

HIGHWAY 3 TWINNING PLANNING STUDY

Town of Taber to West of Burdett

WELCOME

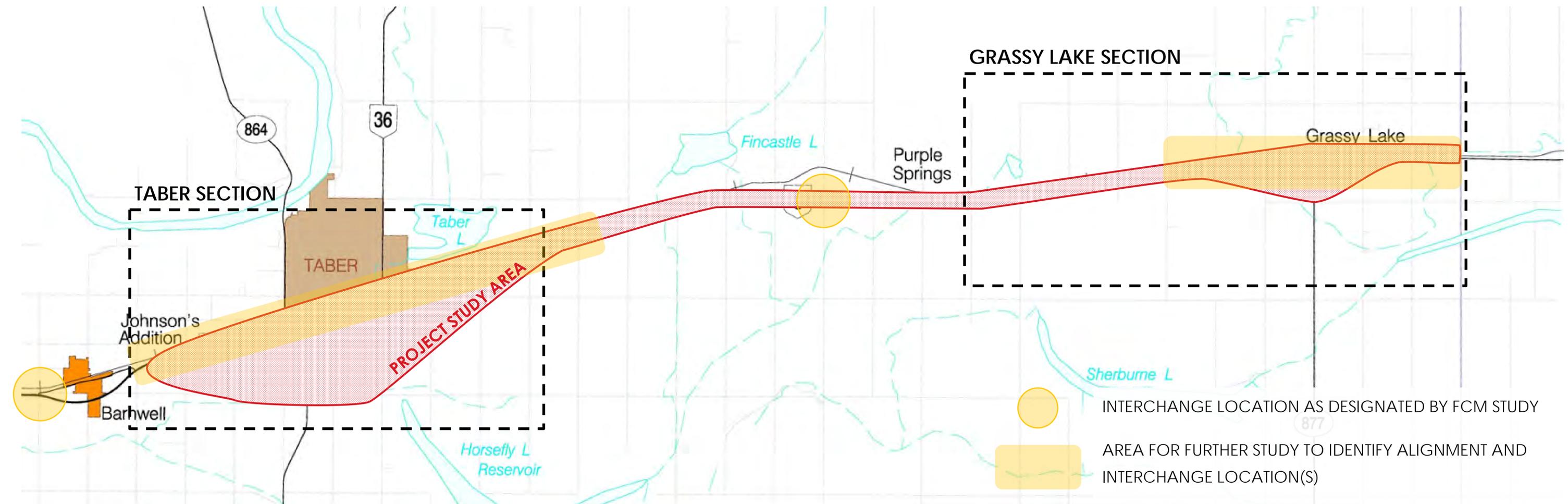
Information Session Purpose:

- Share what we learned from the previous open houses
- Present the recommended improvement strategy

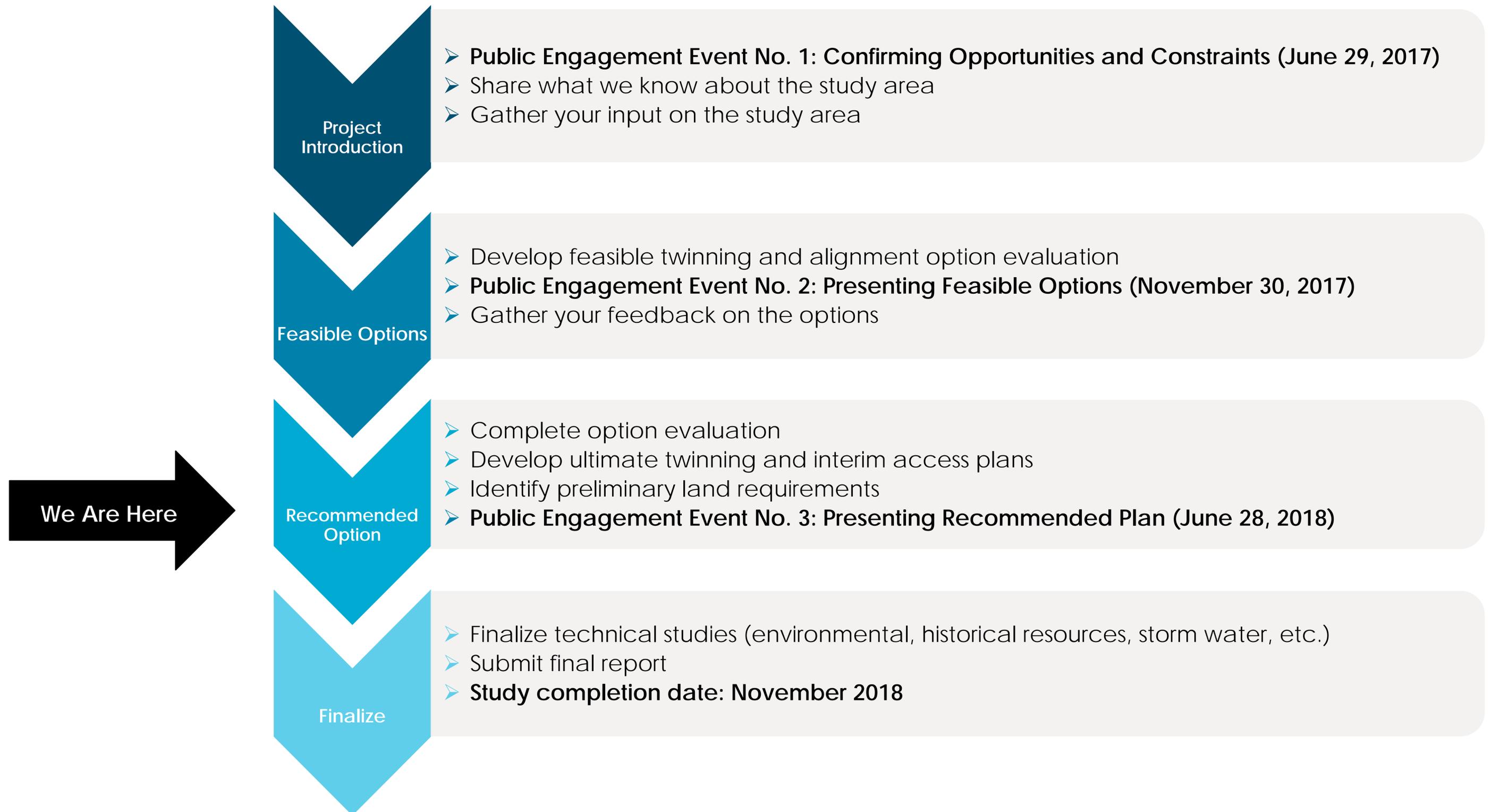
Please review the display boards and discuss the project with our staff

BACKGROUND

- Highway 3 corridor provides a primary connection to other provinces and is one of only three continuous east-west routes through Alberta
- Highway 3 has been classified as a future freeway in the provincial highway network as part of the National Highway System (NHS)
- A Freeway Corridor Management Study (FCMS) was completed in 2006, identifying future access locations along the Highway 3 corridor



STUDY PROCESS AND TIMELINE



WHAT WE HEARD

Open House #1: June 29, 2017

- **Top concerns with existing highway:**
 - Increased traffic volumes
 - Commercial vehicle/truck volumes
 - Safety for vehicles and pedestrians
- **Top concerns with routing options around Taber:**
 - Impacts to irrigated agricultural land
 - Safety for vehicles and pedestrians
 - Direct impacts to property from highway upgrading
 - Maintaining access to businesses
- **Top concerns with routing options around Grassy Lake:**
 - Safety for vehicles and pedestrians
 - Impacts to irrigated agricultural land
 - Increased travel time
 - Maintaining access to businesses



