SPECIFICATION FOR TRAIL RESURFACING CYPHER SYSTEMS GREENWAY TRAIL

PREPARED FOR:

ESSEX REGION CONSERVATION AUTHORITY 360 FAIRVIEW AVE W., ESSEX, ON

Project No. 225065 June 16, 2025

PREPARED BY:



CHALL. ENG. Corporation, Consulting Engineers 12222 Tecumseh Road East, 2nd Floor Tecumseh, Ontario, N8N 1L9 Tel.: (519) 979-7333 Att.: Jennifer Di Domenico, P.Eng.

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Submitted by Tenderer:		-
Contact Person:		-
Contact's Phone No .:	email:	
To (Owner):	Essex Region Conservation Authority	
For Project:	Trail Resurfacing Cypher Systems Greenway Trail, Maidstone	
Dated:	June 16, 2025	
General Statement:	In accordance with the Contract Documents, including Technical Specifications and Drawings	
Documents Prepared by:	Chall.Eng. Corporation, Consulting Engineers	
No. of Addenda Receive	d:	

We hereby offer to furnish all equipment, labour and material necessary for the proper completion of the above named project, including all prime costs, allowances and Government Sales or other Taxes, as called for in the Technical Specifications, in accordance with the above-mentioned documents as follows:

Tender Price Form – Base Bid					
Item No.	Description of Work	Estimated Quantities		Рі	ice
2	General				
2.1	Mobilization, Access and Demobilization	N/A	Lump Sum	\$	
2.2	Out of Town Costs	N/A	Lump Sum	\$	
2.3	Protection of Property	N/A	Lump Sum	\$	
2.4	Site Restoration and Cleaning	N/A	Lump Sum	\$	
2.5	Bonding	N/A	Lump Sum	\$	
3	Trail and Resurfacing				
	Works				
3.1	Scarifying Works	15,600 m ²	Lump Sum	\$	
3.2	Resurfacing Works	15,600 m ²	Lump Sum	\$	
	Tender Price (Excluding HST): HST (13%):				
	ΤΟΤΑ	L TENDER PRICE(in lawfu	Il money of Canada):		
	(Dollars)				
				(cents)	
	(Total Tender Price in Written Form)				

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In submitting this Tender, the Tenderer recognizes the right of the Owner to accept or reject any or all Tenders.

If this Tender is accepted and the Contract is awarded to us, we, the undersigned, hereby undertake to perform this Contract satisfactorily and guarantee the full performance of the Contract.

We further agree to leave this Tender open for acceptance, for a period of sixty (60) days from the closing date of this Tender.

The following labour rates shall be used for additions or deletions to the Contract Price. These labour rates do not include Harmonized Sales Tax (HST).

NO.	DESCRIPTION	LABOUR / MATERIAL RATE
1	Foreman	\$ /hr
2	Journeyman	\$ /hr
3	Labourer	\$ /hr
4	Project Manager	\$ /hr
5	Other	\$ /hr
7	Materials	20%

SUBCONTRACTORS AND SUPPLIERS

- 1. The undersigned agrees that the following Subcontractors and/or Suppliers will be employed on the project.
- 2. Following is a list of Subcontractors that we propose to use for the performance of the identified portions of the Work.
- 3. Only one (1) Subcontractor shall be listed for each identified portion of the Work. Work to be performed by Contractor is indicated by the words "BY OWN FORCES".
- 4. We agree that changes to this list will not be allowed without the express written permission of the Owner.
- 5. We acknowledge that Subcontractors on this list may be so notified by the Owner.

Excavation:

Stone Supplier:

ACCEPTANCE AND CONTRACT

If awarded the contract for this work within Sixty (60) calendar days or less of the date set for receipt of Tenders, the undersigned agrees:

To commence the work by:

To complete the work by:

SECTION 00 02 00 - FORM OF TENDER

Forman Name / Years of		
Experience:		
LEGAL NAME OF COMPAN	Y:	
ADDRESS:		
POSTAL CODE:		
TELEPHONE:		
FAX NUMBER:		
EMAIL ADDRESS:		
SIGNATURE OF AUTHOURI	ZED OFFICER(S):	
NAME AND POSITION OF SIGNING OFFICER(S):		

In the case of a Limited Company, the Company seal shall be affixed to their Tender where the signature of the Signing Officer(s) of the Company appears, as well as the legal and registered name of the company.

END OF SECTION

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Part 1 General

1.1 RELATED SECTIONS

.1 Section 00 02 00 – Form of Tender

1.2 OWNER

.1 Owner shall mean the Essex Region Conservation Authority (ERCA).

1.3 ENGINEER

.1 Engineer shall mean Chall.Eng. Corporation, Consulting Engineers (CEC).

1.4 CONTRACTOR (OR TENDERER)

.1 Contractor (or Tenderer) shall mean the Corporation as noted on the Form of Tender.

1.5 PROJECT DESCRIPTION

- .1 The Work is identified as Trail Resurfacing, located at Cypher Systems Greenway Trail, Maidstone, Ontario, also known as Project Number 225065, as prepared by Chall.Eng. Corporation, Consulting Engineers.
- .2 In general, the scope of work includes, but is not limited to, scarifying the existing surface and the placement of limestone screenings along an approximately 5 km (3.1 miles) section of the trail between County Road 11 (Walker Road) and County Road 15.

1.6 TENDER DOCUMENTS

- .1 The Tender Documents for this project shall include all Technical Specifications and Drawings as listed in Section 00 01 00 Table of Contents.
- .2 In the event of any inconsistency or conflict in the provisions of the Technical Specifications and the Drawings, the Technical Specifications, then the Drawings shall take precedence.
- .3 The Owner does not assume any responsibility for the correctness, accuracy or completeness of the Drawings with respect to the location of existing concealed conditions or other objects (man-made or natural), and should the Drawings be found to be incorrect or incomplete, the Contractor shall not have any claim on this account prior to commencing with the work. Prior to commencing with the work, the Contractor shall confirm the information and dimensions as shown on the Drawings and as noted in the Scope of Work. Notify the Engineer immediately of any discrepancies or errors.

