Webequie Supply Road Project

Webequie First Nation

January 30, 2026

AtkinsRéalis Ref: 661910

APPENDIX V: EA/IA MITIGATION AND MONITORING COMMITMENTS TABLE

Table V-1: Webequie Supply Road Project (the Project) – Environmental Assessment/Impact Assessment (EA/IA) Mitigation and Monitoring Commitments

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
1.	Engagement and Consultation	Webequie First Nation will continue to exercise due diligence in carrying out the delegated aspects of consultation.	Ongoing	EA/IA commitment
2.	Engagement and Consultation	In addition to fulfilling its obligations under the MOU with Ontario, Webequie First Nation has and will continue to carry out relationship-building activities that extend beyond the procedural requirements of consultation and in the context of their Three-Tier Approach to engagement and consultation with Indigenous communities.	Ongoing	EA/IA commitment
3.	Engagement and Consultation	Webequie First Nation will continue to work with stakeholders and Indigenous communities and groups to resolve issues and address comments received in writing through the review period for the Environmental Assessment Report/Impact Statement (EAR/IS) to clarify information on the Project, provide additional information, and discuss potential effects of the Project and proposed mitigation measures.	Ongoing	EA/IA commitment
4.	Engagement and Consultation	Future planned engagement and consultation activities for the Project will involve various engagement options for Indigenous communities to allow for the Project Team to explain the assessment findings in the EAR/IS, including targeted sessions with Indigenous communities for feedback and input on the results of the cumulative effects assessment for the Project.	Ongoing	EA/IA commitment
5.	Engagement and Consultation	Where there are disputes and/or issues that cannot be resolved through discussions, Webequie First Nation will maintain its traditional approach to resolving potential disputes as the first step in the process. This traditional approach will involve establishing a community representatives' group, including Elders, youth, women and others (to be determined by the community on a case-by-case basis) to share perspectives, understand the issue(s) identified, engage in respectful dialogue and recommend appropriate options. If no resolution can be made, then a conventional dispute resolution process will be used.	Ongoing	EA/IA commitment
6.	Geology, Terrain, and Soils	Site specific management plans that describe protocols and procedures to mitigate potential effects to Geology, Terrain, and Soils VC will be developed and implemented as outlined in Section 4.6 of the EAR/IS.	• Detail design • Construction	EA/IA commitment
7.	Geology, Terrain, and Soils	During the construction phase, a Construction Environmental Management Plan (CEMP) will be implemented and during operations an Operational Environment Management Plan (OEMP) will be implemented	• Detail design • Construction • Operations	EA/IA commitment
8.	Geology, Terrain, and Soils	Management plans will be consistent with the requirements of the Project's permits and authorizations to minimize the potential effects of construction and operations activities on geology, terrain, and soils	• Detail design • Construction	EA/IA commitment
9.	Geology, Terrain, and Soils	Management Plans will guide the proponent and its contractors in complying with applicable environmental legislation by providing criteria, standard protocols, and mitigation measures to eliminate, reduce, and/or offset potential adverse effects to Geology, Terrain, and Soils VC.	• Detail design • Construction	EA/IA commitment
10.	Geology, Terrain, and Soils	Indigenous community members will have an active role in developing and implementing management plans.	• Detail design • Construction • Operations	EA/IA commitment
11.	Geology, Terrain, and Soils	An Air Quality and Dust Control Management Plan will describe mitigation measures used to control air emission and dust during construction and/or operations	• Detail design • Construction • Operations	EA/IA commitment
12.	Geology, Terrain, and Soils	A Soil Management Plan will describe protocols and procedures for handling and storing of native soils (i.e., disturbed areas, storage areas, and/or aggregate sources) on-site during construction and/or operations phase(s)	• Detail design • Construction • Operations	EA/IA commitment
13.	Geology, Terrain, and Soils	An Erosion and Sediment Control Plan will include mitigation measures to control runoff, minimize erosion on exposed slopes and substrates, and prevent the introduction of sediment or other deleterious materials from entering watercourses. The Erosion and Sediment Control Plan will describe the applicable permits and best management practices and will follow existing guidelines as appropriate to mitigate erosion and sediment transport.	• Detail design • Construction • Operations	EA/IA commitment
14.	Geology, Terrain, and Soils	A Petroleum Handling and Storage Plan will describe protocols and procedures for handling, storing, and proper disposal of petrochemicals during the construction phase.	• Detail design • Construction • Operations	EA/IA commitment
15.	Geology, Terrain, and Soils	A Site Restoration and Monitoring Plan will provide instructions to the proponent and its contractors on how to undertake site restoration after construction.	• Detail design • Construction • Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
16.	Geology, Terrain, and Soils	An Environment Committee will be established to facilitate communication and engagement during construction and operations of the Project. Committee members will include Webequie First Nation Elders and Knowledge Holders, other First Nations with interest in participating, and appropriate project representatives, to: facilitate communication and engagement during construction and operations of the Project; facilitate use of Indigenous Knowledge in project activities; facilitate evaluation of land use information; and facilitate development of appropriate monitoring programs, protocols and management plans as it relates to Geology, Terrain, and Soils VC.	• Detail design • Construction • Operations	EA/IA commitment
17.	Geology, Terrain, and Soils	The disturbed areas will be restored with native soils (removed or excavated in the same area) or materials that are more permeable than the native soils, where practical, and covered by native vegetation. This can help restore or increase infiltration rates and groundwater levels and prevent or reduce soil erosion.	• Construction	EA/IA commitment
18.	Geology, Terrain, and Soils	Limit disturbance footprint to the permanent development area and associated temporary supportive infrastructure during construction.	• Construction	EA/IA commitment
19.	Geology, Terrain, and Soils	Minimize disturbance footprint to previously disturbed areas during decommissioning.	• Construction	EA/IA commitment
20.	Geology, Terrain, and Soils	Re-contour, stabilize, and re-vegetate disturbed areas to suit original conditions.	• Construction	EA/IA commitment
21.	Geology, Terrain, and Soils	Use rock ripping, hammering, or drilling where possible to minimize blasting.	• Construction	EA/IA commitment
22.	Geology, Terrain, and Soils	Where blasting is used, design blast patterns to minimize ground disturbance beyond the excavation area.	• Construction	EA/IA commitment
23.	Geology, Terrain, and Soils	Dust control measures will be implemented when deemed necessary.	• Construction	EA/IA commitment
24.	Geology, Terrain, and Soils	Prior to the development of quarry sites, the potential for ARD will be further assessed. If the Project chooses to use materials or sites that are identified as having uncertain or known potential for metal leaching/acid rock drainage (ML/ARD), mitigative measures, sensitive receptor identification, and/or supplemental baseline studies will be completed in future development phases. Amongst other things, this may include infrastructure to divert or lower the water table, sub-drains, and/or ongoing monitoring of surface and groundwater.	• Construction	EA/IA commitment
25.	Geology, Terrain, and Soils	A Waste Management Plan will be developed and implemented for the Project.	• Detail design • Construction • Operations	EA/IA commitment
26.	Geology, Terrain, and Soils	A Spill Prevention and Emergency Response Management Plan will be developed and implemented for the Project. This plan will lay out the requirements for training and procedures for the storage, handling, and transportation of potential contaminants, as well as equipment operation and maintenance intended to prevent spills from occurring.	• Detail design • Construction • Operations	EA/IA commitment
27.	Geology, Terrain, and Soils	Maintain drainage in the work area to minimize ponding or channelization of surface flow.	• Construction	EA/IA commitment
28.	Geology, Terrain, and Soils	Conduct progressive restoration activities throughout the construction, maintenance, and decommissioning processes.	• Construction • Operations	EA/IA commitment
29.	Geology, Terrain, and Soils	Use equipment with low ground pressure alongside road and soft soil areas.	• Construction	EA/IA commitment
30.	Geology, Terrain, and Soils	Strip and stockpile topsoil from road and other work areas where practicable.	• Construction	EA/IA commitment
31.	Geology, Terrain, and Soils	Conduct work under frozen or dry ground conditions where reasonable possible.	• Construction	EA/IA commitment
32.	Geology, Terrain, and Soils	Cover or reseed soil stockpiles and exposed slopes.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
33.	Geology, Terrain, and Soils	Limit grading and soil disturbance on slopes and near waterbodies.	• Construction	EA/IA commitment
34.	Geology, Terrain, and Soils	Implement protocols and procedures for cleaning equipment brought to site to control invasive species.	• Construction	EA/IA commitment
35.	Geology, Terrain, and Soils	Monitoring soil conditions during work and changing or adapting mitigation measures, as necessary.	• Construction	EA/IA commitment
36.	Geology, Terrain, and Soils	No application of sand or salt is currently proposed for de-icing of the WSR during the winter season. However, sand may be applied in select locations based on road safety concerns.	• Construction	EA/IA commitment
37.	Geology, Terrain, and Soils	An ongoing follow-up monitoring program (post-construction) will be implemented during the operations and maintenance phase of the Project.	• Operations	EA/IA commitment
38.	Geology, Terrain, and Soils	Design considerations will address the impact of frost on structural foundations, including the potential for settlement-induced stresses.	• Construction	EA/IA commitment
39.	Geology, Terrain, and Soils	Additional mitigation measures to address potential effects on Geology, Terrain, and Soils are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing; • Section 5.2 – Petroleum Handling and Storage; • Section 5.3 – Spill Prevention and Emergency Response; • Section 5.5 – Materials Handling and Storage; • Section 5.7 – Temporary Watercourse Crossings; • Section 5.8 – Temporary Watercourse Diversions; • Section 5.11 – Bridge and Culvert Installations; • Section 5.12 – Blasting Near a Watercourse; • Section 5.16 – Erosion and Sediment Control; • Section 5.17 – Concrete Washout Management Practices; • Section 5.18 – Dust Control Practices; • Section 5.20 – Quarry Site Selection and Development Requirements; and • Section 5.21 – Site Decommissioning and Rehabilitation.	• Construction • Operations	EA/IA commitment
40.	Geology, Terrain, and Soils - Monitoring	Inspect active aggregate pit and quarries frequently for geochemical and stability issues. Inspections are to be completed during rock extraction and aggregate processing activities during construction and operation of the Project.	• Construction • Operations	EA/IA commitment
41.	Geology, Terrain, and Soils - Monitoring	On-site construction monitoring will be required during clearing and soil salvaging and management activities to prevent unnecessary losses or contamination of soil resources.	• Detail design • Construction	EA/IA commitment
42.	Geology, Terrain, and Soils - Monitoring	Conduct frequent inspections of required erosion and sediment control measures as required by the Erosion and Sediment Control Plan, including documentation of corrective actions. Areas more susceptible to erosion should be monitored more frequently, with particular focus prior to, and after, rainfall events.	• Construction • Operations	EA/IA commitment
43.	Geology, Terrain, and Soils - Monitoring	During construction, conduct regular inspections of work areas to ensure that soil management and spill prevention mitigation measures are being implemented effectively.	• Construction	EA/IA commitment
44.	Geology, Terrain, and Soils - Monitoring	Following completion of construction work, post-construction inspections are recommended to ensure that soil conditions along the Project Footprint have been restored and are adequately stabilized to prevent erosion.	• Operations	EA/IA commitment
45.	Surface Water Resources	Indigenous community members will have an active role in developing and implementing management plans.	• Detail design • Construction • Operations	EA/IA commitment
46.	Surface Water Resources	An Environment Committee will be established to facilitate communication and engagement during construction and operations of the Project. Committee members will include Webequie First Nation Elders and Knowledge Holders, other First Nations with interest in participating, and appropriate project representatives, to: facilitate	• Detail design • Construction	EA/IA commitment

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		communication and engagement during construction and operations of the Project; facilitate use of Indigenous Knowledge in project activities; facilitate evaluation of land use information; and facilitate development of appropriate monitoring programs, protocols and management plans as it relates to Surface Water Resources VC.	• Operations	
47.	Surface Water Resources	Recognize the importance of peatlands to First Nations due to their ability to store carbon in their soils and hold a lot of freshwater, a “floating” road design – the proposed road will be constructed on top of the peat (no peat is removed) – will be used for the section of the WSR that crosses peatlands as described in Section 4.3.1.3.1 Road Design in Peatlands.	• Detail design • Construction	EA/IA commitment
48.	Surface Water Resources	Fugitive dust concerns expressed by an Indigenous community will be addressed by the use of the industry best management practices. Water trucks and the use of erosion and sediment control measures will be used along the road right-of-way to eliminate or reduce potential effects of fugitive dust on the water quality.	• Detail design • Construction	EA/IA commitment
49.	Surface Water Resources	The potential impact of runoff from bridges will be addressed through stormwater management designs. Conduits to direct stormwater runoff for treatment, such as stormwater management ponds, will be incorporated into the road design if deemed necessary to minimize the potential impacts to surface water quality.	• Detail design • Construction	EA/IA commitment
50.	Surface Water Resources	A Surface Water and Storm Water Management and Monitoring Plan will be developed during detail design as part of the Construction Environmental Management Plan (CEMP) and the Operation Environmental Management Plan (OEMP) for implementation in the construction and operation phases.	• Detail design • Construction • Operations	EA/IA commitment
51.	Surface Water Resources	An Environmental Activity and Sector Registry (EASR) registration (for Water Taking) will be used to permit the activity when dewatering volumes are more than 50,000 L/day, but less than 400,000 L/day.	• Detail design • Construction	EA/IA commitment
52.	Surface Water Resources	All short-term water takings from surface water and/or groundwater sources for construction purposes will be carried out in accordance with O. Reg. 387/04, as amended by O. Reg. 64/16 under the *Ontario Water Resources Act*, and industry best standards.	• Post EA/IA • Construction	EA/IA commitment
53.	Surface Water Resources	Construction of permanent and temporary waterbody crossing structures will be timed for low-flow conditions to minimize the effect of temporary diversions on stream discharge.	• Construction	EA/IA commitment
54.	Surface Water Resources	Erosion and sediment control measures, including temporary flow diversions or bypass pumping to isolate the work zone will be implemented throughout the construction phase by the Contractor to prevent or reduce environmental effects.	• Construction	EA/IA commitment
55.	Surface Water Resources	Water quality will be directly mitigated through the implementation of spill response and storage and handling procedures for materials that have the potential for adverse interaction with surface water quality and indirectly mitigated through erosion control and water quantity mitigation measures. Water quality monitoring will be implemented during construction to identify exceedances of water quality guidelines and information. Construction operators’ work may need to be temporarily halted or additional mitigation methods be applied.	• Construction	EA/IA commitment
56.	Surface Water Resources	To mitigate potential changes to water quantity (flow/discharge, water levels), waterbody crossings will be designed with single-span elements (bridges or culverts), where possible, to limit the encroachment of structures into stream channels and thereby minimize the effect on discharge under variable flow conditions. As a result, three waterbody crossings require multiple spans (WB-1, WC-3, and WC-27), and 28 crossings were designed with single-span elements	• Construction	EA/IA commitment
57.	Surface Water Resources	Waterbody crossings will be designed with single-span elements (bridges or culverts), where possible, to limit the encroachment of structures into stream channels and thereby minimize the effect on discharge under variable flow conditions.	• Detail design • Construction	EA/IA commitment
58.	Surface Water Resources	The disturbed areas from vegetation and clearing will be restored with native soils (removed or excavated in the same area) or materials that are more permeable than the native soils, where practical, and covered by native vegetation. This can help restore or increase infiltration rates and groundwater levels and prevent or reduce soil erosion.	• Construction	EA/IA commitment
59.	Surface Water Resources	Erosion and Sediment Control measures (e.g., OPSS 805, Construction Specification for Temporary Erosion and Sediment Control Measures) will be incorporated into the detail design and implemented during construction to prevent erosion and migration of soils from the work site during rainfall events.	• Detail design • Construction	EA/IA commitment
60.	Surface Water Resources	The proponent will focus on medium and larger drainage basins for water taking or discharge as much as construction needs would allow, to reduce potential effects.	• Construction	EA/IA commitment
61.	Surface Water Resources	Construction will be delayed during heavy precipitation or run-off events.	• Construction	EA/IA commitment
62.	Surface Water Resources	The roadway and swales will be designed with consideration of low impact development procedures for linear infrastructure. These features include permanent enhanced swales that are designed to convey, treat, and attenuate stormwater runoff from the road.	• Detail design • Construction	EA/IA commitment
63.	Surface Water Resources	The road cross-fall will be designed to drain water after deterioration of the loose gravel road surface until seasonal maintenance operations crews return to reshape the roadway.	• Detail design • Construction	EA/IA commitment
64.	Surface Water Resources	Cross-culverts will be installed at regular intervals along the road (non-waterbody areas) within the lowlands/peatlands to convey surface drainage and movement of subsurface groundwater flow through the road.	• Detail design • Construction	EA/IA commitment

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65.	Surface Water Resources	Clearing and grubbing will be limited to the current work area and will not be done in phased manner as the road construction advances to limit potential erosion and sedimentation.	• Construction	EA/IA commitment
66.	Surface Water Resources	Sediment and erosion control measures will be implemented during the construction of the road and all support infrastructure.	• Construction	EA/IA commitment
67.	Surface Water Resources	A Construction Waste Management Plan will be developed to minimize the amount of the waste to be generated, and the portion going to landfills or for incineration, by applying industry best management practices including collection, recycling, and disposal.	• Detail design • Construction • Operations	EA/IA commitment
68.	Surface Water Resources	Water quality monitoring will be conducted to demonstrate that deleterious substances are not entering waterbodies or watercourses. Monitoring will be conducted as per **Section 7.10** (Follow-up and Monitoring), conditions of permits/approvals and as instructed by MNR and/or MECP prior to, during, and after in water construction activities in fish bearing watercourses and may be required when working near fish bearing watercourses.	• Construction • Operations	EA/IA commitment
69.	Surface Water Resources	During operations, water from trucks will be applied to the gravel road surface along the east half of WSR in the peatlands and shoulders to control dust for safety of road users and to minimize potential impacts to the environment from the dispersal of air borne dust particles to adjacent natural areas.	• Operations	EA/IA commitment
70.	Surface Water Resources	No application of sand or salt is currently proposed for de-icing of the WSR during the winter season based. However, sand may be applied in select locations based on road safety concerns.	• Construction	EA/IA commitment
71.	Surface Water Resources	An ongoing follow-up monitoring program (post-construction) will be implemented during the operations and maintenance phase of the Project.	• Operations	EA/IA commitment
72.	Surface Water Resources	Additional mitigation measures to address potential effects on Surface Water Resources are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing; • Section 5.2 – Petroleum Handling and Storage; • Section 5.3 – Spill Prevention and Emergency Response; • Section 5.5 – Materials Handling and Storage; • Section 5.6 – Working Within or Near Fish Bearing Watercourses; • Section 5.7 – Temporary Watercourse Crossings; • Section 5.8 – Temporary Watercourse Diversions; • Section 5.9 – Fish Passage; • Section 5.10 – Fish Salvage; • Section 5.11 – Bridge and Culvert Installation; • Section 5.12 – Blasting Near a Watercourse; • Section 5.16 – Erosion and Sediment Control; • Section 5.17 – Concrete Washout Management; • Section 5.18 – Dust Control Practices; • Section 5.19 – Aggregate Pit Decommissioning; • Section 5.20 – Quarry Site Selection and Development Requirements; • Section 5.21 – Site Decommissioning and Rehabilitation; and • Section 5.22 – Water Quality Monitoring.	• Construction • Operations	EA/IA commitment
73.	Surface Water Resources - Monitoring	Qualified Environmental Monitors, with representation from Indigenous communities, will be appointed to guide implementation, monitor, and report on the effectiveness of the construction procedures and mitigation measures.	• Construction	EA/IA commitment
74.	Surface Water Resources - Monitoring	Surface water quality and sediment quality will be monitored, documented, and reported according to terms and conditions of the approved water taking permit (e.g., Permits to Take Water or Environmental Activity and Sector Registration) and others permits, if applicable.	• Construction • Operations	EA/IA commitment

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75.	Surface Water Resources - Monitoring	Surface water sampling on a seasonal basis (e.g., spring, summer and fall) and sediment sampling on an annual basis is recommended at representative water body crossings. The monitoring and sampling programs will span pre-, during and post-construction periods (e.g., three years after construction is complete).	• Construction • Operations	EA/IA commitment
76.	Groundwater Resources	Indigenous community members will have an active role in developing and implementing management plans.	• Detail design • Construction • Operations	EA/IA commitment
77.	Groundwater Resources	The Project invites community members to participate in developing and implementing programs, which includes water quality monitoring programs.	• Detail design • Construction • Operations	EA/IA commitment
78.	Groundwater Resources	An Environment Committee will be established to facilitate communication and engagement during construction and operations of the Project. Committee members will include Webequie First Nation Elders and Knowledge Holders, other First Nations with interest in participating, and appropriate project representatives, to: facilitate communication and engagement during construction and operations of the Project; facilitate use of Indigenous Knowledge in project activities; facilitate evaluation of land use information; and facilitate development of appropriate monitoring programs, protocols and management plans as it relates to Groundwater Resources VC	• Detail design • Construction • Operations	EA/IA commitment
79.	Groundwater Resources	The disturbed areas will be restored with native soils (removed or excavated in the same area) or materials that are more permeable than the native soils, where practical, and covered by native vegetation. This can help restore or increase infiltration rates and groundwater levels and prevent or reduce soil erosion.	• Construction	EA/IA commitment
80.	Groundwater Resources	The areas for temporary infrastructure (including access roads, construction camps, laydown and storage yards) will be designed and developed as efficient as possible to limit the Project Footprint as much as possible. The machines and equipment used for site grading will be selected, where practicable, to minimize impacts on soil disturbing and ground hardening. Appropriate decommissioning and reclamation measures will be adopted to restore the disturbed areas to pre-development conditions as much as possible to reduce the project effects on groundwater infiltration and recharge.	• Construction	EA/IA commitment
81.	Groundwater Resources	The blasting will be used at places where other options are not practical. Wherever practical, alternatives including bedrock ripping, typical drilling, hammering, and non-explosive agent (e.g., expanding grout) will be considered. A Construction Blasting Management Plan for the Project will be prepared and submitted by applicable contractor(s) after contract award prior to initiation of blasting activities (refer to Section 2.1.3 in Appendix E – Mitigation Measures).	• Detail design • Construction	EA/IA commitment
82.	Groundwater Resources	If blasting is required, it will be conducted in accordance with OPSS 120 General Specification for the Use of Explosive. A pre-blasting survey will be conducted to identify water supply wells and other environmentally sensitive features within 250 m from the blasting locations. Mitigation measures will be modified or enhanced, if needed, based on the survey results. Blasting will not be conducted within 50 m of water supply wells (if any) and should be avoided in shallow groundwater table areas, where possible.	• Construction	EA/IA commitment
83.	Groundwater Resources	The areas proposed for cut, excavation, and extraction (including borrows and quarries) will be designed and developed as efficient as possible to limit the Project Footprint as much as possible. Appropriate restoration and reclamation measures will be adopted to restore the disturbed areas to the pre-development conditions as much as possible to reduce the project effects on groundwater infiltration and recharge.	• Construction	EA/IA commitment
84.	Groundwater Resources	The dewatering and pumping activities will be regulated through permitting processes (e.g., EASR and/or PTTW) to reduce the potential effects on groundwater resources. In addition, industry best management practices will be used to minimize dewatering / pumping volumes including: • Use temporary supporting systems, where feasible, to help reduce the amount of groundwater inflow into the excavations; • Surface water runoff will be directed away from the open excavations to reduce rain and surface water contribution to the total dewatering volumes; and • Water Conservation techniques and methods.	• Construction	EA/IA commitment
85.	Groundwater Resources	To avoid or reduce the road barrier effects in low-lying areas, such as the peatlands, with shallow water tables, the following measures will be considered during design and construction: • The materials selected for road construction, especially the portion below the existing ground surface / groundwater table, will have the same or higher permeability compared to the surrounding native soils. • If needed, crushed stones (rockfill) and/or equalization culverts will be used at wetland and peatland crossings to maintain natural hydraulic connections between the upgradient and downgradient sides of the road to allow groundwater to flow naturally through the road. • When crossing wetlands and peatlands, the road design will consider consolidation and compression processes of the peat layers associated with road construction (loading), which may result in reduced permeability of the peat, and thus alter natural groundwater flow directions and pathways. Compression of peat could also have implications on water quality. Water quality will be monitored during and post road construction. • In cut areas, groundwater seepage (if any) can typically be controlled and managed through roadside drainage systems (e.g., roadside ditches).	• Construction	EA/IA commitment

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86.	Groundwater Resources	Blasting will be used at places where other options are not practical. Wherever practical, alternatives including bedrock ripping, typical or standard drilling, hammering, and non-explosive agent (e.g., expanding grout) will be considered. A Construction Blasting Management Plan for the Project will be prepared and submitted by applicable contractor(s) after contract award prior to initiation of blasting activities (refer to Section 2.1.3 in Appendix E – Mitigation Measures).	• Detail design • Construction	EA/IA commitment
87.	Groundwater Resources	Dewatering activities will, at a minimum, follow OPSS 517 Dewatering of Pipeline, Utility, and Associated Structure Excavation and OPSS 518 Construction Specification for Control of Water from Dewatering Operations.	• Operations	EA/IA commitment
88.	Groundwater Resources	Erosion and Sediment Control measures (e.g., OPSS 805, Construction Specification for Temporary Erosion and Sediment Control Measures) will be incorporated into the detail design and implemented during construction to prevent erosion and migration of soils from the work site during rainfall events.	• Construction	EA/IA commitment
89.	Groundwater Resources	Filter bag(s), and/or sediment trap, will be used at a minimum during dewatering for treatment of dewatering effluent.	• Construction	EA/IA commitment
90.	Groundwater Resources	Discharge locations from dewatering activities will be at least 30 m away from water bodies.	• Construction	EA/IA commitment
91.	Groundwater Resources	Industry best management practices will be applied for the use of concrete.	• Construction	EA/IA commitment
92.	Groundwater Resources	A Construction Waste Management Plan will be developed for the management of waste products and how they are collected, stored, transported, and disposed of in accordance with provincial and federal legislation and guidelines (refer to Section 2.1.5 in Appendix E – Mitigation Measures).	• Detail design • Construction	EA/IA commitment
93.	Groundwater Resources	No septic systems (with potential leaching chambers/beds) will be used for sewage treatment. Either portable treatment facilities or trucks will be used to dispose the sewage.	• Operations	EA/IA commitment
94.	Groundwater Resources	Additional mitigation measures to address potential effects on Groundwater Resources are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing • Section 5.5 – Materials Handling and Storage • Section 5.12 – Blasting near a Watercourse • Section 5.20 – Quarry Site Selection and Development Requirements • Section 5.21 – Site Decommissioning and Rehabilitation • Section 5.22 – Water Quality Monitoring	• Construction • Operations	EA/IA commitment
95.	Groundwater Resources - Monitoring	Conduct a pre-construction survey (e.g., prior to blasting, dewatering/pumping, etc.) of the identified private well on the Webequie First Nation Reserve lands. The well survey will include completion of well questionnaires to obtain baseline conditions about the well, and collection and analysis of water samples. The well water sampling will continue throughout the construction and post-construction periods on a seasonal basis (e.g., annual, or semi-annual sampling).	• Construction • Operations	EA/IA commitment
96.	Groundwater Resources - Monitoring	Qualified Environmental Monitors with representation from Indigenous communities will be appointed to guide implementation, monitor, and report on the effectiveness of the construction procedures and mitigation measures.	• Construction	EA/IA commitment
97.	Groundwater Resources - Monitoring	Dewatering volumes and discharge water qualities will be monitored, documented, and reported according to terms and conditions of the approved water taking permit (e.g., Permits to Take Water or Environmental Activity and Sector Registration) and others permits, if applicable.	• Construction	EA/IA commitment
98.	Groundwater Resources - Monitoring	Groundwater level monitoring on a seasonal basis (e.g., spring, summer and fall) and groundwater sampling on an annual basis will be conducted using available monitoring wells including piezometers installed in the peatland areas. The monitoring and sampling programs will span pre-, during and post-construction periods (e.g., three years after construction is complete).	• Construction • Operations	EA/IA commitment
99.	Atmospheric Environment	Indigenous community members will have an active role in developing and implementing environmental management plans.	• Detail design • Construction • Operations	EA/IA commitment
100.	Atmospheric Environment	Where effects are considered unacceptable and/or based on concerns raised by Indigenous community members or other stakeholders, further mitigation options will be considered by the road operator in consultation with Indigenous communities and stakeholders.	• Construction	EA/IA commitment
101.	Atmospheric Environment	An Environment Committee will be established to facilitate communication and engagement during construction and operations of the Project. Committee members will include Webequie First Nation Elders and Knowledge Holders, other First Nations with interest in participating, and appropriate project representatives, to: facilitate communication and engagement during construction and operations of the Project; facilitate use of Indigenous Knowledge in project activities; facilitate evaluation of land use information; and facilitate development of appropriate monitoring programs, protocols and management plans as it relates to Atmospheric Environment VC.	• Detail design • Construction • Operations	EA/IA commitment

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102.	Atmospheric Environment - Air Quality	Use of water sprays from trucks to increase moisture levels in active areas during dry days (e.g., haul/access roads, temporary soil and aggregate stockpiles).	• Construction	EA/IA commitment
103.	Atmospheric Environment - Air Quality	Restrict or halt construction and operations during high wind or dry conditions to prevent excessive dust generation near sensitive receptors.	• Construction • Operations	EA/IA commitment
104.	Atmospheric Environment - Air Quality	Use of environmentally certified equipment, with a commitment that 80% of mobile and stationary engines will meet Tier 4F standards.	• Construction	EA/IA commitment
105.	Atmospheric Environment - Air Quality	Dust suppression systems will be used at quarries.	• Construction	EA/IA commitment
106.	Atmospheric Environment - Air Quality	Vehicle speed will be limited.	• Construction	EA/IA commitment
107.	Atmospheric Environment - Air Quality	Vehicle and heavy equipment movement will be limited to designated areas.	• Construction	EA/IA commitment
108.	Atmospheric Environment - Air Quality	Efficient, lower-emission vehicles and equipment will be used, where practical.	• Construction	EA/IA commitment
109.	Atmospheric Environment - Air Quality	Where practical and applicable, use multi-passenger vehicles for the transport of crews to and from job sites	• Construction	EA/IA commitment
110.	Atmospheric Environment - Air Quality	Idling of vehicles and equipment will be minimized when possible.	• Construction	EA/IA commitment
111.	Atmospheric Environment - Air Quality	Work crews will be provided with a training session on eco-driving to reduce fuel usage.	• Construction	EA/IA commitment
112.	Atmospheric Environment - Air Quality	No use of sand or salt is currently proposed for de-icing during winter operations. However, sand may be applied in select locations based on road safety concerns.	• Operations	EA/IA commitment
113.	Atmospheric Environment - Air Quality	An Air Quality and Dust Control Management Plan will be developed and implemented to mitigate the effects of construction activities on air quality. The plan will be adapted for continuation throughout the operations phase of the Project.	• Detail design • Construction • Operations	EA/IA commitment
114.	Atmospheric Environment - Air Quality	Additional mitigation measures to address potential effects on Air Quality are included in Appendix E – Mitigation Measures: • Section 5.18 – Dust Control Practices	• Construction • Operations	EA/IA commitment
115.	Atmospheric Environment - Air Quality - Monitoring	An Air Quality and Dust Control Management Plan will be developed and implemented to manage and reduce air contaminant emissions during construction and operation phases. As described in Section 22 (Follow-up and Compliance Monitoring Programs), follow-up and monitoring activities will be conducted to confirm mitigation measures are being implemented appropriately	• Detail design • Construction • Operations	EA/IA commitment
116.	Atmospheric Environment - Air Quality - Monitoring	The Air Quality and Dust Control Management Plan will integrate a monitoring procedure for dustfall effects and measures to control or limit particulate emissions that would mostly come from the passage of vehicles on the road or the handling of soil or aggregates by mobile equipment during construction.	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
117.	Atmospheric Environment - Air Quality - Monitoring	Ongoing engagement and consultation with potentially affected Indigenous communities and groups will help identify opportunities to address concerns regarding air quality throughout construction and operations of the Project.	• Construction • Operations	EA/IA commitment
118.	Atmospheric Environment – Greenhouse Gases (GHG)	Implement proposed mitigation measures for air quality.	• Construction • Operations	EA/IA commitment
119.	Atmospheric Environment – Greenhouse Gases (GHG)	Biomass (removed due to vegetation clearing) will be used for other purposes like the production of woodchips and erosion control.	• Construction	EA/IA commitment
120.	Atmospheric Environment – Greenhouse Gases (GHG)	An Energy Management Plan will be developed and will include guidance to reduce operational GHG emissions associated with the MSF.	• Detail design • Operations	EA/IA commitment
121.	Atmospheric Environment - Greenhouse Gases (GHGs) - Monitoring	Follow-up and monitoring activities will be conducted to confirm proposed mitigation measures outlined in Section 9.4.2 to reduce GHG emissions are being implemented appropriately.	• Operations	EA/IA commitment
122.	Atmospheric Environment - Greenhouse Gases (GHGs) - Monitoring	Ongoing engagement and consultation with potentially affected Indigenous communities and groups is proposed to help identify opportunities to address concerns regarding GHG emissions throughout construction and operations of the Project.	• Construction • Operations	EA/IA commitment
123.	Atmospheric Environment – Noise and Vibration	Construction will be limited to the daytime period, where possible, especially near residences.	• Construction	EA/IA commitment
124.	Atmospheric Environment – Noise and Vibration	All equipment will be properly maintained to limit noise emissions. As such, all construction equipment will be operated with effective muffling devices that are in good working order.	• Construction	EA/IA commitment
125.	Atmospheric Environment – Noise and Vibration	In the presence of persistent noise complaints, all construction equipment will be verified to comply with MOE NPC-115 guidelines.	• Construction	EA/IA commitment
126.	Atmospheric Environment – Noise and Vibration	A Construction Blasting Management Plan for the Project will be prepared and submitted by applicable contractor(s) after contract award and prior to initiation of blasting activities.	• Detail design • Construction	EA/IA commitment
127.	Atmospheric Environment – Noise and Vibration	Appropriate personal protective equipment (including hearing protection) will be used and the timing of blasting will coordinate with the period of fewest on-site workers, when possible.	• Construction	EA/IA commitment
128.	Atmospheric Environment – Noise and Vibration	A Noise and Vibration Management Plan will be developed and implemented to mitigate the effects of noise and vibration from construction activities. The plan will be adapted for continuation throughout the operations phase of the Project.	• Detail design • Construction • Operations	EA/IA commitment
129.	Atmospheric Environment - Noise and Vibration	Additional mitigation measures to address potential effects of Noise and Vibration are included in Appendix E – Mitigation Measures: • Section 5.4 – Noise Control • Section 5.12 – Blasting near a Watercourse	• Construction • Operations	EA/IA commitment
130.	Atmospheric Environment - Noise	A noise monitoring program for the construction and operation phases of the Project is not recommended. However, response to noise complaints, if they arise, will be investigated, documented, and addressed.	• Construction • Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
	and Vibration - Monitoring			
131.	Atmospheric Environment - Noise and Vibration - Monitoring	Vibration monitoring is expected to be required for aggregate extraction sites and general construction blasting activities to align with guidelines set out by Ministry of Environment, Conservation and Parks (MECP), Ontario Ministry Transportation (MTO), Health Canada, Department of Fisheries and Oceans (DFO) and general industry practices, respectively. Monitoring requirements for construction blasting will be considered and assessed once detailed information regarding the blast designs is available.	• Construction	EA/IA commitment
132.	Fish and Fish Habitat	Indigenous community members will have an active role in developing and implementing environmental management plans.	• Detail design • Construction • Operations	EA/IA commitment
133.	Fish and Fish Habitat	An Environment Committee will be established to facilitate communication and engagement during construction and operations of the Project. Committee members will include Webequie First Nation Elders and Knowledge Holders, other First Nations with interest in participating, and appropriate project representatives, to: facilitate communication and engagement during construction and operations of the Project; facilitate use of Indigenous Knowledge in project activities; facilitate evaluation of land use information; and facilitate development of appropriate monitoring programs, protocols and management plans as it relates to Fish and Fish Habitat VC.	• Detail design • Construction • Operations	EA/IA commitment
134.	Fish and Fish Habitat	Project Routing and Crossing Design: • The preferred route has been selected with consideration to minimize the number of waterbody crossings for the road, where feasible, as well as the Project Footprint will be minimized to the extent possible.	• Detail design • Construction	EA/IA commitment
135.	Fish and Fish Habitat	Project Routing and Crossing Design: • Permanent culverts and bridge crossings have been designed to accommodate the existing bankfull channel width of a watercourse, preserving and minimizing impacts to fish habitat.	• Detail design • Construction	EA/IA commitment
136.	Fish and Fish Habitat	Project Routing and Crossing Design: • For culverts (i.e., open bottom steel arch) at 17 watercourse crossing locations, the design mitigation will include the infilling of the culvert with material (i.e., aggregate) that resembles the natural substrate present at the watercourse, as well the creation of a low flow channel that mimics the existing stream channel. The same will be done for corrugated steel culverts found at the remaining eight crossings requiring culverts. The purpose is to minimize habitat loss by enabling the channel to function as “naturally” as possible to convey flow; maintain channel form and function; and retain fish passage.	• Detail design • Construction	EA/IA commitment
137.	Fish and Fish Habitat	Project Routing and Crossing Design: • For larger waterbody crossings, bridges have been selected for design and construction which are expected to reduce the total fish habitat loss. These locations are: ▫ Winisk Lake crossing (WB-1); ▫ Unnamed Tributary to Muketei River crossing (WC-19); ▫ Winiskisis Channel crossing (WC-3); ▫ Muketei River crossing (WC-26); ▫ Ekwan River crossing (WC-10); and ▫ Unnamed watercourse crossing (WC-27).	• Detail design • Construction	EA/IA commitment
138.	Fish and Fish Habitat	Project Routing and Crossing Design: • For larger waterbody crossings bridges have been selected for design and construction which are expected to reduce the total fish habitat loss.	• Detail design • Construction	EA/IA commitment
139.	Fish and Fish Habitat	Project Routing and Crossing Design: • Larger watercourse crossings will incorporate bridge designs that span the waterbody and avoid the potential for creation of barriers to fish passage.	• Detail design • Construction	EA/IA commitment
140.	Fish and Fish Habitat	Project Routing and Crossing Design: • Bridges will be installed at up to six of the larger watercourses along the roadway to reduce barriers to fish passage.	• Detail design • Construction	EA/IA commitment
141.	Fish and Fish Habitat	Project Routing and Crossing Design: • Flow and migratory fish passage routes will be maintained at all crossings including bridges and culverts.	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
142.	Fish and Fish Habitat	Project Routing and Crossing Design: • Culvert inlets, outlets, and substrates at water crossings will be designed to replicate existing habitat conditions and characteristics of the watercourse channel upstream and downstream of the crossing.	• Construction	EA/IA commitment
143.	Fish and Fish Habitat	Project Routing and Crossing Design: • Culverts will be appropriately sized to allow for fish passage and will maintain the flow and water depth characteristics observed during existing conditions studies.	• Detail design • Construction	EA/IA commitment
144.	Fish and Fish Habitat	Project Routing and Crossing Design: • Culverts will be embedded by 10% to consider low flow conditions and aligned parallel to the watercourse on a straight section of uniform gradient. Culverts will be designed for fish passage at the lowest trophic levels of each system and will meet DFO's species specific passage requirements. This will aid in the ability to reduce the risk of the culvert installation introducing velocities which surpass swimming abilities of a waterbody's fishery. Open bottom culverts (i.e., steel arch structure culverts with no bottom that do not disturb the bed of a waterbody) have been considered for 17 water crossings that has been determined to be sensitive in the fish/fish habitat assessment. Additional mitigation options may also be implemented for culverts to minimize and avoid the introduction of barrier to fish passage and facilitate passage by fish such use of baffles, gradient pools, keyed stones, etc., where required.	• Detail design • Construction	EA/IA commitment
145.	Fish and Fish Habitat	Project Routing and Crossing Design: • Where possible, culverts will be oversized to prevent affects associated with beaver activity.	• Detail design • Construction	EA/IA commitment
146.	Fish and Fish Habitat	Culvert Maintenance Programs: • Culverts will be regularly monitored and maintained during construction and operation to allow for fish passage. Debris removal activities will follow DFO's Code of Practice: Culvert Maintenance (2023) (i.e., gradual removal such that flooding downstream, extreme flows downstream, release of suspended sediment, and avoidance of fish stranding).	• Construction • Operations	EA/IA commitment
147.	Fish and Fish Habitat	Culvert Maintenance Programs: • Implement the fish and fish habitat protection procedures for culvert maintenance as documented in the Ministry of Transportation Fisheries – Best Management Practices Manual.	• Construction • Operations	EA/IA commitment
148.	Fish and Fish Habitat	Culvert Maintenance Programs: • Adjusting maintenance and inspection schedules according to how quickly culverts fill with debris.	• Operations	EA/IA commitment
149.	Fish and Fish Habitat	Culvert Maintenance Programs: • Implementing a beaver dam removal plan to minimize potential effects on fish habitat availability. Where beaver dam removals are required to facilitate the installation or maintenance/repair of water crossing structures, the activity will be completed in consideration of best management practices and environmental permit/approval conditions (once available), including MNR guidelines for access roads, DFO's Measures to Protect Fish and Fish Habitat, Code of Practice for Beaver Dam Removal, and MTO's Fisheries – Best Management Practices Manual.	• Detail design • Construction	EA/IA commitment
150.	Fish and Fish Habitat	Habitat Delineation and Mapping: • Construction and/or silt fencing will be installed to clearly delineate the boundaries of the work areas to prevent habitat damage and destruction beyond work area boundaries. Where feasible, 30 m buffers will be established around riparian areas.	• Construction	EA/IA commitment
151.	Fish and Fish Habitat	Habitat Delineation and Mapping: • Construction personnel and equipment will be directed to avoid entering and crossing any watercourses or areas not required for construction.	• Construction	EA/IA commitment
152.	Fish and Fish Habitat	Habitat Delineation and Mapping: • Work vehicles and equipment will be restricted to designated work areas and access roads.	• Construction	EA/IA commitment
153.	Fish and Fish Habitat	Habitat Delineation and Mapping: • Maps identifying fish habitat, riparian buffers and no-go zones will be created and distributed to construction and operation personnel.	• Construction • Operations	EA/IA commitment
154.	Fish and Fish Habitat	Habitat Delineation and Mapping: • Signage and setbacks will be used to identify fish habitat and communicate restrictions for entering riparian areas.	• Construction	EA/IA commitment
155.	Fish and Fish Habitat	Vegetation Clearing Standard:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• Clearing of riparian habitat will be minimized, where possible, as riparian habitat provides a buffer to fish habitat, regulates water levels, and controls erosion and sedimentation.		
156.	Fish and Fish Habitat	Vegetation Clearing Standard: • Vegetation removal within the ROW will be limited to the footprint of structures placed at water crossing and where feasible to retain a 30 m riparian buffer upstream and downstream of the structure crossings to limit habitat alteration and disruption.	• Construction	EA/IA commitment
157.	Fish and Fish Habitat	Vegetation Clearing Standard: • Vegetation clearing will be conducted using appropriate equipment to prevent tree dragging and minimal earth disturbance in riparian areas of waterbodies.	• Construction	EA/IA commitment
158.	Fish and Fish Habitat	Vegetation Clearing Standard: • Allow for compatible vegetation to grow back within the ROW, including riparian areas, to heights compatible with safe operation of the road.	• Construction • Operations	EA/IA commitment

159.	Fish and Fish Habitat	Vegetation Clearing Standard:
		• Develop and implement a Vegetation and Invasive Species Management Plan detailing that includes details on vegetation restoration/reclamation and riparian area stabilization using native riparian/wetland seed mixes, if applicable, to stabilize soils/banks to pre-construction condition or better:
		  ○ Use of only approved seed mix species and/or plant species of importance to Indigenous communities for site restoration of riparian areas.
		  ○ Details on implementation of a post-construction monitoring plan, which will include activities such as examining and documenting the success of revegetation and restoration measures.
			• Detail design
			• Construction
			• Operations
				EA/IA commitment

160.	Fish and Fish Habitat	Erosion and Sediment Control: • Sediment fencing, silt curtains, and erosion control stabilization materials (e.g., straw mulch, wood chips, erosion control blanket, etc.) will be installed to limit the migration of sediment or release of deleterious substances into fish habitat.	• Construction	EA/IA commitment
161.	Fish and Fish Habitat	Erosion and Sediment Control: • Work will be restricted during high precipitation or run-off events to reduce erosion potential to the extent practicable and in-water work associated with water crossing will be conducted in the dry season or ice-on conditions to minimize risk to negatively impact fish habitat.	• Construction	EA/IA commitment
162.	Fish and Fish Habitat	Erosion and Sediment Control: • Temporary and/or permanent erosion control measures such as rip-rap or other materials will be placed along road where it interacts with water, to reduce erosion potential.	• Construction	EA/IA commitment
163.	Fish and Fish Habitat	Erosion and Sediment Control: • Seeding and revegetation will be completed as soon as the final surfaces are prepared to control erosion and help promote establishment of native vegetation. A healthy native vegetation community will also limit the introduction of invasive species.	• Construction	EA/IA commitment
164.	Fish and Fish Habitat	Erosion and Sediment Control: • Sediment-laden water generated on-site will be pumped into a well-vegetated area at least 30 m from fish habitat to prevent infiltration into fish habitat.	• Construction	EA/IA commitment
165.	Fish and Fish Habitat	Erosion and Sediment Control: • ESC measures will be installed, monitored, and managed as appropriate to reduce the risk of sediment reaching a waterbody prior to and during construction.	• Construction	EA/IA commitment
166.	Fish and Fish Habitat	Erosion and Sediment Control: • Disturbed areas will be re-contoured to restore drainage patterns to the approximate pre-construction conditions, where practicable.	• Construction	EA/IA commitment
167.	Fish and Fish Habitat	Erosion and Sediment Control: • Complete instream construction in isolation of flowing water (i.e., use isolation methods where surface water exists at the time of construction). Isolation measures will follow the DFO Interim Standard for In-water Site Isolation.	• Construction	EA/IA commitment
168.	Fish and Fish Habitat	Erosion and Sediment Control: • Environmental Monitor(s) will be on-site during construction to monitor the installation, use and removal of temporary water crossing structures and during installation of permanent water crossing structures.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
169.	Fish and Fish Habitat	Erosion and Sediment Control: • Temporary ESC measures must be: ▫ Installed according to the plan; ▫ Installed before or immediately after initial disturbance; and ▫ Monitored and effectively maintained (e.g., repaired, replaced or supplemented with functional materials) throughout construction until permanent erosion control is established, or restoration is complete.	• Construction	EA/IA commitment
170.	Fish and Fish Habitat	Habitat Offsetting and Enhancement: • Waterbodies where HADD and/or death of fish occur will require habitat offsetting in order to comply with the *Fisheries Act* and conditions anticipated in the *Fisheries Act* authorization(s). Once the Project design is finalized, any net effects to fish/fish habitat will be offset through habitat creation or habitat enhancement to achieve no net loss of fish habitat and/or productive capacity. Habitat offsetting and enhancement requirements will be determined in consultation with DFO and First Nations during the detail design permitting phase of the Project.	• Detail design • Construction	EA/IA commitment
171.	Fish and Fish Habitat	Habitat Offsetting and Enhancement: • Habitat offsetting and enhancement requirements will be determined in consultation with DFO and First Nations during the detail design permitting phase of the Project.	• Detail design • Construction	EA/IA commitment
172.	Fish and Fish Habitat	Construction Environmental Management and Monitoring: • During the construction phase a CEMP will be implemented. Management plans will be consistent with the requirements of the Project's permits and authorizations to minimize the potential effects of construction and operations activities on fish and fish habitat. Management Plans will guide the proponent and its contractors in complying with applicable environmental legislation by providing criteria, standard protocols, and commitments to mitigation measures in the EA/IA to eliminate, reduce, and/or offset potential adverse effects to fish and fish habitat. During construction and/or operations, the following key environmental management plans relevant to the Fish and Fish Habitat VC within the broader CEMP will be developed and implemented: ▫ Erosion and Sediment Control Plan; ▫ Fish and Fish Habitat Management Plan; ▫ Surface Water and Storm Water Management and Monitoring Plan; ▫ Air Quality and Dust Control Management Plan; ▫ Construction Blasting Management Plan; and ▫ Vegetation and Invasive Species Management Plan.	• Detail design • Construction • Operations	EA/IA commitment
173.	Fish and Fish Habitat	Construction Environmental Management and Monitoring: • The CEMP and OEMP will include the environmental monitoring requirements during the construction and operation phases of the Project to confirm and document compliance with the provisions of the CEMP and conditions of applicable permits and approvals. During the construction phase, Environmental Monitor(s) and/or Indigenous Monitor(s) will be on-site to observe and document/log the implementation of mitigation measures implemented to minimize the potential effects of construction on fish and fish habitat. The documentation log will identify any deficiencies and record the actions taken to correct any issues of concern.	• Detail design • Construction • Operations	EA/IA commitment
174.	Fish and Fish Habitat	Stockpiled Materials Standard: • The temporary storage, handling and disposal of materials used or generated (e.g., organics, soils, woody debris, temporary earth stockpiles, construction debris, etc.) during site preparation, construction and clean-up will be located a minimum 30 m from waterbodies to reduce the risk of that sediment or deleterious substances entering a waterbody.	• Construction	EA/IA commitment
175.	Fish and Fish Habitat	Stockpiled Materials Standard: • Excess material will be managed and monitored to prevent sediment-laden water from entering watercourses and/or waterbodies and affecting fish habitat.	• Construction	EA/IA commitment
176.	Fish and Fish Habitat	Stockpiled Materials Standard: • Materials stored long-term will be covered and stabilized to reduce erosion and sedimentation.	• Construction	EA/IA commitment
177.	Fish and Fish Habitat	Stockpiled Materials Standard: • Waste materials will be hauled off-site for disposal or placed in environmentally stable locations.	• Construction	EA/IA commitment
178.	Fish and Fish Habitat	Spill Prevention and Response:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• All vehicles and equipment will be stored at least 30 m from waterbodies and operated in a way that prevents the release of deleterious substances into a waterbody, irrespective of their fish-bearing status.		
179.	Fish and Fish Habitat	Spill Prevention and Response: • Re-fueling, service and maintenance of equipment and vehicles will generally be caried out in designated areas at temporary construction camps, and laydown areas along the road, and will be located at least 50 m away from waterbodies, and outside of fish habitat.	• Construction	EA/IA commitment
180.	Fish and Fish Habitat	Spill Prevention and Response: • Any vehicle or equipment that enters a waterbody must be free of fluid leaks and externally cleaned and degreased.	• Construction	EA/IA commitment
181.	Fish and Fish Habitat	Spill Prevention and Response: • Storage of above ground fuel storage tanks and other hazardous materials will be located at least 50 m from waterbody, irrespective of their fish-bearing status.	• Construction	EA/IA commitment
182.	Fish and Fish Habitat	Spill Prevention and Response: • Fuel and hazardous materials will be transported in approved containers in licensed vehicles and stored in such a way to reduce the risk of any deleterious substances from entering a waterbody.	• Construction	EA/IA commitment
183.	Fish and Fish Habitat	Spill Prevention and Response: • Vehicles and equipment will not be permitted to work in-water, unless required. In these cases, works will be conducted under observation by a qualified environmental monitor.	• Construction	EA/IA commitment
184.	Fish and Fish Habitat	Spill Prevention and Response: • Concrete truck washout areas will be located a minimum of 50 m away from the ordinary high-water mark of a waterbody and in a non-porous soil location and will be cleaned be cleaned up at the end of the construction activities.	• Construction	EA/IA commitment
185.	Fish and Fish Habitat	Spill Prevention and Response: • Fuels and other liquid contaminants will be stored in containers with secondary containment able to store 110% of the capacity of the container.	• Construction	EA/IA commitment
186.	Fish and Fish Habitat	Spill Prevention and Response: • Containers will be routinely inspected for leaks.	• Construction	EA/IA commitment

