STRAW HAT RESTORATION

ARBORIST REPORT AND TREE PROTECTION PLAN

BLACKMOOR GATES VENTURE, TOWN OF COLLINGWOOD

DECEMBER 22, 2017







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BLACKMOOR GATES VENTURE, TOWN OF COLLINGWOOD

STRAW HAT RESTORATION

PROJECT NO.: 17M-01364-00 DATE: DECEMBER 22, 2017

WSP UNITS C AND D 561 BRYNE DRIVE BARRIE, ON, CANADA L4N 9Y3

T: +1 705 735-9771 F: +1 705 735-6450 WSP.COM



December 22, 2017

Straw Hat Restoration 325 Willard Avenue Toronto, Ontario M6S 3R1

Attention: Mr. Jame Harrison and Mr. Jason Harrison

Dear Mr. James Harrison & Mr. Jason Harrison:

Subject: Arborist Report and Tree Protection Plan

Blackmoor Gates Venture, Town of Collingwood

WSP Canada Inc. (WSP) is pleased to provide you with this Arborist Report and Tree Protection Plan in support of the proposed development of Blackmoor Gates Venture, Collingwood, Ontario.

This report is based on the results of an inventory for trees within 6 m of the project with the potential to be impacted by disturbances associated with the development construction. Due to the unavoidable encroachment into the designated tree protection zones of trees within the vicinity of the construction area, an arborist report has been completed along with the tree protection plan to address potential impacts to trees.

Thank you for the opportunity to complete this assignment. Please contact the undersigned with any questions or comments.

Yours truly,

Dan Reeves, M.Sc. Project Arborist

WMB/nah

WSP ref.: 17M-01364-00

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SIGNATURES

PREPARED BY

Whitney Black, B.Sc., (Hons)

Ecologist, ISA Certified Arborist ON-2146A

REVIEWED BY

Dan Reeves, M.Sc.

Project Biologist, ISA Certified Arborist ON-1599A

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A TREE INVENTORY

1 INTRODUCTION

WSP Canada Inc. (WSP) was retained to complete an Arborist Report and Tree Protection Plan for a site known as Blackmoor Gates Venture subdivision. The site is composed of several residential lots, the largest of which is 774 Hurontario Street, located within the Town of Collingwood, Simcoe County; herein referred to as the "Study Area".

Trees greater than 10 cm diameter at breast height (DBH) within the study area were inventoried and assessed based on their health and condition at the time of the report preparation. This report is based on the results of an inventory of all trees on, and directly adjacent to the property in compliance with the Town of Collingwood Tree Preservation and Protection By-Law No. 2012-084. Due to the unavoidable encroachment into the designated tree protection zones of trees within the vicinity of the construction area, an arborist report has been completed along with the tree protection plan to address potential impacts to trees

2 STUDY METHODOLOGY

An inventory was completed on November 1, 2017 for for all trees within the study area with the potential to be impacted by disturbances associated with the proposed development plans. The following information was obtained for each tree:

- Tree number or grouping;
- Tree species (common and scientific names genus and species);
- Diameter at breast height (DBH);
- Tree condition (structure and vigour);
 - GOOD dead branches less than 10%; signs of good compartmentalization on any wounds, no structural defects.
 - FAIR 10-30% dead branches, size or occurrence of wounds present some concerns, minor structural defects.
 - POOR more than 30% dead branches, weak compartmentalization, early leaf drop, presence of insects or disease, major structural defects.
 - DEAD tree shows no signs of life.
- Evidence of insect or fungal infection;
- Evaluation of the dripline;
- General comments including structural integrity, significant lean, etc.; and,
- A picture of the tree for reference records.

For areas that had high densities of trees, hedgerows were identified based on edge of canopies.

The following information of was obtained for each grouping:

- An estimate of overall number of stems;
- Tree species (common and scientific names genus and species);
- Range of stem sizes; and,
- Overall group condition.

The results from the tree inventory were used to create a tree protection plan (TPP), which identifies and details tree protection methodology. The TPP includes details the tree protection zone (TPZ) for each tree is identified by applying the accepted minimum protection distances for trees, as specified within the Town of Collingwood Tree Preservation and Protection By-Law No. 2012-084. The TPP includes details on the appropriate use of the TPZ, tree protection fencing, and general notes on best management practices.

This arborist report identifies the trees required to be removed to develop the study area, those that will be retained and protected, and those for which injury may occur but may be retained and protected using appropriate treatment and preservation methods. For trees within the Study Area, the 'potential for injury' is defined as encroachment into the identified TPZ. Recommendations are provided for appropriate treatment of trees that will be retained and protected, but may suffer injury due to encroachment into their respective TPZs.

3 CONTACT INFORMATION

APPLICANT:

PROJECT ARBORISTS:

Jason Harrison	Whitney Black, B.Sc., (Hons)	Dan Reeves , M.Sc.
Straw Hat Restoration	Ecologist	Project Biologist
325 Willard Ave.	ISA Certified Arborist ON-2146A	ISA Certified Arborist ON-1599A
Toronto, Ontario M6S 3R1	WSP Canada Inc.	WSP Canada Inc.
,	126 Don Hillock Drive, Unit 2	561 Bryne Dr, Unit C and D
	Aurora, Ontario L4G 0G9	Barrie, Ontario L4N 9Y3
	T +1 905-750-3080 x16317	T +1 705-735-9771 x224
	F +1 905-727-0463	F +1 905-727-0463
	C +1 647-529-0448	C +1 905-954-5990

4 LOCATION OF THE TREES

The Study Area is composed of several residential lots, the largest of which is 774 Hurontario Street, located within the Town of Collingwood, Simcoe County. In addition to the parcel at 774 Hurontario, the proposed project footprint has road frontage along Hurontario Street in the east, Campbell Street to the north, and Findlay Drive to the south. Tree cover consisted of a variety of planted landcape and orchard trees, along with occasional Norway Spruce (*Picea abies*) and Eastern White Cedar (*Tsuga occidentalis*) hedgerows. Common Apple (*Malus pumilo*) was a dominant tree species, while other common species included Scots Pine (*Pinus sylvestris*), Norway Spruce Manitoba Maple (*Acer negundo*) and Norway Maple (*Acer platanoides*). Occasional Sugar Maple (*Acer saccharum*), Black Locust (*Robinia pseudoacacia*), Black Walnut (*Juglans nigra*), White Spruce (*Picea glauca*), and White Birch (*Betula papyrifera*) were also noted. The specific location of each tree is represented on the Tree Inventory and Preservation Plan (Figures 1-4).

5 TREE INVENTORY

A total of 152 individual assessed trees were located within the study area ranging from 12 to 67 cm DBH; 3 hedgerows were also assessed during the tree inventory where 15 additional trees were found. Within the study area, 15 tree species or varieties were inventoried (Table 1).

Table 1 Trees within the Study Area

COMMON NAME	LATIN NAME	NUMBER OF TREES
Apple species	Malus sp.	43
Black Locust	Robinia pseudoacacia	1
Black Walnut	Juglans nigra	1
Colorado Spruce	Picea pungens	4
Eastern White Cedar	Thuja occidentalis	9
Manitoba Maple	Acer negundo	16
Norway Maple	Acer platanoides	5
Norway Spruce	Picea abies	55
Scots Pine	Pinus sylvestris	3
Sugar Maple	Acer saccharum	1
White Ash	Fraxinus Americana	1
White Birch	Betula papyrifera	3
White Mulberry	Morus alba	1
White Pine	Pinus strobus	1
White Spruce	Picea glauca	8
Totals		152

Of the 152 trees inventoried in terms of overall structure and vigor, 59 (38%) were evaluated to be in good condition, 22 (15%) in good- fair condition, 22 (15%) in fair condition, 36 (24%) in fair-poor condition, and 12 (8%) in poor or very poor condition. Refer to Figures 1-4 and Appendix A for results of the tree inventory.

6 TREE PROTECTION AND REMOVAL PLAN

6.1 TREES TO BE REMOVED

Of the 128 individually assessed trees and 15 trees within the hedgerows, 97 are proposed to be removed to permit the proposed development. For these trees, the recommended Tree Protection Zone for trees in RNFP areas cannot be maintained; and for some, factors including poor health conditions support the decision for removal. Details for trees proposed for removal are shown in Figures 1-4 and Appendix A.

6.2 TREES TO BE RETAINED

The area of disturbance associated with the future development is outside the minimum Tree Protection Zones of 44 of the surveyed trees (Figures 1-4 and Appendix A), and are not considered to have the potential for impact. In these instances, tree protection fencing has been proposed within the working area to protect their TPZ, which should not impinge on construction movement due to the overall surrounding width of the work area.

These 44 trees to be retained will not require specific preservation methods, but should receive general preservation methods as described in the following section. Trees to be retained are shown on Figures 1-4.

