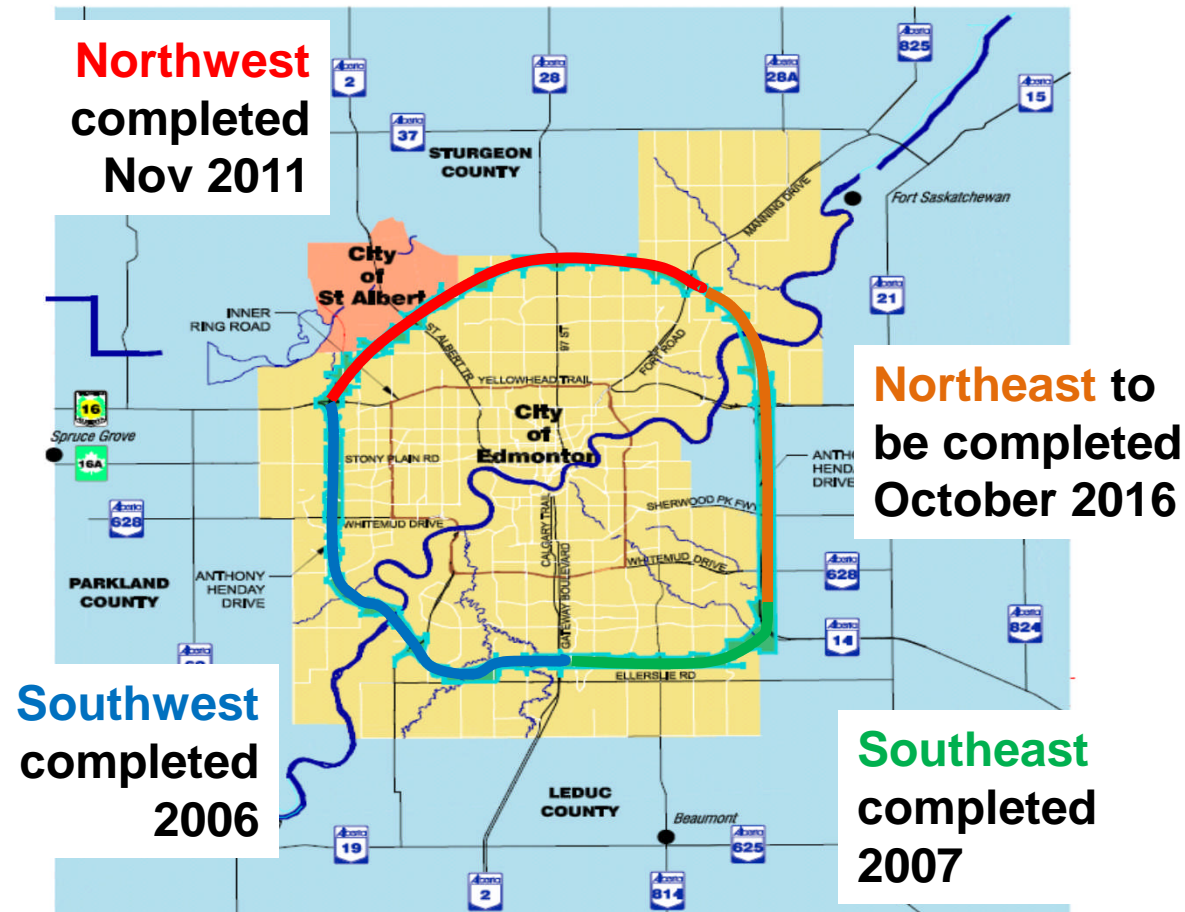


# Northeast Anthony Henday Drive

Bill van der Meer  
Urban Construction Manager - Edmonton  
Alberta Transportation

# Project Background

# Edmonton Ring Road



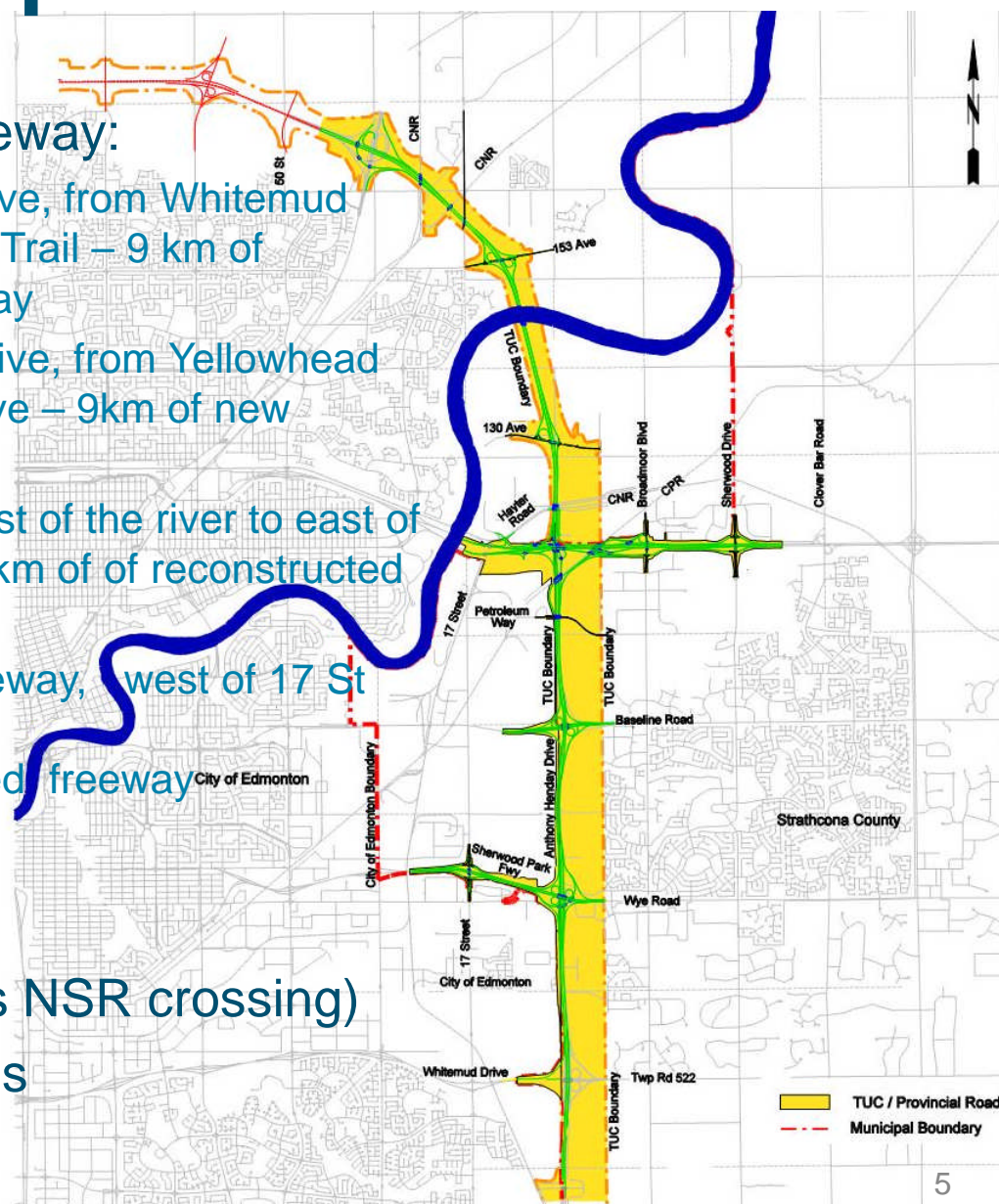
Completion of the Northeast section will make Anthony Henday Drive the first complete ring road around a Canadian city.

