

3.14 VISUAL QUALITY

3.14.1 Introduction

This section describes existing visual resources in the regional study area. It includes a discussion of:

- ▶ Landscape character units used to evaluate visual resources and visual quality considerations associated with each unit
- ▶ An inventory of existing visual resources and significant views in the regional study area
- ▶ A summary of important visual resources and visual quality considerations for local communities based on a review of local land use planning documents

The visual assessment process includes determining effects to visual resources by improvements that would:

- ▶ Block or impede views of scenic value (such as mountains or pastoral landscapes)
- ▶ Change the existing visual character or quality of the site, such as:
 - Introducing new visual elements
 - Relocating homes and businesses
 - Impacting town character
 - Impacting wetland resources, floodplains, and unique landforms

This visual assessment process also examines the consistency of improvements with any visual resource protection policies and goals stated in comprehensive plans and ordinances.

Specific design elements that could affect visual quality are:

- ▶ Sound walls
- ▶ Retaining walls
- ▶ Bridges
- ▶ Road widening- new expanses of pavement
- ▶ Lighting
- ▶ Elevation changes to roads
- ▶ Additional landscaping
- ▶ New rails, stations, and maintenance facilities

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3.14 Visual Quality

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3.14.2 Affected Environment

Due to the magnitude of the regional study area, project area corridors were evaluated according to distinct landscape character units. Physical elements of a landscape are what form the visual patterns that strongly influence our response to the landscape. The six landscape character units evaluated consisted of:

- ▶ Existing transportation corridors
- ▶ Agricultural, open space, and undeveloped land
- ▶ Parks, recreation areas, and trails
- ▶ Water and natural resources
- ▶ Commercial, light industrial, and municipal uses
- ▶ Residential (urban, suburban, rural) uses

A visual quality assessment was performed, which considered the existing visual quality of the regional study area and how existing visual resources (natural areas, important viewsheds, and land use) help to define the scenic backdrop of a community. It also evaluated whether existing visual resources would remain the same or change based on improvements associated with components of the No-Action Alternative and the two build packages.

Visual quality considerations associated with each of the six landscape character units in the project corridor are described below.

Existing Transportation Corridors.

There are three primary transportation corridors in the project area. US 85, I-25 and the BNSF and UPRR corridors were assessed as landscape character units.

The US 85 corridor runs from the City of Greeley in the north to Denver Union Station in the south. The corridor traverses large tracts of agricultural land along the northern portion of the corridor interspersed with rural towns. The southern portion of the corridor is more urban in nature associated with the Denver metropolitan Area.

The I-25 corridor begins in the north at the Town of Wellington and terminates at Denver Union Station. The northern portion of the corridor traverses agricultural lands but moving south becomes more urban in nature, with increasing residential and commercial uses.



Photo 3.14-1. BNSF Rail Corridor, Ft. Collins
This view reflects a more urban residential corridor.



Photo 3.14-2. Big Dry Creek Open Space
Open space is highly regarded by many viewers for its scenic values.

1 The BNSF Railway and UPRR corridors travel through undeveloped fields, rural residential
2 areas, and in built up urban areas. In urban areas, the BNSF rail bed traverses along urban
3 streets as seen in **Photo 3.14-1**, which depicts a typical gravel rail bed that intersects city
4 streets.

5 **Parks, Recreation Areas, and Trails.** There are numerous parks, recreation areas, and trails
6 adjacent to the project corridors. Often these areas offer views to on-site natural resources
7 and views of mountains, hills, and valleys. These resources increase the scenic integrity
8 values of viewsheds within the corridors. These recreation areas sometimes function as open
9 space “buffers” dedicated to enhancing scenic values of an area. (**Photo 3.14-2**)

10 **Water and Natural Resources.** Adjacent
11 floodplains and riparian areas with grasslands,
12 shrubs, and trees are common to larger natural
13 drainage systems. Natural resources also include
14 views to the mountains, hills and valleys that are
15 typical to the more rural undeveloped landscapes.
16 The occurrence of this landscape character unit
17 increases the scenic integrity value of viewsheds
18 within the project corridors. In addition, the more
19 varied the viewshed with natural resource
20 elements such as rock outcroppings, the higher the
21 scenic value is (**Photo 3.14-3**).



Photo 3.14-3. Federal and 119th Street
This view is representative of development land uses adjoining undeveloped areas and natural corridors, with wide sweeping background views of the Front Range and foothills.

22 **Commercial, Light Industrial, and Municipal.**
23 Notable components of this landscape character
24 unit are any historical landscape elements such as
25 those found in historic towns, including historic
26 grain elevators, other farm or ranch outbuildings,
27 and historic government buildings. These elements
28 are often considered to increase the scenic quality
29 of a landscape or viewshed (**Photo 3.14-4**).

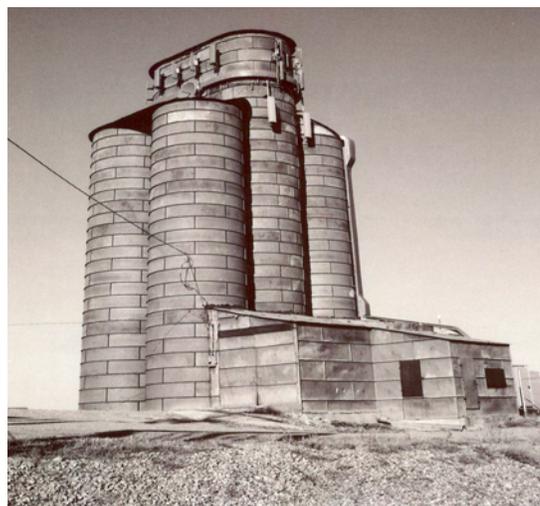
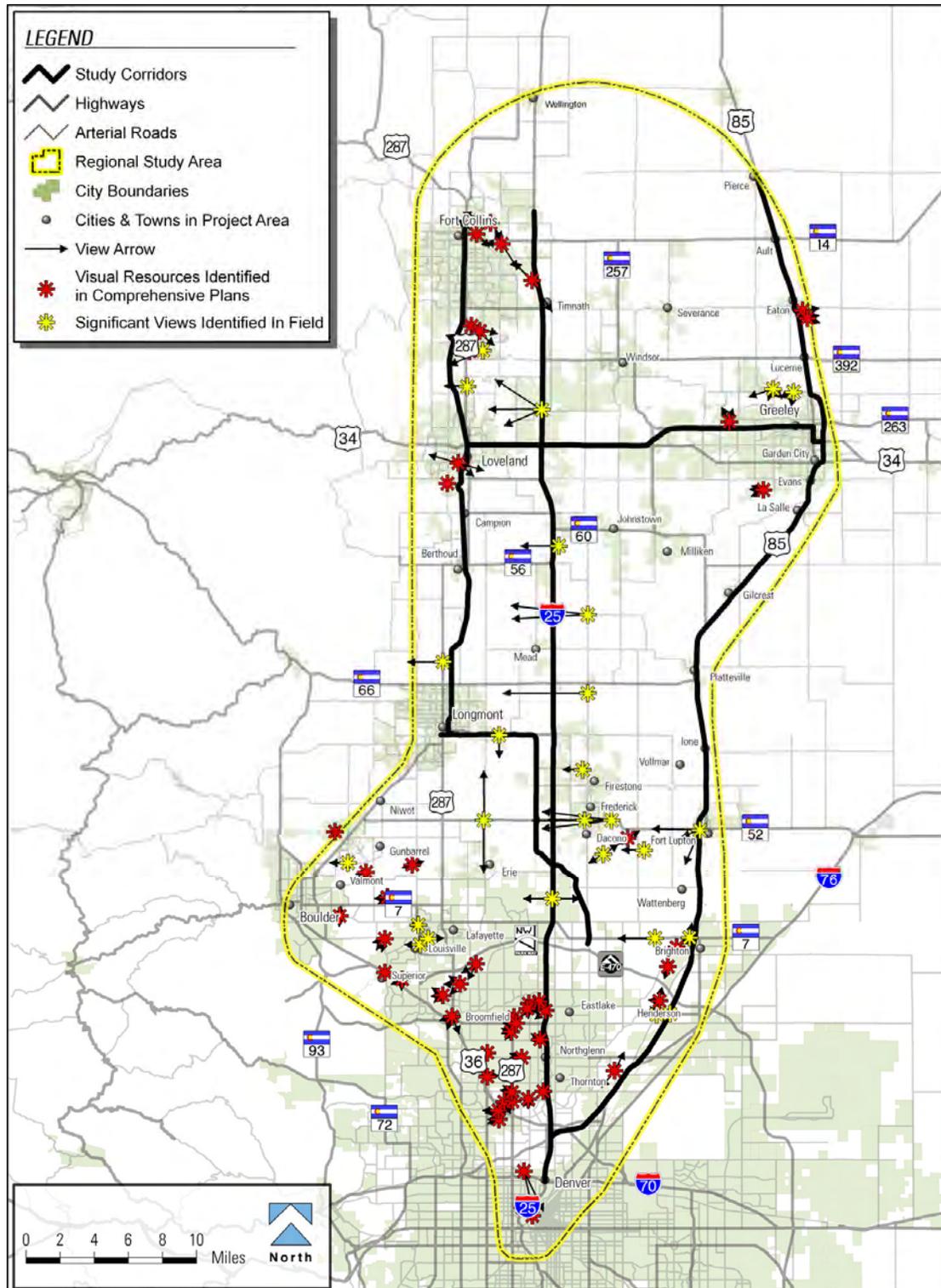


Photo 3.14-4. Grain Elevator, Larimer County
Historic landscape elements, such as this six-chamber grain elevator, can increase a landscape's scenic quality.