Open House #2: November 30, 2017

- **Grassy Lake Realignment Options:**
 - Majority of participants agreed with the identified realignment options
 - Emphasized the importance of minimizing the impact to irrigated land
- **Taber Realignment Options:**
 - Majority of participants agreed with the identified realignment options
 - Emphasized the importance of minimizing the impact to irrigated land
- **Range Road 151 Interchange:**
 - Emphasized the importance of minimizing the impact to irrigated land



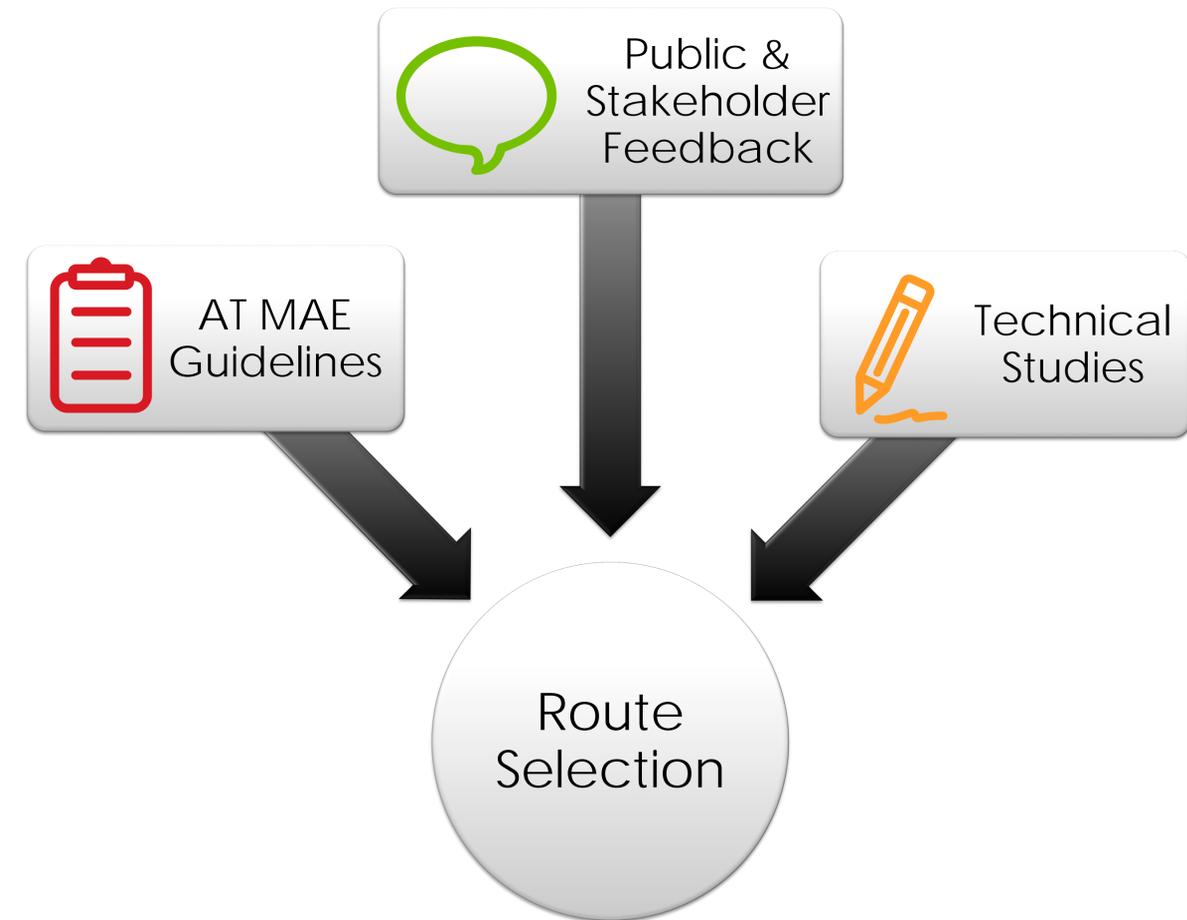
OPTIONS EVALUATION PROCESS

MAE = “Multiple Account Evaluation”

a committee-based consensus-building approach to decision making for complex transportation planning projects

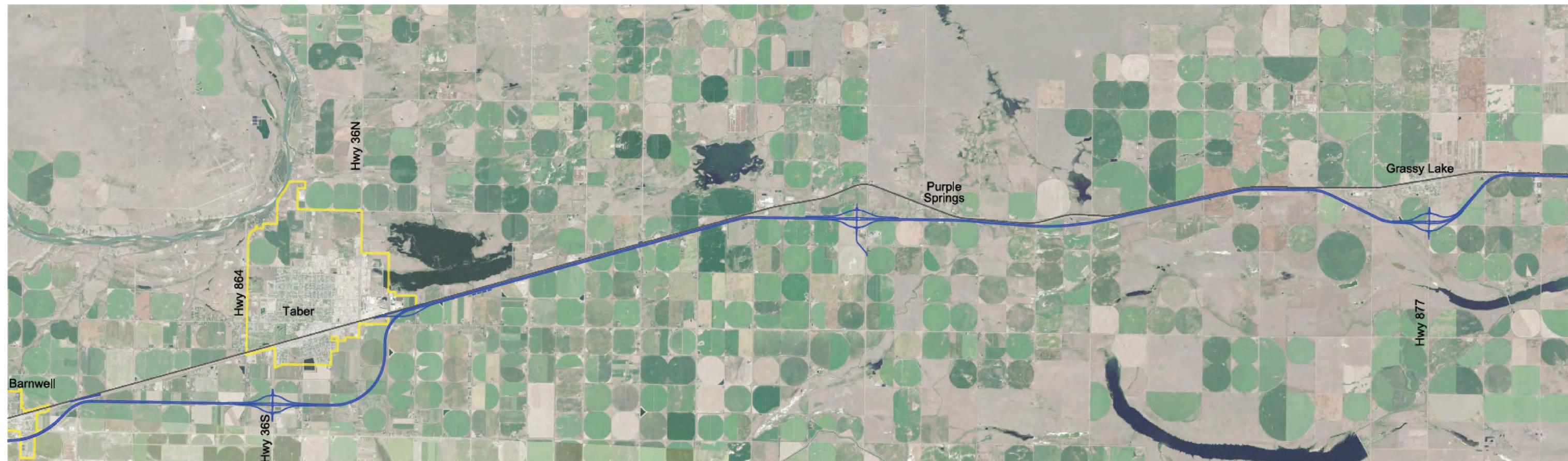
Evaluates options against criteria in five categories:

- Finance
- Environment
- Customer service
- Community sustainability
- Economy



- Realignment options presented at November 2017 open house
- MAE workshop held in March 2018 to identify recommended alignment based on public feedback and technical information
 - Panel included representatives of MD of Taber, Town of Taber, County of Forty Mile, Community Futures, and Alberta Transportation with Stantec providing technical support

