

ROOM		FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS	
NO.	NAME	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C		
G100	Vestibule	C	PCT EM	PCT- 1/6 EM-1	GWB	PCT	PCT- 6	GL GWB	EP	EP-19	GWB	APL EP	APL-1 EP-19	GL GWB	EP	EP-19	GL GWB	EP	EP-19	3000	GWB	P	P-7	Note 5, 25, 32, 43, 70	
G101	Waiting	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	CR EP	ST-1 EP-9	GWB	APL EP	APL-1 EP-19	GL	-	-	GWB	EP	EP-9	3000 VARIES	GWB EXPS	P P	P-1 P-7	Note 1, 5, 27, 32, 33, 44, 47, 70	
G102	Public WR	C	RSF	RSF-4	MGB	SCB - RSF	RSF-4	MGB	EP	EP-1	MGB	EP	EP-4	MGB	EP	EP-1	MGB	EP	EP-1	2700	GWB	EP	EP-12	Note 2	
G103	Service Centre	C	CPT	CPT-2	GWB	MPL	ST-1	-	-	-	GL GWB	EP	EP-19	GWB	EP	EP-19	GWB	EP	EP-9	3000 3000	ACT GWB	ACT P	ACT-2 P-1	Note 4, 14, 70	
G104	Soft Corridor	C	CPT	CPT-1	GWB	MPL	ST-1	GL GWB	EP	EP-14	GL	-	-	GWB	EP	EP-14	GWB	EP	EP-1	3600	GWB	P	P-7	Note 32	
G105	Soft Interview	C	CPT	CPT-1	GWB	MPL	ST-1	GWB	APL CR P	APL-2 ST-1 P-8	GWB	APL CR P	APL-2 ST-1 P-8	GWB	CR P	ST-1 P-8	GL GWB	P	P-8	3200 3000	ACT GWB	ACT P	ACT-3 P-6	Note 8, 48	
G106	Soft Interview	C	CPT	CPT-1	GWB	MPL	ST-1	GWB	APL CR P	APL-3 ST-1 P-15	GWB	APL CR P	APL-3 ST-1 P-15	GWB	CR P	ST-1 P-15	GL GWB	P	P-15	3200 3000	ACT GWB	ACT P	ACT-3 P-6	Note 8, 48	
G107	Corridor	C	CPT	CPT-1	GWB	RCB	RCB- 1	GWB	EP	EP-1	GWB	EP	EP-1	GWB	EP	EP-14	GWB	EP	EP-1	3000	ACT		ACT-1	Note 27, 32, 33	
G109	Closet	C	RSF	RSF-4	GWB	RCB	RCB- 1	GWB	EP	EP-14	GWB	EP	EP-14	GWB	EP	EP-14	GWB	EP	EP-14	2700	ACT		ACT-1	Note 46, 49	
G110	Storage	C	RSF	RSF-4	GWB	RCB	RCB- 1	GWB	P	P-8	GWB	P	P-8	GWB	P	P-8	GWB	P	P-8	2700	ACT		ACT-1		
G112	Computer	C	RF	RF-2	GWB	RCB	RCB- 1	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	2700	ACT		ACT-1		
G113	Clerk	C	CPT	CPT-1	GWB	RCB	RCB- 1	GWB	P	P-8	GWB	P	P-8	GL	-	-	GL GWB	P	P-8	3000	ACT		ACT-1		
G115	Clerk	C	CPT	CPT-1	GWB	RCB	RCB- 1	GWB	P	P-8	GWB	P	P-8	GL	-	-	GL GWB	P	P-8	3000	ACT		ACT-1		
G116	Inspector	C	CPT	CPT-1	GWB	RCB	RCB- 1	GWB	VWC	VWC- 4	GWB	VWC	VWC- 4	GL	-	-	GL GWB	VWC	VWC- 4	3000	ACT		ACT-1		
G117	Meeting Room	C	CPT	CPT-1	GWB	RCB	RCB- 1	GWB	VWC	VWC- 4	GWB	VWC	VWC- 4	GL	-	-	GL GWB	VWC	VWC- 4	3000	ACT		ACT-1		
G118	Staff Sgt.	C	CPT	CPT-1	GWB	RCB	RCB- 1	GWB	VWC	VWC- 4	GWB	VWC	VWC- 4	GL	-	-	GL GWB	VWC	VWC- 4	3000	ACT		ACT-1		
G119	Vestibule	C	PCT EM	PCT- 1/6 EM-1	GWB	CBL	PCT	PCT- 6	GWB	EP	EP-12	GWB	EP	EP-12	GL GWB	EP	EP-12	GL GWB	EP	EP-12	3050	GWB	P	P-7	Note 25, 32, 43
G120	Corridor	C	PCT	PCT- 1	GWB	PCT	PCT- 1	GWB	EP	EP-1	GWB	EP	EP-14	-	-	-	GL	-	-	3000	ACT		ACT-1	Note 10, 66	

ROOM		FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS
NO.	NAME	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C	
G121	Quiet Room	C	CPT	CPT-1	GWB	RCB	RCB-1	GWB	VWC	VWC-3	GWB	VWC	VWC-3	GWB	VWC	VWC-3	GWB	VWC	VWC-3	2900 2700	ACT GWB	ACT P	ACT-3 P-6	Note 6, 12, 33
G122	Janitor	C	EP	EP-10	CBL	RCB	RCB-2	CBL	EP	EP-1	CBL	EP	EP-1	CBL	EP	EP-1	CBL	EP	EP-1	VARIABLES	EXPS	P	P-7	Note 33
G123	Electrical	C	EP	EP-10	GWB	RCB	RCB-2	GWB	EP	EP-1	GWB	EP	EP-1	GWB	EP	EP-1	GWB	EP	EP-1	VARIABLES	EXPS	P	P-7	Note 33
G124	First Aid	C	RSF	RSF-1	GWB CBL	SCB - RSF	RSF-1	CBL	P	P-1	CBL	P	P-1	GWB	P	P-1	CBL	EP	EP-10	2700	ACT		ACT-1	Note 15, 33, 51
G125	Seasonal Clothing	C	RSF	RSF-1	GWB	RCB	RCB-2	GWB	P	P-1	GWB	P	P-1	C	P	P-1	GWB	P	P-1	3000	ACT		ACT-1	Note 16, 33
G127	Corridor	C	RF	RF-1	GWB	RCB	RCB-3	GWB	P	P-1	GWB	P	P-1	GWB	P	P-1	GWB	P	P-1	2700	GWB	P	P-7	Note 17, 33
G128	Corridor	C	RF	RF-1	GWB	RCB	RCB-3	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	2500	GWB	P	P-7	Note 18, 32
G129	Men's Washroom	C	PCT	PCT - 2	GWB/ CBL	PCT	PCT - 3	CB	PCT	PCT - 3	GWB	PCT MR	PCT - 3 GT-1	GWB	PCT	PCT - 3	GWB	PCT	PCT - 3	2500 3000	GWB ACT	P ACT	P ACT-1	Note 19, 32, 45, 68
G130	Men's Lockers	C	RSF	RSF-4	GWB CBL	RCB	RCB-3	GWB CBL	P	P-1/ P-16	GWB	P	P-1	CBL	P	P-1	GWB CBL	P	P-1	VARIABLES	EXPS	P	P-7	Note 21, 27, 32
G130A	Men's Showers	C	PCT	PCT - 4	GWB CBL	PCT	PCT - 5	GWB CBL	PCT	PCT - 5	CB	PCT	PCT - 5	CB	PCT	PCT - 5	CB	PCT	PCT - 5	3000	MGB	EP	EP-7	Note 7, 32, 33, 45
G131	Exercise Room	C	RF	RF-1	GWB CBL	RCB	RCB-3	GWB GL	P	P-5	GL	-	-	GWB CBL	APL P	APL-1 P-1	GWB	APL MR P	APL-1 - P-1	VARIABLES	EXPS	P	P-7	Note 21, 24, 33
G132	Women's Lockers	C	RSF	RSF-4	GWB CBL	RCB	RCB-3	GWB	P	P-1	GWB	P	P-1	GWB	P	P-1	GWB	P	P-16	2500 3000 VARIABLES	GWB ACT EXPS	P - P	P-7 ACT-1 P-7	Note 32
G132A	Women's Showers	C	PCT	PCT - 4	CB CBL	PCT	PCT - 5	CB	PCT	PCT - 5	CB	PCT	PCT - 5	CBL	PCT	PCT - 5	CBL	PCT	PCT - 5	2700	MGB	EP	EP-7	Note 7, 32, 33, 45
G133	Corridor	C	RF	RF-1	GWB	RCB	RCB-3	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	2700	GWB	P	P-7	Note 17, 33
G134A	Corridor	C	RF	RF-1	GWB	RCB	RCB-3	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	2700	GWB	P	P-7	Note 32

ROOM		FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS
NO.	NAME	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C	
G134	Women's Washroom	C	PCT	PCT - 2	CB CBL GWB	PCT	PCT - 3	CB	PCT	PCT - 3	GWB	PCT GT MR	PCT - 3 GT-1 -	CBL	PCT	PCT - 3	GWB	PCT	PCT - 3	2500 3000	GWB ACT	P ACT	P 7 ACT-1	Note 3, 23, 32, 45, 68
G135	Stair	C	HDR RSF	- RSF-1	CBL	RCB	RCB- 2	CBL	P	P-8	CBL	P	P-8	CBL	P	P-8	CBL	P	P-8	VARIABLES	EXPS	P	P-7	Note 26, 33
G136	Corridor	C	PCT	PCT - 1	CBL GWB	PCT	PCT - 1	CBL	EP	EP-1 PLAM- 2A	GWB CBL	EP	EP- 1/14	GWB CBL	EP	EP- 1/14	GWB CBL	EP	EP-14	3000	ACT		ACT-1	Note 10, 27, 32, 66
G137	Lunch Room	C	RSF	RSF- 1,2, 3	GWB	RCB	RCB- 2	GWB	EP	EP- 1/4	GL GWB	EP	EP-1	GWB	EP	EP-1	GWB	EP	EP- 1/4	2750 3000 3300 3500 3600	GWB GWB ACT GWB GWB	EP EP ACT P P	EP -1 EP-1 ACT-2 P-7 P-7	Note 9, 27, 33
G137A	Kitchenette	C	RSF	RSF- 2,3	GWB CBL	RCB	RCB- 2	GWB	EP	EP-1	GWB	EP	EP-1	GWB	EP	EP- 1/4	CBL	EP	EP- 1/4	2750	GWB	P	P-3	Note 13, 27
G138	Vestibule	C	PCT EM	PCT-6 EM-1	GWB CBL	PCT	PCT - 6	CBL	EP	EP-12	GWB	EP	EP-12	GL GWB	EP	EP-12	GL GWB	EP	EP-12	3050	GWB	P	P-7	Note 25, 43
G139	Coat Alcove	C	PCT	PCT - 1	CBL	RCB PCT	RCB-2 PCT-1	CBL	EP	EP-10	CBL	EP	EP-10	CBL	EP	EP-10	CBL	EP	EP-10	3000	ACT		ACT-1	Note 11, 27, 52, 53
G140	Cubbies	C	PCT	PCT - 1	CBL	RCB PCT	RCB-2 PCT-1	CBL	EP	EP-10	CBL	EP	EP-10	CBL	EP	EP-10	CBL	EP	EP-10	3000	ACT		ACT-1	Note 27, 28, 32, 53
G141	Officer Decontam.	C	EF	EF-1	CBL	SCB EF	EF-1	CBL	EW	EW-1	CBL	EW	EW-1	CBL	EW	EW-1	CBL	EW	EW-1	3000	MGB	EW	EW-1	Note 57, 60
G141A	Officer Decontam.	C	EF	EF-1	CBL	SCB EF	EF-1	CBL	EW	EW-1	CBL	EW	EW-1	CBL	EW	EW-1	CBL	EW	EW-1	3000	MGB	EW	EW-1	Note 29, 60
G141B	Officer Decontam.	C	EF	EF-1	CBL	SCB EF	EF-1	CBL	EW	EW-1	CBL	EW	EW-1	CBL	EW	EW-1	CBL	EW	EW-1	3000	MGB	EW	EW-1	Note 60
G141C	Officer Decontam.	C	EF	EF-1	CBL	SCB EF	EF-1	CBL	EW	EW-1	CBL	EW	EW-1	CBL	EW	EW-1	CBL	EW	EW-1	3000	MGB	EW	EW-1	Note 33, 60
G142	Sallyport	C	EF	EF-3	CBL	EF	EF-4	GWB CBL	EP	EP-1	GWB CBL	EP	EP-1	-	-	-	GWB CBL	EP	EP-1	VARIABLES	EXPS	P	P-7	Note 37, 54, 55
G143	Emerg. Eye Wash	C	EF	EF-3	CBL	EF	EF-4	CBL	EP	EP-1	CBL	EP	EP-1	-	-	-	CBL	EP	EP-1	2700	GWB	P	P-7	Note 37, 55
G144	Equip. Decont.	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	3000	GWB	P	P-7	Note 30, 31, 57

