Roads Supplementary Documentation

This roads supplementary documentation is organized into four parts:

- A: Primary Road Corridors
- B: Branch Road Corridors
- C: Operational Roads
- D: Existing Roads or Road Networks

Part A of the roads supplementary documentation has been completed at stage 2 of the planning process. Parts B, C and D will be completed at stage 3 of the planning process – planned operations.

Maps of the proposed alternative primary road corridors are presented at the end of this documentation.

A: PRIMARY ROAD CORRIDORS

The Algonquin Park Forest Management Unit has had an approved permanent forest management road system strategy since 1981. The road system has been completed to provide for economical transportation of forest products to processing facilities and access for renewal and tending activities.

The Algonquin Park Forest Independent Forest Audit 1997-2002 recommended that the roads strategy be reviewed. An updated *Forest Management Access Roads Strategy for the Algonquin Park Forest* has been developed as an internal policy document by Ontario Parks in partnership with the Algonquin Forestry Authority in order to meet this IFA recommendation.

A major part of the Roads Strategy deals with the division of the management unit into "Forest Access Management Areas" (FAMA's) which are based, to the extent possible, on the existing road system. Primary and/or branch roads form the backbone of access to a FAMA. A number of permanent and temporary breaks in the permanent road system were also mapped in support of the objectives and strategies contained in the Road Strategy. It is recognized that refinements to FAMA boundaries and locations of road breaks may be made based on improved information.

Incorporation of any components of the Roads Strategy into the FMP are subject to review and discussion by the planning team.

Four changes to the Primary Road system are proposed for construction during the term of the FMP. One kilometre wide corridors have been developed as per the FMPM.

ROAD NAME/IDENTIFIER: **Billy Lake Road**

1. Alternative Corridors

This change to the Primary road system to provide access to areas in Preston and Sproule townships (FAM Area 25) currently accessed by the Cameron Lake Road is necessitated by two factors:

1. The replacement of the Annie Bay dam will not provide a bridge over the Opeongo River, eliminating access from the north.
2. The *Forest Management Access Roads Strategy for the Algonquin Park Forest* shows a permanent break in the road system at the south end of the Cameron Lake road where it meets the Opeongo Lake Rd.

Loss of these road connections leaves FAM area 25 without road access. It is proposed that access to this area is from the east, off the Shirley Lake Road via an extension of the Billy Lake Road. Both alternatives include some sections of operational road from past harvest cycles. The new section of road will connect with existing roads at its western end.

2. Environmental Analysis of Alternative Corridors

(a) Alternative corridor number: **Alternative 1**

(b) Description (attach map): This alternative passes south of Booth, Mole and Godda Lakes.

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages:

There will be less new road to be built using this alternative and overall fewer water crossings and wet areas to cross. Less distance inside Brook Trout AOC than Alternative 2. Three bridges to be built vs. four in Alternative 2. There is potential for gravel sources along this route.

This route is closer to Booth Lake, which is a heavily used canoe route. Terrain contains more adverse hills than Alternative 2. Road will be within 35m. of Mole Lake to Raja Lake portage for a considerable distance.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):

Maintenance – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety

- bridge and culvert replacement

Monitoring – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

Access Restrictions – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iii) Estimated costs of construction and use management:

Construction of this alternative would be less costly than Alternative 2.

(a) Alternative corridor number: **Alternative 2**

(b) Description (attach map): This alternative passes north of Boot Lake and south of Raja and Sandmartin Lakes.

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages:

This route is farther away from heavily used canoe routes. Rough terrain, but grades are generally favourable.

This route is within the Brook Trout AOC on Boot and Bailey Lakes for a considerable distance. There is currently no road access near these lakes. The watercrossing at the north end of Boot Lake requires a causeway and 30' bridge. Four bridges are needed for this alternative. Extensive rock blasting will be necessary west of Raja Lake. Gravel sources are very limited.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):

Maintenance – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

Monitoring – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

Access Restrictions – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iii) Estimated costs of construction and use management

Construction of this route would be more costly than Alternative 1 due to longer length, longer gravel haul distances, more bridges and blasting.

3. Summary of Public Comments

Alternative 1:

- Concern regarding noise and physical impacts on Booth/Mole/Boot Lake canoe route and portage.

