

TECHNICAL MEMORANDUM

Date: December 20, 2012
To: Environment Canada – Denise Fell
Cc: Dan Stamper (CTC)
From: Scott Korpi (ACP)
Subject: Responses to Comments by Environment Canada on EIS and Peregrine Falcon Management Plan

Purpose:

As part of the ongoing environmental assessment process, this document summarizes the comments resulting from the initial review of the revised EIS document and the Peregrine Falcon Management Plan by Environment Canada.

Documents Reviewed:

Ambassador Bridge Enhancement Project revised Environmental Impact Statement (May 2012) prepared by the Canadian Transit Company

Ambassador Bridge Enhancement Project Technical Memorandum (August 2012) prepared by the Canadian Transit Company

Reviewing Departments:

Environment Canada

Comments and Responses:

1. Please provide EC with a clarification of the “enhancements” to the Peregrine nest ledge that are referred to in the EIS. Does this refer to structural changes/additions?

Response: Enhancements would include the addition of or improvement to a nesting box or tray. Potential other improvements include enlarging the area underneath the bridge that is utilized by the falcons, or drainage improvements if found necessary.

2. It should be clearly acknowledged in the EIS (in all references to the approximate nesting period of Peregrine Falcon) that Peregrine mating/breeding behavior commences in late February, and that the fledgling period commonly extends into mid-August due re-nesting following loss of the first clutch of eggs.

Response: The PFMP has been updated to read, "Mating and breeding behavior commences as early as late February. The fledgling period commonly extends into mid-August due to re-nesting following the loss of the first clutch of eggs." Similar text has been updated throughout the PFMP.

3. It should be noted in the EIS that nest surveys conducted immediately prior to commencement of construction should be conducted within two days prior to commencement of construction.

Response: The PFMP has been updated to read, "If vegetation removals are required between May 1 and July 31, a nest survey will be conducted by a qualified avian biologist within two days prior to commencement of construction to identify and locate active nests of migratory birds and to develop a mitigation plan, if necessary."

4. The precise distance from the Peregrine Falcon nest to the proposed structure should be clearly stated in the PFMP Introduction.

Response: The proposed bridge span is a minimum of approximately 5 meters (17 feet) from the current peregrine falcon nest. The proposed tower pier, where more extensive work will be conducted, is approximately 152 meters (498 feet) from the current falcon nest. These measurements have been added to Section 1.0 of the PFMP. However, if a nesting box is placed on the southeastern side of the bridge as suggested and is successfully used by the birds, the nest will be an additional 17 meters (55 feet) from the proposed work.

5. The proponent should consult with MNR regarding the level and frequency of activity that they believe is most appropriate to acclimatize the Peregrine Falcon to the activities of maintenance personnel.

Response: A meeting was held with Brett Groves with the MNR regarding the PFMP on January 7, 2013. Brett was comfortable with the current wording within the PFMP since the management plan addresses timing of heavier work within the management zones. The level and frequency of activity of maintenance personnel would vary by task and needs and this would be difficult to outline in the management plan.

6. The proponent should consult with MNR regarding the relocation of Peregrine Falcon chicks. The PFMP should summarize communication with named MNR staff, and if moving the chicks is a viable option, a section should be included which outlines all of the necessary steps to safely relocate the chicks, including the acquisition of permits – in particular a provincial Endangered Species Act (ESA) permit.

Response: A meeting was held with Brett Groves with the MNR regarding the PFMP on January 7, 2013. The relocation section was included only to provide guidance in the event the nest and/or hatchlings needs to be relocated for unforeseen reasons. The CTC has no inclination to relocate the hatchlings and doing so will be a last possible resort. To provide additional clarification, Section 7.0 of the Peregrine Falcon Management Plan will be subdivided into two sections. Section 7.1 has been re-titled Nest Mitigation and includes only the discussion on the addition of the next box on the southeastern side of the concrete ledge currently being used. The remainder of the discussion is focused on the potential for nest relocation and has been re-titled Nest/Hatchling Relocation.

Further, language about the need to obtain an ESA permit from the MNR has been added to the new Section 7.2.

