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**ENVIRONMENTAL EVALUATION
PICTON TERMINALS
PICTON, ONTARIO**

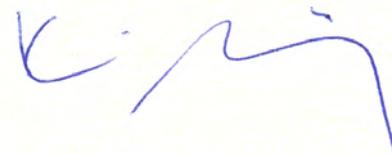
PREPARED FOR:

1213427 ONTARIO CORPORATION AND PICTON TERMINALS LTD.
Scotland Road, R.R. #1
Odessa, ON
K0H 2H0

Attention: Mr. Ben Doornekamp



Dale White, C.E.T.
Project/Office Manager



Kevin Shipley, M.A.Sc., P.Eng., EP(CEA), EP, QP_{RA}
Partner



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1. INTRODUCTION

As requested by Picton Terminals Ltd., XCG Consulting Limited (XCG) prepared this Environmental Evaluation for the Picton Terminals (PT) property located at 24 White Chapel Road in Picton, Ontario.

A Site Plan Control Application and a Zoning By-law Amendment application was filed on behalf of Picton Terminals on November 23, 2018. In a letter dated May 9, 2019, Prince Edward County (the County) requested additional information (letter included in Appendix A). An Environmental Evaluation as per Part III, Section 1.2.6 and 1.7.6 of the Official Plan (PEC, 2006) was requested by the County to support the zoning bylaw amendment.

Section 1.2.6 of Part III the Official Plan requires an Environmental Evaluation to be submitted with applications for development on lands on or adjacent to an Environmentally Sensitive Area if deemed required by the County Council or any government agency. Picton Terminals (site) is located adjacent to Picton Bay which is designated as an Environmentally Sensitive Area under the County Official Plan.

Section 1.7.6 of Part III of the Official Plan requires an Environmental Evaluation to be conducted to support development on lands where escarpments have been identified. Escarpments along the shoreline of the subject site are identified in Schedule B of the Official Plan. According to Section 1.7.6 of Part III of the Official Plan, the Environmental Evaluation should generally address the following matters:

- a. sewage disposal facilities/soil depth;
- b. landscaping;
- c. water supply;
- d. building envelopes;
- e. erosion control;
- f. effects on fish and wildlife habitat; and
- g. surface drainage (quantity and quality of water).

This Environmental Evaluation was prepared to support the zoning by-law amendment application as requested by the County.



2. SITE DESCRIPTION

2.1 Property Operations

The Picton Terminals site has operated as a port since approximately 1955 when it was originally used for iron ore shipments. Currently, it is a port and materials handling facility that receives, stores, and ships a number of products including road salt, aggregate, bauxite, and petcoke. The PT port is also proposed to be used in the future to allow cruise ship disembarkation and passenger bus loading.

The subject property is located on the south side of White Chapel Road along the shore of Picton Bay, approximately 2 kilometres north of the Town of Picton. There are several rural residential properties to the northeast, northwest, and southwest of the subject property.

As shown in Figure 1, the main working area of the site where products are delivered and stored prior to shipping off-site is approximately 25 to 30 metres above the average lake level in Picton Bay. A secondary working area is located at the east corner of the site and is situated several metres above the water level. A covered salt storage facility is currently under construction.

As described in the Zoning By-Law Amendment application and Site Plan Control application, the proposed operations at the site consist of continued operation of the port facility for transshipment use, cruise ship docking, and materials open storage. The conceptual site plan for the development is included in Appendix B. The plan identifies the following proposed features: a gatehouse, two floating docks, and dry covered salt storage area. The existing breakwater facility is under construction to expand by approximately 36 metres toward the shoreline conveyor. The two new floating docks, each approximately 36.5 metres in length, will accommodate cruise ships (northern floating dock) and other transshipment activity such as tugboats (southern floating dock).

2.2 Topography/Relief/Land Forms

According to Chapman and Putnam (1966), Picton Terminals is located in the physiographic region described as the Prince Edward Peninsula. The region is a low plateau underlain by Trenton limestone with irregular shoreline dissected by deep valleys. More than half of the region has shallow soils.

The PT site is located on the shore of Picton Bay. Limestone cliffs are situated along the shoreline. The property is accessible from White Chapel Road by land at the west corner of the site and from the water along the east property boundary as shown on Figure 1. Additionally, an aerial elevation plan of the site is included in Appendix C.

The site has two primary elevation levels. The upper level, including the office building, upper materials storage areas, and access areas are at approximately 95 to 100 metres above sea level (masl). The topography of the upper area is fairly flat. The lower level, including former ore processing pit, lower materials storage area, exfiltration area, future covered salt storage area, and the dock are at approximately



83 to 90 masl. An access road descends from the upper to lower level along the eastern portion of the northeastern property boundary.

2.3 Soils

Based on Ministry of the Environment, Conservation and Parks (MECP)¹ well records, the geology of the area is characterized by overburden made up of a variety of materials including sand, clay, shale, silt, limestone, and gravel. The on-site borehole logs characterize on-site soils as topsoil, sand and gravel, and gravel with cobbles or with clay. The overburden ranged in depth from 0 to 4.9 metres below ground surface (bgs) based on the on-site borehole drilling observations. The borehole drilling is documented in the 2017 Annual Monitoring Report (XCG, 2018). The perimeter berms along White Chapel Road and along the northern property boundary are constructed of imported clay. The berms are approximately 20 to 25 metres wide at the base and approximately 10 metres high.

2.4 Surface Water

The Picton Terminals site is located on the north shore of Picton Bay. Picton Bay is a branch of the Bay of Quinte located along the northern shoreline of Lake Ontario. The site has the water frontage of approximately 1.2 kilometres. The docking facilities are along the waterfront on the southeastern edge of the property. The water depth along the shoreline is approximately 7.5 to 8 metres.

The site is located within Intake Protection Zone (IPZ) 3b for Picton's drinking water supply, as designated in the Quinte Region Source Protection Plan as confirmed by Quinte Conservation in a letter dated July 11, 2019. Because this zone is the least vulnerable of all zones for the Town of Picton's drinking water intake, with a vulnerability score of 6, no significant threats can occur, and no Section 59 clearance notice for source water protection is required.

The surface water quality in the bay has been monitored on a quarterly basis since 2017. The samples are collected from along the shoreline in front of the PT site and to the north in the area where a historical surface water drainage ditch discharged in the bay at 254 White Chapel Road. The results are reported to the MECP on a quarterly and an annual basis.

No surface water quality impacts in Picton Bay have been identified in 2017 and 2018. Therefore, the shallow and deep groundwater exceedances at Picton Terminals and at the neighbouring property at 254 White Chapel Road (as discussed in Section 2.5 below) do not appear to have had an adverse effect on the surface water quality in Picton Bay.

¹ Previously also known as the Ministry of the Environment (MOE), the Ministry of the Environment and Energy (MOEE), and the Ministry of the Environment and Climate Change (MOECC). Currently known as the Ministry of the Environment, Conservation and Parks (MECP).



2.5 Groundwater

The subject site is not located within any wellhead protection areas (WHPA) as designated by the Quinte Region Source Protection Plan.

