

1. LEVEL 0 - AIR DISTRIBUTION - AREA D  
1/8" = 1'-0"

Plan to provide 11-b  
Junc. box in nearby Drop Ceiling  
Stat. E-10 + Stat. of ALL Electric Heaters

- GENERAL NOTES: AIR DISTRIBUTION**
- CONTRACTOR RESPONSIBLE FOR LOCATING ALL HORIZONTAL UNITS CONCEALED ABOVE THE CEILING SO THAT ALL REQUIRED CLEARANCES ARE MAINTAINED AND COORDINATED WITH ALL TRADES. REFER TO INSTALLATION DETAILS ON SHEET M601. PROVIDE ACCESS DOOR IF REQUIRED.
  - CONTRACTOR RESPONSIBLE FOR LOCATING ALL DAMPERS IN DUCTWORK SO THAT ACCESSIBILITY IS MAINTAINED. COORDINATE WITH CEILING SYSTEM. PROVIDE ACCESS DOOR IF REQUIRED.
  - PROVIDE A HIGH EFFICIENCY TAKE-OFF AND VOLUME DAMPER AT EACH GRILLE, REGISTER AND DIFFUSER BRANCH RUNOUT. REFER TO THE DETAIL ON SHEET M600 FOR SPECIFIC REQUIREMENTS.
  - NO DUCTWORK TO BE ROUTED OVER ELECTRICAL PANELS/TRANSFORMERS. REFER TO ELECTRICAL PLANS FOR EQUIPMENT LOCATIONS.
  - REFER TO VERTICAL UNIT INSTALLATION DETAIL ON SHEET M601 FOR SPECIFIC REQUIREMENTS.
  - REFER TO EXHAUST/RETURN AIR CANOPY DETAIL ON SHEET M600 FOR ADDITIONAL INFORMATION FOR E-6R GRILLES.
  - REFER TO CEILING CASSETTE INSTALLATION DETAIL ON SHEET M601 FOR SPECIFIC REQUIREMENTS.
  - REFER TO OUTDOOR AIR SCHEDULE FOR REQUIRED CFM AND DUCT RUN-OUT SIZE FOR ALL OUTSIDE AIR DUCTWORK ROUTED TO AC UNITS.
  - MAINTAIN MANUFACTURERS RECOMMENDED SERVICE CLEARANCE FOR ALL VAV BOXES. REFER TO DETAIL ON SHEET M600 FOR ADDITIONAL INFORMATION.

