



# NORTHEAST RIVER CROSSING FUNCTIONAL PLANNING STUDY

## Phase 2 Feasible Options

### Study Goals

The Northeast River Crossing Functional Planning Study has developed several options for the location of the potential future river crossing and connecting roads to link Highways 15 (Manning Drive) and 21. The final recommendation will identify the approximate bridge and road locations, and the right-of-way requirements, so they can be protected until construction occurs. The study will also identify the need to update land development plans in the study area. Future development in the study area will be influenced by the study recommendations.

### Construction Timeline

This study is early - stage planning. It is being conducted now to identify and protect the right-of-way for the Northeast River Crossing. Construction of the bridge and connecting roads is not expected to be for another 25 to 35 years.

### Phase 2 Feasible Options

Several feasible options have been developed, with public input from Phase 1 as well as a number of other factors such as safety, environment, future land uses and technical design standards being considered. These options are a **snapshot** of where we are in the process and are subject to change. Other options may be developed as the project moves forward. ‘Mix and match’ opportunities between the south and north sides of the North Saskatchewan River have been developed. There are two feasible options (S1 and S2) south of the river and three (N1 – N3) north of the river. Maps of these alignments follow: Options S1 with N1 – N3 and S2 with N1 – N3.

Two charts follow: the first provides facts about each option and the second provides a description of each option.

No.	NERC Feasible Option Facts	Feasible Options					
		S1-N1	S1-N2	S1-N3	S2-N1	S2-N2	S2-N3
1	Overall Length of Highway (km)	14.4	14	14.8	13.2	13	13.5
2	Length of New Highway (km)	8.8	9.5	9	11	12	11.4
3	Length of Crossing River Valley (km)	1.9	1.9	1.9	2.7	2.7	2.7
4	Length of Highway Crossing Flood Fringe (km)	1.6	1.6	1.6	0.7	0.7	1
5	Approximate No. of Developer-Owned Parcels Impacted	11	9	8	11	9	8
6	Approximate No. of Privately-Owned Parcels Impacted	40-45	25-30	35-40	40-45	25-30	35-40
7	No. of ASP Designated Agriculture Parcels Impacted (Edmonton)	1	2	1	1	2	0
8	No. of Interchanges and Underpasses	5			5		

