Committee of the Whole Excerpts
April 09, 2024

PAYZANT/WENTWORTH TRAFFIC LIGHTS EXCERPT

Much discussion has occurred with respect to increased traffic concerns at the Payzant and Wentworth Road intersection. With a potential future connection from Payzant to King being explored and the significant increase in costs associated with a roundabout, a desire was expressed to consider and look at traffic signals installed at this intersection as a possible solution and cost savings.

The recommended motion was that Committee of the Whole recommend that …

COUNCIL DIRECTS THE CAO TO DIRECT STAFF TO COME BACK WITH A CLASS D ESTIMATE ON INSTALLING STREET LIGHTS AT THE INTERSECTION OF WENTWORTH AND PAYZANT.

West Hants
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WEST HANTS REGIONAL MUNICIPALITY REPORT

Information ☐	Recommendation ☑	Decision Request ☐	Councillor Activity ☐

To: Committee of the Whole

Submitted by: _____
Todd Richard

Date: April 9, 2024

Subject: Payzant Drive / Wentworth Road Roundabout Design

LEGISLATIVE AUTHORITY

Nova Scotia Municipal Government Act, Section 65 authorizes Council to expend funds for municipal purposes.

RECOMMENDATION or DECISION REQUEST

It is recommended for Committee of the Whole to recommend to Council that:

Council approve the award of tender WHRMPW24-03 for Construction of the Payzant Drive/Wentworth Road Roundabout to the low compliant bidder, Dexter Construction, for the tendered price of $4,274,980.00 plus applicable taxes. And, council also approves a construction contingency of 15% ($641,247) and the cost for overhead utility relocation, for a total construction estimated cost of $5,116,227 plus applicable taxes.

BACKGROUND

Property	Public Opinion	Environment	Social	Economic	Councillor Activity
☐	☐	☐	☑	☐	☐

The intersection of Payzant Drive and Wentworth Road has proven to be extremely busy over the years, especially during peak times. Solutions have been researched, studied, and discussed extensively and experts agree the best solution needs to provide efficiency, longevity, sustainability and be most suitable for the area.

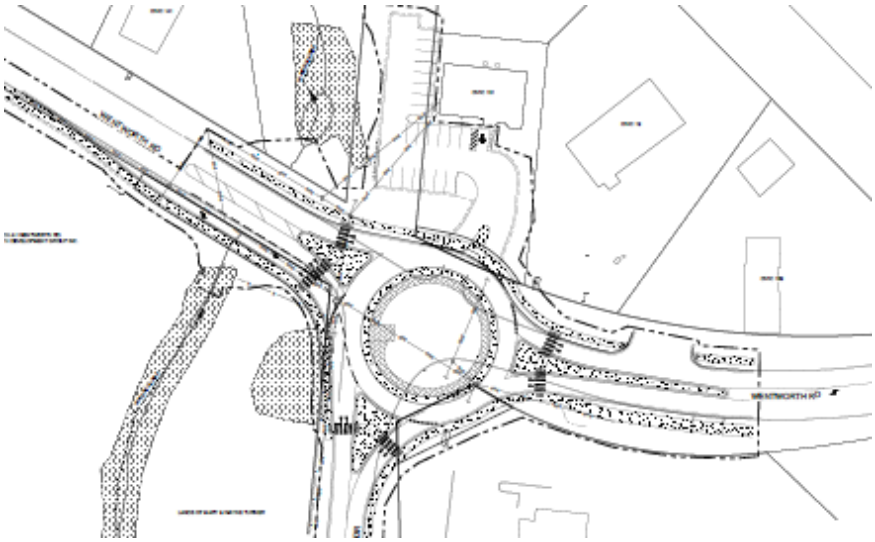
In August 2021 an Intersection Infrastructure Needs Assessment for this proposed project was completed by WSP. Based on findings from this study, in conjunction with the Hants County Exhibition Expansion Traffic Impact Study (WSP, May 2021), it was recommended that plans be prepared to upgrade this intersection to a roundabout.

In September 2021, Public Works requested proposals from pre-qualified engineering consultants to support this project from design through final construction. In October 2021, Public Works recommended Design Point, the low compliant bidder, be awarded the Engineering and Design work.

In January of 2023, Design Point presented at Committee of the Whole – "Proposed Traffic Circle Presentation".

The Municipality is focused on providing optimal long-term solutions for the residents of West Hants Regional Municipality. A Roundabout at The Payzant/Wentworth Intersection will provide this solution with many benefits including:

- Improved Safety – lower speeds and simplified Decision Making. Reduced right angle and head on collisions and fewer conflict points.
- Reduced Delay
- Reduced Environmental Impact – Keeping traffic moving at consistent lower speeds reduces idling, emissions and fuel consumption
- Improved Aesthetics for visual appeal at prominent locations
- Network considerations – allow for safer and more efficient traffic management strategies for surrounding area
- Ability to function during power outages



Proposed Payant/Wentworth Roundabout

DISCUSSION

The Construction tender was issued on the Nova Scotia Procurement website on March 8, 2024. There was a non-mandatory site meeting on March 21, 2024 and the only attendee was Dexter Construction. The tender closed on April 4, 2024 at 2pm. Results were reviewed by Public Works Staff and Design Point Engineering.

Tender Results:

Dexter Construction $4,274,980.00 plus applicable taxes.

There was a water main component of this tender. It should be noted that this will need to be replaced at some time in the future, regardless of the work performed at the intersection of Payzant Drive and Wentworth Road. The Dexter amount for this portion was $620,855.00 and was over the amount originally budgeted was $430,425.00.

Dexter Construction would be an excellent contractor to complete a project of this complexity. Their experience and expertise in road work, services, knowledge of the area, construction scheduling and ability to coordinate simultaneous activities will help limit traffic interruptions and delays.

It is expected that a portion of the work will be in this construction season. There is a lot of NS Power and Bell work to be completed and Dexter is well versed to coordinate with them to provide the best schedule and coordination for the project. It is anticipated that Dexter will be able to complete portions of the work while allowing the utilities to complete their work in an effort to move construction along efficiently. For this reason, we are expecting the work to be carried out over two seasons and be completed by Fall of 2025.

NEXT STEPS

Pending approval of Council; staff will award formal contract to Dexter to proceed with engineering and design work in accordance with their proposal.

FINANCIAL IMPLICATIONS

Tendering Timeline:

Posted to Procurement	March 21, 2024
Closing Date	April 4, 2024
Price Expiry Date	June 3, 2024
Days Remaining	56 Days

2023-24 Capital Budget – Traffic Control Wentworth Road @ Payzant Drive

Tender Pricing	$5,116,227.00
Non-Recoverable Tax *(4.29%)*	$219,486.14
Tender Total	**$5,335,713.14**
2023-24 Budget Value	$2,725,000.00
Variance (over budget)	($2,610,713.14)

Within the 2023-24 Capital Budget, the traffic control project on Wentworth Road at Payzant Drive was scheduled to be funded primarily through long-term debt, with $500,000 to be funded evenly between the former Windsor Infrastructure Reserve and the WHRM Road Infrastructure Reserve. In addition, $100,000 in 2023-24 budgeted for the water main replacement.

The water main accounts for $774,613.13 of the total tender costs. To be funded through long-term borrowing for the water utility. The debt servicing for this will not show up in the water utility budget till the project is completed.

The estimated debt servicing in 2023-24 was $113,040. With the new project total, less the 2023-24 budgeted debt servicing and water utility portion, the estimated debt servicing will increase to $242,168.58. Pending Council decision, the updated figures will be captured in the 2024-25 Capital and Operating Budget.

ALTERNATIVES

1. Council may choose to award this project to an alternative proponent.
2. Council may choose to not to proceed with this capital project.

ATTACHMENTS

Tender Documents and Drawings. Addendum Number one and addendum Number two.

CHIEF ADMINISTRATIVE OFFICER REVIEW

The report provides highlights to the history of the project, it's forecasted benefits and past budget projections (2023/24 $2,610,713.14). It is unfortunate to have one bidder on the project despite the tender being in the public forum. With the forecasted price and not having the debt to service ratio impacts for 2024/25, when considering such a large project, or the overall 2024/25 capital budget reviewed or approved by Council it is advisable that the project be forwarded to budget deliberations for a more thorough review by Council.

It is noted in the report that the tender price will be held until June 3,2024. With date in mind budget deliberations will have started well in advance of that date.

Report Prepared by: _____

Erin Amirault P.Eng. Project Engineer

Report Reviewed by: _____

Todd Richard, Director of Public Works

Report Approved by: _____

Mark Phillips, Chief Administrative Officer

West Hants

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Tender #WHRMPW24-03

Construction

Payzant Drive Roundabout

Issued: March 8, 2024
Closing: March 28, 2024

Contact:
Erin Amirault, P.Eng.
Project Engineer
EAmirault@westhants.ca
902-798-8391 Ext.126

SECTION	TITLE	Pages
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00 43 00	Supplementary Tender Information	7
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Appendices

- Geotechnical Report prepared by DesignPoint Engineering & Surveying Ltd., dated March 7, 2022.
- Drawings: Payzant Drive Roundabout / Feb. 22, 2024 / Issued for Tender

END OF SECTION

This document is a Supplementary Specification to *The Standard Specifications for Municipal Services* as published by the Joint Committee on Contract Documents in association with Nova Scotia Road Builders Association, Consulting Engineers of Nova Scotia and Landscape Nova Scotia.

The West Hants Regional Municipality has decided to use the Standard Specifications in an effort to regulate their specification practices, simplify the review and approval process, and standardize the specifications written by their consultants.

These project documents have been prepared for use with and require being read in conjunction with *The Standard Specifications for Municipal Services* as published by the Joint Committee on Contract Documents. Copies of The Standard Specification are available from the Joint Committee on Contract Documents, c/o Spectech Limited, 18 Laurier Street, Dartmouth, NS, B3A 2G7; telephone: (902) 233-9362; e-mail: nsmunicipalservices@gmail.com; or visit: www.standardspec.ca.

END OF SECTION

Payzant Drive Roundabout
Windsor, Nova Scotia

Owner: West Hants Regional Municipality, 100 King Street, Windsor, NS, B0N 2T0
Engineer: DesignPoint Engineering & Surveying Ltd., 90 Western Parkway, Suite 500, Bedford, NS, B4B 2J3

1.1 Tender Submission

.1 Submit completed tender documents for above project in sealed envelope marked as follows:

TENDER

Payzant Drive Roundabout
Tender #WHRMPW24-03

Closing up to 2:00 p.m., local time, on March 28, 2024 and delivered to:

West Hants Regional Municipality
Public Works Department
100 King St.
PO Box 3000
Windsor, NS, B0N 2T0

.2 Electronic (email) submissions will only be accepted if all the following criteria are met:

.1 The entire bid document is presented and issued in Adobe PDF format.

.2 The PDF documents are emailed to WHRM Document Control (documentcontrol@westhants.ca) by no later than 2:00 p.m. Atlantic Daylight Time, of the stated closing date.

.3 Emails must contain both of the following:

.1 A subject line which reads "Electronic Bid #WHRMPW24-03: Payzant Drive Roundabout" and

.2 The "Read Receipt" must be turned on, which will be acknowledged by staff upon opening of the email submission.

All PDF documents received will remain unopened until 2:15 p.m. on the stated closing date. At which time, they will be opened by municipal staff along with any hard-copy bids received by letter/courier mail.

.3 Any questions can be directed by email to:

Erin Amirault, P.Eng.
Project Engineer, West Hants Regional Municipality
EAmirault@westhants.ca

1.2 Post Tender Submission

.1 Submit post-tender submission documents no later than two (2) working days after tender closing. Failure to provide such documents may constitute grounds for forfeiture of tender security.

.2 Safety Certification

.1 Submit a copy of tenderer's current and valid safety accreditation issued by Nova Scotia Workers' Compensation Board or Certificate of Recognition (COR) issued by Construction Safety Nova Scotia.

.2 Out-of-province tenderers with a current and valid COR from a Canadian Federation of Construction Safety Associations member shall obtain and submit a current and valid Letter of Good Standing from Construction Safety Nova Scotia.

.3 Workers' Compensation

.1 Submit a copy of tenderer's current and valid clearance letter issued by the Workers' Compensation Board of Nova Scotia.

.2 Out-of-province tenderers shall submit a current and valid clearance letter from a government workers' compensation board but must register with the Nova Scotia Workers' Compensation Board prior to being awarded the Contract.

1.3 Tender Opening

.1 Tenders will be opened at 2:15 p.m. local time on March 28, 2024, after Tender close at the offices of West Hants Regional Municipality, 100 King Street, Windsor. Opening will be public.

.2 Tender amendments will be disclosed at public openings.

1.4 Accuracy of Referencing

.1 Indexing and cross-referencing are for convenience only.

1.5 Conditions of Tendering

.1 Take full cognizance of content of all Contract Documents in preparation of tender. Refer to Section 00 41 43 – Tender Form, Subsection 1.3.8 for a complete list of Contract Documents.

1.6 Tenderers to Investigate

.1 Tenderers will be deemed to have familiarized themselves with existing site and working conditions and all other conditions which may affect performance of the Contract. No plea of ignorance of such conditions as a result of failure to make all necessary examinations will be accepted as a basis for any claims for extra compensation or an extension of time.

1.7 Clarification and Addenda

.1 Notify Engineer not less than two (2) Working Days before tender closing of omissions, errors, or ambiguities found in Contract Documents. If Engineer considers that correction, explanation, or interpretation is necessary, a written addendum will be issued. All addenda will form part of Contract Documents.

.2 Confirm in the tender form that all addenda have been received. Tenderers are solely responsible to obtain and acknowledge the receipt of addenda at time of tender closing.

1.8 Preparation of Tender

.1 Legibly complete tender form provided with Project Documents. Tender all items and fill in all blanks. Have corrections initialed by person signing tender.

1.9 Taxes

.1 Include all taxes in prices except Harmonized Sales Tax (HST) in tender unit prices.

1.10 Tender Security

.1 Provide tender security in the minimum amount of ten percent (10%) of total price including HST. Provide security with tender in the form of a certified cheque or money order payable to the Owner, a bid bond on CCDC Form 220, or other Owner-approved form.

1.11 Contract Security

.1 Refer to Section 00 72 45 – General Conditions, subsection GC11.2 – CONTRACT SECURITY for form of contract security. Refer to Project Documents for amount of contract security and alternate type of contract security, if applicable.

1.12 Insurance

.1 Refer to Section 00 72 45, General Conditions, subsection GC11.1 - INSURANCE, Section 00 74 00 – SUPPLEMENTARY SPECIFICATIONS, and CCDC 41 for insurance requirements.

1.13 Form of Agreement

.1 Form of Agreement is attached for information purposes only until execution of the Contract.

1.14 Return of Tender Security

.1 Tender security will be returned to:

.1 All except the three lowest acceptable tenderers within seven (7) days of tender opening.

.2 Two (2) remaining unsuccessful tenderers within fourteen (14) days of date of award.

.3 Successful tenderer following receipt by Owner of executed agreement, specified contract security, and insurance documents.

1.15 Amendment or Withdrawal of Tender

.1 Tenders may be amended or withdrawn by post or email.

.2 Amendment of individual Unit Prices is the only acceptable price amendment. Amendments shall not disclose either original or revised total price.

.3 Head amendment or withdrawal as follows: "[Amendment/Withdrawal] of tender for Payzant Drive Roundabout, Tender # WHRMPW24-03 ". Sign as required for tender and submit to the address given for receipt of tenders. In order to be considered, submissions shall be received prior to time of tender closing.

1.16 Offer, Acceptance, Rejection

.1 The Municipality reserves the right to reject all or any tenders, and to not necessarily accept the lowest tender. The Municipality may accept any tender or any portion of any tender that may be considered in the best interests of the Municipality. The Municipality also reserves the right to waive formality, informality, or technicality in any tender. This includes the right to accept a tender that is not strictly compliant with the instructions in the tender documents.

1.17 Scope of Work

.1 The Work described in the Project Documents will be carried out in full or in part subject to available funding.

1.18 Site Meeting

.1 A formal site meeting is scheduled for March 21, 2024 at 10:30am. Meetup location at the West Hants Sports Complex Parking lot., 16 Centennial Drive, Windsor NS. Tenderers may make site visits as they deem appropriate, no prior permission is required for site visits.

1.19 Subsurface Investigation

.1 A subsurface investigation has been carried out at the site of the works. Subsurface investigation was carried out to determine the character of the sub-soil for design purposes. The report is being provided for information only and the owner assumes no responsibility for this information. The report can be found in the appendices.

1.20 Disruption to Existing Water Services

.1 Tenderers are advised that disruption to existing water services will have certain restrictions, and scheduling and sequencing requirements.

END OF SECTION

1.1 SALUTATION:

.1 To: West Hants Regional Municipality
100 King Street, PO Box 3000
Windsor, NS, B0N 2T0

.2 For: Tender # WHRMPW24-03
Payzant Drive Roundabout
Windsor, Nova Scotia

.3 From: _____

_____

_____

1.2 TENDERER DECLARES:

.1 That this tender was made without collusion or fraud.

.2 That the proposed work was carefully examined.

.3 That the tenderer was familiar with local conditions.

.4 That Contract Documents and Addenda No. __ to __ inclusive were carefully examined.

.5 That all the above were taken into consideration in preparation of this tender.

1.3 TENDERER AGREES:

.1 To enter into a contract to supply all labour, material and equipment and to do all work necessary to construct the Work as described and specified herein for the unit prices stated in Subsection 1.4 hereunder, Schedule of Quantities and Unit Prices.

.2 That the estimated Contract Price shall be the sum of the products of the tendered unit prices multiplied by the estimated quantities in Subsection 1.4 hereunder excluding Harmonized Sales Tax (HST).

.3 That this tender is valid for acceptance for sixty (60) days from tender closing.

.4 That measurement and payment for items listed in Subsection 1.4 hereunder shall be in accordance with corresponding items in Section 01 22 00 Measurement and Payment.

.5 To provide evidence of ability and experience within five (5) working days of request, including: experience in similar work, work currently under contract, senior supervisory staff available for the project, equipment available for use on the Work, and financial resources.

.6 To execute in triplicate the Form of Agreement and forward same together with the specified contract security and insurance documents to the Owner within ten (10) Working Days of written notice of award.

.7 That failure to provide post-tender submission documents or failure to enter into a formal contract and provide specified insurance documents and contract security within time required will constitute grounds for forfeiture of tender security.

.8 That if tender security is forfeited, Owner will retain difference in money between amount of tender and amount for which Owner legally contracts with another party to perform the Work and will refund balance, if any, to tenderer.

.9 That Contract Documents include:

.1 West Hants Regional Municipality's Municipal Services Specifications Manual Revision 3 (October 24, 2023).

.2 Standard Specification for Municipal Services listed in Table of Contents Page Dated January 2023.

.3 Overview

.4 Information to Tenderers

.5 Tender Form

.6 Supplementary Tender Information

.7 Form of Agreement

.8 Supplementary Specifications

.1 Section 00 74 00 – Supplementary Specifications

.9 Drawings

Sheet 1 / Cover Sheet / Feb. 22, 2024/ Issued for Tender
Sheet 2 / Existing Conditions / Feb. 22, 2024/ Issued for Tender
Sheet 3 / Storm Sewer Replacement Profiles / Feb. 22, 2024/ Issued for Tender
Sheet 4 / Catch Basin Profiles / Feb. 22, 2024/ Issued for Tender
Sheet 5 / Wentworth Road - Plan & Profile / Feb. 22, 2024/ Issued for Tender
Sheet 6 / Payzant Drive - Plan & Profile / Feb. 22, 2024/ Issued for Tender
Sheet 7 / Roundabout Grading Plan / Feb. 22, 2024/ Issued for Tender
Sheet 8 / Roundabout Geometry/ Feb. 22, 2024/ Issued for Tender
Sheet 9 / Cross Section Details / Feb. 22, 2024/ Issued for Tender
Sheet 10 / Lane Markings and Signage Plan / Feb. 22, 2024/ Issued for Tender
Sheet 11 / Utility Pole Plan / Feb. 22, 2024/ Issued for Tender
Sheet 12 / Road Construction Details / Feb. 22, 2024/ Issued for Tender
Sheet 13 / Construction Notes and Details 1/ Feb. 22, 2024/ Issued for Tender
Sheet 14 / Construction Notes and Details 2/ Feb. 22, 2024/ Issued for Tender

.10 Nova Scotia Environmental Regulations.

.11 Geotechnical Report prepared by DesignPoint Engineering & Surveying Ltd., dated March 7, 2022.

.12 All addenda as issued and confirmed in subsection 2.4 of this section.

1.4 SCHEDULE OF QUANTITIES AND UNIT PRICES

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
EARTHWORK					
2.	Grubbing	m^2	800		
8.	Exploratory Digs	ea	5		
10.	Karst Topography Cavern Infill (Provisional)				
.1	Less than or equal to 5 cubic metres	ea	3		
.2	Greater than 5 cubic metres	m^3	20		
		SUBTOTAL EARTHWORK:	$		
WATER MAIN					
11.	Pipe				
.1	250mm PVC BIONAX	m	192		
.2	200mm PVC BIONAX	m	135		
12.	Fire Hydrants				
.1	Installation	ea	2		
.2	Relocation	ea	1		
14.	Direct Buried Valves				
.1	250mm Gate Valve	ea	3		
.1	200mm Gate Valve	ea	2		
16.	Connections to Existing Main				
.1	250mm, Payzant Drive 0+826	ea	1		
.2	250mm, Payzant Drive 1+018	ea	1		
.3	200mm, Wentworth Road 0+874	ea	1		
18.	Temporary Water	L.S.	1		
19.	Cap and Abandonment of Existing Main				
.1	250mm, Payzant Drive 0+834	ea	1		
.2	250mm, Payzant Drive 0+890	ea	1		
		SUBTOTAL WATER MAIN:	$		

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
STORM SEWER					
31.	Pipe				
.1	300mm PVC DR18	m	48		
.2	450mm RCP 65D	m	33.5		
32.	Manholes				
.1	1050mm	ea	1		
.2	1200mm	ea	1		
33.	Catch Basins				
.1	1050mm, Single	ea	5		
.2	1050mm, Double	ea	5		
34.	Catch Basin Leads				
.1	200mm PVC DR35	m	15		
.2	250mm PVC DR35	m	38		
.3	250mm PVC DR18	m	40		
.4	300mm PVC DR35	m	102		
.5	300mm PVC DR18	m	30		
36.	Connections to Existing				
.1	Existing Manhole	ea	1		
.1	Wentworth Road Culvert	ea	1		
37.	Culverts				
.1	1200mm RCP 65D	m	6.5		
39.	Precast Headwall				
.1	Up to 600mm Pipe	m	5		
.2	1200mm Pipe	m	1		

SUBTOTAL STORM SEWER: $_____

STREET CONSTRUCTION					
41.	Gravels				
.1	Type 1 (150mm thick)	m^2	3750		
.2	Type 2 (500mm thick)	m^2	3750		
.3	Type 1 (Dentist Parking Lot) (150mm thick)	m^2	1110		
.4	Type 2 (Dentist Parking) (300 mm thick)	m^2	1110		
43.	Asphalt Concrete				
.1	Type C-HF (50 mm thick)	m^2	3750		
.2	Type B-HF (100 mm thick)	m^2	3750		
.3	Type C-HF (Dentist Parking Lot) (40mm thick)	m^2	980		
.4	Type B-HF (Dentist Parking) (50 mm thick)	m^2	980		

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
44.	Curb				
	.1 Concrete	m	960		
45.	Concrete Sidewalk				
	.1 Sidewalk/ Traffic Island (100mm)	m^2	1185		
	.2 Truck Apron (200mm)	m^2	275		
46.	Tactile Walking Surface Indicators	ea	28		
50.	Adjust Existing Manhole Frames and Covers	ea	4		
52.	Segmental Retaining Wall				
	.1 Center Island	m^2	98		
	.2 Civic 151 Parking Lot	m^2	15		
53.	Street Signs and Bases	ea	38		
54.	Stone Pillar Reinstatement	L.S.	1		
55.	Sign Relocation				
	.1 Credit Union	L.S.	1		
	.2 Hospital	L.S.	1		
56.	Raised Crosswalks	ea	6		

SUBTOTAL STREET CONSTRUCTION: $_____

LANDSCAPING

61.	Topsoil and Sod	m^2	1050		
62.	Topsoil and Seed	m^2	530		
66.	Grass Pavers	m^2	205		
67.	Center Island Landscaping	L.S.	1		

SUBTOTAL LANDSCAPING: $_____

ADDITIONAL ITEMS

73.	Replacement of Unsuitable Material w/ Surge Rock	m^3	1900		
76.	Infrastructure Removal	L.S.	1		

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
77.	Trench Excavation – Contaminated Material (Provisional)	m^3	50		

SUBTOTAL ADDITIONAL ITEMS: $_____

ENVIRONMENTAL PROTECTION

90.	Environmental Measures	L.S.	1		

SUBTOTAL ENVIRONMENTAL PROTECTION: $_____

SUBTOTAL EARTHWORK $_____

SUBTOTAL WATER MAIN $_____

SUBTOTAL STORM SEWER $_____

SUBTOTAL STREET CONSTRUCTION $_____

SUBTOTAL LANDSCAPING $_____

SUBTOTAL ADDITIONAL ITEMS $_____

SUBTOTAL ENVIRONMENTAL PROTECTION $_____

ESTIMATED CONTRACT PRICE (EXCLUDING HST) $_____(A)

ADD HARMONIZED SALES TAX (15% of Estimated Contract Price) $_____(B)

TOTAL PRICE (A + B) $_____

TENDERER'S HST REGISTRATION NO. _____

1.5 GENERAL REQUIREMENTS

.1 Refer to Supplementary Specifications and the Tender Drawings for general requirements to complete the work that shall be included in the Tenderer's total price (i.e. erosion & sediment control measures, traffic control, disposal of existing services, coordination with utility owners during construction, pavement markings, etc.).

1.6 COMPLETION TIME

.1 Tenderer agrees to complete the Work during the 2024 and 2025 construction seasons. Substantial completion of the Work to be achieved on or before November 30th, 2025.

1.7 SIGNATURES*

DATED THIS _____ DAY OF_____ , 20_____.

_____
Name of Tenderer

_____
Witness

_____
Signature of Signing Officer

_____
Name and Title (Printed)

_____
Witness

_____
Signature of Signing Officer

_____
Name and Title (Printed)

*NOTE: Tenders submitted by or on behalf of any Corporation must be signed in the name of such Corporation by a duly authorized officer(s) or agent(s).

END OF SECTION

1. This Section is required to be completed and submitted at the time of tendering with all information requested completed in full. Failure to submit the information requested in this Section may be cause for the West Hants Regional Municipality to treat your Tender as non-compliant.

2. Submit with Tender the following:

   .1 Name and address of the chartered Canadian bank or reputable financial institutions to vouch for firm's financial status.

   .2 Name and address of the company who has agreed to underwrite the bonds for Performance and for Labour and Material Payment.

   .3 Name and address of the company who will underwrite the contract insurance required.

   .4 Particulars of recent contracts successfully completed or progressing towards completion.

   .5 A list of equipment to be used.

   .6 A list of project personnel.

   .7 A list of subcontractors.

   .8 A program of the work.

3. Submittals

   .1 Confirmation of Tenderer's financial status.

   Name _____

   _____

   Address _____

   _____

   Contact Person _____ Telephone _____

.2 Name and address of company who has agreed to underwrite the bonds for Performance and for Labour and Material Payment. These bonds shall be issued by a duly licensed surety company authorized to transact the business of suretyship in the Province of Nova Scotia.

Name _____

_____

Address _____

_____

Contact Person _____ Telephone _____

.3 Name and address of company who has agreed to underwrite insurance, the type and amount. This insurance shall be issued by a company having insurance adjusting representation in Nova Scotia.

Name _____

_____

Address _____

_____

Contact Person _____ Telephone _____

Type of Insurance	Amount

.4 Particulars of recent contracts. Furnish particulars of a minimum of three contracts successfully carried out or in the process of being constructed. Projects listed shall be approximate in nature to the work being tendered for and be comparable or greater in size.

Customer	Description	Date		Contract Value
_____	_____	from	_____	$_____
	_____	to	_____	
_____	_____	from	_____	$_____
	_____	to	_____	
_____	_____	from	_____	$_____
	_____	to	_____	
_____	_____	from	_____	$_____
	_____	to	_____	

.5 List of equipment to be used on this project.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

.6 List of project personnel.

