

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical Gas**

<b>Radiation Therapy Module</b>																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
	<b>Reception, Scheduling and Waiting</b>																	
3.1.1.1	Reception/Booking	1	10.0	10.0	1.5	15		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.2	Patient/Family Waiting Area	1	24.0	24.0	1.5	36		30	9	negative	24	30 - 60	-	-	-	-	-	-
3.1.1.3	Coat Closet	1	3.0	3.0	1.3	4		30	3	positive	24	30 - 60	-	-	-	-	-	-
	<b>Sub-Total</b>			<b>37.0</b>		<b>55</b>												
	<b>Radiation Therapy Treatment Area</b>																	
3.1.1.4	Control Work Area	2	18.0	36.0	1.45	52		30	10	positive	21-24	30 - 60	-	-	-	-	-	-
3.1.1.5	Dual Energy Linear Accelerators	2	87.0	174.0	1.8	313		30	15	positive	21-24	30 - 60	required	-	-	-	-	-
3.1.1.6	Patient/Family Waiting Area	1	30.0	30.0	1.3	39	This area is for 25 people. Patients will be gowned in this area. Need to have filtered drinking water dispensed in this area	30	9	negative	24	30 - 60	-	-	-	-	-	-
3.1.1.7	Dressing Cubicle, Patient	4	1.5	6.0	1.3	8		30	6	positive	24	30 - 60	-	-	-	-	-	-
3.1.1.8	Washroom, Patient, Wheelchair Type	2	4.5	9.0	1.3	12		30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.1.8a	Cubicle Change Assisted	1	4.5	4.5	1.3	6		30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.1.9	Linen Alcove	1	2.0	2.0	1.3	3	Shared with CT Simulation	30	3	positive	24	30 - 60	-	-	-	-	-	-
3.1.1.10	Storage, Equipment	1	20.0	20.0	1.3	26		30	3	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.11	Washroom, Staff	2	2.5	5.0	1.3	7		30	12	negative	24	30 - 60	required	-	-	-	-	-
	<b>Sub-Total</b>			<b>286.5</b>		<b>466</b>												
	<b>RT Admin Area</b>																	
3.1.1.12	Office, Assessment Module Leader	1	9.5	9.5	1.3	12	Located on the first floor	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.12a	Office Treatment Module Leader/Chief RT	1	9.5	9.5	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.13	Workstation, Clerk/Secretary	1	6.0	6.0	1.3	8	Located on the first floor		6	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.14	Work Area, Resource Therapists	1	18.0	18.0	1.3	23	3 workstations Located on the first floor	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.15	Office Equipment Room	1	7.0	7.0	1.3	9	Located on the first floor	30	3	equal	24	30 - 60	-	-	-	-	-	-
	<b>Sub-Total</b>			<b>50.0</b>		<b>64</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical Gas**

