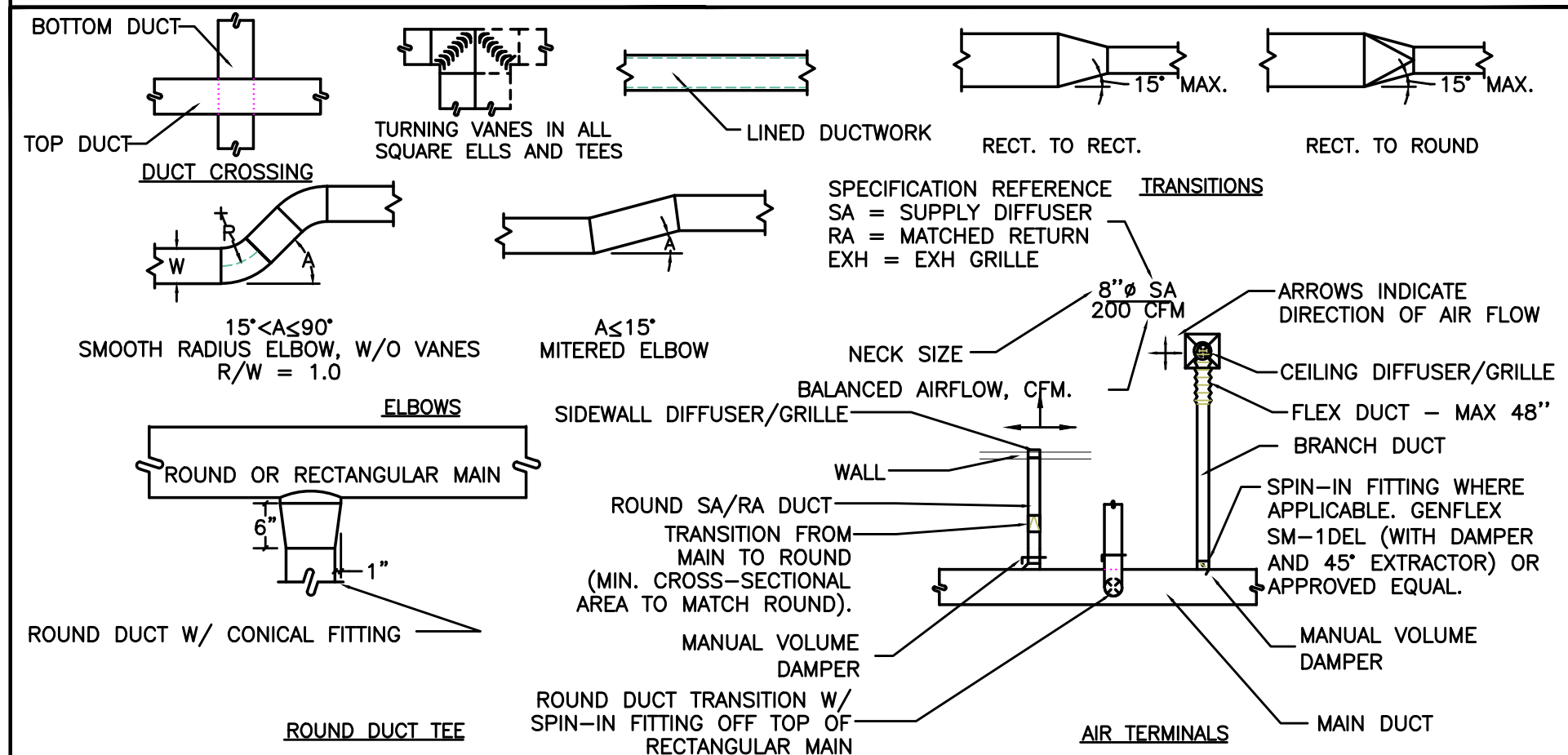


# MECHANICAL LEGEND

	SUPPLY AIR DIFFUSER	AFF	ABOVE FINISH FLOOR
	RETURN AIR GRILLE	AHU	AIR HANDLING UNIT
	EXHAUST AIR GRILLE	B.D.	BOTTOM OF DUCT
	PERFORATED RETURN AIR PANEL	BHP	BRAKE HORSEPOWER
	DIRECTIONAL AIR FLOW	BTU	BRITISH THERMAL UNITS
	MANUAL VOLUME DAMPER	CFM	CUBIC FEET PER MINUTE
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	CONN.	CONNECTION
	RETURN AIR DUCT UP & DOWN	CONT.	CONTINUATION
	EXHAUST AIR DUCT UP & DOWN	CW	DOMESTIC COLD WATER
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	DB	DRY BULB
	RETURN AIR DUCT UP & DOWN	DIA.	DIAMETER
	EXHAUST AIR DUCT UP & DOWN	DIST.	DISTRIBUTION
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	EA	EXHAUST AIR
	RETURN AIR DUCT UP & DOWN	EDB	ENTERING DRY BULB TEMPERATURE
	EXHAUST AIR DUCT UP & DOWN	EWB	ENTERING WET BULB TEMPERATURE
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	EWT	ENTERING WATER TEMPERATURE
	RETURN AIR DUCT UP & DOWN	FF	FINISH FLOOR
	EXHAUST AIR DUCT UP & DOWN	FIXT.	FIXTURE
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	FPM	FEET PER MINUTE
	RETURN AIR DUCT UP & DOWN	FPS	FEET PER SECOND
	EXHAUST AIR DUCT UP & DOWN	FT.	FEET / FOOT
	SUPPLY OR OUTSIDE AIR DUCT UP & DOWN	GA.	GAUGE
	RETURN AIR DUCT UP & DOWN	GPM	GALLONS PER MINUTE
