

**EXISTING VEGETATION PLAN**  
SCALE: 1:1000

**WILD BIRD CENTRE**

PLANT ID #	SIZE DBH / ht. (cm)	COMMON NAME	BOTANICAL NAME	DISTINCTIVE TREE	COMMENTS	ACTION	RATIONALE
<b>McArton Road r.o.w.</b>							
1	25-40	Bur Oak	Quercus macrocarpus	No	grouping of Bur Oak in good condition	Retain	
2	25-40	Eastern White Cedar	Thuja occidentalis	No	Grouping of cedars in fair condition - tops cut off	Retain	
3	25-40	Eastern White Cedar	Thuja occidentalis	No	Grouping of cedars in fair condition - tops cut off	Remove	Within access road and regrading
4	4x40-50	American Linden	Tilia americana	Yes	Good condition with good canopy cover, minor rot at based	Retain / mitigate	Mitigate any grade changes for access roadway
5	20	Bur Oak	Quercus macrocarpus	No	Good Condition	Retain	
6	25-30	Bur Oak	Quercus macrocarpus	No	grouping of Bur Oak in good condition, understorey of buckthorn and hawthorn, poison ivy	Retain / mitigate	Proposed swale location to be adjusted on field with location of Bur Oak
7	20	American Elm	Ulmus americana	No	Good condition with good canopy cover	Retain	
8	25	Sugar Maple	Acer saccharum	No	Good Condition with understorey of cedar, pine, poison ivy	Retain	

**EXISTING VEGETATION**

**HEDGEROW - MCARTON ROAD**  
HEDGEROW CONSISTS OF A MIX OF DECIDUOUS AND CONIFEROUS TREES, SOLID ALONG THE SOUTHWEST HALF; OPENINGS ALONG THE NORTHEAST HALF. TREES CONSISTS OF BUR OAK, LINDEN, ELM, CEDAR, WITH SAPLINGS OF HAWTHORN AND BUCKTHORN. POISON IVY IN GROUND COVER. TREES SIZE: RANGE FROM SAPLINGS TO 50CM DBH (MULTISTEM LINDEN). 25-40CM DBH BUR OAK AND CEDAR ALONG THE SOUTHEAST HALF. CONDITION: MAJORITY ARE IN GOOD CONDITION WITH GOOD CANOPY. SOME OF THE CEDARS HAVE DAMAGED TOPS.

**HEDGEROW - NORTHWEST PROPERTY LINE**  
HEDGEROW ALONG NORTHERN PORTION OF PROPERTY LINE - STRADDLING PROPERTY LINE. TREES CONSISTS OF SUGAR MAPLE, SCOTS PINE, WITH AN UNDERSTOREY OF YOUNG CEDAR AND PINE, DIERVELLA, POISON IVY, SOME BUCKTHORN. TREES SIZE: MATURE SCOTS PINE AND SEMI MATURE SUGAR MAPLE RANGE FROM 25-40CM DBH. CONDITION: MAJORITY ARE IN GOOD CONDITION WITH GOOD CANOPY.

**PARTIAL HEDGEROW - MID FIELD**  
PARTIAL HEDGEROW ALONG LOW FARMER'S STONE WALL. TREES CONSISTS OF CEDAR, HAWTHORN, ELM. TREES SIZE: RANGE FROM SAPLINGS TO 20CM DBH. CONDITION: MAJORITY ARE IN FAIR TO GOOD CONDITION WITH GOOD CANOPY.

**LOW WET AREA A**  
THIS AREA IS ADJACENT OT THE SIGNIFICANT WETLANDS (OFF PROPERTY) AND CONSISTS OF WETLANDS GRASSES (SEDGES, RUSHES), SHRUBS (ALDER, WILLOW) AND SMALL TREES (TAMARACK, ELM, ASH, POPLAR, SOME SPRUCE ALONG EDGES). THIS AREA REMAINS WET. TREES SIZE: RANGE FROM SAPLINGS TO 20CM DBH. CONDITION: MAJORITY ARE IN FAIR TO GOOD CONDITION. ELM AND ASH ARE DEAD OR IN POOR CONDITION. TAMARACK AND SPRUCE IN GOOD CONDITION.