Include below the names, qualifications and previous experience of those employees who will be directly involved with this project.

Name	Title/Role	Related Experience

.7 List of Subcontractors

Enter the name and address of each Subcontractor used in making up this Tender. Only name one Subcontractor for each part of the Work to be sublet.

Upon acceptance of a Tender by the Municipality of the District of West Hants, the Contractor shall not substitute another Subcontractor in place of the one named without the written approval from the Municipality of the District of West Hants.

Subtrade	Subcontractor Name and Address	Extent of Work	Value of Work

.8 Program of the Works

Insert a brief description of the proposed method of operation and phasing to ensure completion in the period set forth in Section – 00 74 00 – Supplementary Specifications, Subsection 3 – Scheduling and Coordination.

_____

_____

_____

_____

_____

_____

_____

_____

.9 References

Bidders shall supply two (2) references from past projects similar in nature to the Payzant Drive Roundabout project. Each reference shall include a brief description of the project, estimated construction cost, name and contact information for the Owner/Client. The Owner reserves the right to review and evaluate the reference information provided by Bidders as part of the Tender Selection process. The lowest price will not necessarily be selected for award.

Reference 1

Project Name & Location:	
Year Completed:	
Construction Value:	$
Owner Name:	
Project Contact Name:	
Project Contact Phone:	
Project Contact Email:	
Project Description:	

Reference 2

Project Name & Location:	
Year Completed:	
Construction Value:	$
Owner Name:	
Project Contact Name:	
Project Contact Phone:	
Project Contact Email:	
Project Description:	

END OF SECTION

This Agreement made on the __ day of ____ in the year___.

BY AND BETWEEN

West Hants Regional Municipality

hereinafter called the "Owner"

and

hereinafter called the "Contractor"

The Owner and the Contractor agree as follows:

ARTICLE A1 - THE WORK

.1 The Contractor shall:

.1 Perform the Work required by the Contract Documents for

Payzant Drive Roundabout Tender # WHRMPW24-03

located at Windsor, Nova Scotia

for which the Agreement has been signed by the parties, and for which

DesignPoint Engineering & Surveying Ltd.

is acting as and is hereinafter called the “Engineer”

and

.2 do and fulfill everything indicated by this Agreement, and

.3 attain Substantial Performance of the work as certified by the Engineer by the 30th day of November in the Year 2025.

ARTICLE A2 – AGREEMENTS AND AMENDMENTS

.1 This Contract supersedes all prior negotiations, representations or agreements, either written or oral, relating in any manner to the work, including the bidding documents that are not expressly listed in Article A3 of the Agreement.

ARTICLE A3 - CONTRACT DOCUMENTS

.1 The following is an exact list of the Contract Documents referred to in Article A1.1 of this Agreement and as defined in subsection 6 of Section 00 71 00 DEFINITIONS. This list is subject to subsequent amendments in accordance with the provisions of the Contract Documents.

.1 STANDARD SPECIFICATION FOR MUNICIPAL SERVICES.
Table of Contents Dated January 2023.

.2 Overview

.3 Information to Tenderers

.4 Tender Form

.5 Supplementary Tender Information

.6 Form of Agreement

.7 Supplementary Specifications

.1 Section 00 74 00 – Supplementary Specifications

.8 Drawings:

Sheet 1 / Cover Sheet / Feb. 22, 2024/ Issued for Tender
Sheet 2 / Existing Conditions / Feb. 22, 2024/ Issued for Tender
Sheet 3 / Storm Sewer Replacement Profiles / Feb. 22, 2024/ Issued for Tender
Sheet 4 / Catch Basin Profiles / Feb. 22, 2024/ Issued for Tender
Sheet 5 / Wentworth Road - Plan & Profile / Feb. 22, 2024/ Issued for Tender
Sheet 6 / Payzant Drive - Plan & Profile / Feb. 22, 2024/ Issued for Tender
Sheet 7 / Roundabout Grading Plan / Feb. 22, 2024/ Issued for Tender
Sheet 8 / Roundabout Geometry/ Feb. 22, 2024/ Issued for Tender
Sheet 9 / Cross Section Details / Feb. 22, 2024/ Issued for Tender
Sheet 10 / Lane Markings and Signage Plan / Feb. 22, 2024/ Issued for Tender
Sheet 11 / Utility Pole Plan / Feb. 22, 2024/ Issued for Tender
Sheet 12 / Road Construction Details / Feb. 22, 2024/ Issued for Tender
Sheet 13 / Construction Notes and Details 1/ Feb. 22, 2024/ Issued for Tender
Sheet 14 / Construction Notes and Details 2/ Feb. 22, 2024/ Issued for Tender

.9 West Hants Regional Municipality's Municipal Services Specifications Manual (October 24, 2023).

.10 Nova Scotia Environmental Regulations.

.11 Geotechnical Report prepared by DesignPoint Engineering & Surveying Ltd., dated March 7, 2022.

.12 Addenda as issued and as confirmed in subsection 2.4 of Section 00 41 43.

ARTICLE A4 - CONTRACT PRICE

.1 The estimated Contract Price is the sum of the products of the estimated quantities multiplied by the appropriate Unit Prices in the tender form excluding the amount of Harmonized Sales Tax.

.2 The estimated Contract Price is $ _____

.3 All amounts shall be in Canadian funds.

.4 The amounts shall be subject to adjustment as provided in the Contract Documents.

ARTICLE A5 - PAYMENT

.1 The Owner shall pay the Contractor in Canadian funds for the performance of the Contract. The Contractor's invoice format is to be submitted for review and approval by the West Hants Regional Municipality prior to issuing the first invoice.

.2 The Owner shall make monthly payments on account to the Contractor for the Work performed, as certified by the Engineer, subject to a 10% holdback.

.3 The amount of the monthly payments shall be calculated as follows:

- .1 The quantity for each pay item on which actual work has been performed shall be measured.
- .2 For each Unit Price item this quantity shall be multiplied by the applicable Unit Price as provided in the Tender Form.
- .3 For each lump sum item, multiply the percent complete by the value of the lump sum item.
- .4 The total value of work completed for the payment period shall be calculated by adding the total of the products for all pay items from 3.2 and 3.3 of this Article.
- .5 The amount of the monthly payment shall be determined by deducting the 10% holdback and the total of all previous payments from the total value of such completed work as determined under 3.4 of this Article.
- .6 To the amount calculated above, the Harmonized Tax shall be added.

.4 The last day of the payment period shall be the last working day of the month.

.5 Upon Substantial Performance of the Work as certified by the Engineer the Owner shall pay to the Contractor the holdback monies then due in accordance with the provisions of Section 00 72 45 - General Conditions, subsection GC5.8 – PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE OF THE WORK.

.6 Upon the issuance of the final certificate for payment as certified by the Engineer, the Owner shall pay to the Contractor the balance of monies then due in accordance with the provision of Section 00 72 45 - General Conditions, subsection GC5.10 – FINAL PAYMENT.

.7 In the event of loss or damage occurring where payment becomes due under the property and boiler insurance policies, payment shall be made to the Contractor in accordance with the provisions of Section 00 72 45 - General Conditions, subsection GC11.1 - INSURANCE.

.8 If the Owner fails to make payment to the Contractor as it becomes due under the terms of the Contract, interest shall be payable as follows:

- .1 The annual interest rate applicable to the contract is 5% compounded monthly.
- .2 Interest shall be calculated on the overdue balance from the due date.

.9 The owner shall pay invoices no later than **30** days from date of receipt.

ARTICLE A6 - RECEIPT OF AND ADDRESSES FOR NOTICES IN WRITING

.1 Notices in writing shall be addressed to the recipient at the address set out below.

.2 The delivery of a notice in writing shall be by hand, courier, prepaid first class mail, or electronic communication during the transmission of which no indication of failure of receipt is communicated to the sender.

.3 A notice in writing delivered by one party in accordance with this Contract shall be deemed to have been received by the other party on the date of delivery if delivered by hand or courier, or if sent by

mail it shall be deemed to have been received five (5) Working Days after the date on which it was mailed.

.4 A notice in writing sent by a form of electronic communication shall be deemed to have been received on the date of its transmission provided that if such day is not a Working Day or if it is received after the end of normal business hours on the date of its transmission at the place of receipt, then it shall be deemed to have been received at the opening of business at the place of receipt on the first Working Day following the transmission thereof.

.5 An address for a party may be changed by notice in writing setting out the new address delivered to the other party in accordance with this Article.

.1 The Owner at West Hants Regional Municipality, 100 King Street, PO Box 3000
Windsor, NS, B0N 2T0

.2 The Contractor at _____

.3 The Engineer at DesignPoint Engineering & Surveying Ltd., 90 Western Parkway
Suite 500, Bedford, NS, B4B 2J3

ARTICLE A7 - QUANTITIES AND MEASUREMENT

.1 The quantities shown in Section 00 41 43 Tender Form - Schedule of Quantities and Unit Prices are estimated.

.2 Measurement for the actual quantities used to determine payments and Contract Price shall be in accordance with Section 01 22 00 - Measurement and Payment.

ARTICLE A8 - SUCCESSION

.1 The aforesaid Contract Documents are to be read into and form part of the Agreement and the whole shall constitute the Contract between the parties and subject to law and the provisions of the Contract Documents shall inure to the benefit of and be binding upon the parties hereto, their respective heirs, legal representatives, successors and assigns.

ARTICLE A9 - RIGHTS AND REMEDIES

.1 No action or failure to act by the Owner, Engineer, or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach thereunder, except as may be specifically agreed in writing.

ARTICLE A10 - TIME

.1 Time shall be construed as being of the essence of the Contract.

In witness whereof the parties hereto have executed this Agreement and by the hands of their duly authorized representatives.

SIGNED AND DELIVERED
In the presence of:

OWNER

Name of Owner

Witness

Signature

Name and Title of Person Signing

Witness

Signature

Name and Title of Person Signing

CONTRACTOR

Name of Contractor

Witness

Signature

Name and Title of Person Signing

Witness

Signature

Name and Title of Person Signing

N.B. Where legal jurisdiction, local practice or Owner or Contractor requirements calls for (a) proof of authority to execute this document, attach such proof of authority in the form of a certified copy of a resolution naming the representative(s) authorized to sign the Agreement for and on behalf of the corporation or partnership; or (b) affixing of a corporate seal, this Agreement should be properly sealed.

END OF SECTION

INTENT

.1 Construct the Work of this Contract in accordance with the Standard Specifications for Municipal Services as developed by the Nova Scotia Road Builders Association and the Consulting Engineers of Nova Scotia Joint Committee on Contract Documents, except as modified herein.

.2 These Supplementary Specifications modify the specification sections to which they refer.

.3 The Supplementary Specifications take precedence over the Standard Specification to which they refer.

SECTION 00 72 45: GENERAL CONDITIONS

GC5.4 BASIS OF PAYMENT FOR COST PLUS WORK

Delete clause 5.4.1 and replace with the following:

.1 Payment for cost plus work shall be based on the cost of such work, as provided in paragraph 5.4.2, plus a fee calculated as a percentage of the cost of such work, for the Contractor's overhead and profit. The percentage amount shall be 10% for work done by the Contractor's own forces and 10% for work done by Subcontractors. The percentage shall not be applied to the cost of Construction Equipment when such cost is based on rates which already include the Contractor's overhead and profit. Equipment rates shall be as per Nova Scotia Roadbuilders rental rates.

GC 5.8 PAYMENT OF HOLDBACK UPON SUBSTANTIAL PERFORMANCE

Add Clause GC 5.8.6 as follows:

.6 If, within sixty (60) days after the issue by the Engineer of the Certificate of Substantial Performance, the Contractor has not corrected all the deficiencies, the Owner shall retain sufficient money to cover the cost of completing the said deficiencies, as determined by the Engineer, in addition to holding monies retained in accordance with the Contract and subject to appropriate legislation of Nova Scotia.

GC 6.5 – DELAYS

Add the following subsections:

.6 Notwithstanding the above subsections, time shall be construed as being of the essence of the Contract. The date of expiring of the time allowed in accordance with the Contract for substantial performance of the Work shall be termed the Date for Completion. Should the Contractor fail to substantially perform the Work by the Date for Completion, the period of time from the Date for Completion to the date of Substantial Performance of the Work as determined by the Engineer, shall be termed the Period of Delay.

.7 In the event of there being a Period of Delay caused by the Contractor, the Contractor shall be liable for and shall pay to the Owner the cost of continuance of supervision during the Period of Delay, and all additional fees, disbursements and costs incurred by the Owner by reason of there being such a period of delay. The said sum or sums in view of the difficulty of ascertaining the losses which the Owner may suffer by reason of delay in the Performance of the said Works, is hereby agreed upon, fixed and determined by the parties hereto as liquidated damages that the Owner will suffer by reason of said delay and default and not as a penalty. The value of the liquidated damages shall be $1000.00 per day for the duration of the Period of Delay. The Owner may deduct the amount of such liquated damaged from any monies payable to the Contractor under the contract.

Delete Subsection GC 6.7 – Quantity Variations and replace with the following:

GC 6.7 QUANTITY VARIATIONS

.1 The Work may be completed in full or in part subject to funding which may lead to substantial quantity adjustments. Due to the variability of the scope of work, Unit Prices issued at the time of Tender close will be final and will not be subject to adjustment upon quantity variation.

GC 11.1 – INSURANCE

Make the following changes to Section GC11.1:

GC11.1.1.1 Replace "$2,000,000 per occurrence with a property damage deductible not exceeding $2,500" with "$10,000,000 per occurrence with a property damage deductible not exceeding $25,000"

Add:
This policy shall include but not be limited to:

a) Name the Municipality of the District of West Hants as an additional insured
b) Cross-liability and severability of interest
c) Blanket Contractual
d) Products and Completed Operations
e) Premises and Operations Liability
f) Personal Injury Liability
g) Contingent Employers Liability
h) Municipality of the District of West Hants and Proponents Protective
i) Broad Form Property Damage
j) Firefighting Expenses
k) Elevator and Hoist Liability
l) Attached Machinery – while loading & unloading

The following may apply:

a. If applicable to the construction project described in the Agreement, coverage shall include shoring, blasting, excavation, underpinning, demolition, pile driving, caisson work and work below ground surface including tunneling and grading.
b. If the work involves asbestos removal, the policy shall either provide coverage for this exposure or coverage shall be provided through a Professional Liability Policy.
c. To achieve the desired limits, umbrella or excess liability insurance may be used.

GC11.1.1.2 Replace "limits of not less than $2,000,000 per occurrence" with "limits of not less than $5,000,000 per occurrence"

GC11.1.1.3 Replace all instances of "$2,000,000" with "$5,000,000".

Add Clause GC 11.1.1.6 as follows:

.6 The Contractor shall carry a Contractor's Pollution Liability Policy, underwritten by an insurer licensed to conduct business in the Province of Nova Scotia for a limit of not less than $10,000,000. Coverage shall include bodily injury, property damage, clean-up, and remediation costs.

Delete Subsection GC 11.2 – Contract Security and replace with the following:

GC 11.2 CONTRACT SECURITY

. 1 The Contractor shall provide to the owner within fourteen (14) days of acceptance of the Tender a Performance Bond and a Labour and Materials Bond each in the amount of 50% of the Estimated Contract Price.

GC 12.3 WARRANTY

Add the following sections:

.7 The Contract requires an operational combination of several components comprising the Work which are customarily guaranteed by their suppliers. Under the terms of this Contract, the Contractor shall provide a guarantee of the Works for a period of one (1) year following the date of Substantial Performance of Work. The terms of the guarantee shall be as follows:

1 Where failure or incipient failure of the material is apparent, the Contractor shall actively commence repair or other remedy not more than twenty-four (24) hours after receiving due notice.

2 If the Contractor on being notified does not for any reason commence repairs within twenty-four (24) hours, the Owner shall have the right to have repairs made by others as necessary to restore, complete, or continue service. The cost of such repairs by others is to be borne by the Contractor. The Owner shall at all times inform or attempt to inform the Contractor before hiring others to affect any repairs and it shall be at all times the Contractor's right to be informed as soon as possible of difficulties and proposed remedial action by others and to make or where practical to complete such repairs at any other time of the guarantee period in preference to others.

3 The employment of some other person or persons for reasons set out shall in no way affect the Contractor's obligations or liability hereunder or relieve him of the performance and fulfilment of any or all of his covenants, undertakings, obligations or duties under the Contract.

4 After the acceptance by the Owner and during the guarantee period, the burden of maintenance shall fall upon the Owner. In the event of damage, failure or incipient failure of any part or parts directly attributable to inadequate or improper maintenance, the Contractor shall be responsible for remedial action, but the cost of such repairs will be reimbursed by the Owner.

5 If the Contractor arranges that the manufacturer of some component or some other party approved by the Owner provide the guarantee on a sub-contract basis, he may designate the direct implementer of the guarantee as his agent under the Contract in which case due notice to the agent will be taken as due notice to the Contractor. This will be a matter for Contractor's convenience only, and shall in no way affect the Contractor's obligations and liabilities hereunder or relieve him from the performance and fulfilment of any or all of his covenants, undertakings, or duties under this contract.

6 In emergency situations, the Owner reserves the right to make appropriate repairs at the Contractor's expense.

SECTION 01 10 00: GENERAL REQUIREMENTS

Delete Subsection 2 – SUMMARY OF WORK and replace with the following:

2. SUMMARY OF WORK

.1 The work includes, but is not limited to, the following:

a. The construction of a roundabout at the intersection of Payzant Drive and Wentworth Road, as shown in the project documents.
b. Lay out of proposed cut and fill slope limits and review with Municipality staff prior to construction.
c. Installation and testing of municipal water and stormwater drainage infrastructure as shown in the project documents. Contractor to use extreme caution when working near existing water mains, sewer mains, and service laterals.
d. Removal of existing buried water and sewer infrastructure located within the project area as indicated on the project drawings.
e. Street construction for the roundabout including but not limited to subgrade, gravels, asphalt, curb, sidewalks, concrete medians, grass pavers, center island landscaping, street signs and bases, raised crosswalks, rectangular rapid flashing beacons, and traffic markings.
f. Installation of retaining walls and relocation of concrete pillars and signs as shown in the project documents.
g. Locate all existing infrastructure prior to construction and provide two week for review by the Engineer and the Municipality.
h. Provision of temporary water supply to all customers connected to the affected water mains, as required.
i. Removal and disposal of the existing road structure as required to complete the work.
j. Removal, disposal, and replacement of all sidewalks, curbs, asphalt, and landscaping within the construction limits, as indicated on the project drawings.
k. Provision of environmental protection for the duration of the project, including one year following project substantial completion.
l. Obtaining all necessary approvals and permits from the appropriate regulatory bodies as well as any associated costs.
m. Testing of services in accordance with Standard Specifications for Municipal Services, dated January 2023.
n. Dewatering of any and all excavations, erosion and sediment control including silt fences, flow checks, ground covers, water treatment, and all other environmental controls required during the course of the Work.
o. All traffic control and detours as per the Municipality of the District of West Hants and Nova Scotia Department of Public Works (NSDPW) Temporary Workplace Traffic Control Manual.
p. Removal, disposal, relocation and replacement of street signs as indicated.
q. Shoring of utility poles, as needed.
r. Clearing, grubbing (disposed of off-site), excavation of common, removal and off-site disposal of surplus material, and importing of fill.
s. Coordination with utilities for location of any existing infrastructure and alteration of this infrastructure. Contractor to notify Engineer of any discrepancies and to allow 2 weeks for review.
t. Coordinate construction with adjacent property owners. Maintain safe access to driveways and properties for the duration of the project. Provision of temporary access to all residents affected by the work, as required and directed by the Municipality.
u. Reinstatement of all disturbed areas to pre-construction condition or better.
v. All incidental items and costs associated with completing the work.

Add the following to Subsection 3 – SCHEDULING AND COORDINATION:

3. SCHEDULING AND COORDINATION

.5 The Contractor is to schedule the work such that the works are completed by November 30th, 2024, unless agreed otherwise with the Municipality.

.6 Contractor is to be familiar with Spring Weight Restrictions and plan accordingly.

Delete subsection 8 – RECORD DRAWINGS and replace with the following:

8. RECORD DRAWINGS

.1 The Contractor shall maintain project Record Drawings and accurately record significant deviations from Contract Drawings caused by site conditions and changes ordered by the Engineer.
.2 Mark changes and deviations in red on one set of whiteprints.
.3 Record the following significant deviations:
  .1 Depths of various elements of works in relation to geodetic elevation.
  .2 Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface such as foundation corners, etc. to the satisfaction of the Engineer.
  .3 Field changes of dimensions.
  .4 Other significant deviations which are concealed in construction and cannot be identified by visual inspection.
.4 At completion of the project and prior to final inspection, neatly transfer records to second set of whiteprints using fine, red marker. Neatly print lettering and number in size to match original. Line may be drawn free hand but shall be neat and accurate. Add at each Drawing Title Block Note: As- Built.
.5 Submit this set of Record Drawings to the Municipality along with a digital copy of all survey points.
.6 In the event that record drawings are not provided by the Contractor, the Value of the record drawings is agreed to be the cost incurred by the Owner to collect the data and produce the drawings and is agreed to be valued at $5000.00 + HST; such costs being removed from the final payment if the drawings are not properly provided.

Delete subsection 10 – TEMPORARY SITE FACILITIES and replace with the following:

10. TEMPORARY SITE FACILITIES

.1 Temporary Site Facilities are not required for this project.

Add the following to Subsection 12 – TRAFFIC CONTROL:

12. TRAFFIC CONTROL

.6 Provide access to all properties during work.
.7 Provide detour plans as required in consultation with the West Hants Regional Municipality and Nova Scotia Department of Public Works.
.8 Signs to be placed as directed by the Municipality indicating that the area is under construction and use is limited to local traffic only.
.9 Provide at minimum one lane of traffic flow at all times, unless approved by the West Hants Regional Municipality traffic authority.
.10 Coordinate all traffic disruptions with the Nova Scotia Health Authority and maintain access for emergency services.

Add the following subsections:

17. UTILITIES

.1 Contractor is responsible for obtaining permits from all utilities such as a Safe Clearance Report from Nova Scotia Power for Work near utilities.

.2 The existence, location, and elevation of underground utilities, utility poles, guy wires, and signs are not guaranteed, and notwithstanding any provision in the Contract Documents, the Contractor shall be responsible for determining the location and elevation of all sewer, water, or other such structures or utilities. The contractor shall coordinate and include in the contract price any required service supplied by any utility, company or provincial department.

.3 Unless designated for removal under this Contract, sustain in place and protect from damage any and all piping, conduits, cables, and all other structures in the approximate locations of buried services or structures, carefully excavate by hand, or similar means to expose these buried services or structures. Any utilities which cross an excavation must be properly supported or shored to prevent settlement. Where trenching is to be done under existing utilities, such utilities shall be shored before excavation commences and shoring is to be left in place. Notify the owners of such utilities or services prior to excavation.

.4 Repair immediately all piping conduits, cables, and all other structures damaged by the Contractor's operations. Provide a letter from the utility stating that any services damaged during construction have been repaired to the utility company's approval. Replace all signs as near as possible to their original location.

.5 The work includes coordination with underground and overhead utility owners to allow excavation in close proximity to their utilities. The contractor shall allow for all incidental costs arising from excavations near existing utility poles, underground utilities, and overhead utilities. Coordination with utilities will also be required during the work as the overhead utilities and poles within the work site may require shoring during the course of construction. No claim of delay will be accepted based on coordination activities between the contractor and the utilities.

18. FLOATATION AND FLOODING

.1 Prevent floatation and flooding during construction of the Work. Make good any damage to pipes or structures caused by floatation and flooding at no extra cost to the Contract.

.2 De-water all excavations and remove accumulations of water prior to backfilling.

.3 Dispose of water drained or pumped such that the Work and adjacent properties are not damaged.

.4 Temporary caps must be placed on all pipe ends when not actively being worked on.

19. DAMAGE AND INJURY

.1 Immediately inform the Engineer of any damage or injury to any persons, property, services, or materials.

.2 Reinstate survey markers, monuments, and survey pins disturbed or covered during construction under the direction of a qualified provincial land surveyor. Include costs in Contract Price.

.3 Any Nova Scotia Department of Public Works or Nova Scotia Power infrastructure that is moved or damaged, shall be reinstated to their specifications and standards.

Section 01 22 00: MEASUREMENT AND PAYMENT

GENERAL

Delete subsection 2 and 3 and replace with the following:

2. For each item include all of the following as required where individual quantities are not provided in the Tender Form: project sign, mobilization, demobilization, traffic control including preparation of traffic control plan, assistance to the Engineer, coordination with all utilities, locating existing infrastructure (including but not limited to service laterals, crossings, and connection points), coordination with home owners, NSPI or other utility charges when working under transmission lines on in the proximity of power or communication infrastructure, environmental protection, protection of existing trees, clearing and grubbing, common and rock excavation,

shoring, dewatering, protection and shoring of existing pipes and infrastructure, utility pole shoring, bedding, backfilling, compaction, removal and disposal of surplus material, removal and disposal of unsuitable material, importation and placement of material, joint restraints and thrust blocks, sleeving, insulation, removal and disposal of existing infrastructure (as required), connections to existing laterals, protective coatings, flushing, pressure testing, vacuum and mandrel testing, disinfection, dechlorination, corrosion protection, cleaning, video inspection prior to Substantial Performance of the Work and at the end of the Warranty Period, marker stakes, tracer wire and test stations, all electrical wiring, reinstatement, shop drawings, manhole and catchbasin frames and covers, rocklining, valve covers, grade adjustment rings, contingency plan and materials to address an existing watermain break, waterproofing membrane, all incidentals, and any other work and materials shown on the drawings.

EARTHWORK

Delete subsection 2 and replace with the following:

2. Grubbing

Unit of Measurement: square metre (m^2)

Method of Measurement: plane measure of indicated area.

This item includes: removal and disposal of all stumps, roots, downed timber, embedded logs, rootmat, humus, and topsoil from areas indicated.

Add new subsections as follows:

8. Exploratory Digs

Unit of Measurement: each (ea)

This item includes: excavation to confirm the horizontal and vertical locations of the existing water and sewer infrastructure, coordination with the Owner, and reinstatement of all disturbed areas. Locations to be provided to the Municipality and Engineer for review. Allow two weeks for review.

10. Karst Topography Cavern Infill (Provisional)

This is a provisional item in the event that during excavation, voids or caverns in gypsum bedrock (Karst Topography) are encountered. No payment will be made under this item unless authorized by the Engineer.

.1 Less than or equal to 5 cubic metres

Unit of Measurement: each (ea)

This item includes: cleaning off and washing down gypsum so that the void or cavern is accessible, pump or place non-shrink fill, and supply of all materials, labour, equipment, and incidentals to complete this work. Reinstatement to be reviewed and certified by project geotechnical engineer.

.2 Greater than 5 cubic metres

Unit of Measurement: cubic metre (m^3)

This item includes: cleaning off and washing down gypsum so that the void or cavern is accessible, pump or place non-shrink fill, and supply of all materials, labour, equipment, and incidentals to complete this work. Reinstatement to be reviewed and certified by project geotechnical engineer.

WATER SYSTEM

Delete subsection 11 and replace with the following:

11. Pipe

Unit of Measurement: metre (m)

Method of Measurement: along centreline of pipe through fittings, valves, and valve chambers.

This item includes: supply and installation of pipe complete with all fittings and thrust restraints, insulation, tracer wire and test stations, anodes, common excavation, removal and disposal of surplus material, import of material, location of and connection to existing services, bedding and pipe protection gravels, backfilling, testing, test stations, chlorination and de-chlorination, flushing, disinfection, dewatering, trench support, stabilization, and any other associated work or materials shown on the drawings not included in any other pay item.

Delete subsection 12 and replace with the following:

12. Fire Hydrants

.1 Installation

Unit of Measurement: each (ea)

This item includes: supply and installation of hydrant complete with lead, anchor tee, gate valve, valve box, anodes, thrust blocks, insulation, bedding and pipe protection gravels, geosynthetic fabric, tracer wire and test stations, common excavation, backfilling, dewatering, trench support, stabilization, and any other associated work or materials shown on the drawings not included in any other pay item.

