Comments Received on the Western Road, Philip Aziz and Sarnia Road Improvemets Environmental Impact Study

Item #	Recommendation	AECOM Responses (January 23, 2023)
1	If in water work is required, searches through the substrate as advised by Scott Gillingwater MUST take place before equipment is used.	The following mitigation will be added to Table 7.1 Item 2.1.10: "- Searches for turtles prior to any in-water works will be completed in conjunction with the fish and mussel relocation in consultation with UTRCA." Specific methodology has been excluded from the public version of report to protect species at risk that are known to occur within the work area based on consultation with Scott Gillingwater that was undertaken in August 6, 2021 and August 18, 2021. The specifics and details of the sensitive information provided by Scott Gillingwater have not been documented or reproduced in this public report; however, AECOM is aware of the SAR present and the appropriate mitigation and consultation that will need to be undertaken during the detail design with UTRCA (specifically Scott Gillingwater).
2	Before detail design is finalized, confirmation of successful mussel relocation be required. Detail design should include consideration of monitoring results from the upstream water pipe removal project.	Mussel relocations are an accepted practice designed to "collect and move ALL unionids in a cost-effective manner that will result in high survival of both transplanted individuals and the resident fauna at the recipient site (Havlik 1997)" (Mackie, Morris, & Ming, 2008) the methods laid out in the *Protocol for the Detection and Relocation of Freshwater Mussel Species at Risk in Ontario - Great Lakes Area (OGLA)* (Mackie, Morris, & Ming, 2008) will be used in the development of the relocation plan. As mentioned already in Table 7-1, item 2.1.3. "Post-relocation monitoring of SAR mussel survival is a mandatory requirement as per DFO protocols for SAR mussel relocation month, one year, and two years following relocation of any SAR mussels". Commitment for Post-relocation monitoring is already included in the report.
3	Scott Gillingwater be included in the development of the detailed Environmental	The following commitment will be added to the report: - Consultation with UTRCA, DFO and MECP will be undertaken during detail design to determine/develop appropriate avoidance, mitigation and compensation measures to avoid or minimize effects on all affected SAR.
4	The EMP include the requirement to conduct pre-construction amphibian and	Under Section 9, additional field studies include an updated SAR habitat screening, and SAR presence absence surveys including those for visual encounter surveys for reptiles and anuran calling surveys.
5	Scott Gillingwater be retained to do the SAR training for construction staff and be retained to be	The following commitment will be added to the EIS report: - Consultation with UTRCA, DFO and MECP will be undertaken during detail design to determine/develop appropriate avoidance and mitigation measures to avoid or minimize effects on all affected SAR. On-site SAR training of construction crew is a industry standard Best Management Practice and will be administered by a qualified Biologist/Ecologist.

6	Before dust suppression measures are used, the site supervisor must consider any contamination it might cause to the river or to	Dust suppression is a standard Best Management Practice associated with erosion and sediment control practices on construction projects. A commitment will be added to the EIS report Table 7-1 Item 3.1.4 to restrict dust suppression to the application of water to the site (vs use of calcium chloride or magnesium chloride on the site). The goal of dust suppression is to prevent airborne material without negatively impacting work conditions and should not result in run-off contaminating the river when paired with appropriate ESC. - To protect sensitive environmental receivers dust suppression methods are limited to the application of water.
7	ECAC also notes there is nothing in the document about reducing or limiting contaminants with this	Suitable permanent LID measures are being considered in coordination with stormwater design. Appropriate measures will be considered and implemented during Detail Design. Future developments efforts related to Western University are independent stormwater reviews, and reducing contaminants need to be considered as part of those reviews. Overlapping considerations can further be reviewed as they become known.
8	Detail design include measures to reduce contaminants from the	The Detail Design work will include these measures.
9	Daily or every other day inspection of ESC measures	Under Table 7-1 Item 3.1.3 "All fencing (silt, tree and wildlife exclusion) should be monitored during construction on a weekly basis and 24 hours after significant rain or wind events to ensure that all fencing is intact and functioning properly."
10	*Pipe Capping* The issue of habitat change once the old pipe is capped (outflow changes resulting in the possibility of less sediment deposited) is a potential issue, though the island/rocky habitat created in the area, most	Positioning of the new outfall has been selected based on the advice of Scott Gillingwater to preserve the existing area of deposition. The requirement for a Fluvial Assessment is documented in Table 7-1 Item 2.1.2 and included as an additional field study under conclusions and recommendations to address concerns around the loss of this area.
11	If at detail design, it is determined that in water work is required, Scott	AECOM is aware of the SAR present and the appropriate mitigation and consultation that will need to be undertaken during the detail design with UTRCA (specifically Scott Gillingwater) as noted in responses above. Section 8 outlines the anticipated Permits and Approvals required to complete the work including permits at a Federal, Provincial, Municipal and Conservation Authority level.
12	When drafted, the detailed description of fencing for this species (Queensnake)	As indicated in Table 7-1, item 2.1.10 "Installation of exclusion fencing around upland work area and suitable stockpiled material prior to April 1 will prevent turtles from entering the work area following the MNRF's Reptile and Amphibian Fencing BMP (2020)." MNRF's protocol is a standard industry best management practice and includes specific fencing description for turtles and queensnake.