30 **Residential: Urban, Suburban, and Rural.** Each
31 of the project corridors bisects residential areas
32 that can be classified as urban, suburban, and
33 rural. Urban residential areas contain higher
34 density housing units with very minimal open
35 space or landscaped areas surrounding the units.
36 Suburban areas are less dense and have larger
37 lots with greater landscaped areas. Rural
38 residential areas are often associated with
39 agriculture. In general, the less dense the land
40 use, the greater the natural scenic integrity
41 remaining intact. The development density
42 associated with residences generally increases
43 when moving from north to south in the

- 1 Visual resources in the regional study area were identified through a review of planning
2 documents and through field observation. Generally, significant visual resources include
3 historic structures, parklands, open space, and natural resources/areas (e.g., lakes, streams,
4 rivers, wetlands). Field observations were performed to determine the locations of sensitive
5 viewsheds and dominant existing views. Desirable, important, and protected views in the
6 regional study area were documented. These views are identified on **Figure 3.14-1**.
- 7 Based on a review of local land use planning documents, some of the primary visual goals
8 important to local communities are:
- 9 ▶ Important ecological and scenic resources, such as wetlands, floodplains, and unique
10 landforms, should be protected and enhanced.
 - 11 ▶ The small-town character of Berthoud should be maintained.
 - 12 ▶ Significant natural features in the Boulder Valley planning area, including Davidson
13 Mesa, Gunbarrel Hill, and Boulder Reservoir, should be preserved.
 - 14 ▶ Numerous natural landmarks were defined as prominent landscape features, deemed
15 important because of the views they afford and for scenic, visual, or aesthetic values.
 - 16 ▶ Active protection of farmland and open space should be encouraged.
 - 17 ▶ The greenbelt around the city of Broomfield should be preserved, where feasible, to
18 protect environmentally constrained lands, steep slopes, creek corridors, and buffer
19 growth in nearby communities.
 - 20 ▶ Wildlife preserves, riparian corridors, Rocky Mountain views, and greenbelt buffers along
21 roadways should be identified as visually important to provide visual relief from more
22 intense land uses.
 - 23 ▶ Mountain and downtown views from public places, such as parks, should be preserved.
 - 24 ▶ Design guidelines for both public and private developments should be maintained to
25 promote protection and enhancement of the visual environment.
 - 26 ▶ Mountain backdrops were identified as significant visual resources.
 - 27 ▶ Historic buildings should be preserved as landscape features that help to create
28 community identity.

1 Figure 3.14-1 Visual Resources Identified in the Regional Study Area



3.14.3 Environmental Consequences

Many of the North Front Range communities comprising the regional study area have unimpeded views to the Front Range of the Rocky Mountains, including Longs Peak and Mount Meeker. Proposed improvements associated with the packages are minor relative to the large scale of this view.

Proposed improvements that affect visual quality in the project area were identified and evaluated for the degree of effect. Effects were rated as minor, moderate, or high. An effect is categorized as minor if it does not block or impede scenic views or diminish the visual character. This would include walls that are 5 feet or less in height and interchanges and bridges that are built at the same height. An effect was categorized as moderate if it either would block or impede a scenic view of value to adjacent businesses or residences (within ½-mile radius) or diminish the visual character. This would include walls from 5 feet to 15 feet in height and bridges and interchanges raised 6 feet or less in height. An effect was categorized as high if it would block or impede a scenic view of value (within ½-mile radius) and also diminish the visual character. This would include walls greater than 15 feet in height and bridges and interchanges raised greater than 6 feet.

The visual effects that occur as a result of highway widening, rail construction, bridge and wall construction, carpool lots, stations, and maintenance facilities were evaluated for each component.

Transportation improvements associated with the project could result in both short-term and long-term visual impacts. Short-term impacts include disruptions during construction while long-term impacts are the result of permanent alterations that change the way people commute in and around the area. Short-term impacts would include detours, an increase in roadway congestion in and around the area, the presence of large equipment, dust from construction, and general disruption to the surrounding neighborhoods and businesses. These short-term impacts would have a temporary visual effect to the community. Long-term impacts include relocation of businesses and residences; new interchanges; increased right-of-way; addition of station amenities; and changes to the surrounding landscape through the use of overpasses, bridges, retaining walls, medians, as well as from alterations to the existing roadway grade.

3.14.3.1 NO-ACTION ALTERNATIVE

Direct Impacts

The No-Action Alternative would generally have minimal effect on visual resources. Existing conditions, described in **Section 3.14.1**, would continue.

Indirect Impacts

Traffic and congestion would continue to increase. Even without highway or transit improvements associated with the project, growth would continue to occur on undeveloped agricultural land. This would change the landscape character along the I-25, the BNSF and US 287 corridors, and alter views and perception of visual character.

1 **3.14.3.2 PACKAGE A**

2 Visual impacts are discussed below for transportation improvement components in
3 Package A. Visual elements associated with highway improvements include interchange
4 upgrades, replacement and modification of bridges, new retaining walls, new sound walls, and the
5 addition of carpool lots. **Table 3.14-6**, provided later in this section, summarizes visual impacts
6 from highway widening and structure upgrades under each Package A highway component.

7 Structural elements include retaining walls, sound walls, bridges, box culverts and interchanges.

8 Retaining walls are proposed in areas that currently do not have them. Retaining walls would be
9 either the Colorado Department of Transportation (CDOT) standard retaining walls or
10 mechanically stabilized earth (MSE) walls and would range from 3 feet, 6 inches to 21 feet, 6
11 inches in height. If the retaining wall goes up vertically from I-25, it would reduce the visual effect
12 of the highway on surrounding homes and businesses while limiting motorists' views. If the
13 retaining wall goes down vertically from I-25, it would limit the views of the surrounding homes to
14 the surrounding community and long-range views from areas east of I-25 to the mountains.

15 Sound walls are proposed in areas which currently do not have them. The new sound walls
16 would range from 10 feet to 12 feet in height. While new sound walls would reduce noise
17 impacts to the surrounding community, they could increase visual impacts. The new sound
18 walls would reduce the visual effect of the highway on surrounding homes and businesses
19 while limiting motorists' views and long-range views of the surrounding community.

20 *A-H1 Highway Safety Improvements (SH 1 to SH 14).*

21 **Structural Impacts.** **Table 3.14-1** identifies the location and height range of one A-H1
22 retaining wall that would be greater than 15 feet in height. This wall would have a high effect
23 to the surrounding community. One retaining wall would be 15 feet in height or less, this wall
24 would have a moderate visual effect.

25 **Table 3.14-1 Retaining Wall Locations in Component A-H1**

Retaining Wall Location	Retaining Wall Height Range	Impacts Motorist or Surrounding Community?
North of LCR 58, south of LCR 60 on I-25	3'-5" to 21'-5"	Surrounding community
Near SH 1 and I-25 (NW quadrant)	3'-5" to 15'-0"	Surrounding community

26 **Table 3.14-2** identifies the location and height for the one sound wall in this component. It
27 would have a moderate visual effect to the surrounding community.

28 **Table 3.14-2 Sound Wall Locations in Component A-H1**

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range	Sound Wall Length
North of SH 1 on I-25	West	10'-12'	1,000'

29 Two interchanges are proposed to be rebuilt with a grade change of 6 feet or less. Ten
30 bridges and box culverts in the project area are proposed to be modified or reconstructed at
31 the same heights as the structures that they are replacing. Four bridges and box culverts are
32 proposed to be reconstructed with a grade change of 6 feet of less. The addition of retaining

1 walls, a sound wall, and the reconstruction of existing bridges and interchanges would
2 overall have a moderate visual effect to motorists and adjacent homes and businesses,
3 since similar structures already exist in these locations.

