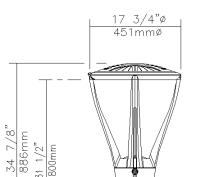




Landowners should include Section 5.14.1 to 5.14.7 in the Landscape Plans.

AP .1.1 Lumec Detail 1 of 6 14ft. Lighting Pole with Banner/Planter

Toronto Emery Village BIA (55213)













EPA: 1.698 sq ft / weight: 32.2 lb (14.6 kg) Note: 3D image may not represent color or option selected.

Logos above include link, click to access.

New Installation MPTC-35W32LED4K-T-LE4-120-BKTX Qty Luminaire

Description of Components:

Hood: Made of die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness, mechanically assembled to the cast aluminum heat sink.

Guard: In a round shape with 4 arms and a built-in mechanical ring, this guard is a one piece die cast A360 Aluminum alloy 0.100 (2.5mm) minimum thickness, mechanically assembled to the fitter.

Access-Mechanism: A die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness technical ring with latch and hinge.

Light Engine: LEDgine composed of 4 main components: LED lamp / Optical System / Heat Sink / Driver Electrical components are RoHS compliant. Maximum ambient operating temperature up to 40C(104F) degrees.

Lens: Made of soda-lime tempered glass lens, mechanically assembled and sealed onto the ring of the access mechanism.

Lamp: LED Module (Included), LED type Philips Lumileds LUXEON T. Composed of 32 high-performance white LEDs. Color temperature of 4000 Kelvin nominal, 70 CRI. Operating lifespan based on TM-21 extrapolation to get results after which 50% of LEDs still emits over 70% (L70) of its original lumen output. Use of metal core board ensures greater heat transfer and longer lifespan of the light engine.

Optical System: (LE4), IES type IV (asymmetrical). Composed of high-performance optical polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. Street side indicated. Dark Sky compliant with 0% uplight and U0 per IESNA TM-15.

LCP60282-55213-160(SA)OB.DOC 12-12-2014 Page 1/8









AP .1.2 Lumec Detail 2 of 6 14ft. Lighting Pole with Banner/Planter

Toronto Emery Village BIA (55213)

Heat Sink: Made of cast aluminum optimising the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device)

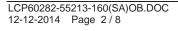
Driver: High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Maximum ambient operating temperature from -40F(-40C) to 130F(55C) degrees. Certified in compliance to UL1310 cULus requirement. Dry and damp location. Assembled on a unitized removable tray with Tyco quick disconnect plug resisting to 221F(105C) degrees. Driver comes with dimming compatible 0-10 volts.

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

Surge Protector: Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

Fitter: Made of die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness, the fitter is complete with a watertight access door giving access to the driver rated IP66, and a terminal block that accepts (#2 max.) wires from the primary circuit. Comes with an easy self adjusting system with two 2 set screws 3/8 16 UNC for ease of maintenance and installation. Fits on a 4"(102mm) outside diameter by 4"(102mm) long tenon.

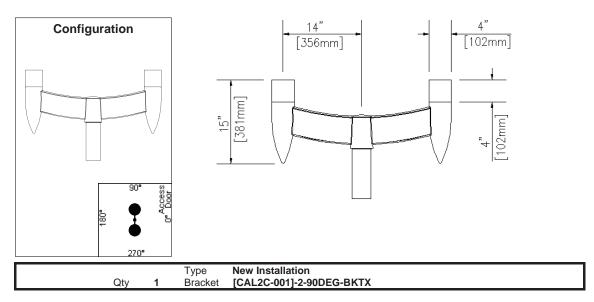






AP .1.3 Lumec Detail 3 of 6 14ft. Lighting Pole with Banner/Planter

Toronto Emery Village BIA (55213)



Description of Components:

Holder: Shall be made from cast 356 aluminum, welded to the arm. Complete with an adaptor providing a 4"(102mm) by 4"(102mm) tenon for the fixtures.

Bracket Options: (90DEG), Bracket to be oriented at 90 degree from access door.

Bracket Weight: 15 lbs (6.8 kg)





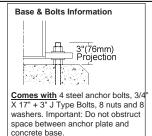


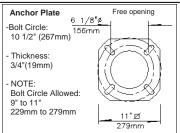
LCP60282-55213-160(SA)OB.DOC 12-12-2014 Page 3/8

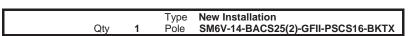


AP .1.4 Lumec Detail 4 of 6 14ft. Lighting Pole with Banner/Planter

Toronto Emery Village BIA (55213)







Description of Components:

Pole Shaft: Shall be made from a 4" (102mm) round high tensile carbon steel tubing, having a 0.250" (6.4mm) wall thickness, welded to the pole base.

Joint Cover: Two-piece round joint cover made from cast 356 aluminum, mechanically fastened with stainless steel screws.