The groundwater aquifers on site are within limestone bedrock. Fourteen on-site and three off-site monitoring wells were installed in 2017 by XCG as documented in the 2017 Annual Monitoring report (XCG, 2018).

A shallow and a deep aquifer have been identified. The shallow aquifer wells are screened in limestone at elevations above 84 masl and the deep aquifer wells are screened below this elevation.

The shallow and deep groundwater quality on site has been monitored on a quarterly basis since 2017. The results are reported to the MECP quarterly and annually.

As of July 2019, some monitoring wells have been either destroyed or have become inaccessible due to on-site construction activities. Replacement wells are proposed to be installed later in 2020 to ensure an adequate groundwater monitoring network.

Throughout 2018, shallow groundwater was impacted with chloride, free cyanide, and metals (cadmium, cobalt, copper, mercury, molybdenum, selenium, silver, sodium, and vanadium) above the applicable MOE 2011 Table 6 and 8 standards. Deep groundwater was impacted with chloride, free cyanide, and metals (barium, cobalt, copper, lead, mercury, molybdenum, selenium, silver, sodium, and vanadium) above the MOE 2011 Table 6 and 8 standards, and benzene and hexane above the Table 6 and/or Table 8 standards. Overall, the shallow and deep groundwater quality throughout 2018 was similar to what was observed in 2017 (XCG, 2018 and XCG, 2019a).

Some of the site alterations that have been completed, as described below in Section 3.6, have resulted in positive changes in groundwater flow patterns. For example, the construction of an exfiltration zone and lower materials storage area in the eastern part of the property resulted in cutting off the flow of impacted shallow groundwater to the neighbouring property to the northeast.



3. EVALUATION

3.1 Drinking Water

The on-site potable water is currently provided via bottled water. Non-potable water is sourced from the shore well that is located in a small pump house along the southeastern shoreline. The non-potable water is not treated and is used for toilet flushing and to wash vehicles and equipment on-site. The proposed gatehouse will be serviced by non-potable water from the same shore well.

The current potable and non-potable water supplies maintained at the site as described above are sufficient for the planned development. The water supplies do not represent a concern with respect to potential negative impacts to the escarpment and/or escarpment vegetation.

3.2 Sewage Management

The sanitary sewage generated at PT is directed to a septic holding tank and an associated septic bed. The septic system was installed prior to 2014 when the PT site was acquired by 1213427 Ontario Corporation (now operated as “Picton Terminals”). The septic tank and the septic bed are located northwest of the brick office building in the central area of the site. The conceptual site plan for future development (Appendix B) does not call for any modifications to the brick office building or the associated septic system, so the future construction operations on-site are not expected to interfere with the operation of the septic system.

The proposed gatehouse will be serviced with a newly constructed septic holding tank and an associated septic bed that will be located on the north side of the gatehouse building.

The current sewage management at the site as described above is sufficient for the planned development. It does not represent a concern with respect to potential negative impacts to the escarpment and/or escarpment vegetation.

3.3 Soil Depth

The soil depth at the site ranges from 0 to 4.9 metres bgs. Limestone outcrops naturally in several areas of the site. In the constructed lower areas in the east corner the limestone is exposed through excavation. A berm up to 10 metres high has been constructed along the northwestern property boundary along White Chapel Road and along the northeastern property boundary adjacent to 254 White Chapel Road.

Soil cover along the escarpment is limited, with bedrock being the predominant exposed feature. Site redevelopment included mitigative measures for stormwater and erosion control to minimize impacts to Picton Bay from site operations. In order to put in place the mitigative measures required, some site grade changes were completed along the escarpment in the area of the loading dock road, product storage areas, stormwater ponds, and exfiltration zones. This resulted in some soil loss along the escarpment north of the loading dock. This is discussed further in Section 3.7.



3.4 **Landscaping**

The working areas of the site have had the overburden removed exposing the limestone bedrock. As required for various site operations, the exposed bedrock is surfaced primarily with asphalt or granular materials. Areas designated for stormwater management such as ponds and ditches are surfaced with clay.

In the southwestern area of the site, the areas not used for material storage are landscaped with grass and trees. The areas outside of the perimeter berms are vegetated with trees.

As can be seen from the composite aerial photograph in Appendix E, approximately 55% of the shoreline is naturally vegetated, approximately 25% is naturally returning to vegetated conditions, and the remaining 20% is actively used for port activities.

To stabilize the constructed berms along the northwestern and northeastern boundaries of the subject site, a tree planting program has been implemented. The first phase was completed in the spring and summer 2019. It included planting of 2,000 seedlings of nine native species of trees and shrubs along the central portion of the northwestern berm and the southeastern portion of the northeastern berm, as shown on the aerial photo in Appendix F. The seedlings ranging from 30 to 100 centimetres at planting were planted in 5 to 7 rows spaced approximately 1 metre apart. The native species included balsam fir, white pine, red pine, shagbark hickory, white birch, hybrid poplar, ironwood, red osier dogwood, and buttonbush. Additionally, the berm has been seeded with a mixture of fescue and rye. These fast-growing species of grass will help to stabilize the berm surface in the short term.

The second phase of berm landscaping is planned for spring 2020. It will include planting of approximately 2,000 seedlings of flowering shrubs and conifers along White Chapel Road. These plantings will help to further stabilize the berm, beautify the area, and provide a visual barrier.

While the above-noted plans for a vegetation program do not have a direct impact on the escarpment, there is an overall intent for site redevelopment including re-vegetation of certain areas.

Due to site redevelopment activities, some additional landscaping is required in the area north of the loading dock where escarpment vegetation was lost. As noted below in Section 3.7, additional landscaping with native species will occur along the disturbed areas of the escarpment north of the loading dock.

The landscaping planned for the site once development is complete is shown on the conceptual site plan included in Appendix B.

3.5 **On-Site Buildings**

There are two on-site buildings. The 500 square metre (m²) office building is located in the centre of the site. The building is a one-storey brick structure with a flat roof. The second building is a small pump house located on the southeastern shoreline. The shore well is in the pump house. This building is located approximately 70 metres west of the top of slope of the escarpment and is well beyond the required 15-metre buffer



zone. The existing building is not expected to have any negative impact on the escarpment.

Other structures on-site include three fixed conveyors, shore cranes, and fixed and floating docks. The on-site equipment at the loading dock is located in an area where the escarpment alterations are historic and are not the result of planned changes. No new negative impacts associated with the on-site equipment at the loading dock are expected.

The future plans for development of the site include the construction of a gatehouse with a scale located adjacent to the main access driveway near the entrance off White Chapel Road. The proposed gate house is approximately 35 metres west of the top of slope of the escarpment and is not expected to have any negative impacts on the escarpment.

3.6 Surface Drainage and Erosion Control

In 1993, a stormwater management system was implemented at the Picton Terminals site that consisted of two stormwater management ponds adjacent to the northeast of the salt storage pad. Also installed at that time was a discharge ditch running across the site to the northeast and onto the adjacent property at 254 White Chapel Road (“neighbouring property”). The ditch from the second on-site pond passed through approximately 220 metres of the PT property and approximately 130 metres of the neighbouring property prior to discharge in Picton Bay. Originally, the ditch passed through a pond on the neighbouring property entering on the southwest side and flowing out on the east site. The ditch was rerouted sometime prior to 2014 to pass immediately south of the pond to mitigate salt-related impacts to the pond.