6.2.1 GENERAL PROTECTION AND PRESERVATION METHODS

General protection and preservation methods are described on Figures 1-4: Tree Protection Plan. In addition to the measures indicated on Figures 1-4 the following should also be implemented:

- Upon receiving the necessary approvals and prior to commencement of tree removals, all trees and areas
 designated for tree protection must be staked or flagged in the field. All trees within the tree protection zone
 must be left standing. The removals are to be completed outside of the migratory bird nesting season,
 approximately end of March to end of August.
- Tree protection fencing should be installed as per Figure 1-4 around trees and areas designated for preservation. Installation should follow details and specifications as approved by the Town of Collingwood tree by-law officer. Tree protection fencing should be orange snow fencing at 1.2 m high, supported by 2" x 4" braces on the outside of the TPZ. If construction is near this fencing, 1.2 m tall plywood panels on scaffold poles is recommended.
- A sign indicating "TREE PROTECTION ZONE" should be mounted regular intervals along the Tree Protection fence. This sign should be a minimum of 40 cm x 60 cm white gator board or similar. Additional information on the sign should include "No grade change, storage, of materials or equipment is permitted within this TPZ. Tree Protection Fencing is to remain in effective condition until all site activities including landscaping are complete.
- To avoid soil compaction, machinery operation is to stay within the work area and avoid the area delineated by the tree protection fencing. No grade changes shall occur within the tree protection zone unless approved as part of this report. In the event that any grade changes may occur, either as a cut or fill situation, the Contact Administrator must be notified prior to such work occurring and ensure that all precautions to preserve the tree can be made.
- To avoid root zone impacts on trees to be retained, excavated material will not be stored against or in tree
 protection zone.
- In the event that it is necessary to remove additional limbs or portions of trees after construction has commenced, the Consulting Arborist or Contract Administrator is to be informed and under the removal is to be executed carefully and in full accordance with arboricultural techniques, by a certified arborist.

6.2.2 SPECIFIC PRESERVATION METHODS

The proposed development and surrounding work area encroach into the Tree Protection Zone of eleven additional trees (#513, 523, 579, OS3, OS4, OS5, OS6, OS7, OS8, OS9 and OS10), the trees can be retained provided specific preservation methods are implemented. Three of the trees are neighbouring trees. Information for the tree, including recommended actions, is provided in Table 2. Details of recommended treatment or specific preservation methods are provided in Table 3. General protection and preservation methods, as outlined above will also be applied for this tree.

Table 2 Trees to be Retained Requiring Specific Preservation Methods

TREE NUMBER	SPECIES	DBH (CM)	CONDITION	RECOMMENDED ACTION*
513	Norway Spruce	61	This tree is in fair condition with less than 10% deadwood. The tree is leaning slightly. Minor encroachment into its TPZ will occur during the construction. This tree is considered retainable.	Retain and Protect with specific preservation methods #1 - 3
523	Norway Spruce	60	This tree is in good condition with less than <10% deadwood. Minor encroachment into its TPZ will occur during construction. This tree is considered retainable.	Retain and Protect with specific preservation methods #1-3
579	White Birch	46	This tree is in fair condition with 40% deadwood. Minor encroachment into its TPZ will occur during the construction. This tree is considered retainable.	Retain and Protect with specific preservation methods #1 – 3
OS3	White Spruce	18	This tree is in good condition with less than 10% deadwood. Minor encroachment into the TPZ will occurring during construction. The tree is located on the adjacent property. This tree is considered retainable.	Retain and Protection with specific preservation methods #1-3
OS4	Norway Spruce	45	This tree is in good condition with 15% deadwood. Minor encroachment into its TPZ will occur during construction. The tree is located on the adjacent property. This tree is considered retainable.	Retain and Protect with specific preservation methods #1 – 3
OS5	Norway Spruce	40	This tree is in good condition with 15% deadwood. Minor encroachment into its TPZ will occur during construction. The tree is located on the adjacent property. This tree is considered retainable.	Retain and Protect with specific preservation methods #1-3
OS6	Norway Spruce	30	This tree is in fair condition with 25% deadwood. Minor encroachment into its TPZ will occur during construction. The tree is located on the adjacent property. This tree is considered retainable.	Retain and Protect with specific preservation methods #1-3
OS7	Colorado Spruce	20	This tree is in good condition with less than 10% deadwood. Minor encroachment into its TPZ will occur construction. The tree is located on the adjacent property. This tree is considered retainable.	Retain and Protect with specific preservation methods #1-3
OS8	White Spruce	30	This tree is in good condition with less than 10% deadwood. Minor encroachment into its TPZ will occur during construction. The tree is located on the adjacent property. This tree is considered retainable.	Retain and Protect with specific preservation methods #1-3

TREE NUMBER	SPECIES	DBH (CM)	CONDITION	RECOMMENDED ACTION*
OS9	Colorado Spruce	30	This tree is in good condition with less than 10% deadwood. Minor encroachment into its TPZ will occur during construction. The tree is located on the adjacent property. This tree is considered retainable.	Retain and Protect with specific preservation methods #1-3
OS10	Colorado Spruce	35	This tree is in good condition with less than 10% deadwood. Minor encroachment into its TPZ will occur during construction. The tree is located on the adjacent property. This tree is considered retainable.	Retain and Protect with specific preservation methods #1-3

^{*}Refer to Table 3.

Table 3 Preservation / Treatment Methods

METHOD DETAILS

	Any branches that overhang the work area and require pruning are to be pruned using good arboricultural practices utilizing by-pass secateurs in accordance with approved horticultural practices and/or American National Standard (ANSI) A300 (Part 1)- 2008 Pruning.
2	Ensure the tree receives adequate water during summer dry periods.
3	Use a low pressure water hydro vac method and cutter to make a clean cut of the roots if excavation goes into the root system. Subsequently, put mulch over exposed root and water soil if needed to maintain moisture.

7 SUMMARY AND CONCLUSIONS

Each tree was inventoried and analyzed to optimize tree protection during the construction and installation of the proposed development. Of the 152 trees inventoried including hedgerows, 97 are to be retained and protected using the general preservation methods outlined, namely protection of the designated TPZ and installation of tree protection fencing. Eleven trees are to be retained and protected using specific preservation methods. An additional 44 trees can be preserved using more specific preservation methods, as outlined above. This Arborist Report and Tree Protection Plan minimizes the number of trees that are to be removed and provides recommended actions to protect and retain the maximum number of trees in good condition.

8 CLOSURE

This report has been prepared by WSP Canada Inc. The assessment represents the conditions at the Site only at the time of the assessment, and is based on the information referenced and contained in this report. WSP Canada Inc. attests that to the best of our knowledge, the information presented in this report is accurate. The use of this report for other projects without written permission of the Client and WSP Canada Inc. is solely at the user's own risk. This report must be reviewed and approved by the relevant regulating agencies prior to being relied upon for planning and/or construction purposes.

Thank you for the opportunity to complete this report. We trust that this information is satisfactory for your current requirements. Please contact us if we can be of further assistance.

9 LITERATURE CITED

Town of Collingwood. 2012. By-law No 2012-084 By-law to Prohibit and Regulate the Destruction or Injury of Trees in the Town of Collingwood. 11 pp.					

FIGURES

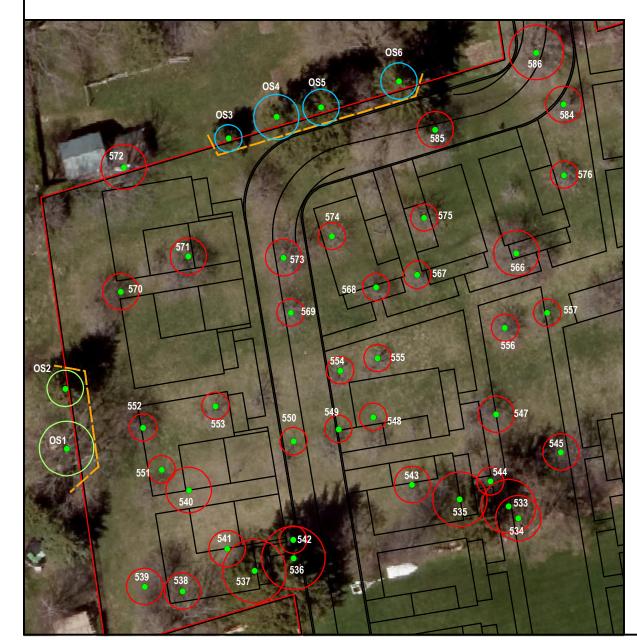
- PRIOR TO COMMENCEMENT OF ANY SITE ACTIVITY THE TREE PROTECTION FENCING SPECIFIED ON THIS PLAN MUST BE INSTALLED AND SHALL
 BE APPROVED FORMALLY BY THE TOWN OF COLLINGWOOD PRIOR TO COMMENCING ANY TREE REMOVAL, CLEARING OR GRUBBING OPERATIONS.
- TREE PROTECTION FENCING MUST REMAIN IN EFFECTIVE CONDITION DUNTIL ALL SITE ACTIVITIES INCLUDING LANDSCAPING ARE COMPLETE.
- AFTER TREE REMOVALS AND PRIOT TO THE ISSUANCE OF THE UNDERGROUND CERTIFICATE, THE TOWN WILL RE-INSPECT THE TREE
 PRESERVATION AREAS. ANY ADDITIONAL TREE REMOVALS OR TREE PRUNING WILL BE IDENTIFIED AND EXECUTED BY THE CONTRACTOR

