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(H) ROADS & WATER-CROSSING DOCUMENTATION

SUPPLEMENTARY DOCUMENTATION

BANCROFT MINDEN FOREST 2021-31 FMP

Table of Contents

1. Primary Roads Planning Documentation	1
1.1 Introduction and context on Confirmed Primary Road Corridors	1
1.2 Primary Road Planning (from 2011-21 FMP Phase 2 Supp. Doc. D)	2
1.2.1 NEPHTON ROAD: DESCRIPTION OF ALTERNATIVE PRIMARY ROAD CORRIDORS	2
MAP OF NEPHTON ROAD PRIMARY ROAD ALTERNATIVE CORRIDORS FROM 2011-21 FMP PHASE 2	8
2. Branch Road Planning.....	9
2.1 Introduction	9
2.2 Description of Proposed Branch Roads.....	9
2.2.1 MONKSHOOD BRANCH ROAD (1.5 KM) – DICKENS TOWNSHIP	9
2.2.2 AIRPORT BRANCH ROAD (4.8 KM) – FARADAY TOWNSHIP	12
2.2.3 BERRYCAN LAKE BRANCH ROAD (4.9 KM) – HINDON TOWNSHIP	16
2.2.4 MCEWEN LAKE BRANCH ROAD (5.3 KM) – RIDOUT TOWNSHIP.....	19
2.2.5 MURRAY-WICKLOW BRANCH ROAD (11KM) – WICKLOW, LYELL TOWNSHIP	22
2.2.6 NORTH PENCIL LAKE BRANCH ROAD (18.7KM) – CAVENDISH, ANSTRUTHER TOWNSHIP	25
2.2.7 SHERBORNE BRANCH ROAD (6.5KM) – SHERBORNE TOWNSHIP	28
3. Use Management Strategies	31
Use Management Strategies for Primary & Branch Roads	31
Use Management Strategies for Existing Operational Roads and ORBs	36
Decommissioning strategies	38
CLUPA Roads (RMS-2)	40
4. Water Crossing Standards.....	41
General Water Crossing Standards That Apply to All Water Crossings	42
Water Crossing Standards That Apply to Specific Water Crossings Structures/Practices	44

1. Primary Roads Planning Documentation

1.1 Introduction and context on Confirmed Primary Road Corridors

The harvest areas for the next 20-years require minimal construction of primary access roads.

One Primary road (which will be identified as Nephton Road once constructed) is confirmed and carried forward that was planned for during the Phase Two 2011-21 FMP. This road was never constructed during the current FMP and the large allocation intended to access has not yet been harvested. The documentation i.e. location and road use strategy have not changed, and the road corridors/alternatives have been confirmed, however only one alternative will be chosen.

Two alternative routes were selected for this primary road corridor:

- Alternative #1 which is designated as Little Jack Lake Road; and
- Alternative #5 which is designated as McCoy Bay Road

These two alternatives are portrayed and named in the Summary Maps and OPS map.

The following Supp. Doc. indicates that “Consideration of use of either road alternative (#1 and #5) will be deferred until Spring 2016 to allow time to further discuss with Williams Treaties First Nation (WTFN) the potential impacts to Aboriginal values and to develop mitigation measures, if needed.” This exercise has yet to occur since the road was not required during Phase 2. Efforts will be made during Operational Planning and Development of the Draft Plan to have these discussions with WTFN which will inform the ultimate selected corridor.

Once the selected alternative is confirmed the road use management strategy will be reviewed and updated including a statement on the intent to transfer the responsibility for the road to MNRF in the next 20 years, and the plan period in which the transfer is intended to occur.

The following text and map (starting on page 2) were documented in Phase 2 SUPP DOC. D - Bancroft Minden Forest Management Plan to provide the background and context on this Primary road.

1.2 Primary Road Planning (from 2011-21 FMP Phase 2 Supp. Doc. D)

Forest operations on Crown land in Burleigh and Methuen Townships in the area around Jack Lake were extensive during the 1970's and 80's, and limited in more recent years. The topography is extremely rugged. Steep ridges with very shallow soils and complex wetland networks are intermixed with deeper soils which support good stands dominated mainly by red oak and white pine. The difficult terrain strongly influenced access routes used to support harvest operations in the past, and limit practical alternatives today. The local supply of good quality aggregate is extremely limited.

Many of the existing roads in this area have seen little or no industrial use since the mid-1980's and currently support both organized and ad hoc recreational use (eg, ATV's, snow machines). In addition, land ownership patterns make it impractical to reliably access 4,640 ha of Crown land without crossing private land. In some cases, landowner willingness to allow industry access has changed from positive to negative. This places future harvest and renewal operations at risk.

This access plan will establish practical long-term access needed to support forestry operations using solely Crown land. Reclassifying and reconstructing existing roads will be preferred over new construction wherever practical. Roads will be constructed or reconstructed to the lowest practical standard suitable for planned operations.

1.2.1 NEPHTON ROAD: DESCRIPTION OF ALTERNATIVE PRIMARY ROAD CORRIDORS

Alternative Corridors (see map attached)

ALTERNATIVE 1

Description: This alternative would join 2 existing primary roads – Burleigh Road and Little Jack Lake Road – in a generally east-west direction by constructing a new road.

Environmental Analysis: Other than sourcing aggregate, this alternative poses no significant construction challenges. A total of 5 water crossings would need to be installed. Because the road passes through habitat for endangered species, a full wetlands analysis and environmental impact assessment would be required before work commences. This alternative would make some use of existing trails. A preliminary review by MNRF District staff is on file.

Use Management Strategy: Access restrictions would be planned to reduce potential threats to endangered species. Specifics would be determined prior to construction, but could include locating the road so that blockage can be facilitated and removal of water crossing structures.

1 **ALTERNATIVE 2**

2 **Description:** This route would follow existing roads from the Burleigh Road through the
3 northwest corner of Petroglyphs Provincial Park in a generally north-east direction, eventually
4 joining Little Jack Lake Road.

5 **Environmental Analysis:** This alternative impacts no known non-timber values, and would
6 make extensive use of existing roads, some of which are currently snow machine trails.
7 Construction would need to take into account the needs of the snow machine club to ensure
8 safety and suitability for both forest industry and recreational users. The route is relatively flat,
9 which should reduce construction costs. Aggregate is likely to be in short supply. The road
10 would be entirely on Crown land. Ontario Parks planning requirements would also apply.

11 **Use Management Strategy:** The road would be gated where it crosses the park boundary.
12 Monitoring would take place at least twice annually, mainly to ensure the integrity and function
13 of any water crossings installed. Maintenance would be limited to that required to support
14 harvest, renewal, and tending operations and there may be extended periods where the road is
15 not passable to vehicular traffic during periods of low forestry activity.

16 **ALTERNATIVE 3**

17 **Description:** This alternative would begin at County Road 6 near Nephton and proceed north,
18 near the eastern boundary of Petroglyphs Provincial Park, eventually joining with the Little Jack
19 Lake Road. Existing roads would be used wherever practical and desirable.

20 **Environmental Analysis:** This alternative impacts very few known non-timber values, and would
21 make extensive use of existing winter roads, parts of which are snow machine trails.
22 Construction would need to take into account the needs of the snow machine club to ensure
23 safety and suitability for both forest industry and recreational users. The route is relatively flat,
24 which should reduce construction costs. The road would be entirely on Crown land, and its
25 completion would support wood flow to the south (through Nephton). Approximately 1.3 km of
26 new road construction would take place along the eastern boundary of Petroglyphs Park. The
27 new road would be relocated further east to avoid boundary incursions created by the current
28 road, reduce the number of water crossings, and avoid guy wires supporting transmission
29 towers.

30 **Use Management Strategy:** This road would be constructed on General Use Crown land. Access
31 restrictions would be limited to the removal of portable bridge structures during extended
32 periods of non-use. Monitoring would take place at least twice annually, mainly to ensure the
33 integrity and function of any water crossings installed. Maintenance would be limited to that
34 required to support harvest, renewal, and tending operations and there may be extended

periods where the road is not passable to vehicular traffic during periods of low forestry activity.

ALTERNATIVE 4

Description: This alternative would begin at County Road 46 near North Lake and cross private land before entering Crown land and joining the McCoy Bay Road.

Environmental Analysis: Use of this corridor would require deeded access across private land, which is uncertain. In addition, it traverses difficult terrain and numerous water and wetland crossings would be required.

Environmental Analysis: Use of this corridor would require deeded access across private land, which is uncertain. In addition, it traverses difficult terrain and numerous water and wetland crossings would be required.

ALTERNATIVE 5

Description: This alternative would join two existing road systems (McCoy Bay and Little Jack Lake Roads) by upgrading about 3 kilometers of existing snow machine trail from south of Little Jack Lake to Jack Lake in a generally northeast direction.

Environmental Analysis: This alternative impacts very few known non-timber values, and would make significant use of an existing snow machine trail. Construction would need to take into account the needs of the snow machine club to ensure safety and suitability for both forest industry and recreational users. The route is relatively flat, which should reduce construction costs. One water crossing (planned as a portable bridge) is known to be required.

Aggregate is likely to be in short supply. The road would be entirely on Crown land, and its completion would support wood flow either south (through Nephton) or north (through Apsley). It is likely that approximately 500 meters of new road would be constructed at the northeast end (near McCoy Bay Road).

Use Management Strategy: This road would be constructed on General Use Crown land, and no access restrictions are proposed. Monitoring would take place at least twice annually, mainly to ensure the integrity and function of any water crossings installed. Maintenance would be limited to that required to support harvest, renewal, and tending operations and there may be extended periods where the road is not passable to vehicular traffic during periods of reduced forestry activity. The proposed bridge crossing would be removed upon completion of harvest operations.

1 **ALTERNATIVE 6**

2 **Description:** This alternative provides access to the Crown land east of Jack Lake across private
3 land to the north. The non-Crown portion of this alternative would use McCoy Bay Road. This is
4 an unassumed public road which becomes a private road just north of Crown land where it
5 leaves the municipal right-of-way. To reach Crown land would need the permission of the
6 landowner for the private portion of the road, preferably via deeded access. Landowner
7 willingness and costs are unknown. In this case, no new road construction would be needed.

8 **Environmental Analysis:** This alternative would minimize or eliminate the need for new road
9 construction and maintain current access patterns within this portion of the management unit.
10 The existing road is constructed to standards generally suitable for harvest operations. Wood
11 flow to the north or south could be accommodated on public roads (via Lasswade or Apsley),
12 although trucking distance may be longer for southbound wood, depending on final
13 destination. No known non-timber values would be affected.

14 **Use Management Strategy:** No new construction is planned, and the existing use management
15 strategy would remain in place.

16 **ALTERNATIVE 7**

17 **Description:** This alternative would join the road constructed in Alternative 3 to the corridor
18 for Alternative 5 and Little Jack Lake Road in a northeasterly direction east of Jack Creek using
19 an existing trail wherever practical.

20 **Environmental Analysis:** This alternative reduces road footprint by using existing trails.
21 Widening, realignment, and improvements to the road bed will be necessary for safe
22 coexistence of industry and recreational users. Although only two streams are crossed, the
23 existing trail parallels Jack Creek and is within its AOC for significant distances. There are
24 limited alternatives for road placement outside the AOC. The two existing culverts are
25 currently functioning but may need replacement to support heavy truck traffic. No other
26 known non-timber values are affected. This route avoids the need for a bridge crossing of Jack
27 Creek (Alternative 3) and the route would be well clear of Petroglyphs Park. Significant
28 construction challenges (exposed bedrock, lack of suitable local roadbed materials) are present.
29 While the corridor is shown crossing private land, new information suggests Crown ownership
30 at this location, which has not yet been confirmed through the local Registry Office.
31 Maintenance would be limited to that required to support harvest, renewal, and tending
32 operations expected to occur over the next 25 years, and there may be extended periods where
33 the road is not passable to vehicular traffic during periods of reduced forestry activity.

Use Management Strategy: Since this trail is used by organized snow machine clubs, no access restrictions or decommissioning activities are planned.

1.2.1.4 Proposed Corridors

The proposed corridors to establish principal access are Alternatives 3 and 5 (see map attached). Both are required to ensure access for planned forest management activities.

Rationale: The proposed corridors eliminate the need for access across private land or through Provincial Parks. In addition, they make extensive use of the existing winter road and trail network, greatly reducing the need for new road construction. This will reduce environmental impacts.

Rationale: The proposed corridors eliminate the need for access across private land or through Provincial Parks. In addition, they make extensive use of the existing winter road and trail network, greatly reducing the need for new road construction. This will reduce environmental impacts.

1.2.1.2 Summary of Public Comments

Note that Alternative 7 was identified subsequent to Phase 2 Stage 1.

No public comments were received during the Phase 2 Stage 1 Information Centre comment period or during the Phase 2 Stage 2 Draft Planned Operations Review. Members of the William Treaties First Nations have expressed concerns regarding this proposal, and further discussions with the communities are planned. Ontario Parks has also expressed concerns regarding potential impacts on Petroglyphs Park. Further discussions would also be required with Ontario Parks.