ROOM		FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS
NO.	NAME	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C	
G146	WR	C	EF	EF-3	CBL	EF	EF-4	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	2400	GWB	EP	EP-7	
G147	WR	C	EF	EF-3	CBL	EF	EF-4	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	2400	GWB	EP	EP-7	
G148	Broom	C	EF	EF-3	CBL	EF	EF-4	CBL	EP	EP-1	CBL	EP	EP-1	CBL	EP	EP-1	CBL	EP	EP-1	2400	GWB	P	P-7	Note 58
G149	Compressor	C	EF	EF-3	CBL	EF	EF-4	-	-	-	GWB CBL	EP	EP-1	GWB CBL	EP	EP-1	-	-	-	VARIES	EXPS	P	P-7	
G150	Garage	C	EF	EF-3	CBL	EF	EF-4	GWB CBL	EP	EP-1	GWB CBL	EP	EP-1	GWB CBL	EP	EP-1	-	-	-	VARIES	EXPS	P	P-7	Note 54, 59
G151	Auto Sup./Work Ct.	C	EF	EF-3	CBL	EF	EF-4	-	-	-	-	-	-	GWB CBL	EP	EP-1	-	-	-	VARIES	EXPS	P	P-7	
G152	Wash Station	C	EF	EF-3	CBL	EF	EF-4	GWB CBL	EP	EP-1	-	-	-	GWB CBL	EP	EP-1	-	-	-	VARIES	EXPS	P	P-7	
G154	Evid. Stor. Large	C	EF	EF-3	CBL	EF	EF-4	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	3200	GWB	P	P-7	
G155	Electrical	C	EF	EF-3	CBL	EF	EF-4	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	2400	GWB	P	P-7	
G156	Archived Storage	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	2700	GWB	P	P-7	Note 30, 57
G157	Evidence Storage	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3000	ACT		ACT-1	Note 30, 57
G158	Vestibule	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3000	GWB	P	P-7	Note 30, 57
G159	Evidence Drying	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	2700	GWB	P	P-7	Note 30, 34, 57
G159A	Evidence Drying	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	CBL	EP	EP-17	2700	GWB	P	P-7	Note 30, 34, 57
G160	Corridor	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	3000	ACT		ACT-4	Note 30, 33
G161	Youth	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 65
G162	Women	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 65
G163	Women	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 65
G164	Janitor	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3000	GWB	EP	EP-7	Note 30
G165	Rowdy	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 35, 65

ROOM		FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS	
NO.	NAME	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C		
G166	Rowdy	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 65	
G167	Rowdy	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 35, 65	
G168	Breath 1	C	EF	EF-2	CBL	GWB SCB EF	EF-2	GWB	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	2700	GWB	EP	EP-7	Note 30, 61, 72	
G169	Breath 2	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-6	GWB	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	2700	GWB	EP	EP-7	Note 30, 61, 72	
G170	Rowdy	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 65	
G171	Rowdy	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 65	
G172	Rowdy	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3500	SCLG- 1	EP	EP-7	Note 30, 65	
G173	WR	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	3000	SCLG- 1	EP	EP-7	Note 30	
G173A	Chair Storage	C	EF	EF-2	CBL	GWB SCB EF	EF-2	GWB	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	3000	GWB	EP	EP-7	Note 30	
G174	Search Alcove	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	3000	ACT		ACT-4	Note 30, 41, 62, 72	
G175	Search Alcove	C	EF	EF-2	CBL	SCB EF	EF-2	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	3000	ACT		ACT-4	Note 30, 41, 62, 72	
G176	Corridor	C	EF	EF-2	CBL	GWB SCB EF	EF-2	GWB CBL	EP	EP-6	CBL	EP	EP-14	CBL	EP	EP-6	CBL	EP	EP-6/14	3000	ACT		ACT-4	Note 27,30, 32, 33, 72	
G176A	Lin.	C	EF	EF-2	CBL	GWB SCB EF	EF-2	CBL	EP	EP-6	GWB	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	3000	GWB	EP	EP-7	Note 30, 63	
G177	Gun Lockers	C	RSF	RSF-4	CBL	GWB CBL	SCB - RSF	RSF-4	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	GWB CBL	EP	EP-6	2700	ACT		ACT-1	Note 2, 33, 64, 73
G178	Property Lockers	C	RSF	RSF-4	CBL	GWB CBL	SCB - RSF	RSF-4	GWB	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	CBL	EP	EP-6	2700	ACT		ACT-1	Note 33, 56
G179	Corridor	C	CPT	CPT-2	CBL	GWB MPL	ST-1	GWB	EP	EP-1/14	GWB	EP	EP-1/14	GWB	EP	EP-1	GWB	EP	EP-1/14	3000 3000	GWB ACT		EP-7 ACT-1	Note 27, 32, 33	
G180	Video Stor. & Recd.	C	RF	RF-2	CBL	GWB RCB	1	GWB	EP	EP-1	GWB	EP	EP-1	GWB	EP	EP-1	GWB	EP	EP-1	3000	ACT		ACT-1		
G181	Video Interview	C	CPT	CPT-2	CBL	GWB MPL	ST-1	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	3000	SCLG- 2		SCLG- 2	Note 65	
G182	Video Interview	C	CPT	CPT-2	CBL	GWB MPL	ST-1	GWB	EP	EP-8	GWB	EP	EP-8	CBL	EP	EP-8	GWB	EP	EP-8	3000	SCLG- 2		SCLG- 2	Note 65	
G182A	WR	C	EF	EF-2	CBL	GWB SCB EF	EF-2	GWB	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	CBL	EP	EP-8	3000	GWB	EP	EP-7	Note 30	

ROOM		FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS
NO.	NAME	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C	
G183	Video Interview	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	3000	SCLG-2		SCLG-2	Note 65
G184	Video Interview	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	3000	SCLG-2		SCLG-2	Note 65
G185	Video Interview	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	3000	SCLG-2		SCLG-2	Note 65
G186	Video Viewing	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	3000	ACT		ACT-1	Note 46
G187	Video Interview	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	3000	SCLG-2		SCLG-2	Note 65
G188	Video Viewing	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	3000	ACT		ACT-1	Note 46
G189	Video Interview	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	GWB	EP	EP-8	3000	SCLG-2		SCLG-2	Note 65
G190	Video Viewing	C	CPT	CPT-2	GWB	MPL	ST-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	GWB	APL EP	APL-1 EP-1	3000	ACT		ACT-1	Note 46
G191	North Atrium Corridor	C	PCT	PCT-1	GWB	PCT	PCT-1	GL GWB	PLAM- P EP PLAM- -	PLAM- 2 P-1 EP-1 PLAM- 1	GWB	PLAM- P EP PLAM- -	PLAM- 2 P-1 EP-1 PLAM- 1	GWB	L PLAM- P EP PLAM- -	L-1 PLAM- 2 P-1 EP-1 PLAM- 1	GWB	PLAM- P EP PLAM- -	PLAM- 2 P-1 EP-1 PLAM- 1	3000 - 3000 VARIES	GWB - ACT EXPS	PLAM- P ACT P	PLAM-2 P-1 ACT-2 P-7	Note 10, 20, 27, 32, 42, 66, 69, 70, 71
G191A	South Atrium Corridor	C	PCT	PCT-1	GWB	PCT	PCT-1	GL GWB	PLAM- P EP PLAM- -	PLAM- 2 P-1 EP-1 PLAM- 1	GL GWB	PLAM- P EP PLAM- -	PLAM- 2 P-1 EP-1 PLAM- 1	GWB	PLAM- P EP PLAM- -	PLAM- 2 P-1 EP-1 PLAM- 1	GWB	PLAM- P EP PLAM- -	PLAM- 2 P-1 EP-1 PLAM- 1	3000 - 3000 VARIES	GWB - ACT EXPS	PLAM- P ACT P	PLAM-2 P-1 ACT-3 P-7	Note 10, 27, 32, 42, 66, 69, 70, 71
G192	Plain Clothes Detectives	C	CPT	CPT-1	GWB	RCB	RCB-1	GL GWB	P	P-18	GL GWB		P-18	GL GWB	P	P-18	GWB	EP P	EP-9 P-18	3000 2600	ACT GWB	ACT P	ACT-2 P-18	Note 27, 33, 36
G192A	Sgt. Of Detectives	C	CPT	CPT-1	GWB	RCB	RCB-1	GL	-	-	GWB	P	P-18	GWB	P	P-18	GWB	P	P-17	3000	ACT		ACT-1	
G193	Ante Room	C	CPT	CPT-1	GWB	MPL	ST-1	GL GWB	VWC	VWC-2	GL GWB	VWC	VWC-2	-	-	-	GWB	VWC	VWC-2	3000 VARIES	GWB EXPS	P P	P-1 P-7	Note 33, 70
G193A	Large Mtg. Room	C	CPT	CPT-1	GWB	MPL	ST-1	GWB	VWC	VWC-2	GWB	VWC	VWC-2	GWB	VWC	VWC-1	GWB	VWC	VWC-2	3600 3000	ACT GWB	ACT P	ACT-2 P-1	Note 50, 70

ROOM		FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS
NO.	NAME	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C	
G194	Sprinkler Room	C	HDR	-	GWB	RCB	RCB-1	C	EP	EP-1	C	EP	EP-1	C	EP	EP-1	C	EP	EP-1	VARIES	EXPS	P	P-7	
G197	Storage	C	RSF	RSF-4	GWB	RCB	RCB-1	GWB	P	P-8	GWB	P	P-8	GWB	P	P-8	GWB	P	P-8	2700	ACT		ACT-1	
G198	Meeting Room	C	CPT	CPT-1	GWB	RCB	RCB-1	GWB	P	P-20	GWB	P	P-20	GL	-	-	GWB	P	P-20	3200 3000	ACT GWB	ACT PLAM	ACT-1 PLAM-2	Note 33, 70, 71
G199	Corridor	C	CPT	CPT-1	GWB	RCB	RCB-1	GL GWB	EP	EP-1	GL GWB	EP	EP-1	-	-	-	-	-	-	3000	ACT		ACT-1	Note 32, 33
G200	Meeting	C	CPT	CPT-1	GWB	RCB	RCB-1	GWB	P	P-1	GWB	P	P-1	GWB	P	P-2	GWB	P	P-1	3200 3000	ACT GWB	ACT P	ACT-3 P-1	Note 22
G201	Corridor	C	CPT	CPT-1	GWB	RCB	RCB-1	-	-	-	-	-	-	GWB	EP	EP-1	GWB	EP	EP-1	3000	ACT		ACT-1	Note 32
G202	Photocopier	C	RSF	RSF-4	GWB	RCB	RCB-1	GWB	P	P-1	GWB	P	P-1	GWB	EP	EP-4	GWB	P	P-1	3000	ACT		ACT-1	Note 32, 38
G203	Reader Room	C	CPT	CPT-1	GWB	RCB	RCB-1	GWB	P	P-18	GWB	P	P-18	GL	-	-	GWB	P	P-17	2700	ACT		ACT-1	Note 33, 70
G204	Plan.Res.Supervisor	C	CPT	CPT-1	GWB	RCB	RCB-1	GWB	P	P-18	GWB	P	P-18	GL GWB	P	P-18	GWB	P	P-17	2700	ACT		ACT-1	Note 33
G205	Radar Radio	C	RSF	RSF-4	GWB	RCB	RCB-1	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	GWB	P	P-17	3000	ACT		ACT-1	Note 33, 39
G206	Shift Supervisor	C	CPT	CPT-2	GWB	RCB	RCB-2	GWB	P	P-20	GL GWB	P	P-20	GL GWB	P	P-20	GL GWB	P	P-20	3200 3000	ACT GWB	ACT PLAM	ACT-1 PLAM-2	Note 33, 40, 70, 71, 72
G207	Street Supervisor	C	CPT	CPT-1	GWB	RCB	RCB-1	GWB	P	P-18	GWB	P	P-18	GL GWB	P	P-18	GWB	P	P-17	2700	ACT		ACT-1	Note 33
G208	Uniformed Operations	C	CPT	CPT-1	GWB	RCB	RCB-1	GWB	P	P-1	GWB	P	P-11	GL	-	-	GWB	P	P-1	3000 3000	ACT GWB	ACT PLAM	ACT-2 PLAM-2	Note 33, 70, 71
2-100	Penthouse	C	HDR	-	GWB	RCB	RCB-1	GWB	P	P-1	GWB	P	P-1	GWB	P	P-1	GWB	P	P-1	VARIES	EXPS	P	P-7	

Notes:

- Waiting G1091 - Ramp up concrete below CPT-2 as required to create level transition between CPT-2 and PCT-1 at Door G100-C. Install Schluter E-3 at Door D-G100-C at tile edge of PCT-1. Install Adaptor A-2 at Door D-G104 between CPT-1 and CPT-2.
- Resilient flooring RSF-4 to be covered up wall 102mm (to come with cove former). At top edge of RSF-4, install Cove Cape CC-1.