187.	Fish and Fish Habitat	Spill Prevention and Response:
		• Spill mitigation measures (spill kits) will be present on-site in all laydown areas, vehicles, equipment, and other designated locations. In the event of a spill/leak, the following precautions will be implemented:
		  ○ The spill/leak will be contained and either disposed of through site waste handling systems or removed for disposal in approved facilities;
		  ○ Reportable spills (as defined under O.Reg. 675/98) of potentially deleterious materials will be reported to the MECP Spills Action Centre; and
		  ○ If the spill is in fish-bearing water or where potential for harm to fish or fish habitat is likely, the MNR and DFO will also be contacted.
			• Construction	EA/IA commitment

188.	Fish and Fish Habitat	Spill Prevention and Response: • Construction will be modified or delayed during heavy precipitation or run-off events.	• Construction	EA/IA commitment
189.	Fish and Fish Habitat	Spill Prevention and Response: • Signage or reduced speed limits will be considered for implementation over bridges to reduce the risk of vehicle accidents and spills.	• Construction	EA/IA commitment
190.	Fish and Fish Habitat	Spill Prevention and Response: • Individuals working on-site and handling petroleum or other hazardous materials will be trained in best practices related to the transportation and handling of dangerous goods.	• Construction	EA/IA commitment
191.	Fish and Fish Habitat	Spill Prevention and Response: • All dewatering will be conducted in compliance with the Ontario Provincial Standard Specification (OPSS) 517 – Construction Specifications for Control of Water from Dewatering Operations, and OPSS 518 – Construction Specification for Dewatering of Pipeline, Utility, and Associated Structure Excavation	• Construction	EA/IA commitment
192.	Fish and Fish Habitat	Spill Prevention and Response:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• Dispersal mechanisms (e.g., tarping, filter bags) will be used to minimize risk of erosion, as required.		
193.	Fish and Fish Habitat	Spill Prevention and Response: • Existing stream flows will be maintained without interruption or diminishment during construction, where feasible.	• Construction	EA/IA commitment
194.	Fish and Fish Habitat	Spill Prevention and Response: • Fish screens to prevent impingement or entrainment will be utilized to reduce fish mortality. DFO guidance for fish screens (2020) will be followed.	• Construction	EA/IA commitment
195.	Fish and Fish Habitat	Spill Prevention and Response: • Complete instream activity in the shortest timeframe practical to minimize the duration and reduce the risk of severe disturbance from dewatering activities.	• Construction	EA/IA commitment
196.	Fish and Fish Habitat	Spill Prevention and Response: • Manage temporary flows, withdrawal, and discharge, including all water from dewatering operations to reduce the risk of erosion and/or release of sediments to a waterbody.	• Construction	EA/IA commitment
197.	Fish and Fish Habitat	Blasting Restrictions: • A Blasting Management Plan will be prepared and implemented by the proponent or their contractor(s) for the Project that describes specific measures that would be implemented if blasting is required.	• Construction	EA/IA commitment
198.	Fish and Fish Habitat	Blasting Restrictions: • Use blasting mats to reduce the percussive, or risk of fly rock, injures to fish, and /or death of fish.	• Construction	EA/IA commitment
199.	Fish and Fish Habitat	Blasting Restrictions: • Establishing setbacks from fish-bearing waters that are protective of fish.	• Construction	EA/IA commitment
200.	Fish and Fish Habitat	Blasting Restrictions: • When blasting in unavoidable, following the DFO Blasting Guidance (Wright and Hopky, 2008) and Ontario Provincial Standard Specification 120 General Specifications for the Use of Explosives (Ontario Provincial Standards 2019).	• Construction	EA/IA commitment
201.	Fish and Fish Habitat	Blasting Restrictions: • Permitting all blasting works appropriately, including applying for Fisheries Act authorization where the potential for HADD and/or death of fish exists.	• Construction	EA/IA commitment
202.	Fish and Fish Habitat	Blasting Restrictions: • Limiting blasting to areas where other methods, such as drilling and standard excavation, are not possible.	• Construction	EA/IA commitment
203.	Fish and Fish Habitat	Blasting Restrictions: • Preparing site-specific blasting plans when blasting is likely to be required.	• Construction	EA/IA commitment
204.	Fish and Fish Habitat	Blasting Restrictions: • No ammonium nitrate-fuel oil mixtures will be used, due to the production of toxic byproducts (i.e., ammonia).	• Construction	EA/IA commitment
205.	Fish and Fish Habitat	Timing Windows for Construction: • Restricted activity periods will include both Spring and Fall windows to protect fish populations during their spawning, rearing and migratory periods. Based on the species present in the study area, preliminary restricted activity periods are estimated to typically be: ▫ April 1 to June 30 (spring window); ▫ September 1 to June 15 (fall/winter window); and ▫ Restricted activity periods will be based on the species discovered in each specific waterbody.	• Construction	EA/IA commitment
206.	Fish and Fish Habitat	Timing Windows for Construction: • Construction of watercourse crossings will occur outside of restricted activity periods to minimize or avoid risk of injury or mortality to fish.	• Construction	EA/IA commitment
207.	Fish and Fish Habitat	Timing Windows for Construction:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• Where fish sampling has not been conducted, the most restrictive activity period will be applied to each individual watercourse to be protective of fish and fish habitat.		
208.	Fish and Fish Habitat	Timing Windows for Construction: • For waterbody crossing, the proposed restricted activity periods will be applicable to: ▫ Any work below the high-water mark (installation of culverts, construction of bridge piers in-water); ▫ Temporary water crossings where an ice bridge, fording or snow fill is proposed; and ▫ Where beaver dam removals are required.	• Construction	EA/IA commitment
209.	Fish and Fish Habitat	Work Isolation and Fish Rescue: • In- water work will allow for construction and repair of waterbody crossing structures will be isolated (i.e., will occur in the dry) from surrounding fish habitat using cofferdams, aquadams, or other methods acceptable the MNR and DFO such as the requirements in the Interim Code of Practice: Temporary Coffer Dams and Diversion Channels.	• Construction	EA/IA commitment
210.	Fish and Fish Habitat	Work Isolation and Fish Rescue: • Submission of appropriate notification and acquisition of necessary permits/approvals from regulatory agencies will occur.	• Construction	EA/IA commitment
211.	Fish and Fish Habitat	Work Isolation and Fish Rescue: • Temporary dam structures to isolate the work zone will be constructed using clean materials that minimize suspended sediment generation.	• Construction	EA/IA commitment
212.	Fish and Fish Habitat	Work Isolation and Fish Rescue: • Flow will be maintained during in-water works at a level sufficient to sustain aquatic life and prevent upstream impoundment.	• Construction	EA/IA commitment
213.	Fish and Fish Habitat	Work Isolation and Fish Rescue: • Fish rescues will be conducted to relocate fish prior to in-water work, dewatering or conducting works in wetted channels or wetlands. Fish within the isolated workspaces will be rescued (i.e., salvaged and relocated) by qualified professionals under the conditions of a MNR License to Collect Fish for Scientific Purposes to be acquired, and in accordance with requirements in the DFO Interim Standard for In-water Site Isolation.	• Construction	EA/IA commitment
214.	Fish and Fish Habitat	Work Isolation and Fish Rescue: • Fish handling will be minimized, including limiting time spent weighing and measuring fish.	• Construction	EA/IA commitment
215.	Fish and Fish Habitat	Work Isolation and Fish Rescue: • For diversions during isolations, appropriately screened pumps will be used to reduce the risk of entrainment or impingement of fish following the guidance within the interim DFO Code of Practice for end-of-pipe fish protection screens for small water intakes in freshwater.	• Construction	EA/IA commitment
216.	Fish and Fish Habitat	Employee Wildlife Orientations and Restrictions: • Employees or visitors on-site in temporary construction camps or at the permanent maintenance and storage facility will be prohibited from hunting, fishing, or harvesting wildlife.	• Construction	EA/IA commitment
217.	Fish and Fish Habitat	Employee Wildlife Orientations and Restrictions: • Temporary access routes, especially those at or approaching waterbody crossings as well as temporary construction camps and laydowns areas will be revegetated as soon as possible.	• Construction	EA/IA commitment
218.	Fish and Fish Habitat	Employee Wildlife Orientations and Restrictions: • Firearms and angling gear will be prohibited on-site.	• Construction	EA/IA commitment
219.	Fish and Fish Habitat	Employee Wildlife Orientations and Restrictions: • Wildlife orientation and education programs will be delivered on-site to inform personnel about best environmental practices for fish and wildlife in the area.	• Construction	EA/IA commitment
220.	Fish and Fish Habitat	Public Access Restrictions: • Temporary access routes, construction camps, and laydown areas that are not required for operation of the roadway will be reclaimed (i.e., revegetated and blocked from public access as soon as feasible).	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
221.	Fish and Fish Habitat	Public Access Restrictions: • Public access to the road route and supportive infrastructure areas (camps, etc.) will be prohibited during construction unless authorized by the proponent.	• Construction	EA/IA commitment
222.	Fish and Fish Habitat	Public Access Restrictions: • Stopping on the roadway during its operations will be prohibited, except in designated rest areas and in emergency situations.	• Construction	EA/IA commitment
223.	Fish and Fish Habitat	Public Access Restrictions: • Fencing or other barricades will be installed near watercourses and on bridges to deter fishing.	• Construction	EA/IA commitment
224.	Fish and Fish Habitat	Public Access Restrictions: • Increased access may require regulatory changes, such as restrictions on fishing in certain locations or changes to harvesting by First Nation community members to prevent additional fishing pressure. However, these legislative changes or changes to First Nation exercise of their rights to harvesting of fish are beyond the direct control the Project.	• Construction	EA/IA commitment
225.	Fish and Fish Habitat	Project Design: • Installing restrictive fencing and/or barricades near waterbody crossing sites, including on bridge structures to deter fishing.	• Construction	EA/IA commitment
226.	Fish and Fish Habitat	Project Design: • Siting designated rest areas along the road as far as practical from potential fishing locations.	• Construction	EA/IA commitment
227.	Fish and Fish Habitat	Additional mitigation measures to address potential effects on Fish and Fish Habitat are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing; • Section 5.2 – Petroleum Handling and Storage; • Section 5.3 – Spill Prevention and Emergency Response; • Section 5.5 – Materials Handling and Storage; • Section 5.6 – Working Within or Near Fish-Bearing Watercourses; • Section 5.7 – Watercourse Crossings; • Section 5.8 – Temporary Watercourse Diversions; • Section 5.9 – Fish Passage; • Section 5.10 – Fish Salvage; • Section 5.11 – Culvert Maintenance and Installation; • Section 5.12 – Blasting Near a Watercourse; • Section 5.16 – Erosion and Sediment Control; • Section 5.17 – Concrete Washout Management Practices; • Section 5.18 – Dust Control Practices; • Section 5.19 – Aggregate Pit Decommissioning; • Section 5.20 – Quarry Site Selection and Development Requirements; • Section 5.21 – Site Decommissioning and Rehabilitation; • Section 5.22 – Water Quality Monitoring; and • Section 5.23 – Prevention of the Transfer of Invasive Species.	• Construction • Operations	EA/IA commitment
228.	Fish and Fish Habitat - Monitoring	Monitoring will be conducted by qualified individual(s) during instream construction (e.g., installation of culverts or bridges) or where active water taking and discharge occurs to observe implementation and report on the effectiveness of the procedures and mitigation measures for minimizing potential effects to fish and fish habitat.	• Construction	EA/IA commitment
229.	Fish and Fish Habitat - Monitoring	Regular inspections and monitoring of installed erosion and sediment control (ESC) measures to verify they are effective and to identify corrective action(s), where applicable.	• Construction	EA/IA commitment
230.	Fish and Fish Habitat - Monitoring	Culvert monitoring programs to remove debris, prevent fish passage interruptions, and assess blockages and/or ponding.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
231.	Fish and Fish Habitat - Monitoring	Monitoring streamflow, turbidity, total suspended solids and other related water quality parameters during construction to confirm effectiveness of ESC measures.	• Construction	EA/IA commitment
232.	Fish and Fish Habitat - Monitoring	Periodic fish community and habitat surveys to detect changes in fish assemblages.	• Construction	EA/IA commitment
233.	Fish and Fish Habitat - Monitoring	Pre- and post-construction fish habitat assessments to evaluate habitat alterations, including monitoring changes to stream morphology and substrate caused by increased sediment loads or changes in streamflow.	• Construction • Operations	EA/IA commitment
234.	Fish and Fish Habitat - Monitoring	Where a DFO Fisheries Act authorization is required, a qualified fisheries specialist will also conduct the following construction monitoring tasks, in addition to the conditions specified in the authorization: • Review existing plans for the Project, including but not limited to, ESC plans, temporary flow management, dewatering plans and environmental management plans, to ensure these are being followed with the appropriate measures in-place. • Confirm the mitigation measures identified in the EA/IA are being installed/implemented and maintained as designed including providing field advice and necessary corrective actions for non-compliance, and documents whether these measures are protecting fish and fish habitat effectively throughout construction. • Undertake monitoring of off-setting measures outlined in the authorization, including that off-setting measures were constructed as designed. • Undertake post-construction monitoring and prepare annual reporting to confirm that the off-setting measures are functioning as designed and successful in providing fish habitat.	• Detail design • Construction	EA/IA commitment
235.	Vegetation and Wetlands	Indigenous community members will have an active role in developing and implementing management plans.	• Detail design • Construction	EA/IA commitment
236.	Vegetation and Wetlands	An Environment Committee will be established to facilitate communication and engagement during construction and operations of the Project. Committee members will include Webequie First Nation Elders and Knowledge Holders, other First Nations with interest in participating, and appropriate project representatives, to: facilitate communication and engagement during construction and operations of the Project; facilitate use of Indigenous Knowledge in project activities; facilitate evaluation of land use information; and facilitate development of appropriate monitoring programs, protocols and management plans as it relates to Vegetation and Wetlands VC.	• Detail design • Construction • Operations	EA/IA commitment
237.	Vegetation and Wetlands	Project components (i.e., roadway, structures, camps/laydown areas, access roads, and aggregate extraction) have been designed to minimize the footprint area and reduce impermeable surfaces.	• Construction	EA/IA commitment
238.	Vegetation and Wetlands	To the extent possible, flexibility in design standards has been applied to reduce Project Footprint and removals requirements (e.g., limit size of in roadside ditches).	• Construction	EA/IA commitment
239.	Vegetation and Wetlands	New bridges and culverts at waterbody crossing have been designed at right angles where possible to reduce the footprint of the structures and thereby limit the vegetation removals required in riparian areas.	• Construction	EA/IA commitment
240.	Vegetation and Wetlands	Mitigation measures have been included in the Project design to limit changes in hydrology and include installing culverts or temporary bridges using best management practices and following conditions of environmental approval.	• Construction	EA/IA commitment
241.	Vegetation and Wetlands	Develop and implement management plans in the CEMP and OEMP related to the protection of vegetation and wetlands. An important plan to develop is for Erosion and Sediment Control (ESC) to minimize run-off, limit erosion on exposed slopes and substrates, and prevent the introduction of sediment or other deleterious materials that would adversely affect vegetation and watercourses. The ESC Plan will describe applicable best management practices and will follow existing permits and guidelines to limit erosion and sediment/soil transport from wind and water. The CEMP and OEMP will also include components relating to soil management that provide direction on topsoil stripping, stockpiling, salvage, and prioritized areas for restoration/reclamation, which are expected to mitigate changes to soil quality and quantity.	• Detail design • Construction	EA/IA commitment
242.	Vegetation and Wetlands	Clearing activities at wetland/peatland areas will be planned to occur during the winter, where possible, to avoid unnecessary disturbance of soils and vegetation as well as minimize compaction of soils.	• Construction	EA/IA commitment
243.	Vegetation and Wetlands	During construction, clearing and grubbing will be limited to the permanent development area and associated temporary supportive infrastructure (e.g., access roads, camps). During operation, it will be limited to those areas within road ROW requiring vegetation management for that phase of the Project.	• Operations	EA/IA commitment
244.	Vegetation and Wetlands	Restoration, reclamation and clean-up activities will occur progressively throughout construction of the Project. These activities will include, but not be limited to, removing refuse, grading disturbed areas, contouring disturbed slopes to a stable profile, re-establishing natural drainage patterns and, seeding to re-establish vegetation. Temporary disturbance areas will be restored to a natural state under the direction of qualified professionals.	• Construction	EA/IA commitment
245.	Vegetation and Wetlands	Removal limits for the Project Footprint (road ROW, camps/laydown areas, aggregate sources, and access roads) will be flagged or fenced to restrict vehicle and worker activities to designated areas and prevent direct vegetation loss or alteration outside of these locations.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
246.	Vegetation and Wetlands	Mitigation measures outlined in Appendix E (Mitigation Measures) and those developed as part of the CEMP and OEMP (e.g., Soil Management Plan, Site Restoration and Monitoring Plan, etc.) will be implemented to address items such as re-grading, soil compaction, and final restoration/reclamation of disturbed areas.	• Detail design • Construction • Operations	EA/IA commitment
247.	Vegetation and Wetlands	Vegetation control during the Operations Phase will be limited to mechanical methods that involve cutting, trimming or removing trees, brush (shrubs) and/or groundcover (grass) in the late fall to improve visibility for drivers or minimize the risk of hazard trees falling onto the roadway or supportive facilities. Various types of cutting and mowing equipment will be used including chainsaws, riding mowers, and weed eaters.	• Operations	EA/IA commitment
248.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • All vehicles and heavy equipment will remain within designated clearing limits.	• Construction	EA/IA commitment
249.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • Implement tree felling and grubbing procedures to minimize risk of damage to adjacent vegetation.	• Construction	EA/IA commitment
250.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • Ensure procedures outlined in the ESC Plan are adhered to control run-off, minimize erosion on exposed slopes and substrates, and prevent the introduction of sediment or other deleterious materials from vegetation assemblages and watercourses.	• Construction	EA/IA commitment
251.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • Where practicable, clearing and grubbing will occur in stages as road construction advances to limit erosion and sedimentation.	• Construction	EA/IA commitment
252.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • When feasible, all equipment, materials, and supplies for clearing and grubbing activities will be stored in designated areas when not in use. Designated areas during construction include construction camp(s) and area(s) for stockpiling, waste storage, fuel storage and refuelling.	• Construction	EA/IA commitment
253.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • Vegetation is to be primarily removed by mechanical means, except within 10 m of a waterbody. In these areas, vegetation will be removed manually, using chain saws and other hand-held equipment, while leaving the under growth and duff layer undisturbed to prevent erosion, until such time as construction of foundations for bridges and culverts is initiated.	• Construction	EA/IA commitment
254.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • Designated areas for brush, timber and mulch will be located a minimum of 50 m from any waterbody, with the exception of the aggregate/rock source area ARA-2, which will include a vegetation buffer zone of a minimum of 100 m in width from the unnamed lake.	• Construction	EA/IA commitment
255.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • Within the clearing limits, all brush and trees, except those identified to be saved, are to be cut level with the ground, and all surface debris, fallen timber, slash and brush is to be disposed of as directed or permitted. Disposal may involve burning, spreading and compacting, chipping, or transport of merchantable or unmerchantable timber to Webequie First Nation for community use.	• Construction	EA/IA commitment
256.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • No burning of cleared and grubbed material will occur in areas with deep organic soils.	• Construction	EA/IA commitment
257.	Vegetation and Wetlands	Vegetation Clearing and Grubbing: • Prior to any vegetation removal, all areas having the potential to contain rare plant species will be surveyed. Any identified rare specimens will be transplanted by qualified personnel before clearing begins.	• Construction	EA/IA commitment
258.	Vegetation and Wetlands	Water Crossing Structures and Changes to Hydrology: • Where practicable, all waterbody crossings will be designed using single-span elements (bridges or culverts) to minimize encroachment into stream channels and reduce effects on water flow, water levels under variable flow conditions, and riparian vegetation.	• Construction	EA/IA commitment
259.	Vegetation and Wetlands	Water Crossing Structures and Changes to Hydrology:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• All watercourse crossings will be constructed in accordance with DFO's Measures to Protect Fish and Fish Habitat (2022) and applicable Codes of Practice (DFO, 2024) and MNR's Environmental Guidelines for Access Roads and Water Crossings.		
260.	Vegetation and Wetlands	Water Crossing Structures and Changes to Hydrology: • Temporary watercourse diversions will be constructed during low-flow conditions. They will also be designed to accommodate flows, thereby preventing upstream flooding while maintaining downstream flow conditions to minimize effects on vegetation during temporary works. Flow to downstream vegetated areas will be maintained at all times while the worksite is isolated (i.e., during the construction of temporary crossings such as culverts and bailey bridges).	• Construction	EA/IA commitment
261.	Vegetation and Wetlands	Water Crossing Structures and Changes to Hydrology: • When pumped diversions are required, water will be drawn from near the surface of the waterbody to minimize turbidity. The pumping system will be sized to accommodate expected watercourse flow and maintain both upstream and downstream vegetation during the lifetime of the diversion. Pumps will be discharged onto geofabrics, filter bags or an alternative approved by the Proponent to dissipate the energy of discharge, mitigate erosion of channel bank vegetation, and provide water quality treatment.	• Construction	EA/IA commitment
262.	Vegetation and Wetlands	Water Crossing Structures and Changes to Hydrology: • Groundwater dewatering and pumping activities to allow for installation or repair of structures is regulated through a permitting process (e.g., Environmental Activity and Sector Registry (EASR), or Permit to Take Water (PTTW)). As part of the supporting the PTTW or EASR applications, hydrogeological studies will be undertaken to detail the dewatering impacts on groundwater levels and any indirect effects to vegetation near the dewatering sites. Site specific discharge plans, mitigation measures and monitoring plans to protect water quality and vegetation will be further developed as part of the permitting process and industry best management practices will be implemented to minimize potential temporary groundwater drawdown, manage dewatering volumes and treat dewatering effluent.	• Detail design • Construction	EA/IA commitment
263.	Vegetation and Wetlands	Water Crossing Structures and Changes to Hydrology: • To maintain or enhance hydraulic connections between the upgradient and downgradient sides of the road and allow groundwater to flow naturally, crushed stones (rockfill) and/or equalization culverts will be used at wetland and peatland crossings at intervals of 100 m to 250 m.	• Construction	EA/IA commitment
264.	Vegetation and Wetlands	Water Crossing Structures and Changes to Hydrology: • In cut areas, groundwater seepage (if any) will be controlled and managed through roadside drainage systems (e.g., roadside ditches), allowing groundwater to infiltrate into the ground and recharge the local groundwater regime.	• Construction	EA/IA commitment
265.	Vegetation and Wetlands	Water Crossing Structures and Changes to Hydrology: • All culverts and bridge structures will be monitored on a scheduled basis to prevent obstructions from causing flooding or drought conditions in vegetation communities adjacent to the road. Particular attention will be paid during the spring freshet.	• Construction • Operations	EA/IA commitment
266.	Vegetation and Wetlands	Grading and Soil Disturbances: • Erosion and sediment control measures will be inspected by the proponent's Contractor on a regular basis and after every major rain or spring melt event, with necessary repairs being made immediately after deficiencies are identified. Inspections will be confirmed by the proponent's Contractor and include opportunities for Indigenous Monitors to participate in the monitoring program.	• Operations	EA/IA commitment
267.	Vegetation and Wetlands	Grading and Soil Disturbances: • Procedures outlined in the ESC Plan shall be followed to control run-off, minimize erosion on exposed slopes and substrates, and prevent sediment or other deleterious materials from entering vegetation assemblages and watercourses.	• Construction • Operations	EA/IA commitment
268.	Vegetation and Wetlands	Grading and Soil Disturbances: • Vegetation cover shall be preserved for as long as possible. Wherever practicable, it will be removed in stages as construction of the road advances, with site grading and disturbance activities being halted during heavy rainstorms and exceedingly wet conditions.	• Construction	EA/IA commitment
269.	Vegetation and Wetlands	Grading and Soil Disturbances: • The Project will provide direction on topsoil stripping, stockpiling, salvage, and placement on the landscape, which is expected to mitigate changes to soil quality and quantity. This guidance (i.e., protocols and procedures) will form part of the Soil Management Plan and be developed and implemented as part of the CEMP and OEMP for the Project.	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
270.	Vegetation and Wetlands	Grading and Soil Disturbances: • Machines and equipment used for site grading will be selected, where practicable, to minimize soil disturbance and soil compaction. Compacted areas will be ripped or otherwise treated to loosen soil and facilitate natural revegetation.	• Construction	EA/IA commitment
271.	Vegetation and Wetlands	Grading and Soil Disturbances: • In order to maintain existing drainage flow paths through the flat floodplains and peatlands in the east-west segment of the road, equalization culverts (approximately 1 m diam.) will be placed at regular intervals along the road to maintain localized minor flow paths across the road.	• Construction	EA/IA commitment
272.	Vegetation and Wetlands	Grading and Soil Disturbances: • To prevent barrier effects from the road, and ensure the maintenance of existing groundwater flows, materials selected for road construction, especially the portion below the existing ground surface / groundwater table, will have the same or higher permeability compared to the surrounding native soils.	• Construction	EA/IA commitment
273.	Vegetation and Wetlands	Grading and Soil Disturbances: • As necessary, underlying crushed stones (rockfill) and/or equalization culverts will be used in wetlands/peatlands to maintain natural hydraulic connections between the upgradient and downgradient sides of the road and allow groundwater to flow naturally through it.	• Construction	EA/IA commitment
274.	Vegetation and Wetlands	Grading and Soil Disturbances: • The road design has considered consolidation and compression processes of the peat layers associated with road construction (loading), which may result in reduced permeability of the peat, and thus alter natural groundwater flow directions and pathways. This aspect of the road design will be further evaluated in the detail design phase for the Project.	• Construction	EA/IA commitment
275.	Vegetation and Wetlands	Grading and Soil Disturbances: • All disturbed banks and shoreline areas that will be restored to their original conditions as soon as practicable, including re-vegetation if necessary.	• Construction	EA/IA commitment
276.	Vegetation and Wetlands	Introduction of Invasive Species: • All construction equipment (including tools, clothing and vehicles) that arrive on the site will be visually inspected to confirm they are in clean condition, free of mud and debris that could harbor seeds of invasive vegetation species. All inspections of equipment and vehicles destined for the Project will adhere to the Clean Equipment Protocol for Industry (2016) and requirements of the Canada-Ontario Invasive Species Centre and the Ontario Ministry of Natural Resources (ontarioinvasiveplants.ca).	• Construction	EA/IA commitment
277.	Vegetation and Wetlands	Introduction of Invasive Species: • Qualified environmental monitors will document all invasive species occurrences observed.	• Construction • Operations	EA/IA commitment
278.	Vegetation and Wetlands	Introduction of Invasive Species: • If imported fill/soil is used outside of the study areas for the Project, the proponent's contractor will confirm the materials are free of contaminants, including roots, stem fragments and seeds of invasive plant species.	• Construction	EA/IA commitment
279.	Vegetation and Wetlands	Introduction of Invasive Species: • All reclamation areas (previously disturbed work sites) will be restored using native trees, shrubs, and/or groundcover seed mixes.	• Construction	EA/IA commitment
280.	Vegetation and Wetlands	Introduction of Invasive Species: • Should any invasive species be located in the study areas, they will be targeted for removal using manual or mechanical methods. The use of herbicides will only be considered where other control methods have proven ineffective. Should it be deemed necessary, any herbicides would be applied by a licensed applicator in accordance with Ontario regulations.	• Construction	EA/IA commitment
281.	Vegetation and Wetlands	Introduction of Invasive Species: • Education and training programs will be implemented to familiarize workers with potential invasive species, with associated reporting procedures.	• Construction	EA/IA commitment
282.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• All hazardous materials products will be transported in accordance with the federal Transportation of Dangerous Goods Act, Ontario Dangerous Goods Transportation Act and Ontario Technical Standards and Safety Act. This will include any materials transported in tanker trucks, drums, or other approved containers.		
283.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • All employees involved in handling and/or storing fuels and hazardous materials will be qualified to handle these materials and have a Workplace Hazardous Materials Information System training.	• Construction	EA/IA commitment
284.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • Designated fuel storage areas will be established at temporary construction camps and/or the permanent Maintenance and Storage Facility (MSF), with barricaded double-walled above-ground storage tanks (ASTs) or other suitable fuel tanks with secondary containment measures (e.g., berm system) for safety. A fuelling truck may also be used for refuelling vehicles and equipment on-site and filling fuel tanks in temporary construction camps.	• Construction	EA/IA commitment
285.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • Fuelling and storage areas will include appropriate drainage controls including secondary containment with a storage capacity of at least 110% of the fuel tank. Drainage will be retained in a sump where hydrocarbons can be captured and separated prior to the release of any rainwater run-off, as appropriate.	• Construction	EA/IA commitment
286.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • Equipment with reduced mobility, such as heavy lift cranes and excavators, will have fuel delivered by a mobile tank and re-fuelling will take place on site, according to safety procedures. Where fuelling of vehicles and other mobile or heavy equipment is required at sites along the road then fuelling will not be permitted within 50 m of a permanent waterbody.	• Construction	EA/IA commitment
287.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • Explosives to be used for blasting activities at aggregate source areas (i.e., ARA-2 and ARA-4) for rock and aggregate materials will be stored in a secured container. Siting of these storage areas will meet the provincial standards and licensing requirements as specified in the Mines and Mining Plants Regulation of the Ontario *Occupational Health and Safety Act*.	• Construction	EA/IA commitment
288.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • Solid waste (hazardous and non-hazardous) and liquid waste (oils, lubricants) generated during the Construction Phase will be stored at temporary construction camps, and during the Operations Phase at the permanent MSF. Solid waste handling and storage areas at camps and the MSF will include a waste recycling area to reduce the amount of solid waste generated. Liquid industrial waste such a waste oils, lubricants and other used oil will be stored in drums at camps and the MSF and will be regularly shipped for disposal. Organic solid waste at the camps and MSF will be temporarily stored in bear-proof containers before being transported to a waste disposal site.	• Construction	EA/IA commitment
289.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • All collected sewage shall be managed on-site through use of sewage treatment plant and discharged according to permit and/or authorization requirements; or shall be removed for off-site disposal at an existing, approved sewage disposal facility.	• Construction	EA/IA commitment
290.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • To avoid potential impacts to vegetation, surface water, and groundwater from winter operations of the road, no storage, handling or application of sand or salt is proposed for de-icing of the WSR during the winter season. However, sand may be applied in select locations based on road safety concerns.	• Construction • Operations	EA/IA commitment
291.	Vegetation and Wetlands	Chemical or Hazardous Material Spills and Waste: • If chemical or hazardous material spills occur as result of the Project, the proponent's contractor will implement the procedures in the Spill Prevention and Emergency Response Management Plan to be prepared as part of the CEMP and OEMP. The proposed mitigation and protection measures to manage spills should they occur are described in Section 5.2 of Appendix E (Mitigation Measures). Some of the key measures include: The proponent's contractor will designate a qualified supervisor as the on-site spills and emergency response coordinator. The emergency response coordinator will have the authority to redirect manpower and equipment to respond in the event of a spill. ○ Individuals working on-site and handling hazardous materials and waste will be trained and aware of the procedures in the Spill Prevention and Emergency Response Management Plan.	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		○ Emergency spill kits will be available near fuel and hazardous materials handling locations (e.g., spill kits at temporary laydown areas and/or temporary construction camps) and in vehicles. Construction equipment and vehicles will be regularly maintained to minimize leaks. Absorbent pads, or other precautions, such as high-density polyethylene groundsheets, will be used to contain fuel and prevent it from being spilled onto the ground surface. All spills of petroleum products or other hazardous substances will be reported to the MECP Spill Action Centre immediately after of the incident occurs and the Contractor will follow any instructions given by the MECP regarding spill response.		
292.	Vegetation and Wetlands	Dust and Air Emissions, and Subsequent Deposition: • Engine idling policies and procedures will be implemented to reduce fuel consumption of vehicles and equipment, and to limit GHG emissions.	• Construction	EA/IA commitment
293.	Vegetation and Wetlands	Dust and Air Emissions, and Subsequent Deposition: • The Project will use energy efficient, lower-emission vehicles and equipment, where practical.	• Construction	EA/IA commitment
294.	Vegetation and Wetlands	Dust and Air Emissions, and Subsequent Deposition: • The proponent's contractor will implement effective dust suppression techniques, such as on-site watering, as necessary to minimize fugitive dust from the road, earth stockpiles and disturbed areas as required. Should chemical dust suppressants, such as magnesium chloride, be required, they will not be applied within 50 m of a water crossing or beyond the road footprint. In general, the use and application of dust suppressants, where applicable, will be conducted in accordance with Ministry of Transportation Ontario Provincial Standard Specification 506 – Construction Specification for Dust Suppressants.	• Construction	EA/IA commitment
295.	Vegetation and Wetlands	Dust and Air Emissions, and Subsequent Deposition: • A Construction Blasting Management Plan will be prepared as part of the CEMP and OEMP to describe the procedures to limit the amount of chemical residue in the environment that may harm vegetation. The Blasting and Communication Management Plan will include measures to address stakeholder and Indigenous community notification, storage, transport and use of explosives, environmentally significant areas, and waterbodies. Prior to blasting, terrestrial surveys will be conducted to identify environmentally sensitive features within 250 m from the blasting location and where required mitigation measures will be modified or enhanced, if needed.	• Detail design • Construction	EA/IA commitment
296.	Vegetation and Wetlands	Changes to Microclimate Conditions: • The design of culverts and roadside drainage systems, including final grading within the road ROW will to the extent practicable minimize potential changes to local microclimatic conditions (e.g., increased drifting and local albedo effects).	• Construction	EA/IA commitment
297.	Vegetation and Wetlands	Changes to Microclimate Conditions: • The use of vegetation windbreaks and snow fencing will be considered along stretches of the roadway where cleared areas for the road have created increased wind conditions affecting adjacent vegetation.	• Construction	EA/IA commitment
298.	Vegetation and Wetlands	Increased Risk of Fire: • No fires shall be started without first taking sufficient precautions to ensure that the fire can be kept under control.	• Construction	EA/IA commitment
299.	Vegetation and Wetlands	Increased Risk of Fire: • To the extent possible, burning of brush and wood from vegetation clearing activities will be avoided during the dry season. In northern Ontario the dry season typically occurs during the peak summer months (July/August) of a given year.	• Construction	EA/IA commitment
300.	Vegetation and Wetlands	Increased Risk of Fire: • Should burning be required for the disposal of biomass, a Burn Permit under the Ontario *Forest Fire Prevention Act* will be obtained from the MNR. All conditions imposed by the Burn Permit will be adhered to.	• Construction	EA/IA commitment
301.	Vegetation and Wetlands	Increased Risk of Fire: • All reasonable steps will be taken in order to prevent a fire from burning out of control or spreading from land owned or occupied for construction purposes.	• Construction	EA/IA commitment
302.	Vegetation and Wetlands	Increased Risk of Fire:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• In the event that a wildfire is identified where construction or operation activities are taking place, all reasonable attempts will be made to extinguish the wildfire using available equipment, services, and workers on-site.		
303.	Vegetation and Wetlands	Increased Risk of Fire: • Signage indicating current fire hazard potential, updated regularly, will be posted along all road at adequate intervals during construction and operations.	• Construction • Operations	EA/IA commitment
304.	Vegetation and Wetlands	Increased Risk of Fire: • No fires will be permitted at designated rest areas for use by the public during operations of the Project.	• Operations	EA/IA commitment
305.	Vegetation and Wetlands	Additional mitigation measures to address potential effects on Vegetation and Wetlands are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing; • Section 5.2 – Petroleum Handling and Storage; • Section 5.5 – Materials Handling and Storage; • Section 5.7 – Temporary Watercourse Crossings; • Section 5.8 – Temporary Watercourse Diversions; • Section 5.11 – Bridge and Culvert Installation; • Section 5.16 – Erosion and Sediment Control; • Section 5.17 – Concrete Washout Management Practices; • Section 5.18 – Dust Control Practices; and • Section 5.23 – Prevention of the Transfer of Invasive Species.	• Detail design • Construction • Operations	EA/IA commitment
306.	Vegetation and Wetlands - Monitoring	Qualified environmental inspector(s) and/or Indigenous EMs will be appointed to guide implementation, monitor, and report on the effectiveness of the construction procedures and mitigation measures.	• Construction	EA/IA commitment
307.	Vegetation and Wetlands - Monitoring	Following construction of the Project, annual reports documenting the recommended long-term restoration and monitoring programs (Section 11.4) will be submitted to the appropriate regulatory agencies and interested Indigenous communities and groups by qualified professional.	• Operations	EA/IA commitment
308.	Vegetation and Wetlands - Monitoring	A dedicated Wetlands Function Monitoring Program will be developed and implemented. Details of this proposed program are presented in Appendix K-4.	• Operations	EA/IA commitment
309.	Vegetation and Wetlands - Monitoring	A Vegetation and Wetlands Off-Setting (compensation) Program will be developed and implemented in accordance with the methodologies outlined in Sections 11.4.5 and Appendix K-3.	• Detail design • Operations	EA/IA commitment
310.	Vegetation and Wetlands - Monitoring	Modifications to restoration and monitoring programs, including adaptive management actions will be implemented by the proponent, if the annual reporting identify deficiencies are occurring.	• Detail design • Operations	EA/IA commitment
311.	Vegetation and Wetlands - Monitoring	For the life of the Project, if additional, unpredicted, Project-related impacts are occurring to vegetation, wetlands, swift remedial action will be undertaken by the proponent, aided by qualified professionals.	• Operations	EA/IA commitment
312.	Wildlife and Wildlife Habitat	Developing a Vegetation and Invasive Species Management Plan, Wildlife Management Plan and Site Restoration and Monitoring Plan as part of the CEMP and implementing it during the construction phase.	• Detail design • Construction	EA/IA commitment
313.	Wildlife and Wildlife Habitat	Reviewing, updating, and implementing these plans (Vegetation and Invasive Species Management Plan, Wildlife Management Plan and Site Restoration and Monitoring Plan) during the operations phase.	• Operations	EA/IA commitment
314.	Wildlife and Wildlife Habitat	Minimizing the extent of clearings at temporary work areas.	• Construction	EA/IA commitment
315.	Wildlife and Wildlife Habitat	Following all environmental conditions of approval.	• Construction	EA/IA commitment
316.	Wildlife and Wildlife Habitat	Maintaining minimum 30 m vegetation protection zones (buffers) around waterbodies and avoiding the clearance of riparian vegetation to the extent practicable.	• Construction	EA/IA commitment
317.	Wildlife and Wildlife Habitat	Endeavour to maintain a cleared ROW of 35 m to the extent practicable.	• Construction	EA/IA commitment
318.	Wildlife and Wildlife Habitat	Installing construction fencing to clearly delineate the boundaries of work areas. Fencing will be designed to serve as exclusion fencing for reptiles.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
319.	Wildlife and Wildlife Habitat	Inspecting fencing, and other site-specific environmental measures to confirm they have been appropriately installed and are functioning correctly.	• Construction	EA/IA commitment
320.	Wildlife and Wildlife Habitat	Avoiding the placement of temporary areas of disturbance, to the extent practicable, in sensitive habitats such as amphibian breeding ponds.	• Construction	EA/IA commitment
321.	Wildlife and Wildlife Habitat	If evidence of a snake hibernaculum is identified during the construction phase, halting work and following appropriate reporting protocols.	• Construction	EA/IA commitment
322.	Wildlife and Wildlife Habitat	Utilizing progressive reclamation to restore temporary areas of disturbance as soon as practicable following the completion of work in each area. Restoration approaches will facilitate natural regeneration but may occasionally be supplemented with native self-sustaining species via transplant, seeding and/or planting.	• Construction	EA/IA commitment
323.	Wildlife and Wildlife Habitat	Conducting effectiveness monitoring.	• Operations	EA/IA commitment
324.	Wildlife and Wildlife Habitat	Keeping construction footprints as small as possible and minimizing the extent of clearings at temporary work areas.	• Construction	EA/IA commitment
325.	Wildlife and Wildlife Habitat	To the extent practicable, retaining amphibian and reptile habitat features in situ where it is safe to do so.	• Construction	EA/IA commitment
326.	Wildlife and Wildlife Habitat	To the extent practicable, conducting any Project activities that could potentially affect snake hibernacula between May 15 and August 31. Otherwise, minimize construction or operations during the active season for amphibians and reptiles in northern Ontario.	• Construction • Operations	EA/IA commitment
327.	Wildlife and Wildlife Habitat	Limiting ground disturbance to the extent necessary for construction. Retaining landforms adjacent to the ROW in situ where possible.	• Construction	EA/IA commitment
328.	Wildlife and Wildlife Habitat	Minimizing the Project Footprint and limiting the extent of vegetation clearing to the extent practicable.	• Construction	EA/IA commitment
329.	Wildlife and Wildlife Habitat	Installing exclusion fencing only in strategic locations. During detail design, consider incorporating eco-passages with fencing.	• Construction	EA/IA commitment
330.	Wildlife and Wildlife Habitat	To the extent practicable, conducting maintenance activities that may cause barriers outside of sensitive life cycle period for amphibians and reptiles.	• Operations	EA/IA commitment
331.	Wildlife and Wildlife Habitat	Checking culverts and other potential amphibian crossing areas for blockages. Appropriately removing any found.	• Construction	EA/IA commitment
332.	Wildlife and Wildlife Habitat	Where appropriate, installing temporary reptile and exclusion fencing in locations along the ROW where upland habitat borders wetlands and waterbodies. Fencing should be installed during the overwintering period and maintained throughout the active season.	• Construction	EA/IA commitment
333.	Wildlife and Wildlife Habitat	Having a qualified resource specialist inspect temporary exclusion fencing at least twice weekly as well as after large rainfall events to verify it is functioning correctly.	• Construction	EA/IA commitment
334.	Wildlife and Wildlife Habitat	Establishing speed limits within the Project Footprint, with lower limits enforced near sensitive habitats (e.g., breeding habitats and known crossing routes).	• Construction	EA/IA commitment
335.	Wildlife and Wildlife Habitat	Providing driver training to Project personnel to encourage reduced speeds and raise awareness of sensitivity of herptiles to vehicle strikes.	• Construction	EA/IA commitment
336.	Wildlife and Wildlife Habitat	Restricting access to the road during construction and controlling access to operational areas using signage, gates and other appropriate measures.	• Construction	EA/IA commitment
337.	Wildlife and Wildlife Habitat	Conducting construction and operations activities outside of sensitive habitats and sensitive periods for amphibians and reptiles (e.g., when they are migrating between breeding and overwintering habitats).	• Construction • Operations	EA/IA commitment
338.	Wildlife and Wildlife Habitat	Conducting activities that have the potential to disturb snake hibernacula when the reptiles would not be inhabiting them (May 15 to August 31).	• Construction	EA/IA commitment
339.	Wildlife and Wildlife Habitat	To the extent practicable, conducting other construction and operations activities outside of the active season for amphibians and reptiles (April 15 and October 15) in the vicinity of sensitive habitats, including when they are migrating between breeding and overwintering habitats.	• Construction • Operations	EA/IA commitment
340.	Wildlife and Wildlife Habitat	Ensuring that Project personnel are made aware of the characteristics of snake hibernacula and know the appropriate protocols to follow if any are encountered during construction.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
341.	Wildlife and Wildlife Habitat	In locations where potential amphibian habitat is being removed (e.g., wetlands where overwintering is occurring), installing exclusion fencing prior to the overwintering period.	• Construction	EA/IA commitment
342.	Wildlife and Wildlife Habitat	Having a qualified resource specialist search areas where exclusion fencing has been installed, to confirm no amphibians or reptiles are trapped on the side to be disturbed.	• Construction	EA/IA commitment
343.	Wildlife and Wildlife Habitat	Blasting will be conducted outside sensitive windows, unless specific approvals have been granted by regulatory agencies and will be limited to areas where drilling or standard excavation are not possible. Regardless of location, blasting shall have control measures implemented for fly rock.	• Construction	EA/IA commitment
344.	Wildlife and Wildlife Habitat	Open excavations and blasting areas will be fenced when unattended.	• Construction	EA/IA commitment
345.	Wildlife and Wildlife Habitat	Additional mitigation measures to address potential effects on Wildlife and Wildlife Habitat are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing; • Section 5.3 – Spill Prevention and Emergency Response; • Section 5.4 – Noise Control; • Section 5.5 – Materials Handling and Storage; • Section 5.12 – Blasting Near a Watercourse; • Section 5.14 – Wildlife and Wildlife Habitat; • Section 5.16 – Erosion and Sediment Control; • Section 5.18 – Dust Control Practices; • Section 5.19 – Aggregate Pit Decommissioning; • Section 5.20 – Quarry Site Selection and Development Requirements; • Section 5.21 – Site Decommissioning and Rehabilitation; • Section 5.23 – Prevention of the Transfer of Invasive Species.	• Construction • Operations	EA/IA commitment
346.	Wildlife and Wildlife Habitat	Site-specific erosion and sediment control and construction staging plans, along with air and dust control measures will be developed and approved prior to construction to address potential deposition of dust and/or sediment that can change soil quality, alter vegetation and wetlands, which can adversely influence wildlife habitat. Water will be used to control dust from exposed excavations, disturbed ground surfaces, pits, quarries and traffic areas. Erosion and sediment control measures may include use of sediment fencing, silt curtains, and temporary erosion control cover (e.g., straw mulch, wood chips, erosion control blanket, etc.) to prevent the migration of sediment off-site.	• Detail design • Construction	EA/IA commitment
347.	Wildlife and Wildlife Habitat	Using existing roads, trails, and other areas of disturbance to access to Project Footprint, to the extent possible, thereby minimizing habitat loss through the creation of new access roads.	• Detail design • Construction	EA/IA commitment
348.	Wildlife and Wildlife Habitat	Qualified project personnel will identify sensitive habitats that are important to wildlife prior to and during construction (e.g., significant wildlife habitat, areas of high use).	• Detail design • Construction	EA/IA commitment
349.	Wildlife and Wildlife Habitat	Limiting the Project Footprint where practicable and minimizing the extent of clearing near areas known to be sensitive.	• Detail design • Construction	EA/IA commitment
350.	Wildlife and Wildlife Habitat	Engaging and receiving approval from the appropriate agencies (e.g., MECP, MNR, CWS-ECCC) prior to the removal of any identified SWH, high-use areas, or other sensitive ecological features that have been identified as being important to wildlife.	• Detail design • Construction	EA/IA commitment
351.	Wildlife and Wildlife Habitat	Using construction fencing to clearly define and delineate the boundaries of work areas to prevent habitat loss or damage beyond the limits of the Project Footprint.	• Detail design • Construction	EA/IA commitment
352.	Wildlife and Wildlife Habitat	Delineating and marking construction boundaries and restricting the clearing of vegetation outside of species-specific, or group-specific timing windows.	• Construction	EA/IA commitment
353.	Wildlife and Wildlife Habitat	Retaining compatible wildlife trees, shrubs, and coarse woody debris (CWD) in environmentally sensitive areas where it is safe to do so. Known sensitive ecological features will be clearly marked and have associated setbacks to prevent their loss.	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
354.	Wildlife and Wildlife Habitat	Enhance existing wildlife habitat, where appropriate, by planting and seeding self-sustaining species that are indigenous to the area.	• Construction	EA/IA commitment
355.	Wildlife and Wildlife Habitat	All vegetation clearing will be undertaken using the appropriate equipment to minimize and avoid impacts outside of the work zone (Project Footprint).	• Detail design • Construction	EA/IA commitment
356.	Wildlife and Wildlife Habitat	Employ soil decompaction, place similar native soils and plant self-sustaining native vegetation as part of site remediation efforts in areas disturbed by temporary support infrastructure.	• Construction	EA/IA commitment
357.	Wildlife and Wildlife Habitat	Develop a Petroleum Handing and Storage Plan, and a Spill Prevention and Emergency Response Plan as part of the CEMP. Use reasonable efforts to have all personnel adequately trained to execute these plans.	• Detail design • Construction	EA/IA commitment
358.	Wildlife and Wildlife Habitat	Store and handle all petroleum according to Ontario Technical Standards and Safety Act. Transport all petroleum products according to Transportation of Dangerous Goods Act (Canada) and Ontario Dangerous Goods Transportation Act. Train all personnel to appropriately handle and store all products in compliance with the above Acts.	• Construction • Operations	EA/IA commitment
359.	Wildlife and Wildlife Habitat	Maintain, store, transfer and dispense fuels or other hazardous materials in designated areas, a minimum of 50 m away from waterbodies.	• Construction • Operations	EA/IA commitment
360.	Wildlife and Wildlife Habitat	Use only approved containers and licenced vehicles to transport fuel or hazardous materials. Regularly inspect containers for leaks and repair or replace, as necessary.	• Construction • Operations	EA/IA commitment
361.	Wildlife and Wildlife Habitat	Verify that vehicles and equipment have pollution control mechanisms in good working order.	• Construction • Operations	EA/IA commitment
362.	Wildlife and Wildlife Habitat	Install signage to raise awareness about reduced speed limits within the LSA.	• Construction • Operations	EA/IA commitment
363.	Wildlife and Wildlife Habitat	Delay construction during heavy precipitation or run-off events.	• Construction	EA/IA commitment
364.	Wildlife and Wildlife Habitat	Hold information sessions and/or circulate education materials to familiarize WSR users with best management practices to prevent the introduction or spread of invasive species in the LSA.	• Construction • Operations	EA/IA commitment
365.	Wildlife and Wildlife Habitat	Avoid carrying out activities that are likely to disturb wildlife during sensitive periods in their life cycle (e.g., using heavy machinery or blasting in proximity to active nests or dens).	• Construction • Operations	EA/IA commitment
366.	Wildlife and Wildlife Habitat	Progressively restore or reclaim areas that are no longer being actively used for construction.	• Construction • Operations	EA/IA commitment
367.	Wildlife and Wildlife Habitat	Avoid or minimize the piling of logs, branches and other biomass in a manner that creates unintentional barriers to wildlife movement. When piling cannot be avoided, remove slash materials that are unintentionally acting as barriers as soon as practicable.	• Construction • Operations	EA/IA commitment
368.	Wildlife and Wildlife Habitat	Educate Project personnel about the dangers of feeding wildlife and the importance of keeping camps, rest areas and other locations free of materials that would attract wildlife.	• Construction • Operations	EA/IA commitment
369.	Wildlife and Wildlife Habitat	Maintain camps, rest areas and other locations in the Project Footprint free of refuse to avoid attracting wildlife.	• Construction • Operations	EA/IA commitment
370.	Wildlife and Wildlife Habitat	Food wastes will be collected on site, temporarily stored in wildlife-proof containers, and transported out of the Project Footprint to be recycled or deposed of at a licenced disposal facility.	• Construction • Operations	EA/IA commitment
371.	Wildlife and Wildlife Habitat	Petroleum-based products and other materials that could attract wildlife be stored in a secure area that wildlife cannot access.	• Construction • Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
372.	Wildlife and Wildlife Habitat	Use reasonable efforts to conduct required maintenance activities required during the operations phase are completed outside of sensitive life cycle periods (e.g., calving season for Moose).	• Operations	EA/IA commitment
373.	Wildlife and Wildlife Habitat	Use reasonable efforts to avoid creating continuous barriers to wildlife movement during snow removal activities.	• Construction • Operations	EA/IA commitment
374.	Wildlife and Wildlife Habitat	Use artificial lighting only where required for worker safety. Angle/shield lights to illuminate only targeted areas.	• Construction • Operations	EA/IA commitment
375.	Wildlife and Wildlife Habitat	Provide all Project personnel with information materials and education sessions so they are aware wildlife have the right-of-way if encountered during the construction phase (unless there is imminent risk to health and safety).	• Construction • Operations	EA/IA commitment
376.	Wildlife and Wildlife Habitat	Implement road access restrictions during construction to reduce hunting opportunities.	• Construction • Operations	EA/IA commitment
377.	Wildlife and Wildlife Habitat	Prohibit firearms from construction camps.	• Construction • Operations	EA/IA commitment
378.	Wildlife and Wildlife Habitat	Fence, or otherwise block temporary access roads, laydowns and construction areas until vegetation has reestablished itself.	• Construction • Operations	EA/IA commitment
379.	Wildlife and Wildlife Habitat	Limit the number of rest areas and pull-offs for road users during operations phase.	• Operations	EA/IA commitment
380.	Wildlife and Wildlife Habitat	All maintenance turnaround areas will be fenced to restrict public access.	• Construction • Operations	EA/IA commitment
381.	Wildlife and Wildlife Habitat	The ROW will be maintained with less palatable forage for herbivores to avoid attracting them to the area.	• Construction • Operations	EA/IA commitment
382.	Wildlife and Wildlife Habitat	Implement wildlife sighting and incident reporting procedures.	• Construction • Operations	EA/IA commitment
383.	Wildlife and Wildlife Habitat	Roadkill will be removed promptly to avoid attracting additional predators to the area.	• Construction • Operations	EA/IA commitment
384.	Wildlife and Wildlife Habitat	Integrate safe road travel protocols that include wildlife awareness training in the Health and Safety Management plan.	• Construction • Operations	EA/IA commitment
385.	Wildlife and Wildlife Habitat - Monitoring	Developing and implementing a CEMP that includes detailed plans for wildlife management and monitoring.	• Detail design • Construction	EA/IA commitment
386.	Wildlife and Wildlife Habitat - Monitoring	Qualified Environmental Monitors are to be present on-site prior to and during construction activities.	• Construction	EA/IA commitment
387.	Wildlife and Wildlife Habitat - Monitoring	A qualified Environmental Monitor will conduct a daily site inspection prior to commencement of project works and activities to ensure wildlife are absent from work areas. A daily checklist will reflect completion of the inspection.	• Construction	EA/IA commitment
388.	Wildlife and Wildlife Habitat - Monitoring	Roads secured by exclusion fencing will be monitored daily for wildlife road mortalities and injuries. Wildlife road mortalities documented EM(s) or others will be submitted to a Qualified Biologist as part of a reporting protocol that will be developed and included in the CEMP and OEMP.	• Construction	EA/IA commitment
389.	Wildlife and Wildlife Habitat - Monitoring	An incidental wildlife reporting protocol will also be developed and included in the CEMP and EMP.	• Construction	EA/IA commitment
390.	Wildlife and Wildlife Habitat - Monitoring	**All Species** • Remote Camera Monitoring will take place along the Webequie Supply Road (WSR) right-of-way (ROW) and at reference sites to monitor the occurrence and distribution of wildlife. This program will commence during the construction phase and continue during the operations phase.	• Construction	EA/IA commitment
391.	Wildlife and Wildlife Habitat - Monitoring	**Moose**	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• GPS collars will be considered for deployed on female Moose to determine if seasonal movements and habitat use change during road construction. The schedule for surveys in terms of number of collars, and the commencement and duration of the survey program, will be determined in consultation with the Ministry of Environment, Conservation and Parks and interested Indigenous communities.		
392.	Wildlife and Wildlife Habitat - Monitoring	**Furbearers** • North American Beaver lodge surveys will be conducted to determine occupancy status prior to any in water activities during construction.	• Construction	EA/IA commitment
393.	Wildlife and Wildlife Habitat - Monitoring	**Furbearers** • If clearance is required within the wolverine denning period (February 1 to May 1) target denning surveys will be conducted within a 2 km radius of the proposed work activity.	• Construction	EA/IA commitment
394.	Wildlife and Wildlife Habitat - Monitoring	**Bats** • Pre-construction bat maternity roost surveys will be conducted within the Project Footprint to identify potential maternity roosting habitat. ▫ If potential maternity roosting habitat is identified and clearance activities are scheduled to take place within the bat maternity roosting season (May 1 to August 31) exit surveys or acoustic monitoring may be required. Requirements will be determined in consultation with the Ministry of Environment, Conservation and Parks.	• Construction	EA/IA commitment
395.	Wildlife and Wildlife Habitat - Monitoring	**Birds** • Where vegetation clearing activities are proposed outside of the migratory bird breeding window for nesting zone C6 (between August 30 and April 24) pre-clearing nest sweeps will be conducted by qualified avian biologists with support from Indigenous EMs. If during the surveys birds are found within the proposed clearance area and presenting breeding behaviour, these areas will be flagged and protected with a disturbance buffer which will be maintained until the fledglings have left the nest or the nest becomes unoccupied.	• Construction	EA/IA commitment
396.	Wildlife and Wildlife Habitat - Monitoring	**Birds** • Pre-clearance surveys for raptor nests will occur along parts of the WSR alignment in forest ecosites containing suitable nesting trees.	• Construction	EA/IA commitment
397.	Wildlife and Wildlife Habitat - Monitoring	**Birds** • Shorebirds and waterfowl will be part of pre-clearance wildlife surveys to determine the presence of any waterfowl and shorebird significant nesting habitats near the WSR alignment prior to clearing.	• Construction	EA/IA commitment
398.	Wildlife and Wildlife Habitat - Monitoring	**Reptiles and Amphibians** • Pre-construction sweeps for reptiles and amphibians will be conducted within the Project Footprint. Any animals discovered within the footprint will be relocated to suitable habitat outside work zones.	• Construction	EA/IA commitment
399.	Wildlife and Wildlife Habitat - Monitoring	**Reptiles and Amphibians** • Annual eDNA monitoring conducted pre-construction, during construction and during operation to detect for presence of ranavirus in waterbodies in the Project Footprint.	• Construction	EA/IA commitment
400.	Wildlife and Wildlife Habitat - Monitoring	**All Species** ▪ The wildlife road mortality program will be conducted during the e operations phase of the Project. Road users will be encouraged to report any wildlife-vehicle encounters. When a carcass is present, mortality incidents will be investigated by an EM. Incidents will be tracked to identify locations with multiple encounters/mortalities, implement corrective actions and track effectiveness.	• Operations	EA/IA commitment
401.	Wildlife and Wildlife Habitat - Monitoring	**All Species** • Remote Camera Monitoring will take place along the proposed alignment and at reference sites to monitor the occurrence and distribution of wildlife within the project area. This program will commence during the construction phase and continue during the operations phase.	• Operations	EA/IA commitment
402.	Wildlife and Wildlife Habitat - Monitoring	**Moose** • GPS collars will be considered to be deployed on female moose to during the operations phase to determine if seasonal movements and habitat use change from road construction. The schedule for surveys in terms of number of collars, and the commencement and duration of the survey program, will be determined in consultation with the Ministry of Environment, Conservation and Parks.	• Operations	EA/IA commitment
403.	Wildlife and Wildlife Habitat - Monitoring	**Furbearers** • Any furbearers detected during Wolverine run-pole station surveys (see Section 13 – Assessment of Effects on Species at Risk) will be included as part of reporting on furbearer abundance and distribution during the operations phase.	• Operations	EA/IA commitment
404.	Wildlife and Wildlife Habitat - Monitoring	**Furbearers** • Beaver lodge surveys to monitor abundance and distribution of beavers will continue as part of operations monitoring.	• Operations	EA/IA commitment
405.	Wildlife and Wildlife Habitat - Monitoring	**Bats**	• Operations	EA/IA commitment