1.7 GENERAL REQUIREMENTS

.1 The Contractor shall furnish all access, labour, equipment and materials necessary to complete all work as specified herein.

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- .2 All labour shall be performed by competent works and to reasonable standards of workmanship.
- .3 All materials furnished under this Contract shall be new and undamaged, and must satisfy all Codes or Regulations.
- .4 Substitute materials shall only be used if approved by the Owner and Engineer, and Tenderers shall not base their Tenders on substitute materials unless noted in an Addendum. The submission process for substitutions is noted in Section 3.2.
- .5 This Tender is for a Stipulated Price Contract CCDC No. 2 (Latest Edition).

1.8 QUANTITIES

.1 The quantities as set out in the Form of Tender are approximate. No claims for extra payment due to changes in final quantities shall be entertained by the Owner unless the Scope of Work is deemed by the Engineer not to logically fall within the specified Scope of Work for items contained in this Contract.

Part 2 Tender Submission

2.1 REQUIREMENTS

.1 Tenders shall be submitted in accordance with Table 1 – Summary of Submission Requirements.

Item	Requirements	
	Upload one (1) digital copy in Adobe PDF readable format of	
Submission items:	the following:	
	1. Item 2.3 Mandatory Requirements;	
	2. Section 00 02 00 Form of Tender	
Submission deadline:	June 30, 2025, until 1:00:00 p.m., local time	
	Email responses to:	
	1. Engineer: Ms. Jennifer Di Domenico, of Chall.Eng.	
Submission location:	Corporation at jdidomenico@cec14.com; and	
	2. Owner's Representative: Mr. Kevin Money, of ERCA	
	at <u>kmoney@erca.org</u> .	

- .2 Failure to comply with the above noted submission requirements may result, at the sole discretion of the Owner, in disqualification of the Tender Submission.
- .3 Late Tenders, or Tenders submitted to the location other than that specified, will not be accepted.
- .4 By submitting a Tender, the Tenderer agrees to every term, provision and condition set out in these Instructions to Bidders.

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2.2 AMENDMENTS/WITHDRAWL OF TENDER SUBMISSIONS

- .1 At any time prior to the Submission Deadline, a Contractor may withdraw and amend its Tender Submission. A Contractor wishing to amend its Tender Submission shall withdraw its initial Tender Submission and replace it with a complete, revised Tender Submission prior to the Submission Deadline. Should a Contractor submit more than one amendment for the same purpose, the one bearing the later date/time confirmation will be evaluated unless it is received after the Submission Deadline.
- .2 A Tenderer may withdraw its Tender at any time prior to the official closing time by submitting a letter rejecting its bid and bearing its signature, to the place of closing specified.

2.3 MANDATORY REQUIREMENTS

- .1 The Owner reserves the right to determine if each Contractor meets the mandatory requirements.
- .2 Each Tender shall include a completed Form of Tender, an Agreement to Bond, WSIB Clearance and Insurances.
 - .1 Form of Tender
 - .1 The prices as tendered shall include the supply of all access, labour, materials and equipment, including all incidentals such as insurances, to complete the works in this Tender to the satisfaction of the Owner.
 - .2 If a Tenderer has omitted to enter a price for an item of work set out in the Form of Tender, the Tenderer shall, unless specifically stated otherwise in the Tender, be deemed to have allowed elsewhere in the Form of Tender for the cost of said item of work and, unless otherwise agreed to by the Owner, no increase shall be made in the Form of Tender on account of such omission.
 - .3 All sales taxes and import duties shall be included in the Total Tender Price.
 - .4 The cost of any works, equipment and/or labour not specifically noted in the Scope of Work that are required to complete the works properly, and the cost of all incidentals, such as insurances, overhead, profit, coordination, etc. that are noted in these Technical Specifications and on the Drawings, shall be included in the Total Tender Price. There will be no additional payment for incidentals.
 - .2 Agreement to Bond
 - .1 The Contractor shall submit an Agreement to Bond issued by a bonding company licensed in the Province of Ontario, in a form acceptable to the Owner, obliging the bonding company to issue Performance and Labour and Material Payment Bonds.
 - .2 The cost of the bonds shall be included in the Form of Tender.
 - .3 WSIB Clearance

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- .1 The Contractor shall submit written evidence to the Owner that they are covered under the Worker's Compensation Act.
- .4 Insurances
 - .1 The Contractor shall submit written evidence to the Owner that they carry liability and property damages of Five Million Dollars (\$5,000,000) insurance.
 - .2 The Owner, the Engineer, and all parties listed in Section 5.2.2 are to be named as additionally insured.
 - .3 The insurance policy shall include a Cross Liability clause.
 - .4 Standard Non-Owned and Owner's Form Automobile Liability Insurance shall have a minimum of \$2,000,000 PLPD.
 - .5 All Risks Builder's Insurance, Liability and Fire Insurance coverage shall be for the full value of the Total Tender Price.
 - .6 The policy shall not exclude any peril that can reasonably be expected in completing the proposed work.

2.4 BONDS

- .1 Performance Bond
 - .1 A Performance Bond in the amount of Fifty Percent (50%) of the Total Tender Price shall be provided by the successful Contractor.
 - .2 The Performance Bond issued by the Surety of the Tenderer's choice shall become part of the Agreement or Contract before the Contract is awarded.
- .2 Labour and Material Payment Bond
 - .1 A Labour and Material Payment Bond in the amount of Fifty Percent (50%) of the Total Tender Price shall be provided by the successful Contractor.
 - .2 A Labour and Material Payment Bond issued by the Surety of the Tenderer's choice shall become part of the Agreement or Contract before the Contract is awarded.

Part 3 Access and Inquiries

3.1 PRE TENDER MEETING

- .1 A brief Non-Mandatory Pre Tender Site Meeting will be held on June 20, 2025, at 10:30 pm. Contractors are requested to park in the parking lot at the Edgar Road (Concession 15) entrance to the Cypher Systems Greenway Trail, Maidstone.
- .2 Before submitting its Tender, each Tenderer shall be held responsible to have examined the premises and satisfied themselves as to the existing conditions under which they will be obliged to operating in performing the work. No extras will be allowed for the failure to make the examination.