**KEYNOTES**

- PROVIDE 12" DEEP PLENUM FULL SIZE OF LOUVER. INTERNALLY LINE PLENUM WITH 1/2" ELASTOMERIC INSULATION. PROVIDE EXPANDED THROAT TAP AT PLENUM CONNECTION.
- PROVIDE NEOPRENE VIBRATION ISOLATION HANGING/SUPPORT KIT WITH FAN. TRANSITION TO FAN CURVED AS REQUIRED. USE FLEXIBLE CANWAS CONNECTORS AT THE INLET AND OUTLET OF THE FAN.
- EXHAUST FAN TO BE CONTROLLED BY MANUAL SWITCH. COORDINATE WITH ELECTRICAL CONTRACTOR.
- PROVIDE 16"x18" SHEET METAL SLEEVE IN WALL ABOVE CEILING FOR EXHAUST AIR PATH. EXTEND SLEEVE 6" ON BOTH SIDES OF WALL.
- PROVIDE A 1/2" MESH SCREEN ON DUCT OPENING. PROVIDE EXPANDED THROAT TAP AT END OF DUCT RUN.
- MOUNT BOTTOM OF UNIT HEATER 8'-0" AFF.
- MOUNT BOTTOM OF ELECTRIC HEATER 18" AFF.
- GREASE DUCTWORK SHALL BE WELDED STEEL CONSTRUCTION AND SLOPED BACK TO HOOD AT 2% GRADE (MIN). WRAP ENTIRE DUCT WITH GREASE DUCT FIRE PROTECTION SYSTEM EQUAL TO JOHNS MANVILLE "SUPER FIRETEMP" DUCT ENCLOSURE AND FIRE STOP MEETING ASTM E-14 6 HOUR ENCLOSURE.
- 21"x10" GREASE DUCT CONNECTION FROM KITCHEN HOOD TO 38"x18" EXHAUST DUCT UP TO KEF-1 ON ROOF. BALANCE EACH CONNECTION TO 2878 CFM. VERIFY FINAL COLLAR SIZES AND CFM VALUES WITH HOOD MANUFACTURER.
- TRANSITION TO 11"x10" DUCT CONNECTION FROM KITCHEN HOOD. 18"x14" EXHAUST DUCT UP TO KEF-2 ON ROOF. BALANCE CONNECTION TO 1470 CFM. VERIFY FINAL COLLAR SIZE AND CFM VALUE WITH HOOD MANUFACTURER.
- TRANSITION TO 5"x8" DUCT CONNECTION FROM DISHWASHER HOOD. 14"x14" EXHAUST DUCT UP TO KEF-3 ON ROOF. BALANCE CONNECTION TO 938 CFM. VERIFY FINAL COLLAR SIZE AND CFM VALUE WITH HOOD MANUFACTURER.
- 18"x12" HOOD MAKE-UP CONNECTIONS (TYPICAL) OF 4". BALANCE TO 1071 CFM. VERIFY FINAL COLLAR SIZES AND CFM VALUES WITH HOOD MANUFACTURER.
- KITCHEN HOOD CONTROL PANEL. SEE KITCHEN VENDOR DRAWINGS FOR MORE INFORMATION.
- DUCTWORK UP TO FLOOR ABOVE. REFER TO SHEET M114 FOR CONTINUATION.
- PROVIDE PLENUM FOR FLOOR REGISTER SAME SIZE AS GRILLE NECK. CONNECT DUCTWORK TO PLENUM WITH EXPANDED THROAT TAP. REFER TO SHEET M114 FOR CHAPEL PLAN.
- MOUNT CENTER OF GRILLE AT 11'-4" AFF. COORDINATE WITH ROLL-UP DOOR.
- MOUNT CENTER OF GRILLE AT 9'-11" AFF.
- DISCHARGE 8" ROUND DUCT TO ABOVE ADJACENT CEILING.
- MOUNT BOTTOM OF AC UNIT 8'-0" AFF.
- DUCTWORK UP TO FLOOR ABOVE. REFER TO SHEET M115 FOR CONTINUATION.
- MOUNT TEMPERATURE CONTROL PANEL 4'-0" AFF. COORDINATE POWER AND DATA WITH ELECTRICAL CONTRACTOR.
- KITCHEN FREEZER AND COOLER COMPRESSORS PROVIDED BY OTHERS. COORDINATE REQUIRED REFRIGERANT CONNECTIONS WITH MECHANICAL CONTRACTOR.
- ROUTE 6" DRYER VENT UP TO ROOF. REFER TO DETAIL ON SHEET M602 FOR ADDITIONAL INFORMATION. PROVIDE CLEANOUTS AS REQUIRED.

**GRD RUNOUT SCHEDULE**

DIFFUSER	DUCT SIZE	DIFFUSER	DUCT SIZE	GRILLE	DUCT SIZE
S-1	6"	R-1	6"	E-1	6"
S-2	8"	R-2	8"	E-2	8"
S-3	10"	R-3	10"	E-3	10"
S-4	12"	R-4	12"	E-4	12"
S-5	36x4	R-5	14"	E-5	14"
S-6	10"	R-6	22x22	E-6	22x22
S-7	24x8	R-7	16x8	E-7	10x4
S-8	10x12"	R-8	36x12	E-8	16x8
S-9	10x4	R-9	8"	E-9	36x12
S-10	12x6	R-10	8"	E-10	6"
S-11	16x8	R-11	12"	E-11	8"
S-12	20x10	R-12	14"	E-12	10"
S-13	8"			E-13	14"
S-14	6"				
S-15	8"				
S-16	10"				
S-17	12"				

