



ADDENDUM NO. 1

From: Township of Wellington North

Date: Friday February 28, 2025

Addendum No. 1

Township of Wellington North

Contract No.: RFT 2025-003

**Tender – Reconstruction of John Street and Construction of Pedestrian Crossover (PXO)
at Queen St E & Fergus St S/Parkside Dr, Mount Forest**

Closing Date: Thursday March 13, 2025 at 2:00:59 p.m.

Please update your Tender documents as per the addendums in this document and attach a copy of this addendum page to your submission, acknowledging receipt and understanding of the addendum.

Except as to the extent that they are amended by the foregoing, all the terms and conditions of the Tender shall remain in full effect.

This Addendum has been sent by electronic mail (email).

I/We hereby acknowledge receipt of this Addendum.

Signed (Must be Signing Officer of Firm)

Name (Print) Date:

Position

Name of Firm

TOWNSHIP OF WELLINGTON NORTH

CONTRACT No. RFT 2025-003

**TENDER – Reconstruction of John Street and Construction of Pedestrian Crossover
(PXO) at Queen St E & Fergus St S/Parkside Dr, Mount Forest
ADDENDUM NO. 1**

Date: Friday February 28, 2025

QUESTIONS:

Question No. 1

Drawings show Commercial Driveways as 75mm HL3 and Spec says 90mm in 2 lifts of 45 mm. Which one is correct?

Response

Commercial driveways should be 50 mm HL4 overlain by 40 mm HL3 for a total depth of 90 mm. Per this Addendum, *Section C - Special Provisions – Item No. 1.40 - Hot Mix Asphalt HL3F for Commercial Driveways* and *RFT 2025-003 Issued for Tender Drawing Set* have been revised to update the requirements for commercial driveways.

Question No. 2

Would the municipality be willing to accept RRFBs manufactured by Carmanah?

Response

Carmanah brand RRFBs will not be accepted. Further, per this Addendum, *Section C – Special Provisions, Item No. 2.11* has been revised to replace a) Material, such that the Double sided rectangular rapid flashing beacons shall be manufactured by Tapco. Refer to the Revisions noted on the following pages.

Question No. 3

Would the municipality be willing to extend the tender closing date?

Response

No, the tender closing date will remain as Thursday March 13, 2025 at 2:00:59 p.m.

Question No. 4

Is there an estimate for the project that can be provided for bonding purposes?

Response

Per *Section A – Information to Tenderers, Clause 8 (A)* of the Contract, a \$100,000.00 bid bond is required, which is based on an estimated tender value between \$1M and \$2M.

REVISIONS:

RFT 2025-003 ISSUED FOR TENDER DRAWING SET

Remove entire Issued for Tender Drawing Set and replace with attached RFT 2025-003 Issued for Tender Drawing Set (Addendum No. 1)

Noting the following changes:

Drawing No. 01 – Removals Plan

Removed call out box at Sta. 0+011 Lt noting “Remove Fuel Vents & Cap Below Grade (Provisional)”.

Drawing No. 02 – Plan and Profile from Queen St W to Sta. 0+120

Updated legend item for Commercial Driveways

SECTION C – SPECIAL PROVISIONS – ITEMS

Remove entire Section C – Special Provisions pages C -1 to C-41 and replace with attached Section C – Special Provisions pages (Addendum No. 1) C-1 to (Addendum No. 1) C-41.

Noting the following changes:

Section C – Special Provisions, Item No. 1.40 – Hot Mix Asphalt HL3F for Commercial Driveways

Replace a) Operation, as follows. No changes to b) Payment.

a) Operation

The depth of asphalt shall be 90 mm (one lift of HL3 at 40 mm over one lift of HL4 at 50 mm).

Section C – Special Provisions, Item No. 1.54 – Supply, Excavate For and Install 200 mm Diameter (DR-35, PVC) Sanitary Sewer

Replace c) Payment, as follows. No changes to a) Material and b) Operation.

c) Payment

Payment at the unit bid price shall be full compensation for the supply, excavation, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material and installation of new sewer including loading, hauling and disposal of surplus excavated material, CCTV video inspection and mandrel testing of the sewer at least 30 days following pipe installation and after the completion of curb and gutter and HL 4 Binder Course Asphalt.

A second CCTV in 2026 is required of the sewer main prior to HL 3 Surface Asphalt as per OPSS 409.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Where clear stone is substituted, no additional payment will be made.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

Section C – Special Provisions, Item No. 1.57 – Sanitary Service From New Sanitary Sewer to Property Line

Replace a) Material and c) Payment, as follows. No changes to b) Measurement for Payment.

a) Material

Service pipe shall be PVC SDR 28, colour green.

Connections as follows:

- Prefabricated tees

c) Payment

Payment at the unit bid price shall be full compensation for rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, connection to the new sewer by manufactured tee, 125 mm diameter PVC (DR-28) pipe, bend, riser and connection to the existing service pipes (all types) at property line including all necessary adaptors, fittings and reducers (where required) and plugging existing pipes (where required), 100 mm diameter cleanout with “Wye” connection and cap provided below grade at property line, granular embedment and approved native backfill to subgrade elevation compacted to 95% S.P.D, as per Standard Drawing S7 - Sanitary Service Detail, and a C.C.T.V. video inspection of the pipe at least 30 days following service installation

and after completion of curb and gutter and HL 4 Binder Course Asphalt as per OPSS 409. Where clear stone is substituted, no additional payment will be made.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

Section C – Special Provisions, Item No. 1.58 – Sanitary Service to Property Line Marker

Replace c) Payment, as follows. No changes to a) Material and b) Measurement for Payment.

c) Payment

Payment at the unit bid price shall be full compensation for rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, connection to the new sewer by manufactured tee, 125 mm diameter PVC (DR-28) pipe, bend, tee-wye connection and cap at property line (as noted in Standard Drawings S7 - Sanitary Service Detail) including all necessary adaptors, fittings and reducers (where required), 50 mm x 75 mm marker at property line painted green, granular embedment, loading, hauling and disposing of excess soil, approved native backfill to sub-grade elevation compacted to 95% S.P.D. and a C.C.T.V. video inspection of the pipe at least 30 days following service installation and after completion of curb and gutter and HL 4 Binder Course Asphalt as per OPSS 409. Where clear stone is substituted no additional payment will be made.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

Section C – Special Provisions, Item No. 1.59 – Sanitary Service from New Sanitary Sewer to Property Line

Replace c) Payment, as follows. No changes to a) Material and b) Measurement for Payment.

c) Payment

Payment at the unit bid price shall be full compensation for rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, connection to the

new sewer by manufactured tee, 150 mm diameter PVC (DR-28) pipe, bend, riser and connection to the existing service pipes (all types) at property line including all necessary adaptors, fittings and reducers (where required) and plugging existing pipes (where required), 100 mm diameter cleanout with “Wye” connection and cap provided below grade at property line, granular embedment and approved native backfill to subgrade elevation compacted to 95% S.P.D, as per Standard Drawing S7 - Sanitary Service Detail, and a C.C.T.V. video inspection of the pipe at least 30 days following service installation and after completion of curb and gutter and HL 4 Binder Course Asphalt as per OPSS 409. Where clear stone is substituted, no additional payment will be made.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

Section C – Special Provisions, Item No. 2.11 – Sanitary Service from New Sanitary Sewer to Property Line

Replace a) Material, as follows. No changes to b) Operation and c) Payment.

a) Material

Double sided rectangle rapid flashing beacons shall be manufactured by Tapco.

This item shall include the accessible audible pushbuttons for the PXO. Audible pedestrian pushbuttons shall be a Polara INx system.

The pushbuttons shall have one-way arrows at each with the informational sign indicating “Push button to turn on warning lights” .

The pushbutton shall be operated such that the button will activate the audible message “Yellow lights are flashing” . The locator tone shall be adjustable and shall adjust to ambient sounds. The pushbutton stations shall be yellow.

Attachments forming part of Addendum No. 1 (separate), as follows:

RFT 2025-003 Section C – Special Provisions (Addendum No. 1) (41 pages)

RFT 2025-003 Issued for Tender Drawing Set (Addendum No. 1) (6 pages)

Addendum No. 1 (6 pages) + Attachments (47 pages) (Total 53 pages)

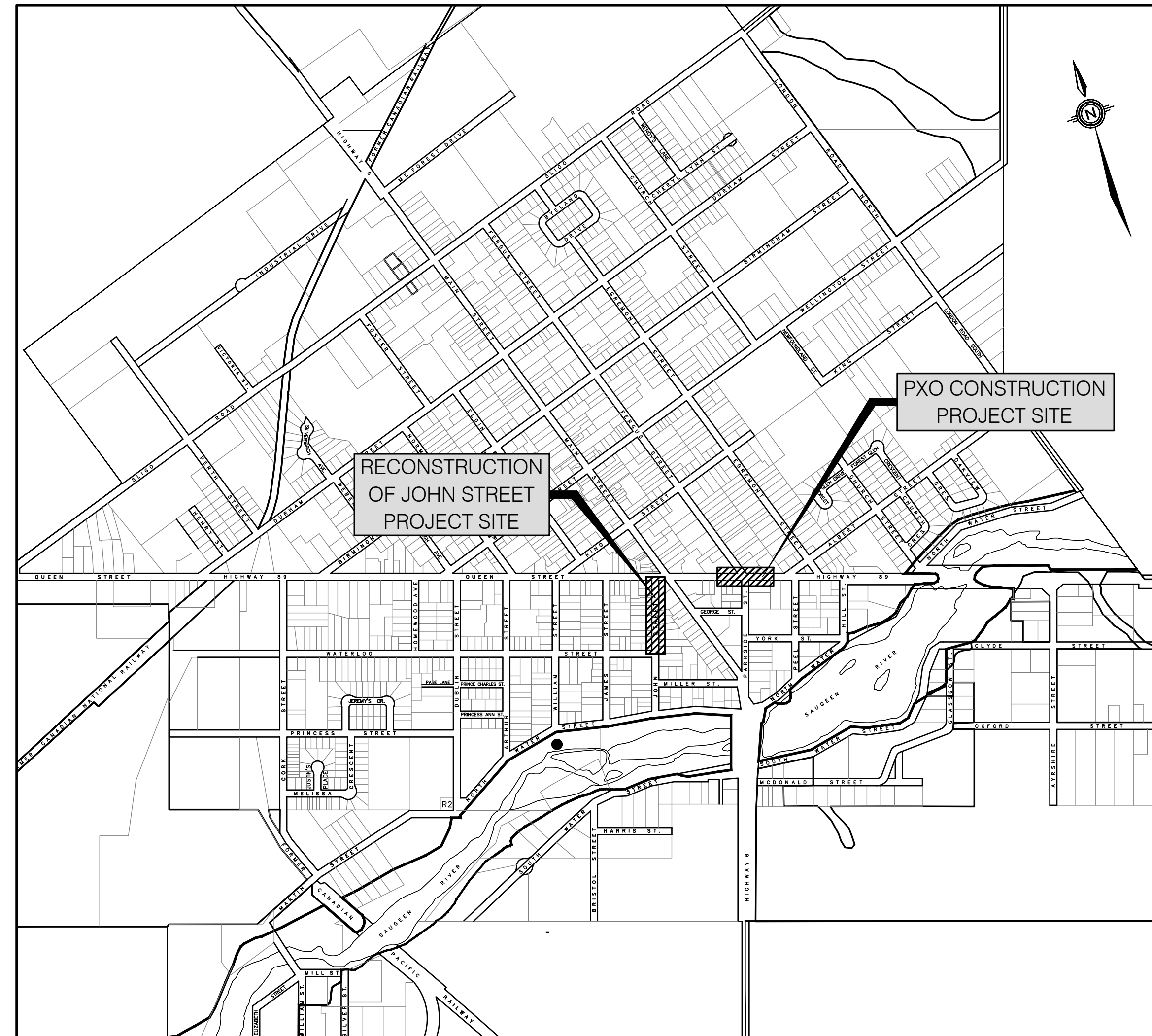
End of Addendum No. 1

TOWNSHIP OF WELLINGTON NORTH



CONTRACT FOR RECONSTRUCTION OF JOHN STREET PXO CONSTRUCTION QUEEN STREET EAST MOUNT FOREST

CONTRACT No. RFT-2025-003



MOUNT FOREST
KEY PLAN

LIST OF DRAWINGS

00 - COVERSHEET

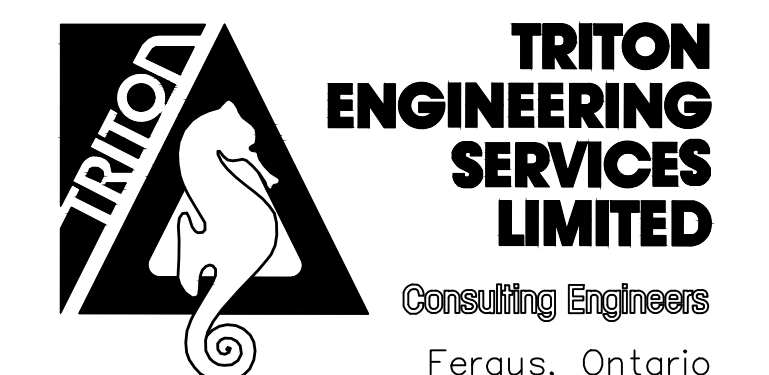
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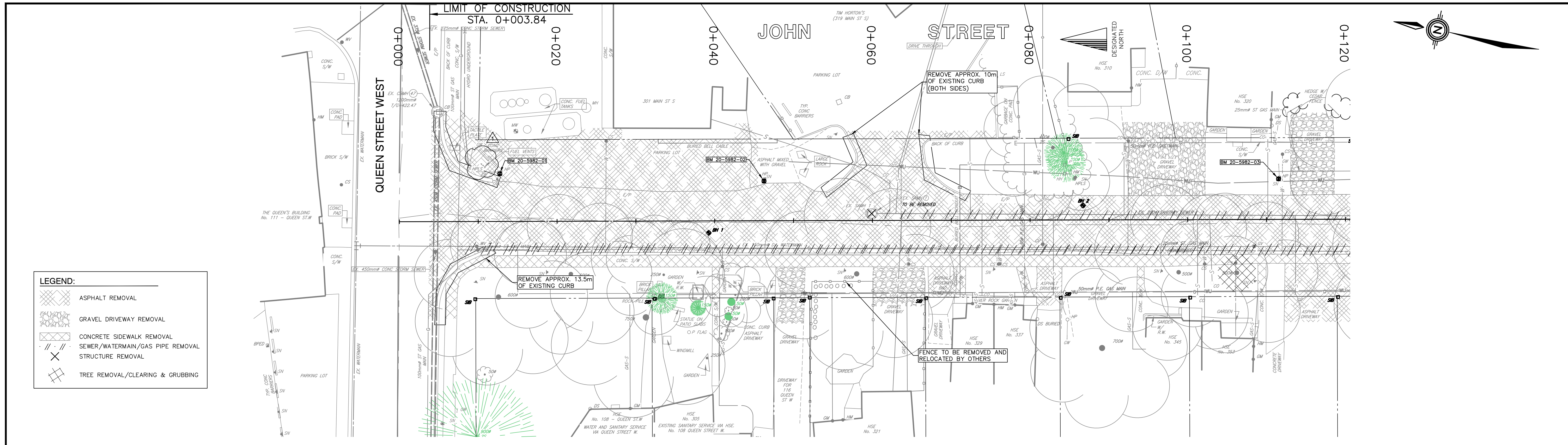
- 01 - REMOVALS PLAN
- 02 - PLAN AND PROFILE, QUEEN STREET W. TO STA. 0+120
- 03 - PLAN AND PROFILE, STA. 0+120 TO WATERLOO ST.
- 04 - TYPICAL SECTIONS

PXO CONSTRUCTION, QUEEN STREET EAST (MOUNT FOREST)

