1 ADDENDUM #7

ALL CLAUSES SET FORTH IN THE BIDDING DOCUMENTS, CONTRACT DOCUMENTS AND GENERAL REQUIREMENTS OF THE ORIGINAL CONTRACT DOCUMENTS SHALL APPLY TO AND GOVERN THIS WORK. THE ADDENDUM REFERS TO CHANGES AND ADDITIONS TO THE ORIGINAL CONTRACT DOCUMENTS AND IS TO BE READ IN CONJUNCTION WITH THE SAME. ALL OTHER PARTS OF THE ORIGINAL CONTRACT DOCUMENTS ARE TO BE CONSIDERED AS APPLYING TO THE WORK OF THIS CONTRACT WITH THE EXCEPTIONS AND CHANGES AS NOTED BELOW.

1.1 ADDENDA

.1 Reference Addendum #4, Specification Item 1.2.6:

.1 Reference Section 10 14 00 Signage:

.1 Reference Paragraph 2.3.2:

.1 Delete Paragraph 2.3.2.1 as written and replace with the following: “Arlon Series 2100 Premium Cast Opaque Film”.

.2 Add new Paragraph 2.3.2.2 as follows:

".2 3M™ Controltac™ Graphic Film with Comply™ Adhesive 180mC.”

.2 Reference Paragraph 2.5.8:

.1 Delete Paragraph 2.5.8.1 as written and replace with the following: “Arlon Series 2100 Premium Cast Opaque Film”.

.2 Add new Paragraph 2.5.8.2 as follows:

".2 3M™ Controltac™ Graphic Film with Comply™ Adhesive 180mC.”

.3 Reference Paragraph 2.6.8:

.1 Delete Paragraph 2.6.8.1 as written and replace with the following: “Arlon Series 2100 Premium Cast Opaque Film”.

.2 Add new Paragraph 2.6.8.2 as follows:

".2 3M™ Controltac™ Graphic Film with Comply™ Adhesive 180mC.”

.4 Reference Paragraph 2.7.8:

.1 Delete Paragraph 2.7.8.1 as written and replace with the following: “Arlon Series 2100 Premium Cast Opaque Film”.

.2 Add new Paragraph 2.7.8.2 as follows:

".2 3M™ Controltac™ Graphic Film with Comply™ Adhesive 180mC.”

.2 Reference Addendum #4, Specification Item 1.2.7:

.1 Delete Section 10 25 13 - Patient Bed Service Walls as issued via Addendum #4 and replaced with revised version attached, dated April 29, 2022.
Clarification: Generally, references to medical gases and vacuum have been removed.

1.2 SPECIFICATIONS (VOLUMES 1 & 2)

.1 Reference Section 00 01 18 - List of Appendices:

.1 Add new Paragraph 1.1.5 as follows:

".5 ***APPENDIX 'E'***

EMS Approval Letter"

Clarification: Attached and forming part of this addendum is Appendix 'E' - EMS Approval Letter, dated April 05, 2022.

.2 Reference Section 01 29 83 - Payment Procedures for Testing Laboratory Services:

.1 Reference Paragraph 1.3.6:

.1 Delete this paragraph in its entirety.

.2 Reference Paragraph 1.3.7:

.1 Delete this paragraph in its entirety.

.3 Reference Section 08 12 16 Interior Aluminum Glazed Doors and Screens:

.1 Reference Paragraph 2.4.1.4.1:

.1 Add new Paragraph .4 as follows:

".4 Series 60 by Anotec."

.4 Reference Section 08 44 13 Glazed Aluminum Curtain Walls:

.1 Reference Paragraph 2.4.2:

.1 Add new Paragraph .3 as follows:

".3 Anotec Series 3400 Curtainwall."

END OF SECTION

1 - GENERAL

1.1 SUMMARY

.1 Work Included: Provide factory fabricated pre-piped and pre-wired patient bed service wall units including but not limited to following:

.1 recessed console units (patience service strips)

.2 Related Requirements: Specifications throughout entirety of Divisions of this Project are directly applicable to this Section, and this Section is directly applicable to them.

1.2 REFERENCES

.1 Definitions:

.1 Post-Disaster Building: This facility is classified as post disaster as defined in the National Building Code of Canada. Post-disaster building means a building that is essential to provision of services in event of a disaster.

.2 Operational and Functional Component (OFC): Components within building which are directly associated with the function and operation of the facility. OFCs consist of architectural components, building services components, and building contents. Items specified herein may be designated as OFCs and may need to be designed in accordance with performance requirements specified herein and in Section 13 48 50.