**LOW WET AREA B**  
THIS AREA CONSISTS OF MAINLY OF POPLAR, WITH SOME ELM, AND ASH WITH AN UNDERGROWTH OF SEDGE GRASSES. TREES SIZE: RANGE FROM SAPLINGS TO 15CM DBH. CONDITION: MAJORITY ARE IN FAIR TO GOOD CONDITION. ELM AND ASH ARE DEAD OR IN POOR CONDITION.

**WOODED AREA**  
THIS AREA IS ADJACENT OT THE SIGNIFICANT WETLANDS (OFF PROPERTY) AND CONSISTS OF A RANGE OF DECIDUOUS (BIRCH, POPLAR, ELM, ASH) AND CONIFEROUS TREES (CEDAR, SPRUCE) WITH AN UDERGROWTH OF SPARSE FERNS, SASPARILLA, POISON IVY. EDGE GROWTH CONSISTS OF DECIDUOUS SHRUBS AND SAPLINGS (DIERVALLA, HAWTHORN, BUCKTHORN, POPLAR, SPRUCE, SERVICEBERRY). TREES SIZE: RANGE FROM SAPLINGS TO 40CM DBH. CONDITION: MAJORITY ARE IN FAIR TO GOOD CONDITION. ELM AND ASH ARE IN POOR CONDITION.

**NORTHERN MEADOW**  
CONSISTS OF A GOOD RANGE OF MEADOW GRASSES AND WILD FLOWERS SUCH AS TIMOTHY, ALFALFA, MILKWEED, RUDBECKIA, DAISY, ST JOHN'S WORT, BUTTERCUP, ASTER. SEDGE GRASSES MORE PREVALENT FURTHER SOUTH.

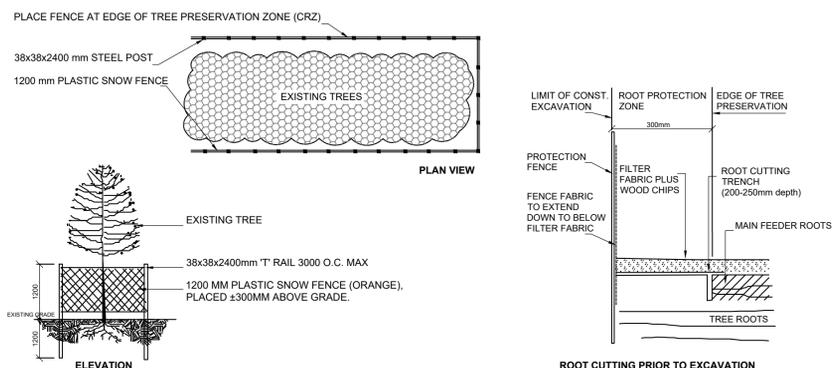
**SOUTHERN MEADOW**  
MEADOW GRASSES CONSISTS OF SAME SPECIES AS NORTHERN HALF, BUT WITH SEDGE GRASSES AS THE PREVALENT SPECIES. A FEW NATURALIZING SPECIES SUCH AS SPREADING JUNIPER, POPLAR, HAWTHORN. ONE SINGLE ELM (20CM DBH) AT CENTRAL STONE PILE IN GOOD CONDITION.

**NOTE:**  
AREA WAS RESEED AFTER PLOUGHING WITH PASTURE MIX AND SEED / ROOT STOCK FROM PREVIOUS MEADOW SPECIES ARE STARTING TO RE-EMERGE.

THIS PLAN IS ISSUED FOR SITE PLAN CONTROL ONLY. ADDITIONAL DETAILING AND SPECIFICATIONS ARE REQUIRED PRIOR TO TENDERING AND CONSTRUCTION.

**LEGEND:**

- EXISTING VEGETATION TO REMAIN
- EXISTING VEGETATION TO BE REMOVED
- TREE PROTECTION FENCE
- DEVELOPMENT AREA



**NOTES:**

- PROVIDE PROTECTION FOR TREES SHOWN AS REQUIRING PROTECTION ON CONTRACT DRAWINGS USING METHOD SHOWN. WHERE OPERATIONS THREATEN OTHER NEARBY TREES, APPLY SAME MEASURES.
- PROTECT ROOTS OF ALL TREES AS SHOWN ABOVE. NO EXCAVATION, FILLING, STORAGE OF MATERIALS, DISPOSAL OF CHEMICALS, VEHICLE TRAFFIC, OR OTHER ACTIVITY WHICH COULD CAUSE DISTURBANCE OF SOIL ROOT AREA, INCLUDING SOIL COMPACTION SHALL TAKE PLACE WITHIN THE PROTECTED AREA.

