



# WELCOME

Virtual Presentation

Reconstruction Project:  
East Avenue

(Frederick Street to Krug Street &  
Cameron Street to Eugene George Way)

April 2024



# Project Information

## Reconstruction Project



East Avenue (Frederick Street to Krug Street &  
Cameron Street to Eugene George Way)

Purpose of the Meeting:	To inform the public of the proposed reconstruction details.
Project Description:	New storm sewer, sanitary sewer, watermain and associated services, curbs, sidewalks, bike lanes, and road structure will be replaced.
Project Funding:	This project is funded by the rate payers of the City of Kitchener.
Construction Schedule:	Construction for Year 1 will begin May 6, 2024 Construction for Year 2 will begin May 2025
Contractor:	Sousa Concrete
Project Management:	City of Kitchener Development Services Department, Engineering Services Division.
Personnel to Contact:	Should you have any questions or comments about this project and wish to speak with someone personally, you may call: Lou Slijepcevic, C.E.T., rcji 519-741-2200 ext. 7153 Lou.Slijepcevic@kitchener.ca Lyndsay Dokas, P.Eng., 519-743-6500 ext. 1339 LDokas@mte85.com



# Road Reconstruction Project

East Avenue (Frederick Street to Krug Street &  
Cameron Street to Eugene George Way)



Welcome to this virtual Public Information Centre presentation, organized by the City of Kitchener, Development Services Department, Engineering Services Division.

This project is being managed and coordinated by the City of Kitchener and funded through sewer and water reserves, and Will Not result in a direct cost to the homeowner.

The purpose of this presentation is as follows:

- ❖ To provide an opportunity for the public and property owners to review design details
- ❖ To present existing and proposed conditions drawings, and streetscape concepts within the project limits
- ❖ To provide a forum for comments by the public and property owners, which may be taken into account during the construction stage of the project.

All members of the public and property owners are invited to:

- ❖ Review the online documentation
- ❖ Consult with the project team members
- ❖ Review the displays depicting the proposed project details and discuss any design issues or impacts on your community and/or property



# Project Highlights

## East Avenue (Year 1: Frederick Street to Krug Street)



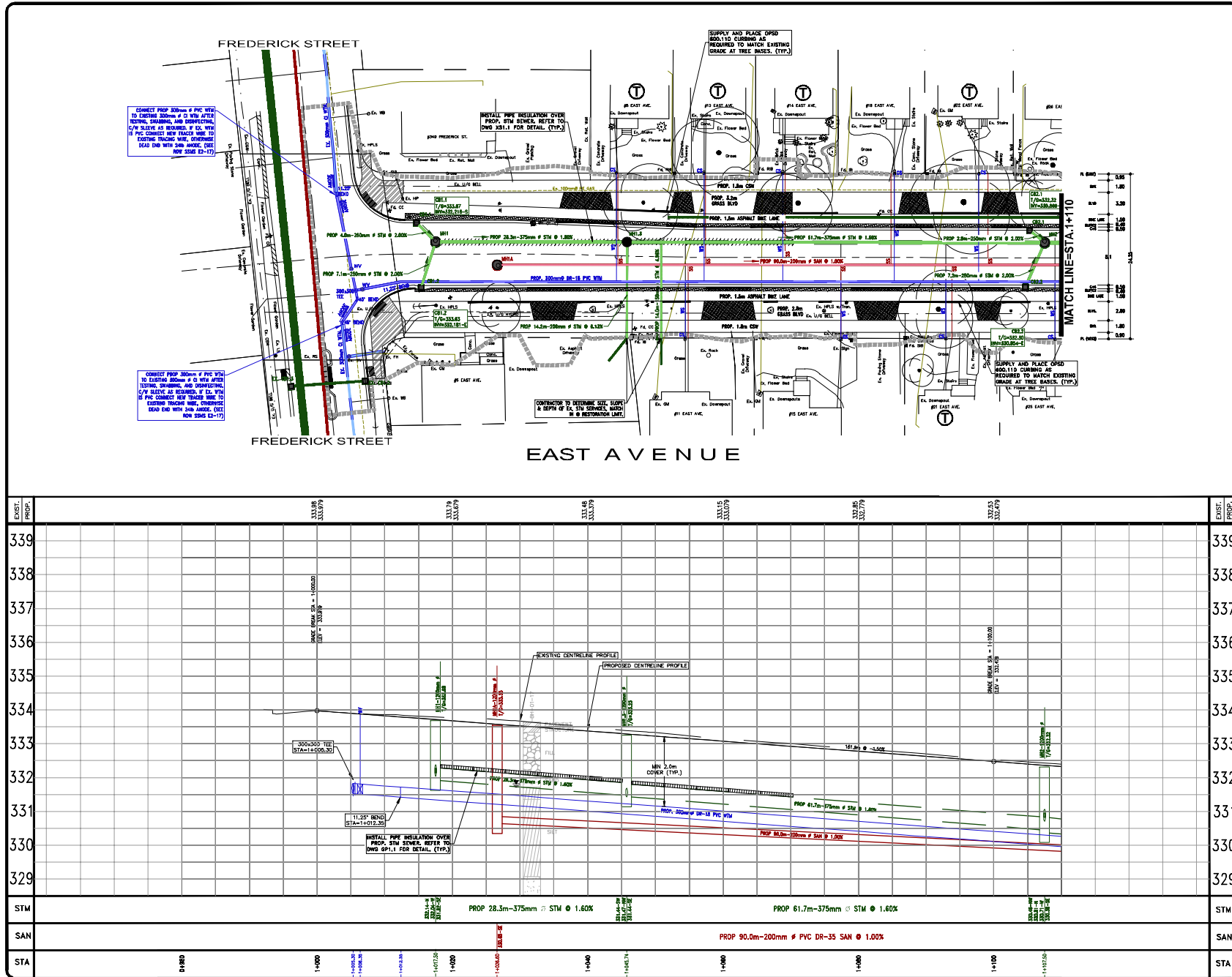
### Overview of Work:

- ❖ Complete reconstruction including new curbs, sidewalks, cycling facilities, asphalt roadway, sanitary sewer and services, watermain and services and storm sewer

### Proposed Changes from Existing Roadway:

- ❖ Reduction of street width from existing ~12.0m to ~9.0m
- ❖ Replacement of cycling facilities
- ❖ 0.3m colour impressed concrete buffer zone between bike lane and roadway
- ❖ The width of the sidewalk will generally be increased to 1.8m
- ❖ No changes to on-street parking are currently expected
- ❖ Some existing street trees will be impacted by the reconstruction
- ❖ Continuous sidewalk and cycling facilities through the Chapel Street intersection

The following slides will illustrate the identified changes with the proposed layout of East Avenue.



constructionNORTH

trueNORTH

THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

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**NOTES:**

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**PROPOSED SANITARY AND/OR WATER SERVICES TO BE**

TUNNELLED TO AVOID CONFLICTS WITH TREES, PLANTING BEDS, ETC.

FOR PARALLEL INSTALLATION OF WATERMAIN AND A SANITARY/STORM SEWER (INCLUDING A CATCHBASIN LEAD), PROVIDE MINIMUM 2.5m CLEAR HORIZONTAL SEPARATION DISTANCE FROM PIPE TO PIPE. FOR CROSSING OF A WATERMAIN BELOW A SANITARY/STORM SEWER (INCLUDING A CATCHBASIN LEAD) PROVIDE A 0.5m CLEAR VERTICAL SEPARATION DISTANCE BETWEEN CROWN WATERMAIN AND INVERT OF SEWER.

SANITARY SERVICES ARE 100mm OR 150mm PVC SDR 26, AND CONNECTION TO EXISTING WILL BE AT PROPERTY LINE, UNLESS OTHERWISE SPECIFIED.

ALL WATER SERVICE CONNECTIONS ARE 25mm P.E. PIPE WITH SERVICE RIGGS SET ON PROPERTY LINE, UNLESS OTHERWISE NOTED.

**BOREHOLES**

REFER TO GEOTECHNICAL INVESTIGATION REPORT BY ENGLOBE REF. NO. 160-P-201208-0-03-102-02-R-0001-04 DATED JUL 31, 2017

**PAVEMENT STRUCTURE**

4.5 SURFACE ASPHALT-40mm  
4.4 BINDER ASPHALT-20mm  
GRANULAR "A" BASE-75mm  
GRANULAR "B" BASE-40mm  
ALL DW'S PER KES W-44, ALL S/W RAMPS PER KES W-74.

**OTHER UTILITIES**

TEMPORARY SUPPORT OF EXISTING UTILITY POLES MUST BE APPROVED BY KITCHENER-BLUMHUT HYDRO. ALL ASSOCIATED COSTS WILL BE THE RESPONSIBILITY OF CONTRACTOR.

**SURVEY**

CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SDR # 52155100A TO 52155100M.

**SITE BENCHMARK**

TOPNUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.7m WEST OF THE CENTRELINE OF EAST AVE. AND 4.9m SOUTH OF THE CENTRELINE OF FREDERICK STREET.  
ELEV. = 555.087m.

**GEODETIC BENCHMARK**

ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 81.0m EAST OF EDNA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 8.1m EAST OF THE SOUTHWEST CORNER AND 9.0m BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 529.126m.

NO.	REVISION	BY	MM/DD/YY
6.			
5.			
4.	ISSUED FOR TENDER	VPP	02/02/24
3.	ISSUED FOR 90% SUBMISSION/ICA APPLICATION	VPP	12/15/23
2.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
1.	ISSUED FOR 30% SUBMISSION	VPP	04/18/23

The Corporation Of The  
**CITY OF KITCHENER**

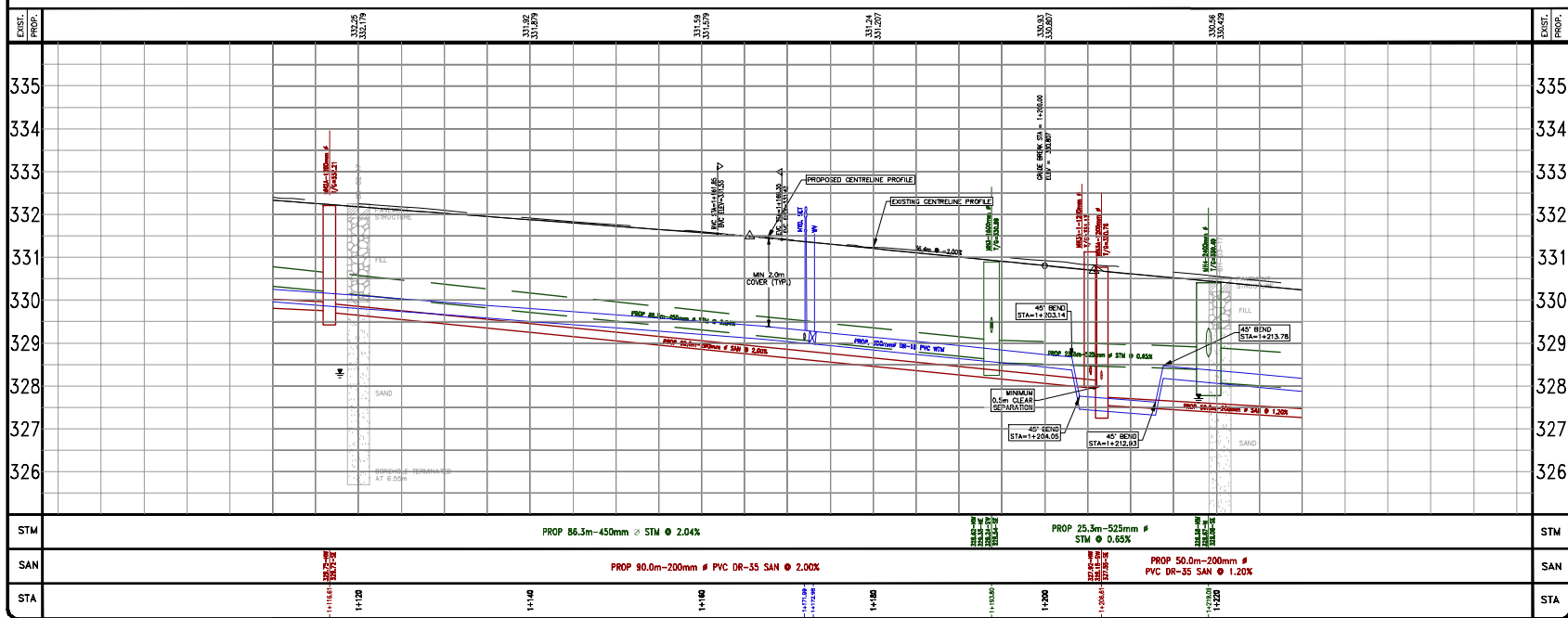
**Development Services**  
Engineering Division

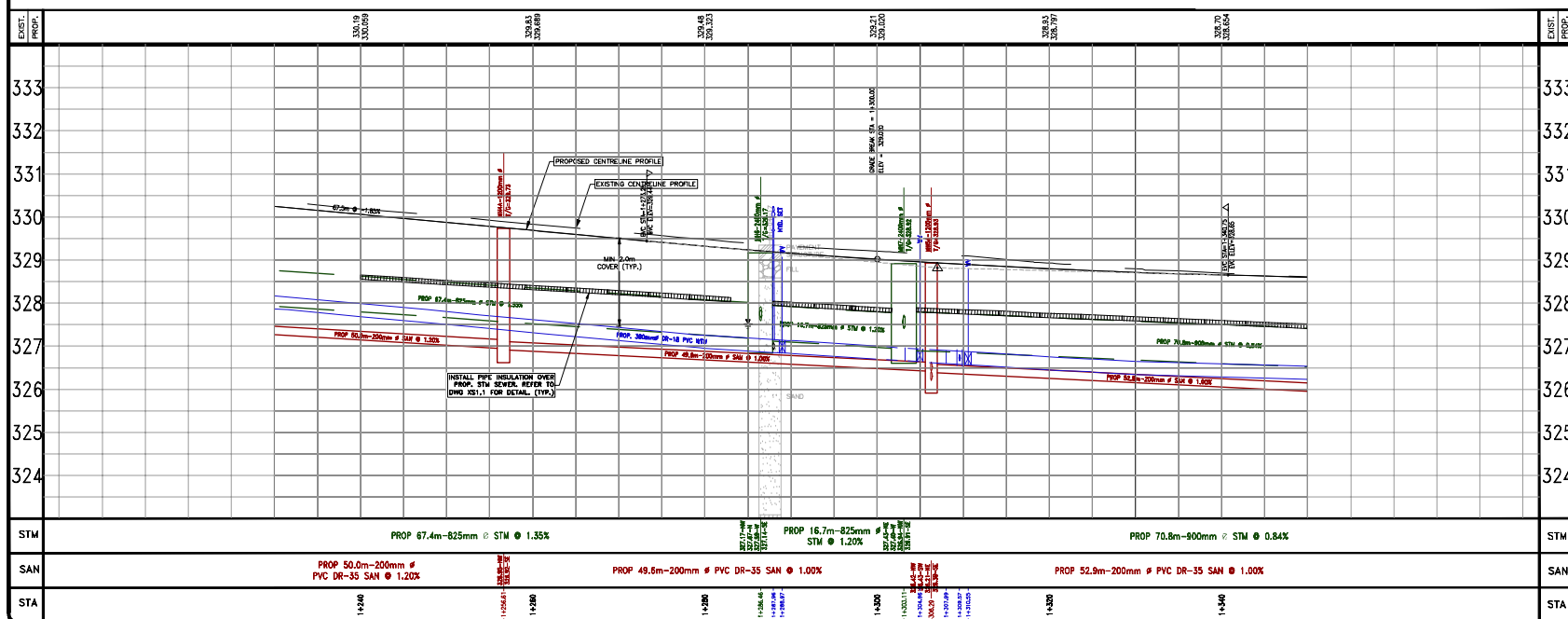
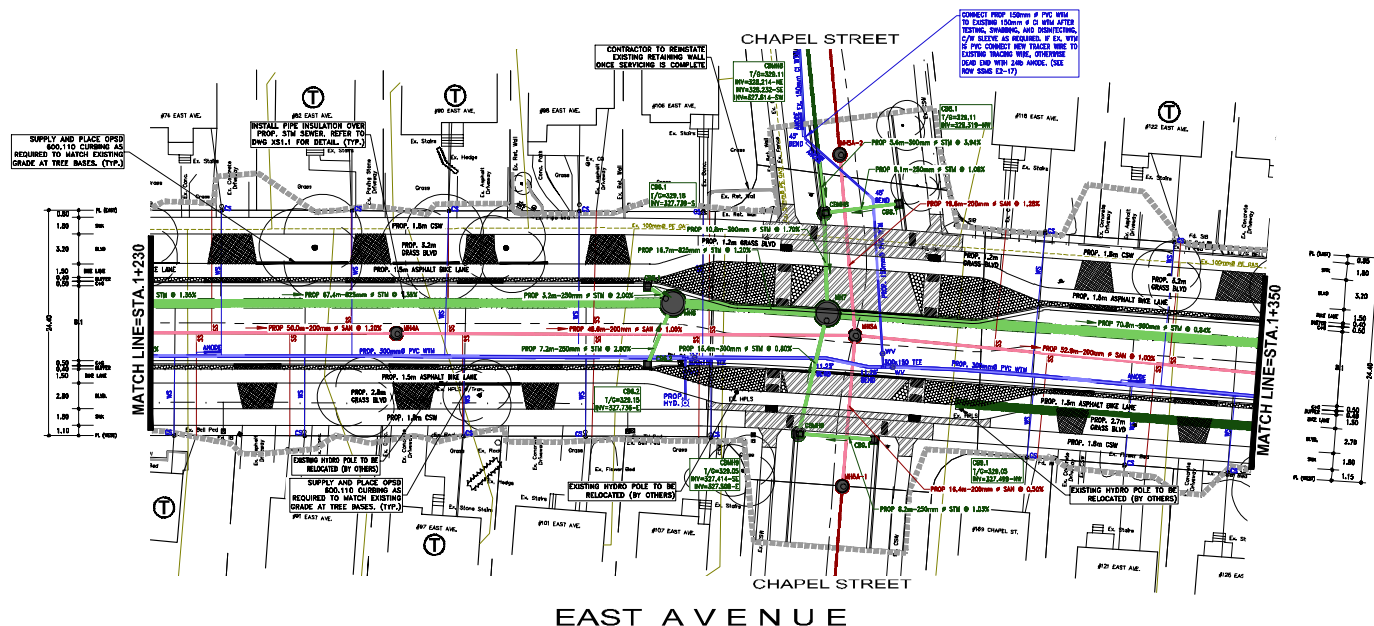
Engineers, Scientists, Surveyors


**PROPOSED CONDITIONS  
EAST AVENUE  
FROM STA. 0+980 TO STA. 1+110**

DESIGNED BY:	APPROVED BY:	DRAWN BY:
JORDEN	MPP	MPP
		CHANGED BY:

SCALE: HORIZ-1:250 (VER-1:50)  
DATE: 09/22/23  
CONSULTANT DWS NO.: 52155-100-PP1  
SHEET NO.: 25 of 63  
DWG NO.: PP1.1


[illegible]





construction

**NORTH**      true **NORTH**



North

THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SENERS, AND SERVICE UTILITIES SHOWN HEREON ARE BASED ON THE 1971 NEIGHBORHOOD MAP OF THE CITY OF KITCHENER. THE ACCURACY OF THE POSITIONS AND DEPTHS OF THE POLE LINES, CONDUITS, WATERMANS, SENERS, AND SERVICE UTILITIES SHOWN HEREON IS NOT GUARANTEED.

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**NOTES:**

**SERVICE CONNECTIONS**

SERVICE CONNECTION INFORMATION MAY BE INCOMPLETE, OR ONLY GENERALLY ACCURATE. SOME SANITARY SERVICES MAY ALSO HAVE SEPARATE COLLAR DRAIN PIPES.

① PROPOSED SANITARY AND/OR WATER SERVICES TO BE TUNNELED TO AVOID CONFLICTS WITH TREES, PLANTING BEDS, ETC.