**HORIZONTAL OA RUNOUT SCHEDULE**

UNIT	AIRFLOW	DUCT SIZE	UNIT	AIRFLOW	DUCT SIZE
AC-12H 0304	100	6"	AC-12H 1302	125	8"
AC-24H 0501	50	6"	AC-18H 1410	175	8"
AC-12H 0802	50	6"	AC-36H 1601	100	6"
AC-24H 0700	100	6"	AC-36H 1701A	75	6"
AC-12H 1108	50	6"	AC-6SH 1703A	75	6"
AC-12H 1114	50	6"	AC-12H 2302	125	8"
AC-6SH 1118	50	6"	AC-36H 3202	350	10"
AC-6SH 1261	100	8"			

**CASSETTE OA RUNOUT SCHEDULE**

UNIT	AIRFLOW	DUCT SIZE	UNIT	AIRFLOW	DUCT SIZE
AC-7.5MC 0400	25	6"	AC-9.5MC 1304C	25	6"
AC-7.5MC 0411	25	6"	AC-12MC 1808	25	6"
AC-7.5MC 0622B	25	6"	AC-12MC 1810	25	6"
AC-7.5MC 0809E	50	6"	AC-18MC 1811	25	6"
AC-12MC 0813E	25	6"	AC-18MC 1813	125	8"
AC-7.5MC 1304A	25	6"	AC-12MC 2307A	25	6"
AC-18MC 1304B	75	6"			

**VERTICAL OA RUNOUT SCHEDULE**

UNIT	AIRFLOW	DUCT SIZE	UNIT	AIRFLOW	DUCT SIZE
AC-36V 0707	400	10x10	AC-18V 1216	100	6"
AC-24V 1101	100	10"	AC-18V 1221	150	8"
AC-18V 1109	150	8"	AC-24V 1222	300	10"
AC-18V 1120	100	8"	AC-18V 1241	150	8"
AC-12V 1200	125	8"	AC-18V 1253	175	8"
AC-18V 1203	150	8"	AC-24V 1701	750	12"x12"
AC-18V 1208	125	8"			

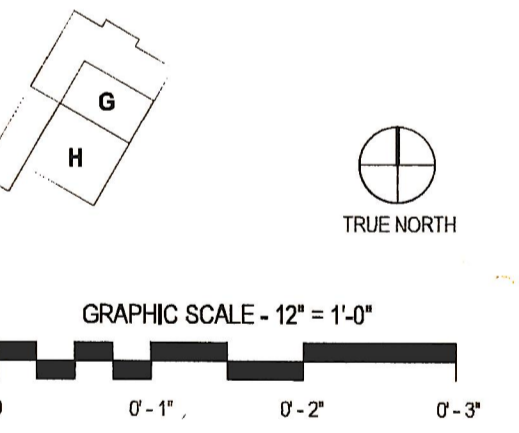
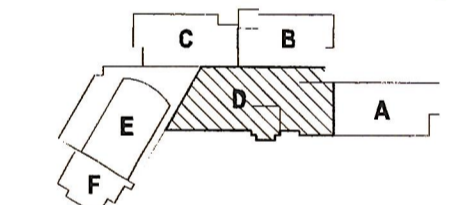


**PAUL VI CATHOLIC HIGH SCHOOL**

CATHOLIC DIOCESE OF ARLINGTON  
200 North Glebe Road  
Arlington, VA 22203  
Loudoun County ZCPA Number 2016-0005  
VMDO Project Number 15.1188



Checked By DRH  
Drawn By CMG



ISSUES AND REVISIONS  
NO. SUBMITTAL DATE  
100% CONSTRUCTION DOCUMENTS 03.17.17

**FLOOR PLAN LEVEL 0  
AREA D - AIR  
DISTRIBUTION**