

Queens Quay Working Group Meeting #10

April 26, 2011

Agenda

1. Welcoming remarks
2. Introduction and meeting overview
 - a. Review agenda
 - b. Review draft meeting minutes from March 22nd
 - c. Review comments/issues matrix
3. Report back on BIXI program
4. Queens Quay process update
5. Meeting working schedule and next steps

Working Schedule

WORKING GROUP MEETING		AGENDA ITEMS
8	February 17, 2011	<ul style="list-style-type: none">• Update on Queens Quay phasing/funding• Update on Curbside Management Plan• Update on Yonge Street, York Street and Bay Street ramp EA• James Urban introduction to working group
9	March 22, 2011	<ul style="list-style-type: none">• Curbside management working session
10	April 26, 2011	<ul style="list-style-type: none">• Queens Quay design update• Report back on issues/comments
11	May 24, 2011	<ul style="list-style-type: none">• Introduction to accessibility• Update on Curbside Management• Report back on issues/comments

BIXI Toronto Public Bicycle System

Sean Wheldrake,
Cycling Infrastructure and
Programs Unit.

What is a Public Bicycle System?



TRANSPORTATION SERVICES

Transportation Infrastructure

Management Section

What is a Public Bicycle System?

- Designed to operate like an extension of the public transit system.
- To be used for one-way trips of less than 30 minutes in duration.

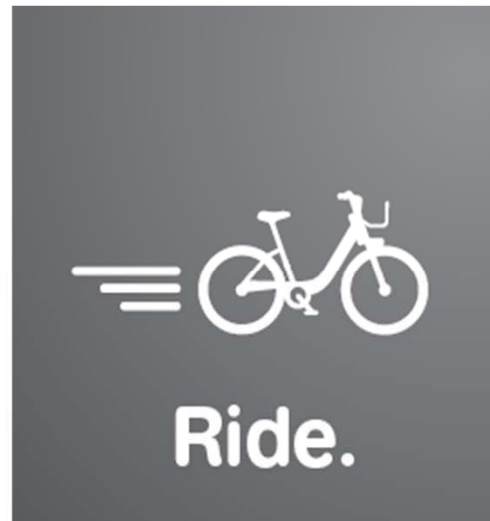
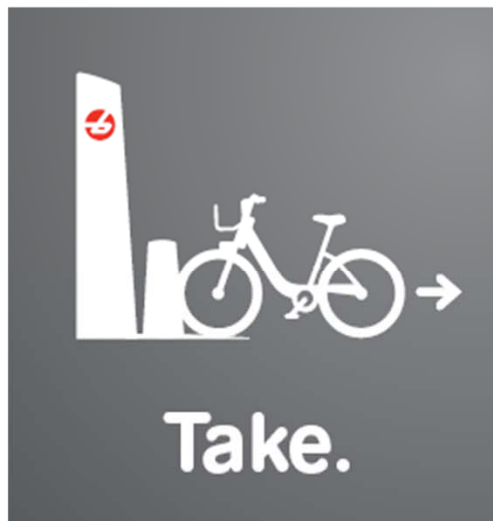
How does a Public Bicycle System Operate?

- Regular users purchase a membership or “pass” for, one month to one year
- Have 24-7 access to the bicycles
- There is no trip fee if the bicycle is returned within 30 minutes
- Bicycles can be picked up and dropped off at any bicycle parking station
- Non-members or day users access system at any station with credit card

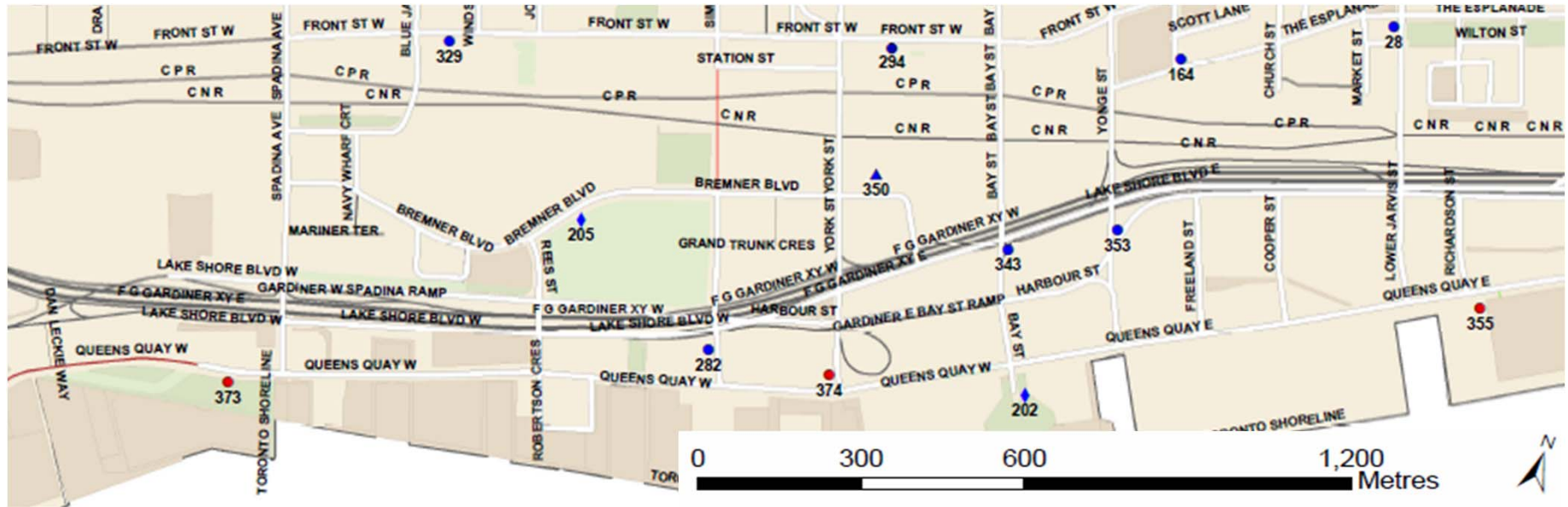
BIXI Toronto. 24-7. 365 days a year.



Users have 30 minutes



A Network of Stations



TRANSPORTATION SERVICES
Transportation Infrastructure
Management Section

Fees

Basic fees + Usage fees for each trip

\$95 / 1 year

\$40 / 30 days

\$5 / 24 hour

+

0-30 min
INCLUDED

31-60 min
+ \$1.50

61-90 min
+ \$4.00

For every additional half-hour
+ \$8.00 + ...

One-time payment per period per bike

Taxes NOT included.

Interconnexion of transportation modes



Bike sharing system facilitates your commute until the last kilometre .

- Easy to use
- Efficient
- Economic

Design. Innovation. Technology.

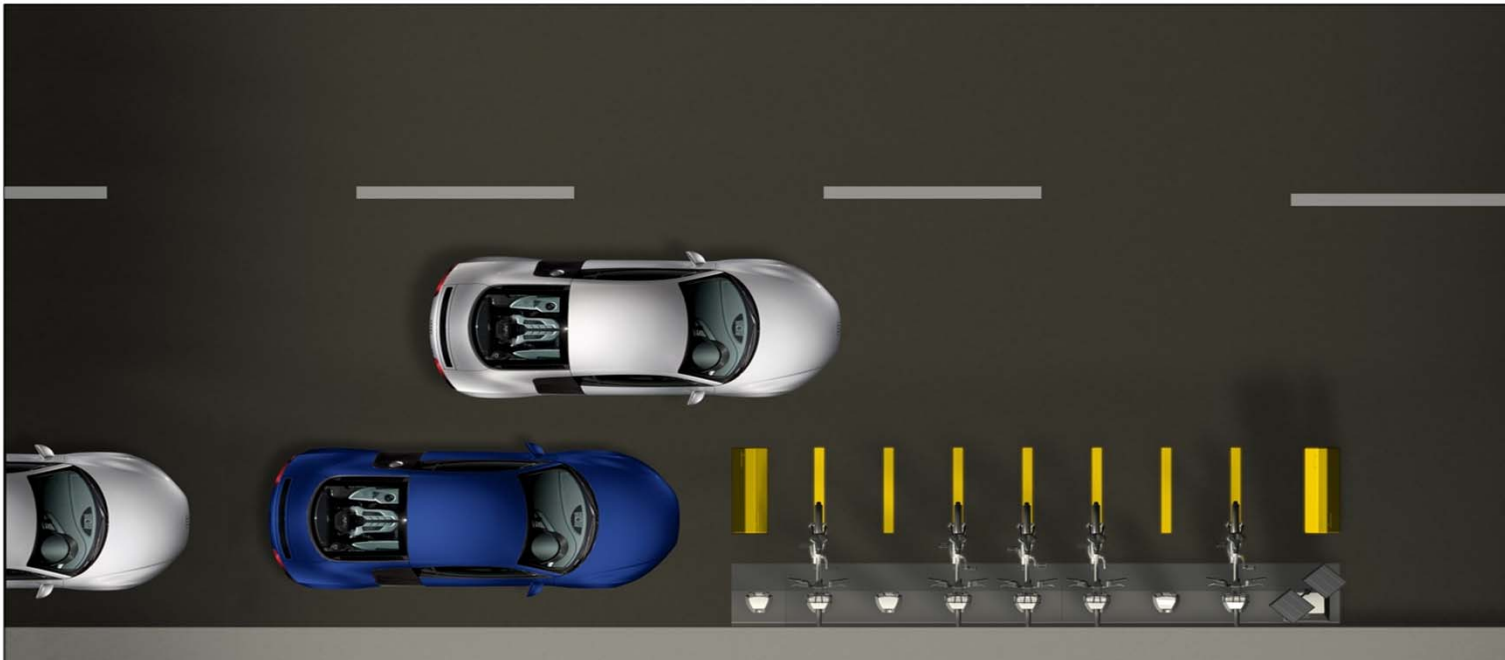


- Discrete system blending in urban landscape without overriding it
- Practical and aesthetic
- Modern and elegant design
- Safe and robust bikes

Design. Innovation. Technology.

No permanent infrastructure.

Bikes, docking points and transactional kiosks:
modular and ready to use (“plug and play”).



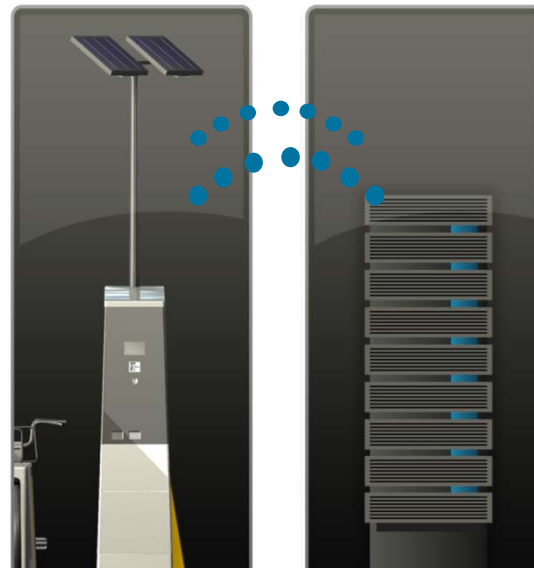
Design. Innovation. Technology.

BIXI. AN ENVIRONMENT FRIENDLY SYSTEM.

Minimum impact on the environment – modular and portable, requiring no excavation or preparatory work for installation



Wireless communications technology Solar energy powered



Minimum impact on the environment from installation to operations



Pay Station



The Bicycle



- aluminum frame – light, strong, durable
- active lighting – front and back, always on
- Front and rear internal brakes for greater safety
- Adjustable seat positioning – standardized through entire fleet of bikes
- Suitable for wide range of riders
- Low center of gravity for greater stability

TRANSPORTATION SERVICES

Transportation Infrastructure Management Section

Background



→ Cities around the world are looking for long term and concrete solutions to diminish negative effects on the environment and the reduction of our addiction to car transportation.

→ The City of Montreal transportation plan focuses on active transportation.

→ **October 2007**, the City of Montreal gives to Stationnement de Montréal the mandate to create, develop and operate a bike sharing system.



Successful in Montreal



- More than 28,000 annual members
- More than 100,000 day users
- More than 2 million rides
- 5,000 bikes/ 400 stations
- Millions of kg of green house gases less

BIXI Bike Community



A people community identifying themselves to and gathering around **environment protection**



A people community who have adopted a **healthy lifestyle, focused on health and physical activity**



A people community praising the use of **public transportation**



A people community tracing the path and setting **trends**



A people community who are pioneers in the bike sharing revolution around the world



Contact BIXI Toronto

- Email: info@toronto.bixi.com
- Toll free: 1-877-412-BIXI (2494)



Questions?



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TRANSPORTATION SERVICES

Transportation Infrastructure Management Section

Queens Quay process update



SCHEMATIC DESIGN

Queens Quay



TORONTO CENTRAL WATERFRONT - EAST BAYFRONT QUEENS QUAY REVITALIZATION

PROGRESS SUBMISSION #1 2010.10.26

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Toronto Technical Services
PETER CHENNETT, P. ENG., EXECUTIVE DIRECTOR, TECHNICAL SERVICES
DORON WACHULLA, P. ENG., DIRECTOR DESIGN & CONSTRUCTION - LINER INFRASTRUCTURE

WEST 8 + DTAH

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Murphy & Research International Inc.
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PMI Inc.
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Stuart Manning Systems
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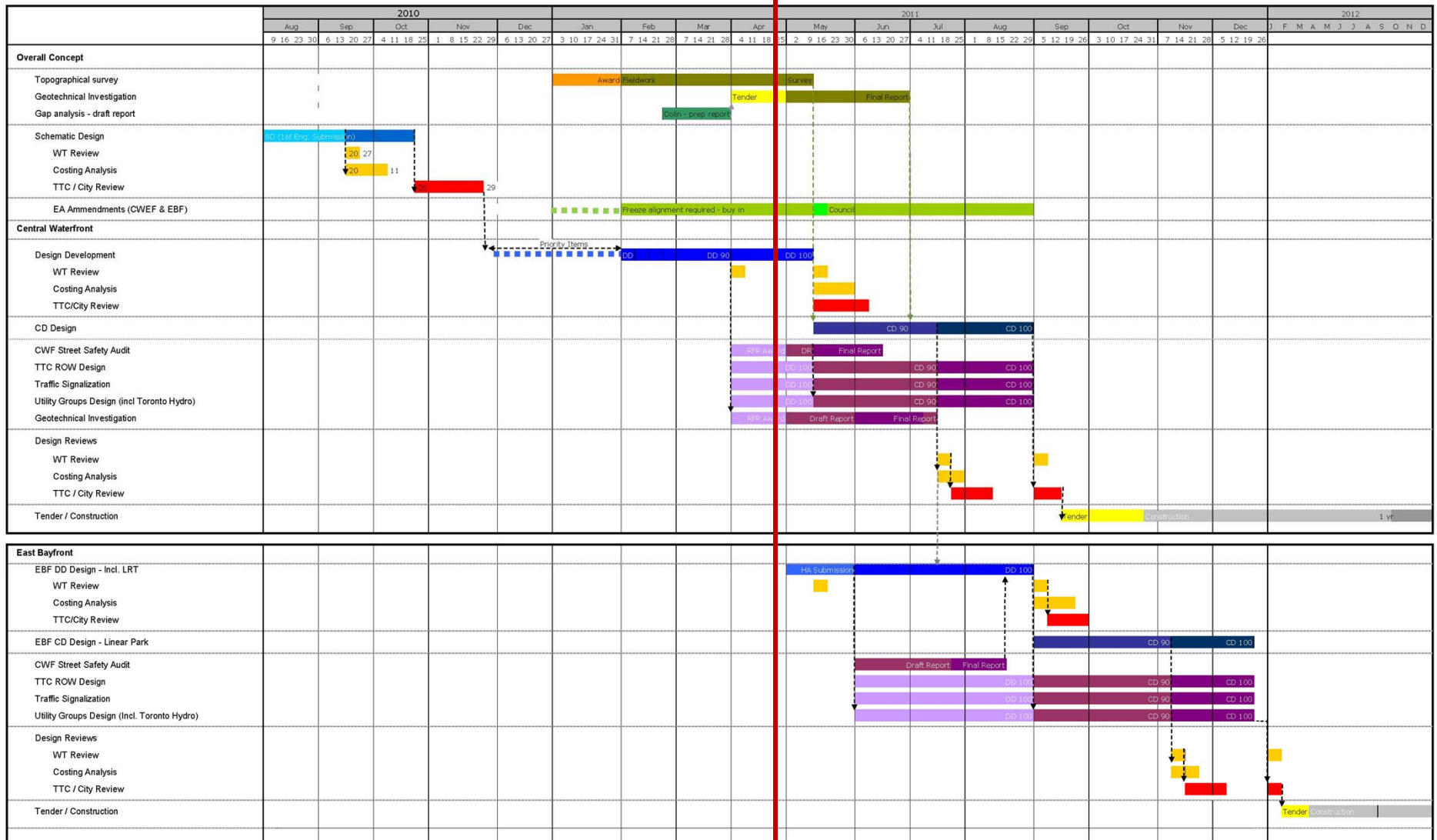
General	G-1	Plate Breakdown Plan
	G-2	Project Boundary and Adjacent Projects
	G-3,(1 to 3)	Road and Transit Alignment Plans
CIVIL		
Staging	M-STG-CWF	Construction / Traffic Staging, Typical Sections, Bathurst to Bay Street
Removals	P-CONS-(001 to 007)	Removals and Construction
Profiles	P-PROF-(001 to 004)	Construction Profiles
Sections	P-SECT-CWF	Typical Sections, Bathurst to Bay Street
	P-SECT-(001 to 009)	Typical Sections, Removals and Construction, Bathurst Street to Bay Street
Utilities	U-SUM-CWF	Composite Utility Plan, West Limits to STA 119+00
	U-STM-(001 to 007)	Utility Treatment, Storm Sewer
	U-SAN-(001 to 007)	Utility Treatment, Sanitary Sewer
	U-WAT-(001 to 007)	Utility Treatment, Watermain
	U-GAS-(001 to 007)	Utility Treatment, Bridge Gas
	U-HYD-(001 to 007)	Utility Treatment, Hydro Utilities
	U-TELE-(001 to 007)	Utility Treatment, Telecommunications
LANDSCAPE		
Plans	L-1,(1 to 7)a	Streetcage Plans
	L-1,(1 to 7)b	Subsurface Plans
	L-2,(1 to 3)	Proposed Paving on Properties Beyond ROW
Sections	L-3,(1 to 2)	Street Sections
Details	L-4,(1 to 3)	Typical Mid-block Plan & Sections
	L-4,(4)	Typical Intersections
	L-5,(1)	Traffic Signage and Street Asymmetric
	L-5,(2)	TTC Details
	L-5,(3 to 4)	TTC Track Details
	L-6	Planting Details
	L-7,(1)	North Side Curb and Ramp Details
	L-7,(2)	South Side Curb and Ramp Details
	L-7,(3)	Paving Details
	L-8	Furnishing Details
ELECTRICAL		
Plan	E-1,(1 to 3)	Electrical Equipment Layout

NOTE:
EAST BAYFRONT DRAWINGS TO BE SUBMITTED AT A LATER DATE.

OVERALL PHASING STRATEGY

2011-03-28

TODAY



SCHEMATIC DESIGN

2010.10.26



TORONTO CENTRAL WATERFRONT - EAST BAYFRONT QUEENS QUAY REVITALIZATION

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NOTE:
EAST BAYFRONT DRAWINGS TO BE SUBMITTED AT A LATER DATE.

