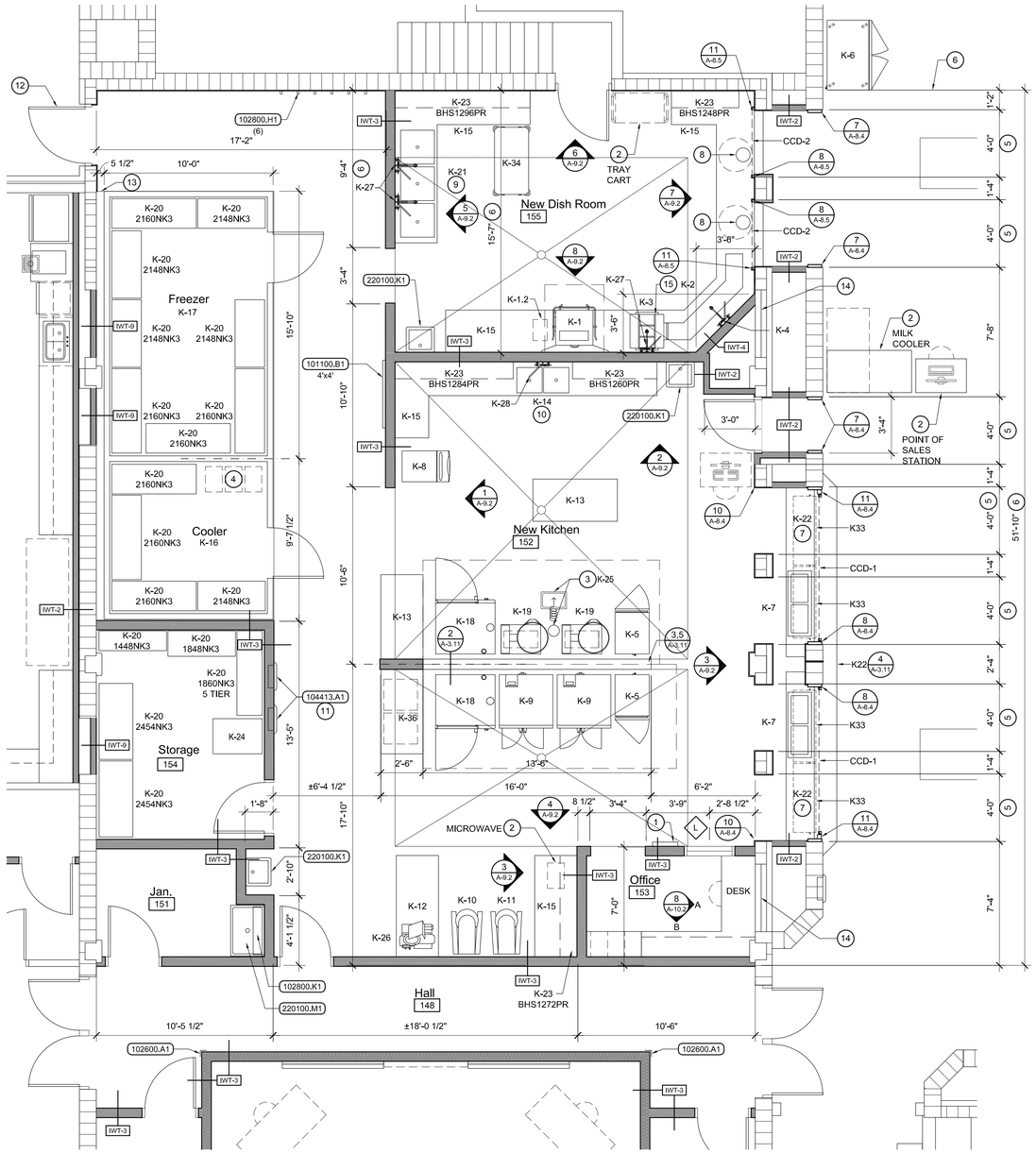


N. 1 Enlarged Kitchen Plan

Scale: 1/4" = 1'-0"

Kitchen Equipment Schedule

Mark	Descrlption	Manufacturer & Catalog Number	Plumbing Connections				Electrlcal	Remarks - Refer to 114000
			Cold	Hot	Waste	Vent		
K-1	DISHWASHER	ADS HT-25/34 W/ BUILT ON BOOSTER HEATER		3/4"	INDIRECT TO FLOOR SINK		208/240v / 3 ph 60 Hz / 12 kw Heater 50 Amp Breaker	PROVIDE COOL DOWN DRAIN KIT.
K-1.2	BOOSTER HEATER	ADS HT-25/34 W/ BUILT ON BOOSTER HEATER		3/4"			208/240v / 3 ph 60 Hz / 12 kw Heater 50 amp Breaker	
K-2	DISHTABLE WITH INTEGRAL TROUGH & STRAINER	CUSTOM FABRICATED REFER TO DETAILS			INDIRECT TO FLOOR SINK			SEE DETAILS 1 AND 6, SHEET A-3.11.
K-3	GARBAGE DISPOSER	'INSINKERATOR' SS-300	1/2"		3"	2"	208v / 3 ph / 6 amp	PROVIDE WITH SHORT BODY AND CC-101 CONTROL CENTER.
K-4	PRE-RINSE UNIT	'T&S BRASS & BRONZE' B-0133-B WITH B-0155 W/ SWING NOZZLE SIZED TO SINKS	1/2"	1/2"				PROVIDE WITH B-109 WALL BRACKET AND HAND WASH FAUCET. 60" STAINLESS STEEL HOSE.
K-5	HOT FOOD CABINET (2)	'METRO' C539-CDC					120v / 16 A 60Hz, 2000W	DUTCH DOORS W/ SWINGS PER PLAN. INSULATED, HOLDING AND PROOFING. NEMA 5-20P.
K-6	REACH-IN REFRIGERATOR	'BEVERAGE-AIR' HRS2HC-1G					115v / 60 / 1ph	DOUBLE DOORS, GLASS DOORS, NEMA 5-15-P PLUG

Kitchen Equipment Notes

1. ALL SHOP AND FIELD JOINTS IN STAINLESS STEEL. TOPS OF DISHTABLES K-2, K-15, AND K-21, PREP COUNTERS K-14 AND K-15, AND SERVING COUNTER K-22, SHALL BE CONTINUOUSLY WELDED WITH STAINLESS STEEL ROD AND GROUND SMOOTH TO FORM A SEAMLESS TOP. PROVIDE SOUND DEADENING PER SPECIFICATIONS,
2. MECHANICAL CONTRACTOR SHALL RUN SUPPLY, WASTE AND VENT PIPING TO AND SHALL MAKE CONNECTIONS TO ALL ITEMS OF KITCHEN EQUIPMENT.
3. ELECTRICAL CONTRACTOR SHALL RUN CONDUIT AND CONDUCTORS TO AND SHALL PROVIDE J-BOXES, OUTLETS, BREAKERS, ETC. FOR ALL ITEMS OF KITCHEN EQUIPMENT AND SHALL MAKE CONNECTIONS TO ALL ITEMS OF KITCHEN EQUIPMENT.
4. KITCHEN EQUIPMENT CONTRACTOR SHALL PROVIDE AND PLUMBING CONTRACTOR SHALL INSTALL ALL FAUCETS, DRAINS, TRAPS, STRAINERS, ETC. FOR SINKS IN KITCHEN EQUIPMENT ITEMS K-2, K-14, AND K-21.
5. ALL KITCHEN EQUIPMENT SHALL BE NSF APPROVED. ITEMS K-2, K-14, K-15, K-21, AND K-22 SHALL BE CONSTRUCTED IN ACCORDANCE WITH NSF STANDARDS.
6. CONDENSING UNITS FOR ITEMS K-16 AND K-17 SHALL BE LOCATED ON THE ROOF. REFER TO MECHANICAL AND ROOF PLAN. EACH CONDENSING UNIT SHALL BE PROVIDED WITH MANUFACTURER'S STANDARD:
   A. WEATHERPROOF CONTROLS
   B. PUMP DOWN CYCLE
   C. HEAD PRESSURE CONTROL VALVE
   D. CRANKCASE HEATER
   E. LEGS AND PLATFORM FOR ROOF MOUNTED INSTALLATION. SEE MECHANICAL FOR DETAIL.
   F. PROTECTIVE STEEL COVER
7. PRE-FABRICATED COOLER / FREEZER PANELS TO MEET REQUIREMENTS OF INTERNATIONAL BUILDING CODE.
8. ITEMS K-16 AND K-17 SHALL MEET THE FOLLOWING CRITERIA:
   A. SIZES SHALL BE AS SHOWN ON THE DRAWINGS AND HEIGHT SHALL BE 8'-6" CLEAR INSIDE.
   B. WALLS SHALL BE 4" THICK R-34. ROOF (CEILING) PANELS SHALL MATCH WALL PANELS. FINISH OF PANELS SHALL BE:
      1. OUTSIDE - 26 GA. EMBOSSED GALVANIZED STEEL WITH BAKED ON POLYESTER ENAMEL (WHITE).
      2. INSIDE - 0.032" EMBOSSED ALUMINUM.
   C. CONCRETE FLOOR SLAB SHALL BE RECESSED TO ACCOMMODATE INSULATED FLOOR PANELS. FLOOR PANELS SHALL HAVE A STAINLESS STEEL FINISH OVER 3/4" O.S.B. SUBFLOOR BACKING. THICKNESS OF FLOOR PANELS SHALL BE 4" TOTAL.
   D. DOORS SHALL BE STANDARD INFITTING OVER LAP TYPE, 36"x80".
   E. PROVIDE ALL ACCESSORIES AND COMPONENTS AS REQUIRED FOR A COMPLETE AND OPERATIONAL COOLER / FREEZER INSTALLATION, MEETING ALL APPLICABLE CODES, REGULATIONS, AND STANDARDS.
   F. ENCLOSURES SHALL BE LISTED BY THE NATIONAL SANITATION FOUNDATION (N.S.F.) STANDARD #7 AND SHALL BEAR THE N.S.F. SEAL OF APPROVAL.
   G. PROVIDE 26 GA. STAINLESS STEEL CLOSURE STRIP AT TOP OF FREEZER / COOLER UNITS TO TERMINATE AT SUSPENDED CEILING. AND AT GAPS BETWEEN ADJACENT WALLS.
   H. PROVIDE A SINGLE WALL PANEL BETWEEN THE FREEZER AND COOLER UNITS.
   I. GROUT BETWEEN FLOOR SLAB AND COOLER / FREEZER UNIT PER MANUFACTURERS SPECS.
9. SEE SPECIFICATIONS FOR ADDITIONAL EQUIPMENT REQUIREMENTS.

Kitchen Equipment Schedule

Mark	Description	Manufacturer & Catalog Number	Plumbing Connections				Electrical / Gas	Remarks - Refer to 114000
			Cold	Hot	Waste	Vent		
K-7	STEAM DROP-IN (2)	'ADVANCE TABCO' SLIMLINE DISLSW-2-240					208v / 3.94 amp 1600W	PROVIDE CUT-OUT FOR UNIT IN COUNTER K-22. PROVIDE DRAIN PLUG AND SPILLAGE PANS SP-S NEMA 6-20P PLUG
K-8	ICE MAKER / ICE BIN	'MANITOWOC' RNP0620A W/ D-420 BIN	1/2"		INDIRECT TO FLOOR SINK		115v / 60 / 1ph 1 HP / 20 amp	PROVIDE WITH WATER FILTER
K-9	DOUBLE STACK CONVECTION OVEN (2)	'VULCAN' VC44GD			INDIRECT TO FLOOR SINK		120v / 60 / 1ph 15.4 amp (2) 3/4" GAS	
K-10	MIXER 30 QUART	'HOBART' HL300-1STD			INDIRECT TO FLOOR SINK		120v / 60 / 1ph 15.4 amp / GAS	PROVIDE WITH STANDARD ACCESSORY PACKAGE. SLICER / GRATER ATTACHMENT, AND BOWL TRUCK. NEMA 5-15 PLUG
K-11	MIXER 60 QUART	'HOBART' HL600-1STD					200-240v / 50 / 60 / 3 PH / 20 amp	PROVIDE WITH STANDARD ACCESSORY PACKAGE. SLICER / GRATER ATTACHMENT, AND BOWL TRUCK.
K-12	S.S. TABLE 30" x 72"	'DUKE' 314S-3072S						PROVIDE WITH SPECIAL HEIGHT LEGS (SP-HT-LEGSSP) OPTION, 2'-10" TOTAL HEIGHT, (3) NO. 731 DRAWERS, AND UNDERSHELF.
K-13	S.S. TABLE 30" x 60" (2)	'DUKE' 314S-3060						PROVIDE WITH SPECIAL HEIGHT LEGS (SP-HT-LEGSSP) OPTION, 2'-10" TOTAL HEIGHT, (3) NO. 731 DRAWERS, AND UNDERSHELF.
K-14	S.S. COUNTER WITH INTEGRAL DBL. SINK	CUSTOM FABRICATED REFER TO DETAILS			INDIRECT TO FLOOR SINK			PROVIDE WITH 'DUKE' 314659 DRAINS. REFER TO MECHANICAL FOR PIPING SIZES AND LOCATIONS.
K-15	S.S. COUNTER(S) PER PLAN	CUSTOM FABRICATED REFER TO DETAILS						
K-16	WALK-IN COOLER	'KOLPAK' 4" PANELS			INDIRECT TO FLOOR SINK		208v / 60 / 1ph 16.4 AMPS 1 1/2 H.P.	REFER TO SPECIFICATION AND KITCHEN EQUIPMENT NOTES.
K-17	WALK-IN FREEZER	'KOLPAK' 4" PANELS			INDIRECT TO FLOOR SINK		208v / 60 / 3ph 19.6 AMPS 2 1/2 H.P.	REFER TO SPECIFICATION AND KITCHEN EQUIPMENT NOTES.
K-18	SINGLE STACK COMBI-OVEN (2)	'RATIONAL' ICOMBI PRO 20 - HALF NG	1/2"				120v / 15 AMP 1" GAS	DOOR SWINGS PER PLAN.
K-19	STEAM KETTLE WITH DRAIN STAND (2)	'CLEVELAND' KGT12T W/ ST-28	1/2"	1/2"	INDIRECT TO FLOOR SINK		120v / 1 ph 5 amp 3/4" GAS	2" TANGENT DRAW OFF VALVE WITH DRAIN STRAINER, HOT AND COLD WATER FAUCET WITH SWING SPOUT AND MOUNTING BRACKET, KETTLE ACCESSORY KIT AND SPRING ASSISTED COVER AND COOKING BASKETS, W/ ST-28 EQUIP. STAND
K-20	WIRE SHELVING UNIT(S) PER PLAN, FLOOR TYPE	'METRO' SUPER ERECTA						4-TIER UNLESS NOTED OTHERWISE, EPOXY COATED WITH MICOBAN PROTECTION. ALUMINUM SPLIT SLEEVES AT COOLER / FREEZER SHELVING.
K-21	S.S. COUNTER WITH INTEGRAL TRIPLE SINK	CUSTOM FABRICATED REFER TO DETAILS			INDIRECT TO FLOOR SINK			PROVIDE WITH 'DUKE' 314659 DRAINS. REFER TO MECHANICAL FOR PIPING SIZES AND LOCATIONS.
K-22	S.S. SERVING COUNTER, CONTINOUS	CUSTOM FABRICATED REFER TO DETAILS						PROVIDE SNEEZE GUARD MOUNTING PLATES AND CUTOUTS FOR DROP-IN STEAM WELLS.
K-23	WALL SHELF(S) W / POT HOOKS PER PLAN	'JOHN BOOS'						14 GA. 12" DEEP x LENGTH INDICATED
K-24	CAN RACK 35" X 77" TALL	'LAKESIDE' 335						
K-25	PEDESTAL POT AND KETTLE FILLER	'T&S BRASS & BRONZE' B-0187	1/2"	1/2"				
K-26	FOOD SLICER (TABLE TOP)	'HOBART' HS-7					120v / 60 / 1ph 5.6 amp	5-15P NEMA PLUG
K-27	PRE-RINSE UNIT (2)	'T&S BRASS & BRONZE' B-0133-B WITH B-0155 W/ SWING NOZZLE SIZED TO SINKS	1/2"	1/2"				PROVIDE WITH B-109 WALL BRACKET AND HAND WASH FAUCET.
K-28	DOUBLE SINK MIXING FAUCET	'T&S BRASS & BRONZE' B-0187	1/2"	1/2"				
K-33	SNEEZE GUARD (4)	'BSI' XG3500-3 W/ SSU5-H						THROUGH COUNTER MOUNTING. SEE PLAN DETAIL 4, SHEET A-3.11.
K-34	MOBILE DRYING RACK	'METRO' PR48VX3-XDR						
K-35	RESTROOM SHELVING (10)	CUSTOM FABRICATED REFER TO DETAILS						SEE DETAIL 8, SHEET A-9.3. SEE RESTROOM PLANS FOR LOCATIONS.
K-36	S.S. TABLE 30" x 60"	'DUKE' 314-3072						PROVIDE WITH SPECIAL HEIGHT LEGS (SP-HT-LEGSSP) OPTION, 2'-10" TOTAL HEIGHT AND (2) INGREDIENT BINS (502?).
K-37	ABOVE COUNTER ICE MAKER / DISPENSER W/ WATER FILTER	'MANITOWOC' CNF02O1A W/ AR-10000-P		1/2"	INDIRECT TO FLOOR SINK		115v / 60 / 1ph 10.3 amp	INSTALL (1) IN FACULTY ROOM 145. NEMA 5-15P PLUG

General Notes

1. EXTERIOR DIMENSIONS ARE TO OUTSIDE FACE OF CONCRETE FOUNDATION WALL / CMU / BRICK VENEER UNLESS NOTED OTHERWISE OR UNLESS CENTERLINE DESIGNATION (– – – – –) IS INDICATED.
2. INTERIOR DIMENSIONS ARE TO FACE OF STUD UNLESS NOTED OTHERWISE OR UNLESS CENTERLINE (– – – – –) DESIGNATION IS INDICATED.
3. SEE SHEET A-1.1 FOR CODE COMPLIANCE FLOOR PLAN AND BUILDING CODE COMPLIANCE SUMMARY.
4. SEE SHEET A-4.1 FOR ROOM FINISH SCHEDULE.
5. SEE SHEETS A-4.2 AND A-4.3 FOR DOOR SCHEDULE AND DOOR AND WINDOW TYPES.
6. FURNISH AND INSTALL INTERIOR SIGNS AT ALL INTERIOR DOORS, BOTH NEW AND EXISTING, AND AT OTHER LOCATIONS AS SPECIFIED. SEE SPECIFICATIONS.
7. FURNISH AND INSTALL WINDOW BLINDS. SEE SHEETS A-4.2 AND A-4.3.
8. SEE SHEET A-9.1 FOR SPECIALTY ITEM MOUNTING HEIGHTS.
9. SEE SHEETS A-8.6 AND A-8.7 FOR WALL TYPES (EWT-7) (IWT-7).

Reference Notes

1. KITCHEN HOOD CONTROLS.
2. OWNER FURNISHED AND INSTALLED FURNITURE / EQUIPMENT (N.I.C.).
3. PEDESTAL FILL STATION AND TRENCH DRAIN. SEE PLUMBING FOR TRENCH DRAIN.
4. MILK CRATE STORAGE AREA.
5. EXISTING CMU WALL ROUGH OPENING.
6. DIMENSIONS TO INSIDE FACE OF EXISTING MASONRY WALL.
7. CUSTOM STAINLESS STEEL SNEEZE GUARD MOUNTING PLATES REQUIRED FOR ATTACHMENT OF SNEEZE GUARDS.
8. 10" DIA. WASTE HOLE IN COUNTER WITH 1" STAINLESS STEEL COLLAR.
9. STAINLESS STEEL TRIPLE SINK. (3) 2'-4" x 2'-0" x 1'-2" DEEP.
10. STAINLESS STEEL DOUBLE SINK. (2) 1'-8" x 1'-8" x 1'-2" DEEP.
11. VERIFY REQUIRED KITCHEN FIRE EXTINGUISHER SIZE WITH LOCAL AUTHORITIES AND PROVIDE INCREASED CABINET SIZE AS REQUIRED. PROVIDE SIGNAGE WITH FIRE EXTINGUISHER TYPE.
12. FURNISH DOOR WITH PEEPHOLE.
13. STAINLESS STEEL CLOSURE.
14. CMU WALL ROUGH OPENING W/ EXISTING INFILL.
15. STAINLESS STEEL TROUGH SINK WITH STAINLESS STEEL REMOVABLE GUIDE ASSEMBLY , 2'-0" x 2'-0" x 1'-0" DEEP.