Pole Base: Shall be made from a 6 5/8" (168mm) round high tensile carbon steel tubing base having a 0.180" (4.6mm) wall thickness, welded to both the bottom and top of the anchor plate.

Maintenance Opening: The pole shall have a 4 1/2" x 10" (114mm x 254mm) maintenance opening centered 21" (533mm) from the bottom of the anchor plate, complete with a weatherproof embossed aluminum cover and a copper ground lug.

Base Cover: Two piece round base cover made from cast 356 aluminum, mechanically fastened with stainless steel screws.

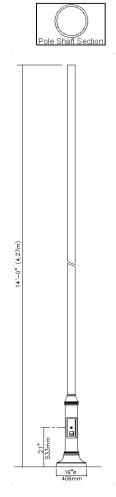
Pole Options: (BA) Single, upper and lower arms (2), clamp-on type, made of steel tubing, 1 1/16" (27mm) outside diameter, mechanically assembled to the pole, complete with a standard cast aluminum decorative ball. (GFI) Duplex receptacle, WR Weather Resistant, 120 volts, ground fault interrupter, complete with an in-use weatherproof aluminum painted cover. Possibility of padlock (Padlock not included). 15 amp., NEMA 5-15R.

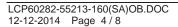
(PS) Single plant support, Clamp-on type, made of steel tubing, 1 1/16" (27mm) outside diameter, mechanically assembled to the pole, complete with standard cast aluminum decorative ball.

Note: A tenon will be provided when the luminaire or bracket does not fit directly on pole shaft. Tenon not shown on the drawing.

IMPORTANT: Philips Lumec strongly recommends the installation of the complete lighting assembly with all of its accessories upon the anchoring of the pole. This will ensure that the structural integrity of the product is maintained throughout its lifetime.

Pole Weight: 145 lbs (65.9 kg)









AP .1.5 Lumec Detail 5 of 6 14ft. Lighting Pole with Banner/Planter

Toronto Emery Village BIA (55213)

Miscellaneous

Description of Components:

Wiring: The connection of the luminaire is done using a terminal block connector 600V, 85A for use with bare son (#2 max.) wires from the primary circuit, located inside the fitter.

Hardware: All exposed screws shall be stainless steel with Ceramic primer-seal basecoat to reduce seizing of the parts. All seals and sealing devices are made and/or lined with EPDM and/or silicone.

Finish: Color to be **black textured RAL9005TX (BKTX)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

Warning: The maximum weight supported by the plant support is 100 lb (45 kg).

LED products manufacturing standard: The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Quality Control: The manufacturer must provide a written confirmation of its ISO 9001-2008 and ISO 14001-2004 International Quality Standards Certification.

Vibration Resistance: The MPTC meets the **ANSI C136.31**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications. (Tested for 3G over 100 000 cycles by an independent lab)

Web site information details: Click on any specific information details you need:

Paint finish / Warranties / Installation pictures / ISO 9001-2008 Certification / ISO 14001-2004 Certification / CULus Certification / CSA Pole Certification







LCP60282-55213-160(SA)OB.DOC

12-12-2014 Page 5/8

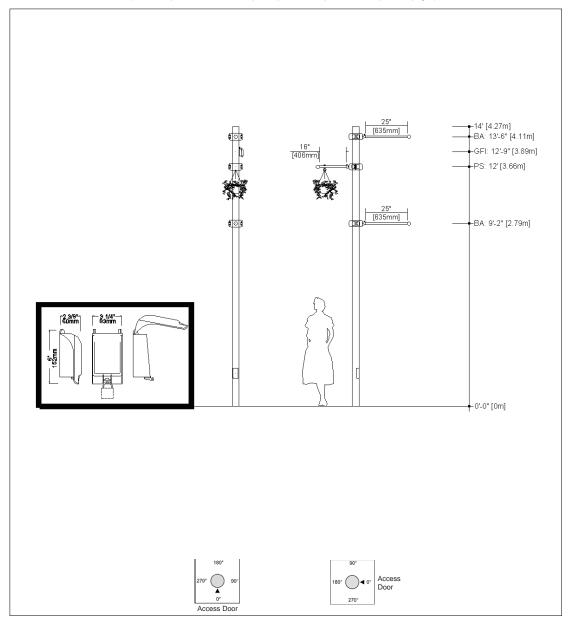


AP .1.6 Lumec Detail 6 of 6 14ft. Lighting Pole with Banner/Planter

Toronto Emery Village BIA (55213)

Parametric Options Illustration

(schematic pole shown, for actual pole representation please refer to previous pages)