.2 Reference Standards: Latest published editions of reference standards listed in this Section in effect as of Bid Closing Deadline of the Project, including any amendments adopted, are applicable unless otherwise indicated.

1.3 ADMINISTRATIVE REQUIREMENTS

.1 Pre-Installation Meetings:

.1 Prior to starting work of this Section, convene a pre-installation meeting at Project site to review Project requirements and site conditions with pertinent parties. Conform to requirements of Division 01.

1.4 SUBMITTALS

.1 Product Data: Submit manufacturer's literature and data sheets for each type of material provided under this Section for *Project* in accordance with requirements of Division 01. Ensure data sheets provide required information including detailed instructions for installing as well as maintaining, preserving and keeping materials in clean and safe conditions. Provide adequate warning of maintenance practices or cleaning agents detrimental to specified materials.

.2 Safety Data Sheets (SDS): Submit SDS for inclusion in Operation and Maintenance Manual specified in Division 01, for adhesives, sealants and any other material designated by Consultant.

.3 *Shop Drawings*: Submit *Shop Drawings* of the work of this Section in accordance with Division 01.

.1 Include sufficient information, clearly presented, to determine compliance with construction documents.

.2 Include electrical ratings, dimensions, mounting details, front view, side view, equipment and device arrangement, wiring diagrams, material, and connection diagrams.

.3 Submit configuration drawings showing devices, including nurse call, medical gases, electrical receptacles and switches.

.4 In addition to minimum requirements indicate following:

.1 Electrical connection layout.

.4 Certifications: Submit in accordance with Division 01.

.1 Submit certification by manufacturer that equipment conforms to requirements of *Contract Documents*.

.2 Submit certification by installer that equipment has been properly installed, adjusted, and tested in accordance with manufacturer's recommendations.

.3 Submit certificate validating seismic assessment and field review of this part of The Work

.5 Regulatory Requirements Submittals: Submit following in accordance with Division 01:

.1 Submit system testing and inspection reports as specified.

.2 Submit CSA Certification or Local Hydro approvals for site wiring of systems as specified.

.6 Samples: Submit samples in accordance with Division 01. Submit following samples in sizes indicated:

.1 Aluminum extrusions minimum 300 mm (12") long.

.2 Plastic laminates minimum 300 mm (12") square.

.7 Closeout Submittals: Prior to the final inspection, deliver four (4) copies of the following to *Owner*:

.1 Complete maintenance and operating manuals including wiring diagrams, technical data sheets, and information for ordering replacement parts:

.2 Include complete "As built" diagrams indicating all items of equipment, their interconnecting wiring and interconnecting piping.

.3 Include complete diagrams of the internal wiring for each of the items of equipment, including "As built" revisions of the diagrams.

.4 Identify terminals on the wiring diagrams to facilitate installation, maintenance and operation.

1.5 QUALITY ASSURANCE

.1 Qualifications:

.1 Manufacturers: Provide Products for Work of this Section by manufacturer with minimum 10 years' experience in the manufacture of such materials.

.2 Installers: Provide work of this Section executed by competent installers with minimum 5 years' experience in the application of Products, systems and assemblies specified and with approval and training of the Product manufacturers.

.2 Welding:

.1 Provide welding in accordance with CSA W59-M performed by a fabricator and mechanics fully approved by the Canadian Welding Bureau as specified herein.

.2 Ensure fabricator is fully certified by Canadian Welding Bureau for fusion welding of steel structures to CSA W47.1 and for fusion welding of aluminum to CSA W47.2.

.3 Licensed Professionals: Employ a professional structural engineer carrying a minimum $2,000,000.00 professional liability insurance and registered in the Province of Prince Edward Island in accordance with requirements of Division 01 to:

.1 design components of The Work of this Section requiring structural reinforcement for seismic requirements.

.2 be responsible for full assemblies and connections

.3 be responsible for determining sizes, joint spacing to allow thermal movement and loading of components in accordance with applicable codes and regulations.

.4 be responsible for production and review of Shop Drawings.

.5 inspect work of this Section during fabrication and erection.

.6 stamp and sign each Shop Drawing.

.7 Provide site administration and inspection of this part of The Work.

.4 Mock-Ups:

.1 Conform to requirements of Division 01. Submit 1 transportable *Mock-Up* in accordance with following requirements:

.1 Minimum Size: 300 mm x 300 mm x 300 mm (12" x 12" x12")
.2 Maximum Size: 450 mm x 450 mm x 450 mm (18" x 18" x18")

.2 Prior to production, construct 1 site *Mock-Up* for *Consultant's* review and acceptance and *Install* where directed by *Consultant*.

.1 one patient strip headwall unit.