01 - PLAN

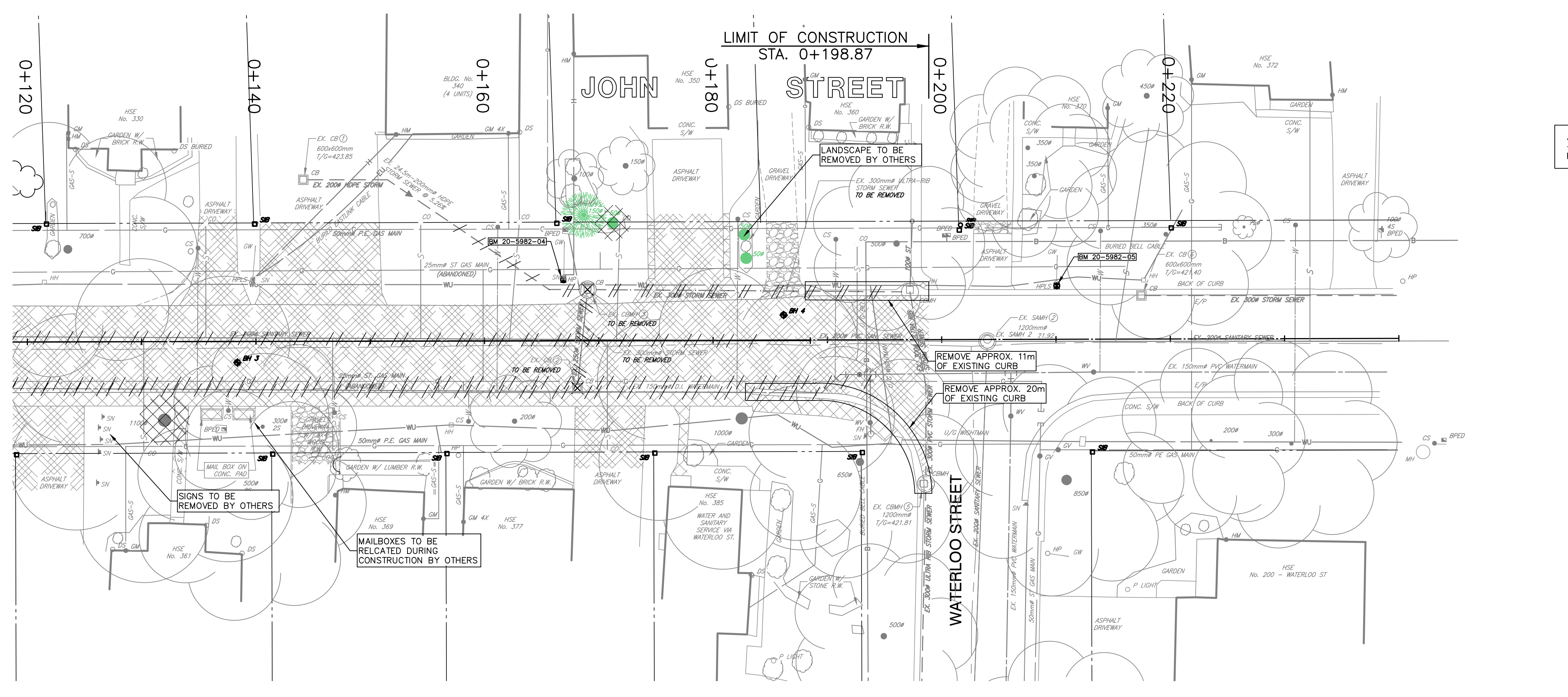
ISSUED FOR APPROVALS	—	DECEMBER 2020
ISSUED FOR PUBLIC INFORMATION	—	OCTOBER 2023
ISSUED FOR TENDER	—	JANUARY 2025
ISSUED FOR TENDER (ADDENDUM No. 1)	—	FEBRUARY 2025
ISSUED FOR CONSTRUCTION	—	
AS RECORDED	—	





LEGEND:

- ASPHALT REMOVAL
- GRAVEL DRIVEWAY REMOVAL
- CONCRETE SIDEWALK REMOVAL
- SEWER/WATERMAIN/GAS PIPE REMOVAL
- STRUCTURE REMOVAL
- TREE REMOVAL/CLEARING & GRUBBING



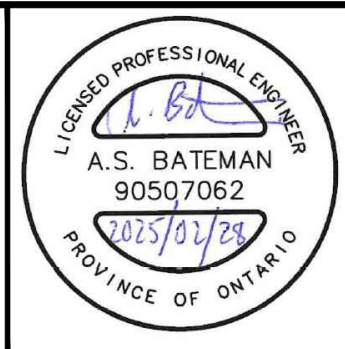
ADDENDUM No. 1
 - REMOVED CALLOUT BOX WITH PROVISIONAL ITEM TO REMOVE FUEL VENTS AND CAP BELOW GRADE

B.M. 20-5982-1	Elev. 424.208
NAIL & WASHERS IN HP, ON SOUTH EAST CORNER OF QUEEN STREET WEST AND JOHN STREET	
B.M. 20-5982-2	Elev. 424.760
NAIL & WASHERS IN HP, ON THE EAST SIDE OF JOHN STREET IN BETWEEN 301 & 319 MAIN STREET SOUTH	
B.M. 20-5982-3	Elev. 424.551
NAIL & WASHERS IN HP, ON THE EAST SIDE OF JOHN STREET IN FRONT OF HOUSE 320	

DISCLAIMERS:

- ALL EXISTING ELEVATIONS & DIMENSIONS TO BE CONFIRMED ON SITE. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY AND 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 AGAINST DAMAGE.

No	DATE	REVISION	INITIAL
4	2025/02/28	ISSUED FOR TENDER (ADDENDUM No. 1)	L.S.
3	2025/02/19	ISSUED FOR PUBLIC INFORMATION	L.S.
2	2025/01/31	ISSUED FOR TENDER	L.S.
1	2020/12/23	ISSUED FOR APPROVALS	L.S.

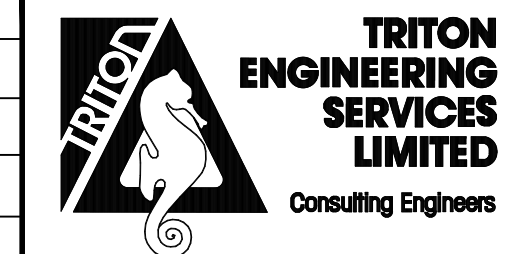


RECONSTRUCTION OF JOHN STREET
 TOWNSHIP OF WELLINGTON NORTH (MOUNT FOREST)

TOWNSHIP OF WELLINGTON NORTH
 7490 SIDEROAD 7 WEST
 KENILWORTH, ON N0G 2E0

REMOVALS PLAN

CONTRACT No.	2025-003
PROJECT No.	M5982
DESIGNED BY:	A.S.B.
CHECKED BY:	P.F.Z.
APPROVED BY:	L.S.
DATE:	DECEMBER 2024

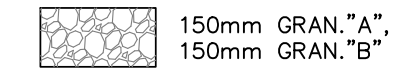

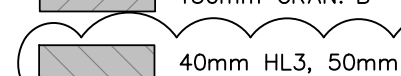
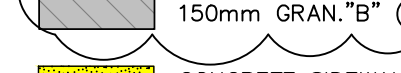
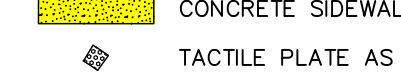

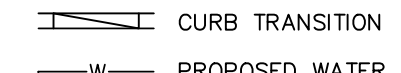

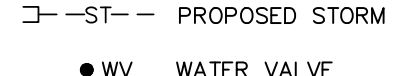





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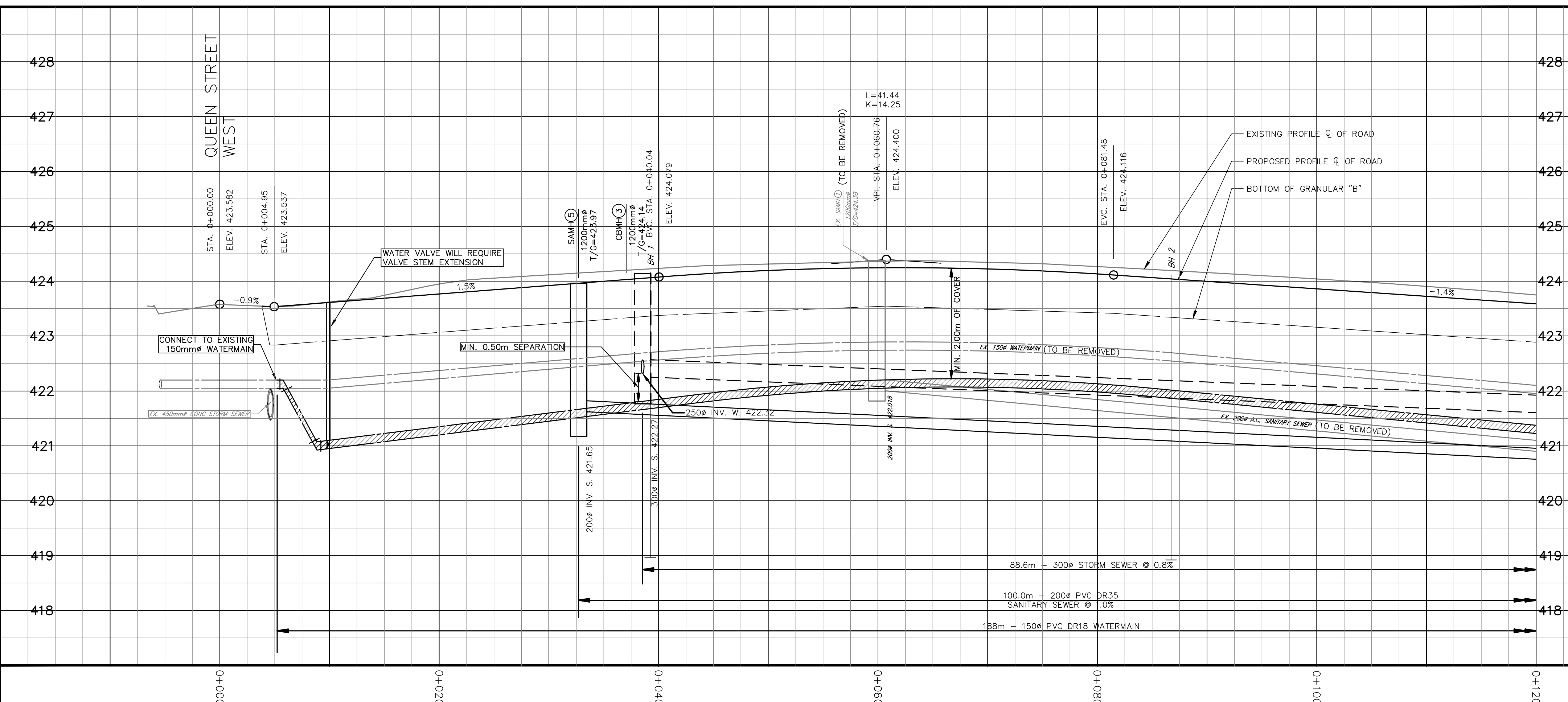
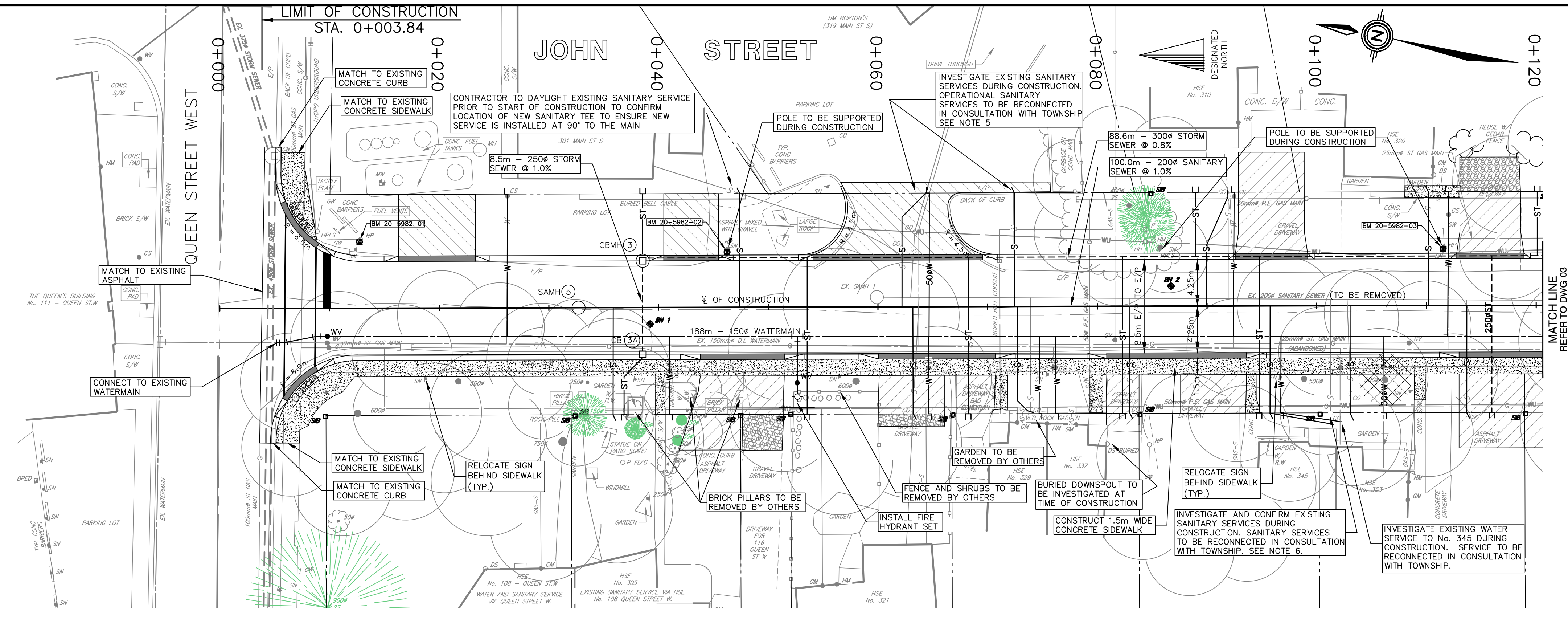
C:\Wellington_north - map\2025\02\28\2025-02-28 - addendum
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LEGEND:

-  150mm GRAN. "A",
150mm GRAN. "B"
-  50mm HL.3C, 150mm GRAN. "A",
150mm GRAN. "B"
-  40mm HL.3, 50mm HL.4, 150mm GRAN. "A",
150mm GRAN. "B" (COMMERCIAL)
-  CONCRETE SIDEWALK
-  TACTILE PLATE AS PER OPSD 310.039
-  DROP CURB
-  CURB TRANSITION
-  PROPOSED WATER SERVICE
-  PROPOSED SANITARY SERVICE
-  PROPOSED STORM SERVICE
-  WATER VALVE
-  TREE REMOVAL

NOTES:

1. INSTALL NEW 25 MM DIAMETER WATER SERVICE FROM NEW 150 MM DIAMETER WATERMAIN TO PROPERTY LINE AND CONNECT TO EXISTING WATER SERVICE FOR 301 MAIN ST S AND HOUSE NO. 305, 310, 320, 321, 329, 337, AND 345.
2. INSTALL NEW 50 MM DIAMETER WATER SERVICE FROM NEW 150 MM DIAMETER WATERMAIN TO PROPERTY LINE AND CONNECT TO EXISTING WATER SERVICE FOR TIM HORTONS (319 MAIN ST S) AND HOUSE NO. 353.
3. INSTALL NEW 125 MM DIAMETER SANITARY SERVICE FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE AND CONNECT TO EXISTING SANITARY SERVICE FOR HOUSE NO. 310, 320, 321, 329, 337 AND 345.
4. INSTALL NEW 125mm DIAMETER SANITARY SERVICE AND MARKER FROM NEW 200mm DIAMETER SANITARY SEWER TO PROPERTY LINE FOR HOUSE NO. 305 JOHN ST.
5. INVESTIGATE EXISTING SANITARY SERVICES FOR TIM HORTONS (319 MAIN ST S) AT THE TIME OF CONSTRUCTION TO DETERMINE IF OPERATIONAL. IF MULTIPLE SERVICES ARE OPERATIONAL, INSTALL NEW 125 MM DIAMETER SANITARY SERVICES FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE AND CONNECT TO EXISTING SANITARY SERVICES. IF ONLY ONE SANITARY SERVICE IS OPERATIONAL, OR IF IT IS FEASIBLE TO RECONNECT THE EXISTING SANITARY SERVICES TO A NEW SINGULAR SERVICE, THEN INSTALL NEW 150 MM DIAMETER SANITARY SERVICE FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE AND CONNECT TO EXISTING SANITARY SERVICE(S).
6. INVESTIGATE EXISTING SANITARY SERVICES FOR HOUSE NO. 353 AT THE TIME OF CONSTRUCTION TO DETERMINE THE FEASIBILITY OF RECONNECTING THE EXISTING SERVICES TO A NEW SINGULAR 150 MM DIAMETER SANITARY SERVICE FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE. IF NOT FEASIBLE, THEN INSTALL NEW 150 MM DIAMETER SANITARY SERVICES FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE AND CONNECT TO EXISTING SANITARY SERVICES.
7. INSTALL NEW 100 MM DIAMETER STORM SERVICE AND MARKER FROM NEW 300 MM DIAMETER STORM SEWER TO PROPERTY LINE FOR BUILDING NO. 301 MAIN ST S, HOUSE NO 305, 310, 320, 321, 329, 337, AND 345. LOCATIONS TO BE DETERMINED AT THE TIME OF CONSTRUCTION.
8. INSTALL NEW 250 MM DIAMETER STORM SERVICE AND MARKER FROM NEW 300 MM DIAMETER STORM SEWER TO PROPERTY LINE FOR BUILDING NO. 353. LOCATION TO BE DETERMINED AT THE TIME OF CONSTRUCTION.
9. SANITARY SERVICES TO BE INSTALLED WITH A MINIMUM OF 2.4 M OF COVER AT PROPERTY LINE (WHERE MAINLINE SEWER ELEVATION ALLOWS), UNLESS NOTED OTHERWISE. CONTRACTOR TO USE VERTICAL SWEEPS AND FITTINGS, AS REQUIRED, TO CONNECT TO EXISTING SERVICES AT PROPERTY LINE.
10. SEPARATION DISTANCES BETWEEN SEWERS AND WATERMANS AND SEWER SERVICES AND WATER SERVICES SHALL BE AS PER MECP PROCEDURE F-6-1. IN GENERAL, 2.5 M HORIZONTAL SEPARATION BETWEEN PARALLEL INSTALLATIONS AND 0.5 M VERTICAL SEPARATION AT CROSSINGS WHERE THE WATERMAIN OR WATER SERVICE CROSSES UNDER THE SEWER. WHERE THIS SPATIAL SEPARATION CANNOT BE ACHIEVED, OTHER MEASURES ARE TO BE IMPLEMENTED, SUCH AS USE OF PRESSURE PIPE (350 KPA) FOR SEWERS, AS TO BE APPROVED BY THE CONTRACT ADMINISTRATOR.
11. FOR TYPICAL ROAD SECTIONS, REFER TO DWG. NO. 04.
12. CONCRETE SIDEWALK ADJACENT TO THE CURB IS TO BE 150 MM THICK.