.2 Relocation

Unit of Measurement: each (ea)

This item includes: relocation of existing hydrant, supply and installation of lead, anchor tee, gate valve, valve box, anodes, thrust blocks, insulation, bedding and pipe protection gravels, geosynthetic fabric, tracer wire and test stations, common excavation, backfilling, dewatering, trench support, stabilization, and any other associated work or materials shown on the drawings not included in any other pay item.

Delete subsection 14 and replace with the following:

14. Direct Buried Valves

Unit of Measurement: each (ea)

This item includes: supply and installation of direct buried valves complete with valve box, appurtenances, anodes, common excavation, backfilling, finished grade adjustment, and any other associated work or materials shown on the drawings not included in any other pay item.

Delete subsection 16 and replace with the following:

16. Connections to Existing Main

Unit of Measurement: each (ea)

This item includes: locating existing main, and supply and installation of pipe, nipples, reducers, fittings, common excavation, backfilling, and any other associated work or materials shown on the drawings not included in any other pay item. This item also includes producing and distributing temporary shutdown notices to affected customers.

Delete subsection 18 and replace with the following:

18. Temporary Water

Unit of Measurement: Lump Sum (L.S)

This item includes, but is not limited to: the supply of all labour, material and equipment required for installation, maintenance and removal of a temporary main line and service laterals complete with pipe, valves, backflow prevention device (sized to match temporary main line diameter), vacuum breakers at the connection to customers, insulation and protection from freezing, chlorination/ de-chlorination of line, testing (including bacteria and pressure), coordination with property owners, temporary laterals, and all fittings and incidentals necessary for a complete installation. Coordinate temporary lateral connections with property owners. Limits of temporary water service may extend outside limits of construction. Submit a proposed plan 2 weeks prior to installation for review by the Owner and Engineer. This item also includes installation of approved vehicle and pedestrian crossing protective measures. This item also includes producing and distributing temporary shutdown notices to affected customers.

Add new subsections as follows:

19. Cap and Abandonment of Existing Main

Unit of Measurement: each (ea)

This item includes: locating existing main, and supply and installation of fittings, grout, common excavation, backfilling, and any other associated work or materials shown on the drawings not included in any other pay item.

STORM SEWER

Delete subsection 31 and replace with the following:

31. Pipe

Unit of Measurement: metre (m)

Method of Measurement: along centreline of pipe through manholes.

This item includes: supply and installation of pipe complete with all fittings, insulation, sleeves, common excavation, removal and disposal of surplus material, import of material, bedding and pipe protection gravels, backfill, testing, flushing, video inspection, and any other associated work or materials shown on the drawings not included in any other pay item.

Delete subsection 32 and replace with the following:

32. Manholes

Unit of Measurement: each (ea)

This item includes: supply and installation of manhole, frame, cover, waterproofing membrane (such as Blueskin,

full manhole to be covered with waterproofing, including sides, bottom, and top of manhole), grout, adjustment to finished grade, common excavation, backfilling, bedding gravels, and any other associated work or materials shown on the drawings not included in any other pay item.

Delete subsection 33 and replace with the following:

33. Catch Basins

Unit of Measurement: each (ea)

This item includes: supply and installation of catch basins, frames and grates, waterproofing membrane (such as Blueskin, full structure to be covered with waterproofing, including sides, bottom, and top of structure), grout, grade adjustment (minimum 300mm), common excavation, backfilling, bedding gravels, and any other associated work or materials shown on the drawings not included in any other pay item.

Delete subsection 34 and replace with the following:

34. Catch Basin Leads

Unit of Measurement: metre (m)

Method of Measurement: along centreline of pipe through catch basins and manholes.

This item includes: supply and installation of pipe complete with all fittings, insulation, sleeves, common excavation, removal and disposal of surplus material, import of material, bedding and pipe protection gravels, backfill, and any other associated work or materials shown on the drawings not included in any other pay item.

Delete subsection 36 and replace with the following:

36. Connections to Existing

Unit of Measurement: each (ea)

This item includes: locating existing structure, supply and installation of all fittings, core drilling and sealing as indicated, common excavation, disposal of surplus material, bedding and pipe protection gravels, backfilling, and any other associated work or materials shown on the drawings not included in any other pay item.

Delete subsection 37 and replace with the following:

37. Culverts

Unit of Measurement: metre (m)

Method of Measurement: along centreline of pipe.

This item includes: supply and installation of culvert complete with all fittings, common excavation, removal and disposal of surplus material, pipe bedding, backfilling, and reinstatement of all disturbed areas not covered by other items (including, but not limited to, gravels, asphalt, sidewalk, and landscaped areas).

Delete subsection 39 and replace with the following:

39. Precast Headwall

Unit of Measurement: each (ea)

This item includes: supply and installation of headwall including common excavation, backfilling, bedding and grate as indicated.

STREET CONSTRUCTION

Delete subsection 41 and replace with the following:

41. Gravels

Unit of Measurement: square metre (m^2)

Method of Measurement: slope measure of indicated area at specified thickness.

This item includes: supply, placement, and compaction of gravel as indicated.

Delete subsection 43 and replace with the following:

43. Asphalt Concrete

Unit of Measurement: square metre (m^2)

Method of Measurement: slope measure of indicated area at specified thickness.

This item includes: cleaning, supply, placement, and compaction of asphaltic concrete as indicated including dry sweeping milled surfaces prior to tacking, tack coat, temporary pavement markings, adjustments to the top of castings, line painting, traffic markings, adjustments, and saw cutting as necessary. This item also includes supply, placement and compaction of asphalt concrete ramps installed at all limits including side streets and pedestrian ramps using hot mix asphalt (or approved equivalent) and a bond separator. Asphalt ramps are to be installed before work is completed for the day, and before the area is opened to live traffic. Asphalt ramps to be constructed to at least a 20 to 1 horizontal to vertical ratio.

Delete subsection 44 and replace with the following:

44. Curb

Unit of Measurement: metre (m)

Method of Measurement: along top face of curb.

This item includes: supply and installation of concrete curb and base gravels, including supply and placement of backfill as indicated, and removal and disposal of surplus material.

Delete subsection 45 and replace with the following:

45. Concrete Sidewalk

Unit of Measurement: square metre (m^2)

Method of Measurement: slope measure of indicated area at specified thickness.

This item includes: supply and installation of concrete, wire mesh where required, reinforcing as indicated on the project drawings, base gravels, backfill, removal and disposal of surplus material, and reinstatement of all disturbed areas not covered by other items (including, but not limited to, gravels, asphalt, sidewalk, and landscaped areas).

Delete subsection 46 and replace with the following:

46. Tactile Walking Surface Indicators

Unit of Measurement: each (ea)

This item includes: supply and installation of Duralast Cast Iron Detectable Warning Plate tactile walking surface indicators as per manufacturer's instructions and as indicated on the project drawings. This item also includes any TWSI wedges or incidentals as required.

Delete subsection 50 and replace with the following:

50. Adjust Existing Manhole Frames and Covers

Unit of Measurement: each (ea)

This item includes: common excavation and backfill, supply and installation of grade rings and grout, raising and lowering existing frames and covers to grades as indicated on the project drawings, removal and disposal of all debris accumulated during construction, and reinstatement of all disturbed areas not covered by other items (including, but not limited to, gravels, asphalt, sidewalk, and landscaped areas).

Delete subsection 52 and replace with the following:

52. Segmental Retaining Wall

Unit of Measurement: square metre (m^2)

Method of Measurement: total area of wall face.

This item includes: common excavation, removal and disposal of surplus material, importation of material, installation of foundation preparation and bedding, supply and installation of modular wall units, geotextile, guards, gravel, infill soil, backfilling, drainage, design, and shop drawings stamped by a Professional Engineer (licensed to practice in Nova Scotia). In addition to normal wall design, design to consider global stability and handrail placement. Only the top exposed faces of retaining walls are required to be aesthetic in nature. Buried sections may have simple/irregular finishes as long as they maintain their structural integrity.

Add new subsections as follows:

53. Street Signs and Bases

Unit of Measure: each (ea)

This item includes: supply and installation of retroreflective street signs conforming to the Manual on Uniform Traffic Control Devices, concrete bases (including provision of shop drawings for approval by the Municipality), galvanized posts and hardware (Telespar), common excavation, infill soil, removal and disposal of existing sign, post, base, and surface reinstatement. Exact locations and sign details to be determined by the Municipality at the time of construction.

54. Stone Pillar Reinstatement

Unit of Measurement: Lump Sum (L.S.)

This item includes: relocation and reinstatement of existing stone pillars, supply and installation of new stone pillars matching the aesthetics of the existing pillars, common excavation, removal and disposal of surplus material, importation of material, bedding, backfilling, and reinstatement of all disturbed areas not covered by other items (including, but not limited to, gravels, asphalt, sidewalk, and landscaped areas). This item also includes blending the reinstated pillars into the existing wall as indicated on the project drawings, and coordination with the property owner.

55. Sign Relocation

Unit of Measurement: Lump Sum (L.S.)

This item includes: removal and relocation of existing signs as indicated on the project drawings, and reinstatement of all disturbed areas not covered by other items (including, but not limited to, gravels, asphalt, sidewalk, and landscaped areas). Relocation of signs to be coordinated with the sign owner and Municipality.

56. Raised Crosswalk

Unit of Measurement: each (ea)

This item includes: supply and installation of raised crosswalks as per the project drawings. Cross sections of every constructed raised crosswalk are to be surveyed per details provided on the project drawings to verify that raised crosswalk has been constructed as intended and falls within required tolerance range. Contractor to provide survey information to the Engineer for review. Raised crosswalk will be acceptable only if it forms a shape relative to the design curve within the tolerance limits. Contractor shall be responsible to take steps necessary to correct any deficiencies that fall outside of required tolerance range. Include the supply and installation of two (2) Rectangular Rapid Flashing Beacons (RRFB) as per the project drawings, including all appurtenances and incidentals required for a complete and functioning installation and any other associated work or materials shown on the drawings not included in any other pay item.

LANDSCAPING

Delete subsection 61 and replace with the following:

61. Topsoil and Sod

Unit of Measurement: square metre (m^2)

Method of Measurement: slope measure.

This item includes: excavation, scarification of the existing soil, supply, placement and compaction of 100 mm topsoil, lime, fertilizer, sod, required accessories, and maintenance.

Delete subsection 62 and replace with the following:

62. Topsoil and Seed

Unit of Measurement: square metre (m^2)

Method of Measurement: slope measure.

This item includes: excavation, scarification of the existing soil, supply, placement and compaction of 100 mm topsoil, lime, fertilizer, mulch, erosion control agent, seed, and maintenance.

Add new subsections as follows:

66. Grass Pavers

Unit of Measurement: square metre (m^2)

Method of Measurement: slope measure of indicated area.

This item includes: excavation, bedding material, and supply and placement of GrassStone (Shaw Brick Item #7169) grass pavers (or approved equivalent) complete with topsoil and sod as per manufacturer's instructions and as indicated on the project drawings.

67. Center Island Landscaping

Unit of Measurement: Lump Sum (L.S.)

This item includes: preparation of subgrade, supply and placement of clearstone, filter fabric, and bedding sand as indicated on the project drawings, supply and placement of vegetation, lime and fertilizer, accessories and maintenance, common excavation, import of material, and infill soil. Placement and quantity of vegetation as directed by the Municipality. Vegetation species to include (unless otherwise directed by the Municipality):

- Winterberry
- Dogwood
- Fragrant Sumac
- Joe Pye Weed
- Swamp Milkweed
- Palm Sedge.

ADDITIONAL ITEMS

Add new subsection as follows:

Delete subsection 73 and replace with the following:

73. Replacement of Unsuitable Material w/ Surge Rock (Provisional)

Unit of Measurement: cubic metre (m^3)

Method of Measurement: surface-to-surface volume method between topographical survey taken before and after the placement and compaction of replacement material.

This item includes: supply, placement, and compaction of surge rock as directed by the Engineer. No payment will be made under this item unless authorized by the Engineer. This item also includes the supply and placement of filter fabric.

Add new subsection as follows:

76. Infrastructure Removal

Unit of Measurement: Lump Sum (L.S.)

This item includes: locating existing infrastructure to be removed, common excavation, removal and disposal of existing infrastructure in the project area as indicated on the project drawings, replacement of required volume with select material as required and backfilling as required. This item includes, but is not limited to, existing asphalt, road gravels, curbing, sidewalk, water infrastructure, and stormwater infrastructure. Dispose of infrastructure at locations approved for the relevant material.

77. Trench Excavation – Contaminated Material

Unit of Measurement: cubic metre (m^3)

Method of Measurement: average end area method for volume of contaminated material based on theoretical trench volume.

This item includes: all excavation, removal, and disposal of contaminated material exceeding Tier 1 RBSL's and CCME commercial guidelines as indicated in Section 39 00 00 – Standard Detail 01 22 00 – 01 and disposal as per requirements of NSE. Written authorization of Engineer required.

ENVIRONMENTAL PROTECTION

Add new subsection as follows:

90. Environmental Measures

Unit of Measurement: Lump Sum (L.S.)

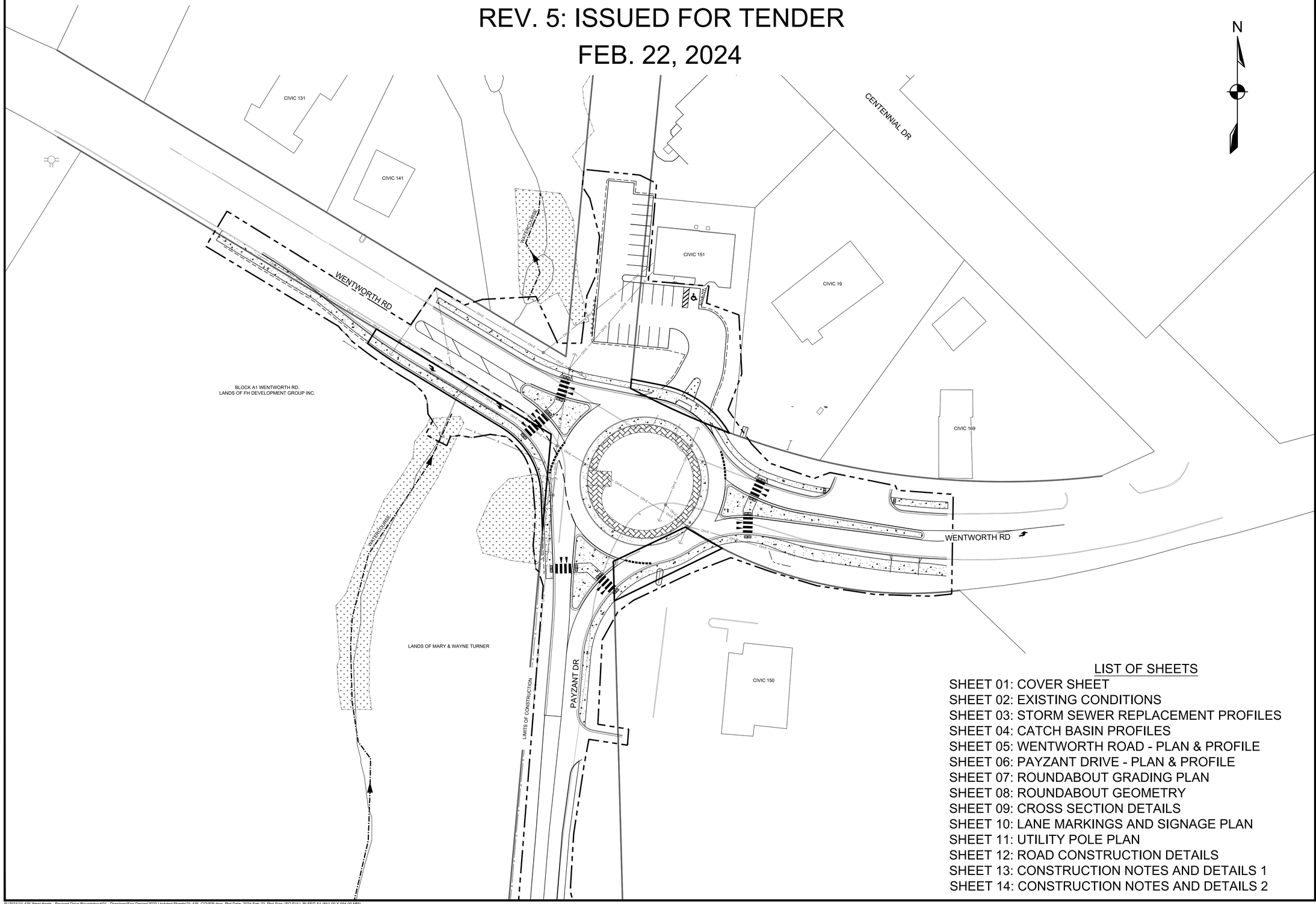
This item includes: supply and installation of all environmental protection measures required to complete the project works, including all erosion and sedimentation control measures. Erosion and sedimentation control measures shall be in accordance with the Erosion and Sedimentation Control Handbook for Construction Sites by Nova Scotia Environment, most recent edition.

END OF SECTION

PAYZANT DRIVE ROUNDABOUT
WINDSOR, NOVA SCOTIA

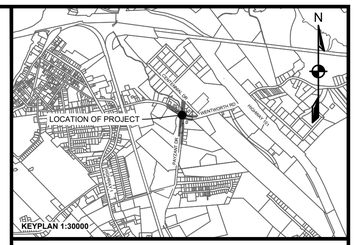
REV. 5: ISSUED FOR TENDER

FEB. 22, 2024



LIST OF SHEETS

SHEET 01: COVER SHEET
SHEET 02: EXISTING CONDITIONS
SHEET 03: STORM SEWER REPLACEMENT PROFILES
SHEET 04: CATCH BASIN PROFILES
SHEET 05: WENTWORTH ROAD - PLAN & PROFILE
SHEET 06: PAYZANT DRIVE - PLAN & PROFILE
SHEET 07: ROUNDABOUT GRADING PLAN
SHEET 08: ROUNDABOUT GEOMETRY
SHEET 09: CROSS SECTION DETAILS
SHEET 10: LANE MARKINGS AND SIGNAGE PLAN
SHEET 11: UTILITY POLE PLAN
SHEET 12: ROAD CONSTRUCTION DETAILS
SHEET 13: CONSTRUCTION NOTES AND DETAILS 1
SHEET 14: CONSTRUCTION NOTES AND DETAILS 2



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ISSUE	DATE	DESCRIPTION
5	FEB. 22, 2024	ISSUED FOR TENDER
4	FEB. 15, 2024	ISSUED FOR REVIEW
3	AUG. 16, 2023	REVISED CROSSWALKS
2	JUN. 16, 2023	REVISED ROUNDABOUT ENTRANCE
1	JUL. 13, 2022	DRAFT

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REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. J. SKETCHLEY — 11560 — PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. T. LEAHY — 20200013 — PROVINCE OF NOVA SCOTIA

CLIENT

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PROJECT DESCRIPTION

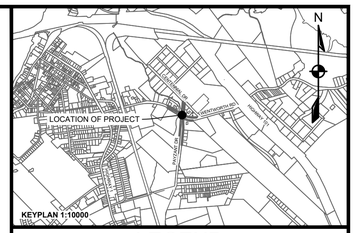
PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

COVER SHEET

Drawn	Engineer	Project No.	Drawing No.
J. DWYER	P. BURGESS	21-435	C-T01
Scale 1:500	Filename 21-435_COVER.dwg		01 of 14



LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
WA-E	WATER PIPE	WA WA
SA-E	SANITARY PIPE	SA SA
ST-E	STORM PIPE	ST ST
GAS-E	NATURAL GAS MAIN	GAS
	WATER LATERAL	
	SANITARY LATERAL	
	STORM LATERAL	
	NATURAL GAS LATERAL	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
STREET TREE			GLB		
			URD		

METRES 5 0 10 15

1:250

ISSUE	DATE	DESCRIPTION
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DATE 22/02/2024
A. J. SKETCHLEY
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A. T. LEAHY
20200013
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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

EXISTING CONDITIONS

Drawn	Engineer	Project No.	Drawing No.
J. DWYER	P. BURGESS	21-435	C-TR02
Scale 1:250	Filename 21-435_TR01_EXISTING CONDITIONS.dwg		02 of 14

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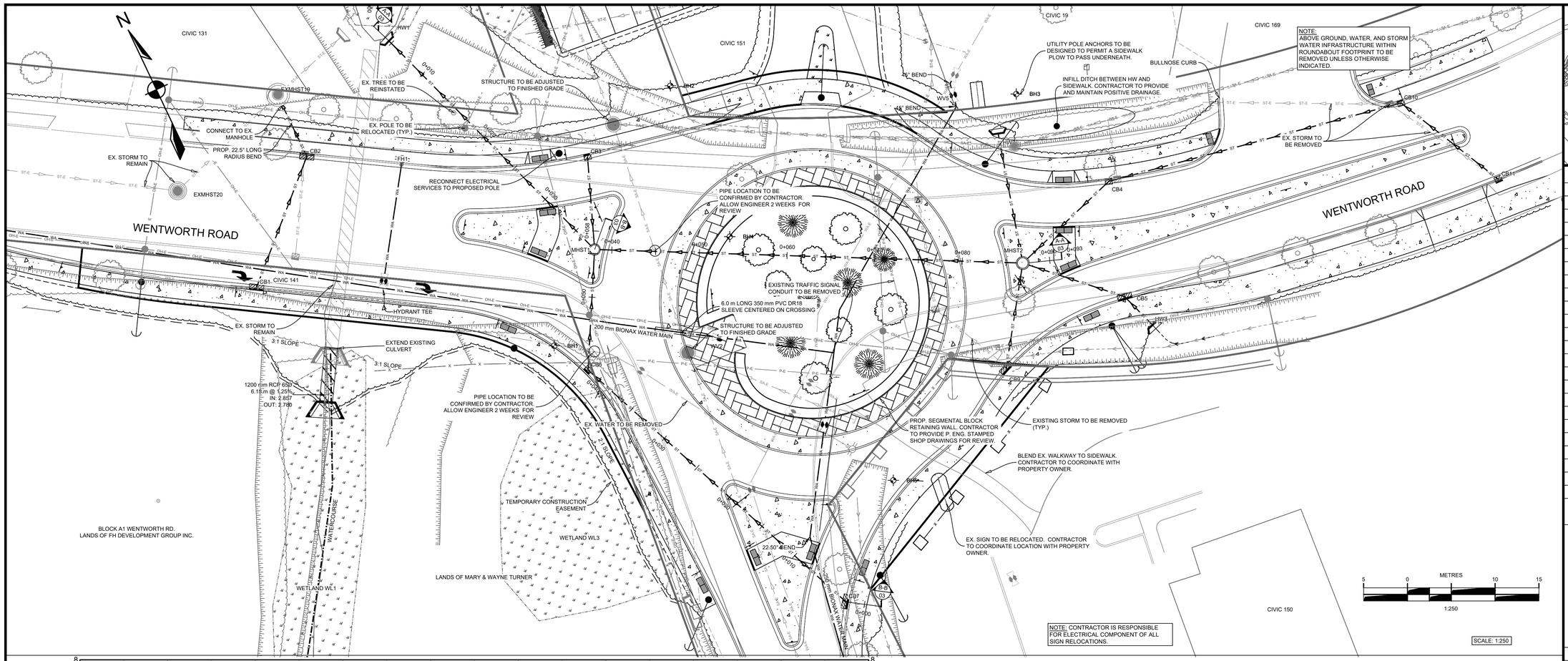

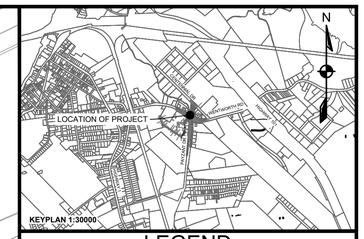

LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
WA-E	WATER PIPE	WA WA
SA-E	SANITARY PIPE	SA SA
ST-E	STORM PIPE	ST ST
GAS-E	NATURAL GAS MAIN	GAS
	WATER LATERAL	
	SANITARY LATERAL	
	STORM LATERAL	
	NATURAL GAS LATERAL	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X X	FENCELINE	X X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
STREET TREE			GLB		
			URD		

ISSUE	DATE	DESCRIPTION
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REGISTERED PROFESSIONAL ENGINEER — DATE: 22/02/2024 — A. T. LEAHY — 20200013 — PROVINCE OF NOVA SCOTIA

CLIENT

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PROJECT DESCRIPTION

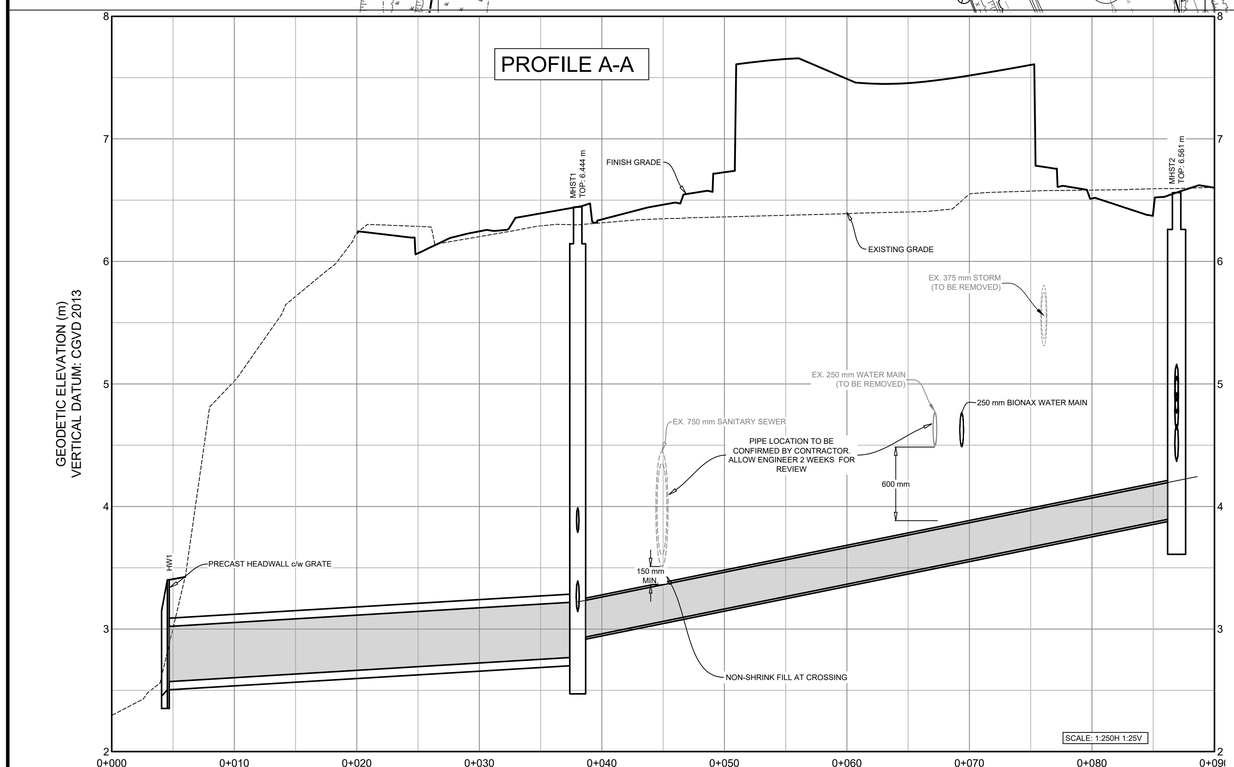
PAYZANT DRIVE ROUNDABOUT

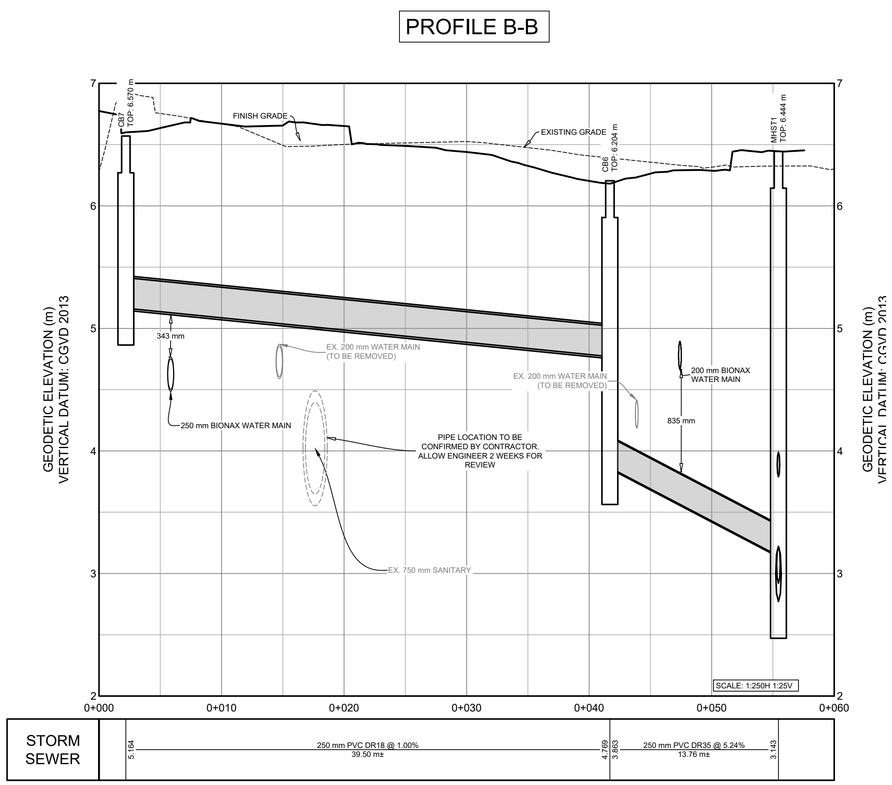
WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

