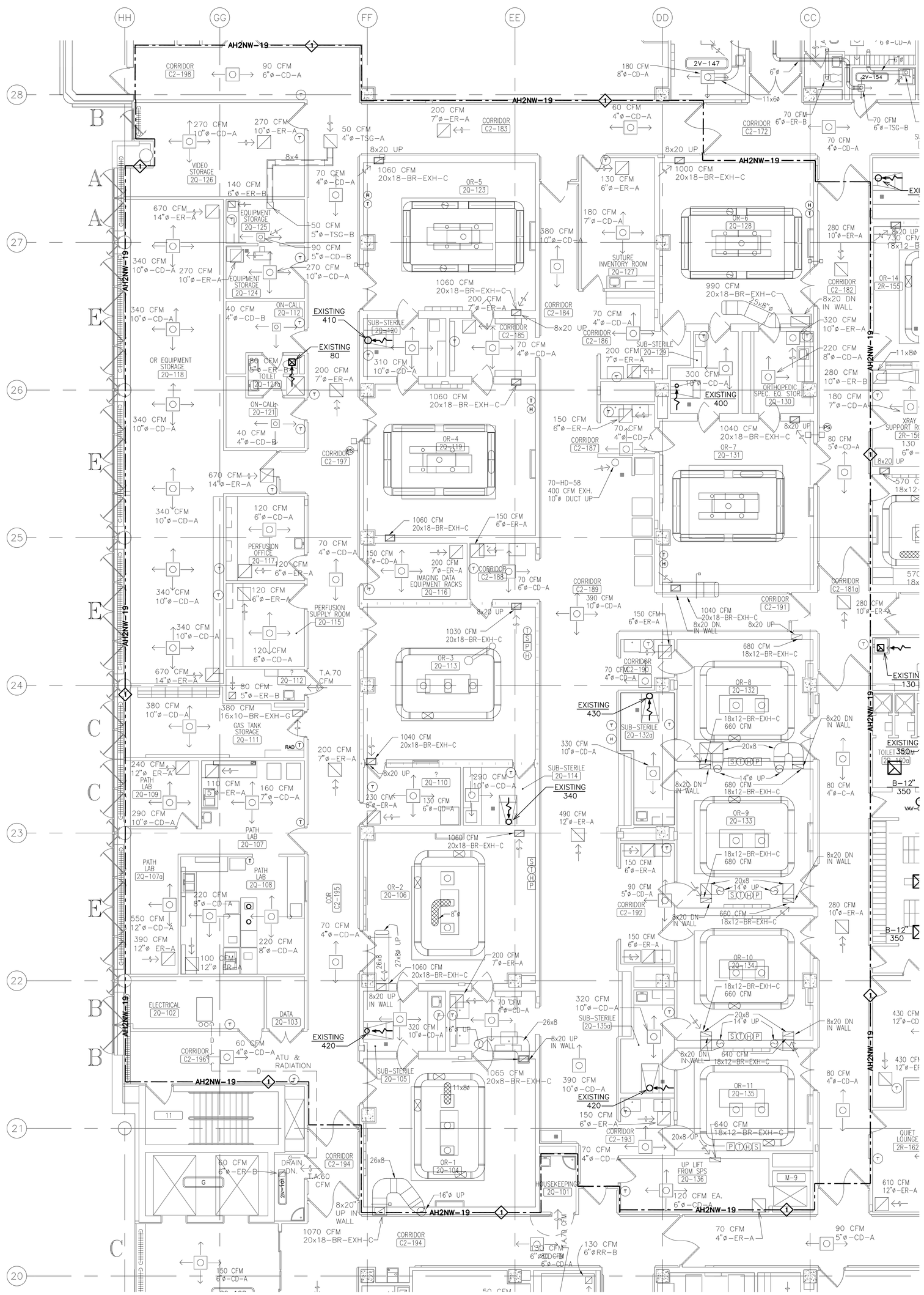

1 2ND FLOOR AH2NW-19 BALANCING PLAN
SCALE: 1/8"=1'-0"

