

APPENDIX 4C

PLANT SERVICES

1. INTERPRETATION

In this Appendix, in addition to the definitions set out in Schedule 1 of this Agreement:

"Building Systems" means the mechanical, electrical and other systems in or servicing the Facility described in Table 3 in Attachment 1 to this Appendix and in respect of each system listed in Table 3 in Attachment 1 to this Appendix, as constructed and supplied or provided by Project Co pursuant to Schedule 3 [Design and Construction Specifications], and if such systems are connected or integrated with the Authority's systems servicing CWHC, to the point of connection of such systems with the Authority's systems;

"Demand Maintenance" means ad hoc and responsive unscheduled Maintenance;

"Elevator Availability" means, in respect of each elevator and escalator in the Facility, the amount of time that such elevator was available during a measured period expressed as a percentage and calculated as follows:

$$\text{(Total Time – Down Time) x100 / Total Time}$$

Where:

Down Time is the number of hours that such elevator or escalator was unavailable for normal use other than times during which Scheduled Maintenance was performed on such elevator or escalator in accordance with the Annual Service Plan in effect; and

Total Time is the total number of hours during the measured period;

"Facility Incident" means an event that is inconsistent with the normal operations of the Facility including flood, fire, evacuation, gas leak or rupture, electrical or other utility disruption, life safety system disruption, patient or visitor injury or death related to Plant Services' actions or inactions, Plant Services' infection control breaches, labour action or notice of legal action;

"Maintained Elements" means all elements of the Facility and Site constructed or installed pursuant to this Agreement including:

- (a) the Building Systems;
- (b) improvements to the Site, including the external areas described in Table 4 in Attachment 1 of this Appendix, including soft landscaping, planted areas, lawns or gardens of courtyards or on rooftops;
- (c) underground parking facilities; and
- (d) the Maintained Equipment,

but does not include Category A1 Equipment, Category B1 Equipment, Category C Equipment, Category E Equipment and Category G1 Equipment;

"Maintained Equipment" means Category A2 Equipment, Category B2 Equipment, Category D, Category F Equipment and Category G2 Equipment;

"Maintenance" means commissioning, testing, servicing, maintenance, repair, renewal or replacement of the Maintained Elements;

"Maintenance Access Times" means the times set out in the Annual Service Plan during which Project Co may perform Maintenance Services;

"Maintenance Services" means Demand Maintenance and Scheduled Maintenance;

"Miscellaneous Maintenance" has the meaning given in Section 3.9 of this Appendix;

"Plant Services" means all of the services and requirements described in this Appendix, including Demand Maintenance and Scheduled Maintenance; and

"Scheduled Maintenance" means planned, preventive and replacement Maintenance.

2. SERVICES

2.1 General Requirements

In addition to the standards and specifications set out in Schedule 4 [Services Protocols and Specifications], Project Co will deliver the Plant Services:

- (a) 24 hours per day, 365(6) days per year;
- (b) in a manner which:
 - (1) is efficient, comprehensive and responsive to the needs of Facility Users;
 - (2) ensures a collaborative working relationship with the Authority, its employees and contractors;
 - (3) minimizes, to the extent reasonably possible, any interruption to the use and operation of the Facility by Facility Users;
 - (4) is integrated and co-ordinated with the delivery of all:
 - (A) other Services provided by Project Co; and
 - (B) services delivered by the Authority at the Facility;
 - (5) is safe for all Facility Users; and
 - (6) does not create any environmental hazards;

