

APPENDIX A19

UTILITIES TECHNICAL MEMORANDUM

FOR THE State Highway 9 Iron Springs Alignment Environmental Assessment

Prepared for

**COLORADO DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

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ACRONYMS

CDOT	Colorado Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
ITS	Information Technology Services
kV	kilovolt
ROD	Record of Decision
SH 9	State Highway 9

1 INTRODUCTION

2 This technical memorandum has been prepared in support of the State Highway (SH) 9 Iron
3 Springs Alignment Environmental Assessment (EA). This memorandum evaluates the effects of
4 the Iron Spring Alignment (Proposed Action) and the No Action Alternative (widening on the
5 existing alignment) with respect to existing major utilities in the study area. Utilities, both public
6 and private, are typically located within the SH 9 right-of-way or separate utility easements.
7 Privately owned utilities within the study area include telephone, electrical, communications,
8 fiber optics, and gas services. The Town of Breckenridge and Town of Frisco provide public water
9 and sanitary services. Since utilities are generally parallel or are located within the roadway
10 right-of-way, impacts are a common occurrence with roadway improvements. These impacts
11 will require utility adjustments or relocations. Utility coordination should start early in the
12 process with design verification occurring during the preliminary and final design process.

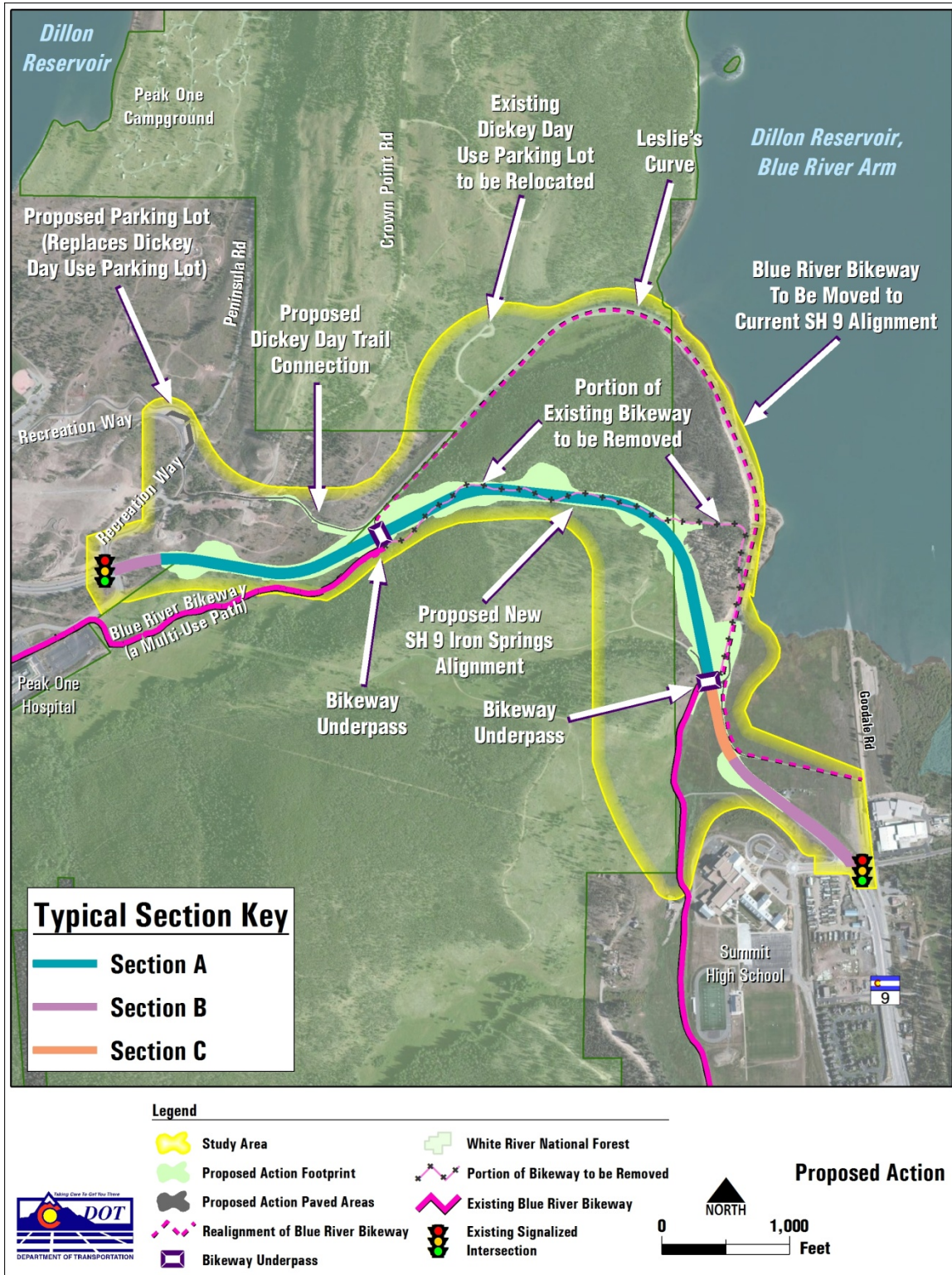
13 PROPOSED ACTION

14 As part of implementation of the SH 9 improvements between Frisco and Breckenridge, the
15 Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA)
16 are proposing to realign approximately 1.3 miles of existing SH 9 just south of the Town of