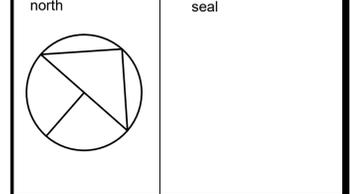
THE CITY OF OTTAWA TREES BY-LAW REQUIRES THAT CONTRACTORS WORKING NEAR TREES MUST:

- ERECT A FENCE AT THE CRITICAL ROOT ZONE (CRZ) OF TREES;
- NOT PLACE ANY MATERIAL OR EQUIPMENT WITHIN THE CRZ OF THE TREE;
- NOT ATTACH ANY SIGNS, NOTICES OR POSTERS TO ANY TREE;
- NOT RAISE OR LOWER THE EXISTING GRADE WITHIN THE CRZ WITHOUT APPROVAL;
- TUNNEL OR BORE WHEN DIGGING WITHIN THE CRZ OF A TREE;
- NOT DAMAGE THE ROOT SYSTEM, TRUNK OR BRANCHES OF ANY TREE;
- ENSURE THAT EXHAUST FUMES FROM ALL EQUIPMENT ARE NOT DIRECTED TOWARDS ANY TREE'S CANOPY.

**CRITICAL ROOT ZONE (CRZ) OF A TREE:**  
D (DIAMETER OF TRUNK IN CENTIMETERS) X 10CM = CRITICAL ROOT ZONE. THE CRITICAL ROOT ZONE IS ESTABLISHED AS BEING 10 CENTIMETRES FROM THE TRUNK OF A TREE FOR EVERY CENTIMETRE OF TRUNK DIAMETER. THE TRUNK DIAMETER IS MEASURED AT A HEIGHT OF 1.2 METRES FOR TREES OF 15 CENTIMETRES DIAMETER AND GREATER AND AT A HEIGHT OF 0.3 METRES FOR TREES OF LESS THAN 15 CENTIMETRES DIAMETER. THE CONTRACTOR MUST OBTAIN ALL PERMITS AND APPROVALS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CALL A CITY TREE INSPECTOR WHEN WORK IS REQUIRED NEAR A CITY TREE.

**TREE PROTECTION AND ROOT CUTTING DETAIL**

no.	issue / revision	date
4	SPC Resubmission	Dec. 16/20
3	for us	Nov. 12/20
2	Requested SPC revisions	Sep. 20/19
1	Issued for SPC	Aug. 08/19



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project  
**WILD BIRD CARE CENTER**  
8520 McArton Road,  
Ottawa, ON.

**TREE CONSERVATION PLAN**

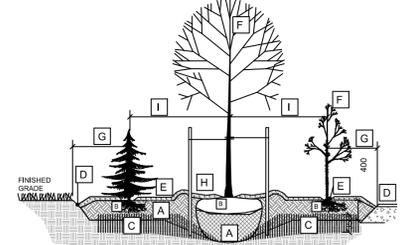
scale 1:200	drawn by M. Malkov	designed by R. Ruhland
date October, 2016	checked by R. Ruhland	plot date Dec. 16/20
project number <b>18 - 1556</b>	drawing number <b>L - 01</b>	

Contractor to check and verify all dimensions on the job

THIS PLAN IS ISSUED FOR SITE PLAN CONTROL ONLY. ADDITIONAL DETAILING AND SPECIFICATIONS ARE REQUIRED PRIOR TO TENDERING AND CONSTRUCTION.

- GENERAL NOTES
- All general site information and conditions compiled from existing plans, surveys and consultant's field notes. Report all discrepancies prior to any work. No responsibility is born by the Consultant for unknown subsurface conditions.
  - The location of the utilities is approximate only, and the exact location should be determined by consulting the municipal authorities and utility companies concerned. The Contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.
  - All dimensions shown are to be verified on site prior to any construction. No deviations are to be made from the layouts as shown on this plan without prior consultation with the Landscape Architect and Owner.
  - No other trees to be removed without prior approval by Landscape Architect.