2 ** PHASE 1 ** BALANCING NOTE

ROOM NUMBER	ROOM NAME	AREA (SF)	CEILING HEIGHT (F)	VOLUME	AHU	EXISTING DESIGN CFM SUPPLY	EXISTING DESIGN CFM EXHAUST	EXISTING DESIGN CFM TRNSFR		VA DESIGN MANUAL MIN TOT ACH	VA DESIGN MANUAL CFM FROM ACH	PHASE 1 SUPPLY	PHASE 1 RETURN	PHASE 1 EXHAUST	PHASE 2 SUPPLY	PHASE 2 RETURN	PHASE 2 EXHAUST	PHASE 3 (FINAL BLANCE) SUPPLY	PHASE 3 (FINAL BLANCE) RETURN	PHASE 3 (FINAL BLANCE) EXHAUST
2Q-126	VIDEO STORAGE	365	8	2920	AH2NW-19	270	270	0	6-97	4	195	270	0	270	270	0	270	270	0	270
2Q-125	EQUIPMENT STORAGE	80	8	640	AH2NW-19	90	140	50	6-23	4	43	90	140	0	90	140	50	90	140	0
2Q-124	EQUIPMENT STORAGE	96	8	768	AH2NW-19	270	270	0	6-23	4	51	270	270	0	270	270	0	270	270	0
2Q-112	ON-CALL	105	8	840	AH2NW-19	40	0	0			0	40			40			40		
2Q-121a	TOILET	50	8	400	AH2NW-19	0	80	0	6-54	10	67	0		80	0		80			80
2Q-121	ON-CALL	100	8	800	AH2NW-19	40	0	0			0	40			40			40		
2Q-118	OR EQUIPMENT STORAGE	1175	8	9400	AH2NW-19	2040	2010	0	6-98	4	627	2040	2010		2040	2010		2040	2010	
2Q-117	PERFUSION OFFICE	154	8	1232	AH2NW-19	120	120	0	6-98	4	82	120	120		120	120		120	120	
2Q-115	PERFUSION SUPPLY OFFICE	152	8	1216	AH2NW-19	120	120	0	6-98	4	81	120	120		120	120		120	120	
2Q-112	?	58	8	464	AH2NW-19	0	80	70			0	0		80	0		80			80
2Q-111	GAS TANK STORAGE	250	8	2000	AH2NW-19	380	380	0			0	380		380	380		380	380		380
2Q-109	PATH LAB	112	8	896	AH2NW-19	290	240	0			0	290		240	290		240	290		240
2Q-107	PATH LAB	267	8	2136	AH2NW-19	160	110	0			0	160		110	160		110	160		110
2Q-107A	PATH LAB	148	8	1184	AH2NW-19	550	390	0			0	550		390	550		390	550		390
2Q-108	PATH LAB	337	8	2696	AH2NW-19	440	700	0			0	440		700	440		700	440		700
2Q-102	ELECTRICAL	161	8	1288	AH2NW-19	0	0	0	6-101		0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2Q-103	DATA	46	8	368	AH2NW-19	0	0	0			0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
C2-196	CORRIDOR	214	8	1712	AH2NW-19	60	0	0	6-25	4	114	60			60			60		
C2-195	CORRIDOR	477	8	3816	AH2NW-19	70	200		6-25	4	254	70	200		70	200		70	200	
C2-197	CORRIDOR	689	8	5512	AH2NW-19	140	200	-70	6-25	4	367	140	200		150	200		140	200	
C2-183	CORRIDOR	483	8	3864	AH2NW-19	60	200	-50	6-25	4	258	60	200		60	200		60	200	
C2-198	CORRIDOR	273	8	2184	AH2NW-19	90	0	0	6-25	4	146	90			90			90		
C2-184	CORRIDOR	325	8	2600	AH2NW-19	380	0	0	6-25	4	173	380			380			380		
C2-189	CORRIDOR	463	8	3704	AH2NW-19	390	490	0	6-25	4	247	390	490		390	490		390	490	
C2-191	CORRIDOR	122	8	976	AH2NW-19	0	0	0	6-25	4	65	0			0			0		
C2-190	CORRIDOR	434	8	3472	AH2NW-19	70	150	0	6-25	4	231	70	150		70	150		70	150	
C2-192	CORRIDOR	708	8	5664	AH2NW-19	160	790	0	6-25	4	378	160	790		160	790		160	790	