17 Frisco, Colorado (see **Figure 1**). This stretch of SH 9, which falls between mileposts 93 and 95,
18 would be realigned to provide a four-lane reduced section roadway away from Dillon Reservoir.
19 This Proposed Action, also referred to as the Iron Springs Alignment, would shorten SH 9 by
20 approximately 0.4 mile. The Proposed Action would provide roadway safety benefits, as well as
21 water quality and drinking water protection benefits, as a result of straightening the highway to
22 remove a tight, compound curve (known as Leslie’s Curve), which is in close proximity to Dillon
23 Reservoir. The existing condition on Leslie’s Curve is considered substandard and contributes to
24 accidents in the area.

25 The Proposed Action would include realignment of a portion of the existing Frisco-Farmer’s
26 Korner-Blue River Bikeway (also referred to herein for brevity as the Blue River Bikeway or
27 bikeway). This portion of the bikeway would be moved to the alignment currently occupied by
28 SH 9, would be approximately 0.4 mile longer than the existing bikeway, and would be at a
29 gentler grade than the current alignment. In addition, the Dickey Day Use Parking Lot would be
30 moved west to a new parking lot to be constructed as part of the project, with access provided
31 via Recreation Way using the existing signalized intersection at SH 9 and Recreation Way. A new
32 trail connection would be provided to link the proposed parking lot with the realigned bikeway
33 and existing trail, which currently begins at the old Dickey Day Use Parking Lot.

34 Additional detail regarding the Proposed Action, including typical sections, is provided in the EA
35 main text and the project drawings provided in Appendix A1 of the EA.

