



CITY OF HAMILTON

**PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Growth Management Division**

TO: Chair and Members Public Works Committee	WARD(S) AFFECTED: WARD 11
COMMITTEE DATE: June 4, 2012	
SUBJECT/REPORT NO: Glover Road and Twenty Road Tree Removals (PED12077) (Ward 11)	
SUBMITTED BY: Tim McCabe General Manager Planning and Economic Development Department	PREPARED BY: Sally Yong-Lee (905) 546-2424 Ext. 1428
SIGNATURE:	

RECOMMENDATION

That the existing City trees on or adjacent to the Glover Road (east and west sides) municipal allowance or within the Twenty Road municipal allowance, as outlined in Appendices “A” and “B” attached to Report PED12077, be removed to facilitate the urbanization of Glover Road and Twenty Road in accordance with the North Glanbrook Industrial Business Park (now known as Red Hill Business Park (RHBP)) Transportation Master Plan Class Environmental Assessment (EA).

EXECUTIVE SUMMARY

The purpose of this Report is to request the approval for the removal of 30 living City trees (including two in poor to fair condition) that are located within or adjacent to the Glover Road municipal road allowance (670m South of Twenty Road to 110m North of Twenty Road) (see Appendix “A”), excluding trees abutting the Maple Leaf Food site which are considered private trees and 56 living City trees (including 12 in poor condition) on Twenty Road (Glover Road to Future Dartnall Road) (see Appendix “B”). The removal of these trees is necessary to implement the works required to complete the urbanization of Glover Road and Twenty Road. Tree removals in these locations enable the municipality to upgrade Glover Road and Twenty Road to an industrial standard.

FINANCIAL / STAFFING / LEGAL IMPLICATIONS

Financial: Funding for tree removals and planting is available in the following approved Capital Budget Account No. 3620707005.

Staffing: N/A

Legal: Council approval is required for the removal of more than 25 trees in accordance with City of Hamilton Public Tree Removal Policy as referenced in the City of Hamilton Tree By-law 06-151.

HISTORICAL BACKGROUND

The North Glanbrook Industrial Business Park Transportation Master Plan (TMP) was prepared and adopted by Council in 2006.

The objective of the North Glanbrook Industrial Business Park TMP was to identify a road network that will support the development of the RHBP lands. The study was to plan for an expected increase in traffic on roadways within and adjacent to the RHBP when development occurs.

The City initiated the reconstruction of Glover Road and Twenty Road projects for implementation in 2012 and 2013 respectively. It should be noted there are utility relocations that are necessary in advance of the implementation dates.

City Forestry staff has provided a condition review of the affected trees and is in agreement with the removal recommendations in this Report.

POLICY IMPLICATIONS

Council approval for tree removal is being requested in accordance with the City's Public Tree Removal Policy as referenced in the City of Hamilton Tree By-law 06-151. Council approval is not required for the removal of the dead and invasive trees that meet Forestry and Horticulture's criteria for removal.

The tree removals are to facilitate the urbanization of Glover Road in accordance with North Glanbrook Industrial Business Park (EA).

RELEVANT CONSULTATION

The Ward Councillor has been consulted and is in agreement with the removal of the trees.

Forestry and Horticulture Section has been consulted with respect to the City trees on the east and west sides of Glover Road (from approximately 110m north of Twenty Road to approximately 660m south of Twenty Road) and Twenty Road (Glover Road to Future Dartnall Road). Forestry staff has reviewed the tree inventory and condition assessment and have verified such on site.

ANALYSIS / RATIONALE FOR RECOMMENDATION

(include Performance Measurement/Benchmarking Data, if applicable)

Large caliper (70mm) replacement trees will be planted as per the tree planting plan which will be sent for review and approval to the Forestry and Horticulture Section.

ALTERNATIVES FOR CONSIDERATION

(include Financial, Staffing, Legal and Policy Implications and pros and cons for each alternative)

Do Nothing – Traffic volumes within the road network will increase as a result of the new Maple Leaf Foods facility and future developments in the RHBP. The existing roads will not be sufficient to support the planned growth.

Lack of improvements to the road network will place the City at a disadvantage in its ability to attract new industrial developments.

CORPORATE STRATEGIC PLAN (Linkage to Desired End Results)

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

Financial Sustainability

- ◆ Effective and sustainable growth management; and,
- ◆ Delivery of municipal services and management Capital assets/liabilities in a sustainable, innovative and cost effective manner.

Growing Our Economy

- ◆ Road network improvements will spur industrial development and make available “shovel ready lands” in the RHBP.

Environmental Stewardship

- ◆ Natural resources are protected and enhanced.
- ◆ Staff Comment: An overall loss of canopy cover but impacts are mitigated by the planting of new large caliper trees.

Healthy Community

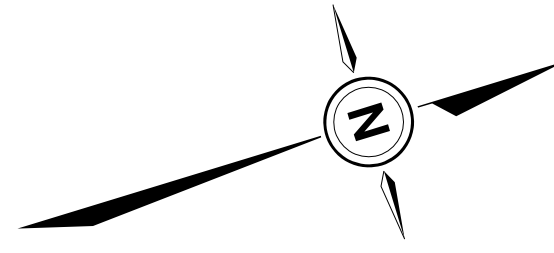
- ◆ Plan and manage the built environment.

