

BANK STREET

RIVERSIDE DRIVE TO LEDBURY AVENUE

FUNCTIONAL DESIGN STUDY

PUBLIC AND BUSINESS CONSULTATION GROUP MEETING NO.1

JUNE 28, 2016

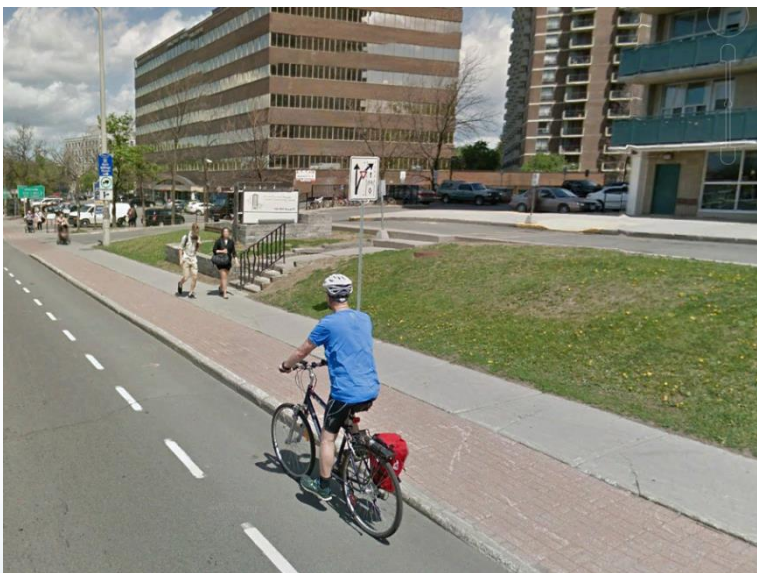


AGENDA

- INTRODUCTIONS
- PROJECT LIMITS
- PURPOSE OF STUDY
- STUDY TIMELINE
- STUDY CONTEXT
- ISSUES AND CONSIDERATIONS
- WORK COMPLETED TO-DATE
- NEXT STEPS
- QUESTIONS/COMMENTS

PURPOSE OF STUDY

UPDATE THE FUNCTIONAL DESIGN PLAN FOR BANK STREET FROM RIVERSIDE DRIVE NORTH TO LEDBURY AVENUE.



PROJECT LIMITS



PURPOSE OF STUDY

PLAN WILL INCLUDE:

- GEOMETRY AND GENERAL LAYOUT
- TYPICAL CROSS-SECTIONS
- INTERSECTION DETAILS
- LANDSCAPE DETAILS
- IDENTIFY PROPERTY
- IDENTIFY COSTS

PURPOSE OF STUDY

UPDATE WILL:

- BUILD ON 2007 PRELIMINARY DESIGN REPORT FOR BANK STREET (MRC)
- INCORPORATE RECOMMENDATIONS EMERGING FROM 2012 BANK STREET COMMUNITY DESIGN PLAN
- BUILD UPON POLICIES AND GUIDELINES OF 2013 OFFICIAL PLAN (OP) AND TRANSPORTATION MASTER PLAN (TMP) DESIGN PLAN
- CONSIDER COMPLETE STREETS, USING MULTIMODAL LEVEL OF SERVICE (MMLOS) GUIDELINES
- SEGREGATED CYCLING FACILITY
- EVALUATE TRANSIT PRIORITY MEASURES

PURPOSE OF STUDY

UPDATE DOES NOT INCLUDE:

- REVIEW OF UNDERGROUND INFRASTRUCTURE — STORM AND SANITARY AND WATERMAIN - FROM 2007 PRELIMINARY DESIGN REPORT
- RECOMMENDATIONS FOR POTENTIAL BURYING OF OVERHEAD HYDRO LINES
- ADVANCEMENT OF RELATED PROJECTS IDENTIFIED IN THE CDP
 - BILLINGS BRIDGE RECONSTRUCTION
 - SIGNATURE PUBLIC ART (PRELIMINARY AND DETAIL DESIGN)
 - GREENWAY LINEAR PARK

STUDY TIMELINE

WE ARE HERE



1ST ROUND OF
CONSULTATIONS
P&BCG AND TAC
(JUNE 2016)

2ND ROUND OF
CONSULTATIONS
P&BCG AND TAC
(SEPT. 2016)

PUBLIC OPEN HOUSE
(OCT. 2016)

PRESENTATION TO THE
TRANSPORTATION
COMMITTEE
(OPTIONAL – DEC. 2016)

START

ANALYSIS OF
EXISTING
CONDITION

DEVELOP DRAFT
FUNCTIONAL DESIGN
PLAN

MODIFY PLAN BASED
ON CONSULTATION
GROUP INPUT

REFINE AND
DEVELOP
RECOMMENDED
PLAN (DEC. 2016)

FINAL
REPORT
(JAN. 2017)

TRANSFER TO INFRASTRUCTURE
SERVICES DEPARTMENT
(JAN. 2017)

STUDY CONTEXT

2007 PRELIMINARY DESIGN REPORT FOR BANK STREET (PDR)

- STUDY UNDERTAKEN TO ADDRESS DETERIORATED CONDITIONS OF PAVEMENT AND UNDERGROUND UTILITIES
- REVIEW OF EXISTING AND FUTURE CAPACITY INFRASTRUCTURE NEEDS FROM RIVERSIDE DR. TO WALKLEY RD.
- “SHELVED” DUE TO DOWNSTREAM SEWER CONSTRAINTS

