EXISTING AIR HANDLING UNIT SCHEDULE BASIS OF DESIGN SF RF SUPPLY SUPPLY OUTSIDE MINIMUM MAXIMUM MIN OUTSIDE MAX QTY QTY MANUFACTURER MODEL REMARKS (E) AHU-1 MECH ROOM RECIRCULATING 5000 CFM 10000 CFM 500 CFM 2500 CFM 2 2 INGENIA CUSTOM AHU 1. EXISTING AIR HANDLING UNIT AIRFLOW SETPOINTS HAVE BEEN REVISED TO MEET CURRENT AUDITORIUM DESIGN. (E) AHU-1 WILL REQUIRE A REVISED TAB AND COMMISSIONING TO MEET THE DESIGN AIRFLOW VALUES LISTED IN THIS SCHEDULE.

						(E) AH	U-1 (COILS	SCHE	DUL	=					
			TOTAL	SENSIBLE				P	AIRSIDE D	ATA			WA	FERSIDE	DATA	
		AIRFLOW	CAPACITY	CAPACITY	MIN	MAX FINS	EAT DB	EAT WB	LAT DB	LAT WB	MAX AIR PD	EWT	LWT	FLOW	WATER MAX PD	
TAG	TYPE	[CFM]	[MBH]	[MBH]	ROWS	PER INCH	[°F]	[°F]	[°F]	[°F]	[IN-WG]	[°F]	[°F]	[GPM]	[FT-H20]	REMARKS
(E) AHU-1 CC	HYDRONIC	5000	307	199	10	12	85	70	49	49	1.60	44	60	38	17.50	DATA IS FOR ONE COIL; QTY OF COILS IS 2
(E) AHU-1 PHC	HYDRONIC	5000	16	16	1	7	47		53		0.10	130	100	2	1.00	DATA IS FOR ONE COIL; QTY OF COILS IS 2
(E) AHU-1 RHC	HYDRONIC	5000	130	130	2	10	49		72		0.25	130	100	9	1.00	DATA IS FOR ONE COIL; QTY OF COILS IS 2

1. EXISTING AIR HANDLING UNIT COIL PERFORMANCE HAS BEEN REVISED TO MEET CURRENT AUDITORIUM DESIGN. (E) AHU-1 WILL REQUIRE A REVISED TAB AND COMMISSIONING TO MEET THE DESIGN FLOW (GPM) VALUES AND AIRSIDE PERFORMANCE VALUES LISTED IN THIS SCHEDULE.

> **NOT FOR** CONSTRUCTION

RENOVATE BAIRD

AUDITORIUM

				A	IR HANI	DLING UN	VIT-2	SCHEDU	LE			
				AIRFLOW [CFN	/]			FILTER S	SECTIONS	BASIS OF	DESIGN	
					MIN	MAX OUTSIDE						
TAG	LOCATION	TYPE	SUPPLY MINIMUM	SUPPLY MAXIMUM	OUTSIDE AIR	AIR	SF QTY	PRE FILTER	FINAL FILTER	MANUFACTURER	MODEL	REMARKS
AHU-2	GREEN RM MEZZ	RECIRCULATING	1500	5000	500	1600	2	MERV 8	MERV 13	INGENIA	CUSTOM AHU	

1. FANS SHALL BE SELECTED ASSUMING SCHEDULED FILTERS UNDER MEDIUM LOADING.

				PU	MP (SCHED	ULE			
				DISCHARGE		MOTOR DAT	A	BASIS OF DE	ESIGN	
TAG	LOCATION	TYPE	FLOW	HEAD [FT-WG]	HP	VOLTAGE	PHASE	MANUFACTURER	MODEL	REMARKS
CP-1	ELEC RM	CONDENSATE PUMP	2 GPM	5.00	0.025	120 V	1	LITTLE GIANT	VCL	
CP-2	DRESSING RM	CONDENSATE PUMP	2 GPM	5.00	0.025	120 V	1	LITTLE GIANT	VCL	
P-HC2-1	GREEN RM MEZZ	COIL CIRCULATOR	10 GPM	15.00	0.1	120 V	1	BELL & GOSSETT	ECO-CIRC	