APPENDICES / SCHEDULES

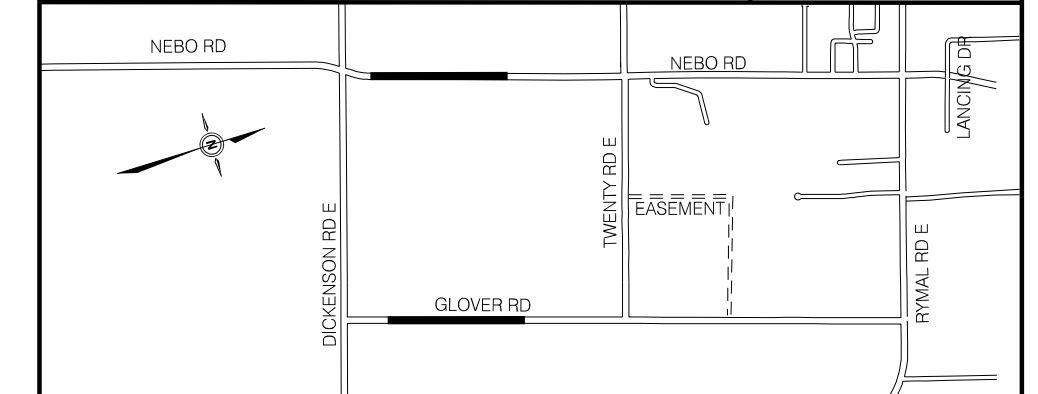
Appendix “A” - Tree Removal Plans (T1 and T2) for Glover Road
Appendix “B” - Tree Removal Plans (T1 and T2) for Twenty Road

SYL:ra
Attachs. (2)

GLOVER ROAD



CONTRACT No. C15-29-12 (HSW) SHEET No. T1
 DRAWING No. 11-H-55 (T1)
 FILE No.



DIMENSIONS SHOWN ON THIS PLAN ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

LEGEND (Proposed Works)

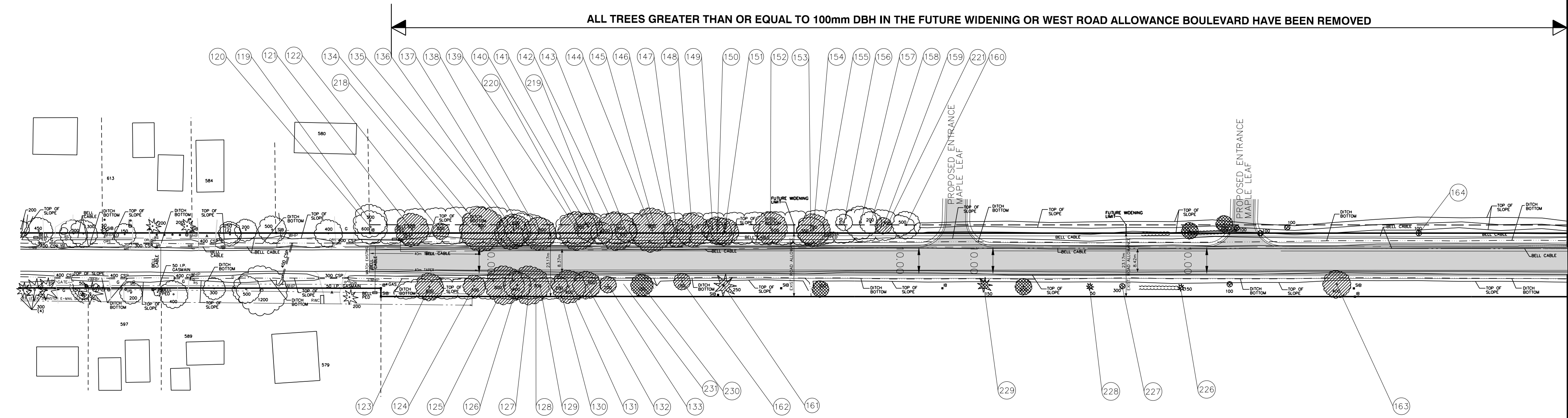
- EXISTING DECIDUOUS TREE (TO REMAIN)
- EXISTING DECIDUOUS TREE (REMOVE)
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GENERAL NOTES
 (Unless scheduled for removal on this drawing, all trees to be protected by tree preservation fencing)

All contractors, engineers and architects working in the vicinity of municipally owned trees shall adhere to the following:

- All existing trees to remain on site, or on adjacent properties, shall be tagged and fully protected with tree preservation fencing to the satisfaction of the Manager of Forestry and Horticulture or his designate to protect the roots, trunks and branches during construction. Areas within the protective fencing zone shall remain undisturbed and shall not be used for the storage of building materials, structures or equipment. This tree protection zone shall be completed prior to the commencement of site clearance, demolition, or any type of construction.
- Surplus soil, equipment, vehicles, tools, debris or materials shall not be placed over the root systems of the trees within the Tree Protection Zone. No contaminants shall be dumped or flushed where feeder roots of trees exist.
- The Contractor shall, wherever possible, avoid cutting surface roots. If root cuts are necessary, they should be done quickly, making smooth flush cuts. The roots shall be back-filled and watered before they have a chance to dry out.
- Where limbs or portions of trees must be removed to accommodate construction work, Forestry personnel in accordance with accepted Arboricultural practices will remove them. Contractor shall take measures to prevent any further damage.
- Where necessary, the trees will be given an overall pruning by the City of Hamilton Forestry personnel at appropriate stages during construction.
- The Contractor shall, wherever possible, avoid disturbing original grades around trees in areas of protective fencing.
- At no time shall the Contractor place, deposit or store any stone, brick, sand, concrete, soil or any other material or equipment which may impede the free passage of water, air or nutrients to the tree.
- No cables or ropes of any type shall be wrapped around or installed in trees.
- At no time, under any circumstances, shall any part of the tree that is to remain after construction is completed, have signs or fences nailed to it or survey markings or paint applied to the tree.
- The Manager of Forestry & Horticulture or his designate shall be notified to inspect all Tree Protection measures. These measures shall remain in effect until the completion of construction, at which time authorization from the Manager of Forestry & Horticulture or his designate must be obtained for the removal of the Tree Protection Zone.
- The Manager of Forestry & Horticulture must be notified immediately when any municipally owned tree is injured or destroyed during construction.