	EXHAUST AIR DUCT UP & DOWN	H	HEIGHT
	VAV TERMINAL UNIT	HP	HORSEPOWER
	VVT TERMINAL UNIT	I.D.	INSIDE DIAMETER
	EXISTING	IN.	INCHES
	CONNECT TO EXISTING	L	LENGTH
	THERMOSTAT OR TEMP. SENSOR	LBS.	POUNDS
	NOTE	LDB	LEAVING DRY BULB
	EQUIPMENT DESIGNATOR	LWB	LEAVING WET BULB
	BALL VALVE	LWT	LEAVING WATER TEMPERATURE
	GATE VALVE	MAX.	MAXIMUM
	CHECK VALVE	MBH	THOUSANDS OF BTUs PER HOUR
	BALANCING VALVE	MIN.	MINIMUM
	THERMOMETER	NC	NOISE CRITERIA
	DIRECTION OF FLOW	N.C.	NORMALLY CLOSED
	PUMP	N.I.M.	NOT IN MECHANICAL
	STRAINER	NO.	NUMBER
	PRESSURE GAUGE	N.O.	NORMALLY OPEN
	PETE'S PLUG	O.A.	OUTSIDE AIR
	DOUBLE CHECK ASSEMBLY	P	PERSON
	PRESSURE REDUCING VALVE	PSI	POUNDS PER SQUARE INCH
	UNION	P/T	PRESSURE / TEMPERATURE
	2-WAY CONTROL VALVE	R.A.	RETURN AIR
	3-WAY CONTROL VALVE	RECT.	RECTANGULAR
	CAP	REQ'D	REQUIRED
	SMOKE DETECTOR	S.A.	SUPPLY AIR
	MOTORIZED DAMPER	S.P.	STATIC PRESSURE
		SQ.	SQUARE
		TEMP.	TEMPERATURE
		TYP.	TYPICAL
		VAV	VARIABLE AIR VOLUME
		W	WIDTH
		WB	WET BULB
		WPD	WATER PRESSURE DROP
		Ø	DIAMETER
			(E) EXISTING
			(D) DEMOLISH
			NEW WORK
		HWS	(HWS) HEATING WATER SUPPLY
		HWR	(HWR) HEATING WATER RETURN
		▲	FIRE DAMPER
		■	FIRE / SMOKE DAMPER
		⊙	SMOKE DAMPER
			SEISMIC BRACING
			LATERAL BRACING
			LONGITUDINAL BRACING
			LONGITUDINAL & LATERAL BRACING

