

**Title: Hwy 2A & Dunbow Rd. Intersection–Improvement & Signalization**

 Memorandum (or Approval) Date: February 9<sup>th</sup>, 2015

 Design Exception Request Date: January 23<sup>rd</sup>, 2015

Region: Southern

Approval Status: Approved

| Project Location |                 |       |         |       |               |
|------------------|-----------------|-------|---------|-------|---------------|
| Highway          | Control Section | At km | From km | To km | Existing AADT |
| 2A               | 08              |       | 0+000   | 5.229 | 22560         |

| Project Type (Mark all that apply with an X) |                     |  |                   |
|--|---------------------|--|-------------------|
| Functional Planning:                         | New Construction:   | Reconstruction:                                  | Paving/Surfacing: |
| Bridge:                                      | Operations:         | Geotechnical:                                    | Environmental:    |
| Shoulder Widening:                           | Preliminary Design: | Geometry Improvement and Signalization: <b>X</b> |                   |

| Summary   |
|---|
| <p>The existing skew angle of 70 degrees does not provide sufficient tangent section to ensure that the through movement along Dunbow Road (eastbound – westbound movement) is aligned. The re-aligned skew angle will be at 67 degrees.</p> <p>In addition to the re-alignment of Dunbow Road, the intersection is proposed to be signalized with adequate illumination. The posted speed approaching the intersection from the North/South will be 80 km/h and the posted speed approaching the intersection from the East/West will be 50km/h.</p> |

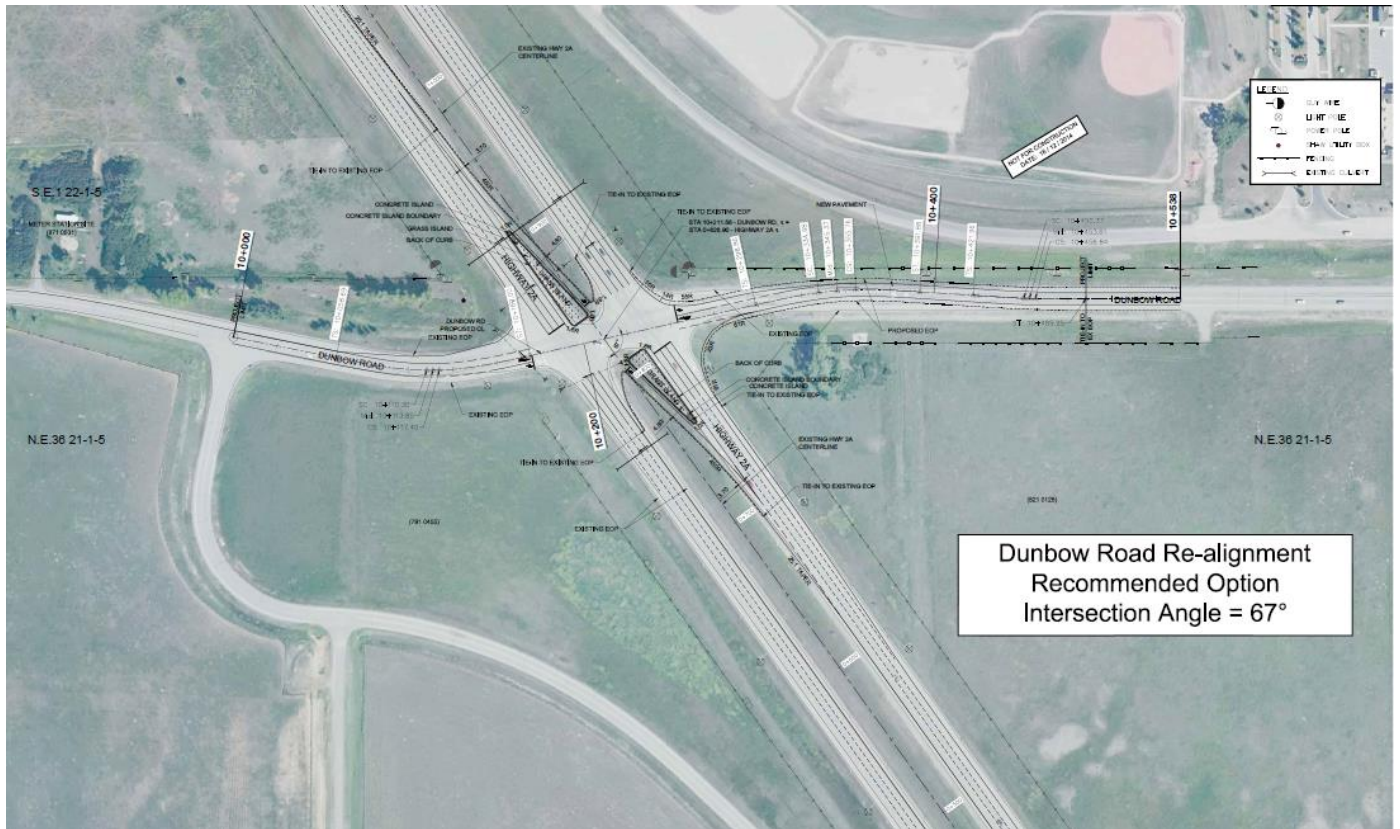
| Rationale for Approval/Rejection  |
|---|
| <ul style="list-style-type: none"> <li>• The skew angle will be 67 degrees which provides an aligned East/West movement</li> <li>• Provides the most cost effective option among the several reviewed</li> <li>• This option provides less throwaway of the existing pavement and also accommodates future growth</li> <li>• A reduced skew angle will negatively impact the sightlines for a vehicle approaching the intersection on Dunbow Road. The risk is mitigated by the signalization of the intersection</li> <li>• A relatively flat vertical alignment exists along Highway 2A and Dunbow Road with the intersection on a tangent section on Highway 2A</li> <li>• Adequate illumination approaching the intersection and proper signage will be provided</li> </ul> |

| Additional Mitigation Required |
|--------------------------------|
| None.                          |

| Key Words |
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|           |

Alignment, align, signal, skew angle, intersection

Photograph/Diagram



Dunbow Road Re-alignment with Intersection Angle at 67 degrees