.5 Single Source Responsibility: Ensure primary materials provided in this Section are obtained from 1 source by a single manufacturer and secondary materials are obtained from sources recommended by primary materials manufacturers.

2 - PRODUCTS

2.1 MANUFACTURERS

.1 *Products* of following manufacturers are acceptable subject to conformance to requirements of *Drawings*, Schedules and *Specifications*:

.1 Amico Corporation; www.amico.com

.2 Medical Design; www.medicaldesign.ca

.3 Interspec Systems Limited.; www.interspecsystems.com

.2 Substitution Limitations: This Specification is based on Amico's *Products*. Comparable Products from manufacturers listed herein offering functionally and aesthetically equivalent products in Consultant's opinion, and subject to Consultant's review, will be considered provided they meet the requirements of this Specification.

2.2 DESCRIPTION

.1 Regulatory Requirements:

.1 Fire-Test-Response Characteristics: Flame-spread index shall be in accordance with National Building Code of Canada requirements when tested according to CAN/ULC-S102.

.2 Design and Performance Requirements:

.1 *Provide* units complete with structural frames, access panels, electrical outlets, electrical back boxes, light switches, wiring, grounding and similar services.

.2 Make provision (i.e. rough-in boxes and conduits) for communication stations (nurse calls), accessory rails, monitor mounting rails, blank for future service and data device and wire. Provide rough-in boxes and conduit.

.3 Ensure patient bed service wall system is listed by UL and ULC. Provide Products conforming to following standards and regulations:

.1 CSA Z7396.1,
.2 NFPA-99c,
.3 CSA C22
.4 NFPA 70

.4 Connections:

.1 Provide patient bed service wall system with integrated raceways and single area connection for electrical wiring for each electrical outlet or device (critical, emergency normal, low voltage/communication etc.) as well as dimmer switches.
.2 Locate electrical termination as indicated on *Drawings*. Ensure connections are factory installed and manifolded for single-point connection to building services as indicated on reviewed Shop *Drawings*.
.3 Provide data wiring connected to device junction box via conduit or raceway.
.4 Coordinate with electrical trades for provision and wiring of communication station device (if required).

.5 Fascia: Where required, *Provide* removable type at all location to provide access for easy installation and maintenance of headwall services.

.6 Welding of any structural component related to work of this Section shall be executed by a fabricator having certification in accordance with Division 3, CSA W47.1.

2.3 MATERIALS

.1 Aluminum Sheet: ASTM B209 (ASTM B209M), Alloy 6061-T6.

.2 Aluminium Extrusions: ASTM B221 (ASTM B221M), Alloy 6063-T5.

.3 Structural Shapes, Plates, Etc.: New material conforming to CSA G40.20 and CSA G40.21, Grade 300W.

.4 Uncoated, Cold-Rolled Steel Sheet: ASTM A1008/A1008M, structural steel, Grade 170, new material, unless another grade is required by design loads; exposed.

.5 Steel studs: ASTM C645, minimum base-metal thickness, 43 mils (0.0428" – 1.087 mm – 18 ga – Yellow)

.6 Medium Density Fibreboard (MDF):

.1 Minimum density: 770 kg/m^3 (48 lb. /cu ft.)

.2 Surface characteristics: In accordance with ANSI/NPA A208.2

.3 Grade: Minimum 155.

.4 Finish and Texture: To match Consultant's sample

.7 Plastic Laminate (PLAM): HPDL, type VGS - 0.7 mm (0.028"), conforming to ANSI/NEMA LD3 and ANSI/NEMA LD3.1a

.1 Colours and Finishes: To be selected by Consultant at a later date from plastic laminate manufacturer's full colour range including solid and woodgrain patterns with ability to offer cross-grain patterns and printed patterns in suede or matte finishes.

.2 Acceptable Manufacturers:

.1 Arborite; www.arborite.com/en
.2 Formica Inc.; www.formica.com/
.3 Nevamar Company, LLC; www.nevamar.com
.4 Wilsonart Canada; www.wilsonart.com

.3 Maximum number of colours and patterns: 5

2.4 MANUFACTURED UNITS

.1 Console Units

.1 Mounting: Recessed

.2 Sizes: As indicated on Drawings

.3 *Provide* console units with removable front assembly. *Provide* console supported by galvanized steel bracket attached to structural wall by means of screws.

.4 Fascia: extruded, clear anodized aluminum with moulded plastic end caps.

.5 Back box: galvanized sheet steel, minimum 1.5 mm (0.060") thick.

.6 Ensure all specified devices are factory installed in console backbox with single cutout dimension for all accessories (outlets & electrical devices) to meet design requirements and as recommended by manufacturer.