4 **Carpool Lots.** A carpool lot is proposed in the southwest quadrant of I-25 and SH 1. Carpool lots
5 would consist of parking, lighting, and landscaping. The amount of landscaping depends on
6 municipal standards. The addition of the carpool lot would have a minor visual effect because it
7 does not block any views and would not require the relocation of businesses or residences.

8 *A-H2 General Purpose Lanes (SH 14 to SH 60)*

9 **Highway Widening.** Widening the highway from SH 14 to SH 60 would require the
10 relocation of residences and businesses. Highway widening would have a moderate visual
11 effect to the surrounding community because of the required relocation of businesses and
12 residences. The greater expanse of pavement, from 68 feet to 120 feet between SH 14 and
13 Crossroads and from 68 feet to 144 feet between Crossroads and SH 60, would result in a
14 change in the visual experience for motorists.

15 **Structural Impacts.** **Table 3.14-3** identifies the location and height range of eighteen A-H2
16 retaining walls that would be greater than 15 feet in height, which would have a high visual
17 effect to the surrounding community. **Table 3.14-4** identifies the location and height of one sound
18 wall in A-H2 which would have a moderate visual effect to the surrounding community.

19 **Table 3.14-3 Retaining Wall Locations in Component A-H2**

Retaining Wall Location	Retaining Wall Height Range	Impacts Motorist or Surrounding Community?
North of Harmony Road, south of LCR 40 on I-25	11'-0" to 15'-5"	Motorist
North of SH 392, south of LCR 36 on I-25	11'-0" to 69'-0"	Surrounding community
North of SH 392, south of LCR 36 on I-25	11'-0" to 20'-0"	Surrounding community
North of SH 392, south of LCR 36 on I-25	18'-0" to 23'-0"	Motorist
North of SH 392, south of LCR 36 on I-25	14'-0" to 22'-0"	Surrounding community
Near SH 392 and I-25	3'-5" to 20'-5"	Surrounding community
Near Crossroads Blvd and I-25	19'-0" to 34'-0"	Motorist
Near US 34 and I-25	5'-0" to 22'-0"	Surrounding community
Near US 34 and I-25	5'-0" to 22'-0"	Surrounding community
Near US 34 and I-25	4'-5" to 35'-0"	Surrounding community
Near US 34 and I-25	10'-0" to 22'-0"	Surrounding community
Near US 34 and I-25	5'-0" to 22'-0"	Surrounding community
Near US 34 and I-25	3'-5" to 31'-0"	Surrounding community
Near US 34 and I-25	3'-0" to 35'-0"	Surrounding community
North of LCR 18, south of LCR 20E on I-25	5'-5" to 19'-0"	Surrounding community
North of LCR 18, south of LCR 20E on I-25	4'-5" to 30'-0"	Surrounding community
Near LCR 16 and I-25	27'-0" to 39'-5"	Surrounding community
Near SH 60 and I-25	10'-5" to 29'-5"	Surrounding community

20

1 **Table 3.14-4 Sound Wall Locations in Component A-H2**

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range	Sound Wall Length
South of SH 392 and north of CR 30 on I-25 at Mountain Range Shadows	West	12'	2,500'

2 Five interchanges are proposed to be rebuilt with a grade change of 6 to 12 feet. Rebuilding the
 3 interchange with the grade change would have a moderate effect on visual conditions. Two
 4 interchanges are proposed to be rebuilt with a change to the vertical alignment. The interchange
 5 of I-25 and SH 402 would be modified to have SH 402 go over I-25 and the interchange of I-25
 6 and LCR 16 would be modified to have LCR 16 go over I-25. Modifying the vertical alignment of
 7 I-25 and the cross street would have a moderate visual effect because it would block existing
 8 views from I-25 to the mountains. Lowering the vertical alignment of I-25 would limit the views of
 9 the vehicular traveler, while opening the view to adjacent properties. One interchange is
 10 proposed to be rebuilt with a grade change of 6 to 12 feet. Nine bridges that make up the US 34
 11 interchange would be constructed in two levels. One level approximately 24 feet above the
 12 existing US 34 and another level approximately 48 feet above existing US 34. The US 34
 13 eastbound and westbound by-pass over LCR 5, and the US 34 over Rocky Mountain Avenue
 14 would require relocation of businesses. The increase of size and vertical alignment of the US 34
 15 interchange would have a high visual effect to the vehicular traveler and adjacent properties.

16 Nine bridges and box culverts in the project area are proposed to be reconstructed or modified
 17 at the same heights as the bridges that they are replacing. Eighteen bridges and box culverts
 18 are proposed to be reconstructed with a grade change of 6 feet or less. Four bridges and box
 19 culverts are proposed to be constructed with a grade change from 6 to 12 feet. Three bridges
 20 are proposed to be reconstructed with a grade change of 28 feet. The introduction of numerous
 21 retaining walls over 15-feet in height, a sound wall, reconstructed interchanges and bridges that
 22 vary in their degree of visual effect to the surrounding community would have a high visual effect
 23 overall.

24 **Carpool Lots.** Five carpool lots are proposed at the following locations: I-25 and SH 14, I-25
 25 and Prospect Road, I-25 and Harmony Road, I-25 and SH 392, and I-25 and SH 402. The
 26 carpool lots would consist of parking, lighting, and landscaping. The amount of landscaping
 27 depends on municipal standards. The addition of carpool lots would have a minor visual effect
 28 because they would not block views or require the relocation of businesses or residences.

29 ***A-H3 General Purpose Lanes (SH 60 to E-470)***

30 **Highway Widening.** The widening of the highway from SH 60 to SH 66 and from SH 52 to
 31 E-470 would require the relocation of residences and businesses and naturalized type
 32 landscaping. Highway widening would have a moderate visual effect to the surrounding
 33 community because it would require the relocation of businesses. The greater expanse of
 34 pavement, from 68 feet to 120 feet between SH 60 and SH 66, from 128 feet to 144 feet
 35 between SH 52 and SH 7, and from 136 feet to 168 feet between SH 7 and E-470, would result
 36 in a change in the visual experience for motorists.

37 **Structural Impacts.** Table 3.14-5 identifies the location and height range of thirteen A-H3
 38 retaining walls that would be greater than 15 feet in height. These would have a high visual
 39 effect to the surrounding community. One retaining wall would be 15 feet in height or less, this
 40 wall would have a moderate visual effect.

Table 3.14-5 Retaining Wall Locations in Component A-H3

Retaining Wall Location	Retaining Wall Height Range	Impacts Motorist or Surrounding Community?
North of WCR 40, south of SH 56 on I-25	3'-5" to 29'-0"	Motorist
North of WCR 40, south of SH 56 on I-25	14'-0"	Motorist
North of WCR 40, south of SH 56 on I-25	14'-0" to 18'-0"	Surrounding community
Near WCR 34 and I-25	24'-0" to 30'-0"	Surrounding community
Near WCR 34 and I-25	12'-0" to 34'-0"	Motorist
Near WCR 34 and I-25	34'-0" to 38'-0"	Surrounding community
North of SH 66, south of WCR 32 on I-25	5'-0" to 25'-5"	Surrounding community
North of SH 66, south of WCR 32 on I-25	21'-0" to 27'-0"	Surrounding community
North of 160 th , south of SH 7 on I-25	1'-0" to 18'-2"	Surrounding community
SH 7 and I-25	2'-0" to 42'-0"	Surrounding community
SH 7 and I-25	2'-6" to 33'-1"	Surrounding community
SH 7 and I-25	2'-0" to 34'-9"	Surrounding community
SH 7 and I-25	1'-9" to 45'-2"	Surrounding community
SH 7 and I-25	5'-8" to 16'-5"	Surrounding community

1 Five interchanges are proposed to be rebuilt at the same heights that exist today.
 2 Rebuilding the interchanges at the same heights would have a minor effect on visual
 3 conditions. One interchange is proposed to be rebuilt with a change to its vertical
 4 alignment. The interchange of I-25 and SH 56 would be modified to have I-25 go over
 5 SH 56. Lowering the vertical alignment of SH 56 would limit the views of adjacent
 6 properties and improve the views to motorists on I-25. Modifying the vertical alignment of
 7 I-25 and the cross street would have a moderate effect to visual conditions because it
 8 would impact the views of surrounding businesses and residences to the mountains and
 9 require relocation of a residence.