Option Pair	NERC Preliminary Feasible Option Descriptions	
S1	<ul style="list-style-type: none"> <li>• Good interchange spacing</li> <li>• Good access to Fort Saskatchewan</li> <li>• Network connection with Township Road 542</li> <li>• Compatible with Strathcona County's land use plans.</li> </ul>	<ul style="list-style-type: none"> <li>• Crosses Class 'A' fish habitat twice</li> <li>• Impacts oxbow/mining area and proposed future site reclamation</li> <li>• Splits agricultural operations</li> </ul>
N1	<ul style="list-style-type: none"> <li>• Good interchange spacing</li> <li>• Alignment is similar to route proposed in Edmonton land use plans</li> </ul>	<ul style="list-style-type: none"> <li>• Minimizes impacts to environmentally sensitive areas</li> <li>• Minimizes potential to impact historical resources</li> <li>• Remnant (isolated) land parcels near DND parcel</li> <li>• Impacts future designated country residential</li> </ul>
N2	<ul style="list-style-type: none"> <li>• Alignment with most horizontal curvature</li> <li>• Close interchange spacing near Hwy 28A</li> <li>• Amendments to Horse Hill Area Structure Plan are required</li> </ul>	<ul style="list-style-type: none"> <li>• More impacts to environmentally sensitive areas than N1 or N3</li> <li>• Marginally greater potential to impact historical resources than N1 or N3</li> <li>• Remnant (isolated) parcels near CN rail</li> <li>• Impacts the most current owner-operated land and designated long-term agricultural lands</li> <li>• Minimizes impact to future designated long-term country residential</li> </ul>
N3	<ul style="list-style-type: none"> <li>• Good interchange spacing</li> <li>• Skewed crossing of CN rail</li> <li>• Amendments to Horse Hill Area Structure Plan are required</li> <li>• Potential utility crossing challenges</li> </ul>	<ul style="list-style-type: none"> <li>• Minimizes impact to environmentally sensitive areas</li> <li>• Minimizes potential to impact historical resources</li> <li>• Impacts future designated country residential</li> </ul>
S2	<ul style="list-style-type: none"> <li>• Good connection between Highways 28A &amp; 16.</li> <li>• Close interchange spacing near Highway 21</li> <li>• Network connection with Township Road 540</li> <li>• Modifies Strathcona County's area concept plan</li> </ul>	<ul style="list-style-type: none"> <li>• Avoids Class 'A' fish habitat</li> <li>• Shortest distance through flood prone area</li> <li>• Impacts a known historical site</li> <li>• Avoids oxbow area / crown-claimed wetland</li> <li>• Crosses Pointe-aux-Pins Creek three times</li> <li>• Increased footprint in river valley environmentally sensitive areas (ESA)</li> <li>• Impacts proposed restoration area (Ribbon of Green)</li> </ul>
N1	<ul style="list-style-type: none"> <li>• Amendments to Edmonton land use plans are required.</li> </ul>	<ul style="list-style-type: none"> <li>• Remnant (isolated) parcels near Department of National Defence (DND) parcel</li> <li>• Minimizes impact to designated long-term agricultural lands</li> <li>• Minimizes fragmentation of owner-operated fields</li> <li>• Impacts future designated country residential</li> </ul>
N2	<ul style="list-style-type: none"> <li>• Skewed crossing of CN rail</li> <li>• Close interchange spacing near Hwy 28A</li> <li>• Amendments to Edmonton land use plans are required.</li> </ul>	<ul style="list-style-type: none"> <li>• Crosses unnamed river valley ravine</li> <li>• Remnant (isolated) parcels near CN rail</li> <li>• Impacts substantial number of owner-operated lands/designated long-term agricultural lands</li> </ul>
N3	<ul style="list-style-type: none"> <li>• Skewed river bridge crossing</li> <li>• Amendments to Edmonton land use plans are required.</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts natural area</li> <li>• Avoids designated long-term agricultural lands</li> <li>• Avoids fragmenting owner-operated fields</li> <li>• Impacts future designated country residential</li> </ul>

## Feasible Option Evaluation

Criteria for the evaluation of the options have been defined by the project team and take into consideration the Phase 1 public feedback. The criteria are:

**Community** - The community category considers the impacts on future agricultural lands as determined in land use plans, the potential development of remnant parcels, and future connections to land uses as designated by the land use plans.

**Driver Experience** - The driver experience category considers how easy it is for a driver to find their way along the road, intersections and bridge.

**Economic** - The economic category considers how the options will improve connections to the region and link employment areas with residential areas.