1.2.1.3 Selected Corridors

Note that Alternative 7 was identified subsequent to the Phase 2 Stage 1 information centre because of updated land ownership information. While it is documented here, this alternative was not ultimately selected. In part, this is due to road construction challenges, and in part because land ownership confirmation (private vs Crown) has not been completed.

The road alternative corridors selected are alternatives 1 and 5.

At the time of Draft Phase 2 Planned Operations, proposed road alternatives #3 and #5 were identified as preferred. However, further discussions with the Williams Treaty First Nations (WTFN) took place in December 2015 and January 2016, after Draft Phase 2 Planned Operations review. A change from preferred road alternative 3 (adjacent to Petroglyphs Provincial Park) to

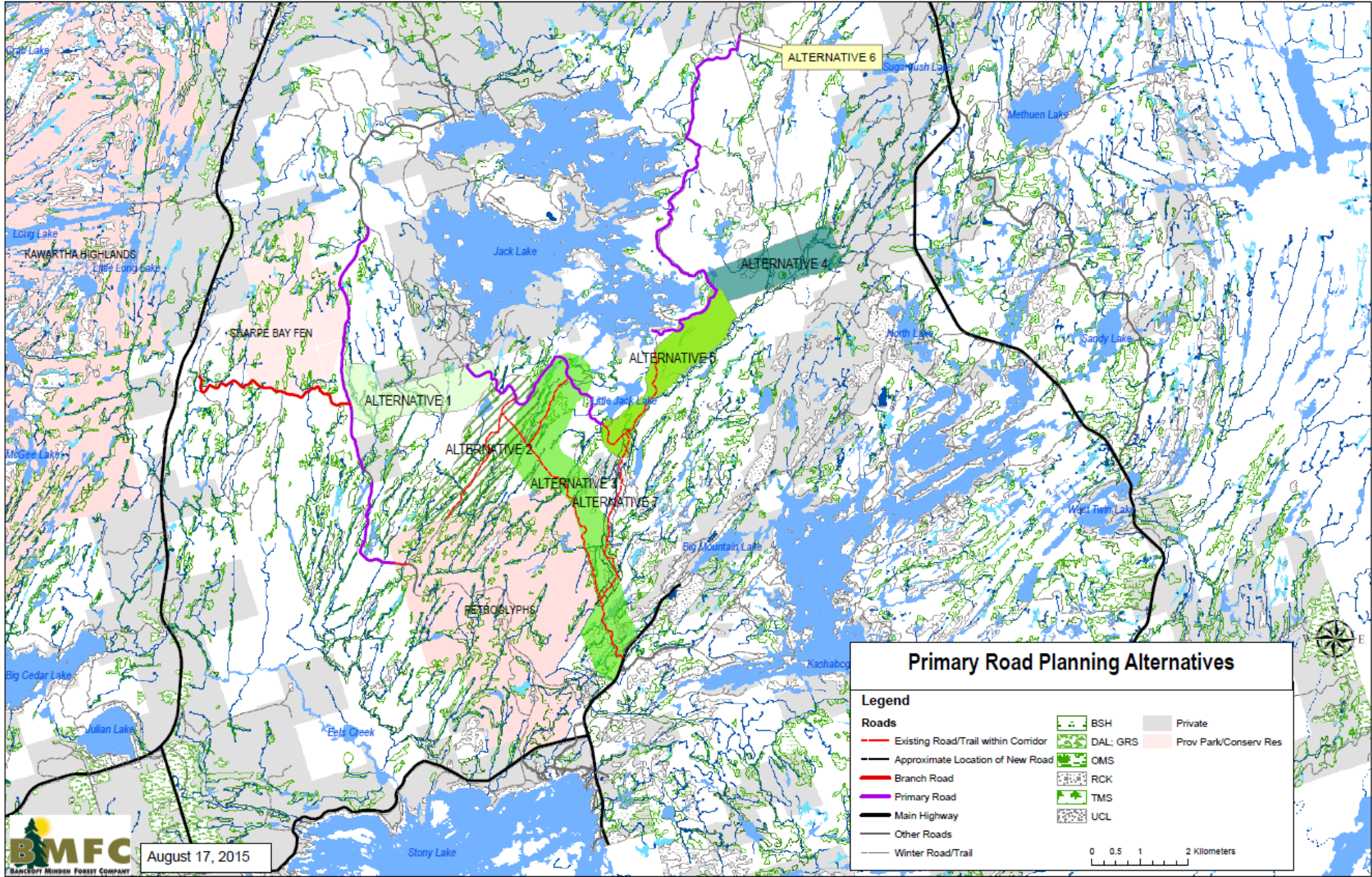
1 road alternative 1 (linking Burleigh Road and Little Jack Lake Road) was made to accommodate
2 concerns identified by the WTFN. Alternative 3 is not selected.

3 Alternative 1 (designated as Little Jack Lake Road) poses some challenges. It has been
4 identified primarily to provide access to Block 1100 and 1691 in the event restrictions are
5 placed on the use of the McCoy Bay Road. Part of this road may be constructed to support
6 current planned operations at Block 1101.

7 Alternative 5 (designated as McCoy Bay Road) is expected to provide access to Block 1100
8 (which was deferred from Phase 1) assuming unfettered use of the existing McCoy Bay Road
9 continues.

10 Consideration of use of either road alternative (#1 and #5) will be deferred until Spring 2016 to
11 allow time to further discuss with WTFN the potential impacts to Aboriginal values and to
12 develop mitigation measures, if needed. An amendment to the Phase 2 Planned Operations
13 may be required.

MAP OF NEPHTON ROAD PRIMARY ROAD ALTERNATIVE CORRIDORS FROM 2011-21 FMP PHASE 2



2. Branch Road Planning

2.1 Introduction

There are seven branch roads proposed for construction during the 2021-31 FMP. Six of these roads are new and one (Monkshood Road) is confirmed and being carried forward from the Phase 2 2011-21 FMP.

The common road use management strategy that applies to the following branch roads planned for construction is described in section 3. Use Management Strategies.

2.2 Description of Proposed Branch Roads

2.2.1 MONKSHOOD BRANCH ROAD (1.5 KM) – DICKENS TOWNSHIP

Proposed Corridor (map on following page)

The following text describing the Monkshood Road is carried forward from the Phase 2 2011-21 FMP and wording updated slightly to comply with the 2020 FMPM and apply to the 2021 FMP.

Description: This corridor, located in Dickens Township, has been identified as the location in which a new branch road may be constructed. It is an extension of the existing Monkshood road (which is a Primary road) and will follow a pre-existing road bed which requires major upgrades. See map on following page.

Rationale: This road is required to provide access across Crown land to a large planned harvest allocation that was planned during Phase 2 of the 2011 FMP. Since the road was not upgraded, the allocation intended to access was not harvested and is being carried forward to the 2021 FMP as a bridging block.

a) The degree to which the physical conditions, identified values and significant engineering or safety factors in the area act as constraints or provide opportunities, including possibilities for development of other resources:

- Previous harvest likely accessed this area through adjacent private land.
- The proposed route has been chosen after field verification, considering both topography and adjacent non-timber values.
- Locations for water crossings have also been confirmed through field validation.

1
2 b) Other planning initiatives that deal with access in the area:

- 3
4 • This location is within E52a, the Aylen Lake West and Upper Madawaska River Enhanced
5 Management Area (EMA).
6 • This corridor was chosen to minimize the construction of new access roads within the
7 EMA by using existing roads and corridors.

8 c) The result of consultation within known affected persons, organizations and First Nation
9 & Metis communities:

- 10 • This location is remote, and there are no known persons or organizations that might be
11 directly affected by this proposal – no special consultation has occurred.
12 • The area is within the Algonquins of Ontario (AOO) Traditional Territory. The AOO have
13 been consulted on this branch road and have not identified any concerns. In general,
14 they have stated their preference for roads to be built on Crown land vs. through private
15 land.

16 **Use Management Strategy:** subject to common Road Use Management Strategy RMS-2 due to
17 its location within E52a, the Aylen Lake West and Upper Madawaska River Enhanced
18 Management Area (EMA). Direction on roads in this EMA is as follows:

19 New roads must be planned through comprehensive long-term access planning that considers
20 the values of the area. Some guidelines are:

- 21 – roads should be constructed to the lowest standard possible;
22 – new roads/trails should be directed to existing corridors where possible;
23 – layout should consider aesthetics; and,
24 – design and construction should facilitate access controls and closure/rehabilitation.

25 Access Control #12 is applicable on this branch road to conform with Crown Land Use Policy
26 Atlas (CLUPA) specifications regarding existing and new roads.

27 This road is also within the South Algonquin MEA where CORLAP #16 applies. Access control
28 #13 is applicable on this branch road to conform with CORLAP direction for MEAs.

29 **Summary of Public Comments:**

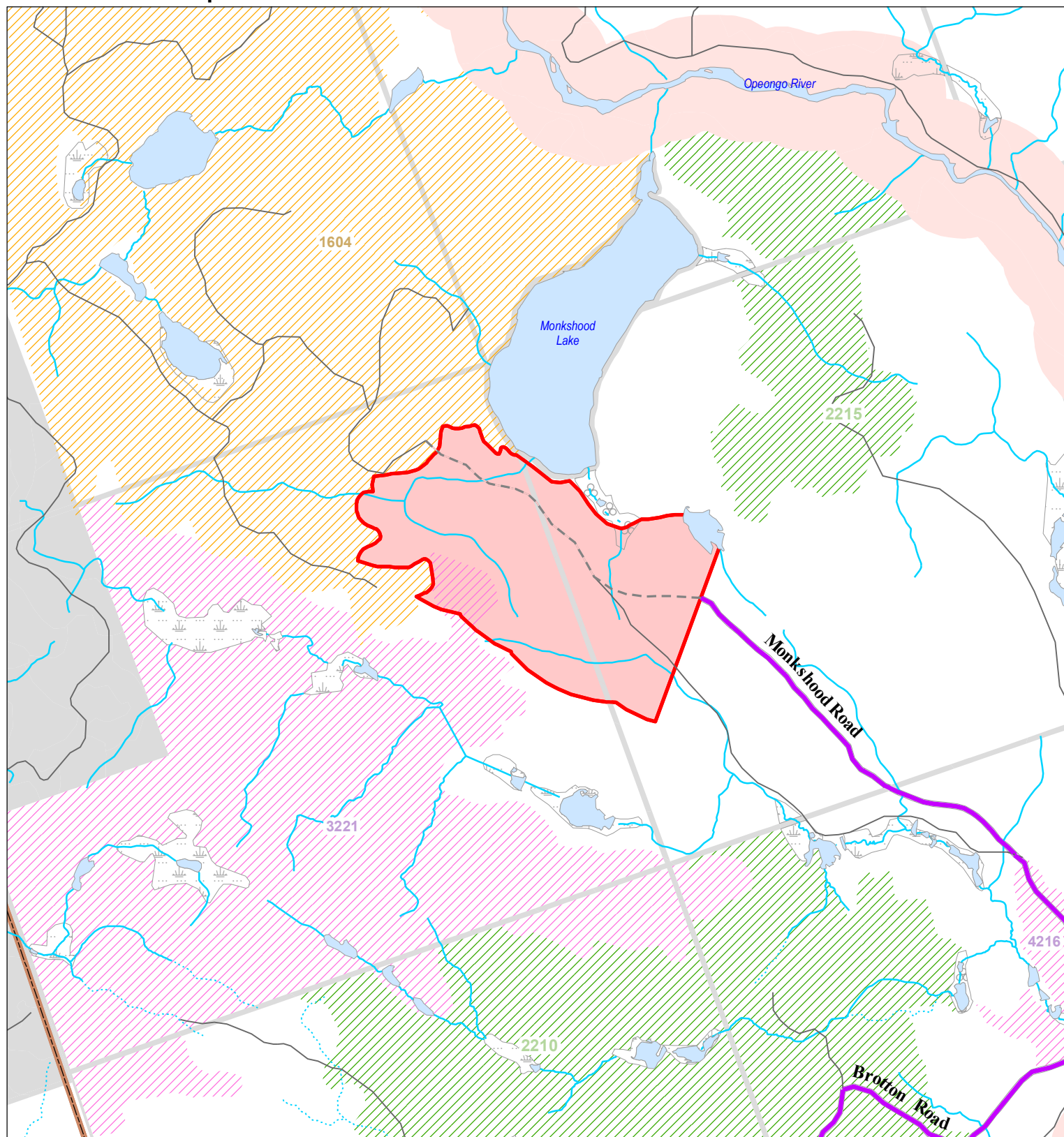
30
31 Comments from OF4WD have expressed interest in roads that effect their organization. The
32 main points are that existing roads and trails are kept open where appropriate. They have
33 requested prior communications before water crossing removal that may affect their group to

1 discuss options in having access remain open where possible through a Memorandum of
2 Understanding (MOU). Continued consultation efforts will be made as plans are finalized to
3 consider their input.

