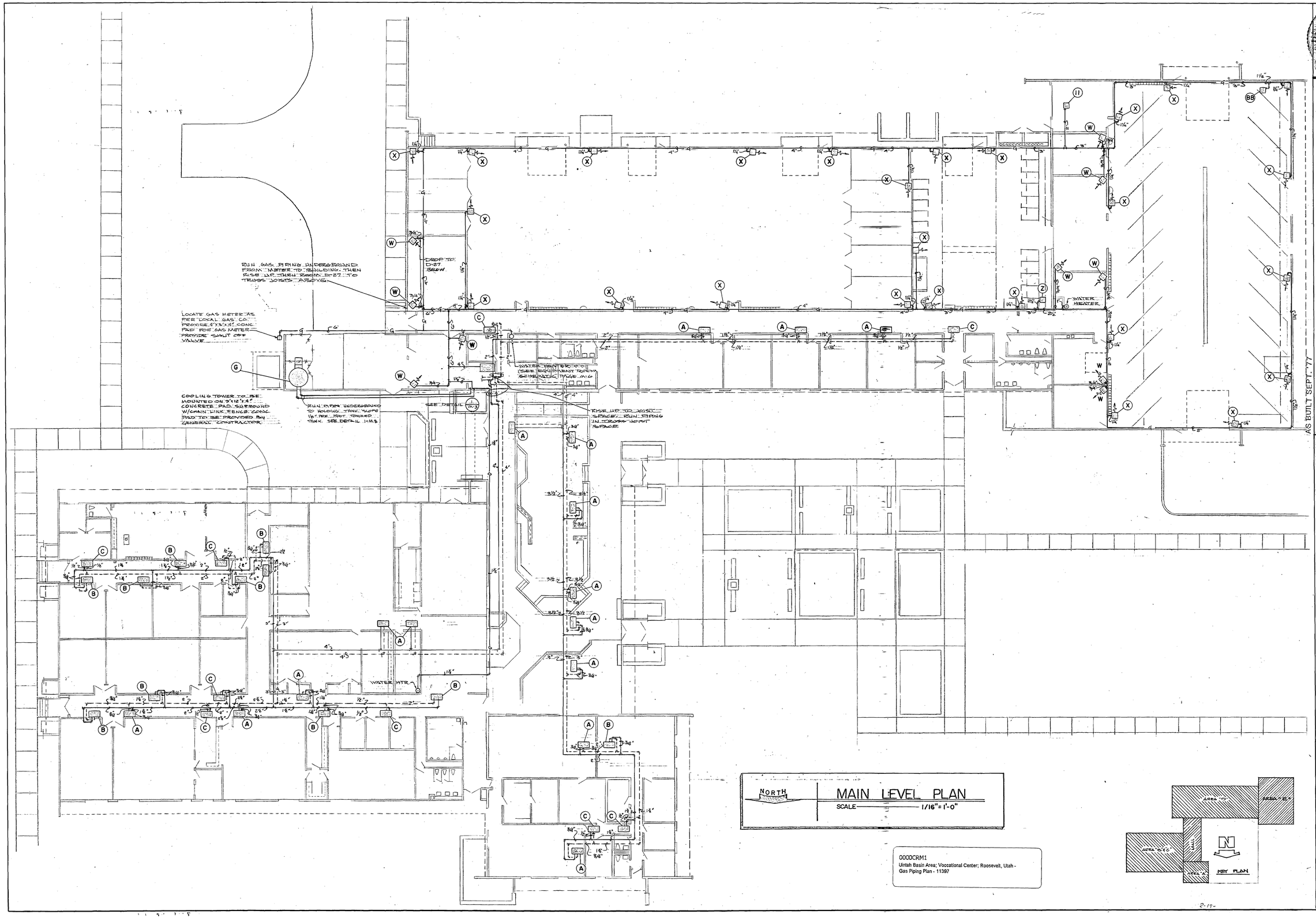


AS BUILT SEPT. '77

SHEET SUBJECT GAS PIPING PLAN

ALVIN A. GABRIELSEN
ARCHITECT
OGDEN UTAH

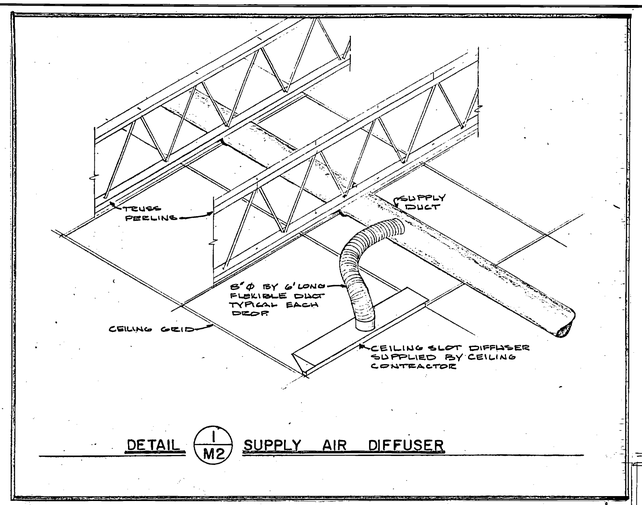
PROJECT DATE: NOV '79

PROJECT NO.: 79-5-18

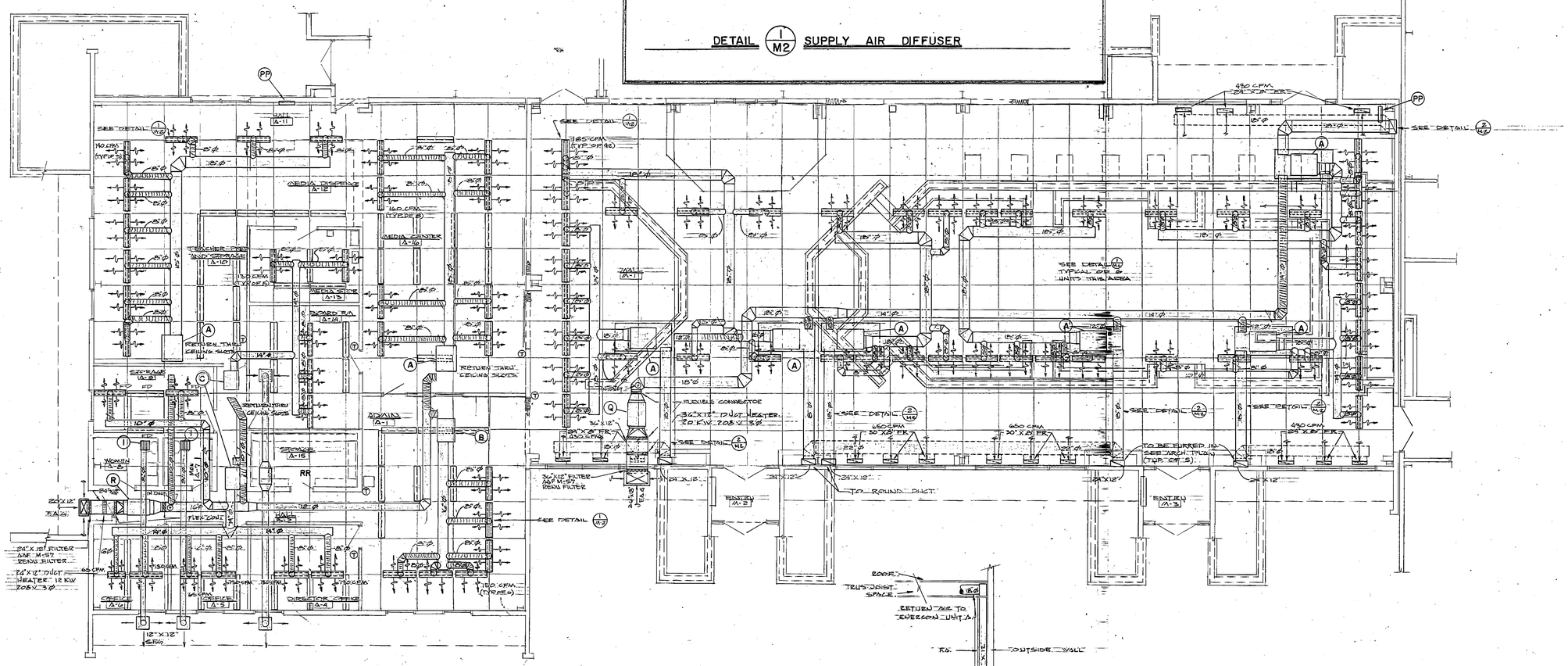
UINTAH BASIN AREA
VOCATIONAL CENTER
ROOSEVELT, UTAH