Treatment Planning Module																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
	<b>Treatment Planning</b>																	
3.1.1.16	Work Area, Physicist assistant	1	10.0	10.0	1.3	13	Located on the second floor-next to Physics Labs	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.17	Dosimetry Laboratory	1	35.0	35.0	1.5	53	Located on the second floor-workstations for 6 people	30	10	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.18	Staff Washroom	1	2.5	2.5	1.3	3		30	12	negative	24	30 - 60	required	-	-	-	-	-
	<b>Sub-Total</b>			<b>47.5</b>		<b>69</b>												
	<b>Technical Area</b>																	
3.1.1.19	Work Area, Electronic Technicians	1	15.0	15.0	1.5	23	Located on the first floor	30	10	negative	24	30 - 60	required	-	-	-	-	-
3.1.1.20	Electronics laboratory	1	20.0	20.0	1.5	30	Located on the first floor	30	10	negative	24	30 - 60	required	-	-	-	-	-
3.1.1.24	Cerrobend Workroom	1	7.5	7.5	1.5	11	Must have proper ventilation	30	10	equal	24	30 - 60	required	-	-	-	-	-
3.1.1.21	Physics laboratory	1	20.0	20.0	1.5	30	Located on the second floor	30	10	equal	24	30 - 60	required	-	-	-	-	-
3.1.1.22	Storage, Equipment/Material	1	15.0	15.0	1.3	20	Located on the first floor	30	3	negative	24	30 - 60	required	-	-	-	-	-
3.1.1.22a	Storage Radioactive sources	1	9.0	9.0	1.3	12	Required once HDR installed	30	15	negative	24	30 - 60	required	-	-	-	-	-
	<b>Sub-Total</b>			<b>86.5</b>		<b>126</b>												
	<b>Simulation Area</b>																	
3.1.1.25	Stretcher Storage Area	1	2.5	2.5	1.3	3		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.1.26	Control Room	1	14.0	14.0	1.5	21		30	9	equal	21-24	30 - 60	-	-	-	-	-	-
3.1.1.27	Patient Stretcher Holding-Including Nursing Station	1	20.0	20.0	1.5	30	This area is to have med gases and other services required for recovering a patient after a procedure. It will also hold 3 stretcher bays and a small nurse station	30	6	equal	24	30 - 60	-	1	1	1	-	-
3.1.1.28	CT Simulation Room	1	55.0	55.0	1.5	82	shielding will to provide to meet national standards for Brachytherapy (HDR)	30	9	equal	21-24	30 - 60	-	1	1	-	-	-
3.1.1.29	Dressing Cubicle, Patient Assisted	1	2.5	2.5	1.3	4		30	6	positive	24	30 - 60	-	-	-	-	-	-
3.1.1.30	Washroom, Patient, Wheelchair Type	2	4.5	9.0	1.3	12		30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.1.31	Soiled Utility Room	1	8.0	8.0	1.3	11		30	10	negative	24	30 - 60	required	-	-	-	-	-
3.1.1.32	Clean Utility	1	10.0	10.0	1.3	13		30	6	equal	24	30 - 60	required	-	-	-	-	-
3.1.1.33	Storage, Immobilization shells	1	11	11	1.3	14		30	6	equal	24	30 - 60	required	-	-	-	-	-
3.1.1.34	Seed Room	1	10	10	1.5	15		30	15	negative	24	30 - 60	required	-	-	-	-	-
	<b>Sub-Total</b>			<b>142</b>		<b>202</b>												
			<b>NSM</b>	<b>649.5</b>		<b>985</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical Gas**

Systemic Treatment Unit																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N20	Gas Scavenging
	<b>Reception/Scheduling</b>																	
3.1.2.1	Workstation, Reception/ Unit Clerk	1	10.0	10.0	1.50	15		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.2.2	Waiting Room Patient/Family	1	15.0	15.0	1.30	20	10 person waiting area shared with Pharmacy	30	9	negative	24	30 - 60	-	-	-	-	-	-
3.1.2.3	Coat Alcove	1	3.0	3.0	1.30	4		30	3	positive	24	30 - 60	-	-	-	-	-	-
3.1.2.4	Stretcher/Wheelchair Alcove	1	6.0	6.0	1.30	8		30	3	positive	24	30 - 60	-	-	-	-	-	-
	<b>Sub-Total</b>			<b>34.0</b>		<b>47</b>												
	<b>Treatment Area</b>																	
3.1.2.5	Open Recliner Chair Area	8	8.0	64.0	1.50	96	Requires O2	30	6	negative	24	30 - 60	required	1	1	1	-	-
3.1.2.6	Open Bed Cubicle Area	2	12.0	24.0	1.50	36	requires medical gases	30	6	negative	24	30 - 60	required	1	1	1	-	-
3.1.2.7	Washroom, Patient, Wheelchair type	3	4.5	13.5	1.45	20	must meet accessibility standards	30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.2.8	Linen Alcove	1	1.5	1.5	1.45	2		30	3	positive	24	30 - 60	-	-	-	-	-	-
3.1.2.9	Negative Pressure Room	1	12.0	12.0	1.50	18	Must have appropriate air handling to create a negative pressure room.	30	12	negative	24	30 - 60	required	1	1	-	-	-
3.1.2.10	Negative Pressure Washroom	1	4.5	4.5	1.50	7	Located in the Negative Pressure room	30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.2.11	Positive Pressure Ante Room	1	5.0	5.0	1.50	8	Located at the entrance of the Negative Pressure Room	30	9	positive	24	30 - 60	-	-	-	-	-	-
3.1.2.12	Procedure Room	1	14.0	14.0	1.50	21		30	12	positive	24	30 - 60	required	1	1	1	-	-
3.1.2.13	Care Station	1	20.0	20.0	1.50	30	a portion of this area should be glazed off from patient access; Coat hooks for staff	30	6	positive	24	30 - 60	-	-	-	-	-	-
3.1.2.14	Med Prep	1	10.0	10.0	1.50	15	Sink Required to prime IV lines	30	6	positive	24	30 - 60	required	-	-	-	-	-
3.1.2.15	Chart Prep	1	10.0	10.0	1.50	15	Work surface for assembling and review charts. Chart Storage	30	6	positive	24	30 - 60	-	-	-	-	-	-
	<b>Sub-Total</b>			<b>178.5</b>		<b>268</b>												
	<b>Clinical Support Areas</b>																	
3.1.2.16	Office, Clinical Nurse Leader	1	9.0	9.0	1.30	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.2.17	Teaching Room	1	12.0	12.0	1.30	16	5-6 people			equal	24	30 - 60	-					
3.1.2.18	Emergency Response Cart	1	0.5	0.5	1.30	1	in the main circulation corridor	30	3	positive	24	30 - 60	-	-	-	-	-	-
3.1.2.19	Nourishment Centre	1	4.5	4.5	1.30	6		30	9	negative	24	30 - 60	required	-	-	-	-	-
3.1.2.20	Clean Supply Holding Room	1	11.0	11.0	1.50	17		30	6	positive	24	30 - 60	-	-	-	-	-	-
3.1.2.21	Soiled Utility Room	1	7.5	7.5	1.50	12		30	10	negative	24	30 - 60	required	-	-	-	-	-
3.1.2.22	Housekeeping Closet	1	5.0	5.0	1.30	7		30	10	negative	24	30 - 60	required	-	-	-	-	-
3.1.2.23	Staff Purse Lockers	1	0.5	0.5	1.30	1		30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.2.24	Washroom, Staff	1	2.5	2.5	1.30	3		30	12	negative	24	30 - 60	required	-	-	-	-	-
	<b>Sub-Total</b>			<b>52.5</b>		<b>75</b>												
	<b>TOTAL</b>		<b>NSM</b>	<b>265</b>	<b>CGSM</b>	<b>390</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical Gas**

