AIR CONDITIONING AND VENTILATING SUPPLY UNITS SCHEDULE

TAG	AREA SERVED	CASING ARRANGEMENT	TOTAL QUANITY CFM	FAN STATIC PRESSURE IN WATER	NO OF FANS	MAX. FAN OUTPUT VELOCITY FPM	TEMPERING COIL ④ MIN. FACE AREA SQ.FT.	TEMPERING COIL ENTERING AIR TEMP.	TEMPERING COIL LEAVING AIR TEMP.	TEMPERING COIL NUMBER OF ROWS	TEMPERING COIL GPM	HEATING COIL MIN. FACE AREA SQ.FT.	HEATING COIL ENTERING AIR TEMP.	HEATING COIL LEAVING AIR TEMP.	HEATING COIL NUMBER OF ROWS	HEATING COIL GPM	COOLING COIL MIN. FACE AREA SQ.FT.	COOLING COIL ENTERING AIR TEMP.	COOLING COIL LEAVING AIR TEMP.	COOLING COIL NUMBER OF ROWS	COOLING COIL GPM	MOTOR CHARACTERISTICS	REMARKS
A	GYMNASIUM	MULTI-ZONE	12460	1¼"	2	1640	23.38	40°	60°	1	① 35.6	23.4	60°	90°	1	① 53.4	—	—	—	—	—	10HP, 3ϕ, 208V.	
B	KITCHEN	HORIZONTAL	15000	1¼"	2	1490	23.38	-10°	80°	3	① 146.0	—	—	—	—	—	—	—	—	—	—	10HP, 3ϕ, 208V.	
C	CAFETERIA, LIBRARY	MULTI-ZONE	24420	2½"	1	1475	38.3	40°	60°	1	③ 52.8	49.5	60°	90°	8	③ 216.0	49.5	81°DB, 70°WB	55°DB, 53.5°WB	8	③ 216.0	20HP, 3ϕ, 208V.	③
D	CLASSROOMS	MULTI-ZONE	⑤ 5840	2½"	1	1420	8.5	40°	60°	1	③ 12.6	11.7	60°	85°	8	③ 46.0	11.7	81°DB, 65.5°WB	55°DB, 53.5°WB	8	③ 46.0	5HP, 3ϕ, 208V.	③

① CAPACITY BASED ON 220° ENT. WATER, 200° LVG. WATER
② CAPACITY BASED ON 180° ENT. WATER
③ CAPACITY BASED ON 45° ENT. WATER, 57° LVG. WATER
④ WITH INTERNAL FACE & BY-PASS DAMPERS.
⑤ UNITS WITHOUT SEPARATE HEATING COIL. COOLING COIL TO SERVE AS HEATING COIL. PROVIDE MANUAL DAMPERS IN UNIT BY-PASS.
⑥ FUTURE CAPACITY. PRESENT CAPACITY 4840 CFM.

CLASSROOM UNIT VENTILATOR SCHEDULE

TAG	CABINET TYPE & SIZE	TOTAL AIR QUANITY CFM	OUTSIDE AIR QUANITY CFM ①	COIL CAPACITY HEATING TOTAL CAPACITY	HEATING GPM	COOLING ② TOTAL CAPACITY	COOLING GPM	REMARKS
A	90"W-32"H-14⅞"D	1250	225	③ 125.0	16	50.0	16	
B	101"W-32"H-14⅞"D	1500	225	③ 140.0	14	56.0	14	
C	68"W-32"H-14⅞"D	750	150	② 73.0	10	30.0	10	
D	90"W-32"H-14⅞"D	1250	225	③ 119.0	10	44.0	10	
E	101"W-32"H-14⅞"D	1500	225	③ 140.0	16	60.0	16	
F	79"W-32"H-14⅞"D	1000	120	③ 96.0	14	39.0	14	
G	47"W-25⅛"H-9¼"D.	500	100	③ 30.1	2.2	15.2	2.2	④ FAN COIL UNIT
H	101"W.-32"L. x 12"D.	1500	300	④ 80.0	8	—	—	CEILING MOUNTED
J	79"W-32"L. x 12"D.	1000	300	④ 55.0	5.5	—	—	CEILING MOUNTED

① OUTSIDE AIR TEMPERATURE: -10° WINTER & 95° DB, 75° WB SUMMER.
② CAPACITY BASED ON 180° ENT. WATER & 70° ROOM AIR.
③ CAPACITY BASED ON 45° ENT. WATER & 80° D.B. 67° WB. ROOM AIR.
④ CAPACITY BASED ON 220° ENT. WATER, 200° LVG. WATER, 70° ROOM AIR WITH OUTDOOR AIR INTAKE

AIR FILTER SCHEDULE

TAG	AREA SERVED	AIR CAPACITY CFM	MAX. FACE VELOCITY FPM	TYPE	CURRENT CHARACTERISTICS	APPROXIMATE SIZE
A	GYMNASIUM	12460	500	AUTO. RENEWABLE	1ϕ, 60~, 115V.	9'-8"W. x 5'-0"H.
B	KITCHEN	15000	500	AUTO. RENEWABLE	1ϕ, 60~, 115V.	9'-8"W. x 6'-0"H.
C	CAFETERIA, LIBRARY	24420	500	AUTO. RENEWABLE	1ϕ, 60~, 115V.	10'-0"W. x 7'-0"H.
D	CLASSROOMS	5840	500	AUTO. RENEWABLE	1ϕ, 60~, 115V.	5'-8"W. x 3'-0"H.