2008 BANK STREET/RIVERSIDE DRIVE

INTERSECTION MODIFICATIONS FUNCTIONAL DESIGN

- FUNCTIONAL DESIGN PLAN DEVELOPED BUT NEVER IMPLEMENTED

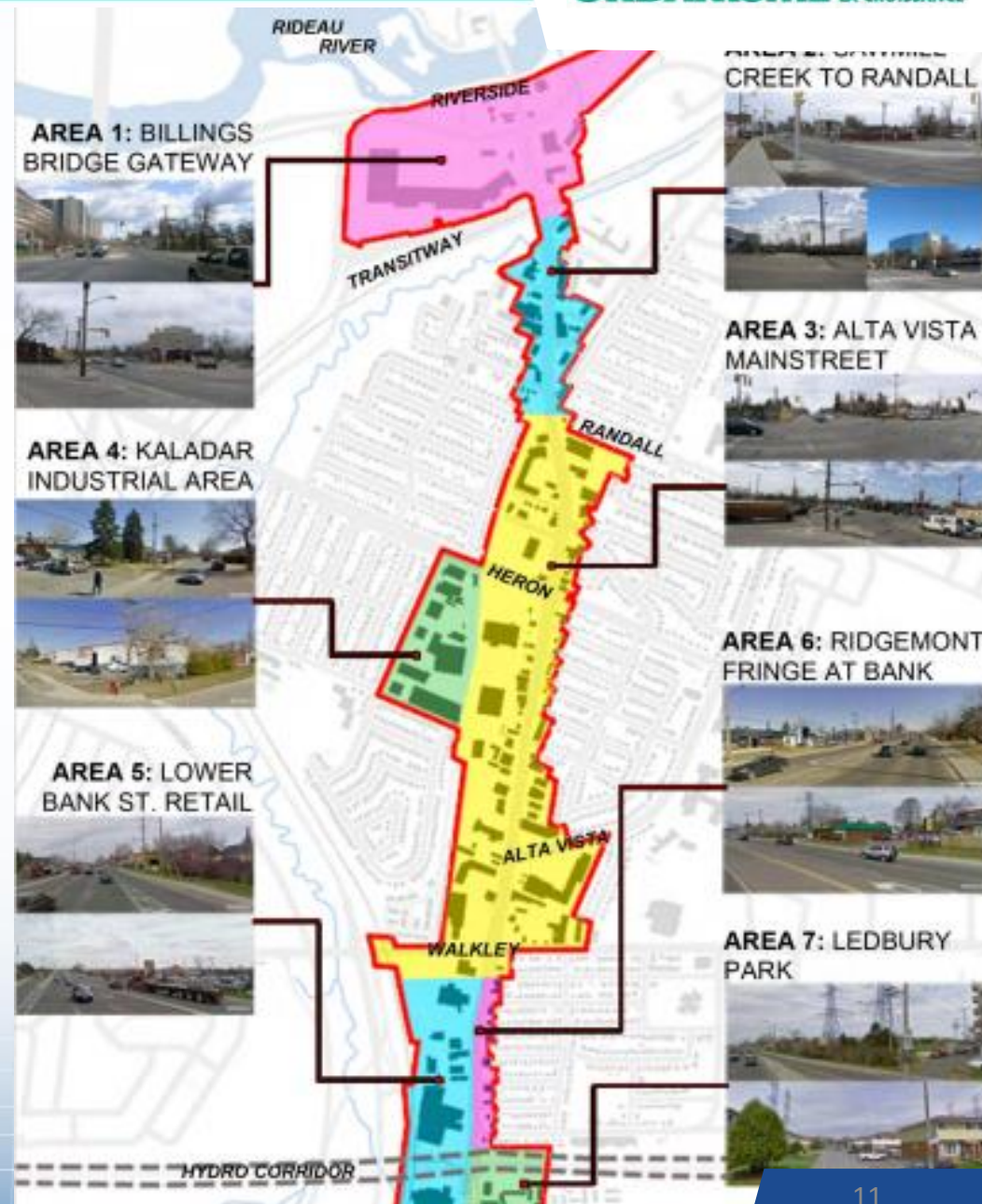
STUDY CONTEXT

2012 COMMUNITY DESIGN PLAN (CDP)

- PURPOSE: TO CREATE A FRAMEWORK FOR THE FUTURE DEVELOPMENT OF THESE LANDS, FULFILLING:
 - POLICY DIRECTIONS OUTLINED IN THE CITY'S OFFICIAL PLAN
 - SETS SPECIFIC OBJECTIVES FOR THE BANK STREET COMMUNITY
- PROVIDES THE LAND USE CONCEPT FOR THE AREA AND THE SERVICING AND TRANSPORTATION STRUCTURE FOR FUTURE DEVELOPMENT

STUDY CONTEXT

CHARACTER MAP



STUDY CONTEXT

2012 COMMUNITY DESIGN PLAN (CDP)

THE CDP'S IDENTIFIED 13 RELATED CAPITAL PROJECTS:

- BILLINGS BRIDGE RECONSTRUCTION
- MUNICIPAL PARKING LOT
- CONVERSION OF WESTERLY RAMP BETWEEN RIVERSIDE DRIVE NORTH AND SOUTH INTO ROAD
- SIGNATURE PUBLIC ART
- BILLING ESTATE MUSEUM
- BRUCE TIMMERMAN PARK
- LEDBURY PARK AREA CONNECTION IMPROVEMENTS
- NEW PARKETTE NEAR LEDBURY
- COMMUNITY GARDEN
- BROOKFIELD MUP
- BIKE LANES ON CPR BRIDGE
- LINK TO DATA CENTRE DRIVE AND

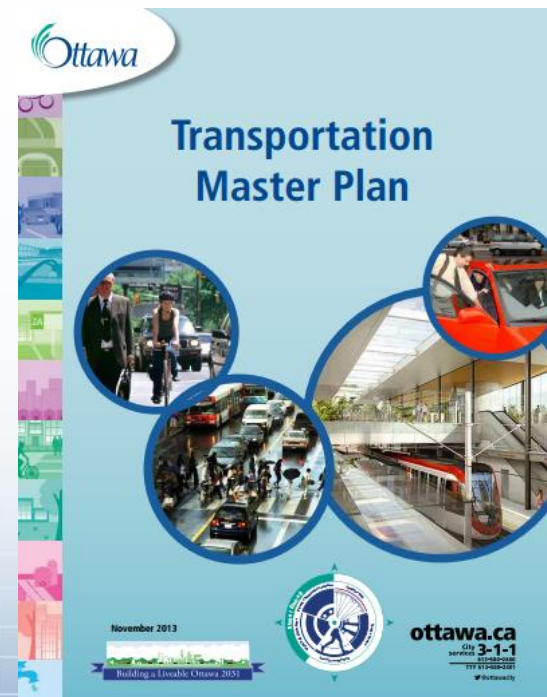
THE FUNCTIONAL DESIGN PLAN ONLY ADDRESSES THE FIRST PROJECT LISTED IN THE CDP:

- THE BANK STREET RECONSTRUCTION PROJECT, WHICH ENTAILS THE DETAILED DESIGN, RIGHT-OF-WAY CROSS SECTION, AND PUBLIC REALM IMPROVEMENTS ALONG THE STREETScape.