4 **Selected Corridor:**

5 The proposed corridor has been selected.

2021-2031 FMP Proposed Road Corridor: Monkshood Branch Road



Legend

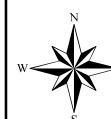
- Proposed Branch Road Corridor
- AOC Crossing Corridor
- Proposed Road Location
- Lake & River
- Permanent Stream
- Intermittent Stream

- Major Highways
- Other Roads
- Primary Roads
- Branch Roads
- Operational Roads
- Management Unit Boundary
- Township Boundary

- Agricultural Land
- Rock
- Treed Muskeg
- Brush & Alder
- Open Muskeg
- Grass & Meadow
- Unclassified Land

- Regular Harvest Area
 - Contingency Area
 - Bridging Area
 - Private Land
 - Provincial Park
 - Conservation Reserve
- Datum: NAD83, UTM Zone 18N
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Township(s): DICKENS



Scale 1:20,000

0 200 400
Meters



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BANCROFT MINDEN FOREST COMPANY
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2.2.2 AIRPORT BRANCH ROAD (4.8 KM) – FARADAY TOWNSHIP

Proposed Corridor (map on following page)

Description: This corridor, located in Faraday Township, has been identified as the location in which a new branch road may be constructed. It is considered new construction as it does not currently meet the definition of a road (i.e. you cannot drive with a 4x4 pickup). The road is accessed south of the Airport concession road following an OFSC snowmobile trail.

Rationale: This road is required to provide access across Crown land to two planned regular harvest hardwood allocations that will require continued silviculture treatment post 2021 FMP. Using the Crown access will avoid the alternative access crossing private land.

a) The degree to which the physical conditions, identified values and significant engineering or safety factors in the area act as constraints or provide opportunities, including possibilities for development of other resources:

- Previous harvest likely accessed this area through adjacent private land.
- The proposed route has been chosen after field verification, considering both topography and adjacent non-timber values.
- No water crossings have been confirmed through field validation.

b) There are no other planning initiatives that deal with access in the area.

c) The result of consultation within known affected persons, organizations and First Nation & Metis communities:

- The OFSC might be directly affected by this proposal – no special consultation has occurred to this point, however efforts will be made as plans are finalized to consider their input.
- The area is within the Algonquins of Ontario (AOO) Traditional Territory. The AOO have been consulted on this branch road and have not identified any concerns. In general, they have stated their preference for roads to be built on Crown land vs. through private land.

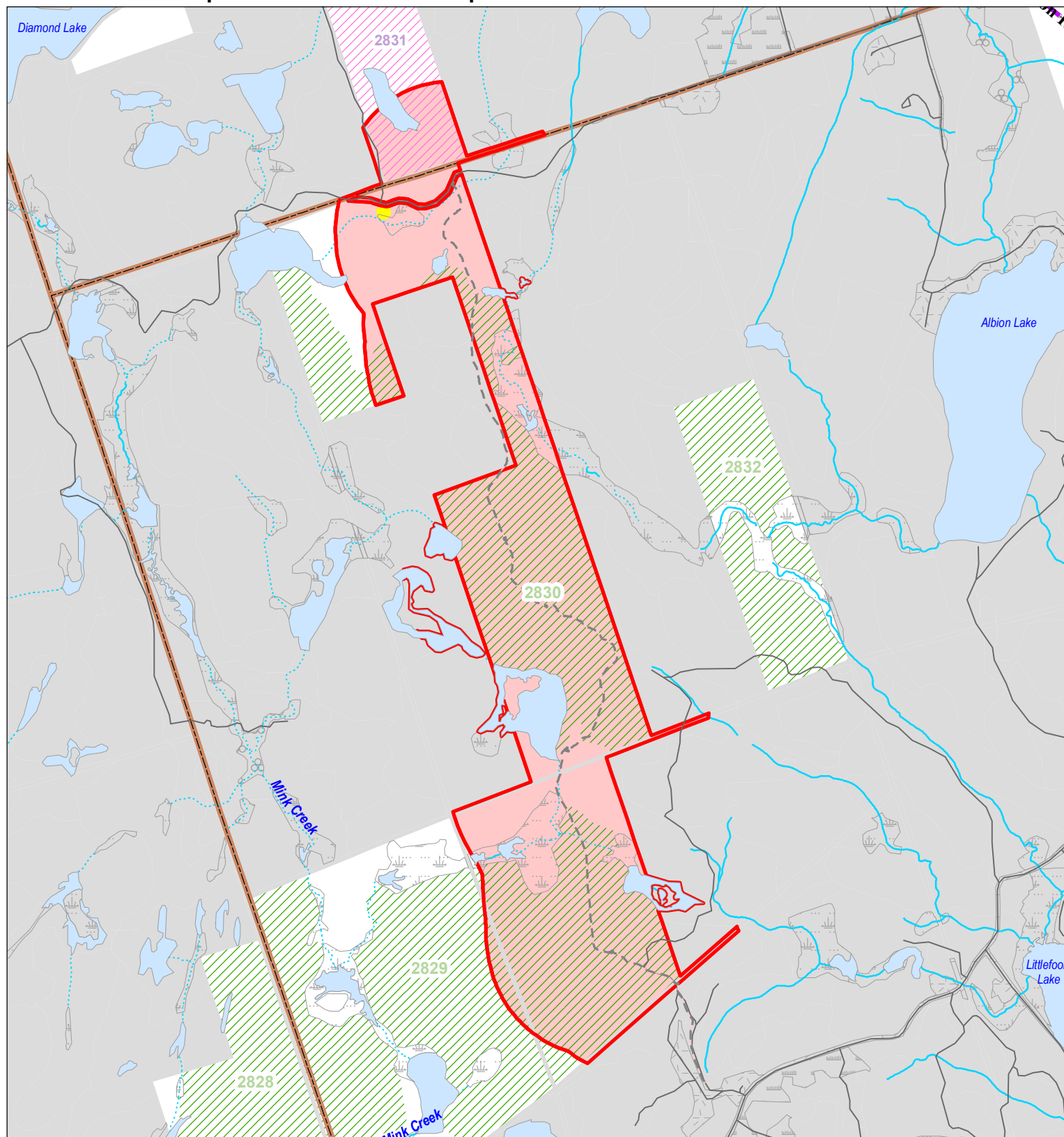
Use Management Strategy: subject to common Road Use Management Strategy RMS-1

Summary of Public Comments:

Comments from OF4WD have expressed interest in roads that effect their organization. The main points are that existing roads and trails are kept open where appropriate. They have requested prior communications before water crossing removal that may affect their group to discuss options in having access remain open where possible through a Memorandum of

- 1 Understanding (MOU). Continued consultation efforts will be made as plans are finalized to
- 2 consider their input.
- 3 **Selected Corridor:**
- 4 The proposed corridor has been selected.

2021-2031 FMP Proposed Road Corridor: Airport Branch Road



Legend

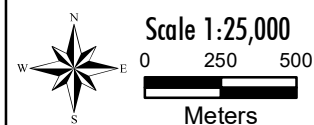
- Proposed Branch Road Corridor
- AOC Crossing Corridor
- Proposed Road Location
- Lake & River
- Permanent Stream
- Intermittent Stream

- Major Highways
- Other Roads
- Primary Roads
- Branch Roads
- Operational Roads
- Management Unit Boundary
- Township Boundary

- Agricultural Land
- Rock
- Treed Muskeg
- Brush & Alder
- Open Muskeg
- Grass & Meadow
- Unclassified Land

- Regular Harvest Area
 - Contingency Area
 - Bridging Area
 - Private Land
 - Provincial Park
 - Conservation Reserve
- Datum: NAD83, UTM Zone 18N
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Township(s): FARADAY, HERSCHEL



2.2.3 BERRycAN LAKE BRANCH ROAD (4.9 KM) – HINDON TOWNSHIP

Proposed Corridor (map on following page)

Description: This corridor, located in Hindon Township, has been identified as the location in which a new branch road may be constructed. The proposed branch road will follow an existing multi-use road which is currently used to access a hunt camp on private land adjacent to 2021 FMP allocation #2720. Access is South of Highway 118 on unnamed road.

Rationale: This road is required to provide access across Crown land to a large hardwood allocation which will require continued silviculture treatment post 2021 FMP including beech bark disease management.

b) The degree to which the physical conditions, identified values and significant engineering or safety factors in the area act as constraints or provide opportunities, including possibilities for development of other resources:

- The proposed route has been chosen after field verification, considering both topography and adjacent non-timber values. The route follows an existing road that is difficult to navigate using a 4x4 pickup truck and will require significant upgrades to improve safety for haul traffic.
- One water crossing has been confirmed through field validation and will be re-assessed as plans develop for upgrading this road to branch status.

b) There are no other planning initiatives that deal with access in the area.

c) The result of consultation within known affected persons, organizations, and First Nation & Metis communities:

- The owner of the private hunt camp will be directly affected by this proposal, however given the poor condition of the road, they are likely to benefit positively from the upgrades – no special consultation has occurred with the landowner.
- The area lies within WTFN traditional territory. The proposal has been presented to the planning team and no comments have been received from WTFN representatives.

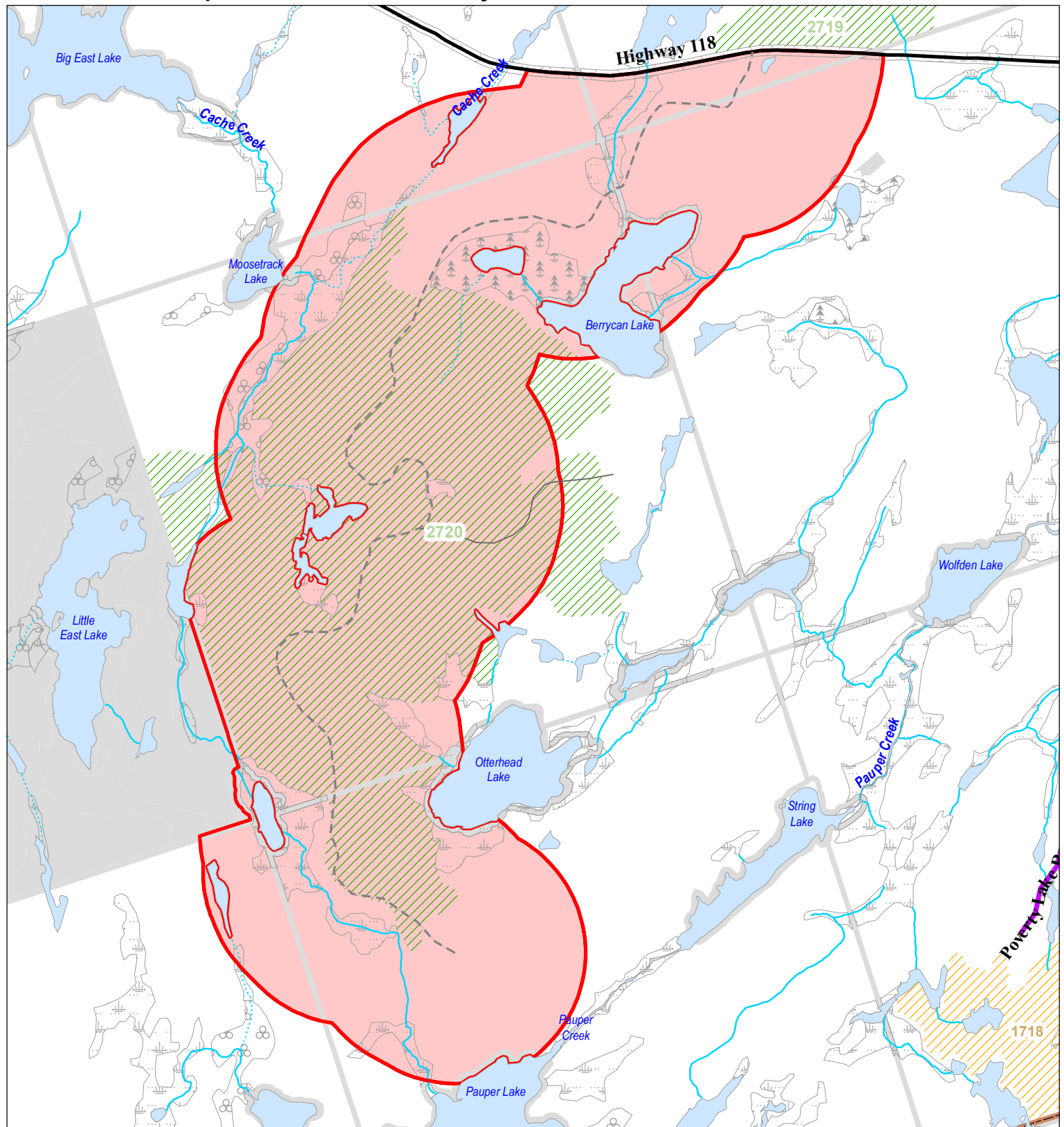
Use Management Strategy: subject to common Road Use Management Strategy RMS-1

Summary of Public Comments:

Comments from OF4WD have expressed interest in roads that effect their organization. The main points are that existing roads and trails are kept open where appropriate. They have requested prior communications before water crossing removal that may affect their group to discuss options in having access remain open where possible through a Memorandum of

- 1 Understanding (MOU). Continued consultation efforts will be made as plans are finalized to
- 2 consider their input.
- 3 **Selected Corridor:**
- 4 The proposed corridor has been selected.

