.</li> </ul>   | NA                              |                              |
|                              | <ul style="list-style-type: none"> <li>CDOT will continue to maintain any non-irrigated areas in the interchange area.</li> </ul>  | NA                              |                              |
| Water Resources/Quality      | <ul style="list-style-type: none"> <li>Permanent water quality treatment features will be included in the final design to collect and treat roadway runoff by filtering pollutants before discharging stormwater into area waterways.</li> </ul>   | Plan                            |                              |
|                              | <ul style="list-style-type: none"> <li>A Colorado Discharge Permit System (CDPS) - Stormwater Construction Permit (SCP) will be required for this project. A Stormwater Management Plan will be developed in accordance with the conditions of the SCP.</li> </ul>   | Specification/Plan              |                              |
|                              | <ul style="list-style-type: none"> <li>CDOT will follow the Water Quality Consent Decree requirements, which was issued to CDOT by the CDPHE in January 2009.</li> </ul>   |                                 |                              |
|                              | <ul style="list-style-type: none"> <li>Obtain the appropriate CDPS general permit for management of groundwater from CDPHE Water Quality Control Division.</li> </ul>  | Permit                          |                              |
|                              | <ul style="list-style-type: none"> <li>Erosion and sediment control BMPs will be implemented in accordance with CDOT Standard Specifications for Road and Bridge Construction and the revised provisions for water quality outlined in the Consent Order with CDPHE and incorporated into Section 107.25 (Water Quality) and Section 208 (Erosion Control).</li> </ul>                         | Specification/Plan              |                              |

APPENDIX B: MITIGATION AND MONITORING COMMITMENTS

| Resource                      | Mitigation and Monitoring Commitments   | Where to Include in BID Package | Comments/Status <sup>1</sup> |
|-------------------------------|---|---------------------------------|------------------------------|
|                               | <ul style="list-style-type: none"> <li>Contractors will be required to follow <i>CDOT's Standard Specifications for Road and Bridge Construction</i>.</li> </ul>  | Specification                   |                              |
| Wetlands and Waters of the US | <ul style="list-style-type: none"> <li>Obtain a Section 404 permit for impacts to wetlands and WUS. The U.S. Army Corps of Engineers (USACE) has confirmed informally that a Nationwide Permit (14 and/or 27) would be applicable.</li> </ul> | Plan/Permit                     |                              |
|                               | <ul style="list-style-type: none"> <li>Complete a wetland finding during final design, which will include a final assessment of impacts and a detailed plan for mitigation.</li> </ul>  | Plan/Specification              |                              |
|                               | <ul style="list-style-type: none"> <li>Unavoidable impacts to wetlands resulting from the Build Alternative will be mitigated on a one-for-one basis in accordance with CDOT policy, resulting in no net loss of wetlands.</li> </ul>         | Permit                          |                              |



## INDEX OF CORRESPONDENCE

Email from Jill Coffman, July 13, 2009

Letter from Pat Banker, July 14, 2009

Public Hearing Written Comment Form, July 22, 2009

Public Hearing Verbal Comments Recorded by Court Reporter, Re: Michael Seal, David Green, George Sherman, Brian Lamke, Kim Frazer, Randy Nichols, Celia Greenman, Glennis Flemming, July 22, 2009

Public Hearing Written Comment Form, July 22, 2009

Public Hearing Written Comment Form, July 22, 2009

Email from Susan Hurst, Re: Environmental Impact Statement, August 1, 2009

Email from Susan Hurst, Response from David Singer/CDOT, August 1, 2009

Email from Susan Hurst, Re: Response from David Singer/CDOT, August 5, 2009

Weston K. Mauz Public Hearing Written Comment, August 12, 2009

J Gurly Public Hearing Written Comment; July 22, 2009

EIN Public Comments, August 18, 2009

Letter from Celia Greenman, Re: Noise Tech Memo, August 23, 2009

Celia Greenman Comment via Project Website, Re: Noise Tech Memo, August 25, 2009

City of Lakewood Comments, August 24, 2009

Michael Villano Comment via Project Website, August 25, 2009

Email from Olympia Investments, LTD, August 26, 2009

Philip Schmidt Comment via Project Website, August 26, 2009

Letter from Olen C. Crockett, August 28, 2009

Letter from United States Department of the Interior, Re: Draft EA, September 14, 2009

Email from Rebecca Clark/Lakewood Reinvestment Authority, August 21, 2009

Letter from Federal Highway Administration, Re: MOA, September 2, 2009

Letter from Advisory Council on Historic Preservation, Re: MOA Filing, September 17, 2009

Letter from City of Lakewood, Re: Letter of Concurrence, October 29, 2009

Letter from APCD, Re: Letter of Concurrence, February 24, 2010



**Roberts, Colleen/DHO**

---

**From:** jill coffman [coffman\_j@msn.com]  
**Sent:** Monday, July 13, 2009 5:36 PM  
**To:** Roberts, Colleen/DHO  
**Subject:** RE: US 6/Wadsworth Public Hearing and Environmental Assessment

I would like to complain that noise levels at wadsworth is very loud, so additional lanes do not help my cause.

Thank you

---

**From:** Colleen.Roberts@CH2M.com  
**To:** Colleen.Roberts@CH2M.com  
**Date:** Thu, 9 Jul 2009 16:26:28 -0600  
**Subject:** US 6/Wadsworth Public Hearing and Environmental Assessment

CDOT is pleased to announce the publication of the US 6/Wadsworth Environmental Assessment for public review. Please join us at the upcoming public hearing on Wednesday July 22, 2009 from 5:00 to 7:30 p.m. at the Lakewood City Council Chambers in Lakewood, Colorado. Our Summer 2009 newsletter provides more details on the Environmental Assessment, the public hearing, and ways you can provide input during the public review period.

Click on the link below to access the Summer 2009 newsletter.  
<http://www.dot.state.co.us/us6Wadsworth/Pdfs/Summer2009Newsletter.pdf>.

Thank you,  
**US 6/Wadsworth Project Team**  
Colleen Kirby Roberts, AICP  
Public Involvement Manager  
CH2M Hill  
1515 Wazee Street, Ste. 380  
Denver, CO 80202  
720-286-0914 phone

Pat Banker

patbanker1@comcast.net

Date: July 14<sup>th</sup>, 2009

1 { Thank you for this opportunity to comment. I took a look at the proposed design and my only concern is that it doesn't appear to improve the pedestrian situation. With light rail going in just a few blocks north this is an opportunity to provide safe pedestrian and bicycle access and should be looked at carefully. We live near this intersection and would like to see a pedestrian/bicycle bridge over 6th Avenue. There is no safe walking or bicycling access across 6th Avenue from Perry Street to Simms. Please consider this request in your plans.

Kind regards, Pat Banker

~~1~~

2



CF3

First Name: [REDACTED] Last Name: [REDACTED]  
 City: [REDACTED] Zip Code: [REDACTED]  
 Email Address: [REDACTED]

We welcome your comments on the US 6 and Wadsworth Environmental Assessment and Draft Section 4(f) Evaluation! Please print clearly and provide enough detail to ensure our understanding of your comments. Your comments will be considered by the Federal Highway Administration prior to making a decision about the project and will be addressed in the Decision Document (anticipated Fall 2009).

1 } Given that Lakewood has very strict signage/advertising regulations for businesses, how will business access be affected during construction? Will businesses in the area be allowed signage (directional) during construction that they would not normally be allowed? Will sections of Wadsworth be blocked off that will adversely affect business access? How will this issue be addressed?

2 }



# Public Hearing Comment Form

CF4

First Name: [REDACTED] Last Name: [REDACTED]  
 Address: [REDACTED] City: [REDACTED] Zip Code: [REDACTED]  
 Email Address: [REDACTED]

We welcome your comments on the US 6 and Wadsworth Environmental Assessment and Draft Section 4(f) Evaluation! Please print clearly and provide enough detail to ensure our understanding of your comments. Your comments will be considered by the Federal Highway Administration prior to making a decision about the project and will be addressed in the Decision Document (anticipated Fall 2009).

1 Sound walls are a blessing to the property next to them; however they create a wind tunnel effect which brings trash in large quantities to the adjacent properties. Any possibility the engineers can prevent this trash problem?

Perhaps being on the north edge of the frontage road?

Or find the trash source and enforce existing fine structure.

2 7373 W 6th Ave. Could the driveway be reconfigured to allow for solid south edge sound wall on property? Perhaps a joint driveway to the west for this and the property to the east? Then the sound wall could be totally on the north side of the two-way frontage road all the way to Crescent Lane.



CFI

First Name: [redacted] Last Name: [redacted]  
 Address: [redacted] City: [redacted] Zip Code: [redacted]  
 Email Address: \_\_\_\_\_

We welcome your comments on the US 6 and Wadsworth Environmental Assessment and Draft Section 4(f) Evaluation! Please print clearly and provide enough detail to ensure our understanding of your comments. Your comments will be considered by the Federal Highway Administration prior to making a decision about the project and will be addressed in the Decision Document (anticipated Fall 2009).

Above is my address. I am very concerned with the possible U-Turn for people turning north from 6<sup>1/2</sup> Ave to Wadsworth. I am concerned about traffic backing up and causing the possibility of rear-end collisions. Need to be very observant about traffic flow on the 9<sup>th</sup> Ave area.

# Public Hearing Comment Form

CR

First Name: [REDACTED] Last Name: [REDACTED]  
 Address: [REDACTED] City: [REDACTED] Zip Code: [REDACTED]  
 Email Address: [REDACTED]

We welcome your comments on the US 6 and Wadsworth Environmental Assessment and Draft Section 4(f) Evaluation! Please print clearly and provide enough detail to ensure our understanding of your comments. Your comments will be considered by the Federal Highway Administration prior to making a decision about the project and will be addressed in the Decision Document (anticipated Fall 2009).

- 1. { Seniors over 80 would be more willing to give up driving if circulator buses will circulate around neighborhood + to such points as to Light Rail points, Red Rocks, \_\_\_\_\_, Belmar, etc. Others would find this helpful near library (safety benefit)
- 2. { I would favor a ballot to push up date for 6th Avenue to Downtown. Especially (uninterrupted) service to Downtown.

1. Seniors over 80 would be more willing to give up driving if circulator buses will circulate around neighborhood and to such points as to Light Rail points, Red Rocks, \_\_\_\_\_, Belmar, etc. Others would find this helpful near library (safety benefit).

2. I would favor a ballot to push up date for 6th Avenue to Downtown. Especially (uninterrupted) service to Downtown.

P R O C E E D I N G S

①

MICHAEL SEAL: My name is Michael Seal and I

live at 8230 West Eighth Avenue. This is two blocks from  
 Sixth Avenue and it's a slightly higher elevation. I am  
 concerned about the construction of the new sound wall as  
 I think it might make the noise pollution at my house  
 worse. The current proposal calls for building two walls  
 out of concrete on either side of Sixth Avenue. If they  
 do this, I will receive both direct sound and the  
 reflected sound from the far wall at my house. What I am  
 suggesting is that CDOT spend approximately 3 percent  
 more money to build sound-absorbant sound walls so that  
 it will actually reduce the sound at my house and other  
 peoples' houses at this elevation. There would only be a  
 3 percent cost difference, and I think it is worth it for  
 the long term benefit of these residents.

②

DAVID GREEN: This is in regard to McIntyre

Gulch. Lakewood City was going to improve the gulch --  
 stabilize the gulch, the banks of the gulch and this was  
 to be done between Carr and Wadsworth where all the  
 property owners are losing 2 to 3 feet of property every  
 year into the gulch. The gulch is going deeper, wider.  
 What impact is working on Sixth Avenue going to have on  
 this project? All other problems on the gulch or a lot  
 of the problems have been fixed over the past year. Now

8

1 it is time for this section to be fixed, according to  
2 Lakewood. The funding should come from the Colorado  
3 water people and Lakewood. This section is probably the  
4 last section of the gulch that is eroding.

9

5 GEORGE SHERMAN: They are going to increase  
6 the size of the culvert where it goes under Wadsworth and  
7 it goes into that new Two Creeks Park north of Tenth  
8 Avenue. Where the water goes through that park, it then  
9 goes back underground into another culvert for  
10 approximately 1 to 1 1/2 blocks along Tenth Avenue.

11 Since they are increasing the culvert leading into Two  
12 Creeks Park, are they going to increase the size of the  
13 culvert that leads out? Because that is a real flood  
14 problem. Every time we have a moderate rain, the water  
15 goes over the top of that culvert along Tenth Avenue,  
16 especially where it crosses Teller.

10

17 BRIAN LAMKE: I own a building that is on  
18 Sixth Avenue at 7727 West Sixth Avenue. On the proposed  
19 site you have a noise wall that starts at the beginning  
20 of the building. It's going to block all of the signage;  
21 it's a commercial building. What I would like them to do  
22 is move that wall to the back of the building -- at least  
23 behind the building. It's supposed to be 15 feet, and  
24 it's too tall. It will block all the signage -- moving  
25 the beginning of the wall westward to the building or to

1 the back of the property. This would allow the signage  
2 to be unobstructed.

3 (11) KIM FRAZER: My concern is the noise during  
4 construction. I live on Fifth Avenue, so not far at all  
5 from where the construction will be taking place. And I  
6 imagine it will be a long construction period; one to two  
7 years, something like that. So I'm just curious if they  
8 have taken that into consideration at all. Do they have  
9 any plans to at least contain the hours or the noise  
10 levels, anything that would improve that whole situation  
11 during that time frame?

12 (The proceedings were concluded at 7:31 p.m.,  
13 on Wednesday, July 22, 2009.)  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

(12) MR. RANDY NICHOLS: My name is Randy Nichols and I'm 29 years old times three. And my primary concern is I would like to see some method for pedestrians and bicyclists to go over -- or under 6th Avenue without having to deal with the traffic. There are a couple of examples of where this has been done. One is on Kipling where the -- Clear Creek goes under Kipling -- I think it's about 38th or so -- and that works. And there's another one on I-70 -- again, about 38th or so -- that's an overpass. And I don't know how effective that is. But anyway, that may be nice to have.

There's one minor problem with underpasses. And if anybody here was here on Monday, sometimes when you

2  
1 get pretty dramatic weather -- and two years ago, I worked  
2 down in the vicinity of 11th and Decatur. And the  
3 Lakewood Gulch used to have a bike path through there.

4 About two years ago, a lady was pushing her baby through  
5 there. And we had a humongous storm, and this big surge  
6 of water came through and she lost her child. So that's  
7 the downside of underpasses.

8 It would be nice not to have to deal with the  
9 traffic to get from south -- from north of 6th Avenue  
10 south. I have a lot of friends that ride bikes. And I  
11 can tell you for sure, we don't ever use Sheridan because  
12 there's always the chance a big chunk of concrete is going  
13 to fall down on your head. And Wadsworth is a little  
14 safer, but not as convenient. That's my wish. Thank you.

15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

21     (13)     MS. CELIA GREENMAN:   Hi.   I'm Celia Greenman.  
22     I'm not quite as old as Randy.   The question I have when  
23     you were speaking about the noise impacts, you said that  
24     there had been other options considered beside the noise  
25     walls.   Could you tell me what those were?

1 MS. MANDY WHORTON: I can't -- this is just  
2 the official comments. So we can respond to that then; or  
3 if you want, I can talk to you about what those other  
4 options are. But we're not --

5 (13) MS. CELIA GREENMAN: Okay. My concern is that  
6 we live behind -- we live north of the 6th Avenue area,  
7 and we're in a -- topographically, we're a little bit  
8 higher. So we get quite a lot of the noise from 6th  
9 Avenue right there. With the noise walls, as they're  
10 proposed, we're thinking that if -- that that will just  
11 channel more noise up into that area.

12 So my question would be -- I guess -- I guess  
13 that's more a question than a comment -- would be to  
14 consider having some material that is more noise absorbent  
15 than just concrete, because that is just a noise  
16 reflector, particularly with -- when you would have the --  
17 the two walls on either side of 6th Avenue reflecting all  
18 that noise. So it could get quite loud. But I'd like to  
19 talk to you afterwards about that. Thank you.

20  
21  
22  
23  
24  
25

1

2

3

4

5

6

7

8

MS. GLENNIS FLEMMING: Can I come up without signing up?

9

10

MR. TIM EVERSOLL: You certainly may. Come up -- and again, just state name and address and --

11

12

(14) MS. GLENNIS FLEMMING: I am Glennis Flemming, and I live at 7865 West 8th Avenue. And as we were

13

14

looking to see about all the noise barriers, we were told

15

that there would be no noise barriers on the northwest

16

side of the exchange, because the homes are all too far

17

back. I would like to know what myself and my neighbors

18

could do to have somebody come and check the noise

19

decibels in our backyards. Because the overpass is quite

20

high on -- on 6th, and it throws the noise over -- even in

21

the summer, the trees don't cut the noise. And it comes

22

into our yards. And I'd like to know what we could do to

23

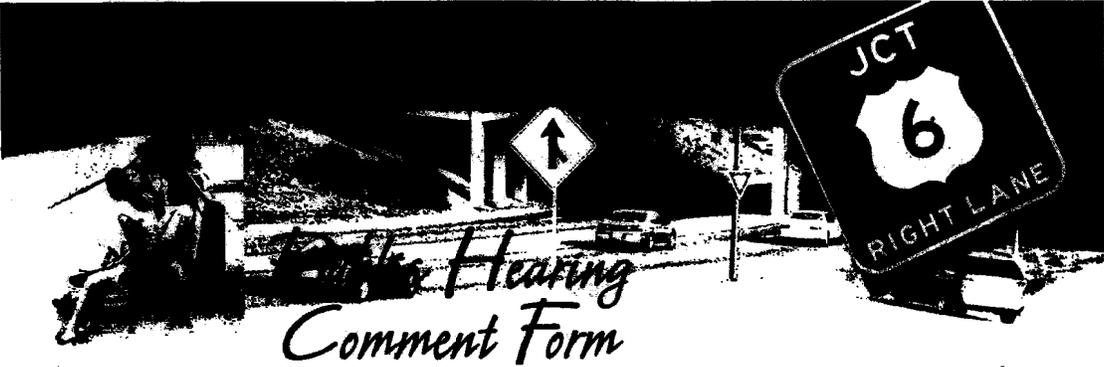
have somebody come and check it. Thank you.

24

MR. TIM EVERSOLL: Anyone else? Any other

25

comments?