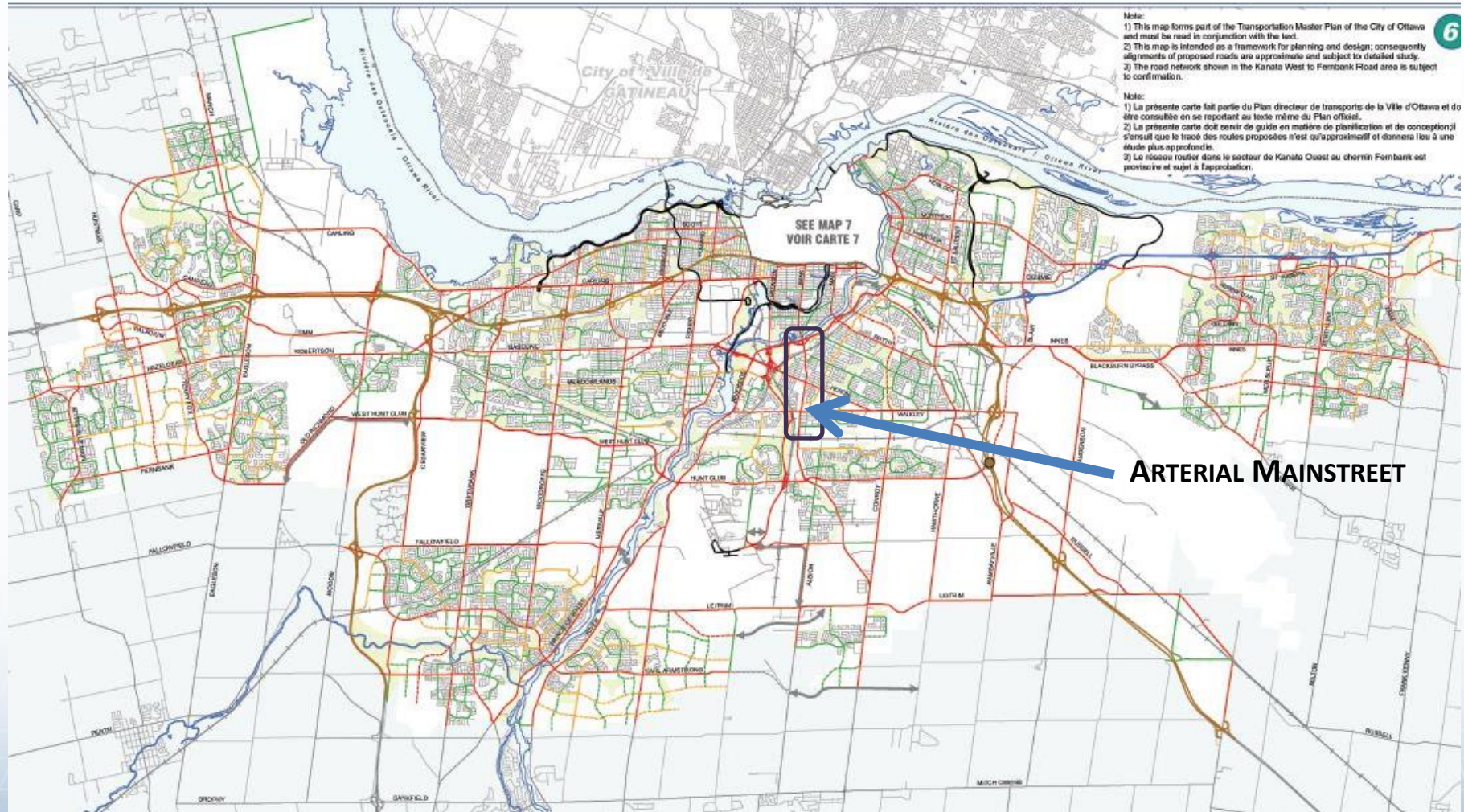
STUDY CONTEXT

2013 TRANSPORTATION MASTER PLAN (TMP)

- TMP IS THE CITY'S BLUEPRINT FOR PLANNING, DEVELOPMENT, AND TRANSPORTATION NETWORKS
- TRANSPORTATION VISION FOR 2031 WITH FOCUS ON THESE KEYS AREAS:
 - INTEGRATION OF COMPLETE STREETS
 - IMPROVING WALKING AND CYCLING
 - SUPPORTING TRANSIT-ORIENTED DEVELOPMENT
- BANK STREET IDENTIFIED AS ARTERIAL MAINSTREET