.1 Low Voltage Data Provisions: connected to device junction box via conduit or raceway. Provide pull cord extending from junction box to service provision. Refer to Division 26 for additional wiring requirements.

.7 Basis-of-Design: "Recessed Console – Alert 1 Series" by Amico or approved equivalent

2.5 COMPONENTS

.1 Ensure components specified in this Section are factory installed and tested.

.2 Electrical Requirements:

.1 Wiring: Wire for standard and critical branch power circuits: #10 or #12 (as specified) type RW90 stranded copper wire, 600 volt, with heat resistant thermoplastic insulation for hot (black) and neutral (white).

.2 Grounds: #10 RW90 stranded copper wire (green).

.3 Grounding and Bonding: All ground conductors to be installed in conduit or raceway. Each power receptacle to have a ground conductor connected to a grounding screw. Where

electrical terminations are located inside headwall, install grounding bus for each type of power, to ensure grounding of complete power system.

.4 Low Voltage Data Provisions: connected to device junction box via conduit or raceway. Provide pull cord extending from junction box to service provision. Refer to Division 26 for additional wiring requirements.

.5 Switching:

.1 Pass & Seymour industrial grade 120 or 277 volt, 15 or 20 amps. SPST, 3 way or momentary type as indicated on reviewed Shop *Drawings*.
.2 Low-voltage switching: 0-12 volts, 15 amps unless otherwise indicated.
.3 All switches to be provided pre-installed and pre-wired by manufacturer.

.6 Electrical Receptacles: All receptacles to be Pass & Seymour Hospital Grade 15 or 20 amp, 120 or 277 volt, U.L listed and marked "Hospital Grade". Quantity and type as shown on reviewed Shop *Drawings*. Ensure compatibility of plug on accessory equipment to be used with these devices.

.1 Duplex and Simplex receptacles: NEMA style 5-15R or 5-20R.
.2 Safety Receptacles: duplex type, NEMA style 5-15R or 5-20R. Ensure receptacles limited proper access to energized contacts and accept both 2 wire and 3 wire plugs.
.3 Colours: Ivory for use on normal (standard) circuits and red for use on emergency (critical) circuits, unless otherwise indicated.

.3 Provisions:

.1 Provide accessories indicated on Drawings by manufacturer to ensure compatibility.

.2 Ensure patient bed service walls can accommodate provisions including, but not limited to, nurse call equipment, monitoring equipment, data jacks, phone jacks, lighting, etc.

.3 *Provide* factory-installed required EMT or flexible metal conduit runs to appropriate termination point at junction box.

.4 *Provide* cover plates and trim plates for all provisions unless indicated otherwise.

2.6 ACCESSORIES

.1 Provide accessories indicated on reviewed Shop Drawings. Accessories shall be selected at a later date in consultation with Owner and may include, but are not limited to: LED lighting, LCD mounts, wash stations etc.

.2 Unless indicated otherwise on Drawings, provide units with the following:

.1 Three (3) Duplex electrical

.2 One (1) Nurse Call (to the Inpatient Nurse Desk)

.3 One (1)Code Blue

.4 One (1) Communications Connection

2.7 FINISHES

.1 Steel: Hot-dip galvanized after fabrication, ASTM A123 or ASTM A653

.2 Aluminum: Class I, clear anodic finish; complying with AAMA 611

3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

.1 Comply with manufacturer's written recommendations, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 EXAMINATION

.1 Site Verification of Conditions:

.1 Verify actual site dimensions and location of adjacent materials prior to commencing work. Notify Consultant in writing of any conditions which would be detrimental to the installation. Commencement of work implies acceptance of previously completed work.

.2 Inspect and verify that walls and areas in which work is to be performed are acceptable for headwall installation in accordance with manufacturer's published recommendations and all applicable Sections.

.3 Proceed with installation only after discrepancies and unacceptable conditions have been remedied.

3.3 PREPARATION

.1 Coordinate headwall installation with work of other trades for proper sequence to avoid delays. Coordinate service connection work with electrical, piping, and communication Subcontractors.

3.4 INSTALLATION

.1 *Install* headwall units in accordance with manufacturer's instructions and in accordance with NFPA 70, NFPA 99 and local authorities having jurisdiction requirements. Install and make connections as required for a complete and operational patient bed service wall system for each unit.

.2 Coordinate the work of this Section with other trades adjacent to work of this Section in particular Section 06 40 00 and Section 09 21 16.

.3 Anchor all fixed components securely, square, level, and plumb at heights indicated on drawings.

.4 Align slots in vertical support elements to ensure hanging units are level.

3.5 INSPECTION AND TESTING

.1 Inspect installation for proper installation in accordance with the CSA C22 requirements.