General Clinics																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N20	Gas Scavenging
	<b>Reception/Admitting</b>																	
3.1.3.1	Cosmetic Counseling	1	14.0	14.0	1.45	20	Area for Wig fits and other programs; should have a retail expression	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.2	Stretcher Holding Area	2	4.0	8.0	1.30	11		30	6	positive	24	30 - 60	-	-	-	-	-	-
3.1.3.3	Storage Alcove, Equipment	1	9.5	9.5	1.30	12		30	3	positive	24	30 - 60	-	-	-	-	-	-
	<b>Sub-Total</b>			<b>31.5</b>		<b>43</b>												
	<b>Clinic Area</b>																	
3.1.3.4	Workstation, Unit Clerk	2	10.0	20.0	1.50	30	1 for each pod. Will have responsibility of greeting patients	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.5	Health Unit Clerk	1	5.5	5.5	1.30	7	needs to be in a private and quiet area	30	6	positive	24	30 - 60	-	-	-	-	-	-
3.1.3.6	Waiting Area	1	36.0	36.0	1.30	47	seating for approximately 24 patients/family/visitors	30	9	negative	24	30 - 60	-	-	-	-	-	-
3.1.3.7	Coat Closet	2	1.0	2.0	1.30	3	Storage of Outwear for Patients and Family	30	3	positive	24	30 - 60	-	-	-	-	-	-
3.1.3.8	Inter Professional Team Room	2	20	40	1.30	52	5-6 workstations; includes dictation cubicle; includes purse locker area; must have coat closet for outwear storage	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.9	Weight Scale Alcove	2	2.0	4.0	1.50	6	one at the entrance of each pod in a private area	30	3	positive	24	30 - 60	-	-	-	-	-	-
3.1.3.10	Emergency Response Cart	1	0.5	0.5	1.30	1	Easily accessible from circulation corridors for the code team	30	3	positive	24	30 - 60	-	-	-	-	-	-
3.1.3.11	Telehealth Exam Area	2	5.0	10.0	1.50	15	Area for Oncologist to hold clinics with patients in remote areas; one in each pod;	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.12	Exam Room	8	11.0	88.0	1.50	132	Hand-wash sink; computer workstation; exam table; 2 guest chairs;	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.13	Exam Room, Stretcher	3	13.0	39.0	1.50	59	needs to be large enough to accommodate a stretcher, hand wash sink; computer workstation; 2 guest chairs;	30	6	equal	24	30 - 60	-	1	1	1	-	-
3.1.3.14	ENT Exam Room	1	14.0	14.0	1.5	21	Equipped with an ENT chair place in the room to allow for access behind the patient in the chair; should be equipped with medical gases; sink; storage; charting area; computer workstation; 2 guest chairs;	30	6	equal	24	30 - 60	-	1	1	1	-	-
3.1.3.15	Not used																	
3.1.3.16	Not used																	
3.1.3.17	Not used																	
3.1.3.18	Patient Counseling Area	2	11.0	22.0	1.30	29	1 in each pod; should provide seating for 4-6 people	30	6	equal	24	30 - 60	-	-	-	-	-	-