C2-193	CORRIDOR	280	8	2240	AH2NW-19	460	150	0	6-25	4	149	460	150		460	150		460	150	
2Q-123	OR-5	583	9	5247	AH2NW-19	2480	2120	0	6-84	20	1749	1750	1450		2480	2120		2480	2120	
2Q-120	SUB-STERILE	111	8	888	AH2NW-19	310	410	0	6-85	6	89	275		425	275		425	275		425
C2-185	CORRIDOR	116	8	928	AH2NW-19	70	200	0	6-25	4	62	70	200		70	200		70	200	
2Q-119	OR-4	598	9	5382	AH2NW-19	2520	2120	0	6-84	20	1794	1800	1400		2520	2120		2520	2120	
2Q-116	IMAGING DATA EQUIPMENT RACK	136	8	1088	AH2NW-19	150	200	0			0	150	200		150	200		150	200	
C2-188	CORRIDOR	85	8	680	AH2NW-19	70	150	0	6-25	4	45	70	150		70	150		70	150	
2Q-113	OR-3	605	9	5445	AH2NW-19	2250	2070	0	6-84	20	1815	1800	1400		2250	1850		2250	1850	
2Q-110	?	129	8	1032	AH2NW-19	130	230	0			0	130	230		130	230		130	230	
2Q-114	SUB-STERILE	97	8	776	AH2NW-19	290	340	0	6-85	6	78	250		350	250		350	250		350
2Q-106	OR-2	593	9	5337	AH2NW-19	2250	2120	0	6-84	20	1779	1800	1400		2250	1850		2250	1850	
2Q-105	SUB-STERILE	116	8	928	AH2NW-19	320	420	0	6-85	6	93	275		425	275		425	275		425
2Q-104	OR-1	590	9	5310	AH2NW-19	2250	2135	0	6-84	20	1770	1800	1400		2250	1850		2250	1850	
C2-187	CORRIDOR	62	8	496	AH2NW-19	70	150	0	6-25	4	33	70	150		70	150		70	150	
C2-186	CORRIDOR	143	8	1144	AH2NW-19	70	200	0	6-25	4	76	70	200		70	200		70	200	
2Q-127	SUTURE INVENTORY ROOM	224	8	1792	AH2NW-19	180	130	0			0	180	130		180	130		180	130	
5Q-128	OR-6	583	9	5247	AH2NW-19	2390	1990	0	6-84	20	1749	1800	1400		2390	1990		2390	1990	
2Q-129	SUB-STERILE	110	8	880	AH2NW-19	300	400	0	6-85	6	88	275		425	275		425	275		425
2Q-130	ORTHOPEDIC SPEC. EQ. STOR.	114	8	912	AH2NW-19	220	320	0	6-92	6	91	220	320		220	320		220	320	
2Q-131	OR-7	584	9	5256	AH2NW-19	2520	2080	0	6-84	20	1752	1800	1400		2520	2080		2520	2080	
2Q-132	OR-8	384	9	3456	AH2NW-19	1500	1340	0	6-84	20	1152	1300	900		1500	1100		1500	1100	
2Q-132A	SUB-STERILE	158	8	1264	AH2NW-19	330	430	0	6-85	6	126	275		425	275		425	275		425
2Q-133	OR-9	439	9	3951	AH2NW-19	1500	1360	0	6-84	20	1317	1300	900		1500	1100		1500	1100	
2Q-135A	SUB-STERILE	113	8	904	AH2NW-19	320	420	0	6-85	6	90	275		425	275		425	275		425
2Q-134	OR-10	400	9	3600	AH2NW-19	1500	1320	0	6-84	20	1200	1300	900		1500	1100		1500	1100	
2Q-135	OR-11	335	9	3015	AH2NW-19	1400	1280	0	6-84	20	1005	1200	800		1400	1000		1400	1000	
2Q-136	UP LIFT FROM SPS	185	8	1480	AH2NW-19	120	70	0			0	120	70		120	70		120	70	
C2-182	CORRIDOR	470	8	3760	AH2NW-19	80	280	0	6-25	4	251	80	280		80	280		80	280	
C2-181A	CORRIDOR	132	8	1056	AH2NW-19	0	280	0	6-25	4	70	0	280		0	280			280	
???C2-181B???	CORRIDOR	632	8	5056	AH2NW-19	160	280	0	6-25	4	337	160	280		160	280		160	280	