Alternative 2:

- Concern regarding noise and physical impacts on Raja/Muskrat/Bailey/Boot Lake canoe route.
- Concern regarding native brook trout

Both Alternatives:

- Suggested timing restriction on hauling (last Saturday in June to Labour Day).
- Suggested alternative corridor which AFA/Ontario Parks have previously investigated and determined to be infeasible.
- Ongoing concern that removal of vehicular access over Annie Bay dam affects traditional Algonquin harvesting rights has been expressed in the process related to the dam replacement.

4. Proposed Corridor

(a) Description: Alternative 1

(b) Use management strategy: As above

(c) Rationale: Alternative 1 is proposed as it has the least environmental impact:

- Fewer watercrossings,
- Less distance inside the brook trout AOC and does not provide road access to previously inaccessible lakes.
- Overall shorter road length

5. Summary of Public Comments

Complete this section after Phase I: Stage Three of consultation.

6. Selected Corridor

If the proposed corridor and use management strategy are selected, no further documentation is required.

If the selected corridor and/or use management strategy is different from the proposed corridor and/or use management strategy, complete the applicable requirements of sections 4(a), (b) and (c) for the selected corridor an/or use management strategy.

ROAD NAME/IDENTIFIER: **Manta Lake Road**

1. Alternative Corridors

In the last cycle the area bounded by Burntroot, Manta and Hogan Lakes (FAM Area 32) was accessed via the Hogan Lake Road and a crossing of the Hogan Lake marsh at the south end of Hogan Lake. This crossing no longer exists and for several reasons will not be rebuilt. Primary access to the area must be developed either south from the Narrowbag road or west from the Bisset Creek Road.

2. Environmental Analysis of Alternative Corridors

(a) Alternative corridor number: **Alternative 1 – Manta Lake Road**

(b) Description (attach map): This alternative involves constructing approximately 3km of new road to connect the existing road to the south with the Narrowbag Road to the north

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages: Alternative 1 has a lesser environmental impact with respect to water crossings, as all are over relatively small creeks, and is the most efficient route, minimizing overall trucking related environmental impacts.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):

Maintenance – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

Monitoring – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

Access Restrictions – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iii) Estimated costs of construction and use management:
Alternative 1 would be the most direct route, with the lower construction and haul costs of the two alternatives. No major bridges are required, as all water crossings are over small creeks. This alternative also has the least impact on canoe routes as it only crosses the Manta Lake portage.

(a) Alternative corridor number: **Alternative 2 - Charles Lake Rd Extension**

(b) Description (attach map): This alternative involves the upgrading of approximately 10.4 km of road from the Bissett Creek Road near Charles lake to the Little Madawaska River to the west. A major crossing of the Little Madawaska River north of Hogan Lake would require a bridge with a span of at least 16 metres (50'). Approximately 3.6 km of major upgrades and new road construction would be required between the Little Madawaska river and the existing Manta Lake road to the west.

(c) Environmental analysis (Part A, Section 1.2.7):
(i) Advantages and disadvantages:
Alternative 2 has greater environmental impacts due to much more significant road construction, longer haul routes and a major water crossing.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):
Maintenance – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

Monitoring – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

Access Restrictions – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iv) Estimated costs of construction and use management

Alternative 2 would result in significantly higher construction costs, approximately $250,000 above Alternative 1. Alternative 2 also results in higher hauling costs due to the less direct route. Alternative 2 is also less desirable from a social perspective as the route necessitates the crossing of the canoe route on the Little Madawaska River.

3. Summary of Public Comments

- Alternative 2 has greater impact on canoe routes.

4. Proposed Corridor

Complete this section prior to Phase I: Stage Three of consultation.

(a) Description : Alternative 1 – Manta Lake Rd
(b) Use management strategy: As above
(c) Rationale: Alternative 1 is proposed:
- Less impact on recreational values
- Eliminates the need for a major watercrossing.

5. Summary of Public Comments

Complete this section after Phase I: Stage Three of consultation.

6. Selected Corridor

If the proposed corridor and use management strategy are selected, no further documentation is required.

If the selected corridor and/or use management strategy is different from the proposed corridor and/or use management strategy, complete the applicable requirements of sections 4(a), (b) and (c) for the selected corridor an/or use management strategy.

ROAD NAME/IDENTIFIER: <u>Three Mile Lake Road</u>

1. Alternative Corridors

In the last cycle the Three Mile Lake Road ran down the west side of Three Mile Lake, at some points along the shore. Access to the area south of Three Mile Lake (currently designated as FAM Area 2 or 3) was via this road. The road is currently not driveable and options are being looked at to avoid rebuilding the road along the shoreline of Three Mile Lake.

