

Environmental Impact Study

Draft Plan of Subdivision

294 Quaker Road Northwest Welland Secondary Plan Area

Prepared For:

Centennial Homes (Niagara) Inc.

Prepared By:

Beacon Environmental Limited

Date:

2024-12-04

Project:

221305



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1. Introduction

Beacon Environmental Limited (Beacon) was retained by Centennial Homes (Niagara) Inc. to undertake an Environmental Impact Study (EIS) in support of a proposed draft plan of subdivision to be located on lands identifies as 294 Quaker Road in the City of Welland (**Figure 1**), the subject lands. The lands lie north of Quaker Road and east of First Avenue within the City of Welland Northwest Secondary Plan Area (NWSPA), City of Welland Official Plan Amendment 29 (OPA 29, 2021).

This EIS has been prepared following the requirements of the Environmental Impact Guidelines of the Niagara Region (2018) and the Niagara Peninsula Conservation Authority (NPCA 2022). A term of reference for conducting the EIS was provided to the Niagara Region and Niagara Peninsula Conservation Authority (NPCA) for review and approval was provided by the Region on June 15, 2021 (**Appendix A**). For the subject lands, and adjacent lands, a background review, field investigations, and assessment of natural heritage features and functions were undertaken by Beacon in 2021 and 2022.

1.1 Overview of Study Area

The Towpath Drain flows west to east to Niagara Street via a culvert crossing at First Avenue and crosses through the middle of the subject lands. As can be seen on **Figure 1**, the only natural feature within the subject lands is a 30 m wide vegetated corridor that is associated with the Towpath Drian (**Photographs 1 & 2**). The remainder of the property supports a residential home along Quaker Road and farmed/fallow fields (**Photographs 3**).



Photograph 1. Vegetated Corridor Along the Towpath Drian





Photograph 2. Vegetated Corridor Along the Towpath Drian, Right, and Adjacent Fallow Farm Field Looking West to First Avenue



Photograph 3. Residence Along Quaker Road and Fallow Farm Field Looking Southwest to First Avenue



Site Location		Figure 1
Proposed Plan of Subdivision 294 Quaker Road, City of Welland		
		Project: 221305 Last Revised: November 2023
Client: Centennial Construction & Contracting (Niagara) Inc		Prepared by: BD Checked by: RH
	1:3,500	Inset Map: 1:50,000
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The subject lands are within the NWSPA and for the development of the secondary plan an assessment of the natural heritage features and functions within the plan area was undertaken by Aquafor Beech Limit (2019) and detailed in Appendix F in a report titled Rationale for Urban Growth in Northwest Welland (SGL 2019). The Aquafor Beech report identifies significant natural heritage features within the plan area as Environmental Protection Area (EPA), Environmental Conservation Area (ECA) and wildlife corridor (see report Figure 7.4 in **Appendix B**). The subject lands are located within Area C of the Aquafor Beech NWSPA study area. Based on the Aquafor Beech study, Schedule G Land Use Structure of OPA No 29 identifies the natural heritage features with the plan area (**Appendix B**). No EPA was identified to be associated with the subject lands. The vegetated corridor associated with the Towpath Drain corridor that runs through the subject lands is identified as ECA.

2. Realignment of the Towpath Drain

Following the completion of the NWSPA study, a landowner group retained Upper Canada Consultants (UCC) to undertake design for stormwater control within the NWSPA. The UCC study identified that the realignment of the Towpath Drain was required to facilitate stormwater control for future residential subdivision development. The section of the drain to be realigned is located north of Quaker Road, from the Niagara Street crossing, upstream (west) to Montgomery Road, a straight-line distance of 2 km. The drain and associated headwater drainage features are regulated by the NPCA pursuant to Ontario Regulation 155/06 under the provisions of Section 28 (1) of the *Conservation Authorities Act*, and therefore a permit from the NPCA was required to conduct the realignment works. A design for the drain realignment was developed by UCC which was submitted to the NPCA as part of the permit application (NPCA file No. 202201368). The permit application was approved by the NPCA April 15, 2024.

2.1 Towpath Drain Realignment EIS

In support of the NPCA permit application for the realignment of the Towpath Drain, UCC retained Beacon to undertake an EIS. As required by the NPCA, Beacon provided a Terms of Reference, dated April 26, 2023, to undertake the EIS. The Towpath Drain Realignment EIS (Beacon 2023) assessed the natural heritage features and functions associated with the drain corridor based on field investigations undertaken for the landowners in 2021, 2022 and 2023.

As the only natural features within the subject lands are associated with the drain corridor, the EIS completed by Beacon for the realignment of the drain provides the details regarding the field surveys completed and description of the existing natural heritage features and functions associated with the drain corridor. ***The Beacon EIS for the realignment of the Towpath Drain is provided as separate documentation and must be reviewed as part of this EIS.***

The following section provides a summary of the Beacon 2023 EIS findings for the subject lands.

3. Summary of Natural Heritage for the Subject Lands

3.1 Headwater Drainage Features

Two headwater drainage features are associated with the subject lands that direct flows to the drain. They are identified as H4 and H5 in the Beacon 2023 EIS and following the headwater assessment protocol (TRCA and CVC 2014) they are assessed to support ephemeral flows with limited contributing functions. Following the protocols assessment for required management, they are assessed as no management required.

3.2 Fish Habitat

Sampling of the drain by Aquafor Beech Limited for the NWSPA study did not identify fish to be present. Field survey by Beacon over a two-year period has established that no permanent standing water is associated with these sections of the drain and therefore permanent fish habitat is not present. There is the potential for seasonal fish habit during high flow condition with fish migrating from downstream, upstream into these sections of the drain. However, 92 m piped section of the drain at the Niagara Street crossing represent a significant barrier to seasonal upstream fish migration. Therefore the drain is not considered to support annual seasonal fish habitat. The drain is assessed to provide indirect fish habitat through contribution of water flows and allochthonous material and nutrients to downstream to aquatic habitats associated with the Towpath Drain east of the Niagara Street crossing.

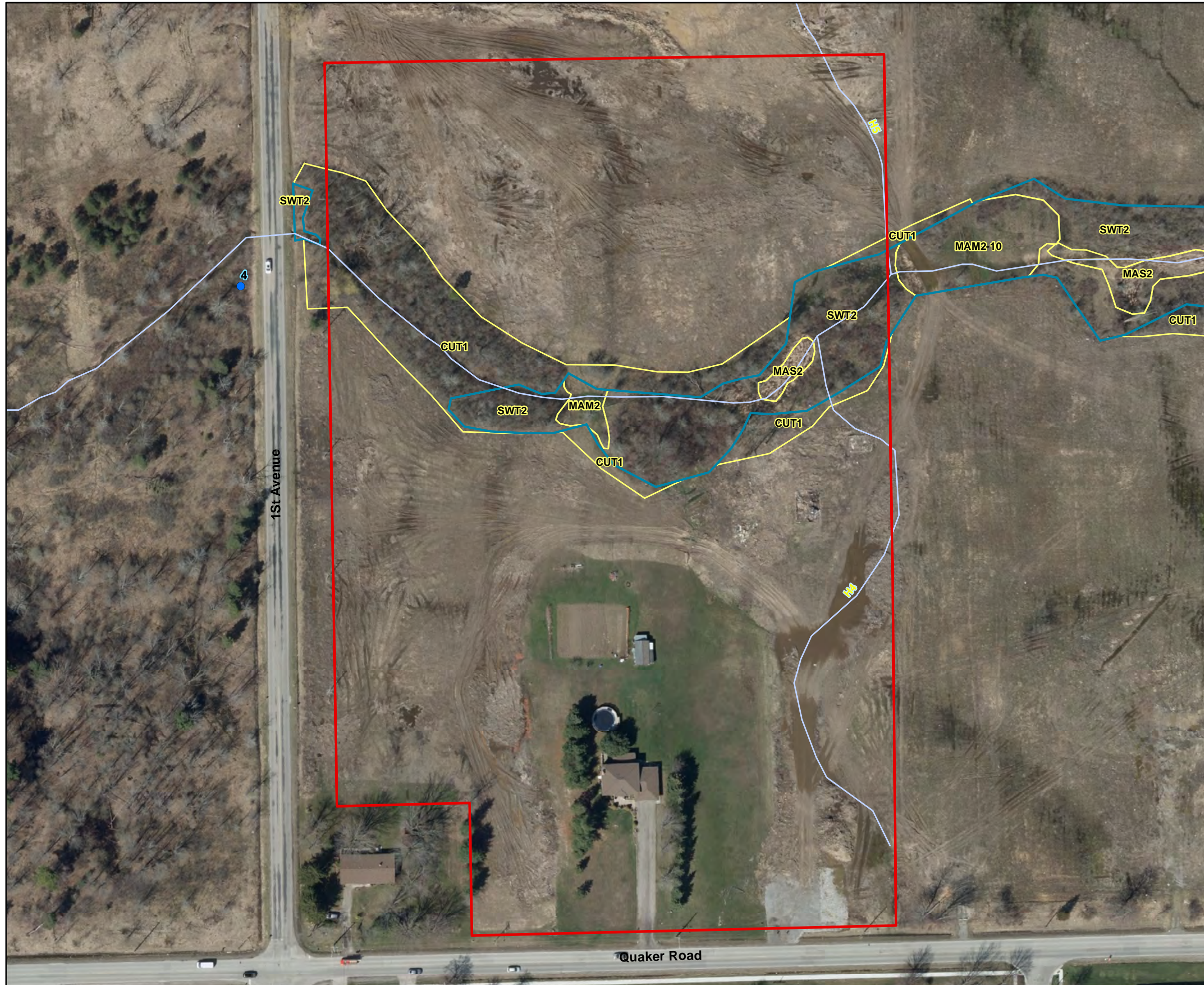
3.3 Vegetation Communities Within the Subject Lands Drain Corridor

The Beacon 2023 Towpath Drain Realignment EIS details the ELC vegetation communities that were identified for the section of the drain within the subject lands and is presented on **Figure 2**. The communities that were identified within the subject lands included a small narrow pocket of shallow marsh (MAS2), a small 0.02 ha meadow marsh (MAM2), a band of thicket swamp (SWT2) and cultural thicket (CUT1). **Appendix C** provides a photographic record of these communities.

