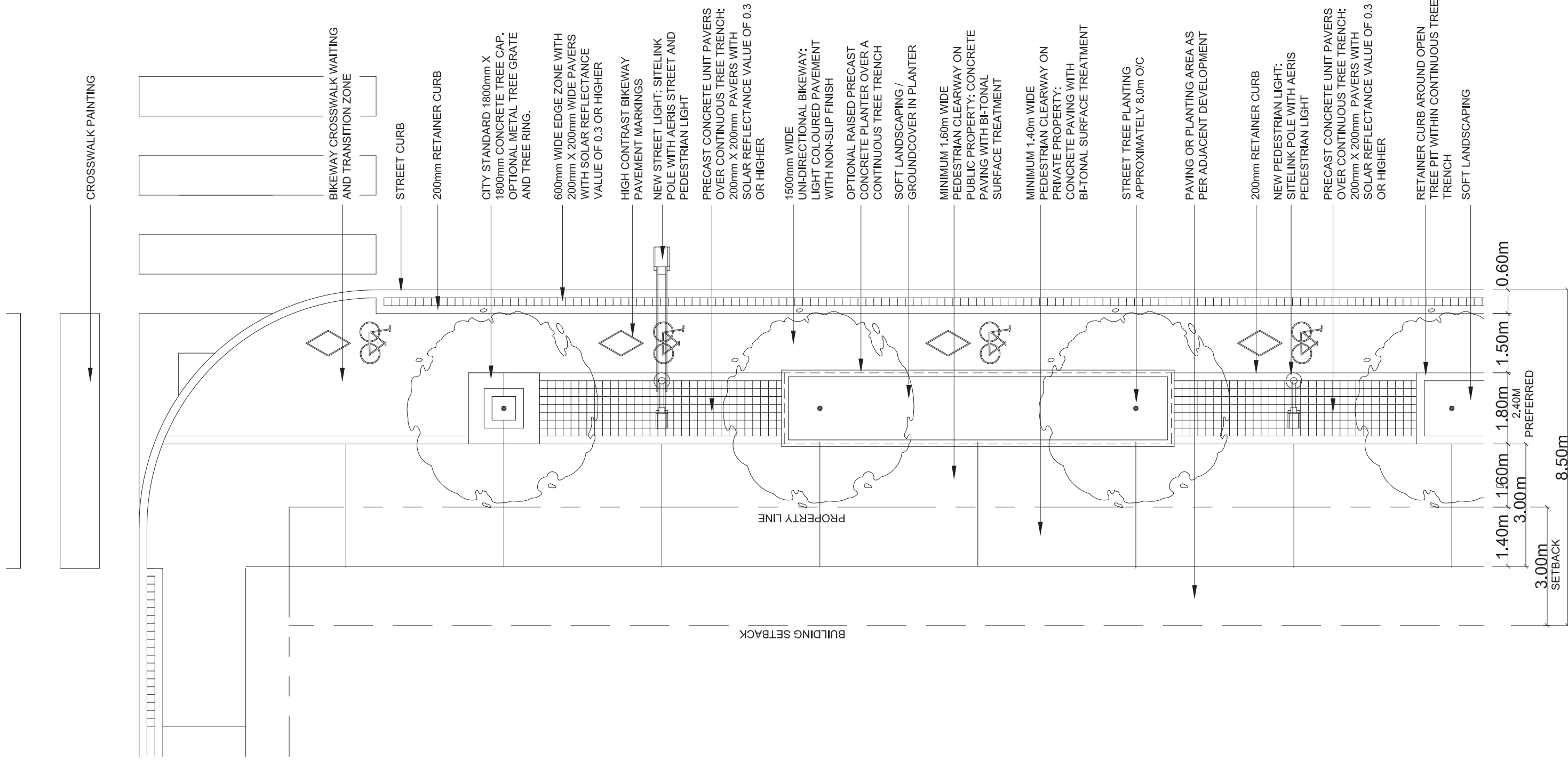


10.0 Appendices

- A Boulevard Treatments
- B Preferred Lighting
- C Costing
- D Arborist Report & Recommended Tree Species List

Appendix A

Boulevard Treatments



CROSSWALK PAINTING

BIKEWAY CROSSWALK WAITING AND TRANSITION ZONE

STREET CURB

200mm RETAINER CURB

CITY STANDARD 1800mm X 1800mm CONCRETE TREE CAP. OPTIONAL METAL TREE GRATE AND TREE RING.

600mm WIDE EDGE ZONE WITH 200mm X 200mm WIDE PAVERS WITH SOLAR REFLECTANCE VALUE OF 0.3 OR HIGHER

HIGH CONTRAST BIKEWAY PAVEMENT MARKINGS

NEW STREET LIGHT: SITELINK POLE WITH AERIS STREET AND PEDESTRIAN LIGHT

PRECAST CONCRETE UNIT PAVERS OVER CONTINUOUS TREE TRENCH: 200mm X 200mm PAVERS WITH SOLAR REFLECTANCE VALUE OF 0.3 OR HIGHER

BUILDING SETBACK

PROPERTY LINE

1500mm WIDE UNI-DIRECTIONAL BIKEWAY: LIGHT COLOURED PAVEMENT WITH NON-SLIP FINISH

OPTIONAL RAISED PRECAST CONCRETE PLANTER OVER A CONTINUOUS TREE TRENCH

SOFT LANDSCAPING / GROUND COVER IN PLANTER

MINIMUM 1.60m WIDE PEDESTRIAN CLEARWAY ON PUBLIC PROPERTY: CONCRETE PAVING WITH BI-TONAL SURFACE TREATMENT

MINIMUM 1.40m WIDE PEDESTRIAN CLEARWAY ON PRIVATE PROPERTY: CONCRETE PAVING WITH BI-TONAL SURFACE TREATMENT

STREET TREE PLANTING APPROXIMATELY 8.0m O/C

PAVING OR PLANTING AREA AS PER ADJACENT DEVELOPMENT

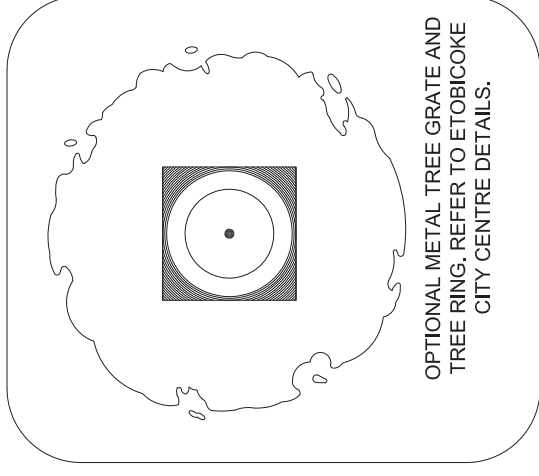
200mm RETAINER CURB

NEW PEDESTRIAN LIGHT: SITELINK POLE WITH AERIS PEDESTRIAN LIGHT

PRECAST CONCRETE UNIT PAVERS OVER CONTINUOUS TREE TRENCH: 200mm X 200mm PAVERS WITH SOLAR REFLECTANCE VALUE OF 0.3 OR HIGHER

RETAINER CURB AROUND OPEN TREE PIT WITHIN CONTINUOUS TREE TRENCH
SOFT LANDSCAPING

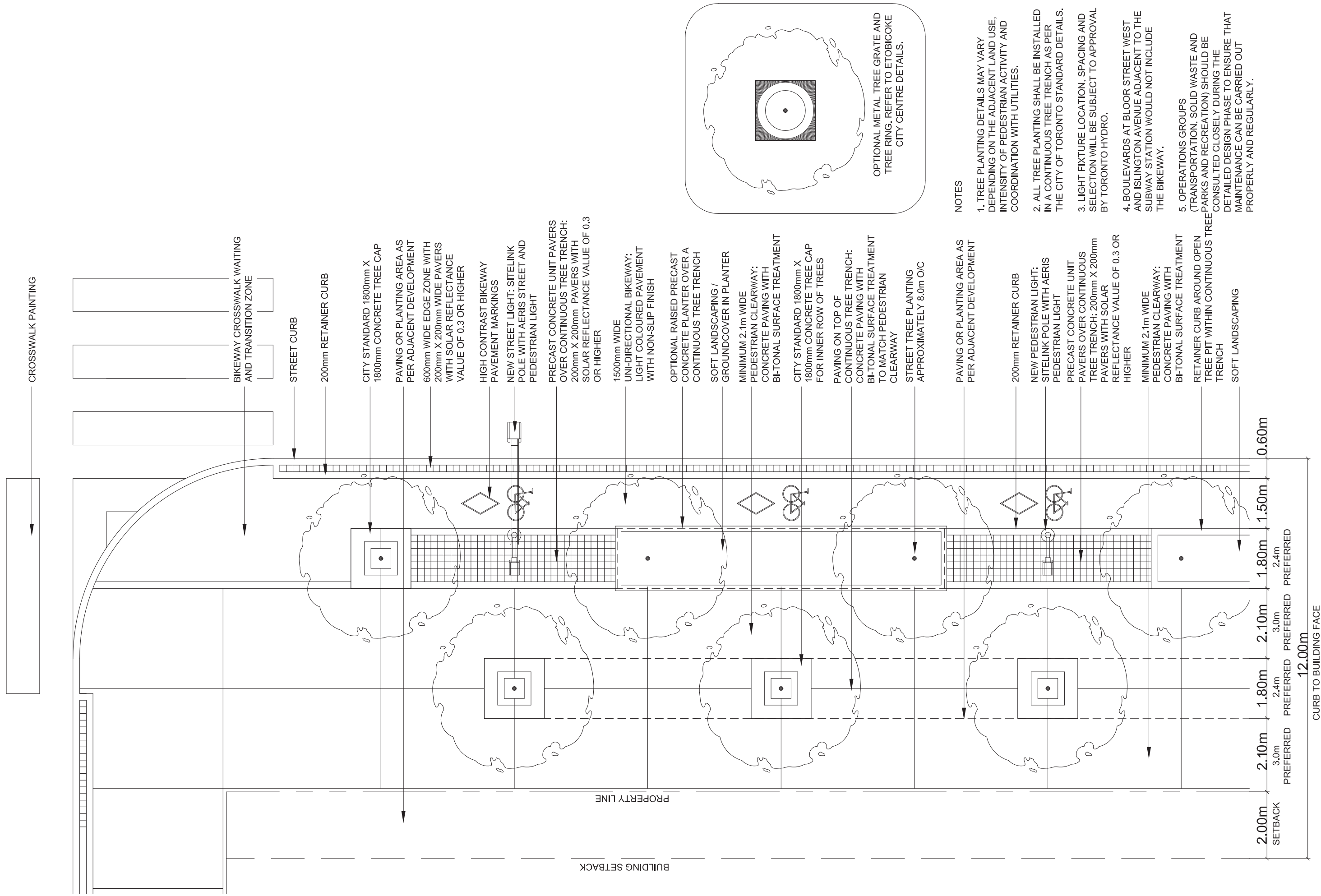
1.40m | 1.60m | 1.80m | 1.50m | 0.60m
3.00m
2.40m
PREFERRED
3.00m SETBACK | 8.50m



OPTIONAL METAL TREE GRATE AND TREE RING. REFER TO ETOBICOKE CITY CENTRE DETAILS.