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3.2 SUBSTITUTIONS

- .1 The Tender Price shall be based upon materials and equipment specified or approved equivalents.
- .2 Contractors and suppliers wishing to obtain approval for equipment and/or material items as equivalent to those specified shall submit a minimum of five (5) days prior to the Tender Closing Date, complete with the following:
 - .1 Product name and manufacturer's name, address, telephone numbers, and web site.
 - .2 Reason(s) for proposing the substitution.
 - .3 A statement verifying that the substitution will not affect the Contract Price and Contract Time.
 - .4 A statement verifying that the substitution will not affect the performance or warranty of other parts of the Work.
 - .5 Manufacturer's product literature for the substitution, including material descriptions, compliance with applicable codes and reference standards, performance and test data, compatibility with contiguous materials and systems, and environmental considerations.
 - .6 A summarized comparison of the physical properties and performance characteristics of the specified product and the substitution, with any significant variations clearly highlighted.
- .3 Contractors will be notified of acceptable substitutions via email, a minimum of two (2) days prior to the Tender Closing Date.
- .4 Deviations from Specifications must be stated in writing at the time of submission.

3.3 QUESTIONS

- .1 It is the responsibility of the Tenderer to clarify any details in question and not mentioned in this Tender or shown on the accompanying drawings before submitting their Tender. No allowance will be made for the Tenderer not being familiar with this Tender.
- .2 Any inquiries or questions concerning this project should be directed, by email, to Ms. Jennifer Di Domenico, of Chall.Eng. Corporation, Consulting Engineers, by email at <u>jdidomenico@cec14.com</u>. Telephone inquiries will not be accepted.
- .3 If the Engineer considers a question to be relevant to all Contractors, the Engineer will provide both the question and the answer in the form of an addendum.
- .4 Any oral or written response provided by anyone other than the Engineer in connection with this Tender will neither be binding on the Owner, nor will it change, modify, amend or waive the requirements of this Tender is any way.
- .5 The last day for questions is June 24, 2025, at 12:00 pm. Any questions submitted after this time will not be answered.

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3.4 ADDENDA

- .1 All addenda will be issued by email only and circulated to all Tenderers.
- .2 If any addenda are issued, the Tenderer shall indicate the number of addenda that the Tenderer received in the appropriate blank space on the Form of Tender. If no addenda are received, the Tenderer shall indicate zero.
- .3 The Owner reserves the right to reject any Tender Submission that fails to identify addenda issued against the Tender Documents.
- .4 Addenda items shall govern and supersede any items in the Technical Specifications and the Drawings.
- .5 The last addendum will be issued no later than June 25, 2025, at 2:00 pm.

Part 4 Tender Award

4.1 ACCEPTANCE/REJECTION OF TENDERS

- .1 Tenders shall remain open for acceptance for a period of sixty (60) calendar days commencing on and including the day on which the Tenders are received.
- .2 The Owner reserves the right to accept or reject any or all Tenders and to waive or not waive any informalities as it may deem advantageous.
- .3 The lowest or any Tender may not be accepted.
- .4 The Form of Tender and any Mandatory Requirements shall be legible in ink or typewritten.
- .5 Tender Submissions which are unsigned, improperly signed or sealed, incomplete, unbalanced, conditional or obscure, or which contain erasures or alterations not properly initialed, or irregularities of any kind, may be rejected.
- .6 The Owner may, as permitted by the Tender Documents, or with the agreement of any party with whom it has entered into, or proposes to enter into, a Contract, delete, add or change items in the Technical Specifications and Drawings at any time before or after Tender acceptance.
- .7 A Tender is considered as accepted by the Owner upon receipt of a Letter of Authorization, with a CCDC No. 2 Stipulated Sum Contract to follow to the Tenderer.

Part 5 Pre-Construction

5.1 BUILDING PERMITS AND INSPECTIONS

.1 A Building Permit is not required to be obtained for these works.

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5.2 COMMENCEMENT AND COMPLETION

- .1 The Contractor shall commence the Work by July 7, 2025, and be substantially complete by August 25, 2025.
- .2 Prior to commencing the Works, the Contractor shall submit and obtain approval from the Owner for the following documents:
 - .1 Notice of Project Ministry of Labour;
 - .2 Insurances, which name the Essex Region Conservation Authority as insured, and Chall.Eng. Corporation, Consulting Engineers, as additionally insured;
 - .3 Bonds Performance, Labour and Material Payment Bonds;
 - .4 Project Schedule;
 - .5 WSIB Certificate of Clearance;
 - .6 CCDC No. 2 Contract signed and sealed;
 - .7 Schedule of Values; and
 - .8 Manufacturer's Technical Information as noted in the Technical Specifications or on the Drawings.
- .3 Should the Contractor not complete the Works within the time frame as specified, the Owner may proceed with the work using its own forces or hire or employ such labour, firms, materials, and/or equipment as is necessary to complete the work and charge all costs so incurred in excess of the Contract Price, against the Contractor or recover in a court of competent jurisdiction as a debt due to the Owner.

Part 6 Contract Modification

6.1 CHANGE ORDER PROCEDURES

- .1 Upon issuance by the Engineer to the Contractor of a proposed change in the Work, and unless otherwise requested in the proposed change or unless otherwise agreed:
 - .1 Submit to the Engineer a fixed price quotation for the proposed change in the Work within 5 days after receipt of the proposed change in the Work.
 - .2 Include in the quotation the increase or decrease to the Contract Time, if any, for the proposed change, stated in number of days.
 - .3 Include in the quotation the number of days for which the quotation is valid.
- .2 The quotation will be evaluated by the Engineer and the Owner and, if accepted by the Owner, be documented in the form of a signed Change Order.
- .3 Where there is to be a valuation of changes in the work and lump sum or Units Prices cannot be agreed upon, the cost and percentages fee will be determined as the total of the following:

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- .1 Actual cost of labour, including such items as Work Place and Insurance Board Clearance Certificate and Unemployment Insurance or labour cost based on agreed upon schedule of rates;
- .2 Actual cost of materials to be incorporated into the Work, including such items as freight and taxes;
- .3 For Work done by the Contractor, an amount equal to 10% of the totals from subsections (.1) and (.2) above, which shall constitute overhead (5%) and profit (5%) of the Contractor, unless subsection (.1) is based on the schedule of rates in which case no surcharge will apply on the latter;
- .4 For Work done by Sub-Contractors, an amount equal to 15% of the totals from subsections (.1) and (.2) above, which shall constitute overhead (5%) and profit (5% Contractor / 5% Subcontractor) of the Contractor and Sub-Contractors, unless subsection (.1) is based on the schedule of rates or Lump Sum changed by Sub-Contractor in which case only 15% will apply to the latter;
- .5 Rental of equipment and plant having a new value of greater than \$300; and
- .6 Reports shall be submitted daily in writing indicating the total chargeable quantities of labour, material and equipment for certification by the Engineer.