NO.	ROOM NAME	FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS
		MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C	
3.	Women's WC G134 - Paint wood cap and reveal on partial height wall EP-17.																							
4.	Service Centre G103 Millwork - PLAM 1 & 2. Edge Tape ET-2 on base cabinets..																							
5.	Vestibule G100 & Waiting G101 - Refer to Elevation 30/A6.1 for location/layout of Acoustic Panels APL-1 located above bulkhead at 3000mm. Acoustic Panels to follow slope of wall and c/w 13 mm painted reveals.																							
6.	Quiet Room G121 - Paint Face of GWB bulkhead P-6.																							
7.	Men's (G130A) and Women's Showers (G132A) shower curtains to be FB-1. Refer to Drapery Schedule.																							
8.	Soft Interview Rooms G105 and G106 - Refer to Elevations 9 to 12/A6.3 for location of Acoustic Panels APL and chair rail detail. Paint 13 mm reveal space between panels to match adjacent walls. Stain chair rail ST-1.																							
9.	Lunch Room G137 - Paint face of bulkhead at 2750mm on North wall - EP-1. Paint Face of bulkhead (west elevation) at 3000mm - EP-1.																							
10.	PCT-1 tile to be cut lengthwise in half for base (approx 149 mm high). At top edge of PCT-1 base, install Schluter edge protection E-3. General note: Where there is PCT-1 floor, install PCT-1 base.																							
11.	Coat Alcove G139 - Refer to Finish Plan A1.7 and Plan Detail 13/A4.1 for location of PLAM-2.																							
12.	Quiet Room G-121A - See Drapery Specifications and Schedule for Drapery Track DT-1. Curtain Fabric to be FB-2.																							
13.	Kitchenette G137A - Paint face of bulkhead at 2750 - P-3. Millwork lower cabinets to be PLAM -2 c/w Edge Tape ET-2. Upper cabinets to be PLAM-3 c/w Edge Tape ET-3. Countertop and backsplash to be PLAM -4.																							
14.	Service Centre G103 Handrail - Stain Wood handrail ST-1. Paint Metal Brackets EP-19.																							
15.	First Aid G124 - Millwork on West Wall - PLAM 1B base and upper cabinets, PLAM -9 Countertop & backsplash. PVC Edge Tape ET-1 (base and upper cabinets) .																							
16.	Seasonal Clothing G125 - Millwork - PLAM 7.																							
17.	Corridor G127 and Corridor G133 - At PCT-1 tile edge at Door D-G127 and Door D-G133 install Schluter Edge Protection - E-3. Rubber Floor RF-1 and PCT-1 to have level transition. Within Corridors G127 and G133 ramp up/feather concrete floor if required by D-G127 and D-G133 to provide level transition between the two materials.																							
18.	Corridor G128 - At PCT-2 tile/RF-1 connection at entrance to Men's WC G129 install Schluter Transition/Edge Protection - E-5.																							
19.	Men's WC G129 - Refer to elevations for location of glass tiles GT-1 on South Wall. Vanity and Backsplash millwork - PLAM 5.																							
20.	Lumicor Panels - L-1 installed on top of PLAM-2 bulkhead (at Shift Supervisor G206). Refer to Drawing A-8.9 for details.																							
21.	Men's Locker Room G130 & Exercise Room G131 - Paint central column P-1.																							
22.	Meeting Room G200 - Paint face of bulkhead P-1.																							
23.	Women's WC G134 - Refer to elevations for location of glass tiles GT-1 on South Wall. Vanity millwork and backsplash - PLAM-6.																							
24.	Exercise Room G131 - Refer to Elevations 25 & 27/A-6.3 for Acoustic Panels APL-1. 25mm reveal space between panels to be painted to match adjacent walls.																							
25.	PCT-6 tile to be cut in half for base (approx 149 mm high). At top edge of PCT-6 base, install Schluter edge protection E-3.																							
26.	Stairs G135 - Paint stair handrail EP-10																							
27.	Refer to Finishes Plan A1.7 for floor and wall finishes.																							
28.	Cubbies G140 - Millwork - PLAM 1, c/w PVC edge tape ET-1.																							

NO.	ROOM NAME	FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS
		MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C	
29.	Shower G141A - shower curtain to be FB-1. See specifications for curtain rod.																							
30.	Install waterproof membrane (refer to specifications) on Concrete subfloor. Epoxy floor EF-2 to be brought up 200mm to first course of concrete block to create a continuous cove base. Cove base to come with cove strip. Apply security caulking at top edge of base at wall.																							
31.	Equip. Decontamination G144 - Millwork on west wall - Stainless Steel Finish, refer to Elevation.																							
32.	Refer to Finish Plan A1.7 for location of all transition strips, adaptors, edge protection strips.																							
33.	Refer to Finish Plan A1.7 for location of all areas where concrete subfloor is gradually ramped/feathered near and at door locations with cementitious material to height as required to provide level transitions between two different floor materials.																							
34.	Evidence Drying G159 and G159A - Millwork - Stainless Steel. Refer to Elevation.																							
35.	Epoxy floor EF-2 to be brought up 200mm to first course of concrete block on concrete bench and all walls to create a continuous cove base. Cove base to have cove strip. Apply security caulking at top edge of base at wall. Above Epoxy Flooring base EF-2 apply Epoxy Paint EP-8.on all surfaces of walls and concrete benches																							
36.	Plain Clothes Detectives G192 - Millwork on West Wall - PLAM 11 countertop, backsplash and trim, PLAM 10 base cabinet. Edge Tape ET-3 on base cabinet. Countertop (c/w 50 mm edges) over filing cabinets to be PLAM 11.																							
37.	Refer to Finish Plan A1.7 for locations of chasing between floors EF-3 and EF-1/EF-2 to provide level transition between the two floor materials.																							
38.	Photocopier G202 - Millwork - PLAM 1 countertop and backsplash, PLAM 1 Mail Slots c/w stainless steel shelves, PLAM 10 base and upper cabinets. Edge Tape ET-3 pm base & upper cabinets.																							
39.	Radar Radio G205 - Millwork PLAM 1, Edge Tape ET-1.																							
40.	Shift Supervisor G206 - Bulkhead at 3000 mm underside and face - PLAM 2A, refer to Reflected Ceiling Plan A1.4.																							
41.	Search Alcoves G174, G175 drapery - FB-3 with FB-1 Liner at entry. In Windows W-G174 and W-G175 install drapery full length of north wall - FB-3. Install Drapery Tracks as shown on Floor Plan A1.3. Refer to Drapery Schedule.																							
42.	North Atrium Corridor G191 and South Atrium Corridor G191A - refer to Elevations A-6.2 - for all wall finishes & plastic laminate wall panels - PLAM 1 & 2.																							
43.	Refer to Finishes Plan A1.7 for floor finishes - PCT-6/1 and EM-1. Concrete subfloor to be depressed approximately 22 mm at EM-1 Matwell Frame (refer to Structural Drawings). Entrance Matt and matwell frame to have level transition with PCT-6/1. Install cementitious leveling compound below entrance matting to create level transition between ribbed rubber entrance matt and matwell frame .																							
44.	Waiting G101 - Stain chair rail on north and north-west (angled) wall ST-1.																							
45.	Install wall tile edge protection E-2 and/or E-4. Refer to Finish Plan A1.7 for locations.																							
46.	Video Viewing G186, G188, G190 - refer to Elevations 20 to 23/ A-6.3 for location of Acoustic Panels APL-1. 13mm reveal space between panels to be painted to match adjacent walls.																							
47.	Waiting G101 - Paint Face of Bulkhead at 3000 A.F.F. and walls above bulkhead P-1 .																							
48.	Soft Interview Rooms G105 and G106 - Paint face of Bulkheads P-6.																							
49.	Closet G109 - Millwork - PLAM 7.																							
50.	Large Meeting Room G193A - Millwork - PLAM 8 Countertop, PLAM 1 Base Cabinet.																							
51.	Resilient flooring RSF-1 to be covered up wall 102mm (to come with cove former). At top edge of RSF-1, install Cove Cape CC-2.																							
52.	Coat Alcove G139 - Millwork - PLAM 1, c/w PVC edge tape ET-1.																							
53.	Porcelain Tile Floor PCT-1 to run to wall faces. Millwork to sit on top. Millwork to have Rubber Base RB-2. Walls to have PCT-1 base. PCT-1 base is not required behind millwork.																							

ROOM		FLOOR			BASE			NORTH WALL			SOUTH WALL			EAST WALL			WEST WALL			CEILING				REMARKS
NO.	NAME	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	MATL	FIN	C	HT	MATL	FIN	C	
54.	SallyPort G142, Garage G150 painted lines on floor to be Stonkote HT4 - Color: Safety Yellow.																							
55.	Epoxy Flooring Cove Base EF-4 to run up wall 200mm to meet first course of concrete block on wall, to form continuous base. Cove base to come with cove strip.																							
56.	Property Lockers G178 - Millwork - Stainless Steel finish, refer to Elevation.																							
57.	At transition of Epoxy Floor EF-1 or EF-2 and EF-3 (floor in Sally Port G142 and Garage G150) provide 3/4" chasing at doors to provide level transition between the two materials. Refer to Detail																							
58.	Broom G148 - Millwork on North Wall - PLAM 1.																							
59.	Garage 150 Millwork - Shoe Shine Stand - Stainless Steel, PLAM-1B, Rubber Cove base on millwork RCB-1																							
60.	Install waterproof membrane (refer to specifications) on Concrete subfloor. Epoxy floor EF-1 to be brought up 200mm to first course of concrete block to create a continuous cove base. Cove base to come with cove strip. Apply security caulking at top edge of base at wall.																							
61.	Breath 1 G168 and Breath 2 G169 - Millwork - PLAM 1																							
62.	Search Alcoves G174, G175 Millwork - Stainless Steel, refer to Elevation.																							
63.	Lin. G176A - Millwork - PLAM 1																							
64.	Gun Lockers G177 - Millwork - PLAM 1																							
65.	Paint number on wall - EP-10. Number to correspond to number on door face. Number to be 8" high, 48" from floor to bottom of number. Font style to match door number. Refer to Finishes Plan A1.7 for location.																							
66.	Porcelain tile PCT-1 - grout to be 1/8" thick. Refer to specification for grout color and type. Provide movement profile E-1 in floor every 400 sq.ft. Contractor to verify locations of movement profiles in floor with contract administrator on-site before installation. Allow small gap between porcelain floor tile and walls to allow for movement/expansion. Cover gap at wall with porcelain tile base PCT-1.																							
67.	WR G182A - Install Transition Strip A-2 at Door G182A.																							
68.	Porcelain tile - grout to be 1/8" thick. Refer to specification for grout color and type. Allow small gap between porcelain floor tile and walls to allow for movement/expansion. Cover gap at wall with porcelain wall tile as specified.																							
69.	Paint face of bulkheads @3000 mm - P-1.																							
70.	Round Column finish - Anodized Aluminum Column Cover c/w reveals - Refer to Detail 8 & 9/A4.2.																							
71.	Underside and Face of Bulkhead at 3000mm to be PLAM-2 at Meeting Room G198, Shift Supervisor G208. Ceiling at 3000 mm in Uniformed Operations G208 to be PLAM-2. Refer to Elevations and Reflected Ceiling Plan A1.4 for locations.																							
72.	Paint Hollow Metal Window Frames - EP-10.																							
73.	Paint Hollow Metal Window Frames - EP-12.																							
ABBREVIATIONS																								
CB	Cement Board																							
MR	Mirror																							
CR	Chair Rail																							
L	Lumicor Panels																							

Part 1 General

1.1 SECTION INCLUDES

- .1 Gypsum board and joint treatment.
- .2 Gypsum sheathing.
- .3 Cementitious backer board.
- .4 Metal stud wall framing.
- .5 Metal channel ceiling framing.
- .6 Acoustic accessories.

1.2 RELATED SECTIONS

- .1 Section 06 10 00 – Rough Carpentry.
- .2 Section 07 21 15 – Insulation: Acoustic and Thermal insulation.
- .3 Section 07 28 00 – Air and Vapour Barriers.
- .4 Section 09 90 00 – Painting and Coating.
- .5 Section 07 84 00 - Firestopping.

1.3 REFERENCES

- .1 ASTM C36 - Standard Specification for Gypsum Wallboard.
- .2 ASTM C79 - Standard Specification for Gypsum Sheathing Board.
- .3 ASTM C442 - Standard Specification for Gypsum Backing Board and Coreboard.
- .4 ASTM C475 - Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board.
- .5 ASTM C645 - Specifications for Non-Structural Steel Framing Members.
- .6 ASTM C754 - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Board.
- .7 ASTM C840-04a - Standard Specification for Application and Finishing of Gypsum Board.
- .8 ASTM C1002-01 - Steel Self-Piercing, Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs.
- .9 ASTM C1396/C1396M-04 - Standard Specification for Gypsum Board.

