

# Tree Management Plan

## **MATTAMY (JOSHUA'S CREEK NORTH) DRAFT PLAN OF SUBDIVISION**

for:

Mattamy (Joshua's Creek North)

by:

LGL Limited  
environmental research associates

SEPTEMBER 2024  
LGL FILE TA9380



# MATTAMY (JOSHUA'S CREEK NORTH) DRAFT PLAN OF SUBDIVISION TREE MANAGEMENT PLAN

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## 1.0 INTRODUCTION

LGL Limited was retained by Mattamy (Joshua's Creek North) Limited to prepare a Tree Management Plan for the purpose of satisfying a condition to a development permit. The subject property is located in the Town of Oakville, Halton Region, with Burnhamthorpe Road to the northwest. The legal description is described as Part of Lots 9, Concession 1 North of Dundas Street (Geographic Township of Trafalgar) in the Town of Oakville. See Figure 1 Key Map for the location of the subject property. The objectives of this report are to:

- Identify and map tree resources;
- Identify trees which may pose a constraint to development;
- Identify trees which require removal to facilitate proposed development plans; and,
- Specify the type and locations of tree protection zones.

The information, interpretation and analysis contained within this Assessment are to be used solely for the purposes outlined within this Assessment. This Assessment is for the exclusive use of the client.

## 2.0 BACKGROUND

Oakville's Tree Protection By-Law 2017-038 (Consolidated Version as of March 28, 2022) regulates or prohibits the injury or destruction of trees on private property. *Exceptions* 5. (f) confirms that this submission is not regulated by the By-law "The provisions of this By-Law do not apply to the removal of trees for the purpose of satisfying a condition to the approval of a site plan, a plan of subdivision, a plan of condominium, or a consent under sections 41, 51, and 53 of the Planning Act, or as a requirement of a site or subdivision agreement under those section of the Act; and 5. (j) in the sole discretion of the Director of Development Engineering for the Town of Oakville, as a result of activities or matters undertaken as part of the approved process for Environmental Implementation and Functional Servicing requirements for the lands in the North Oakville Secondary Plan area other than the lands designated Natural Heritage System. Relevant definitions of the By-law used in this report include:

- *Boundary Tree* means a tree whose tree trunk, at ground level, straddles or is bisected by the property line of the lot;
- *Dead* means a tree that has no living tissue, or a tree which is infected by an invasive pest such as Emerald Ash Borer or Asian Long-horned Beetle as confirmed by an arborist certificate;
- *DBH* means the diameter at breast height, measured outside the bark, of the trunk of a tree, measured at 1.37 metres above grade;
- *Dripline* means the vertical projection of the outermost edge of a tree's canopy;
- *Good Arboricultural Practices* means the proper implementation of removal, renewal and maintenance activities known to be appropriate for individual trees in and around urban areas to minimize detrimental impacts on urban forest values and includes pruning of trees to remove dead limbs, maintain structural stability and balance, or to encourage their natural form, provided that such pruning is limited to the appropriate removal or not more than one-third of the live branches or limbs of a tree, but does not include pruning to specifically increase light or space;
- *Hazard* means a tree that is destabilized or structurally compromised such that it poses a potential



safety concern to property or life; and,

- *Tree* means a self-supporting woody plant which will reach a height of at least 4.5 metres at maturity.

Conservation Halton's Landscaping and Tree Preservation Guidelines (2021) have been reviewed to support design of this Tree Management Plan.

### 3.0 METHODOLOGY

Tree inventories were conducted across several dates for this assessment, including January 28, 31, February 1, 2, 13, 2024. A tree *Species at Risk* screening was conducted within the site and 50 metres beyond the parcel boundary. A detailed inventory was conducted with the following methodology for tree inventory and impact assessment:

- **Species:** each tree was identified to species level using common and scientific names;
- **Size:** diameter at breast height (DBH) was recorded in centimetres, measured 1.37 metres above ground level consistent with ISA standards. All trees with  $DBH \geq 15$  cm were assessed to align with the by-law requirements;
- **Health:** each tree surveyed was assigned a ranking of *poor* (more than 30% dead branches, weak compartmentalization, early leaf drop, presence of insects/disease, major structural defects), *dead* – (tree exhibits no signs of life), *fair* (10 - 30% dead branches, size or occurrence of wounds presents some concerns, minor structural defects) or *good* (dead branches less than 10%, signs of good compartmentalization, none or minor wounds, no structural defects). Note that surveys were conducted from ground level only and did not include excavation of root systems or aerial inspections of the canopy;
- **Site identification:** each tree was marked with a numbered ISA-approved aluminum tag;
- **Species were screened for listing by the Ontario *Endangered Species Act*, 2007 and species ranked S1 to S3 (SRank is the conservation status of a species or plant community within a particular province). In addition, cavities, hollows were noted for relevance to habitat of species at risk mammals;**
- **Geographical location:** the location of each tree was recorded with an EOS Arrow 100 GPS unit plotted in the appended figures with a horizontal accuracy of set to a criteria of sub-one metre. Identification numbers in the appended figures correspond with identification numbers in the inventory table; and,
- **An impact assessment has been prepared which lists trees identified for removal and protection in relation to the proposed plan including a tally of proposed tree removals within the Natural Heritage System (NHS) regulated area.**

## 4.0 RESULTS

The Joshua's Creek North Lands include agricultural fields, hedgerows, and natural heritage system (NHS) Core 10. A total of 654 trees are included in the inventory. Thirty species have been inventoried (Table 1). Diameters of surveyed trees ranged from 10 to 90 centimetres. Refer to Figures 2-A to 2-H for tree locations and the Appendix A-Tree Inventory.

**Table 1. List of Inventoried Species**

Scientific Name	Common Name
<i>Picea glauca</i>	white spruce
<i>Acer negundo</i>	Manitoba maple
<i>Fraxinus sp.</i>	Ash (dead and unidentifiable to species)
<i>Picea abies</i>	Norway spruce
<i>Carya ovata var. ovata</i>	shagbark hickory
<i>Quercus macrocarpa</i>	bur oak
<i>Prunus avium</i>	sweet cherry
<i>Prunus serotina</i>	black cherry
<i>Juglans nigra</i>	black walnut
<i>Quercus alba</i>	white oak
<i>Malus pumila</i>	apple
<i>Pyrus sp.</i>	Pear
<i>Fraxinus pennsylvanica</i>	Red Ash
<i>Salix x rubens</i>	crack willow
<i>Populus alba</i>	white poplar
<i>Populus deltoides ssp. deltoides</i>	eastern cottonwood
<i>Acer saccharum ssp. saccharum</i>	sugar maple
<i>Ulmus americana</i>	American elm
<i>Salix sp.</i>	willow
<i>Acer platanoides</i>	Norway maple
<i>Acer saccharinum</i>	silver maple
<i>Robinia pseudoacacia</i>	black locust
<i>Ulmus pumila</i>	Siberian elm
<i>Pinus sylvestris</i>	Scots pine
<i>Populus tremuloides</i>	trembling aspen
<i>Pinus strobus</i>	white pine
<i>Quercus bicolor</i>	swamp white oak
<i>Quercus rubra</i>	red oak
<i>Amelanchier sp.</i>	serviceberry
<i>Tilia americana</i>	basswood
<i>Juniperus virginiana</i>	Eastern red cedar

#### **4.1 SPECIES AT RISK**

Tree species regulated by the Ontario *Endangered Species Act, 2007*, were not observed within the study area nor 50 metres beyond the proposed limit of disturbance.