.2 Submit 2 written reports on the results of the ground leakage testing and the installation inspection authored by equipment manufacturer's technician.

.3 Arrange and pay for CSA and Hydro inspection, testing and approvals required for site wired headwall unit and associated systems electrical work.

3.6 FIELD QUALITY CONTROL

.1 Manufacturer's Services: Provide manufacturer's field services consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with

manufacturer's instructions. Report any inconsistencies from manufacturer's recommendations immediately to Consultant.

.2 Obtain field reports within three days of review and submit immediately to Consultant.

3.7 DEMONSTRATION

.1 Arrange and *Provide* a demonstration of the systems in a series of tests for the *Owner's* and *Consultant's* verification.

3.8 CLEANING

.1 Clean all surfaces to remove all marks, soil, and foreign matter immediately after installation and adjustment are complete.

.2 Recheck all components and perform any necessary additional cleaning just prior to substantial completion.

.3 Remove surplus materials, debris, tools, and equipment upon completion.

.4 Adjust headwall and service column components for easy, non-binding operation.

.5 Remove and dispose of protective finishes and clean exposed surfaces.

3.9 PROTECTION

.1 Protect installed headwall from damage during remaining construction work.

END OF SECTION

APPENDIX 'E'

EMS Approval

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Department of Transportation, Infrastructure and Energy

P O Box 2000, Charlottetown
Prince Edward Island
Canada C1A 7N8

C.P. 2000, Charlottetown
Ile-du-Prince-Edouard
Canada C1A 8NB

Environmental Management Section

Approval-to-Proceed No: QT22-007
(No Watercourse, Wetland or Buffer Zone Activity Permit)

EMS APPROVAL - TO - PROCEED

In accordance with the Environmental Permit Process for the Department of Transportation , Infrastructure and Energy, Permission is hereby granted to:

Attention:	Philip Jefferson
Company	Transportation and Infrastructure
TIR DivisionAgency	Public Works and Planning
Postal Code	C1A 7N5
Address	124 Deacon Grove Lane
Address2	
CityProvCountry	Charlottetown, Prince Edward Island, Canada

to undertake the Project / Work as described in their Environment Assessment / Registration Application dated

Monday, May 9, 2022 namely:

Charlottetown - QEH - 60 Riverside Dr. - QEH Emergency Dept. Addition - Addition of appr. 7,900 sq ft of emergency department area to the existing QEH Emergency Dept. to accommodate a new Mental Health & Additions Assessment and Short Stay unit.

Work to take place in the Electoral Districts of Charlottetown-Kings Square (District # 12) in / near the Community of Charlottetown on QEH-Riverside Dr. Route Number: None in Queens County, PEI

This Approval-to-Proceed, by order of the Minister of Transportation, Infrastructure and Energy, becomes effective on Monday, May 9, 2022 and expires on Friday, September 30, 2022 and is subject to the full implementation of and compliance with the terms and conditions as outlined on the back of this Approval , as per on-site consultation with Environmental Management Section staff, and as per the following terms and conditions

(1) Installation of environmental controls shall be a first step in the construction sequence, and their design, installation and maintenance shall be as per TI's Environmental Protection Plan (EPP);
(2) and Specifications Manual;
(3) All necessary environmental controls (e.g. silt fencing, check dams, etc.) shall be in place prior to, during and after project activities to avoid offsite siltation;
(4) and siltation towards the watercourse/wetland;
(5) Do not disturb existing vegetation any more than absolutely necessary;
(6) Stockpiled/excavated materials shall be contained onsite (e.g. silt fencing, straw bales), and any excess material shall be removed from site for reuse or proper disposal. Reuse or disposal of project materials shall not take place within 30 meters of a watercourse or wetland without Consultation with County EMS Officer;
(26) An appropriately sized emergency spill response kit shall be used on the job site;
(40) Excavated materials, including any decommissioned environmental protection structures, shall be re-used or disposed of in compliance with Provincial Regulations;
(57) Upon project completion, all barren soil shall be stabilized (e.g. seed, mulch, jute, etc.) by September 30, 2022. Otherwise, a heavy layer of mulch must be applied for over wintering that will be removed in the Spring of 2023 for surface preparation and seeding;
(64) Contact TI Environment Officer (Hannah Jenkins at 902-218-9152) when starting project; and
(65) The Applicant is responsible to ensure that this Approval/Permit is maintained at the job site.

If you have any questions regarding this Approval-to-Proceed, please contact Paul Strain at (902)368-4199

Date Issued: Tuesday, April 5, 2022

Signed:

Paul Strain
A/Environmental Coordinator