ADDENDUM No. 1
-UPDATED LEGEND ITEM FOR COMMERCIAL DRIVEWAYS

B.M. 20-5982-1	Elev. 424.208
NAIL & WASHERS IN HP, ON SOUTH EAST CORNER OF QUEEN STREET WEST AND JOHN STREET	
B.M. 20-5982-2	Elev. 424.760
NAIL & WASHERS IN HP, ON THE EAST SIDE OF JOHN STREET BETWEEN 301 & 319 MAIN STREET SOUTH	
B.M. 20-5982-3	Elev. 424.551
NAIL & WASHERS IN HP, ON THE EAST SIDE OF JOHN STREET IN FRONT OF HOUSE 320	

No	DATE	REVISION	INITIAL
5	2025/02/28	ISSUED FOR TENDER (ADDENDUM No. 1)	L.S.
4	2025/02/19	ISSUED FOR PUBLIC INFORMATION	L.S.
3	2025/01/31	ISSUED FOR TENDER	L.S.
2	2023/10/23	ISSUED FOR PUBLIC INFORMATION	L.S.
1	2020/12/23	ISSUED FOR APPROVALS	L.S.

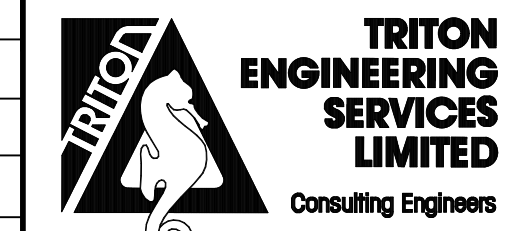


RECONSTRUCTION OF JOHN STREET
TOWNSHIP OF WELLINGTON NORTH (MOUNT FOREST)

TOWNSHIP OF WELLINGTON NORTH
7490 SIDEROAD 7 WEST
KENILWORTH, ON N0G 2E0

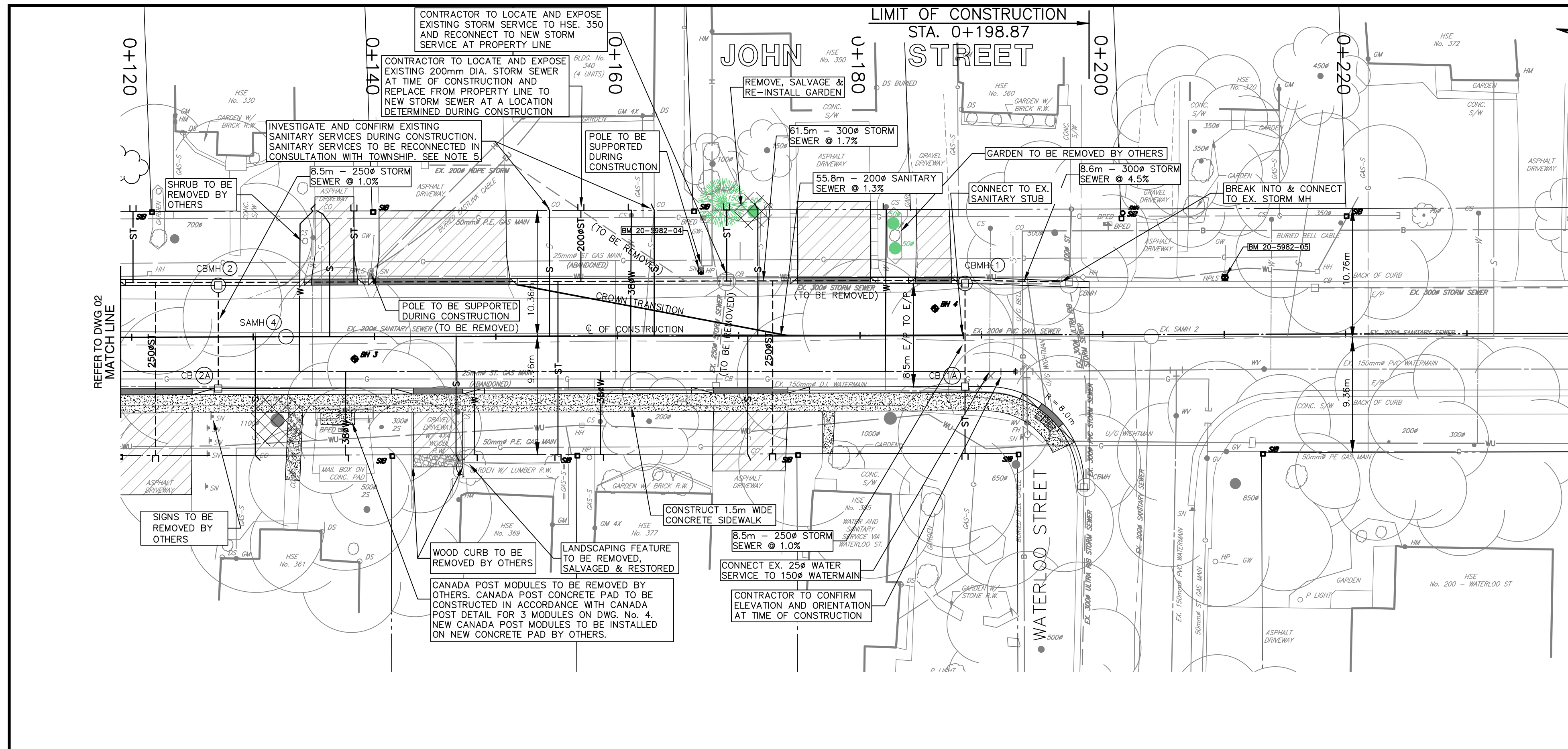
PLAN AND PROFILE FROM QUEEN ST W TO STA. 0+120

CONTRACT No.	2025-003
PROJECT No.	M5982
DESIGNED BY:	A.S.B.
CHECKED BY:	P.F.Z.
APPROVED BY:	L.S.
DATE:	NOVEMBER 2024



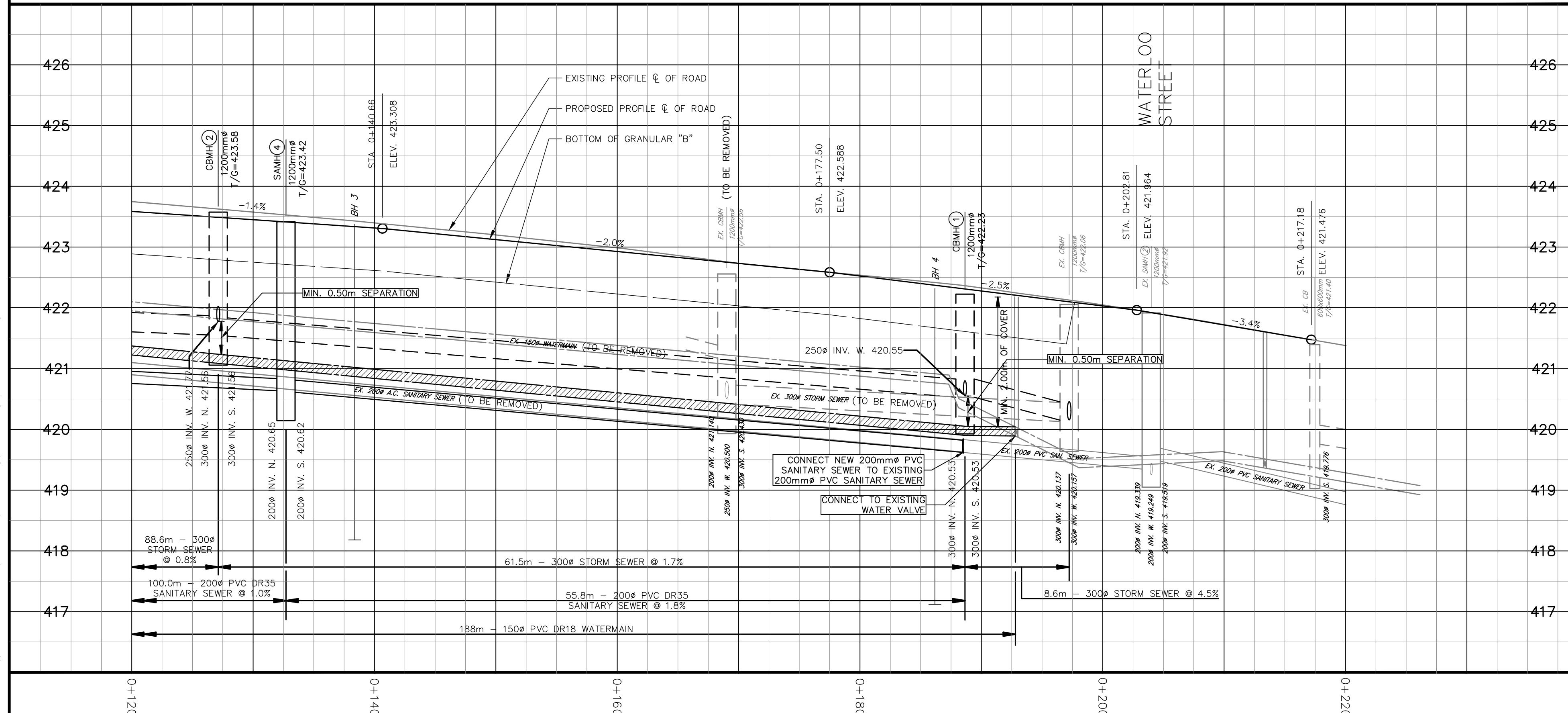
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	UNLESS OTHERWISE SHOWN	
DRAWING NUMBER	02	

C:\wellington_north - hwp\p1\5982 - john st recon.dwg (last saved: 2025-02-28 - 10:58:00 AM)



- LEGEND:**
- 150mm GRAN. "A", 150mm GRAN. "B"
 - 50mm HL3C, 150mm GRAN. "A", 150mm GRAN. "B"
 - CONCRETE SIDEWALK
 - TACTILE PLATE AS PER OPSD 310.039
 - DROP CURB
 - CURB TRANSITION
 - W PROPOSED WATER SERVICE
 - S PROPOSED SANITARY SERVICE
 - ST PROPOSED STORM SERVICE
 - WV WATER VALVE
 - TREE REMOVAL

- NOTES:**
1. INSTALL NEW 25 MM DIAMETER WATER SERVICE FROM NEW 150 MM DIAMETER WATERMAIN TO PROPERTY LINE AND CONNECT TO EXISTING WATER SERVICE FOR HOUSE NO. 330, 350, AND 369.
 2. INSTALL NEW 38 MM DIAMETER WATER SERVICE FROM NEW 150 MM DIAMETER WATERMAIN TO PROPERTY LINE AND CONNECT TO EXISTING WATER SERVICE FOR HOUSE NO. 340, 361 AND 377.
 3. INSTALL NEW 125 MM DIAMETER SANITARY SERVICE FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE AND CONNECT TO EXISTING SANITARY SERVICE FOR HOUSE NO. 330, 350, AND 369.
 4. INSTALL NEW 150 MM DIAMETER SANITARY SERVICE FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE AND CONNECT TO EXISTING SANITARY SERVICE FOR HOUSE NO. 361 AND 377.
 5. INVESTIGATE EXISTING SANITARY SERVICES FOR HOUSE NO. 340 AT THE TIME OF CONSTRUCTION TO DETERMINE THE FEASIBILITY OF RECONNECTING THE EXISTING SERVICES TO A NEW SINGULAR 150 MM DIAMETER SANITARY SERVICE FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE. IF NOT FEASIBLE, THEN INSTALL NEW 125 MM DIAMETER SANITARY SERVICES FROM NEW 200 MM DIAMETER SANITARY SEWER TO PROPERTY LINE AND CONNECT TO EXISTING SANITARY SERVICES.
 6. INSTALL NEW 100 MM DIAMETER STORM SERVICE AND MARKER FROM NEW 300 MM DIAMETER STORM SEWER TO PROPERTY LINE FOR HOUSE NO. 330, 369, AND 385. LOCATIONS TO BE DETERMINED AT THE TIME OF CONSTRUCTION.
 7. INSTALL NEW INLINE DRAIN FROM NEW 300 MM DIAMETER STORM SEWER AND CONNECT TO EXISTING STORM SERVICE FOR HOUSE NO. 350. CONTRACTOR TO LOCATE AND EXPOSE EXISTING STORM SERVICE DURING CONSTRUCTION. LOCATION OF INLINE DRAIN TO BE DETERMINED AT THE TIME OF CONSTRUCTION.
 8. INSTALL NEW 200 MM DIAMETER STORM SERVICE FROM NEW 300 MM DIAMETER STORM SEWER TO PROPERTY LINE AND CONNECT TO EXISTING STORM SERVICE FOR HOUSE NO. 340. CONTRACTOR TO LOCATE AND EXPOSE EXISTING STORM SERVICE DURING CONSTRUCTION.
 9. INSTALL NEW 250 MM DIAMETER STORM SERVICE AND MARKER FROM NEW 300 MM DIAMETER STORM SEWER TO PROPERTY LINE FOR BUILDING NO. 361 AND 377. LOCATIONS TO BE DETERMINED AT THE TIME OF CONSTRUCTION.
 10. SANITARY SERVICES TO BE INSTALLED WITH A MINIMUM OF 2.4 M OF COVER AT PROPERTY LINE (WHERE MAINLINE SEWER ELEVATION ALLOWS), UNLESS NOTED OTHERWISE. CONTRACTOR TO USE VERTICAL SWEEPS AND FITTINGS, AS REQUIRED, TO CONNECT TO EXISTING SERVICES AT PROPERTY LINE.
 11. SEPARATION DISTANCES BETWEEN SEWERS AND WATERMANS AND WATER SERVICES AND WATER SERVICES SHALL BE AS PER MECP PROCEDURE F-6-1; IN GENERAL, 2.5 M HORIZONTAL SEPARATION BETWEEN PARALLELS. INSTALLATIONS AND 0.5 M VERTICAL SEPARATION AT CROSSINGS WHERE THE WATERMAIN OR WATER SERVICE CROSSES UNDER THE SEWER. WHERE THIS SPATIAL SEPARATION CANNOT BE ACHIEVED, OTHER MEASURES ARE TO BE IMPLEMENTED, SUCH AS USE OF PRESSURE PIPE (350 KPA) FOR SEWERS, AS TO BE APPROVED BY THE CONTRACT ADMINISTRATOR.
 12. FOR TYPICAL ROAD SECTIONS, REFER TO DWG. NO. 04.

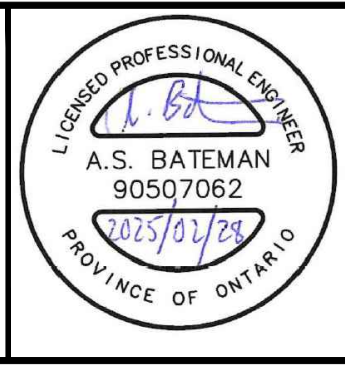


B.M. 20-5982-4	Elev. 423.256
NAIL & WASHERS IN HP, ON THE EAST SIDE OF JOHN STREET IN BETWEEN HOUSE 340 & HOUSE 350	
B.M. 20-5982-5	Elev. 422.275
NAIL & WASHERS IN HP, ON THE EAST SIDE OF JOHN STREET IN FRONT OF HOUSE 370	
B.M. 20-5982-6	Elev. 421.939
NAIL & WASHERS IN HP, ON SOUTH SIDE OF WATERLOO STREET IN FRONT OF HOUSE 220	

DISCLAIMERS:

1. ALL EXISTING ELEVATIONS & DIMENSIONS TO BE CONFIRMED ON SITE. THE LOCATION OF UTILITIES IS APPROXIMATE ONLY AND 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 AGAINST DAMAGE.

No	DATE	REVISION	INITIAL
5	2025/02/28	ISSUED FOR TENDER (ADDENDUM No. 1)	L.S.
4	2025/02/19	ISSUED FOR PUBLIC INFORMATION	L.S.
3	2025/01/31	ISSUED FOR TENDER	L.S.
2	2023/10/23	ISSUED FOR PUBLIC INFORMATION	L.S.
1	2020/12/23	ISSUED FOR APPROVALS	L.S.



