

ENGINEERING &  
PUBLIC WORKS

Kentville

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*TOWN OF KENTVILLE CAPITAL 2024*

*SIDEWALK REHABILITATION & ROAD EXTENSION*

*CONTRACT #2024-10*

*KENTVILLE, NS*

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*SET NO.   1*  
*JUNE 2024*

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Town of Kentville: Sidewalk Rehabilitation & Road Extension

**Owner / Engineer:**

Town of Kentville  
354 Main Street  
Kentville, NS B4N 1K6

1. Tender Submission

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

Tender for:

“Town of Kentville: Sidewalk Rehabilitation & Road Extension”

Closing: 2:01pm local time Thursday, June 13, 2024, at the Town of Kentville office.

Town of Kentville  
Attn: Dave Bell, P.Eng.  
Director of Engineering & Public Works  
354 Main Street, Kentville, NS B4N 1K6  
P: 902-679-2521

2. Safety Certification

- .1 Submit with tender 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 with tender 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.
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#### 4. Tender Opening

- .1 Tenders will be opened on Thursday, June 13, 2024 at 2:01pm at the Kentville Town Office at 354 Main Street.
- .2 Tender amendments will be disclosed at public openings.

#### 5. Document Fee

- .1 **Firms must register with the Town of Kentville or their tender will be considered invalid.** To receive full tender documents contact 902-679-2521 or email [dbell@kentville.ca](mailto:dbell@kentville.ca) and tender documents will be issued in digital format at no charge. Paper documents are also available for a fee of \$100.00 payable to Town of Kentville.

#### 6. Accuracy of Referencing

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

#### 7. 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 3.9 for a complete list of Contract Documents.

#### 8. 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.

#### 9. 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.

#### 10. 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.

11. Taxes .1 Include all taxes in prices except Harmonized Sales Tax (HST).
-

## 12. 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.

## 13. 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.

## 14. Insurance

- .1 Refer to Section 00 72 45, General Conditions, subsection GC11.1 - INSURANCE, for insurance requirements.

## 15. Form of Agreement

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

## 16. Return of Tender Security

- .1 Tender security will be returned to:
  - .1 All except the three lowest acceptable tenderers within five (5) Working Days of tender opening.
  - .2 Two (2) remaining unsuccessful tenderers within ten (10) Working Days of date of award.
  - .3 Successful tenderer following receipt by Owner of executed agreement, specified contract security, and insurance documents.

## 17. Amendment or Withdrawal of Tender

- .1 Tenders may be amended or withdrawn prior to tender closing.
  - .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 [Name of Project/Contract] [Contract number, if applicable]". Sign as required for tender, and submit at address given for receipt of tenders. In order to be considered, submissions shall be received prior to time of tender closing.
-

18. Offer, Acceptance, Rejection

- .1 The Owner reserves the right to accept or reject any tender and to cancel the tendering process and reject all tenders at any time prior to the award of Contract without incurring any liability to affected tenderers.

18. Contingency Allowance

- .1 A contingency allowance is included in Section 00 41 43. This amount covers any cost for extra work as directed by the Engineer which is not included in the items in the Schedule of Quantities and Unit Prices.

19. On-Site Materials

- .1 On-site materials will only be paid for as they are incorporated in the works.

20. Time .1 Time is considered to be of the essence.

21. Project Schedule

- .1 The project MUST be completed on or before September 30, 2024.

22. Safety .1 Safety shall be of primary importance at all times and the current safety regulations of the Nova Scotia “Occupational Health and Safety Act” must be adhered to at all times.

23. Procurement Policy

- .1 All contracts must be awarded in a manner that is transparent, competitive, and consistent with value for money principles and meet NS Procurement policies.

**DELETE: RECORD DRAWINGS General Requirements, Section 01 10 00, Subsection 8.1 and 8.2**

**ADD:**

**24. As-built Records/Drawings**

- .1 Record information is the responsibility of the contractor. The contractor will provide the Town of Kentville with a coordinate file in NAD83 UTM format containing survey grade 3D points for every fixture, including valves, bends, tees, services at main and property line, MH tops and inverts, hydrant tops, centerline, shoulder, and ditch points (where applicable). Main lines are to be located at a minimum measurement of 30 m.**

1. SALUTATION:

- .1 To: TOWN OF KENTVILLE  
354 MAIN STREET  
KENTVILLE, NS B4N 1K6
- .2 For: CONTRACT #2024-10  
2024 KENTVILLE CAPITAL WORKS  
SIDEWALK REHABILITATION & ROAD EXTENSION
- .3 From: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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.

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 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 4 hereunder excluding Harmonized Sales Tax (HST).
- .3 That this tender is valid for acceptance for 60 days from tender closing.
- .4 That measurement and payment for items listed in Subsection 4 hereunder shall be in accordance with corresponding items in Section 01 22 00 Measurement and Payment.

- .5 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.
- .6 That 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.
- .7 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.
- .8 That Contract Documents include:

- .1 Standard Specification for Municipal Services listed in Table of Contents Page Dated May 2023.
- .2 Tender Form
- .3 Form of Agreement
- .4 Supplementary Specifications
- .5 Drawings

Drawing	Plan #	Latest Revision
Cover		
Prospect Ave Sidewalk Rehabilitation	C101	May 14, 2024
0+000 TO 0+052 Prospect Ave Extension	C102	May 14, 2024
MacDonald Ave Top Lift of Pavement	C103	May 14, 2024
Belcher Street Sidewalk Rehabilitation	C104	May 14, 2024
Details	C105	May 14, 2024

- .6 Addenda as issued and as confirmed in subsection 2.4 of this section.



4. SCHEDULE OF QUANTITIES AND UNIT PRICES

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
<b>PROSPECT AVE. SIDEWALK &amp; CURB REHABILITATION</b>					
<b><u>Removals &amp; Replacements</u></b>					
10.	Remove existing asphalt sidewalk, curb & 150mm subbase material	ls	100%	_____	_____
<b><u>Replace Existing Asphalt Curb &amp; sidewalk</u></b>					
20.	Sidewalk Re-construction Prepare and make ready subbase including asphalt removal, scarifying, shaping, fine grading, tackcoat, manhole cover and valvebox adjustment and all else necessary to complete the work specifies and/ or shown on the drawing				
.1	Type 1 Gravel base (± 150mm thick) compacted in place	m <sup>3</sup>	35	_____	_____
.2	Concrete straight back curb Including asphalt removal and reinstatement	m	150	_____	_____
.3	65mm HMAC sidewalk Including driveway and landscape reinstatement	m <sup>2</sup>	220	_____	_____
				<b>TOTAL</b>	_____

4. SCHEDULE OF QUANTITIES AND UNIT PRICES

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
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**MACDONALD AVE, HENRY STREET & BRAESIDE DRIVE TOP LIFT PAVEMENT**

- 40. Road Pavement  
Prepare and make ready top lift of surface course asphalt, tack coat, manhole cover and valve box adjustment and all else necessary to complete the works as specified and/or as shown on the drawings.

.1	Type C-HF 35 mm	tonnes	540	_____	_____
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**TOTAL** \_\_\_\_\_

4. SCHEDULE OF QUANTITIES AND UNIT PRICES

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
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**BELCHER STREET SIDEWALK REHABILITATION**

**Removals % Replacements**

10.	Remove existing asphalt sidewalk & 150mm subbase material	ls	100%	_____	_____
30.	Sidewalk Re-construction Prepare and make ready subbase including asphalt removal, scarifying, shaping, fine grading, tackcoat, manhole cover and valvebox adjustment and all else necessary to complete the work specifies and/ or shown on the drawing patch paving and all else to complete the work as specified and as shown on the drawings.				
.1	Type 1 Gravel base (± 150mm thick) compacted in place	m <sup>3</sup>	55	_____	_____
.2	65mm HMAc sidewalk Including driveway and landscape reinstatement	m <sup>2</sup>	350	_____	_____

**TOTAL** \_\_\_\_\_

4. SCHEDULE OF QUANTITIES AND UNIT PRICES

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
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**STREET CONSTRUCTION**  
**Prospect Aveune Extension**

40. Road Reconstruction

Prepare and make ready subbase including asphalt removal, scarifying, shaping, fine grading, tack coat, manhole cover and valve box adjustment and all else necessary to complete the works as specified and/or as shown on the drawings.

.1	Type II gravel (250mm) compacted	m <sup>3</sup>	120	_____	_____
.2	Type I gravel (150mm)	m <sup>3</sup>	70	_____	_____
.3	landscape reinstatement	tonnes	70	_____	_____
.4	Type C-HF 35mm (2025)	tonnes	40	NIC	NIC

41. Curb

Remove, topsoil, organics, place and compact subgrade gravel.

.1	Curb & Gutter (Concrete)	m	105	_____	_____
				<b>TOTAL</b>	_____

4. SCHEDULE OF QUANTITIES AND UNIT PRICES

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
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**CONTRACT SUMMARY**

.1 PROSPECT AVE. SIDEWALK & CURB REHABILITATION					_____
.2 MACDONALD AVE, HENRY STREET & BRAESIDE DRIVE TOP LIFT PAVEMENT					_____
.3 BELCHER STREET SIDEWALK REHABILITATION					_____
.4 PROSPECT AVE. EXTENSION STREET CONSTRUCTION					_____
.5 CONTINGENCY					\$20,000.00
				Subtotal	_____
				HST (15% of Subtotal)	_____
				<b>Total Tender Price</b>	_____

5. COMPLETION TIME

.1 Tenderer agrees to complete the Work within \_\_\_\_ weeks of written notification of award.

6. SIGNATURES\*

DATED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2024.

[Seal]

\_\_\_\_\_  
Name of Firm Tendering

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Signature of Signing Officer

\_\_\_\_\_  
Name and Title (Printed)

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Signature of Signing Officer

\_\_\_\_\_  
Name and Title (Printed)

\_\_\_\_\_  
Company Address

\_\_\_\_\_  
Telephone No.

\_\_\_\_\_  
Fax No.

TENDERER'S HST REGISTRATION NO. \_\_\_\_\_.

\*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  
\_\_\_\_\_

These Supplementary General Conditions amend Section 00 71 00 DEFINITIONS and Section 00 72 45 - GENERAL CONDITIONS.

SECTION 00 71 00 - DEFINITIONS

1. Page 2, after definition for Project, add definition for Project Documents as follows:

**Project Documents**

Project Documents consist of those documents prepared to supplement the Standard Specification for the Work on a specific Project. Where applicable, they consist of the Information for Tenderers, Tender Form, Form of Agreement, Supplementary Specifications, drawings and addenda.

2. Page 3, after definition for Specifications, add definition for Standard Specification as follows:

**Standard Specification**

The Standard Specification consists of Definitions, General Conditions, Supplementary General Conditions, Measurement and Payment, General Requirements, other technical specifications and standard details developed by the Nova Scotia Road Builders Association and the Consulting Engineers of Nova Scotia Joint Committee on Contract Documents and published with the title of Standard Specification for Municipal Services.

3. Page 3, after definition for Supplemental Instruction, add definition for Supplementary Specifications as follows:

**Supplementary Specifications**

Supplementary Specifications consist of the specifications for a specific project which amend or add to the Standard Specification.

4. Where the term "Consultant" is used throughout the General Conditions, revise to read "Engineer".

SECTION 00 72 45 - GENERAL CONDITIONS

5. GC5.4 BASIS OF PAYMENT FOR COST PLUS WORK

Page 16, delete clause 5.4.1 and replace with the following:

"5.4.1 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 \_\_\_% for work done by the Contractor's own forces and % for work done by Subcontractors but 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.”

6. GC5.5 APPLICATIONS FOR PROGRESS PAYMENT

Page 17, delete clause 5.5.2 and replace with the following:

“5.5.2 Applications for payment shall be dated the last day of the agreed monthly payment period and the amount claimed shall be for the value, proportionate to the amount of the Contract, of Work performed at that date.”

Page 18, delete clause 5.5.6.

7. GC5.6 PROGRESS PAYMENT

Page 18, delete clauses 5.6.1 and 5.6.2 and replace with the following:

“5.6.1 The Consultant will issue to the Owner no later than five (5) Working Days after the receipt of an application for payment from the Contractor, submitted in accordance with GC 5.5 - APPLICATIONS FOR PROGRESS PAYMENT, a certificate for payment in the amount applied for, or such other amount as the Consultant determines to be properly due. If the Consultant amends the application, the Consultant will promptly notify the Contractor, in writing, giving reasons for the amendment.”

“5.6.2 The Owner shall make payment to the Contractor on account as provided in Article A-5 - PAYMENT of the Agreement no later than Fifteen (15) Working Days after the date of a certificate for payment issued by the Consultant.”

8. GC5.10 FINAL PAYMENT

Page 19, clause 5.10.4, change “5 Working Days” to read “ten (10) Working Days”.

9. GC10.1 TAXES AND DUTIES

Page 28, add the following clause 10.1.3:

“10.1.3 The Contractor will indicate on each application for payment, as a separate amount, the appropriate Harmonized Sales Tax the Owner is legally obliged to pay. This amount will be paid to the Contractor in addition to the amount certified for payment under the Contract.”



