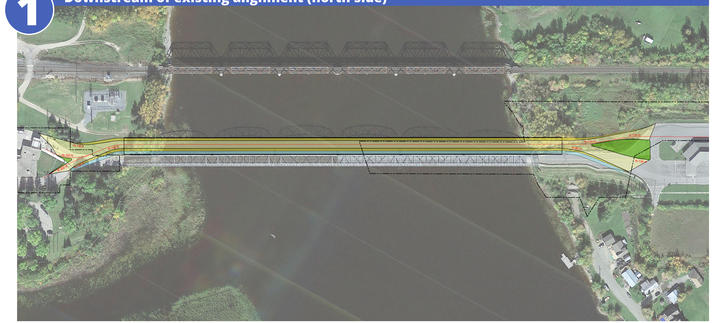
Evaluation of Alternatives

SCALE
1:1000
150 ft
50 m

- New Asphalt Lanes
- New Asphalt Shoulder
- New Concrete Sidewalk
- New Grass Boulevard
- Detour Lanes
- Detour Sidewalk

Criteria impact
- Positive
- Neutral
- Negative

1 Downstream of existing alignment (north side)



Transportation Engineering

Geometrics and Safety
- New profile meets design standards
- New horizontal alignment meets design standards
- Trucks approaching the U.S. Port of Entry can use right lane only
- Relocation of detection equipment is required to accom- modate trucks in left lane on the U.S side of the border

Constructability
- Construction area between the existing bridge and the CN rail bridge is constrained

Cost
- Cost is consistent with other similar bridge replacement projects with minimal throw-away costs

Pedestrians / Cyclists
- No impacts to criteria

Social and Cultural Environment

Property / Right-of-way
- Requires purchase of private / municipal property on U.S. side

Archaeology and Cultural Heritage
- Does not impact unidentified gravesites / cultural heritage features on U.S. side and areas with high archaeological potential
- Does not impact any registered archaeological sites

Impacts to Park Land / 4(f)
- Does not impact Baudette City Park on U.S. side

Aesthetics / Visual Impacts
- No visual or aesthetic impact due to alignment

Environmental Justice / Business Impacts / Access Impacts
- No impacts to criteria

Natural Environment

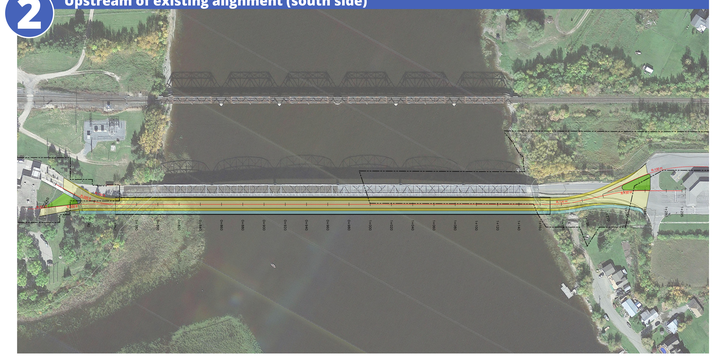
Fish and Aquatic Habitats
- Potential impacts to threatened and endangered / Species-at-Risk and their habitat
- Potential impacts to fisheries resources, including fish spawning areas
- May impact contaminated soils from former electric power plant on U.S. side

Wildlife & Terrestrial Habitats / Vegetation
- Requires natural vegetation removal

Noise / Vibration
- Minimal potential for noise impacts

Wetlands / Floodplains / Protected Waters
- Minimizes impacts to identified wetlands on the U.S. side

2 Upstream of existing alignment (south side)



Transportation Engineering

Geometrics and Safety
- New profile meets design standards
- New horizontal alignment meets design standards
- Provides desirable geometric alignment connections to existing U.S. and Canadian Ports of Entry facilities
- U.S. Port of Entry detection equipment can remain in place
- Improved Truck entry at U.S. Port of Entry

Constructability
- No significant or unique constructability concerns

Cost
- Cost is consistent with other similar bridge replacement projects with minimal throw-away costs

Pedestrians / Cyclists
- No impacts to criteria

Social and Cultural Environment

Property / Right-of-way
- Requires purchase of property on U.S. side
- Requires purchase of property on Canadian side

Archaeology and Cultural Heritage
- Potentially impacts unidentified gravesites/cultural heritage features on U.S. side and areas with high archaeological potential
- Does not impact any registered archaeological sites

Impacts to Park Land / 4(f)
- Impacts Baudette City Park on U.S. side

Aesthetics / Visual Impacts
- Potential visual and aesthetic impact due to closer proximity of bridge for residents

Environmental Justice / Business Impacts / Access Impacts
- No impacts to criteria