7. Monitoring of Peregrine Falcon during construction should be conducted in cooperation with MNR, and a list of experienced individuals likely to be members of the monitoring team should be included in the PFMP.

Response: A meeting was held with Brett Groves with the MNR regarding the PFMP on January 7, 2013. A list of individuals likely to be conducting the monitoring activities was developed in conjunction with the MNR and has been added to the Final PFMP. Potential individuals include, but are not limited to, the following: Mark Nash, David Jolly, Yves Scholten, and/or Dan Werner.

8. Please clarify exactly what is meant by “capture” of Peregrine Falcon, whether MNR is supportive, and, whether ESA permit(s) are required for the activity.

Response: Capture is meant to describe physically containing the bird and removing them from harm. If nest/hatchling relocation is necessary, the chicks would need to be captured prior to the nest relocation. As stated in the PFMP, this would be proposed only as a last possible resort. The person(s) conducting the relocation would be required to have a SARA permit and an ESA permit from the MNR. Any relocation or capture activities would only be done after consultation and approval from the MNR and will only be considered as a last possible resort.

9. Please provide us with additional details on the monitoring at the Ambassador Bridge that was used to develop the 200 m and 400 m Peregrine Falcon buffer zones. How exactly were these distances derived?

Response: The zone boundaries were based on present habitat, past monitoring efforts, the design of the bridge, and the line of sight from the nest site to activity. Detailed observations of the falcons nesting on the Ambassador Bridge can be found through the Canadian Peregrine Foundation as well as other birding sites. These observations, as well as those of internal staff at CTC, were used to help determine the draft management zones for the peregrine falcons. The PFMP has been updated to include this information.

The Restricted Zone includes the nest site and extends 200 m from the nest. The objective of the restricted zone is to minimize activities and limit excessive noise disturbances (10 dBA greater than ambient). This zone is generally considered a high use area for the peregrines for foraging and roosting. No construction staging activities will occur within the Restricted Zone. Construction within the Restricted Zone will be avoided within the nesting season to the extent possible. If avoidance is not possible, the duration of time spent on work activities that must be conducted during the nesting season will be minimized by evaluating cost effective work shift alternatives. Activities that cause excessive noise disturbances (10 dBA greater than ambient), such as pile driving, will be limited in the Restricted Zone during the nesting season (approximately March 1 to July 31, though nesting behavior could begin as early as late February). Should the fledglings leave the nest prior to July 31, limitations will be lifted.

The Sensitive Zone is the area adjacent to the Restricted Zone and extends approximately 400 m away from the nest. The Sensitive Zone is generally considered a moderate use area for the peregrines. Human activities in this zone have less potential to cause noise disturbance because of the distance to the nest site. Activities will be minimized within the Sensitive Zone during the nesting season. For example, staging areas will be located outside of the Sensitive Zone wherever possible. Work associated with the plaza and roadway improvements are outside of the Sensitive Zone. The number of separate activities within a short time period (i.e one week) within the Sensitive or Restricted Zone will be minimized during the nesting season.

A statement has been added to the PFMP that states the boundaries of these zones are subject to change once construction begins based on the behavior of birds. The zones were set up prior to

construction in order to help lay out areas considered safe for staging and to help determine the sequence of construction.

10. The proponent should also contact MNR prior to conducting unavoidable work with the potential to adversely impact nesting falcons during the nesting season.

Response: The PFMP has been updated to include coordination with MNR prior to conducting unavoidable work with the potential to adversely impact nesting falcons during the nesting season.

11. The proponent should contact Katherine Jonge, SAR Biologist with the MNR Aylmer District Office to ensure they are following all provincial guidance, regulations and legal requirements with respect to Peregrine Falcon.