No rare vegetation communities, provincial S-rank of S1, S2, or S3, are found within the drain corridor.

3.4 Habitat for Threatened and Endangered Species

No species of flora or fauna that are listed by the *Endangered Species Act* (ESA) as endangered, threatened, or special concern occur or are expected to occur within the habitats that are found in the drain corridor within the subject lands.



Existing Vegetation Communities	Figure 2
Proposed Plan of Subdivision 294 Quaker Road, City of Welland	
Legend	
	Subject Property
	Wetland Limit
	H1 Headwater Watercourse
	Ecological Communities
●	Amphibian Survey Stations

Code	Wetland Communities
MAS2	Mineral Shallow Marsh
MAM2	Mineral Meadow Marsh
MAM2-10	Forb Mineral Meadow Marsh
SWT2	Mineral Thicket Swamp
	Cultural Communities
CUT1	Mineral Cultural Thicket

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3.5 Provincially Significant Wetlands (PSW)

There is no Provincially Significant Wetland (PSW) identified within or adjacent to the subject lands.

3.6 Areas of Natural and Scientific Interest (ANSI)

There are no Provincial or Regional ANSIs identified within or adjacent to the subject lands.

3.7 City of Welland NWSPA EPA and ECA

No areas are identified that supports an EPA designation within or adjacent to the subject Lands. The vegetated corridor associated with the Towpath Drian is designated ECA.

3.8 Significant Valleylands

There are no valleylands within or adjacent to the subject lands.

3.9 Significant Wildlife Habitat

According to the Significant Wildlife Habitat Technical Guidelines (MNR 2000), there are four main categories of Significant Wildlife Habitat (SWH):

- Seasonal Concentration Areas of Animals;
- Rare Vegetation Communities or Specialized Habitat for Wildlife;
- Habitat for Species of Special Concern; and
- Animal Movement Corridors.

Within each of these categories, there are multiple types of SWH, each intended to capture a specialized type of habitat that may or may not be captured by other existing feature-based categories (e.g., significant wetlands, significant woodlands). For the Towpath Drian Realignment EIS the Significant Wildlife Habitat Criteria Schedules for Ecoregion 7E (MNR 2015) were used as a screening for SWH within the drain corridor.

3.9.1 Seasonal Concentration Areas

No areas or habitats are found within the subject lands that supports seasonal concentrations of animals.

3.9.2 Rare Vegetation or Specialized Habitat for Wildlife

No rare or specialized vegetations communities are found within, or adjacent to, the subject lands. The NWSPA study identified a potential snake hibernaculum in Area 3 west of First Avenue, however,

no features or structures that could potentially support a snake hibernaculum were found to occur within the subject lands.

At the local level, the small wetland pockets within the drain through the subject lands can be considered to provide low quality specialized breeding habitat for frogs and toads.

No habitat for rare species of flora or fauna was found to occur.

3.9.3 Habitat for Species of Special Concern

No species of special concern was found to occur in the drain corridor associated with the subject lands.

The NWSPA study identifies that there is the potential for Milksnake (*Lampropeltis triangulum*) and Eastern Ribbonsnake (*Thamnophis sauritus*). Though the drain corridor can be considered to support general habitat for these two species, for the local population the habitats associated with the large area of PSW directly west of First Avenue can be considered to be the core habitat.

The NWSPA study also identified specialized habitat for the special concern Monarch Butterfly (*Danaus plexippus*) to be associated with open meadows or similar habitats containing milkweeds and other wildflowers. The subject lands do not support open meadow habitat with an abundance of milkweeds or wildflowers.

3.9.4 Animal Movement Corridors

The primary ecological function of the drain corridor through the subject lands is to provide a local east-west terrestrial and aquatic movement corridor within a landscape that is dominated by agricultural fields.

3.10 Significant Woodlands

Based on the findings of the NWSPA study, no significant woodland is associated with the subject lands or adjacent lands.

4. Proposed Development

The general elements of the proposed draft plan of subdivision are provided on **Figure 3**. Detailed plans are provided in **Appendix D** and should be reviewed in conjunction with the following text.

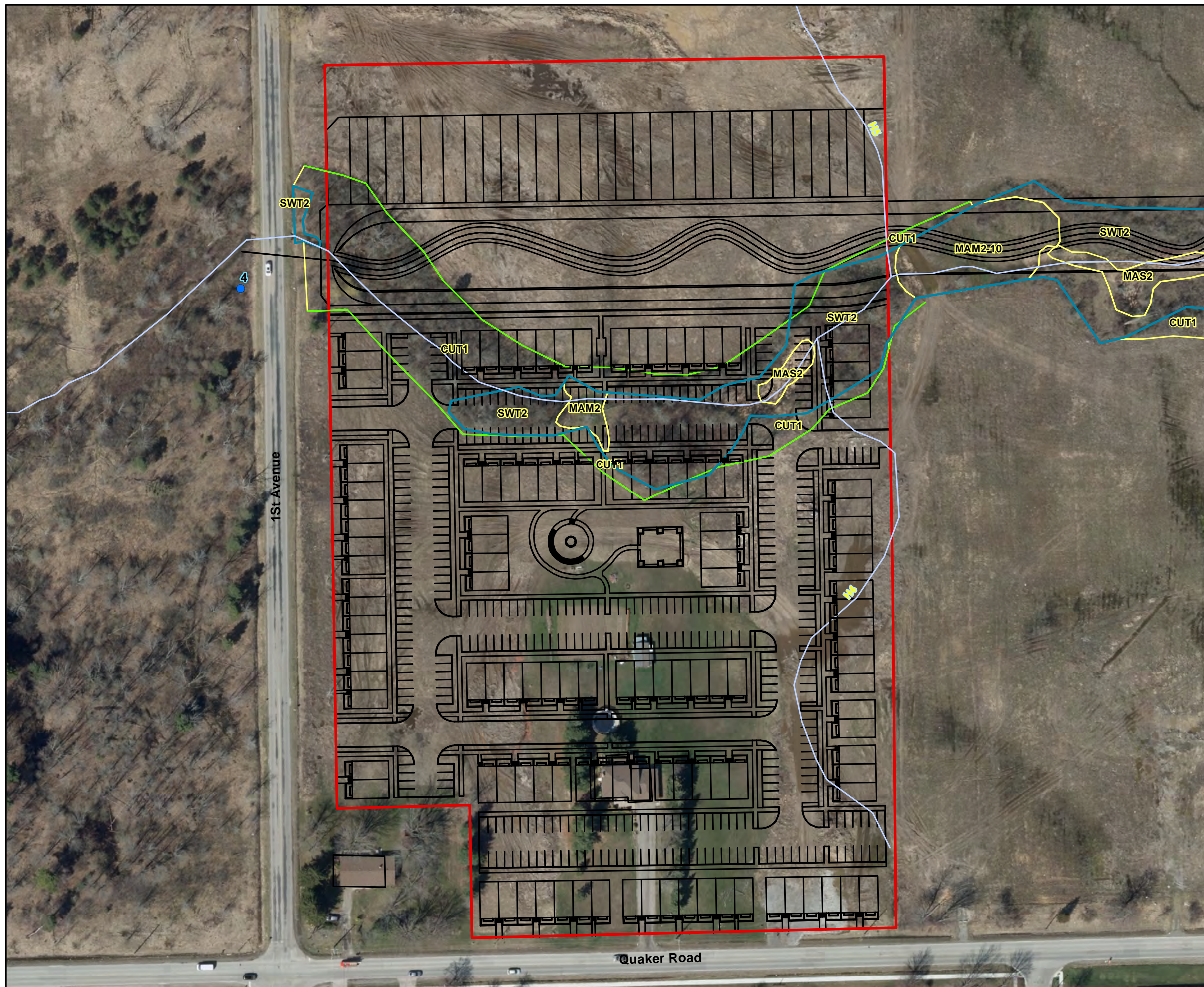
The drain realignment 30 m wide corridor will be located in Block 7. Twenty-eight (28) residential street towns will be constructed in Blocks 1 through 5 located to the north of the drain realignment corridor. These will be accessed via Street A with an intersection with First Avenue. South of the realignment corridor three hundred and six-nine (369) multi-family units will be located in Block 6. These units will be accessed through an internal street network that will have two intersections with First Avenue. No street crossing of the drain realignment corridor (Block 7) will occur.

