

1 GENERAL

1.01 REFERENCE STANDARDS

1. Canadian Construction Documents Committee (CCDC)
 - .1 CCDC 2-2020, Stipulated Price Contract.

1.02 RELATED REQUIREMENTS

- .1 Refer to Specification Index for Sections applicable to this work.

1.03 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work of this Contract includes the following:
 - .1 Reinstated Stations and infrastructure upgrades along ONTC rail corridor at the following sites:
 - .1 North Bay.
 - .2 Temagami.
 - .3 Temiskaming Shores.
 - .4 Englehart.
 - .5 Kirkland Lake (Swastika).
 - .6 Matheson.
 - .7 Cochrane.
 - .2 The Work is divided into two packages:
 - .1 Package 1: Kirkland Lake (Swastika), Matheson, and Cochrane Stations.
 - .2 Package 2: North Bay, Temagami, Temiskaming Shores, and Englehart Stations.
- .2 The Summary of Work below is provided for reference only:
 - .1 **North Bay:** Reconstruction of existing platform to install raised concrete platform, platform curb and tactile edge strip, and transition grading to existing station platform grades and at building facade. Works include asphalt milling, concrete curbs and paving removal, installation of barrier free parking and all required line painting, concrete access paths, connection to new platform and bike rack on concrete pad and select wayfinding signage. Removal and reinstallation of select station furniture including new waste, and smoker's receptacles.
 - .2 **Temagami:** Reconstruction of existing platform to install raised concrete platform, platform curb and tactile edge strip, and transition grading to existing station platform grade and at building facade. Works include removal of asphalt, concrete curbs and paving removal, installation of barrier free and standard parking bays and associated line markings, concrete access

- connection to new platform parking bays and installation of bike rack on concrete pad. Removal and reinstallation of select station furniture including planter boxes, handrails, and a flagpole. Permitting, trenching, ducts, cables, associated equipment and inspections for new power supply feeder connection per Hydro One new service requirements and backlit signage totem. Installation of concrete pad for power and communication cabinets and the associated equipment and cabinets. Platform light poles, CCTV, PA and PAI equipment including associated trenching, ducts, and cabling. Installation of a premanufactured station platform shelter including concrete perimeter curb, safety bollards and associated CCTV, PA and PAI equipment, electrical utilities, signage decals, shelter lighting and heaters. Installation of wayfinding signage, including backlit totem, within parking lot, platform and at access roads.
- .3 **Temiskaming Shores:** Reconstruction of existing platform to install raised concrete platform, platform curb and tactile edge strip, and transition grading to existing station platform grades. Removal of existing parking lot asphalt and regrade parking lot and access road with granular fill. Works include removal of asphalt, concrete curbs and paving removal, installation of paved barrier free and gravel standard parking bays and associated line markings and concrete wheel stops, concrete access ramp with tactile edges, handrails and connection to new platform and installation of a bike rack on concrete pad. Permitting, trenching, ducts, cables, associated equipment and inspections for new power supply feeder connection per Hydro One new service requirements and backlit signage totem. Installation of concrete pad for power and communication cabinets and the associated equipment and cabinets. Reinstatement of existing light poles including upgraded light fixtures in parking lot and access road, platform light poles, CCTV, PA and PAI equipment including associated trenching, ducts, and cabling. Installation of a premanufactured station platform shelter including concrete perimeter curb, safety bollards and associated CCTV, PA and PAI equipment. electrical utilities, signage decals, shelter lighting and heaters. Installation of wayfinding signage, including backlit totem, within parking lot, platform and at access roads.
- .4 **Englehart:** Reconstruction of existing platform to install raised concrete platform, platform curb and tactile edge strip, and transition grading to existing station platform grades and at building facade. Works include asphalt milling, concrete curbs and paving removal, installation of paved barrier free and gravel standard parking bays and concrete wheel stops, concrete access paths and connection to new platform and bike rack on concrete pad. Platform light poles, CCTV, PA and PAI equipment including associated trenching, ducts, and cabling and power supply feeder from existing building electrical distribution panel. Installation of wayfinding signage, including backlit totem, within parking lot, platform, at access roads and on the existing station building.
- .5 **Kirkland Lake (Swastika):** Reconstruction of existing platform to install raised concrete platform, platform curb and tactile edge strip, and transition grading to existing station platform grades and installation of end of platform gate and fencing. Works include removal of asphalt, concrete curbs, and paving removal installation of paved barrier free and gravel standard parking bays and associated line markings, concrete access paths and connection to new platform, and installation of a bike rack on concrete pad. Permitting, trenching, ducts, cables, associated equipment and inspections for new power supply feeder connection per Hydro One new service requirements and backlit signage totem. Installation of concrete pad for power and communication cabinets and the associated equipment and cabinets. Platform light poles, CCTV, PA and PAI equipment including associated trenching, ducts, and cabling. Installation of a premanufactured station platform shelter including concrete perimeter curb, safety bollards and associated CCTV, PA and PAI equipment, electrical utilities, signage decals, shelter lighting

