

WELCOME

Anthony Henday Drive

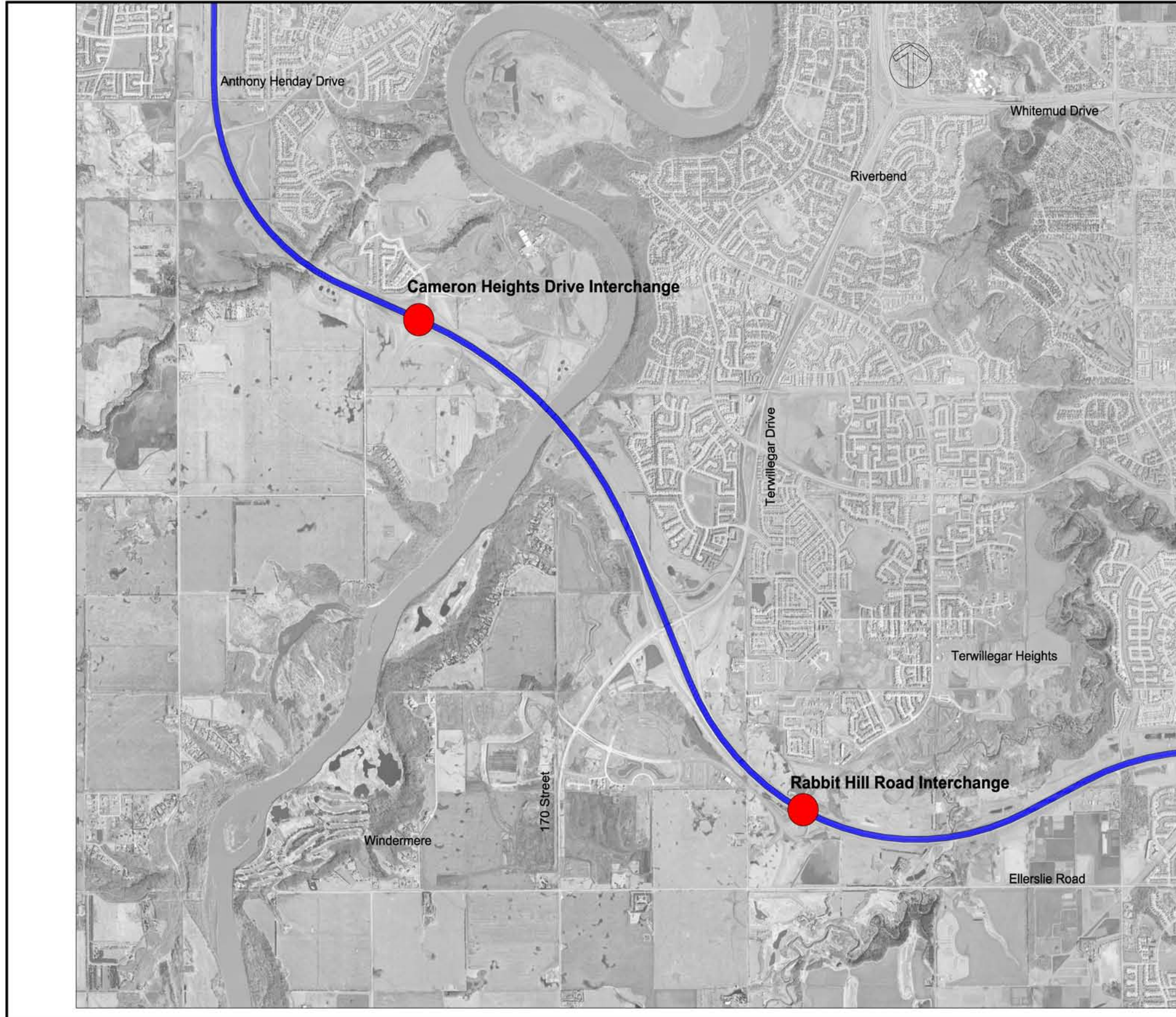
Open House, April 28, 2009

ANTHONY HENDAY DRIVE

Cameron Heights Drive
and
Rabbit Hill Road

Functional Planning and Design Studies

Location Plan



Anthony Henday Drive Cameron Heights Drive and Rabbit Hill Road Interchanges

Functional Planning and
Design Studies

Location Plan

Date: April 28, 2009

Cameron Heights Drive

Problem / Needs

- Southwest Anthony Henday Drive opened in 2004.
- Access to Cameron Heights controlled by signalized intersection
- Anthony Henday Drive will be free flow (i.e. no at-grade intersections)
- Interchange required to accommodate access to both Cameron Heights and future development to southwest