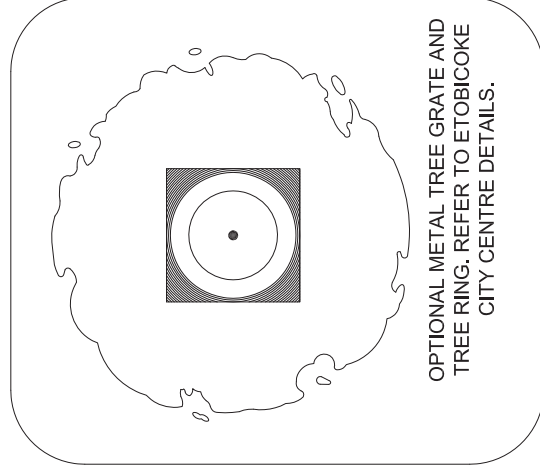
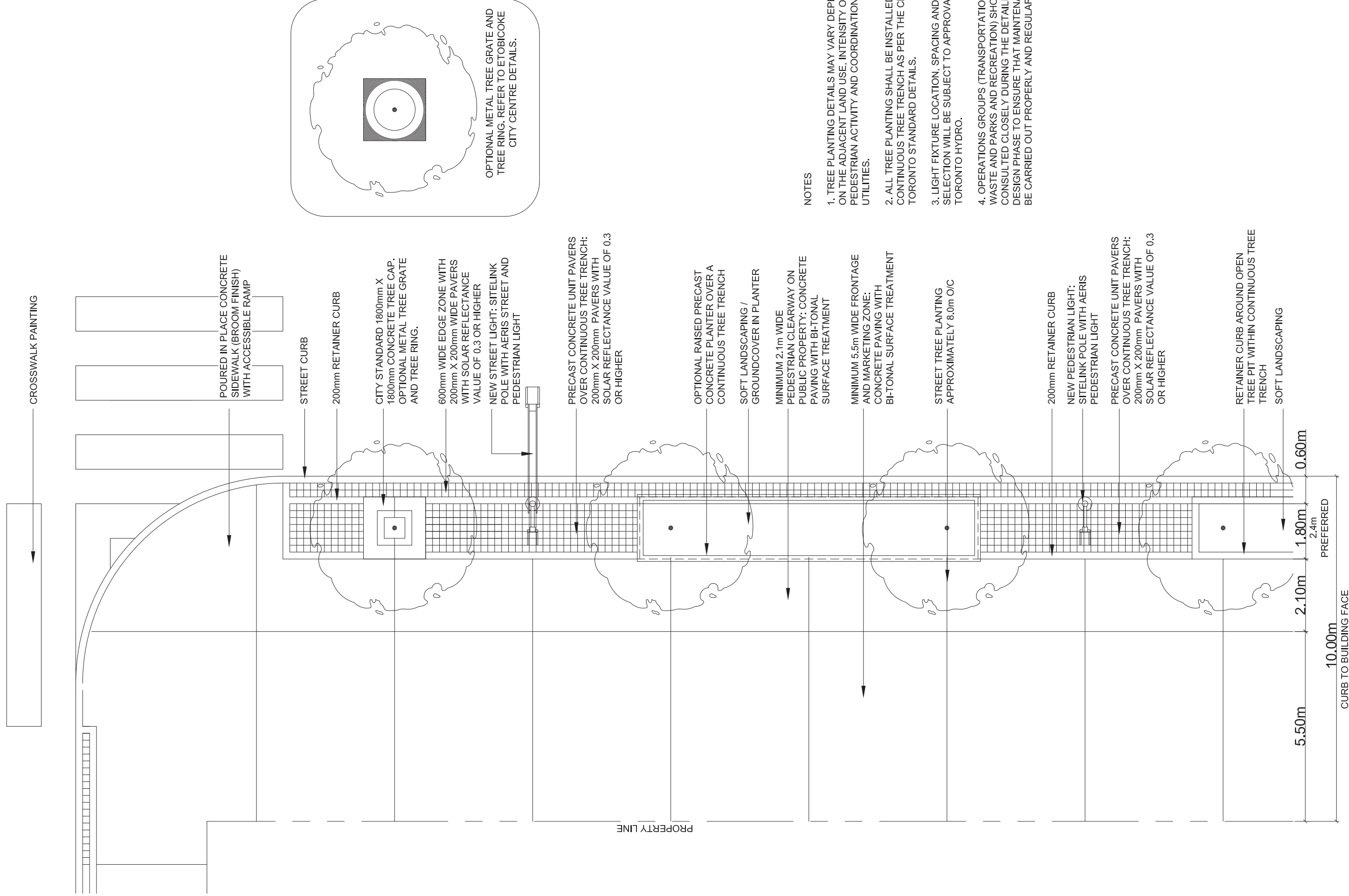
NOTES

1. TREE PLANTING DETAILS MAY VARY DEPENDING ON THE ADJACENT LAND USE, INTENSITY OF PEDESTRIAN ACTIVITY AND COORDINATION WITH UTILITIES.
2. ALL TREE PLANTING SHALL BE INSTALLED IN A CONTINUOUS TREE TRENCH AS PER THE CITY OF TORONTO STANDARD DETAILS.
3. LIGHT FIXTURE LOCATION, SPACING AND SELECTION WILL BE SUBJECT TO APPROVAL BY TORONTO HYDRO.
4. REFER TO FULL REPORT (PAGE 74) FOR DETAIL ON TREATMENT OF DUNDAS STREET WEST ADJACENT TO THE KIPLING MOBILITY HUB.
5. OPERATIONS GROUPS (TRANSPORTATION, SOLID WASTE AND PARKS AND RECREATION) SHOULD BE CONSULTED CLOSELY DURING THE DETAILED DESIGN PHASE TO ENSURE THAT MAINTENANCE CAN BE CARRIED OUT PROPERLY AND REGULARLY.



NOTES

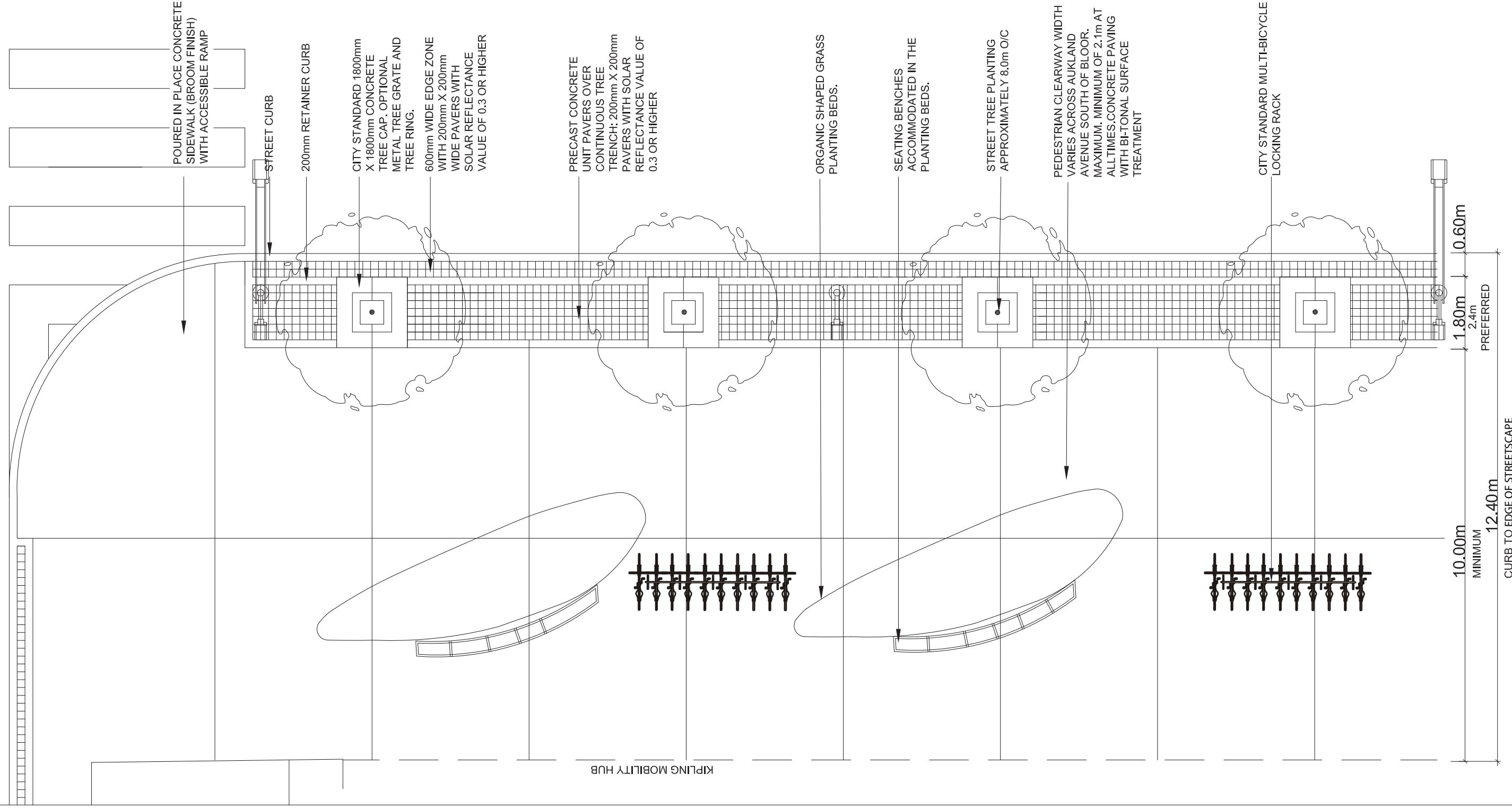
1. TREE PLANTING DETAILS MAY VARY DEPENDING ON THE ADJACENT LAND USE, INTENSITY OF PEDESTRIAN ACTIVITY AND COORDINATION WITH UTILITIES.
2. ALL TREE PLANTING SHALL BE INSTALLED IN A CONTINUOUS TREE TRENCH AS PER THE CITY OF TORONTO STANDARD DETAILS.
3. LIGHT FIXTURE LOCATION, SPACING AND SELECTION WILL BE SUBJECT TO APPROVAL BY TORONTO HYDRO.
4. BOULEVARDS AT BLOOR STREET WEST AND ISLINGTON AVENUE ADJACENT TO THE SUBWAY STATION WOULD NOT INCLUDE THE BIKEWAY.
5. OPERATIONS GROUPS (TRANSPORTATION, SOLID WASTE AND PARKS AND RECREATION) SHOULD BE CONSULTED CLOSELY DURING THE DETAILED DESIGN PHASE TO ENSURE THAT MAINTENANCE CAN BE CARRIED OUT PROPERLY AND REGULARLY.



NOTES

1. TREE PLANTING DETAILS MAY VARY DEPENDING ON THE ADJACENT LAND USE, INTENSITY OF PEDESTRIAN ACTIVITY AND COORDINATION WITH UTILITIES.
2. ALL TREE PLANTING SHALL BE INSTALLED IN A CONTINUOUS TREE TRENCH AS PER THE CITY OF TORONTO STANDARD DETAILS.
3. LIGHT FIXTURE LOCATION, SPACING AND SELECTION WILL BE SUBJECT TO APPROVAL BY TORONTO HYDRO.
4. OPERATIONS GROUPS (TRANSPORTATION, SOLID WASTE AND PARKS AND RECREATION) SHOULD BE CONSULTED CLOSELY DURING THE DETAILED DESIGN PHASE TO ENSURE THAT MAINTENANCE CAN BE CARRIED OUT PROPERLY AND REGULARLY.

CROSSWALK PAINTING



POURED IN PLACE CONCRETE SIDEWALK (BROOM FINISH) WITH ACCESSIBLE RAMP

STREET CURB

200mm RETAINER CURB

CITY STANDARD 1800mm X 1800mm CONCRETE TREE CAP. OPTIONAL METAL TREE GRATE AND TREE RING.

600mm WIDE EDGE ZONE WITH 200mm X 200mm WIDE PAVERS WITH SOLAR REFLECTANCE VALUE OF 0.3 OR HIGHER

PRECAST CONCRETE UNIT PAVERS OVER CONTINUOUS TREE TRENCH: 200mm X 200mm PAVERS WITH SOLAR REFLECTANCE VALUE OF 0.3 OR HIGHER

ORGANIC SHAPED GRASS PLANTING BEDS.

SEATING BENCHES ACCOMMODATED IN THE PLANTING BEDS.

STREET TREE PLANTING APPROXIMATELY 8.0m O/C

PEDESTRIAN CLEARWAY WIDTH VARIES ACROSS AUKLAND AVENUE SOUTH OF FLOOR. MAXIMUM. MINIMUM OF 2.1m AT ALL TIMES. CONCRETE PAVING WITH BIT-TONAL SURFACE TREATMENT

CITY STANDARD MULTI-BICYCLE LOCKING RACK

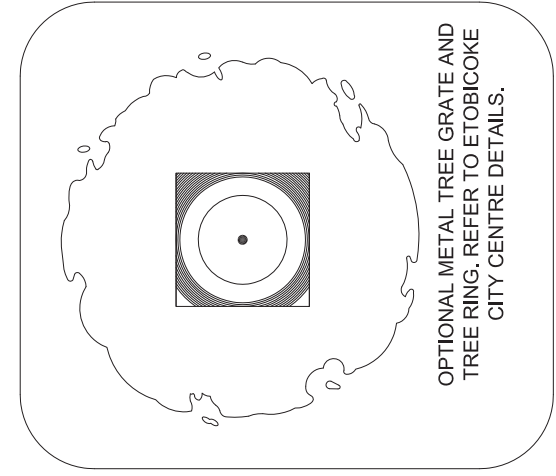
10.00m MINIMUM

12.40m PREFERRED

CURB TO EDGE OF STREETSCAPE

1.80m 2.4m PREFERRED

0.60m



OPTIONAL METAL TREE GRATE AND TREE RING. REFER TO ETOBICOKE CITY CENTRE DETAILS.

NOTES

1. TREE PLANTING DETAILS MAY VARY DEPENDING ON THE ADJACENT LAND USE, INTENSITY OF PEDESTRIAN ACTIVITY AND COORDINATION WITH UTILITIES.
2. ALL TREE PLANTING SHALL BE INSTALLED IN A CONTINUOUS TREE TRENCH AS PER THE CITY OF TORONTO STANDARD DETAILS.
3. LIGHT FIXTURE LOCATION, SPACING AND SELECTION WILL BE SUBJECT TO APPROVAL BY TORONTO HYDRO.
4. OPERATIONS GROUPS (TRANSPORTATION, SOLID WASTE AND PARKS AND RECREATION) SHOULD BE CONSULTED CLOSELY DURING THE DETAILED DESIGN PHASE TO ENSURE THAT MAINTENANCE CAN BE CARRIED OUT PROPERLY AND REGULARLY.

Appendix B

Preferred Lighting

Specifications

Roadway & Pedestrian Arm Pole

POST DESCRIPTION

The lighting post shall consist of an aluminum shaft and a welded base. The shaft profile will consist of 4 mounting tracks and internal passages as shown. There shall be two Toronto arm mounted at specific heights and orientations.

MATERIALS

The shaft shall be extruded from 6061 aluminum alloy per ASTM B221. The pole shall be heat treated after welding to maximize strength. All castings shall be produced using aluminum alloy 356 per ASTM B26.

Anchor bolts shall meet the requirement of AASHTO M314 or ASTM F1554 Grade 55 and be hot dip galvanized per ASTM A153.

Other fasteners shall be stainless steel.

FINISH

Finish to be specified by customer.

DIMENSIONS

The post shall be 25'-3" in height. A 3" x 12" hand hole shall be provided for access.

INSTALLATION

The post shall be provided with (4) 1-1/4" x 42" + 6", hot dip galvanized L-type anchor bolts to be installed on a 15.5" bolt circle. Four anchor bolts, 8 washers, and 8 nuts will be supplied.