QUEENS QUAY

Progress Submission #1 Design Review Comments

Revised as per meetings with City of Toronto Departments

2011.03.23

WEST 8

+

DTAH

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* Comments / responses in blue indicate changes resulting from discussions with City Departments

DESIGN REVIEW COMMENTS

OVERVIEW

TTC

- Spadina/QQ intersection platform width & configuration & Half Grand Union Design
 - > platform 2.40m width & eastbound platform on east side of intersection
 - > reduce distance between intersection crosswalk and leading edge of the streetcar platforms
- TTC ROW material
 - > standard concrete top finish, no grass: TTC ROW to make the surface universally accessible to rubber tire vehicles
 - > prove that other materials work at intersection (granite unit paver or concrete unit paver)
- Curb height -> 6" high
 - > The TTC ROW must remain accessible to TTC buses and as a secondary emergency route for Fire and EMS
 - > a proposed 5" curb
- Project Timing – existing tracks must be replaced in 2012

Fire / EMS

- Proposed width of roadway -> wider than 6,60m
 - > The TTC ROW must remain accessible to TTC buses and as a secondary emergency route for Fire and EMS
- Maintain West and East driveways to EMS and egress accessibility for EMS vehicles
- Lane width at Harbour Square
- Curb height -> 4" high
 - > a proposed 5" curb
- Grass surface will not be acceptable along the TTC ROW
 - > standard concrete top finish, grass will be eliminated from TTC ROW, make the surface universally accessible to rubber tire vehicles, a textured ROW

Technical Service

- Utility spacing & subsurface utility engineering (storm/sanitary sewers)
- Detailing widening of the Peter Slip Bridge
- Property impact
 - > inventory of all properties along the corridor and list all potential impacts
- Road & track allowance
 - > roads grades shall not be less than 0.5%

GENERAL COMMENTS 3TH PARTIES/STAKEHOLDERS

OVERVIEW

Toronto Water

- Relocation
- Silva cells/trees versus utilities

Transportation Service

- Intersection design -> typical intersection has been revised
 - > pedestrian crossings
 - > location of stopbar
 - > location of traffic poles (numbers, location, ...)
 - > remove rumble strip
 - > mixing zone
- Maintenance
 - > no mosaic on private ROW
- Alternative signal head colors is not acceptable
- Accessibility
- Extension of MGT west of Spadina
- Modifications to existing parks and adjacent properties
- Layby design
- Wider crosswalks: Simcoe, York, Bay Young all provide 4m crosswalks

Urban design

- Minimum pedestrian clearway -> minimum clearway is 1.70m as per accessibility guidelines
- Trees on the north side look like they may be short of soil -> minimum of 15m, spacing 10m (was 7.5m)

Parks, Forestry & Recreation

- Encroachments into parks/limits of work
- Clear sight lines should be provided (driveway)
- Potential for a physical barrier between Harbour Square laneway and MGT
- 90cm setback between MGT and TTC platforms
- Tree species/selection

90% DETAILED DESIGN/DEVELOPMENT

Queens Quay



FOR INTERNAL APPROVAL ONLY

TORONTO CENTRAL WATERFRONT - EAST BAYFRONT QUEENS QUAY REVITALIZATION

90% DETAILED DESIGN 2011.03.31

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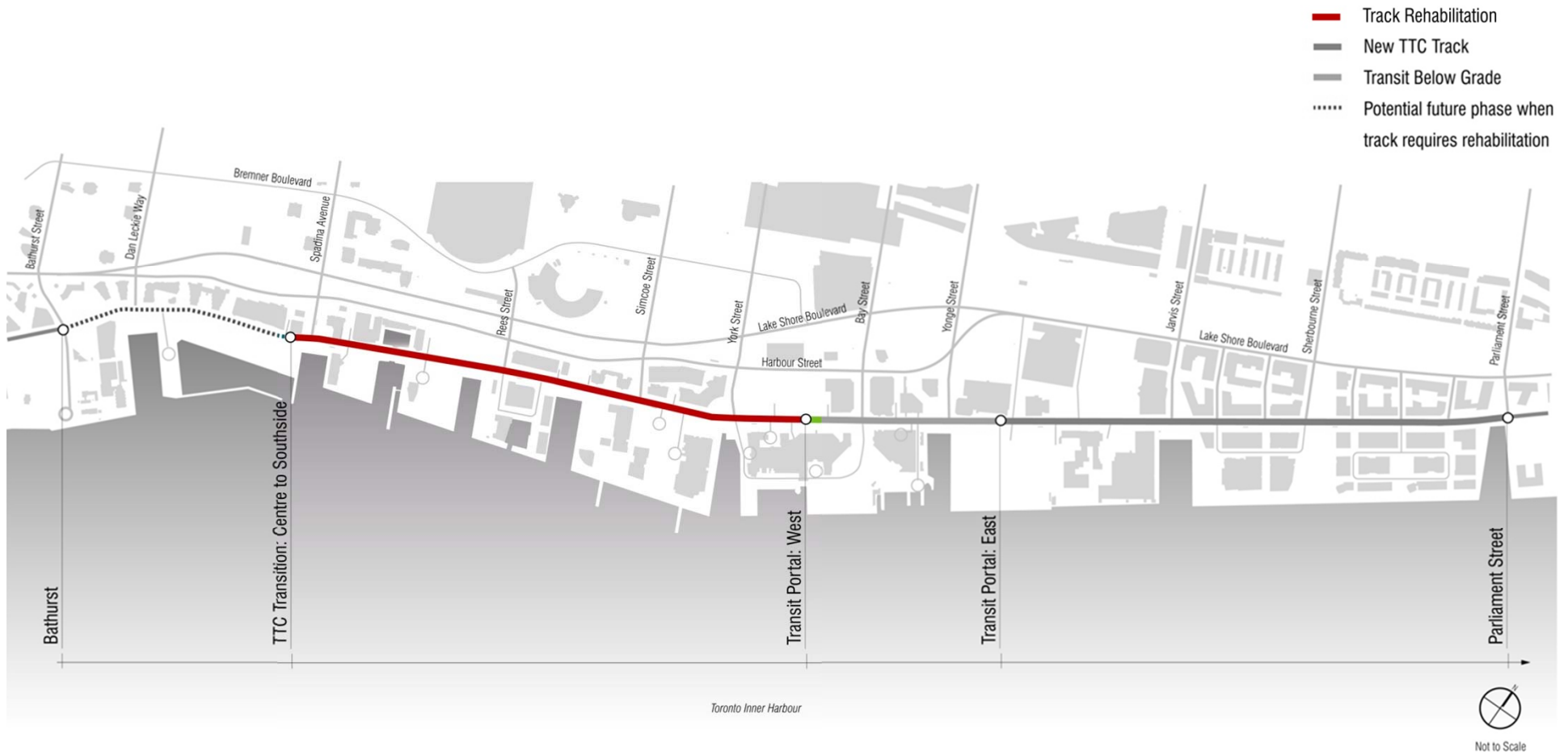
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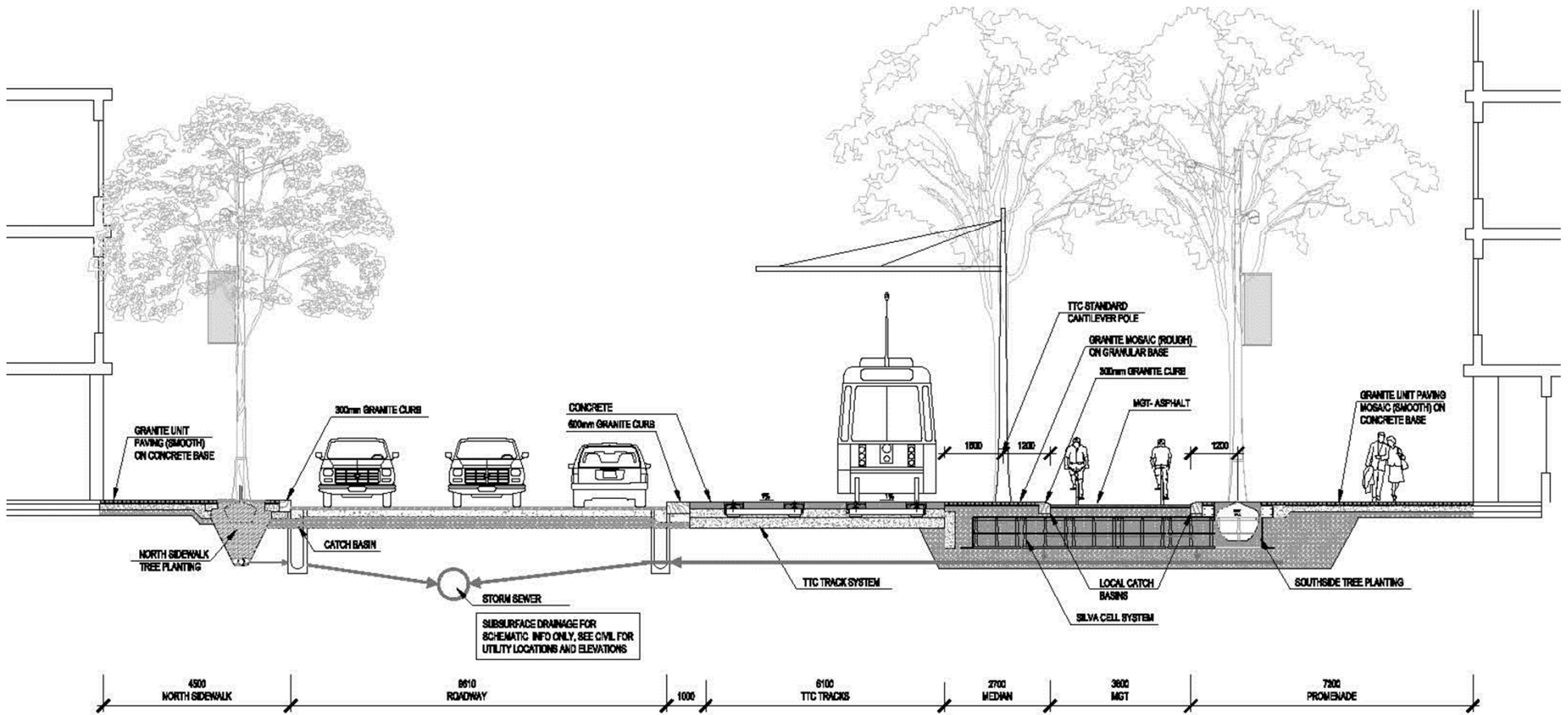
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S3.10	Peter Slip Bridge Details
S-001	
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E-2	Removals
E-3 - E-8	Street Lighting Layout
E-9 - E-14	Street Lighting Wiring Diagram
E-15 - E-17	

