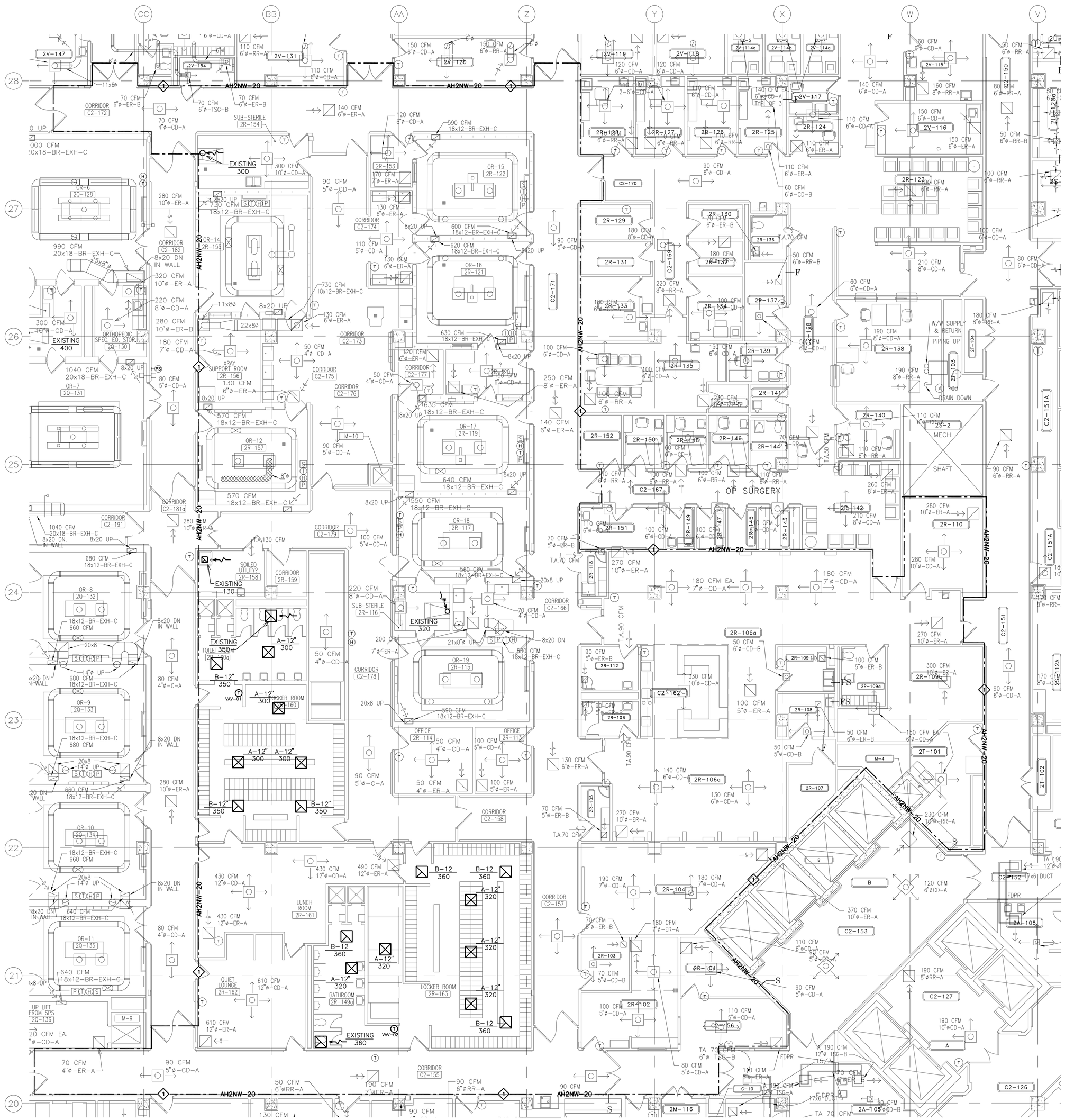

1 2ND FLOOR AH2NW-20 BALANCING PLAN
SCALE: 1/8" = 1'-0"