LCP60282-55213-160(SA)OB.DOC 12-12-2014 Page 6 / 8



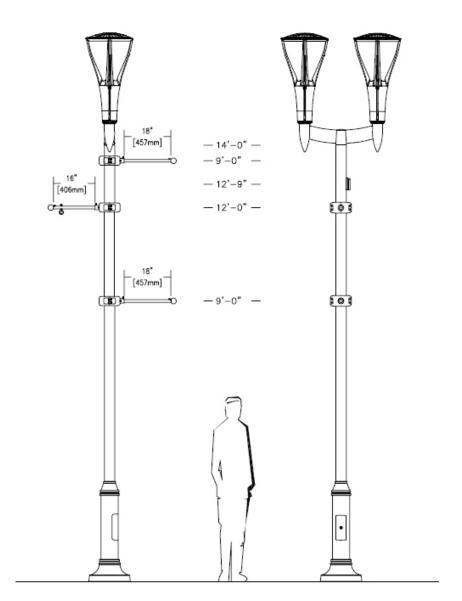






Presentation





Toronto Emery Village BIA (55213)

Type: New Installation MPTC-35W32LED4K-T-LE4-120-[CAL2C-001]-2-90DEG-SM6V-14-BACS25(2)-GFII-PSCD16-3/4x20-10 1/2-DEC-BKTX 20141110_144502.doc

MPTC-TA-60282-55213-IT



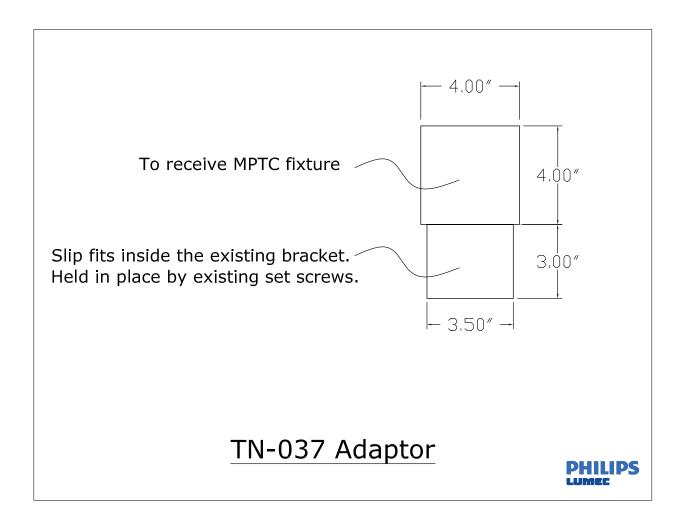




AP .1 LED LIGHTING POLE ADAPTER - 14FT.

Where BIA light poles have been built, Landowners should include Section 5.14.8 in the Landscape Plans. This adapter retrofits the smaller 3.5" of the conventional lighting pole for the 4" needed for the new LED fixture.

Existing Lighting Pole Retrofit for LED Lighting AP .1.8

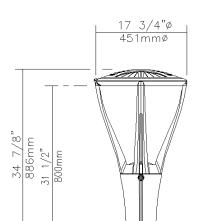




Landowners should include Section 5.14.1 to 5.14.7 in the Landscape Plans.

AP .2.1 Lumec Detail 1 of 6 14ft. Lighting Pole with Double Banner

Toronto Emery Village BIA (55213)













EPA: 1.698 sq ft / weight: 32.2 lb (14.6 kg)

Note: 3D image may not represent color or option selected.

Logos above include link, click to access.

Type New Installation
Qty 2 Luminaire MPTC-35W32LED4K-T-LE4-120-BKTX

Description of Components:

Hood: Made of die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness, mechanically assembled to the cast aluminum heat sink.

Guard: In a round shape with 4 arms and a built-in mechanical ring, this guard is a one piece die cast A360 Aluminum alloy 0.100 (2.5mm) minimum thickness, mechanically assembled to the fitter.

Access-Mechanism: A die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness technical ring with latch and hinge.

Light Engine: LEDgine composed of 4 main components: LED lamp / Optical System / Heat Sink / Driver Electrical components are RoHS compliant. Maximum ambient operating temperature up to 40C(104F) degrees.

Lens: Made of soda-lime tempered glass lens, mechanically assembled and sealed onto the ring of the access mechanism.

Lamp: LED Module (Included), LED type Philips Lumileds LUXEON T. Composed of 32 high-performance white LEDs. Color temperature of 4000 Kelvin nominal, 70 CRI. Operating lifespan based on TM-21 extrapolation to get results after which 50% of LEDs still emits over 70% (L70) of its original lumen output. Use of metal core board ensures greater heat transfer and longer lifespan of the light engine.

Optical System: (LE4), IES type IV (asymmetrical). Composed of high-performance optical polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. Street side indicated.Dark Sky compliant with 0% uplight and U0 per IESNA TM-15.