Cameron Heights Location Plan



Anthony Henday Drive and Cameron Heights Drive Interchange

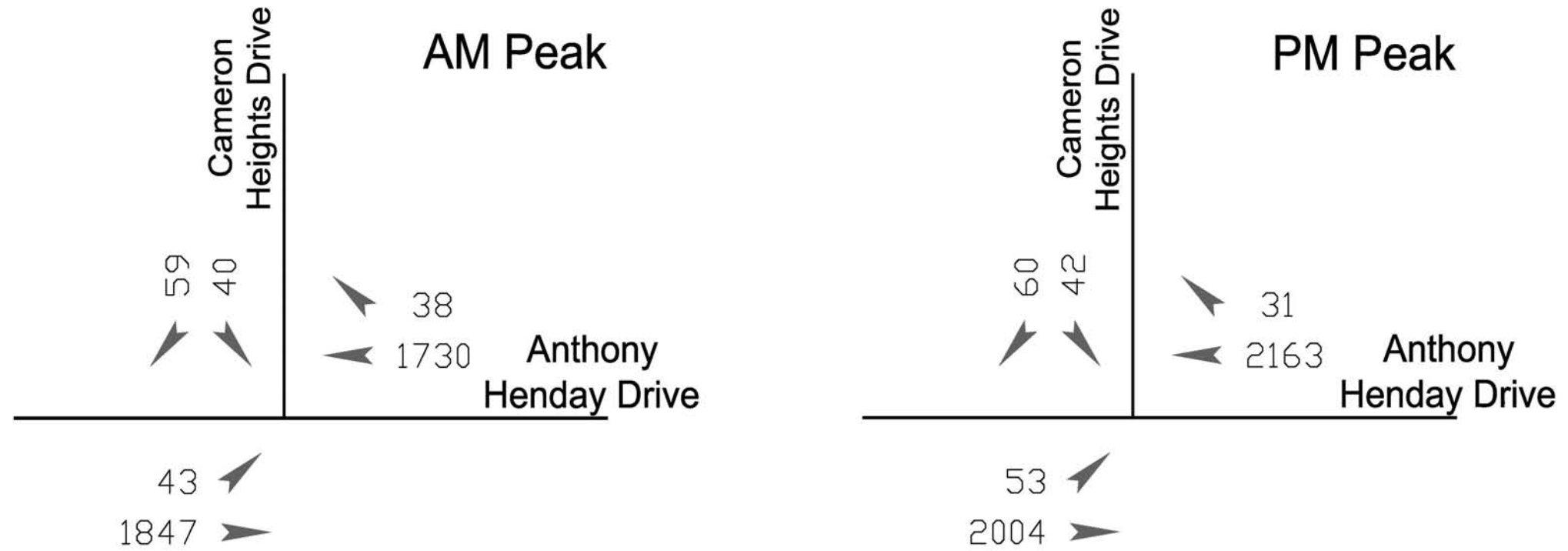
Functional Planning Study

Cameron Heights
Location Plan

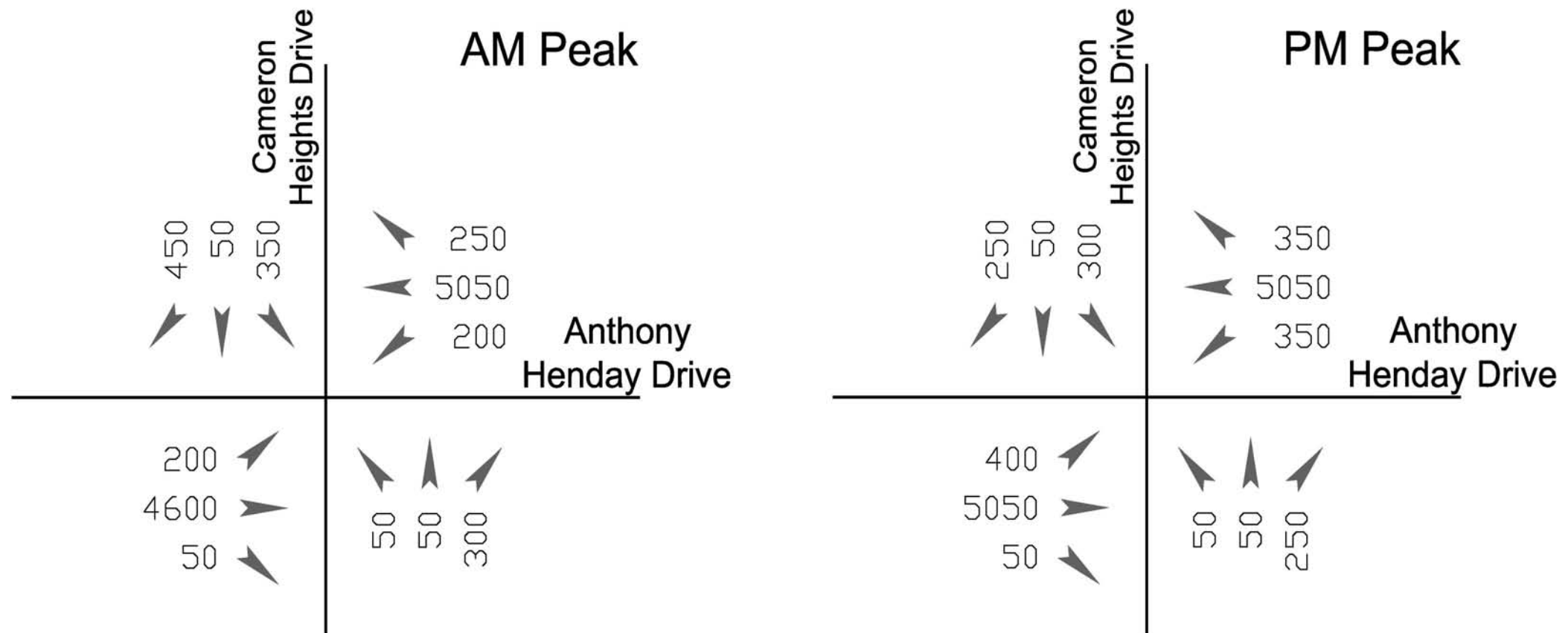
Date: April 28, 2009

Existing and Future Traffic Volumes

Existing:



2041:



Noise Study

- Noise study undertaken in 2007
- 20 year projection based on 80,000 veh/day, resulting in a noise level of 61.2 dBA with existing noise wall
- Threshold noise level for attenuation is 65 dBA
- Current traffic volumes approximately 40,000 veh/day
- Noise to be re-evaluated in conjunction with future widening of Anthony Henday Drive

Noise Modeling Results - Current Conditions



ACI Acoustical Consultants Inc.

Noise Modeling Results - Future Conditions



ACI Acoustical Consultants Inc.

Interchange Evaluation Criteria

- Driver Safety
- Traffic Accommodation
- Community Impact
- Bridge Requirements
- Impact on Anthony Henday Drive
- Economics (Construction Costs)
- Impact on E.L. Smith Access
- Connectivity to 23 Avenue

Evaluation of Alternatives

- 7 interchange alternatives were developed
- 4 were eliminated through an initial screening analysis due to:
 - Designs that were unsafe for drivers
 - Inability to accommodate future traffic volumes
 - Unacceptable impact on Anthony Henday Drive
 - Unacceptable impact on E.L. Smith access road
- 3 remaining alternatives were reviewed and a recommended alternative has been identified

Simple Diamond



Anthony Henday Drive and Cameron Heights Drive Interchange

Functional Planning Study

- Cameron Heights Drive to pass over Anthony Henday Drive
- Cameron Heights Drive to ultimately connect to 23 Avenue / SR627 (initially connecting to 184 Street).
- 7 lane structure required to accommodate future traffic.
- Sidewalk to be included on the bridge
- Intersections on Cameron Heights Drive north of Anthony Henday Drive approximately 150m apart.