10. GC10.2 LAWS, NOTICES, PERMITS AND FEES

Page 28, add the following clause 10.2.8:

"10.2.8 Various areas of Nova Scotia have requirements for posting non-refundable fees before excavations are carried out within public right-of-way. The Contractor is responsible for the determination of the requirement for each specific project and for the required deposits."

11. GC11.1 INSURANCE

Page 29, change \$2,000,000 policy limits to \$5,000,000 policy limits in clauses 11.1.1.1, 11.1.1.2 and 11.1.1.3.

Page 29, change \$2,500 deductible to \$5,000 deductible in clauses 11.1.1.1 and 11.1.1.4(1).

12. GC11.2 CONTRACT SECURITY

Page 31, add the following clause 11.2.3:

"11.2.3 The Contractor shall supply a Performance Bond and a Labour and Material Payment Bond, each in the amount of fifty percent (50%) of the estimated Contract Price plus Harmonized Sales Tax. Should it become apparent that the final cost of the Work will exceed the estimated Contract Price by more than ten percent (10%), the Contractor shall arrange to have the Bonds reissued, based on the projected final Contract Price plus Harmonized Sales Tax."

13. GC12.1 INDEMNIFICATION

Page 31, change indemnification limits from \$2,000,000 to \$5,000,000, two places, in clause 12.1.2.

1. GENERAL .1 This section specifies administrative, procedural and temporary requirements.
2. SUMMARY OF THE WORK .1 Refer to Supplementary Specifications for summary description of the Work.  
.2 The work completed under this contract includes the following:  
.3 Replace Sidewalk and curb on the Prospect Ave. from Academy St. to Church Ave.  
.4 Construct Road extension at the end of Prospect from STA 0+000 To 0+052.  
.5 Pave the second lift on MacDonald Ave, Henry St. and Braeside Dr. Subdivision.  
.6 Replace Asphalt sidewalk on Belcher St. as in the drawing.
3. SCHEDULING AND COORDINATION .1 Submit within five (5) Working Days of date of award detailed schedule for critical operations and performance of the Work by completion date. Revise, update and submit schedule as directed.  
.2 Schedule and perform the Work within hours and days established by authorities having jurisdiction in the Place of the Work.  
.3 If indicated in Project Documents, the Engineer will carry out necessary tests and inspections and will verify measurements required for record drawings so as not to cause delay.  
.4 Provide submittals and schedule delivery of products, as required, to meet the agreed schedule.
4. SETTING OUT THE WORK .1 Refer to Project Documents for survey control points.  
.2 Set elevations and lay out the work in detail from control points.
5. EXISTING SITE CONDITIONS .1 Before commencing the Work, notify Engineer if site conditions at the Place of the Work differ significantly from those indicated. Engineer will investigate and issue appropriate instructions.

- .2 Obtain utility locates before commencing any work.
6. PROJECT MEETINGS .1 Engineer will arrange project meetings, set times and record and distribute minutes.

7. SUBMITTALS

7.1 Shop Drawings

- .1 On shop drawings clearly show in detail the dimensions, materials of construction, finish, performance, service and installation requirements, and other pertinent information.
- .2 Check shop drawings prior to submission. Determine and verify all field measurements, field construction criteria, materials, catalogue numbers and similar data and check and coordinate each shop drawing with the requirements of the Work and Contract Documents. Sign and date each shop drawing to confirm compliance with above requirements.
- .3 Engineer will not review shop drawings where it is evident that they do not meet the requirements of 7.1.1 and 7.1.2 above.
- .4 Submit for review one (1) PDF copy of shop drawings or as indicated in Project Documents.
- .5 After review Engineer will return one (1) PDF copy of shop drawings or as indicated in Project Documents.
- .6 Make any corrections as noted, and resubmit, if required.
- .7 Do not proceed with work involving relevant products until completion of shop drawing review.

7.2 Samples

- .1 Submit samples for review as required in Supplementary Specifications. Indicate locations of sources.
- .2 Do not deliver relevant products to site until completion of review.

7.3 Mix Design

- .1 Submit mix design for concrete and asphalt materials as required in Supplementary Specifications.

7.4 Design  
Verification of  
Temporary Works

- .1 Submit plans sealed by a professional engineer registered to practice in Nova Scotia for temporary works as required in Contract Documents.

- 7.5 Operating and Maintenance Data
- .1 Submit three (3) paper copies and one (1) PDF copy of the following prior to application for final payment:
    - .1 General description, list of equipment including nameplate information, installation, operation and maintenance instructions, and parts list.
    - .2 Names, addresses and phone numbers of Sub-Contractors, suppliers and manufacturers.
    - .3 Guarantees and warranties.
  - .2 Type lists and notes. Use drawings, diagrams and manufacturer's literature.
- 7.6 Test Results
- .1 Submit one (1) PDF copy of certificates and monitoring, test and inspection reports or as indicated in Project Documents.
8. RECORD DRAWINGS
- .1 Obtain data necessary to prepare record drawings.
  - .2 Do not bury pipework and appurtenances or other portions of the Work until necessary measurements have been taken.
  - .3 Procedure and responsibility as indicated in Project Documents.
9. QUALITY CONTROL
- .1 Provide Owner and Engineer with access to the Work, and to locations where products to be incorporated into the Work are being prepared.
  - .2 Cooperate with and assist Engineer in conducting necessary tests.
  - .3 Notify Engineer in advance of requirements for tests and inspections.
  - .4 Arrange for inspections or tests by authorities other than the Engineer.
  - .5 Do not bury pipework and appurtenances or other portions of the Work until Engineer has advised that necessary tests or inspections are completed.
  - .6 Engineer may order any buried work to be uncovered for examination. Defective work shall be repaired by Contractor. If work was

previously approved and no defects are found, Owner will reimburse Contractor's costs.

- .7 Owner will appoint and pay for services of testing laboratory except for:
  - .1 Inspection and testing required by laws, ordinances, rules and regulations.
  - .2 Tests specified to be performed by Contractor.
  - .3 Inspection and testing performed exclusively for convenience of Contractor.
  - .4 Testing, adjustment and balancing of mechanical and electrical equipment systems.

10. TEMPORARY  
SITE FACILITIES

- .1 Obtain all approvals required for the disposal of sanitary sewage from any facilities including offices, washrooms and bunkhouses.
- .2 Access:
  - .1 Provide and maintain adequate access to project site.
  - .2 Build and maintain temporary roads and walks as required.
  - .3 Provide access for pedestrians to property and premises adjacent to the Work.
- .3 Engineer's Site Office:
  - .1 Provide Engineer's site office, when required by Project Documents, as follows:
    - .1 Minimum floor area of ten square metres.
    - .2 Heat, air conditioning, light and internet connection.
    - .3 Desk: 1.0 x 1.5 m plan table, shelving and a four-drawer lockable filing cabinet.
  - .2 Maintain in clean condition.
  - .3 Remove when no longer required by Engineer but not later than attainment of Substantial Performance of the Work.
- .4 Provide and maintain sanitary facilities for site personnel.
- .5 Remove temporary facilities from site when no longer required.
- .6 Temporary power will be provided by the party identified in the Supplementary Specifications.

Coordinate with electrical utility when installing temporary power.

- .7 Temporary water will be provided by the party identified in the Supplementary Specifications.

11. DELIVERY OF MATERIALS AND USE OF THE SITE

- .1 Confine equipment, products, and operations to limits indicated.
- .2 Deliver, store and maintain materials so as to avoid damage.

12. TRAFFIC CONTROL

- .1 Provide traffic control in accordance with Temporary Workplace Traffic Control Manual issued by Nova Scotia Transportation and Infrastructure Renewal.
- .2 In urban areas, consult with local authorities having jurisdiction for possible additional or special requirements.
- .3 Meet with local authorities having jurisdiction prior to start of construction to determine allowable diversions of vehicle and pedestrian traffic, and access to construction area.
- .4 Provide traffic control personnel, signals, lights and other traffic control methods where required.
- .5 Provide and maintain signs, delineators, barricades, barriers, and miscellaneous warning devices to indicate construction activities or other temporary and unusual conditions.

13. SUBSTITUTIONS

- .1 Requests for substitutions will not be considered until after award of Contract.
- .2 Proposals for substitution will only be considered by Engineer in the following circumstances:
  - .1 Products specified are not available; or
  - .2 Delivery of specified products would unduly delay completion; or
  - .3 Alternate products will result in reduction in Contract Price.
- .3 Provide information on proposed substitutions

in adequate detail to permit evaluation.

- .4 Submit to the Engineer drawings and specifications for modifications, adjustments or additions required by substitutions in same detail as presented in Contract Documents.
- .5 Do not make changes or substitutions without written consent of Engineer.
- .6 Subject to prior notice Contractor may be back-charged for time spent by Engineer in evaluating substitutions.

14. STANDARDS AND  
REFERENCE  
DOCUMENTS

- .1 Standards and reference documents in effect at time of tender closing referred to in Specifications are an integral part of Contract Documents.

15. WASTE  
MANAGEMENT AND  
DISPOSAL

- .1 Prepare, for review, waste management plan, including source separating plan and waste disposal plan.
- .2 Maintain site and adjacent areas in tidy condition free from accumulation of waste products and debris.
- .3 Upon attaining Substantial Performance of the Work remove surplus products, tools, machinery and equipment.
- .4 Completion of cleanup is required for Substantial Performance of the Work.

16. PROJECT  
CLOSEOUT

- .1 Final Cleaning:
  - .1 When the Work is substantially performed, remove surplus products, tools, construction machinery and equipment not required for performance of remaining work.
  - .2 Remove waste materials and debris from site at regularly scheduled times or dispose of as directed by Owner. Do not burn waste materials on site.
  - .3 Leave Work broom clean before inspection process commences.
- .2 Review/Takeover Procedures:
  - .1 Prior to application for Certificate of



Substantial Performance, review the Work and confirm it is substantially complete, and construction deficiencies are identified. Notify Engineer, in writing, of satisfactory completion of the Work and request a review.

.2 During Engineer's review, a list of deficiencies and defects will be tabulated. Correct same.

.3 When Engineer considers deficiencies and defects have been corrected and the requirements of Contract have been performed, make application for final payment.

PART 1 - GENERAL

<u>1.1 Work Included</u>	.1	This section specifies requirements for constructing cast-in-place concrete. Work includes supply and installation of falsework, formwork, reinforcement, concrete and accessories.	
<u>1.2 Related Sections</u>	.1	Metal Fabrication	Section 05 50 00
	.2	Earthwork	Section 31 20 00
	.3	Walks, Curbs and Gutters	Section 32 16 00
	.4	Reinstatement	Section 32 98 00
	.5	Water Mains	Section 33 11 00
	.6	Sanitary Sewers	Section 33 31 00
	.7	Pressure Sewers	Section 33 34 00
	.8	Precast Manholes, Catch Basins and Structures	Section 33 39 00
	.9	Storm Sewers and Culverts	Section 33 40 00
	.10	Standard Details	Section 39 00 00
<u>1.3 Reference Standards</u>	.1	ASTM A933/A933M-2014, Standard Specification for Vinyl-Coated Steel Wire and Welded Wire Reinforcement.	
	.2	ASTM C260/C260M-10a(2016), Standard Specification for Air-Entraining Admixtures for Concrete.	
	.3	ASTM C309-11, Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.	
	.4	ASTM C494/C494M-17, Standard Specification for Chemical Admixtures for Concrete.	
	.5	ASTM C1017/C1017M-13e1, Standard Specification for Chemical Admixtures for Use in Producing	

Flowing Concrete.

- .6 AASHTO M 182-05(2017), Standard Specification for Burlap Cloth Made from Jute or Kenaf and Cotton Mats.
- .7 CSA A3000-18, Cementitious Materials Compendium.
- .8 CSA A23.1-14/A23.2-14, Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete.
- .9 CSA S269.1-16, Falsework and Formwork.
- .10 CSA G30.18-09(R2014), Carbon Steel Bars for Concrete Reinforcement

1.4 Submittals

- .1 Submit shop drawings and samples in accordance with Section 01 10 00 for items listed in the Supplementary Specifications.

PART 2 - PRODUCTS

2.1 Materials

- .1 Portland Cement: to CSA Standard A3000, Type GU, Normal and CSA A23.1, Table 6.
- .2 Blended Hydraulic Cement: CSA Standard A3000 and CSA A23.1, Table 7. Ternary blended cements may be used with the agreement of the Engineer.
- .3 Aggregates: to CSA A23.1. For exposure Classes C-XL, C-1, C-2, C-3, C-4 and F-1, supply certification that the concrete mixtures have been evaluated for alkali-aggregate reaction and that measures have been taken to mitigate the reaction.
- .4 Water: to CSA A23.1, Table 9.
- .5 Admixtures:
  - .1 Air Entraining: to ASTM C260/C260M.
  - .2 Chemical: to ASTM C494/C494M or C1017/C1017M for flowing Concrete.
- .6 Supplementary Cementing Materials:
  - .1 Low Calcium Fly Ash (Class F): to CSA A3000 and CSA 23.1, Table 8. Provide

confirmation of compliance to CSA A3000 for the fly ash used in the concrete.

