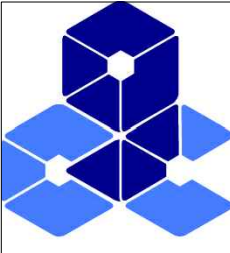




CITY OF OTTAWA
FUNCTIONAL PLANNING
2168 TENTH LINE ROAD

ACCESS CONCEPT DESIGN



**Castleglenn
Consultants**
Engineers, Project Managers & Planners

PROJECT REF. NUMBER: 7246

Contract No.
7246

Dwg. No.
01

Sheet 1 of 3

Asset Group
ISD

Des.
RM

Chk'd.
JB

Dwn.
RM

Chk'd.
AS

Utility Circ. No.

Index No.

Cost. Inspector

Scale:
10m 0 10m
HORIZ 1:500

NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

	No.	Description	By	Date (dd/mm/yy)
REVISIONS	1	AS PER CITY COMMENTS	XX	XXXXXX

NOTES

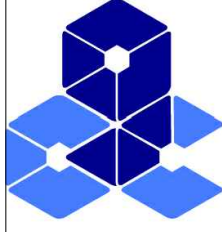
- THE MODIFICATION OF STORMWATER DRAINAGE TO SUIT THE WIDENED ROAD SHALL BE DONE AT DETAILED DESIGN STAGE.
- THE LOCATIONS OF UNDERGROUND UTILITIES AND ANY PROTECTION/RELOCATION REQUIREMENTS SHALL BE DETERMINED AT DETAILED DESIGN STAGE.

LEGEND

- ① –EXISTING CATCH BASINS TO BE MOVED DURING DETAILED DESIGN
- ② –EXISTING ELECTRIC POWER POLES TO BE LEFT IN PLACE

CITY OF OTTAWA
FUNCTIONAL PLANNING
2168 10TH LINE ROAD

ACCESS CONCEPT DESIGN
TYPICAL CROSS SECTION



**Castleglenn
Consultants**
Engineers, Project Managers & Planners

PROJECT REF. NUMBER: 7246

Contract No.
7246

Dwg. No.
02

Sheet 2 of 3

Asset Group
ISD

Des.
RM

Chk'd.
JB

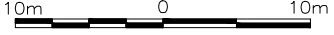
Dwn.
RM

Chk'd.
AS

Utility Circ. No.

Index No.

Cost. Inspector

Scale:

1: 25

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No.	Description	By	Date (dd/mm/yy)
1	AS PER CITY COMMENTS	XX	XX/XX/XX

NOTES

FINAL PAVEMENT DESIGN TO BE CONFIRMED AT DETAILED DESIGN STAGE

The diagram illustrates a typical cross-section of a road and adjacent path. From left to right, the components are:

- MULTI USE PATH**: 3m wide, sloped at 3:1 and 10:1. It includes a **MUP ACCORDING TO CITY STANDARD SC 21**.
- BOULEVARD**: VARIES 3m (TYP). It consists of three layers: **GRANULAR 'B' TYPE II - 300mm**, **GRANULAR 'A' -150mm**, and **ASPHALT CONCRETE - 50mm**.
- PROPOSED RIGHT TURN LANE**: VARIES 0 TO 3.5m. It features a **NEW CURB** on the left and an **EXISTING CURB TO BE REMOVED** on the right. The pavement structure includes **GRANULAR 'B' TYPE II - 400mm**, **GRANULAR 'A' -150mm**, **ASPHALT CONCRETE SUPERPAVE 19.0mm - 40mm (2 LAYERS)**, and **ASPHALT CONCRETE SUPERPAVE 12.5 - 50mm**.
- EXISTING PAVEMENT**: Includes **SAW CUT PAVEMENT** and **EXISTING ASPHALT TO REMAIN UNDISTURBED**. Dimensions of 0.6m, 0.3m, and 0.3m are indicated for the curb and pavement transition.

Orientation is indicated by **WEST** (left) and **EAST** (right) arrows. A large downward arrow points to the proposed right turn lane.