FOR PARALLEL INSTALLATION OF WATERMAIN AND A SANITARY/STORM SEWER EXISTING A CATCHPANEL LEAD, PROVIDE MINIMUM 5.0m CLEAR HORIZONTAL SEPARATION DISTANCE FROM PIPE DEED TO PIPE DEED FOR EXISTING OR MATERIAL BELOW A SANITARY/STORM SEWER (INCLUDING A CATCHPANEL LEAD) PROVIDE A 0.5m CLEAR VERTICAL SEPARATION DISTANCE BETWEEN CHIMNEY WATERMAIN AND INLET OF SEWER.

SANITARY SERVICES ARE 100mm P OR 150mm P PVC 305 SB, AND CONNECTION TO EXISTING WILL BE AT PROPERTY LINE, UNLESS NOTED OTHERWISE.

ALL WATER SERVICE CONNECTIONS ARE 25mm P F.E. PIPE WITH SERVICE BODIES SET ON PROPERTY LINE, UNLESS OTHERWISE NOTED

**BORERHOLES**

ACCORD TO GEOLOGICAL INVESTIGATION REPORT BY ENGLOSER INC. 7/17/16-P-0012208-0-03-02-02-00-0001-DA DATED JUL 31, 2017

**PAVEMENT STRUCTURE**

4.5" SURFACE ASPHALT-50mm  
4.5" SUBBASE ASPHALT-50mm  
15" SUBBASE-1.5" BASE-1.5" DRAINAGE  
ALL DWT'S PER KES W-44. ALL S/W RAMPS PER KES W-74.

**OTHER UTILITIES**

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**SURVEY**

CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 308 X 52155100A TO 52155100M.


**SITE BENCHMARK**

TURNPIET OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.5m WEST OF THE CENTERLINE OF EAST AVE. AND 4.0m SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.067m.

**GEODETTIC BENCHMARK**

ONE STONY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 81.0m EAST OF EDNA STREET, TABLET IS SET VERTICALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.0m EAST OF THE SOUTHWEST CORNER AND 8.0m BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 329.128m.

61.	ISSUED FOR TENDER	MFP	02/02/24
54.			
4.	ISSUED FOR 30K SUBMISSION/GEA APPLICATION	MFP	12/15/23
2.	ISSUED FOR 60K SUBMISSION	MFP	09/22/23
1.	ISSUED FOR 30K SUBMISSION	MFP	04/18/23
NO.	REVISION	BY	DATE
			06/08/23



**KITCHENER**


The Corporation Of The

**CITY OF KITCHENER**

**ENGINEERING DIVISION**

## Development Services

Engineering Division



**MTE**

Engineers, Scientists, Surveyors

**PROPOSED CONDITIONS**

# EAST AVENUE

FROM STA. 1+2350 TO STA. 1+3500

DESIGNED BY:

JARVILLE

APPROVED BY:

ISSUED BY:

MFP

CONVEYANCE FEE (MTE INC.):

DRAWN BY:

27 OF 63

SCALE:

HOR: 1:2500VER: 1:50

DATE: PROJECT:

12.15.23

CONVEYANCE FEE (MTE INC.):

DRAWN BY:

27 OF 63

SCALE:

HOR: 1:2500VER: 1:50

DATE: PROJECT:

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DRAWN BY:

27 OF 63

SCALE:

HOR: 1:2500VER: 1:50

DATE: PROJECT:

12.15.23

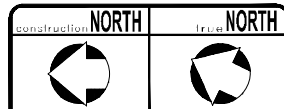
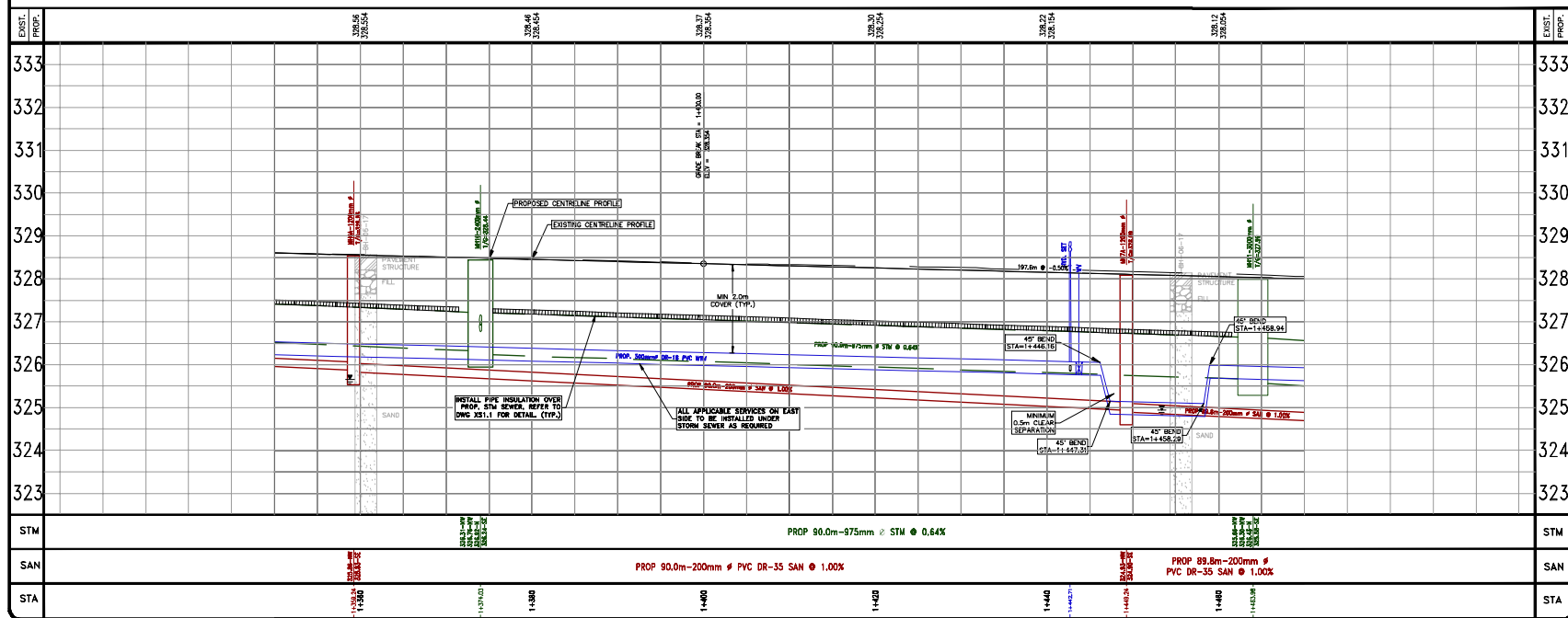
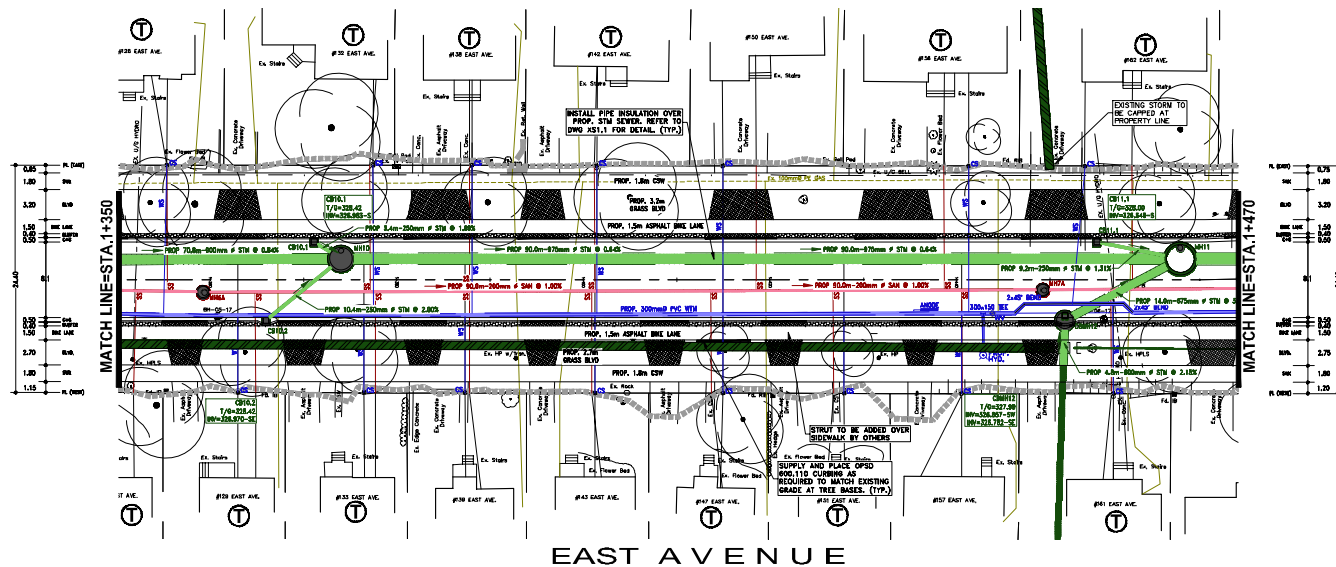
CONVEYANCE FEE (MTE INC.):

DRAWN BY:

27 OF 63

SCALE:

HOR: 1:250



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FOR PARALLEL INSTALLATION OF WATERMAIN AND A SANITARY/STORM SEWER (INCLUDING A CATCH-BASIN LEAD), PROVIDE MINIMUM 2.5m CL. HORIZONTAL SEPARATION DISTANCE FROM PIPE EDGE TO PIPE EDGE.

FOR CROSSING OF A WATERMAIN BELOW A SANITARY/STORM SEWER (INCLUDING A CATCH-BASIN LEAD) PROVIDE A 0.5m CLEAR VERTICAL SEPARATION DISTANCE BETWEEN GROWN WATERMAIN AND INVERT OF

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**BOREHOLES**  
REFER TO GEOTECHNICAL INVESTIGATION REPORT BY ENGLOBE REF. N  
160-2-001308-2-03-102-05-8-0001-04 DATED MAY 31 2017

**PAVEMENT STRUCTURE**  
H.B. SURFACE ASPHALT-40mm

HL4 BINDER ASPHALT-80mm  
GRANULAR "A" BASE-210mm  
GRANULAR "B" BASE-450mm

ALL DWY.'S PER KES M-64. ALL S/W RAMPS PER KES M-74.

**SURVEY**

CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SDR # 52155100A TO 52155100M.

## SITE BENCHMARK

TOPNUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE,  
AND FREDERICK STREET. 12.7m WEST OF THE CENTERLINE OF EAST  
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ELEV. = 335.087m.

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ELEV. = 328.128m.

6.			
5.			
4.	ISSUED FOR TENDER	VPP	02/02/24
3.	ISSUED FOR 90% SUBMISSION/ECA APPLICATION	VPP	12/15/23
2.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
1.	ISSUED FOR 30% SUBMISSION	VPP	04/18/23
NO.	REVISION	BY	MM/DD/YY



**Development Services**  
Engineering Division



### PROPOSED CONDITIONS

### PROPOSED CONDITIONS

## EAST AVENUE

AM STA 1+350 TO STA 1

WM STA. 14350 TO STA. 1

[illegible]

APPROVED BY:	DATE:

	CHECK
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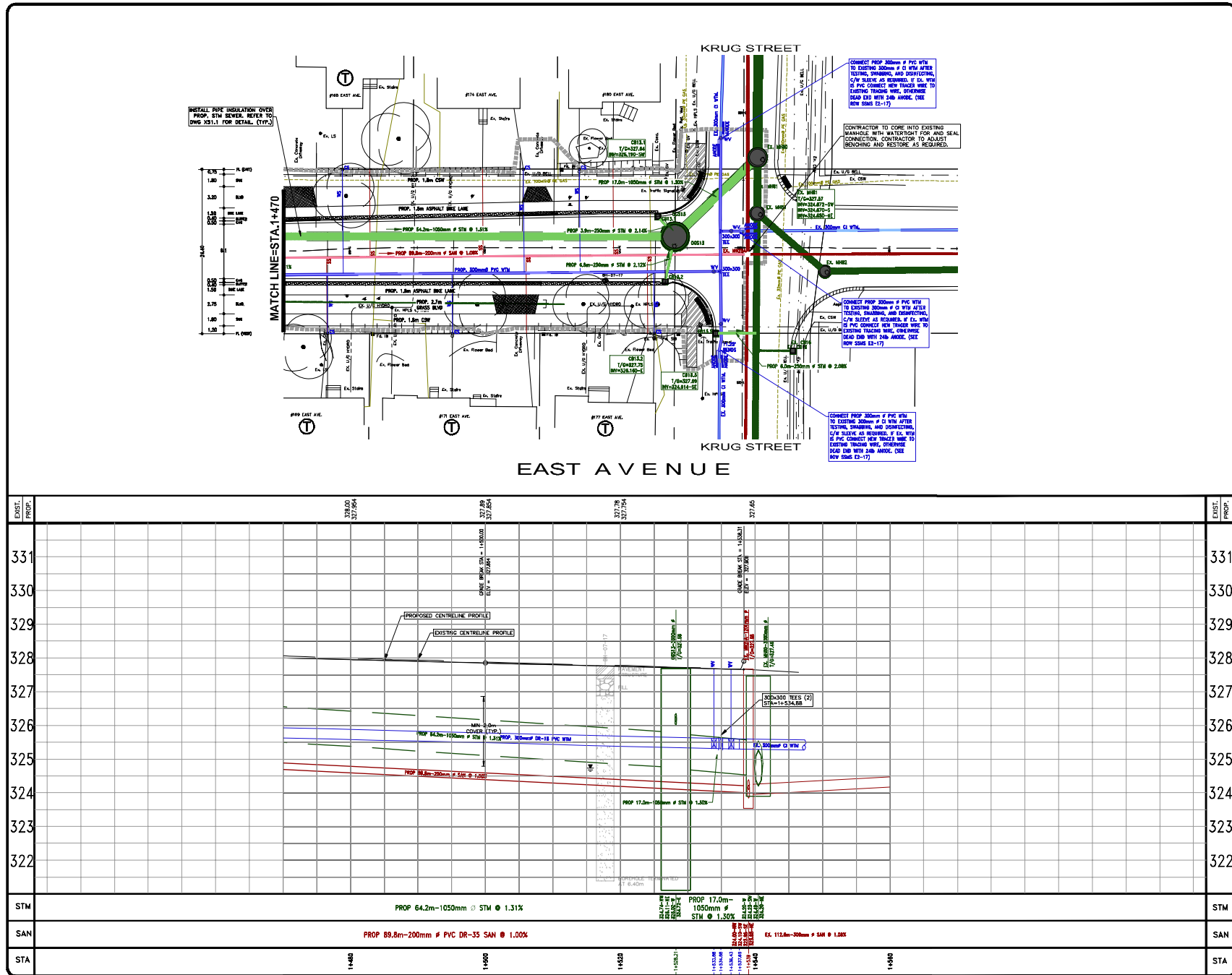
[illegible]

		SCALE
		HOM

[illegible]


SHEET No. **28 of 63**

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construction

NORTH

True NORTH

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BOREHOLES

REFER TO GEOTECHNICAL INVESTIGATION REPORT BY ENCLERB REE, INC. FOR PROPOSED BOREHOLE LOCATIONS AND DEPTHS DATED JULY 31, 2017.

PAVEMENT STRUCTURE

1.5" SURFACE ASPHALT-40mm  
1.5" BASE ASPHALT-20mm  
BRICKLAY "A" BASE-210mm  
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ALL DWT.'S PER KES M-64, ALL S/W RAMP PER KES M-74.

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DECEMBER 2022 SD# # 52155100A TO 52155100M.

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NO.	REVISION	BY	MM/DD/YY
1	ISSUED FOR TENDER	VPP	02/02/24
2	ISSUED FOR 30% SUBMISSION/EDA APPLICATION	VPP	12/15/23
3	ISSUED FOR 60% SUBMISSION	VPP	08/22/23
4	ISSUED FOR 30% SUBMISSION	VPP	04/18/23

The Corporation Of The  
CITY OF KITCHENER

Development Services  
Engineering Division

MTE  
Engineers, Scientists, Surveyors

PROPOSED CONDITIONS  
EAST AVENUE  
FROM STA. 1+470 TO STA. 1+570

DRAWN BY:	APPROVED BY:	CHECKED BY:
JORDEN	MTE	

SCALE:	DATE:	DWG. NO.:
1:100 (1:250) (1:50)	12.15.23	52155-100-PP1

CONSULTANT (DWG. NO.)  
SHEET NO. 29 OF 63  
PP1.5



# Project Highlights

East Avenue (Year 2: Cameron Street to Eugene George Way)



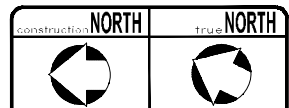
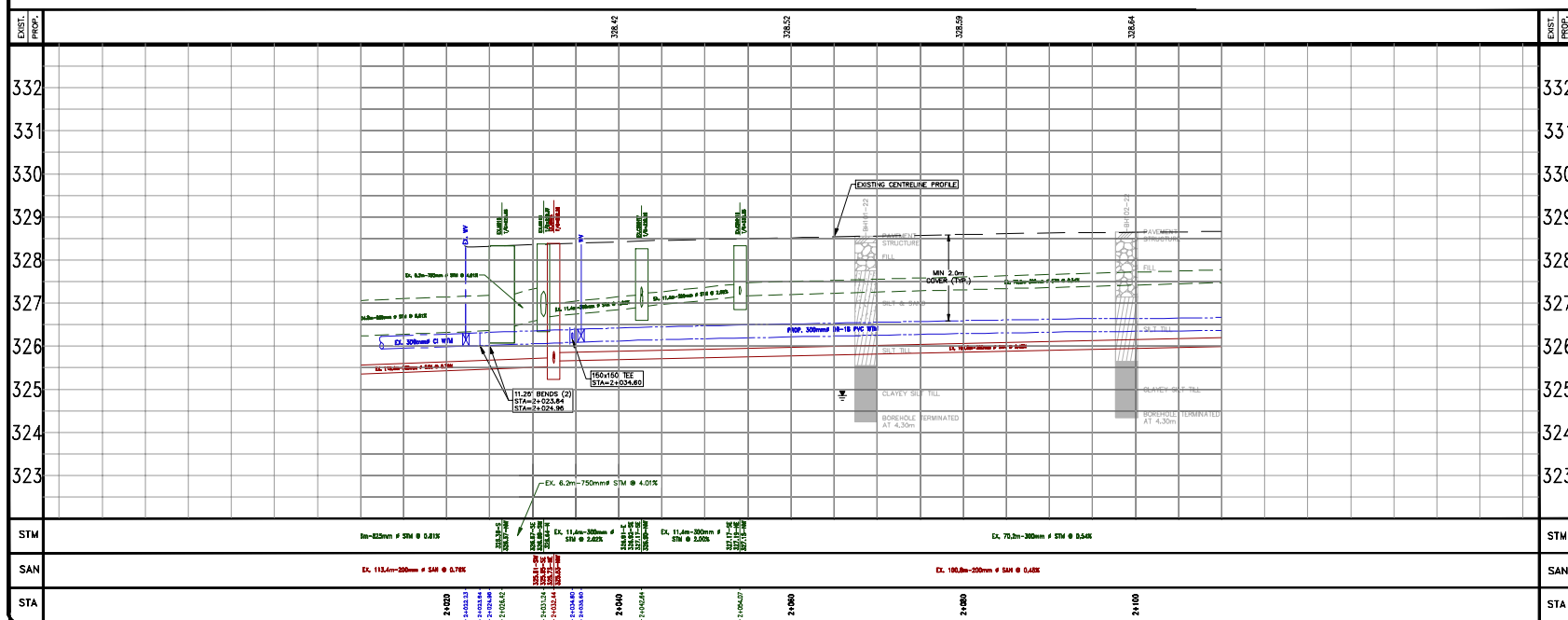
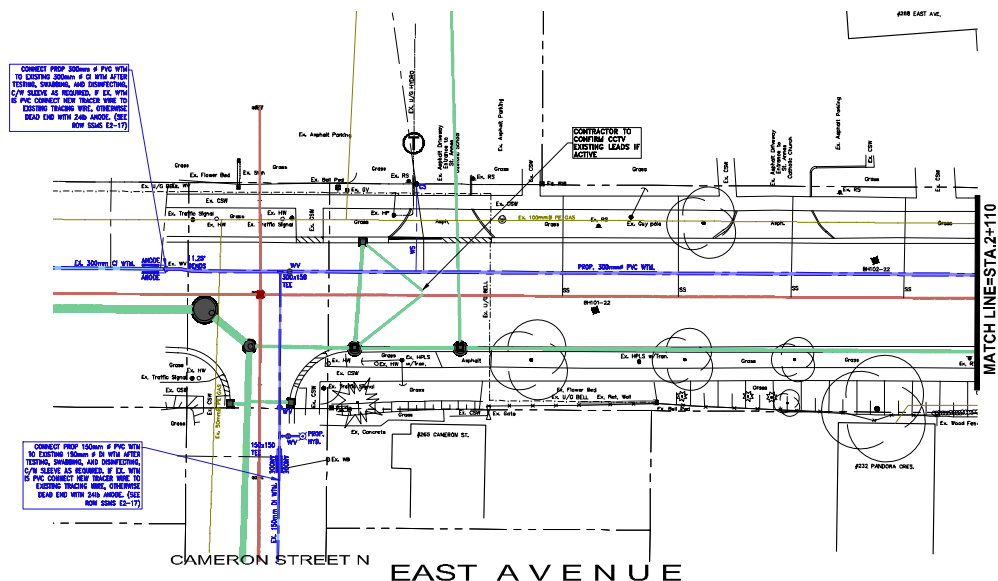
## Overview of Work:

- ❖ Replace watermain and appurtenances including restoration of the asphalt roadway

## Proposed Changes from Existing Roadway:

- ❖ No changes are proposed for the existing roadway layout

The following slides will illustrate the proposed design along Year 2 of East Avenue.