- .10 ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne-Sound Transmission Loss of Building Partitions.
- .11 ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
- .12 GA-214 (Gypsum Association) - Recommended Specification: Levels of Gypsum Board Finish.
- .13 UL - Fire Resistance Directory.

1.4 QUALITY ASSURANCE

- .1 Perform Work in accordance with ASTM C840..
- .2 Applicator Qualifications: Company specializing in performing the work of this section with minimum five years documented experience.

1.5 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for fire rated assemblies.

Part 2 Products

2.1 MANUFACTURERS - GYPSUM BOARD SYSTEM

- .1 Domtar Construction Materials.
- .2 Certainteed
- .3 Canadian Gypsum Company.
- .4 Georgia Pacific Co.
- .5 National Gypsum Co.

2.2 FRAMING MATERIALS

- .1 Studs and Tracks: ASTM C645;; galvanized sheet steel, 0.53 mm thick, C shape, with knurled faces.
- .2 Exterior wall framing: 0.91 mm steel studs for exterior wall framing. Refer to structural notes for framing spacing on exterior walls.
- .3 Slip joint head track: 0.61 mm thick, galvanized sheet steel, 50 mm deep. Pre-punched slots minimum 25 mm long for attaching studs.
- .4 Shaftwall studs: 0.76 mm thick; "C-H" stud to suit gypsum core board for one sided installation.
- .5 Furring, Framing, and Accessories: ASTM C645

- .6 Fasteners: ASTM C1002.
- .7 Anchorage to Substrate: Tie wire, nails, screws, and other metal supports, of type and size to suit application; to rigidly secure materials in place.
- .8 Carrying Channels: 1.52 mm galvanized sheet steel, 12 x 19 mm.
- .9 Hangers: galvanized steel wire, size to suit application, maximum deflection 1/360.

2.3 GYPSUM BOARD MATERIALS

- .1 Standard Gypsum Board: ASTM C36; 16 mm thick, maximum available length in place; ends square cut, tapered edges.
- .2 Fire Rated Gypsum Board: ASTM C36; fire resistive type, UL or WH rated; 16 mm thick, maximum available length in place; ends square cut, tapered edges.
- .3 Gypsum Coreboard: ASTM C442, 25 mm thick, maximum available size in place; tongue and groove edges, ends square cut.
- .4 Gypsum Sheathing Board: ASTM C79; moisture resistant type; 13 mm thick, maximum available size in place; ends square cut, square edges; water repellent paper faces.
- .5 Cementitious Backing Board: High density Cement board; Hardiebacker manufactured by James Hardie building products, 12 mm thick..
- .6 All gypsum board on ceilings to be 16 mm thick unless noted

2.4 ACCESSORIES

- .1 Acoustic Insulation: Section 07 21 15.
- .2 Acoustical Sealant: non-hardening, non-skinning, for use in conjunction with gypsum board, specified in Section 07 92 00 Type B.
- .3 Corner Beads: 0.45 mm. thick, galvanized sheet steel, paper faced; tapable
- .4 Edge Trim: Galvanized steel with 'J' type bead, tapable..
- .5 Joint Materials: ASTM C475; reinforcing tape, joint compound, adhesive, and water.
- .6 Fasteners: ASTM C1002, Type S12.
- .7 Control joints: V profile with 6 mm open slot protected with plastic tape to be removed after joint finishing.

Part 3 Execution

3.1 METAL STUD INSTALLATION

- .1 Install studs in accordance with ASTM C754. and manufacturer's instructions.

- .2 Metal Stud Spacing: 400 mm on center.
- .3 Install 0.91 mm steels studs at locations where stud wall heights are greater than 3.5 m.
- .4 Refer to Drawings for indication of partitions extending stud framing through the ceiling to the structure above. Maintain clearance under structural building members to avoid deflection transfer to studs.
- .5 Install slip joint head track where stud walls meet structure. Allow for 40 mm deflection.
- .6 Door Opening Framing: Install double studs at door frame jambs.
- .7 Coordinate installation of bucks, anchors, blocking, electrical and mechanical work placed in or behind partition framing.

3.2 WALL FURRING INSTALLATION

- .1 Erect wall furring for direct attachment to masonry and concrete walls.
- .2 Erect furring channels vertically; space maximum 400 mm oc, not more than 100 mm from abutting walls. Secure in place on alternate channel flanges at maximum 600 mm on center.

3.3 CEILING FRAMING INSTALLATION

- .1 Install in accordance with ASTM C754 and manufacturer's instructions.
- .2 Coordinate location of hangers with other work.
- .3 Install ceiling framing independent of walls, columns, and above ceiling work.
- .4 Reinforce openings in ceiling suspension system which interrupt main carrying channels or furring channels, with lateral channel bracing. Extend bracing minimum 600 mm past each end of openings.
- .5 Laterally brace entire suspension system.
- .6 Install access panels where indicated on drawings

3.4 ACOUSTIC ACCESSORIES INSTALLATION

- .1 Place acoustic insulation in partitions tight within spaces, around cut openings, behind and around electrical and mechanical items within or behind partitions, and tight to items passing through partitions.
- .2 Install acoustical sealant at gypsum board perimeter at base, between metal framing and substrate, and caulk all penetrations of partitions by conduit, pipe, ductwork, rough-in boxes, etc. Refer to Section 07 92 00.

3.5 GYPSUM BOARD INSTALLATION

- .1 Install gypsum board in accordance with ASTM C840-04a.
- .2 Erect single layer standard gypsum board in most economical direction, with ends and edges occurring over firm bearing.
- .3 Erect single layer fire rated gypsum board vertically, with edges and ends occurring over firm bearing.
- .4 Erect exterior gypsum sheathing horizontally, with edges butted tight and ends occurring over firm bearing.
- .5 Use screws when fastening gypsum board to metal furring or framing.
- .6 Double Layer Applications: Secure second layer to first with adhesive and sufficient support to hold in place. Apply adhesive in accordance with manufacturer's instructions.
- .7 Place second layer perpendicular to first layer. Offset joints of second layer from joints of first layer.
- .8 Treat cut edges and holes exterior gypsum soffit board with sealant.
- .9 Place control joints consistent with lines of building spaces as directed, but not more than 10 m o.c.
- .10 Place corner beads at external corners as indicated. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.
- .11 Install backing board over metal studs in accordance with manufacturer's instructions.
- .12 Provide fire rated slip joint head track where fire rated walls meet structure.

3.6 JOINT TREATMENT

- .1 Finish in accordance with GA-214 Level 4.
- .2 Feather coats on to adjoining surfaces so that camber is maximum 0.8 mm.
- .3 Fill and finish joints and corners of cementitious backing board.

3.7 TOLERANCES

- .1 Maximum Variation of Finished Gypsum Board Surface from True Flatness: 3 mm in 3 m in any direction.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Metal furring and lathing.
- .2 Portland cement foundation parging.
- .3 Surface finish.

1.2 RELATED SECTIONS

- .1 Section 07 21 15-Insulation.
- .2 Section 06 10 00 - Rough Carpentry.
- .3 Section 09 11 16 - Gypsum Board Assemblies.

1.3 REFERENCES

- .1 ASTM C150 - Standard Specification for Portland Cement.
- .2 ASTM C206 - Standard Specification for Finishing Hydrated Lime.
- .3 ASTM C897 - Standard Specification for Aggregate for Job-Mixed Portland Cement-Based Plasters.
- .4 ASTM C926 - Standard Specification for Application of Portland Cement-Based Plaster.
- .5 PCA (Portland Cement Association) - Portland Cement Plaster (Stucco) Manual.

1.4 SUBMITTALS FOR REVIEW

- .1 Samples: Submit two samples, 300x300 mm in size illustrating finish colour and texture.

1.5 QUALITY ASSURANCE

- .1 Perform Work in accordance with PCA Portland Cement Plaster (Stucco) Manual.
- .2 Applicator Qualifications: Company specializing in performing the work of this section with minimum five years documented experience.

1.6 ENVIRONMENTAL REQUIREMENTS

- .1 Do not apply plaster when substrate or ambient air temperature is less than 10 degrees C nor more than 27 degrees C.
- .2 Maintain minimum ambient temperature of 10 degrees C during installation of plaster and until cured.
- .3 Gas fired heaters shall be vented outside of hoarding.

Part 2 Products

2.1 PLASTER MATERIALS

- .1 Cement: ASTM C150, Normal Portland type, grey color.
- .2 Lime: ASTM C206, Type S.
- .3 Aggregate: In accordance with ASTM C897.
- .4 Water: Clean, fresh, potable and free of mineral or organic matter which can affect plaster.

2.2 FURRING AND LATHING

- .1 Metal Lath: flat diamond self furring mesh 1.84 kg/sq m galvanized.
- .2 Casing Bead: Formed sheet steel, depth governed by plaster thickness, maximum possible lengths, expanded metal flanges, with square edges; galvanized.
- .3 Base Screed: Formed sheet steel, depth governed by plaster thickness, maximum possible lengths, expanded metal flanges, with square edge; galvanized.
- .4 Corner Mesh: Formed sheet steel, minimum 0.5 mm thick, perforated expanded flanges shaped to permit complete embedding in plaster, minimum 50 mm size; galvanized.
- .5 Strip Mesh: Expanded metal lath, minimum 0.5 mm thick, 50 mm wide x 600 mm long; galvanized.
- .6 Control and Expansion Joint Accessories: Formed sheet steel, accordion W profile, 50 mm expanded metal flanges each side, galvanized.
- .7 Anchorage: Tie wire, nails, and other metal supports, of type and size to suit application; to rigidly secure materials in place, galvanized.

2.3 CEMENT PLASTER MIXES

- .1 Mix and proportion cement as indicated.
- .2 Base Coat, and Finish Coat: One part cement, minimum 3-1/2 and maximum 4 parts aggregate, and minimum 15 percent and maximum 25 percent hydrated lime.
- .3 Mix only as much plaster as can be used prior to initial set.
- .4 Mix materials dry, to uniform colour and consistency, before adding water.
- .5 Protect mixtures from freezing, frost, contamination, and excessive evaporation.
- .6 Do not retemper mixes after initial set has occurred.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that surfaces and site conditions are ready to receive work.
- .2 Beginning of installation means acceptance of existing conditions.
- .3 Mechanical and Electrical: Verify services within walls have been tested and approved.

3.2 INSTALLATION - LATHING MATERIALS

- .1 Ensure underlayment is in place prior to installing reinforcement..
- .2 Apply metal lath taut, with long dimension perpendicular to supports.
- .3 Lap ends minimum 25 mm. Secure end laps with tie wire where they occur between supports.
- .4 Lap sides of diamond mesh lath minimum 38 mm. Nest outside ribs of rib lath together.
- .5 Attach metal lath to supports at maximum 150 mm on center.

3.3 INSTALLATION - ACCESSORIES

- .1 Continuously reinforce internal angles with corner mesh, return metal lath 75 mm from corner to form the angle reinforcement; fasten at perimeter edges only.
- .2 Place corner bead at external wall corners; fasten at outer edges of lath only.
- .3 Place strip mesh diagonally at corners of lathed openings. Secure rigidly in place.
- .4 Place 100 mm wide strips of metal lath centered over junctions of dissimilar backing materials. Secure rigidly in place.
- .5 Place casing beads at terminations of plaster finish. Butt and align ends. Secure rigidly in place.

3.4 CONTROL AND EXPANSION JOINTS

- .1 Locate exterior control and expansion joints every 3 m 10 feet unless otherwise indicated on drawings.
- .2 Establish control and expansion joints with specified joint device.

3.5 PARING

- .1 Apply paring in accordance with CSA A82.30M.
- .2 Apply to a nominal thickness of 10mm 3/8" with a finish coat to a nominal thickness of 4 mm over surfaces.

- .3 Bring surface of base coat to a true even plane and floated to a uniform surface to accept finish coat.
- .4 Moist cure base coat for minimum 48 hours.
- .5 After curing, dampen base coat prior to applying finish coat.
- .6 Apply finish coat according to manufacturers instructions to a smooth textured finish as approved by the Contract Administrator.
- .7 Maintain minimum temperature of 10 degrees C during and 7 days after completion of cement plaster work.

3.6 ERECTION TOLERANCES

- .1 Maximum Variation from True Flatness: 3 mm in 3 m.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Porcelain tile floor, base and wall finish using the thinset application method.
- .2 Glass tile
- .3 Grout
- .4 Edge protection and control joints.

1.2 RELATED SECTIONS

- .1 Section 03 35 50 - Concrete Floor Finishing: Troweling of floor slab for tile application.
- .2 Section 09 21 16 – Gypsum board assemblies: Wall substrate surface.

1.3 REFERENCES

- .1 ANSI A108.1 - Installation of Ceramic Tile with Portland Cement Mortar.
- .2 ANSI A108.3 - Quarry Tile and Paver Tile Installed With Portland Cement Mortar.
- .3 ANSI A108.10 - Installation of Grout in Tilework.
- .4 ANSI A118.4 - Latex-Portland Cement Mortar.
- .5 ANSI A118.6 - Ceramic Tile Grouts.
- .6 ANSI A137.1 - Standard Specifications for Ceramic Tile.
- .7 TTMAC (Terrazzo, Tile, and Marble Association of Canada) - Manual.