First Name: [REDACTED] Last Name: [REDACTED]  
 Address: [REDACTED] City: [REDACTED] Zip Code: [REDACTED]  
 Email Address: [REDACTED]

We welcome your comments on the US 6 and Wadsworth Environmental Assessment and Draft Section 4(f) Evaluation! Please print clearly and provide enough detail to ensure our understanding of your comments. Your comments will be considered by the Federal Highway Administration prior to making a decision about the project and will be addressed in the Decision Document (anticipated Fall 2009).

- 1) The proposed roadway improvements @ Gr & Wadsworth represent the best solution to our existing traffic problems.
- 2) Specifically for the residential zone @ the N.E. quadrant, the encouragement of commercial and through traffic should be greatly diminished. To that end the new sound wall should not only reduce the noise, but will also visually define the boundaries of separation.
- 3) Once the service road is re-configured and the sound wall installed, prominent new signage will be needed to aid in the establishment of new patterns of use.



First Name: [REDACTED] Last Name: [REDACTED]  
 Address: [REDACTED] City: [REDACTED] Zip Code: [REDACTED]  
 Email Address: [REDACTED]

We welcome your comments on the US 6 and Wadsworth Environmental Assessment and Draft Section 4(f) Evaluation! Please print clearly and provide enough detail to ensure our understanding of your comments. Your comments will be considered by the Federal Highway Administration prior to making a decision about the project and will be addressed in the Decision Document (anticipated Fall 2009).

1 I AGREE THE 6<sup>th</sup> AVE. AND WADSWORTH BLVD. INTERCHANGE NEEDS TO BE UPDATED TO SAFELY HANDLE THE EVER INCREASING AMOUNT OF AUTOMOBILE TRAFFIC. BUT I HOPE THERE WILL BE AN ELEVATED SENSE ~~of~~ of importance given to the design for maximum pedestrian and bicycle safety. 2 ALTERNATE MODES OF TRANSPORTATION WILL INCREASE ON WADSWORTH BLVD. WITH THE COMPLETION OF THE RTD WADSWORTH LIGHT RAIL STATION, AND AS OUR SOCIETY AND ECONOMY CHANGES.

3 THESE TWO VERY LARGE PUBLIC TRANSPORTATION PROJECTS BEING DEVELOPED WITHIN CLOSE PROXIMITY TO EACH OTHER OFFERS AN EXTRAORDINARY OPPORTUNITY TO SET AN EXAMPLE OF HOW ALTERNATE MODES OF TRANSPORTATION CAN BE SUPPORTED IN CONJUNCTION WITH MORE TRADITIONAL AUTOMOBILE TRAFFIC. PLEASE GIVE PEDESTRIANS AND BICYCLISTS YOUR FULL ATTENTION IN THE BUILDING OF THIS PUBLIC PROJECT.

Respectfully,  
 Scott Koop  
 WARD 2, LAKEWOOD

**Whorton, Mandy/DHO**

**From:** Susandhurst@aol.com  
**Sent:** Saturday, August 01, 2009 6:00 PM  
**To:** Roberts, Colleen/DHO  
**Cc:** Pjelofson@aol.com; EnvironInfNetwk@aol.com; joanseem@msn.com; gkmarsh@gmail.com  
**Subject:** Re: US 6/Wadsworth Public Hearing and Environmental Assessment

1 { I reviewed your EIS and did not see a photo of our townhomes. We are right off 6th and VANCE; and we will be greatly impacted by this project. Noise, added dust of everyday traffic - before, during and after the project - the Webster street apartments provide some buffer and the homes directly south of the frontage road as well. With these gone the sound on the second floor where our bedrooms are will be unbearably loud. It's loud now, I just CAN'T imagine how LOUD it will be with backed up traffic, demolition, constant noise of heavy trucks, earth moving.

2 { How is this going to affect the 'settling' of our home? The addition of the sound wall made a bit of settling, but this will be another matter entirely.

3 { I would think that this section of our townhome's would be considered for relocation - it will be next to impossible to get in or out of our driveways!!

Would it be possible to have a telephone conversation with SOMEONE regarding this Monday?

**Susan Elofson-Hurst**  
**303-233-6677**

*In a message dated 7/9/2009 8:27:36 P.M. Mountain Daylight Time, Colleen.Roberts@CH2M.com writes:*

Susan, thanks for letting me know. Occasionally the CDOT server doesn't load for a brief period of time. You might try visiting it again. If it still doesn't load through the link, you can go to [www.US6Wadsworth.com](http://www.US6Wadsworth.com), and the newsletter is the first link on the Project Documents page. The home page will load as long as the CDOT server is working. If you still end up having problems, you should be receiving a hard copy of the newsletter in the mail, and I can email you an electronic version as well.

Thanks, and have a good evening,

**Colleen Kirby Roberts, AICP**  
 Associate Planner  
 CH2M Hill - Downtown Denver  
 1515 Wazee Street, Ste. 380  
 Denver, CO 80202  
 720-286-0914 phone

---

**From:** Susandhurst@aol.com [mailto:Susandhurst@aol.com]  
**Sent:** Thursday, July 09, 2009 5:49 PM  
**To:** Roberts, Colleen/DHO  
**Subject:** Re: US 6/Wadsworth Public Hearing and Environmental Assessment

Your link does not work, I also tried to copy the link to my browser bar and the site would not

(17)

load.

**Susan Elofson-Hurst**  
303-233-7766

*In a message dated 7/9/2009 4:26:53 P.M. Mountain Daylight Time, Colleen.Roberts@CH2M.com writes:*

CDOT is pleased to announce the publication of the US 6/Wadsworth Environmental Assessment for public review. Please join us at the upcoming public hearing on Wednesday July 22, 2009 from 5:00 to 7:30 p.m. at the Lakewood City Council Chambers in Lakewood, Colorado. Our Summer 2009 newsletter provides more details on the Environmental Assessment, the public hearing, and ways you can provide input during the public review period.

Click on the link below to access the Summer 2009 newsletter.  
<http://www.dot.state.co.us/us6Wadsworth/Pdfs/Summer2009Newsletter.pdf>

Thank you,  
**US 6/Wadsworth Project Team**  
Colleen Kirby Roberts, AICP  
Public Involvement Manager  
CH2M Hill  
1515 Wazee Street, Ste. 380  
Denver, CO 80202  
720-286-0914 phone

---

**Dell Studio XPS Desktop: Save up to \$400 - Limited Time Offer**

**Friend, Fawn/DEN**

**From:** Susandhurst@aol.com  
**Sent:** Saturday, August 01, 2009 8:50 PM  
**To:** Roberts, Colleen/DHO; Seyed.Kalantar@dot.state.co.us; Whorton, Mandy/DHO; bmurphy@lakewood.org; Governor.ritter@state.co.us; senator\_bennet@bennet.senate.gov; Senator\_Salazar@salazar.senate.gov; ken@kengordon.com; kkellen@lakewood.org; Svstack@aol.com; CWise@lakewood.org; dkoop@lakewood.org; danderson@lakewood.org; sking@lakewood.org; cbaroway@lakewood.org; epeterson@lakewood.org; apaul@lakewood.org; tqinn@lakewood.org  
**Cc:** Pjelfson@aol.com; joanseem@msn.com; gkmarsh@gmail.com; jim.dileo@state.co.us; pgibson@jeffco.org; nneelan@jeffco.org; clay.brown@state.co.us; Scott.Babcock@state.co.us; jerrie.mckee@state.co.us; udfcd@udfcd.org; klloyd@raqc.org; lmugler@drcog.org; Gina.McAfee@jacobs.com; david.hollis@rtd-fastracks.com; vzebauer@jeffco.us; esabina@drcog.org; rthompson@drcog.org; nathan.moore@state.co.us; david.beckhouse@fta.dot.gov; margaret.k.langworthy@usace.army.mil; susan\_linner@fws.gov; david.w.rigirozzi@hud.gov; nancy.steinberger@dhs.gov; joe.shieffelin@state.co.us; Eversoll, Tim/DEN; Bgremartin@aol.com  
**Subject:** US 6/Wadsworth Public Hearing and Environmental Assessment

I have concerns regarding additional indoor dust/pollution health issues; additional buildup on appliances/electronics/furnace/air conditioning units; and possible power surges/spikes.

\* Will C-DoT regularly clean the exterior of our building?

\* Provide Uninterrupted Power Backup System's for all of our major appliances and electronics;

\* 1 (one) Ion Air Cleaner per floor (3 floors) of our home to prevent additional wear from the above (dust/dirt and power surges or outages from this project)?

Please look at your map, I'm at 544 Vance, in our building, 10 families would be affected and possibly 2 from the building directly East of us that's closest to the frontage road. I think you should make a personal visit to check this out yourself. Seriously, I am inviting everyone in this email to call and come out to stand in my second floor bedroom that faces 6th Avenue. Then go out and stand in my bedroom's balcony. Don't bother trying to make phone calls from the patio (even though we have a garage to 'buffer' noise), you can't hear the conversation from the blaring traffic. I will begin taking appointments at 9:00 a.m. 3 days a week starting this week.

You will need to make prior arrangements as we have had to 'burglar proof' the exterior of our townhome, so access is limited. After the existing sound wall was built we discovered that the traffic noise drowns out sounds of people trying to break into your home from the back side (North side faces 6th Avenue). I was home during one of these break-in attempts.

The sound wall on the frontage road was NOT in place when we purchased our home here; 6th Avenue noise got louder when and after the wall was built. I was told by C-DoT crew (yes, I have this on film) that the EIS only addressed ground floor living space noise; not second floor space.

I want to make sure you get the 'true affect' of the noise and dirt/dust issues that will be a health issue for MY family. I look forward to hearing from you ~ I really do!

Susan Elofson-Hurst  
 Paula Elofson-Gardine  
 303-233-6677

10/12/2009

**Whorton, Mandy/DHO**

---

**From:** Singer, David [David.Singer@dot.state.co.us]  
**Sent:** Wednesday, August 05, 2009 8:52 AM  
**To:** susandhurst@aol.com  
**Subject:** Thank you for your comment on the 6th and Wadsworth Environmental Assessment  
**Attachments:** Re: US 6/Wadsworth Public Hearing and Environmental Assessment; US 6/Wadsworth Public Hearing and Environmental Assessment

Ms. Hurst,

My name is David Singer, Colorado Department of Transportation (CDOT) Environmental Project Manager for the 6<sup>th</sup> Avenue and Wadsworth Boulevard Environmental Assessment (EA). Seyed Kalantar, PE, and Colleen Roberts forwarded copies of your two emails dated August 1<sup>st</sup>, 2009, attached.

Thank you for reviewing the EA and for providing comments. Your comments related to noise, air pollution, construction impacts and right-of-way relocation are important issues and will be included as a part of the public record. During this public comment period, the project team has been gathering written comments as well as comments submitted at the July 22<sup>nd</sup> Public Hearing.

Once the public review period is completed, CDOT and Federal Highway Administration (FHWA) will consider all received comments when issuing a decision document. This decision document (expected Fall 2009) will address all comments received and will include official responses from CDOT and FHWA. The document will provide details about mitigation of the project impacts and will clarify if there are any changes to the preferred alternative that result from the public's input.

I have attached a link to the EA as well as the Noise Technical Memorandum, completed in November 2008.

<http://www.dot.state.co.us/US6Wadsworth/default1.htm>

<http://www.dot.state.co.us/US6Wadsworth/docs/Noise%20Assessment%20Summary%20Report.pdf>

If you have additional comments on the Document or Tech Memo, please submit them to either myself or Colleen Roberts ([Colleen.Roberts@ch2m.com](mailto:Colleen.Roberts@ch2m.com)). The public comment period ends on August 26<sup>th</sup>.

**David Singer**

Environmental Project Manager  
Colorado Department of Transportation  
Region 6  
2000 South Holly St  
Denver, CO 80222  
(303) 757-9930  
[David.Singer@dot.state.co.us](mailto:David.Singer@dot.state.co.us)

8/27/2009

**Whorton, Mandy/DHO**

**From:** Susandhurst@aol.com  
**Sent:** Wednesday, August 05, 2009 10:58 AM  
**To:** David.Singer@dot.state.co.us  
**Cc:** Roberts, Colleen/DHO; Seyed.Kalantar@dot.state.co.us; BMurphy@lakewood.org; christopher.r.smith@state.co.us; Congressman.EdPerlmutter@capitolenews.com; councilwomankoop@msn.com; david.w.rigirozzi@hud.gov; dkoop@lakewood.org; doug@councilmananderson.com; epeterson@lakewood.org; Gregory.Hayes@dot.state.co.us; KatBea@lakewood.org; keith@keithking.org; kkellen@lakewood.org; boher\_@msn.com; HerbstJA@aol.com; Bgremartin@aol.com; CouncilWoman@aol.com; Whorton, Mandy/DHO; danderson@lakewood.org; tquinn@lakewood.org; jim.dileo@state.co.us; clay.brown@state.co.us; Scott.Babcock@state.co.us; rthompson@drcog.org; margaret.k.langworthy@usace.army.mil; Eversoll, Tim/DEN

**Subject:** Questions on new Interchange project

Mr. Singer,

Thank you for your response. Does this mean that I am too late in asking questions or making comments? (re: public meeting July 22, '09 I was out of state) May I ask WHY you have not send direct mailings to the maximally exposed population in the Stonebridge Townhomes complex? Please consider the comments below, and respond most specifically to those comments I have highlighted in red. I am asking for a responses to these issues.

**The issue is more than the noise, its deadly PM2.5, VOCs & aldehydes from demolition and earth moving! The large trees have helped buffer noise, filtered some of the air pollution and highway grit. Removing houses and trees will change the character of this neighborhood significantly and in a very negative way. Additional noise and fugitive dust emissions from this project, on top of what we already have had to put up with since the wall was put in, will make this neighborhood undesirable as a residential neighborhood.**

**This was a nice, quiet neighborhood when we purchased our townhome here, until the sound wall was put in, which pushed the highway noise up and over to our property. This created significant noise to the 2<sup>nd</sup> floor bedrooms in our building, as that highway noise bounced directly to that level. It also caused settling in the area, evidenced by cracks appearing in our driveway, carports, garages, patios, etc. Will CDOT compensate us and/or relocate us for that impact?**

**Additional noise adds stress, which impacts quality of life and health. There are plenty of scientific studies that validate this point. Will they be working on this project during night time hours? What about the most sensitive populations, that being the elderly, pregnant women and children? Has your EIS/EA taken that into consideration?**

**Sue has Post Traumatic Stress Syndrome with fibromyalgia, which are severely affected by this kind of noise, pollution, and heavy vibration activity, which will be ongoing for several years. Paula has asthma (pollution reactive), and prior exposure that created hypersensitivity to asphalt/petroleum fumes. Both of us would be greatly negatively impacted by the disruption, vibration, noise and pollution from this project, and in our cases, it could be life threatening. We feel this makes us candidates for relocation, with CDOT purchasing our property and paying to move us to another location.**

- 8 { **Does this EIS address noise for second floor living?** I couldn't find a reference for it.
- 9 { **Considering the drastic change of topography will our building of townhomes be considered for relocation?** One of the homes directly North of us that faces the frontage road (south side of Sixth Avenue and Vance) looks like it will be removed. That is **one of the homes** that has been a buffer for noise from traffic for our building.
- 10 { I agree that this much needed interchange would be a wonderful improvement for commuters. Unfortunately, residents in our building will have their quality of life negatively impacted by this project. I hope we can have meaningful exchange in trying to figure out answers to our concerns.

**Susan Elofson-Hurst**  
**Paula Elofson-Gardine**  
 544 Vance Street  
 Lakewood, CO 80226

*In a message dated 8/5/2009 8:52:44 A.M. Mountain Daylight Time, David.Singer@dot.state.co.us writes:*  
 Ms. Hurst,

*My name is David Singer, Colorado Department of Transportation (CDOT) Environmental Project Manager for the 6<sup>th</sup> Avenue and Wadsworth Boulevard Environmental Assessment (EA). Seyed Kalantar, PE, and Colleen Roberts forwarded copies of your two emails dated August 1<sup>st</sup>, 2009, attached.*

*Thank you for reviewing the EA and for providing comments. Your comments related to noise, air pollution, construction impacts and right-of-way relocation are important issues and will be included as a part of the public record. During this public comment period, the project team has been gathering written comments as well as comments submitted at the July 22<sup>nd</sup> Public Hearing.*

*Once the public review period is completed, CDOT and Federal Highway Administration (FHWA) will consider all received comments when issuing a decision document. This decision document (expected Fall 2009) will address all comments received and will include official responses from CDOT and FHWA. The document will provide details about mitigation of the project impacts and will clarify if there are any changes to the preferred alternative that result from the public's input. I have attached a link to the EA as well as the Noise Technical Memorandum, completed in November 2008.*

<http://www.dot.state.co.us/US6Wadsworth/default1.htm>  
<http://www.dot.state.co.us/US6Wadsworth/docs/Noise%20Assessment%20Summary%20Report.pdf>

*If you have additional comments on the Document or Tech Memo, please submit them to either myself or Colleen Roberts ([Colleen.Roberts@ch2m.com](mailto:Colleen.Roberts@ch2m.com)). The public comment period ends on August 26<sup>th</sup>.*

**David Singer**  
 Environmental Project Manager  
 Colorado Department of Transportation  
 Region 6  
 2000 South Holly St  
 Denver, CO 80222  
 (303) 757-9930  
[David.Singer@dot.state.co.us](mailto:David.Singer@dot.state.co.us)

*I reviewed your EIS and did not see a photo of our townhomes. We are right off 6th and VANCE; and we will be greatly impacted by this project. Noise, added dust of everyday traffic - before, during and after the project - the Webster street apartments provide some buffer and the homes directly south of the*

8/27/2009

**PUBLIC HEARING COMMENT  
US 6/WADSWORTH ENVIRONMENTAL ASSESSMENT**

Submitted by: Weston K. Mauz

Date: 12 Aug 2009

Mailing Address:  
2227 County Road 214  
Silt, Colorado 81652

Email: siltranch@willowwisp.net

Attachments: Maps 1 and 2 (Microsoft PowerPoint file).

Mauz properties impacted by the CDOT "US 6 and Wadsworth" project are located on the SW corner of the intersection of W 14th Ave and Wadsworth Blvd.

Owners: Weston K. Mauz and Henry H. Mauz Jr.