TREE PROTECTION ZONE SIGNAGE
 (See Special Provisions for Tree Preservation Zone Signage)



Tree ID Number	Species		DBH (cm)	Condition	Location	Ownership	Action	
	Botanical	Common						
119	Quercus macrocarpa	Bur Oak	31	41	Good	Within Proposed Ditch Work Area	Private	Preserve
120	Quercus macrocarpa	Bur Oak	45	Good	Within Proposed Ditch Work Area	Private	Preserve	
121	Quercus macrocarpa	Bur Oak	52	Good	Within Proposed Ditch Work Area	Private	-	
122	Quercus macrocarpa	Bur Oak	19	Poor	Within Proposed Ditch Work Area	Private	-	
123	Quercus macrocarpa	Bur Oak	32	Good	Within Proposed Ditch Work Area	City	Remove	
124	Catalpa speciosa	Northern Catalpa	23	Good	Within Proposed Ditch Work Area	City	Remove	
125	Quercus macrocarpa	Bur Oak	53	Good	Within Proposed Ditch Work Area	City	Remove	
126	Quercus macrocarpa	Bur Oak	45	Good	Within Proposed Ditch Work Area	City	Remove	
127	Quercus macrocarpa	Bur Oak	42	39	Good	Within Proposed Ditch Work Area	City	Remove
128	Quercus macrocarpa	Bur Oak	29	Good	Within Proposed Ditch Work Area	City	Remove	
129	Ameiurites sp.	Servottery species	21	Fair	Within Proposed Ditch Work Area	City	Remove	
130	Quercus macrocarpa	Bur Oak	52	Good	Within Proposed Ditch Work Area	City	Remove	
131	Quercus macrocarpa	Bur Oak	34	Good	Within Proposed Ditch Work Area	City	Remove	
132	Acer negundo	Manitoba Maple	23	Good	Within Proposed Ditch Work Area	City	Remove	
133	Quercus rubra	Red Oak	15	Good	Within Proposed Ditch Work Area	City	Remove	
134	Quercus macrocarpa	Bur Oak	71	Good	Within Proposed Ditch Work Area	Private	Remove	
135	Quercus macrocarpa	Bur Oak	51	Good	Within Proposed Ditch Work Area	City/Private	-	
136	Quercus macrocarpa	Bur Oak	52	Good	Within Proposed Ditch Work Area	City/Private	-	
137	Quercus macrocarpa	Bur Oak	47	21	Good	Within Proposed Ditch Work Area	Private	-
138	Quercus macrocarpa	Bur Oak	41	Good	Within Proposed Ditch Work Area	City/Private	-	
139	Quercus macrocarpa	Bur Oak	67	Good	Within Proposed Ditch Work Area	City/Private	-	
140	Fraxinus pennsylvanica	Green Ash	22	Good	Within Proposed Ditch Work Area	Private	-	
141	Quercus macrocarpa	Bur Oak	37	Good	Within Proposed Ditch Work Area	City/Private	-	

* TREES REMOVED AS OF MARCH 31, 2012 SITE VISIT

Tree ID Number	Species		DBH (cm)	Condition	Location	Ownership	Action
	Botanical	Common					
142	Quercus macrocarpa	Bur Oak	24	Good	Within Proposed Ditch Work Area	City/Private	-
143	Quercus macrocarpa	Bur Oak	54	Good	Within Proposed Ditch Work Area	City/Private	-
144	Quercus macrocarpa	Bur Oak	22	Fair	Within Proposed Ditch Work Area	Private	-
145	Quercus macrocarpa	Bur Oak	89	Good	Within Proposed Ditch Work Area	Private	-
146	Quercus macrocarpa	Bur Oak	36	Good	Within Proposed Ditch Work Area	Private	-
147	Prunus avium	Sweet Cherry	17	Good	Within Proposed Ditch Work Area	City/Private	-
148	Quercus macrocarpa	Bur Oak	54	Good	Within Proposed Ditch Work Area	City/Private	-
149	Quercus macrocarpa	Bur Oak	27	Good	Within Proposed Ditch Work Area	Private	-
150	Quercus macrocarpa	Bur Oak	50	Good	Within Proposed Ditch Work Area	City/Private	-
151	Quercus macrocarpa	Bur Oak	35	Good	Within Proposed Ditch Work Area	City/Private	-
152	Quercus macrocarpa	Bur Oak	52	Good	Within Proposed Ditch Work Area	Private	-
153	Quercus macrocarpa	Bur Oak	21	Good	Within Proposed Ditch Work Area	City/Private	-
154	Quercus macrocarpa	Bur Oak	32	Good	Within Proposed Ditch Work Area	City/Private	-
155	Quercus macrocarpa	Bur Oak	54	Good	Within Proposed Ditch Work Area	Private	-
156	Prunus avium	Sweet Cherry	17	Good	Within Proposed Ditch Work Area	Private	-
157	Carus ovata	Shagbark Hickory	33.37	Good	Within Proposed Ditch Work Area	Private	-
158	Prunus avium	Sweet Cherry	19	Good	Within Proposed Ditch Work Area	Private	-
159	Quercus macrocarpa	Bur Oak	17	Good	Within Proposed Ditch Work Area	Private	-
160	Prunus avium	Sweet Cherry	18	Good	Within Proposed Ditch Work Area	Private	Remove
161	Quercus macrocarpa	Bur Oak	35	Good	Within Proposed Ditch Work Area	City	Remove
162	Pinus strobus	White Pine	21	Good	Within Proposed Ditch Work Area	City	Remove
163	Ulmus pumila	Siberian Elm	38	Good	Within Proposed Ditch Work Area	City	Remove
164	Crataegus sp.	Hawthorn species	22	Good	Within Proposed Ditch Work Area	City	Remove