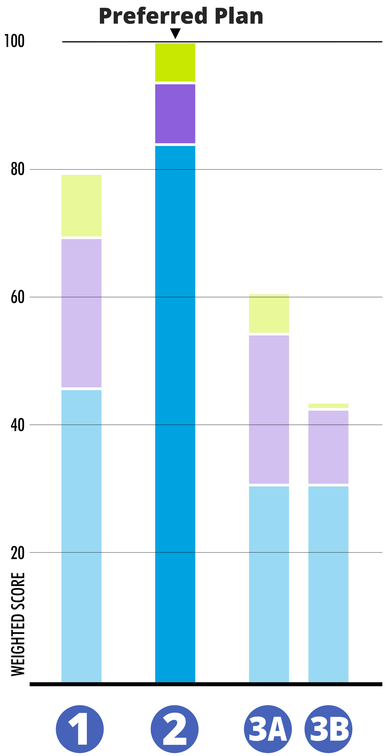
Natural Environment

Fish and Aquatic Habitats
- Potential impacts to threatened and endangered species/Species-at-Risk and their habitat
- Potential impacts to fisheries resources, including fish spawning areas

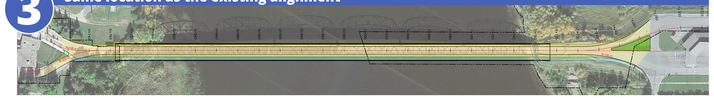
Wildlife & Terrestrial Habitats / Vegetation
- Requires natural vegetation removal

Noise / Vibration
- Minimal potential for noise impacts

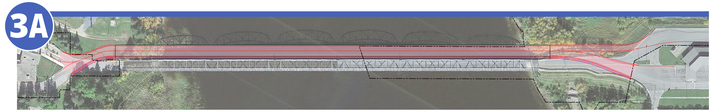
Wetlands / Floodplains / Protected Waters
- Impacts identified wetlands on the U.S. side



3 Same location as the existing alignment



3A



Transportation Engineering

Geometrics and Safety
- New profile meets design standards
- Maintains existing horizontal alignment and minimizes permanent impacts to U.S. and Canadian Ports of Entry facilities
- U.S. Port of Entry detection equipment can remain in place
- Truck entry at U.S. Port of Entry will be maintained
- Temporary traffic delays and safety concerns due to narrow temporary bridge

Constructability
- Construction area between the existing bridge and the CN rail bridge is constrained
  Increased duration of construction

Cost
- Cost of temporary bridge is high, resulting in significant throw away costs

Pedestrians / Cyclists
- No impacts to criteria

Social and Cultural Environment

Property / Right-of-way
- Temporary property requirements on U.S. side

Archaeology and Cultural Heritage
- Does not impact unidentified gravesites / cultural heritage features on U.S. side and areas with high archaeological potential
- Does not impact any registered archaeological sites

Impacts to Park Land / 4(f)
- Does not impact Baudette City Park on U.S. side

Aesthetics / Visual Impacts
- No visual or aesthetic impact due to alignment

Environmental Justice / Business Impacts / Access Impacts
- No impacts to criteria

Natural Environment

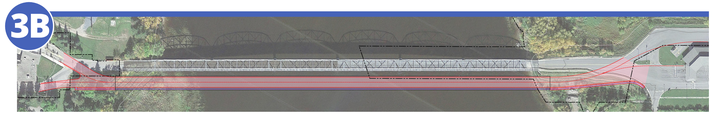
Fish and Aquatic Habitats
- Potential impacts to threatened and endangered species/Species-at-Risk and their habitat
- Greater impacts to fisheries resources, including fish spawning and nursery areas (additional piers in water)
- May impact contaminated soils from former electric power plant on U.S. side

Wildlife & Terrestrial Habitats / Vegetation
- Requires natural vegetation removal

Noise / Vibration
- Minimal potential for noise impacts

Wetlands / Floodplains / Protected Waters
- Minimizes impacts to identified wetlands on the U.S. side

3B



Transportation Engineering

Geometrics and Safety
- New profile meets design standards
- Maintains existing horizontal alignment and minimizes permanent impacts to U.S. and Canadian Ports of Entry facilities
- U.S. Port of Entry detection equipment can remain in place
- Truck entry at U.S. Port of Entry will be maintained
- Temporary traffic delays and safety concerns due to narrow temporary bridge

Constructability
- Increased duration of construction

Cost
- Cost of temporary bridge is high, resulting in significant throw away costs

Pedestrians / Cyclists
- No impacts to criteria

Social and Cultural Environment

Property / Right-of-way
- Temporary property requirements on U.S. side
- Temporary property requirements on Canadian side

Archaeology and Cultural Heritage
- Potentially impacts unidentified gravesites/cultural heritage features on U.S. side and areas with high archaeological potential
- Does not impact any registered archaeological sites

Impacts to Park Land / 4(f)
- Impacts Baudette City Park on U.S. side

Aesthetics / Visual Impacts
- No visual or aesthetic impact due to alignment

Environmental Justice / Business Impacts / Access Impacts
- No impacts to criteria

Natural Environment

Fish and Aquatic Habitats
- Potential impacts to threatened and endangered species/Species-at-Risk and their habitat
- Greater impacts to fisheries resources, including fish spawning and nursery areas (additional piers in water)

Wildlife & Terrestrial Habitats / Vegetation
- Requires natural vegetation removal

Noise / Vibration
- Minimal potential for noise impacts

Wetlands / Floodplains / Protected Waters
- Potential impacts to identified wetlands on the U.S. side