PROJECT BOUNDARIES



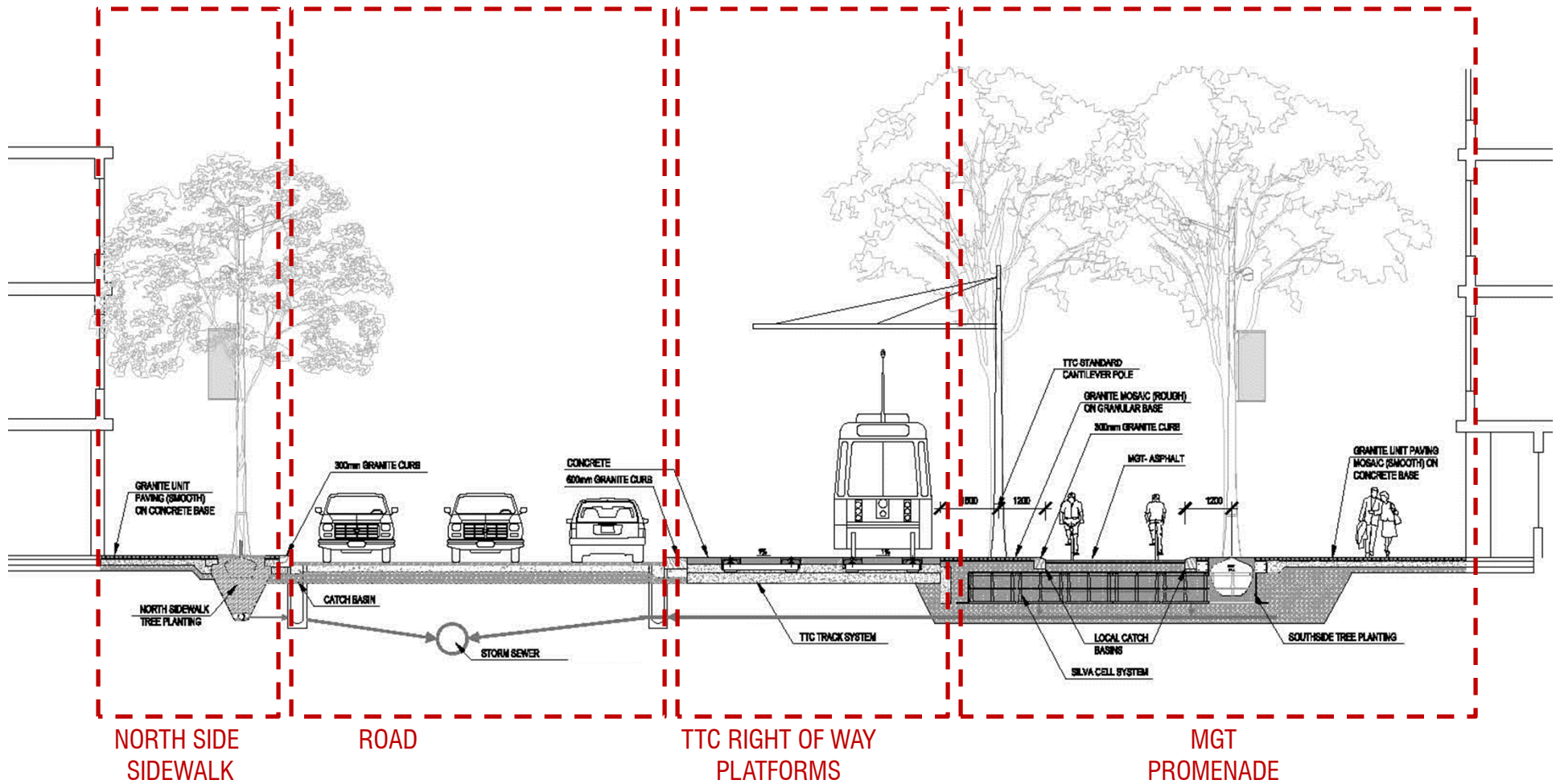
TYPICAL SECTION

Detailed Design 2011.03.31

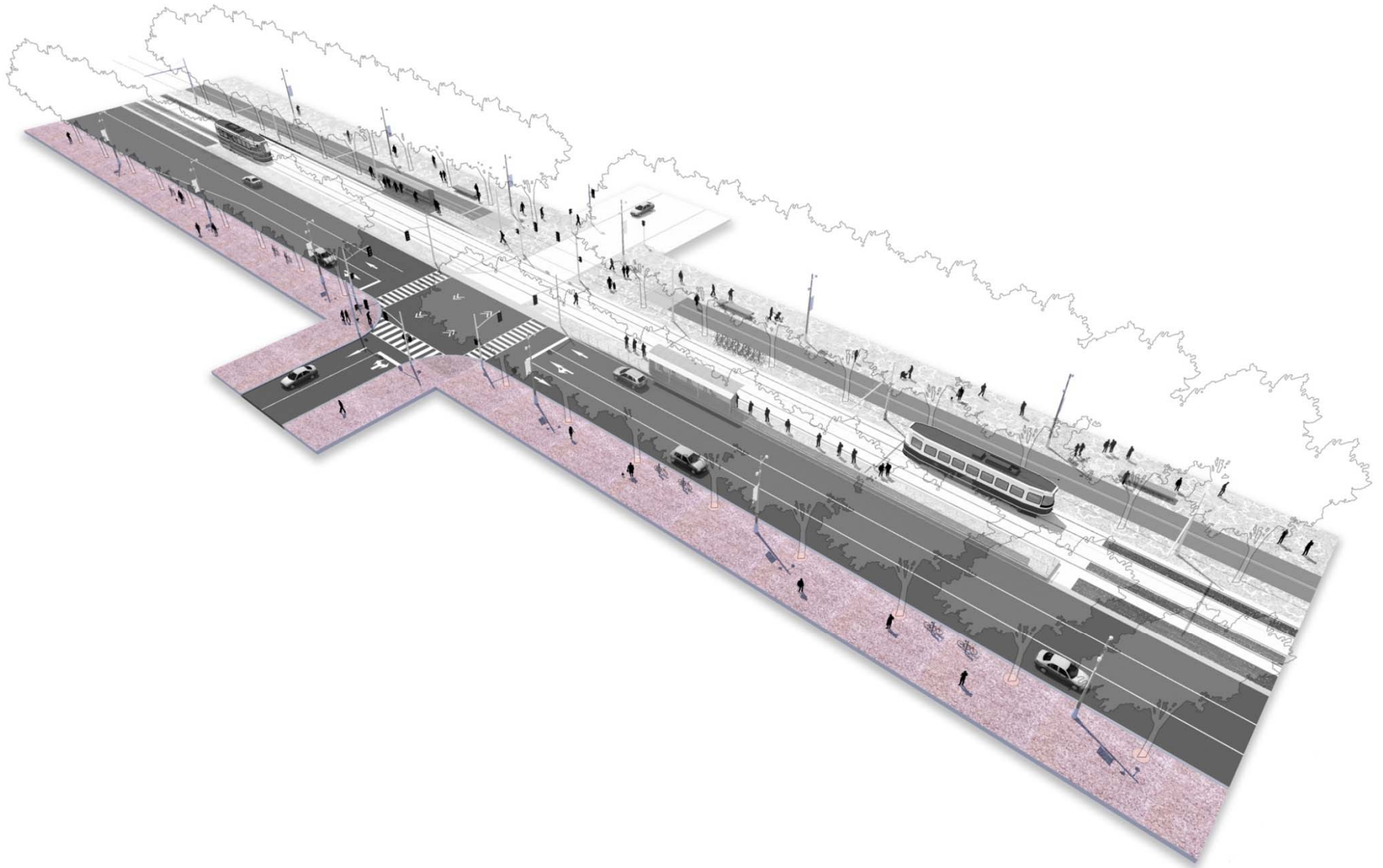


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Detailed Design 2011.03.31

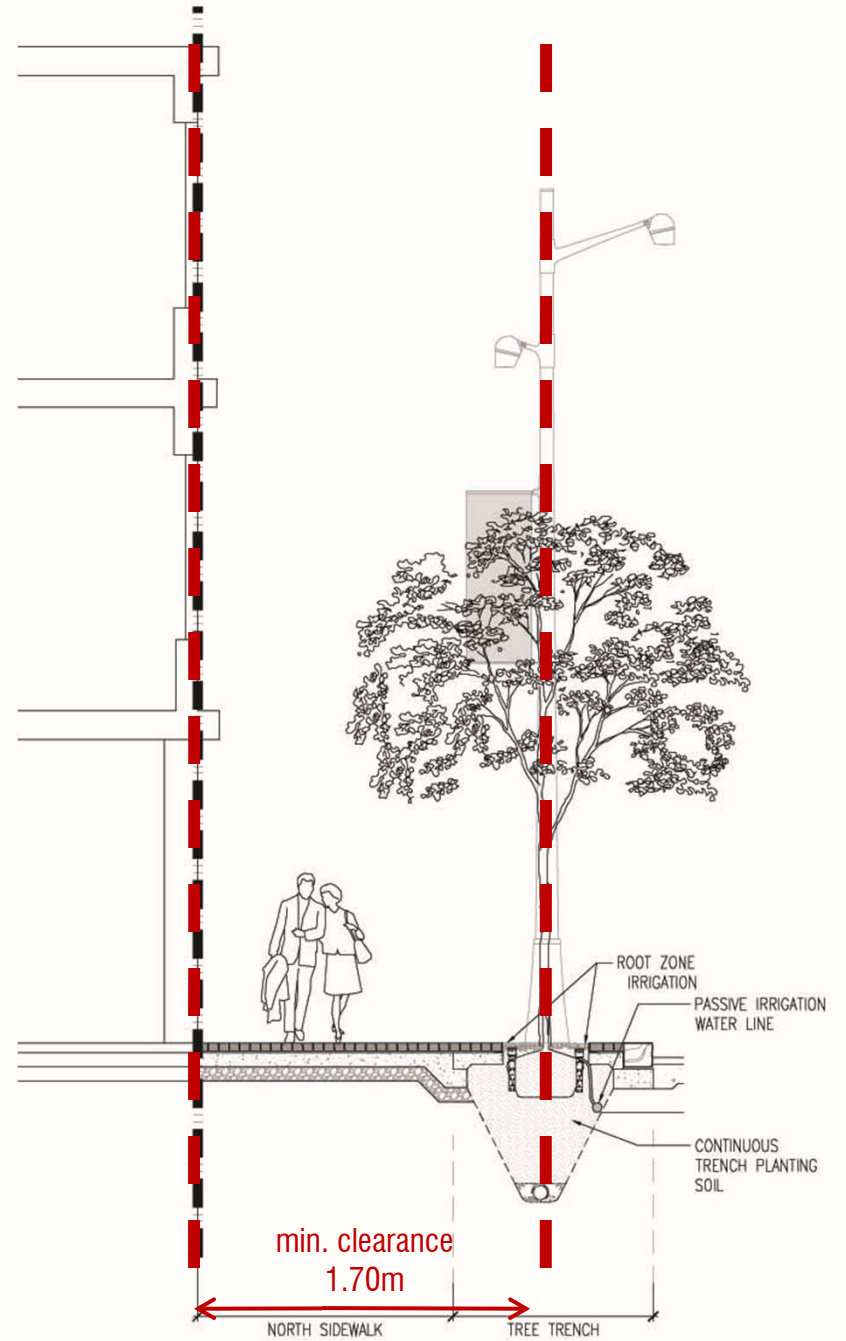
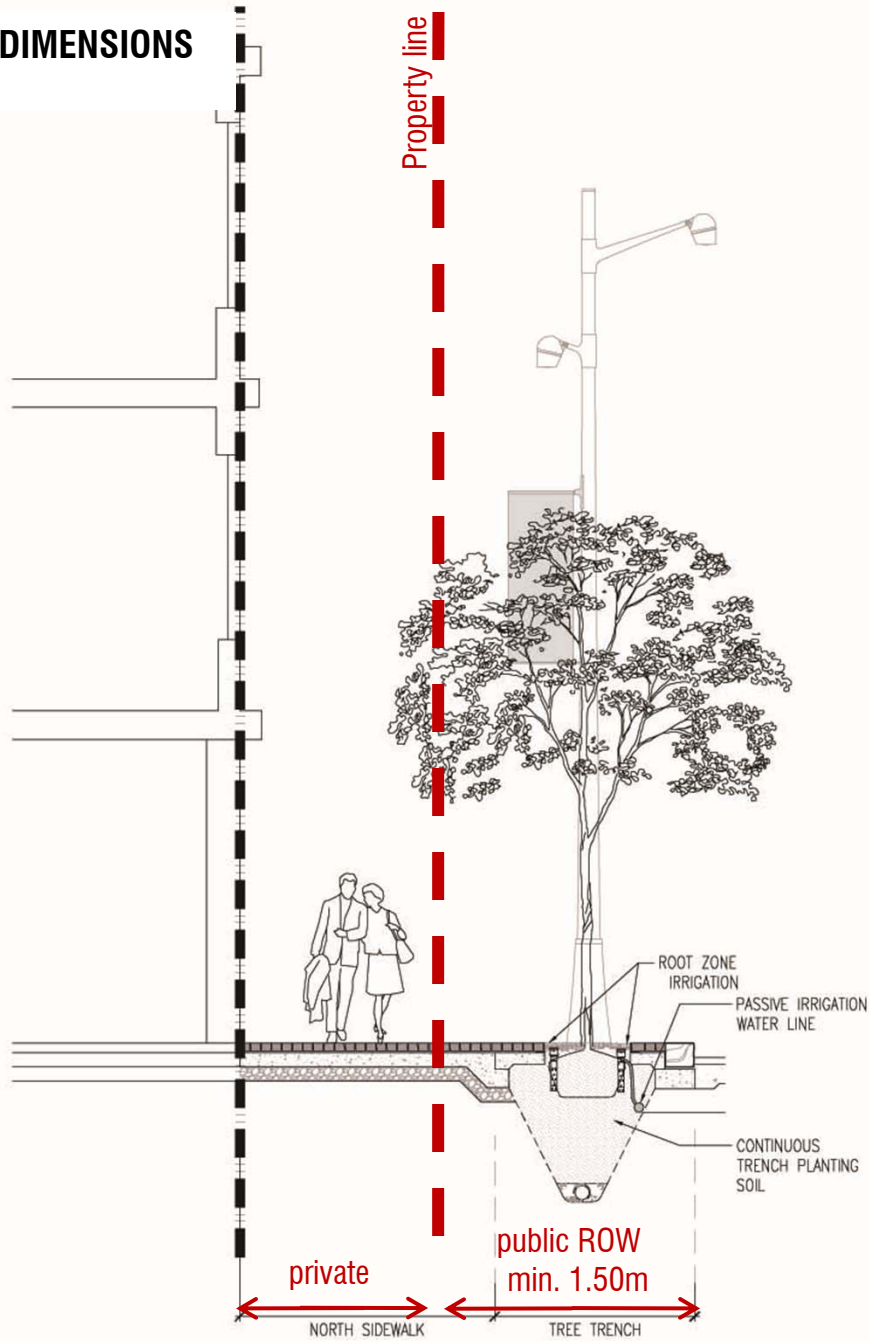


1. NORTH SIDE WALK



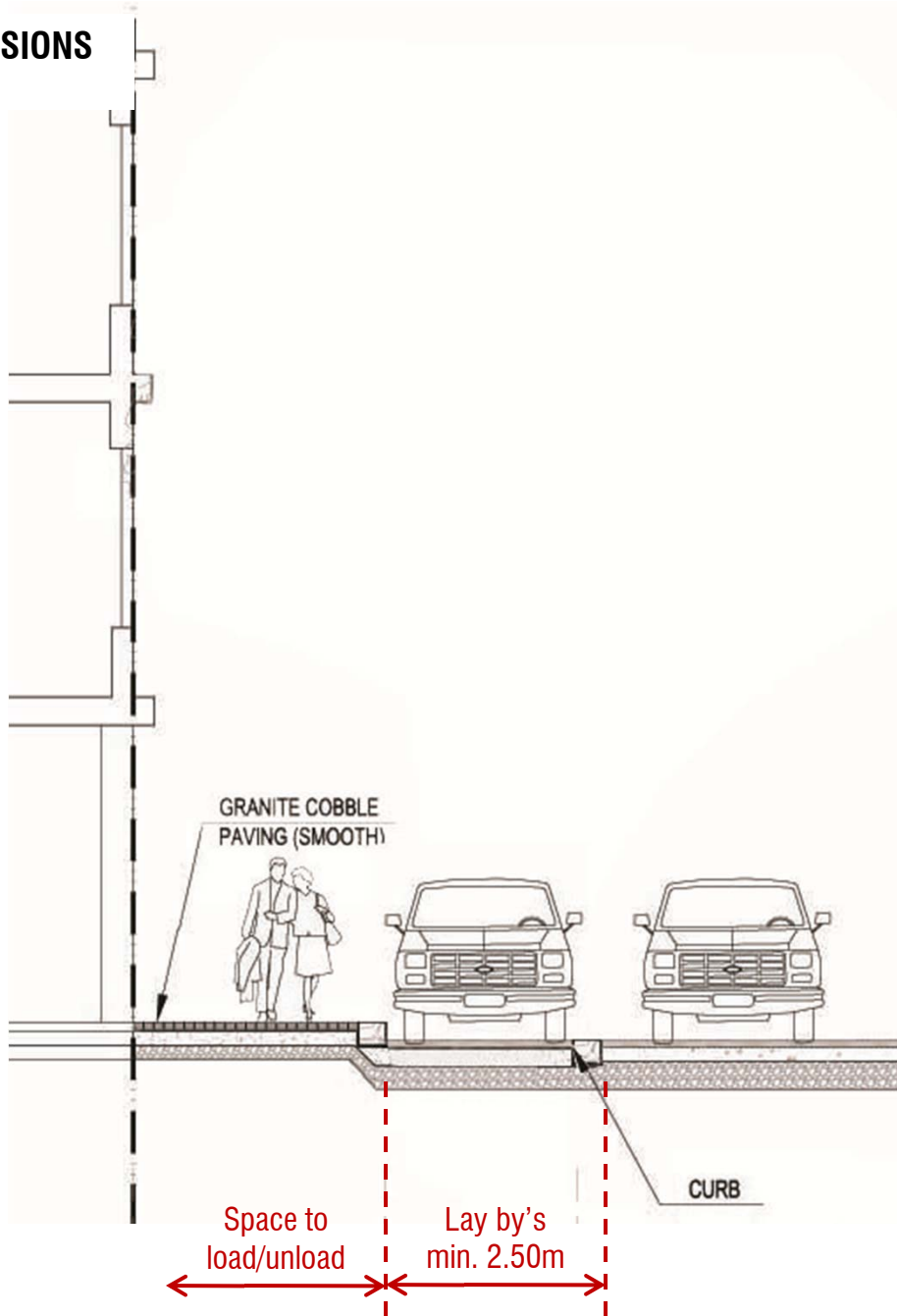
MINIMUM DIMENSIONS

North side walk



MINIMUM DIMENSIONS

North side walk



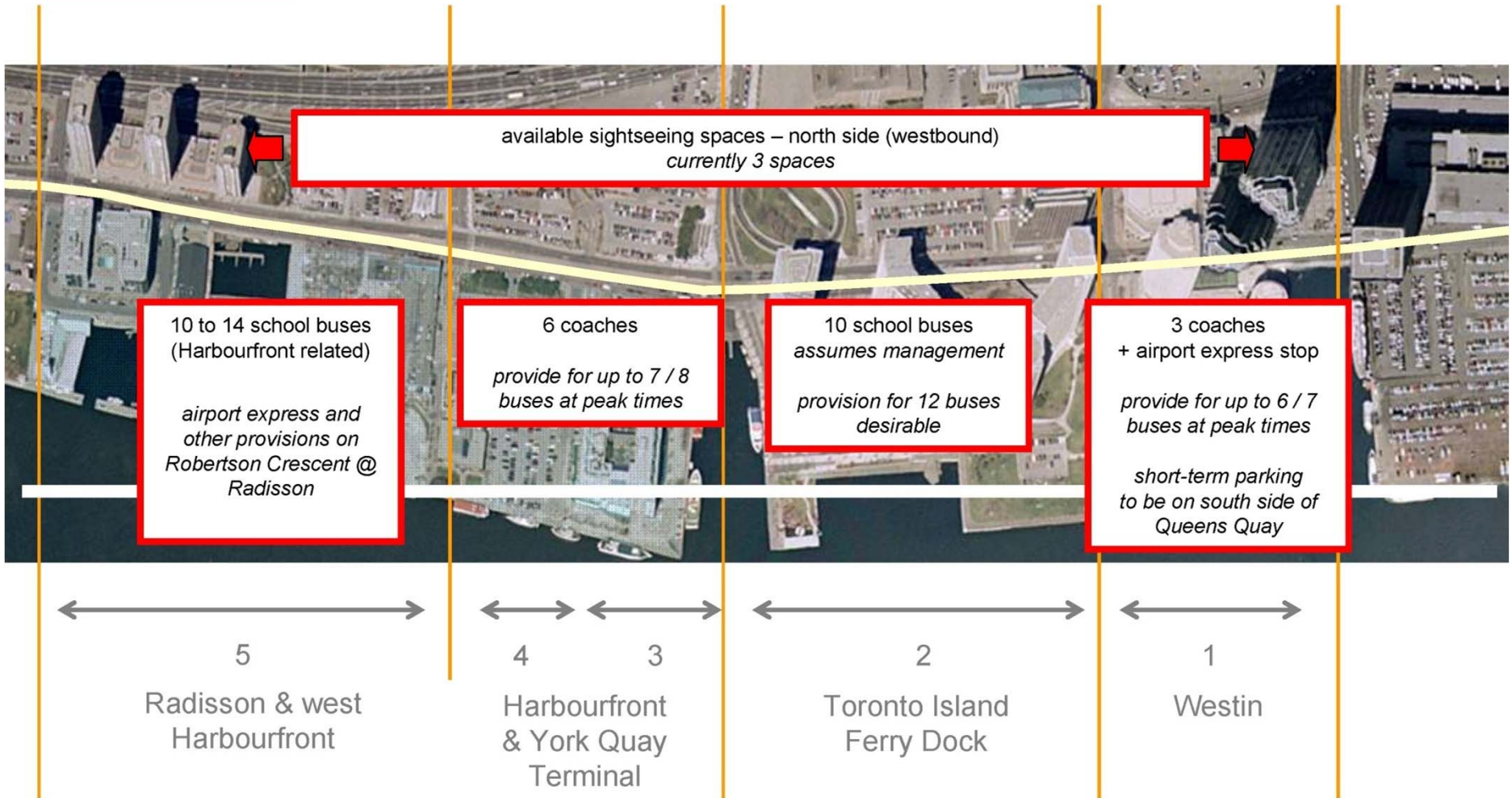
Changes:

- location and amount of parking spaces/loading unloading along the north side

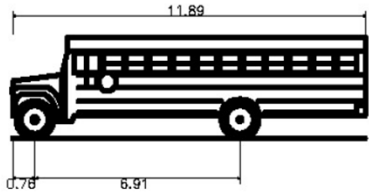
Design Bus Parking Demand Targets

3 coaches
+ 1 airport express

Bus Parking Target by Zone

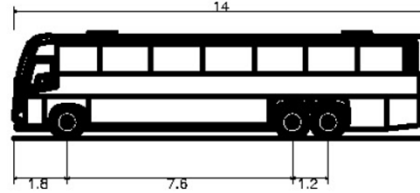


● ● ● Typical Design Bus Dimensions



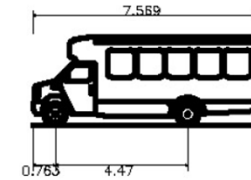
School Bus

Length 11.9m
Width 2.6m



Highway Coach

Length 14.0m
Width 2.6m

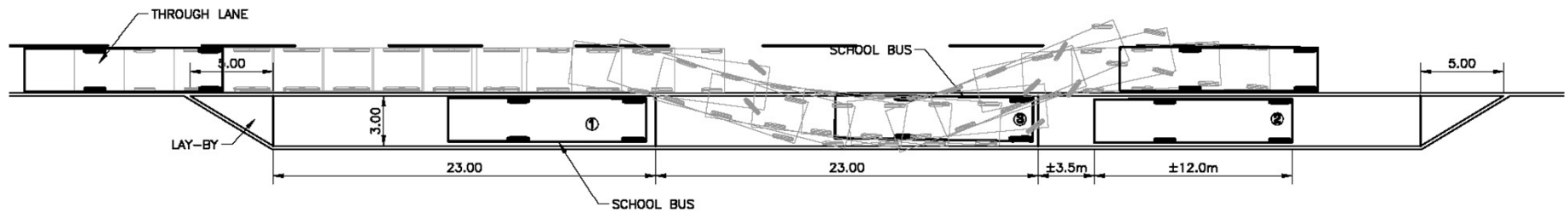


Tour Bus

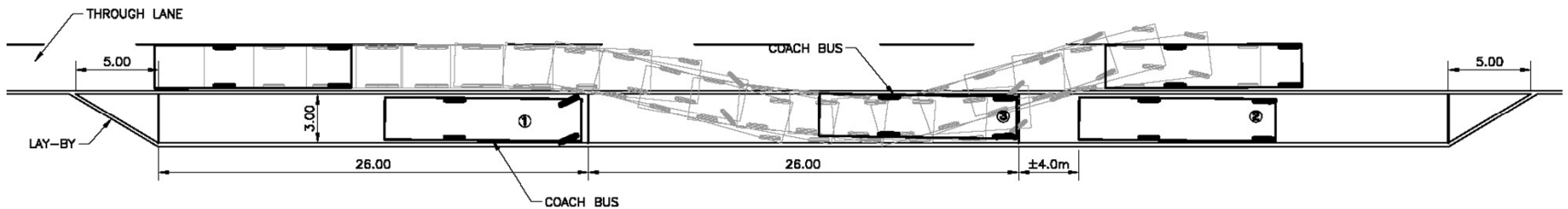
Length 7.6m
Width 2.5m



● ● ● Bus Lay-By Design – Independent Entry
– Independent Egress



+ School Buses: +/- 23.0m per bus space



+ Motor Coaches: +/- 26.0m per bus space

STREET ELEMENTS

North side walk

Sidewalks should use a higher quality materials than typical Toronto sidewalks.

1. Granite Curb



Caledonia Grey
Waterjet Finish - top
Split Face - vertical face
per EBF Public Realm detail

2. Lighting



Bulk Purchase item
9.0 m Pole
1 Long Arm and 1 Short Arm

3. Tree



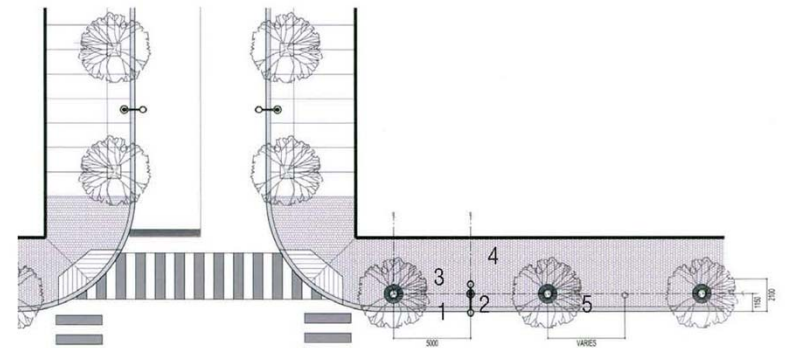
Tree species to be determined
1 type of tree

4. Paving



Red granite or concrete
t.b.c.