TREE PRESERVATION AND PROTECTION RECOMMENDATIONS

ESTABLISHMENT OF TREE PROTECTION ZONES:

- TREE PROTECTION FENCING WILL BE USED TO ESTABLISH THE TPZ FOR TREES WITHIN THE VICINITY OF THE CONSTRUCTION SITE THAT ARE TO BE PRESERVED.
- NO GRADE CHANGES SHALL OCCUR WITHIN THE TPZ. IN THE EVENT THAT GRADE CHANGES OCCUR AS A RESULT OF A CUT OR FILL SITUATION,
 THE CONSULTING ARBORIST MUST BE NOTIFIED SO THAT PRECAUTIONS TO PRESERVE THE TREE CAN BE TAKEN PRIOR TO THE PLACEMENT
 OF FILL OR EXCAVATION ACTIVITIES
- WHERE BRANCHES OVERHANG OR EXTEND INTO THE CONSTRUCTION ZONE AND MAY BE IMPACTED BY MACHINERY, THE BRANCHES SHOULD BE PRUNED BEFORE EXCAVATION ACTIVITIES ARE COMMENCED. PRUNING SHOULD BE IMITED TO LESS THAN 20% OF THE TREE'S CROWN AND SHOULD BE COMPLETED BY A CERTIFIED ARROBIST OR QUIAL HEIGH TREE PROFESSIONAL
- DAMAGE TO TREES, INCLUDING BROKEN LIMBS, DAMAGE TO ROOTS, OR WOUNDS TO THE MAIN TRUNK MUST BE REPORTED TO THE CONSULTING
- ARBORIST IMMEDIATELY SO THAT MITIGATION MEASURES CAN BE PROMPTLY IMPLEMENTED.

 THE FOLLOWING ACTIVITIES ARE PROHIBITED WITHIN THE TPZ:
- CONSTRUCTION:
- ALTERING OF GRADE BY ADDING FILL, EXCAVATING, TRENCHING OR DISTURBANCE OF ANY KIND:
- STORAGE OR STOCKPILING OF MATERIALS, EQUIPMENT, SOIL, CONSTRUCTION WASTE OR DEBRIS;
- DISPOSAL OF ANY LIQUIDS;
- MOVEMENT OF VEHICLES, EQUIPMENT, OR PEDESTRIANS; AND
- PARKING OF VEHICLES OR MACHINERY.
- SHOULD ANY WORK BEYOND THAT IDENTIFIED ON THIS PLAN BE REQUIRED WITHIN THE TPZ, THE CONTRACTOR AND THE CONSULTING ARBORIST SHALL CONTACT THE TOWN OF COLLINGWOOD.



TREE PROTECTION FENCING/HOARDING FENCING:

- FENCING SHOULD BE INSTALLED OUTSIDE THE TPZ, BETWEEN THE AREAS OF PROPOSED DEVELOPMENT AND RETAINED TREES, AS INDICATED ON
- THE TREE PROTECTION PLAN, TO REDUCE THE POTENTIAL FOR PHYSICAL DAMAGE TO THE TREES AND THEIR ROOT SYSTEMS.

 INSTALLATION SHOULD FOLLOW DETAILS AND SPECIFICATIONS OUTLINED IN THE CITY OF TORONTO TREE PROTECTION POLICY AND SPECIFICATIONS FOR CONSTRUCTION NEAR TREES (2016) OR AS APPROVED BY CITY OF TORONTO URBAN FORESTRY, RAVINE AND NATURAL FEATURE PROTECTION.
- FENCING SHOULD BE 1.2 M (4 FT) HIGH PLYWOOD HOARDING ON A 2" X 4" BRACING FRAME LOCATED OUTSIDE THE TPZ.
- ALTERNTIVELY, FAST FENCE (MODULOC OR EQUIVALENT) IS ACCEPTABLE, BUT EACH SEGMENT MUST BE SECURED TO THE GROUND USING T-BAR AND BRACED TO THE NEXT SEGMENT.
- TREE PROTECTION FENCING SHOULD BE INSTALLED BEFORE WORK ON THE SITE BEGINS AND INSPECTED REGULARLY TO ENSURE IT IS PERFORMING ITS INTENDED FUNCTION. IF ANY SECTION IS FOUND TO BE DAMAGED OR NON-FUNCTIONAL IT SHOULD BE REPLACED IMMEDIATELY.

TREE REMOVAL:

- TREES ARE TO BE FELLED INTO THE CONSTRUCTION AREA SO AS TO REDUCE THE POTENTIAL FOR INJURY/DAMAGE TO NEIGHBOURING TREES.
- TO AVOID INTERFERENCE WITH THE EGGS, NESTS OR YOUNG OF BIRDS PROTECTED UNDER THE FEDERAL MIGRATORY BIRDS CONVENTION ACT (GOVERNMENT OF CANADA, 1994), REMOVALS SHOULD NOT OCCUR FROM MAY 1 TO JULY 31 OF ANY GIVEN YEAR. IDEALLY, REMOVAL SHOULD OCCUR FROM AUGUST THROUGH DECEMBER TO AVOID INTERFERENCE WITH ALL NESTING BIRDS. SHOULD REMOVAL BE REQUIRED WITHIN THE APRIL 1 TO AUGUST 1 BREEDING PERIOD, A QUALIFIED AVIAN BIOLOGIST SHOULD CONDUCT A THOROUGH SURVEY IMMEDIATELY PRIOR TO THE DESIRED TREE REMOVAL DATE TO CONFIRM PRESENCE OR ABSENCE OF PROTECTED SPECIES. IF PROTECTED SPECIES ARE PRESENT, REMOVAL CANNOT OCCUR WITHOUT A PERMIT FROM THE CANADIAN WILDLIFE SERVICE.

RESTORATION OF DISTURBED AREAS

TOPSOIL REMOVED DURING SITE GRADING SHOULD BE STORED IN A DESIGNATED STOCKPILING AREA AND USED DURING SITE RESTORATION. FOLLOWING COMPLETION OF THE CONSTRUCTION ACTIVITIES, DISTRUBED AREAS SHOULD BE GRADED TO MATCH PRECONSTRUCTION CONDITION AND COMPACTED SOILS BEYOND THE DEVELOPMENT AREA SHOULD BE DECOMPACTED BY SCAPIFICATION OR A SIMILAR APPROVED METHOD PRIO TO REPLACEMENT OF RESERVED TOPSOIL. AREAS OF DISTURBED/ EXPOSED SOILS BEYOND THE DEVELOPMENT AREA SHALL BE STABILIZED AND RE-VEGETATED USING AN APPROVED NATIVE SEED MIX. IF REQUIRED, UP TO 15 CM OF CONTAMINANT-FREE AND WEED-FREE TOPSOIL SHOULD BE APPLIED TO THE DISTURBED AREA PRIOR TO APPLYING THE SEED MIX.