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ALL WATER SERVICE CONNECTIONS ARE 25mm @ P.E. PIPE WITH SERVICE BOXES SET ON PROPERTY LINE, UNLESS OTHERWISE NOTED

**BOREHOLES**  
REFER TO GEOTECHNICAL INVESTIGATION REPORT BY MTE CONSULTANTS  
DATED OCTOBER 20, 2022 REPORT No. 81340-102

**PAVEMENT STRUCTURE**  
 HL3 SURFACE ASPHALT-40mm  
 HL4 BINDER ASPHALT-80mm

ALL DWY.'S PER KES W-64, ALL S/W RAMPS PER KES W-74.

**OTHER UTILITIES**  
TEMPORARY SUPPORT OF EXISTING UTILITY POLES MUST BE APPROVED BY KITCHENER-WILMOT HYDRO. ALL ASSOCIATED COSTS WILL BE THE RESPONSIBILITY OF CONTRACTOR.

## SURVEY

CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SDR # 52155100A TO 52155100M.

## SITE BENCHMARK

TOPNUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE.  
AND FREDERICK STREET, 12.7m WEST OF THE CENTERLINE OF EAST  
AVE. AND 8.9m SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.067m.

**GEODETIC BENCHMARK**

ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 61.0m EAST OF EDNA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.18m EAST OF THE SOUTHWEST CORNER AND 9cm BELOW THE FIRST COURSE OF BRICKWORK.

ELEV. = 329.128m.

6.			
5.			
4.	ISSUED FOR TENDER	VPP	02/02/24
3.	ISSUED FOR 90% SUBMISSION/ECA APPLICATION	VPP	12/15/23
2.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
1.	ISSUED FOR 30% SUBMISSION	VPP	04/19/23
<b>NO.</b>	<b>REVISION</b>	<b>BY</b>	<b>MM/DD/YY</b>



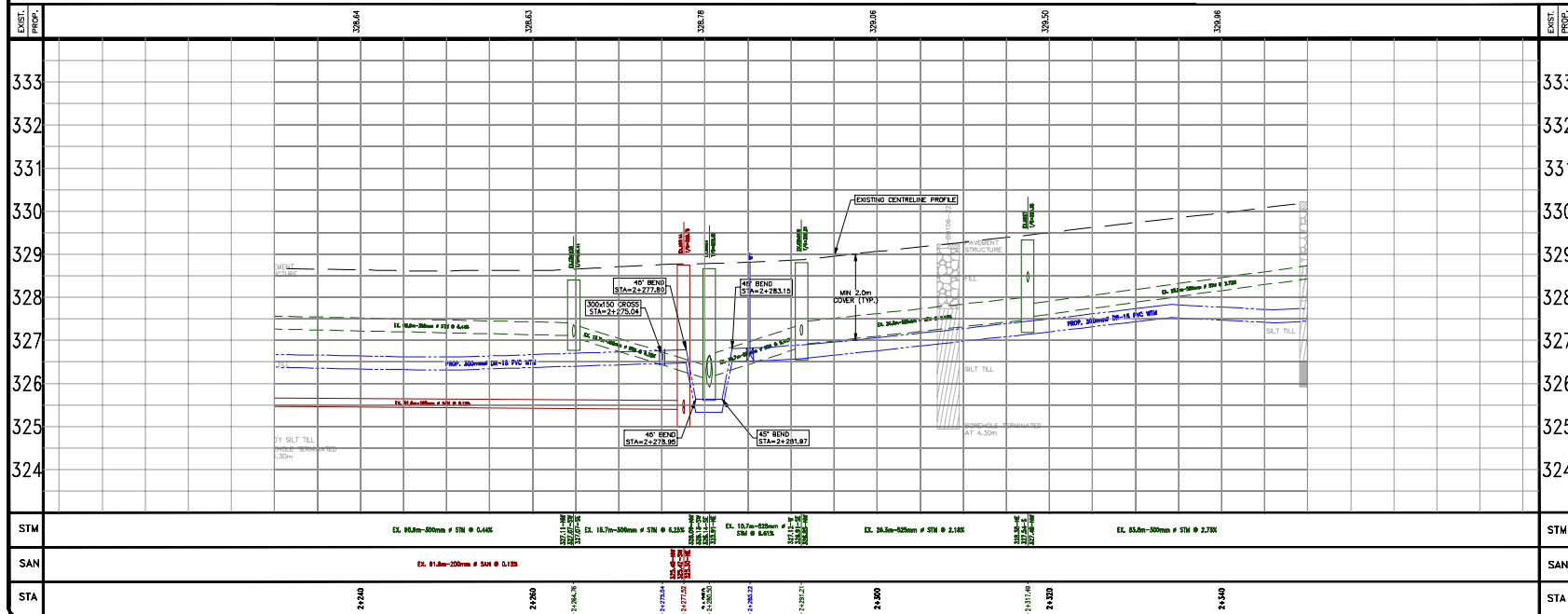
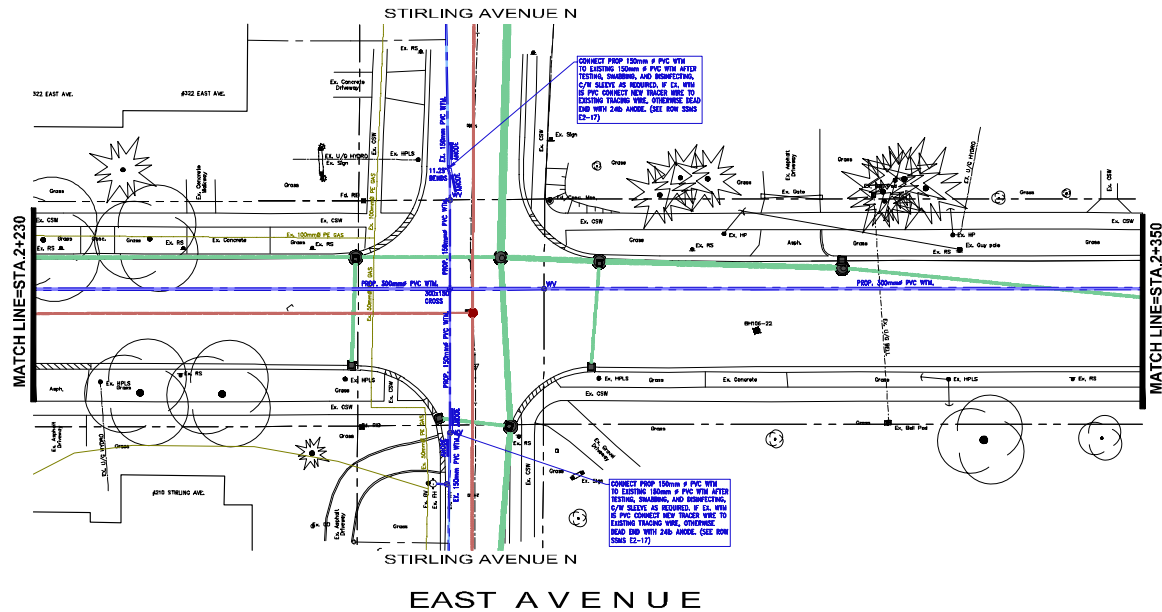
**Development Services**  
Engineering Division



PROPOSED CONDITIONS  
**EAST AVENUE**  
FROM STA. 2+010 TO STA. 2+110

No. Date Time Loc.	DESIGNED BY: <b>JAKREVIM</b>	APPROVED BY:	DRAWN BY: <b>MPPF</b>
	CONSULTANT DRAWING: <b>S2155-100-PPI</b>	SHEET NO. <b>30 OF 63</b>	CHECKED BY: <b>-</b>
SCALE: <b>HOR:-1:250(VER:-1:50)</b> DATE: (WWSO/TY) <b>12.15.23</b>			
			DWG. NO. <b>PP1.6</b>

DESIGNED BY: JXREVM	APPROVED BY:	DRAWN BY: MPP
		CHECKED BY: -
SCALE: HOR.-1:250/VER.-1:50		DATE: (DD.MM.YY) 12.15.23
CONSULTANT DRAWING NO.: 02155-100-PP1	SHEET NO.: <b>31 of 63</b>	DRAWING NO.: <b>PP17</b>



construction

construction

NORTH

true NORTH

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

**BEFORE STARTING WORK**

THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

**NOTES:**

**SERVICE CONNECTIONS**

SERVICE CONNECTION INFORMATION MAY BE INCOMPLETE, OR ONLY GENERALLY ACCURATE. SOME SANITARY SERVICES MAY ALSO HAVE SEPARATE CELLAR DRAIN PIPES.

1. PROPOSED SANITARY AND/OR WATER SERVICES TO BE TUNNELLED TO AVOID CONFLICTS WITH TREES, PLANTING BEDS, ETC.

FOR PARALLEL INSTALLATION OF WATERMAIN AND A SANITARY/STORM SEWER (INCLUDING A CATCHBASIN LEAD), PROVIDE MINIMUM 2.5m CLEAR HORIZONTAL SEPARATION DISTANCE FROM PIPE TO PIPE (END). FOR CROSSING OF A WATERMAIN BELOW A SANITARY/STORM SEWER (INCLUDING A CATCHBASIN LEAD) PROVIDE A 0.5m CLEAR VERTICAL SEPARATION DISTANCE BETWEEN CROWN WATERMAIN AND INVERT OF SEWER.

SANITARY SERVICES ARE 100mm # OR 150mm # PVC SDR 26, AND CONNECTION TO EXISTING WILL BE AT PROPERTY LINE, UNLESS OTHERWISE SPECIFIED.

ALL WATER SERVICE CONNECTIONS ARE 35mm # P.E. PIPE WITH SERVICE BOXES SET ON PROPERTY LINE, UNLESS OTHERWISE NOTED.

**BOREHOLES**

REFER TO GEOTECHNICAL INVESTIGATION REPORT BY MTE CONSULTANTS DATED OCTOBER 20, 2022 REPORT NO. 81540-102

**PAVEMENT STRUCTURE**

HL3 SURFACE ASPHALT-40mm  
HL4 BINDER ASPHALT-20mm  
GRANULAR "A" BASE-210mm  
GRANULAR "B" BASE-40mm  
ALL DWS'S PER RES M-54, ALL S/W RAMPES PER RES M-74.

**OTHER UTILITIES**

TEMPORARY SUPPORT OF EXISTING UTILITY POLES MUST BE APPROVED BY KITCHENER-WATER DIVISION. ALL ASSOCIATED COSTS WILL BE THE RESPONSIBILITY OF CONTRACTOR.

**SURVEY**

CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SDR # 52155100A TO 52155100M.

**SITE BENCHMARK**

TOPNUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 10.7m WEST OF THE CENTRELINE OF EAST AVE. AND 8.9m SOUTH OF THE CENTRELINE OF FREDERICK STREET. ELEV. = 555.087m.

**GEODETIC BENCHMARK**

ONE STOREY WHITE BRICK, STONE-FACED BUILDING (HOUSING LOUQUO CONTING BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING #1.0m EAST OF EDNA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 1.8m EAST OF THE SOUTHWEST CORNER AND 9.0m BELOW THE FIRST COURSE OF BRICKWORK. ELEV. = 528.128m.

NO.	REVISION	BY	MM/DD/YY
6.			
5.			
4.	ISSUED FOR TENDER	VPP	02/02/24
3.	ISSUED FOR 50% SUBMISSION/ICA APPLICATION	VPP	12/15/23
2.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
1.	ISSUED FOR 30% SUBMISSION	VPP	04/18/23

The Corporation Of The  
**CITY OF KITCHENER**

**Development Services**  
Engineering Division

Engineers, Scientists, Surveyors

**PROPOSED CONDITIONS  
EAST AVENUE**  
FROM STA. 2+230 TO STA. 2+350

DESIGNED BY:  
JORDEN

APPROVED BY:  
MPP

DRAWN BY:  
MPP

CHECKED BY:  
MPP

SCALE:  
AS SHOWN (VER. 1:50)

DATE:  
05/27/23

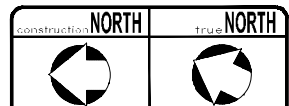
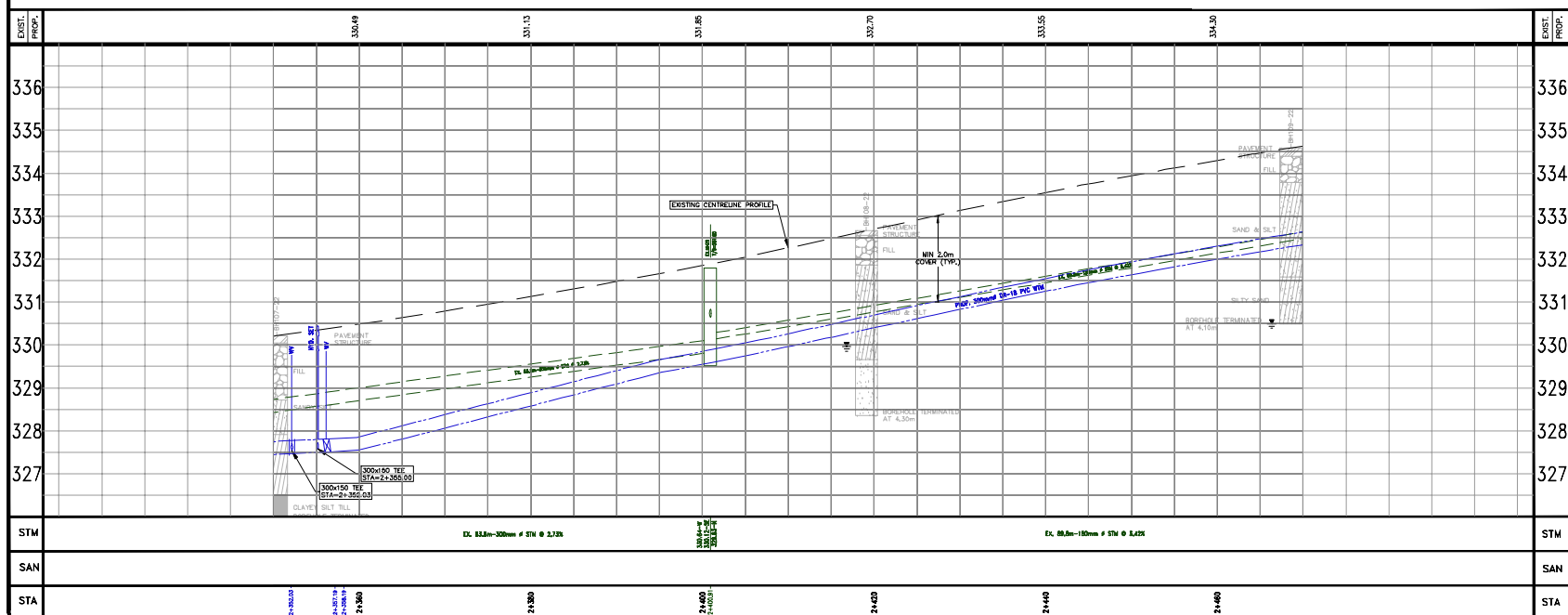
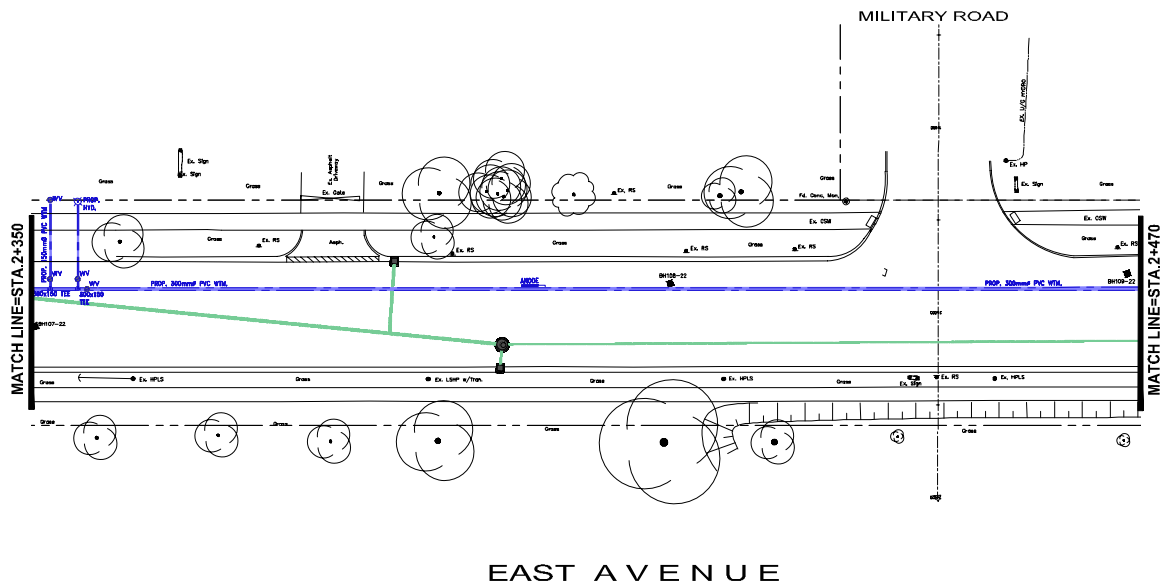
DRAWN BY:  
MPP

DATE:  
05/27/23

CONSULTANT (FIRM NO.):  
52155-100-PP1.8

DRAWN BY:  
32 of 63

PP1.8



THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

### BEFORE STARTING WORK

THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

**NOTES:**

## SERVICE CONNECTIONS

SERVICE CONNECTION INFORMATION MAY BE INCOMPLETE, OR ONLY GENERALLY ACCURATE. SOME SANITARY SERVICES MAY ALSO HAVE SEPARATE CELLAR DRAIN PIPES.

- 
- 

①-PROPOSED SANITARY AND/OR WATER SERVICES TO BE TUNNELLED TO AVOID CONFLICTS WITH TREES, PLANTING BEDS, ETC.

FOR PARALLEL INSTALLATION OF WATERMAIN AND A SANITARY/STORM SEWER (INCLUDING A CATCHBASIN LEAD), PROVIDE MINIMUM 2.5m CLEAR

FOR CROSSING OF A WATERMAIN BELOW A SANITARY/STORM SEWER (INCLUDING A CATCHBASIN LEAD) PROVIDE A 0.5m CLEAR VERTICAL SEPARATION DISTANCE BETWEEN CROWN WATERMAIN AND INVERT OF SEWER.