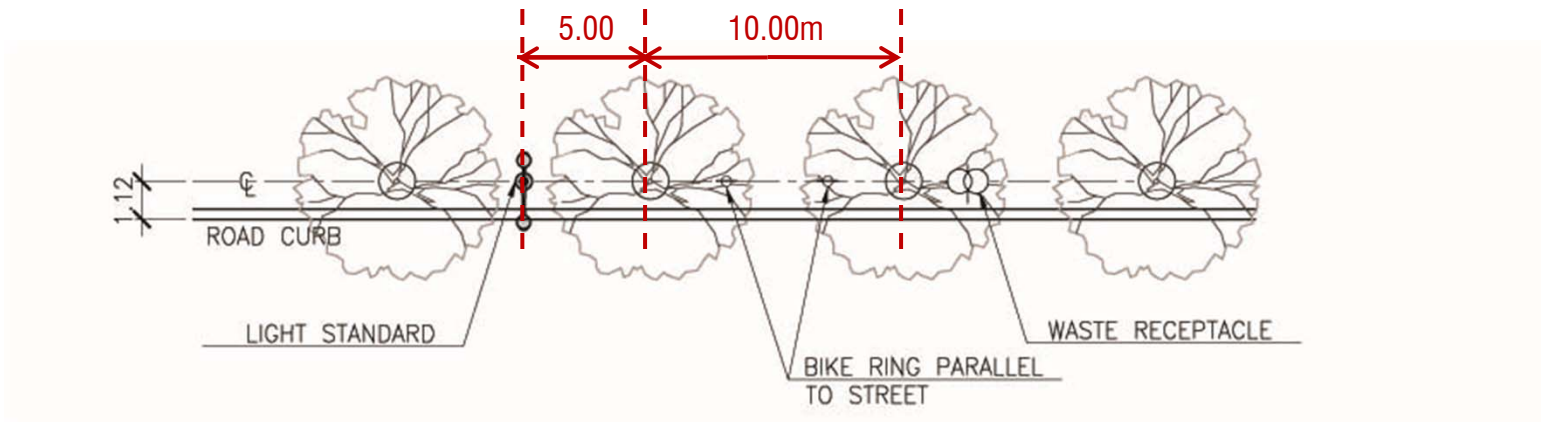
5. Tree Ring



PLACING STRATEGY STREET FURNISHING

North side walk

Changes:
- tree spacing



Light pole



Garbage receptacle



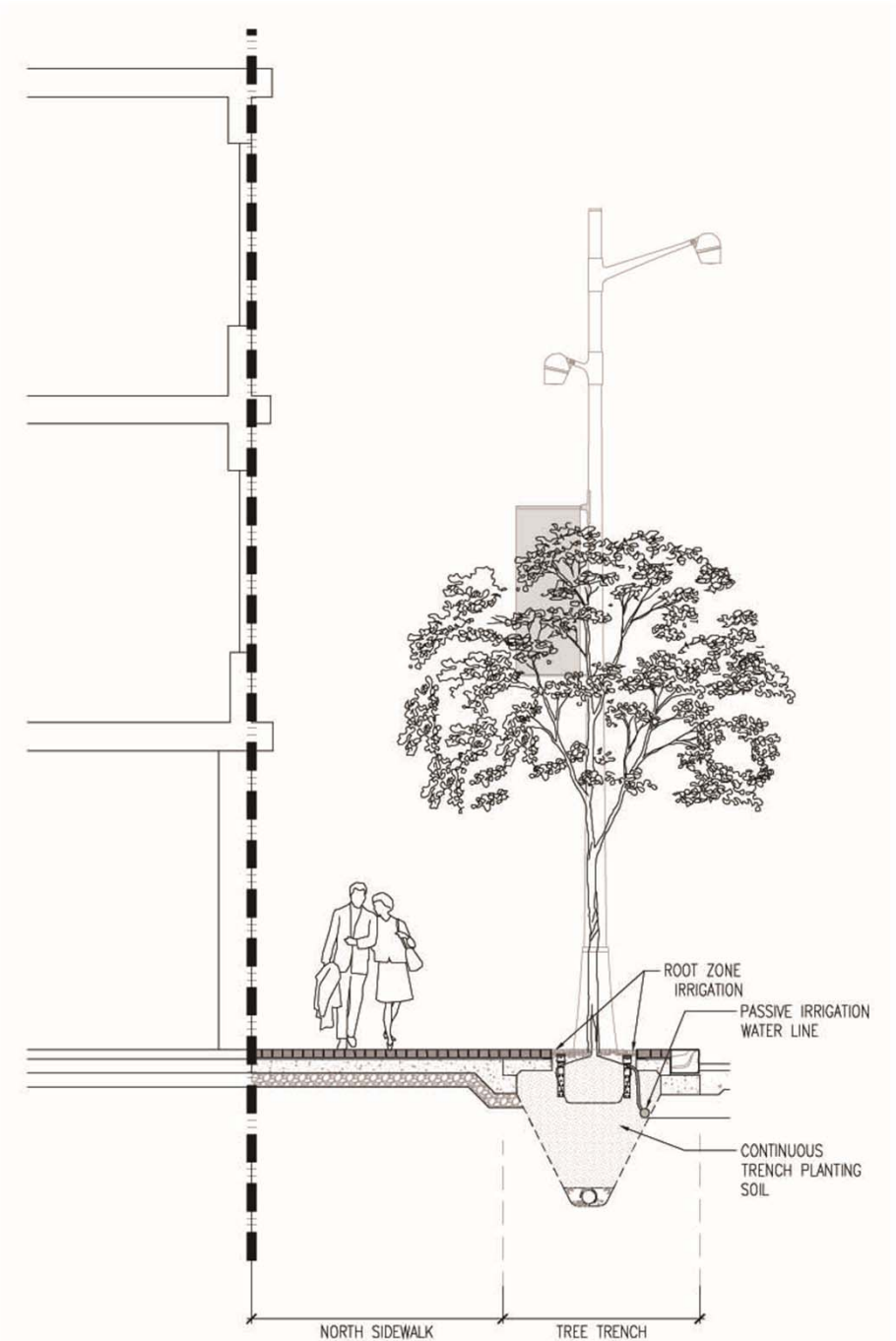
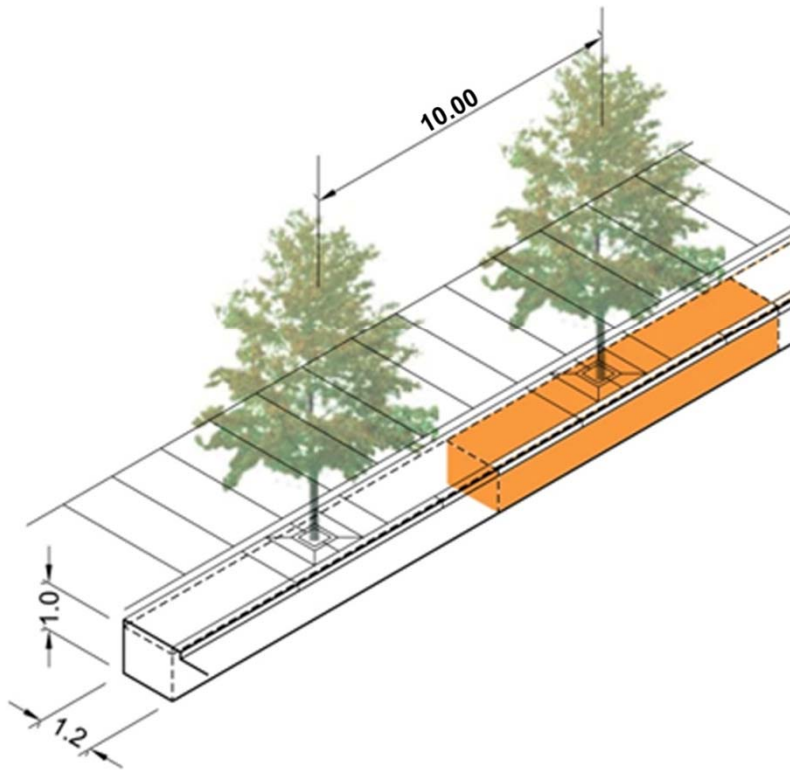
Bike ring

TREE PLANTING STRATEGY - CONDITIONS

North side walk

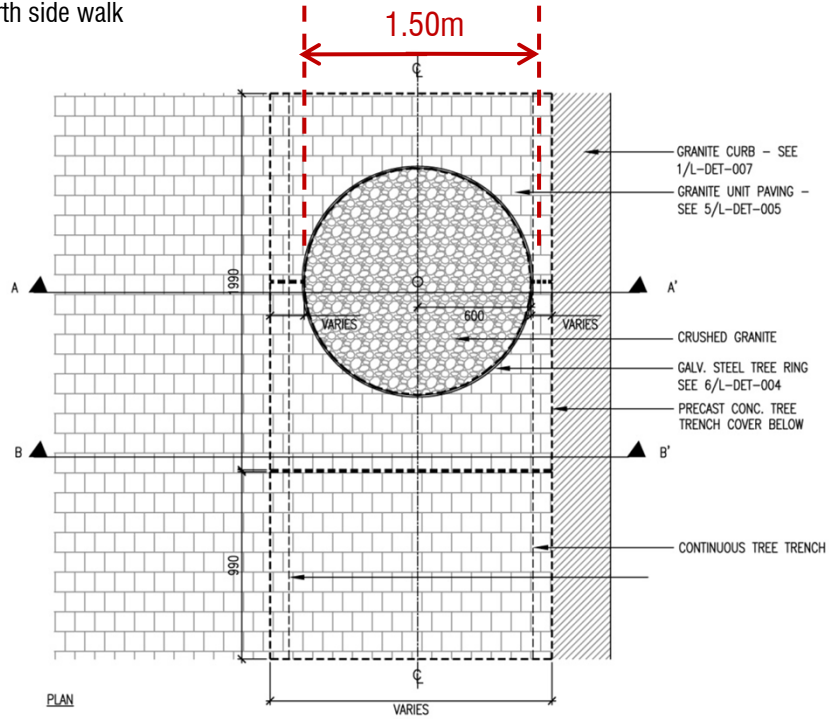
Creating the ideal conditions to plant a tree

Continuous tree trench system similar or greater than soil volume of City of Toronto Standard
- approximately 8.7m³/tree

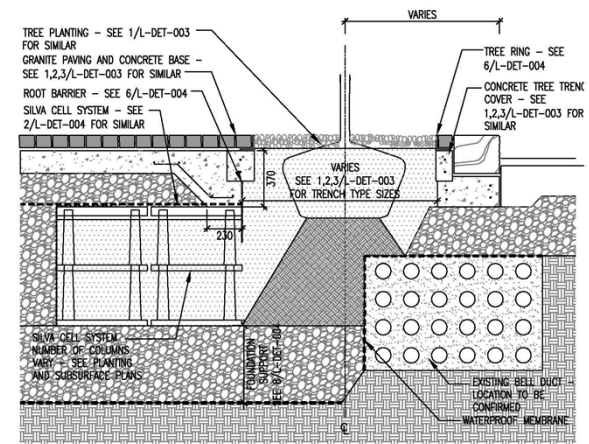
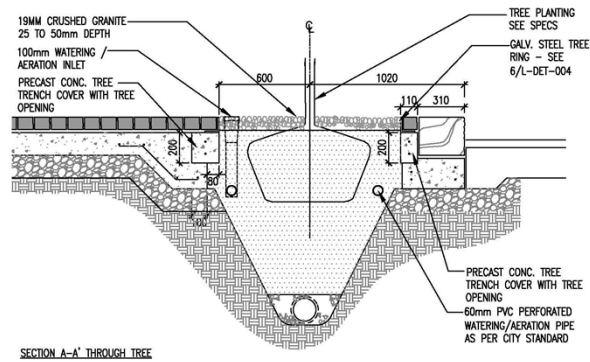
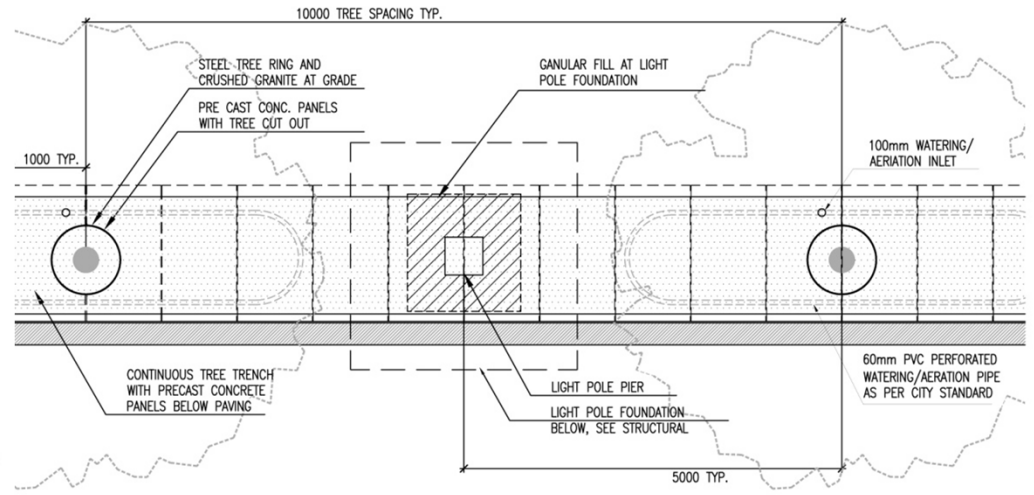


TREE PLANTING STRATEGY - CONDITIONS

North side walk



Changes:
- width of tree ring



TREE PLANTING STRATEGY – SPECIES SELECTION

North side walk

Changes:
- tree species

Diverse variety of native species and hardy cultivars, planted to suit available soil conditions