6.2 CHANGE DIRECTIVE PROCEDURES

.1 When proceeding with a change in the Work under a Change Directive, keep accurate records of daily time sheets for labour and construction equipment, and invoices for product and construction equipment costs. Submit such records to the Engineer weekly, until the Change Order superseding the Change Directive is issued.

6.3 SUPPLEMENTAL INSTRUCTIONS

- .1 The Engineer may issue Supplemental Instructions to provide clarifications to the Contract Documents, provide additional information, or make minor variations in the Work not involving adjustment in the Contract Price or Contract Time.
- .2 If the Contractor considers a Supplemental Instruction to require an adjustment in Contract Price or Contract Time, the Contractor shall promptly notify the Engineer and the Owner in writing and shall not proceed with any work related to the Supplemental Instruction pending receipt of a Change Order, a Change Directive, or, in accordance with the dispute resolution provisions of the General Conditions of Contract, a Notice in Writing of a dispute and instructions to proceed.

Part 7 Construction Period

7.1 GENERAL

.1 The Contractor shall note that the Owner will not be responsible for any loss or damage to the site between the time of the calling of the Tenders and the date work is completed.

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Should there be any substantial or significant changes, the Contractor shall submit a request in writing for any changes to the Contract's work and/or price.

.2 A competent Foreman, Supervisor or Company Representative shall be on site at all times during the course of the work.

7.2 CONSTRUCTION SAFETY

- .1 The Contractor's attention is direction to the Occupational Health and Safety Act (OHSA) for Construction Projects. All Work shall be carried out in conformance with these Regulations.
- .2 The Contractor shall obtain a Notice of Project from the Ministry of Labour and submit a copy to the Owner, prior to commencing the Work on this site. The Contractor shall be the "Constructor" as defined by the OHSA.

7.3 WORK RESTRICTIONS

- .1 The Contractor shall complete work in an orderly manner so as not to interfere with the Owner's and other Contractor's and Owner's Client's use and occupancy of the premises, except for the work area specified.
- .2 The Contractor is advised to co-ordinate their works with the Owner's Representative.
- .3 Comply with smoking / vaping restrictions. Smoking or vaping is not permitted within the work area.

7.4 PROTECTION OF WORK AND ACCESS TO THE PROPERTY

- .1 The Contractor shall continuously maintain adequate protection and security, such as temporary and permanent fencing and barricades, to prevent access to the work area and shall protect the Owner's property from damage or loss arising in connection with the Contractor's work.
- .2 Facilitate maintenance of the grass and landscaping throughout the course of the work, with the Owner's forces.

7.5 CLEANING AND WASTE MANAGEMENT

- .1 Comply with applicable regulatory requirements when disposing of waste materials.
- .2 Obtain permits from authorities having jurisdiction and pay disposal fees where required for disposal of waste materials and recyclables. Cost of disposal fees to be included in the Total Tender Price.
- .3 Maintain the work area in an organized manner, clean site of debris daily and dispose to a suitable location off site on a weekly basis.

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7.6 HOURS OF WORK

- .1 Work may be performed during Monday to Friday between the hours of 8:00 a.m. to 5:00 p.m., with some quiet work being permitted before 8:00 am and until 6:00 p.m., and with some exceptions for additional quiet work.
- .2 Schedule noisy work to avoid disturbance to neighbouring properties between the hours of 9:00 am and 4:30 pm.
- .3 Use power actuated devices only with the Engineer's written permission.
- .4 Provide seventy-two (72) hours written notice to the Engineer and the Owner for work to be performed outside of the designated times, for Owner approval.
- .5 Saturday work may be permitted by the Owner upon request and will be reviewed on an as needed basis, however permission may not necessarily be granted.
- .6 Work will not be permitted on statutory or government / bank holidays.
- .7 Allow for hours of work restrictions in the construction schedule.

7.7 WORK SEQUENCE

.1 Each segment of the trail is to be closed for the duration of the works for that segment. Schedule works to reduce the downtime. The intent is to close each segment of the trail for only as long as it is being worked on.

7.8 EXAMINATION AND PREPARATION

- .1 Before commencing excavation, establish or confirm location and extent of all existing underground / embedded utilities and structures in work area.
- .2 Protect, relocate or maintain existing active services.
- .3 Where work specified in any Technical Specification Section is dependent on the work of another Technical Specification Section or Technical Specification Sections having been properly completed, verify that work is complete and in a condition suitable to receive the subsequent work. Commencement of work of a Technical Specification Section or Section that is dependent on the work of another Technical Specification Section or Technical Specification Section shaving been properly completed, were another the subsequent work of another Technical Specification Section or Technical Specification Sections having been properly completed, means acceptance of the existing conditions.
- .4 Verify that ambient conditions are suitable before commencing the work of any Technical Specification Section and will remain suitable for as long as required for proper setting, curing, or drying of Products used.
- .5 Ensure that substrate surfaces are clean, dimensionally stable, cured and free of contaminants.
- .6 Notify Engineer in writing of unacceptable conditions.

7.9 EXECUTION

.1 Install, erect, or apply Products in strict accordance with manufacturer's instructions.