- (c) in a safe and functional working environment applying safe working practices including:
 - (1) using recognized risk assessment and management systems; and
 - (2) placing, maintaining and keeping records of all hazard notices and safety signage in accordance with the standards included in Section 2.1(e) of this Appendix;
- (d) in accordance with principles consistent with the LEED Gold certification points:
 - (1) identified in the LEED score sheet contained in the Proposal Extracts; and
 - (2) achieved in respect of the Facility;
- (e) having regard for and without limiting the requirements set out in Section 3.2 of Schedule 4 [Services Protocols and Specifications]:
 - (1) CAN/CSA-Z317.1 Special Requirements for Plumbing Installations in Health Care Facilities;
 - (2) CAN/CSA-Z317.10 Handling of Waste Materials in Health Care Facilities;
 - (3) CAN/CSA-Z317.11 Area Measurement for Health Care Facilities;
 - (4) CAN/CSA Z317.2-10 Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities;
 - (5) CAN/CSA-Z317.5 Illumination Systems in Health Care Facilities;
 - (6) CAN/CSA-Z317.13 Infection Control during Construction or Renovation of Health Care Facilities;
 - (7) CAN/CSA-Z318.0 Commissioning of Health Care Facilities;
 - (8) CAN/CSA-Z323.5 Mechanical/Electromechanical Lifting Devices for Persons;
 - (9) CAN/CSA-Z7396.1 Medical Gas Pipeline Systems;
 - (10) CAN/CSA-B44 Safety code for Elevators and Escalators;
 - (11) CAN/CSA-C282-00 Emergency Electrical Supply for Buildings;
 - (12) CAN/CSA-Z32 Electrical Safety and Essential Electrical Systems in Health Care Facilities;
 - (13) the Accreditations;
 - (14) PAS55; and
 - (15) ISO31000.

3. PLANT SERVICES REQUIREMENTS

3.1 Annual Service Plan

Project Co will develop in accordance with Sections 4.1 and 4.3 of Schedule 4 [Services Protocols and Specifications] and implement as part of the Annual Service Plan appropriate policies, procedures, practices, schedules and a self-monitoring inspection and reporting system in respect of the delivery of the Plant Services to the Authority.

3.2 Maintenance Services

Project Co will provide the Plant Services in accordance with this Appendix so that:

- (a) each of the Maintained Elements:
 - (1) is properly and safely maintained in accordance with all Plans;
 - (2) remains functional, safe, operationally sound and of good appearance;
 - (3) performs in accordance with their respective design criteria as set out in Schedule 3 [Design and Construction Specifications]; and
 - (4) achieves the requirements set out in Tables 2 to 4 in Attachment 1 to this Appendix;
- (b) the Building Systems, including heating, air conditioning, lighting, humidity and mechanical ventilation systems, function in accordance with the requirements set out in Table 3 in Attachment 1 to this Appendix; and
- (c) the exterior areas of the Facility are maintained in accordance with Table 4 of Attachment 1 to this Appendix;
- (d) all other Maintained Elements operate as designed and intended.

3.3 First Response Maintenance for Equipment

Project Co will respond to Demand Requisitions in respect of all Equipment. If the Equipment which is the subject of the Demand Requisition is not Maintained Equipment, Project Co will determine whether the problem relates to the Equipment itself or a Maintained Element supporting the Equipment. If:

- (a) the problem relates to a Maintained Element, Project Co will rectify the problem in accordance with this Appendix; or
- (b) the problem does not relate to a Maintained Element, Project Co will promptly give notice of the problem to the Authority together with a summary of the results of the investigation into the problem conducted by Project Co.

3.4 Maintenance Times

Subject to Section 3.5 of this Appendix, Project Co will perform the Maintenance Services during the relevant Maintenance Access Times and will:

- (a) perform Scheduled Maintenance during the periods agreed in the Annual Service Plan then in effect and will give the Authority 10 Business Days' written notice before commencing any such Maintenance; and
- (b) undertake and complete Demand Maintenance within the relevant Response Time and Rectification Period set out in Section 4 of this Appendix and Schedule 8 [Payments].

3.5 Re-Scheduling of Maintenance

Notwithstanding any notice delivered by Project Co pursuant to Section 3.4 of this Appendix, if the Authority, acting reasonably, determines that the times at which Project Co proposes to perform Maintenance will cause material disruption to the operations of the Authority or other Facility Users, the Authority may give notice to Project Co not to carry out such Maintenance until such time as the Authority and Project Co, each acting reasonably, agree on an alternate time. Upon such agreement, the Response Time and Rectification Period for such Maintenance will be adjusted accordingly.

3.6 Elevators

Project Co will:

- (a) operate and maintain all elevators, escalators, elevating devices and related equipment at the speeds and in accordance with the elevator design specifications set out in Schedule 3 [Design and Construction Specifications];
- (b) dispatch its on-Site personnel promptly to respond to all elevator alarms or telephone calls from an elevator and initiate the required action to rectify faults and release occupants;
- (c) undertake Scheduled Maintenance of elevators, escalators, elevating devices and related equipment such that at no time will any Functional Area be without elevator or escalator service and ensure that not more than one elevator in a bank of two or more elevators is out of service;
- (d) include in each Performance Monitoring Report for the relevant period:
 - (1) the calculation of Elevator Availability; and
 - (2) a summary of any elevator, escalator or elevating device failures and corrective actions.