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical Gas**

General Clinics																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N20	Gas Scavenging
3.1.3.19	Procedure Rooms	1	15.0	15.0	1.50	23	Med Gases Required	30	12	positive	21-24	30 - 60	required	1	1	1	-	-
3.1.3.20	Washroom, Patient, Wheelchair Access	2	4.5	9.0	1.50	14	Needs to meet accessibility standards	30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.3.21	Washroom, Staff	2	2.5	5.0	1.30	7		30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.3.22	Scope Cleaning Room	1	10.0	10.0	1.50	15	Must meet specific IP&C requirements for equipment and cleaning procedures and flow	30	9	negative	24	30 - 60	required	-	1	1	-	-
	<b>Sub-Total</b>			<b>320</b>		<b>461</b>												
	<b>Shared Support Areas</b>																	
3.1.3.23	Office, Clinical Nurse Educator	1	9.0	9.0	1.30	12	Located on the second floor	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.24	Clinical/Conference Room	1	20.0	20.0	1.30	26	Must be equipped with telehealth capability	30	10	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.25	Clinical Supervisor	1	9.0	9.0	1.30	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.26	Pain and Symptom Management Nurse	1	9.0	9.0	1.30	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.27	Office, Telephone Care Management	1	9.0	9.0	1.30	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.3.28	Not used																	
3.1.3.29	Chart Prep	1	16.0	16.0	1.50	24	work surface for the preparation of charts and chart storage	30	6	positive	24	30 - 60	-	-	-	-	-	-
3.1.3.30	Photocopier Alcove	1	7.5	7.5	1.30	10	Share with RT	30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.3.31	Clean supply holding Room	1	15.0	15.0	1.30	20	shared between pods	30	6	positive	24	30 - 60	-	-	-	-	-	-
3.1.3.32	Soiled Utility Room	1	9.0	9.0	1.30	12	shared between pods	30	10	negative	24	30 - 60	required	-	-	-	-	-
3.1.3.33	Housekeeping Closet	1	5.0	5.0	1.30	7	shared between pods	30	10	negative	24	30 - 60	required	-	-	-	-	-
	<b>Sub-Total</b>			<b>108.5</b>		<b>147</b>												
	<b>TOTAL</b>		<b>NSM</b>	<b>460</b>	<b>CGSM</b>	<b>651</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Pharmacy																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
	<b>Dispensing Area</b>																	
3.1.4.1	Waiting Area	1	8.0	0		0	shared with STU	-	-	-	-	-	-	-	-	-	-	-
3.1.4.2	Counseling Area	1	12.0	12	1.3	16	access from waiting area; direct access to Oral Dispensary	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.4.3	Oral Prescription Dispensary	1	20.0	20.0	1.5	30	2 workstations, and counter open to public. Must be secure after hours	30	6	positive	24	30 - 60	-	-	-	-	-	-
	<b>Sub-Total</b>			<b>32</b>		<b>46</b>												
	<b>Preparation Area</b>																	
3.1.4.4	IV Pre-Preparation Area	1	11.0	11.0	1.5	17		30	10	positive	24	30 - 60	-	-	-	-	-	-
3.1.4.5	IV Preparation Area	1	15.0	15.0	1.5	23	Must have appropriate ventilation and pressurization for the preparation of toxic materials. Must have hood vent in the room; requires an airlock pass through to IV Dispensing. Must be configured so that the BSCs are installed side by side, Sufficient space to hold 4 lakeside carts and counterspace must be adjacent to the IV Prep Area and provide appropriate ventilation and pressurization to achieve air separation between the IV Prep Area and IV Dispensing; eye wash station. 5x5ft stainless steel supplies cart for drug storage, fridge, freezer and dishwasher. Bench to sit while donning PPE.. Required a hand-free stainless steel scrub sink.	30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.4.6	Ante Room/Storage Area	1	17.0	17.0	1.5	26	needs to be in close proximate to drug handling - in the Ante Room Raised shower area so that water is contained. No drainage due to infection control.	30	9	positive	24	30 - 60	-	-	-	-	-	-
3.1.4.7	decontamination shower	1	2.0	2.0	1.5	3	includes Remote Dispensing work station; has an opening to the STU for dispensing	30	3	positive	24	30 - 60	-	-	-	-	-	-
3.1.4.8	IV Dispensing	1	7.5	7.5	1.5	11		30	6	positive	24	30 - 60	required	-	-	-	-	-
	<b>Sub-Total</b>			<b>52.5</b>		<b>80</b>												
	<b>Support Areas</b>																	
3.1.4.9	Office, Pharmacist	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.4.10	Reference/Work Area	1	25.0	25.0	1.3	33	5 workstations	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.4.11	Storage, Drug Kits, Clinical Trials	1	9.0	9.0	1.3	12	Requires a Fridge and Freezer counter and sink. This can be reduced to 9sqm so that we can increase storage area required above.	30	6	equal	24	30 - 60	required	-	-	-	-	-
3.1.4.12	Staff Washroom	1	3.0	3.0	1.3	4	Adjacent to the Locker room; must have clothing hooks and shelf to facilitate staff changing	30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.4.13	Locker Alcove, Staff	1	10.0	10.0	1.3	13	includes 10 half lockers. And coat storage linen cart and dirty linen bin	30	3	negative	24	30 - 60	required	-	-	-	-	-
3.1.4.14	Receiving Area	1	10.0	10.0	1.3	13	must have holding area for cardboard recycling	30	6	positive	24	30 - 60	-	-	-	-	-	-
	<b>Sub-Total</b>			<b>66.0</b>		<b>87</b>												
	<b>TOTAL</b>		<b>NSM</b>	<b>150.5</b>	<b>CGSM</b>	<b>213</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