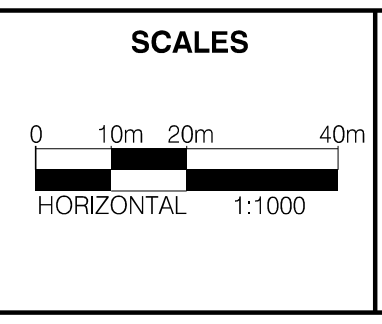
SEE SHEET T2
MATCH LINE

PRELIMINARY ONLY

No.	REVISIONS	INITIAL	DATE	DRAWN BY: DC/SJH	DATE: MARCH 2012

Reviewed and Approved

Forestry & Horticulture Date

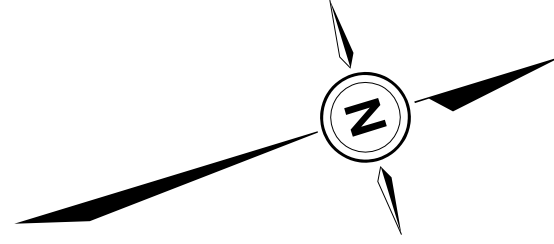


Project Manager (Design)
 NAME _____
 Manager of Design
 Susan Jacob, P. Eng.

City of HAMILTON
 Public Works Department

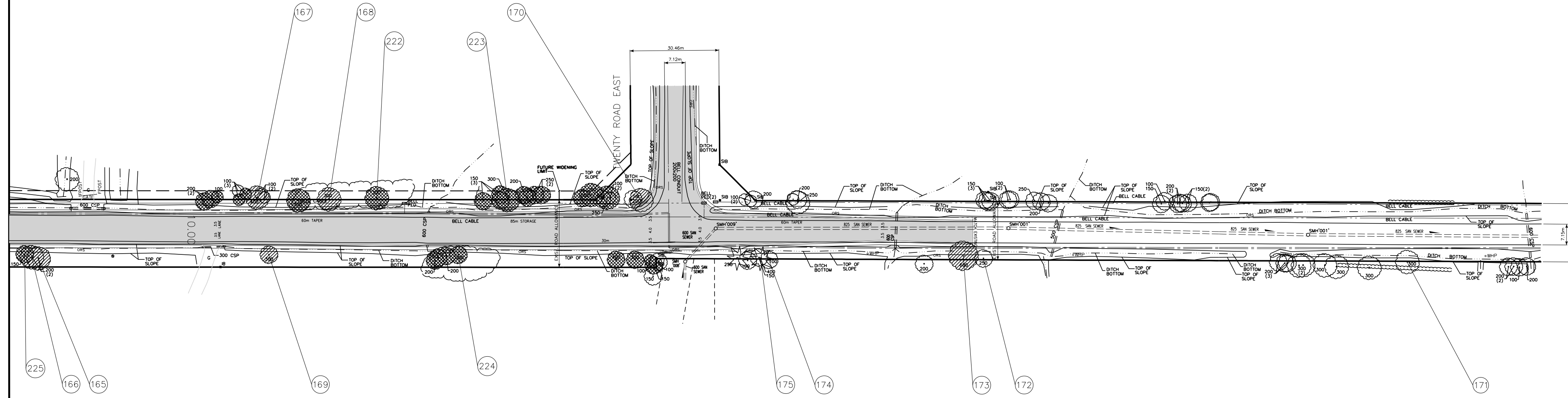
GLOVER ROAD
 ROAD RECONSTRUCTION
 TREE PRESEVATION/REMOVAL PLAN
 From : 670m South of Twenty Road East
 To : 110m North of Twenty Road East

