COLUMN SCHEDULE – PHASE THREE

COLUMN NUMBER	COLUMN SIZE	COLUMN LOAD (KIPS)	BASE PLATE			TOP PLATE				SPLICE		REMARKS
			BTM.ELEV.	LENGTH x WIDTH	THICKNESS	TOP ELEV.	N–S DIR.	E–W DIR.	THICKNESS	ELEVATION	DETAIL	
D.3 / 1.7	TS 6x6x1/2"	135	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	142'–0"	6"	6"	1/2"	120'–8"	2/S4.7	–
D.3 / 1	TS 6x6x1/2"	75	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	142'–0"	6"	6"	1/2"	120'–8"	2/S4.7	
E / 4.6	TS 8x8x3/8"	97	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	110'–0"	8"	8"	1/2"	NA		
E / 4.7	TS 8x8x3/8"	133	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	110'–0"	8"	8"	1/2"	NA		
E / 5	TS 8x8x3/8"	97	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	110'–0"	8"	8"	1/2"	NA		
F.5 / 4.2	TS 8x8x5/8"	125	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	110'–0"	8"	8"	1/2"	NA		
F.5 / 4.6	TS 6x6x3/8"	56	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	142'–0"	6"	6"	1/2"	120'–8"	2/S4.7	
F.5 / 4.8	TS 6x6x3/8"	56	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	142'–0"	6"	6"	1/2"	120'–8"	2/S4.7	
K.8 / 2.5	TS 12x12x1/2"	–	99'–5 1/2"	SEE DETAIL 10/S4.7	1"	110'–0"	12"	12"	1/2"	NA		

I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

For: MEAD & HUNT, INC.

By:
Title: PROJECT MANAGER
Registration No: 22452

ALL SCALES SHOWN ARE BASED ON A STANDARD DRAWING SIZE OF 28" X 40" OR METRIC DRAWING SIZE OF 841mm X 594mm. IF ANY OTHER SIZE DRAWINGS ARE FURNISHED OR PLOTTED THE CONTRACTOR SHALL ADJUST THE SCALES ACCORDINGLY. THE CONTRACTOR SHALL ALSO ADVISE HIS SUB–CONTRACTORS OF THE ABOVE.

Revisions			
Symbol	Descriptions	Date	Approved

Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA	Engineer: MEAD & HUNT MADISON, WISCONSIN	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

Designed by: JMM
Drawn by: ACT
Checked by: TLK
Reviewed by: REC
Submitted by:

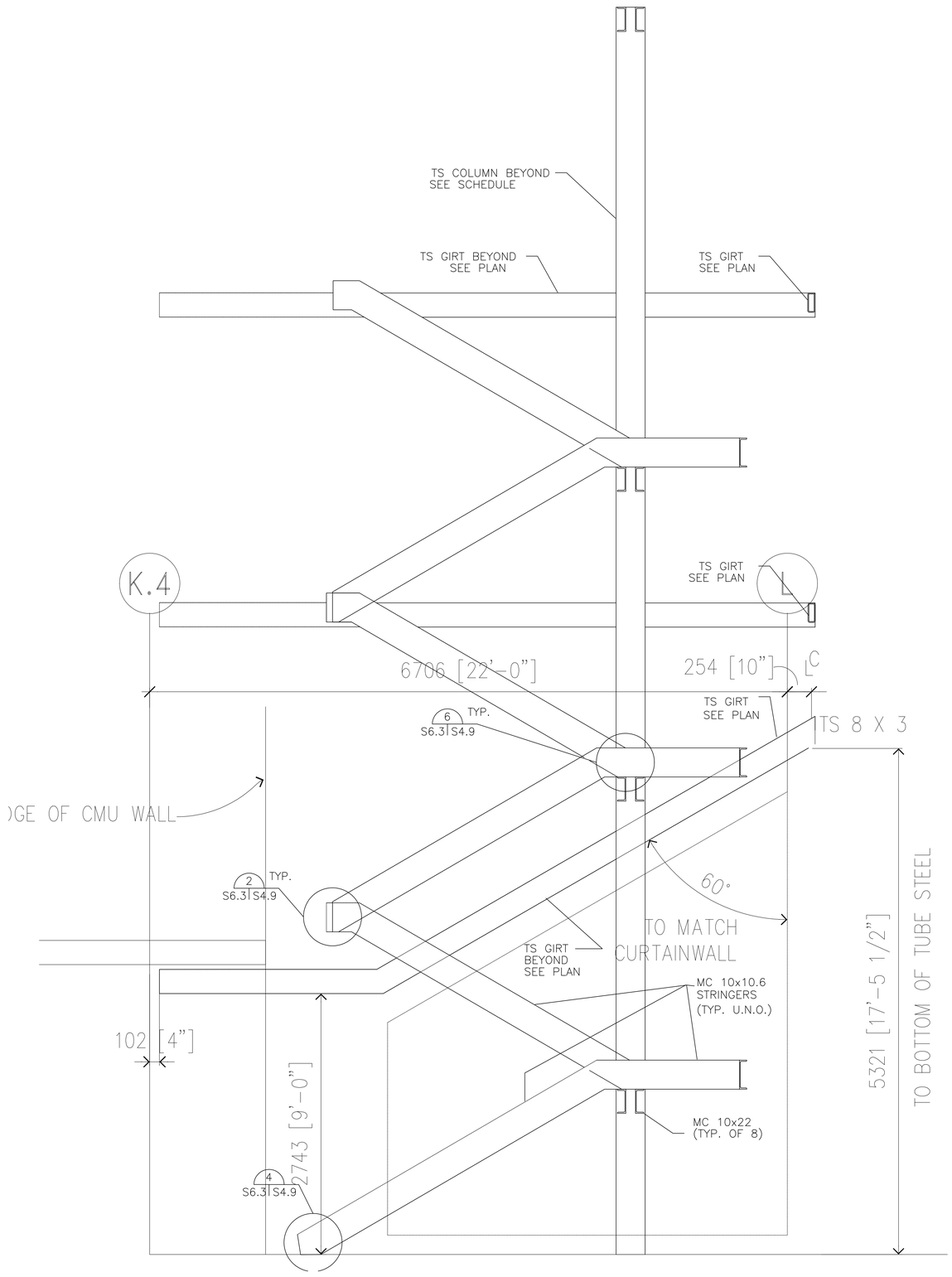
MINNEAPOLIS–ST.PAUL AFR — MINNESOTA

CONSOLIDATED LODGING FACILITY
– PHASE THREE –

COLUMN SCHEDULE

Plot Scale Ratio: 1: 1
Design File: 8785S503.DWG
Date: 2–14–2002
Spec. No.: DACA 45–02–B–0008
Contract No.: DACA
Drawing Code: AF 721–315–03
Sheet reference number: S5.3

QJKL-990011P3



1 S3.7 S3.8 S3.10 | S6.3 — SECTION FACING EAST AT STAIR E

NO SCALE

I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

For: MEAD & HUNT, INC.

By:
Title: PROJECT MANAGER
Registration No: 22452

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Revisions

Symbol	Descriptions	Date	Approved

Architect:	Engineer:	
ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA	MEAD & HUNT MADISON, WISCONSIN	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

Designed by: JMM
Drawn by: MJE
Checked by: TLK
Reviewed by: REC
Submitted by:

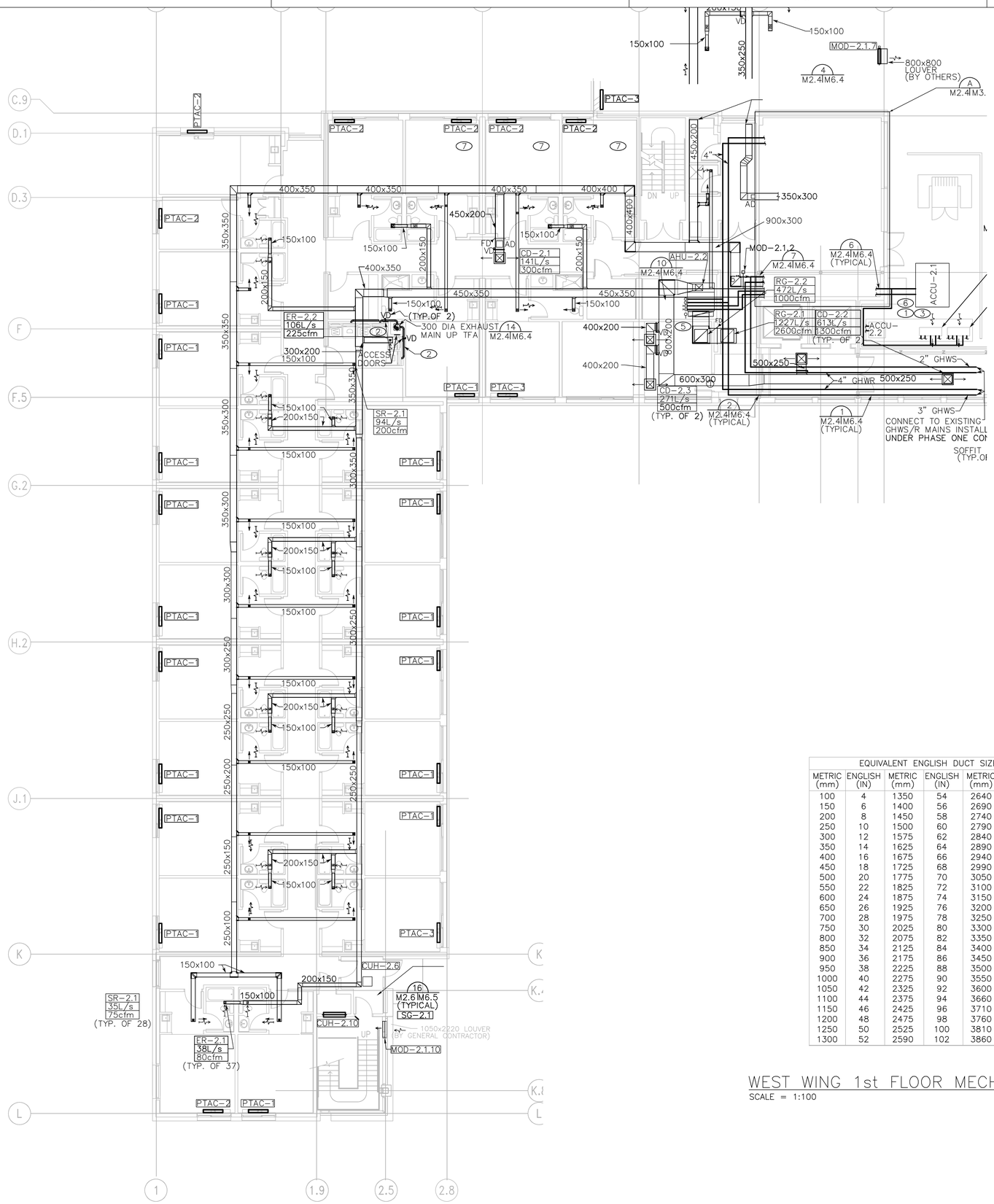
MINNEAPOLIS-ST.PAUL AFR — MINNESOTA

CONSOLIDATED LODGING FACILITY
– PHASE THREE –

STAIR SECTION

Plot Scale Ratio: 1: 1
Design File: 8785S603.DWG
Date: 2-14-2002
Spec. No.: DACA 45-02-B-0008
Drawing Code: AF 721-315-03
Contract No.: DACA
Sheet reference number: S6.3

QJKL-990011P3



GENERAL NOTES:

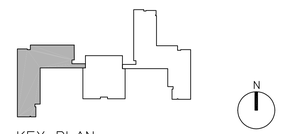
(1) REFRIGERANT LINES SHALL BE SIZED BY MANUFACTURE.

(2) RUN REFRIGERANT SUPPLY AND RETURN IN WALL SPACE AS SHOWN. DROP TO FIN GRADE BEFORE EXITING WALL TO ACCU.