STORM SEWER REPLACEMENT PROFILES

Drawn	Engineer	Project No.	Drawing No.
J. GALLANT	A. SKETCHLEY	21-435	C-PP03
Scale: AS SHOWN	Filename: 21-435_PP02_STORM PROFILES 1.dwg		03 OF 14





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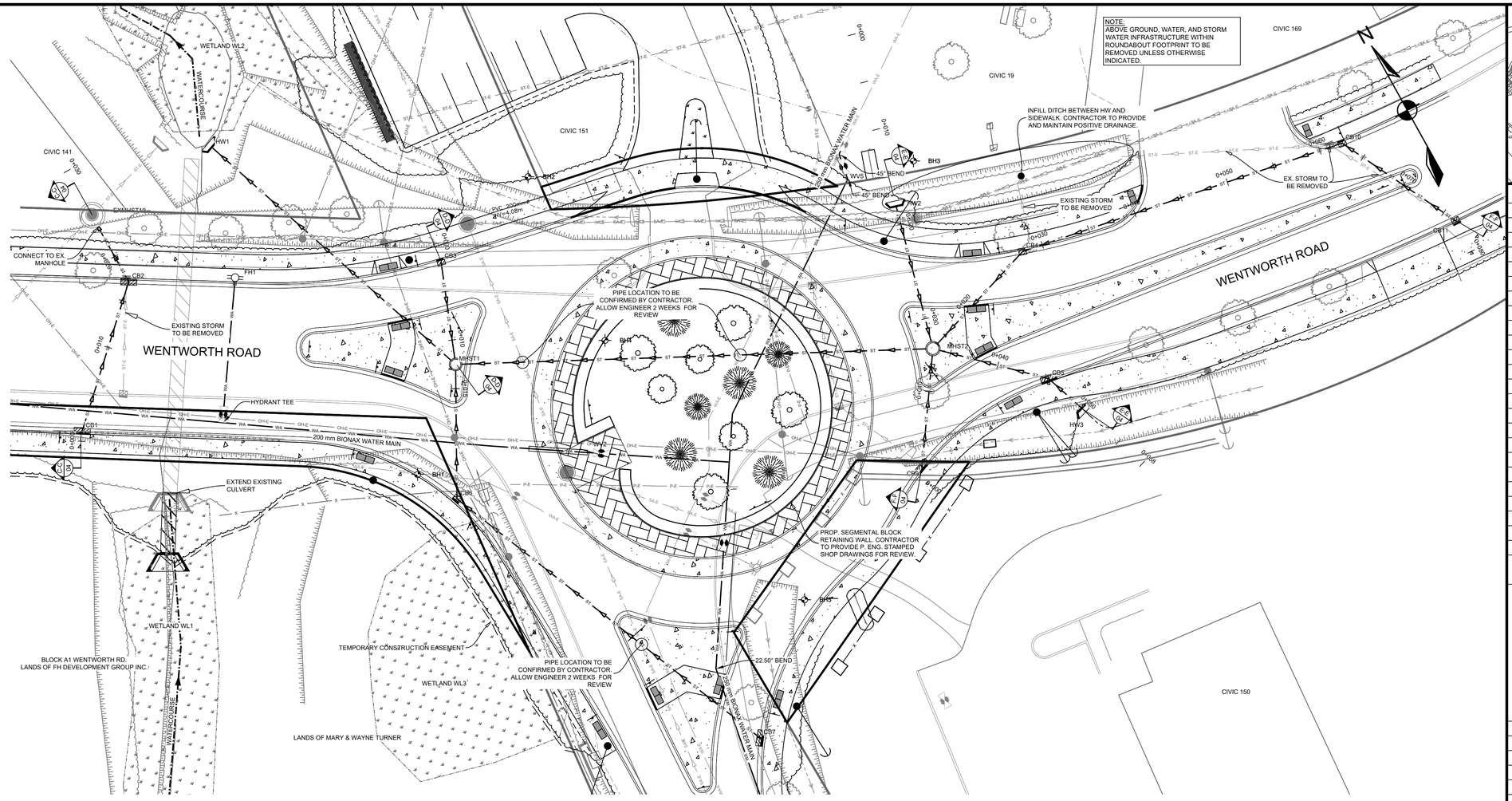

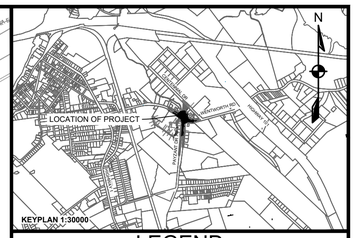

LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
WA-E	WATER PIPE	WA WA
SA-E	SANITARY PIPE	SA SA
ST-E	STORM PIPE	ST ST
GAS-E	NATURAL GAS MAIN	GAS
	WATER LATERAL	
	SANITARY LATERAL	
	STORM LATERAL	
	NATURAL GAS LATERAL	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X X	FENCELINE	X X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
STREET TREE			GLB		
			URD		

METRES 5 0 10 15

1:250

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REGISTERED PROFESSIONAL ENGINEER A. J. SKETCHLEY 11560 DATE 22/02/2024 PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER A. T. LEAHY 20200013 DATE 22/02/2024 PROVINCE OF NOVA SCOTIA

CLIENT

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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

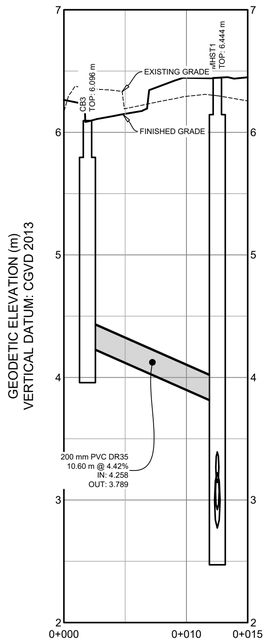
WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

CATCH BASIN PROFILES

Drawn	Engineer	Project No.	Drawing No.
J. GALLANT	A. SKETCHLEY	21-435	C-PP04
Scale 1:250 H; 1:25V	Filename 21-435_PP03_STORM PROFILES 2.dwg		04 OF 14

PROFILE D-D



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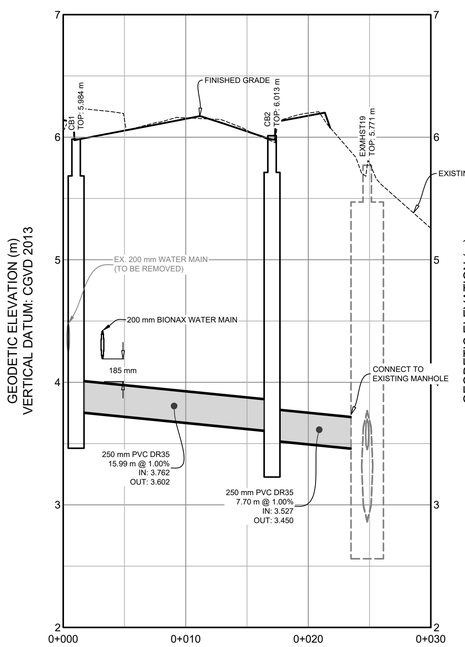

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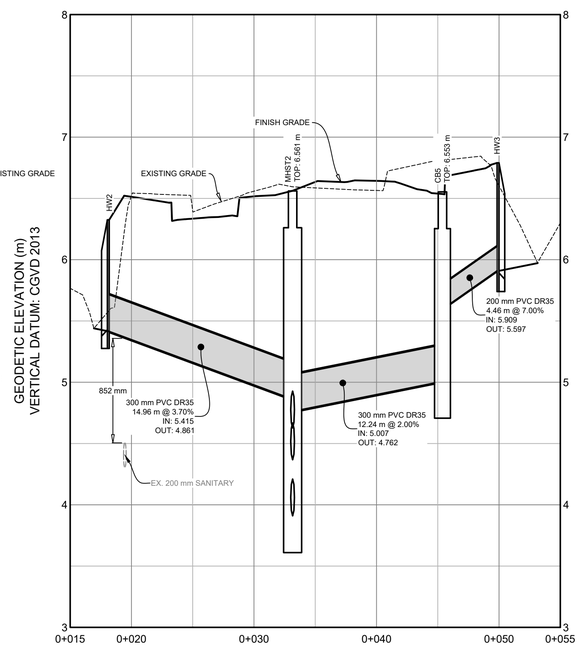
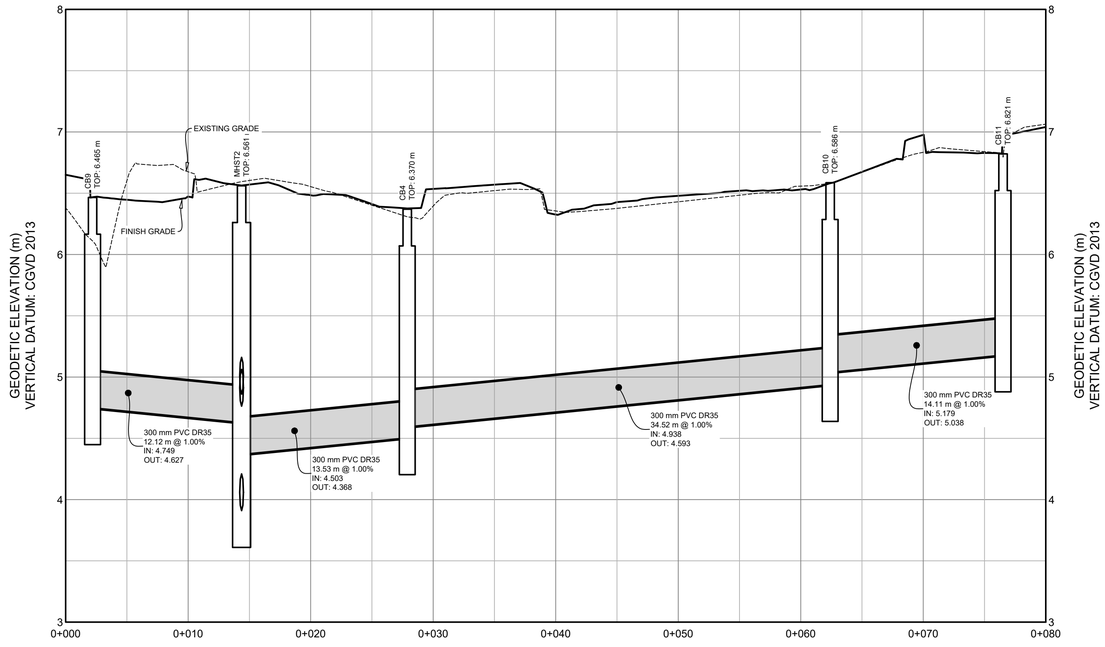
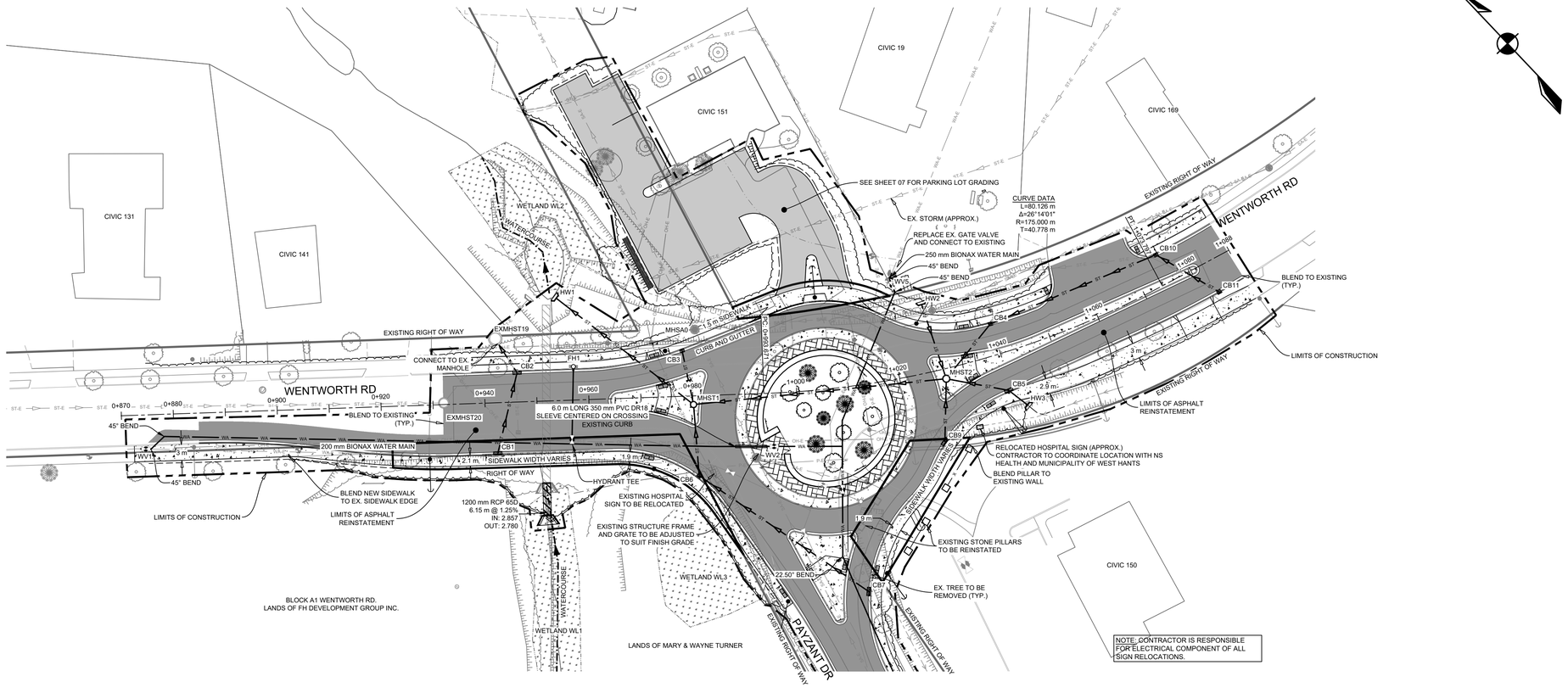
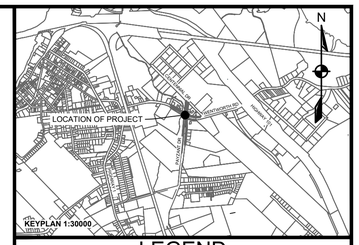


PROFILE F-F







LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
WA-E	WATER PIPE	WA
SA-E	SANITARY PIPE	SA
ST-E	STORM PIPE	ST
GAS-E	NATURAL GAS MAIN	GAS
	WATER LATERAL	
	SANITARY LATERAL	
	STORM LATERAL	
	NATURAL GAS LATERAL	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
STREET TREE			GLB		
			URD		

METRES 10 0 20 30

1:500

ISSUE	DATE	DESCRIPTION
5	FEB. 22, 2024	ISSUED FOR TENDER
4	FEB. 15, 2024	ISSUED FOR REVIEW
3	AUG. 16, 2023	REVISED CROSSWALKS
2	JUN. 16, 2023	REVISED ROUNDABOUT ENTRANCE
1	JUL. 13, 2022	DRAFT

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REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. J. SKETCHLEY — 11560 — PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. T. LEAHY — 20200013 — PROVINCE OF NOVA SCOTIA

CLIENT

West Hants
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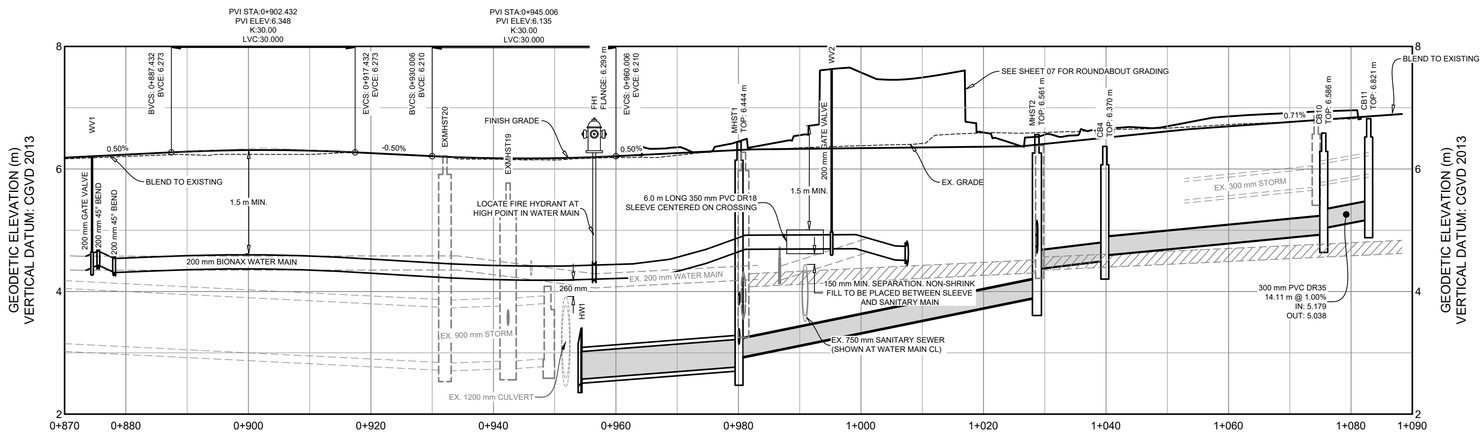
PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

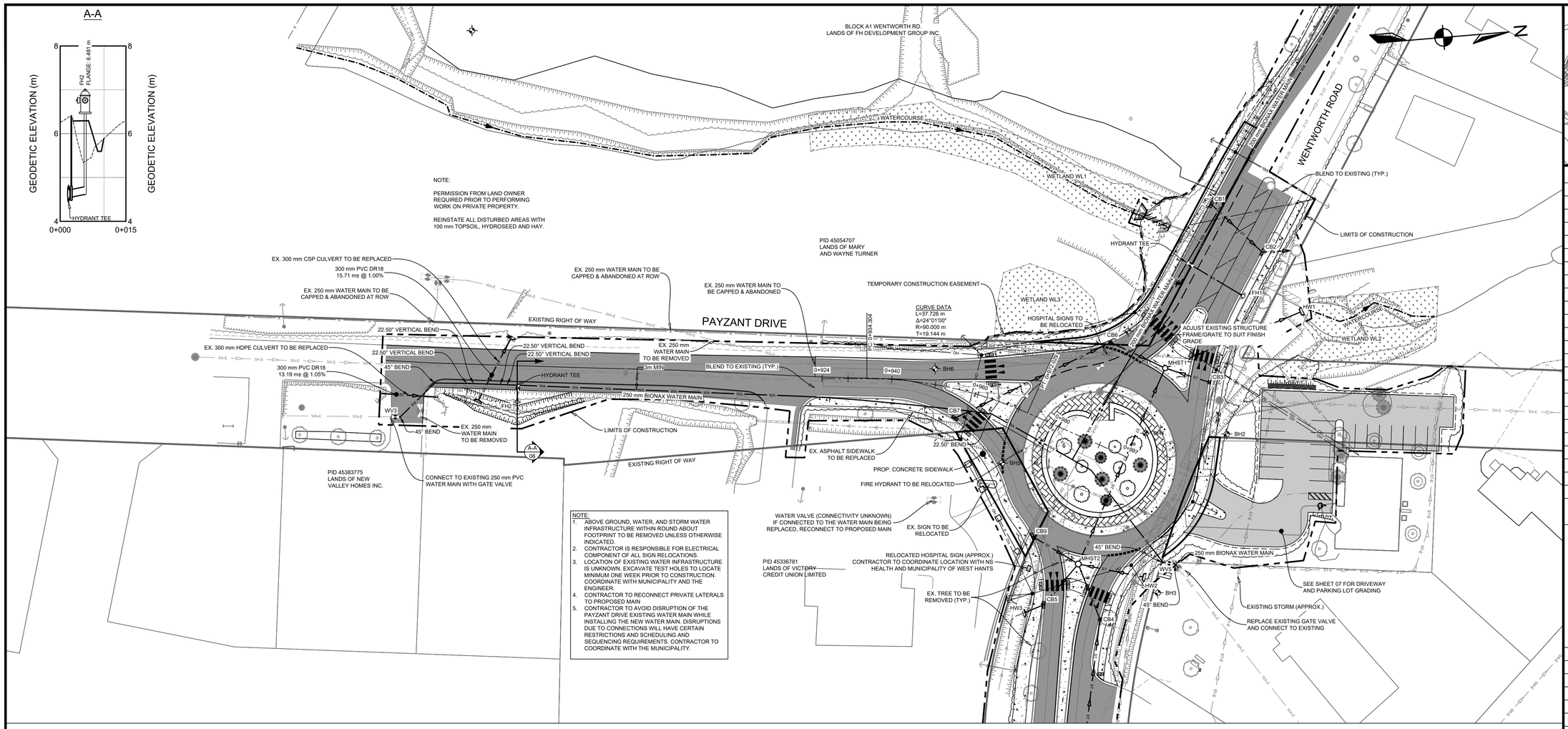
WENTWORTH ROAD - PLAN & PROFILE



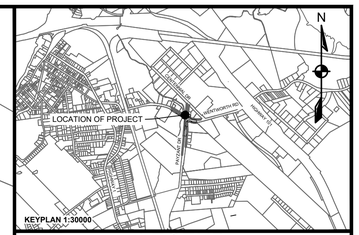
STORM SEWER															
		2.571	450 mm RCP 65D @ 0.60% 33.34 m±	2.771	2.921	300 mm PVC DR18 @ 2.02% 48.88 m±	3.910	4.096	300 mm PVC DR35 @ 1.00% 13.53 m±	4.503	4.550	300 mm PVC DR35 @ 1.00% 34.52 m±	4.938		

Drawn	Engineer	Project No.	Drawing No.
J. GALLANT	A. SKETCHLEY	21-435	TR05
Scale 1:500 H, 1:50 V	Filename 21-435_TR02_INT-WENTWORTH.dwg		05 or 14

P:\2021\21-435 West Hants - Payzant Drive Roundabout\01 - Drawings\Eng Design\2023 Updates\Sheets\21-435_TR02_INT-WENTWORTH.dwg, Plot Date: 2024-Feb-22, Plot Size: ISO FULL BLEED A1 (841.00 X 594.00 MM)



NOTE:
1. ABOVE GROUND, WATER, AND STORM WATER INFRASTRUCTURE WITHIN ROUND ABOUT FOOTPRINT TO BE REMOVED UNLESS OTHERWISE INDICATED.
2. CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL COMPONENT OF ALL SIGN RELOCATIONS.
3. LOCATION OF EXISTING WATER INFRASTRUCTURE IS UNKNOWN. EXCAVATE TEST HOLES TO LOCATE MINIMUM ONE WEEK PRIOR TO CONSTRUCTION. COORDINATE WITH MUNICIPALITY AND THE ENGINEER.
4. CONTRACTOR TO RECONNECT PRIVATE LATERALS TO PROPOSED MAIN
5. CONTRACTOR TO AVOID DISRUPTION OF THE PAYZANT DRIVE EXISTING WATER MAIN WHILE INSTALLING THE NEW WATER MAIN. DISRUPTIONS DUE TO CONNECTIONS WILL HAVE CERTAIN RESTRICTIONS AND SCHEDULING AND SEQUENCING REQUIREMENTS. CONTRACTOR TO COORDINATE WITH THE MUNICIPALITY.



LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
WA-E	WATER PIPE	WA
SA-E	SANITARY PIPE	SA
ST-E	STORM PIPE	ST
GAS-E	NATURAL GAS MAIN	GAS
	WATER LATERAL	
	SANITARY LATERAL	
	STORM LATERAL	
	NATURAL GAS LATERAL	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
STREET TREE			GLB		
			URD		

METRES
10 0 20 30
1:500

ISSUE	DATE	DESCRIPTION
5	FEB. 22, 2024	ISSUED FOR TENDER
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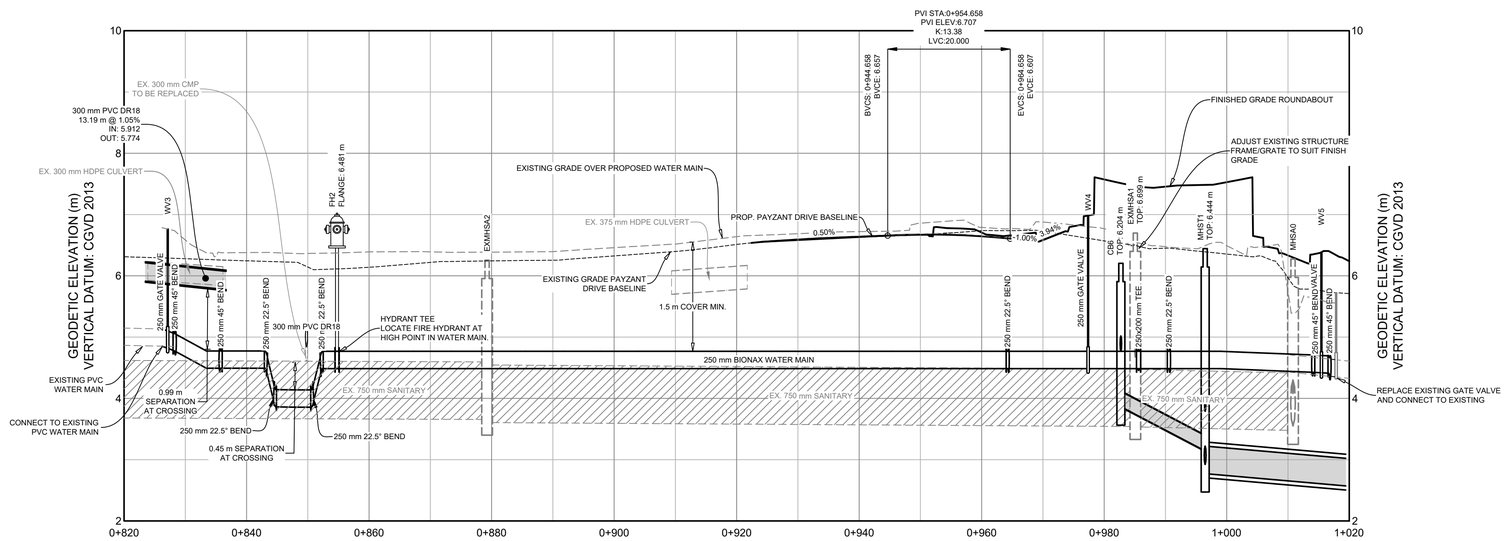
3	AUG. 16, 2023	REVISED CROSSWALKS
2	JUN. 16, 2023	REVISED ROUNDABOUT ENTRANCE
1	JUL. 13, 2022	DRAFT

NOTE:
LOCATION OF EXISTING INFRASTRUCTURE IS BASED ON BEST AVAILABLE INFORMATION, INCLUDING RECORD INFORMATION, AND IS APPROXIMATE. CONTRACTOR TO VERIFY SIZE AND LOCATION IN FIELD PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ENGINEER. ALLOW ONE WEEK FOR REVIEW.