Corylus colurna / Turkish Hazel



Tilia / Greenspire Linden



Gleditsia / Sunset Honeylocust



Ulmus / Princeton Elm



Acer / Sunset Maple

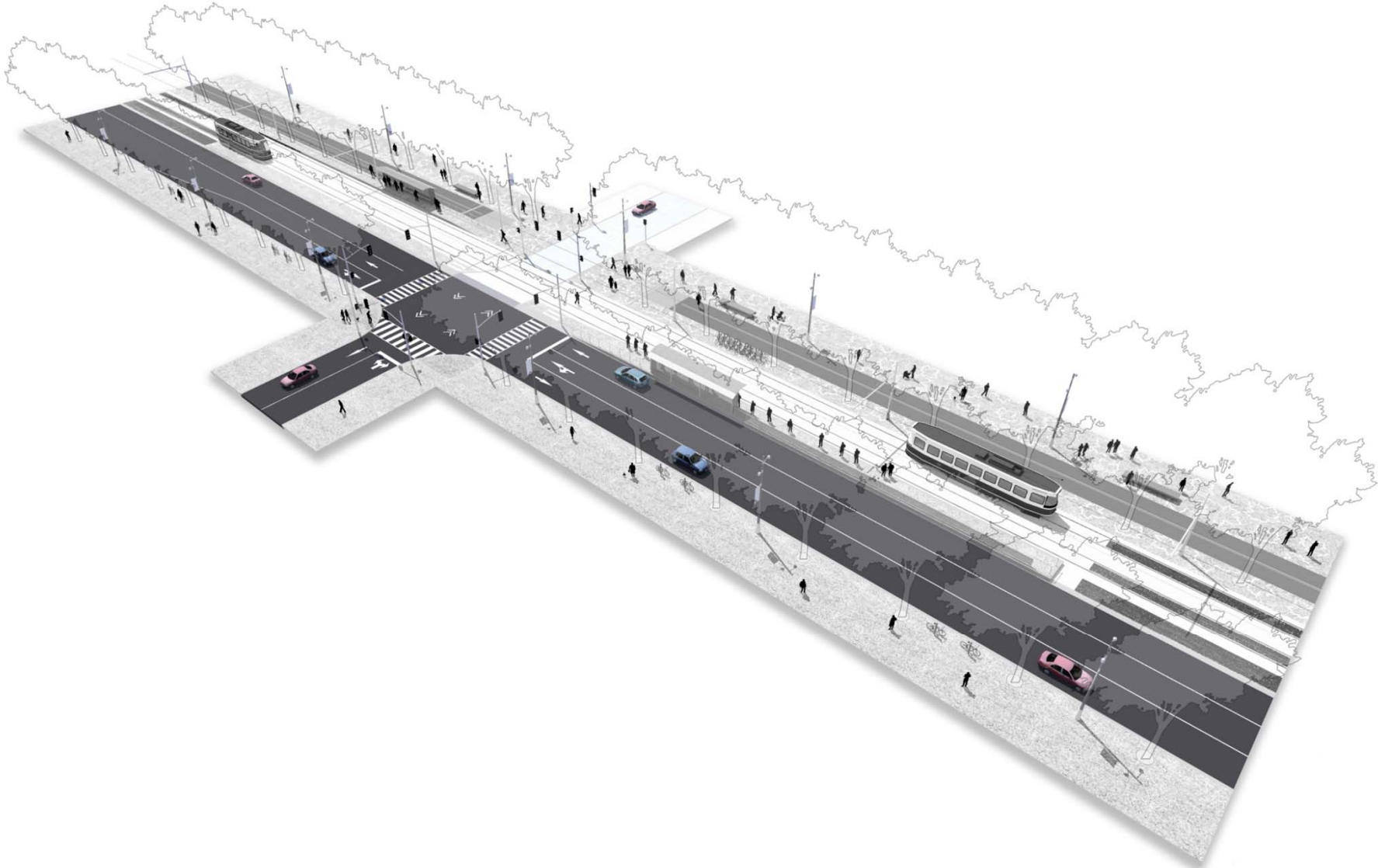


Acer / Freeman Maple





2. ROAD

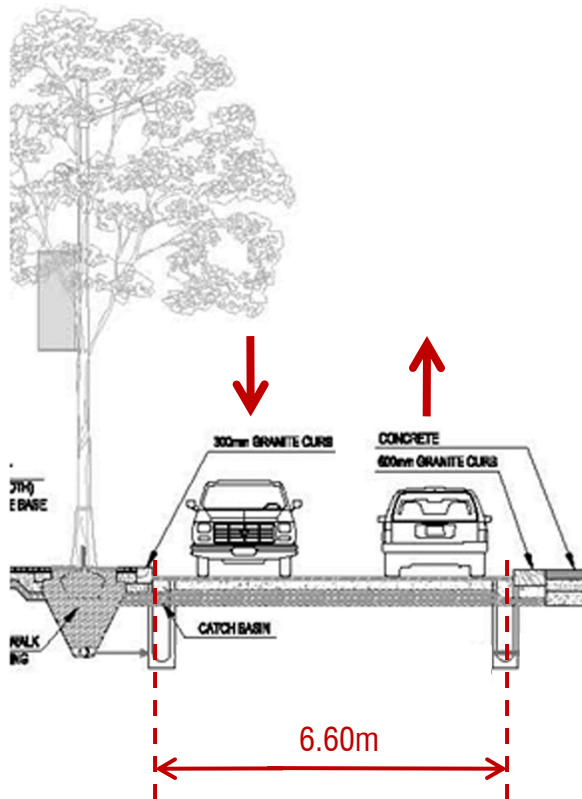


MINIMUM DIMENSIONS

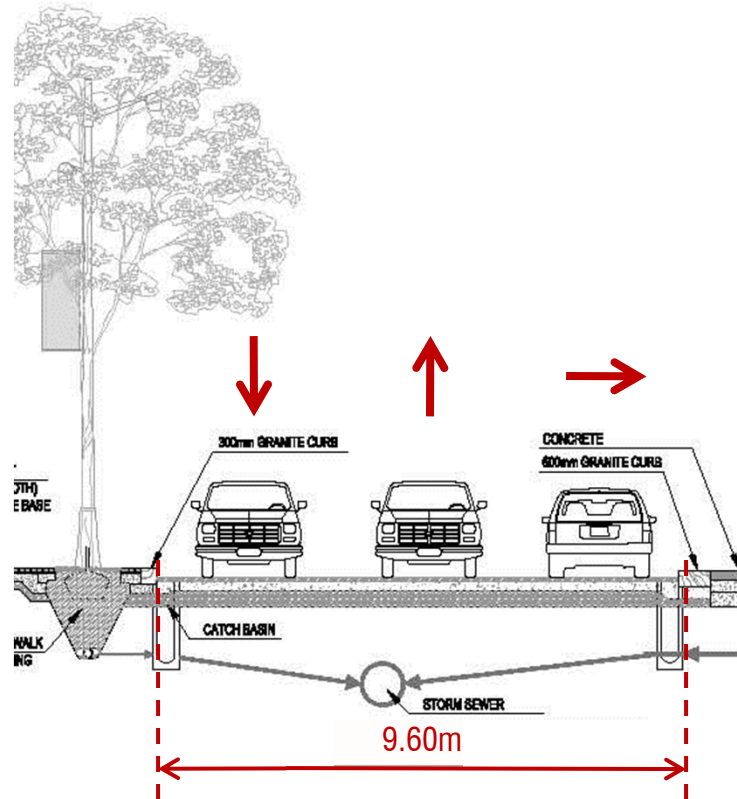
Road

Changes:
- 5" curb stone

Typical road dimension



Road dimensions near an intersection

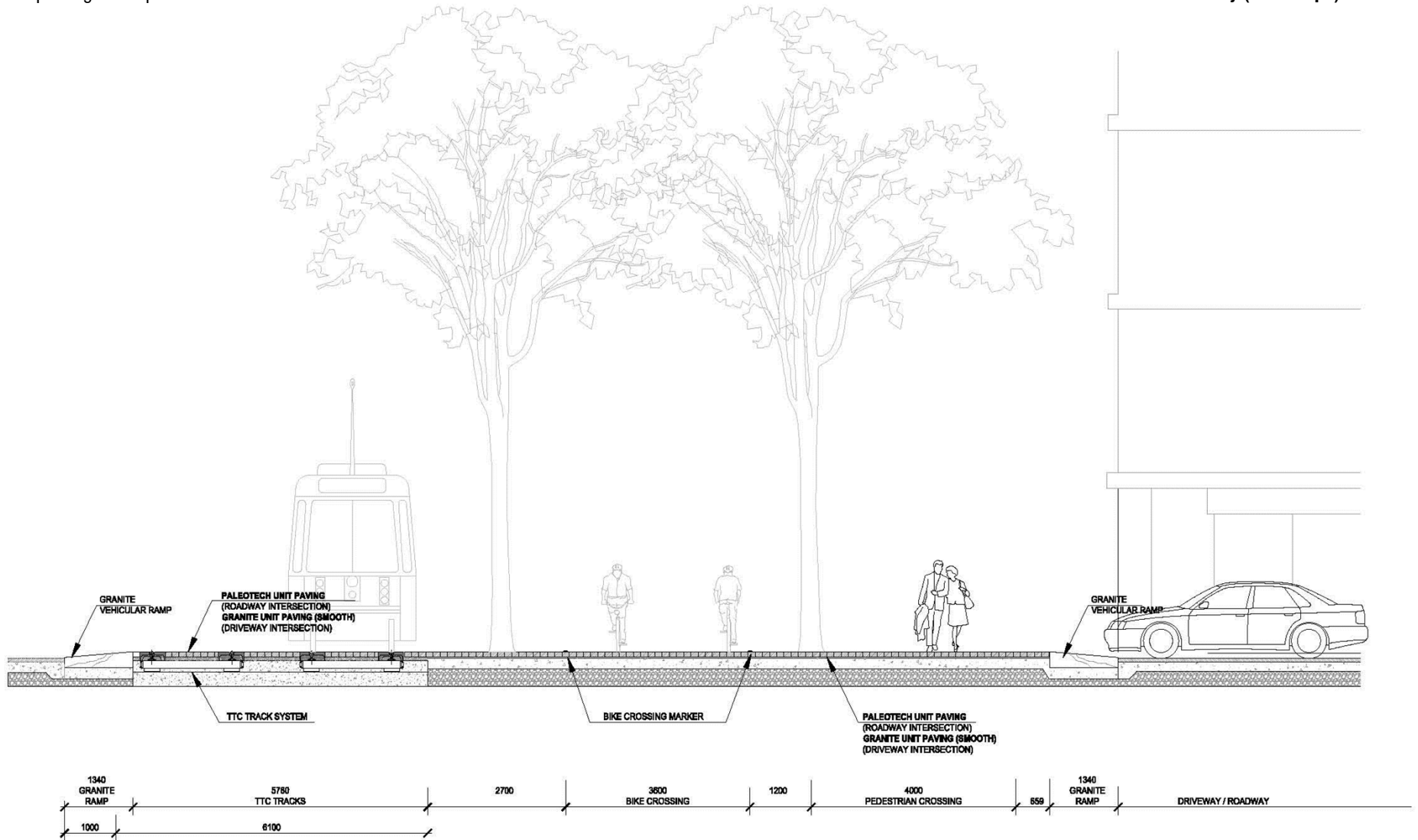


MINIMUM DIMENSIONS

Table top design – slopes

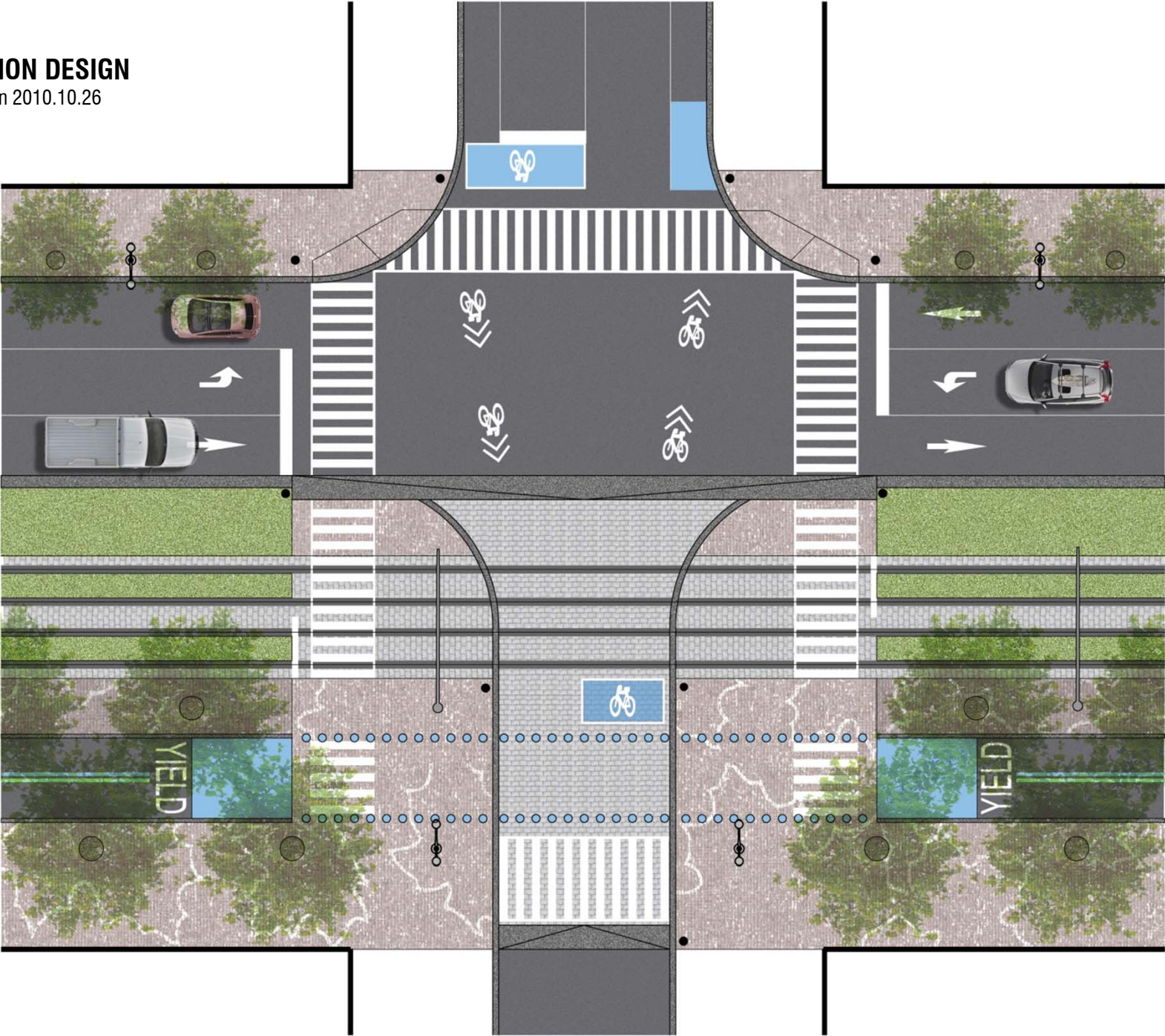
Changes:

- 5" curb stone – accessibility (1:12 slope)



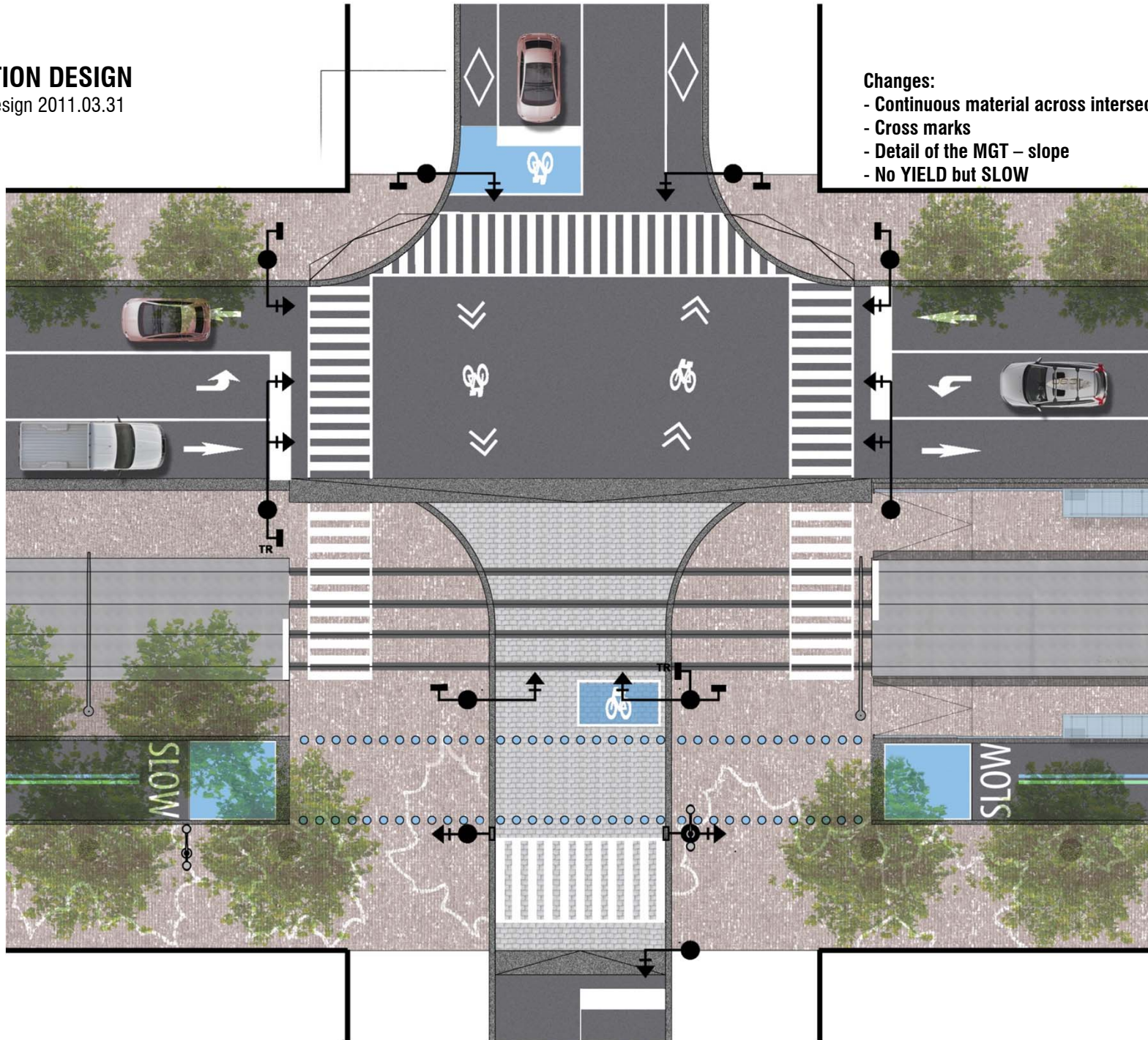
INTERSECTION DESIGN

Schematic design 2010.10.26



INTERSECTION DESIGN

90% Detailed Design 2011.03.31



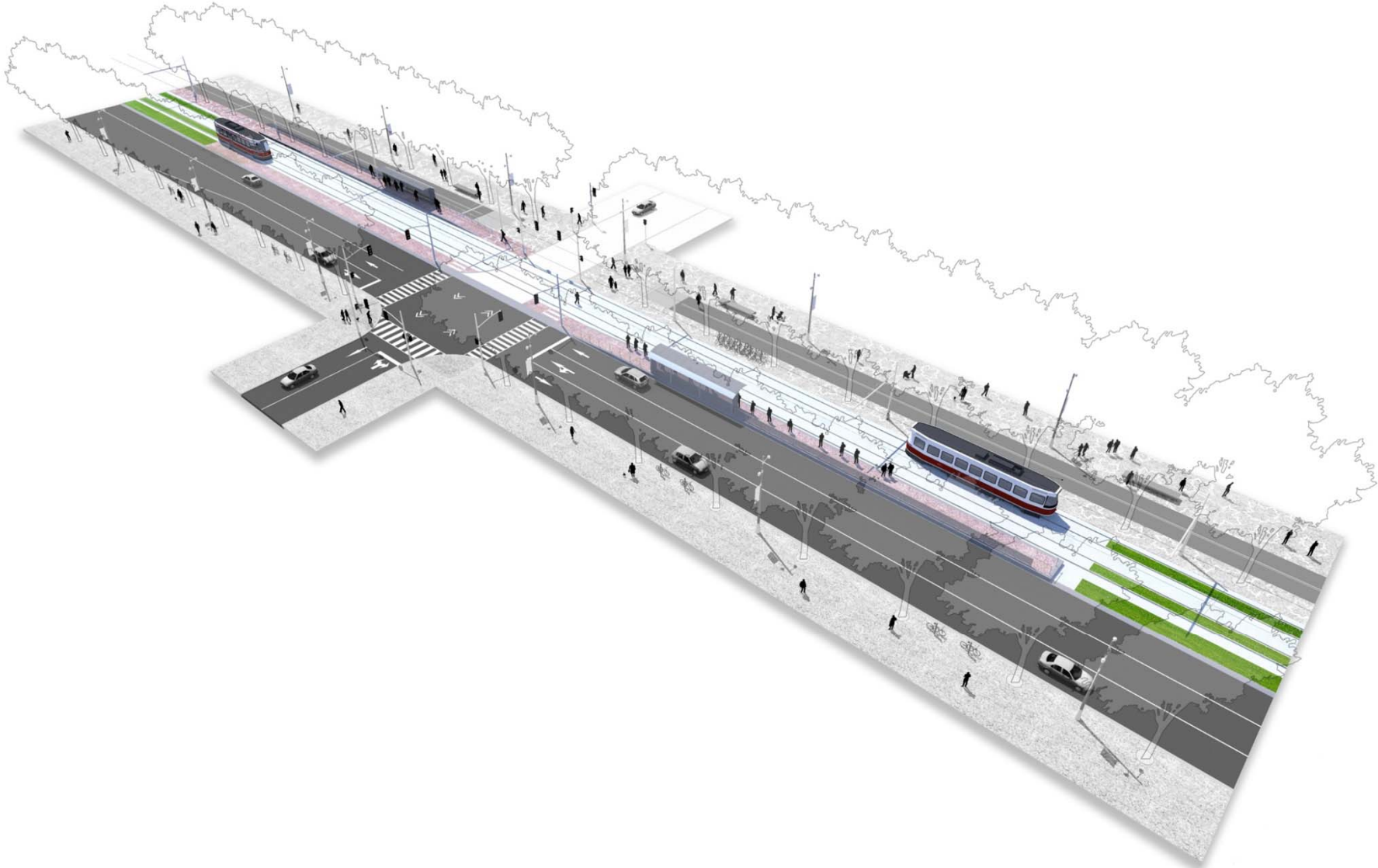
Changes:

- Continuous material across intersection
- Cross marks
- Detail of the MGT – slope
- No YIELD but SLOW





3. TTC RIGHT OF WAY & PLATFORMS



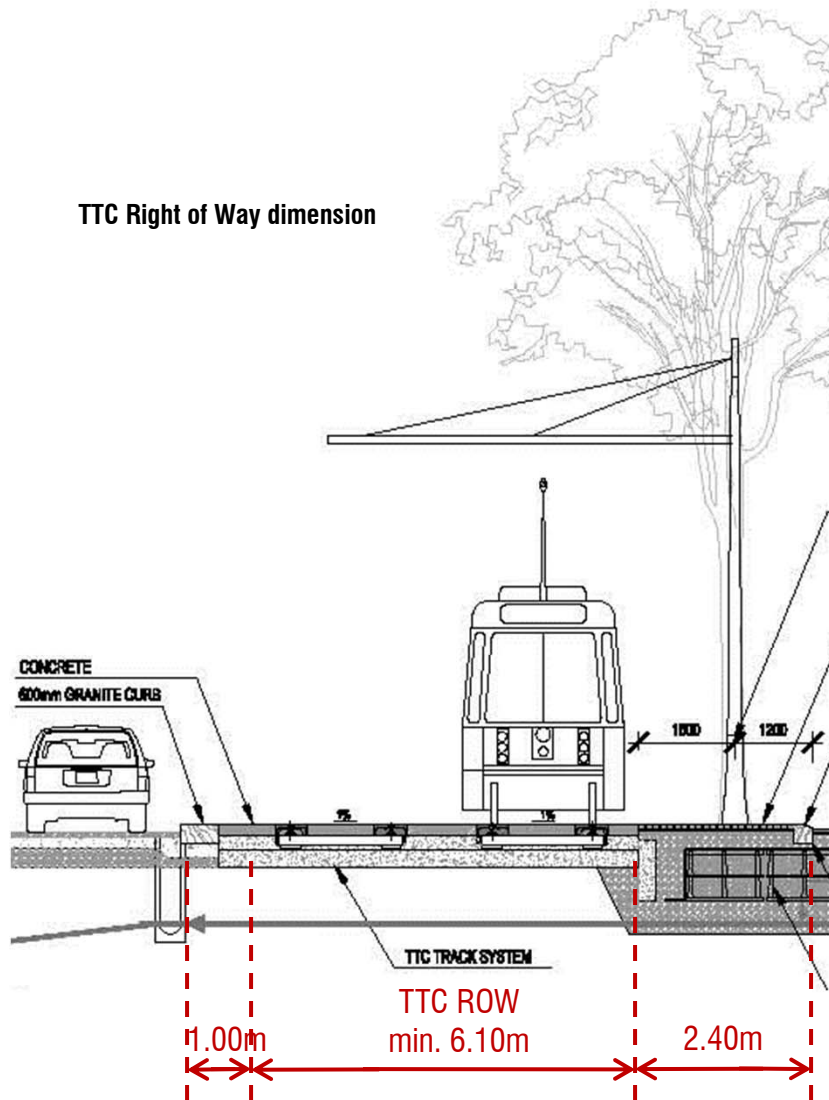
MINIMUM DIMENSIONS

TTC Right of Way

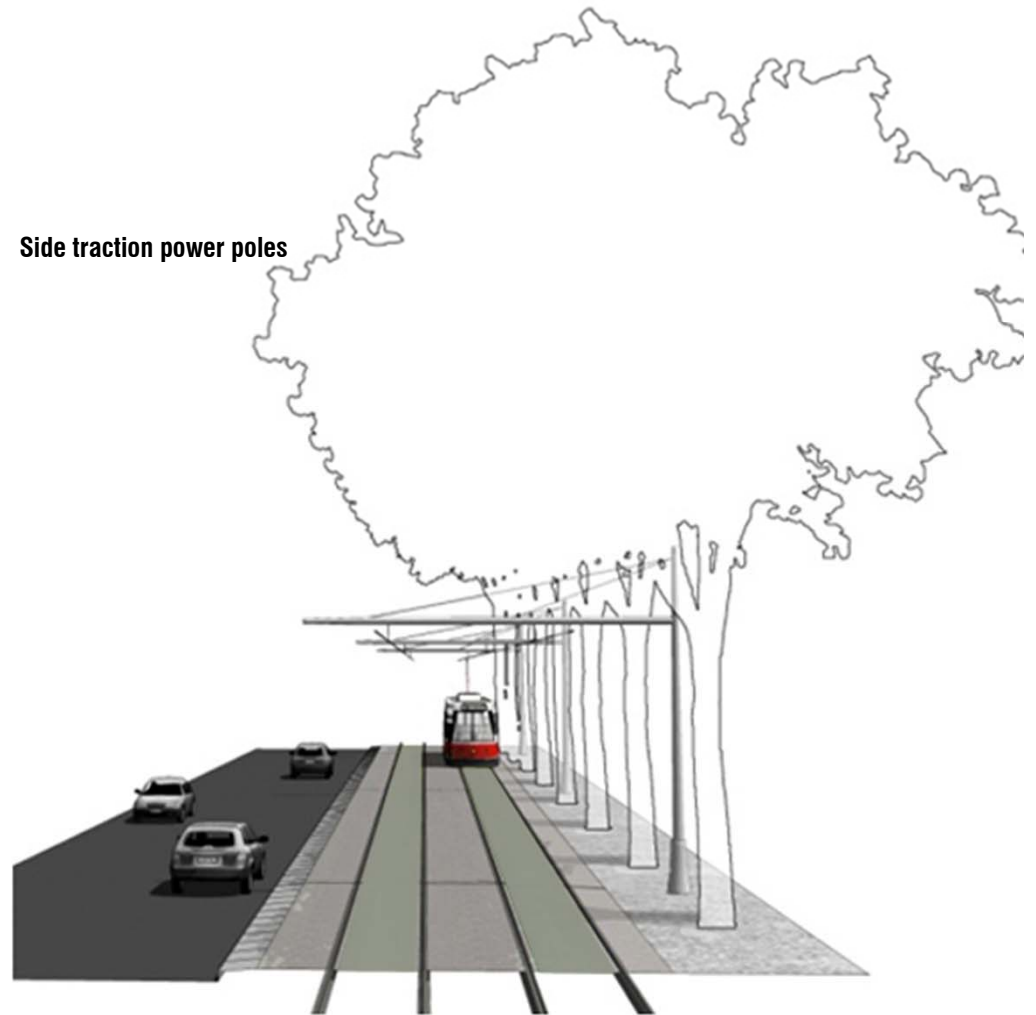
Changes:

- No grass in TTC ROW

TTC Right of Way dimension



Side traction power poles





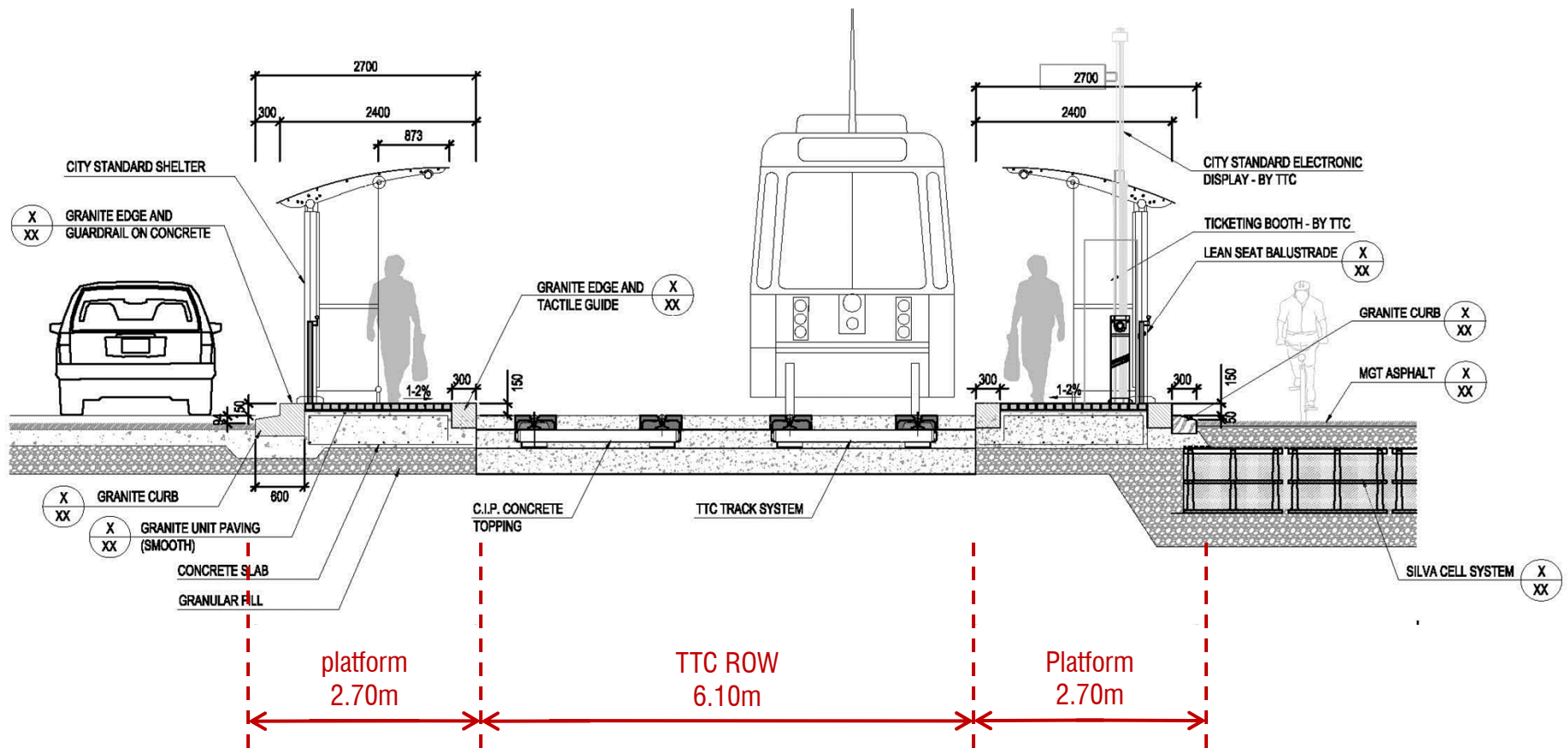


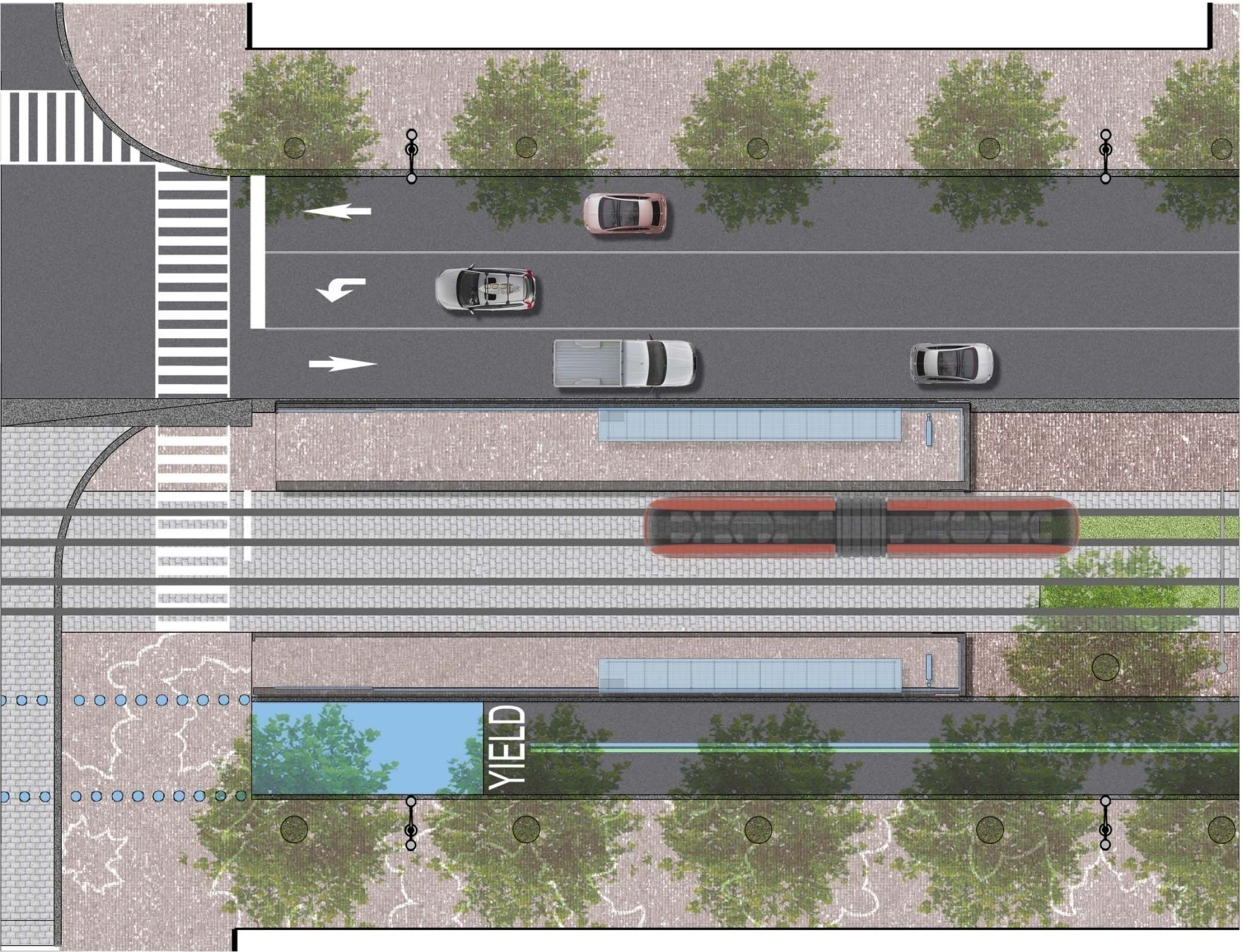
MINIMUM DIMENSIONS

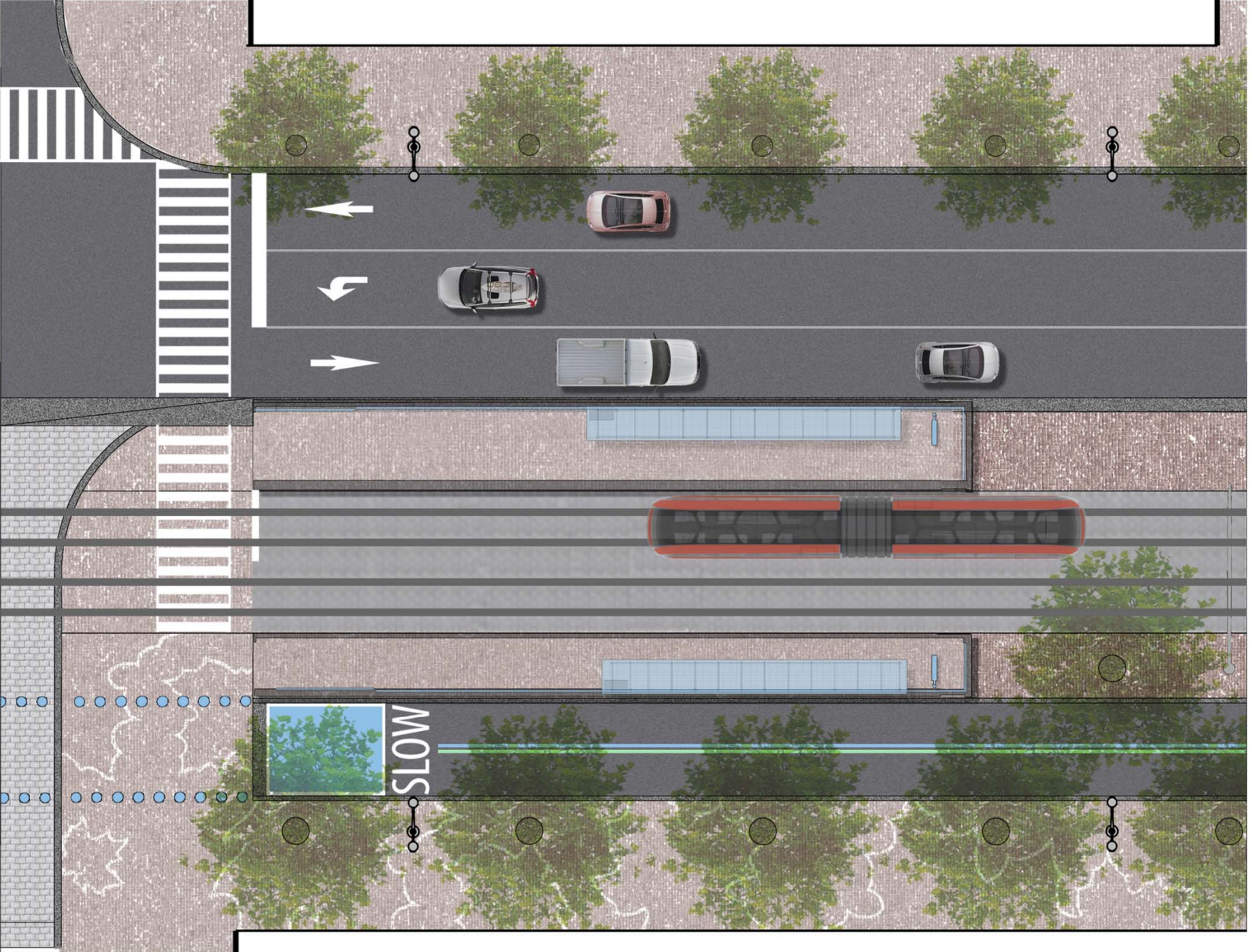
Platform design

Changes:

- 2.40m wide platform
- 15cm high platform





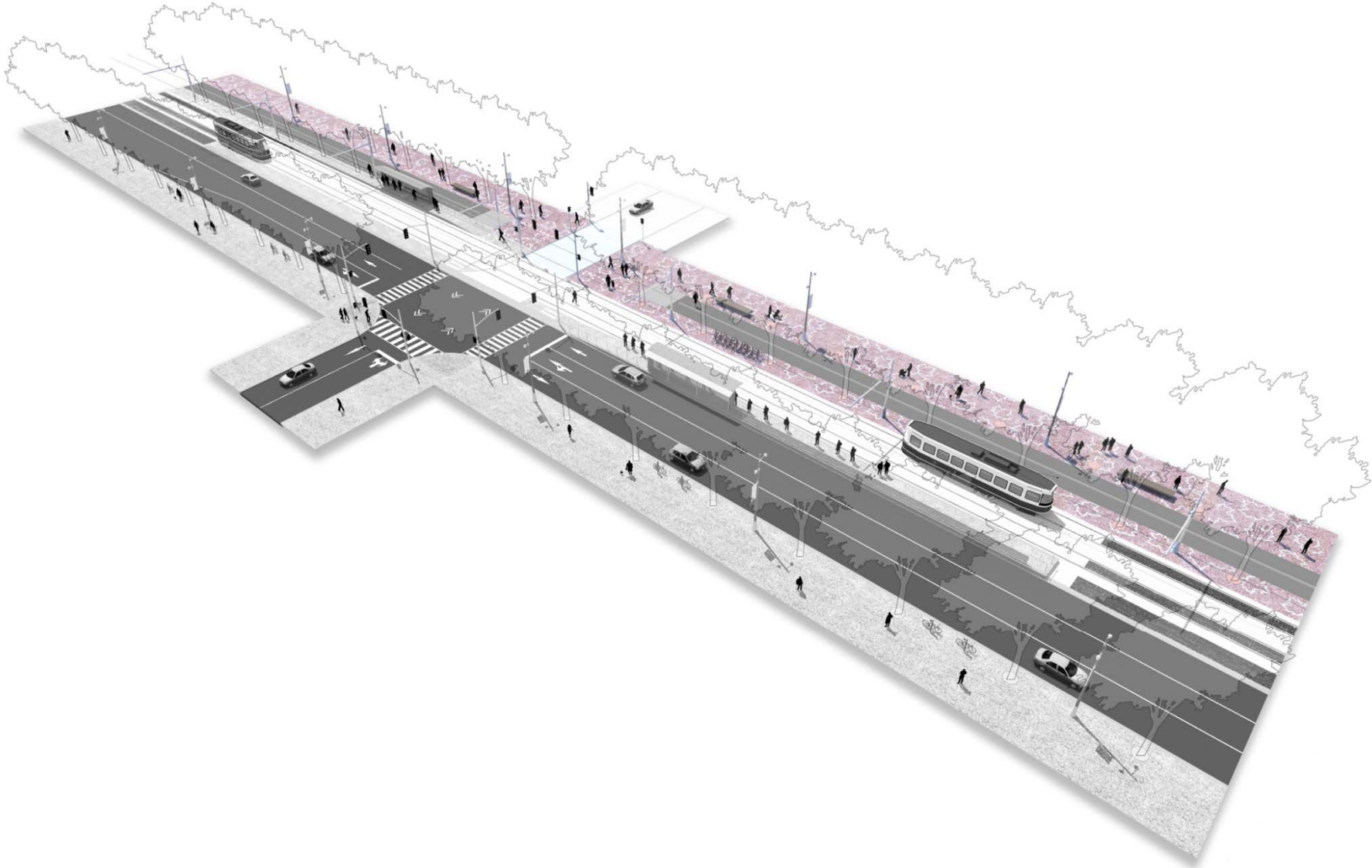


SLOW



Illustration of the platform

4. SOUTH SIDE PROMENADE & MGT

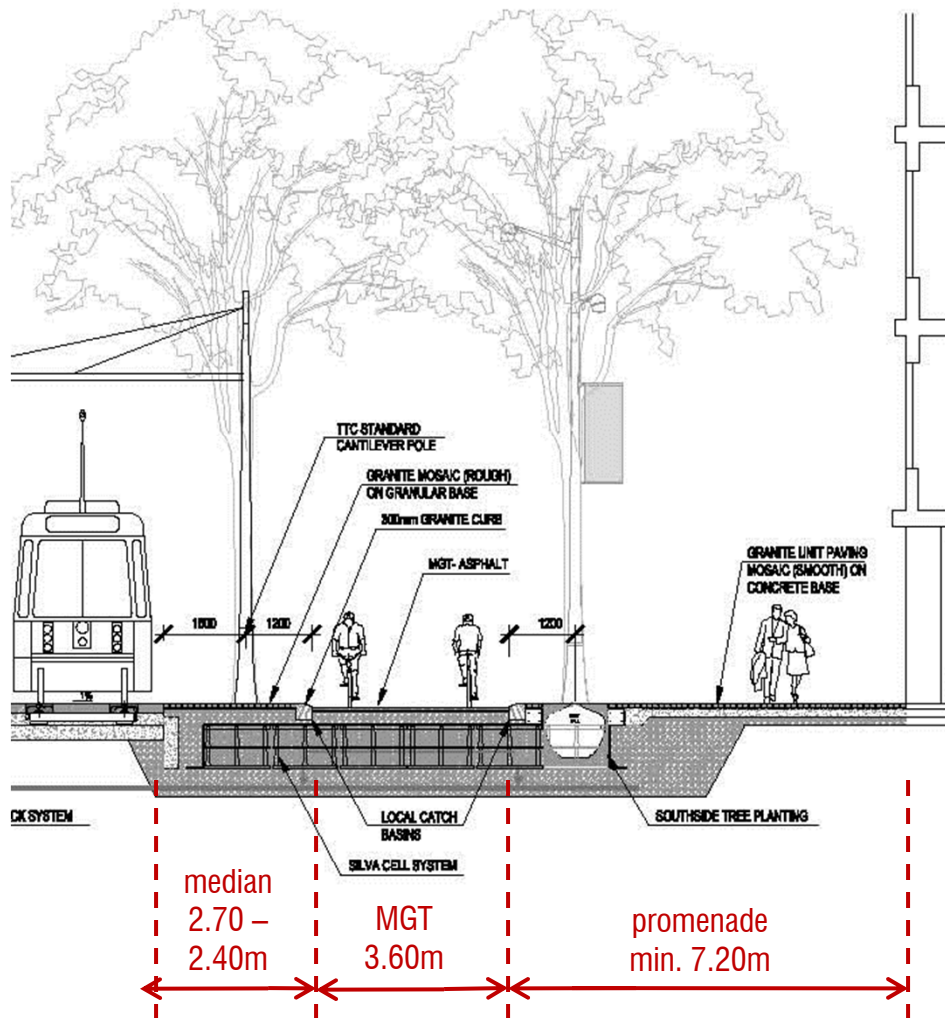


MINIMUM DIMENSIONS

South side promenade & MGT

Changes:

- width of the median between MGT and TTC ROW
- detailing of the MGT
- tree ring width



MOSAIC

South side promenade



Two color mosaic - San Sebastian and Canadian Red



Paving Pattern Module – no mosaic on private ROW

Contrast of texture



Outline mosaic pattern of the leaf motif





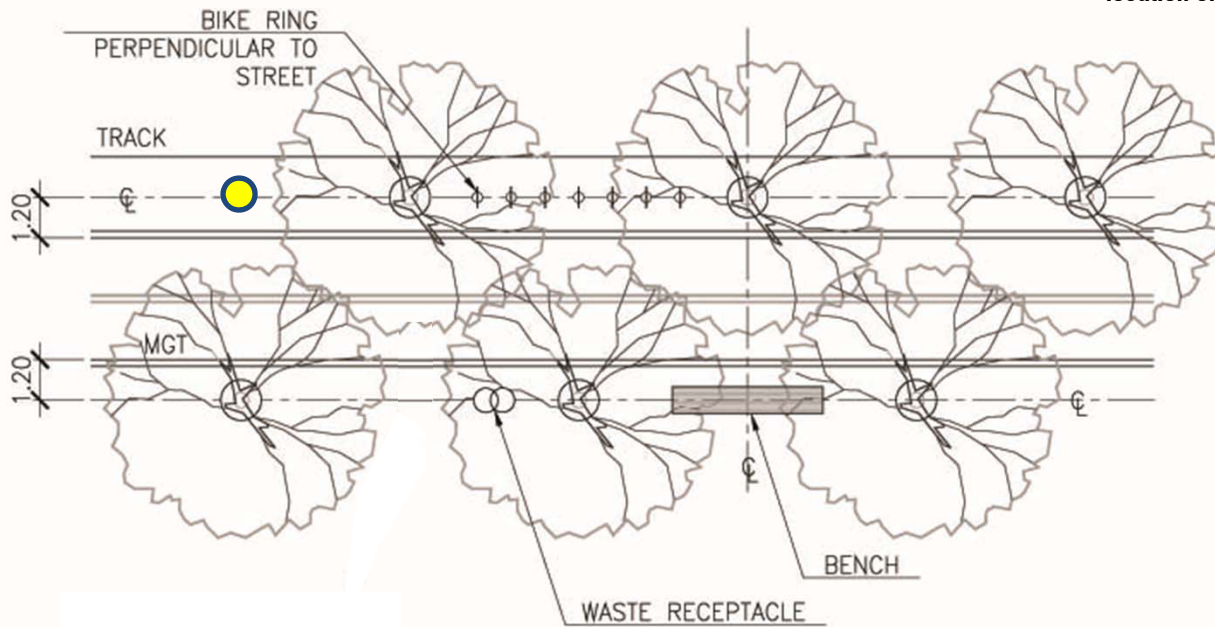
Water's Edge Promenade – reference

PLACING STRATEGY STREET FURNISHING

Promenade & MGT

Changes:

- location of the light poles



Light pole



Bench



Waste receptacle



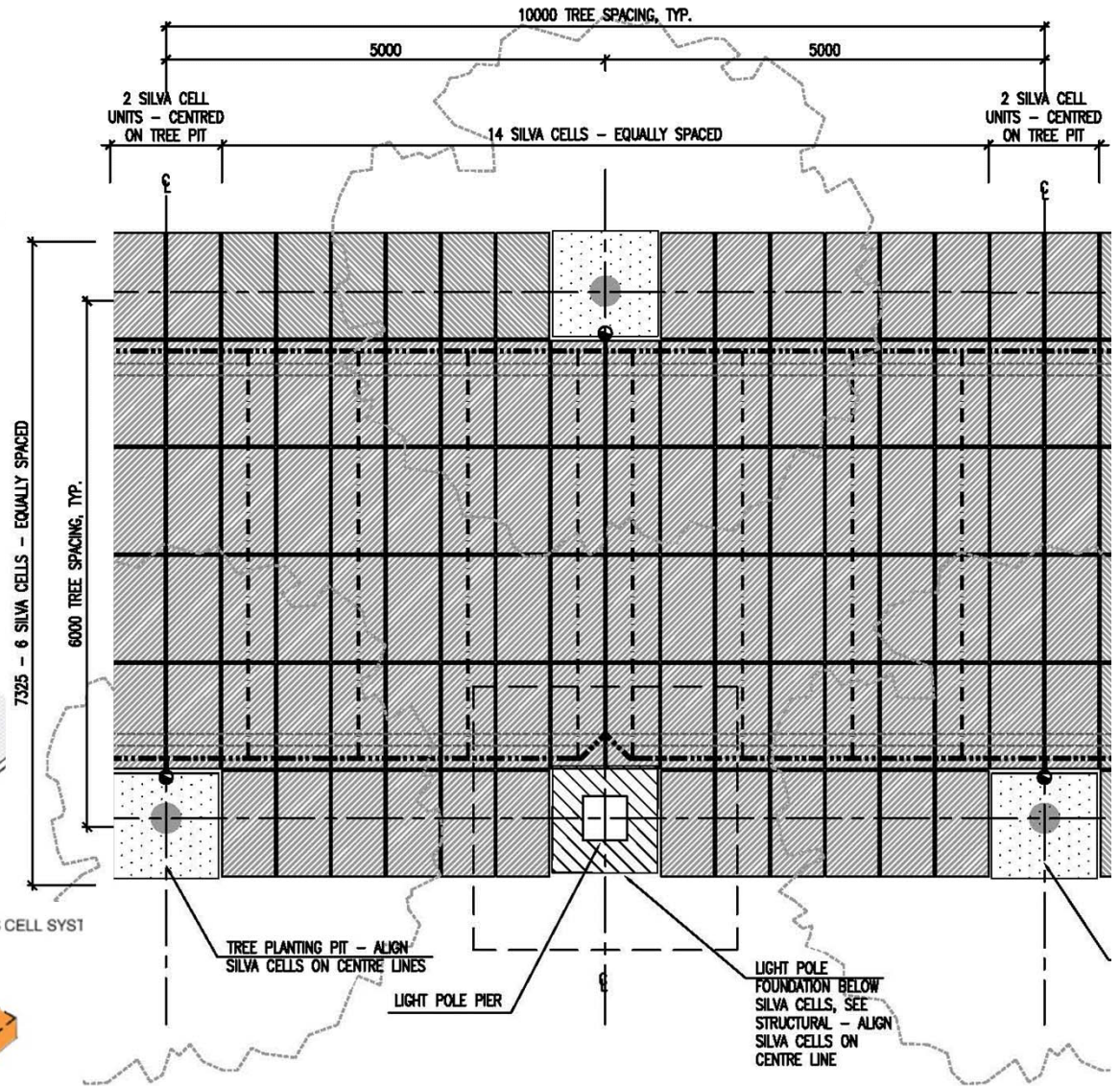
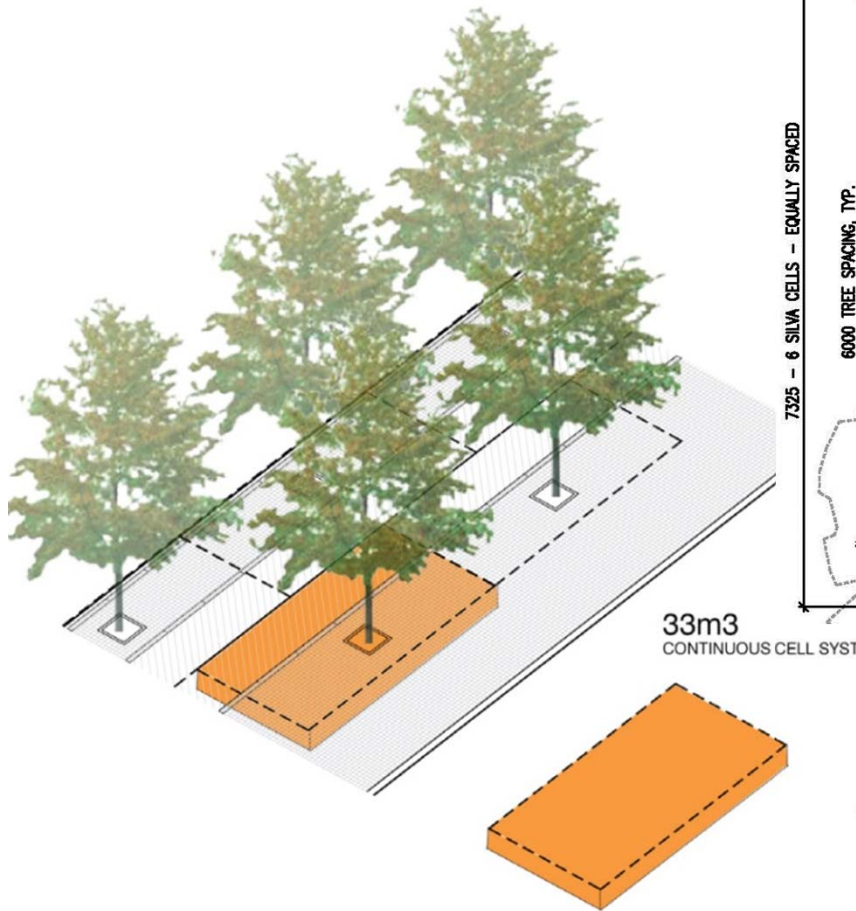
Bike ring

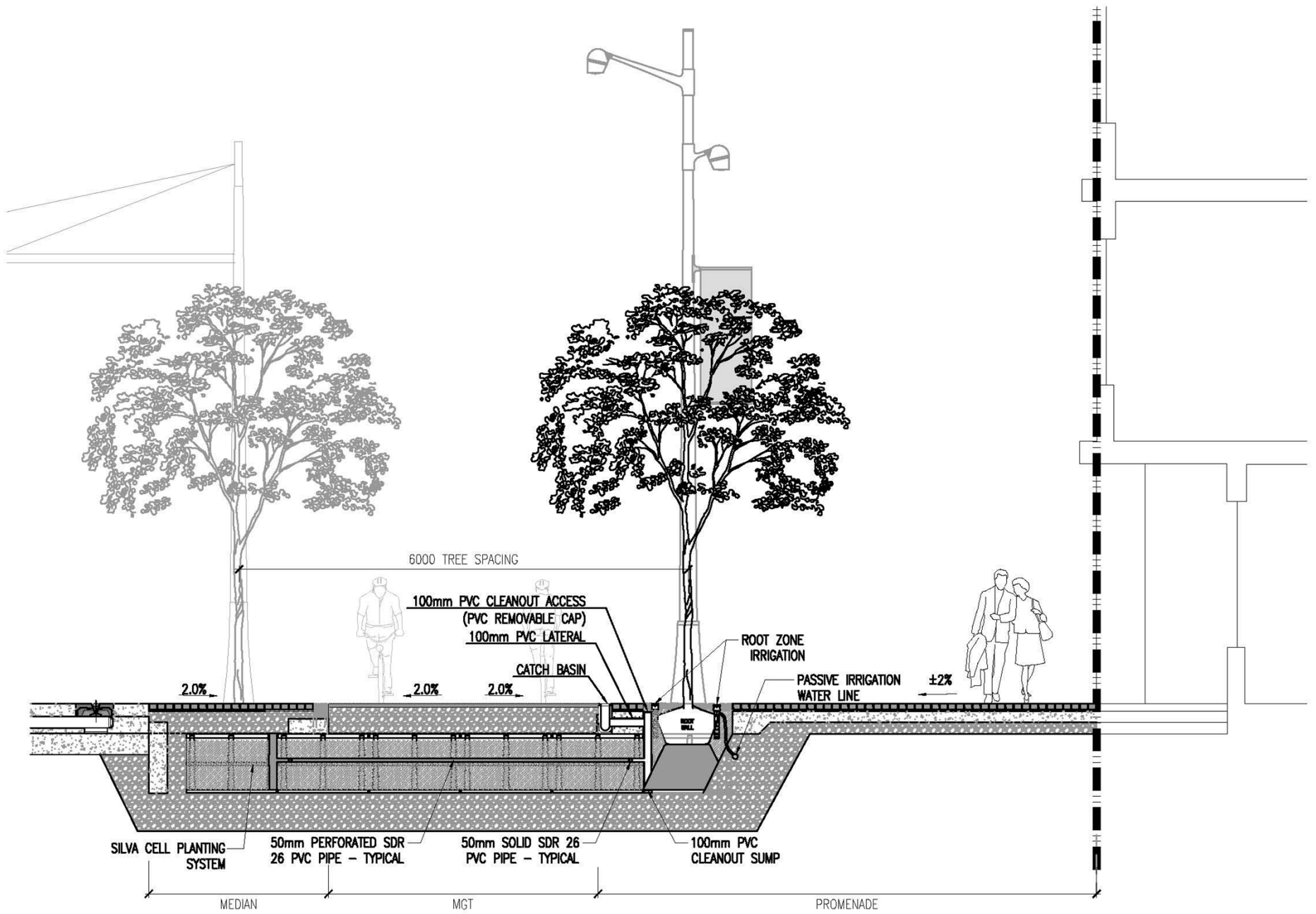
TREE PLANTING STRATEGY – CONDITIONS

Promenade & MGT

Creating the ideal conditions to plant a tree

Continuous silva cell system under trees and Martin Goodman Trail approximately 33m³/tree





TREE PLANTING STRATEGY – CONDITIONS

Promenade & MGT



2 layers of Silva Cells over granular base



Electrical ducts and Irrigation through Silva Cells



Top deck of Silva Cells



Tree pit opening in top deck of Silva Cells



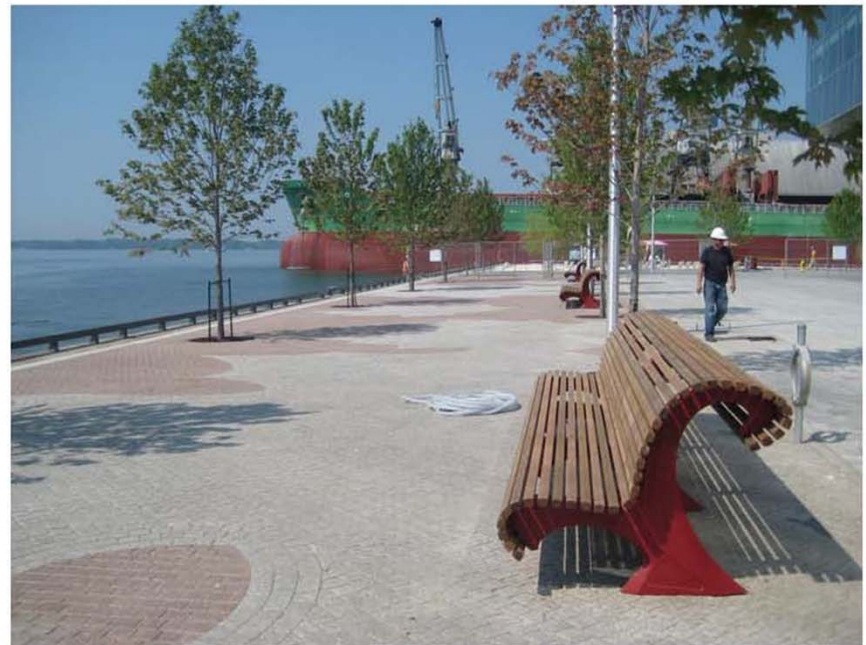
Formwork for tree pit over Silva Cells



Granular over Silva Cells



Tree planting in Silva Cells



Finished surface over Silva Cells

TREE PLANTING STRATEGY – SPECIES SELECTION

Promenade & MGT

1 tree species in different cultivars

Platanus occidentalis (Plane tree)