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- .2 Notify Engineer, in writing, of conflicts between Contract Documents and manufacturer's instructions where, in Contractor's opinion, conformance with Contract Documents instead of the manufacturer's instructions may be detrimental to the Work or may jeopardize the manufacturer's warranty.
- .3 Provide manufacturer's representatives with access to the Work at all times. Render assistance and facilities for such access so that manufacturer's representatives may properly perform their responsibilities.
- .4 Consider location of fixtures, outlets, and devices indicated on Drawings as approximate.
- .5 Promptly notify Engineer in writing of conflicting installation requirements for fixtures, outlets, and devices. If requested, indicate proposed locations and obtain approval for actual locations.
- .6 Adequately protect parts of the Work completed and in progress from any kind of damage.

7.10 REMOVAL OF PARTS/MATERIALS

- .1 The Contractor shall not remove or relocate any parts/materials on site without the permission of the Owner.
- .2 The Contractor shall be given space for the storage of their materials and equipment on site, but the Owner is not responsible for any loss, damage, and/or theft to the Contractor's equipment and materials.
- .3 Items identified for removal/demolition become the property of the Contractor. The Contractor shall be responsible to clean-up, remove and properly dispose of any excess materials and/or debris related to the Contractor's works to a suitable and proper location off site.

7.11 DEFICIENCIES

- .1 At the completion of the Works, conduct an inspection with the Engineer to identify defective, deficient, or incomplete work.
- .2 Prepare a comprehensive and detailed list of deficiencies to be completed or corrected, with an anticipated schedule for completion or correction.
- .3 Identify the dollar amount associated with each deficiency, with this dollar amount being held back until the deficiency has been completed or corrected to the satisfaction of the Engineer. If the completion or correction of the deficiencies is prolonged, the itemized dollar amount will be subtracted from the Total Tender Price and the Owner will take over in completing the unfinished works.

7.12 CLOSE OUT PROCEDURES

- .1 Prior to final payment, undertake the following:
 - .1 Complete or correct all deficiencies.

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- .2 Remove all remaining surplus products, construction equipment, and temporary work.
- .3 Return all elements and materials of the site that were part of the work area to their pre-construction state and cleanliness following the work. Ensure all walls, roof areas and landscaping are adequately cleaned and/or returned to their pre-construction state or better.
- .4 Submit all manuals, warranty documentation, and extra materials as required.

Part 8 Payment and Holdback

- .1 The Contractor shall submit an invoice monthly, based on the value of the materials supplied and the works completed during that month (HST included) inclusive of the value of any extra works completed and approved in writing, and less the value of any incomplete or deficient works, works deleted and Statutory Holdback of 10%.
- .2 Each proper invoice for payment submitted by the Contractor must be accompanied by the following documents:
 - .1 Schedule of Values, indicating the values, to the date of application for payment, of work performed and products delivered to place of the work;
 - .2 Updated Project Schedule;
 - .3 Current Workplace Safety and Insurance Board Clearance Certificate; and
 - .4 Statutory Declaration for the second and subsequent applications and as prescribed for the holdback release.
- .3 The Owner and Engineer will review the Work to determine a payment amount.
- .4 Payments will be made by the Owner after certification by the Engineer directly to the Contractor within 30 days of the Contractor's submission.
- .5 The payment of the 10% Holdback of the Contract value shall be made in accordance with the Construction Lien Act.
- .6 A payment for the incomplete or deficient works shall be made upon the successful completion of these works to the Owner's satisfaction.

Part 9 Warranty

.1 Unless noted otherwise in the Technical Specifications, the Contractor agrees to warranty the work for a period of two (2) years from the date of acceptance (Substantial Completion) thereof from deficiencies that, in the opinion of the Owner, were caused by faulty workmanship or materials. The Contractor, at his own expense, make good and repair deficiencies and every part thereof, all to the satisfaction of the Owner. Should the Contractor for any cause fail to do so, the Owner may employ such other person or persons as it may be deemed to make such repairs or do such work, as the whole costs, charges and expenses so incurred may be deducted from any amount due to the Contractor or may be collected otherwise by the Owner from the Contractor.

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.2 The decision of the Owner shall be final as to the necessity of repairs of any work required to be done under the provisions of this clause or clauses, in the amounts expended therefore.

END OF SECTION

Part 1 Scope of Work

1.1 SCOPE OF WORK

.1 The Work as specified below and as noted on Drawings S1 to S4 shall form the basis of this Contract to scarify the existing trail surface and place new limestone screenings along an approximately 5 km (3.1 mile) section of the Cypher Systems Greenway Trail between County Road 11 (Walker Road) and County Road 15, Maidstone.

Part 2 General

2.1 MOBILIZATION, ACCESS, AND DEMOBILIZATION:

- .1 The Contractor is to provide and undertake the following:
 - .1 Mobilize to the site and provide all access, materials, tools, and equipment necessary to facilitate and carry out works.
 - .2 Maintain the work area in an organized manner, clean site of debris daily and dispose to a suitable location off site on a weekly basis.
 - .3 Provide notice to the Owner two (2) weeks prior to mobilization to facilitate notice to public users of the Conservation Area.
 - .4 Provide access to the Owner and Engineer to inspect the work area prior to work, through-out progress and upon completion.
 - .5 Maintain a full copy of all project documents on site at all times.
- .2 Payment of this item will be released in equal amounts with the first and last payment.

2.2 OUT OF TOWN COSTS:

- .1 Should the Contractor not have an office / shop located within 100 km (62.5 miles) of Windsor Essex County, the Contractor is to include a breakout of their out of town costs, including labour housing, meals, and travel.
- .2 Payment of this item will be released in equal payments, based on the anticipated schedule and the Contract Value.

2.3 **PROTECTION OF PROPERTY:**

- .1 The Contractor is to provide and undertake the following:
 - .1 Take all measures to protect the site and existing site finishes from damage by the Contractor's work.
 - .2 Erect and maintain fencing, hoarding, dust barriers and construction signage at the perimeter of the work / staging areas as required to undertake the work in accordance with Technical Specification Section 01 56 00 Temporary Works.

- .3 Post traffic signs and barriers which may include, but are not limited to, snow fencing, plywood, barrels, plastic sheeting and supports, saw horses and caution tape.
- .4 Advise Owner / Engineer of proposed barriers.
- .2 Payment of this item will be released in equal payments, based on the anticipated schedule and the Contract Value.