EQUIVALENT ENGLISH DUCT SIZES					
METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)
100	4	1350	54	2640	104
150	6	1400	56	2690	106
200	8	1450	58	2740	108
250	10	1500	60	2790	110
300	12	1575	62	2840	112
350	14	1625	64	2890	114
400	16	1675	66	2940	116
450	18	1725	68	2990	118
500	20	1775	70	3050	120
550	22	1825	72	3100	122
600	24	1875	74	3150	124
650	26	1925	76	3200	126
700	28	1975	78	3250	128
750	30	2025	80	3300	130
800	32	2075	82	3350	132
850	34	2125	84	3400	134
900	36	2175	86	3450	136
950	38	2225	88	3500	138
1000	40	2275	90	3550	140
1050	42	2325	92	3600	142
1100	44	2375	94	3660	144
1150	46	2425	96	3710	146
1200	48	2475	98	3760	148
1250	50	2525	100	3810	150
1300	52	2590	102	3860	152

WEST WING 1st FLOOR MECHANICAL PLAN

SCALE = 1:100



KEY PLAN

2000 1000 0 2000 4000

SCALE: 1 : 50

4000 2000 0 4000 8000

SCALE: 1 : 100

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For: MEAD & HUNT, INC.

By:
Title: PROJECT MANAGER
Registration No: 22452

Revisions			
Symbol	Descriptions	Date	Approved

Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA	Engineer: MEAD & HUNT MADISON, WISCONSIN	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

Designed by: KAS
Drawn by: JET
Checked by: KAS
Reviewed by: REC
Submitted by:

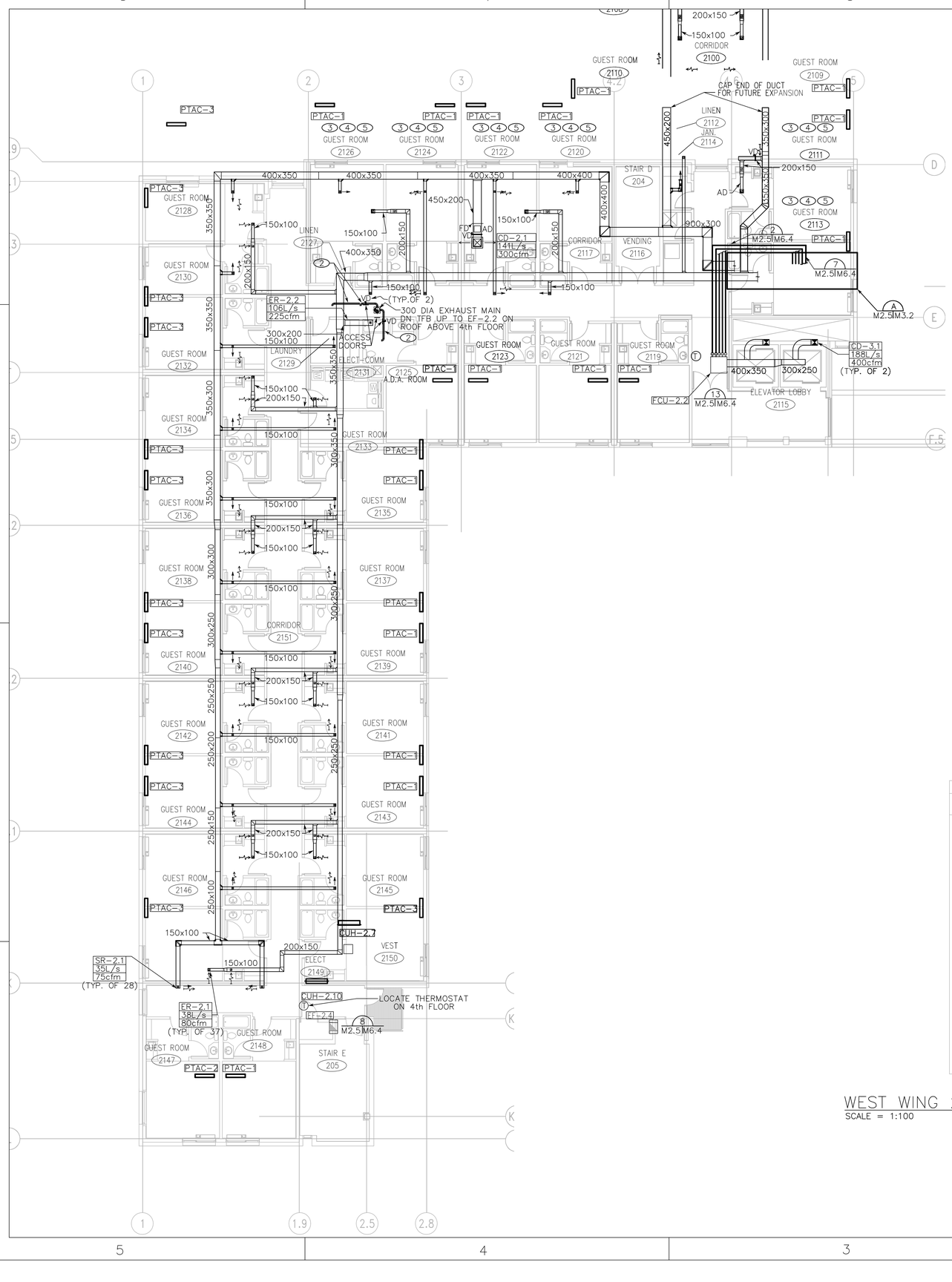
MINNEAPOLIS-ST.PAUL AFR — MINNESOTA

CONSOLIDATED LODGING FACILITY
– PHASE THREE –

1st FLOOR MECHANICAL PLAN

Plot Scale Ratio: 1: 1	Date: 2-14-2002	Sheet reference number:
Design File: 8785M204.DWG		
Spec. No.: DACA 45-02-B-0008	Drawing Code: AF 721-315-03	M2.4
Contract No.: DACA		

QJKL-990011P3



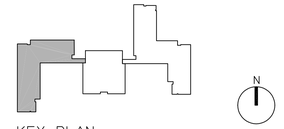
GENERAL NOTES:

1. THIS SECOND FLOOR MECHANICAL PLAN IS REPRESENTATIVE OF THE THIRD AND FORTH FLOORS ABOVE. ALL MECHANICAL SYSTEMS ON THE THIRD AND FORTH FLOORS ARE IDENTICAL TO THIS FLOOR PLAN. ROOM NUMBERS FOR THE FLOORS ABOVE ARE SEQUENTIAL, SUCH THAT, THE FIRST DIGIT IN THE ROOM NUMBER REPRESENTS FLOOR LEVEL.

EQUIVALENT ENGLISH DUCT SIZES					
METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)
100	4	1350	54	2640	104
150	6	1400	56	2690	106
200	8	1450	58	2740	108
250	10	1500	60	2790	110
300	12	1575	62	2840	112
350	14	1625	64	2890	114
400	16	1675	66	2940	116
450	18	1725	68	2990	118
500	20	1775	70	3050	120
550	22	1825	72	3100	122
600	24	1875	74	3150	124
650	26	1925	76	3200	126
700	28	1975	78	3250	128
750	30	2025	80	3300	130
800	32	2075	82	3350	132
850	34	2125	84	3400	134
900	36	2175	86	3450	136
950	38	2225	88	3500	138
1000	40	2275	90	3550	140
1050	42	2325	92	3600	142
1100	44	2375	94	3660	144
1150	46	2425	96	3710	146
1200	48	2475	98	3760	148
1250	50	2525	100	3810	150
1300	52	2590	102	3860	152

WEST WING 2nd, & 3rd FLOOR MECHANICAL PLAN

SCALE = 1:100



KEY PLAN

2000 1000 0 2000 4000

SCALE: 1 : 50

4000 2000 0 4000 8000

SCALE: 1 : 100

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For: MEAD & HUNT, INC.

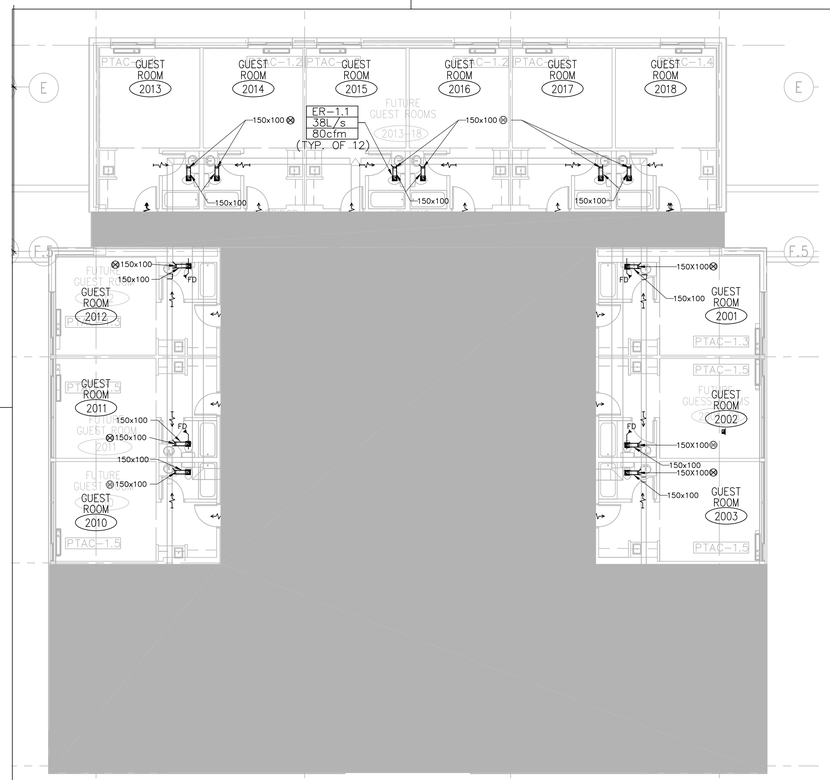
By:
Title: PROJECT MANAGER
Registration No: 22452

Revisions			
Symbol	Descriptions	Date	Approved

Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA	Engineer: MEAD & HUNT MADISON, WISCONSIN	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

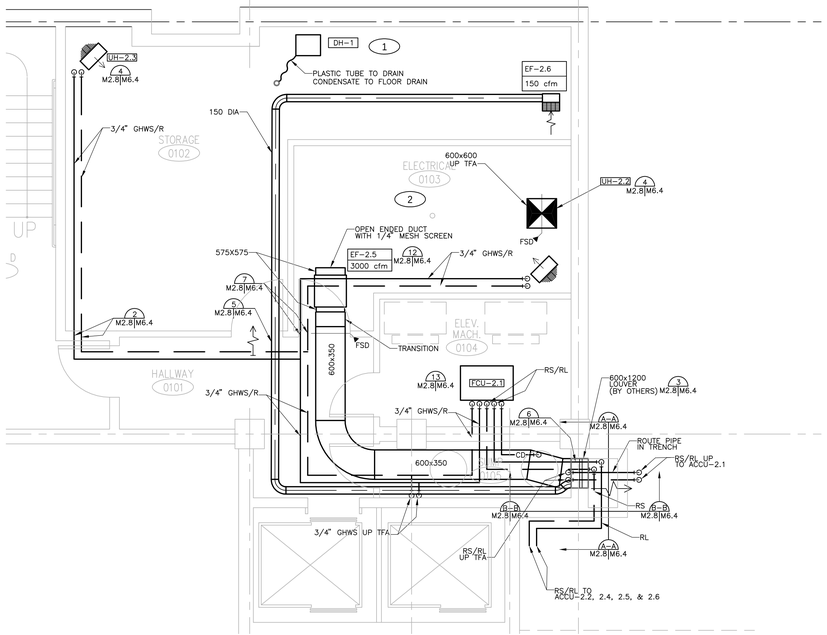
Designed by: KS	MINNEAPOLIS-ST.PAUL AFR		MINNESOTA
Drawn by: JET	CONSOLIDATED LODGING FACILITY – PHASE THREE –		
Checked by: KS	2nd & 3rd FLOOR MECHANICAL PLAN		
Reviewed by: REC	Plot Scale Ratio: 1: 1	Date: 2-14-2002	Sheet reference number:
	Design File: 8785M205.DWG		
Submitted by:	Spec. No.: DACA 45-02-B-0008	Drawing Code:	M2.5
	Contract No.: DACA	AF 721-315-03	

