FAN COIL UNIT SCHEDULE

UNIT DESIGNATION		B1	B2
NOTES		①②	①③
NOMINAL CFM		800	200
COIL SELECTION, CFM		760	190
MAXIMUM CHILLED WATER FLOW, GPM		5.3	.8
COOLING	MINIMUM COIL CAPACITY, SENSIBLE BTUH	17,700	3,600
	MINIMUM COIL CAPACITY, TOTAL BTUH	30,500	4,300
	ENTERING AIR TEMP., DB °F	82	78
	ENTERING AIR TEMP., WB °F	71	65
	ENTERING WATER TEMP., °F	42	42
HEATING	MINIMUM COIL CAPACITY, TOTAL BTUH	24,317	4000
	ENTERING AIR TEMP., DB °F	68	68
	ENTERING WATER TEMP., °F	140	140
CFM OUTSIDE AIR		320	—
PIPING RUNOUT SIZE, SUPPLY & RETURN		3/4	1/2
MAXIMUM MOTOR WATTAGE		140	80
MAXIMUM HOT WATER FLOW, GPM		1.5	0.3

① MAXIMUM WATER PRESS. DROP 10 FT. W. G.
MANUFACTURER SHALL SELECT SENSIBLE CAPACITY NOT TO EXCEED 10% OF THAT INDICATED
MANUFACTURER SHALL SELECT SENSIBLE & LATENT CAPACITY NOT LESS THAN THAT INDICATED.
② VERTICAL TYPE UNIT W/OUTSIDE AIR INTAKE ③ VERTICAL TYPE UNIT
COIL SELECTIONS SHALL BE WITH A 3-SPEED FAN MOTOR @ HIGH SPEED.

AIR COOLED CHILLER SELECTION

UNIT DESIGNATION	ACC-1	ACC-2
BUILDING SERVED	1,2,3,4 & 5	1,2,3,4 & 5
MINIMUM TOTAL CAPACITY TONS	82	82
ENTERING WATER TEMP. °F	51.6	51.6
LEAVING WATER TEMP °F	42	42
WATER FLOW, GPM	249	249
AMBIENT AIR TEMP., DB °F	90	90
MAXIMUM WATER PRESSURE DROP, FT. W.G.	20	20
MAXIMUM UNIT KW.	112	112
VOLTS / PHASE / HERTZ	460/3/60	460/3/60

① CHILLER SHALL HAVE MINIMUM OF 4 STEPS OF CAPACITY REDUCTION

EXHAUST FAN SCHEDULE

UNIT DESIGNATION	EF-1	EF-2	EF-3	EF-4
NOTES	① ③	②	①	① ③ ④
AIR FLOW, CFM	420	500	65	1A,2A,3A,4A,5A 320 / 6 812
TOTAL STATIC PRESSURE, IN W.G.	.125	.125	.10	.125
LOCATION	ROOF	WALL	WALL	ROOF
AREA SERVED	TOILET JAN. CLST.	LAUNDRY	TOILETS	MECHANICAL BLDG
MAX. MOTOR H.P.	1/20	1/20	60 WATTS	1/8
VOLTS / PHASE / HERTZ	120/1/60	120/1/60	120/1/60	120/1/60
FAN TYPE	CENTRI.	PROP.	PROP.	CENTRI.

① FURNISH WITH GRAVITY BACKDRAFT DAMPER & DISCONNECT SWITCH
② FURNISH WITH ALUMINUM WALL GRILLE, MOTOR SIDE FAN GUARD, GRAVITY BACKDRAFT DAMPER & DISCONNECT SWITCH.
③ FURNISH WITH BIRDSCREEN
④ FURNISH ALUMINUM, SELF-FLASHING CURB FOR BLDG.6.

