

# Webequie Supply Road Project

Webequie First Nation

February 10, 2025

AtkinsRéalis Ref: 661910

# APPENDIX C-2: FACTORS, DISCIPLINES, CRITERIA, AND INDICATORS

AtkinsRéalis



**WSR**  
WEBEQUIE  
SUPPLY ROAD



Factor	Discipline	Criteria (VC)	Indicator	Score
Living Environment	Vegetation	Upland Ecosystem	Area of impacted upland ecosystem.	5
Living Environment	Vegetation	Upland Ecosystem	Edge Habitat – Total length (km) of edges removed/displaced.	11
Living Environment	Vegetation	Upland Ecosystem	Area of impacted Low Structural/Vegetative Complexity (Biodiversity)	4
Living Environment	Vegetation	Upland Ecosystem	Area of impacted Moderate Structural/Vegetative Complexity (Biodiversity)	8
Living Environment	Vegetation	Upland Ecosystem	Area of impacted High Structural/Vegetative Complexity (Biodiversity).	30
Living Environment	Vegetation	Upland Ecosystem	Area of Low Habitat Usage impacted.	4
Living Environment	Vegetation	Upland Ecosystem	Area of Moderate Habitat Usage impacted.	8
Living Environment	Vegetation	Upland Ecosystem	Area of High Habitat Usage impacted.	30
Living Environment	Vegetation	Riparian Ecosystem	Area of impacted riparian ecosystem.	5
Living Environment	Vegetation	Riparian Ecosystem	Area of impacted Low Structural/Vegetative Complexity (Biodiversity).	5
Living Environment	Vegetation	Riparian Ecosystem	Area of impacted Moderate Structural/Vegetative Complexity (Biodiversity).	10
Living Environment	Vegetation	Riparian Ecosystem	Area of impacted High Structural/Vegetative Complexity (Biodiversity).	30
Living Environment	Vegetation	Riparian Ecosystem	Area of Low Habitat Usage impacted.	5
Living Environment	Vegetation	Riparian Ecosystem	Area of Moderate Habitat Usage impacted.	15
Living Environment	Vegetation	Riparian Ecosystem	Area of High Habitat Usage impacted.	30
Living Environment	Vegetation	Wetland Ecosystem	Area of impacted wetland ecosystem.	5
Living Environment	Vegetation	Wetland Ecosystem	Edge Habitat – Total length (km) of edges removed	15
Living Environment	Vegetation	Wetland Ecosystem	Area of impacted Low Structural/Vegetative Complexity (Biodiversity).	3
Living Environment	Vegetation	Wetland Ecosystem	Area of impacted Moderate Structural/Vegetative Complexity (Biodiversity).	5
Living Environment	Vegetation	Wetland Ecosystem	Area of impacted High Structural/Vegetative Complexity (Biodiversity).	10
Living Environment	Vegetation	Wetland Ecosystem	Area of Low Habitat Usage impacted.	3
Living Environment	Vegetation	Wetland Ecosystem	Area of Moderate Habitat Usage impacted.	5
Living Environment	Vegetation	Wetland Ecosystem	Area of High Habitat Usage impacted.	23
Living Environment	Vegetation	Wetland Ecosystem	Area of Low Wetland Function impacted.	3
Living Environment	Vegetation	Wetland Ecosystem	Area of Moderate Wetland Function impacted.	5
Living Environment	Vegetation	Wetland Ecosystem	Area of High Wetland Function impacted.	23
Living Environment	Vegetation	Fire Potential	Area of Low Fire Potential within 500 m.	8
Living Environment	Vegetation	Fire Potential	Area of Moderate Fire Potential within 500 m.	17
Living Environment	Vegetation	Fire Potential	Area of High Fire Potential within 500 m.	30
Living Environment	Vegetation	Fire Potential	Area of Extreme Fire Potential within 500 m.	45
Living Environment	Vegetation	Designated Areas (ANSI, ESA, PSW, Rare Communities, etc.)	Area of Designated Areas removed /displaced	100