QJKL-990011P3



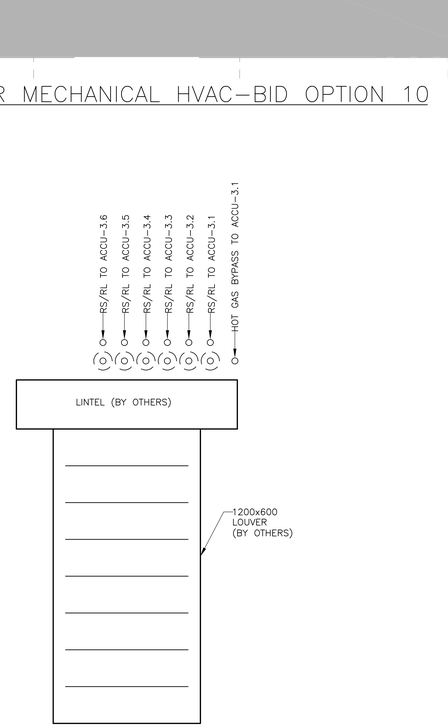
2nd FLOOR MECHANICAL HVAC–BID OPTION 10

SCALE = 1:100



BASEMENT MECHANICAL PLUMBING AND HVAC

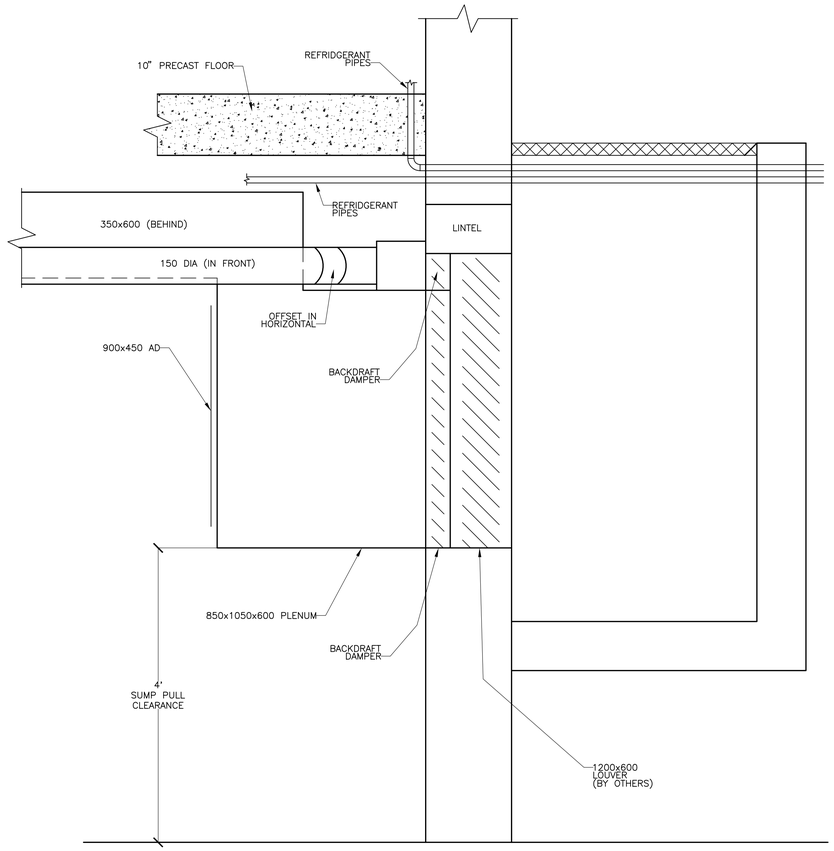
SCALE = 1:50



BASEMENT SECTION, LOOKING WEST A–A

SCALE = 1:10

P2.8 | P2.8



BASEMENT SECTION, LOOKING NORTH B–B

SCALE = 1:10

P2.8 | P2.8

GENERAL NOTES:

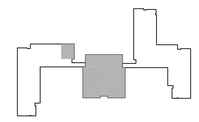
1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS.

KEYED NOTES:

(1) DEHUMIDIFIER SHALL HAVE A CAPACITY OF AT LEAST 30 PINTS/DAY WITH PLUG FOR 115/1 ELECTRICAL CONNECTION AND BE SIMILAR TO SANTA FE MANUFACTURED BY THERMA–STAR PRODUCTS.

(2) DO NOT ROUTE PIPING, DUCTWORK, OR EQUIPMENT OVER ELECTRICAL PANELS.

EQUIVALENT ENGLISH DUCT SIZES					
METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)
100	4	1350	54	2640	104
150	6	1400	56	2690	106
200	8	1450	58	2740	108
250	10	1500	60	2790	110
300	12	1575	62	2840	112
350	14	1625	64	2890	114
400	16	1675	66	2940	116
450	18	1725	68	2990	118
500	20	1775	70	3050	120
550	22	1825	72	3100	122
600	24	1875	74	3150	124
650	26	1925	76	3200	126
700	28	1975	78	3250	128
750	30	2025	80	3300	130
800	32	2075	82	3350	132
850	34	2125	84	3400	134
900	36	2175	86	3450	136
950	38	2225	88	3500	138
1000	40	2275	90	3550	140
1050	42	2325	92	3600	142
1100	44	2375	94	3660	144
1150	46	2425	96	3710	146
1200	48	2475	98	3760	148
1250	50	2525	100	3810	150
1300	52	2590	102	3860	152



KEY PLAN

2000 1000 0 2000 4000

SCALE: 1 : 50

4000 2000 0 4000 8000

SCALE: 1 : 100

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For: MEAD & HUNT, INC.

By:
Title: PROJECT MANAGER
Registration No: 22452

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Revisions			
Symbol	Descriptions	Date	Approved

Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA	Engineer: MEAD & HUNT MADISON, WISCONSIN	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

Designed by: WFH
Drawn by: JET
Checked by: WHF
Reviewed by: REC
Submitted by:

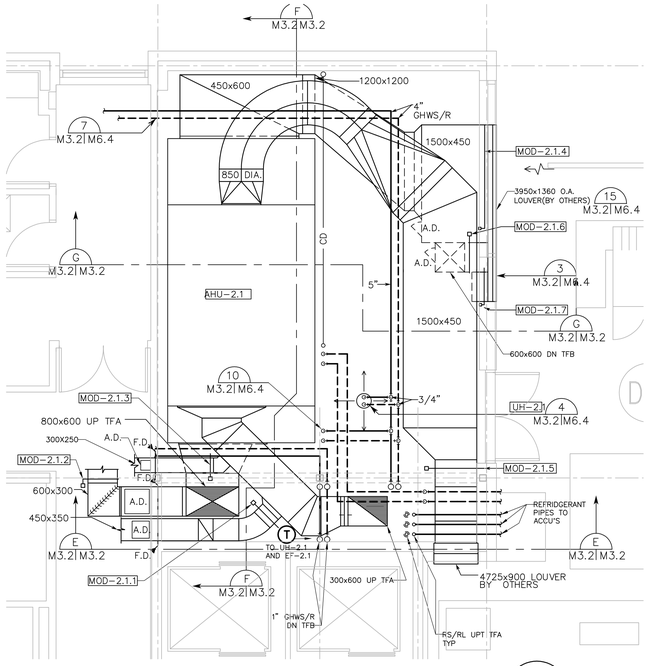
MINNEAPOLIS–ST.PAUL AFR — MINNESOTA

CONSOLIDATED LODGING FACILITY
– PHASE THREE –

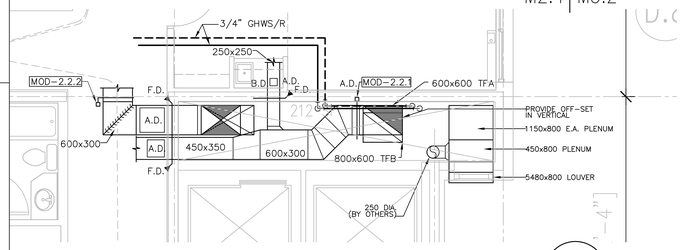
BASEMENT AND PARTIAL 2nd FLOOR MECHANICAL PLAN

Plot Scale Ratio: 1: 1
Design File: 8785M208.DWG
Date: 2–14–2002
Spec. No.: DACA 45–02–B–0008
Drawing Code: AF 721–315–03
Contract No.: DACA
Sheet reference number: M2.8

QJKL-990011P3



1st FLOOR MECH. CHASE PLAN A
SCALE = 1:50 — M2.4|M3.2



2nd FLOOR MECH. CHASE PLAN B
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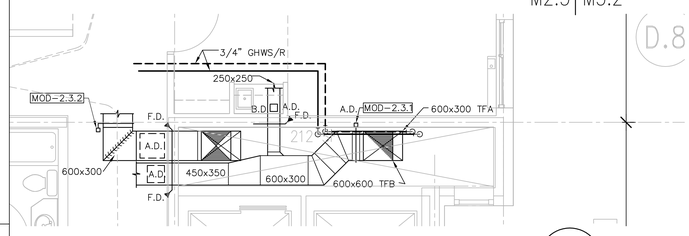
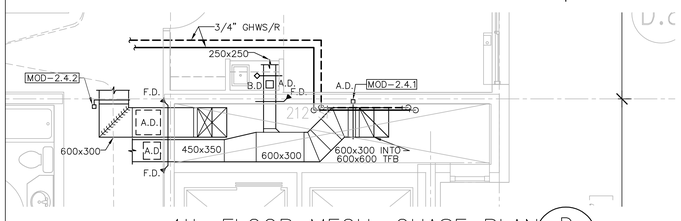
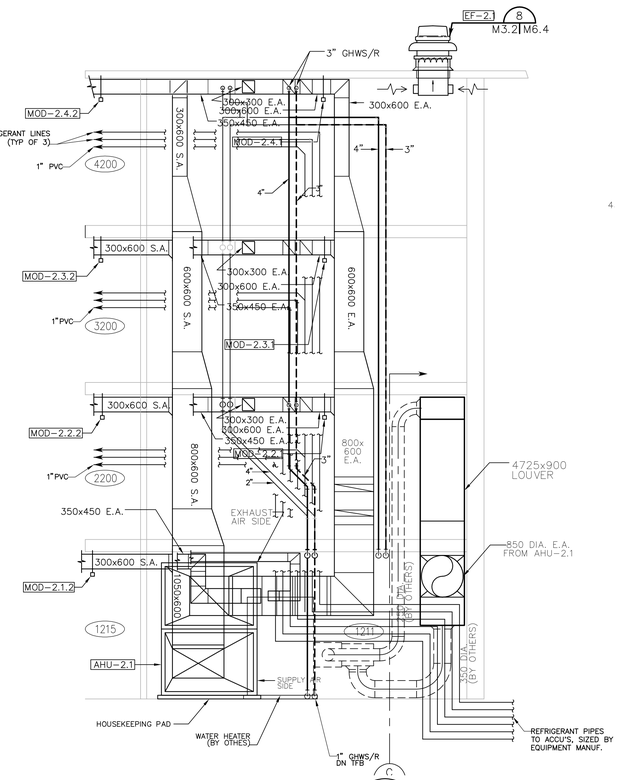


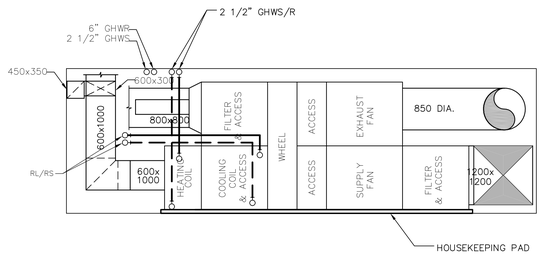
3rd FLOOR MECH. CHASE PLAN C
SCALE = 1:50 — M2.5|M3.2



