

EXECUTIVE SUMMARY

Highway 3 is part of the National Highway System that serves to facilitate the growth of inter-provincial trade, tourism and economic development throughout southern Alberta. The Town of Pincher Creek is the largest community within the Municipal District (MD) of Pincher Creek and is located approximately 100 km west of the City of Lethbridge and 215 km south of Calgary.

CastleGlenn Consultants Inc. was retained by Alberta Transportation (AT) to undertake a functional planning study to confirm the “ultimate” alignment of the Highway 3 corridor and determine the location of a future interchange along Highway 3 between Highway 6 and Highway 785, north of the Town of Pincher Creek. As the functional planning study progressed the study area was expanded to include the section of Highway 3 between Township Road 70-1 and Highway 785 and the section of Highway 6 between the existing Highway 3 corridor and 1.2 km south of Highway 507S (See Exhibit ES-1).

Goals and Objectives

The primary objectives for the study were to:

- Determine the location and configuration of a future interchange that would link Highway 3 with Highway 6 and Highway 785; and
- Address access management requirements along the highway within the study area consistent with the function and service classification of the highways.

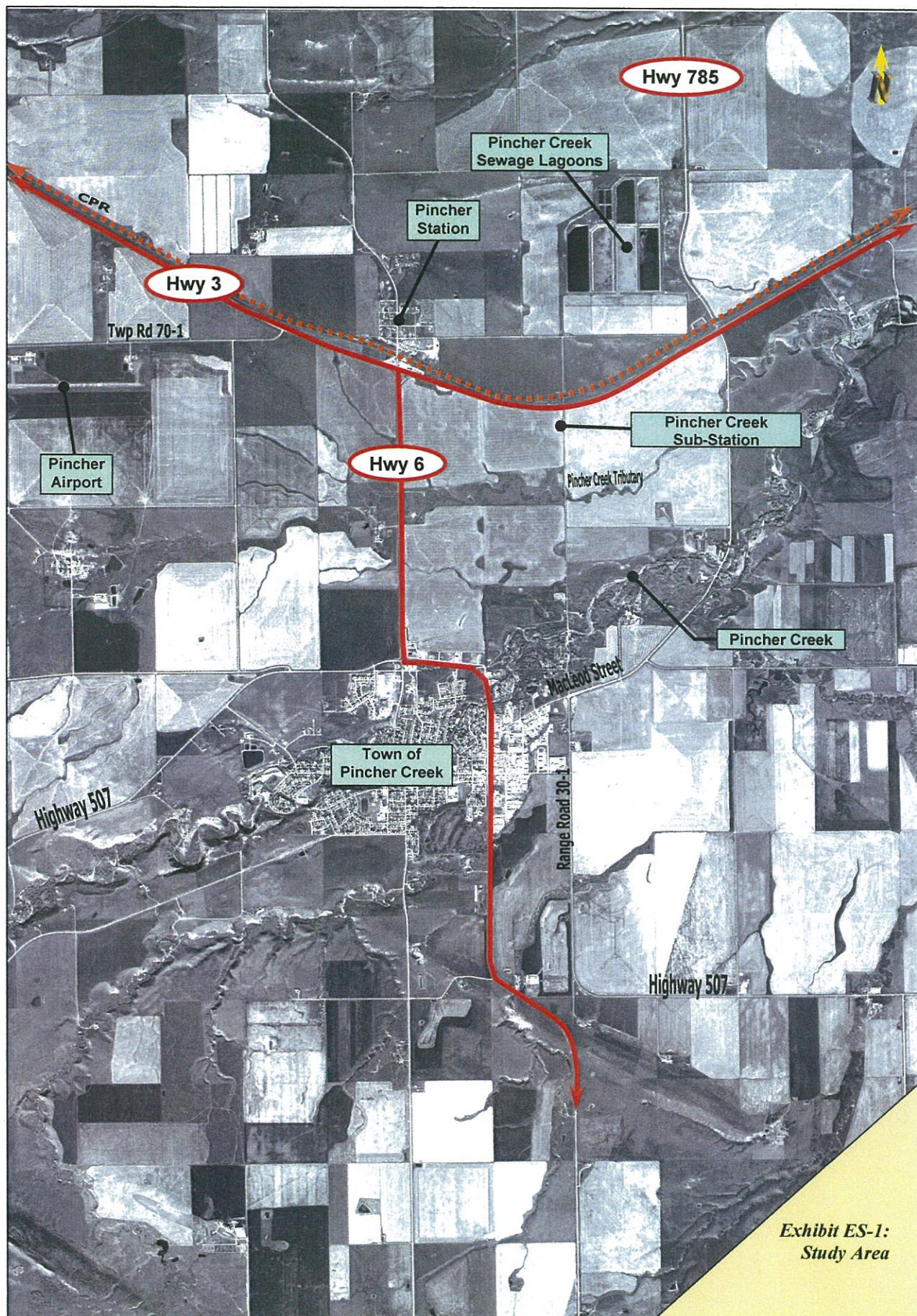
Public Consultation Process

The study involved consultation with the local municipalities and property owners potentially impacted by the future highway alignments and proposed interchange location. A Public Information Session was also held to advise local residents and business owners of the preferred solutions.