The surface drainage patterns have been significantly altered at the PT site since 2014 when PT took ownership of the property. In August 2016, a new stormwater management pond system and a berm along a portion of the north and east property lines were installed in order to provide increased retention time for the stormwater, prevent flow of stormwater onto the neighbouring property, and prevent point source surface discharge of stormwater into Picton Bay.

Currently, the stormwater from the asphalt salt storage area flows overland as sheet flow towards the excavated areas of the future covered dry storage structure. The water flows over the rock face into the excavated future dry storage structure, where it is directed to the constructed material storage and exfiltration areas. The stormwater control measures include ditching, exfiltration zones, and structures in the configuration shown on the appended drawing in Appendix D.

Due to the evolution of site drainage patterns brought about by the ongoing construction activities, this stormwater management system receives storm drainage from the area to the northwest of Area B (see Appendix D) but receives no significant drainage from Area A.

The stormwater generated on-site is currently managed according to the Phase 2 Interim Action Plan (IAP) which was submitted to the MECP for review on July 8, 2019. The Phase 2 IAP allows for system reconfiguration during the construction activities while achieving the same level of stormwater discharge control.



The future and final stormwater management configuration is expected to be in accordance with the Environmental Compliance Approval (ECA) and design completed by Josselyn Engineering (2018). The ECA application was submitted to MECP in May 2018 and was approved on March 2, 2020. With approved the ECA, full development of the site including completion of construction of the dry storage facility and implementation of the final stormwater management infrastructure will be carried out.

The stormwater management designed by Josselyn Engineering includes features such as covered salt storage area, grassy swales to convey runoff through the site, rock check dams, a settling pond, step pools to convey water down the slope, and two new oil/grit separators.

In order to achieve the required mitigative stormwater and erosion control measures, some site grade changes were completed along the escarpment in the area of the loading dock road, product storage areas, stormwater ponds, and exfiltration zones. This is discussed further in Section 3.7 below.

3.7 Escarpment Impacts

The Picton Terminals site is located in an area adjacent to Picton Bay that is known to have a shoreline escarpment.

As noted above in Sections 3.3 and 3.6, some loss of escarpment features has occurred along approximately 100 metres of shoreline north of the loading dock. The loss of escarpment features represents approximately 10% of the area of the overall shoreline escarpment on-site, and this will be largely returned to a naturally vegetated area as site development proceeds.

The changes to the escarpment were kept to a minimum and were required as part of the overall site redevelopment plan. These changes will not represent a significant alteration to vegetated areas along the shoreline once the planned landscaping activities are complete.

3.8 Effects on Ecological Receptors

The Picton Terminals site provides aquatic habitat in Picton Bay and bird habitat along the limestone shoreline cliffs. Based on the on-site activities, the site is expected to provide a limited habitat for non-avian terrestrial species in the areas of undisturbed or re-planted vegetation.

The proposed construction activities are not expected to have significant impact on the terrestrial receptors, as the areas under constructions are within previously used and disturbed portions of the site.



4. MITIGATION MEASURES

4.1 Erosion Control

The working areas of the site have been cleared of overburden. The remaining limestone bedrock provides a solid base for truck and machinery travel, therefore reducing erosion.

The size of the active area along the shoreline escarpment is not expected to increase. Thus, the existing naturally vegetated areas and areas that are being naturally reclaimed by vegetation will not be disturbed by the site activities.

A two-stage vegetation program has been designed for the newly constructed clay berms as described in Section 3.4. The root systems of the trees, shrubs and grasses will serve to stabilize the surficial soil on the berms and minimize erosion.

The surface drainage and erosion control at the site, now and in the future, will be managed as described in Section 3.6. A system of ponds, ditches, swales, and exfiltration areas (some of them rock-filled) will be used to minimize erosion during storm events.

4.2 Stormwater Management Plans

As discussed in Section 3.6, the stormwater management will be configured as per the Phase 2 Interim Action Plan during the site construction works and will eventually be constructed in accordance with the Stormwater ECA. The main objectives of the plans are to ensure there are no direct stormwater discharges into Picton Bay, to reduce particulate matter load into Picton Bay, to minimize direct contact of precipitation with the stored materials such as salt, and to dissipate on-site stormwater discharge into groundwater to allow for assimilation within Picton Bay.

The first objective has been achieved and stormwater no longer discharges directly into Picton Bay as a point load. In the Phase 2 Interim Action Plan the stormwater from the northern portion of the site is directed to temporary exfiltration areas and ditches where it is allowed to settle and slowly infiltrate to groundwater.

4.3 Dust Control

Dust generation on-site is controlled through best management practices and storing loose products such as salt under tarps.

For salt deliveries, arrangements are made with Coverall Tarps ahead of time to coordinate tarping of any new stockpiles. It is anticipated that each stockpile will be covered within two to three weeks of delivery of the salt. The timing for covering of salt piles is highly dependent on weather conditions. When it is windy tarping cannot be done for safety reasons. During loading and shipping of salt product the salt piles will remain covered with only the working face remaining exposed. The working face will be kept to a minimum size, exposing only the necessary area for loading. It is not practicable to cover the exposed face during times when salt is being shipped from the site due to constant activity from loading of trucks. During times of year when salt



shipments are not in progress, the working face will be tarped until such time as shipments resume.

In the future, it is anticipated that the salt will be stored in the covered dry storage facility.

Additional dust control measures employed at the site include limiting activities that disturb surface soils and stockpiled materials during windy dry conditions, applying water to materials to limit dust generation when they are disturbed, spraying roads with water, and monitoring the wind speed and direction to identify times when dust will tend to blow in the direction of neighbouring residential properties.

4.4 Environmental Monitoring

The ongoing surface water and groundwater quality monitoring, as described in Sections 2.4 and 2.5, will continue. This will enable long-term tracking of changes in surface water and groundwater quality. If it is determined that surface water or groundwater quality is worsening in a particular area or areas, follow-up monitoring will be conducted to assess whether this is the result of a short-term event or a long-term trend. If a worsening trend is identified, investigations will be taken to identify the root cause of the problem and appropriate corrective action will be taken.

4.5 Ecological Mitigation Measures

To address loss of nesting habitat along the escarpment for barn and cliff swallows due to on-site operations, artificial nesting areas were installed (see photos in Appendix G). Two artificial nesting structures for barn swallows have been installed on the dock and near the pump house. Nesting cups were attached to the cliff adjacent to the dock for the cliff swallows. No swallows were identified nesting in these nesting areas in spring of 2018 and 2019. Additional nesting cups may be installed along the escarpment in disturbed areas as vegetation is reinstated in those areas.