10 Nine bridges and box culverts in the project area are proposed to be reconstructed at the
 11 same heights as the bridges that they are replacing. Reconstruction of existing structures
 12 would have a minor visual effect to the highway because the area already has structures
 13 in these locations. Nine bridges and box culverts are proposed to be reconstructed with a
 14 grade change of 6 feet or less. Nine bridges and box culverts are proposed to be
 15 reconstructed with a grade change of 7 to 14 feet. The introduction of new interchange
 16 alignments and bridges that vary in their degree of visual effect to the surrounding
 17 community would have a high visual effect overall to a highway that already has
 18 numerous bridges and interchanges.

19 **Carpool Lots.** Six carpool lots are proposed at the following locations: I-25 and SH 60, I-
 20 25 and SH 56, I-25 and SH 66, I-25 and SH 119, I-25 and SH 52, and I-25 and SH 7. The
 21 carpool lots would consist of parking, lighting, and landscaping. The amount of
 22 landscaping depends on municipal standards. The addition of the carpool lot would have
 23 a minor visual effect because it would not block views or require relocation of businesses
 24 or residences.

1 *A-H4 Structure Upgrades (E-470 to US 36)*

2 Bridges in the A-H4 component project area are proposed to be reconstructed at the same
3 height as the bridges that they are replacing. Reconstruction of existing bridges and
4 interchanges would have a minor visual effect to a highway that already has bridges and
5 interchanges in these locations.

6 **Table 3.14-6 Package A Highway Components Effects Analysis**

Package A Highway Components	Highway Widening effect	Structural Upgrade effect
A-H1	None	Moderate
A-H2	Moderate	High
A-H3	Moderate	High
A-H4	None	Minor

7 *A-T1 Commuter Rail – Fort Collins to Longmont*

8 **Rail Impacts.** This portion of the commuter rail alignment is proposed to be located in the
9 BNSF right-of-way. Between the BNSF North Yard and the CSU station at University Avenue,
10 the commuter rail alignment would use the existing track through Fort Collins. Since there
11 would be no improvements to the track through this portion, there would be no visual effects.
12 South of CSU to North Longmont, the commuter rail alignment would transition to a double
13 track. The commuter rail alignment would utilize the existing BNSF track and proposes a new
14 track to the east of the existing track. For the majority of this component, the new track would
15 follow the horizontal and vertical alignment of the existing track. A 6-foot chain link fence would
16 run parallel on the east and west sides of the tracks. At all railroad crossings, gates would be
17 upgraded or installed in order to provide safe crossings and potentially limit horns at crossings.
18 Ten railroad crossings would be upgraded to a four-quadrant gate. This would add two
19 additional gates in the medians of the adjacent cross street. Adding gates would reduce noise
20 impacts to the community but would have a minor visual effect on surrounding businesses and
21 residences. The new track and chain link fence would represent a moderate effect to the
22 surrounding community because they would require relocation of residences and businesses.

23 **Structural Impacts.** Table 3.14-7 identifies the location and height range of five
24 A-T1 retaining walls that could be greater than 15 feet in height. These would have a high
25 visual effect.

1 **Table 3.14-7 Retaining Wall Locations in Component A-T1**

Retaining Wall Location	Retaining Wall Height Range	Impacts transit rider or surrounding community?
North of Fossil Creek Trail, south of Fairway Lane along BNSF	14'-5" to 16'-4"	Transit rider
North of Fossil Creek Trail, south of Fairway Lane along BNSF	11'-5" to 16'-3"	Transit rider
North of Fossil Creek Drive, south of Fossil Creek Trail along BNSF	15'-4" to 16'-5"	Surrounding community
North of Fossil Creek Drive, south of Fossil Creek Trail along BNSF	12'-7" to 18'-6"	Surrounding community
24 th Street SW and BNSF	8'-6" to 16'-2"	Surrounding community

2 **Table 3.14-8** identifies the location of fifteen A-T1 sound walls, all of which would have a
3 high visual effect to the surrounding community.

4 **Table 3.14-8 Sound Wall Locations in Component A-T1**

Sound Wall Location	East/West Side of tracks	Sound Wall Length
East of 23 rd St- Mountain Ash Place (Loveland)	East	1,400'
35 th Street SW (Champion)	East	600'
South CR 15 (Berthoud)	East	400'
21 st Avenue- 23 rd Avenue (Longmont)	West	900'
17 th Avenue- 19 th Avenue (Longmont)	West	1,300'
17 th Avenue- 21 st Avenue (Longmont)	East	2,500'
15 th Avenue- 17 th Avenue (Longmont)	East	1,200'
Mountain View Avenue- 15 th Avenue (Longmont)	East	1,300'
11 th Avenue- Mountain View Avenue (Longmont)	East	1,500'
9 th Avenue- 10 th Avenue (Longmont)	East	600'
8 th Avenue- 9 th Avenue (Longmont)	East	600'
7 th Avenue- 8 th Avenue (Longmont)	East	500'
5 th Avenue- 6 th Avenue (Longmont)	East	500'
4 th Avenue- 5 th Avenue	East	500'
3 rd Avenue- 4 th Avenue	East	500'

5 New bridges would run parallel to the existing track and cross at the same height. The
6 introduction of new bridges would have a minor visual effect to a railroad corridor that
7 already has tracks and bridges in these locations. Although the effect associated with the
8 bridges would be minor, with the addition of the sound walls and new bridges, this would
9 have an overall high visual effect to the rail corridor. **Table 3.14-9** summarizes commuter rail
10 impacts associated with Component A-T1.

11 **Commuter Rail Stations.** Standard commuter rail stations would consist of two platforms,
12 which measure 400 feet by 25 feet. The commuter rail platforms would require a pedestrian
13 overpass that is 12-feet wide and 23-feet high between the platforms with elevator and stair
14 towers. Amenities associated with stations would include: shelters, fare boxes, benches,
15 windscreen, elevators, stairs, pedestrian overpass, parking, bike parking, bus bays, kiss-n-
16 ride, lighting, and landscaping. The addition of a parking lot would create an asphalt area.
17 **Table 3.14-9** summarizes commuter rail station impacts associated with Component A-T1.

1 The Fort Collins Downtown Transit Center would be an exception to the standard commuter
2 rail station. This station is proposed to be served by one platform with no overpasses or stair
3 towers required. The parking at the Downtown Transit Center is proposed to be either
4 surface parking or a parking structure. The addition of a parking lot would create a large area
5 of asphalt while a parking structure would introduce a three-story building in an urban area
6 where the average building height is two to four stories. Adding a station at the Fort Collins
7 Downtown Transit Center would have a moderate visual effect to the urban downtown area
8 because it would require relocation of the City of Fort Collins parking lot but would not affect
9 views.

10 **Table 3.14-9 Component A-T1 Commuter Rail Stations Effects Analysis**

Station Name	Effects	Classification
Fort Collins Downtown Transit Center	Relocation of parking lot	Moderate
Colorado State University	Views to mountains blocked	Moderate
South Fort Collins Transit Center	Views to mountains blocked	Moderate
North Loveland	Business relocation, views to mountains blocked	High
Downtown Loveland	Parking lot relocation, views to mountains blocked	High
Berthoud	Business relocation, views to mountains blocked	High
North Longmont	Residential relocation, views to mountains blocked	High

11 The North Loveland, Downtown Loveland, Berthoud, and North Longmont stations would
12 have a high visual effect because they would require relocation of a business or residence
13 and the station would impede views from the east to the mountains.

14 Stations at CSU and South Fort Collins Transit Center would have a moderate visual effect
15 to the surrounding community because they would impede views from the east to the
16 mountains, particularly Longs Peak. The effect would be moderate because, while it would
17 impede views, it would not require the relocation of any businesses.

18 **Figure 3.14-2** and **Figure 3.14-3** are visual simulations that depict the Berthoud commuter
19 rail station.

20 **Maintenance Facility.** Two commuter rail maintenance facility locations are being
21 considered in Package A. The standard maintenance facility would consist of additional
22 tracks, offices, dispatch/ driver support areas, vehicle maintenance bays, repair shops,
23 vehicle wash areas, fueling facilities, storage, and parking. Visual impacts associated with
24 each commuter rail maintenance facility location are summarized in **Table 3.14-10**.

1 **Figure 3.14-2 Berthoud Station, View at Commuter Rail Plaza**



2
3 **Figure 3.14-3 Berthoud Station, View at Commuter Rail Station**



1 **Table 3.14-10 Package A Maintenance Facility Effects Analysis**

Maintenance Facility Name	Effects	Classification
East Vine and Timberline	Visible to surrounding community	Moderate
CR 46 and US 287	Visible to surrounding community	Moderate

2 East Vine Drive and North Timberline. The land identified to accommodate the maintenance
3 facility is currently vacant. It is adjacent to vacant land and to residential and commercial
4 buildings. The maintenance facility would be visible to Vine Drive and the surrounding
5 neighborhood. The proposed maintenance facility would have a moderate visual effect because it
6 would be visible to the surrounding community and change the visual character of the area.