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		• Bat presence and species diversity will be surveyed post-construction and compared to baseline data using acoustic monitoring. The surveys are proposed to occur a minimum of three times in the first five years of operation.		
406.	Wildlife and Wildlife Habitat - Monitoring	**Migratory Songbirds** ▪ Ultrasonic recording units (ARU) and point count surveys along the ROW and at reference sites will be conducted and compared to baseline data. The surveys are proposed to occur a minimum of three times in the first five years of operation. The schedule for surveys in terms of frequency of surveys and the number of years following the commencement of road operations will be determined in consultation with Environment and Climate Change Canada.	• Operations	EA/IA commitment
407.	Wildlife and Wildlife Habitat - Monitoring	**Shorebirds** • Surveys for shorebirds will follow the Ontario Shorebird Survey Protocol. Surveys are proposed to take place four times a year twice in the spring migration period and twice in the fall migration period. The surveys are proposed to occur during years 1, 3 and 5 in the first five years of operation. The schedule for surveys in terms of frequency of surveys and the number of years following the commencement of road operations will be determined and confirmed in consultation with Environment and Climate Change Canada.	• Operations	EA/IA commitment
408.	Wildlife and Wildlife Habitat - Monitoring	**Waterfowl** • Breeding Bird Survey for Waterfowl Nesting Areas will take place using the protocols described in Birds and Bird Habitats: Guidelines for Wind Power Projects. Surveys are proposed to take place four times a year twice in the spring migration period and twice in the fall migration period. The surveys are proposed to occur during years 1, 3 and 5 in the first five years of operation. The schedule for surveys in terms of frequency of surveys and the number of years following the commencement of road operations will be determined and confirmed in consultation with Environment and Climate Change Canada.	• Operations	EA/IA commitment
409.	Wildlife and Wildlife Habitat - Monitoring	**Reptiles and Amphibians** • ARU surveys for anurans will be included as part of the same study design for migratory songbirds.	• Operations	EA/IA commitment
410.	Species at Risk	Indigenous community members will have an active role in developing and implementing management plans.	• Detail design • Construction	EA/IA commitment
411.	Species at Risk	An Environment Committee will be established to facilitate communication and engagement during construction and operations of the Project. Committee members will include Webequie First Nation Elders and Knowledge Holders, other First Nations with interest in participating, and appropriate project representatives, to: facilitate communication and engagement during construction and operations of the Project; facilitate use of Indigenous Knowledge in project activities; facilitate evaluation of land use information; and facilitate development of appropriate monitoring programs, protocols and management plans as it relates to Species at Risk VC.	• Detail design • Construction • Operations	EA/IA commitment
412.	Species at Risk	Habitat delineation and mapping activities will work as precautionary protective measures. This will include construction fencing being installed to clearly delineate the boundaries of the work areas. The goal of the fencing is to prevent habitat damage and destruction beyond the limits of the work area. Delineation and fencing will also restrict human access to sensitive habitats.	• Construction	EA/IA commitment
413.	Species at Risk	Restrictions will be put in place to reduce the stopping of vehicles and equipment along the roadway. Maps will be created identifying no-go zones and the importance of these zones will be shared during environmental training and awareness program for workers.	• Construction	EA/IA commitment
414.	Species at Risk	All vegetation clearing will be undertaken using the appropriate equipment to minimize and avoid impacts outside of the work zone (Project Footprint). Cleared vegetation will be disposed of according to best management practices, such as chipping, spreading, compacting or transporting logs or timber to Webequie First Nation for community use.	• Detail design • Construction	EA/IA commitment
415.	Species at Risk	The CEMP to be prepared and implemented for the Project will identify the protocols and procedures for the stockpiling and management of vegetation and soils, including how disturbed areas will be stabilized and monitored.	• Detail design • Construction	EA/IA commitment
416.	Species at Risk	Timing for construction activities will be established to reduce the potential impact on wildlife species and their habitat. The timing windows[1] for construction activities (e.g., vegetation clearing) have been determined in consultation with the MECP and Canadian Wildlife Service-Environment and Climate Change Canada (CWS-ECCC).	• Construction	EA/IA commitment
417.	Species at Risk	The effectiveness of mitigation measures will be evaluated during construction and operations, with mitigation measures being modified or enhanced as necessary through adaptive management.	• Detail design • Construction • Operations	EA/IA commitment

[1] In wildlife biology, timing windows are specific periods of the year when certain activities can be conducted with minimal impact on wildlife. Timing windows vary based on the ecological needs of certain species (or species groups) and are often tied to life cycles, with stages that involve breeding, nesting or young often being considered the most important to avoid.

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
418.	Species at Risk (SAR) – SAR and SAR Habitat	Habitat Structural Change: • Following approval conditions, authorizations or permits issued for the Project, including those from CWS-ECCC and MECP.	• Construction	EA/IA commitment
419.	Species at Risk – SAR and SAR Habitat	Habitat Structural Change: • Retaining trees, shrubs, and coarse woody debris in environmentally sensitive areas where it is safe to do so. Known sensitive ecological features will be clearly marked and have associated setbacks to minimize the likelihood of habitat change.	• Construction	EA/IA commitment
420.	Species at Risk – SAR and SAR Habitat	Habitat Structural Change: • To the extent possible, progressively reclaiming areas during construction and restoring the habitat to resemble pre-construction conditions. Ideally, this would mean that all non-permanent worksites are restored as soon as possible after work in a certain area has been completed. The restoration work would include the removal of construction debris, decompaction and amendments to soils, and revegetating disturbed areas.	• Construction	EA/IA commitment
421.	Species at Risk – SAR and SAR Habitat	Habitat Structural Change: • Restoration activities will incorporate approaches designed to permit natural regeneration of vegetation, and, when necessary, the establishment of self-sustaining species that are indigenous to the area by transplanting individuals or using root or stem cuttings. All planting must be carried out under appropriate weather conditions (e.g., low or no wind, low or no rainfall, soft or thawed ground).	• Construction	EA/IA commitment
422.	Species at Risk – SAR and SAR Habitat	Habitat Structural Change: • Having qualified personnel conduct site visits and inspections to verify that site-specific environmental protection measures have been implemented correctly, maintained and, as necessary, repaired, until the vegetation has been re-established (e.g., erosion and sediment control).	• Construction	EA/IA commitment
423.	Species at Risk – SAR and SAR Habitat	Habitat Structural Change: • Conducting follow-up monitoring to evaluate the effectiveness of mitigation and enhancement measures.	• Construction • Operations	EA/IA commitment
424.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Development of a Surface Water and Storm Water Management and Monitoring Plan as part of the CEMP and implementing it during the construction phase.	• Detail design • Construction	EA/IA commitment
425.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Ensuring that any short-term water takings from surface water and/or groundwater sources for construction purposes are carried out in accordance with O. Reg. 387/04, as amended by O. Reg. 64/16 under the *Ontario Water Resources Act* and industry best standards. Appropriate permits (e.g., permit to take water) and registrations (e.g., Environmental Activity Sector Registry registration) will be obtained prior to the commencement of work.	• Construction	EA/IA commitment
426.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Following any conditions, permits or authorizations relating to environmental approvals for the Project, including those from ECCC, MNR and MECP, during the construction phase of the Project.	• Construction	EA/IA commitment
427.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Minimizing areas where site grading or ground hardening occurs. This can include designing areas used for temporary infrastructure, including access roads and storage yards, efficiently, and incorporating the use of coarse materials (i.e., with the same or higher permeability compared to surrounding native soils) in the base of permanent roads to permit infiltration and groundwater recharge.	• Construction	EA/IA commitment
428.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Utilizing industry best management practices to ensure dewatering (pumping) volumes are minimal.	• Detail design • Construction	EA/IA commitment
429.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Restoring disturbed areas (resulting from temporary supportive infrastructure) by decompacting the soil, and either replacing it, or supplementing it with similar native soils, prior to planting or seeding self-sustaining indigenous vegetation.	• Construction	EA/IA commitment
430.	Species at Risk – SAR and SAR Habitat	Hydrological Changes:	• Construction	EA/IA commitment

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		• Timing construction of permanent and/or temporary waterbody crossing structures with low-flow conditions to minimize diversions of surface water and including temporary flow diversions or bypass pumping during construction to minimize environmental effects (including flow volumes) upstream and downstream of the site. These measures will provide SAR with continued access to a source of surface water, and, in some cases, foraging opportunities.		
431.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Further minimizing potential changes to water quantity by designing permanent water body crossings with bridges or culverts whenever possible. The use of single-span elements will limit the encroachment of structures into stream channels and thus minimize their impact(s) on discharge.	• Construction	EA/IA commitment
432.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Installing localized drainage cross-culverts (900 mm diameter) at regular intervals in low-lying areas to prevent water from ponding on either side of the roadway, instead maintaining existing hydrological flow paths. In wetland habitat, crossing structures should be spaced no more than 50 m apart, and up to 300 m apart in other continuous habitat features.	• Detail design • Construction	EA/IA commitment
433.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Designing the roadway and swales with low impact development procedures in mind. The designs include permanent swales that are designed to convey, treat, and attenuate stormwater runoff from the road, thereby improving the removal of contaminants over traditional channel roadside ditch designs.	• Construction	EA/IA commitment
434.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Ensuring all mitigation measures implemented during the construction phase comply with relevant federal and provincial regulations and guidelines regarding the collection and storage of explosives and solid waste (e.g., federal Explosives Act).	• Construction	EA/IA commitment
435.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Testing discharge water quality to ensure it meets Ontario Provincial Water Quality Objectives, with detailed plans in place for monitoring and contingency measures recommended. Construction workers may be required to temporarily stop their work so contingency measures can be employed.	• Construction	EA/IA commitment
436.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Avoiding the use of herbicides during the construction phase and avoiding the use of road salt on the ROW for de-icing.	• Construction	EA/IA commitment
437.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Developing an Air Quality and Dust Control Management Plan as part of the CEMP. Recommendations from this plan will be implemented during construction. Typical mitigation measures include using environmentally certified equipment to conduct the work, ensuring such equipment is maintained regularly, minimizing the idling of equipment, and setting speed limits within the Project Footprint and LSA.	• Detail design • Construction	EA/IA commitment
438.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Incorporating noise abatement, emission and pollution control equipment on vehicles, equipment and machinery operating in the Project Footprint, and ensuring that all vehicles, equipment, and machinery are regularly inspected to ensure they are in good working order.	• Construction	EA/IA commitment
439.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Following industry best management practices and adhering to relevant federal and/or provincial thresholds regarding the deposit of acidifying compounds on plants.	• Detail design • Construction	EA/IA commitment
440.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Where practicable, using multi-passenger vehicles to transport personnel to the job site and limit vehicle emissions.	• Construction	EA/IA commitment
441.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Minimizing the burning of wooden logs, branches and other vegetation that has been removed from the LSA (current objective is ≤ ten percent). Ensure any slash pile burning from clearing operations has been approved by the appropriate regulatory agencies and complies with O. Reg. 207/96, subject to agreements with nearby First Nations.	• Construction	EA/IA commitment
442.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Minimizing dust-generating activities during periods of high wind to limit dust emissions.	• Construction	EA/IA commitment

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443.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Where necessary, implementing dust control measures, such as water sprays or dust control solutions that can be applied on the road surface. The use of chloride containing compounds will be minimized to the extent possible. Sprays may also be used to increase moisture levels in the air on dry days. Water application rates shall be carefully monitored to ensure there is no erosion of sediments, or pooling and/or runoff of water.	• Construction	EA/IA commitment
444.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Should magnesium chloride, or other chemical dust suppressants be required, they will not be applied within 50 m of a water crossing or beyond the road footprint. In general, the use and application of dust suppressants, where applicable, will be conducted in accordance with MTO OPSS – Construction Specification for Dust Suppressants.	• Construction	EA/IA commitment
445.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Using temporary cover on soil and fill stockpiles (e.g., wood chips, straw, tarps) or alternately, keeping them moist during construction (i.e., by applying water) to minimize drifting of soils.	• Construction	EA/IA commitment
446.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Within the western half of the WSR Project Footprint, where more stable soil conditions are found, using a chip seal treatment on the road, which is similar to asphalt pavement, and consists of a tar slurry and gravel.	• Construction	EA/IA commitment
447.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Within the eastern portion of the LSA, where there are peatlands with relatively poor soil conditions, using a granular A-type gravel on the driving surface.	• Construction	EA/IA commitment
448.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Development of a Petroleum Handling and Storage Plan as part of the CEMP to minimize the chance of accidental spills or leaks in the Project Footprint or LSA, and a Spill Prevention and Emergency Response Plan to ensure an effective and efficient clean-up response should any spills or leaks occur. This plan will be developed in accordance with all applicable contract specifications, environmental legislation, permits and authorizations.	• Construction	EA/IA commitment
449.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Handling and storing all petroleum products in compliance with the *Ontario Technical Standards and Safety Act* and transporting all petroleum products in accordance with the federal *Transportation of Dangerous Goods Act* and *Ontario Dangerous Goods Transportation Act.*	• Construction	EA/IA commitment
450.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Making personnel aware of the Petroleum Handling and Storage Plan and the Spill Prevention and Emergency Response Plan; educating them to appropriately handle and store all products in compliance with provincial and federal legislation and guidelines.	• Construction	EA/IA commitment
451.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Storing and maintaining all vehicles and equipment at least 30 m from waterbodies and operating them in a way that prevents the release of deleterious substances into waterbodies or waterways, which could negatively impact SAR habitat.	• Construction	EA/IA commitment
452.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Storing, transferring, and dispensing fuels in areas well set back from waterbodies (e.g., 50 m setback from the ordinary high watermark) in designated areas at temporary construction camps and laydown areas along the road.	• Construction	EA/IA commitment
453.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Only transporting fuel and hazardous materials in approved containers in licenced vehicles. Such containers will be routinely inspected for leaks.	• Construction	EA/IA commitment
454.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Incorporating signage and reduced speed limits within the LSA to reduce the risk of vehicle accidents and spills.	• Construction	EA/IA commitment
455.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Delaying construction during heavy precipitation or run-off events, to minimize the extent spilled substances may travel.	• Construction	EA/IA commitment
456.	Species at Risk – SAR and SAR Habitat	Accidental Spills:	• Construction	EA/IA commitment

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		• Maintaining on-site spill kits that can be used to manage and adsorb any spilled material that is visible on the water's surface. Such kits will be provided in fuel and hazardous materials storage and handling facilities, in on-site work areas and/or in vehicles and equipment. All personnel will be trained in spill response practices and procedures.		
457.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Reporting any major spill of petroleum or other hazardous material to the MECP Spill Action Centre, immediately after occurrence of the environmental accident (as per Ontario Regulation 675/98).	• Construction	EA/IA commitment
458.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Containing and immediately cleaning up any spill that is identified as "non-reportable" under subsection 6(2) of Ontario Regulation 224/07 in accordance with the Emergency Response Plan developed for the site.	• Construction	EA/IA commitment
459.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Removing any contaminated soil and/or vegetation from the local area and subsequently replacing the soils that have been exposed to spilled material as soon as possible.	• Construction	EA/IA commitment
460.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Allowing indigenous vegetation to regenerate local areas where soil and/or vegetation removal has occurred, occasionally enhancing re-establishment by planting or seeding programs that use self-sustaining species indigenous to the area.	• Construction	EA/IA commitment
461.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Developing a Noise and Vibration Management Plan that includes guidance to mitigate the effects of noise and vibration from construction activities, a Light Management Plan that will describe procedures and best management practices to control light emissions from construction activities, and a Construction Blasting Management Plan with protocols to reduce sensory impacts on SAR.	• Detail design • Construction	EA/IA commitment
462.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Following the conditions, permits or authorizations relating to environmental approvals that were issued for the Project, including those from ECCC, MNR, and MECP.	• Construction	EA/IA commitment
463.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Avoiding new disturbances (e.g., clearing and grubbing) beyond the Project Footprint to the extent practicable, particularly at waterbody crossing sites.	• Construction	EA/IA commitment
464.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Minimizing the extent of vegetation cleared at all navigable waterbody crossings within the Project Footprint to reduce sensory impacts on SAR.	• Construction	EA/IA commitment
465.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • To the extent practicable, maximizing efforts to retain vegetation and landforms along the ROW to provide screening (buffering) of Project activities and components on adjacent lands.	• Construction	EA/IA commitment
466.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Ensuring temporarily disturbed areas within the Project Footprint are restored (i.e., allowed to naturally regenerate and/or seeded to permit the establishment of self-sustaining native vegetation) as soon as possible after construction has been completed in that area.	• Construction	EA/IA commitment
467.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Adhering to timing windows and restrictions to avoid sensitive life-cycle periods for SAR (e.g., maternity roosting, breeding).	• Construction	EA/IA commitment
468.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • If adherence to the timing windows and restrictions is not possible, the proponent's contractor will develop site specific mitigation measures and effectiveness monitoring in consultation with appropriate regulatory agencies (e.g., MECP, CWS-ECCC).	• Construction	EA/IA commitment
469.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances:	• Construction	EA/IA commitment

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		• Requiring the Contractor to comply with noise By-laws, and, where applicable, using noise control measures as agreed to by the adjacent Indigenous communities and municipal authorities.		
470.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Requiring all vehicles and equipment supplied by the Contractor for use on the Project to be effectively 'sound-reduced' though the use of noise abatement equipment such as silencers, mufflers, and acoustic shields. Noise abatement equipment will be maintained in good working order.	• Construction	EA/IA commitment
471.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Where practicable, turning off vehicles and equipment when not in use.	• Construction	EA/IA commitment
472.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • To the extent possible, having construction activities typically occur during daylight hours, typically within one (1) 10-hour shift per day, within the hours of 7:00 to 19:00, unless otherwise regulated by adjacent Indigenous communities or municipal authorities with a written exemption that can be provided to the proponent upon request. • Enforcing speed limits for vehicles and prohibiting the recreational use of vehicles (e.g., snowmobiles, all-terrain vehicles [ATVs]) by Project personnel on the Project Footprint.	• Construction	EA/IA commitment
473.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Preparing and Submitting a Construction Blasting Management Plan for the Project to the Contractor prior to the initiation of blasting activities. Blasting restriction 'windows' for the protection of aquatic and wildlife species will be addressed in the plan.	• Detail design • Construction	EA/IA commitment
474.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Carrying out blast operations in accordance with Department of Fisheries and Oceans (DFO) guidelines (where applicable) and Ontario Provincial Standard Specification 120 General Specification for the Use of Explosives.	• Construction	EA/IA commitment
475.	Species at Risk – SAR and SAR Habitat	Sensory Disturbances: • Blasting will be completed as quickly as possible to shorten the duration of disturbance.	• Construction	EA/IA commitment
476.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Developing an invasive species management and monitoring plan as part of the Vegetation and Invasive Species Management Plan in the CEMP and implementing the plan during construction. This plan would include measures to detect, control (i.e., remove) and monitor areas containing exotic species.	• Detail design • Construction	EA/IA commitment
477.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Following all environmental approval conditions, authorizations or permits issued for the Project, including those from ECCC, MNR and MECP.	• Construction	EA/IA commitment
478.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Holding information sessions, producing education materials and/or installing signage to familiarize workers with potential invasive species, as well as what they should do when invasive species are encountered in the LSA (i.e., appropriate reporting procedures). Such sessions or materials should be delivered prior to the start of construction and repeated whenever new personnel become engaged in Project-related construction activities.	• Construction	EA/IA commitment
479.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Reducing the potential of introducing invasive plants by including visual inspections (of vehicles, machinery and equipment) as part of standard operating procedures during construction. Particular attention should be paid to the undersides, wheels, wheel arches, guards, radiator grills and other attachments as applicable.	• Construction	EA/IA commitment
480.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Removing any invasive materials found, including seeds or other plant materials, by scraping or washing the exterior surfaces of vehicles and equipment. Removal activities will be conducted at least 30 m away from any watercourse, waterbody or vegetation community, with the material being isolated until it can be safely removed from the RSA.	• Construction	EA/IA commitment
481.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species:	• Construction	EA/IA commitment

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		• Such measures are aimed at ensuring construction machinery and vehicles arrive on the site in a clean condition, free of mud and debris that could harbor seeds of invasive vegetation species.		
482.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Prohibiting the recreational use of motorized vehicles by Contractors and limiting the use of off-road vehicles during construction.	• Construction	EA/IA commitment
483.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Minimizing soil disturbance to the extent practicable, to reduce the loss of topsoil and preserving a base layer that is sufficient to permit natural regeneration. Disturbed areas shall be contoured to minimize soil erosions and encourage the growth of native vegetation. Where necessary, these areas may be enhanced by planting and/or seeding self-sustaining indigenous species as soon as possible following disturbance.	• Construction	EA/IA commitment
484.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Where practicable, using local soil banks from grading operations for re-vegetation and restoration treatments, and when not practical, incorporating transplants from the RSA, and/or using an approved plant species of importance to Indigenous communities and/or native seed mix that has been sourced from a reputable supplier.	• Construction	EA/IA commitment
485.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Confirming imported fill or soil is free of contaminants, including seeds or materials from invasive species, to reduce the potential of their introduction or spread in the LSA.	• Construction	EA/IA commitment
486.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Targeting invasive non-native species for removal through manual, mechanical and/or chemical methods. To the extent possible, mechanical means such as mowing, tilling, digging or pulling will be used for vegetation rather than chemical methods.	• Construction	EA/IA commitment
487.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Herbicides are not proposed for use to control weeds. However, if mechanical control methods prove ineffective in weed management, and represent a concern with respect to the spread to abutting natural areas, then the use of herbicides may be considered by the Proponent. Should herbicide be used as a method of invasive plant control, all herbicides will be applied by a licensed applicator in accordance with Ontario regulations.	• Construction	EA/IA commitment
488.	Species at Risk – SAR and SAR Habitat	Habitat Structural Change: • Aggregate (sand, gravel) and rock material will be required for road maintenance and repair activities, and may involve additional vegetation clearing; however, these areas will be progressively rehabilitated during the construction and operation phases of the Project. A Vegetation Management and Monitoring Plan and a Wildlife Management and Monitoring Plan will also be developed and implemented as part of the OEMP.	• Detail design • Construction • Operations	EA/IA commitment
489.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Mitigation measures from the Surface Water and Stormwater Management and Monitoring Plan will be reviewed and updated as necessary as part of the OEMP. They will subsequently be implemented.	• Detail design • Construction	EA/IA commitment
490.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Any conditions, permits or authorizations relating to environmental approvals, including those from ECCC, MNR and MECP, will be adhered to during the operations phase of the Project.	• Operations	EA/IA commitment
491.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Neither road salt, nor sand is currently proposed to be used on the WSR for winter maintenance activities (i.e., de-icing). However, sand may be applied in select locations based on road safety concerns.	• Construction • Operations	EA/IA commitment
492.	Species at Risk – SAR and SAR Habitat	Hydrological Changes: • Herbicides are not proposed for use to control weeds. However, if mechanical control methods prove ineffective in weed management, and represent a concern with respect to the spread to abutting natural areas, then the use of herbicides may be considered by the Proponent. Should herbicides be used as a method of invasive plant control, all herbicides will be applied by a licensed applicator in accordance with Ontario regulations.	• Construction	EA/IA commitment

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493.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Reviewing and updating (as necessary) the Air Quality and Dust Control Management Plan as part of the OEMP. This plan will include a procedure for documenting compliance with applicable standards and conditions (as identified in authorizations, permits and licences for the site).	• Detail design • Construction	EA/IA commitment
494.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Integrating a monitoring program (as described in the Air Quality and Dust Control Management Plan) and measures to control or limit particulate emissions that result from handling of soil or aggregates by mobile equipment, or from passenger vehicles.	• Detail design • Construction	EA/IA commitment
495.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Placing a permanent Maintenance Storage Facility (MSF) near the WSR for the storage of equipment and materials (i.e., for inspection, maintenance, and repair activities).	• Construction	EA/IA commitment
496.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Installing a dedicated diesel generator set(s) at the MSF that will include energy efficiency measures.	• Construction	EA/IA commitment
497.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Completing regular inspections and maintenance to ensure the road meets minimum operational standards for roads.	• Construction • Operations	EA/IA commitment
498.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Having a water-spraying truck readily available for use by the maintenance crew on an ‘as needed’ basis during operations, particularly between the months of May and November.	• Construction	EA/IA commitment
499.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Training members of the Webequie community involved in the operations phase in techniques that would facilitate eco-driving and encouraging them to follow recommended practices to minimize fuel use (e.g., avoidance of vehicle idling).	• Construction	EA/IA commitment
500.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • Ensuring equipment is well maintained to mitigate fuel usage (e.g., tires, alignment, mechanized features are optimized).	• Construction	EA/IA commitment
501.	Species at Risk – SAR and SAR Habitat	Deposition of Dust and Other Airborne Particles: • To the extent possible, using logs, branches, and other biomass for purposes such as the production of timber or roundwood that could be used in Webequie for landscaping, erosion control or construction projects, rather than burning them. An objective of burning no more than 10% of cleared living biomass has been incorporated into Project plans.	• Construction	EA/IA commitment
502.	Species at Risk – SAR and SAR Habitat	Accidental Spills: • Mitigation measures that were described in Section 13.4.2 (Construction) will also be effective in minimizing the potential risks of accidental spills during the operations phase of the Project.	• Construction • Operations	EA/IA commitment
503.	Species at Risk – SAR and SAR Habitat	Sensory Disturbance: • To the extent practicable, limiting the use of lighting during operations of the Project while still allowing for safety.	• Operations	EA/IA commitment
504.	Species at Risk – SAR and SAR Habitat	Sensory Disturbance: • Using light shields for illumination fixtures on a site-specific basis to minimize and reduce light trespass where this is a concern to SAR wildlife. A Noise Management Plan will also form a portion of the OEMP.	• Detail design • Construction	EA/IA commitment
505.	Species at Risk – SAR and SAR Habitat	Sensory Disturbance: • Designing and implementing plans to manage artificial light, noise, and vibrations as part of the CEMP.	• Detail design • Construction	EA/IA commitment
506.	Species at Risk – SAR and SAR Habitat	Sensory Disturbance:	• Construction	EA/IA commitment

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		• Avoiding activities (such as heavy machinery use) that are likely to disturb SAR wildlife during sensitive periods in their life cycle. Species specific and group specific timing windows are described in Sections 13.4.3 – 13.4.7.		
507.	Species at Risk – SAR and SAR Habitat	Sensory Disturbance: • Designing and Implementing a Construction Waste Management Plan (including hazardous, contaminated and controlled materials) as part of the CEMP. The Waste Management Plan will include procedures to verify that wastes have been collected, stored, transported and disposed of in an environmentally responsible manner. It is recommended that: ▫ Areas of human activity (e.g., camps, rest areas) be kept clear of refuse (e.g., gray water, sewage) to avoid attracting wildlife (particularly carnivores and omnivores). ▫ Food wastes be collected on site, temporarily stored in wildlife-proof containers, and transported out of the RSA to be recycled or deposed of at a licenced disposal facility. ▫ Petroleum-based products and other materials that could attract wildlife be stored in a secure area that wildlife cannot access.	• Detail design • Construction	EA/IA commitment
508.	Species at Risk – SAR and SAR Habitat	Sensory Disturbance: • Informing all Project personnel about the hazards of feeding wildlife and prohibiting such activity.	• Construction	EA/IA commitment
509.	Species at Risk – SAR and SAR Habitat	Sensory Disturbance: • Lighting only those areas required to ensure worker safety, and angling or shielding lights so that they illuminate only targeted areas.	• Construction	EA/IA commitment
510.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Reviewing, updating as necessary, and implementing the Invasive Species Monitoring and Management Plan that was prepared for the construction phase. This plan will include a reporting system for the operations phase.	• Detail design • Construction • Operations	EA/IA commitment
511.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Holding information sessions, circulating education materials that will familiarize individuals that travel the road with harmful invasive species, and/or introducing best management practices to prevent the introduction or spread of exotic species within the LSA. Signage placed near major river crossings will assist in raising awareness of invasive aquatic plants.	• Construction	EA/IA commitment
512.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Conducting visual inspections of equipment and vehicles that travel along the WSR, paying particular attention to wheels, wheel arches, undersides, and other attachments to which invasive species, or their components (e.g., seeds, buds, sprouts) may adhere.	• Construction	EA/IA commitment
513.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Removing components of invasive species (e.g., seeds, buds, cuttings) by washing vehicles and equipment prior to moving them from one portion of the LSA to another. Such components should be isolated until they can be safely removed from the site.	• Construction	EA/IA commitment
514.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Targeting invasive species that establish themselves along the WSR for removal through manual, mechanical and/or chemical methods. Mechanical methods of removal, such as mowing, tilling, digging or pulling of vegetation is preferred over chemical methods.	• Construction	EA/IA commitment
515.	Species at Risk – SAR and SAR Habitat	Invasive Plant Species: • Monitoring areas where invasive species were removed the year following remediation. The effectiveness of measures will be modified or enhanced, as necessary through adaptive management.	• Operations	EA/IA commitment
516.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity: • Phasing construction to create segments of low or no activity to permit unimpeded wildlife passage through those areas.	• Construction	EA/IA commitment
517.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity:	• Construction	EA/IA commitment

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		• Minimizing the size of the construction footprint to the extent possible and restricting vegetation removal near sensitive habitats (refer to **Sections** Error! Reference source not found. **–** Error! Reference source not found. for additional information).		
518.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity: • Progressively restoring areas that are no longer being actively used for construction. Progressive restoration or reclamation will minimize the effect of recontoured or cleared areas that are acting as a barrier to movement.	• Operations	EA/IA commitment
519.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity: • Incorporating wildlife crossings and passages in the road design and, where practicable, progressively installing these features during the construction phase. While wolverine themselves are not well known to use wildlife overpasses or underpasses, some of their prey do.	• Construction	EA/IA commitment
520.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity: • Removing any windrowed/slash materials that have been unintentionally piled in a manner that creates barriers.	• Construction	EA/IA commitment
521.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity: • Maintaining posted lower speed limits in sensitive habitats and identified crossing areas.	• Operations	EA/IA commitment
522.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity: • Ensuring maintenance activities occur outside of sensitive life cycle periods (e.g., nesting season for SAR birds, roosting season for SAR bats).	• Operations	EA/IA commitment
523.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity: • Ensuring snow removal activities (i.e., plowing) do not create continuous barriers to the movement of SAR.	• Operations	EA/IA commitment
524.	Species at Risk – SAR and SAR Habitat	Loss of Connectivity: • Maintaining any wildlife corridors or passages that were created during construction of the road. Where practicable, creating new ones in areas where a need is identified (e.g., a 'new' wildlife crossing area that was identified through construction monitoring, or other reporting procedures).	• Operations	EA/IA commitment
525.	Species at Risk – SAR and SAR Habitat	Increased Access: • Road access restrictions will be implemented during construction to prevent individuals that are not Project personnel from entering the Project Footprint.	• Construction	EA/IA commitment
526.	Species at Risk – SAR and SAR Habitat	Increased Access: • Personal firearms will be prohibited from construction camps.	• Construction	EA/IA commitment
527.	Species at Risk – SAR and SAR Habitat	Increased Access: • A Construction Waste Management Plan will be developed prior to construction and implemented during the construction phase. The plan will include procedures to check that the collection, storage, transportation, and disposal of all wastes generated will be conducted in a safe, environmentally responsible manner that complies with federal and provincial legislation.	• Detail design • Construction	EA/IA commitment
528.	Species at Risk – SAR and SAR Habitat	Increased Access: • Camps and rest areas will be kept clean, with food waste being stored appropriately to avoid wildlife conflicts (i.e., because food waste can attract carnivores and omnivores).	• Construction	EA/IA commitment
529.	Species at Risk – SAR and SAR Habitat	Increased Access: • Petroleum-based products and other toxic materials that can attract wildlife will be stored in secured areas.	• Construction	EA/IA commitment
530.	Species at Risk – SAR and SAR Habitat	Increased Access: • Educational (informational) sessions shall be provided to all Project personnel that makes them aware wildlife have the right-of-way (barring circumstances in which there is imminent risk to the health and safety of workers and/or the public).	• Construction	EA/IA commitment
531.	Species at Risk – SAR and SAR Habitat	Increased Access: • Temporary access roads, laydowns, and construction areas will be fenced, or otherwise blocked, until vegetation has re-established itself.	• Construction	EA/IA commitment

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532.	Species at Risk – SAR and SAR Habitat	Increased Access: • A Construction Blasting Management Plan will be included as part of the CEMP and implemented during the construction phase. The Blasting Management Plan will include policies and actions to minimize the risk of SAR being struck by fly rock.	• Detail design • Construction	EA/IA commitment
533.	Species at Risk – SAR and SAR Habitat	Increased Access: • Open excavations and blasting areas will be fenced off when left unattended to avoid injury to, or death of SAR.	• Construction	EA/IA commitment
534.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Enforcing speed limits on the ROW and access roads.	• Construction	EA/IA commitment
535.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Enforcing access restrictions to the road during the construction phase.	• Construction	EA/IA commitment
536.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Integrating safe travel protocols in the Health and Safety Management Plan. These protocols will include wildlife and SAR awareness training and reporting protocols.	• Detail design • Construction	EA/IA commitment
537.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Should movement corridors be identified during monitoring, posting and enforcing reduced speeds at the location(s) of the corridor(s).	• Construction	EA/IA commitment
538.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Incorporating wildlife crossings and passages in the road design and, where practicable, progressively installing these features as part of the construction phase.	• Construction	EA/IA commitment
539.	Species at Risk – SAR and SAR Habitat	Increased Access: • Conducting regular inspections of the road and rest areas during operations (e.g., 1-2 times per week), with litter being collected when found, and waste in receptacles being appropriately disposed of.	• Operations	EA/IA commitment
540.	Species at Risk – SAR and SAR Habitat	Increased Access: • Managing roadkill by removing it from the ROW and appropriately disposed of (e.g., to brush areas adjacent to the Project Footprint) within 48 hours of detection.	• Construction • Operations	EA/IA commitment
541.	Species at Risk – SAR and SAR Habitat	Increased Access: • Limiting the number of rest areas and pull-off areas along road (i.e., to those required for the safety of WSR users). It is recommended that each of these rest areas contain a wildlife-proofed waste receptacle.	• Construction	EA/IA commitment
542.	Species at Risk – SAR and SAR Habitat	Increased Access: • Fencing all maintenance turnaround areas (for use by operations personnel only) to restrict public access.	• Construction	EA/IA commitment
543.	Species at Risk – SAR and SAR Habitat	Increased Access: • Fencing and/or gating access roads to aggregate areas and other operational infrastructure.	• Construction	EA/IA commitment
544.	Species at Risk – SAR and SAR Habitat	Increased Access: • Implementing access restrictions on the WSR to reduce hunting, trapping or poaching opportunities in sensitive wildlife habitats or during sensitive timing windows for SAR throughout the operations phase.	• Operations	EA/IA commitment
545.	Species at Risk – SAR and SAR Habitat	Changes to Predator-Prey Dynamics: • Temporarily disturbed areas and access roads will be reclaimed. During this process any barriers to movement will be removed unless they were intentionally placed as movement barriers.	• Construction	EA/IA commitment
546.	Species at Risk – SAR and SAR Habitat	Changes to Predator-Prey Dynamics: • Limit the creation of temporary access roads.	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
547.	Species at Risk – SAR and SAR Habitat	Changes to Predator-Prey Dynamics: • Maintaining ROWs with reduced forage, which may attract herbivores.	• Construction	EA/IA commitment
548.	Species at Risk – SAR and SAR Habitat	Changes to Predator-Prey Dynamics: • Where practicable, incorporating measures to reduce the effectiveness of predators will be explored further during the future detail design phase of the Project.	• Detail design • Construction	EA/IA commitment
549.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Ensuring maintenance activities take place away from sensitive habitats during critical life cycle time periods (e.g., nesting season, calving season).	• Operations	EA/IA commitment
550.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Lowering the posted speed limit in known areas with SAR habitat and/or movement corridors.	• Operations	EA/IA commitment
551.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Maintaining line of site for drivers.	• Operations	EA/IA commitment
552.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Controlling roadside vegetation.	• Operations	EA/IA commitment
553.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Implementing wildlife sighting and incident reporting procedures.	• Operations	EA/IA commitment
554.	Species at Risk – SAR and SAR Habitat	Collisions with Vehicles and Equipment: • Maintaining any wildlife passages that were created, or signage that was erected to identify wildlife corridors during the construction phase.	• Operations	EA/IA commitment
555.	Species at Risk – Caribou	Clearance Activities: • Developing a Vegetation and Invasive Species Management Plan, Wildlife Management Plan and Site Restoration and Monitoring Plan in advance of construction. These plans will form subcomponents of the CEMP and will be implemented following Project initiation. In development of these plans provincial best management guidance documents will be followed, including the Best Management Practices for Renewable Energy, Energy Infrastructure and Energy Transmission Activities and Woodland Caribou in Ontario. To the extent possible, restoration and management plans will be developed in cooperation with Local Rights Holders, relevant Federal and/or Provincial Agencies and other Stakeholders.	• Detail design • Construction	EA/IA commitment
556.	Species at Risk – Caribou	Clearance Activities: • Reviewing and updating, as necessary, the Vegetation and Invasive Species Management Plan, Wildlife Management Plan and Site Restoration and Monitoring Plan prior to the operations phase.	• Detail design • Construction	EA/IA commitment
557.	Species at Risk – Caribou	Clearance Activities: • Where practicable, placing construction camps, laydown yards and other temporary construction areas in strategic locations that avoid habitat identified as of high use, or otherwise critical for caribou.	• Construction	EA/IA commitment
558.	Species at Risk – Caribou	Clearance Activities: • Using existing roads, trails and other areas of disturbance to access the Project Footprint to the extent practicable, thereby minimizing the loss of habitat to create new access roads.	• Construction	EA/IA commitment
559.	Species at Risk – Caribou	Clearance Activities: • Reducing the extent of clearings at quarries, borrow pits and other temporary areas.	• Construction	EA/IA commitment
560.	Species at Risk – Caribou	Clearance Activities: • Installing construction fencing to clearly delineate the boundaries of the work areas to prevent habitat damage and destruction beyond the limits of the work area. Suitable setbacks will be established based on the Wildlife Management Plan.	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
561.	Species at Risk – Caribou	Clearance Activities: • It is recommended that vegetation clearing in the vicinity of winter use or calving areas occur outside species-specific timing windows. For example, vegetation in suitable winter use areas will be removed in winter when Caribou are less likely to be using areas.	• Construction	EA/IA commitment
562.	Species at Risk – Caribou	Clearance Activities: • If adherence to these windows is not possible, specific mitigation and monitoring measures will be developed in cooperation with MECP, CWS-ECC, or other appropriate regulatory agencies.	• Construction	EA/IA commitment
563.	Species at Risk – Caribou	Clearance Activities: • Subsequently, an appropriate course of action will be determined, in consultation with regulatory agencies (e.g., MECP, CWS-ECCC) if required. It may be necessary to apply for and receive permits, authorizations or approvals from the appropriate regulatory agencies prior to the removal of Caribou habitat.	• Construction	EA/IA commitment
564.	Species at Risk – Caribou	Clearance Activities: • Areas of temporary disturbance will be reclaimed during the construction phase, in alignment with the Best management practices for renewable energy, energy infrastructure and energy transmission activities and Woodland Caribou in Ontario. These areas will be restored to a functional state as soon as possible following the completion of work.	• Construction	EA/IA commitment
565.	Species at Risk – Caribou	Clearance Activities: • Restoration activities will include the removal of debris, soil decompaction and amendment, and other techniques to promote the re-establishment of self-sustaining vegetation native to the area.	• Construction	EA/IA commitment
566.	Species at Risk – Caribou	Clearance Activities: • Where necessary, reclamation efforts may involve vegetation being enhanced by transplanting species from within the RSA, and/or seeding or planting self-sustaining native species from approved stock and a reputable supplier. Species of importance to Indigenous communities will be included along with species from pre-construction conditions.	• Construction	EA/IA commitment
567.	Species at Risk – Caribou	Clearance Activities: • Reclamation activities will be carried out under appropriate environmental conditions.	• Construction	EA/IA commitment
568.	Species at Risk – Caribou	Clearance Activities: • Qualified personnel will carry out site visits and inspections to verify environmental protection measures have been correctly implemented and are maintained until vegetation has re-established itself.	• Construction	EA/IA commitment
569.	Species at Risk – Caribou	Clearance Activities: • On-site restoration opportunities will be prioritized. Where appropriate, off-site restoration will be investigated and implemented (i.e., should insufficient area be available in the LSA).	• Construction	EA/IA commitment
570.	Species at Risk – Caribou	Habitat Structural Change: • Following all approval conditions for the Project, including any issued by MECP or CWS-ECCC.	• Construction	EA/IA commitment
571.	Species at Risk – Caribou	Habitat Structural Change: • Keeping construction footprints as small as possible and minimizing or restricting vegetation clearing near sensitive areas, particularly if known to be of high use to Caribou. Key ecological features will be clearly marked (e.g., flagged or fenced) and a vegetation buffer will be established between them and the work area.	• Construction	EA/IA commitment
572.	Species at Risk – Caribou	Habitat Structural Change: • To the extent practicable, temporary work areas will be reclaimed, and natural vegetation will be allowed to natural regenerate. When necessary, reclamation may involve augmenting vegetation by transplanting vegetation from the RSA, or planting or seeding native self-sustaining species from approved stock and a reputable supplier. The goal of reclamation is to restore habitats to pre-construction conditions, incorporating species of importance to Indigenous communities as appropriate.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
573.	Species at Risk – Caribou	Habitat Structural Change: • Completing restoration and reclamation activities under appropriate environmental condition.	• Construction	EA/IA commitment
574.	Species at Risk – Caribou	Habitat Structural Change: • Having qualified staff carry out site visits to ensure environmental protection measures have been correctly implemented. They will also complete ecological monitoring to evaluate the effectiveness of habitat retention, reclamation, and restoration efforts.	• Construction	EA/IA commitment
575.	Species at Risk – Caribou	Hydrological Changes: • Designing and construction temporary and permanent waterbody crossings to accommodate anticipated water flows during their lifespan.	• Construction	EA/IA commitment
576.	Species at Risk – Caribou	Hydrological Changes: • Installing cross-culverts at regular intervals in lowland areas to prevent water from ponding on either side of the roadway.	• Construction	EA/IA commitment
577.	Species at Risk – Caribou	Hydrological Changes: • Avoiding the use of road salt or sand for winter maintenance activities during the construction and operations phases. However, sand may be applied in select locations based on road safety concerns.	• Construction • Operations	EA/IA commitment
578.	Species at Risk – Caribou	Sensory Disturbance: • Implementing the mitigation measures identified in the Noise and Vibration Management Plan, the Light Management Plan, and the Construction Blasting Plan (all of which form parts of the CEMP).	• Detail design • Construction	EA/IA commitment
579.	Species at Risk – Caribou	Sensory Disturbance: • Prohibiting the recreational use of personal motorized vehicles (e.g., snowmobiles, all-terrain vehicles) by Project personnel and enforcing speed limits in the Project Footprint.	• Construction	EA/IA commitment
580.	Species at Risk – Caribou	Sensory Disturbance: • Adhering to recommended construction timing “windows” for Caribou.	• Construction	EA/IA commitment
581.	Species at Risk – Caribou	Sensory Disturbance: • If adherence to timing windows or restrictions is not possible, having the Contractor develop site-specific mitigation and monitoring plans in consultation with qualified biologists and the appropriate regulatory agencies.	• Construction	EA/IA commitment
582.	Species at Risk – Caribou	Sensory Disturbance: • The Contractor will be responsible for obtaining any permits or authorizations required to implement the plans.	• Construction	EA/IA commitment
583.	Species at Risk – Caribou	Sensory Disturbance: • Noise abatement equipment shall be installed on machinery. Project personnel will ensure such equipment is correctly installed and maintained.	• Construction	EA/IA commitment
584.	Species at Risk – Caribou	Sensory Disturbance: • Where practicable, vehicles and equipment will be turned off when not in use (i.e., to minimize unnecessary noise).	• Construction	EA/IA commitment
585.	Species at Risk – Caribou	Sensory Disturbance: • The use of artificial lighting will be minimized, being employed only where necessary to ensure health and safety of Project personnel and the public.	• Construction	EA/IA commitment
586.	Species at Risk – Caribou	Sensory Disturbance: • Lighting will be directed, or light shields will be used to reduce the amount of light outside of the ROW.	• Construction	EA/IA commitment
587.	Species at Risk – Caribou	Sensory Disturbance: • Vegetation protection zones (i.e., buffers or setbacks) will be maintained to reduce sensory impacts.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
588.	Species at Risk – Caribou	Sensory Disturbance: • Speed limits will be posted in areas where high use is known, or key habitat for Caribou has been identified.	• Operations	EA/IA commitment
589.	Species at Risk – Caribou	Sensory Disturbance: • Maintenance activities will occur outside of critical life cycle periods, such as calving season for Caribou.	• Operations	EA/IA commitment
590.	Species at Risk – Caribou	Changes to Predator-Prey Dynamics: • Blocking off temporarily areas of disturbance until restoration or reclamation activities have been successfully completed.	• Construction	EA/IA commitment
591.	Species at Risk – Caribou	Changes to Predator-Prey Dynamics: • During detail design, including measures that reduce the effectiveness of predators (e.g., wolves) such as incorporating switchbacks or bends in temporary access routes.	• Construction	EA/IA commitment
592.	Species at Risk – Caribou	Changes to Predator-Prey Dynamics: • Maintaining ROWs with reduced or less palatable forage for Caribou and other ungulates.	• Construction	EA/IA commitment
593.	Species at Risk – Caribou	Collisions with Project Vehicles: • The use of road salt will be avoided during winter maintenance activities to reduce attracting Caribou to the Project Footprint.	• Operations	EA/IA commitment
594.	Species at Risk – Caribou	Collisions with Project Vehicles: • During the growing season, the ROW will be maintained in a manner that reduces forage attractive to Caribou or other ungulates.	• Operations	EA/IA commitment
595.	Species at Risk – Caribou	Collisions with Project Vehicles: • Road maintenance activities will not occur during sensitive life cycle periods, such as calving season.	• Operations	EA/IA commitment
596.	Species at Risk – Caribou	Collisions with Project Vehicles: • Speed limits will be enforced in known Caribou crossing areas and other sensitive habitats.	• Operations	EA/IA commitment
597.	Species at Risk – Caribou	Additional mitigation measures to address potential effects on Caribou are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing; • Section 5.2 – Petroleum Handling and Storage; • Section 5.3 – Spill Prevention and Emergency Response; • Section 5.4 – Noise Control; • Section 5.7 – Temporary Watercourse Crossings; • Section 5.11 – Bridge and Culvert Installation; • Section 5.12 – Blasting Near a Watercourse; • Section 5.14 – Wildlife and Wildlife Habitat; • Section 5.16 – Erosion and Sediment Control; • Section 5.18 – Dust Control Practices; • Section 5.19 – Aggregate Pit Decommissioning; • Section 5.20 – Quarry Site Selection and Development; • Section 5.21 – Site Decommissioning and Rehabilitation; and • Section 5.23 – Prevention of the Transfer of Invasive Species.	• Construction • Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
598.	Species at Risk - Wolverine	Clearance Activities: • Follow all conditions of environmental approval for the Project, including any issued by MECP or CWS-ECCC.	• Construction	EA/IA commitment
599.	Species at Risk - Wolverine	Clearance Activities: • Maintain vegetation buffers (or setbacks) of 30 m around waterbodies and limiting the clearance of riparian vegetation.	• Construction	EA/IA commitment
600.	Species at Risk - Wolverine	Clearance Activities: • Have qualified biologists or resource specialists review aerial imagery and make note of vegetation communities that may contain fallen trees (e.g., areas of blowdown) while conducting aerial surveys (targeting Caribou) prior to construction.	• Construction	EA/IA commitment
601.	Species at Risk - Wolverine	Clearance Activities: • Avoid, where practicable, placement of camps, laydown areas, temporary access routes and other temporary construction infrastructure in areas of mature coniferous and mixed forests with suitable habitat for denning (i.e., locations where it is likely denning is occurring.	• Construction	EA/IA commitment
602.	Species at Risk - Wolverine	Clearance Activities: • Minimize the Project Footprint and limit vegetation clearing to the extent necessary for construction (i.e., a phased approach that would be accompanied by progressive restoration). ○ Maintain a cleared ROW of 35 m to the extent practicable, unless a specific area is required for construction.	• Construction	EA/IA commitment
603.	Species at Risk - Wolverine	Clearance Activities: • Clearly mark a vegetation protection zone (buffer or setback) between key ecological features for wolverine (e.g., confirmed wolverine den sites) and the Project Footprint. A minimum setback distance of 2 km from den sites will be implemented between June 2 and January 31 of the calendar year, unless den use continues beyond this date, in which these measures will continue to be implemented. • Conduct all project-related activities outside of the denning period for wolverine (February 1 to June 1) in areas where suitable habitat has been identified. ○ If adhering to this timing window is not practicable, qualified biologists or resource specialists will survey areas of suitable habitat to search for evidence denning or other key habitats. A buffer of 8 km (4 km radius) will be implemented adjacent to wolverine dens in active use	• Construction	EA/IA commitment
604.	Species at Risk - Wolverine	Clearance Activities: • Have qualified personnel conduct site visits to verify that environmental protection measures have been correctly implemented. If not, corrections will be made prior to construction resuming.	• Construction	EA/IA commitment
605.	Species at Risk - Wolverine	Clearance Activities: • To the extent practicable, reclaim disturbed areas using processes that facilitate natural regeneration. When necessary, reclamation may involve the use of locally sourced transplants, and/or plant or seed native self-sustaining species from approved stock and a reputable supplier, with the goal of restoring habitats to pre-construction conditions. Species of importance to Indigenous communities will be incorporated, as appropriate.	• Construction	EA/IA commitment
606.	Species at Risk - Wolverine	Clearance Activities: • Complete restoration activities under the appropriate environmental conditions.	• Construction	EA/IA commitment
607.	Species at Risk - Wolverine	Clearance Activities: • Complete ecological monitoring to evaluate the effectiveness of habitat retention, reclamation, and restoration efforts. Mitigation measures may be modified or enhanced as necessary.	• Construction	EA/IA commitment
608.	Species at Risk - Wolverine	Habitat Structural Changes: • Follow all conditions of environmental approval for the Project, including any issued by MECP or CWS-ECCC.	• Construction	EA/IA commitment
609.	Species at Risk - Wolverine	Habitat Structural Changes: • Maintain vegetation buffers (or setbacks) of 30 m around waterbodies and limiting the clearance of riparian vegetation.	• Construction	EA/IA commitment
610.	Species at Risk - Wolverine	Habitat Structural Changes: • Have qualified biologists or resource specialists review aerial imagery and make note of vegetation communities that may contain areas of blowdown or large boulders (i.e., suitable locations for dens).	• Construction	EA/IA commitment
611.	Species at Risk - Wolverine	Habitat Structural Changes: • To the extent practicable, locate temporary construction infrastructure outside of coniferous forests, mixed forests and other vegetation communities containing suitable sites for denning.	• Construction	EA/IA commitment
612.	Species at Risk - Wolverine	Habitat Structural Changes:	• Construction	EA/IA commitment