Proposed Plan of Subdivision
294 Quaker Road, City of Welland

Legend

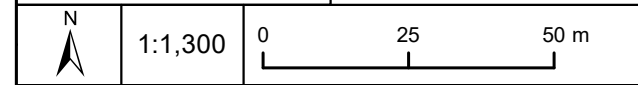
- Subject Property
- Proposed Development
- Wetland Limit
- Dripline
- H1 Headwater Watercourse
- Ecological Communities
- Amphibian Survey Stations

Code	Wetland Communities
MAS2	Mineral Shallow Marsh
MAM2	Mineral Meadow Marsh
MAM2-10	Forb Mineral Meadow Marsh
SWT2	Mineral Thicket Swamp
	Cultural Communities
CUT1	Mineral Cultural Thicket



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Storm water will be collected through a curb and gutter system and will be directed to storm water management facilities located to east near Niagara Street. Water and sanitary will be serviced through the street network and connect to the system within the Quaker Road right-of-way.

The construction will be phased, with realignment of the Towpath Drain being constructed in phase 1. The street network is expected to be completed in one year, with the construction of homes occurring over a number of years.

5. Impact Assessment and Mitigation

The realignment of the Towpath Drain corridor is the only impact of the draft plan on natural heritage. The vegetation corridor associated the drain is identified as ECA within the NWSPA and the realignment works will result in its removal. No significant natural heritage features and functions were identified that would result in a significant negative impact by the realignment of the drain (Beacon 2023).

To address the impact of the realignment to obtain NPCA approval and work permit, the UCC developed a design for the new alignment that incorporated a number of features to maintain and enhance the natural features and function of the drain corridor. A summary is provided below.

5.1 Design Mitigation for the New Drain Corridor

The following details design mitigation measures that will off set the impacts of the removal/alteration of the existing drain corridor. The general design of the proposed drain corridor east of First Avenue, which includes the subject lands, is presented in **Appendix E**.

5.1.1 Design of New Corridor

To mitigate the loss/alteration of the existing drain corridor, the design for the new drain will include a 30 m wide naturalized corridor, including wetland areas within the watercourse flow channel. The drain corridor will have total length of 1.77 km. The total area of the new drain corridor will be 5.07 ha, representing a 0.86 ha increase.

For the existing drain, two sections of the drain are enclosed. At the western limit west of Rice Road, a 170 m section of the drain is piped through a culvert under soccer fields. At the eastern limit at Niagara Street the drain follows through a 92 m long piped section under the paved parking lot of Toronto Autoparts. For the new corridor these piped sections of the drain will be day lighted, resulting in a continuous corridor. The opening of these sections of the drain will greatly enhance the aquatic and terrestrial corridor function of the drain.

5.1.2 Naturalization of the New Corridor

For the mitigation and enhancement of the ecological function of the new drain, the follow features have been included in the design:

- A corridor width of 30 m;
- Flow channel meanders;
- Diversify in flow channel substrate (gravel/cobble pockets);
- Creation of wetland areas for compensation for wetland loss at a minimum ratio of 1:1;
- Wetland function enhancement through the creation of shallow and deep-water wetland pockets; and
- Plantings to create a naturalized corridor.

The entire 30 m wide corridor will be naturalized with the planting of shrubs and trees. In addition, the proposed design includes a number of wetland areas located throughout the corridor representing a total area of 3.89 ha, a 1.24 ha increase, consisting of shrub thicket wetland and deep aquatic pools. The combined area of the deep-water pools that will be located throughout the drain corridor is 1.66 ha, representing 43% of the total wetland areas that will be created. The absence of prolonged standing water within the existing drain is a limiting factor for the existing wetland functions, and the proposed design represents a significant enhance for wetland functions. In addition, the existing flow channel in drain only supports a clay substate and the design for the new watercourse will include riffels with cobble gravel substrate that will be located throughout the drain corridor which will increase the diversity of habitats.

Details regarding the planting plans and enhanced ecological conditions for the corridor are provided in a design brief that has been prepared by and Ecological & Environmental Solutions (EES 2022) and will be provided to the Region under a separate cover.

5.1.3 Buffers

The new drain corridor will have a minimum width of 30 m. No buffer lands adjacent to this corridor are proposed. However, as part of the corridor design to address post development impacts on the new corridor, post construction a chain link fence will be located along the perimeter of the corridor. Also, a no-gate by-law is recommended to reduce human encroachment and limit the movement of pets into the adjacent natural corridor.

For intermittent or ephemeral watercourses that do not support fish habitat and non PSW wetlands NPCA development policy is to provide a 15 metre buffer. The new drain watercourse will be located centrally within the 30 m wide naturalized corridor, which will provide a 15 m buffer to each side of most of the watercourse. It is noted that the design includes meanders in the watercourse so that at some locations the outer side of the meander will have a reduced buffer by 2 to 5 m. The reconstructed watercourse has varying setbacks from the newly constructed wetland of 6-9 metres average with additional width in various locations. With the naturalization of the buffer lands and the fencing along the perimeter of the corridor, localized reductions in the 15 m buffer to wetland areas and the watercourse is not considered significant with respect to protecting the ecological function of the watercourse and wetlands within the new drain corridor.

5.2 Street Crossings

A primary function of the drain corridor will be to provide a terrestrial and aquatic movement corridor. The proposed draft plan has been designed so that no street crossings will be required for the section of the new drain corridor within the subject lands (Block 7).

5.3 Construction Mitigation

The construction works will be undertaken in two stages, east and west. The east stage includes the section between Niagara Street and First Avenue and includes the subject lands. The west stage includes the section east and west of Rice Road. The downstream east stage will be constructed first. During construction flows will be maintained by temporary swales. Once a section is completed flow will be directed to the new channel and the temporary swales will be removed. Detailed information on the staging of the works has been provided to the NPCA by UCC.

During the construction the following general construction mitigation measures are recommended for the construction works:

- Soil erosion from construction sites can result in adverse environmental impacts if sediment-laden stormwater runoff reaches the drain. Therefore, an erosion and sediment control plan should be implemented prior to any site alteration or construction. This plan is to be approved by the NPCA;
- All construction and development related activities should be confined to the established limit of development, except for those areas subject to naturalization where landscaping works are permitted;
- To avoid impacts on breeding birds and other wildlife, removal of vegetation should be conducted between October 1 and March 31;
- Though the drain is assessed to not support fish habitat, nevertheless, prior to works a fish salvage plan should be undertaken under MNRF; and
- Storage of equipment and materials and the fueling of equipment should not be permitted within 30 m of a watercourse or PSW boundary. Ontario Provincial Standard Specification 180 is to be followed for the management of excess materials.

6. Cumulative Impacts

The cumulative impact of development on the natural heritage within the City of Welland is beyond the scope of this EIS. At the local level the subject lands lie within the NWSPA, and development of the surrounding lands will occur in the future. The secondary plan has identified EPA and ECA and development polices for their protection, therefor potential cumulative impacts within the secondary plan area has been addressed.

7. Policy conformity

The following is a summary the proposed subdivision development conformity with relevant environmental development policies.

7.1 Federal Fisheries Act

Development and site alteration are not permitted in fish habitat except in accordance with federal requirements pursuant to the *Fisheries Act (1984)*. No fish habitat is associated with the drain and construction mitigation measures have been identified to protect fish via preconstruction fish salvage and sediment control measures to prevent downstream impacts. A request for project review was provided to Fisheries and Oceans Canada (DFO), Fish and Fish Habitat Protection Program. Following review, provided a letter (November 2024) stating that with the identified mitigation measures the proposed works are not likely to result in the death of fish or the harmful alteration, disruption or destruction of fish habitat and is therefore in compliance with Sections 34.4(1) and 35(1) of the *Fisheries Act*; therefore, the draft plan is in conformity with the regulations of the *Fisheries Act*.

7.2 Ontario Endangered Species Act (ESA)

The *Endangered Species Act (ESA 2007)* does not permit development or site alteration in habitat for threatened and endangered species except in accordance with provincial requirements detailed in the Act's regulations. No habitat for endangered or threatened species is found within or adjacent to the subject lands; therefore, the draft plan is in conformity with the regulations of the ESA.