SANITARY SERVICES ARE 100mm Ø OR 150mm Ø PVC SDR 28, AND CONNECTION TO EXISTING WILL BE AT PROPERTY LINE, UNLESS OTHERWISE DIRECTED.

ALL WATER SERVICE CONNECTIONS ARE 25mm @ P.E. PIPE WITH SERVICE BOXES SET ON PROPERTY LINE, UNLESS OTHERWISE NOTED

**BOREHOLES**  
REFER TO GEOTECHNICAL INVESTIGATION REPORT BY MTE CONSULTANTS

PAVEMENT STRUCTURE

HL3 SURFACE ASPHALT-40mm  
HL4 BINDER ASPHALT-80mm  
GRANULAR "A" BASE-210mm

GRANULAR "B" BASE-450mm  
ALL DWT.'S PER KES W-64, ALL S/W RAMPS PER KES W-74.

**OTHER UTILITIES**  
TEMPORARY SUPPORT OF EXISTING UTILITY POLES MUST BE APPROVED

## SURVEY

CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SDR # 52155100A TO 52155100M.

## SITE BENCHMARK

TOPNUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE.  
AND FREDERICK STREET. 12.7m WEST OF THE CENTERLINE OF EAST  
AVE. AND 8.9m SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.067m.

**GEODETIC BENCHMARK**

ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 61.0m EAST OF EDNA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.18m EAST OF THE SOUTHWEST CORNER AND 9cm BELOW THE FIRST COURSE OF BRICKWORK.

ELEV. = 329.128m.

6.			
5.			
4.	ISSUED FOR TENDER	VPP	02/02/24
3.	ISSUED FOR 90% SUBMISSION/ECA APPLICATION	VPP	12/15/23
2.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
1.	ISSUED FOR 30% SUBMISSION	VPP	04/18/23
NO.	REVISION	BY	MM/DD/YY

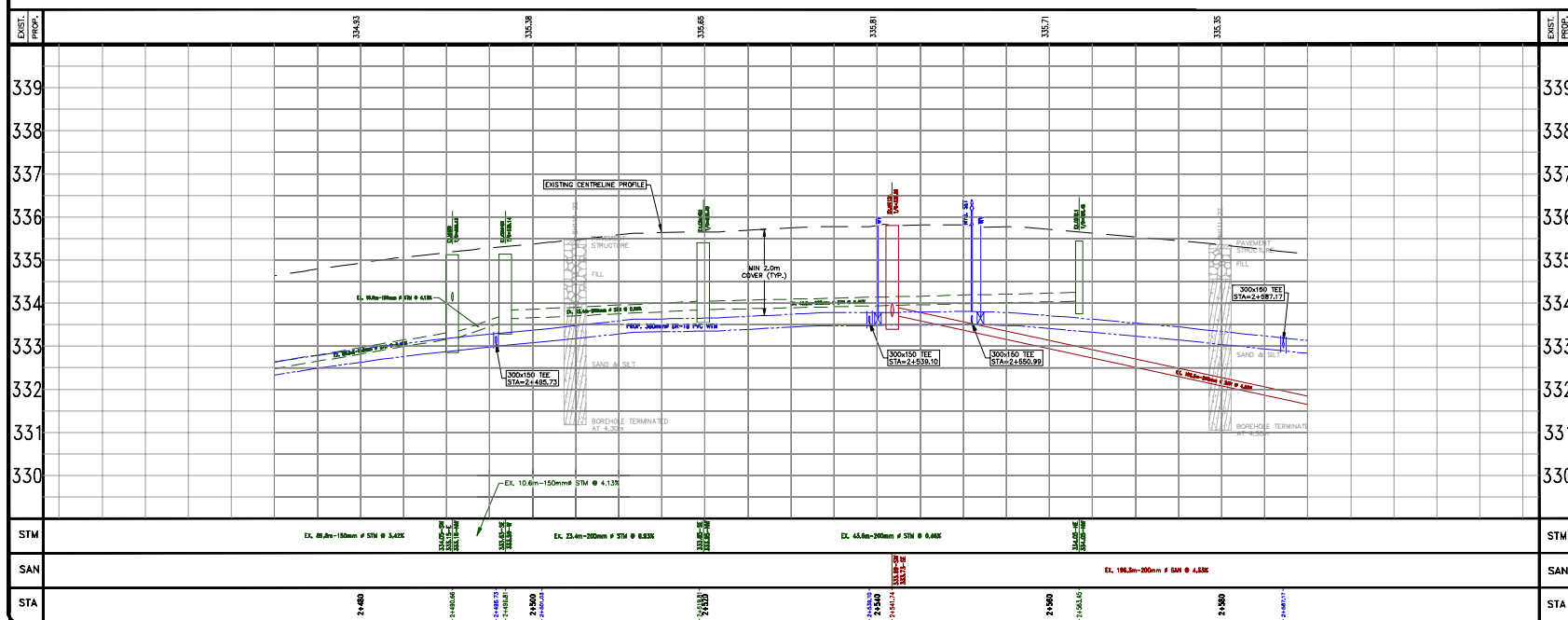
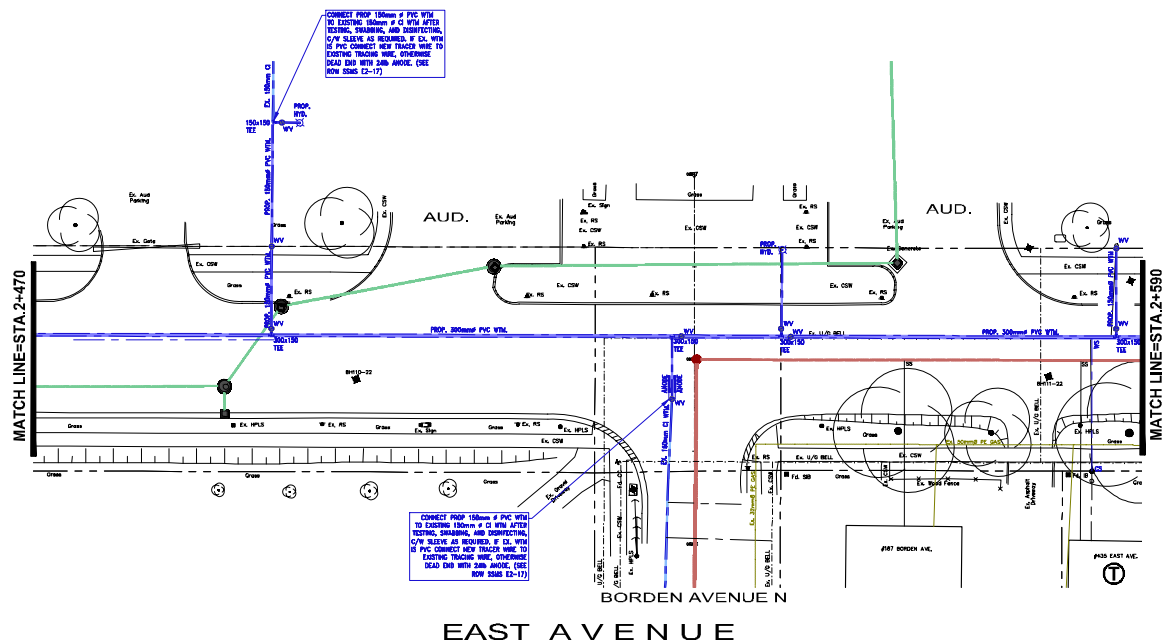






**Development Services**  
Engineering Division

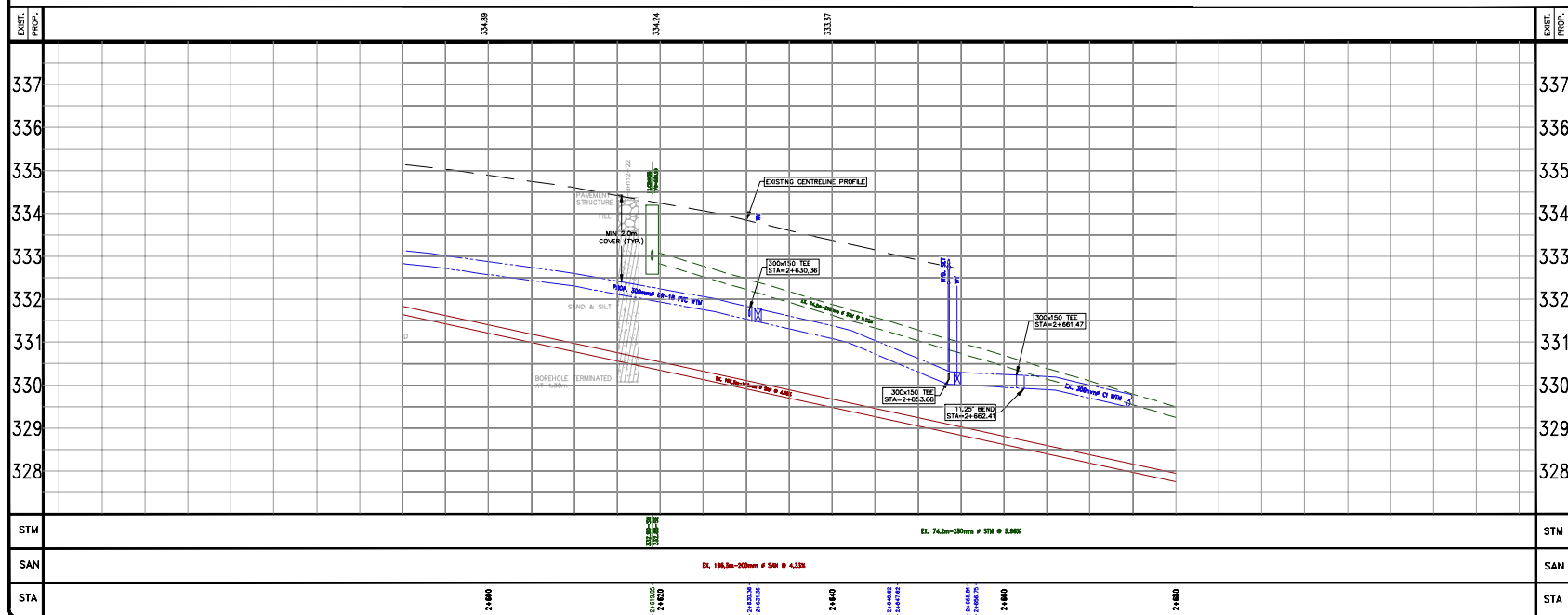
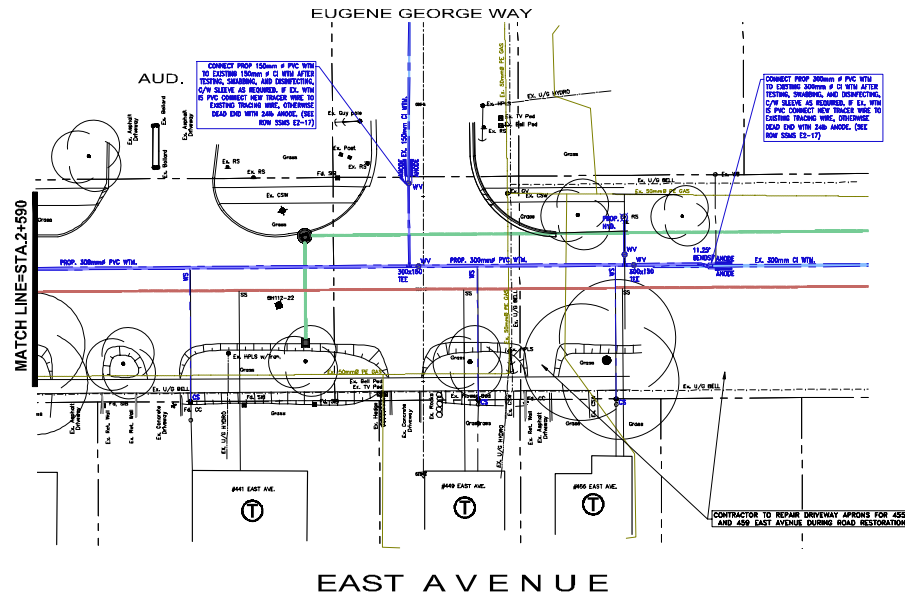


PROPOSED CONDITIONS  
**EAST AVENUE**  
FROM STA. 2+350 TO STA. 2+470

DESIGNED BY: JXR/EVM	APPROVED BY:	DRAWN BY: MPP
		CHECKED BY: -
		SCALE: HOR: 1:250 VER: 1:50
		DATE: (WEEKLY) 12.15.23
CONSULTANT DRG. NO. 12-15-23-001	SHEET NO. 33 of 63	DRG. NO. E21.9



construction	<b>NORTH</b>	true <b>NORTH</b>	
			
THE POSITION OF THE POLE LINES, COORDINATES, WATERMANS, SENSERS, AND OTHER UTILITIES AND STRUCTURES ARE AS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHILE SHOWN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.			
BEFORE STARTING WORKS			
THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.			
NOTES:			
SERVICE CONNECTIONS			
THE INFORMATION MAY BE INCOMPLETE, OR ONLY GENERALLY ACCURATE. SOME SANITARY SERVICES MAY ALSO HAVE SEPARATE CLEAN DRAIN PIPES.			
<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; border-radius: 50%; width: 20px; height: 20px; margin-right: 5px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;"> <div style="border-top: 1px solid black; border-bottom: 1px solid black; width: 5px; height: 10px;"></div> </div> <div> <p>PROPOSED SANITARY AND/OR WATER SERVICES TO BE TUNNELLED TO AVOID CONFLICTS WITH TREES, PLANTING BEDS, ETC.</p> <p>FOR PARALLEL INSTALLATION OF WATERMAIN AND SANITARY PLANTING BEDS (INCLUDING A CATCHBRAIN LEAD), PROVIDE MINIMUM 3.5m CLEAR HORIZONTAL SEPARATION BETWEEN PIPE EDGE TO PIPE EDGE. FOR CROSSING OF A WATERMAIN BELOW A SANITARY SERVICE, PROVIDE A CATCHBRAIN LEAD. PROVIDE A 3.0m CLEAR VERTICAL SEPARATION DISTANCE BETWEEN CROWN WATERMAIN AND INVERT OF SANITARY SERVICES.</p> <p>ALL WATER SERVICE CONNECTIONS ARE 25mm or P.E. PIPE WITH SERVICE BOXES SET ON PROPERTY LINE, UNLESS OTHERWISE NOTED.</p> <p><b>BOREHOLES</b></p> <p>REFER TO GEOLOGICAL INVESTIGATION REPORT BY MTE CONSULTANTS DATED 12/10/2022 REPORT NO. 81340-102</p> <p><b>PAVEMENT STRUCTURE</b></p> <p>HL3 SURFACE ASPHALT-40mm HL3 BINDER ASPHALT-40mm GRANULAR "A" BASE-210mm GRANULAR "B" BASE-40mm</p> <p>ALL 200% PER SIDE W-44, ALL 50% RAMP PER SIDE W-74.</p> <p><b>OTHER UTILITIES</b></p> <p>TEMPORARY SUPPORT OF EXISTING UTILITY POLES MUST BE APPROVED BY INTERFERING AGENCY. ALL ASSOCIATED COSTS WILL BE THE RESPONSIBILITY OF CONTRACTOR.</p> </div> </div>			
SURVEY			
CONDITION SURVEY BY MTE CONSULTANTS INC. DECEMBER 2022 SDR # 521551004 TO 521551006.			
SITE BENCHMARK			
TOWNPIKE FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND KENNEDY STREET, 12.0m WEST OF THE CENTRELINE OF EAST AVE. AND 6.5m SOUTH OF THE CENTRELINE OF KENNEDY STREET. ELEV. = 535.087m.			
GEODETIC BENCHMARK			
ONE STREET WIDE BRICK STONE-FACED BUILDING (HOUSING LOCUS CORP. OF CHICAGO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET) BEING 41.0m EAST OF EDNA STREET. TARGET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.1m EAST OF THE SOUTHWEST CORNER AND 9.0m BELOW THE FIRST COURSE OF BRICKWORK. ELEV. = 529.128m.			
6. 5. 4. 3. 2. 1.	ISSUED FOR TENDER ISSUED FOR SOLE SUBMISSION/CCA APPLICATION ISSUED FOR 60% SUBMISSION ISSUED FOR 30% SUBMISSION	VPP VPP VPP VPP	02/02/24 12/15/23 09/22/23 04/18/23
NO.	REVISION	BY MM/DD/YY	
 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <p>The Corporation Of The</p> <p><b>CITY OF KITCHENER</b></p> </div>			
Development Services			
Engineering Division			
 <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <p><b>MTE</b></p> <p>Engineers, Scientists, Surveyors</p> </div>			
PROPOSED CONDITIONS			
EAST AVENUE			
FROM STA. 2+47.0 TO STA. 2+59.0			
DESIGNED BY: JAZ/REV	APPROVED BY:	DRAWN BY: MPP  CHECKED BY:	
SCALE: HORIZ=1:200VERT=1:50 DATE: 12/15/23		SHEET NO.: PP1-1.0	
CONSULTANT NO.: 0105-100-0001		SHEET NO.: 34 of 63	



construction

construction

NORTH

true NORTH

THE POSITION OF THE POLE LINES, CONDUITS, WATERMAINS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

**BEFORE STARTING WORK**

THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

**NOTES:**

**SERVICE CONNECTIONS**

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1. PROPOSED SANITARY AND/OR WATER SERVICES TO BE TUNNELLED TO AVOID CONFLICTS WITH TREES, PLANTING BEDS, ETC.

FOR PARALLEL INSTALLATION OF WATERMAIN AND A SANITARY/STORM SEWER (INCLUDING A CATCHBASIN LEAD), PROVIDE MINIMUM 2.5m CLEAR HORIZONTAL SEPARATION DISTANCE FROM PIPE EDGE TO PIPE EDGE. FOR CROSSING OF A WATERMAIN BELOW A SANITARY/STORM SEWER (INCLUDING A CATCHBASIN LEAD) PROVIDE A 0.5m CLEAR VERTICAL SEPARATION DISTANCE BETWEEN CROWN WATERMAIN AND INVERT OF SEWER.

SANITARY SERVICES ARE 100mm # OR 150mm # PVC SDR 26, AND CONNECTION TO EXISTING WILL BE AT PROPERTY LINE, UNLESS OTHERWISE DIRECTED.

ALL WATER SERVICE CONNECTIONS ARE 35mm # P.E. PIPE WITH SERVICE RINGS SET ON PROPERTY LINE, UNLESS OTHERWISE NOTED.

**BOREHOLES**

REFER TO GEOTECHNICAL INVESTIGATION REPORT BY MTE CONSULTANTS DATED OCTOBER 20, 2022 REPORT NO. 81540-102

**PAVEMENT STRUCTURE**

HL3 SURFACE ASPHALT-40mm  
HL4 BINDER ASPHALT-20mm  
GRANULAR "A" BASE-210mm  
GRANULAR "B" BASE-40mm  
ALL DWS'S PER KES W-64, ALL S/W RAMPES PER KES W-74.

**OTHER UTILITIES**

TEMPORARY SUPPORT OF EXISTING UTILITY POLES MUST BE APPROVED BY KITCHENER-WHOM ITING. ALL ASSOCIATED COSTS WILL BE THE RESPONSIBILITY OF CONTRACTOR.

**SURVEY**

CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SDR # 52155100A TO 52155100M.

**SITE BENCHMARK**

TOPNUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 10.7m WEST OF THE CENTRELINE OF EAST AVE. AND 0.3m SOUTH OF THE CENTRELINE OF FREDERICK STREET.  
ELEV. = 555.087m.

**GEODETIC BENCHMARK**

ONE STOREY WHITE BRICK, STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING #1.0m EAST OF EDNA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 0.1m EAST OF THE SOUTHWEST CORNER AND 0.9m BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 528.128m.