- and heaters. Installation of wayfinding signage, including backlit totem, within parking lot, platform and at access roads.
- .6 **Matheson:** Demolition of existing station building, including salvage of select exterior building elements, reconstruction of existing platform to install raised concrete platform, platform curb and tactile edge strip, and transition grading to existing station platform grades. Works include removal of asphalt, concrete curbs and paving removal, installation of paved barrier free and gravel standard parking bays and associated line markings and installation of a bike rack on concrete pad. Permitting, trenching, ducts, cables, associated equipment and inspections for new power supply feeder connection per Hydro One new service requirements and backlit signage totem. Installation of concrete pad for power and communication cabinets and the associated equipment and cabinets. Platform light poles, CCTV, PA and PAI equipment including associated trenching, ducts, and cabling. Installation of a premanufactured station platform shelter including concrete perimeter curb, safety bollards and associated CCTV, PA and PAI equipment, electrical utilities, signage decals, shelter lighting and heaters. Installation of wayfinding signage, including backlit totem, within parking lot, platform and at access roads.
- .7 **Cochrane:** Reconstruction of existing platform to install raised concrete platform, new platform curb and tactile edge strip for full length of platform, and transition grading to existing station platform grades and at building facade. Works include asphalt milling, concrete curbs and paving removal, concrete access paths, connection to new platform and bike rack on concrete pad and select wayfinding signage. Removal and reinstallation of select station furniture including new waste, and smoker's receptacles.
- .8 The contractor shall undertake the Work during 2024 and 2025 with all Work to be completed by Oct 31, 2025.

1.04 SUBMITTALS

- .1 Submit for review and Acceptance in accordance with Section 01 33 00 - Submittal Procedures.
- .2 In addition to Submittals identified throughout the Specifications, submit the following:
- .1 Submit Project Construction Schedule in accordance with Section 01 32 16.16 - Construction Progress Schedule.
- .2 Submit Construction Waste Management Plan highlighting recycling and salvage requirements in accordance with Section 01 74 19 - Waste Management And Disposal.
- .3 Submit site-specific Health and Safety Plan in accordance with Section 01 35 29.06 - Health and Safety Requirements.
- .4 Submit a Construction Project Management Plan, including communication, risk, and Quality Management Plans.
- .5 Submit and update on a monthly basis a project risk register including a risk description, scoring, ranking, and corresponding mitigation measures.

1.05 WORK BY OTHERS

- .1 The Work under this Contract shall be performed by the Contractor.

- .2 Contractor shall co-operate with other contractors retained by the Owner in carrying out their respective works and carry out instructions from the Owner and the Consultant. Refer to General Condition 3.2 – Construction by the Owner or Other Contractors and Supplementary Conditions for additional requirements.

1.06 WORK SEQUENCE

- .1 Construct Work in a manner that accommodates Owner's and public continued and/or intermittent use of premises during construction. Refer to Section 01 14 00 - Work Restrictions.
- .2 Co-ordinate Construction Schedule and Owners use of premises during construction.
- .3 Do not close off Owner or public usage of premises until use of one stage of Work will provide alternate usage.
- .4 Maintain fire access/control.
- .5 Protect workers and public safety.
- .6 Work near rail tracks shall be preapproved by the Consultant and completed as per Owner's procedures and policies.