# Project Scope



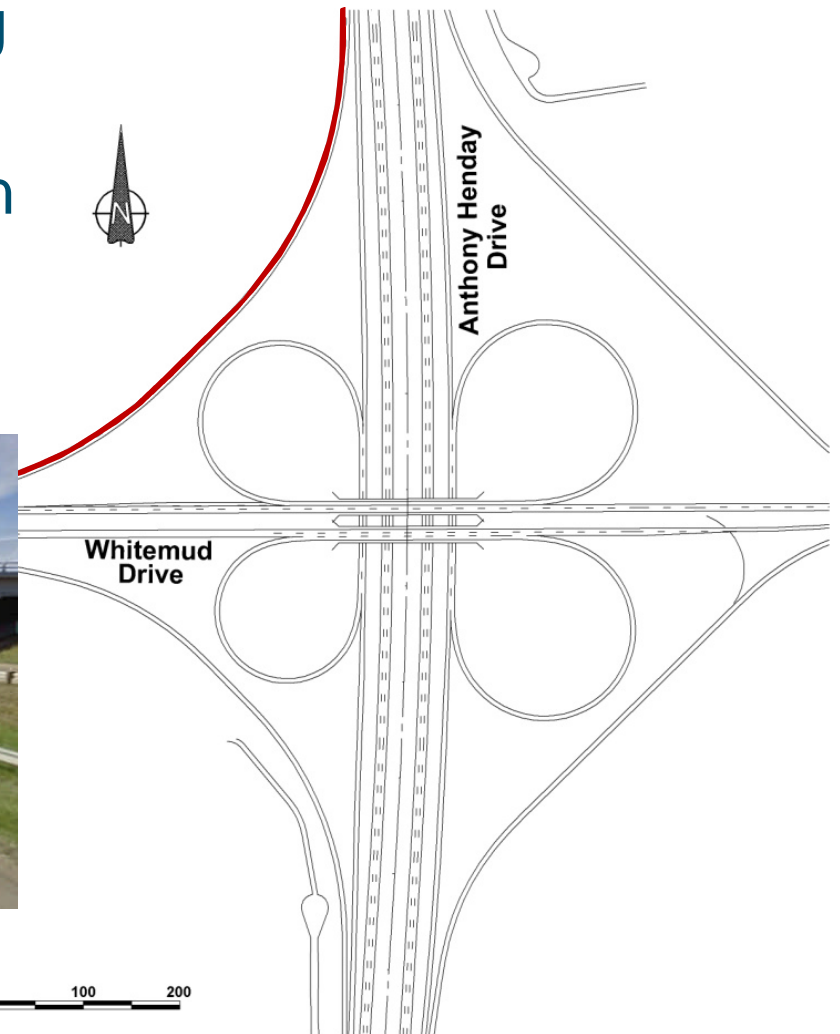
# Project Scope

- 27 kilometres of freeway:
  - Anthony Henday Drive, from Whitemud Drive to Yellowhead Trail – 9 km of reconstructed freeway
  - Anthony Henday Drive, from Yellowhead Trail to Manning Drive – 9km of new freeway
  - Yellowhead Trail, east of the river to east of Sherwood Drive – 6km of reconstructed freeway
  - Sherwood Park Freeway, west of 17 St to Ordze Crescent – 3 km of reconstructed freeway
- 9 interchanges
- 2 flyovers
- 47 bridges (includes NSR crossing)
- 24 stormwater ponds
- 103 overhead signs



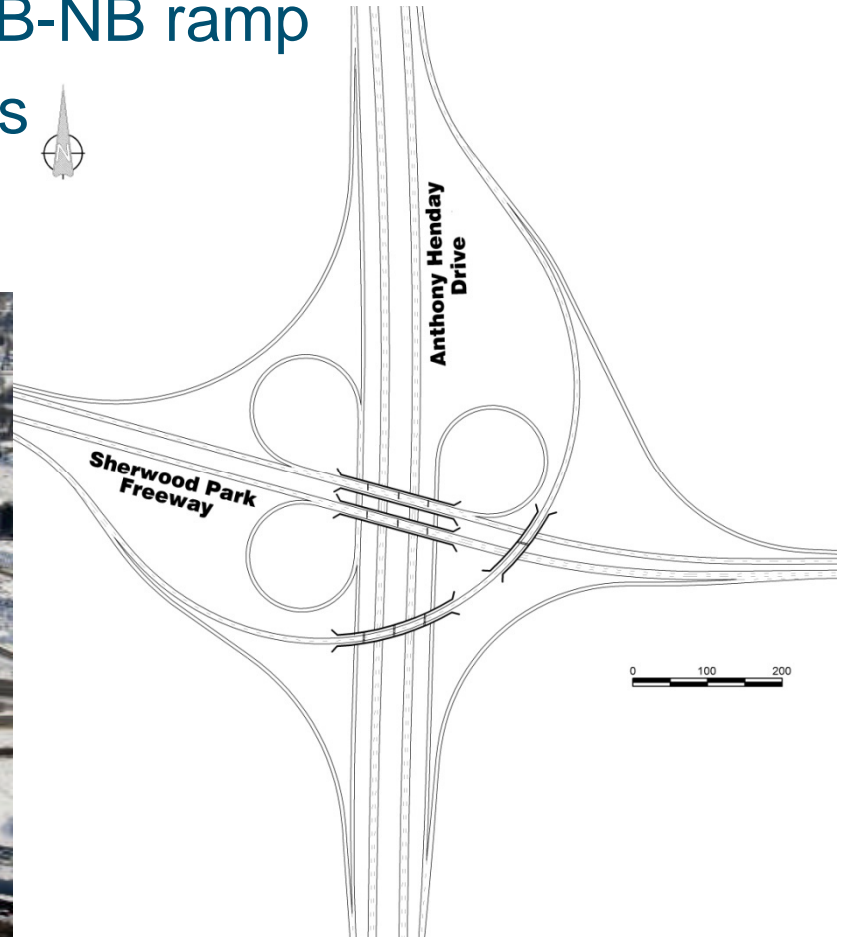
# Whitemud Drive

- Resurfacing of existing cloverleaf interchange
- Addition of one lane on SB-WB ramp



# Sherwood Park Freeway

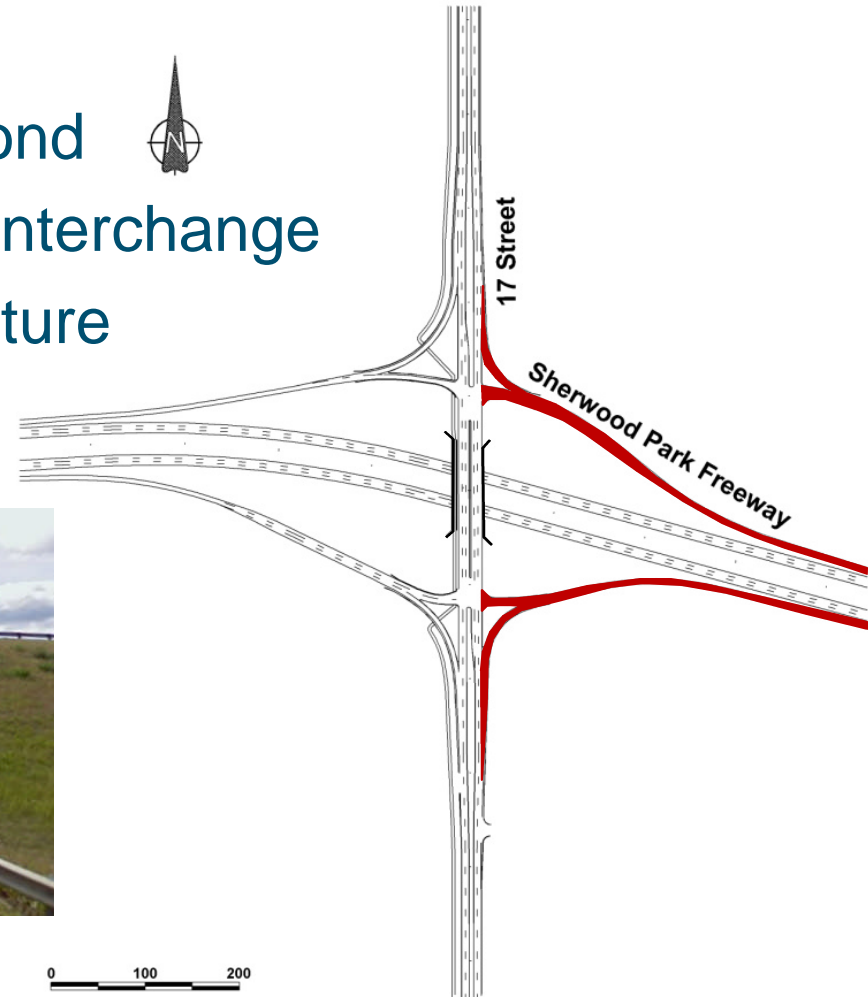
- Completely new Parclo interchange
- Elevated Directional EB-NB ramp
- 4 new bridge structures