LCP60282-55213-160(SA)OB.DOC 12-12-2014 Page 1 / 8









AP .2.2 Lumec Detail 2 of 6 14ft. Lighting Pole with Double Banner

Toronto Emery Village BIA (55213)

Heat Sink: Made of cast aluminum optimising the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device)

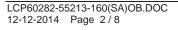
Driver: High power factor of 95%. Electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 120 to 277 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Maximum ambient operating temperature from -40F(-40C) to 130F(55C) degrees. Certified in compliance to UL1310 cULus requirement. Dry and damp location. Assembled on a unitized removable tray with Tyco quick disconnect plug resisting to 221F(105C) degrees. Driver comes with dimming compatible 0-10 volts.

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

Surge Protector: Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA.

Fitter: Made of die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness, the fitter is complete with a watertight access door giving access to the driver rated IP66, and a terminal block that accepts (#2 max.) wires from the primary circuit. Comes with an easy self adjusting system with two 2 set screws 3/8 16 UNC for ease of maintenance and installation. Fits on a 4"(102mm) outside diameter by 4"(102mm) long tenon.

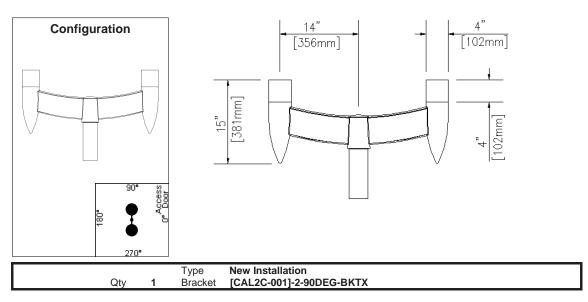






AP .2.3 Lumec Detail 3 of 6 14ft. Lighting Pole with Double Banner

Toronto Emery Village BIA (55213)



Description of Components:

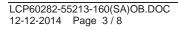
Holder: Shall be made from cast 356 aluminum, welded to the arm. Complete with an adaptor providing a 4"(102mm) by 4"(102mm) tenon for the fixtures.

Bracket Options: (90DEG), Bracket to be oriented at 90 degree from access door.

Bracket Weight: 15 lbs (6.8 kg)







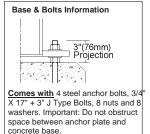
terraplan

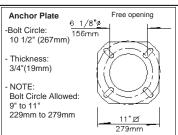




AP .2.4 Lumec Detail 4 of 6 14ft. Lighting Pole with Double Banner

Toronto Emery Village BIA (55213)







Description of Components:

Pole Shaft: Shall be made from a 4" (102mm) round high tensile carbon steel tubing, having a 0.250" (6.4mm) wall thickness, welded to the pole base.

Joint Cover: Two-piece round joint cover made from cast 356 aluminum, mechanically fastened with stainless steel screws.

Pole Base: Shall be made from a 6 5/8" (168mm) round high tensile carbon steel tubing base having a 0.180" (4.6mm) wall thickness, welded to both the bottom and top of the anchor plate.

Maintenance Opening: The pole shall have a 4 1/2" x 10" (114mm x 254mm) maintenance opening centered 21" (533mm) from the bottom of the anchor plate, complete with a weatherproof embossed aluminum cover and a copper ground lug.

Base Cover: Two piece round base cover made from cast 356 aluminum, mechanically fastened with stainless steel screws.

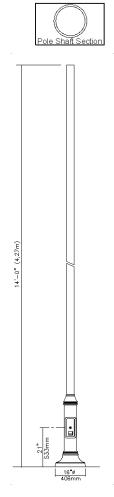
Pole Options: (BA) Single, upper and lower arms (2), clamp-on type, made of steel tubing, 1 1/16" (27mm) outside diameter, mechanically assembled to the pole, complete with a standard cast aluminum decorative ball. (GFI) Duplex receptacle, WR Weather Resistant, 120 volts, ground fault interrupter, complete with an in-use weatherproof aluminum painted cover. Possibility of padlock (Padlock not included). 15 amp., NEMA 5-15R.

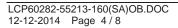
(PS) Single plant support, Clamp-on type, made of steel tubing, 1 1/16" (27mm) outside diameter, mechanically assembled to the pole, complete with standard cast aluminum decorative ball.

Note: A tenon will be provided when the luminaire or bracket does not fit directly on pole shaft. Tenon not shown on the drawing.

IMPORTANT: Philips Lumec strongly recommends the installation of the complete lighting assembly with all of its accessories upon the anchoring of the pole. This will ensure that the structural integrity of the product is maintained throughout its lifetime.

Pole Weight: 145 lbs (65.9 kg)









AP .2.5 Lumec Detail 5 of 6 14ft. Lighting Pole with Double Banner

Toronto Emery Village BIA (55213)

Miscellaneous

Description of Components:

Wiring: The connection of the luminaire is done using a terminal block connector 600V, 85A for use with bare son (#2 max.) wires from the primary circuit, located inside the fitter.

Hardware: All exposed screws shall be stainless steel with Ceramic primer-seal basecoat to reduce seizing of the parts. All seals and sealing devices are made and/or lined with EPDM and/or silicone.