Existing Conditions

Highway 3

- Is currently a 2-lane undivided roadway with a design designation of RAU 213-110.
- The corridor has a posted speed limit of 100 km/hr through most of the study area with the exception of the east and west approaches to Highway 6 where the speed limit is reduced to 70 km/hr.
- Traffic volumes along the study corridor range from 4,160 to 4,440 vehicles-per-day (vpd) with approximately 15 percent heavy vehicle traffic.



Highway 6

- Is classified as a major two-lane arterial highway with a design designation of RAU 212-100.
- The posted speed on this highway is 100 km/hr outside of the urban area and reduces to 70 km/hr as it approaches the Highway 3 corridor. To the south as it approaches the urbanized limits of Pincher Creek the speed limit decreases to 50 km/hr.
- Traffic on Highway 6 south of Hwy 3 is currently 3,780 vpd.

Highway 785

- Is classified as a major two-lane undivided rural highway with a posted speed of 100 km/hr outside of the urbanized areas. The northern portion of the corridor provides access to the Town of Pincher Creek sewage lagoons located north of the Highway 3 corridor while the southern portion serves as an alternate access to the Town of Pincher Creek.
- Traffic on Highway 785 south of Highway 3 is currently 1,590 vpd.

Forecast Traffic

Twenty-year traffic forecasts indicate daily traffic estimates could reach 10,100 vpd for the Highway 3 corridor and 11, 770 vpd on the realigned Highway 6 corridor.

Recommendations

The functional plans as shown in Exhibit ES-2 and ES-3 include:

Highway Realignments:

- A future realignment of approximately 6.7 km of the Highway 3 corridor and twinning to a 4-lane cross-section between Township Road 70-1 and Highway 785.
- Realignment of approximately 7.4 km of Highway 6 between the existing Highway 3 corridor on the north and 1.2 km south of Highway 507S. The proposed Highway 6 corridor would provide for:
 - An “interim” two-lane alignment posted at 60 km/hr that would link the Highway 3 corridor to the Town of Pincher Creek by transitioning into the Highway 6/Waterton Avenue intersection. The “interim” corridor would intersect with Corner Mountain Street and provide driveway access to the municipal pumping station.
 - An “ultimate” two-lane alignment that could later be expanded to a 4-lane divided cross section located to the east of the Town’s existing boundaries over the Pincher Creek with intersections at MacLeod Street, the easterly extension of Main Street and at Highway 507S.

An Interchange:

- The implementation of a new spread-diamond Highway 3/6 interchange would be constructed to a freeway standard located 610m south of the existing Highway 3 and 145 m west of the Range Road 30-1. The interchange would include a bridge structure (19.4 m

wide by 86.5 m long) over the realigned Highway 3 corridor and four interchange ramps within each of the four quadrants of the interchange.

An Access Management Strategy:

- The proposed strategy provides access through a system of supporting service roads to assure that access takes place only via the proposed interchange facility. The proposed Highway 3/6 interchange would:
 - Provide access to the existing Highway 3 corridor by way of the proposed interchange;
 - Provide access to the existing Township Road 70-1, Highway 6, Range Road 30-1 and Highway 785 corridors by way of the proposed interchange;
 - Require two new service roads:
 - A 1.6 km long service road to connect Township Road 70-1 to the existing Highway 6 alignment; and
 - A 1.4 km long service road to connect the properties located at the south-east corner of SE5 7-29-4 to the Highway 785.

Property Requirements

The total amount of property required to effect the preferred alignments and interchange arrangement was determined to be 150 hectares (371 acres).

Jurisdiction

The existing Highway 3 (5.4 km), Highway 6 (7.9 km) and Highway 785 (3.9 km) facilities would not longer be required as part of the Provincial highway system and would become “local” roads. The combined length of these corridors was determined to be approximately 17.2 km.