RECONSTRUCTION OF JOHN STREET

TOWNSHIP OF WELLINGTON NORTH (MOUNT FOREST)

TOWNSHIP OF WELLINGTON NORTH
7490 SIDEROAD 7 WEST
KENILWORTH, ON N0G 2E0

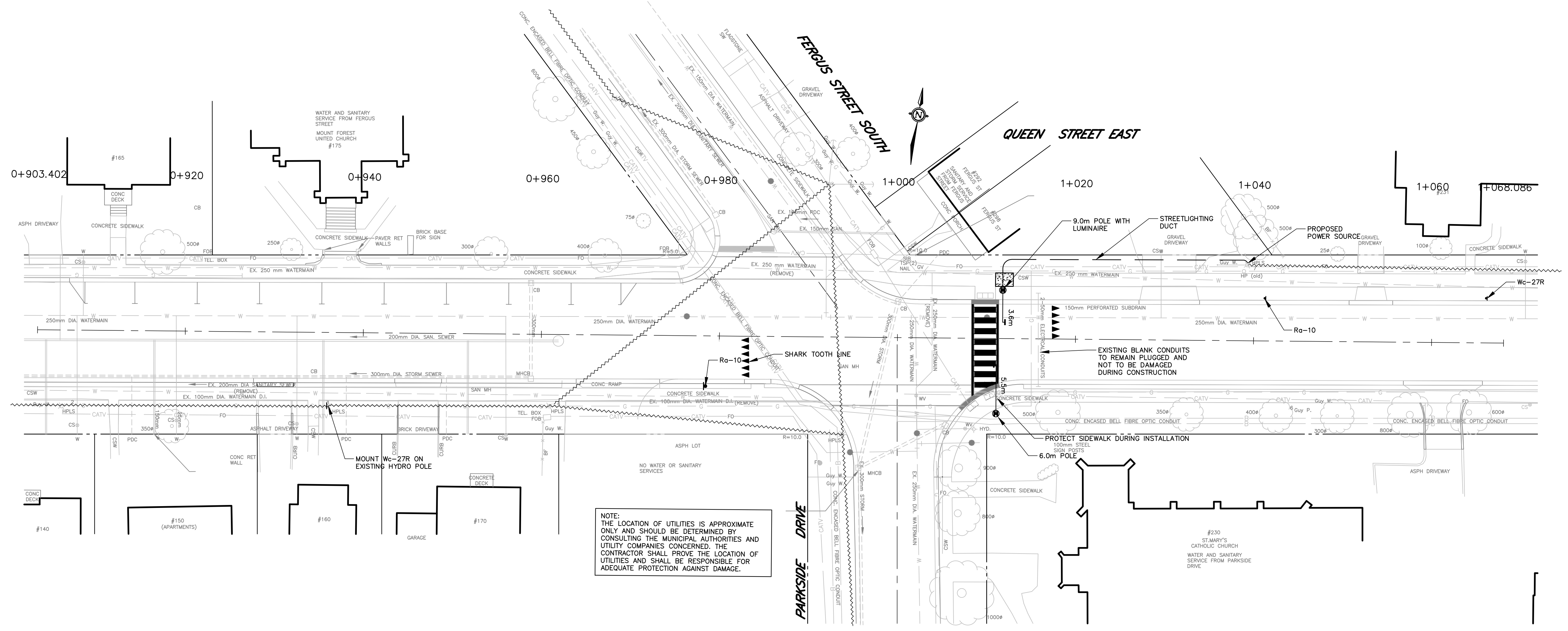
PLAN AND PROFILE FROM STA. 0+120 TO WATERLOO ST

CONTRACT No. 2025-003
PROJECT No. M5982
DESIGNED BY: A.S.B.
CHECKED BY: P.F.Z.
APPROVED BY: L.S.
DATE: NOVEMBER 2024

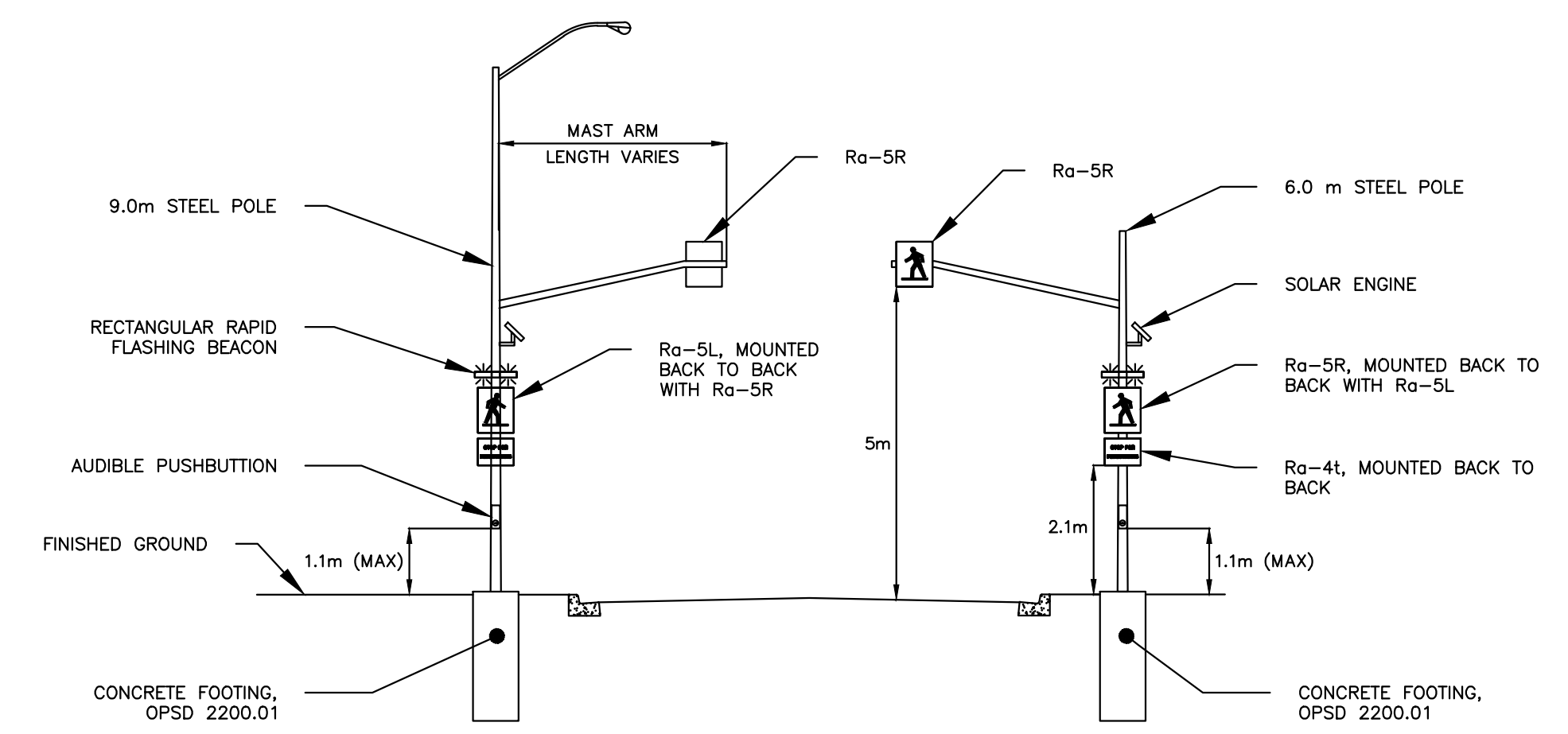


SCALE:
H: 1:250 H: 1:500
V: 1:50 V: 1:100
(865247) (175117)
UNLESS OTHERWISE SHOWN

DRAWING NUMBER
03



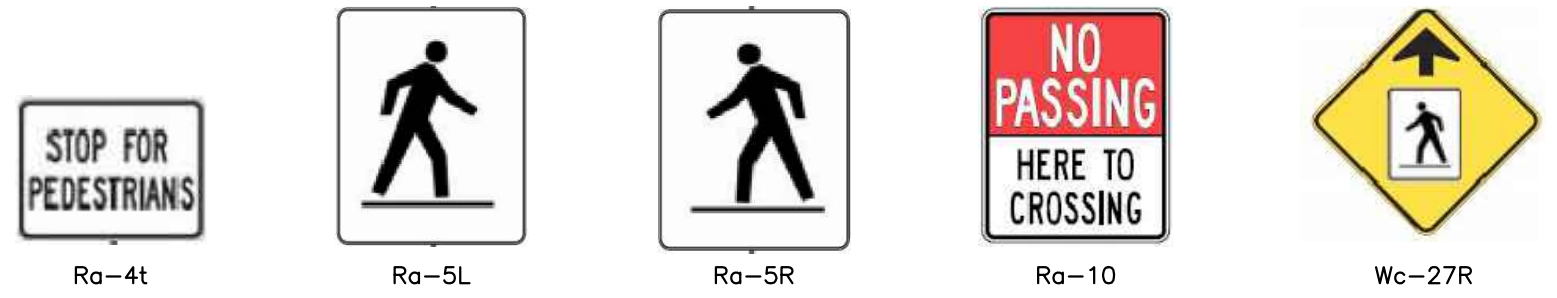
NOTE:
THE LOCATION OF UTILITIES IS APPROXIMATE ONLY AND SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION AGAINST DAMAGE.



POLE INSTALLATION
TYPE B
N.T.S.

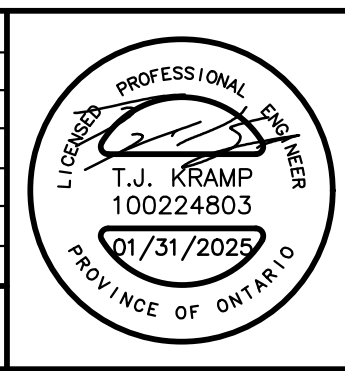
- LEGEND**
- DROP CURB
 - TACTILE WARNING PLATES
 - CONCRETE SIDEWALK
 - EXISTING OVERHEAD HYDRO
 - 75mm DIA. PVC DUCT (CSA C22.2 No. 211.2)
 - SIGN ASSEMBLY

- NOTE**
1. EXISTING CROSSWALK PAVEMENT MARKINGS SHALL BE OBLITERATED. EXISTING CENTRELINE PAVEMENT MARKING SHALL BE OBLITERATED BETWEEN YIELD LINES
 2. NEW PAVEMENT MARKINGS ARE TO BE DURABLE
 3. EXISTING "SCHOOL CROSSING" AND "SCHOOL CROSSING AHEAD" SIGNS TO BE REMOVED



NOTES

No	DATE	REVISION	INITIAL
03	FEB. 2025	ISSUED FOR TENDER (ADDENDUM No. 1)	T.J.K.
02	JAN. 2025	ISSUED FOR TENDER	T.J.K.
01	NOV. 2023	ISSUED FOR MTO REVIEW	T.J.K.



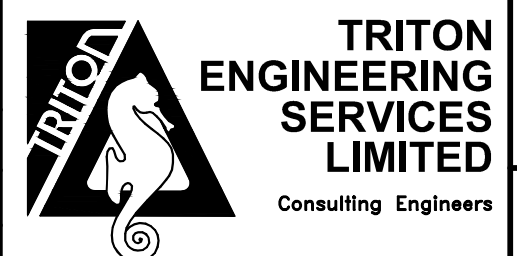
PXO CONSTRUCTION
QUEEN STREET EAST
INTERSECTION WITH PARKSIDE DRIVE
MOUNT FOREST, ON

TOWNSHIP OF WELLINGTON NORTH
7490 SIDEROAD 7 WEST P.O. BOX 125
KENILWORTH ONTARIO

PLAN

PROJECT No
RFT 2025-003

DRAWN BY: M.H.
CHECKED BY: T.J.K.
APPROVED BY: T.J.K.
DATE: JUNE 2023



SCALES

1:250 HORIZONTAL N/A VERTICAL

DRAWING NUMBER **01**

ROADS AND DRAINAGE

TRAFFIC AND PEDESTRIAN CONTROL --- ITEM NO. 1.01 & 2.01

a) Operation

The Contractor shall provide approved construction signage to advise traffic and pedestrians of the construction operations.

Pedestrian Safety Considerations as per Section 2.6.2 of Ontario Traffic Manual Book 7.

b) Payment

Payment at the unit bid price shall be full compensation for the preparation and submission of a traffic plan for approval by the Contract Administrator and Township of Wellington North including supply, erection and maintenance of all signs, delineators, barriers etc., as required by the Ontario Traffic Control Manual, Book 7, Temporary Conditions and the Ontario Occupational Health and Safety Act. On completion of the work, the Contractor shall remove all signs, barriers etc.

Daily maintenance of the signs, barricades, delineators, etc. shall be the responsibility of the Contractor and no additional payment shall be made for these operations.

Payment shall be made on a lump sum basis based on the following criteria:

- 60% upon supply and installation of the completed traffic control plan,
- 30% for maintenance and continual implementation of the traffic control plan and
- 10% for removal of signs, barricades, fencing, etc.

TREE PROTECTION --- ITEM NO. 1.02

a) General Constraints/Requirements

Protection from the Contractor's operations of trees not designated for removal shall be ensured by, but not restricted to, the following:

The Contractor shall ensure that his operations do not cause flooding or sediment deposition within the dripline in areas where trees not designated for removal are located.

Unless the contract requires work within the dripline of trees not designated for removal, equipment shall not be operated within that dripline area. When the contract requires work within the dripline of trees not designated for removal, operation of equipment within that dripline area shall be kept to the minimum necessary to perform the work required.

Equipment or vehicles shall not be parked, repaired or refueled, construction materials shall not be stored, and earth materials shall not be stockpiled within the dripline area of any tree not designated for removal.

The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches.

The Contractor shall install and maintain 1.2 m high orange plastic safety/ barrier fence protection adjacent to trees and shrubs not designated for removal.

b) Tree Repair Work

Repair work to trees not designated for removal shall be performed in accordance with approved

horticultural practice as follows:

Bark that is damaged by the Contractor's operations shall be neatly trimmed back to uninjured bark, without causing further injury, within the same day of damage.

Branches 25 mm or larger in diameter that are broken by the Contractor's operations, shall be cut back to a neat surface within the same day of breakage; branches to be removed completely shall be cut back to within 10 mm of their bases.

Roots 25 mm or larger in diameter that are exposed by the Contractor's operation shall be cut back cleanly to the soil surface within the same day of exposure.

c) Asphalt Pavement and Concrete Sidewalk Removal

Breaking of asphalt and concrete prior to removal adjacent to trees which are to be preserved shall be performed by hand held equipment. The broken asphalt and concrete shall be removed from these areas very carefully by means which will minimize damage to the trees and roots.

d) Payment

Payment at the unit bid price shall be full compensation for costs associated with all of the above work.

CLEARING AND GRUBBING --- ITEM NO. 1.03

a) Operation

The Contractor shall clear and grub trees, brush, and stumps in the locations designated on the Contract Drawings. No work can proceed until all plastic barrier fence is installed in areas designated for protection of existing trees.

b) Measurement for Payment

Measurement for payment shall be by each for the complete clearing, grubbing and disposing of the existing trees as shown on the Contract Drawings.

c) Payment

Payment at the unit bid price shall be full compensation for clearing, grubbing and disposing of existing trees in the areas shown on the Contract Drawings.

REMOVAL OF FULL DEPTH BITUMINOUS PAVEMENT, DRIVEWAYS AND BOULEVARDS --- ITEM NOS. 1.04 & 1.05

a) Operation

Existing bituminous pavement shall be sawcut at all limits of removal, as required, to form a clean, neat edge.

The bituminous pavement material shall not remain on the roadway after completion of the day's operation and placing of the material on any grass or gravel area prior to hauling off site shall not be permitted.

The bituminous pavement material shall be the responsibility of the Contractor to stockpile or dispose of at an approved location in accordance with the requirements of Section 309 of the

Environmental Protection Act and Guidelines for the Decommissioning and Cleanup of Site in Ontario.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment, and materials required to do the work, including sawcutting of bituminous pavement and the disposal of excess materials.

REMOVE, SALVAGE AND RESTORE LANDSCAPING FEATURES --- ITEM NO. 1.06

a) Operation

The existing miscellaneous landscaping located at or behind property line for House No. 350 and No. 369 John St, as noted on the Contract Drawings, including but not limited to plantings, fencing, borders/curbs, barriers, landscaping stone, landscaping fabric, surface mulch, topsoil and soil amendments, shall be carefully removed and salvaged, if possible, by the Contractor in a manner that shall minimize damage. Material shall be stockpiled and re-used to restore the property landscaping to pre-construction condition. Excess material shall be the property owners and shall be stockpiled in a location on the property as designated by the Contract Administrator and as approved by the owner.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material required for the removal, salvage, disposal (if required) and staking of salvaged material on adjacent property and restoration. Any of the existing miscellaneous landscaping material not salvaged must be replaced consistent with material alike to pre-construction conditions at the Contractor's expense.

Measurement for payment of excavation, removal and installation of concrete sidewalk shall be included in the appropriate item for concrete sidewalk. No additional payment will be made for those items under Remove, Salvage, and Re-Install Miscellaneous Landscaping For House No. 350 and No. 369 John Street.

DISPOSAL OF POTENTIALLY IMPACTED SURPLUS MATERIAL - PROVISIONAL --- ITEM NO. 1.07

a) Disposal of Excavated Material

Potentially impacted material exceeding Table 2 Standards is being carried for budgeting purposes within the tender.

The surplus excavated material is to be disposed of by the Contractor at a Licensed Facility. Stockpiling of material on site will not be permitted. Stockpiling of the material on-site will not be permitted. All surplus material excavated for disposal shall be loaded into trucks (appropriately licensed hauler as per O. Reg. 351/12) and handled with care.

Limited chemical analysis was undertaken as part of the geotechnical investigation. The required tests for chemical analysis may vary and will depend on the disposal site utilized by the Contractor. Should the Contractor's choice of disposal site require additional testing or only accept laboratory test results that have been completed within 30 days of exporting, then those costs for additional chemical analysis will be the responsibility of the Municipality.

Refer to Special Provisions – General, Section 7 (Management of Excess Materials).

b) Measurement for Payment

Measurement for payment will be based on the tonnage recorded at the Licensed Facility.

c) Payment

Payment at the unit bid price shall be full compensation for the loading, hauling and disposal of all the unsuitable excavated materials at the Licensed Facility. The Contractor is responsible for all arrangements with the waste hauler and site facility, including analytical data required by the disposal site. Associated electronic Soil Tracking will be the Contractor's responsibility and cost including submission of project soil tracking information to the Contract Administrator and Owner.

Excavation of material shall be paid for under the appropriate Special Provision Item.

SOIL EXCAVATION (GRADING) --- ITEM NO. 1.08a) Disposal of Excavation Materials

All excavated material, except that material required for fill in ditches, boulevards, embankments, sub-excavation of topsoil etc. shall be the property of the Contractor and shall be disposed of off-site in accordance with the current version of the Ontario Regulation 406/19 On-Site and Excess Soil Management.