CONDITION (G/F/P) PROTECTION

	TREE							
				CONDITION	(G/F/P)	PROTECTION		
TREE #	COMMON NAME	SCIENTIFIC NAME	(DBH (cm)	STRUCTURE	VIGOUR	ZONE (m)	RECOMMENDATIONS	
533	MANITOBA MAPLE	ACER NEGUNDO	54	F	F	3.6	REMOVE	
534	MANITOBA MAPLE	ACER NEGUNDO	32.27	P	F.	3	REMOVE	
535	NORWAY SPRUCE	PICEA ABIES	58	Ġ	G	3.6	REMOVE	
536	NORWAY SPRUCE	PICEA ABIES	64	F	F	4.2	REMOVE	
537	NORWAY SPRUCE	PICEA ABIES	67	F	F	4.2	REMOVE	
538	MANITOBA MAPLE	ACER NEGUNDO	32	F	F	2.4	REMOVE	
539	MANITOBA MAPLE	ACER NEGUNDO	32	F	F	2.4	REMOVE	
		MALUS SP.		P	F	3	REMOVE	
540	APPLE SPECIES	MALUS SP. MALUS SP.	30,19,34	P	P	2.4		
541	APPLE SPECIES	MALUS SP. MALUS SP.	21,17	P			REMOVE	
542	APPLE SPECIES		18		P F	1.8	REMOVE	
543	APPLE SPECIES	MALUS SP.	34	P		2.4	REMOVE	
544	APPLE SPECIES	MALUS SP.	26	P	F	1.8	REMOVE	
545	APPLE SPECIES	MALUS SP.	14,27	P	F	2.4	REMOVE	
547	APPLE SPECIES	MALUS SP.	37	P	P	2.4	REMOVE	
548	APPLE SPECIES	MALUS SP.	16	P	P	1.8	REMOVE	
549	APPLE SPECIES	MALUS SP.	16	P	F	1.8	REMOVE	
550	APPLE SPECIES	MALUS SP.	16	P	F	1.8	REMOVE	
551	APPLE SPECIES	MALUS SP.	14	P	F	1.8	REMOVE	
552	APPLE SPECIES	MALUS SP.	29	P	F	1.8	REMOVE	
553	APPLE SPECIES	MALUS SP.	12	P	F	1.8	REMOVE	
554	APPLE SPECIES	MALUS SP.	12	P	F	1.8	REMOVE	
555	APPLE SPECIES	MALUS SP.	12,10	P	P	1.8	REMOVE	
556	APPLE SPECIES	MALUS SP.	17,11	P	P	1.8	REMOVE	
557	APPLE SPECIES	MALUS SP.	16	P	F	1.8	REMOVE	
566	APPLE SPECIES	MALUS SP.	32,25	P	F	3	REMOVE	
567	APPLE SPECIES	MALUS SP.	16	P	F	1.8	REMOVE	
568	APPLE SPECIES	MALUS SP.	12,14	P	F	1.8	REMOVE	
569	APPLE SPECIES	MALUS SP.	14,13	P	F	1.8	REMOVE	
570	APPLE SPECIES	MALUS SP.	25,20	P	F	2.4	REMOVE	
571	APPLE SPECIES	MALUS SP.	32,19	P	F	2.4	REMOVE	
572	BLACK WALNUT	JUGLANS NIGRA	32,34	F	F	3	REMOVE	
573	APPLE SPECIES	MALUS SP.	18,13,20	P	F	2.4	REMOVE	
574	APPLE SPECIES	MALUS SP.	17	Р	F	1.8	REMOVE	
575	APPLE SPECIES	MALUS SP.	19,12	Р	F	1.8	REMOVE	
576	APPLE SPECIES	MALUS SP.	11.10	P	Р	1.8	REMOVE	
584	APPLE SPECIES	MALUS SP.	28,18,21	P	P	2.4	REMOVE	
585	APPLE SPECIES	MALUS SP.	30	P	P	2.4	REMOVE	
586	MANITOBA MAPLE	ACER NEGUNDO	56	F	G	3.6	REMOVE	
OS1	BLACK LOCUST	ROBINIA PSEUDOACACIA	45.40	F	Ğ	3.6	RETAIN	
OS2	WHITE SPRUCE	PICEA GLAUCA	40	Ġ	Ğ	2.4	RETAIN	
OS3	WHITE SPRUCE	PICEA GLAUCA	18	Ğ	Ğ	1.8	RETAIN WITH SPECIFIC MEASURES	
OS4	NORWAY SPRUCE	PICEA ABIES	45	Ğ	Ğ	3.0	RETAIN WITH SPECIFIC MEASURES	
OS5	NORWAY SPRUCE	PICEA ABIES	40	Ğ	Ğ	2.4	RETAIN WITH SPECIFIC MEASURES	
086	NORWAY SPRIICE	PICEA ABIES	30	F	F	2.4	RETAIN WITH SPECIFIC MEASURES	



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		APPROXIMATE SITE LOCATION
		PROPOSED DEVELOPMENT
	•	TREE LOCATIONS
NS	\bigcirc	TREES TO BE REMOVED
DR.		TREES TO BE RETAINED
		TREES TO BE RETAINED WITH SPECIFIC METHODS
	\approx	HEDGEROW TO BE RETAINED

TREE PROTECTION FENCING



4 2 0 4 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

STRAW HAT RESTORATION

PROJECT:

ARBORIST REPORT AND
TREE PROTECTION PLAN
BLACKMOOR GATES VENTURE SUBDIVISION
774 HURONTARIO STREET
TOWN OF COLLINGWOOD, SIMCOE COUNTY

PROJECT NO:	DATE:	
17M-01364-00	DECEMBER 2017	
DESIGNED BY:		
•		
DRAWN BY:		
T.P.		
CHECKED BY:		
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FIGURE NO:	SCALE:	
1	1:500	
TITLE:		
TDEE DDO	TECTION PLAN	
IREE PRO	TECTION PLAN	
DISCIPLINE:		
ENVII	RONMENT	
ISSUE:		REV.:
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		l -

- PRIOR TO COMMENCEMENT OF ANY SITE ACTIVITY THE TREE PROTECTION FENCING SPECIFIED ON THIS PLAN MUST BE INSTALLED AND SHALL BE APPROVED FORMALLY BY THE TOWN OF COLLINGWOOD PRIOR TO COMMENCING ANY TREE REMOVAL, CLEARING OR GRUBBING OPERATIONS.
- TREE PROTECTION FENCING MUST REMAIN IN EFFECTIVE CONDITION UNTIL ALL SITE ACTIVITIES INCLUDING LANDSCAPING ARE COMPLETE.
- AFTER TREE REMOVALS AND PRIOT TO THE ISSUANCE OF THE UNDERGROUND CERTIFICATE. THE TOWN WILL BE INSPECT THE TREE PRESERVATION AREAS. ANY ADDITIONAL TREE REMOVALS OR TREE PRUNING WILL BE IDENTIFIED AND EXECUTED BY THE CONTRACTOR

TREE PRESERVATION AND PROTECTION RECOMMENDATIONS

ESTABLISHMENT OF TREE PROTECTION ZONES:

- · TREE PROTECTION FENCING WILL BE USED TO ESTABLISH THE TPZ FOR TREES WITHIN THE VICINITY OF THE CONSTRUCTION SITE THAT ARE
- NO GRADE CHANGES SHALL OCCUR WITHIN THE TPZ. IN THE EVENT THAT GRADE CHANGES OCCUR AS A RESULT OF A CUT OR FILL SITUATION,
 THE CONSULTING ARBORIST MUST BE NOTIFIED SO THAT PRECAUTIONS TO PRESERVE THE TREE CAN BE TAKEN PRIOR TO THE PLACEMENT OF FILL OR EXCAVATION ACTIVITIES
- WHERE BRANCHES OVERHANG OR EXTEND INTO THE CONSTRUCTION ZONE AND MAY BE IMPACTED BY MACHINERY, THE BRANCHES SHOULD BE PRUNED BEFORE EXCAVATION ACTIVITIES ARE COMMENCED. PRUNING SHOULD BE LIMITED TO LESS THAN 20% OF THE TREE'S CROWN AND SHOULD BE COMPLETED BY A CERTIFIED ARRORIST OR QUALIFIED TREE PROFESSIONAL
- DAMAGE TO TREES, INCLUDING BROKEN LIMBS, DAMAGE TO ROOTS, OR WOUNDS TO THE MAIN TRUNK MUST BE REPORTED TO THE CONSULTING
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- ALTERING OF GRADE BY ADDING FILL EXCAVATING TRENCHING OR DISTURBANCE OF ANY KIND:
- STORAGE OR STOCKPILING OF MATERIALS, EQUIPMENT, SOIL, CONSTRUCTION WASTE OR DEBRIS;
- MOVEMENT OF VEHICLES, EQUIPMENT, OR PEDESTRIANS; AND
- PARKING OF VEHICLES OR MACHINERY.
- SHOULD ANY WORK BEYOND THAT IDENTIFIED ON THIS PLAN BE REQUIRED WITHIN THE TPZ, THE CONTRACTOR AND THE CONSULTING ARBORIST SHALL CONTACT THE TOWN OF COLLINGWOOD.



TREE PROTECTION FENCING/HOARDING FENCING:

- · FENCING SHOULD BE INSTALLED OUTSIDE THE TPZ, BETWEEN THE AREAS OF PROPOSED DEVELOPMENT AND RETAINED TREES, AS INDICATED ON
- THE TREE PROTECTION PLAN, TO REDUCE THE POTENTIAL FOR PHYSICAL DAMAGE TO THE TREES AND THEIR ROOT SYSTEMS.
 INSTALLATION SHOULD FOLLOW DETAILS AND SPECIFICATIONS OUTLINED IN THE CITY OF TORONTO TREE PROTECTION POLICY AND SPECIFICATIONS FOR CONSTRUCTION NEAR TREES (2016) OR AS APPROVED BY CITY OF TORONTO URBAN FORESTRY, RAVINE AND NATURAL FEATURE PROTECTION.
- FENCING SHOULD BE 1.2 M (4 FT) HIGH PLYWOOD HOARDING ON A 2" X 4" BRACING FRAME LOCATED OUTSIDE THE TPZ.
- ALTERNTIVELY, FAST FENCE (MODULOC OR EQUIVALENT) IS ACCEPTABLE, BUT EACH SEGMENT MUST BE SECURED TO THE GROUND USING T-BAR AND BRACED TO THE NEXT SEGMENT.
- TREE PROTECTION FENCING SHOULD BE INSTALLED BEFORE WORK ON THE SITE BEGINS AND INSPECTED REGULARLY TO ENSURE IT IS PERFORMING ITS INTENDED FUNCTION. IF ANY SECTION IS FOUND TO BE DAMAGED OR NON-FUNCTIONAL IT SHOULD BE REPLACED IMMEDIATELY.