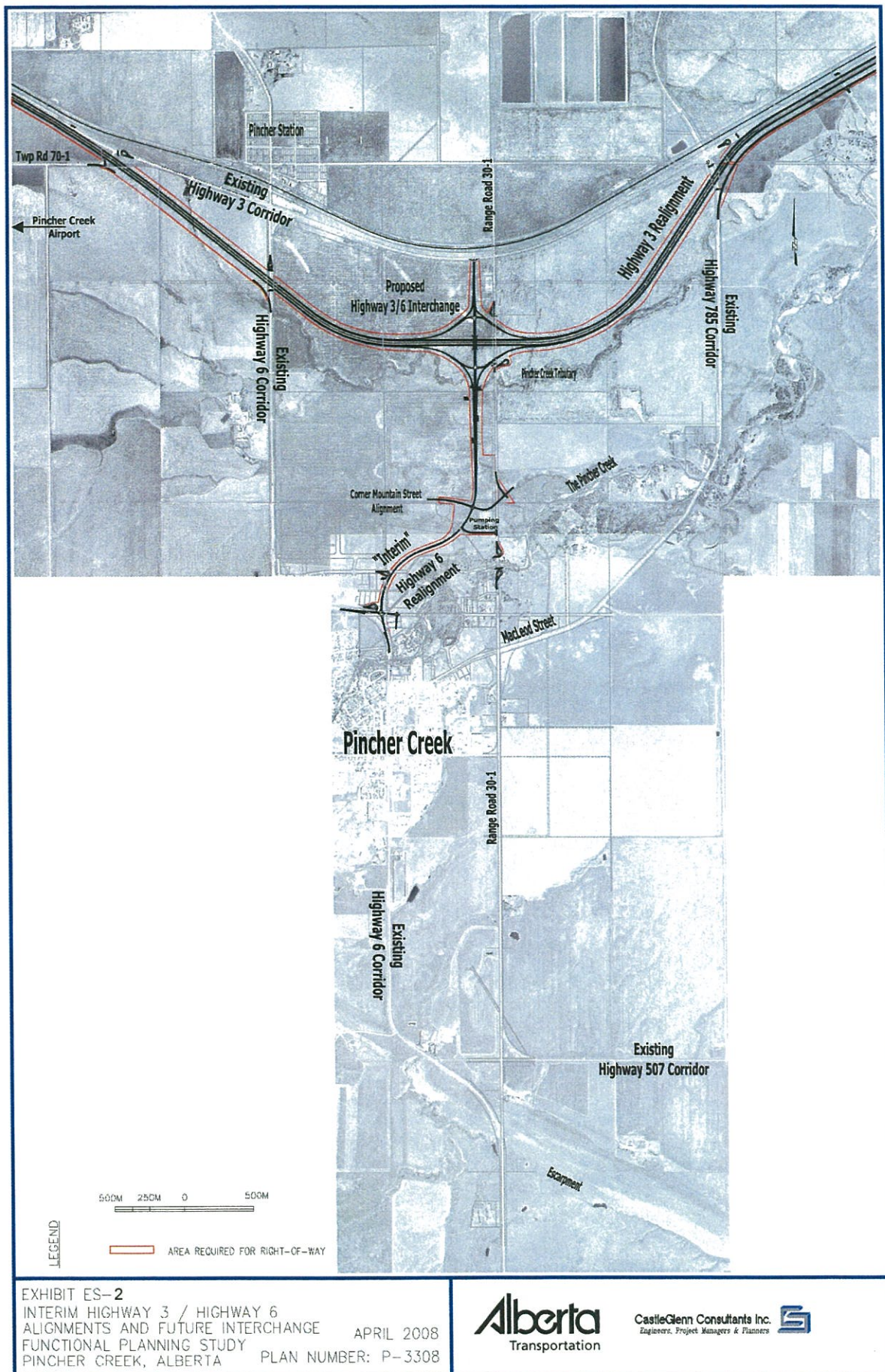
Cost Estimates

- The present value cost for the recommended alignments and interchange were estimated to cost approximately \$87M.

Table ES-1: Conceptual Staging Costs

<i>Stage</i>	<i>Description</i>	<i>Total Conceptual Construction Cost (\$)</i>
Stage I	<ul style="list-style-type: none"> • Southern realignment of Highway 3, development of new Highway 3/6 interchange and realignment of Highway 6 linking the new Highway 3 corridor to the existing Highway 6 alignment through the Town of Pincher Creek. 	\$ 53.5M
Stage II ¹	<ul style="list-style-type: none"> • Southerly extension of Highway 6 along “ultimate” alignment transitioning back into the existing Highway 6, 1.2 km south of Highway 507S. 	\$ 22.2M
Stage III	<ul style="list-style-type: none"> • Twinning of the Highway 6 corridor between the Highway 3/6 interchange (completed in Stage II) and the Highway 507S corridor. 	\$ 11.0M
Total		\$ 86.7M

1. “Throw away” costs associated with the realignment of Highway 6 were anticipated to be in the order of \$2.9M.