GLOVER ROAD



SEE SHEET T1

MATCH LINE

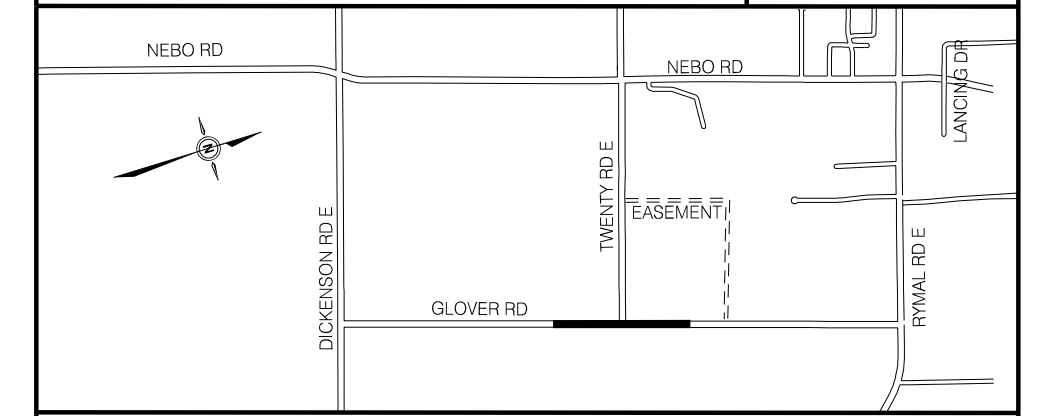


Tree ID Number	Species		DBH (cm)	Condition	Location	Ownership	Action
	Botanical	Common					
165	<i>Tilia americana</i>	Basswood	22	Fair	Within Proposed Ditch Work Area	City	Remove
166	<i>Tilia americana</i>	Basswood	17	Good	Within Proposed Ditch Work Area	City	Remove
167	<i>Crataegus sp.</i>	Hawthorn species	28	Good	Within Proposed Ditch Work Area	City	Remove
168	<i>Fraxinus pennsylvanica</i>	Green Ash	20, 16, 16	Fair-Good	Within Proposed Ditch Work Area	City	Remove
169	<i>Catalpa speciosa</i>	Northern Catalpa	32	Good	Within Proposed Ditch Work Area	City	Remove
170	<i>Fraxinus pennsylvanica</i>	Green Ash	25, 15, 15, 5-25	Fair-Good	Within Proposed Ditch Work Area	City/Private	Remove
171	<i>Malus pumila</i>	Common Apple	23	N/A	Outside Project Area	City	Preserve
172	<i>Crataegus sp.</i>	Hawthorn species	25	Good	Within Proposed Ditch Work Area	City	Remove
173	<i>Acer saccharum</i>	Sugar Maple	50	Good	Within Proposed Ditch Work Area	City	Remove
174	Unknown	Unknown	46	Dead	Within Proposed Ditch Work Area	City/Private	Remove
175	<i>Picea sp.</i>	Spruce species	20	Fair	Within Proposed Ditch Work Area	City/Private	Remove
218	<i>Crataegus sp.</i>	Hawthorn species	13	Fair-Good	Within Proposed Ditch Work Area	City	Remove
219	Unknown	Unknown	14	Dead	Within Proposed Ditch Work Area	City	Remove
220	Unknown	Unknown	14	Dead	Within Proposed Ditch Work Area	City	Remove
221	Unknown	Unknown	12	Dead	Within Proposed Ditch Work Area	City	Remove
222	<i>Prunus avium</i>	Sweet Cherry	24, 13	Fair	Within Proposed Ditch Work Area	City	Remove
223	<i>Crataegus sp.</i>	Hawthorn species	13, 14, 12	Dead	Within Proposed Ditch Work Area	City	Remove
224	<i>Malus pumila</i>	Common Apple	27	Fair	Within Proposed Ditch Work Area	City	Remove
225	<i>Prunus avium</i>	Sweet Cherry	10	Good	Within Proposed Ditch Work Area	City	Remove
226	<i>Pinus strobus</i>	White Pine	11	Poor-Fair	Within Proposed Ditch Work Area	City	Remove
227	<i>Crataegus sp.</i>	Hawthorn species	14	Dead	Within Proposed Ditch Work Area	City	Remove
228	<i>Acer rubrum</i>	Red Maple	10, 11, 12	Fair	Within Proposed Ditch Work Area	City	Remove
229	<i>Pinus strobus</i>	White Pine	13	Poor-Fair	Within Proposed Ditch Work Area	City	Remove
230	<i>Crataegus sp.</i>	Hawthorn species	12	Good	Within Proposed Ditch Work Area	City	Remove
231	<i>Quercus rubra</i>	Red Oak	13	Good	Within Proposed Ditch Work Area	City	Remove

* TREES REMOVED AS OF MARCH 31, 2012 SITE VISIT

CONTRACT No. C15-29-12 (HSW)
DRAWING No. 11-H-55 (T2)
FILE No.

SHEET No.
T2



DIMENSIONS SHOWN ON THIS PLAN ARE IN MILLIMETRES UNLESS OTHERWISE NOTED

LEGEND (Proposed Works)

- EXISTING DECIDUOUS TREE (TO REMAIN)
- EXISTING DECIDUOUS TREE (REMOVE)
- EXISTING CONIFEROUS TREE (TO REMAIN)
- EXISTING CONIFEROUS TREE (REMOVE)

GENERAL NOTES

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- 1) All existing trees to remain on site, or on adjacent properties, shall be tagged and fully protected with tree preservation fencing to the satisfaction of the Manager of Forestry and Horticulture or his designate to protect the roots, trunk and branches during construction. Areas within the protective fencing zone shall remain undisturbed and shall not be used for the storage of building materials, structures or equipment. This tree protection zone shall be completed prior to the commencement of site clearance, demolition, or any type of construction.
- 2) Surplus soil, equipment, vehicles, tools, debris or materials shall not be placed over the root systems of the trees within the Tree Protection Zone. No contaminants shall be dumped or flushed where feeder roots of trees exist.
- 3) The Contractor shall, wherever possible, avoid cutting surface roots. If root cuts are necessary, they should be done quickly, making smooth flush cuts. The roots shall be back-filled and watered before they have a chance to dry out.
- 4) Where limbs or portions of trees must be removed to accommodate construction work, forestry personnel in accordance with accepted Arboricultural practices will remove them. Contractor shall take measures to prevent any further damage.
- 5) Where necessary, the trees will be given an overall pruning by the City of Hamilton Forestry personnel at appropriate stages during construction.
- 6) The Contractor shall, wherever possible, avoid disturbing original grades around trees in areas of protective fencing.
- 7) At no time shall the Contractor place, deposit or store any stone, brick, sand, concrete, soil or any other material or equipment which may impede the free passage of water, air or nutrients to the tree.
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- 9) In no time, under any circumstances, shall any part of the tree that is to remain after construction is completed, have signs or fences related to it or survey markings or paint applied to the tree.
- 10) The Manager of Forestry & Horticulture or his designate shall be notified to inspect all Tree Protection measures. These measures shall remain in effect until the completion of construction, at which time authorization from the Manager of Forestry & Horticulture or his designate must be obtained for the removal of the Tree Protection Zone.
- 11) The Manager of Forestry & Horticulture must be notified immediately when any municipally owned tree is injured or destroyed during construction.