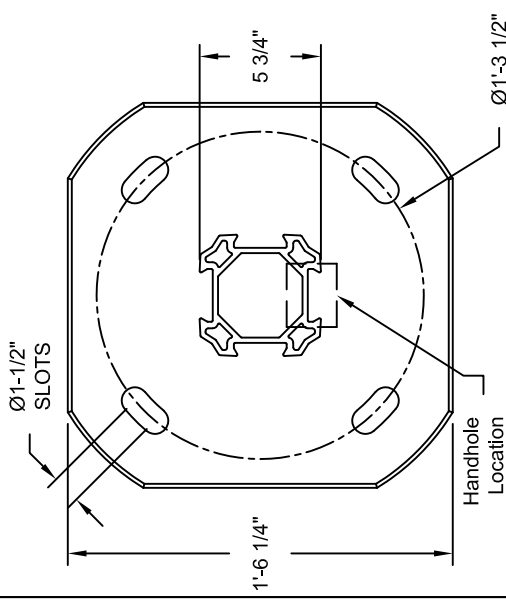
WIND LOADING

Wind loading criteria to be supplied by customer.

Accessory Mounting Detail

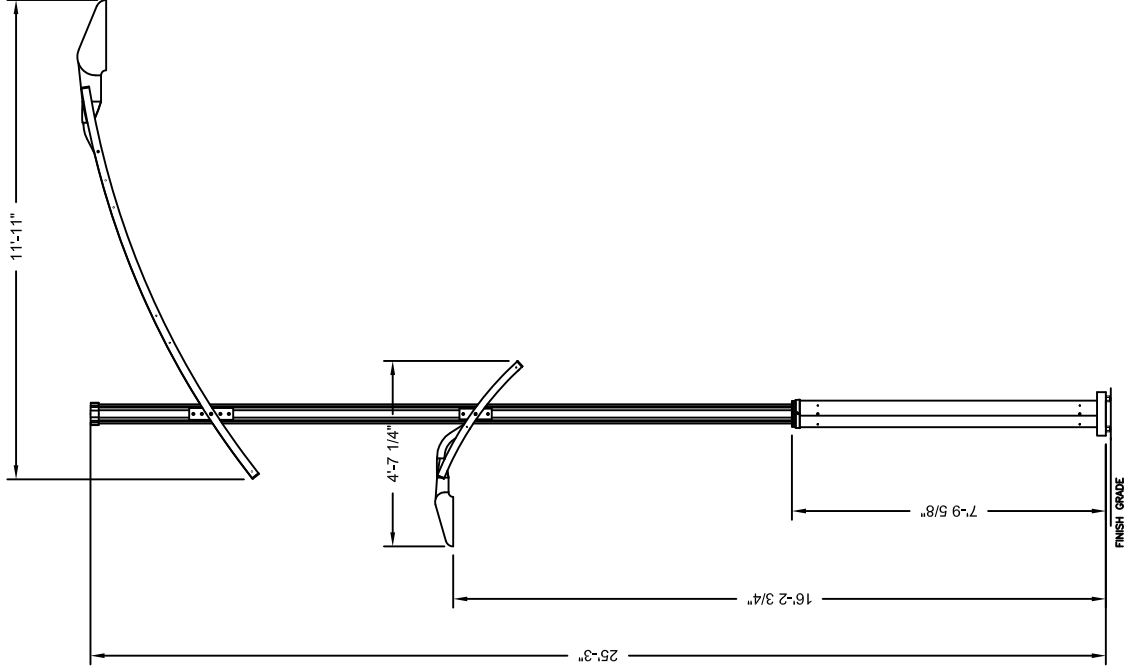
	Orientation	Height
TOR115		
TOR55		

Anchorage Detail



Catalog #s:

SLT22503CMP0U157E - TOR115/1T2CACMU157E - TOR55/1T2CACMU157E - SLDCEV/RU157E - AS2 - AS1



Toronto Transportation

Toronto, ON

ORDER #: _____

TYPE: T2

REVISION: 3

REVISION DATE: 12/11/10

DRAWN: ACH

PAGE: 1 of 3



HOLOPHANE
LEADER IN LIGHTING SOLUTIONS

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THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A UNIT OF SIMILAR DESIGN MAY BE SUPPLIED, BUT ONLY AFTER APPROVAL BY THE CUSTOMER IN WRITING. ON POLE ORDERS AN ANCHOR BOLT TEMPLATE PRINT WILL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS CONDITION THAT IT WILL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

Specifications

Roadway & Pedestrian Arm Pole

POST DESCRIPTION

The lighting post shall consist of an aluminum shaft and a welded base. The shaft profile will consist of 4 mounting tracks and internal passages as shown. There shall be a Toronto arm mounted at a specific heights and orientation.

MATERIALS

The shaft shall be extruded from 6061 aluminum alloy per ASTM B221. The pole shall be heat treated after welding to maximize strength. All castings shall be produced using aluminum alloy 356 per ASTM B26.

Anchor bolts shall meet the requirement of AASHTO M314 or ASTM F1554 Grade 55 and be hot dip galvanized per ASTM A153.

Other fasteners shall be stainless steel.

FINISH

Finish to be specified by customer.

DIMENSIONS

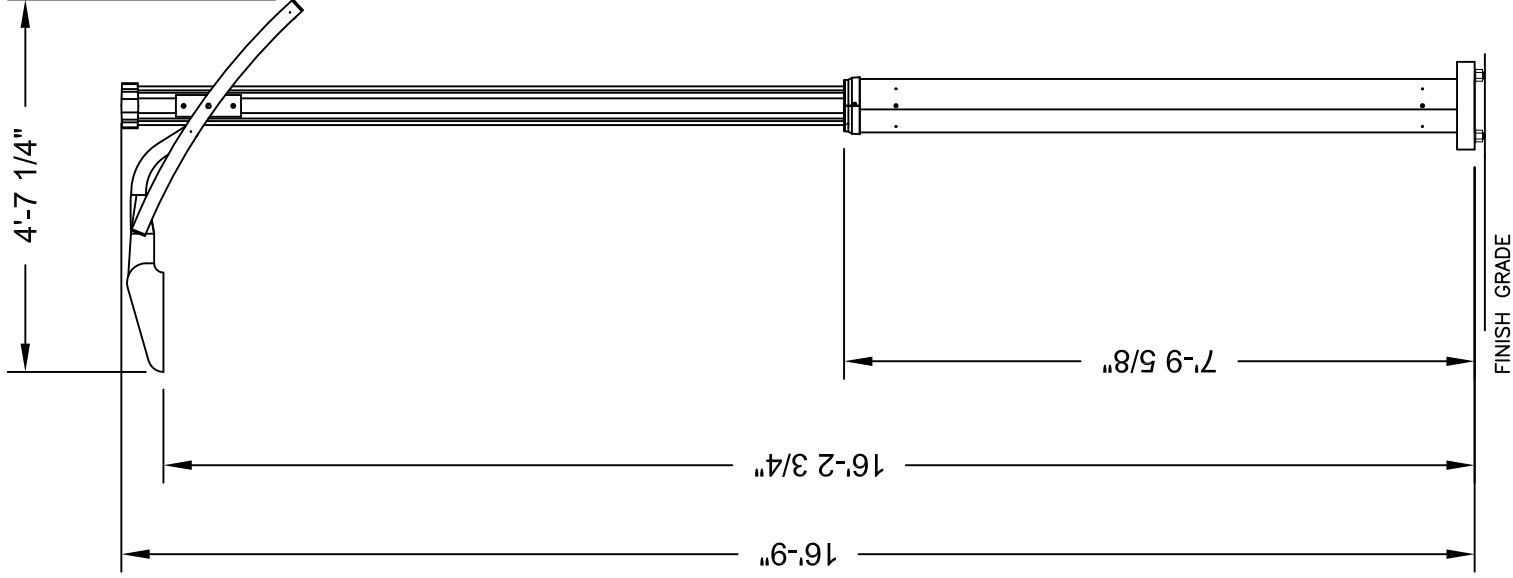
The post shall be 16'-9" in height. A 3" x 12" hand hole shall be provided for access.

INSTALLATION

The post shall be provided with (4) 1-1/4" x 42" + 6", hot dip galvanized L-type anchor bolts to be installed on a 15.5" bolt circle. Four anchor bolts, 8 washers, and 8 nuts will be supplied.

WIND LOADING

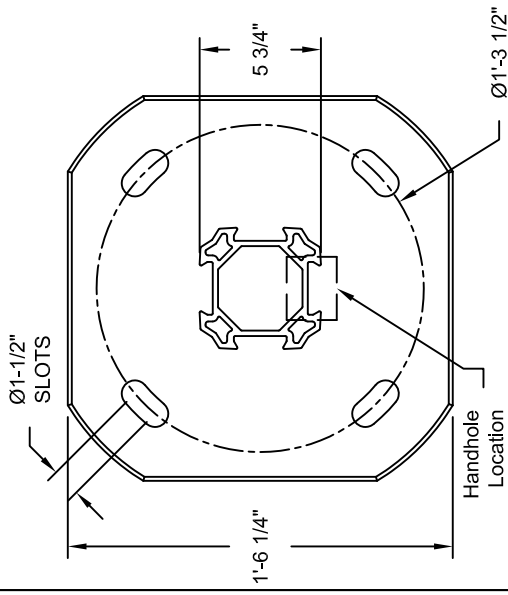
Wind loading criteria to be supplied by customer.



Accessory Mounting Detail

Orientation	Height
TOR55	

Anchorage Detail



Catalog #s:

SLT21609CMP00157E - TOR55/1T2CACMU157E - SLDECVRU157E - AS1

Toronto Transportation

Toronto, ON

ORDER #: TYPE: T2

REVISION: 3 REVISION DATE: 12/11/10

DRAWN: ACH ORIGIN DATE: 03-08-10

DRAWING #:

TSG 005418

PAGE: 2 of 3



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Specifications

Roadway & Pedestrian Arm Pole

POST DESCRIPTION

The lighting post shall consist of an aluminum shaft and a welded base. The shaft profile will consist of 4 mounting tracks and internal passages as shown. There shall be a Toronto arm mounted at specific height and orientation.

MATERIALS

The shaft shall be extruded from 6061 aluminum alloy per ASTM B221. The pole shall be heat treated after welding to maximize strength. All castings shall be produced using aluminum alloy 356 per ASTM B26. Anchor bolts shall meet the requirement of AASHTO M314 or ASTM F1554 Grade 55 and be hot dip galvanized per ASTM A153.

Other fasteners shall be stainless steel.

FINISH

Finish to be specified by customer.

DIMENSIONS

The post shall be 25'-3" in height. A 3" x 12" hand hole shall be provided for access.

INSTALLATION

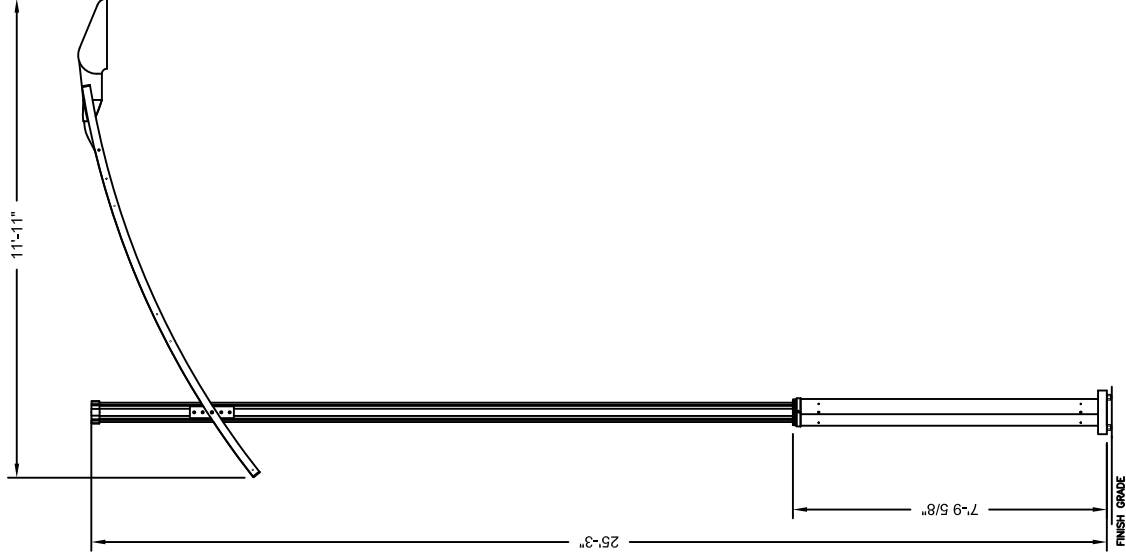
The post shall be provided with (4) 1-1/4" x 42" + 6", hot dip galvanized L-type anchor bolts to be installed on a 15.5" bolt circle. Four anchor bolts, 8 washers, and 8 nuts will be supplied.

WIND LOADING

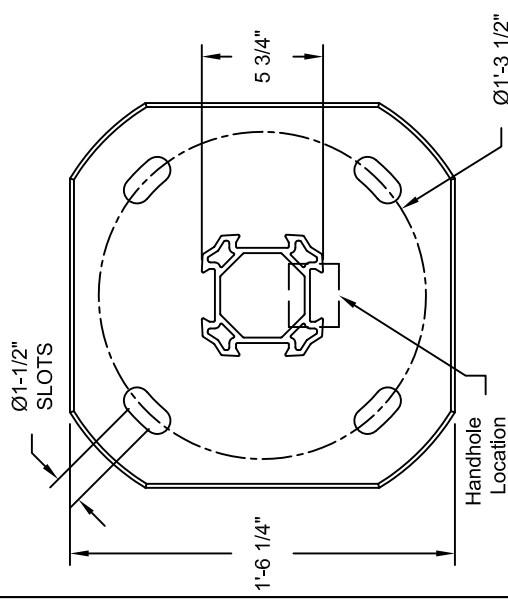
Wind loading criteria to be supplied by customer.