7.3 Niagara Peninsula Conservation Authority

The NPCA regulates wetlands and watercourses pursuant to Ontario Regulation 155/06 under the provisions of Section 28 (1) of the *Conservation Authorities Act*, and therefore a permit from the NPCA is required for the realignment of the Towpath Drain within the subject lands. For the permit application the NPCA required that an EIS be undertaken. An EIS was completed in 2023 in support of a work permit application and the NPCA has approved the proposed design provided a permit on April 2024 (File Number PLPER202201368), therefore the works are in conformity with their environmental development policies of the NPCA (NPCA 2024).

7.4 Provincial Planning Statement

Section 4.1 of the Provincial Planning Statement (PPS 2024) provides direction to regional and local municipalities regarding planning policies specifically for the protection and management of natural heritage features and resources. The development policies of the current Official Plans of the Niagara Region and City of Welland are in conformity with Section 4.1 of the PPS. Therefore, conformity with the Official Plans ensures conformity with the PPS.

7.5 Niagara Region and City of Welland

7.5.1 Niagara Region

Section 3.1.30.4.1 of the Niagara Region Official Plan (2022) states that where a secondary plan has been approved after July 1, 2012, those portions that are not subject to a draft approved plan of subdivision or plan of condominium shall be approved in accordance with the approved mapping and

policies of the secondary plan. The subject lands lie within the City of Welland Northwest Secondary Plan Area, Official Plan Amendment No. 29, which was approved by the Niagara Region, on July 14, 2021. Therefore, conformity with the Secondary Plan is required by the Region.

7.5.2 City of Welland

Environmental development policies for the NWSPA are detailed in Section 7.3.1.6 Land Use Structure of the OPA No. 29 and natural heritage features are identified on Schedule G. Section 7.3.1.6 identifies that lands designated Environmental Protection Area (EPA) or Environmental Conservation Area (ECA) on Schedule G shall be subject to the policies of Section 6.1 Environment of City's Official Plan (OP 2019).

No EPA is identified to occur within the subject lands. The drain corridor is identified as ECA. Section 6.1.2.3.C states development and site alteration may be permitted without an amendment to the Plan in ECA, Natural Heritage Corridors, and on all adjacent lands if it has been demonstrated that there will be no negative impact on the natural features or their ecological functions. The proponent shall be required to prepare an Environmental Impact Study (EIS) in accordance with the Policies of this Plan. Schedule G shows that the vegetated corridor associated with the Towpath Drain through the subject lands is designated as ECA. The 2023 EIS completed by Beacon for NPCA approval for the realignment of the Towpath Drain assessed the corridor and found that there were no significant features and functions that would result in a significant negative impact and that naturalization of a 30m corridor identified for the new realignment would maintain and/or enhance existing natural features and functions of the ECA associated with the drain; therefore the draft plan is in conformity with ECA development policies.

With respect to drainage features Section 7.3.1.6 of the OPA states that a headwater drainage feature assessment shall be required to the satisfaction of the City and the Conservation Authority prior to approval of development adjacent to those drainage features. The assessment shall evaluate and classify the drainage feature status based on criteria established by the Conservation Authority and shall determine if the drainage features are to be maintained in-situ, can be relocated or can be removed. The EIS completed by Beacon for the NPCA approval for the realignment of the drain undertook the required headwater drainage feature assessment following the required protocol (TRCA/CVC 2014). Two headwater features were identified, and their assessment determined that their removal did not require mitigation. In addition, the OPA states that where drainage features are to be maintained or moved, applications for development shall use natural channel design techniques to maintain or enhance the overall productivity of the reach. The design for the realignment of the drain incorporates natural channel design and a naturalized 30 m corridor which will enhance the overall ecological function of the drain. Therefore, the draft plan is in conformity with drainage features development policies.

With respect to wetland areas within the drain, Section 7.3.1.6 of the OPA states that for several small wetlands less than 0.5 hectares that prior to development, evaluation of these wetlands should be undertaken to determine if they are significant and warrant protection. The EIS completed by Beacon for the NPCA approval for the realignment of the Towpath Drain undertook an assessment of the functions associated with the wetland pockets within the drain and identified that they are not PSW. To mitigate the removal of the wetland pockets, the design for the realignment of the drain has incorporated the creation of wetland pockets that will increase the total wetland area within the drain; therefore, the draft plan is in conformity with wetland development policies.

The Beacon EIS identified that the drain corridor supports a local wildlife movement corridor. Section 7.3.1.6 of the OPA states that development can be located, designed, and constructed to maintain and, where possible, enhance the ecological functions of the natural heritage corridor in linking the natural heritage system or where an alternative corridor can be accommodated. In addition, stormwater management facilities are permitted within a corridor. Also, street crossings are permitted if they are designed with to facilitate safe movement of wildlife through the linkage. The naturalized corridor design for the drain realignment will maintain wildlife movement function and the draft plan will not require street crossings of the new drain. Based on the design of the drain realignment the draft plan is in conformity with respect to maintaining a wildlife movement corridor.

8. Conclusion

This EIS has been prepared in support of a proposed plan of subdivision to be located at 294 Quaker Road on lands the are located within the City of Welland Northwest Secondary Plan Area (NWSPA). This EIS detailed and evaluated the natural heritage features associated with the subject lands and assessed the potential impacts of the proposed development on ecological features and functions. This EIS concludes that with the implementation of the recommended design and construction mitigation measures, the proposed plan of subdivision is supported with respect to maintaining the natural heritage system of the City of Welland, Niagara Region and the Province.

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9. References

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- SGL Planning & Design Inc. 2019.
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and Region Conservation Authority and Credit Valley Conservation, TRCA Approval July 2013
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Inventory prepared for the Niagara Peninsula Conservation Authority.

Appendix A



Appendix A

Agency Correspondence

From: Boudens, Adam [<mailto:Adam.Boudens@niagararegion.ca>]
Sent: June 15, 2021 9:48 AM
To: William Heikoop <WHeikoop@ucc.com>
Cc: Lampman, Cara <Cara.Lampman@niagararegion.ca>; Earl, Lindsay <lindsay.earl@niagararegion.ca>
Subject: RE: Term of Reference for 294 Quaker Road

Hi William,

Regional Environmental Planning staff have reviewed the attached Terms of Reference (TOR) for the Environmental Impact Study (EIS) required for the property located at 294 Quaker Road, in the City of Welland. While the TOR is generally acceptable, we offer the following comments for your consideration:

1. Staff note that A Natural Heritage and Natural Hazards Existing Conditions Report (by Aquafor Beech Limited) was prepared for the Welland Northwest Area Secondary Plan, in which the subject property resides. As such, staff request that the findings of this Report be reviewed and incorporated into the EIS, as applicable.
2. Further to the proposed field studies, please ensure that the EIS considers the areas of natural cover that are not currently mapped, consistent with policy 7.B.1.8 of the Regional Official Plan. For example, if wetlands or woodlands are identified outside of currently mapped features, through ELC, ensure consideration as to whether these features meet the Region's criteria for designation. If additional wetlands are identified within the subject lands, an OWES evaluation should be completed and submitted to the MNRF and NPCA for review. All correspondence should be appended to the EIS.
3. Significant Woodland boundaries must be staked in the field with Regional Environmental Planning staff prior to the submission of the EIS.
4. In the future, please include the Species at Risk (SAR) and Significant Wildlife Habitat (SWH) screenings in TOR submissions. Attached is a SWH screening table which we prefer is used during TOR development. This will assist staff with scoping of field surveys. If the screenings indicate potential for SAR or SWH species, please ensure that specific surveys according to accepted protocols should be used (e.g., Survey Protocol for Ontario's SAR Snakes, etc.). Staff have reviewed the proposed location of development and note the following potential candidate SWH:
 - a. Bat Maternity Colonies
 - b. Deer Winter Congregation Areas
 - c. Other Rare Vegetation Communities
 - d. Reptile Hibernacula
 - e. Woodland Raptor Nesting Habitat
 - f. Migratory Butterfly Stopover Area
 - g. Amphibian Breeding Habitat
 - h. Terrestrial Crayfish
 - i. Special Concern and Rare Wildlife Species
 - j. Amphibian Movement Corridors

5. The EIS should include the screening, survey results and any mitigation required by the Ministry of Environment, Conservation and Parks (MECP) and/or other relevant agencies, as applicable. Please include all correspondence in an appendix to the EIS.
6. If S1-S3 species are found on site or within adjacent lands, their locations and habitat extent must also be mapped and included within the EIS to ensure no negative impact to the species or its habitat.
7. A high level/general water balance will be required if any wetlands or fish habitat is identified on the subject lands to demonstrate no hydrological impacts to wetlands and no net loss to productive capacity for fish habitat. If applicable, the EIS should describe the pre-development surface water drainage patterns, and assess potential impacts to the wetland and fish habitat. Supporting field investigations may be required to support the EIS (e.g., topography survey, hydrogeological assessment to determine spring high groundwater table, etc.).
8. An assessment of potential wildlife corridors/connections within the subject lands.
9. As always, please include all field survey data sheets as an appendix in the EIS.

