

MEMO

TO: Sandy Acchione, CPA, CA-MBS, Chief Financial Officer, Principal

AMA Investments Inc.

37 Claridge Drive, Richmond Hill, ON L4C 6G8

FROM: Lisa Cullen, OALA, AAPQ, ISA

Associate Partner, Landscape Architecture (CIMA+)

ISA Certified Arborist ON-0741A

DATE: June 25, 2019

SUBJECT: Forest Edge Management for 84 Nancy St, Bolton

PROJECT: C14-0252

CIMA Canada Inc. (CIMA+) was retained to prepare a Forest Edge Management Plan, for the property at 84 Nancy Street in Bolton, Ontario. The figure below indicates the location of the property.



84 Nancy Street



This memo provides an overview of the proposed buffer area. A full member of the OALA (Ontario Association of Landscape Architects) has been utilized for the development of the Forest Edge Management Plan for the 10.0m buffer.

CIMA+ has prepared this report for the sole use of the client. Any use of this report by a third party, or any decision based on this report, is the singular responsibility of the third party. CIMA+ will not be held responsible for eventual damages towards a third party resulting from decisions taken, or based, on this report.

The most current air photo (2018) was used to delineate the dripline edge of the wooded area at the south-west and west limits of the subject site. A 10.0m buffer was applied from the edge of the dripline. No grading, structures or parking is allowed within the buffer area.

The dripline and 10.0m buffer were integrated into the topographic survey and then coordinated with the architectural and engineering consultants associated with the project.

Trees, shrubs and seeding have been proposed for the buffer area (shown on Drawing FE-1). Only native species have been proposed. Following is a list of the proposed species:

Deciduous Trees:

- Sugar Maple, *Acer saccharum*
- Paper Birch, Betula papyrifera
- Beech, Fagus grandifolia
- Ironwood, Ostrya virginiana
- Red Oak, Quercus rubra

Shrubs:

- Gray Dogwood, Cornus racemose
- Red Osier Dogwood, Cornus sericea
- Alpine Currant, Ribes alpinum
- Rugosa Rose, Rosa rugosa
- Staghorn Sumac, Rhus typhina
- Flowering Rasberry, Rubus odoratus
- Snowberry, Symphoricarpos albus

Coniferous Trees:

- Norway Spruce, Picea abies
- White Spruce, Picea glauca
- White Pine, Pinus strobus
- White Cedar, Thuja occidentalis

Seeding:

- Native Bank Seed Mix OSC #8215 (Big Bluestem, Black Eyed Susan, Bottlebrush Grass, Fowl Bluegrass, Fowl Manngrass, Fox Sedge, New England Aster)

Proposed trees and shrubs shall be planted as per Town of Caledon specifications (as shown on Drawing FE-2).



Site Reference Photos



Forest Edge – South Corner





Forest Edge – South and South-West



Forest Edge – South





Forest Edge – South-West



Forest Edge – South-West Corner

C14-0252 Forest Edge Management Memo_V02.docx



Conclusion

The proposed trees, shrubs and seeding will provide a buffer of native vegetation to protect and enhance the forest edge. It is our opinion that all trees located within the forested area can be successfully retained. Special care shall be taken when working within the forest edge dripline and 10.0m buffer area to plant the proposed trees and shrubs, to minimize damage to the existing vegetation.

Should you have any questions regarding this memo, please contact the undersigned directly.

Respectfully submitted,

Cisa ah

CIMA+

Lisa Cullen, OALA, AAPQ, ISA Associate Partner – Landscape Architecture

ISA Certified Arborist ON-0741A









NOTE: FINAL EXTENT OF RESTORATION MAY

CHANGE DUE TO SITE CONDITIONS AND WILL BE FINALIZED BY THE LANDSCAPE ARCHITECT ON SITE.

NOTE: ALL SEED MIXES TO BE APPROVED BY TRCA (TORONTO AND REGION CONSERVATION AUTHORITY) AND TORONTO RNFP (RAVINE AND NATURAL FEATURES PROTECTION).