- .7 Reinforcement:
  - .1 Bars: to CSA G30.18, carbon steel, grade 400, deformed.
  - .2 Welded Steel Wire Fabric: to ASTM A933/A933M.
  - .3 Bar Supports and Spacers: to CSA A23.1.
- .8 Falsework and Formwork:
  - .1 Falsework to CSA S269.1
  - .2 Forms: to CSA A23.1, plywood and lumber, clean and free of loose knots, splits or metal.
  - .3 Form Ties: to CSA-A23.1, removable or snap-off metal ties, fixed or adjustable length. Form ties, tie wire, spacers or other embedded fixtures shall not be positioned closer than 20mm of the surface. For severe environments, dimension to be shown on the Project Drawings.
  - .4 Release Agent: non-staining natural organic chemicals of sprayable consistency which prevent adhesion of concrete to forms.
  - .5 Formwork design: to CSA S269.1.
- .9 Curing Compound: to CSA A23.1, white. Refer to AASHTO M182 and ASTM A309.
- .10 Waterstops:
  - .1 Ribbed or flexible strip, extruded PVC waterstops of type and size indicated.
  - .2 Bentonite: NSF certified, expandable strip composed of sodium bentonite, complete with adhesive if product is not self-adhering.
- .11 Non-shrink Grout: pre-mixed, dry pack or pourable, containing non-metallic aggregate, plasticizing agents and cement, minimum compressive strength of 45 MPa at 28 days.

## 2.2 Concrete Mix

- .1 Provide in accordance with CSA A23.1, Table 5, Alternate (1) Performance or (2) Prescription.
- .2 Mix proportions to provide workable concrete having required durability and strength.
- .3 Air entraining admixtures: to obtain Air Content Category as defined in CSA A23.1, Tables 1, 2 and 4.

- .4 Slump: to CSA A23.1, Clause 4.3.2.3.
- .5 Compressive strength at 28 days: for mixtures containing supplementary cementing materials, other ages may be appropriate as determined by the Engineer.
- .6 Water/cement ratio: to CSA A23.1, Tables 1, 2 and 4 as required for exposure conditions.
- .7 Ready mix plant must conform to CSA and possess a current certificate of conformance for concrete production facilities as issued by the Atlantic Concrete Association.

### PART 3 - EXECUTION

#### 3.1 General

- .1 Do concrete work to CSA A23.1 and as herein specified.
- .2 Use ready-mixed concrete unless on-site mixing is approved.
- .3 If on-site mixing is approved, equipment to be capable of accurately proportioning ingredients to produce required concrete.
- .4 Do not change concrete mix without prior approval of the Engineer. Changes in material supply will require submission of a new mix design for review.

#### 3.2 Formwork and Falsework

- .1 Construct falsework and formwork to CSA A23.1 and CSA S269.1.
- .2 Construct formwork to produce finished concrete to required shape, dimensions and levels indicated within tolerances required by CSA A23.1. Provide close fitting joints to prevent leakage of mortar and form ties and bracing sufficient to withstand pressure of plastic concrete without deflection.
- .3 When falsework is required, engage the services of a Professional Engineer, registered or licensed to practice in the Province of Nova Scotia, to provide design and erection details

and inspect its installation in accordance with CSA S269.1. Provide record copy of drawings signed and sealed by Professional Engineer responsible for their preparation.

- .4 Use approved form release agent.
- .5 Remove formwork in accordance with CSA A23.1.
- .6 Remove falsework in accordance with CSA S269.1.
- .7 Fill form tie holes with non-shrink mortar and finish to texture of adjacent concrete.

3.3 Reinforcement\_ and Embedded Items

- .1 Clean reinforcing of rust build-up, mill scale or other coatings that prevent or reduce bond.
- .2 Bend bars cold to measurements required.
- .3 Confirm reinforcement and inserts are not disturbed during concrete placement.
- .4 Place and support reinforcing using bar supports and side form spacers to obtain cover, spacing and location indicated.

3.4 Waterstops

- .1 Install waterstops as specified in the Project Documents and in accordance with manufacturer's written instructions.
- .2 Do not pierce, or distort waterstops, or displace reinforcement except near edges as required for securing.

3.5 Placing

- .1 Place concrete to CSA A23.1, Clause 7.4.
- .2 Place concrete on dampened base.
- .3 Convey concrete from mixer to forms by methods that will maintain specified slump and prevent segregation.
- .4 Do not drop concrete more than 1.5 metres vertically unless it can be shown that the concrete will not segregate. Deposit concrete in final position in forms to avoid lateral movement.

- .5 Place concrete in continuous operation, starting from lowest point in form, in lifts not greater than 500mm.
- .6 Internally consolidate each layer to obtain dense homogeneous structure free of cold joints, fill planes, voids and honeycombing. For vertical installation vibrate at least 150mm into previously placed layers. Concrete to be well bonded to all reinforcing steel, anchors, waterstops and other embedded parts.

3.6 Joints

- .1 Make joints in accordance with CSA A23.1, Clause 7.2.

3.7 Finishing

- .1 Finish concrete in accordance with CSA A23.1, Clause 7.6.

3.8 Curing and Protection

- .1 Provide curing and protection to CSA A23.1, Section 7.4. Keep the temperature of the concrete within the limits of Table 14.
- .2 Do not place concrete on frozen base. Remove all snow, ice and frost from area prior to placing concrete. Do not place concrete on, or against, any surface that will lower the temperature of the concrete in place below the minimum value shown in Table 14.
- .3 When air temperature may drop below 5°C or when there is a probability that it will drop below 5°C within 24 hours of placing, raise temperature of base, reinforcing steel, embedded parts and forms above 5°C prior to placing concrete. In addition, before placement have available all materials and equipment needed for adequate protection and curing.
- .4 When air temperature is at or above 27°C, or when there is a probability of its rising to 27°C during the placing period, provide facilities for protection of concrete in place from effects of hot and/or drying weather conditions. Under severe drying conditions, protect formwork reinforcement and concreting equipment from direct rays of sun, or cool by fogging.

- .5 After placing is completed, maintain minimum curing conditions for the concrete in accordance with CSA A23.1, Clause 7.6.
- 3.9 Concrete Quality .1 Test concrete in accordance with CSA A23.1 using a Canadian Council of Independent Laboratories.
- 3.10 Defective Work .1 Remediate all structural defects in concrete such as spalling, low points and delaminating where defect could cause long term deterioration of the structure.
- .2 Remediate all aesthetic defects in exposed concrete. Aesthetic defects include minor honeycombing, blemishes, embedded debris from tie holes and other surface defects.
- .3 Submit method and obtain approval of Engineer prior to proceeding with remediation of all structural and aesthetic defects.



PART 1 - GENERAL

- 1.1 Work Included .1 This section specifies requirements for constructing asphalt concrete pavement. Work includes fine grading, supply and placing of prime or tack coat, hot mix asphalt concrete, and pavement markings.
- 1.2 Related Sections .1 Concrete: Section 03 30 00  
.2 Earthwork: Section 31 20 00  
.3 Walks, Curbs and Gutters: Section 32 16 00  
.4 Reinstatement: Section 32 98 00  
.5 Precast Manholes, Catch Basins and Structures: Section 33 39 00  
.6 Standard Details: Section 39 00 00
- 1.3 Reference Standards .1 CAN/CGSB 1-74-2001, Alkyd Traffic Paint.  
.2 Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance.  
.3 Transportation Association of Canada: Manual of Uniform Traffic Control Devices for Canada.
- 1.4 PGAB Escalation/De-Escalation .1 If specified in Project Documents an asphalt index mechanism in accordance with the Nova Scotia Transportation Infrastructure and Renewal program shall be applicable to the Work.

PART 2 - PRODUCTS

- 2.1 Materials .1 Asphalt materials: Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance.  
.2 Paint for pavement marking: to CAN/CGSB 1-GP-74M.

- .3 Recycled engine oil binders (REOB) are not accepted in any PGAB to be used on streets and roads. Provide the Engineer with certification that the PGAB supplied does not contain REOBs.

2.2 Asphalt Concrete

- .1 Asphalt concrete mix: to Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance, Division 4, Section 4, and type indicated in the Project Documents.

PART 3 - EXECUTION

3.1 Fine Grading

- .1 Fine grade gravel surface to within 10mm of elevations and cross sections indicated immediately prior to placement of asphalt materials. Add or remove gravel as required. Compact to 100% Standard Proctor Density or as directed by the Engineer.

3.2 Adjusting Tops of Castings

- .1 Prior to placing asphalt surface course:
  - .1 Adjust manhole covers and catch basin frames to match asphalt surface, using manufactured or cast-in-place grade rings.
  - .2 Adjust valve boxes to finished asphalt surface. Raise or lower top sections of valve boxes.

3.3 Prime Coat

- .1 When specified by the Project Documents, apply prime coat to Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance, Division 4, Section 5.

3.4 Tack Coat

- .1 Apply tack coat on existing asphalt concrete to Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance, Division 4, Section 1. Apply tack coat to contact surface of curbs, castings and structures.

3.5 Paving

- .1 Transport, place and compact asphalt concrete mix to Nova Scotia Transportation and Infrastructure Renewal Standard Specification -

Highway Construction and Maintenance. Construct pavement within specified tolerances to lines, elevations, cross sections and dimensions at locations indicated.

- .2 Thickness of asphalt courses not to vary more than 6mm from thickness indicated, with average thickness as indicated.
- .3 Finished asphalt surfaces to be within 6mm of design elevation, but not uniformly high or low. Finished asphalt surface not to have irregularities exceeding 6mm when checked with a 3 metre straightedge placed in any direction.

3.6 Pavement  
Markings

- .1 Apply temporary markings prior to removal of temporary traffic control.
- .2 Surface to be dry and clean prior to application of permanent markings. Apply paint at application rate indicated with spray gun to lines and at locations indicated. Dimensions and colour to Transportation Association of Canada Manual of Uniform Traffic Control Devices for Canada, Part C.

PART 1 - GENERAL

- 1.1 Work Included
- .1 This section specifies requirements for constructing walks, curbs, and gutters.
  - .2 Work includes fine grading; supply, placing and finishing of Portland Cement concrete and asphalt concrete; and backfilling.
- 1.2 Related Sections
- .1 Concrete Section 03 30 00
  - .2 Earthwork Section 31 20 00
  - .3 Asphalt Concrete Paving Section 32 12 16
  - .4 Reinstatement Section 32 98 00
  - .5 Standard Details Section 39 00 00
- 1.3 Reference Standards
- .1 ASTM A48/A48M-03(2016), Standard Specification for Grey Iron Castings.
  - .2 ASTM D1751-18, Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
  - .3 CSA A23.1-14/A23.2-14, Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete.
  - .4 CSA B651-18, Accessible Design for the Built Environment.
  - .5 Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance.
- 1.4 Protection
- .1 Provide protection, including security if necessary, to prevent damage to newly installed walks, curbs and gutters.
  - .2 Keep sufficient covering on site to protect fresh concrete from damage by weather.

PART 2 - PRODUCTS

2.1 Materials

- .1 Concrete: to Section 03 30 00, type GU cement at 28 days, slump 80mm ±20mm minimum compressive strength of 32 MPa, a maximum water cement ratio of 0.45, C-2 class of exposure, 5 - 8% total air content,
- .2 Chemical admixtures: type as approved, and in accordance with ASTM C494
- .3 Isolation joint filler: to ASTM D 1751.
- .4 Granular base: Type 1 Gravel to Section 31 20 00.
- .5 Asphalt materials: to Section 32 12 16.
- .6 Curing compound: to CSA A23.1-M, white in colour.
- .7 Tactile walking surface indicators:
  - .1 Cast iron plates in accordance with ASTM A48, minimum class 30B, free from damage or blemishes, sound, free from pouring faults, cracks, blow-holes and other defects.
  - .2 Attention type (truncated domes), 12mm top surface diameter, 22mm base surface diameter, 42-61mm centre-to-centre between domes to CSA B651.
  - .3 Slip resistant and colour contrasted with surrounding walking material in accordance with CSA B651.

PART 3 - EXECUTION

3.1 Fine Grading

- .1 Fine grade gravel surface prior to placing Portland Cement concrete or asphalt concrete.

3.2 Adjusting  
Tops of Castings

- .1 Adjust castings to match finished surface prior to placing surface course of asphalt concrete or Portland Cement concrete.