Please note that the Niagara Peninsula Conservation Authority (NPCA) continues to be responsible for the review and comment on planning applications related to hazard lands and their regulated features. As such, the NPCA should be consulted with respect to the TOR and their comments read in conjunction

The above comments are provided in effort to ensure that the development application will include all information needed to address the Core Natural Heritage System (CNHS) policies of the Region's Official Plan (ROP). Staff will review the completed EIS against the requirements in the proposed TOR and outlined above. Should Beacon Environmental be of the opinion that one or more of the requirements outlined above should not be included within the EIS scope; Regional staff may entertain a reduced scope if sufficient rationale is provided. Should the comments above be acceptable, staff will accept the Beacon Environmental proposed TOR along with this letter as the final EIS TOR, with both appended to the final EIS.

Please do not hesitate to contact me if you have any questions or require additional information. There is no need to submit a revised TOR. Please just include all relevant agency correspondence as an appendix in the EIS.

Kind regards,

Adam

Adam

Senior Environmental Planner/Ecologist

Boudens

Planning and Development Services, Niagara Region

1815 Sir Isaac Brock Way, P.O. Box 1042

Thorold,

ON

L2V

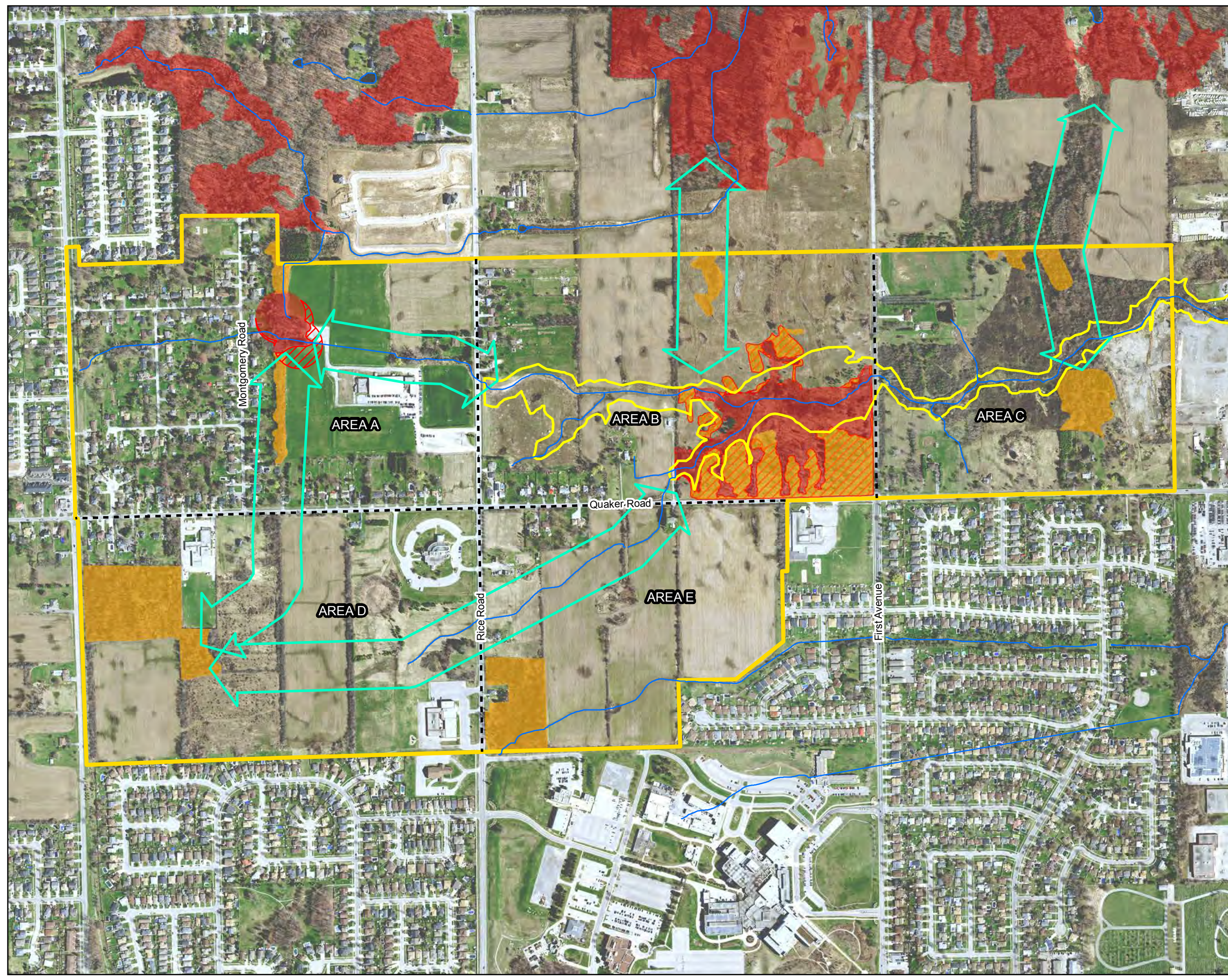
4T7

Phone: **905-980-6000 ext. 3770** Toll-free: 1-800-263-7215

Adam.Boudens@niagararegion.ca

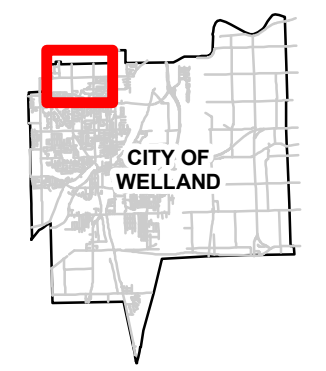
Appendix B





- Legend**
- Watercourse (NPCA)
 - Vegetation Survey Area Divisions
 - Environmental Protection Area
 - *Potential Environmental Protection Area
 - Environmental Conservation Area
 - Potential Corridor
 - NPCA Advisory Floodplain
 - Secondary Plan Boundary

(*) NOTE: Pending Further Assessment

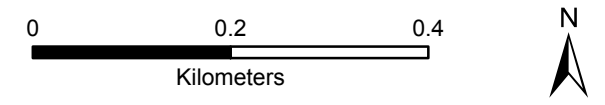


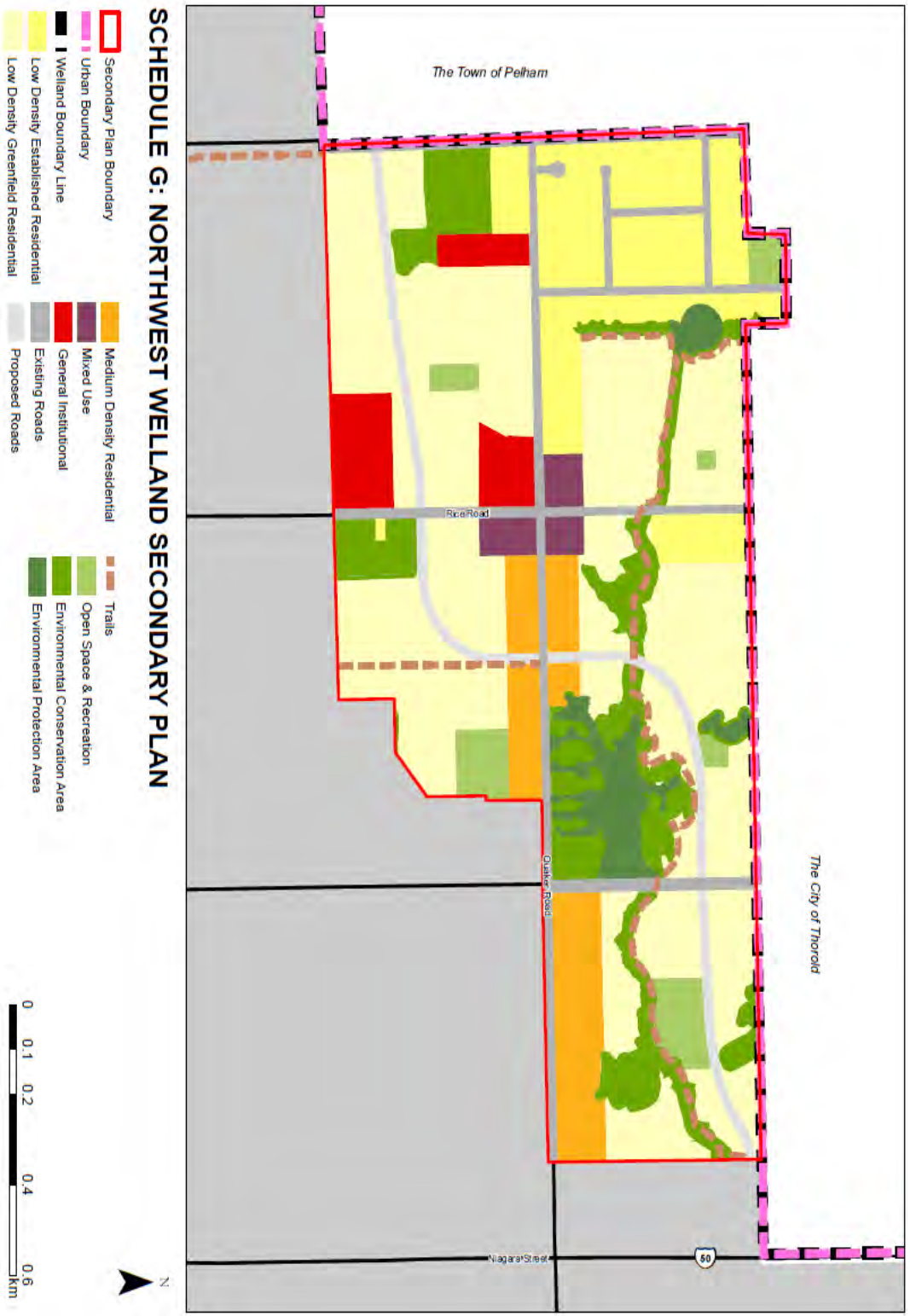
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Figure 7.4