#### **5.0 PROPOSED PLANS**

The proposed plan for Joshua's Creek North lands includes single detached homes, street townhouses, rear lane townhouses, live/work townhouses, village square, natural heritage system, neighborhood park, elementary school, servicing block, and trail.

#### **6.0 IMPACT ANALYSIS**

A draft plan of subdivision has been proposed for Joshua's Creek North. The impact analysis is based on draft plan details as of January 2024 and provides a level of detail sufficient to highlight where conflicts with tree resources may occur and where tree protection is required. Trees within the tableland areas, proposed pedestrian (specifics to be refined at detailed design) and vehicle crossings of the NHS conflict with the draft plan layout such that they will require removal. Note that the two proposed crossing of the NHS (Reaches JC-6 and JC-7) have been studied and addressed as part of the Mattamy Phase 3 EIR/FSS Addendum #3 to the Final Joshua's Creek EIR/FSS.

##### **6.1 TREE REMOVALS**

Trees on the tableland are in conflict with proposed road and trail layout, lotting, neighbourhood parks, and village square.

A total of 536 trees greater than 15 cm DBH have been identified for removal.

##### **6.2 POTENTIAL TREE REMOVALS**

Approximately 30 trees are within the NHS adjacent to proposed stormwater pond outfalls. Since design details have not yet been finalized an impact assessment has been deferred. The determination of whether trees will be retained or removed in this areas will be dependent on the method of construction (open cut vs tunnelling). Therefore, these trees are illustrated with purple text/white halo on Figure 3 with unknown impacts.

#### **7.0 TREE PROTECTION**

The Town of Oakville requires Tree Protection Zones (TPZ) to be installed prior to ground-breaking. The Tree Protection Zone is the minimum setback required to maintain the structural integrity of the tree's anchor roots, based on generally accepted arboricultural principles. No grade change, storage or materials or equipment is permitted within the TPZ. Tree protection barriers must be erected prior to the commencement of any construction activity that may injure a tree on the site and are to remain in place throughout the entire duration of the project. Mattamy, or its authorized representatives, shall notify the

appropriate Town department in writing prior to commencing any such activities to confirm that the tree protection barriers are in place. Tree protection barriers must be erected prior to the commencement of any construction activity that may injure a tree on the site and are to remain in place throughout the entire duration of the project. If fill or excavated material must be temporarily located near the tree protection barrier, a wooden barrier must be used to ensure no material enters the TPZ. See appended Figures and Appendix A for a list of trees requiring avoidance/protection and project-specific tree protection fence (TPF) location.

## 7.1 TREE PROTECTION MEASURES

Mitigation measures shall be implemented to minimize impacts to trees adjacent to the construction zone. The following recommendations conform to Town protection specifications and good arboricultural practices and are designed to ensure impacts to trees surrounding the work zone and those identified for preservation are avoided or minimized.

Trees outside of the subject lands shall be protected from the impacts of grading, manoeuvring of machinery, material laydown, and other construction related activities. The following recommendations are intended to isolate trees from the impacts of construction:

- Delineation of the disturbance limits within work areas should be clearly defined on construction drawings and on site prior to construction;
- No trees shall be pruned or removed or impacted without prior approval from the Town and/or Conservation Halton;
- It is the responsibility of the project team to become directly acquainted with the site, to carefully examine the location of the proposed work, and to notify the Town of any discrepancies in the site conditions;
- The Site Supervisor shall be familiar with these recommendations and be cognizant of the purpose and function of Tree Protection Zones (TPZ) and Tree Protection Fence (TPF);
- Trees on neighbouring non-participating properties or on the property boundary shall be left in place until such time that the ownership is confirmed or upon written authorization for removal;
- Tree protection hoarding/barrier must be erect prior to commencement of work;
- Any area inside a TPZ must be left undisturbed (including overhead);
- Heavy machinery is not to be operated within the TPZ (including overhead swinging of machine arms);
- Construction materials or equipment are not to be stored within the TPZ or dripline of the trees;
- No signs or objects should be displayed or affixed to any retained trees;
- Disposal of any liquids shall not occur within the TPZ;
- For project planning and scheduling purposes, removal of vegetation should occur:
  - outside of the bird nesting season to comply with the Migratory Birds Convention Act

(MBCA), and the Fish and Wildlife Conservation Act (FWCA). Together, these Acts protect birds, nests, and eggs of regulated species (game birds, raptors, owls, migratory song birds). The nesting season is generally considered to be late March to late August (<https://www.ec.gc.ca>); and,

- outside of the bat summer roosting period considered March 15 - November 15 to avoid impacts to roosting bats protected by the FWCA and the Endangered Species Act;
- Should any additional, incidental or accidental tree injuries occur during construction, a qualified professional should be consulted to determine if additional mitigation measures should be employed;
- Ash tree removals are subject to CFIA Regulation D-03-08, which details the phytosanitary requirements to prevent the entry into and spread of the Emerald Ash Borer (EAB), *Agrilus planipennis Fairmaire*. The tree removal contractor shall comply with the conditions set by D-03-08 when conducting Ash tree removal;
- Trees approved to be removed should be marked with paint to inform the site contractor during vegetation clearing;

Oakville-specific recommendations include:

- Tree protection barriers must be erected prior to the commencement of any construction activity that may injure a tree on the site and are to remain in place throughout the entire duration of the project. The applicant shall notify the appropriate Town department in writing prior to commencing any such activities to confirm that the tree protection barriers are in place.
- The tree protection barriers specified herein must remain in a condition satisfactory to the Town until all site activities including landscaping are complete.
- Authorization from the appropriate Town department must be obtained prior to the removal of tree protection barriers.
- If some fill or excavated material must be temporarily located near the tree protection barrier, a wooden barrier must be used to ensure no material enters the TPZ.

A sign, provided by the Town that is similar to the illustration below will be paid for by the application and mounted on one side of a tree protection barrier for the duration of the project.

A sign, provided by the Town (example below) shall be mounted on one side of a tree protection barrier for the duration of the project.

<p><b>Tree Protection Zone</b></p> <p>No grade change, storage of materials or equipment is permitted within this area.</p> <p>This tree protection barrier must not be removed without the written authorization of the Town of Oakville.</p> <p>Report any contraventions to</p> <p><b>Contact Name _____ Tel No. _____</b></p> <p>Unauthorized removal of the tree protection barrier or other contraventions may result in prosecution.</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## 8.0 WILDLIFE CONSIDERATIONS

Tree removals may be subject to the requirements and provisions of other legislation, regulations or bylaws, such as the *Migratory Birds Convention Act* (MBCA), *Conservation Authorities Act*, *Endangered Species Act*, or the *Fisheries Act*. With respect to the MBCA, it is strongly recommended that vegetation removals be avoided during the breeding bird season (late-March to late August) and the bat roosting season (April 1-September 30). Vegetation removals are preferred to occur during November to March; a time when bats and most birds are not utilizing trees for roosting or nesting. These recommendations are consistent with the outcome of the consultation process with MNRF Species at Risk Biologists during the Joshua's Creek and Tributaries EIR/FSS, which included the Phase 3 lands. While this mitigation method is expected to be implemented for the Joshua's Creek North lands, acceptance of this strategy is being sought from the Ministry of Environment, Conservation and Parks who currently administers the Endangered Species Act.

## 9.0 COMPENSATION

Compensation for the removal of trees within the Conservation Halton (CH) regulated areas in the past have been provided at a minimum of 3:1 for trees measuring 15 cm DBH and greater. In this case, seventeen (17) trees greater than or equal to 15cm DBH are proposed for removal to facilitate construction of the trail portions that are within the NHS. Thus, 51 compensation trees should be provided in future landscape designs.