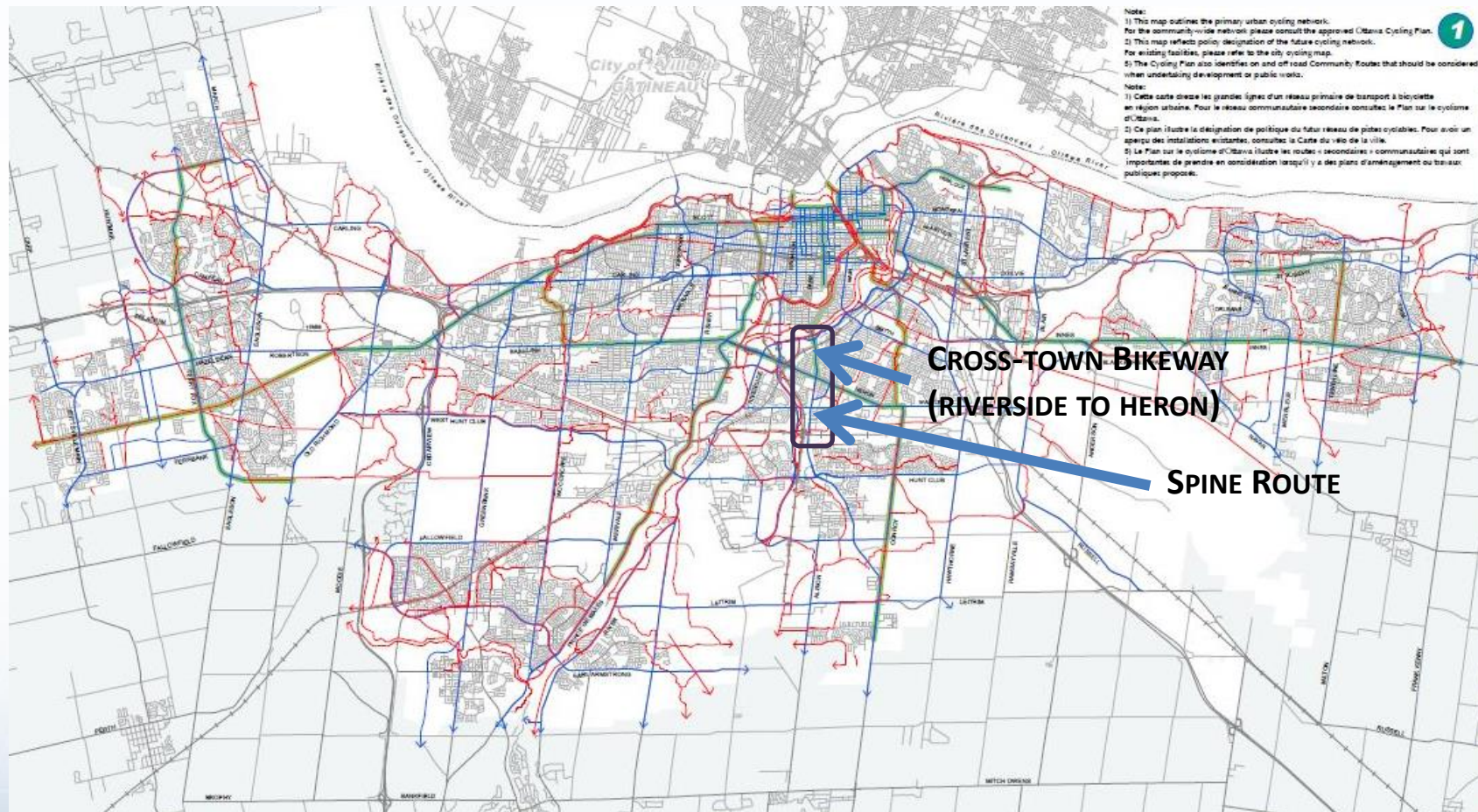


STUDY CONTEXT ROAD NETWORK



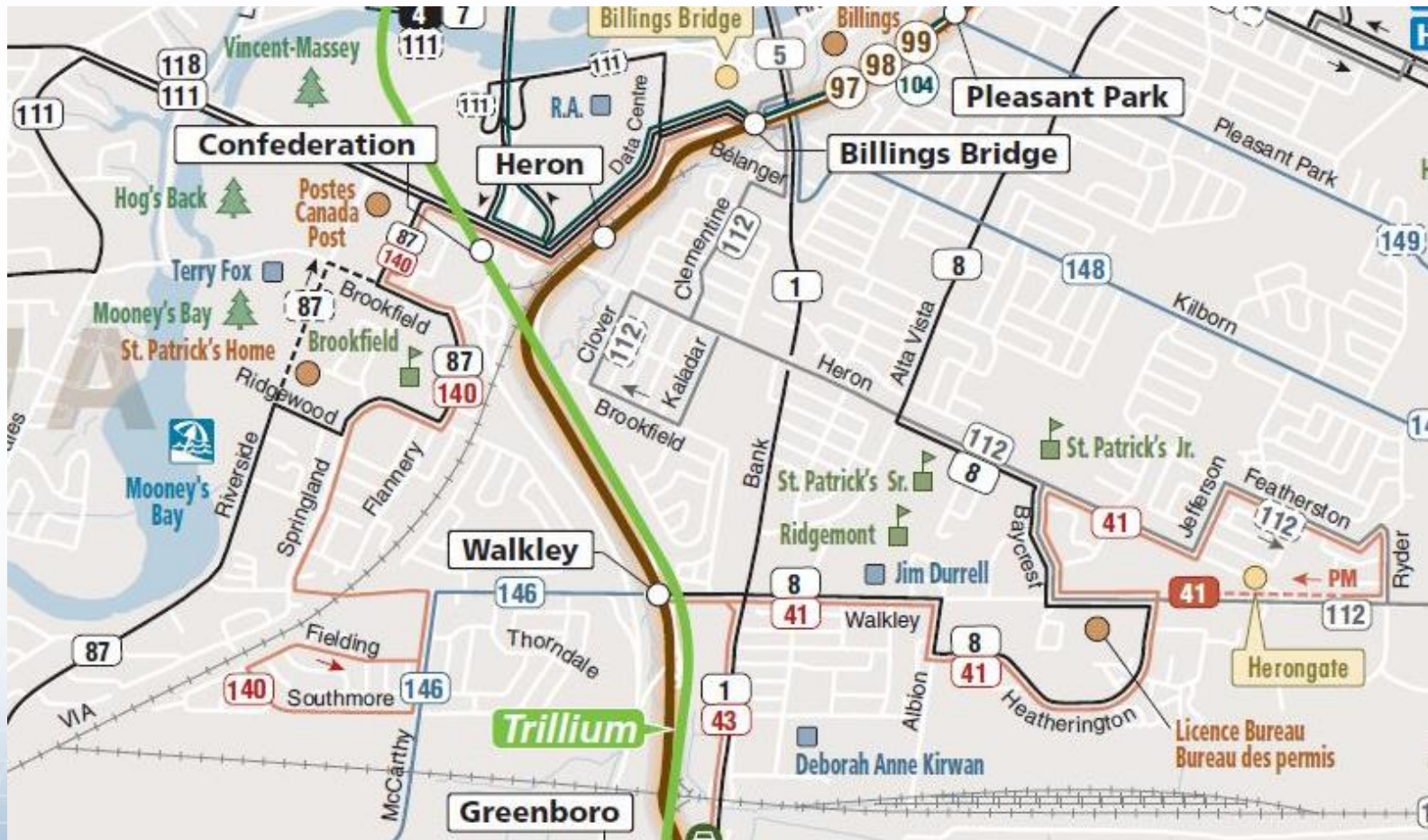
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STUDY CONTEXT CYCLING NETWORK



STUDY CONTEXT

TRANSIT SERVICES OPERATE ROUTES 1, 5, 8, 41, 43, 112, 148



STUDY CONTEXT

2013 COMPLETE STREETS


- DESIGNED TO ACCOMMODATE AND BALANCE THE SAFETY AND MOBILITY OF ALL USERS
- FACILITATE THE USE OF PUBLIC TRANSIT AND WILL SUPPORT TRANSIT-ORIENTED DEVELOPMENT
- DEVELOPMENT OF MMLOS GUIDELINES



STUDY CONTEXT

MULTIMODAL LEVEL OF SERVICE (MMLOS)

THE MMLOS ALLOWS FOR COMPARISON OF MODES IN ORDER TO EVALUATE TRADE-OFFS BY ASSESSING CRITICAL PARAMETERS THAT DETERMINE THE RELATIVE ATTRACTIVENESS AND COMFORT FOR PARTICULAR MODE ALONG A CORRIDOR.

MODE	ELEMENT	LEVEL OF SERVICE	
			
Pedestrians (PLOS)	Segments	High level of comfort	Low level of comfort
	Intersections	Short delay, high level of comfort, low risk	Long delay, low level of comfort, high risk
Bicycles (BLOS)	Segments	High level of comfort	Low level of comfort
	Intersections	Low level of risk / stress	High level of risk / stress
Trucks (TkLOS)	Segments	Unimpeded movement	Impeded movement
	Intersections	Unimpeded movement / short delay	Impeded movement / long delay
Transit (TLOS)	Segments	High level of reliability	Low level of reliability
	Intersections	Short delay	Long delay
Vehicles (LOS)	Intersections	Low lane utilization	High lane utilization