TYPICAL CROSS SECTION



CITY OF OTTAWA
FUNCTIONAL PLANNING
2168 10TH LINE ROAD

ACCESS CONCEPT DESIGN
VEHICLE TURNING MANOEUVERS



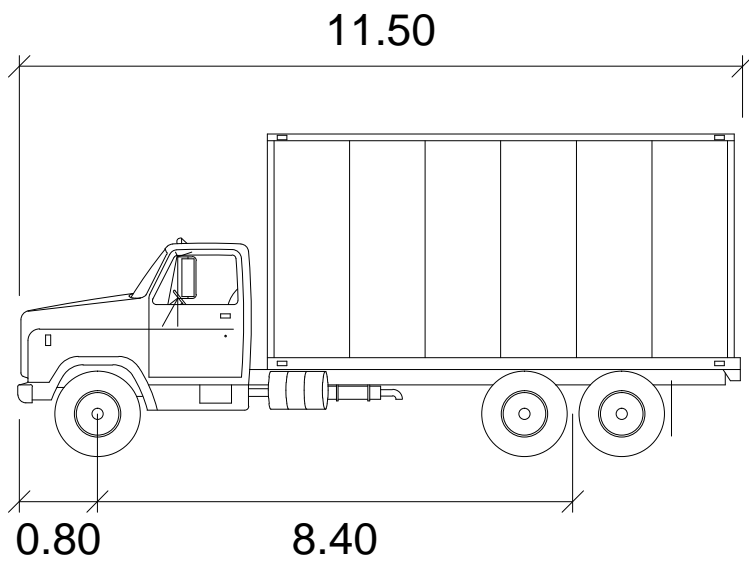
PROJECT REF. NUMBER: 7246

Contract No.		Dwg. No.	
7246		03	
Sheet 3 of 3			
Asset Group			
ISD			
Des.		Chk'd.	
RM		JB	
Dwn.		Chk'd.	
RM		AS	
Utility Circ. No.		Index No.	
Cost. Inspector			
Scale:			
<div><div><div></div><div></div><div></div></div><div>10m010m</div></div> <div>HORIZ 1:500</div>			