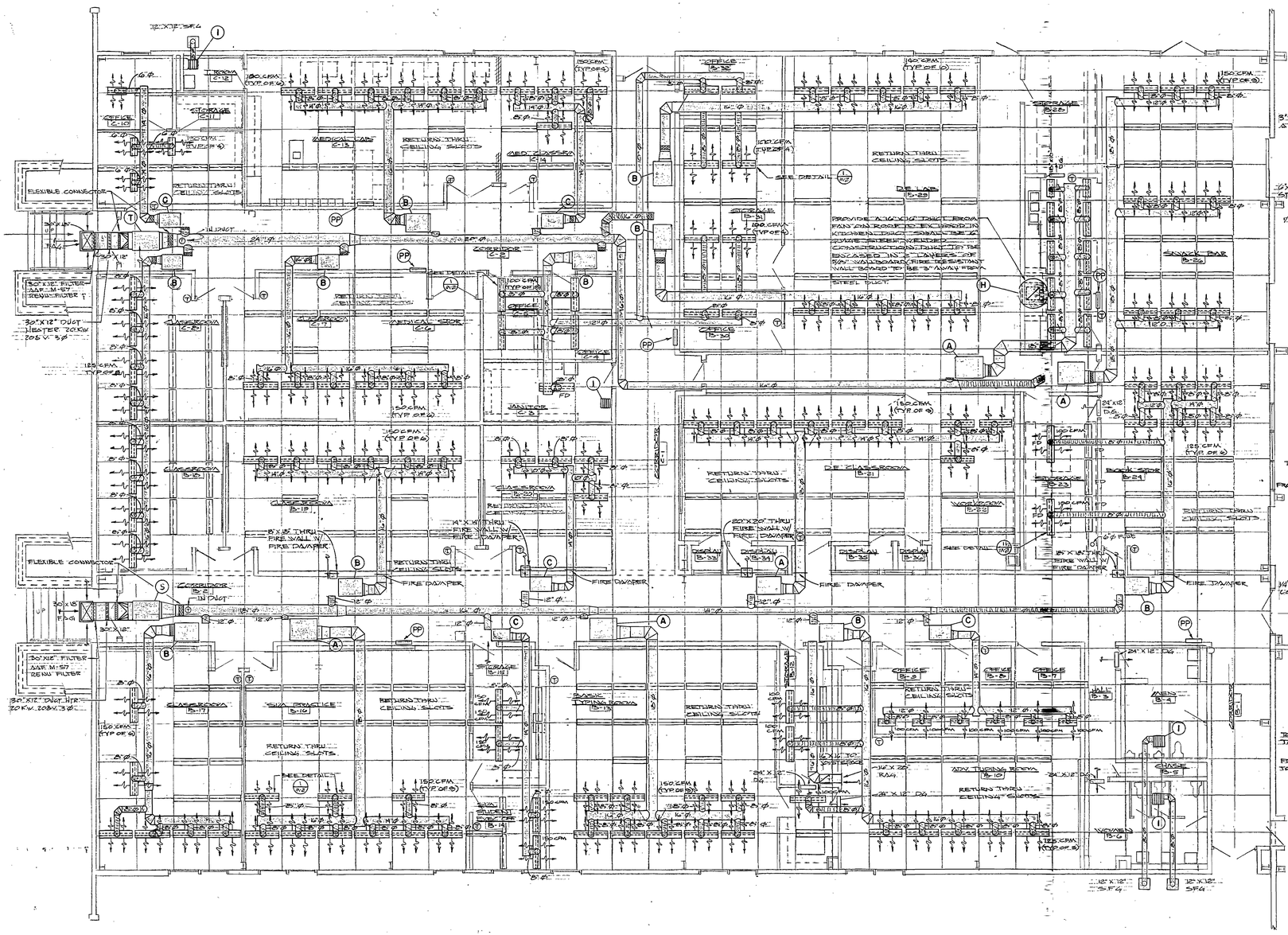
MECHANICAL

SHEET M1 OF 7



DETAIL 1/M2 SUPPLY AIR DIFFUSER


SEE DETAIL 1/M2
160 CFM (TYPICAL)
MEDIA STORAGE A-12
MEDIA CENTER A-16
TEACHER PREP AND STORAGE A-10
MEDIA STORE A-13
MEDIA STORE A-14
RETURN THRU CEILING SLOTS
STORAGE A-21
ADMIN A-1
STORAGE A-15
RR
WOMEN A-8
MEN A-7
HALL A-6
FLEX CONT
CAFETERIA A-5
QUIET TALK STORE A-4
24"X 18" FILTER AAF M-607 RENEW FILTER
24"X12" DUCT HEATER 12 KW 208X3Φ
12"X12"
185 CFM (TYP. OF 4)
FLEXIBLE CONNECTOR
32"X12" DUCT HEATER 20 KW 208X3Φ
SEE DETAIL 1/M2
32"X12" FILTER AAF M-607 RENEW FILTER
24"X12"
ENTRY A-2
TO ROUND DUCT
SEE DETAIL 1/M2
SEE DETAIL 2/M2
650 CFM 30"X18" EK
450 CFM 28"X18" EK
TO BE FURRED IN SEE ARCH. PLAN (TYP. OF 3)
ENTRY A-3
SEE DETAIL 2/M2
SEE DETAIL 2/M2
SEE DETAIL 2/M2



0000CRM3
Uintah Basin Area; Voccational Center; Roosevelt, Utah - Area "B" & "C" Mechanical Plan - 11399