1 **Figure 1 Proposed Action**



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1 **NO ACTION ALTERNATIVE**

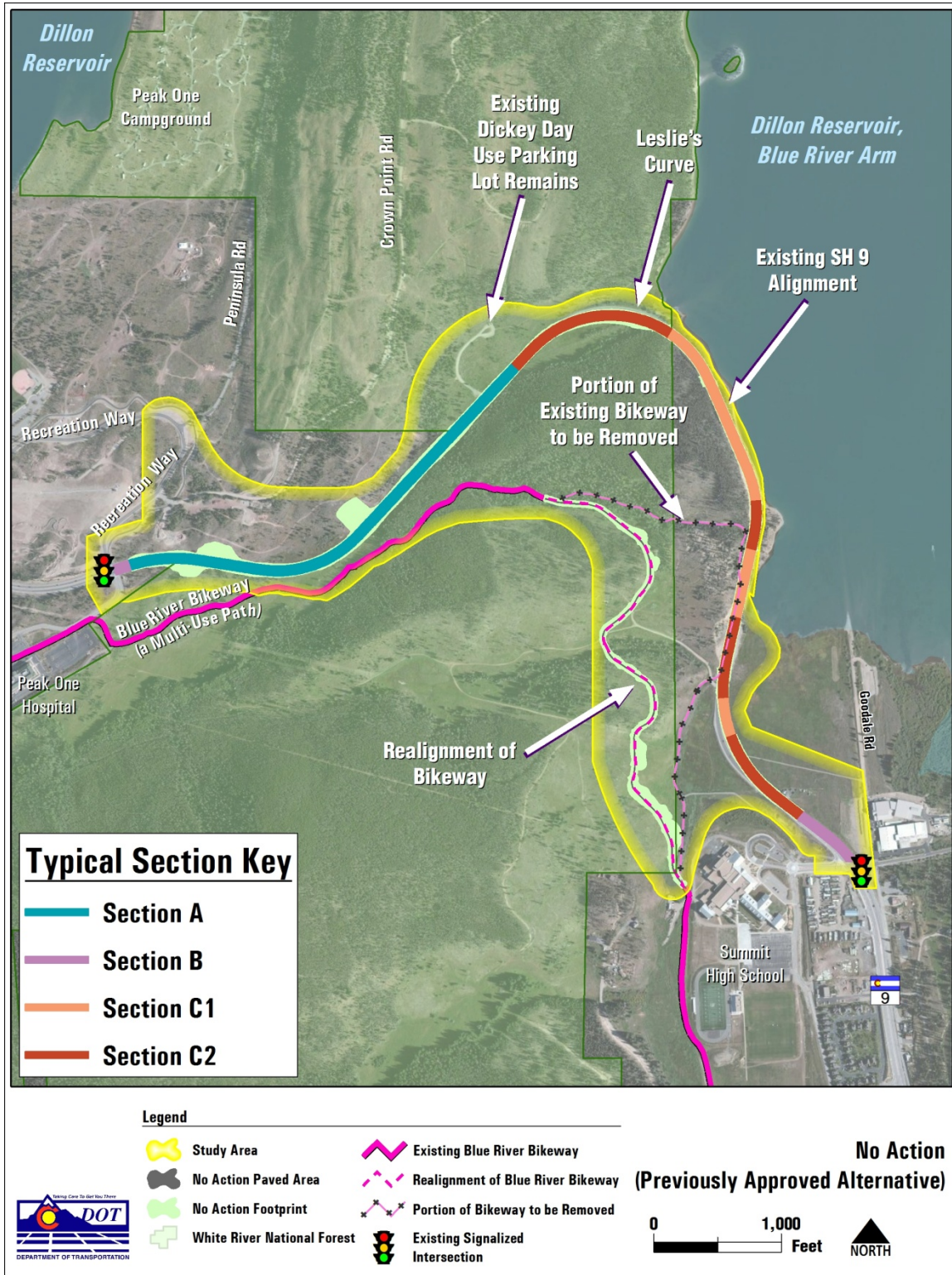
2 If the Proposed Action is not selected for implementation, SH 9 would be widened to provide a
3 four-lane reduced section roadway along the existing alignment as previously approved in the
4 SH 9 Frisco to Breckenridge Environmental Impact Statement (EIS) and Record of Decision (ROD)
5 (CDOT and FHWA, 2004a, 2004b) (**Figure 2**). The 2004 Preferred Alternative is considered the
6 “No Action Alternative” for this EA and is used as a baseline for comparison with the Proposed
7 Action. These improvements would be implemented if the Proposed Action is not selected.

8 Widening along the existing alignment would require large rock cuts and retaining walls
9 (problematic to design and construct), and the highway would remain in close proximity to
10 Dillon Reservoir. The length of SH 9 would remain the same as that of the existing highway. The
11 tight Leslie’s Curve would not be eliminated; however, safety features such as a barrier between
12 opposing lanes would be installed to improve safety.

13 With this alternative, approximately 0.8 mile of the existing Blue River Bikeway would be
14 realigned to allow space for the highway widening. The length of bikeway would not change
15 appreciably and the current relatively steep grades on the path would remain.

16 Additional detail regarding the No Action Alternative, including typical sections, is provided in
17 the EA main text and the project drawings provided in Appendix A1 of the EA.

1 Figure 2 No Action Alternative (Previously Approved)



2

3

1 **CURRENT CONDITIONS**

2 **Table 1** lists the utility owners who were contacted to obtain current information about utility
 3 types and locations.