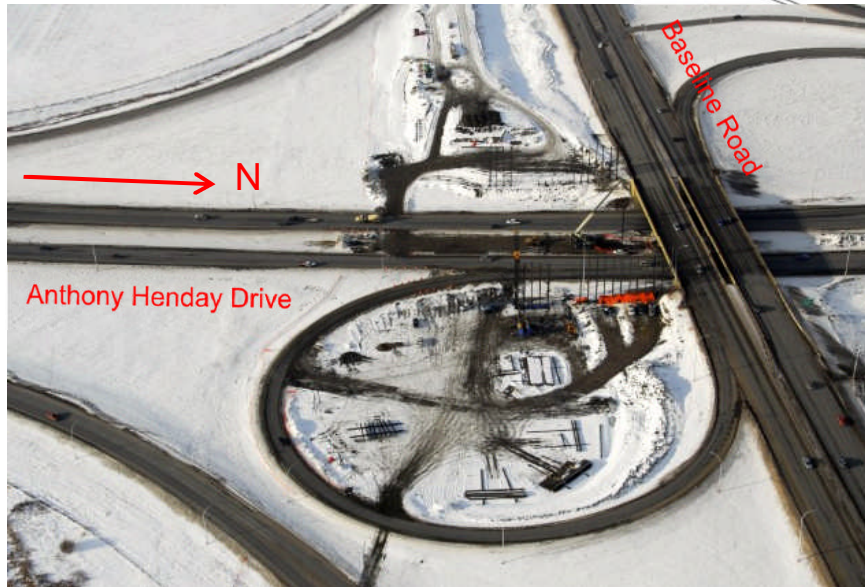
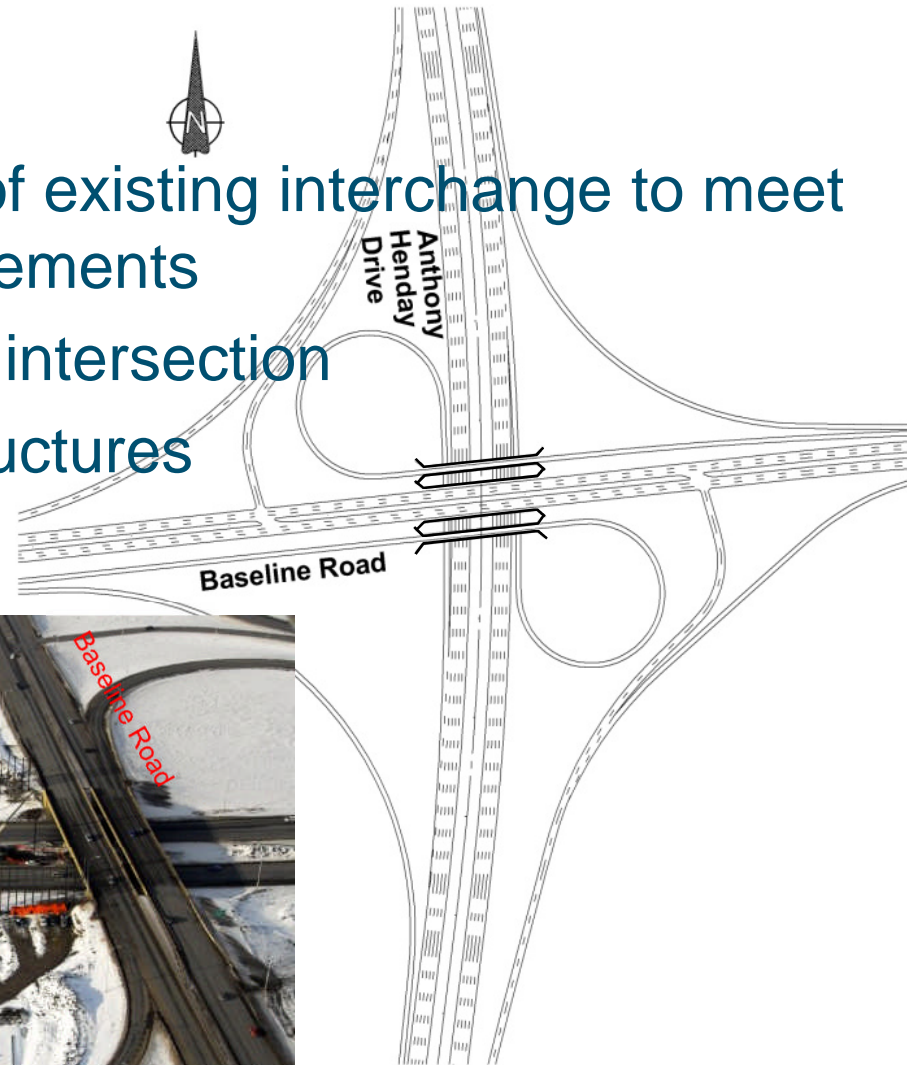
# Sherwood Park Freeway/17 Street

- Existing half diamond
- New full diamond interchange
- 1 new bridge structure



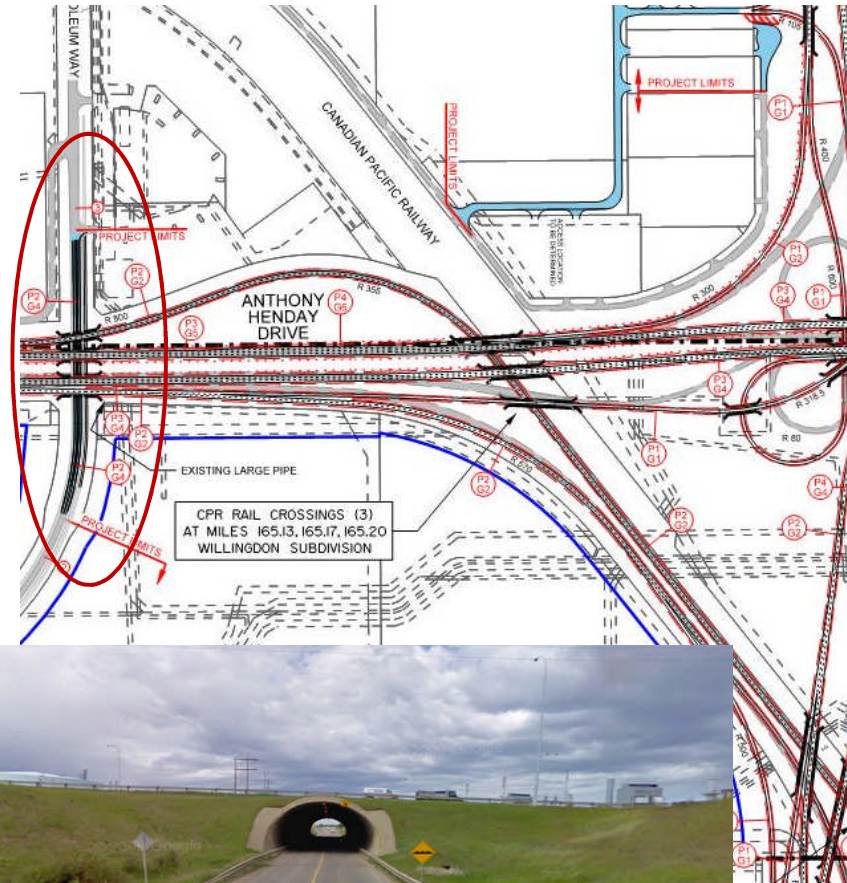
# Baseline Road/101 Avenue

- Reconstruction of existing interchange to meet geometric requirements
- Signalized ramp intersection
- 3 new bridge structures