# AIR DISTRIBUTION DETAILS



# VENTILATION AIR SCHEDULE - AC-5

ROOM NUMBER AND NAME	AREA (SQ. FT.)	OCCUPANT LOAD (#/1000 SQ. FT.)	NUMBER OF OCCUPANTS	OUTSIDE AIR REQUIREMENT (CFM/P)	OUTSIDE AIR REQUIREMENT (CFM/SQ.FT.)	OUTSIDE AIR REQUIRED (CFM)	ZONE OSA (CFM)	SUPPLY AIR (CFM)	PRIMARY OSA FRACTION	RETURN AIR (CFM)	EXHAUST AIR (CFM)	Zone Ventilation Efficiency	Corrected OSA CFM	AIR SYSTEMS
	Az		Pz	Rp	Ra	Vbz	Ez	Voz	Vpz	Zp		Evz		
<b>HOMELSS SHELTER</b>														
105 SLEEP ROOM 1	3084	29	90	5	0.06	635	0.8	794	2000	0.40	2000	0	1.00	793.80 AC-5
<b>TOTAL</b>	<b>3084</b>		<b>90</b>			<b>635</b>		<b>794</b>	<b>2000</b>		<b>2000</b>	<b>0</b>	<b>1.00</b>	<b>794</b>
<b>CORRECTED TOTAL OUTDOOR AIR FLOW RATE</b>										<b>794</b>	<b>CFM</b>	<b>Corrected OSA Fractor</b>	<b>Zs =</b>	<b>0.40</b>

# VENTILATION AIR SCHEDULE - AC-4

ROOM NUMBER AND NAME	AREA (SQ. FT.)	OCCUPANT LOAD (#/1000 SQ. FT.)	NUMBER OF OCCUPANTS	OUTSIDE AIR REQUIREMENT (CFM/P)	OUTSIDE AIR REQUIREMENT (CFM/SQ.FT.)	OUTSIDE AIR REQUIRED (CFM)	ZONE OSA (CFM)	SUPPLY AIR (CFM)	PRIMARY OSA FRACTION	RETURN AIR (CFM)	EXHAUST AIR (CFM)	Zone Ventilation Efficiency	Corrected OSA CFM	AIR SYSTEMS
	Az		Pz	Rp	Ra	Vbz	Ez	Voz	Vpz	Zp		Evz		
<b>HOMELSS SHELTER</b>														
110 SLEEP ROOM 2	1571	25	40	5	0.06	294	0.8	368	2000	0.18	2000	0	1.00	367.83 AC-4
<b>TOTAL</b>	<b>1571</b>		<b>40</b>			<b>294</b>		<b>368</b>	<b>2000</b>		<b>2000</b>	<b>0</b>	<b>1.00</b>	<b>368</b>
<b>CORRECTED TOTAL OUTDOOR AIR FLOW RATE</b>										<b>368</b>	<b>CFM</b>	<b>Corrected OSA Fractor</b>	<b>Zs =</b>	<b>0.18</b>

# VENTILATION AIR SCHEDULE - AC-3

ROOM NUMBER AND NAME	AREA (SQ. FT.)	OCCUPANT LOAD (#/1000 SQ. FT.)	NUMBER OF OCCUPANTS	OUTSIDE AIR REQUIREMENT (CFM/P)	OUTSIDE AIR REQUIREMENT (CFM/SQ.FT.)	OUTSIDE AIR REQUIRED (CFM)	ZONE OSA (CFM)	SUPPLY AIR (CFM)	PRIMARY OSA FRACTION	RETURN AIR (CFM)	EXHAUST AIR (CFM)	Zone Ventilation Efficiency	Corrected OSA CFM	AIR SYSTEMS
	Az		Pz	Rp	Ra	Vbz	Ez	Voz	Vpz	Zp		Evz		
<b>HOMELSS SHELTER</b>														
103 STAFF OFFICE	333	15	5	5	0.06	45	0.8	56	500	0.11	500	0	1.01	64.68 AC-3
104 MGR OFFICE	94	5	1	5	0.06	11	0.8	13	75	0.18	75	0	0.94	15.30 AC-3
107 CRISIS 1	84	50	5	5	0.06	30	0.8	38	150	0.25	150	0	0.87	43.20 AC-3
108 CRISIS 2	84	50	5	5	0.06	30	0.8	38	150	0.25	150	0	0.87	43.20 AC-3
109 MULTI PURPOSE SLEEP ROOM 1 ADDITIONAL AIR	345	30	11	5	0.06	76	0.8	95	400	0.24	400	0	0.88	108.85 AC-3
	0	0	0	0	0.06	0	0.8	0	725	0.00	725	0	1.12	0.00 AC-3
<b>TOTAL</b>	<b>940</b>		<b>27</b>			<b>191</b>		<b>239</b>	<b>2000</b>		<b>2000</b>	<b>0</b>	<b>0.87</b>	<b>275</b>
<b>CORRECTED TOTAL OUTDOOR AIR FLOW RATE</b>										<b>275</b>	<b>CFM</b>	<b>Corrected OSA Fractor</b>	<b>Zs =</b>	<b>0.14</b>