4 **Table 1 Contacted Utility Owners**

Owner	Utility Type	Contact Number	Contact Name	Contact Email
Xcel Energy	Transmission	303-571-7260 / 303-571-7759	Mike Diehl / Jason Manassee	Michael.diehl@xcelenergy.com
Xcel Energy	Distribution	970-262-4039	Pamela McGuire	Pamela.mcguire@xcelenergy.com
Xcel Energy	High Pressure Gas	303-571-3926	Sarah Robinson	Sarah.robinson@xcelenergy.com
Comcast	Cable TV	970-534-0610	Dave Stepisnik	Dave_stepisnik@cable.comcast.com
CenturyLink	Telephone	970-468-6860	Sam Tooley	Sam.tooley@CenturyLink.com
CDOT Region 1	Information Technology Services	303-512-5805	Jill Scott	Jill.scott@state.co.us
Town of Breckenridge	Water	970-453-3173	Gary Roberts	Garyr@townofbreckenridge.com
Town of Frisco	Water	970-668-0836	Dave Koop	Davek@townoffrisco.com
Upper Blue River Sanitation District	Wastewater	970-453-6442	Greg Brown	Gbbrecksan@aol.com

5

6 *Electrical (Transmission)*

7 **Xcel Energy**

8 There is a 115 kilovolt (kV) overhead electrical transmission line that exists within a utility
 9 easement that crosses SH 9 at a location just south of the abandoned bike path on Denver
 10 Municipal Water Board property. The transmission crossing over SH 9 is supported by
 11 transmission towers that are located on each side of the highway.

12 *Electrical and Low Pressure Gas (Distribution)*

13 **Xcel Energy**

14 There is a three-phase overhead electrical line and an underground distribution line that exists
 15 directly south of the 115kV electrical transmission. There is also a single-phase electric line that
 16 drops down a 3-phase pole east of SH 9 and heads south to provide service to Summit High
 17 School. No other above or underground electrical distribution lines exist inside the project
 18 limits.

19 No low pressure natural gas distribution facilities exist inside the project limits.

20 *Gas (High Pressure)*

21 **Xcel Energy**

22 Two active high pressure natural gas transmission pipelines are the only known to exist inside a
 23 utility easement spanning across the Town of Frisco and the Town of Breckenridge. These two
 24 gas lines enter into CDOT right-of-way just south of the abandoned bike path on Denver
 25 Municipal Water Board Property; the lines bend onto Alpensee Drive and head south to provide
 26 service to the Town of Breckenridge.

1 *Telecommunication / Fiber Optic*

2 **Comcast Cable**

3 Comcast facilities exist inside the project limits.

4 **CenturyLink**

5 CenturyLink facilities exist inside the project limits.

6 **CDOT Information Technology Services (ITS)**

7 A Fiber Optic Backbone exists along the shoulder of SH 9 from Swan Mountain Road to Peak One
8 Drive and beyond. This facility provides traffic management capabilities and advanced traveler
9 information for the public.

10 *Potable Water Lines*

11 **Town of Breckenridge Water**

12 No potable water facilities exist inside the project limits.

13 **Town of Frisco Water**

14 No potable water facilities exist inside the project limits.

15 *Sanitary Sewer Lines*

16 **Upper Blue River Sanitation District**

17 An 8-inch sanitary sewer line currently crosses SH 9 at the intersection of Swan Mountain Road
18 to serve Summit High School.

19 A 30-inch sanitary sewer line exists between SH 9 and the frontage road which extends south to
20 serve the Town of Breckenridge.

21 A 30-inch effluent pipe runs in a northwest direction from the Treatment Plant and discharges
22 into a ditch that is located downstream of the fen complex.

23 *Raw Water Lines*

24 No raw water facilities exist inside the project limits.

25 **CONSEQUENCES**

26 *Consequences of the No Action Alternative*

27 **Electrical (Transmission)**

28 The No Action Alternative would require a relocation of the overhead transmission tower
29 located just east of SH 9, due to flattening of the SH 9 curve. It is anticipated that a new tower
30 would be constructed approximately 60 feet to the east of the existing location and inside the
31 existing Xcel utility easement.

32 **Electrical and Low Pressure Gas (Distribution)**

33 The three-phase overhead electrical distribution line on the east side of SH 9 just south of the
34 overhead transmission line will require relocation due to the power pole being directly impacted
35 by the flattening of the highway curve. The single-phase underground electric line running along

1 the west side of SH 9 will also require relocation due to highway storm sewer and water quality
2 facilities.