2.4 SITE RESTORATION AND CLEANING

- .1 The Contractor is to provide and undertake the following:
 - .1 Prior to mobilization to the site, document site conditions.
 - .2 Take preconstruction photographs and distribute copies to the Owner.
 - .3 Protect adjacent surfaces during construction operations, including equipment and storage of materials.
 - .4 Take all measures possible to protect the existing site features during the construction.
 - .5 Restore the site features to their preconstruction condition or better prior to demobilizing from each suite.
- .2 Payment of this item will be released with the final application for payment.

2.5 BONDING

- .1 Arrange, obtain and submit bonds specified in Technical Specification Section 00 21 13 Information to Bidders to the Engineer.
- .2 Payment of this item will be released with the first invoice following submission of specified bonds.

Part 3 Trail and Resurfacing Works

3.1 SCARIFYING WORKS

- .1 Provide all access, labour, materials, equipment, site safety, and supervision to scarify the existing surface of the trail including, but not limited to, the following:
 - .1 Remove the grassy vegetation from the surface of the existing gravel trail (minimum width of 3 metres (10 feet) and around trail entrances and gates to a minimum depth of 50 mm (2 inches), separate the vegetation from the existing granular screenings and spread the removed vegetation on the sides of the trail.
 - .2 Small equipment and hand tools should be used as required to remove the existing vegetation around the gate posts.
 - .3 The removed vegetation material shall be spread adjacent to the existing trail in a manner that does not impede or affect the current storm drainage patterns.
- .2 Payment will be released monthly based on percentage of work completed at the end of the month.

3.2 RESURFACING WORKS

- .1 Provide all access, labour, materials, equipment, site safety and supervision to supply, place, grade and compact a 50 mm (2 inch) thick layer of limestone granular screenings over the existing gravel trail, including, but not limited to, the following:
 - .1 Limestone screenings to be compactable. The material used shall be from a source approved by the Owner prior to construction. Upon the Owner's request, submit a sample in accordance with Technical Specification Section 01 33 00 Submittal Procedures.
 - .2 Any re-compaction and/or re-testing of the placed material shall be undertaken at the Contractor's sole expense. Any material deemed to be unsuitable for the intended purpose shall be removed and disposed of off-site at the Contractor's expense.

END OF SECTION

Part 1 Procedures

1.1 ADMINISTRATIVE

- .1 Submit specified submittals to Engineer for review. Submit with reasonable promptness and in orderly sequence so as to not cause delay in the Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time or for product substitutions or other deviations from the Drawings and Specifications.
- .2 Where required by authorities having jurisdiction, provide submittals to such authorities for review and approval.
- .3 Do not proceed with Work affected by a submittal until review is complete.
- .4 Present shop drawings, product data, and samples in SI metric units. Where items or information is not produced in SI metric units, converted values are acceptable.
- .5 Review submittals, provide verified field measurements where applicable, and affix Contractor's review stamp prior to submission to Engineer. Contractor's review stamp represents that necessary requirements have been determined and verified, and that the submittal has been checked and coordinated with requirements of the Work and Contract Documents.
- .6 Verify field measurements and that affected adjacent work is coordinated.
- .7 Submittals not meeting specified requirements will be returned with comments.
- .8 Reproduction of construction drawings to serve as background for shop drawings is not permitted.
- .9 Do not propose substitutions or deviations from Contract Documents via shop drawing, product data or sample submittals.

1.2 SHOP DRAWINGS AND PRODUCT DATA

- .1 Indicate products, methods of construction, attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of the Work.
- .2 Where products attach or connect to other products, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross-references to drawings, specifications and other already reviewed shop drawings.
- .3 Shop drawing submittals shall include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor.
 - .2 Supplier.

- .3 Manufacturer.
- .4 Product data submittals shall include material safety data sheets for all controlled products.
- .5 Submit an electronic copy of shop drawings where specified in the Technical Specifications.
- .6 Submit electronic copy of product data sheets or brochures where specified in the technical specifications.
- .7 Where a submittal includes information not applicable to the Work, clearly identify applicable information and strike out non-applicable information.
- .8 Supplement standard information to include details for the project.
- .9 If upon Engineer's review, no errors or omissions are discovered, or if only minor corrections are required as indicated, submittal will be returned and fabrication or installation of the Work may proceed.
- .10 If upon Engineer's review significant errors or omissions are discovered, a so noted copy will be returned for correction and resubmission. Do not commence with fabrication or installation.
- .11 Engineer's notations on submittals are intended to ensure compliance with the Contract Documents and are not intended to constitute a change in the Work requiring change to the Contract Price or Contract Time. If the Contractor considers any Engineer's notation to be a change in the Work, promptly notify the Engineer in writing before proceeding with the Work.
- .12 Resubmit corrected submittals through the same procedure indicated above, before fabrication or installation of the Work proceeds. When resubmitting, notify Engineer in writing of any revisions other than those requested by the Engineer.

1.3 SAMPLES

- .1 Submit samples for Engineer's review in duplicate where specified in the Technical Specifications. Label samples as to origin, Project name, and intended use.
- .2 Deliver samples prepaid to the site office.
- .3 Notify Engineer in writing of any deviations in samples from requirements of Contract Documents.
- .4 Where a required colour, pattern or texture has not been specified, submit full range of available products meeting other specified requirements.
- .5 Engineer selection from samples is not intended to change the Contract Price or Contract Time. If a selection would affect the Contract Price or Contract Time, notify Engineer in writing prior to proceeding with the Work.
- .6 Resubmit samples as required by Engineer to comply with Contract Documents.
- .7 Reviewed and accepted samples will establish the standard against which installed Work will be reviewed.

END OF SECTION

Part 1 Barriers and Enclosures

1.1 GENERAL

- .1 Provide temporary barriers and enclosures as necessary to protect the public and to secure the place of the Work during performance of the Work.
- .2 Comply with applicable regulatory requirements.
- .3 Maintain temporary barriers and enclosures in good condition for the duration of the Work.
- .4 Remove temporary barriers and enclosures from the place of the Work when no longer required.

1.2 FENCING

- .1 Erect temporary security and safety site fencing, a minimum 1.8 m (6 ft) high, using chain link fencing or self-supporting wire fence sections as required to enclose the work area.
- .2 Maintain site fencing in good repair until removed.
- .3 Provide lockable access gates as required to facilitate construction access.