Factor	Discipline	Criteria (VC)	Indicator	Score
Living Environment	Vegetation	Plants of significance or importance; and designated Species at Risk plant populations (including species with special conservation status, rarity, or cultural significance)	Area of significant, important, and/or designated plants impacted.	33.0
Living Environment	Vegetation	Plants of significance or importance; and designated Species at Risk plant populations (including species with special conservation status, rarity, or cultural significance)	Area of sites identified by Indigenous peoples as culturally significant or of value.	33.0
Living Environment	Vegetation	Plants of significance or importance; and designated Species at Risk plant populations (including species with special conservation status, rarity, or cultural significance)	Area of impacted rare plant species.	34.0
Living Environment	Fish and Fish Habitat	Fish and Fish Habitat (SAR Fish – Lake Sturgeon)	Area of impacted rare habitat	100
Living Environment	Fish and Fish Habitat	Fish and Fish Habitat (Non-SAR Fish)	Area of waterbodies impacted	10
Living Environment	Fish and Fish Habitat	Fish and Fish Habitat (Non-SAR Fish)	Area of Low Sensitivity Habitat impacted.	10
Living Environment	Fish and Fish Habitat	Fish and Fish Habitat (Non-SAR Fish)	Area of Moderate Sensitivity Habitat impacted.	30
Living Environment	Fish and Fish Habitat	Fish and Fish Habitat (Non-SAR Fish)	Area of High Sensitivity Habitat impacted.	50
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Range Level (+ 500 m buffer) impacted.	5
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 1 Habitat: High Use Area (nursery) at the Sub-range Level impacted.	21
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 1 Habitat: High Use Area (nursery) at the Sub-range Level (within 10 km) impacted.	5
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 1 Habitat: High Use Area (winter use) at the Sub-range Level impacted.	21
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 1 Habitat: High Use Area (winter use) at the Sub-range Level (within 10 km) impacted.	5
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 1 Habitat: High Use Area (travel corridor) at the Sub-range Level impacted.	21
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 1 Habitat: High Use Area (travel corridor) at the Sub-range Level (within 10 km) impacted.	5
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 2 Habitat (seasonal range) impacted.	10
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 2 Habitat (seasonal range, within 10 km) impacted.	5
Living Environment	Wildlife	Caribou (Boreal population and Eastern Migratory population), Species at Risk	Area of Category 3 Habitat impacted.	2
Living Environment	Wildlife	Wolverine, Species at Risk	Area of den habitat sites within 2 km impacted. (den + 2km buffer around den & the area of this buffer that intersects the ROW)	45
Living Environment	Wildlife	Wolverine, Species at Risk	Area of habitat impacted.	45
Living Environment	Wildlife	Wolverine, Species at Risk	Area of ROW within impact zone buffer (10 km) around known wolverine occurrences	10