Addresses: 1395 Wadsworth Blvd  
7666 W 14th Ave  
7676 W 14th Ave  
1370 Yukon St  
1380 Yukon St

The total area of the properties is described as follows:  
150 feet of frontage on Wadsworth Blvd  
282.6 feet of frontage on W 14th Ave between Wadsworth Blvd and Yukon St

The properties combined form a rectangle 150 feet by 282.6 feet and, *prior to Wadsworth reconstruction*, comprise a total of 42,390 square feet. It is the intent of Mauz to combine the properties into a single unit at the time of future redevelopment.

Explanation of maps:

Map 1: overview of the Wadsworth Station Core area.

Map 2: detail of Map 1, centered on the W 14th Ave and Wadsworth Blvd intersection.

Features shown, with sources noted below and on the maps:

- **Wadsworth Station Core Area** (purple outline); City of Lakewood.  
[www.lakewood.org/CPD/pdfs/lightrail/WadsworthPlan.pdf](http://www.lakewood.org/CPD/pdfs/lightrail/WadsworthPlan.pdf): p.10
- **Wadsworth LR Station and Parking** (purple shaded); RTD.  
[www.rtd-fastracks.com/image\\_viewer.php?img=22&section=wc](http://www.rtd-fastracks.com/image_viewer.php?img=22&section=wc)
- **CDOT Construction Envelope** (red); CDOT.  
[www.dot.state.co.us/us6wadsworth/MAPBOOK\\_PublicMeeting\\_061608.pdf](http://www.dot.state.co.us/us6wadsworth/MAPBOOK_PublicMeeting_061608.pdf): p.9
- **Mauz properties** (bold yellow outline); parcels: Jefferson County GIS.  
[jeffco.us/jmap/](http://jeffco.us/jmap/)
- **losses of parking and square footage** (orange), computed by Mauz.
- **Current Location of Proposed CDOT Detention Pond** (blue); CDOT.  
[www.dot.state.co.us/us6wadsworth/MAPBOOK\\_PublicMeeting\\_061608.pdf](http://www.dot.state.co.us/us6wadsworth/MAPBOOK_PublicMeeting_061608.pdf): p.9
- **Possible Alternative Pond Location** (blue), suggested by Mauz.

### COMMENTS

#### 1. CDOT construction envelope: impacts to property use and commercial value.

1 { Within the CDOT construction envelope, 34% of existing parking spaces at the 1395 Wadsworth (Mauz) commercial property will be immediately lost to the Wadsworth widening project (Map 2). The total area of the combined Mauz parcel will be reduced by 12% (5100 sq ft), permanently reducing its commercial value.

The likely immediate impact to the Mauz commercial property is loss of income to the tenant, resulting in inability to meet rent, and ultimate loss of the tenant. Reduced parking facility will negatively impact lease potential for the property, resulting in long-term economic loss to Mauz.

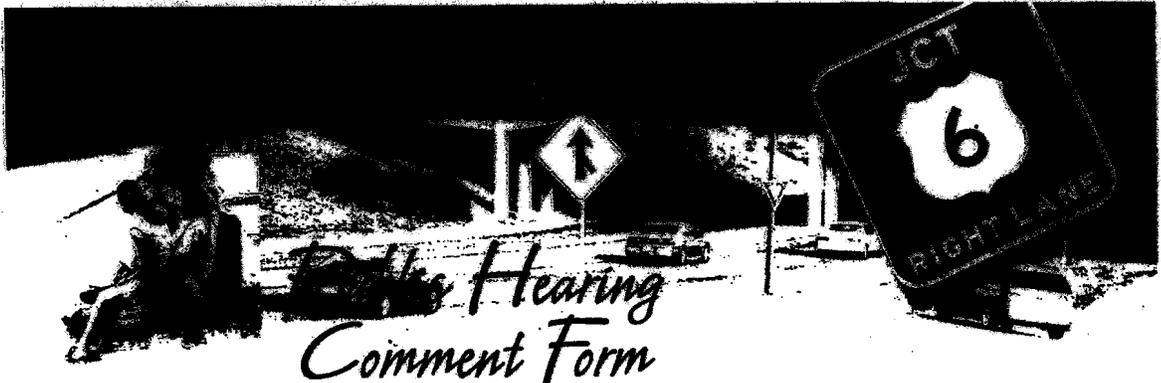
2 { There are currently no alternative locations that can provide compensatory parking in the proximity of the Mauz commercial property. The configuration of the future parking structure on the east side of Wadsworth is unknown. An allotment of parking spaces in that facility for the businesses on the west side of Wadsworth that will permanently and/or temporarily lose parking area and/or all vehicle access as a result of the reconstruction process should become part of the RTD/City of Lakewood/CDOT planning process.

#### 2. CDOT detention pond: current proposed location, impacts, and suggested alternative.

3 { The current location of the proposed CDOT detention pond on the 1355 Wadsworth (Crockett) property, immediately south of the Mauz property, displaces a currently productive business and fragments the southwest quarter of the Station Core (Map 1, Map 2).

4 { The pond at its current proposed location would permanently inhibit redevelopment options for the west side of Wadsworth, including Mauz property, that is across from the Station parking facility and within one block of the Light Rail Station.

5 { The suggested alternative location indicated at the south end of the 7590 W Colfax property (FirstBank of Colorado) places the pond in a currently open greenspace in the northeast quarter of the Station Core. The alternative location is at the corner of a block where business access and land use potential are not immediately or permanently compromised.



# Public Hearing Comment Form

CF7

First Name: \_\_\_\_\_ Last Name: Grunly  
 Address: 85 So Estes St City: LKUD Zip Code: 80226  
 Email Address: JFCOMEDATE@GMAIL.COM

We welcome your comments on the US 6 and Wadsworth Environmental Assessment and Draft Section 4(f) Evaluation! Please print clearly and provide enough detail to ensure our understanding of your comments. Your comments will be considered by the Federal Highway Administration prior to making a decision about the project and will be addressed in the Decision Document (anticipated Fall 2009).

N { HAVING USED THE 6TH & WADSWORTH INTERCHANGE FOR SEVERAL DECADES WITHOUT INCIDENT MY QUESTION IS: WHY CHANGE WHAT ISN'T BROKEN? EVERY STOP LIGHT ADDED INCREASES THE LIKELIHOOD OF SERIOUS ACCIDENTS, CLOGGED TRAFFIC & EXTRA POLLUTION FROM IDLING VEHICLES. THE CLOVERLEAF DESIGN HAS PROVEN ITSELF OVER 70 OR MORE YEARS. ADDING ANOTHER SIGNALIZED INTERSECTION WITHIN A BLOCK OF THE EXISTING ONE SPELLS "GAIDLICK", REPLACING A CLOVERLEAF WITH A LEFT TURN ACROSS HEAVY TRAFFIC INVITES ACCIDENTS - ACCIDENTS @ CLOVERLEAFS ELIMINATE. IS THIS A "STIMULATED MAKE-WORK PROJECT"?

M { LEAVE THE EXISTING DESIGN ALONE, ADJUST THE LANE STRIPING AND SPEED LIMITS FOR ON/OFF TRAFFIC BUT LET THE PROVEN ENGINEERING DESIGN DO ITS JOB, PERHAPS YOU COULD CRACK DOWN ON THE TEXTING, PHONING, EATING & DRINKING DRIVERS INSTEAD?

N { THIS APPEARS TO BE AN UNNEEDED, UNWISE, ANNUAL KILLING, PUBLIC BOON DOGGLE AND WASTE OF PUBLIC FUNDS. \* THE "WEAVING" OF TRAFFIC IS A BASIC DRIVING SKILL. PEOPLE WHO CANNOT MANAGE THE TASK CAN'T HEED STOP SIGNALS & TURN ARROWS EITHER.

**Environmental Information Network (EIN), Inc.**  
Paula Elofson-Gardine, Executive Director  
Susan Hurst, Publications Director  
544 Vance Street  
Lakewood, CO 80226  
303-233-6677

August 18, 2009

Seyed Kalantar, PE – Project Manager  
CDOT-Region 6, Central Engineering  
425 B Corporate Circle  
Golden, CO 80401  
720-497-6955

US 6 & Wadsworth EA  
c/o Colleen Kirby Roberts  
CH2M Hill Public Involvement Manager  
1515 Wazee Street, Suite 380  
Denver, CO 80202  
720-286-0914

-AND-

Tim Eversoll, PE – Project Manager  
CH2M Hill  
9193 South Jamaica St.  
Englewood, CO 80112  
720-286-5137

**Re: US 6/Wadsworth Environmental Assessment Public Comment**

Dear Sirs and Madame,

The following are our public comments on the above project. We have general comments and **personal concerns** that we would like you to review that appear farther down on pages **18-19** of 19 pages in this public comment document. We also are attaching as part of our comments the World Health Organization Guidelines for Community Noise. We will be sending our primary comments via email without the WHO attachment, and hand delivering the entire package.

1 { This is a project that is very much needed for the city, but it will negatively affect the residents. After reviewing the EA, we feel there are many areas that are too conservative (underestimated) regarding impacts, or does not have proper definition, references, and real time measurements for comparison.

2 { **This project would be better served by having a full Environmental Impact Statement (EIS) done.** We would urge the US EPA to review this EA pursuant to Section 309 of the Clean Air Act (CAA) due to fugitive dust emissions and no apparent plans for effective dust control. At a minimum, appropriate monitoring should be utilized, including PM-10 monitors. The EPA should also evaluate the short and long term effects of the demolition and construction for excess noise and environmental release of pollutants to local environs and residents.

3 { The CDOT Noise Analysis Procedure; Sound Pressure Levels graphic from public meetings appears to equate expected construction noise at 50 feet to being between 70 to 90 decibels (this will damage hearing). We took our calibrated digital noise meter, and found just sitting at the intersection at 5<sup>th</sup> and Wadsworth during a light traffic time (no construction), captured readings of 65 to 70 decibels. CDOT's document compares their expected 70-90 decibel range noise from construction to a motorcycle or semi truck driving by.

4 { The State of Colorado allowable noise levels are cited as 55 decibels during the daytime hours of 7:00 a.m. to 7:00 p.m., and 50 dBA between the hours of 7:00 p.m. and 7:00 a.m. Our ambient background noise at our home location outdoor patio is already at 55 dBA from local/US6 traffic. The World Health Organization defines noise annoyance levels to be between 50 to 55 decibels, and hearing impairment levels start at 70 decibels. We are particularly

5 { interested in the anticipated hours of operation for this project. Will CDOT be doing construction work overnight to lessen the impact on commuter traffic? What about significant impacts to local residents located around this construction activity? We feel CDOT's analysis has made wrong assumptions based on flawed data or information. This requires further analysis and remedies.

**Impacts:**

6 { We have personal experience of highway construction in our backyard so to speak. The previous CDOT project that was adjacent to our property at Stonebridge Townhomes B Building (most NW building) was the construction of the US6 Noise Wall, about 5 years or so ago. The workers on this wall construction told us that the noise impact study did not take into consideration 2<sup>nd</sup> floor living, which applies to our building. Because the wall is not tall enough to be effective, it merely pushes the sound up and over to our building. This is a major flaw with highway projects. The noise and vibration estimates are too conservative, as our topography causes the noise and vibration to be funneled, or to flow in our direction through "city canyons" created by the buildings and fences.

7 { The heavy equipment traffic 50 feet north of us was definitely felt in the vibrations conducted to our home, including the "back up" safety alarms, which are extremely loud and disruptive, as they are designed to be. Example: A Pile Driver at 50 feet is listed in other environmental documents as a noise source generating 110 decibels, and that does not include the impact vibrations being conducted. No amount of white noise, ear plugs, or other mitigation can help alleviate impacts like this. Even trying to sleep, the construction vibrations were felt in our building. The US6/Wadsworth project will be 50-100 feet west of us, certainly close enough to "feel" the vibrations of the heavy equipment, construction activity, and backed up traffic.

8 { This CDOT EA specifies under Noise Mitigation that the current plan is to extend the noise wall along US6 west from Wadsworth, all the way to Garrison Street. This is completely unnecessary, and a waste of the taxpayers money, that could be put to better use in this project.

9 { The installation itself is highly disruptive to residents and to local structures. If it is not high enough, it merely concentrates and pushes the noise up and out to 2<sup>nd</sup> floor and higher  
10 { structures. The construction itself inserts support pilons that act like tuning forks to conduct

10 { more vibrations from the highway to local homes and businesses, which is more disruptive than leaving it alone. In this case, the current configuration allows the highway noise to naturally disperse without creating a noise bellows so to speak. In our neighborhood, when the section of noise wall was installed on the south side of US6, East of Wadsworth, we found that the noise and vibration situation was much less before the installation. So this has had a negative impact on our quality of life, not an improvement. It did not reduce noise or vibration, it increased it.

12 { The following sound levels table is an excerpt from the Mission Trails Environmental Impact Statement. It provides more realistic sound level comparisons:

**Table 3.5-5  
Sound Levels of Typical Noise Sources and Noise Environments  
(A-Weighted Sound Levels)**

| Noise Source<br>(at a Given Distance)  | Scale of<br>A-Weighted<br>Sound Level in<br>Decibels | Noise Environment                          | Human Judgment of<br>Noise Loudness (Relative<br>to a Reference Loudness<br>of 70 Decibels*) |
|--|--|--|--|
| Military Jet Take-off with<br>After-burner (50 ft)<br>Civil Defense Siren (100 ft)       | 140<br>130   | Aircraft Carrier Flight Deck               |  |
| Commercial Jet Take-off (200 ft)   | 120  |  | Threshold of Pain<br>*32 times as loud   |
| Pile Driver (50 ft)  | 110  | Rock Music Concert                         | *16 times as loud  |
| Ambulance Siren (100 ft)<br>Newspaper Press (5 ft)<br>Power Lawn Mower (3 ft)            | 100  |  | Very Loud<br>*8 times as loud  |
| Motorcycle (25 ft)<br>Propeller Plane Flyover (1,000 ft)<br>Diesel Truck, 40 mph (50 ft) | 90   | Boiler Room<br>Printing Press Plant        | *4 times as loud   |
| Garbage Disposal (3 ft)  | 80   | High Urban Ambient Sound                   | *2 times as loud   |
| Passenger Car, 65 mph (25 ft)<br>Vacuum Cleaner (10 ft)                                  | 70   |  | Moderately Loud<br>*70 decibels<br>(Reference Loudness)                                      |
| Normal Conversation (5 ft)<br>Air Conditioning Unit (100 ft)                             | 60   | Data Processing Center<br>Department Store | *1/2 as loud   |
| Light Traffic (100 ft)   | 50   | Private Business Office                    | *1/4 as loud   |
| Bird Calls (distant)   | 40   | Lower Limit of Urban<br>Ambient Sound      | Quiet<br>*1/8 as loud  |
| Soft Whisper (5 ft)  | 30   | Quiet Bedroom                              |  |
|  | 20   | Recording Studio                           | Very Quiet   |
|  | 10   |  |  |
|  | 0  |  | Threshold of Hearing   |

13 { We would like to refer you to the following article(s) regarding the physiological effects of excess noise found at: [http://en.wikipedia.org/wiki/Noise\\_pollution](http://en.wikipedia.org/wiki/Noise_pollution)

**Human health effects (Main article: Noise health effects)**

Noise health effects are both health and behavioural in nature. The unwanted sound is called noise. This unwanted sound can damage physiological and psychological health. Noise pollution can cause annoyance and aggression, hypertension, high stress levels, tinnitus, hearing loss, sleep disturbances, and other harmful effects.<sup>[3][4][5]</sup> Furthermore, stress and hypertension are the leading causes to health problems, whereas tinnitus can lead to forgetfulness, severe depression and at times panic attacks.<sup>[4][6]</sup>

Chronic exposure to noise may cause noise-induced hearing loss. Older males exposed to significant occupational noise demonstrate significantly reduced hearing sensitivity than their non-exposed peers, though differences in hearing sensitivity decrease with time and the two groups are indistinguishable by age 79.<sup>[7]</sup> A comparison of Maaban tribesmen, who were insignificantly exposed to transportation or industrial noise, to a typical U.S. population showed that chronic exposure to moderately high levels of environmental noise contributes to hearing loss.<sup>[8]</sup>

High noise levels can contribute to cardiovascular effects and exposure to moderately high levels during a single eight hour period causes a statistical rise in blood pressure of five to ten points and an increase in stress<sup>[9]</sup> and vasoconstriction leading to the increased blood pressure noted above as well as to increased incidence of coronary artery disease.

Noise pollution is also a cause of annoyance. A 2005 study by Spanish researchers found that in urban areas households are willing to pay approximately four Euros per decibel per year for noise reduction.<sup>[9]</sup>

**Environmental effects**

Noise can have a detrimental effect on animals by causing stress, increasing risk of mortality by changing the delicate balance in predator/prey detection and avoidance, and by interfering with their use of sounds in communication especially in relation to reproduction and in navigation. Acoustic overexposure can lead to temporary or permanent loss of hearing.<sup>[9]</sup>

An impact of noise on animal life is the reduction of usable habitat that noisy areas may cause, which in the case of endangered species may be part of the path to extinction. One of the best known cases of damage caused by noise pollution is the death of certain species of beached whales, brought on by the loud sound of military sonar.<sup>[10]</sup>

Noise also makes species communicate louder, which is called Lombard vocal response.<sup>[11]</sup> Scientists and researchers have conducted experiments that show whales' song length is longer when submarine-detectors are on.<sup>[12]</sup> If creatures don't "speak" loud enough, their voice will be masked by anthropogenic sounds. These unheard voices might be warnings, finding of prey, or preparations of net-bubbling. When one species

begins speaking louder, it will mask other species' voice, causing the whole ecosystem to eventually speak louder.

European Robins living in urban environments are more likely to sing at night in places with high levels of noise pollution during the day, suggesting that they sing at night because it is quieter, and their message can propagate through the environment more clearly<sup>[13]</sup>. Interestingly, the same study showed that daytime noise was a stronger predictor of nocturnal singing than night-time Light pollution, to which the phenomenon is often attributed.