GENERAL NOTES:

A. SEE SHEET 1293-70-MH3.0 FOR GENERAL HVAC AND INFECTION CONTROL NOTES. ALSO REFER TO PHASING OUTLINE ON THAT DRAWING FOR SCHEDULING OF BALANCING EFFORTS.

KEY NOTES:

1. COORDINATE COMPLETE REBALANCE OF ALL EXHAUST AIRFLOWS HIGHLIGHTED ON THIS PLAN ONCE NEW EXHAUST DUCTWORK IS IN PLACE AND CONNECTED. REBALANCE SUPPLY/RETURN FOR ALL AREAS SERVED BY BOTH AH2NW-19 AND AH2NW-20 BEFORE AND AFTER EACH PROJECT PHASE AS IDENTIFIED IN THE ATTACHED BALANCING TABLES UNDER THE SPECIFIC PHASE IDENTIFIED. ALL AREAS TO RECEIVE THREE(3) COMPLETE REBALACES ALONG WITH PRELIMINARY AIRFLOW READINGS TO VERIFY AIRFLOW PRIOR TO DEMOLITION.

2. NOTE THAT PHASE 1 BALANCING WILL BE BACKFED FROM EXISTING AH2NW-19 AND COULD POTENTIALLY BE SHORT OF AIRFLOW LISTED ON THE TABLE BELOW. BALANCING CONTRACTOR SHALL WORK WITH ENGINEER TO PROVIDE PRE-DEMOLITION AIRFLOW READINGS OF THIS FAN AT FULL VFD FREQUENCY AND RESHEAVE SUPPLY FAN ALONG WITH NEW BELTS AS REQUIRED. BALANCING CONTRACTOR MAY BE REQUESTED TO ADJUST SEVERAL LOCATIONS TO A LEVEL LOWER THAN THOSE LISTED ON THIS TABLE FOR THIS TEMPORARY PHASE 1 CONSTRUCTION. VA HOSPITAL SHOULD HAVE A CONTINGENCY PLAN IN PLACE IF SOME OPERATING ROOMS ARE NOT ABLE TO BE FULLY SUPPORTED DURING THIS PHASE 1 TIME FRAME WHERE THEY ARE BACKFED FROM A SIGNLE EXISTING AHU.

CD ISSUE
FULLY SPRINKLERED

GENERAL NOTES:

GENERAL CONTRACTOR AND/OR ALL SUBCONTRACTORS SHALL FIELD VERIFY ALL DIMENSIONS SHOWN ON THESE PLANS AND SHALL BE RESPONSIBLE FOR VARIATIONS BETWEEN PLAN DIMENSIONS AND ACTUAL FIELD DIMENSIONS. WHERE VARIATIONS ARE FOUND TO OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING PRIOR TO PROCEEDING WITH CONSTRUCTION; NO ADJUSTMENT TO THE WORK WILL BE MADE WITHOUT THE PRIOR APPROVAL OF THE PROJECT ENGINEER.

GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL DEMOLITION INCLUDING REMOVAL OF WALLS, PARTITIONS, DOORS & CEILING & FLOORS. ANY AND ALL CUTTING OF CONCRETE FLOORS, WALLS OR STRUCTURE SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY. CORE DRILLING THROUGH CONCRETE WALLS, FLOORS OR STRUCTURE FOR PIPING OR CONDUIT SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR BY TRADE; FIRESTOPPING OF THESE OPENINGS SHALL BE DONE BY THE RESPECTIVE SUBCONTRACTOR. REMOVAL OF DEBRIS RESULTING FROM DEMOLITION, CUTTING, AND/OR DRILLING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. PATCHING AND REPAIR OF CONCRETE WALLS, FLOOR, OR STRUCTURE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR; THIS WILL BE ACCOMPLISHED UPON COMPLETION OF THE INSTALLATION OF ANY AND ALL UTILITIES INSTALLED BY THE VARIOUS SUBCONTRACTORS.

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PROJECT NUMBER: 0414950-004-00

TRUE NORTH
PLAN NORTH

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
JASON GOTTWALT, PE
Date 08/08/2014 Reg. No. 41360

Drawing Title
2ND FLOOR INTERSTITIAL MECHANICAL
AH2NW-19 BALANCING PLAN

Project Title
UPGRADE AHU'S PHASE 2

Project No. 618-13-130
Building Number 70

Drawing Scale AS NOTED
Plot Scale 12" = 1'-0"

Approved: Catherine Joyce, Chief, Projects Section
Approved: Steven Challeen, Director, Engineering

Location V.A. MEDICAL CENTER
ONE VETERANS DRIVE
MINNEAPOLIS, MN 55417

Date 08/08/2014 Checked JRG Drawn JG/RF

DRAWING NO. 1293-70-MH2.8
Dwg. 17 of 30

Office of Facilities Management
Department of Veterans Affairs