Limited chemical analysis was undertaken as part of the geotechnical investigation. The required tests for chemical analysis may vary and will depend on the disposal site utilized by the Contractor. Should the Contractor's choice of disposal site require additional testing, then those costs for additional chemical analysis will be the responsibility of the Municipality.

Refer to Special Provisions – General, Section 7 (Management of Excess Materials).

b) Removal of Existing Pipes

All pipes 300 mm diameter and under, encountered in the excavation other than those specified for removal elsewhere in this specification, shall be considered as soil excavation and no additional payment will be made for their removal, disposal and plugging of open pipes remaining.

c) Operation

All excavation operations shall be performed in such a manner as to avoid the disturbance of the subgrade and damage to utilities. At no time shall more than 15 metres of excavation be left open. Stripping of topsoil in areas required for fill will be included in this item.

d) Excavation of Sidewalk and Curb and Gutter

Measurement for payment of sidewalk, curb and gutter excavation shall be included in the appropriate item for concrete sidewalk and curb and gutter. No additional payment will be made for those items under Soil Excavation. Soil Excavation of lawns, boulevards and driveways to match with existing will be included in the unit price for Soil Excavation

e) Payment

The Contractor is advised that the Plan Quantity listed in Table B (Form of Tender) has been calculated using the in-place volume of earth in cubic meters. The Contractor shall note that no allowance for material bulking has been made in the quantities for earth excavation and no compensation shall be made for material bulking.

Payment for soil excavation (grading) listed as Plan Quantity will have no quantity adjustments considered, unless changes to excavation or restoration limits are made with prior approval by the Contract Administrator, or the limits of soil characterization change during construction as requested by the Contractor's Qualified Person (QP) and accepted by the owner's QP and the Contract Administrator. Payment for soil excavation over the Plan Quantity is made under Item No. 1.09.

SOIL EXCAVATION (GRADING), OVER EXCAVATION --- ITEM NO. 1.09

a) Disposal of Excavation Materials

All excavated material, except that material required for fill in ditches, boulevards, embankments, sub-excavation of topsoil etc. shall be the property of the Contractor and shall be disposed of off-site in accordance with the current version of the Ontario Regulation 406/19 On-Site and Excess Soil Management.

Limited chemical analysis was undertaken as part of the geotechnical investigation. The required tests for chemical analysis may vary and will depend on the disposal site utilized by the Contractor. Should the Contractor's choice of disposal site require additional testing, then those costs for additional chemical analysis will be the responsibility of the Municipality.

Refer to Special Provisions – General, Section 7 (Management of Excess Materials).

b) Removal of Existing Pipes

All pipes 300 mm diameter and under, encountered in the excavation other than those specified for removal elsewhere in this specification, shall be considered as soil excavation and no additional payment will be made for their removal, disposal and plugging of open pipes remaining.

c) Operation

All excavation operations shall be performed in such a manner as to avoid the disturbance of the subgrade and damage to utilities. At no time shall more than 15 metres of excavation be left open. Stripping of topsoil in areas required for fill will be included in this item.

Soil Excavation (Grading), Over Excavation (i.e, changes to the excavation or restoration limits) must be prior approved by the Contract Administrator, or in the case of a change to the limits of soil characterization during construction as requested by the Contractor's Qualified Person (QP) and accepted by the owner's QP and the Contract Administrator.

d) Excavation of Sidewalk and Curb and Gutter

Measurement for payment of sidewalk, curb and gutter excavation shall be included in the appropriate item for concrete sidewalk and curb and gutter. No additional payment will be made for those items under Soil Excavation. Soil Excavation of lawns, boulevards and driveways to match with existing will be included in the unit price for Soil Excavation

e) Payment

The actual volume of material removed as determined by field measurement.

REMOVAL OF CONCRETE SIDEWALK (ALL TYPES) --- ITEM NO. 1.10 & 2.02

a) Operation

Existing concrete shall be sawcut at all limits of removal to form a clean, neat edge.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material required to do the work, including removal and disposal off site.

REMOVAL OF CONCRETE CURB AND GUTTER (ALL TYPES, INCLUDING BARRIER CURB) --- ITEM NO. 1.11

a) Operation

Existing concrete shall be cut at all limits of removal to form a clean, neat edge. Cutting shall be by means of suitable sawing equipment capable of making a clean cut and leaving a perfect edge.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material required to do the work, including removal and disposal of site.

REMOVE EXISTING FRAME AND GRATE/COVER --- ITEM NO. 1.12

a) Operation

All frame and grates/covers removed will be the property of the Contractor for disposal.

b) Payment

Payment at the unit bid price shall be full compensation for complete removal and disposal of frame and grates/covers.

REMOVAL OF EXISTING STORM STRUCTURE --- ITEM NOS. 1.13

a) Payment

Payment at the unit bid price shall be full compensation for breaking out, and the removal and disposal of existing structure, the disposal of surplus excavated material, plugging of existing pipes (where required), backfilling of excavation after structure removal with site selected native material to subgrade elevation and compacted to 95% S.P.D.

REMOVAL OF EXISTING STORM SEWER --- ITEM NOS. 1.14 & 1.15

a) Operation

The Contractor shall remove and dispose of all existing storm sewers shown on the Contract Drawings.

All pipes will be the property of the Contractor for disposal and all earth shall be removed and disposed of in accordance with the Special Provision for Soil Excavation. All other pipe under 300 mm diameter not shown on the Contract Drawings and within the limits of road excavation shall be considered as Soil Excavation.

b) Payment

Payment at the unit bid price shall be full compensation for the removal and disposal of pipes and plugging of all openings in pipes and structures remaining and backfilling of excavation with native

material to sub-grade elevation compacted to 95% S.P.D.

LOCATE AND EXPOSE EXISTING 200 MM STORM SERVICE AND REPLACE FROM PROPERTY LINE TO NEW STORM SEWER --- ITEM NO. 1.16

a) Operation

The Contractor shall locate and expose the existing storm service and replace with new 200 mm diameter storm sewer from connection to existing 200 mm diameter storm sewer at or behind property line to new 300 mm diameter storm sewer. All pipes will be the property of the Contractor for disposal and all earth shall be removed and disposed of in accordance with the Special Provision for Soil Excavation. Location of new storm service to be determined at time of construction, in consultation with Contract Administrator and Township.

b) Payment

Payment at the unit bid price shall be full compensation for locating and exposing the existing storm service, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, remove existing storm service, supply and installation of new 200 mm diameter storm sewer service, connection to the new sewer and existing storm service sewer at or behind property line by manufactured tee, 200 mm dia. PVC (DR-28) pipe, Class "B" bedding, fittings, risers or bends, plug (plugging wye at property line as noted in Standard Drawings R5 – Temporary Catch Basin Drain) and approved native backfill to subgrade elevation compacted to 95% S.P.D. CCTV video inspection of the pipe at least 30 days following pipe installation and prior to the completion of HL4 Binder Course Asphalt as per OPSS 409.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

LOCATE AND EXPOSE EXISTING STORM SERVICE AND REPLACE FROM PROPERTY LINE TO NEW STORM SEWER, INCLUDING INLINE/AREA DRAIN --- ITEM NO. 1.17

a) Material

Inline Drain shall be 360 mm diameter including grey structural foam polyolefin grate by Nyloplast Drainage Systems as supplied by "Corix". Granular bedding shall be Granular "A". Clear stone may be substituted in wet trench conditions.

b) Operation

The Contractor shall locate and expose the existing storm service and replace with new 100 mm diameter storm service from connection to existing storm service and installation of inline/area drain at, or behind property line to new 300 mm diameter storm sewer. All pipes will be the property of the Contractor for disposal and all earth shall be removed and disposed of in accordance with the Special Provision for Soil Excavation.

c) Payment

Payment at the unit bid price shall be full compensation for locating and exposing the existing storm service, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated

material, remove existing storm service, supply and installation of new 100 mm diameter storm service, supply and installation of inline/area drain, connection to the new sewer and existing storm service sewer by manufactured tee, 100 mm dia. PVC (DR-28) pipe, Class “B” bedding, fittings, risers or bends, plug (plugging wye at property line as noted in Standard Drawings R5 – Temporary Catch Basin Drain), approved native backfill to subgrade elevation compacted to 95% S.P.D, and Granular “A” bedding, compacted to 95% S.P.D. Where clear stone is substituted no additional payment will be made. CCTV video inspection of the pipe at least 30 days following pipe installation and prior to the completion HL4 Binder Course Asphalt as per OPSS 409.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

CORE INTO AND CONNECT TO EXISTING STORM STRUCTURE --- ITEM NO. 1.18

a) Payment

Payment at the unit bid price shall be full compensation for the excavation, coring into existing structure, cutting pipes smooth and flush with inside wall of structure, grouting of pipes, removal of debris and re-benching where required.

SUPPLY, EXCAVATE FOR AND INSTALL STORM SEWERS --- ITEM NOS. 1.19 & 1.20

a) Material

Where storm sewer pipe material is not specified, the material shall be one of the following products:

600 mm diameter or less:

- PVC DR 35
- Concrete – CSA A257.2 (reinforced)
- HDPE Boss 2000, 320 kPa stiffness c/w Ultra Stab 75 Joint as manufactured by Armtec, in accordance with CSA B182.8-02 Storm Sewer Grade. Pipe and fittings must bear CSA logo.
- PVC pipe, “KORFLO” as manufactured by Royal Pipe Company, in accordance with CSA 182.4

675 mm diameter or greater:

- Concrete – CSA A257.2 (reinforced)

Leads to rear yard catchbasins are to be concrete.

Granular bedding shall be Granular “A”. Clear Stone may be substituted in wet trench conditions and may only be used for bedding. Cover material shall be Granular “A”.

b) Operation

Native material for backfill of trenches is to be used 300 mm above the top of the pipe and up to the subgrade elevation. Backfill to be compacted to 95% S.P.D.

c) Payment

Payment at the unit bid price shall be full compensation for the supply, excavation, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material and installation including loading, hauling, disposing of excess material, granular embedment, approved

native backfill material to subgrade elevation, compacted to 95% S.P.D., CCTV video inspection and mandrel test of the pipe at least 30 days following pipe installation and prior to the completion HL8 Binder Course Asphalt as per OPSS 409. Where clear stone is substituted, no additional payment will be made.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

SUPPLY, EXCAVATE FOR AND INSTALL PERFORATED CORRUGATED PLASTIC SUB-DRAIN WITH GEOTEXTILE --- ITEM NO. 1.21

a) Material

Subdrain shall be HDPE Boss 2000.

Granular bedding shall be concrete sand. Geotextile sock shall be factory installed non-woven material.

b) Payment

Payment at the unit bid price shall be full compensation for the supply, excavation and installation of the sub-drain as specified on the Contract Drawings including connection of the sub-drain to existing and new structures and concrete sand bedding.

SUPPLY, EXCAVATE FOR AND INSTALL STORM SERVICE AND CONNECT TO EXISTING AT PROPERTY LINE - PROVISIONAL--- ITEM NO. 1.22

a) Material

Granular bedding shall be Granular "A". Clear Stone may be substituted in wet trench conditions and may only be used for bedding. Cover material shall be Granular "A" or Sand.

b) Operation

A new storm service is to be constructed from the new storm sewer and connected to the existing storm service at or behind property line using a pre-fabricated connection.

c) Measurement for Payment

Measurement for payment is by each service constructed from the new storm sewer to the existing downspout/ roof leader at or behind property line.

d) Payment

Payment at the unit bid price shall be full compensation for complete installation of the service, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, connection to the new sewer by manufactured tee or mechanical coring methods, loading, hauling and disposing of excess soil, 100 mm diameter PVC (DR-28) pipe, granular embedment, fittings, risers or bends, connection to the existing downspout and approved native backfill to sub-grade elevation compacted to 95% S.P.D. Where clear stone is substituted no additional payment will be made.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

SUPPLY, EXCAVATE FOR AND INSTALL STORM SERVICES --- ITEM NO. 1.23 & 1.24

a) Measurement for Payment

Measurement for payment is by each service constructed from the storm sewer to the property line.

b) Payment

Payment at the unit bid price shall be full compensation for complete installation of the service, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, connection to the new sewer or existing sewer by manufactured tee, 100 mm dia. PVC (DR-28) pipe or 250 mm dia. PVC (DR-28) pipe as specified in the Contract Drawings, Class “B” bedding, fittings, risers or bends, plug (plugging wye at property line as noted in Standard Drawings R5 – Temporary Catch Basin Drain) and 50 mm x 75 mm marker painted white and approved native backfill to subgrade elevation compacted to 95% S.P.D. CCTV video inspection of the pipe at least 30 days following pipe installation and prior to the completion HL4 Binder Course Asphalt as per OPSS 409.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

CONSTRUCT MAINTENANCE HOLES AND CATCHBASINS --- ITEM NOS. 1.25 & 1.26

a) Operation

All castings in the gutter line are to be set to surface course asphalt elevation using concrete adjustment units set in a bed of mortar and paved around each casting to base course asphalt grade with Hot Mix HL4 asphalt in Year 2025, including temporary asphalt ramping and surface drains. Prior to placement of the surface course asphalt in Year 2026, temporary asphalt ramping and surface drains shall be removed and plugged with 30 MPa concrete.

b) Material

Steel lift rings, concrete brick or block and asphalt are not permitted. Adjustment units shall be precast concrete.

c) Payment

Frames and grates shall not be included in the unit bid price. Reconnection of existing pipes shall be included in the unit price of this item.

Payment at the unit bid price shall be full compensation for complete installation of maintenance holes and catchbasins, including adjustments and granular backfill. Catchbasin installation shall be as noted in Standard Drawing R5 – Temporary Catch Basin, including construction of temporary drains and temporary asphalt ramping and granular backfill. Payment for the supply and placement of concrete curb and gutter shall be paid for under Special Provision for Item No. 1.32.

Payment shall be made on a lump sum basis based on the following criteria

- 80% upon installation of structure and
- 20% upon completion of paving, removal of debris from the bottom of the structure and benching when applicable.

SUPPLY AND INSTALL FRAME AND GRATE/COVER --- ITEM NOS. 1.27

a) Material

All frame and grates/covers shall be painted in the shop with one coat of asphalt or tar base black paint.

Should the Contractor decide to lower and raise existing frame and covers to the proposed finished grades for paving operations not specified in this Item, it shall be completed by the Contractor at their own expense.

GRANULAR “B”, TYPE III --- ITEM NO. 1.28

a) Operation

The Granular “B” base course shall be placed by the method of rear end dump trucks and the material shall be pushed ahead by suitable equipment. No dump trucks or other heavy vehicle will be permitted on the subgrade until a lift of 300 mm minimum is constructed above the subgrade. The placing of Granular “B” shall be kept within 15 m of road excavation operations at all times.

GRANULAR “A” --- ITEM NO. 1.29

a) Payment

Payment for Granular “A” under sidewalks shall be included in the item for Concrete Sidewalk.

CONCRETE BARRIER CURB --- ITEM NO. 1.32

a) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material to form and pour concrete barrier curb as shown on the Contract Drawings.

CONCRETE CURB AND GUTTER (ALL TYPES) --- ITEM NO. 1.33

a) Operation

Refer to Township Standard Drawing R5 – Temporary Catch Basin Drain.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material to form and pour concrete curb and gutter as shown on the Contract Drawings.

CONCRETE SIDEWALK --- ITEM NOS. 1.34

a) Material

Expansion joint material shall not be permitted.

b) Operation

Joints shall be sawcut in the hardened concrete within a sufficient time of placing the concrete sidewalk and driveway.

Supply, placement, and compaction of Granular “A” shall be included in this item.

Concrete sidewalk thickness shall be 150 mm.

c) Payment

Payment at the bid unit price shall be full compensation for all labour, equipment and material, including the excavation, disposal of surplus excavated material, supply, place and compact the Granular “A” base.

TACTILE WARNING PLATES --- ITEM NO. 1.35

a) Material

Tactile warning plates shall be “duralast” coated cast iron plates (clay red colour) as manufactured by East Jordan Ironworks or an approved equivalent. Plates shall have a minimum width of 610 mm. Plates shall have a radial curve to suit curb lines as shown on the Contract Drawings.

b) Operation

Plates are to be set between 150 mm to 200 mm from the back of curb edge.

c) Measurement for Payment

Measurement for payment shall be based on Each plate installed.

d) Payment

Payment at the unit bid price shall be full compensation for supply and installation of tactile warning plates.

COLD PLANING EXISTING ASPHALT --- ITEM NO. 1.36

a) Operation

The equipment used for partial pavement removal shall be automatically controlled for grade and slope during removal. The surface remaining after removal shall have a constant and continuous cross fall matching the intended surface course cross fall. The surface remaining after reclaiming shall have an even texture longitudinally and transversely.

Care shall be taken, while removing, to minimize contamination.

The salvaged asphalt material shall not remain on the roadway after completion of the day's operation and placing of the material on a grade other than a bituminous surface prior to hauling to

stockpile shall not be permitted. The salvaged asphalt pavement shall be the responsibility of the Contractor to either stockpile or dispose of at an approved location.

b) Measurement of Payment

Measurement of payment for cold planing existing pavement at joints between new and existing pavement and removal of ramps shall be in square meters based on full width removal from edges of pavement and to a minimum depth of 40 mm.

c) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material required to complete the above work.

HOT MIX ASPHALT HL 4 BINDER COURSE --- ITEM NO. 1.37

a) Material

Asphalt Cement shall be PGAC 58-28

b) Operation

Grading of Granular "A" surface to the cross-section and depth required for placement of new asphalt shall be included in this item.

Depth of asphalt shall be 50mm.