3.3 Concrete\_  
Surfaces

- .1 Do concrete work in accordance with Section 03 30 00 and as specified herein:

- .1 Placing: Place concrete in continuous operation beginning at lowest point. Tamp or vibrate to prevent honeycombing.
- .2 Jointing:
  - .1 Control joints to be minimum of one quarter of section thickness.
  - .2 Space a control joint every 3 metres for curbs and every 1.5 metres for concrete walks unless otherwise indicated. Match joints in abutting curb and walk to extent practical.
  - .3 Provide a control joint within 150mm of change in cross section of curbs, gutters and walks.
  - .4 Finish perimeter of all slabs with an edger.
  - .5 Saw cutting is permitted if done as soon as concrete has set sufficiently to resist ravelling and before shrinkage cracks appear.
  - .6 Install isolation joint filler where concrete abuts permanent structure or curb, or as indicated.
  - .7 Provide an expansion joint every 50m and at every cold joint.
- .3 Finishing: Do not apply water to newly placed concrete surfaces.
  - .1 Broom finish concrete surfaces to provide evenly textured, non-skid surface.
  - .2 Curing: Apply curing compound in accordance with CSA A23.1.
- .4 Form Stripping: Strip forms only when concrete has developed sufficient strength to resist damage to corners and edges.

3.4 Asphalt  
Concrete Surfaces

- .1 Place asphalt concrete mix in accordance with Section 32 12 16.

3.5 Backfilling

- .1 Backfill when Portland Cement concrete or asphalt concrete have strength sufficient to resist damage from backfilling operations. Do backfilling to Section 31 20 00.

3.6 Tactile Walking  
Surface Indicators

- .1 Install tactile walking surface indicators in accordance with the manufacturer's written instructions and to the tolerances specified in the Project Documents.
- .2 Install the base surface level with the surrounding surface, or with its edges beveled and not more than 3mm above the surrounding surface.
- .3 Install tactile walking surface for the entire width of curb depression or hazard to a minimum depth of 600mm to 650mm with one side abutting curb depression or hazard.
- .4 Clean plates after installation and inspect for proper height tolerance. Replace any units outside specified tolerances.

PART 1 - GENERAL

<u>1.1 Work Included</u>	.1	This section specifies requirements for reinstatement of surfaces, property, and structures damaged or disturbed by operations under this Contract. Work includes but is not limited to reinstatement of paved, gravelled and grassed surfaces; sidewalks, curbs and gutters; and ditches and culverts.	
<u>1.2 Related Sections</u>	.1	Concrete	Section 03 30 00
	.2	Metal Fabrications	Section 05 50 00
	.3	Earthwork	Section 31 20 00
	.4	Asphalt Concrete Paving	Section 32 12 16
	.5	Walks, Curbs and Gutters	Section 32 16 00
	.6	Trees, Shrubs and Groundcover:	Section 32 90 00
	.7	Topsoiling and Finish Grading	Section 32 91 19
	.8	Seeding and Sodding	Section 32 92 00
	.9	Water Mains	Section 33 11 00
	.10	Sanitary Sewers	Section 33 31 00
	.11	Pressure Sewers	Section 33 34 00
	.12	Precast Manholes, Catch Basins and Structures	Section 33 39 00
	.13	Storm Sewers and Culverts	Section 33 40 00
	.14	Standard Details	Section 39 00 00
<u>1.3 Reference Standards</u>	.1	Nova Scotia Transportation and Infrastructure Renewal Specification - Highway Construction and Maintenance.	



- .2 Canadian Landscape Standards 2016 (CLS) Section 2 General Requirements 2.1.22 ACCEPTANCE.

PART 2 - PRODUCTS

2.1 Materials

- .1 Gravels: to Section 31 20 00.
- .2 Asphalt Concrete Materials: to Nova Scotia Transportation and Infrastructure Renewal Specification, Division 4, Section 4 - Highway Construction and Maintenance.
- .3 Concrete Materials: to Section 03 30 00.
- .4 Culverts: to Section 33 40 00.
- .5 Topsoiling and Finish Grading: to Section 32 91 19.
- .6 Seeding and Sodding: to Section 32 92 00.
- .7 Trees, Shrubs and Groundcover: to Section 32 90 00.

2.2 Mixes

- .1 Asphalt Concrete:
  - .1 Roads: to Section 32 12 16
  - .2 Walks and Curbs: to Section 32 16 00
- .2 Portland cement concrete: to Section 03 30 00.

PART 3 - EXECUTION

3.1 General

- .1 Reinststate all surfaces to lines, elevations and dimensions which existed prior to construction and to match abutting surfaces.
- .2 Make good all damage or disturbances to surfaces, survey markers, properties and structures disturbed during construction.

3.2 Gravel Surfaces

- .1 Place, spread, and fine grade to minimum compacted thickness of 150mm for shoulders and other gravel surfaces. Compact to 100% Standard Proctor Density.

3.3 Asphalt\_  
Concrete Surfaces

- .1 Make vertical saw cut to full depth of asphalt concrete in straight lines. Cut back 300mm minimum from edge of excavation or beyond to eliminate tension cracks.
- .2 Place or remove gravel to depth indicated.
- .3 Shape, fine grade and compact gravel surface to 100 percent Standard Proctor Density.
- .4 Clean contact surfaces and apply tack coat prior to placing asphalt concrete.
- .5 Place and compact hot-mix, hot-placed asphalt concrete to Section 32 12 16, and to the following minimum thickness or as indicated in the Project Documents:
  - .1 Sidewalk: 50mm
  - .2 Other Surfaces: 75mm

3.4 Asphalt\_  
Concrete Curbs

- .1 Cut back existing curb to full cross section, clean asphalt concrete contact surfaces and apply tack coat prior to placing asphalt concrete curb.
- .2 Place hot-mix, hot-placed asphalt concrete to Nova Scotia Transportation and Infrastructure Renewal Standard Specification - Highway Construction and Maintenance. Use curb machine having mould dimensions equal to those of the existing asphalt concrete curb. Hand placing not permitted unless approved by Engineer.

3.5 Concrete Walks,  
Curbs and Gutters

- .1 Construct concrete walks, curbs and gutters to Section 32 16 00.
- .2 Terminate reinstatement at nearest existing control joint or as directed.

3.6 Landscaped\_  
Surfaces

- .1 Fine grade to smooth surface all areas to be reinstated.
- .2 Reinstate landscaped surfaces to Sections 32 91 19, 32 92 00 and 32 90 00.

3.7 Ditches

- .1 Re-establish ditches to provide drainage that existed prior to construction.

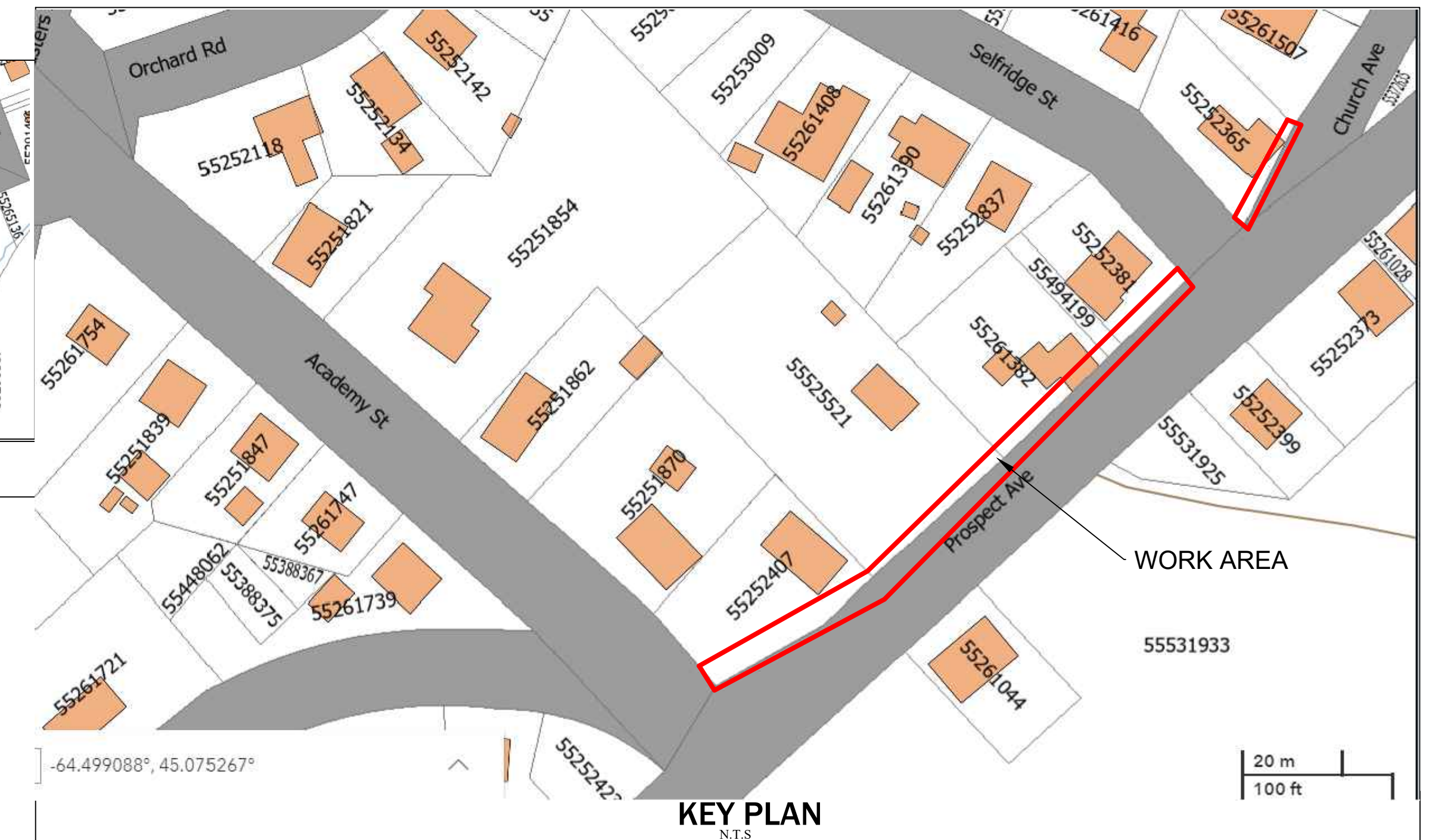
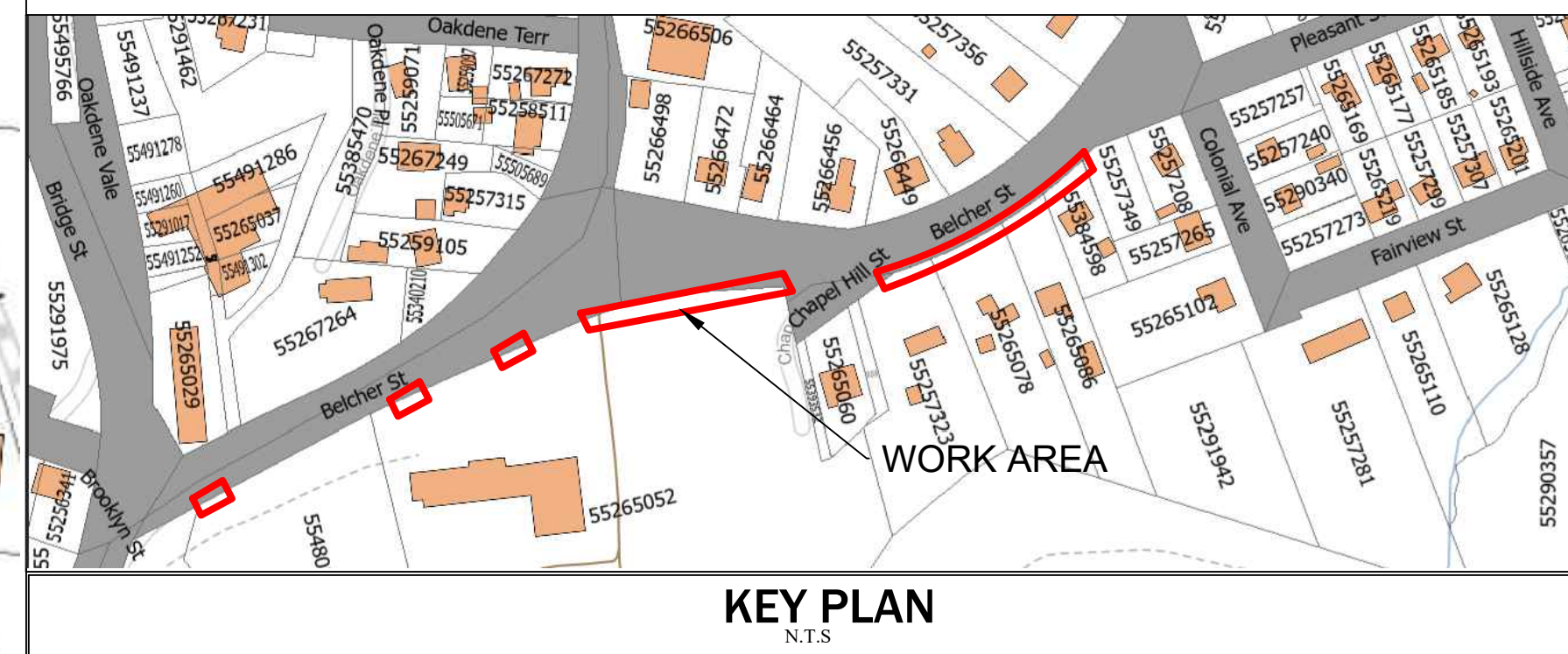
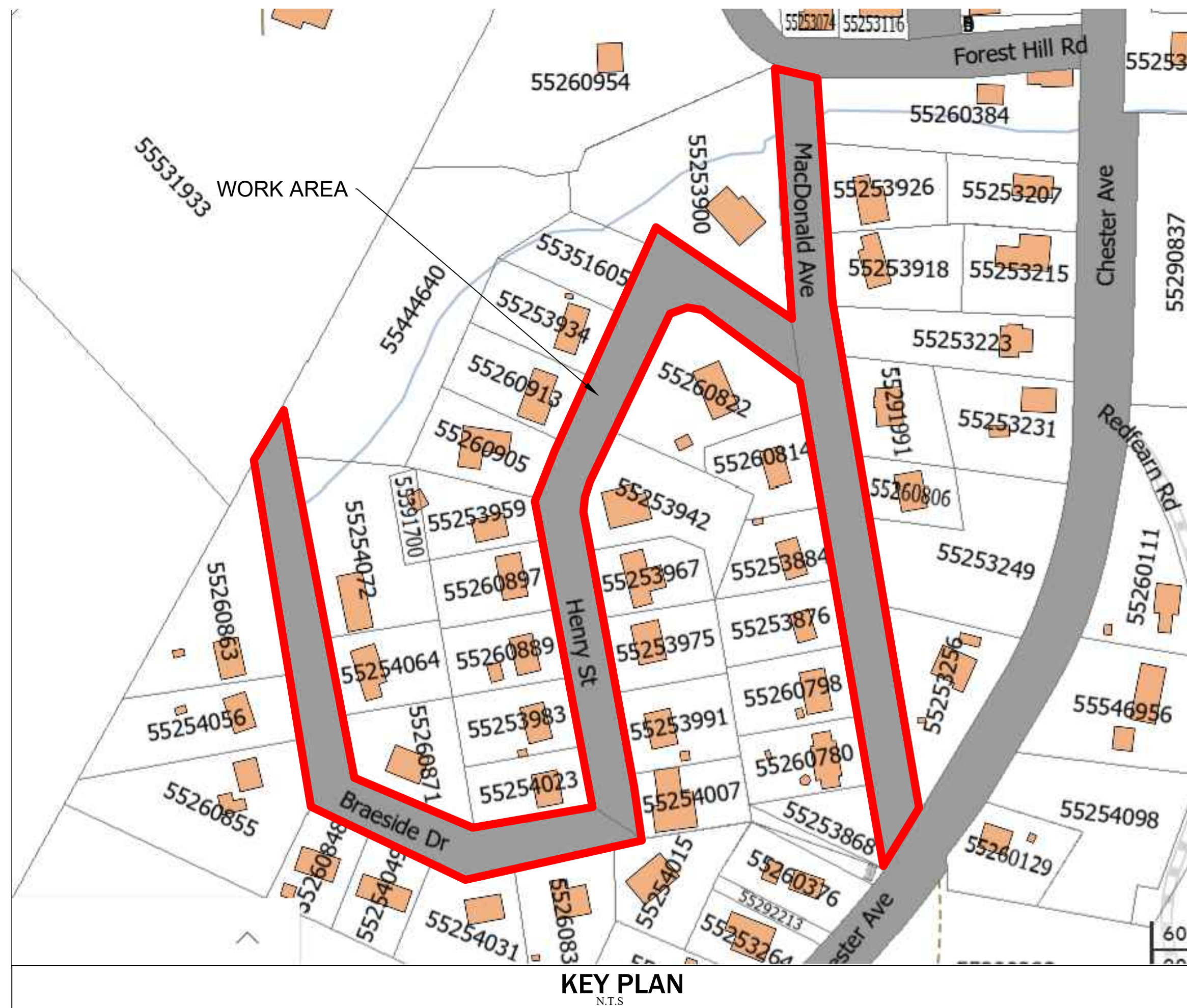
3.8 Culverts .1 Repair or replace all damaged culverts with new culvert of same or approved material and to original lines, elevations, and dimensions.