# Petroleum Way Underpass

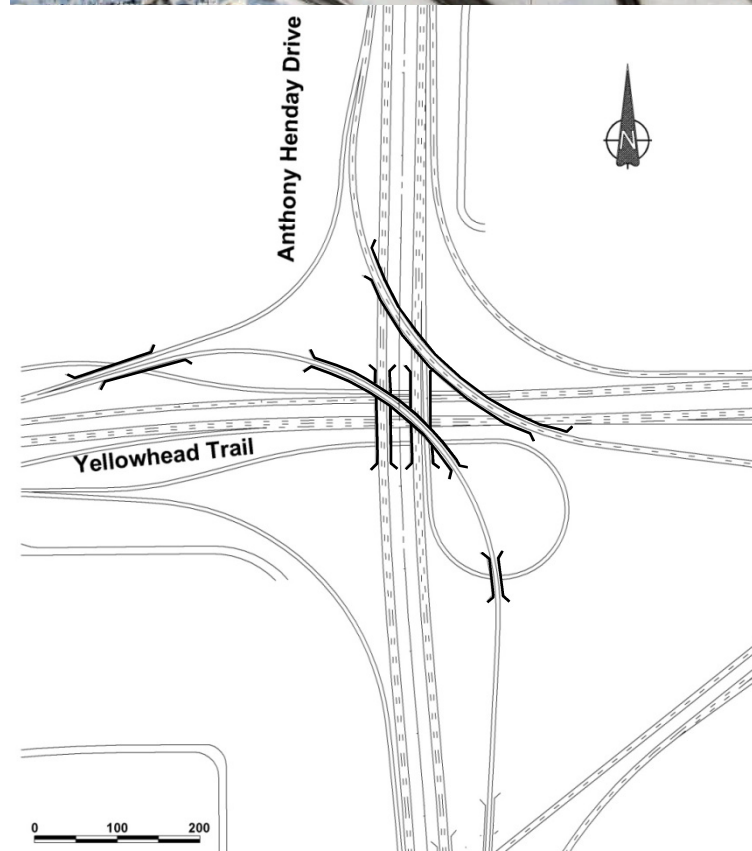
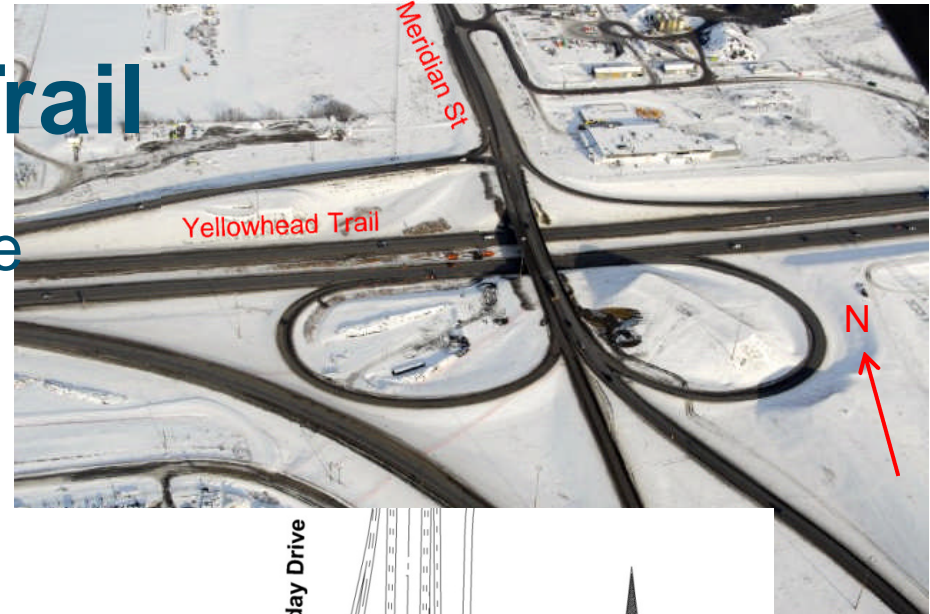
- Evacuation route for Petro Canada refinery
- Road to be widened with grading for 4 lanes; 2 lanes paved in Stage 1
- Existing bridge culvert structure to be removed and replaced with new ultimate stage structure





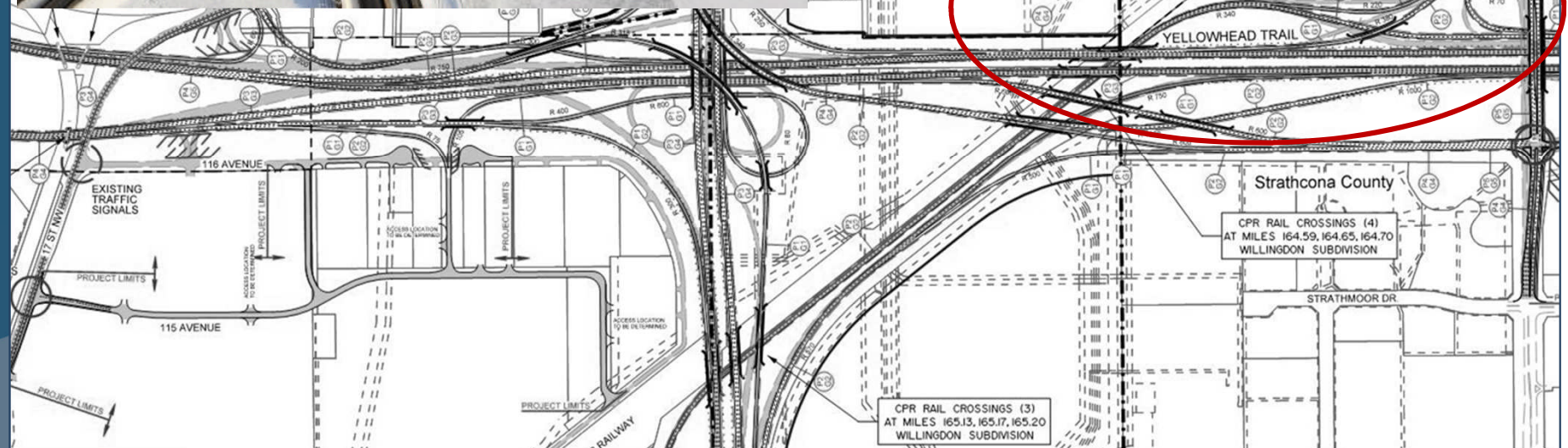
# Yellowhead Trail

- Systems Interchange
- 6 new bridge structures on 3 elevations
- New major, multi-level, free-flow interchange replacing existing service interchange