4th FLOOR MECH. CHASE PLAN D
SCALE = 1:50 — M2.5|M3.2



SECTION E–E
SCALE = 1:50 — M3.2|M3.2



SECTION F–F
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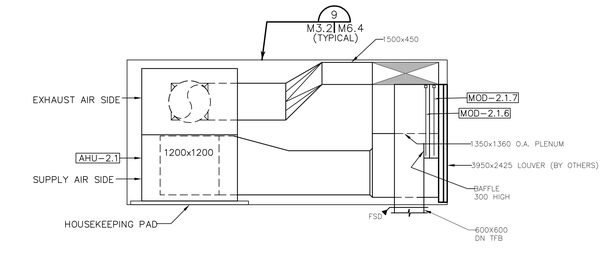
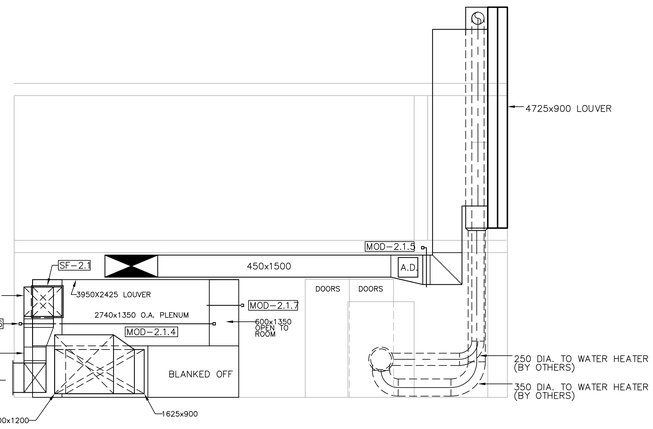


SECTION G–G
SCALE = 1:50 — M3.2|M3.2



SECTION H–H
SCALE = 1:50 — M3.2|M3.2

GENERAL NOTES:

1 ALL FIRE DAMPERS SHOWN SHALL BE COMBINATION SMOKE AND FIRE DAMPERS AND SHALL BE INTERLOCKED WITH FIRE ALARM SYSTEM.

KEYED NOTES:

1. REFRIGERANT PIPING SHALL BE SIZED BY ACCU MANUFACTURER.
2. SIZE CONDENSATE DRAIN TO MATCH COIL DRAIN CONNECTION. TRAP AS REQUIRED. ROUTE TO FLOOR DRAIN.
3. THE LOWER 2325mm (3'–6") OF THE LOUVER SHALL BE BLANKED OFF.
4. INSULATE PER SPECIFICATION FOR OUTSIDE AIR DUCT.
5. INSULATE FOR 20 FEET FROM LOUVER PER SPECIFICATION FOR OUTSIDE AIR DUCT.

EQUIVALENT ENGLISH DUCT SIZES

METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)	METRIC (mm)	ENGLISH (IN)
100	4	1350	54	2640	104
150	6	1400	56	2690	106
200	8	1450	58	2740	108
250	10	1500	60	2790	110
300	12	1575	62	2840	112
350	14	1625	64	2890	114
400	16	1675	66	2940	116
450	18	1725	68	2990	118
500	20	1775	70	3050	120
550	22	1825	72	3100	122
600	24	1875	74	3150	124
650	26	1925	76	3200	126
700	28	1975	78	3250	128
750	30	2025	80	3300	130
800	32	2075	82	3350	132
850	34	2125	84	3400	134
900	36	2175	86	3450	136
950	38	2225	88	3500	138
1000	40	2275	90	3550	140
1050	42	2325	92	3600	142
1100	44	2375	94	3660	144
1150	46	2425	96	3710	146
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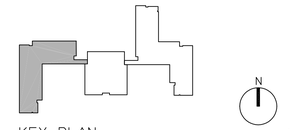
1300	52	2590	102	3860	152



KEY PLAN

2000 1000 0 2000 4000

SCALE: 1 : 50

4000 2000 0 4000 8000

SCALE: 1 : 100

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I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

For: MEAD & HUNT, INC.

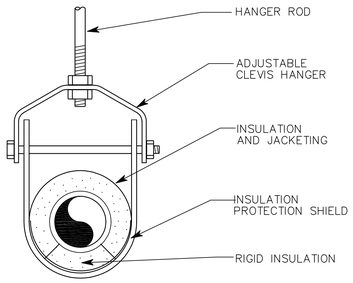
By:
Title: PROJECT MANAGER
Registration No: 22452

Revisions			
Symbol	Descriptions	Date	Approved

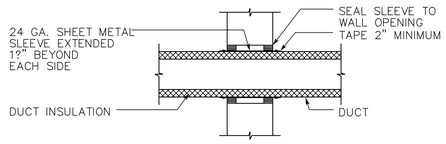
Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA	Engineer: MEAD & HUNT MADISON, WISCONSIN	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

Designed by: EJC	MINNEAPOLIS–ST.PAUL AFR		MINNESOTA
Drawn by: JFG	CONSOLIDATED LODGING FACILITY – PHASE THREE –		
Checked by: SMF	MECHANICAL EQUIPMENT ROOM PLANS CHASE DETAILS, SECTIONS		
Reviewed by: REC	Plot Scale Ratio: 1: 1	Date: 2–14–2002	Sheet reference number:
Submitted by:	Design File: 8785M302.DWG		
	Spec. No.: DACA 45–02–B–0008	Drawing Code: AF 721–315–03	M3.2
	Contract No.: DACA		

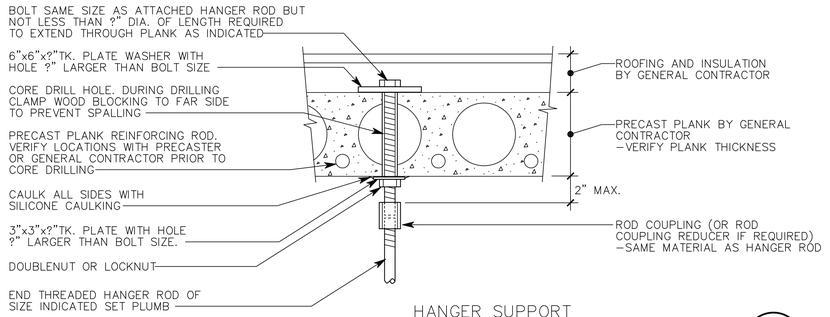
QJKL-990011P3



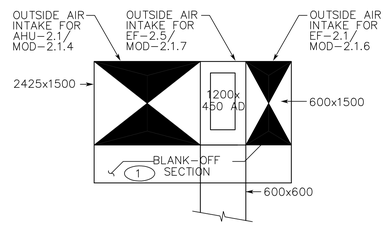
CLEVIS PIPE HANGER DETAIL 1
NO SCALE
M2.4 M2.5 M3.2 | M6.4



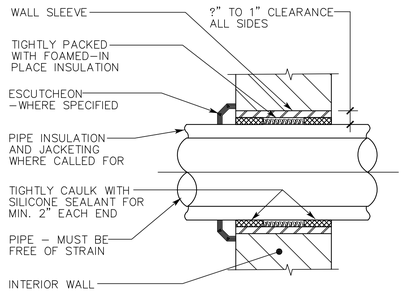
DUCT THRU NON-RATED WALL 5
NO SCALE
M2.4 M2.5 M2.8 | M6.4



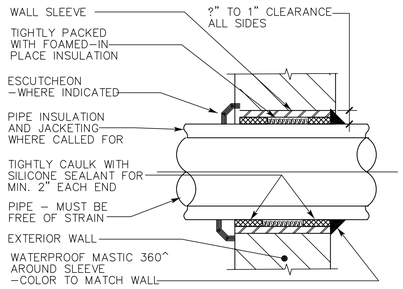
HANGER SUPPORT AT PRECAST PLANK DETAIL 9
NO SCALE
M2.4 M2.5 M3.2 | M6.4



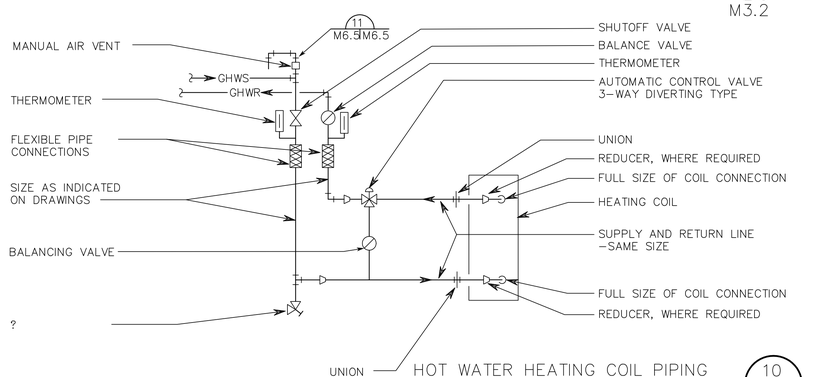
INTAKE LOUVER BLANK-OFF DETAIL 15
NO SCALE
M3.2 | M6.4



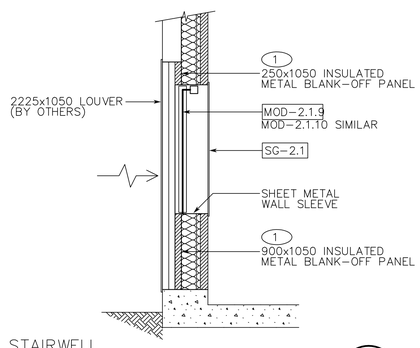
INTERIOR WALL PIPE SLEEVE DETAIL 2
NO SCALE
M2.4 M2.5 M2.8 | M6.4



EXTERIOR WALL PIPE SLEEVE DETAIL 6
NO SCALE
M6.4



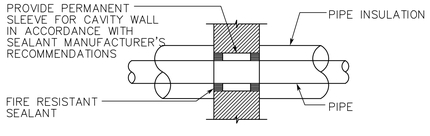
HOT WATER HEATING COIL PIPING 10
NO SCALE
M2.4 M3.2 | M6.4



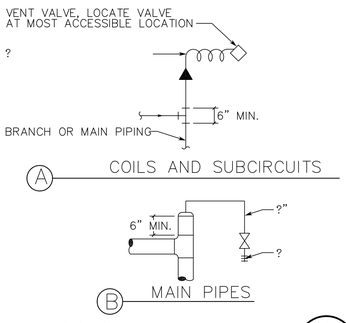
STAIRWELL VENTILATION LOUVER DETAIL 16
NO SCALE
M2.4 | M6.4

NOTES:
1. USE PVC COATED METAL DUCT FOR BOTTOM OF O.A. INTAKE DUCT FROM LOUVER TO THIS POINT.
2. PROVIDE BIRD SCREEN WHERE FILTER IS INDICATED. PROVIDE INSECT SCREEN WHERE NO FILTER IS INDICATED.

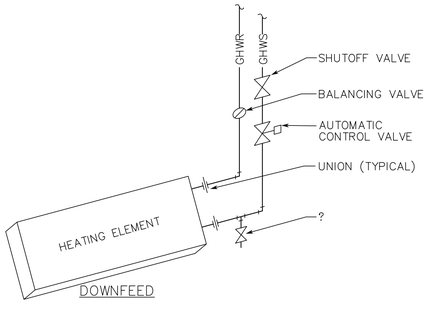
DUCT CONNECTION LOUVER 3
NO SCALE
M2.8 M3.2 | M6.4



HOT WATER OR STEAM PIPE THRU FIRE RATED INTERIOR WALL 7
NO SCALE
M2.4 M2.5 M3.2 M2.8 | M6.4



AIR VENT PIPING 11
NO SCALE
M6.4 | M6.4



FAN COIL UNIT HEATING PIPING 13
NO SCALE
M2.5 M2.8 | M6.4

KEYED NOTES:

(1) INSULATED METAL BLANK-OFF PANELS SHALL HAVE METAL FACING BOTH SIDES, COLOR TO MATCH LOUVER WITH MIN. 1" RIGID INSULATED CORE.

I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

For: MEAD & HUNT, INC.