Keyed Notes

DIVISION 10 - SPECIALTIES

102600.A1	CORNER GUARD, 90°, 4'-0"
102800.K1 102800.H1	SHELF / MOP HOLDER COAT / TOWEL HOOK
104413.A1	FIRE EXTINGUISHER CABINET, SEMI-RECESSED

DIVISION 22 - PLUMBING

220100.K1 220100.L1	LAVATORY SINK

LKV ARCHITECTS
2400 E RIVERWALK DRIVE
BOISE, IDAHO 83706
WWW.LKVARCHITECTS.COM
208.336.3443

PRELIMINARY

NOT FOR CONSTRUCTION

Jefferson Elementary School Addition and Remodel

600 N. Fillmore Street, Jerome, Idaho

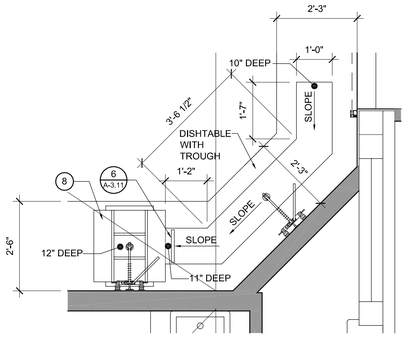
DATE: February 10, 2023
LKV PROJECT #: -
REVISIONS:

DRAWN BY: MS
CHECKED BY: WT

Conceptual Design

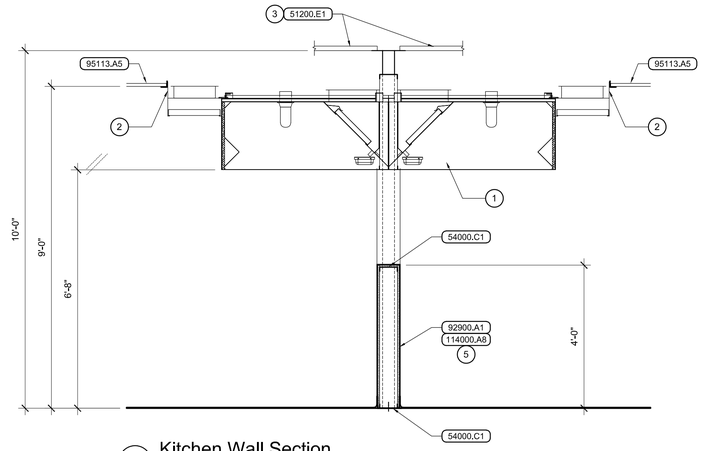
DRAWING NO.

A-3.7



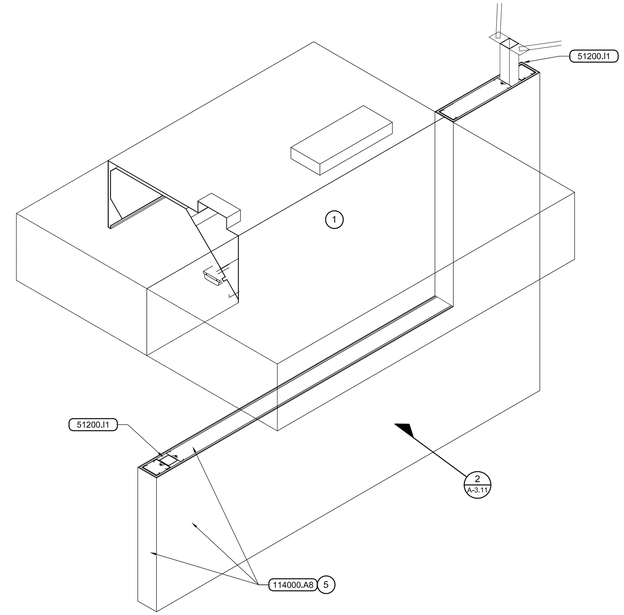
1 Enlarged Dish Room Trough

Scale: 1/2" = 1'-0"



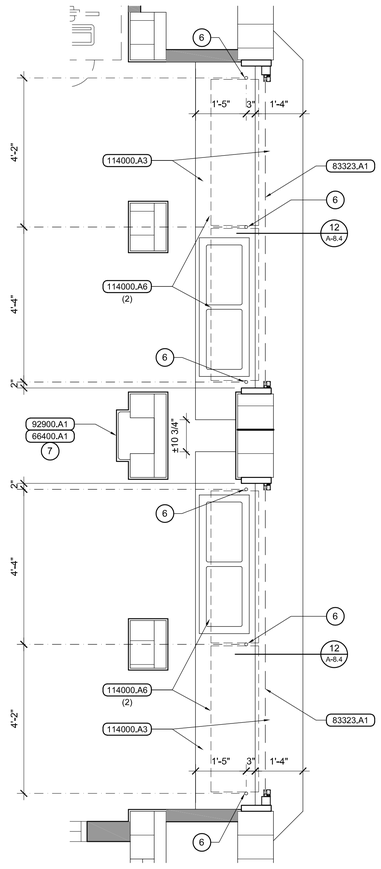
2 Kitchen Wall Section

Scale: 1/2" = 1'-0"



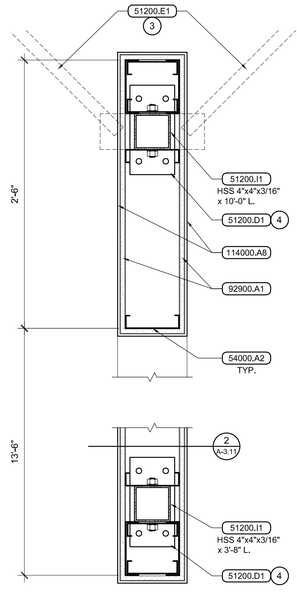
3 Kitchen Wall Isometric

Scale: NTS



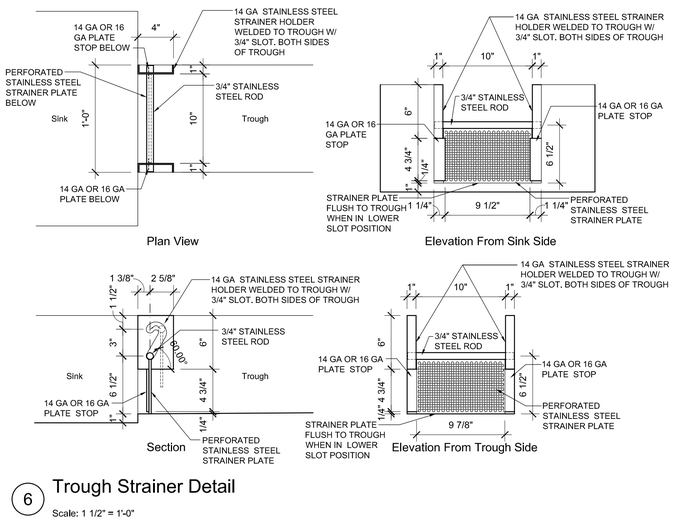
4 Enlarged Kitchen Serving Counter / Sneeze Guard Layout

Scale: 1/2" = 1'-0"



5 Kitchen Wall Plan

Scale: 1 1/2" = 1'-0"



6 Trough Strainer Detail

Scale: 1 1/2" = 1'-0"

General Notes

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2. INTERIOR DIMENSIONS ARE TO FACE OF STUD UNLESS NOTED OTHERWISE OR UNLESS CENTERLINE (– – – – –) DESIGNATION IS INDICATED.
3. SEE SHEET A-1.1 FOR CODE COMPLIANCE FLOOR PLAN AND BUILDING CODE COMPLIANCE SUMMARY.
4. SEE SHEET A-4.1 FOR ROOM FINISH SCHEDULE.
5. SEE SHEETS A-4.2 AND A-4.3 FOR DOOR SCHEDULE AND DOOR AND WINDOW TYPES.
6. FURNISH AND INSTALL INTERIOR SIGNS AT ALL INTERIOR DOORS, BOTH NEW AND EXISTING, AND AT OTHER LOCATIONS AS SPECIFIED. SEE SPECIFICATIONS.
7. FURNISH AND INSTALL WINDOW BLINDS. SEE SHEETS A-4.2 AND A-4.3.
8. SEE SHEET A-9.1 FOR SPECIALTY ITEM MOUNTING HEIGHTS.
9. SEE SHEETS A-8.6 AND A-8.7 FOR WALL TYPES (EWT-?) | (IWT-?).

Reference Notes

1. KITCHEN HOOD. SEE MECHANICAL.
2. STAINLESS STEEL SHROUD TO CEILING AS REQUIRED BY HOOD INSTALLER.
3. 4"x4"x1/8" HORIZONTAL BRACE ANGLE TO STORAGE 154 WALL AT +10'-0" A.F.F.
4. 5"x10" BASE PLATE WITH (4) 5/8" DIA. EPOXY ANCHORS INTO CONCRETE.
5. ALL EXPOSED SURFACES.
6. THROUGH-COUNTER MOUNTING OF SNEEZE GUARD LEGS. CUSTOM STAINLESS STEEL FABRICATOR TO PROVIDE UNDER COUNTER MOUNTING PLATES PER SNEEZE GUARD MANUFACTURERS RECOMMENDATIONS.
7. FRP OVER GYPSUM BOARD ALL (4) SIDES, TYP. MASTIC GYPSUM BOARD TO MASONRY
8. STAINLESS STEEL TROUGH SINK WITH STAINLESS STEEL REMOVABLE GUIDE ASSEMBLY , 2'-0" x 2'-0" x 1'-0" DEEP.

Keyed Notes

DIVISION 5 - METALS

51200.D1	STEEL BEARING PLATE
51200.E1	STEEL ANGLE
51200.I1	STEEL TUBE
54000.A2	STEEL STUD(S) 6", 20 GA. @ 16" O.C., U.N.O.
54000.C1	STEEL STUD TRACK, SAME WIDTH AND GAUGE AS STUDS U.N.O.

DIVISION 6 - WOOD, PLASTICS, & COMPOSITES

66400.A1	FIBERGLASS REINFORCED PLASTIC PANELS

DIVISION 8 - OPENINGS

83323.A1	OVERHEAD COILING COUNTER DOOR

DIVISION 9 - FINISHES

92900.A1	SINGLE LAYER GYPSUM BOARD, 5/8" TYPE "X" U.N.O.
95113.A5	SUSPENDED ACOUSTICAL PANEL CEILING, METAL PAN PANELS W/ CLIPS

DIVISION 11 - EQUIPMENT

114000.A3	14 GA. STAINLESS STEEL COUNTERTOP W/ SPLASH
114000.A6	STAINLESS STEEL SNEEZE GUARD
114000.A8	16 GA. STAINLESS STEEL CLADDING

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2400 E RIVERWALK DRIVE
BOISE, IDAHO 83706
WWW.LKVARCHITECTS.COM
208.336.3443

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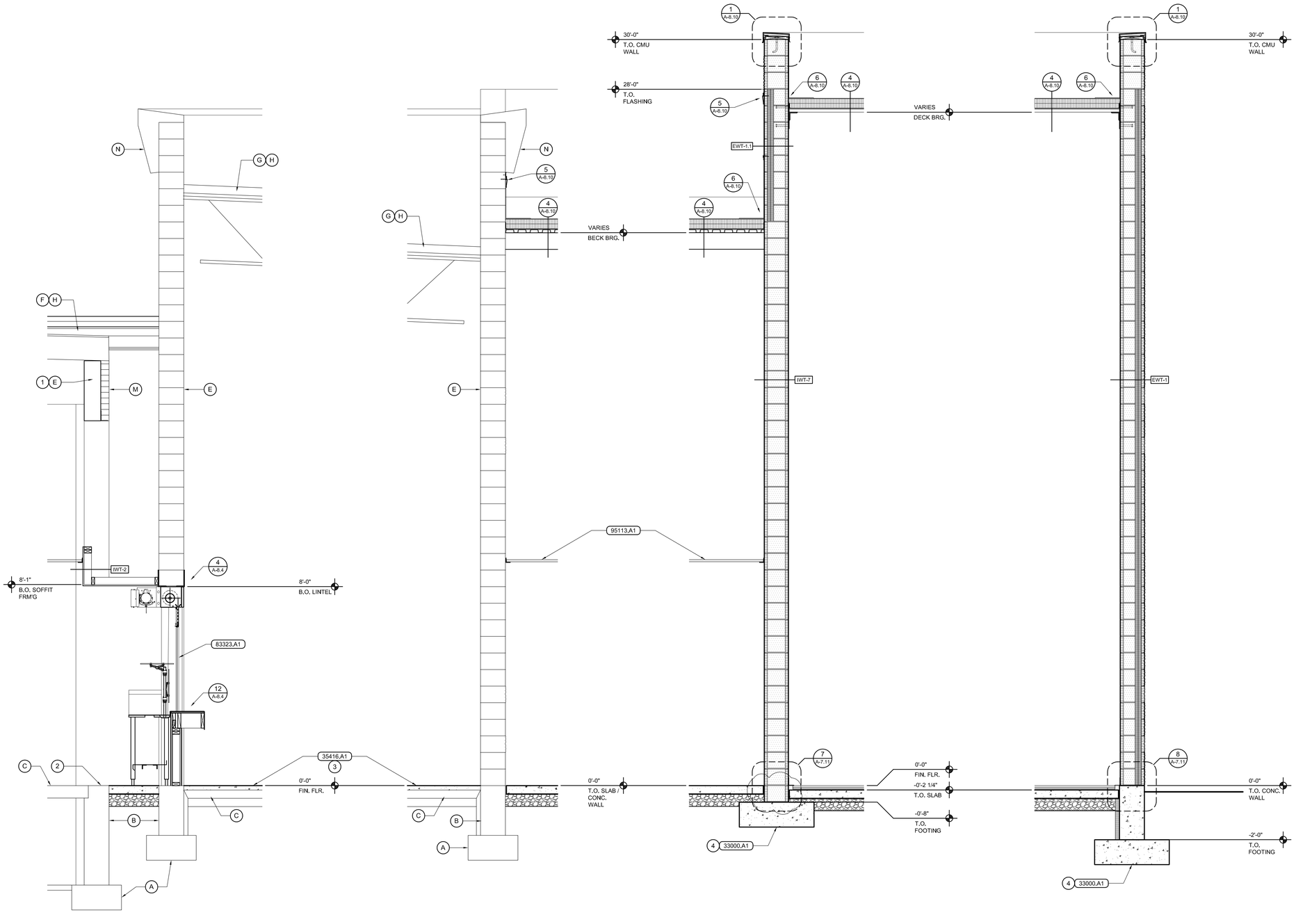

1 Wall Section
Scale: 1/2" = 1'-0"

2 Wall Section
Scale: 1/2" = 1'-0"

3 Wall Section
Scale: 1/2" = 1'-0"

4 Wall Section
Scale: 1/2" = 1'-0"

General Notes

1. SEE STRUCTURAL NOTES AND EARTHWORK SPECIFICATIONS FOR STRUCTURAL FILL REQUIREMENTS BELOW CONCRETE FOOTINGS AND SLABS.
2. SEE STRUCTURAL PLANS AND DETAILS FOR JOIST, TRUSS, BEAM, AND HEADER SIZES AND SPACINGS.
3. SEE ROOM FINISH SCHEDULE , SHEET A-4.1 FOR CEILING TYPES AND HEIGHTS NOT SHOWN OR NOTED.
4. SEE SHEETS A4.2 AND A4.3 FOR WINDOW AND DOOR TYPES AND SIZES.
5. SEE SHEETS A-8.6 AND A-8.7 FOR WALL TYPES (EWT-7) (IWT-7).

Reference Notes

- (A) EXISTING CONCRETE FOOTING.
- (B) EXISTING CONCRETE FOUNDATION WALL.
- (C) EXISTING CONCRETE FLOOR SLAB.
- (D) EXISTING WOOD STUD WALL.
- (E) EXISTING CONCRETE MASONRY UNIT WALL.
- (F) EXISTING WOOD ROOF JOISTS / TRUSSES.
- (G) EXISTING OPEN WEB STEEL ROOF JOISTS.
- (H) EXISTING SINGLE-PLY MEMBRANE ROOF.
- (I) EXISTING PIPE TUNNEL.
- (J) EXISTING WOOD CEILING FRAMING.
- (K) EXISTING DOOR AND / OR FRAME TO REMAIN. SEE DOOR SCHEDULE.
- (L) EXISTING WINDOW TO REMAIN.
- (M) EXISTING BRICK VENEER TO REMAIN.
- (N) EXISTING STUCCO FASCIA AND METAL COPING TO REMAIN.

- (1) EXISTING CONCRETE BOND BEAM.
- (2) GRIND TOP OF EXISTING FOUNDATION WALL SMOOTH / FLUSH AS REQUIRED.
- (3) HYDRAULIC CEMENT FILL DEPTH. APPROX. 2 1/4". FIELD VERIFY.
- (4) SEE STRUCTURAL FOR SIZE AND REINFORCING.

Keyed Notes

DIVISION 3 - CONCRETE

33000.A1	CONCRETE FOOTING
35416.A1	HYDRAULIC CEMENT UNDERLAYMENT

DIVISION 8 - OPENINGS

83323.A1	OVERHEAD COILING COUNTER DOOR

DIVISION 9 - FINISHES

95113.A1	SUSPENDED ACOUSTICAL PANEL CEILING, STANDARD PANELS

LKV ARCHITECTS
2400 E RIVERWALK DRIVE
BOISE, IDAHO 83706
WWW.LKVARCHITECTS.COM
208.336.3443

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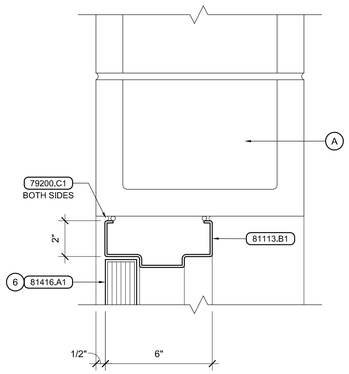
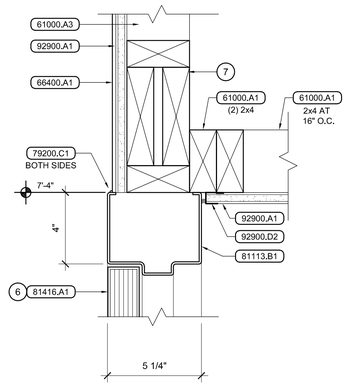
A-7.7



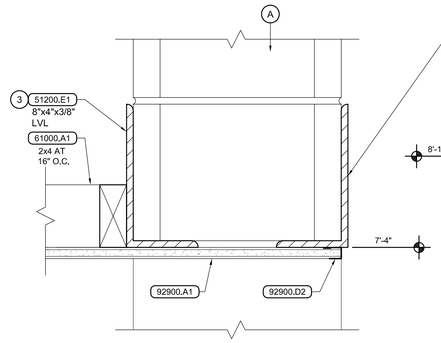
1 Door Head

Scale: 3" = 1'-0"



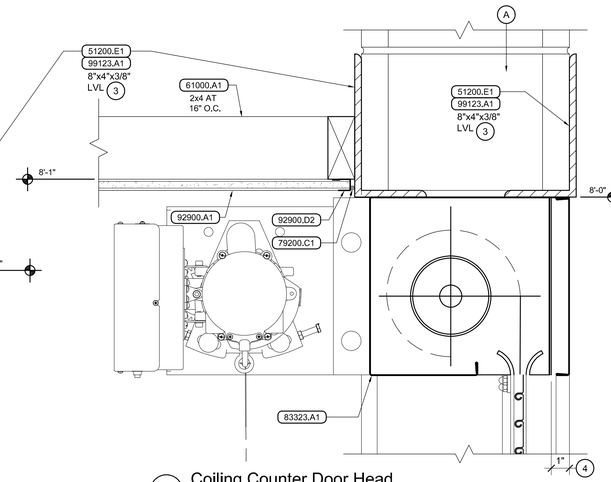
2 Door Head

Scale: 3" = 1'-0"



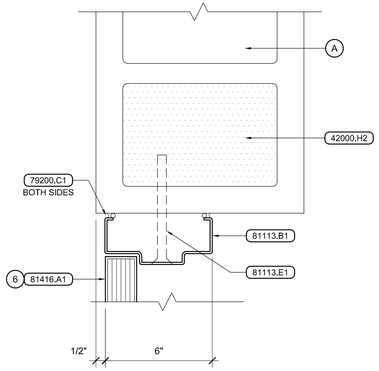
3 Masonry Wall Opening

Scale: 3" = 1'-0"



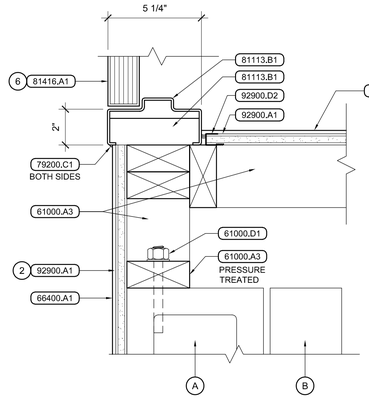
4 Coiling Counter Door Head

Scale: 3" = 1'-0"



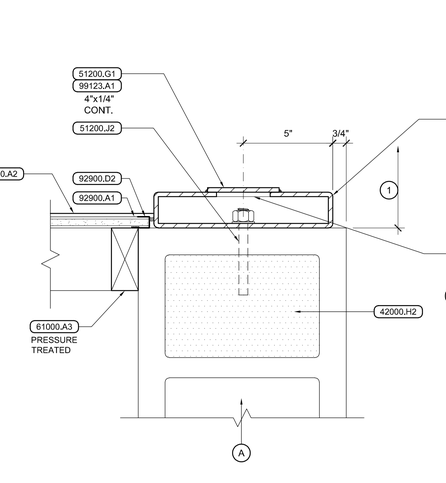
5 Door Jamb

Scale: 3" = 1'-0"