# TOK 2024 - 10 SIDEWALK REHABILITATION & ROAD EXTENSION PROSPECT AVE/ BELCHER ST/ MACDONALD SD

## Kentville

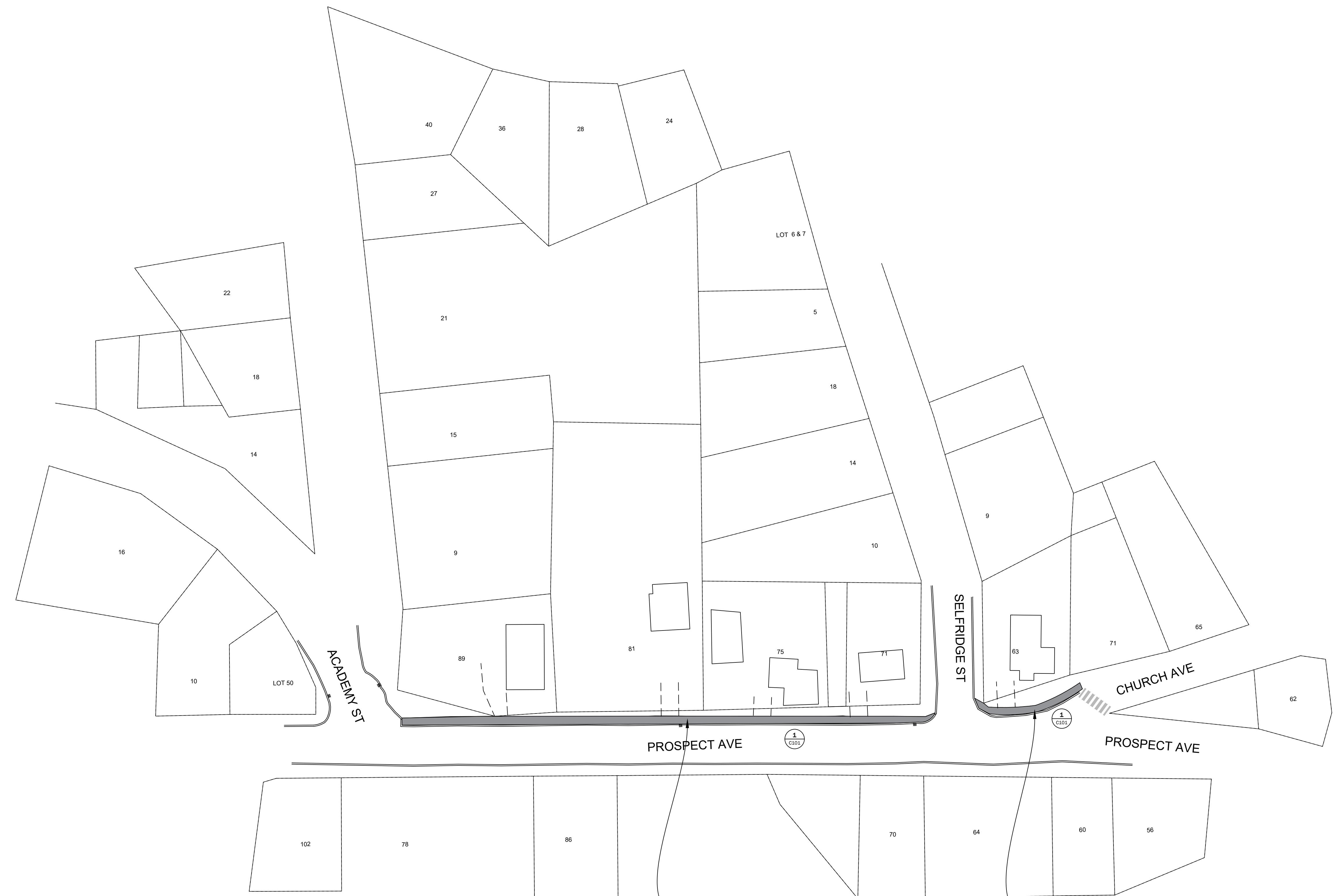
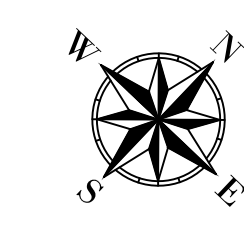
TOWN OF KENTVILLE



INDEX TO DRAWING	
SHEET No:	DESCRIPTION
	COVER SHEET
1	PROSPECT SIDEWALK REHABILITATION
2	PROSPECT EXTENSION PLAN & PROFILE STA 0+000 TO 0+052
3	MACDONALD AVE TOP LIFT OF PAVEMENT
4	BELCHER STREET SIDEWALK REHABILITATION
5	DETAILS

**ATTENTION:**  
CONTRACTOR IS RESPONSIBLE FOR THE EXACT LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION.





REPLACE EX. ASPHALT SIDEWALK & CURB W. CONC. CURB & 1.5m ASPHALT SIDEWALK FROM ACADEMY ST. TO SELFDRIDGE ST. ESTIMATED QUANTITY

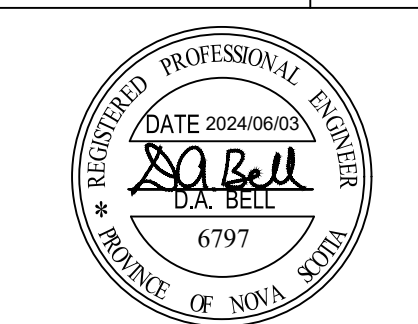
CONSTRUCT NEW 1.5m ASPH. SW & CONC. CURB

Notes

- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
- STANDARD & SUPPLEMENTAL SPECIFICATIONS FOR MUNICIPAL SERVICES (NSCEA & NSRBA)
  - EROSION & SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION SITES (NSE)
  - SEPARATION DISTANCES, AS OUTLINED IN THE POLICY ON INSTALLATION OF GRAVITY SEWERS, SEWAGE FORCEMAINS AND WATERMAINS IN COMBINED AND SEPARATE TRENCHES (NSE)
  - ALL ELEVATIONS ARE IN METRES TO CANADIAN GEODETIC DATUM USING NSHPN No. 208278
  - REMOVE AND REPLACE EXISTING MAILBOXES, FENCES AND SIGNS WHERE NECESSARY, AS DIRECTED BY THE TOWN ENGINEER.
  - REINSTATE EXISTING DRIVEWAYS, DITCHES, LAWNS AND ASPHALT SURFACES DAMAGED OR DISTURBED DURING CONSTRUCTION AND REPLACE EXISTING DRIVEWAY CULVERTS IF DISTURBED OR DAMAGED TO THE APPROVAL OF THE CONSULTANT, IN ACCORDANCE WITH THE REQUIREMENTS OF THE NOVA SCOTIA DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS.

LEGEND

EXISTING		PROPOSED
SA	SANITARY PIPE	
S	SANITARY MANHOLE	S
WAT	WATER PIPE	
⊗	VALVE	⊗
⊠	CATCH BASIN	⊠
▷	DIRECTION OF FLOW	▷
⊙	HYDRANT	⊙
↓	CAPPED OR PLUGGED	↓