PAYZANT BASELINE PROFILE



STORM SEWER					
3.563	250 mm PVC DR35 @ 5.24% 13.76 m±	3.271	450 mm RCP 65D @ 0.60% 33.34 m±	2.571	

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REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. J. SKETCHLEY — 11560 — PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. T. LEAHY — 20200013 — PROVINCE OF NOVA SCOTIA

CLIENT

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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

PAYZANT DRIVE PLAN AND PROFILE

Drawn	Engineer	Project No.	Drawing No.
J. GALLANT	A. SKETCHLEY	21-435	TR06
Scale 1:500 H; 1:50 V	Filename 21-435_3-PP01_PAYZANT.dwg		06 OF 14

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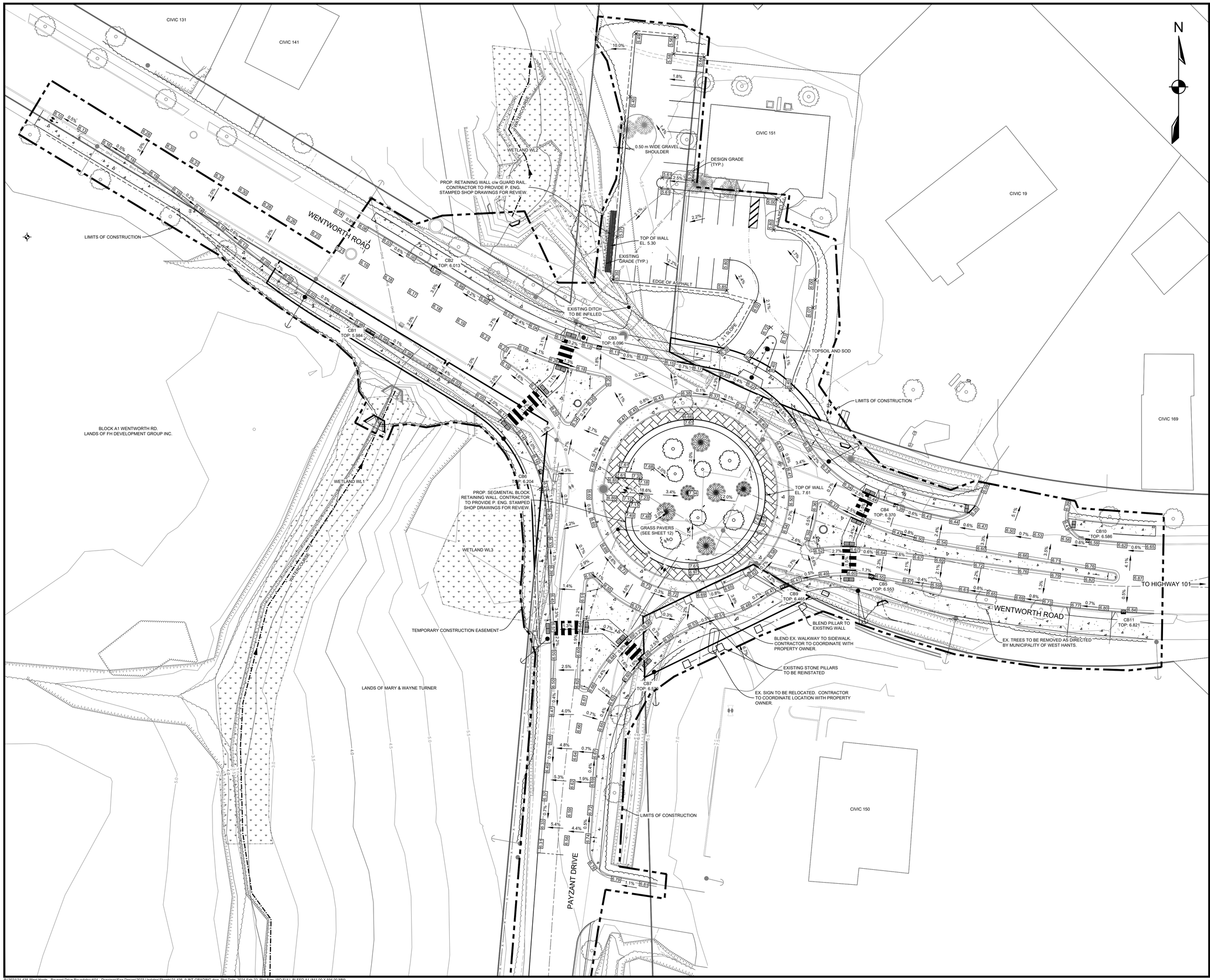

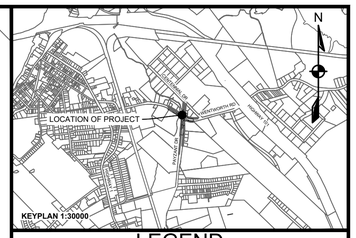

LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
WA-E	WATER PIPE	WA WA
SA-E	SANITARY PIPE	SA SA
ST-E	STORM PIPE	ST ST
GAS-E	NATURAL GAS MAIN	GAS
	WATER LATERAL	
	SANITARY LATERAL	
	STORM LATERAL	
	NATURAL GAS LATERAL	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
STREET TREE			GLB		
			URD		

METRES
10 0 10 20
1:300

ISSUE	DATE	DESCRIPTION
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REGISTERED PROFESSIONAL ENGINEER
DATE 22/02/2024
A. J. SKETCHLEY
11560
PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER
DATE 22/02/2024
A. T. LEAHY
20200013
PROVINCE OF NOVA SCOTIA

CLIENT

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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

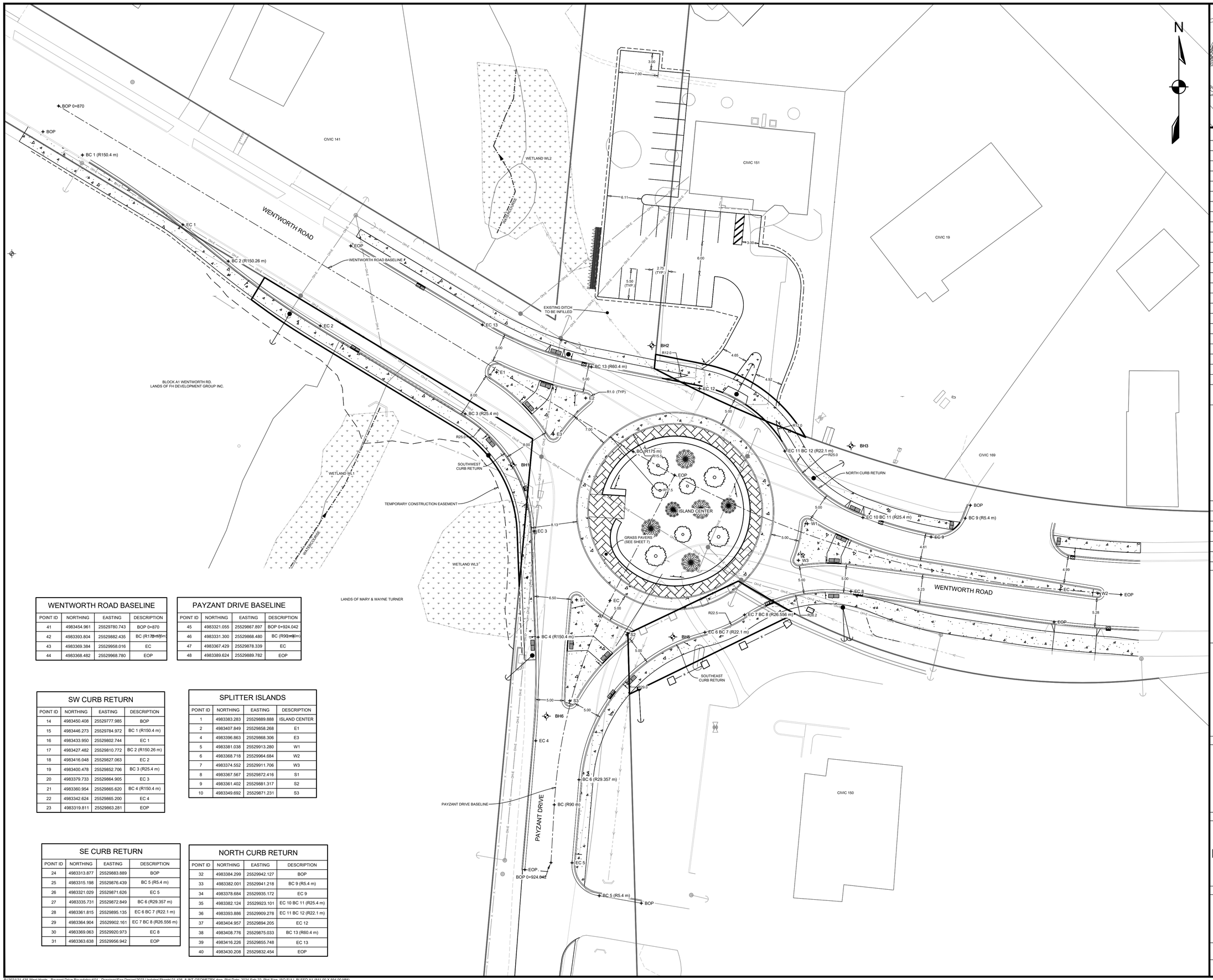
WEST HANTS, NOVA SCOTIA

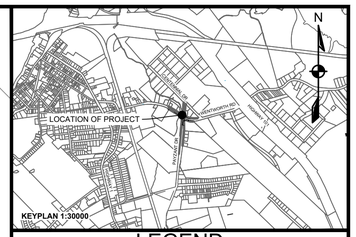
SHEET DESCRIPTION

ROUNDABOUT GRADING PLAN

Drawn	Engineer	Project No.	Drawing No.
J. GALLANT	A. SKETCHLEY	21-435	TR07
Scale 1:300	Filename 21-435_9-INT-GRADING.dwg		07 of 14

P:\2021\21-435 West Hants - Payzant Drive Roundabout\01 - Drawings\Eng Design\2023 Updates\Sheets\21-435_9-INT-GRADING.dwg, Plot Date: 2024-Feb-22, Plot Size: ISO FULL BLEED A1 (841.00 X 594.00 MM)





LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
WA-E	WATER PIPE	WA WA
SA-E	SANITARY PIPE	SA SA
ST-E	STORM PIPE	ST ST
GAS-E	NATURAL GAS MAIN	GAS
	WATER LATERAL	
	SANITARY LATERAL	
	STORM LATERAL	
	NATURAL GAS LATERAL	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X X	FENCELINE	X X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
STREET TREE			GLB		
			URD		

METRES
10 0 10 20
1:300

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1	JUL. 13, 2022	DRAFT

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REGISTERED PROFESSIONAL ENGINEER
DATE 22/02/2024
P.V. BURGESS
6041
PROVINCE OF NOVA SCOTIA

CLIENT

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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WINDSOR, NOVA SCOTIA

SHEET DESCRIPTION

ROUNDABOUT GEOMETRY

Drawn	Engineer	Project No.	Drawing No.
P.BURGESS	P.BURGESS	21-435	TR-08
Scale 1:300	Filename 21-435_8-INT-GEOMETRY.dwg		08 OF 14

WENTWORTH ROAD BASELINE

POINT ID	NORTHING	EASTING	DESCRIPTION
41	4983454.961	25529780.743	BOP 0+870
42	4983393.804	25529882.435	BC (R175 m)
43	4983369.384	25529958.016	EC
44	4983368.482	25529968.780	EOP

PAYZANT DRIVE BASELINE

POINT ID	NORTHING	EASTING	DESCRIPTION
45	4983321.055	25529867.897	BOP 0+924.042
46	4983331.300	25529868.480	BC (R90 m)
47	4983367.429	25529878.339	EC
48	4983389.624	25529889.782	EOP

SW CURB RETURN

POINT ID	NORTHING	EASTING	DESCRIPTION
14	4983450.408	25529777.985	BOP
15	4983446.273	25529784.972	BC 1 (R150.4 m)
16	4983433.950	25529802.744	EC 1
17	4983427.482	25529810.772	BC 2 (R150.26 m)
18	4983416.048	25529827.063	EC 2
19	4983400.478	25529852.706	BC 3 (R25.4 m)
20	4983379.733	25529864.905	EC 3
21	4983360.954	25529865.620	BC 4 (R150.4 m)
22	4983342.624	25529865.200	EC 4
23	4983319.811	25529863.281	EOP

SPLITTER ISLANDS

POINT ID	NORTHING	EASTING	DESCRIPTION
1	4983383.283	25529889.888	ISLAND CENTER
2	4983407.849	25529858.268	E1
4	4983396.863	25529868.306	E3
5	4983381.038	25529913.280	W1
6	4983368.718	25529964.684	W2
7	4983374.552	25529911.706	W3
8	4983367.567	25529872.416	S1
9	4983361.402	25529881.317	S2
10	4983349.692	25529871.231	S3

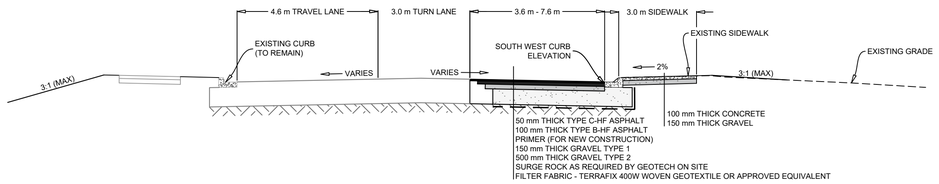
SE CURB RETURN

POINT ID	NORTHING	EASTING	DESCRIPTION
24	4983313.877	25529883.889	BOP
25	4983315.198	25529876.439	BC 5 (R5.4 m)
26	4983321.029	25529871.626	EC 5
27	4983335.731	25529872.849	BC 6 (R29.357 m)
28	4983361.815	25529895.135	EC 6 BC 7 (R22.1 m)
29	4983364.904	25529902.161	EC 7 BC 8 (R26.556 m)
30	4983369.063	25529920.973	EC 8
31	4983363.638	25529956.942	EOP

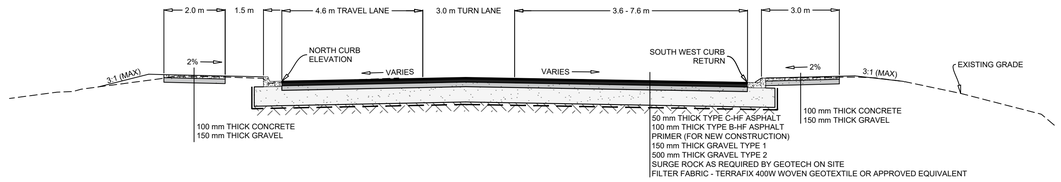
NORTH CURB RETURN

POINT ID	NORTHING	EASTING	DESCRIPTION
32	4983384.299	25529942.127	BOP
33	4983382.001	25529941.218	BC 9 (R5.4 m)
34	4983378.684	25529935.172	EC 9
35	4983382.124	25529923.101	EC 10 BC 11 (R25.4 m)
36	4983393.886	25529909.278	EC 11 BC 12 (R22.1 m)
37	4983404.957	25529894.205	EC 12
38	4983408.776	25529875.033	BC 13 (R60.4 m)
39	4983416.226	25529855.748	EC 13
40	4983430.208	25529832.454	EOP

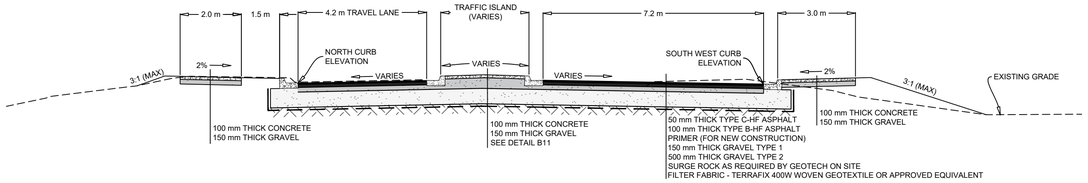
A / 09 WENTWORTH RD TYPICAL PROPOSED CROSS SECTION 0+870 TO 0+925
N.T.S.



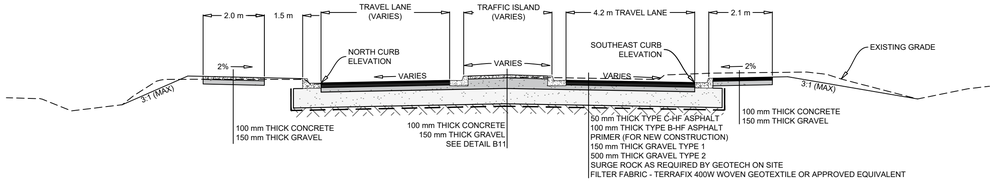
B / 09 WENTWORTH RD TYPICAL PROPOSED CROSS SECTION 0+925 TO 0+960
N.T.S.



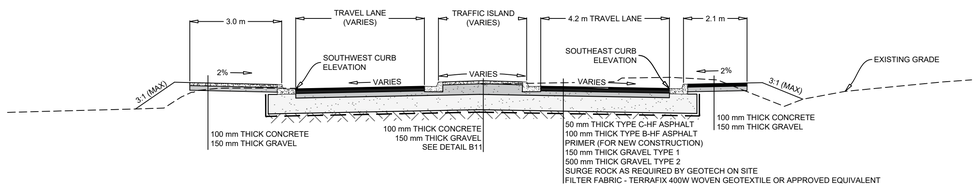
C / 09 WENTWORTH RD TYPICAL PROPOSED CROSS SECTION 0+960 TO 0+975
N.T.S.



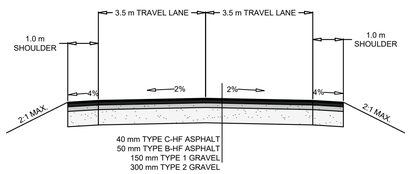
D / 09 WENTWORTH RD TYPICAL PROPOSED CROSS SECTION 1+030 TO 1+045
N.T.S.



E / 09 PAYZANT DR TYPICAL PROPOSED CROSS SECTION 0+950 TO 0+970
N.T.S.



F / 09 DRIVEWAY TYPICAL PROPOSED CROSS SECTION
N.T.S.



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REGISTERED PROFESSIONAL ENGINEER
DATE 22/02/2024
A. J. SKETCHLEY
11560
PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER
DATE 22/02/2024
A. T. LEAHY
20200013
PROVINCE OF NOVA SCOTIA

CLIENT

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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

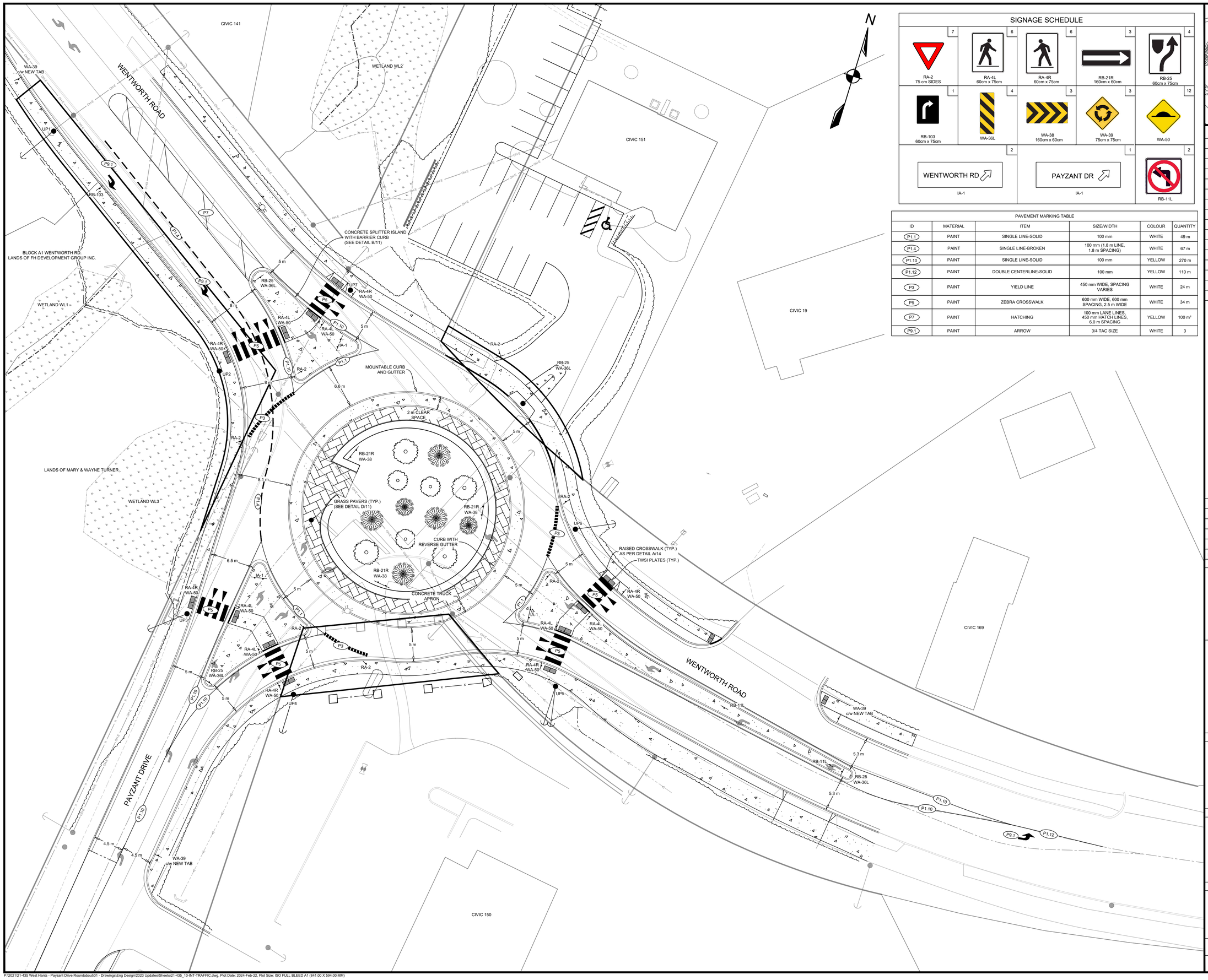
WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

CROSS SECTION DETAILS

Drawn	Engineer	Project No.	Drawing No.
J. GALLANT	A. SKETCHLEY	21-435	TR09
Scale N.T.S.	Filename 21-435_TR05_INT-WENTWORTH XS.dwg		09 of 14

P:\2021\21-435 West Hants - Payzant Drive Roundabout\01 - Drawings\Eng Design\2023 Updates\Sheets\21-435_TR05_INT-WENTWORTH XS.dwg, Plot Date: 2024-Feb-22, Plot Size: ISO FULL BLEED A1 (841.00 X 594.00 MM)

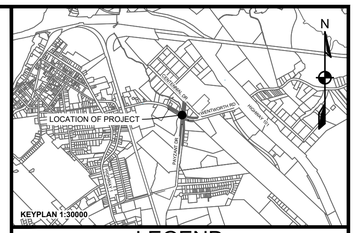


SIGNAGE SCHEDULE

7 RA-2 75 cm SIDES	6 RA-4L 60cm x 75cm	6 RA-4R 60cm x 75cm	3 RB-21R 160cm x 60cm	4 RB-25 60cm x 75cm
1 RB-103 60cm x 75cm	4 WA-36L	3 WA-38 160cm x 60cm	3 WA-39 75cm x 75cm	12 WA-50
2 WENTWORTH RD IA-1		1 PAYZANT DR IA-1		2 RB-11L

PAVEMENT MARKING TABLE

ID	MATERIAL	ITEM	SIZE/WIDTH	COLOUR	QUANTITY
P1.1	PAINT	SINGLE LINE-SOLID	100 mm	WHITE	49 m
P1.4	PAINT	SINGLE LINE-BROKEN	100 mm (1.8 m LINE, 1.8 m SPACING)	WHITE	67 m
P1.10	PAINT	SINGLE LINE-SOLID	100 mm	YELLOW	270 m
P1.12	PAINT	DOUBLE CENTERLINE-SOLID	100 mm	YELLOW	110 m
P3	PAINT	YIELD LINE	450 mm WIDE, SPACING VARIES	WHITE	24 m
P5	PAINT	ZEBRA CROSSWALK	600 mm WIDE, 600 mm SPACING, 2.5 m WIDE	WHITE	34 m
P7	PAINT	HATCHING	100 mm LANE LINES, 450 mm HATCH LINES, 6.0 m SPACING	YELLOW	100 m²
P9.1	PAINT	ARROW	3/4 TAC SIZE	WHITE	3



LEGEND

EXISTING		PROPOSED
	EASEMENT	
P-E / P-E	UNDERGROUND POWER	P / P
C-E / C-E	UNDERGROUND COMM.	C / C
TR-E	TRAFFIC CONDUIT	TR / TR
OH-E	OVERHEAD LINE	OH / OH
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
X / X	FENCELINE	X / X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			HYDRANT		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
PRECAST HEADWALL			SIGNAL POLE		
CATCHBASIN			SIGNAL HEAD		
			PEDESTRIAN HEAD		

SIGNAGE NOTES:

1. WHERE TO INDICATE EXACT LOCATION OF NEW SIGN INSTALLATIONS ON SITE.
2. ALL SIGNS ARE TAC UNLESS OTHERWISE INDICATED ON SIGNAGE SCHEDULE.
3. REMOVED SIGNS AND POSTS TO BE RETURNED TO WHRM.

PAVEMENT MARKING NOTES:

1. ALL LANE MARKINGS SHALL BE ACCORDING TO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA (MUTCDC) USING SIGNS APPROVED FOR USE IN CONTROL SIGNS.
2. LANE LINES ARE TO BE 100 mm WIDE EXCEPT WHERE OTHERWISE INDICATED. CROSSWALK LINES ARE TO BE 200 mm WIDE. STOP BARS ARE TO BE 450 mm WIDE.
3. CENTERLINES AND CROSS HATCHING TO BE YELLOW. ALL OTHER PAVEMENT MARKINGS TO BE WHITE.
4. PEDESTRIAN CURB CUTS AND RAMPS TO BE PROVIDED AT BOTH ENDS OF ALL CROSSWALKS.
5. REMOVE ALL EXISTING PAVEMENT MARKINGS AT INTERSECTIONS AND APPROACHES AND RE-PAINT AS SHOWN, UNLESS OTHERWISE NOTED.
6. ALL MARKINGS DIMENSIONED TO CENTER OF LINES.

METRES 5 0 10 15

1:250

ISSUE	DATE	DESCRIPTION
5	FEB. 22, 2024	ISSUED FOR TENDER
4	FEB. 15, 2024	ISSUED FOR REVIEW
3	AUG. 16, 2023	REVISED CROSSWALKS
2	JUN. 16, 2023	REVISED ROUNDABOUT ENTRANCE
1	JUL. 13, 2022	DRAFT

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REGISTERED PROFESSIONAL ENGINEER
DATE 22/02/2024
P.V. BURGESS
6041
PROVINCE OF NOVA SCOTIA

CLIENT

West Hants
something inspiring awaits

PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

LANE MARKINGS AND SIGNAGE PLAN

Drawn	Engineer	Project No.	Drawing No.
J. DWYER	P. BURGESS	21-435	C-TR10
Scale 1:250	Filename 21-435_10-INT-TRAFFIC.dwg		10 of 14

P:\2021\21-435 West Hants - Payzant Drive Roundabout\01 - Drawings\Eng Design\2023 Updates\Sheets\21-435_10-INT-TRAFFIC.dwg, Plot Date: 2024-Feb-22, Plot Size: ISO FULL BLEED A1 (841.00 X 594.00 MM)

CIVIC 131

CIVIC 151

CIVIC 19

CIVIC 150

WENTWORTH ROAD

WETLAND WL2

WETLAND WL1

WETLAND WL3

WATERCOURSE

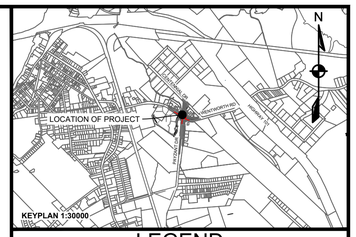
BLOCK A1 WENTWORTH RD.
LANDS OF FH DEVELOPMENT GROUP INC.