7 CR 46 and US 287. The land identified to accommodate the maintenance facility is currently
8 vacant. It is adjacent to residential and commercial development. Additional traffic would be
9 added to local streets. The maintenance facility would be visible to motorists on US 287,
10 3rd Street, and in the surrounding neighborhood. The proposed maintenance facility would
11 have a moderate visual effect because it would be visible to the surrounding community and
12 change the visual character of the area.

13 ***A-T2 Commuter Rail – Longmont to FasTracks North Metro***

14 **Rail Impacts.** The commuter rail alignment from the Sugar Mill station would utilize the
15 existing BNSF track and place a new track to the east of the existing track. The new track
16 would follow the horizontal and vertical alignment of the existing BNSF track. A double track
17 with two new tracks would provide the connection from the Sugar Mill station to the proposed
18 FasTracks North Metro end-of-line station. The track would run parallel to SH 119 east from
19 Sugar Mill, turn south and parallel CR 7, then follow the UPRR alignment across I-25 to the
20 FasTracks North Metro end-of-line station. A six-foot chain link fence would run parallel to
21 the tracks on the east and west sides of the tracks. At all railroad crossings, gates would be
22 installed to improve safety and limit noise effects. While the addition of gates would reduce
23 noise effects, they could increase effects to the visual environment. The introduction of a
24 new track would require the relocation of residences and businesses. The relocation of
25 businesses and residences, new track, chain link fence, railroad, and crossing elements
26 would have an overall moderate effect on the surrounding community.

27 Component A-T2 would include three new grade separations where one does not currently
28 exist. These are at the following locations:

- 29 ▶ SH 52 - this grade-separated crossing would moderately impact adjacent residences.
30 The new structure over SH 52 would impede views to the Front Range that have been
31 identified as significant.
- 32 ▶ Wyndham Hill Parkway - just north of SH 52, there would be a new bridge that would be
33 visible from residential areas both east and west of County Road 7. The structure over
34 Wyndham Hill Parkway would impede views to the Front Range. This impact would be
35 moderate.
- 36 ▶ SH 119 (Longmont) - on the eastern side of Longmont, a new bridge would be
37 constructed to carry the commuter rail tracks over SH 119. This would affect views from
38 motorists traveling east and west on SH 119 and residents in the area. This impact would
39 be moderate.

1 **Structural Impacts**

2 **Table 3.14-11** identifies the location and height ranges for sixteen A-T2 retaining walls that
3 would be greater than 15 feet in height. This would have a high visual impact.

Table 3.14-11 Retaining Wall Locations in Component A-T2

Retaining Wall Location	Retaining Wall Height Range	Impacts Transit Rider or Surrounding Community?
East of Emery Street, west of Martin Street on BNSF/1 st Avenue	8'-5" to 25'-0"	Surrounding community
East of Emery Street, west of Martin Street on BNSF/1 st Avenue	10'-5" to 25'-0"	Surrounding community
West of Alpine Drive, east of Martin Street on BNSF	14'-2" to 21'-3"	Transit rider
West of Alpine Drive, east of Martin Street on BNSF	4'-7" to 21'-3"	Transit rider
West of the intersection of SH 119 and Ken Pratt Boulevard	17'-0" to 26'-0"	Transit rider
West of the intersection of SH 119 and Ken Pratt Boulevard	3'-5" to 20'-9"	Transit rider
East of the intersection of SH 119 and Ken Pratt Boulevard	10'-6" to 25'-0"	Transit rider
East of the intersection of SH 119 and Ken Pratt Boulevard	10'-6" to 25'-0"	Transit rider
North of SH 52, south of CR 14.5 on CR 7	10'-1" to 18'-6"	Surrounding community
North of SH 52, south of CR 14.5 on CR 7	9'-3" to 18'-6"	Surrounding community
North of SH 52, south of CR 14.5 on CR 7	20'-5" to 25'-0"	Transit rider
North of SH 52, south of CR 14.5 on CR 7	20'-5" to 25'-0"	Transit rider
SH 52 and CR 7	9'-0" to 20'-3"	Surrounding community
SH 52 and CR 7	9'-0" to 20'-3"	Surrounding community
SH 52 and CR 7	13'-2" to 17'-3"	Surrounding community
South of 168 th Avenue and Colorado Blvd	9'-3" to 19'-8"	Surrounding community

4 **Table 3.14-12** identifies the location of the A-T2 sound wall, which would have a high visual
5 effect on the surrounding community.

6 **Table 3.14-12 Sound Wall Locations in Component A-T2**

Sound Wall Location	East/West Side of I-25	Sound Wall Length
CR 8 (Dacono)	East	1,500'

7

1 The new bridges would run parallel and cross at the same height as the existing track from
2 Longmont to Sugar Mill. The introduction of these new bridges would have a minor visual
3 effect to a railroad corridor that already has tracks and bridges in these locations. The
4 bridges over ditches and creeks would not be raised in height from the surrounding grade;
5 therefore, they would have a minor visual effect. The new bridge that crosses SH 119 would
6 be 30 feet with structure depth over the roadway. This would have a high visual effect to the
7 surrounding community because it would impede views to the mountains and surrounding
8 development. The introduction of retaining walls, sound walls, and new bridges would have
9 an overall high visual effect on the rail corridor. A summary of the results of the A-T2
10 commuter rail effects analysis is provided in **Table 3.14-13**.

Table 3.14-13 Package A Commuter Rail Effects Analysis

Commuter Rail Components	Rail	Structural
A-T1	Moderate	High
A-T2	Moderate	High

11 **Commuter Rail Stations.** **Table 3.14-14** summarizes A-T2 commuter rail station visual
12 impacts.

Table 3.14-14 Component A-T2 Commuter Rail Stations Effects Analysis

Station Name	Effects	Classification
Longmont at Sugar Mill	Business relocation, views to mountains blocked	Moderate
I-25 and WCR 8	Views to mountains blocked	Moderate
FasTracks North Metro	None	None

13 The stations at I-25 and WCR 8 and at the Longmont and Sugar Mill would have a moderate
14 visual effect to the surrounding community because they would impede views from the east
15 to the mountains and Longs Peak. Commuter rail would stop at all of the North Metro
16 corridor stations. These stations have not been included in the analysis since the stations
17 are being designed and built as part of FasTracks, and no additional improvements are
18 proposed as part of Package A.

19 ***A-T3 and A-T4 Commuter Bus – Greeley to Denver/DIA***

20 **Commuter Bus Stations.** The standard commuter bus station would include parking, bus
21 bays, kiss-n-ride, lighting, and landscaping. The amount and type of landscaping would
22 depend on city standards. **Table 3.14-15** summarizes visual impacts associated with
23 proposed commuter bus stations.

24 The Greeley, South Greeley, Evans, Platteville and Fort Lupton stations would have a
25 moderate visual effect because they would result in the relocation of a business or
26 residence. These stations would not, however, impede views to the mountains. Commuter
27 bus would stop at the existing Brighton park-n-Ride, Denver Union Station and DIA and the
28 proposed Commerce City park and ride. These stations have not been included in the
29 analysis and are assumed to be in existence at the time the EIS improvements and no
30 additional improvements are proposed as part of Package A.

1 **Table 3.14-15 Component A-T3 Commuter Bus Station Effects Analysis**

Station Name	Impact	Classification
Greeley	Relocation of business	Moderate
South Greeley	Use of existing parking lot	Moderate
Evans	Relocation of residence	Moderate
Platteville	Relocation of business	Moderate
Fort Lupton	Relocation of business	Moderate
Brighton	None	None
Commerce City	None	None
Denver Union Station	None	None
DIA	None	None

2 **Maintenance Facility.** Two locations for the commuter bus maintenance facility are being
3 considered in Package A. The standard maintenance facility would consist of offices,
4 dispatch/ driver support areas, vehicle maintenance bays, repair shops, vehicle wash areas,
5 fueling facilities, storage, and parking. **Table 3.14-16** summarizes visual impacts associated
6 with each of the two potential locations for the commuter bus maintenance facility.