## 10.0 CONCLUSION

Trees on the Mattamy Joshua's Creek North Lands were surveyed in January and February of 2024. There were no observations of tree species that are regulated by the Ontario *Endangered Species Act*, 2007, nor were there trees that pose a specific constraint to development.

Note that the construction methods for stormwater management pond outlets have not yet been finalized and so the following statements regarding the quantity of trees to be removed may be revised in future submissions.

A total of 536 trees ( $\geq 15$ cm DBH) regulated by the Town of Oakville are proposed for removal as they conflict with road layout, servicing, grading, and lotting.

Seventeen (17) trees ( $\geq 15$ cm DBH) are within CH regulated area and proposed for removal, triggering a requirement for 51 compensation trees.

Tree protection shall be installed along the boundary of the NHS and Joshua's Creek North lands to protect trees identified for preservation.

## **11.0 DISCLAIMER**

### **11.1 LIMITATIONS OF THIS ASSESSMENT**

This Assessment is based on the circumstances and observations as they existed at the time of the site inspection of the Client's Property and the trees situate thereon and upon information provided by the Client to LGL Limited. The opinions in this Assessment are given based on observations made and using generally accepted professional judgment, however, because trees and plants are living organisms and subject to change, damage and disease, the results, observations, recommendations, and analysis as set out in this Assessment are valid only as at the date any such testing, observations and analysis took place and no guarantee, warranty, representation or opinion is offered or made as to the length of the validity of the results, observations, recommendations and analysis contained within this Assessment. As a result, the Client shall not rely upon this Assessment, save and except for representing the circumstances and observations, analysis and recommendations that were made as at the date of such inspections. It is recommended that the trees discussed in this Assessment should be re-assessed periodically.

### **11.2 RESTRICTION OF ASSESSMENT**

The Assessment carried out was restricted to the Property. No assessment of any other trees or plants has been undertaken by LGL. LGL is not legally liable for any other trees or plants on the Property except those expressly discussed herein. The conclusions of this Assessment do not apply to any areas, trees, plants or any other property not covered or referenced in this Assessment.

### **11.3 PROFESSIONAL RESPONSIBILITY**

In carrying out this Assessment, LGL Limited and any Assessor appointed for and on behalf of LGL Limited to perform and carry out the Assessment has exercised a reasonable standard of care, skill and diligence as would be customarily and normally provided in carrying out this Assessment. The Assessment has been made using accepted arboricultural techniques. These include a visual examination of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, discolored foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the current or planned proximity of property and people. Except where specifically noted in the Assessment, none of the trees examined on the property were dissected, cored, probed, or climbed and detailed root crown examinations involving excavation were not undertaken. While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or all parts of them will remain standing. It is professionally impossible to predict with absolute certainty the behaviour of any single tree or group of trees, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential to fall, lean, or otherwise pose a danger to property and persons in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Without limiting the foregoing, no liability is assumed by LGL or its directors, officers, employers, contractors, agents or Assessors for:

- a) any legal description provided with respect to the Property;
- b) issues of title and or ownership respect to the Property;

- c) the accuracy of the Property line locations or boundaries with respect to the Property;
- d) the accuracy of any other information provided to LGL by the Client or third parties;
- e) any consequential loss, injury or damages suffered by the Client or any third parties, including but not limited to replacement costs, loss of use, earnings and business interruption; and,
- f) the unauthorized distribution of the Assessment.

#### **11.4 GENERAL**

Any plans and/or illustrations in this Assessment are included only to help the Client visualize the issues in this Assessment and shall not be relied upon for any other purpose.



## 12.0 REFERENCES

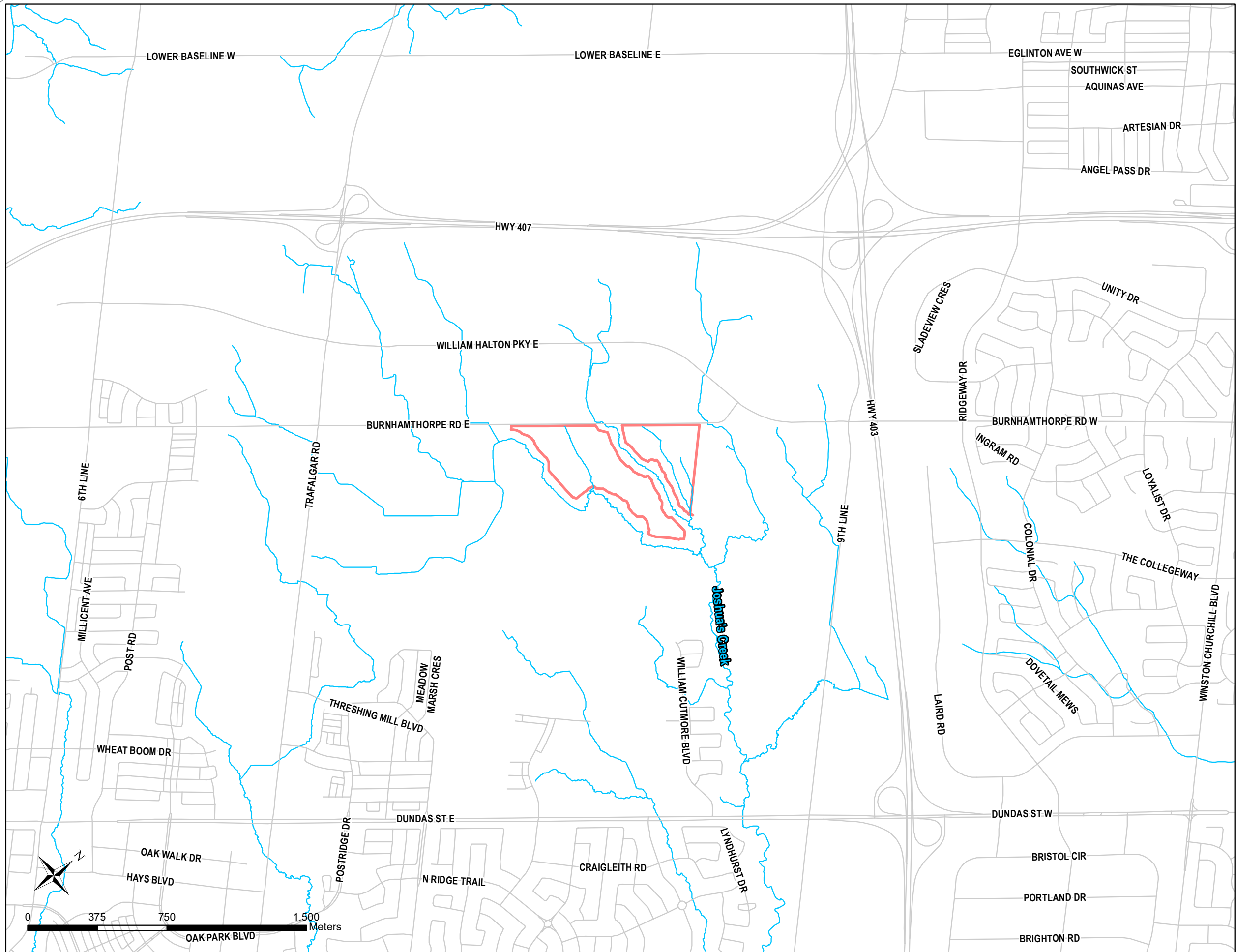
Farrar, J.L. 1995. *Trees in Canada*. Fitzhenry and Whiteside Limited and the Canadian Forest Service. Markham, Ontario. 502 pp.