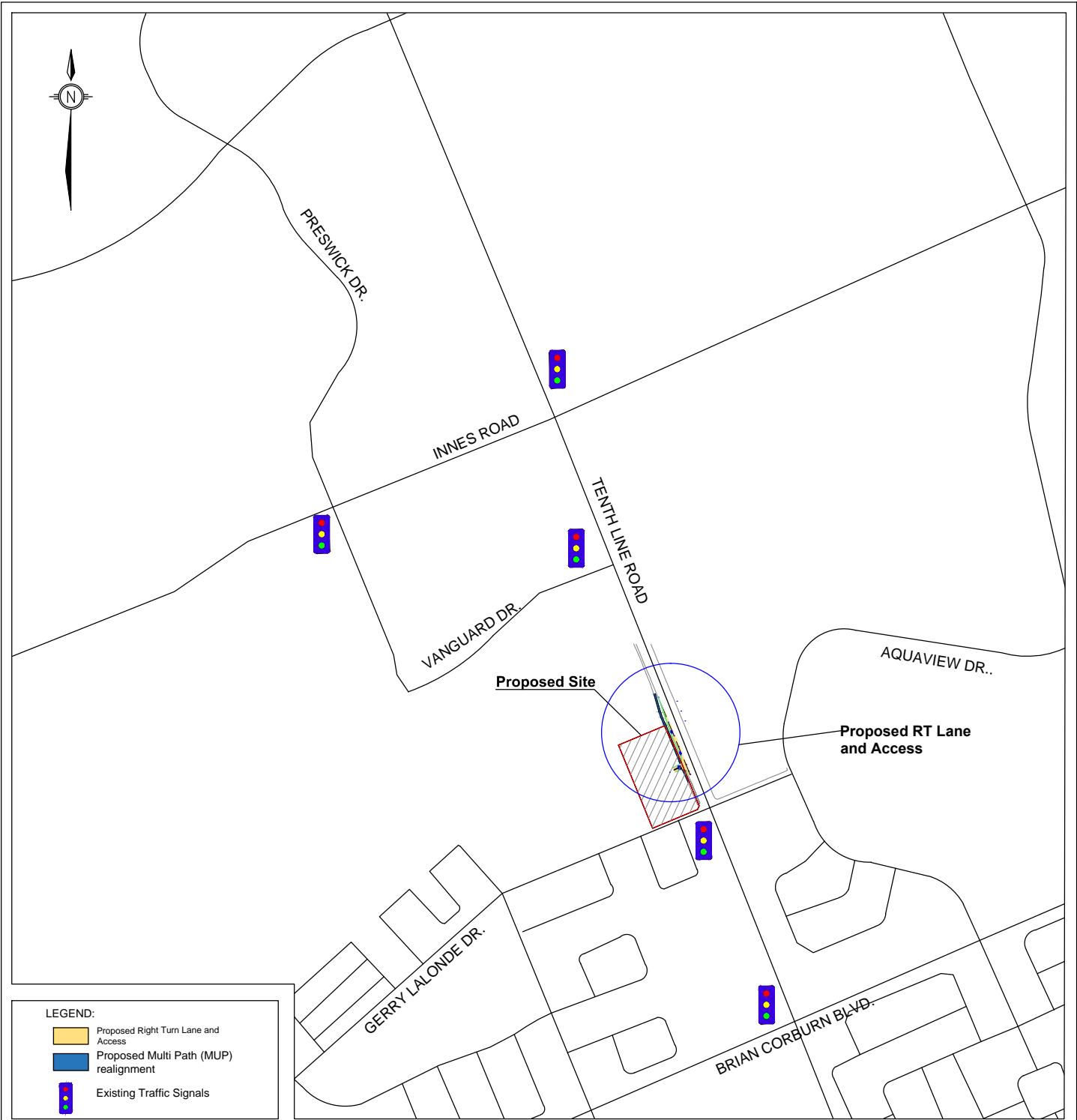
NOTE: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall prove the location of utilities and shall be responsible for adequate protection from damage.

REVISIONS	No.	Description	By	Date (dd/mm/yy)
	1	AS PER CITY COMMENTS	XX	XX/XX/XX

NOTES




HSU	meters
Width	: 2.60
Track	: 2.60
Lock to Lock Time	: 6.0
Steering Angle	: 39.7



LEGEND:

- Proposed Right Turn Lane and Access
- Proposed Multi Path (MUP) realignment
- Existing Traffic Signals

 PLANNING AND GROWTH MANAGEMENT	<u>KEY PLAN</u>		Design Review and Implementation	
	TENTH LINE ROAD SOUTH OF INNES ROAD		Approved By:	Drawing No.: DRI.0XXB
			Completed By: CASTLEGLENN CONSULTANTS INC.	
			Scale: NTS Date: JULY 2020	
			Sheet 1 of 2	



MUP REALIGNED

EXTENDED RIGHT TURN LANE



PROPOSED ACCESS

TENTH LINE ROAD

PROJECT LIMIT

PROJECT LIMIT

LEGEND:

-  Proposed Right Turn Lane and Access
-  Proposed Multi Path (MUP) realignment



PLANNING AND GROWTH
MANAGEMENT

CONCEPT PLAN

TENTH LINE ROAD
SOUTH OF INNES ROAD

Design Review and Implementation

Approved By:

Drawing No.:

Completed By:
CASTLEGLENN CONSULTANTS INC.