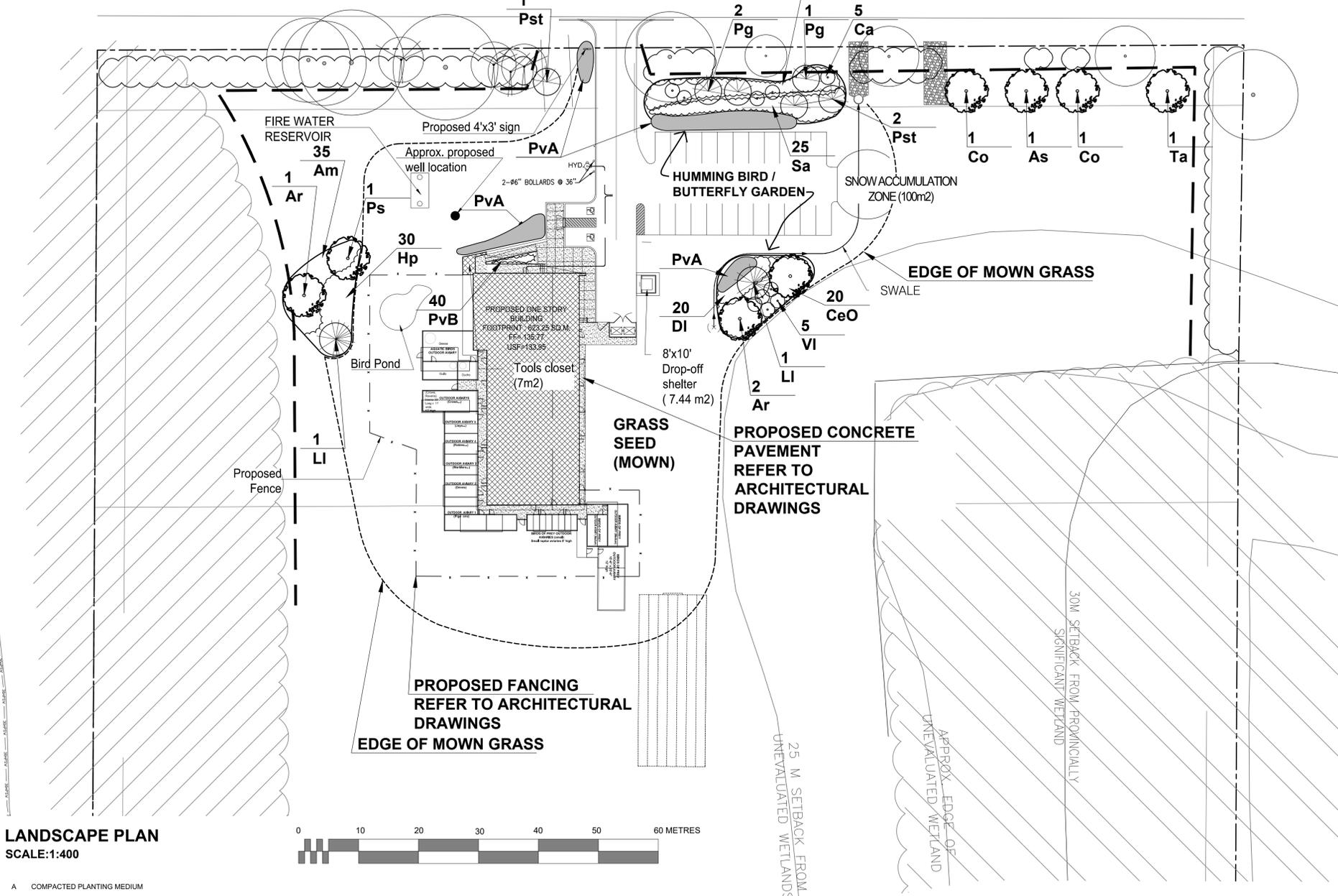
- LEGEND
- A 400mm COMPACTED PLANTING MEDIUM, DEEPEN AT LARGE SHRUBS AND TREES TO BOTTOM OF ROOTBALL.
  - B ROOTBALL, TOP OF ROOT CROWN TO BE FLUSH WITH PLANTING SOIL AND 50mm ABOVE SOIL OUTSIDE PLANTING BED
  - C 350mm PLANTING MEDIUM / SUBSOIL CULTIVATED LAYER, SCARIFY THROUGHOUT PLANTING BED
  - D EDGE TO DEPTH OF 100mm
  - E 75mm MULCH LAYER, KEEP MULCH AWAY FROM STEMS
  - F PRUNE DAMAGE, DISEASED OR WEAK BRANCHES AS PER ACCEPTED HORTICULTURAL PRACTICE, DO NOT DAMAGE OR REMOVE LEADER
  - G FIRST ROW OF SHRUBS/WHIPS TO BE PLANTED 1500mm FROM EDGE OF BED OR HARDSURFACE
  - H PROVIDE 150 mm DEEP SAUCER AT LARGE SHRUBS/WHIPS
  - I REFER TO PLANT LIST FOR PLANT SPACING