<b>Clinical Trials</b>																		
Rm Code	Space	Area Requirements					Remarks	HVAC					Medical gas per unit					
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N20	Gas Scavenging
3.1.5.1	Workstation, Data Manager	1	6.5	6.5	1.3	8	area closed to public; security access required	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.5.2	Work Area, Nurse Coordinator	2	5.5	11.0	1.3	14	area closed to public; security access required	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.5.3	Data Coordinators	2	5.5	11.0	1.3	14	area closed to public; security access required	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.5.4	Workstation, Unit Clerk	1	5.5	5.5	1.3	7	area open to the public	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.5.5	Storage, Files	3	3.0	9.0	1.3	12	area closed to public; security access required	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.5.6	Monitor Room	1	11.0	11.0	1.3	14	workstation required	30	6	equal	24	30 - 60	-	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>54.0</b>	<b>CGSM</b>	<b>69</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

<b>Cancer Rehabilitation</b>																		
Rm Code	Space	Area Requirements					Remarks	HVAC					Medical gas per unit					
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
3.1.6.1	Waiting Area	1	6.0	6.0	1.3	8	Shared with Population Information	30	9	negative	24	30 - 60	-	-	-	-	-	-
3.1.6.2	Workstation, Secretary	1	5.5	5.5	1.3	7	Needs to be adjacent to waiting area	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.6.3	Office Work Room/Storage	1	10.0	10.0	1.3	13	Photocopier/Print/Fax in this room Shared with Population Information	30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.6.4	Office, Team Leader	2	12.0	24.0	1.3	30	Patient counseling in office- 1 Dietary, 1 PFC	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.6.5	Office, Social Workers	2	11.0	22.0	1.3	29	Patient counseling in office	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.6.6	Office, Dietitians	1	11.0	11.0	1.3	14	Patient counseling in office	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.6.7	Office, Psychiatrist	2	12.0	24.0	1.3	31	Patient counseling in office. Workstation configuration must allow Psychiatrist have access to door	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.6.8	Counseling Room	1	11.0	11.0	1.3	14	To be shared with Population Information	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.6.9	Multi-purpose room	1	30.0	30.0	1.3	39	Needs to have Video conference capability - to be a large open room with counter and sink	30	10	equal	24	30 - 60	-	-	-	-	-	-
3.1.6.10	Storage, Equipment	1	10.0	10.0	1.3	13	Adjacent to Multi-purpose room for storage of various group equipment (mats, blankets, bolsters)	30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.6.11	Washroom, Patient/Public, Wheelchair access	2	4.5	9.0	1.3	12	Must meet Accessibility Guidelines	30	12	negative	24	30 - 60	required	-	-	-	-	-
<b>TOTAL</b>			<b>NSM</b>	<b>162.5</b>	<b>CGSM</b>	<b>210</b>												