						AHL	J-2 C	OIL S	CHE	DULE						
			TOTAL	SENSIBLE				A	AIRSIDE D	ATA			WA	TERSIDE	DATA	
		AIRFLOW	CAPACITY	CAPACITY	MIN	MAX FINS	EAT DB	EAT WB	LAT DB	LAT WB	MAX AIR PD	EWT	LWT	FLOW	WATER MAX PD	
TAG	TYPE	[CFM]	[MBH]	[MBH]	ROWS	PER INCH	[°F]	[°F]	[°F]	[°F]	[IN-WG]	[°F]	[°F]	[GPM]	[FT-H20]	REMARKS
AHU-2 -CC -1	HYDRONIC COOLING	5000	311	184	8	12	82	69	48	48	1.00	44	56	40	20.00	
AHU-2 -HC -1	HYDRONIC HEATING	5000	150	150	2	7	50		78		0.15	130	100	10	5.00	

												AHU-2	FAN SC	CHEDUL	E											
				All	R CAPACITY	Y							OCTAVE BANI	OS, MAX DUTY	POINT, MAX PV	VL (DB RE 10^(-	12)) W				MOTOR	DATA		BASIS OF	DESIGN	
																								MANUFACTU		
TAG	SYSTEM	LOCATION	TYPE	MIN	DESIGN	MAX	TSP	ESP	FAN RPM	VOLUME CONTROL	1 (63 HZ)	2 (125 HZ)	3 (250 HZ)	4 (500 HZ)	5 (1,000 HZ)	6 (2,000 HZ)	7 (4,000 HZ)	8 (8,000 HZ)	BHP	HP	MAX RPM	VOLTAGE	PHASE	RER	MODEL	REMARKS
AHU-2 RF-1	AHU-2	EXTERIOR TO UNIT	INLINE	1000 CFM	5000 CFM	5000 CFM	2.00 in-wg	2.00 in-wg	3500	VFD	83	87	94	91	87	85	81	77	.63	5	3600	480 V	3	GREENHECK	AX	
AHU-2 SF-1	AHU-2	IN UNIT	PLENUM	1000 CFM	2500 CFM	5000 CFM	6.80 in-wg	3.00 in-wg	2392	VFD	51	73	76	81	83	79	75	68	4.24	10	3600	480 V	3	GREENHECK	APD	
AHU-2 SF-2	AHU-2	IN UNIT	PLENUM	1000 CFM	2500 CFM	5000 CFM	6.80 in-wg	3.00 in-wg	2392	VFD	51	73	76	81	83	79	75	68	4.24	10	3600	480 V	3	GREENHECK	APD	

1. PROVIDE ALL FAN WITH BACKDRAFT DAMPER 2. AHU-2 SF 1&2 SHALL BE SELECTED SUCH THAT EACH FAN IS CAPABLE OF THE MAXIMUM AND DESIGN AIRFLOWS AT THE SCHEDULED ESP. (N+1 OPERATION)

							VOLU	IME CO	NTROL I	BOX SC	HED	ULE								
							AIRSIDE	DATA			REH	EAT COIL	_ DATA			NOISE	DATA	BASIS OF	DESIGN	
				INLET	OUTLET					HEATING						RADIATED SOUND	DISCHARGE SOUND	MANUFACTU		
TAG	LOCATION OF EQUIPMENT	LOCATION SERVED	TYPE	SIZE	SIZE	MIN AIRFLOW	MAX AIRFLOW	MAX AIR PD	MIN INLET SP	AIRFLOW	EAT	LAT	EWT	LWT	FLOW	(NC)	(NC)	RER	MODEL	REMARKS
VAV-1	GREEN RM MEZZANINE	GREEN ROOM	SINGLE DUCT WITH REHEAT	6	12x8	100 CFM	400 CFM	0.50 in-wg	0.25 in-wg	300 CFM	50 °F	85 °F	130 °F	100 °F	0.5 GPM	27	30	TITUS	DESV	
VAV-2	EAST AMBULATORY	STAGE	SINGLE DUCT WITH REHEAT	14	20x18	525 CFM	1700 CFM	0.50 in-wg	0.25 in-wg	1700 CFM	50 °F	75 °F	130 °F	100 °F	3.0 GPM	27	25	TITUS	DESV	
VAV-3	EAST AMBULATORY	AMBULATORIES	SINGLE DUCT WITH REHEAT	14	15x16	525 CFM	2600 CFM	0.50 in-wg	0.25 in-wg	2600 CFM	50 °F	75 °F	130 °F	100 °F	4.6 GPM	30	30	TITUS	DESV	
VAV-4	BACK OF HOUSE CORRIDOR	BACK OF HOUSE CORRIDOR	SINGLE DUCT WITH REHEAT	8	10x12	150 CFM	400 CFM	0.50 in-wg	0.25 in-wg	400 CFM	50 °F	100 °F	130 °F	100 °F	1.5 GPM	25	30	TITUS	DESV	
VAV-5	BACK OF HOUSE CORRIDOR	DRESSING ROOM	SINGLE DUCT WITH REHEAT	6	10x12	80 CFM	150 CFM	0.50 in-wg	0.25 in-wg	150 CFM	50 °F	75 °F	130 °F	100 °F	0.5 GPM	25	25	TITUS	DESV	