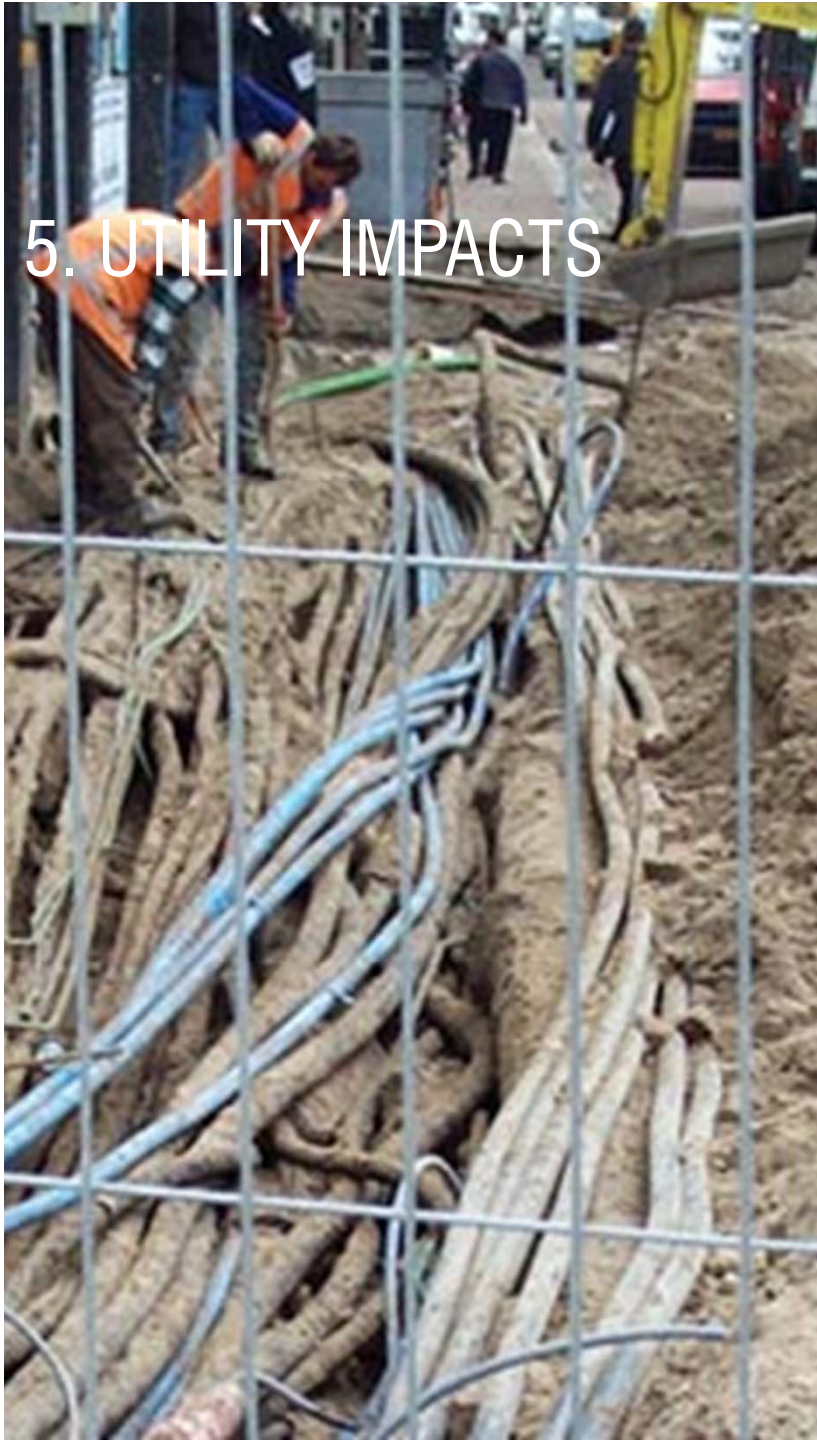






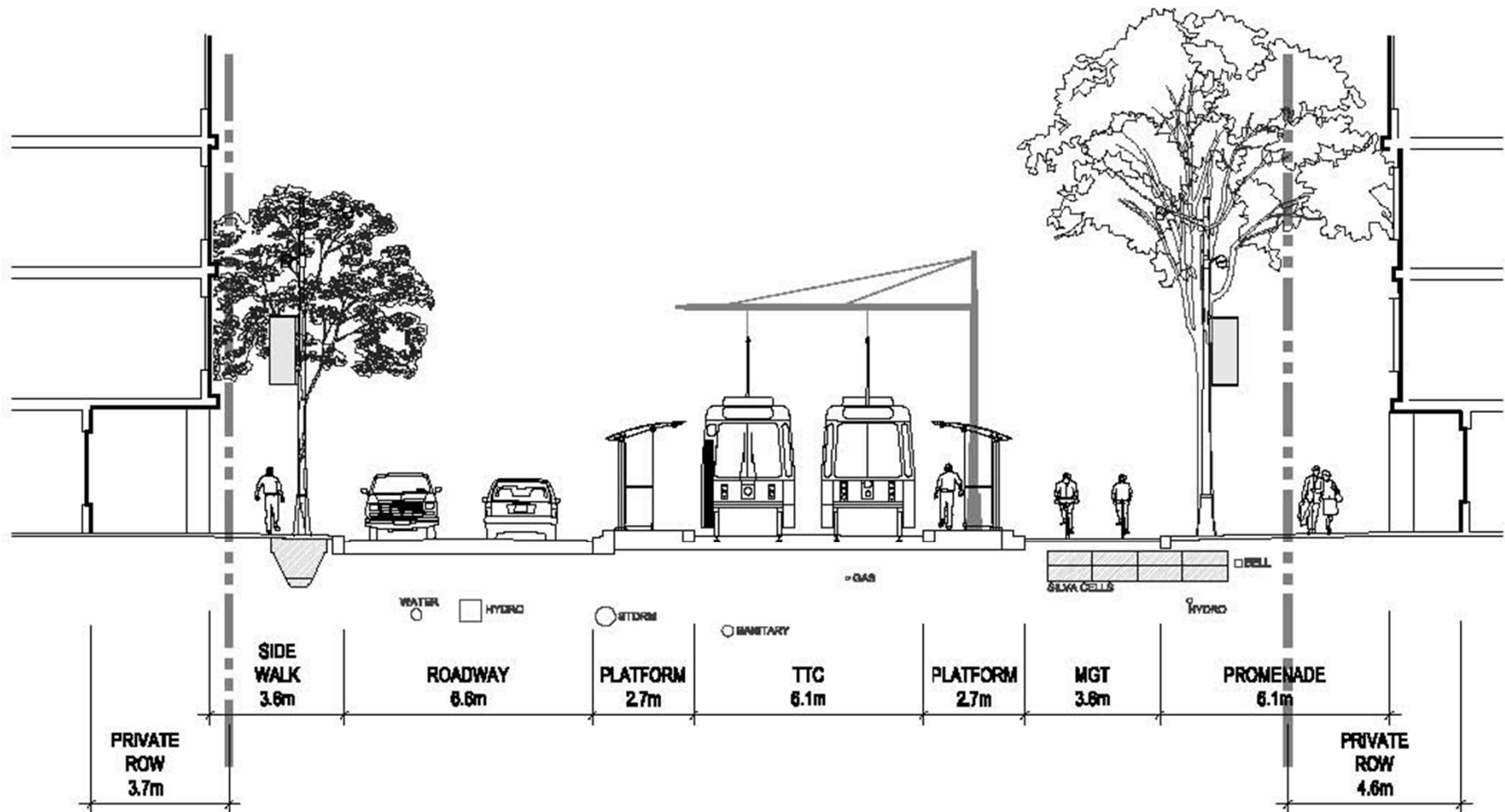


5. UTILITY IMPACTS



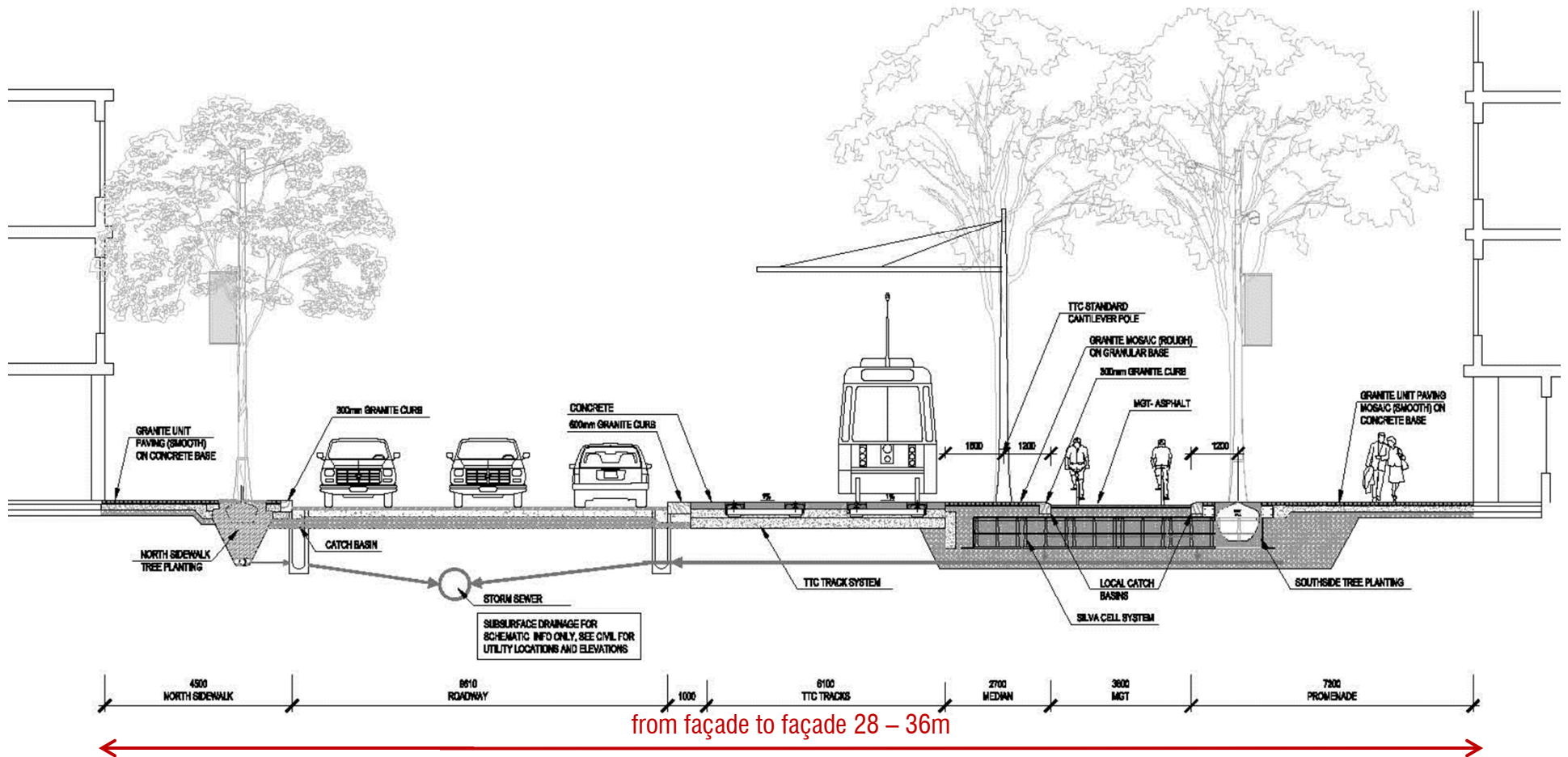
UTILITY IMPACTS

Detailed Design 2011.03.31



HORIZONTAL ALIGNMENT

Detailed Design 2011.03.31



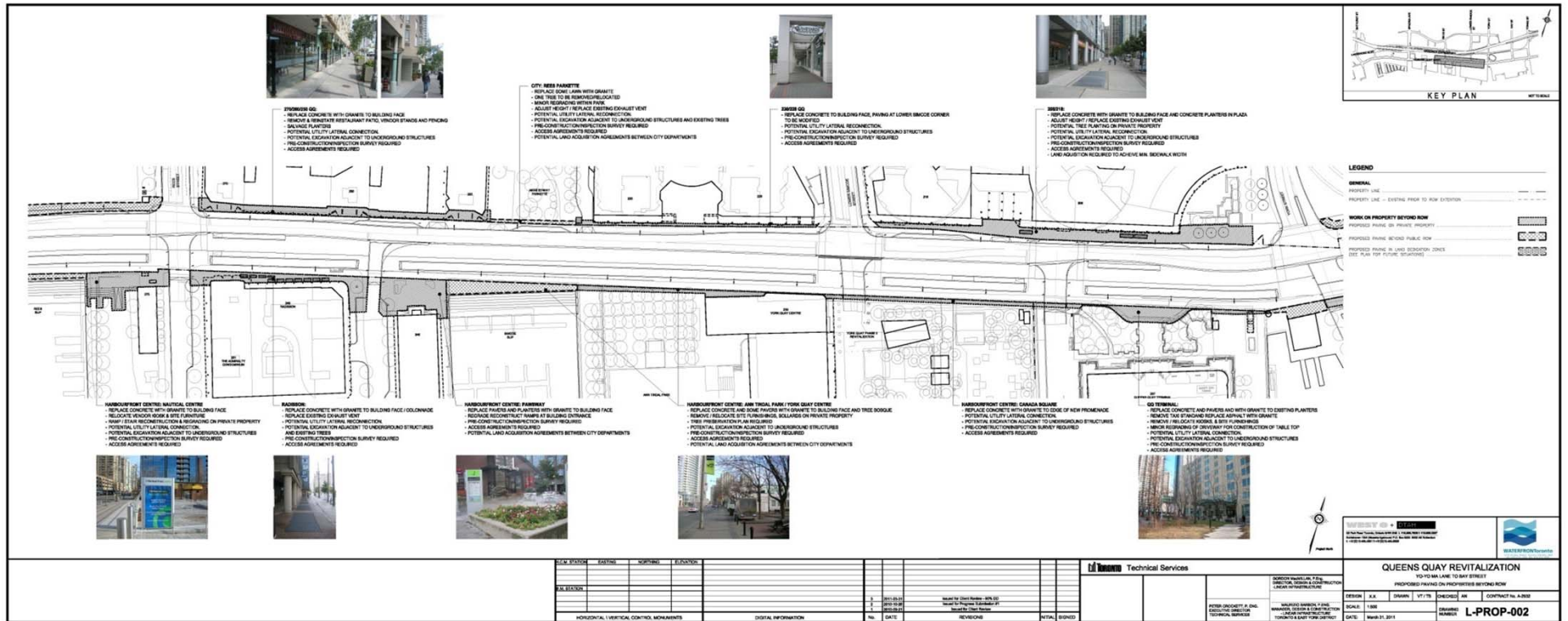
TYPICAL MIDBLOCK

Detailed Design 2011.03.31



PROPERTY IMPACT


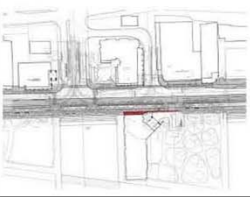

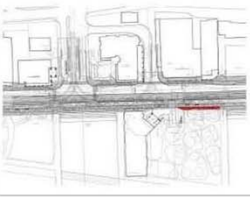

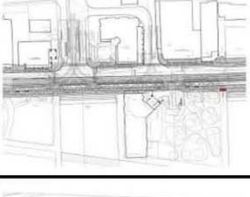

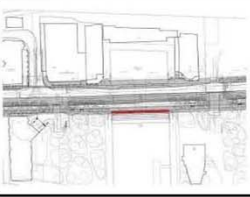

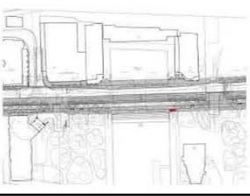
Detailed Design 2011.03.31



PROPERTY IMPACT

Detailed Design 2011.03.31

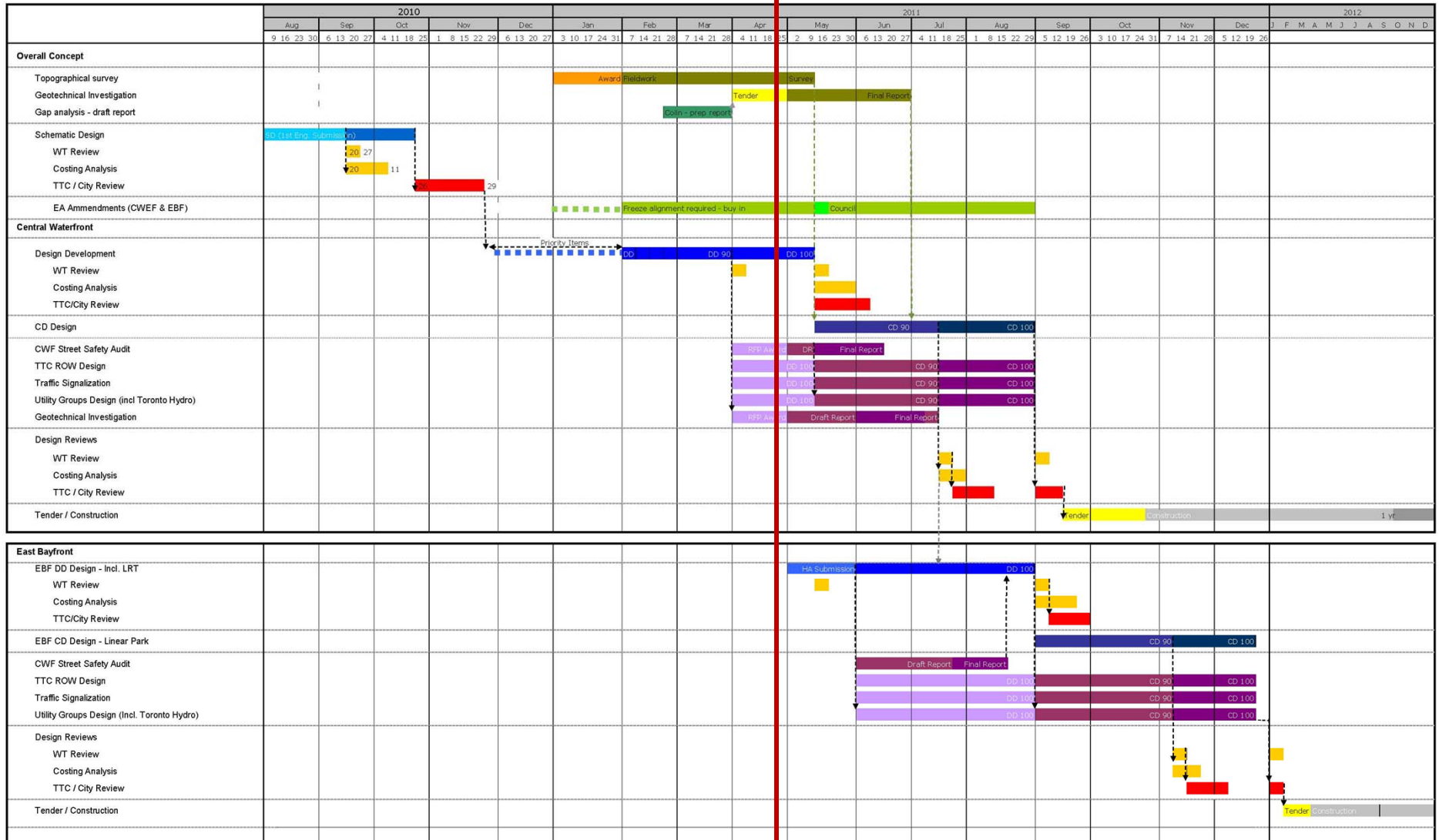
QUEENS QUAY PROPERTY IMPACT INVENTORY - CENTRAL WATERFRONT

PROPERTY	OWNER / CONTACT	PLAN	OWNERSHIP /TYPE	PARCEL I.D. ID number / Assessment Roll No. / Legal Parcel No. / Lot Number /	Zoning	Existing MSL Agreements	IMPACTS					Mitigation	AGREEMENTS REQUIRED	COMMUNICATION RECORD
							Surface	Underground utilities	Additional Investigations / Surveys Required	Duration				
Harbour Terrace 401 Queen's Quay West Toronto, ON M5V 1A2 	David Wallis Property Manager 416-260-9036		Private Residential	PIW-21419-9502 (LT)			<ul style="list-style-type: none"> - Replace concrete pavement with granite cobble paving to building face - Re-grading on private property (existing paver driveway will likely require significant grading to eliminate 200mm issue) - stop bar on private property - Entrance and/or access disruption 	<ul style="list-style-type: none"> - Potential utility service reconnection/disruption - Potential excavation adjacent to underground structures 	<ul style="list-style-type: none"> - Pre-construction inspection / survey required 			<ul style="list-style-type: none"> - Access agreements 		
HTO Park West 	City of Toronto		Public Park	PIW-21419-0014 (LT)			<ul style="list-style-type: none"> - Relocate park structures & replace landscaping with granite cobble paving - Location of new surface electrical equipment - art to salvaged and reinstated - signs to be salvaged and reinstated - bollards, light standards and underground conduits to be reinstated - Minor regrading within park - Entrance and/or access disruption 		<ul style="list-style-type: none"> - Pre-construction inspection / survey required - Tree preservation plan 		<ul style="list-style-type: none"> - Access agreements - Potential land acquisition agreements between City departments 			
HTO Park West 	City of Toronto		Public Park	PIW-21419-0012 (LT)			<ul style="list-style-type: none"> - Replace concrete pavement with granite cobble paving - Entrance and/or access disruption 		<ul style="list-style-type: none"> - Pre-construction inspection / survey required 		<ul style="list-style-type: none"> - Access agreements - Potential land acquisition agreements between City departments 			
Peter Slip Bridge 	City of Toronto		New PUBLIC ROW				<ul style="list-style-type: none"> - Replace concrete pavement with granite cobble paving - need design to determine impact (potential removals and salvage?) 		<ul style="list-style-type: none"> - Pre-construction inspection / survey required 		<ul style="list-style-type: none"> - Access agreements - Potential land acquisition agreements between City departments 			
HTO Park East 	City of Toronto		Public Park	PIW-21419-0022 (LT)			<ul style="list-style-type: none"> - Relocate park structures & replace landscaping with granite cobble paving - stop bar and crosswalk on BMS property - art to salvaged and reinstated - signs to be salvaged and reinstated - bollards, light standards and underground conduits to be reinstated - Minor regrading within park - Entrance and/or access disruption 		<ul style="list-style-type: none"> - Pre-construction inspection / survey required 		<ul style="list-style-type: none"> - Access agreements - Potential land acquisition agreements between City departments 			

OVERALL PHASING STRATEGY

2011-03-28

TODAY



SCHEDULING

OVERVIEW

QQ schedule

- next formal submission to stakeholders for end of May, 2011 with Design Completion for end of July
- finalize approvals and permit acquisition late summer 2011
- construction start – fall 2011
- TTC base Spring 2012

TTC Schedule

- Spadina Avenue King to Lakeshore – September 2011
- QQ tracks from Spadina to the Portal – Spring 2012
- Half Grand Union and Spadina intersection - 2013

Utilities

- inform design process
- designing
- execution – fall 2011

City of Toronto

- inform design process

MEETINGS

OVERVIEW

WT

- bi-weekly design meetings
- bi-weekly coordination meetings
- design review panel (June 8th 2011)

CITY

- Bus management
- Transportation Service coordination meetings
- Technical service
-

Utilities

Data Collection

Stakeholders

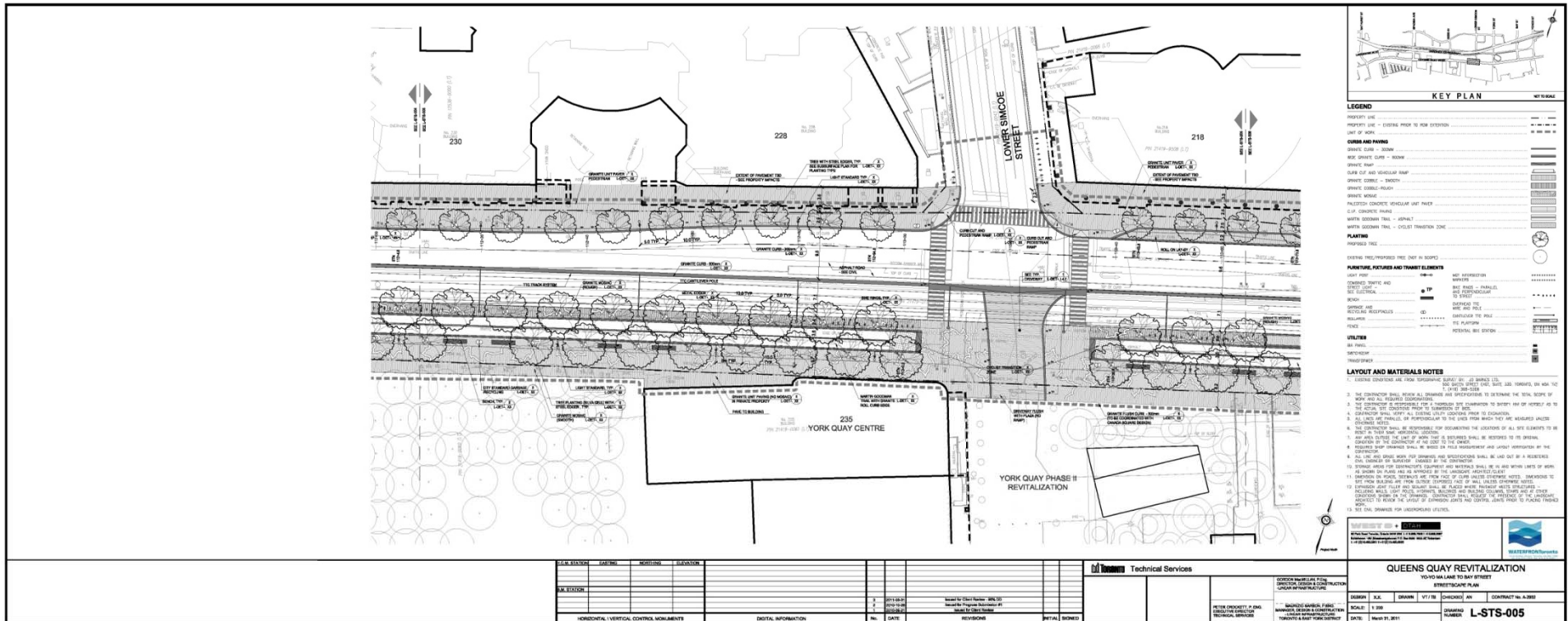
- TTC
- BIA
-

Coordination with other designers

- Pier 27
- York Quay
- Oxford property
- York Ramp
- ...

Next Steps

- Finishing 100% Detailed Design CWF
- Technical review of Detailed Design CWF
- Initiate Construction Design process CWF
- Finishing Schematic Design and Detailed Design EBF



Next Steps

- Queens Quay Working Group Meeting # 11 is scheduled for May 24, 2011

<http://www.waterfrontoronto.ca/qqconsultation>