LANDS OF MARY & WAYNE TURNER

PAYZANT DRIVE

EXISTING POLE TO BE REMOVED

N



LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
P-E	UNDERGROUND POWER	P
C-E	UNDERGROUND COMM.	C
	POWER SERVICE	
	COMMUNICATIONS SERVICE	
	OVERHEAD LINE	OH
OH-E	OVERHEAD LINE (TO BE REMOVED)	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
			UTILITY POLE (TO BE REMOVED)		
STREET TREE			GLB		
			URD		

METRES

5 0 10 15

1:250

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REGISTERED PROFESSIONAL ENGINEER
DATE 22/02/2024
A. J. SKETCHLEY
11560
PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER
DATE 22/02/2024
A. T. LEAHY
20200013
PROVINCE OF NOVA SCOTIA

CLIENT

West Hants
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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

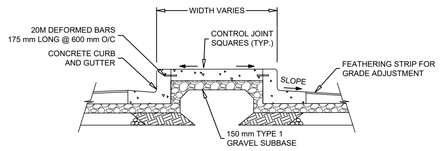
SHEET DESCRIPTION

UTILITY POLE PLAN

Drawn	Engineer	Project No.	Drawing No.
A. LEAHY	A. SKETCHLEY	21-435	C-E11
Scale 1:250	Filename 21-435_E1.dwg		11 of 14

TYPICAL CONCRETE TRAFFIC ISLAND DETAIL (A/12)

(N.T.S.)

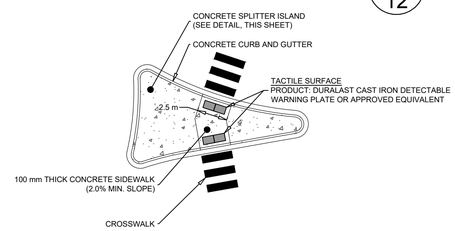


NOTES:

1. MAXIMUM SPACING FOR CONTROL JOINTS IS TO BE 2.5 m.
2. SLOPE SLAB TO FACILITATE DRAINAGE.
3. SLOPE GUTTER TO MATCH STREET CROSS SECTION.
4. ENDS AND CORNERS OF TRAFFIC ISLANDS TO HAVE HIGH BACK CONCRETE CURB AND GUTTER.
5. GEOMETRIC DESIGN OF CONCRETE ISLANDS TO BE AS PER THE TAC GEOMETRIC DESIGN GUIDE.

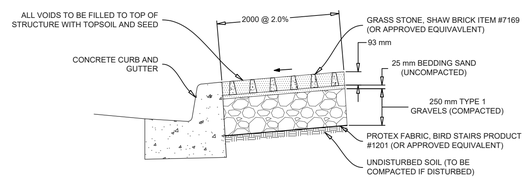
TYPICAL DROPPED SIDEWALK DETAIL (B/12)

(N.T.S.)



GRASS PAVER TYPICAL DETAIL (D/12)

(N.T.S.)

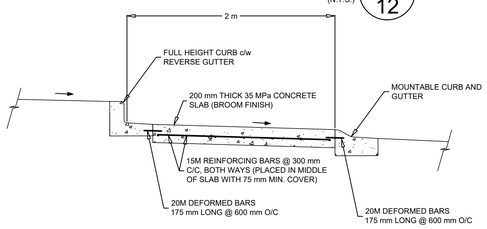


NOTES:

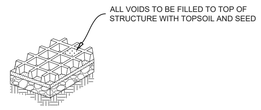
1. PRODUCTS TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

TYPICAL TRUCK APRON DETAIL (C/12)

(N.T.S.)



GRASS PAVER ISOMETRIC VIEW



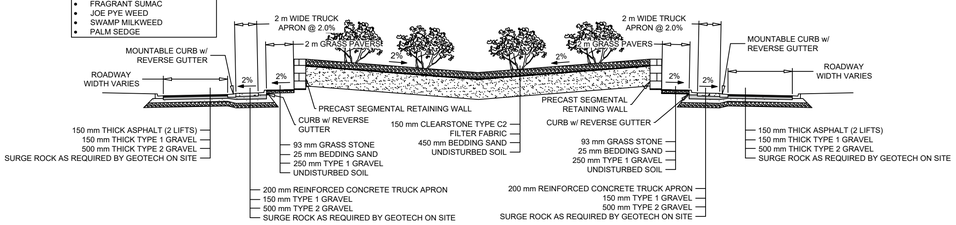
TYPICAL ROUNDABOUT CROSS-SECTION (E/07)

(N.T.S.)

NOTE: CENTER ISLAND VEGETATION TO CONSIST OF THE FOLLOWING:

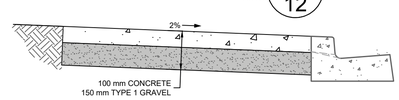
- WINTERBERRY
- DOGWOOD
- FRAGRANT SUMAC
- JOE PYE WEED
- SWAMP MILKWEED
- PALM SEDGE

NOTE: FOR PRECAST SEGMENTAL RETAINING WALL, CONTRACTOR TO PROVIDE P.ENG STAMPED SHOP DRAWINGS FOR REVIEW.



SIDEWALK STRUCTURE (F/12)

N.T.S.



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REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. J. SKETCHLEY — 11560 — PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. T. LEAHY — 20200013 — PROVINCE OF NOVA SCOTIA

CLIENT

West Hants
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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

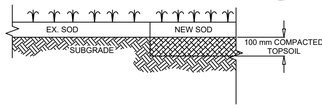
SHEET DESCRIPTION

ROAD CONSTRUCTION DETAILS

Drawn	Engineer	Project No.	Drawing No.
J. DWYER	P. BURGESS	21-435	C-D12
Scale N.T.S.	Filename 21-435_D01_INT-DETAILS.dwg		12 OF 14

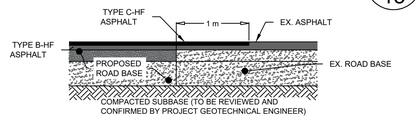
LANDSCAPING REINSTATEMENT (A / 13)

N.T.S.



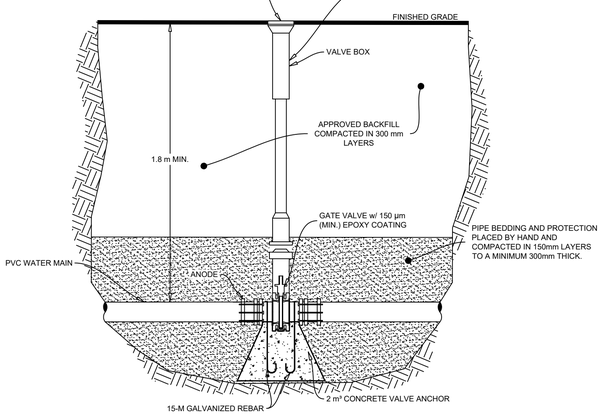
BLEND TO EX. PAVEMENT DETAIL (B / 13)

N.T.S



STANDARD GATE VALVE CONNECTION (C / 13)

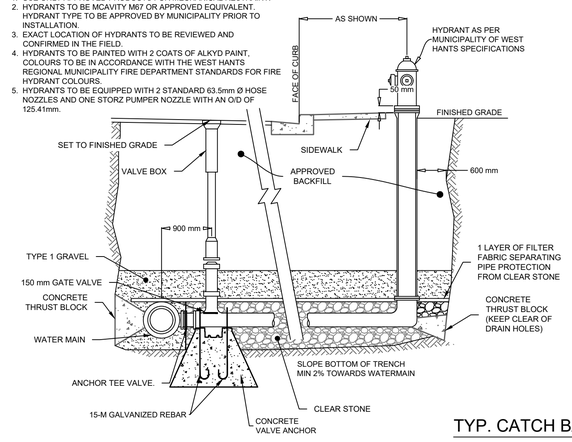
N.T.S.



TYPICAL FIRE HYDRANT DETAIL (D / 13)

N.T.S.

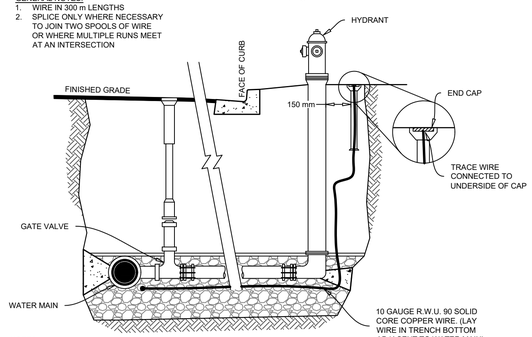
NOTES:
1. USE ONLY APPROVED PRODUCTS FOR MECHANICAL RESTRAINT.
2. HYDRANTS TO BE MCAVITY M67 OR APPROVED EQUIVALENT. HYDRANT TYPE TO BE APPROVED BY MUNICIPALITY PRIOR TO INSTALLATION.
3. EXACT LOCATION OF HYDRANTS TO BE REVIEWED AND CONFIRMED IN THE FIELD.
4. HYDRANTS TO BE PAINTED WITH 2 COATS OF ALKYD PAINT, COLOURS TO BE IN ACCORDANCE WITH THE WEST HANTS REGIONAL MUNICIPALITY FIRE DEPARTMENT STANDARDS FOR FIRE HYDRANT COLOURS.
5. HYDRANTS TO BE EQUIPPED WITH 2 STANDARD 63.5mm Ø HOSE NOZZLES AND ONE STORZ PUMPER NOZZLE WITH AN O/D OF 125.41mm.



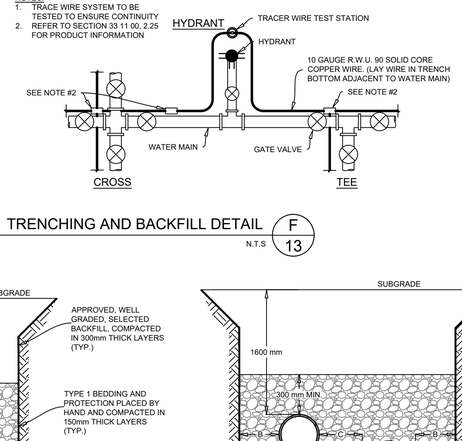
STANDARD TRACE WIRE DETAIL (FOR PVC WATER MAIN) (E / 13)

N.T.S.

GENERAL NOTES:
1. WIRE IN 300 m LENGTHS
2. SPLICE ONLY WHERE NECESSARY TO JOIN TWO SPOOLS OF WIRE OR WHERE MULTIPLE RUNS MEET AT AN INTERSECTION

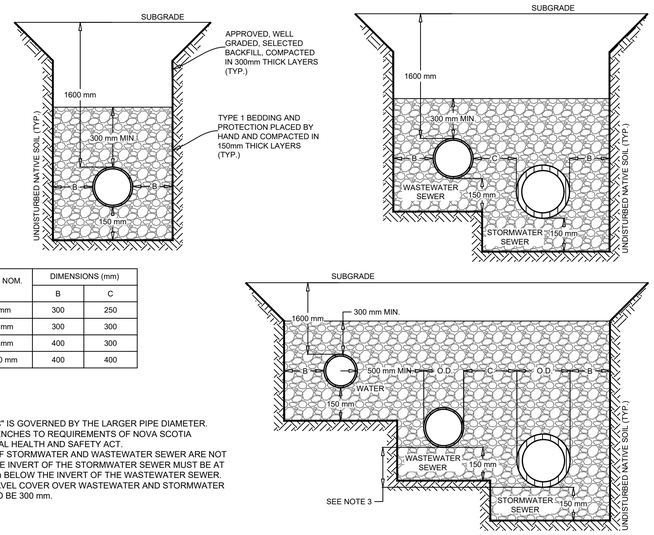


NOTES:
1. TRACE WIRE SYSTEM TO BE TESTED TO ENSURE CONTINUITY
2. REFER TO SECTION 33 11 00, 2.25 FOR PRODUCT INFORMATION



TRENCHING AND BACKFILL DETAIL (F / 13)

N.T.S



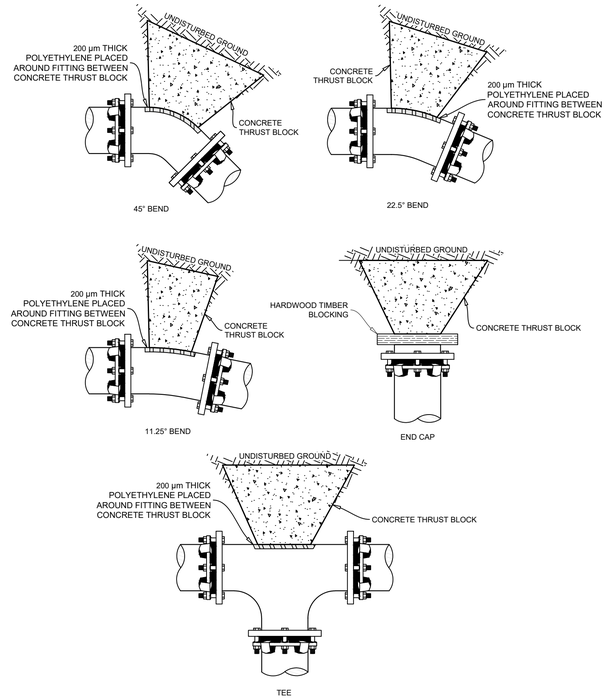
PIPE SIZE NOM. DIA.	DIMENSIONS (mm)	
	B	C
UP TO 375 mm	300	250
376 TO 500 mm	300	300
501 TO 750 mm	400	300
751 TO 1200 mm	400	400

NOTES
1. DIMENSION "C" IS GOVERNED BY THE LARGER PIPE DIAMETER.
2. SIDES OF TRENCHES TO REQUIREMENTS OF NOVA SCOTIA OCCUPATIONAL HEALTH AND SAFETY ACT.
3. IF CROWNS OF STORMWATER AND WASTEWATER SEWER ARE NOT MATCHED, THE INVERT OF THE STORMWATER SEWER MUST BE AT LEAST 100 mm BELOW THE INVERT OF THE WASTEWATER SEWER.
4. MINIMUM GRAVEL COVER OVER WASTEWATER AND STORMWATER SEWERS IS TO BE 300 mm.

THRUST BLOCK DETAILS (G / 13)

N.T.S

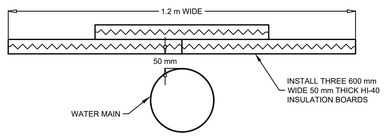
DUCTILE IRON CL52 MECHANICAL JOINT FITTINGS



MINIMUM THRUST BLOCK CONTACT AREA (m²)					
BASED ON SOIL BEARING CAPACITY OF 100 kPa AND INTERNAL PIPE PRESSURE OF 1035 kPa.					
PIPE DIAMETER (mm)	CAP	TEE	45° BEND	22.5° BEND	11.25° BEND
100	0.25	0.25	0.20	0.16	0.16
150	0.48	0.48	0.40	0.24	0.16
200	0.80	0.80	0.64	0.32	0.16
250	1.28	1.28	0.96	0.48	0.24
300	1.76	1.76	1.44	0.72	0.40
350	2.40	2.40	1.96	0.98	0.54
400	3.13	3.13	2.56	1.28	0.71

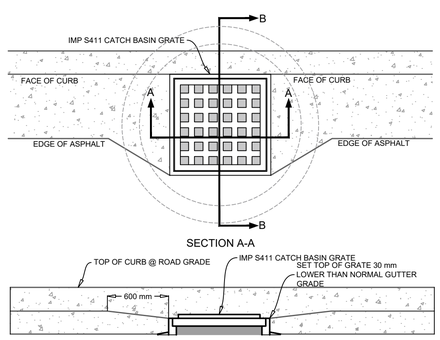
WATER MAIN INSULATION DETAIL (G / 13)

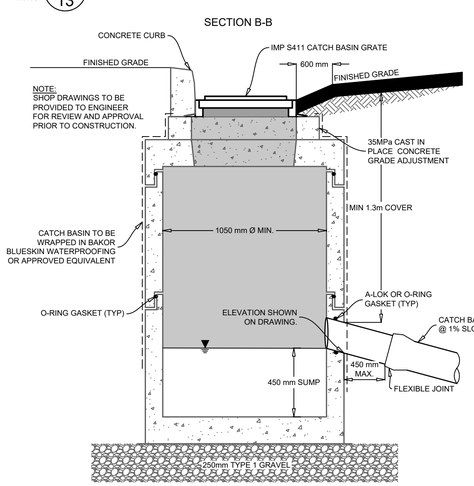
N.T.S



TYP. CATCH BASIN (I / 13)

N.T.S

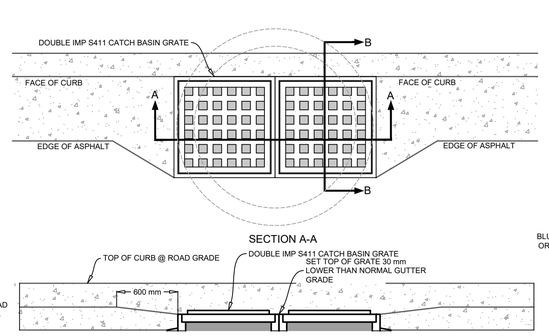


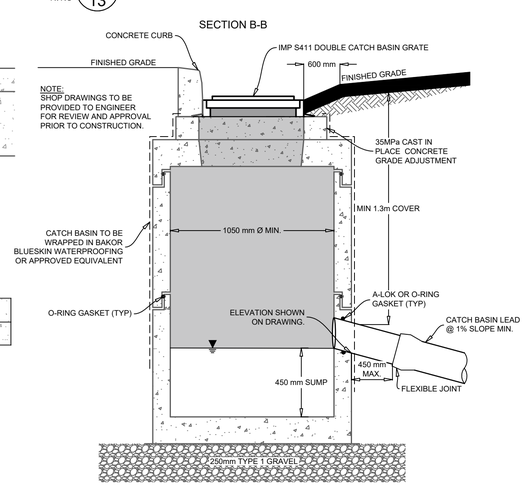


NOTE:
SHOP DRAWINGS TO BE PROVIDED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

TYP. DOUBLE CATCH BASIN (J / 13)

N.T.S





NOTE:
SHOP DRAWINGS TO BE PROVIDED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

GENERAL CONSTRUCTION NOTES:

1. **SAFETY IS PARAMOUNT AND THE CONTRACTOR MUST USE SAFE WORK PRACTICES IN ACCORDANCE WITH THE NOVA SCOTIA OCCUPATIONAL HEALTH AND SAFETY ACT.**
2. ALL WORKS TO BE IN ACCORDANCE WITH MUNICIPAL SERVICES SPECIFICATION MANUAL (CURRENT EDITIONS).
3. ALL WORKS TO BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATION FOR MUNICIPAL SERVICES" PREPARED JOINTLY BY THE NOVA SCOTIA ROADBUILDERS ASSOCIATION AND THE CONSULTING ENGINEERS OF NOVA SCOTIA (CURRENT EDITION).
4. ALL WORKS TO BE IN ACCORDANCE WITH REQUIREMENTS OF ALL PERMITS AND REGULATIONS AS ISSUED BY THE NOVA SCOTIA DEPARTMENT OF ENVIRONMENT.
5. CONTRACTOR TO NOTIFY DESIGNPOINT AND WEST HANTS REGARDING CONSTRUCTION SCHEDULING 2 WEEKS PRIOR TO COMMENCING CONSTRUCTION.
6. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF NATURAL WATERCOURSES FROM DAMAGE DUE TO SILT-LADEN RUNOFF FROM THE CONSTRUCTION SITE. ACCEPTABLE CONSTRUCTION PROCEDURES MAY BE OBTAINED FROM 'EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION SITES" (CURRENT EDITION), BY THE NOVA SCOTIA DEPARTMENT OF ENVIRONMENT.
7. ALL DISTURBED AREAS NOT STABILIZED BY GRAVEL, ASPHALT, CONCRETE, OR SOD ARE TO BE STABILIZED WITH 100mm TOPSOIL AND HYDROSEEDED. HYDROSEEDED AREAS TO BE COVERED WITH HAY MULCH (MIN. 3500 kg/Ha). HYDROSEEDED AREAS THAT DO NOT SHOW ACTIVE GROWTH WITHIN THE FIRST GROWING SEASON TO BE RE-STABILIZED.
8. MATERIALS SHALL NOT BE SUBSTITUTED UNLESS PRIOR APPROVAL IS PROVIDED BY THE ENGINEER.
9. SHOP DRAWINGS TO BE PROVIDED FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO CONSTRUCTION.
10. CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM WORKS AND TO COMPLY WITH ALL PERMIT REQUIREMENTS AND CONDITIONS.
11. LOCATIONS OF EXISTING INFRASTRUCTURE IS BASED ON BEST AVAILABLE INFORMATION, INCLUDING RECORD INFORMATION. CONTRACTOR TO CONFIRM LOCATIONS OF EXISTING INFRASTRUCTURE AND NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. CONTRACTOR TO ALLOW A 1 WEEK REVIEW PERIOD BY THE ENGINEER.
12. CONTRACTOR TO VERIFY ALL EXISTING UTILITY LOCATIONS, SUCH AS HERITAGE GAS, NOVA SCOTIA POWER, BELL ALIANT, AND EASTLINK. CONTRACTOR TO VISIT CLICKBEFOREYOUDIG.COM TO REQUEST LOCATES PRIOR TO COMPLETING ANY EXCAVATION. CONTRACTOR SHALL ADHERE TO ALL OCCUPATIONAL HEALTH AND SAFETY REGULATIONS FOR WORKING AROUND LIVE GAS MAINS.
13. ALL POWER AND COMMUNICATION INFRASTRUCTURE TO BE INSTALLED AS PER NSPI AND COMMUNICATION PROVIDER (I.E. BELL) SPECIFICATIONS. CONTRACTOR TO CONFIRM AND COORDINATE WITH UTILITIES AS REQUIRED.
14. PERMISSION FROM LANDOWNER(S) REQUIRED TO WORK ON PRIVATE PROPERTY.
15. CONTRACTOR TO NOTIFY PROPERTY OWNERS WHO WILL EXPERIENCE DISRUPTION DURING THE WORK (PROPERTY ACCESS, MUNICIPAL SERVICE LOSS, POWER/COMMUNICATION LOSS, ETC.) AT LEAST 48 HOURS PRIOR TO THE DISRUPTION.
16. ALL ELEVATIONS ARE METRIC AND GEODETIC. TOPOGRAPHICAL SURVEY COMPLETED BY DESIGNPOINT IN NOV. 2021. CONTRACTOR TO CONTACT DESIGNPOINT FOR CONSTRUCTION LAYOUT CONTROL INFORMATION 2 WEEKS PRIOR TO CONSTRUCTION.
17. ALL EART ORK (INCLUDING SUBGRADE), TRENCH WORK, PIPE BEDDING, AND SURFACE TREATMENT (INCLUDING GRAVELS, ASPHALT, AND CONCRETE) TO BE REVIEWED AND CERTIFIED BY PROJECT GEOTECHNICAL ENGINEER.
18. DRAWINGS SUBJECT TO CONSTRUCTION APPROVAL BY THE APPLICABLE APPROVAL AGENCIES (e.g. WEST HANTS AND NOVA SCOTIA DEPARTMENT OF ENVIRONMENT) PRIOR TO CONSTRUCTION.
19. CONTRACTOR RESPONSIBLE FOR ALL TRAFFIC CONTROL MEASURES REQUIRED FOR THE PROJECT. ALL TEMPORARY TRAFFIC CONTROL MEASURES TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NOVA SCOTIA TRANSPORTATION AND INFRASTRUCTURE RENEWAL TEMPORARY WORKPLACE TRAFFIC CONTROL MANUAL AND THE LATEST EDITION OF THE TRANSPORTATION ASSOCIATION OF CANADA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA.
20. INSULATION TO BE 50mm THICK HI40 RIGID STYROFOAM (ROAD AND TRAFFIC RATED).
21. CONTRACTOR MAY REQUEST GRADE ADJUSTMENTS SUBJECT TO REVIEW AND APPROVAL BY ENGINEER AND APPLICABLE APPROVAL AGENCIES. CONTRACTOR RESPONSIBLE FOR COSTS ASSOCIATED WITH DRAWING REVISIONS AND APPROVALS.
22. ALL TEMPORARY ROAD CLOSURES WILL REQUIRE A ROAD CLOSURES PERMIT.
23. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR IS TO COMPLETE AND PROVIDE A COPY OF A CCTV INSPECTION AND REPORT TO THE ENGINEER FOR REVIEW OF ALL GRAVITY SEWERS 150 mm Ø OR LARGER.
24. ALL TESTING OF SEWERS TO BE IN ACCORDANCE WITH WEST HANTS SPECIFICATIONS, INCLUDING MANHOLE VACUUM TEST. PRESSURE TEST TO BE COMPLETED FOR ENTIRE PIPE LENGTH. TEMPORARY END CAPS TO BE INSTALLED AS REQUIRED TO FACILITATE TESTING.
25. ALL TESTING OF WATER MAINS TO BE IN ACCORDANCE WITH WEST HANTS SPECIFICATIONS, INCLUDING PRESSURE TEST AND CHLORINATION FOR ALL SERVICE LATERALS 100 mm Ø AND LARGER. BASE LIFT OF GRAVEL TO BE PLACED OVER WATER MAINS AND SERVICES PRIOR TO TESTING (PUBLIC AND PRIVATE INFRASTRUCTURE).
26. ANY FIELD MANHOLE CONNECTIONS (IF REQUIRED) TO BE MADE USING CORE DRILL AND KOR-N-SEAL (SUBJECT TO APPROVAL BY UTILITY AND ENGINEER).
27. ALL GRAVITY PIPE TO BE INSTALLED IN AN UPSTREAM DIRECTION. CONTRACTOR TO BEGIN PIPE INSTALLATION AT THE MOST DOWNSTREAM LOCATION. INSTALLING TEMPORARILY ORPHANED PIPE SECTIONS IS NOT ACCEPTABLE (UNLESS APPROVED BY THE UTILITY AND THE ENGINEER).
28. CONTRACTOR TO PROVIDE 24 HOURS NOTICE TO WEST HANTS AND THE ENGINEER OF PIPE AND MANHOLE TESTING, INCLUDING CCTV INSPECTION AND DEFLECTION TESTING.
29. ALL PRECAST MANHOLES AND CATCH BASINS TO BE WRAPPED IN BAKOR BLUESKIN OR APPROVED EQUIVALENT.