Accessory Mounting Detail

Orientation	Height
TOR115	



Anchorage Detail



Catalog #s:

SLT22503CMP0U157E - TOR115/1T2CACMU157E - SLDECVRU157E - AS2

Toronto Transportation

Toronto, ON

ORDER #: TYPE: T2

REVISION: 3 REVISION DATE: 12/11/10

DRAWN: ACH ORIGIN DATE: 03-08-10 DRAWING #: TSG 005418 PAGE: 3 of 3



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Appendix C

Costing

TREATMENT TYPE : EC-P1

Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED RATE PER UNIT	TOTAL COST
BOULEVARD TREATMENT					
1.0	Edge Zone				
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	10	l.m	\$ 95.00	\$ 950.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	4	sq. m	\$ 110.00	\$ 440.00
2.0	Bike Lane				
2.1	Concrete Paving 125mm thick, broom finish	15.0	sq. m	\$ 80.00	\$ 1,200.00
2.2	Apply field reacted polymeric pavement marking, solid black	2	each	\$ 200.00	\$ 400.00
3.0	Planting and Furnishing Zone				
3.1	Permeable precast concrete paving over structural soil tree trench	12.0	sq. m	\$ 125.00	\$ 1,500.00
3.2	Paving retainer curb (flush curb)	13.0	l.m.	\$ 70.00	\$ 910.00
3.3	Tree pit retainer curb	15.0	l.m.	\$ 85.00	\$ 1,275.00
3.4	Structural soil between tree pit locations	12	cu.m	\$ 300.00	\$ 3,600.00
3.5	Planting soil at tree pits	8	cu.m	\$ 55.00	\$ 440.00
3.6	Clearstone drainage layer and 100mm PVC drainage lines	18	sq. m	\$ 50.00	\$ 900.00
3.7	60mm perforated pvc watering/aeration pipes	10.0	l.m.	\$ 25.00	\$ 250.00
3.8	600mm geocomposite membrane	20.0	l.m.	\$ 38.00	\$ 760.00
3.9	Mulch (100mm estimated depth)	7.0	sq.m	\$ 10.00	\$ 70.00
3.10	Ground cover planting	7	sq.m	\$ 90.00	\$ 630.00
3.11	Deciduous street trees	2.0	each	\$ 550.00	\$ 1,100.00
3.12	City Standard Litter/Recycling Receptacle	1	each	\$ 2,717.00	\$ 2,717.00
3.13	City Standard Bike Rack	2	each	\$ 1,492.00	\$ 2,984.00
3.14	City Standard Bench	1	each	\$ 3,200.00	\$ 3,200.00
4.0	Pedestrian Clearway				
4.1	Concrete Paving, 125mm thick. Broom finish	8	sq. m	\$ 80.00	\$ 640.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	8	sq. m	\$ 90.00	\$ 720.00
			Estimated Value for 10m Length	\$	24,686.00
			Estimated Value for 1m Length	\$	2,468.60

Notes:

- 1 Construction mobilization costs are not included.
- 2 Demolition and removal costs of existing paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- 3 Excavation and disposal of existing soils to create tree trenches are not included.
- 4 Irrigation is not included.
- 5 Lighting is not included in this per linear metre costs. Refer to lighting unit costs provided.
- 6 Relocation of above and below ground utilities is not included.
- 7 Boulevard treatment between property lines and setback lines is not included.
- 8 Lighting costs related to wiring, conduiting, and energization are not included.
- 9 Per linear meter cost does not include raised planters. Estimate assumes that open, curbed pits or pits with caps are constructed. Refer to unit prices for raised planter costs.
- 10 The cost of underdrain connections to existing storm sewer is not included.

TREATMENT TYPE : EC-P2

Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER		UNIT TYPE	ESTIMATED RATE PER UNIT	TOTAL COST
		10m Unit	10m Unit			
BOULEVARD TREATMENT						
1.0	Edge Zone					
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	10		l.m	\$ 95.00	\$ 950.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	4		sq. m	\$ 110.00	\$ 440.00
2.0	Bike Lane					
2.1	Concrete Paving 125mm thick, broom finish	15.0		sq. m	\$ 80.00	\$ 1,200.00
2.2	Apply field reacted polymeric pavement marking, solid black	2		each	\$ 200.00	\$ 400.00
3.0	Planting and Furnishing Zone					
3.1	Permeable precast concrete paving over structural soil tree trench	12.0		sq. m	\$ 125.00	\$ 1,500.00
3.2	Paving retainer curb (flush curb)	13.0		l.m.	\$ 70.00	\$ 910.00
3.3	Tree pit retainer curb	15.0		l.m.	\$ 85.00	\$ 1,275.00
3.4	Structural soil between tree pit locations	24		cu.m	\$ 300.00	\$ 7,200.00
3.5	Reinforced concrete trench cover	23		sq.m	\$ 145.00	\$ 3,335.00
3.6	Precast concrete planter cover	2		each	\$ 750.00	\$ 1,500.00
3.7	Planting soil at tree pits	12		cu.m	\$ 55.00	\$ 660.00
3.8	Clearstone drainage layer and 100mm PVC drainage lines	36		sq. m	\$ 60.00	\$ 2,160.00
3.9	60mm perforated pvc watering/aeration pipes	20.0		l.m.	\$ 25.00	\$ 500.00
3.10	600mm geocomposite membrane	40.0		l.m.	\$ 38.00	\$ 1,520.00
3.11	Mulch (100mm estimated depth)	15.0		sq.m	\$ 10.00	\$ 150.00
3.12	Ground cover planting	15		sq.m	\$ 90.00	\$ 1,350.00
3.13	Deciduous street trees	4.0		each	\$ 550.00	\$ 2,200.00
3.14	City Standard Litter/Recycling Receptacle	2		each	\$ 2,717.00	\$ 5,434.00
3.15	City Standard Bike Rack	4		each	\$ 1,492.00	\$ 5,968.00
3.16	City Standard Bench	2		each	\$ 3,200.00	\$ 6,400.00
4.0	Pedestrian Clearway					
4.1	Concrete Paving, 125mm thick. Broom finish	21		sq. m	\$ 80.00	\$ 1,680.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	21		sq. m	\$ 90.00	\$ 1,890.00
					Estimated Value for 10m Length	\$ 48,622.00
					Estimated Value for 1m Length	\$ 4,862.20

Notes:

- 1 Construction mobilization costs are not included.
- 2 Demolition and removal costs of existing paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- 3 Excavation and disposal of existing soils to create tree trenches are not included.
- 4 Irrigation is not included.
- 5 Lighting is not included in this per linear metre costs. Refer to lighting unit costs provided.
- 6 Relocation of above and below ground utilities is not included.
- 7 Boulevard treatment between property lines and setback lines is not included.
- 8 Lighting costs related to wiring, conduiting, and energization are not included.
- 9 Per linear meter cost does not include raised planters. Estimate assumes that open, curbed pits or pits with caps are constructed. Refer to unit prices for raised planter costs.
- 10 The cost of underdrain connections to existing storm sewer is not included.

TREATMENT TYPE : EC-P3

Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED RATE PER UNIT	TOTAL COST
BOULEVARD TREATMENT					
1.0	Edge Zone				
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	10	l.m	\$ 95.00	\$ 950.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	4	sq. m	\$ 110.00	\$ 440.00
2.0	Bike Lane				
	na				
3.0	Planting and Furnishing Zone				
3.1	Permeable precast concrete paving over structural soil tree trench	12.0	sq. m	\$ 125.00	\$ 1,500.00
3.2	Paving retainer curb (flush curb)	13.0	l.m.	\$ 70.00	\$ 910.00
3.3	Tree pit retainer curb	15.0	l.m.	\$ 85.00	\$ 1,275.00
3.4	Structural soil between tree pit locations	12	cu.m	\$ 300.00	\$ 3,600.00
3.7	Planting soil at tree pits	8	cu.m	\$ 55.00	\$ 440.00
3.8	Clearstone drainage layer and 100mm PVC drainage lines	18	sq. m	\$ 60.00	\$ 1,080.00
3.9	60mm perforated pvc watering/aeration pipes	10.0	l.m.	\$ 25.00	\$ 250.00
3.10	600mm geocomposite membrane	20.0	l.m.	\$ 38.00	\$ 760.00
3.11	Mulch (100mm estimated depth)	7.0	sq.m	\$ 10.00	\$ 70.00
3.12	Ground cover planting	7	sq.m	\$ 90.00	\$ 630.00
3.13	Deciduous street trees	2.0	each	\$ 550.00	\$ 1,100.00
3.14	City Standard Litter/Recycling Receptacle	1	each	\$ 2,717.00	\$ 2,717.00
3.15	City Standard Bike Rack	2	each	\$ 1,492.00	\$ 2,984.00
3.16	City Standard Bench	1	each	\$ 3,200.00	\$ 3,200.00
4.0	Pedestrian Clearway				
4.1	Concrete Paving, 125mm thick. Broom finish	38	sq. m	\$ 80.00	\$ 3,040.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	38	sq. m	\$ 90.00	\$ 3,420.00
			Estimated Value for 10m Length	\$	28,366.00
			Estimated Value for 1m Length	\$	2,836.60

Notes:

- Construction mobilization costs are not included.
- Demolition and removal costs of existing paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- Excavation and disposal of existing soils to create tree trenches are not included.
- Irrigation is not included.
- Lighting is not included in this per linear metre costs. Refer to lighting unit costs provided.
- Relocation of above and below ground utilities is not included.
- Boulevard treatment between property lines and setback lines is not included.
- Lighting costs related to wiring, conduiting, and energization are not included.
- Per linear meter cost does not include raised planters. Estimate assumes that open, curbed pits or pits with caps are constructed. Refer to unit prices for raised planter costs.
- The cost of underdrain connections to existing storm sewer is not included.

TREATMENT TYPE : EC-P4

Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED RATE PER UNIT	TOTAL COST
BOULEVARD TREATMENT					
1.0	Edge Zone				
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	10	l.m	\$ 95.00	\$ 950.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	4	sq. m	\$ 110.00	\$ 440.00
2.0	Bike Lane				
	na				
3.0	Planting and Furnishing Zone				
3.1	Permeable precast concrete paving over structural soil tree trench	12.0	sq. m	\$ 125.00	\$ 1,500.00
3.2	Paving retainer curb (flush curb)	13.0	l.m.	\$ 70.00	\$ 910.00
3.3	Tree pit retainer curb	15.0	l.m.	\$ 85.00	\$ 1,275.00
3.4	Structural soil between tree pit locations	12	cu.m	\$ 300.00	\$ 3,600.00
3.7	Planting soil at tree pits	8	cu.m	\$ 55.00	\$ 440.00
3.8	Clearstone drainage layer and 100mm PVC drainage lines	18	sq. m	\$ 60.00	\$ 1,080.00
3.9	60mm perforated pvc watering/aeration pipes	10.0	l.m.	\$ 25.00	\$ 250.00
3.10	600mm geocomposite membrane	20.0	l.m.	\$ 38.00	\$ 760.00
3.11	Mulch (100mm estimated depth)	7.0	sq.m	\$ 10.00	\$ 70.00
3.12	Ground cover planting	7	sq.m	\$ 90.00	\$ 630.00
3.13	Deciduous street trees	2.0	each	\$ 550.00	\$ 1,100.00
3.14	City Standard Litter/Recycling Receptacle	1	each	\$ 2,717.00	\$ 2,717.00
3.15	City Standard Bike Rack	2	each	\$ 1,492.00	\$ 2,984.00
3.16	City Standard Bench	1	each	\$ 3,200.00	\$ 3,200.00
4.0	Pedestrian Clearway				
4.1	Concrete Paving, 125mm thick. Broom finish	28	sq. m	\$ 80.00	\$ 2,240.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	28	sq. m	\$ 90.00	\$ 2,520.00
			Estimated Value for 10m Length	\$	26,666.00
			Estimated Value for 1m Length	\$	2,666.60

Notes:

- 1 Construction mobilization costs are not included.
- 2 Demolition and removal costs of existing paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- 3 Excavation and disposal of existing soils to create tree trenches are not included.
- 4 Irrigation is not included.
- 5 Lighting is not included in this per linear metre costs. Refer to lighting unit costs provided.
- 6 Relocation of above and below ground utilities is not included.
- 7 Boulevard treatment between property lines and setback lines is not included.
- 8 Lighting costs related to wiring, conduiting, and energization are not included.
- 9 Per linear meter cost does not include raised planters. Estimate assumes that open, curbed pits or pits with caps are constructed. Refer to unit prices for raised planter costs.
- 10 The cost of underdrain connections to existing storm sewer is not included.