By:
Title: PROJECT MANAGER
Registration No: 22452

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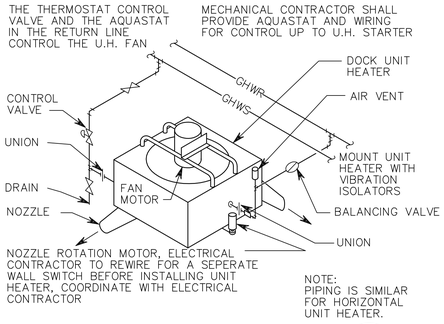
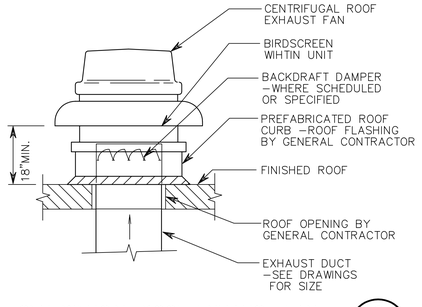
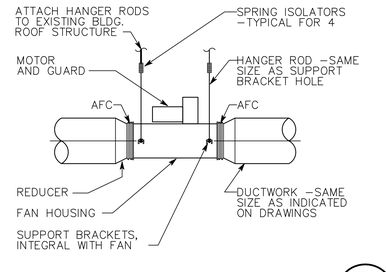


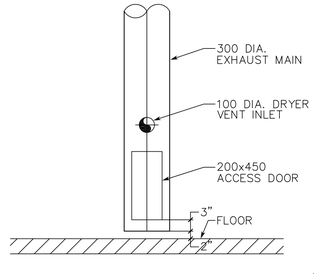
UNIT HEATER PIPING 4
NO SCALE
M2.4 M3.2 M2.8 | M6.4



CENTRIFUGAL ROOF EXHAUST FAN 8
NO SCALE
M3.2 | M6.4



INLINE FAN DETAIL 12
NO SCALE
M2.8 M3.2 | M6.4



DRYER VENT DETAIL 14
NO SCALE
M2.4 M2.5 | M6.4

Revisions			
Symbol	Descriptions	Date	Approved

Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA	Engineer: MEAD & HUNT MADISON, WISCONSIN	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

Designed by: KAS/EJC
Drawn by: JFG/RRW
Checked by: SMF
Reviewed by: REC
Submitted by:

MINNEAPOLIS-ST.PAUL AFR — MINNESOTA

CONSOLIDATED LODGING FACILITY
- PHASE THREE -

MECHANICAL DETAILS

Plot Scale Ratio: 1: 1
Design File: 8785M604.DWG
Date: 2-14-2002
Sheet reference number: M6.4
Spec. No.: DACA 45-02-B-0008
Drawing Code: AF 721-315-03
Contract No.: DACA

QJKL-990011P3

HEATING/COOLING/BOOSTER COIL (HC/CC/BC) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	TYPE	COIL FACE AREA (SQ. FT.)	COIL FACE AREA (SQ. M)	FINS PER FOOT	FINS PER M	AIR FLOW L/S	AIR FLOW CFM	AIR PD Pa	AIR PD IN. WG	COIL FACE VELOCITY M/S	COIL FACE VELOCITY FPM	CAPACITY TOTAL kW	CAPACITY TOTAL MBH	CAPACITY SENSIBLE kW	CAPACITY SENSIBLE MBH	ENTERING AIR TEMPERATURE DRY BULB C	ENTERING AIR TEMPERATURE DRY BULB F	ENTERING AIR TEMPERATURE WET BULB C	ENTERING AIR TEMPERATURE WET BULB F	LEAVING AIR TEMPERATURE DRY BULB C	LEAVING AIR TEMPERATURE DRY BULB F	LEAVING AIR TEMPERATURE WET BULB C	LEAVING AIR TEMPERATURE WET BULB F	MEDIA TYPE	MEDIA FLOW RATE L/S	MEDIA FLOW RATE PPH	MEDIA FLOW RATE GPM	MEDIA FLOW RATE TONS	MEDIA PRESSURE ENTER kPa	MEDIA PRESSURE ENTER PSIG	MEDIA PRESSURE DROP M	MEDIA PRESSURE DROP FT	EMT C	EMT F	LMT C	LMT F	LOCATION	REMARKS
HC-2.1	McQUAY, 5WH0801B	WATER	25.7	2.4	–	–	7500	16,000	25	0.1	10750	623	119	406	–	–	7	-12	–	–	22	72	–	–	45% GLY/WTR	2.8	–	45	–	–	–	1.0	3.3	93	200	82	180	AHU-2.1	(1) (4)
HC-2.2	McQUAY, 5WB0601G	WATER	7	0.7	–	–	1770	3750	–	–	12800	515	19.3	66	–	–	19	66	–	–	27	80	–	–	45% GLY/WTR	0.5	–	7.3	–	–	–	0.02	0.06	93	200	82	180	AHU-2.2	(1)
CC-2.1	McQUAY, 5EJ0906B	DX	26.5	2.5	–	–	7500	16,000	155	0.62	8760	604	152.4	520	117	400	27	89	23	73	13	55	12	54.4	R- 22	–	–	–	43.3	–	–	–	–	2	36	46	115	AHU-2.1	(1) (2) (3) (4) ACCU-2.1
CC-2.2	McQUAY, 5EJ0604B	DX	7.5	0.7	–	–	1770	3750	–	–	9145	480	27.9	95.1	25	83.9	27	80	19	67	17	61.7	15	59.4	R- 22	–	–	–	7.5	–	–	–	–	7	45	46	115	AHU-2.2	(1) (2) (3) ACCU-2.2

REMARKS:
(1) BY SAME MANUFACTURER OF AIR HANDLING UNIT.
(2) MATCHED AIR COOLED CONDENSING UNIT.
(3) DUAL CIRCUIT.
(4) ENTERING AIR TEMPERATURES ARE ENTERING THE ENERGY RECOVERY WHEEL. THE NET EFFECT OF THE ENERGY RECOVERY WHEET AND HEATING/COOLING COIL SHALL GIVE THE LEAVING AIR CONDITION.

UNIT HEATER (UH) AND DUCT HEATER (DH) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	TYPE	CAPACITY (MBH)	AIR FLOW L/S	AIR FLOW CFM	AIR THROW M	AIR THROW FT	MOTOR kW	MOTOR HP	ELECTRICAL (VOLTS/PHASE)	EAT C	EAT F	LAT C	LAT F	WATER FLOW L/S	WATER FLOW GPM	WATER PD M	WATER PD FT	WATER EWT C	WATER EWT F	WATER LWT C	WATER LWT F	(2) ACCESSORIES	(1) MOUNTING HEIGHT M	MOUNTING HEIGHT FT	LOCATION	REMARKS
UH-2.1	TRANE, UHPA- 018	V	8.3	205.75	436	–	–	0.03	1/25	120/1	15.5	60	28.89	84	0.05	0.8	0.01	.04	92.4	200	81.4	180	5	2.4	8	1111	MEDIA 45% ETHLENE GLYCOL/WATER MIX
UH-2.2	TRANE, UHSA- 018	H	2.4	221.8	470	–	–	0.03	1/25	120/1	7.2	45	12.9	50	0.02	0.24	.009	0.15	92.4	200	82.2	180	–	2.4	8	0103	MEDIA 45% ETHLENE GLYCOL/WATER MIX
UH-2.3	TRANE, UHSA- 018	H	2.4	221.8	470	–	–	0.03	1/25	120/1	7.2	45	12.9	50	0.02	0.24	.009	0.15	92.4	200	82.2	180	–	2.4	8	0102	MEDIA 45% ETHLENE GLYCOL/WATER MIX

TYPE			
H	HORIZONTAL	GV	GRAVITY VENT
V	VERTICAL	PV	POWER VENT
LT	LONG THROW	EX	EXPLOSION PROOF (SEE REMARKS FOR POWER REQUIREMTS)
S	SEPARATED COMBUSTION		

ACCESSORIES	
1	CONCENTRIC VENT ASSEMBLY
2	DOWN TURN AIR NOZZLE
3	STAINLESS STEEL HEAT EXCHANGER
4	STAINLESS STEEL BURNER
5	LOUVER CONE DIFFUSER
6	LOUVER DIFFUSER

REMARKS:
(1) MOUNTING HEIGHT SHALL BE TO BOTTOM OF UNIT HEATER.
(2) SEE SPECIFICATION SECTION FOR ANY ADDITIONAL ACCESSORIES/OPTIONS.

GENERAL NOTES:

1. REFERENCES TO BRAND NAME PRODUCT LISTINGS IN THE PLANS AND SPECIFICATIONS PERTAINING TO EQUIPMENT, MATERIAL, ARTICLES OR CATALOG NUMBER SHALL BE REGARDED AS ESTABLISHING A STANDARD OF QUALITY AND IS FOR INFORMATIONAL PURPOSES. PRODUCTS OF OTHER MANUFACTURERS MAY BE USED SUBJECT TO APPROVAL BY THE CONTRACTING OFFICER. THE GOVERNMENT IS MAKING NO WARRANTY OF AVAILABILITY OR FITNESS OF THE PRODUCTS FOR USE.

AIR HANDLING UNIT (AHU) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	TYPE	SUPPLY FAN SUPPLY AIR FLOW L/S	SUPPLY FAN SUPPLY AIR FLOW CFM	SUPPLY FAN MIN. OUTDOOR AIR FLOW L/S	SUPPLY FAN MIN. OUTDOOR AIR FLOW CFM	SUPPLY FAN TOTAL SP Pa	SUPPLY FAN TOTAL SP IN WG	SUPPLY FAN EXTERNAL SP Pa	SUPPLY FAN EXTERNAL SP IN WG	SUPPLY FAN FAN MOTOR POWER kW	SUPPLY FAN FAN MOTOR POWER HP	SUPPLY FAN FAN MOTOR RPM	EXHAUST/RETURN FAN EXHAUST/RETURN AIR FLOW L/S	EXHAUST/RETURN FAN EXHAUST/RETURN AIR FLOW CFM	EXHAUST/RETURN FAN TOTAL SP Pa	EXHAUST/RETURN FAN TOTAL SP IN WG	EXHAUST/RETURN FAN EXTERNAL SP Pa	EXHAUST/RETURN FAN EXTERNAL SP IN WG	EXHAUST/RETURN FAN FAN MOTOR POWER kW	EXHAUST/RETURN FAN FAN MOTOR POWER HP	EXHAUST/RETURN FAN FAN MOTOR RPM	ELECTRICAL VOLT	ELECTRICAL PHASE	HTG COIL MARK	CLG COIL MARK	(1) ACCESSORIES	(2) MOUNTING HEIGHT (FT)	LOCATION	REMARKS
AHU-2.1	McQUAY, CAH028FBAM	CS	7500	16,000	7500	16,000	870	3.5	374	1.5	15	20	1069	7500	16,000	722	2.9	374	1.5	11.2	15	815	208	3	HC-2.1	CC-2.1	5, 7, 8, 9	FLOOR	1111	(5) (6)
AHU-2.2	McQUAY, CAH008FDAC	SS	1700	3600	0	0	500	2.0	374	1.5	1.5	2	1000	–	–	–	–	–	–	–	–	–	208	1	HC-2.2	CC-2.2	6	FLOOR	1119	VERTICAL POSITION (4)

TYPE			
CS	CENTRAL STATION		
PRT	PACKAGED ROOFTOP		
C	CUSTOM		
IF	INDIRECT FIRED		
DF	DIRECT FIRED		

ACCESSORIES TYPE					
1	INTAKE HOOD	6	PRE-FILTER/MIXING SECTION	11	HUMIDIFIER SECTION
2	INLET DAMPER	7	FILTER SECTION	12	AIR BLENDER SECTION
3	DISCHARGE DAMPER	8	FINAL FILTER SECTION	13	DISCHARGE PLENUM SECTION
4	ROOF CURB	9	ENERGY RECOVERY SECTION		
5	DOUBLE WALL	10	ECONOMIZER SECTION		

REMARKS:
(1) SEE SPECIFICATION FOR ANY ADDITIONAL ACCESSORIES/OPTIONS.
(2) MOUNTING HEIGHT SHALL BE FROM FINISHED FLOOR TO BOTTOM OF UNIT.
(3) BARAMETRIC RELIEF.
(4) CONSTANT VOLUME SUPPLY FAN.
(5) VARIABLE VOLUME, VFD, SUPPLY FAN
(6) VARIABLE VOLUME, VFD, RETURN FAN

AIR COOLED CONDENSING UNIT (ACCU) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	TOTAL CAPACITY kW	TOTAL CAPACITY MBH	COP	EER	REFRIGERANT TYPE	SST C	SST F	AIR TEMP AT CONDENSER MIN C	AIR TEMP AT CONDENSER MIN F	AIR TEMP AT CONDENSER MAX C	AIR TEMP AT CONDENSER MAX F	CONDENSING COIL FACE AREA SQ. M	CONDENSING COIL FACE AREA SQ. FT.	COMPRESSORS NO.	COMPRESSORS kW	COMPRESSORS HP	CONDENSING FANS NO.	CONDENSING FANS kW EA.	CONDENSING FANS HP EA.	ELECTRICAL (VOLTS/PHASE)	LOCATION	REMARKS
ACCU-2.1	McQUAY, AC2-045	152	596	–	11.4	R- 22	2	42	-17.6	0	35	95	6.23	67.1	4	51.2	–	6	0.75	1.0	208/3	UTILITY COURT	INCLUDE DISCONNECT AND STARTER OPTIONS
ACCU-2.2	McQUAY, CBA090HA	28	95.1	–	11.4	R- 22	7	45	-17.6	0	35	95	1.42	15.3	1	–	7.5	1	0.37	3/4	208/3	UTILITY COURT	–
ACCU-2.3	AAON, CA-03	11	36	3.9	13.5	R- 22	7	45	4	40	35	95	0.7	7.2	1	–	–	1	0.25	1/3	208/1	UTILITY COURT	–
ACCU-2.4	AAON, CA-03	11	36	3.9	13.5	R- 22	7	45	4	40	35	95	0.7	7.2	1	–	–	1	0.25	1/3	208/1	UTILITY COURT	–
ACCU-2.5	AAON, CA-03	11	36	3.9	13.5	R- 22	7	45	4	40	35	95	0.7	7.2	1	–	–	1	0.25	1/3	208/1	UTILITY COURT	–
ACCU-2.6	AAON, CA-03	11	36	3.9	13.5	R- 22	7	45	4	40	35	95	0.7	7.2	1	–	–	1	0.25	1/3	208/1	UTILITY COURT	–

REMARKS:
(1) MANUFACTURER SHALL SIZE REFRIGERANT PIPING, VALVES AND ACCESSORIES FOR PROPER OPERATION OF SYSTEM.