7 **Table 3.14-16 Package A Maintenance Facility Effects Analysis**

Maintenance Facility Name	Impact	Classification
Portner Road and Trilby Road	Visible to surrounding community	Moderate
31 st Street and 1 st Avenue	Visible to surrounding community	Moderate

8 Portner Road and Trilby Road. The land identified to accommodate the maintenance facility
9 is currently vacant. It is adjacent to vacant land and to residential and commercial buildings.
10 The maintenance facility would be visible to Trilby Road and the surrounding neighborhood.
11 The proposed maintenance facility would have a moderate effect on the visual environment
12 because it would change the visual character of the area.

13 31st Street and 1st Avenue. The land identified to accommodate the maintenance facility is
14 currently vacant. It is adjacent to vacant land and commercial development. The
15 maintenance facility would be visible to 31st Street and the surrounding neighborhood. The
16 proposed maintenance facility would have a moderate effect on the visual environment
17 because it would change the visual character of the area.

18 **Summary of Package A Impacts**

19 **Direct Impacts.** Highway and transit improvements would include rebuilding interchanges,
20 replacement and modification of bridges, new retaining walls, new sound walls, and the
21 addition of carpool lots, tracks, platforms, shelters, fare boxes, benches, windscreen,
22 elevators, stairs, pedestrian overpass, parking, bike parking, bus bays, kiss and ride, lighting,
23 and landscaping. In a project area that primarily consists of undeveloped agricultural land
24 with extensive views to the mountains, including Longs Peak to the west, most of the
25 proposed improvements would not have a substantial effect to the visual quality of the
26 corridor.

1 Both the highway and transit components in Package A would have short-term and long-
2 term impacts. Short-term impacts would result from disruptions during construction while
3 long-term impacts would result from permanent alterations that change the way people
4 commute in and around the area. Short-term impacts under Package A would include
5 detours, increased roadway congestion in and around the area, the presence of large
6 equipment, dust from construction, and general disruption to the surrounding neighborhoods
7 and businesses. These short-term impacts would have a temporary visual effect to the
8 community. Long-term impacts include relocation of businesses and residences, new
9 interchanges, increased right-of-way, additions of station amenities, and changes to the
10 surrounding landscape through the use of overpasses, bridges, retaining walls, medians, as
11 well as alterations to the existing roadway grade.

12 **Indirect Impacts.** The proposed highway and transit improvements could encourage
13 development that is more compact and denser, especially within walking distance of a
14 commuter rail station. This would change the visual character.

15 The addition of stations and a maintenance facility would add additional traffic to local
16 streets. Both the stations and maintenance facility would generate lighting that would be
17 seen by motorists, as well as from adjacent businesses and residences.

18 3.14.3.3 PACKAGE B

19 Package B includes the same basic structural elements (retaining walls, sound walls,
20 bridges, box culverts, and interchanges) that were described for Package A. Visual elements
21 associated with highway improvements include highway widening, reconstruction and
22 modification of interchanges, new bridges, replacement and modification of bridges, new
23 retaining walls, new sound walls, and the addition of three carpool lots. **Table 3.14-24**, later
24 in this section, summarizes visual impacts from highway widening and structure upgrades for
25 each Package B highway component.

26 *B-H1 Highway Safety Improvements (SH 1 to SH 14)*

27 **Structural Impacts.** **Table 3.14-17** identifies the location and heights of two B-H1 retaining walls
28 that would be less than or equal to 15 feet in height. These would have a moderate visual effect
29 to the surrounding community.

Table 3.14-17 Wall Locations in Component B-H1

Retaining Wall Location	Retaining Wall Height Range	Impacts motorist or surrounding community?
Near SH 1 and I-25 (NW quadrant)	3'-5" to 15'-0"	Surrounding community
Near SH 1 and I-25 (SE quadrant)	3'-5" to 15'-0"	Surrounding community

30 The location of the B-H1 sound wall is provided in **Table 3.14-18**. This would have a
31 moderate visual effect to the surrounding community.

1 **Table 3.14-18 Sound Wall Locations in Component B-H1**

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range	Sound Wall Length
North of SH 1 on I-25	West	10'-12'	1,000'

2 Two interchanges are proposed to be rebuilt with a grade change of 6 feet or less. Ten
3 bridges and box culverts in the project area are proposed to be modified or reconstructed at
4 the same elevation as the bridges that they are replacing. Two bridges and box culverts
5 would be reconstructed with a grade change of 6 feet or less. The addition of retaining walls,
6 a sound wall, and reconstruction of existing bridges and interchanges would overall have a
7 moderate visual effect because these structures would block and impede views to the
8 mountains.

9 **Carpool Lots.** A carpool lot is proposed in the southwest quadrant of I-25 and SH 1. Carpool
10 lots would consist of parking, lighting, and landscaping. The amount of landscaping depends
11 on municipal standards. The addition of the carpool lot would have a minor visual effect
12 because it would not block views or require relocation of businesses or residences.

13 *B-H2 Tolled Express Lane (SH 14 to SH 60)*

14 **Highway Widening.** The widening of the highway from SH 14 to Harmony Road would
15 require a buffer separating the tolled express lanes (TELs) in each direction. The widening of
16 the highway from Harmony Road to SH 60 would require one new barrier separating the two
17 TELs in each direction. The widening of the highway from SH 14 to SH 60 would require the
18 relocation of residences and businesses. The greater expanse of pavement, from 68 feet to
19 128 feet between SH 14 and Harmony Road and 68 feet to 192 feet between Harmony Road
20 and SH 60, would result in a change in the visual experience for the motorist. Highway
21 widening would have a moderate effect on visual conditions because it would require
22 relocation of businesses or residences.

23 **Structural Impacts.** Table 3.14-19 identifies the location and heights of nineteen B-H2
24 retaining walls greater than 15 feet in height. These would have a high visual effect to the
25 surrounding community. Three retaining walls would be 15 feet in height or less, these would
26 have a moderate visual effect.

1 **Table 3.14-19 Retaining Wall Locations in Component B-H2**

Retaining Wall Location	Retaining Wall Height Range	Impacts Motorist or Surrounding Community?
Near SH 14 and I-25	3'-5" to 15'-0"	Surrounding community
North of LCR 40, south of Prospect Road on I-25	3'-5" to 33'-5"	Motorist
Near LCR 40 and I-25, north of Harmony Road	3'-5" to 18'-5"	Surrounding community
Near Harmony Road and I-25	3'-5" to 16'-0"	Surrounding community
Near 392 and I-25	3'-5" to 15'-0"	Surrounding community
North of Crossroads Blvd, south of LCR 30 on I-25	3'-5" to 25'-0"	Motorist
North of Crossroads Blvd, south of LCR 30 on I-25	6'-0" to 29'-0"	Motorist
North of US 34, south of Crossroads Blvd. on I-25	11'-0" to 22'-0"	Surrounding community
North of US 34, south of Crossroads Blvd. on I-25	5'-0" to 22'-0"	Surrounding community
North of US 34, south of Crossroads Blvd. on I-25	5'-0" to 22'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	4'-5" to 35'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	10'-0" to 22'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	5'-0" to 22'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-5" to 31'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-0" to 35'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-5" to 25'-5"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-5" to 25'-5"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-5" to 25'-5"	Surrounding community
North of LCR 18, south of US 34 on I-25	14'-0" to 31'-5"	Surrounding community
North of LCR 16, south of LCR 18 on I-25	3'-5" to 19'-5"	Motorist
North of LCR 16, south of LCR 18 on I-25	26'-0" to 36'-5"	Surrounding community
Near SH 60 (WCR 48) and I-25	3'-5" to 15'-0"	Surrounding community

2 The location of the B-H2 sound wall is shown in **Table 3.14-20**. This would be a moderate
3 visual effect to the surrounding community.

Table 3.14-20 Sound Wall Locations in Component B-H2

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range	Sound Wall Length
South of SH 392 and North of CR 30 on I-25 at Mountain Range Shadows	West	12'	2,500'

4 Five interchanges are proposed to be rebuilt with a grade change of 6 feet or less. Two
5 interchanges are proposed to be rebuilt with a change to the vertical alignment. The
6 interchange of I-25 and SH 402 would be modified to have SH 402 go over I-25 and the
7 interchange of I-25 and LCR 16 would be modified to have LCR 16 go over I-25. Modifying
8 the vertical alignment of I-25 and the cross street would have a moderate effect to visual
9 conditions. Lowering the vertical alignment of I-25 would limit views of motorists, while
10 opening the view to adjacent properties and to motorists of the raised cross street. One
11 interchange is proposed to be rebuilt with a grade change of 6 to 12 feet. Nine bridges that
12 make up the US 34 interchange would be constructed in two levels. One level approximately
13 24 feet above the existing US 34 and another level approximately 48 feet above existing US
14 34. The US 34 eastbound and westbound by-pass over LCR 5, and the US 34 over Rocky

1 Mountain Avenue would require relocation of businesses. The increase of size and vertical
2 alignment of the US 34 interchange would have a high visual effect to the vehicular traveler
3 and adjacent properties.