TREATMENT TYPE : EC-P5

Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED RATE PER UNIT	TOTAL COST
BOULEVARD TREATMENT					
1.0 Edge Zone					
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	10	l.m	\$ 95.00	\$ 950.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	4	sq. m	\$ 110.00	\$ 440.00
2.0 Bike Lane	na				
3.0 Planting and Furnishing Zone					
3.1	Permeable precast concrete paving over structural soil tree trench	12.0	sq. m	\$ 125.00	\$ 1,500.00
3.2	Paving retainer curb (flush curb)	13.0	l.m.	\$ 70.00	\$ 910.00
3.3	Tree pit retainer curb	15.0	l.m.	\$ 85.00	\$ 1,275.00
3.4	Structural soil between tree pit locations	12	cu.m	\$ 300.00	\$ 3,600.00
3.7	Planting soil at tree pits	8	cu.m	\$ 55.00	\$ 440.00
3.8	Clearstone drainage layer and 100mm PVC drainage lines	18	sq. m	\$ 60.00	\$ 1,080.00
3.9	60mm perforated pvc watering/aeration pipes	10.0	l.m.	\$ 25.00	\$ 250.00
3.10	600mm geocomposite membrane	20.0	l.m.	\$ 38.00	\$ 760.00
3.11	Mulch (100mm estimated depth)	7.0	sq.m	\$ 10.00	\$ 70.00
3.12	Ground cover planting	7	sq.m	\$ 90.00	\$ 630.00
3.13	Deciduous street trees	2.0	each	\$ 550.00	\$ 1,100.00
3.14	City Standard Litter/Recycling Receptacle	1	each	\$ 2,717.00	\$ 2,717.00
3.15	City Standard Bike Rack	10	each	\$ 1,492.00	\$ 14,920.00
3.16	City Standard Bench	2	each	\$ 3,200.00	\$ 6,400.00
3.17	Shaped landscape area - Soil	16	cu.m	\$ 55.00	\$ 880.00
3.18	Shaped landscape area - Planting	90	sq.m	\$ 90.00	\$ 8,100.00
3.19	Shaped landscape area - seating	5	l.m.	\$ 1,500.00	\$ 7,500.00
4.0 Pedestrian Clearway					
4.1	Concrete Paving, 125mm thick. Broom finish	50	sq. m	\$ 80.00	\$ 4,000.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	50	sq. m	\$ 90.00	\$ 4,500.00
				Estimated Value for 10m Length	\$ 62,022.00
				Estimated Value for 1m Length	\$ 6,202.20

Notes:

- Construction mobilization costs are not included.
- Demolition and removal costs of existing paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- Excavation and disposal of existing soils to create tree trenches are not included.
- Irrigation is not included.
- Lighting is not included in this per linear metre costs. Refer to lighting unit costs provided.
- Relocation of above and below ground utilities is not included.
- Boulevard treatment between property lines and setback lines is not included.
- Lighting costs related to wiring, conduiting, and energization are not included.
- Per linear meter cost does not include raised planters. Estimate assumes that open, curbed pits or pits with caps are constructed. Refer to unit prices for raised planter costs.
- The cost of underdrain connections to existing storm sewer is not included.

Focus Area One - Kipling Mobility Hub**Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.**

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED		TOTAL COST
				RATE PER UNIT	COST	
BOULEVARD TREATMENT						
1.0 Edge Zone						
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	360	l.m	\$ 95.00	\$	34,200.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	145	sq. m	\$ 110.00	\$	15,950.00
2.0 Bike Lane						
2.1	Concrete Paving 125mm thick, broom finish	460.0	sq. m	\$ 80.00	\$	36,800.00
2.2	Apply field reacted polymeric pavement marking, solid black	60	each	\$ 200.00	\$	12,000.00
3.0 Planting and Furnishing Zone						
3.1	Permeable precast concrete paving over structural soil tree trench	25.0	sq. m	\$ 125.00	\$	3,125.00
3.2	Paving retainer curb (flush curb)	30.0	l.m.	\$ 70.00	\$	2,100.00
3.3	Tree pit / planter retainer curb	240.0	l.m.	\$ 85.00	\$	20,400.00
3.4	Structural soil between tree pit locations	25	cu.m	\$ 300.00	\$	7,500.00
3.5	Planting soil at tree pits	20	cu.m	\$ 55.00	\$	1,100.00
3.6	Clearstone drainage layer and 100mm PVC drainage lines	16	sq. m	\$ 50.00	\$	800.00
3.7	60mm perforated pvc watering/aeration pipes	50.0	l.m.	\$ 25.00	\$	1,250.00
3.8	600mm geocomposite membrane	50.0	l.m.	\$ 38.00	\$	1,900.00
3.9	Mulch (100mm estimated depth)	20.0	sq.m	\$ 10.00	\$	200.00
3.10	Ground cover planting (tree pits)	20	sq.m	\$ 90.00	\$	1,800.00
3.11	Deciduous street trees	5.0	each	\$ 550.00	\$	2,750.00
3.12	City Standard Litter/Recycling Receptacle	10	each	\$ 2,717.00	\$	27,170.00
3.13	City Standard Bike Rack	10	each	\$ 1,492.00	\$	14,920.00
3.14	City Standard Bench	10	each	\$ 3,200.00	\$	32,000.00
3.17	Shaped landscape area - Soil	30	cu.m	\$ 55.00	\$	1,650.00
3.18	Shaped landscape area - Planting	30	sq.m	\$ 90.00	\$	2,700.00
3.19	Shaped landscape area - Seating	48	l.m.	\$ 1,500.00	\$	72,000.00
3.20	Tree ring and grate	5	each	\$ 4,500.00	\$	22,500.00
3.21	Raised planters (400mm Height)	160	l.m.	\$ 350.00	\$	56,000.00
3.22	Raiser planter integrated seating element	12	l.m.	\$ 1,100.00	\$	13,200.00
4.0 Pedestrian Clearway						
4.1	Concrete Paving, 125mm thick. Broom finish	500	sq. m	\$ 80.00	\$	40,000.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	500	sq. m	\$ 90.00	\$	45,000.00
5.0 Lighting						
5.1	Type 1 - 25' Aeris Trac Pole with vehicular and pedestrian light (incl. foundation)	10.00	each	\$ 6,650.00	\$	66,500.00
5.2	Type 1 - 16' Aeris Trac Pole pedestrian light (incl. foundation)	10.00	each	\$ 5,050.00	\$	50,500.00
5.3	Type 2 - L16 Retrofit with Holophane Arm and pedestrian light	na	each	\$ 900.00	\$	-
5.4	Type 3 - Identifier Sleeve	4	each	\$ 1,500.00	\$	6,000.00
5.5	Type 4 - Mobility Maker	6	each	\$ 21,000.00	\$	126,000.00

Estimated Budget (refer also to notes) \$ 718,015.00**Notes:**

- Construction mobilization costs are not included.
- Demolition and removal costs of existing buildings, walls, paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- Major earthworks are not included.
- Structural modifications to existing abutment walls not included.
- Drainage structures and required connections are not included.
- Irrigation is not included.
- Low voltage landscape lighting is not included.
- Lighting costs related to wiring, conduiting, and energization are not included.
- Relocation or treatment of above and below ground utilities is not included.
- Improvements to existing pavements, ramps, steps, walls and handrails are not included.
- Roadway works not included.
- Estimate does not include applicable taxes

Focus Area Two - Dundas and Kipling**Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.**

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED		TOTAL COST
				RATE PER UNIT	COST	
BOULEVARD TREATMENT						
1.0 Edge Zone						
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	480	l.m	\$ 95.00	\$	45,600.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	200	sq. m	\$ 110.00	\$	22,000.00
2.0 Bike Lane						
2.1	Concrete Paving 125mm thick, broom finish	565.0	sq. m	\$ 80.00	\$	45,200.00
2.2	Apply field reacted polymeric pavement marking, solid black	75	each	\$ 200.00	\$	15,000.00
3.0 Planting and Furnishing Zone						
3.1	Permeable precast concrete paving over structural soil tree trench	750.0	sq. m	\$ 125.00	\$	93,750.00
3.2	Paving retainer curb (flush curb)	845.0	l.m.	\$ 70.00	\$	59,150.00
3.3	Tree pit / planter retainer curb	490.0	l.m.	\$ 85.00	\$	41,650.00
3.4	Structural soil between tree pit locations	750	cu.m	\$ 300.00	\$	225,000.00
3.5	Planting soil at tree pits	220	cu.m	\$ 55.00	\$	12,100.00
3.6	Clearstone drainage layer and 100mm PVC drainage lines	970	sq. m	\$ 50.00	\$	48,500.00
3.7	60mm perforated pvc watering/aeration pipes	1,800.0	l.m.	\$ 25.00	\$	45,000.00
3.8	600mm geocomposite membrane	1,800.0	l.m.	\$ 38.00	\$	68,400.00
3.9	Mulch (100mm estimated depth)	216.0	sq.m	\$ 10.00	\$	2,160.00
3.10	Ground cover planting (tree pits)	216	sq.m	\$ 90.00	\$	19,440.00
3.11	Deciduous street trees	85.0	each	\$ 550.00	\$	46,750.00
3.12	City Standard Litter/Recycling Receptacle	16	each	\$ 2,717.00	\$	43,472.00
3.13	City Standard Bike Rack	16	each	\$ 1,492.00	\$	23,872.00
3.14	City Standard Bench	16	each	\$ 3,200.00	\$	51,200.00
3.17	Shaped landscape area - Soil	na	cu.m	\$ 55.00	\$	-
3.18	Shaped landscape area - Planting	na	sq.m	\$ 90.00	\$	-
3.19	Shaped landscape area - Seating	na	l.m.	\$ 1,500.00	\$	-
3.20	Tree ring and grate	12	each	\$ 4,500.00	\$	54,000.00
3.21	Raised planters (400mm Height)	265	l.m.	\$ 350.00	\$	92,750.00
3.22	Raiser planter integrated seating element	50	l.m.	\$ 1,100.00	\$	55,000.00
3.23	Precast concrete planter cover	68	each	\$ 750.00	\$	51,000.00
4.0 Pedestrian Clearway						
4.1	Concrete Paving, 125mm thick. Broom finish	1,010	sq. m	\$ 80.00	\$	80,800.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	1,010	sq. m	\$ 90.00	\$	90,900.00
5.0 Lighting						
5.1	Type 1 - 25' Aeris Trac Pole with vehicular and pedestrian light (incl. foundation)	16.00	each	\$ 6,650.00	\$	106,400.00
5.2	Type 1 - 16' Aeris Trac Pole pedestrian light (incl. foundation)	16.00	each	\$ 5,050.00	\$	80,800.00
5.3	Type 2 - L16 Retrofit with Holophane Arm and pedestrian light	na	each	\$ 900.00	\$	-
5.4	Type 3 - Identifier Sleeve	16	each	\$ 1,500.00	\$	24,000.00
5.5	Type 4 - Mobility Maker	na	each	\$ 21,000.00	\$	-
					Estimated Budget (refer also to notes)	\$ 1,543,894.00

Notes:

- Construction mobilization costs are not included.
- Demolition and removal costs of existing buildings, walls, paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- Major earthworks and roadways works are not included.
- Structural modifications to existing abutment walls not included.
- Drainage structures and required connections are not included.
- Irrigation is not included.
- Low voltage landscape lighting is not included.
- Lighting costs related to wiring, conduiting, and energization are not included.
- Relocation or treatment of above and below ground utilities is not included.
- Improvements to existing pavements, ramps, steps, walls and handrails are not included.
- Roadway works not included.
- Estimate does not include applicable taxes

Focus Area Three - Six Points Park**Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.**