Zebra finches become less faithful to their partners when exposed to traffic noise. This could alter a population's evolutionary trajectory by selecting traits, sapping resources normally devoted to other activities and thus lead to profound genetic and evolutionary consequences.<sup>[14]</sup>

**References (3-14)**

1. ^ a b Senate Public Works Committee. Noise Pollution and Abatement Act of 1972. S. Rep. No. 1160. 92nd Cong. 2nd session
2. ^ C. Michael Hogan and Gary L. Latshaw. The relationship between highway planning and urision specialty conference. May 21-23, 1973. Chicago, Illinois by American Society of Civil Engineers. Urban Transportation Division
3. ^ a b c S. Rosen and P. Olin, Hearing Loss and Coronary Heart Disease, Archives of Otolaryngology, 82:236 (1965)
4. ^ a b J.M. Field, Effect of personal and situational variables upon noise annoyance in residential areas, Journal of the Acoustical Society of America, 93: 2753-2763 (1993)
5. ^ "Noise Pollution". World Health Organisation. <http://www.euro.who.int/Noise>.
6. ^ Karl D. Kryter, The Effects of Noise on Man, Academic Press (1985)
7. ^ Rosenhall U, Pedersen K, Svanborg A (1990). "Presbycusis and noise-induced hearing loss". Ear Hear 11 (4): 257-63. doi:10.1097/00003446-199008000-00002. PMID 2210099.
8. ^ Jesús Barreiro, Mercedes Sánchez, Montserrat Viladrich-Grau (2005), "How much are people willing to pay for silence? A contingent valuation study", Applied Economics, 37 (11)
9. ^ Effects of Anthropogenic Noise in the Marine Environment
10. ^ Balcomb, Ken (2003-05-12). "US Navy Sonar blasts Pacific Northwest killer whales". San Juan Islander. [http://www.sanjuanislander.com/groups/center for whale research/sonar.shtml](http://www.sanjuanislander.com/groups/center_for_whale_research/sonar.shtml). Retrieved 2006-04-30.
11. ^ [www.dosits.org/glossary/pop/lvr.htm](http://www.dosits.org/glossary/pop/lvr.htm)
12. ^ Variation in humpback whale (Megaptera novaeangliae) song length in relation to low-frequency sound broadcasts
13. ^ Fuller RA, Warren PH, Gaston KJ (2007). "Daytime noise predicts nocturnal singing in urban robins.". Biology Letters 3: 368-70. doi:10.1098/rsbl.2007.0134.
14. ^ Milius, S. (2007). High Volume, Low Fidelity: Birds are less faithful as sounds blare, Science News vol. 172, p. 116. (references)

14 } A second article excerpt of interest is regarding physiological effects of excess noise pollution: <http://www.infoplease.com/ce6/sci/A0835810.html>

***“Noise pollution, human-created noise harmful to health or welfare. Transportation vehicles are the worst offenders, with aircraft, railroad stock, trucks, buses, automobiles, and motorcycles all producing excessive noise. Construction equipment, e.g., jackhammers and bulldozers, also produce substantial noise pollution.***

Noise intensity is measured in decibel units. The decibel scale is logarithmic; each 10-decibel increase represents a tenfold increase in noise intensity. Human perception of loudness also conforms to a logarithmic scale; a 10-decibel increase is perceived as roughly a doubling of loudness. Thus, 30 decibels is 10 times more intense than 20 decibels and sounds twice as loud; 40 decibels is 100 times more intense than 20 and sounds 4 times as loud; 80 decibels is 1 million times more intense than 20 and sounds 64 times as loud. Distance diminishes the effective decibel level reaching the ear. Thus, moderate auto traffic at a distance of 100 ft (30 m) rates about 50 decibels. To a driver with a car window open or a pedestrian on the sidewalk, the same traffic rates about 70 decibels; that is, it sounds 4 times louder. At a distance of 2,000 ft (600 m), the noise of a jet takeoff reaches about 110 decibels—approximately the same as an automobile horn only 3 ft (1 m) away.

***Subjected to 45 decibels of noise, the average person cannot sleep. At 120 decibels the ear registers pain, but hearing damage begins at a much lower level, about 85 decibels. The duration of the exposure is also important. There is evidence that among young Americans hearing sensitivity is decreasing year by year because of exposure to noise, including excessively amplified music. Apart from hearing loss, such noise can cause lack of sleep, irritability, heartburn, indigestion, ulcers, high blood pressure, and possibly heart disease.***

*One burst of noise, as from a passing truck, is known to alter endocrine, neurological, and cardiovascular functions in many individuals; prolonged or frequent exposure to such noise tends to make the physiological disturbances chronic. In addition, noise-induced stress creates severe tension in daily living and contributes to mental illness.”*

Here is a table excerpted from the World Health Organization (WHO) Guidelines for Community Noise, found at: [http://www.ruidos.org/Noise/WHO Noise guidelines contents.html](http://www.ruidos.org/Noise/WHO%20Noise%20guidelines%20contents.html) Please see the WHO Community Noise Guidelines document, included as an attachment to our comments.

**Table 1: Guideline values for community noise in specific environments.**

| Specific environment | Critical health effect(s)                                      | L <sub>Aeq</sub> [dB(A)] | Time base [hours] | L <sub>Amax</sub> fast [dB] |
|----------------------|--|--------------------------|-------------------|-----------------------------|
| Outdoor living area  | Serious annoyance, daytime and evening                         | 55                       | 16                | -                           |
|                      | Moderate annoyance, daytime and evening                        | 50                       | 16                | -                           |
| Dwelling, indoors    | Speech intelligibility & moderate annoyance, daytime & evening | 35                       | 16                |                             |

|   |  |       |               |        |
|---|--|-------|---------------|--------|
| Inside bedrooms   | Sleep disturbance, night-time  | 30    | 8             | 45     |
| Outside bedrooms  | Sleep disturbance, window open (outdoor values)                                      | 45    | 8             | 60     |
| School class rooms & pre-schools, indoors                               | Speech intelligibility, disturbance of information extraction, message communication | 35    | during class  | -      |
| Pre-school bedrooms, indoor   | Sleep disturbance  | 30    | sleeping-time | 45     |
| School, playground outdoor  | Annoyance (external source)  | 55    | during play   | -      |
| Hospital, ward rooms, indoors   | Sleep disturbance, night-time  | 30    | 8             | 40     |
|   | Sleep disturbance, daytime and evenings  | 30    | 16            | -      |
| Hospitals, treatment rooms, indoors                                     | Interference with rest and recovery  | #1    |               |        |
| Industrial, commercial shopping and traffic areas, indoors and outdoors | Hearing impairment   | 70    | 24            | 110    |
| Ceremonies, festivals and entertainment events                          | Hearing impairment (patrons:<5 times/year)   | 100   | 4             | 110    |
| Public addresses, indoors and outdoors                                  | Hearing impairment   | 85    | 1             | 110    |
| Music and other sounds through headphones/earphones                     | Hearing impairment (free-field value)  | 85 #4 | 1             | 110    |
| Impulse sounds from toys, fireworks and firearms                        | Hearing impairment (adults)  | -     | -             | 140 #2 |
|   | Hearing impairment (children)  | -     | -             | 120 #2 |

|  |                            |    |  |  |
|--|----------------------------|----|--|--|
| Outdoors in parkland and conservations areas | Disruption of tranquillity | #3 |  |  |
|--|----------------------------|----|--|--|

- #1: As low as possible.
- #2: Peak sound pressure (not LAF, max) measured 100 mm from the ear.
- #3: Existing quiet outdoor areas should be preserved and the ratio of intruding noise to natural background sound should be kept low.
- #4: Under headphones, adapted to free-field values.

3 } There are a few excerpts from the WHO Guidelines for Community Noise document that we feel are directly pertinent to our concerns about prolonged elevated construction noise so close to our residence:

**3 Adverse health effects of noise:** *The health significance of noise pollution is given in chapter 3 of the Guidelines under separate headings according to the specific effects: noise-induced hearing impairment; interference with speech communication; disturbance of rest and sleep; psychophysiological, mental-health and performance effects; effects on residential behaviour and annoyance; and interference with intended activities. This chapter also considers vulnerable groups and the combined effects of mixed noise sources...The main social consequence of hearing impairment is the inability to understand speech in daily living conditions, and this is considered to be a severe social handicap. Even small values of hearing impairment (10 dB averaged over 2 000 and 4 000 Hz and over both ears) may adversely affect speech comprehension...*

*Sleep disturbance is a major effect of environmental noise. It may cause primary effects during sleep, and secondary effects that can be assessed the day after night-time noise exposure. Uninterrupted sleep is a prerequisite for good physiological and mental functioning, and the primary effects of sleep disturbance are: difficulty in falling asleep; awakenings and alterations of sleep stages or depth; increased blood pressure, heart rate and finger pulse amplitude; vasoconstriction; changes in respiration; cardiac arrhythmia; and increased body movements. The difference between the sound levels of a noise event and background sound levels, rather than the absolute noise level, may determine the reaction probability. The probability of being awakened increases with the number of noise events per night. The secondary, or after-effects, the following morning or day(s) are: reduced perceived sleep quality; increased fatigue; depressed mood or well-being; and decreased performance.*

*For a good night's sleep, the equivalent sound level should not exceed 30 dB(A) **for continuous background noise, and individual noise events exceeding 45 dB(A) should be avoided.** In setting limits for single night-time noise exposures, the intermittent character of the noise has to be taken into account. This can be achieved, for example, by measuring the number of noise events, as well as **the difference between the maximum sound level and the background sound level.** Special attention should also be given to: noise sources in an environment with low background sound levels; combinations of noise and vibrations; and to noise sources with low-frequency components.*

*Physiological Functions...After prolonged exposure, susceptible individuals in the general population may develop permanent effects, such as hypertension and ischaemic heart disease associated with exposure to high sound levels. The magnitude and duration of the effects are*

determined in part by individual characteristics, lifestyle behaviours and environmental conditions. Sounds also evoke reflex responses, particularly when they are unfamiliar and have a sudden onset.

Noise exposure may also produce after-effects that negatively affect performance. In schools around airports, children chronically exposed to aircraft noise under-perform in proof reading, in persistence on challenging puzzles, in tests of reading acquisition and in motivational capabilities. It is crucial to recognize that some of the adaptation strategies to aircraft noise, and the effort necessary to maintain task performance, come at a price. Children from noisier areas have heightened sympathetic arousal, as indicated by increased stress hormone levels, and elevated resting blood pressure. Noise may also produce impairments and increase in errors at work, and some accidents may be an indicator of performance deficits.

*Social and Behavioural Effects of Noise; Annoyance...* Noise above 80 dB(A) may also reduce helping behaviour and increase aggressive behaviour. There is particular concern that high-level continuous noise exposures may increase the susceptibility of schoolchildren to feelings of helplessness. **Stronger reactions have been observed when noise is accompanied by vibrations and contains low-frequency components, or when the noise contains impulses, such as with shooting noise.** Temporary, stronger reactions occur when the noise exposure increases over time, compared to a constant noise exposure.

*Sleep Disturbance.* Measurable effects of noise on sleep begin at LAeq levels of about 30 dB. However, the more intense the background noise, the more disturbing is its effect on sleep. Sensitive groups mainly include the elderly, shift workers, people with physical or mental disorders and other individuals who have difficulty sleeping.

*Sleep disturbance from intermittent noise events increases with the maximum noise level. Even if the total equivalent noise level is fairly low, a small number of noise events with a high maximum sound pressure level will affect sleep. Therefore, to avoid sleep disturbance, guidelines for community noise should be expressed in terms of the equivalent sound level of the noise, as well as in terms of maximum noise levels and the number of noise events. It should be noted that low-frequency noise, for example, from ventilation systems, can disturb rest and sleep even at low sound pressure levels.*

*When noise is continuous, the equivalent sound pressure level should not exceed 30 dB(A) indoors, if negative effects on sleep are to be avoided. For noise with a large proportion of low-frequency sound a still lower guideline value is recommended. When the background noise is low, noise exceeding 45 dB LAmx should be limited, if possible, and for sensitive persons an even lower limit is preferred. Noise mitigation targeted to the first part of the night is believed to be an effective means for helping people fall asleep. It should be noted that the adverse effect of noise partly depends on the nature of the source. A special situation is for newborns in incubators, for which the noise can cause sleep disturbance and other health effects.*

*Annoyance.* The capacity of a noise to induce annoyance depends upon its physical characteristics, including the sound pressure level, spectral characteristics and variations of these properties with time. During daytime, few people are highly annoyed at LAeq levels below 55 dB(A), and few are moderately annoyed at LAeq levels below 50 dB(A). **Sound levels during the evening and night should be 5-10 dB lower than during the day.** Noise with low-frequency components require lower guideline values. For intermittent noise, it is emphasized that it is necessary to take into account both the maximum sound pressure level and the number of noise events. Guidelines or noise abatement measures should also take into account residential outdoor activities.

*Social Behaviour. The effects of environmental noise may be evaluated by assessing its interference with social behavior and other activities. For many community noises, interference with rest/recreation/watching television seem to be the most important effects. There is fairly consistent evidence that noise above 80 dB(A) causes reduced helping behavior, and that loud noise also increases aggressive behavior in individuals predisposed to aggressiveness. In schoolchildren, there is also concern that high levels of chronic noise contribute to feelings of helplessness. Guidelines on this issue, together with cardiovascular and mental effects, must await further research.*

1/6 } We would like to offer you some comparisons from a very helpful source regarding the impacts of vibration: <http://www.consultnet.ie/environmental%20vibration.htm>

**What is vibration & air over pressure?** *Ground-borne vibration can be generated by a number of sources, including road and railways, construction activities such as piling, blasting and tunnelling. Vibration can be defined as regularly repeated movement of a physical object about a fixed point. The parameter normally used to assess the ground vibration is the peak particle velocity (ppv) expressed in millimetres per second (mm/s).*

*In order to completely define ground vibration, the amplitude and frequency of the motion are measured in the three orthogonal directions generally in terms of velocity which is considered to be the best descriptor for assessing human comfort and the potential damage response of structures. The vibration velocity signals are summed (in real time) and the maximum amplitude of this vector sum is defined as the Peak Vector Sum (PVS). Vibration can cause varying degrees of damage in buildings and affect vibration-sensitive machinery or equipment. Its effect on people may be to cause disturbance or annoyance or, at higher levels, to affect a person's ability to work. To put vibration levels in context, below is a list of common tasks and the level of vibration they produce:*

|                              |                         |
|------------------------------|-------------------------|
| <i>Jumping</i>               | <i>Up to 250</i>        |
| <b><i>Hammering nail</i></b> | <b><i>Up to 100</i></b> |
| <i>Sliding door</i>          | <i>Up to 10</i>         |
| <i>Shutting door</i>         | <i>Up to 30</i>         |

**Air overpressure** *is energy transmitted from a blast site within the atmosphere in the form of pressure waves. As these waves pass a given position, the pressure of the air rises very rapidly then falls more slowly then returns to the ambient value after a number of oscillations. The maximum excess pressure in this wave is known as the **peak air overpressure**, generally measured in decibels, using the linear (or unweighted) scale to obtain an unfiltered reading of the change in pressure. The unit used is **dB Linear**.*

*Vibration generating activities which can cause annoyance and are typically monitored form an environmental impact perspective include:*

- *Blasting at mine, quarrying and rock removal during road construction and building basement development.*
- *Piling*

- Demolition
- Road & rail traffic

Blast vibration is very dependent on the sites geological condition, distance to the blast and the blasting technique and amount of explosives used. It can be designed to ensure vibration and air overpressure levels are within acceptable limits. Blast design can be modified by:

- Number of blast holes
- Weight of explosive
- Amount of stemming
- Delay timing

Typical levels measured during construction activities are shown below:

|                                       |  |
|---------------------------------------|--|
| <b>Vibratory roller</b>               | <b>Up to 1.5mms @ 25m</b>  |
| <b>Hydraulic rock breakers</b>        | <b>4.5 mm/s @ 5m, 0.4 @ 20m, 0.1 @ 50m</b>                             |
| <b>Compactor</b>                      | <b>20mm/s @ 5m, &lt;0.3mm/s @30m</b>                                   |
| <b>Pile driving</b>                   | <b>1-3mm/s @ 50m depending on soil conditions and piling technique</b> |
| <b>Bulldozer</b>                      | <b>1-2mm/s @ 5m, 0.1 @ 50m</b>   |
| <b>Truck traffic (smooth surface)</b> | <b>&lt;0.2mm/s @ 20m</b>   |
| <b>Truck traffic (rough surface)</b>  | <b>&lt;2mm/s @ 20m</b>   |

Here are the noise limits according to the State of Colorado and the City of Lakewood:

### Colorado Noise Statute

Source: <http://www.nonoise.org/lawlib/states/colorado/colorado.htm>

#### 25-12-103 - Maximum permissible noise levels.

(1) Every activity to which this article is applicable shall be conducted in a manner so that any noise produced is not objectionable due to intermittence, beat frequency, or shrillness. Sound levels of noise radiating from a property line at a distance of twenty-five feet or more there from in excess of the db(A) established for the following time periods and zones shall constitute prima facie evidence that such noise is a public nuisance:

| Zone             | 7:00 a.m. to next 7:00 p.m. | 7:00 p.m. to next 7:00 a.m. |
|------------------|-----------------------------|-----------------------------|
| Residential      | 55 db(A)                    | 50 db(A)                    |
| Commercial       | 60 db(A)                    | 55 db(A)                    |
| Light industrial | 70 db(A)                    | 65 db(A)                    |
| Industrial       | 80 db(A)                    | 75 db(A)                    |

(2) In the hours between 7:00 a.m. and the next 7:00 p.m., the noise levels permitted in subsection (1) of this section may be increased by ten db(A) for a period of not to exceed fifteen minutes in any one-hour period.

(3) Periodic, impulsive, or shrill noises shall be considered a public nuisance when such noises are at a sound level of five db(A) less than those listed in subsection (1) of this section.

(4) This article is not intended to apply to the operation of aircraft or to other activities which are subject to federal law with respect to **noise** control.

(5) Construction projects shall be subject to the maximum permissible **noise** levels specified for industrial zones for the period within which construction is to be completed pursuant to any applicable construction permit issued by proper authority or, if no time limitation is imposed, for a reasonable period of time for completion of project.

(6) All railroad rights-of-way shall be considered as industrial zones for the purposes of this article, and the operation of trains shall be subject to the maximum permissible **noise** levels specified for such zone.

(7) This article is not applicable to the use of property for purposes of conducting speed or endurance events involving motor or other vehicles, but such exception is effective only during the specific period of time within which such use of the property is authorized by the political subdivision or governmental agency having lawful jurisdiction to authorize such use.

(8) For the purposes of this article, measurements with sound level meters shall be made when the wind velocity at the time and place of such measurement is not more than five miles per hour.