Newmaster, S.G., A. Lehela, P.W.C. Uhlig, S. McMurray and M.J. Oldham. 1998. *Ontario Plant List*. Ontario Ministry of Natural Resources, Ontario Forest Research Institute, Sault Ste. Marie, Ontario, Forest Research Information Paper No. 123, 550 pp.+ appendices.

Town of Oakville Tree Protection Barrier Schedule 1. <http://www.oakville.ca/townhall/en-tre-001-001.html>

Town of Oakville Tree Protection Plan Form. <http://www.oakville.ca/townhall/en-tre-001-001.html>

## **Figures**



**LEGEND**

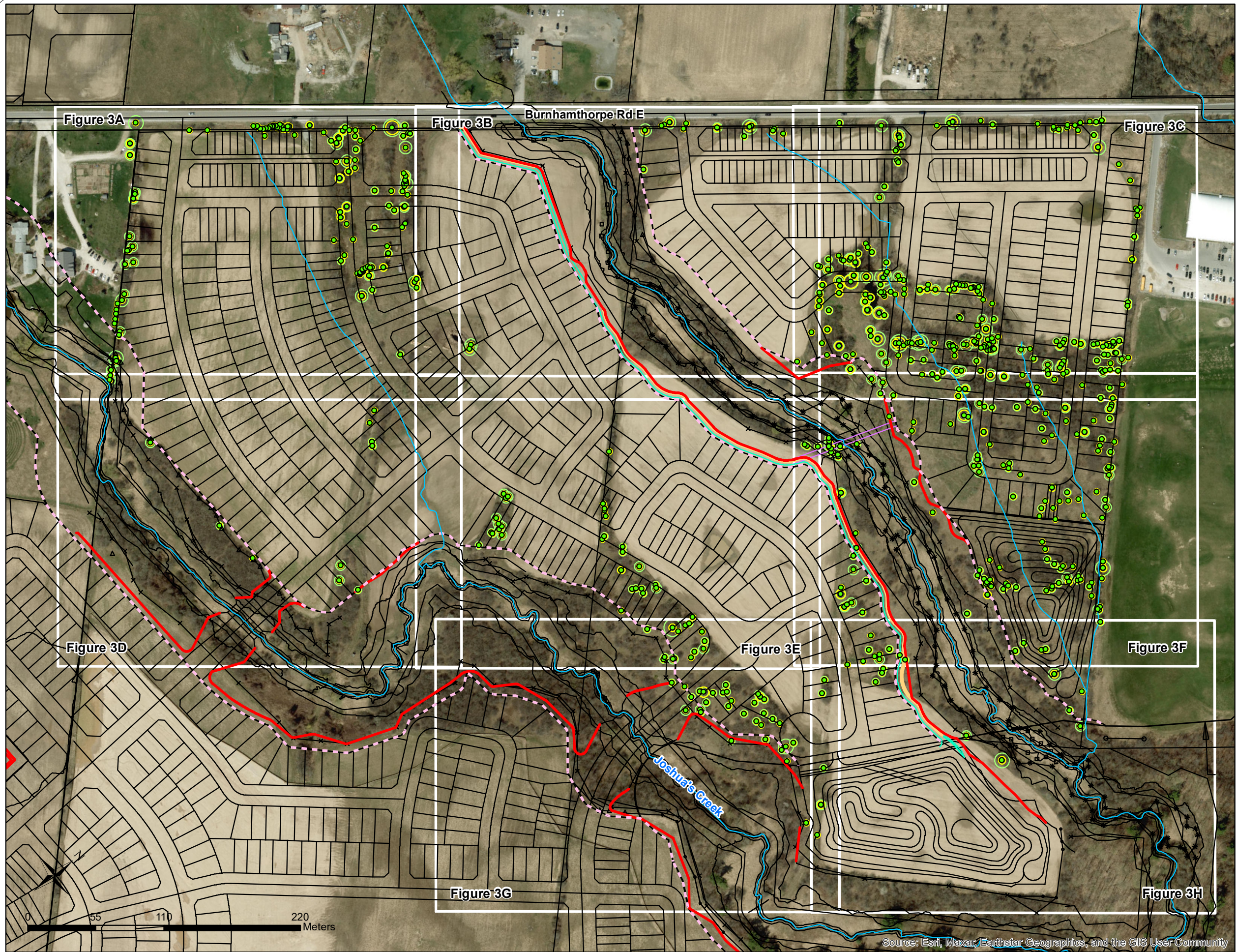
- Subject Property
- Watercourse (LIO)
- Road Network

**Joshua's Creek North  
Key Map**



Project	TA9380	Figure	1
Date	March, 2024	Prepared By:	VLG
Scale	1:20,000	Verified By:	JPB





**LEGEND**

- Tree Resources
- Dripline
- TPZ
- Watercourse (LIO)
- NHS Limit of Development
- Grading Limit
- Proposed Trail
- Proposed Access Road
- Proposed Pedestrian Bridge

**Joshua's Creek North  
Tree Resources**



Project	TA9380	Figure	2
Date	March, 2024	Prepared By:	VLG
Scale	1:3,000	Verified By:	JPB

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community





### LEGEND

- ⊗ Cavity Tree to be Removed
- Tree Impacts Unknown (Design Details not Finalized)
- Tree to be Retained
- Tree to be Injured
- ⊗ Tree to be Removed
- Dripline
- TPZ
- ⋯ Tree Protection Fencing
- Tree Addressed in Separate Report
- Joshua's Creek North Phase Boundary
- Grading Limit
- Proposed Pedestrian Bridge
- Property Line
- Aug 2024 Draft Plan
- SWM Pond
- Proposed Access Road/Trail
- Storm Water Outfall
- NHS Limit of Development
- Watercourse (LIO)
- Core 11 Boundary
- Provincially Significant Wetland