STUDY CONTEXT MMLOS TARGETS

OP Designation / Policy Area	Road Class	PLOS	Bicycle - BLOS				Transit - TLOS ³			Truck - TrLOS		Auto - LOS ⁴
			Cross-town Bikeway	Spine Route	Local Route	Elsewhere	Rapid Transit Corridor	TP - Continuous Lanes	TP - Isolated Measures	Truck Route	Other	
Land-Use Designation												
Central Area	Arterial	A	A	C	B	D	A	C	D	D	E	E
	Collector	A	A	B	B	D	A	C	D	D	No target	E
	Local	A	A	B	B	D	A	C	D	E	No target	E
Developing Community	Arterial	C	B	C	B	D	B	C	D	D	No target	D
	Collector	C	B	C	B	D	B	C	D	D	No target	D
	Local	C	B	C	B	D	B	C	D	N/A	No target	D
Employment Area	Arterial	C	B	C	C	E	B	C	D	B	D	D
	Collector	C	B	C	C	E	B	C	D	B	D	D
	Local	C	B	D	C	No target	B	C	D	D	E	D
Enterprise Area	Arterial	C	B	C	B	D	B	C	D	B	E	D
	Collector	C	B	C	B	D	B	C	D	B	E	D
	Local	C	B	C	B	No target	B	C	D	D	No target	D
General Rural Area	Arterial	No target	N/A	D	D	No target	N/A	N/A	N/A	C	E	D
	Collector	No target	N/A	D	D	No target	N/A	N/A	N/A	C	No target	D
	Local	No target	N/A	D	D	No target	N/A	N/A	N/A	No target	No target	D
General Urban Area	Arterial	C	B	C	B	D	B	C	D	D	E	D
	Collector	C	B	C	B	D	B	C	D	D	No target	D
	Local	C	B	C	B	D	B	C	D	N/A	No target	D
Mixed Use Centre	Arterial	C	A	C	B	D	B	C	D	D	E	D
	Collector	C	A	B	B	D	B	C	D	D	No target	D
	Local	C	A	B	B	D	B	C	D	N/A	No target	D
Village	Arterial	C	B	C	B	D	N/A	N/A	N/A	D	No target	D
	Collector	C	B	C	B	D	N/A	N/A	N/A	D	No target	D
	Local	C	B	C	B	D	N/A	N/A	N/A	N/A	No target	D
Traditional Main Street	Arterial	B	A	C	C	D	B	C	D	D	E	D
	Collector	B	A	C	C	D	B	C	D	D	No target	D
Arterial Main Street	Arterial	C	B	C	D	D	B	C	D	D	E	D
All Other Designations	Arterial	D	B	C	C	D	B	C	D	D	No target	D
	Collector	D	B	C	C	D	B	C	D	D	No target	D
	Local	D	B	C	C	D	B	C	D	N/A	No target	D
Policy Area ²												
Within 600m of a rapid transit station	Arterial	A	A	C	B	D	A	C	D	D	E	E
	Collector	A	A	B	B	D	A	C	D	D	No target	E
	Local	A	A	B	B	D	A	C	D	N/A	No target	E
Within 300m of a school	Arterial	A	A	C	B	D	A	C	D	D	E	E
	Collector	A	A	B	B	D	A	C	D	D	No target	E
	Local	A	A	B	B	D	A	C	D	N/A	No target	E

ISSUES AND CONSIDERATIONS

SPECIFIC CONCERNS TO BE ADDRESSED

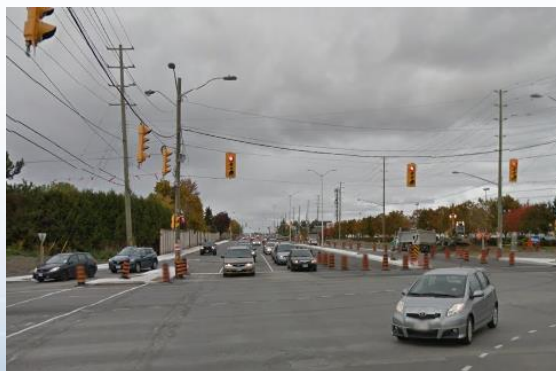
- ACCESS TO BUSINESSES
- TWO-WAY LEFT TURNS
- TRANSIT PRIORITY
- COMPATIBILITY WITH CDP
- SEGREGATED CYCLING FACILITIES
- PEDESTRIAN ENVIRONMENT
- DESIGN SPEED



WELLINGTON ST TWO-WAY CYCLE TRACK



EXISTING CONDITIONS OF BANK ST AT
WALKLEY RD



GREENBANK RD SIDEWALK WIDENING



EXISTING CONDITIONS OF BANK ST AT
HERON RD

ISSUES AND CONSIDERATIONS

PUBLIC CONCERNS

- ENTRANCE/EXIT OF BLUE HERON MALL
- PEDESTRIAN SIGNALIZATION AT BANK STREET AND RIVERSIDE DRIVE NORTH

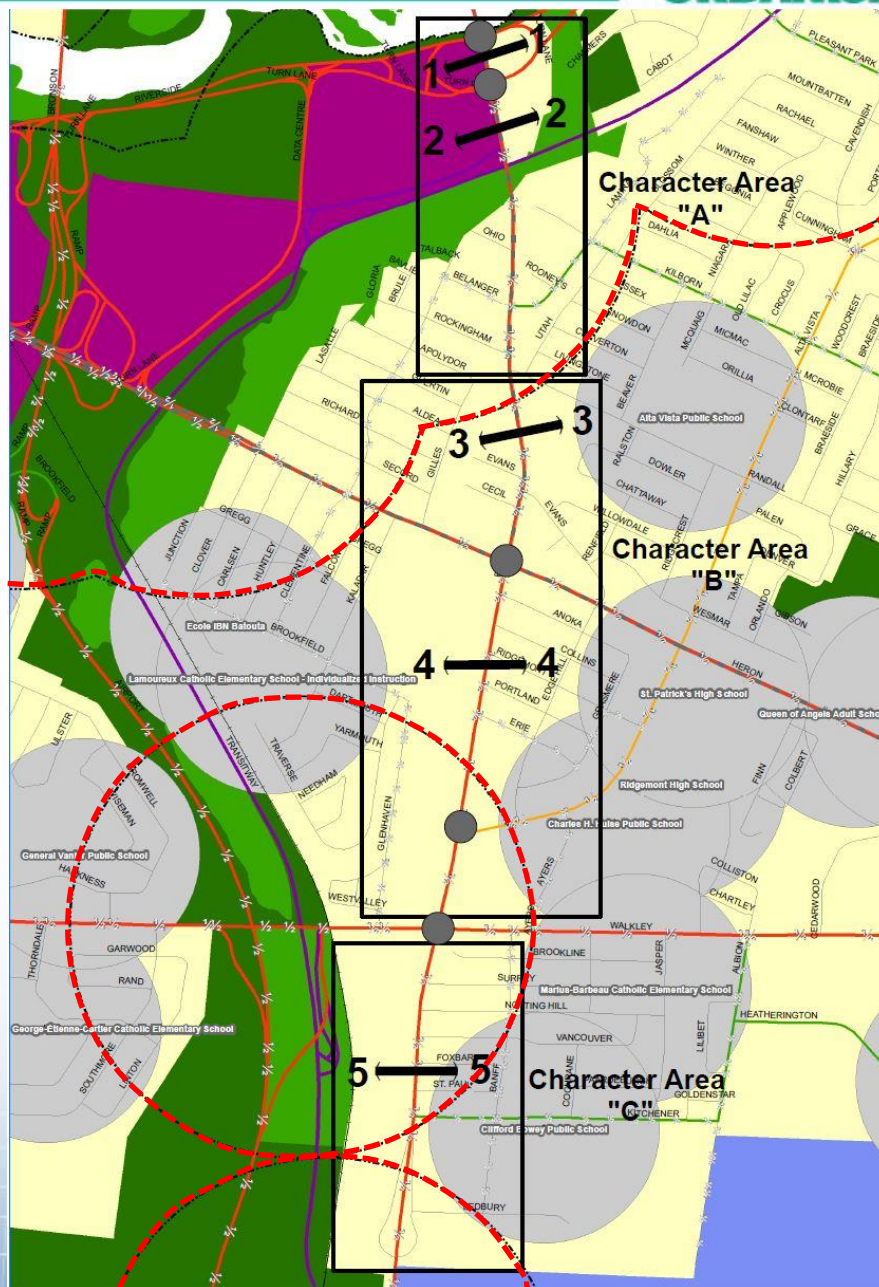


WORK COMPLETED TO-DATE

- TRAFFIC ANALYSIS OF EXISTING CONDITIONS
 - REVIEW OF EXISTING TRAFFIC COUNTS
 - REVIEW OF COLLISION DATA
- MMLOS ANALYSIS OF EXISTING CONDITIONS
- REVIEWED INITIAL CROSS SECTION ALTERNATIVES