AS BUILT SEPT. '77

ALVIN A. GABRIELSEN
ARCHITECT
OGDEN UTAH

SHEET SUBJECT AREA "B & C" MECHANICAL PLAN

PROJECT DATE: NOV '79

PROJECT NO.: 79-5-18

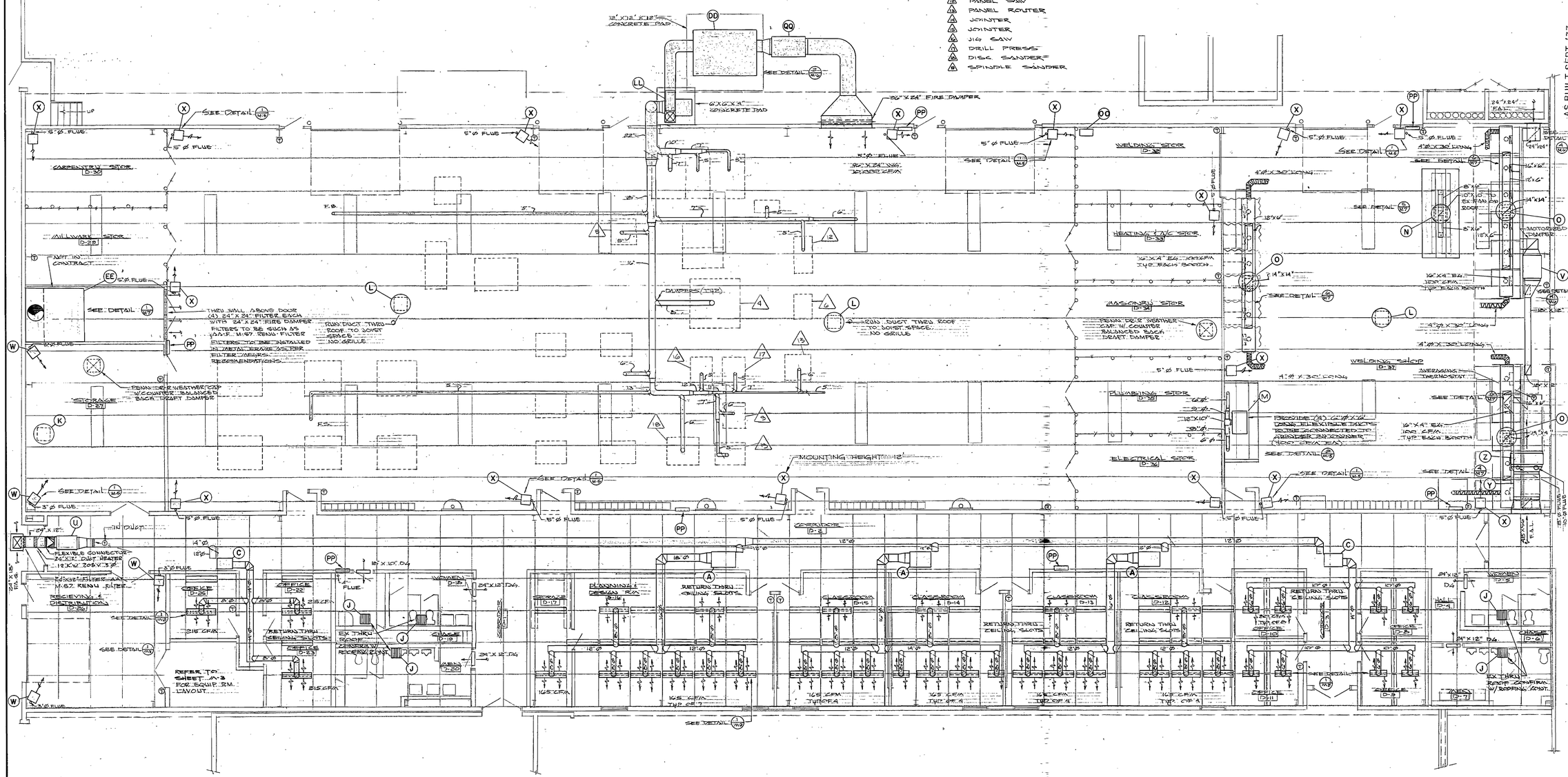
UINTAH BASIN AREA
VOCATIONAL CENTER
ROOSEVELT, UTAH

MECHANICAL

SHEET M3 OF 7

SHOP EQUIPMENT

1. BENCH GRINDER
2. BENCH GRINDER
3. SURFACE PLANER
4. DRUM SANDER
5. RADIAL ARM SAW
6. RADIAL ARM SAW
7. TABLE SAW
8. TABLE SAW
9. BAND SAW
10. SHAPER
11. OVER ARM ROUTER
12. PANEL SAW
13. PANEL ROUTER
14. JOINTER
15. JOINTER
16. JIG SAW
17. DRILL PRESS
18. DISC SANDER
19. SPINDLE SANDER



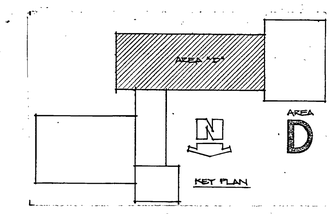
NORTH

MAIN LEVEL PLAN

SCALE 1/8" = 1'-0"

(AREA "D" MECHANICAL)

0000CRM4
Uintah Basin Area; Voccational Center; Roosevelt, Utah - Area "D" Mechanical Plan - 11400



REGISTERED PROFESSIONAL ENGINEER No. 2561 STATE OF UTAH

AS BUILT SEPT. '77

SHEET SUBJECT: AREA "D" MECHANICAL PLAN

PROJECT DATE: NOV. '79

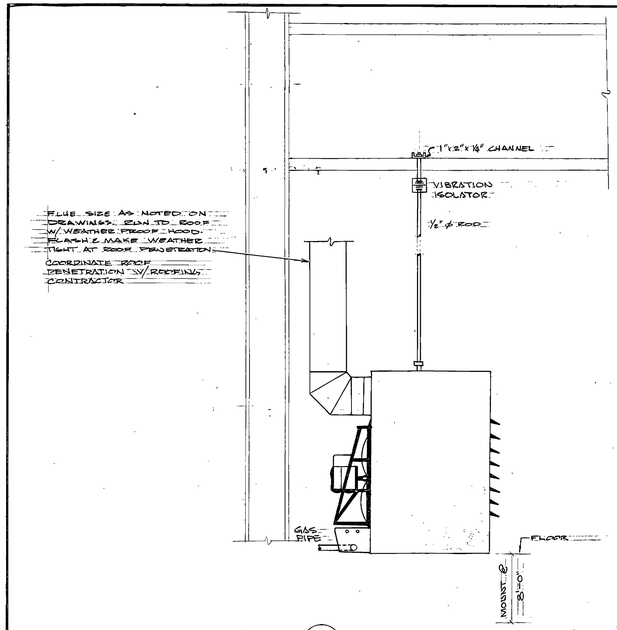
PROJECT NO.: 79-5-18

ALVIN A. GABRIELSEN ARCHITECT
OGDEN UTAH

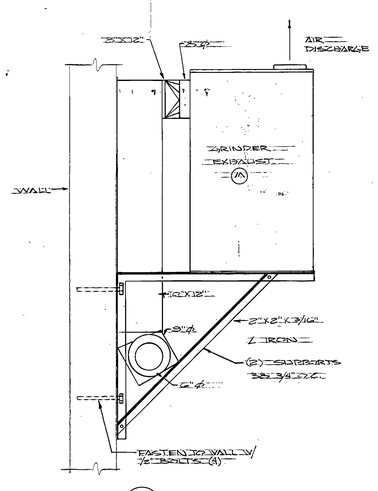
UINTAH BASIN AREA VOCATIONAL CENTER
ROOSEVELT, UTAH