NO.	REVISION	BY	MM/DD/YY
6.			
5.			
4.	ISSUED FOR TENDER	VPP	02/02/24
3.	ISSUED FOR 30% SUBMISSION/ICA APPLICATION	VPP	12/15/23
2.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
1.	ISSUED FOR 30% SUBMISSION	VPP	04/18/23

The Corporation Of The  
**CITY OF KITCHENER**

**Development Services**  
Engineering Division

MTE  
Engineers, Scientists, Surveyors

PROPOSED CONDITIONS  
**EAST AVENUE**  
FROM STA. 2+590 TO STA. 2+680

DESIGNED BY: JORDEN  
APPROVED BY: MRP  
DRAWN BY: MRP  
CHECKED BY: MRP  
SCALE: AS SHOWN  
DATE: 09/22/23  
CONSULTANT (SINCE 1981)  
52155-100-PP1

35 of 63  
PP1.11



# Project Highlights

## East Avenue (Staging Plans and Tree Management Plans)



### Staging Plans:

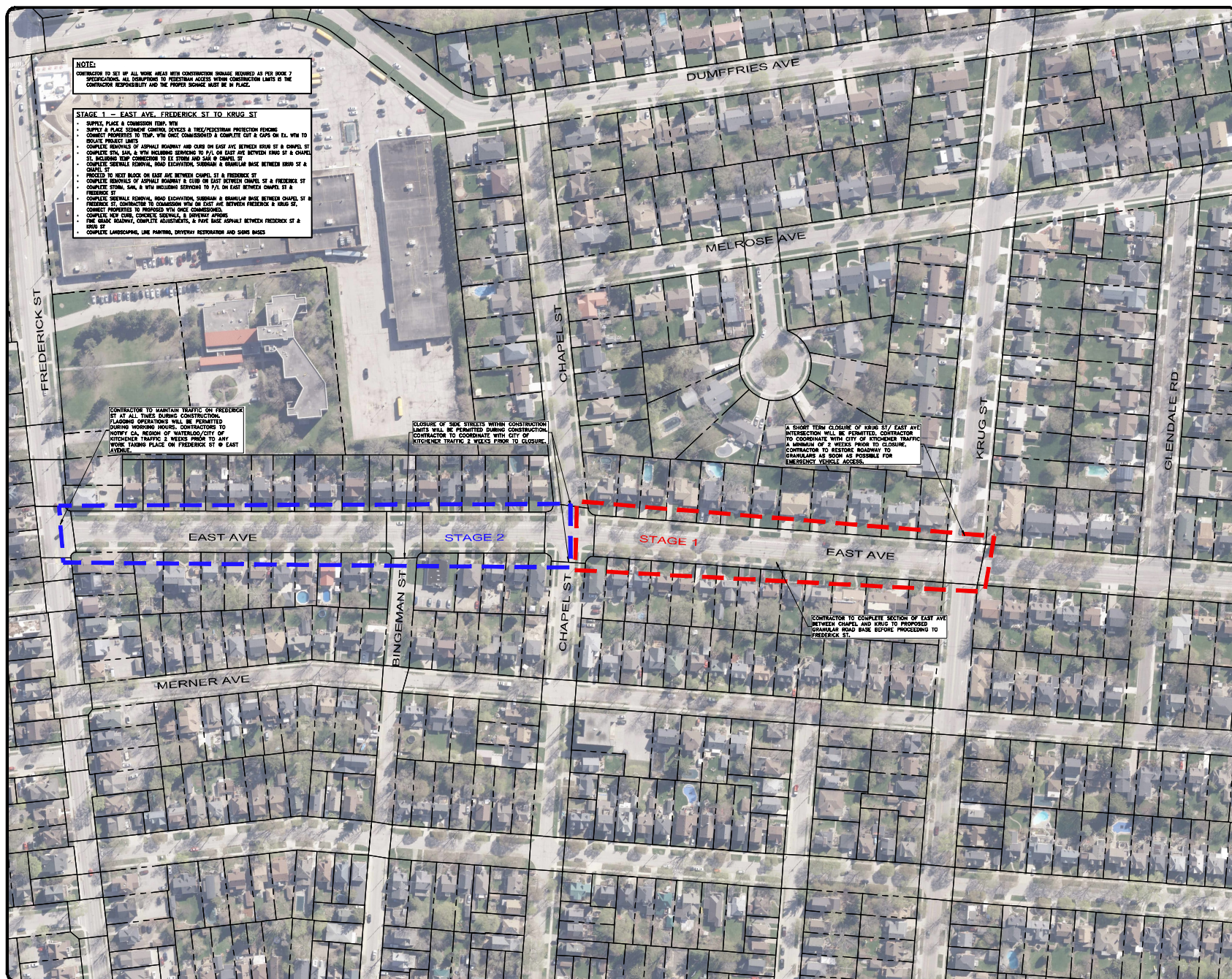
- ❖ Present the order and details of construction as well as the proposed road closures.

### Tree Management Plan:

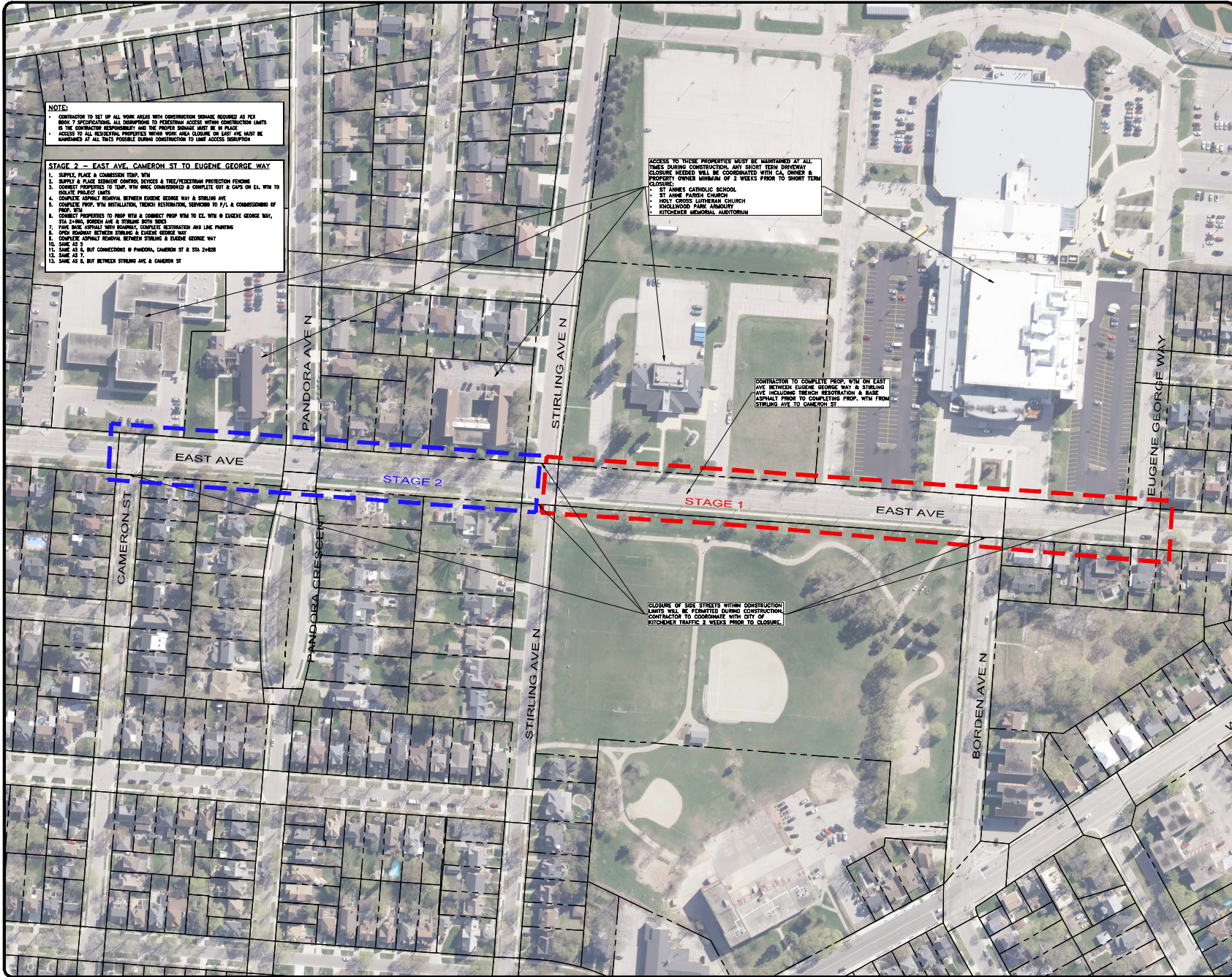
- ❖ Present the action to be taken by the contractor for the trees along East Avenue.

The following slides will illustrate the Staging Plans and Tree Management Plans.

KITCHENER



construction <b>NORTH</b> 	true <b>NORTH</b> 	
THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.		
<b>BEFORE STARTING WORK</b> THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.		
<b>NOTES:</b>  <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 30%;">   </div> <div style="width: 60%;"> <b>STAGE 1 BOUNDARY</b>   <b>STAGE 2 BOUNDARY</b> </div> </div>		
<b>SURVEY</b> CONDUCTION SURVEY BY MTE CONSULTANTS INC. DECEMBER 2022 SDR # 521551004 TO 521551004.		
<b>SITE BENCHMARK</b> TOWNPLOT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.7m WEST OF THE CENTERLINE OF EAST AVE. AND 4.9m SOUTH OF THE CENTERLINE OF FREDERICK STREET. ELEV. = <b>335.067m.</b>		
<b>GEODETIC BENCHMARK</b> ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING) LIQUOR CONTROL BOARD OF ONTARIO ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 41.0m EAST OF EDNA STREET, TARIOT IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.1m EAST OF THE SOUTHWEST CORNER AND 4.9m BELOW THE FIRST COURSE OF BRICKWORK. ELEV. = <b>329.128m.</b>		
6.		
4.	ISSUED FOR TENDER	VVP 02/02/24
3.	ISSUED FOR 30% SUBMISSION/2CA APPLICATION	VVP 12/15/23
2.	ISSUED FOR 60% SUBMISSION	VVP 09/22/23
1.	ISSUED FOR 30% SUBMISSION	VVP 04/18/23
NO.	REVISION	BY MM/DD/YY
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>The Corporation Of The</p> <p><b>CITY OF KITCHENER</b></p> </div> </div> <div style="text-align: center; margin-top: 20px;"> <h2 style="margin: 0;">Development Services</h2> <p style="margin: 0;">Engineering Division</p> </div> <div style="text-align: center; margin-top: 20px;"> <p style="margin: 0; color: #0070C0;">Engineers, Scientists, Surveyors</p> </div> <div style="text-align: center; margin-top: 20px;"> <p>STAGING PLAN</p> <p>YEAR 1</p> <p><b>EAST AVENUE</b></p> <p>FEDERICK ST TO KRUG ST</p> </div>		
DESIGNED BY: JAZUEVM	APPROVED BY: VVP	DRAWN BY: EVM  CHECKED BY: A  SCALE: HOR.: 1:1000 DATE: 12.15.23
CONSULTANT'S (O&M) NO. 5210-686-GP3.1	SHEET NO. <b>1 of 63</b>	DATE: GP3.1



Construction: **NORTH**

True: **NORTH**

THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE AS SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

**BEFORE STARTING WORK**

THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES AND SHALL ABSTAIN ALL CLAIMS FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

**NOTES:**

— STAGE 1 BOUNDARY

— STAGE 2 BOUNDARY

**SURVEY**

CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SUR # 201501006 TO 521551006.

**SITE BENCHMARK**

TORNOUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.27M WEST OF THE CENTERLINE OF EAST AVE. AND 8.9M SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.067m.

**GEODETIC BENCHMARK**

ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 41.0M EAST OF EDNA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.18M EAST OF THE SOUTHWEST CORNER AND 9.0M BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 329.126m.

1.	ISSUED FOR 30% SUBMISSION	VPP	04/18/23
2.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
3.	ISSUED FOR 90% SUBMISSION/ACA APPLICATION	VPP	12/15/23
4.	ISSUED FOR TENDER	VPP	02/02/24

NO.	REVISION	BY	MM/DD/YY
1.			
2.			
3.			
4.			

The Corporation of The  
**CITY OF KITCHENER**

**Development Services**  
Engineering Division

MTE  
Engineers, Scientists, Surveyors

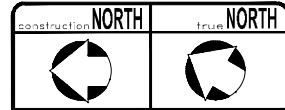
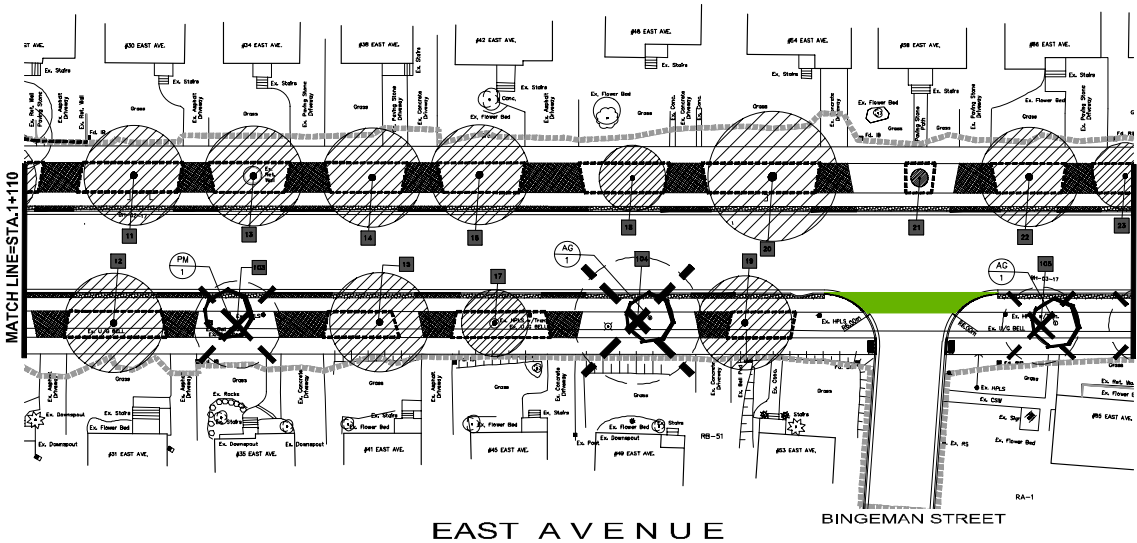
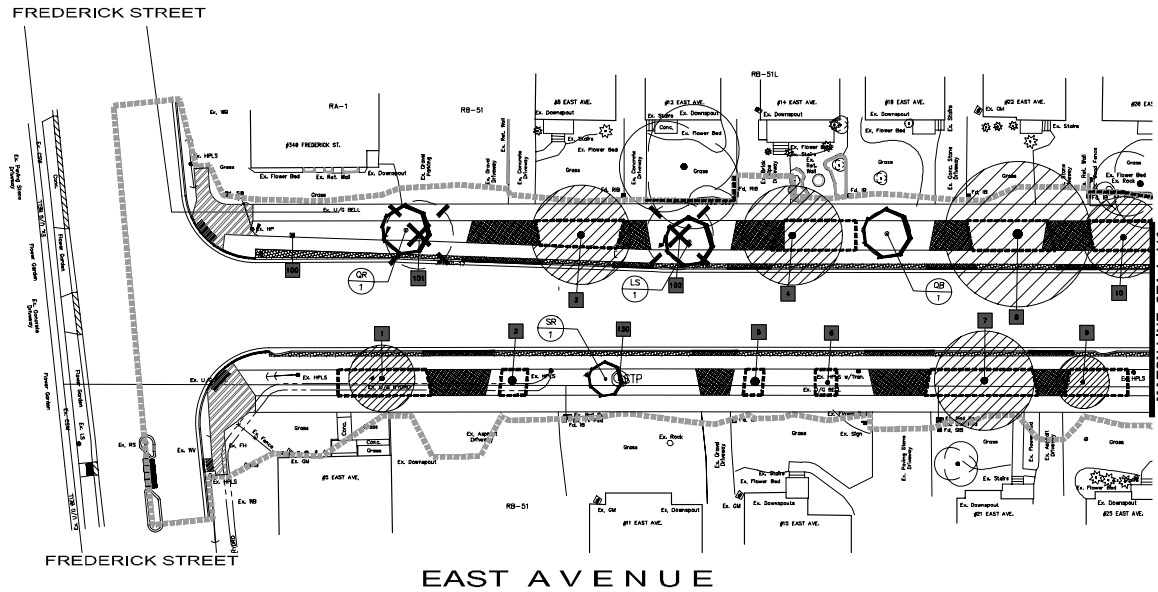
**STAGING PLAN**  
**YEAR 2**  
**EAST AVENUE**  
CAMERON ST TO EUGENE GEORGE WAY

DESIGNED BY: JUREVIM	APPROVED BY: VPP	DRAWN BY: EVM
CHECKED BY: -		SCALE: NOR-1:1000
		DATE: 15.10.23

CONTRACT DTD: 52155-100-GP3.2

SHEET No. **2 of 63**

GP3.2



THE POSITION OF THE POLE LINES, CONDUITS, WATERWAYS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE AS SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

**BEFORE STARTING WORK**  
THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES ASSUMED ALL INFORMATION FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

- LEGEND:**
- TREE TO REMAIN
  - CANOPY
  - CRITICAL ROOT ZONE (CRZ)
  - SIGNIFICANT TREE TO REMAIN
  - TREE REMOVAL
  - STUMP TO BE REMOVED
  - PROPOSED TREE PLANTING
  - TREE PROTECTION FENCING
  - PROPOSED SANITARY AND/OR WATER SERVICES TO BE INSTALLED USING TRENCHLESS METHOD
  - TREE IDENTIFICATION NUMBER
  - Tree Protection Zone (TPZ)
  - Root Harvest Conservation Zone (RHCC)

TREES / STUMPS IDENTIFIED FOR REMOVAL ON THIS PLAN ARE TO BE REMOVED BY CONTRACTOR UNLESS NOTED OTHERWISE. SPECIAL CONDITIONS MAY APPLY FOR TREES ADJACENT TO HYDRO LINES.

TOPSOIL AND GRASS WITHIN TREE PROTECTION ZONES TO REMAIN.

**SURVEY**  
CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 FOR # 52155-100-100 TO 52155-100-100M.

**SITE BENCHMARK**  
TURNOUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.7M WEST OF THE CENTERLINE OF EAST AVE. AND 8.5M SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.087m.

**GEODETTIC BENCHMARK**  
ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 40M EAST OF EDNA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.18M EAST OF THE SOUTHWEST CORNER AND 90M BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 329.126m.