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED		TOTAL COST
				RATE PER UNIT	COST	
BOULEVARD TREATMENT						
1.0 Edge Zone						
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	700	l.m	\$ 95.00	\$	\$ 66,500.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	280	sq. m	\$ 110.00	\$	\$ 30,800.00
2.0 Bike Lane						
2.1	Concrete Paving 125mm thick, broom finish	na	sq. m	\$ 80.00	\$	\$ -
2.2	Apply field reacted polymeric pavement marking, solid black	na	each	\$ 200.00	\$	\$ -
3.0 Planting and Furnishing Zone						
3.1	Permeable precast concrete paving over structural soil tree trench	400.0	sq. m	\$ 125.00	\$	\$ 50,000.00
3.2	Paving retainer curb (flush curb)	450.0	l.m.	\$ 70.00	\$	\$ 31,500.00
3.3	Tree pit / planter retainer curb	210.0	l.m.	\$ 85.00	\$	\$ 17,850.00
3.4	Structural soil between tree pit locations	400	cu.m	\$ 300.00	\$	\$ 120,000.00
3.5	Planting soil at tree pits	100	cu.m	\$ 55.00	\$	\$ 5,500.00
3.6	Clearstone drainage layer and 100mm PVC drainage lines	450	sq. m	\$ 50.00	\$	\$ 22,500.00
3.7	60mm perforated pvc watering/aeration pipes	450.0	l.m.	\$ 25.00	\$	\$ 11,250.00
3.8	600mm geocomposite membrane	450.0	l.m.	\$ 38.00	\$	\$ 17,100.00
3.9	Mulch (100mm estimated depth)	100.0	sq.m	\$ 10.00	\$	\$ 1,000.00
3.10	Ground cover planting (tree pits)	450	sq.m	\$ 90.00	\$	\$ 40,500.00
3.11	Deciduous street trees	65.0	each	\$ 550.00	\$	\$ 35,750.00
3.12	City Standard Litter/Recycling Receptacle	23	each	\$ 2,717.00	\$	\$ 62,491.00
3.13	City Standard Bike Rack	23	each	\$ 1,492.00	\$	\$ 34,316.00
3.14	City Standard Bench	23	each	\$ 3,200.00	\$	\$ 73,600.00
3.17	Shaped landscape area - Soil	na	cu.m	\$ 55.00	\$	\$ -
3.18	Shaped landscape area - Planting	na	sq.m	\$ 90.00	\$	\$ -
3.19	Shaped landscape area - Seating	na	l.m.	\$ 1,500.00	\$	\$ -
3.20	Tree ring and grate	16	each	\$ 4,500.00	\$	\$ 72,000.00
3.21	Raised planters (400mm Height) with soil	140	l.m.	\$ 350.00	\$	\$ 49,000.00
3.22	Raised planter integrated seating element	32	l.m.	\$ 1,100.00	\$	\$ 35,200.00
3.23	Precast concrete planter cover	28	each	\$ 750.00	\$	\$ 21,000.00
4.0 Pedestrian Clearway						
4.1	Concrete Paving, 125mm thick. Broom finish	2,660	sq. m	\$ 80.00	\$	\$ 212,800.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	2,660	sq. m	\$ 90.00	\$	\$ 239,400.00
5.0 Lighting						
5.1	Type 1 - 25' Aeris Trac Pole with vehicular and pedestrian light (incl. foundation)	23.00	each	\$ 6,650.00	\$	\$ 152,950.00
5.2	Type 1 - 16' Aeris Trac Pole pedestrian light (incl. foundation)	23.00	each	\$ 5,050.00	\$	\$ 116,150.00
5.3	Type 2 - L16 Retrofit with Holophane Arm and pedestrian light	na	each	\$ 900.00	\$	\$ -
5.4	Type 3 - Identifier Sleeve	16	each	\$ 1,500.00	\$	\$ 24,000.00
5.5	Type 4 - Mobility Maker	na	each	\$ 21,000.00	\$	\$ -
6.0 Six Points Park						
6.1	Earthworks	3,200	cu.m	\$ 75.00	\$	\$ 240,000.00
6.2	Topsoil / fine grading/sodding	3,200	sq. m	\$ 50.00	\$	\$ 160,000.00
6.3	Concrete landing	na	sq. m	\$ 500.00	\$	\$ -
6.4	Concrete sidewalk paving	560	sq. m	\$ 80.00	\$	\$ 44,800.00
6.5	Concrete steps	na	l.m.nose	\$ 400.00	\$	\$ -
6.6	Concrete knee wall	na	l.m.	\$ 250.00	\$	\$ -
6.7	Terrace retaining walls (600mm height)	na	sq.face	\$ 500.00	\$	\$ -
6.8	New handrail	na	l.m.	\$ 250.00	\$	\$ -
6.9	Shade trees	62	each	\$ 550.00	\$	\$ 34,100.00
6.10	Ornamental trees	30	each	\$ 450.00	\$	\$ 13,500.00
6.11	Shrub and groundcover planting	750	sq.m	\$ 90.00	\$	\$ 67,500.00
6.12	Lighting	1	Budget	\$ 100,000.00	\$	\$ 100,000.00

Estimated Budget (refer also to notes) \$ 2,203,057.00

Notes:

1 Construction mobilization costs are not included.

- 2 Demolition and removal costs of existing buildings, walls, paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- 3 Major earthworks and roadways works are not included.
- 4 Structural modifications to existing abutment walls not included.
- 5 Drainage structures and required connections are not included.
- 6 Irrigation is not included.
- 7 Low voltage landscape lighting is not included.
- 8 Lighting costs related to wiring, conduiting, and energization are not included.
- 9 Relocation or treatment of above and below ground utilities is not included.
- 10 Improvements to existing pavements, ramps, steps, walls and handrails are not included.
- 11 Roadway works not included.
- 12 Estimate does not include applicable taxes
- 13 Public art is not included.

Focus Area Four - Bloor Overpass

Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED RATE PER UNIT	TOTAL COST
BOULEVARD TREATMENT					
1.0	Michael Powers Place Extension (Ramp Improvements)				
1.1	Earthworks / slope stabilization	250	cu.m	\$ 75.00	\$ 18,750.00
1.2	Topsoil / fine grading/sodding	370	sq. m	\$ 50.00	\$ 18,500.00
1.3	Concrete Landing	25	sq. m	\$ 500.00	\$ 12,500.00
1.4	Concrete sidewalk paving	90	sq. m	\$ 80.00	\$ 7,200.00
1.5	Concrete steps (18 steps assumed)	40	l.m.nose	\$ 400.00	\$ 16,000.00
1.6	Concrete knee wall	40	l.m.	\$ 250.00	\$ 10,000.00
1.7	Terrace retaining walls (600mm height)	120	sq.face	\$ 500.00	\$ 60,000.00
1.8	New handrail	40	l.m.	\$ 250.00	\$ 10,000.00
1.9	Shade trees	14	each	\$ 550.00	\$ 7,700.00
1.10	Ornamental trees	8	each	\$ 450.00	\$ 3,600.00
1.11	Shrub and groundcover planting	160	sq.m	\$ 90.00	\$ 14,400.00
1.12	Lighting	1	Budget	\$ 50,000.00	\$ 50,000.00

Estimated Budget (refer also to notes) \$ 228,650.00

2.0	Kenway Park Extension				
2.1	Earthworks / slope stabilization (at stair connection)	750	cu.m	\$ 75.00	\$ 56,250.00
2.2	Topsoil / fine grading/sodding	400	sq. m	\$ 50.00	\$ 20,000.00
2.3	Concrete landing	25	sq. m	\$ 500.00	\$ 12,500.00
2.4	Concrete sidewalk paving	280	sq. m	\$ 80.00	\$ 22,400.00
2.5	Concrete steps	20	l.m.nose	\$ 400.00	\$ 8,000.00
2.6	Concrete knee wall	15	l.m.	\$ 250.00	\$ 3,750.00
2.7	Terrace retaining walls (600mm height)	120	sq.face	\$ 500.00	\$ 60,000.00
2.8	New handrail	20	l.m.	\$ 250.00	\$ 5,000.00
2.9	Shade trees	14	each	\$ 550.00	\$ 7,700.00
2.10	Ornamental trees	8	each	\$ 450.00	\$ 3,600.00
2.11	Shrub and groundcover planting	150	sq.m	\$ 90.00	\$ 13,500.00
2.12	Lighting	1	Budget	\$ 65,000.00	\$ 65,000.00

Estimated Budget (refer also to notes) \$ 277,700.00

3.0	Police Park				
3.1	Earthworks / slope stabilization (at stair connection)	400	cu.m	\$ 75.00	\$ 30,000.00
3.2	Topsoil / fine grading	6,300	sq. m	\$ 50.00	\$ 315,000.00
3.4	Concrete sidewalk paving	1,100	sq. m	\$ 80.00	\$ 88,000.00
3.5	Concrete steps (18 steps assumed)	80	l.m.nose	\$ 400.00	\$ 32,000.00
3.6	Concrete knee wall	24	l.m.	\$ 250.00	\$ 6,000.00
3.7	Terrace retaining walls (600mm height)	96	sq.face	\$ 500.00	\$ 48,000.00
3.8	New handrail	40	l.m.	\$ 250.00	\$ 10,000.00
3.9	Shade trees	50	each	\$ 550.00	\$ 27,500.00
3.10	Ornamental trees	50	each	\$ 450.00	\$ 22,500.00
3.11	Shrub and groundcover planting	250	sq.m	\$ 90.00	\$ 22,500.00
3.12	Lighting	1	Budget	\$ 200,000.00	\$ 200,000.00

Estimated Budget (refer also to notes) \$ 801,500.00

Notes:

- 1 Construction mobilization costs are not included.
- 2 Demolition and removal costs of existing buildings, walls, paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- 3 Major earthworks are not included.
- 4 Structural modifications to existing abutment walls not included.
- 5 Drainage structures and required connections are not included.
- 6 Irrigation is not included.
- 7 Low voltage landscape lighting is not included.
- 8 Lighting costs related to wiring, conduiting, and energization are not included.
- 9 Relocation or treatment of above and below ground utilities is not included.
- 10 Improvements to existing pavements, ramps, steps, walls and handrails are not included.
- 11 Roadway works not included.
- 12 Estimate does not include applicable taxes

Focus Area Five - Islington Cordova Overpass

Note: Estimates are based on conceptual design. Please refer to detailed notes below with respect to items that are excluded / assumed.

ITEM NO	DESCRIPTION OF WORK	EST. QTY PER 10m Unit	UNIT TYPE	ESTIMATED RATE PER UNIT	TOTAL COST
BOULEVARD TREATMENT					
1.0	Islington Cordova Overpass				
1.1	Earthworks / slope stabilization	3,000	cu.m	\$ 75.00	\$ 225,000.00
1.2	Topssoil / fine grading/sodding	1,800	sq. m	\$ 50.00	\$ 90,000.00
1.3	Concrete Landing	36	sq. m	\$ 500.00	\$ 18,000.00
1.4	Concrete sidewalk paving	1,000	sq. m	\$ 80.00	\$ 80,000.00
1.5	Concrete steps (20 steps assumed)	120	l.m.noise	\$ 400.00	\$ 48,000.00
1.6	Concrete knee wall	72	l.m.	\$ 250.00	\$ 18,000.00
1.7	Terrace retaining walls (400mm height)	360	sq.face	\$ 500.00	\$ 180,000.00
1.8	New handrail	140	l.m.	\$ 250.00	\$ 35,000.00
1.9	Shade trees	25	each	\$ 550.00	\$ 13,750.00
1.10	Ornamental trees	10	each	\$ 450.00	\$ 4,500.00
1.11	Shrub and groundcover planting	575	sq.m	\$ 90.00	\$ 51,750.00
1.12	Lighting	1	Budget	\$ 75,000.00	\$ 75,000.00
Estimated Budget (refer also to notes)					\$ 839,000.00

Notes:

- 1 Construction mobilization costs are not included.
- 2 Demolition and removal costs of existing buildings, walls, paving, curbs, furnishings, trees, poles etc are not included in the above unit prices.
- 3 Major earthworks are not included.
- 4 Structural modifications to existing abutment walls not included.
- 5 Drainage structures and required connections are not included.
- 6 Irrigation is not included.
- 7 Low voltage landscape lighting is not included.
- 8 Lighting costs related to wiring, conduiting, and energization are not included.
- 9 Relocation or treatment of above and below ground utilities is not included.
- 10 Improvements to existing pavements, ramps, steps, walls and handrails are not included.
- 11 Roadway works not included.
- 12 Estimate does not include applicable taxes
- 13 Estimate does not include public art costs.
- 14 Estimate does not include costs of land acquisition.

Budgetary Unit Prices

ITEM NO	DESCRIPTION OF WORK	UNIT TYPE	ESTIMATED RATE PER UNIT
BOULEVARD TREATMENT			
1.0	Edge Zone		
1.1	Concrete Curb, monolithic with concrete unit paver forming (for edge zone)	l.m	\$ 95.00
1.2	Precast concrete unit pavers (200x200x60mm) (Edge zone)	sq. m	\$ 110.00
2.0	Bike Lane		
2.1	Concrete Paving 125mm thick, broom finish	sq. m	\$ 80.00
2.2	Apply field reacted polymeric pavement marking, solid black	each	\$ 200.00
3.0	Planting and Furnishing Zone		
3.1	Permeable precast concrete paving over structural soil tree trench	sq. m	\$ 125.00
3.2	Paving retainer curb (flush curb)	l.m.	\$ 70.00
3.3	Tree pit retainer curb	l.m.	\$ 85.00
3.4	Structural soil between tree pit locations	cu.m	\$ 300.00
3.5	Reinforced concrete trench cover	sq.m	\$ 145.00
3.6	Precast concrete planter cover	each	\$ 750.00
3.7	Planting soil at tree pits	cu.m	\$ 55.00
3.8	Clearstone drainage layer and 100mm PVC drainage lines	sq. m	\$ 60.00
3.9	60mm perforated pvc watering/aeration pipes	l.m.	\$ 25.00
3.10	600mm geocomposite membrane	l.m.	\$ 38.00
3.11	Mulch (100mm estimated depth)	sq.m	\$ 10.00
3.12	Ground cover planting (tree pits)	sq.m	\$ 90.00
3.13	Deciduous street trees	each	\$ 550.00
3.14	City Standard Litter/Recycling Receptacle	each	\$ 2,717.00
3.15	City Standard Bike Rack	each	\$ 1,492.00
3.16	City Standard Bench	each	\$ 3,200.00
3.17	Shaped landscape area - Soil	cu.m	\$ 55.00
3.18	Shaped landscape area - Planting	sq.m	\$ 90.00
3.19	Shaped landscape area - Seating	l.m.	\$ 1,500.00
3.20	Tree ring and grate	each	\$ 4,500.00
3.21	Raised planters (400mm Height)	lm	\$ 350.00
3.22	Raiser planter integrated seating element	lm	\$ 1,100.00
4.0	Pedestrian Clearway		
4.1	Concrete Paving, 125mm thick. Broom finish	sq. m	\$ 80.00
4.2	Concrete Paving, 125mm thick. Sandblast finish	sq. m	\$ 90.00
5.0	Lighting		
5.1	Type 1 - 25' Aeris Trac Pole with vehicular and pedestrian light (incl. foundation)	each	\$ 8,750.00
5.2	Type 1 - 16' Aeris Trac Pole pedestrian light (incl. foundation)	each	\$ 6,550.00
5.3	Type 2 - L16 Retrofit with Holophane Arm and pedestrian light	each	\$ 1,600.00
5.4	Type 3 - Identifier Sleeve	each	\$ 1,500.00
5.5	Type 4 - Mobility Marker	each	\$ 21,000.00

Appendix **D**

Arborist Report & Recommended Tree Species List

PROJECT NAME: Etobicoke Centre Public Space and Streetscape
PROJECT NUMBER: USG001
DATE: 01/13/2011
PERSONS PRESENT: Stanley Luk, MBTW Group

LOCATION: Description:
Etobicoke Centre redevelopment area at
Dundas Street, Bloor Street, Kipling and
Islington Avenue.