PACKAGED TERMINAL AIR CONDITIONER (PTAC) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	COOLING CAP. KW	COOLING CAP. BTUH	COP	EER	HEATING CAP. KW	HEATING CAP. BTUH	SUPPLY AIR FLOW L/S	SUPPLY AIR FLOW CFM	MINIMUM OUTDOOR AIR FLOW L/S	MINIMUM OUTDOOR AIR FLOW CFM	ELECTRICAL (VOLTS/PHASE)	ACCESSORIES	LOCATION	REMARKS
PTAC-1	McQUAY, SES-07	2.0	7000	3.4	11.6	2.0	6820	113.26	240	16.5	35	208/1	1, 5, 6, 7, 8, 9,	REFER TO PLAN	(1)
PTAC-2	McQUAY, SES-07	2.0	7000	3.4	11.6	2.9	9890	113.26	240	16.5	35	208/1	1, 5, 6, 7, 8, 9,	REFER TO PLAN	(1)
PTAC-3	McQUAY SES-09	2.6	9000	3.3	11.3	2.9	9890	113.26	240	16.5	35	208/1	1, 5, 6, 7, 8, 9,	REFER TO PLAN	(1)
PTAC-4	McQUAY, SES-12	2.6	9000	3.3	11.3	4.1	13980	113.26	240	16.5	35	208/1	1, 5, 6, 7, 8, 9,	REFER TO PLAN	(1)
PTAC-5	McQUAY, SES-12	3.5	12000	3.1	10.7	4.1	13980	113.26	240	16.5	35	208/1	1, 5, 6, 7, 8, 9,	REFER TO PLAN	(1)

ACCESSORIES					
1	POWERED OUTSIDE AIR VENT AND DAMPER	7	EXTRUDED ANODIZED ALUMINUM ARCHITECTURAL OUTDOOR GRILLE	13	HARD-WIRE JUNCTION BOX
2	REMOTE/WALL THERMOSTAT	8	CONDENSER BAFFLES	14	POWER DISCONNECT SWITCH
3	REMOTE TEMPERATURE SENSOR	9	CONDENSATE DRAIN	15	CIRCUIT BREAKER
4	CONDENSATE REMOVAL HEAT PUMP	10	KEY LOCK CONTROL COVER	16	FUSE HOLDER
5	SUB-BASES (2)	11	LEVELING LEGS	17	HYDRONIC HEAT
6	WALL SLEEVES	12	ADJOINING ROOM DUCT TRANSITION	18	HYDRONIC HEAT CONTROL VALVES

REMARKS:
(1) WIDTH OF OUTDOOR GRILLE TO MATCH WIDTH OF ROOM WINDOW. PROVIDE INSULATED BLANK-OFF PANEL AT UNUSED PORTIONS.
(2) SUB-BASES SHALL BE 8" HIGH.

I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

For: MEAD & HUNT, INC.

By:
Title: PROJECT MANAGER
Registration No: 22452

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Designed by: KAS/EJC	MINNEAPOLIS-ST.PAUL AFR		MINNESOTA
Drawn by: JFG/RRW	CONSOLIDATED LODGING FACILITY - PHASE THREE -		
Checked by: SMF	MECHANICAL SCHEDULES		
Reviewed by: REC	Plot Scale Ratio: 1: 1	Date: 2-14-2002	Sheet reference number: M7.4
Submitted by:	Design File: 8785M704.DWG		
	Spec. No.: DACA 45-02-B-0008	Drawing Code: AF 721-315-03	
	Contract No.: DACA		

QJKL-990011P3

FAN COIL UNIT (FCU) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	TYPE	SUPPLY AIR FLOW L/S	SUPPLY AIR FLOW CFM	OUTSIDE AIR FLOW L/S	OUTSIDE AIR FLOW CFM	(2) E.S.P. Pa	E.S.P. (IN. W.C.)	FAN MOTOR POWER kW	FAN MOTOR POWER HP	FAN MOTOR ELECTRICAL (VOLTS PHASE)	COOLING CAPACITY TYPE	EAT DRY BULB C	EAT DRY BULB F	EAT WET BULB C	EAT WET BULB F	CAPACITY TOTAL kW	CAPACITY TOTAL MBH	CAPACITY SENSIBLE kW	CAPACITY SENSIBLE MBH	MEDIA TYPE	MEDIA FLOW RATE L/S	MEDIA FLOW RATE GPM	MEDIA FLOW RATE TONS	EMT C	EMT F	LMT C	LMT F	HEATING CAPACITY TYPE	EMT C	EMT F	CAPACITY kW	CAPACITY MBH	MEDIA TYPE	MEDIA FLOW RATE L/S	MEDIA FLOW RATE GPM	MEDIA FLOW RATE FPH	EMT C	EMT F	LMT C	LMT F	LOCATION	REMARKS
FCU–2.1	AAON H2–A1, SIZE 02	H,C	470	1000	0	0	0	0	0.25	1/3	115/1	DX	29	85	15	60	7	24	7	24	R–22	–	–	2	–	45	–	–	45% E. GLYCOL	15	60	1.5	5	HOT WATER	0.03	0.5	–	93	200	82	180	0104	–
FCU–2.2	AAON H2–A1, SIZE 03	H,C,D	564	1200	0	0	62	0.25	0.25	1/3	115/1	DX	26	78	18	65	11	36	7	25	R–22	–	–	3	–	45	–	–	45% E. GLYCOL	21	70	8	27	HOT WATER	0.17	2.7	–	93	200	82	180	2117	
FCU–2.3	AAON H2–A1, SIZE 03	H,C,D	564	1200	0	0	62	0.25	0.25	1/3	115/1	DX	26	78	18	65	11	36	7	25	R–22	–	–	3	–	45	–	–	45% E. GLYCOL	21	70	8	27	HOT WATER	0.17	2.7	–	93	200	82	180	3117	
FCU–2.4	AAON H2–A1, SIZE 03	H,C,D	564	1200	0	0	62	0.25	0.25	1/3	115/1	DX	26	78	18	65	11	36	7	25	R–22	–	–	3	–	45	–	–	45% E. GLYCOL	21	70	8	27	HOT WATER	0.17	2.7	–	93	200	82	180	4117	

TYPE

V VERTICAL
H HORIZONTAL
L LOW PROFILE
C CONCEALED
D DUCTED
R RECESSED
A ANGLED TOP
S SEMI–RECESSED

ACCESSORIES

1 DISCONNECT SWITCH
2 TAMPER PROOF ACCESS DOOR FASTENERS
3 LEVELING FEET
4 SUB–BASE (FOR SPECIFIED MOUNTING HEIGHT)
5 FALSE BACK
6 FRESH AIR DAMPER
7 FRESH AIR WALL BOX
8 FACTORY MOUNTED PIPING PACKAGE
9 MANUAL 3 SPEED FAN CONTROL SWITCH

REMARKS:
(1) SEE SPECIFICATION SECTION 15875 FOR ANY ADDITIONAL ACCESSORIES/OPTIONS.
(2) DOES NOT INCLUDES PRESSURE DROP FOR ACCESSORIES SUCH AS COILS, FILTERS, ETC.

CABINET UNIT HEATER (CUH) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	FLOW RATE L/S	FLOW RATE CFM	EAT C	EAT F	LAT C	LAT F	MEDIA TYPE	HEATING CAPACITY kW	HEATING CAPACITY MBH	HEATING FLOW RATE L/S	HEATING FLOW RATE GPM	HEATING FLOW RATE kg/S	HEATING FLOW RATE PPH	CABINET SIZE DEPTH MM	CABINET SIZE DEPTH IN	CABINET SIZE LENGTH MM	CABINET SIZE LENGTH IN	CABINET SIZE HEIGTH MM	CABINET SIZE HEIGTH IN	FAN MOTOR kW	FAN MOTOR HP	FAN MOTOR RPM	ELECTRICAL (VOLTS/PHASE)	(1) MOUNTING HEIGHT M	MOUNTING HEIGHT FT	MOUNTING TYPE	LOCATION	REMARKS
CUH–2.6	Q–MARK, CDF–548	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.23	–	–	–	–	175	7	600	24	600	24	–	–	–	208/1	CLG.	CLG.	R/S	1150	(2) (3)
CUH–2.7	Q–MARK, AWH–4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.23	–	–	–	–	89	3.5	365	14	464	18	–	–	–	208/1	0.25	0.75	R/S	2150	(2)
CUH–2.8	Q–MARK, AWH–4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.23	–	–	–	–	89	3.5	365	14	464	18	–	–	–	208/1	0.25	0.75	R/S	3150	(2)
CUH–2.9	Q–MARK, AWH–4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.23	–	–	–	–	89	3.5	365	14	464	18	–	–	–	208/1	0.25	0.75	R/S	4150	(2)
CUH–2.10	Q–MARK, CU935RTK	235	500	7.2	45	26.7	80	ELECTRIC	10	34.1	–	–	–	–	254	10	1194	47	670	26	–	–	–	208/3	0.25	0.75	R/S	105	(2)
CUH–2.11	Q–MARK, CU935RTK	235	500	7.2	45	26.7	80	ELECTRIC	10	34.1	–	–	–	–	254	10	1194	47	670	26	–	–	–	208/3	0.25	0.75	R/S	205	(2)
CUH–2.12	Q–MARK, CU935RTK	235	500	7.2	45	26.7	80	ELECTRIC	10	34.1	–	–	–	–	254	10	1194	47	670	26	–	–	–	208/3	0.25	0.75	R/S	305	(2)
CUH–2.13	Q–MARK, CU935RTK	235	500	7.2	45	26.7	80	ELECTRIC	10	34.1	–	–	–	–	254	10	1194	47	670	26	–	–	–	208/3	0.25	0.75	R/S	405	(2)

MOUNTING TYPES

R RECESSED
S SEMI–RECESSED
C CEILING
F FLOOR STANDING
W WALL

REMARKS:
(1) MOUNTING HEIGHT SHALL BE FROM FINISHED FLOOR TO BOTTOM OF UNIT.
(2) PROVIDE DISCONNECT SWITCH AND INTEGRAL TAMPER RESISTANT THERMOSTAT.
(3) CEILING MOUNTED UNITS SHALL BE EQUIPPED WITH ACCESSORIES REQUIRED FOR CEILING TYPE.
(4) CUH–2.1 THRU CUH–2.5 ARE NOT IN THIS CONTRACT.