RECOMMENDED ULTIMATE PLAN

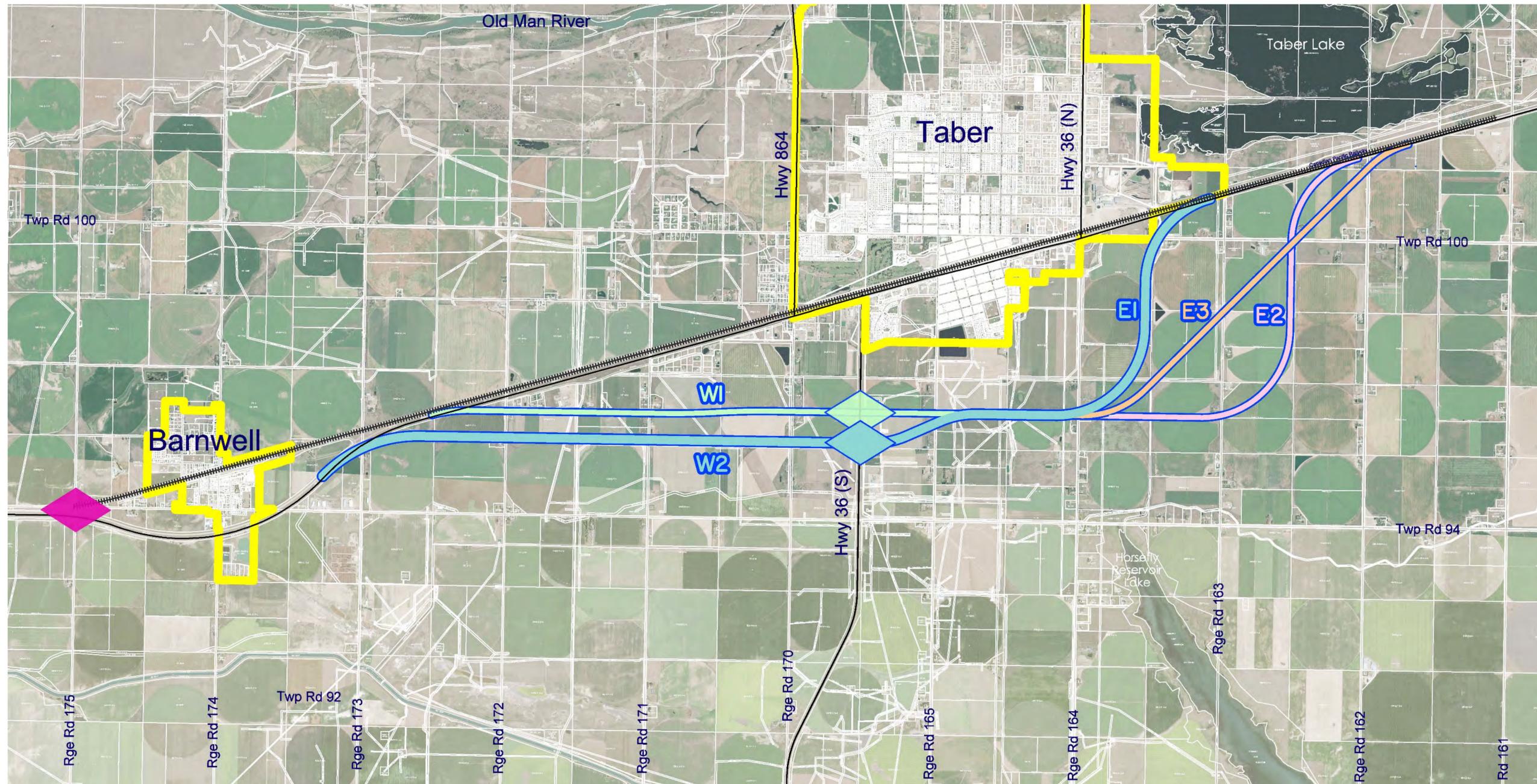


Key Features of the Alignment:

- Twinning to the south of the existing highway
- Maintains direct access between Taber and Barnwell
- Proposed geometric improvement east of Purple Springs
- Taber and Grassy Lake realignments minimize impact to irrigated lands
- Location of interchange at Range Road 151 optimized to:
 - Avoid impact to Purple Springs Cemetery and existing CPR crossing
 - Minimize impact to irrigated lands



TABER REALIGNMENT OPTIONS



- Two west options and three east options presented
- MAE panel final scoring identified Option W2 and Option E1 as the recommended alignments
- Alignments optimized following selection

TABER OPTIONS EVALUATION

Taber West Realignment Options Evaluation

Description	W1	W2
Financial		
Preliminary Construction Estimate	FAIR	VERY GOOD
Maintenance Costs	FAIR	FAIR
Constructability	FAIR	FAIR
Potential Environmental & Historical Impacts		
Wildlife	FAIR	FAIR
Historical Resources	FAIR	FAIR
User Benefits/Customer Service		
Road User Cost	POOR	FAIR
Network Connectivity	FAIR	VERY GOOD
Safety/ Driver Comfort	VERY GOOD	VERY GOOD
Community Sustainability		
Development Impacts (impacted farmstead/buildings)	VERY POOR	VERY GOOD
Agricultural Impacts of Irrigated Parcels	FAIR	VERY GOOD
Accommodate Urban Growth / Land Use Planning	FAIR	VERY GOOD
Community Access	POOR	VERY GOOD
Noise	FAIR	VERY GOOD
Economy		
Local Tourism and Economic Development	VERY POOR	POOR
OVERALL SCORE	VERY POOR	VERY GOOD

- W1 more costly due to utility, development, and irrigated land impacts
- Minimal environmental / historical impacts for both
- W2 allows direct access between Taber and Barnwell → better network connectivity and lesser impact on local access
- W1 generates more impacts to developments and irrigated land than W2

The evaluation identified Option W2 as the recommended alignment

Taber East Realignment Options Evaluation

Description	E1	E2	E3
Financial			
Preliminary Construction Estimate	FAIR	FAIR	VERY GOOD
Maintenance Costs	VERY GOOD	FAIR	FAIR
Constructability	FAIR	FAIR	FAIR
Potential Environmental & Historical Impacts			
Wildlife	FAIR	FAIR	FAIR
Historical Resources	VERY GOOD	FAIR	FAIR
User Benefits/Customer Service			
Road User Cost	FAIR	POOR	POOR
Network Connectivity	FAIR	FAIR	FAIR
Safety/ Driver Comfort	VERY GOOD	VERY GOOD	VERY GOOD
Community Sustainability			
Development Impacts (impacted farmstead/buildings)	POOR	FAIR	FAIR
Loss of Irrigatable Acres	POOR	VERY POOR	POOR
Severance Impacting Irrigation	FAIR	POOR	VERY POOR
Accommodate Urban Growth / Land Use Planning	VERY GOOD	POOR	FAIR
Community Access	FAIR	FAIR	FAIR
Noise	FAIR	FAIR	FAIR
Economy			
Local Tourism and Economic Development	VERY GOOD	VERY POOR	VERY POOR
OVERALL SCORE	VERY GOOD	VERY POOR	FAIR

