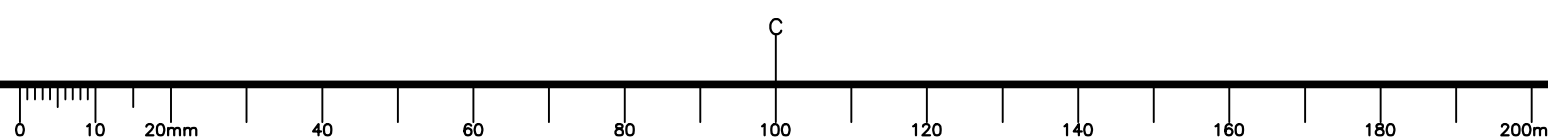


-c



NEW HIGH-PLUME DILUTION LABORATORY EXHAUST SYSTEM																																			
UNIT NO.	APPLICATION	LOCATION	ARRANGEMENT & DRIVE	FAN DATA				MOTOR DATA				STARTER DATA		FAN INTERLOCKING	VIBRATION ISOLATORS			EFFECTIVE PLUME HEIGHT (m)	SOUND POWER LEVEL (db) (INLET OCTAVE BANDS)								SOUND POWER LEVEL (db) (OUTLET OCTAVE BANDS)								
				I/s	S.P. Pa	NOZZLE O.V. m/min	WINDBAND O.V. m/min	BHP (kW)	RPM	kW	ELECT. DATA	TYPE	LOCATION		BASE	SPRINGS	STATIC DEF. (mm)		1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	dBA (10)
FF1	BLOCK "C" PENTHOUSE	PENTHOUSE ROOF	STANDBY FAN TYPE, COMMON BYPASS AIR PLENUM, BYPASS AND ISOLATION DAMPERS	9433	750	1772	613	20.4	1346	22.4	575/3/60	VFD	PH	FF1 & FF2 (BAS)				13.7 m	57	93	100	94	91	87	83	76	95	63	97	95	90	88	85	81	75
FF2	BLOCK "C" PENTHOUSE	PENTHOUSE ROOF	STANDBY FAN TYPE, COMMON BYPASS AIR PLENUM, BYPASS AND ISOLATION DAMPERS	9433	750	1772	613	20.4	1346	22.4	575/3/60	VFD	PH	FF1 & FF2 (BAS)				13.7 m	57	93	100	94	91	87	83	76	-	-	-	-	-	-	-	-	-
NOTES: 1. SEE DWG H-602 FOR FAN DIMENSIONS, CONFIGURATION, AND WEIGHT. 2. FANS c/w DOUBLE-WALLED WIND BAND DISCHARGE ATTENUATOR c/w 2" INSULATION IN A SS LINER 3. MOTOR: NEMA PREMIUM EFFICIENCY, VFD RATED INDUSTRIAL MOTORS. 4. ASSEMBLY c/w BYPASS AIR PLENUM, BYPASS DAMPER, ISOLATION DAMPER, WEATHER HOOD AND INLET SCREEN OVER BYPASS DAMPER 5. NEMA 3R HEAVY DUTY DISCONNECT, EXTERIOR, MOUNTED AND WIRED. 6. 14" ROOF CURB c/w 2" INSULATION 7. HINGED MOTOR COVER, REMOVABLE 8. ENTIRE UNIT AND CURB COATED WITH LAB-RATED EPOXY PAINT FINISH 9. STANDARD OF ACCEPTANCE: GREEHECK VEKTOR MD-33-9-85-MV-HPW OR STROBIC AIR TRI-STACK																																			