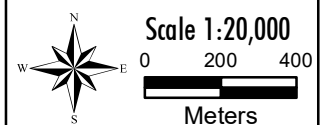
2021-2031 FMP Proposed Road Corridor: Berrycan Lake Branch Road



Legend

	Proposed Branch Road Corridor		Major Highways		2267 Regular Harvest Area
	AOC Crossing Corridor		Other Roads		4206 Contingency Area
	Proposed Road Location		Primary Roads		1074 Bridging Area
	Lake & River		Branch Roads		Private Land
	Permanent Stream		Operational Roads		Provincial Park
	Intermittent Stream		Management Unit Boundary		Conservation Reserve
			Township Boundary		
			Agricultural Land		
			Rock		
			Treed Muskeg		
			Brush & Alder		
			Open Muskeg		
			Grass & Meadow		
			Unclassified Land		

Township(s): HINDON



2.2.4 MCEWEN LAKE BRANCH ROAD (5.3 KM) – RIDOUT TOWNSHIP

Proposed Corridor (map on following page)

Description: This corridor, located in Ridout Township, has been identified as the location in which a new branch road may be constructed. The proposed branch road will follow an existing multi-use road which is currently used to access an old sawmill on the former Leslie M. Frost Center limits. Road will extend beyond the old sawmill following old harvest road now only usable by ATV to access harvest area adjacent to McKeown Lake. Access is East off of Highway 35, just North of Margaret Lake Road.

Rationale: This road is required to provide access across Crown land to a large hardwood allocation which will require continued silviculture treatment post 2021 FMP including beech bark disease management.

c) The degree to which the physical conditions, identified values and significant engineering or safety factors in the area act as constraints or provide opportunities, including possibilities for development of other resources:

- The proposed route has been chosen after field verification, considering both topography and adjacent non-timber values. The route follows an existing road that is difficult to navigate using a 4x4 pickup truck and will require significant upgrades to improve safety for haul traffic.
- One water crossing has been confirmed through field validation and will be re-assessed as plans develop for upgrading this road to branch status.

b) Other planning initiatives that deal with access in the area:

- This corridor is within the Hindon MEA and was chosen to minimize the construction of new access roads by using existing roads.
- The very north end of this corridor is also subject to CLUPA direction E65r-2.

c) The result of consultation within known affected persons, organizations, and First Nation & Metis communities:

- This area lies within the Former Frost Centre in which the township of Algonquin Highlands currently run a recreational program called Water Trails. There is a network of ski trails in this location where this road will have an impact.
- The area lies within WTFN traditional territory. The proposal has been presented to the planning team and no comments have been received from WTFN representatives.

Use Management Strategy: subject to common Road Use Management Strategy RMS-2 due to its location within EMA G421, the Leslie M. Frost Natural Resource Centre and intersection (at far north end) within E65r-2, the Black River - Frost Centre Enhanced Management Area (EMA). Direction on roads in this EMA is as follows:

- G421: All new logging roads must have an abandonment strategy developed and approved prior to construction
- E65r-2: Where the Recreation Enhanced Management Area has been identified to protect remote recreation values, industrial activities and the related construction and use of new roads, need to be carried out in such a way as to maintain or enhance the remote recreation qualities.

Access Control #12 is applicable on this branch road to conform with Crown Land Use Policy Atlas (CLUPA) specifications regarding existing and new roads.

This road is also within the Hindon MEA where CORLAP #16 applies. Access control #13 is applicable on this branch road to conform with CORLAP direction for MEAs.

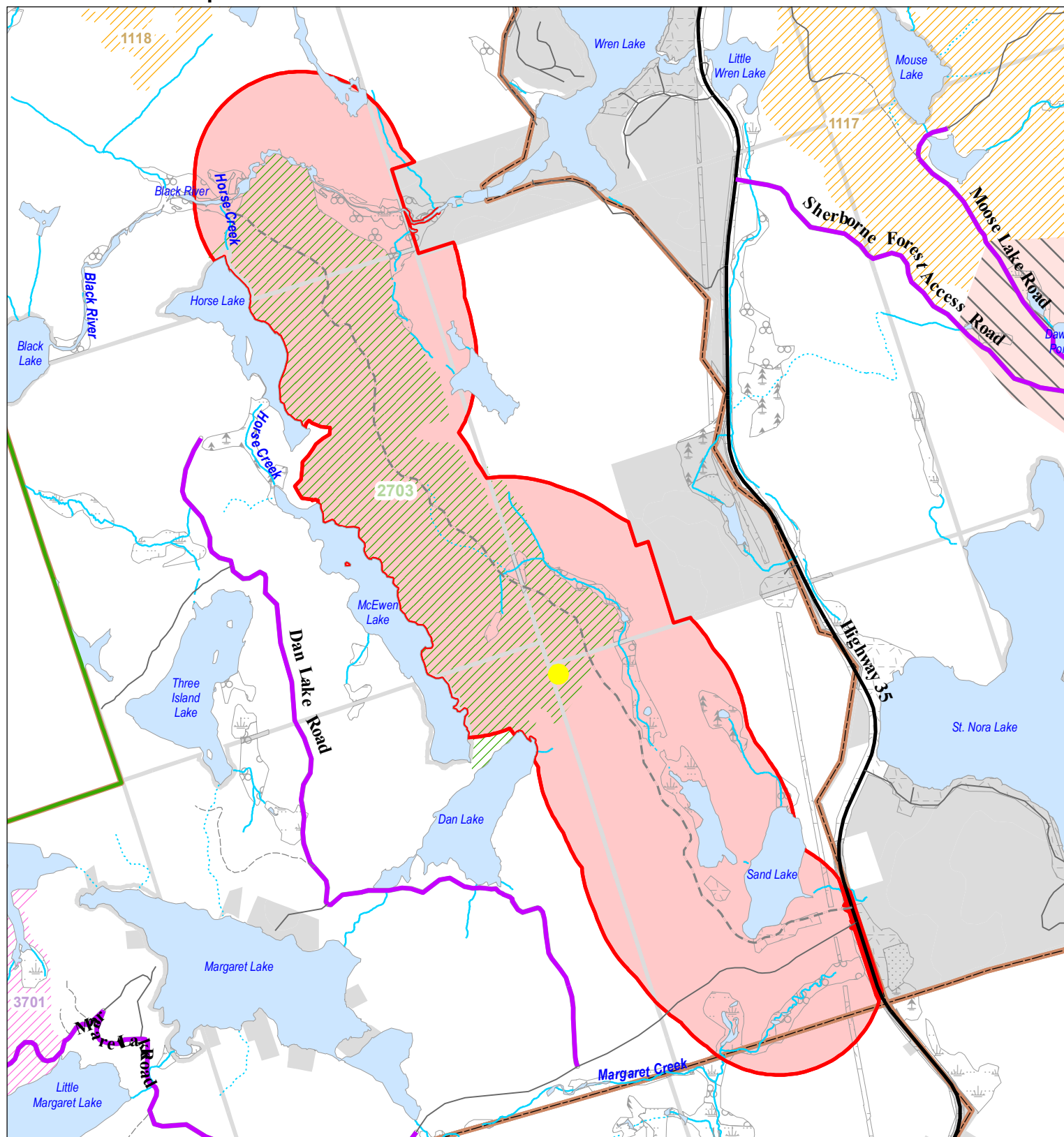
Summary of Public Comments:

Comments at Stage 3 were received by the Water Trails regarding forest activity in this area. Point of concern is that the Frost Centre Ski Trail operations are within the branch road area identified and part of the plan appears to utilize the ski trail. Consideration to operating season, rehabilitation and effect on ski trails should be included.

Selected Corridor:

The proposed corridor has been selected.

2021-2031 FMP Proposed Branch Road Corridor: McEwen Lake Branch Road



Legend

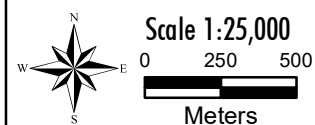
- Proposed Branch Road Corridor
- AOC Crossing Corridor
- Proposed Road Location
- Lake & River
- Permanent Stream
- Intermittent Stream

- Major Highways
- Other Roads
- Primary Roads
- Branch Roads
- Operational Roads
- Management Unit Boundary
- Township Boundary

- Agricultural Land
- Rock
- Treed Muskeg
- Brush & Alder
- Open Muskeg
- Grass & Meadow
- Unclassified Land

- Regular Harvest Area
 - Contingency Area
 - Bridging Area
 - Private Land
 - Provincial Park
 - Conservation Reserve
- Datum: NAD83, UTM Zone 18N
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Twp(s): HINDON, RIDOUT



2.2.5 MURRAY-WICKLOW BRANCH ROAD (11KM) – WICKLOW, LYELL TOWNSHIP

Proposed Corridor (map on following page)

Description: This corridor, located in Wicklow and Lyell Townships, has been identified as the location in which a new branch road may be constructed. Road will be built on a portion of OFSC snowmobile trail heading west off existing primary road Murray-Lyell road before heading south following different sections of old haul roads. Some of which are drivable with 4x4 pickups while others are only passable by ATV or snowmobile.

Rationale: This road is required to provide access across Crown land to one bridging allocation and four 2021 FMP allocations, including a large red pine plantation at the very end of the proposed road which will require repeated entries for commercial thinning. This branch road will avoid access across private land and the Lake St. Peter Provincial Park extension.

a) The degree to which the physical conditions, identified values and significant engineering or safety factors in the area act as constraints or provide opportunities, including possibilities for development of other resources:

- The proposed route has been chosen after field verification, considering both topography and adjacent non-timber values.
- Two water crossings have been confirmed through field validation and will be re-assessed as plans develop for upgrading this road to branch status.

b) Other planning initiatives that deal with access in the area:

- This corridor is within the Algonquin MEA and was chosen to minimize the construction of new access roads by using existing roads.

c) The result of consultation within known affected persons, organizations and First Nation & Metis communities:

- The OFSC might be directly affected by this proposal – no special consultation has occurred to this point, however efforts will be made as plans are finalized to consider their input.
- The area is within the Algonquins of Ontario (AOO) Traditional Territory. The AOO have been consulted on this branch road and have not identified any concerns. In general, they have stated their preference for roads to be built on Crown land vs. through private land.

Use Management Strategy: subject to common Road Use Management Strategy RMS-2 due to its location within the South Algonquin MEA where CORLAP #16 applies.