**(9) In all sound level measurements, consideration shall be given to the effect of the ambient noise level created by the encompassing noise of the environment from all sources at the time and place of such sound level measurement.**

(10) This article is not applicable to the use of property for the purpose of manufacturing, maintaining, or grooming machine-made snow. This subsection (10) shall not be construed to preempt or limit the authority of any political subdivision having jurisdiction to regulate **noise** abatement.

(11) This article is not applicable to the use of property by this state, any political subdivision of this state, or any other entity not organized for profit, including, but not limited to, nonprofit corporations, or any of their lessees, licensees, or permittees, for the purpose of promoting, producing, or holding cultural, entertainment, athletic, or patriotic events, including, but not limited to, concerts, music festivals, and fireworks displays. This subsection (11) shall not be construed to preempt or limit the authority of any political subdivision having jurisdiction to regulate **noise** abatement. **Source: L. 71: p. 648, § 1. C.R.S. 1963: § 66-35-3. L. 82: (10) added, p. 424, § 1, effective March 11. L. 87: (11) added, p. 1154, § 1, effective May 20.**

**Am. Jur.2d.** See 61A Am. Jur.2d, Pollution Control, § 267.

**Residential development of property is not precluded** when **noise** emanating onto property exceeds limits set forth in this section. *Einarsen v. City of Wheat Ridge*, 43 Colo. App. 232, 604 P.2d 691 (1979).

**Trier of fact to determine mode to use in measuring noise.** *Davis v. Izaak Walton League of America*, 717 P.2d 984 (Colo. App. 1985).

**Applied** in *City of Lakewood v. DeRoos*, 631 P.2d 1140 (Colo. App. 1981).

**See City of Lakewood Noise Ordinance (next page)**

**Lakewood Municipal Code, Title 9: Public Peace and Safety**  
**V. Offenses Against Public Peace, Chapter 9.52: Noise**

**III. Prohibited Noise-Sound Level Standards**

**"9.52.140 Construction activities.**

*Except as otherwise provided in this chapter, no person shall engage in, cause or permit any person to be engaged in construction activities in any residential or commercial district between the hours of nine p.m. of one day and six a.m. of the following day. Construction activities directly connected with the abatement of an emergency are excluded from the provisions of this section. (Ord. O-86-42 § 1 (part), 1986).*

**9.52.150 Power equipment.**

*No person shall operate or permit to be operated on any private property, or on the public way within any residential or commercial district(s), any power equipment used for home or building repair or grounds maintenance, or any construction equipment used for construction activities, between the hours of ten p.m. of one day and seven a.m. of the next day. Such power equipment shall include, but not be limited to, lawn mowers, garden tools, snow removal equipment, electric or chain saws, pavement breakers, log chippers, riding tractors, or powered hand tools. (Ord. O-86-42 § 1 (part), 1986)."*

18 { Short and long term noise and vibration disturbances of this magnitude, and at this close proximity to residents creates conditions for greater stress and sleep loss. This impacts people's health and welfare by weakening immune systems and impacting chronic conditions such as: musculo-skeletal disorders such as arthritis, fibromyalgia; asthma, allergies, and post traumatic stress syndrome symptoms, etc.

19 { The pylons placed for the US6 sound wall conducts vibrations that were previously undetected. The highway noise was reasonable before the noise wall was constructed. After completion, the noise wall concentrated (increased) and bounced that noise to our 2<sup>nd</sup> floor bedrooms and patio areas in such a way that people have to raise their voices to be heard. The highway noise is now heard in the courtyard on the south side of our building, echoing to both bedrooms on front and back side of the building. Since the US6 sound wall was installed, when heavy trucks, buses, or motorcycles pass by on US6 that shift their load or use their air brakes, we feel the "clunk" in our building thanks to the vibration conduction by the noise wall supports. This has added stress cracks to our carport, garage, back patio, and north wall in our lower level basement that were not there previous to the installation of new windows in 2004.

20  
21 { This US6/Wadsworth Project EA does not sufficiently address seismic vibration conducted to our buildings from heavy trucks, equipment, concrete demolition, jackhammers, earthmoving, and other construction activities. This type of project also causes settling in our area, as demonstrated by the construction of the US6 noise wall. Building demolition and tree removal will necessitate the use of chainsaws across the street and behind us, so we will be surrounded by inordinant levels of nuisance noise and vibration that can irreversibly damage our hearing.

22

White noise and ear plugs will not alleviate the conduction of sound and vibrations from the project to our home that disrupts sleep, etc. Sound decibels of heavy trucks and equipment being started up and driven back and forth are too conservative in this EA. There will be multiple sources with loud or sharp retorts (air brakes, shifting gears, horns, start up idling, etc.), that have not been accounted for in the estimates. **We are asking CDOT to address the multiplicative effect of the cumulative noise and vibration from all sources associated with the project, added to existing levels of noise and vibration.**

23

Instead of hearing and seeing local squirrels, birds, foxes, hawks, etc., we will be hearing the blaring heavy truck horns, back up alarms, and demolition activity for the duration of the project, which could be 2 years. After the project, we will no longer be able to enjoy the changing of the leaf colors on the trees because they will have been removed, and many of the local wildlife may have moved on by then to get away from the project irritants. These are significant impacts, not a FONSI. **CDOT needs to do a more realistic comparison of the synergistic effect of these multiple sources of noise and vibration pollution impacts.**

24

It is highly likely that there will be NO public street parking in front of our townhome complex on Vance with the additional traffic flow coming through our neighborhood which will impact our already limited parking available to us inside the complex.

25

Behind our Building, which is on the north end of the complex, the driveway to our carports and garages is an elevated dead end with steps at the end. Will CDOT open this up so we have options to drive all the way through to the east parking lot so we can reach the other two exits? Either way, ingress and egress will be made more difficult by the increase in local traffic. If a second exit is created behind our building to give us another through way, we will lose more parking spaces on the east end of our building. This will also increase noisy traffic attempting to get through our back area – making us more vulnerable to crime as well.

26

When the US6 highway is cleaned, it sends clouds of dust covering our cars, balconies and patio, necessitating closure of all windows and doors. It leaves a fine layer of dust in our home **on everything** (furniture, T.V.'s, lamps, computers, appliances, cabinets, picture frames, plants, flooring...) that needs cleanup the next day. If weather permits, most people want to open their doors and windows to let fresh air and sunshine in. With additional particulate and fugitive dust, that will be a health concern. The particulate from the US6/Wadsworth project, along with "unknown" hazards potentially to include lead based paint, **asbestos**, old transformers with PCB's from the older buildings being demolished, and other potential hazardous chemicals/materials expected to be encountered during construction will be greater than what is generated by highway cleaning, especially during demolition and grading activities.

27

Our neighborhood It is being changed from a quiet residential community to one with large volumes of cut-through traffic as we will now be situated alongside an on-ramp of a busy highway -- **as you are moving it closer to us**. There needs to be a relocation option for those local residents desiring relocation from a neighborhood that will have its character substantially

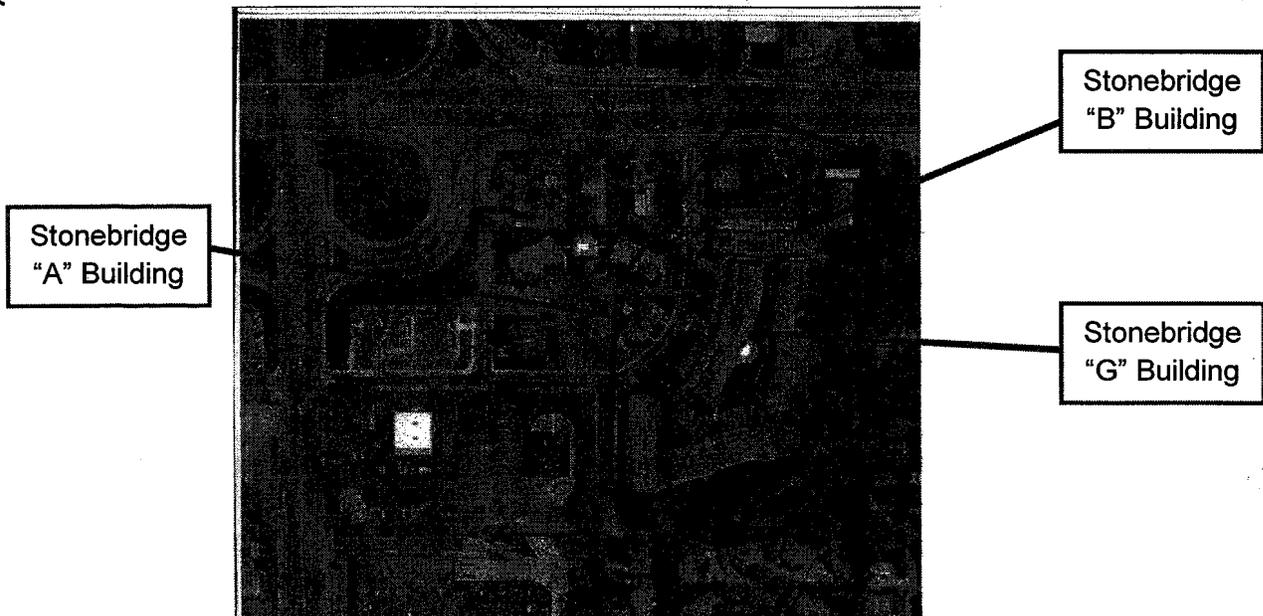
28

28 { and negatively affected and changed by the impacts of this project. We feel an EIS is in order because of the air pollution concerns, as well as local flora and fauna effects.

**Public Involvement**

29 { You did lots of public outreach to many neighborhood communities, including school principals, businesses, Eiber, O’Kane, and Morse Park neighborhood associations, **but failed to contact those closest to the US6/Wadsworth interchange project.** We have concerns about the lack of outreach or direct contact with our community, a maximally exposed/impacted population located on Vance Street next to the project. Our neighborhood should have been involved in the 2007 scoping period. Stonebridge Townhomes comprise the addresses from 420 to 582 Vance Street. How could you miss 84 homes adjacent to the project, yet do outreach to these neighborhood associations so much farther removed?  
The first notice we received was a card announcing the July 2009 public meeting, when we were out of town. After we inadvertently found out about the project from an insert in a free newspaper in Green Mountain, and called to find out why we weren’t informed, we received the Summer 2009 Newsletter.

30 { Stonebridge residents and the HOA Board appear to have not received any direct mailings until we requested it several months ago. We asked the Homestead Management Representative Michael Bordas if Stonebridge Townhomes management or the board had any meetings with CDOT about this project and we were told no, there had been no meetings. There is no substitute for contacting each and every homeowner surrounding a project such as this.



31 { Our townhome complex with 84 homes and between 168 to 336 adults and/or children is on Vance Street, between 5<sup>th</sup> Avenue, and the US6 Frontage Road. There are seven (7) buildings designated A through G in our complex. Three (3) of these buildings, A, **B (ours)**, and G, will be maximally impacted by the sound, vibration, fugitive dust, and other irritants or pollutants from

31 this project. **B Building is the most NW building that is closest to Vance and the 6<sup>th</sup> Avenue Frontage Road. This building will bear the greatest impact from this project.** Please refer to above illustration with red arrows pointing out A, B, and G Stonebridge Buildings.

**Environmental Justice Issues:**

Regarding exhibit ES-1: Summary of Impacts and Mitigation, US6/Wadsworth Environmental Assessment section, under Impacts of the Build Alternative cites several items of interest:

32 • "Without noise mitigation, projected noise for residences along US6 would increase 2 to 7 decibels."  
○ **We have reasonable cause to believe that this is an understatement. The simple addition of the noise wall along US 6 actually increased the noise to our building by 10 to 15 decibels (dBA). We have a calibrated Digital Sound Level Meter that we have used periodically that has validated this concern.**

33 • "Construction equipment and activities would intermittently generate loud noise."  
○ **This is another understatement that needs to be defined more completely. Our references indicate that the intermittent loud noise can spike from 70 (moderately loud, defined by WHO as already damaging to hearing) to 110 decibels (equivalent to a Pile Driver at 50 feet away, or a Commercial jet taking off at 200 feet). This is not MINOR disruptive noise, but would be considered to be very loud nuisance noise that can be damaging to resident's health and hearing. This does not include impact vibration and multiple sources. For night time construction activity, the City of New Jersey adds 10 dBA to noise estimates to account for what should be "quiet" residential sleep times, and how much more disruptive construction activity would be.**

34 • "Approximately 31.1 acres of property would be required from 96 ownerships; acquisitions would range from small slivers of property to entire parcels."  
○ **Is this an underestimate of property acquisition?**

35 • "14 residences and 28 businesses would be displaced."  
○ **We feel this is a misrepresentation. Consider the 84 residences at Stonebridge, containing 168-336 individuals, and the two large apartment buildings that sit between Webster and Vance Streets. These two neighborhood complexes are sitting adjacent to the construction zone. Those residents that express an interest to be relocated that live in these extremely close residences should be given the option to be relocated with property acquired from owners, and relocation expenses provided.**

36 • "Construction could disrupt access and travel through the project area for residents, businesses, and emergency service providers."

36 { ○ This is a major issue that is unacceptable. CDOT needs to come up with solutions. How are residents supposed to have ingress and egress from their homes during this project, which could last between 1 to 2 years? How are people going to go out, get groceries, and get them back into their homes, especially in inclement weather? What about at-risk children, adults, and medical responders? How about the disabled, such as one of our family members? Like any other neighborhood, we too have emergencies.

• “No disproportionately high and adverse impacts would occur in areas of minority or low-income populations.”

37 { ○ Are you kidding? This is a wrong hypothesis/assertion. There is a mix of population from mid-level income to low-level income in this neighborhood. In particular, we would bring your attention to the “Near Belmar Apartments”, previously known as the “Webster Street Apartments” located between Webster and Vance, just south of the buildings slated to be removed along the current US6 Avenue Frontage Road. This particular set of two (2) buildings is known for their high numbers of LOW INCOME Section 8 Housing residents. They will be right there, within 20 feet of the construction. Our Stonebridge Townhomes Building B, is on Vance, adjacent to the buildings slated to be removed in your EA. It is about 50 to 100 feet from the construction zone. There is a mix of rentals and individually owned property at Stonebridge Townhomes. The homes that have low income people in them are marked by greater numbers of individuals living in those homes to contribute to the overhead.

38 { ○ Environmental Justice guidelines should tell you that there is an inequity here, especially considering that CDOT has done active outreach to neighborhood associations farther removed from this construction site at US6/Wadsworth than for residents at Stonebridge and the Near Belmar Apartments. You did outreach to those property owners that would be directly displaced, but failed to do direct outreach to residents RIGHT at and surrounding the construction zone that would be maximally impacted by the disruption and pollution of dismantling buildings, heavy truck traffic, earthmoving and the like.

• The EA also mentions: “Noise walls will be constructed to reduce noise noticeably at approximately 380 residences.”

39 { ○ In our case, the noise wall installation did not reduce noise, in fact it INCREASED it significantly by 10 to 15 dBA more than before. It did not address 2<sup>nd</sup> floor living, as the sound walls bounce the noise around even more so because they are not high enough to shield nearby residences. The conduction of highway vibrations was an additional unexpected “bonus” impact of the US6 noise wall. You underestimated the number of residences affected, since you appeared to have overlooked the communities of people south and east of the US6/Wadsworth project.

**Personal Concerns:**

40 { We are sisters that have lived at our current location for over ten years. In that time, we have remodeled our home extensively, including enclosing the patio, installing a back access door to the garage, replacing all of the windows (bay window, kitchen garden window, energy efficient front window, two energy efficient windows downstairs), security storm doors front and back, remodeled three (2 full & 1 1/2 bath) bathrooms twice, including installing a whirlpool tub in one, and putting in French Doors downstairs in preparation for an additional bathroom and bedroom installation. We also have recently replaced the furnace and hot water heater.

We were preparing to replace sliding glass balcony doors with French Doors to the two balconies; add another full bathroom and moving laundry facilities to the lower level (basement), replacing carpeting with bamboo flooring in preparation to remodel the kitchen and dining area.

41 { Now that we have become aware of the severe impacts of this project, we are NOT moving forward with improvements to our property, as we recognize it may be better to be relocated, due to excessive construction impacts of sound, vibration, vehicular traffic including heavy equipment backup alarms (ear piercing), air brakes, rumbling startups, fugitive dust, structural building issues (plumbing pipes, settling/roofing). The "unknown" contamination is also of concern with the age of the properties slated for demolition. This poses serious negative impacts to our stress levels and health via noise, vibration, and air contamination.

42 { The anticipated difficult logistics of daily coming and going from our location with construction and traffic impeding our only outlet, with the severe health impacts, daily quality of life issues combined with loss of sleep, makes it now a very undesirable location. We will no longer have trees to look at which have acted as noise & pollution buffers, or the Webster to Vance 6<sup>th</sup> Avenue Frontage Road buildings acting as similar buffers. You will be substantially changing the character of our neighborhood, and quality of life in a negative way.

43 { An asthmatic since childhood, one family member has had several lung injury incidents involving particulate, asphalt, roofing tar, and diesel fumes from projects. An extreme hypersensitivity reaction closed her lungs down, putting her in critical condition for over 3 months. Some of this treatment necessitated leaving town for a period of time to get out of the local ozone levels for recovery. She is now highly sensitive to environmental pollutants including cigarette smoke, particulates, fugitive dust, asphalt, tar, and diesel fumes. Her critical care pulmonologist advised her that further exposure to these types of pollutants in any significant quantity or chronic exposure could be fatal to her. The impacts of this project pose undue burden to health and welfare.

44 { Another close member of our family is disabled. She is very sensitive to environmental pollutants and excess noise and vibration levels, due to musculo-skeletal disease and other debilitating conditions. The drastic negative change in daily quality of life with the noise and vibration increases would be overly burdensome for her condition. The Americans with Disabilities Act (ADA) would apply for accommodation by relocation of this individual.

45 { Because of the their pre-existing medical conditions, and the anticipated impacts of noise, vibration, fugitive dust, and other contaminants from this project, we feel it gives us reasonable cause to point out they are candidates for property acquisition and relocation as soon as possible, before this project commences.

46 { **We are therefore requesting CDOT to acquire our property and relocate us per the "Uniform, Relocation Assistance, and Real Property Acquisition Policies Act of 1970, as amended."** Our neighbors on Webster Street were already notified that their property will be acquired when funding comes through. They received the relocation packet and booklet from CDOT. We are requesting a relocation packet and booklet from CDOT be sent out to us.