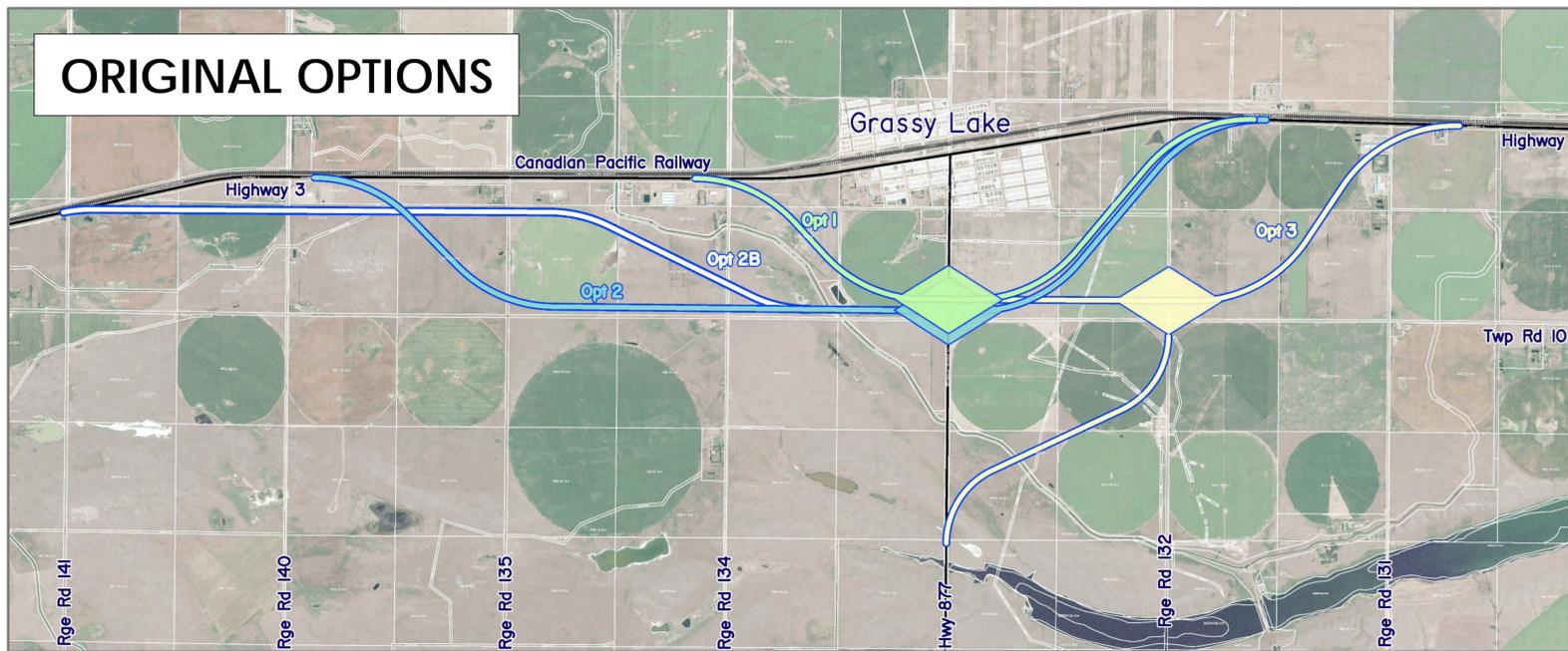
LEGEND:

VERY GOOD
GOOD
FAIR
POOR
VERY POOR

- E1 & E2 more costly due to utility conflicts
- Minimal environmental / historical impacts for all
- E2 & E3 have greater impact to local access between parcels
- E3 has flatter curves and longer straight segments → greater driver comfort
- E1 will have more development impacts
- E2 will result in the highest loss of irrigatable land; however, E3 will sever the most parcels
- E1 provides more business visibility

The evaluation identified Option E1 as the recommended alignment

GRASSY LAKE REALIGNMENT OPTIONS



- Initial evaluation of four options:
 - Option 2 eliminated – ties into existing Hwy 3 further west
 - Option 3 eliminated – irrigation impacts with realignment of Hwy 877
 - Option 2B – modification proposed to tie into existing Hwy 3 sooner
- Detailed evaluation continued with Options 1 and “Option 2B-modified”

Grassy Lake Realignment Options Evaluation

Description	Option 1	Option 2B-modified
Financial		
Preliminary Construction Estimate	Yellow	Yellow
Maintenance Costs	Yellow	Yellow
Constructability	Yellow	Yellow
Potential Environmental & Historical Impacts		
Wildlife	Yellow	Yellow
Historical Resources	Yellow	Yellow
User Benefits/Customer Service		
Road User Cost	Yellow	Yellow
Network Connectivity	Yellow	Yellow
Safety/ Driver Comfort	Yellow	Yellow
Community Sustainability		
Development Impacts (impacted farmstead/buildings)	Red	Green
Agricultural Impacts of Irrigated Parcels	Green	Green
Community Access	Yellow	Green
Noise	Yellow	Yellow
Impact to Proposed Solar Project	Green	Green
Economy		
Access to Regional Agriculture Destinations	Yellow	Green
OVERALL SCORE	Red	Green

LEGEND:

VERY GOOD	GOOD	FAIR	POOR	VERY POOR
-----------	------	------	------	-----------

- Comparable costs (within 10%), minimal environmental / historical impacts for both options
- Comparable road user costs, safety/driver comfort, and connection to the provincial road network
- Option 1 generates more impacts to development impacts and irrigated land
- Option 1 severs developments west of the alignment from Grassy Lake and impacts mobility from these developments to the north

The evaluation identified **Option 2B-modified** as the recommended alignment

LEGEND

- Stage 1
- Stage 2
- Stage 3
- Existing Railway
- Service Road (Gravel)
- Access Road (Optional)
- Existing Roads
- Interim At Grade Access

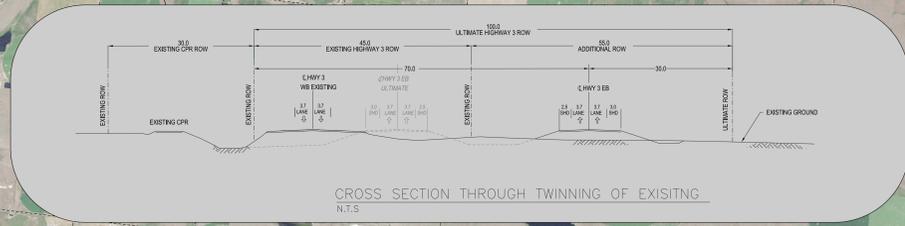
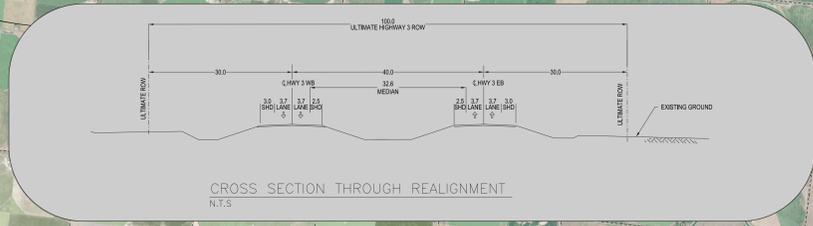
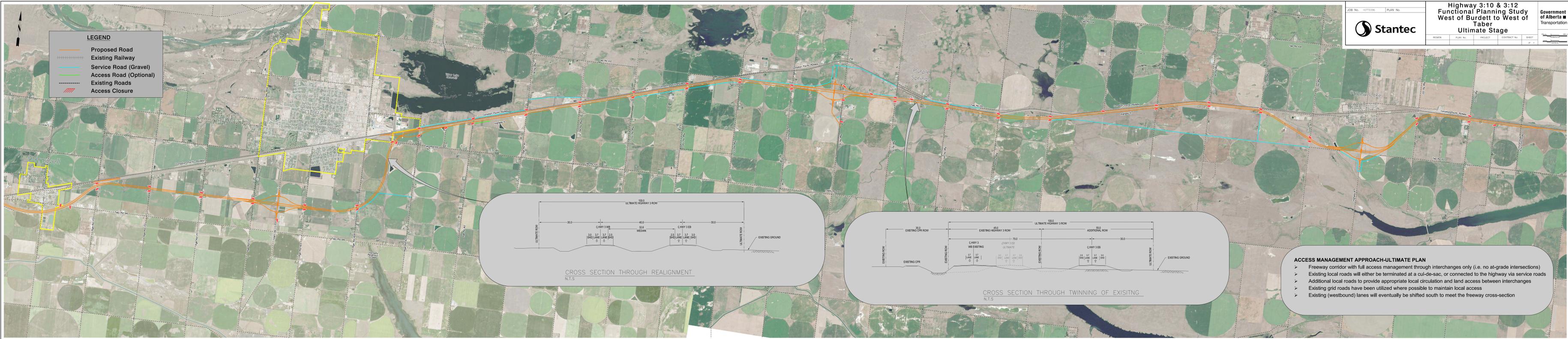