MBTW was retained to provide a record of the existing vegetation zones and review of the existing streetscape plantings at the proposed Etobicoke Centre Public Space and Streetscape redevelopment site.

A site review was conducted on January 5th, 2011 to provide information on the various vegetative habitats of the subject site and an overview on the composition and health condition of the canopy vegetation. Each distinct vegetation habitat was identified and provided with a descriptive title according to the species composition, general land use of district and age of vegetation groupings. Tom Riley Park was excluded from the report as the park is a natural area under the jurisdiction of the TRCA and is not included in the Etobicoke Centre Streetscape redevelopments.

Due to the subject site being a predominantly urban landscape, the understorey components were tabulated only in naturalized areas where they occur as integral components of the vegetation community. Ornamental groundcovers and shrubs plantings such as commercial parking lot plantings, park planting beds, and foundation plantings are not included in the scope of this report.

The conditions of trees were documented according to an arborist assessment of infestations of pathogens, canopy structure stability and location of trees. The potential for preservation was conducted by the observation of the tree species, provenance of tree, health condition, structural stability, invasive potential of the species into natural habitats if it is non-native, and potential for conflicts with future site developments.

The tree species were documented according to the common name and Latin binominal names. Each tree species is tabulated according to the number of occurrence of each individual tree within the vegetative group. Trees that comprises over 50% of the vegetative group is identified as being Dominant. Trees that comprises between 50 and 25% are identified as being Common. Trees species that occur in densities of less than 25% are identified as being Occasional.

Zone 1 - Commercial Landscapes
Refer to Zone Map – Appendix A

Street tree and ornamental tree plantings located in public right of way and private properties along Dundas and Bloor Street. Most trees observed were installed as street trees or installed as shade trees. Predominant tree species observed along the Bloor and Dundas streets is the Honeylocusts, where the species accounts for over 50% of the total of all tree plantings.

Most trees are in fair to poor condition due to the environmental stress, drought, canopy reduction pruning and compacted soil conditions. The streetscape is heavily used by vehicles and pedestrians. There is also evidence of heavy use of deicing salts during the winter months by local residences and municipal snow clearance operations. Many trees also exhibit stunted growth due to dry soil conditions as a result of the extensive concrete and asphalt paving around tree pits and planting beds.

Tree species observed		
Honey Locust	<i>Gleditsia triacanthos</i>	Dominant
Norway Maple	<i>Acer platanoides</i>	Common
Freeman Maple	<i>Acer freemanii</i>	Occasional
Hackberry	<i>Celtis occidentalis</i>	Occasional
Green Ash	<i>Fraxinus pennsylvanica</i>	Occasional
Little Leaf Linden	<i>Tilia cordata</i>	Occasional
Austrian Pine	<i>Pinus nigra</i>	Occasional

Potential for preservation – Poor

Due to the paved streetscape conditions of zone 1 and environmental stress, most trees were observed to be in poor condition. As a result there were limited opportunities for preservation. The Honeylocust is heavily used along the Bloor and Dundas corridor due to their tolerance to urban conditions. However, they are susceptible to many insect diseases due to overplanting. Other tree species should be installed in future street tree planting schemes to increase biodiversity.

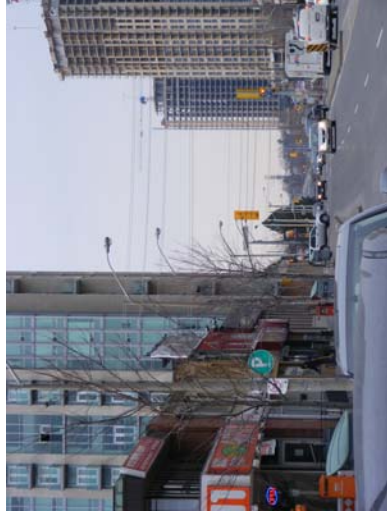


Image 1: View of Bloor Street, east of Islington, view west.



Image 2: View of Dundas Street, north east corner at Renown Street.

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Image 3: View of Dundas Street, view east at Burnhamthorpe Road.



Image 4: View of Dundas Street, view west at Burnhamthorpe Road.



Image 5: View of Dundas Street, view west at Aukland Road.

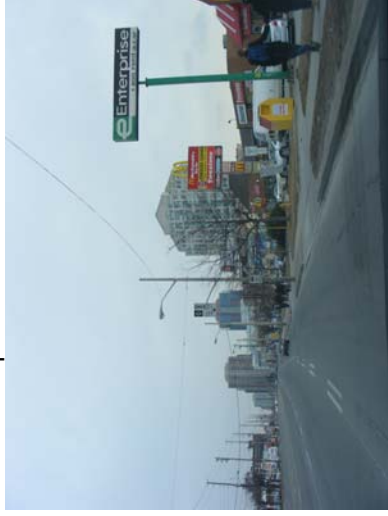


Image 6: View of Dundas Street, view east at Shaver Street.



Image 7: View east of Bloor Street, at Jopling Street to Kipling Avenue



Image 8: View of Bloor Street, view west to Jopling Avenue

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Zone 2 – Residential Streetscape – Old Multi-storey dwellings
Refer to Zone Map – Appendix A

Streetscape and landscape plantings located around apartment complexes. Area located around Cordova and Mabelle Avenue.

Condition of trees in Zone 3 varies from good to poor due to the advanced age of the trees and the lack of maintenance. Many spruces were observed to be dead or in poor condition along roadway frontages. Many Austrian Pines were also observed to be in poor condition due to the diploida fungus infestations. Though there is a varied mix of tree species observed, most trees are non-native in origin. Dominant tree species observed in zone 2 includes the Honeylocust, Siberian Elm, Austrian Pine, Norway Maple and Little Leaf Linden.

Tree species observed		
Honey Locust	Gleditsia triacanthos	Common
Siberian Elm	Ulmus pumila	Common
Norway Maple	Acer platanoides	Common
Silver Maple	Acer saccharinum	Common
Little Leaf Linden	Tilia cordata	Common
Austrian Pine	Pinus nigra	Common
Crabapple hybrids	Malus species.	Occasional
Weeping Willow	Salix X alba	Occasional
Green Ash	Fraxinus pennsylvanica	Occasional
Manitoba Maple	Acer negundo	Occasional
Tree of Heaven	Ailanthus altissima	Occasional
Colorado Spruce	Picea pungens	Occasional
Douglas Fir	Pseudotsuga menziesii	Occasional
Paper Birch	Betula papyrifera	Occasional

Potential for preservation – Poor

Due to the lack of species diversity and poor condition of trees, most trees in the older residential streetscapes are not considered to be candidates for preservation. The use of invasive tree species such as Norway maple, Siberian elm and Austrian pine provides a seed source for these invasive tree species to invade into the adjacent Tom Riley park and Mimico ravine system.



Image 9: View of Dundas, South side, view East to Mabelle Avenue.



Image 10: View of boulevard tree planting, west side of Mabelle Avenue.

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Image 11: View of boulevard tree planting, Mabelle Avenue view north to Dundas.



Image 12: View of boulevard tree planting, Cordova Avenue, view west.



Image 13: View of tree plantings at Cordova road and Mabelle Street intersection

Zone 3 – Residential Streetscape – New multi-storey residential dwellings
Refer to Zone Map – Appendix A

Street trees and landscape tree plantings in new condominium and town house developments. Area located along the south side of Dundas Street, east and west of the Kipling intersection. Most trees are less than 10 years of age and are in the process of establishment. Trees in this zone are generally in good condition due to regular maintenance and irrigation. Dominant street tree species is the Honeylocust, Norway Maple and Freeman Maple.

Tree species observed		
Honey Locust	Gleditsia triacanthos	Common
Norway Maple	Acer platanoides	Common
Freeman Maple	Acer x freemanii	Common
Ornamental Pear	Pyrus caleryana	Occasional
Green Ash	Fraxinus pennsylvanica	Occasional
Little Leaf Linden	Tilia cordata	Occasional
Austrian Pine	Pinus nigra	Occasional
Colorado Spruce	Picea pungens	Occasional

Potential for preservation – Good

The new residential developments of zone 3 include recently installed streetscapes with new tree planting. The species composition of new plantings is dominated by the use of Honeylocust which is over planted throughout the subject site. If trees are to be replaced, alternative species should be considered. However due to the good condition of the existing trees and streetscape, there is good potential for the preservation of the streetscapes and street trees in zone 3.



Image 14: View of Dundas Street, South side, view East at Dunbloor Road.



Image 15: View of Dundas Street, South side, view South to Viking Road.



Image 16: View of Dundas Street, South side, view West at Summerland Terrace.

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Zone 4 – Mixed Residential / Commercial Streetscape.
Refer to Zone Map – Appendix A

Streetscape and residential plantings in mixed use area between CPR rail line to the north and Bloor Street to the south and Tom Riley Park to the east.
Condition of trees are good due to maintenance by property owners. Plantings of Ginkgo, Little Leaf Linden, and Ornamental Pear trees along Aberfoyle Crescent and Lamont Drive are in good condition. A spruce hedge is located at the boundary between Aberfoyle Crescent and Tom Riley Park. Older street tree plantings of Norway Maple and Crabapple varies in health condition due to old age and poor maintenance along Islington Avenue.

Tree species observed		
Ginkgo	Ginkgo biloba	Common
Norway Maple	Acer platanoides	Common
Ornamental Pear	Pyrus caleryana	Common
Little Leaf Linden	Tilia cordata	Common
Freeman Maple	Acer x freemanii	Common
Crabapple hybrids	Malus species.	Occasional
White poplar	Populus alba	Occasional
London Plane Tree	Platanus x acerifolia	Occasional
Colorado Spruce	Picea pungens	Occasional

Potential for preservation – Good

The general condition of the streetscape plantings are in good condition due to good maintenance practices and larger soil volume associated with larger landscaped areas around the buildings. The use of invasive tree species such as the Norway maple is not a concern as they are located along the west end of the vegetation zone as streetscape plantings. The spruce buffer along Aberfoyle Crescent and Tom Riley Park should be preserved as the trees are in good condition and contribute to the separation of the urban landscape and the natural park conditions.



Image 17: View of tree plantings at Bloor Street, West to Islington Avenue.



Image 18: View of tree plantings at Bloor Street, view east at Islington Avenue

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Image 19: View of tree plantings at Aberfoyle Crescent east to Tom Riley Park.



Image 20: View of tree plantings at Aberfoyle Crescent west to Islington Avenue.

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Zone 5 – Residential – Single Family Dwellings
Refer to Zone Map – Appendix A

The street trees observed along Montgomery Avenue are associated with two storey detached single family residences. The tree species observed are in good condition and were located in sodded boulevards. The most dominant species consists of Red Oaks interspersed with Silver Maples and Norway Maples.

Tree species observed		
Red Oak	Quercus rubra	Dominant
Silver Maple	Acer saccharinum	Occasional
Norway Maple	Acer platanoides	Occasional

Potential for preservation – Good

Due to the dominance of large, healthy boulevard trees and the dominance of Red Oak trees, there is good potential for preservation. The few Norway Maple trees observed along Montgomery Ave. serve as seed sources that have the potential to invade into the Mimico creek system through the adjacent Tom Riley Park. However due to their greater distance away from the creek and separation by maintained landscapes around the adjacent houses, there are few opportunities for the species to spread into the creek system.



Image 21: View of boulevard tree plantings at Montgomery Ave, north of the CPR line overpass.

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Zone 6 – Brown Field

Refer to Zone Map – Appendix A

Open field and herbaceous groundcover with naturalized tree saplings. Tree species consist of a monoculture of Siberian elms. Most trees are in the juvenile phase and are located along fence lines.

Tree species observed	Ulmus pumila	Dominant
Siberian Elm		

Potential for preservation – Poor

The dominant vegetation in the fallow fields consists of primary succession herb species and the Siberian elm which is an invasive alien tree species in the Southern Ontario. As a result, there are no potential for preservation of the trees in the Brown field vegetation zones.



Image 22: View of naturalized Siberian Elm grouping at the south edge of fallow fields.



Image 23: View of naturalized Siberian Elm grouping at the east edge of fallow fields.

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Zone 6 – Existing Schools
Refer to Zone Map – Appendix A

There are two schools located along Montgomery Avenue between Dundas and Bloor Street. There are mature tree plantings in the public right of way between the sidewalk and school properties. The trees observed are in good condition and exhibit potential for preservation.

Tree species observed		
Norway Maple	Acer platanoides	Common
Basswood	Tilia americana	Common
Green Ash	Fraxinus pennsylvanica	Common
Silver Maple	Acer saccharinum	Occasional
Colorado Spruce	Picea pungens	Occasional
Austrian Pine	Pinus nigra	Occasional
Little Leaf Linden	Tilia cordata	Occasional
Red Oak	Quercus rubra	Occasional
Honeylocust	Gleditsia triacanthos	Occasional

Potential for preservation – Good

Due to the good condition of the trees in private properties and public right of way in front of the school grounds, the trees represent good candidates for preservation. However several Red oak trees have been severely pruned with large areas of exposed heartwood. This creates opportunities for wood rots to develop. Future observation by qualified arborists is recommended to review their structural integrity and to prevent hazardous conditions from developing.



Image 24: View of boulevard tree plantings in school grounds, at Montgomery road, south of CPR line.