Factor	Discipline	Criteria (VC)	Indicator	Score
Living Environment	Wildlife	Bats (including SAR Bats)	Area of impacted candidate maternity habitat (forested).	40
Living Environment	Wildlife	Bats (including SAR Bats)	Area of impacted high-quality candidate habitat.	40
Living Environment	Wildlife	Bats (including SAR Bats)	Number of candidate bat hibernacula habitat (e.g., caves) within 2 km impacted.	15
Living Environment	Wildlife	Bats (including SAR Bats)	Number of candidate bat hibernacula habitat (e.g., caves) within 5 km impacted.	5
Living Environment	Wildlife	Forest Birds (including SAR birds)	Area of candidate nesting habitat impacted.	60
Living Environment	Wildlife	Forest Birds (including SAR birds)	Number of SAR recorded occurrences within 2 km	30
Living Environment	Wildlife	Forest Birds (including SAR birds)	Number of SAR recorded occurrences within 5 km impacted.	10
Living Environment	Wildlife	Raptors (including SAR birds)	Area of candidate nesting habitat impacted.	37
Living Environment	Wildlife	Raptors (including SAR birds)	Area of raptor nests recorded occurrences impacted	10
Living Environment	Wildlife	Raptors (including SAR birds)	Area of Raptor Nesting SWH impacted.	37
Living Environment	Wildlife	Raptors (including SAR birds)	Area of Osprey and Bald Eagle nests impacted	10
Living Environment	Wildlife	Raptors (including SAR birds)	Area (ha) of Osprey and Bald Eagle Nesting SWH (within 5 km) impacted.	6
Living Environment	Wildlife	Shorebirds	Area of low-quality habitat impacted - GRYE	5
Living Environment	Wildlife	Shorebirds	Area of moderate quality habitat impacted - GRYE	15
Living Environment	Wildlife	Shorebirds	Area of high-quality habitat impacted - GRYE	35
Living Environment	Wildlife	Shorebirds	Area of Shorebird Stopover SWH impacted.	35
Living Environment	Wildlife	Shorebirds	Area of Shorebird Stopover SWH (within 5 km) impacted.	10
Living Environment	Wildlife	Waterfowl	Area of stopover and staging SWH impacted.	5
Living Environment	Wildlife	Waterfowl	Area of stopover and staging SWH (within 5 km) impacted.	2
Living Environment	Wildlife	Waterfowl	Area of Waterfowl Nesting SWH impacted.	26
Living Environment	Wildlife	Waterfowl	Area of Waterfowl Nesting SWH (within 5 km) impacted.	2
Living Environment	Wildlife	Waterfowl	Area of low-quality habitat impacted - Canada Goose	2
Living Environment	Wildlife	Waterfowl	Area of moderate quality habitat impacted - Canada Goose	5
Living Environment	Wildlife	Waterfowl	Area of high-quality habitat impacted - Canada Goose	26
Living Environment	Wildlife	Waterfowl	Area of low-quality habitat impacted - Mallard	2
Living Environment	Wildlife	Waterfowl	Area of moderate quality habitat impacted - Mallard	5
Living Environment	Wildlife	Waterfowl	Area of high-quality habitat impacted - Mallard	25
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of bog/fen habitat impacted.	10
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of low-quality habitat impacted - Olive Sided Fly Catcher	3
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of moderate quality habitat impacted - Olive Sided Fly Catcher	10
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of high-quality habitat impacted - Olive Sided Fly Catcher	25
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of low-quality habitat impacted - CONI	3

Factor	Discipline	Criteria (VC)	Indicator	Score
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of moderate quality habitat impacted - CONI	10
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of high-quality habitat impacted - CONI	26
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of Sharp-tailed Grouse Leks SWH within 2 km impacted.	10
Living Environment	Wildlife	Bog/Fen Birds and Other Wetland Birds (including SAR-birds)	Area of Sharp-tailed Grouse Leks SWH within 5 km impacted.	3
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Area of low-quality habitat impacted - Marten	5
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Area of moderate quality habitat impacted - Marten	10
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Area of high-quality habitat impacted - Marten	26
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Area of low-quality habitat impacted - Otter	5
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Area of moderate quality habitat impacted - Otter	10
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Area of high-quality habitat impacted - Otter	26
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Number of den sites within 2 km impacted.	6
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Number of den sites within 5 km impacted.	3
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Number of Wolf Rendezvous Sites within 2 km impacted	6
Living Environment	Wildlife	Furbearers - Excluding SAR (Wolverine)	Number of Wolf Rendezvous Sites within 5 km impacted	3
Living Environment	Wildlife	Moose	Area of low-quality winter area habitat impacted	8
Living Environment	Wildlife	Moose	Area of moderate quality winter area habitat impacted	15
Living Environment	Wildlife	Moose	Area of high-quality winter area habitat impacted	34
Living Environment	Wildlife	Moose	Area (ha) of high-quality winter area habitat removed/displaced within 2 km.	10
Living Environment	Wildlife	Moose	Area (ha) of moderate quality winter area habitat removed/displaced within 2 km.	8
Living Environment	Wildlife	Moose	Area (ha) of low-quality winter area habitat removed/displaced within 2 km.	2
Living Environment	Wildlife	Moose	Area (ha) of high-quality winter area habitat removed/displaced within 10 km.	10
Living Environment	Wildlife	Moose	Area (ha) of moderate quality winter area habitat removed/displaced within 10 km.	8
Living Environment	Wildlife	Moose	Area (ha) of low-quality winter area habitat removed/displaced within 10 km.	2
Living Environment	Wildlife	Moose	Area of aquatic (wetland) feeding habitat within 2 km impacted.	2
Living Environment	Wildlife	Moose	Area of aquatic (wetland) feeding habitat within 10 km impacted.	1
Living Environment	Wildlife	Amphibians (Frogs)	Area of candidate breeding habitat impacted.	100
Living Environment	Wildlife	Designated Significant Wildlife Habitat	Area of non-caribou significant wildlife habitat impacted.	100
Physical Environment	Surface Water	Surface Water	Area of lakes and ponds crossed	50
Physical Environment	Surface Water	Surface Water	Area of streams and rivers crossed	50
Physical Environment	Groundwater	Groundwater	Number of drinking water wells displaced or potentially affected within 300 m of alternative.	25
Physical Environment	Groundwater	Groundwater	Number of springs displaced or potentially affected within 300 m of alternative.	25
Physical Environment	Groundwater	Groundwater	Area (ha) of recharge areas impacted.	25