UPGRADING AND ACCESS MANAGEMENT APPROACH-INTERIM PLAN

- > Highway 3 will be upgraded in stages and will be considered for construction based on provincial priorities and provincial funding plans.
 - Stage 1
 - Existing highway with intersection improvements as needed and warranted
 - Interim improvements as required.
 - Stage 2
 - Twinning to the south starting east of Taber with 4-Lane realignment around Grassy Lake
 - Intersections provided for public roadways only, no direct property or field access.
 - Minimum spacing 1.6 km between intersections.
 - Stage 3
 - 4-Lane realignment around Taber not anticipated in the foreseeable future; however, right-of-way will be reserved for when it is required in the long term.
- > At-grade intersections will remain until traffic volumes or operational safety concerns warrant upgrading or closing.
- > Highway operations through Taber are projected to function satisfactorily for 20+ years (Level of Service "A").

LEGEND

- Proposed Road
- Existing Railway
- Service Road (Gravel)
- Access Road (Optional)
- Existing Roads
- Access Closure



ACCESS MANAGEMENT APPROACH-ULTIMATE PLAN

- Freeway corridor with full access management through interchanges only (i.e. no at-grade intersections)
- Existing local roads will either be terminated at a cul-de-sac, or connected to the highway via service roads
- Additional local roads to provide appropriate local circulation and land access between interchanges
- Existing grid roads have been utilized where possible to maintain local access
- Existing (westbound) lanes will eventually be shifted south to meet the freeway cross-section

PROCESS BY	DATE
TO IDMS	
TO GIS	
MICROFILMED	

PLAN DESCRIPTION
Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber

BAR CODE

PLAN No.	CONTRACT No.	PLAN LOCATION
COORDINATE DATA	NAD 83	BASE LONGITUDE

PHOTO No.	DATE
TITLE SEARCH	
DATE	
GRAPHICS FILE	

BY	DATE
SURVEYED	
DESIGNED	
CHECKED	
DRAWN	

REVISION	BY	DATE

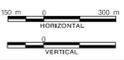
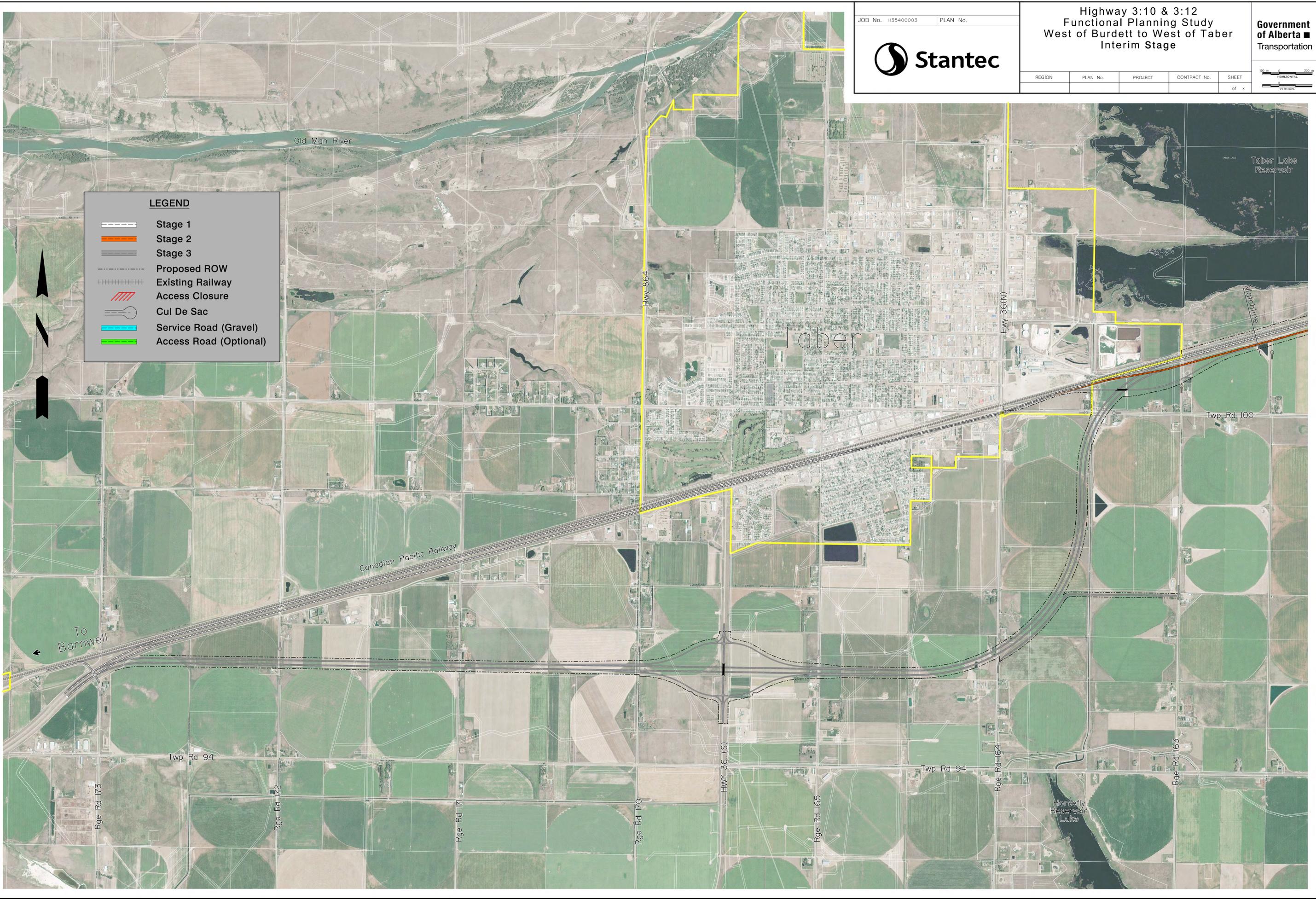
JOB No. 1135400003 PLAN No.



Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber Interim Stage

Government of Alberta Transportation

REGION	PLAN No.	PROJECT	CONTRACT No.	SHEET
				of x

LEGEND

-  Stage 1
-  Stage 2
-  Stage 3
-  Proposed ROW
-  Existing Railway
-  Access Closure
-  Cul De Sac
-  Service Road (Gravel)
-  Access Road (Optional)

PROCESS BY	DATE
TO IDMS	
TO GIS	
MICROFILMED	

PLAN DESCRIPTION
Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber

BAR CODE

PLAN No.	CONTRACT No.	PLAN LOCATION

COORDINATE DATA
NAD 83
BASE LONGITUDE

PHOTO No.	TITLE SEARCH DATE	GRAPHICS FILE

BY	DATE

SURVEYED	DESIGNED	CHECKED	DRAWN

BY	DATE

REVISION	

No.	

JOB No. 1135400003 PLAN No.



Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber Interim Stage

Government of Alberta Transportation

REGION	PLAN No.	PROJECT	CONTRACT No.	SHEET
				of x




PROCESS BY	DATE
TO IDMS	
TO GIS	
MICROFILMED	

PLAN DESCRIPTION
Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber

BAR CODE

PLAN No.	CONTRACT No.	PLAN LOCATION
COORDINATE DATA	NAD 83	BASE LONGITUDE

PHOTO No.	DATE
TITLE SEARCH	
DATE	
GRAPHICS FILE	

BY	DATE
SURVEYED	
DESIGNED	
CHECKED	
DRAWN	

REVISION	DATE

JOB No. 1135400003 PLAN No.

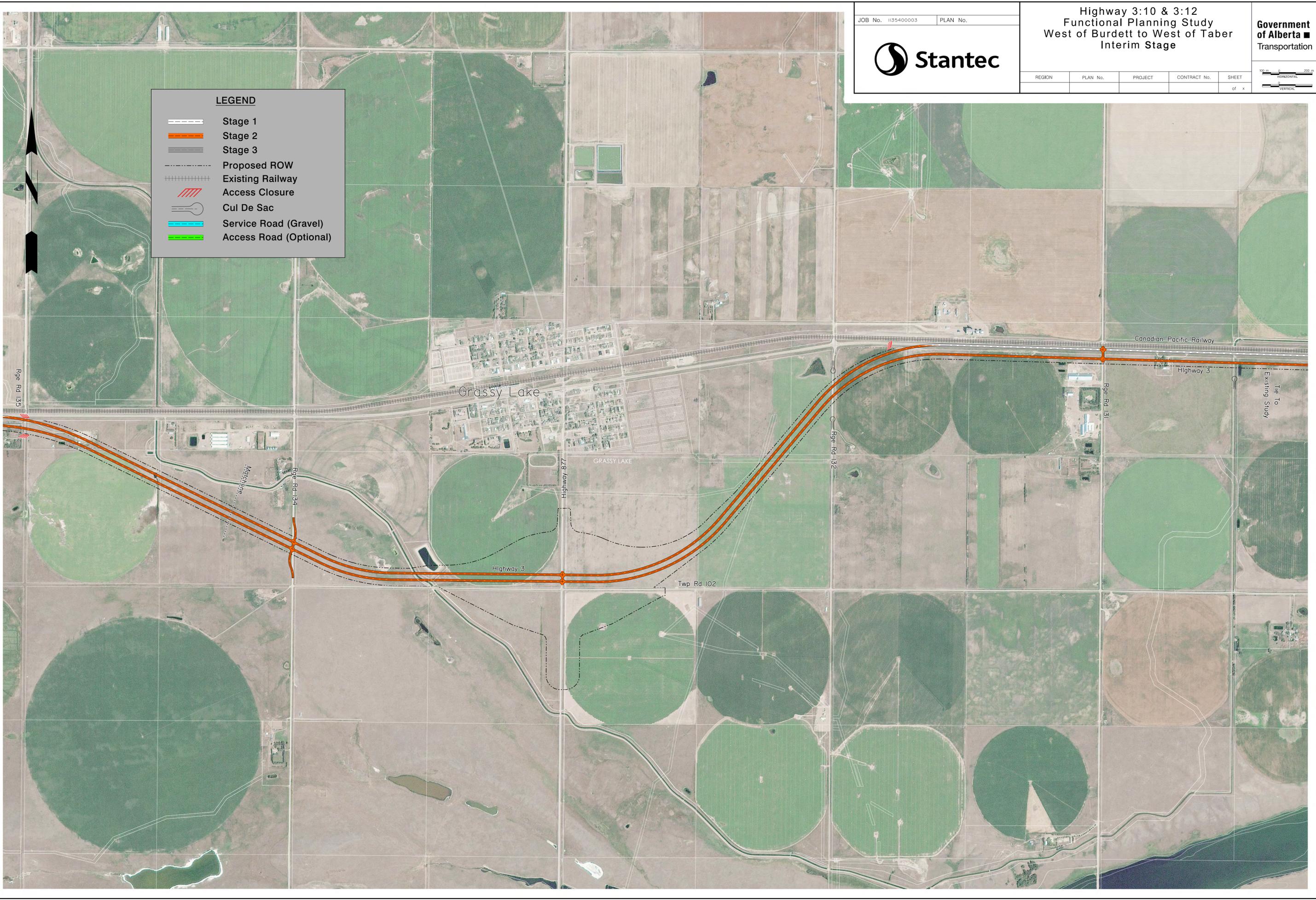


Highway 3:10 & 3:12 Functional Planning Study
West of Burdett to West of Taber
Interim Stage

REGION	PLAN No.	PROJECT	CONTRACT No.	SHEET
				of x

100 m 0 200 m
 HORIZONTAL
 VERTICAL

Government of Alberta
 Transportation



LEGEND

-  Stage 1
-  Stage 2
-  Stage 3
-  Proposed ROW
-  Existing Railway
-  Access Closure
-  Cul De Sac
-  Service Road (Gravel)
-  Access Road (Optional)

No.	REVISION	BY	DATE	SURVEYED	DESIGNED	CHECKED	DRAWN	BY	DATE	PHOTO No.	COORDINATE DATA	PLAN No.	CONTRACT No.	PLAN LOCATION	BAR CODE	PLAN DESCRIPTION	PROCESS	BY	DATE
											NAD 83					Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber	TO DIMS		
										GRAPHICS FILE	BASE LONGITUDE					Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber	TO GIS		
																MICROFILMED			

JOB No. 1135400003 PLAN No.