TREE PROTECTION ZONE SIGNAGE

(See Special Provisions for Tree Preservation Zone Signage)

PRELIMINARY ONLY

No.	REVISIONS	INITIAL	DATE	DRAWN BY: DC/SJH	DATE: MARCH 2012

Reviewed and Approved

Forestry & Horticulture Date _____

SCALES

0 10m 20m 40m

HORIZONTAL 1:1000

DILLON CONSULTING
5 CHERRY BLOSSOM ROAD, UNIT 1
CAMBRIDGE, ONTARIO
N3H 4R7

Project Manager (Design)

NAME _____

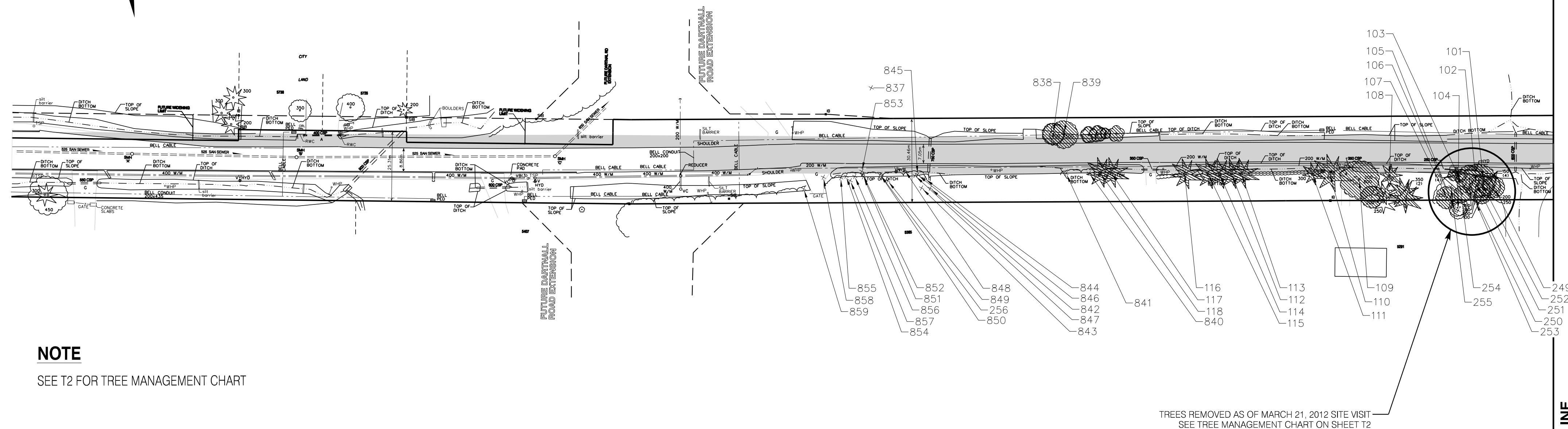
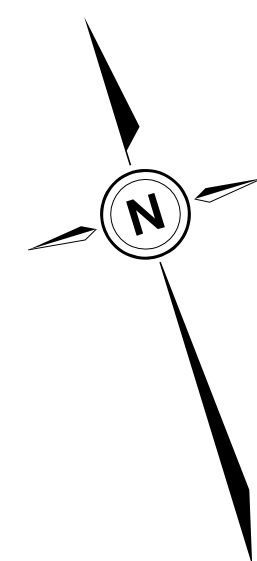
Manager of Design

Susan Jacob, P. Eng.

CITY OF HAMILTON
Public Works Department

GLOVER ROAD
ROAD RECONSTRUCTION
TREE PRESEVATION/REMOVAL PLAN
From : 670m South of Twenty Road East
To : 110m North of Twenty Road East

TWENTY ROAD EAST



NOTE
SEE T2 FOR TREE MANAGEMENT CHART

FILE No.	CONTRACT No. PW-08-00 (HSW) DRAWING No. 11-H-54 (T1)	SHEET No. T1 OF T2
DIMENSIONS SHOWN ON THIS PLAN ARE IN MILLIMETRES UNLESS OTHERWISE NOTED		

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No.	REVISIONS	INITIAL	DATE	DRAWN BY: SJH	DATE: March 2012	<p>SCALES</p> <p>HORIZONTAL 1:500</p>	<p>Project Manager (Design)</p> <p>NAME _____</p> <p>Manager of Design</p> <p>Susan Jacob, P. Eng.</p>	<p>CITY OF HAMILTON</p> <p>Public Works Department</p>	<p>TWENTY ROAD EAST</p> <p>TREE MANAGEMENT PLAN</p> <p>From : Glover Road To : 800m Westerly</p>
REFERENCE MATERIAL:				Geodetic Bench Mark Index No. 75u197 Borehole Report - Elevation=213.996m					

TWENTY ROAD EAST

FILE No.	CONTRACT No. PW-08-00 (HSW) DRAWING No. 11-H-54 (T2)	SHEET No. T2 OF T2
DIMENSIONS SHOWN ON THIS PLAN ARE IN MILLIMETRES UNLESS OTHERWISE NOTED		