1.4 SUBMITTALS

- .1 Samples: Mount tile and apply grout on two plywood panels, 300x300 mm in size illustrating pattern, colour variations, and grout joint size variations.

1.5 MAINTENANCE DATA

- .1 Maintenance Data: Include recommended cleaning methods, cleaning materials, stain removal methods, and polishes and waxes.

1.6 QUALITY ASSURANCE

- .1 Conform to TTMAC Manual.

1.7 QUALIFICATIONS

- .1 Installer: Company specializing in performing the work of this section with minimum five years documented experience.

1.8 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store, protect and handle products to site.
- .2 Protect adhesives from freezing or overheating in accordance with manufacturer's instructions.

1.9 ENVIRONMENTAL REQUIREMENTS

- .1 Do not install adhesives in an unventilated environment.
- .2 Maintain 10 degrees C during installation of mortar materials.

1.10 EXTRA MATERIALS

- .1 Provide sq m of each size, colour, and surface finish of tile specified.

Part 2 Products

2.1 TILE MATERIALS

- .1 Porcelain Tile (PCT-1): Ames Distributors Ltd.; Unglazed Porcelain; Extrema Series; Product No. EXTGR24; 12" x 24" Colour - Charcoal.
 - .1 Grout colour: G-1.
 - .2 Provide expansion Joints every 400 sq. ft.
 - .3 Tile pattern: brick running bond pattern.
- .2 Porcelain Tile (PCT-2): Olympia Tile; yura Series; NY.YS.LGY.1616; Colour lead Grey; 16" x 16".
 - .1 Grout colour: G-2.
 - .2 Line up grout lines of floor tile with wall tile (PCT-3).
- .3 Porcelain Tile (PCVT-3): Olympia Tile; Yura series; NY.YS.SNO.0416.OC; Colour - Snow Y01; 4" x 16".
 - .1 Grout Colour: G-3.
 - .2 Pattern: tiles laid out horizontally on wall , stacked one on top of the other. Grout lines to match floor grout lines.
- .4 Porcelain Tile (PCT-4): Olympia Tile; Niagara Series; MI.NG.BLK.0101.SP.PF.; colour - Speckled Black MU-2460; 1" x 1".
 - .1 Grout Colour: G-2.
 - .2 Shower Floor waterproofing: Flextile WP-980 Waterproof and Crack isolation membrane on floor and up wall 200mm.
- .5 Porcelain Tile (PCT-5): Olympia Tile; Artech Series; RF.AT.BGE.1224; Beige; 12"x 24".
 - .1 Grout Colour: G-4.

- .2 Pattern: Lay tiles horizontally stacked one of top of the other.
- .3 Apply Flextile 52 Versatile P.M. thin set mortar on Cement board base.
- .6 Porcelain Tile (PCT-6): Ames Distributors Ltd.; Unglazed Porcelain; Extrema Series; Product No. EXTGR12; 12" x 12" Colour - Charcoal.
 - .1 Grout colour: G-1.
 - .2 Tile pattern: stack bond pattern.
- .7 Glass Tile (GT-1): Ames Sanwon Ceramic; colourful Life Décor Glass Tile; colour - Z7 Glacier; 2" x 2".
 - .1 Grout colour: G-3.

2.2 BASE MATERIALS

- .1 Base: refer to room finish schedule for base height and type of tile.

2.3 MORTAR MATERIALS

- .1 Acceptable Manufacturers:
 - .1 Laticrete
 - .2 Mapei
 - .3 Flextile
 - .4 C-Cure
- .2 Mortar Materials: ANSI A118.4 Latex Modified , Portland cement, sand, latex additive, and water.

2.4 GROUT MATERIALS

- .1 Grout (G-1): Mapei Ultracolor Grout; #47 Charcoal complete with penetrating sealer.
- .2 Grout (G-2): Mapei Kerapoxy Epoxy Grout; #10 Black.
- .3 Grout (G-3): Mapei Kerapoxy Epoxy Grout; #14 Biscuit.
- .4 Grout (G-4): Flextile Lte.; Flex-Epoxy 100 #612 Bone.

2.5 MORTAR AND GROUT MIX

- .1 Mix and proportion pre-mix setting bed and grout materials in accordance with manufacturer's instructions.

2.6 ACCESSORIES

- .1 Movement profile strip (E-1): Schluter Dilex; AKSN 100G; Colour - Grey.
- .2 Edge Protection (E-2): Schluter Jolly Brushed Chrome Anodized Aluminum ACGB; sided to suit thickness of ceramic tile. Located on top edge of washroom tile.

- .3 Edge Protection (E-3): Schluter- Schiene Satin Anodized Aluminum AE sized to suit thickness of tile.
- .4 Edge Protection (E-4): Schluter - Rondec Chrome Anodized Aluminum ACGB; size to suit tile thickness; on outside corners of washroom wall tile.
- .5 Edge Protection (E-5): Schluter - Reno-V; Satin Anodized Aluminum AE; sized to suit height of porcelain tile - length of transition leg - 19 mm.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that surfaces are ready to receive work.

3.2 PREPARATION

- .1 Protect surrounding work from damage or disfiguration.
- .2 Vacuum clean surfaces and damp clean.
- .3 Seal substrate surface cracks with filler. Level existing substrate surfaces to acceptable flatness tolerances.
- .4 Apply sealer or conditioner to substrate surfaces in accordance with adhesive manufacturer's instructions.

3.3 INSTALLATION - THINSET METHOD

- .1 Install adhesive tile, and grout in accordance with manufacturer's instructions to TTMAC Manual.
- .2 Lay tile to pattern indicated. Do not interrupt tile pattern through openings.
- .3 Place edge strips at exposed tile edges.
- .4 Cut and fit tile tight to penetrations through tile. Form corners and bases neatly. Align floor, base and wall joints.
- .5 Place tile joints uniform in width, subject to variance in tolerance allowed in tile size. Make joints watertight, without voids, cracks, excess mortar, or excess grout.
- .6 Sound tile after setting. Replace hollow sounding units.
- .7 Keep expansion or control joints free of adhesive or grout. Apply sealant to joints.
- .8 Allow tile to set for a minimum of 48 hours prior to grouting.
- .9 Grout tile joints.
- .10 Provide movement profile in the following floors every 400 Sq.ft. Confirm locations with Contract Administrator prior to installation:

- .1 North Atrium Corridor G191, South Atrium Corridor G191A, Corridor 120, Corridor G136, Coat Alcove G139 Cubbies G140 and G140A.

3.4 CLEANING

- .1 Clean tile and grout surfaces.

3.5 PROTECTION OF FINISHED WORK

- .1 Do not permit traffic over finished floor surface for 4 days after installation.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Suspended metal grid ceiling system and perimeter trim.
- .2 Acoustic tile.

1.2 RELATED SECTIONS

- .1 Section 07 21 15 - Insulation.
- .2 Section 09 21 16 – Gypsum Board Assemblies.
- .3 Mechanical devices in ceiling system.
- .4 Electrical fixtures in ceiling system.

1.3 REFERENCES

- .1 ASTM C635 - Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- .2 ASTM C636 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
- .3 ASTM E580 - Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Seismic Restraint.
- .4 ASTM E1264 - Classification of Acoustical Ceiling Products.
- .5 UL - Fire Resistance Directory.

1.4 SUBMITTALS

- .1 Samples: Submit two samples 200 x 200 mm in size illustrating material and finish of acoustic units.
- .2 Samples: Submit two samples each, 300 mm long, of suspension system main runner, cross runner and perimeter molding,

1.5 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for fire rated assembly combustibility requirements for materials and seismic installation.

1.6 ENVIRONMENTAL REQUIREMENTS

- .1 Maintain uniform temperature of minimum 16 degrees C, and maximum humidity of 40 percent prior to, during, and after acoustic unit installation.
- .2 Store material in work area 48 hours prior to installation.

1.7 PROJECT CONDITIONS

- .1 Sequence work to ensure acoustic ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- .2 Install acoustic units after interior wet work is dry.

1.8 EXTRA MATERIALS

- .1 Provide 2 percent of total acoustic unit area of extra tile metal pans to City.

Part 2 Products

2.1 SUSPENSION SYSTEM MATERIALS

- .1 Manufacturers:
 - .1 Armstrong
 - .2 Canadian Gypsum Co.
 - .3 Chicgao Metallic
- .2 Non-fire Rated Grid: ASTM C635, intermediate; exposed T components die cut and interlocking.
- .3 Fire Rated Grid (ACT-4): ASTM C635, intermediate, listed by UL for use in a Class A assembly, exposed T; components die cut and interlocking.
- .4 Grid Materials: Commercial quality cold rolled steel with galvanized coating.
- .5 Exposed Grid Surface Width: 24 mm.
- .6 Grid Finish: White. colour as selected.
- .7 Accessories: Stabilizer bars, clips, splices, perimeter moldings, required for suspended grid system.
- .8 Support Channels and Hangers: Galvanized steel; size and type to suit application , seismic requirements, and ceiling system flatness requirement specified.

2.2 ACOUSTIC UNIT MATERIALS

- .1 Acoustic panel (ACT-1): Armstrong Cirrus Tegular ; Item Number 581; angled tegular edges 24" x 48" x 7/8: White colour; provide shadow moulding No.7874.
- .2 Acoustic panel (ACT-2): Armstrong Cirrus Open Plan ; Item Number 551; angled tegular edges 24" x 48" x 7/8: White colour; provide shadow moulding No.7874.
- .3 Acoustic panel (ACT-3): Armstrong Cirrus Tegular ; Item Number 534; angled tegular edges 24" x 24" x 7/8: White colour; provide shadow moulding No.7874.

- .4 Acoustic panel (ACT-4): Armstrong Armatuff ; Item Number 860; square edges 24" x 48" x 7/8: White colour. Provide #414 Retention Clips.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that layout of hangers will not interfere with other work.

3.2 INSTALLATION - LAY-IN GRID SUSPENSION SYSTEM

- .1 Install suspension system in accordance with manufacturer's instructions and as supplemented in this section.
- .2 Install system in accordance with ASTM E580.
- .3 Install system capable of supporting imposed loads to a deflection of 1/360 maximum.
- .4 Locate system on room axis according to reflected plan.
- .5 Install after major above ceiling work is complete. Coordinate the location of hangers with other work.
- .6 Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- .7 Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- .8 Do not support components on main runners or cross runners if weight causes total dead load to exceed deflection capability. Support fixture loads by supplementary hangers located within 150 mm of each corner; or support components independently.
- .9 Do not eccentrically load system, or produce rotation of runners.
- .10 Perimeter Molding:
 - .1 Install edge molding at intersection of ceiling and vertical surfaces.
 - .2 Use longest practical lengths.
 - .3 Miter corners.
 - .4 Provide at junctions with other interruptions.
- .11 Form expansion joints to accommodate plus or minus 25 mm movement. Maintain visual closure.

3.3 INSTALLATION - ACOUSTIC UNITS

- .1 Install acoustic units in accordance with manufacturer's instructions.
- .2 Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.

- .3 Fit border trim neatly against abutting surfaces.
- .4 Install units after above ceiling work is complete.
- .5 Install acoustic units level, in uniform plane, and free from twist, warp, and dents.
- .6 Cutting Acoustic Units:
 - .1 Cut to fit irregular grid and perimeter edge trim.
 - .2 Double cut and field paint exposed edges of tegular units.
- .7 Where bullnose concrete block corners round obstructions occur, provide preformed closures to match perimeter molding.
- .8 Install hold-down clips to retain panels tight to grid system in ACT-4 ceilings.

3.4 ERECTION TOLERANCES

- .1 Maximum Variation from Flat and Level Surface: 3 mm in 3 m.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Suspended metal grid ceiling system and perimeter trim.
- .2 Acoustic metal planks.
- .3 Supplementary acoustic insulation over system units.

1.2 RELATED SECTIONS

- .1 Section 07 21 15 - Insulation.
- .2 Section 09 51 23 - Acoustic Tile Ceilings.
- .3 Section 09 21 16 – Gypsum Board Assemblies.
- .4 Mechanical devices in ceiling system.
- .5 Electrical fixtures in ceiling system.

1.3 REFERENCES

- .1 ASTM C635 - Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- .2 ASTM C636 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
- .3 ASTM E580 - Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Seismic Restraint.

1.4 SUBMITTALS

- .1 Samples: Submit two samples 200 x 200 mm in size illustrating material and finish of acoustic units.
- .2 Samples: Submit two samples each, 300 mm long, of suspension system and perimeter molding,

1.5 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for fire rated assembly and combustibility requirements for materials.
- .2 System to be designed to the NBC 2005 for a building importance category of post-disaster.

1.6 PROJECT CONDITIONS

- .1 Sequence work to ensure acoustic ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- .2 Install acoustic units after interior wet work is dry.