Factor	Discipline	Criteria (VC)	Indicator	Score
Physical Environment	Groundwater	Groundwater	Area (ha) of discharge areas impacted	25
Indigenous Environment	Indigenous Peoples Land Use and Interests	Indigenous Current and Historical Use of Lands and Resources for Traditional Purposes	Area of caribou habitat impacted.	16.7
Indigenous Environment	Indigenous Peoples Land Use and Interests	Indigenous Current and Historical Use of Lands and Resources for Traditional Purposes	Number of hunting/fishing cabin sites impacted	16.7
Indigenous Environment	Indigenous Peoples Land Use and Interests	Indigenous Current and Historical Use of Lands and Resources for Traditional Purposes	Number of unspecified Indigenous land use sites of value or interest impacted.	16.7
Indigenous Environment	Indigenous Peoples Land Use and Interests	Indigenous Current and Historical Use of Lands and Resources for Traditional Purposes	Area of hunting and trapping sites impacted.	16.7
Indigenous Environment	Indigenous Peoples Land Use and Interests	Indigenous Current and Historical Use of Lands and Resources for Traditional Purposes	Number of fishing sites impacted.	16.7
Indigenous Environment	Indigenous Peoples Land Use and Interests	Indigenous Current and Historical Use of Lands and Resources for Traditional Purposes	Area (ha) of plant harvesting (food and/or medicinal) or gathering sites impacted.	16.7
Indigenous Environment	Indigenous Peoples Land Use and Interests	Cultural Continuity (ability to practice and transmit cultural traditions including historical disruptions where Indigenous peoples have a desire to reinvigorate a cultural tradition)	Number of water access routes used by small boats (i.e., canoe) impacted.	12.5
Indigenous Environment	Indigenous Peoples Land Use and Interests	Cultural Continuity (ability to practice and transmit cultural traditions including historical disruptions where Indigenous peoples have a desire to reinvigorate a cultural tradition)	Number of historical travel routes impacted.	12.5
Indigenous Environment	Indigenous Peoples Land Use and Interests	Cultural Continuity (ability to practice and transmit cultural traditions including historical disruptions where Indigenous peoples have a desire to reinvigorate a cultural tradition)	Number of portage routes impacted.	12.5
Indigenous Environment	Indigenous Peoples Land Use and Interests	Cultural Continuity (ability to practice and transmit cultural traditions including historical disruptions where Indigenous peoples have a desire to reinvigorate a cultural tradition)	Number of burial sites impacted.	12.5
Indigenous Environment	Indigenous Peoples Land Use and Interests	Cultural Continuity (ability to practice and transmit cultural traditions including historical disruptions where Indigenous peoples have a desire to reinvigorate a cultural tradition)	Number of hunting blinds impacted.	12.5
Indigenous Environment	Indigenous Peoples Land Use and Interests	Cultural Continuity (ability to practice and transmit cultural traditions including historical disruptions where Indigenous peoples have a desire to reinvigorate a cultural tradition)	Number of ice fishing houses/huts impacted.	12.5
Indigenous Environment	Indigenous Peoples Land Use and Interests	Cultural Continuity (ability to practice and transmit cultural traditions including historical disruptions where Indigenous peoples have a desire to reinvigorate a cultural tradition)	Number of cultural teaching/spiritual sites impacted.	12.5
Indigenous Environment	Indigenous Peoples Land Use and Interests	Cultural Continuity (ability to practice and transmit cultural traditions including historical disruptions where Indigenous peoples have a desire to reinvigorate a cultural tradition)	Number of tent frames impacted.	12.5
Socio-Economic Environment	Land and Resource Use (non-Indigenous)	Mineral and Aggregate Resources	Number of mining claims impacted.	50.0
Socio-Economic Environment	Land and Resource Use (non-Indigenous)	Mineral and Aggregate Resources	Area of licensed pits/quarries impacted.	50.0