1.07 CONTRACTOR USE OF PREMISES

- .1 Contractor shall establish a Construction Area where the Contractor assumes the role of Constructor and will be responsible for the Construction Area until Ready for Takeover. The Contractor will be required to secure the Construction Area for the duration of the Project. The Contractor will be responsible for all activities inside the Construction Area, including health and safety. The Contractor shall coordinate the Work with the Owner to ensure that work being done by the Owner in the areas outside of the Construction Area is not interrupted. Access by the Contractor shall be restricted to the Construction Area only.
- .2 In some circumstances, Contractor shall coordinate and limit its access to Construction Area to allow:
 - .1 Owner occupancy.
 - .2 Partial owner occupancy.
 - .3 Work by other contractors or utilities providers.
 - .4 Public usage.
 - .5 Third Party Property Owner occupancy and use.
- .3 Co-ordinate use of premises under the direction of the Owner.
- .4 Refer to Section 01 51 00 - Temporary Utilities, Section 01 52 00 - Construction Facilities and Section 01 56 00 - Temporary Barriers and Enclosures, for temporary facilities, access roads and parking areas, traffic regulations, and utilities.

1.08 OWNER OCCUPANCY

- .1 Owner may occupy premises (train platform, adjacent buildings, railway tracks) during the entire construction period for execution of normal operations.
- .2 Co-operate with the Owner in scheduling of the Work to minimize conflict and to facilitate Owner occupancy and usage of the premises.

1.09 Products Supplied by Others

- .1 The Owner will supply the following items under this Contract:
 - .1 New Shelters and their related components for Temagami, Temiskaming Shores, Kirkland Lake (Swastika) and Matheson sites.
 - .2 IT and communications equipment such as Gateways, network switches, surge suppression, Wi-Fi Access Points, required router and network switches, cameras, access control system with door control assemblies, card readers and controllers, digital display systems, passenger assistance intercom (PAI) and public address system.
- .2 The list above is provided for reference only. The Contractor shall review the Contract Documents and gain a good understanding of the Project requirements.
- .3 Contractor is responsible for receiving, unloading, if required, and handling Products Supplied by Others at the project site; setting or installing the Products in place; making any required connections to the mechanical, plumbing, electrical systems, and any other systems; and disposal of shipping or packing materials. Owner and/or Consultant and Contractor shall jointly inspect the Products for damage upon delivery to the Place of the Work. If this inspection determines that the furnished Products are damaged or defective, the Owner will arrange for the necessary replacement or repairs. Contractor is responsible for protecting the Products Supplied by Others from damage during storage and handling and is responsible for damage caused to those Products during storage and handling.
- .4 Contractor to install all Products Supplied by Others in accordance with the manufacturer's installation instructions and the design Drawings, Specifications and Contract Documents.
- .5 Contractor to review manufacturer's installation instructions and advise the Consultant of any discrepancies or issues in a timely manner to avoid any potential delays.
- .6 Contractor to obtain manufacturer and Consultant approval before making any modification to Products Supplied by Others.
- .7 Upon completion of the installation of the Products Supplied by Others, the Contractor, the Consultant and/or the Owner will inspect the Work. Manufacturers and or Suppliers may participate in the inspection as required by their contract obligations. Upon Acceptance, the Contractor will provide a workmanship warranty in accordance with the Contract Documents.

1.10 ALTERATIONS, ADDITIONS OR REPAIRS TO EXISTING BUILDING AND STRUCTURES

- .1 Execute Work with least possible interference or disturbance to premises, site, Owner operations,

occupants, public and normal use of premises. Arrange with the Consultant and Owner to facilitate execution of Work.

- .2 Use only elevators existing in the building for moving workers and material.
 1. Investigate the status of existing elevators in building(s) to determine if they are functional and safe for moving workers and materials before the Work starts.
 2. Provide the required protection for passenger elevators walls and obtain the Owner approval before using these elevators.
 3. Accept liability for damage, safety of equipment and overloading of existing equipment.