GENERAL NOTES:

1. REFERENCES TO BRAND NAME PRODUCT LISTINGS IN THE PLANS AND SPECIFICATIONS PERTAINING TO EQUIPMENT, MATERIAL, ARTICLES OR CATALOG NUMBER SHALL BE REGARDED AS ESTABLISHING A STANDARD OF QUALITY AND IS FOR INFORMATIONAL PURPOSES. PRODUCTS OF OTHER MANUFACTURERS MAY BE USED SUBJECT TO APPROVAL BY THE CONTRACTING OFFICER. THE GOVERNMENT IS MAKING NO WARRANTY OF AVAILABILITY OR FITNESS OF THE PRODUCTS FOR USE.

AIR OUTLETS AND INLETS SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	APPLICATION	INLET/OUTLET	TYPE	MTG. SYST.	DAMPER	OVERALL SIZE MM	OVERALL SIZE IN	NECK SIZE MM	NECK SIZE IN	CONSTRUCTION MATERIAL	ACCESSORIES	(1) MOUNTING HEIGHT M	MOUNTING HEIGHT FT	LOCATION	REMARKS
CD–2.1	CARNES, SKTA20	SUPPLY	1	9	1	OB	610x610	24x24	300x300	12x12	ALUM.	EQUALIZING DEFLECTOR	–	CLG.	REFER TO PLAN	TWO–WAY BLOW PATTERN
CD–2.2	CARNES, SKTA20	SUPPLY	1	9	1	N	610x610	24x24	457x457	18x18	ALUM.	EQUALIZING DEFLECTOR	–	CLG.	REFER TO PLAN	TWO–WAY BLOW PATTERN
CD–2.3	CARNES, SKTA40	SUPPLY	1	9	1	N	610x610	24x24	381x381	15x15	ALUM.	EQUALIZING DEFLECTOR	–	CLG.	REFER TO PLAN	FOUR–WAY BLOW PATTERN
RG–2.1	CARNES, SLJB	RETURN	3	4	1	OB	610x610	24x24	559x559	22x22	ALUM.	–	–	CLG.	REFER TO PLAN	PAINT INTERIOR OF DUCTWORK FLAT BLACK ALL SIGHT LINES
RG–2.2	CARNES, SLJB	RETURN	3	4	1	OB	610x610	24x24	406x406	16x16	ALUM.	–	–	CLG.	REFER TO PLAN	PAINT INTERIOR OF DUCTWORK FLAT BLACK ALL SIGHT LINES
ER–2.1	CARNES, RTLA	EXHAUST	2	3	2	OB	203x203	8x8	152x152	6x6	STEEL	–	–	CLG.	REFER TO PLAN	–
ER–2.2	CARNES, RTLA	EXHAUST	2	3	2	OB	356x356	14x14	300x300	12x12	STEEL	–	–	CLG.	REFER TO PLAN	–
SR–2.1	CARNES, RTLA	EXHAUST	2	3	2	OB	203x203	8x8	152x152	6x6	STEEL	–	–	CLG.	REFER TO PLAN	–
SR–2.2	CARNES, RTLA	EXHAUST	2	3	2	OB	356x356	14x14	300x300	12x12	STEEL	–	–	CLG.	REFER TO PLAN	–
SG–2.1	CARNES, RSLAH	SUPPLY	3	3	3	N	575x1100	23x44	525x1050	21x42	STEEL	–	1.68	5.5	REFER TO PLAN	–

INLET/OUTLET

1 DIFFUSER
2 REGISTER
3 GRILLE
4 LOUVER
5 PENTHOUSE
6 VENT

TYPE

1 SINGLE DEFLECTION
2 DOUBLE DEFLECTION
3 FIXED BLADE
4 PERFORATED
5 LINEAR
6 SLOT
7 DRUM
8 EGGCRATE
9 LOUVERED
10 HOODED
11 DOOR TRANSFER
12 BRICK
13 PUNKAH

MOUNTING SYSTEM

1 T–BAR CEILING
2 PLASTER/CONCRETE CEILING
3 PLASTER/MASONRY WALL
4 EXPOSED DUCTWORK
5 METAL PANEL WALL
6 ROOF

DAMPER LEGEND

B BUTTERFLY
G GRAVITY
MP MOTOR OPERATED–PNEUMATIC
ME MOTOR OPERATED–ELECTRIC
N NONE
OB OPPOSED BLADE
PB PARALLEL BLADE

REMARKS:
(1) MOUNTING HEIGHT SHALL BE FROM FINISHED FLOOR TO TOP OF OPENING.

EXHAUST FAN (EF) AND SUPPLY FAN (SF) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	TYPE	AIR FLOW L/S	AIR FLOW CFM	ESP Pa	ESP IN WG	MOTOR kW	MOTOR HP	FAN RPM	DRIVE TYPE	ELECTRICAL (VOLTS/PHASE)	ACCESSORIES	(1) INTERLOCK/W	(2) MTG. HGT. M	MTG. HGT. FT	OPENING MM	OPENING IN	LOCATION	REMARKS
EF–2.1	GREENHECK, S2–18–411–A4	1	1130	2400	93	0.375	0.2	1/4	1750	DIRECT	120/1	1,4	T–STAT	–	ROOF	610 SQ.	24 SQ	ROOF	MECHANICAL ROOM VENT
EF–2.2	GREENHECK, G120	2	280	600	93	0.375	0.2	1/4	865	DIRECT	120/1	1,9	AHU–2.1	–	ROOF	368 SQ.	14.5 SQ	ROOF	DRYER VENT
EF–2.4	GREENHECK, G–180	2	1133	2400	93	0.375	0.25	1/3	860	DIRECT	115/1	1,9,14	T–STAT	–	ROOF	521 SQ.	20.5 SQ	ROOF	–
EF–2.5	GREENHECK, SQ–160–A	4	1400	3000	125	0.5	500	2	1725	BELT	208/1	8,10,14	T–STAT	2.4	8	–	–	0103	–
EF–2.6	GREENHECK, SP–9	6	70	150	75	0.3	0.13	0.2	1050	DIRECT	115/1	8	SWITCH	2.4	8	–	–	0102	–

TYPE

1 SIDEWALL PROPELLER
2 ROOFTOP CENTRIFUGAL
3 SIDEWALL CENTRIFUGAL
4 INLINE CENTRIFUGAL
5 UTILITY CENTRIFUGAL
6 CABINET
7 TUBE AXIAL
8 VANE AXIAL
9 UPBLAST AXIAL
10 ROOFTOP HOODED AXIAL
11 ROOFTOP HOODED CENTRIFUGAL
12 ROOFTOP CENTRIFUGAL UPBLAST
13 OTHER (SEE SPECIFICATIONS)

ACCESSORIES

1 BACKDRAFT DAMPER
2 WEATHERHOOD
3 WALL COLLAR
4 INLET WIRE GUARD
5 MOTOR WIRE GUARD
6 MOTOR (OSHA) WIRE GUARD
7 BELT (OSHA) GUARD
8 HANGING ISOLATORS
9 MANUFACTURER'S ROOF CURB
10 INLET/OUTLET FLANGES
11 SPECIAL COATING (SEE SPECIFICATIONS)
12 MANUFACTURER'S HOODED WALL CAP
13 MANUFACTURER'S HOODED ROOF CAP
14 DISCONNECT SWITCH

REMARKS:
(1) SEE SPECIFICATION – SEQUENCE OF OPERATION.
(2) MOUNTING HEIGHT IS FROM FINISHED FLOOR LEVEL TO TOP OF FAN OR WALL OPENING.
(3) EF–2.3 IS NOT IN THIS CONTRACT.

I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

For: MEAD & HUNT, INC.

By.
Title: PROJECT MANAGER
Registration No: 22452

ALL SCALES SHOWN ARE BASED ON A STANDARD DRAWING SIZE OF 28" X 40" OR METRIC DRAWING SIZE OF 841mm X 594mm. IF ANY OTHER SIZE DRAWINGS ARE FURNISHED OR PLOTTED THE CONTRACTOR SHALL ADJUST THE SCALES ACCORDINGLY. THE CONTRACTOR SHALL ALSO ADVISE HIS SUB–CONTRACTORS OF THE ABOVE.

Revisions

Symbol	Descriptions	Date	Approved

Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA

Engineer: MEAD & HUNT MADISON, WISCONSIN

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

Designed by: KAS
Drawn by: JET
Checked by: KAS
Reviewed by: REC
Submitted by:

MINNEAPOLIS–ST.PAUL AFR MINNESOTA

CONSOLIDATED LODGING FACILITY
– PHASE THREE –

MECHANICAL SCHEDULES

Plot Scale Ratio: 1: 1
Design File: 8785M705
Date: 2–14–2002
Spec. No.: DACA 45–02–B–0008
Drawing Code: AF 721–315–03
Contract No.: DACA
Sheet reference number: M7.5

QJKL-990011P3

FAN COIL UNIT (FCU) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	TYPE	SUPPLY AIR FLOW L/S	SUPPLY AIR FLOW CFM	OUTSIDE AIR FLOW L/S	OUTSIDE AIR FLOW CFM	(2) E.S.P. Pa	E.S.P. (IN. W.C.)	FAN MOTOR POWER kW	FAN MOTOR POWER HP	FAN MOTOR ELECTRICAL (VOLTS PHASE)	COOLING CAPACITY TYPE	EAT DRY BULB C	EAT DRY BULB F	EAT WET BULB C	EAT WET BULB F	CAPACITY TOTAL kW	CAPACITY TOTAL MBH	CAPACITY SENSIBLE kW	CAPACITY SENSIBLE MBH	MEDIA TYPE	MEDIA FLOW RATE L/S	MEDIA FLOW RATE GPM	MEDIA FLOW RATE TONS	EMT C	EMT F	LMT C	LMT F	HEATING CAPACITY TYPE	EMT C	EMT F	CAPACITY kW	CAPACITY MBH	MEDIA TYPE	MEDIA FLOW RATE L/S	MEDIA FLOW RATE GPM	MEDIA FLOW RATE FPH	EMT C	EMT F	LMT C	LMT F	LOCATION	REMARKS
FCU–2.1	AAON H2–A1, SIZE 02	H,C	470	1000	0	0	0	0	0.25	1/3	115/1	DX	29	85	15	60	7	24	7	24	R–22	–	–	2	–	45	–	–	45% E. GLYCOL	15	60	1.5	5	HOT WATER	0.03	0.5	–	93	200	82	180	0104	–
FCU–2.2	AAON H2–A1, SIZE 03	H,C,D	564	1200	0	0	62	0.25	0.25	1/3	115/1	DX	26	78	18	65	11	36	7	25	R–22	–	–	3	–	45	–	–	45% E. GLYCOL	21	70	8	27	HOT WATER	0.17	2.7	–	93	200	82	180	2117	
FCU–2.3	AAON H2–A1, SIZE 03	H,C,D	564	1200	0	0	62	0.25	0.25	1/3	115/1	DX	26	78	18	65	11	36	7	25	R–22	–	–	3	–	45	–	–	45% E. GLYCOL	21	70	8	27	HOT WATER	0.17	2.7	–	93	200	82	180	3117	
FCU–2.4	AAON H2–A1, SIZE 03	H,C,D	564	1200	0	0	62	0.25	0.25	1/3	115/1	DX	26	78	18	65	11	36	7	25	R–22	–	–	3	–	45	–	–	45% E. GLYCOL	21	70	8	27	HOT WATER	0.17	2.7	–	93	200	82	180	4117	

TYPE

V VERTICAL
H HORIZONTAL
L LOW PROFILE
C CONCEALED
D DUCTED
R RECESSED
A ANGLED TOP
S SEMI–RECESSED

ACCESSORIES

1 DISCONNECT SWITCH
2 TAMPER PROOF ACCESS DOOR FASTENERS
3 LEVELING FEET
4 SUB–BASE (FOR SPECIFIED MOUNTING HEIGHT)
5 FALSE BACK
6 FRESH AIR DAMPER
7 FRESH AIR WALL BOX
8 FACTORY MOUNTED PIPING PACKAGE
9 MANUAL 3 SPEED FAN CONTROL SWITCH

REMARKS:
(1) SEE SPECIFICATION SECTION 15875 FOR ANY ADDITIONAL ACCESSORIES/OPTIONS.
(2) DOES NOT INCLUDES PRESSURE DROP FOR ACCESSORIES SUCH AS COILS, FILTERS, ETC.