										FAI	1 COI	L UN	IT SC	CHEDI	JLE	·										
			A	AIRSIDE DATA			MOTOR DATA	4				COOLIN	G COIL D	ATA						HEATING C	OIL DATA	١		BASIS OF D	ESIGN	
				VOLUME					TOTAL	SENSIBLE																
TAG	LOCATION	TYPE	AIRFLOW	CONTROL	ESP	HP	VOLTAGE	PHASE	CAPACITY	CAPACITY	EAT DB	EAT WB	LAT DB	LAT WB	EWT	LWT F	LOW MA	AX PD EA						MANUFACTURER	MODEL	REMARKS
FCU-1	DRESSING RM	HORIZONTAL RECESSED	400 CFM	ECM	0.50 in-wg	0.25	277 V	1	12400 BTU	9100 Btu/h	76 °F	65 °F	55 °F	55 °F	44° F	56° F	2.1 0	0.77 70°	F 85° F	130° F 10	0° F 0.5	GPM :	5 FT-WG	DAIKIN	FCHR	

1. PROVIDE WITH BACKDRAFT DAMPER 2. PROVIDE AND INSTALL WITH VIBRATION ISOLATION

		FIN TU	JBE R	ADIA	TION SCH	HEDU	LE			
							AVERAGE	BASIS OF DES	SIGN	
			HEIGHT	LENGTH	CAPACITY / FT	FLOW	WATER/STEAM			
TAG	MOUNTING	TYPE	[INCHES]	[INCHES]	[BTU/HR]	[GPM]	TEMPERATURE [°F]	MANUFACTURER	MODEL	REMARKS
FT-1	WALL MOUNTED	DOUBLE FINNED PANEL RADIANT/CONVECTIVE	6.0	94	600	1.00	120	RUNTAL	R2-F	
FT-2	WALL MOUNTED	DOUBLE FINNED PANEL RADIANT/CONVECTIVE	6.0	94	600	1.00	120	RUNTAL	R2-F	

							E	BLOWE	R CC	IL UI	VIT S	CHEI	DULI	=						
			AIRSIDE	DATA		MOTOR DATA	A				COOLING	COIL DAT	Ā					BASIS OF D	ESIGN	
								TOTAL									OPERATING			
TAG	LOCATION	TYPE	AIRFLOW	ESP	HP	VOLTAGE	PHASE	CAPACITY	EAT DB	EAT WB	LAT DB	LAT WB	EWT	LWT	FLOW	MAX PD	WEIGHT	MANUFACTURER	MODEL	REMARKS
BCU-1	ELEC RM	HORIZONTAL EXPOSED	1500 CFM	0.50 in-wg	0.5	277 V	1	57600 Btu/h	80 °F	67 °F	55 °F	55 °F	44° F	60° F	7 GPM	10 FT-WG	600 lb	DAIKIN	BCHD	

1. PROVIDE ALL SUPPORTS AND MOUNTING HARDWARE FROM FINNED TUBE MANUFACTURER. 2. COORDINATE COLOR OF FTR AND ALL HARDARE/FASTENERS WITH ARCHITECURE