12. **Response: A meeting was held with Brett Groves with the MNR regarding the PFMP on January 7, 2013. Brett has reviewed the PFMP and feels it follows all applicable provincial guidance, regulations and legal requirements with respect to Peregrine Falcon. Further, per Brett Groves, the MNR is planning to down-list the peregrine falcon from threatened to Special Concern as early as April, 2013.**

13. Sec. 7.4.6.4, p. 202, para. 1 should read, "Occasional collisions with the bridge structure and resultant mortality of some avian species will occur.", since it is a virtual certainty that some birds will strike the bridge. It is therefore incorrect to state that, "No impacts to migratory birds are anticipated once the project is in operation." (Sec. 7.4.6, p. 194, para. 5). It should be specifically stated that bird mortality as a result of collisions with the bridge will be a residual effect after mitigation.

Response: Scott – We agree that bird collisions with the bridge are possible, though unlikely. Therefore, minimal impacts to migratory birds could occur.

14. It is stated that, "The new bridge will be 55 metres (181 feet) taller than the existing bridge at the location of the support towers.", and, "... the proposed Project will not significantly increase avian mortalities from collisions." (Sec. 7.4.6.4, p. 202, para. 1) when compared to the existing Ambassador Bridge. EC agrees with this statement provided bird-friendly lighting is incorporated into the bridge design (as proposed) and we believe the conclusion is still valid if both towers are increased in height by an additional 12.57 metres to accommodate design changes to the US landing site. This recent proposal to increase the bridge height should be noted in the EIS and the Peregrine Falcon Management Plan (PFMP).

Response: A detailed discussion of the potential impacts to the proposed taller tower were discussed in the submitted Technical Memorandum dated August 13, 2012. This included a discussion of the potential impacts to birds and bird collisions and is meant to supplement the EIS, per direction given to us by Transport Canada. The height of the tower has been updated in the PFMP.

15. It is noted that "Work outside of the nesting season that does not alter the known nest ledge" (Sec. 7.9.2, p. 258, point 10, last bullet) may be conducted at any time of year without restrictions. This seems appropriate, but it is unclear what the proponent means by "other than enhancements". EC defines "enhancements", as structural changes/additions, but the proponent's definition should be clarified.

Response: Enhancements would include the addition or improvement of a nesting box or tray. Potential other improvements include enlarging the area underneath the bridge that is utilized by the falcons, or drainage improvements if found necessary.

16. In numerous places in the Environmental Impact Statement (EIS), the nesting season for Peregrine Falcon is described as occurring from "approximately March 15 to July 31st" (Sec. 5.7.1, p. 66, para. 6; Sec. 5.8.1, p.

68, para.1; Sec. 5.18, Table 5.19, point 10, p. 101; Sec. 7.4.6, p. 194, para. 3; Sec. 7.4.6, p. 196, para. 3; Sec. 7.9.2, p. 257, para. 2). While this is generally the date range for nesting, it should be noted, as is stated in the PFMP (Sec. 4.2, p. 6, Table 1), that during mild winters, mating/breeding behavior commences in late February. Furthermore, it should be stated in all references in the EIS to the approximate nesting period, that re-nesting following loss of the first clutch of eggs is common (PFMP Sec. 4.0, p. 5, para. 1), and this can extend the fledgling period into mid-August (PFMP Sec. 4.2, p. 6, Table1).

Response: The PFMP has been updated to read, “Mating and breeding behavior commences as early as late February. The fledgling period commonly extends into mid-August due to re-nesting following the loss of the first clutch of eggs.” Similar text has been updated throughout the PFMP.

17. There are many references in the EIS to the possible need for vegetation clearing during the nesting season (Sec. 5.19 Summary of Mitigation and Commitments Table, point 10, p. 100; Sec. 5.7.1, p. 67, para. 1; Sec. 5.8.1, p. 68, para. 2; Sec. 7.4.6, p. 196, para. 3; Sec. 7.4.6.4, p. 200, para. 4; Sec. 7.4.6.4, p. 203, para. 2; Sec. 7.9.2, p. 257, para. 4), and there is also mention of this in the Comment/Response Table (356 and #89). It is stated that, “If vegetation removals are required between May 1 and July 31, a nest survey will be conducted by a qualified avian biologist immediately prior to commencement of construction to identify and locate active nests of migratory birds and to develop a mitigation plan, if necessary.” It should be noted in these references that “immediately prior” means within two days.