FILTERS TO BE AMERICAN AIR FILTER ROLL-O-MATIC MODEL G, ARRANGEMENT 2.

CENTRIFUGAL FAN SCHEDULE

TAG	DUTY	AIR CAPACITY CFM	STATIC PRESSURE OF H_2O	OUTLET VELOCITY FPM	WHEEL DIAMETER INCHES	TYPE	ARRANGEMENT	DISCHARGE	ROTATION	MOTOR CHARACTERISTICS
A	RETURN AIR	14000	1/8"	1200	40½"	LARGE-SWSI	3	UBD	CW	5HP, 3ϕ, 208V.
B	RETURN AIR	5160	1/8"	1495	24½"	UTILITY SET	1	UBD	CW	1HP, 3ϕ, 208V.
C	RETURN AIR	16700	3/4"	1300	30"	LARGE-DWDI	3	UBD	CW	5HP, 3ϕ, 208V.
D	RETURN AIR	① 5840	1/2"	1690	24½"	UTILITY SET	1	THD	CCW	1½HP, 3ϕ, 208V.
E	LOCKER EXH.	5505	1/2"	1545	24⅞"	UTILITY SET	1	THD	CCW	1HP, 3ϕ, 208V.
F	LOCKER EXH.	1280	1/2"	1490	12¼"	UTILITY SET	1	UBD	CW	⅓HP, 1ϕ, 115V.
G	TOILET EXH.	1170	1/2"	1350	12¼"	UTILITY SET	1	UBD	CW	¼HP, 1ϕ 115V.

① FUTURE CAPACITY. PRESSENT CAPACITY - 4840 CFM

ROOF EXHAUST FAN SCHEDULE

TAG	DUTY	CAPACITY C.F.M.	CAPACITY STATIC PRESSURE IN. OF WATER	MOTOR H.P.	MOTOR PHASE AND VOLTAGE	MOTOR RPM	DRIVE	MAX. TIP SPEED R.P.M.	REMARKS
A	TOILET EXH.	760	1/2"	1/6	1ϕ, 115V	1750	V-BELT	3700	
B	TOILET EXH.	760	1/2"	1/6	1ϕ, 115V	1750	V-BELT	3700	
C	TOILET EXH.	760	1/2"	1/6	1ϕ, 115V	1750	V-BELT	3700	
D	TOILET EXH.	100	5/8"	1/15	1ϕ, 115V	1600	DIRECT	—	
E	TOILET EXH.	100	5/8"	1/15	1ϕ, 115V	1600	DIRECT	—	
F	KITCHEN EXH.	7000	1/2"	2	3ϕ, 208V.	1750	V-BELT	4200	
G	KITCHEN EXH.	7000	1/2"	2	3ϕ, 208V.	1750	V-BELT	4200	
H	DISHWASHER EXH.	1500	1/2"	1/2	3ϕ, 208V.	1750	V-BELT	3700	
K	LOCKER RM. EXH.	2060	1/2"	1/4	3ϕ, 208V.	1750	V-BELT	3800	
L	LOCKER RM. EXH.	4200	1/2"	1	3ϕ, 208V.	1750	V-BELT	3800	
M	FUME HOOD EXH.	3300	1/2"	1/2	3ϕ, 208V.	1750	V-BELT	3700	
N	FUME HOOD EXH.	3000	1/2"	1/2	3ϕ, 208V.	1750	V-BELT	3700	
P	OFFICE EXH.	810	1/2"	1/4	1ϕ, 115V.	1750	V-BELT	4000	
Q	OFFICE EXH.	1280	1/2"	1/3	1ϕ, 115V.	1750	V-BELT	4000	

MECHANICAL EQUIPMENT SCHEDULE

PLUMBING

SUMP PUMP (DUPLEX)
- BASIN ——— 42"ϕ x 72"D.
- PUMPS:
  - CAPACITY (EACH) ——— 60 GPM
  - TOTAL DYNAMIC HEAD ——— 70 FEET
  - MOTORS ——— ½HP, 3ϕ, 208V.

DOMESTIC HOT WATER RETURN PUMP, 120°F SYSTEM
- CLOSE-COUPLED FLOOR MOUNTED TYPE
- CAPACITY ——— 20 GPM
- TOTAL DYNAMIC HEAD ——— 35 FT.
- MOTOR ——— ½HP, 3ϕ, 208V.

DOMESTIC HOT WATER RETURN PUMP, 180° SYSTEM (BELL & GOSSETT PE IN-THE-LINE)
- CAPACITY ——— 10 GPM
- TOTAL DYNAMIC HEAD ——— 10 FT.
- MOTOR ——— ⅙HP, 1ϕ, 115V

WATER METER
- SIZE ——— 4"
- FLOW @ 10 P.S.I. DROP ——— 300 GPM

GREASE INTERCEPTOR (JOSAM #JHR-6)
- FLOW RATE ——— 50 GPM
- GREASE CAPACITY ——— 100 LB.