1 Access control #13 is applicable on this branch road to conform with CORLAP direction for
2 MEAs.

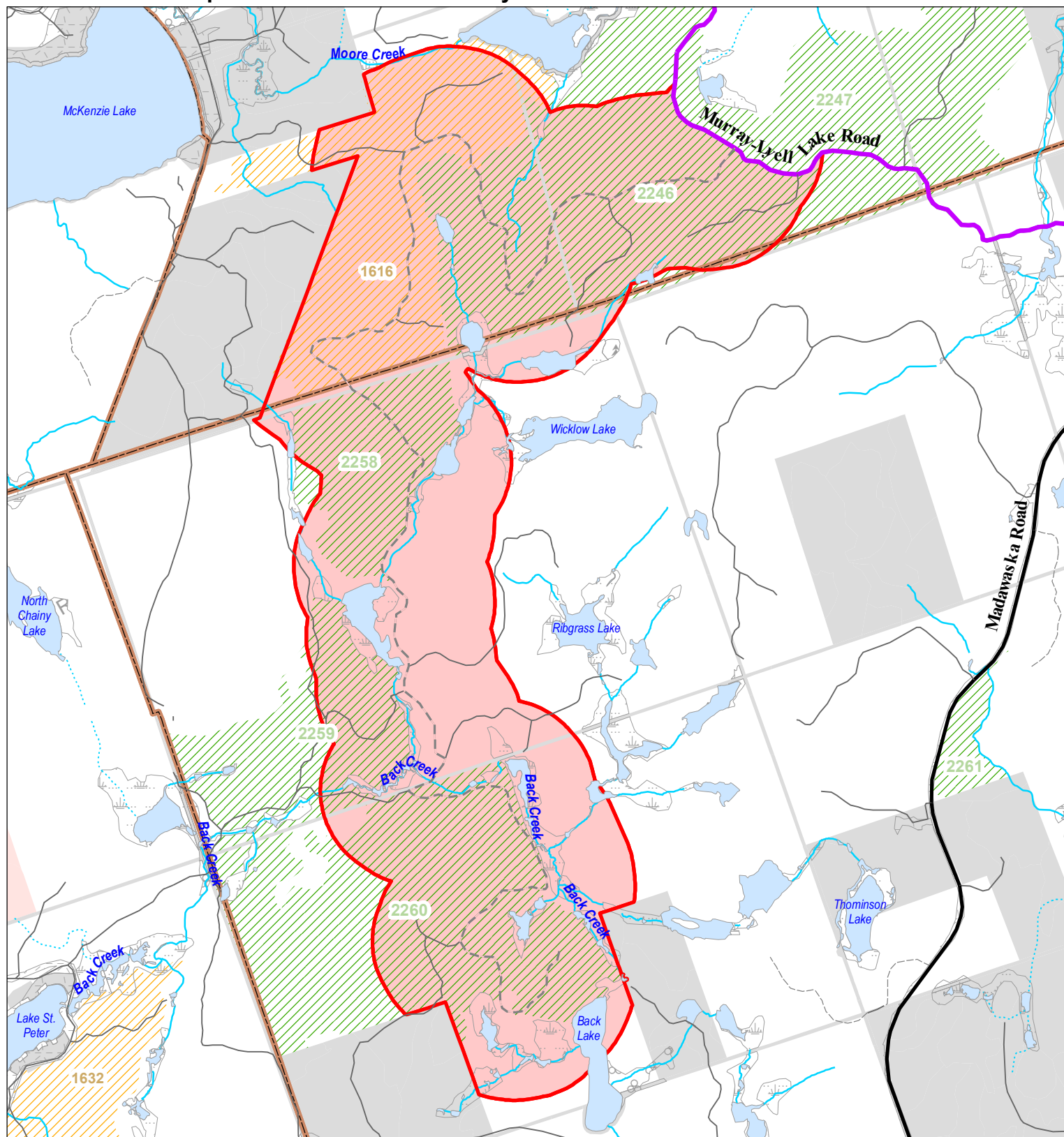
3 **Summary of Public Comments:**

4 Comments from OF4WD have expressed interest in roads that effect their organization. The
5 main points are that existing roads and trails are kept open where appropriate. They have
6 requested prior communications before water crossing removal that may affect their group to
7 discuss options in having access remain open where possible through a Memorandum of
8 Understanding (MOU). Continued consultation efforts will be made as plans are finalized to
9 consider their input.

10 **Selected Corridor:**

11 The proposed corridor has been selected.

2021-2031 FMP Proposed Road Corridor: Murray Wicklow Branch Road



Legend

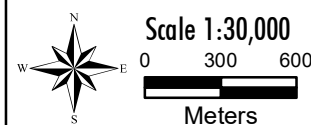
- Proposed Branch Road Corridor
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Township(s): LYELL, WICKLOW



2.2.6 NORTH PENCIL LAKE BRANCH ROAD (18.7KM) – CAVENDISH, ANSTRUTHER TOWNSHIP

Proposed Corridor (map on following page)

Description: This corridor, located in Cavendish and Anstruther Townships, has been identified as the location in which a new branch road may be constructed. North Pencil Lake Road was a Primary road during the 2006 FMP. It is an existing road connecting West Eels lake road and county road #507 and is currently used to access multiple hunt camps and private land, being used by both OFSC and HATVA associations.

Rationale: This road is required to provide access across Crown land to six 2021 FMP allocations (mostly tolerant hardwood) which will require continued silviculture treatment post 2021 FMP including beech bark disease management and is predicted to be used for multiple allocations within the following 2031 FMP.

a) The degree to which the physical conditions, identified values and significant engineering or safety factors in the area act as constraints or provide opportunities, including possibilities for development of other resources:

- The proposed route has been chosen after field verification, considering both topography and adjacent non-timber values.
- Multiple crossings have been confirmed through field validation and will be re-assessed as plans develop for upgrading this road to branch status.

b) Other planning initiatives that deal with access in the area:

- This corridor is within the Kawartha MEA and was chosen to minimize the construction of new access roads by using existing roads.
- This location is within EMA-G340/RA1 and access restrictions will apply.

c) The result of consultation within known affected persons, organizations and First Nation & Metis communities:

- The OFSC might and HATVA associations may be directly affected by this proposal – both organizations are aware of this proposal and have provided comments during Stage 3 of public consultation. Continued consultation efforts will be made as plans are finalized to consider their input.
- The area lies within WTFN traditional territory. The proposal has been presented to the planning team and no comments have been received from WTFN representatives.

Use Management Strategy: subject to common Road Use Management Strategy RMS-2 due to its location within an EMA G340/RA1. Direction on roads in this EMA is as follows:

To provide continued opportunities for high quality recreation opportunities in a relatively remote setting in the planning area. No new roads will be permitted except those absolutely essential for resource extraction and such roads will not be open to the public.

Access Control #12 is applicable on this branch road to conform with Crown Land Use Policy Atlas (CLUPA) specifications regarding existing and new roads.

This road is also within the Hindon MEA where CORLAP #16 applies. Access control #13 is applicable on this branch road to conform with CORLAP direction for MEAs.

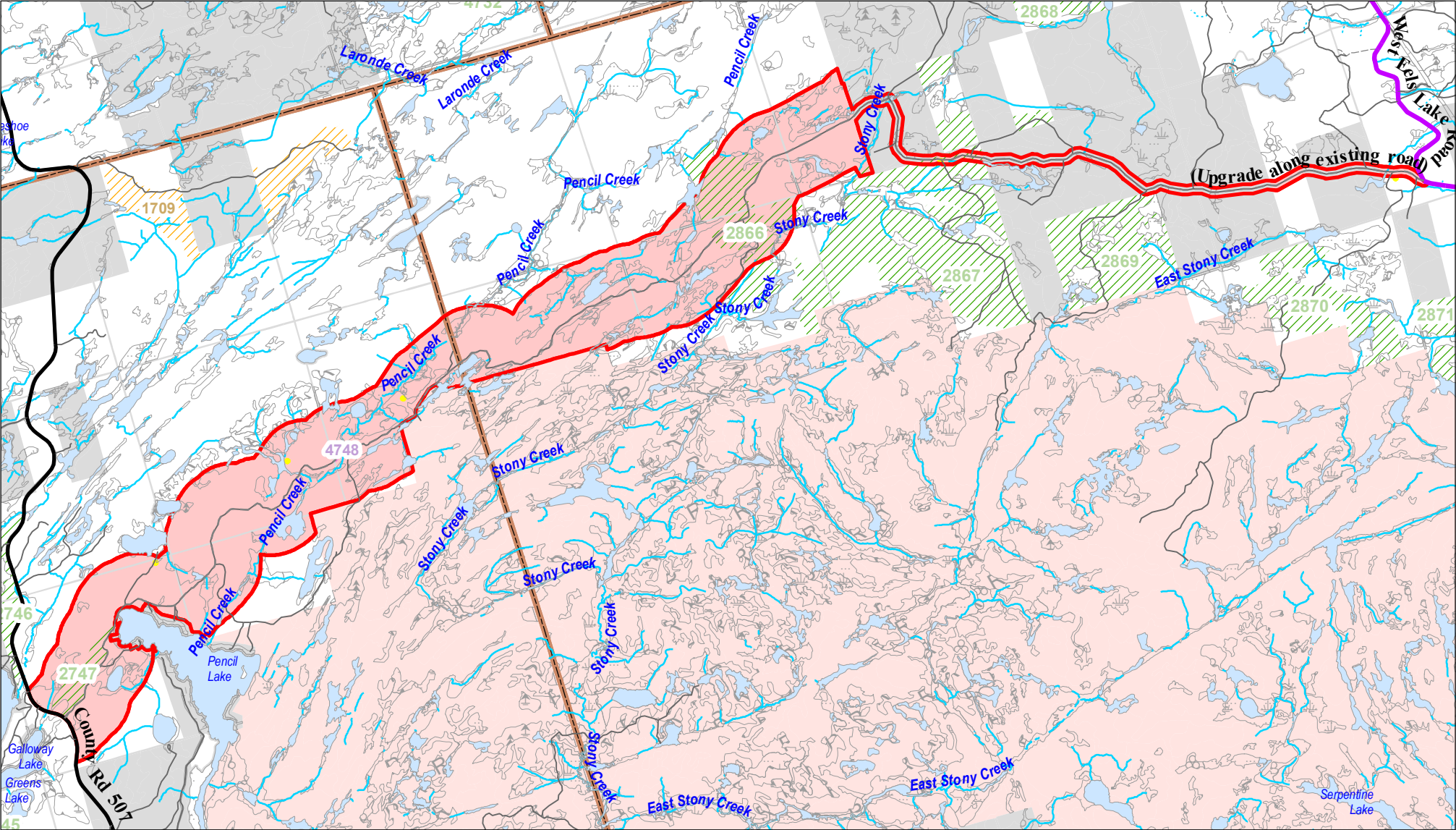
Summary of Public Comments:

Comments from OF4WD have expressed interest in roads that effect their organization. The main points are that existing roads and trails are kept open where appropriate. They have requested prior communications before water crossing removal that may affect their group to discuss options in having access remain open where possible through an Memorandum of Understanding (MOU). Continued consultation efforts will be made as plans are finalized to consider their input.

Selected Corridor:

The proposed corridor has been selected.

2021-2031 FMP Proposed Branch Road Corridor: North Pencil Lake Branch Road



Legend

- Proposed Branch Road Corridor
- AOC Crossing Corridor
- Proposed Road Location
- Lake & River
- Permanent Stream
- Intermittent Stream

- Major Highways
- Other Roads
- Primary Roads
- Branch Roads
- Operational Roads
- Management Unit Boundary
- Township Boundary

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- Unclassified Land

- Regular Harvest Area
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- Bridging Area
- Private Land
- Provincial Park
- Conservation Reserve

Datum: NAD83, UTM Zone 18N
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Twp(s): ANSTRUTHER, CAVENDISH

Scale 1:60,000

0 500 1,000 Meters

FRMG Inc.

BMFC
BANCROFT MINDEN FOREST COMPANY
Produced March 4, 2021

2.2.7 SHERBORNE BRANCH ROAD (6.5KM) – SHERBORNE TOWNSHIP

Proposed Corridor (map on following page)

Description: This corridor, located in Cavendish Township, has been identified as the location in which a new branch road may be constructed. It is considered new construction as it does not currently meet the definition of a road (i.e. you cannot drive with a 4x4 pickup). The road is accessed off the Sherborne Primary road. New construction will use a combination of overgrown historic winter haul roads and OFSC snowmobile trails.

Rationale: After losing the use of Saskatchewan lake road during the 2011 FMP, new access is required to allocated harvest area east of Sherborne lake within the 2021 FMP, This road will service access to timber east of Sherborne Lake, west of Nunikani Lake and north of Big Hawk Lake.

a) The degree to which the physical conditions, identified values and significant engineering or safety factors in the area act as constraints or provide opportunities, including possibilities for development of other resources:

- The proposed route has been chosen after field verification, considering both topography and adjacent non-timber values. The route follows an existing trail that is difficult to navigate using a 4x4 pickup truck and will require significant upgrades to improve safety for haul traffic.
- Multiple water crossings have been confirmed through field validation and will be re-assessed as plans develop for upgrading this road to branch status.

b) Other planning initiatives that deal with access in the area:

- This corridor is within the Hindon MEA and was chosen to minimize the construction of new access roads by using existing roads.

c) The result of consultation within known affected persons, organizations and First Nation & Metis communities:

- The OFSC might be directly affected by this proposal – no special consultation has occurred to this point, however efforts will be made as plans are finalized to consider their input.
- The area lies within WTFN traditional territory. The proposal has been presented to the planning team and no comments have been received from WTFN representatives.
- This area lies within the Former Frost Centre in which the township of Algonquin Highlands currently run a recreational program called Water Trails. There is a

network of canoe routes and campsites in this location where this road will have an impact. There is a CLUPA that applies to this area (see below).

Use Management Strategy: subject to common Road Use Management Strategy RMS-2 due to its location within EMA G421, the Leslie M. Frost Natural Resource Centre and intersection (at far north end) within E64a-2, the Clear Lake - Frost Centre Enhanced Management Area (EMA). Direction on roads in this EMA is as follows:

- G421: All new logging roads must have an abandonment strategy developed and approved prior to construction.
- E64a-2: New roads must be planned through comprehensive long-term access planning that considers the values of the area. Some guidelines are:
 - roads should be constructed to the lowest standard possible;
 - new roads/trails should be directed to existing corridors where possible;
 - layout should consider aesthetics; and,
 - design and construction should facilitate access controls and closure/rehabilitation.

Access Control #12 is applicable on this branch road to conform with Crown Land Use Policy Atlas (CLUPA) specifications regarding existing and new roads.

This road is also within the Hindon MEA where CORLAP #16 applies. Access control #13 is applicable on this branch road to conform with CORLAP direction for MEAs.