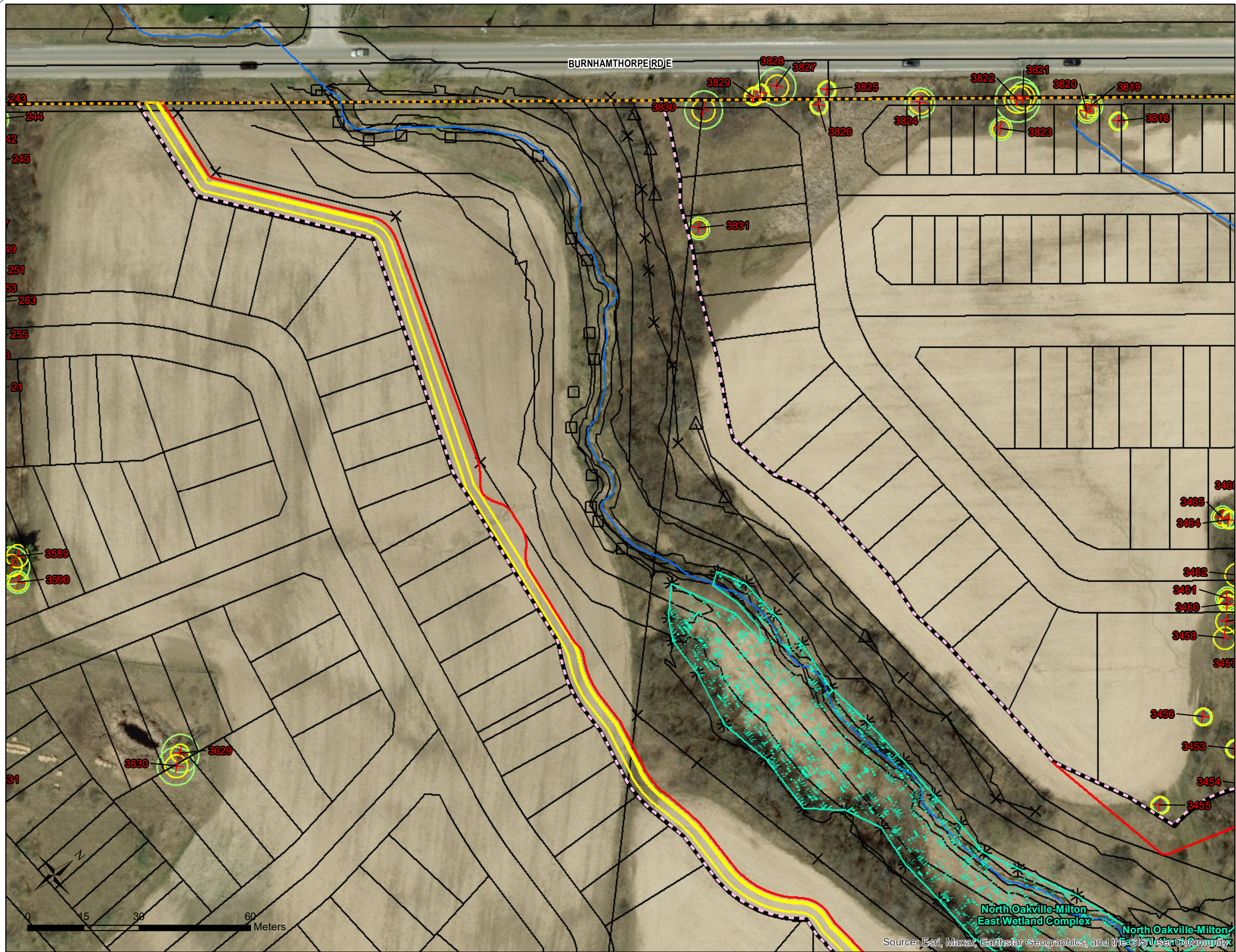
## Joshua's Creek North Tree Impacts



Project	TA9380	Figure	3-A
Date	September, 2024	Prepared By:	VLG
Scale	1:1,000	Verified By:	MJO

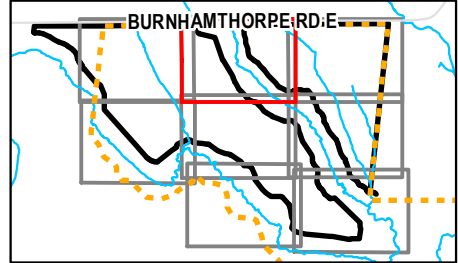
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community





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**Joshua's Creek North  
Tree Impacts**



Project	TA9380	Figure	3-B
Date	September, 2024	Prepared By:	VLG
Scale	1:1,000	Verified By:	MJO

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community





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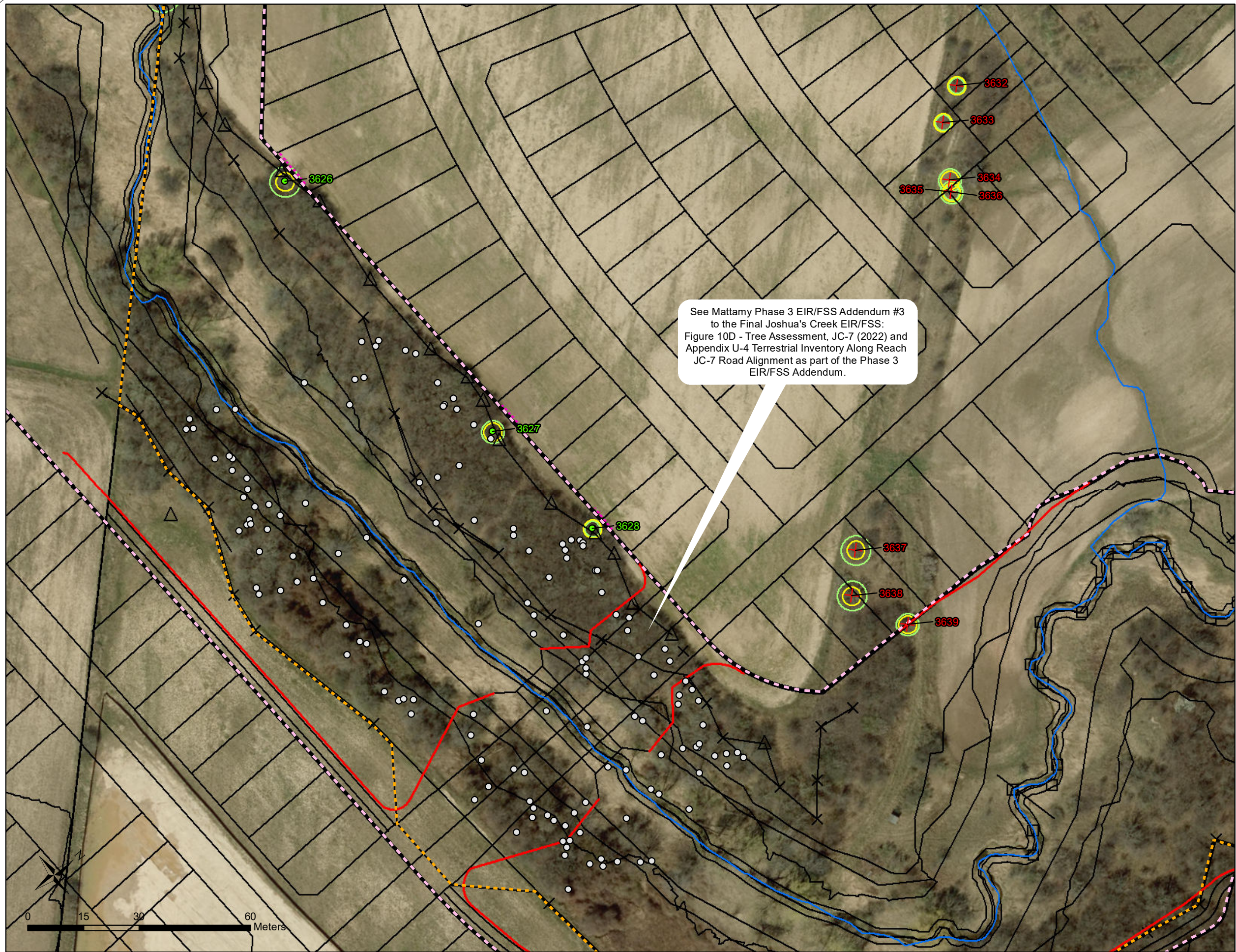
## Joshua's Creek North Tree Impacts



Project	TA9380	Figure	3-C
Date	September, 2024	Prepared By:	VLG
Scale	1:1,000	Verified By:	MJO

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community





See Mattamy Phase 3 EIR/FSS Addendum #3 to the Final Joshua's Creek EIR/FSS: Figure 10D - Tree Assessment, JC-7 (2022) and Appendix U-4 Terrestrial Inventory Along Reach JC-7 Road Alignment as part of the Phase 3 EIR/FSS Addendum.