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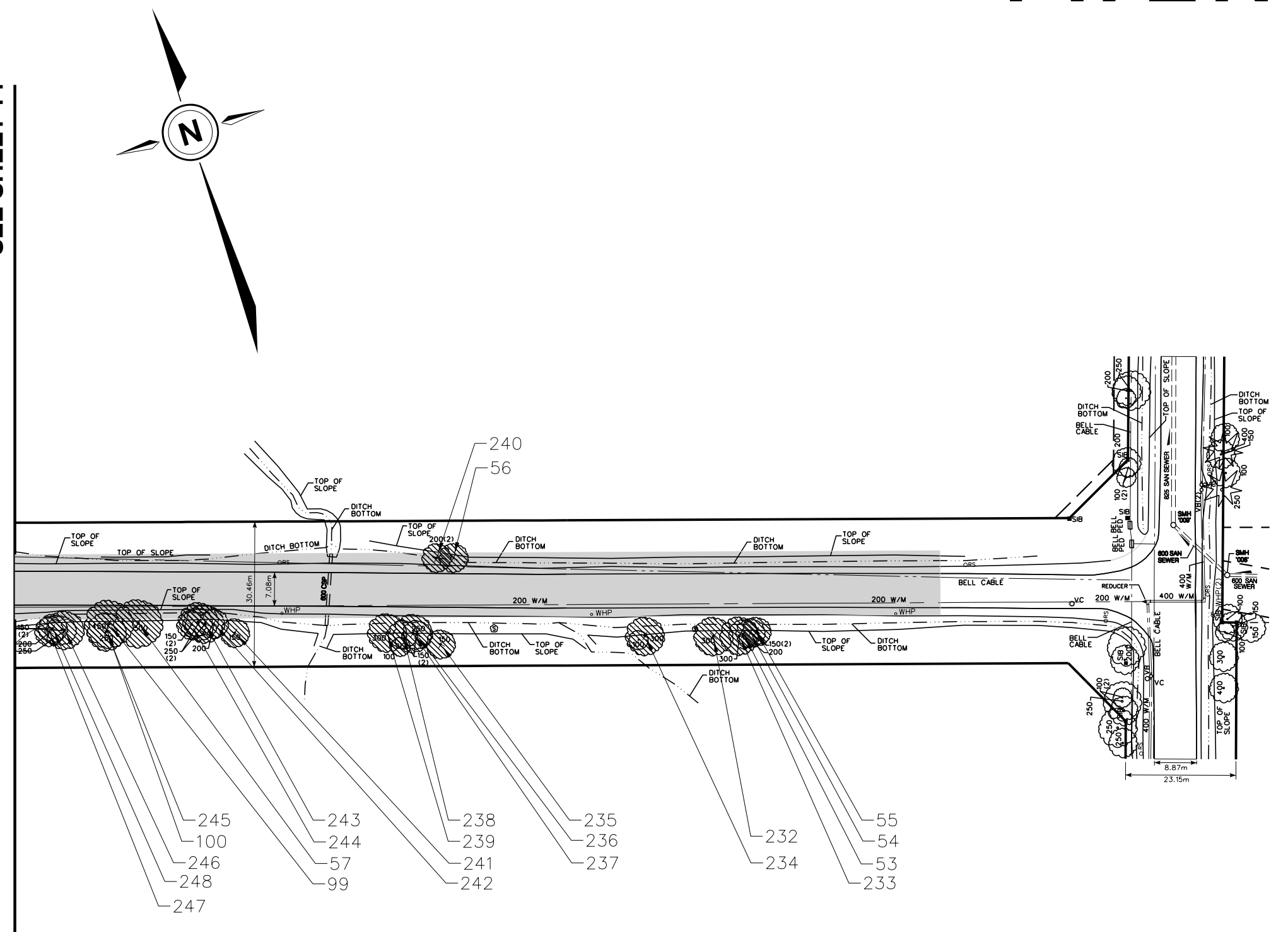
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- The Manager of Forestry & Horticulture or his designate shall be notified to inspect all Tree Protection measures. These measures shall remain in effect until the completion of construction, at which time authorization from the Manager of Forestry & Horticulture or his designate must be obtained for the removal of the Tree Protection Zone.
- The Manager of Forestry & Horticulture must be notified immediately when any municipally owned tree is injured or destroyed during construction.

TREE PROTECTION ZONE SIGNAGE
(See Special Provisions for Tree Preservation Zone Signage)