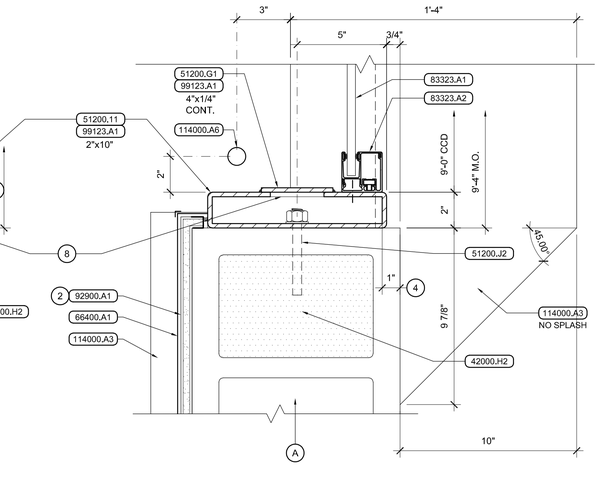
6 Door Jamb

Scale: 3" = 1'-0"



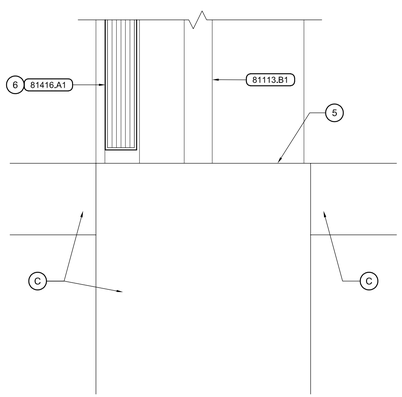
7 Masonry Wall Opening

Scale: 3" = 1'-0"



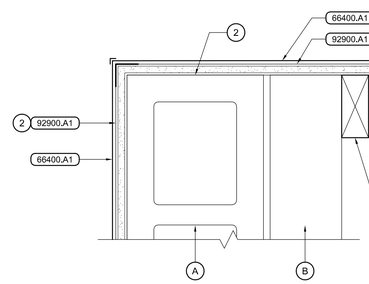
8 Coiling Counter Door Jamb

Scale: 3" = 1'-0"



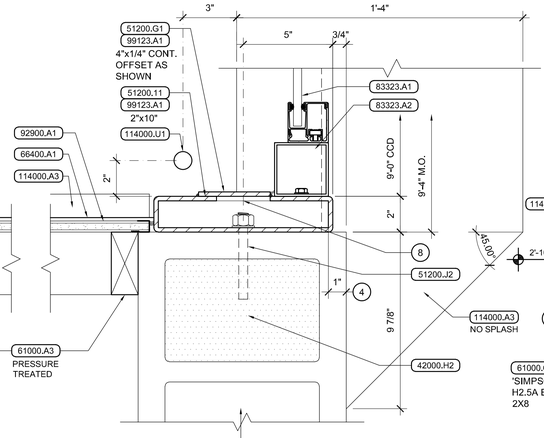
9 Door Threshold

Scale: 3" = 1'-0"



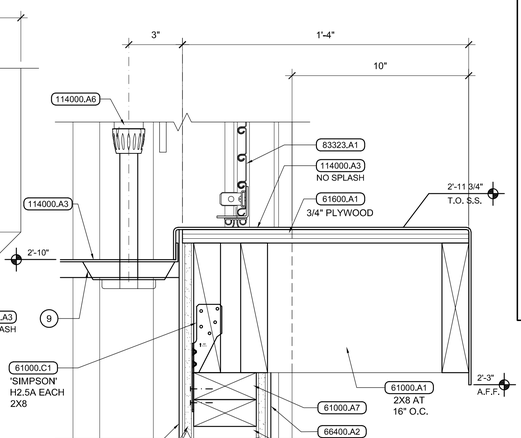
10 Wall Corner

Scale: 3" = 1'-0"



11 Coiling Counter Door Jamb

Scale: 3" = 1'-0"



12 Coiling Counter Door Sill

Scale: 3" = 1'-0"

General Notes

1. FIELD VERIFY EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING WORK.

Reference Notes

- (A) EXISTING CONCRETE MASONRY WALL.
- (B) EXISTING BRICK VENEER.
- (C) EXISTING FOUNDATION WALL AND SLAB ON GRADE.

- (1) MASONRY OPENING PER FLOOR PLAN.
- (2) MASTIC GYPSUM BOARD TO MASONRY.
- (3) EXTEND ANGLES 8" BEYOND EACH SIDE OF CMU OPENING.
- (4) DIMENSION TO OUTSIDE FACE OF TRACK.
- (5) GRIND TOP OF EXISTING FOUNDATION WALL AS REQUIRED TO FLUSH OUT WITH EXISTING CONCRETE FLOOR SLAB.
- (6) SEE SHEET A-4.2 FOR DOOR TYPE.
- (7) SEE STRUCTURAL FOR HEADER TYPE / SIZE .
- (8) 3" DIA. OPENINGS. SPACING PER STRUCTURAL.
- (9) CUSTOM STAINLESS STEEL SNEEZE GUARD MOUNTING PLATES REQUIRED FOR ATTACHMENT OF SNEEZE GUARDS.

Keyed Notes

DIVISION 4 - MASONRY

42000.H2	SOLID GROUT

DIVISION 5 - METALS

51200.E1	STEEL ANGLE
51200.G1	STEEL PLATE
51200.I1	STEEL TUBE
51200.J2	ANCHOR BOLT(S)

DIVISION 6 - WOOD, PLASTICS, & COMPOSITES

61000.A1	DIMENSION LUMBER
61000.A3	WOOD STUD(S) 2x4 AT 16" O.C. U.N.O.
61000.A7	DBL. 2x WOOD TOP PLATE TO MATCH STUD WIDTH, U.N.O.
61000.C1	FRAMING HARDWARE
61000.D1	FASTENER(S)
61600.A1	SHEATHING, MISC. (TYPE AND THICKNESS INDICATED)
66400.A1	FIBERGLASS REINFORCED PLASTIC PANELS
66400.A2	FIBERGLASS REINFORCED PLASTIC PANELS (DECORATIVE)

DIVISION 7 - THERMAL & MOISTURE PROTECTION

79200.C1	LATEX JOINT SEALANT

DIVISION 8 - OPENINGS

81113.B1	HOLLOW METAL DOOR FRAME
81113.E1	FRAME ANCHOR(S) FOR MASONRY WALLS
81113.E3	FRAME ANCHOR(S) FOR WOOD STUD WALLS
81416.A1	FLUSH WOOD DOOR
83323.A1	OVERHEAD COILING COUNTER DOOR
83323.A2	OVERHEAD COILING COUNTER DOOR TRACK

DIVISION 9 - FINISHES

92900.A1	SINGLE LAYER GYPSUM BOARD, 5/8" TYPE "X" U.N.O.
92900.D2	METAL TRIM, LC
99123.A1	PAINT-INTERIOR

DIVISION 11 - EQUIPMENT

114000.A3	14 GA. STAINLESS STEEL COUNTERTOP W/ SPLASH
114000.A6	SNEEZE GUARD

LKV ARCHITECTS
2400 E RIVERWALK DRIVE
BOISE, IDAHO 83706
WWW.LKVARCHITECTS.COM
208.336.3443

PRELIMINARY

NOT FOR CONSTRUCTION

Jefferson Elementary School Addition and Remodel

600 N. Fillmore Street, Jerome, Idaho

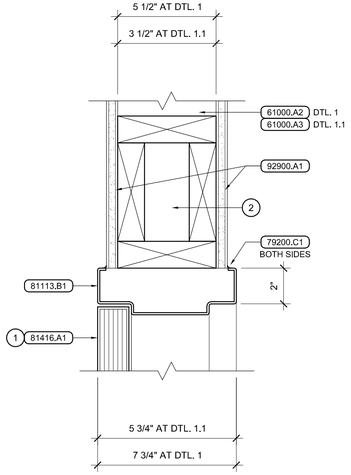
DATE: February 10, 2023
LKV PROJECT #: •
REVISIONS:

DRAWN BY: MS
CHECKED BY: WT

Conceptual Design

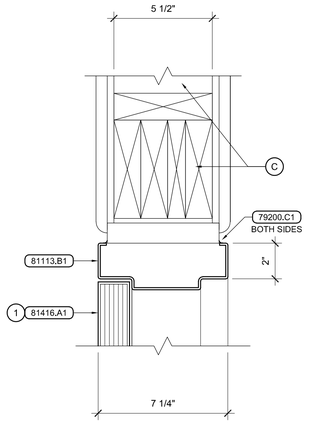
DRAWING NO.

A-8.4



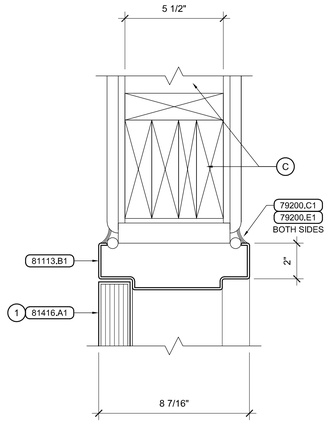
1 1.1 Door Head

Scale: 3" = 1'-0"



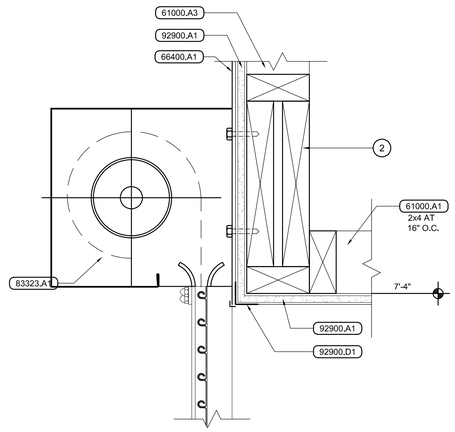
2 Door Head

Scale: 3" = 1'-0"



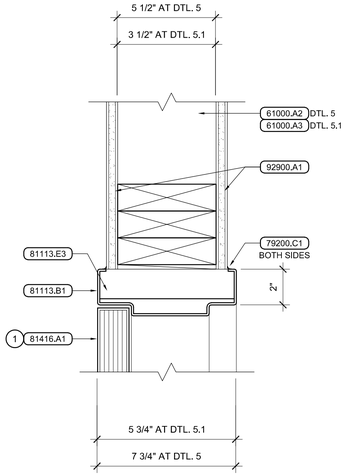
3 Door Head

Scale: 3" = 1'-0"



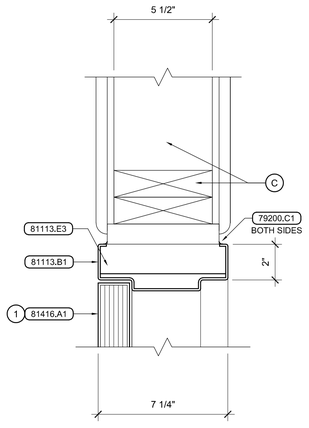
4 Coiling Counter Door Head

Scale: 3" = 1'-0"



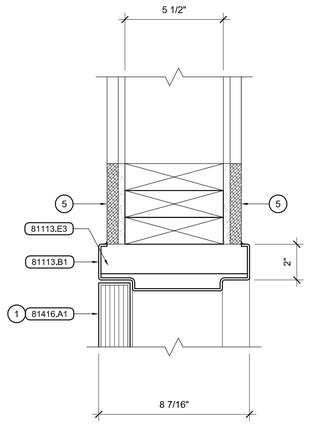
5 5.1 Door Jamb

Scale: 3" = 1'-0"



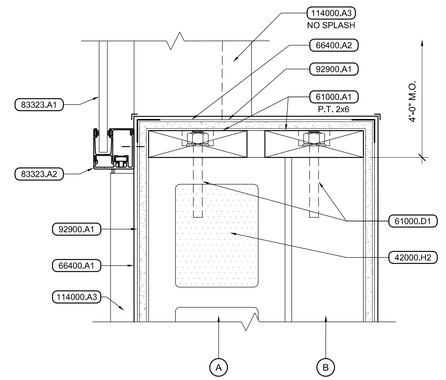
6 Door Jamb

Scale: 3" = 1'-0"



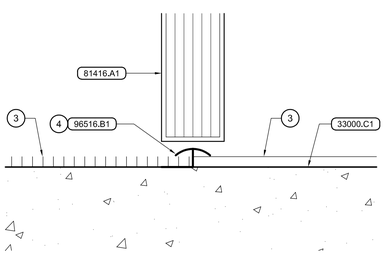
7 Door Jamb

Scale: 3" = 1'-0"



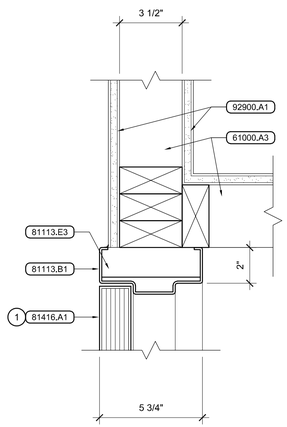
8 Coiling Counter Door Jamb

Scale: 3" = 1'-0"



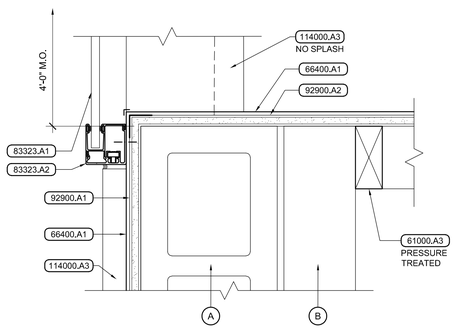
9 Door Threshold

Scale: 6" = 1'-0"



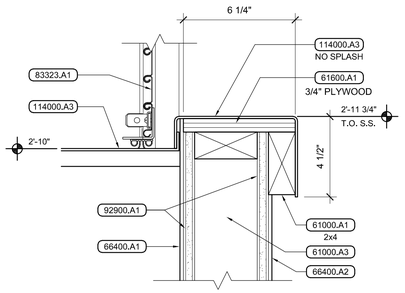
10 Door Jamb

Scale: 3" = 1'-0"



11 Coiling Counter Door Jamb

Scale: 3" = 1'-0"



12 Coiling Counter Door Sill

Scale: 3" = 1'-0"

General Notes

1. FIELD VERIFY EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING WORK.

Reference Notes

- (A) EXISTING CONCRETE MASONRY UNIT WALL.
- (B) EXISTING BRICK VENEER.
- (C) EXISTING WOOD STUD WALL / HEADER.

- (1) SEE SHEET A-4.2 FOR DOOR TYPE.
- (2) SEE STRUCTURAL FOR HEADER TYPE / SIZE .
- (3) SEE FINISH SCHEDULE SHEET A-4.1, FOR FLOOR TYPES.
- (4) A.D.A. COMPLIANT.
- (5) PLASTER / GYPSUM BOARD TO MATCH EXISTING.

Keyed Notes

DIVISION 3 - CONCRETE

33000.C1 CONCRETE FLOOR SLAB ON GRADE, 4" U.N.O.

DIVISION 4 - MASONRY

42000.H2 SOLID GROUT

DIVISION 6 - WOOD, PLASTICS, & COMPOSITES

61000.A1 DIMENSION LUMBER
61000.A3 WOOD STUD(S) 2x4 AT 16" O.C. U.N.O.
61000.D1 FASTENER(S)

61600.A1 SHEATHING, MISC. (TYPE AND THICKNESS INDICATED)

66400.A1 FIBERGLASS REINFORCED PLASTIC PANELS
66400.A2 FIBERGLASS REINFORCED PLASTIC PANELS (DECORATIVE)

DIVISION 7 - THERMAL & MOISTURE PROTECTION

79200.C1 LATEX JOINT SEALANT

DIVISION 8 - OPENINGS

81113.B1 HOLLOW METAL DOOR FRAME
81113.E3 FRAME ANCHOR(S) FOR WOOD STUD WALLS

81416.A1 FLUSH WOOD DOOR

83323.A1 OVERHEAD COILING COUNTER DOOR
83323.A2 OVERHEAD COILING COUNTER DOOR TRACK

DIVISION 9 - FINISHES

92900.A1 SINGLE LAYER GYPSUM BOARD, 5/8" TYPE "X" U.N.O.
92900.D1 METAL CORNER BEAD

96513.D1 FLOORING TRANSITION STRIP.

DIVISION 11 - EQUIPMENT

114000.A3 14 GA. STAINLESS STEEL COUNTERTOP W/ SPLASH

LKV ARCHITECTS
2400 E RIVERWALK DRIVE
BOISE, IDAHO 83706
WWW.LKVARCHITECTS.COM
208.336.3443

PRELIMINARY

NOT FOR CONSTRUCTION

Jefferson Elementary School
Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

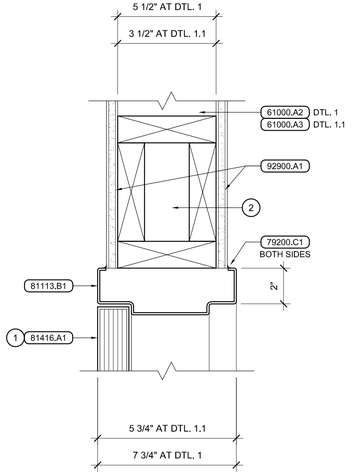
DATE: February 10, 2023
LKV PROJECT #: -
REVISIONS:

DRAWN BY: MS
CHECKED BY: WT

Conceptual Design

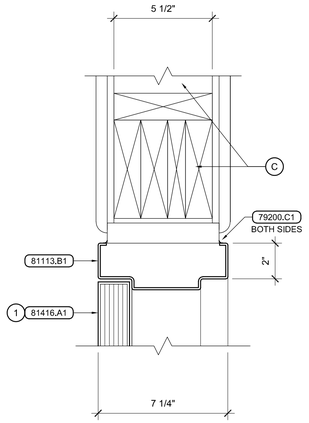
DRAWING NO.

A-8.5



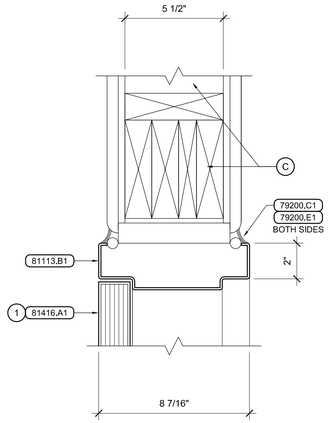
1 1.1 Door Head

Scale: 3" = 1'-0"



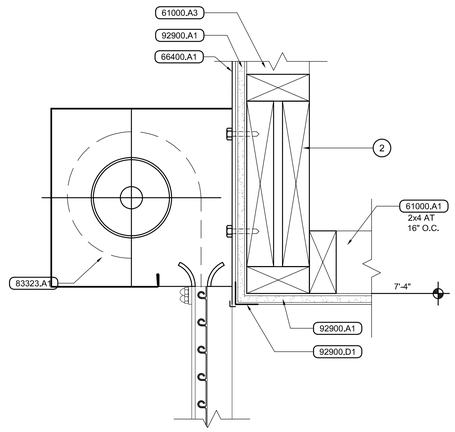
2 Door Head

Scale: 3" = 1'-0"



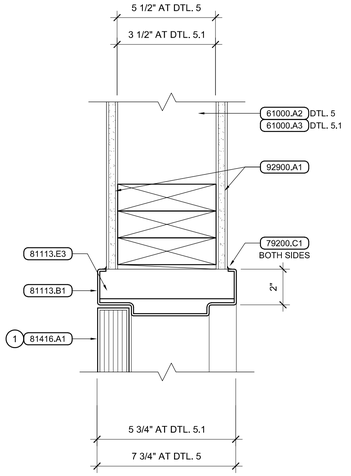
3 Door Head

Scale: 3" = 1'-0"



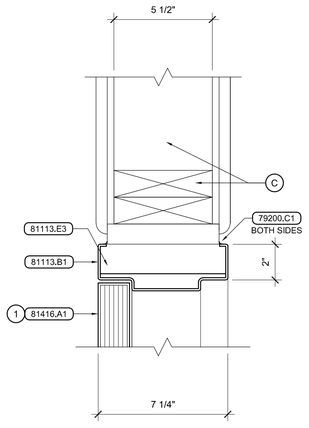
4 Coiling Counter Door Head

Scale: 3" = 1'-0"



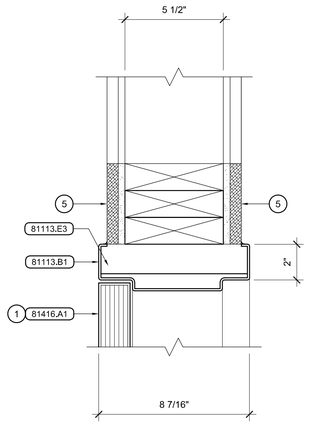
5 5.1 Door Jamb

Scale: 3" = 1'-0"



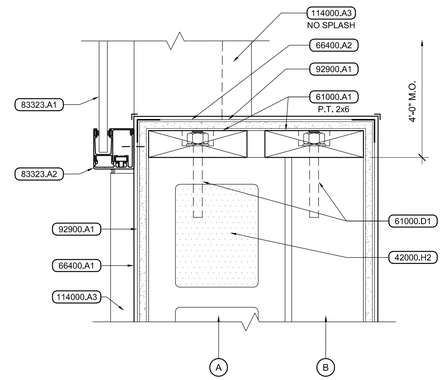
6 Door Jamb

Scale: 3" = 1'-0"



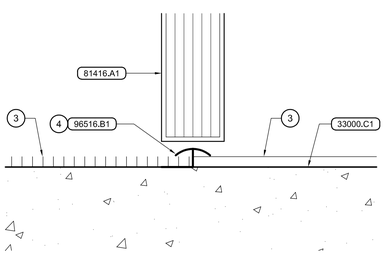
7 Door Jamb

Scale: 3" = 1'-0"



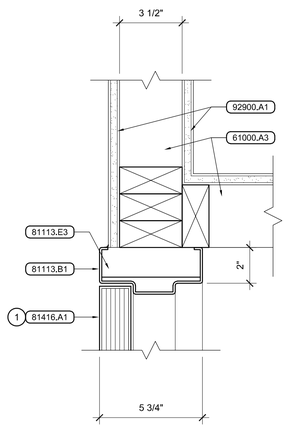
8 Coiling Counter Door Jamb

Scale: 3" = 1'-0"



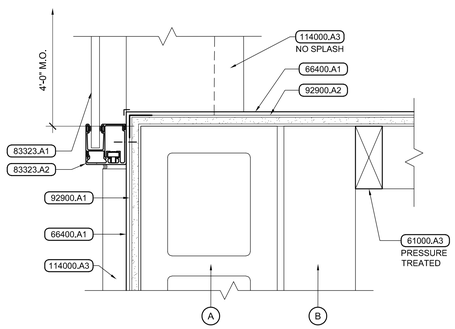
9 Door Threshold

Scale: 6" = 1'-0"



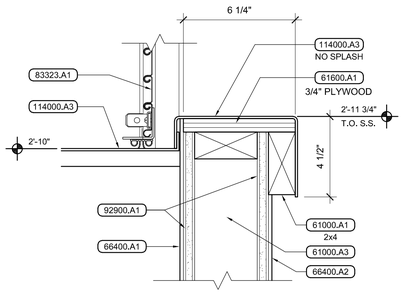
10 Door Jamb

Scale: 3" = 1'-0"



11 Coiling Counter Door Jamb

Scale: 3" = 1'-0"



12 Coiling Counter Door Sill

Scale: 3" = 1'-0"

General Notes

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Reference Notes

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- (1) SEE SHEET A-4.2 FOR DOOR TYPE.
- (2) SEE STRUCTURAL FOR HEADER TYPE / SIZE .
- (3) SEE FINISH SCHEDULE SHEET A-4.1, FOR FLOOR TYPES.
- (4) A.D.A. COMPLIANT.
- (5) PLASTER / GYPSUM BOARD TO MATCH EXISTING.