SETTLING BASIN
- SIZE ——— 36"ϕ x 48"D.

HEATING

BOILER
- CAPACITY TO BE DEVELOPED ——— 5000 MBH
- MINIMUM HEATING SURFACE ——— 679 SQ. FT.
- OPERATING PRESSURE ——— 60 PSI

HOT WATER HEATING EXPANSION TANK
- CAPACITY AND SIZE TAG A ——— 264 GAL. - 36"ϕ x 60"L.
- CAPACITY AND SIZE TAG B ——— 117 GAL. - 24"ϕ x 60"L.

HOT WATER HEATING CIRCULATING PUMP

	TAG A	TAG B
CAPACITY	1000 GPM	300 GPM
DISCHARGE HEAD	150 FT.	50 FT.
MOTOR	60HP, 3ϕ, 208V.	7½HP, 3ϕ, 208V.

INCINERATOR
- REFUSE BURNING CAPACITY TYPE 2 ——— 250 LB/HR.
- CHARGING DOOR ——— 24" x 20"
- PRESSING ——— 19"-19" INSIDE
- GAS BURNER ——— 500,000 BTU/HR.
- JOSEPH GODREJ NO. 903 IN PLIBRICO NO. AC 150
- AIRDUCER INDUCED DRAFT FAN AT STACK WITH TURNING VANE IN STACK
- FAN CAPACITY ——— 2800 CFM
- MOTOR ——— 1½ HP 3 ϕ 208 VOLTS

DOMESTIC HOT WATER HEATER
- STORAGE CAPACITY ——— 645 GAL. ③ CHANGE TO 120°
- HEATING CAPACITY ——— 983 GPH
- WATER TEMPERATURE RISE ——— 40° TO (180°)
- GAS BURNER ——— 1,440,000 BTU/HR.

FORCED FLOW CONVECTOR

	TAG A	TAG B
HEATING CAPACITY @ 60° ENT. AIR	24.5 MBH	24.5 MBH
WATER TEMPERATURE DROP	180° TO 160°	180° TO 160°
AIR QUANITY @ 70°	760 CFM	760 CFM
MAXIMUM FAN SPEED	800 RPM	800 RPM
MAXIMUM FINAL AIR TEMPERATURE	84.7°	84.7°
MOTOR	⅙HP, 1ϕ, 115V.	⅙HP, 1ϕ, 115V.
RECESS	6"	CEILING MOUNTED

UNIT HEATER
- HEATING CAPACITY @ 60° ENT. AIR ——— 69.8 MBH
- WATER TEMPERATURE DROP ——— 180° TO 160°
- AIR QUANITY @ 70° ——— 1760 CFM
- MAXIMUM FAN SPEED ——— 1100 RPM
- MAXIMUM FINAL AIR TEMPERATURE ——— 96.6°
- MOTOR ——— ⅙HP, 1ϕ, 115V.

VENTILATING

SAWDUST COLLECTOR
(AMERICAN AIR FILTER NO. 10 TYPE D ROTO-CLONE WITH SKIMMER, PRECLEANER & RS HOPPER)
- CAPACITY @ 6" S.A ——— 8500 CFM
- MOTOR ——— 5 HP 3 ϕ, 208 V.
- UNIT TO BE WEATHERPROOF FOR OUTSIDE INSTALLATION. PROVIDE EYES FOR PURPOSE OF LOCKING HOPPERS.

NO	PRINTS & DISTRIBUTION	BY	DATE
5	Pedge	EG	6-21
6	Office	EG	6-21
7	Bid Purposes	EG	7-6-65
1	BLDG. DEP. NATIONAL	JLC	11-16-65
1	MR. WILSON'S REVIEW	JLC	11-15-65
11	(8) G.C. (3) STEAMP (1) PM	WC	11-16-65

NO	REVISIONS - THUS	BY	DATE
2	GENERAL	EG	7-14-65
3	HEATING	E.V.	10-27-65

WESTCHESTER TOWNSHIP JUNIOR HIGH SCHOOL
FIFTH STREET
CHESTERTON INDIANA
FOR THE
WESTCHESTER TOWNSHIP SCHOOL BUILDING CORP.

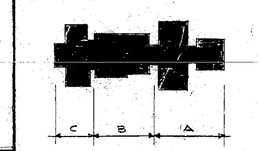
SCHEDULES

THE Perkins & Will PARTNERSHIP
ARCHITECTS
309 West Jackson Blvd.
Chicago Illinois 60606
Phone 312-427-9300

MECHANICAL

DATE	6-21-65
PROJECT NO.	21690-3
DRAWN BY	SCHARRES
CHECKED BY	SCHARRES
DEPT. HEAD	SCHARRES
PROJ. ARCH.	P. BENEDICT

MG



KEY PLAN

SCHARRES & ASSOCIATES
CONSULTING ENGINEERS
RIVERSIDE PLAZA CHICAGO, ILLINOIS