DRI.0XXB

Scale:
1:1000

Date:
JULY 2020

Sheet 2 of 2



**Castleglenn
Consultants**

Engineers, Project Managers & Planners

Access and Right Turn Lane Extension
Tenth Line Road - Conceptual Cost Estimate

ITEM NO.	ITEM	ESTIMATED QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
A	<u>REMOVALS</u>				
A.1	Sawcut Asphalt	150	m	\$17	\$2,475
A.3	Remove Existing Asphalt	95	m ²	\$11	\$1,045
A.4	Remove & Dispose of Concrete Curb	150	m	\$28	\$4,125
A.5	Remove Asphalt on a Multi Use Path	536	m ²	\$11	\$5,896
A.6	Remove & Relocate Warning Signs	2	each	\$275	\$550
	SUBTOTAL A				\$14,091
B	<u>UTILITIES AND STORM SEWER</u>				
B.1	Adjust Manhole Elevation	1	LS	\$1,100	\$1,100
B.2	Relocate and replace curbside Storm Drain with covers	5	each	\$3,300	\$16,500
	SUBTOTAL B				\$17,600
C	<u>ROADWAY AND ACCESS</u>				
C.1	<u>Earthworks and Granular Layers</u>				
C.1.1	Excavate for Subgrade	786	m ³	\$11	\$8,644
C.1.2	Granular "B" Type II, 400mm Thickness	838	Tonne	\$30	\$25,128
C.1.3	Granular "A" Type I, 150mm Thickness	257	Tonne	\$40	\$10,272
C.1.4	Preparing Subgrade Surface	616	m ²	\$2	\$1,232
	SUBTOTAL C.1				\$45,276
C.2	<u>Asphalt Concrete Pavement</u>				
C.2.1	Asphalt-40mm (Two Lifts)	156	Tonne	\$144.0	\$22,464
C.2.2	Asphalt-50mm (One Lift)	91	Tonne	\$154.0	\$14,014
	SUBTOTAL C.2				\$36,478
C.3	<u>Curb Extension, Signs & Pavement Markings</u>				
C.3.1	Curb and Gutter	175	m	\$55.0	\$9,625
C.3.4	Pavement Marking / Signs	1	LS	\$3,300	\$3,300
	SUBTOTAL C.3				\$12,925
	SUBTOTAL - ROADWAY AND ACCESS				\$94,679
	TOTAL ROADWAY AND ACCESS CONSRTUCTION				\$126,370
D	<u>MULTI USE PATH</u>				
D.1	<u>Earthworks</u>				
D.1.1	Excavate for Subgrade	110	m ³	\$11	\$1,210
D.1.2	Fill	55	m ³	\$35	\$1,925
D.1.3	Granular "B" Type II, 300mm Thickness	416	Tonne	\$30	\$12,474
D.1.4	Granular "A" Type I, 150mm Thickness	196	Tonne	\$40.0	\$7,841
D.1.5	Preparing Subgrade Surface	578	m ²	\$2	\$1,155
D.1.6	Geotextile filter fabric Supply and Install	660	m ²	\$5	\$3,300
D.1.7	Top Soil Placement and seeding on the Boulevard	542	m ²	\$10	\$5,420
	SUBTOTAL D.1				\$33,325
D.2	<u>Asphalt Concrete Pavement</u>				
D.2.1	Asphalt-40mm (Two Lifts)	0	Tonne	\$144.0	\$0
D.2.2	Asphalt-50mm (One Lift)	64	Tonne	\$154.0	\$9,910
	SUBTOTAL D.2				\$9,910
	SUBTOTAL - MULTI USE PATH				\$43,235
	SUBTOTAL (ROADWAY, ACCESS AND MULTIUSE PATH)				\$169,604
	CONTINGENCY (5%)				\$8,480
	TOTAL PROJECT CONCEPTUAL COST				\$178,084

Please Note:

- 1) Additional costs could be incurred subsequent to utility plan circulations and final plan approval
- 2) An existing utility survey is necessary to determine the location of all underground utilities
- 3) Relocation (if required) of underground utilities is not included in the above cost
- 4) All quantities are approximate and need to be verified at Detailed Design
- 5) The cost estimates does not account for additional street lights (if required)
- 6) The cost estimates does not include engineering, survey, traffic control fees, mobilization/demobilization