Potential Landscape Connections

Date: January 2019
 Projection: NAD83_UTM_Zone_17N
 Data Source: Niagara Peninsula Conservation Authority,
 City of Welland





Appendix C



Appendix C

Photographic Reference



Photograph 1. Shallow Marsh (MAS2) in the Drain Flow Channel Supporting Grasses and Large Bur-reed, May 26, 2022, Looking East Downstream



Photograph 2. Grass Meadow Marsh (MAM2) in the Drain Corridor



Photograph 3. Linear Thicket Swamp SWT2 Within the Drain Corridor



Photograph 4. Buckthorn Cultural Thicket Community (CIT1) That Dominates the Drain Corridor



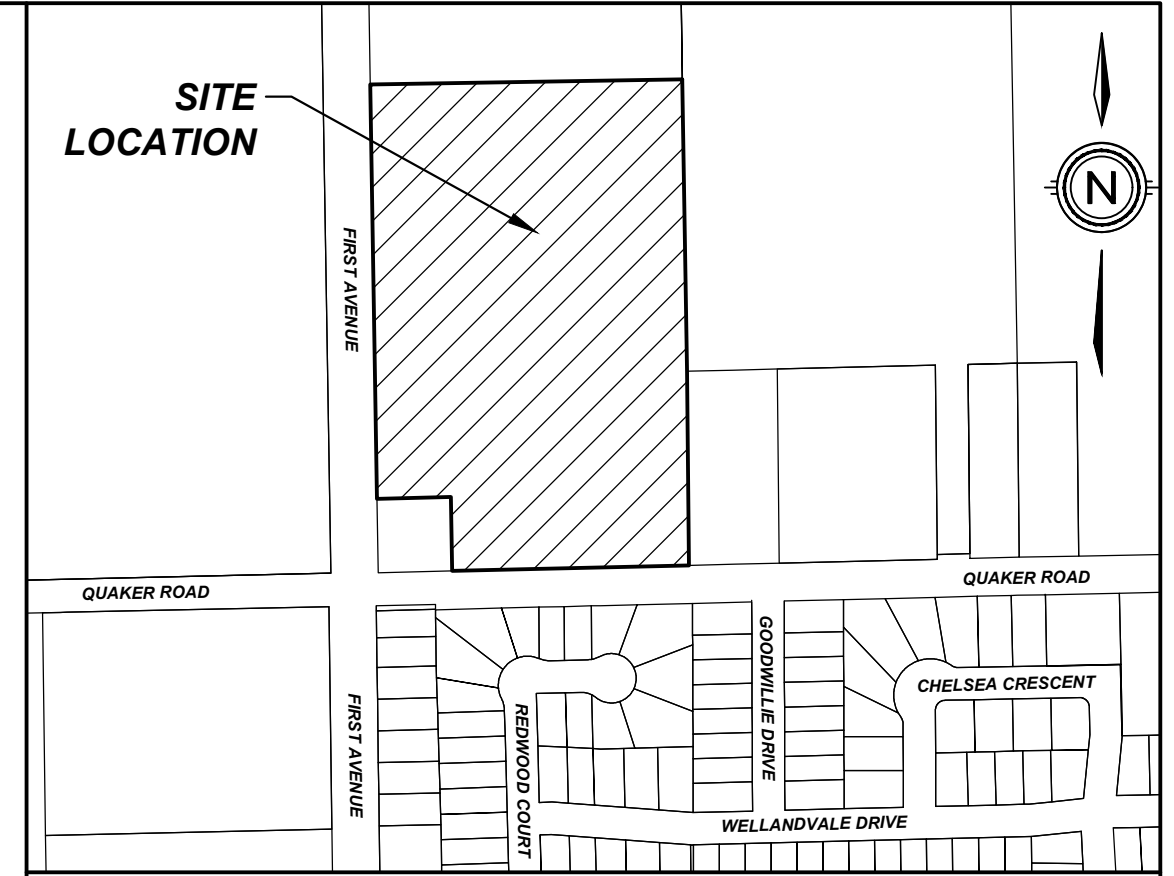
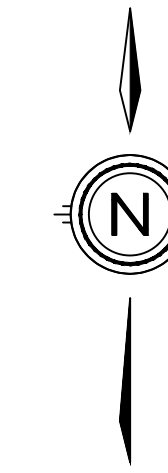
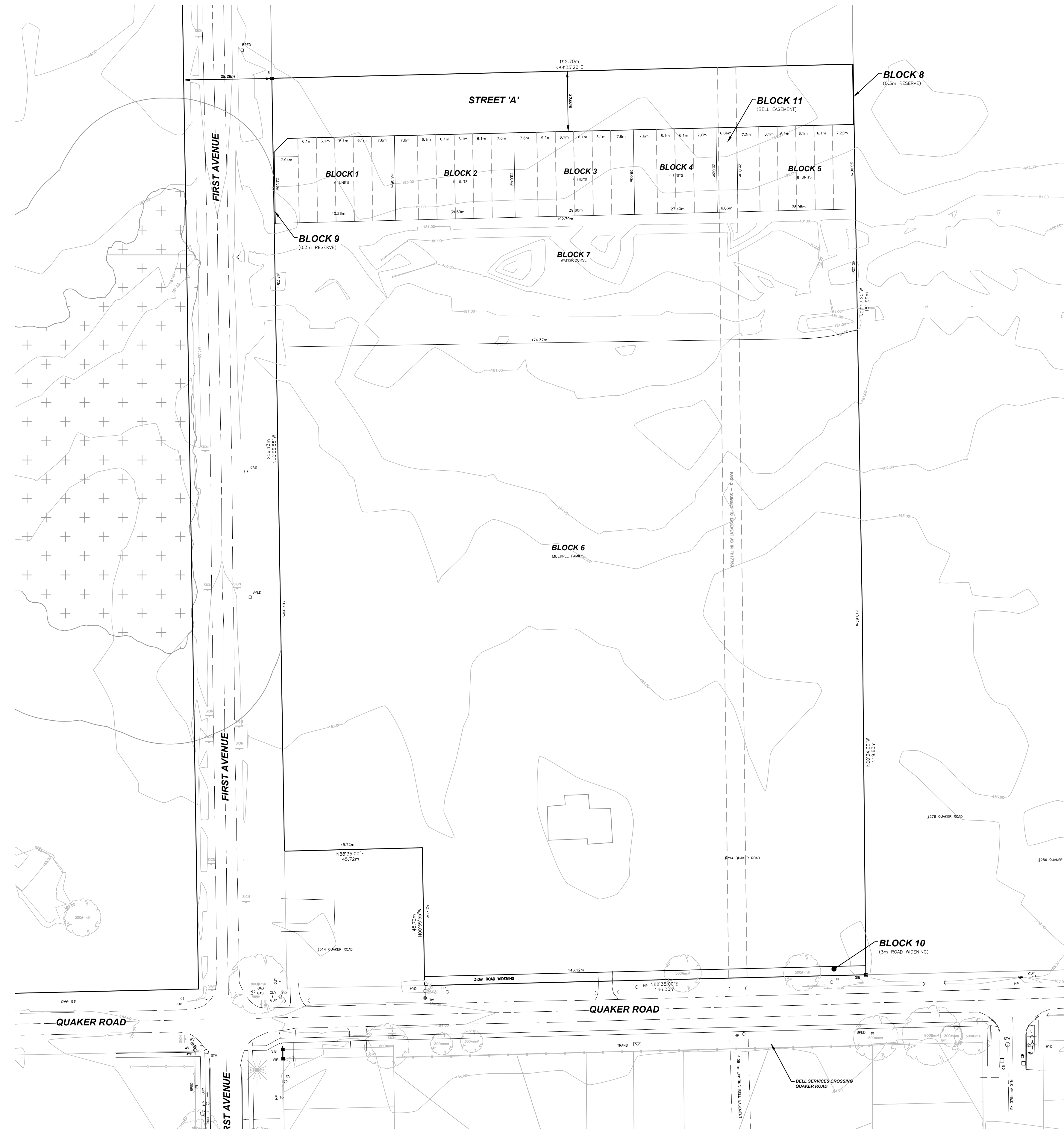
Photograph 5. Buckthorn Cultural Thicket Community (CIT1) That Dominates the Drain Corridor

Appendix D



Proposed Draft Plan of Subdivision

294 QUAKER RD WELLAND



KEY PLAN
N.T.S.