AIR DISTRIBUTION SCHEDULE

DESCRIPTION
EXHAUST REGISTER EGG CRATE TYPE, ½"x½" GRID, 90% FREE AREA, OBD

REFER TO EXHAUST RISER Nº 2 ON DWG. M-5

DESIGN CONDITIONS

	OUTSIDE	INSIDE
SUMMER	90°F db., 79°F wb	78°F, 50% RH
WINTER	23°F	68°F

STEAM/HOT WATER HEAT EXCHANGER

UNIT DESIGNATION	C-1	C-2
TYPE SERVICE	HEATING	DOMESTIC
BLDG. SERVED	1,2,3,4 & 5	1,2,3,4 & 5
TEMP. IN. °F	108	40
TEMP. OUT, °F	140	140
STEAM PRESS., PSIG	25	25
STEAM FLOW, LB/HR	2822.8	660
WATER FLOW, GPM	175	13
EXCHANGE TYPE	SHELL & TUBE	TANK
NOTES	① ② ④	① ② ③ ⑤

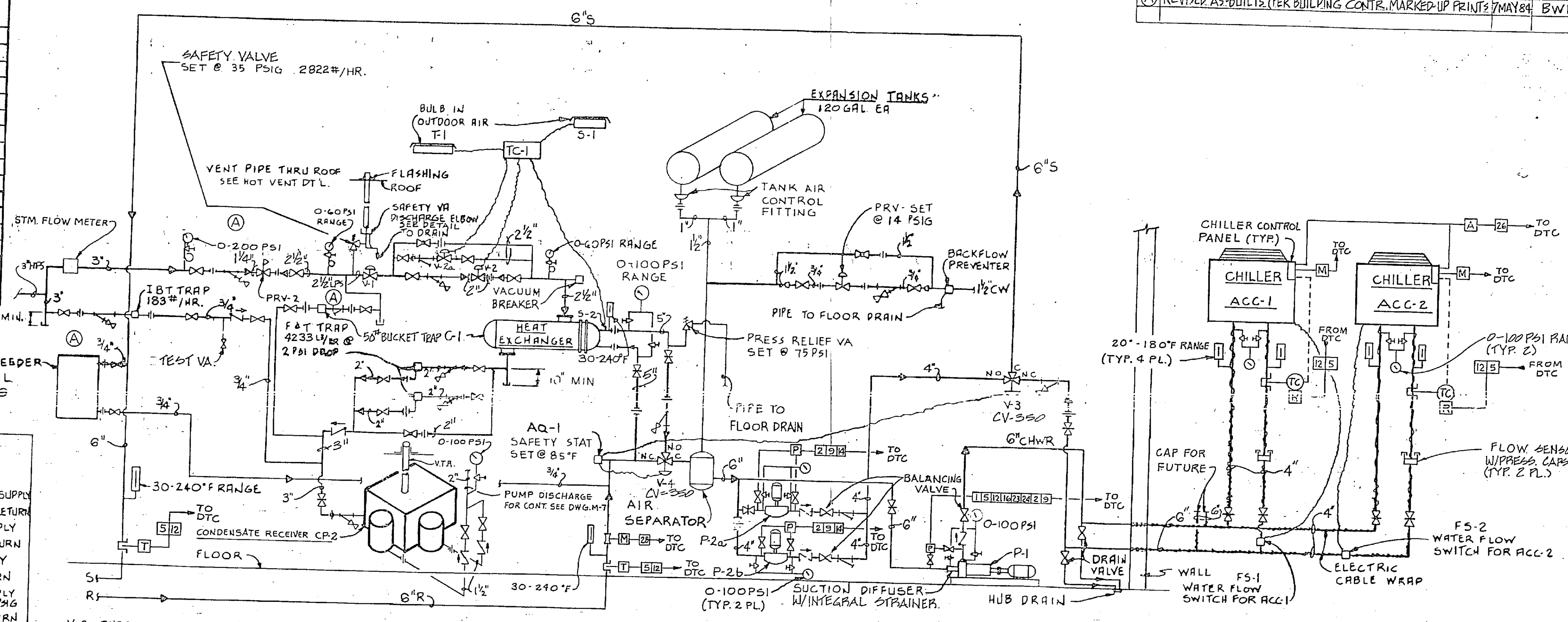
① MAX. TUBE VEL. - 5 F.P.S.
② MAX. PRESS. DROP - 5 FT. W.G.
③ MIN. SCALE FACTOR TO USE FOR SELECTION - .001
④ MIN. SCALE FACTOR TO USE FOR SELECTION - .0005
⑤ MIN. COIL LENGTH 50% STORAGE TANK DIAMETER