WORK COMPLETED TO-DATE

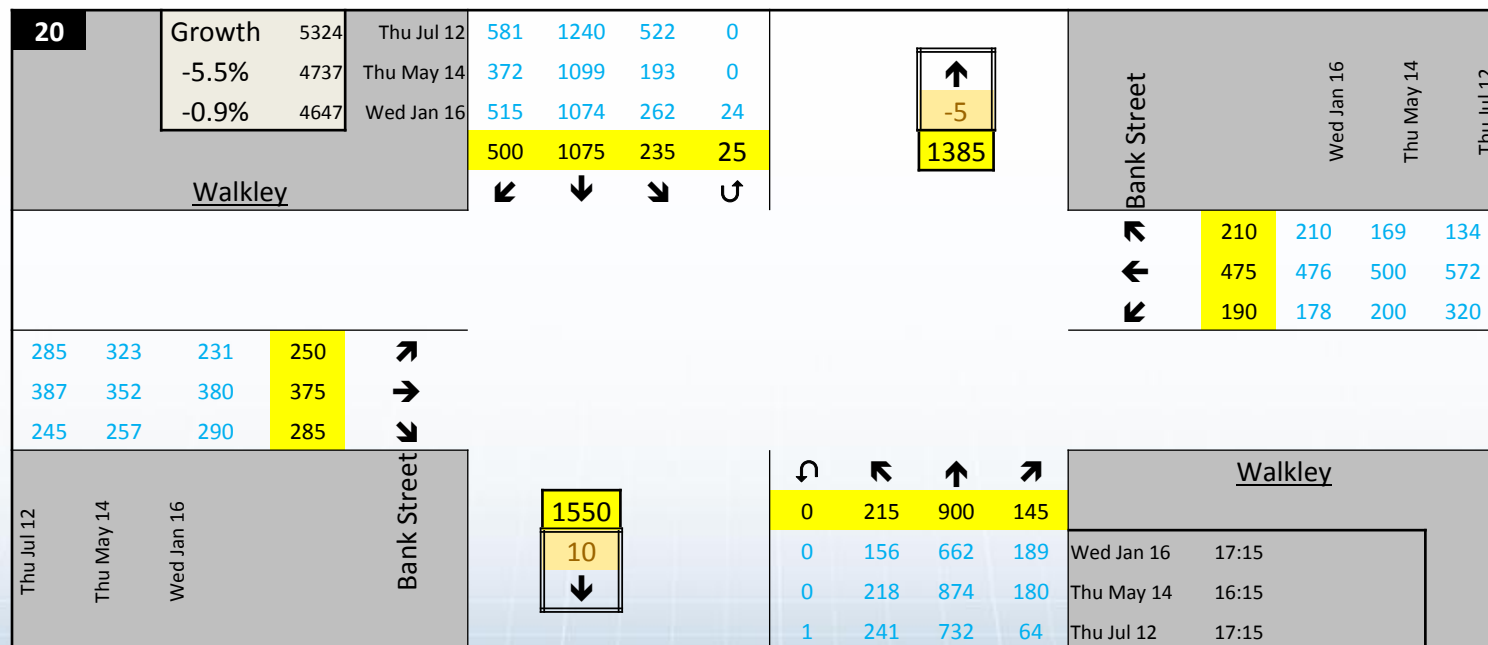
SEGMENT MAP



WORK COMPLETED TO-DATE






TRAFFIC ANALYSIS OF EXISTING CONDITIONS

A.M. AND P.M. PEAK-HOUR WAS CONSIDERED AND DATA COLLECTED BY THE CITY WAS USED FOR THE ANALYSIS








WORK COMPLETED TO-DATE

MMLOS ANALYSIS OF EXISTING CONDITIONS FOR INTERSECTIONS






INTERSECTION NUMBER & CROSS-STREET						
1	RIVERSIDE DRIVE WESTBOUND	C (C)	N/A	D (E)	D	C (D)
2	RIVERSIDE DRIVE EASTBOUND	E (E)	F	D (C)	D	C (E)
13	HERON ROAD	F (F)	F	F (F)	B	E (E)
19	ALTA VISTA DRIVE	E (E)	F	C (D)	C	B (B)
20	WALKLEY ROAD	F (F)	F	F (F)	A	B (D)

MMLOS TARGETS FOR INTERSECTIONS






INTERSECTION NUMBER & CROSS-STREET						
1	RIVERSIDE DRIVE WESTBOUND	A	A	D	D	E
2	RIVERSIDE DRIVE EASTBOUND	A	A	D	D	E
13	HERON ROAD	C	B	D	D	D
19	ALTA VISTA DRIVE	A	B	D	D	E
20	WALKLEY ROAD	A	B	D	D	E