NEW INLINE EXHAUST FAN SCHEDULE																													
UNIT NO.	APPLICATION	LOCATION	ARRANGEMENT & DRIVE	MOUNTING	FAN DATA				MOTOR DATA		STARTER DATA		FAN INTERLOCKING	VIBRATION ISOLATORS				REMARKS	SOUND POWER LEVEL (db) (INLET OCTAVE BANDS)										
					L/s	S.P. (Pa)	O.V. (m/s)	BHP kW	RPM	kW	ELEC.	TYPE		LOCATION	BASE	SPRINGS	STATIC DEF. (mm)		WEIGHT (KG) SILENCER	1	2	3	4	5	6	7	8	LWA dBA	
GE1	BLOCK "C" LAB GENERAL EXHAUST	BLOCK "C" PENTHOUSE	MIXED FLOW ARR # 9	CLG HUNG	7547	875	8.82	10.8	1298	14.9	575/3/60	VFD	PH	AHU-5A/5B (BAS)	CLG HUNG	SPRING HANGER	50mm	680	c/w INLET SILENCER	79	83	88	85	83	78	74	69	87	76
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<div>NOTES:</div> <div>1. SEE DWG H-602 FOR FAN DIMENSION AND CONFIGURATION</div> <div>2. MOTOR NEMA PREMIUM EFFICIENCY, VFD RATED</div> <div>3. c/w INLET & OUTLET FLANGES AND INLET SILENCERS</div> <div>4. FAN ASSEMBLY COATED WITH LAB-RATED EPOXY FINISH</div> <div>5. c/w COPPER EXTENDED LUBE LINES AND HINGED ACCESS DOOR</div> <div>6. STANDARD OF ACCEPTANCE: GREENHECK QEI-30-11-200 (MIXED FLOW)</div>																													

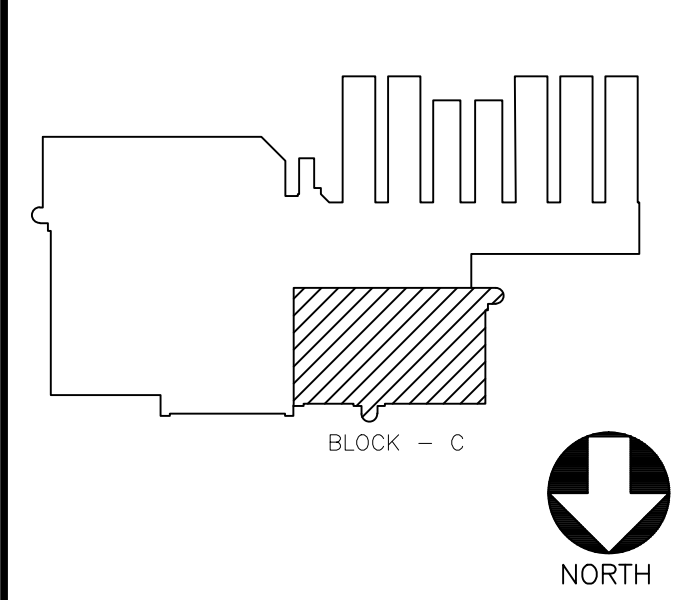
NEW & EXISTING FUME HOODS: SCHEDULE OF CONNECTED SERVICES																			
ROOM NO.	EXISTING FUME HOOD NO.#	MAKE	MODEL	SERIAL NO.	TYPE	DIMENSIONS (WxDxH)(mm)	DUCT # (mm)	CUP SINK	SINGLE VACUUM OUTLET	SINGLE STEAM OUTLET	DUPLEX AIR OUTLET	DUPLEX GAS OUTLET	COM-PRESSED AIR	COLD WATER	HOT WATER	DEIONIZED WATER	PROPANE GAS	LIGHTS	REMARKS
C130	FF18	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X	X				X	X	X		X	X	—
C205	FF25	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X	X					X	X		X	X	—
C217	FF28	FISHER SCIENTIFIC	FISHER	N/A	STANDARD	1500x876	250	X	X				X	X			X	X	—
C223	FF24	BEDCO LAB	N/A	N/A	ACID	1500x825	250	X	X	X				X	X		X	X	—
C223	FF23	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X	X	X				X	X		X	X	—
C227	FF23	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X	X					X	X		X	X	—
C247	FF21	BEDCO LAB	N/A	N/A	ACID	1500x825	250	X	X					X	X		X	X	—
C247	—	NU AIR	NU 425-400	1127 2902 1407	BIO-SAFETY	750x1372	250		X				X				X	X	RELOCATED FROM ROOM 3042
C251	FF40	MOTT	7221000	20336-01	BIO-SAFETY	1220x826x1384	250	X	X					X	X	X	X	X	—
C251	FF19	BEDCO LAB	N/A	N/A	STANDARD	1500x825x1500	250	X	X					X	X	X	X	X	—
C257	1	NU AIR	NU 425-400	76662 AFN	BIO-SAFETY	1500x840x1360	250						X				X	X	—
C257	2	NU AIR	NU 425-600	76663 AFN	BIO-SAFETY	1970x825x1473	250										X	X	—
C257	3	NU AIR	NU 425-400	123840322800	BIO-SAFETY	1500x825x1473	250										X	X	—
C259	FF26	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X					X	X	X		X	X	—
C304	FF6	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X					X	X	X		X	X	—
C304	FH3	FISHER	SAFETY FLOW	N/A	STANDARD	1500-876	250	X					X	X	X		X	X	—
C315	FF5	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X	X	X			X	X	X		X	X	—
C319	FF4	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X	X				X	X	X		X	X	—
C319	FF17	BEDCO LAB	N/A	N/A	ACID	1500x825	250	X		X			X	X	X		X	X	—
C325	FF16	BEDCO LAB	N/A	N/A	ACID	1500x825	250	X	X	X			X	X	X			X	—
C329	FF15	BEDCO LAB	N/A	N/A	STANDARD	1500x825	250	X	X	X			X	X	X		X	X	—
C359	FF41	MOTT	70321001	N/A	WALK-IN	1500x1130	250	X	X				X	X	X		X	X	—
C359	FF2	BEDCO LAB	N/A	N/A	ACID	1500x825	250	X	X	X			X		X		X	X	—
3040	FF10	BEDCO LAB	VBA-60	90040-1	STANDARD	1500x825	250	X	X				X	X	X		X	X	—
NOTES:																			
1. ALL EXISTING FUME HOODS, (WITH THE EXCEPTION OF THE THREE (3) BIO-SAFETY CABINETS IN RM C257, AND WALK-IN HOOD IN RM. C359) ARE TO BE REPLACED WITH NEW HOODS. IT IS THE MECHANICAL CONTRACTOR REASONABILITY TO DISCONNECT ALL SERVICES TO THE HOODS, AS NOTED ABOVE, AND REMOVE AND DISPOSE OF THE EXISTING HOODS. IT IS THE CONTRACTORS RESPONSIBILITY TO SUPPLY AND INSTALL THE NEW FUME HOODS, AND RE-CONNECT ALL OF THE EXISTING SERVICES.																			
2. DISCONNECTING ALL ELECTRICAL SERVICES FROM THE EXISTING HOODS AND RECONNECT ALL ELECTRICAL SERVICES TO NEW FUME HOODS WOULD BE THE REASONABILITY OF THE ELECTRICAL CONTRACTOR																			
3. REFER TO ELECTRICAL DRAWINGS FOR FUME HOOD ELECTRICAL REQUIREMENTS.																			