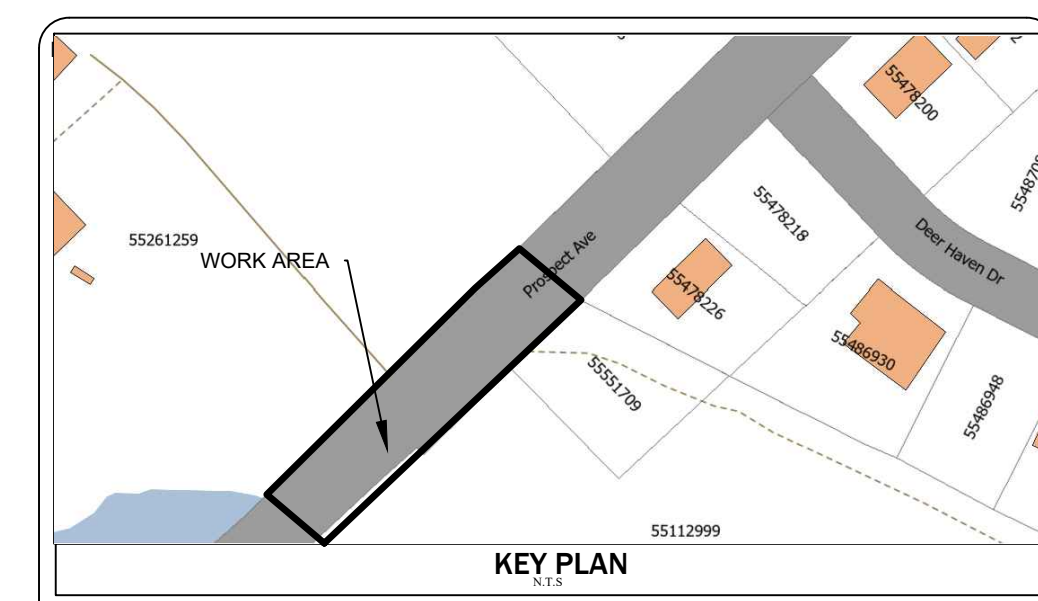
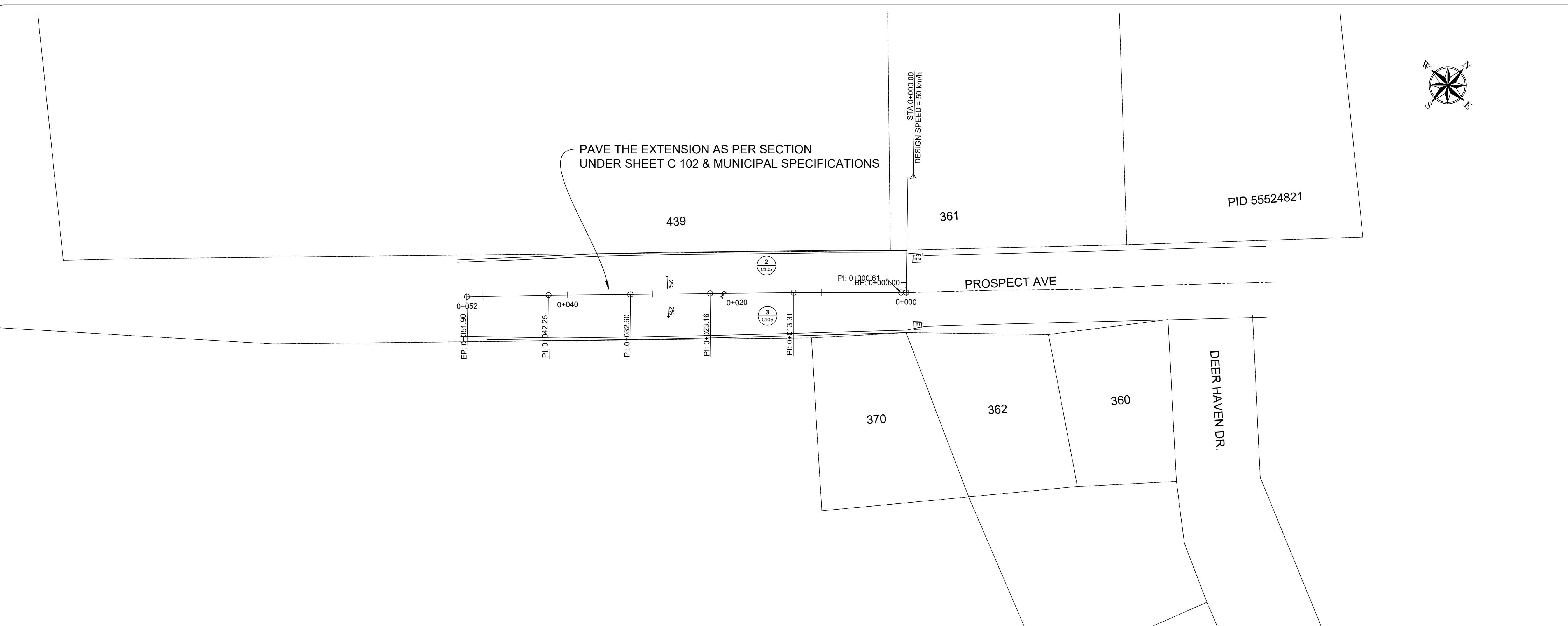
No.	MM/DD/YYYY	Revision Description	By
1	06/03/2024	ISSUED FOR TENDER	AEK



**TOWN OF KENTVILLE**  
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS

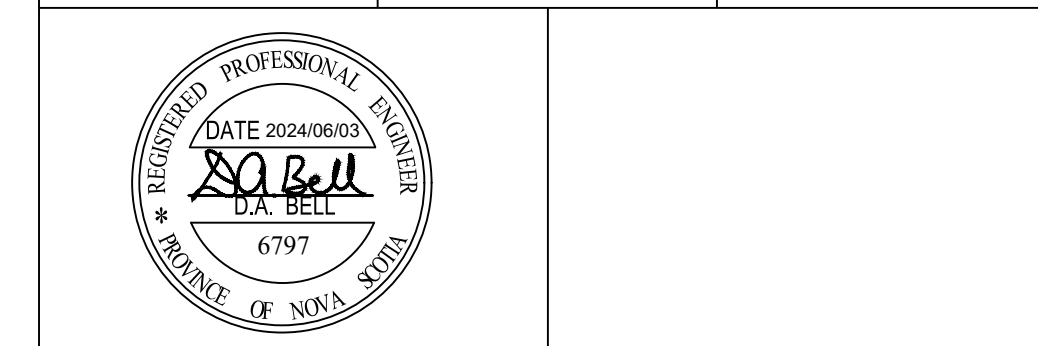
Horizontal 1:500	Vertical 1:50	Plot ARCH D (24"x36")
Project <b>TOK 2024-10 SIDEWALK REHABILITATION &amp; ROAD EXTENSION</b>		
Title <b>PROSPECT AVE SIDEWALK &amp; CURB REPLACEMENT KENTVILLE, NOVA SCOTIA</b>		
Tender No. TOK 2024-10	Account No.	
Issued For Tender Date: JUNE 03 - 2024	Issued For Construction Date:	As Construction Date:
Project No. 2024-10	Drawn AEK	Sheet 1 of 5
Ref.	Engineer DAB	Drawing No.
Date MAY 14 - 2024	Check DAB	<b>C101</b>

1:500 HORIZONTAL SCALE  
 1:50 VERTICAL SCALE  
 ARCH D (24"x36") PLOT SIZE  
 PROJECT: TOK 2024-10 SIDEWALK REHABILITATION & ROAD EXTENSION  
 TITLE: PROSPECT AVE SIDEWALK & CURB REPLACEMENT  
 KENTVILLE, NOVA SCOTIA  
 TENDER NO.: TOK 2024-10  
 ACCOUNT NO.:  
 ISSUED FOR TENDER DATE: JUNE 03 - 2024  
 ISSUED FOR CONSTRUCTION DATE:  
 AS CONSTRUCTION DATE:  
 PROJECT NO.: 2024-10  
 DRAWN: AEK  
 SHEET: 1 OF 5  
 REF.:  
 ENGINEER: DAB  
 DRAWING NO.:  
 DATE: MAY 14 - 2024  
 CHECK: DAB  
 C101



- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
- STANDARD & SUPPLEMENTAL SPECIFICATIONS FOR MUNICIPAL SERVICES (NSCEA & NSRBA)
  - EROSION & SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION SITES (NSE)
  - SEPARATION DISTANCES, AS OUTLINED IN THE POLICY ON INSTALLATION OF GRAVITY SEWERS, SEWAGE FORCEMANS AND WATERMANS IN COMBINED AND SEPARATE TRENCHES (NSE)
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  - REINSTATE EXISTING DRIVEWAYS, DITCHES, LAWNS AND ASPHALT SURFACES DAMAGED OR DISTURBED DURING CONSTRUCTION AND REPLACE EXISTING DRIVEWAY CULVERTS IF DISTURBED OR DAMAGED TO THE APPROVAL OF THE CONSULTANT, IN ACCORDANCE WITH THE REQUIREMENTS OF THE NOVA SCOTIA DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS.

LEGEND		
EXISTING		PROPOSED
SA	SANITARY PIPE	
S	SANITARY MANHOLE	S
WAT	WATER PIPE	
⊗	VALVE	⊗
⊠	CATCH BASIN	⊠
▷	DIRECTION OF FLOW	▷
⊙	HYDRANT	⊙
↓	CAPPED OR PLUGGED	↓