Simple Diamond Interchange west of existing intersection

Date: April 28, 2009

Loop Ramp in Northeast Quadrant



Anthony Henday Drive and Cameron Heights Drive Interchange

Functional Planning Study

- Cameron Heights Drive to pass over Anthony Henday Drive
- Cameron Heights Drive to ultimately connect to 23 Avenue / SR627 (initially connecting to 184 Street).
- Loop ramp in northeast quadrant accommodates northbound to westbound movement
- 4 lane structure required
- Sidewalk to be included on the bridge
- Increased separation between intersections on Cameron Heights Drive north of Anthony Henday Drive.
- Curvilinear alignment for Cameron Heights Drive north of Anthony Henday Drive.
- East ramp terminals encroach onto the North Saskatchewan River Bridge

Loop Ramp in Northeast Quadrant

Interchange 300m east of existing intersection

Date: April 28, 2009

Trumpet



Anthony Henday Drive and Cameron Heights Drive Interchange

Functional Planning Study

- Cameron Heights Drive to pass over Anthony Henday Drive
- Cameron Heights Drive to ultimately connect to 23 Avenue / SR627 (initially connecting to 184 Street).
- Loop ramp in northeast quadrant accommodates northbound to westbound and southbound to westbound movements
- 4 lane structure required
- Sidewalk to be included on the bridge

Trumpet

Interchange east of existing intersection

Date: April 28, 2009

Evaluation Matrix

Ranking Criteria	Simple Diamond	Loop Ramp in Northeast Quadrant	Trumpet
Driver Safety	2	4	4
Traffic Accommodation	2	4	3
Community Impact (Visual and Noise)	3	4	4
Bridge Requirements	2	4	3
Impact on Anthony Henday Drive	5	2	5
Construction Costs	3	2	4
Impact on E.L. Smith Access	4	4	3
Connectivity to 23 Avenue	4	3	4
Ranking Total	25	27	30

Ranking Legend
 5 – Best Case
 1 – Worst Case

Recommended Alternative



Anthony Henday Drive and Cameron Heights Drive Interchange

Functional Planning Study

- Cameron Heights Drive to pass over Anthony Henday Drive
- Cameron Heights Drive to ultimately connect to 23 Avenue / SR627 (initially connecting to 184 Street).
- Loop ramp in northeast quadrant accommodates northbound to westbound and southbound to westbound movements
- 4 lane structure required
- Sidewalk to be included on the bridge

Trumpet
Interchange east of existing intersection

Date: April 26, 2009

What Happens Next

- Review / incorporate comments from open house
- Finalize functional plan
- Post on Government of Alberta Transportation website
- Initiate preliminary design of interchange
- Conduct open house (early fall, 2009)
- Complete design of interchange
- Implementation not in current 3 year construction program

Rabbit Hill Road

Problem/Needs

- Southwest Anthony Henday Drive opened in 2004
- South ramps (connecting to Windermere Boulevard) open to traffic April 2009
- North ramps (connecting to Rabbit Hill Road) will be open to traffic fall 2009
- 2 lane extension from Windermere Boulevard to Ellerslie Road to be constructed in 2009
- Bridge required to complete interchange