MECHANICAL

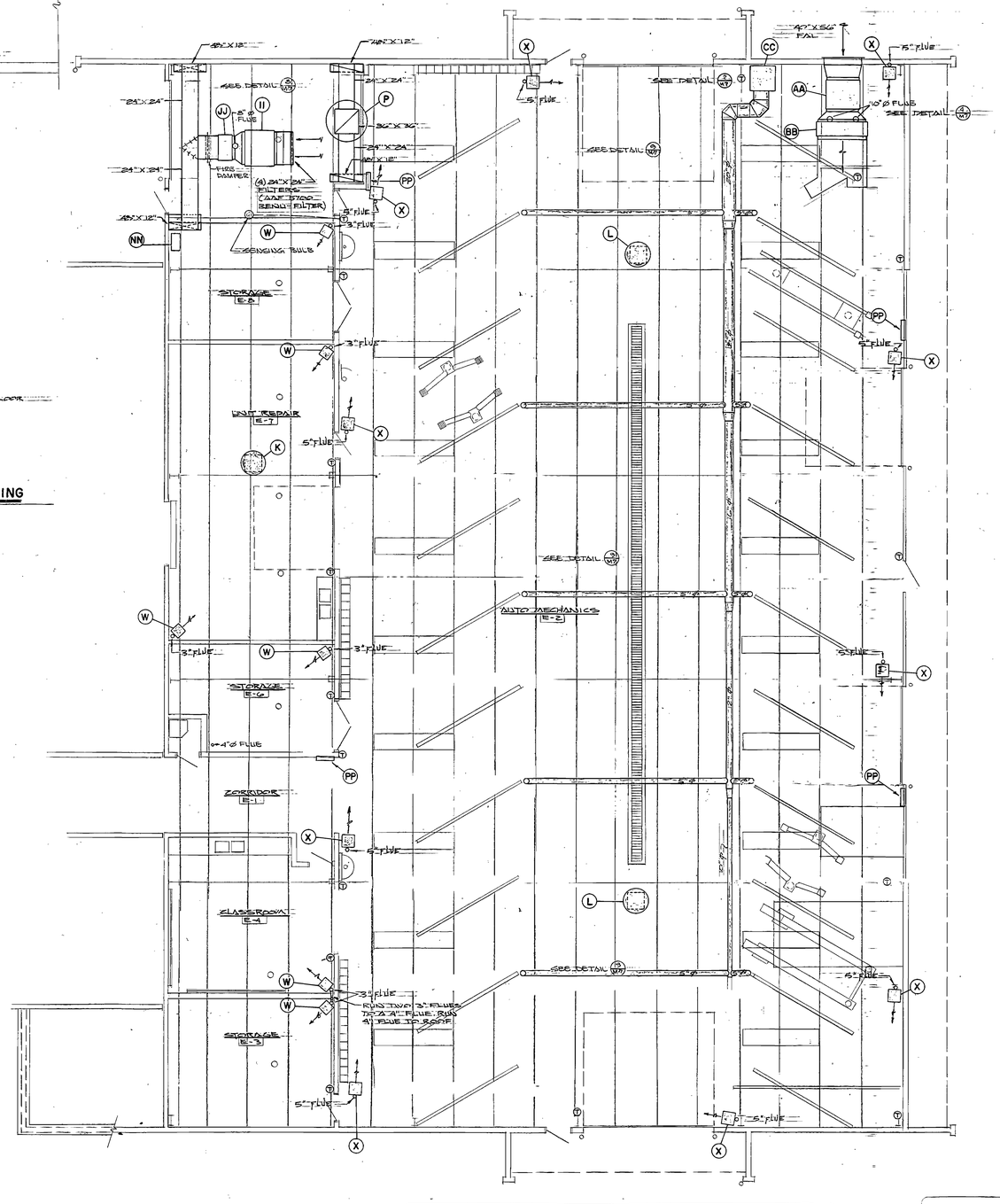
SHEET M4 OF 7



DETAIL 1/M-5 UNIT HEATER MOUNTING



DETAIL 2/M 5 GRINDER EXHAUST



GENERAL NOTES

1. 8"ø and 6"ø branch ducts from trunk ducts to diffusers to be flexible duct w/acoustical lining. Flexible ducts to be 6' min. Length.

2. Each Branch Duct to have a balancing damper.

3. Ceiling slot diffusers & returns to be supplied by the Ceiling Contractor & to be placed as shown on the drawings.

4. Each enercon unit is to be supplied w/a Griswold 3532 flow control valve.

5. Provide flexible connectors on the supply duct from each unit 'A', 'B', and 'C'.

6. All roof mounted exhaust fans shall be mounted on curbs provided by the roofing contractor. The mechanical contractor shall provide flashing and counter flashing for these fans.

7. Boiler 'D' to be supplied w/vertical drafts.

8. Provide 20" x 20" duct from exhaust fan "H" to 1" below kitchen ceiling. Duct should be covered w/fire proof sheet rock. Provide cover over exhaust duct in kitchen. The kitchen equipment contractor will connect the hood to the 20" x 20" duct.

9. In building trades shop D-31 the owner will build his own receiver booth to which the dust collection ducts will be connected.

10. All penetrations thru outside walls to be coordinated w/the general contractor. Seal around all penetrations & make weather tight.

11. Fire Dampers shall be such as Tuttle and Bailer model 'FI' for rectangular duct and model 'F' for round duct.

12. Flues shown on plan to be run to above roof with weather proof hood. Coordinate roof penetration with roofing contractor.

13. All equipment to be supported on vibration isolators.

14. All six enercon units in room M-1 to be connected to a single thermostat.

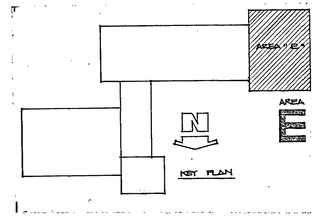
15. All round branch ducts for, sawdust collection, auto exhaust, and welding exhaust ducts to have 18" minimum radius at point of take off from main ducts.

NORTH

MAIN LEVEL PLAN

SCALE 1/8" = 1'-0"
(AREA "E" MECHANICAL)

0000CRM5
Uintah Basin Area; Voccational Center; Roosevelt, Utah - Area "E" Mechanical Plan - 11401