1.11 EXISTING SERVICES

- .1 Notify the Owner, the Consultant, Third Party Property Owners, and utility companies of intended interruption of existing services and obtain required permissions when applicable.
- .2 Where Work involves breaking into or connecting to existing services, provide the Owner at least five (5) Working Days' notice of necessary interruptions of mechanical or electrical service during the Work. Minimize the duration of interruptions. Carry out Work at times as directed by Authorities Having Jurisdiction and the Owner to ensure minimum disturbance to pedestrian and vehicular traffic and the Owner operations.
- .3 Provide alternative safe and protected routes for personnel, pedestrian and vehicular traffic.
- .4 Establish location and extent of service lines in the Place of the Work before starting Work. Notify the Consultant of findings.
- .5 Submit schedule for Acceptance by the Consultant ten (10) Working Days before any scheduled work for any shut-down or closure of active service or facility including power and communications services. Adhere to Accepted schedule and provide notice to affected parties. Refer to Section 01 14 00 - Work Restrictions.
- .6 Provide temporary services when directed by the Owner to maintain critical operations, building and tenant services. Refer to Section 01 14 00 - Work Restrictions.
- .7 Provide adequate bridging over trenches which cross sidewalks or roads to permit normal traffic.
- .8 Where unknown services are encountered, immediately advise the Consultant and confirm findings in writing.
- .9 Protect, relocate or maintain existing active services. When inactive services are encountered, cap off in a manner approved by Authorities Having Jurisdiction and the Consultant.
- .10 Record locations of maintained, re-routed and abandoned service lines.
- .11 Construct barriers, as required, in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.
- .12 Locate and trace existing underground services before any excavation.

- .13 Any damage to existing services during the Work will be the responsibility of the Contractor.

1.12 DOCUMENTS REQUIRED

- .1 Maintain at the Place of the Work, one copy of each document as follows:
- .1 Contract Documents.
 - .2 Contract Drawings.
 - .3 Technical Specifications.
 - .4 Accepted Shop Drawings, Product data and samples.
 - .5 List of Outstanding Shop Drawings.
 - .6 Change Orders.
 - .7 Other Contract Amendments.
 - .8 Field Test Reports.
 - .9 Copy of Accepted Construction Schedule.
 - .10 Health and Safety Plan and Other safety related documents.
 - .11 As-Built Drawings.
 - .12 Other documents as specified.

2 EXECUTION

2.01 General Requirements:

- .1 Contractor will be required to complete the Work in accordance with applicable federal, provincial, and municipal laws.
- .2 The Contractor shall designate a Project Manager with overall responsibility for the Work. The Contractor will also designate a site supervisor who will be responsible for managing the Work at each site and be responsible for on-site safety, including all Sub-contractors and Suppliers. The site supervisor will be the single point of contact at each site. This site supervisor will be required to communicate with the Consultant and Owner as required to ensure the Work is completed safely with no impact on Owner operations.
- .3 The Contractor will be required to coordinate their hours of work with the Consultant.
- .4 The Contractor's employees, Subcontractors, and Suppliers will be required to sign in and sign out every time they enter or leave the Place of the Work using a sign-in/sign-out log book which will be held by the site supervisor in charge of that site.

- .5 Contractor shall supply all necessary tools, machinery, and equipment to perform the Work including, but not limited to, forklifts, mobile cranes, hoisting equipment, scaffolding, ladders, man lifts, temporary lighting, heating, welding machines, ventilation, consumables, and any other material or equipment required to complete the Work. The Contractor shall provide all necessary vehicles and qualified personnel to transport people and materials.

END OF SECTION

DIVISION OF WORK MATRIX

SHELTER DIVISION OF WORK						
Task No.	Element	Work Description	Furnished By	Installed By	Terminated By	Notes
	SUBSTRUCTURE					
1	Foundation	Cast-in-Place Concrete Foundations	C	C		
	SUPERSTRUCTURE					
2	Framing	Structural Aluminum Framing	S	C		
3	Roof Framing	Roof Framing	S	C		
4	Miscellaneous Framing	Metal Framing / Roof Fascia / Ceiling Support	S	C		
5	Base Plates	Column Base Plates and Anchors	S	C		The anchor rods shall be cast-in-place. The Supplier shall furnish anchors and templates to the contractor performing the concrete works for placement. The Supplier shall provide an anchor rod layout to the Contractor for incorporation into the placement drawings.
6	Structural Connection	Structural Connections	S	C		
	EXTERIOR ENVELOPE					
7	Glazing	Laminated Tempered Glass with Bird Friendly Frits	S	C		
8	Exterior Doors	Aluminum Exterior Doors and Door Hardware	S	C		
9	Exterior Doors	Door and door hardware, including Door Handle, door stop, Overhead Door Operator, Panic Bar, Threshold, etc.	S	C		
10	Metal Louvers	Exterior wall - Louvers	S	C		
11	Roofing	Roof Material / Panels and Support	S	C		
12	ACM Panel	ACM Wall Panel and Support	S	C		
13	ACM Fascia	ACM Fascia Panel and Panel Support	S	C		
	INTERIOR					
14	ACM Ceiling Panels	ACM Ceiling Panels on Metal Frame	S	C		
15	Ceiling Access Panels	Ceiling Access Panels	S	C		
16	Service Wall	Service wall with ACM Panel Finishing	S	C		
17	Static Advertising	Static Advertising Lockable Cabinet with Tempered Glass Door	S	C		
	MECHANICAL					
18	Infrared Heaters	Ceiling Mounted Recessed Infrared Heaters	S	S		Factory Tested and Commissioned by the Supplier
19	Infrared Heaters	Post-Mounted Recessed Infrared Heaters - Push Buttons	S	S	S	Factory Tested and Commissioned by the Supplier