DRAFT PLAN OF SUBDIVISION

LEGAL DESCRIPTION

PART OF LOT 227
GEOGRAPHIC TOWNSHIP OF THOROLD,
IN THE CITY OF WELLAND
REGIONAL MUNICIPALITY OF NIAGARA

OWNER'S CERTIFICATE

BEING THE REGISTERED OWNER, I HEREBY
AUTHORIZE UPPER CANADA CONSULTANTS TO
PREPARE AND SUBMIT THIS DRAFT PLAN OF
SUBDIVISION TO THE CITY OF WELLAND
FOR APPROVAL.

[Signature] JULY 16, 2024
CENTENNIAL HOMES (NIAGARA) DATE

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE BOUNDARIES OF
THE LANDS TO BE SUBDIVIDED ARE
CORRECTLY SHOWN.

[Signature] Feb 6, 2024
J.D. BARNES LTD. DATE
22-16-112-01

REQUIREMENTS OF SECTION 51(17) OF THE PLANNING ACT

- a) SEE PLAN
- b) SEE PLAN
- c) SEE PLAN
- d) SEE PLAN
- e) SEE PLAN
- f) SEE PLAN
- g) SEE PLAN
- h) MUNICIPAL WATER
- i) SILTY SAND
- j) SEE PLAN
- k) FULL SERVICE
- l) SEE PLAN

LAND USE SCHEDULE

LAND USE	LOT/BLOCK	# OF UNITS	AREA(ha)	AREA(%)
STREET TOWN RESIDENTIAL	BLOCK 1-5	28	0.503	8.98
MULTIPLE FAMILY RESIDENTIAL	BLOCK 6	369	3.829	68.34
WATERCOURSE	BLOCK 7		0.823	14.69
0.3m RESERVE	BLOCK 8-9		0.002	0.03
3.0m ROAD WIDENING	BLOCK 10		0.044	0.78
EXISTING BELL EASEMENT	BLOCK 11		0.019	0.34
ROADWAY			0.383	6.84
TOTAL		397	5.603	100.00

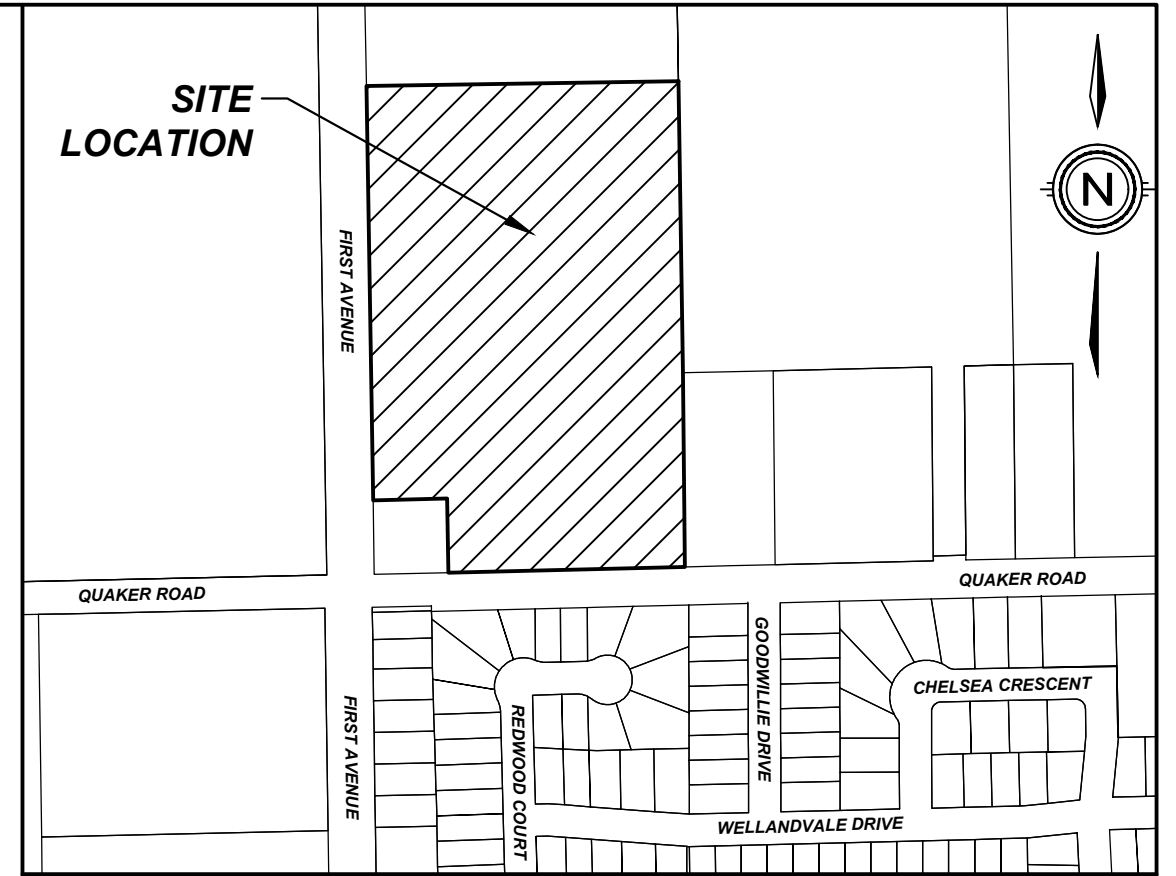
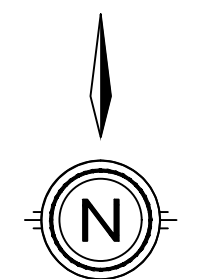
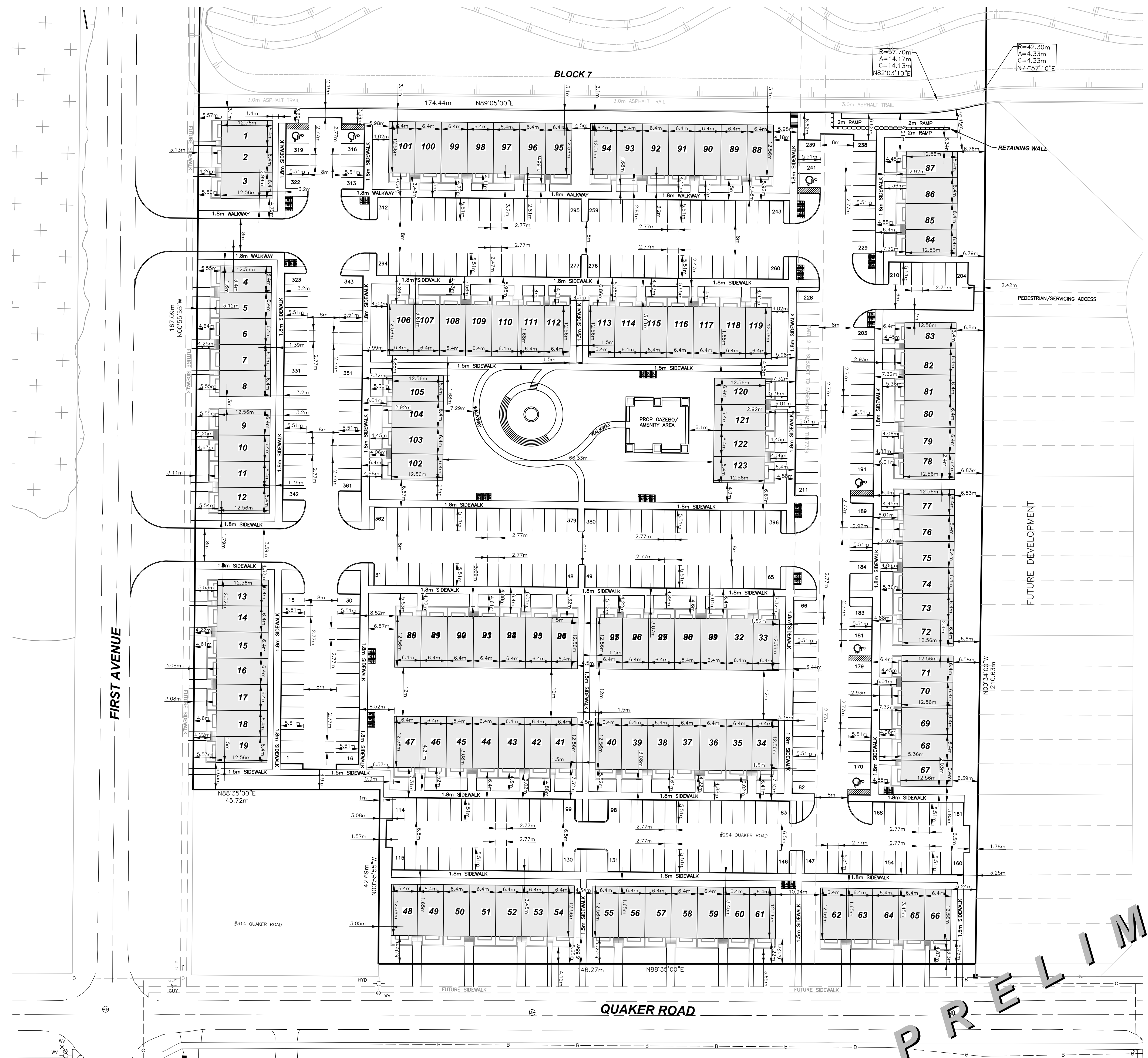
DEVELOPABLE AREA = 4.780ha (EXCLUDES WATERCOURSE)
DEVELOPABLE DENSITY = 83.05 units/ha