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		• Keep the Project Footprint as small as possible and limit vegetation clearing to the extent necessary for construction (i.e., develop the ROW in a phased approach that will be accompanied by progressive reclamation).		
613.	Species at Risk - Wolverine	Habitat Structural Changes: • Clearly mark a vegetation protection zone (buffer or setback) between key ecological features for wolverine (e.g., confirmed wolverine den sites) and the Project Footprint. A minimum setback distance of 2 km (1 km radius) from den sites known to be in regular use will be implemented between June 2 and January 31 of the calendar year, unless evidence suggests that the den is still active during this period (as per direction received from MECP in March 2021 relating to a confirmed den site).	• Construction	EA/IA commitment
614.	Species at Risk - Wolverine	Habitat Structural Changes: • All project activities, including vegetation clearing, will be conducted outside of the denning period for wolverine (February 1 to June 1) in areas where suitable habitat has been identified, unless evidence suggests denning continues beyond June 1. ○ If adhering to this timing window is not practicable, qualified biologists or resource specialists will survey areas of suitable habitat to search for evidence denning or other key habitats prior to the onset of active construction. A buffer of 4km (2km radius) will be implemented adjacent to Wolverine dens in active use.	• Construction	EA/IA commitment
615.	Species at Risk - Wolverine	Habitat Structural Changes: • To the extent practicable, progressively reclaiming areas using restoration techniques that facilitate natural regeneration. Where necessary, natural regeneration may be augmented by transplanting plants from the RSA, or planting or seeding self-sustaining Indigenous species from approved stock and a reputable supplier.	• Construction	EA/IA commitment
616.	Species at Risk - Wolverine	Habitat Structural Changes: • Completing restoration activities under appropriate environmental conditions.	• Construction	EA/IA commitment
617.	Species at Risk - Wolverine	Habitat Structural Changes: • Having qualified personnel carry out site visits to ensure environmental protection measures have been correctly implemented. They will also complete ecological monitoring to evaluate the effectiveness of habitat retention, reclamation and restoration efforts.	• Construction • Operations	EA/IA commitment
618.	Species at Risk - Wolverine	Habitat Structural Changes: • Adapting mitigation measures as necessary, pending the results of monitoring.	• Construction • Operations	EA/IA commitment
619.	Species at Risk - Wolverine	Hydrological Changes: • Designing temporary crossings to accommodate anticipated water flows during their lifespan.	• Construction	EA/IA commitment
620.	Species at Risk - Wolverine	Hydrological Changes: • Installing cross-culverts at regular intervals in lowland areas to prevent water from ponding on either side of the roadway and allow overland flow to follow existing hydrological flow paths.	• Construction	EA/IA commitment
621.	Species at Risk - Wolverine	Loss of Connectivity and Sensory Disturbance: • Construction of the WSR will be completed in phases, with construction sites having breaks in between to permit wildlife passage. The physical breaks between construction sites should be at least 1km, and preferably more if the presence of wolverine has been confirmed or is considered highly probable.	• Construction	EA/IA commitment
622.	Species at Risk - Wolverine	Loss of Connectivity and Sensory Disturbance: • Progressive restoration will take place in areas of temporary disturbance (i.e., to the extent practicable, as soon as these areas are no longer needed for construction).	• Construction	EA/IA commitment
623.	Species at Risk - Wolverine	Loss of Connectivity and Sensory Disturbance: • Windrowed and slash materials will not be excessively piled to create unintentional barriers to the movement of wolverine or its prey species.	• Construction	EA/IA commitment
624.	Species at Risk - Wolverine	Loss of Connectivity and Sensory Disturbance: • Since activities can act as a barrier for aquatic furbearers (e.g., dewatering, cofferdams), temporary cofferdams and wildlife passages or corridors will be implemented during construction, as needed. In-water works will also be completed during periods when aquatic furbearers are less active, including their breeding seasons.	• Construction	EA/IA commitment
625.	Species at Risk - Wolverine	Sensory Disturbances: • Construction of each phase of the WSR (i.e., each site) will be completed as quickly as possible to reduce the period of disturbance. Access to designated areas (i.e., construction footprints) will be restricted to Project personnel working in that area.	• Construction	EA/IA commitment

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626.	Species at Risk - Wolverine	Sensory Disturbances: • Construction will occur outside of the denning season for wolverine (February 1 to June 1), to the extent practicable, wherever potentially suitable den habitat has been identified. ○ If adhering to this timing window is not practicable, qualified biologists or resource specialists will survey areas of suitable habitat to search for evidence of active den sites prior to the onset of active construction. A buffer of 4km will be implemented adjacent to wolverine dens in active use (i.e., 2 km radius). The area to be surveyed will include a 2km distance from the outer edge of the Project Footprint.	• Construction	EA/IA commitment
627.	Species at Risk - Wolverine	Sensory Disturbances: • Logs, coarse woody debris, and other physical control measures will be used to block human access to areas of temporary disturbance until reclamation efforts have been completed and successive revegetation has occurred. Signage, flagging, or other markers may accompany the blockage.	• Construction	EA/IA commitment
628.	Species at Risk - Wolverine	Sensory Disturbances: • Logs, coarse woody debris, and other physical control measures may remain in place if long-term human access concerns are present.	• Construction	EA/IA commitment
629.	Species at Risk - Wolverine	Sensory Disturbances: • Restoration efforts will focus on natural regeneration at the location of temporary disturbance, where practicable. Active restoration will be used if deemed necessary by a qualified professional.	• Construction • Operations	EA/IA commitment
630.	Species at Risk - Wolverine	Loss of Connectivity: • Ensure maintenance activities take place outside of critical life cycle periods for wolverine (e.g., denning season) and their prey (e.g., breeding season).	• Operations	EA/IA commitment
631.	Species at Risk - Wolverine	Loss of Connectivity: • Ensure maintenance activities take place outside of sensitive habitats and identified wildlife crossing areas.	• Operations	EA/IA commitment
632.	Species at Risk - Wolverine	Loss of Connectivity: • Ensure plowing activities don't create continuous or unintentional barriers to the movement of wolverine or their prey.	• Operations	EA/IA commitment
633.	Species at Risk - Wolverine	Loss of Connectivity: • Maintain any wildlife passes that were created during construction of the road. Adding new ones, as practicable, where a need has been identified (e.g., wildlife crossing areas detected through reporting.	• Operations	EA/IA commitment
634.	Species at Risk - Wolverine	Changes to Predator-Prey Dynamics: • Block areas of temporary disturbance until they can be restored to a functional state.	• Construction	EA/IA commitment
635.	Species at Risk - Wolverine	Changes to Predator-Prey Dynamics: • Keep the Project Footprint free of refuse, sewage and other materials that may attract predators. Appropriately storing petroleum products and other materials toxic to wolverine in wildlife-proof containers prior to removing them appropriately from the LSA	• Construction	EA/IA commitment
636.	Species at Risk - Wolverine	Changes to Predator-Prey Dynamics: • Incorporate measures to reduce the movement rates of large predators, such as curves or bends in temporary access roads, during detail design	• Construction	EA/IA commitment
637.	Species at Risk - Wolverine	Incidental Take: • Following all approval conditions for the Project, including any issued by MECP or CWS-ECCC.	• Construction	EA/IA commitment
638.	Species at Risk - Wolverine	Incidental Take: • Clearing vegetation outside of the denning period for Wolverine (February 1 to June 1) in areas where suitable habitat has been identified. ○ If adhering to this timing window is not practicable, qualified biologists or resource specialists will survey areas of suitable habitat to search for evidence denning or other key habitats prior to the onset of active construction. A buffer of 4km will be implemented around wolverine dens in active use (i.e., circle with radius of 2 km).	• Construction	EA/IA commitment
639.	Species at Risk - Wolverine	Incidental Take: • Training operations personnel to identify dens and be aware of the correct protocols to follow should a potential den site be identified. ○ If an active den is encountered, construction work will stop immediately, and the appropriate project personnel and regulatory agencies will be contacted. The den will be marked, and a buffer established. No work will take place within the buffer until clearance is issued by the MECP.	• Construction • Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
640.	Species at Risk - Wolverine	Incidental Take: • If an active den is encountered, construction work will stop immediately, and the appropriate project personnel and regulatory agencies will be contacted. The den will be marked, and a buffer established. No work will take place within the buffer until clearance is issued by the MECP	• Construction	EA/IA commitment
641.	Species at Risk - Wolverine	Increased Access: • Fencing and/or gating access roads to aggregate areas and other operational infrastructure.	• Operations	EA/IA commitment
642.	Species at Risk - Wolverine	Increased Access: • Limiting pull-off areas along the WSR.	• Operations	EA/IA commitment
643.	Species at Risk - Wolverine	Increased Access: • Blocking areas of temporary disturbance until the they can be restored to a functional stage (ideally ones that mimic pre-construction conditions). Restoration approaches will facilitate natural regeneration, but may be supplemented as necessary, with self-sustaining species native to the area.	• Operations	EA/IA commitment
644.	Species at Risk - Wolverine	Changes to predator-Prey Dynamics: • Blocking areas that have been reclaimed following temporary disturbance until they can be restored to a functional state, and preferably ones that resemble pre-construction conditions.	• Operations	EA/IA commitment
645.	Species at Risk - Wolverine	Changes to predator-Prey Dynamics: • Incorporating measures that reduce predatory efficiency during operations, such as maintaining vegetation along the ROW that is 2 m in height or less and avoiding the snow removal unless it is required for site access.	• Operations	EA/IA commitment
646.	Species at Risk - Wolverine	Changes to predator-Prey Dynamics: • During operations, effectiveness monitoring will be conducted, with mitigation measures being modified or enhanced as necessary.	• Operations	EA/IA commitment
647.	Species at Risk - Wolverine	Additional mitigation measures to address potential effects on Wolverines are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing; • Section 5.3 – Spill Prevention and Emergency Response; • Section 5.4 – Noise Control; • Section 5.7 – Temporary Watercourse Crossings; • Section 5.8 – Temporary Watercourse Diversions; • Section 5.11 – Bridge and Culvert Installation; • Section 5.12 – Blasting Near a Watercourse; • Section 5.14 – Wildlife and Wildlife Habitat; • Section 5.16 – Erosion and Sediment Control; • Section 5.18 – Dust Control Practices; • Section 5.19 – Aggregate Pit Decommissioning; • Section 5.20 – Quarry Site Selection and Development; • Section 5.21 – Site Decommissioning and Rehabilitation; and • Section 5.23 – Prevention of the Transfer of Invasive Species.	• Construction • Operations	EA/IA commitment
648.	Species at Risk – SAR Bats	Clearance Activities: • Developing a CEMP that includes a Site Restoration and Monitoring Plan, Vegetation and Invasive Species Management Plan and Wildlife Management Plan.	• Detail design • Construction	EA/IA commitment
649.	Species at Risk – SAR Bats	Clearance Activities: • Implementing the CEMP during the construction phase.	• Construction	EA/IA commitment
650.	Species at Risk – SAR Bats	Clearance Activities: • Following all environmental conditions of approval for the Project, including those issued by CWS-ECCC, and MECP.	• Construction	EA/IA commitment
651.	Species at Risk – SAR Bats	Clearance Activities: • Maintaining vegetation buffers (setbacks) of at least 30 m around waterbodies and minimizing the clearing of riparian vegetation, to the extent practicable.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
652.	Species at Risk – SAR Bats	Clearance Activities: • Having qualified biologists or resource specialists delineate (with flagging, fencing or another appropriate marker) a vegetation setback (i.e., buffer or protection zone) of 120 m from any maternity roosting habitat identified during monitoring for construction.	• Construction	EA/IA commitment
653.	Species at Risk – SAR Bats	Clearance Activities: • Avoiding vegetation removal within this protection zone, to the extent practicable, until there has been engagement with and approval from the appropriate regulatory agencies (e.g., MECP, CWS-ECCC).	• Construction	EA/IA commitment
654.	Species at Risk – SAR Bats	Clearance Activities: • Training Project personnel to identify potential maternity roosting habitat and be aware of protocols to follow should any be found during construction.	• Construction	EA/IA commitment
655.	Species at Risk – SAR Bats	Clearance Activities: • Should any potential maternity roosting areas for SAR bats be discovered by Project personnel during construction, work will cease, the feature will be documented (e.g., photographs, notes) and a qualified biologist or resource specialist will delineate a 120 m setback from outer extent of the habitat. ▫ This setback (buffer) will be flagged in which vegetation removal will be avoided to the extent practicable. ▫ The proponent and local Indigenous communities will be notified. ▫ This zone of protective forest vegetation will remain in place (along with the identified maternity roosting habitat) until the appropriate regulatory agencies have been contacted (e.g., MECP, MNR, CWS-ECCC), and any required permissions or other authorizations are received to clear it.	• Construction	EA/IA commitment
656.	Species at Risk – SAR Bats	Clearance Activities: • Minimizing the extent of clearings at camps, access roads and other temporary construction areas.	• Construction	EA/IA commitment
657.	Species at Risk – SAR Bats	Clearance Activities: • Installing construction fencing to clearly delineate the boundaries of the work areas and prevent habitat damage or destruction beyond the limits of the work area.	• Construction	EA/IA commitment
658.	Species at Risk – SAR Bats	Clearance Activities: • Progressively reclaiming areas with temporary habitat loss from construction-related disturbance and degradation (e.g., access roads, construction camps, laydown areas, etc.) and restoring them to a functional stage, with natural vegetation regeneration expected over time. When necessary, natural regeneration may be supplemented with transplants or seeds from the RSA, or self-sustaining native plants and seeds from an approved list and reputable supplier.	• Construction	EA/IA commitment
659.	Species at Risk – SAR Bats	Clearance Activities: • Reviewing and updating, as necessary, the Site Restoration and Monitoring Plan, Vegetation and Invasive Species Management Plan and Wildlife Management Plan for incorporation into the OEMP and implementing them.	• Detail design • Operations	EA/IA commitment
660.	Species at Risk – SAR Bats	Clearance Activities: • Continuing to follow conditions of environmental approval issued by regulatory agencies that are applicable to the operations phase.	• Operations	EA/IA commitment
661.	Species at Risk – SAR Bats	Clearance Activities: • Maintaining vegetation buffers (setbacks) of at least 30 m around waterbodies throughout the operations phase, and minimizing the clearing of riparian vegetation, to the extent practicable.	• Operations	EA/IA commitment
662.	Species at Risk – SAR Bats	Clearance Activities: • Minimizing the extent of clearings at quarries, pits, and other temporary areas.	• Operations	EA/IA commitment
663.	Species at Risk – SAR Bats	Clearance Activities: • Restricting access to restored areas (i.e., that were formerly disturbed) until such a time as habitat has been returned to a functional stage, ideally resembling pre-construction conditions.	• Operations	EA/IA commitment
664.	Species at Risk – SAR Bats	Habitat Structural Change: • To the extent practicable, minimizing construction footprints and maintaining vegetation in upland habitats that contain features that appear suitable for maternity roosting (e.g., large cavity trees or snags).	• Construction	EA/IA commitment
665.	Species at Risk – SAR Bats	Habitat Structural Change: • To the extent practicable, maintaining vegetation structure and composition in other sensitive habitats that bat utilize (e.g., wetland foraging habitat).	• Construction	EA/IA commitment
666.	Species at Risk – SAR Bats	Habitat Structural Change:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• Progressively reclaiming any areas of temporary disturbance from construction activities (e.g., access roads, construction camps, laydown areas), and restoring them to a functional stage, with natural regeneration expected over time. Where necessary, natural revegetation will be supplemented by transplanting species from within the RSA, or planting and/or seeding self-sustaining species native to the area obtained from a reputable supplier. ▫ Reclamation will occur as soon as possible following the completion of work in each area.		
667.	Species at Risk – SAR Bats	Habitat Structural Change: • Reviewing and updating, as necessary, the Site Restoration and Monitoring Plan, Vegetation and Invasive Species Management Plan and Wildlife Management Plan for incorporation into the OEMP and implementing this plan.	• Detail design • Operations	EA/IA commitment
668.	Species at Risk – SAR Bats	Habitat Structural Change: • Maintaining vegetation buffers (setbacks) of at least 30 m around waterbodies throughout the operations phase. and minimizing the clearing of riparian vegetation, to the extent practicable.	• Operations	EA/IA commitment
669.	Species at Risk – SAR Bats	Habitat Structural Change: • Minimizing the extent of clearings at quarries, pits and other temporary areas.	• Operations	EA/IA commitment
670.	Species at Risk – SAR Bats	Habitat Structural Change: • Progressively reclaiming areas of temporary disturbance from operation of the WSR (including quarries and access roads), restoring them to a functional stage, with natural regeneration expected over time. ▫ Reclamation will occur as soon as practicable following the decommission of quarries, pits or other work areas during the operations phase.	• Operations	EA/IA commitment
671.	Species at Risk – SAR Bats	Hydrological Changes: • Developing and Implementing Surface and Stormwater Management and Monitoring Plans, and Erosion and Sediment Control Plans as part of the CEMP.	• Detail design • Construction	EA/IA commitment
672.	Species at Risk – SAR Bats	Hydrological Changes: • Designing temporary crossings to accommodate anticipated water flows during their lifespan.	• Construction	EA/IA commitment
673.	Species at Risk – SAR Bats	Hydrological Changes: • Installing localized drainage cross-culverts at regular intervals along the WSR in lowland areas.	• Construction	EA/IA commitment
674.	Species at Risk – SAR Bats	Hydrological Changes: • Allowing overland flow to follow existing hydrological flow paths.	• Construction	EA/IA commitment
675.	Species at Risk – SAR Bats	Hydrological Changes: • Implementing Best Management Practices that minimize soil compaction and dewatering.	• Detail design • Construction	EA/IA commitment
676.	Species at Risk – SAR Bats	Hydrological Changes: • Reviewing, and updating (as necessary) Surface and Stormwater Management and Monitoring Plans, and Erosion and Sediment Control Plans developed as part of the CEMP. Implementing these measures throughout operations.	• Detail design • Operations	EA/IA commitment
677.	Species at Risk – SAR Bats	Hydrological Changes: • Maintaining localized drainage cross-culverts at regular intervals along the WSR in lowland areas, to permit overland flow to follow pre-construction hydrological flow paths.	• Operations	EA/IA commitment
678.	Species at Risk – SAR Bats	Hydrological Changes: • Continuing to implement best management practices that minimize soil compaction and retain permeability.	• Detail design • Operations	EA/IA commitment
679.	Species at Risk – SAR Bats	Hydrological Changes: • Continuing to implement best management practices that minimize dewatering during operations.	• Operations	EA/IA commitment
680.	Species at Risk – SAR Bats	Sensory Disturbance: • Following all environmental conditions of approval for the Project, including those issued by CWS-ECCC, and MECP.	• Construction	EA/IA commitment
681.	Species at Risk – SAR Bats	Sensory Disturbance: • Restricting access to the ROW to Project personnel during the construction phase.	• Construction	EA/IA commitment
682.	Species at Risk – SAR Bats	Sensory Disturbance: • Restricting construction traffic to designated areas, where practicable.	• Construction	EA/IA commitment

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683.	Species at Risk – SAR Bats	Sensory Disturbance: • Prohibiting the use of personal motorized vehicles during the construction phase in the LSA.	• Construction	EA/IA commitment
684.	Species at Risk – SAR Bats	Sensory Disturbance: • Conducting blasting outside of sensitive timing windows for SAR bats (i.e., from just before breeding begins in the late spring until after pups have matured and left the roost in the late summer or fall). In Northern Ontario, the active season for these species extends from May 1 to August 31. ▫ If it is determined that there is a need to conduct blasting within 500 m of probable maternity roosting habitat for these two species during the previously mentioned window, qualified biologists will carry out pre-blasting sweeps to assess habitat occupancy. ▫ Should habitat use be confirmed, a minimum 500 m setback from the habitat will be flagged or otherwise marked. The vegetation barrier will be maintained between the Project Footprint and maternity-roosting habitat. Blasting in that area will be subject to federal or provincial authorizations (e.g., CWS-ECCC, MECP) and will likely require site-specific mitigation measures and/or adherence to SAR permitting requirements.	• Construction	EA/IA commitment
685.	Species at Risk – SAR Bats	Sensory Disturbance: • Maintaining a vegetation barrier of at least 120 m between the Project Footprint and critical habitat for SAR bats between May 1 and August 31 unless approval is received from the appropriate regulatory agency. ▫ Removal of critical habitat, or its buffer will be subject to federal or provincial species at risk permitting requirements and site-specific mitigation measures that would be developed in consultation with CWS-ECCC, MECP, or other regulatory agencies. Local Indigenous communities will be notified.	• Construction	EA/IA commitment
686.	Species at Risk – SAR Bats	Sensory Disturbance: • If any other previously unidentified bat maternity roosting habitat is encountered during construction: ▫ The contractor will immediately halt work in that location and notify the proponent. ▫ They will also clearly flag or otherwise mark a setback 120 m from the feature and document its location. ▫ Local Indigenous communities will be notified. ▫ Activity will not resume in that location until qualified personnel have assessed the feature (i.e., for occupancy) and determined a suitable course of action, after consulting the appropriate regulatory agencies, as necessary.	• Construction	EA/IA commitment
687.	Species at Risk – SAR Bats	Sensory Disturbance: • Minimizing the use of nighttime lighting in the vicinity of suitable maternity roosting areas for SAR bats during their active seasons, to the extent practicable. Use of light shields, or angling light away from vegetation may also reduce light trespass beyond the ROW.	• Construction	EA/IA commitment
688.	Species at Risk – SAR Bats	Sensory Disturbance: • Posting and enforcing speed limits in sensitive areas.	• Construction	EA/IA commitment
689.	Species at Risk – SAR Bats	Sensory Disturbance: • Blocking and then progressively restoring areas of temporary disturbance as soon as practicable following completion of work. Restoration approaches will encourage natural regeneration, and may be supplemented, as necessary, by transplants from the RSA, or seeds and plants from approved suppliers. Species of importance to Indigenous people will be incorporated, as appropriate.	• Construction	EA/IA commitment
690.	Species at Risk – SAR Bats	Sensory Disturbance: • Reviewing the Noise and Vibration Management Plan, Light Management Plan, Wildlife Management Plan and the Construction Blasting Plan developed as part of the CEMP. Updating these plans, as necessary, prior to implementation during the operations phase.	• Detail design • Operations	EA/IA commitment
691.	Species at Risk – SAR Bats	Sensory Disturbance: • Continuing to follow any environmental conditions of approval that are applicable to the operations phase.	• Operations	EA/IA commitment
692.	Species at Risk – SAR Bats	Sensory Disturbance: • Restricting public access to quarries and other work areas during operations phase.	• Operations	EA/IA commitment
693.	Species at Risk – SAR Bats	Sensory Disturbance: • Completing operations activities, such as blasting, that are likely to cause sensory disturbance outside of the period of May 1 to August 31.	• Operations	EA/IA commitment

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		▫ If it is determined that there is a need to conduct blasting within 500 m of probable maternity roosting habitat for these species during the previously mentioned window, the procedures outlined for the construction phase will be applicable (e.g., complete pre-blasting surveys, contact regulatory agencies and notify local Indigenous communities). ▫ If it is determined that there is a need to conduct other (non-blasting) activities that may cause sensory disturbance withing 120m of probable maternity roosting habitat for SAR bats, procedures established during the construction phase will be followed. ▫ Removal of critical SAR bat habitat, or its buffer will be subject to federal or provincial species at risk permitting requirements and site-specific mitigation measures that would be developed in consultation with CWS-ECCC, MECP, or other regulatory agencies. Local Indigenous communities will be notified.		
694.	Species at Risk – SAR Bats	Sensory Disturbance: • Using nighttime lighting only where necessary for health and safety reasons during operations, thereby minimizing light trespass in the vicinity of suitable maternity roosting areas for SAR bats during their active seasons.	• Operations	EA/IA commitment
695.	Species at Risk – SAR Bats	Sensory Disturbance: • Restricting access to areas of reclamation until the habitat has returned to a functional state.	• Operations	EA/IA commitment
696.	Species at Risk – SAR Bats	Sensory Disturbance: • Maintaining reduced speed limits in sensitive areas.	• Construction • Operations	EA/IA commitment
697.	Species at Risk – SAR Bats	Sensory Disturbance: • Ensuring maintenance activities take place outside critical time periods such as the maternity roosting season.	• Construction • Operations	EA/IA commitment
698.	Species at Risk – SAR Bats	Sensory Disturbance: • Ensuring maintenance activities are located at least 120 m away from maternity roosting habitats.	• Construction • Operations	EA/IA commitment
699.	Species at Risk – SAR Bats	Incidental Take: • Preparing and following the requirements of the Wildlife Management Plan and Construction Blasting Plan prior to construction. These plans will be reviewed and updated, as necessary, prior to being implemented during the operations phase.	• Detail design • Operations	EA/IA commitment
700.	Species at Risk – SAR Bats	Incidental Take: • Following all environmental conditions of approval for the Project, including any issued by MNR, CWS-ECCC or MECP.	• Construction • Operations	EA/IA commitment
701.	Species at Risk – SAR Bats	Incidental Take: • Avoiding any blasting activity within 500 m of suitable maternity roosting habitat for SAR bats during their maternity roosting period (May 1 – August 31). ▫ If it is determined that there is a need to conduct blasting within 500 m of probable maternity roosting habitat for SAR bats between May 1 and August 31, qualified biologists will carry out pre-blasting ground sweeps to assess habitat occupancy. ▫ Should use of the maternity roosting habitat be confirmed, a 500 m setback from the habitat will be flagged, or otherwise appropriately marked. The activity (blasting) will be subject to federal or provincial species at risk authorizations, depending on jurisdiction. The activity will also likely require site-specific mitigation measures developed in cooperation with the relevant regulatory agency (e.g., CWS-ECCC, MECP).	• Construction	EA/IA commitment
702.	Species at Risk – SAR Bats	Incidental Take: • Blasting, regardless of location, shall have control measures for fly-rock generated so there is no danger from projectiles.	• Construction	EA/IA commitment
703.	Species at Risk – SAR Bats	Incidental Take: • To the extent practicable, avoiding other construction or maintenance-related activities within 120 m of suitable maternity roosting habitat for SAR bats between May 1 and August 31. ▫ If there is a proposal to remove potential maternity roosting habitat during this window, qualified biologists will carry out pre-clearance ground sweeps to assess habitat occupancy. ▫ Removal of confirmed maternity roosting habitat or its buffer will be subject to federal or provincial (depending on jurisdiction) species at risk permitting requirements and site-specific mitigation measures that would be developed in consultation with MNR, MECP, and CWS/ECCC. Local Indigenous communities will be notified.	• Construction • Operations	EA/IA commitment
704.	Species at Risk – SAR Bats	Incidental Take:	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• If any other previously unidentified bat maternity roosting habitat is encountered during construction: ▫ The contractor will immediately halt work in that location and notify the proponent. ▫ They will also clearly flag or otherwise mark a setback 120 m from the feature and document its location. ▫ The incident may need to be reported to the appropriate regulatory agencies. ▫ Local Indigenous communities will be informed. ▫ Activity will not resume in that location until qualified personnel have assessed the feature (i.e., for occupancy) and determined a suitable course of action, after consulting the appropriate regulatory agencies, as necessary.		
705.	Species at Risk – SAR Bats	Incidental Take: • Restricting construction traffic to designated areas, and limit pullout areas along the road.	• Construction	EA/IA commitment
706.	Species at Risk – SAR Bats	Incidental Take: • Restricting access to the ROW to Project personnel during the construction phase.	• Construction	EA/IA commitment
707.	Species at Risk – SAR Bats	Incidental Take: • Prohibiting the use of personal recreational vehicles during Construction within the LSA.	• Construction	EA/IA commitment
708.	Species at Risk – SAR Bats	Incidental Take: • Restricting traffic to approved access routes during construction.	• Construction	EA/IA commitment
709.	Species at Risk – SAR Bats	Incidental Take: • Posting and enforcing speed limits in sensitive areas during construction and operations phases.	• Construction • Operations	EA/IA commitment
710.	Species at Risk – SAR Bats	Additional mitigation measures to address potential effects on SAR Bats are included in Appendix E – Mitigation: • Section 5.1 – Clearing and Grubbing; • Section 5.3 – Spill Prevention and Emergency Response; • Section 5.4 – Noise Control; • Section 5.11 – Bridge and Culvert Installation; • Section 5.12 – Blasting Near a Watercourse; • Section 5.14 – Wildlife and Wildlife Habitat; • Section 5.16 – Erosion and Sediment Control; • Section 5.18 – Dust Control Practices; • Section 5.19 – Aggregate Pit Decommissioning; • Section 5.20 – Quarry Site Selection and Development; • Section 5.21 – Site Decommissioning and Rehabilitation; and • Section 5.23 – Prevention of the Transfer of Invasive Species.	• Construction • Operations	EA/IA commitment
711.	Species at Risk – SAR Birds	Clearance Activities: • Developing and implementing a CEMP that includes detailed plans for vegetation management, wildlife management and site restoration and monitoring.	• Detail design • Construction	EA/IA commitment
712.	Species at Risk – SAR Birds	Clearance Activities: • Following all environmental conditions of approval for the Project, including any issued by CWS-ECCC and/or MECP.	• Construction	EA/IA commitment
713.	Species at Risk – SAR Birds	Clearance Activities: • Minimizing the extent of clearings at temporary areas, including access roads and construction camps.	• Construction	EA/IA commitment
714.	Species at Risk – SAR Birds	Clearance Activities: • Installing construction fencing to clearly delineate the boundaries of the work areas and prevent habitat destruction beyond the limits of the Project footprint.	• Construction	EA/IA commitment
715.	Species at Risk – SAR Birds	Clearance Activities:	• Construction	EA/IA commitment

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		• Maintaining vegetation buffers (setbacks or protection zones) of at least 30 m around waterbodies. Minimizing the clearing of riparian vegetation to the extent practicable.		
716.	Species at Risk – SAR Birds	Clearance Activities: • Having qualified biologists or resource specialists conduct ground sweeps prior to the onset of construction to confirm that the nests of SAR birds, and other critical habitats have been identified.	• Construction	EA/IA commitment
717.	Species at Risk – SAR Birds	Clearance Activities: • Having qualified Project personnel carry out site visits to verify that environmental protection measures have been correctly implemented.	• Construction	EA/IA commitment
718.	Species at Risk – SAR Birds	Clearance Activities: • To the extent practicable, avoiding vegetation clearance and activities that disturb the ground between April 25 and August 29 of the calendar year, which is the active season for migratory birds in Northern Ontario.	• Construction	EA/IA commitment
719.	Species at Risk – SAR Birds	Clearance Activities: • To the extent feasible, preserving any used, or potentially used large trees or snags.	• Construction	EA/IA commitment
720.	Species at Risk – SAR Birds	Clearance Activities: • Making Project personnel aware of legislative requirements for SAR birds, their residences and habitats. These include requirements of the Migratory Bird Convention Act and Regulations, the Species at Risk Act and the Endangered Species Act.	• Construction	EA/IA commitment
721.	Species at Risk – SAR Birds	Clearance Activities: • Developing and implementing a protocol for Project personnel to follow should SAR birds, their nests, or eggs be encountered during construction, particularly during the active season. ▫ The protocols may include the stoppage of work in the vicinity of the habitat until the proponent and local Indigenous groups have been notified, a qualified biologist or resource specialist makes an assessment, and contact with regulatory agencies has been completed (as necessary). ▫ Species-specific mitigation measures, including the establishment of vegetation buffers around active nests and other key habitats may also be required.	• Construction	EA/IA commitment
722.	Species at Risk – SAR Birds	Clearance Activities: • Progressively reclaiming disturbed areas that have caused temporary habitat loss (e.g., access roads, construction camps, laydown areas, etc.) and restoring them to a functional stage, with natural vegetation regeneration expected over time. When necessary, natural regeneration may be supplemented by transplanting species from within the RSA, or planting and/or seeding self sustaining species native to the area from a reputable supplier.	• Construction	EA/IA commitment
723.	Species at Risk – SAR Birds	Clearance Activities: • Qualified biologists or resource specialists will monitor the site to determine the effectiveness of mitigation measures and restoration efforts.	• Construction	EA/IA commitment
724.	Species at Risk – SAR Birds	Clearance Activities: • All environmental conditions of approval for the Project will be followed.	• Operations	EA/IA commitment
725.	Species at Risk – SAR Birds	Clearance Activities: • The CEMP will be reviewed, and updated as necessary, for implementation during the operations phase. The OEMP will include direction relating to vegetation management, wildlife management and effectiveness monitoring.	• Detail design • Operations	EA/IA commitment
726.	Species at Risk – SAR Birds	Clearance Activities: • To the extent practicable, habitat loss for SAR birds will be mitigated by reducing the extent of clearings at quarries, borrow pits, and other temporary work areas.	• Operations	EA/IA commitment
727.	Species at Risk – SAR Birds	Clearance Activities: • Areas of temporary disturbance will be reclaimed as soon as practicable following completion of work in each area in alignment with the Best management practices for renewable energy, energy infrastructure and energy transmission activities and Woodland Caribou in Ontario (e.g., shortly after a quarry site is decommissioned).	• Operations	EA/IA commitment
728.	Species at Risk – SAR Birds	Clearance Activities: • Reclamation approaches will facilitate the natural regeneration of vegetation. However, these approaches may be augmented via transplants from within the RSA, or planting and seeding self-sustaining species indigenous to the study area from approved stock and a reputable supplier.	• Operations	EA/IA commitment
729.	Species at Risk – SAR Birds	Habitat Structural Change: • Developing and implementing a CEMP that includes detailed plans for vegetation management, wildlife management and site restoration and monitoring.	• Detail design • Construction	EA/IA commitment
730.	Species at Risk – SAR Birds	Habitat Structural Change:	• Construction	EA/IA commitment

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		• Following all approval conditions for the Project, including any issued by MECP or CWS-ECCC.		
731.	Species at Risk – SAR Birds	Habitat Structural Change: • Maintaining vegetation buffers (protection zones) of at least 30 m around waterbodies.	• Construction	EA/IA commitment
732.	Species at Risk – SAR Birds	Habitat Structural Change: • Limiting vegetation clearance in riparian areas to the extent practicable.	• Construction	EA/IA commitment
733.	Species at Risk – SAR Birds	Habitat Structural Change: • Minimizing (restricting) clearance activities near other sensitive habitats in a manner that keeps the ROW as narrow as possible, and using construction fencing, or other appropriate markers to delineate the boundary of the work area.	• Construction	EA/IA commitment
734.	Species at Risk – SAR Birds	Habitat Structural Change: • Keeping construction footprints as small as practicable, phasing work so that only the necessary amount of vegetation is cleared at any one time and using progressive restoration to reclaim areas as soon as each work area is no longer required for construction or operations.	• Construction	EA/IA commitment
735.	Species at Risk – SAR Birds	Habitat Structural Change: • Reclamation approaches will facilitate natural regeneration (i.e., succession), and will occasionally be augmented by planting or seeding self-sustaining species native to the RSA or transplanting self-sustaining species from within the RSA.	• Construction	EA/IA commitment
736.	Species at Risk – SAR Birds	Habitat Structural Change: • All restoration activities will be conducted under appropriate environmental conditions.	• Construction	EA/IA commitment
737.	Species at Risk – SAR Birds	Habitat Structural Change: • Qualified Project personnel will carry out site visits to that verify environmental protection measures have been implemented and that any required modifications or corrections are made in a timely manner. They will also conduct effectiveness monitoring.	• Construction • Operations	EA/IA commitment
738.	Species at Risk – SAR Birds	Habitat Structural Change: • Avoid re-opening access roads and laydown areas during maintenance activities.	• Operations	EA/IA commitment
739.	Species at Risk – SAR Birds	Habitat Structural Change: • Restrict brushing and clearing of ROW within the limits of the original clearance.	• Operations	EA/IA commitment
740.	Species at Risk – SAR Birds	Hydrological Changes: • During Project Planning, the Study Team considered how consolidation and compression processes could impact the peat layers (i.e., reduced permeability from placement of fill) and alter groundwater flow directions and pathways.	• Construction	EA/IA commitment
741.	Species at Risk – SAR Birds	Hydrological Changes: • Temporary crossings will be designed to accommodate anticipated water flows during their lifespan.	• Construction	EA/IA commitment
742.	Species at Risk – SAR Birds	Hydrological Changes: • Cross-culverts will be installed at regular intervals in lowland areas to prevent water from ponding on either side of the roadway, instead permitting surface water to follow hydrological flow paths that preceded construction.	• Construction	EA/IA commitment
743.	Species at Risk – SAR Birds	Hydrological Changes: • Culverts and other crossings will be regularly maintained (i.e., kept in good repair).	• Operations	EA/IA commitment
744.	Species at Risk – SAR Birds	Hydrological Changes: • Culverts and other crossings will be regularly checked during road maintenance activities for blockages. Such blockages will be appropriately as soon as feasible after being documented.	• Operations	EA/IA commitment
745.	Species at Risk – SAR Birds	Loss of Connectivity: • Developing a CEMP that includes detailed plans for vegetation management, wildlife management, site restoration and effectiveness monitoring. Reviewing and updating these plans, as necessary, for implementation during the operations phase.	• Detail design • Construction • Operations	EA/IA commitment
746.	Species at Risk – SAR Birds	Loss of Connectivity: • Following all conditions of approval for the Project.	• Construction • Operations	EA/IA commitment
747.	Species at Risk – SAR Birds	Loss of Connectivity: • Constructing the WSR in phases, with construction areas having physical breaks in between (i.e., where habitat is maintained).	• Construction	EA/IA commitment

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748.	Species at Risk – SAR Birds	Loss of Connectivity: • Maintaining a minimum 30 m vegetation buffer (protection zone) around waterbodies.	• Construction	EA/IA commitment
749.	Species at Risk – SAR Birds	Loss of Connectivity: • Retaining as much riparian vegetation as is practicable.	• Construction	EA/IA commitment
750.	Species at Risk – SAR Birds	Loss of Connectivity: • Keeping construction footprints as small as possible and minimizing (or restricting) vegetation clearing near sensitive areas.	• Construction	EA/IA commitment
751.	Species at Risk – SAR Birds	Loss of Connectivity: • Using progressive restoration in areas of temporary disturbance and conducting reclamation activities as soon as practicable following the completion of work.	• Construction	EA/IA commitment
752.	Species at Risk – SAR Birds	Loss of Connectivity: • Incorporating bridge designs instead of causeways at larger watercourse crossings to allow waterfowl to cross under the road.	• Construction	EA/IA commitment
753.	Species at Risk – SAR Birds	Sensory Disturbance: • Phasing the development of the WSR temporally as well as physically (i.e., completing construction in a few work areas before moving onto others).	• Construction	EA/IA commitment
754.	Species at Risk – SAR Birds	Sensory Disturbance: • Completing each phase as quickly as possible to minimize the length of disturbance.	• Construction • Operations	EA/IA commitment
755.	Species at Risk – SAR Birds	Sensory Disturbance: • Completing construction and maintenance activities (i.e., operations) outside of the active period for SAR birds in Northern Ontario (April 25 – August 29) to the extent practicable.	• Construction • Operations	EA/IA commitment
756.	Species at Risk – SAR Birds	Sensory Disturbance: • Logs, coarse woody debris, and/or other physical control measures will be used to block human access to areas where reclamation efforts have been focused until successful revegetation has occurred.	• Construction • Operations	EA/IA commitment
757.	Species at Risk – SAR Birds	Increased Access: • Preparing and implementing a Wildlife Management Plan as part of the CEMP.	• Detail design • Construction	EA/IA commitment
758.	Species at Risk – SAR Birds	Increased Access: • Limiting road access to Project personnel to reduce hunting opportunities during the construction phase.	• Construction	EA/IA commitment
759.	Species at Risk – SAR Birds	Increased Access: • Prohibiting firearms from construction camps.	• Construction	EA/IA commitment
760.	Species at Risk – SAR Birds	Increased Access: • Keeping camps and rest areas clean and having food waste stored properly to deter any wildlife conflicts that may occur (because of refuse attracting SAR birds and/or their predators).	• Construction	EA/IA commitment
761.	Species at Risk – SAR Birds	Increased Access: • Fencing, or otherwise blocking, temporary access roads, laydowns and construction areas until native vegetation has been re-established.	• Construction	EA/IA commitment
762.	Species at Risk – SAR Birds	Collisions with Vehicles: • Setting speed limits for construction vehicles and enforcing them on the ROW and access roads.	• Construction	EA/IA commitment
763.	Species at Risk – SAR Birds	Collisions with Vehicles: • Enforcing restricted access to approved routes during construction.	• Construction	EA/IA commitment
764.	Species at Risk – SAR Birds	Collisions with Vehicles: • Prohibiting the use of personal recreational vehicles during construction in the LSA.	• Construction	EA/IA commitment
765.	Species at Risk – SAR Birds	Collisions with Vehicles: • Integrating safe road travel protocols in the Health and Safety Management Plan, including wildlife awareness training, and collision reporting protocols.	• Detail design • Construction	EA/IA commitment
766.	Species at Risk – SAR Birds	Incidental Take: • Developing plans for wildlife management and construction blasting as part of the CEMP and implementing them during construction.	• Detail design • Construction	EA/IA commitment
767.	Species at Risk – SAR Birds	Incidental Take: • Identifying and establishing buffers around known sensitive features (e.g., stopover areas, nesting habitat) during prior to construction.	• Construction	EA/IA commitment

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768.	Species at Risk – SAR Birds	Incidental Take: • Implementing control measures for fly-rock so there is no danger posed by projectiles.	• Construction	EA/IA commitment
769.	Species at Risk – SAR Birds	Incidental Take: • Making Project personnel aware of the requirements of the Migratory Bird Convention Act and Regulations and establishing a process for staff to follow should any active bird nests be found during construction.	• Construction	EA/IA commitment
770.	Species at Risk – SAR Birds	Incidental Take: • Providing environmental orientation as part of health and safety training for all Project personnel, including instruction to staff that wildlife always have the right of way (except in instances where there is imminent risk to the health and safety of workers and/or the public).	• Construction	EA/IA commitment
771.	Species at Risk – SAR Birds	Incidental Take: • Scheduling vegetation removal to occur outside the migratory bird nesting period (April 25 to August 29) to the extent practicable.	• Construction	EA/IA commitment
772.	Species at Risk – SAR Birds	Incidental Take: • Using trained personnel to look for signs of bird breeding behaviour and identify active bird nests.	• Construction	EA/IA commitment
773.	Species at Risk – SAR Birds	Incidental Take: • If an active nest is located: ▫ Construction work will stop immediately, and the appropriate Project personnel will be contacted. ▫ Local Indigenous communities will be notified. ▫ The nest will be marked, and a protective vegetation buffer established based on species requirements. ▫ No work will resume within this buffer until site-specific mitigation measures have been developed (in consultation with MECP, MNR or CWS-ECCC as appropriate) and implemented. ▫ Species at Risk permitting or other authorizations may be required.	• Construction	EA/IA commitment
774.	Species at Risk – SAR Birds	Incidental Take: • Limiting the use of blasting to areas where other methods, such as drilling and standard excavation, are not possible, and having any blasting activity occur outside of established buffers. Vegetation buffers (protection zones) are often species-specific and shall be determined by a qualified biologist based on established protocols (in cooperation with the appropriate regulatory agency, when necessary).	• Construction	EA/IA commitment
775.	Species at Risk – SAR Birds	Incidental Take: • Site-specific blasting plans shall be developed when blasting is likely to be required. Blasting, regardless of location, shall have control measures for fly-rock generated so there is no danger from projectiles.	• Construction	EA/IA commitment
776.	Species at Risk – SAR Birds	Incidental Take: • In areas where operations will be carried out during the breeding season, contour aggregate piles to have a slope of less than 70 degrees.	• Construction	EA/IA commitment
777.	Species at Risk – SAR Birds	Incidental Take: • Install scaring devices to deter Bank Swallows from establishing colonies.	• Construction	EA/IA commitment
778.	Species at Risk – SAR Birds	Incidental Take: • Use of geotextiles as exclusion netting.	• Construction	EA/IA commitment
779.	Species at Risk – SAR Birds	Incidental Take: • Mowing and brushing will be timed to occur outside of bird nesting periods (mid-April until the end of August).	• Operations	EA/IA commitment
780.	Species at Risk – SAR Birds	Incidental Take: • All hazard trees will be assessed for potential use by raptors or cavity nesting species prior to removal.	• Operations	EA/IA commitment
781.	Species at Risk – SAR Birds	Incidental Take: • If birds within the area of operations are displaying breeding behavior, the precautionary principle will be applied.	• Operations	EA/IA commitment
782.	Species at Risk – SAR Birds	Incidental Take: • Mitigation measures, which may include stopping all activities and having a search conducted by qualified personnel, will be implemented.	• Operations	EA/IA commitment
783.	Species at Risk – SAR Birds	Changes to Predator-Prey Relationships:	• Construction	EA/IA commitment