PT is in the process of upgrading the port facilities to accommodate two additional floating docks. The upgrade includes installation of a sheet pile wall around the existing ‘dolphin’ structures and backfilling with clean aggregate material. The Department Fisheries and Oceans Canada (DFO) issued an authorization on May 2, 2019, under Paragraph 35(2)(b) of the Fisheries Act to infill the shoreline which may include destruction of up to 620 m² of fish habitat (Appendix H). The Bay of Quinte area is known to support a Walleye population.

The permit includes monitoring and reporting conditions as well as a requirement to offset the serious harm to fish. The Offsetting Plan directs construction of nearshore habitat features by depositing gravel, rubble, and boulders over a minimum area of 515 m². The habitat will consist of an approximately 1 metre thick bed of clean rock with randomly placed boulders up to 1 metre in size placed on top of the bed.

Any future in-water construction will receive permits from the appropriate regulatory bodies and required monitoring and habitat offsets will be determined at that time.



5. CONCLUSIONS

PT operated as a port since 1955. The main impacts on the environment from the existing port operations include land disturbance, impacts to the groundwater quality, and potential impacts to the aquatic habitat in Picton Bay.

In recent years, PT has made significant alterations to the site to improve stormwater management and salt storage practices. The alterations have resulted in several improvements such as stopping the flow of salt-impacted stormwater to the neighbouring property to the northeast and directly into Picton Bay as a point discharge. The stormwater is now slowly infiltrated into the ground to allow for control of suspended sediment and slow dissipation into Picton Bay. Additionally, the construction of the exfiltration zone and lower materials storage areas resulted in cutting off the flow of impacted shallow groundwater to the neighbouring property to the northeast. Best management practices have been implemented to manage salt stockpiles such as tarping, limiting open work faces of the stockpile, and offloading in non-windy conditions.

The ongoing monitoring of the groundwater quality demonstrates relatively unchanged levels of contamination. However, no surface water impacts have been identified in Picton Bay based on the results of the ongoing surface water monitoring program. The effects of the in-water construction and fish habitat offset performance are and will be monitored as per the requirements set out in the DFO Authorization for the in-water work. Additionally, PT has a Tree Planting Plan in place to vegetate berms that provide buffer between on-site operations and the neighbouring properties.

The overall conclusion is that the current and future planned operations at the PT site, in consideration of the mitigation measures that have been and will be put in place, are expected to maintain and/or restore environmental conditions along the escarpment.



6. LIMITATIONS

This Environmental Evaluation was prepared to support the Zoning Bylaw Amendment and Site Plan Control Amendment applications as requested by Prince Edward County.

The information included in this report is based on XCG's observations, design considerations, and information provided by Picton Terminals, and others. XCG cannot be held responsible for environmental conditions at the site that were not apparent from the available information.

The scope of this report is limited to the matters expressly covered. This report was prepared for the sole benefit of 1213427 Ontario Corporation and Picton Terminals Ltd. and may not be relied upon by any other person or entity. Any use or reuse of this document (or the findings, conclusions, or recommendations represented herein) by parties other than 1213427 Ontario Corporation and Picton Terminals Ltd. is at the sole risk of those parties.



7. REFERENCES

1. Chapman, L.J. and D.F. Putnam, 1966, “The Physiography of Southern Ontario, 2nd edition.
2. County of Prince Edward (PEC), 2006, Official Plan (Office Consolidation – November 2006).
3. Fotenn Planning + Design, 2018, “Planning Justification Letter, 62 White Chapel Road,” dated November 20, 2018.
4. Josselyn Engineering Incorporated, 2018, “Stormwater Management and Drainage Report, Picton Terminals, 62 White Chapel Road, Prince Edward County,” dated October 4, 2018.
5. Ontario Ministry of the Environment (MOE), 2011, “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act,” dated April 15, 2011.
6. Quinte Region Source Protection Committee, 2014, “Approved Quinte Region Source Protection Plan,” dated September 2014, effective January 1, 2015.
7. Quinte Conservation, 2019, letter to 1213427 Ontario Corporation o/a Picton Terminals, dated July 11, 2019.
8. XCG Consulting Ltd., 2018, “2017 Annual Monitoring Report, Picton Terminals Property, 62 White Chapel Road, Picton, Ontario,” dated January 31, 2018.
9. XCG Consulting Ltd., 2019a, “2018 Annual Monitoring Report, Picton Terminals Property, 62 White Chapel Road, Picton, Ontario,” dated January 31, 2019.
10. XCG Consulting Ltd., 2019b, “Phase 2 Interim Action Plan, Picton Terminals, Picton, Ontario,” dated July 8, 2019.



FIGURE

FIGURE



APPENDIX A
PRINCE EDWARD COUNTY, "INFORMATION REQUIREMENTS
FOR A COMPLETE APPLICATION(S), ZONING BY-LAW
AMENDMENT AND SITE PLAN CONTROL," DATED MAY 9,
2019



Development Services

The Corporation of the County of Prince Edward
Office: 280 Picton Main Street, Picton, ON K0K 2T0
Mailing: 332 Picton Main Street, Picton, ON K0K 2T0
T: 613.476.2148 x 2025 | F: 613.471.2051
pwalsh@pecounty.on.ca | www.thecounty.ca

May 9, 2019

Attn: Michael Keene

Fotenn Consultants Inc.
The Woolen Mill
6 Cataraqui St, Suite 108
Kingston, Ontario
K7K 1Z7

Dear Mr. Michael Keene,

**RE: Information Requirements for a Complete Application(s)
Zoning By-law Amendment and Site Plan Control**
Proponent: 1213427 Ontario Corporation o/a Picton Terminals
Agent: Fotenn Consultants Inc.
Location: 62 White Chapel Road
Lot 125, 130-131 RCP 28 Hallowell and Pt Lot 11, Con 1 SW Green Point:
Sophiasburgh, Pt 1, 47R-2991

Thank you for your submissions to the Development Services Department of a Site Plan Control Application and a Zoning By-law Amendment Application received November 23, 2018. Since then we have had discussions regarding a number of planning considerations. In summary, you have indicated:

- the expanded uses as proposed through the Zoning By-law Amendment are in conformity with the Official Plan and that an Amendment is not required.
- the proposed Zoning By-law Amendment to the Site-Specific *Special Extractive Industrial (MX-#) Zone* is the appropriate zone for the existing and expanded uses as proposed.

Previous to this submission, a Site Plan Control Application County File No. SP-03-18 was received on October 31-18 to address the legal non-conforming uses of the lands. Our understanding is that it was your intention to first submit a Site Plan Control application to address the legal non-conforming uses. However, the County requests that you submit one Site Plan Control application for your client's entire lands in conjunction with your application for a zoning by-law amendment.

Please find herein detailed comments regarding completeness of information. A number of the indicated reports/information requirements below may have been submitted to other jurisdictions in the course of seeking related approvals. If so, please submit the information together with comments from the other jurisdiction.