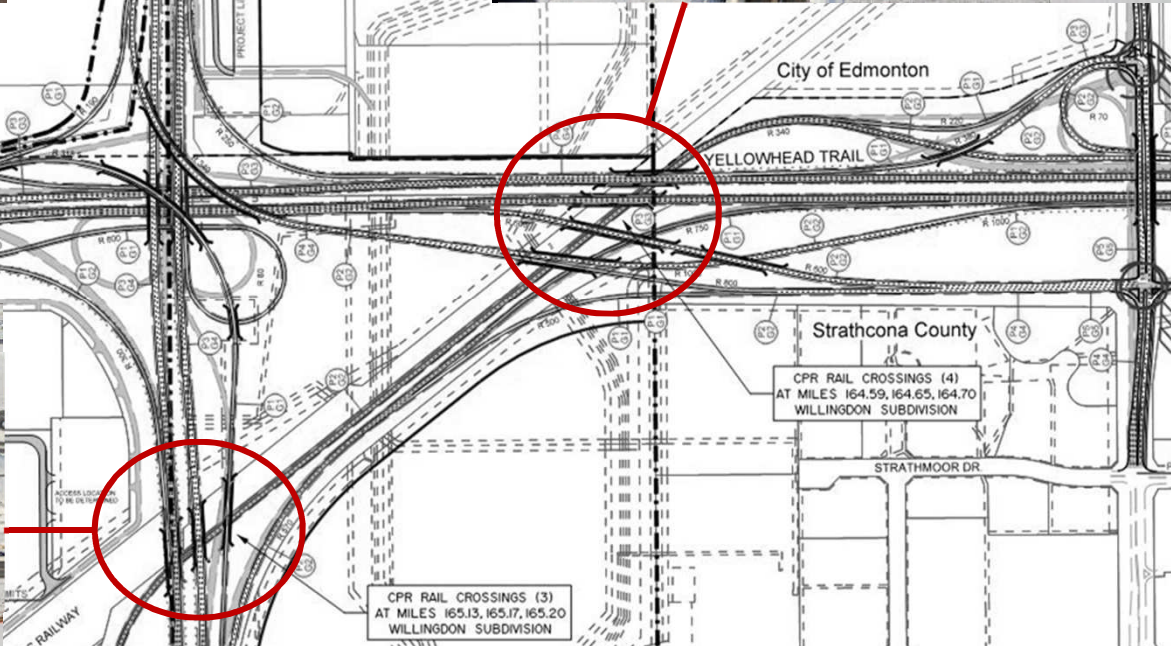
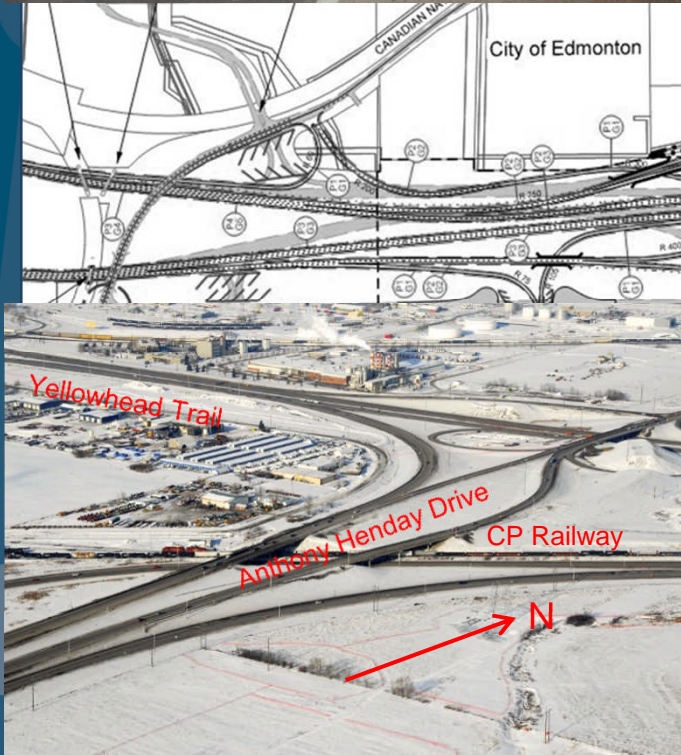
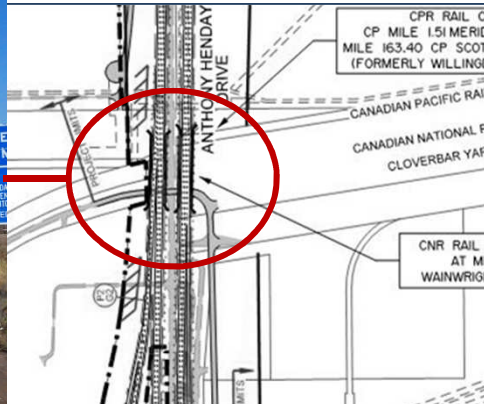
# Yellowhead Trail