TAG SYSTEM LOCATION TYPE DESIGN MAX ESP FAN RPM VOLUME CONTROL BHP HP MAX RPM VOLTAGE PHASE MANUFACTURER MODEL										FAN							
TAG SYSTEM LOCATION TYPE DESIGN MAX ESP FAN RPM VOLUME CONTROL BHP HP MAX RPM VOLTAGE PHASE MANUFACTURER MODEL		ESIGN	BASIS OF DE		DATA	MOTOR						PACITY	AIR CAF				
	REMARKS	MODEL	MANUFACTURER	PHASE	VOLTAGE	MAX RPM	HP	BHP	VOLUME CONTROL	FAN RPM	ESP	MAX	DESIGN	TYPE	LOCATION	SYSTEM	TAG
EF-1 TOILET/DRESSING RM EXHAUST TOILET RM CEILING INLINE 250 CFM 500 CFM 1.25 in-wg 1885 ECM .25 1 2200 480 V 1 GREENHECK APD		APD	GREENHECK	1	480 V	2200	1	.25	ECM	1885	1.25 in-wg	500 CFM	250 CFM	INLINE	TOILET RM CEILING	TOILET/DRESSING RM EXHAUST	EF-1

								DUC	TSILE	NCER SCH	IED	ULE	I								
					DIMENSIONS						MINIM	IUM DY			ON LOS	S PER 00 3]	CTAVE	BAND			
			DUCT	OUTER WIDTH	DUCT HEIGHT	OUTER HEIGHT		AIRFLOW	MAX DP	MAX DP W/ SYS											
TAG	SYSTEM	TYPE	WIDTH [IN]	[IN]	[IN]	[IN]	LENGTH [IN]	[CFM]	[IN-WG]	EFF [IN-WG]	63	125	250	500	1000	2000	4000	8000	MANUFACTURER	MODEL	REMARKS
SA-1R	AHU-1	EXRNM	42	44	42	44	60	10000	0.10	0.15	11	8	17	18	12	11	9	8	VIBRO ACOUSTICS	EX-RNM-MV-F3	
SA-1S	AHU-1	EXRNM	60	63	30	31	60	10000	0.10	0.15	7	7	15	18	12	11	9	8	VIBRO ACOUSTICS	EX-RNM-MV-F3	
SA-2R	AHU-2	EXRNM	24	25	24	25	36	5000	0.10	0.15	6	5	12	15	10	9	7	6	VIBRO ACOUSTICS	EX-RNM-HV-F3	
SA-2S	AHU-2	EXRNM	24	25	24	25	36	5000	0.10	0.15	2	4	10	14	9	8	7	5	VIBRO ACOUSTICS	EX-RNM-HV-F3	

TYPE: EX - EXTENDED CASING
RE - RECTANGULAR ELBOW

NM - NO MEDIA

M - MEDIA R - RECTANGULAR

1. PROVIDE AND INSTALL WITH VIBRATION ISOLATION

2. IDEAL PRESSURE DROP AS DETERMINED PER ASTM E477-13 IN A NVLAP-ACCREDITED ACOUSTICAL LABORATORY. 3. PRESSURE DROP PER ASTM E477-13 PLUS SYSTEM EFFECTS FOR NEARBY DUCT ELEMENTS.

4. MAXIMUM SELF GENERATED NOISE DETERMINED PER ASTM E477-13 IN A NVLAP-ACCREDITED ACOUSTICAL LABORATORY. 5. NON-BASIS OF DESIGN SILENCER MANUFACTURER SHALL PROVIDE, FOR APPROVAL, PROFESSIONAL ENGINEER STAMPED ACOUSTICAL CALCULATIONS FOR ALL SYSTEMS WITH SILENCERS TO DEMONSTRATE THAT: A) THE RESULTANT DUCTBORNE FAN SOUNT LEVELS, INCLUDING AIRBORNE AND BREAKOUT NOISE, MEET THE REQUIRED CRITERIA

B) THE RESULTANT DROP WITH SYSTEM EFFECTS DOES NOT EXCEED SCHEDULED VALUES.