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		• Clearly delineating the boundaries of work areas to prevent habitat damage and destruction beyond the limits of the work area. Construction fencing or other appropriate markers will be used.		
784.	Species at Risk – SAR Birds	Changes to Predator-Prey Relationships: • Blocking any temporarily disturbed areas and/or access roads until reclamation is complete.	• Construction	EA/IA commitment
785.	Species at Risk – SAR Birds	Changes to Predator-Prey Relationships: • Incorporating measures that reduce the efficiency of land predators (such as red fox) during Construction. For example, maintaining vegetation along the ROW that is 2 m in height or less and avoiding the snow removal unless it is required for site access.	• Construction	EA/IA commitment
786.	Species at Risk – SAR Birds	Changes to Predator-Prey Relationships: • Maintaining a feathered multi-layer edge in forested ecosites during vegetation removal, to the extent practicable.	• Construction	EA/IA commitment
787.	Species at Risk – SAR Birds	Changes to Predator-Prey Relationships: • Minimizing maintenance activities that clear vegetation along the ROW.	• Operations	EA/IA commitment
788.	Species at Risk – SAR Birds	Changes to Predator-Prey Relationships: • Avoiding the creation of abrupt edges between the ROW and natural vegetation during maintenance activities.	• Operations	EA/IA commitment
789.	Species at Risk – SAR Birds	Changes to Predator-Prey Relationships: • Removing roadkill from the ROW as soon as practicable, to reduce the likelihood that predators will be attracted to the Project Footprint.	• Operations	EA/IA commitment
790.	Species at Risk – SAR Birds	Increased Access: • Reviewing the CEMP and updating it as necessary prior to implementation during operations.	• Operations	EA/IA commitment
791.	Species at Risk – SAR Birds	Increased Access: • Following all environmental conditions of approval for the Project, including any issued by CWS-ECCC or MECP.	• Operations	EA/IA commitment
792.	Species at Risk – SAR Birds	Increased Access: • Limiting the number of pull-offs and rest areas along the road.	• Operations	EA/IA commitment
793.	Species at Risk – SAR Birds	Increased Access: • Fencing all maintenance turnaround areas (with strategic locations accessible to Operations personnel only).	• Operations	EA/IA commitment
794.	Species at Risk – SAR Birds	Increased Access: • Blocking off temporary areas of disturbance, such as access roads and decommissioned quarry sites until vegetation has been successfully re-established.	• Operations	EA/IA commitment
795.	Species at Risk – SAR Birds	Forest Songbirds (Evening Grossbeak): • Mature upland conifer and mixed forests are rare in the LSA, except on the far west side. These habitats, which are also recognized as important areas for bats, were avoided during route selection, where practicable.	• Construction	EA/IA commitment
796.	Species at Risk – SAR Birds	Forest Songbirds (Evening Grossbeak): • A Vegetation and Invasive Species Management Plan including measures to protect rare vegetation communities will be developed as part of the CEMP and implemented during the construction phase.	• Detail design • Construction	EA/IA commitment
797.	Species at Risk – SAR Birds	Raptors (Bald Eagle): • To the extent practicable, the clearance of vegetation in the ecosite surrounding suitable nest trees will occur outside of the breeding season for Bald Eagle (March 1 to August 31).	• Construction	EA/IA commitment
798.	Species at Risk – SAR Birds	Raptors (Bald Eagle): • During the preliminary proposed route selection process, known Bald Eagle nests (i.e., those identified during the baseline study) were avoided, to the extent practicable. A total of 29 Bald Eagle nests were recorded during field studies for the Project. Bald Eagle nests were located primarily along the expansive shoreline of Winisk Lake and among the many lakes west of Webequie. No Bald Eagle nests were located within 1 km of the route alternatives for the WSR.	• Construction	EA/IA commitment
799.	Species at Risk – SAR Birds	Raptors (Bald Eagle): • If additional Bald Eagle nests are identified during the construction phase their locations will be recorded, and specific mitigation measures shall be implemented including: ▫ Temporarily stopping construction within the local work area.	• Construction	EA/IA commitment

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		▫ Appropriately documenting the nest(s) (e.g., notes made regarding location, photographs). ▫ Notifying the proponent and local Indigenous communities. ▫ Having a qualified biologist or resource specialist delineate (with flagging, fencing or another appropriate material) a vegetation buffer of 400 m to 800 m from the nest, depending on the sightlines. ▫ MNR, CWS-ECCC and/or other appropriate regulatory agencies will be consulted prior to the removal of vegetation in the vicinity of Bald Eagle nests to discuss next steps. Specific authorizations or permits may be required to proceed.		
800.	Species at Risk – SAR Birds	Raptors (Bald Eagle): • To the extent practicable, the clearing of vegetation within ecosites containing suitable nest trees will occur outside of the critical periods for Bald Eagle (March 1 to August 31).	• Construction	EA/IA commitment
801.	Species at Risk – SAR Birds	Raptors (Bald Eagle): • Should an active Bald Eagle nest be encountered during the construction phase, its location will be noted and the measures outlined in **Section** Error! Reference source not found. (Habitat Loss – Construction – Bald Eagle) shall be implemented.	• Construction	EA/IA commitment
802.	Species at Risk – SAR Birds	Raptors (Bald Eagle): • Roadkill will be removed from ROW as soon as practicable.	• Construction • Operations	EA/IA commitment
803.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • During the preliminary proposed route selection process, the removal of habitat in fens, bogs and burned areas were avoided, where practicable.	• Construction	EA/IA commitment
804.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • Restoration of early successional habitat that follows in temporary areas of disturbance (e.g., access roads, laydown areas) will incorporate downed woody debris, to provide suitable habitat for voles, which are a primary prey species of Short-eared Owl. The incorporation of downed woody debris will be particularly important in areas where there is dry ground adjacent to taller vegetation (i.e., >6m in height) such as coniferous forests.	• Construction	EA/IA commitment
805.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • Although no Short-eared Owl were detected during field studies for the Project, they are a relatively non-vocal species. Should a Short-eared Owl be encountered during the construction phase, its location will be documented in wildlife reporting protocols that were developed for the site.	• Construction	EA/IA commitment
806.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • Should evidence of breeding activity be encountered during construction within 500 m of the Project Footprint (e.g., territorial behaviour, agitated behaviour, potential nest site): ▫ Construction activity in the local work area shall cease. ▫ The proponent and local Indigenous communities will be notified. ▫ A qualified biologist or resource specialist shall conduct a ground survey, and delineate (with flagging, fencing, or another appropriate material) a suitable vegetation buffer (e.g., approximately 500 m from a nest depending on level of activity and sightlines). ▫ The buffer of protective vegetation will remain in place until the appropriate regulatory agencies have been contacted, and any required permits or authorizations obtained.	• Construction	EA/IA commitment
807.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • To the extent practicable, the clearing of vegetation within ecosites containing suitable habitat for Short-eared Owl will occur outside of the critical period of disturbance for this species (April 1 – August 31).	• Construction	EA/IA commitment
808.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • Should evidence of breeding activity be encountered during construction within 500 m of the Project Footprint (e.g., territorial behaviour, agitated behaviour, potential nest site), the location will be noted and the measures outlined in Section 13.4.6.1 (Habitat Loss – Construction – Short-eared Owl) shall be implemented.	• Construction	EA/IA commitment
809.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • Establish and enforce slower speed limits in areas where suitable foraging habitat for Short-eared Owl occurs immediately adjacent to the road.	• Construction • Operations	EA/IA commitment

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810.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • Provide Project personnel with educational training about this SAR and implement a reporting program should they be encountered during construction.	• Construction	EA/IA commitment
811.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • Ensure Project personnel that are responsible for driving are made aware that the species is most active in the early morning and early evening and remind personnel to be particularly alert during these times.	• Construction	EA/IA commitment
812.	Species at Risk – SAR Birds	Raptors (Short-eared Owl): • Post signage in suitable locations to alert Project personnel to reduced speed limits in such areas.	• Construction • Operations	EA/IA commitment
813.	Species at Risk – SAR Birds	Shorebirds (Lesser Yellowlegs): • To the extent practicable, construction will occur outside of the nesting season for Lesser Yellowlegs (i.e., late-April to July) in the vicinity of suitable breeding habitat (i.e., a radial distance of 6 km from any confirmed nest or observation point of a Lesser Yellowlegs with confirmed or probable breeding evidence.	• Construction	EA/IA commitment
814.	Species at Risk – SAR Birds	Shorebirds (Lesser Yellowlegs): • To the extent practicable, any clearance activities, or other construction work that results in habitat loss will avoid areas of suitable breeding habitat and their surrounding buffer, until it is confirmed that the habitat has not been used for two (2) consecutive years.	• Construction	EA/IA commitment
815.	Species at Risk – SAR Birds	Shorebirds (Lesser Yellowlegs): • If important habitat (e.g., nesting areas, foraging areas or stopover habitat) for Lesser Yellowlegs is identified during the construction phase: ▫ A temporary work stoppage will occur in the vicinity of the habitat. ▫ The sensitive habitat will be documented. It will be delineated, as appropriate, by a qualified biologist or resource specialist. ▫ The proponent, local indigenous communities, and the appropriate regulatory agencies will be contacted (e.g., CWS-ECCC, MECP). ▫ Feature specific mitigation measures will be implemented including the establishment of vegetation buffers (e.g., 100m radius around migratory stopover habitat) based on the guidance of appropriate regulatory agencies. These measures will remain in place until permits or other authorizations have been obtained (e.g., from CWS-ECCC, MECP).	• Construction	EA/IA commitment
816.	Species at Risk – SAR Birds	Common Nighthawk: • If any areas are identified with large numbers of Common Nighthawk strikes during construction monitoring, signage with reduced speed limits will be posted specifically in these areas.	• Construction	EA/IA commitment
817.	Species at Risk – SAR Birds	Common Nighthawk: • During the construction phase, educational training about this SAR will be completed and a reporting program implemented.	• Construction	EA/IA commitment
818.	Species at Risk – SAR Birds	Additional mitigation measures to address potential effects on SAR Birds are included in Appendix E – Mitigation: • Section 5.1 – Clearing and Grubbing; • Section 5.3 – Spill Prevention and Emergency Response; • Section 5.4 – Noise Control; • Section 5.7 – Temporary Watercourse Crossings; • Section 5.11 – Bridge and Culvert Installation; • Section 5.12 – Blasting Near a Watercourse; • Section 5.14 – Wildlife and Wildlife Habitat; • Section 5.16 – Erosion and Sediment Control; • Section 5.17 – Concrete Washout Management Practices; • Section 5.18 – Dust Control Practices; • Section 5.19 – Aggregate Pit Decommissioning;	• Construction • Operations	EA/IA commitment

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		• Section 5.20 – Quarry Site Selection and Development; • Section 5.21 – Site Decommissioning and Rehabilitation; and • Section 5.23 – Prevention of the Transfer of Invasive Species		
819.	Species at Risk – Lake Sturgeon	Applicable best management strategies, avoidance and mitigation measures will be applied using the practices within the MNR Environmental Guidelines for Access Roads and Water Crossings (MNR 1990), MNR and DFO protocol for the review and approval of forestry water crossings (MNR and DFO 2021), DFO's Measures to Protect Fish and Fish Habitat (DFO 2022a) and applicable Codes of Practice (DFO 2022c), and standard mitigation measures presented in the Ministry of Transportation/Fisheries and Oceans/Ministry of Natural Resources (MTO/DFO/MNR) Protocol for Protecting Fish and Fish Habitat on Provincial Transportation Undertakings (MTO/DFO/MNR 2020.	• Detail design • Construction	EA/IA commitment
820.	Species at Risk – Lake Sturgeon	The preferred route has been selected with consideration to minimize the number of waterbody crossings for the road, where feasible, as well as the Project Footprint will be minimized to the extent possible.	• Construction	EA/IA commitment
821.	Species at Risk – Lake Sturgeon	Permanent culverts and bridge crossings have been designed to accommodate the complete existing bankfull channel width of a watercourse, preserving and minimizing impacts to fish habitat.	• Construction	EA/IA commitment
822.	Species at Risk – Lake Sturgeon	For culverts (i.e., open bottom steel arch) at 17 watercourse crossing locations, the design mitigation will include the infilling of the culvert with material (i.e., aggregate) that resembles the natural substrate present at the watercourse, as well the creation of a low flow channel that mimics the existing stream channel. The same will be done for corrugated steel culverts found at the remaining eight crossings requiring culverts. The purpose is to minimize habitat loss by enabling the channel to function as "naturally" as possible to convey flow; maintain channel form and function; and retain fish passage.	• Construction	EA/IA commitment
823.	Species at Risk – Lake Sturgeon	For larger waterbody crossings bridges have been selected for design and construction which are expected to reduce the total fish habitat loss. These locations are: • Winisk Lake crossing (WB-1); • Unnamed Tributary to Muketei River crossing (WC-19); • Winiskisis Channel crossing (WC-3); • Muketei River crossing (WC-26); • Ekwan River crossing (WC-10); and • Unnamed watercourse crossing (WC-27).	• Construction	EA/IA commitment
824.	Species at Risk – Lake Sturgeon	Fish habitat delineation and mapping, Standards, and specifications for protection of fish/fish habitat will be developed in the CEMP and OEMP for implementation to limit accidental disturbances (habitat loss) beyond the Project Footprint. These measures include: • Construction and/or silt fencing will be installed to clearly delineate the boundaries of the work areas to prevent habitat damage and destruction beyond work area boundaries. Where feasible, 30 m buffers will be established around riparian areas. • Construction personnel and equipment will be directed to avoid entering and crossing any watercourses or areas not required for construction. • Work vehicles and equipment will be restricted to designated work areas and access roads. • Maps identifying fish habitat, riparian buffers and no-go zones will be created and distributed to construction and operation personnel. • Signage and setbacks will be used to identify fish habitat and communicate restrictions for entering riparian areas.	• Detail design • Construction	EA/IA commitment
825.	Species at Risk – Lake Sturgeon	Channel realignments/infilling will be avoided through Project planning and design to the extent practicable. Channel realignments/infilling will only be undertaken in locations where specific conditions are met and/or where required based on the detail design for each permanent waterbody crossing structure to be determined in the future developed stage of the Project. If required, DFO/MNR permitting and consultation will be undertaken to reduce the risk of negatively impacting the aquatic environment.	• Construction	EA/IA commitment
826.	Species at Risk – Lake Sturgeon	Sensitive habitats will be avoided (e.g., species at risk/species of conservation concern habitats, spawning areas, groundwater upwellings, etc.) where permit conditions apply and through project planning and design.	• Construction	EA/IA commitment
827.	Species at Risk – Lake Sturgeon	All temporary construction camps and temporary laydown areas and aggregate source areas (i.e., ARA-2 and ARA-4) and permanent supportive infrastructure (e.g., maintenance and storage facility, rest areas and Maintenance turn-around areas) will be located a minimum of 50 m back from the ordinary high-water mark of a waterbody through detailed planning.	• Construction	EA/IA commitment
828.	Species at Risk – Lake Sturgeon	Refuelling, service, and maintenance of construction and operation vehicles and equipment will generally be carried out in designated areas at temporary construction camps, temporary laydown areas, and operations and maintenance facility located a minimum of 100 from waterbodies. These areas will be designed and constructed	• Construction • Operations	EA/IA commitment

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		to collect and contain minor leaks and spills. If refuelling within 100 of a waterbody cannot be avoided, enhanced spill containment measures will be used. In the event that refuelling, servicing and maintenance is required in the field. There may be locations where this is not possible due to the prevalence of wetlands (i.e., peatland areas); however, in these locations enhanced spill containment measures will be used.		
829.	Species at Risk – Lake Sturgeon	The number of temporary water crossings required for the Project will be minimized, where possible.	• Construction	EA/IA commitment
830.	Species at Risk – Lake Sturgeon	Once the Project design is finalized, any net effects to fish/fish habitat will be offset through habitat creation or habitat enhancement to achieve no net loss of fish habitat and/or productive capacity. Habitat offsetting and enhancement requirements will be determined in consultation with DFO and First Nations during the detail design permitting phase of the Project.	• Construction	EA/IA commitment
831.	Species at Risk – Lake Sturgeon	Where temporary waterbody crossings are required, these will be minimized to the extent where appropriate. Waterbody crossings may involve temporary bridges (i.e., clear-span bridges, rig mats), ice bridges/snow fills (for winter construction); and may potentially include culverts. As appropriate, some waterbody crossings may use a very short-term rig mat to facilitate clearing and access equipment, before being immediately replaced with a temporary bridge.	• Construction	EA/IA commitment
832.	Species at Risk – Lake Sturgeon	Where temporary waterbody crossing structures are proposed, the primary preferred structures to be used are clear-span bridges, ice bridges/snow fills (for winter construction), culverts, and rig mats.	• Construction	EA/IA commitment
833.	Species at Risk – Lake Sturgeon	Where in-water work is required to install a temporary waterbody crossing structure, such as a culvert, water management may include the use of cofferdams, diversion channels or by-pass pumps to isolate the work zone. Fish within the isolated work zone will be rescued (i.e., safely relocated) by qualified professionals prior to construction under the conditions of a MNR Licence to Collect Fish for Scientific Purposes.	• Detail design • Construction	EA/IA commitment
834.	Species at Risk – Lake Sturgeon	The proponent, or its contractor, will incorporate best management practices for temporary watercourse crossings in the MNR Environmental Guidelines for Access Roads and Water Crossings, and DFO's Measures to Protect Fish and Fish Habitat and applicable Interim Codes of Practice for Temporary Stream Crossings.	• Detail design • Construction	EA/IA commitment
835.	Species at Risk – Lake Sturgeon	Temporary crossing materials, if used, will be removed immediately following the completion of construction activities. Upon removal of the crossing materials, the waterbody bed and banks will be returned to their original conditions if needed and disturbed areas will be stabilized, as necessary, to prevent soil erosion	• Construction	EA/IA commitment
836.	Species at Risk – Lake Sturgeon	Culverts and bridges are designed to match or exceed expected flow rates to provide capacity for expected water levels and water volumes. This includes consideration of site-specific and discharge rates at crossing to inform on the appropriate sizing of the water crossing structures.	• Construction	EA/IA commitment
837.	Species at Risk – Lake Sturgeon	Bridge designs have been adopted for larger watercourse crossings which are expected to reduce harmful alteration and/or disruption of fish habitat by spanning over the waterbody and minimizing the placement of the structures in-water.	• Construction	EA/IA commitment
838.	Species at Risk – Lake Sturgeon	Culvert design criteria have been used to dictate the function of the culvert including the minimum and maximum water levels in culverts for fish passage, erosion control and the proper hydraulic function of culverts. Culverts will be embedded by 10% to consider low flow conditions and aligned parallel to the waterbody channel on a straight section of uniform gradient. Culverts will be designed for fish passage at the lowest trophic levels of each system and will meet DFO's species specific passage requirements. This will aid in the ability to reduce the risk of the culvert installation introducing velocities which surpass swimming abilities of a waterbody's fishery. Open bottom culverts (i.e., steel arch structure culverts with no bottom that do not disturb the bed of a waterbody) have been considered for 17 water crossings that has been determined to be sensitive in the fish/fish habitat assessment.	• Construction	EA/IA commitment
839.	Species at Risk – Lake Sturgeon	Additional mitigation options may also be implemented for culverts to minimize net habitat alteration or loss and optimize usage and passage by fish such use of baffles, gradient pools, keyed stones, etc., where required. For proposed open bottom culverts and closed culverts (e.g., corrugated steel pipes), substrates will be placed inside the culvert to mimic the existing substrates upstream of the crossing to reduce habitat alteration.	• Construction	EA/IA commitment
840.	Species at Risk – Lake Sturgeon	Culvert length will be minimized to reduce habitat alteration and disruption, where possible.	• Construction	EA/IA commitment
841.	Species at Risk – Lake Sturgeon	Materials placed in-water will be erosion-resistant, or covered with such materials, to reduce erosion and sedimentation and limit downstream habitat alteration and disruption.	• Construction	EA/IA commitment
842.	Species at Risk – Lake Sturgeon	During the construction phase a CEMP will be implemented and during operations an OEMP will be implemented. Management plans will be consistent with the requirements of the Project's permits and authorizations to minimize the potential effects of construction and operations activities on fish and fish habitat. Management Plans will guide the proponent and its contractors in complying with applicable environmental legislation by providing criteria, standard protocols, and commitments to mitigation measures in the EA/IA to eliminate, reduce, and/or offset potential adverse effects to fish and fish habitat. During construction and/or operations, the following key environmental management plans relevant to the Fish and Fish Habitat VC within the broader CEMP and OEMP will be developed and implemented. • Erosion and Sediment Control Plan; • Fish and Fish Habitat Management Plan; • Surface Water and Storm Water Management and Monitoring Plan; • Air Quality and Dust Control Management Plan;	• Detail design • Construction • Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• Construction Blasting Management Plan; and • Vegetation and Invasive Species Management Plan		
843.	Species at Risk – Lake Sturgeon	The CEMP and OEMP will include the environmental monitoring requirements during the construction and operation phases of the Project to confirm and document compliance with the provisions of the CEMP and OEMP and conditions of applicable permits and approvals. During the construction phase, Environmental Monitor(s) and/or Indigenous Monitor(s) will be on-site to observe and document/log the implementation of mitigation measures implemented to minimize the potential effects of construction on fish and fish habitat. The documentation log will identify any deficiencies and record the actions taken to correct any issues of concern.	• Detail design • Construction • Operations	EA/IA commitment
844.	Species at Risk – Lake Sturgeon	Vegetation clearing will be conducted using appropriate equipment to prevent tree dragging and minimal earth disturbance in riparian areas of waterbodies.	• Construction	EA/IA commitment
845.	Species at Risk – Lake Sturgeon	Clearing of riparian habitat will be minimized, where possible, as riparian habitat provides a buffer to fish habitat, regulates water levels, and controls erosion and sediment.	• Construction	EA/IA commitment
846.	Species at Risk – Lake Sturgeon	Vegetation removal within the ROW will be limited to the footprint of structures placed at water crossing and where feasible to retain a 30 m riparian buffer upstream and downstream of the structure crossings to limit habitat alteration and disruption.	• Construction	EA/IA commitment
847.	Species at Risk – Lake Sturgeon	Allow for compatible vegetation to grow back within the ROW, including riparian areas, to heights compatible with safe operation of the road.	• Construction • Operations	EA/IA commitment
848.	Species at Risk – Lake Sturgeon	Develop and implement a Vegetation and Invasive Species Management Plan detailing that includes details on vegetation restoration/reclamation and riparian area stabilization using native riparian/wetland seed mixes, if applicable, to stabilize soils/banks to pre-construction condition or better.	• Detail design • Construction	EA/IA commitment
849.	Species at Risk – Lake Sturgeon	Use of only approved seed mix species and/or plant species of importance to Indigenous communities for site restoration of riparian areas.	• Construction	EA/IA commitment
850.	Species at Risk – Lake Sturgeon	Details on implementation of a post-construction monitoring plan, which will include activities such as examining and documenting the success of revegetation and restoration measures.	• Operations	EA/IA commitment
851.	Species at Risk – Lake Sturgeon	An Erosion and Sediment Control Plan will be developed and implemented to contain, manage site drainage and run-off.	• Construction • Operations	EA/IA commitment
852.	Species at Risk – Lake Sturgeon	The temporary storage, handling and disposal of materials used or generated (e.g., organics, soils, woody debris, temporary earth stockpiles, construction debris, etc.) during site preparation, construction and clean-up will be located a minimum 30 m from waterbodies to reduce the risk of that sediment or deleterious substances entering a waterbody.	• Construction	EA/IA commitment
853.	Species at Risk – Lake Sturgeon	Excess material will be managed and monitored to prevent sediment-laden water from entering watercourses and/or waterbodies and affecting fish habitat.	• Construction	EA/IA commitment
854.	Species at Risk – Lake Sturgeon	Materials stored long-term will be covered and stabilized to reduce erosion and sedimentation.	• Construction	EA/IA commitment
855.	Species at Risk – Lake Sturgeon	Waste materials will be hauled off-site for disposal or placed in environmentally stable locations.	• Construction	EA/IA commitment
856.	Species at Risk – Lake Sturgeon	Sediment fencing, silt curtains, and erosion control stabilization materials (e.g., straw mulch, wood chips, erosion control blanket, etc.) will be installed to limit the migration of sediment or release of deleterious substances into fish habitat.	• Construction	EA/IA commitment
857.	Species at Risk – Lake Sturgeon	Work will be restricted during high precipitation or run-off events to reduce erosion potential to the extent practicable and in-water work associated with water crossing will be conducted in the dry season or ice-on conditions to minimize risk to negatively impact fish habitat.	• Construction	EA/IA commitment
858.	Species at Risk – Lake Sturgeon	Temporary and/or permanent erosion control measures such as rip-rap or other materials will be placed along road where it interacts with water, to reduce erosion potential.	• Construction	EA/IA commitment
859.	Species at Risk – Lake Sturgeon	Seeding and revegetation will be completed as soon as the final surfaces are prepared to control erosion and help promote establishment of native vegetation. A healthy native vegetation community will also limit the introduction of invasive species.	• Construction	EA/IA commitment
860.	Species at Risk – Lake Sturgeon	Sediment-laden water generated on-site will be pumped into a well-vegetated area at least 30 m from fish habitat to prevent infiltration into fish habitat.	• Construction	EA/IA commitment
861.	Species at Risk – Lake Sturgeon	ESC measures will be installed, monitored, and managed as appropriate to reduce the risk of sediment reaching a waterbody prior to and during construction.	• Construction	EA/IA commitment
862.	Species at Risk – Lake Sturgeon	Disturbed areas will be re-contoured to restore drainage patterns to the approximate pre-construction conditions, where practicable.	• Construction	EA/IA commitment

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863.	Species at Risk – Lake Sturgeon	Complete instream construction in isolation of flowing water (i.e., use isolation methods where surface water exists at the time of construction). Isolation measures will follow the DFO Interim Standard for In-water Site Isolation.	• Construction	EA/IA commitment
864.	Species at Risk – Lake Sturgeon	Environmental Monitor(s) will be on-site during construction to monitor the installation, use and removal of temporary water crossing structures and during installation of permanent water crossing structures.	• Construction	EA/IA commitment
865.	Species at Risk – Lake Sturgeon	Temporary ESC measures must be: • Installed according to the plan; • Installed before or immediately after initial disturbance; and • Monitored and effectively maintained (e.g., repaired, replaced or supplemented with functional materials) throughout construction until permanent erosion control is established, or restoration is complete	• Construction	EA/IA commitment
866.	Species at Risk – Lake Sturgeon	All vehicles and equipment will be stored at least 30 m from waterbodies and operated in a way that prevents the release of deleterious substances into a waterbody, irrespective of their fish-bearing status.	• Construction	EA/IA commitment
867.	Species at Risk – Lake Sturgeon	Re-fueling, service and maintenance of equipment and vehicles will generally be caried out in designated areas at temporary construction camps, and laydown areas along the road, and will be located at least 50 m away from waterbodies, and outside of fish habitat.	• Construction	EA/IA commitment
868.	Species at Risk – Lake Sturgeon	Any vehicle or equipment that enters a waterbody must be free of fluid leaks and externally cleaned and degreased.	• Construction	EA/IA commitment
869.	Species at Risk – Lake Sturgeon	Storage of above ground fuel storage tanks and other hazardous materials will be located at least 50 m from waterbody, irrespective of their fish-bearing status.	• Construction	EA/IA commitment
870.	Species at Risk – Lake Sturgeon	Fuel and hazardous materials will be transported in approved containers in licensed vehicles and stored in such a way to reduce the risk of any deleterious substances from entering a waterbody.	• Construction	EA/IA commitment
871.	Species at Risk – Lake Sturgeon	Vehicles and equipment will not be permitted to work in-water, unless required. In these cases, works will be conducted under observation by a qualified environmental monitor.	• Construction	EA/IA commitment
872.	Species at Risk – Lake Sturgeon	Concrete truck washout areas will be located a minimum of 50 m away from the ordinary high-water mark of a waterbody and in a non-porous soil location and will be cleaned be cleaned up at the end of the construction activities.	• Construction	EA/IA commitment
873.	Species at Risk – Lake Sturgeon	Fuels and other liquid contaminants will be stored in containers with secondary containment able to store 110% of the capacity of the container.	• Construction	EA/IA commitment
874.	Species at Risk – Lake Sturgeon	Containers will be routinely inspected for leaks.	• Construction	EA/IA commitment
875.	Species at Risk – Lake Sturgeon	Spill mitigation measures (spill kits) will be present on-site in all laydown areas, vehicles, equipment, and other designated locations. In the event of a spill/leak, the following precautions will be implemented: • The spill/leak will be contained and either disposed of through site waste handling systems or removed for disposal in approved facilities; • Reportable spills (as defined under O. Reg. 675/98) of potentially deleterious materials will be reported to the MECP Spills Action Centre; and • If the spill is in fish-bearing water or where potential for harm to fish or fish habitat is likely, the MNR and DFO will also be contacted.	• Construction	EA/IA commitment
876.	Species at Risk – Lake Sturgeon	Construction will be modified or delayed during heavy precipitation or run-off events.	• Construction	EA/IA commitment
877.	Species at Risk – Lake Sturgeon	Signage or reduced speed limits will be considered for implementation over bridges to reduce the risk of vehicle accidents and spills.	• Construction	EA/IA commitment
878.	Species at Risk – Lake Sturgeon	Individuals working on-site and handling petroleum or other hazardous materials will be trained in best practices related to the transportation and handling of dangerous goods.	• Construction	EA/IA commitment
879.	Species at Risk – Lake Sturgeon	All dewatering will be conducted in compliance with the Ontario Provincial Standard Specification (OPSS) 517 – Construction Specifications for Control of Water from Dewatering Operations, and OPSS 518 – Construction Specification for Dewatering of Pipeline, Utility, and Associated Structure Excavation.	• Construction • Operations	EA/IA commitment
880.	Species at Risk – Lake Sturgeon	Dispersal mechanisms (e.g., tarping, filter bags) will be used to minimize risk of erosion, as required.	• Construction	EA/IA commitment
881.	Species at Risk – Lake Sturgeon	Existing stream flows will be maintained without interruption or diminishment during construction, where feasible.	• Construction	EA/IA commitment

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882.	Species at Risk – Lake Sturgeon	Fish screens to prevent impingement or entrainment will be utilized to reduce fish mortality. DFO guidance for fish screens (2020) will be followed.	• Construction	EA/IA commitment
883.	Species at Risk – Lake Sturgeon	Complete instream activity in the shortest timeframe practical to minimize the duration and reduce the risk of severe disturbance from dewatering activities.	• Construction	EA/IA commitment
884.	Species at Risk – Lake Sturgeon	Manage temporary flows, withdrawal, and discharge, including all water from dewatering operations to reduce the risk of erosion and/or release of sediments to a waterbody.	• Operations	EA/IA commitment
885.	Species at Risk – Lake Sturgeon	Limit vehicle emissions.	• Construction	EA/IA commitment
886.	Species at Risk – Lake Sturgeon	Vehicles and equipment will be regularly serviced, maintained, and inspected to ensure they are good working order per manufacturer specifications.	• Construction	EA/IA commitment
887.	Species at Risk – Lake Sturgeon	Obey all speed limits to limit fugitive dust.	• Construction	EA/IA commitment
888.	Species at Risk – Lake Sturgeon	Exposed excavations, disturbed ground surfaces and the road surface will be sprayed with water as a dust control practice, where deemed necessary.	• Construction	EA/IA commitment
889.	Species at Risk – Lake Sturgeon	Slash pile burning from clearing operations will be subject to permits and approvals by appropriate regulatory agencies and in compliance with O. Reg. 207/96.	• Operations	EA/IA commitment
890.	Species at Risk – Lake Sturgeon	Minimize dust-generating activities, where required, during periods of high wind to limit dust emissions and spread.	• Construction	EA/IA commitment
891.	Species at Risk – Lake Sturgeon	Restore disturbed areas as soon as reasonably possible to minimize duration of soil exposure.	• Construction	EA/IA commitment
892.	Species at Risk – Lake Sturgeon	Multi-passenger vehicles will be used to transport construction personnel to the job site, where practicable.	• Construction	EA/IA commitment
893.	Species at Risk – Lake Sturgeon	Culverts will be regularly monitored and maintained during construction and operation to allow for fish passage. Debris removal activities will follow DFO's Code of Practice: Culvert Maintenance (2023) (i.e., gradual removal such that flooding downstream, extreme flows downstream, release of suspended sediment, and avoidance of fish stranding).	• Construction • Operations	EA/IA commitment
894.	Species at Risk – Lake Sturgeon	Implement the fish and fish habitat protection procedures for culvert maintenance as documented in the Ministry of Transportation Fisheries – Best Management Practices Manual (MTO, 2020).	• Detail design • Operations	EA/IA commitment
895.	Species at Risk – Lake Sturgeon	Adjusting maintenance and inspection schedules according to how quickly culverts fill with debris.	• Operations	EA/IA commitment
896.	Species at Risk – Lake Sturgeon	Implementing a beaver dam removal plan to minimize potential effects on fish habitat availability. Where beaver dam removals are required to facilitate the installation or maintenance/repair of water crossing structures, the activity will be completed in consideration of best management practices and environmental permit/approval conditions (once available), including MNR guidelines for access roads, DFO's Measures to Protect Fish and Fish Habitat, Code of Practice for Beaver Dam Removal and Fisheries – Best Management Practices Manual.	• Detail design • Construction • Operations	EA/IA commitment
897.	Species at Risk – Changes to Fish Population	Follow the general avoidance measures and project planning in Section 13.4.8.1 such as reducing the risk of fish mortality through restricted activity periods (timing windows) and fish rescues/relocations and avoid blasting in or near water, unless absolutely necessary.	• Construction	EA/IA commitment
898.	Species at Risk – Changes to Fish Population	A Blasting Management Plan will be prepared and implemented by the proponent or their contractor(s) for the Project that describes specific measures that would be implemented if blasting is required.	• Detail design • Construction	EA/IA commitment
899.	Species at Risk – Changes to Fish Population	Use blasting mats to reduce the percussive, or risk of fly rock, injures to fish, and /or death of fish.	• Construction	EA/IA commitment
900.	Species at Risk – Changes to Fish Population	Establishing setbacks from fish-bearing waters that are protective of fish.	• Construction	EA/IA commitment

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901.	Species at Risk – Changes to Fish Population	When blasting in unavoidable, following the DFO Blasting Guidance and Ontario Provincial Standard Specification 120 General Specifications for the Use of Explosives.	• Construction	EA/IA commitment
902.	Species at Risk – Changes to Fish Population	Permitting all blasting works appropriately, including applying for Fisheries Act authorization where the potential for HADD and/or death of fish exists.	• Construction	EA/IA commitment
903.	Species at Risk – Changes to Fish Population	Limiting blasting to areas where other methods, such as drilling and standard excavation, are not possible.	• Construction	EA/IA commitment
904.	Species at Risk – Changes to Fish Population	Preparing site-specific blasting plans when blasting is likely to be required.	• Construction	EA/IA commitment
905.	Species at Risk – Changes to Fish Population	No ammonium nitrate-fuel oil mixtures will be used, due to the production of toxic byproducts (i.e., ammonia).	• Construction	EA/IA commitment
906.	Species at Risk – Changes to Fish Population	Restricted activity periods will include both Spring and Fall windows to protect fish populations during their spawning, rearing and migratory periods. Based on the species present in the study area, these windows are estimated to typically be: • April 1 to June 30 (spring window); • September 1 to June 15 (fall/winter window); and • Restricted activity periods will be based on the species discovered in each specific waterbody.	• Construction	EA/IA commitment
907.	Species at Risk – Changes to Fish Population	Construction of watercourse crossings will occur outside of restricted activity periods to minimize or avoid risk of injury or mortality to fish.	• Construction	EA/IA commitment
908.	Species at Risk – Changes to Fish Population	Where fish sampling has not been conducted, the most restrictive activity period will be applied to each individual watercourse to be protective of fish and fish habitat.	• Construction	EA/IA commitment
909.	Species at Risk – Changes to Fish Population	For waterbody crossing, the proposed restricted activity periods will be applicable to: • Any work below the high-water mark (installation of culverts, construction of bridge piers in-water); • Temporary water crossings where an ice bridge, fording or snow fill is proposed; and • Where beaver dam removals are required.	• Construction	EA/IA commitment
910.	Species at Risk – Changes to Fish Population	In-water work to allow for construction and repair of waterbody crossing structures will be isolated (i.e., will occur in the dry) from surrounding fish habitat using cofferdams, aquadams, or other methods acceptable the MNR and DFO such as the requirements in the Interim Code of Practice: Temporary Coffer Dams and Diversion Channels [DFO 2023b].	• Construction	EA/IA commitment
911.	Species at Risk – Changes to Fish Population	Submission of appropriate notification and acquisition of necessary permits/approvals from regulatory agencies.	• Construction	EA/IA commitment
912.	Species at Risk – Changes to Fish Population	Temporary dam structures to isolate the work zone will be constructed using clean materials that minimize suspended sediment generation.	• Construction	EA/IA commitment
913.	Species at Risk – Changes to Fish Population	Flow will be maintained during in-water works at a level sufficient to sustain aquatic life and prevent upstream impoundment.	• Construction	EA/IA commitment
914.	Species at Risk – Changes to Fish Population	Fish rescues will be conducted to relocate fish prior to in-water work, dewatering or conducting works in wetted channels or wetlands. Fish within the isolated workspaces will be rescued (i.e., salvaged and relocated) by qualified professionals under the conditions of a MNR License to Collect Fish for Scientific Purposes to be acquired, and in accordance with requirements in the DFO Interim Standard for In-water Site Isolation.	• Construction	EA/IA commitment

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915.	Species at Risk – Changes to Fish Population	Fish handling will be minimized, including limiting time spent weighing and measuring fish.	• Construction	EA/IA commitment
916.	Species at Risk – Changes to Fish Population	For diversions during isolations, appropriately screened pumps will be used to reduce the risk of entrainment or impingement of fish following the guidance within the interim DFO Code of Practice for end-of-pipe fish protection screens for small water intakes in freshwater (DFO 2020).	• Construction	EA/IA commitment
917.	Species at Risk – Changes to Fish Population	Installing restrictive fencing and/or barricades near waterbody crossing sites, including on bridge structures to deter fishing.	• Construction	EA/IA commitment
918.	Species at Risk – Changes to Fish Population	Siting designated rest areas along the road as far as practical from potential fishing locations.	• Construction	EA/IA commitment
919.	Species at Risk – Changes to Fish Population	Employees or visitors on-site in temporary construction camps or at the permanent maintenance and storage facility will be prohibited from hunting, fishing, or harvesting wildlife.	• Construction	EA/IA commitment
920.	Species at Risk – Changes to Fish Population	Temporary access routes, especially those at or approaching waterbody crossings as well as temporary construction camps and laydowns areas will be revegetated as soon as possible.	• Construction	EA/IA commitment
921.	Species at Risk – Changes to Fish Population	Firearms and angling gear will be prohibited on-site.	• Construction	EA/IA commitment
922.	Species at Risk – Changes to Fish Population	Wildlife orientation and education programs will be delivered on-site to inform personnel about best environmental practices for fish and wildlife in the area.	• Construction	EA/IA commitment
923.	Species at Risk – Changes to Fish Population	Temporary access routes, construction camps and laydown areas that are not required for operation of the roadway will be reclaimed (i.e., revegetated and blocked from public access as soon as feasible).	• Construction	EA/IA commitment
924.	Species at Risk – Changes to Fish Population	Public access to the road route and supportive infrastructure areas (camps, etc.) will be prohibited during construction unless authorized by the proponent.	• Construction	EA/IA commitment
925.	Species at Risk – Changes to Fish Population	Stopping on the roadway during its operations will be prohibited, except in designated rest areas and in emergency situations.	• Operations	EA/IA commitment
926.	Species at Risk – Changes to Fish Population	Fencing or other barricades will be installed near watercourses and on bridges to deter fishing.	• Construction	EA/IA commitment
927.	Species at Risk – Changes to Fish Population	Increased access may require regulatory changes, such as restrictions on fishing in certain locations or changes to harvesting by First Nation community members to prevent additional fishing pressure. However, these legislative changes or changes to First Nation exercise of their rights to harvesting of fish are beyond the direct control the Project.	• Construction • Operations	EA/IA commitment
928.	Species at Risk - Monitoring	**Compliance Monitoring** • Developing and implementing a CEMP that includes detailed plans for Species at Risk (SAR) wildlife management and monitoring.	• Construction	EA/IA commitment
929.	Species at Risk - Monitoring	**Compliance Monitoring** • Qualified Environmental Monitors are to be present on-site prior to and during construction activities.	• Construction	EA/IA commitment
930.	Species at Risk - Monitoring	**Compliance Monitoring** • A qualified Environmental Monitor will conduct a daily site inspection prior to commencement of project works and activities to ensure wildlife SAR are absent from work areas. A daily checklist will reflect completion of the inspection.	• Construction	EA/IA commitment

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931.	Species at Risk - Monitoring	**Compliance Monitoring** • Roads secured by exclusion fencing related to SAR will be monitored daily for wildlife road mortalities and injuries. Wildlife road mortalities will be submitted to a Qualified Biologist as part of a reporting protocol that will be developed and included in the environmental protection plan.	• Construction	EA/IA commitment
932.	Species at Risk - Monitoring	**Compliance Monitoring** • An incidental wildlife reporting protocol will also be developed and included in the CEMP and OMEP.	• Construction	EA/IA commitment
933.	Species at Risk - Monitoring	**Compliance Monitoring** • A qualified Environmental Monitor will inspect water crossings where aquatic SAR are known to be present to prevent fish passage interruptions and assess blockages and/or ponding.	• Construction	EA/IA commitment
934.	Species at Risk - Monitoring	**All Species** • Remote Camera Monitoring will take place along the proposed road ROW and at reference sites to monitor the occurrence and distribution of SAR wildlife. This program will commence during the construction phase and continue during the operations phase.	• Construction	EA/IA commitment
935.	Species at Risk - Monitoring	**Caribou** • GPS collars may be deployed on female caribou to determine if seasonal movements and habitat use change during or following road construction. The schedule for surveys in terms of number of collars, and the commencement and duration of the survey program, will be determined in consultation with the Ministry of Environment, Conservation and Parks and Environment and Climate Change Canada.	• Construction	EA/IA commitment
936.	Species at Risk - Monitoring	**Caribou** • Data from GPS collars will be used to inform construction activities and may impose restriction on activities until collar data indicates the collared caribou have left the activity buffer area. Buffer distance will be dependant on the disturbance level of the activity.	• Construction	EA/IA commitment
937.	Species at Risk - Monitoring	**Caribou** • If clearing or construction activities are required to take place within Category 1 Caribou habitat during sensitive periods (May 1 to September 15 for Nursery use areas and December 1 to March 31 for Winter use areas) aerial caribou sweeps will be conducted prior to construction activities to ensure that there are no caribou are within activity buffer areas. Minimum flight separation distances will be maintained to minimize potential disturbance.	• Construction	EA/IA commitment
938.	Species at Risk - Monitoring	**Wolverine** • Potential wolverine dens along the WSR alignment will be identified using aerial surveys during the denning period prior to the start of vegetation clearing activities.	• Construction	EA/IA commitment
939.	Species at Risk - Monitoring	**Wolverine** • Where clearance of construction activities is required within the wolverine denning period (February 1 to May 1) target denning surveys will be conducted within a 2 km radius of the proposed activity.	• Construction	EA/IA commitment
940.	Species at Risk - Monitoring	**SAR Bats** • Pre-construction bat maternity roost surveys will be conducted within the Project Footprint to identify potential maternity roosting habitat. ▫ If potential maternity roosting habitat is identified and vegetation clearing activities are scheduled to take place within the bat maternity roosting season (May 1 to August 31) exit surveys or acoustic monitoring may be required. Requirements will be determined in consultation with the Ministry of Environment, Conservation and Parks.	• Construction	EA/IA commitment
941.	Species at Risk - Monitoring	**SAR Birds** • Where vegetation clearing activities are proposed outside of the migratory bird breeding window for nesting zone C6 (between August 30 and April 24) pre-clearing nest sweeps will be conducted by qualified avian biologists with support from Indigenous EM(s). If during the surveys birds are found within the proposed clearance area and are presenting breeding behaviour, these areas will be flagged and protected with a disturbance buffer which will be maintained until the fledglings have left the nest or the nest becomes unoccupied.	• Construction	EA/IA commitment
942.	Species at Risk - Monitoring	**SAR Birds** • While no Bald Eagle nests were recorded within the proposed ROW for the WSR, pre-clearance surveys for raptor nests are proposed to occur along parts of the road ROW in forest ecosites containing suitable nesting trees.	• Construction	EA/IA commitment
943.	Species at Risk - Monitoring	**SAR Birds** • Lesser Yellowlegs will be part of pre-clearance wildlife surveys to determine the presence of any waterfowl and shorebird significant nesting habitats near the road alignment prior to vegetation clearing activities.	• Construction	EA/IA commitment
944.	Species at Risk - Monitoring	**SAR Birds** • Short-eared Owl road-side surveys will take place along the road alignment. These surveys will also follow the Saskatchewan Short-eared Owl Survey Protocol. The schedule for surveys in terms of frequency of surveys and the number of years post beginning of operation of the road will be determined in consultation with Environment and Climate Change Canada.	• Construction	EA/IA commitment

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945.	Species at Risk - Monitoring	**Lake Sturgeon** • Pre- and post-construction fish habitat assessments at select water crossing sites with known occurrence of Lake Surgeon will be conducted to evaluate habitat alterations, including monitoring changes to stream morphology and substrate caused by increased sediment loads or changes in streamflow.	• Construction	EA/IA commitment
946.	Species at Risk - Monitoring	**All SAR** • The wildlife road mortality program will continue through the operations phase of the program. Road users will be encouraged to report any wildlife-vehicle encounters. When a carcass is present, mortality incidents will be investigated by an environmental monitor. Incidents will be tracked in order to identify locations with multiple encounters/mortalities, implement corrective actions and track effectiveness.	• Operations	EA/IA commitment
947.	Species at Risk - Monitoring	**All SAR** • Remote Camera Monitoring will take place along the proposed road ROW and at reference sites to monitor the occurrence and distribution of SAR wildlife. This program will commence during the Construction Phase and continue during the Operations Phase.	• Operations	EA/IA commitment
948.	Species at Risk - Monitoring	**Caribou** • GPS collars may be deployed on female caribou to determine if seasonal movements and habitat use change during or following road construction. The schedule for surveys in terms of number of collars, and the commencement and duration of the survey program, will be determined in consultation with the Ministry of Environment, Conservation and Parks and Environment and Climate Change Canada.	• Operations	EA/IA commitment
949.	Species at Risk - Monitoring	**Wolverine** • Wolverine run-pole station surveys will be conducted to model wolverine populations and behaviour response to the road during the operations phase. The schedule for surveys in terms of number of collars, and the commencement and duration of the survey program, will be determined in consultation with the Ministry of Environment, Conservation and Parks.	• Operations	EA/IA commitment
950.	Species at Risk - Monitoring	**SAR Bats** • Bat presence and species diversity will be surveyed post-construction and compared to baseline data using acoustic monitoring. The surveys are proposed to occur a minimum of three times in the first five years of project operation.	• Operations	EA/IA commitment
951.	Species at Risk - Monitoring	**SAR Migratory Songbirds** • ARU and point count surveys along the road ROW and at reference sites will be conducted and compared to baseline data. The surveys are proposed to occur a minimum of three times in the first five years of operation. The schedule for surveys in terms of frequency of surveys and the number of years following the commencement of road operations will be determined in consultation with Environment and Climate Change Canada.	• Operations	EA/IA commitment
952.	Species at Risk - Monitoring	**SAR Migratory Songbirds** • Nightjar surveys will take place along the road once operations commence. These surveys will follow the Canadian Nightjar Survey Protocol. The surveys are proposed to occur during years 1, 3 and 5 in the first five years of operation. The schedule for surveys in terms of frequency of surveys and the number of years following the commencement of road operations will be determined and confirmed in consultation with Environment and Climate Change Canada.	• Operations	EA/IA commitment
953.	Species at Risk - Monitoring	**SAR Raptors** • Short-eared Owl road-side surveys will be conducted following opening of the road. These surveys will follow the Saskatchewan Short-eared Owl Survey Protocol. The surveys are proposed to occur during years 1, 3 and 5 in the first five years of operation. The schedule for surveys in terms of frequency of surveys and the number of years following the commencement of road operations will be determined and confirmed in consultation with Environment and Climate Change Canada.	• Operations	EA/IA commitment
954.	Species at Risk - Monitoring	**SAR Shorebirds** • Surveys for Lesser Yellowlegs and other shorebirds will follow the Ontario Shorebird Survey Protocol. Surveys are proposed to take place four (4) times a year twice in the spring migration period and twice in the fall migration period. The surveys are proposed to occur during years 1, 3 and 5 in the first five years of operation. The schedule for surveys in terms of frequency of surveys and the number of years following the commencement of road operations will be determined and confirmed in consultation with Environment and Climate Change Canada.	• Operations	EA/IA commitment
955.	Species at Risk - Monitoring	**Lake Sturgeon** • Lake Sturgeon monitoring at select water crossing sites with known presence of this species will be part of periodic fish community and habitat surveys to detect changes in fish assemblages.	• Operations	EA/IA commitment

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956.	Social Environment	Implementation of CRP (Community Readiness Plan).	• Construction	EA/IA commitment
957.	Social Environment	Installation of four construction camps to accommodate temporary workers, with smaller scale temporary accommodations during the operation phase.	• Construction • Operations	EA/IA commitment
958.	Social Environment	Develop education, skills, and training approach for community members to align with Project opportunities.	• Construction	EA/IA commitment
959.	Social Environment	Incorporate traditional learning and cultural teachings into training.	• Construction	EA/IA commitment
960.	Social Environment	Alignment with existing programs and services.	• Construction	EA/IA commitment
961.	Social Environment	The CRP will include plans for enhancing housing stock to address housing capacity issues.	• Construction	EA/IA commitment
962.	Social Environment	The Project will provide services for temporary workers to minimize or avoid strain on existing community services.	• Construction	EA/IA commitment
963.	Social Environment	Implement a Community Well-being Monitoring and Adaptive Management Plan to monitor various parameters including pressure on Community Services.	• Detail design • Construction	EA/IA commitment
964.	Social Environment	Potential expansion of existing community services.	• Construction	EA/IA commitment
965.	Social Environment	Potential implementation of additional health awareness and promotion efforts.	• Construction	EA/IA commitment
966.	Social Environment	Implementation of a dedicated childcare and early childhood drop-in centre to enable families to participate in business and employment opportunities from the Project.	• Construction	EA/IA commitment
967.	Social Environment	Implementation of CRP enhancement measures to identify and plan for education and training needs, especially underrepresented groups (youth, women, Elders).	• Construction	EA/IA commitment
968.	Social Environment	Integrating ongoing skills inventory studies in Webequie and other LSA and RSA communities.	• Construction	EA/IA commitment
969.	Social Environment	Facilitating in-community training.	• Construction	EA/IA commitment
970.	Social Environment	Develop scholarships and partnerships with colleges and universities.	• Construction	EA/IA commitment
971.	Social Environment	Provision of on-reserve and on-the-job training (e.g., trades apprenticeships, surveyors, heavy equipment operators and road safety auditors.	• Construction	EA/IA commitment
972.	Social Environment	Pre-employment training to equip underrepresented Webequie members (i.e., youth, women) for the Project employment opportunities.	• Construction	EA/IA commitment
973.	Social Environment	Convene a sub-working group on education, training and traditional learning that will monitor communities that require adequate capacity to deliver programming for community members.	• Construction	EA/IA commitment
974.	Social Environment	Providing programming that assists youth and other underrepresented groups in gaining the necessary skills to gain employment.	• Construction	EA/IA commitment
975.	Social Environment	Upgrade/expansion of existing primary school or new primary school.	• Construction	EA/IA commitment
976.	Social Environment	Space for metal health including counselling and programming; A training centre and a high school, or a combination of both together.	• Construction	EA/IA commitment
977.	Social Environment	Completing the land-base camp as a healing and teaching space.	• Construction	EA/IA commitment
978.	Social Environment	A community kitchen for teaching and for helping with food security.	• Construction	EA/IA commitment
979.	Social Environment	A stand-alone day care/early years centre, or as part of an expansion on the primary school (Headstart is already operating at the school).	• Construction	EA/IA commitment
980.	Social Environment	Construction camps will have first-aid stations to address minor incidents on-site.	• Construction	EA/IA commitment
981.	Social Environment	Helicopters will also be available at camps to provide emergency evacuation to the nearest medical facility.	• Construction	EA/IA commitment