Finish: Color to be **black textured RAL9005TX (BKTX)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

Warning: The maximum weight supported by the plant support is 100 lb (45 kg).

LED products manufacturing standard: The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

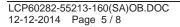
Quality Control: The manufacturer must provide a written confirmation of its ISO 9001-2008 and ISO 14001-2004 International Quality Standards Certification.

Vibration Resistance: The MPTC meets the **ANSI C136.31**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications. (Tested for 3G over 100 000 cycles by an independent lab)

Web site information details: Click on any specific information details you need:

Paint finish / Warranties / Installation pictures / ISO 9001-2008 Certification / ISO 14001-2004 Certification / CULus Certification / CSA Pole Certification







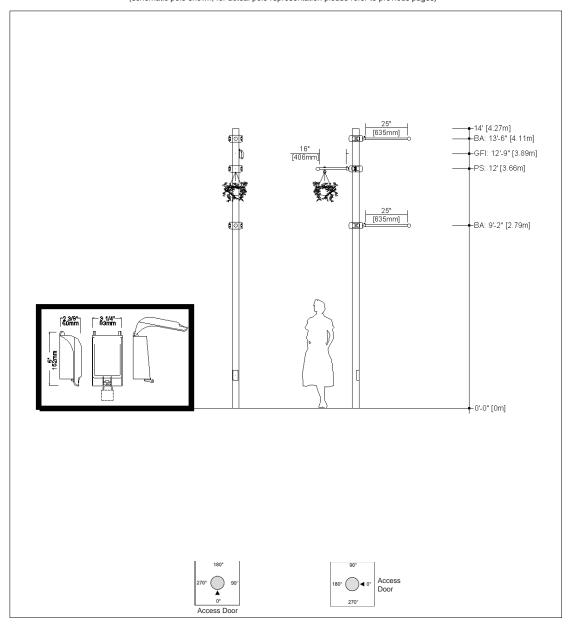


AP .2.6 Lumec Detail 6 of 6 14ft. Lighting Pole with Double Banner

Toronto Emery Village BIA (55213)

Parametric Options Illustration

(schematic pole shown, for actual pole representation please refer to previous pages)



LCP60282-55213-160(SA)OB.DOC 12-12-2014 Page 6 / 8



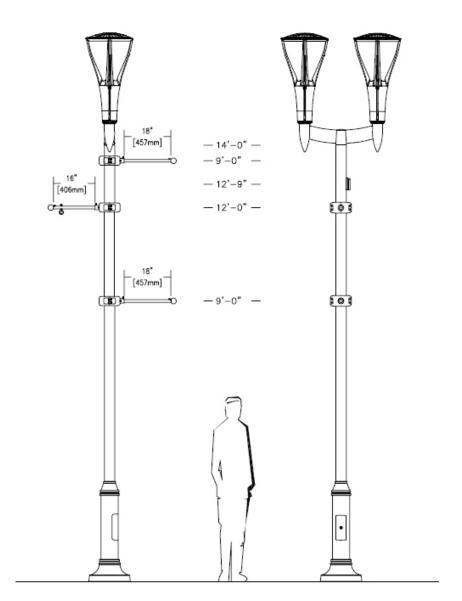






Presentation





Toronto Emery Village BIA (55213)

Type: New Installation MPTC-35W32LED4K-T-LE4-120-[CAL2C-001]-2-90DEG-SM6V-14-BACS25(2)-GFII-PSCD16-3/4x20-10 1/2-DEC-BKTX 20141110_144502.doc

MPTC-TA-60282-55213-IT



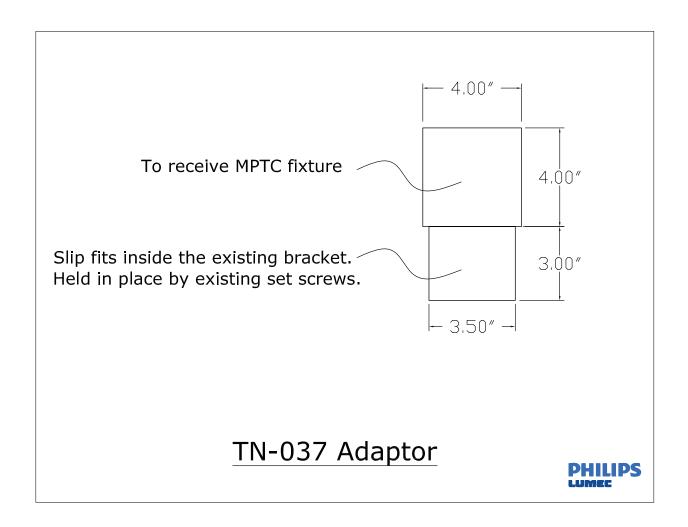




AP .3 LED LIGHTING POLE ADAPTER - 14FT.