- 2 basket weaves





# Yellowhead Trail

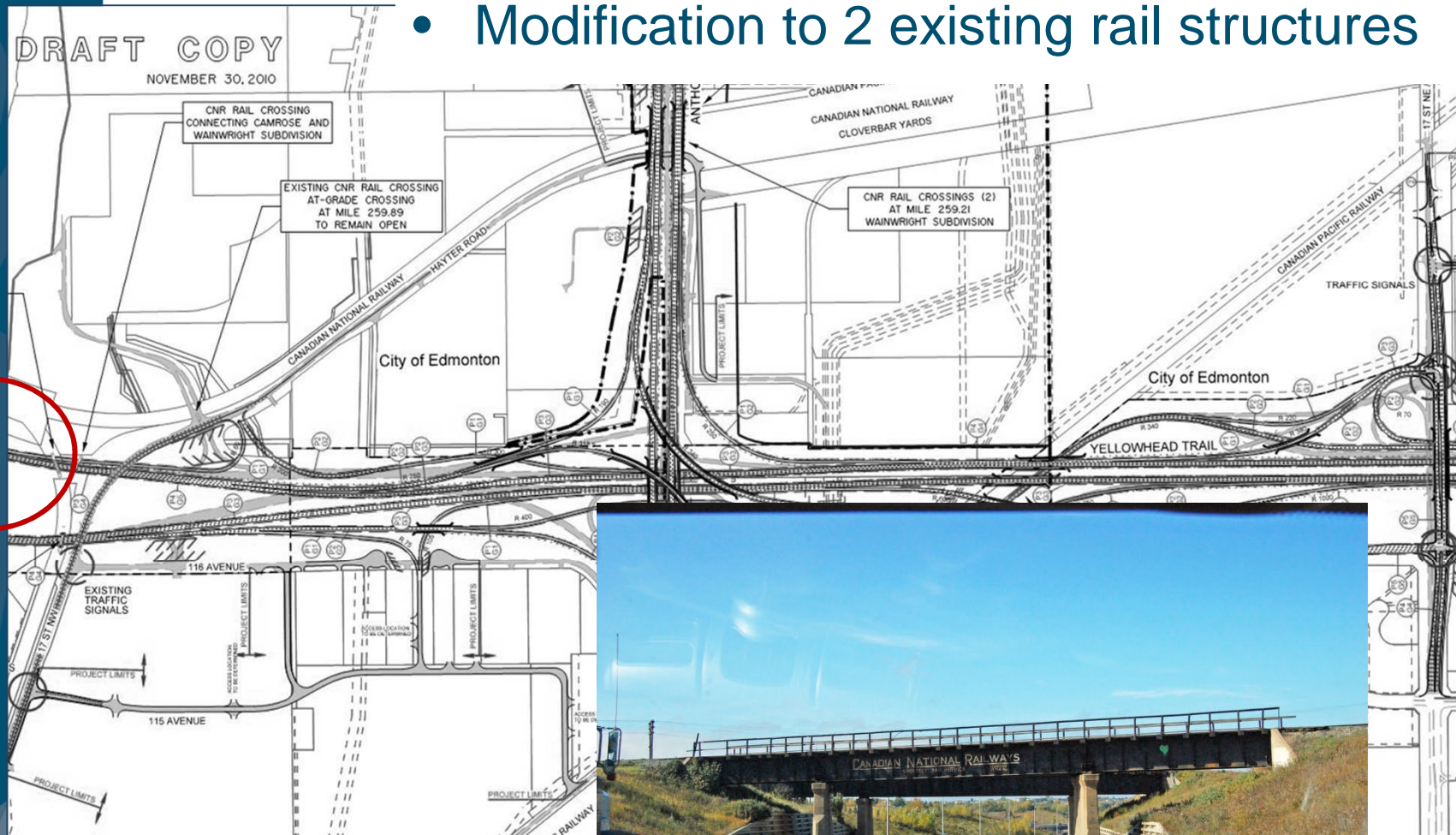


- 9 new rail crossing structures



# Yellowhead Trail

- Modification to 2 existing rail structures



# Yellowhead Trail/Broadmoor Boulevard

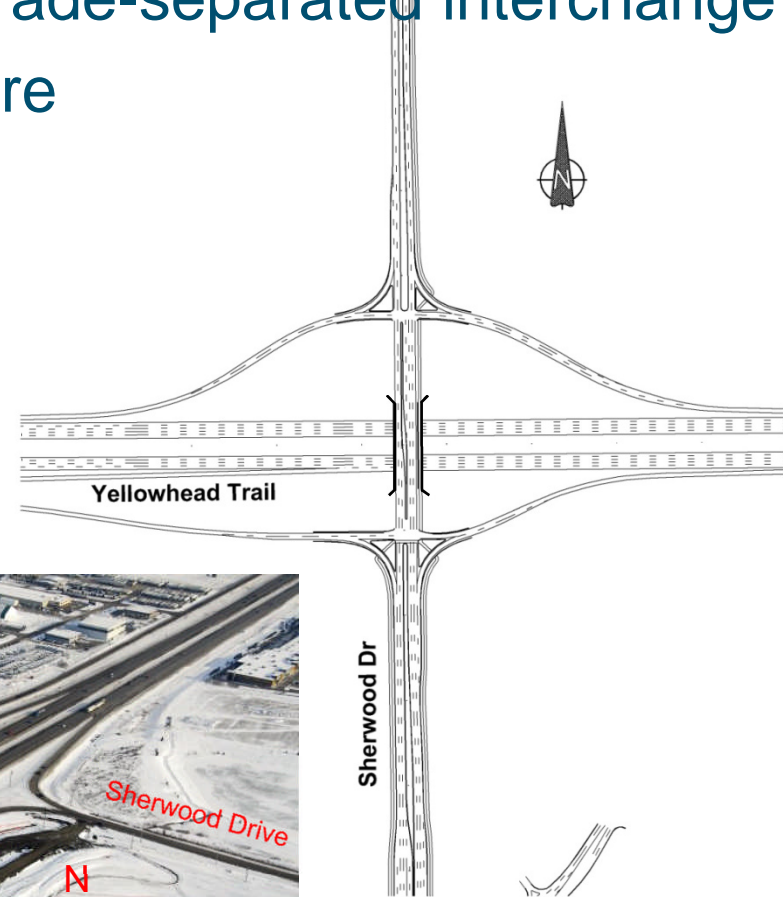
- Existing parclo interchange to be replaced.
- 1 new bridge structure





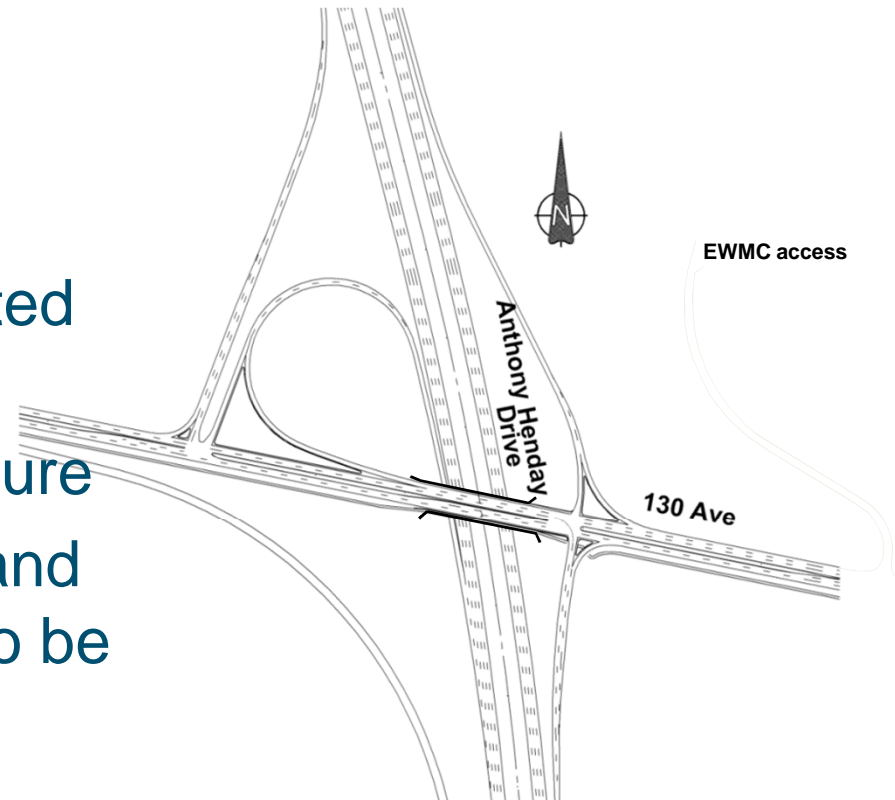
# Yellowhead Trail/Sherwood Drive

- Existing right-in-right-out intersection to be replaced with new grade-separated interchange
- 1 new bridge structure



# 130 Avenue

- New grade-separated interchange
- 1 new bridge structure
- Access to EWMC and gravel operations to be maintained