Background

The application for a Zoning By-law Amendment would rezone portions of the property that is currently zoned the *Extractive Industrial (MX) Zone* and the *Rural (RU1) Zone* to a Site-Specific *Special*

Extractive Industrial (MX- #) Zone. The specific zone proposes the added permitted use of four boat docking together with the expanded transshipment operations and related accessory open storage uses. Specific locations are proposed to be rezoned subject to “Holding” provision where further archaeological investigation is required prior to development occurring. In summary, the proposal involves:

- amending the RU1 Zone on the site to the same MX Zone applicable to the majority remainder of the site
- permitting the legal non-conforming transshipment use and its expansion
- permitting a tour boat dock(s)
- permitting open storage as an accessory use

For reference, the documents received with the submission are the following:

- Application for Rezoning and Application for Site Plan Control (**un-signed**) with related Fees;
- Record of Indigenous Engagement for a Stage 1 Archaeological Assessment;
- Stage 1 Archaeological Assessment, including Registry Letter from MTCS and a Record of Indigenous Engagement, ARA, Feb 6 2018;
- Picton Terminals, Concept Plan, Nov 15 2018;
- Planning Justification Letter, Fotenn, Nov 19 2018;
- Stormwater Management Report, Josselyn Engineering, Oct 4 2018;
- Traffic Impact Study, McIntosh Perry Consulting Engineers, Nov 19 2018; and,
- Planning Justification Letter, Fotenn, November 19, 2018

The previous Site Plan Control Application File No. SP-03-18 included the following information:

- Site Plan Application Form, 62 White Chapel Rd
- Parcel Register, 62 White Chapel Rd
- Site Plan, Josselyn Engineering, 62 White Chapel Rd, May 25 2017
- Grading Plan Ph 1-5 Josselyn Engineering, May 25 2017
- Stormwater Management Report, Josselyn Engineering, May 30 2018
- Topographic Survey, Leslie M. Higginson Surveying, May 2015

Official Plan

The submitted materials were reviewed in relation to planning requirements and with respect to policies of the Official Plan. As accurately identified in the Planning Justification Letter, the subject lands are designated the **Industrial** designation on Schedule E – Land Use. The Official Plan provides direction to industrial land uses, Part III Section 2.4.5 (deep water port facilities) and Part IV 10.2.1 (permitted uses).

Part III Section 1.2 of the Official Plan establishes the Bay of Quinte as an Environmentally Sensitive Area. Section 1.2.6 directs that all development applications are subject to a review of alternatives, the minimization of impacts and the submission of an Environmental Evaluation. As an escarpment is present on the Subject lands, Section 1.7.6 directs potential impacts on escarpments to be addressed through an Environmental Evaluation.

This office requests that additional information be submitted prior to processing the applications for a zoning by-law amendment and a site plan agreement. The additional information involves the following:

Zoning Bylaw Amendment

The following additional materials are requested to complete the application for a Zoning By-law Amendment:

- Supplemental Planning Justification Letter analyzing the option of a Site-specific **General Industrial (MG- #) Zone**.
- An Environmental Evaluation as per Part III Sections 1.2.6 and 1.7.6 of the Official Plan.
- A source water risk management plan, or a statement from the County's Risk Management Official that no risk is being imposed onto the County's public drinking water supply (Intake Protection Zones)
- Rural Design Brief/Preliminary Elevations prepared by an Urban Designer or an Architect (OAA) for all buildings, machinery, and other facilities;
- Servicing Options Report;
- Geo-technical and Hydrogeological Assessment;
- Site Contaminations report; and,
- Noise and Vibration Assessment

Site Plan Control

The following additional materials are required to be submitted in support of the application for Site Plan Control:

- A completed Site Plan Control application **with original signatures**.
- To-scale site plan illustrating the top and toe of banks (existing and proposed), parking areas, dimensions and locations of outdoor storage areas (lot coverage calculations included), buildings (existing and proposed), docks (existing and proposed, showing dimensions and scaled relative locations and maximum length), fuel storage/containment areas
- Building and Facilities Elevations – existing and proposed;
- Floor Plan of existing and proposed buildings;
- Grading Plan and Drainage Plan & Erosion and Sediment Control Plan, including shoreline works description;
- Servicing Plan for existing and proposed buildings and boat services;
- Emergency Services Plan;
- Landscape Plan, including screening plan (e.g. landscaped berms, trees, fences, etc.). Include a design that softens views from the water.
- Exterior Lighting-Illumination Plan;
- Utilities Plan;
- Signage;
- Statement of hours of operation.

Summary:

The applications will be deemed complete in accordance with the *Planning Act* upon the receipt of the required information identified in this letter. Upon receiving the required information, two sets of applications will be processed - a Zoning By-law Amendment application and a related Site Plan Control application for the expanded uses as proposed.

Should you have any questions with regard to the above, please feel free to contact the undersigned.

Sincerely,

A handwritten signature in black ink that reads "Paul Walsh." The signature is written in a cursive, slightly slanted style.

Paul Walsh, MCIP, RPP
Manager of Planning
Corporation of the County of Prince Edward

Cc: Mr. Peter Moyer, Director of Development Services
Mr. W. Fairbrother, Templeman LLP, Solicitors to the County



APPENDIX B
CONCEPT PLAN

62 White Chapel Road Conceptual Site Plan



LEGEND

	PROPOSED BUILDING
	EXISTING BUILDING
	EXISTING BREAKWATER PLATFORM
	LANDSCAPED OPEN SPACE
	OPEN STORAGE AREA
	SALT STORAGE AREA