NATIVE BANK SEED MIX OSC #8215

| BOTANNICAL NAME | COMMON NAME | % OF MIX |
|---------------------|-------------------|---------------|
| A | D: DI . | 0 '5 11 |
| Andropogon gerardii | Big Bluestem | Specified by |
| Rudbeckia hirta | Black Eyed Susan | OSC (Ontario |
| Elymus hystrix | Bottlebrush Grass | Seed Company) |
| Poa palustris | Fowl Bluegrass | , |
| Glyceria striata | Fowl Manngrass | |
| Carex vulpinoidea | Fox Sedge | |
| Actor novae angliae | New England Actor | |

How To Grow

N2519'10'

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ARTS PLAN RO 185

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PART 7. PLAN RD-197

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Pg 3

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Native mixes do best when planted in the fall, between Oct. 15th and Nov. 15th. Late fall sowings additionally stratify the seed. An early spring sowing in April will work but not as effectively. If ideal growing conditions are unavailable, the seed may go dormant and not germinate until the spring of the following year.

Site Preparation

Remove weeds by hand or apply an organic non-selective herbicide. Loosen soil to 2.5 cm (1") depth with a stiff rake, cultivator or hoe. Prairie flowers and grasses will germinate and establish themselves much better when planted into a bed of well drained soil, rather than compost or dense compacted topsoil. Broadcast the seed and let mother nature do the rest. Smaller seeds can be mixed with dry sand to improve distribution when sowing. Rain, snow and frost-heaving of the soil will work the seed down into the soil bed. If you choose to do a spring planting, make sure the seed comes into good contact with the soil & irrigate as needed.

Life Cycle

Propagation Direct Sow in Spring However Direct Sow in Fall is Preferred Liaht

Full Sun Frost Tolerance Winter Hardy

Degree of Difficulty Prior Experience Beneficial

Heritage Native of Ontario

Suggested uses. Native habitat restoration and creation

Erosion control Wildlife food and shelter

NOTES

- ALL SEED MIXTURES TO BE AS SUPPLIED BY ONTARIO SEED COMPANY, WATERLOO, ONTARIO (OR APPROVED EQUAL).
- MIXES ARE DESIGNED TO BE PLANTED AT 16kg/ha (15lbs/acre) OR 250g/90sq M
- PREPARE ALL AREAS TO BE SEEDED WITH MIN 100mm OF SOIL/COMPOST

SEEDING 01 N.T.S.

GENERAL NOTES

- LANDSCAPE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALI OTHER CONTRACT DRAWINGS, DETAILS, SPECIFICATIONS, AND CORRESPONDENCE ISSUED DURING THE CONTRACT.
- CONTRACTOR SHALL CHECK AND VERIEVALL DIMENSIONS QUANTITIES AND SITE CONDITIONS BEFORE PROCEEDING WITH THE WORK, AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT BEFORE PROCEEDING. NO ALLOWANCE SHALL BE MADE ON BEHALF OF THE CONTRACTOR FOR FAILURE TO DO SO.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND STAKING OUT THE LOCATION OF ALL EXISTING UTILITIES AND SERVICES. CONTRACTOR SHALL GIVE UTILITIES ADVANCE NOTICE PRIOR TO DIGGING.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT MINIMUM 48 CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT MINIMOM 48 HOURS PRIOR TO COMMENCEMENT OF WORK TO COORDINATE INSPECTION SCHEDULES. CONTRACTOR TO CONFIRM LAYOUT OF ALL LANDSCAPE AND PLANTINGS WITH LANDSCAPE ARCHITECT BEFORE
- CONSTRUCTION MUST CONFORM TO ALL APPLICABLE CODES AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION.
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 CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING
 STREETS, SIDEWALKS, STRUCTURES, AND TREES TO REMAIN DURING
 CONSTRUCTION OF THIS PROJECT AND SHALL REPAIR SUCH DAMAGE
 AND CLEAN UF CONSTRUCTION DEBRIS TO THE SATISFACTION OF THI
 OWNER AND THE MUNICIPALITY AT NO ADDITIONAL COST.
- THE CONTRACTOR, UPON ACCEPTANCE OF THE CONTRACT, ASSUMES COMPLETE RESPONSIBILITY AND LIABILITY FOR THE JOB SITE DURING THE COURSE OF CONSTRUCTION, AND SHALL ENSURE PUBLIC SAFETY AND CLEANLINESS OF MUNICIPAL ROADS NEAR THE SITE.