#	ISSUED FOR APPROVAL	DATE	INIT
0	ISSUED FOR APPROVAL	2024-11-27	TA
	REVISION		



DRAFT PLAN OF SUBDIVISION	DRAFTING	TA
	DATE	NOVEMBER 27, 2024
	PRINTED	DECEMBER 3, 2024
	SCALE	1:750
DWG No.	2159-DP	REV
		0

BLOCK 6 WELLAND



KEY PLAN N.T.S.

LEGAL DESCRIPTION

PART OF LOT 227
GEOGRAPHIC TOWNSHIP OF THOROLD,
IN THE CITY OF WELLAND
REGIONAL MUNICIPALITY OF NIAGARA

SITE STATISTICS

AREA	ha	% COVERAGE
BUILDING (369 UNITS)	0.989	25.48
ROADWAY/PARKING	1.250	32.20
LANDSCAPE	1.643	42.32
TOTAL	3.882	100.00
DENSITY		95.05 un/ha

ZONING MATRIX

PROVISION	ZONING (RM-NWSP)	PROVIDED
STACKED TOWNS		
MIN. LOT FRONTAGE	4.5m (PER UNIT)	6.4m
MIN LOT AREA	90m ² (PER UNIT)	105.34m ² (PER UNIT)
MIN. FRONT YARD	3.0m (DWELLING) 5.5m (GARAGE)	5.75m (QUAKER ROAD) *NO GARAGE*
MIN. INTERIOR SIDE YARD	1.0m, 0.0m ALONG A COMMON PARTY WALL	3.05m (UNIT 48)
MIN EXTERIOR SIDE YARD	1.0m	N/A
MIN REAR YARD	3.0m	6.4m (UNIT 67)
MAX. BUILDING HEIGHT	14.5m	11.2m
MIN. LANDSCAPED AREA	NOT APPLICABLE	42.32%
MAX LOT COVERAGE	NOT APPLICABLE	25.48%

PARKING REQUIRED (BLOCK TOWNS) - 1 PER UNIT x 369 = 369
PARKING REQUIRED TOTAL = 369 SPACES

ACCESSIBLE REQUIRED (100 OR MORE SPACES) = 2 SPACE +
FOR EVERY ADDITIONAL 100 SPACES, 1 SPACE IS REQUIRED = 5
PARKING PROVIDED = 396 SPACES
(INCLUDES 6 ACCESSIBLE)

BICYCLE PARKING REQUIRED - 0.25 SPACES PER UNIT
- 369 UNITS X 0.25 SPACES = 92.25 SPACES

REQUIRED TOTAL = 93.00 SPACES
BICYCLE PARKING PROVIDED = 93 SPACES

#	ISSUED FOR REVIEW	2024-09-18	TA
0	ISSUED FOR REVIEW	2024-09-18	TA
#	REVISION	DATE	INIT

BLOCK 6 MASTER PLAN DEVELOPED BY RPD STUDIO



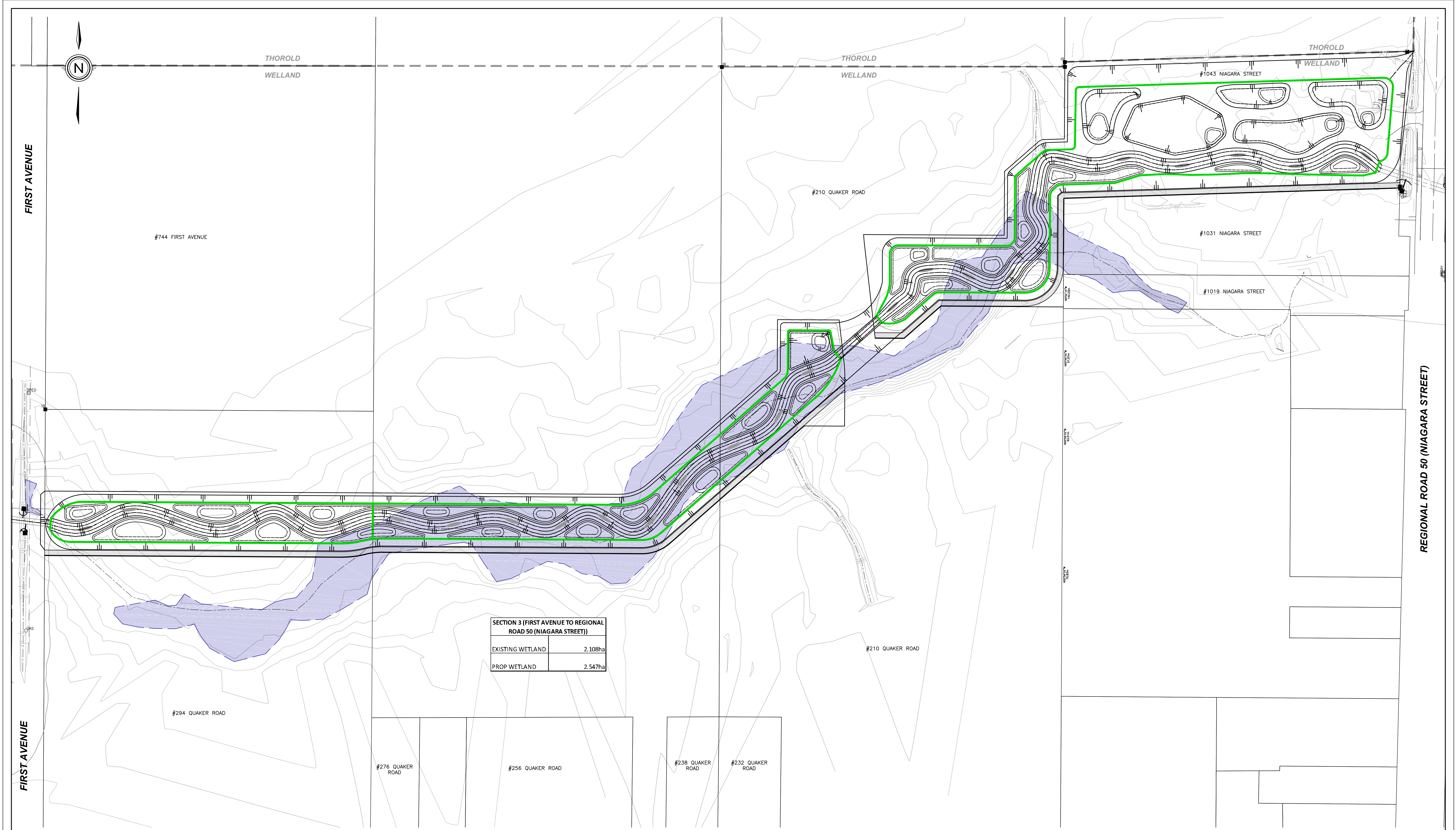
DRAWING TITLE	DRAFTING	TA
SITE PLAN OF VACANT LAND CONDOMINIUM	DATE	SEPTEMBER 18, 2024
	PRINTED	NOVEMBER 12, 2024
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	DWG No.	REV
	2159-SP	0


PRELIMINARY

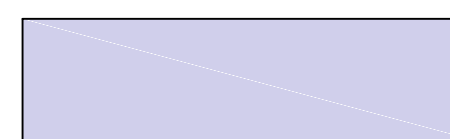
Appendix E



Proposal Drain Realignment Design



 PROPOSED WETLAND AREA PROVIDED (TOTAL AREA = 3.885ha)

 EXISTING WETLAND STAKED OUT JUNE 14 2023 (TOTAL AREA = 2.618ha)

 UPPER CANADA CONSULTANTS ENGINEERS / PLANNERS		TOWPATH DRAIN RE-ALIGNMENT WELLAND WETLAND AREAS 2	CONSULTANT FILE No. 21243
			DATE 2023-07-26
			PRINTED 2023-07-27
			SCALE 1:1000 m
			REF No.
			DWG No. 21243-WETLAND2
			REV 0