3 No low pressure natural gas distribution facilities exist; therefore, no impacts are anticipated.

4 **Gas (High Pressure)**

5 Potential impacts are anticipated to the two high pressure natural gas lines running along the
6 shoulder of SH 9 just north of Summit High School. The nature of these impacts is due to the
7 need for highway storm sewer and water quality facilities. Any required relocations will be
8 determined during final design.

9 **Telecommunication / Fiber Optic**

10 *Comcast Cable*

11 Comcast facilities exist inside the project limits. Any required relocations will be determined
12 during final design.

13 *CenturyLink*

14 CenturyLink facilities exist inside the project limits. Any required relocations will be determined
15 during final design.

16 *CDOT ITS*

17 Minor impacts are anticipated to the ITS backbone that runs along the shoulder of SH 9. The
18 nature of these impacts is due to the need for highway storm sewer and water quality facilities.
19 Any required relocations will be determined during final design.

20 **Potable Water Lines**

21 *Town of Breckenridge Water*

22 No impacts are anticipated.

23 *Town of Frisco Water*

24 No impacts are anticipated.

25 **Sanitary Sewer Lines**

26 *Upper Blue River Sanitation District*

27 No impacts are anticipated.

28 **Raw Water Lines**

29 No impacts are anticipated.

30 *Consequences of the Proposed Action*

31 **Electrical (Transmission)**

32 No impacts are anticipated.

33 **Electrical and Low Pressure Gas (Distribution)**

34 The single-phase underground electric line running along the west side of SH 9 that feeds a
35 flashing beacon sign will require relocation for the construction of highway storm sewer and
36 water quality facilities. This relocation would occur inside CDOT right-of-way.

37 No gas distribution facilities exist; therefore, no impacts are anticipated.

1 **Gas (High Pressure)**

2 Potential impacts are anticipated to the two high pressure gas lines running along the shoulder
3 of SH 9 just north of Summit High School. The nature of these impacts is due to the need for
4 highway cantilevered walls, storm sewer and water quality facilities. Any required relocations
5 will be determined during final design.

6 **Telecommunication / Fiber Optic**

7 *Comcast Cable*

8 Comcast facilities exist inside the project limits. Any required relocations will be determined
9 during final design.

10 *CenturyLink*

11 CenturyLink facilities exist inside the project limits. Any required relocations will be determined
12 during final design.

13 *CDOT Information Technology Services*

14 Minor impacts are anticipated to the ITS backbone that runs along the shoulder of SH 9. The
15 nature of these impacts is due to the need for highway storm sewer and water quality facilities.
16 Any required relocations will be determined during final design.

17 **Potable Water Lines**

18 *Town of Breckenridge Water*

19 No impacts are anticipated.

20 *Town of Frisco Water*

21 No impacts are anticipated.

22 **Sanitary Sewer Lines**

23 *Upper Blue River Sanitation District*

24 No impacts are anticipated.

25 **MITIGATION**

26 Minor horizontal and vertical utility relocations that are anticipated to avoid impacts to highway
27 storm and water quality facilities will fit inside the existing right-of-way. Xcel gas and electric
28 relocations required by the Proposed Action are anticipated to fall inside existing right-of-way
29 and/or easement.

30 During preliminary and final design, locator services and potholing will be conducted to provide
31 more accurate information on underground utilities. Where relocations are required due to
32 conflicts, designs to relocate the utility will be developed with the utility company or public
33 utility department. Utility adjustments that are required will be reviewed by each affected
34 company or public utility department. Proper detours and advance notice will be coordinated
35 with service providers to allow delivery of uninterrupted utility service during construction.

1 **REFERENCES**

- 2 Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA).
3 2004a. *State Highway 9 Frisco to Breckenridge Final Environmental Impact Statement and 4(f)*
4 *Evaluation*. February. [Note: This document is an abbreviated Final EIS which incorporates the
5 Draft EIS, constituting the complete Final EIS.]
- 6 Colorado Department of Transportation (CDOT) and Federal Highway Administration (FHWA).
7 2004b. *State Highway 9 Frisco to Breckenridge Record of Decision*. May.