1	DRAFT	2018.10.31	MW
No.	REVISION	DATE	BY

CLIENT
**1213427 Ontario Corporation
o/a Picton Terminals**

FOTENN
Planning + Design

6 Cataraqi Street, Kingston, ON K7K 1Z7
613.542.5454 www.fotenn.com

DESIGNED	MW
REVIEWED	YL
DATE	2018.10.31

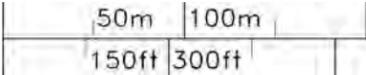
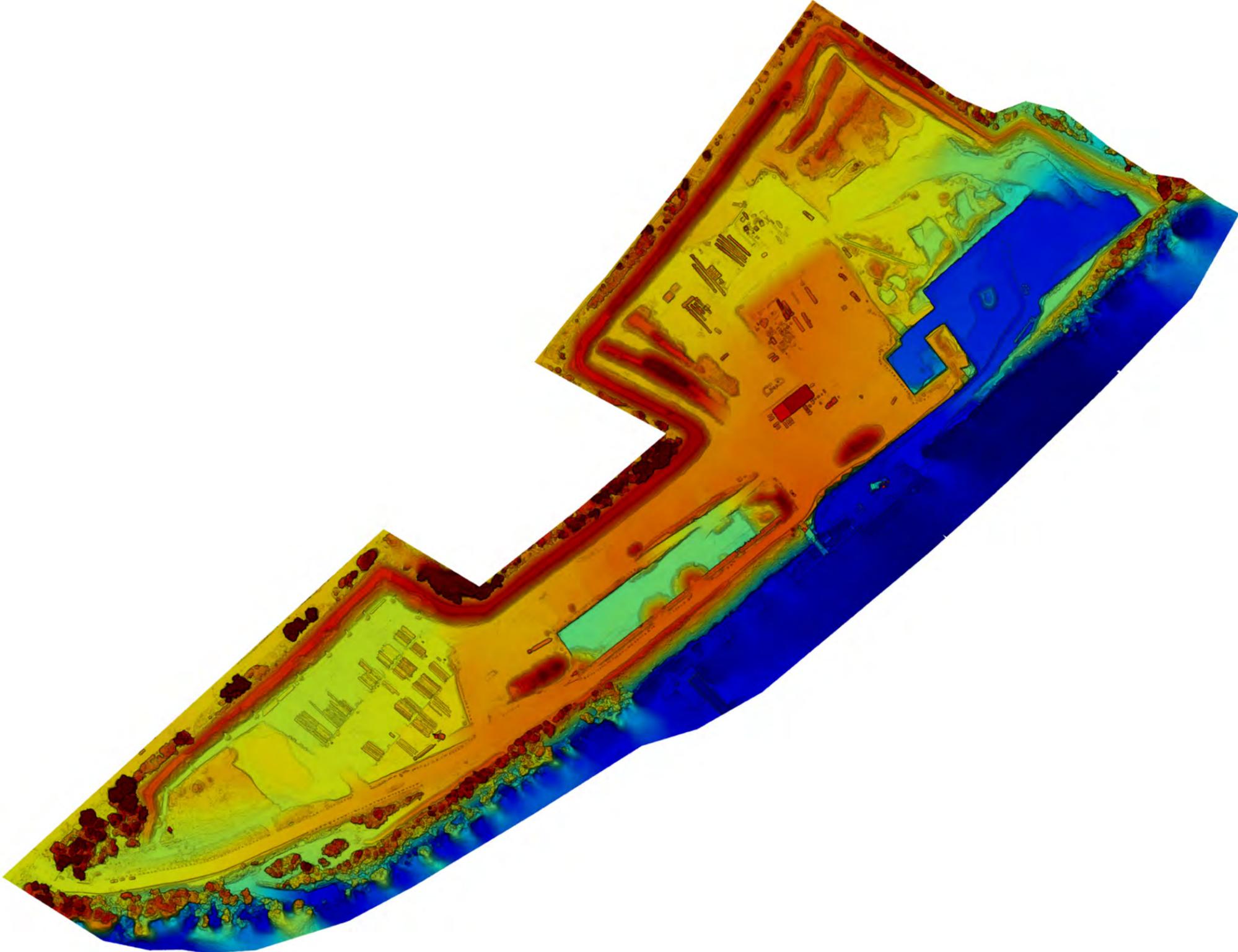
P1



NOTES
1. The base plan (lot lines, existing roads and surrounding areas) is based on a survey provided by the client and aerial imagery.



APPENDIX C
AERIAL ELEVATION PLAN, JUNE 12, 2019





APPENDIX D
PHASE 2 – INTERIM DRAINAGE PLAN

Phase 2 – Interim Drainage Plan

Area A – Asphalt Salt Storage Area 2019/2020

Area B – Stormwater Management Area Under Development

Area C – Storage area under development, some stormwater storage and exfiltration will occur during construction.

Area D – Exfiltration area, north to be constructed by blasting, south is existing rubble dock area.

Area E – Exfiltration area, constructed by blasting existing floor of future dry storage structure to final grade.

Notes:

→ Blue arrows indicate overland flow paths.

→ Red arrows indicate constructed ditching.





APPENDIX E
COMPOSITE SHORELINE AERIAL PHOTOGRAPH

Naturally Vegetated

Naturally Returning
to Vegetated
Conditions

Actively
Used

Naturally Returning
to Vegetated
Conditions



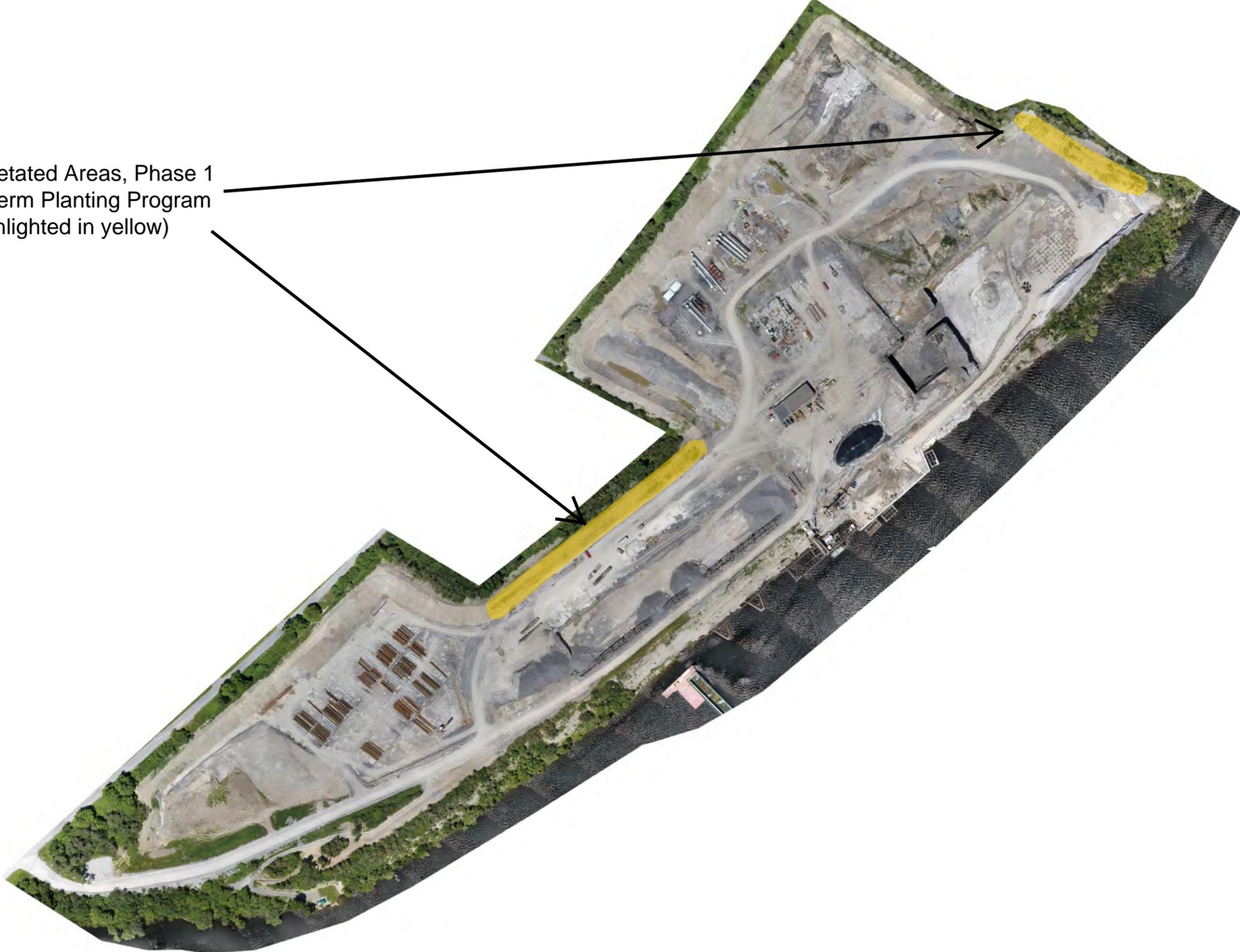
Naturally
Vegetated

Aerial Composite
Photograph, June 12, 2019



APPENDIX F
PHASE ONE TREE PLANTING AREAS

Vegetated Areas, Phase 1
of Berm Planting Program
(highlighted in yellow)





APPENDIX G
ARTIFICIAL NESTING SITE PHOTOS



Photo 1: Artificial barn swallow nesting site near the dock structure.