Response: The PFMP has been updated to read, “If vegetation removals are required between May 1 and July 31, a nest survey will be conducted by a qualified avian biologist within two days prior to commencement of construction to identify and locate active nests of migratory birds and to develop a mitigation plan, if necessary.”

18. There are many references to the proponent providing an experienced monitoring team for the peregrine falcon nest to determine if construction of other elements of the project is affecting the nest and to determine when the birds “flee the nest.” (Sec. 5.7.1, p. 66, para. 6; Sec. 5.8.1, p. 68, para. 2; Sec. 5.18, Table 5.19, point 10, p. 101; Sec. 7.4.6, p. 194, para. 4; Sec. 7.4.6, p. 196, para. 3; Sec. 7.4.6.4, p. 203, para. 2; Sec. 7.9.2, p. 257, para. 4). These references should state that the experienced monitoring team will determine when the young birds have fledged, that is, when they have matured and flown from the nest.

Response: The PFMP has been updated to read, “CTC will provide an experienced monitoring team for the peregrine falcon nest and other nesting birds to determine if construction of other elements of the project are affecting the nest and to determine when the young birds have fledged the nest.”

19. The PFMP states, “The new six-lane cable-stayed bridge will be located approximately 30.5 metres (100 feet) west of the centre line of the existing Ambassador Bridge to the centre line of the proposed bridge which is referred to as the replacement span.” (Sec. 3.0, p. 2, para. 3). This description is misleading, since as is noted in the Comment/Response Table (#57 and #96), “The location of the proposed bridge is approximately only 20 feet from the existing nest.” The very close proximity of the Peregrine Falcon nest to the proposed structure is the reason EC recommended that a PFMP be prepared, so the actual distance should be clearly stated in the PFMP Introduction (Sec. 1.0).

Response: The proposed bridge span is a minimum of approximately 5 meters (17 feet) from the current peregrine falcon nest. The proposed tower pier, where more extensive work will be conducted, is approximately 152 meters (498 feet) from the current falcon nest. These measurements have been added to Section 1.0 of the PFMP. However, if a nesting box is placed on the southeastern side of the bridge as suggested and is successfully used by the birds, the nest will be an additional 17 meters (55 feet) from the proposed work.

Section 1.0 of the PFMP has been updated to read, “Currently the peregrine falcon nest is approximately 5 meters (17 feet) from the proposed bridge span and approximately 152 meters (498 feet) from the proposed tower pier location.”

20. It is stated that, “It is recommended that bridge personnel who regularly work on the bridge should appear on the structure as frequently as possible to enable the falcons to recognize them.” (Sec. 7.1, p. 8, para. 2). This statement should be reviewed after the proponent receives input from MNR as to level and frequency of activity that they believe is most appropriate to acclimatize the birds to the activities of maintenance personnel.

Response: Brett Groves of MNR felt comfortable with the wording within the PFMP as it is currently stated since the management plan addresses timing of heavier work within the management zones. The level and frequency of activity of maintenance personnel would vary by task and needs and this would be difficult to outline in the management plan.

21. With regard to the relocation of chicks from the existing nest site (i.e., SW side of pier) to the nesting box (SE side of pier) it is stated that, “Chicks cannot be moved until at least twelve (12) days after hatching. Any possible relocation may occur after the 12 day period has passed and can only occur under the discretion of an MNR biologist that has the training and experience in relocating falcons.” (Sec. 7.1, p. 8, para. 4). EC is not convinced that MNR would agree to the relocation of chicks. The PFMP should summarize communication with named MNR staff, and if moving the chicks is a viable option, a section should be included which outlines all of the necessary steps to safely relocate the chicks, including the acquisition of permits – in particular a provincial Endangered Species Act (ESA) permit.

Response: A meeting was held with Brett Groves with the MNR regarding the PFMP on January 7, 2013. The relocation section was included only to provide guidance in the event the nest and/or hatchlings needs to be relocated for unforeseen reasons. The CTC has no inclination to relocate the hatchlings and doing so will be a last possible resort. To provide additional clarification, Section 7.0 of the Peregrine Falcon Management Plan will be subdivided into two sections. Section 7.1 has been re-titled Nest Mitigation and includes only the discussion on the addition of the next box on the southeastern side of the concrete ledge currently being used. The remainder of the discussion is focused on the potential for nest relocation and has been re-titled Nest/Hatchling Relocation.