3.7 Building Management System (BMS)

Project Co will:

- (a) configure the BMS to monitor and operate the Facility and the Services within the Facility and remotely through internet connections;
- (b) monitor, control, indicate alarms and provide trending information for all BMS connected sensors and control points;
- (c) configure the BMS to automatically initiate an alarm and immediately page or otherwise notify staff designated by the Authority of particulars related to any alarmed equipment specified in Schedule 2 [Design and Construction Protocols] or Schedule 3 [Design and Construction Specifications]; and
- (d) include with each Performance Monitoring Report and provide the Authority with continuous direct access (via web-accessed dashboard customized to the Authority's requirements, and other than during such reasonable periods as the BMS may be undergoing Scheduled Maintenance or emergency Maintenance) to the following information generated by the BMS during the relevant period:
 - (1) Facility Incident failures and all information relevant to Facility Incident investigations, as required by the Authority;
 - (2) daily, weekly and periodic status reports (including equipment availability or unavailability);
 - (3) exception reports by element status;
 - (4) trend log data (including multi-trend presentation where required to demonstrate effective and efficient sequencing of related equipment);
 - (5) time of occurrence, Response and Rectification; and
 - (6) such other information as the Authority may reasonably require.

3.8 Medical Gases and Vacuum

Project Co will perform all monitoring, maintenance, operations and periodic testing and certification required to ensure a safe and continuous flow of medical gases and vacuum in the Building, including:

- (a) monitoring and controlling the medical gases and medical air supplies from and including source equipment, to and including terminal outlets, and all interconnecting distribution pipelines, safeties, and venting;
- (b) responding to all alarms related to the medical gas system and storage facilities;
- (c) metering, trending and reporting the consumption of medical gases in the Building;
- (d) monitoring the available inventory of bulk and bottled medical gases and notify the Authority or such contractor or agent as designated by the Authority if replacement inventory is required;

- (e) managing delivery of bulk and bottled supplies of medical gases as necessary, including transport and swapping bottles and empties as necessary; and
- (f) monitoring and controlling the medical vacuum system from and including terminal devices (inlets), to and including the medical vacuum equipment station, and all interconnecting distribution pipelines, safeties and venting.

3.9 Miscellaneous Maintenance Services

Project Co will:

- (a) within 24 hours notice from the Authority (not counting days that are not Business Days) , Respond to Demand Requisitions for general labour services including:
 - (1) the installation and hanging of white boards, pictures, art work shelving and other items of a similar nature affixed to the walls of the Facility; and
 - (2) other similar services typically performed by the physical plant department of a similar health care facility,

(“**Miscellaneous Maintenance**”); and
- (b) complete such Miscellaneous Maintenance within two weeks of the Demand Requisition.

3.10 Maintenance of Key Energy Consuming Building Systems

Project Co will:

- (a) maintain all key energy consuming Building Systems, including all boilers, so that each such system operates efficiently; and
- (b) conduct regular efficiency testing of all such systems in accordance with Good Industry Practice, and without limitation no less than quarterly for the boilers under load, and will include the results of such testing in each Performance Monitoring Report.

3.11 Maintenance Equipment and Supplies

Project Co will provide, maintain, clean and replace as required all equipment, supplies, apparatus and consumable items (including any consumable required for the operation of Maintained Elements) required to deliver the Plant Services, including scaffolding, crantage, tackle, machinery, tools or other equipment.

3.12 Manufacturer Support of Communication Systems and Components

With respect to the communication systems and components provided by Project Co pursuant to Section 7.8 (Communications - Division 27) of Schedule 3 and included in the Maintained Elements:

- (a) the Authority acknowledges that manufacturers of such systems and components frequently release new or upgraded systems and components;

- (b) the Authority acknowledges that Project Co will not be automatically required to replace such systems and components solely as a result of the release of new or upgraded systems and components; and
- (c) Project Co will be required to replace such systems or components when both manufacturer (or a qualified third party approved by the Authority, acting reasonably) software and other manufacturer-provided (or qualified third party-provided approved by the Authority, acting reasonably) support (either by way of active service contracts or by warranty terms and conditions) are withdrawn for such systems or components.