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982.	Social Environment	A Community Well-being Monitoring and Adaptive Management Plan will monitor of road safety and emergency and protective services capacity.	• Detail design • Construction	EA/IA commitment
983.	Social Environment	Develop a Road Safety Plan.	• Detail design • Construction	EA/IA commitment
984.	Social Environment	Security staff to patrol the construction camp for hazards/threats (e.g. wildlife) and protect workers.	• Construction	EA/IA commitment
985.	Social Environment	Develop Safety Management Plans.	• Detail design • Construction	EA/IA commitment
986.	Social Environment	Workers will also be safety-trained prior to commencing work to ensure they are capable of performing their duties safely.	• Construction	EA/IA commitment
987.	Social Environment	Develop Health and Safety Plans.	• Detail design • Construction	EA/IA commitment
988.	Social Environment	All safety incidents related to the Project will be reported within 24-hours and records of these incidents will be archived.	• Construction	EA/IA commitment
989.	Social Environment	The Project will have health and safety staff who are qualified to provide immediate medical care for the construction phase.	• Construction	EA/IA commitment
990.	Social Environment	Proposed infrastructure enhancements in the Webequie community as part of a Housing and Infrastructure Enhancement Plan.	• Construction	EA/IA commitment
991.	Social Environment	An updated Webequie First Nation Capital Planning Study is required for a full and up-to-date needs assessment to confirm upgrades needed for housing and infrastructure.	• Construction	EA/IA commitment
992.	Social Environment	Housing and infrastructure enhancements are also outlined as part of the CRP in Appendix N of the EAR/IS.	• Construction	EA/IA commitment
993.	Social Environment	Coordination of community events that bring together the community and the Project employees.	• Construction	EA/IA commitment
994.	Social Environment	Providing culturally relevant training and counselling supports for Indigenous employees.	• Construction	EA/IA commitment
995.	Social Environment	Establishment of a group made of community members to function as Community Liaison Officers.	• Construction	EA/IA commitment
996.	Social Environment	Developing a grievance mechanism for community concerns and issues.	• Construction	EA/IA commitment
997.	Social Environment	Creating and implementing training programs focused on the safety of women, girls and 2SLGBTQQIA people.	• Construction	EA/IA commitment
998.	Social Environment	Establishing partnerships with Kiikenomaga Kikenjigewen Employment & Training Services (KKETs) to provide driver's education and licensing.	• Construction	EA/IA commitment
999.	Social Environment	Establishing procedures and plans regarding drug and alcohol usage during Project work.	• Construction	EA/IA commitment
1000.	Social Environment	Develop Air Quality and Dust Control Management Plan, Noise and Vibration Management Plan, Light Control Management Plan, and Construction Waste Management Plan.	• Detail design • Construction	EA/IA commitment
1001.	Social Environment	During the operations phase, safety incidents relating to the Project will be recorded and monitored as part of the Community Well-Being Monitoring and Adaptive Management Plan.	• Detail design • Operations	EA/IA commitment
1002.	Social Environment	During the operations phase, road patrols and inspection of the road will occur, and their frequency may require adjustment to address specific situations, such as during spring break-up, during and after heavy wind or rain events, and emergencies (e.g., accidents, fires, stranded motorists, wildlife mortality from collision with vehicles).	• Operations	EA/IA commitment
1003.	Social Environment	A Spill Prevention and Emergency Response Management Plan will be developed and utilized by operations and maintenance staff, and where applicable subcontractors. The plan will cover various emergency response situations that are most likely to occur such as personal injury, fire, explosions and hazardous material spills.	• Detail design • Operations	EA/IA commitment
1004.	Social Environment - Monitoring	**Grievance monitoring:** Setup of a grievance mechanism for the Project, preferably with support from community members, to keep track of issues related to the Project, including racism, sexism, gender-based violence, and other issues.	• Construction • Operations	EA/IA commitment

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1005.	Social Environment - Monitoring	**Involvement of Community Liaison Officers:** Establish a working group of Indigenous community members to function as liaison officers employed under the Project, to provide updates and information on Project, collect feedback and suggestions, resolve any issues/ problems related to community's needs, and act as a point of contact for Project' connection to the community.	• Construction • Operations	EA/IA commitment
1006.	Social Environment - Monitoring	**Reporting and Adjustment:** Regularly report findings to Webequie First Nation and other Project stakeholders and rights-holders. Use this data to make any necessary adjustments to the Project approach to enhance local benefits and address concerns.	• Construction • Operations	EA/IA commitment
1007.	Social Environment - Monitoring	**Community database of infrastructure:** Establishment of a comprehensive database of community infrastructure, including housing, based on the Webequie Comprehensive Community Plan, to keep track of changes as result of the WSR and other projects, and carry out comprehensive projections for future needs and community.	• Construction • Operations	EA/IA commitment
1008.	Social Environment - Monitoring	**Post-Project Evaluation:** After the completion of the road construction, perform a final evaluation to measure the long-term impacts and goals set out at the Project's initiation.	• Operations	EA/IA commitment
1009.	Economic Environment – Labour Force, Employment, and Income	Procurement policies for the recruitment, development, and retention of underrepresented groups (i.e., women, Indigenous Peoples, minorities) of Webequie First Nation, other LSA communities and the RSA in the Project. This may include setting Mandatory Minimum Indigenous Requirements to hit targets for employment of specific groups like women and youth.	• Construction	EA/IA commitment
1010.	Economic Environment – Labour Force, Employment, and Income	Creation and implementation of workplace policies and programs, including a diversity and inclusion strategy, zero-tolerance policies for racism and workplace violence, codes of conduct, workplace safety programs and cultural training programs (e.g., Indigenous Awareness Training), as a means to retain employees through positive work experience.	• Construction	EA/IA commitment
1011.	Economic Environment – Labour Force, Employment, and Income	Supporting full-time paid employment of underrepresented groups (i.e., youth and women) through opportunities such as job shadowing, mentorship programs, and paid internships to improve employment outcomes, such as Indigenous women as mentors to junior female employees.	• Construction	EA/IA commitment
1012.	Economic Environment – Labour Force, Employment, and Income	To the extent practicable, ensuring working shifts and hours consider childcare responsibilities to help remove barriers to employment for women.	• Construction	EA/IA commitment
1013.	Economic Environment – Labour Force, Employment, and Income	Policies supporting flexibility in work schedule and/or opportunities for leave for Indigenous employees in order to support important cultural practices, such as harvesting which may allow them to continue to participate in the traditional economy (i.e., hunting, trapping, fishing).	• Construction	EA/IA commitment
1014.	Economic Environment – Labour Force, Employment, and Income	Screening of employees during hiring process for suitability for shift work as well as educating potential employees on shift work and its potential effects on way of life.	• Construction	EA/IA commitment
1015.	Economic Environment – Labour Force, Employment, and Income	Continued engagement and improvements to workforce with North Superior Workforce Planning Board efforts for supporting Webequie First Nation and Marten Falls First Nation youth and workforce members via the Employment Readiness Strategic Plan (North Superior Workforce Planning Board, n.d.). Improved access to education and employment opportunities will result in increased engagement and opportunities for employment for the community members, especially with the job openings available through WSR.	• Construction	EA/IA commitment
1016.	Economic Environment – Overall Economy	Minimize the length of the road to the degree possible and practical.	• Construction	EA/IA commitment
1017.	Economic Environment – Overall Economy	Avoid difficult or poor quality terrain, where possible and/or practical.	• Construction	EA/IA commitment
1018.	Economic Environment – Overall Economy	Minimize the requirements for access roads and other supportive infrastructure.	• Construction	EA/IA commitment
1019.	Economic Environment – Overall Economy	Minimize waterbody crossings.	• Construction	EA/IA commitment
1020.	Economic Environment – Overall Economy	Avoid or minimize effects to identified sensitive land and resource use areas of value or interest to Indigenous communities.	• Construction	EA/IA commitment

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1021.	Economic Environment – Overall Economy	Avoid interactions with designated environmentally sensitive areas or critical habitats for wildlife, where practical.	• Construction	EA/IA commitment
1022.	Economic Environment – Overall Economy	Avoid and/or minimize effects to areas and sites of known archaeological and/or cultural heritage importance.	• Construction	EA/IA commitment
1023.	Economic Environment – Overall Economy	Following completion of construction, areas outside the Project Footprint of the WSR will be restored by the proponent, minimizing lasting effects on the ability of Webequie community members to engage in the traditional economy	• Construction	EA/IA commitment
1024.	Economic Environment – Business Environment	Provide advanced notice of procurement opportunities (e.g., public announcements, advertisements) and establish clear and equitable certification processes for local and Indigenous businesses. This would include providing a clear definition and requirements of local and Indigenous businesses and/or asking Webequie First Nation to define eligibility criteria for their businesses, maintaining a list of qualified businesses, increasing the time to submit bids, and reducing technical requirements in order to reduce barriers for Indigenous business participation and encourage new Indigenous business owners.	• Construction	EA/IA commitment
1025.	Economic Environment – Business Environment	Procurement policies for joint ventures with Indigenous-owned entities. Joint ventures would benefit Indigenous businesses by providing the financial and human resources support that may be required to carry out a contract that they otherwise may not be capable of participating in. However, for Indigenous partners to benefit, Indigenous ownership (i.e., at least 51%) and retention of majority gross profit margin by the Indigenous partner must be evident and monitored.	• Construction	EA/IA commitment
1026.	Economic Environment – Business Environment	Set-aside procurement, whereby certain contracts are set-aside for local and Indigenous businesses to guarantee procurement opportunities by limiting competition. Due to the limited number of existing businesses in Webequie, set-aside procurement may be conditional as it is uncertain whether local and Indigenous businesses have the capacity to fulfill the contract.	• Construction	EA/IA commitment
1027.	Economic Environment – Business Environment	Provide options for scalable contracts and training. Providing scalable contracts and options for training to develop skills would aid reduce barriers to participation and help build capacity of local and Indigenous businesses to increase opportunities with the Project as well as support their sustainability beyond the Project.	• Construction	EA/IA commitment
1028.	Economic Environment – Public and Indigenous Community Finances	Increase the size of the workforce and have higher workforce participation rates.	• Construction	EA/IA commitment
1029.	Economic Environment – Public and Indigenous Community Finances	Decrease barriers for community members to achieve higher educational attainment.	• Construction	EA/IA commitment
1030.	Economic Environment – Public and Indigenous Community Finances	Create space from Project related on-reserve training and train and develop skills that will allow the community to fill more employment roles.	• Construction	EA/IA commitment
1031.	Economic Environment – Public and Indigenous Community Finances	Increase opportunities and lower barriers for community members to participate in cultural activities.	• Construction	EA/IA commitment
1032.	Economic Environment – Public and Indigenous Community Finances	Sustain worker participation in the traditional economy.	• Construction	EA/IA commitment
1033.	Economic Environment – Public and Indigenous Community Finances	Have more business and administration capacity to develop entrepreneurship, partnership, and supply relationships to benefit from the Project.	• Construction	EA/IA commitment
1034.	Economic Environment - Monitoring	**Employment Tracking:** Implement a system to track the employment of local community members in the Project, including job roles, duration of employment, and wage levels, with objective to assess if the Project meets or exceeds the set targets for local hiring.	• Construction • Operations	EA/IA commitment
1035.	Economic Environment - Monitoring	**Business Participation:** Monitor the involvement of local businesses in the Project. This includes direct contracts, subcontracts, and other procurement opportunities extended to local enterprises.	• Construction • Operations	EA/IA commitment

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1036.	Economic Environment - Monitoring	**Economic Impact Assessment:** Conduct regular assessments to evaluate the broader economic impact on the Indigenous communities, such as increased local spending and improvements in local infrastructure that support other economic activities.	• Construction • Operations	EA/IA commitment
1037.	Economic Environment - Monitoring	**Feedback Mechanisms:** Establish robust feedback mechanisms to collect insights and concerns from the community of Webequie regarding the Project's economic effects. This could include surveys, focus groups, and public meetings.	• Construction • Operations	EA/IA commitment
1038.	Economic Environment - Monitoring	**Reporting and Adjustment:** Regularly report findings to the Webequie First Nation and other Project stakeholders and rights-holders. Use this data to make any necessary adjustments to the Project approach to enhance local benefits.	• Construction • Operations	EA/IA commitment
1039.	Economic Environment - Monitoring	**Post-Project Evaluation:** After the completion of the road construction, perform a final evaluation to measure the long-term effects and success in achieving the economic goals set out at the Project's initiation.	• Operations	EA/IA commitment
1040.	Non-Traditional Land and Resource Use	Indigenous community members will have an active role in developing and implementing environmental management plans.	• Detail design • Construction	EA/IA commitment
1041.	Non-Traditional Land and Resource Use	Minister's (Crown-Indigenous Relations and Northern Affairs Canada) written permission and consent of First Nation to remove aggregate from reserve.	• Construction	EA/IA commitment
1042.	Non-Traditional Land and Resource Use	Use federal and/or provincial policy instruments to restrict potential access for trespassers to comply with federal legislation.	• Construction	EA/IA commitment
1043.	Non-Traditional Land and Resource Use	Complete CBLUPs to resolve concerns in area shared with First Nations to support Indigenous stewardship of lands.	• Construction	EA/IA commitment
1044.	Non-Traditional Land and Resource Use	Decommission and restoration of temporary supportive infrastructure to return areas of mining claims to holders.	• Construction	EA/IA commitment
1045.	Non-Traditional Land and Resource Use	Utilize *Mining Act* instruments to minimize potential increase in mining claims (road restrictions identified in Land Use and Stewardship to reduce potential increase of mining claims).	• Construction	EA/IA commitment
1046.	Non-Traditional Land and Resource Use	Receive consent of First Nation per federal legislation for the removal of aggregate from reserve.	• Construction	EA/IA commitment
1047.	Non-Traditional Land and Resource Use	Regular road maintenance to minimize potential of aggregate expansion during operations phase.	• Operations	EA/IA commitment
1048.	Non-Traditional Land and Resource Use	First Nation engagement and consultation in subsequent stages of project for impact to recreational/land user camp site, use of removed trees for new recreational facilities, for compliance with navigable waterways access, coordination with recreation programs and land users for waterway travel route access.	• Construction	EA/IA commitment
1049.	Non-Traditional Land and Resource Use	Establish community construction committee to notify, update and coordinate with selected contractor on impacts to existing travel routes.	• Construction	EA/IA commitment
1050.	Non-Traditional Land and Resource Use	Determine opportunities for public art on waterbody crossings to as waterbody crossings impact waterway travel routes.	• Construction	EA/IA commitment
1051.	Non-Traditional Land and Resource Use	Develop tourism plan to support CBLUP, stewardship of shared lands with other First Nations to manage remoteness and "outsiders" potential impact on fish and wildlife resources.	• Construction	EA/IA commitment
1052.	Non-Traditional Land and Resource Use	Engagement and consultation with First Nations in subsequent stages of the Project on WSR design features and safety measures at land-based travel routes.	• Construction	EA/IA commitment
1053.	Non-Traditional Land and Resource Use	First Nations representatives monitoring of waterbody crossings to minimize impacts on fish and fish habitat.	• Construction	EA/IA commitment
1054.	Non-Traditional Land and Resource Use	Project employment that respects cultural needs, removes barriers for Indigenous peoples, and is targeted to youth, to enhance Project beneficial effects that may increase recreational activities and users.	• Construction	EA/IA commitment
1055.	Non-Traditional Land and Resource Use	Transition to renewable energy to enhance the Project's benefits of employment opportunities and income to reduce recreational supplies (fuel/diesel) costs and increase recreational activities and users.	• Construction	EA/IA commitment
1056.	Non-Traditional Land and Resource Use	Establish Technical Working Group to coordinate transport and mobilization of supplies that will increase air and road traffic.	• Construction	EA/IA commitment
1057.	Non-Traditional Land and Resource Use	Implement improvements for Webequie community roads for increased road traffic and Webequie workers to construction site.	• Construction	EA/IA commitment
1058.	Non-Traditional Land and Resource Use	Implement improvements for winter roads for the increased road traffic.	• Construction	EA/IA commitment

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1059.	Non-Traditional Land and Resource Use	Implement airport and air service improvements (including airport redevelopment) to manage increasing demand for air services.	• Construction	EA/IA commitment
1060.	Non-Traditional Land and Resource Use - Monitoring	**Land Use Planning and Stewardship** - Monitor and document the following commitment: • Proponent and/or selected contractor receives permission from the Minister of Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) or representative regarding the removal of aggregate from Webequie First Nation reserve.	• Construction	EA/IA commitment
1061.	Non-Traditional Land and Resource Use - Monitoring	**Land Use Planning and Stewardship** - Monitor and document the following commitment: • Proponent and/or selected contractor receives consent from Webequie First Nation for the removal of aggregate from reserve.	• Construction	EA/IA commitment
1062.	Non-Traditional Land and Resource Use - Monitoring	**Land Use Planning and Stewardship** - Monitor and document the following commitment: • Status of Community-Based Land Use Plan (CBLUP) or other land use plans of First Nations in shared areas of traditional territory with Webequie First Nation for consideration in the construction of and operations phases of the Project.	• Construction	EA/IA commitment
1063.	Non-Traditional Land and Resource Use - Monitoring	**Commercial/Industrial Land Use Activities** - Monitor and document the following commitment: • Province's approach to compensation or use of Mining Act for loss of mining claims.	• Construction	EA/IA commitment
1064.	Non-Traditional Land and Resource Use - Monitoring	**Commercial/Industrial Land Use Activities** - Monitor and document the following commitment: • Province's funding to First Nations to fully participate in mining claim processes.	• Construction	EA/IA commitment
1065.	Non-Traditional Land and Resource Use - Monitoring	**Commercial/Industrial Land Use Activities** - Monitor and document the following commitment: • Contractor consideration and potential coordination of access for mining exploration and activities.	• Construction	EA/IA commitment
1066.	Non-Traditional Land and Resource Use - Monitoring	**Commercial/Industrial Land Use Activities** - Monitor and document the following commitment: • Status of appropriate government auditor tracking outcomes of litigation and mining claim registrations and exchanges.	• Construction	EA/IA commitment
1067.	Non-Traditional Land and Resource Use - Monitoring	**Recreation and Tourism** - Monitor and document the following commitment: • Proponent and/or selected contractor to establish agreement for use of removed trees for Webequie First Nation purposes.	• Construction	EA/IA commitment
1068.	Non-Traditional Land and Resource Use - Monitoring	**Recreation and Tourism** - Monitor and document the following commitment: • Consult with First Nations with territories that overlap the Project Footprint on communities' interest to use of removed trees for potential construction of recreational structures.	• Construction	EA/IA commitment
1069.	Non-Traditional Land and Resource Use - Monitoring	**Recreation and Tourism** - Monitor and document the following commitment: • Proponent and/or selected contractors' compliance with Canadian Navigable Waterways and Navigation Protection Program and any related approvals for installation of waterbody crossings impacts to navigation.	• Construction	EA/IA commitment
1070.	Non-Traditional Land and Resource Use - Monitoring	**Recreation and Tourism** - Monitor and document the following commitment: • Proponent and/or selected contractor(s) to consult and coordinate advanced notification of waterbody and road construction activities with First Nations land users and groups to minimize adverse effects on individual and group trips, including establishment of a construction committee, with community representation.	• Construction	EA/IA commitment
1071.	Non-Traditional Land and Resource Use - Monitoring	**Recreation and Tourism** - Monitor and document the following commitment: • Proponent to consider opportunities for public art at waterbody crossings and other design components during detail design with financial support of federal and provincial government.	• Construction	EA/IA commitment
1072.	Non-Traditional Land and Resource Use - Monitoring	**Recreation and Tourism** - Monitor and document the following commitment: • Proponent, provincial and federal governments initiatives to identify programs and directives for contractor to remove barriers to employment for Indigenous people and especially youth.	• Construction	EA/IA commitment
1073.	Non-Traditional Land and Resource Use - Monitoring	**Transportation** - Monitor and document the following commitment: • Proponent to establish Technical Working Group to oversee transportation mitigation activities, follow-up and monitoring, including advising selected contractor, to manage changes in road traffic and demand for air services.	• Construction	EA/IA commitment
1074.	Non-Traditional Land and Resource Use - Monitoring	**Transportation** - Monitor and document the following commitment: • First Nations and federal government program and t recommendations for road improvements within Webequie First Nation Reserve.	• Construction	EA/IA commitment

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1075.	Non-Traditional Land and Resource Use - Monitoring	**Transportation** - Monitor and document the following commitment: • Province, road enforcement and First Nations' standards and funds for winter road improvements, including recommendations from Draft Technical Background Report, 2023 Northern Road Summit, and 2024 Northern Ontario Transportation Task Force.	• Construction	EA/IA commitment
1076.	Non-Traditional Land and Resource Use - Monitoring	**Transportation** - Monitor and document the following commitment: ▪ Provincial road improvements for routes used to transport and deliver construction materials during detail design in coordination with Technical Working Group.	• Construction	EA/IA commitment
1077.	Non-Traditional Land and Resource Use - Monitoring	**Transportation** - Monitor and document the following commitment: • Webequie, federal and provincial governments' advice to Technical Working Group on improvements to the airport as indicated in the Airport Redevelopment Plan, Northern Ontario Transportation Task Force, Technical.	• Construction	EA/IA commitment
1078.	Non-Traditional Land and Resource Use - Monitoring	**Transportation** - Monitor and document the following commitment: • Further consultation with First Nations on potential design enhancements for the WSR such as pedestrian safety features during detail design.	• Construction	EA/IA commitment
1079.	Non-Traditional Land and Resource Use - Monitoring	**Land Use Planning and Stewardship** - Monitor and document the following commitment: • Proponent, owner and operator, provincial and federal governments, Webequie First Nation to advice d other communities in Treaty No. 9 on potential federal and provincial policy and legislation tools for road access restrictions in accordance with United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) articles.	• Operations	EA/IA commitment
1080.	Non-Traditional Land and Resource Use - Monitoring	**Commercial/Industrial Land Use Activities -** Monitor and document the following commitment: • Proponent and/or Webequie First Nation to monitor aggregate use during operations and opportunities to minimize need to expand ARA-4.	• Operations	EA/IA commitment
1081.	Non-Traditional Land and Resource Use - Monitoring	**Recreation -** Monitor and document the following commitment: • Province and First Nations with territory in the Project Footprint development of a tourism plan that also recognizes and aligns with road restrictions in land use planning and stewardship.	• Operations	EA/IA commitment
1082.	Non-Traditional Land and Resource Use - Monitoring	**Recreation -** Monitor and document the following commitment: • Proponent, provincial and federal governments programs and directives to operator of WSR and mining development companies in the Ring of Fire on removal of barriers to employment for Indigenous people and especially youth.	• Operations	EA/IA commitment
1083.	Non-Traditional Land and Resource Use - Monitoring	**Recreation -** Monitor and document the following commitment: • Provincial and federal governments, and First Nations communities' development of an energy transmission plan to reduce the costs associated with recreation (fuel) to increase activities to get out onto the land.	• Operations	EA/IA commitment
1084.	Human Health	Indigenous community members will have an active role in developing and implementing environmental management plans.	• Detail design • Construction	EA/IA commitment
1085.	Human Health	Webequie First Nation will consult with community members throughout the construction phase to provide regular updates regarding construction activities that may impact traditional activities on the land, so community members are prepared for the changes. The contractor will aim to avoid impacts to traditional land activities as much as possible. The proponent will develop and implement cultural training programs (e.g., Indigenous Awareness Training). The overall aim will be for the contractor to learn about cultural protocols and avoid actions that could exacerbate trauma, such as disrupting sacred lands or cultural site.	• Construction	EA/IA commitment
1086.	Human Health	Webequie First Nation and the contractor will aim to limit outsiders working on construction on the Project from entering the community to the extent possible. This may limit the amount of illegal drugs and alcohol from entering the community, and limit impacts to mental health.	• Construction	EA/IA commitment
1087.	Human Health	Webequie First Nation will work with the Province to increase access to trauma-informed mental health services and traditional healing practices for community members such as counselling, support groups, and healing circles.	• Construction	EA/IA commitment
1088.	Human Health	Webequie First Nation will work with the contractor to help ensure that the Project creates employment opportunities for community members, including Investing in training programs to build community capacity.	• Construction	EA/IA commitment
1089.	Human Health	Webequie First Nation will aim to limit outsiders from entering the community through the WSR to the extent possible. This may limit the amount of illegal drugs and alcohol from entering the community, and limit impacts to mental health.	• Operations	EA/IA commitment
1090.	Human Health	Webequie First Nation will aim to help ensure that the employment and economic growth opportunities from the Project creates sustainable employment and positive growth in income for most community members. This will help most members of the community access the services they need to address the trauma and mental health issues due to residential schools and colonization.	• Operations	EA/IA commitment

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1091.	Human Health	The contractor will be advised to work with Webequie First Nation to promote respectful relationships between Webequie First Nation members and construction workers by implementing regular mandatory in-person cultural and Indigenous awareness training to increase awareness and knowledge of Indigenous history and culture among workers and on raising awareness for the safety of Indigenous women and girls.	• Construction	EA/IA commitment
1092.	Human Health	The contractor will establish and enforce zero-tolerance policies on racism and violence in the workplace, which can help to provide a safer, more understanding work environment for Indigenous employees and encourage the potential Indigenous employees.	• Construction	EA/IA commitment
1093.	Human Health	Webequie First Nation will consider the ways in which the construction phase of the Project may boost local business development, financial independence for the First Nation, development of business relationships with surrounding Indigenous and non-Indigenous communities, and employment opportunities for community members.	• Construction	EA/IA commitment
1094.	Human Health	Prior to construction, it is suggested Webequie First Nation develop a Businesses Development Plan to: • Outline an inventory of local and/or Indigenous-owned companies that can be used throughout the construction phase. • Identify specific Project services that would be targeted to local and/or Indigenous-owned businesses. • Establish procurement policies for the recruitment, development, and retention of underrepresented groups of Webequie First Nation, other LSA communities and the RSA. • Set procurement targets (e.g., total contract value, employment of specific groups like women, youth and individuals with disabilities) for the participation of local and/or Indigenous businesses in Project construction. Additional support for underrepresented groups, such as women, youth and individuals with disabilities, could be provided through opportunities such as job shadowing, mentorship programs, and paid internships. • Specify how contracts should be released by the Project management to maximize Project participation by local and/or Indigenous owned businesses. This may include providing information on advanced notice of procurement opportunities (e.g., public announcements, advertisements) and establishing clear requirements and equitable certification processes for local and Indigenous businesses.	• Detail design • Construction	EA/IA commitment
1095.	Human Health	Webequie First Nation will consider that local economic growth benefits all sub-groups within the community, including women, youth and those with disabilities.	• Construction	EA/IA commitment
1096.	Human Health	The same enhancement measures outlined above for the construction phase will be applied for the operations phase.	• Operations	EA/IA commitment
1097.	Human Health	To enhance physical and mental health and wellbeing, Webequie First Nation should have a decision-making role throughout the planning and development of the WSR.	• Construction	EA/IA commitment
1098.	Human Health	The community will be provided with regular information and messaging regarding planning for the Project, including challenges faced, and how they are being addressed. This will allow the community to participate in the Project throughout.	• Construction	EA/IA commitment
1099.	Human Health	As was conveyed during in-person consultations, Webequie First Nation will consider how best the Project can benefit all sub-groups within the community in the long-term, with commitment to social programming in the community.	• Operations	EA/IA commitment
1100.	Human Health	Locations of the construction camps should be chosen that minimize interactions with high traffic areas and areas that are often used for traditional activities.	• Construction	EA/IA commitment
1101.	Human Health	It is advised that non-Indigenous workers should not be allowed into Webequie First Nation during the construction phase, except by permission. Protocols should be put in place to regulate entry of members from other Indigenous communities. This may limit negative impacts to the safety and security of Webequie First Nation. However, the extent of mitigation of the impact will depend on how effectively non-members of the community are kept out.	• Construction	EA/IA commitment
1102.	Human Health	The contractor will be advised to work with Webequie First Nation to promote respectful relationships between Webequie First Nation members and construction workers by implementing mandatory in-person cultural and Indigenous awareness training to increase awareness and knowledge of Indigenous history and culture among workers and on raising awareness for the safety of Indigenous women and girls.	• Construction	EA/IA commitment
1103.	Human Health	The contractor will work with Webequie First Nation to provide a safe and productive work environment by establishing and enforcing clear guidelines on substance use that includes the prohibition of drugs and alcohol in construction camps during the construction phase.	• Construction	EA/IA commitment
1104.	Human Health	To mitigate potential impacts on housing within the community from off-reserve members participating in construction jobs, the community can consider adding additional temporary housing within the reserve to house off-reserve members during the construction phase.	• Construction	EA/IA commitment
1105.	Human Health	Any additional housing that is added in the community during the construction phase can be potentially converted to more permanent housing. One of the construction camps is expected to be converted to temporary housing to house medical staff, teachers, and support personnel, who want to stay in the community	• Operations	EA/IA commitment
1106.	Human Health	To minimize dust pollution, it is recommended that the contractor use tarps to prevent dust from spreading, or spray the roads with a water-based solution to suppress dust, especially in dry areas such as haul/access roads or temporary soil and aggregate stockpiles. The use of dust suppression systems at quarries, truck speed limitations, vehicle and heavy equipment movement limitations to designated areas, minimizing idling and so forth.	• Construction	EA/IA commitment
1107.	Human Health	The contractor should endeavour to use of environmentally certified equipment (e.g., Tier 4 engines) as much as possible.	• Construction	EA/IA commitment

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1108.	Human Health	The contractor should develop and implement an Air Quality and Dust Control Management Plan to manage and reduce air contaminant emissions during construction phase. The Air Quality and Dust Control Management Plan will integrate a monitoring procedure for dustfall effects and measures to control or limit usage of vehicle or equipment that are the main emission source of particulates.	• Detail design • Construction	EA/IA commitment
1109.	Human Health	Minimize the combustion of living biomass which will reduce GHG emissions by using the biomass for other purposes such as the production of roundwood and timber that would be used in Webequie for construction projects or woodchips used as mulch for landscaping, erosion control, etc.	• Construction	EA/IA commitment
1110.	Human Health	During operations, while it is not feasible to have a direct control on emissions from vehicle engines, it is possible to work on dust emissions from the road surface. Considering that part of the road will not be fully surfaced with asphalt or chip seal from the start, the maintenance crew will operate a truck that will spray water over the gravel-surface road from May to November, or when needed.	• Operations	EA/IA commitment
1111.	Human Health	An Air Quality and Dust Control Management Plan will be developed and implemented to manage and reduce air contaminant emissions during operations phase. The Air Quality and Dust Control Management Plan will also include a procedure for documenting compliance with applicable standards and required conditions as stipulated in permits, approvals, licenses and/or authorizations.	• Detail design • Operations	EA/IA commitment
1112.	Human Health	To address the potential noise effects from blasting, it is proposed that a Construction Blasting Management Plan for the Project will be prepared by applicable contractor(s) prior to initiation of blasting activities. The plan will include a requirement for controlling peak overpressure sound levels to meet the blasting noise guidelines and criteria.	• Detail design • Construction	EA/IA commitment
1113.	Human Health	Concerns of noise pollution has caused Webequie community members to recommend that there be more regulations around noise in the region. An example is maintaining equipment to limit noise emissions.	• Construction	EA/IA commitment
1114.	Human Health	The contractor should aim to limit construction to the daytime period, where possible, especially near residences. Noise complaints, if arise during the project construction and operations, will be investigated and addressed.	• Construction	EA/IA commitment
1115.	Human Health	For the Operations Phase, implement same mitigation measures for blasting activities outlined for Construction Phase above	• Operations	EA/IA commitment
1116.	Human Health	Dewatering, water takings, and discharges will be regulated by MECP permits (i.e., a permit to take water will be required for the Project) and industry best management practices will be used to minimize dewatering/pumping volumes.	• Detail design • Construction	EA/IA commitment
1117.	Human Health	Restore disturbed areas from vegetation clearing and grubbing to minimize effects on runoff rates.	• Construction	EA/IA commitment
1118.	Human Health	Erosion and sediment control measures taken into consideration when constructing waterbody crossing structures along with implementing water quality monitoring.	• Construction	EA/IA commitment
1119.	Human Health	Reduce construction during times that would most affect fish and fish habitat (e.g., breeding seasons).	• Construction	EA/IA commitment
1120.	Human Health	Proper handling and storage of petroleum and other hazardous materials as well as emergency response plans to mitigate accidental spills and leaks.	• Construction	EA/IA commitment
1121.	Human Health	A Construction Blasting Management Plan for the Project will be prepared.	• Detail design • Construction	EA/IA commitment
1122.	Human Health	A Construction Waste Management Plan will be developed to minimize the amount of waste to be generated.	• Detail design • Construction	EA/IA commitment
1123.	Human Health	An ongoing follow-up monitoring program (post-construction) will be implemented during the operations phase of the Project.	• Operations	EA/IA commitment
1124.	Human Health	Water will be used to control the dispersion of dust to nearby waterbodies.	• Operations	EA/IA commitment
1125.	Human Health	Inform community members of upcoming construction activities and where they will be focused so members are prepared to see construction equipment and changes in specific areas.	• Construction	EA/IA commitment
1126.	Human Health	As per the Visual Impact Assessment (Appendix R), mitigation measures for effects to visual environment will be incorporated into the project design and will be implemented to minimize negative effects. Mitigation measures considered in the potential effects analysis for visual environment included the following, and are re-iterated from the human health standpoint to limit impacts to mental health as a result of change to the visual environment: • Avoiding new Project footprint disturbances to the extent practicable, with particular consideration at the three waterbody crossing sites. • Minimizing the extent of vegetation clearing at the three waterbody crossings, and other crossings, that are considered navigable waterbodies will be limited to minimize visual impacts and where necessary meet safety standards. • Maximizing efforts to retain existing vegetation and landforms, to the extent practicable, to provide screening of activities and project components.	• Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• Reducing the extent of disturbed area within the road right-of-way. Disturbed areas will be restored and seeded to allow for natural revegetation and its management to support the safe operations of the road.		
1127.	Human Health	All workers, except individuals from Webequie First Nation, should be housed in the designated construction camps.	• Construction	EA/IA commitment
1128.	Human Health	During the construction phase, the construction camp structures will be designed to ensure all required services are available to the workers at the camp itself, with neutral to minimal disturbance/impact to the existing community infrastructure of Webequie First Nation.	• Construction	EA/IA commitment
1129.	Human Health	For off-reserve members of Webequie First Nation working on the construction of the WSR, additional temporary housing within the community that can be converted into longer-term housing should be considered to avoid overcrowding in existing homes.	• Construction	EA/IA commitment
1130.	Human Health	The population groups who are already disproportionately affected by poor and crowded housing conditions, i.e., single mothers, older adults, women and single individuals, should be prioritized in the allocation of housing.	• Construction	EA/IA commitment
1131.	Human Health	The Webequie First Nation Community Readiness Plan will include plans and measures for enhancing housing stock to address housing capacity issues. Given the importance of housing as a vital determinant of health, these measures are also recommended from a human health standpoint.	• Operations	EA/IA commitment
1132.	Human Health	Off-reserve community members and medical staff and personnel should be prioritized for residence in the one construction camp expected to be converted into housing for community needs	• Operations	EA/IA commitment
1133.	Human Health	Webequie First Nation will consider working with the Province to invest in training programs to build local capacity. Webequie First Nation will also work with the contractor to consider providing childcare services so women can participate in training and education to take advantage of employment opportunities resulting from the construction phase, as well as helping to ensure that workers from the community are offered fair wages, safe working conditions, job security, and address inequalities in labour practices.	• Construction	EA/IA commitment
1134.	Human Health	Webequie First Nation will work with the contractor to help ensure additional support for underrepresented groups such as youth, through opportunities such as job shadowing, mentorship programs, and paid internships.	• Construction	EA/IA commitment
1135.	Human Health	Creation and implementation of workplace policies and programs, including a diversity and inclusion strategy, zero-tolerance policies for racism and workplace violence, codes of conduct, workplace safety programs and cultural training programs (e.g., Indigenous Awareness Training), as a means to retain employees through positive work experience.	• Construction	EA/IA commitment
1136.	Human Health	The contractor should consider providing disability supports (e.g., access to wheelchair and access ramps, hearing aids, etc.) to allow community members with disabilities to participate in the workforce as much as possible, potentially in desk-jobs or low intensity jobs.	• Construction	EA/IA commitment
1137.	Human Health	Webequie First Nation will consider a plan that would shape the Project as a source of sustainable employment opportunities for community members. Investing in training programs to build local capacity. Ensuring that workers from the community are offered fair wages, sage working conditions, job security, to address inequalities in labor practices.	• Construction	EA/IA commitment
1138.	Human Health	Safe, reliable, and accessible care options for children, older persons, and those with disabilities will help those who have care duties access and use the road to access employment opportunities.	• Operations	EA/IA commitment
1139.	Human Health	Creation and implementation of workplace policies and programs, including a diversity and inclusion strategy, zero-tolerance policies for racism and workplace violence, codes of conduct, workplace safety programs and cultural training programs (e.g., Indigenous Awareness Training), as a means to retain employees through positive work experience, should be implemented in all projects in the Ring of Fire area.	• Operations	EA/IA commitment
1140.	Human Health	Webequie First Nation will work with the contractor to help ensure that educational and specialized skills training opportunities in construction will be provided to community members ahead of the construction phase, so they are prepared with necessary skills. The Community Readiness Plan will include enhancement measures for Education, Training and Traditional Learning Programming and Facility Space to identify and plan for education and training needs.	• Construction	EA/IA commitment
1141.	Human Health	Funding and educational programs will need to be available for members of the community to financially and practically access education and skills training required to participate in construction work. Webequie First Nation is encouraged to explore options for funding together with the contractor and the Province. Training may also be available through local educational service providers or through apprenticeships with construction companies or experienced members of the community. The community can also consider specialized programs for community members who have learning disabilities.	• Construction	EA/IA commitment
1142.	Human Health	Educational attainment levels for women in Webequie is lower than for men. To realize any health benefit from increased education/training in construction, some community members, and especially women, will need to be provided with child-care so they may attend training and get work	• Construction	EA/IA commitment

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1143.	Human Health	As there is potential for food insecurity arising from disturbance of land and habitat of traditional food sources due to construction-related activities, traditional hunting areas should be clearly identified by the contractor, and the impact to these areas from the Project should be kept minimal to avoid loss of habitat, and loss of animal traffic due to noise. This will maintain access to traditional foods, and related health benefits.	• Construction	EA/IA commitment
1144.	Human Health	Construction and any ground disturbing activity should be avoided by the contractor during critical windows of habitat movement, mating or spawning to help avoid lasting damage to specific species. If this is not possible, appropriate permits should be obtained to reduce the impact to wildlife.	• Construction	EA/IA commitment
1145.	Human Health	It is advised that Webequie First Nation be involved in all land use planning activities to manage any new developments that may arise due to the Project to secure the integrity of their traditional hunting, fishing, and trapping grounds to help to ensure current and future generations maintain traditional food security, and the health benefits associated with the consumption of traditional foods.	• Construction	EA/IA commitment
1146.	Human Health	It is possible that construction workers who are not members of Webequie First Nation will access the traditional lands of the community to hunt for recreation and sport. This use of the land by non-members should be prohibited or strictly regulated by Webequie First Nation during the construction period to maintain self-sustaining populations of traditional food sources and therefore maintain the resulting health benefits associated with traditional food security.	• Construction	EA/IA commitment
1147.	Human Health	Webequie First Nation can include in their Community Readiness Plan the need for continuing to provide youth and interested members of the community with knowledge related to harvesting traditional foods. This will help with the passing of traditional knowledge to the next generation, spark joy associated with traditional methods and allow the next generation to experience the health benefits associated with traditional food harvesting and consumption.	• Construction	EA/IA commitment
1148.	Human Health	The use of traditional lands by non-members will be discouraged or limited by Webequie First Nation. Hunters who are not from the community should follow all provincial regulations, and poaching should be monitored through standard enforcement procedures to help to ensure all regulations are followed.	• Operations	EA/IA commitment
1149.	Human Health	Community members suggest that Webequie First Nation should continue to provide youth and interested members of community with knowledge related to harvesting traditional foods.	• Operations	EA/IA commitment
1150.	Human Health	The contractor is encouraged to develop policies that support flexibility in work schedule and/or opportunities for leave for Indigenous employees in order to support important cultural practices, such as harvesting, which may allow them to continue to participate in the traditional economy and harvesting.	• Construction	EA/IA commitment
1151.	Human Health	From the cultural enrichment plan of the Community Readiness Plan, enhancement measures for Webequie First Nation to consider could include continuing to hold camping and canoe trips, holding cultural and recreational activities, creating on the land retreats and a healing centre, creating a cultural centre, and development of new powwow grounds.	• Construction	EA/IA commitment
1152.	Human Health	The contractor will be advised to work with Webequie First Nation to promote respectful relationships between Webequie First Nation members and construction workers by implementing regular mandatory in-person cultural and Indigenous awareness training in order to increase awareness and knowledge of Indigenous history and culture among workers and on raising awareness for the safety of Indigenous women and girls.	• Construction	EA/IA commitment
1153.	Human Health	The contractor will be advised to work with Webequie First Nation to create and implement mandatory training programs focused on the safety of Indigenous women, girls and 2SLGBTQQIA individuals.	• Construction	EA/IA commitment
1154.	Human Health	Webequie First Nation should consider establishing a group made of community members to function as Community Liaison Officers as part of the project workforce during the construction phase, to bridge the gap between the community's needs and Project's requirements and effects (see Community Readiness Plan – Appendix N).	• Construction	EA/IA commitment
1155.	Human Health	The contractor will be advised to work with Webequie First Nation to develop a grievance mechanism for community concerns and issues at the construction camps, inclusive of issues regarding racism, sexism, gender-based violence, and other issues.	• Construction	EA/IA commitment
1156.	Human Health	Webequie First Nation will consider developing a Safety and Security Plan for Vulnerable Community Members with the purpose of providing enhanced safety and security for women, children, youth and vulnerable people in the Webequie community, including 2SLGBTQQIA and under-housed people, to address any new hazards and safety concerns related to the Project.	• Construction	EA/IA commitment
1157.	Human Health	It is recommended that Webequie First Nation work with government bodies on implementation of Ontario's strategy in response to the National Inquiry into Missing and Murdered Indigenous Women and Girls recommendations.	• Construction	EA/IA commitment
1158.	Human Health	It is recommended that Webequie First Nation advocate for creating and implementing training programs focused on the history and culture of Indigenous peoples, and the safety of Indigenous peoples, especially women, girls and 2SLGBTQQIA people for all projects being undertaken in the Ring of Fire area.	• Operations	EA/IA commitment
1159.	Human Health	The contractor will be advised to develop a Construction Traffic Management Plan together with Webequie First Nation, to provide guidance on how project-related traffic is managed in and around the project construction site, including use of the winter road during construction of the Project.	• Detail design • Construction	EA/IA commitment

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1160.	Human Health	Key mitigation measures proposed to address potential hazards of traffic during the operations phase include: • Develop a plan to enforce road safety; • Consider road patrols and inspections; • Consider partnerships for driver education and licensing; • Consider roadside safety options; and • Consider maintenance/turnaround/rest areas.	• Operations	EA/IA commitment
1161.	Human Health	Webequie First Nation will consider working with the Province to improve health care services (including counselling services, and substance use-support programs) within the community before construction activities begin.	• Construction	EA/IA commitment
1162.	Human Health	Construction work will have safety management plans and workers will be required to adhere to these protocols and associated trainings for safe work. This reduces the potential for work-related incidents, such as injuries or fires.	• Detail design • Construction	EA/IA commitment
1163.	Human Health	Construction camps are expected to have first-aid stations and occupational health and safety staff to address minor injuries and illness.	• Construction	EA/IA commitment
1164.	Human Health	Health and safety plans will be developed for all parts of the project activities.	• Construction	EA/IA commitment
1165.	Human Health	Webequie First Nation will consider working with the Province to improve mental health care services within the community before construction activities begin to ensure the community's already limited health care services will not be burdened.	• Construction	EA/IA commitment
1166.	Human Health	Webequie First Nation will consider working with the Province to improve mental health care services within the community to help ensure the community's already limited health care services will not be burdened.	• Operations	EA/IA commitment
1167.	Human Health	Webequie First Nation may want to consider how community members needing to travel to and from the community, via air travel or the winter road, to access services and for other reasons, are still able to do so freely and not impeded by the higher demand placed on air travel and by winter road to bring in construction-related equipment and personnel.	• Construction	EA/IA commitment
1168.	Human Health	For those travelling to the Ring of Fire area to access employment and opportunities via the WSR, Webequie First Nation may want to consider arranging community transportation services to assist those who are elderly, have a disability, and those who do not have access to a vehicle to access the mining areas and take advantage of opportunities. This will increase the potential positive impacts to health.	• Operations	EA/IA commitment
1169.	Human Health	Webequie First Nation should seek external funding for a fire station and fire truck to put out fires and protect community members.	• Construction	EA/IA commitment
1170.	Human Health	Additional emergency response services for drug-related medical concerns and overdoses should be considered by the community.	• Construction	EA/IA commitment
1171.	Human Health	Construction camps are to include a first aid station, and occupational health and safety staff to address minor injuries and illness. Major emergencies will use helicopter transport and will not burden the health care system of the community.	• Construction	EA/IA commitment
1172.	Human Health	Construction work will have safety management plans and workers will be required to adhere to these protocols for safe work.	• Detail design • Construction	EA/IA commitment
1173.	Human Health	Workers will be expected to remain within the camp at all times and will rarely enter the Webequie community, reducing the use of protective services within the Webequie community.	• Construction	EA/IA commitment
1174.	Human Health	Camps will also have security staff to patrol the camp for hazards/threats and protect workers.	• Construction	EA/IA commitment
1175.	Human Health	All safety incidents related to the Project will be reported within 24 hours and records of these incidents will be archived.	• Construction	EA/IA commitment
1176.	Human Health	As part of the Community Readiness Plan, a community well-being monitoring and adaptive management plan will monitor road safety as well as the capacity of the emergency and protective services.	• Detail design • Operations	EA/IA commitment
1177.	Human Health	Road safety plan will include measures to mitigate adverse effects.	• Operations	EA/IA commitment
1178.	Human Health	Implementing road signs, raising public awareness about road safety, and providing education and awareness on road safety is also considered as an enhancement measure.	• Operations	EA/IA commitment
1179.	Human Health	As per the Community Readiness Plan, an initiative will be developed to implement a dedicated childcare and youth services drop-in centre in the Webequie community that will provide support to family members that require childcare to participate in education and training programs and employment opportunities related to the Project. In addition, a drop-in centre will also focus on services available to youth, such as services under Jordan's Principle, and people with disabilities.	• Detail design • Construction	EA/IA commitment

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1180.	Human Health	Webequie First Nation will consider working with the Province to obtain additional mental health supports and counselling for Webequie First Nation community to help with challenges community members anticipate facing regarding project activities and concerns.	• Construction	EA/IA commitment
1181.	Human Health	Contact should be limited between the work camps and the community to reduce the stress and concern felt due to the threat of violence or concern for personal safety, especially by women and girls.	• Construction	EA/IA commitment
1182.	Human Health	The contractor will be advised to work with Webequie First Nation and aim to offer mandatory annual Indigenous cultural sensitivity training to workers to promote positive work relationships between Indigenous and non-Indigenous employees, and limit risk to the safety of women, girls and 2SLGBTQQIA individuals.	• Construction	EA/IA commitment
1183.	Human Health	The contractor should aim to understand Webequie cultural practices and respect cultural practices by allowing time and flexibility for workers to participate in cultural ceremonies, traditions or community events when possible as Elders believe these traditional practices promote positive mental well-being.	• Construction	EA/IA commitment
1184.	Human Health	To address feelings of ecological grief due to changes to the landscape, it is suggested that Webequie continue to keep community members (especially Elders) comprised of ongoing construction activities, so they are not surprised by sudden changes. And also ask the contractor to stage construction equipment and work camps away from sight lines to minimize visual disturbance to the landscape.	• Construction	EA/IA commitment
1185.	Human Health	The contractor should work with Webequie First Nation to understand environmental stewardship practiced by Webequie and incorporate these principes into construction practices whenever possible.	• Construction	EA/IA commitment
1186.	Human Health	Webequie First Nation will consider implementing inspection areas to not only limit access to community to outsiders, but also to discourage illegal entry of illicit substances and alcohol into the community. This will reduce safety and security risks, and improve mental wellness when members feel safe in the community.	• Operations	EA/IA commitment
1187.	Human Health	Webequie First Nation may wish to consider working with the Province to obtain additional mental health supports and counselling for community to help with challenges community members anticipate facing regarding project activities and concerns.	• Operations	EA/IA commitment
1188.	Human Health	Webequie First Nation will consider increasing substance use support services in the community before construction begins, as well as provide enhanced messaging and programming around the harms of substance use.	• Construction	EA/IA commitment
1189.	Human Health	It is advised that workers who are not members of Webequie First Nation not be allowed into Webequie First Nation during the construction phase. This may limit opportunities for illicit drugs and/or alcohol to be transported into the community by outsiders.	• Construction	EA/IA commitment
1190.	Human Health	The contractor should work with Webequie First Nation to provide a safe and productive work environment by establishing and enforcing clear guidelines on substance use that includes the prohibition of drugs and alcohol in construction camps during the construction phase.	• Construction	EA/IA commitment
1191.	Human Health	The contractor will be advised to provide education and training for workers on the effects of substance use and importance of maintaining a drug-free work environment.	• Construction	EA/IA commitment
1192.	Human Health	Webequie First Nation consider implementing inspection areas to not only limit access to community to outsiders, but also to discourage illegal entry of illicit substances and alcohol into the community.	• Operations	EA/IA commitment
1193.	Human Health	Webequie First Nation will consider stepping up programs to educate younger generations about the effects of alcohol and drug use.	• Operations	EA/IA commitment
1194.	Human Health	Webequie First Nation will work with contractor(s) to ensure that disturbances to the local environment are made in a way that minimizes disturbance to natural habitats and focuses on the long-term stability of wild game and traditional plant populations during construction including minimizing noise pollution, especially during key mating periods.	• Construction	EA/IA commitment
1195.	Human Health	Members of the community who hunt may want to notice and maintain records of changes in patterns of behaviour among game animals and growth patterns of traditional plants as a result of the WSR.	• Operations	EA/IA commitment
1196.	Human Health	Webequie First Nation is encouraged to work with the Ontario Ministry of Natural Resources to monitor and issue licenses for large game, such as moose, through the provincial hunting lottery system, and regulate fish catches by conservation laws.	• Operations	EA/IA commitment
1197.	Human Health - Monitoring	**Colonization and Trauma from Residential Schools** • Monitoring and implementation of consultation during the construction phase between Webequie First Nation and the contractor regarding construction activities that may impact traditional activities on the land.	• Construction	EA/IA commitment
1198.	Human Health - Monitoring	**Racism and Social Exclusion** • Monitoring of implementation of mandated in-person cultural and Indigenous awareness training for construction workers and all operations personnel.	• Construction • Operations	EA/IA commitment