PUMP SCHEDULE

UNIT DESIGNATION	P-1	P-2a	P-3	P-4	P-2b
TYPE SERVICE	CHILLED WATER	HOT WATER	DOM. HOT WATER	SUMP	HOT WATER
BLDG. SERVED	1,2,3,4 & 5	1,2,3,4 & 5	1,2,3,4 & 5	1A, 2A, 3A, 4A, 5A, 6	1,2,3,4,5
WATER FLOW, GPM	497	86	13	25 Ⓐ	86
TOTAL HEAD, FT. W.G.	140	25	16	15	25
R. P. M.	3550	1750	1750	1750	1750
MAX MOTOR H.P.	30	1½	1/4	1/3	1½
VOLTS/PHASE/HERTZ	460/3/60	460/3/60	120/1/60	120/1/60	460/3/60
PUMP TYPE	BASE MTD.	IN-LINE	IN-LINE	FLOOR MTD. LONG SHAFT SUMP PUMP Ⓐ	IN-LINE

SYMBOL LEGEND

SYMBOL	DESCRIPTION
VA.	VALVE
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
S	DUAL TEMP. SUPPLY
R	DUAL TEMP. RETURN
HPS	HIGH PRESS. SUPPLY (STEAM) 125PSIG
HPR	HIGH PRESS. RETURN (STEAM) 125PSIG
LPS	LOW PRESS. SUPPLY (STEAM) 25PSIG
LPR	LOW PRESS. RETURN (STEAM) 25PSIG
CW	DOMESTIC COLD WATER
	GATE VALVE
	GLOBE OR BALL VALVE
	HOSE END GATE VALVE
	BUTTERFLY VALVE
	STRAINER
	UNION
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
	ECCENTRIC REDUCER
	THERMOMETER
	PRESSURE GAUGE w/cock
	CHECK VALVE
	STEAM PRV STATION
	CONTROL VA. ASSEMBLY
MAV	MANUAL AIR VENT
MVD	MANUAL VOLUME DAMPER
AP/AD	ACCESS PANEL/ DOOR
F&T	FLOAT & THERMOSTATIC
PRV	PRESSURE REDUCING VALVE
PD	PUMP DISCHARGE (CONDENSATE)
	TRAP
	DOMESTIC HOT WATER SUPPLY
	DOMESTIC HOT WATER RETURN
E.F.	EXHAUST FAN
D.G.	DOOR GRILLE
O.B.D.	OPPOSED BLADE DAMPER
P.A.	PIPE ANCHOR
⊗	INDICATE POINT WHERE NEW WORK IS TO START UNDER THIS CONTRACT
I.B.T	INVERTED BUCKET TRAP
	FLEXIBLE CONNECTION
V-1	STM. SHUT-OFF VA.
V-2	THERMOSTATIC STM. VA.
V-3	3-WAY CONTROL VA.
V-4	3-WAY CONTROL VA.
T-1	OUTDOOR THERMOSTAT
V-5	3-WAY CONTROL VA.
S-1	OUTSIDE AIR SENSOR
S-2	HOT WATER CONVERTER SENSOR
TC-1	TEMP. CONTROLLER
AQ-1	AQUASTAT
FS-1	FLOW SWITCH ACC-1
FS-2	FLOW SWITCH ACC-2
CR1	RELAY
MS-1	FAN SWITCH
TS-1	CHANGE OVER T'STAT
RT-1	ROOM T'STAT
	BALANCING & SHUT OFF VALVE W/PRESS. CAPS