CABINET UNIT HEATER (CUH) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	FLOW RATE L/S	FLOW RATE CFM	EAT C	EAT F	LAT C	LAT F	MEDIA TYPE	HEATING CAPACITY kW	HEATING CAPACITY MBH	HEATING FLOW RATE L/S	HEATING FLOW RATE GPM	HEATING FLOW RATE kg/S	HEATING FLOW RATE PPH	CABINET SIZE DEPTH MM	CABINET SIZE DEPTH IN	CABINET SIZE LENGTH MM	CABINET SIZE LENGTH IN	CABINET SIZE HEIGTH MM	CABINET SIZE HEIGTH IN	FAN MOTOR kW	FAN MOTOR HP	FAN MOTOR RPM	ELECTRICAL (VOLTS/PHASE)	(1) MOUNTING HEIGHT M	MOUNTING HEIGHT FT	MOUNTING TYPE	LOCATION	REMARKS
CUH–2.6	Q–MARK, CDF–548	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.23	–	–	–	–	175	7	600	24	600	24	–	–	–	208/1	CLG.	CLG.	R/S	1150	(2) (3)
CUH–2.7	Q–MARK, AWH–4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.23	–	–	–	–	89	3.5	365	14	464	18	–	–	–	208/1	0.25	0.75	R/S	2150	(2)
CUH–2.8	Q–MARK, AWH–4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.23	–	–	–	–	89	3.5	365	14	464	18	–	–	–	208/1	0.25	0.75	R/S	3150	(2)
CUH–2.9	Q–MARK, AWH–4404	47.2	100	7.2	45	22.8	73	ELECTRIC	3	10.23	–	–	–	–	89	3.5	365	14	464	18	–	–	–	208/1	0.25	0.75	R/S	4150	(2)
CUH–2.10	Q–MARK, CU935RTK	235	500	7.2	45	26.7	80	ELECTRIC	10	34.1	–	–	–	–	254	10	1194	47	670	26	–	–	–	208/3	0.25	0.75	R/S	105	(2)
CUH–2.11	Q–MARK, CU935RTK	235	500	7.2	45	26.7	80	ELECTRIC	10	34.1	–	–	–	–	254	10	1194	47	670	26	–	–	–	208/3	0.25	0.75	R/S	205	(2)
CUH–2.12	Q–MARK, CU935RTK	235	500	7.2	45	26.7	80	ELECTRIC	10	34.1	–	–	–	–	254	10	1194	47	670	26	–	–	–	208/3	0.25	0.75	R/S	305	(2)
CUH–2.13	Q–MARK, CU935RTK	235	500	7.2	45	26.7	80	ELECTRIC	10	34.1	–	–	–	–	254	10	1194	47	670	26	–	–	–	208/3	0.25	0.75	R/S	405	(2)

MOUNTING TYPES

R RECESSED
S SEMI–RECESSED
C CEILING
F FLOOR STANDING
W WALL

REMARKS:
(1) MOUNTING HEIGHT SHALL BE FROM FINISHED FLOOR TO BOTTOM OF UNIT.
(2) PROVIDE DISCONNECT SWITCH AND INTEGRAL TAMPER RESISTANT THERMOSTAT.
(3) CEILING MOUNTED UNITS SHALL BE EQUIPPED WITH ACCESSORIES REQUIRED FOR CEILING TYPE.
(4) CUH–2.1 THRU CUH–2.5 ARE NOT IN THIS CONTRACT.

GENERAL NOTES:

1. REFERENCES TO BRAND NAME PRODUCT LISTINGS IN THE PLANS AND SPECIFICATIONS PERTAINING TO EQUIPMENT, MATERIAL, ARTICLES OR CATALOG NUMBER SHALL BE REGARDED AS ESTABLISHING A STANDARD OF QUALITY AND IS FOR INFORMATIONAL PURPOSES. PRODUCTS OF OTHER MANUFACTURERS MAY BE USED SUBJECT TO APPROVAL BY THE CONTRACTING OFFICER. THE GOVERNMENT IS MAKING NO WARRANTY OF AVAILABILITY OR FITNESS OF THE PRODUCTS FOR USE.

AIR OUTLETS AND INLETS SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	APPLICATION	INLET/OUTLET	TYPE	MTG. SYST.	DAMPER	OVERALL SIZE MM	OVERALL SIZE IN	NECK SIZE MM	NECK SIZE IN	CONSTRUCTION MATERIAL	ACCESSORIES	(1) MOUNTING HEIGHT M	MOUNTING HEIGHT FT	LOCATION	REMARKS
CD–2.1	CARNES, SKTA20	SUPPLY	1	9	1	OB	610x610	24x24	300x300	12x12	ALUM.	EQUALIZING DEFLECTOR	–	CLG.	REFER TO PLAN	TWO–WAY BLOW PATTERN
CD–2.2	CARNES, SKTA20	SUPPLY	1	9	1	N	610x610	24x24	457x457	18x18	ALUM.	EQUALIZING DEFLECTOR	–	CLG.	REFER TO PLAN	TWO–WAY BLOW PATTERN
CD–2.3	CARNES, SKTA40	SUPPLY	1	9	1	N	610x610	24x24	381x381	15x15	ALUM.	EQUALIZING DEFLECTOR	–	CLG.	REFER TO PLAN	FOUR–WAY BLOW PATTERN
RG–2.1	CARNES, SLJB	RETURN	3	4	1	OB	610x610	24x24	559x559	22x22	ALUM.	–	–	CLG.	REFER TO PLAN	PAINT INTERIOR OF DUCTWORK FLAT BLACK ALL SIGHT LINES
RG–2.2	CARNES, SLJB	RETURN	3	4	1	OB	610x610	24x24	406x406	16x16	ALUM.	–	–	CLG.	REFER TO PLAN	PAINT INTERIOR OF DUCTWORK FLAT BLACK ALL SIGHT LINES
ER–2.1	CARNES, RTLA	EXHAUST	2	3	2	OB	203x203	8x8	152x152	6x6	STEEL	–	–	CLG.	REFER TO PLAN	–
ER–2.2	CARNES, RTLA	EXHAUST	2	3	2	OB	356x356	14x14	300x300	12x12	STEEL	–	–	CLG.	REFER TO PLAN	–
SR–2.1	CARNES, RTLA	EXHAUST	2	3	2	OB	203x203	8x8	152x152	6x6	STEEL	–	–	CLG.	REFER TO PLAN	–
SR–2.2	CARNES, RTLA	EXHAUST	2	3	2	OB	356x356	14x14	300x300	12x12	STEEL	–	–	CLG.	REFER TO PLAN	–
SG–2.1	CARNES, RSLAH	SUPPLY	3	3	3	N	575x1100	23x44	525x1050	21x42	STEEL	–	1.68	5.5	REFER TO PLAN	–

INLET/OUTLET

1 DIFFUSER
2 REGISTER
3 GRILLE
4 LOUVER
5 PENTHOUSE
6 VENT

TYPE

1 SINGLE DEFLECTION
2 DOUBLE DEFLECTION
3 FIXED BLADE
4 PERFORATED
5 LINEAR
6 SLOT
7 DRUM
8 EGGCRATE
9 LOUVERED
10 HOODED
11 DOOR TRANSFER
12 BRICK
13 PUNKAH

MOUNTING SYSTEM

1 T–BAR CEILING
2 PLASTER/CONCRETE CEILING
3 PLASTER/MASONRY WALL
4 EXPOSED DUCTWORK
5 METAL PANEL WALL
6 ROOF

DAMPER LEGEND

B BUTTERFLY
G GRAVITY
MP MOTOR OPERATED–PNEUMATIC
ME MOTOR OPERATED–ELECTRIC
N NONE
OB OPPOSED BLADE
PB PARALLEL BLADE

REMARKS:
(1) MOUNTING HEIGHT SHALL BE FROM FINISHED FLOOR TO TOP OF OPENING.

EXHAUST FAN (EF) AND SUPPLY FAN (SF) SCHEDULE

MARK	MANUFACTURER, MODEL NUMBER	TYPE	AIR FLOW L/S	AIR FLOW CFM	ESP Pa	ESP IN WG	MOTOR kW	MOTOR HP	FAN RPM	DRIVE TYPE	ELECTRICAL (VOLTS/PHASE)	ACCESSORIES	(1) INTERLOCK/W	(2) MTG. HGT. M	MTG. HGT. FT	OPENING MM	OPENING IN	LOCATION	REMARKS
EF–2.1	GREENHECK, S2–18–411–A4	1	1130	2400	93	0.375	0.2	1/4	1750	DIRECT	120/1	1,4	T–STAT	–	ROOF	610 SQ.	24 SQ	ROOF	MECHANICAL ROOM VENT
EF–2.2	GREENHECK, G120	2	280	600	93	0.375	0.2	1/4	865	DIRECT	120/1	1,9	AHU–2.1	–	ROOF	368 SQ.	14.5 SQ	ROOF	DRYER VENT
EF–2.4	GREENHECK, G–180	2	1133	2400	93	0.375	0.25	1/3	860	DIRECT	115/1	1,9,14	T–STAT	–	ROOF	521 SQ.	20.5 SQ	ROOF	–
EF–2.5	GREENHECK, SQ–160–A	4	1400	3000	125	0.5	500	2	1725	BELT	208/1	8,10,14	T–STAT	2.4	8	–	–	0103	–
EF–2.6	GREENHECK, SP–9	6	70	150	75	0.3	0.13	0.2	1050	DIRECT	115/1	8	SWITCH	2.4	8	–	–	0102	–

TYPE

1 SIDEWALL PROPELLER
2 ROOFTOP CENTRIFUGAL
3 SIDEWALL CENTRIFUGAL
4 INLINE CENTRIFUGAL
5 UTILITY CENTRIFUGAL
6 CABINET
7 TUBE AXIAL
8 VANE AXIAL
9 UPBLAST AXIAL
10 ROOFTOP HOODED AXIAL
11 ROOFTOP HOODED CENTRIFUGAL
12 ROOFTOP CENTRIFUGAL UPBLAST
13 OTHER (SEE SPECIFICATIONS)

ACCESSORIES

1 BACKDRAFT DAMPER
2 WEATHERHOOD
3 WALL COLLAR
4 INLET WIRE GUARD
5 MOTOR WIRE GUARD
6 MOTOR (OSHA) WIRE GUARD
7 BELT (OSHA) GUARD
8 HANGING ISOLATORS
9 MANUFACTURER'S ROOF CURB
10 INLET/OUTLET FLANGES
11 SPECIAL COATING (SEE SPECIFICATIONS)
12 MANUFACTURER'S HOODED WALL CAP
13 MANUFACTURER'S HOODED ROOF CAP
14 DISCONNECT SWITCH

REMARKS:
(1) SEE SPECIFICATION – SEQUENCE OF OPERATION.
(2) MOUNTING HEIGHT IS FROM FINISHED FLOOR LEVEL TO TOP OF FAN OR WALL OPENING.
(3) EF–2.3 IS NOT IN THIS CONTRACT.

I hereby certify this drawing was prepared by me or under my direct supervision and that I am a duly registered architect under the laws of the State of Minnesota.

For: MEAD & HUNT, INC.

By.
Title: PROJECT MANAGER
Registration No: 22452

ALL SCALES SHOWN ARE BASED ON A STANDARD DRAWING SIZE OF 28" X 40" OR METRIC DRAWING SIZE OF 841mm X 594mm. IF ANY OTHER SIZE DRAWINGS ARE FURNISHED OR PLOTTED THE CONTRACTOR SHALL ADJUST THE SCALES ACCORDINGLY. THE CONTRACTOR SHALL ALSO ADVISE HIS SUB–CONTRACTORS OF THE ABOVE.

Revisions

Symbol	Descriptions	Date	Approved

Architect: ARCHITECTURAL ALLIANCE MINNEAPOLIS, MINNESOTA

Engineer: MEAD & HUNT MADISON, WISCONSIN

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS OMAHA, NEBRASKA

Designed by: KAS
Drawn by: JET
Checked by: KAS
Reviewed by: REC
Submitted by:

MINNEAPOLIS–ST.PAUL AFR MINNESOTA

CONSOLIDATED LODGING FACILITY
– PHASE THREE –

MECHANICAL SCHEDULES

Plot Scale Ratio: 1: 1
Design File: 8785M705
Date: 2–14–2002
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