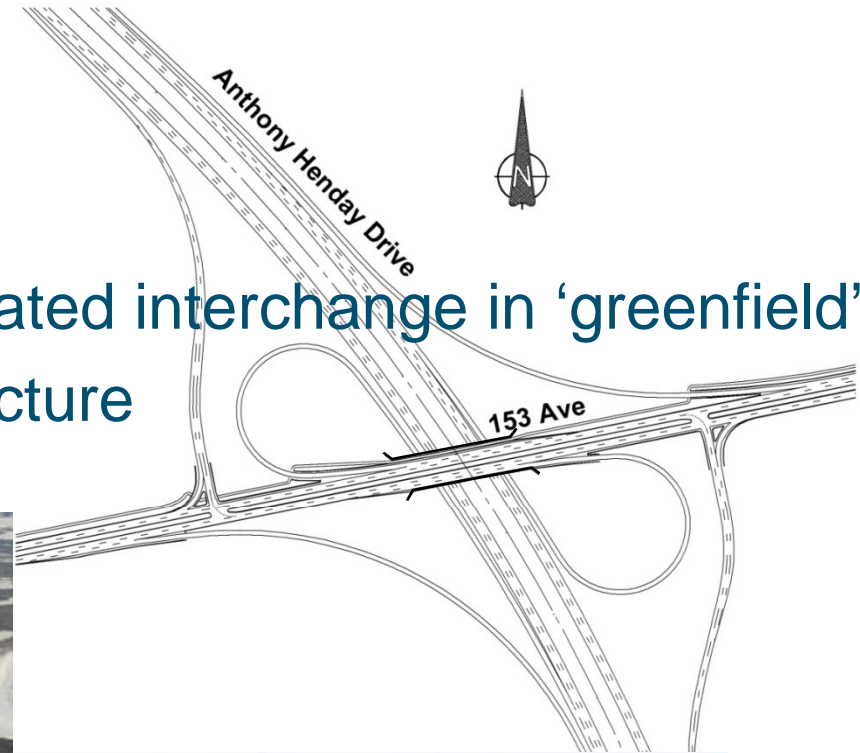
# North Saskatchewan River Crossing

- New four-span twin bridge structures across the North Saskatchewan River



# 153 Avenue

- New grade-separated interchange in 'greenfield'
- 1 new bridge structure

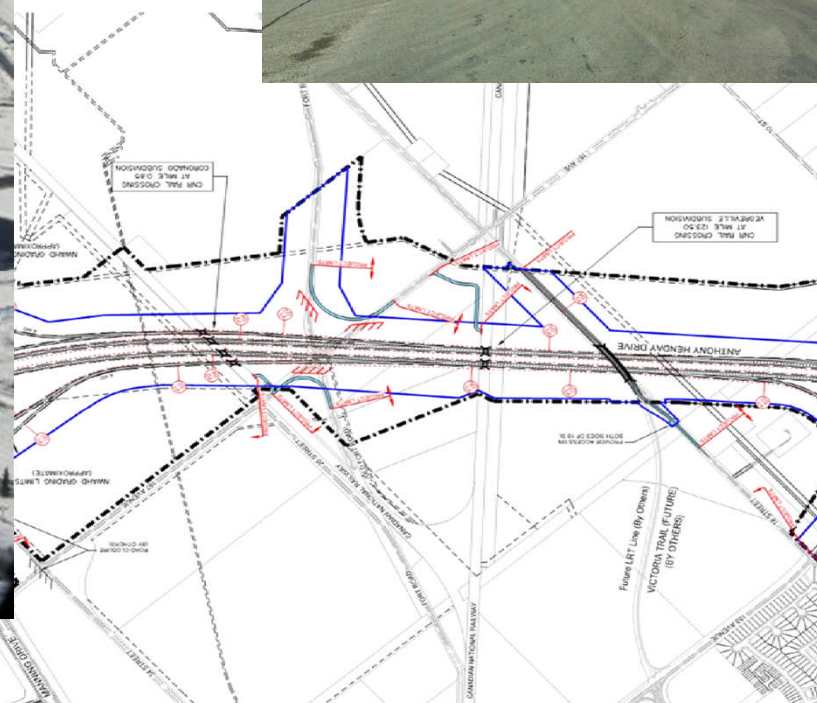
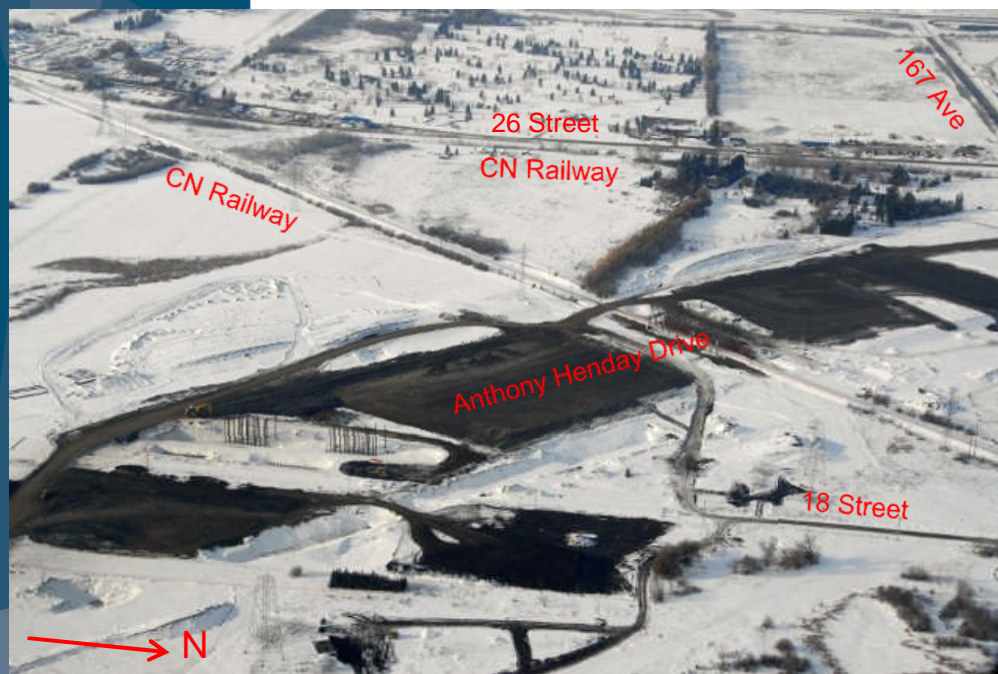




# Victoria Trail/CN Crossings

- New Victoria Trail underpass
- Flyovers at Coronado and Vegreville CN crossings

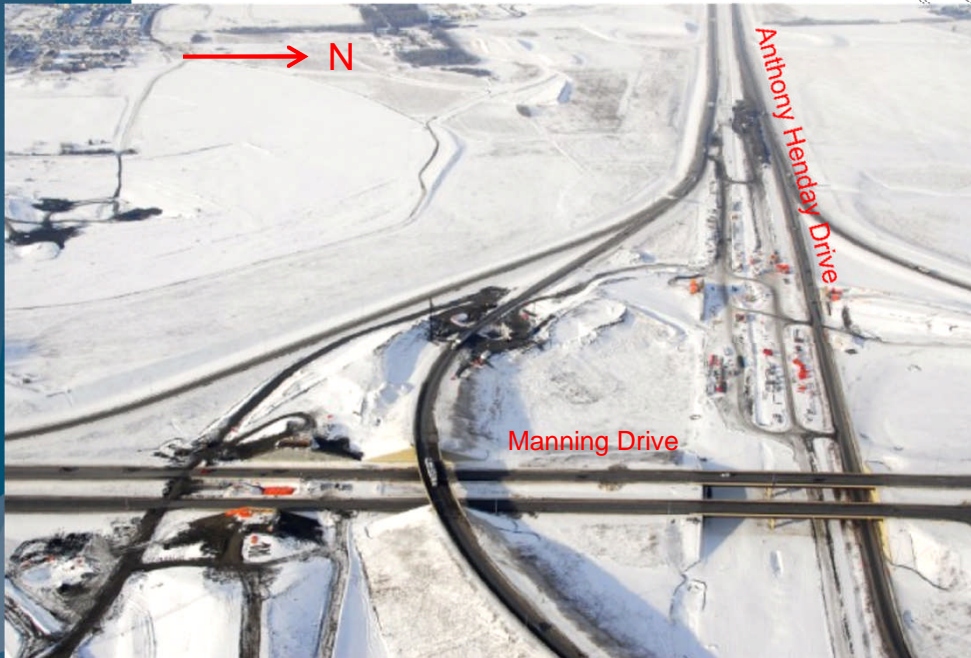
Anthony Henday Drive





# Manning Drive

- 3 new bridge structures
- Paving of already graded east leg to be completed as part of NEAHD.



# Project information

# Project Costs

- Net present value  
\$1.81B
- Largest provincial road  
contract ever

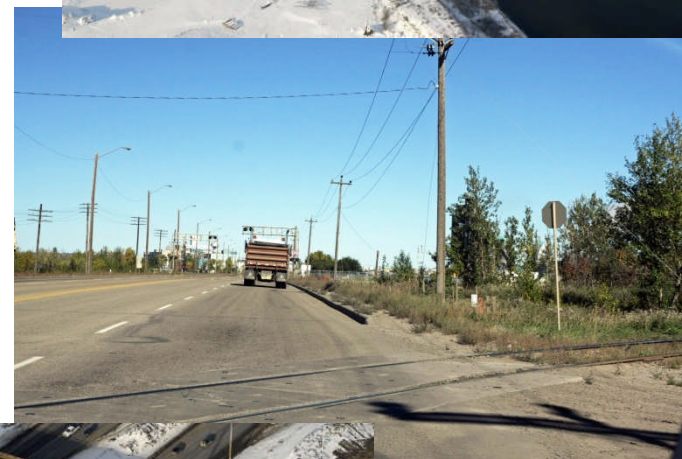


- Previous Alberta Projects
  - Northwest Ring Road  
\$1,420M net present value
  - Southeast Ring Road  
\$497M net present value
  - Northeast Stony Trail  
\$651M net present value



# Challenges

- Construction on existing roads
- 9 rail crossings
- North Saskatchewan River crossing
- 500+ identified potential utility conflicts including major pipelines



# Detour Standards

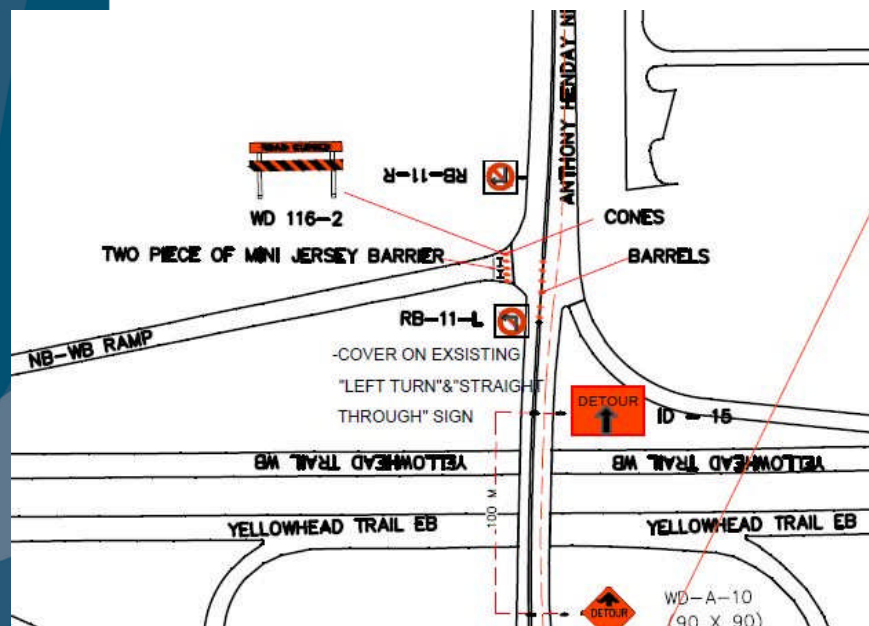
- Yellowhead Trail, Anthony Henday Drive - 2 lanes each direction at all times
- Baseline Road, Sherwood Park Freeway, Broadmoor Boulevard, Sherwood Drive, Whitemud Drive – 2 lanes each direction at all times
- All other roadways – 1 lane each direction at all times