**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Professional Staff Offices																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
	<b>Professional Staff Office Area</b>																	
3.1.7.1	Medical Physics Leader	1	12.0	12.0	1.3	16		30	6	equal	24	30 - 60	-	-	-	-	-	
3.1.7.2	Physicist Office	2	11.0	22.0	1.3	29		30	6	equal	24	30 - 60	-	-	-	-	-	
3.1.7.3	GPO	1	13.0	13.0	1.3	17	Shared office (2 people)	30	6	equal	24	30 - 60	-	-	-	-	-	
3.1.7.4	Not Used																	
3.1.7.5	Medical Secretary	4	5.5	22.0	1.3	29	Must to adjacent to Professional Offices	30	6	equal	24	30 - 60	-	-	-	-	-	
3.1.7.6	Office, Professional	6	11.0	66.0	1.3	86	3 Rad Oncs, 3 Systemic	30	6	equal	24	30 - 60	-	-	-	-	-	
3.1.7.7	Washroom, Staff	2	2.5	0	1.3	0	Shared with Admin Offices	-	-	-	-	-	-	-	-	-	-	
3.1.7.8	Photocopy/Print Room	1	9.0	0	1.3	0	Shared with Admin Offices	-	-	-	-	-	-	-	-	-	-	
	<b>TOTAL</b>		<b>NSM</b>	<b>135</b>	<b>CGSM</b>	<b>177</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Administration Offices																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N20	Gas Scavenging
	<b>Cancer Centre Administration</b>																	
3.1.8.0	Waiting Room	1	7.0	7.0	1.3	9		30	9	negative	24	30 - 60	-	-	-	-	-	-
3.1.8.1	Workroom/Storage	1	24.5	24.5	1.3	32	including Photocopier	30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.8.2	Director Operations	2	11.0	22.0	1.3	29		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.8.3	RT Program Secretary Workstation, Executive Assistant	1	5.5	5.5	1.3	7	Moved from Prof Staff offices	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.8.4	Office, Finance Clerk	2	6.0	12.0	1.3	16		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.8.5	Flex Offices	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.8.6	Flex Offices	2	9.0	18.0	1.3	23	to be shared by visiting administration	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.8.7	Flex Workstations	2	5.5	11.0	1.3	14	to be shared by visiting administration	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.8.9	ST Program Secretary	1	5.5	5.5	1.3	7		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.8.10	Housekeeping Room	1	5.0	5.0	1.3	7		30	10	negative	24	30 - 60	required	-	-	-	-	-
3.1.8.11	Not used																	
3.1.8.12	Coffee Station	1	4.0	4.0	1.3	5	To be have a microwave, undercont fridge (x2), plumbed coffee, sink, storage cupboards	30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.8.13	Staff Washroom	2	2.5	5.0	1.3	7		30	12	negative	24	30 - 60	required	-	-	-	-	-
	<b>Inter-Professional Research Cluster</b>																	
3.1.8.14	Workstations	3	5.5	16.5	1.3	21	work space for students	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.8.15	Office, bio-statistician	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>154.0</b>	<b>CGSM</b>	<b>201</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Conference Facilities																	
Rm Code	Space	Area Requirements					Remarks	HVAC					Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N20
	Large Multi-purpose Room	1	50.0	50.0	1.3	65	(25-35 people); telehealth capability	30	10	equal	24	30 - 60	-	-	-	-	-
	Seminar Room	2	20.0	40.0	1.3	52	(12-15 people); telehealth capability	30	10	equal	24	30 - 60	-	-	-	-	-
	Meeting Room	2	15.0	30.0	1.3	39	(6-8 people); telehealth capability	30	10	equal	24	30 - 60	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>120.0</b>	<b>CGSM</b>	<b>156</b>											