TREE REMOVAL:

- TREES ARE TO BE FELLED INTO THE CONSTRUCTION AREA SO AS TO REDUCE THE POTENTIAL FOR INJURY/DAMAGE TO NEIGHBOURING TREES.
- TO AVOID INTERFERENCE WITH THE EGGS, NESTS OR YOUNG OF BIRDS PROTECTED UNDER THE FEDERAL MIGRATORY BIRDS CONVENTION ACT (GOVERNMENT OF CANADA, 1994), REMOVALS SHOULD NOT OCCUR FROM MAY 1 TO JULY 31 OF ANY GIVEN YEAR. IDEALLY, REMOVAL SHOULD OCCUR FROM AUGUST THROUGH DECEMBER TO AVOID INTERFERENCE WITH ALL NESTING BIRDS. SHOULD REMOVAL BE REQUIRED WITHIN THE APRIL 1 TO AUGUST 1 BREEDING PERIOD, A QUALIFIED AVIAN BIOLOGIST SHOULD CONDUCT A THOROUGH SURVEY IMMEDIATELY PRIOR TO THE DESIRED TREE REMOVAL DATE TO CONFIRM PRESENCE OR ABSENCE OF PROTECTED SPECIES. IF PROTECTED SPECIES ARE PRESENT, REMOVAL CANNOT OCCUR WITHOUT A PERMIT FROM THE CANADIAN WILDLIFE SERVICE.

RESTORATION OF DISTURBED AREAS

TOPSOIL REMOVED DURING SITE GRADING SHOULD BE STORED IN A DESIGNATED STOCKPILING AREA AND USED DURING SITE RESTORATION. FOLLOWING COMPLETION OF THE CONSTRUCTION ACTIVITIES, DISTRUBED AREAS SHOULD BE GRADED TO MATCH PRECONSTRUCTION CONDITIONS AND COMPACTED SOILS BEYOND THE DEVELOPMENT AREA SHOULD BE DECOMPACTED BY SCARIFICATION OR A SIMILAR APPROVED METHOD PRIOR TO BEPLACEMENT OF RESERVED TOPSOIL AREAS OF DISTURBED/ EXPOSED SOILS REYOND THE DEVELOPMENT AREA SHALL BE STABILIZED AND RE-VEGETATED USING AN APPROVED NATIVE SEED MIX. IF REQUIRED, UP TO 15 CM OF CONTAMINANT-FREE AND WEED-FREE TOPSOIL SHOULD BE APPLIED TO THE DISTURBED AREA PRIOR TO APPLYING THE SEED MIX. TREE PROTECTION

TREE #	COMMON NAME S	CIENTIFIC NAME	(DBH (cm)	STRUCTURE	VIGOUR	ZONE (m)	RECOMMENDATIONS
582	APPLE SPECIES	MALUS SP.	25,24	Р	F	2.4	REMOVE
587	WHITE ASH	FRAXINUS AMERICANA	20.21	F	F	1.8	REMOVE
588	NORWAY MAPLE	ACER PLATANOIDES	25	F	F	1.8	REMOVE
589	WHITE MULBERRY	MORUS ALBA	43	F	G	3	REMOVE
590	WHITE SPRUCE	PICEA GLAUCA	32	G	G	2.4	REMOVE
591	WHITE BIRCH	BETULA PAPYRIFERA	24,24	F	G	2.4	REMOVE
592	MANITOBA MAPLE	ACER NEGUNDO	32	F	G	2.4	REMOVE
593	WHITE PINE	PINUS STROBUS	49	F	F	3	REMOVE
594	WHITE SPRUCE	PICEA GLAUCA	25	G	G	1.8	REMOVE
595	WHITE SPRUCE	PICEA GLAUCA	27	G	G	1.8	REMOVE
596	WHITE SPRUCE	PICEA GLAUCA	35	G	G	2.4	REMOVE
597	NORWAY SPRUCE	PICEA ABIES	66	F	G	4.2	REMOVE
598	MANITOBA MAPLE	ACER NEGUNDO	22,18,28	F	G	2.4	REMOVE
599	NORWAY SPRUCE	PICEA ABIES	42	G	G	3	REMOVE
600	NORWAY SPRUCE	PICEA ABIES	32	G	F	2.4	REMOVE
601	MANITOBA MAPLE	ACER NEGUNDO	38	F	G	2.4	REMOVE
602	NORWAY SPRUCE	PICEA ABIES	47	G	F	3	REMOVE
603	NORWAY SPRUCE	PICEA ABIES	40	G	F	2.4	REMOVE
604	NORWAY SPRUCE	PICEA ABIES	52	G	F	3.6	REMOVE
605	MANITOBA MAPLE	ACER NEGUNDO	31,29,7	F	G	3	REMOVE
606	NORWAY SPRUCE	PICEA ABIES	35	G	F	2.4	REMOVE
607	NORWAY SPRUCE	PICEA ABIES	41	G	F	3	REMOVE
608	NORWAY SPRUCE	PICEA ABIES	34	G	F	2.4	REMOVE
609	MANITOBA MAPLE	ACER NEGUNDO	45,27	F	G	3.6	REMOVE
610	NORWAY SPRUCE	PICEA ABIES	54	G	G	3.6	REMOVE
611	NORWAY SPRUCE	PICEA ABIES	67	G	G	4.2	REMOVE
H2	MANITOBA MAPLE HEDGEROW	I ACER NEGUNDO	5 @ 10-25 CM	G	G	1.8	RETAIN
OS10	COLORADO SPRUCE	PICEA PUNGENS	35	G	G	2.4	RETAIN WITH SPECIFIC MEASURES
OS7	COLORADO SPRUCE	PICEA PUNGENS	20	G	G	1.8	RETAIN WITH SPECIFIC MEASURES
OS8	WHITE SPRUCE	PICEA GLAUCA	30	G	G	2.4	RETAIN WITH SPECIFIC MEASURES
OS9	COLOBADO SPRUCE	PICEA PUNGENS	30	G	G	2.4	BETAIN WITH SPECIFIC MEASURES

CONDITION (G/F/P)



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LEGEND	

APPROXIMATE SITE LOCATION

PROPOSED DEVELOPMENT

TREE LOCATIONS

TREES TO BE REMOVED

TREES TO BE RETAINED

TREES TO BE RETAINED WITH SPECIFIC METHODS

HEDGEROW TO BE RETAINED

TREE PROTECTION FENCING



Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

STRAW HAT RESTORATION

PROJECT

ARBORIST REPORT AND TREE PROTECTION PLAN BLACKMOOR GATES VENTURE SUBDIVISION 774 HURONTARIO STREET TOWN OF COLLINGWOOD, SIMCOE COUNTY

PROJECT NO:	DATE:
17M-01364-00	DECEMBER 2017
DESIGNED BY:	
-	
DRAWN BY:	
T.P.	
CHECKED BY:	
-	
FIGURE NO:	SCALE:
2	1:500
TITLE:	

TREE PROTECTION PLAN

DISCIPLINE:

ISSUE:

ENVIRONMENT

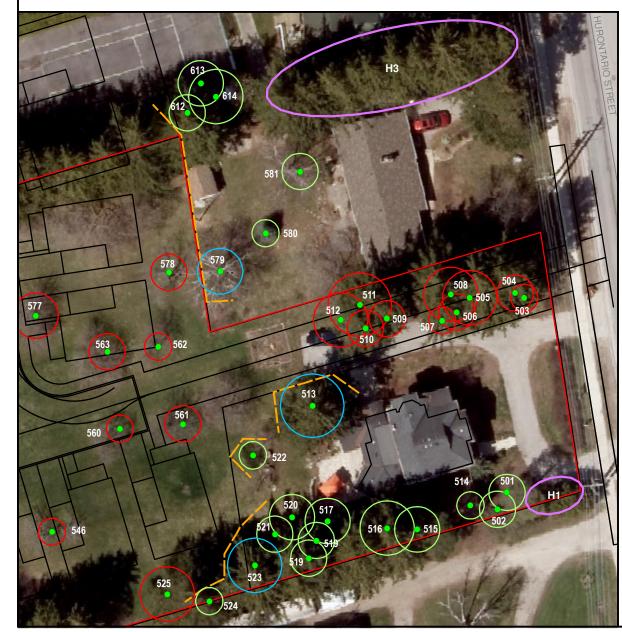
REV.:

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| CONDITION (G/F/P) | PROTECTION