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1199.	Human Health - Monitoring	**Racism and Social Exclusion** • Monitoring and documentation of community members reports of incidents related to racism and social exclusion and set up a transparent way in which the proponent can address these incidents and take action.	• Construction • Operations	EA/IA commitment
1200.	Human Health - Monitoring	**Local Economic Growth** • Monitoring of procurement targets (e.g., total contract value) for the participation of local and/or Indigenous businesses in Project construction. Procurement policies for the recruitment, development, and retention of underrepresented groups of Webequie First Nation, other communities in the Local Study Area (LSA) and Regional Study Area (RSA) of the Project may include setting Mandatory Minimum Indigenous Requirements to hit targets for employment of specific groups like women, youth and individuals with disabilities.	• Construction	EA/IA commitment
1201.	Human Health - Monitoring	**Worker Accommodations (i.e., worker/construction camps)** • Monitoring of the implementation of the in-person cultural and Indigenous awareness training for all construction workers.	• Construction	EA/IA commitment
1202.	Human Health - Monitoring	**Worker Accommodations (i.e., worker/construction camps)** • Monitoring and enforcing of guidelines on substance use that includes the prohibition of drugs and alcohol in construction camps during the construction phase.	• Construction	EA/IA commitment
1203.	Human Health - Monitoring	**Worker Accommodations (i.e., worker/construction camps)** • Monitoring and documenting community members reports of incidents of workplace harassment and way in which the contractor can address these incidents and take action.	• Construction	EA/IA commitment
1204.	Human Health - Monitoring	**Worker Accommodations (i.e., worker/construction camps)** • Monitoring commitments of proponent to set up a surveillance method to identify and monitor harassment of women and 2SLGBTQQIA+ individuals and identify protocols to address these infractions.	• Construction	EA/IA commitment
1205.	Human Health - Monitoring	**Air Quality (including GHG Emissions)** • Documenting compliance with proponent's Air Quality and Dust Control Management Plan once established that will include a monitoring procedure for dustfall effects and measures to control or limit usage of vehicle or equipment that are the main emission source of particulates.	• Detail design • Construction • Operations	EA/IA commitment
1206.	Human Health - Monitoring	**Noise Levels and Vibration** • Monitoring and documenting community members report of construction-related noise and any adverse effects to harvesting areas for big and small game and birds.	• Construction	EA/IA commitment
1207.	Human Health - Monitoring	**Employment and Income** • Monitoring the implementation of workplace policies and programs, such as a diversity and inclusion strategy, zero-tolerance policies for racism and workplace violence, codes of conduct, workplace safety programs and cultural training programs (e.g., Indigenous Awareness Training).	• Construction • Operations	EA/IA commitment
1208.	Human Health - Monitoring	**Education / Access to Education** • Monitoring status and results of recommended surveys every 6 months or annually how community members have gained education and skills and in which areas are beneficial to the community. In addition, identifying which trades/skills are in high demand and in which training is needed will allow the community to better prepare for taking advantage of opportunities in ongoing work on the project.	• Construction • Operations	EA/IA commitment
1209.	Human Health - Monitoring	**Food Security** • Monitoring and reporting if harvesting of traditional foods is impacted during the construction and operations of the Project. During construction, surveying with the community of the Webequie is recommended every 3 – 6 months on changes they've noticed in the difficulty in harvesting big and small game, including opportunities for project activities to be adjusted to minimize disturbing traditional land use.	• Construction • Operations	EA/IA commitment
1210.	Human Health - Monitoring	**Social Cohesion and Cultural Continuity** • Monitoring the implementation of workplace policies and programs, such as a diversity and inclusion strategy, zero-tolerance policies for racism and workplace violence, codes of conduct, workplace safety programs and cultural training programs (e.g., Indigenous Awareness Training).	• Construction • Operations	EA/IA commitment
1211.	Human Health - Monitoring	**Safety of Women and Girls** • Monitoring the implementation of workplace policies and programs focused on the safety of Indigenous women, girls and 2SLGBTQQIA+ individuals (covering issues like sexual harassment and sex trafficking) for all Project employees.	• Construction • Operations	EA/IA commitment
1212.	Human Health - Monitoring	**Safety of Women and Girls** • Appointed Community Liaison Officers are to follow-up on community concerns and issues at the construction camps, inclusive of issues regarding racism, sexism, gender-based violence, and other issues in a culturally appropriate and safe manner.	• Construction	EA/IA commitment
1213.	Human Health - Monitoring	**Traffic Volume and Safety** • Monitoring the status and outcomes from the Construction Traffic Management Plan that is to be developed with the contractor and Webequie First Nation.	• Detail design • Construction	EA/IA commitment

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1214.	Human Health - Monitoring	**Traffic Volume and Safety** • Following up during the detail design phase of the Project to ensure compliance with the MTO Roadside Design Manual and adequate road-side safety elements are included.	• Construction	EA/IA commitment
1215.	Human Health - Monitoring	**Access to Healthcare Services (family doctor or specialist care provider)** • Monitoring the need and uptake of healthcare services prior to construction activities and increasing availability of specific healthcare services as needed. This is a key step in ensuring increased resiliency of the community to withstand impacts of the project.	• Construction	EA/IA commitment
1216.	Human Health - Monitoring	**Access to Healthcare Services (family doctor or specialist care provider)** • Following up to ensure safety management plans and health and safety plans are in-place for workers.	• Detail design • Construction	EA/IA commitment
1217.	Human Health - Monitoring	**Access to Social, Mental Health and Family Services** • Monitoring mental health and wellness of the community over time by using indicators such as demand for mental health services, new reported incidence of mental health issues, incidence, both new and ongoing of substance use issues, etc. Should indicators show negative change, a mental health management plan may be developed and implemented to provide community members, and those who are most affected, with adequate mental health supports, including the use of traditional healing practices.	• Detail design • Construction • Operations	EA/IA commitment
1218.	Human Health - Monitoring	**Access to Emergency Response Services** • Following up to ensure safety management plans and health and safety plans are in-place for workers.	• Detail design • Construction • Operations	EA/IA commitment
1219.	Human Health - Monitoring	**Access to Emergency Response Services** • Monitoring to ensure workers remain within the construction camp at all times.	• Construction	EA/IA commitment
1220.	Human Health - Monitoring	**Access to Emergency Response Services** • Monitoring the safety incidents reported at the camps.	• Construction	EA/IA commitment
1221.	Human Health - Monitoring	**Access to Emergency Response Services** • As part of the Community Readiness Plan, a community well-being monitoring and adaptive management plan will monitor road safety as well as the capacity of the emergency and protective services.	• Detail design • Construction • Operations	EA/IA commitment
1222.	Human Health - Monitoring	**Mental Wellness** • Monitoring any concerns or issues related to contact between the outside workers and community members in the work camps to reduce the stress and concern felt due to the threat of violence or concern for personal safety, especially by women and girls.	• Construction	EA/IA commitment
1223.	Human Health - Monitoring	**Mental Wellness** • Annual monitoring of the Indigenous cultural sensitivity training to workers to promote positive work relationships between Indigenous and non-Indigenous employees.	• Construction • Operations	EA/IA commitment
1224.	Human Health - Monitoring	**Mental Wellness** • Monitoring the need for and uptake of mental health and wellness services offered in the community, including traditional healing practices.	• Construction • Operations	EA/IA commitment
1225.	Human Health - Monitoring	**Substance Use** • Monitoring and enforcing of guidelines on substance use that includes the prohibition of drugs and alcohol in construction camps during the construction phase.	• Construction	EA/IA commitment
1226.	Human Health - Monitoring	**Substance Use** • During the operations phase, continuing to track and monitoring the potential for movement of large quantities of alcohol and illegal drugs into the community (i.e., trafficking) by outsiders and engage appropriate law enforcement to raise alarm about the issue.	• Operations	EA/IA commitment
1227.	Human Health - Monitoring	**Diet, Including Access to Traditional Country Foods** • Monitoring changes in patterns of behaviour among game animals and growth patterns of traditional plants as a result of the WSR.	• Operations	EA/IA commitment
1228.	Visual Environment	Avoid new disturbances beyond the Project Footprint to the extent practicable, with particular consideration at waterbody crossing sites.	• Operations	EA/IA commitment
1229.	Visual Environment	Minimize the extent of vegetation clearing at the three waterbody crossings, and other crossings, that are considered navigable waterbodies will be limited to minimize visual impacts and where necessary meet safety standards.	• Operations	EA/IA commitment
1230.	Visual Environment	Maximizing efforts to retain existing vegetation and landforms, to the extent practicable, to provide screening of activities and project components.	• Operations	EA/IA commitment
1231.	Visual Environment	Reducing the extent of disturbed area within the road ROW. Disturbed areas will be restored and seeded to allow for natural revegetation and its management to support the safe operations of the road.	• Operations	EA/IA commitment

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1232.	Visual Environment	Additional mitigation measures to address potential effects on the Visual Environment are included in Appendix E – Mitigation Measures: • Section 5.1 – Clearing and Grubbing; and • Section 5.21 – Site Decommissioning and Rehabilitation	• Operations	EA/IA commitment
1233.	Visual Environment - Monitoring	During construction and operations, follow-up and monitoring activities will be conducted to confirm mitigation measures are being implemented appropriately and net effects are as predicted.	• Construction • Operations	EA/IA commitment
1234.	Visual Environment - Monitoring	Ongoing engagement and consultation with potentially affected Indigenous communities and groups will help identify opportunities to address concerns regarding visual quality throughout construction and operations of the Project.	• Construction • Operations	EA/IA commitment
1235.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Mitigations provided via other sections of EAR/IS on the biophysical environment of the Project area.	• Construction • Operations	EA/IA commitment
1236.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Implement the CEMP and OEMP.	• Construction • Operations	EA/IA commitment
1237.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Implement the CRP.	• Construction • Operations	EA/IA commitment
1238.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Implement mitigation measures suggested via IK Studies.	• Construction • Operations	EA/IA commitment
1239.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Provide access and adaptive management for harvesters throughout the construction phase.	• Construction	EA/IA commitment
1240.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Maintain line of site for land users during construction activities.	• Construction	EA/IA commitment
1241.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Engage with First Nations communities periodically to understand their harvesting schedules and cultural practices.	• Construction	EA/IA commitment
1242.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Schedule and plan timing of construction activities to avoid peak harvesting periods.	• Construction	EA/IA commitment
1243.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Temporary access roads or detours will facilitate continued harvesting.	• Construction	EA/IA commitment
1244.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Protection of waterways and access and community-led water monitoring.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
1245.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Minimize disruptions to traditional land and water use.	• Construction	EA/IA commitment
1246.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Provide accessible and available communication materials, in plain language, and translate as needed to community's Indigenous language.	• Construction • Operations	EA/IA commitment
1247.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Establish partnerships with organizations for Indigenous-led environmental justice and stewardship initiatives.	• Construction • Operations	EA/IA commitment
1248.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Establish hunting database.	• Construction	EA/IA commitment
1249.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Establish buffer zones around key harvesting areas to the extent possible for protection against any direct effects.	• Construction	EA/IA commitment
1250.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Time construction activities that may cause sensory disturbances outside of the wildlife movement patterns.	• Construction	EA/IA commitment
1251.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Utilize on-site controls to buffer the effect of sensory disturbances.	• Construction • Operations	EA/IA commitment
1252.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Install monitoring devices for sensory effects to track and alert construction workforce when above a set threshold.	• Construction	EA/IA commitment
1253.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Establish seasonal restrictions on construction activities to avoid critical periods for wildlife, such as breeding or migration seasons.	• Construction	EA/IA commitment
1254.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Implement relevant mitigations provided via the Section 4.2 Cultural Protection Guidelines of the Webequie On-Reserve Land Use Plan.	• Construction • Operations	EA/IA commitment
1255.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Change distance to culturally and spiritually important sites and areas.	• Construction	EA/IA commitment
1256.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Consult with First Nations to establish temporary alternative routes.	• Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
1257.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Demarcate areas and sites of cultural and traditional importance.	• Construction	EA/IA commitment
1258.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Set up protocols and schedules for working around culturally and traditionally important sites and areas.	• Construction	EA/IA commitment
1259.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Change sufficiency of lands and resources for cultural practices.	• Construction	EA/IA commitment
1260.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Adopt a landscape-scale approach to assess and manage cultural resources.	• Construction • Operations	EA/IA commitment
1261.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Implement adaptive management practices that allow for ongoing monitoring and adjustment of mitigation measures.	• Detail design • Construction • Operations	EA/IA commitment
1262.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Ensure that cultural awareness training is provided to all Project workers.	• Construction	EA/IA commitment
1263.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Have opportunities for Elders and youth to get out onto the and teach/learn stewardship.	• Construction • Operations	EA/IA commitment
1264.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Use timber from removed vegetation for traditional or cultural purposes.	• Construction	EA/IA commitment
1265.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Recruit community members as spiritual monitors.	• Construction • Operations	EA/IA commitment
1266.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Develop opportunities to harmonize traditional knowledge and modern culture to protect and improve culture.	• Construction • Operations	EA/IA commitment
1267.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests	Target programs for youth involvement and interest in cultural values, practices, and activities.	• Construction • Operations	EA/IA commitment
1268.	Indigenous Peoples and Aboriginal and Treaty Rights and Interests - Monitoring	A Webequie Community Readiness Plan (CRP) has been developed for the Project (Appendix N of the EAR/IS). Monitor further development of the CRP in consultation with First Nations with the aim to confirm the findings on social, economic, and health impacts of the Project and guide mitigation and monitoring measures, including helping Webequie First Nation and other communities benefit from the Project's opportunities.	• Detail design • Construction • Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
1269.	Cultural Heritage Resources	Indigenous community members will have an active role in developing and implementing management plans.	• Detail design • Construction • Operations	EA/IA commitment
1270.	Cultural Heritage Resources	An Environment Committee will be established to facilitate communication and engagement during construction and operations of the Project. Committee members will include Webequie First Nation Elders and Knowledge Holders, other First Nations with interest in participating, and appropriate project representatives, to: facilitate communication and engagement during construction and operations of the Project; facilitate use of Indigenous Knowledge in project activities; facilitate evaluation of land use information; and facilitate development of appropriate monitoring programs, protocols and management plans as it relates to Cultural Heritage Resources VC.	• Detail design • Construction • Operations	EA/IA commitment
1271.	Cultural Heritage Resources	Mitigation measures may include, but are not limited to: • Avoidance and protection; • Alternative design or construction approaches; • Monitoring by spiritual monitors trained by Elders in the community on what sites/areas to avoid; • Relocation; • Remedial landscaping; and • Documentation, where appropriate	• Construction	EA/IA commitment
1272.	Cultural Heritage Resources	Webequie First Nation Elders and Knowledge Holders, along with provincial guidelines, will be consulted for advice on scope, methodology and approach in the development of appropriate mitigation measures.	• Construction	EA/IA commitment
1273.	Cultural Heritage Resources	As the three CHLs (or parts thereof) are located on provincially-owned Crown land, the Standards and Guidelines for Conservation of Provincial Heritage Properties (Government of Ontario, 2010) must be followed. An evaluation against both Ontario Regulation (O.Reg.) 9/06 and O.Reg. 10/06 will be completed for each CHL to determine their Cultural Heritage Value or Interest (CHVI). O.Reg. 9/06 provides criteria to determine the CHVI at a local level to determine whether it is a Provincial Heritage Property, while O.Reg. 10/06 provides criteria to determine if the resource has CHVI of provincial significance to determine whether it is a Provincial Heritage Property of Provincial Significance. Minister's Consent is required where properties that meet O.Reg. 10/06 are subject to direct impacts such as removal, demolition, alteration of heritage structures/landscapes, or transfer from provincial control.	• Post EA/IA • Construction	EA/IA commitment
1274.	Cultural Heritage Resources	Cultural Heritage Evaluation Reports (CHERs) will be completed in collaboration with the proponent and their Consultation Lead, Webequie First Nation Elders and Knowledge Holders (as appropriate), and while following provincial guidelines, to determine the appropriate scope, methodology and approach to the completion of the CHERs of these cultural sensitive sites and areas. Guidance documents include the following: • Standards and Guidelines for Conservation of Provincial Heritage Properties – Heritage Identification & Evaluation Process (Government of Ontario, 2014).	• Post EA/IA • Construction	EA/IA commitment
1275.	Cultural Heritage Resources	Should the CHERs determine that a CHL has CHVI, a Heritage Impact Assessment (HIA) must be conducted to develop appropriate mitigation measures. The proposed undertaking should endeavor to avoid adversely affecting known and potential cultural heritage resources and interventions should be managed in such a way that identified significant cultural heritage resources are conserved. When the nature of the undertaking is such that adverse effects are unavoidable, it may be necessary to implement alternative approaches or mitigation strategies that alleviate the negative effects on identified BHRs and CHLs. Mitigation is the process of lessening or negating anticipated adverse effects to cultural heritage resources and may include, but are not limited to, such actions as avoidance, monitoring, protection, relocation, remedial landscaping, and documentation of the BHR or CHL if to be demolished or relocated. Strategic Conservation Plans may also be a possible mitigation measure. Guidance documents include the following: • Information Bulletin 2 – Strategic Conservation Plans for Provincial Heritage Properties (Government of Ontario, 2017a). • Information Bulletin 3 – Heritage Impact Assessment for Provincial Heritage Properties (Government of Ontario, 2017b).	• Post EA/IA • Construction	EA/IA commitment
1276.	Cultural Heritage Resources	Mitigation of archaeological resources may involve avoidance and protection or excavation in accordance with MCM Standards and Guidelines for Consultant Archaeologists for Stage 4 Mitigation, as determined through Stage 2 and 3 Archaeological Assessments. The outstanding Stage 2 assessment work, and any further stages of archaeological assessment recommended by its results, will be carried out as early as possible during detail design and prior to any ground disturbing activities.	• Construction	EA/IA commitment
1277.	Cultural Heritage Resources	Ground-disturbing activities will not commence until archaeological assessment reports recommending no further assessment have been entered into the Ontario Public Register of Archaeological Reports.	• Construction	EA/IA commitment
1278.	Cultural Heritage Resources	A Cultural Heritage Resources Management Plan will be developed to guide contractors in the event that a previously unidentified heritage or archaeological resources are suspected or encountered unexpectedly during construction. The plan will include the following provisions:	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• If previously unidentified archaeological resources are encountered unexpectedly during construction, the proponent or person discovering the archaeological resources shall cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the *Ontario Heritage Act*. • Any person discovering human remains shall cease all activities immediately and notify the police or coroner. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act.*		
1279.	Cultural Heritage Resources - Monitoring	The CEMP and OEMP will include a Cultural Heritage Resources Management Plan with procedures and protocols when encountering unexpected heritage or archaeological resources during ground disturbance. The Cultural Heritage Resources Management Plan will give on-site personnel information to identify heritage or archaeological materials if encountered in the construction or maintenance area, procedures for notification and reporting the find, and actions to follow to protect the site from impacts. The contactor's adherence to the procedures and protocols in the Cultural Heritage Resources Management Plan will be monitored.	• Detail design • Construction • Operations	EA/IA commitment
1280.	Accidents and Malfunctions	Prevent hazardous material spills through proper storage, containment, inspections, trained personnel, and immediate spill-response procedures.	• Construction • Operations	EA/IA commitment
1281.	Accidents and Malfunctions	Reduce fuel and oil leak risks by inspecting equipment regularly, maintaining vehicles, using contained fueling areas, and cleaning contaminated soil promptly.	• Construction • Operations	EA/IA commitment
1282.	Accidents and Malfunctions	Prevent fire and explosion hazards by following regulated handling and storage requirements, maintaining fire-suppression equipment, training workers, and controlling ignition sources.	• Construction • Operations	EA/IA commitment
1283.	Accidents and Malfunctions	Prevent petroleum storage system failures through proper grounding, containment, overfill protection, licensed installation, regular inspections, and emergency spill cleanup.	• Construction • Operations	EA/IA commitment
1284.	Accidents and Malfunctions	Reduce burning or vegetation-clearing fire risks by following fire-prevention regulations, monitoring weather, supervising burns, extinguishing fires fully, and having firefighting equipment available.	• Construction • Operations	EA/IA commitment
1285.	Accidents and Malfunctions	Prevent structural failures of bridges, culverts, and road surfaces by using proper engineering design, conducting routine inspections, maintaining infrastructure, and having emergency response plans in place.	• Construction • Operations	EA/IA commitment
1286.	Accidents and Malfunctions	Minimize vehicle and equipment accident risks through traffic management measures, signage, safe-driving protocols, operator training, equipment maintenance, and emergency procedures.	• Construction • Operations	EA/IA commitment
1287.	Accidents and Malfunctions	Reduce wildlife collision and hazard risks by lowering vehicle speeds, installing wildlife signage, training workers in wildlife awareness, monitoring wildlife presence, and minimizing habitat disturbance.	• Construction • Operations	EA/IA commitment
1288.	Accidents and Malfunctions	The project commits to developing a Waste Management Plan that ensures hazardous and non-hazardous wastes are stored, handled, transferred, and disposed of safely. This plan will define the procedures needed to minimize environmental impacts from waste materials during all project phases.	• Detail design • Construction	EA/IA commitment
1289.	Accidents and Malfunctions	A dedicated plan will be created to prevent spills and provide a structured response if they occur. This includes establishing protocols for inspections, training, contingency planning, notifications, and site remediation. The plan ensures personnel are prepared to reduce spill-related risks involving petrochemicals throughout construction and operations.	• Detail design • Construction	EA/IA commitment
1290.	Accidents and Malfunctions	The project will implement a Blasting Management Plan that governs the safe storage, transportation, and detonation of explosives used on site. The plan will outline mitigation measures to control risks associated with blasting activities and ensure compliance with safety standards.	• Detail design • Construction	EA/IA commitment
1291.	Accidents and Malfunctions	A Health and Safety Management Plan will be developed to protect the workforce and ensure compliance with legal and regulatory requirements. This plan will outline procedures, controls, and responsibilities to minimize risks to worker health and safety during all construction and operational activities.	• Detail design • Construction • Operations	EA/IA commitment
1292.	Accidents and Malfunctions	The Traffic Management Plan will identify and implement measures to reduce project-related traffic hazards, including improved traffic flow and mitigation of road-safety risks. The plan will address both everyday vehicle movement and emergency response scenarios to protect workers and the public.	• Detail design • Construction	EA/IA commitment
1293.	Accidents and Malfunctions	A Community Readiness Plan will be created to help local and Indigenous communities prepare for and mitigate potential risks from project-related accidents and malfunctions. The plan will focus on safeguarding community members and reducing the severity of impacts from unexpected events.	• Detail design • Construction	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
1294.	Accidents and Malfunctions	The project commits to ensuring Indigenous community members have an active role in developing and implementing environmental management plans. This involvement recognizes the importance of Indigenous knowledge and supports collaborative planning and decision-making.	• Detail design • Construction	EA/IA commitment
1295.	Accidents and Malfunctions	An Environment Committee will be formed to support communication and engagement between the project and local communities during construction and operation. The committee will include Elders, Knowledge Holders, and representatives from interested First Nations, along with project personnel. Its role includes facilitating dialogue, sharing Indigenous Knowledge, guiding monitoring programs, and helping shape mitigation measures for accidents and malfunctions.	• Detail design • Construction	EA/IA commitment
1296.	Effects of the Environment on the Project	The most current revisions of Canada's and Ontario's codes, guidelines, specifications, and standards, and other references were used in the design of all structures, foundations, and related facilities to mitigate potential effects of the environment on the Project.	• Detail design • Construction • Operations	EA/IA commitment
1297.	Effects of the Environment on the Project	Indigenous community members will participate actively in developing and implementing environmental management plans.	• Detail design • Construction • Operations	EA/IA commitment
1298.	Effects of the Environment on the Project	An Environment Committee will be established, including Indigenous Elders, Knowledge Holders, and Nations, to guide engagement, Indigenous Knowledge integration, and monitoring.	• Detail design • Construction • Operations	EA/IA commitment
1299.	Effects of the Environment on the Project	The project will be designed using applicable codes, standards, and climate-resilient design considerations.	• Detail design • Construction • Operations	EA/IA commitment
1300.	Effects of the Environment on the Project	An Emergency Response Plan will be implemented for extreme weather events.	• Detail design • Construction • Operations	EA/IA commitment
1301.	Effects of the Environment on the Project	Contingency plans will be maintained for emergency repairs and weather-related hazards.	• Detail design • Construction • Operations	EA/IA commitment
1302.	Effects of the Environment on the Project	Signage requirements (weather alerts, wildlife crossing, etc.) will be finalized during detail design phase.	• Detail design • Construction • Operations	EA/IA commitment
1303.	Effects of the Environment on the Project	A trained Fire Boss will be appointed before construction begins.	• Detail design • Construction • Operations	EA/IA commitment
1304.	Effects of the Environment on the Project	Burning and smoking restrictions will be applied during high or extreme fire hazard conditions.	• Detail design • Construction • Operations	EA/IA commitment
1305.	Effects of the Environment on the Project	A water truck will be present onsite during elevated fire risk periods.	• Detail design • Construction • Operations	EA/IA commitment
1306.	Effects of the Environment on the Project	Vegetation will be managed along the ROW to reduce wildfire risks.	• Detail design • Construction • Operations	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
1307.	Effects of the Environment on the Project	Contingency and notification procedures will be coordinated with Indigenous communities and police services during unsafe conditions.	• Detail design • Construction • Operations	EA/IA commitment
1308.	Effects of the Environment on the Project	Construction and operations schedules will include buffers for extreme weather and wildfire-related delays.	• Construction • Operations	EA/IA commitment
1309.	Effects of the Environment on the Project - Monitoring	Follow-up and monitoring on effects of the environment on the Project will be integrated as part of the CEMP and OEMP that will be developed for the Project and includes implementation of post-construction monitoring procedures and reporting. Follow-up and monitoring activities will include, but are not limited to, the following: • Monitor implementation of the proposed risk control and mitigation measures during construction and operations; • Regularly inspect and evaluate the integrity of the project components; • Inspect and repair project components as warranted after extreme weather events; and • Implement adaptive management to mitigate climate risks, depending on future climate projections.	• Detail design • Construction • Operations	EA/IA commitment
1310.	Project Contributions to Sustainability	The proponent has made the commitment to achieve sustainable outcomes through: Taking a long-term planning approach, Implementing Seven Generations teachings, Commitments to improving the quality of life for present and future generations, developing climate resilient infrastructure, Assessing and mitigation planning, Mitigation Measures and Construction and Operations Environmental Management Plans.	• Detail design • Construction • Operations	EA/IA commitment
1311.	Project Contributions to Sustainability	Mitigation measures have been incorporated into commitments within the CRP to maximize Project benefits.	• Detail design • Construction • Operations	EA/IA commitment
1312.	Project Contributions to Sustainability	Develop a Monitoring and Adaptive Management Plan to track key parameters such as pressures on the community.	• Detail design • Construction • Operations	EA/IA commitment
1313.	Project Contributions to Sustainability	With the implementation of the WSR, Webequie First Nation has committed to implementing several social enhancement plans aimed at readying the communities for the Project – through education, training, improvements to critical infrastructure, civil and community services.	• Detail design • Construction • Operations	EA/IA commitment
1314.	Atmospheric Environment – Air Quality (MECP-AQA-09)	As proposed by MECP – Air Quality Analyst: Ensure the following mitigation measures are formally committed to in the EA tables and tracked through the Air Quality and Dust Control Management Plan • Development and implementation of an Air Quality and Dust Control Management Plan for both construction and operations phases. • Use of dust suppression systems at quarries. • Use of water sprays from trucks to suppress dust on haul roads and stockpiles. • Limiting vehicle speeds and restricting movement to designated areas. • Minimizing idling of equipment and vehicles. • Use of environmentally certified equipment, with a commitment that 80% of mobile and stationary engines will meet Tier 4F standards. • Eco-driving training for work crews to reduce fuel consumption. • No use of sand or salt for de-icing during winter operations. • Possibility of air quality monitoring and reporting as part of the Air Quality and Dust Control Management Plan and broader follow-up program. • Restrict or halt operations during high wind or dry conditions to prevent excessive dust generation near sensitive receptors. Mitigation measures as identified will be reflected in the EA tables, where applicable and will be reflected and tracked in the Air Quality and Dust Control Plan for implementation during the construction and operation phases of the Project.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1315.	Atmospheric Environment – Air Quality (MECP-AQA-11)	Proposed action from MECP – Air Quality Analyst: • Installation of real-time air quality monitoring stations at key locations, particularly near predicted points of impingement. • Monitoring of TSP, PM_{10}, $PM_{2.5}$, and NO_2 to ensure compliance with applicable guidelines. • Implementation of dust suppression techniques, including:	• Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		○ Water spray trucks operating over the gravel-surface road from May to November, or as needed, until the road is surfaced with asphalt or chip seal. ○ Additional dust control systems at quarries and stockpiles. ○ If exceedances are observed. • Provision of regular updates on air quality data to stakeholders and rights-holders, including Webequie First Nation. • Periodic review of monitoring data to identify trends and implement corrective actions if necessary.		
1316.	Atmospheric Environment – Air Quality MECP-EAB-23	Mitigation and monitoring related to dust control will be further detailed in the Air Quality and Dust Management Control Plan to be developed and implemented for the construction and operation phases of the Project. Monitoring is envisioned to include frequent visual daily monitoring during the summer dry periods and/or in high winds to assess the need to apply water-spraying on the road surface for dust suppression.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1317.	Follow-up and Compliance Monitoring MECP-EAB-60	Reporting structure will include preparation of Annual Follow-up and Compliance Monitoring Reporting, and that this will document the proponent's fulfilment of commitments made during the EA/IA process, and conditions of approvals (if granted) under the EA Act and IA Act.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1318.	Groundwater Resources MECP-GW-01	The proponent has made a commitment to undertake further acid-base accounting (ABA) and Synthetic Precipitation Leaching Procedure (SPLP) testing during the detail design stage and prior to construction and use of materials. This commitment is stated in Section 4.4.2.8 of the EAR/IS.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1319.	Groundwater Resources MECP-GW-04/05	More wells are currently proposed along the road and will be installed at water crossings and in peatlands / wetlands to allow for further engineering design of the road. This will include more testing, monitoring and sampling to inform design and prepare anticipated dewatering EASRs or PTTWs in the detail design phase of the Project.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1320.	Groundwater Resources MECP-GW-06/07	Proposed action from MECP – GW: • An evaluation of the need for a dewatering approval (EASR or PTTW) will likely be based upon site specific data collected during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1321.	Groundwater Resources MECP-GW-14/17	The drilling and well installation program is ongoing to advance the engineering design for the Project. Data loggers will be installed in some of the wells, and the monitoring and logger data downloading are planned for about twice a year for two years.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1322.	Groundwater Resources MECP-GW-18	Multiple tests will be considered for future hydraulic conductivity test events.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1323.	Pesticides MECP-PR-01	The proponent acknowledges the regulatory framework outlined under Ontario Regulation 63/09 and the Ontario Pesticides Act, and remains committed to ensuring that all future pesticide use for road maintenance, if implemented, will strictly adhere to provincial and federal requirements.	• Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1324.	Surface Water Resources MECP-SW-05	Dissolved Organic Carbon (DOC) was not one of the water quality parameters examined as part of the surface water sampling program to characterize existing conditions. The proponent makes commitment to capture DOC at select waterbody crossings in subsequent stages of project development as additional representative of baseline conditions and in future surface monitoring programs prior to the initiation of construction and during the construction and operation phases of the Project.	• Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1325.	Surface Water Resources MECP-SW-06	The proponent is committed to collect additional baseline sediment samples at select waterbody crossings prior to construction to provide supplemental sediment quality baseline data.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1326.	Surface Water Resources MECP-SW-07	Identify the potential need for an Environmental Compliance Approval (ECA) for the management of site drainage water and treatment of aggregate processing water at pit/quarry locations.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1327.	Surface Water Resources MECP-SW-08	Carry out follow-up benthic macroinvertebrate sampling at waterbody crossings where an authorization under the Fisheries Act is anticipated.	• Detail design • Construction	EA/IA commitment (comment on Draft EAR/IS)
1328.	Thunder Bay District (MECP-TBDO-02)	Copies of the Plans (CEMP and OEMP) will be submitted to the District The District of Thunder Bay for review and awareness. The District will be notified of any changes to the Plans. This condition should be included as a reporting requirements within the Plans.	• Detail design / post EA/IA	EA/IA commitment

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				(comment on Draft EAR/IS)
1329.	Thunder Bay District (MECP-TBDO-03)	Proposed action from MECP – Thunder Bay District: <u>Sewage</u> • MECP ECA required for sewage works with a design capacity in excess of 10,000 litres per day (OWRA). • Sewage disposal evaluation is required prior to construction activities. • Any transported wastewater and sewage will require a WMS approval to haul such waste. All waste must be sent to an approved facility to accept such waste. Volume capacity may not be available under existing ECAs for municipal/private sites. • Grease trap for kitchen wastewater should be considered. <u>Portable Sewage Treatment Facilities</u> • These systems are engineered to meet effluent discharge standards and are often used where permanent infrastructure is not feasible. Must meet MECP effluent criteria, typically requiring secondary treatment or equivalent as the minimum standards. ECA required.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1330.	Thunder Bay District (MECP-TBDO-04)	Proposed action from MECP – Thunder Bay District: <u>Domestic Non-Hazardous Wastes</u> • Review of R.R.O. 1990, Reg. 347: GENERAL - WASTE MANAGEMENT • The Waste Management Plan discussed should include a section on how construction and domestic waste shall be handled. A description of waste generated, timing of removal, and destination of final waste needs to be discussed. Volume capacity may not be available under existing ECAs for municipal/private waste disposal sites. Site evaluations and determination is required prior to construction activities. • Waste generated and stored on site will require to be stored in an approved manner to limit waste causing adverse effect to the natural environment (ex. Closed leak proof containers). <u>Wastes</u> • General Registration under Review of R.R.O. 1990, Reg. 347: GENERAL - WASTE MANAGEMENT with respect to hazardous waste and liquid waste management with Resource Productivity & Recovery Authority (RPRA). • List of types of wastes generated during the project (including drilling waste water, domestic, Dangerous Goods, waste oils, etc.), planned disposal framework, and transportation to the approved waste facility should be established prior to construction activities. • If storage of waste is greater than 90 days, a notice of Storage will be required. If waste is stored for longer than 24 months approval for a waste site maybe required. • An ECA or an EASR (under O. Reg. 351/12) is required for the transportation of solid non-hazardous wastes to a licensed facility. <u>Spill Events and Response Protocol</u> • All spills must be reported immediately to the MECP Spills Action Centre (SAC) and remediated forthwith, in accordance with Sections 92 and 93 of the Environmental Protection Act (EPA). In cases of uncertainty regarding what constitutes a reportable spill, Best Management Practice (BMP) is to document and report all spills and associated remedial actions to MECP SAC. Refer to Part X of the EPA for detailed regulatory requirements. <u>Contingency Planning</u> • A Contingency Plan must be developed prior to the commencement of construction to address potential spill scenarios along the corridor during and after construction activities.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1331.	Thunder Bay District (MECP-TBDO-05)	Proposed action from MECP – Thunder Bay District: • Evaluations of the proposed camp facilities setbacks to sensitive receivers (water, wetlands, groundwater). This evaluation should be completed prior to construction activities and applications for MECP approvals (i.e. PTTW, EASR for groundwater takings, stormwater management, ECA for discharges, air and noise).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1332.	Thunder Bay District (MECP-TBDO-06)	Proposed action from MECP – Thunder Bay District: • An ECA or an EASR (under Ontario Regulation 245/11) may be required for the use if the diesel generators.	• Detail design / post EA/IA	EA/IA commitment

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• Review of Environmental Noise Guideline – Stationary and Transportation Sources (NPC-300) and Ontario Regulation 419/05 (Local Air Quality).		(comment on Draft EAR/IS)
1333.	Thunder Bay District (MECP-TBDO-07)	Proposed action from MECP – Thunder Bay District: • Depending on the water taking activity a PTTW and/or EASR is required. Review of Ontario Regulation 63/16 and 387/04. • Dewatering of an area (including groundwater) for construction purposes is subject to eligibility criteria included in the water taking EASR regulation (Ontario Regulation 245/11).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1334.	Thunder Bay District (MECP-TBDO-08)	Proposed action from MECP – Thunder Bay District: • Registrations with Technical Standards and Safety Authority (TSSA) maybe required. • BMPs should be implemented for the storage of large volumes of fuel and other fuel-based liquids (secured compounds, secondary containment). • Ensure appropriate amount of spills kits are always available. • All spills are to be reported to MECP Spills Action Centre (SAC) and remediated forthwith (EPA, Section 92 and 93). Ontario Regulation 675/98 speaks to spill exemptions. The Spills and Emergency Preparedness Plan discuss what classifies as a reportable spill. These exemptions do not exempt the spiller from clean up of the spill forthwith and submit a report completed by a QP of the cleanup.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1335.	Thunder Bay District (MECP-TBDO-09)	Proposed action from MECP – Thunder Bay District: • Noise and Vibration, Blasting, and Communication Management Plans are required. • Review of Environmental Noise Guideline – Stationary and Transportation Sources (NPC-300) • Reference should be made to MECP Publications NPC-115 and NPC-118 for source-based noise limits, to NPC-119 and NPC-207 for receptor-based limits due to impulsive vibration from construction activities such as blasting and pile driving, and to MECP Publications NPC-300 for stationary and transportation sources. • Considerations should be considered for Human Health associated with frequent vibrations and blasting.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1336.	Thunder Bay District (MECP-TBDO-10)	Proposed action from MECP – Thunder Bay District: • The Excess Soil Regulation (Ontario Regulation 406/19) may apply if the contractor is planning on removing greater than 100 m3 of soil from a project area and transporting off-site. So, while 100 m^3 is a notable threshold for exemption from certain requirements (especially when soil is going to a landfill or transfer facility), Regulation 406/19 may still apply based on: destination of the soil, project location and type, potential for contamination, total volume being excavated. The BMP and Soil Management Plan must discuss whether areas of the project fall under the Excess Soil Regulation. • This should also include how the contractor will manage, store, handle, transport and details on the final disposal location(s) and quantities.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1337.	Thunder Bay District (MECP-TBDO-11)	Proposed action from MECP – Thunder Bay District: • Opacity discharge into the air (Ontario Reg 419) may apply and the requirement for a BMP Plan for the duration of project. Include complaint procedures and mitigation measures. • Included in CEMP; require Air Quality and Dust Control Management Plan. • Off site impacts may be occurring, if people and the natural environment are adversely affected.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1338.	Thunder Bay District (MECP-TBDO-12)	Proposed action from MECP – Thunder Bay District: • An ECA or an EASR (under Ontario Regulation 137/05) may be required for SWM.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1339.	Thunder Bay District (MECP-TBDO-13)	Proposed action from MECP – Thunder Bay District: • General Registration under Review of R.R.O. 1990, Reg. 347: GENERAL - WASTE MANAGEMENT with respect to hazardous waste and liquid waste management with Resource Productivity & Recovery Authority (RPRA). List of types of wastes generated during the project, planned disposal framework, and transportation to the approved waste facility. • ECAs and/or EASRs will be required for transportation and disposal activities.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
		• The spill contingency plan and emergency response plan was mentioned. This should also include how the contractor will manage, store and handle fuel, with a description of how and where wastes from spills will be transported and disposed of. Review O. Reg 224/07: Spill Prevention and Contingency Plan. • Review the Guidelines for environmental protection measures at chemical and waste storage facilities for storage guidance and BMP. • Include information on servicing options and disposal, as capacity may not be available under existing ECAs for to accept these wastes. • Review of the Waste Diversion Act, 2022. • Review of Hazardous waste management: business and industry.		
1340.	Thunder Bay District (MECP-TBDO-14)	Proposed action from MECP – Thunder Bay District: • Sediment erosion control would be required during vegetation clearing, at water crossings, and/or when working near water. Refer to comments provided by the surface water technical staff. • Review of B-6 Guidelines for Evaluating Construction Activities Impacting on Water Resources • Completion of a Receiving Water Assessments/Impact Assessments. • Contact MNR to determine permits/approvals.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1341.	Thunder Bay District (MECP-TBDO-15)	Proposed action from MECP – Thunder Bay District: • Metal-Leaching and Acid Rock Drainage Management Plan is required. • The District is requesting a copy of this plan be submitted for review and awareness.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1342.	Thunder Bay District (MECP-TBDO-16)	Proposed action from MECP – Thunder Bay District: • An ECA is required for on-site waste oil incinerator(s) (EPA Section 9 and 27)	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1343.	Thunder Bay District (MECP-TBDO-17)	Proposed action from MECP – Thunder Bay District: • Slash pile burning may be required during the construction phase. Notification to the local fire department is recommended prior to burning. Emergency fire suppression should be considered and planned. • Contact MNR to determine permits/approvals.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1344.	Thunder Bay District (MECP-TBDO-18)	Proposed action from MECP – Thunder Bay District: • Incinerator ash is classified as a special waste and must be disposed of at designated, approved landfill facilities. This material must be handled with precautions (this includes covered metal containers during transport). Incinerator ash is not permitted in standard waste streams; instead, it must be managed and transported in full compliance with regulatory requirements to ensure environmental and public health protection. • This issue should be addressed at both the EA phase and permitting phase. The EA should include information on servicing options for ash disposal associated with the temporary construction camps, as capacity may not be available under existing ECAs for municipal disposal sites. Additional testing may be required for ash disposal. • Considerations and explore beneficial uses for incinerator ash. • Review of R.R.O. 1990, Reg. 347: GENERAL - WASTE MANAGEMENT and Guideline A-7: Air Pollution Control, Design and Operation Guidelines for Municipal Waste Thermal. Guideline A-7 outlines air pollution control and operational standards for incinerators	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1345.	Thunder Bay District (MECP-TBDO-19)	Proposed action from MECP – Thunder Bay District: • If aggregate extraction is below the water table and water is to be removed (pumped) PTTW may be required. • If water is contaminated (sediment), an Industrial sewage ECA may also be required for discharge of a contaminant other than water. • In addition, environmental conditions are also found in the ARA License for the site.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1346.	Thunder Bay District (MECP-TBDO-20)	Proposed action from MECP – Thunder Bay District: • All spills are to be reported to MECP SAC and remediated forthwith (EPA, Section 92 and 93). Review of R.R.O. 1990, Reg. 347: GENERAL - WASTE MANAGEMENT and Ontario Regulation 675/98, OWRA, EPA, and Fisheries Act (Canada).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

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		• Spills to water require special considerations due to the potential for widespread environmental harm, impacts on aquatic ecosystems, DW Sources, and challenges in containment and remediation. • Ontario Regulation 675/98 speaks to spill exemptions. The Spills and Emergency Preparedness Plan should discuss what classifies as a reportable spill. Note, that although spills less than 100 L in restricted areas from public access, and spills less than 25 L in areas with public access are not required to be reported, this does not exempt the spiller from clean up of the spill forthwith and file an internal record of the cleanup. If there is confusion on what to report to MECP SAC, BMP would be to record and report all spills and remedial activity to SAC and follow up with district office. • Review of R.R.O. 1990, Reg. 347: GENERAL - WASTE MANAGEMENT with respect to waste characterization. Submission of a worst case soil sample for Toxicity Characterization Leaching Procedure (TCLP) analysis of Contaminates of Concern (COC) is required prior to remedial activities. TCLP sample from the spill site is to be completed prior to remedial activities to determine suitable disposal facilities (hazardous vs non-hazardous). • Spill Prevention and Emergency Response Management Plan to be completed. The District is requesting copies of these plans be submitted for review and awareness.		
1347.	Waste MECP-WU-01	Proposed action from MECP – Waste Unit: • Wastes that are generated from construction activities should be managed in accordance with the EPA and Reg. 347 and long-term storage facilities should obtain an ECA where necessary. (s. 27 of the EPA) • No establishment of an onsite landfill is proposed as part of the project.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1348.	Waste MECP-WU-03	Proposed action from MECP – Waste Unit: • Any long term waste handling and storage facility proposed must obtain an ECA if it is required under s. 27 of the EPA. • Wastes hauled to and from a project area must be conducted by approved haulers (EASR registration) and waste must go to approved receiving facilities for disposal or further processing/reuse. • Any waste incineration facilities under consideration will require an ECA to operate and may have implications under the EAA as well. Reg. 50/24 provides triggers for thermal treatment projects requiring approval subject to the EAA (p. 4-36).	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1349.	Waste MECP-WU-05	Proposed action from MECP – Waste Unit: • The establishment of a facility to incinerate waste will require an ECA and may also have requirements under the EAA (Reg. 50/24)	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1350.	Waste MECP-WU-06	If on-site waste incineration will occur, an ECA will be obtained and all other applicable provincial and federal laws and regulations will be adhered to.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1351.	Wastewater MECP-WWU-01	Stormwater management works must obtain an ECA as outlined in permitting requirements described in Table 1-3 of the EAR/IS.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1352.	Wastewater MECP-WWU-02	The specific sanitary sewage and treatment system is to be determined during the detail design phase and is based on further assessment of site conditions at camps and Maintenance and Storage Facility. This could include potential onsite portable package treatment units, use of septic tanks that where sewage and domestic wastewater is hauled by trucks to the existing treatment plant in Webequie, or use of an onsite conventional septic system with tank and leaching bed.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1353.	Ministry of Transportation (MTO) MTO-02	ESC plans will be prepared as part of the detail design phase of the Project for watercourse crossings, road grading and drainage and at supportive infrastructure sites (camps, pits/quarries, etc.). This will include design drawings showing the location of ESC measures, construction notes, typical details for ESC measures and supportive specifications and quantities of materials. A general overview of the ESC Plan will be described in the CEMP and OEMP that include approach and planning for ESC, areas of sensitivity along the route for consideration, and standard operating procedures for ESC, including routine inspections, ongoing maintenance activities and implementation of corrective actions, where applicable.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1354.	MTO-05	Correction from OFAT to OWIT will be made where applicable in future development and design stages of the Project. In the detail design phase, flow values for all watersheds will be updated using alternative methods (comprehensive hydrologic assessment of the study area was conducted), as the previously applied OFAT values were no longer applicable or available. Watershed characteristics were derived from the OWIT; however, updates were incorporated where recent information was available, particularly for smaller water crossings using Bathymetric survey, LiDAR and field data.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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		Whenever watershed characteristics are used as an input into hydrological models, these models are subsequently calibrated/ validated to confirm the validity of previous assumptions and used values.		
1355.	MTO-08	Physical measurements will be undertaken during the detail design stage for the Project, where access is suitable and free of significant constraints.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1356.	MTO-09	Erosion and sediment control will be in accordance with appropriate MTO guidelines, policies. More detailed work and analysis of scour protection will be undertaken during the detail design stage of the Project.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1357.	MTO-10	All dewatering, temporary drainage facilities and temporary flow passage systems will be in accordance with the standards mentions and the appropriate OPSS/OPSD. Details will be developed during detail design phase of the Project.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1358.	MTO-11	Stormwater management provisions where required have been identified at preliminary design stage, and will be developed further during detail design phase of the Project.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1359.	MTO-12	Subdrains are not proposed as a standard feature in WSR project. The design approach prioritizes compliance with MOE 203, which requires maintaining peatland hydrology and avoiding excessive lowering of water tables. However, subdrains may be considered in localized areas where: • Detailed geotechnical assessment confirms they are necessary for road stability (e.g., deep peat with high saturation or frost heave risk). • Design includes safeguards such as controlled outlet elevations, flow regulation, and post construction environmental monitoring. • If stormwater ponds, outlets, or access roads intersect areas with high groundwater or poor drainage, subdrains can help maintain structural stability and prevent frost-related issues. If required for any of the above scenarios, subdrains will be designed in accordance with OPSS 405, incorporating geotextile wrap, clear stone bedding, controlled outlet elevations, and measures to prevent large-scale dewatering, ensuring wetland function is preserved.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1360.	MTO-13	MTO Gravity Pipe Design Guidelines (GPDG) and the Gravity Pipe Trenchless Technologies Design Guides for Gravity Pipe Design Approvals) will be applied to the design for the Project and appropriate references have been inserted into the documents.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1361.	MTO-15	Embankment stability will be addressed in the updated geotechnical design report to be prepared during the future detail design phase of the Project.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1362.	MTO-16	During the detail design and permitting stage, there will be further analysis of the restricted activity periods and their constraints to construction, including identifying and seeking exemptions to select timing windows, where permitted, with implementation of enhanced mitigation.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1363.	MTO-17	Further geotechnical drilling is proposed during the detail design and permitting stage of the Project at aggregate source areas to fully characterize materials and meet the technical requirements for permit applications, including ability to meet provincial aggregate standards.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1364.	MTO-18	Where safety concerns are identified by operation and maintenance crews, the road operator may consider applying sand in strategic locations to improve traction on slippery surfaces, especially in very cold temperatures within the study area where salt is not effective.	• Operations	EA/IA commitment (comment on Draft EAR/IS)
1365.	MTO-29	The Erosion and Sediment Control (ESC) Plan for the Webequie Supply Road will formally be integrated into the detail design phase to proactively manage erosion risks and minimize long-term maintenance challenges. Sensitive areas such as peatlands, lowlands, and permafrost zones will be identified refined using LiDAR, geotechnical investigations, and hydrological modeling.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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1366.	MECP Species at Risk (SAR) Branch MECP-SAR-002	The Project team will engage with the MECP Species at Risk Branch in the development of the Construction Environmental Management Plan, Operation Environmental Management Plan, and all relevant component management plans.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1367.	MECP-SAR-003	Any activities associated with the Webequie Supply Road will consider potential adverse impacts to protected species and their habitat, implement mitigation and avoidance measures appropriate for these species, and seek project authorization under the amended ESA or SCA or register activities under the SCA as required. The Little Brown Myotis and Northern Myotis maternity roost habitat suitability mapping and effects assessment presented in the Draft EAR/IS Report does not capture all of the suitable Eastern Red Bat, Hoary Bat, and Silver-haired Bat maternity roost habitat types, and as such the route evaluation, assessment of residual effects of the Community Access Road, and proposed mitigation for Little Brown Myotis and Northern Myotis is not directly applicable to the migratory bat species.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1368.	MECP-SAR-008	All temporary infrastructure will be progressively rehabilitated and restored.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1369.	MECP-SAR-009	The best management practices for the restoration of disturbed areas consistent with Boreal Caribou habitat will be incorporated in the detail design stage. Specifically, best management practices for mineral exploration and development activities and Woodland Caribou in Ontario will be used.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1370.	MECP-SAR-010	When developing the Traffic Management Plan, mitigation measures for species at risk will be considered to minimize potential impacts.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1371.	MECP-SAR-011 MECP-SAR-012	All necessary noise attenuation equipment will be assessed and incorporated in the detail design stage that would minimize emissions around equipment, where reasonable to minimize sensory disturbances to species at risk.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1372.	MECP-SAR-017	• Consideration of Sensitive Periods: Activities will respect Ontario's defined sensitive time periods for Caribou life stages (nursery areas, winter use areas, and travel corridors) to minimize sensory disturbance. • Compliance with Updated Legislation: Commitment to consider applicable legislation (amended ESA and new SCA) following EA completion to ensure compliance for project-related impacts to protected species and habitat.	• Detail design • Construction	EA/IA commitment (comment on Draft EAR/IS)
1373.	MECP-SAR-024	Additional information on Boreal Caribou (and Eastern Migratory Caribou) collected by the Northern Road Link and Marten Falls Community Access Road Projects, where available, will be considered in the detail design.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1374.	MECP-SAR-087	Should an authorization be required under the ESA or SCA, various authorization pathways (e.g., Section 17 permit under the ESA; registration under the SCA) may require actions to mitigate lasting impacts to impacted species at risk (e.g., actions to offset net effects). This may include offsite actions to create or enhance species at risk habitat within the LSA or RSA.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1375.	MECP-SAR-090	The detail design stage will address which specific construction activities will be avoided during SAR sensitive periods.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1376.	MECP-SAR-093	The proponent will consider the Best Management Practices for mineral exploration and development activities and Woodland Caribou in Ontario in the development of the proposed Vegetation and Invasive Species Management Plan, Wildlife Management Plan and Site Restoration and Monitoring Plan during the detail design stage of the Project; and engage MECP SARB on the Plan to ensure it is appropriate and sufficient for species at risk.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1377.	MECP-SAR-094	The detail design stage will clarify the field survey methods for identifying Caribou habitat.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1378.	MECP-SAR-096	• The best approach to restoration will be taken, including the application of all necessary silvicultural actions (e.g., soil decompaction, scarification, etc.) and either natural regeneration, seeding, or planting of tree seedlings, as appropriate.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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		• Site-specific restoration actions will be developed by a Qualified Professional (i.e., forester with input from a biologist with expertise in each species at risk) with consideration for ecosite characteristics (e.g., soil, moisture, nutrient, and vegetation conditions, etc.) and other relevant factors (e.g., available light, etc.) and outlined in the Site Restoration and Monitoring Plan.		
1379.	MECP-SAR-098	The proponent will develop and implement a comprehensive habitat restoration monitoring program for all areas in which restoration measures are undertaken as part of the Operation Environmental Management Plan and all relevant component management plans during the detail design stage of the Project.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1380.	MECP-SAR-101	The Operation Environmental Management Plan and all relevant component management plans will include mitigation measures during the design stage that will minimize sensory disturbances to Caribou during the nursery period (May 1 to sept. 15) and winter use period (Dec. 1 to Mar. 31) associated with aggregate operations.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1381.	MECP-SAR-103	The detail design stage will discuss the speed limits that will be reduced within a biologically relevant distance of Boreal Caribou habitat and other species at risk.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1382.	MECP-SAR-104	Pre-construction surveys will be undertaken within 4 km of construction activities to identify potential Wolverine dens and/or denning areas through the identification of tracks leading to/from areas of fallen trees, boulders, snow drifts, etc.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1383.	MECP-SAR-105	Clearly marking a vegetation protection zone (buffer or setback) between key ecological features for wolverine (e.g., confirmed and suspected wolverine den sites) and the Project Footprint. A minimum setback distance of 2 4 km or more from den sites will be implemented between January 15 to May 31 June 2 and January 31 of the calendar year, unless den use continues beyond this date, in which case these measures will continue to be implemented.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1384.	MECP-SAR-106	Biologically appropriate breaks for Wolverines in construction sites will be considered in the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1385.	MECP-SAR-107	The detail design stage will incorporate mitigation measures to minimize sensory disturbances to Wolverine during the denning period associated with aggregate operations.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1386.	MECP-SAR-108	If an active den is encountered, construction work will stop immediately, and the appropriate project personnel and regulatory agencies will be contacted. The den will be marked, and a 4 km buffer established. No work will take place within the buffer until clearance is issued by the MECP after the denning period. Where this is not possible, an authorization under the Endangered Species Act, 2007 or Species Conservation Act, 2025 will be required, as appropriate.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1387.	MECP-SAR-109	Additional details on proposed mitigation measures to address potential effects on bat maternity roosting habitat will be provided during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1388.	MECP-SAR-110	The active season for Little Brown Myotis and Northern Myotis will be noted as May 1 to August 31 and the active season for Hoary Bat, Silver-haired Bat, and Eastern Red Bat will be noted as April 15 to October 15.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1389.	MECP-SAR-111	An authorization under the ESA or SCA will be obtained prior to any blasting activity within 500 m of potential bat maternity roost habitat during the active period, if required.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1390.	MECP-SAR-112	Specific Best Management Practices to minimize soil compaction and retain permeability will be described.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1391.	MECP-SAR-113	Specific field survey methods for undertaking ground sweeps for critical habitats will be described.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1392.	MECP-SAR-114	Authorization under the ESA or SCA will be obtained prior to vegetation clearing during the nesting period for Lesser Yellowlegs and/or Short-eared Owl.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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1393.	MECP-SAR-115	If it is determined that blasting needs to be conducted within 500 m of potential Lesser Yellowlegs and/or Short-eared Owl habitat during the nesting period, qualified biologists will carry-out pre-blasting sweeps to assess habitat occupancy. If habitat is confirmed, a minimum 500 m setback from the habitat will be flagged and blasting in that area will only occur once federal or provincial authorizations have been obtained.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1394.	MECP-SAR-139	The proponent will consider and incorporate Hoary Bat, Eastern Red Bat, and Silver-haired Bat in the assessment of net effects during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1395.	MECP-SAR-156	If required, additional baseline monitoring will be conducted to update an assessment of adverse effects during the ESA authorization process.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1396.	MECP-SAR-157	Pre-construction monitoring for Caribou (Boreal population) will occur to identify areas being used by Caribou for the purposes of breeding and rearing or wintering.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1397.	MECP-SAR-158	The proponent will: • Consider MECP SARB Input in CEMP and OEMP: Ensure these plans reflect MECP SARB's feedback during development. • Consultation Commitment: Allocate sufficient time to consult relevant ministries (including MECP) and Indigenous communities/organizations on appropriate monitoring activities.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1398.	MECP-SAR-159	The details of the ground-based and/or aerial-based pre-clearing surveys will be described during the detailed design stage of the Project in the Wildlife Management and Monitoring Plan which will be prepared prior to the project authorization process so as to inform provincial and federal authorizations, as necessary.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