ISSUE	DATE	DESCRIPTION
1	JUL. 13, 2022	DRAFT

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REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. J. SKETCHLEY — 11560 — PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER — DATE 22/02/2024 — A. T. LEAHY — 20200013 — PROVINCE OF NOVA SCOTIA

CLIENT

West Hants
something inspiring awaits

PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

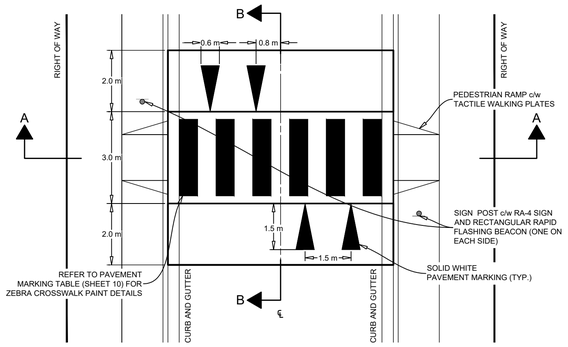
WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

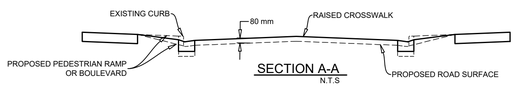
CONSTRUCTION NOTES AND DETAILS 1

Drawn	Engineer	Project No.	Drawing No.
J. GALLANT	A. SKETCHLEY	21-435	C-D13
Scale: N.T.S	Filename: 21-435_D01_INT-DETAILS.dwg		13 of 14

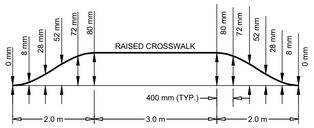
TYP. RAISED CROSSWALK (A / 14)
N.T.S



NOTES:
1. THE EXISTING ASPHALT SURFACE TO BE MILLED TO A DEPTH OF 40 mm WHEN RETROFITTING
2. CATCH BASINS ARE REQUIRED ON THE UPHILL SIDE OF THE RAISED CROSSWALK AS INDICATION ON PLANS.
3. POSITIVE DRAINAGE TO NEAREST CATCHBASIN TO BE CONFIRMED BY THE ENGINEER AND ADJUSTED AS REQUIRED
4. RAISED CROSSWALKS TO BE CONSTRUCTED USING TYPE D-HF ASPHALT (UNLESS OTHERWISE APPROVED BY THE W)
5. ALL DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE

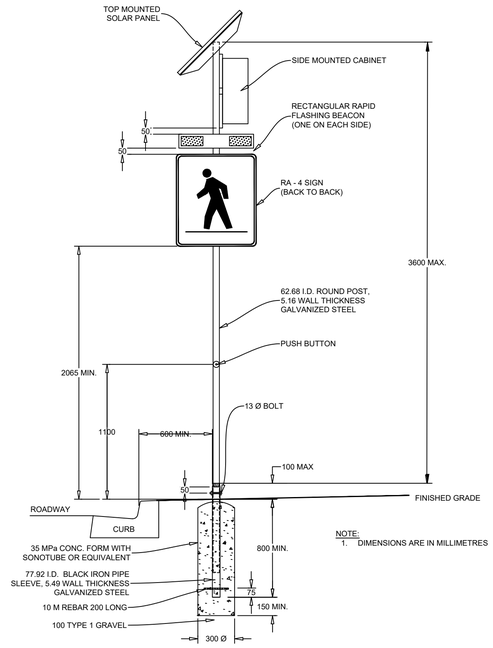


SECTION A-A
N.T.S



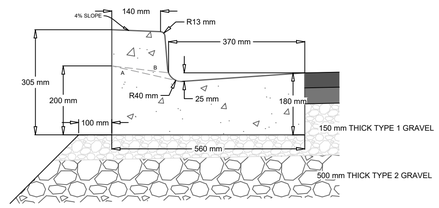
SECTION B-B
N.T.S

RECTANGULAR RAPID-FLASHING BEACON SIGNAL CONFIGURATION (SOLAR PANEL) (B / 14)
N.T.S



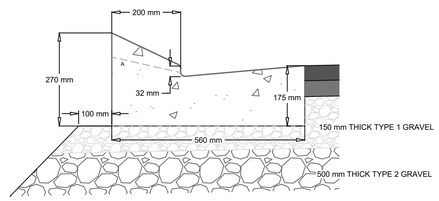
NOTE:
1. DIMENSIONS ARE IN MILLIMETRES

TYPICAL CURB DETAIL (C / 14)
N.T.S.



NOTES:
LINE A INDICATES CURB AT PEDESTRIAN RAMPS.
LINE B INDICATES CURB AT DRIVEWAYS

MOUNTABLE CURB DETAIL (D / 14)
N.T.S.



ISSUE	DATE	DESCRIPTION
5	FEB. 22, 2024	ISSUED FOR TENDER
4	FEB. 15, 2024	ISSUED FOR REVIEW
3	AUG. 16, 2023	REVISED CROSSWALKS
2	JUN. 16, 2023	REVISED ROUNDABOUT ENTRANCE
1	JUL. 13, 2022	DRAFT

CONSULTANT

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REGISTERED PROFESSIONAL ENGINEER
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20200013
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CLIENT

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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

CONSTRUCTION NOTES AND DETAILS 2

Drawn	Engineer	Project No.	Drawing No.
T.MILLS	A. SKETCHLEY	21-435	C-D14
Scale: N.T.S	Filename: 21-435_D01_INT-DETAILS.dwg		14 of 14

Addendum #1

To All Bidders of WHRMPW24-03:

Please note: the following addendum applies to WHRMPW24-03 and shall be taken into consideration when preparing bid documents.

Replace drawings: C-TR02 Sheet 2 of 14, Rev 5, dated February 22, 2024
C-D12 Sheet 12 of 14, Rev 5, dated February 22, 2024
C-D14 Sheet 14 of 14, Rev 5, dated February 22, 2024

With the following: C-TR02 Sheet 2 of 14, Rev 6, dated March 27, 2024
C-D12 Sheet 12 of 14, Rev 6, dated March 27, 2024
C-D14 Sheet 14 of 14, Rev 6, dated March 27, 2024

Add the following schematic:

Services Removal Plan	TSK-01	Sheet 1 of 1, dated March 27, 2024
Infill Surcharging Sketch	TSK-02	Sheet 1 of 1, dated March 28, 2024

Addendum #1

Replace Section 00 41 43 – Tender Form, Section 1.4 Schedule Of Quantities And Unit Prices:

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
EARTHWORK					
2.	Grubbing	m^2	800		
6.	Borrow	m^3	550		
8.	Exploratory Digs	ea	5		
9.	Infill Surcharging	L.S.	1		
10.	Karst Topography Cavern Infill (Provisional)				
	.1 Less than or equal to 5 cubic metres	ea	3		
	.2 Greater than 5 cubic metres	m^3	20		
			SUBTOTAL EARTHWORK:	$	
WATER MAIN					
11.	Pipe				
	.1 250mm PVC BIONAX	m	192		
	.2 200mm PVC BIONAX	m	135		
12.	Fire Hydrants				
	.1 Installation	ea	2		
	.2 Relocation	ea	1		
14.	Direct Buried Valves				
	.1 250mm Gate Valve	ea	3		
	.1 200mm Gate Valve	ea	2		
16.	Connections to Existing Main				
	.1 250mm, Payzant Drive 0+826	ea	1		
	.2 250mm, Payzant Drive 1+018	ea	1		
	.3 200mm, Wentworth Road 0+874	ea	1		
18.	Temporary Water	L.S.	1		
19.	Cap and Abandonment of Existing Main				
	.1 250mm, Payzant Drive 0+834	ea	1		
	.2 250mm, Payzant Drive 0+890	ea	1		
			SUBTOTAL WATER MAIN:	$	

Addendum #1

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
STORM SEWER					
31.	Pipe				
.1	300mm PVC DR18	m	48		
.2	450mm RCP 65D	m	33.5		
32.	Manholes				
.1	1050mm	ea	1		
.2	1200mm	ea	1		
33.	Catch Basins				
.1	1050mm, Single	ea	5		
.2	1050mm, Double	ea	5		
34.	Catch Basin Leads				
.1	200mm PVC DR35	m	15		
.2	250mm PVC DR35	m	38		
.3	250mm PVC DR18	m	40		
.4	300mm PVC DR35	m	102		
.5	300mm PVC DR18	m	30		
36.	Connections to Existing				
.1	Existing Manhole	ea	1		
.1	Wentworth Road Culvert	ea	1		
37.	Culverts				
.1	1200mm RCP 65D	m	6.5		
39.	Precast Headwall				
.1	Up to 600mm Pipe	m	5		
.2	1200mm Pipe	m	1		

SUBTOTAL STORM SEWER: $_____

STREET CONSTRUCTION					
41.	Gravels				
.1	Type 1 (150mm thick)	m^2	3750		
.2	Type 2 (500mm thick)	m^2	3750		
.3	Type 1 (Dentist Parking Lot) (150mm thick)	m^2	1110		
.4	Type 2 (Dentist Parking) (300 mm thick)	m^2	1110		
43.	Asphalt Concrete				
.1	Type C-HF (50 mm thick)	m^2	3750		
.2	Type B-HF (100 mm thick)	m^2	3750		

Addendum #1

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
	.3 Type C-HF (Dentist Parking Lot) (40mm thick)	m^2	980		
	.4 Type B-HF (Dentist Parking) (50 mm thick)	m^2	980		
44.	Curb				
	.1 Curb and Gutter - Concrete	m	550		
	.2 Curb only - Concrete	m	430		
45.	Concrete Sidewalk				
	.1 Sidewalk/ Traffic Island (100mm)	m^2	1185		
	.2 Truck Apron (200mm)	m^2	275		
46.	Tactile Walking Surface Indicators	ea	28		
48.	Guardrail				
	.1 Rail for Civic 151 wall	m	12		
50.	Adjust Existing Manhole Frames and Covers	ea	4		
52.	Segmental Retaining Wall				
	.1 Center Island	m^2	98		
	.2 Civic 151 Parking Lot	m^2	15		
53.	Street Signs and Bases	ea	38		
54.	Stone Pillar Reinstatement	L.S.	1		
55.	Sign Relocation				
	.1 Credit Union	L.S.	1		
	.2 Hospital	L.S.	1		
56.	Raised Crosswalks	ea	6		
57.	Temporary Asphalt Reinstatement (Provisional)	m^2	3000		

SUBTOTAL STREET CONSTRUCTION: $_____

LANDSCAPING

61.	Topsoil and Sod	m^2	1050		
62.	Topsoil and Seed	m^2	530		

Addendum #1

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
66.	Grass Pavers	m^2	205		
67.	Center Island Landscaping	L.S.	1		

SUBTOTAL LANDSCAPING: $_____

ADDITIONAL ITEMS

73.	Replacement of Unsuitable Material w/ Surge Rock (Provisional)	m^3	1900		
76.	Infrastructure Removal	L.S.	1		
77.	Trench Excavation – Contaminated Material (Provisional)	m^3	50		

SUBTOTAL ADDITIONAL ITEMS: $_____

ENVIRONMENTAL PROTECTION

90.	Environmental Measures	L.S.	1		

SUBTOTAL ENVIRONMENTAL PROTECTION: $_____

SUBTOTAL EARTHWORK $_____

SUBTOTAL WATER MAIN $_____

SUBTOTAL STORM SEWER $_____

SUBTOTAL STREET CONSTRUCTION $_____

SUBTOTAL LANDSCAPING $_____

SUBTOTAL ADDITIONAL ITEMS $_____

SUBTOTAL ENVIRONMENTAL PROTECTION $_____

ESTIMATED CONTRACT PRICE (EXCLUDING HST) $_____ (A)

ADD HARMONIZED SALES TAX (15% of Estimated Contract Price) $_____ (B)

TOTAL PRICE (A + B) $_____

TENDERER'S HST REGISTRATION NO. _____

Addendum #1

Add Section 01 22 00 – Measurement and Payment, Item 57. Temporary Asphalt Reinstatement:

9. Infill Surcharging

Unit of Measurement: Lump Sum

This item includes: supply, placement and compaction of borrow material to a thickness that is double the required fill thickness (grubbed grade to finished grade). Excavation and shaping of the placed material to occur in the following year to facilitate roadway construction. No payment additional payments will be made under pay item 6 for the imported borrow in these areas.

Replace Section 01 22 00 – Measurement and Payment, Item 48. Guardrail with the following:

48. Guardrail

Unit of Measurement: metre (m)

Method of Measurement: along the top of rail through posts.

This item includes: common excavation, importation of material, bedding, backfill, supply and placing posts, rail and accessories. This item also includes all coordination with retaining wall installation and any accessories required.

Replace Section 01 22 00 – Measurement and Payment, Item 52. Segmental Retaining Wall with the following:

52. Segmental Retaining Wall

Unit of Measurement: square metre (m2)

Method of Measurement: total area of wall face.

This item includes: common excavation, removal and disposal of surplus material, importation of material, installation of foundation preparation and bedding, supply and installation of modular Stone Strong wall units, geotextile, guards, gravel, infill soil, backfilling, drainage, design, and shop drawings stamped by a Professional Engineer (licensed to practice in Nova

Scotia). In addition to normal wall design, design to consider global stability and guardrail placement. Only the top exposed faces of retaining walls are required to be aesthetic in nature. Buried sections may have simple/irregular finishes as long as they maintain their structural integrity.

Add Section 01 22 00 – Measurement and Payment, Item 57. Temporary Asphalt Reinstatement:

57. Temporary Asphalt Reinstatement:

Unit of Measurement: square metre (m2)

Method of Measurement: slope measure.

This item includes: common excavation, removal and disposal of surplus material, supply and placement of gravel, asphalt and line painting as directed by the Engineer. No payment will be made under this item unless authorized by the Engineer.

Replace Section 01 22 00 – Measurement and Payment, Item 73. Replacement of Unsuitable Material w/ Surge Rock (Provisional) with the following:

73. Replacement of Unsuitable Material w/ Surge Rock (Provisional)

Unit of Measurement: cubic metre (m^3)

Method of Measurement: surface-to-surface volume method between topographical survey taken before and after the placement and compaction of replacement material.

This item includes: all excavation, removal, and disposal of unsuitable material. As well as the supply, placement, and compaction of surge rock as directed by the Engineer. No payment will be made under this item unless authorized by the Engineer. This item also includes the supply and placement of filter fabric.

The following questions have been asked and the answers are provided for clarification:

Addendum #1

Question 1: The new road structure details (detail A-E) shown on drawing TR09 indicates prime is required on top of the Type 1 gravel. As discussed at the site meeting, this is atypical for projects like this and would be difficult to apply as traffic will be traveling over the gravels prior to paving. Can you please confirm that prime won't be required?

Answer 1: **Primer will not be required on top of the Type 1 gravel.**

Question 2: The new road structure details (detail A-E) shown on drawing TR09 indicate geotextile is required under the new road structure on top of the subgrade. There isn't a pay item for this on the tender form. Could you please provide a pay item for this work?

Answer 2: **Geotextile is only required when placing surge rock on subgrade and has been added to the description of surge rock.**

Question 3: There is mention in the Geotechnical report under grade increases/settlement that preload/surcharge may be required for fill areas. As discussed at the site meeting and indicated in the geotechnical report, if this was required it would have had to be completed long before the project was tendered. Can you please confirm this won't be applicable for this project?

Answer 3: **See the attached Infill Surcharging sketch and pay item 9.**

Question 4: Further to the question we had submitted previously, it was discussed at the site meeting that pay items would be provided for mass excavation/earthwork scope required for this project. Can you please provide unit price items for Common Excavation and Disposal Offsite, Supply and Placement of Imported Borrow Material in Fill Areas, and Common Excavation and Re-Use in Landscape Areas on site.

Answer 4: **See the updated pay line items and schedule of quantities. Excavation, placement, and disposal are all included in General Item 2 in Measurement and Payment and apply to all items. A quantity has been added for borrow.**

Question 5: The existing conditions plan provides no existing grading information. The grading plan provides very minimal existing grading information but is insufficient for use to calculate volumes. Can you please provide more detailed existing grading information?

Answer 5: **See the updated existing conditions plan.**

Question 6: It was mentioned onsite that a specific type and color of retaining wall was wanted for the roundabout and the retaining wall at the dentist office parking lot. There was no design or specification provided with the tender documents and the tender drawings say the contractor is to provide a design and shop drawing for the retaining walls. Please provide details for retaining walls so that we can ensure we're allowing for the type and color of block that the municipality would like.

Answer 6: **Stone Strong walls are to be used for both the roundabout and dentist office retaining walls.**

Question 7: There are no details provided for headwalls. Please provide details for headwalls for pipe diameters up to 600mm and for the larger headwall required for the 1200mm pipe extension as well as details for any grates or rails that may be required.

Answer 7: **See the updated detail sheet 14.**

Question 8: The new water main on Payzant drive runs under the existing sidewalk from the optometrist to the credit union. There is a section of sidewalk and asphalt curb between the optometrist and credit union driveway entrances that appears to be shown as new asphalt sidewalk and curb but no notes or pay items to confirm this. Is the intent to replace this with new asphalt sidewalk or should this be concrete sidewalk like all of the other new sidewalk on the project? If the intent is to use asphalt sidewalk, please provide a detail and associated pay items. If this section is being replaced with concrete sidewalk, please confirm that this will be paid under item 45.1. Also, the existing curb in this area is asphalt. Please confirm if you require asphalt or concrete curb here and, if asphalt, provide a detail.

Answer 8: **The existing curb and sidewalk are to be replaced with concrete curb and gutter and concrete sidewalk.**

Question 9: After further review of the drawings and discussions at the site meeting, we would ask for some of the curb types to be changed. As discussed at the site meeting, we would ask that the curb around the inner circle of the roundabout be changed to standard NSDPW Type E High Back curb as the truck apron in front of this curb is graded away which makes gutter here redundant. Reverse gutter is also difficult to work with from a grading perspective. We would also ask that the curbed islands be changed to NSDPW Type E High Back Curb. There are no catch basins in the curbed islands and the adjacent asphalt is sloping away from the curb which also

makes gutter here redundant and will likely lead to water being trapped in the gutter. The Curb around the outermost edges of the roundabout island is currently designed as mountable curb with reverse gutter. We would also ask for this to be changed to remove the gutter as the grade on the adjacent asphalt is running away from the curb which makes gutter redundant and will also be much easier to match into with asphalt. We've attached a copy of a standard NSDPW detail that has been being used for this purpose on other roundabouts in the area. Please confirm if this will be acceptable.

Answer 9: Traffic island curb and gutter may be replaced with curb only. Refer to detail C-12 for roundabout curb detailing

Question 10: Detail A on drawing C-D12 has a note pointing to the asphalt in front of the curb that says feathering strip for grading adjustments. please clarify what is meant by this note?

Answer 10: Disregard that note. Note removed in revised detail sheet.

Question 11: It was mentioned at the site meeting that the existing buried infrastructure requires removal only in locations where it interferes with new buried infrastructure. On the drawings, it says to remove all buried infrastructure within the limits of construction. Please confirm we are only required to remove the existing buried infrastructure if it interferes with the new infrastructure. Also, further to the question we had submitted previously, please provide a separate removals plan so that removals can be accurately quantified.

Answer 11: See the attached removal plan.

Question 12: It was discussed at the site meeting that temporary asphalt reinstatement may be required over pipe trenches to keep traffic flowing safely given that the project will span the 2024 and 2025 construction seasons. Can you please provide a unit price pay item for temporary reinstatement of asphalt?

Answer 11: See the updated pay line items.

Question 13: What will be required for backfill material of pipe trenches between bedding material as shown on detail F/13 and the bottom of the proposed road and sidewalk structure? Will this need to be imported granular material or will excavated site material be acceptable for this?

Answer 13: Refer to section 5.2 of the geotechnical report.

Question 14: As discussed at the site meeting, we request an extension to the tender closing of one week to allow time for consultants to respond to questions and for the contractor to process their response.

Answer 14: Extension already posted on NS Procurement Site. April 4th, 2024 at 2pm.

Question 15: Pay item 76 for Infrastructure Removal has been provided on the tender form and is noted to include all removal of existing infrastructure. There is a note indicating that all water, storm, and surface infrastructure within the project footprint is to be removed unless otherwise noted; however, the level of detail on the drawings make it difficult to fully quantify the full scope of removals required for the project. As this is a lump sum item, we want to make sure we're able to capture all of the cost related to this scope of work under this item. Can you please revise the existing conditions plan (Drawing C-TR02) to clearly indicate all of the removals required for the project so they can be accurately quantified by all bidders?

Answer 16: See answer 11.

Question 16: Further to question 1 above, Pay item 76 also notes that common excavation and replacement of required volume with select material is to be included in this item. We'd like to request that separate unit price pay items be provided for these two items.

Answer 16: This pay item will remain as is.

Question 17: Pay item 18 for temporary water is provided as a lump sum item which will requires the bidder to quantify time and materials required for this scope of work. Can you please provide a plan showing the extents to which the existing water main in this area can be isolated so that we can determine the number of customers affected and the level of effort required to provide temporary water service to affected customers? Can we assume that temporary water can be provided by way of connection to existing hose bibs?

Answer 17: The following sequencing is suggested. The contractor will be responsible for the final temporary water plan and execution.

1. Payzant Drive – install new water main short of connections to existing so that existing water main may remain in service.

2. If disturbance of the lateral for 150 Wentworth Rd. is required, relocate around the new water main or provide temporary service.
3. Retap existing services to the 151 Wentworth Rd. and 19 Centennial Dr. north of water tie in point.
4. Test new Payzant water main.
5. Make connections to the existing water main at either end with a short-duration shut down.
6. Connect 150 Wentworth Rd. to new water main if existing service is still connected to existing main.
7. Wentworth Road – Install valve at Sta. 0+875 and a length of pipe so that the valve can be closed, leaving the existing main pressurized with a temporary shut down.
8. Provide service to 141 Wentworth Rd. from Civic 131 Wentworth Rd.

Question 18: Can excess excavated site material be disposed of at the Windsor public works yard?

Answer 18: **The excess excavated material can be disposed of at the dump site located on Colonial Road. Material shall be placed and leveled as directed by WHRM Staff.**

Question 19: Can you please confirm that coordination with Nova Scotia Power and any cost related to moving of poles and overhead wires will be the responsibility of the owner?

Answer 19: **These costs will be the responsibility of WHRM. The contractor will still be required to pay for any bracing/shoring required for existing or future poles and will need to coordinate with NSPI.**

Question 20: Pay item 73 for replacement of unsuitable material with surge notes that it includes supply, placement, and compaction of surge as directed by the engineer but doesn't note that excavation of unsuitable material is to be included under this item. Please clarify.

Answer 20: **Excavation is included in General Item 2 in Measurement and Payment and has been added to Item 73.**

Question 21: Pay item 52.2 has been provided for a segmental retaining wall at civic 151 with a tender quantity of 15m2. This particular wall requires a handrail on the top of it. As the actual quantity may vary somewhat from the tender quantity, can you please add a separate pay item for this handrail?

Answer 21: A pay item has been added for this guardrail.

Question 22: Please confirm whether the costs associated with electrical works as per drawing C-E11 are NOT included in the tender scope

Answer 22: See answer 19.

Question 23: In the Supplementary Specs for pay item number 8 for Exploratory Digs, it is noted that this item includes reinstatement of all disturbed areas. Is the intent for us to include asphalt reinstatement at the surface if located in an existing asphalt area? Please clarify. A previous question that we submitted requested a pay item for temporary asphalt. If this item is provided, can we assume that we will be paid under that new item for this? If located in a landscape area, can we assume that landscape reinstatement will be paid under the pay items for topsoil and sod or topsoil and seed?

Answer 22: Any and all reinstatement that is required as a result of exploratory digs/investigations are to be included in the pay item 8.

Question 24: The tender quantity for pay item 45.1 (concrete truck apron) is 275m2. The measured quantity from the drawing is approximately 195m2. We've requested pricing from our rebar supplier based on the tender quantity; however, if the actual quantity is significantly lower, this will significantly impact our lump sum price for rebar and will skew our bid cost for this item. Can you please adjust the tender quantity to reflect the quantity shown on the drawings?

Answer 24: The quantity has been updated in the revised schedule of quantities and prices above.

Question 25: Tender quantities for pay items 41.1 and 41.2 (Type 1 and Type 2 gravels) matches the tender quantity for pay items 43.1 and 43.2 (Type B and C asphalt). The cross sections on drawing TR09 show the road structure gravels beginning behind the curb and carrying through the curbed islands to behind the curb on the other side of the road as well as under the truck apron (detail E/07 on C-D12) which would make the actual quantity for pay items 41.1 and 41.2 higher than the quantities for 43.1 and 43.2. I realize that the supplementary specs for curb and sidewalk note that gravel is included in those items; however, in reality this gravel would be placed at the same time as the road structure gravel as it is the same type and thickness. Can we assume that placement of 500mm Type 2 and

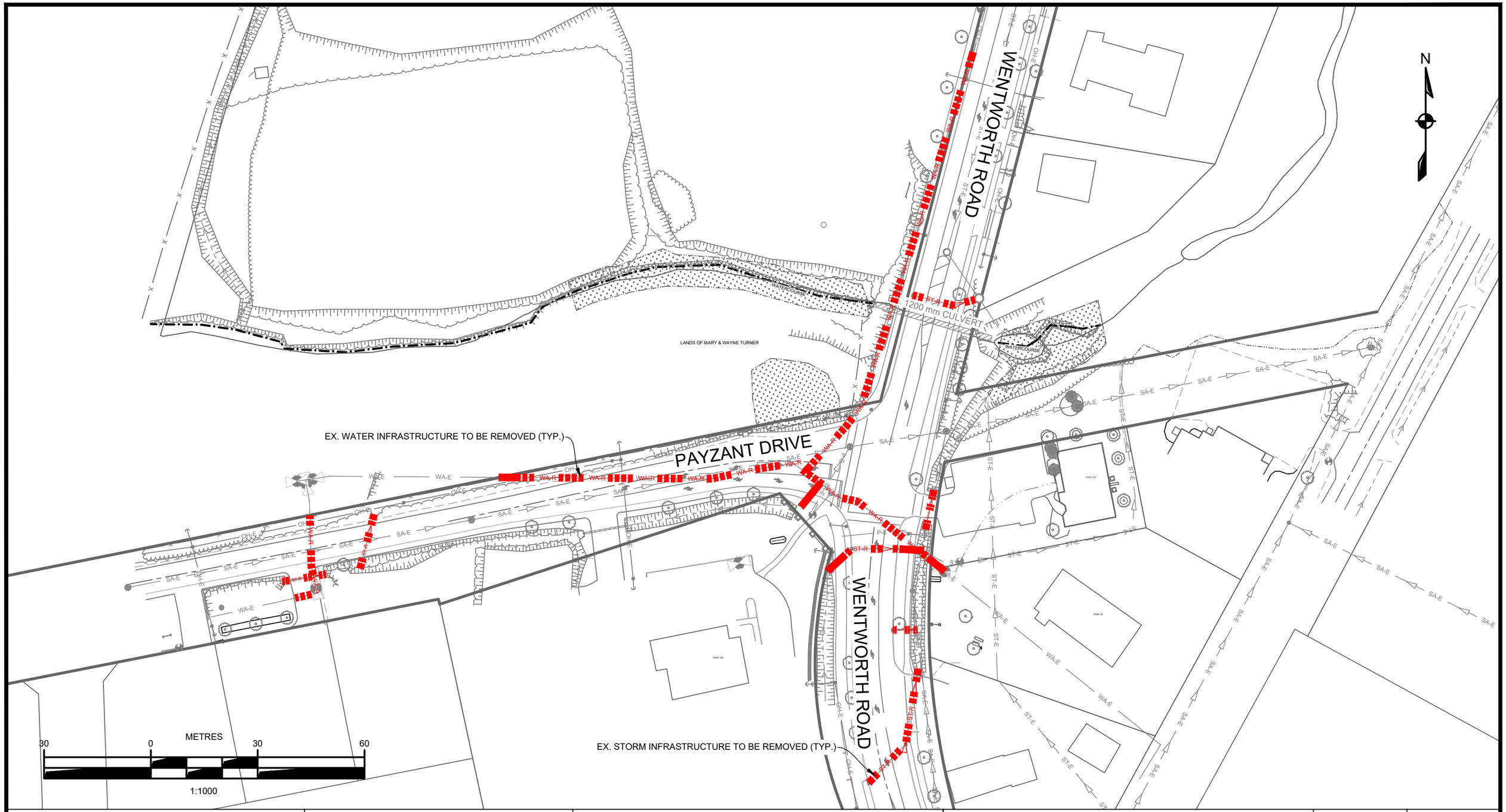
150mm Type 1 in these areas will be paid under items 41.1 and 41.2 with any additional gravel between this elevation and the bottom of concrete in the islands included with concrete sidewalk pay items? If so, can you please adjust tender quantities to accommodate this?

Answer 25: **These pay items will remain as they are. Items 41.1 and 41.2 are for road gravels only. Gravels associated with concrete works are to be included in the pay items for those works.**

Question 26: The roundabout cross section detail (E/07 on dwg C-D12) shows asphalt at 150mm thick in two lifts. Cross sections on TR09 and pay items of course show this as 100mm of Type B and 50mm of Type C. However, the 100mm of Type B should be placed in two lifts as 100mm would be too thick too be placed in one lift and still achieve adequate compaction. Can you please confirm that the intent is to place 100mm Type B asphalt in two lifts to ensure that all bidders are on the same page?