NEW DUAL DUCT VARIABLE VOLUME MIXING BOX SCHEDULE											
MARK	CAPACITY		MIN. REQ'D S.P. AT MAX. L/S	N.C.		INLET SIZE (mm)	DISCHARGE DUCT SIZE (mm)	REMARKS			
	MIN. L/S	MAX. L/S		AT MIN. S.P.	900mm S.P.						
D04	21	106	75	-	-	125ø	300x200	-	-	-	-
D05	107	160	75	-	-	125ø	300x200	-	-	-	-
D06	161	189	75	-	-	150ø	300x200	-	-	-	-
D07	190	260	75	-	-	175ø	300x250	-	-	-	-
D08	261	354	75	-	-	225ø	350x300	-	-	-	-
D09	355	472	75	-	-	225ø	350x300	-	-	-	-
D010	473	613	75	-	-	250ø	350x300	-	-	-	-
D012	614	897	75	-	-	300ø	375x350	-	-	-	-
1. DUAL DUCT BOXES TO BE PREMIUM QUALITY ULTRA-QUIET TYPE c/w INTEGRAL DISCHARGE SILENCER. 2. EACH DUAL DUCT BOX c/w THREE(3) MULTI-POINT VELOCITY SENSOR LOCATED IN THE HOT DECK, COLD DECK AND TOTAL FLOW TO ALLOW FOR ACCURATE PRESSURE INDEPENDENT VAV OPERATION 3. DUAL DUCT VAV BOXES c/w INTEGRAL MIXING BAFFLES CAPABLE OF 20:1 MIXING EFFICIENCY RATIO. THIS ALLOWS FOR DISCHARGE TEMPERATURE VARIATIONS OF LESS THAN 0.5°C FOR EVERY 5.5°C DIFFERENCE BETWEEN HOT AND COLD DECKS. 4. TWO(2) AIR-VALVES, ONE(1) ON THE HOT DECK SIDE AND ONE(1) ON THE COLD DECK SIDE, MAY BE USED IN LIEU OF THE DUAL DUCT VAV BOX IF REQUIRED BY THE MECHANICAL CONTRACTORS CONTROL CONTRACTOR. TO MEET THE REQUIRED LAB PRESSURIZATION CONTROL PERFORMANCE, A SUPPLY AIR DUCT SILENCER WOULD BE REQUIRED DOWN STREAM OF TWO(2) AIR-VALVES WITH EQUIVALENT SOUND PERFORMANCE AS SPECIFIED DUAL DUCT BOX. 5. STANDARD OF ACCEPTANCE: PRICE DDUL											