Keyed Notes

DIVISION 3 - CONCRETE

33000.C1 CONCRETE FLOOR SLAB ON GRADE, 4" U.N.O.

DIVISION 4 - MASONRY

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DIVISION 6 - WOOD, PLASTICS, & COMPOSITES

61000.A1 DIMENSION LUMBER
61000.A3 WOOD STUD(S) 2x4 AT 16" O.C. U.N.O.
61000.D1 FASTENER(S)

61600.A1 SHEATHING, MISC. (TYPE AND THICKNESS INDICATED)

66400.A1 FIBERGLASS REINFORCED PLASTIC PANELS
66400.A2 FIBERGLASS REINFORCED PLASTIC PANELS (DECORATIVE)

DIVISION 7 - THERMAL & MOISTURE PROTECTION

79200.C1 LATEX JOINT SEALANT

DIVISION 8 - OPENINGS

81113.B1 HOLLOW METAL DOOR FRAME
81113.E3 FRAME ANCHOR(S) FOR WOOD STUD WALLS

81416.A1 FLUSH WOOD DOOR

83323.A1 OVERHEAD COILING COUNTER DOOR
83323.A2 OVERHEAD COILING COUNTER DOOR TRACK

DIVISION 9 - FINISHES

92900.A1 SINGLE LAYER GYPSUM BOARD, 5/8" TYPE "X" U.N.O.
92900.D1 METAL CORNER BEAD

96513.D1 FLOORING TRANSITION STRIP.

DIVISION 11 - EQUIPMENT

114000.A3 14 GA. STAINLESS STEEL COUNTERTOP W/ SPLASH

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600 N. Fillmore Street, Jerome, Idaho

DATE: February 10, 2023
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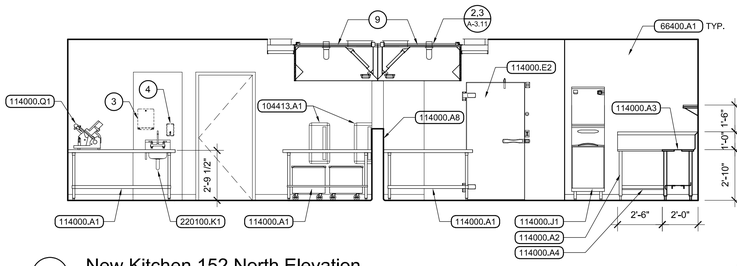
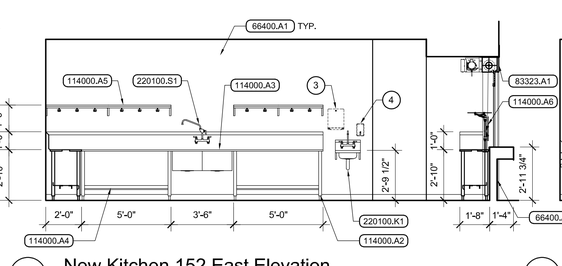
A-8.5



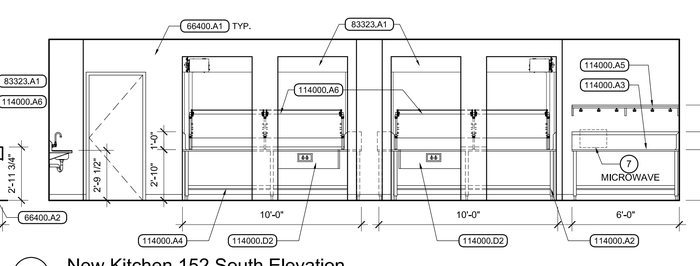
1 New Kitchen 152 North Elevation

Scale: 1/4" = 1'-0"



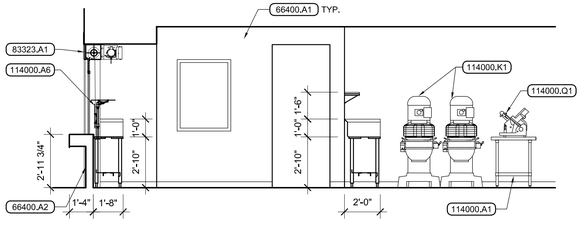
2 New Kitchen 152 East Elevation

Scale: 1/4" = 1'-0"



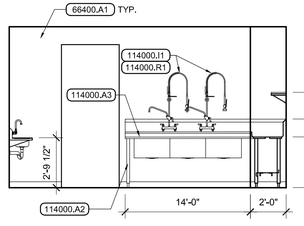
3 New Kitchen 152 South Elevation

Scale: 1/4" = 1'-0"



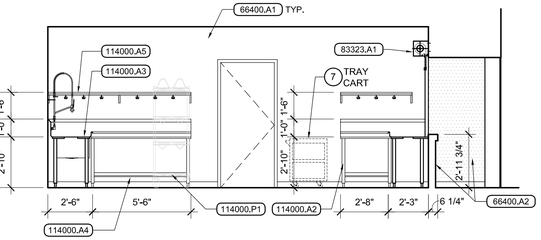
4 New Kitchen 152 West Elevation

Scale: 1/4" = 1'-0"



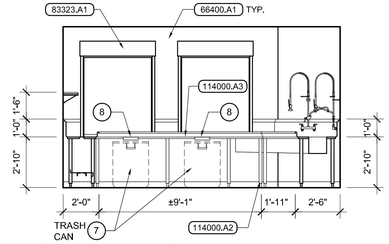
5 New Dish Room 155 North Elevation

Scale: 1/4" = 1'-0"



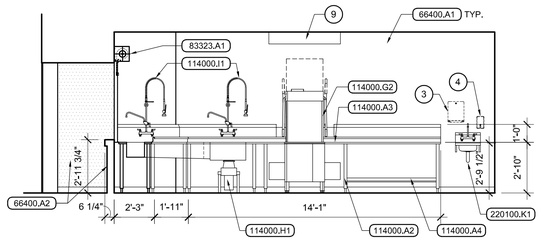
6 New Dish Room 155 East Elevation

Scale: 1/4" = 1'-0"



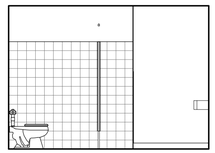
7 New Dish Room 155 South Elevation

Scale: 1/4" = 1'-0"

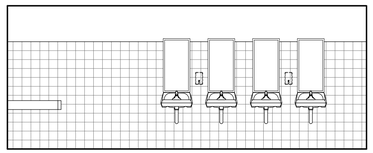


8 New Dish Room 155 West Elevation

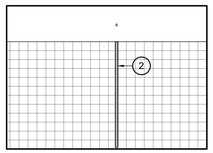
Scale: 1/4" = 1'-0"



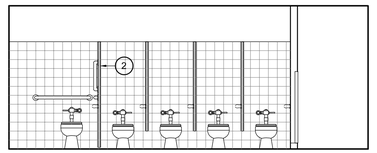
View A



View B



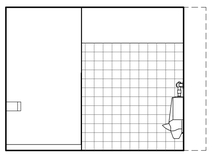
View C



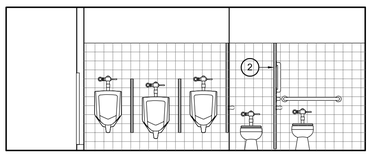
View D

9 New Girls 122

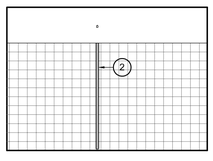
Scale: 1/4" = 1'-0"



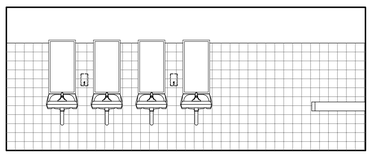
View A



View B



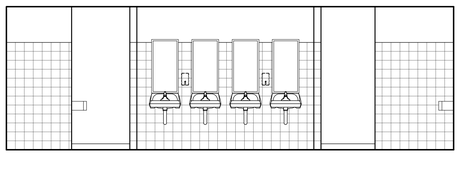
View C



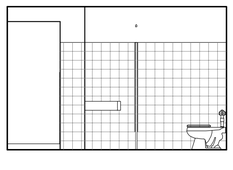
View D

10 New Boys 123

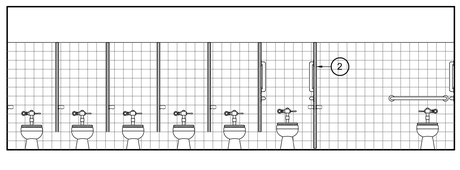
Scale: 1/4" = 1'-0"



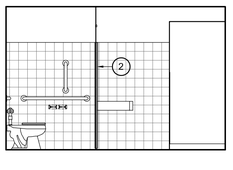
View A



View B



View C



View D

11 Girls 139

Scale: 1/4" = 1'-0"

General Notes

1. SEE ROOM FINISH SCHEDULE, SHEET A-4.1, FOR FINISHES NOT SHOWN OR NOTED.

Reference Notes

1. VERIFY MOUNTING HEIGHTS WITH ARCHITECT/OWNER.
2. PRIVACY PARTITION AND DOOR.
3. PAPER TOWEL DISPENSER FURNISHED BY OWNER. INSTALLED BY CONTRACTOR.
4. SOAP DISPENSER FURNISHED BY OWNER. INSTALLED BY CONTRACTOR.
5. TOILET PAPER DISPENSER FURNISHED BY OWNER. INSTALLED BY CONTRACTOR.
6. DIMENSION TO BOTTOM OF REFLECTIVE GLASS.
7. OWNER FURNISHED AND INSTALLED FURNITURE / EQUIPMENT. N.I.C.
8. 10" DIA. WASTE HOLE IN COUNTER WITH 1" STAINLESS STEEL COLLAR.
9. HOOD. SEE MECHANICAL.

Keyed Notes

DIVISION 6 - WOOD, PLASTICS, & COMPOSITES

66400.A1	FIBERGLASS REINFORCED PLASTIC PANELS
66400.A2	FIBERGLASS REINFORCED PLASTIC PANELS (DECORATIVE)

DIVISION 8 - OPENINGS

83323.A1	OVERHEAD COILING COUNTER DOOR

DIVISION 10 - SPECIALTIES

104413.A1	FIRE EXTINGUISHER CABINET, SEMI-RECESSED

DIVISION 11 - EQUIPMENT

114000.A1	14 GA. STAINLESS STEEL TABLE
114000.A2	1 5/8" DIA. 16 GA. GALVANIZED TUBULAR LEGS
114000.A3	14 GA. STAINLESS STEEL COUNTERTOP W/ SPLASH
114000.A4	14 GA. STAINLESS STEEL UNDERSHELF
114000.A5	14 GA. STAINLESS STEEL WALL SHELF
114000.A6	STAINLESS STEEL SNEEZE GUARD
114000.A8	16 GA. STAINLESS STEEL CLADDING
114000.A9	STAINLESS STEEL DRAWER(S)
114000.D2	DOUBLE DROP-IN UNIT
114000.E2	REFRIGERATOR (WALK-IN)
114000.G2	DISHWASHER
114000.H1	DISPOSER
114000.I1	PRE-RINSE UNIT
114000.J1	ICE MAKER / DISPENSER
114000.K1	MIXER
114000.P1	MOBILE DRY RACK
114000.Q1	SLICER
114000.R1	TRIPLE SINK MIXING FAUCET
114000.S1	DOUBLE SINK MIXING FAUCET

DIVISION 22 - PLUMBING

220100.K1	LAVATORY

Paint Colors

P-1	- PAINT COLOR 1	PAINT COLORS P-1, P-2, AND P-3 MAYBE DIFFERENT IN GYM AND CAFETERIA.
P-2	- PAINT COLOR 2	
P-3	- PAINT COLOR 3	

Mounting Heights

MIRRORS	+ 40" MAX. A.F.F. TO BOTTOM OF REFLECTIVE SURFACE	
GRAB BARS	+ 34 1/2" A.F.F. TO CENTER	
TOILET PAPER DISPENSER	+ 30" A.F.F. TO TOP OF DISPENSER	
PAPER TOWEL DISPENSER	+ 48" A.F.F. MAX TO DISPENSER OPENING	
SOAP DISPENSER	+ 45" A.F.F. TO TOP OF DISPENSER	
MARKER BOARDS	+ 6'-8" A.F.F. TO TOP	1
TACK BOARDS	+ 6'-8" A.F.F. TO TOP	1
INTERIOR SIGNS	+ 5'-0" A.F.F. TO TOP, 3" FROM DOOR FRAME, LATCH SIDE OF DOOR.	
FIRE EXTINGUISHER CABINETS :	4'-4" A.F.F. TO TOP. VERIFY WITH A.H.J.	

LKV ARCHITECTS
2400 E RIVERWALK DRIVE
BOISE, IDAHO 83706
WWW.LKVARCHITECTS.COM
208.336.3443

PRELIMINARY

NOT FOR CONSTRUCTION

Jefferson Elementary School Addition and Remodel

600 N. Fillmore Street, Jerome, Idaho

DATE: February 10, 2023
LKV PROJECT #: -
REVISIONS:

DRAWN BY: MS
CHECKED BY: WT

Conceptual Design

DRAWING NO.

A-9.2

MECHANICAL ABBREVIATIONS

A/C or AC	AIR CONDITIONING	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	KWH	KILOWATT HOUR
AHU	AIR HANDLING UNIT		
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS	LAT	LEAVING AIR TEMPERATURE
		LAV	LAVATORY
BTU	BRITISH THERMAL UNITS	LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN
BTUH	BTUS PER HOUR	LWT	LEAVING WATER TEMPERATURE
CA	COMBUSTION AIR	MAX	MAXIMUM
CC	COOLING COIL	MCA	MINIMUM CIRCUIT AMPS
CFM	AIR FLOW RATE (CUBIC FEET PER MINUTE)	MOCP	MAXIMUM OVERCURRENT PROTECTION
CHWR	CHILLED WATER RETURN	MIN	MINIMUM
CHWS	CHILLED WATER SUPPLY		
CLG	CEILING	NC	NOISE CRITERIA
CW	COLD WATER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
		NTS	NOT TO SCALE
DEG or °	DEGREE		
DIA or Ø	DIAMETER	OSA	OUTSIDE AIR
DB	DRY BULB		
		PD	PRESSURE DROP
EA	EXHAUST AIR	PH or Ø	PHASE
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
EER	ENERGY EFFICIENCY RATIO		
ESP	EXTERNAL STATIC PRESSURE	RA	RETURN AIR
EWT	ENTERING WATER TEMPERATURE	RPM	REVOLUTIONS PER MINUTE
		RTU	ROOFTOP UNIT
FCO	FLOOR CLEANOUT		
FD	FIRE DAMPER	SA	SUPPLY AIR
FLA	FULL LOAD AMPS	SEER	SEASONAL ENERGY EFFICIENCY RATIO
FLR	FLOOR	SFD	COMBINATION SMOKE/FIRE DAMPER
FPM	FEET PER MINUTE	SP	STATIC PRESSURE
FT	FEET	SYM	SYMBOL
GA	GAUGE	T & P	TEMPERATURE AND PRESSURE
GCO	GRADE CLEANOUT	TEMP	TEMPERATURE
GPM	WATER FLOW RATE (GALLONS PER MINUTE)	TYP	TYPICAL
HC	HEATING COIL	UMC	UNIFORM MECHANICAL CODE
HP	HORSE POWER	UPC	UNIFORM PLUMBING CODE
HVAC	HEATING, VENTILATING, AIR CONDITIONING	URL	URINAL
HW	HOT WATER		
HWR	HOT WATER RETURN	VTR	VENT THROUGH ROOF
HWS	HOT WATER SUPPLY	V	VOLTS
IBC	INTERNATIONAL BUILDING CODE	W/	WITH
IEEC	INTERNATIONAL ENERGY CONSERVATION CODE	WB	WET-BULB
IFC	INTERNATIONAL FIRE CODE	WC	WATER CLOSET
IFGC	INTERNATIONAL FUEL GAS CODE	WCO	WALL CLEANOUT
IMC	INTERNATIONAL MECHANICAL CODE	WH	WATER HEATER
IPC	INTERNATIONAL PLUMBING CODE		

NOTE: THIS IS A STANDARD LIST OF COMMONLY USED MECHANICAL ABBREVIATIONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE MAY NOT BE USED IN THIS DRAWING PACKAGE.

MECHANICAL GENERAL NOTES

1. ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE (IMC) LATEST EDITION, AND ALL LOCAL & STATE CODES.
2. ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADOPTED PLUMBING CODE, AND ALL LOCAL & STATE CODES.
3. ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
4. MECHANICAL CONTRACTORS SHALL RECEIVE PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER BEFORE MAKING CUTS THROUGH ANY STRUCTURAL MEMBER.
5. MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION WITH CONSTRUCTION SUPERVISOR AND WITH ALL OTHER TRADES TO AVOID CONFLICTS.
6. THE MECHANICAL CONTRACTORS SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWINGS BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS.
7. SEE MECHANICAL SCHEDULE SHEET FOR SCHEDULED CAPACITIES OF ALL MECHANICAL EQUIPMENT AND MATERIALS SPECIFIED.
8. DOMESTIC WATER SERVICE IS PROVIDED WITH A DOUBLE CHECK BACKFLOW PREVENTER.
9. ALL MECHANICAL EQUIPMENT TO BE PROPOSED MUST BE ON THE APPROVED LIST PRIOR TO SUBMITTALS. ALL APPROVED MANUFACTURERS MUST BE CAPABLE OF MEETING THE REQUIREMENTS OF THE SPECIFIED EQUIPMENT.
10. RUNOUT AND HOOKUP SIZES TO INDIVIDUAL PLUMBING FIXTURE CAN BE FOUND ON THE PLUMBING FIXTURE SCHEDULE.
11. PROVIDE REMOTE CEILING ACCESS BALANCE DAMPERS WITH CONCEALED CHROME PLATE COVERS FOR BALANCE DAMPERS LOCATED ABOVE HARD CEILINGS.
12. PAINT ALL VTR'S, FLUES, EXHAUST CAPS, AND OTHER MECHANICAL ITEMS ON THE ROOF TO MATCH THE ROOF COLOR.
13. INSULATED FLEXIBLE DUCTWORK MAY BE USED FOR RUNOUTS TO GRILLES AND DIFFUSERS, IN LENGTHS OF 6'-0" OR LESS.
14. MAINTAIN MINIMUM OF 10'-0" DISTANCE BETWEEN ALL FRESH AIR INTAKES AND EXHAUST OR GAS FLUE DISCHARGES.
15. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL BACKFLOW DEVICES TO BE INSPECTED BY A CERTIFIED BACKFLOW TECHNICIAN BEFORE THE USE OF THE BUILDING POTABLE WATER SYSTEM.
16. LOCATE ACCESS HATCHES SO AS TO PROVIDE OPTIMUM SERVICEABILITY TO EQUIPMENT AND/OR VALVING. SEE ARCHITECTURAL SPECIFICATION FOR TYPE AND COLOR. COORDINATE LOCATION WITH STRUCTURAL & LIGHTING.
17. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
18. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR VERIFICATION OF EXISTING JOB CONDITIONS PRIOR TO BID. NO ADDITIONAL COST SHALL BE AWARDED TO THE SUCCESSFUL CONTRACTOR (OR THEIR SUBCONTRACTORS) AFTER BIDS HAVE BEEN SUBMITTED AND CONTRACTS AWARDED FOR FAILURE TO VERIFY EXISTING FIELD CONDITIONS. DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION FOR ALTERNATIVE METHODS OF INSTALLATION PRIOR TO THE BIDDING OF THIS PROJECT.
19. UNLESS OTHERWISE NOTED ALL EXISTING MECHANICAL EQUIPMENT, PIPING, ETC, TO BE REMOVED SHALL BE DISPOSED OF BY THE CONTRACTOR UNDER THIS CONTRACT. THE OWNER SHALL RETAIN THE RIGHT TO KEEP ANY REMOVED ITEMS.
20. ALL DOMESTIC COLD AND HOT WATER LINES IN THE AREA OF WORK WHICH ARE NO LONGER IN USE DUE TO THIS PROJECT SHALL BE REMOVED BACK TO THE MAINS AND CAPPED.
21. HOLES IN EXISTING WALL OR FLOORS SHALL BE PATCHED TO MATCH EXISTING WHERE PIPING, DUCTWORK, ETC. WERE REMOVED OR ADDED DURING THIS PROJECT.
22. DAMAGE TO THE EXISTING FACILITY DURING THE CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.