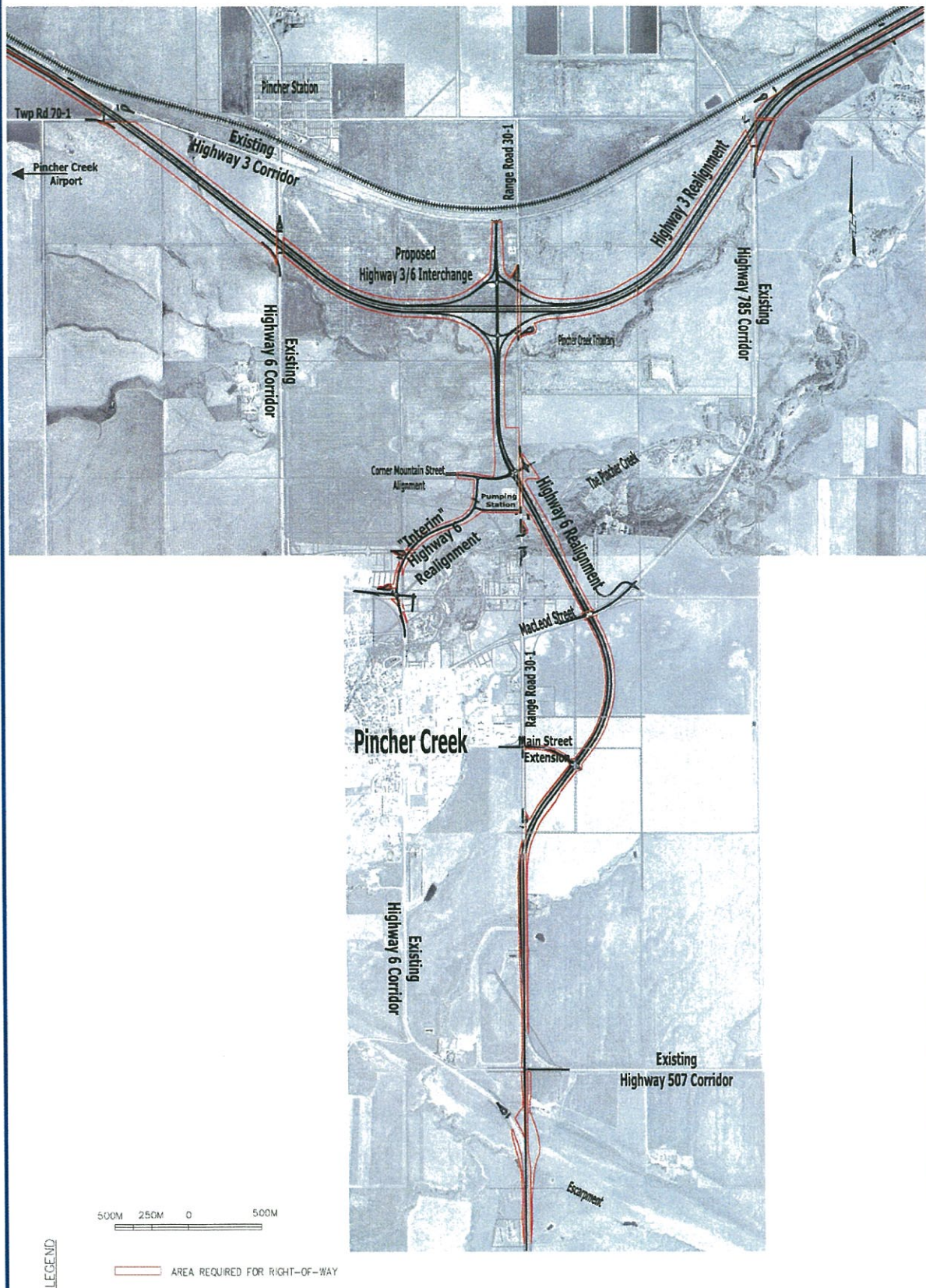


EXHIBIT ES-1
 ULTIMATE HIGHWAY 3 / HIGHWAY 6
 ALIGNMENTS AND FUTURE INTERCHANGE
 FUNCTIONAL PLANNING STUDY
 PINCHER CREEK, ALBERTA
 APRIL 2008
 PLAN NUMBER: P-3308

Alberta
 Transportation

CastleGlenn Consultants Inc. 
 Engineers, Project Managers & Planners