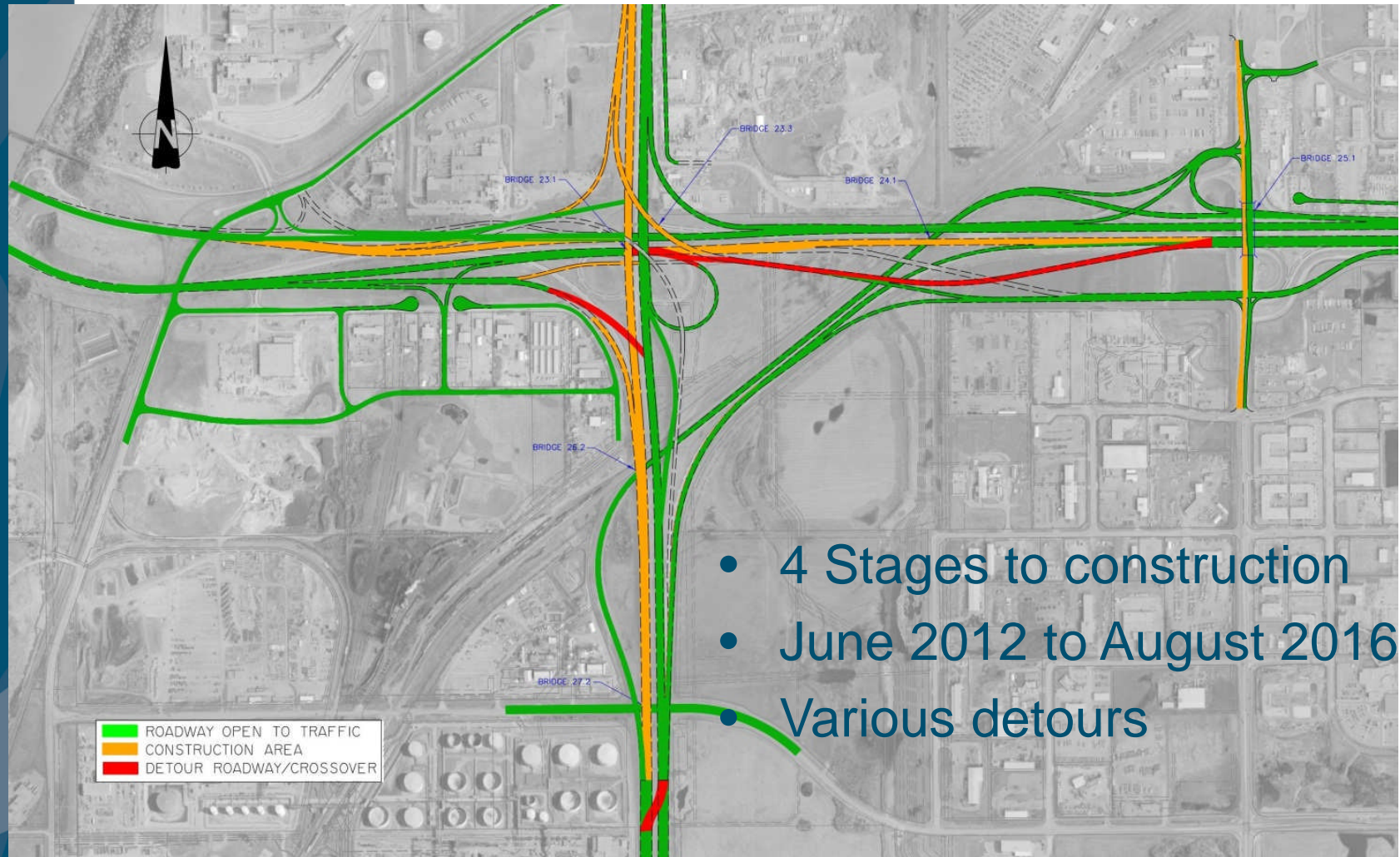
# Technical Requirements

- Maintain existing traffic movements throughout construction at all loops and ramps, at-grade intersections



- Maintain access to properties affected by construction
- Submit traffic accommodation plans for approval

# Yellowhead Trail/Anthony Henday Drive





# The Contract

- Design, Build, Finance, Operate
- Innovative solutions
- Integrate design, construction and maintenance
- More rapid implementation
- Fixed price
- Fixed completion date
- 30 year warranty





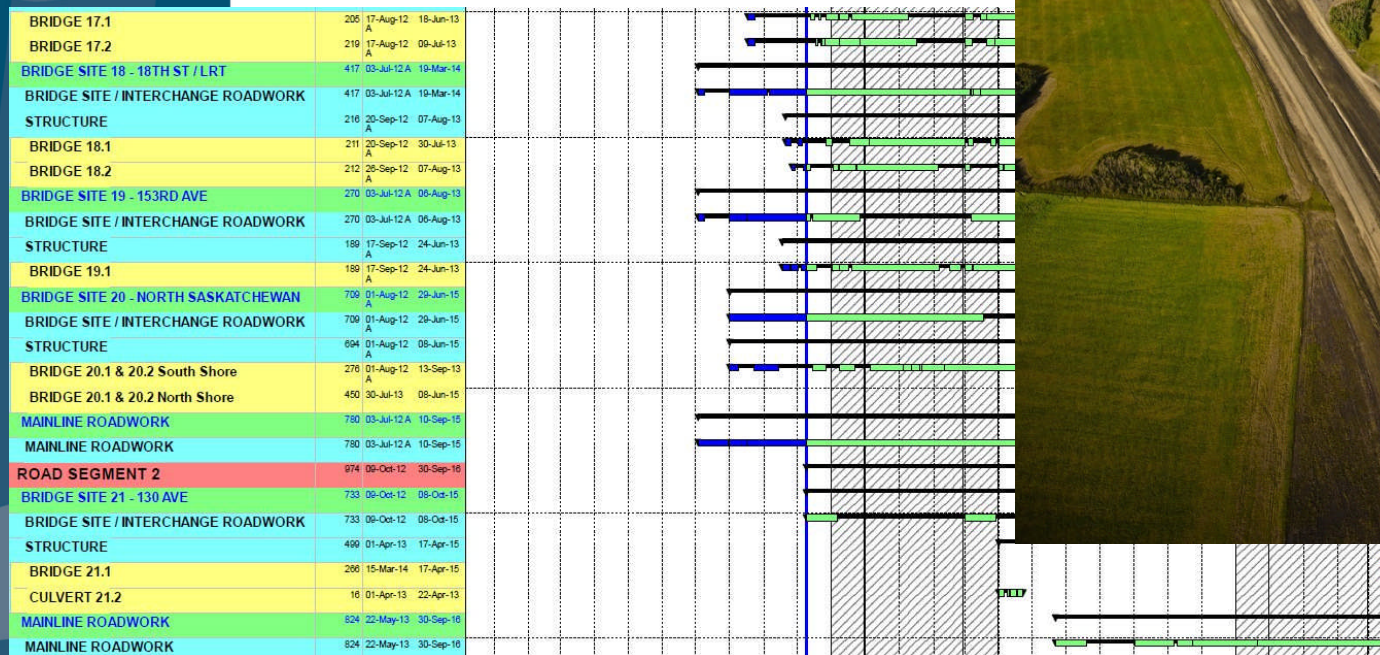
# The Team

- Client
  - Owner - Alberta Transportation
  - Owner's Engineer - ISL Engineering
- Concessionaire
  - Capital City Link Group Partnership (CCLGP)
- Design/Build Contractor Team
  - Flatiron Dragados Aecon Lafarge (FDAL)
  - AECOM, Stantec and MMM
- Operations/Maintenance
  - Volker Stevin



# The Program

- Contract Award  
May 2012
- Traffic Availability  
October 2016





# Drive-through

Government  
of Alberta  
Transportation



ISL Engineering  
and Land Services



# Any Questions?