SHELTER DIVISION OF WORK						
Task No.	Element	Work Description	Furnished By	Installed By	Terminated By	Notes
20	Drainage	Gutter and Roof Leaders with all attachments	S	S		
	ELECTRICAL					
21	Lighting	120 V Ceiling Mounted Recessed Lighting	S	S	S	Factory Tested and Commissioned by the Supplier
22	Heat Tracing	Gutter and Roof Leader Heat Tracing	S	S	S	Factory Tested and Commissioned by the Supplier
23	Receptacles	120 V GFCI Receptacles for general use, Special receptacles for LED screen, Door Operator and Convenience	S	S	S	Factory Tested and Commissioned by the Supplier
24	Infrared Heaters	Direct connection for two (2) Infrared Shelter heaters	S	S	S	Factory Tested and Commissioned by the Supplier
25	Conduits	Electrical Conduits shall be "liquid tight flexible conduit" 21 and 53mm	S	S	S	Factory Tested and Commissioned by the Supplier
26	Junction Boxes	Junction Boxes at shelter columns and door stopper bar for installation of devices	S	S	S	Could be welded to the columns
27	Junction Boxes	Junction Boxes and Pull Wire at ceiling void	S	S	S	Factory Tested and Commissioned by the Supplier
28	Pull Box	Pull/Termination Box below Advertising Board	S	S	S	Factory Tested and Commissioned by the Supplier
29	Terminal Box	Terminal Box with Breakers for Shelter in the ceiling void	S	S	S	Factory Tested and Commissioned by the Supplier
30	Electrical Wiring	All Electrical Wiring for lighting, IR Heaters, door hardware	S	S	S	Factory Tested and Commissioned by the Supplier
31	Grounding	Cu Ground Bar 250/50/6mm	S	S	S	Factory Tested and Commissioned for continuity within the Shelter by the Supplier. Tested and Commissioned for Impedance to Ground by the Contractor.
32	Grounding	Grounding Loop and Grounding rods and test pits	C	C	C	Field Tested and Commissioned by GC
33	Grounding	Grounding Stub-ups 53mm at 4 corners and termination/welding of grounding wire to the Shelter Columns	C	C	C	Field Tested and Commissioned by GC
34	Electrical and Comms Stub-ups	Stub-ups 53mm from the Concrete Foundation for Electrical and Comms	C	C	C	Field Tested and Commissioned by GC
35	ESA Inspections	ESA will be a two-stage inspection, one while all electrical conduits and boxes are exposed and visible, and the second after completion of the installation works.	S+C	S+C	S+C	The Supplier shall provide ESA approved Shelter for final design and partial electrical components installation.