13	The information here should not be focussed solely on nesting since it is the shallow, soft-bottomed habitat that is used for various life stages of Spiny Softshell, Snapping Turtle and Map Turtle. The	Specific methodology and species occurrence has been excluded from the public version of report to protect species at risk that are known to occur within the Study Area. The specifics and details of the sensitive information provided by Scott Gillingwater have not been documented or reproduced in this public report; however, AECOM is aware of the SAR present and the appropriate mitigation and consultation that will need to be undertaken during the detail design with UTRCA (specifically Scott Gillingwater).
14	A fluvial geomorphological assessment with a review	The requirement for a Fluvial Assessment is documented in Table 7-1 Item 2.1.2 and included as an additional field study under conclusions and recommendations.
15	Before any in water work take place, Scott Gillingwater must be consulted as to best practices for this section of the river.	The following mitigation will be added to Table 7.1 Item 2.1.10: "- Searches for turtles prior to any in-water works will be completed in conjunction with the fish and mussel relocation in consultation with UTRCA." Specific methodology has been excluded form public version of report to protect species at risk that are known to occur within the work area based on consultation with Scott Gillingwater that was undertaken in August 6, 2021 and August 18, 2021. The specifics and details of the sensitive information provided by Scott Gillingwater have not been documented or reproduced in this public report; however, AECOM is aware of the SAR present and the appropriate mitigation and consultation that will need to be undertaken during the detail design with UTRCA (specifically Scott Gillingwater).
16	Change 2.1.2 Loss of Turtle Nesting Areas (including habitat for turtle SOCC and SAR) in the net impacts table to MEDIUM from	LOW Net Effect includes "indicates loss of habitat possessing limited potential habitat value, or loss of a portion of habitat, which will not result in long-term impact to the remaining habitat, or reduction in associated key ecological functions." Siting of the new outfall has been considered to avoid key turtle habitat functions per the guidance of Scott Gillingwater and AECOM feels the Avoidance, Mitigation and Compensation measures will result in LOW Net Effects. Further consideration of Avoidance, Mitigation and Compensation measures will be considered during the detail design and EIS to minimize impacts on sensitive species.
17	The EMP include a compensation plan for any loss of habitat (assuming	Required compensation will be developed during Detail Design and permitting specific to the target species and the construction disturbance area and documented in the EMP.
18	The EMP include detailed compensation plans for loss	Section 7.3 notes that "The amount of compensation planting and at what ratio should be confirmed with the City of London once the CDA is further refined during the detail design phase." Detailed compensation will be developed during Detail Design.
19	The table in 2.1.3, *Harmful Alteration, Disruption, or Destruction of Fish Habitat, Death of Fish, and alteration of Aquatic Species at Risk Individuals or Habitat* be changed to include "medium net	Mussel relocations are an accepted practice designed to "collect and move ALL unionids in a cost-effective manner that will result in high survival of both transplanted individuals and the resident fauna at the recipient site (Havlik 1997)" (Mackie, Morris, & Ming, 2008) the methods laid out in the *Protocol for the Detection and Relocation of Freshwater Mussel Species at Risk in Ontario - Great Lakes Area (OGLA).* Specific reference to the standard protocol will be added to Table 7-1 Item 2.1.3 but net effects will be kept at Low.

20	The Invasive Species Plan to be included at detail design must also include an	The Invasive Species Plan will be prepared following the guidance and objectives of the City of London Invasive Plant Management Strategy (2017) which will be added to Table 7-1 Item 3.1.6.
21	The project includes widening of roads in an area very close to the new Wampum Learning Center,	To date in our discussions with Western University, this Centre has not been mentioned. Notwithstanding that the Centre will not likely impact the work undertaken as part of this Environmental Assessment, further discussion and review can be done at the Detail Design stage.
22	Wording be changed	Language is appropriate for an Environmental Asessment level report where Detail Design has not been completed to inform specific impacts. Qualifying language (including may or likely) is used for the concept design during the EA phase and will be refined during detail design as part of the EMP.
23	Appendix 1: Missing/Incorrect Species Occurrence Data	Developing these reports will often occur over multiple years and while a more recent record may exist now, it was likely that it was not available at the time of the background review. As is standard practice (noted in Section 9) to address the changing status of species and update records, the background review will be updated again at the beginning of detail design, which will capture any records of new species since the background review completed for the EA was completed in order to inform additional studies and/or permits that may be required during detail design. Clarification will be added to Sections 3.6 and 3.7 to note that bird occurrence records outside of the Breeding Bird survey window of May 28 to July 7 will be noted but not further discussed as SAR birds receive habitat protection for their nesting habitat, but typically not overwintering or migration habitat.