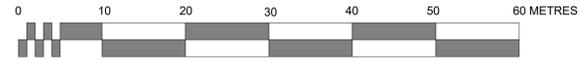
- BED PREPARATION
- EXCAVATE OR PLACE FILL FOR PLANTING BED TO PROVIDE 400mm MINIMUM DEPTH OF PLANTING MEDIUM. PLANTING BED TO BE DEEPENED AT LARGE SHRUB AND TREE LOCATIONS. IF BASE OF PIT IS OVER EXCAVATED, RAISE BOTTOM TO PROPER LEVEL WITH COMPACTED PLANTING MEDIUM.
  - PLACE 150mm PLANTING MEDIUM ON SUBGRADE AND CULTIVATE INTO TOP 200mm OF SUBSOIL.
  - PLACE REMAINDER OF PLANTING MEDIUM OVER CULTIVATED PORTION TO ACHIEVE FINAL GRADE.
  - CENTRE OF BED TO BE CROWNED ABOVE ADJACENT GRADE TO APPROVAL OF CONSULTANT.
  - ENSURE POSITIVE DRAINAGE.

FORESTATION BED DETAIL - SECTION FOR SHRUB NATURALIZATION BED OR REFORESTATION BED

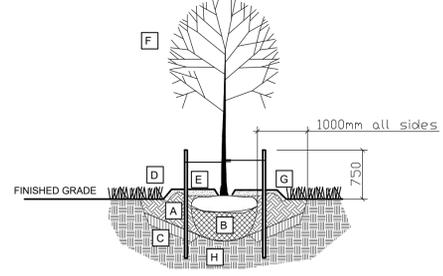
- LEGEND:
- EXISTING VEGETATION TO REMAIN
  - PROPOSED PLANTING
  - TREE PROTECTION FENCE



LANDSCAPE PLAN SCALE:1:400



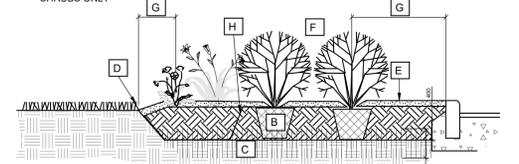
- A COMPACTED PLANTING MEDIUM  
 B ROOTBALL, TOP OF ROOT CROWN TO BE FLUSH WITH PLANTING SOIL AND 50mm ABOVE SOIL OUTSIDE PLANTING PIT  
 C LOOSEN PIT BOTTOM TO DEPTH OF 200mm (EXCEPT IMMEDIATELY BENEATH ROOT BALL), IF BASE OF PIT IS OVER EXCAVATED RAISE TO PROPER LEVEL WITH COMPACTED TOPSOIL  
 D EDGE TO DEPTH OF 100mm  
 E 50-75 mm MULCH LAYER, KEEP MULCH AWAY FROM STEMS  
 F PRUNE DAMAGE, DISEASED OR WEAK BRANCHES AS PER ACCEPTED HORTICULTURAL PRACTICE, DO NOT DAMAGE OR REMOVE LEADER  
 G PROVIDE 150 mm DEEP SAUCER AT TREES  
 H APPROVED SUBGRADE (NATIVE OR IMPORTED)



- TREE PLANTING:
- CUT AND REMOVE TOP 1/3 OF BURLAP AND WIRE BASKET FROM ROOTBALL.
  - PLACE 2 METAL POSTS (40 x 40 x 2100 mm) AT OUTSIDE OF ROOTBALL AND FASTEN TO TRUNK WITH APPROVED TREE TIES.
  - WATER THOROUGHLY SUBSEQUENT TO PLANTING.
  - WRAP TREE TRUNK AFTER INSPECTION OF TREES BY LANDSCAPE ARCHITECT.
  - PROTECT TREE FROM RODENT DAMAGE.
  - REMOVE TREE RINGS, STAKES AND TRUNK WRAPPING AFTER WARRANTY PERIOD.