Further, language about the need to obtain an ESA permit from the MNR has been added to the new Section 7.2.

22. It is stated that, “If activities must occur within the nesting season, an experience(d) monitoring team will evaluate if the activity is likely to adversely affect the nesting peregrines and may be required to monitor the nest during the activity.” (Sec. 8.0, p. 9, para. 1). Such monitoring should be conducted in cooperation with MNR, and a list of experienced individuals likely to be members of the monitoring team should be included in the PFMP.

Response: A meeting was held with Brett Groves with the MNR regarding the PFMP on January 7, 2013. A list of individuals likely to be conducting the monitoring activities was developed in conjunction with the MNR and has been added to the Final PFMP. Potential individuals include, but are not limited to, the following: Mark Nash, David Jolly, Yves Scholten, and/or Dan Werner.

23. There are several vague references to Peregrine Falcon “capture” in the PFMP (Sec. 8.1, p. 9, point 4; Sec. 8.2, p. 11, point 4). It should be clear: (1) exactly what is meant by capture, (2) whether MNR is supportive, and, (3) whether permit(s) are required for the activity.

Response: Capture is meant to describe physically containing the bird to remove them from harm. This definition has been added to the PFMP. A meeting was held with Brett Groves with the MNR regarding the PFMP on January 7, 2013. The relocation section was included only to provide guidance in the event the nest and/or hatchlings needs to be relocated for unforeseen reasons. The CTC has no inclination to relocate the hatchlings and doing so will be a last possible resort. Brett agreed that this section should be included in the PFMP in the event that capture and relocation of the hatchlings is deemed necessary. To provide additional clarification, Section 7.0 of the Peregrine Falcon Management Plan will be subdivided into two sections. Section 7.1 has been re-titled Nest Mitigation and includes only the discussion on the addition of the next box on the southeastern side of the concrete ledge currently being used. The remainder of the discussion is focused on the potential for nest relocation and has been re-titled Nest/Hatchling Relocation.

Further, language about the need to obtain an ESA permit from the MNR has been added to the new Section 7.2.

24. There are several references to “buffer zones” (Sec. 8.1, p. 9, point 4), more specifically a “Restricted Zone” which includes the nest site and extends 200 m from the nest (Sec. 8.2, p. 10, para. 3), and a “Sensitive Zone” which is the area adjacent to the Restricted Zone and extends approximately 400 m away from the nest (Sec. 8.2, p. 10, para. 4). EC questioned these buffer zone distances in previous comments but the PFMP still does not provide a detailed explanation as to how they were derived. It is stated that, “Management zones have been determined from past monitoring efforts, the design of the bridge, and the line of sight from the nest site to the activity.” (Sec. 8.2, p. 10, para. 2). As was noted by EC using the example of the Burlington Lift Bridge Management Plan, Peregrine Falcon nest sensitivity is usually addressed according to the specific circumstances of the project and the resultant behavior of the birds during the various stages of nesting. It would be helpful to have some additional details on the monitoring at the Ambassador Bridge that was used to develop the 200 m and 400 m zones.

Response: The zone boundaries were based on present habitat, past monitoring efforts, the design of the bridge, and the line of sight from the nest site to activity. Detailed observations of the falcons nesting on the Ambassador Bridge can be found through the Canadian Peregrine Foundation as well as other birding sites. These observations, as well as those of internal staff at CTC, were used to help determine the draft management zones for the peregrine falcons. The PFMP has been updated to include this information.

The Restricted Zone includes the nest site and extends 200 m from the nest. The objective of the restricted zone is to minimize activities and limit excessive noise disturbances (10 dBA greater than ambient). This zone is generally considered a high use area for the peregrines for foraging and roosting. No construction staging activities will occur within the Restricted Zone. Construction within the Restricted Zone will be avoided within the nesting season to the extent possible. If avoidance is not possible, the duration of time spent on work activities that must be conducted during the nesting season will be minimized by evaluating cost effective work shift alternatives. Activities that cause excessive noise disturbances (10 dBA greater than ambient), such as pile driving, will be limited in the Restricted Zone during the nesting season (approximately March 1 to July 31, though nesting behavior could begin as early as late February). Should the fledglings leave the nest prior to July 31, limitations will be lifted.