Reclaimed asphalt pavement (RAP) portion to be in compliance with OPSS 1150. The use of up to 10% by mass of RAP shall be permitted for HL 4 binder course mixes.

c) Payment

Payment at the unit bid price shall also be full compensation for the supply and placing of HL 4 asphalt to the required surface elevation for roadway as shown on the Contract Drawings. The depth of asphalt is as noted above.

Payment at the unit bid price shall also include grading of Granular "A" surface to cross-section and depth required including compaction.

Appendix 310-B, November 2017 of OPSS.MUNI 310 shall apply to this contract. The Township of Wellington North will adjust the payment to the Contractor based on changes to the Ministry of Transportation's performance graded asphalt cement price index (no opt out will be allowed).

HOT MIX ASPHALT HL 3 SURFACE COURSE (Year 2026) --- ITEM NO. 1.38

a) Material

Asphalt cement – the grade shall be PG 58-28.

All vegetation between the concrete curb and base asphalt is to be removed and the areas sterilized. Streets are to be flushed, cleaned and swept, including the concrete gutters.

b) Operation

Depth of surface asphalt shall be 40 mm.

Trackless tack coat is required prior to placement of surface course asphalt.

. Recycled hot mix asphalt shall not be used on this Contract.

It will be the Contractor's responsibility to monitor and prevent "End Load Segregation". Should the density and graduation not meet the required specifications of this Contract, the Contractor at their expense will be required to mill and replace the affected area to the satisfaction of the Township of Wellington North.

No direct dumping of asphalt into the spreader will be permitted for straight stretches in excess of 200 m unless approved by the Engineer. All costs associated with the use of specialized equipment will be included within the unit price bid for the placement of asphalt.

Equipment to prevent end load segregation will only be required for the surface asphalt.

c) Payment

Payment at the unit bid price shall also include the removal of vegetation and sterilization of the joints between the concrete curb and base asphalt, removal and disposal of existing asphalt ramps, sweeping, cleaning and flushing the existing asphalt surface and concrete gutters in preparation for the placement of trackless tack coat and the surface course asphalt, and padding existing asphalt areas where required.

Payment for adjustment of castings and installation of curb will be made under the appropriate items for adjustment of M.H.'s and C.B.'s and for the construction of curb and gutter.

Payment at the unit bid price shall also be full compensation for the supply and placing of HL 3 asphalt to the required surface elevation.

Appendix 310-B, November 2017 of OPSS.MUNI 310 shall apply to this contract. The Township of Wellington North will adjust the payment to the Contractor based on changes to the Ministry of Transportation's performance graded asphalt cement price index (no opt out will be allowed).

HOT MIX ASPHALT HL 3F FOR RESIDENTIAL DRIVEWAYS AND BOULEVARDS --- ITEM NO. 1.39

a) Operation

The depth of asphalt shall be 50 mm.

b) Payment

Payment at the bid unit price shall be full compensation for all labour, equipment and material to complete the work.

HOT MIX ASPHALT HL 3F FOR COMMERCIAL DRIVEWAYS --- ITEM NO. 1.40

a) Operation

The depth of asphalt shall be 90 mm (one lift of HL3 at 40 mm over one lift of HL4 at 50 mm).

b) Payment

Payment at the bid unit price shall be full compensation for all labour, equipment and material to complete the work.

TOPSOIL (IMPORTED) --- ITEM NO. 1.41

a) Operation

Topsoil shall be placed at a minimum depth of 200 mm.

b) Measurement for Payment

Measurement for payment shall be based on the surface area measured in square metres.

SOD --- ITEM NO. 1.42

a) Operation

The application of fertilizer shall be applied directly to the topsoil and incorporated in the top 25 mm prior to the placement of sod.

OPSS 803.07.05 (Maintenance of Completed Sodding), OPSS 803.08.01 (Performance Measure) and 803.08.02 (Acceptance) is amended in that all references to a “30 day maintenance period” are replaced with a “60 day maintenance period”.

Add the following to OPSS 803.07.05 - Maintenance of Completed Sodding.

Water shall be applied to new sod immediately (within 1 hour) after placement and the sod is to be watered a minimum of once a day during the first 7 days and then regularly during the 60 day maintenance period. Each watering shall provide a minimum amount of water of soak the top 50mm of soil beneath the area sodded.

Any settlements in sodded areas arising from excavation work as part of this project will be the responsibility of the Contractor for the full duration of the Contract warranty period. All replacement sod will be subject to the same placement, care and warranty requirements outlined within this specification

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment, material, water, fertilizer, and maintenance require to do the work.

PAVEMENT MARKINGS --- ITEM NOS. 1.43, 2.16, 2.17 & 2.18

a) Operation

All line painting shall be completed within two (2) weeks of the completion of the surface course asphalt, if applicable.

The line painting subcontractor will complete the required painting layout based on Ontario Traffic Manual Book 11, Markings and Delineation.

The surface asphalt shall have one (1) coat applied under one mobilization for the first application and a second single coat applied not less than one (1) month after the initial application but not longer than two (2) months. This is due to the Township experiencing issues with the water-based paint maintaining effectiveness on new asphalt over the course of the first winter. Paint applied shall be per metre as stated in the Schedule of Unit Prices. The Contractor shall account in his

pricing the cost to mobilize multiple times to complete the work. Payment shall be for lineal metres of paint regardless of the number of applications.

Yield to pedestrian “shark tooth” line shall be as OTM – Book 15 (Pedestrian Crossing Treatments) and placed a minimum of 6.0 m in advance of the crosswalk in the direction of travel.

b) Material

Pavement markings shall be in accordance with OPSS 1716.

Durable markings shall be in accordance with OPSS 1714.

c) Measurement for Payment

Measurement for payment shall be based on a lump sum.

d) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material for all types of pavement markings.

REMOVE, SALVAGE & RE-INSTALL EXISTING SIGNS --- ITEM NO. 1.44

a) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material to remove the existing traffic control and street signs, providing temporary storage of the signs during construction, re-installation of the traffic control signs at completion of excavation and grading operation. Where signs are required for traffic control i.e. stop signs, then they shall be temporarily installed during the construction operation.

It will be the Contractor’s responsibility to replace at their expense any signs damaged or lost during construction.

EXISTING SIGN INVENTORY		
STATION AND OFFSET		DESCRIPTION
John Street		
Sta. 0+009.0	5 m O/S Rt	Street Sign (Queen Street / John Street)
Sta. 0+018.6	6.5 m O/S Rt	No Parking or Stopping at Any Time
Sta. 0+032.8	6.5 m O/S Rt	No Parking or Stopping at Any Time
Sta. 0+012.4	7.9 m O/S Lt	Stop Sign (Ra-1)
Sta. 0+018.6	6.5 m O/S Rt	No Parking or Stopping at Any Time
Sta. 0+032.8	6.5 m O/S Rt	No Parking or Stopping at Any Time
Sta. 0+046.4	5.4 m O/S Lt	No Parking or Stopping at Any Time*
Sta. 0+055.3	11 m O/S Lt	Tim Horton’s Drive Thru Sign
Sta. 0+056	6.5 m O/S Rt	No Parking or Stopping at Any Time
Sta. 0+070.5	6.5 m O/S Rt	No Parking or Stopping at Anytime
Sta. 0+086.9	5 m O/S Lt	No Parking or Stopping at Any Time* (x2)

EXISTING SIGN INVENTORY		
STATION AND OFFSET		DESCRIPTION
John Street		
Sta. 0+096.7	6.5 m O/S Rt	No Parking or Stopping at Any Time
Sta. 0+096.7	6.5 m O/S Rt	No Parking or Stopping at Any Time
Sta.0+111.4	4.5 m O/S Lt	No Parking or Stopping at Any Time*
Sta. 0+140.7	5 m O/S Lt	No Parking or Stopping at Any Time*
Sta. 0+167.2	5 m O/S Lt	No Parking or Stopping at Any Time*
Sta. 0+193.3	8.5 m O/S Rt	Fire Hydrant Sign
Sta. 0+207.3	14.5 m O/S Rt	Stop Sign (Ra-1) / Street Sign (John St. / Waterloo St.)

* Sign located on Hydro Pole

SUPPLY AND PLANT NEW TREES --- ITEM NO. 1.45

a) Material

All plant material to be nursery grown in accordance with the Canadian Standards for Nursery Stock 7th Edition, by the Canadian Nursery Trades Association.

Botanical Name	Common Name	Qty	Size	Type	Comments
Acer saccharum	Sugar Maple	3	75 mm	Wire Basket	

Trees to be a minimum 2.5 m in height.

All plant material to be guaranteed for a period of two (2) years from the date of planting.

Minimum 100 mm depth shredded bark mulch

b) Operation

Trees to be staked as directed by nursery.

Water to maintain soil moisture conditions for optimum establishment, growth and health of plant material without causing erosion. Water evergreen plants thoroughly in late fall prior to freeze-up to saturate soil and root system.

Trees to be placed at House Nos. 350, 353, and 361. Exact locations will be determined in the field.

c) Payment

Payment at the unit bid price shall be full compensation for the supply, installation and maintenance of the planting materials.

SANITARY SEWERS

MAINTENANCE OF EXISTING SEWAGE FLOWS --- ITEM NO.1.46

a) Operation

The Contractor shall maintain all sewage flows by method of by-pass, pumping sewage around working area from the closest upstream maintenance hole to the closest downstream maintenance holes, or by other methods approved by the Contract Administrator.

At the end of each working day the Contractor shall make a temporary connection between the existing sewer and the new sewer.

The Contractor shall take note of Clause 16, Section D- Special Provisions – General

b) Payment

Payment at the unit bid price shall be full compensation of all labour, equipment and materials required to maintain sewage flows.

REMOVE AND DISPOSE OF EXISTING AC SANITARY SEWER --- ITEM NO. 1.47

a) Operation

The Contractor shall maintain all sewage flows as described under Special Provision – Item No. 1.46.

b) Payment

Payment at the unit bid price shall be full compensation for breaking out and the removal of existing asbestos cement sewer, proper disposal of material, maintaining sewage flows and plugging existing pipes (where required).

REMOVAL OF EXISTING SANITARY MAINTENANCE HOLE --- ITEM NO. 1.48

a) Operation

The Contractor shall maintain all sewage flows as described under Special Provision – Item No. 1.46.

b) Payment

Payment at the unit bid price shall be full compensation for breaking out and removal of the existing structure (all types), disposal of material, maintaining sewage flows and plugging existing pipes (where required).

REMOVE EXISTING MAINTENANCE HOLE FRAME AND COVER --- ITEM NO. 1.49

a) Operation

All frame and cover removed will be the property of the Contractor for disposal.

INVESTIGATING EXISTING SANITARY SERVICE TO DETERMINE IF OPERATIONAL OR NOT AT TIME OF CONSTRUCTION --- ITEM NOS. 1.50, 1.51 &1.52a) Payment

Payment at the unit bid price shall be full compensation to locate existing service, excavation, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, break into existing sanitary service and completing a CCTV camera inspection to determine if operational.

CONNECT TO EXISTING SANITARY SEWER --- ITEM NOS. 1.53a) Payment

Payment at the unit bid price shall be full compensation for locating and connecting to the existing sanitary sewer and all necessary material to make a smooth transition and watertight connection as well as inspection and testing requirements, including reporting as per the Inspection and Testing Plan as required in the Item for installation of sanitary sewers.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

SUPPLY, EXCAVATE FOR AND INSTALL SANITARY SEWERS --- ITEM NO. 1.54a) Material

Sewer pipe shall be PVC SDR 35.

Granular bedding shall be Granular "A". Clear Stone may be substituted in wet trench conditions and may only be used for bedding. Cover material shall be Granular "A" or sand.

b) Operation

Native material for backfill of trenches is to be used from 300 mm above the top of the pipe and up to the subgrade elevation. Backfill to be compacted to 95% S.P.D.

The Contractor shall submit an Inspection and Testing Plan describing the procedure, equipment, schedule, safety requirements and emergency response plan for inspection and testing of new and replaced sanitary sewers, sanitary maintenance holes and sanitary connections, including services, to ensure integrity of the installed material for water tightness prior to placing the infrastructure into service. The Plan shall be submitted for review by the Municipality and Contract Administrator at least 2 weeks prior to the inspection or testing. The Plan must be accepted by the Municipality and Contract Administrator at least five (5) business days before proceeding with inspection and testing. Inspection and testing shall conform to the requirements of the Design Criteria for Sanitary Sewers, Storm Sewers and Forcemains for Alterations Authorized under Environmental Compliance Approval v.1.1 (MECP, July 28, 2022), including recording and reporting requirements.

c) Payment

Payment at the unit bid price shall be full compensation for the supply, excavation, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing

utilities or services where needed, shall include the proper disposal of excess excavated material and installation of new sewer including loading, hauling and disposal of surplus excavated material, CCTV video inspection and mandrel testing of the sewer at least 30 days following pipe installation and after the completion of curb and gutter and HL 4 Binder Course Asphalt.

A second CCTV in 2026 is required of the sewer main prior to HL 3 Surface Asphalt as per OPSS 409.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Where clear stone is substituted, no additional payment will be made.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

CONSTRUCT SANITARY MAINTENANCE HOLES --- ITEM NO. 1.55

a) Operation

All external joints in precast sections shall be wrapped with 150 mm wide “Denso LT Tape”.

All maintenance hole base, riser and lid sections to be installed with rubber seal gasket. Frost straps (internal or external) shall be provided to hold maintenance hole sections together (at least two between each section) conforming to OPSD 701.100. External straps to extend vertically from top to bottom and for deep maintenance holes extended at least 1 m below frost depth.

b) Payment

Frames and covers shall not be included in the unit bid price for this item.

Payment at the unit bid price shall be full compensation for the supply, excavation including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material and installation of the maintenance holes, including, “Kor-N-Seal” watertight connection assemblies, pre-benched and “Denso Tape” on external joints of precast sections, frost straps, granular backfill, as well as inspection and testing requirements, including reporting as per the Inspection and Testing Plan as required in the item for installation of sanitary sewers.

No additional payments will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

SUPPLY AND INSTALL FRAME AND GRATE/COVER --- ITEM NOS. 1.56

a) Material

All frame and grates/covers shall be painted in the shop with one coat of asphalt or tar base black paint.

All frames and grate/cover in the roadway to use AutoStable frame and lid manufactured by Bibby-Ste-Croix.

SANITARY SERVICE FROM NEW SANITARY SEWER TO PROPERTY LINE --- ITEM NO. 1.57a) **Material**

Service pipe shall be PVC SDR 28, colour green.

Connections as follows:

- ***Prefabricated tees***

b) **Measurement for Payment**

Measurement for payment is by each service constructed from the new sanitary sewer or sanitary maintenance hole to property line or behind property line, as shown on the Contract Drawings.

c) **Payment**

Payment at the unit bid price shall be full compensation for rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, connection to the new sewer by manufactured tee, 125 mm diameter PVC (DR-28) pipe, bend, riser and connection to the existing service pipes (all types) at property line including all necessary adaptors, fittings and reducers (where required) and plugging existing pipes (where required), 100 mm diameter cleanout with "Wye" connection and cap provided below grade at property line, granular embedment and approved native backfill to subgrade elevation compacted to 95% S.P.D, as per Standard Drawing S7 – Sanitary Service Detail, and a C.C.T.V. video inspection of the pipe at least 30 days following service installation and after completion of curb and gutter and HL 4 Binder Course Asphalt as per OPSS 409. Where clear stone is substituted, no additional payment will be made. .

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

SANITARY SERVICE TO PROPERTY LINE MARKER --- ITEM NO. 1.58a) **Material**

Service pipe shall be PVC SDR 28, colour green.

Connections as follows:

- Prefabricated tees

b) **Measurement for Payment**

Measurement for payment is by each service constructed from the new sanitary sewer to the property line.

c) **Payment**

Payment at the unit bid price shall be full compensation for rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, connection to the new sewer by manufactured tee, 125 mm diameter PVC (DR-28) pipe, bend, tee-wye connection and cap

at property line (as noted in Standard Drawings S7 – Sanitary Service Detail) including all necessary adaptors, fittings and reducers (where required), 50 mm x 75 mm marker at property line painted green, granular embedment, loading, hauling and disposing of excess soil, approved native backfill to sub-grade elevation compacted to 95% S.P.D. and a C.C.T.V. video inspection of the pipe at least 30 days following service installation and after completion of curb and gutter and HL 4 Binder Course Asphalt as per OPSS 409. Where clear stone is substituted no additional payment will be made.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

SANITARY SERVICE FROM NEW SANITARY SEWER TO PROPERTY LINE --- ITEM NO. 1.59

a) Material

Service pipe shall be PVC SDR 28, colour green.

Connections as follows:

- Prefabricated tees

b) Measurement for Payment

Measurement for payment is by each service constructed from the new sanitary sewer or sanitary maintenance hole to property line or behind property line, as shown on the Contract Drawings.

c) Payment

Payment at the unit bid price shall be full compensation for rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, connection to the new sewer by manufactured tee, 150 mm diameter PVC (DR-28) pipe, bend, riser and connection to the existing service pipes (all types) at property line including all necessary adaptors, fittings and reducers (where required) and plugging existing pipes (where required), 100 mm diameter cleanout with “Wye” connection and cap provided below grade at property line, granular embedment and approved native backfill to subgrade elevation compacted to 95% S.P.D, as per Standard Drawing S7 – Sanitary Service Detail, and a C.C.T.V. video inspection of the pipe at least 30 days following service installation and after completion of curb and gutter and HL 4 Binder Course Asphalt as per OPSS 409. Where clear stone is substituted, no additional payment will be made.

No additional payment will be made to correct any issues identified in the inspections and testing and for re-inspection of the corrected pipe segments.

Payment for preparation and acceptance of the Inspection and Testing Plan shall be included in the item for installation of sanitary sewers.