4 Nine bridges and box culverts in the project area are proposed to be modified or
5 reconstructed at the same elevation as the structures that they are replacing. The
6 reconstruction of existing structures would have a minor visual effect to a highway that
7 already has structures in these locations. Eighteen bridges and box culverts would be
8 reconstructed with a grade change of 6 feet or less. Four bridges and box culverts are
9 proposed to be constructed with a grade change from 6 to 12 feet. Three bridges are
10 proposed to be rebuilt at a grade change of 28 feet. The introduction of numerous retaining
11 walls over 15 feet in height, a sound wall, reconstructed bridges, and interchanges would
12 have a high visual effect overall because these structures would block views and require
13 relocation of residences or businesses.

14 **Carpool Lots.** Three carpool lots are proposed at the following locations: the northeastern
15 corner of I-25 and SH 14, the northwestern corner of I-25 and Prospect and the
16 southwestern corner of I-25 and SH 402 (alternative location at the southeastern corner).
17 The carpool lots consist of parking, lighting, and landscaping. The amount of landscaping
18 depends on municipal standards. The addition of the carpool lots would have a minor visual
19 effect because they do not block views and do not require relocation of businesses or
20 residences.

21 *B-H3 Tolled Express Lanes (SH 60 to E-470)*

22 **Highway Widening.** The widening of the highway from SH 60 to E-470 would require the
23 addition of a new buffer-separated Tolled Express Lane (TEL) in each direction. The
24 widening of the highway from SH 60 to E-470 would require relocation of businesses and
25 naturalized type landscaping. The greater expanse of pavement, from 128 feet to 152 feet
26 between SH 66 and SH 7, would result in a change in the visual experience for the motorist.
27 The highway widening and relocation of businesses would represent a moderate effect to the
28 surrounding community.

29 **Structural Impacts.** The location and heights of nine B-H3 retaining walls greater than
30 15 feet in height are included in **Table 3.14-21**. These walls would have a high visual effect
31 to the surrounding community.

1 **Table 3.14-21 Retaining Wall Locations in Component B-H3**

Retaining Wall Location	Retaining Wall Height Range	Impacts Motorist or Surrounding Community?
North of WCR 36, south of WCR 38 on I-25	6'-0" to 18'-5"	Surrounding community
North of WCR 34, south of WCR 36 on I-25	23'-5" to 32'-5"	Surrounding community
North of WCR 34, south of WCR 36 on I-25	3'-5" to 25'-6"	Surrounding community
North of WCR 28, south of SH 66 on I-25	12'-5" to 39'-0"	Surrounding community
North of 160 th , south of SH 7 on I-25	2'-0" to 20'-0"	Surrounding community
SH 7 and I-25	11'-0" to 22'-0"	Surrounding community
SH 7 and I-25	12'-0" to 25'-0"	Surrounding community
SH 7 and I-25	11'-0" to 27'-0"	Surrounding community
SH 7 and I-25	13'-0" to 18'-0"	Surrounding community

2 Seven interchanges are proposed to be rebuilt at the same height that exists today.
 3 Rebuilding the interchanges at the same heights would have a minor effect on visual
 4 conditions. One interchange is proposed to be rebuilt with a change to the vertical alignment.
 5 The interchange of I-25 and SH 56 would be modified to have I-25 go over SH 56. Lowering
 6 the vertical alignment of SH 56 would limit the views of adjacent properties to the mountains
 7 and surrounding development and improve views of motorists on I-25. Modifying the vertical
 8 alignment of I-25 and the cross street would overall have a moderate effect to visual
 9 conditions because it would block and impede views to the mountains.

10 Eighteen bridges and box culverts in the project area are proposed to be reconstructed at
 11 the same elevation as the structures that they are replacing. Eleven bridges and box culverts
 12 would be reconstructed with a grade change of 6 feet or less. Six bridges and box culverts
 13 would be reconstructed with a grade change of 6 to 14 feet. The introduction of numerous
 14 retaining walls over 15 feet in height, reconstructed bridges, and interchanges would have a
 15 high visual effect overall because these structures would block views and require relocation
 16 of residences or businesses.

17 **Carpool Lots.** Three carpool lots are proposed at the following locations: the southeastern
 18 corner of I-25 and SH 60, the northwestern corner of I-25 and SH 56, and the southwestern
 19 corner of I-25 and SH 66.

20 The carpool lots would consist of parking, lighting, and landscaping. The amount of landscaping
 21 depends on municipal standards. The addition of a carpool lot would have a minor visual effect
 22 because it would not block views or require relocation of businesses or residences.

23 ***B-H4 Tolled Express Lane (E-470 to US 36)***

24 **Highway Widening.** The widening of the highway from E-470 to just south of US 36 would
 25 require the addition of one buffer-separated TEL lane in each direction, which would require
 26 the relocation of residences and businesses. The greater expanse of pavement, from
 27 136 feet to 176 feet between SH 7 and US 36, would result in a change in the visual
 28 experience for the motorist. This would have a moderate effect on visual conditions because
 29 widening would require relocation of businesses or residences.

30 **Structural Impacts.** The location and heights of 23 B-H4 retaining walls greater than
 31 15 feet in height are included in **Table 3.14-22**. These walls would have a high visual
 32 effect to the surrounding community. Two retaining walls would be 15 feet in height or
 33 less, these would have a moderate visual effect

1 **Table 3.14-22 Retaining Wall Locations in Component B-H4**

Retaining Wall Location	Retaining Wall Height Range	Impacts Motorist or Surrounding Community?
North of US 36, south of 84 th on I-25	2'-0" to 20'-0"	Surrounding community
North of 84 th , south of 88 th on I-25	31'-0" to 32'-0"	Motorist
North of 84 th , south of 88 th on I-25	26'-0" to 27'-0"	Motorist
North of 84 th , south of 88 th on I-25	15'-0" to 30'-0"	Surrounding community
North of 84 th , south of 88 th on I-25	3'-0" to 20'-0"	Surrounding community
North of 84 th , south of 88 th on I-25	17'-0" to 34'-0"	Surrounding community
North of 84 th , south of 88 th on I-25	2'-0" to 17'-0"	Motorist
North of 84 th , south of 88 th on I-25	2'-0" to 16'-0"	Surrounding community
North of 84 th , south of 88 th on I-25	4'-0" to 14'-0"	Surrounding community
North of 84 th , south of 88 th on I-25	5'-0" to 27'-0"	Surrounding community
North of 84 th , south of 88 th on I-25	4'-0" to 33'-0"	Motorist
North of 84 th , south of 88 th on I-25	5'-0" to 16'-0"	Surrounding community
North of 84 th , south of Thornton Pkwy on I-25	2'-0" to 28'-0"	Motorist
North of 84 th , south of 104 th on I-25	2'-0" to 20'-0"	Surrounding community
South of 104 th and I-25	3'-0" to 15'-0"	Motorist
104 th and I-25	26'-0" to 28'-0"	Surrounding community
104 th and I-25	2'-0" to 17'-0"	Surrounding community
104 th and I-25	3'-0" to 22'-0"	Surrounding community
104 th and I-25	9'-0" to 19'-0"	Surrounding community
North of 104 th , south of 112 th on I-25	3'-0" to 22'-0"	Surrounding community
112th and I-25	2'-0" to 29'-0"	Surrounding community
120 th and I-25	14'-0" to 19'-0"	Surrounding community
120 th and I-25	8'-0" to 24'-0"	Surrounding community
North of 120 th , south of 128 th on I-25	2'-0" to 31'-0"	Surrounding community
North of 128 th , south of 136 th on I-25	10'-0" to 27'-0"	Surrounding community

2 The location and heights of the four B-H4 sound walls are provided in **Table 3.14-23**. This
3 would have a moderate visual effect to the surrounding community.

Table 3.14-23 Sound Wall Locations in Component B-H4

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range	Sound Wall Length
North of 128 th Ave on I-25, Thorncreek	East	14'	1,850'
North of Community Center Drive on I-25	East/West	14'	1,300'
North of Thornton Parkway on I-25, Badding Reservoir	West	10'-12'	600'
North of US 36 on I-25	East	12'	1,300'

4 One interchange is proposed to be rebuilt at the same vertical alignment that exists today.
5 Two interchanges would be rebuilt with a grade change of 6 feet or less.