STREET TREE PLANTING DETAIL

- A COMPACTED PLANTING MEDIUM  
 B ROOTBALL / POT  
 C PLANTING MEDIUM / SUBSOIL CULTIVATED LAYER  
 D EDGE TO DEPTH OF 100mm  
 E 50-75 mm MULCH LAYER, KEEP MULCH AWAY FROM STEMS  
 F PRUNE DAMAGE, DISEASED OR WEAK BRANCHES AS PER ACCEPTED HORTICULTURAL PRACTICE  
 G FIRST ROW OF PERENNIALS TO BE PLANTED 600mm FROM EDGE OF BED/CURB FIRST ROW OF SHRUBS TO BE PLANTED 900mm FROM EDGE OF BED/CURB  
 H WEED BARRIER, EXTEND BELOW PERENNIAL PORTION AS SHOWN (WHERE PERENNIALS MEET SHRUBS ONLY)



- BED PREPARATION
- EXCAVATE OR PLACE FILL FOR PLANTING BED TO PROVIDE 400mm MINIMUM DEPTH OF PLANTING MEDIUM.
  - PLACE 150mm PLANTING MEDIUM ON SUBGRADE AND CULTIVATE INTO TOP 200mm OF SUBSOIL.
  - PLACE REMAINDER OF PLANTING MEDIUM OVER CULTIVATED PORTION TO ACHIEVE FINAL GRADE.
  - CENTRE OF BED TO BE CROWNED ABOVE ADJACENT GRADE TO APPROVAL OF CONSULTANT.
  - ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING WALLS WHERE APPLICABLE.

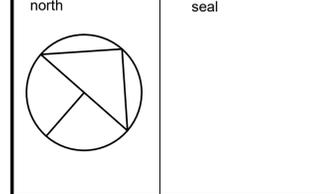
SHRUB / PERENNIAL PLANTING BED DETAIL

ID	Qty	Botanical Name	Common Name	Scheduled Size	Remarks
<b>Trees</b>					
As	1	Acer saccharum	Sugar Maple	60mm cal.	WB, Staked
Ar	3	Acer rubrum	Red Maple	60mm cal.	WB, Staked
Co	2	Celtis occidentalis	Chicagoland Hackberry	60mm cal.	WB, Staked
LI	2	Larix laricina	Canadian Tamarack	175cm ht.	WB, Staked
Pg	3	Picea glauca	White Spruce	175cm ht.	WB, Staked
Ps	1	Prunus serotina	Black Cherry	50mm cal.	WB, Staked
Pst	3	Pinus strobus	White Pine	175cm ht.	WB, Staked
Ta	1	Tilia americana	American Basswood	60mm cal.	WB, Staked
<b>Shrub Bed</b>					
Am	35	Aronia melanocarpa	Chokeberry (Back)		Potted, 1.5m o.c.
Ca	5	Cornus alternifolia	Alternate-Leaf Dogwood		
Ceo	20	Cephalanthus occidentalis	Buttonbush (Back)		Potted, 1.5m o.c.
DI	20	Dienella Lonicera	Bush Honey Suckle (Front)		Potted, 1.0m o.c.
Hp	30	Hypericum prolificum	Shrubby St. John's wort (Front)		Potted, 0.90m o.c.
Po	25	Physocarpus opulifolius	Ninebark (Front)		Potted, 1.5m o.c.
Sa	25	Symphoricarpos albus	Snowberry (Back)		Potted, 1.0m o.c.
VI	5	Viburnum lentago	Nannyberry		
<b>PERENNIALS</b>					
PvA	135m <sup>2</sup>	Hummingbird / Butterfly perennials *	Native Wild flower seed mix		
PvB	40	Flowering perennials / Ornamental / grasses **	Native varieties	150mm pot	

\* Hummingbird / Butterfly friendly natives or naturalized seed mix to include species such as: Cardinal flower, trumpet honeysuckle, bee balm, native sage, daisy, rudbeckia, milkweed, joepey weed.

\*\* Flowering perennials / Ornamental grasses to include species such as: Helianthus, Rudbeckia, Aster, Asclepias, Hypericum, Monarda, Nepeta, Bouteloua, Pannicum, Sorghastrum.

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LANDSCAPE PLAN

scale	drawn by	designed by
1:400	M. Malkov	R. Ruhland
date	checked by	plot date
October, 2016	R. Ruhland	Dec. 16/20
project number	drawing number	
18 - 1556	L - 02	

Contractor to check and verify all dimensions on the job