# VENTILATION AIR SCHEDULE - RTU-6

ROOM NUMBER AND NAME	AREA (SQ. FT.)	OCCUPANT LOAD (#/1000 SQ. FT.)	NUMBER OF OCCUPANTS	OUTSIDE AIR REQUIREMENT (CFM/P)	OUTSIDE AIR REQUIREMENT (CFM/SQ.FT.)	OUTSIDE AIR REQUIRED (CFM)	ZONE OSA (CFM)	SUPPLY AIR (CFM)	PRIMARY OSA FRACTION	RETURN AIR (CFM)	EXHAUST AIR (CFM)	Zone Ventilation Efficiency	Corrected OSA CFM	AIR SYSTEMS
	Az		Pz	Rp	Ra	Vbz	Ez	Voz	Vpz	Zp		Evz		
<b>HOMELSS SHELTER</b>														
113 COMMONS 1	1734	30	53	5	0.06	369	0.8	461	1700	0.27	1800	0	0.93	496.17 RTU-6
126/136 CORRIDOR & RESTROOMS	1702	0	0	0	0.06	102	0.8	128	1200	0.11	0	1200	1.09	137.30 RTU-6
135 STAFF LAUNDRY	95	0	0	0	0.12	11	0.8	14	100	0.14	0	0	1.06	15.33 RTU-6
<b>TOTAL</b>	<b>3531</b>		<b>53</b>			<b>483</b>		<b>603</b>	<b>3000</b>		<b>1800</b>	<b>1200</b>	<b>0.93</b>	<b>649</b>
<b>CORRECTED TOTAL OUTDOOR AIR FLOW RATE</b>										<b>649</b>	<b>CFM</b>	<b>Corrected OSA Fractor</b>	<b>Zs =</b>	<b>0.22</b>

# VENTILATION AIR SCHEDULE - RTU-5

ROOM NUMBER AND NAME	AREA (SQ. FT.)	OCCUPANT LOAD (#/1000 SQ. FT.)	NUMBER OF OCCUPANTS	OUTSIDE AIR REQUIREMENT (CFM/P)	OUTSIDE AIR REQUIREMENT (CFM/SQ.FT.)	OUTSIDE AIR REQUIRED (CFM)	ZONE OSA (CFM)	SUPPLY AIR (CFM)	PRIMARY OSA FRACTION	RETURN AIR (CFM)	EXHAUST AIR (CFM)	Zone Ventilation Efficiency	Corrected OSA CFM	AIR SYSTEMS
	Az		Pz	Rp	Ra	Vbz	Ez	Voz	Vpz	Zp		Evz		
<b>HOMELSS SHELTER</b>														
161 COMMONS 2	1631	35	58	5	0.06	388	0.8	485	1750	0.28	1800	150	0.96	504.83 RTU-5
114 KITCHEN	452	10	5	5	0.06	52	0.8	65	350	0.19	0	0	1.05	67.84 RTU-5
116 CLINIC ROOM	181	5	1	5	0.06	16	0.8	20	300	0.07	0	450	1.17	20.64 RTU-5
<b>TOTAL</b>	<b>2264</b>		<b>64</b>			<b>456</b>		<b>570</b>	<b>2400</b>		<b>1800</b>	<b>600</b>	<b>0.96</b>	<b>593</b>
<b>CORRECTED TOTAL OUTDOOR AIR FLOW RATE</b>										<b>593</b>	<b>CFM</b>	<b>Corrected OSA Fractor</b>	<b>Zs =</b>	<b>0.25</b>

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AS-BUILT PREPARED 1.22.2020

**FOSTER SHELTER**  
 6144 SE FOSTER RD., PORTLAND, OREGON 97206  
 CLIENT: MULTNOMAH COUNTY

PORTLAND, OREGON 97217 P-303.232.3753  
**MBA** MERRYMAN BARNES ARCHITECTS 4713 N ALBINA AVE. SUITE 304

PROJECT NO. 17-0918 ISSUE DATE 05.04.2018  
 REVISIONS  
 A CHECKSHEET 5.23.2018  
 B OWNER CHANGES 2.26.2019

SHEET  
 MECHANICAL SCHEDULES  
**M6.0**  
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