REGISTERED PROFESSIONAL ENGINEER No. 2561 STATE OF UTAH

AS BUILT SEPT. '77

SHEET SUBJECT AREA "E" MECHANICAL PLAN

ALVIN A. GABRIELSEN ARCHITECT
OGDEN UTAH

PROJECT DATE: NOV '79

PROJECT NO.: 79.5.10

UINTAH BASIN AREA VOCATIONAL CENTER ROOSEVELT, UTAH

MECHANICAL

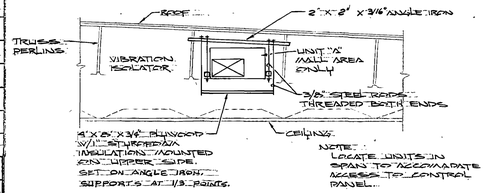
SHEET M5 OF 7

EQUIPMENT SCHEDULE

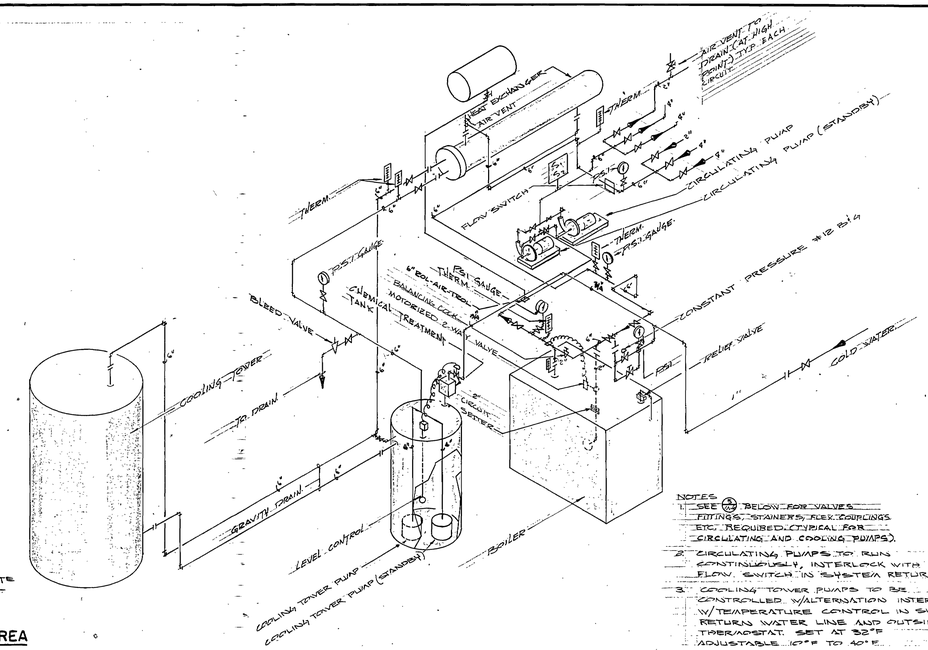
NO.	DESCRIPTION	HEATING BTU	HEATING KW	HEATING STPS	COOL TONS	FAN CFM	FAN SP	FAN RPM	HP	POWER V	POWER FLA	POWER PH	DIMENSIONS L	DIMENSIONS H	DIMENSIONS D	REMARKS	MFGR. & CAT. NO.
A	ENERCON UNIT	51,000			4	1300			1/2	208	6.9	3	44	20	36		AAF MODEL HW 51-4
B	ENERCON UNIT	47,000			3	900			1/3	208	15	3	40	18	30		AAF MODEL HW 40-4
C	ENERCON UNIT	28,000			2	650			1/4	208	16.7	1	35	16	25		AAF MODEL HW 26-2
D	BOILER	2016,000											71	69	45		PEERLESS 2103-13
E	HEAT EXCHANGER												168	18	18		B & G GWW 1188-48
F	PUMP								1½	208		3				283 GPM 60' HEAD	FEDERAL 3CH-10-4
G	COOLING TOWER				75	14,000			7½	208		3	71½	79			RHEEM ACME RCT-75
H	EXHAUST FAN					2000	¾	540	1	208		3	58	33	58		PENN FMX 30 B
I	EXHAUST FAN					230	1/8	1050		115		1	13¾	11⅞	11½		PENN Z-8
J	EXHAUST FAN					110	1/8	1050		115		1	12½	9½	9		PENN Z-10
K	EXHAUST FAN					500	¼	650	¼	115		1	31	25	31		PENN B3-45
L	EXHAUST FAN					1000	¼	720	1/2	208		1	31	25	31		PENN B3-531
M	EXHAUST FAN					1600	½		3	208		3	44	44	27		AAF ARRESTALL 1200
N	EXHAUST FAN					1200	¾	1125	1/2	208		1	31	25	31	EXPLOSION PROOF MOTOR	PENN B3-531
O	EXHAUST FAN					2200	1¼	800	1½	208		3	38	27	38		PENN LB 24
P	EXHAUST FAN					5000			5	208		3	63	36	63	EXPLOSION PROOF MOTOR	PENN (2 SPEED) FMX-36B
Q	IN LINE FAN					2000	¾	660	2	208		3	41	30	30		PENN REX 122 B
R	IN LINE FAN					1200	¾	800	1½	208		3	37	26	26		PENN REX 80 B
S	IN LINE FAN					2250	1	700	2	208		3	44	33	33		PENN REX 124 B
T	IN LINE FAN					3300	1¼	670	3	208		3	54	40	40		PENN REX 130 B
U	IN LINE FAN					1000	¾	750	1½	208		3	37	26	26		PENN REX 80 B
V	IN LINE FAN					3000	¾	730	2	208		3	44	33	33		PENN REX 124 B
W	UNIT HEATER	19,200				370		1000		115		1	14½	23½	18½		JANITROL 68-030-7AN-10A
X	UNIT HEATER	54,500				1220		1000	1/30	115		1	20½	29¾	18½		JANITROL 68-085-7AN-30A
Y	CABINET BLOWER					3000 6000			2	208		3	43	37¾	51½	2-SPEED	JANITROL 75-135-5
Z	DUCT FURNACE	360,000								208		1	20¾	37¾	63½	STAINLESS STEEL HEAT EXCHANGER	JANITROL 72-500-3BN-006
AA	CABINET BLOWER					2000			3	208		3	43	37¾	51½		JANITROL 75-135-5
BB	DUCT FURNACE	120,000								208		1	20¾	37¾	75½	STAINLESS STEEL HEAT EXCHANGER	JANITROL 72-600-4BN-006
CC	AUTO EXHAUST BLOWER					6000	4		7½	208		3	42	42	48		KENT-MOORE MONOMETER KA2388
DD	SAW DUST COLLECTOR					10624				208			120	345	67		AAF AMERIPULSE 10-72-500
EE	SPRAY BOOTH					7200		1295	1	208		3	110	98	100	W/ 34" DIA FAN	DEVILBISS XDA-6014
FF	PUMP							1750	3	208		3				300 GPM 30' HEAD	FEDERAL V55-46-3-4
GG	HOLDING TANK												36Ø	84			
HH	EXPANSION TANK												18⅞	72		80 GAL.	
II	CABINET BLOWER					5000			5	208		3	43	37¾	51½	2-SPEED	JANITROL 75-135-5
JJ	DUCT FURNACE	200,000								208		1	20¾	37¾	38		JANITROL 72-300-3BN-006
LL	FAN					10624	14		40	208		3	58	70	57	ARR # 10 UP DISCHARGE	CHAMPION 60 LS
NN	COMPRESSOR								10	208		3					QUINCY QF350
OO	COMPRESSOR								5	208		3					QUINCY H220
PP	FIRE EXTINGUISHER															W/ 20# ABC EXTINGUISHER	JL INDUSTRIES CLASS VU-585
QQ	DUCT SILENCER					10624							64	38	38		AAF PLUGG TDM-30-E-N
RR	IN LINE FAN					400	¼		1/10	115		1	20	12	12		PENN REX-6BR

REGISTER & GRILLE SCHEDULE

SYMBOL	DESCRIPTION	MFGR. & CAT. NO.
DG	DOOR GRILLE	T & B - T350 WP
FAG	FRESH AIR GRILLE	T & B - CRE 500
FAL	FRESH AIR LOUVER	KRUEGER XAL-4
RAG	RETURN AIR GRILLE	T & B - T110 DG
EG	EXHAUST GRILLE	T & B - NT 70
SEG	SOFFIT EXHAUST GRILLE	T & B - CRE 500
FR	FLOOR RETURN	T & B - AF 250
WG	WALL GRILLE	T & B - ATG
FD	FIRE DAMPER	SEE NOTE # 11