Summary of Public Comments:

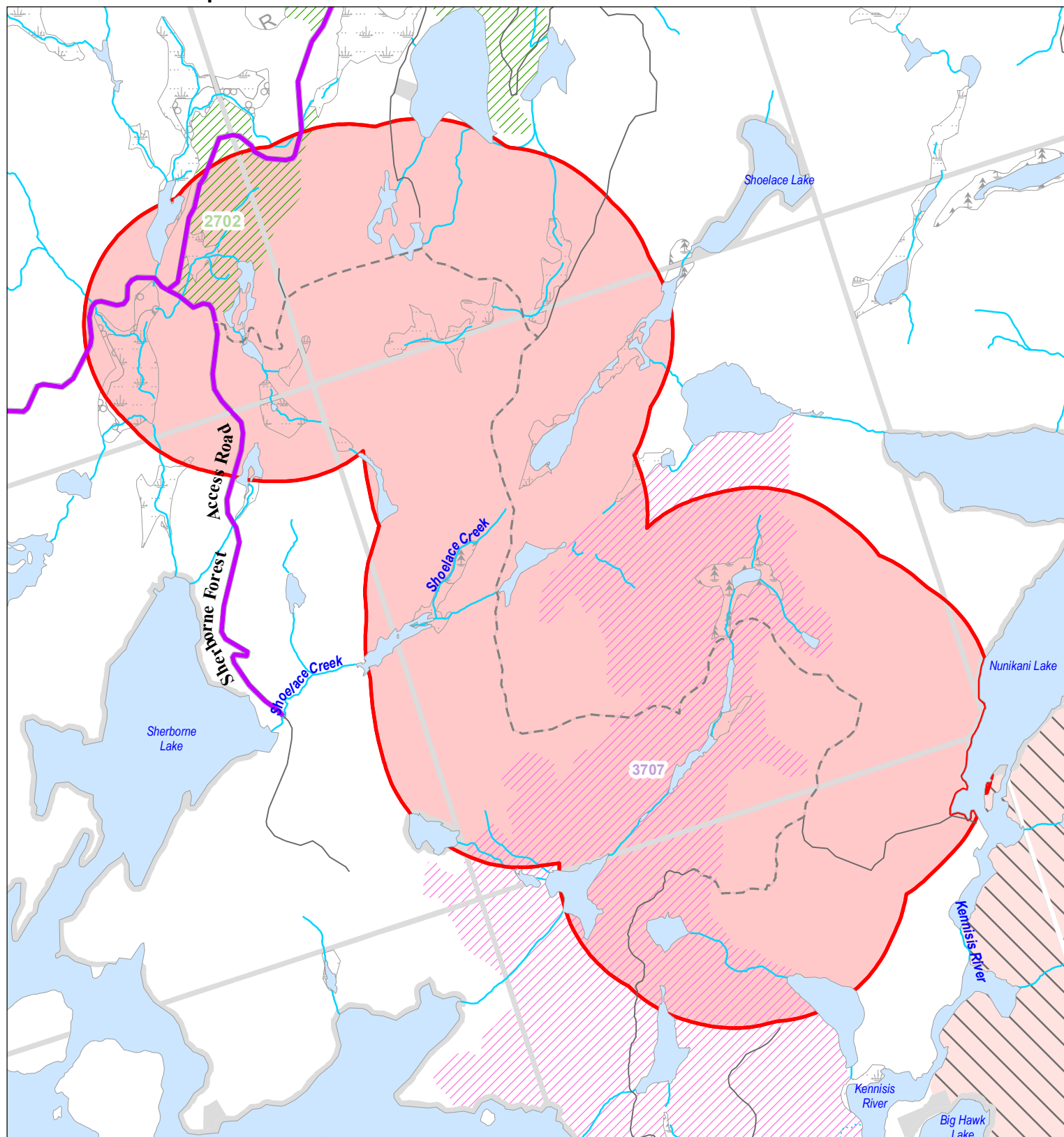
Comments at Stage 3 were received by the Water Trails regarding forest activity in this area. Point of concern is proximity to Frost Centre area canoe routes campsites and portages within that area.

Comments from OF4WD have expressed interest in roads that affect their organization. The main points are that existing roads and trails are kept open where appropriate. They have requested prior communications before water crossing removal that may affect their group to discuss options in having access remain open where possible through an Memorandum of Understanding (MOU). Continued consultation efforts will be made as plans are finalized to consider their input.

Selected Corridor:

The proposed corridor has been selected.

2021-2031 FMP Proposed Road Corridor: Sherbourne Branch Road



Legend

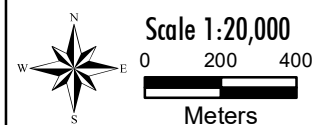
- Proposed Branch Road Corridor
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- Intermittent Stream

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Township(s): SHERBORNE



3. Use Management Strategies

Road Use Management Strategies are described following the FMPM Part A, section 1.3.6.7, items (a)-(g). There are common principles which apply to all Primary and Branch roads in the Management Unit which are described in the section below. This section is also meant to supplement the information in FMP-18. There are two general Use Management Strategies that apply to Existing roads:

RMS-1: No access controls or provisions

RMS-2: Access restrictions or provisions apply

These strategies are defined in section (E) Preliminary Indication Of Management Intent as they apply to the specified class of road i.e. Primary & Branch or Operational.

The SFL is responsible for monitoring and maintenance of MNRF roads as described in greater detail below. MNRF will be provided an opportunity to inspect these roads to ensure maintenance and monitoring responsibilities have been satisfactorily carried out prior to the completion of forest management activities in the area and the SFL's submission of a block completion FOIP report.

Use Management Strategies for Primary & Branch Roads

(a) MAINTENANCE PROVISIONS:

The SFL is responsible for maintenance activities on MNRF responsible roads when used for forest management during periods of active operations (i.e. start-up notification until completed block FOIP report). This commonly means that roads will be graded or plowed and that water crossings will be in good repair when harvesting and hauling are in progress. When a road is being used as part of a forest operation, a road will only receive regular maintenance to the extent required to facilitate the forest operation being undertaken.

Existing roads are also subject to routine road maintenance activities which are intended to maintain or restore the condition of an existing road for forest management purposes (e.g. harvest, renewal, tending, transportation and hauling activities). Unless explicitly prohibited, road maintenance is permitted within AOCs provided that any prescribed mitigative measures are adhered to. Road maintenance activities may include one or a combination of the following:

1 There are 7 codes for maintenance provisions in FMP-18:

- 2 1) Grading & gravelling (includes road base improvement, dust control, snow plowing and
- 3 sanding and salting).
- 4 2) Cross drain installation, repairs, ditching and clearing of blocked culverts (includes repair
- 5 of minor washouts & ditch line cleaning/establishment).
- 6 3) Brushing for sight lines, hazard tree removal, corner widening or straightening to
- 7 address safety or accommodate longer trailers.
- 8 4) Water crossing repair and replacement.
- 9 5) signage and safety structure installation and repairs, e.g. guide rails.
- 10 6) Emergency road maintenance.
- 11 7) MNRF will maintain after SFL operations complete, road transferred back to MNRF with
- 12 conditions of risk assessment met & road meets definition criteria.

13 When maintenance is no longer the responsibility of the SFL, MNRF conducts maintenance
14 activities using a risk-based assessment approach through an annual review of priority areas in
15 need of repair and maintenance. Maintenance activities may occur based on risk assessment
16 ranking (i.e. low, medium and high) and funding availability.

17 **Emergency road maintenance:** In some cases, road infrastructure may degrade to the point it
18 represents an environmental or safety risk and requires immediate attention to restore access
19 and reduce the chance of personal injury, damage to equipment, inconvenience to road users
20 and further road damage (e.g., major washouts, blocked culverts, damaged bridges, etc.).
21 Emergency maintenance will be necessary where public safety and/or environmental damage
22 have occurred unexpectedly. When this occurs, emergency maintenance may be performed by
23 the Crown or the SFL only to the extent that mitigates the environmental or safety risk.

24 Emergency maintenance may be limited to such actions as the removal of degraded water
25 crossing structures to prevent harm to fish habitat or requesting that MNRF impose access
26 restrictions to ensure public safety. BMFC is only responsible for emergency maintenance on
27 road infrastructure that it has formally accepted responsibility for. Emergency road
28 maintenance will be addressed on a case-by-case basis in consultation between the MNRF and
29 SFL. Notification of emergency road maintenance will be provided to affected Indigenous
30 Communities.

31 **Maintenance for other purposes:** The SFL and its Licensees will not perform maintenance on
32 roads and water crossings for other road users. SFL staff will ensure that all road and water
33 crossing construction and maintenance activities, performed for forest operations under the
34 FMP, are conducted to standards prescribed by MNRF and outlined in the FMP. Barring natural

1 events, such as floods, this may result in a road being accessible for a number of years following
2 the completion of forest operations.

3 When a road is not being used for forest operations, natural events, such as major storms, and
4 regular road use by other parties may result in road and water crossing damage and
5 degradation that renders a road impassable. In these cases, there is no obligation on behalf of
6 the Crown or the SFL to undertake repair work on behalf of other road users, even if other
7 users do not have the resources to replace failed road infrastructure. As a result, road access
8 for recreational or business purposes could be disrupted at any time. Any ad-hoc, unauthorized
9 modifications to failed or decommissioned roads or water crossings implemented by third party
10 users would be a contravention of the Fisheries Act and could create a public safety hazard. In
11 the event of damages, neither the Crown nor the SFL would be held liable for the actions of a
12 third party.

13 **(b) MONITORING PROVISIONS:**

14
15 While the road/road network is in use for management purposes (e.g. harvest, renewal,
16 tending, transportation and hauling activities), it will be monitored on an ongoing basis for
17 safety or environmental concerns. Otherwise,

- 18
19 • Road segments and associated culverts will receive visual inspections once every three
20 years;
- 21 • 'heavy truck haul bridges' inspected at least once a year by a competent inspector
22 following Crown Land Bridge Management Guidelines.

23
24 Reports from the general public, staff, contractors and other user groups will also contribute to
25 the monitoring of the condition of the roads and water crossings. Additionally, roads and
26 crossings will be inspected based on a risk management approach following severe weather
27 events (such as extreme windstorms or precipitation).

28
29 There are 3 codes for monitoring in FMP-18:

30 **Monitoring type 8** – SFL and forest industry during operations.

31 **Monitoring type 9** – After storm events.

32 **Monitoring type 10** – MNRF will monitor after SFL operations are completed, road transferred
33 back to MNRF with conditions of risk assessment met and road meets definition criteria.

34 Generally, monitoring type 8 and 9 apply to all existing Primary and Branch roads; monitoring
35 types 8,9 & 10 applies to all roads planned for construction and monitoring type 8 applies to all
36 existing operational roads and roads planned for construction.

(C) ACCESS PROVISIONS OR RESTRICTIONS

In some instances, access provisions or restrictions are imposed on roads which impact the public and commercial resource users. The primary reasons for this are Enhanced Management Areas (e.g. Moose Emphasis Areas) or Crown Land Use Policy Atlas Direction (CLUPA) or to protect species at risk. Roads with additional access provisions or restrictions are identified as RMS-2 roads.

There are 3 codes for access restrictions in FMP-18 (note that these apply to all road classes):

Access control type 11 - Signage to indicate that road infrastructure is temporary, and road will be left for natural abandonment.

Access control type 12 - Access restrictions will confirm with Crown Land Use Policy Atlas (CLUPA) specifications regarding existing and new roads. Consult CLUPA descriptions for details.

Access control type 13 - Access control may be applied for species protection. Refer to relevant AOC and CORLAP direction (e.g. MEA, BLT).

See individual roads in FMP-18 for this information.

(D) STATEMENT OF INTENT TO TRANSFER

Where roads are identified as being the responsibility of the SFL, a statement is required to indicate the intent to transfer the road or road network to MNRF in the next 20 years and the operating year in which the transfer is to occur.

In general, the SFL intends to transfer responsibility for new roads constructed by the SFL back to MNRF upon completion of harvest operations. MNRF does not intend to maintain these roads for public use and will accept them when decommissioning activities have been completed. Prior to undertaking decommissioning activities, the SFL will contact the MNRF to confirm the required road activities. Standard road activities include, but are not limited to, the removal of all water crossing structures, and strategic placement of access restrictions prior to road responsibility transfer - further information is described in section G) Activities required prior to transfer.

Many new roads constructed will require follow up renewal and maintenance activities as well as continued use for anticipated operations in future FMP periods. Therefore, the SFL may not indicate an intent to transfer.

The “Transfer Year” in table FMP-18 will indicate whether the SFL has identified the intent to transfer. This year is 2031 (final year of the FMP) as the SFL cannot predict when the transfer can occur through plan implementation. If no year is indicated, the SFL has no intent to transfer or this field is not applicable (i.e. MNRF responsible road).

(E) PRELIMINARY INDICATION OF MANAGEMENT INTENT

Where the SFL has indicated an intent to transfer responsibility, MNRF will provide a preliminary indication of the management intent for the road or road network.