Photo 2: Nesting cup for cliff swallow near the dock structure.



APPENDIX H
DEPARTMENT OF FISHERIES AND OCEANS (DFO) CANADA –
PARAGRAPH 35(2)(B) OF FISHERIES ACT AUTHORIZATION



Fisheries and Oceans
Canada

Pêches et Océans
Canada

Central and Arctic Region
520 Exmouth Street
Sarnia, Ontario
N7T 8B1

Région du centre et de l'arctique
520 rue Exmouth
Sarnia (Ontario)
N7T 8B1

MAY 02 2019

Your file Votre référence
Our file Notre référence
16-HCAA-01206

Picton Terminals Ltd. (ABNA Investments Ltd.)
Attention: Ben Doornekamp
588 Scotland Road
Odessa, ON KOH 2HO

Dear Mr. Doornekamp,

Subject: *Fisheries Act* Authorization

Pursuant to paragraph 35(2)(b) of the *Fisheries Act*, the Minister of Fisheries and Oceans Canada authorizes the carrying on of your proposed work, undertaking or activity that results in serious harm to fish arising from shoreline infill in Picton Bay Terminal. A paragraph 35(2)(b) *Fisheries Act* authorization is attached.

Failure to comply with any of the terms or conditions of the attached Authorization may lead to prosecution under the *Fisheries Act*.

A copy of this Authorization should be kept on site while the work is in progress and upon request be provided to relevant federal or provincial officials. Work crews should be familiar with, and able to adhere to, the conditions.

If you or anyone conducting work on your behalf has any questions, please contact Caroline Boros at 905-336-4435, or by email at caroline.boros@dfo-mpo.gc.ca.

Yours sincerely,

Scott Gilbert
A/Regional Director General
Central and Arctic Region
Fisheries and Oceans Canada

ATTACHMENT: *Fisheries Act* AUTHORIZATION

Canada



PARAGRAPH 35(2)(b) FISHERIES ACT AUTHORIZATION

Authorization issued to

Picton Terminals Ltd. (ABNA Investments Ltd.)
Attention: Ben Doornekamp
588 Scotland Road
Odessa, ON K0H 2H0

(hereafter referred to as the "Proponent")

Location of Proposed Project

Nearest community (city, town, village): Picton
Municipality, district, township, county: Prince Edward County
Province: Ontario
Name of watercourse, waterbody: Picton Bay, Lake Ontario
Latitude and Longitude Coordinates: 44°02'14" N, 77°07'46" W

Description of Proposed Project

The proposed project of which the work, undertaking or activity authorized is a part involves:

Infilling a portion of a privately leased water lot to facilitate the operation of the existing port. This shall be accomplished by installing a sheet pile wall around the existing 'dolphin' structures and backfilling with clean aggregate material.

Description of Authorized work(s), undertaking(s) or activity(ies) likely to result in serious harm to fish

The work(s), undertaking(s), or activity(ies) associated with the proposed project described above, that is likely to result in serious harm to fish, is:

- Infilling of the shoreline into the Bay of Quinte near Picton Bay.

The serious harm to fish likely to result from the proposed work(s), undertaking(s), or activity(ies), and covered by this authorization includes

- The destruction to a maximum of 620 square metres (m²) of fish habitat.

Conditions of Authorization

The above described work, undertaking or activity that is likely to result in serious harm to fish must be carried on in accordance with the following conditions.

1. **Conditions that relate to the period during which the work, undertaking or activity that will result in serious harm to fish can be carried on**

The work, undertaking or activity that results in serious harm to fish is authorized to be carried on during the following period:

From: **Date of Issuance** of the Authorization to **March 14, 2020**.

If the Proponent cannot complete the work, undertaking or activity during this period, Fisheries and Oceans Canada (DFO) must be notified in advance of the expiration of the above time period. DFO may, where appropriate, provide written notice that the period to carry on the work, undertaking or activity has been extended.

The periods during which other conditions of this authorization must be complied with are provided in their respective sections below. DFO may, where appropriate, provide written notice that these periods have been extended, in order to correspond to the extension of the period to carry on a work, undertaking, or activity.

2. **Conditions that relate to measures and standards to avoid and mitigate serious harm to fish**

2.1 Sediment and erosion control: Sediment and erosion control measures must be in place and shall be upgraded and maintained, such that release of sediment is avoided at the location of the authorized work, undertaking, or activity.

2.1.1 All erosion and sediment controls shall be in place and functioning around the area of planned daily work and offsetting activity prior to work commencing and shall be removed once the site is stabilized.

2.1.2 Erosion and sediment control measures shall be inspected daily and repaired or upgraded as required and temporary measures removed once the site is stabilized.

2.1.3 All fill material to be used in construction shall be clean and free of debris prior to placement.

2.2 List of measures and standards to avoid and mitigate serious harm to fish: Described below, and as set out in the proponent's plan for the Picton Terminals Project, Attachment AF4, received by email on February 23, 2017:

2.2.1 In-water works shall not be conducted from **March 15 to July 15** of any given year.

2.2.2 Visually monitor and ensure there are no fish present in the infilling project area during works.

2.2.3 In-water construction shall be conducted on calm days and staged to mitigate sediment moving off-site.

2.2.4 Machinery shall be washed, refueled and serviced in such a way as to prevent any deleterious substances from entering the water.

2.3 Contingency measures: Described below, and as set out in the proponent's plan for the Picton Terminals Project, Attachment AF4, received by email on February 23, 2017, shall be put in place if monitoring required in condition 3 below indicates that the measures and standards to avoid and mitigate serious harm to fish are not successful.

2.3.1 Should fish (dead or alive) be observed in the work area, works shall cease and fish shall be excluded and isolated from the work area prior to fill operations recommencing.

2.3.2 Should re-suspended sediment be observed migrating outside of the work site, work shall cease and the issue corrected prior to work recommencing.