47 { Should CDOT be inclined to relocate us away from this project, we would consider our personal concerns about the project to no longer be valid.

We appreciate your time and consideration of these public comments on the US6/Wadsworth Environmental Assessment, and look forward to your response. If you need further information or comment, please feel free to contact us by phone at 303-233-6677, at the address listed at the public comments header, or our email address: [environinfnetwk@aol.com](mailto:environinfnetwk@aol.com) , or our personal emails at [pjeloatson@aol.com](mailto:pjeloatson@aol.com), or [susandhurst@aol.com](mailto:susandhurst@aol.com).

Respectfully Submitted,

*Paula Elofson-Gardine*

*Susan Elofson-Hurst*

Paula Elofson-Gardine  
Executive Director

Susan Elofson-Hurst  
Publications Director

**Attachment:**

World Health Organization (WHO) Guidelines for Community Noise

Celia Greenman  
P.O. Box 261153  
Lakewood, CO 80226

303-274-8768  
mgseal@earthlink.net

August 23, 2009

Mr. Tim Ebersoll, P.E, Project Manager  
CH2M Hill  
9193 S. Jamaica Street  
Englewood, CO 80012

Re: US6 and Wadsworth Blvd EA, BICH2M Hill Project No. 358660

Dear Mr. Ebersoll,

1 { I have read through the Noise Technical Memorandum and feel that the report is incomplete on grounds of the locations where measurement was performed and the mitigation that is proposed.

2 { The effect of sound is not only a function of the linear distance from the source, but of **topography**. At our home, 8230 W. 8<sup>th</sup> Ave, during the morning (generally 6:00 a.m. to about 9 a.m.) we hear sound that is equally as loud as that within 50 ft of 6<sup>th</sup> Ave. The noise typically subsides during the day, as indicated in your report, and increases again around the time of the evening rush hour. The loudness is due to the fact that the house sits topographically higher (about 30 ft, based on GPS data) than the highway, and it exceeds CDOT's 66 dBA Noise Abatement Criteria. We invite you to measure the sound in the backyard at our house or any of the houses along the street, or we would be happy to furnish you with the supporting data. **CDOT's guidelines** state that noise mitigation should be considered for any receptor or group of receptors where predicted traffic noise levels, using future traffic volumes and roadway conditions, equal or exceed CDOT's Noise Abatement Criteria. My address falls into this category.

3 {

4 { We welcome the implementation of noise walls along 6<sup>th</sup> Ave, but not if their construction exacerbates the decibel level at our location. Under Noise FAQs, which was part of the Summer 2009 Newsletter of the US6/Wadsworth Environmental Assessment, Q-15 asks, "How are **noise reflections** from buildings and barrier walls considered?" the answer was that "some of the sound is diffracted over the barrier. In the case of parallel barriers, however, studies have shown that if two walls are constructed very close together, there is a potential for multiple reflections that may perceptibly increase noise levels." The two sound walls on either side of 6<sup>th</sup> Ave could act as parallel reflectors.

5 { To better ensure that sound at even higher decibel level than at present is not transmitted to nearby residences, I ask that **construction material other than concrete be considered for the noise barriers**. Concrete is a strong reflector

Celia Greenman  
P.O. Box 261153  
Lakewood, CO 80226

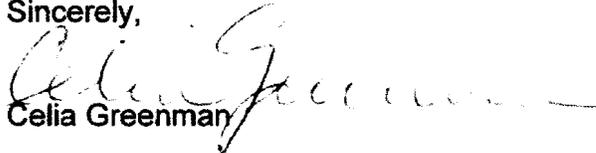
303-274-8768  
mgseal@earthlink.net

5 } of sound. The **cost benefit** paragraph in the EA does not discuss the  
6 } construction material of the noise barrier walls, but I suggest that **recycled tires**  
be evaluated, similar to that which has been constructed along 6<sup>th</sup> Ave between  
Alkire and Coors streets. It has been called attractive and effective by local  
residents (*Looking at Lakewood*, vol. 24, issue 6, December 2008).

7 } The objective of mitigation is to provide benefit to a population, but also to not  
worsen a bad situation for a portion of the population. I suggest that modeling  
and field tests be performed to determine how rubber would perform with regard  
to sound absorption, sound reflection, and cost. It could prove a win-win  
situation and also be highlighted as a "green" project.

Thank you for your consideration.

Sincerely,

  
Celia Greenman



DENVER CO 802  
24 AUG 2009 PM 3 L

Celia Greenman  
8230 West 8<sup>th</sup> Ave  
Lakewood, CO 80214

S3

Evercoll

NIS

Mr. Tim Ebersoll, P.E., Project Manager  
CH2M Hill  
9193 S. Jamaica Street  
Englewood, CO 80012



80112+5546

Celia Greenman

August 25, 2009

Comment sent via project website

Mr. Tim Ebersoll, P.E, Project Manager  
CH2M Hill  
9193 S. Jamaica Street  
Englewood, CO 80012

Re: US6 and Wadsworth Blvd EA, BICH2M Hill Project No. 358660

Dear Mr. Ebersoll,

I have read through the Noise Technical Memorandum and feel that the report is incomplete on grounds of the locations where measurement was performed and the mitigation that is proposed.

The effect of sound is not only a function of the linear distance from the source, but of topography. At our home, 8230 W. 8th Ave, during the morning (generally 6:00 a.m. to about 9 a.m.) we hear sound that is equally as loud as that within 50 ft of 6th Ave. The noise typically subsides during the day, as indicated in your report, and increases again around the time of the evening rush hour. The loudness is due to the fact that the house sits topographically higher (about 30 ft, based on GPS data) than the highway, and it exceeds CDOT's 66 dBA Noise Abatement Criteria. We invite you to measure the sound in the backyard at our house or any of the houses along the street, or we would be happy to furnish you with the supporting data. CDOT's guidelines state that noise mitigation should be considered for any receptor or group of receptors where predicted traffic noise levels, using future traffic volumes and roadway conditions, equal or exceed CDOT's Noise Abatement Criteria. My address falls into this category.

We welcome the implementation of noise walls along 6th Ave, but not if their construction exacerbates the decibel level at our location. Under Noise FAQs, which was part of the Summer 2009 Newsletter of the US6/Wadsworth Environmental Assessment, Q-15 asks, "How are noise reflections from buildings and barrier walls considered?" the answer was that "some of the sound is diffracted over the barrier. In the case of parallel barriers, however, studies have shown that if two walls are constructed very close together, there is a potential for multiple reflections that may perceptibly increase noise levels." The two sound walls on either side of 6th Ave could act as parallel reflectors.

To better ensure that sound at even higher decibel level than at present is not transmitted to nearby residences, I ask that construction material other than concrete be considered for the noise barriers. Concrete is a strong reflector of sound. The cost benefit paragraph in the EA does not discuss the construction material of the noise barrier walls, but I suggest that recycled tires be evaluated, similar to that which has been constructed along 6th Ave between Alkire and Coors streets. It has been called attractive and effective by local residents (Looking at Lakewood, vol. 24, issue 6, December 2008).

The objective of mitigation is to provide benefit to a population, but also to not worsen a bad situation for a portion of the population. I suggest that modeling and field tests be performed

to determine how rubber would perform with regard to sound absorption, sound reflection, and cost. It could prove a win-win situation and also be highlighted as a "green" project.

Thank you for your consideration.

Sincerely,

Celia Greenman  
P.O. Box 261153  
Lakewood, CO 80226  
303-274-8768



City of Lakewood

Office of the Mayor  
Bob Murphy

480 S. Allison Parkway  
Lakewood, CO 80226-3127  
303-987-7040 Voice  
303-987-7057 TDD  
303-987-7063 FAX

August 24, 2009

Syed Kalantar, P.E.  
Project Manager  
CDOT Region 6, Central Engineering  
425 B Corporate Circle  
Golden, CO 80401

**RE: City of Lakewood comments on US 6/Wadsworth Environmental Assessment including Improvements on Wadsworth Boulevard from 4<sup>th</sup> to 14th Avenues**

Dear Mr. Kalantar:

1 [ Thank you for the opportunity to provide comments on this Environmental Assessment. The City believes that improvements to Wadsworth and the Wadsworth/US 6 interchange are greatly needed and appreciates the work to date by the team led by CDOT.

**Transportation Improvements for the Proposed Build Alternative**

• **Reduced congestion**

- 2 [ ○ Three through lanes in each direction combined with controlled median access will provide significant congestion reduction on Wadsworth.
- 3 [ ○ The US 6/Wadsworth interchange has been identified by DRCOG as one of 18 "chokepoints" on the regional freeway system. The proposed layout is expected to relieve congestion on US 6 traffic flow.

• **Improved safety and driver comfort**

- 4 [ ○ Controlled median access management on Wadsworth greatly reduces the number of left turn conflicts to/from businesses and side streets.
- 5 [ ○ Interchange layout eliminates weaving conflicts. On and off ramps include longer acceleration/deceleration merge lanes making it safer to transition between speeds of the interchange ramps, US 6, and Wadsworth.

• **Improved bicycle and pedestrian safety and mobility**

6 [ Throughout the EA process, citizens identified pedestrian and bicycle safety as one of the most important issues to address (as identified in the Purpose and Need statements on Page 1-1 and the public comment on Page 1-5). The North Wadsworth Boulevard Corridor Plan and other adopted Lakewood plans also identify the need to improve conditions for pedestrians, bicyclists, and transit users along and across the Wadsworth Boulevard corridor and the Build Alternative provides an excellent opportunity to do so.

7 [ ○ On Page 1-5, Wadsworth Boulevard is identified as "...an important component of bicycle mobility in Lakewood because it offers the only opportunity for bicycles to cross US 6 in the 2.5 mile stretch between Sheridan Boulevard and Garrison Street." Wadsworth Boulevard is a critical link in the Lakewood bicycle system for this reason and it is important to capitalize on the opportunity to provide a safe, convenient crossing of US 6 at Wadsworth Boulevard. With the future light rail station at 13<sup>th</sup> Avenue and Wadsworth Boulevard, this crossing will become even more important with the expected increase in pedestrians and bicyclists accessing the station from Belmar and other areas south of US 6.

8 [ ○ On Page 3-7 of the EA, concern is raised about out-of-direction travel or unsafe mid-block crossings by pedestrians on Wadsworth if the pedestrian/bicycle crossing at Lakewood Gulch is not constructed. The proposed new Lakewood Gulch drainage culvert under Wadsworth will include an additional section for a trail crossing. Future plans for trail system along Lakewood Gulch can connect to this new crossing. A future connection from the new Wadsworth sidewalks could also provide a grade separated crossing for pedestrians/bicyclist could eventually be constructed (by others). We support the installation of the widened box culvert during project construction and future completion of this crossing.

9 [ ○ The EA acknowledges that visibility for pedestrians and bicyclists at the interchange ramps, while slightly improved over existing conditions, would remain poor with the Build Alternative (Page 3-7). The EA addresses measures that will be considered during final design to improve visibility and safety of these crossings (Pages 3-7 and 3-8). We strongly support inclusion of these proposed mitigation options.

10 [ ○ Continue sidewalks along Wadsworth (on both the east and west sides) and through the interchange area. Detached sidewalk provides a safer and more comfortable buffer between pedestrians and vehicle traffic

11 [ ○ Safer controlled crossings through the interchange area. Potential to incorporate a grade separated (underpass) of the loop ramp in the NW quadrant (determination of feasibility during final design).

• **Improved frontage road system**

12 [ ○ Revised configuration proposed by the neighborhood and adopted as a study recommendation reduces neighborhood cut through traffic in northeast quadrant.

- 13 [ ○ Improves access to adjacent businesses in the northwest quadrant of the interchange.
- **Improved transit connection's and operations**
- 14 [ ○ Three through lanes in each direction on Wadsworth provides for bus stop sites without need for additional turn-out lanes.
- 15 [ ○ Interchange bridge carrying U.S. 6 is long enough to accommodate future transit needs along Wadsworth should they be developed.

**Environmental Improvements for Proposed Build Alternative**

• **Noise Walls**

- 16 [ ○ Over 2 miles of proposed new noise walls would mitigate noise levels along US 6 between Garrison and Wadsworth. Includes extended noise mitigation around the interchange area.
- 17 [ ○ The City of Lakewood appreciates the opportunity to work with area residents and CDOT to provide input on design elements related to noise mitigation (Page 3-11) during final design.

• **Drainage**

- 18 [ ○ Drainage culverts and channels will accommodate the 100-year storm events, reducing the probability of flooding and overtopping of Wadsworth and adjacent properties.

• **Water Quality**

- 19 [ ○ Permanent water quality features provide treatment for surface water runoff
- 20 [ ○ The EA proposes a water quality pond at 1355 Wadsworth Boulevard. This parcel is zoned Transit Mixed Use-Station Core and is less than one block from the future light rail station at 13<sup>th</sup> Avenue and Wadsworth Boulevard. A great deal of planning has been done for this area with substantial effort from the City and area citizens. The area was rezoned by the City of Lakewood in 2007 to allow for higher-density transit oriented development (Station Core Area). Future aggregation of parcels is very likely because of the proximity to the Wadsworth major light rail station. Locating a water quality pond on this parcel is not conducive to implementing the long-term vision of the adopted plans and adopted zoning.
- 21 [ We understand that detention / water quality facilities in this area are necessary for the Build Alternative and based on current conditions, the identified parcel

may be an appropriate location for a water quality pond. However, during final design we would support CDOT in considering locally regionalized detention / water quality possibilities and/or coordinating these efforts with private development in the area to design a combined water quality /detention feature that would be an amenity to the Station Core area.

• **Land Use**

22 [ o Final design and right-of-way negotiations by CDOT will coordinate with Lakewood to address compatibility with land-use plans and potential allowances for nonconforming properties that may result from right-of-way acquisition

23 [ o *Zoning Nonconformance*  
- Throughout the EA, references are made to zoning nonconformance that could occur as a result of a construction project. On July 13, 2009 the City of Lakewood adopted an ordinance amending Article 17-16 of the Lakewood Municipal Code. The amendment related to the effects of acquisitions for, or construction of, public projects on individual properties. The ordinance amendment ensures that existing parcels and structures remain conforming, when appropriate. A copy of the ordinance is enclosed.

24 [ o *Colfax Avenue Rezoning*  
- On Page 3-23, the EA states that Lakewood is "...considering rezoning Colfax Avenue to promote pedestrian- and bicycle-oriented development..." The Colfax Avenue rezoning process occurred concurrently with the EA project. On May 11, 2009, the Lakewood City Council approved the legislative rezoning of properties along Colfax Avenue within the Lakewood Reinvestment Authority boundaries to the new Colfax Mixed Use Zone District. The zoning became effective on June 29, 2009.

25 [ o *North Wadsworth Boulevard Corridor Plan*  
- Also on Page 3-23, the EA references the Wadsworth Boulevard Strategic Plan. This Plan was repealed on June 22, 2009 and the North Wadsworth Boulevard Corridor Plan was adopted on this date. The Plan envisions Wadsworth Boulevard as a pedestrian, bicycle, and transit friendly corridor.

▪ **Visual Resources**

26 [ o The City of Lakewood appreciates the opportunity to work closely with CDOT during the final design phase on the aesthetics of project design elements. The EA recognizes that the new interchange has the potential to establish visual distinction and to be a gateway and a positive image for Lakewood (Page 3-45).

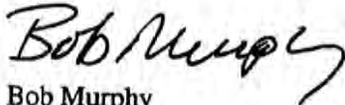
**NEPA Process**

▪ **Streamlined Schedule**

- 27 [ ○ Environmental assessment document completed in two years (compared to the typical 3 to 4 year schedule).
- 28 [ ○ Document and streamlined process being recognized by CDOT and FHWA as a model for future EA studies.
- 29 [ ○ Efficient and effective public outreach effort. Received numerous compliments on the team's ability to keep stakeholders informed and up-to-date on progress of the study, issues of concern, and decisions made throughout the study schedule.
- 30 [ ○ Agency charter with key participants provided structured guidelines for coordination, review, and approval roles for primary team members.

31 [ I reiterate the appreciation the City has for the project team's work with the community during the development of the environmental assessment. We look forward to continued progress toward fully implementing the improvements.

Sincerely,



Bob Murphy  
Mayor

Enclosure

cc: Jay Hutchison  
David Baskett  
Allen Albers  
Roger Wadnal  
Alexis Moore

O-2009-32

AN ORDINANCE

AMENDING ARTICLE 17-16 OF THE LAKEWOOD MUNICIPAL CODE RELATING TO THE EFFECTS OF ACQUISITIONS FOR, OR CONSTRUCTION OF, PUBLIC PROJECTS; FURTHER DECLARING AN EMERGENCY.

WHEREAS, public projects may result in existing properties and structures becoming nonconforming; and

WHEREAS, the existing ordinance that addresses the effects of nonconformance caused by public projects imposes time and effort on property owners; and

WHEREAS, there are active public projects currently in the City that generate such impacts on property owners; and

WHEREAS, this amendment to Article 17-16 of the Zoning Ordinance is intended to reduce uncertainty and ensure that existing parcels and structures remain conforming, when appropriate; and

WHEREAS, the amendment to Article 17-16 will allow property owners affected by public projects to proceed either under the existing provisions of Article 17-16-9 or under new provisions designed to simplify the process for property owners; and

WHEREAS, it is necessary that this ordinance take effect immediately to assist property owners affected by the Regional Transportation District's West Corridor FasTracks project.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Lakewood, Colorado, that:

SECTION 1. Article 17-16-9 of the Lakewood Municipal Code, is hereby repealed and readopted as follows:

**17-16-9. PROPERTY AFFECTED BY ACQUISITIONS FOR OR CONSTRUCTION OF PUBLIC PROJECTS:**

(1) If, as a direct result of a public project, a parcel and/or structure would become non-conforming with regard to any applicable zoning standard, the owner of the real property so affected may elect, one time and in writing, to proceed under either Subsection (2) or Subsection (3), below.

(2) If a portion of a parcel of land is taken for public use such that the remaining portion of the parcel does not conform to the requirements of this Ordinance, the following shall apply:

(a) If the taking causes a variance of no greater than twenty (20) percent in one or more numerical requirements, then the use shall be considered a legal, conforming use and a permanent variance shall be granted by the Board of Adjustment.

(b) If the taking of land causes a variance of more than twenty (20) percent in one or more numerical requirements and, in the judgment of the Board of Adjustment, would not create a hazardous situation or be otherwise unreasonable, the use shall be considered a legal nonconforming use and shall be subject to the applicable nonconforming use regulations set forth in this Article 16.