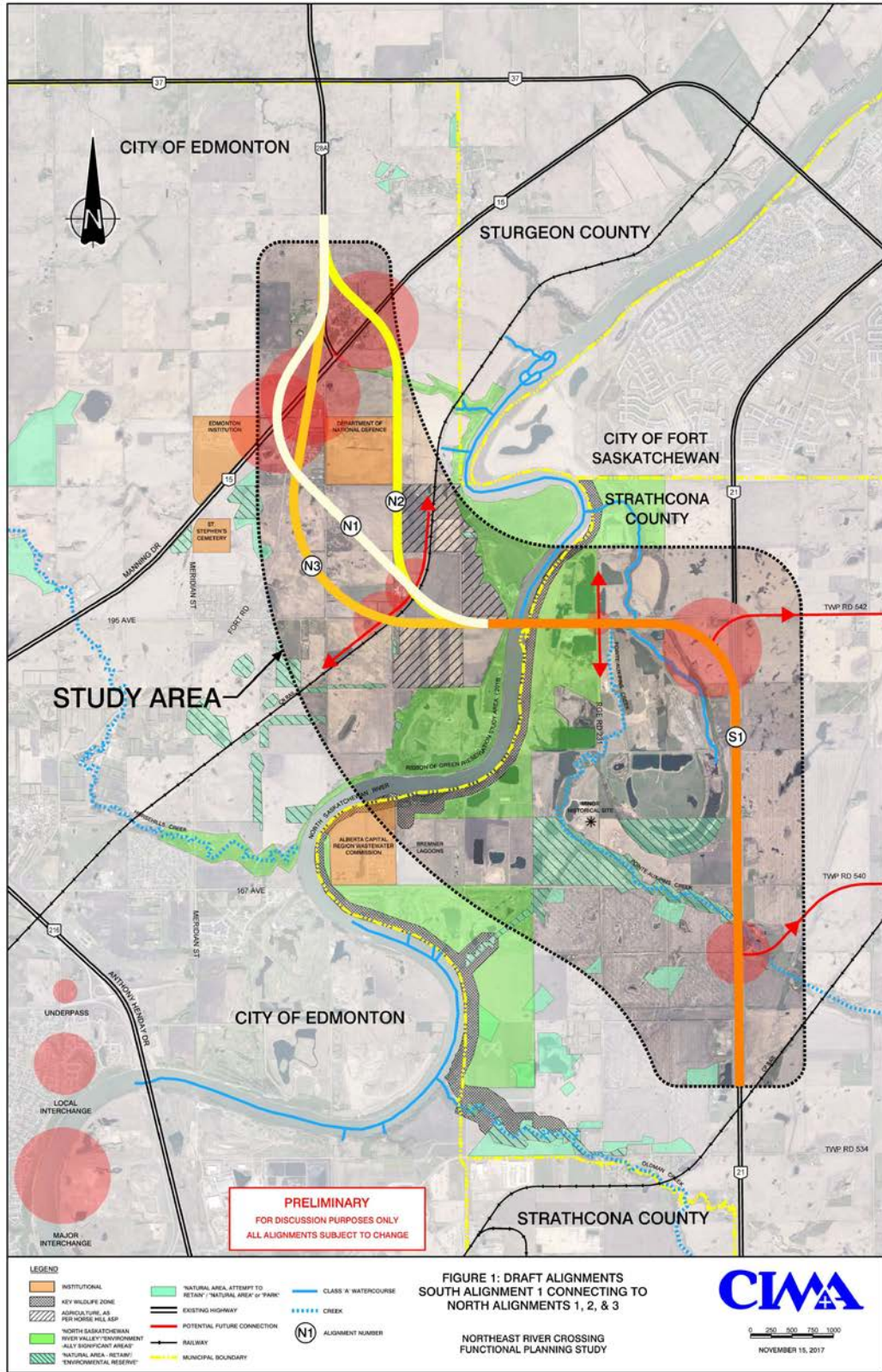
**Environment** - The environment category considers the impacts to environmentally sensitive areas including wildlife habitat, river system, natural areas and historic resources, and whether these impacts can be mitigated to meet the requirements of regulatory agencies.

**Financial** - The financial category considers the costs to construct the project.

**For more information** and to complete the survey on the evaluation criteria and the alignment options, visit your municipal website. Your input will be taken into consideration in developing the recommended plan.

[www.edmonton.ca/northeastrivercrossing](http://www.edmonton.ca/northeastrivercrossing)  
[www.strathcona.ca/rivercrossing](http://www.strathcona.ca/rivercrossing)  
[www.fortsask.ca/northeast-river-crossing](http://www.fortsask.ca/northeast-river-crossing)  
[www.strurgeoncounty.ca/nerc](http://www.strurgeoncounty.ca/nerc)  
[www.transportation.alberta.ca/6046.htm](http://www.transportation.alberta.ca/6046.htm)

# Feasible Option S1/N1 – N3



# Feasible Option S2/N1 – N3