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Health Information Services																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
3.1.9.1	New Patient Referrals	2	5.5	11.0	1.3	14		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.9.2	Booking Clerk	1	5.5	5.5	1.3	7		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.9.3	Processing Area	1	25.0	25.0	1.3	33	includes 4 workstations and chart sorting area	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.9.4	Chart Storage	1	35.0	35.0	1.3	46	High Density Shelving to be used. 5 shelves/unit 2500 linear feet required	30	3	equal	24	30 - 60	-	-	-	-	-	-
3.1.9.5	Coordinator's Office	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.9.6	Chart Receiving	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.9.7	Photocopier/Printer Alcove	1	7.5	7.5	1.3	10		30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.9.8	HRA - ROI	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.9.9	(HRAs)	1	13.0	13.0	1.3	17	Shared office for 2 HRAs	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.9.10	ROI - Reception	1	5.5	5.5	1.3	7		30	6	equal	24	30 - 60	-	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>129.5</b>	<b>CGSM</b>	<b>170</b>												

**Appendix 3B Mechanical HVAV (space design comfort, ventilation and pressurization) and Medical gas**

Population Oncology																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N20	Gas Scavenging
<b>Genetic Secretary Cancer Program</b>																		
3.1.10.1	Office for Genetics Counsellor	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.10.2	Workstation - Support Staff	1	5.5	5.5	1.3	7		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.10.3	Counseling Room	1	11.0	0	1.3	0	Shared with Cancer Rehab	-	-	-	-	-	-	-	-	-	-	-
<b>Surveillance &amp; Outcomes Support</b>																		
3.1.10.4	Office for Surveillance coordinator	1	9.0	9.0	1.3	12	Located in the Administration component	30	6	equal	24	30 - 60	-	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>23.5</b>	<b>CGSM</b>	<b>31</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Prevention																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
3.1.11.1	Office, Director	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.11.2	Workstations (assistant, CPC, Students)	4	5.5	22.0	1.3	29		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.11.3	Active inventory	1	10.0	10.0	1.3	13	For Literature and Educaitonal Information. Will need access to bulk staging	30	3	equal	24	30 - 60	-	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>41.0</b>	<b>CGSM</b>	<b>54</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Staff Facilities																		
Rm Code	Space	Area Requirements					Remarks	HVAC					Medical gas per unit					
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
3.1.12.1	Staff Break Room	1	40.0	40.0	1.3	52	To have Kitchenette; fridge, sink, microwave, access to exterior view	30	9	equal	24	30 - 60	-	-	-	-	-	-
3.1.12.2	Locker/Change Room, Female	1	20.0	20.0	1.3	26	half lockers; boot storage	30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.12.3	Washroom, Female	1	15.0	15.0	1.3	20		30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.12.4	Locker/Change Room, Male	1	10.0	10.0	1.3	13		30	6	negative	24	30 - 60	required	-	-	-	-	-
3.1.12.5	Washroom, Male	1	10.0	10.0	1.3	13	half lockers; boot storage	30	12	negative	24	30 - 60	required	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>95.0</b>	<b>CGSM</b>	<b>124</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Volunteer Services																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
3.1.13.1	Volunteer Lounge	1	12.0	12.0	1.3	16	Includes kitchenette, computer terminal and locker storage	30	9	equal	24	30 - 60	-	-	-	-	-	-
3.1.13.2	Washroom	1	4.5	4.5	1.3	6		30	12	negative	24	30 - 60	required	-	-	-	-	-
3.1.13.3	Office, Volunteer Services	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>25.5</b>	<b>CGSM</b>	<b>34</b>												



**Appendix 3B Mechanical HVAV (space design comfort, ventilation and pressurization) and Medical gas**

Cancer Foundation																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
3.1.14.1	Coordinator Office	1	9.0	9.0	1.3	12		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.14.2	Workstation	1	5.5	5.5	1.3	7		30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.14.3	Reception/Waiting area	1	7.5	7.5	1.3	10	literature display	30	6	equal	24	30 - 60	-	-	-	-	-	-
3.1.14.4	Storage - Media & literature	1	5.0	5.0	1.3	7		30	3	equal	24	30 - 60	-	-	-	-	-	-
3.1.14.5	Donor Wall						located in main lobby	-	-	-	-	-	-	-	-	-	-	-
3.1.14.6	Printer/Photocopier Alcove	1	2.0	2.0	1.3	3		30	6	negative	24	30 - 60	required	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>29.0</b>	<b>CGSM</b>	<b>39</b>												