MECHANICAL AND PLUMBING DRAWINGS LEGEND

	FLEXIBLE DUCTWORK		THREE WAY CONTROL VALVE
	DUCTWORK		TWO WAY CONTROL VALVE
	DUCTWORK BREAK		PRESSURE REDUCING VALVE
	DUCTWORK OR PIPING RISE		GATE VALVE
	CONCENTRIC SQUARE TO ROUND TRANSITION		REDUCER
M	MOTORIZED DAMPER		GLOBE VALVE
	MANUAL VOLUME DAMPER		BALL VALVE
AIRFLOW	SPIN-IN FITTING W/ AIR EXTRACTOR AND HAND DAMPER		BUTTERFLY VALVE
AIRFLOW	HIGH EFFICIENCY FITTING W/ HAND DAMPER		BALANCE VALVE
$	SWITCH		CHECK VALVE
T	THERMOSTAT	FCO	FLOOR CLEANOUT
H	HUMIDISTAT	WCO	WALL CLEANOUT
S	TEMPERATURE SENSOR	GCO	GRADE CLEANOUT
CO_2	CARBON DIOXIDE SENSOR		WATER HAMMER ARRESTOR
CO	CARBON MONOXIDE SENSOR		FLOOR DRAIN
NO_2	NITROGEN DIOXIDE SENSOR		FLOOR SINK
SD	DUCT SMOKE DETECTOR		GAS PRESSURE REGULATOR W/ GAS COCK
SFD	COMBINATION SMOKE/FIRE DAMPER		PRESSURE RELIEF VALVE
FD	FIRE DAMPER		VENT-THROUGH-ROOF
SD	SMOKE DAMPER		VENT
-- / #	EQUIPMENT CALLOUT		SOIL, WASTE, OR SANITARY SEWER
	TURNING VANES	AW	ACID WASTE LINE
	INTAKE OR EXHAUST	AV	ACID VENT LINE
	DIRECTION OF AIRFLOW	SD	STORM DRAIN
X-X CFM X"Ø	SUPPLY DIFFUSER	RD	ROOF DRAIN LINE
R-X X"Ø	RETURN GRILLE	OD	OVERFLOW DRAIN LINE
R-X CFM X"Ø	EXHAUST GRILLE	CD	CONDENSATE DRAIN LINE
G-X CFM X"Ø	FLOOR GRILLE	–	DOMESTIC COLD WATER (CW)
	CEILING EXHAUST FAN	– –	DOMESTIC HOT WATER (HW)
	TEMPERATURE GAUGE	– – –	DOMESTIC HOT WATER RETURN (HWR)
	PRESSURE GAUGE (LIQUID FILLED W/ ISOLATION VALVE)	TW	TEMPERED WATER (TW)
TS	TEMPERATURE SENSOR (DUCT OR PIPING)	MPG	MEDIUM PRESSURE NATURAL GAS
FS	FLOW SWITCH	G	LOW PRESSURE NATURAL GAS
	STAINLESS STEEL BRAIDED FLEX CONNECTION	F	FIRE SPRINKLER LINE
	ELASTOMETRIC FLEX CONNECTOR	GWS	GEOTHERMAL WATER SUPPLY
	SUCTION DIFFUSER	GWR	GEOTHERMAL WATER RETURN
	Y TYPE STRAINER (1 1/2" OR LARGER PROVIDED W/ BLOW DOWN VALVE)	CWS	CHILLED WATER SUPPLY
	FLOW DIRECTION	CWR	CHILLED WATER RETURN
	DEMOLITION / EQUIPMENT TO BE REMOVED	CS	CONDENSER WATER SUPPLY
	NEW TO EXISTING CONNECTION POINT	CR	CONDENSER WATER RETURN
(E)	EXISTING	HWS	HEATING WATER SUPPLY
(F)	FUTURE	HWR	HEATING WATER RETURN
(N)	NEW	L	LIQUID REFRIGERANT LINE
	REDUCED PRESSURE BACKFLOW PREVENTER	S	SUCTION REFRIGERANT LINE
	DOUBLE CHECK BACKFLOW PREVENTER		SLOPE PIPE IN DIRECTION OF ARROW
	UNION		PIPE ANCHOR
	AIR VENT		PIPE GUIDE
	TRIPLE DUTY VALVE		CAP

NOTE: THIS IS A LIST OF COMMONLY USED MECHANICAL AND PLUMBING SYMBOLS. SOME OF THE SYMBOLS SHOWN ABOVE MAY NOT BE USED IN THIS DRAWING PACKAGE.

ENERGY CODE COMPLIANCE

A. COMPLIANCE WITH THE LATEST ADOPTED EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE IS REQUIRED FOR THIS PROJECT. THESE NOTES COVER MANDATORY REQUIREMENTS OF THE CODE. ADDITIONAL REQUIREMENTS ARE NOTED ON THE DRAWINGS AND IN THE SPECIFICATIONS.

B. MINIMUM REQUIREMENTS FOR SUPPLY AND RETURN DUCTWORK INSULATION:

1. R-6: DUCTS LOCATED IN UNCONDITIONED SPACES (SPACE NEITHER HEATED NOR COOLED SUCH AS ABOVE CEILING SPACES, WALL SPACES, DUCT CHASES, SOFFITS, ATTICS, CRAWL SPACES, UNHEATED BASEMENTS, AND UNHEATED GARAGES).
2. R-12: DUCTS LOCATED OUTSIDE OF THE BUILDING'S INSULATION ENVELOPE (SUCH AS ABOVE THE ATTIC INSULATION).

TYPICAL INSULATION THICKNESS REQUIRED TO MEET THESE REQUIREMENTS:

1. DUCT WRAP:
   R-6 = 1-1/2"
   R-12 = 4"
2. DUCT LINER:
   R-6 = 1-1/2"
   R-12 = 3"

C. CONTRACTOR SHALL VERIFY WITH THE MANUFACTURER, THE R-VALUES OF THE ACTUAL INSULATION USED. R-VALUES SHALL BE INSTALLED VALUES.

D. WHERE DUCTS USED FOR COOLING ARE EXTERNALLY INSULATED, THE INSULATION SHALL BE COVERED WITH A VAPOR RETARDER HAVING A MAXIMUM PERMEANCE OF 0.05 PERM OR ALUMINUM FOIL HAVING A MINIMUM THICKNESS OF 2 MILS. INSULATION HAVING A PERMEANCE OF 0.05 PERMS OR LESS SHALL NOT BE REQUIRED TO BE COVERED. ALL JOINTS AND SEAMS SHALL BE SEALED TO MAINTAIN THE CONTINUITY OF THE VAPOR RETARDER.

E. ALL DUCT JOINTS, SEAMS, AND CONNECTIONS SHALL BE FASTENED AND SEALED WITH WELDS, GASKETS, ADHESIVES, MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, OR TAPES. TAPES AND MASTICS SHALL BE LISTED AND LABELED PER UL181A OR UL181B. DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS. DUCT CONNECTIONS TO FLANGES OR EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED.

F. MINIMUM REQUIREMENTS (THICKNESS) FOR PIPING INSULATION SHALL BE AS FOLLOWS:

FLUID	NOMINAL PIPE DIAMETER		
	1/2" TO < 1 1/2"	1 1/2" TO < 4"	4" AND ABOVE
1. HEATING WATER	1 1/2"	2"	2"
1. CHILLED WATER	1/2"	1"	1"
2. STEAM	2 1/2"	2 1/2"	3"
3. CONDENSATE RETURN	2 1/2"	2 1/2"	3"
4. REFRIGERANT	SEE SPECIFICATIONS		

THE ABOVE INSULATION IS BASED ON HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU-INCH/HOUR-FT2-°F.

G. DOMESTIC HOT WATER PIPING SYSTEMS SHALL BE INSULATED WITH 1" INSULATION HAVING A CONDUCTIVITY NOT EXCEEDING 0.27 BTU-INCH/HOUR-FT2-°F.

H. DOMESTIC WATER HEATERS WHICH ARE NOT PROVIDED WITH INTEGRAL HEAT TRAPS AND SERVE NONCIRCULATING SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON THE SUPPLY AND DISCHARGE PIPING AT THE WATER HEATER.

I. DOMESTIC HOT WATER SYSTEMS WITH RECIRCULATION PUMPS OR ELECTRIC HEAT TRACE SHALL BE CONTROLLED WITH 7-DAY TIME CLOCKS.

J. AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE O&M MANUAL SHALL CONTAIN THE FOLLOWING INFORMATION AS A MINIMUM:

1. EQUIPMENT CAPACITY (INPUT & OUTPUT).
2. EQUIPMENT OPERATING AND MAINTENANCE INSTRUCTIONS.
3. CONTROL SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCES.
4. CONTROL SYSTEM SETPOINTS SHALL BE SHOWN ON CONTROL DRAWINGS, AT CONTROL DEVICES, OR IN PROGRAMMING COMMENT ON DDC SYSTEMS.
5. A COMPLETE WRITTEN NARRATIVE ON HOW EACH MECHANICAL SYSTEM IS INTENDED TO OPERATE.

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Project No. 22-104

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2/10/23

Jefferson Elementary School
Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

DATE: JANUARY 9, 2023
LKV PROJECT #: -
REVISIONS:

DRAWN BY: JM/CD
CHECKED BY: BC

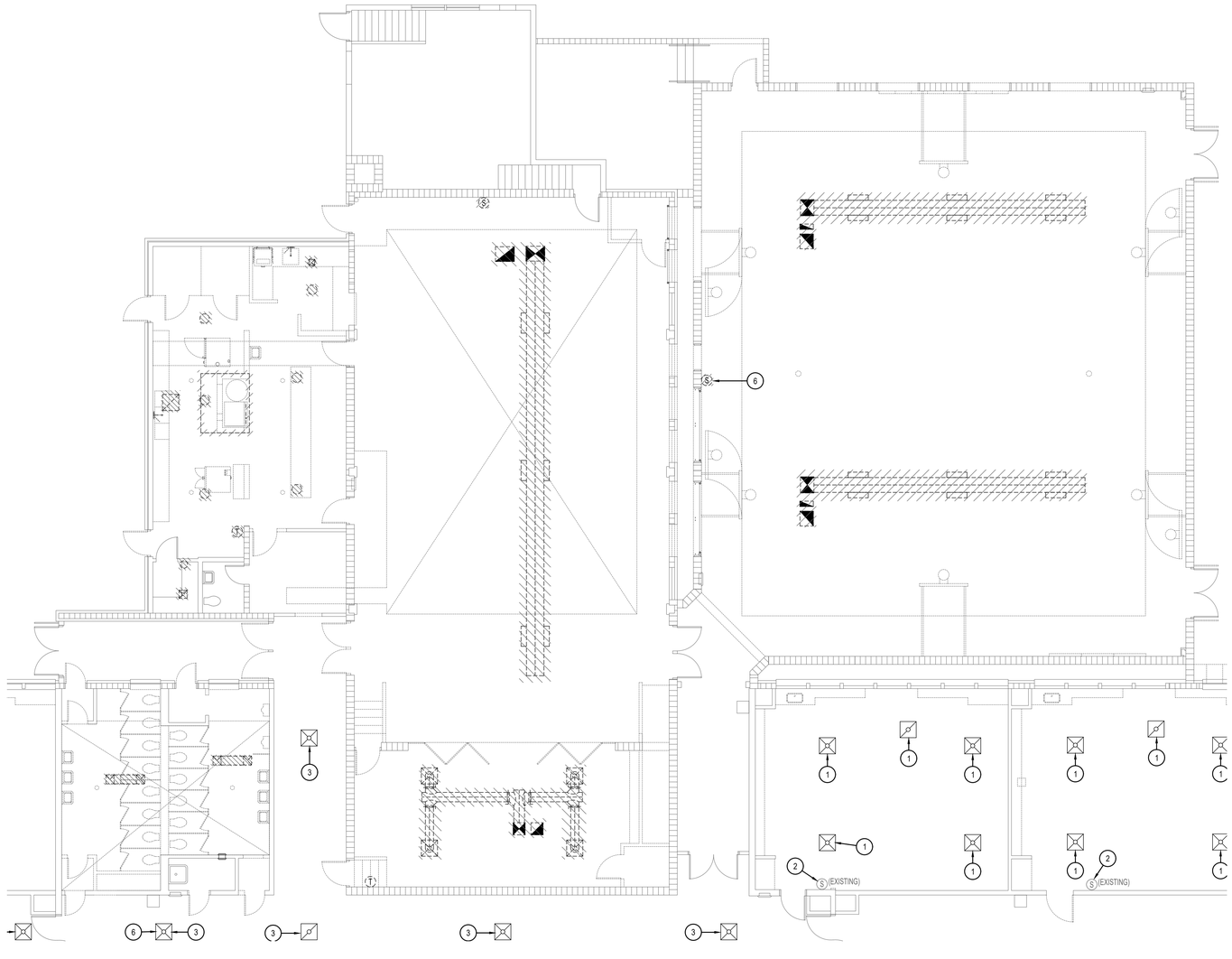
Design Development

DRAWING NO.
M-0.0

KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

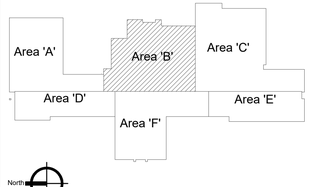
1. REMOVE, RETAIN AND PROTECT EXISTING GRILLE / DIFFUSER FOR NEW WORK. ASSOCIATED DUCTWORK SHALL REMAIN.
2. BID ALT#2: REMOVE EXISTING WALL SENSOR AND ASSOCIATED WIRE.
3. BID ALT#1: REMOVE, RETAIN AND PROTECT EXISTING GRILLE / DIFFUSER FOR NEW WORK. ASSOCIATED DUCTWORK SHALL REMAIN.
4. REMOVE EXISTING HVAC EQUIPMENT.
5. REMOVE EXISTING GRILLE / DIFFUSER AND ALL ASSOCIATED DUCTWORK.
6. REMOVE EXISTING WALL SENSOR AND ASSOCIATED WIRE.



N. 1 Mechanical Demolition Plan - Area 'B'

Scale: 1/8" = 1'-0"

Key Plan



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Project No. 22-104

PRELIMINARY
NOT FOR CONSTRUCTION
2/10/23

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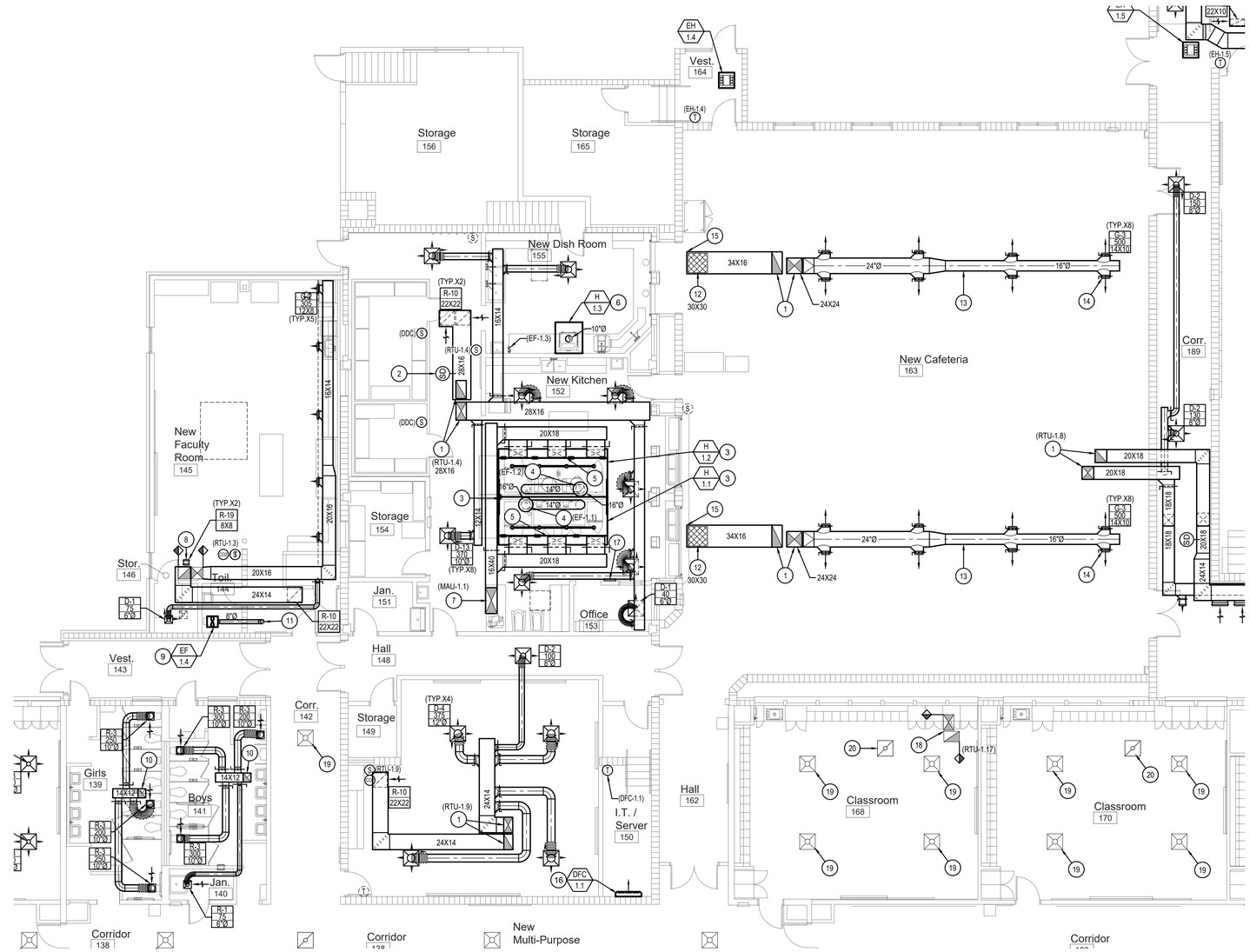
Design Development

DRAWING NO.
M-1.2

NOTE:

THE HOOD OVER THE COOKING EQUIPMENT IS A TYPE 2 BECAUSE THE KITCHEN WILL BE USED FOR REHEATING FOOD. HOWEVER THE EXHAUST DUCTWORK AND FANS SHALL BE FOR TYPE 1 USE. ALLOWING SCHOOL TO CHANGE THE HOOD TO TYPE 1 WITH FIRE SUPPRESSION IF THEY CHOOSE TO COOK AT THIS FACILITY AT A LATER DATE.