LEGEND



EXISTING TREE TO REMAIN



PROPOSED DECIDUOUS TREE



PROPOSED CONIFEROUS TREE PROPOSED SHRUB PLANTING



SEED RESTORATION AREA



IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THEMSELVES OF THE EXACT LOCATION OF, AND ASSUME ALL LIBELITY FOR DAMAGE TO ALL UTILITIES SERVICES AND COMMENTED THE WORKER ARE ALL UTILITIES SERVICES AND COMMENCING THE WORK ARE ALL UTILITIES AND ONE BEFORE COMMENCING THE WORK SUCH MECHANICAL IS NOT NECESSARILY SHOWN ON THE DRAWNING, AND WHERE SHOWN, THE ACCURACY CANNOT BE GUARANTEED.

WITH THE SOLE EXCEPTION OF THE BENCHMARK(S) SPECIFICALLY DESCRIBED FOR THIS PROJECT, NO ELEVATION INDICATED OR ASSUMED HEREON IS TO BE USED AS A REFERENCE ELEVATION FOR ANY PURPOSE.

L DIMENSIONS AND INFORMATION SHALL BE CHECKED AND RIFIED ON THE JOB AND ANY DISCREPANCIES MUST BE PORTED TO THE MUNICIPALITY BEFORE COMMENCING THE WORK AWINGS ARE NOT TO BE SCALED.



| 1 | June 25-19 | SN | Issued for Review |
|-----|------------|----|--------------------|
| No. | DATE | BY | ISSUES / REVISIONS |
| | | | |

84 NANCY STREET Bolton, Ontario Town of Caledon

FOREST EDGE MANAGEMENT PLAN

| DRAWN BY : | CHECKED BY : | PROJECT |
|---------------|---------------|-------------|
| S. NAILER | L. CULLEN | C14-0252 |
| DESIGNED BY : | APPROVED BY : | DRAWING No. |
| | L. CULLEN | |
| SCALE: | DATE : | |
| 1:500 | JUNE 2019 | FE-1 |

SPECIFICATIONS B. PLANT MATERIAL All plants shall be installed true to specified names, sizes, grades etc., and shall conform to the standards of the Canadian Nursery Landscapes Association. mmencing work, the Contractor shall: 1. Become familiar with the plans, details, and specifications of this project. 2. Visit the site to ascertain and take account of existing conditions and any deviations from the plans in work by others, and 3. Finalize all design allematives in consultation with the Landscape Architect. All plants shall be nursery grown in a hardiness zone appropriate t site conditions, as published by Agriculture Canada, titled 'Map of Plant Hardiness Zones in Canada'.

- iv) The Contractor shall make plants available for inspection by the Landscape Architect and/or the Town's representative prior to shipping to the site. This does not limit the right of the Landscape Architect and/or the Town's representative to later neject plant material that is of poor quality, damaged during shipping or installation, performing poorly while the guarantee period is still in effect, or otherwise does not conform to the specifications. iii) Prior to excavating, the Contractor shall verify the location of all underground utilities. In the event of a conflict between a proposed tree location and an underground service, the exact location of the tree shall be determined on site by the Landscape Architect and/or the Town's representative.

 - vi) The Contractor shall use standard industry methods for planting trees and shrubs. Trees shall be turned to give the best appearance; they shall also be guyed or staked immediately after planting and as detailed on the drawings.

| TOWN OF CALEDON | | | | | APR'D: | C.C. | DATE: JUNE 08 |
|-------------------------------|-----|--|-------|---------|--------|--------|---------------|
| | | | | | | | |
| NATURALIZATION SPECIFICATIONS | | | | | DRAWN: | abal | SCALE: NTS |
| STANDARD NOTES | 1 | NOTES EDIT, STANDARD No. 1175.01 NOW 715 | | JUNE 08 | | | |
| PART 1 | NO. | REVISION | APR'D | DATE | s | TANDAR | D No. 715 |
| | | | | | | | |