Where BIA light poles have been built, Landowners should include Section 5.14.8 in the Landscape Plans. This adapter retrofits the smaller 3.5" of the conventional lighting pole for the 4" needed for the new LED fixture.

Existing Lighting Pole Retrofit for LED Lighting AP .3.1



AP .4 CONCRETE PLANTERS

Raised planters within the BIA streetscape improvements are to be replaced with concrete planters using formliner system. Landowners should specify on Landscape plans the Reckli Formliner manufacturer and the Amrum form as the liner pattern.



RECKLI SUPPLIER:
Tri-Krete Limited
152 Toryork Dr.
Toronto, Ontario M9L 1X6
T: (416) 746-2479 F: (416) 746-6218
www.tri-krete.com

NOTE:

Tri-Krete to provide shop drawings prior to installation. Design of Planter will vary according to site conditions.



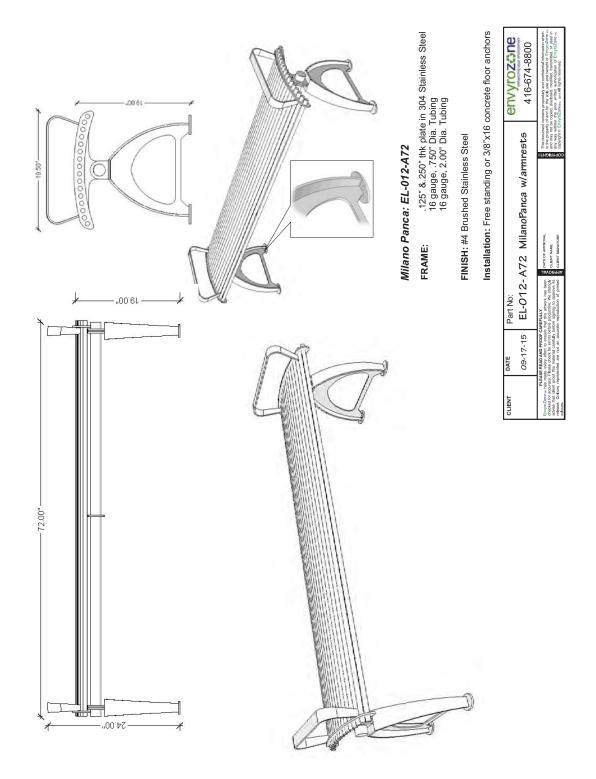






AP .5 STAINLESS STEEL BACKLESS BENCH

AP .5.1 Manufacturer's Detail for Stainless Steel Backless Bench



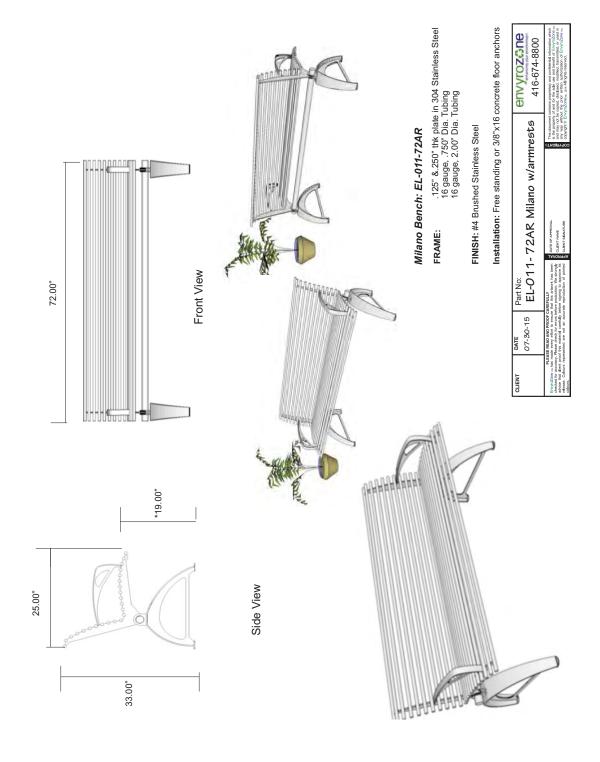






AP .6 STAINLESS STEEL BENCH

AP .6.1 Manufacturer's Detail for Stainless Steel Bench



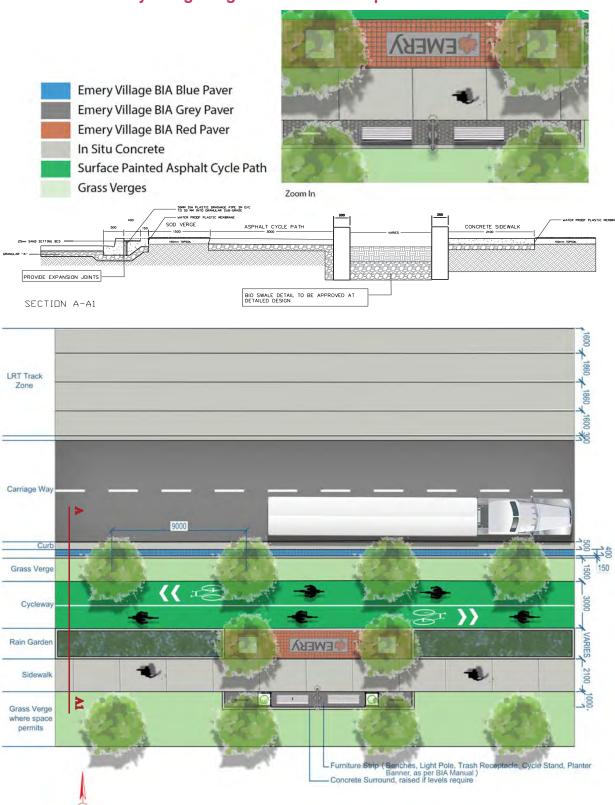






AP .7 MIXED USED CORRIDORS OPTION C

AP .7.1 Emery Village Logo in Transition Strip



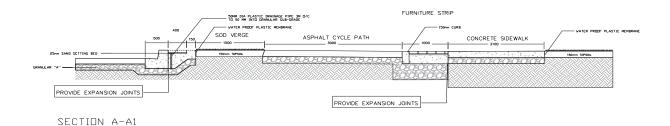


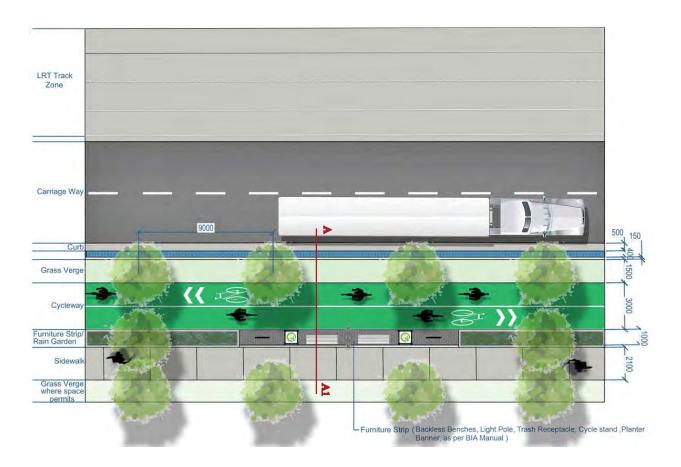


AP .7 MIXED USED CORRIDORS OPTION D

AP .7.2 Dual Cycle Path at Sidewalk Grade with Separator Strip







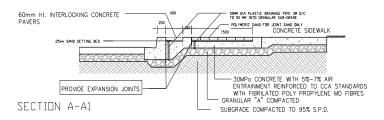


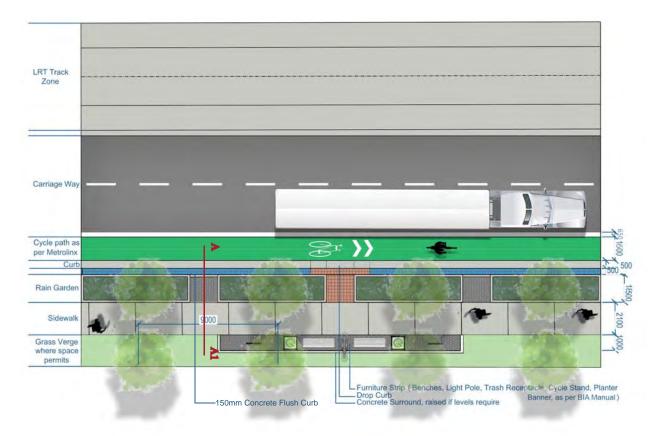


AP .7 MIXED USED CORRIDORS OPTION E

AP .7.3 Single Cycle Path at Road Grade.