ADJUST AND REBUILD MAINTENANCE HOLES (YEAR 2026) --- ITEM NO. 1.60

a) Operation

The Contractor shall sawcut, remove and dispose of existing base course asphalt at maintenance holes as required, excavate and restore granular base, adjust the castings to the proposed finished

grade and repave around each casting to base asphalt grade with Hot Mix HL 4 asphalt, prior to placement of the surface course asphalt.

b) Material

Steel lift rings, concrete brick or block are not permitted. Adjustment units shall be precast concrete set in a bed of mortar.

c) Payment

Payment at the unit bid price shall be full compensation for the sawcutting, removal and disposal of asphalt for the lowering or raising frames and covers to the proposed finished grades including replacement of existing adjustment units and restoration of base asphalt with Hot Mix Asphalt HL 4 compacted to 95% proctor density.

WATERWORKSMAINTENANCE OF WATER SUPPLY --- ITEM NO. 1.61a) Operation

The Contractor shall provide and maintain temporary water supply to buildings at all times. The Contractor will be responsible for the quality testing of the temporary supply in accordance with the Ministry of Environment, Conservation and Parks (MECP) Watermain Disinfection Procedure, or more stringent, and to the satisfaction of the Wellington North Environmental Services Department.

Wellington North does not permit the use of municipal hydrants as the source water for temporary water systems unless it is demonstrated that the hydrant is the only feasible option. The Contractor shall cut and cap the existing watermain for the connection point of the temporary water. Prior to any connection between the temporary system and the existing user, the system shall be approved by the Wellington North Environmental Services Department.

The Contractor shall provide Wellington North Environmental Services Department at least forty-eight (48) hours advance notice when a change in control of the water is required. All necessary water supply interruptions shall be scheduled in co-operation with Wellington North Environmental Services Department.

All building occupants shall be notified forty-eight (48) hours in advance of shut down of their water supply.

The Contractor shall maintain temporary water supply to all building that are affected by a water shut down in excess of eight (8) continuous hours.

Temporary water service connections to a private building shall be connected to the public side of the existing curb stop. In the event that this scenario is not possible, it's the responsibility of the Contractor to determine how to provide temporary water service to the satisfaction of the Township and the property owner.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material to provide and maintain temporary water supply to buildings during the operations required to install the new watermain, including the supply, installation and temporary water supply system and associated testing and commissioning.

REMOVAL OF EXISTING WATERMAIN --- ITEM NO. 1.62a) Payment

Payment at the unit bid price shall also include the locating of existing watermain, disconnection of existing watermain, removal and proper disposal of existing pipe and backfilling of excavation after removal of pipe with native material to subgrade elevation, compacted to 95% S.P.D.

REMOVAL OF EXISTING GATE VALVE AND BOX --- ITEM NO. 1.63a) Payment

Payment at the unit bid price shall be full compensation for the removal of existing gate valves, plugging of the existing watermain (where required) and disposal of existing gate valve and box.

CONNECT TO EXISTING WATERMAIN --- ITEM NO. 1.64a) Operation

Only certified operators from Wellington North Environmental Services Department shall operate valves on existing watermains for the purpose of controlling water. No person other than the certified operators from Wellington North Environmental Services Department shall shut down or charge any section of existing watermain or operate any valve for the purpose of controlling water from existing watermains.

The Contractor shall provide Wellington North Environmental Services Department at least forty-eight (48) hours advance notice when a change in control of the water is required. All necessary water supply interruptions shall be scheduled in co-operation with Wellington North Environmental Services Department.

All building occupants shall be notified forty-eight (48) hours in advance of shut down of their water supply.

The Contractor shall maintain temporary water supply to all existing buildings that are affected by a water shut down in excess of eight (8) continuous hours.

The Contractor shall comply with the Safe Drinking Water Act (SDWA) and all applicable regulations made in accordance with that act, including but not limited to the Drinking Water Works Permit (DWWP) and the Municipal Drinking Water License (MDWL). Both the DWWP and the MDWL can be made available to the Contractor by the Contract Administrator upon request.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment, material to make a watertight connect between new water and existing pipes including mechanical restraining devices, notification to building occupants, and temporary water supply where required.

CONNECT TO EXISTING GATE VALVE AND BOX --- ITEM NO. 1.65a) Operation

Only certified operators from Wellington North Environmental Services Department shall operate valves on existing watermains for the purpose of controlling water. No person other than the certified operators from Wellington North Environmental Services Department shall shut down or charge any section of existing watermain or operate any valve for the purpose of controlling water from existing watermains.

The Contractor shall provide Wellington North Environmental Services Department at least forty-eight (48) hours advance notice when a change in control of the water is required. All necessary water supply interruptions shall be scheduled in co-operation with Wellington North Environmental Services Department.

All building occupants shall be notified forty-eight (48) hours in advance of shut down of their water supply.

The Contractor shall maintain temporary water supply to all existing buildings that are affected by a water shut down in excess of eight (8) continuous hours.

The Contractor shall comply with the Safe Drinking Water Act (SDWA) and all applicable regulations made in accordance with that act, including but not limited to the Drinking Water Works Permit (DWWP) and the Municipal Drinking Water License (MDWL). Both the DWWP and the MDWL can

be made available to the Contractor by the Contract Administrator upon request.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment, material to make a watertight connect between new watermain and existing watermain gate valve including mechanical restraining devices, notification to building occupants, and temporary water supply where required.

SUPPLY, EXCAVATE FOR AND INSTALL WATERMAIN --- ITEM NO. 1.66

a) Material

All fittings shall be mechanical joint and pressure rated to 1035 kPa

Mechanical Joint Restraints shall be 'Grip Ring' pipe restrainer as manufactured by Romac Industries Inc., 'Uni-Flange', Series 1300 manufactured by Ford Meter Box Company Inc., 'MJ Field Lok', Series PV Manufactured by Mueller Company, PVC Stargrip Series 4000 Restrainers manufactured by Star Pipe Products or 2000PV Series Restrainers manufactured by EBAA Iron Sales, Inc. One-LOK™ Series SLC/SLCE for PVC manufactured by Sigma™.

PVC pipe shall be DR-18, Class 235 PVC and conform to ASTM D1784, AWWA Standard C900 and C.S.A. Standard CAN3-B137.3-M86.

Tracer wire shall be 12 gauge, 7 strand copper with plastic coating, colour blue. Waterproof connectors for tracer wire to be DryConn Direct Bury Lug Aqua with dielectric silicone filled to seal out moisture and corrosion.

Double nut type connections of anodes to pipes and fittings.

Cathodic protection for water services as per OPSD 1109.011 (Rev. 3) and shall be included in Item Nos. 1.70, 1.71 and 1.72.

Bedding and cover material shall be Granular "A".

b) Operation

The Contractor shall maintain temporary water supply to the existing buildings that will be affected by the installation of the new watermain.

The Contractor shall submit a Watermain Commissioning Plan for review by the Wellington North Environmental Services Department and Contract Administrator at pre-construction meeting that details the watermain disinfection, testing, sampling and final connection procedures. The Watermain Commissioning Plan shall contain a complete description of all the steps the Contractor will undertake to ensure the watermain satisfies all the testing and sampling requirements. All testing will follow AWWA C651 Disinfecting Water Mains, Watermain Disinfection Procedure August 1, 2020, Ontario Regulation 170/03 and Wellington North MSS.

Only certified operators from Wellington North Environmental Services Department shall operate valves on existing watermains for the purpose of controlling water. No person other than the certified operators from Wellington North Environmental Services Department shall shut down or charge any section of existing watermain or operate any valve for the purpose of controlling water from existing watermains.

The Contractor shall provide Wellington North Environmental Services Department at least forty-eight (48) hours advance notice when a change in control of the water is required. All necessary

water supply interruptions shall be scheduled in co-operation with Wellington North Environmental Services Department.

All building occupants shall be notified forty-eight (48) hours in advance of shut down of their water supply.

The Contractor shall comply with the Safe Drinking Water Act (SDWA) and all applicable regulations made in accordance with that act, including but not limited to the Drinking Water Works Permit (DWWP) and the Municipal Drinking Water License (MDWL). Both the DWWP and the MDWL can be made available to the Contractor by the Contract Administrator upon request.

Anode connecting wire shall be loosely wrapped around pipes and fittings and knotted. Anode shall be installed with double nut type connection as per Standard Drawing W5 – Cathodic Protection for PVC Watermain Systems.

Native material for backfill of trenches is to be used 300 mm above the top of the pipe and up to the subgrade elevation. Backfill to be compacted to 95% S.P.D.

c) Payment

Payment at the unit bid price shall be full compensation for all labour, material and equipment necessary for the locating of existing watermain, removal and disposal of existing watermain and appurtenances (where required), also including, the supply, excavation and installation of 150 mm diameter (DR-18, Class 235 PVC) pipe, all fittings tracer wire, thrust blocks or approved mechanical restraining devices, supply and installation of anodes on iron fittings and valves, granular embedment and approved native backfill compacted to 95% S.P.D. and testing of watermain. Where clear stone is substituted no additional payment will be made. Item Nos, 1.69, 1.70, & 1.71 will also include payment for the connection of tracer wire at the copper water service with ground clamps

d) Testing Procedures

1.0 *Temporary and existing watermain connection shall be as follows:*

1.0.1 No new watermain shall be connected to an existing watermain until all testing procedures have been completed and approved by the Township of Wellington North Environmental Services Department.

1.0.2 The new watermain shall be kept isolated from the existing waterworks system using a physical separation until satisfactory microbiological testing has been completed and accepted by the municipality. Water required to fill the new main for hydrostatic pressure testing, disinfection, and flushing shall be supplied through a temporary connection between the existing water system and the new main (refer to Std. Dwg. W3 and W4). The temporary connection shall include an appropriate and approved cross-connection control device (reduced pressure zone backflow preventer). Environmental Services Department will require written certification of the backflow preventer operation in accordance with CAN/Canadian Standards Association-B64.5 Series Manual and/or AWWA C510.

1.0.3 At the beginning of each new watermain installation, a minimum of two (2) swab shall be installed. Swabbing of the new watermain shall be completed prior to hydrostatic testing.

1.1 *Hydrostatic Testing (Reference OPSS 441.07.24):*

1.1.1 Hydrostatic testing shall be conducted under the supervision of the Township of Wellington North Environmental Services Department upon completion of the watermain including services and backfilling.

- 1.1.2 A test section shall be either a section between valves or the completed watermain.
- 1.1.3 Test Pressure shall be 1035 kPa.
- 1.1.4 The test section shall be filled slowly with water and all air shall be removed from the pipeline. A twenty-four (24) hour absorption period may be allowed before starting the test. The test section shall be subjected to the specified continuous test pressure for two (2) hours.
- 1.1.5 The leakage is the amount of water added to the test section to maintain the specified test pressure for the test duration. The measured leakage shall be compared with the allowable leakage as calculated for the test section. The allowable leakage is 0.082 litres per millimeter of pipe diameter per kilometer of watermain for a two (2) hour test period.
- 1.1.6 If the measured leakage exceeds the allowable leakage, all leaks shall be located and repaired and the test section shall be retested until a satisfactory result is obtained.
- 1.1.7 **Watermain Pressure Test Form shall be completed for all installations. Form is as shown on Page No. C-26 - Special Provisions – Items.**
- 1.2 *Flushing and Disinfecting Watermain (Reference OPSS 441.07.25):*
- 1.2.1 Flushing and disinfecting operations shall be conducted under the supervision of the Township of Wellington North Environmental Services Department. The Environmental Services Department shall be notified at least two (2) business days in advance of the proposed date on which flushing and disinfecting operations are to commence.

Liquid chlorine solution shall be introduced so that the chlorine is distributed throughout the section being disinfected. The chlorine shall be applied so that the chlorine concentration is at an acceptable concentration (refer to Table 1) throughout the section. The system shall be left charged with the chlorine solution for twenty-four (24) hours.

TABLE 1: CHLORINE CONCENTRATIONS AND CONTACT TIMES FOR NEW WATERMAINS			
Disinfection Method	Minimum Contact Time	Initial Chlorine Concentration	Maximum Allowable Decrease in Chlorine Concentration
Tablet or Continuous Feed	24 hours	≥ 25 mg/L	40% of Initial Chlorine Concentration to a Maximum of 50 mg/L

Example 1:

When using the continuous feed method of chlorination with an initial chlorine concentration of 50mg/L, the maximum allowable decrease in chlorine concentration is 40% of 50mg/L, or 20 mg/L. Therefore at least 30mg/L of chlorine must be present after twenty-four (24) hours.

Example 2:

When using the continuous feed method of chlorination with an initial chlorine concentration of 150mg/L, the maximum allowable decrease in chlorine concentration is 50 mg/L, because 40% of 150mg/L is greater than the maximum allowable decrease of 50 mg/L. Therefore, at least 100 mg/L of chlorine must be present after twenty-four (24) hours.

The Township of Wellington North Environmental Services Department may consider alternative chlorine concentrations and contact times on an individual basis.

- 1.2.2 Sampling and testing for chlorine residual will be carried out by the Township of Wellington North Environmental Services Department. The chlorine residual will be tested in the section after twenty-four (24) hours. If tests indicate an acceptable decrease in chlorine concentration, the section shall be flushed completely and recharged with water normal to the operation of the system. If the test does not meet the requirements, the chlorination procedure shall be repeated until satisfactory results are obtained.
- 1.2.3 Watermain shall be flushed in a sequence approved by the Township of Wellington North Environmental Services Department. The Environmental Services Department may permit or require the flushing to be carried out in stages as sections of the system are completed. Flushed sections shall be protected from contamination.
- 1.2.4 The Contractor shall provide acceptable equipment and chemical additives to dechlorinate the water that must be wasted. Chlorinated water discharged to the sanitary sewer shall be discharged at such a low flow rate or dechlorinated prior to discharge so that there is no possibility of chlorine residual remaining in the waste water when it reached the waste water treatment plant. Total residual chlorine in water discharged into storm sewers, drainage ditches or watercourses shall not exceed 0.2 mg/L.
- 1.2.5 Recharge the watermain with Municipal water and flush via a 20 mm maximum diameter pipe for twenty-four (24) hours.
- 1.2.6 After final flushing and before the watermain is approved for connection of the new main to the existing water system, two (2) consecutive sets of water samples, taken at least sixteen (16) hours apart, shall be collected, every 350 metres, plus from the end of the line and from each branch. Certified staff from the Environmental Services Department shall collect for bacteriological samples.
- 1.2.7 All water samples will be collected by the Township of Wellington North Environmental Services Department and analyzed by a certified laboratory. Two (2) – 200 ml microbiological sample (bottles supplied by the Township ONLY) must be obtained at each location. The sample form is to be filled out requesting for PA and background analysis and is to include the samplers license number. Each sample collected must include a 'Total and Free Chlorine residual' reading.
- 1.2.8 The Township will pay laboratory expenses for the initial first set of sampling required for microbiological results. If the disinfection fails to produce satisfactory samples, disinfection and testing shall be repeated at the contractor's expense including water usage until satisfactory samples have been obtained.
- 1.2.9 The Township of Wellington North minimum requirements for acceptability of microbiological tests are:
- | | |
|-----------------|-------------------------------|
| E-coli Coliform | 0 CFU/100mL |
| Total Coliform | 0 CFU/100mL |
| Background | not greater than 25 CFU/100mL |
- 1.3 *Commissioning of New Main*
- 1.3.1 Final connections are to be less than 6 meters and a certified water operator from the Township must be onsite to witness the connection as per Watermain Disinfection Procedure.
- 1.3.2 When all of the tests including the microbiological samples are satisfactory, approval from the Environmental Services Department for the main to be connected to the existing water

system must be obtained.

- 1.3.3 All new piping and appurtenances placed in the connection of the new main and existing waterworks system must be disinfected with a 1% solution of sodium hypochlorite or equivalent method.
- 1.3.4 The system shall not be put into operation until clearance has been given by the Township of Wellington North Environmental Services Department.



Township of Wellington North

Watermain Pressure Test Form (To Be Completed For All New Installations)

Project: _____ Contract No: _____

Area: _____ Date: _____

Contractor: _____

Required Test Pressure: _____

Pipe Material: _____

Diameter (mm): _____

Length Tested: _____

*Allowable Leakage in litres = 0.082 x _____ Dia.(mm) x _____ Length (m) FOR 2 HOURS
(OPSS 441.07.24.03) 1000*

Minimum time test required (hours): _____

Maximum volume loss allowed for (hours): _____ (litres): _____

Actual period of time the main was under pressure (hours): _____

Actual measured volume loss (litres): _____

Test Results: Satisfactory Unsatisfactory

Comments:

Public Work's
Signature

Contractor's
Signature

Inspector's
Signature

SUPPLY, EXCAVATE FOR AND INSTALL GATE VALVE AND BOX --- ITEM NO. 1.67

a) Material

Gate Valves shall be:

- i. Mueller Resilient Wedge Gate Valve AWWA C509, mechanical joint with:
 - fusion-bonded epoxy coating
 - bronze stem
 - open counter clockwise
- ii. Clow Resilient Wedge Valve AWWA C-509, F-6100 mechanical joint with:
 - fusion-bonded epoxy coating
 - bronze stem
 - open counter clockwise

Valve boxes shall be Mueller Canada, MVB Composite Valve Box with 300 mm ductile iron adjustable top complete with MVB guide plate and cast iron lid or Bibby, VB 4200, 3 piece slide type, No. 6 round base.