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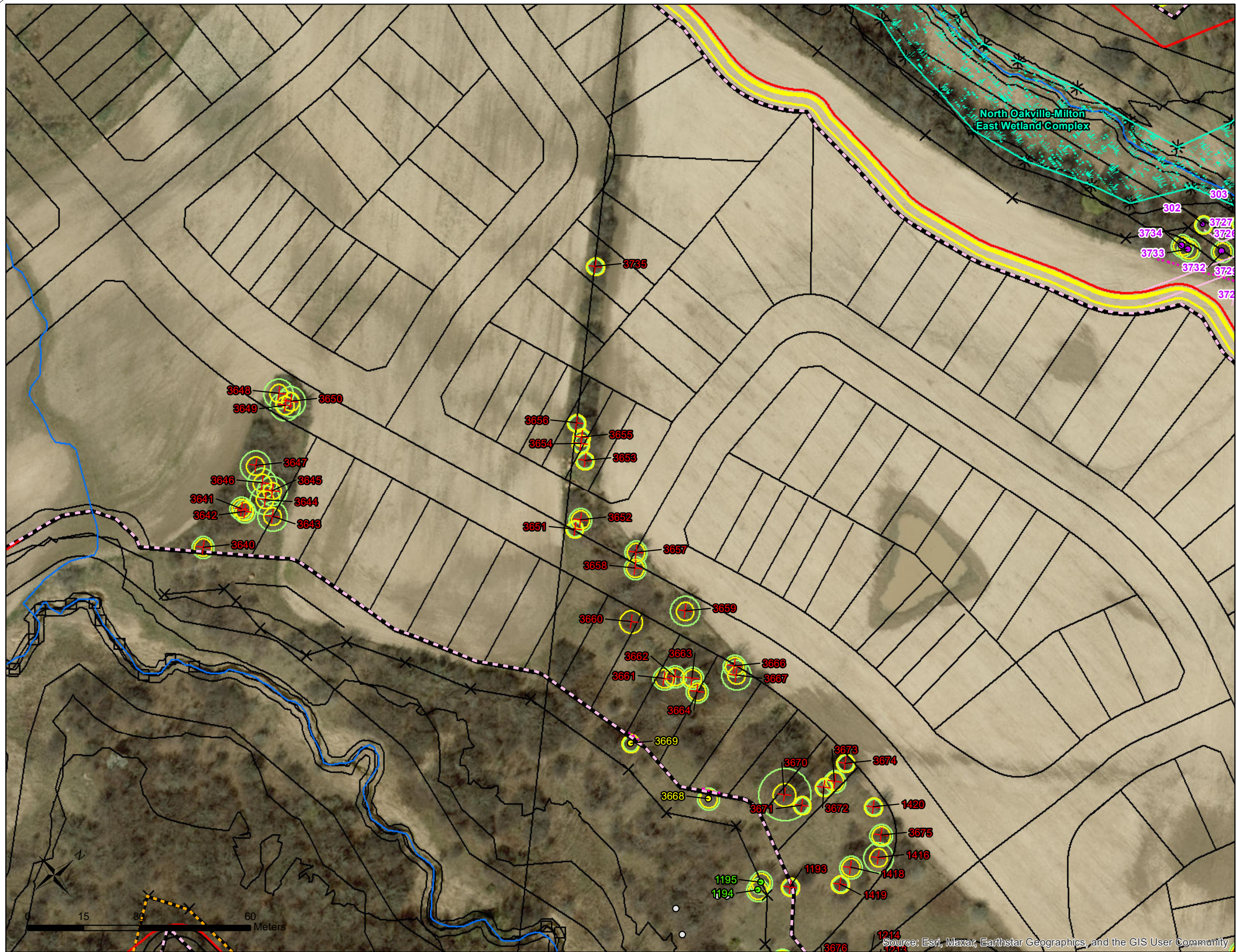
## Joshua's Creek North Tree Impacts



Project	TA9380	Figure	3-D
Date	September, 2024	Prepared By:	VLG
Scale	1:1,000	Verified By:	MJO







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- Joshua's Creek North Phase Boundary
- Grading Limit
- Proposed Pedestrian Bridge
- Property Line
- Aug 2024 Draft Plan
- SWM Pond
- Proposed Access Road/Trail
- Storm Water Outfall
- NHS Limit of Development
- Watercourse (LIO)
- Core 11 Boundary
- Provincially Significant Wetland

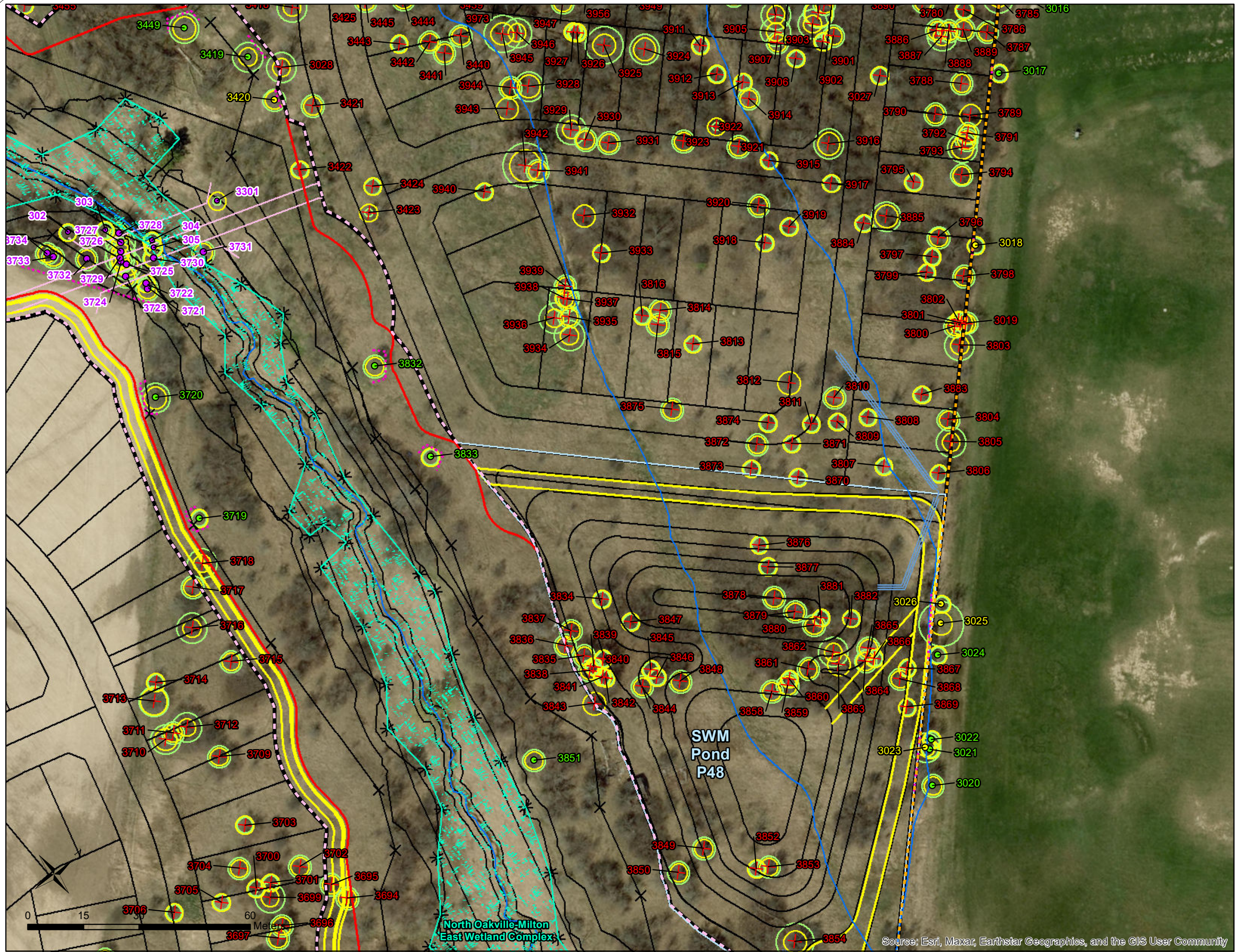
## Joshua's Creek North Tree Impacts



Project	TA9380	Figure	3-E
Date	September, 2024	Prepared By:	VLG
Scale	1:1,000	Verified By:	MJO