1399.	MECP-SAR-160	The proponent will consider the following in the development of the CEMP and OEMP:
		• Continue Caribou collaring to assess project effects and mitigation effectiveness.
		• Implement Wolverine run-pole station surveys to assess project effects and mitigation effectiveness.
		• Consult MECP SARB (in addition to ECCC) on the development of Short-eared Owl roadside surveys.
		• Consult MECP SARB (in addition to ECCC) on the development of Lesser Yellowlegs surveys.
		• Consider additional Operations Monitoring measures, including:
		  ▫ Remote camera monitoring of Wolverine dens/denning areas identified pre-construction to determine continued use during/after construction.
		  ▫ Acoustic bat surveys within the LSA.
		  ▫ Breeding bird point counts focused on suitable Lesser Yellowlegs and Short-eared Owl habitat.
		  ▫ ARU (autonomous recording unit) surveys focused on suitable Lesser Yellowlegs habitat.
		• Acknowledge that ESA/SCA authorizations, if required, may include proposed construction monitoring or mandate additional effects/effectiveness monitoring.
			• Detail design	EA/IA commitment (comment on Draft EAR/IS)

1400.	Ministry of Natural Resources (MNR) MNR-023	A permit will be acquired under the Aggregate Resources Act and the permit application will include additional technical studies and site plans to meet the requirements of the Act and the Aggregate Resources of Ontario Standards. The permit will use the 2023 reference of the Technical Reports and Information Standards.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1401.	MNR-025	When applying for the aggregate permit ARA-2, the road right-of-way will not be included in the proposed permit area.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1402.	MNR-026	Rehabilitation references in the EA will be reviewed to ensure they align with any proposed pit/quarry operations within the resource area.	• Detail design • Operations	EA/IA commitment (comment on Draft EAR/IS)
1403.	MNR-027	To align with the 'Aggregate Resources of Ontario Site Plan (2020) Standards', the Rehabilitation Plan will include the location, layout and type of vegetation that will be established on the site during progressive and final rehabilitation. The type of vegetation (e.g., trees, wetland plants, grass seed mixtures) established will depend on the circumstances of each site and will take into consideration surrounding land uses.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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1404.	MNR-028	Construction camp permitting for Camp 2-A will determine if the camp is considered a 'sensitive receptor' for the purposes of the Act and if so Camp 2-A may be moved outside of the sensitive noise receptor zone.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1405.	MNR-029	Permitted pits and quarries will be rehabilitated (progressive and final rehabilitation) and 'surrendered' in accordance with the Aggregate Resources Act.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1406.	MNR-031	In accordance with Ontario Regulation 244/97 (Section 0.13), rehabilitated pit slopes will be no steeper than 3:1, unless otherwise approved in the aggregate permit.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1407.	MNR-032	To meet Aggregate Resource Act requirements, Site Plans will include the locations of any required setbacks, including any mitigation measures identified in the Technical Reports and Information.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1408.	MNR-033	Aggregate extraction will avoid the habitat of endangered species and consultation with MECP will occur to determine potential adverse effects to endangered and threatened species if activities will be carried out within or near their habitat.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1409.	MNR-034	An aggregate permit will be obtained under the Aggregate Resources Act prior to extraction of aggregate resources.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1410.	MNR-035	Quarry development will be carried out in accordance with a permit (including the site plan) issued under the Aggregate Resources Act.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1411.	MNR-036	The contractor will provide notice to the MNR regarding the location of processing areas (e.g., crushing operations), the location of the initial extraction area, and other matters associated with the development of quarries in ARA-2. This information will be incorporated on the site plan submitted in support of a permit application. Additionally, the operation of the aggregate permit will comply with the conditions outlined in the approved permit and site plan. Operational details associated with the development of quarries in ARA-2 will be documented in the required permit applications submitted under the Aggregate Resources Act.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1412.	MNR-038	Construction will be delayed during heavy precipitation or runoff events.	• Construction	EA/IA commitment (comment on Draft EAR/IS)
1413.	MNR-039	Details regarding the proposed design of the ARA-4 access road will be provided for permitting.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1414.	MNR-041	Where additional water crossings are needed to support the project (and are not identified in the EA), an amendment to the EA will be required.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1415.	MNR-043	The Index Flood Method will be used for all streams and peak flow estimates will be validated using an independent method appropriate for watersheds near the Hudson Plains Ecosystem. The Rational method will only be applied to watersheds under 1 km^2. Time of concentration can be provided in the detailed design report.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1416.	MNR-044	The impact of the compression/consolidation of the peatlands on the continuous movement of groundwater under the roadway will be considered in the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1417.	MNR-045	The presence of beaver dams at waterbody crossings will be incorporated into the hydraulic design of the crossings.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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1418.	MNR-046	Hydrologic modeling will be used only for establishing the percent increase factor, and the hydrologic model flows for future conditions will not be used as the future design flows.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1419.	MNR-047	An anticipated timeframe for the peatland compression to be completed and how this is incorporated into the road construction schedule will be described in the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1420.	MNR-048	How channel and ladder fens were incorporated into the drainage design will be described in the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1421.	MNR-050	At the permitting stage, supporting hydraulic calculations will be provided for the high-water level calculations.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1422.	MNR-051	The relationships for the 100-year flood, 50-year flood, and 25-year flood will be provided in the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1423.	MNR-052	Three daily flow hydrographs that show the three drainage area sizes and display the general surface water flowing hydrology of the area will be provided in the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1424.	MNR-053	Focus water taking or discharge in medium and large drainage basins to reduce impacts on water levels. • Avoid 19 crossings in small basins (< 50.3 km²) due to higher vulnerability. • Use 11 crossings in larger basins (> 349.4 km²) as they are more suitable for water taking or discharge. • Minimize potential impacts and effects by following this basin-based approach.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1425.	MNR-055	Potential Delegation of Crown's Duty to Consult: The Ministry of Natural Resources (MNR) may propose delegating procedural aspects of the Crown's duty to consult to the proponent before issuing MNR permits required for project implementation.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1426.	MNR-074	Prior to permitting detailed mapping, details on end-use timber, renewal plans, and areas proposed for harvest will be provided to MNR.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1427.	MNR-076	All supporting documentation regarding culvert sizing will be submitted prior to permitting.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1428.	MNR-077	A reference to proper installation techniques and provincial standards will be provided in the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1429.	MNR-079	Right-of-way safety management: Include maintenance and management considerations for the road ROW to address safety hazards (e.g., trees near the road).	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1430.	MNR-080	Prior to permitting, documentation on watershed calculations and culvert sizing will be provided.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1431.	MNR-081	Erosion control mitigation measures will only use clean non-erodible materials below the high-water mark and revegetation will only be used above the high-water mark. If applicable, the inspection schedule outlined in the Crown Land Bridge Management Guidelines will be adhered to.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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1432.	MNR-083	Prior to permitting, a detailed restoration plan will be submitted for review.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1433.	MNR-084	A Vegetation Management and Invasive Species Plan will be submitted with sufficient review time prior to permitting.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1434.	MNR-085	Where a permit is required to harvest merchantable timber according to the CFSA will apply and be paid by the permit holder. Prior to permitting, the end-use/disposal of merchantable timber will be described and submitted for review.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1435.	MNR-086	Details on the disposal of cleared trees and brush will be done in accordance with contract specifications and may involve burning, compacting, piling, burying, windrowing and compacting, and chipping. These details will be submitted for review prior to permitting.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1436.	MNR-087	Details for proposed windrowing (e.g., size, length) and any proposed mitigation (e.g., leaving gaps for wildlife at certain intervals) and their potential impacts will be provided during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1437.	MNR-090	Final design drawings and calculations for waterbody crossings will be submitted for review and comment prior to permitting.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1438.	MNR-093	Prior to project implementation, a fire prevention preparedness plan will be developed, Ontario Regulation 207/96 and Forest Fire Prevention guidelines will be followed during construction and maintenance, and a fire mitigation program will be developed.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1439.	MNR-094	Road ownership and operations will be determined prior to the issuance of MNR permits to construction of the Project	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1440.	MNR-095	A Permit to Remove, all applicable Work Permits, Public Lands Act – Occupational authorizations, and authorizations under the Lakes and Rivers Act will be obtained.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1441.	MNR-097	Reassess access control for maintenance turnaround areas: Review the gating-and-lock approach due to potential plowing/sanding and operational challenges. • Consider signage instead of gates: Commit to evaluating and, where appropriate, use signage in lieu of gates to allow easier winter maintenance and emergency use by the public. • Maintain emergency accessibility: Ensure turnaround areas remain available for emergency situations while balancing operational needs and safety.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1442.	MNR-098	The restoration/rehabilitation of construction camps will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1443.	MNR-099	PLA and LRIA authorizations will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1444.	MNR-100	Site specific landfill information such as location and management will be provided during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1445.	MNR-108	When a disposition of Crown resources is needed to implement the Project, the Project team will provide MNR with a letter confirming that they have met their EA Act obligations as part of the Comprehensive EA process.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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1446.	MNR-112	A Construction Environmental Management Plan and an Operations Environmental Management Plan will be developed and finalized prior to receiving MNR permits related to the Project components.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1447.	MNR-118	Construction camps that are converted into housing will obtain necessary permits.	• Detail design • Operations	EA/IA commitment (comment on Draft EAR/IS)
1448.	MNR-119	All temporary access roads and detours will be considered and described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1449.	MNR-120	Additional studies, engagement/consultation, protocols/schedules, etc. regarding cultural heritage resources will be completed and incorporated into the proposed mitigation measures where feasible/possible, during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1450.	MNR-121	Archaeological Assessments will be conducted and any requirements and recommendations within the assessments will be completed prior to the issuance of MNR permits.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1451.	MNR-124	Camp 4B is located on an existing mining lease under the Mining Act and will need consent/agreement with the leaseholder to build the camp. Tree clearing to support camp 4B construction will require authorization by MNR under the Crown Forest Sustainability Act.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1452.	MNR-127	Refinement of access roads will be considered during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1453.	MNR-128	The exact water crossings where the proposed potential storage/laydown areas may be required, including details such as potential size and location will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1454.	MNR-132	Mitigation measures and permit conditions will be built into contractor conditions.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1455.	MNR-143	How peatland will be removed and the type of monitoring program for vegetation restoration will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1456.	MNR-144	Details regarding who will be responsible for the road patrols and inspections, as well as the intended duration of these activities will be provided during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1457.	MNR-150	The classification of a watercourse for the purposes of applying a riparian buffer will be defined and a description of how riparian buffers will be demarked/identified on the ground for watercourses and waterbodies will be provided. “All natural vegetated ecosites” will also be defined during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1458.	MNR-182	Site preparation on rock barrens and the effects of Project activities on vegetation communities in rock barrens will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1459.	MNR-185	Additional details on mitigation measures for construction and operation activities associated with aggregate sites, camps, and laydown areas, how the effectiveness of mitigation measures will be monitored, and an outline of how construction and operation response plans will be implemented if unexpected adverse effects are observed will be described during the detail design stage.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1460.	MNR-187	Details on the disposal plan for roadkill and how these incidents will be reported will be provided during the detail design stage.	• Detail design	EA/IA commitment

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		A reclamation plan for review and consideration that details the proposed measures and design, including details such as tree stocking rates (stems/ha), species, clear definitions on “critical habitat” that will be avoided (as mitigation), and any effectiveness monitoring will be provided during the detail design stage.		(comment on Draft EAR/IS)
1461.	MNR-188	A timeframe for reclamation activities in the proposed mitigation measures during construction and operations will be defined and specific mitigation measures will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1462.	MNR-191	Critical bird habitats, criteria for defining these areas, and surveys to be conducted by qualified personnel prior to construction and permit issuance (including details on qualifications and survey timing) will be described during the detail design stage. Sensitive timing windows for species to prevent disturbance during blasting and vegetation removal, mitigation measures such as buffers and nest protection, legislative requirements for nest/egg removal, and methods for identifying bird movement corridors will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1463.	MNR-195	Invasive aquatic species monitoring and information on what methodologies will be used with regards to bat and amphibian surveys will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1464.	MNR-196	Details of management plans and sensitive timing windows for species will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1465.	MNR-201	How impacts to birds not protected by the Migratory Birds Convention Act, 1994 and bats will be mitigated if vegetation clearing occurs during sensitive timing windows and authorizations that may need to be requested to conduct work within this period will be discussed and described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1466.	MNR-204	Information on feedback on how wildlife habitat opportunities through the decommissioning of ancillary infrastructure may or may not have been considered, and what the feasibility and/or efficacy may be with respect to the Project will be provided during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1467.	MNR-209	Proposed mitigation measures will be described in detail during the detail design stage so that their effectiveness can be evaluated and incorporated into the assessment of impacts.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1468.	MNR-213	Details on how invasive species are discovered or introduced through the Project will be described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1469.	MNR-214	Policies restricting hunting, fishing, or harvesting wildlife and how this may impact traditional rights for Indigenous Peoples will be clarified during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1470.	MNR-253	How road construction may alter surface and groundwater in peatland areas and the potential effects as well as mitigation measures will be considered and described during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1471.	MNR-254	The discrepancy of thermal regime classifications will be explained and justified during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1472.	MNR-255/256/257	A precautionary approach to Restricted Activity Timing Windows (RATWs) will be used, with the most restrictive RATW applied to all watercourse crossings in the Project area. Further confirmation with MNR and future discussion on RATWs is required.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1473.	MNR-258	A comprehensive, detailed list of specific sources used to identify fish species presence within watercourses in the Local and Regional Study Areas of the Project will be provided during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1474.	MNR-260	The Project Team will collaborate closely with MNR to review and approve the detailed culvert design and operational plans for each crossing, ensuring proposed mitigation measures effectively maintain natural stream conditions before authorization is granted.	• Detail design	EA/IA commitment

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				(comment on Draft EAR/IS)
1475.	MNR-261	Draft versions of the Construction and Operation Environmental Management Plans will be submitted for review during the detail design stage. These plans will be reviewed and endorsed by MNR prior to approval and implementation to ensure compliance with regulatory requirements and effective mitigation throughout the project lifecycle.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1476.	MNR-262	MNR review and permitting will be obtained for all temporary watercourse crossings and all relevant MNR and DFO standards, guidelines, and legislative requirements will be followed. All applicable MNR and DFO standards, guidelines, best management practices, codes of practice, and legislative requirements for permanent crossings will apply to temporary ones as well.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1477.	MNR-263	Culverts will be embedded by a minimum of 10%, with additional embedment determined based on local streambed conditions to align with the MNR/DFO Joint Protocol and common forestry practices in Ontario. DFO authorization as well as PLA and/or LRIA authorization will be obtained for infilling watercourses below the high-water mark. Qualifications, specific roles, and responsibilities of Environmental and Indigenous Monitors will be described to demonstrate the effectiveness of monitoring.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1478.	MNR-265	The Erosion and Sediment Control Plan, including site-specific drawings and specifications, will be developed and submitted to MNR for review and endorsement during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1479.	MNR-266	Additional details on mitigation measures regarding how flow and migratory fish passage will be maintained at all crossings, including design considerations, construction practices, and reference to applicable guidelines will be provided during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1480.	MNR-268	Site-specific mitigation measures will be developed when required by MNR as conditions of approval for work permits related to water crossing construction.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1481.	MNR-269	Natural waterflow and fish passage will not be blocked or impeded upstream or downstream of crossings except for very short, temporary disruptions strictly limited to construction or removal activities. All culverts installed for temporary winter watercourse crossings will include removal mechanisms to ensure timely extraction before the spring thaw.	• Construction	EA/IA commitment (comment on Draft EAR/IS)
1482.	MNR-270	Details will be provided to MNR about the fish spawning site along the access road to the ARA-4 aggregate site, including the fish species present, location, and timing of spawning activities.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1483.	MNR-271	A Fish and Fish Management Plan will be developed for construction and another plan will be developed to outline alternative measures to monitor and mitigate potential impacts throughout operations.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1484.	MNR-272	Both federal and provincial permitting requirements will be equally reflected in mitigation language to reinforce compliance obligations. In addition to adhering to DFO authorization conditions, all conditions and requirements associated with MNR-issued authorizations, permits, and approvals will be followed.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1485.	MNR-273	A comprehensive, site-specific mitigation plan for each water crossing location, detailing measures to minimize impacts on fish habitat and populations will be provided during the detail design stage.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1486.	Aroland First Nation (ARFN) ARFN-7	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), the proponent will seek to obtain a permit under the Indian Act, Section 58 (4)(b), where applicable, to remove aggregate from ARA-4 on Webequie First Nation Reserve lands and it will be limited to 75 - year life span. Where an extension beyond this duration is needed approvals will be obtained.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1487.	ARFN-8	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), the amount of waste to be generated will be further examined in the future detail design stage of the Project. Based on the waste management options described in Section 4 and elsewhere in the EAR/IS it is assumed that a new waste disposal/landfill facility will not be required. Should this assumption prove incorrect, the proponent will follow the EA amendment procedure process for managing design changes as outlined in Section 27 that may be included in conditions of the EA Notice of Approval, if received.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

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1488.	ARFN-9	Where medium or long-term deactivation of the WSR is identified in the future, the proponent will prepare a Road Decommissioning and Monitoring Plan, including opportunities for First Nations to review the draft plan and provide their feedback.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1489.	ARFN-10	Excess organics generated during construction in the form of brush or trees will be burned, chipped for use in restoration and reclamation of disturbed areas or offered to community members of Webequie First Nation for their use. In the peatlands, peat material will not be removed; surface organics will be reapplied within the row to support revegetation. The proponent commits to develop a Surface Water and Storm Water Management and Monitoring Plan and Erosion and Sediment Control Plan during detail design as part of a Construction Environmental Management Plan (CEMP)	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1490.	ARFN-12	The proponent is committed to making their best efforts in the construction planning and execution to use stationary and mobile equipment with EPA Tier 4 emission standards.	• Detail design • Construction	EA/IA commitment (comment on Draft EAR/IS)
1491.	ARFN-16	Once the proponent for the future development stages has been identified it is anticipated that First Nations who have expressed an interest in the WSR will be updated on the next steps, if the EA/IA is approved.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1492.	ARFN-20	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), the proponent will meet with Aroland First Nation to discuss further coordination of ongoing planning processes related to the all-season road projects and the Ring of Fire mineral development area, including identifying effects, mitigation and enhancement measures and monitoring.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1493.	ARFN-24	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), monitoring programs developed for the Project will fall within the LSA and RSA for Species of Risk. Mitigation measures will include the development and implementation of restoration plans in cooperation with Indigenous communities and groups, Local Rights Holders, and other stakeholders, to the extent practicable.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1494.	ARFN-26	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), the proponent is committed to ongoing dialogue with Aroland First Nation to determine how additional representatives from the RSA can be included in the Community Readiness Working Group.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1495.	ARFN-33	A Cultural Heritage Resources Management Plan will be developed to guide contractors in the event that a previously unidentified heritage or archaeological resources are suspected or encountered unexpectedly during construction.	• Detail design • Construction	EA/IA commitment (comment on Draft EAR/IS)
1496.	ARFN-34, ARFN-46	Assess cumulative effects on Indigenous Peoples and the exercise of Aboriginal and Treaty rights and interests (ATRI) from the perspective of the First Nation as receptor/VC based on their traditional territories mapping.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1497.	ARFN-48	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), the proponent is committed to work with MFFN, AFN, and other impacted and interested First Nations to establish a Technical Working Group, or sub-group as part of a Joint Roads Governance Board to address ongoing issues that arise from transportation changes and to oversee transportation mitigation activities, which could include addressing road access restrictions and governance.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1498.	Attawapiskat First Nation (AFFN) ATFN-3	Assess cumulative effects on Indigenous Peoples and the exercise of Aboriginal and Treaty rights and interests (ATRI).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1499.	Constance Lake First Nation (CLFN) CLFN-1	Monitoring details are expected to be identified and developed as part of the future permitting and detail design stage of the Project where applicable approvals are required.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1500.	CLFN-6	Monitoring efforts will be based on confirming the validity of those designs. Monitoring details are expected to be identified and developed as part of the future permitting and detail design stage of the Project where applicable approvals are required.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1501.	CLFN-7, CFLN-17	Define the extent of road surface treatment.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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1502.	CLFN-7	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), road safety protocols will be evaluated during the detail design period. Signage and roadside safety measures will also be evaluated during detail design in accordance with regulatory requirements.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1503.	CLFN-8	Assessment and ultimate confirmation of structure types at water crossings will be further examined in the detail design and permitting phase of the Project, incorporating assessment of sensitive fish habitat.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1504.	CLFN-9	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), detailed monitoring plans for post-construction will be included in the Operations Environmental Management Plan.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1505.	CLFN-14	Success criteria for wetland and/or riparian environments will be developed independently as part of the CEMP and OEMP in the future development phases of the Project.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1506.	CLFN-15	Wildlife-specific measures will be included in the Noise and Light Management Plans	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1507.	CLFN-16	Proactive measures will form part of the Invasive Species Management Plan (e.g., measures to control the introduction of invasive species or noxious plants).	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1508.	CLFN-19	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), the proponent commits to develop and implement monitoring programs including monitoring changes in patterns of behavior among game animals and growth patterns of traditional plants as a result of the WSR.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1509.	CLFN-20	Regular inspections of the road and rest areas will occur during construction and throughout operations.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1510.	CLFN-25	The future proponent will engage First Nations to receive feedback on implementation and oversight of access control measures and monitoring/enforcement where applicable.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1511.	CLFN-26	Contingency protocols and/or reporting to regulatory authorities and notification to impacted First Nations if a Bald Eagle nest is disturbed or destroyed will be addressed in the Construction Environmental Management Plan (Wildlife Management and Monitoring Plan).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1512.	CLFN-30	The proposed Ecological Restoration Plan will be developed in consultation with Indigenous communities and will include plans for construction oversight and effectiveness monitoring	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1513.	CLFN-32	The CLFN proposed soil sampling program will be considered by the ultimate owner/operator in future development stages of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1514.	CLFN-33	The proponent will consider additional surface water quality sampling at high priority and select water crossing locations to capture seasonal variability and visit the locations that have not been visited yet, prior to construction.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1515.	CLFN-37	The ultimate owner/operator will consider and evaluate the need for sediment sampling at water crossings and potentially downstream of the project area.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1516.	CLFN-38	The ultimate owner/operator will consider and evaluate if predictive water quality model with 20 to 50 year forecasts is required or beneficial to assess during detail design phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

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1517.	CLFN-39	The ultimate owner/operator will consider and evaluate the need for or additional water quality sampling prior to construction and need for continuous monitoring afterwards.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1518.	CLFN-39	The ultimate owner/operator will consider if a Mann-Kendall analysis or other analysis will be performed on the baseline data results, including whether additional data collection is necessary.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1519.	CLFN-41	The ultimate owner/operator will this consider the need for enhanced modelling to support the detail design and permitting for the Project where data is available, particularly at water crossings, peatland areas and aggregate sites.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1520.	CLFN-43	More groundwater data may be collected during the detail design phase of the Project by the ultimate owner/operator to provide more information on seasonal variations over a longer period of time.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1521.	CLFN-45	The ultimate owner/operator will be conducting further hydrology/hydrogeology analysis to support aggregate permit applications and a monitoring program will be developed and implemented to assess changes to groundwater levels and flow. The monitoring program will span pre-, during and post-construction periods (e.g., three years after construction is complete).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1522.	CLFN-48	Further detailed mapping and numerical groundwater modelling will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1523.	CLFN-49	Further slope stability numerical modelling will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1524.	CLFN-49	The need for geotechnical hazard maps to identify failure-prone zones will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1525.	CLFN-49	Contingency measures related to potential slope stability issues will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1526.	CLFN-50	Further geochemical sampling will be undertaken by the ultimate owner/operator during the detail design and permitting phase for the Project, and prior to construction.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1527.	CLFN-50	Further kinetic test will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1528.	CLFN-50	Further additional work into ARD/ML management will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1529.	CLFN-51	The use of erosion prediction models will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1530.	CLFN-51	Site specific erosion control plans will be developed by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1531.	CLFN-52	Further assessment of permafrost conditions, as part of the geotechnical program, will be undertaken by the ultimate owner/operator during the detail design and permitting phase for the Project	• Detail design / post EA/IA	EA/IA commitment

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1532.	CLFN-54	Further assessment of the floating road design and any alternative design refinements will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1533.	CLFN-54	Further assessment construction execution strategy will be developed by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1534.	CLFN-58	Further development of road governance structure and access controls will be considered by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1535.	CLFN-63	Further notification, management and/or monitoring procedures for air quality exceedances will be described in Construction Environmental Management Plan to be developed by the ultimate owner/operator during the detail design and permitting phase for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1536.	CLFN-64	Outside of the EAR/IS review process (i.e., taken on by the ultimate owner/operator), the development and the need for a monitoring program to address air quality regulatory requirements will be considered by the ultimate owner/operator during the detail design and permitting phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1537.	CLFN-66	The proponent commits to conducting a noise and vibration monitoring program at aggregate extraction and blasting sites.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1538.	CLFN-66	A Complaints Protocol will be developed by the proponent for use during construction and operations of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1539.	CLFN-67	Development/implementation of a Vegetation and Invasive Species Management Plan	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1540.	CLFN-69	Recommendation to involve First Nations in climate monitoring, management, and adaptation processes will be considered by the ultimate owner/operator in future development stages of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1541.	CLFN-69	Monitoring efforts, where applicable, will be based on confirming the validity of those designs (for water crossing performance criteria) and will be examined by the future ultimate owner/operator of the Project	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1542.	Fort Albany First Nation (FAFN) FAFN-001, FAFN-002, FAFN-009	The proponent is committed to ongoing dialogue with Fort Albany First Nation to consider their input in the development of future governance and decision-making frameworks.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1543.	FAFN-004	The Project is committed to following the principles outlined in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the United Nations Declaration Act (UNDA).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1544.	FAFN-007	An evaluation of cumulative effects will be undertaken once the severity of potential adverse effects on Indigenous Peoples and rights has been fully characterized.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1545.	FAFN-011	The proponent is committed to working collaboratively with First Nations in the future development phases of the Project.	• Detail design / post EA/IA	EA/IA commitment

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1546.	Kashechewan First Nation (KFN) KFN-1	• Integration of KFN Report: Information and concerns from the Kashechewan First Nation Existing Conditions Report have been incorporated into the Final EAR/IS across multiple sections (Surface Water, Groundwater, Atmospheric Environment, Fish and Fish Habitat, Vegetation and Wetlands, Wildlife, Species at Risk, Social and Economic Environment, Non-Traditional Land Use, Aboriginal and Treaty Rights, Cultural Heritage Resources). • Ongoing Engagement: The Project Team commits to inviting community members to participate in developing and implementing monitoring programs to assess mitigation effectiveness and potential environmental effects. **Regular Communication: The proponent is committed to maintaining regular contact with Indigenous communities to keep them informed.**	• Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)
1547.	KFN-2	Monitoring and sampling programs are proposed during the construction and post construction periods of the Project to evaluate surface water and groundwater quality. Post-construction monitoring will continue for the appropriate duration as stipulated in approvals for the Project. Annual follow-up monitoring and compliance reporting is also proposed to provide Indigenous communities and groups, the public, government agencies, and stakeholders with information as the Project progresses. The proponent will also ensure reporting and communication activities are conducted in accordance with requirements in the approvals under the Ontario Environmental Assessment Act and Canada Impact Assessment, if granted, including all other applicable permits, authorizations and/or approvals for the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1548.	Mushkegowuk Council (MC) MC-6	The western section of the road will be surface treated and if additional measures are required, those will be implemented once the road is operational. The eastern section, which is mainly constructed on peatlands, will be gravel surfaced until active settlement has ceased at which point it will be surface treated as well. The roadway will be maintained to Ministry of Transportation standards during its operations by the ultimate owner/operator.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1549.	MC-7	The interval and size of cross-culverts will be determined during the detail design phase of the Project by the ultimate owner/operator and will be based on the detailed analysis of groundwater flow and surface water flow in areas along the road.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1550.	MC-11	Security fencing and lighting at construction camps will be determined by the ultimate owner/operator during the construction phase and will adhere to the mitigation measures to minimize impacts to wildlife. Its anticipated there will be minimum and limited night time construction activity.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1551.	MC-11	The proponent will adhere to the restricted activity periods to minimize impacts to wildlife and fish. Where this is not possible or feasible, the proponent will seek advice from regulatory agencies and obtain approvals/permits, where applicable.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1552.	MC-11	The final vertical clearance at bridges will be determined at the detail design stage of the Project and currently the design has considered and accommodated for wildlife movement.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1553.	MC-12	Further details on location of designated culverts for wildlife passage and signage to minimize potential injury/death to wildlife from collisions with vehicles will be determined in the detail design phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1554.	MC-15	Pets will not be permitted in construction camps. Details on eco-passages will be considered in the future detail design and permitting phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1555.	MC-16	Annual eDNA will undertake and would identify non-native/invasive aquatic species if present.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1556.	MC-19	Native species are proposed for vegetation restoration of disturbed areas and may involve the use of groundcover mixes, tree and shrub seeding mixes, and/or natural regeneration. The proponent will adhere to Ministry of Transportation operation and maintenance standards developed for provincial highway facilities.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1557.	MC-20	Construction activities are intended to be conducted during daylight hours, but in some cases the proponent's contractor may need to conduct nighttime work and where applicable will implement mitigation measures to minimize impacts to wildlife, including species at risk.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

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1558.	MC-21	Details on further GPS collaring of caribou, as part of the monitoring program to assess changes in their movement during construction phase and post-construction (operation phase) will be determined during the future permitting phase the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1559.	MC-23	The future owner/operator will have progressive policy and/or employment targets to maximize project benefit to Indigenous community members and businesses.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1560.	MC-26	The Construction Waste Management Plan will be developed in the future detail design and permitting phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1561.	MC-30	A Cultural Heritage Resources Management Plan will be developed to guide contractors in the event that a previously unidentified heritage or archaeological resources are suspected or encountered unexpectedly during construction.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1562.	MC-37, MC-39	All waste will be collected, stored, transported and disposed of in a safe, environmentally responsible manner that complies with federal and provincial legislation.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1563.	MC-66, MC-69	Designated wildlife crossings and/or warning signage will be further examined by the ultimate owner/operator during the detail design and permitting phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1564.	MC-67	It's expected that vehicles at construction camps will be stored in a secured facility.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1565.	MC-68	The ultimate disposal measures for managing wildlife carcasses will be documented in the Construction Environmental Management Plan and Operation Environmental Management Plan.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1566.	MC-76	A phone application for bird identification will be considered by the ultimate owner/operator where future monitoring of birds is proposed prior to construction, during construction or post-construction.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1567.	Marten Falls First Nation (MFFN) MFFN-21, MFFN-23, MFFN-25, MFFN-101	The proponent will discuss the inclusion of MFFN members as monitors on the sections of the road that are within MFFN traditional territory and in the development of the CEMP.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1568.	MFFN-22	The proponent will consider representatives from Marten Falls First Nation for inclusion in the Environmental Committee.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1569.	Nibinamik First Nation (NIFN) NIFN-3	The proponent will provide a response to Nibinamik's request to be involved in drafting, reviewing, and codeveloping all mitigation and monitoring plans for both construction and operations, with adequate capacity funding to support participation.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1570.	NIFN-10	Methyl mercury and mercury sampling will be considered in future surface water monitoring and sampling events to be undertaken by the ultimate owner/operator.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1571.	NIFN-13	Beaver dam removal is a construction and operational issue for management that will be further described in the Construction Environmental Management Plan (CEMP) and in the Operational Environmental Management Plan (OEMP).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

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1572.	NIFN-14, NIFN-15	The floating road design has been completed to a preliminary design engineering level and will be further developed during the detail design phase for the Project to ensure that groundwater flow and displacement is taken into account. Monitoring is also proposed to be undertaken pre and post construction to address settling and lateral displacement of the road in the peatlands. If during detail design, locations are identified where additional measures are required to provide additional support to the road, they will be implemented.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1573.	NIFN-16	Qualified environmental and engineering professionals will be involved in the design of equalization culverts.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1574.	NIFN-18	The proponent will specify the design flood that will be used for culvert design and for scour analysis.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1575.	NIFN-19	The proponent will define the surface water monitoring program.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1576.	NIFN-20	The proponent will define the stormwater maintenance and monitoring program	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1577.	NIFN-21	Soil decompaction and other restoration techniques available to restore hydrology and hydrogeology of wetlands will be documented in the CEMP and its subcomponent plans (e.g., Soil Management Plan, Site Restoration and Monitoring Plan).	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1578.	NIFN-22	The OEMP will address the potential effects of winter maintenance.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1579.	NIFN-26	Further details on erosion and sediment control (ESC) measures and monitoring will be detailed in the CEMP and its subcomponent (Erosion and Sediment Control Plan), developed in the detail deign drawings for the Project and in site-specific ESC plans that are anticipated to be required to secure permits/approvals.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1580.	NIFN-27	Climate considerations are incorporated into the flow computations and current preliminary engineering design that supports the EA/IA and will be further developed in the future detail design phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1581.	NIFN-28	Consideration will be made for using geoliners to reduce the effects of road overtopping and erosion due to flooding.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1582.	NIFN-29	Further hydrology/hydraulic analysis of water crossings will be undertaken by the ultimate owner/operator during the future detail design and permitting phase for the Project and can be shared with Nibinamik First Nation.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1583.	NIFN-31	Additional geophysical surveys are proposed for the Project, and the field work is in the planning phase. Once the field work is completed and the results become available, updated groundwater elevations will be used for detail design. The resolution or accuracy of the groundwater elevations will be documented by the ultimate owner/operator.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1584.	NIFN-32	Further targeted or designated spring groundwater studies, field investigations, and/or consultation on this aspect will be considered by the ultimate owner/operator during the future detail design phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1585.	NIFN-33	Upon completion of the groundwater field work programs, further analysis will be undertaken to confirm predictions in the EAR/IS on the effects of the Project on peatlands/wetlands, including follow-up monitoring and contingency plans proposed. It is expected that these analyses will be completed during the future detail design phase by the ultimate owner/operator of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

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1586.	NIFN-34	The design of the equalization culverts will be further examined by a team of structural engineers, hydrologists/hydraulic engineers, geotechnical engineers and hydrogeologists. The effects of these culverts will be analyzed using modelling methods combined with groundwater and surface water interactions, embankment loading, and peat settlement. The follow-up monitoring of water levels on both sides of the road will also be used as part of the monitoring plan to be further developed during the detail design phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1587.	NIFN-35	Further water balance analysis will be completed using more advanced modelling methods, e.g., numerical modelling at a watershed level, with additional data collected during the detail design phase.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1588.	NIFN-36	A more detailed and comprehensive monitoring program will be developed during the detail design phase, where more analysis will be conducted. The results of these analyses will be used or referenced to further refine the monitoring programs.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1589.	NIFN-39	A Waste Management Plan for the operations phase will be prepared by the ultimate owner/operator and presented as a subcomponent plan of the OEMP, when detail design drawings of the MSF and other facilities are available.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1590.	NIFN-40	More detailed and comprehensive groundwater and surface water quality monitoring plans are proposed to be developed during the detail design phase. Treatment and disposal of wastewater including process water (in any) will be detailed in the waste disposal measures.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1591.	NIFN-42	Temporary or permanent infrastructure locations will be refined in the detail design phase of the Project will, where practicable, be located away from peatlands or wetlands to avoid and/or minimize the disturbance and restoration of the peatlands.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1592.	NIFN-43, NIFN-167	The potential impacts of construction and operation of aggregate pits will be further examined in the detail design phase to support the permit application under Aggregate Resources Act, including hydrogeological study report(s). Reclamation and monitoring plans will also be developed during the permit application process and will become part of the permit terms and conditions to be observed and implemented during construction and operations of the aggregate pits/quarries.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1593.	NIFN-45	The dewatering assessment including groundwater drawdown, ZOI and dewatering volume will be further refined in the detail design phase of the Project. At that time, additional data will be available including geophysical surveys, geotechnical and hydrogeological investigations and detail design drawings for aggregate pits, structures, construction camps and other temporary and permanent facilities. With supplemental data and information, the dewatering assessment will be further refined to provide estimates/results and used to secure applicable permits.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1594.	NIFN-50	The ultimate owner will consider road applications with a longer-term effectiveness than water to improve the performance of mitigations for dust and particulate matter.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1595.	NIFN-52	The net effects assessment will consider the timing of effects as this is an important criterion for traditional land use and understanding noise impacts	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1596.	NIFN-54	Noise mitigation measures will be further evaluated during detail design phase for the Project and will be documented in Construction Environmental Management Plan. Trees will be considered in NSAs where appropriate.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1597.	NIFN-56	The proponent is committed to develop and implement an Energy Management Plan that will includes guidance to reduce operational GHG emissions.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1598.	NIFN-59	The ultimate owner will address the inclusion of First Nations communities in the development of the plans and receipt of monitoring reporting.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1599.	NIFN-62	The appropriate mitigation measures for impacts on fish and fish habitat will be addressed in the detail design phase of the Project and documented in the CEMP and OEMP.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

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1600.	NIFN-63	The addition of further representative sampling sites on small watercourses where riparian vegetation will be disturbed will be considered in the future detail design phase of the Project by the ultimate owner operator.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1601.	NIFN-64	Additional fish and fish habitat sampling will be considered during the detail design phase, but extrapolation is possible in many cases for fish species likely present in waterbodies.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1602.	NIFN-65, NIFN-66, NIFN-68, NIFN-69	Additional sampling, as required, will be considered during the detail design phase of the Project on a crossing-specific basis and where applicable to meet expected permitting requirements.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1603.	NIFN-74	Members of the Environmental Committee will be selected by the ultimate owner/operator in future development stages of the Project and the request for Nibinamik to be member of the committee will be considered.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1604.	NIFN-75	Any need for channel realignment/infilling will be assessed during the detail design phase on a crossing-specific basis. Concerns can be addressed at this time.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1605.	NIFN-76	Where temporary crossings require provincial or federal permits/authorizations, it is our understanding First Nations will be afforded the opportunity to provide feedback in accordance with Crown's duty to consult.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1606.	NIFN-77	It envisioned at this time that the ultimate owner operator will have Indigenous Monitors as part of their construction team.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1607.	NIFN-78	Further development and details of site revegetation and measures to control the introduction of invasive plant species will be addressed in the detail design phase and included in the CEMP and OEMP.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1608.	NIFN-79	Further monitoring measures will be considered in the context of applicable permits and authorizations for the Project. Surface water quality monitoring will be further detailed in the CEMP and OEMP by the ultimate owner/operator.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1609.	NIFN-80, NIFN-81	Impacts to fish/fish habitat documented in the EAR/IS are to be confirmed by the ultimate owner operator during the future detail design and permitting phase of the Project, and on a water crossing-specific basis.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1610.	NIFN-84, NIFN-89	The full aquatic invasive management plan will be included in the CEMP to be developed and implemented by the ultimate owner/operator for the Project	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1611.	NIFN-86	The request for Nibinamik to participate in future monitoring programs will be considered by the ultimate owner/operator.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1612.	NIFN-87	Where SAR fish can be potentially captured, a SARA permit is required. The SARA permit will provide conditions that are considered necessary for protecting the species, minimizing the impact of the authorized activity on the species and / or providing for its recovery. Further assessment of impacts will be examined during the detail design phase, and if Lake Sturgeon is considered present at other crossings, this item will be addressed by the ultimate owner/operator on a crossing-specific basis, including assessing permitting requirements.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1613.	NIFN-88	There is a need to monitor and enforce the mitigation and monitoring measure aimed at minimizing harvest to fish species utilized by Indigenous communities.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1614.	NIFN-94	The ultimate owner will identify how further mitigation measures are enacted if unacceptable effects are observed during monitoring activities.	• Detail design / post EA/IA	EA/IA commitment

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1615.	NIFN-95	Appropriate monitoring measures for fish and fish habitat will be documented in the CEMP and OEMP, as necessary.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1616.	NIFN-96	Additional spawning sampling, where required, will be considered during the detail design phase of the Project on a crossing-specific basis and to meet requirements for such studies to secure applicable permits/approvals.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1617.	NIFN-97	Additional eDNA sampling, where required, will occur during the detail design phase of the Project on a crossing-specific basis.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1618.	NIFN-98	SARA permits are anticipated to be required for Lake Sturgeon in Muketei River, Winisk Lake, and the Winiskisis Channel crossing sites. In the detail design phase, if Lake Sturgeon is considered present at other crossings, then this will be addressed as required on a crossing-specific basis.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1619.	NIFN-99	Further assessment of impacts will be examined during the detail design phase, and if Lake Sturgeon is considered present at other crossings, this item will be addressed by the ultimate owner/operator on a crossing-specific basis, including assessing permitting requirements.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1620.	NIFN-100	The ultimate owner/operator will likely provide opportunities for interested First Nations to provide feedback on the developed of the CEMP and OEMP for implementation.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1621.	NIFN-101	Details on contingency mitigation will be considered in the CEMP and OWMP by the ultimate owner operator of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1622.	NIFN-102	The restricted activity periods to protect fish and fish habitat during spawning, rearing and migration will be revaluated with consideration of Nibinamik's comment and in consultation with the Ministry of Natural Resources and Fisheries and Oceans Canada (DFO) during the future detail design and permitting phase of the Project and on water crossing specific basis.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1623.	NIFN-103	The avoidance of fords as a temporary crossing method will be considered by the ultimate owner/operator during the future detail design and permitting phase of the Project and on water crossing specific basis.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1624.	NIFN-104, NIFN-105, NIFN-106, NIFN-107	Details on monitoring temporary watercourse crossings will be included in the CEMP.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1625.	NIFN-108	Thermal regimes may be reevaluated during the detail design and permitting phase in consultation with MNR by the ultimate owner/operator.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1626.	NIFN-111	Follow-up monitoring programs for wetland functions would be site-specific.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1627.	NIFN-115	Follow-up and compliance monitoring programs, including a Vegetation and Invasive Species Management Plan, and a long-term restoration and monitoring program will be developed during the future detail design phase. Community members will be provided the opportunity to provide feedback on monitoring programs and participate in the implementation of these programs.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1628.	NIFN-117	The ultimate owner will consider the request for consultation, oversight, participation in decision making and involvement in monitoring of vegetation communities and wetlands during all project phases	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)

ID #	Commitment Type/ Valued Component (VC)	Mitigation and Monitoring Commitments	Timeline / Project Phase	Status
1629.	NIFN-118	The ultimate owner will consider the development of a country food monitoring program to verify the presence and absence of contamination.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1630.	NIFN-119	The ultimate owner will consider the development of a country foods monitoring program to verify the health of wildlife and potential risks to Nibinamik members from the consumption of country foods.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1631.	NIFN-120	The ultimate owner will consider the development of adaptive management and mitigation plans should be created in order to reduce impacts to SWH features.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1632.	NIFN-121	A monitoring plan will be developed during the future detail design phase, including consideration of eco-passages for wildlife and Nibinamik will be engaged during its development.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1633.	NIFN-122	Further field investigation related to hibernacula sites will be consider by the ultimate owner/operator during the detail design and permitting phase of the Project.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1634.	NIFN-125	The ultimate owner will consider involvement in consultation, oversight, decision making and involvement in the development and implementation of caribou impact mitigation planning, provision of a memorandum report on the caribou that was killed during the collaring program; and road mitigation planning to include seasonal shut-downs when caribou migration or calving is present near the proposed road.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1635.	NIFN-126	The ultimate owner will consider involvement in consultation, oversight, decision making and involvement in new commercial hunting and fishing operations in the region, access permissions along the proposed road, permitting forestry and mining operations and developments, and development of detailed Monitoring Plans for the road's construction and operation including records and analysis of hunting and harvesting in the region.	• Detail design / post EA/IA	EA/IA commitment (comment on Draft EAR/IS)
1636.	NIFN-133	The ultimate owner will consider creating opportunities for leadership-to-leadership discussions.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1637.	NIFN-159	The ultimate owner will consider creating opportunities for equal representation of all First Nations in the LSA on the Community Readiness Working Group.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1638.	NIFN-161	The ultimate owner will consider the request for First Nations in the LSA to be included in land use planning activities, and all other relevant monitoring or planning activities, including the Community Readiness Plan, the Community Liaison Committee, cultural sensitivity training, Community Health and Well-being survey.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1639.	NIFN-163	The ultimate owner will consider the request to provide funding to Nibinamik to develop and implement a monitoring program to monitor the effects of the project on their rights and interests.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1640.	NIFN-164	The ultimate owner will consider the request to provide funding for monitoring and follow-up programs are geared to impacts on not only WFN, but also surrounding First Nations, including Nibinamik.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1641.	NIFN-173	The ultimate owner will consider fire break and fire source mitigations.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1642.	NIFN-178	The ultimate owner will consider implementing a biodiversity offsetting plan tied to CBD 2030 Targets, identify conservation or land set-asides equivalent to lost habitat and create the conditions necessary to demonstrate there will be no-net-loss or net gain for biodiversity; a caribou-specific mitigation and monitoring plan developed with Indigenous partners and whether the cumulative effect on migratory birds considers industrial and forestry development relative to the Convention for the Protection of Migratory Birds through incidental mortality.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)

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1643.	NIFN-179	Detailed restoration activities will be documented in the Site Restoration and Monitoring Plan to be developed and implemented as part of the Construction Environmental Monitoring Plan. The offsetting/restoration approach also describes a consultation process that would include relevant agencies and local community input in the development of the final compensation and restoration plans.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1644.	NIFN-181	The ultimate owner will consider Indigenous co-governance in monitoring and adaptive management.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1645.	Weenusk First Nation (WEFN) WEFN-1	A draft of the WMMP for the post-construction period will be provided to WEFN for feedback prior to the start of the operations phase of the project and we are committed to sharing the results of the monitoring program with WEFN to receive their insights.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1646.	WEFN-4	The ultimate owner will consider discussions with Weenusk First Nation regarding notification of the quarry operations and culturally appropriate mitigation measures related to health and well-being.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1647.	WEFN-5	Mitigation and monitoring measures identified during the EA/IA will be further developed in the Construction Environmental Management Plan (CEMP) and Operations Environmental Management Plan (OEMP)	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1648.	Wildlife Conservation Society (WCS) Canada WCS-1.3	The floating road approach will be further addressed during the future detail design phase of the Project by the ultimate owner/operator.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1649.	WCS-1.4	Additional testing along the road right-of-way (ROW) is proposed to be undertaken during the future detail design phase of Project to ensure there is sufficient information to support the road embankment design in the peatlands. Note that peat material will not be excavated; and the organic upper surface material will be side-cast and then placed within the ROW to support revegetation with local seed sources.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1650.	WCS-2.2	Further assessment of functional caribou habitat alteration/degradation, and associated buffer distances for this aspect, will be considered by the ultimate owner/operator during the future detail design phase of the Project to address permitting requirements for species at risk where applicable.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1651.	WCS-2.3	Further mitigation and monitoring strategies and/or programs for caribou will be considered by the ultimate owner/operator during the future detail design phase of the Project, including a proposed detailed monitoring program to secure permits/approvals for species at risk, where applicable.	• Detail design	EA/IA commitment (comment on Draft EAR/IS)
1652.	WCS-2.4	The full aquatic invasive management plan will be included in the CEMP to be developed and implemented by the ultimate owner/operator for the Project.	• Detail design • Construction • Operations	EA/IA commitment (comment on Draft EAR/IS)