Part 2 Products

2.1 MANUFACTURER

- .1 Metal Plank Security ceiling system: (SCLG-2): manufactured by Steel Ceilings Inc.

2.2 SUSPENSION SYSTEM

- .1 Mid-span support: 1.9 mm C channels welded and supported from existing structure by 2.5 mm hanger wire at 1200 mm maximum; finished to match panel.
- .2 Support struts: 1.5 mm C channels secured to hanger wire from structure to mid-span support to prevent uplift.
- .3 Mouldings: 1.9 mm galvanized steel fastened to wall at 600 mm o.c. maximum. Provide 1.9 mm thick hold down clips within the wall moulding.

2.3 SECURITY PLANKS

- .1 Security Planks: 1.9 mm thick galvanized steel with overlapping edges; 600 mm wide; perforated with 23% open area.
- .2 Provide access panels in each room, location as directed by Contract Administrator. Use tamper resistant fasteners.

2.4 ACOUSTIC UNIT MATERIALS

- .1 Acoustic infill: 75 mm thick 1 pound density pvc wrapped glass fibre insulation.

2.5 FINISHES

- .1 Finish: all exposed metal to be finished with backed on powder cat finish - colour to be selected by Contract Administrator.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that layout of hangers will not interfere with other work.

3.2 INSTALLATION

- .1 Install suspension system in accordance with manufacturer's instructions and as supplemented in this section.

- .2 Install system in accordance with ASTM E580.
- .3 Install system capable of supporting imposed loads to a deflection of 1/360 maximum.
- .4 Locate system on room axis according to reflected plan.
- .5 Install after major above ceiling work is complete. Coordinate the location of hangers with other work.
- .6 Hang suspension system independent of walls, columns, ducts, pipes and conduit. Where carrying members are spliced, avoid visible displacement of face plane of adjacent members.
- .7 Where ducts or other equipment prevent the regular spacing of hangers, reinforce the nearest affected hangers and related carrying channels to span the extra distance.
- .8 Support on ceiling components independently.
- .9 Do not eccentrically load system, or produce rotation of runners.
- .10 Perimeter Molding:
 - .1 Install edge molding at intersection of ceiling and vertical surfaces.
 - .2 Use longest practical lengths.
 - .3 Miter.
 - .4 Provide at junctions with other interruptions.
- .11 Install acoustic planks in accordance with manufacturer's instructions. Fasten adjoining planks at 600 mm o.c. maximum.
- .12 Fit planks in place, free from damaged edges or other defects detrimental to appearance and function.
- .13 Install units after above ceiling work is complete.
- .14 Install units level, in uniform plane, and free from twist, warp, and dents.
- .15 Fit insulation tight in plank pans.
- .16 Cut and fit planks as required for penetrations by other work.

3.3 ERECTION TOLERANCES

- .1 Maximum Variation from Flat and Level Surface: 3 mm in 3 m.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Resilient sheet flooring.
- .2 Rubber flooring
- .3 Resilient base.
- .4 Rubber Base.
- .5 Accessories.

1.2 RELATED SECTIONS

- .1 Section 09 06 00 - Room Finish Schedule
- .2 Section 09 68 00 – Carpeting.

1.3 REFERENCES

- .1 ASTM E84 - Surface Burning Characteristics of Building Materials.
- .2 CSA A126 - Sheet Flooring Products
- .3 ASTM F1861 - Resilient Wall Base.
- .4 FS SS-W-40 - Wall Base: Rubber and Vinyl Plastic.

1.4 SUBMITTALS

- .1 Samples: Submit two samples, 300x300 mm in size illustrating colour and pattern for each floor material for each colour specified.
- .2 Submit two 300 mm long samples of base and stair material for each colour specified.

1.5 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for flame/smoke rating requirements of / in accordance with ASTM E84.

1.6 ENVIRONMENTAL REQUIREMENTS

- .1 Store materials for three days prior to installation in area of installation to achieve temperature stability.
- .2 Maintain ambient temperature required by adhesive manufacturer three days prior to, during, and 24 hours after installation of materials.

1.7 MAINTENANCE DATA

- .1 Provide manufacturers instructions covering care and maintenance of materials of this section for incorporation into maintenance manual.
- .2 Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning, stripping, and re-waxing.

1.8 EXTRA MATERIALS

- .1 Provide 2% of flooring, whichever is greater, and 5 m of base of each material specified.

Part 2 Products

2.1 MATERIALS - SHEET FLOORING

- .1 Resilient Sheet Flooring (RSF-1): Tarkett Optima colour and pattern through total thickness; colour 25832 - Brown; weldrod - Matching 32944296.
- .2 Resilient Sheet Flooring (RSF-2): Tarkett Optima colour and pattern through total thickness; colour 05846 - Lime Green; weldrod matching 12870370.
- .3 Resilient Sheet Flooring (RSF-3): Tarkett Optima colour and pattern through total thickness; colour 05864 - Grey; weldrod matching 32912146.
- .4 Resilient Sheet Flooring (RSF-4): Tarkett Optima colour and pattern through total thickness; colour 05845 - Black; weldrod matching 32918456.

2.2 MATERIALS - RUBBER FLOORING

- .1 Rubber Flooring (RF-1): Mondo Sport Impact; 008 black; 10 mm thick; 14.64 Kg/m²; sealskin texture.
- .2 Static Control Rubber Flooring (RF-2): Static Smart Environments by Julie Industries; StaticSmart Rubber ESD control, static dissipative hammered surface rubber tile flooring; Rhino Rubber Series; Sumatran Basalt colour No. 3902; tile size 1000 mm x 1000 mm x 305 mm thick.
 - .1 Adhesive StaticSmart Adhere MC

2.3 MATERIALS - BASE

- .1 Rubber Cove Base (RCB-1): rubber; top set coved; Johnsonite 40 Black; 100 mm high.
- .2 Rubber Cove Base (RCB-2): rubber; top set coved; Johnsonite 44 Dark Brown; 100 mm high:
- .3 Rubber Cove Base (RCB-3): rubber; top set coved; Johnsonite 40 Black; 150 mm high.

2.4 ACCESSORIES

- .1 Subfloor Filler: White premix latex ; type recommended by adhesive material manufacturer.

- .2 Primers and Adhesives: Waterproof; types recommended by flooring manufacturer.
- .3 Adapter (A-1): Johnsonite Carpet to resilient adapter; 6 mm carpet to 3 mm resilient; model no. CTA-40-A 40 Black.
- .4 Adapter (A-2): Johnsonite Carpet to resilient adapter; 6 mm to 3 mm; model no. CTA-40-C 40 Black.
- .5 Cant Strip: Plastic 38 mm radius.
- .6 Cove cap (CC-1): Johnsonite Resilient Cove Cap for 3 mm materials Model No. SCC-40-B; 40 Black.
- .7 Cove cap (CC-2): Johnsonite Resilient Cove Cap for 3 mm materials Model No. SCC-47-B; 47 Brown.
- .8 Transition (T-1): Johnsonite Wheeled traffic transitions; 2 mm to 9 m Model no CTA-40-Z; colour - 40 Black; 62 mm wide.
- .9 Transition (T-2): Johnsonite Wheeled traffic transitions; 2 mm to 6 m Model no CTA-40-HT; colour - 40 Black; 62 mm wide.
- .10 Sealer and Wax: Types recommended by flooring manufacturer.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify concrete floors are dry to a maximum moisture content acceptable to flooring and adhesive manufacturer, and exhibit negative alkalinity, carbonization, or dusting.
- .2 For renovation work, the existing substrate floor and lower wall surfaces must be acceptable to receive new floor and base adhesives. Supplement the following paragraph to address specific project conditions.
- .3 Verify floor and lower wall surfaces are free of substances that may impair adhesion of new adhesive and finish materials.

3.2 PREPARATION

- .1 Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with sub-floor filler to achieve smooth, flat, hard surface.
- .2 Prohibit traffic until filler is cured.
- .3 Vacuum clean substrate.
- .4 Apply primer to surfaces as required by adhesive manufacturer.

3.3 INSTALLATION - SHEET FLOORING

- .1 Install in accordance with manufacturer's instructions.

- .2 Spread only enough adhesive to permit installation of materials before initial set.
- .3 Set flooring in place, press with heavy roller to attain full adhesion.
- .4 Lay flooring with joints and seams in accordance with seaming plan. parallel to building lines to produce minimum number of seams.
- .5 Joint seaming methods for sheet flooring vary with the type of sheet material specified. Cushioned back sheet flooring requires special consideration. Heat sealing and solvent sealing are two of several methods of joint seaming.
- .6 Install sheet flooring parallel to length width of room. Provide minimum of 1/3 full roll width. Double cut sheet; provide continuously heat welded seal. butt joint.
- .7 Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar.
- .8 Install edge strips at unprotected or exposed edges, and where flooring terminates.
- .9 Turn up flooring to form base where scheduled. Back floor and wall junction with cant strip. Provide cap strip to terminate base. Taper cant strip at door frames to prevent cove from protruding past frame.
- .10 Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

3.4 INSTALLATION - TILE FLOORING

- .1 Install in accordance with manufacturer's instructions.
- .2 Mix tile from container to ensure shade variations are consistent when tile is placed.
- .3 Spread only enough adhesive to permit installation of materials before initial set.
- .4 Set flooring in place, press with heavy roller to attain full adhesion.
- .5 Lay flooring with joints and seams parallel to building lines to produce symmetrical tile pattern.
- .6 Terminate flooring at centerline of door openings where adjacent floor finish is dissimilar.
- .7 Install edge strips at unprotected or exposed edges, and where flooring terminates. Scribe flooring to walls, columns, cabinets, floor outlets, and other appurtenances to produce tight joints.

3.5 INSTALLATION - BASE

- .1 Fit joints tight and vertical. Maintain minimum measurement of 45 mm between joints.
- .2 Miter internal corners. At external corners, 'V' cut back of base strip to 2/3 of its thickness and fold.

- .3 Install base on solid backing. Bond tight to wall and floor surfaces.
- .4 Scribe and fit to door frames and other interruptions.

3.6 CLEANING

- .1 Remove excess adhesive from floor, base, and wall surfaces without damage.
- .2 Clean, seal, and wax floor and base surfaces in accordance with manufacturer's instructions.

3.7 PROTECTION OF FINISHED WORK

- .1 Prohibit traffic on floor finish for 48 hours after installation.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Carpet placed with glue down method.
- .2 Entrance matting.
- .3 Accessories.

1.2 RELATED SECTIONS

- .1 Section 03 30 00-Cast in Place Concrete: Floor substrate surface.
- .2 Section 09 21 16-Gypsum Board Assemblies: Wall materials to receive application of base.
- .3 Section 09 65 00 - Resilient Flooring: Base

1.3 REFERENCES

- .1 ASTM D2859 - Test Method for Flammability of Finished Textile Floor Covering Materials.
- .2 ASTM E84 - Surface Burning Characteristics of Building Materials.
- .3 ASTM E648 - Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.

1.4 SUBMITTALS

- .1 Samples: Submit two samples 300x300 mm in size illustrating colour and pattern for each carpet material specified.

1.5 QUALIFICATIONS

- .1 Installer: Company specializing in installing carpet with minimum three years documented experience.

1.6 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for flame/smoke rating.

1.7 ENVIRONMENTAL REQUIREMENTS

- .1 Store materials for 3 days prior to installation in area of installation to achieve temperature stability.
- .2 Maintain minimum 21 degrees C ambient temperature 1 3 days prior to, during and 24 hours after installation.

1.8 MAINTENANCE DATA

- .1 Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning.

1.9 EXTRA MATERIAL

- .1 Provide 10 sq m of carpeting of each type, colour, and pattern specified.

Part 2 Products

2.1 MATERIALS - CARPET

- .1 Carpet (CPT-1): Designweave; City Style No Z6424; colour 00548, Swank; 100% Eco Solution Q ® premium Branded SD Nylon Ultraloc ® Pattern secondary backing; 12' widths; tufted yarn weight 30 oz.; finished pile height 0.152"
- .2 Carpet (CPT-2): NeoFloor style - Glasgow; pattern N 050F; oo4 Highland Roll format; 100% nylon 606 Wear layer with a closed cell vinyl base and intermediate fibreglass layer; thickness of 4.3 mm.

2.2 MATERIALS - ENTRANCE MATING

- .1 Entrance matting (EM-1): Johnsonite Floor keeper; 19 mm height; BM 17 - Black ¾; colour - space.
- .2 Aluminum frame: Aluminum Matwell; FRA031 25mm x 25 mm.

2.3 ACCESSORIES

- .1 Sub-Floor Filler: White premix latex ; type recommended by adhesive material manufacturer.
- .2 Grout for leveling entrance matting: Ardex K55 leveling grout.
- .3 Adhesive: Compatible with carpet material. Recommended by carpet manufacturer.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that surfaces are smooth and flat with maximum variation of 6 mm in 3 m, and are ready to receive work.
- .2 Verify concrete floors are dry to a maximum moisture content of 7 percent; and exhibit negative alkalinity, carbonization, or dusting.