WORK COMPLETED TO-DATE

MMLOS ANALYSIS OF EXISTING CONDITIONS FOR SEGMENTS

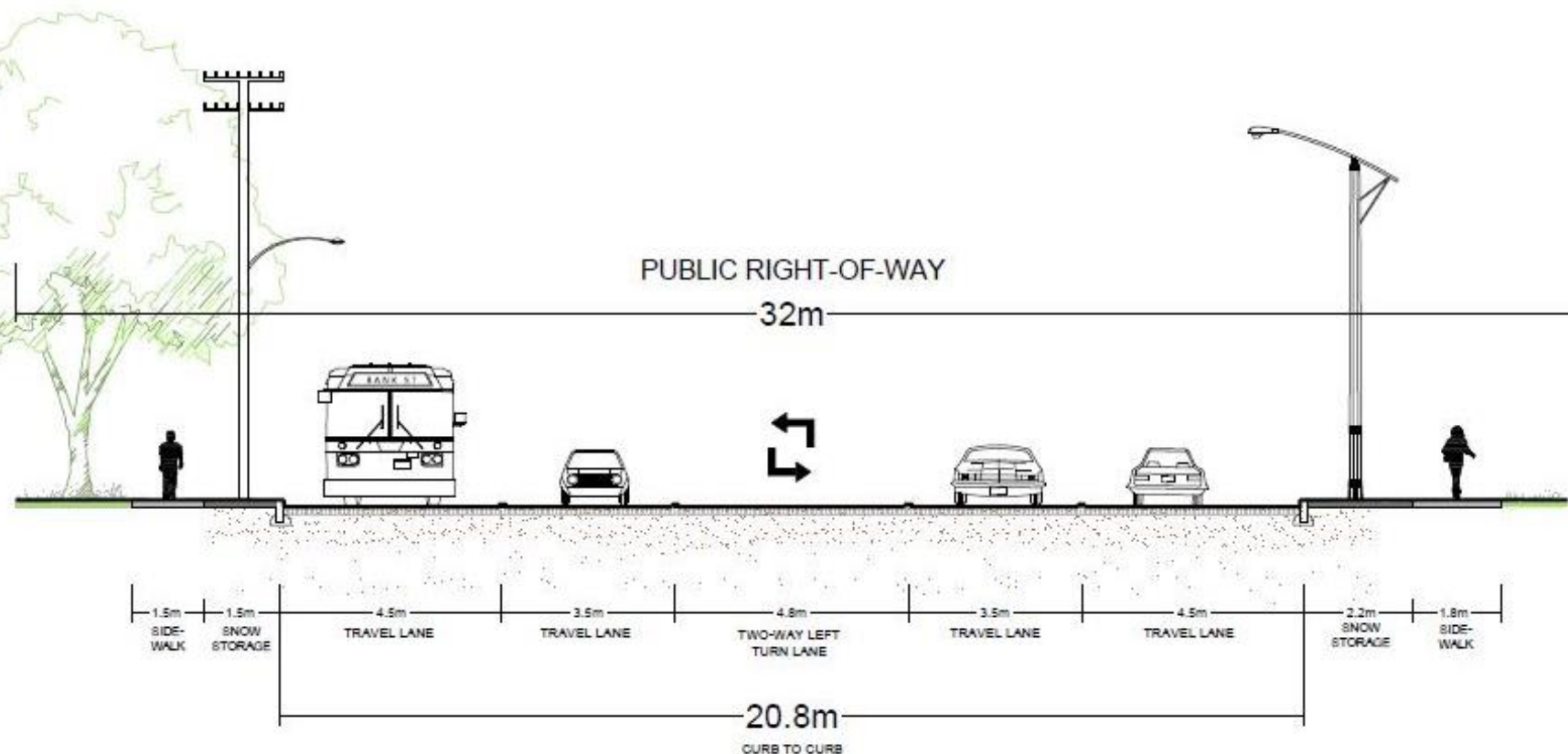
SEGMENT NUMBER & FROM / TO						
1	FROM RIVERSIDE DRIVE WESTBOUND TO RIVERSIDE DRIVE EASTBOUND	E	E	D	A	VLOS NOT REPORTED FOR SEGMENTS
2	FROM RIVERSIDE DRIVE EASTBOUND TO BILLINGS BRIDGE TRANSITWAY	E	B	D	A	
3	FROM RANDALL AVENUE TO HERON ROAD	E	E	D	C	
4	FROM HERON ROAD TO ERIE AVENUE	E	E	D	E	
5	FROM WALKLEY ROAD TO KITCHENER AVENUE	E	E	D	C	

MMLOS TARGETS FOR SEGMENTS

SEGMENT NUMBER & FROM / TO						
1	FROM RIVERSIDE DRIVE WESTBOUND TO RIVERSIDE DRIVE EASTBOUND	A	A	D	D	VLOS NOT REPORTED FOR SEGMENTS
2	FROM RIVERSIDE DRIVE EASTBOUND TO BILLINGS BRIDGE TRANSITWAY	A	A	D	D	
3	FROM RANDALL AVENUE TO HERON ROAD	C	B	D	D	
4	FROM HERON ROAD TO ERIE AVENUE	C	C	D	D	
5	FROM WALKLEY ROAD TO KITCHENER AVENUE	A	B	D	D	