- 2.4 Dates by which these measures and standards shall be implemented: Measures and standards to avoid and mitigate serious harm to fish shall be implemented prior to the commencement of the project and maintained through to completion of the project.
3. **Conditions that relate to monitoring and reporting of measures and standards to avoid and mitigate serious harm to fish**
- 3.1 Monitoring of avoidance and mitigation measures: The Proponent shall monitor the implementation of avoidance and mitigation measures referred to in section 2 of this authorization and report to DFO on or before April 30, 2020 and indicate whether the measures and standards to avoid and mitigate serious harm to fish were conducted according to the conditions of this authorization. This shall be done, by:
- 3.1.1 Demonstration of effective implementation and functioning: Over the implementation period of the works, provide dated photographs from the same vantage point(s), direction and angle of view with locations indicated on a plan view map; details of fishes captured and relocated; inspection reports to demonstrate effective implementation and functioning of mitigation measures (e.g., water colour during various work activities and stages); and, standards described above to limit the serious harm to fish to what is covered by this authorization.
- 3.1.2 Contingency measures: Providing details of any contingency measures that were followed to prevent impacts greater than those covered by this authorization in the event that mitigation measures did not function as described.
- 3.2 Other monitoring and reporting conditions: Not Applicable
4. **Conditions that relate to the offsetting of the serious harm to fish likely to result from the authorized work, undertaking or activity**
- 4.1 Letter of credit: DFO may draw upon funds available (\$52,000.00) to DFO as the beneficiary of the letter of credit provided to DFO as part of the application for this authorization, to cover the costs of implementing the offsetting measures required to be implemented under this authorization, including the associated monitoring and reporting measures included in section 5, in instances where the Proponent fails to implement these required measures.
- 4.2 Scale and description of offsetting measures: Shall be carried out in accordance with the description below and measures set out in the Proponent's Offsetting Plan for the Picton Terminals Project, AF2a, AF2b and AF3, received by email on July 30, 2018 (*hereafter referred to as the "Offsetting Plan"*), approved by DFO:
- 4.2.1 Nearshore habitat features shall be created by **March 14, 2020** on the north east water lot by depositing gravel, rubble and boulders for a minimum of 515 m² which includes:
- 4.2.1.1 A bed of clean rock shall be placed in the offsetting area first ranging in size between 25 and 50 cm and roughly 1 m in depth.
- 4.2.1.2 Clean large boulders shall be randomly placed on top of the bed of rock and shall be up to 1 m in size.
- 4.3 Offsetting criteria to assess the implementation and effectiveness of the offsetting measures: All fish habitat offsetting measures shall be completed and functioning according to the criteria below and as set out in the Proponent's Offsetting Plan approved by DFO:
- 4.3.1 All nearshore habitat features shall be shown to be constructed as designed and stable, and shall be assessed by in-water visual inspection and underwater imagery.
- 4.3.2 All nearshore habitat features shall be available to fishes immediately post-construction and shall be assessed for fish presence including a minimum of two (2) native taxonomic fish

families observed in the offsetting area using in-water visual inspection and underwater imagery.

4.4 Contingency measures: If the results of monitoring as required in condition 5 indicate that the offsetting measures are not completed by the date specified and/or are not functioning according to the above criteria in condition 4.3, the Proponent shall give written notice to DFO and shall implement the contingency measures and associated monitoring measures, as set out within the approved Offsetting Plan, to ensure the implementation of the offsetting measures is completed and functioning as required by this authorization.

4.4.1 Scale and description of contingency measures:

4.4.1.1 Should offsetting measures (described in condition 4.3) be deemed unstable or deficient by year two (2) of monitoring, adjustments or replacements to the offsetting measure(s) shall be implemented by the Proponent within one (1) year to rectify the offsetting measures.

4.4.1.2 Should the two (2) native taxonomic fish families not be identified in the offsetting area an additional year of monitoring shall be implemented, adding spring and fall observations.

4.4.1.3 Should the offsetting measures not meet the predicted results in terms of habitat functionality potential additional contingency offsets shall be determined through consultation with DFO.

4.4.2 Monitoring measures to ensure offsetting contingency is completed and/or functioning as required:

4.4.2.1 Unstable or deficient offsetting: Two (2) additional years of inspection, monitoring and reporting to ensure stability and configuration of repaired offsetting is functioning as designed.

4.5 The Proponent shall not carry on, or allow, any work, undertaking or activity that will adversely disturb or impact the offsetting measures.

4.6 Other conditions related to offsetting: Not Applicable

5. Conditions that relate to monitoring and reporting of implementation of offsetting measures (described above in section 4):

5.1 Schedule(s) and criteria: The Proponent shall conduct monitoring of the implementation of offsetting measures according to the approved timeline and criteria below and as set out within the approved Offsetting Plan:

5.1.1 List of timeline(s) and monitoring and reporting criteria:

5.1.1.1 Form and stability of the nearshore habitat features shall be assessed through visual inspections annually for 2 years following construction, starting in 2020.

5.1.1.2 Fish presence shall be monitored at the offsetting features at minimum in the late spring or early summer annually for 2 years, starting in 2020.

5.1.1.2.1 The effectiveness of the offset measures shall be assessed by a qualified biologist.

5.1.1.3 An annual digital photographic record of pre-construction, during construction and post-construction conditions shall be compiled using the same vantage points and direction, referenced on a map, to show that the approved works have been completed and are stable in accordance with the Offsetting Plan for all project phases of construction until project and monitoring completion.

5.2 List of reports to be provided to DFO: The Proponent shall report to DFO on whether the offsetting measures were conducted according to the conditions of this authorization by providing the following:

5.1.2 Written reports to include, but not limited to, criteria listed in conditions 5.1.1.1 - 5.1.1.3 shall be submitted in an annual report to DFO on or before **November 30, 2020 and 2021**.

5.3 Other monitoring and reporting conditions for offsetting: Not Applicable

Authorization Limitations and Application Conditions

The Proponent is solely responsible for plans and specifications relating to this authorization and for all design, safety and workmanship aspects of all the works associated with this authorization.

The holder of this authorization is hereby authorized under the authority of Paragraph 35(2)(b) of the *Fisheries Act*, R.S.C., 1985, c.F. 14 to carry on the work(s), undertaking(s) and/or activity(ies) that are likely to result in serious harm to fish as described herein. This authorization does not purport to release the applicant from any obligation to obtain permission from or to comply with the requirements of any other regulatory agencies.

This authorization does not permit the deposit of a deleterious substance in water frequented by fish. Subsection 36(3) of the *Fisheries Act* prohibits the deposit of any deleterious substances into waters frequented by fish unless authorized by regulations made by Governor in Council.

This authorization does not permit the killing, harming, harassment, capture or taking of individuals of any aquatic species listed under the *Species at Risk Act* (SARA) (s. 32 of the SARA), or the damage or destruction of residence of individuals of such species (s. 33 of the SARA) or the destruction of the critical habitat of any such species (s. 58 of the SARA).

At the date of issuance of this authorization DFO has determined that impacts from the work, undertaking, or activity proposed, to aquatic species listed under the *Species at Risk Act* are not likely.

The failure to comply with any condition of this authorization constitutes an offence under Paragraph 40(3)(a) of the *Fisheries Act* and may result in charges being laid under the *Fisheries Act*. This authorization must be held on site and work crews must be made familiar with the conditions attached.

This authorization cannot be transferred or assigned to another party. If the work(s), undertaking(s) or activity(ies) authorized to be conducted pursuant to this authorization are expected to be sold or transferred, or other circumstances arise that are expected to result in a new Proponent taking over the work(s), undertaking(s) or activity(ies), the Proponent named in this authorization shall advise DFO in advance.

Date of Issuance: MAY 02 2019

Approved by: 

Scott Gilbert
A/Regional Director General
Central and Arctic
Fisheries and Oceans Canada