Rabbit Hill Road Location Plan



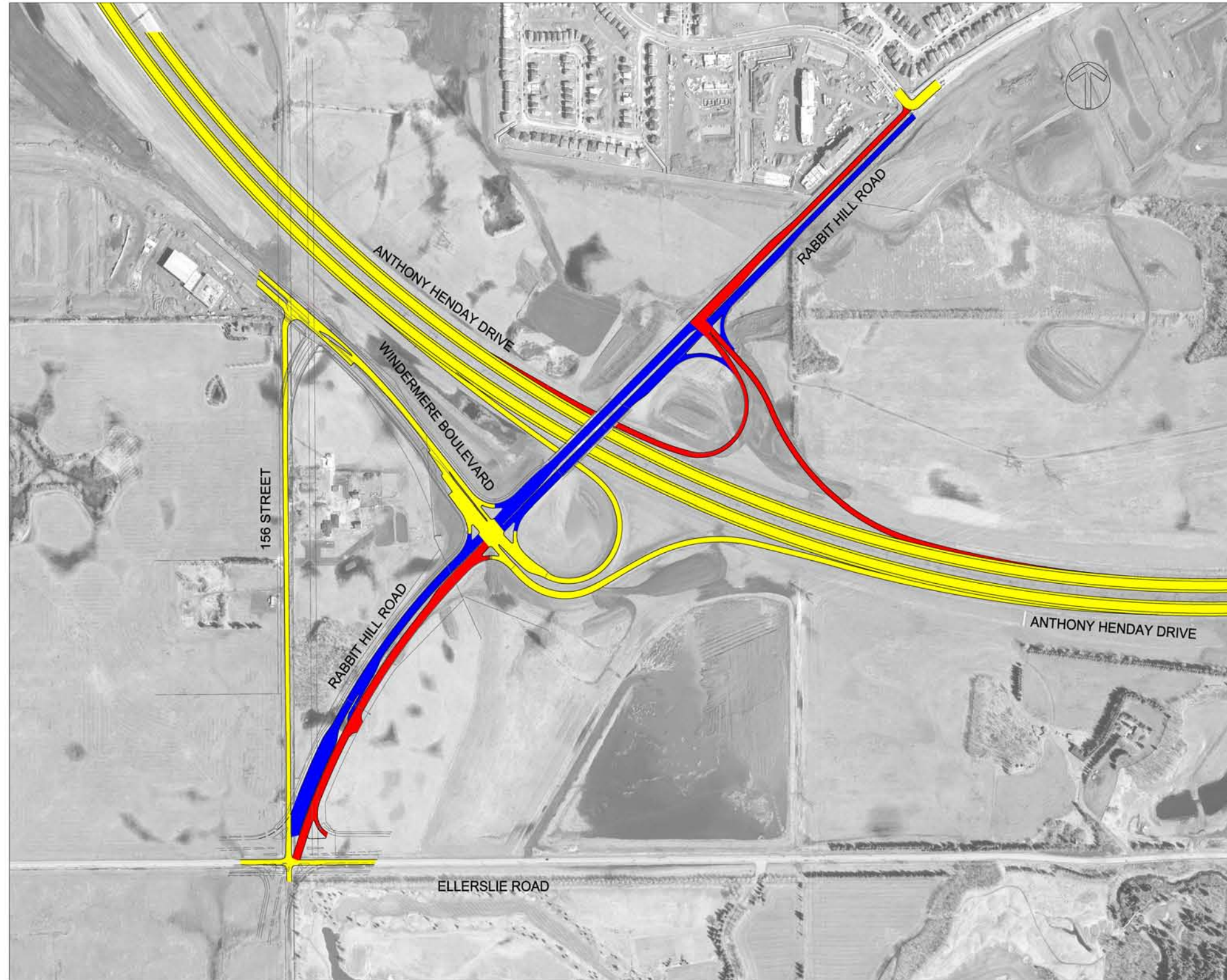
Anthony Henday Drive and Rabbit Hill Road Interchange