There are two descriptions for management intent in FMP-18:

RMS-1 – strategy for all roads within the management unit where no access controls or additional management considerations apply with the following intent:

Primary & Branch Roads: It is the MNRF's intent not to maintain and or regularly monitor these roads when they are not being used for forestry operations. In many cases, the roads will be left for natural abandonment (e.g. water crossing removal); however, all or some of maintenance activities (1 to 6) may occur depending on funding availability.

RMS-2 – strategy for all roads within the management unit subject to access controls or additional management considerations apply for the following reasons with the following intent:

Reduce access for relevant AOC & CORLAP direction: management intent is to promptly decommission road or apply access control measures upon completion of operations due to relevant AOC and CORLAP direction. E.g. Moose Emphasis Area

Enhanced Management Area (EMA): management intent for roads that fall within an EMA will conform with CLUPA conditions on new and existing roads. Applicable EMA codes are indicated in FMP-18.

See individual Primary and Branch roads in FMP-18 for this information.

(G) ACTIVITIES REQUIRED PRIOR TO TRANSFER

Where the sustainable forest licensee has indicated an intent to transfer responsibility within the plan period and MNRF's management intent is to not maintain the road for public use, the activities required prior to transfer, including potential removal of water crossings will be documented (e.g., decommissioning, signs).

Activities will be determined by road during plan implementation after the SFL has communicated with MNRF their stated intent to transfer.

Use Management Strategies for Existing Operational Roads and ORBs

All existing operational roads on Crown land in the Bancroft Minden Forest are subject to a common road use management strategy, consistent with the provisions and practices of all previous forest management plans since the SFL took management responsibility for the Management Unit. Industry responsibility for any part of the operational roads network begins when operations commence and ends upon completion of decommissioning activities.

Operational roads are generally meant to provide access for the duration of active forestry operations and/or subsequent renewal treatments. Operational roads may not provide suitable access for other forest users as they are built to a minimal standard and may only be seasonably passable. Existing roads and corridors are used preferentially; however operational road boundaries (ORBs) are identified within which operational roads might be constructed. The specific location of operational roads is not planned at the FMP level.

The Areas Selected for Operations Maps portray the Operational Road Boundaries (ORBs), which delineates the possible locations for operational roads which were delineated to provide flexibility in operational road location where necessary (e.g., terrain limitations). An operational road boundary may include planned areas of operations, and the area from an existing road or planned road corridor to the planned areas of operations within which an operational road is planned to be constructed. Each ORB has been assigned a unique identifier that corresponds to the block number it surrounds i.e. ORB-####. Once constructed the ORB will be subject to the principles common to the Operational Road Use Management Strategy (described below) and any relevant RMS-2 (access restrictions or CLUPA direction) indicated in table FMP-18. The principles common to the operational road use management strategy are as follows:

(a) MAINTENANCE PROVISIONS:

Construct and maintain roads only to the extent and degree required to support operations and make use of existing corridors wherever possible. Maintenance activities typically would include gravelling, grading, brushing, ditching, and repairs or replacements to water crossings.

(b) MONITORING PROVISIONS:

Monitor roads while in use by industry to ensure any potential safety, environmental, or maintenance issues are addressed promptly.

(C) ACCESS PROVISIONS OR RESTRICTIONS

Operational Roads and Operational Road Boundaries may have access restrictions applied within Enhanced Management Areas due to Crown Land Use Policy Atlas Direction (CLUPA) or due to relevant AOC and CORLAP direction (e.g. Moose Emphasis Areas). Note that the same three access control type codes identified in section C of the Primary and Branch road use management strategy also apply to Operational roads.

MNR and the Company with First Nation input, may discuss and identify these temporary access restrictions on an annual basis with sufficient time to be included in the AWS (i.e. early fall). Temporary access restrictions may include options such as boulders, berms, ditches, or water crossing removals. The Company and Licensees will be responsible for the installation of these temporary access restrictions after the completion of each forest management operation but will not be responsible when an unauthorized removal of the access restriction has taken place. The specific locations of access restrictions, such as water crossing removals will be identified at the AWS stage on the AWS operational maps.

If two access controls apply to the same road segment, both access control types must be recorded in the CONTROL1 and CONTROL2 attributes accordingly. If there are more than two access control types on the same road segment, select two which are determined to be the most restrictive. See the abbreviation of grouped activities listed below for the access control options in the FMPM Tech Spec 2020:

BERM	Berm and/or ditch
GATE	Gated/physical barrier
SCAR	Scarify and/or pland and/or seed road
SIGN	Signed
PRIV	Private land
SLSH	Slash pile
WATX	Water crossing (x)

New operational roads within remote access EMAs will have access restricted through Public Lands Act signage to meet the intent of the Crown Land Use Policy Atlas.

(D) STATEMENT OF INTENT TO TRANSFER

The existing operational road network is considered SFL responsibility. Intent is to transfer responsibility back to MNR upon completion of planned decommissioning activities or to other identified party through a transfer agreement.

1 **(E) PRELIMINARY INDICATION OF MANAGEMENT INTENT**

2
3 **RMS-1** – strategy for all roads within the management unit where no access controls or
4 additional management considerations apply with the following intent:

5 **Operational Roads:** It is the MNRF's intent not to maintain and or regularly monitor
6 these roads when they are not being used for forestry operations. Operational roads are
7 generally decommissioned upon completion of forest operations following
8 decommissioning strategies described below e.g. water crossing removal, berm,
9 ditching, application of boulders.

10 **RMS-2** – strategy for all roads within the management unit subject to access controls or
11 additional management considerations apply with the following intent:

12 Management intent is to promptly decommission road or apply access control measures
13 upon completion of operations due to: relevant AOC & CORLAP direction or CLUPA
14 conditions.

15 **(G) ACTIVITIES REQUIRED PRIOR TO TRANSFER**

16
17 Operational roads are generally decommissioned upon completion of forest operations
18 according to a memorandum of understanding with MNRF, however, input from indigenous
19 communities will be considered.

20 In general, decommissioning activities are identified in the annual work schedule and the MNRF
21 will be provided an opportunity to inspect roads identified for transfer during the AWS.

22 Upon decommissioning an operational road, BMFC relinquishes all responsibility of the road.
23 Any party wishing to restore the conditions of an operational road will consult with MNRF on
24 required permits and road responsibility agreements.

25 Decommissioning strategies in the following section will be used.

26 **Decommissioning strategies**

27
28 In some instances it is the SFL or MNRFs intent to decommission a road or road segment and
29 remove (i.e. retire) the road from the land base through decommissioning activities. The intent
30 is for the road to no longer be accessible by a 2X4 licenced highway vehicle and no longer meet
31 the definition of a road. This section applies to decommissioning tactics which applies to all
32 roads on Crown land regardless of their road class.

As a rule of thumb, successful road decommissioning is achieved when heavy equipment is necessary to restore access. A combination of multiple, permanent decommissioning options will be used, however if one decommissioning method is recommended, prior discussion with MNRF must occur. The diagram below is an illustrative example of standard decommissioning practices required prior to road responsibility transfer; however, these requirements are confirmed on an individual basis.

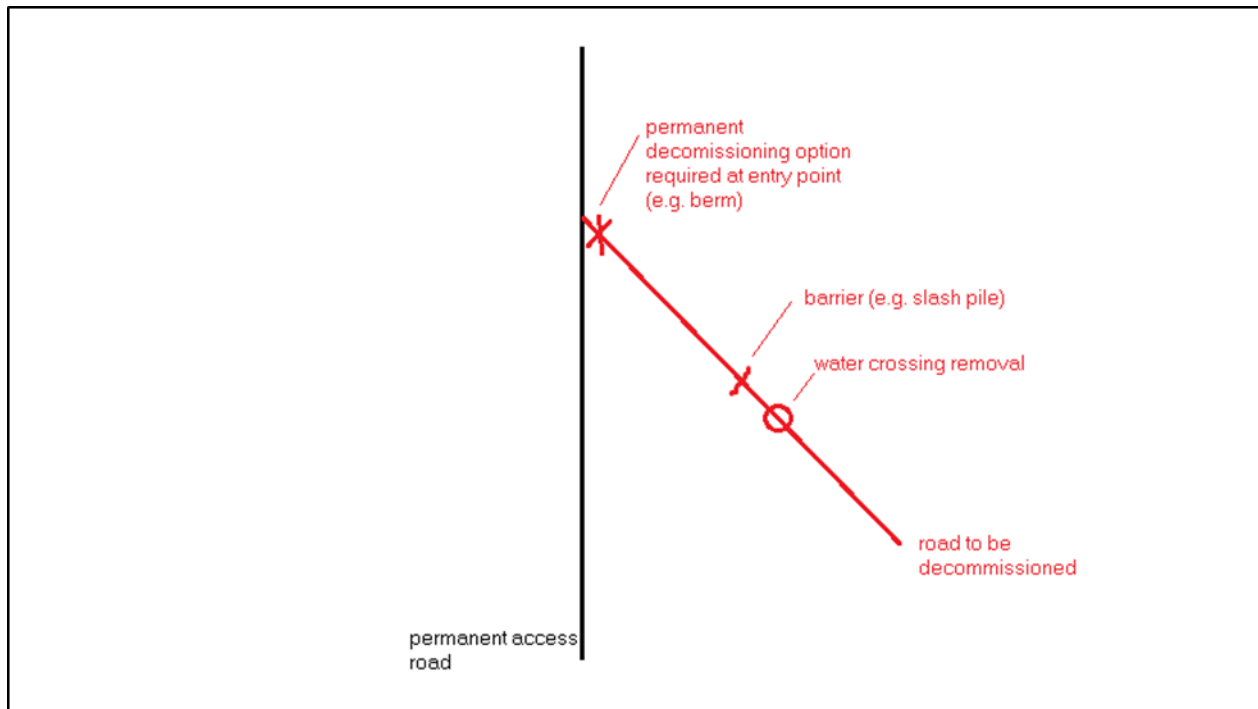


Figure 1. Illustrative example of required permanent access restriction for roads proposed for decommissioning

All decommissioned water crossing locations require adequate warning measures (e.g. berm, barrier, signage) so the site cannot be encountered unexpectedly.

When several decommissioning activities are used, report on the most restrictive option applied. Please use the abbreviation of grouped activities listed below for additional decommissioning activities not captured through the AR FIM Tech Spec 2020:

WATX	SCAR	BERM	SLSH
water crossing removal	scarify roads, winter road, de-building road, plant road	berm, ditching, boulders	slash piles, root mats, physical barrier

*Detailed record of specific measures implemented can be found in the Access FOIP Report

The most common type of road decommissioning activity is the removal of water crossings.

Provisional road removal points (e.g. ditching/berming of the roadbed, water crossing removals etc.) have been tentatively identified (based on input from the stakeholders). Specific details regarding the decommissioning (location and type of road removals activity) for these roads/road networks and associated water crossings are subject to ground reconnaissance and will be addressed at the AWS level.

CLUPA Roads (RMS-2)

In addition to roads on general use Crown land, there is also specific policy direction on road construction, maintenance, monitoring and future intent for roads that fall in designated land use planning areas. Policy typically falls under Enhanced Management Areas (EMA) which have their own unique identifier. Roads with applicable CLUPA direction are indicated with the corresponding EMA code in FMP-18. The Crown Land Use Policy Atlas must be consulted prior to constructing and decommissioning roads within EMAs.

4. Water Crossing Standards

The Ministry of Natural Resources and Forestry/Fisheries and Oceans Canada Protocol for the Review and Approval of Forestry Water Crossings, 2017 (the Protocol) provides a risk-informed Proponent self-screening approach for lower-risk water crossings that utilizes pre-determined and mandatory technical water crossing standards to direct routine water crossing construction and decommissioning activities in a manner that protects the productivity of Ontario's commercial, recreational or Aboriginal (CRA) fisheries or fish that support such a fishery. Adopting this type of risk-informed and modernized approach will allow government and industry stakeholders to focus resources on planning and reviewing water crossing activities that pose a greater potential risk of serious harm to Ontario's CRA fisheries or fish that support such a fishery.

The approved water crossing standards in the Protocol have been developed collaboratively with input from the Ministry of Natural Resources and Forestry (MNRF), Department of Fisheries and Oceans (DFO) and representatives from Ontario's forest industry. They represent minimum levels of performance requirements that must be met by the proponent when constructing and decommissioning water crossings using a proponent self-screening approval framework.

The conditions and requirements included in the general and specific water crossing standards have been deemed by MNRF and DFO staff as the necessary mitigation measures required to classify the water crossing project as not likely to result in serious harm to CRA fisheries or fish that support such a fishery. If a proponent determines that the requisite water crossing standards that apply to their specific project can be implemented, they may proceed with their activity, so long as the water crossing standards notification requirements are met, and forest management approval processes outlined in this Protocol and the appropriate version of FMPM are followed.

In cases where a Proponent determines that the requisite water crossing standards that apply to their specific project cannot be implemented, a review and approval will be required by either MNRF and/or DFO as per the Protocol.

Failure to follow the requirements of these water crossing standards could result in compliance and enforcement actions under both the *Fisheries Act* and the *Crown Forest Sustainability Act* (CFSA).