NO.	REVISION	BY	MM/DD/YY
1	ISSUED FOR TENDER	VPP	02/02/24
2	ISSUED FOR 80% SUBMISSION/ISA APPLICATION	VPP	12/15/23
3	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
4	ISSUED FOR 30% SUBMISSION	VPP	04/18/23

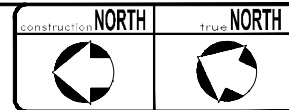
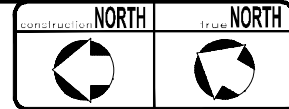
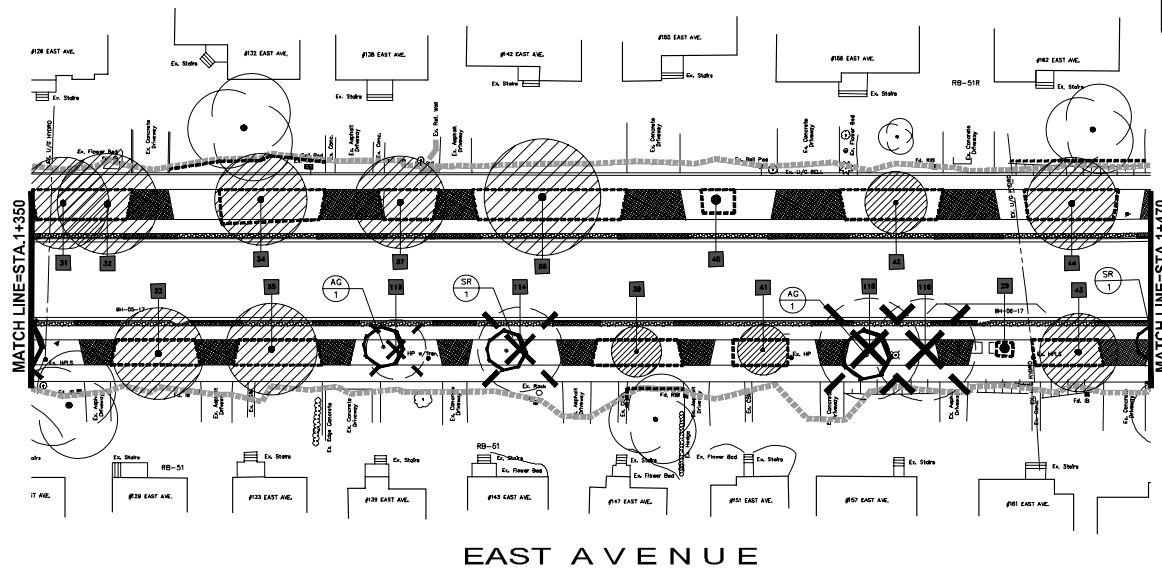
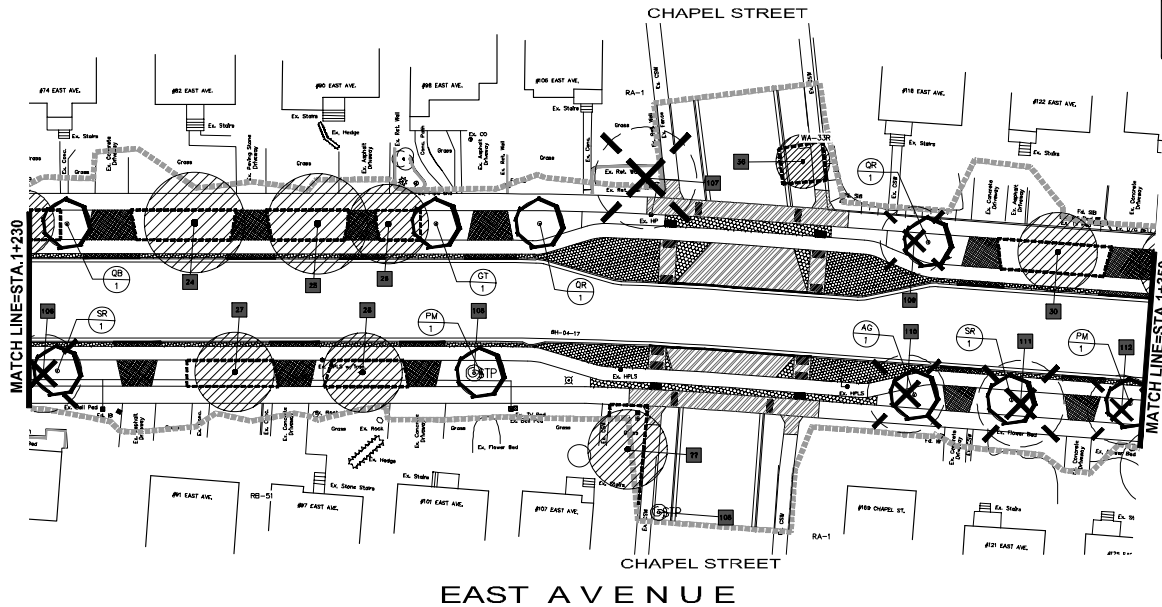


**Development Services**  
Engineering Division



**TREE MANAGEMENT PLAN**  
**EAST AVENUE**  
FROM STA. 0+980 TO STA. 1+230

DESIGNED BY: J. ZIEVE	APPROVED BY: MPP	CHECKED BY: -
DATE: 12-15-23	DATE: 12-15-23	DATE: 12-15-23
CONSULTANT Dwg. No.: 52155-100-TM1.1	SHEET No.: 53 of 63	DWG. No.: TM1.1



THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE AS SHOWN ON THE PREVIOUS DRAWING. THE CONTRACTOR SHALL VERIFY THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

BEFORE STARTING WORK, THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

- NOTES:**
- TREE TO REMAIN
  - CANOPY
  - CRITICAL ROOT ZONE (CRZ)
  - SIGNIFICANT TREE TO REMAIN
  - TREE REMOVAL
  - STUMP TO BE REMOVED
  - PROPOSED TREE PLANTING
  - TREE PROTECTION FENCING
  - PROPOSED SANITARY AND/OR WATER SERVICES TO BE INSTALLED USING TRENCHLESS METHOD
  - TREE IDENTIFICATION NUMBER
  - Tree Identification Zone
  - Root Health Conservation Zone
- TREES / STUMPS IDENTIFIED FOR REMOVAL ON THIS PLAN ARE TO BE REMOVED IN ACCORDANCE WITH THE CITY OF KITCHENER'S SPECIAL CONDITIONS MAY APPLY FOR TREES ADJACENT TO HERD LINES.
- TOPSOIL AND GRASS WITHIN TREE PROTECTION ZONES TO REMAIN

**SURVEY**  
CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SDN # 52155100A TO 52155100M.

**SITE BENCHMARK**  
TOWNSHIP OF KITCHENER ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.7m WEST OF THE CENTERLINE OF EAST AVE. AND 8.0m SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.097m.

**GEODETIC BENCHMARK**  
ONE STORY WHITE BRICK STONE-FACED BUILDING (Housing Liquor CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH) BEING 18.0m EAST OF EDNA STREET. TARGET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.1m EAST OF THE SOUTHWEST CORNER AND 8.0m BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 329.126m.

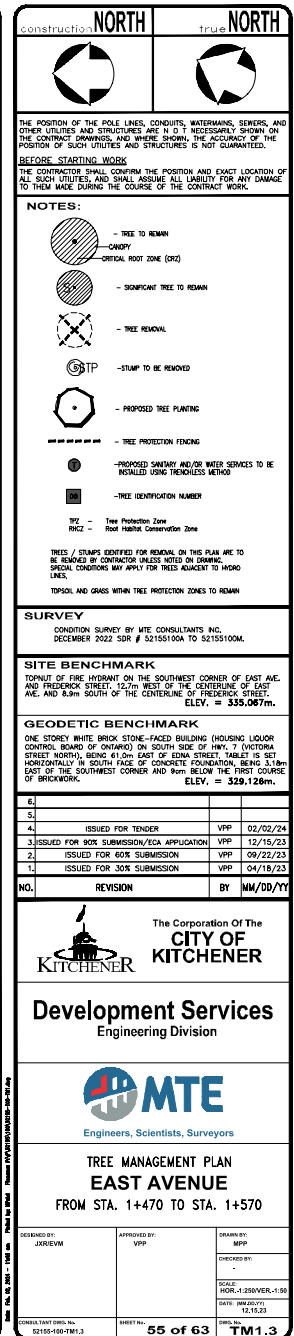
6.		
5.		
4.	ISSUED FOR TENDER	VPP 02/02/24
3.	ISSUED FOR 90% SUBMISSION/ECA APPLICATION	VPP 12/16/23
2.	ISSUED FOR 60% SUBMISSION	VPP 09/22/23
1.	ISSUED FOR 30% SUBMISSION	VPP 04/18/23
NO.	REVISION	BY MM/DD/YY

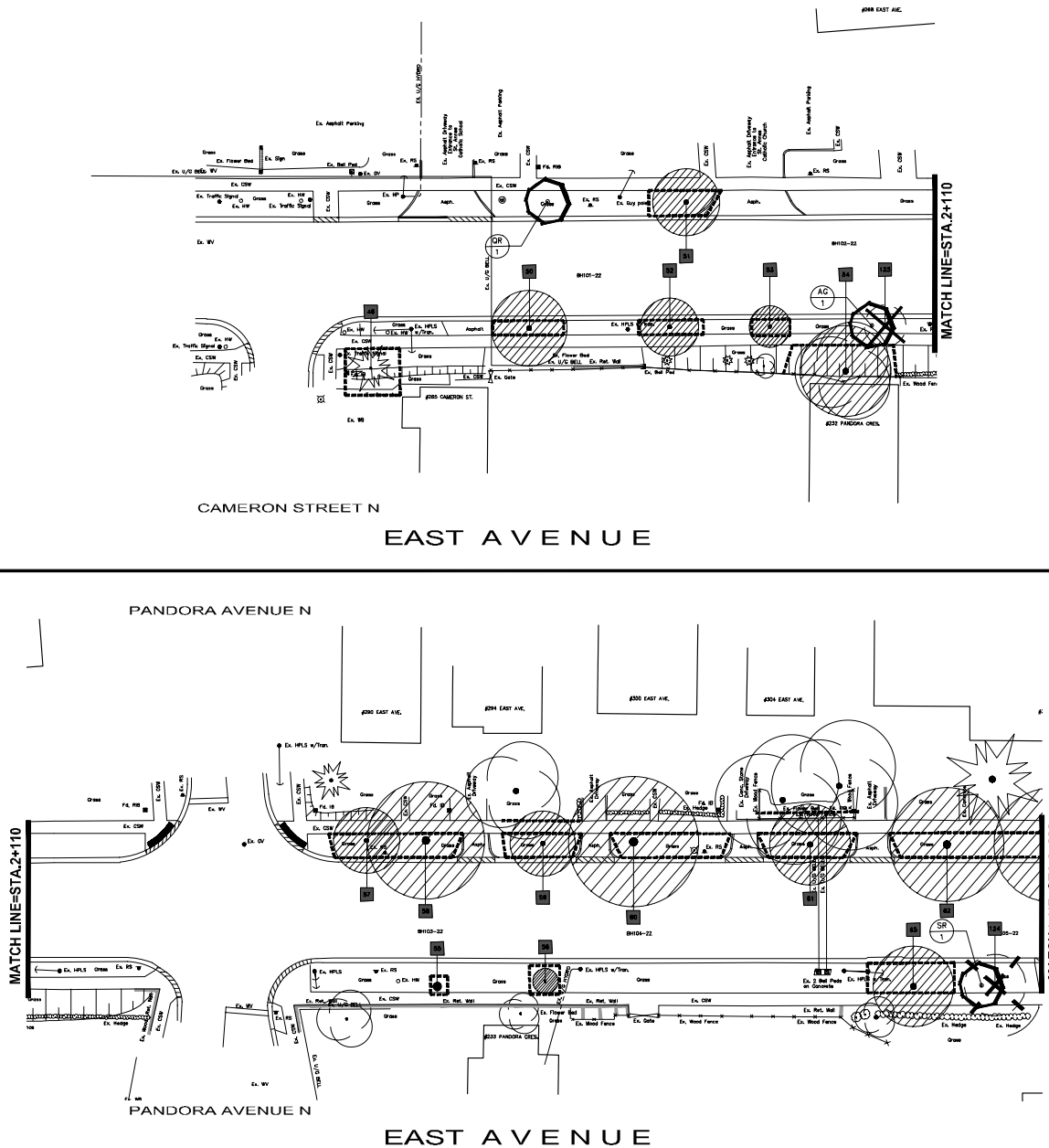
The Corporation Of The  
**CITY OF KITCHENER**  
**Development Services**  
Engineering Division

**MTE**  
Engineers, Scientists, Surveyors

**TREE MANAGEMENT PLAN**  
**EAST AVENUE**  
FROM STA. 1+230 TO STA. 1+470

DESIGNED BY: JOSIEVE	APPROVED BY: VPP	DRAWN BY: MPP
CHECKED BY: -		
SCALE: NOR-S: 2500/VER: 1:50		
DATE: 06/23/2017 12.15.23		
CONSULTANT PROJ. NO. 52155-100-TM1.2	SHEET NO. 54 of 63	FILE NO. TM1.2





Construction: **NORTH**

True: **NORTH**

THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE AS SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF EACH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

**BEFORE STARTING WORK**  
THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXIST LOCATION OF ALL SUCH UTILITIES AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

**NOTES:**

- TREE TO REMAIN
- CRIMP
- ORIGINAL ROOT ZONE (SRZ)
- SIGNIFICANT TREE TO REMAIN
- TREE REMOVAL
- STUMP TO BE REMOVED
- PROPOSED TREE PLANTING
- TREE PROTECTION FENCING
- PROPOSED SANITARY AND/OR WATER SERVICES TO BE INSTALLED USING TRENCHLESS METHOD
- TREE IDENTIFICATION NUMBER
- Tree Protection Zone (TPZ)
- Root Habitat Conservation Zone (RHCCZ)

TREES / STUMPS IDENTIFIED FOR REMOVAL ON THIS PLAN ARE TO BE REMOVED BY CONTRACTOR UNLESS NOTED OTHERWISE. SPECIAL CONDITIONS MAY APPLY FOR TREES ADJACENT TO ADJACENT LINES.

TOPSOIL AND GRASS WITHIN TREE PROTECTION ZONES TO REMAIN

**SURVEY**  
CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SUR # 52155100M TO 52155100M.

**SITE BENCHMARK**  
TOWNHIP OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND PANDORA STREET, 12.70m WEST OF THE CENTERLINE OF EAST AVE. AND 8.9m SOUTH OF THE CENTERLINE OF PANDORA STREET.  
ELEV. = 335.067m.

**GEODETTIC BENCHMARK**  
ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 41.0m EAST OF EDNA STREET TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.18m EAST OF THE SOUTHWEST CORNER AND 90m BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 329.126m.

NO.	REVISION	BY	DATE
1.	ISSUED FOR 30% SUBMISSION	VPP	04/18/23
2.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
3.	ISSUED FOR 90% SUBMISSION/ECA APPLICATION	VPP	12/15/23
4.	ISSUED FOR TENDER	VPP	02/02/24

The Corporation of The  
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**Development Services**  
Engineering Division

MTE  
Engineers, Scientists, Surveyors

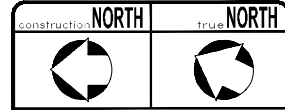
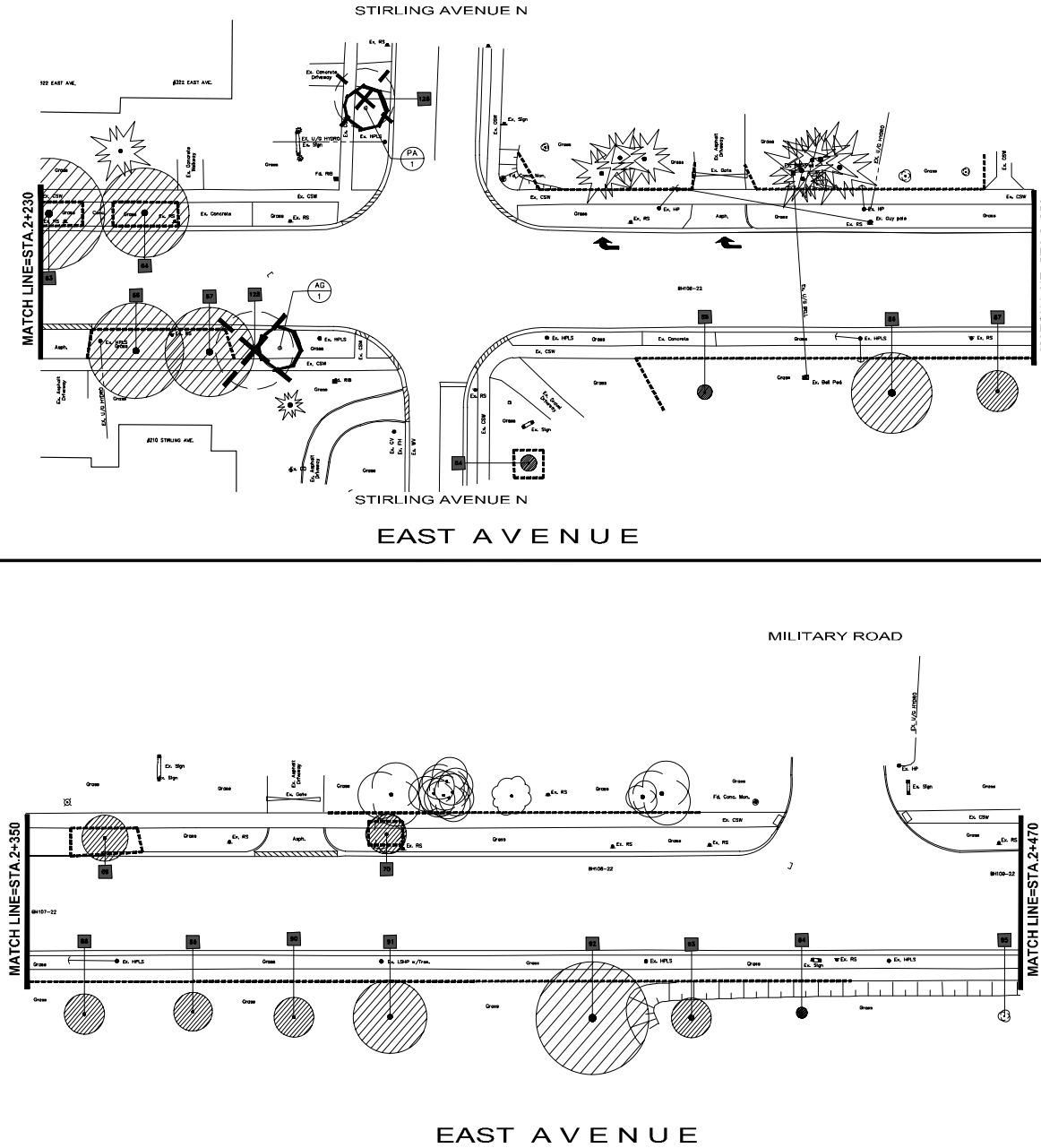
**TREE MANAGEMENT PLAN**  
**EAST AVENUE**  
FROM STA. 2+010 TO STA. 2+230

REVISION	APPROVED BY	DRAWN BY
1	JUREVIM	VPP
2		
3		
4		

SCALE	DATE	REVISION
HOR-1:250 VER-1:50	12-15-23	

66 of 63

TM1.4



THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE AS SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF EACH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

**BEFORE STARTING WORK**  
THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF EACH SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

- NOTES:**
- TREE TO REMAIN
  - CRADY
  - CRITICAL ROOT ZONE (CRZ)
  - SIGNIFICANT TREE TO REMAIN
  - TREE REMOVAL
  - STUMP TO BE REMOVED
  - PROPOSED TREE PLANTING
  - TREE PROTECTION FENCING
  - PROPOSED SANITARY AND/OR WATER SERVICES TO BE INSTALLED USING TRENCHLESS METHOD
  - TREE IDENTIFICATION NUMBER
  - Tree Protection Zone
  - Root Habitat Conservation Zone

TREES / STUMPS IDENTIFIED FOR REMOVAL ON THIS PLAN ARE TO BE REMOVED BY CONTRACTOR UNLESS NOTED OTHERWISE. SPECIAL CONDITIONS MAY APPLY FOR TREES ADJACENT TO ADJAC LINES.

TOPSOIL AND GRASS WITHIN TREE PROTECTION ZONES TO REMAIN

**SURVEY**  
CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SUR # 52155100M TO 52155100M.

**SITE BENCHMARK**  
TORNIT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.70' WEST OF THE CENTERLINE OF EAST AVE. AND 8.00' SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.067m.

**GEODETTIC BENCHMARK**  
ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 41.0m EAST OF KENYA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.18m EAST OF THE SOUTHWEST CORNER AND 90m BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 329.126m.