SEE SHEET T1

MATCH LINE



Tree ID Number	Botanical Species	Common	DBH (cm)	Condition	Location	Ownership	Action
53	<i>Oslyra virginiana</i>	Ironwood	20	Good		City	Remove
54	<i>Prunus avium</i>	Sweet Cherry	22.17	Good		City	Remove
55	<i>Fraxinus pennsylvanica</i>	Green Ash	16.23	Good		City	Remove
56	<i>Fraxinus sp.</i>	Ash species	16	Dead		City	Remove
57	<i>Quercus macrocarpa</i>	Bur Oak	42	Good		City	Remove
99	<i>Acer saccharum</i>	Sugar Maple	36	Good		City	Remove
100	<i>Quercus macrocarpa</i>	Bur Oak	22	Good		City	Remove
101	<i>Quercus macrocarpa</i>	Bur Oak	38	Dead	Removed	City	None
102	<i>Quercus macrocarpa</i>	Bur Oak	26	Good	Removed	City	None
103	<i>Tilia americana</i>	Basswood	18	Good	Removed	City	None
104	<i>Quercus rubra</i>	Red Oak	15	Good	Removed	Private	None
105	<i>Populus grandidentata</i>	Largetooth Aspen	22	Good	Removed	None	None
106	<i>Quercus rubra</i>	Red Oak	17	Good	Removed	Private	None
107	<i>Quercus rubra</i>	Red Oak	23	Good	Removed	City	None
108	<i>Pinus strobus</i>	White Pine	18	Good	Removed	City	None
109	<i>Quercus alba</i>	White Oak	37.46	Good		City	Remove
110	<i>Picea abies</i>	Norway Spruce	52	Good		City	Remove
111	<i>Picea abies</i>	Norway Spruce	26	Good		City	Remove
112	<i>Picea abies</i>	Norway Spruce	38	Good		City	Remove
113	<i>Picea abies</i>	Norway Spruce	30	Good		City	Remove
114	<i>Picea abies</i>	Norway Spruce	29	Fair		City	Remove
115	<i>Picea abies</i>	Norway Spruce	35	Good		City	Remove
116	<i>Picea abies</i>	Norway Spruce	38	Good		City	Remove
117	<i>Picea abies</i>	Norway Spruce	26	Fair		City	Remove
118	<i>Picea abies</i>	Norway Spruce	23	Fair		City	Remove
837	<i>Salix alba</i>	White Willow	24.42	Good		City	Preserve
838	<i>Prunus serotina</i>	Black Cherry	42	Poor		City	Remove
839	<i>Malus pumila</i>	Common Apple	50	Poor		City	Remove
840	<i>Picea abies</i>	Norway Spruce	35	Poor		City	Remove
841	<i>Picea abies</i>	Norway Spruce	28	Poor		City	Remove
842	<i>Salix alba</i>	White Willow	34	Good		City	Remove
843	<i>Salix alba</i>	White Willow	25	Poor		City	Remove
844	<i>Gleditsia triacanthos</i>	Honey Locust	45	Poor		City	Remove
845	<i>Gleditsia triacanthos</i>	Honey Locust	20.16	Poor		City	Remove
846	<i>Gleditsia triacanthos</i>	Honey Locust	27	Fair		City	Remove
847	<i>Gleditsia triacanthos</i>	Honey Locust	27	Good		City	Remove
848	<i>Gleditsia triacanthos</i>	Honey Locust	30	Fair		City	Remove
849	<i>Gleditsia triacanthos</i>	Honey Locust	21.30	Fair		City	Remove
850	<i>Gleditsia triacanthos</i>	Honey Locust	18	Poor		City	Remove
851	<i>Gleditsia triacanthos</i>	Honey Locust	19	Poor		City	Remove
852	<i>Gleditsia triacanthos</i>	Honey Locust	27.18	Poor		City	Remove
853	<i>Gleditsia triacanthos</i>	Honey Locust	29	Fair		City	Remove
854	<i>Gleditsia triacanthos</i>	Honey Locust	25	Fair		City	Remove
855	<i>Gleditsia triacanthos</i>	Honey Locust	24.24	Poor		City	Remove
856	<i>Gleditsia triacanthos</i>	Honey Locust	34	Good		City	Remove
857	<i>Gleditsia triacanthos</i>	Honey Locust	32	Fair		City	Remove
858	<i>Gleditsia triacanthos</i>	Honey Locust	26	Good		City	Remove
859	<i>Picea abies</i>	Norway Spruce	34	Poor		City	Remove
232	<i>Crataegus sp.</i>	Hawthorn Species	14	Good		City	Remove
233	<i>Crataegus sp.</i>	Hawthorn Species	11	Good		City	Remove
234	<i>Crataegus sp.</i>	Hawthorn Species	11	Good		City	Remove
235	<i>Fraxinus pennsylvanica</i>	Green Ash	14	Good		City	Remove
236	<i>Crataegus sp.</i>	Hawthorn Species	12	Good		City	Remove
237	<i>Crataegus sp.</i>	Hawthorn Species	12.14	Good		City	Remove
238	<i>Crataegus sp.</i>	Hawthorn Species	13	Good		City	Remove
239	<i>Crataegus sp.</i>	Hawthorn Species	17,15,13,12,11	Good		City	Remove
240	Unknown	Unknown	11	Dead		City	Remove
241	<i>Crataegus sp.</i>	Hawthorn Species	16	Good		City	Remove
242	<i>Crataegus sp.</i>	Hawthorn Species	13	Good		City	Remove
243	<i>Crataegus sp.</i>	Hawthorn Species	12,13,11,11	Good		City	Remove
244	<i>Crataegus sp.</i>	Hawthorn Species	11	Fair-Good		City	Remove
245	<i>Quercus rubra</i>	Red Oak	10	Good		City	Remove
246	<i>Crataegus sp.</i>	Hawthorn Species	12,13,11,14,11,11	Good		City	Remove
247	<i>Crataegus sp.</i>	Hawthorn Species	14,14	Good		City	Remove
248	<i>Crataegus sp.</i>	Hawthorn Species	14	Good		City	Remove
249	<i>Quercus rubra</i>	Red Oak	14	Fair-Good	Removed	City	None
250	<i>Quercus alba</i>	White Oak	12	Good	Removed	City	None
251	<i>Quercus rubra</i>	Red Oak	14	Good	Removed	City	None
252	<i>Quercus rubra</i>	Red Oak	13	Fair	Removed	City	None
253	<i>Quercus rubra</i>	Red Oak	10,8,8	Good	Removed	City	None
254	<i>Quercus alba</i>	White Oak	12	Good	Removed	City	None
255	<i>Crataegus sp.</i>	Hawthorn Species	11	Good	Removed	City	None
256	<i>Gleditsia triacanthos</i>	Honey Locust	12	Fair		City	Remove

* TREES REMOVED AS OF MARCH 21, 2012 SITE VISIT

PRELIMINARY ONLY

No.	REVISIONS	INITIAL	DATE	DRAWN BY: SJH	DATE: March 2012	<p>SCALES</p> <p>HORIZONTAL 1:500</p>	<p>Project Manager (Design)</p> <p>NAME _____</p> <p>Manager of Design</p> <p>Susan Jacob, P. Eng.</p>	<p>CITY OF HAMILTON</p> <p>Public Works Department</p>	<p>TWENTY ROAD EAST</p> <p>TREE MANAGEMENT PLAN</p> <p>From : Glover Road To : 800m Westery</p>
REFERENCE MATERIAL:				Geodetic Bench Mark Index No. 75u197 Borehole Report - Elevation = 213.998m					
Surveyed By : G. Jones, E. Bettencourt Sewer Plans : 05-S-03,05-S-04,05-S-12,10-H-06,99-H-39 Water Plans : 80-W-31A,82-W-2,82-W-3,82-W-4 Inspectors Report : IR00716,IR01741 Large Service Plans : LSP 2835									