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community





### LEGEND

- Cavity Tree to be Removed
- Tree Impacts Unknown (Design Details not Finalized)
- Tree to be Retained
- Tree to be Injured
- Tree to be Removed
- Dripline
- TPZ
- Tree Protection Fencing
- Tree Addressed in Separate Report
- Joshua's Creek North Phase Boundary
- Grading Limit
- Proposed Pedestrian Bridge
- Property Line
- Aug 2024 Draft Plan
- SWM Pond
- Proposed Access Road/Trail
- Storm Water Outfall
- NHS Limit of Development
- Watercourse (LIO)
- Core 11 Boundary
- Provincially Significant Wetland

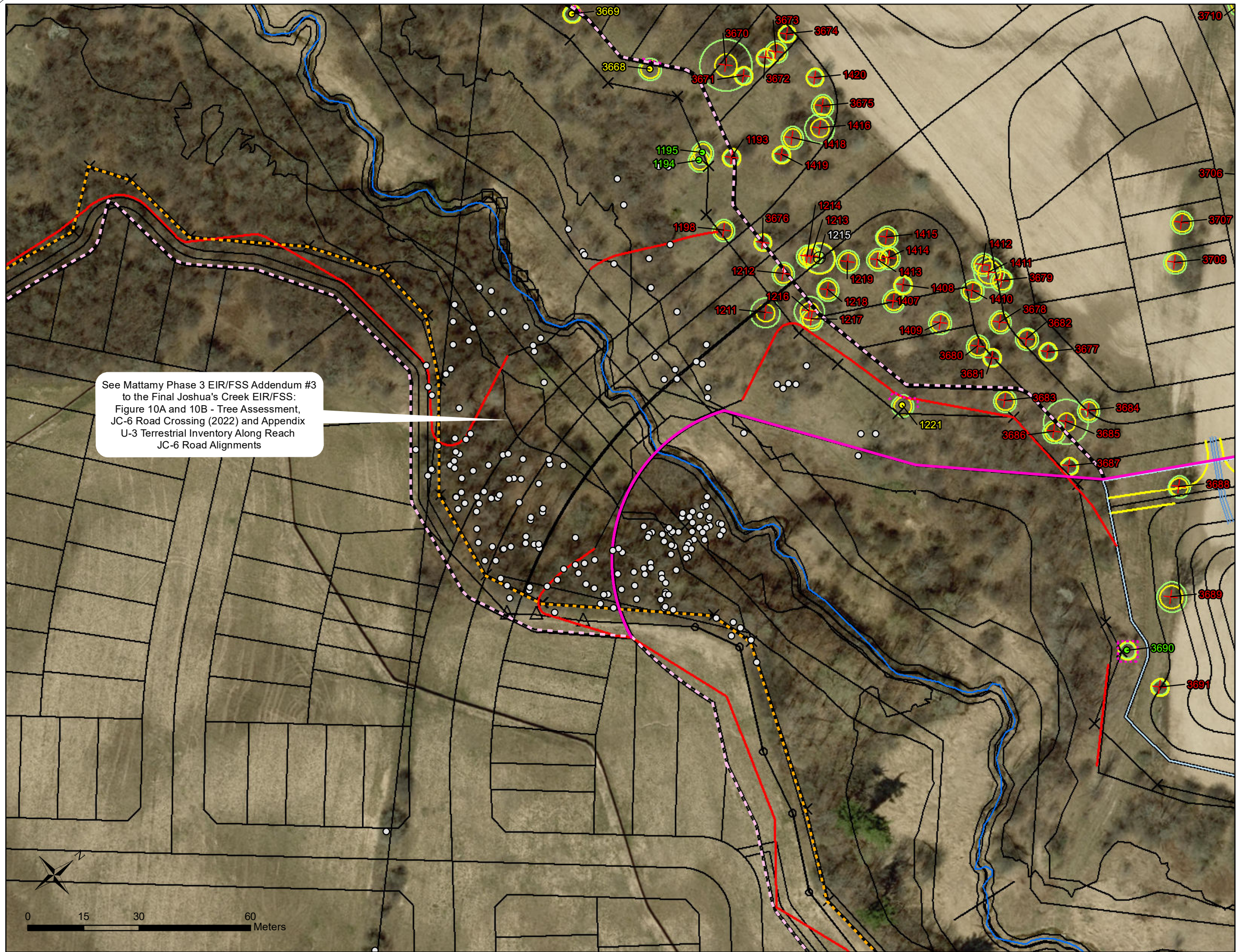
## Joshua's Creek North Tree Impacts



Project	TA9380	Figure	3-F
Date	September, 2024	Prepared By:	VLG
Scale	1:1,000	Verified By:	MJO

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community





See Mattamy Phase 3 EIR/FSS Addendum #3 to the Final Joshua's Creek EIR/FSS: Figure 10A and 10B - Tree Assessment, JC-6 Road Crossing (2022) and Appendix U-3 Terrestrial Inventory Along Reach JC-6 Road Alignments