NEW CEILING EXHAUST REGISTERS/GRILLES SCHEDULE					
MARK	CLG. SIZE (mm)	CAPACITY L/S	NC LEVEL	SP Pa	REMARKS
GE1	150 x 150	0-30	NC-17	17.4	
GE2	200 x 150	31-44	NC-20	22.4	
GE3	200 x 200	45-65	NC-21	17.4	
GE4	250 x 250	66-85	NC-20	12.4	
GE5	300 x 300	86-115	NC-19	12.4	
GE6	350 x 350	116-150	NC-21	12.4	
GE7	400 x 400	151-225	NC-23	12.4	
GE8	450 x 450	226-295	NC-22	12.4	
GE9	500 x 500	296-375	NC-27	15.0	
GE10	600 x 600	376-485	NC-28	-	
GE11	600 x 600	-	-	-	LAY-IN T-BAR TYPE
1. STANDARD OF ACCEPTANCE: PRICE 600/C/L					

NEW SUPPLY DIFFUSER SCHEDULE						
MARK	NECK SIZE mm	CLG. SIZE	CAPACITY L/S	NC LEVEL	SP Pa	REMARKS
S1	125ø	300 x 300	0-56	NC-25	10.0	IN 600x600 PANEL
S2	150ø	300 x 300	57-75	NC-26	7.5	IN 600x600 PANEL
S3	200ø	300 x 300	76-100	NC-26	5.0	IN 600x600 PANEL
S4	200ø	600 x 600	101-148	NC-26	10.0	
S5	250ø	600 x 600	149-205	NC-25	7.5	
1. STANDARD OF ACCEPTANCE: PRICE SCD						

NEW LABORATORY RADIAL FLOW DIFFUSERS						
MARK	NECK SIZE mm	CLG. SIZE mm	CAPACITY L/S	NC LEVEL	SP Pa.	REMARKS
SR1	250ø	600 x 600	118-175	NC-30	15	RFD-2WAY
SR2	300ø	1200 x 600	176-355	NC-30	12.5	RFD-2WAY
1. STANDARD OF ACCEPTANCE: PRICE RFD						



GENERAL NOTES :
DO NOT SCALE THIS DRAWING FOR CONSTRUCTION PURPOSES. USE FIGURED DIMENSIONS AS NOTED.
THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATIONS AND GENERAL CONTRACTUAL CONDITIONS.
ALL DIMENSIONS AND CONDITIONS ARE TO BE VERIFIED ON SITE. ALL DISCREPANCIES ARE TO BE REPORTED TO THE DEPARTMENTAL REPRESENTATIVE AND AGREED UPON WITH THEM IN WRITING BEFORE PROCEEDING WITH WORKS.
INFORMATION ON THESE DRAWINGS IS TO BE USED FOR THIS PROJECT ONLY AND SHALL NOT BE USED FOR ANY OTHER PURPOSE



3	ISSUED FOR TENDER	OCT 28 2015
2	99% REVIEW	SEP 11 2015
1	66% REVIEW	JUNE 30 2015
revisions		date

project project

Aafc KENTVILLE RESEARCH CENTRE LABORTORY BLOCK-C CONTROLS SYSTEM UPGRADE KENTVILLE, N.S.

MECHANICAL SCHEDULES:
NEW EQUIPMENT

designed PFH	conçu
date JULY 2015	
drown CAB	dessiné
date JULY 2015	
approved	approuvé
date	
Tender	Soumission
PWGSC Project Manager	Administrateur de projets TPSCG
project number	no. du projet
R.074306.001	
drawing no.	no. du dessin
H604	