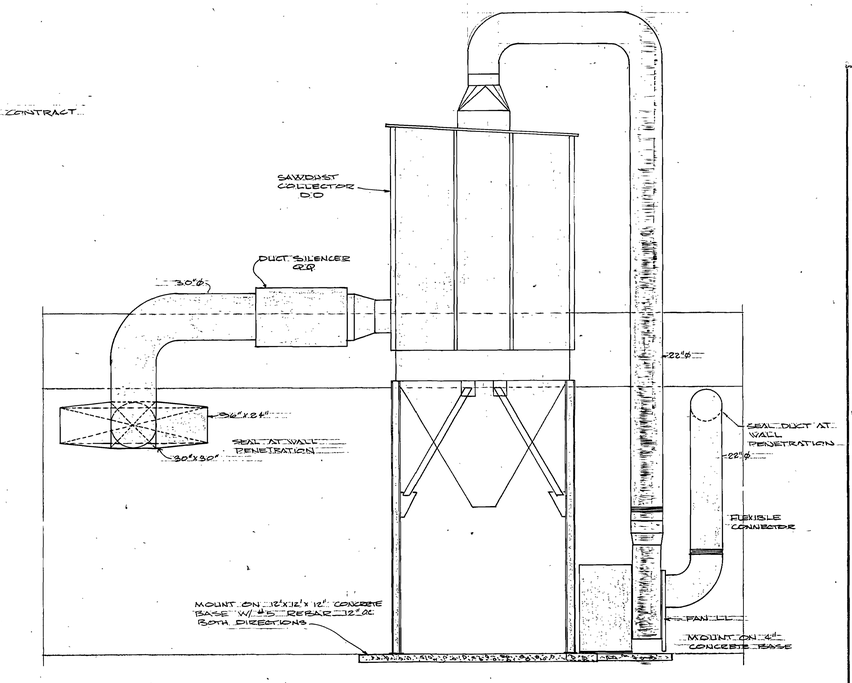


DETAIL 1/M-6 ENERCON UNIT MOUNTING — MALL AREA
SCALE: 1/4" = 1' - 0"

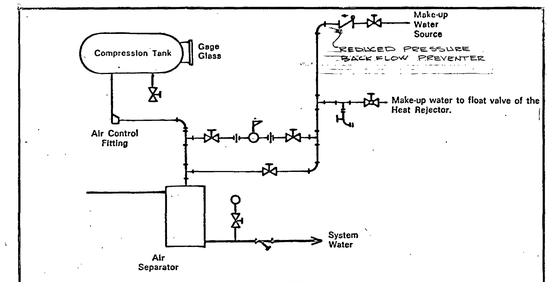


NOTES
1. SEE 2 BELOW FOR VALVES, FITTINGS, STRAINERS, FLEX. COUPLINGS, ETC. REQUIRED TYPICAL FOR CIRCULATING AND COOLING PUMPS.
2. CIRCULATING PUMPS TO RUN CONTINUOUSLY, INTERLOCK WITH FLOW SWITCH IN SYSTEM RETURN LINE.
3. COOLING TOWER PUMPS TO BE CONTROLLED W/ALTERNATION INTERLOCK W/ TEMPERATURE CONTROL IN SYSTEM RETURN WATER LINE AND OUTSIDE THERMOSTAT. SET AT 32°F ADJUSTABLE 10°F TO 40°F.

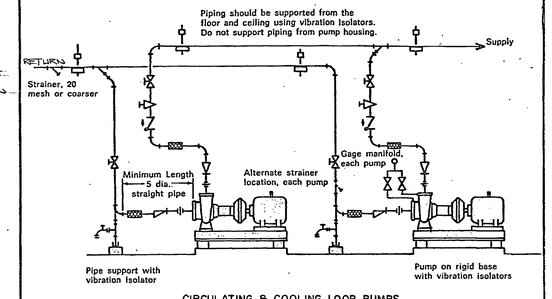
SCHEMATIC — EQUIPMENT ROOM



DETAIL 2/M6 SAWDUST COLLECTION SYSTEM
SCALE: 1/4" = 1'-0"



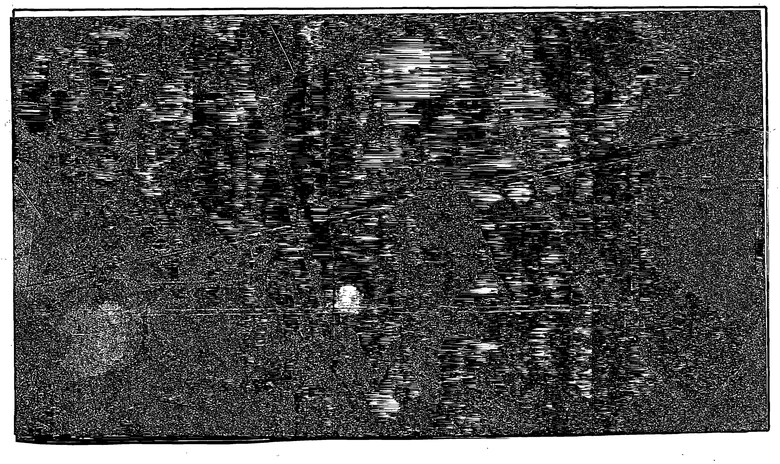
SYSTEM—WATER PRESSURE & AIR CONTROL



CIRCULATING & COOLING LOOP PUMPS

Shut-off valve	Check valve	Strainer
Combination balancing/shut-off valve	Thermometer	Motorized valve
Balancing cock	Pressure gage	Air vent located wherever air pockets might occur.
Flow Indicator	Pressure reducer & regulator	Flexible connector
Union or hose swivel fitting	Hose bib	Pipe reducer

DETAIL 5/M-6 PIPING ARRANGEMENT



00000RM6
Uintah Basin Area; Voccational Center; Roosevelt, Utah - Mechanical Details & Equipment Schedules - 11402

REGISTERED PROFESSIONAL ENGINEER No. 2561 STATE OF UTAH ARTHUR R. SMITH

AS BUILT SEPT. '77

SHEET SUBJECT: MECHANICAL DETAILS & EQUIPMENT SCHEDULE

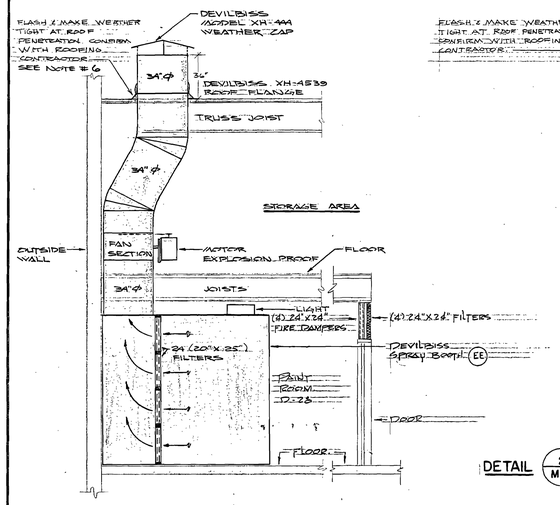
ALVIN A. CABRIELSEN ARCHITECT
OGDEN UTAH