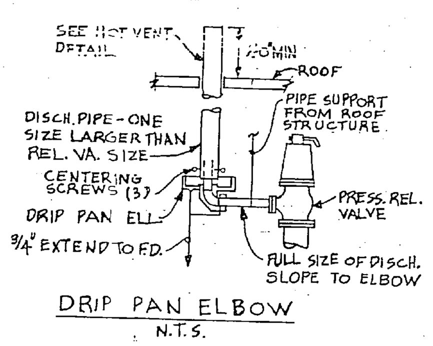


V-2 - THERMOSTATIC STEAM VALVE SET @ 182°F MIN Cv = 19 CAP. = 959

V-2a - THERMOSTATIC STEAM VALVE SET @ 180°F MIN. Cv = 35 CAP. = 1863

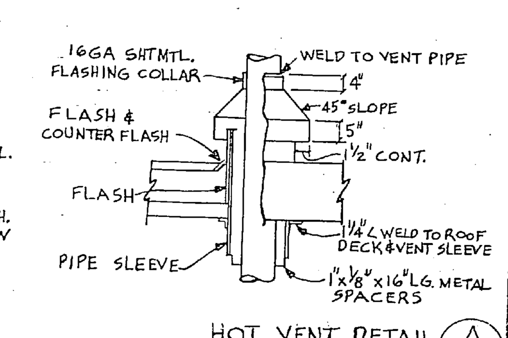
PIPING & CONTROL SCHEMATIC FOR CHILLED/HOT WATER SYSTEM

NO SCALE



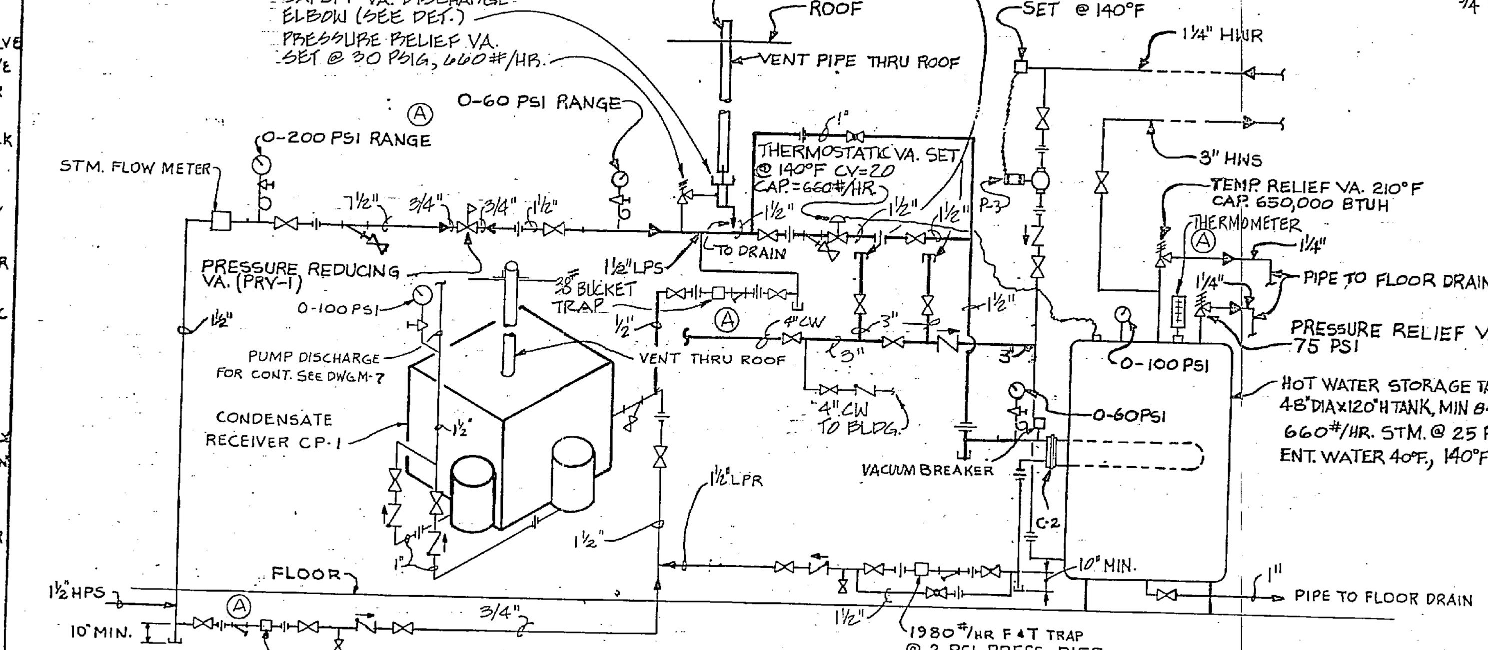
DRIP PAN ELBOW

N.T.S.