N

1 Mechanical New Work Plan - Area 'B'

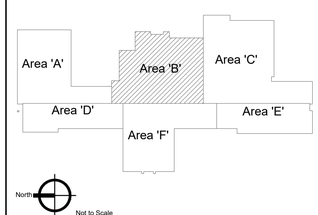
Scale: 1/8" = 1'-0"

KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. ROUTE RETURN AND SUPPLY DUCTS UP THROUGH ROOF AND TRANSITION TO UNIT AS REQUIRED. PROVIDE TURNING VANES IN ELBOWS AND A FLEXIBLE DUCT CONNECTION AT UNIT.
2. SMOKE DUCT DETECTOR IN RETURN DUCT SHALL SHUT DOWN UNIT UPON DETECTION OF SMOKE. SMOKE DETECTOR SHALL BE PROVIDED AND WIRED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR.
3. MOUNT TYPE II HOODS BACK TO BACK , MOUNT BOTTOM OF HOOD AT 6'-4" AFF.
4. PROVIDE AND CONNECT TYPE I FACTORY BUILT DOUBLE WALL GREASE DUCTWORK TO TYPE II HOOD. ROUTE DOUBLE WALL GREASE DUCT TO ROOF MOUNTED EXHAUST FAN. INSTALLATION SHALL BE DONE THE SAME AS FOR A TYPE I SYSTEM.
5. PROVIDE AND CONNECT MAKE UP AIR DUCTWORK TO HOOD PLENUM. 28X12 BRANCH DUCTS WITH DAMPER, EVENLY DIVIDE MAKE UP AIR TO EACH BRANCH DUCT.
6. MOUNT DISH HOOD ABOVE DISH MACHINE. PROVIDE AND ROUTE ALUMINUM DUCT UP THROUGH ROOF AND CONNECT TO EXHAUST FAN.
7. ROUTE SUPPLY DUCT UP THROUGH ROOF AND TRANSITION TO MAKE UP AIR UNIT AS REQUIRED. PROVIDE TURNING VANES IN ELBOWS AND A FLEXIBLE DUCT CONNECTION AT UNIT.
8. PROVIDE TRANSFER DUCT AND GRILLES, MOUNT BOTTOM OF GRILLES 6" AFF. SIZE DUCT SAME AS GRILLE.
9. CEILING CABINET EXHAUST FAN, PROVIDE VIBRATION ISOLATION AND FLEXIBLE DUCT CONNECTION.
10. ROUTE EXHAUST DUCT UP THROUGH ROOF TO ROOF MOUNTED EXHAUST FAN. TRANSITION TO UNIT AS REQUIRED, PROVIDE FLEXIBLE DUCT CONNECTION.
11. ROUTE EXHAUST DUCT UP THROUGH ROOF. SEE HVAC ROOF PLAN FOR CONTINUATION.
12. PROVIDE OPENING ON TOP SIDE OF DUCT, COVER WITH EXPANDED METAL SCREENING, MAINTAIN A MINIMUM DISTANCE OF 4" BETWEEN OPENING (TOP SIDE OF DUCT) AND STRUCTURE. SIZE OF OPENING AS INDICATED.
13. SUSPEND ROUND SPIRAL DUCTWORK, SEE DETAIL.
14. PROVIDE TAKE OFF WITH DAMPER AND GRILLE, ANGLE TAKE OFF 30 DEGREES DOWNWARD FROM HORIZONTAL, TYPICAL. SEE DETAIL.
15. INTERNALLY LINE RETURN DUCTWORK THE ENTIRE LENGTH FROM UNIT TO END OF DUCTWORK. NO EXTERNAL INSULATION.
16. MOUNT DUCTLESS SPLIT FAN COIL HIGH ON WALL. MAINTAIN MANUFACTURERS REQUIRED CLEARANCES. ROUTE REFRIGERATION LINES HIDDEN OUT OF SITE IN WALLS AND CEILINGS TO ROOF MOUNTED CORRESPONDING CONDENSING UNIT.
17. MOUNT HOOD CONTROL PANEL ON WALL AT THIS LOCATION.
18. BID ALT#2: CONNECT EXISTING DUCT DROPS TO NEW UNIT. MODIFICATION SHALL BE REQUIRED. WHERE APPLIES REUSE EXISTING SMOKE DUCT DETECTOR.
19. PROVIDE NEW SUPPLY DIFFUSER IN NEW CEILING. CONNECT TO EXISTING SUPPLY DUCTWORK. BALANCE AIR FLOW AS INDICATED.
20. PROVIDE NEW RETURN GRILLE IN NEW CEILING. CONNECT TO EXISTING RETURN DUCTWORK.

Key Plan



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DRAWN BY: JM/CD
CHECKED BY: BC

Design Development

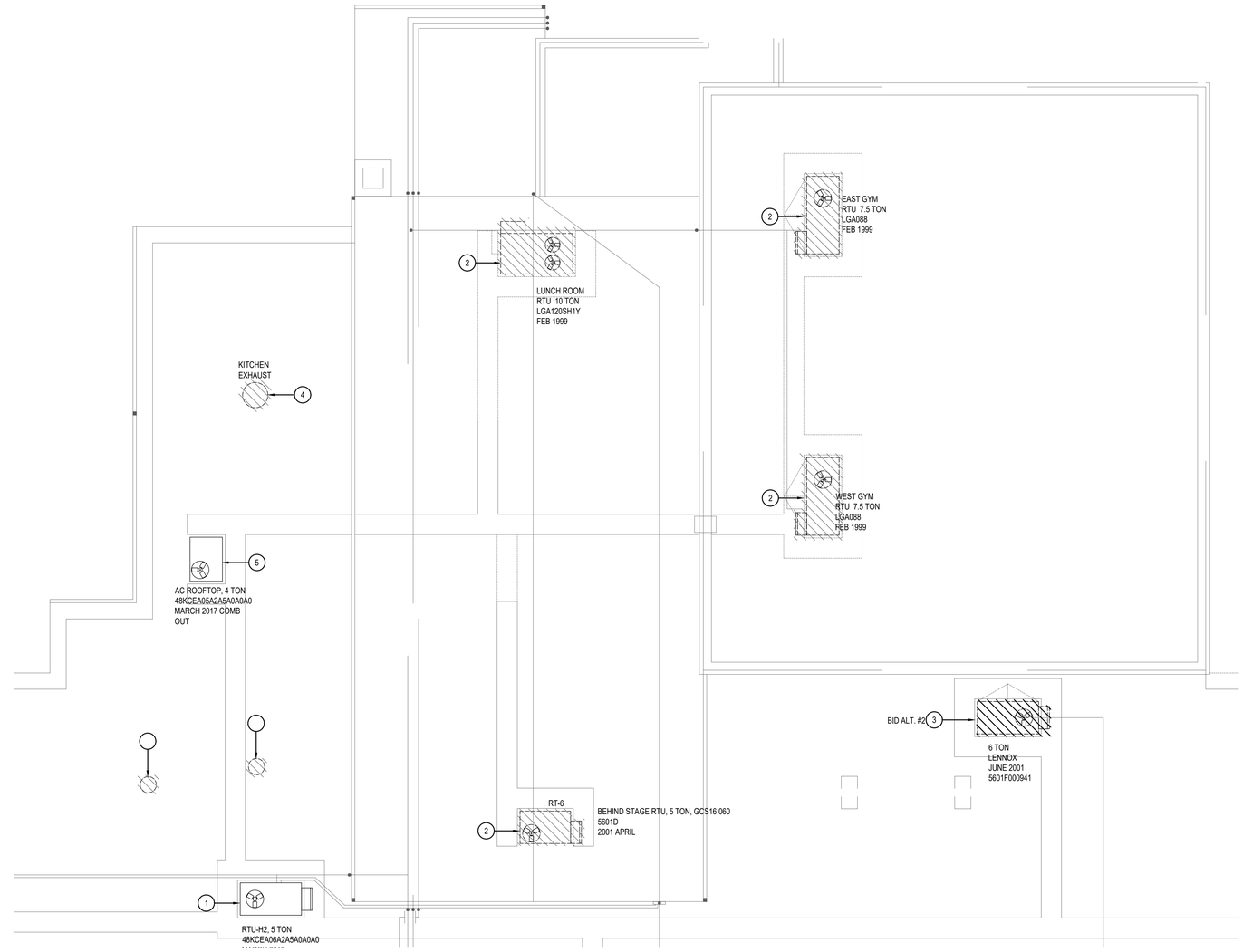
DRAWING NO.

M-2.2

KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

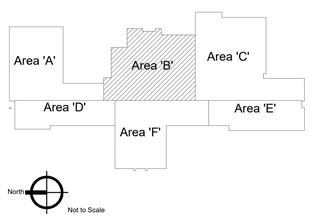
1. NO WORK TO EXISTING UNIT REMAIN AS IS.
2. REMOVE EXISTING UNIT AND EXISTING CURB. ROOF PENETRATION SHALL BE REUSED.
3. REMOVE EXISTING UNIT AND EXISTING CURB UNDER BID ALT. #2.
4. REMOVE EXISTING EXHAUST FAN AND CURB, PATCH ROOF TO MATCH EXISTING.
5. EXISTING RTU SHALL REMAIN.



N 1 Mechanical Demolition Plan - Area 'B'

Scale: 1/8" = 1'-0"

Key Plan



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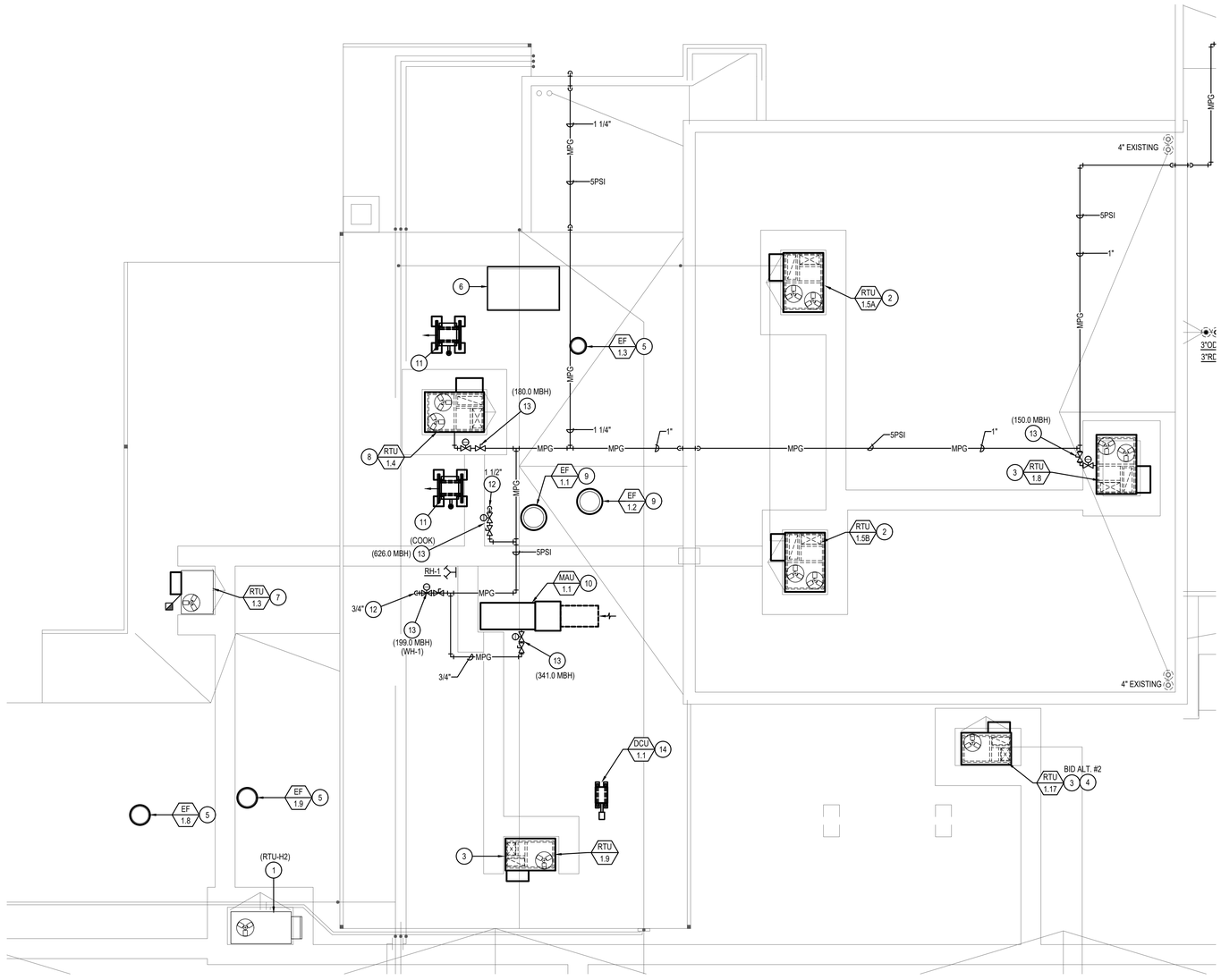
DRAWING NO.

M-3.2



N

1 Mechanical New Work Roof Plan - Area 'B'

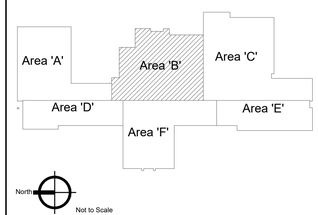
Scale: 1/8" = 1'-0"

KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. NO WORK TO EXISTING UNIT REMAIN AS IS.
2. PROVIDE NEW ISO ROOF CURB, ROOF PENETRATION SHALL BE REUSED. PATCH ROOF TO MATCH EXISTING CONDITIONS. SET NEW RTU ON ISO CURB, SEE ISO CURB DETAIL. USE EXISTING GAS LINE AND VALVE (S), CONNECT TO NEW UNIT.
3. PROVIDE NEW ROOF CURB, ROOF PENETRATION SHALL BE REUSED. PATCH ROOF TO MATCH EXISTING CONDITIONS. SET NEW RTU ON CURB, SEE CURB DETAIL. USE EXISTING GAS LINE AND VALVE (S), CONNECT TO NEW UNIT.
4. WORK TO BE DONE UNDER BID ALT. #2.
5. PROVIDE NEW CURB AND EXHAUST FAN. SET EXHAUST FAN ON CURB. SEE EXHAUST FAN DETAIL.
6. CAP UNUSED EXISTING CURB WEATHER TIGHT.
7. EXISTING RTU SHALL REMAIN. PROVIDE NEW ECONOMIZER AND POWER EXHAUST. SEE RTU SCHEDULE FOR FURTHER INFORMATION.
8. PROVIDE NEW ISO ROOF CURB AND SET RTU ON ISO CURB. SEE ISO CURB DETAIL.
9. SET NEW EXHAUST FAN ON FAN CURB FOR TYPE II HOOD, FAN CURB AND FAN SHALL BE PROVIDEED FOR TYPE I READINESS.
10. MOUNT MAKE UP AIR UNIT ON ROOF.
11. HVAC CONTRACTOR SHALL PROVIDE MIRRO STAND FOR KITCHEN WALK IN COOLER AND FREEZER. PROVIDED BY OTHERS. COORDINATE SIZE AND WEIGHT WITH COOLER/FREEZER SUPPLIER, SEE DETAIL.
12. ROUTE GAS LINE DOWN THROUGH ROOF, SEAL PENETRATION WEATHER TIGHT.
13. PROVIDE GAS PRESSURE REGULATOR, REDUCE PRESSURE FROM 5 PSI DOWN TO 7"WC, PROVIDE SHUT OFF VALVE. SEE DETAIL.
14. PROVIDE EQUIPMENT STAND FOR CONDENSING UNIT.

Key Plan



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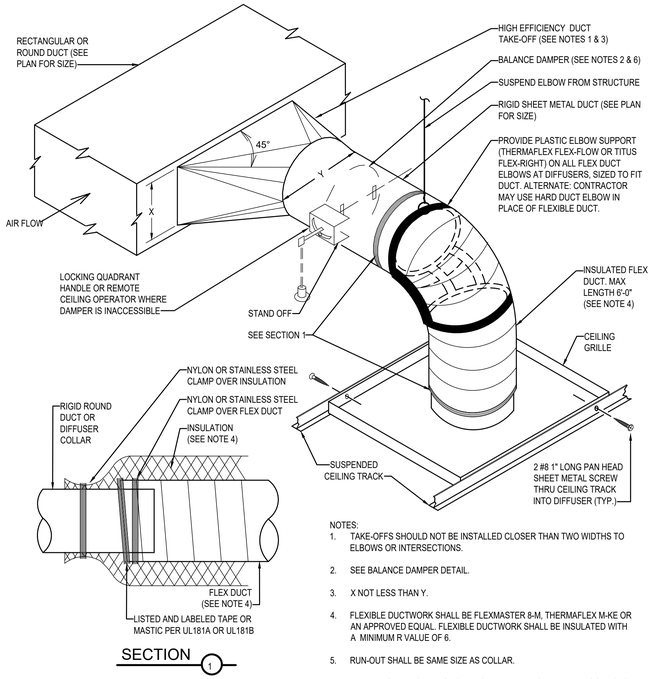
M-4.2



SECTION 1

NOTES:
1. TAKE-OFFS SHOULD NOT BE INSTALLED CLOSER THAN TWO WIDTHS TO ELBOWS OR INTERSECTIONS.
2. SEE BALANCE DAMPER DETAIL.
3. X NOT LESS THAN Y.
4. FLEXIBLE DUCTWORK SHALL BE FLEXMASTER 8-M, THERMAFLEX M-KE OR AN APPROVED EQUAL. FLEXIBLE DUCTWORK SHALL BE INSULATED WITH A MINIMUM R VALUE OF 6.
5. RUN-OUT SHALL BE SAME SIZE AS COLLAR.
6. REFERENCE HVAC PLANS FOR REQUIRED BALANCE DAMPER LOCATIONS.

- HIGH EFFICIENCY TAKE-OFF DETAIL
NOT TO SCALE

NOTES:
1. FOR TAKE-OFFS LARGER THAN 12" DIAMETER, USE A FACTORY MANUFACTURED DAMPER. LOUVERS & DAMPERS, INC. MODEL CD-600 WITH A LOCKING HAND QUADRANT OR EQUAL.
2. ROD CONTINUOUS ON 2" W.G. CLASS AND ON ALL DAMPERS OVER 12" DIAMETER.
3. BLADE 22 GAGE MIN., BUT NOT LESS THAN TWO GAGES MORE THAN THE DUCT GAGE.
4. PROVIDE REMOTE CEILING OPERATOR WHERE DAMPER IS INACCESSIBLE.
5. FOR DUCTS OVER 12" HIGH USE MULTIPLE BLADE DAMPERS (SEE FIG. C).
6. ALTERNATE MANUFACTURERS INCLUDE: AMERICAN WARMING, SAFE-AIR/DOWCO, J&J, LOUVERS & DAMPERS, RUSKIN, NAILOR, ARROW UNITED, POTTORFF, & CESCO.
7. PROVIDE STAND-OFF FOR DAMPER ARMS LOCATED W/EXTERNAL INSULATION.

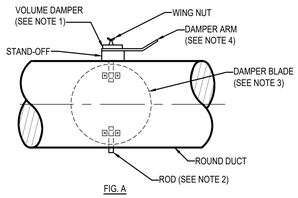


FIG. A

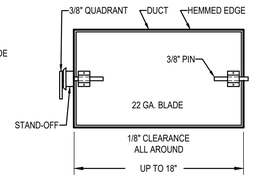


FIG. B

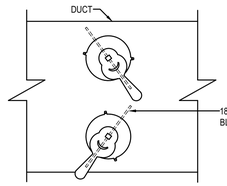


FIG. C
ELEVATION, TWO BLADE ARRANGEMENT

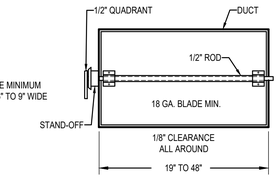
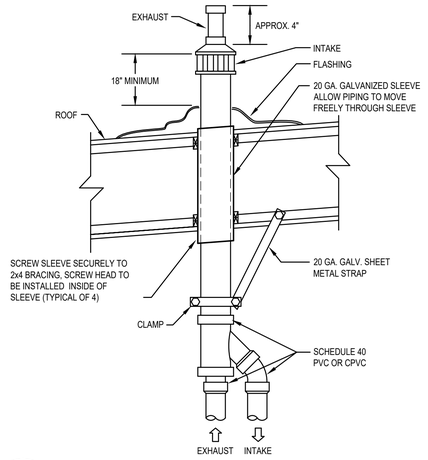
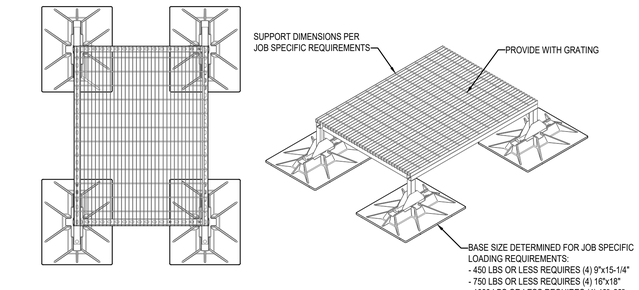


FIG. D

- BALANCE DAMPER DETAIL
NOT TO SCALE

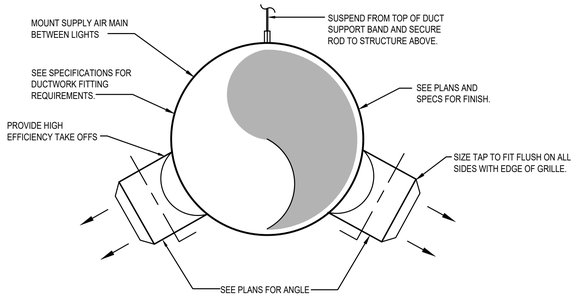


- CONCENTRIC GAS VENT DETAIL (90%)
NOT TO SCALE

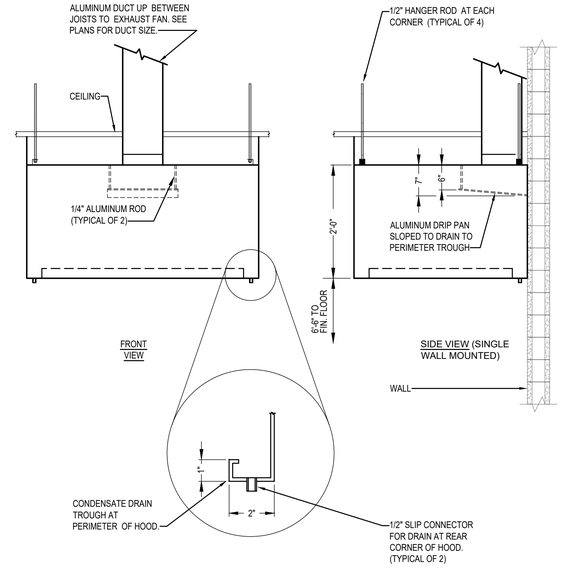


NOTES:
1. PROVIDE WITH MIRO INDUSTRIES MODEL HD, HEAVY DUTY MECHANICAL GALVANIZED ROOF SUPPORT WITH ADJUSTABLE SUPPORT LEGS.
2. SUPPORT SHALL EXTEND A MINIMUM OF 6" BEYOND EQUIPMENT IN EACH DIRECTION.
3. BOLT EQUIPMENT TO MECHANICAL SUPPORT, A MINIMUM OF (4) LOCATIONS.
4. APPROVED ALTERNATE MANUFACTURERS: UNISTRUT AND ROOF-PRO.