### LEGEND

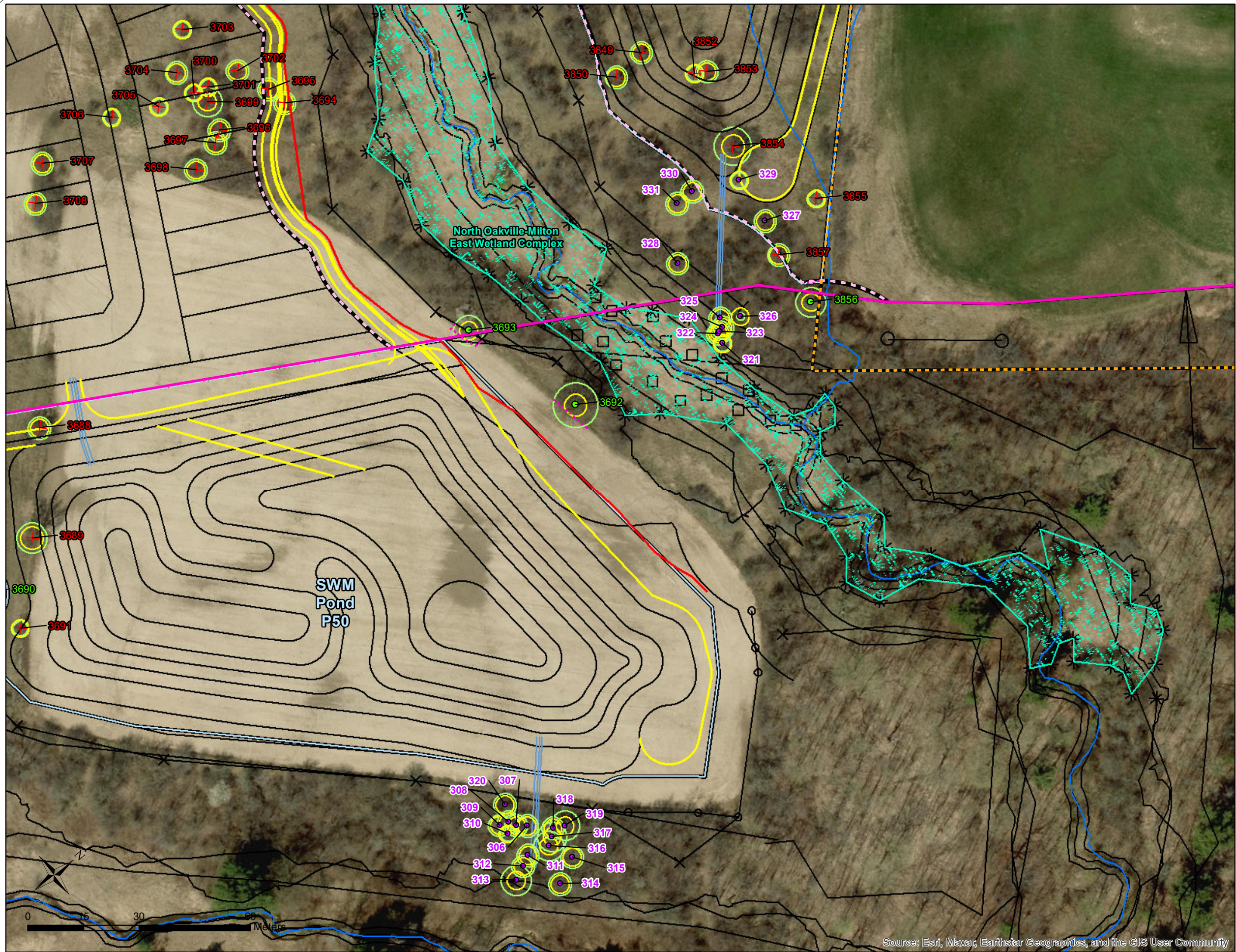
- ⊗ Cavity Tree to be Removed
- Tree Impacts Unknown (Design Details not Finalized)
- Tree to be Retained
- Tree to be Injured
- ⊗ Tree to be Removed
- Dripline
- TPZ
- ⋯ Tree Protection Fencing
- Tree Addressed in Separate Report
- Joshua's Creek North Phase Boundary
- Grading Limit
- Proposed Pedestrian Bridge
- Property Line
- Aug 2024 Draft Plan
- SWM Pond
- Proposed Access Road/Trail
- Storm Water Outfall
- NHS Limit of Development
- Watercourse (LIO)
- Core 11 Boundary
- Provincially Significant Wetland

## Joshua's Creek North Tree Impacts



Project	TA9380	Figure	3-G
Date	September, 2024	Prepared By:	VLG
Scale	1:1,000	Verified By:	MJO





### LEGEND

- ⊗ Cavity Tree to be Removed
- Tree Impacts Unknown (Design Details not Finalized)
- Tree to be Retained
- Tree to be Injured
- ✗ Tree to be Removed
- Dripline
- TPZ
- ⋯ Tree Protection Fencing
- Tree Addressed in Separate Report
- Joshua's Creek North Phase Boundary
- Grading Limit
- Proposed Pedestrian Bridge
- Property Line
- Aug 2024 Draft Plan
- SWM Pond
- Proposed Access Road/Trail
- Storm Water Outfall
- NHS Limit of Development
- Watercourse (LIO)
- Core 11 Boundary
- Provincially Significant Wetland

## Joshua's Creek North Tree Impacts



Project	TA9380	Figure	3-H
Date	September, 2024	Prepared By:	VLG
Scale	1:1,000	Verified By:	MJO

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



## **Appendix A Tree Inventory**















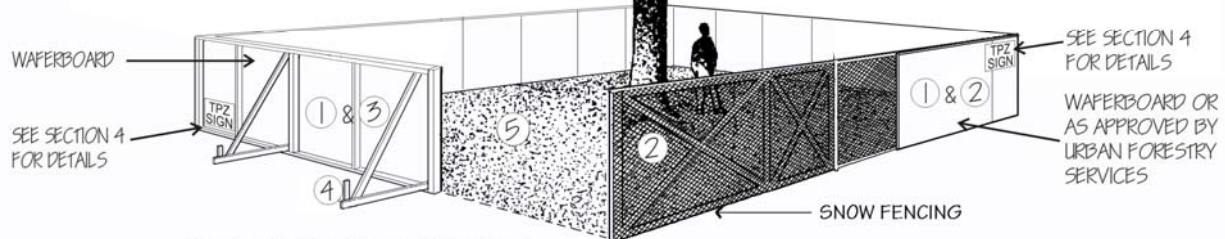
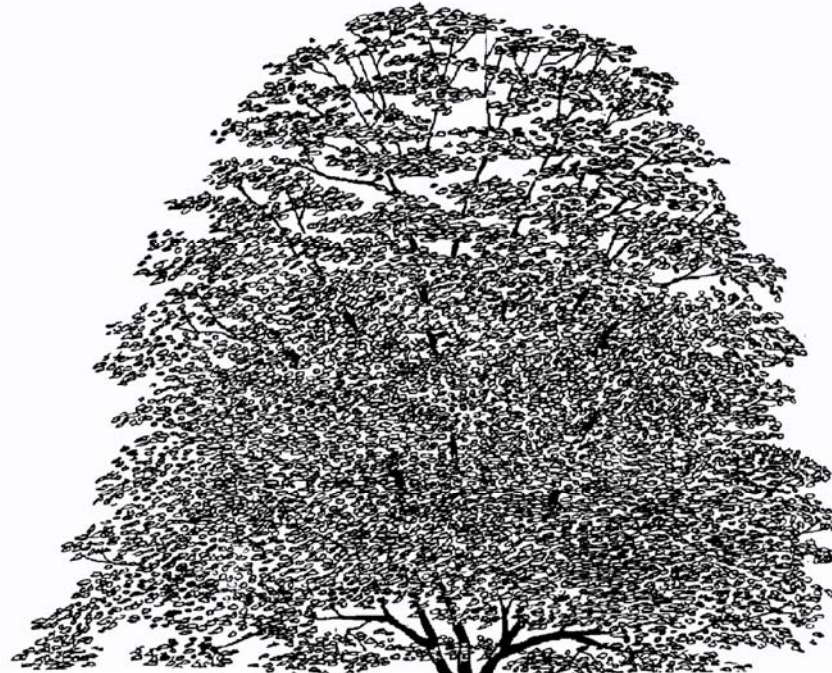


## **Appendix B Tree Protection Hoarding**



OAKVILLE

## SCHEDULE 1 TREE PROTECTION BARRIER



### Tree Protection Barriers

PLYWOOD

- ① Tree protection barriers must be 1.2m (4ft) high, waferboard hoarding or an equivalent approved by Urban Forestry Services.
- ② Tree protection barriers for trees situated on the Town road allowance where visibility must be maintained can be 1.2m (4ft.) high and consist of plastic web snow fencing on a wood frame made of 2"x 4"s .
- ③ Where some excavate or fill has to be temporarily located near a tree protection barrier, plywood must be used to ensure no material enters the Tree Protection Zone.
- ④ All supports and bracing should be outside the Tree Protection Zone. All such supports should minimize damaging roots outside the Tree Protection Barrier.
- ⑤ No construction activity, grade changes, surface treatment or excavations of any kind is permitted within the Tree Protection Zone.