3.2 PREPARATION

- .1 Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes, and other defects with sub-floor filler.

- .2 Apply, trowel, and float filler to achieve smooth, flat, hard surface. Prohibit traffic until filler is cured.
- .3 Vacuum clean substrate.

3.3 INSTALLATION

- .1 Apply carpet and adhesive in accordance with manufacturers' instructions.
- .2 Verify carpet match before cutting to ensure minimal variation between dye lots.
- .3 Double cut carpet, to allow intended seam and pattern match. Make cuts straight, true, and unfrayed
- .4 Locate seams in area of least traffic.
- .5 Lay carpet tight and flat on subfloor, well fastened at edges, with a uniform appearance. Provide monolithic colour, pattern, and texture match within any one area.
- .6 Do not change run of pile in any room where carpet is continuous through a wall opening into another room. Locate change of colour or pattern between rooms under door centerline.
- .7 Centre carpet CPT-1 with pattern centered in corridor, run pattern in East West direction. Confirm pattern layout with Contract Administrator prior to cutting.
- .8 Cut and fit carpet around interruptions.
- .9 Fit carpet tight to intersection with vertical surfaces without gaps.
- .10 Where wall bases are scheduled, cut carpet tight to walls. Fit carpet tight to vertical interruptions, leaving no gaps.

3.4 ENTRANCE MATTING

- .1 Coordinate entrance mat framing installation with section 03 30 00.
- .2 Install entrance matting in accordance with manufactures instructions.
- .3 Apply a cementitious grout to inside of framing system to ensure matting is level with surrounding floor finishes.
- .4 Refer to finish plan for direction of mat ribs.

3.5 CLEANING

- .1 Remove excess adhesive without damage, from floor, base, and wall surfaces.
- .2 Clean and vacuum carpet surfaces.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Surface preparation.
- .2 Wall covering.

1.2 RELATED SECTIONS

- .1 Section 09 21 16 - Gypsum Board Assemblies: Wall substrate.
- .2 Section 09 90 00 – Painting And Coating: Priming of substrate surfaces.

1.3 REFERENCES

- .1 ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
- .2 NFPA 255 - Test of Surface Burning Characteristics of Building Materials.

1.4 SUBMITTALS

- .1 Samples: Submit two samples of wall covering, x mm in size illustrating colour, finish, and texture.

1.5 QUALIFICATIONS

- .1 Applicator: Company specializing in performing the work of this section with minimum five years documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store, protect and handle products to site.
- .2 Inspect roll materials on site to verify acceptance.
- .3 Protect packaged adhesive from temperature cycling and cold temperatures.
- .4 Do not store roll goods on end.

1.7 ENVIRONMENTAL REQUIREMENTS

- .1 Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the adhesive or vinyl covering product manufacturer.
- .2 Maintain these conditions 24 hours before, during, and after installation of adhesive wall covering.
- .3 Provide lighting level of 860 lx measured mid-height at substrate surfaces.

1.8 EXTRA MATERIALS

- .1 Provide 8 linear m of each colour of wall covering.

- .2 Package and label each roll by manufacturer, colour and pattern, and destination room number; store where directed.

Part 2 Products

2.1 MATERIALS

- .1 Wall Covering (VWC-1): Metro Wallcovering; Sanitas Pattern Collection; Pattern Rememberance; colour Cinnabar 2R21-63; 54" width; 21 oz weight; Type II
- .2 Wall Covering (VWC-2): Metro Wallcovering; Sanitas Pattern Collection; Pattern Rememberance; colour Sichuan Grey 2R21-98; 54" width; 21 oz weight; Type II
- .3 Wall Covering (VWC-3): Metro Wallcovering; Colour and Design; Pattern Kiito; colour CD2-KTO-05 Limestone; 54" width; 20 oz weight; Type II
- .4 Wall Covering (VWC-4): Egan -Lang Inc; Lanark Wallcovering; Pattern Strand; colour L2-SD-10 Cottonwood; 53/54" width; 23 oz weight; Type II
- .5 Adhesive: Type recommended by wall covering manufacturer to suit application to substrate.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that substrate surfaces are prime painted and ready to receive work, and conform to requirements of the wall covering manufacturer.
- .2 Measure moisture content of surfaces using an electronic moisture meter. Do not apply coverings unless moisture content of surfaces are below the following maximums:
 - .1 Plaster and Gypsum Wallboard: 12 percent.
- .3 Verify flatness tolerance of surfaces does not vary more than 3 mm in 3 m nor vary at a rate greater than 1.5 mm/300 mm.

3.2 PREPARATION

- .1 Fill cracks and smooth irregularities with filler; sand smooth.
- .2 Wash impervious surfaces with trisodium phosphate, rinse and neutralize; wipe dry.
- .3 Sand glossy surfaces; seal marks which may bleed with shellac.
- .4 Remove electrical, telephone, wall plates and covers.
- .5 Vacuum clean surfaces free of loose particles.

3.3 INSTALLATION

- .1 Apply adhesive and wall covering in accordance with manufacturer's instructions.
- .2 Apply adhesive to fabric surface immediately prior to application of wall covering.

- .3 Use wall covering in roll number sequence.
- .4 Razor trim edges on flat work table. Do not razor cut on gypsum board surfaces.
- .5 Apply wall covering smooth, without wrinkles, gaps or overlaps. Eliminate air pockets and ensure full bond to substrate surface. Butt edges tight.
- .6 Horizontal seams are not acceptable.
- .7 Do not seam within 50 mm of internal corners or within 150 mm of external corners.
- .8 Do not install wall covering more than 6 mm below top of resilient base.
- .9 Cover spaces above and below windows, above doors, in pattern sequence from roll.
- .10 Remove excess wet adhesive from seam before proceeding to next wall covering sheet. Wipe clean with dry cloth.

3.4 CLEANING

- .1 Clean wall coverings of excess adhesive, dust, dirt, and other contaminants.
- .2 Reinstall wall plates and accessories removed prior to work of this Section.

3.5 PROTECTION OF FINISHED WORK

- .1 Do not permit work at or near finished wall covered areas.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Manufactured acoustical wall panels

1.2 RELATED SECTIONS

- .1 Section 07 21 15 - Insulation, air and Vapour Barriers.
- .2 Section 09 51 23 - Suspended Acoustical Ceilings.

1.3 REFERENCES

- .1 ASTM E1264 - Classification of Acoustical Ceiling Products.
- .2 UL - Fire Resistance Directory.

1.4 SUBMITTALS

- .1 Samples: Submit two samples 200 x 200 mm in size illustrating material and finish of acoustic units.
- .2 Samples: Submit two samples each, of attachment system.
- .3 Submit shop drawings and product data and indicate, configuration, anchor types and spacing, location of cutouts, reinforcement, finish, dimensions and layout.

1.5 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for fire rated assembly and combustibility requirements for materials.

1.6 ENVIRONMENTAL REQUIREMENTS

- .1 Maintain uniform temperature of minimum 16 degrees C and maximum humidity of 40 percent prior to, during, and after acoustic unit installation.
- .2 Store material in work area 48 hours prior to installation.

1.7 PROJECT CONDITIONS

- .1 Sequence work to ensure acoustic panels are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.
- .2 Install acoustic units after interior wet work is dry.

Part 2 Products

2.1 PREMANUFACTURED ACOUSTIC WALL PANELS

- .1 Acoustic Panel (APL-1): medium density core with fabric finish. Decoustic AP resin hardened edge; square edge profile; fabric covering: Guilford of Maine Panel Fabric FR 701, Style 2100 colour 538 Silver Papier; 38 mm thick. Provide mechanical mounting for secure attachment to wall.
- .2 Acoustic panel (APL-2 to APL-5): High Impact Tackable acoustical panel; with fabric finish. Decoustic H.I.R. #1 resin hardened edge; square edge profile; 41 mm thick. Provide mechanical mounting for secure attachment to wall.
 - .1 APL-2: Fabric covering: Guilford of Maine Panel Fabric FR 701, Style 2100 colour 130 Wheat.
 - .2 APL-3: Fabric covering: Guilford of Maine Panel Fabric FR 701, Style 2100 colour 749 Dune.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that surfaces are ready to receive work.
- .2 Beginning of installation means acceptance of site conditions.

3.2 INSTALLATION - ACOUSTIC UNITS

- .1 Install acoustic units in accordance with manufacturer's instructions.
- .2 Securely fasten panels to walls using fasteners suitable for the structure.
- .3 Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.
- .4 Install acoustic units level, in uniform plane, and free from twist, warp, and dents.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Surface preparation and field application of paints and coatings.

1.2 RELATED SECTIONS

- .1 Section 05 12 00 - Structural steel: Shop primed items.
- .2 Section 08 14 16-Flush Wood Doors.
- .3 Section 09 06 00 - Room Finish Schedule
- .4 Mechanical Identification.
- .5 Electrical Identification.

1.3 REFERENCES

- .1 ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.
- .2 ASTM D2016 - Test Method for Moisture Content of Wood.
- .3 MPI (The Master Painters Institute) - Architectural Painting Specification Manual
- .4 SPCC - Society for Protective Coatings (formerly Steel Structures Painting Council):
 - .1 Steel Structures Painting Manual.

1.4 SUBMITTALS

- .1 Samples: Submit two samples, 200x200 mm in size illustrating selected colours and textures for each colour selected.

1.5 QUALIFICATIONS

- .1 Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum five years documented experience.
- .2 Applicator: Company specializing in performing the work of this section with minimum five years documented experience.
- .3 Acceptable manufacturers, materials, workmanship and all items affecting the work of this section is to be in accordance with The Master Painters Institute (MPI) "Architectural Painting Specification Manual".

1.6 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store, protect and handle products to site.
- .2 Deliver products to site in sealed and labeled containers; inspect to verify acceptability.

- .3 Container label to include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, colour designation, and instructions for mixing and reducing.
- .4 Store paint materials at minimum ambient temperature of 7 degrees C and a maximum of 32 degrees C, in ventilated area, and as required by manufacturer's instructions.

1.7 ENVIRONMENTAL REQUIREMENTS

- .1 Do not apply materials when surface and ambient temperatures are outside the temperature ranges required by the paint product manufacturer.
- .2 Do not apply exterior coatings during rain or snow, or when relative humidity is outside the humidity ranges required by the paint product manufacturer.
- .3 Minimum Application Temperatures for Latex Paints: 7 degrees C for interiors; 10 degrees C for exterior; unless required otherwise by manufacturer's instructions.
- .4 Provide lighting level of 860 lx measured mid-height at substrate surface.

1.8 EXTRA MATERIALS

- .1 Provide 4 L of each colour, type, and surface texture to City.
- .2 Label each container with colour, type, texture, room locations, and in addition to the manufacturer's label.

Part 2 Products

2.1 MANUFACTURERS

- .1 Manufacturers: all paint and varathane used shall be listed in the Master Painters Institute approved product List – most recent edition..
- .2 Paint materials for paint systems shall be products of a single manufacturer.

2.2 MATERIALS

- .1 Coatings: Ready mixed, except field catalyzed coatings, capable of being readily and uniformly dispersed to a homogeneous coating; good flow and brushing properties; capable of drying or curing free of streaks or sags.
- .2 Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.
- .3 Patching Materials: Latex filler.
- .4 Fastener Head Cover Materials: Latex filler.

2.3 FINISHES

- .1 Refer to schedule at end of section for surface finish and colour schedule.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that surfaces substrate conditions are ready to receive work as instructed by the product manufacturer.
- .2 Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.
- .3 Test shop applied primer for compatibility with subsequent cover materials.
- .4 Do not apply finishes unless moisture content of surfaces are below the paint manufacturer's recommended maximums.

3.2 PREPARATION

- .1 Remove electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
- .2 Correct defects and clean surfaces which affect work of this section. Remove existing coatings that exhibit loose surface defects.
- .3 Seal with shellac and seal marks which may bleed through surface finishes.
- .4 Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.
- .5 Insulated Coverings: Remove dirt, grease, and oil from canvas and cotton.
- .6 Copper Surfaces Scheduled for a Paint Finish: Remove contamination by steam, high pressure water, or solvent washing. Apply vinyl etch primer immediately following cleaning.
- .7 Gypsum Board Surfaces: Fill minor defects with filler compound. Spot prime defects after repair.
- .8 Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.
- .9 Concrete and Unit Masonry Surfaces Scheduled to Receive Paint Finish: Remove dirt, loose mortar, scale, salt or alkali powder, and other foreign matter. Remove oil and grease with a solution of tri-sodium phosphate; rinse well and allow to dry. Remove stains caused by weathering of corroding metals with a solution of sodium metasilicate after thoroughly wetting with water. Allow to dry.
- .10 Uncoated Steel and Iron Surfaces: Remove grease, mill scale, weld splatter, dirt, and rust. Where heavy coatings of scale are evident, remove by hand, power tool, wire brushing or sandblasting; clean by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Spot prime paint after repairs.