2. Environmental Analysis of Alternative Corridors

(a) Alternative corridor number: **Alternative 1 – Original route**

(b) Description (attach map): The original route used in the previous harvest cycle. The current road location is close to Three Mile Lake, often within 500m.

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages:

Alternative 1 has disadvantages associated with being located close to Three Mile Lake, but would require the least use of aggregate and construction related disturbance, since the entire length would be reconstructed upon the footprint of the existing road. It also has the social disadvantage of using the portage between Manitou Lake and Three Mile Lake as the road for approximately 1 km.

(iii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):

<u>Maintenance</u> – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

<u>Monitoring</u> – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

<u>Access Restrictions</u> – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iv) Estimated costs of construction and use management:
Alternative 1 would result in road construction costs approximately 13 to18 percent less than the other alternatives.

(a) Alternative corridor number: **Alternative 2- Three Mile Lake Bypass**

(b) Description (attach map): The new proposed location for Three Mile Lake Road with three new bypass sections located outside the 2005 FMP Brook Trout AOC on Three Mile Lake. A total of approximately 9 km of new road construction would be required to locate the road further from the lake, in addition to the use of sections of rebuilt road from the previous harvest cycle.

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages:
Alternative 2 is approximately 1 km shorter than Alternative 1, resulting in lesser environmental impacts related to trucking (noise, wildlife collisions, air pollution). Alternative 2 also has the advantage of avoiding five small water crossings associated with Alternative 1, south of Three Mile Lake.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):
Maintenance – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

Monitoring – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

Access Restrictions – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iii) Estimated costs of construction and use management:
Alternative 2 - would result in similar construction costs to Alternative 3, but would result in slightly higher trucking costs due to the longer haul distance.

(a) Alternative corridor number: **Alternative 3- Totem Lake Road**

(b) Description (attach map): Alternative 3 would involve the construction of approximately 6.3 km of new road on the east side of Three Mile Lake, linking the Maple Lake road with the southern portion of the existing Three Mile Lake road.

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages:
Alternative 3 is approximately 1 km shorter than Alternative 2, and 2.5 km shorter than Alternative 1, resulting in lesser environmental impacts related to trucking (noise, wildlife collisions, air pollution). This alternative has the social advantage of avoiding the crossing of the portage between Kawa and Upper Kawa lakes, but does require the crossing of the low use portage between Upper Kawa and Totem lakes.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):
Maintenance – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

Monitoring – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

Access Restrictions – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iii) Estimated costs of construction and use management:
Alternative 3 would result in the lowest overall haul costs and would have similar construction costs to Alternative 2.

3. Summary of Public Comments

Alternative 1:

- Concern regarding impact of road on canoe route in Three Mile, Kawa and Upper Kawa Lakes.

Alternative 2:

- Concern regarding impact of road on portages (Sinclair-Kawa ; Manitou-Three Mile).

All Alternatives:

- Suggestion that subsequent branch road planning consider breaks at canoe routes/portages.

4. Proposed Corridor

(a) Description: Alternative 3 – Totem Lake Rd.
(b) Use management strategy: As above
(c) Rationale: Alternative 3 is proposed:

- It moves the primary road away from Three Mile Lake and associated canoe routes.
- Overall shorter length of road.

5. Summary of Public Comments

Complete this section after Phase I: Stage Three of consultation.

6. Selected Corridor

If the proposed corridor and use management strategy are selected, no further documentation is required.

If the selected corridor and/or use management strategy is different from the proposed corridor and/or use management strategy, complete the applicable requirements of sections 4(a), (b) and (c) for the selected corridor an/or use management strategy.

ROAD NAME/IDENTIFIER: **<u>Thompson Lake Road</u>**

1. Alternative Corridors

The Thompson Lake Road is existing, but not drivable. Options for accessing FAM area 5 are being investigated.

2. Environmental Analysis of Alternative Corridors

(a) Alternative corridor number: **Alternative 1 – Original Route**

(b) Description (attach map): Alternative 1 is the original route used in the previous harvest cycle. This alternative would require the rebuilding of approximately 4.1 km of old road outside Algonquin park, from the Daventry Road to the park boundary near Thompson Lake, and another 1 km inside the park, with the remainder of the road inside the park shared with alternative 2. This alternative would require a new bridge with a span of approximately 10 metres (30') over Pautois Creek just off of Daventry Road at km 8, and a new bridge with span of approximately 14 metres (40') between Thompson and Little Thompson Lakes.