- ROOFTOP CONDENSING UNIT PLATFORM DETAIL
NOT TO SCALE (EQUIPMENT WEIGHTS UP TO 1000 LBS)



1 EXPOSED SPIRAL DUCT AND TAKE OFF DETAIL
SCALE: NOT TO SCALE



NOTES:
1. HOOD SHALL BE CONSTRUCTED OF 16 GAUGE ALUMINUM.
2. PROVIDE ALUMINUM SHEET METAL CLOSURE BETWEEN HOOD AND CEILING.
3. HOOD SHALL OVERHANG DISHWASHER 12" ON ALL OPEN SIDES. SEE PLANS FOR HOOD SIZE.

- TYPE II DISHWASHER HOOD
NOT TO SCALE

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M-6.1

PACKAGED AIR CONDITIONING SCHEDULE

SYMBOL	AREA SERVED	NOM. TONS	SUPPLY FAN				COOLING CAPACITY 95°OSA, 80°EDB, 62°EWB			GAS HEATING CAPACITY		RTU ELECTRICAL			ELECTRICAL POWER EXHAUST				OSA CFM	MIN. SEER / EER	OPER. WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	BRAKE BHP	DRIVE	STAGES	TOTAL MBH	SENS. MBH	INPUT MBH	OUTPUT MBH	MCA	MOCP	V/Ø	HP	MCA	MOCP	V/Ø					
RTU-1.1	CLASSROOM 120	4	1600	.50	.72	DIRECT ECM	1	42.8	41.3	120.0 / 150.0	96.0 / 120.0	24.0	30	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-05 STANDARD EFFICIENCY	1 , 2 , 3 , 8 , 9 , 10
RTU-1.2	CLASSES 132, 134 & 136	6	2400	.50	1.31	DIRECT ECM	2	66.9	66.5	120.0 / 150.0	96.0 / 120.0	33.0	50	208/3	0.5	2.9	5.2	208/3	320	11.2 EER	1350	CARRIER 48FC-07 STANDARD EFFICIENCY	1 , 2 , 3 , 8 , 9 , 10
RTU-1.3 EXISTING	FACILITY	4	1600	.50	.72	DIRECT ECM	1	42.8	41.3	115.0	93.0	24.0	30	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	EXISTING CARRIER MODEL 48KCEA05A2A5A0A0A0 RELOCATED.	1 , 2 , 8 , 11
RTU-1.4	KITCHEN	7.5	3000	.50	2.4	DIRECT ECM	2	81.7	78.4	120.0 / 180.0	98.0 / 148.0	39.0	50	208/3	N/A	N/A	N/A	208/3	320	11.2 EER	1900	CARRIER 48FC-08 STANDARD EFFICIENCY	1 , 2 , 6 , 8 , 9 , 10
RTU-1.5A	CAFETERIA	10	4000	.50	2.4	DIRECT ECM	2	117.0	113.4	180.0/ 224.0	146.0/ 181.0	45.0	60	208/3	2	8.0	14.4	208/3	320	11.0 EER	2000	CARRIER 48FC-12 STANDARD EFFICIENCY	1 , 2 , 6 , 8 , 9 , 10
RTU-1.5B	CAFETERIA	10	4000	.50	2.4	DIRECT ECM	2	117.0	113.4	180.0/ 224.0	146.0/ 181.0	45.0	60	208/3	2	8.0	14.4	208/3	320	11.0 EER	2000	CARRIER 48FC-12 STANDARD EFFICIENCY	1 , 2 , 7 , 8 , 9 , 10
RTU-1.6	STAGE	6	2400	.50	1.31	DIRECT ECM	2	66.9	66.5	120.0 / 150.0	96.0 / 120.0	33.0	50	208/3	0.5	2.9	5.2	208/3	320	11.2 EER	1350	CARRIER 48FC-07 STANDARD EFFICIENCY	1 , 2 , 3 , 8 , 9 , 10
RTU-1.7A	GYM	15	6000	.50	3	DIRECT ECM	2	166.7	163.8	280.0 / 350.0	224.0 / 284.0	67.0	80	208/3	3	11.5	20.7	208/3	800	10.8 EER	3000	CARRIER 48FC-16 STANDARD EFFICIENCY HORIZONTAL DISCHARGE	1 , 2 , 6 , 8 , 9 , 10
RTU-1.7B	GYM	15	6000	.50	3	DIRECT ECM	2	166.7	163.8	280.0 / 350.0	224.0 / 284.0	67.0	80	208/3	3	11.5	20.7	208/3	800	10.8 EER	3000	CARRIER 48FC-16 STANDARD EFFICIENCY HORIZONTAL DISCHARGE	1 , 2 , 7 , 8 , 9 , 10
RTU-1.8	GYM FOYER	6	2400	.50	1.31	DIRECT ECM	2	66.9	66.5	120.0 / 150.0	96.0 / 120.0	33.0	50	208/3	0.5	2.9	5.2	208/3	320	11.2 EER	1350	CARRIER 48FC-07 STANDARD EFFICIENCY	1 , 2 , 3 , 8 , 9 , 10
RTU-1.9	MULTIPURPOSE CLASS	4	1600	.50	.72	DIRECT ECM	1	42.8	41.3	120.0 / 150.0	96.0 / 120.0	24.0	30	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-05 STANDARD EFFICIENCY	1 , 2 , 3 , 8 , 9 , 10
RTU-1.10	ADMIN	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1 , 2 , 3 , 8 , 9 , 10
RTU-1.11	COMPUTER LAB	5	2000	.50	1.06	DIRECT ECM	1	53.7	53.7	120.0 / 150.0	96.0 / 120.0	29.0	40	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-06 STANDARD EFFICIENCY	1 , 2 , 3 , 8 , 9 , 10

REMARKS:

1. APPROVED ALTERNATE MANUFACTURERS: BRYANT, TRANE, AAON, LENNOX, AND YORK.
2. UNIT SHALL BE CONTROLLED BY DDC, CONTROLLER PROVIDED BY DDC CONTRACTOR
3. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), HAIL GUARDS, LOW AMBIENT CONTROLS (TO 0°F), FLUE EXTENDER, HIGH ALTITUDE KIT, THRU-THE-BOTTOM OF CURB ELECTRICAL CONNECTION KIT, HINGED ACCESS PANELS. MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (STANDALONE TSTAT) ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
4. PROVIDE UNIT WITH MICROMETL WELDED SPRING ISOLATION CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), PROVIDE MANUFACTURER'S FLUE EXTENDER, HAIL GUARDS, HIGH ALTITUDE KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (USE JADE ONLY FOR STANDALONE TSTAT). ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
5. PROVIDE UNIT WITH MICROMETL WELDED SPRING ISOLATION CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), PROVIDE UNIT WITH MANUFACTURERS FLUE EXTENDER, HAIL GUARDS, HIGH ALTITUDE KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS AND AUX END SWITCH, MICROMETL MODULATING POWER EXHAUST WITH VARIABLE SPEED MOTOR CONTROLLER (100% RELIEF) WIRING HARNESS AND JADE CONTROLLER (USE JADE ONLY FOR STANDALONE TSTAT), PRESSURE SENSOR SET TO .02 POSITIVE PRESSURE. ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
6. PROVIDE UNIT WITH MICROMETL WELDED SPRING ISOLATION CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), PROVIDE MANUFACTURER'S FLUE EXTENDER, HAIL GUARDS, HIGH ALTITUDE KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, REMOTE DUCT MOUNTED MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (USE JADE ONLY FOR STANDALONE TSTAT). ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
7. PROVIDE UNIT WITH MICROMETL WELDED SPRING ISOLATION CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), PROVIDE UNIT WITH MANUFACTURERS FLUE EXTENDER, HAIL GUARDS, HIGH ALTITUDE KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS AND AUX END SWITCH, REMOTE DUCT MOUNTED MICROMETL MODULATING POWER EXHAUST WITH VARIABLE SPEED MOTOR CONTROLLER (100% RELIEF) WIRING HARNESS AND JADE CONTROLLER (USE JADE ONLY FOR STANDALONE TSTAT), PRESSURE SENSOR SET TO .02 POSITIVE PRESSURE. ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
8. C02 SENSOR PROVIDED BY DDC CONTRACTOR. OUTSIDE AIR SHALL HAVE A MINIMUM SETPOINT OF ZERO AND THE DAMPER SHALL MODULATE OPEN AS REQUIRED TO SATISFY THE C02 SENSOR. THE OSA CFM LISTED IN THIS SCHEDULE SHALL BE THE MAXIMUM OSA DAMPER SETPOINT (IF NOT IN ECONOMIZER MODE). THE OUTSIDE AIR DAMPER SHALL CLOSE DURING THE UNOCCUPIED MODE.
9. PROVIDE 2" PLEATED MERV 8 FILTER AND FILTER RACK WITH 4 EXTRA SETS PER UNIT.
10. MAXIMUM "A-WEIGHTED" SUPPLY AIR SOUND RATINGS FOR UNITS 2-18 TONS = 95 DB @ 125 HZ, 90 DB @ 250 HZ, PER ARI STANDARDS 270 & 370.
11. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), HAIL GUARDS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (STANDALONE TSTAT) ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED. COMB OUT BENT FINS, CHANGE FILTER WITH A 2" MERV 8 AND INSPECT UNIT, REPORT ANY DEFICIENCIES.

DUCTLESS SPLIT HIGH WALL COOLING UNIT SCHEDULE

SYMBOL	AREA SERVED	NOMINAL TONS	UNIT TYPE	SUPPLY FAN		COOLING CAPACITY AT 95°F OSA		ELECTRICAL OUTDOOR UNIT			MINIMUM SEER	INDOOR / OUTDOOR WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
				CFM	V/Ø	TOTAL (MBH)	SENSIBLE (MBH)	MCA	MOCP	V/Ø				
DFC-1.1 DCU-1.1	I.T. ROOM	1.0	HIGH WALL COOLING ONLY	305	THRU O/U	12.0	8.5	11	15	208/1	19.0	20 / 65	CARRIER FAN COIL MODEL 40MHH12 CARRIER CONDENSING UNIT MODEL 38MHRBC12	1 , 2 , 3 , 4 , 5 , 6

REMARKS:

1. APPROVED ALTERNATE MANUFACTURERS: LENNOX, MITSUBISHI, PANASONIC, SAMSUNG, LG, DAIKIN, OR APPROVED EQUAL BY ENGINEER.
2. CONTROL UNIT WITH MANUFACTURER'S HARD-WIRED WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT.
3. PROVIDE MANUFACTURERS CRANKCASE HEATER, LOW AMBIENT CONTROLS & (TO 0°F) WIND BAFFLES, REFRIGERATION LINE SET SIZED BY MANUFACTURER, AND TAMPER PROOF PORT CAPS.
4. PROVIDE WITH BIG FOOT MECHANICAL ROOF SUPPORT WITH ADJUSTABLE SUPPORT LEGS. SUPPORT SHALL EXTEND A MINIMUM OF 6" BEYOND EQUIPMENT IN EACH DIRECTION. BOLT EQUIPMENT TO MECHANICAL SUPPORT.
5. PROVIDE WITH MANUFACTURER'S CONDENSATE PUMP, LITTLE GIANT MINI CONDENSATE PUMP, CONCEAL PUMP BEHIND UNIT WITHIN MOUNTING BRACKET ASSEMBLY. PUMP SHALL BE POWERED BY FAN COIL.
6. ELECTRICAL TO PROVIDE DISCONNECT.

PACKAGED AIR CONDITIONING SCHEDULE BID ALT#2

SYMBOL	AREA SERVED	NOM. TONS	SUPPLY FAN				COOLING CAPACITY 95°OSA, 80°EDB, 62°EWB			GAS HEATING CAPACITY		RTU ELECTRICAL			ELECTRICAL POWER EXHAUST				OSA CFM	MIN. SEER / EER	OPER. WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	BRAKE BHP	DRIVE	STAGES	TOTAL MBH	SENS. MBH	INPUT MBH	OUTPUT MBH	MCA	MOCP	V/Ø	HP	MCA	MOCP	V/Ø					
RTU-1.13	HALLWAYS	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.14	CLASS ROOMS	10	4000	.50	2.4	DIRECT ECM	2	117.0	113.4	180.0/ 224.0	146.0/ 181.0	45.0	60	208/3	2	8.0	14.4	208/3	320	11.0 EER	2000	CARRIER 48FC-12 STANDARD EFFICIENCY	1 , 2 , 4 , 5 , 6 , 7
RTU-1.15	MEDIA	6	2400	.50	1.31	DIRECT ECM	2	66.9	66.5	120.0 / 150.0	96.0 / 120.0	33.0	50	208/3	0.5	2.9	5.2	208/3	320	11.2 EER	1350	CARRIER 48FC-07 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.16	CLASS ROOMS	6	2400	.50	1.31	DIRECT ECM	2	66.9	66.5	120.0 / 150.0	96.0 / 120.0	33.0	50	208/3	0.5	2.9	5.2	208/3	320	11.2 EER	1350	CARRIER 48FC-07 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.17	CLASS ROOMS	6	2400	.50	1.31	DIRECT ECM	2	66.9	66.5	120.0 / 150.0	96.0 / 120.0	33.0	50	208/3	0.5	2.9	5.2	208/3	320	11.2 EER	1350	CARRIER 48FC-07 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.18	CLASS ROOMS	10	4000	.50	2.4	DIRECT ECM	2	117.0	113.4	180.0/ 224.0	146.0/ 181.0	45.0	60	208/3	2	8.0	14.4	208/3	320	11.0 EER	2000	CARRIER 48FC-12 STANDARD EFFICIENCY	1 , 2 , 4 , 5 , 6 , 7
RTU-1.19	CLASS ROOMS	6	2400	.50	1.31	DIRECT ECM	2	66.9	66.5	120.0 / 150.0	96.0 / 120.0	33.0	50	208/3	0.5	2.9	5.2	208/3	320	11.2 EER	1350	CARRIER 48FC-07 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.20	CLASS ROOM	4	1600	.50	.72	DIRECT ECM	1	42.8	41.3	120.0 / 150.0	96.0 / 120.0	24.0	30	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-05 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.21	CLASS ROOM	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.22	CLASS ROOM	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.23	CLASS ROOM	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.24	CLASS ROOM	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7
RTU-1.25	CLASS ROOM	3	1200	.50	.44	DIRECT ECM	1	30.9	29.9	82.0 / 110.0	65.0 / 93.0	19.0	25	208/3	0.5	2.9	5.2	208/3	320	14.0	1100	CARRIER 48FC-04 STANDARD EFFICIENCY	1 , 2 , 3 , 5 , 6 , 7

REMARKS:

1. APPROVED ALTERNATE MANUFACTURERS: BRYANT, TRANE, AAON, LENNOX, AND YORK.
2. UNIT SHALL BE CONTROLLED BY DDC, CONTROLLER PROVIDED BY DDC CONTRACTOR
3. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), HAIL GUARDS, LOW AMBIENT CONTROLS (TO 0°F), FLUE EXTENDER, HIGH ALTITUDE KIT, THRU-THE-BOTTOM OF CURB ELECTRICAL CONNECTION KIT, HINGED ACCESS PANELS. MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (STANDALONE TSTAT) ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
4. PROVIDE UNIT WITH MICROMETL WELDED SPRING ISOLATION CURB (SEE DETAIL FOR SEISMIC RESTRAINTS), PROVIDE MANUFACTURER'S FLUE EXTENDER, HAIL GUARDS, HIGH ALTITUDE KIT, HINGED ACCESS PANELS, MICROMETL GEAR DRIVEN INTEGRATED DRY BULB ECONOMIZER WITH BELIMO LOGIC ACTUATORS, MICROMETL CENTRIFUGAL POWER EXHAUST (100% RELIEF) WITH WIRING HARNESS AND JADE CONTROLLER (USE JADE ONLY FOR STANDALONE TSTAT). ELECTRICAL CONTRACTOR TO PROVIDE THE POWER CONNECTION BETWEEN RTU AND THE POWER EXHAUST AND PROVIDE FUSED DISCONNECT AS REQUIRED.
5. C02 SENSOR PROVIDED BY DDC CONTRACTOR. OUTSIDE AIR SHALL HAVE A MINIMUM SETPOINT OF ZERO AND THE DAMPER SHALL MODULATE OPEN AS REQUIRED TO SATISFY THE C02 SENSOR. THE OSA CFM LISTED IN THIS SCHEDULE SHALL BE THE MAXIMUM OSA DAMPER SETPOINT (IF NOT IN ECONOMIZER MODE). THE OUTSIDE AIR DAMPER SHALL CLOSE DURING THE UNOCCUPIED MODE.
6. PROVIDE 2" PLEATED MERV 8 FILTER AND FILTER RACK WITH 4 EXTRA SETS PER UNIT.
7. MAXIMUM "A-WEIGHTED" SUPPLY AIR SOUND RATINGS FOR UNITS 2-18 TONS = 95 DB @ 125 HZ, 90 DB @ 250 HZ, PER ARI STANDARDS 270 & 370.

DUCTLESS SPLIT CEILING CASSETTE COOLING & HEATING UNIT SCHEDULE

SYMBOL	AREA SERVED	NOMINAL TONS	UNIT TYPE	SUPPLY FAN			COOLING REQUIRED AT 95°F OSA, 80°F EDB, 62°F EWB		HEATING REQUIRED AT 32°F OSA, 69°F EDB.	ELECTRICAL OUTDOOR UNIT			MINIMUM SEER / HSPF	INDOOR/ OUTDOOR OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
				CFM	HP	V/Ø	TOTAL MBH	SENSIBLE MBH	TOTAL MBH	MCA	MOCP	V/Ø				
DFC-1.2 DHP-1.2	WORK ROOM	1.5	CEILING CASSETTE COOL/HEAT UNIT	290-420	.061	THROUGH OUTDOOR UNIT	19.0	12.5	22.5	18	25	208/1	20.0/10.5	45/120	CARRIER INDOOR UNIT MODEL 40MBCQ18 CARRIER OUTDOOR UNIT MODEL 38MBRQ18	1 , 2 , 3 , 4 , 5 , 6

REMARKS:

1. APPROVED ALTERNATE MANUFACTURERS: LENNOX, MITSUBISHI, PANASONIC, SAMSUNG, LG, DAIKIN , OR APPROVED EQUAL BY ENGINEER.
2. CONTROL UNIT WITH MANUFACTURER'S HARD-WIRED WALL MOUNTED 7 DAY PROGRAMMABLE THERMOSTAT WITH AUTO CHANGE OVER.
3. PROVIDE MANUFACTURERS CRANKCASE HEATER , LOW AMBIENT CONTROLS & (TO -13°F COOLING TO -22°F HEATING) WIND BAFFLES, REFRIGERATION LINE SET SIZED BY MANUFACTURER AND TAMPER PROOF PORT CAPS.
4. PROVIDE WITH MIRO IND. OR BIG FOOT HEAVY DUTY MECHANICAL ROOF SUPPORT WITH ADJUSTABLE SUPPORT LEGS. SUPPORT SHALL EXTEND A MINIMUM OF 6" BEYOND EQUIPMENT IN EACH DIRECTION. BOLT EQUIPMENT TO MECHANICAL SUPPORT.
5. PROVIDE WITH MANUFACTURER'S CONDENSATE PUMP, OR LITTLE GIANT MINI CONDENSATE PUMP, CONCEAL PUMP BEHIND UNIT WITHIN MOUNTING BRACKET ASSEMBLY. ELECTRICAL CIRCUIT FOR PUMP SHALL BE INTEGRATED TO FAN COIL.
6. ELECTRICAL TO PROVIDE DISCONNECT AND HEAT TRACE BENEATH UNIT AND TO ROOF DRAIN.

ENERGY RECOVERY UNIT SCHEDULE

SYMBOL	SUPPLY		EXHAUST		ELECTRICAL		WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
	CFM	ESP	CFM	ESP	WATTS	V/Ø			
ERV-1.1	65	.40	85	.40	100	120/1	45	PANASONIC FV-10VEC2	1 , 2 , 3

REMARKS:

1. APPROVED ALTERNATE MANUFACTURERS: UPON PRIOR APPROVAL OF ENGINEER.
2. PROVIDE WITH EXHAUST ONLY FROST PREVENTION CONTROLS, HI/LOW SPEED, ADJUSTABLE SUPPLY AND EXHAUST FLOW DIALS, MERV 8 FILTERS IN EACH AIR STREAM, 6 YEAR WARRANTY, VIBRATION ISOLATORS ON EACH HANGING ROD, FLEXIBLE DUCT CONNECTIONS, HINGED ACCESS PANELS, AND FILTER ALARM. PROVIDE UNIT WITH UL APPROVAL LISTING.
3. ELECTRICAL TO PROVIDE DISCONNECT AND SPECIAL CONNECTION, UNIT IS EQUIPMENT WITH WALL PLUG.