TREE #	COMMON NAME	SCIENTIFIC NAME	(DBH (cm) S	TRUCTURE	VIGOUR	ZONE (m)	RECOMMENDATIONS	ı
501	SCOTS PINE	PINUS SYLVESTRIS	40	F	Р	2.4	RETAIN	ш
502	SCOTS PINE	PINUS SYLVESTRIS	34	F	P	2.4	RETAIN	
503	NORWAY SPRUCE	PICEA ABIES	18	F	F	1.8	REMOVE	
504	NORWAY SPRUCE	PICEA ABIES	30	G	G	2.4	REMOVE	
505	NORWAY SPRUCE	PICEA ABIES	52	G	G	3.6	REMOVE	
506	NORWAY SPRUCE	PICEA ABIES	30	F	F	2.4	REMOVE	
507	NORWAY SPRUCE	PICEA ABIES	21	F	F	1.8	REMOVE	
508	NORWAY SPRUCE	PICEA ABIES	53	G	G	3.6	REMOVE	
509	NORWAY SPRUCE	PICEA ABIES	40	G	F	2.4	REMOVE	
510	NORWAY SPRUCE	PICEA ABIES	31	G	F	2.4	REMOVE	
511	NORWAY SPRUCE	PICEA ABIES	61	G	G	4.2	REMOVE	
512	NORWAY SPRUCE	PICEA ABIES	54	G	G	3.6	REMOVE	
513	NORWAY SPRUCE	PICEA ABIES	61	F	F	4.2	RETAIN WITH SPECIFIC MEASURES	
514	NORWAY MAPLE	ACER PLATANOIDES	19	F	G	1.8	RETAIN	
515	SCOTS PINE	PINUS SYLVESTRIS	45	P	F	3	RETAIN	
516	NORWAY SPRUCE	PICEA ABIES	56	F	F	3.6	RETAIN	4
517	NORWAY SPRUCE	PICEA ABIES	44	F	F	3	RETAIN	
518	NORWAY SPRUCE	PICEA ABIES	49	G	G	3.0	RETAIN	L
519	NORWAY SPRUCE	PICEA ABIES	33	G	G	2.4	RETAIN	ľ
520	NORWAY SPRUCE	PICEA ABIES	47	Ğ	Ğ	3	RETAIN	H
521	NORWAY SPRUCE	PICEA ABIES	37	G	G	2.4	RETAIN	(
522	NORWAY MAPLE	ACER PLATANOIDES	17	Ğ	Ğ	1.8	RETAIN	
523	NORWAY SPRUCE	PICEA ABIES	60	Ğ	Ğ	3.6	RETAIN WITH SPECIFIC MEASURES	
524	NORWAY SPRUCE	PICEA ABIES	24	Ğ	Ğ	1.8	RETAIN	
525	NORWAY SPRUCE	PICEA ABIES	58	Ğ	F	3.6	REMOVE	
546	APPLE SPECIES	MALUS SP.	22	P	P	1.8	REMOVE	
560	APPLE SPECIES	MALUS SP.	29	P	F	1.8	REMOVE	
561	APPLE SPECIES	MALUS SP.	24.22	P	F	2.4	REMOVE	
562	APPLE SPECIES	MALUS SP.	15	P	P	1.8	REMOVE	
563	APPLE SPECIES	MALUS SP.	20.23.26	P	F	2.4	REMOVE	Н
577	APPLE SPECIES	MALUS SP.	34.25	P	F	3	REMOVE	F
578	APPLE SPECIES	MALUS SP.	24.20	P	F.	2.4	REMOVE	
579	WHITE BIRCH	BETULA PAPYRIFERA	46	F	F	3	RETAIN WITH SPECIFIC MEASURES	
580	COLORADO SPRUCE	PICEA PUNGENS	17	G	G	1.8	RETAIN	
581	WHITE BIRCH	BETULA PAPYRIFERA	32.20	F	Ğ	2.4	RETAIN	
612	NORWAY SPRUCE	PICEA ABIES	36	G	Ğ	2.4	RETAIN	
613	NORWAY SPRUCE	PICEA ABIES	46	Ğ	Ğ	3	RETAIN	
614	NORWAY SPRUCE	PICEA ABIES	52	Ğ	Ğ	3.6	RETAIN	ı
H1	EASTERN WHITE CEDAR HEDGEROW	THUJA OCCIDENENTALIS	9 AT <10CM	G	Ğ	1.8	RETAIN	ı
H3	NORWAY SPRUCE HEDGEROW	PICEA ABIES	11 @ 20-35CI		Ğ	1.8	RETAIN	ı



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LEGEND	
	APPROXIMATE SITE LOCATION
	TREE PROTECTION FENCING
	PROPOSED DEVELOPMENT
•	TREE LOCATIONS
\bigcirc	TREES TO BE REMOVED
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4 2 0 4 Metres

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

STRAW HAT RESTORATION

PROJECT:

ARBORIST REPORT AND
TREE PROTECTION PLAN
BLACKMOOR GATES VENTURE SUBDIVISION
774 HURONTARIO STREET
TOWN OF COLLINGWOOD, SIMCOE COUNTY

17M-01364-00	DECEMBER 2017	
DESIGNED BY:		
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DRAWN BY:		
T.P.		
CHECKED BY:		
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FIGURE NO:	SCALE:	
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TDEE DDO	TECTION PLAN	
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DISCIPLINE:		
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- CONSTRUCTION:
- ALTERING OF GRADE BY ADDING FILL, EXCAVATING, TRENCHING OR DISTURBANCE OF ANY KIND:
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- DISPOSAL OF ANY LIQUIDS;
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- INSTALLATION SHOULD FOLLOW DETAILS AND SPECIFICATIONS OUTLINED IN THE CITY OF TORONTO TREE PROTECTION POLICY AND SPECIFICATIONS FOR CONSTRUCTION NEAR TREES (2016) OR AS APPROVED BY CITY OF TORONTO URBAN FORESTRY, RAVINE AND NATURAL FEATURE PROTECTION.
- FENCING SHOULD BE 1.2 M (4 FT) HIGH PLYWOOD HOARDING ON A 2" X 4" BRACING FRAME LOCATED OUTSIDE THE TPZ.
- ALTERNTIVELY, FAST FENCE (MODULOC OR EQUIVALENT) IS ACCEPTABLE, BUT EACH SEGMENT MUST BE SECURED TO THE GROUND USING T-BAR AND BRACED TO THE NEXT SEGMENT.
- TREE PROTECTION FENCING SHOULD BE INSTALLED BEFORE WORK ON THE SITE BEGINS AND INSPECTED REGULARLY TO ENSURE IT IS PERFORMING ITS INTENDED FUNCTION. IF ANY SECTION IS FOUND TO BE DAMAGED OR NON-FUNCTIONAL IT SHOULD BE REPLACED IMMEDIATELY.

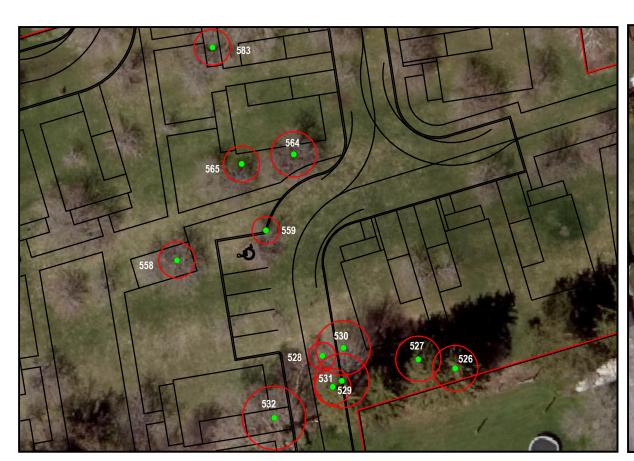
TREE REMOVAL:

- TREES ARE TO BE FELLED INTO THE CONSTRUCTION AREA SO AS TO REDUCE THE POTENTIAL FOR INJURY/DAMAGE TO NEIGHBOURING TREES.
- TO AVOID INTERFERENCE WITH THE EGGS, NESTS OR YOUNG OF BIRDS PROTECTED UNDER THE FEDERAL MIGRATORY BIRDS CONVENTION ACT (GOVERNMENT OF CANADA, 1994), REMOVALS SHOULD NOT OCCUR FROM MAY 1 TO JULY 31 OF ANY GIVEN YEAR. IDEALLY, REMOVAL SHOULD OCCUR FROM AUGUST THROUGH DECEMBER TO AVOID INTERFERENCE WITH ALL NESTING BIRDS. SHOULD REMOVAL BE REQUIRED WITHIN THE APRIL 1 TO AUGUST 1 BREEDING PERIOD, A QUALIFIED AVIAN BIOLOGIST SHOULD CONDUCT A THOROUGH SURVEY IMMEDIATELY PRIOR TO THE DESIRED TREE REMOVAL DATE TO CONFIRM PRESENCE OR ABSENCE OF PROTECTED SPECIES. IF PROTECTED SPECIES ARE PRESENT, REMOVAL CANNOT OCCUR WITHOUT A PERMIT FROM THE CANADIAN WILDLIFE SERVICE.