No.	MM/DD/YYYY	Revision Description	By
0	06/03/2024	ISSUED FOR TENDER	AEK



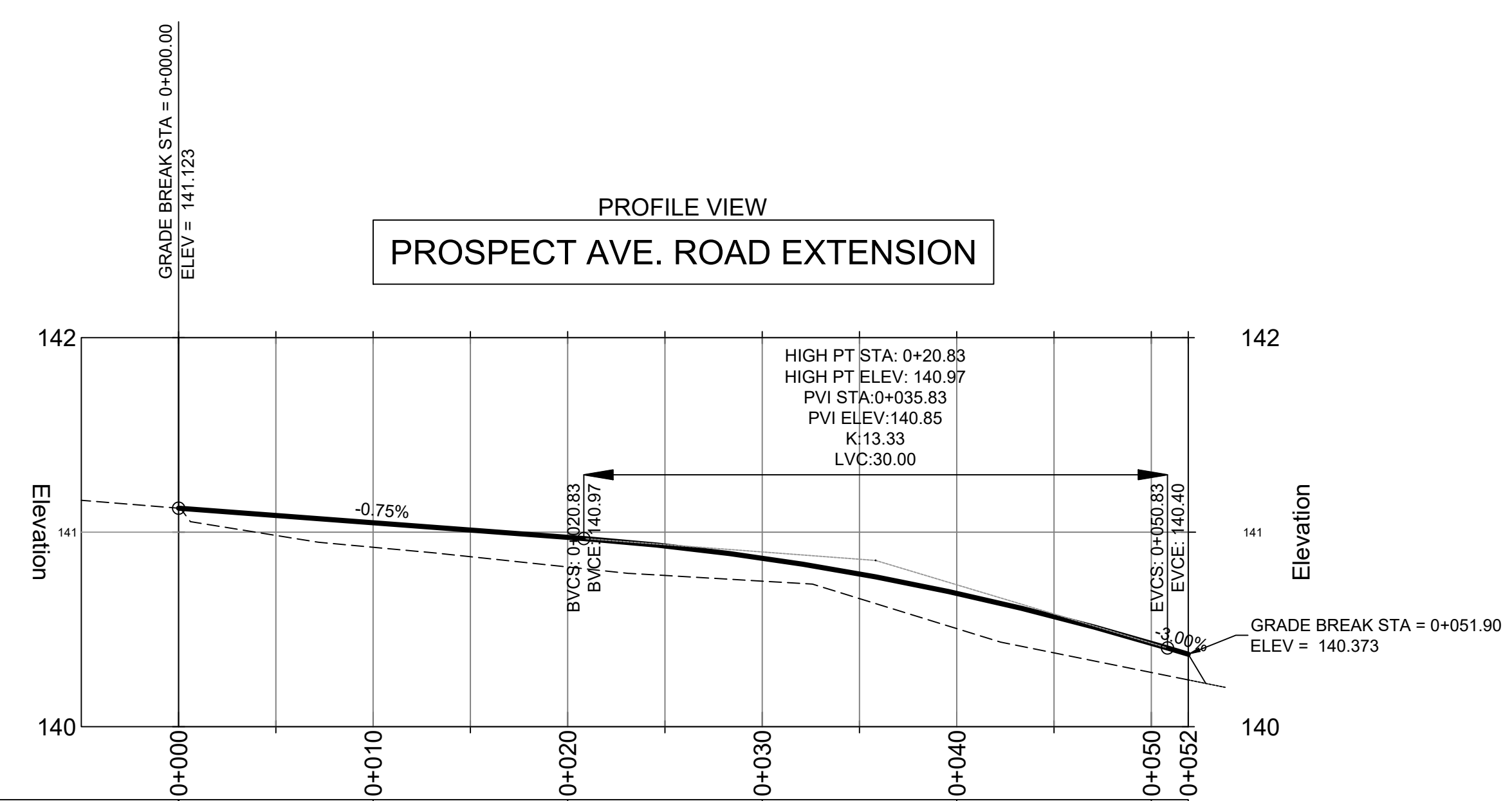
**TOWN OF KENTVILLE**  
DEPARTMENT OF ENGINEERING AND PUBLIC WORKS

Horizontal 1:250	Vertical 1:25	Plot ARCH D (24"x36")
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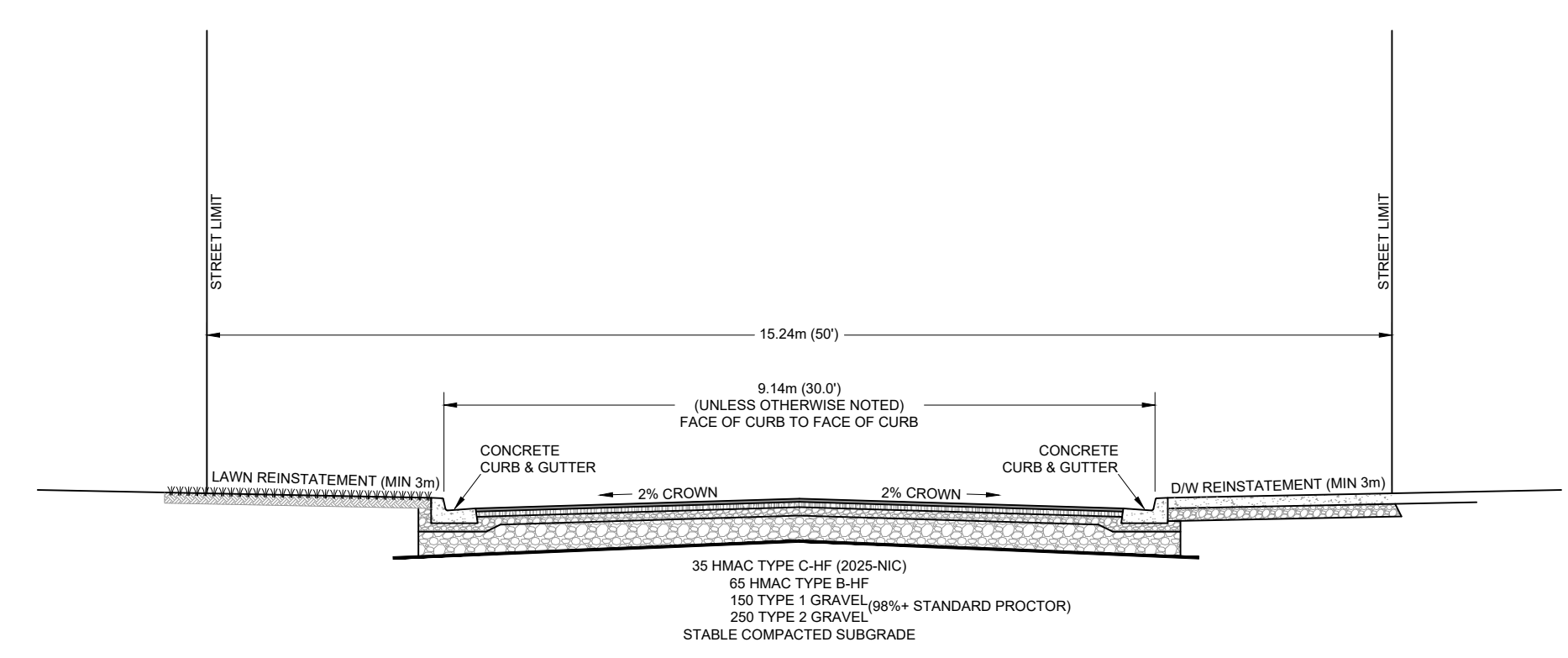
Project: TOK- 2024-10 SIDEWALK REHABILITATION & ROAD EXTENSION  
Title: **PROSPECT ROAD EXTENSION**  
PLAN & PROFILE FROM STA 0+000 TO 0+052  
KENTVILLE, NOVA SCOTIA

Tender No. TOK-2024-10	Account No.	
Issued For Tender Date: JUNE 03-2024	Issued For Construction Date:	As Construction Date:
Project No. 2024-10	Drawn AEK	Sheet 2 of 5
Ref.	Engineer DAB	Drawing No.
Date MAY 14-2024	Check DAB	<b>C102</b>

PROFILE VIEW  
PROSPECT AVE. ROAD EXTENSION



EG FG	0+000	0+010	0+020	0+030	0+040	0+050	0+052
FG DIFFERENCE	141.12 0.00	140.92 141.048 0.13	140.82 140.973 0.15	140.75 140.867 0.12	140.50 140.686 0.18	140.28 140.429 0.15	140.28 140.37 0.09



PAVE THE EXTENSION AS PER SECTION UNDER SHEET C 102 & MUNICIPAL SPECIFICATIONS

STA 0+000.00  
DESIGN SPEED = 50 km/h

PID 55524821

370

362

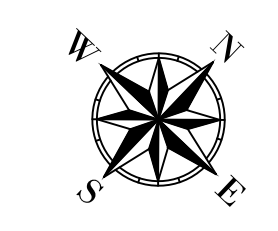
360

DEER HAVEN DR.

439

361

PROSPECT AVE





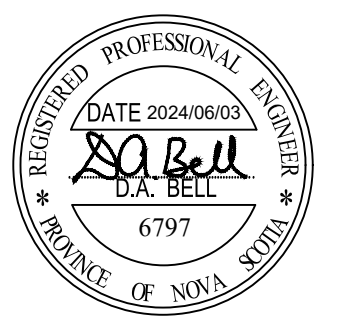
**LEGEND**

- NEW HYDRANT
- EXISTING HYDRANT
- NEW VALVE
- EXISTING VALVE
- CAPPED OR PLUGGED
- EXISTING MANHOLE
- NEW MANHOLE
- STORM MANHOLE
- CATCH BASIN
- EXISTING CATCH BASIN
- LIGHT STANDARD
- DIRECTION OF FLOW
- ▲ NSHPN



**GENERAL NOTES:**

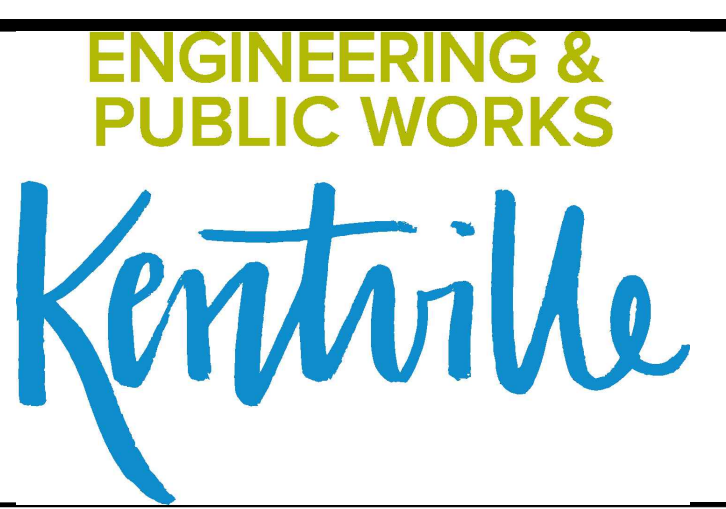
- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
1. STANDARD & SUPPLEMENTAL SPECIFICATIONS FOR MUNICIPAL SERVICES (NSCEA & NSRBA)
  2. EROSION & SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION SITES (NSE)
  3. SEPARATION DISTANCES, AS OUTLINED IN THE POLICY ON INSTALLATION OF GRAVITY SEWERS, SEWAGE FORCEMAINS AND WATERMAINS IN COMBINED AND SEPARATE TRENCHES (NSE)
  4. ALL ELEVATIONS ARE IN METRES TO CANADIAN GEODETIC DATUM USING NSHPN No. 208278
  5. UNDERGROUND AND OVERHEAD SERVICES SUCH AS WATER, SEWER, DRAINS, TELEPHONE, ETC., SHOWN ON PLANS ARE APPROXIMATE ONLY.
  6. THE OWNER OF EXISTING SERVICES IN THE WORK AREA MUST BE NOTIFIED BY THE CONTRACTOR AT LEAST ONE (1) WEEK BEFORE WORK COMMENCES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH THE WORK AREA, AND ALL EXISTING SERVICES, WHETHER SHOWN ON THE ENGINEER'S PLANS OR NOT, BEFORE EXCAVATING.
  7. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE SERVICES AND MAINTAINING ALL EXISTING SERVICES AT ALL TIMES DURING THE CONSTRUCTION PERIOD.
  8. REMOVE AND REPLACE EXISTING MAILBOXES, FENCES AND SIGNS WHERE NECESSARY, AS DIRECTED BY THE CONSULTANT.
  9. REINSTATE EXISTING DRIVEWAYS, DITCHES, LAWNS AND ASPHALT SURFACES DAMAGED OR DISTURBED DURING CONSTRUCTION AND REPLACE EXISTING DRIVEWAY CULVERTS IF DISTURBED OR DAMAGED TO THE APPROVAL OF THE CONSULTANT, IN ACCORDANCE WITH THE REQUIREMENTS OF THE NOVA SCOTIA DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS.
  10. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 450mm CLEARANCE BETWEEN WATER MAINS AND ANY INTERSECTING SANITARY OR STORM LINES.
  11. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL EXISTING MANHOLES AND STRUCTURES. ANY ABANDONED STRUCTURES LEFT IN PLACE TO BE CUT OFF 600mm BELOW GRADE & FILLED WITH NON-FILL (LEAN CONCRETE).



**ENGINEER'S STAMP**

No.	DESCRIPTION	DATE	BY
1	ISSUED FOR TENDER	2024/06/03	AEK

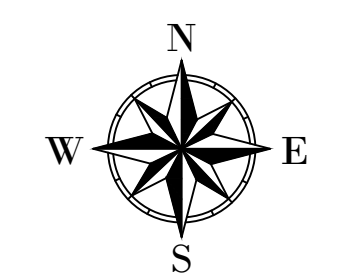
**REVISION OR ISSUE**



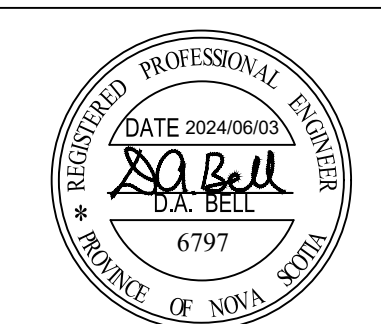
**PROJECT:**  
**TOWN OF KENTVILLE**  
**STREET AND SERVICES UPGRADE**  
**OVERALL PLAN**  
**MacDONALD AVENUE SUBDIVISION**  
**KENTVILLE, KINGS Co., NS**

DATE	MAY 9, 2022	REF NO	
DRAWN BY	AEK	CHK	DAB
DWG NO	2022-03-01	SHEET	C103
SCALE	1:500		3 of 4





- Notes
- THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
1. STANDARD & SUPPLEMENTAL SPECIFICATIONS FOR MUNICIPAL SERVICES (NSCEA & NSRBA)
  2. EROSION & SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION SITES (NSE)
  3. ALL SIDEWALKS IN THE DRAWING TO BE REPLACED WITH ASPHALT
  4. ALL ELEVATIONS ARE IN METRES TO CANADIAN GEODETIC DATUM USING NSHPN No. 208278
  5. REMOVE AND REPLACE EXISTING MAILBOXES, FENCES AND SIGNS WHERE NECESSARY, AS DIRECTED BY THE TOWN ENGINEER.
  6. REINSTATE EXISTING DRIVEWAYS, DITCHES, LAWNS AND ASPHALT SURFACES DAMAGED OR DISTURBED DURING CONSTRUCTION AND REPLACE EXISTING DRIVEWAY CULVERTS IF DISTURBED OR DAMAGED TO THE APPROVAL OF THE CONSULTANT, IN ACCORDANCE WITH THE REQUIREMENTS OF THE NOVA SCOTIA DEPARTMENT OF TRANSPORTATION & PUBLIC WORKS.



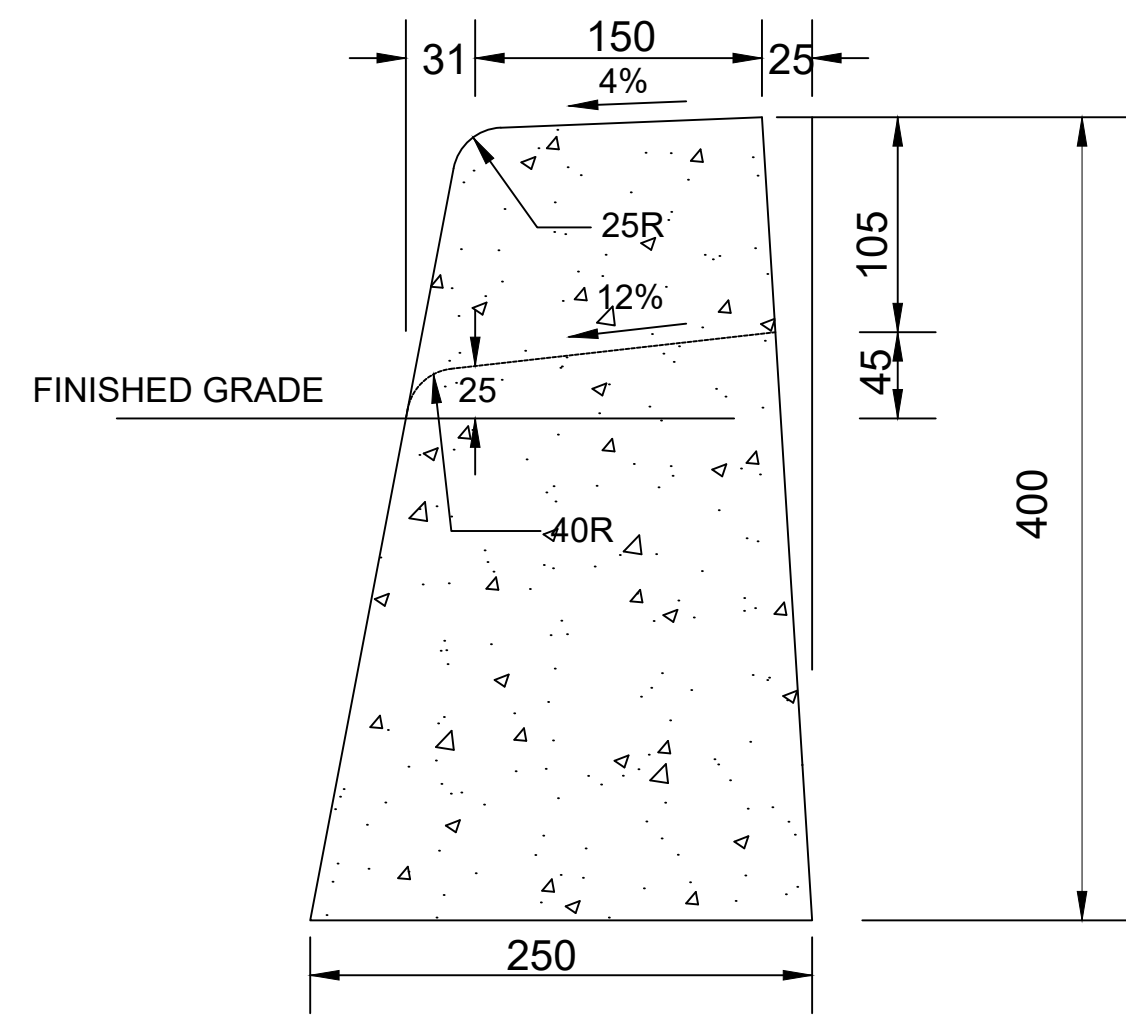
No.	MM/DD/YYYY	Revision Description	By
1	06/03/2024	ISSUED FOR TENDER	AEK