SHELTER DIVISION OF WORK						
Task No.	Element	Work Description	Furnished By	Installed By	Terminated By	Notes
	COMMUNICATIONS					
36	LED Screen	Schedule Information LED Screen	ONTC	C		
37	Door Hardware	Door locking / unlocking hardware such as mechanical door locks (maglocks or door strike), door operator, holder/release devices, door contact, Request to Exit (REX) device, keying systems, door switch, push plates, terminal controller, and required conduits and wiring	S	C		
38	CCTV Camera	Ceiling Mounted CCTV Cameras	ONTC	C		
39	Camera mounting hardware	Ceiling Mounted CCTV Camera Mounting hardware	C	C		
40	Public Address Speaker	Public Address Speaker(s)	ONTC	C		
41	Public Address System mounting hardware	Public Address Speaker(s) Mounting	C	C		
42	Door Access Controller and Card Reader(s)	Door Access Controller and Card Reader(s) including wiring	ONTC	C		
43	Wi-Fi Access Point Device	Wi-Fi Service Point Device	ONTC	C		
44	Conduits	Communications Conduits	C	C		
45	Communications Stub-ups	Stub-ups from the Concrete Foundation	C	C		
46	Junction Boxes	Junction Boxes	C	C		
47	Intercom Device	Emergency two-way communication system	ONTC	C		
48	Intercom Pedestal	Pedestal-mounted enclosure housing and safeguarding the intercom device affixed to the finished floor	C	C		
49	Wiring	Communications Wiring (LED Screen wiring, CCTV, PA, Wi-Fi AP, Intercom, wiring between the junction box for the Door Operator and the Door Controller)	C	C		
	MISCELLANEOUS					
50	Factory Testing and Commissioning	Factory Testing and Commissioning	S			
51	Exterior Bollards	Stainless Steel Bollards	C	C		
52	Metal Door Guards	Exterior Metal Door Guards	S	C		
53	Bench Seats	8 seats	S	C		
54	Splash Block	Splash Block	C	C		

SHELTER DIVISION OF WORK						
Task No.	Element	Work Description	Furnished By	Installed By	Terminated By	Notes
55	Shelter Delivery	Shelter delivery to sites	S			
56	Shelter Assembly	Shelter assembly		C		

STATION DIVISION OF WORK (COMMUNICATIONS)							
Task No.	Element	Work Description	Furnished By	Installed By	Terminated By	Configured By	Notes
12	Communications Work		C	C	C	ONTC	The Contractor shall perform all work, including the final connections necessary for complete and operational station systems.
13	CCTV Camera	Pole Mounted CCTV Cameras	ONTC	C	C	ONTC	
14	Camera mounting hardware	Pole Mounted CCTV Camera Mounting hardware	C	C	C	N/A	
15	Public Address Speaker	Public Address Speaker(s)	ONTC	C	C	ONTC	
16	Public Address System mounting hardware	Public Address Speaker(s) Mounting	C	C	C	N/A	
17	Conduits	Communications Conduits	C	C	C	N/A	
18	Communications Stub-ups	Stub-ups from the Concrete Foundation	C	C	C	N/A	
19	Junction Boxes	Junction Boxes	C	C	C	N/A	
20	Intercom Device	Emergency two-way communication system	ONTC	C	C	ONTC	
21	Intercom Pedestal	Pedestal-mounted enclosure housing and safeguarding the intercom device affixed to the finished floor	C	C	C	N/A	
22	Wiring	Communications Wiring (LED Screen wiring, CCTV, PA, Wi-Fi AP, Intercom, wiring between the junction box for the Door Operator and the Door Controller)	C	C	C	N/A	
23	Communication Cabinet	NEMA Type 3R 316SS Freestanding Enclosure for outdoor use.	C	C	N/A	N/A	
24	Hardware and accessories inside the communication cabinet	Required hardware and accessories inside the communication cabinet	C	C	C	N/A	
25	Mobile Access and Applications Router	Mobile Access and Applications Router	ONTC	C	C	ONTC	
26	Antenna and Power Supply	Starlink Antenna and Power Supply	ONTC	C	C	ONTC	

STATION DIVISION OF WORK (COMMUNICATIONS)							
Task No.	Element	Work Description	Furnished By	Installed By	Terminated By	Configured By	Notes
27	Network Security Appliance	Network Security Appliance	ONTC	C	C	ONTC	
28	Ethernet Switch	Cloud-managed network security appliance with SD-WAN (Software-Defined Wide Area Network)	ONTC	C	C	ONTC	
29	Verkada Door Controller	Cloud-managed door controller	ONTC	C	C	ONTC	
30	Verkada Battery Backup	Backup battery for redundant power	ONTC	C	C	N/A	

Notes:

1. The above tables are not all-inclusive. All Work or components of work that are not listed above shall be furnished, installed, and terminated by the Contractor as per the contract documents.