Design Study

Rabbit Hill Road Location Plan

Date: April 28, 2009

Proposed Improvements



Anthony Henday Drive and Rabbit Hill Road Interchange

Design Study

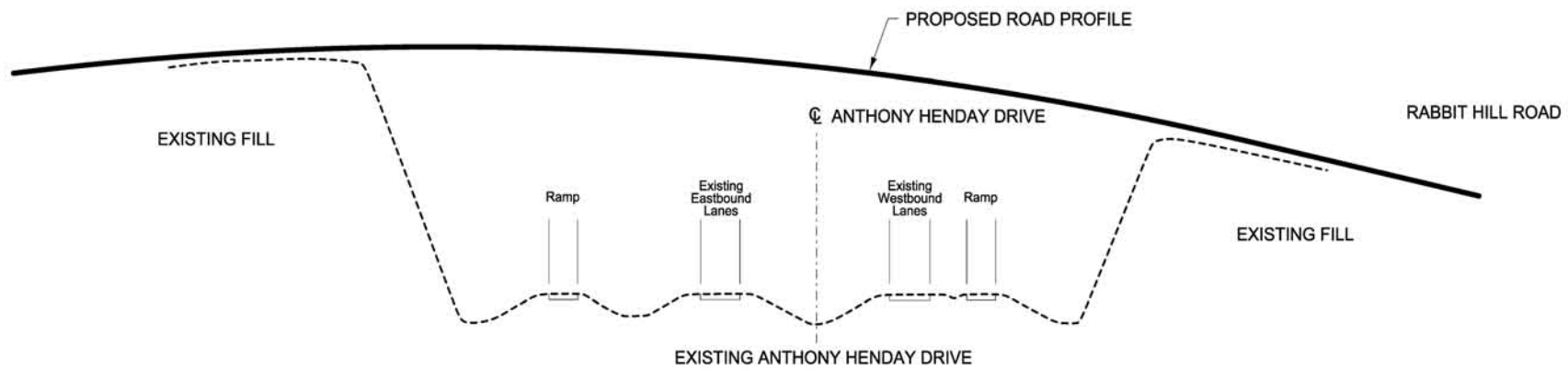
Legend

- Roads in Operation Today
- Roads in Operation Fall 2009
- Proposed Improvements

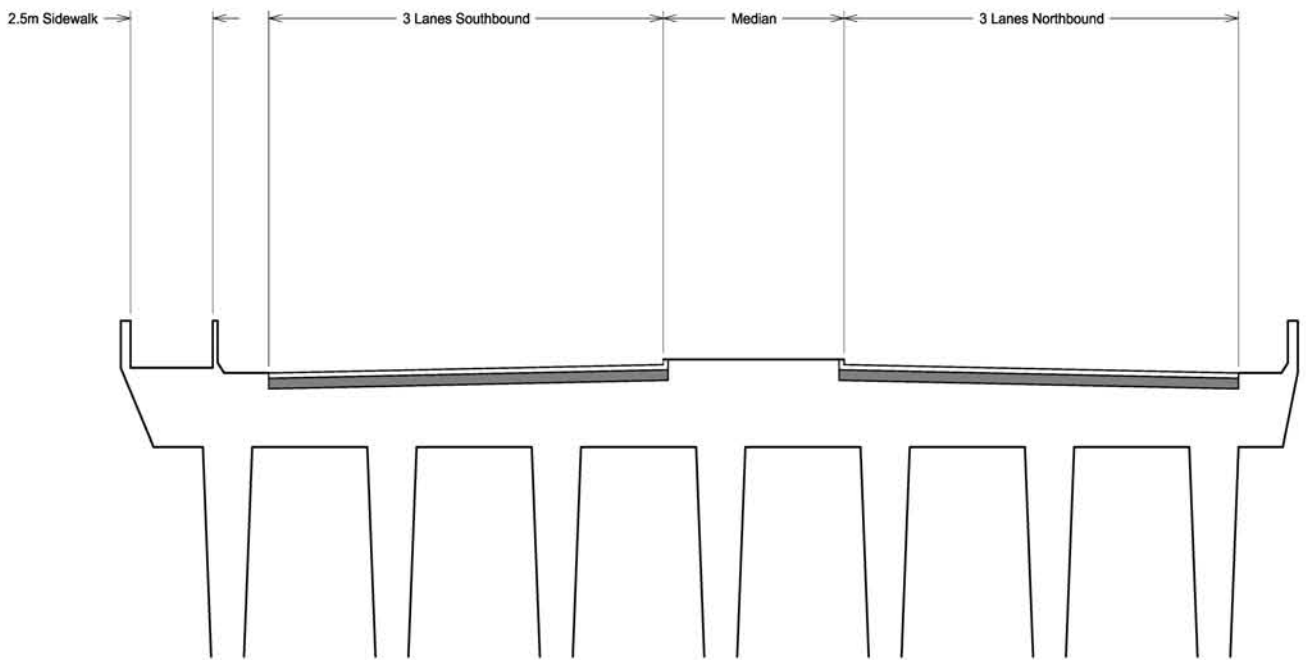
Conceptual Road Plan

Date: April 28, 2009

Bridge Profile and Cross Section



RABBIT HILL ROAD BRIDGE
PROFILE LOOKING WEST
NTS



RABBIT HILL ROAD BRIDGE
CROSS SECTION LOOKING NORTH
NTS

Anthony Henday Drive and Rabbit Hill Road Interchange

Functional Planning Study

Rabbit Hill Road Bridge Profile and cross section

Date: April 28, 2009

What Happens Next

- Review / incorporate comments from open house
- Finalize design of bridge and roads
- Post design on Government of Alberta Transportation website
- Implementation not in current 3 year construction program

THANK YOU

for attending tonight's open house

Please fill out a questionnaire