SPECIFICATIONS continued from previous panel C. BED PREPARATION The Contractor shall scarify the sides and bottom of excavated tree pits and shrub beds prior to backfilling. Due to the heavy clay soil in the Bolton area, tree and planting beds shall be backfilled to the specified depths with: The Contractor shall apply 2280 kg/ha fibre mulch over the newly seeded area to form a uniform, blotter-like ground cover that allows the absorption and percolation of water. ii) The area seeded in a single day shall not exceed the area that can be mulched that same day. Parts "triple mix," delivered to the site, to be well-mixed with ... 1 Part local topsoil (viz., subdivision topsoil that has been removed and stockpiled.) If topsoil is unavailable, topsoil with clay content shall be imported and mixed with triple mix. iii) The Contractor shall apply the specified seed mixture using accepted industry methods for hydroseeding and at rates recommended by the seed supplier. The type and rate of fertilizer application shall be as recommended in the topsoil test report for the particular area being seeded. D. TOPSOIL AND FINE GRADING F. PRELIMINARY ACCEPTANCE When landscaping is completed, the Landscape Architect shall submit a Certificate of Completion to the Town of Caledon certifying that all landscape works have been completed in accordance with the approved plans. The Contractor shall place 100mm of rich topsoil on approved subgrades. Topsoil shall be imported when insufficient amounts are available on site. Upon receipt of the Certificate of Completion, the Planning Department will conduct a preliminary inspection of the site and, provided that the works are in satisfactory condition, will grant preliminary acceptance of the landscaping. TOWN OF CALEDON RD: C.C. DATE: JUNE 08 RAWN: abal SCALE: NTS NATURALIZATION SPECIFICATIONS 1 STANDARD No. 1175.02 NOW 716 JUNE 08 STANDARD NOTES

| SPECIFICATIONS continued from previous panel | | | | | | | |
|--|---|--|--|-------------------|------------|---------------|--|
| G. GUARANTEE | | I. CERTIFICATE OF A | SSUMPTIO | N. | | | |
| All returnatived innoisesping shall earry a guaranteerministenance of the returnative distribution of the size that previously consistency in the size that previously consistency is gracted by the Muricipality. The Owner shall provide the Municipality with a copy of the maintenance agreement between the Owner and the Contractor. In each of the next three summers, the Landscape Architect shall official on inspection and prepare a report, recommending the replacements and/or works needed to active the little of the approved intendacep plan. The Landscape Architect shall fine a copy of the report with the Municipality. Architect shall fine a copy of the report with the Municipality. | | tree stakes, roder mulch where nece ween ers, ii) When these final re a will be inspected to been completed ir will issue a Certifi funds. | At the end of the guarantee period, the Contractor shall remove all the stakes, rodent guards, and bank worp, and shall add extra mulch where necessary. When these final tasks have been completed, all landscape work will be inspected by the Municipality and, £ statisfied that all work has been completed in accordance with the approved indescape plans, will save a confittate of Assumption and releases any outstanding | | | | |
| All other landscape work performed under this contriguaranteed for TWO (2) years. MAINTENANCE The maintenance of all landscape installations through | | fully | end o | of specifications | | | |
| guarantee period shall include: 1 apolyina paporpiste fertilizer to pormote growth, 2) pruming dead or diseased fissue, 3) removing dead or diseased fissue, 4) replacing dead conflerous naturalization species minimum live-docting standard of 50%, somethina in minimum live-docting standard of 50%, somethina in minimum live-docting standard of 50% of 50%, supersessing weed growth around mely planted to shrinds by adding more much another removing we not by cutting the weeds down with power trimme | n species to b, and rees and reds by har | 5 | | | | | |
| | | | | | | | |
| TOWN OF CALEDON | \Box | | | | APRD: C.C. | DATE: JUNE 08 | |

12mm DIA, BLACK RUBBER HOSE LOOPED ABOVE FIRST STRONG BRANCH.

CONSTRUCT SOIL SAUCER 100mm DEEP, 600mm DIA, AROUND TREE BASE AND COVER WITH 75mm APPROVED SHREDDED WOOD

JUNE O

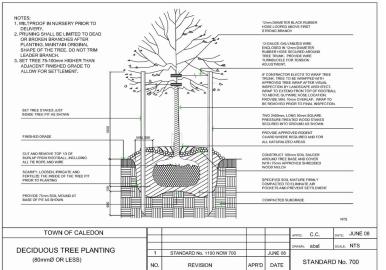
APRD: C.C. DATE: JUNE 08

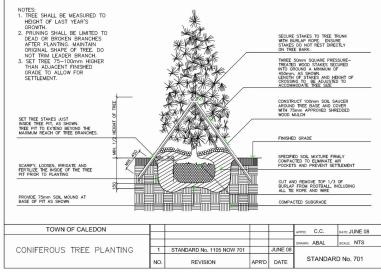
DRAWN: abal SCALE: NTS

STANDARD No. 706

01 NATURALIZATION SPECIFICATIONS N.T.S.

v) All site work shall conform to the Canadian National Master Construction Specifications, a copy of which can be obtained from Construction Specifications Canada, 100 Londard SL, Suite 200, Toronto, Ontario M5C 1M3; Tel. (416) 777-2198; Fax (416) 777-2197, It is the responsibility of the Contractor to be thoroughly familiar with these specifications and their implications for this project.