(3) If, as a direct result of a Public Project, a parcel and/or structure would become non-conforming with regard to any applicable zoning standard, said standard shall be adjusted as follows. The extent of the adjustment shall be the minimum amount necessary to ensure the existing parcel and/or structure conforms to said standard. The adjustment shall be effective upon completion of the property acquisition and/or construction that would have made the parcel and/or structure non-conforming. The change shall apply only to the affected parcel and/or structure.

(a) Adjustments to zoning standards pursuant to this Subsection (3) shall no longer apply to any parcel that is rezoned after the application of this Subsection. However, this Subsection (3) shall again be applied should an additional Public Project occur after said rezoning.

(b) Future modifications shall be allowed to any parcel and/or structure to which this Subsection (3) applies, provided the property has not been rezoned after the Public Project occurs, if the modifications comply (i) with the zoning standards in effect at the time of the Public Project as modified by this Subsection; and (ii) with all other City requirements applicable at the time of the modifications. Notwithstanding the foregoing, future modifications to a structure to which 17-16-9(1) applies are subject to the following restrictions:

(1) If a structure is intentionally modified, damaged, demolished or destroyed to the extent of more than sixty percent (60%) of its value any modifications must comply with the zoning standards in effect at the time of the modifications. For purposes of this paragraph, the structure's value shall be as determined by the method of valuation of buildings for permit issuance in the adopted Building Code.

(2) If a structure is intentionally modified, damaged, demolished or destroyed to the extent of sixty percent (60%) or less of its value and the Director determines that the proposed modification would create a hazard to the public health, safety or welfare, the Director may deny the proposed modification. Any such denial may be appealed to the Board of Adjustment in accordance with Section 17-4-6 of this Code. For purposes of this paragraph, the structure's value shall be as determined by the method of valuation of buildings for permit issuance in the adopted Building Code.

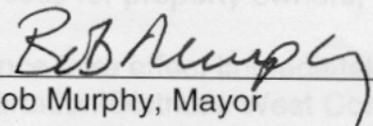
SECTION 2. Section 17-6-1 of the Lakewood Municipal Code is hereby amended to add the following:

**17-16-1. ADMINISTRATION AND DEFINITIONS.**

(1) "Public Project" means any project undertaken by a public entity or private entity to provide improvements that will be owned by a public entity for use by the general public. Said project may include acquisition of private property, construction of public improvements or both.

SECTION 3. EMERGENCY CLAUSE. This ordinance is necessary for the immediate preservation of the public peace, health and safety in order that it will apply to the properties affected by the Regional Transportation District's West Corridor FasTracks project and shall take effect upon the Mayor's signature.

I hereby attest and certify that the within and foregoing ordinance was introduced and read on first reading at a regular meeting of the Lakewood City Council on the 22nd day of June 2009; published by title in the Denver Post and in full on the City of Lakewood's website, [www.lakewood.org](http://www.lakewood.org), on the 25th day of June 2009; set for public hearing on the 13th day of July 2009; read, finally passed and adopted by the City Council on the \_\_\_\_ day of \_\_\_\_\_, 2009, and signed, and approved by the Mayor on the \_\_\_\_ day of \_\_\_\_\_, 2009.

  
\_\_\_\_\_  
Bob Murphy, Mayor

WHEREAS: It is necessary that this ordinance be adopted to amend the existing provisions of Article 17-16-9 or under new provisions designed to simplify the process for property owners; and property owners affected by the Regional Transportation District's West Corridor FasTracks project.

ATTEST:

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Lakewood, Colorado, that:

SECTION 1: Article 17-16-9 of the Lakewood Municipal Code, is hereby repealed and readopted as follows:

**17-16-9. PROPERTY AFFECTED BY ACQUISITIONS FOR OR CONSTRUCTION OF PUBLIC PROJECTS:**

(1) If, as a direct result of a public project, a parcel and/or structure would become non-conforming with regard to any applicable zoning standard, the owner of the real property so affected may elect, one time and in writing, to proceed under either Subsection (2) or Subsection (3), below.

(2) If a portion of a parcel of land is taken for public use such that the remaining portion of the parcel does not conform to the requirements of this Ordinance, the following shall apply:

Michael Villano

August 25, 2009

Comment sent via project website

Soundwalls:

1 { When you construct the US 6 soundwall, it would be nice if you extended it along the highway all the way to the west side of the Garrison Street overpass, like the soundwalls on the elevated portion of I-70 over the 20th Avenue overpass. For those of us not immediately adjacent to the highway, the worst noise comes from the elevated portion of US 6.

2 { Please, please, please construct the soundwall out of something like the tan block construction of the existing soundwall east of Wadsworth, and not the horrible pink demonstration soundwalls between Simms Street and Indiana. The adobe/stucco/used tire demonstration soundwall is perhaps the ugliest thing I've ever seen. Even grey patterned concrete would be better than the pink stuff.

3 { Finally, I assume the soundwall is going between the frontage road and [the]sic highway, rather than outside [teh]sic frontage road like it is east of Sheridan. The [piecemeal]sic approach east of Sheridan is nearly worthless.

**Olympia Investments, LTD.  
5565 East Yale Avenue, Suite No. 3  
Denver, CO 80222  
(303) 691-0263**

August 26, 2009

**VIA E-MAIL**

Mr. Seyed Kalantar, P.E.  
Project Manager  
CDOT Region 6, Central Engineering  
425 B Corporate Circle  
Golden, CO 80401  
Seyed.Kalantar@dot.state.co.us

Mr. Tim Eversoll, P.E.  
Project Manager  
CH2M HILL  
9193 S. Jamaica Street  
Englewood, CO 80112  
teversol@ch2m.com

Re: Proposed US 6 and Wadsworth Blvd. Project (the "Proposed Project")

Dear Gentlemen:

I am President of Olympia Investments Ltd. ("Olympia"). Olympia is owner and landlord of the commercial real property and improvements thereon located at 639 and 699 Wadsworth Blvd. (the "Olympia Property"). The Olympia Property is located generally at the Northwestern corner of the existing highway cloverleaf intersection at US 6 and Wadsworth Blvd. Olympia has owned the Olympia Property for several years. We have attended several of the public meetings regarding the Proposed Project.

I write in opposition to the Proposed Project for several reasons.

1 { First, from the Proposed Project presentations at the public meetings, it is clear that the Proposed Project would have a significant and material negative impact on the Olympia Property. We stand to lose the entire Olympia Property.

2 { Indeed, we are not the only ones who stand to lose our property. According to the Executive Summary for the Proposed Project, "[a]pproximately 31.1 acres of property would need to be acquired from 96 property owners through 114 acquisition parcels, including 45 residential, 65 commercial, and 4 publicly owned parcels." The Proposed Project is adversely affecting a whole lot of people.

August 26, 2009  
Mr. Kalantar and Mr. Eversoll

3 { Second, there are other alternatives for the US 6 and Wadsworth Blvd. project that would not result in us losing all the Olympia Property and would not result in other negative affects. These alternatives have been identified at the public meetings we have previously attended.

4 { Third, the Proposed Project is already way over budget. Significantly, we have been told that the budget for this project is approximately \$70 million and the estimated cost for the Proposed Project is more than \$90 million. These estimated costs likely have increased over time. We cannot understand how anyone would consider this project when, among other things, (a) the project is \$20 million over budget, (b) the project will materially and negatively affect a large number of property owners in the area, and (c) the federal, state, and local governments, as well as the citizens, are now facing severe financial and economic hardships. There simply is no justifiable reason to embark on a project of the grandiose scale at this time. In our opinion, there are far more important public improvement matters that would be better served with these financial resources.

Thank you for your consideration on these important issues.

Very truly yours,

Olympia Investments, Ltd.



George Peter Koclanes  
President

Philip Schmidt

August 26, 2009

Comment sent via project website

Hello,

- 1 { I am a homeowner in Green Acres, very close to the proposed new frontage road route. My wife and I support the proposed interchange design and feel the frontage road changes will be beneficial to our neighborhood, primarily because it should reduce non-resident travel through the neighborhood, from those trying to travel east from Wadsworth on the frontage road.
- 2 { However, we do feel that the noise walls along the frontage road (as they appear in the proposed interchange graphic) are absolutely necessary to minimize the impact of the increased travel on the Wadsworth end of the frontage road.
- 3 { In summary, we strongly support the current design proposal.

Thank you.

Philip Schmidt

Tim Eversall, P.E.

CH2M Hill  
9193 S. Jamaica St.  
Englewood, CO 80112

1 { My property is on the West side at 1355, 1345 Wadsworth including 1340 and 1360 Yukon. I believe you are going to need these properties with light rail going through there.

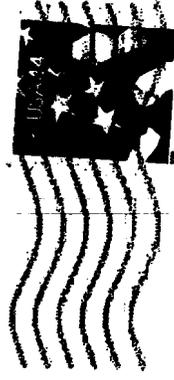
2 { An example of not planning ahead was for parking on the light rail down Santa Fe near Quincey Ave. Their parking lot had to be expanded several times at a higher cost each time. You could possibly combine this project with a developer to help keep costs down. The longer you wait, costs will keep going up.

Olen C. Crockett

*Olen C. Crockett*

DR. OLEN C. GINCKETT  
1345 WADSWORTH BLVD.  
LAKEWOOD, CO 80214

DENVER CO 802  
28 AUG 2009 PM 6 T



Tim Eversall, P.E.  
CH2M Hill  
9193 S. Jamaica St.  
Englewood, CO 80112

8011235946





# United States Department of the Interior

OFFICE OF THE SECRETARY  
Washington, DC 20240



TAKE PRIDE  
IN AMERICA

9043.1  
PEP/NRM

SEP 14 2009

ER 09/702

Ms. Karla S. Petty, P.E.  
Division Administrator  
Federal Highway Administration  
Colorado Division  
12300 West Dakota Avenue, Suite 180  
Lakewood, Colorado 80228

Dear Ms. Petty:

Thank you for the opportunity to comment on the Draft Environmental Assessment and Section 4(f) Evaluation for **US-6 and Wadsworth Boulevard Interchange Improvements, City of Lakewood, Jefferson County, Colorado**. The Department of the Interior (Department) reviewed the document and submits the following comments.

### SPECIFIC COMMENTS

The third bullet of the Fish and Wildlife Resource column in Appendix B, page B-2, states that trees will not be removed between April 1 and August 15 to avoid impacts to migratory birds. The Department is now recommending that the window be extended to August 31. } 1

### SECTION 4(f) COMMENTS

Following our review of the Section 4(f) Evaluation, the Department concurs that there is no feasible or prudent alternative to the Preferred Alternative selected in the document and that all measures to minimize harm to these resources has been taken. The Department acknowledges your consultation with the Colorado State Historic Preservation Office and that a Memorandum of Agreement to minimize adverse effects to historic properties will be prepared. } 2

We appreciate the opportunity to review this document. If you should have questions about specific comments, please contact Alison Deans Michael at 303 236-4758. Questions about the Section 4(f) comments should be referred to Julie Sharp at 303 236-4758.

Sincerely,

Willie R. Taylor  
Director, Office of Environmental  
Policy and Compliance

**From:** Rebecca Clark [mailto:RebCla@lakewood.org]

**Sent:** Friday, August 21, 2009 3:42 PM

**To:** Kalantar, Seyed

**Cc:** David Baskett; Michelle Hadwiger; Alexis Moore; Allen Albers

**Subject:** At your suggestion - to put into writing my comments and questions concerning EA and affect on 1190 Wadsworth

Mr. Kalantar,

At your recommendation I am putting both my questions and comments to you regarding the property at 1190 Wadsworth into writing.

As I indicated to you via phone conversation, I am assisting the property owners on the southeast corner of Wadsworth and 14<sup>th</sup> in a business relocation effort as established by resolution, policy and agreement per the direction of the Lakewood Mayor and City Council. This business and residence is being acquired and displaced due to RTD's LRT West Line Corridor. I am being assisted in this endeavor by RTD, their relocation specialist, the business owner's realtor and another realtor interested in working with property owner located at 1190 Wadsworth.

Therefore, by conducting research, due diligence and knowledge in both my capacity as the Lakewood Reinvestment Authority Director and Community Planning and Development position, I do have knowledge that 1190 Wadsworth will potentially be affected by the proposed highway widening. The affect on 1190 Wadsworth would be caused by acquiring and dedicating additional travel lane(s) and right-of-way, as well as an illustrated detention pond on CDOT's 15% design drawings.

As you and I both know, by way of a legislative rezoning, 1190 Wadsworth has been rezoned to TMU-MDR (Transit Mixed Use-Medium Density Residential) due to its proximity to the Wadsworth/13<sup>th</sup> elevated Light Rail Station. Which the City has taken extraordinary measures to improve upon the RTD design and the Reinvestment Authority will be providing additional funding to design and construct betterments on the elevated station. It has always been the intention and now through a variety of actions and approvals by the City Council and Reinvestment Authority, to develop and redevelop the properties within the TMU zone districts.

My direct City contacts and delegation on this project and the EA, again due to my position within the City's organization, has been through Dave Baskett, Allen Albers and Alexis Moore. I have known about the previous TLT discussions on those

properties that may be specifically affected within the proximity of the Wadsworth Station for detention purposes and the restrictions this could possibly place on the City's efforts to redevelop.

My questions:

- 2 [ 1. Are the proposed layouts for WQ basins based on current situations only?
- 3 [ 2. If this area (the site with the proposed WQ basin) were to be redeveloped due to the TOD, would the 6/WW plan consider alternative sites?
- 4 [ 3. Is CDOT/consultant in the process of investigating contingent designs for WQ facilities in the area?

Again, and I emphasize, as assigned by the Mayor and Council, I am assisting the emotionally traumatized displaced business and don't wish them additional injury should this property not be suitable for redevelopment for their current or FUTURE use of the property. More importantly, I don't want to have any fall out placed upon either the City or CDOT. This business has made quite a name for themselves in the media over the RTD eminent domain issue.

Thanks for your consideration and understanding. I will wait to hear a response.  
Becky

**Rebecca Clark, AICP**

*Director*

*Lakewood Reinvestment Authority*

303.987.7731



U.S. Department  
of Transportation

**Federal Highway  
Administration**

**Colorado Federal Aid  
Division**

12300 W. Dakota Avenue, Suite 180  
Lakewood, CO 80228

September 2, 2009

Mr. Reid Nelson, Director  
Office of Federal Agency Programs  
Advisory Council on Historic Preservation  
1100 Pennsylvania Avenue NW, Suite 803  
Washington, DC 20004

Attn: Carol Legard

**SUBJECT:** Memorandum of Agreement, CDOT Project STU 0062-019 US 6 and Wadsworth  
Interchange Improvements, Lakewood, Jefferson County, Colorado (SA 15215)

Dear Mr. Nelson:

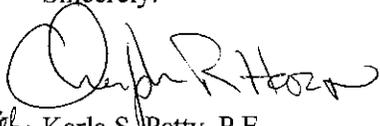
Transmitted herewith is the Memorandum of Agreement (MOA) for Colorado Department of Transportation (CDOT) Project referenced above. The Federal Highway Administration (FHWA) and the Colorado State Historic Preservation Officer (SHPO) have agreed that the proposed undertakings will have an adverse effect on the following properties:

- 7935 West 6<sup>th</sup> Avenue Frontage road (5JF3548)
- 7423 West 6<sup>th</sup> Avenue Frontage Road (5JF3549)
- 7433 West 6<sup>th</sup> Avenue Frontage road (5JF4542)
- 700 Wadsworth Boulevard (5JF4536)

The Colorado Department of Transportation and the City of Lakewood have signed this agreement as invited signatories. In accordance with the process set forth in the Council regulations, Section 800.6(b)(1)(iv), mitigation measures and measures considered to avoid or minimize the undertakings adverse effects have been agreed upon with the SHPO and are outlined in the MOA. There have not been additional views expressed by the public concerning this project.

If there are any questions, please contact CDOT Region 6 senior historian Dianna Litvak at (303)757-9461 or FHWA Senior Operations Engineer Mr. Chris Horn at (720)963-3017.

Sincerely,

  
Karla S. Petty, P.E.  
Division Administrator

Enclosures (copy of MOA for ACHP files)  
cc: Jim Paulmeno, CDOT Region 6 RPEM  
~~Dianna Litvak~~, Region 6 Historian, (with original MOAs)



**MEMORANDUM OF AGREEMENT  
BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION  
AND THE COLORADO STATE HISTORIC PRESERVATION OFFICER  
REGARDING Sites 5JF3548, 5JF3549, 5JF4542, and 5JF4536  
COLORADO DEPARTMENT OF TRANSPORTATION  
PROJECT STU 0062-019 (Sub Acct 15215) , US Highway 6 and Wadsworth Boulevard  
Interchange Reconstruction**

---

**WHEREAS**, the Colorado Department of Transportation (CDOT) Project STU 0062-019, US 6 and Wadsworth Interchange Reconstruction, will require demolition of four properties eligible for listing on the National Register of Historic Places and the Federal Highway Administration (FHWA) and CDOT have determined that the project will have adverse effects on these properties; and

**WHEREAS**, the following historic properties that will be adversely affected by the project were determined eligible to the National Register of Historic Places in August 2008:

**7395 West 6th Avenue Frontage Road (5JF3548)**, which is eligible to the National Register under Criterion C as a good representative example of an English-Norman Cottage style residence in Lakewood.

**7423 West 6th Avenue Frontage Road (5JF3549)**, which is eligible to the National Register under Criterion C for architectural merit as a good representative example of a Mediterranean Revival style residence in Lakewood.

**7433 West 6th Avenue Frontage Road (5JF4542)**, which is eligible to the National Register under Criterion C for architectural merit as a good representative example of a Minimal Traditional style residence in Lakewood.

**700 Wadsworth Boulevard (5JF4536)**, which is eligible to the National Register under Criterion C for architectural merit as a good representative example of an early Ranch style residence with Usonian influences in Lakewood.