The Sensitive Zone is the area adjacent to the Restricted Zone and extends approximately 400 m away from the nest. The Sensitive Zone is generally considered a moderate use area for the peregrines. Human activities in this zone have less potential to cause noise disturbance because of the distance to the nest site. Activities will be minimized within the Sensitive Zone during the nesting season. For example, staging areas will be located outside of the Sensitive Zone wherever possible. Work associated with the plaza and roadway improvements are outside of the Sensitive Zone. The number of separate activities within a short time period (i.e one week) within the Sensitive or Restricted Zone will be minimized during the nesting season.

A statement has been added to the PFMP that states the boundaries of these zones are subject to change once construction begins based on the behavior of birds. The zones were set up prior to construction in order to help lay out areas considered safe for staging and to help determine the sequence of construction.

25. The PFMP notes that it serves as a protocol to facilitate communication between the proponent, EC-CWS and MNR (Sec. 1.0, p. 1, para. 3), yet as far as EC can determine, there has been little to no communication between the proponent and MNR. It is likely that the provincial ESA applies to this project, so EC recommends that the proponent contact Katherine Jonge, SAR Biologist with the MNR Aylmer District Office to ensure they are following all provincial guidance, regulations and legal requirements with respect to Peregrine Falcon.

Response: A meeting was held with Brett Groves with the MNR regarding the PFMP on January 7, 2013. Mr. Groves has reviewed the PFMP and feels it follows all applicable provincial guidance, regulations and legal requirements with respect to Peregrine Falcon. Further, per Brett Groves, the MNR is planning to down-list the peregrine falcon from threatened to Special Concern as early as April, 2013.

26. It is stated that, "If an activity has the potential to adversely impact nesting falcons and cannot be avoided during the nesting season, CTC will contact EC prior to conducting work (or as soon as possible for emergency work)." (Sec. 8.2, point 2, p. 10). The proponent should also contact MNR prior to conducting work. It is further stated that, "CTC will coordinate with EC, MNR and/or experts to evaluate potential impacts and provide additional management recommendations for implementation." (Sec. 8.2, point 2, p. 10). It should be noted that there may be permit/legal issues (as above) that prevent the proponent from being able consult experts other than MNR where Peregrine Falcon may be adversely affected.

Response: The PFMP has been updated to read, "If an activity has the potential to adversely impact nesting falcons and cannot be avoided during the nesting season, CTC will contact EC and/or MNR prior to conducting work (or as soon as possible for emergency work). CTC will coordinate with EC, MNR and experts, as necessary, to evaluate potential impacts and provide additional management recommendations for implementation. Permits may be required and will be determined in coordination with EC and/or MNR."

27. As in the case of the EIS, it is noted in the PFMP that "Work outside of the nesting season that does not alter the known nest ledge" (Sec. 8.2, p. 11, para. 9, bullet 9) may be conducted at any time of year without restrictions. Again, it is unclear what the proponent means by "other than enhancements", and as noted above, the proponent's definition should be clarified.

Response: Enhancements would include the addition of or improvement to a nesting box or tray. Potential other improvements include enlarging the area underneath the bridge that is utilized by the falcons, or drainage improvements if found necessary.

28. In Section 6.0 (p. 7), the last sentence in the 3rd paragraph does not make sense.

Response: Sentence has been updated to read, “Essential maintenance, inspection and repairs must be undertaken to ensure the safe and smooth operation of the bridge as it will serve as a redundant resource for this border crossing.”

29. The “Contact Information” section (p. 12) shows the Niagara MNR contact for the Burlington Lift Bridge Management Plan; this should be changed to the contact information of Katharine Jonge, SAR Biologist with the MNR Aylmer District Office (as above).

Response: Contact information has been updated and Brett Groves has been added as a secondary contact.