Water crossings in which a water crossing standard is being proposed for construction or decommissioning will be approved upon the submission of the Annual Work Schedule (AWS) or a revision to the AWS.

General Water Crossing Standards That Apply to All Water Crossings

This general water crossing standard applies to all water crossings constructed or decommissioned under the authority of the CFSA for which a self-screening approval approach is being implemented. Additional measures that are specific to certain water crossing types or structures must also be implemented.

General Standards

- The implementation of water crossing standards (e.g. type and location of project) must be consistent with the applicable and approved FMP.
- The implementation of water crossing standards must be overseen or carried out by individuals who are trained and competent to:
 - Understand the intent and objectives of the specification's standards;
 - ensure that specification's water crossing standards and appropriate mitigation measures are satisfactorily applied; and
 - Recognize when water crossing standards and appropriate mitigation measures have not been satisfactorily implemented and understand the requirements to report and correct any mistakes that have occurred.
- The project must be compliant with applicable water crossing standards and guidelines in the most recent versions of Ontario's forest management guide(s) that address the conservation of biodiversity at the landscape scale and the stand and site scales and MNRF's Crown Land Bridge Manual.

Design and Location

- The project does not include watercourse realignment.
- Projects are designed and constructed in a way that minimizes loss or disturbance to riparian vegetation. The removal of riparian vegetation must be restricted to the disturbance footprint required for the construction, maintenance and decommissioning of water crossings.

Erosion and Sediment Control

- Erosion and sediment control measures must be installed prior to the commencement of construction or decommissioning activities to prevent the release of sediment or other deleterious substances to the watercourse. Erosion and sediment control measures will be:
 - Effective and installed properly with respect to the site conditions;
 - Inspected regularly during the course of construction with any necessary repairs being made if any damage occurs;
 - Maintained until the site has become stabilized through the permanent re-establishment of vegetation (i.e., a root mass has been established that ensures site stabilization), either naturally or through planting and tending activities within disturbed areas and approaches, and/or they have been stabilized with rip-rap, or appropriately sized non-erodible aggregate material.

- Fill material placed below the normal high water mark will be erosion-resistant and/or protected from erosion.
- Water crossings are to be constructed and decommissioned to help ensure that storm water runoff from bridge decks, side slopes, and road approaches and ditches are directed away from the watercourse and into a retention pond or vegetated areas to remove suspended solids, dissipate velocity, and prevent sediment and other deleterious substances from entering the watercourse. Erosion and siltation in ditch lines adjacent to watercourse crossing approaches are to be controlled by using sediment traps such as rock/soil dams or log jams as site conditions warrant.
- Crossing sites are to be stabilized during and post construction and decommissioning, including any material stockpiling, spoil, and/or other waste materials to prevent sediment or other deleterious substances from entering the watercourse. Cut and fill slopes around the water crossing structure and decommissioned sites are to be stabilized at a 2:1 slope or stable angle of repose for the materials used using site appropriate methods.

CRA fisheries or fish that support such a fishery

- At any time of year, the free movement of water and the passage of fish may not be blocked or otherwise impeded up and down stream of the crossing, with the exception of potential and temporary blockage due to water crossing construction/decommissioning activities.
- All in-water construction and decommissioning activities must abide by the appropriate fisheries in-water timing windows documented in approved FMPs and/or forest management guides in order to avoid disrupting sensitive fish life stages. In cases where the fishery community inventories at the location of the proposed project are not well documented, the most restrictive in-water timing window must be used.
- All in-water construction and decommissioning activities must be undertaken in an uninterrupted fashion and be completed in an appropriate timeframe to minimize the potential for site disturbance.
- The construction and decommissioning activities must not employ the use of any explosives.

Construction and Maintenance

- Machinery must be maintained free of fluid and fuel leaks.
- Machinery must be operated on land with tracks/wheels above the normal high water mark, or on ice in a manner that avoids disturbance to the banks of the watercourse and adjacent riparian vegetation areas.
- Machinery must be washed, refueled and serviced a minimum of 30 metres away from the watercourse. Fuel and other materials for the machinery are to be stored a minimum of 30 metres away from the watercourse to minimize the chance of any deleterious substance from entering the water.
- Removal of riparian vegetation must be restricted to the disturbance footprint required for the construction, maintenance and decommissioning of water crossings. Site-specific operational and/or safety concerns that warrant the removal of additional riparian vegetation will be

determined on a case-by-case basis and will be kept to a minimum within the road right-of-way in order to help maintain the stability of watercourse banks.

- All debris resulting from construction and decommissioning activities must be removed from the work site following the completion of the undertaking.
- If machinery fording the watercourse is required during the course of construction activities, it will be limited to a one-time event (over and back) per piece of equipment that is essential to implementation of the project and must occur only if an existing crossing at another location is not available or practical to use.
 - If minor rutting is likely to occur, watercourse bank and bed protection methods (e.g., swamp mats, pads) are to be used provided they do not constrict flows or block fish passage;
 - Grading of the watercourse banks for the approaches is not permitted;
 - If the watercourse bed and banks are steep and highly erodible (e.g., dominated by organic materials and silts) and erosion and degradation are likely to occur as a result of equipment fording, a temporary crossing structure or other practice must be used to protect these areas;
 - The one-time fording must adhere to the appropriate in-water timing windows; Fording must occur under low-flow conditions and not when flows are elevated due to local rain events or seasonal flooding.

Water Crossing Standards That Apply to Specific Water Crossings Structures/Practices

The following water crossing standards apply to specific water crossing structures and/or practices and must be implemented in addition to the general water crossing standards.

STANDARDS FOR CONSTRUCTION

	Bridges (A)	Open Bottom Arch Culverts (C)	Snow Fill & Ice Bridge Crossings (D)	Round Culverts (E)
General Standards	All General standards apply.			All General standards apply. Additionally: The project does not replace an existing open-bottom crossing or culvert larger in diam. than what is being installed; Involve the installation of more than one closed-bottom culvert at the crossing location.
Design & Location	Must not be located on a meandering bend or any unstable bank prone to erosion.	Culverts must be sized to a minimum Q25 design flow	The work must not include dredging, placing fill, or grading or excavating the bed or banks of the watercourse.	Same standards as C apply. Additionally: - Crossings must be located, designed & constructed to minimize likelihood of outlet scour, culvert undermining &/or erosion of fill to provide for stable & non-perched crossing sites conducive to fish passage - Must not be installed where the channel slope at the crossing location is of a gradient > 2% or where the slope of road approaches or either of the bank approaches is >30%/17° - Locations must be selected where culverts can be embedded below the grade of the watercourse bed.
Erosion & Sediment control	Use mitigation measures to prevent erosion. E.g. non-erodible materials to stabilize crossings; Rock to be placed at original watercourse bank grade to avoid narrowing of watercourse		No earth fill or aggregate is permitted below the normal high water mark of the watercourse. Crossings must be constructed of clean water, ice and snow that are free of dirt and debris.	Use mitigation measures to prevent erosion. E.g. both the inlet & outlet ends must be stabilized with non-erodible material. Rock to be placed at original watercourse bank grade to avoid narrowing of watercourse. Fill below high water mark to be erosion resistant.
CRA Fisheries or Fish that Support Such a Fishery	** All projects not to be located within 100m of a fisheries spawning or sensitive habitat if in-water work is required (Applies to all standard identifiers)		Must not restrict water flow within the watercourse where it occurs naturally during winter conditions, or otherwise completely obstruct fish passage at any time.	Must not be located within 500m of any brook trout spawning or upwelling areas or on any watercourses or tributaries that flow into, and are within 500m, of known naturally reproducing brook trout lakes. The culvert size, length, slope & drainage area will not create accelerated water velocities that will consistently and predictably impede the passage of fish.

STANDARDS FOR CONSTRUCTION (continued)

	Bridges (A)	Open Bottom Arch Culverts (C)	Snow Fill & Ice Bridge Crossings (D)	Round Culverts (E)
Construction & maintenance	Bridge & abutments must be placed outside normal high water mark & not result in bed or bank alteration or narrowing of watercourse	The project cannot result in any excavation &/or reconstruction of the streambed; The crossing must be installed under low-flow conditions; The culvert must be secured on continuous footings outside the normal high water mark & constructed according to manufacturer's specs. using materials appropriate for the site and expected loads. Where footings are constructed with concrete, appropriate measures must be taken to ensure concrete materials do not encroach into the bed of the watercourse. Construction must not result in the alteration of the bed or banks of the watercourse or infilling or narrowing of the watercourse channel.	Appropriate seasonal conditions required (e.g., adequate depth of snow & ice, winter T⁰) to provide certainty that construction & removal water crossing standards can be met. Aggregate or loose woody material cannot be used to top the crossing. If logs or corduroy are used to stabilize the approaches of ice and snow fill crossings: The logs must be clean & securely bound together. No logs or woody debris can be left within the watercourse. Corduroy (if used) adjacent to the watercourse banks must be removed and placed outside the floodplain. Corduroy that is frozen or embedded into the road approaches or watercourse banks must be left in place. If required, remedial work will be carried out on the site after the crossing is removed to ensure that no logs or woody debris can wash back into the watercourse. Logs may be placed on road approaches to assist in diverting runoff away from the watercourse outside of the floodplain in a manner to ensure they do wash back into the watercourse. Sanding of snow and ice crossings must be kept to a minimum; Corduroy logs or brush mats must be installed on the approaches to the watercourse crossing when conditions are soft in order to avoid disturbing the banks and crossing approaches; If water is being pumped from a watercourse to reinforce the crossing, the intakes must be sized and adequately screened to prevent debris blockage and fish entrainment.	The crossing must be installed under low-flow conditions; Both the interior and exterior of culverts installed on fishery waterbodies must be corrugated to ensure structural stability and facilitate fish passage; The grade of the culvert must reflect the grade of the natural watercourse bed. Backfill must be adequately compacted around the culvert. Only clean sand or gravel can be used as backfill and must be compacted around the culvert in layers. Culverts must be the correct length to permit banks to be sloped at an angle of 2:1 or a stable angle for the materials used.

STANDARDS FOR DECOMMISSIONING

	Clearspan Bridges (B)	Round Culverts (F)
General Standards	All General standards apply. Decommissioning will only occur if it is consistent with the approved road use management strategy in the FMP.	All same conditions as B. Additionally: If the construction of the crossing was originally reviewed and approved by MNRF and/or DFO, all applicable conditions of approval must be fulfilled.
Erosion & Sediment control	- Upon decommissioning, including the removal of bridge abutments, cribs, and/or sill logs, the site must be stabilized and protected against erosion. - Bridge abutments and cribs may be left in place if they are in good condition, stable for the long term, are not affecting watercourse or fish community dynamics, and are permissible in the approved FMP and/or AWS-2 table. - Surface water runoff and road approaches and ditches must be directed away from the watercourse and into vegetated areas. Diagonal berms or waterbars must be installed where the erosion potential of the road approaches is likely to result in the road's gravel surface and underlying fill being deposited into the watercourse over time. Sediment traps used within ditch lines adjacent to the watercourse crossing approach should be replaced and/or maintained to their original condition at the time of crossing decommissioning.	- Upon decommissioning, the site must be stabilized and protected against erosion. Approaches to the watercourse should be stabilized at a 2:1 slope or stable angle for the materials used using site appropriate methods. - All exposed soil must be seeded and/or stabilized immediately following completion of activities. Erosion and sediment control measures must be appropriate for the site conditions and maintained until vegetation has become permanently re-established within disturbed areas and/or exposed mineral soils have been stabilized with rip-rap or appropriately sized non-erodible rock material. - Materials removed or stockpiled during decommissioning (e.g. grubbing, overburden fill) must be deposited outside the floodplain and stabilized/protected against erosion to ensure material does not enter the watercourse. - Surface water runoff and road approaches and ditches must continue to be directed away from the watercourse and into vegetated areas. Diagonal berms or waterbars must be installed where the erosion potential of the road approaches is likely to result in the road's gravel surface and underlying fill being deposited into the watercourse over time. Sediment traps used within ditch lines adjacent to the watercourse crossing approach must be replaced and/or maintained to their original condition prior to the construction of the crossing. - Appropriately sized erosion-resistant materials must be used below the normal high water mark for stream bank rehabilitation.
CRA Fisheries or Fish that Support Such a Fishery	Project not to be located within 100m of a fisheries spawning or sensitive habitat if in-water work is required	
Construction & maintenance	Decommissioning of bridges, including the removal of bridge abutments, cribs and/or sill logs will not result in the alteration of the bed or banks of the watercourse or infilling or narrowing of the watercourse channel.	- The crossing must be decommissioned under low-flow conditions and not when flows are elevated due to local rain events or seasonal flooding. - The watercourse must be restored as closely as possible to its original condition prior to the construction of the crossing, including retaining the original stream alignment. - All crossing infrastructure must be completely removed from the site. - Grubbing must be minimized to leave as much of the existing vegetation intact.