4.		
3.		
4.	ISSUED FOR TENDER	VPP 02/02/24
3.	ISSUED FOR 90% SUBMISSION/ECA APPLICATION	VPP 12/15/23
2.	ISSUED FOR 60% SUBMISSION	VPP 09/22/23
1.	ISSUED FOR 30% SUBMISSION	VPP 04/18/23
NO.	REVISION	BY MM/DD/YY

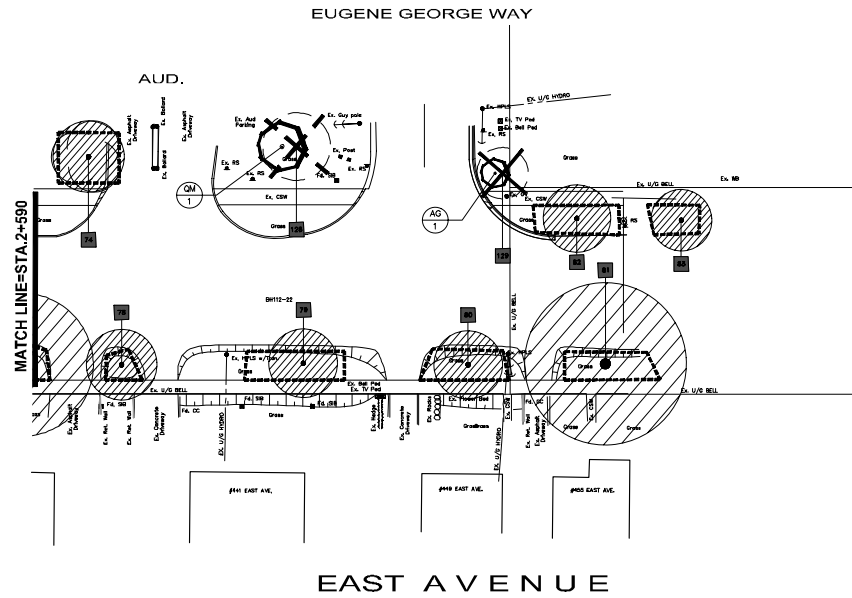
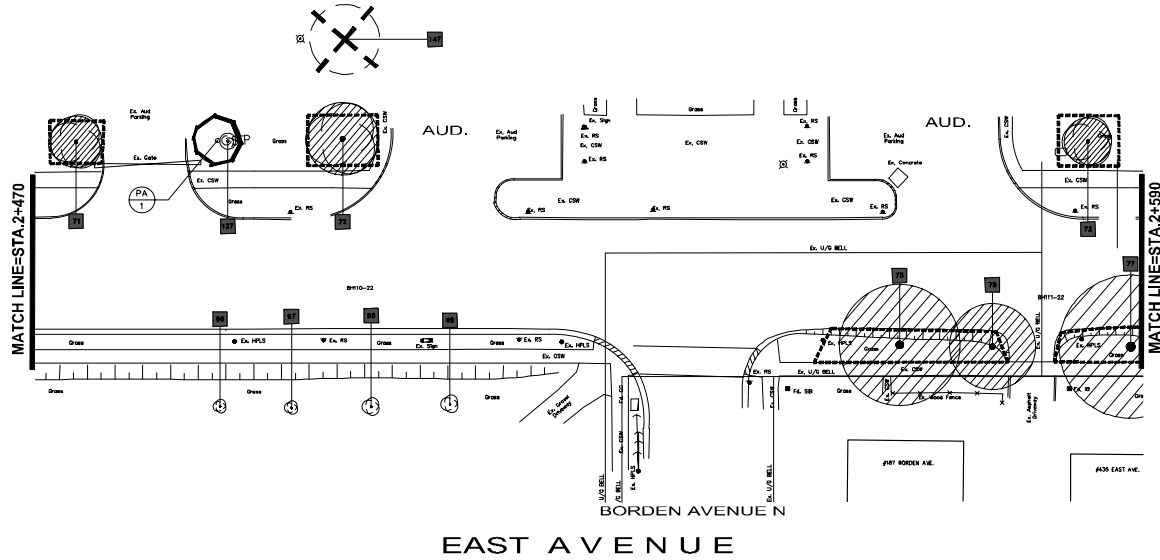
The Corporation of The  
**CITY OF KITCHENER**

**Development Services**  
Engineering Division

**MTE**  
Engineers, Scientists, Surveyors

**TREE MANAGEMENT PLAN**  
**EAST AVENUE**  
FROM STA. 2+230 TO STA. 2+470

DESIGNED BY: JUREVIM	CHECKED BY: VPP	DRAWN BY: MPP
SCALE: HOR-1:250 VERT-1:50	SHEET NO.: 57 of 63	DATE: 01-15-23
PROJECT NO.: 52155-100-TM1.5		TM1.5



Construction: **NORTH**

True: **NORTH**

THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE AS SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

**BEFORE STARTING WORK**  
THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

**NOTES:**

- TREE TO REMAIN
- CRADY
- CRITICAL ROOT ZONE (CRZ)
- SIGNIFICANT TREE TO REMAIN
- TREE REMOVAL
- STUMP TO BE REMOVED
- PROPOSED TREE PLANTING
- TREE PROTECTION FENCING
- PROPOSED SANITARY AND/OR WATER SERVICES TO BE INSTALLED USING TRENCHLESS METHOD
- TREE IDENTIFICATION NUMBER
- Tree Protection Zone (TPZ)
- Root Habitat Conservation Zone (RHCCZ)

TREES / STUMPS IDENTIFIED FOR REMOVAL ON THIS PLAN ARE TO BE REMOVED BY CONTRACTOR UNLESS NOTED OTHERWISE. SPECIAL CONDITIONS MAY APPLY FOR TREES ADJACENT TO ADJACENT LINES.

TOPSOIL AND GRASS WITHIN TREE PROTECTION ZONES TO REMAIN

**SURVEY**  
CONDITION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SUR # 52155100M TO 52155100M.

**SITE BENCHMARK**  
TAPPOINT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.70m WEST OF THE CENTERLINE OF EAST AVE. AND 8.9m SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.067m.

**GEODETIC BENCHMARK**  
ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING 41.0m EAST OF EXTRA STREET TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.18m EAST OF THE SOUTHWEST CORNER AND 9m BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 329.126m.

1.	ISSUED FOR TENDER	VPP	02/02/24
2.	ISSUED FOR 90% SUBMISSION/ECA APPLICATION	VPP	12/15/23
3.	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
4.	ISSUED FOR 30% SUBMISSION	VPP	04/18/23

NO.	REVISION	BY	MM/DD/YY

The Corporation of The  
**CITY OF KITCHENER**

**Development Services**  
Engineering Division

Engineers, Scientists, Surveyors

**TREE MANAGEMENT PLAN**  
**EAST AVENUE**  
FROM STA. 2+470 TO STA. 2+590

DESIGNED BY: JUREVIM	APPROVED BY: VPP	DRAWN BY: MPP
CHECKED BY: -		
SCALE: HOR-1:250 VERT-1:50		
DATE: 12/15/23		

CONTRACT DTD: 52155-100-TM1.6  
SHEET No. **58 of 63**  
TM1.6

TRENO	TREED	CIVIC/STREET	LOCATION	SPECIES	DBH (cm)	TREE HEIGHT (m)	AVERAGE TREE CROWN DIAMETER (m)	PRESERVATION	CRITICAL ROOT ZONE RADIUS (m)
1	156704	5 East Avenue	Boulevard	Globe Norway Maple	29	6	7	Preserve	2.4
2	10033148	5 East Avenue	Boulevard	Autumn Brilliance Serviceberry	4	3.5	1.25	Preserve	1.8
3	126713	8 East Avenue	Boulevard	Norway Maple	40	19	8	Preserve	3
4	187789	14 East Avenue	Boulevard	Norway Maple	56	13.5	10.5	Preserve	3.6
5	10046868	15 East Avenue	Boulevard	Autumn Brilliance Serviceberry	3	3.5	1	Preserve	1.8
6	10047832	15 East Avenue	Boulevard	Autumn Brilliance Serviceberry	3	3.5	1	Preserve	1.8
7	156703	21 East Avenue	Boulevard	Norway Maple Red Variety	52	10.5	12	Preserve	3.6
8	187790	22 East Avenue	Boulevard	Norway Maple Red Variety	60	14	10	Preserve	4.2
9	130069	25 East Avenue	Boulevard	Globe Norway Maple	26	6	6.25	Preserve	2.4
10	164008	26 East Avenue	Boulevard	Norway Maple	38	12	9.5	Preserve	3
11	122995	30 East Avenue	Boulevard	Norway Maple	41	12.5	10.5	Preserve	3
12	194849	31 East Avenue	Boulevard	Globe Norway Maple	38	7.5	9.5	Preserve	3
13	159903	34 East Avenue	Boulevard	Norway Maple	47	13.5	9.5	Preserve	3
14	143417	36 East Avenue	Boulevard	Norway Maple Red Variety	67	14	10	Preserve	4.2
15	194848	41 East Avenue	Boulevard	Globe Norway Maple	30	7	7.5	Preserve	2.4
16	155520	42 East Avenue	Boulevard	Norway Maple	51	11.5	9.5	Preserve	3.6
17	126538	45 East Avenue	Boulevard	Globe Norway Maple	28	5.5	8	Preserve	2.4
18	132198	48 East Avenue	Boulevard	Soft Maple	31	11.5	6	Preserve	3
19	179246	53 East Avenue	Boulevard	Norway Maple Red Variety	47	8.5	8.75	Preserve	3
20	187783	54 East Avenue	Boulevard	Norway Maple Red Variety	72	16.5	12	Preserve	4.8
21	10000044	56 East Avenue	Boulevard	Borlita Sugar Maple	9	6	2	Preserve	1.8
22	159904	66 East Avenue	Boulevard	Norway Maple	54	12	9.5	Preserve	3.6
23	164009	74 East Avenue	Boulevard	Norway Maple	37	9	8.5	Preserve	3
24	172033	82 East Avenue	Boulevard	Norway Maple	53	10	9.5	Preserve	3.6
25	188028	90 East Avenue	Boulevard	Norway Maple	60	10	10	Preserve	4.2
26	188029	90 East Avenue	Boulevard	Norway Maple	57	14	9.5	Preserve	3.6
27	133667	91 East Avenue	Boulevard	Globe Norway Maple	35	7.5	9.5	Preserve	3
28	124068	97 East Avenue	Boulevard	Globe Norway Maple	35	8	10	Preserve	3
29	161136	101 East Avenue	Boulevard	Serviceberry	58	5	3.5	Preserve	1.8
30	146820	122 East Avenue	Boulevard	Norway Maple	43	10	9	Preserve	3
31	143621	126 East Avenue	Boulevard	Norway Maple	35	9	7.5	Preserve	3
32	175617	126 East Avenue	Boulevard	Norway Maple	53	11.5	10.5	Preserve	3.6
33	155029	129 East Avenue	Boulevard	Globe Norway Maple	30	7	8	Preserve	2.4
34	185539	132 East Avenue	Boulevard	Norway Maple	42	11	9.5	Preserve	3
35	172678	133 East Avenue	Boulevard	Globe Norway Maple	34	6.5	7.5	Preserve	3
36	146876	118 East Avenue	Boulevard	Norway Maple Red Variety	44	7	8	Preserve	3
37	146821	142 East Avenue	Boulevard	Norway Maple	55	12.5	8	Preserve	3.6
38	143622	142 East Avenue	Boulevard	Norway Maple Red Variety	43	12	11	Preserve	3
39	117039	147 East Avenue	Boulevard	Ivory Silk	20	6	4	Preserve	2.4
40	10033151	150 East Avenue	Boulevard	Accolade Elm	5	4	2	Preserve	1.8
41	146778	151 East Avenue	Boulevard	Globe Norway Maple	22	6	5.5	Preserve	2.4
42	170150	155 East Avenue	Boulevard	Norway Maple Red Variety	26	9.5	8.5	Preserve	3
43	150051	161 East Avenue	Boulevard	Norway Maple	55	10	11	Preserve	3.6
44	125280	162 East Avenue	Boulevard	Norway Maple Red Variety	43	11	9.5	Preserve	3
45	18619	168 East Avenue	Boulevard	Norway Maple Red Variety	50	12	9	Preserve	3
46	1007002	207 East Avenue	Boulevard	European Larch	23	12	5.75	Preserve	3
47	126999	171 East Avenue	Boulevard	Norway Maple	48	10.5	8.5	Preserve	3
48	186781	179 East Avenue	Boulevard	Norway Maple Red Variety	48	10.5	9.5	Preserve	3
49	161891	179 East Avenue	Boulevard	Norway Maple	52	10.5	10.5	Preserve	3.6
50	128910	207 Common Street	Boulevard	Globe Norway Maple	29	7.5	9	Preserve	2.4
51	143683	208 East Avenue	Boulevard	Norway Maple	32	9.5	8.5	Preserve	3
52	150096	232 Pandora Cres	Boulevard	Globe Norway Maple	25	7.5	8.5	Preserve	2.4
53	191537	232 Pandora Cres	Boulevard	Globe Norway Maple	22	4	4.5	Preserve	2.4
54	1008972	232 Pandora Cres	Boulevard	Norway Maple	58	19	13	Preserve	3.6
55	1004338	233 Pandora Cres	Boulevard	Ivory Silk	5	3.5	1	Preserve	1.8
56	185429	233 Pandora Cres	Boulevard	Globe Norway Maple	13	4	3.5	Preserve	2.4
57	154622	290 East Avenue	Boulevard	Norway Maple	33	11	6.5	Preserve	3
58	116704	290 East Avenue	Boulevard	Norway Maple	50	13.5	11	Preserve	3
59	175021	294 East Avenue	Boulevard	Norway Maple	34	11	6.25	Preserve	3
60	136738	300 East Avenue	Boulevard	Norway Maple	70	12	11.75	Preserve	4.2
61	132178	304 East Avenue	Boulevard	Honey Locust Species	36	14	7.75	Preserve	3
62	121900	322 East Avenue	Boulevard	Norway Maple	48	13	10.25	Preserve	3
63	175622	322 East Avenue	Boulevard	Honey Locust Species	47	14	11.5	Preserve	3
64	195521	322 East Avenue	Boulevard	Honey Locust Species	48	12	11.5	Preserve	3
65	185430	210 String Avenue	Boulevard	Norway Maple	61	15.5	11	Preserve	4.2
66	191539	210 String Avenue	Boulevard	Norway Maple	61	12.5	10.5	Preserve	4.2
67	191540	210 String Avenue	Boulevard	Norway Maple	71	13.5	12.5	Preserve	4.8
68	1008982	350 East Avenue	Lawn	European Larch	34	14.5	4.5	Preserve	3
69	1008983	350 East Avenue	Boulevard	Norway Maple	27	9	6	Preserve	2.4
70	1009094	350 East Avenue	Boulevard	Norway Maple	21	7	5.25	Preserve	2.4
71	118883	400 East Avenue	City Park	Norway Maple	25	8.5	6.25	Preserve	2.4
72	140636	400 East Avenue	City Park	Norway Maple	30	8	7.25	Preserve	2.4
73	176813	400 East Avenue	City Park	Norway Maple	37	9	6.5	Preserve	3
74	140414	400 East Avenue	City Park	Norway Maple	34	8	7.25	Preserve	3
75	116139	187 Donlon Avenue	Boulevard	Norway Maple	68	9	13.5	Preserve	4.2
76	188848	187 Donlon Avenue	Boulevard	Norway Maple	43	8	7.5	Preserve	3
77	154055	435 East Avenue	Boulevard	Norway Maple	64	11	12.5	Preserve	4.2
78	185382	441 East Avenue	Boulevard	Norway Maple Red Variety	36	8.5	6.75	Preserve	3
79	109196	445 East Avenue	Boulevard	Northern Redcedar	28	9	6.5	Preserve	2.4
80	121310	448 East Avenue	Boulevard	Norway Maple Red Variety	44	8.5	7	Preserve	3
81	181840	455 East Avenue	Boulevard	Norway Maple	91	13	15	Preserve	6
82	122025	458 East Avenue	Boulevard	Norway Maple Red Variety	28	7.5	5	Preserve	2.4
83	10038435	458 East Avenue	Boulevard	Soft Maple	13	6.5	3.5	Preserve	2.4
84	180795	175 String Avenue	City Park	Norway Maple	61	15	9.5	Preserve	5.4
85	10006542	175 String Avenue	City Park	Littellat Linden				Preserve	
86	10002062	175 String Avenue	City Park	Sugar Maple				Preserve	
87	10005961	175 String Avenue	City Park	Autumn Blaze Maple				Preserve	
88	158452	175 String Avenue	City Park	Crimson King Maple				Preserve	
89	10006960	175 String Avenue	City Park	Autumn Blaze Maple				Preserve	
90	124130	175 String Avenue	City Park	Crimson King Maple				Preserve	
91	136303	175 String Avenue	City Park	Norway Maple				Preserve	
92	170101	175 String Avenue	City Park	Norway Maple				Preserve	
93	152815	175 String Avenue	City Park	Norway Maple				Preserve	
94	10006579	175 String Avenue	City Park	Autumn Blaze Maple				Preserve	
95	10006962	175 String Avenue	City Park	Autumn Blaze Maple				Preserve	
96	10006963	175 String Avenue	City Park	Autumn Blaze Maple				Preserve	
97	10006964	175 String Avenue	City Park	Autumn Blaze Maple				Preserve	
98	100069512	175 String Avenue	City Park	Autumn Blaze Maple				Preserve	
99	100069513	175 String Avenue	City Park	Autumn Blaze Maple				Preserve	

TRENO	TREED	CIVIC/STREET	LOCATION	SPECIES	DBH (cm)	PRESERVATION	COMMENTS
100	10095462	340 Frederick Street	Boulevard	Soft Maple	2	Remove	Planted by resident
101	172552	349 Frederick Street	Boulevard	Norway Maple	35	Remove	
102	187788	12 East Avenue	Boulevard	Norway Maple	27	Remove	
103	130066	35 East Avenue	Boulevard	Globe Norway Maple	34	Remove	
104	455	40 East Avenue	Boulevard	Norway Maple	59	Remove	
105	179245	85 East Avenue	Boulevard	Globe Norway Maple	33	Remove	
106	118212	85 East Avenue	Boulevard	Globe Norway Maple	32	Remove	
107	139103	106 East Avenue	Lawn	Black Walnut	42	Remove	Historic grade change around stem when retaining wall was built
108	181373	107 East Avenue	Boulevard	Norway Maple	NA	Remove Stump	
109	116701	118 East Avenue	Boulevard	Norway Maple	38	Remove	
110	172679	109 Chapel Street	Boulevard	Globe Norway Maple	33	Remove	
111	100918	121 East Avenue	Boulevard	Globe Norway Maple	36	Remove	
112	158210	125 East Avenue	Boulevard	Globe Norway Maple	30	Remove	
113	181139	138 East Avenue	Boulevard	Globe Norway Maple	26	Remove	
114	132481	143 East Avenue	Boulevard	Norway Maple Red Variety	65	Remove	
115	158208	157 East Avenue	Boulevard	Norway Maple	82	Remove	
116	145322	157 East Avenue	Boulevard	Sugar Maple	68	Remove	
117	139172	166 East Avenue	Boulevard	Littellat Linden species	NA	Remove Stump	
118	117626	169 East Avenue	Boulevard	Globe Norway Maple	17	Remove	
119	191745	171 East Avenue	Boulevard	Norway Maple	39	Remove	
120	132581	174 East Avenue	Boulevard	Norway Maple Red Variety	34	Remove	
121	179818	174 East Avenue	Boulevard	Norway Maple Red Variety	58	Remove	
122	170101	180 East Avenue	Boulevard	Sugar Maple	22	Remove	
123	150067	232 Pandora Crescent	Boulevard	Globe Norway Maple	18	Remove	
124	122791	210 String Avenue North	Boulevard	Norway Maple	51	Remove	
125	149038	210 String Avenue North	Boulevard	Norway Maple	51	Remove	
126	135111	322 East Avenue	Boulevard	Norway Maple	56	Remove	Contractor to remove standing stem and stump (12/19/24)
127	146079	400 East Avenue	Lawn	Norway Maple	35	Remove	Auditorium property
128	146786	400 East Avenue	Lawn	Norway Maple	31	Remove	Auditorium property
129	103385	458 East Avenue	Lawn	Norway Maple Red Variety	28	Remove	Active work order--may be stump at time of project.
130	10008891	11 East Avenue	Boulevard	Crataegus species	NA	Remove Stump	Homeowner removed this tree

KEY/BOTANICAL NAME	COMMON NAME	CALIPER (STOCK TYPE) QUANTITY
PA <i>Platanus x acerifolia</i> 'Bloodgood'	Blood Good Plane Tree	50mm Wire Basket 2
QM <i>Quercus macrocarpa</i>	Bur Oak	50mm Wire Basket 2
QM <i>Quercus rubra</i> 'Fastigiata'	Columnar English Oak	50mm Wire Basket 5
GT <i>Gleditsia inaequalis</i> var. <i>inermis</i> 'Shademoor'	Honey Locust Shade Master	50mm Wire Basket 1
SR <i>Syringa reticulata</i> 'Ivory Silk'	Ivory Silk Lilac	50mm Wire Basket 6
SD <i>Gymnocladus dioica</i> 'Espresso'	Kentucky Coffee Tree 'Espresso'	50mm Wire Basket 1
PM <i>Prunus melanocarpa</i>	Manchurian Cherry	50mm Wire Basket 3
AM <i>Aesculus glabra</i>	Ohio Buckeye	50mm Wire Basket 6
AM <i>Aesculus x grandiflora</i>	Serviceberry 'Autumn Brilliance'	50mm Wire Basket 4
QB <i>Quercus bicolor</i>	Swamp White Oak	50mm Wire Basket 1
LS <i>Liquidambar styraciflua</i>	Sweet Gum	50mm Wire Basket 1

construction

NORTH

true

NORTH

THE POSITION OF THE POLE LINES, CONDUITS, WATERMANS, SEWERS, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

**BEFORE STARTING WORK**

THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.