4. PERFORMANCE INDICATORS

	Indicator	Service Failure Level ¹	Response Time	Rectification Period	Recording Frequency	Monitoring Method
	Maintenance					
4.1	Demand Maintenance (other than Miscellaneous Maintenance) carried out in accordance with this Appendix.	Emergency –High Urgent – Medium Routine - Low	Emergency – 15 minutes Urgent – 30 minutes Routine – 4 hours	Emergency – 2 hours Urgent – 6 hours Routine – 7 days	Per Occurrence	Performance Monitoring Report
4.2	Miscellaneous Maintenance (other than Demand Maintenance) carried out in accordance with this Appendix.	Low	24 hours on Business Days	2 weeks	Per Occurrence	Performance Monitoring Report
4.3	Maintained Elements that are not the subject of Demand Maintenance are maintained in accordance with this Appendix.	Medium	2 hours	24 hours	Per Occurrence	Performance Monitoring Report
4.4	Project Co performs Maintenance at the times permitted in Sections 3.4 and 3.5 of this Appendix.	High	N/A	N/A	Per Occurrence	Performance Monitoring Report

¹ See Table 1 of Attachment 1 to this Appendix.

	Indicator	Service Failure Level ¹	Response Time	Rectification Period	Recording Frequency	Monitoring Method
4.5.4	Project Co carries out 100% of Scheduled Maintenance on life safety, emergency systems and statutory/regulatory requirements within the times scheduled in the Annual Service Plan.	High	N/A	N/A	Per occurrence	Performance Monitoring Report
4.6	Project Co carries out 85% of all other Scheduled Maintenance within the times scheduled in the Annual Service Plan. All Deferred Maintenance to be completed within 30 days of its scheduled date.	High	N/A	N/A	Per occurrence	Performance Monitoring Report
	Elevators					
4.7	Elevator Availability of not less than 97.5% for each elevator within the Facility during each Payment Period.	High – per elevator	N/A	N/A	Monthly	Performance Monitoring Report
4.8	If an elevator is out of service and occupants are trapped, suitably trained Project Co staff respond and safely release occupants.	High	5 minutes	(a) 30 minutes between the hours of 7am and 7pm on Business Days; and (b) 60 minutes at all other times.	Per Occurrence	Performance Monitoring Report
	Medical Gas and Vacuum					
4.9	Project Co performs all monitoring, maintenance, operations and periodic testing and certification required for complete, safe and functional systems. Refer also to Section 3.8 of this Appendix.	High	5 minutes	30 minutes	Per Occurrence	Performance Monitoring Report
	[Intentionally Deleted]					
4.10	[Intentionally Deleted]					

	Indicator	Service Failure Level ¹	Response Time	Rectification Period	Recording Frequency	Monitoring Method
	Other					
4.11	Project Co complies with all testing and reporting requirements under all applicable Authority policies, policies of insurance and all applicable Laws.	Medium	N/A	N/A	Per occurrence	Performance Monitoring Report
4.12	External areas of the Facility maintained in accordance with this Appendix	Low for the first week of failure and Medium for each week thereafter until rectified	N/A	N/A	Weekly	Performance Monitoring Report
4.13	Snow and Ice removal from external areas of the Facility in accordance with Table 4 of this Appendix	Low for the first hour of failure, Medium for the second hour and High for each hour thereafter until rectified	1 hour	1 hour	Per Occurrence	Performance Monitoring Report
4.14	Records and information provided to the Authority, in accordance with Schedule 14, Section 3.7(d) of this Appendix, and access to the Performance Monitoring Program, the BMS, the CMMS and all Help Desk records.	Medium	24 hours	48 hours	Per occurrence	Annual Report
4.15	All hazard notices and safety signs are maintained, recorded, located and displayed correctly, and fully serviceable.	Medium	15 minutes	(a) 30 minutes between the hours of 7am and 7pm, 7 days per week; and (b) 60 minutes at all other times	Per Occurrence	Performance Monitoring Report
4.16	Project Co implementing and adhering to all other elements of the Annual Service Plan related to Plant Services and not otherwise addressed in this Section 4.	Low	N/A	N/A	Per occurrence	

Note: N/A means "not applicable" and that the table does not indicate or specify a Response Time or Rectification Period for the specified Performance Indicator.