1.3 PROTECTION OF SITE FINISHES

.1 Provide necessary temporary barriers and enclosures to protect existing and completed or partially completed finished surfaces from damage during performance of the Work.

Part 2 Temporary Controls

2.1 GENERAL

- .1 Provide temporary controls as necessary for performance of the Work and in compliance with applicable regulatory requirements.
- .2 Maintain temporary controls in good condition for the duration of the Work.
- .3 Remove temporary controls and construction equipment used to provide temporary controls from the place of the Work when no longer required.

2.2 TRAFFIC CONTROL

- .1 Provide traffic control on the project at all times when construction vehicles interfere with, or temporarily block, traffic on existing roadways.
- .2 Submit details of proposed traffic control methods in accordance with Technical Specification Section 01 33 00 Submittal Procedures.

- .3 Traffic control plan shall incorporate signs, flashing lights and flagmen in accordance with MTO Procedures for traffic control as outlined in Ontario Traffic Control Manual, latest edition.
- .4 All signs are to be kept clean and in good condition, and shall meet or exceed the standard of reflectorization set out in the Ontario Traffic Manual.
- .5 All costs and expenses associated with traffic control shall be the sole responsibility of the Contractor.

2.3 PLANT PROTECTION

- .1 Protect trees and other plant material.
- .2 No trees, shrubs or vegetation shall be removed with the approval of the Owner.
- .3 Protect roots inside dripline from disturbance or damage during excavation and grading.
- .4 Avoid traffic, dumping and storage of materials over root zones.

2.4 DUST AND PARTICULATE CONTROL

- .1 Implement and maintain dust and particulate control measures in accordance with applicable regulatory requirements.
- .2 Execute Work by methods that minimize production of dust from construction operations and spreading of dust on site or to adjacent properties.
- .3 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

2.5 EROSION AND SEDIMENT CONTROL

- .1 Minimize amount of bare soil exposed at one time. Stabilize disturbed soils as quickly as practical to minimize erosion. Remove accumulated sediment resulting from construction activity from adjoining surfaces, drainage systems, and watercourses, and repair damage caused by soil erosion and sedimentation.
- .2 Provide and maintain appropriate temporary measures, such as silt fences, straw bales, ditches, geotextiles, drains, berms, terracing, riprap, temporary drainage piping, sedimentation basins, vegetative cover, dikes, and other measures that may be required to prevent erosion and migration of silt, mud, sediment, and other debris.
- .3 Periodically inspect erosion and sediment control measures to detect evidence of erosion and sedimentation. Promptly take corrective measures when necessary.
- .4 If soil and debris from site accumulate in ditches or other low areas, remove accumulation, and restore area to original condition.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

.1 This Section specifies excavation, backfilling and grading materials, and methods for sub-grade materials.

1.2 RELATED SECTIONS

- .1 Section 01 11 00 Summary of Work
- .2 Section 01 33 00 Submittal Procedures
- .3 Section 01 56 00 Temporary Works

1.3 REFERENCES

- .1 All references to be latest edition.
- .2 American Society for Testing and Materials (ASTM):
 - .1 ASTM C136: Standard Test Method for Sieve Analysis of Fine and Course Aggregates
 - .2 ASTM D422: Standard Test Method for Particle Size Analysis of Soils
- .3 Canadian General Standards Board (CGSB):
 - .1 CAN/CGSB-8.1: Sieves, Testing, Woven Wire, Inch Series
 - .2 CAN/CGSB-8.2: Sieves, Testing, Woven Wire, Metric
- .4 Canadian Standards Association (CSA):
 - .1 CAN/CSA-23.1: Concrete Materials and Methods of Concrete Construction
 - .2 CAN/CSA-A3000: Cementitious Materials Compendium
- .5 Ontario Provincial Standard Specification (OPSS):
 - .1 OPSS 1001: Material Specifications for Aggregates (General)
 - .2 OPSS 1004: Material Specifications for Aggregates (Miscellaneous)
 - .3 OPSS 1010: Material Specification for Aggregates Base, Subbase, Select Subgrade and Backfill Material

1.4 SUBMITTALS

- .1 Submittals to be in accordance with Technical Specification Section 01 33 00 Submittal Procedures.
- .2 Inform Engineer at least one week prior to commencing Work of proposed source of fill materials.
- .3 Submittals To and For Review by Engineer:
 - .1 Designs of engineered fill and mix designs for un-shrinkable fill.

- .2 Gradations of all granular materials specified herein used in the work.
- .4 Submit duplicate samples of each type of material and colour.

1.5 QUALITY ASSURANCE

- .1 Arrange for the presence of an independent testing agency approved by the Engineer. One (1) compaction test shall be carried out for each 1000 square meters (1,195 square yards) of material placed. Excavation and fill work shall be done only by skilled workmen, with suitable machinery, supervised by foremen experienced in the Work of this Section.
- .2 Installer Qualifications: Company specializing in performing the Work of this section with minimum five (5) years documented experience.

1.6 WARRANTY

- .1 Correct defective Work, including settlement causing ponding, cracking, break down of the surface or other defects in material or workmanship, within a thirty (30) day period after Date of Substantial Completion.
- .2 Provide warranty for this Work for a period of two (2) years from the date of completion and final acceptance by the Owner, including supplying all requisite labour, equipment and materials, at no additional cost to the Owner, to correct defective Works.

1.7 SITE EXAMINATION

- .1 Verify all site conditions which may affect the performance or Works in this Section.
- .2 Report in writing all conditions which may adversely affect the Work in this Section.

1.8 FIELD MEASUREMENTS

.1 Measurements shown on drawings are estimates only. Verify actual measurements prior to placement of fill.

1.9 **PROTECTION**

- .1 Protect building and site features in accordance with Technical Specification Section 01 56 00 Temporary Works.
- .2 Be responsible for the protection of all buildings and landscaped areas.
- .3 Existing buried utilities and structures:
 - .1 Prior to commencing excavation work, notify applicable Owner or authorities having jurisdiction.
 - .2 Establish location and state of use of buried utilities and structures.
 - .3 Confirm locations and buried utilities by careful test excavations.
 - .4 Maintain and protect from damage water, sewer, gas, electric, telephone and other utilities and structures encountered.