PROJECT DATE: NOV '79
PROJECT NO.: 79-5-16

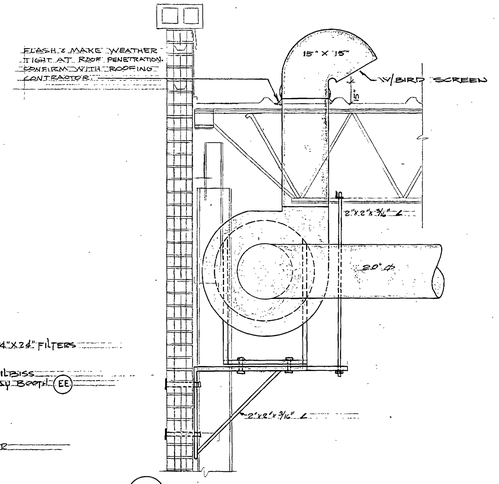
UINTAH BASIN AREA VOCATIONAL CENTER
ROOSEVELT, UTAH

MECHANICAL SHEET M6

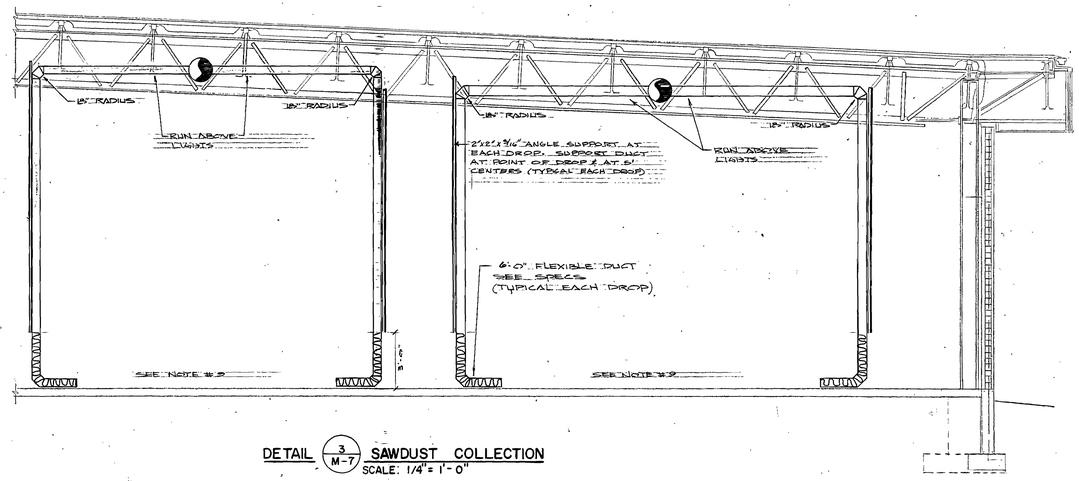
OF 7



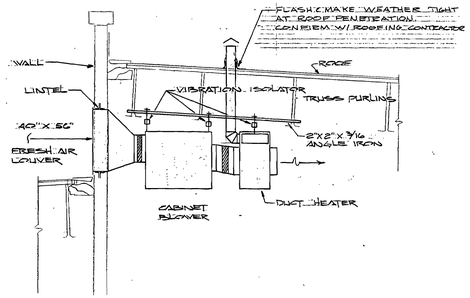
DETAIL 1/M-7 PAINT SPRAY BOOTH
SCALE: 1/4" = 1'-0"



DETAIL 2/M-7 AUTO EXHAUST UNIT
SCALE: 1/2" = 1'-0"



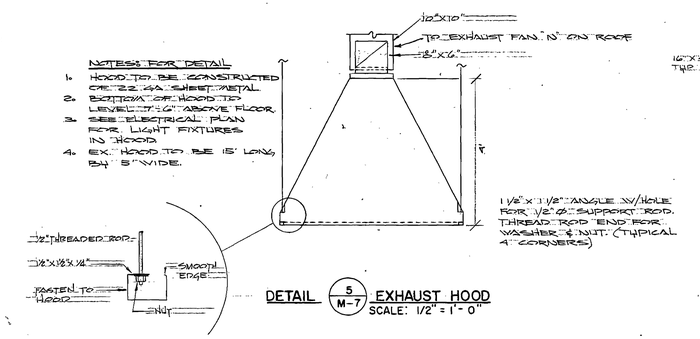
DETAIL 3/M-7 SAWDUST COLLECTION
SCALE: 1/4" = 1'-0"



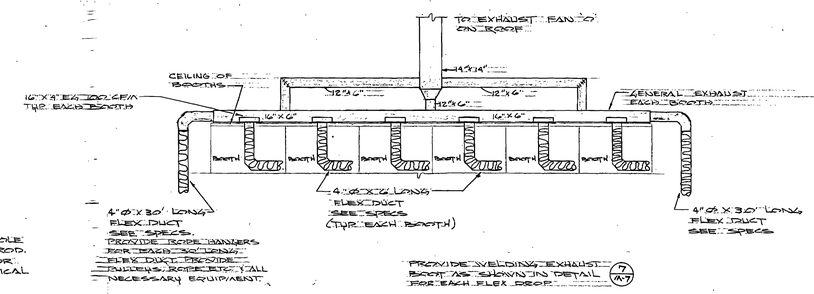
DETAIL 4/M-7 MAKE UP AIR UNIT
SCALE: 1/4" = 1'-0"

NOTES FOR DETAIL

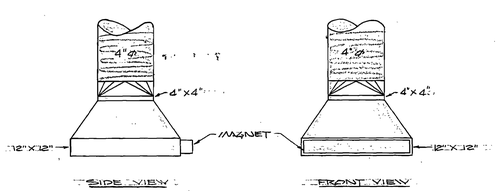
1. HOOD TO BE CONSTRUCTED OF 22 GA SHEET METAL
2. BOTTOM OF HOOD TO LEVEL 7'-6" ABOVE FLOOR
3. SEE ELECTRICAL PLAN FOR LIGHT FIXTURES IN HOOD
4. EX. HOOD TO BE 15' LONG BY 5' WIDE.



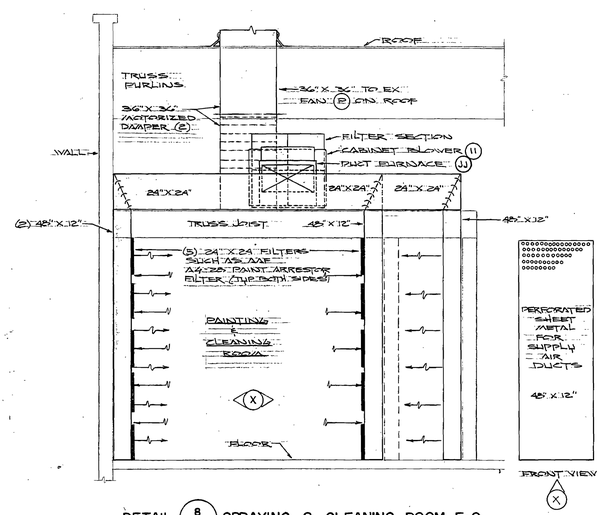
DETAIL 5/M-7 EXHAUST HOOD
SCALE: 1/2" = 1'-0"