04) DECIDUOUS TREE ON SLOPE PLANTING N.T.S.

SET TREE STAKES JUST INSIDE TREE PIT AS SHOWN

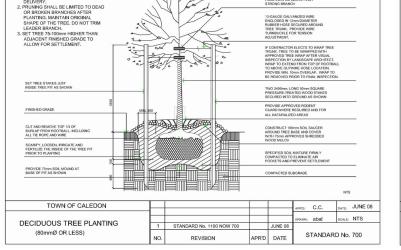
MAINTAIN ORIGINAL GRADE OF TREE BASE AFTER PLANTING OR SLIGHTLY HIGHER TO SUIT SOIL CONDITIONS,

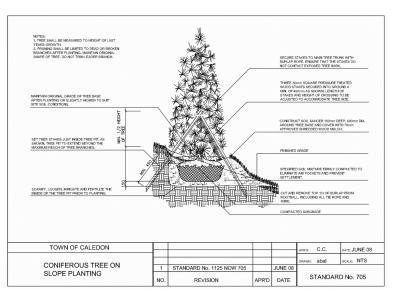
SCARIFY, LOOSEN, IRRIGATE AND FERTILIZE THE INSIDE OF THE TREE PIT PRIOR TO PLANTING.

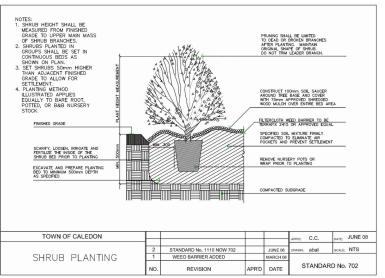
TOWN OF CALEDON

DECIDUOUS TREE ON SLOPE

PLANTING (80mm & LESS)







N.T.S.

MATCH TO EXISTING GRADE LEALAWATE SHRUB BED TO ACCOMMODATE NUMBER OF SHRUBS INDICATED ON DRAWING, REMOVE ANY SUBSOLO REQUISITED FOR THE UNLESS OTHERWISE DIRECTED, SPACE SHRUBS AS INDICATED IN PLANT LIST. FOR RODENT PROTECTION, SPRAY DECIDIOUS SHRUBS WITH SKOOT, OR EQUIVALENT, EACH FALL DURING THE THREE YEAR MAINTENANCE MASS OF SHRUB BRNACHES.

2. SHRUBS PLANTED IN GROUPS SHALL BE SET IN CONTINUOUS BEDS AS SHOWN ON PLAN.

3. SET PLANT 50mm HIGHER THAN ADJACENT FINISHED GRADE TO ALLOW FOR SETTLEMENT. 4. PLANTING METHOD ILLUSTRATED APPLIES EQUALLY TO BARE ROOT, POTTED OR B&B NURSERY STOCK. TOWN OF CALEDON PRD: C.C. DATE: JUNE 08 awn: abal SCALE: NTS SHRUB AND CONIFEROUS SEEDLING

STANDARD No. 1120 NOW 704

O7) SHRUB AND CONIFEROUS SEEDLING ON SLOPE PLANTING

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- THE CONTRACTOR, UPON ACCEPTANCE OF THE CONTRACT, ASSUMES AND CLEANLINESS OF MUNICIPAL ROADS NEAR THE SITE.



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| 1 | June 21-19 | SN | Issued for Draft Review |
|-----|------------|----|-------------------------|
| No. | DATE | BY | ISSUES / REVISIONS |
| | | | |

PROJECT:

84 NANCY STREET Bolton, Ontario Town of Caledon

FOREST EDGE MANAGEMENT PLAN PLANTING DETAILS

| DRAWN BY : | CHECKED BY : | PROJECT | |
|---------------|---------------|-------------|--|
| S. NAILER | L. CULLEN | C14-0252 | |
| DESIGNED BY : | APPROVED BY : | DRAWING No. | |
| | L. CULLEN | | |
| SCALE: | DATE: | | |
| | JUNE 2019 | FE-2 | |

CONIFEROUS TREE ON SLOPE PLANTING N.T.S.

02) DECIDUOUS TREE PLANTING N.T.S.

SHRUB PLANTING N.T.S.

03 CONIFEROUS TREE PLANTING N.T.S.