RESTORATION OF DISTURBED AREAS

TOPSOIL REMOVED DURING SITE GRADING SHOULD BE STORED IN A DESIGNATED STOCKPILING AREA AND USED DURING SITE RESTORATION. FOLLOWING COMPLETION OF THE CONSTRUCTION ACTIVITIES, DISTRUBED AREAS SHOULD BE GRADED TO MATCH PRECONSTRUCTION CONDITIONS AND COMPACTED SOILS BEYOND THE DEVELOPMENT AREA SHOULD BE DECOMPACTED BY SCARIFICATION OR A SIMILAR APPROVED METHOD PRIOR TO REPLACEMENT OF RESERVED TOPSOIL. AREAS OF DISTURBED/EXPOSED SOILS BEYOND THE DEVELOPMENT AREA SHALL BE STABILIZED AND RE-VEGETATED USING AN APPROVED NATIVE SEED MIX. IF REQUIRED, UP TO 15 CM OF CONTAMINANT-FREE AND WEED-FREE TOPSOIL SHOULD BE APPLIED TO THE DISTURBED AREA PRIOR TO APPLYING THE SEED MIX.

				CONDITION	CONDITION (G/F/P)		
TREE #	COMMON NAME	SCIENTIFIC NAME	(DBH (cm)	STRUCTURE	VIGOUR	ZONE (m)	RECOMMENDATIONS
526	NORWAY SPRUCE	PICEA ABIES	44	F	F	3	REMOVE
527	NORWAY SPRUCE	PICEA ABIES	48	F	F	3	REMOVE
528	APPLE SPECIES	MALUS SP.	27	P	F	1.8	REMOVE
529	NORWAY SPRUCE	PICEA ABIES	58	P	P	3.6	REMOVE
530	SUGAR MAPLE	ACER SACCHARUM	46,18,13	F	F	3.6	REMOVE
531	NORWAY SPRUCE	PICEA ABIES	32	F	F	2.4	REMOVE
532	MANITOBA MAPLE	ACER NEGUNDO	66	F	F	4.2	REMOVE
558	APPLE SPECIES	MALUS SP.	27,29	P	F	2.4	REMOVE
559	APPLE SPECIES	MALUS SP.	25	P	F	1.8	REMOVE
564	APPLE SPECIES	MALUS SP.	24,20,28	P	F	3	REMOVE
565	APPLE SPECIES	MALUS SP.	34	P	F	2.4	REMOVE
583	APPLE SPECIES	MALUS SP.	24,27	P	F	2.4	REMOVE
615	NORWAY MAPLE	ACER PLATANOIDES	30	G	G	2.4	REMOVE
616	NORWAY MAPLE	ACER PLATANOIDES	32	G	G	2.4	REMOVE
617	WHITE SPRUCE	PICEA GLAUCA	26	F	F	1.8	REMOVE







126 DON HILLOCK DRIVE, UNIT 2 AURORA, ONTARIO CANADA L4G 0G9 TEL.: 905-750-3080 | FAX: 905-727-0463 | WWW.WSP.COM

LEGEND

APPROXIMATE SITE LOCATION

─ PROPOSED DEVELOPMENT

TREE LOCATIONS

THEE EGOTHON

TREES TO BE REMOVED

TREES TO BE RETAINED

TREES TO BE RETAINED WITH SPECIFIC METHODS

HEDGEROW TO BE RETAINED



4 2 0 4 Metr

Data Source: Ministry of Natural Resources, Ontario Base Mapping, October 2016.

CLIENT:

STRAW HAT RESTORATION

PROJECT:

ARBORIST REPORT AND
TREE PROTECTION PLAN
BLACKMOOR GATES VENTURE SUBDIVISION
774 HURONTARIO STREET
TOWN OF COLLINGWOOD, SIMCOE COUNTY

PROJECT NO: 17M-01364-00	DATE: DECEMBER 2017
17101-01304-00	DECEMBER 2017
DESIGNED BY:	
•	
DRAWN BY:	
T.P.	
CHECKED BY:	
-	
FIGURE NO:	SCALE:
4	1:500
TITLE:	

TREE PROTECTION PLAN

DISCIPLINE:

ENVIRONMENT

ISSUE:

REV.:

APPENDIX

A TREE INVENTORY



TREE INVENTORY

Tree		1	1	Effective	% Dead	Condition	(G/E/D)			I
ID	Common Name	Scientific Name	DBH (cm)	DBH	Branche	Structure	Vigour	Comments (Wounds, Insects, Disease, other)	TPZ	Recommendation
H1	Eastern White Cedar Hedgerow	Thuja occidenentalis	9 at <10cm		<10	G	G		1.8	Retain
501	Scots Pine	Pinus sylvestris	40	40	30	F	Р	twisted branchs, dieback	2.4	Retain
502	Scots Pine	Pinus sylvestris	34	34	30	F	Р	sap sucker holes	2.4	Retain
503	Norway Spruce	Picea abies	18	18	25	F	F	competition from adjacent trees	1.8	Remove
504	Norway Spruce	Picea abies	30	30	<10	G	G		2.4	Remove
505	Norway Spruce	Picea abies	52	52	<10	G	G	limb pruned	3.6	Remove
506	Norway Spruce	Picea abies	30	30	20	F	F	competition from adjacent trees	2.4	Remove
507	Norway Spruce	Picea abies	21	21	20	F	F	one dead limb, curved topped, competition from adjacent tree	1.8	Remove
508	Norway Spruce	Picea abies	53	53	<10	G	G	slight lean	3.6	Remove
509	Norway Spruce	Picea abies	40	40	<10	G	F		2.4	Remove
510	Norway Spruce	Picea abies	31	31	20	G	F	bare underneath	2.4	Remove
511	Norway Spruce	Picea abies	61	61	<10	G	G		4.2	Remove
512	Norway Spruce	Picea abies	54	54	15	G	G		3.6	Remove
513	Norway Spruce	Picea abies	61	61	<10	F	F	sap oozing, slight lean	4.2	Retain with Specific Measures
514	Norway Maple	Acer platanoides	19	19	<10	F	G	leaning	1.8	Retain
515	Scots Pine	Pinus sylvestris	45	45	30	Р	F	leaning, sapsucker, twisted branches	3	Retain
516	Norway Spruce	Picea abies	56	56	20	F	F		3.6	Retain
517	Norway Spruce	Picea abies	44	44	20	F	F	competition from adejacent trees, broken branches	3	Retain
518	Norway Spruce	Picea abies	49	49	<10	G	G		3.0	Retain
519	Norway Spruce	Picea abies	33	33	<10	G	G	nail in trunk	2.4	Retain
520	Norway Spruce	Picea abies	47	47	<10	G	G		3	Retain
521	Norway Spruce	Picea abies	37	37	<10	G	G		2.4	Retain
522	Norway Maple	Acer platanoides	17	17	<10	G	G		1.8	Retain
523	Norway Spruce	Picea abies	60	60	<10	G	G		3.6	Retain with Specific Measures
524	Norway Spruce	Picea abies	24	24	<10	G	G		1.8	Retain
525	Norway Spruce	Picea abies	58	58	<10	G	F	been pruned, buckthorn competition	3.6	Remove
526	Norway Spruce	Picea abies	44	44	15	F	F	buckthorn competition, leaning	3	Remove
527	Norway Spruce	Picea abies	48	48	20	F	F	buckthorn competition, leaning	3	Remove
528	Apple species	Malus sp.	27	27	40	P	F	two dead limbs	1.8	Remove
529	Norway Spruce	Picea abies	58	58	70	Р	P	dieback, brush at base	3.6	Remove
530	Sugar Maple	Acer saccharum	46,18,13	51	20	F	F	Y at base	3.6	Remove
531	Norway Spruce	Picea abies	32	32	30	F	F	1 00000	2.4	Remove
532	Manitoba Maple	Acer negundo	66	66	20	F	F		4.2	Remove
533	Manitoba Maple	Acer negundo	54	54	30	F	F	broken dead limbs	3.6	Remove
534	Manitoba Maple	Acer negundo	32,27	42	25	Р	F	dead trunk, leaning	3	Remove
535	Norway Spruce	Picea abies	58	58	<10	G	G	dedu trank, learning	3.6	Remove
536	Norway Spruce	Picea abies	64	64	20	F	F	sap oozing, curved branches	4.2	Remove
537	Norway Spruce	Picea abies	67	67	20	F	F	sap oozing, curved branches	4.2	Remove
538	Manitoba Maple	Acer negundo	32	32	25	F	F	leaning, epicormic shooting	2.4	Remove
539	Manitoba Maple	Acer negundo	32	32	25	F	F	leaning, epicormic shooting	2.4	Remove
540	Apple species	Malus sp.	30.19.34	49	25	P	F	wounds	3	Remove
541	Apple species Apple species	Malus sp.	21,17	34	40	P	P	wounds, significant leaning	2.4	Remove
542	Apple species Apple species	Malus sp.	18	18	40	P P	P	one dead, wounds, leaning	1.8	Remove
543	Apple species Apple species	Malus sp.	34	34	30	P	F	one dedd, wounds, realling	2.4	Remove
544	Apple species Apple species	Malus sp.	26	26	35	P	F		1.8	Remove
545	Apple species Apple species	Malus sp.	14,27	30	25	P	F	wound at base, epicormic shooting, fruiting bodies	2.4	Remove
545		Malus sp.	14,27	22	45	P	P	dead trunk	1.8	
546	Apple species		37	37	30	P P	P P	wound, hollow trunk	2.4	Remove Remove
547	Apple species Apple species	Malus sp. Malus sp.	16	16	50	P	P P	significant leaning	1.8	Remove
548	Apple species Apple species	Malus sp.	16	16	30	P	F F	significant leaning	1.8	Remove
550			16	16	30	P P	F	signineant reaning	1.8	Remove
	Apple species	Malus sp.								
551	Apple species	Malus sp.	14	14	30	P	F	V at hace	1.8	Remove
OS1	Black Locust	Robinia pseudoacacia	45,40	60	<10	F	G	Y at base	3.6	Retain
OS2	White Spruce	Picea glauca	40	40	<10	G	G		2.4	Retain
552	Apple species	Malus sp.	29	29	30	P	F	1	1.8	Remove
553	Apple species	Malus sp.	12	12	30	P	F	leaning, twisted	1.8	Remove
554	Apple species	Malus sp.	12	12	30	P	F		1.8	Remove
555	Apple species	Malus sp.	12,10	16	30	P	P		1.8	Remove
556	Apple species	Malus sp.	17,11	20	30	P	Р		1.8	Remove



