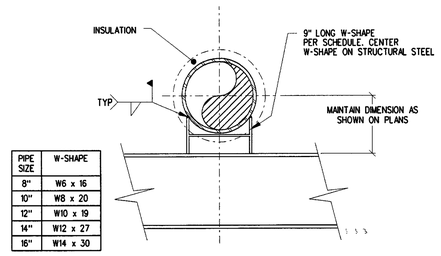
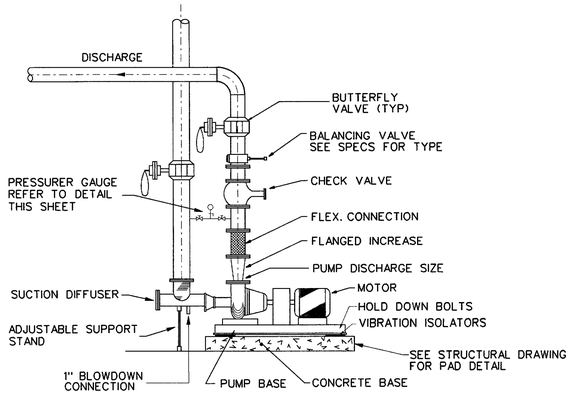


PIPE SIZE	W-SHAPE
8"	W6 x 16
10"	W8 x 20
12"	W10 x 19
14"	W12 x 27
16"	W14 x 30

② FLOOR MOUNT CONDENSER WATER PIPE

NO SCALE



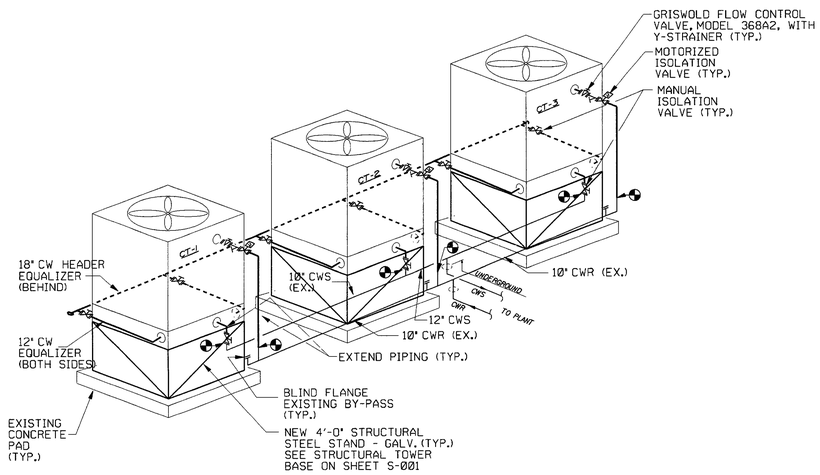
PUMP SCHEDULE

DESIGNATION	DISCHARGE SIZE (in.)	SYSTEM PIPE SIZE (in.)	METRAFLEX FLEX. CONN.	NON-SLAM SWING CHECK VALVE *	BALANCING VALVE **	ISOLATION VALVE ***
P-1 - PRIMARY CHWP	4	6	RSS 4 to 6 REDUCER	6	6	6
P-2 - PRIMARY CHWP	4	6	RSS 4 to 6 REDUCER	6	6	6
P-3 - PRIMARY CHWP	4	6	RSS 4 to 6 REDUCER	6	6	6
P-4 - CWP	5	8	MLP8	8	AT TOWER	8
P-5 - CWP	5	8	MLP8	8	AT TOWER	8
P-6 - CWP	5	8	MLP8	8	AT TOWER	8
P-7 - SECONDARY CHWP	4	8	MLP 8	8	N/A	8
P-8 - SECONDARY CHWP	4	8	MLP 8	8	N/A	8
P-9 & P-10 (HW CIRC)	3	5	MLP 5	5	N/A	5
P-11 - ICE CHWP	8	8	MLP 8	8	8	8

* EQUIVALENT TO STOCKHAM FIG.# G932B.
** EQUIVALENT TO GRISWOLD FLOW CONTROL VALVE MOD.3682A
*** EQUIVALENT TO CRANE MONARCH FIG. #24N CENTERLINE SERIES LT.
N/A - NON-APPLICABLE. SECONDARY CHW AND HW ARE VARIABLE SPEED PUMPS.
AT TOWER - AUTOMATIC BALANCE VALVE AT COOLING TOWER. SEE DETAIL.