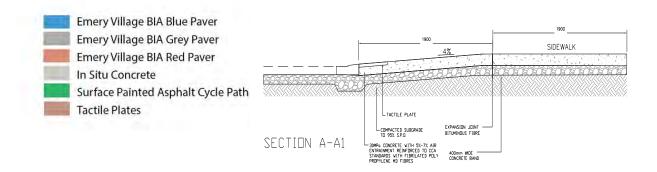


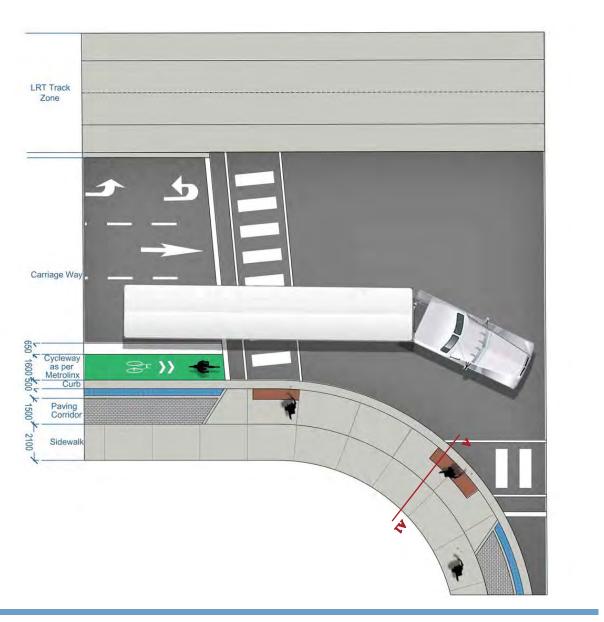




AP .7 MIXED USED CORRIDORS OPTION F

AP .7.4 **Wide Crosswalk Treatment**





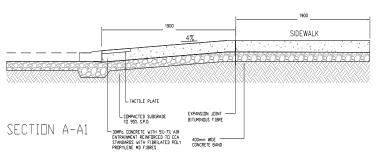


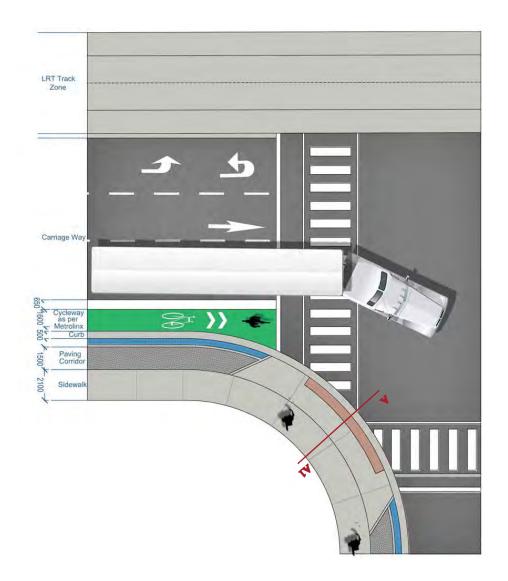


AP .7 MIXED USED CORRIDORS OPTION G

AP .7.5 Small Crosswalk Treatment









AP .7 MIXED USED CORRIDORS OPTION F

AP .7.6 Typical Furniture Layout



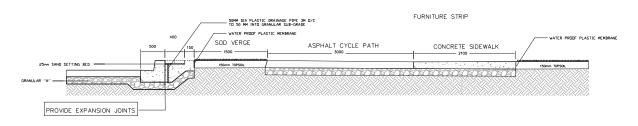




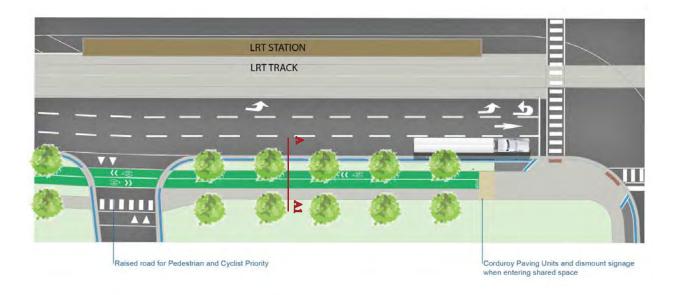
AP .7 MIXED USED CORRIDORS OPTION G

AP .7.7 Typical Junction Approach





SECTION A-A1

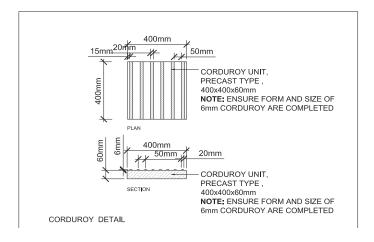


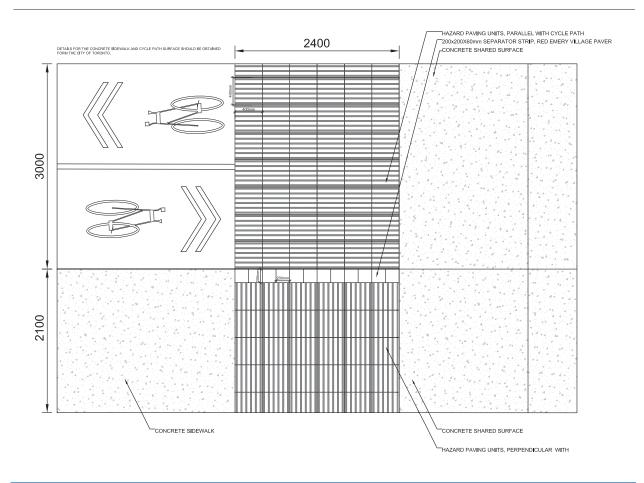






AP .7.8 Corduroy Paving Detail











AP .8 PLANTER - 36 INCH HT

SF .8.1 Manufacturer's Detail for 36" Ht Planter.