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Building Support																	
Rm Code	Space	Area Requirements					Remarks	HVAC					Medical gas per unit				
		Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O
<b>Public Spaces</b>																	
3.1.15.1	Main Reception/Information	1	12.0	12.0	1.3	16	Provide pay phones in the Facility's entry lobby	30	6	equal	24	30 - 60	-	-	-	-	-
3.1.15.2	Public Waiting	1	15.0	15.0	1.3	20	Waiting for 10 people; in proximity to entrance	30	9	negative	24	30 - 60	-	-	-	-	-
3.1.15.3	Venting Area	1	5.0	5.0	1.3	7		30	6	negative	24	30 - 60	-	-	-	-	-
3.1.15.4	Public Washroom (Female)	1	4.5	4.5	1.3	6	Main Lobby	30	12	negative	24	30 - 60	required	-	-	-	-
3.1.15.5	Public Washroom (Male)	1	4.5	4.5	1.3	6	Main Lobby	30	12	negative	24	30 - 60	required	-	-	-	-
3.1.15.6	Housekeeping Room	1	5.0	5.0	1.3	7		30	10	negative	24	30 - 60	required	-	-	-	-
3.1.15.7	Emergency Supply Cabinet Alcove	6	1.0	6.0	1.3	8	Located in an accessible area. Recessed out of circulation	30	6	equal	24	30 - 60	-	-	-	-	-
3.1.15.8	Spiritual Care Room	1	12.0	12.0	1.3	16		30	6	equal	24	30 - 60	required	-	-	-	-
	<b>Sub-Total</b>			<b>64.0</b>		<b>86</b>											
<b>IT Requirements</b>																	
3.1.15.9	Network Service Provider Access Room	1	9.0	9.0	1.3	12	room for termination of network and telphony service accessible by ilec.	30	6	equal	20	30 - 60	-	-	-	-	-
3.1.15.10	Server/Core Network	1	18.0	18.0	1.3	23	3-telecom racks required; 4-server racks required; Fibre distribution between racks required; Fibre distribution from telecom rack to each edge network closet.	-	6	equal	20	30 - 60	-	-	-	-	-
3.1.15.11	Workroom	1	8.0	8.0	1.3	10	Millwork bench required for equipment assemble and repairs	30	6	equal	20	30 - 60	-	-	-	-	-
3.1.15.11 b	Storage Area	1	10.0	10.0	1.3	13		-	6	equal	20	30 - 60	-	-	-	-	-
3.1.15.12	Edge Communciation Closet	4	9.0	36.0	1.3	47	3.5mx3.5m room per floor per 150m linear distance; power to be provided from redundant UPS feed; cooling provided from A/C in HVAC/Power Services	-	3	equal	20	30 - 60	-	-	-	-	-
	<b>Sub-Total</b>			<b>81.0</b>		<b>105</b>											
	<b>TOTAL</b>		<b>NSM</b>	<b>145.0</b>	<b>CGSM</b>	<b>191</b>											

**Appendix 3B Mechanical HVAC (space design comfort, ventilation and pressurization) and Medical gas**

Resource Center																		
Rm Code	Space	Area Requirements					Remarks	HVAC						Medical gas per unit				
	CIC	Units	Nsm/unit	NSM	Planning Factor	CGSM		Minimum outdoor air percentage	Minimum total air changes per hour	Relative pressurization	Temperature °C	Relative Humidity %	Exhaust	Oxygen	Vacuum	Air	N2O	Gas Scavenging
3.1.15.13	Public Use Computer Workstation	2	2.5	5.0	1.3	7		30	9	equal	24	30 - 60	-	-	-	-	-	-
3.1.15.14	Literature Storage	1	10.0	10.0	1.3	13		30	3	equal	24	30 - 60	-	-	-	-	-	-
	<b>TOTAL</b>		<b>NSM</b>	<b>15.0</b>	<b>CGSM</b>	<b>20</b>												