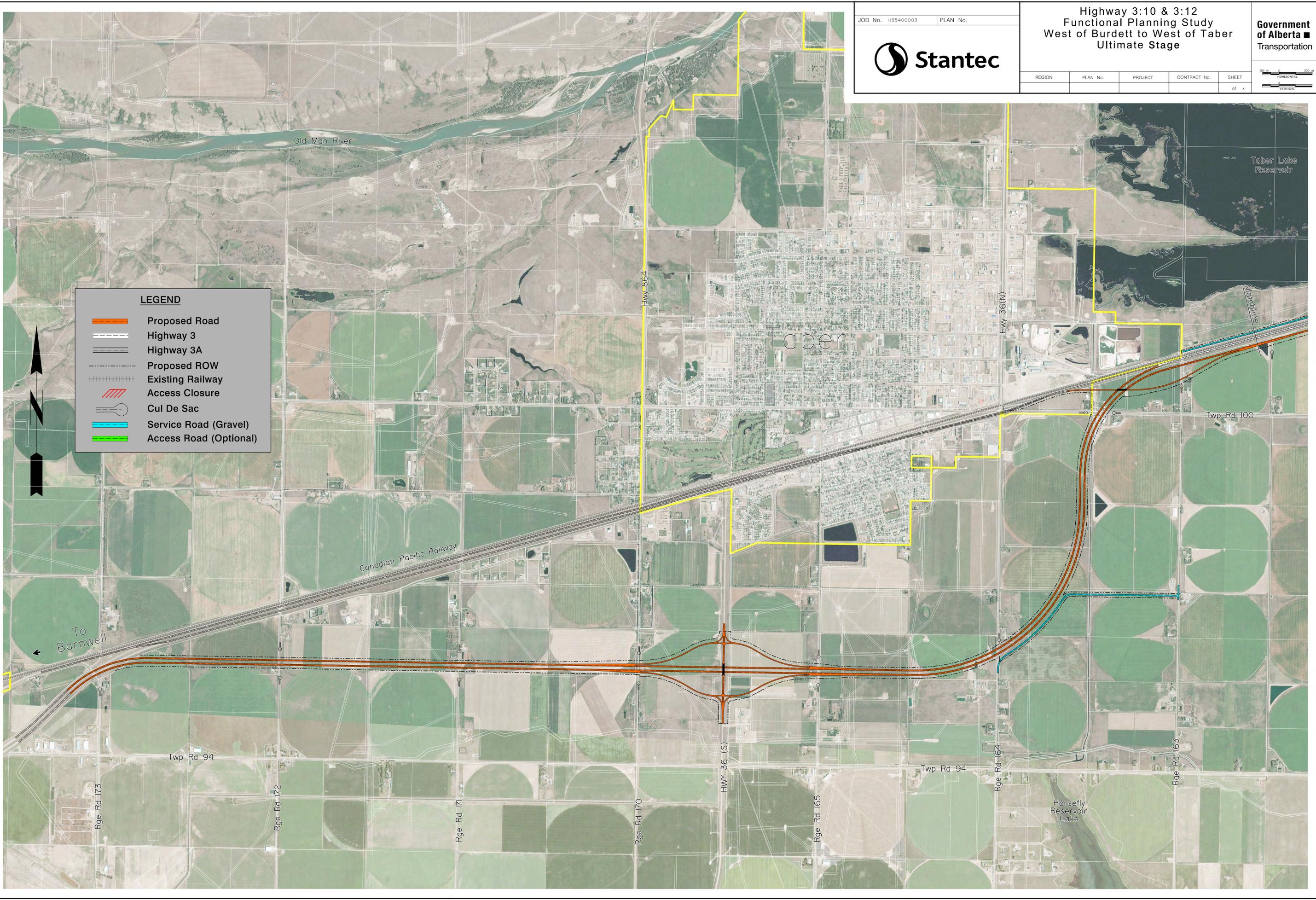


Highway 3:10 & 3:12
Functional Planning Study
West of Burdett to West of Taber
Ultimate Stage

Government of Alberta
Transportation

REGION	PLAN No.	PROJECT	CONTRACT No.	SHEET
				of x

150 m 300 m
HORIZONTAL
VERTICAL



LEGEND

-  Proposed Road
-  Highway 3
-  Highway 3A
-  Proposed ROW
-  Existing Railway
-  Access Closure
-  Cul De Sac
-  Service Road (Gravel)
-  Access Road (Optional)

PROCESS BY	DATE
TO IDMS	
TO GIS	
MICROFILMED	

PLAN DESCRIPTION
Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber

BAR CODE

PLAN No.	CONTRACT No.	PLAN LOCATION
COORDINATE DATA	BASE LONGITUDE	
NAD 83		

PHOTO No.	DATE
TITLE SEARCH	
DATE	
GRAPHICS FILE	

BY	DATE
SURVEYED	
DESIGNED	
CHECKED	
DRAWN	

BY	DATE
REVISION	
No.	

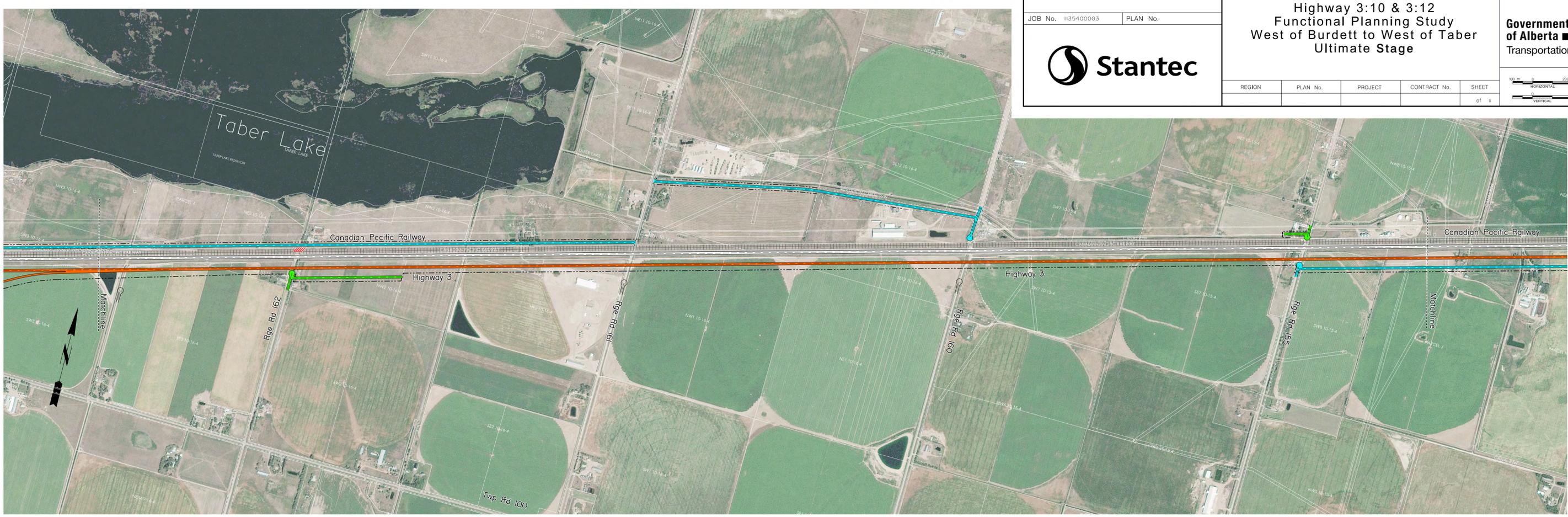
JOB No. 1135400003 PLAN No.



Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber Ultimate Stage

Government of Alberta Transportation

REGION	PLAN No.	PROJECT	CONTRACT No.	SHEET
				of x

PROCESS BY	DATE
TO IDMS	
TO GIS	
MICROFILMED	

PLAN DESCRIPTION
Highway 3:10 & 3:12 Functional Planning Study West of Burdett to West of Taber

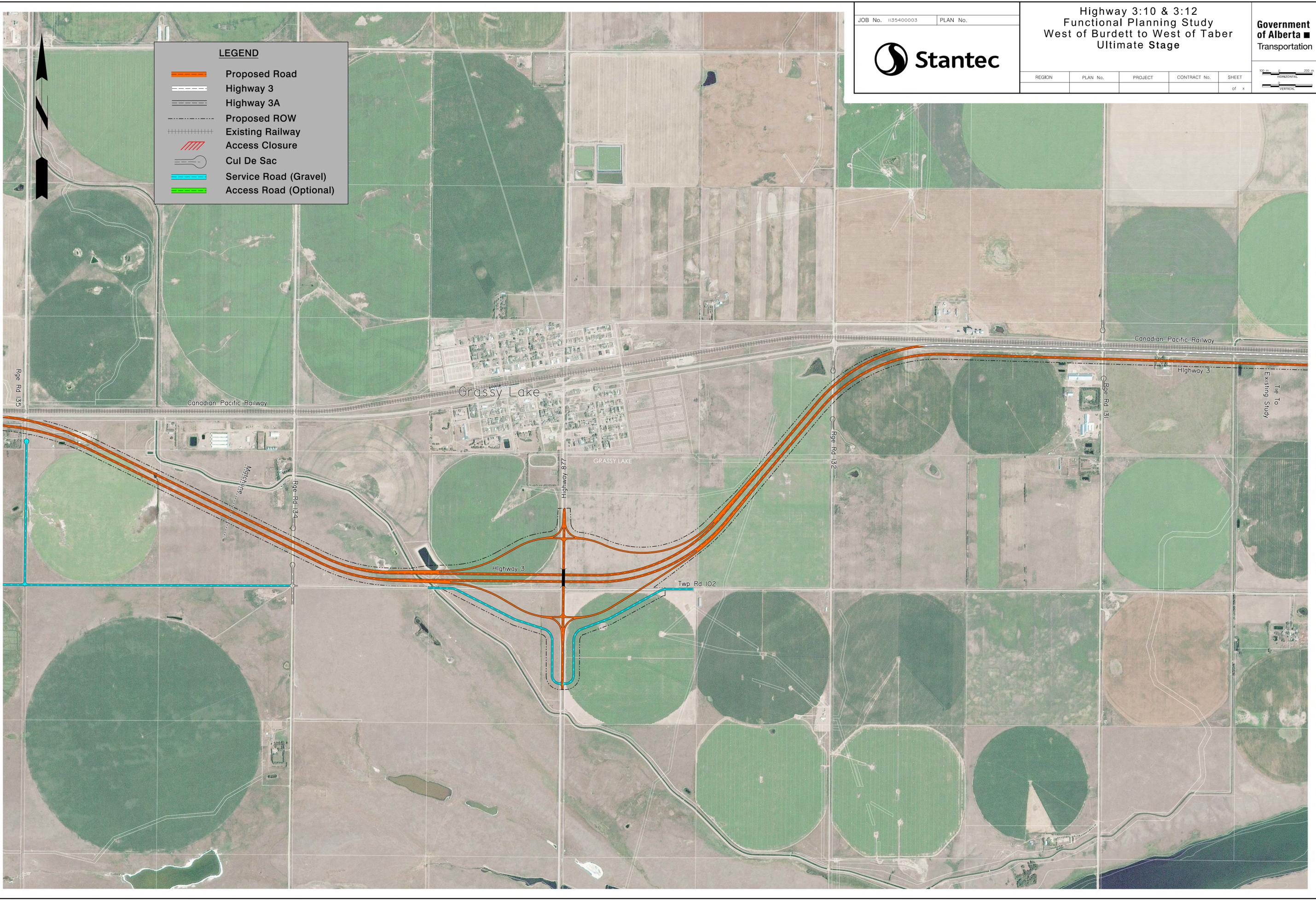
BAR CODE

PLAN No.	CONTRACT No.	PLAN LOCATION
COORDINATE DATA	NAD 83	BASE LONGITUDE

PHOTO No.	DATE
TITLE SEARCH	
DATE	
GRAPHICS FILE	

BY	DATE
SURVEYED	
DESIGNED	
CHECKED	
DRAWN	

REVISION	BY	DATE



JOB No. 1135400003 PLAN No.

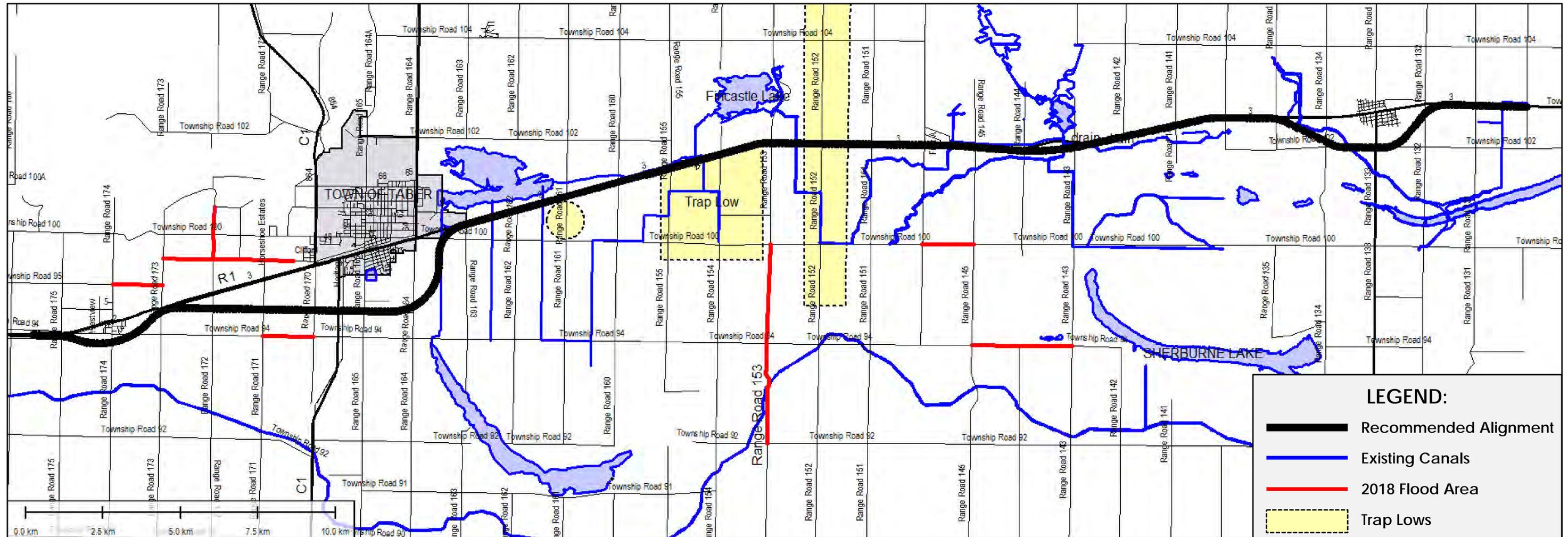
Highway 3:10 & 3:12 Functional Planning Study
West of Burdett to West of Taber
Ultimate Stage

Government of Alberta Transportation

REGION	PLAN No.	PROJECT	CONTRACT No.	SHEET
				of X

100 m
 HORIZONTAL
 VERTICAL

SURFACE DRAINAGE



- This study will address drainage impacting the highway and locations where highway drainage may impact downstream properties
- Surface Drainage Guiding Principles:
 - Highway remains in service during emergency (local flooding due to rainfall or snowmelt)
 - Irrigation and land drainage canals pass across the highway right of way unimpeded
 - Runoff generated within the right of way is dealt with inside the right of way where possible and released at pre-development rates at selected locations only
 - Highway runoff will be directed to natural drainage courses
 - Detention ponds, if required, will be located within an Alberta Transportation right of way

COMMENTS

Your comments are important.

Please complete a comment form and submit in person or
via email by July 13, 2018

Learn more at <http://www.transportation.alberta.ca/6088.htm>