Factor	Discipline	Criteria (VC)	Indicator	Score
Socio-Economic Environment	Land and Resource Use (non-Indigenous)	Provincial Parks, Areas of Natural and Scientific Interest (ANSIs) or Conservation Reserves	Area of Provincial Parks, Areas of Natural and Scientific Interest (ANSIs) and/or Conservation Reserves impacted.	100
Socio-Economic Environment	Visual Aesthetics	Visual Character and Sensitivity	Number of tourism/outfitter operations within 1 km impacted.	33.3
Socio-Economic Environment	Visual Aesthetics	Visual Character and Sensitivity	Number of known land and/or water access routes impacted.	33.3
Socio-Economic Environment	Visual Aesthetics	Visual Character and Sensitivity	Number of fishing and hunting areas impacted where potential visual change or experience may occur.	33.3
Socio-Economic Environment	Archaeology	Archaeological Sites and Resources	Number of registered archaeological sites within 1 km impacted.	25
Socio-Economic Environment	Archaeology	Archaeological Sites and Resources	Area of archaeological potential impacted.	25
Socio-Economic Environment	Archaeology	Archaeological Sites and Resources	Number of known burial sites within 1 km impacted.	25
Socio-Economic Environment	Archaeology	Archaeological Sites and Resources	Number of known burial sites impacted.	25
Socio-Economic Environment	Cultural Heritage	Built Heritage Resources and Cultural Heritage Landscapes	Number of known Indigenous or non-Indigenous built heritage features/sites impacted.	33.3
Socio-Economic Environment	Cultural Heritage	Built Heritage Resources and Cultural Heritage Landscapes	Number of non-Indigenous cultural heritage landscapes of value or interest impacted.	33.3
Socio-Economic Environment	Cultural Heritage	Built Heritage Resources and Cultural Heritage Landscapes	Number of designated Provincial heritage properties affected	33.3
Technical Considerations	Technical	Constructability and Design	Area of geohazards (hazardous slopes, landslides, sinkholes/depressions) intersected.	15
Technical Considerations	Technical	Constructability and Design	Area of good terrain conditions for design and construction.	5
Technical Considerations	Technical	Constructability and Design	Area of fair terrain conditions for design and construction.	10
Technical Considerations	Technical	Constructability and Design	Area of poor terrain conditions for design and construction.	15
Technical Considerations	Technical	Constructability and Design	Area of very poor terrain conditions for design and construction.	25
Technical Considerations	Technical	Constructability and Design	Area of open water crossings required for consideration of structures (bridges, culverts).	15
Technical Considerations	Technical	Constructability and Design	Area of alluvial floodplains crossed with floating vegetation mats or groundwater near surface that may need enhanced engineering design.	15
Technical Considerations	Technical	Cost	Total length (km) of alternative route.	10
Technical Considerations	Technical	Cost	Construction capital cost (\$)	70
Technical Considerations	Technical	Cost	Operation and maintenance cost (\$)	20
Technical Considerations	Technical	Location of Supportive Infrastructure (aggregate/rock extraction areas, construction camps, laydown/storage yards, access roads)	Length (km) of temporary and permanent access roads required to construct and maintain the alternative route	100