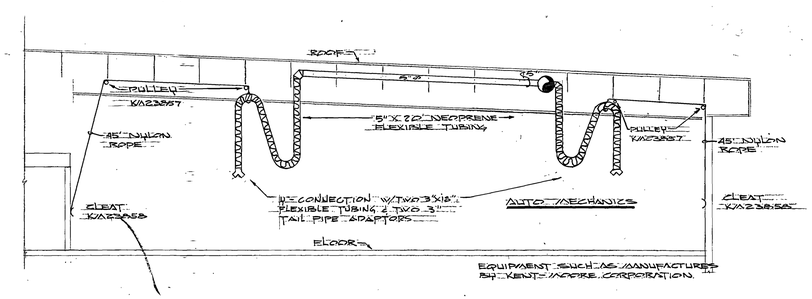
DETAIL 6/M-7 WELDING BOOTH EXHAUST
SCALE: 1/4" = 1'-0"



DETAIL 7/M-7 WELDING EXHAUST HOOD



DETAIL 8/M-7 SPRAYING & CLEANING ROOM E-9
SCALE: 1/4" = 1'-0"



DETAIL 9/M-7 AUTO EXHAUST SYSTEM
SCALE: 1/8" = 1'-0"

0000CRM7
Uintah Basin Area; Voccational Center; Roosevelt, Utah - Mechanical Details - 11403

REGISTERED PROFESSIONAL ENGINEER No. 2561 STATE OF UTAH ARTHUR H. NEBEKER, JR.

AS BUILT SEPT. '77

SHEET SUBJECT: MECHANICAL DETAILS

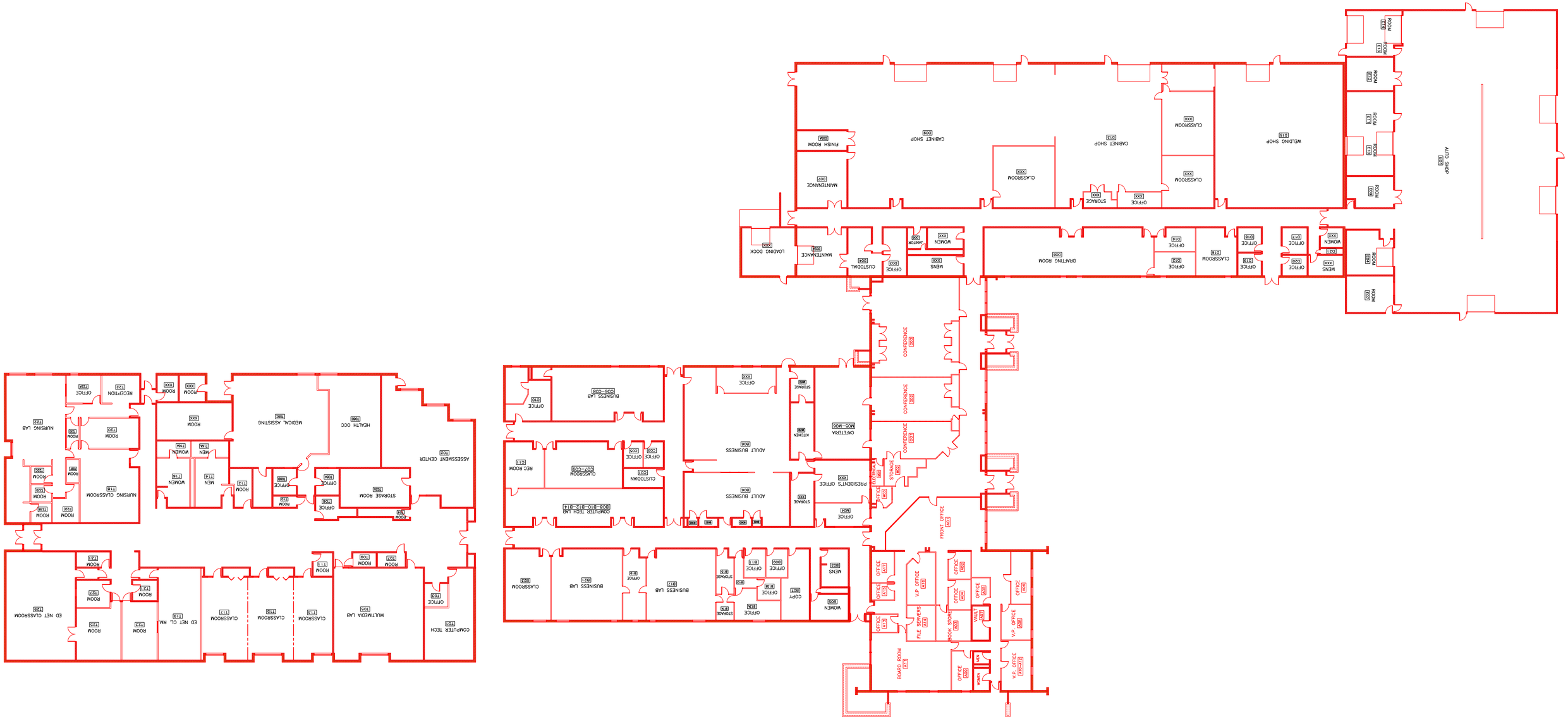
ALVIN A. CABRIELSEN
ARCHITECT
OGDEN UTAH

PROJECT DATE: NOV. '79
PROJECT NO.: 79.5.18

UINTAH BASIN AREA
VOCATIONAL CENTER
ROOSEVELT, UTAH

MECHANICAL

SHEET M7 OF 7



AUTO SHOP
WELDING SHOP
CABINET SHOP
CABINET SHOP
FINISH ROOM
MAINTENANCE
CLASSROOM
CLASSROOM
CLASSROOM
CLASSROOM
STORAGE
OFFICE
LOADING DOCK
MAINTENANCE
CUSTODIAL
OFFICE
MENS
WOMEN
DRAFTING ROOM
OFFICE
CLASSROOM
OFFICE
OFFICE
OFFICE
MENS
WOMEN
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
CONFERENCE
CONFERENCE
CONFERENCE
CAFETERIA
KITCHEN
STORAGE
ADULT BUSINESS
ADULT BUSINESS
PRESIDENT'S OFFICE
STORAGE
OFFICE
OFFICE
BUSINESS LAB
OFFICE
CUSTODIAN
CLASSROOM
OFFICE
OFFICE
REC.ROOM
COMPUTER TECH LAB
FRONT OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
V.P. OFFICE
OFFICE
OFFICE
OFFICE
OFFICE
V.P. OFFICE
FILE SERVERS
BOOK STORE
VAULT
BOARD ROOM
OFFICE
MEN
WOMEN
V.P. OFFICE
CLASSROOM
BUSINESS LAB
BUSINESS LAB
STORAGE
OFFICE
OFFICE
OFFICE
COPY
MENS
WOMEN
STORAGE
OFFICE
ASSESSMENT CENTER
HEALTH OCC
MEDICAL ASSISTING
ROOM
ROOM
ROOM
ROOM
WOMEN
MEN
WOMEN
MEN
ROOM
OFFICE
OFFICE
STORAGE ROOM
OFFICE
ROOM
NURSING LAB
NURSING CLASSROOM
RECEPTION
OFFICE
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ROOM
ED NET CLASSROOM
ROOM
ROOM
ED NET CL. RM.
CLASSROOM
CLASSROOM
CLASSROOM
MULTIMEDIA LAB
COMPUTER TECH
OFFICE