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Zone 7 – TTC and GO train properties.
Refer to Zone Map – Appendix A

Open field with manicured grass groundcover and naturalized tree, saplings and shrubs along property boundaries of private properties and Railway lands. Most trees observed are in fair to good condition. Most species occur at the property boundary as a result of naturalized seedlings from adjacent seed sources. The native tree species such as Black walnut and Green Ash were probably distributed from existing wooded areas along Mimico Creek.

Tree species observed		
Siberian Elm	Ulmus pumila	Common
Manitoba Maple	Acer negundo	Common
Green Ash	Fraxinus pennsylvanica	Occasional
Black walnut	Juglans nigra	Occasional

Potential for preservation - Poor

Due to the dominant vegetation being invasive in origin such as the Siberian elm, there is limited potential for preservation. Also due to right of way clearance requirements, trees will be removed by regular railway maintenance operations to ensure safe operation of trains along the railway lines.



Image 25: View of naturalized Siberian Elm groupings at the north edge of CPR line at Cordova Road parking lot.



Image 26: View of naturalized Siberian Elm and Black walnut grouping at CPR line, east of Tom Riley Park.

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Zone 8- Industrial Streetscape
Refer to Zone Map – Appendix A

The dominant boulevard tree species along Fieldway Road is the Tree lilac (*Syringa reticulata*). The condition of this small growing street tree species is an appropriate tree selection due to location of hydro wires above. Other tree species occur within the private properties abutting onto the sidewalk of Fieldway Road with most trees being in good condition and well maintained.

Tree species observed		
Tree lilac	<i>Syringa reticulata</i>	Dominant
Norway Maple	<i>Acer platanoides</i>	Common
Silver Maple	<i>Acer saccharinum</i>	Common
Austrian Pine	<i>Pinus nigra</i>	Common
Crabapple hybrids	<i>Malus</i> species.	Occasional

Potential for preservation – Good

Due to the good condition of the tree species identified along this vegetation zone, there is good potential for preservation. However due to the monoculture conditions with the use of the Tree Lilac, replacement trees should include other native tree species to increase biodiversity.



Image 27: View of Fieldway Road west from Kenway Road.



Image 28: View of Fieldway Road west from Shires Road.

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Zone 10 – Hydro Easement
Refer to Zone Map – Appendix A

Open manicured sodded fields with specimen tree plantings. All tree species encountered occurs as specimen trees or buffer plantings. Most trees located within the Hydro Easement are in good condition. There are naturalized groupings of Siberian Elms along the easement intersection with Dundas Street. The Hydro easement zone is a discontinuous area extending from the transformer station, south of the Kipling Go Train parking lot to Aukland Avenue, north of Bloor Street west.

Tree species observed		
Siberian Elm	Ulmus pumila	Common
Norway Maple	Acer platanoides	Common
Green Ash	Fraxinus pennsylvanica	Common
Austrian Pine	Pinus nigra	Common
White Spruce	Picea glauca	Common
Serbian Spruce	Picea omorika	Common
Crabapple hybrids	Malus species.	Occasional
Manitoba Maple	Acer negundo	Occasional
White cedar	Thuja occidentalis	Occasional

Potential for preservation – Poor

Ornamental plantings around the transfer stations and hydro towers should be retained if required to ensure that a vegetated buffer is retained to prevent access by trespassers. Naturalized tree groupings of invasive species such as Siberian Elm do not represent potential for preservation.



Image 29: Transformer station buffer planting



Image 30: hydro easement, Dundas St.



Image 31: View of tree clusters at hydro easement, south of Bloor Street.



Image 32: View of tree clusters at hydro easement, north of Bloor Street

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Zone 11 – Parks and Public Open Spaces

Three parks were observed in the subject site including Cloverdale Park, Michael Power Park and a sports field and associated green space along Mabelle Avenue. Trees located in Cloverdale Park consists of mature specimen of Little leaf linden, White fir (Abies concolor), Norway Spruce (Picea abies) and Norway maples. New plantings of Hackberry is observed.

Trees observed at Michael Power park consists of a mature Colorado spruce and recent installations of Honeylocust, Lindens and Serviceberry (Amelanchier canadensis). Tree planting at the open space along Mabelle Avenue consists of plantings of Austrian Pine with naturalized hedgerows of Siberian Elm and Weeping Willow saplings along an existing swale.

Tree species observed		
Norway Maple	Acer platanoides	Common
Green Ash	Fraxinus pennsylvanica	Common
Austrian Pine	Pinus nigra	Common
Little Leaf Linden	Tilia cordata	Common
White Spruce	Picea glauca	Common
Norway Spruce	Picea abies	Common
Siberian Elm	Ulmus pumila	Common
White Fir	Abies concolor	Occasional
Serviceberry	Amelanchier canadensis	Occasional
Hackberry	Celtis occidentalis	Occasional
Crabapple hybrids	Malus species.	Occasional

Potential for preservation - Good

The trees located in Cloverdale Park and Michael Power Park are worthy of preservation due to the good condition and location within the park boundary. However the Siberian elm and willows located in the greenspace within Mabelle Avenue are from a naturalized origin and there is no requirement for their preservation due to the potential for the seeds to spread into the Mimico Creek ravine system and Tom Riley Park.



Image 33: View of trees along southwest side of Cloverdale Park



Image 34: View of trees along southeast side of Cloverdale Park

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Image 35: View of Michael Power Place at Dundas St frontage.



Image 36: View of tree clusters at open space along Mabelle Street

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Zone 12 – 6 point Roadway Interchange
Refer to Zone Map – Appendix A

Tree plantings and naturalized tree groupings were observed in the roadway interchange at the intersection of Kipling, Bloor and Dundas Street. Most trees observed in the roadway interchange are in good to fair condition with many trees exhibiting signs of salt damage. Many trees are open grown in manicured lawn setting. Several zones were maintained as regeneration zones where various tree and shrub species were either planted or allowed to naturalize in dense stands.

Tree species observed		
Black Locust	<i>Robinia pseudoacacia</i>	Common
Norway Maple	<i>Acer platanoides</i>	Common
Silver Maple	<i>Acer saccharinum</i>	Common
<i>Tilia cordata</i>	Little Leaf Linden	Common
<i>Salix fragilis</i>	Crack Willow	Occasional
Jack Poplar	<i>Populus x jackii</i>	Occasional
Green Ash	<i>Fraxinus pennsylvanica</i>	Occasional
Horsechestnut	<i>Aesculus hippocastanum</i>	Occasional
Red Oak	<i>Quercus rubra</i>	Occasional
Black walnut	<i>Juglans nigra</i>	Occasional

Potential for preservation – Poor

Due to the existing land use in the site, most tree species are suffering from root and canopy damage due to salt sprays from de-icing operations. Most large canopy trees are non-native and were probably originated from ornamental plantings. As a result, these trees do not represent opportunities for preservation. Many saplings of invasive species such as Black locust and Siberian elm were also observed in various locations. These species represent poor candidates for preservation.



Image 37: View of tree groupings in Kipling and Dundas/Bloor St. interchange.



Image 38: View of Poplar plantings in Kipling and Bloor Street interchange.

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Image 39: View of Red oak and Siberian Elm planting in Kipling and Bloor interchange.



Image 40: View of Black walnut plantings in Kipling and Bloor Street interchange.

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Zone 13 – Cemetery
Refer to Zone Map – Appendix A

The Cemetery located on Dundas Street between Cabot Court and Burnhamthorpe Road contains a stand of Basswood (*Tilia americana*) along the Dundas Street frontage. The Basswood trees are in good condition but were recently pruned by hydro maintenance crews due to conflicts with the adjacent overhead wires.

Tree species observed		
Basswood	<i>Tilia americana</i>	Common
Scot Pine	<i>Pinus sylvestris</i>	Common
Black locust	<i>Robinia pseudoacacia</i>	Occasional

Potential for preservation – Good

Due to the good condition and heritage considerations of the existing Basswood plantings, it is recommended that these trees to be preserved. All trees within the cemetery should also be preserved for heritage and historic considerations.



Image 41: View of Basswood tree planting, south side of cemetery, north side of Dundas Street.



Image 42: View of Scott pine and Black Locust plantings in the cemetery grounds, north side of Dundas Street.

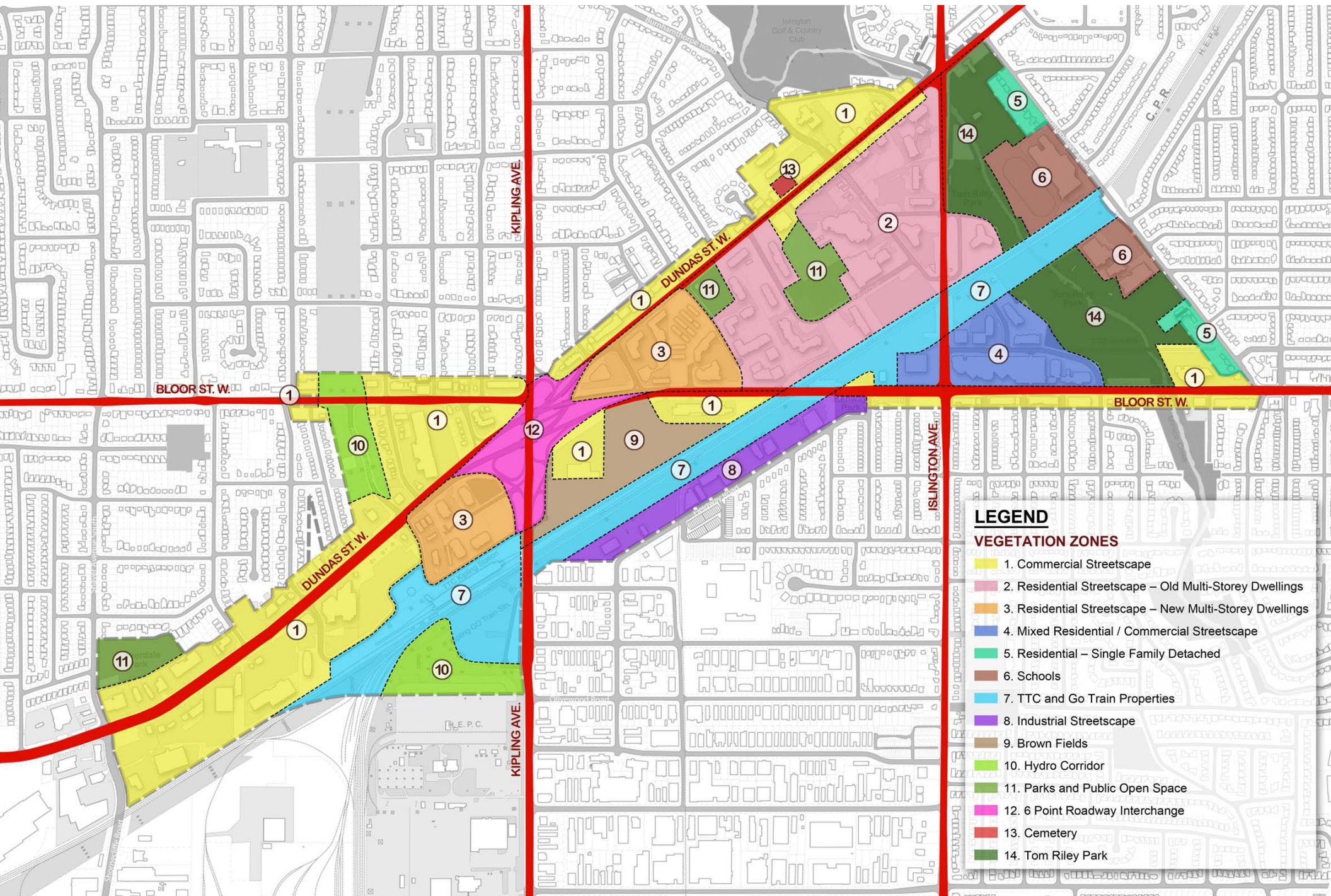
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APPENDIX A – ZONE MAP

Recommended Tree Species List Etobicoke Centre Streetscape and Public Realm Plan - Draft

General Street Trees:

Bur Oak *Quercus macrocarpa*
English Oak *Quercus robur*
Ginko 'Maidenhairtree' *Ginkgo biloba*
Basswood *Tilia americana*
Greenspire Linden *Tilia cordata* 'Greenspire'
Honey Locust *Gleditsia triacanthos* 'Skyline'
Horse-chestnut *Aesculus hippocastanum*
Ironwood *Ostrya virginiana*
Littleleaf Linden *Tilia cordata* 'Glenleven'
Maidenhair Tree *Ginkgo biloba*
Ohio Buckeye *Aesculus glabra*
Red Oak *Quercus rubra*
Shagbark Hickory *Carya ovata*
Sugar Maple *Acer sacharum*
Sycamore Maple *Acer pseudoplatanus*
Turkish Filbert *Corylus colurna*
White Oak *Quercus alba*

Medium/Short Street Trees:

Amur Cork Tree *Phellodendron amurense*
Amur Maple *Acer ginnala* – Tree form
Hackberry *Celtis occidentalis*
Hop Hornbeam *Ostrya virginiana*
Japanese Tree Lilac *Syringa reticulata*

Narrow Street Trees:

Armstrong Maple *Acer freemanii* 'Armstrong'
Bowhall Maple *Acer rubrum* 'Bowhall'
Ornamental Pear *Pyrus* 'Capital/Chanticleer'
Pyramidal English Oak *Quercus robur* 'Fastigiata'
Princeton Sentry Maidenhair Tree *Ginkgo biloba* 'Princeton Sentry'
Pyramidal European Hornbeam *Capinus betulus* 'Fastigiata'

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