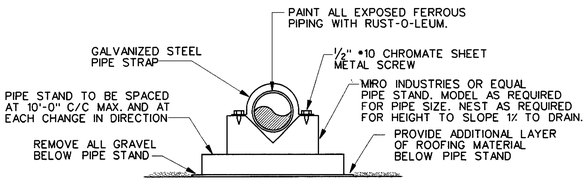
⑤ TYPICAL END SUCTION PUMP DETAIL

NO SCALE



⑧ EXISTING COOLING TOWER MODIFICATION DETAIL

NO SCALE

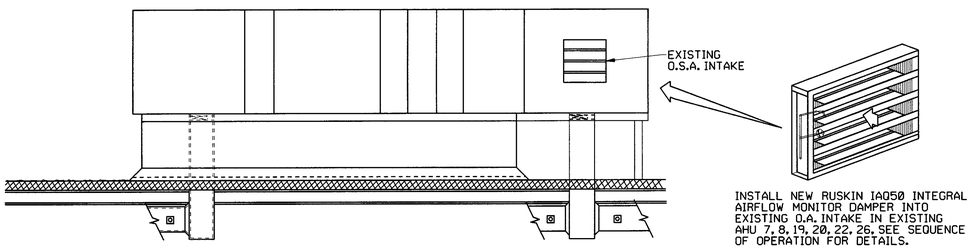


⑨ CONDENSATE PIPE SUPPORT DETAIL

NO SCALE

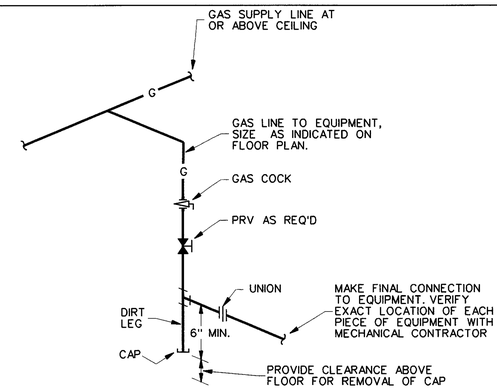
AHU	* OSA OPENING ON UNIT	SIZE OF EXIST. OPENINGS	MIN. OSA (cfm)	MIN. OA DAMPER FREE AREA
7	2	2'-1⅜" x 4'-1⅛"	2155	②
8	2	1'-8" x 1'-10⅝"	373	0.6¢ ②
19	2	2'-1⅜" x 4'-1⅛"	4131	②
20	2	3'-7⅛" x 3'-5¼"	10,797	②
22	1	4'-1" x 2'-9⅜"	225	0.6¢ ①
26	2	3'-7½" x 3'-5¼"	6888	③

① COMBINATION IAQ50 & ECONOMIZER DAMPER
② PROVIDE IAQ50 DAMPER IN UPPER SECTION OF ONE OSA OPENING OF THE AREA INDICATED, BLANK-OFF REMAINING OPENING AND PROVIDE ECONOMIZER DAMPER IN OPPOSITE OSA OPENING.
③ PROVIDE IAQ50 DAMPER FULL SIZE OF EXISTING OPENING AND ECONOMIZER DAMPER OPPOSITE OSA OPENING.



SEQUENCE TO INSTALL AIR FLOW SENSORS IN THE OUTDOOR INTAKES OF EXISTING AHU

A. NEW DAMPER TO BE RUSKIN IAQ50 INTEGRAL AIRFLOW MONITOR/DAMPER INSTALLATION AS FOLLOWS:
1. UNBOLT AND REMOVE OA RAIN HOOD.
2. REMOVE OA PREFILTER ASSEMBLY (UNDER RAIN HOOD).
3. UNATTACH EXISTING DAMPER LINKAGES (ONE SHAFT PER DAMPER, ONE OA DAMPER ON EACH SIDE OF UNIT).
4. UNATTACH DAMPER POSITION LINKAGE (CONNECTED TO JOHNSON CONTROLS ELECTRIC RELAY).
5. UNBOLT, UNSEAL AND REMOVE DAMPER ASSEMBLY.
6. PROVIDE NEW DAMPER ASSEMBLY OF SIZE TO FIT OPENING (SPECIAL NOTE: INSTALL NEW DAMPERS SO THAT SHAFTS DON'T INTERFERE WITH CASING).
7. REATTACH ACTUATOR LINKAGES; MAY REQUIRE REMOUNTING OF ACTUATORS.
8. REPLACE POSITION LINKAGE AND RELAY.
9. REINSTALL OA PREFILTER ASSEMBLY ON OUTSIDE OF UNIT.
10. RESEAL AND REBOLT OA RAIN HOOD. ENSURE NO INTERFERENCE WITH NEW DAMPER ASSEMBLY.



⑩ TYPICAL GAS CONNECTION DETAIL

NO SCALE

THESE DOCUMENTS HAVE BEEN PREPARED PRIMARILY BASED ON INFORMATION PROVIDED BY OTHERS. I.C. THOMASSON HAS NOT VERIFIED THE ACCURACY OF ALL INFORMATION PROVIDED BY OTHERS. SEE LIMIT OF LIABILITIES STATEMENT ON COVER SHEET.

US ARMY ENGINEERING AND SUPPORT CENTER HUNTSVILLE

Symbol	Description	Date	Appr.

Date: 02/27/04 | Checked by: WTT
CADD File Name: 3121M502.DGN | Dwn by: ICT
ICT Project No. 20312 | DAC87-03-D-0006
Plot date: 02/27/04 | Approved by:
Plot scale: | Chief, Prj. Mgmt. Division

TASK ORDER #1, FRR004

UNIQUED ENGINEERING

PADUCAH, KENTUCKY VOICE 270-442-8620

I.C. Thomasson Associates, Inc.
NASHVILLE, TENNESSEE PHONE (615) 346-3400

ICT

DEFENSE INFORMATION SCHOOL
FT. MEADE MARYLAND

MECHANICAL DETAILS

STATE OF MARYLAND — WILLIAM T. TOLLEY — No. 19981 — REGISTERED PROFESSIONAL MECHANICAL ENGINEER

Sheet reference number:
M-502