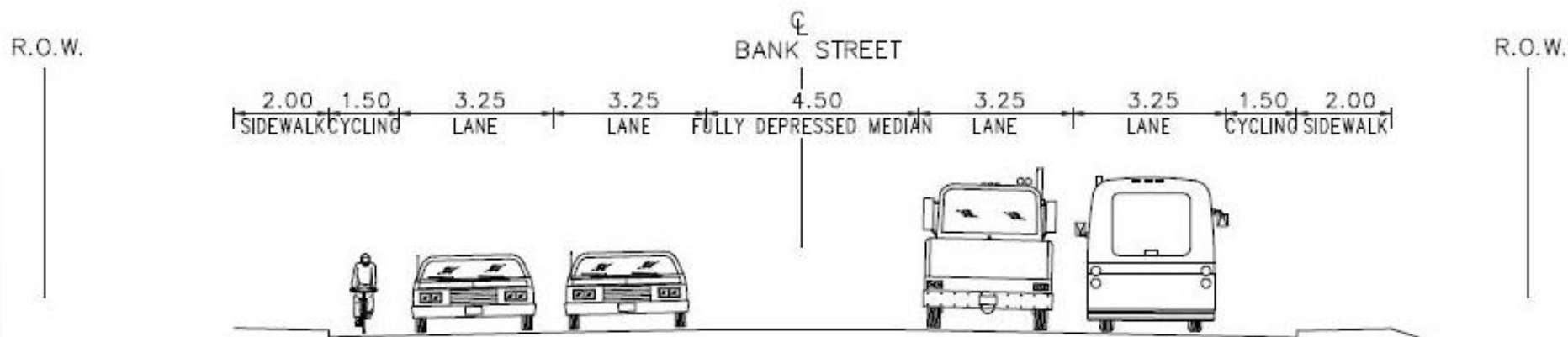
WORK COMPLETED TO-DATE

CROSS-SECTION OF EXISTING CONDITIONS BETWEEN HERON STREET AND RANDALL AVENUE



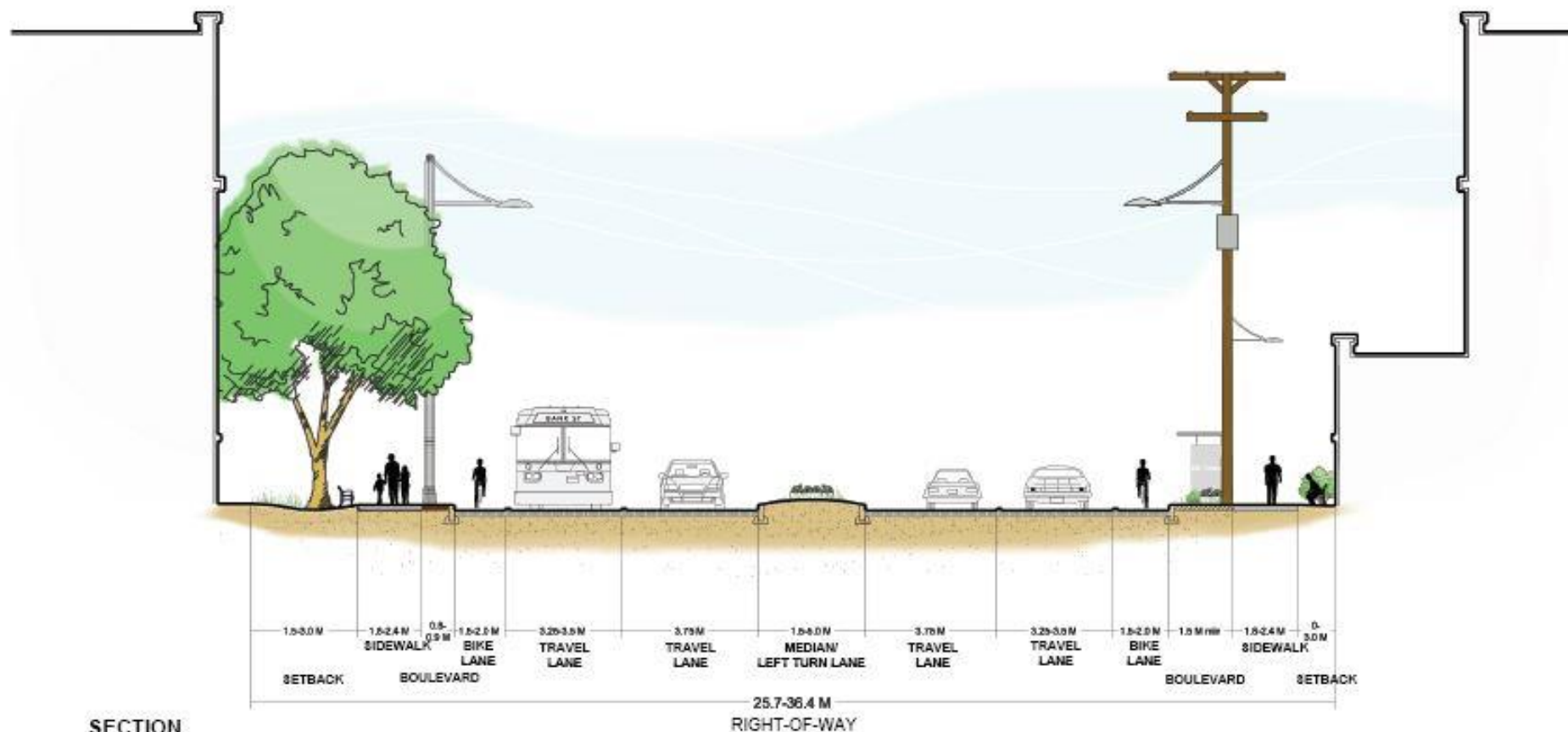
WORK COMPLETED TO-DATE

PDR 2007 CROSS-SECTION BETWEEN HERON STREET AND RANDALL AVENUE



WORK COMPLETED TO-DATE

CDP 2012 CROSS-SECTION BETWEEN HERON STREET AND RANDALL AVENUE

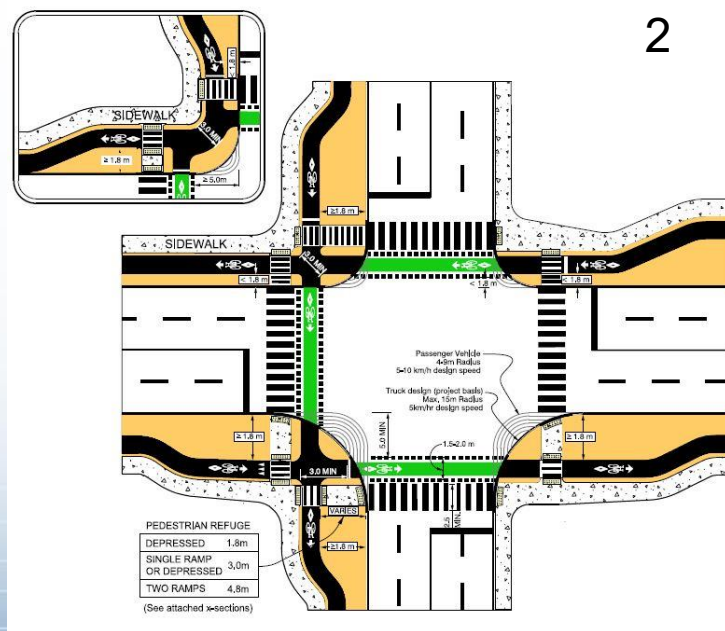
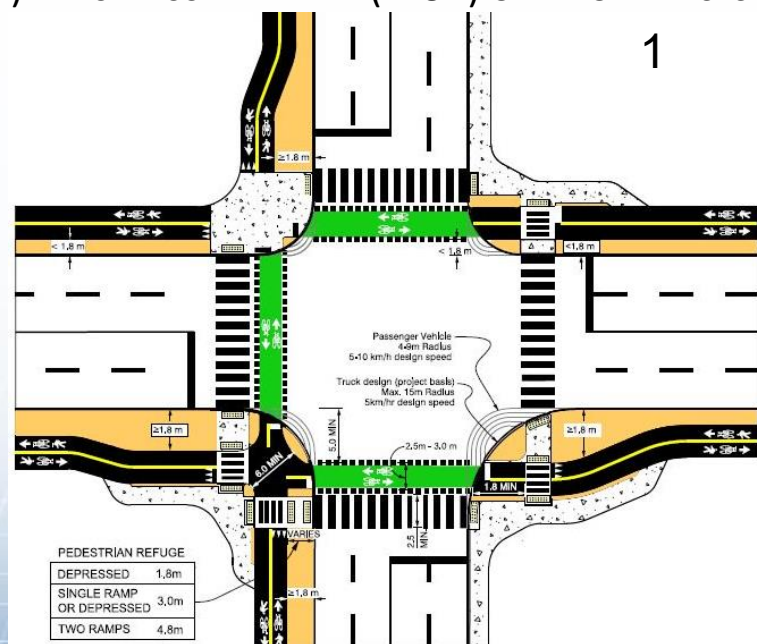


WORK COMPLETED TO-DATE

TOOL KIT – PROTECTED INTERSECTIONS

THE CITY HAS DRAFTED PROTECTED INTERSECTION PLANS, WHICH WILL BE CONSIDERED DURING THE FUNCTIONAL DESIGN STUDY

- 1) CYCLE TRACK AND SIDEWALK TREATMENTS; AND
- 2) MULTI-USE PATHWAY (MUP) OR TWO-WAY CYCLE TRACK AND SIDEWALK TREATMENTS.



NEXT STEPS

- DEVELOP DRAFT FUNCTIONAL DESIGN PLAN
 - GEOMETRY AND GENERAL LAYOUT
 - LANDSCAPING
- SECOND ROUND OF CONSULTATION GROUP MEETINGS — SEPTEMBER 2016
- MODIFY PLAN BASED ON CONSULTATION GROUP INPUT
 - PROPERTY REQUIREMENTS
 - COSTING
- PUBLIC OPEN HOUSE — OCTOBER 2016
- REFINE AND DEVELOP RECOMMENDED PLAN — DECEMBER 2016
- PRESENTATION TO THE TRANSPORTATION COMMITTEE — DECEMBER 2016 (OPTIONAL)
- FINAL REPORT — JANUARY 2017

QUESTIONS/COMMENTS

FOR MORE INFORMATION, PLEASE VISIT:

<http://ottawa.ca/en/city-hall/public-consultations/transportation/bank-street-renewal-between-riverside-drive-north-and>

COMMENT SHEETS ARE AVAILABLE; PLEASE RETURN THEM BY **JULY 19, 2016**.

FOR FURTHER INQUIRIES, PLEASE CONTACT ANN SELFE: ANN.SELFE@OTTAWA.CA

THANK YOU