TREE INVENTORY

557	Apple species	Malus sp.	16	16	30	Р	F		1.8	Remove
558	Apple species	Malus sp.	27,29	40	30	P	F		2.4	Remove
559	Apple species	Malus sp.	25	25	30	Р	F		1.8	Remove
560	Apple species	Malus sp.	29	29	30	P	F		1.8	Remove
561	Apple species	Malus sp.	24,22	33	20	P	F		2.4	Remove
562	Apple species	Malus sp.	15	15	70	P	P	dead leader	1.8	Remove
563	Apple species	Malus sp.	20,23,26	40	30	P	F		2.4	Remove
564	Apple species	Malus sp.	24,20,28	42	30	P	F	epicormic shooting	3	Remove
565	Apple species	Malus sp.	34	34	30	Р	F	wound at base, epicormic shooting	2.4	Remove
566	Apple species	Malus sp.	32,25	41	30	Р	F		3	Remove
567	Apple species	Malus sp.	16	16	30	P	F		1.8	Remove
568	Apple species	Malus sp.	12,14	18	30	Р	F		1.8	Remove
569	Apple species	Malus sp.	14,13	19	30	Р	F		1.8	Remove
570	Apple species	Malus sp.	25,20	32	30	Р	F		2.4	Remove
571	Apple species	Malus sp.	32,19	37	30	Р	F		2.4	Remove
572	Black Walnut	Juglans nigra	32,34	47	25	F	F	Y at 1.5 m	3	Remove
OS3	White Spruce	Picea glauca	18	18	<10	G	G		1.8	Retain with Specific Measures
OS4	Norway Spruce	Picea abies	45	45	15	G	G		3.0	Retain with Specific Measures
OS5	Norway Spruce	Picea abies	40	40	15	G	G		2.4	Retain with Specific Measures
573	Apple species	Malus sp.	18,13,20	30	25	P	F		2.4	Remove
574	Apple species	Malus sp.	17	17	30	Р	F		1.8	Remove
575	Apple species	Malus sp.	19,12	22	30	P	F		1.8	Remove
576	Apple species	Malus sp.	11,10	15	40	P	P	pruned epicormic shooting	1.8	Remove
577	Apple species	Malus sp.	34,25	42	30	P	F	pranea epicornic snooting	3	Remove
578	Apple species	Malus sp.	24,20	31	30	P	F		2.4	Remove
579	White Birch	· ·	46	46	40	F	F		3	Retain with Specific Measures
580	Colorado Spruce	Betula papyrifera Picea pungens	17	17	<10	G	G		1.8	Retain
					15	F			2.4	
581	White Birch	Betula papyrifera	32,20	38			G		2.4	Retain
582	Apple species	Malus sp.	25,24	35	25	P	F		_	Remove
583	Apple species	Malus sp.	24,27	36	25	P	F	hollow trunks	2.4	Remove
584	Apple species	Malus sp.	28,18,21	39	30	P	P		2.4	Remove
585	Apple species	Malus sp.	30	30	30	Р	Р		2.4	Remove
OS6	Norway Spruce	Picea abies	30	30	25	F	F		2.4	Retain with Specific Measures
586	Manitoba Maple	Acer negundo	56	56	<10	F	G		3.6	Remove
587	White Ash	Fraxinus americana	20,21	29	25	F	F	Y at base	1.8	Remove
OS7	Colorado Spruce	Picea pungens	20	20	<10	G	G		1.8	Retain with Specific Measures
588	Norway Maple	Acer platanoides	25	25	20	F	F	twisted trunk	1.8	Remove
OS8	White Spruce	Picea glauca	30	30	<10	G	G		2.4	Retain with Specific Measures
OS9	Colorado Spruce	Picea pungens	30	30	<10	G	G		2.4	Retain with Specific Measures
OS10	Colorado Spruce	Picea pungens	35	35	<10	G	G		2.4	Retain with Specific Measures
H2	Manitoba Maple Hedgrow	Acer negundo	5 @ 10-25 cm		<10	G	G		1.8	Retain
589	White Mulberry	Morus alba	43	43	<10	F	G	epicormic shooting, dead limb	3	Remove
590	White Spruce	Picea glauca	32	32	<10	G	G		2.4	Remove
591	White Birch	Betula papyrifera	24,24	34	<10	F	G	Y at 1 m	2.4	Remove
592	Manitoba Maple	Acer negundo	32	32	<10	F	G	leaning	2.4	Remove
593	White Pine	Pinus strobus	49	49	25	F	F	leaning	3	Remove
594	White Spruce	Picea glauca	25	25	<10	G	G		1.8	Remove
595	White Spruce	Picea glauca	27	27	<10	G	G		1.8	Remove
596	White Spruce	Picea glauca	35	35	<10	G	G		2.4	Remove
597	Norway Spruce	Picea abies	66	66	<10	F	G	leaning	4.2	Remove
598	Manitoba Maple	Acer negundo	22,18,28	40	<10	F	G	significant lean	2.4	Remove
599	Norway Spruce	Picea abies	42	42	<10	G	G		3	Remove
600	Norway Spruce	Picea abies	32	32	35	G	F		2.4	Remove
601	Manitoba Maple	Acer negundo	38	38	<10	F	G		2.4	Remove
602	Norway Spruce	Picea abies	47	47	25	G	F		3	Remove
603	Norway Spruce	Picea abies	40	40	25	G	F		2.4	Remove
604	Norway Spruce	Picea abies	52	52	25	G	F		3.6	Remove
605	Manitoba Maple	Acer negundo	31,29,7	43	<10	F	G	significant lean	3	Remove
606	Norway Spruce	Picea abies	35,23,7	35	20	G	F		2.4	Remove
607	Norway Spruce	Picea abies	41	41	20	G	F		3	Remove
608	Norway Spruce	Picea abies	34	34	20	G	F		2.4	Remove
UUO	privor way opruce	r iceu unies	34	54	20	ı u		1	2.4	nemove



TREE INVENTORY

609	Manitoba Maple	Acer negundo	45,27	52	<10	F	G	significant lean	3.6	Remove
610	Norway Spruce	Picea abies	54	54	<10	G	G		3.6	Remove
611	Norway Spruce	Picea abies	67	67	<10	G	G		4.2	Remove
612	Norway Spruce	Picea abies	36	36	<10	G	G		2.4	Retain
613	Norway Spruce	Picea abies	46	46	<10	G	G		3	Retain
614	Norway Spruce	Picea abies	52	52	<10	G	G		3.6	Retain
Н3	Norway Spruce Hedgerow	Picea abies	1 @ 20-35cm		<10	G	G		1.8	Retain
615	Norway Maple	Acer platanoides	30	30	<10	G	G		2.4	Remove
616	Norway Maple	Acer platanoides	32	32	<10	G	G		2.4	Remove
617	White Spruce	Picea glauca	26	26	20	F	F		1.8	Remove