**NOTES:**

- TREE TO REMAIN
- CRITICAL ROOT ZONE (CRZ)
- SOFTENING TREE TO REMAIN
- TREE REMOVAL
- STUMP TO BE REMOVED
- PROPOSED TREE PLANTING
- TREE PROTECTION FENCING
- PROPOSED SAFETY AND/OR WEAR SERVICES TO BE INSTALLED USING TRUCKLESS METHOD
- TREE IDENTIFICATION NUMBER
- Tree Protection Zone
- Root Health Conservation Zone

TREES / STUMPS IDENTIFIED FOR REMOVAL ON THIS PLAN ARE TO BE REMOVED BY CONTRACTOR UNLESS NOTED ON DRAWING. SPECIAL CONDITIONS MAY APPLY FOR TREES ADJACENT TO WORK LINES.

TOPSIS AND GRASS WITH TREE PROTECTION ZONES TO REMAIN

**SURVEY**

CONDUCTION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SUR # 52155100A TO 52155100M.

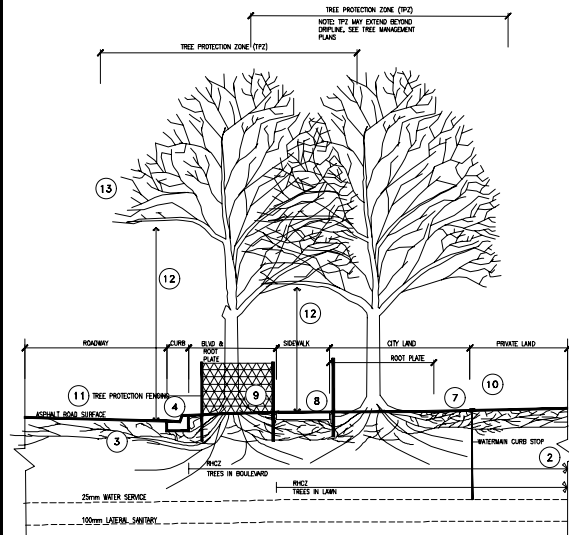
**SITE BENCHMARK**

TOPNUT OF FIRE HYDRANT ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 10.7m WEST OF THE CENTERLINE OF EAST AVE. AND 8.3m SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 555.087m.

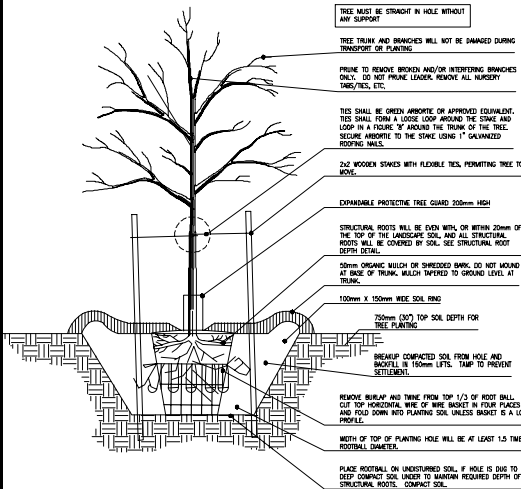
**GEODETIC BENCHMARK**

ONE STOREY WHITE BRICK, STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (VICTORIA STREET NORTH), BEING #1.0m EAST OF EDNA STREET. TABLET IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 1.0m EAST OF THE SOUTHWEST CORNER AND 8.0m BELOW THE FIRST COURSE OF BRICKWORK.  
ELEV. = 528.126m.

6.			
5.			
4.			
3.	ISSUED FOR TENDER	VPP	02/02/24
2.	ISSUED FOR 90% SUBMISSION/CDIA APPLICATION	VPP	12/15/23
1.	ISSUED		



A TREE MANAGEMENT DETAIL & NOTES  
SCALE: N.T.S.



B DECIDUOUS TREE PLANTING DETAIL  
SCALE: N.T.S.

TREE PROTECTION DETAIL NOTES

1. Tree Protection Zone (TPZ) - is the area around the trunk where roots essential for tree health and stability are located. At a minimum this area is defined by the edge of the tree's drip-line. For Significant trees and trees with narrow crowns, the Urban Forestry (UF) representative will define a TPZ that extends beyond the tree's drip-line. All TPZs are shown on the Tree Management Plan. No construction activity or work will occur in this area unless approved by the UF representative.
2. Root Habitat Conservation Zone (RHCCZ) - extends 1 to 2 times beyond the tree's drip-line, and reflects the root habitat required for healthy, mature trees. In residential areas this zone includes the boulevard, front lawns, and driveways and side lawns. Tree root growth is highly variable. UF tree concerns about any activity that would have a negative impact on the RHCCZ.
3. Contractor may encounter roots within roadway. All tree roots greater than 5 cm within the roadway are to be cut cleanly with a pruning saw 15 cm behind the new curb. If extensive roots are encountered, UF is to be notified prior to backfilling to assess long term impact to the tree.
4. The contractor will use appropriate work practices to not damage the buttress roots within the root plate during asphalt and curb removal. Where identified, root excavation will not occur beyond the original curb until inspected by the UF representative. At the time of inspection, the UF representative may request additional protection of the root plate and special work practices. At no time will excavation exceed the approved limits. As requested by the UF representative, hand forming and excavation limits will be required to protect the root plate during road base excavation and curb work. All roots larger than 5 cm approved for removal will be cut cleanly.
5. Prior to any work being done within the TPZ, the contractor will locate all internal sanitary services. The location of the services will be marked from the edge of the roadway to 1.5 m past the property line. The Site Inspector, Contractor, UF, and Engineering will review all internal services within the TPZ. The UF representative and Site Inspector will determine the most appropriate method of excavation to be carried out at property line. Where major conflicts occur with the service connection and the tree, Engineering in consultation with the UF representative may direct the contractor to make the connection at a different location. The contractor may also be requested to carry out an exploratory root excavation prior to any service being made.
6. Prior to any work being done within the TPZ, the Site Inspector, Contractor, UF representative, and Engineering/Utilities (when necessary) will review all lateral water services within the TPZ to determine the most appropriate method of excavation to be carried out on property line. Where major conflicts occur with the service and the tree's root plate, the UF representative and Engineering/Utilities may direct the contractor to make a connection at a different location. The contractor may be requested to carry out an exploratory root excavation prior to any decision being made.
7. Excavation of the property line for water and sanitary service connections will be carried out in a manner to minimize the amount of soil disturbance and root damage. For specific work practices refer to Appendix 6. All tree pits will be covered to prevent root desiccation.
8. The TPZ includes the sidewalk zone. The UF representative will review and approve all work practices within the tree protection zone for all sidewalks and driveway works prior to the works starting. Special work practices including hand work, minimal excavation and hand forming may be required. Changes to the sidewalk design and elevation may be required to protect the root plate.
9. The root plate and buttress roots of mature trees typically change the elevation of city boulevards and tree lawn areas. Work within this area can seriously impact the structural integrity and health of a tree. The UF representative will review and approve all site restoration work within the TPZ. The contractor and its subcontractors will not dump any construction waste, excess gravel, etc. during any construction work. All excess material will be removed to the satisfaction of the UF representative. As standard practice only the areas disturbed will be restored, all other areas within the TPZ will be left as is.
10. Tree Protection Zones for City Trees may be extended into private property, no work will be carried out by the contractor or its subcontractors on private property where a City Tree exists until the proposed work is reviewed and approved by UF.
11. Tree Protection Fencing is to be installed at all locations shown on the Tree Management Plan, 300 mm behind the curb and 200 mm from the edge of all other paved surfaces. Change of grade facing 1.2 m high with 1.2 m x 3 m in content. Protective fencing will remain in place until the site is ready for soil and tree planting.
12. Tree services to provide 4.3 m clearance over roadway, and 2.4 m clearance over walkway. The contractor is expected to work within these height limits.
13. The Contractor will use care working around trees to not damage any branches or the trunk. All damage to trees will be reported to the UF representative. Unless construction equipment is being used under a tree, no vehicle will be left under a tree.

TREE PLANTING DETAILS

1. All trees will be reviewed and approved by the Urban Forestry representative prior to planting. Damaged trees, trees with poor form or root structure and trees not meeting the Canadian Standards for Nursery Stock will be refused. The contractor is also responsible to ensure that all plant material, including cultivars and tree sizes are provided and installed as stated on this plan. No alternatives, including species, tree size will be accepted unless approved by the Urban Forestry representative.
2. The Urban Forestry representative will mark the location of all tree planting locations, and review with the landscape contractor its expectations regarding proper planting practices, along with the standard depth for structural roots. Trees not planted to the City of Kitchener Standard will be removed and replaced at the contractor's expense.
3. The contractor is responsible for determining the location of all utilities and other obstructions above and below ground.
4. During the transport, storage and planting of the trees, the contractor will use appropriate work practices to not damage the tree or root ball. The contractor will ensure that the tree does not suffer drought stress during this operation.
5. All twine and burlap will be bio-degradable. If the tree has been rebagged, the burlap inside of the wire basket will be removed.
6. Trees will be planted in accordance to the planting detail. The depth of the planting hole will be determined by the depth of the root ball. The tree's structural roots will be even with, or within 20mm of the top of the landscape soil. All structural roots will be covered by soil. See Detail E.
7. A 100 mm high and 150 mm wide soil ring will be created at the edge of the tree hole. Excess soil will not be added to the root ball, all excess soil will be removed from the surface.
8. 50 mm of an organic mulch will be applied to the surface of the soil ring and root ball. The mounding of soil and mulch within the root ball and against the tree trunk is prohibited.
9. The tree will be watered immediately after planting and the placement of the mulch, with the tree saucer being completely filled with water.
10. An expandable tree cover 200mm high will be placed around the base of the tree.
11. Trees will be staked with two wooden stakes 50mm x 50 mm x 2 m placed outside of the root ball. Flexible ties will be used.
12. Trees not planted to this specification or not at the approved depth, or trees that settle after planting will be removed and replaced at the contractor's expense. If the tree ball cannot be removed from the hole intact to the satisfaction of the Urban Forestry representative, the tree will be replaced at the contractor's full expense.
13. Tree to be watered and mulched immediately following planting.
14. Tree shall bear same relation to finished grade as it bore to previous existing grade, following settlement.

TREE PROTECTION REVIEWS / APPROVALS CHECKLIST			
No.	Task	Description	Completed
1	Tree Removal & Stumping	Contractor to prepare a tree removal and stumping plan for the UF representative's approval (see note below).	
2	Tree Protection Fencing	Contractor outlines the UF representative when work completed for review.	
3	Asphalt & Curb Removal	UF representative / Site Inspector inspect asphalt and curb removal within TPZ. Tree protection requirements reviewed with contractor.	
4	Lateral Sanitary Services	Contractor locates all sanitary services within TPZ. Site Inspector will inspect with the UF representative to determine method of excavation. Contractor informed of required work activities.	
5	Lateral Water Services	Contractor locates all water services within TPZ. Site Inspector will inspect with the UF representative to determine method of excavation. Contractor informed of required work activities.	
6	Road Excavation	UF representative / Site Inspector inspect road excavation within TPZ. Work requirements reviewed with contractor prior to work.	
7	Curb Setup / Installation	UF representative / Site Inspector review curb work within TPZ. Work requirements reviewed with contractor prior to work.	
8	Sidewalk / Removal/Installation	UF representative / Site Inspector review sidewalk work within TPZ. Work requirements reviewed with contractor prior to work.	
9	Driveway Ramps & Driveways	UF representative / Site Inspector review driveway ramps within TPZ. Work requirements reviewed with contractor prior to work.	
10	Site Restoration / Landscaping	UF representative / Site Inspector mark root restoration areas within TPZ. Work requirements reviewed with contractor prior to work.	
11	Tree Planting	UF representative marks tree planting locations. Contractor sets up meeting with landscape contractor. The UF representative is notified when trees planted for final inspection.	

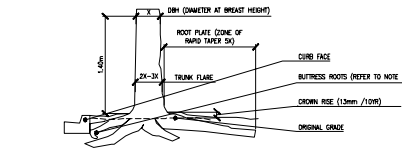
Note: The UF representative may identify other activities requiring review.

All requests for reviews are to occur through the regularly scheduled site meetings. Issues requiring attention between scheduled meetings are to be directed to the UF representative through the Site Inspector, and will be addressed as soon as possible. When the UF representative is not on site, the Site Inspector will act on their behalf, and it is expected that the Site Inspector will ensure that all requirements of the Tree Management Plan and Tree Planting Plan are carried out as required.

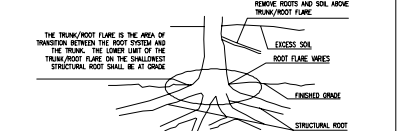
TREE REMOVAL WORK PLAN

- The UF representative may request a tree removal work plan. The work plan will include the following:
- Name of subcontractor & summary of their work experience within an urban residential environment.
  - A description of the lead hand and workers that will carry out their work, and their qualifications.
  - A removal plan detailing the techniques and approach to be used to remove all trees. For all trees greater than 38 cm on the plan will include details on the removal and rigging techniques that will be used to prevent any damage to city, utility, or residential property.
  - Planned work dates.
  - Traffic and pedestrian plan.
  - Scheduling and approvals from KW Hydro regarding any required service drops.
  - Description of stumping equipment to be used, including model, and maximum depth that machine can grind to.
  - Any additional requirements identified by the UF representative.

C TRUNK TIE PLAN DETAIL  
SCALE: N.T.S.



D ROOT PLATE CROSS-SECTION DETAIL  
SCALE: N.T.S.

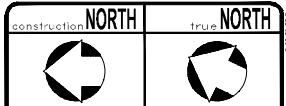


E STRUCTURAL ROOT DEPTH DETAIL  
SCALE: N.T.S.

E STRUCTURAL ROOT DEPTH DETAIL  
SCALE: N.T.S.

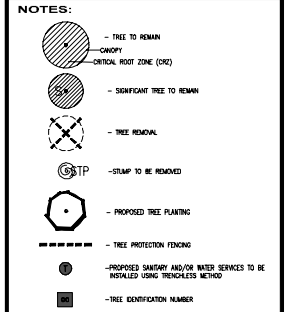
TREE MANAGEMENT NOTES:

1. All tree protection within this project is directed by the Standard Specification for Construction (see Table Appendix E, Unapproved Tree Damage, General Provisions in Tenders) and all additional measures stated on this plan.
2. It is the responsibility of the Contractor, Consultant & Site Inspector to ensure that they are aware of all measures being taken to protect City trees on this project.
3. Except where permitted by the UF representative, the Contractor will not enter, excavate or store any materials within the Tree Protection Zone (TPZ). Where construction activities are approved, the Contractor will adhere to the requirements of this Tree Management Plan, and all direction by the UF representative.
4. All work around City and Border Trees will be reviewed and approved by the UF representative in the field before any work is carried out. No changes to the agreed work plan around trees will occur unless approved by the UF representative.
5. All City, Border and Private trees to be saved shall be protected with tree protection fencing installed as shown on this plan and detail. Tree protection fencing to be approved upon installation by the UF representative. Tree protection fencing shall remain in place until all site activities including the landscaping are complete.
6. All damage to trees will be reported to the UF representative immediately by the Site Inspector.
7. The contractor will be responsible for all tree removals and stumping identified on this plan as trees > 38mm to be removed by contractor. Where secondary electrical services are within the area of trees to be removed by the contractor, the contractor will be responsible for notifying owners of properties where service wires are required to be temporarily disconnected for any tree work. All power outages will be kept to a minimum, and carried out with the agreement of the owner and City. The contractor shall contact Kitchener - Wind Hydro at least one week in advance of the work to arrange for the disconnect. The contractor will also contact Hydro to have the service wires disconnected. The contact number for service disconnects and reconnects is 519-745-4771 x316.
8. All tree removals and stumping will be carried out by qualified and competent tree workers with demonstrated work experience in urban residential areas. The work will be done using approved arboricultural practices (e.g. tree removals, rigging, aerial lift, etc.) and will be consistent with all provincial regulations and industry standards.



THE POSITION OF THE POLE LINES, CONSULTS, WATERMANS, SERVICES, AND OTHER UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THIS PLAN. THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED.

BEFORE STARTING WORK  
THE CONTRACTOR SHALL CONFIRM THE POSITION AND EXACT LOCATION OF ALL SUCH UTILITIES, AND SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO THEM MADE DURING THE COURSE OF THE CONTRACT WORK.



SURVEY  
CONSTRUCTION SURVEY BY MTE CONSULTANTS INC.  
DECEMBER 2022 SUR # 52155100A TO 52155100N.

SITE BENCHMARK  
TOWNSHIP OF FIFE HOPKINSON ON THE SOUTHWEST CORNER OF EAST AVE. AND FREDERICK STREET, 12.7m WEST OF THE CENTERLINE OF EAST AVE. AND 8.4m SOUTH OF THE CENTERLINE OF FREDERICK STREET.  
ELEV. = 335.067m.

GEODETTIC BENCHMARK  
ONE STOREY WHITE BRICK STONE-FACED BUILDING (HOUSING LIQUOR CONTROL BOARD OF ONTARIO) ON SOUTH SIDE OF HWY. 7 (WATERLOO STREET NORTH), BEING 41.0m EAST OF ERM STREET. BENCHMARK IS SET HORIZONTALLY IN SOUTH FACE OF CONCRETE FOUNDATION, BEING 3.18m EAST OF THE SOUTHWEST CORNER AND 8m BELOW THE FIRST COURSE OF BENCHMARK.  
ELEV. = 329.126m.

NO.	REVISION	BY	MM/DD/YY
1	ISSUED FOR TENDER	VPP	02/02/24
2	ISSUED FOR 30% SUBMISSION	VPP	12/15/23
3	ISSUED FOR 60% SUBMISSION	VPP	09/22/23
4	ISSUED FOR 90% SUBMISSION	VPP	04/18/23

The Corporation Of The  
**CITY OF KITCHENER**  
Development Services  
Engineering Division

**MTE**  
Engineers, Scientists, Surveyors

TREE MANAGEMENT PLAN  
**EAST AVENUE**

DESIGNED BY JACKIE WONG	APPROVED BY VPP	DRAWN BY MPP
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DATE: 02/02/24  
PROJECT NO.: 52155-100-TM1.8  
SHEET NO.: 60 OF 63  
SCALE: AS SHOWN  
DATE: 02/02/24  
SCALE: AS SHOWN  
DATE: 02/02/24  
SCALE: AS SHOWN



# QUESTIONS?



## Reconstruction Project

East Avenue (Frederick Street to Krug Street &  
Cameron Street to Eugene George Way)

Should you have any questions or comments about this project and wish to speak with someone personally, you may contact:

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KITCHENER