1 Six bridges and box culverts in the project area are proposed to be reconstructed at the
2 same elevation as the structures that they are replacing. Four bridges and box culverts
3 would be rebuilt with a grade change of 6 feet or less. The introduction of new retaining
4 walls, sound walls, and reconstruction of existing bridges and interchanges would have a
5 moderate visual effect overall to a highway that already has sound walls, bridges, and
6 interchanges in these locations. **Table 3.14-24** summarizes visual impacts from highway
7 widening and structure upgrades under each Package B highway component.

Table 3.14-24 Package B Highway Effects Analysis

Components	Widening Effect	Structural Effect
B-H1	Minor	Moderate
B-H2	Moderate	High
B-H3	Moderate	High
B-H4	Moderate	Moderate

8 *B-T1 Bus Rapid Transit (BRT) - Fort Collins/Greeley to Denver*

9 **BRT Impacts.** BRT is proposed to travel on arterial roads and share the TEL lanes on I-25.
10 When BRT travels on arterial roads, it would function similar to commuter bus. The BRT
11 would load and unload passengers in the park-and-ride or at an on-street bus stop. When
12 BRT travels on I-25, the BRT would stop at a platform located in the median of I-25. The new
13 TEL lanes would represent a minor visual effect to the surrounding community.

14 **BRT Stations.** Typical BRT stations would include one platform that is 20 feet in width by
15 300 feet in length, a pedestrian overpass, parking, bus bays, kiss and ride, lighting and
16 landscaping. A pedestrian overpass would be provided from the median platform over I-25 to
17 the proposed park-and-ride with the exception of SH 7 where the grade separated cross
18 street would be utilized for pedestrian connectivity. The pedestrian overpass would be 17
19 feet, 6 inches from the top of road to the bottom of the bridge. For stations located on I-25,
20 barriers would run parallel on the east and west sides of the bus loading lanes at the
21 platform. BRT stations that are not located on the I-25 corridor would not include the platform
22 or pedestrian overpass. Instead, these stations would function similar to commuter bus
23 stations. **Table 3.14-25** summarizes visual impacts associated with BRT stations.

24 The Windsor and Firestone stations would have a high visual effect because these locations
25 would require relocation of a business or residence and the stations would impede views to
26 the mountains.

27 **Figure 3.14-4** and **Figure 3.14-5** are visual simulations that depict the Windsor BRT station.

1 **Figure 3.14-4 Windsor Station, View from BRT Plaza**



2
3 **Figure 3.14-5 Windsor Station, View from BRT Loading/Unloading Zone**



1 **Table 3.14-25 Package B BRT Stations Effects Analysis**

Station Name	Effect	Classification
South Fort Collins Transfer Center	None*	Minor
Harmony Road and Timberline	None*	Minor
I-25 and Harmony Road	None*	Minor
Windsor	Pedestrian overpass may impede view	High
Crossroads Boulevard	Block views to the mountains	Moderate
Berthoud	Block views to the mountains	Moderate
Firestone	Relocation of business	High
Frederick/Dacono	Block views to the mountains	Moderate
I-25 and SH 7	None*	Minor
US 34 and SH 257	None*	Minor
Greeley Downtown Transfer Center	None*	Minor
West Greeley	None*	Minor

* The visual impact of these sites would include one or more of the following: new landscaping and addition of a large mass of asphalt. These impacts have been determined to represent negligible visual impact and not diminish the visual character of the area.

2 Stations at Crossroads, Berthoud, and Frederick/Dacono would have moderate visual effects
3 to the surrounding community. The stations would impede views to the mountains, including
4 Longs Peak, but would not require relocation of any businesses.

5 Stations at South Fort Collins Transit Center, Harmony Road and Timberline, I-25 and
6 Harmony Road, I-25 and SH 7, Greeley Downtown Transfer Center, West Greeley, and
7 US 34 and SH 257 would have a minor effect because these locations would not require
8 relocation of any businesses and would not block views to the mountains.

9 **Maintenance Facility.** Two bus maintenance facility locations are being considered in
10 Package B. The standard maintenance facility would consist of offices, dispatch/ driver
11 support areas, vehicle maintenance bays, repair shops, vehicle wash areas, fueling facilities,
12 storage, and parking. **Table 3.14-26** summarizes visual impacts associated with each of the
13 proposed bus maintenance facility locations.

Table 3.14-26 Maintenance Facility Effects Analysis

Maintenance Facility Name	Impact	Classification
Portner Road and Trilby Road	Visible to surrounding community	Moderate
31 st Street and 1 st Avenue	Visible to surrounding community	Moderate

14 Portner Road and Trilby Road. The land identified to accommodate the maintenance facility
15 is currently vacant. It is adjacent to vacant land and to residential and commercial buildings.
16 Additional traffic would be added to local streets. The maintenance facility would be visible to
17 Trilby Road and the surrounding neighborhood. The proposed maintenance facility would
18 have a moderate effect on the visual environment.

19 31st Street and 1st Avenue. The land identified to accommodate the maintenance facility is
20 currently vacant. It is adjacent to vacant land and commercial development. The
21 maintenance facility would be visible to 31st Street and the surrounding neighborhood. The
22 proposed maintenance facility would have a moderate effect on the visual environment.

1 *B-T2 Bus Rapid Transit Fort Collins/Greeley to DIA*

2 *Summary of Package B Impacts*

3 **Direct Impacts.** Package B highway and transit improvements would include rebuilding
4 interchanges, the replacement and modification of bridges, new retaining walls, new sound
5 walls, and the addition of carpool lots, platforms, shelters, fare boxes, benches, windscreen,
6 elevators, stairs, pedestrian overpass, parking, bike parking, bus bays, kiss and ride, lighting,
7 and landscaping. In a project area that primarily consists of undeveloped agricultural land
8 with extensive views to the mountains, such as Longs Peak to the west, most of the
9 proposed improvements would not have a substantial effect on the visual quality of the
10 corridor.

11 Both Package B highway and transit components would result in short-term and long-term
12 impacts. Short-term impacts would result from disruptions during construction while long-
13 term impacts would be the result of permanent alterations that change the way people
14 commute in and around the area. Package B short-term impacts would include detours,
15 increase in roadway congestion in and around the area, the presence of large equipment,
16 dust from construction, and general disruption to the surrounding neighborhoods and
17 businesses. These short-term effects would have a temporary visual effect to the community.
18 Long-term effects would include the relocation of businesses and residences, new
19 interchanges, increased right-of-way, addition of station amenities, and changes to the
20 surrounding landscape through use of overpasses, bridges, retaining walls, and medians, as
21 well as from alterations to the existing roadway grade.

22 **Indirect Impacts.** The proposed Package B highway and transit improvements could
23 encourage development, therefore, changing the landscape character as described in this
24 section. The addition of stations and a maintenance facility would add additional traffic to
25 local streets. Both the stations and maintenance facility also would generate lighting that
26 would be seen by motorists, as well as from adjacent businesses and residences.

27 **3.14.4 Mitigation Measures**

28 Mitigation measures will be implemented to minimize adverse visual impacts from proposed
29 highway and transit improvements. Mitigation measures will include providing visual buffers
30 and enhanced architectural treatments to structures.

31 **3.14.4.1 HIGHWAY**

32 Potential mitigation measures to soften and enhance the visual effects of the proposed
33 highway improvements will include landscaping and architectural features.

34 Mitigation measures to address the visual effects of highway widening will include
35 incorporating landscaping at interchanges and along the highway. Mitigation measures to
36 address the visual effects of structural elements will include providing architectural interest or
37 color into retaining walls, sound walls, and reducing the effect of overpasses by providing
38 architectural detailing of the railings and other features.

1 **3.14.4.2 TRANSIT**

2 Potential mitigation measures to soften and enhance the visual effect of the proposed transit
3 improvements will include fencing types, landscaping, and architectural features.

4 Mitigation measures to soften and enhance the visual effects of track widening will include
5 incorporating landscaping, considering vinyl coated chain link fencing, providing architectural
6 interest or color in retaining wall and bridge design, and limiting lighting to only what is
7 required for safety and security.

8 Mitigation measures to address the visual effects of stations will include providing distinctive
9 treatments at platform station locations to designate station locations. Local communities,
10 business districts, or other entities should be involved in upgrading or enhancing the
11 currently proposed features. The effects of overpasses will be reduced with architectural
12 detailing of the railing and other features. Station effects will be reduced with the use of trees
13 in combination with shrubs to filter views to the station and parking lots, provide a human
14 scale, and present a positive image to attract ridership. Landscape islands with shade trees
15 will be placed in parking lots to break up the expanse of pavement and parked vehicles.

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