- .11 Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.
- .12 Interior Wood Items Scheduled to Receive Paint Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats.
- .13 Interior Wood Items Scheduled to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats.
- .14 Wood and Metal Doors Scheduled for Painting: Seal top and bottom edges with primer.

3.3 APPLICATION

- .1 Apply products in accordance with manufacturer's instructions.
- .2 Do not apply finishes to surfaces that are not dry.
- .3 Apply each coat to uniform finish.
- .4 Apply each coat of paint slightly darker than preceding coat unless otherwise approved.
- .5 Sand wood and metal lightly between coats to achieve required finish.
- .6 Vacuum clean surfaces free of loose particles. Use tack cloth just prior to applying next coat.
- .7 Allow applied coat to dry before next coat is applied.
- .8 Where clear finishes are required, tint fillers to match wood. Work fillers into the grain before set. Wipe excess from surface.

3.4 FINISHING MECHANICAL AND ELECTRICAL EQUIPMENT

- .1 Refer to Mechanical and Electrical Sections for schedule of colour coding and identification banding of equipment, duct work, piping, and conduit.
- .2 Paint shop primed equipment. Paint shop prefinished items occurring at interior areas .
- .3 Remove unfinished louvers, grilles, covers, and access panels on mechanical and electrical components and paint separately.
- .4 Prime and paint insulated and exposed pipes, conduit, boxes, insulated and exposed ducts, hangers, brackets, collars and supports, and except where items are prefinished.
- .5 Paint interior surfaces of air ducts, and convector and baseboard heating cabinets that are visible through grilles and louvers with one coat of flat black paint, to visible surfaces. Paint dampers exposed behind louvers, grilles, and convector and baseboard cabinets to match face panels.

- .6 Paint exposed conduit and electrical equipment occurring in finished areas.
- .7 Paint both sides and edges of plywood backboards for electrical and telephone equipment before installing equipment.
- .8 Reinstall electrical cover plates, hardware, light fixture trim, escutcheons, and fittings removed prior to finishing.

3.5 CLEANING

- .1 Collect waste material which may constitute a fire hazard, place in closed metal containers and remove daily from site.

3.6 SCHEDULE

- .1 All paint systems shall consist of one coat primer and two finish coats minimum except for intense colours shall have three finish coats.
- .2 All metal shall be painted semi gloss.
- .3 All epoxy paint shall be semi-gloss.
- .4 All concrete block and gypsum board shall be latex acrylic pearl finish.
- .5 Ceilings shall be dry fall flat finish.
- .6 Pply one primer coat to all areas receiving vinyl coated wall covering.
- .7 Refer to paint finish schedule for paint colours and types.
- .8 ST-1 clear finish to be four coats of finish, sand between coats.

3.7 PAINT FINISH SCHEDULE

- .1 P-1: ICI 663 Pelican MP#30YY 72/018; Pearl Finish
- .2 EP-1: Epoxy paint; ICI 663 Pelican MP#30YY 72/018; Semi-gloss Finish.
- .3 P-2: Pratt & Lambert; 6-15 Poppy; Pearl Finish.
- .4 P-3: ICI MP#60YY 57/304; Pearl Finish.
- .5 EP-4: Epoxy paint. Sherwin Williams, SW6423 Ryegrass; Semi-gloss Finish.
- .6 P-5: ICI, 708 Coronation; MP#40YY 58/422; Pearl Finish.
- .7 P-6: ICI, 934 Whisper White; MP#90YY 83/036; Pearl Finish.
- .8 EP-6: ICI, Epoxy paint; 934 Whisper White, MP#90YY 83/036; Semi-gloss Finish.
- .9 P-7: Benjamin Moore, 2122-70 Snow White; Flat Finish.

- .10 EP-7: Epoxy paint; Benjamin Moore Epoxy paint, 2122-70 Snow White; Semi-gloss Finish.
- .11 P-8: Sherwin Williams, SW 6155 Rice Grain; Pearl Finish
- .12 EP-8: Epoxy paint; Sherwin Williams, SW 6155 Rice Grain; Semi-gloss Finish.
- .13 EP-9: Epoxy paint; Sherwin Williams. SW 6408 Wheat Grass; Semi-gloss finish.
- .14 EP10: Epoxy paint; ICI, 579 Burrwood MP#30YY 11/076; Semi-gloss Finish.
- .15 P-11: Sherwin Williams SW 6150 universal Khaki; Pearl Finish.
- .16 EP-12: Epoxy paint; Sherwin Williams, epoxy paint; SW6151 Quiver Tan; Semi-gloss Finish.
- .17 EP-13: Epoxy paint; ICI 1674 Deep onyx; MP#00NN 07/000; Semi-gloss Finish.
- .18 EP-14: Epoxy paint; Sherwin Williams epoxy paint, SW 6149 Relaxed Khaki; Semi-gloss Finish.
- .19 P-15: ICI 879 Thyme MP#70 YY 46/160; Pearl Finish.
- .20 EP-15: Epoxy paint; ICI 879 Thyme MP#70 YY 46/160; Semi-gloss Finish.
- .21 P-16: ICI, 880 Sage Green MP#70YY 49/206; Pearl Finish.
- .22 EP-16: Epoxy paint; ICI, 880 Sage Green MP#70YY 49/206; Semi-gloss Finish.
- .23 P-17: ICI, 709 Manuscript MP# 40YY 60/103; Pearl Finish.
- .24 EP-17: Epoxy paint; ICI, 709 Manuscript MP# 40YY 60/103; Semi-gloss Finish.
- .25 P-18: ICI 670 Winter Bird MP#30YY 78/018; Pearl Finish.
- .26 EP-19: Epoxy paint; Sherwin Williams; SW 6152 Superior Bronze; Semi-gloss Finish.
- .27 P-20: ICI, 881 Pale Moss MP#70YY 52/150; Pearl Finish.
- .28 EP-21; Epoxy paint; ICI, 911 Pacific Pines MP# 90YY/35/169; Semi-gloss Finish.
- .29 EP-M.EXT – Epoxy paint; Color to match Exterior Brick color or Metal Galvalume color. Submit Paint samples to contract administrator for approval.
- .30 ST-1: Clear finish; non yellowing water base; Flecto Diamond Elite varathane.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Epoxy flooring application and curing.
- .2 Cove base.
- .3 Epoxy wall coating application and curing.
- .4 Protection to adjacent materials and surfaces.
- .5 Clean up all surfaces and areas of work.
- .6 Substrate preparation

1.2 RELATED SECTIONS

- .1 Section 09 90 00 – Painting and Coating: epoxy paint

1.3 SAMPLES

- .1 Provide two samples each 300 mm x 300 mm minimum size on 12 mm inch thick plywood indicating floor colour and texture of flooring selected. Submit range of slip resistance available for selection by Contract Administrator.
- .2 Provide two samples each 300 mm x 300 mm minimum size of wall coating on cement board indicating colour and texture of coating selected. Indicate on sample stages of application.

1.4 QUALITY ASSURANCE

- .1 Execute work of this Section by applicators approved by floor coating manufacturer having five years of experience and a proven record of satisfactory installations similar to that specified

1.5 COORDINATION

- .1 Coordinate work of this Section with Work of Section 09800, Epoxy Wall Finish and ensure compatibility of floor and wall finish products where they come in contact. Coordinate installation to provide neatly finished overlap where floor and wall coatings meet.

1.6 MAINTENANCE DATA

- .1 Upon completion of work of this Section and prior to Substantial Performance of the Work provide Contract Administrator three copies of manufacturer's instructions covering care and maintenance of flooring.

1.7 DELIVERY / STORAGE / HANDLING

- .1 Store materials in a dry protected area with a minimum temperature of 16°C and away from fires or open flames.
- .2 Handle and store materials in accordance with manufactures printed directions.
- .3 Store flammable materials in safe approved containers to eliminate fire hazards. Remove from Site at end of each work shift.
- .4 Do not use materials that has been stored for period of time exceeding maximum recommended shelf life of materials.

1.8 ENVIRONMENTAL CONDITIONS

- .1 Maintain surface and ambient temperature of 16°C for 24 hours before, during and 48 hours after flooring has cured.
- .2 Ventilate area in which flooring is being applied. Post and enforce "no smoking or open flame" signs until flooring has cured.
- .3 Provide uniform and sufficient lighting in areas of installation.

1.9 PROTECTION

- .1 Mask and protect adjacent surfaces and materials from damage. Make good any damage so caused to the satisfaction of the Contract Administrator.
- .2 Keep all traffic out of area in which flooring is being applied or being cured.

Part 2 Products

2.1 MATERIALS

- .1 Epoxy Seamless Flooring (EF-1, EF-2): CGSB 81-GP-4M; 100% solids, no VOC no odour, multicoat system consisting of troweled mortar system: two component Epoxy, system consisting of primer, Aggregate mortar, and seal coat; 6 mm thick; Custom colour to be selected by Contract Administrator from full range of colours.
 - .1 Flooring EF-1: Stonehard HRI with Stonproof ME7 waterproof membrane; colour to be Ash with medium texture and matte finish.
 - .2 Flooring EF-2: Stonehard HRI with Stonproof ME7 waterproof membrane; colour to be Ash with matte finish. Texture to be grit free - sand between the top gloss coats removing all the grit leaving a smooth "orange peel" finish.
- .2 Epoxy Seamless Flooring (EF-3): 100% solids, no VOC no odour two component Epoxy coating, 4 mils thick. Colour to be Charcoal.. Provide Safety yellow colour for parking lines.
 - .1 Flooring EF-3: Stonehard Stonecost HT4.

- .3 Epoxy Seamless Flooring (EF-4): 100% solids, no VOC no odour, multicoat system consisting of troweled mortar system: three component Epoxy, system; 6 mm thick; Colour to be Charcoal.
 - .1 Flooring EF - 4 (base only): Stonehard Stonclad HT.
- .4 Epoxy Wall Finish: 100% solids, low VOC two component epoxy glaze coating; 10 mil dry thickness; Stoneglaze VSC manufactured by Stonehard. Colour to be Bone.
 - .1 Primer:
 - .1 Concrete block: prime concrete block with Stonglaze block primer.
 - .2 Gypsum board: Stonglaze VSC cut with 3 - 5% acetone.
- .5 Primer, Cleaning Solvents: as recommended by the manufacturer for the specific site conditions.
- .6 Joint backing: Preformed compressible strips of closed cell polyethylene or urethane foam, diameter 25 % greater than joint width. Compatible with sealant, primer and epoxy flooring.
- .7 Joint sealant; CAN/CGSB –19.24M, type 1, Class B, multi-component modified urethane base chemical curing; material compatible with floor finish and as recommended by flooring manufacturer.

Part 3 Execution

3.1 PREPARATION

- .1 Prepare existing floor surface to requirements of flooring materials manufacturer.
- .2 Shot blast floor area prior to applying material.
- .3 Ensure that sub-floor is clean, dry, hard and sound and free of oils or any other substance which would affect proper bonding and curing.
- .4 Report any defects or conditions affecting the flooring installation to the Contract Administrator in writing.
- .5 Pre-fill surface irregularities, holes, cracks, as per manufacturers recommendations.
- .6 Level floor prior to applying epoxy flooring material. Use levelling material and methods to flooring manufacturers recommendations. At sloped areas use epoxy material compatible with flooring material to achieve slope.
- .7 Ensure that backing surfaces for cove bases are free of voids and irregularities. Fill recessed joints with recommended epoxy plaster.

3.2 PROTECTION

- .1 Protect adjacent surfaces from damage resulting from work of this trade. If necessary, mask and/or cover adjacent surfaces, fixtures, equipment, etc. by suitable means.

- .2 Traffic control - no individuals permitted in areas during application and until surface has cured, including protection after cure, against damage by other trades working over the floor.

3.3 APPLICATION -GENERAL

- .1 Application of fluid plastic flooring is to be performed by trained and experienced applicators franchised by the manufacturer.
- .2 Prepare, mix materials and apply each component of flooring system in strict accordance with CGSB 81-GP-10M and manufacturers printed directions to produce uniform monolithic wearing surface of thickness specified, with integral cove bases, uninterrupted except at divider strips or sawn joints.
- .3 Apply flooring ensuring that no laps, pin holes voids, crawls, skips or other marks or irregularities are visible, and to provide uniform appearance.
- .4 Make clean true junctions with no visible overlap between adjoining applications or coatings.

3.4 FINISH COATS

- .1 Apply finish coats as recommended by manufacture to obtain specified finish and slip resistance to match approved samples and to Contract Administrators approval. Approved finish in mock-up areas shall be the standard of acceptance for the remainder of the project.

3.5 COVE BASES

- .1 General: Provide 25 mm cove at junction of wall and floor. Run epoxy floor up wall to height noted on schedule.
- .2 EF4: – Provide 25 mm epoxy mortar cove at junction of wall and garage floor. Run Epoxy up wall to height shown on schedule and feather at floor to match floor coating. Terminate base with zinc termination strip securely fastened to wall..

3.6 CLEAN UP

- .1 Promptly as work proceeds, clean up excess materials, rubbish and overspray or splash.

END OF SECTION