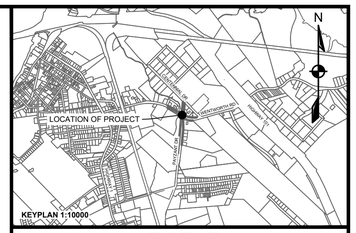
Answer 26: **Please disregard the asphalt thickness shown in detail E-07 on sheet 12. Type B-HF asphalt should be placed in two 50 mm lifts.**

*******End of Addendum #1*******



CONSULTANT	CLIENT	PROJECT DESCRIPTION	SHEET DESCRIPTION	Engineer	Drawn
DESIGNPOINT engineering • surveying • solutions 902.832.5597 designpoint.ca	West Hants something inspiring awaits	PAYZANT DRIVE ROUNDABOUT WINDSOR, NOVA SCOTIA	SERVICES REMOVAL PLAN	A.Leahy	A.Leahy
				Scale 1:1000	Date Mar. 27, 2024
				Project No. 21-435	Drawing No. TSK-01
				Filename	1 OF 1

P:\2021\21-435 West Hants - Payzant Drive Roundabout\01 - Drawings\Eng Design\2023 Updates\Sheets\21-435_TR01_EXISTING CONDITIONS.dwg, Plot Date: 2024-Mar-27, Plot Size: ANSI full bleed B (11.00 x 17.00 Inches), Plotted By: Adam Leahy



LEGEND

EXISTING		PROPOSED
	VERTICAL PROFILE	
	APPROXIMATE 1 IN 100 YEAR FLOOD LIMIT	100 YR
	EASEMENT	
WA-E	WATER PIPE	WA WA
SA-E	SANITARY PIPE	SA SA
ST-E	STORM PIPE	ST ST
GAS-E	NATURAL GAS MAIN	GAS
	WATER LATERAL	
	SANITARY LATERAL	
	STORM LATERAL	
	NATURAL GAS LATERAL	
	SIDEWALK	
	WALKWAY/A.T. TRAIL	
	GUARDRAIL	
	TOP OF SLOPE	
	BOTTOM OF SLOPE	
X	FENCELINE	X

	EXISTING	PROPOSED		EXISTING	PROPOSED
CURB CUT/RAMP			AIR RELEASE VALVE		
CURBSTOP			WATER VALVE		
REDUCER			HYDRANT		
PRECAST HEADWALL			CATCHBASIN		
STREET SIGN			UTILITY POLE w/ GUY WIRE		
STREET TREE			GLB		
			URD		

EXISTING GRADE CONTOURS ARE SHOWN AT A 0.5 m INTERVAL

METRES 5 0 10 15

1:250

ISSUE	DATE	DESCRIPTION
6	MAR. 26, 2024	ISSUED FOR ADDENDUM 1
5	FEB. 22, 2024	ISSUED FOR TENDER
4	FEB. 15, 2024	ISSUED FOR REVIEW
3	AUG. 16, 2023	REVISED CROSSWALKS
2	JUN. 16, 2023	DRAFT

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REGISTERED PROFESSIONAL ENGINEER
DATE 27/03/2024
A. J. SKETCHLEY
11560
PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER
DATE 27/03/2024
A. T. LEAHY
20200013
PROVINCE OF NOVA SCOTIA

CLIENT

West Hants
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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

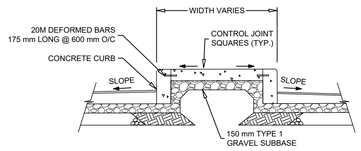
EXISTING CONDITIONS

Drawn	Engineer	Project No.	Drawing No.
J. DWYER	P. BURGESS	21-435	C-TR02
Scale 1:250	Filename 21-435_TR01_EXISTING CONDITIONS.dwg		02 OF 14

P:\2021\21-435 West Hants - Payzant Drive Roundabout\01 - Drawings\Eng Design\2023 Updates\Sheets\21-435_TR01_EXISTING CONDITIONS.dwg, Plot Date: 2024-Mar-27, Plot Size: ISO FULL BLEED A1 (841.00 X 594.00 MM)

TYPICAL CONCRETE TRAFFIC ISLAND DETAIL (A / 12)

(N.T.S.)

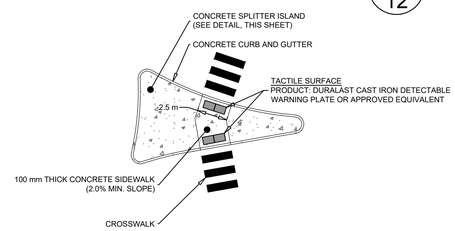


NOTES:

1. MAXIMUM SPACING FOR CONTROL JOINTS IS TO BE 2.5 m.
2. SLOPE SLAB TO FACILITATE DRAINAGE.
3. ENDS AND CORNERS OF TRAFFIC ISLANDS TO HAVE HIGH BACK CONCRETE CURB GEOMETRIC DESIGN OF CONCRETE ISLANDS TO BE AS PER THE TAC GEOMETRIC DESIGN GUIDE.

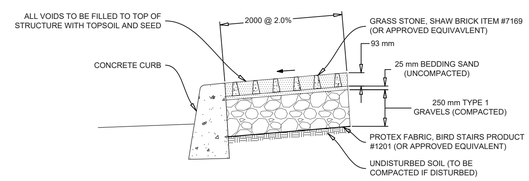
TYPICAL DROPPED SIDEWALK DETAIL (B / 12)

(N.T.S.)



GRASS PAVER TYPICAL DETAIL (D / 12)

(N.T.S.)

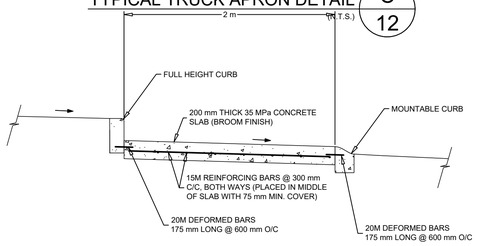


NOTES:

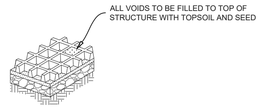
1. PRODUCTS TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

TYPICAL TRUCK APRON DETAIL (C / 12)

(N.T.S.)



GRASS PAVER ISOMETRIC VIEW



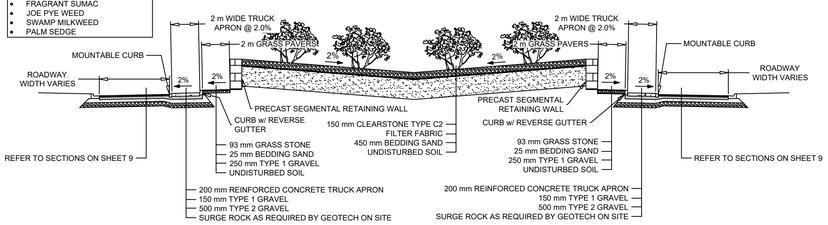
TYPICAL ROUNDABOUT CROSS-SECTION (E / 07)

(N.T.S.)

NOTE: CENTER ISLAND VEGETATION TO CONSIST OF THE FOLLOWING:

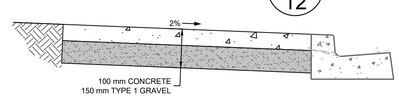
- WINTERBERRY
- DOGWOOD
- FRAGRANT SUMAC
- JOE PYE WEED
- SWAMP MILKWEED
- PALM SEDGE

NOTE: FOR PRECAST SEGMENTAL RETAINING WALL, CONTRACTOR TO PROVIDE P.ENG STAMPED SHOP DRAWINGS FOR REVIEW.



SIDEWALK STRUCTURE (F / 12)

N.T.S.



ISSUE	DATE	DESCRIPTION
6	MAR. 26, 2024	ISSUED FOR ADDENDUM 1
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4	FEB. 15, 2024	ISSUED FOR REVIEW
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REGISTERED PROFESSIONAL ENGINEER — DATE 27/03/2024 — A. J. SKETCHLEY — 11560 — PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER — DATE 27/03/2024 — A. T. LEAHY — 20200013 — PROVINCE OF NOVA SCOTIA

CLIENT

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PROJECT DESCRIPTION

PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

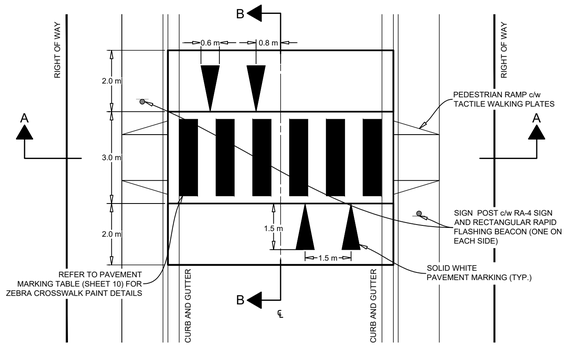
SHEET DESCRIPTION

ROAD CONSTRUCTION DETAILS

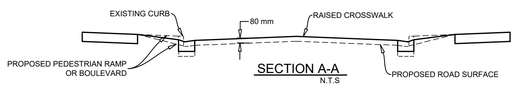
Drawn	Engineer	Project No.	Drawing No.
J. DWYER	P. BURGESS	21-435	C-D12
Scale N.T.S.	Filename 21-435_D01_INT-DETAILS.dwg		12 of 14

TYP. RAISED CROSSWALK (A / 14)

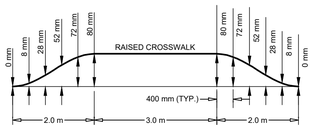
N.T.S



NOTES:
1. THE EXISTING ASPHALT SURFACE TO BE MILLED TO A DEPTH OF 40 mm WHEN RETROFITTING
2. CATCH BASINS ARE REQUIRED ON THE UPHILL SIDE OF THE RAISED CROSSWALK AS INDICATION ON PLANS.
3. POSITIVE DRAINAGE TO NEAREST CATCHBASIN TO BE CONFIRMED BY THE ENGINEER AND ADJUSTED AS REQUIRED
4. RAISED CROSSWALKS TO BE CONSTRUCTED USING TYPE D-HF ASPHALT (UNLESS OTHERWISE APPROVED BY THE W)
5. ALL DIMENSIONS ARE IN METERS UNLESS INDICATED OTHERWISE



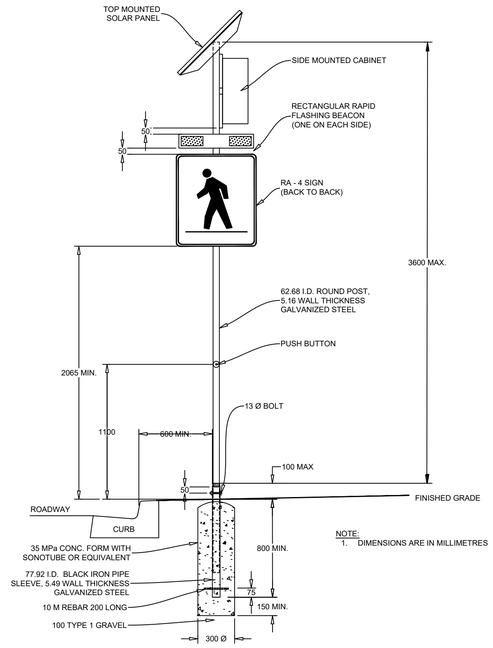
SECTION A-A
N.T.S



SECTION B-B
N.T.S

RECTANGULAR RAPID-FLASHING BEACON SIGNAL CONFIGURATION (SOLAR PANEL) (B / 14)

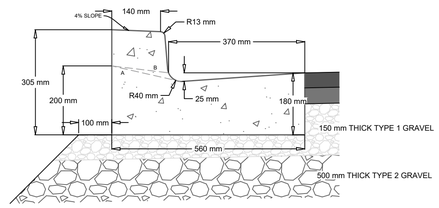
N.T.S



NOTE:
1. DIMENSIONS ARE IN MILLIMETRES

TYPICAL CURB AND GUTTER DETAIL (C / 14)

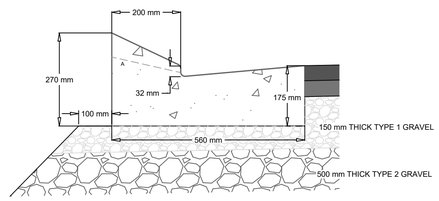
N.T.S.



NOTES:
LINE A INDICATES CURB AT PEDESTRIAN RAMPS.
LINE B INDICATES CURB AT DRIVEWAYS

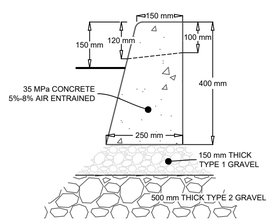
MOUNTABLE CURB AND GUTTER DETAIL (D / 14)

N.T.S.



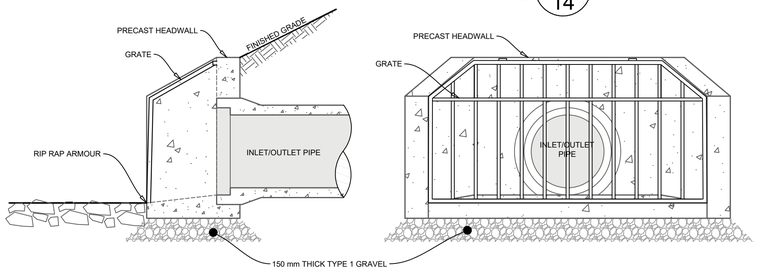
TYPICAL CURB DETAIL (E / 14)

N.T.S



TYPICAL HEADWALL DETAIL (F / 14)

N.T.S.



NOTES:
1. ANY PIPE SYSTEMS OR CULVERTS LONGER THAN 30 m TO HAVE HEADWALL GRATES ON INLETS.
2. BARS TO BE VERTICAL ON INLET GRATES. GRATES ARE NOT PERMITTED ON OUTLETS.
3. AREA OF HEADWALL GRATE (WHERE REQUIRED) TO BE MINIMUM 6 TIME LARGER THAN PIPE CROSS SECTIONAL AREA.
4. GRATES TO BE GALVANIZED STEEL.
5. HEADWALL TO BE SIZED BASED ON PIPE SIZE AS PER PRECAST MANUFACTURERS RECOMMENDATION.

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REGISTERED PROFESSIONAL ENGINEER
DATE 27/03/2024
A. J. SKETCHLEY
11560
PROVINCE OF NOVA SCOTIA

REGISTERED PROFESSIONAL ENGINEER
DATE 27/03/2024
A. T. LEAHY
20200013
PROVINCE OF NOVA SCOTIA

CLIENT

West Hants
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PROJECT DESCRIPTION

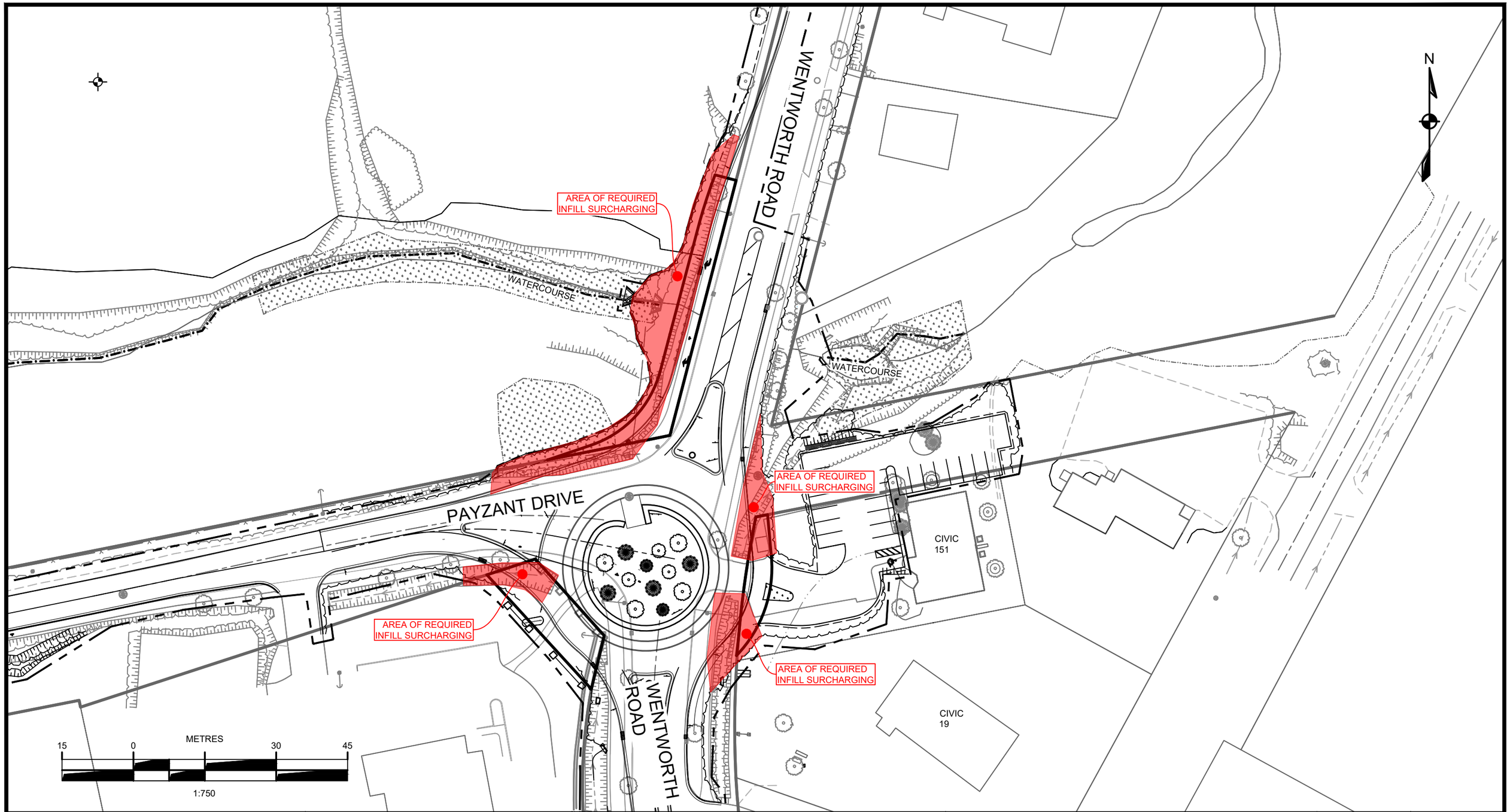
PAYZANT DRIVE ROUNDABOUT

WEST HANTS, NOVA SCOTIA

SHEET DESCRIPTION

CONSTRUCTION NOTES AND DETAILS 2

Drawn	Engineer	Project No.	Drawing No.
T.MILLS	A. SKETCHLEY	21-435	C-D14
Scale N.T.S	Filename 21-435_D01_INT-DETAILS.dwg		14 OF 14



CONSULTANT	CLIENT	PROJECT DESCRIPTION	SHEET DESCRIPTION	Engineer	Drawn
DESIGNPOINT engineering • surveying • solutions 902.832.5597 designpoint.ca	West Hants something inspiring awaits	PAYZANT DRIVE ROUNDABOUT WINDSOR, NOVA SCOTIA	INFILL SURCHARGING SKETCH	A.Leahy	A.Leahy
				Scale 1:750	Date Mar. 28, 2024
				Project No. 21-435	Drawing No. TSK-02
				Filename 21-435_3-PP01_PAYZANT.dwg	1 OF 00

P:\2021\21-435 West Hants - Payzant Drive Roundabout\01 - Drawings\Eng Design\2023 Updates\Sheets\21-435_3-PP01_PAYZANT.dwg, Plot Date: 2024-Mar-28, Plot Size: ANSI full bleed B (11.00 x 17.00 Inches), Plotted By: Adam Leahy

Addendum #2

To All Bidders of WHRMPW24-03:

Please note: the following addendum applies to WHRMPW24-03 and shall be taken into consideration when preparing bid documents.

Replace Section 01 22 00 – Measurement and Payment, Item 57. Temporary Asphalt Reinstatement:

57. Temporary Asphalt Reinstatement:

Unit of Measurement: square metre (m2)

Method of Measurement: slope measure.

This item includes: common excavation, removal and disposal of surplus material, supply and placement of gravel, asphalt pavement, asphalt sidewalk and line painting as directed by the Engineer. Reinstatement extents to be confirm with engineer prior to placement. No payment will be made under this item unless authorized by the Engineer.

Replace Section 00 41 43 – Tender Form, Section 1.4 Schedule Of Quantities And Unit Prices:

Addendum #2

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
EARTHWORK					
2.	Grubbing	m^2	800		
6.	Borrow	m^3	550		
8.	Exploratory Digs	ea	5		
9.	Infill Surcharging	L.S.	1		
10.	Karst Topography Cavern Infill (Provisional)				
	.1 Less than or equal to 5 cubic metres	ea	3		
	.2 Greater than 5 cubic metres	m^3	20		
			SUBTOTAL EARTHWORK:	$	
WATER MAIN					
11.	Pipe				
	.1 250mm PVC BIONAX	m	192		
	.2 200mm PVC BIONAX	m	135		
12.	Fire Hydrants				
	.1 Installation	ea	2		
	.2 Relocation	ea	1		
14.	Direct Buried Valves				
	.1 250mm Gate Valve	ea	3		
	.1 200mm Gate Valve	ea	2		
16.	Connections to Existing Main				
	.1 250mm, Payzant Drive 0+826	ea	1		
	.2 250mm, Payzant Drive 1+018	ea	1		
	.3 200mm, Wentworth Road 0+874	ea	1		
18.	Temporary Water	L.S.	1		
19.	Cap and Abandonment of Existing Main				
	.1 250mm, Payzant Drive 0+834	ea	1		
	.2 250mm, Payzant Drive 0+890	ea	1		
			SUBTOTAL WATER MAIN:	$	

Addendum #2

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
STORM SEWER					
31.	Pipe				
.1	300mm PVC DR18	m	48		
.2	450mm RCP 65D	m	33.5		
32.	Manholes				
.1	1050mm	ea	1		
.2	1200mm	ea	1		
33.	Catch Basins				
.1	1050mm, Single	ea	5		
.2	1050mm, Double	ea	5		
34.	Catch Basin Leads				
.1	200mm PVC DR35	m	15		
.2	250mm PVC DR35	m	38		
.3	250mm PVC DR18	m	40		
.4	300mm PVC DR35	m	102		
.5	300mm PVC DR18	m	30		
36.	Connections to Existing				
.1	Existing Manhole	ea	1		
.1	Wentworth Road Culvert	ea	1		
37.	Culverts				
.1	1200mm RCP 65D	m	6.5		
39.	Precast Headwall				
.1	Up to 600mm Pipe	m	5		
.2	1200mm Pipe	m	1		

SUBTOTAL STORM SEWER: $_____

STREET CONSTRUCTION					
41.	Gravels				
.1	Type 1 (150mm thick)	m^2	3750		
.2	Type 2 (500mm thick)	m^2	3750		
.3	Type 1 (Dentist Parking Lot) (150mm thick)	m^2	1110		
.4	Type 2 (Dentist Parking) (300 mm thick)	m^2	1110		
43.	Asphalt Concrete				
.1	Type C-HF (50 mm thick)	m^2	3750		
.2	Type B-HF (100 mm thick)	m^2	3750		

Addendum #2

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
	.3 Type C-HF (Dentist Parking Lot) (40mm thick)	m^2	980		
	.4 Type B-HF (Dentist Parking) (50 mm thick)	m^2	980		
44.	Curb				
	.1 Curb and Gutter - Concrete	m	550		
	.2 Curb only - Concrete	m	430		
45.	Concrete Sidewalk				
	.1 Sidewalk (100mm)	m^2	965		
	.2 Truck Apron (200mm)	m^2	190		
	.3 Traffic Island (100mm)	m^2	355		
46.	Tactile Walking Surface Indicators	ea	28		
48.	Guardrail				
	.1 Rail for Civic 151 wall	m	12		
50.	Adjust Existing Manhole Frames and Covers	ea	4		
52.	Segmental Retaining Wall				
	.1 Center Island	m^2	98		
	.2 Civic 151 Parking Lot	m^2	15		
53.	Street Signs and Bases	ea	38		
54.	Stone Pillar Reinstatement	L.S.	1		
55.	Sign Relocation				
	.1 Credit Union	L.S.	1		
	.2 Hospital	L.S.	1		
56.	Raised Crosswalks	ea	6		
57.	Temporary Asphalt Reinstatement (Provisional)	m^2	1500		

SUBTOTAL STREET CONSTRUCTION: $_____

LANDSCAPING

61.	Topsoil and Sod	m^2	1050		
62.	Topsoil and Seed	m^2	530		

Addendum #2

Item No.	Description	Unit of Measurement	Estimated Quantity	Unit Price	Item Total
66.	Grass Pavers	m^2	205		
67.	Center Island Landscaping	L.S.	1		

SUBTOTAL LANDSCAPING: $_____

ADDITIONAL ITEMS

73.	Replacement of Unsuitable Material w/ Surge Rock (Provisional)	m^3	1900		
76.	Infrastructure Removal	L.S.	1		
77.	Trench Excavation – Contaminated Material (Provisional)	m^3	50		

SUBTOTAL ADDITIONAL ITEMS: $_____

ENVIRONMENTAL PROTECTION

90.	Environmental Measures	L.S.	1		

SUBTOTAL ENVIRONMENTAL PROTECTION: $_____

SUBTOTAL EARTHWORK $_____

SUBTOTAL WATER MAIN $_____

SUBTOTAL STORM SEWER $_____

SUBTOTAL STREET CONSTRUCTION $_____

SUBTOTAL LANDSCAPING $_____

SUBTOTAL ADDITIONAL ITEMS $_____

SUBTOTAL ENVIRONMENTAL PROTECTION $_____

ESTIMATED CONTRACT PRICE (EXCLUDING HST) $_____ (A)

ADD HARMONIZED SALES TAX (15% of Estimated Contract Price) $_____ (B)

TOTAL PRICE (A + B) $_____

TENDERER'S HST REGISTRATION NO. _____

Addendum #2

The following questions have been asked and the answers are provided for clarification:

Question 1: A pay item, sketch, and associated supplementary spec was provided for infill surcharging. If I understand correctly, it appears that the intent is to grub the noted areas and supply and place twice the required imported borrow material as what is required to establish design subgrade in 2024 then remove half of that material and establish actual design subgrade in 2025.

The supplementary spec also notes that no additional payment for imported borrow will be made under pay item 6 in these areas. We're just wondering if you could clarify this. Pay item 6 for imported borrow was just added with this addendum. We would expect that the intent with this item would be for payment of any imported borrow material required to establish subgrade. Will any borrow required in surcharge areas up to design subgrade be paid under pay item 6 with the extra quantity above this to be part of the lump sum pay item 9? Or is the intent that all borrow material in surcharge areas including what is required to get to design subgrade as well as the additional material above this be included in the lump sum pay item for infill surcharging?

Answer 1: **The assumed intent is correct. Borrow required to fill areas up to subgrade will be paid under pay item 6, the additional material required for surcharging shall be included as part of pay item 9.**

Question 2: A provisional item was added for temporary asphalt as part of addendum 1 with a tender quantity of 3,000m2. It was our understanding from the site meeting that the intent with this item would be that it would be used for temporary reinstatement of trench cuts; however, where the tender quantity is quite high, we just wanted to confirm what the Municipality's intent is with this item. Is this just intended for temporary patching of trench cuts or is the intent to use this item to pave and temporary roadways/driveways?

Answer 2: **The temporary asphalt item is intended for trench cuts within the roadways, driveways, and sidewalks only. The quantity of this pay item has been reduced.**

Addendum #2

Question 3: As per Q&A item number 25 in addendum 1, all gravels associated with concrete works will be included in pay items for those works. Curb details show the same structure (500mm Type 2, 150mm Type 1) as under the asphalt areas which is also in keeping with cross sections on drawing TR09. Truck apron gravel structure is shown in cross section E/07 to be the same as what is under asphalt and curb.
However, there are conflicting details for gravels under concrete surfacing in curbed traffic islands and, if gravels for these areas are to be included with sidewalk items, we'll need clarification on which is correct. Cross sections on drawing TR09 show the same road structure carried under the curbed traffic islands. However, details A/12 and F/12 both indicate only 150mm of Type 1 under concrete sidewalk and traffic island. Both concrete traffic island and concrete sidewalk are paid under pay item 45 for concrete sidewalk. Can you please confirm which is correct?

Answer 3: **The pay item 45.1 has been split into two separate pay items (45.1 and 45.3). Concrete traffic islands shall include; 100 mm concrete, 150 mm Type 1 gravels, and 500 mm Type 2 gravels. Concrete sidewalk shall include; 100 mm concrete, and 150 mm Type 1 gravels.**

Question 4: Q&A item #24 in the addendum noted that the tender quantity for the truck apron was corrected but it looks like the revised tender form is still showing the same original quantity of 275m2.

Answer 4: **See the revised Schedule of Quantities and Unit Prices table.**

*******End of Addendum #2*******