						GRILLE, F	REGISTER,	AND D	IFFUS	SER	SCHEDULE		
		MINIMUM	NA A MINALINA	NECK		LINEAR DIFFUSE	R DATA		MAYDD	NAAV	BASIS OF DE	SIGN	
MARK	TYPE	AIRFLOW [CFM]	MAXIMUM AIRFLOW [CFM]	NECK SIZE	LENGTH [FT]	SLOT QUANTITY	SLOT WIDTH [IN]	FACE SIZE	MAX PD [IN-W.G]		MANUFACTURER	MODEL	REMARKS
S1-1	SQUARE PLAQUE	50	195	6	-	-	-	24X24	0.06	22	PRICE	SPD	SEE NOTE 2
S1-2	SQUARE PLAQUE	196	315	8	-	-	-	24724	0.06	22	PRICE	3PD	SEE NOTE 2
S2-1	LINEAR SLOT SUPPLY	0	150	10	4	2	1	-	0.05	22	PRICE	TBD	SEE NOTE 1
S3-1	SUPPLY GRILLE	0	500	40x10				42x12	0.04	22	PRICE	LBMH	
S4-1	ROUND PLAQUE	0	200	6				14	0.06	22	PRICE	RPD	SEE NOTE 2, 6
S4-2	ROUND PLAQUE	0	450	8				18	0.06	22	PRICE	RPD	SEE NOTE 2, 6
S5-1	MODULAR FLOOR DIFFUSER	0	30						0.06	22	PRICE	MFD-DP	SEE NOTE 4
S6-1	FLOOR GRILLE	0	1000	VARIES	VARIES			6	0.06	22	PRICE	LBMH	SEE NOTE 5
S7-5	LOUVERED SUPPLY, ROUND	0	450	14				16	0.06	22	PRICE	RSG	
R1-1	CEILING RETURN	-	-	12	-	-	-	24x24	0.08	22	PRICE	PDR	
R2-1	LINEAR SLOT RETURN				4	2	1		-	-	PRICE	TBD	SEE NOTE 3
E1-1	EXHAUST GRILLE	-	100	6	-	-	-	12x12	0.04	22	PRICE	LBMH	GRILLE SIZE SHALL MATCH TRANSFER DUCT CONNECTION SIZE
E2-1	EXHAUST GRILLE	0	100	6x6				6x6	.05	30	PRICE	600	

PROVIDE LINEAR SLOT DIFFUSERS WITH INSULATED SUPPLY PLENUM.
PROVIDE FACTORY OPTION FOR R-6 INSULATION BLANKET.

3. PROVIDE WITH LIGHT SHEILD. 4. PROVIDE MODULAR FLOOR DIFFUSERS WITH BASKET ATTACHMENT AND FACTORY EXTENSION MODULE FOR BASKET. BASKET SHALL NOT BE FACE ADJUSTABLE AND SHALL BE SET TO THE OPEN POSITION AT TIME OF INSTALL.

5. FLOOR GRILLE LENGTHS SHALL BE TAILORED TO THE OPENINGS OF THE AUDITORIUM STAGE FLOOR. SEE ARCHITECTURAL AND STRUCTURAL PLANS. PROVIDE WITH CUSTOM, INSULATED UNDERFLOOR SUPPLY PLENUM. DEPTH OF PLENUM SHALL BE COORDINATED WITH UNDER STAGE DUCTWORK. CORE STYLE 27C (30 DEGREE DEFLECTION PENCIL

PROOF). DIRECTION OF DEFLECTION SHALL DIRECT AIR TOWARD THE CENTER OF STAGE. 6. ADJÚST FACTORY THROW PATTERN FOR HORIZONTAL DISTRIBUTION.

MAIN BUILDING (NMNH) COURT AUDITORIUM

GRAPHIC SCALE(S)

Н	2/14/2025	BID SET	`
	REVISION # DATE	REVISION DESCRIPTION	
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Smithsonian Facilities 600 Maryland Avenue S.W. Suite 5001 Washington, DC 20024-2520

BUILDING NAME 1000 Madison Drive NW Washington, D.C. ADDRESS

RENOVATE BAIRD AUDITORIUM PROJECT TITLE SF PROJECT NUMBER A/E PROJECT NUMBER 14572.000 DRAWING TITLE MECHANICAL SCHEDULES

WORKING STAFF Designer Author Checker

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