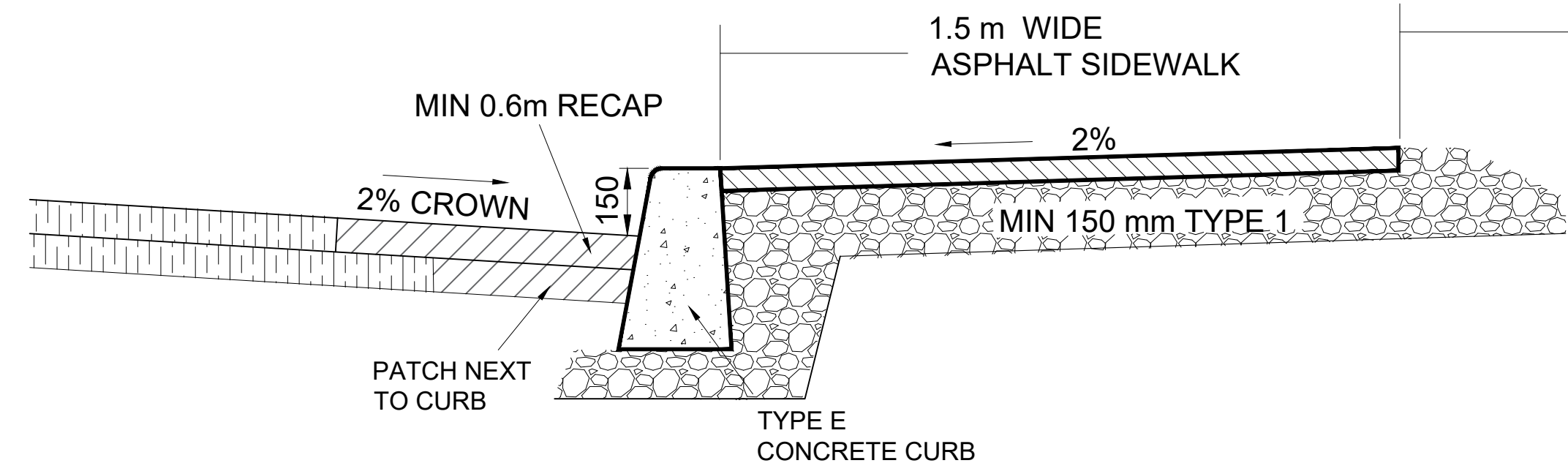
**TOWN OF KENTVILLE**  
DEPARTMENT OF ENGINEERING  
AND PUBLIC WORKS

Horizontal 1:400	Vertical 1:50	Plot ARCH D (24"x36")
Project <b>TOK 2024-10 SIDEWALK REHABILITATION &amp; ROAD EXTENSION</b>		
<b>BELCHER ST. SIDEWALK REHABILITATION</b>		
SIDEWALK REPLACEMENT		
KENTVILLE, NOVA SCOTIA		
Tender No. TOK 2024-10	Account No.	
Issued For Tender Date: JUNE 03 2024	Issued For Construction Date:	As Construction Date:
Project No. 2024-10	Drawn AEK	Sheet 4 of 5
Ref.	Engineer DAB	Drawing No.
Date MAY 14 2024	Check DAB	<b>C104</b>

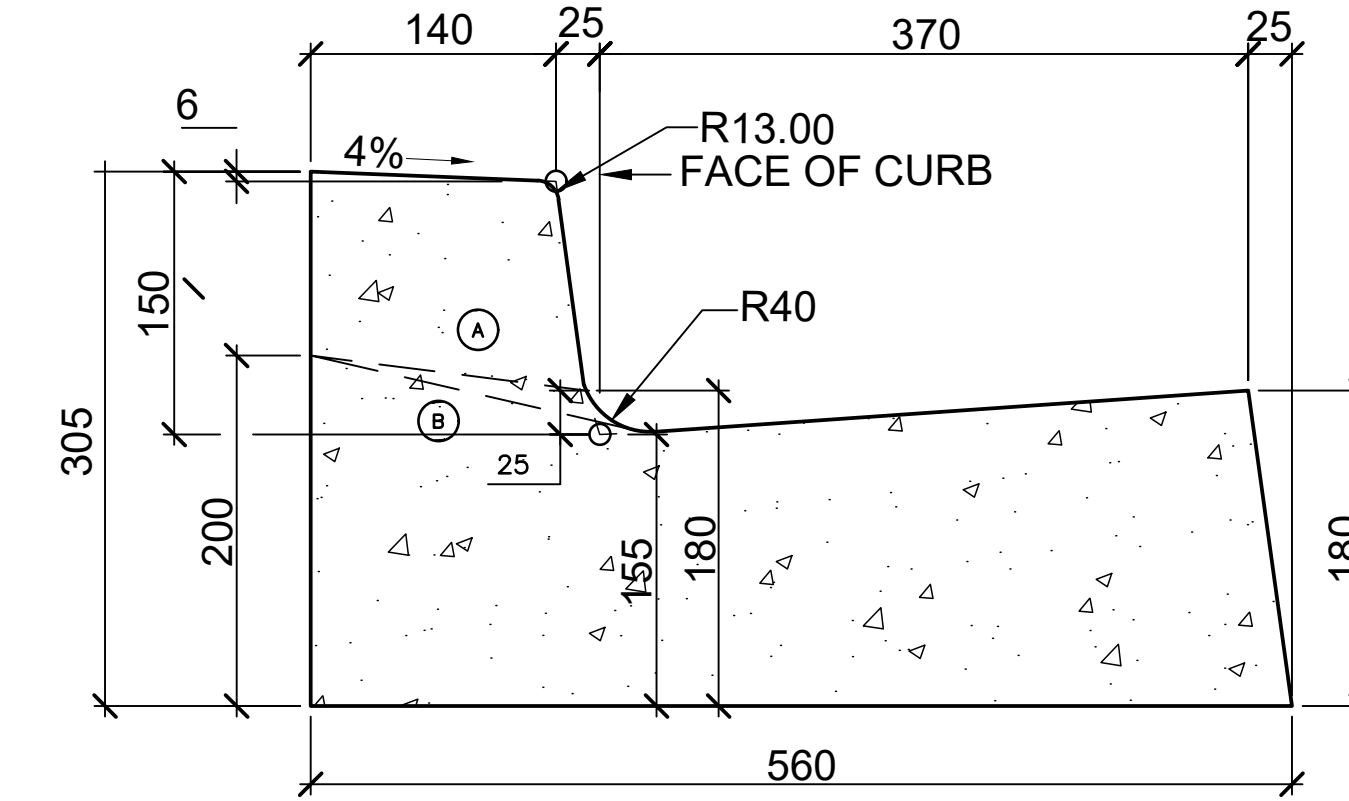




**1** STRAIGHT BACK CURB CROSS SECTION  
C105 NTS.



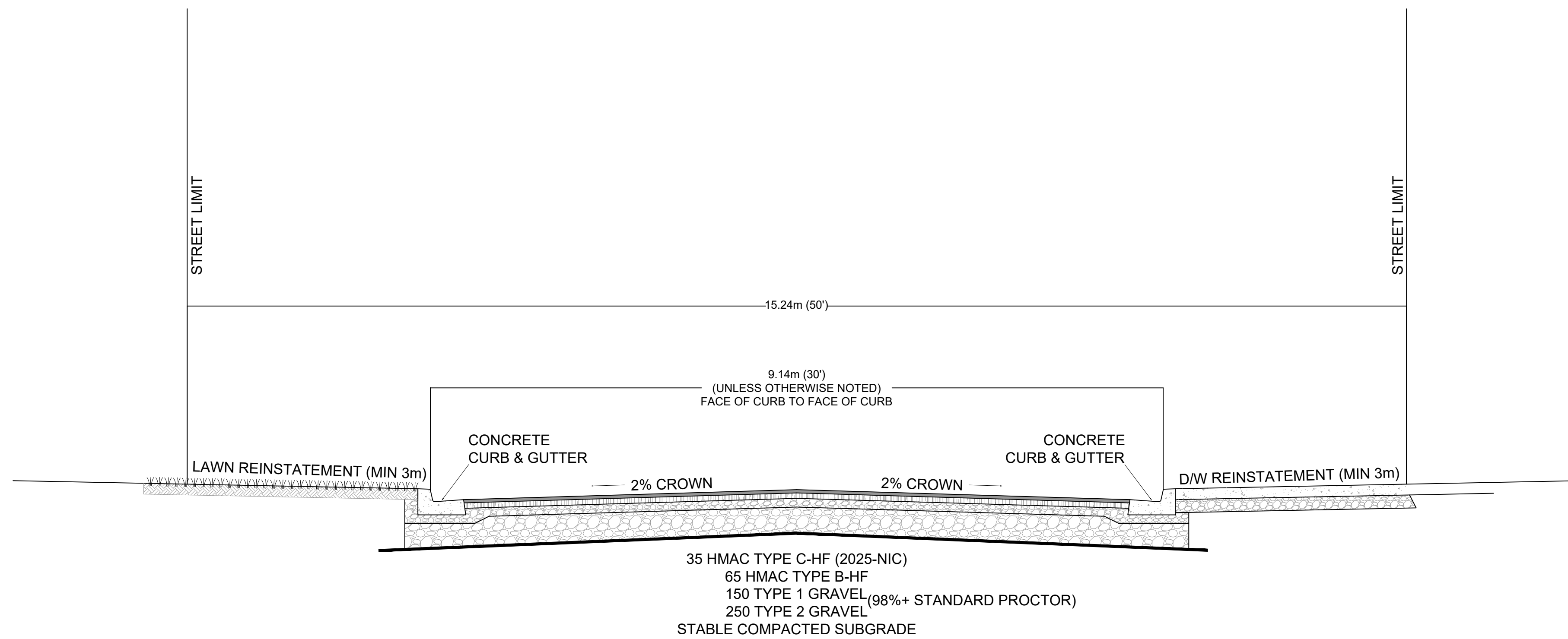
**2** CONCRETE CURB AND GUTTER SECTION  
C105 NTS.



NOTES:  
1. DASHED LINE "A" INDICATES CURB AT DRIVEWAYS  
2. DASHED LINE "B" INDICATES CURB AT PEDESTRIAN RAMPS

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE

NOTE: ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE



**3** ROAD CROSS SECTION  
C105 NTS.

Notes

LEGEND

EXISTING		PROPOSED
SA	SANITARY PIPE	
S	SANITARY MANHOLE	S
WAT	WATER PIPE	
⊗	VALVE	⊗
⊠	CATCH BASIN	⊠
▷	DIRECTION OF FLOW	▷
⊙	HYDRANT	⊙
↓	CAPPED OR PLUGGED	↓



No.	MM/DD/YYYY	Revision Description	By
1	06/03/2024	ISSUED FOR TENDER	AEK

**Kentville**

**TOWN OF KENTVILLE**  
DEPARTMENT OF ENGINEERING  
AND PUBLIC WORKS

Horizontal NTS	Vertical NTS	Plot ARCH D (24"x36")
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Project: TOK- 2024-10 SIDEWALK REHABILITATION & ROAD EXTENSION

Title: **DETAILS**

Tender No. TOK 2024-10	Account No.	
Issued For Tender Date: JUNE 03- 2024	Issued For Construction Date:	As Construction Date:
Project No. 2024-10	Drawn AEK	Sheet 5 of 5
Ref.	Engineer DAB	Drawing No.
Date MAY 14-2024	Check DAB	<b>C105</b>

WATER REINSTATEMENT (MIN 3m)