HOT VENT DETAIL (A)

N.T.S. M-8 | M-10



MECH.RM.1A 144#/HR I.B. TRAP @ 60 PSI PRESS. DIFF.

MECH.RM.2A, 3A, 4A & 5A 63#/HR. I.B. TRAP @ 60 PSI PRESS. DIFF.

TYPICAL HOT WATER STORAGE HEATER PIPING

NO SCALE

PRV SCHEDULE

DESIGNATION	PRV-1	PRV-2
ENT. PRESSURE, PSIG	150	150
LVG. PRESSURE, PSIG	38	50
MAX. LB/HR.	660	2822
MIN. PRV SIZE	1/2	1¼

CONDENSATE PUMP SCHED.

UNIT DESIGNATION	CP-1	CP-2
BLDG. SERVED	1,2,3,4,5	1,2,3,4,5
MIN. PUMP CAP., GPM	4	17
MIN. DISC. PRESS., PSIG	60	60
MAX. MOTOR H.P. (EA)	5	5
RPM	1750	1750
VOLTS/ PHASE/ HERTZ	208/3/60	460/3/60

① UNITS SHALL BE DUPLEX TYPE COMPLETE WITH TWO PUMPS, TWO MOTORS, TWO FLOAT SWITCHES & CAST IRON RECEIVER
② FURNISH WITH MECHANICAL TYPE ALTERNATOR & MAGNETIC STARTERS

UNIT HEATER SCHEDULE

UNIT DESIGNATION	U.H.-1
AREA SERVED	LAUNDRY
MIN. CAP., BTUH ①	4028
ENT. AIR TEMP., °F	65
WATER TEMP. IN, °F	140
WATER TEMP DROP, °F	32
MAX. MOTOR H.P.	1/30
VOLTS/ PHASE/ HERTZ	120/1/60
HEATER TYPE	HORIZONTAL DISCHARGE
GPM	0.5

① FURNISH WITH DIRECTIONAL DISCHARGE LOUVER

REVISIONS

SYM.	DESCRIPTION	DATE	APPROVED
Ⓐ	REVISED AS-BUILTS (PER BUILDING CONTR. MARKED-UP PRINTS)	7MAY84	BWR

SATISFACTORY TO [signature]
DATE 5/5/81

RECORD DRAWING
LETTER DATED MAY 7 1984

J. E. SIRRINE CO.
Architects – Engineers
GREENVILLE, S. C.

DES. CROMER DR. ROPER CHK. CROMER
PROJ. MGR. HILTON CH. ENGR. HUNTER
SUBMITTED BY [signature] V.P. 5/20/81 DATE
FIRM MEMBER PRINCIPAL
EFD [signature] RVD [signature]
HQ [signature] DIR [signature]
APPROVED DATE
OFFICER IN CHARGE
APPROVED [signature] DATE 29 JUN 1981
FOR EFD FOR COMMANDER NAVFAC

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 6877 CLINTON M. HUNTER, JR.
J. E. SIRRINE COMPANY, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 31 NORTH CAROLINA GREENVILLE, S. C.

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NORFOLK, VIRGINIA
NAVAL STATION
MARINE CORPS BASE
CAMP LEJEUNE NORTH CAROLINA
UNACCOMPANIED ENLISTED PERSONNEL HOUSING
HVAC SCHEDULES AND DETAILS

M-10

SIZE F | CODE IDENT NO. 80091 | NAVFAC DRAWING NO. 4064061
CONSTR. CONTR. NO. N62470-79-B-9061
SCALE SHOWN | SPEC 05-79-9061 | SHEET 64 OF 95
EFD DWG. NO. 164061