- .4 Excavate by hand at locations near existing buried utilities and structures, where required to protect these buried utilities and structures.
- .5 Existing building and surface features:
 - .1 Conduct a condition survey of existing buildings, trees and other plants, lawns, fencing, service poles, wires, pavement, and survey and benchmarks which may be affected by the work.
 - .2 Protect existing buildings and surface features from damage. In the event of damage, immediately make repair to approval of the Engineer.
 - .3 Where required for excavation, cut roots or branches as approved by Engineer.
- .6 Repair and make good to a condition equal to or better than existing at no additional cost to the Owner all damages to the site and its materials and features caused by the Contractor's Work.

1.10 WASTE MANAGEMENT AND DISPOSAL

- .1 Do not dispose of any liquids into the sewer system, streams, lakes, onto the ground or in other locations where it will pose a health or environmental hazard. Dispose of liquids to a proper and suitable facility.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.

Part 2 Products

2.1 MATERIALS

- .1 Soil Fill: Clean, natural sod material, free from organic matter, rocks larger than 50 mm (2 inches) in diameter, foreign or building material debris and other deleterious materials.
- .2 Granular Fill: to OPSS 1010.
- .3 Limestone Screenings: Clean, hard durable particles of natural screenings resulting from the crushing of rock, stone or gravel and shall be free of clay, silt or other objectionable material meeting OPSS 1001, OPSS 1004 and OPSS 1010.

Part 3 Execution

3.1 PREPARATION

- .1 Protect installed work of other trades from staining or contamination.
- .2 Remove obstructions, ice, and snow from surfaces to be excavated.
- .3 Cut trail surface neatly along limits of proposed excavation in order that surface may break evenly and cleanly.

3.2 DEWATERING AND DRAINAGE

.1 Protect open excavations against flooding and damage due to surface run-off.

- .2 Submit details of proposed dewatering or heave prevention methods, such as well points and sheet pile cut-offs.
- .3 Avoid excavation below groundwater table if quick condition or heave is likely to occur.
- .4 Prevent piping or bottom heave of excavations by ground water lowering, sheet pile cutouts or other means.
- .5 Dispose of water in a manner not detrimental to public and private property, or any other portion of work completed or under construction.

3.3 EXCAVATION

- .1 Advise Engineer at least one (1) week in advance of excavation operations.
- .2 Excavation shall be to neat lines as required for work to be carried out or as noted on Drawings.
- .3 The bottom of the excavation shall not be disturbed. If disturbed due to improper protection or premature excavation, the disturbed portion shall be removed and replaced with material as per Engineer's direction at no cost to the Owner.
- .4 In soft conditions, construction shall commence immediately after the removal of material to level required.
- .5 Do not disturb soils within branch spread of trees or shrubs that are to remain. If excavating through roots, excavate by hand and cut roots with sharp axe or saw.
- .6 Keep excavated and stockpiled materials a safe distance away from the edge of the trench.
- .7 Restrict vehicle operations directly adjacent to open trenches.
- .8 Dispose of surplus and unsuitable excavated material as directed by the Engineer onsite.
- .9 Do not obstruct the flow of surface drainage or natural watercourses.
- .10 Earth bottoms of excavations to be undisturbed soil, level, free from loose, soft or organic matter. Remove unsuitable material from trench bottom to extent and depth as directed by the Engineer.
- .11 Over excavated areas shall be restored to the required level at no cost to the Owner with granular A material.
- .12 Hand trim, make firm and remove loose material and debris form excavations where material at bottom of excavation is disturbed. Compact foundation soil to density at least equal to undisturbed soil.

3.4 BACKFILLING

- .1 Areas to be backfilled to be free from debris, snow, ice and water.
- .2 Do not use backfill material which is frozen or contains ice, snow or debris.

- .3 Place backfill material in uniform layers not exceeding 200 mm (8 inches) thickness up to grades indicated or to match existing. Compact each layer before placing succeeding layer.
- .4 Backfilling around installations:
 - .1 Place bedding and surround material as specified elsewhere.
 - .2 Do not backfill around or over cast-in-place concrete within 24 hours after placing of concrete.
 - .3 Place layers simultaneously on both sides or installed work to equalize loading.

3.5 ROUGH GRADING AND SUBGRADE PREPARATION

- .1 Rough grade work area to suit required backfill depths. Proof roll the exposed subgrade to identify areas of unsuitable material.
- .2 Subgrade below proposed new trail shall be undisturbed and/or stable material, having a minimum 98% of the maximum dry density, as determined by M.T.O. LS-706, at optimum moisture content. Compact and adjust the moisture content to the top 300 mm (12 inches) of the exposed subgrade where required to achieve these limits.
- .3 If unsatisfactory material is encountered in the subgrade, remove this material at a 45 degree slope (1:1) beneath and away from the base elevation of the proposed trail. Unsatisfactory material includes any man-made fill that was not controlled during placement or contains unacceptable constituents. Once unsatisfactory fill material is completely removed, it is to be replaced with an approved import fill material. Place in maximum 200 mm (8 inch) lifts. Each lift shall be compacted to obtain 98% of the maximum dry density, as determined by M.T.O. LS-706, at optimum moisture content, before proceeding to apply a subsequent layer.

3.6 RESTORATION

- .1 Upon completion of Work, remove waste materials and debris off site at local landfill and/or recycling facility.
- .2 Trim slopes, and correct defects as directed by the Engineer.
- .3 Clean and reinstate areas affected by work.

END OF SECTION

CYPHER SYSTEMS GROUP **GREENWAY TRAIL RESURFACING**

TOWN OF ESSEX **ISSUED FOR TENDER: JUNE 16, 2025** CHALL.ENG. PROJECT NO. 225065

Essex Region Conservation Authority



DRAWING LIST:

COVER SHEET

- **S1** SITE PLAN
- SEGMENT 1 SITE PLAN S2
- **S**3 SEGMENT 2 SITE PLAN
- S4 SEGMENT 3 SITE PLAN



AREA OF WORK

N.T.S