**WHEREAS**, FHWA has consulted with the Colorado State Historic Preservation Officer (SHPO) pursuant to 36 CFR 800 regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f) (NHPA) and the Colorado SHPO concurred in the adverse effect determinations; and

**WHEREAS**, CDOT carries out activities for federal aid transportation projects on behalf of FHWA, including consultation under Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's (Council) regulations, National Environmental Policy Act (NEPA) analysis, and construction contract administration; and

**WHEREAS**, FHWA has consulted with CDOT regarding the effects of the undertaking on historic properties and has requested CDOT to sign this MOA as an invited signatory; and

**WHEREAS**, FHWA and CDOT have consulted with the City of Lakewood to assist in the implementation of some of the mitigation as described in this MOA and has requested the City to sign this

MEMORANDUM OF AGREEMENT  
PROJECT STU 0062-019 US 6 AND WADSWORTH INTERCHANGE IMPROVEMENTS

---

MOA as an invited signatory; and

**WHEREAS**, the Council issues regulations to implement Section 106 and provides comments to agency officials on undertakings and programs that affect historic properties, has reviewed this undertaking and declined to participate in the consultation process; and

**WHEREAS**, the duration for projects described in this Agreement is ten years after the execution of this Agreement to allow for the project to be constructed in phases as funding becomes available; and,

**NOW, THEREFORE**, FHWA and the SHPO agree, and CDOT concurs, that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties in compliance with Section 106 of the NHPA.

**STIPULATIONS**

FHWA, in consultation with CDOT, shall ensure that the following measures are carried out:

- a. **Mitigation:** CDOT and FHWA shall develop creative mitigation that interprets the historic significance of this area of Lakewood and historic preservation education.
  - a. CDOT shall include mitigation measures in the project special provisions, plans, and specifications of the proposed project.
  - b. CDOT shall work with the City of Lakewood Heritage, Culture, and the Arts Manager and the Lakewood Historical Society to develop and review the mitigation as part of the transportation improvement project.
  - c. SHPO shall have the opportunity to comment upon all of the mitigation products developed for this project.
  - d. Interpretive mitigation shall focus upon the evolution of Lakewood from an agricultural area to a suburban city after World War II, serve as an educational tool to help Lakewood citizens identify historic resources in their community, and provide more information on preserving and designating historic resources. These concepts will be implemented in the following ways:
    - 1) A low-profile interpretive sign placed along the bike path within the US 6 and Wadsworth project area.
    - 2) An educational website with content relating to Lakewood's historical sites, historic preservation, and tools to help residents interested in the historic significance of local sites. The website can be part of the content on the City of Lakewood's Heritage, Culture and the Arts web page and be maintained by the City. Other creative mitigation options that arise in the process of the projects that further the education or understanding of the importance of the resource shall also be considered according to project circumstances, but are not required under the terms of this Agreement. CDOT shall coordinate with FHWA, SHPO, the City of Lakewood Heritage, Culture, and the Arts Manager and the Lakewood Historical Society to determine whether these options are

MEMORANDUM OF AGREEMENT  
PROJECT STU 0062-019 US 6 AND WADSWORTH INTERCHANGE IMPROVEMENTS

---

desired. And, CDOT shall determine if these other options can be implemented within the project budget.

- 3) CDOT shall ensure that all mitigation activities will be performed or directly supervised by architects, historians, photographers and/or other professionals meeting the minimum qualifications in their field as specified in the Secretary of Interior's Professional Qualifications Standards (36 CFR 61, Appendix A).
- 
2. **Duration:** This agreement shall become effective upon execution by FHWA, SHPO, and CDOT and acceptance by the Council and shall remain in effect until the completion of the mitigation stipulations that fall under the terms of this Agreement within a ten-year period. The time frame can be expanded if agreed to in writing by the signatories prior to the expiration date. Prior to such time, FHWA may consult with the other signatories to reconsider the terms of the agreement and amend it in accordance with Stipulation 5 below. FHWA shall provide the Council with written notification regarding any extension of the MOA.
  3. **Reporting Requirements:** By June 30th of each year the agreement is in effect, CDOT will provide a report to SHPO on the status of the MOA, including the stipulations that have been implemented. The annual report will also include any recommendations to amend this Agreement or improve communication among the parties. The Council will be provided a copy of the annual report but will not be required to comment on the report.
  4. **Resolving Objections:** Should any party to this Agreement object in writing to FHWA regarding any action carried out or proposed with respect to the implementation of this Agreement, FHWA shall consult with the objecting party. If after initiating such consultation, FHWA determines that the objection cannot be resolved through consultation, it shall forward all documentation relevant to the objection to the Council, including FHWA's proposed response to the objection. Within 45 calendar days after receipt of all pertinent documentation, the Council shall exercise one of the following options:
    - a. Advise FHWA that the Council concurs with FHWA's proposed response to the objection, whereupon FHWA will respond to the objection accordingly; or
    - b. Provide FHWA with recommendations, which FHWA shall take into account in reaching a final decision regarding its response to the objection; or
    - c. Should the Council not exercise one of the above options within 45 calendar days after receipt of the pertinent documentation, FHWA may assume the Council concurrence in its proposed response to the objection.
    - d. At any time during implementation of any stipulation in this Agreement, should an objection to any such stipulation or its manner of implementation be raised by a member of the public, FHWA shall take the objection into account and consult as needed with the objecting party, the Council, and SHPO to address the objection

MEMORANDUM OF AGREEMENT  
PROJECT STU 0062-019 US 6 AND WADSWORTH INTERCHANGE IMPROVEMENTS

---

5. **Amendments:** The SHPO, FHWA, CDOT or City of Lakewood may request that this Agreement be amended, whereupon they will consult in accordance with 36 CFR 800 to consider such amendment. No amendment shall take effect until it has been executed by all signatories. In the event of an amendment, the Council will be notified and FHWA will file the resulting amendment with this Agreement.
6. **Termination:** The SHPO, FHWA, or CDOT may propose to terminate this Agreement by providing thirty (30) calendar days notice to the other parties explaining the reason(s) for the proposed termination pursuant to 36 CFR 800.6(c)(8). The SHPO, FHWA, CDOT and City of Lakewood will consult during this period to seek agreement on amendments or other actions that would avoid termination. If the annual report is not received within 90 days of the due date, the agreement may be terminated.
7. **Failure to Carry Out the Agreement:** In the event FHWA determines it cannot or will not carry out the terms of this MOA, it will immediately consult with the other parties to develop an amendment to this MOA pursuant to 36 CFR 800.6(c)(7). If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation 6, above.
8. **Review:** The SHPO may review activities carried out pursuant to this Agreement. FHWA and CDOT will cooperate with SHPO in carrying out their review responsibilities and will arrange for on-site visits for SHPO if so requested.
9. **FHWA Coordination:** Prior to submitting documentation to SHPO and consulting parties under the terms of this Agreement, CDOT will coordinate with FHWA, which has the responsibility of oversight of the implementation of this MOA.
10. **Coordination with National Environmental Policy Act (NEPA):** FHWA shall use this agreement as part of its responsibility to meet the requirements of NEPA.
11. **Coordination with Section 4(f) of the Department Of Transportation Act [Section 4(f)]:** FHWA shall use this agreement as part of its responsibility to comply with Section 4(f) as it applies to historic properties.

MEMORANDUM OF AGREEMENT  
PROJECT STU 0062-019 US 6 AND WADSWORTH INTERCHANGE IMPROVEMENTS

---

Execution of this Memorandum of Agreement by FHWA and Colorado SHPO and the submission of documentation and filing of this document with the The Council pursuant to 36 CFR 800.6(b)(1)(iv) prior to FHWA's approval of this undertaking and implementation of its terms, is evidence that FHWA has taken into account the effects of this undertaking on historic properties and afforded the THE COUNCIL an opportunity to comment.

**SIGNATORIES:**

**Federal Highway Administration**

*for* Stephen Gibson 8/26/09  
Karla S. Petty, P.E., Division Administrator Date

**Colorado State Historic Preservation Officer**

ED W. T. 8/14/09  
Edward C. Nichols, SHPO Date

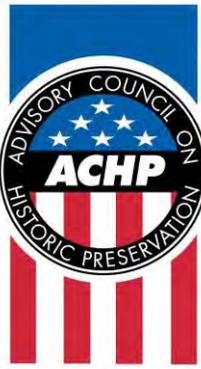
**INVITED SIGNATORIES:**

**Colorado Department of Transportation**

Russell George for 8/5/09  
Russell George, Executive Director Date

**City of Lakewood**

Kathy Hodson for 7/31/09  
Mike Rock, City Manager Date



*Preserving America's Heritage*

September 17, 2009

Karla S. Petty, P.E.  
Division Administrator  
Federal Highway Administration  
Colorado Federal Aid Division  
12300 W. Dakota Avenue, Suite 180  
Lakewood, CO 80228

REF: *Filing of executed Memorandum of Agreement regarding the US Highway 6  
and Wadsworth Boulevard Interchange Improvements in Lakewood,  
Jefferson County, Colorado  
CDOT Project STU 0062-019*

Dear Ms. Petty:

On September 8, 2009, the Advisory Council on Historic Preservation (ACHP) received the Memorandum of Agreement (MOA) for the above referenced project. In accordance with Section 800.6(b)(1)(iv) of the ACHP's regulations, the ACHP acknowledges receipt of the MOA. The filing of the MOA, and execution of its terms, completes the requirements of Section 106 of the National Historic Preservation Act and the ACHP's regulations.

We appreciate your providing us with a copy of the MOA and will retain it for inclusion in our records regarding this project. Should you have any questions or require additional assistance, please contact me at (202) 606-8509 or [ljohnson@achp.gov](mailto:ljohnson@achp.gov).

Sincerely,

LaShavio Johnson  
Historic Preservation Technician  
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004  
Phone: 202-606-8503 • Fax: 202-606-8647 • [achp@achp.gov](mailto:achp@achp.gov) • [www.achp.gov](http://www.achp.gov)



# City of Lakewood

## Department of Community Resources

480 South Allison Parkway  
Civic Center South  
Lakewood, Colorado 80226-3127  
(303) 987-7800 Fax (303) 987-7821  
TDD (303) 987-7599

October 29, 2009

**Letter of Concurrence – US 6/Wadsworth Project**  
**Section 4(f) *De Minimis* Finding**  
**Proposed Two Creeks Park**

The City of Lakewood (Lakewood) has jurisdiction over the proposed Two Creeks Park located between West 10<sup>th</sup> Avenue and West 12<sup>th</sup> Avenue and along Dry Gulch. While currently undeveloped, Lakewood plans to develop a park on this property to serve a currently underserved neighborhood, and considers the proposed park a significant recreation resource that qualifies for protection under Section 4(f) of the United States Transportation Act of 1966.

### Proposed Two Creeks Park Background

The land for the proposed Two Creeks Park was acquired in the fall of 2006, and was purchased by Lakewood, with Jefferson County Open Space funds, for express use as a park. No park facilities or amenities have been developed on the parcel. At the time of the initial data collection for the US 6 and Wadsworth Interchange project, the team did not identify the proposed Two Creeks Park as a potential Section 4(f) resource because the Jefferson County Assessor data did not yet reflect that the property had transferred to public ownership. During the scoping period, Lakewood clarified that they had recently purchased the property. The project team followed up with Lakewood right-of-way (ROW) and parks staff, who concurred that this planned park is significant and should be considered a Section 4(f) resource.

The park is not reflected in either the City's Comprehensive Plan or the adopted Neighborhood Plan, yet both plans identify the need for a park in the area. There are no funds to develop the park in the next five years. The property is not currently used for recreation or park purposes because it lacks infrastructure. Lakewood would like to develop a trail through the park that is accessible from Wadsworth Boulevard, but the profile of the drainage basin associated with Dry Creek is challenging.

### Impacts to Proposed Two Creeks Park

The US 6/Wadsworth project requires widening of Wadsworth Boulevard to add two travel lanes and sidewalks. Additionally, the drainage culvert for Dry Gulch under Wadsworth Boulevard needs to be replaced. The widening of the roadway and the replacement of the Dry Gulch culvert would have minor effects to the west end of the proposed Two Creeks Park, requiring a small amount of use of the park land for the transportation facility. The widened roadway would span the park property and would not result in any direct encroachment or use of the park land. The bridge over the park property would continue to be over the gulch where no active recreation occurs or would occur once the property was fully developed. The new culvert would extend farther into the park property, incorporating an additional 0.11 acre of the drainage channel, resulting in a Section 4(f) use. These impacts would not adversely affect the future activities, features, or attributes of the proposed Two Creeks Park. The affected land could not support active recreation because of the confined channel.

CDOT detailed these impacts in an Environmental Assessment (EA) published in July 2009. The public was provided an opportunity to comment on the impacts to the proposed park, and public notices and a poster at the public hearing open house highlighted potential impacts. No public comments were

**Alternative formats of this document available upon request.**

**Letter of Concurrence – US 6/Wadsworth Project**  
Section 4(f) *De Minimis* Finding  
Proposed Two Creeks Park

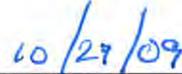
received. The Department of Interior, which is responsible for legal review of Section 4(f) evaluations, concurred with FHWA's Section 4(f) evaluation, including a *de minimis* determination for the planned Two Creeks Park.

Concurrence

The City of Lakewood concurs that the expansion of the drainage culvert at the proposed Two Creeks Park would not adversely affect the activities, features and attributes that qualify the property for protection under Section 4(f). This signed acknowledgement is a coordination element that is required before FHWA can make such a determination.



Ross E. Williams, RLA, CPRP  
Park Planner  
City of Lakewood



Date

# STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION

## Environmental Programs Branch

4201 East Arkansas Avenue  
Denver, Colorado 80222  
(303) 757-9011



February 24, 2010

Paul Tourangeau  
Director  
Air Pollution Control Division  
Colorado Department of Public Health and Environment  
4300 Cherry Creek Drive South  
Denver, CO 80222

RE: US 6 and Wadsworth EA Project in Lakewood, Colorado.

Dear Mr. Tourangeau,

In June 2009, the Colorado Department of Transportation completed an Environmental Assessment for improvements to the US 6/ Wadsworth Boulevard interchange and along Wadsworth between 14th and 4th Avenues in Lakewood. The project includes interchange reconstruction, bridge widening and ramp reconfigurations, and roadway widening along Wadsworth Boulevard between 14<sup>th</sup> and 4<sup>th</sup> Avenues. The purpose of the project is to improve traffic flow and safety, accommodate high traffic volumes, and increase multi-modal travel options and connections. To determine the localized air quality impacts of the proposed project, CDOT analyzed all affected intersections in the project area that would operate at Level of Service D, E, or F in future years, for both the No Build and Build Alternative to determine any potential exceedances of the carbon monoxide National Ambient Air Quality Standards.

The highest modeled eight-hour average carbon monoxide concentrations were 6.8 ppm for 2007 existing conditions, 4.7 ppm in 2035 for the No Build Alternative, and 4.6 ppm in 2035 for the Build Alternative. Therefore, this project will not cause or contribute to an exceedance of the federal eight-hour average carbon monoxide standard of 9.0 ppm.

The proposed undertaking is not a project of air quality concern for PM as defined in 40 CFR 93.123(b)(1). Therefore, the project-level conformity determination requirements of CRF 93.116 have been satisfied and no qualitative PM hot spot analysis is required.

CDOT's analysis of the project further indicates that the project will have a positive impact on traffic flow and will reduce the idling time of cars and trucks, thereby reducing emissions of ozone precursors and particulates.

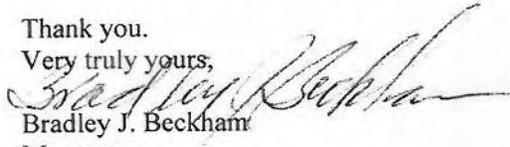
This project is included in the fiscally constrained 2035 *Metro Vision Regional Transportation Plan* (DRCOG 2007). The Right-of-Way and Final Design funds are being programmed into the current conforming TIP. In fulfillment of air quality conformity analyses completed for the 2035 RTP, the US6/ Wadsworth interchange reconstruction has been included in the 2015 staging year of the air quality conformity modeling run. Widening along Wadsworth Boulevard has been included in the 2020 staging year of the air quality conformity modeling run. This project will be implemented consistent with the staging years in the conformity analysis for the TIP and Fiscally Constrained Long Range Plan.

The Colorado Department of Transportation acknowledges receipt of a 2/23/2010 letter from Mr. Jim DiLeo, the Air Pollution Control Division's (APCD) NEPA Coordinator, that explains in detail the APCD's position regarding the unusual circumstances of concurrence on project-level conformity for this project.

If you concur with the results of the air quality analysis and the conclusions regarding conformity of this project, please sign below and return this letter by February 26, 2010.

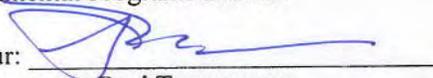
Thank you.

Very truly yours,



Bradley J. Beckham  
Manager  
Environmental Programs Branch

I Concur:

  
Paul Tourangeau

February 25, 2010  
Date

## INDEX OF CORRESPONDENCE

Email from Jill Coffman, July 13, 2009

Letter from Pat Banker, July 14, 2009

Public Hearing Written Comment Form, July 22, 2009

Public Hearing Verbal Comments Recorded by Court Reporter, Re: Michael Seal, David Green, George Sherman, Brian Lamke, Kim Frazer, Randy Nichols, Celia Greenman, Glennis Flemming, July 22, 2009

Public Hearing Written Comment Form, July 22, 2009

Public Hearing Written Comment Form, July 22, 2009

Email from Susan Hurst, Re: Environmental Impact Statement, August 1, 2009

Email from Susan Hurst, Response from David Singer/CDOT, August 1, 2009

Email from Susan Hurst, Re: Response from David Singer/CDOT, August 5, 2009

Weston K. Mauz Public Hearing Written Comment, August 12, 2009

J Gurly Public Hearing Written Comment; July 22, 2009

EIN Public Comments, August 18, 2009

Letter from Celia Greenman, Re: Noise Tech Memo, August 23, 2009

Celia Greenman Comment via Project Website, Re: Noise Tech Memo, August 25, 2009

City of Lakewood Comments, August 24, 2009

Michael Villano Comment via Project Website, August 25, 2009

Email from Olympia Investments, LTD, August 26, 2009

Philip Schmidt Comment via Project Website, August 26, 2009

Letter from Olen C. Crockett, August 28, 2009

Letter from United States Department of the Interior, Re: Draft EA, September 14, 2009

Email from Rebecca Clark/Lakewood Reinvestment Authority, August 21, 2009

Letter from Federal Highway Administration, Re: MOA, September 2, 2009

Letter from Advisory Council on Historic Preservation, Re: MOA Filing, September 17, 2009

Letter from City of Lakewood, Re: Letter of Concurrence, October 29, 2009

Letter from APCD, Re: Letter of Concurrence, February 24, 2010