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages: Alternative 1 results in the shortest haul distance, which reduces trucking related environmental impacts, but requires more road construction work (and related environmental disturbance) than alternative 2. Alternative 1 requires the construction of two significant permanent bridges, which is the most significant environmental impact of the three alternatives considered.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):

<u>Maintenance</u> – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

<u>Monitoring</u> – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

<u>Access Restrictions</u> – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iii) Estimated costs of construction and use management:
Due to the length of road to upgrade and the two large bridges required, the construction of Alternative 1 would be 10% to 80% more costly than alternative 2. The wide range in cost difference is related to the uncertainty of adjacent work that may be undertaken by operators on the Nipissing Forest.

(a) Alternative corridor number: **Alternative 2- Thompson Lake Bypass-North**

(b) Description (attach map): Alternative 2 would require a new section of road connecting the original route inside the park with the Daventry Road directly to the East. This alternative would avoid the need for the two significant permanent bridges required for Alternative 1. In order to harvest the area to the north of Little Thompson Lake, a portable bridge would be required between Thompson Lake and Little Thompson Lake, or skid trails could be used to cross the park boundary from the north, if work on the adjacent Nipissing Forest permitted access to that area.

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages: Compared to Alternative 1, this alternative would have less environmental impact as there are no major permanent bridges required, but would add approximately 4km to the distance to be travelled by log trucks.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) – (e)):

Maintenance – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

Monitoring – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

Access Restrictions – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iii) Estimated costs of construction and use management:
Alternative 2 is the least costly alternative to construct, but would result in slightly higher wood hauling costs due to the increase in total trucking distance compared to Alternative 1.

(a) Alternative corridor number: **Alternative 3 – Thompson Lake Bypass - Sou**th

(b) Description (attach map): Alternative 3 is the construction of approximately 10 km of new and existing road, linking the Daventry road south of Brain lake with the operating units to the northwest by following a route entirely within Algonquin Park. In order to harvest the area to the north of Little Thompson Lake, a portable bridge would be required between Thompson Lake and Little Thompson Lake, or skid trails could be used to cross the park boundary from the north, if work on the adjacent Nipissing Forest permitted access to that area.

(c) Environmental analysis (Part A, Section 1.2.7):

(i) Advantages and disadvantages: This alternative would require a new bridge with a span of approximately 10 metres (30') over Cauchon Creek, as well as several culverts over smaller creeks. Compared to Alternative 2, the indirect route created by this alternative would require3 km of additional road construction and would add 12 km to the log haul route. The combination of water crossings, road construction and additional trucking required by this alternative contribute to a significantly higher environmental impact than the other two alternatives.

(ii) Use management strategy (Part A, Section 1.3.6.6, items (a) –(e)):

Maintenance – General road maintenance will consist of the following activities:

- road base improvements – gravelling and grading, ditching
- repair of washouts
- clearing of obstacles from right-of-way
- brushing along roadsides, around signs, line of sight etc.
- snowplowing and sanding
- dust control
- signage and safety structure repairs
- culvert repairs and cleaning
- minor bridge work to preserve structural integrity, serviceability and safety
- bridge and culvert replacement

Monitoring – roads and water crossings will be monitored annually by the Algonquin Forestry Authority.

Access Restrictions – As is the case with most interior roads in Algonquin Park, this road is closed to the public.

Road Responsibility Transfer – As it is anticipated that this road will be used by the forest industry for the next 20 years there are no plans to transfer responsibility.

(iii) Estimated costs of construction and use management:
Construction of this alternative would cost two to three times more than the others, and would result in additional log hauling costs of $165,000 and $120,000 for Alternatives 1 and 2 respectively.

3. Summary of Public Comments

Alternative 1:

- Concern regarding watercrossings and access

Alternative 2 :

- Supportive of this option

Alternative 3:

- Concern regarding increased use of Daventry Road and impact on Brain Lake canoe route.

4. Proposed Corridor

(a) Description: Alternative 1
(b) Use management strategy: As above
(c) Rationale: Alternative 1:

- Uses the park boundary crossing that was used in the last harvest cycle
- Requires the least amount of primary road construction.
- No impact on recreational values.

5. Summary of Public Comments

Complete this section after Phase I: Stage Three of consultation.

6. Selected Corridor

If the proposed corridor and use management strategy are selected, no further documentation is required.

If the selected corridor and/or use management strategy is different from the proposed corridor and/or use management strategy, complete the applicable requirements of sections 4(a), (b) and (c) for the selected corridor an/or use management strategy.