2 ** PHASE 1 ** BALANCING NOTE

ROOM NUMBER	ROOM NAME	AREA	CEILING HEIGHT	VOLUME	AHU	EXISTING DESIGN CFM SUPPLY	EXHAUST	TRNSFR		VA DESIGN MANUAL MIN TOT ACH	CFM FROM ACH	PHASE 1 SUPPLY	RETURN	EXHAUST	PHASE 2 SUPPLY	RETURN	EHXAUST	PHASE 3 (FINAL BLANCE) SUPPLY	RETURN	EXHAUST
C2-173,175,176	CORRIDOR	855	8	6840	AH2NW-20	230	260	0	6-25	4	456	230	260		230	260		230	260	
C2-174	CORRIDOR	124	8	992	AH2NW-20	110	260	0	6-25	4	66	110	260		110	260		110	260	
C2-179	CORRIDOR	375	8	3000	AH2NW-20	110	0	130	6-25	4	200	110			110			110		
C2-178	CORRIDOR	377	8	3016	AH2NW-20	90	0	0	6-25	4	201	90			90			90		
C2-158	CORRIDOR	105	8	840	AH2NW-20	0	0	0	6-25	4	56									
C2-155	CORRIDOR	865	8	6920	AH2NW-20	180	190	0	6-25	4	461	180	190		180	190		180	190	
C2-166	CORRIDOR	1005	8	8040	AH2NW-20	160	140	0	6-25	4	536	160	140		160	140		160	140	
C2-157	CORRIDOR	570	8	4560	AH2NW-20	90	130	0	6-25	4	304	90	130		90	130		90	130	
2R-154	SUB-STERILE	183	8	1464	AH2NW-20	300	300	0	6-85	6	146	300		300	300		300	300		300
2R-155	OR-14	395	9	3555	AH2NW-20	1500	1460	0	6-84	20	1185	1200	800		1500	1100		1500	1100	
2R-156	XRAY SUPPORT ROOM	163	8	1304	AH2NW-20	180	280	0			0	180	280		180	280		180	280	
2R-157	OR-12	325	9	2925	AH2NW-20	1300	1140	0	6-84	20	975	1100	700		1300	900		1300	900	
2R-158	SOILED UTILITY?	98	8	784	AH2NW-20		130	130	6-105	6	78			130			130			130
2R-159	CORRIDOR	58	8	464	AH2NW-20	0	0	0	6-25	4	31									
2R-160A	TOILET ROOM	253	8	2024	AH2NW-20	80	440	0	6-54	10	337	80		450	80		450	80		450
2R-160	LOCKER ROOM	665	8	5320	AH2NW-20	260		0	6-73	6	532	600		700	600		700	600		700
2R-161	LUNCH ROOM	483	8	3864	AH2NW-20	860	920	0	6-75	6	386	800	920		800	920		800	920	
2R-162	QUIET LOUNGE	348	8	2784	AH2NW-20	610	610	0			0	600	600		600	600		600	600	
2R-149A	BATHROOM	250	8	2000	AH2NW-20	90	470	0	6-54	10	333	90		480	90		480	90		480
2R-163	LOCKER ROOM	958	8	7664	AH2NW-20	280	490	0	6-73	6	766	800		900	800		900	800		900
2R-153	CORRIDOR	67	8	536	AH2NW-20	120	170	0	6-25	4	36	120	170		120	170		120	170	
2R-122	OR-15	333	9	2997	AH2NW-20	1300	1190	0	6-84	20	999	1100	700		1300	900		1300	900	
2R-121	OR-16	346	9	3114	AH2NW-20	1300	1250	0	6-84	20	1038	1100	700		1300	900		1300	900	
C2-177	CORRIDOR	66	8	528	AH2NW-20	50	120	0	6-25	4	35	50	120		50	120		50	120	
2R-120	?	117	8	936	AH2NW-20	150	250	0			0	150	250		150	250		150	250	
2R-119	OR-17	370	9	3330	AH2NW-20	1400	1275	0	6-84	20	1110	1200	800		1400	1000		1400	1000	
2R-117	OR-18	330	9	2970	AH2NW-20	1300	1110	0	6-84	20	990	1100	700		1300	900		1300	900	
2R-116	SUB-STERILE	65	8	520	AH2NW-20	220	320	0	6-85	6	52	220		320	220		320	220		320
2R-116	OR-19	357	9	3213	AH2NW-20	1400	1170	0	6-84	20	1071	1200	800		1400	1000		1400	1000	
2R-114	OFFICE	159	8	1272	AH2NW-20	50	50	0	6-98	4	85	50	75		50	75		50	75	
2R-113	OFFICE	117	8	936	AH2NW-20	100	100	0	6-98	4	62	50	75		50	75		50	75	
2R-106A	???????	1645	8	13160	AH2NW-20	810	910	0			0									
2R-118	BATHROOM???	35	8	280	AH2NW-20	0	70	70	6-54	10	47			70			70			70
2R-110	CONFERENCE???	233	8	1864	AH2NW-20	280	280	0	6-95	4	124	280	280		280	280		280	280	
2R-112	WOMENS	77	8	616	AH2NW-20	0	90	0	6-54	10	103			90			90			90
2R-106	MENS	61	8	488	AH2NW-20	0	90	90	6-54	10	81			90			90			90
C2-159	??????	725	8	5800	AH2NW-20	270	270				0	270	270		270	270		270	270	
C2-162	???????	249	8	1992	AH2NW-20	330	0	0			0	330			330			330		
2R-108	???????	77	8	616	AH2NW-20	50	0	0			0									
2R-109	???????	75	8	600	AH2NW-20	50	100	0			0									
2R-109A	BATHROOM	81	8	648	AH2NW-20	0	0	0	6-54	10	108									
2R-109B	???????	305	8	2440	AH2NW-20	150	300	0			0									
2R-107	???????	75	8	600	AH2NW-20	0	0	0			0									
2T-101	???????	322	8	2576	AH2NW-20	150	0	0			0									
2R-105	???????	49	8	392	AH2NW-20	0	70	70			0			70			70			70
2R-104	???????	444	8	3552	AH2NW-20	370	370	0			0	370	370		370	370		370	370	
2R-103	???????	81	8	648	AH2NW-20	70	70	0			0	70		70	70		70	70		70
2R-102	???????	243	8	1944	AH2NW-20	180	180	0			0	180		180	180		180	180		180
2R-101	???????	107	8	856	AH2NW-20	90	90	0			0	90	90		90	90		90	90	
C2-156	???????	320	8	2560	AH2NW-20	110	110	0			0	110	110		110	110		110	110	

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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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-20 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-M-12.9
Dwg. 18 of 30

Office of Facilities Management
Department of Veterans Affairs