Valves exceeding 2.5 m in depth require valve nut extensions.
Double nut type connections of anodes to pipes and fittings.

b) Operation

Only certified operators from Wellington North Environmental Services Department shall operate valves on existing watermains for the purpose of controlling water. No person other than the certified operators from Wellington North Environmental Services Department shall shut down or charge any section of existing watermain or operate any valve for the purpose of controlling water from existing watermains.

The Contractor shall provide Wellington North Environmental Services Department at least forty-eight (48) hours advance notice when a change in control of the water is required. All necessary water supply interruptions shall be scheduled in co-operation with Wellington North Environmental Services Department.

All building occupants shall be notified forty-eight (48) hours in advance of shut down of their water supply.

The Contractor shall comply with the Safe Drinking Water Act (SDWA) and all applicable regulations made in accordance with that act, including but not limited to the Drinking Water Works Permit (DWWP) and the Municipal Drinking Water License (MDWL). Both the DWWP and the MDWL can be made available to the Contractor by the Contract Administrator upon request.

Anode connecting wire shall be loosely wrapped around pipes and fittings and knotted. Anode shall be installed with double nut type connection as per Standard Drawing W5 – Cathodic Protection for PVC Watermain Systems.

c) Payment

Payment at the unit bid price shall be full compensation for the supply and installation of gate valve, valve nut extensions, box, fittings, mechanical restraining devices, supply and installation of anodes, granular embedment and approved native backfill compacted to 95% S.P.D.

SUPPLY, EXCAVATE FOR AND INSTALL HYDRANT SET --- ITEM NO. 1.68a) Material

All hydrants shall be complete with “Storz” pumper connection and shall open counter clock-wise. All hydrants shall be one of the following:

- i) Canada Valve, Century (as manufactured by Mueller)
- ii) Clow Canada, Brigadier Series M-67-B (as manufactured by Clow Canada)

Hydrants shall be painted as follows:

Barrel	-	Red
Bonnet	-	Red
2.5” Caps	-	Black
Storz Pumper Cap	-	Black

Double nut type connections of anodes to pipes and fittings.

b) Operation

Only certified operators from Wellington North Environmental Services Department shall operate valves on existing watermains for the purpose of controlling water. No person other than the certified operators from Wellington North Environmental Services Department shall shut down or charge any section of existing watermain or operate any valve for the purpose of controlling water from existing watermains.

The Contractor shall provide Wellington North Environmental Services Department at least forty-eight (48) hours advance notice when a change in control of the water is required. All necessary water supply interruptions shall be scheduled in co-operation with Wellington North Environmental Services Department.

All building occupants shall be notified forty-eight (48) hours in advance of shut down of their water supply.

The Contractor shall maintain temporary water supply to all existing buildings that are affected by a water shut down in excess of eight (8) continuous hours.

The Contractor shall comply with the Safe Drinking Water Act (SDWA) and all applicable regulations made in accordance with that act, including but not limited to the Drinking Water Works Permit (DWWP) and the Municipal Drinking Water License (MDWL). Both the DWWP and the MDWL can be made available to the Contractor by the Contract Administrator upon request.

Location of hydrant valve shall be 1.2 m from centre of hydrant.

Anode connecting wire shall be loosely wrapped around pipes and fittings and knotted. Anode shall be installed with double nut type connection, complete with sacrificial zin nuts, as per Standard Drawing W10 – Cathodic Protection for PVC Watermain Systems.

Minimum watermain restraints requirements as per Standard Drawing W11 – Minimum Watermain Restraints Requirements.

c) Payment

Payment at the unit bid price shall be full compensation for installing new hydrant set, including all labour, equipment, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material and material including new 150 mm diameter PVC (DR-18) watermain, anodes, supply and installation of hydrant valve, material to make a watertight connection including concrete thrust blocks or mechanical restraining devices, notification to building occupants and temporary water supply where required.

WATER SERVICES TO PROPERTY LINE --- ITEM NO. 1.69, 1.70 & 1.71

a) Material

Crosslinked polyethylene (PEX) conforming to AWWA C904, "Municipex" by Rehau, "Blue904" by Ipex or approved equivalent.

Anodes shall be DPZ-5, 2.7 kg and shall be installed on mainstop and curb stop.

Tracer wire shall be 12 gauge, 7 strand copper with plastic coating, colour blue. Waterproof connectors for tracer wire to be DryConn Direct Bury Lug Aqua with dielectric silicone filled to seal out moisture and corrosion.

Mainstops stops shall be either Cambridge Brass, Ball Style, Series 301NL (No-lead), AWWA x CB assembly or Mueller Canada, Mueller Ground Key Design Type, H-15008N (No-lead), Mueller 110 Compression Joint.

Curb stops shall be either Cambridge Brass, Ball Style, Series 202NL (No-lead), CB Compression x CB Compression assembly or Mueller Canada, Mueller Mark II Oriseal, Type H-15209N (No-lead), Mueller 110 Compression Joint.

Saddle shall be Robar Stainless Steel, 2616 Double Bolt, Wide Band.

Rod and pin shall be stainless steel.

Bedding and cover material shall be sand, to 300 mm above the top of pipe.

b) Operation

Native material for backfill of trenches is to be used from 300 mm above the top of the pipe and up to the subgrade elevation. Backfill to be compacted to 95% S.P.D.

Water services to have minimum 2.0 m cover.

Anodes to be installed on curb stop and main stops regardless of type of material (copper or PEX). Main stops and curb stops to have electrical connection for anode to attach.

Unions are not permitted.

c) Measurement for Payment

Measurement for payment shall be based on each service constructed between connection to existing service at property line or behind property line, as shown on the Contract Drawings, from new watermain, including rental of Hydro Excavation Truck and materials required to expose expeditiously, existing utilities or services where needed, shall include the proper disposal of excess excavated material, cathodic protection, mainstop, saddle, water service pipe, tracer wire, curb stop and box, reconnected to existing service at property line, sand embedment and approved native backfill to subgrade elevation compacted to 95% S.P.D.

ADJUST EXISTING VALVE BOXES TO BINDER COURSE ASPHALT GRADE --- ITEM NO. 1.72

a) Operation

Where existing valve boxes cannot be raised by turning of top section then Contractor shall excavate and restore granular base as required, adjust the casting to the proposed finished grade prior to placement of the binder course asphalt.

b) Material

Road levelers are not permitted.

c) Payment

Payment at the unit bid price shall be full compensation for the lowering or raising of valves to the proposed binder grades including restoration of granular base compacted to 97% S.P.D.

Note: No additional payment shall be made for the lowering or raising of valve boxes for grading operations.

ADJUST VALVE BOXES TO SURFACE COURSE ASPHALT GRADE (YEAR 2026) --- ITEM NO. 1.73

a) Operation

Where existing valve boxes cannot be raised by turning of top section then Contractor shall sawcut, remove and dispose of existing binder course asphalt at valve boxes as required, excavate and restore granular base, adjust casting to the proposed finished grade and repave around each casting to binder asphalt grade with Hot Mix HL 4 asphalt, prior to placement of the surface course asphalt.

b) Material

Road levelers are not permitted.

c) Payment

Payment at the unit bid price shall be full compensation for the lowering or raising valves to the proposed surface course asphalt grades including restoration of granular and binder asphalt with Hot Mix HL 4 asphalt compacted to 95% S.P.D..

MISCELLANEOUS

CONSTRUCTION LAYOUT --- ITEM NO. 1.74 & 2.21

a) Operation

The Contract Administrator shall provide the Contractor with the following:

- i. Geodetic Benchmarks.
- ii. Digital Copy of the Tender Drawings.

The Contractor shall provide the Contract administrator with a copy of all grade sheets required during construction of the various stages of work including boning rod and cross-heads.

PRE-CONSTRUCTION SURVEY --- ITEM NO. 1.75

a) General

The Contractor is advised that the project involves construction activities near buildings, structures and utilities. It is the Contractor's responsibility to take all necessary precautions to protect buildings, structures and utilities. The Contractor shall be responsible for any damage to buildings, structures and utilities due to any type of construction activity. Occupants of nearby buildings shall be notified by the Contractor prior to the commencement of any construction activities generating vibrations. This notification shall include, in writing, the name and telephone number of the Contractor's representative in the case of noise and vibration complaints. The Contractor shall keep a record of all such complaints and submit a copy to the Contract Administrator.

b) Pre-construction Condition Survey

The Contractor shall arrange for a pre-construction condition survey of any nearby buildings, structures and utilities which may potentially be at risk from any construction activity. The Survey method used shall be acceptable to the vibration control engineer and the Contractor's insurers. A copy of the pre-construction survey records shall be provided to the Contract Administrator. If required by the Contract Administrator, the Contractor shall arrange for a similar post-construction survey.

c) Payment

Payment on a lump sum basis for the above tender item shall be full compensation for all labour, equipment and materials to complete the work.

HOLD EXISTING UTILITY POLES --- ITEM NOS. 1.76

a) Operation

The Contractor shall be responsible for contacting, scheduling and payment of all costs for any hold of existing utility pole(s) as required during:

- Construction operations that may affect the structural stability of the pole; and
- In the opinion of the Contract Administrator, construction operations that require the use of a truck to hold the pole as a safety precaution.

b) Payment

Payment at the unit bid price shall include full compensation of all expenses, labour, materials, equipment, and incidentals required to complete the work.

PEDESTRIAN CROSSING

REMOVE AND REPLACE HOT MIX ASPHALT HL 3F IN DRIVEWAYS AND BOULEVARD --- ITEM NOS. 2.03

a) Material

Reclaimed asphalt pavement (RAP) portion to be in compliance with OPSS 1150. The use of up to 15% by mass of RAP shall be permitted for HL3F mixes.

b) Operation

Depth of asphalt shall be 50 mm.

c) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material to complete the work including sawcutting, removal and disposal of existing asphalt.

STEEL POLE, BASE MOUNTED --- ITEM NO. 2.04, 2.05, & 2.06

a) Material

The poles shall be 11-gauge galvanized steel octagonal, with a hot dip galvanized finish.

b) Operation

The poles shall be installed on concrete bases as shown on the Contract Drawings. No erection of poles shall take place within 72 hours of the construction of the concrete bases.

The poles shall be installed with the “rake” as recommended by the manufacturer so as to assure a vertical set when the load is applied. Threaded adjusting nuts shall be used to establish the “rake”. The use of shims or other levelling devices shall not be permitted.

c) Measurement for Payment

Measurement for payment shall be on the basis of each pole installed

RIGID DUCT, DIRECT BURIED --- ITEM NO. 2.08

a) Material

Rigid PVC ducts shall be in accordance with CSA C22.2 No. 211.2. All duct shall be supplied with pull ropes.

b) Operation

Ducts shall be placed in a 0.3 m deep envelope of clean screened sand. 300mm wide red or yellow plastic warning tape shall be supplied and installed over the ducts in all trenches. This item shall include all excavation, sand bedding and native material for the backfill of trenches is to be used 150 mm above the top of duct and up to the subgrade elevation. Backfill to be compacted to 95% S.P.D.

All costs associated with the supply and installation of the bends and wyes shall be included in the above tender item.

Where the rigid duct is connected to the concrete pole bases, a wobble joint fitting with Styrofoam bedding shall be supplied and installed, as per OPSD 2102.01.

SECTION C - SPECIAL PROVISIONS – ITEMS

C-38 (Addendum No. 1)

c) Measurement for Payment

Measurement for payment shall be based on the lineal metre of duct installed.

d) Payment

Payment at the Contract Price for the above tender item shall be full compensation for all labour, equipment, and materials required to do the work.

STREETLIGHT CABLE SYSTEM --- ITEM NO. 2.09

a) Material

The streetlight wiring shall be #6 Cu.RWU-90 complete with jacketed ground.

b) Operation

A sufficient length of wire shall be left coiled at the power supply source and attached to the pole to allow Wellington North Power to connect to the overhead secondary circuit. The Contractor shall make all connections to the light standards.

c) Payment

Payment shall be made on a lump sum basis for the supply, installation, and connection of all cabling required.

SUPPLY AND INSTALL TRAFFIC SIGNS --- ITEM NOS. 2.10

a) Material

All posts shall be galvanized “U-shaped” steel telescopic posts.

b) Operation

Signs to be manufactured by Cedar Signs (www.cedarsignsinc.com) Signs that are installed in concrete sidewalk or asphalt shall be placed in 75 mm diameter sleeves.

All signs shall have a mounting height of 1.50 to 2.0 m.

Signs shall be installed as per Ontario Traffic Manual – Book 15 (Pedestrian Crossover Level 2 Type C/D – Mid-Block)

c) Payment

Payment at the unit bid price shall be full compensation for labour, equipment and materials to supply and install new traffic control signs.

Supply and Install Traffic Signs				
OTM Sign Number	Description	Station and Offset		Qty
QUEEN STREET EAST, MOUNT FOREST				
Ra-5L	Pedestrian Crossing	Sta. 1+011.2	8.4 m O/S Rt.	1
Ra-5R	Pedestrian Crossing	Sta. 1+011.2	8.4 m O/S Rt.	2
Ra-5L	Pedestrian Crossing	Sta. 1+011.8	5.4 m O/S Lt.	1
Ra-5R	Pedestrian Crossing	Sta. 1+011.8	5.4 m O/S Lt.	2

Supply and Install Traffic Signs				
OTM Sign Number	Description	Station and Offset		Qty
Ra-4t	Stop for Pedestrians	Sta. 1+011.2	8.4 m O/S Lt.	2
		Sta. 1+011.8	5.4 m O/S Rt.	2
Ra-10	No Passing – Here to Crossing	Sta. 0+978.5	5.6 m O/S Lt.	1
		Sta. 1+041.2	4.8 m O/S Rt.	1
Wa-27R	Crossing Ahead	Sta. 0+935.9	8.3 m O/S Lt.	1
		Sta. 1+066.1	5.1 m O/S Rt.	1

DOUBLE SIDED RECTANGULAR RAPID FLASHING BEACON, INCLUDING SOLAR ENGINE AND AUDIBLE PEDESTRIAN PUSHBUTTON --- ITEM NO. 2.11

a) Material

Double sided rectangle rapid flashing beacons shall be manufactured by Tapco.

This item shall include the accessible audible pushbuttons for the PXO. Audible pedestrian pushbuttons shall be a Polara INx system.

The pushbuttons shall have one-way arrows at each with the informational sign indicating "Push button to turn on warning lights".

The pushbutton shall be operated such that the button will activate the audible message "Yellow lights are flashing". The locator tone shall be adjustable and shall adjust to ambient sounds. The pushbutton stations shall be yellow.

b) Operation

The pedestrian signal system shall be adjusted and tested at the time of beacon turn-on.

c) Payment

Payment at the Contract Price for the above item shall include all labour, equipment, and materials required to do the work.

ALUMINUM MAST ARM --- ITEM NO. 2.12 & 2.13

a) Material

The mast arms shall be aluminium. All incidental and mounting hardware shall be stainless steel or hot dip galvanized.

b) Operation

Mast arms shall be mounted to provide a minimum of 5.0 metres vertical clearance between the bottom of the traffic signs and the travelled portion of the road.

c) Measurement for Payment

Measurement for payment shall be on the basis of each mast arm installed.

d) Payment

Payment at the Contract price for the above tender item shall be full compensation for all labour, equipment and materials required to complete the work described above.

LUMINAIRE AND 2.4 m BRACKET --- ITEM NO. 2.14

a) Material

Cobra head luminaires and brackets shall be supplied and installed on the poles. Brackets are to be 2.4m aluminium tapered elliptical. Luminaires shall be 80-Watt Light Emitting Diode (LED), Series NXT-M as manufactured by LED Roadway Lighting NXT-48M-0-R-3LB-525-GY-4-UL-X-2H or approved equivalent. Luminaires are to have the following features:

- individual photocell control
- type III optics
- 120V-240V universal voltage
- 3000 K colour temperature
- horizontal tenon mount
- flat glass lens

b) Operation

Each luminaire shall be fused at the handhole with 15 Amp fuses in a 65xD65 Elastimold fused connector kit.

c) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment, and materials required to complete the work described above.

PAVEMENT MARKINGS, OBLITERATION --- ITEM NOS. 2.15

a) Operation

All mechanical grinding pavement marking obliteration shall be carried out using a soft abrasive blast cleaning system or high-pressure water method. The depth of removal shall be the minimum required to totally remove the existing pavement markings, to a normal depth, typically averaging 3mm.

The Contractor's operation shall be carried out so as to control any dust or effluent generated by the operation. The use of black out paint or temporary tape will not be permitted.

The Contractor shall control the operation so that the asphalt pavement is not damaged in any way and to ensure that no pavement marking remains visible upon completion. Failure to remove the markings as specified by the Engineer will require the Contractor to return to the site and remove the remaining markings at their own expense.

Any excessive damages to the asphalt caused by the obliteration operation and subsequent cost of repair/replacement shall be at the Contractor's expense. The Owner shall undertake the repair of the asphalt and shall invoice the Contractor for the costs.

Pavement marking obliteration shall be by Abrasive Blasting, in accordance with MTO Standard Special Provision 710S03.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material required to complete the work described above.

SECTION C - SPECIAL PROVISIONS – ITEMS

C-41 (Addendum No. 1)

REMOVAL OF EXISTING TRAFFIC SIGNS --- ITEM NO. 2.19

a) Operation

Existing signs shall be removed, salvaged, and delivered to the Townships Works Yard. Signs to be removed are noted on the Contract Drawings.

b) Payment

Payment at the unit bid price shall be full compensation for all labour, equipment and material required to complete the work above.

TOPSOIL (IMPORTED) AND SOD--- ITEM NOS. 2.20

a) Operation

Topsoil shall be placed at a minimum depth of 200mm.

b) Measurement for Payment

Measurement for payment shall be based on the surface area measured in square metres.