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Project No. 22-104

PRELIMINARY

NOT FOR CONSTRUCTION
2/10/23

Jefferson Elementary School
Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

DATE: JANUARY 9, 2023
LKV PROJECT #: -
REVISIONS:

DRAWN BY: JM/CD
CHECKED BY: BC

Design Development

DRAWING NO.
M-7.0

ELECTRIC HEATER SCHEDULE

SYMBOL	AREA SERVED	UNIT TYPE	FAN			ELECTRICAL				MANUFACTURER AND MODEL	REMARKS
			CFM	RPM	HP	KW	STEPS	V/Ø	AMPS		
EH-1.1	VESTIBULE	CEILING RECESS MOUNTED	300	1400	1/8	2	1	208/1	9.6	QMARK MODEL CDF SERIES WITH RECESSED ENCLOSURE	1 , 4 , 6
EH-1.2	HALL ENTRY	CEILING RECESS MOUNTED	300	1400	1/8	2	1	208/1	9.6	QMARK MODEL CDF SERIES WITH RECESSED ENCLOSURE	1 , 4 , 6
EH-1.3	RISER	SURFACE MOUNTED	245	1400	1/8	2	1	208/1	9.6	MARKEL MODEL 3420 SERIES	1 , 2 , 3 , 5
EH-1.4	VESTIBULE 164	CEILING RECESS MOUNTED	300	1400	1/8	2	1	208/1	9.6	QMARK MODEL CDF SERIES WITH RECESSED ENCLOSURE	1 , 4 , 6
EH-1.5	HALL ENTRY	CEILING RECESS MOUNTED	300	1400	1/8	2	1	208/1	9.6	QMARK MODEL CDF SERIES WITH RECESSED ENCLOSURE	1 , 4 , 6

REMARKS:

1. APPROVED ALTERNATE MANUFACTURERS: BRASCH, QMARK, MARKEL, INDEECO, OUELLET, AND CHROMALOX.
2. PROVIDE UNIT WITH AN INTEGRAL THERMOSTAT. THERMOSTAT SHALL BE COVERED WITH A TAMPER-PROOF ACCESS COVER.
3. PROVIDE SURFACE MOUNTING KIT.
4. ADJUST HEATER TO OPERATE AT 60°F.
5. ADJUST HEATER TO OPERATE AT 50°F.
6. PROVIDE REMOTE LINE VOLTAGE THERMOSTAT ON WALL. FINISH THERMOSTAT WITH LOCKABLE COVER.

DESTRATIFICATION FAN SCHEDULE

SYMBOL	AREA SERVED	FAN		ELECTRICAL			WEIGHT LBS.	MAXIMUM dBA	MAXIMUM MOUNTING HEIGHT	MANUFACTURER AND MODEL	REMARKS
		CFM	RPM	V/Ø	WATTS	AMPS					
DSF-1.1	GYM	1128	2700	120/1	175	1.48	14	64	45'	AIRIUS MODEL AIR PEAR A-45-P2	1 , 2 , 3 , 4 , 5
DSF-1.2	GYM	1128	2700	120/1	175	1.48	14	64	45'	AIRIUS MODEL AIR PEAR A-45-P2	1 , 2 , 3 , 4 , 5

REMARKS:

1. APPROVED ALTERNATE MANUFACTURERS: WITH PRIOR APPROVAL OF ENGINEER.
2. PROVIDE UNIT WITH PCS MOTOR, SEALED BEARINGS, 6' CORD, GUARD GRILLE, STATOR, 6' STEEL SAFETY CABLE AND HANGING BRACKET.
3. CONTROL UNIT WITH MANUFACTURES WALL MOUNTED (TRIAC-120-1.5 FOR PCS MOTOR) SPEED CONTROLLER. IN ADDITION TO THE SPEED CONTROLLER, CONTROL SCHEDULE OF USE BY DDC.
4. PROVIDE OFF WHITE COLOR.
5. FAN SHALL BE INTEGRATED TO THE FIRE CONTROL PANEL. INCLUDES A 10-30 VDC PILOT RELAY FOR SEAMLESS FIRE CONTROL PANEL INTEGRATION. THE PILOT RELAY CAN BE WIRED NORMALLY OPEN OR NORMALLY CLOSED IN THE FIELD.

EXHAUST FAN SCHEDULE

SYMBOL	AREA SERVED	UNIT TYPE	BLOWER				ELECTRICAL		MAXIMUM SONES	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	MAXIMUM RPM	DRIVE	HP/W	V/Ø				
EF-1.4	FACULTY RR	CEILING CABINET	100	.375	1075	DIRECT	46.5 W	115/1	2.5	15	COOK MODEL GC-148	1 , 2 , 4
EF-1.5	MECHANICAL ROOM	CEILING CABINET	75	.375	900	DIRECT	36.2 W	115/1	1.5	15	COOK MODEL GC-146	1 , 2 , 4
EF-1.6	BACK STAGE RR	ROOFTOP UPBLAST	250	.375	1550	DIRECT	1/8 HP	115/1	4.5	55	COOK MODEL ACRU-D-90R	1 , 3 , 5
EF-1.7	RESTROOMS 122/123	ROOFTOP UPBLAST	1000	.375	1725	BELT	1/6 HP	115/1	9.9	125	COOK MODEL ACRU-B-135R	1 , 3 , 5
EF-1.8	RESTROOM 139	ROOFTOP UPBLAST	700	.375	1725	BELT	1/6 HP	115/1	10.4	75	COOK MODEL ACRU-B-100R	1 , 3 , 5
EF-1.9	RESTROOM 141 & JAN 140	ROOFTOP UPBLAST	875	.375	1725	BELT	1/4 HP	115/1	12.6	75	COOK MODEL ACRU-B-100R	1 , 3 , 5
EF-1.10	RESTROOM 193	ROOFTOP UPBLAST	400	.375	1725	BELT	1/6 HP	115/1	7.9	75	COOK MODEL ACRU-B-100R	1 , 3 , 5
EF-1.11	RESTROOM 194	ROOFTOP UPBLAST	400	.375	1725	BELT	1/6 HP	115/1	7.9	75	COOK MODEL ACRU-B-100R	1 , 3 , 5

REMARKS:

1. APPROVED ALTERNATE MANUFACTURERS: ACME, GREENHECK, PENNBARRY, TWIN CITY FAN COMPANY, SOLER & PALAU
2. PROVIDE UNIT WITH MANUFACTURER'S ALUMINUM ROOF CAP (FLAT ROOF) EQUAL TO COOK MODEL PR (W/ INTEGRAL BIRD SCREEN AND ROOF CURB), MANUFACTURER'S STEEL ROOF JACK (SLOPED ROOF) EQUAL TO COOK MODEL RJ (W/ INTEGRAL BIRD SCREEN, FLASHING FLANGE AND BLACK EPOXY FINISH), BACKDRAFT DAMPER, OUTLET FLEX DUCT CONNECTION, STANDARD PLUG DISCONNECT, PRE-WIRED FAN SPEED CONTROLLER, THERMAL OVERLOAD PROTECTION, HANGING VIBRATION ISOLATORS, AND WHITE ALUMINUM GRILLE.
3. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB W/ DAMPER TRAY AND BACKDRAFT DAMPER, THERMAL OVERLOAD PROTECTION (120 VOLT ONLY), PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH, AND INTEGRAL BIRD SCREEN.
4. CONTROL FAN WITH SEPARATE WALL SWITCH
5. CONTROL FAN WITH DDC. EXHAUST FAN SHALL OPERATE DURING OCCUPIED HOURS.

EXHAUST HOOD SCHEDULE

SYMBOL	TYPE	HOOD DIMENSIONS		EXHAUST AIR			MAKE-UP AIR			WEIGHT LBS.	MANUFACTURER AND MODEL	REMARKS
		LENGTH	DEPTH	AIRFLOW CFM	DUCT CONNECITON	MAX S.P. LOSS	AIRFLOW CFM	DUCT CONNECTION	PLENUM WIDTH			
H-1.1	TYPE II EXHAUST HOOD (MAIN) (FRONT PSP MAKE-UP)	14'-0"	60"	2800	(2)14"Ø	-0.173"	2240	28"X12"	14"	850	CAPTIVEAIRE MODEL 6024 VHB-G-PSP-F TYPE 2 HOOD. WITH DEMAND VENTILATION.	1 , 2 , 3 , 4
H-1.2	TYPE II EXHAUST HOOD (MAIN) (FRONT PSP MAKE-UP)	14'-0"	60"	2800	(2)14"Ø	-0.173"	2240	28"X12"	14"	850	CAPTIVEAIRE MODEL 6024 VHB-G-PSP-F TYPE 2 HOOD. WITH DEMAND VENTILATION.	1 , 2 , 3 , 4
H-1.3	TYPE II DISHWASHER HOOD	3'-6"	48"	525	10"Ø	-0.069"	N/A	N/A	N/A	200	CAPTIVEAIRE MODEL 4824 VHB-G-ND	3

REMARKS:

1. HOOD SYSTEM(S) SHALL BE BY THE SAME MANUFACTURER.
2. PROVIDE WITH REMOTE MOUNTED CONTROLS (INCLUDING VFDs, HMI CABLE, CONTACTORS, AND TEMPERATURE SENSOR) AND ENERGY MANAGEMENT SYSTEM OVERRIDE.
3. PROVIDE HOOD WITH STAINLESS STEEL CEILING WRAP, EXHAUST COLLAR, FULL CONDENSATE CHANNEL AND DRAIN CONNECTION.
4. PROVIDE HOOD WITH STAINLESS STEEL END PANELS AND PERFORATED SUPPLY PLENUMS WITH COLLARS.

GAS FIRED MAKE-UP AIR UNIT SCHEDULE

SYMBOL	AREA SERVED	TYPE	SUPPLY FAN				ELECTRICAL			TEMP RISE (°F)	GAS HEATING		EVAP. FLOW RATE (GAL/HR)	EVAP. COOLER EDB TEMP.	EVAP. COOLER LDB TEMP.	EVAP. COOLER LWB TEMP.	WEIGHT (LBS)	SONES	MANUFACTURER AND MODEL	REMARKS
			MAX. CFM	ESP	HP	RPM	V/Ø	MCA	MOCP		INPUT MBH	OUTPUT MBH								
MAU-1.1	TYPE II HOODS	OUTDOOR, DIRECT GAS FIRED	4480	.50	5.0	1860	208/3	18.8	30	78.0	341.0	314.4	6.22	91.0°F	72.0°F	63.0°F	1550	17	CAPTIVEAIRE MODEL A2-D.500-20D WITH DEMAND VENTILATION	1 , 2 , 3 , 4 , 5 , 6

REMARKS:

1. MAKE UP AIR UNIT SHALL BE THE SAME MANUFACTURER AS THE TYPE I HOOD(S).
2. PROVIDE UNIT WITH STAINLESS STEEL BURNER, EVAPORATIVE COOLING SECTION WITH FREEZE PROTECTION DRAIN DOWN VALVE KIT, FILTER RACK AND FILTERS, INSULATED DOWNTURN PLENUM CABINET, MOTORIZED BACKDRAFT DAMPER, 100% OSA SCREENED INLET AIR HOOD AND FULL ROOF CURB.
3. PROVIDE UNIT WITH TOTALLY ENCLOSED PREMIUM EFFICIENCY MOTORS FOR VFD.
4. UNIT SHALL BE CONTROLLED BY HOOD CONTROL PANEL.
5. ELECTRICAL TO PROVIDE SEPARATE 120V/1Ø CIRCUIT FOR PLUMBING CONTROLS VALVES AT UNIT.

KITCHEN EXHAUST FAN SCHEDULE

SYMBOL	AREA SERVED	UNIT TYPE	BLOWER				ELECTRICAL		MAXIMUM SONES	OPERATING WEIGHT (LBS)	MANUFACTURER AND MODEL	REMARKS
			CFM	ESP	MAXIMUM RPM	DRIVE	HP	V/Ø				
EF-1.1	HOOD H-1.1	ROOF MOUNTED UP BLAST	2800	.50	1097	DIRECT	1.0	208/3	13.9	200	CAPTIVEAIRE MODEL DU180HFA WITH DEMAND VENTILATION	1 , 2 , 4
EF-1.2	HOOD H-1.2	ROOF MOUNTED UP BLAST	2800	.50	1097	DIRECT	1.0	208/3	13.9	200	CAPTIVEAIRE MODEL DU180HFA WITH DEMAND VENTILATION	1 , 2 , 4
EF-1.3	DISH HOOD H-1.3	ROOF MOUNTED UP BLAST	525	.50	1326	DIRECT	.33	115/1	12.2	125	CAPTIVEAIRE MODEL DU33HFA	1 , 3 , 5

REMARKS:

1. EXHAUST FANS SHALL BE THE SAME MANUFACTURER AS THE HOOD(S).
2. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB (VENTED ROOF CURB IF EXHAUST DUCT IS SHAFTED RATHER THAN WRAPPED), THERMAL OVERLOAD PROTECTION (120 VOLT ONLY), PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH, HINGED SUB BASE, GREASE TERMINATOR
3. PROVIDE UNIT WITH MANUFACTURER'S ROOF CURB W/ DAMPER TRAY AND BACKDRAFT DAMPER, THERMAL OVERLOAD PROTECTION (120 VOLT ONLY), PRE-WIRED NEMA 3R ELECTRICAL DISCONNECT SWITCH, AND INTEGRAL BIRD SCREEN.
4. CONTROL FAN WITH HOOD CONTROL SYSTEM.
5. ELECTRICAL SHALL PROVIDE WALL SWITCH WITH PILOT LIGHT TO CONTROL FAN.

NOTE:

THE HOOD OVER THE COOKING EQUIPMENT IS A TYPE 2 BECAUSE THE KITCHEN WILL BE USED FOR REHEATING FOOD. HOWEVER THE EXHAUST DUCTWORK AND FANS SHALL BE FOR TYPE 1 USE. ALLOWING SCHOOL TO CHANGE THE HOOD TO TYPE 1 WITH FIRE SUPPRESSION IF THEY CHOOSE TO COOK AT THIS FACILITY AT A LATER DATE.

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Project No. 22-104

PRELIMINARY
NOT FOR CONSTRUCTION
2/10/23

Jefferson Elementary School
Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

DATE: JANUARY 9, 2023
LKV PROJECT #: -
REVISIONS:

DRAWN BY: JM/CD
CHECKED BY: BC

Design Development

DRAWING NO.
M-7.1

SUPPLY GRILLE SCHEDULE

SYMBOL	NOMINAL SIZE	NECK / RUNOUT SIZE	CFM RANGE	REMARKS
S-1 CFM SIZE	6X6	6X6	0-180	1 , 2 , 3 , 4
S-2 CFM SIZE	12X8	12X8	180-450	1 , 2 , 3 , 4
S-3 CFM SIZE	14X10	14X10	400-700	1 , 2 , 3 , 4

REMARKS:

1. WALL GRILLE SIZES BASED ON TITUS MODEL 272F, DOUBLE DEFLECTION ADJUSTABLE BLADES, 3/4" SPACING, WHITE FINISH. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, CARNES, J&J REGISTER, TUTTLE & BAILEY, NAILOR, METAL-AIRE, KRUEGER, PRICE, AND UNITED ENERTECH.
2. SIZES BASED ON A MAXIMUM NC LEVEL OF 25.
3. ALL OF THE GRILLES SHOWN IN THIS SCHEDULE MAY NOT BE USED. REFERENCE THE HVAC PLAN FOR GRILLE CALL-OUTS AND THE QUANTITY OF EACH SIZE REQUIRED.
4. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.

DIFFUSER SCHEDULE

SYMBOL	NOMINAL SIZE	NECK / RUNOUT SIZE	CFM RANGE	REMARKS
D-1 CFM 6"Ø	6X6	6"Ø	0 - 90	1 , 2 , 3 , 4 , 5 , 6 , 7
D-2 CFM 8"Ø	9X9	8"Ø	90 - 200	1 , 2 , 3 , 4 , 5 , 6 , 7
D-3 CFM 10"Ø	12X12	10"Ø	200 - 350	1 , 2 , 3 , 4 , 5 , 6 , 7
D-4 CFM 12"Ø	15X15	12"Ø	300 - 500	1 , 2 , 3 , 4 , 5 , 6 , 7
D-5 CFM 14"Ø	15X15	14"Ø	400 - 650	1 , 2 , 3 , 4 , 5 , 6 , 7
D-6 CFM 16"Ø	18X18	16"Ø	600 - 900	1 , 2 , 3 , 4 , 5 , 6 , 7
D-7 CFM 21X21	21X21	21X21	900 - 1400	1 , 2 , 3 , 4 , 5 , 6 , 7
D-8 CFM 8"Ø	48" (3)-3/4" SLOT, 8" OVAL	8"Ø	0 - 175	2 , 4 , 5 , 6 , 7 , 8
D-9 CFM 12"Ø	48" (3)-3/4" SLOT, 12" OVAL	12"Ø	0 - 240	2 , 4 , 5 , 6 , 7 , 8
D-10 CFM 12"Ø	72" (3)-3/4" SLOT, 10" OVAL	10"Ø	0 - 275	2 , 4 , 5 , 6 , 7 , 8
D-11 CFM 12"Ø	72" (3)-3/4" SLOT, 12" OVAL	12"Ø	250 - 360	2 , 4 , 5 , 6 , 7 , 8
D-12 CFM 8"Ø	24X24 MODULE 8"Ø NECK	8"Ø"	0 - 200	2 , 4 , 5 , 6 , 7 , 9
D-13 CFM 10"Ø	24X24 MODULE 10"Ø NECK	10"Ø"	100 - 400	2 , 4 , 5 , 6 , 7 , 9
D-14 CFM 18"Ø	40"Ø	18"Ø	700 - 1075	2 , 4 , 5 , 6 , 7 , 10

REMARKS:

1. SIZES BASED ON TITUS MODEL TDCA SERIES, HORIZONTAL TO VERTICAL ADJUSTABLE DISCHARGE. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH.
2. SIZES BASED ON A MAXIMUM NC LEVEL OF 25.
3. ALL DIFFUSERS LOCATED IN LAY-IN CEILING AREAS SHALL BE BORDER TYPE 3 AND BE MOUNTED IN MANUFACTURER PROVIDED 24"x24" PANELS. ALL DIFFUSERS LOCATED IN HARD CEILING AREAS SHALL BE BORDER TYPE 6 (BEVELED) SURFACE MOUNTED. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF VARIOUS CEILING TYPES.
4. SEE HVAC FLOOR PLANS FOR DIRECTIONAL THROW REQUIREMENTS FOR EACH DIFFUSER.
5. ALL OF THE DIFFUSERS SHOWN IN THIS SCHEDULE MAY NOT BE USED. REFERENCE THE HVAC PLAN FOR DIFFUSER CALL-OUTS AND THE QUANTITY OF EACH SIZE REQUIRED.
6. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
7. WHITE FINISH.
8. SIZES BASED ON TITUS MODEL ML-38 WITH PLENUM MP-38. DIFFUSERS LOCATED IN LAY-IN CEILING AREAS SHALL BE BORDER TYPE 3 AND HARD CEILING AREAS SHALL BE BORDER TYPE 6. SEE ARCHITECTURAL PLANS FOR LOCATIONS OF VARIOUS CEILING TYPES. HARD CEILING APPLICATION SHALL BE CLIP TYPE AND NO SCREWS SHALL BE USED ON DIFFUSER. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER AND PRICE.
9. SIZES BASED ON TITUS MODEL PCS-DF SERIES. 4-WAY ADJUSTABLE DEFLECTORS (PATTERN CONTROLLER), VERTICAL/HORZONTAL WITH HINGED DROP PERFORATED FACE. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH
10. SIZES BASED ON TITUS MODEL TMRA, TYPE 3, ROUND CEILING DIFFUSER, STEEL CONSTRUCTION. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, J&J REGISTER, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER , PRICE, AND UNITED ENERTECH.

RETURN & EXHAUST GRILLE SCHEDULE

SYMBOL	NOMINAL SIZE	NECK / RUNOUT SIZE	CFM RANGE	REMARKS
R-1 6"Ø	8X8	6"Ø	0-80	1 , 2 , 3 , 4 , 5 , 6
R-2 8"Ø	10X10	8"Ø	80-180	1 , 2 , 3 , 4 , 5 , 6
R-3 10"Ø	12X12	10"Ø	180-300	1 , 2 , 3 , 4 , 5 , 6
R-4 6"Ø	22X10	6"Ø	0-80	1 , 2 , 3 , 4 , 5 , 6
R-5 8"Ø	22X10	8"Ø	80-180	1 , 2 , 3 , 4 , 5 , 6
R-6 10"Ø	22X10	10"Ø	180-300	1 , 2 , 3 , 4 , 5 , 6
R-7 12"Ø	22X22	12"Ø	300-500	1 , 2 , 3 , 4 , 5 , 6
R-8 14"Ø	22X22	14"Ø	500-750	1 , 2 , 3 , 4 , 5 , 6
R-9 22X10	22X10	22X10	500-1100	1 , 2 , 3 , 4 , 5 , 6
R-10 22X22	22X22	22X22	1100-2000	1 , 2 , 3 , 4 , 5 , 6
R-11 22X22	22X22	16"Ø	1100-1300	1 , 2 , 3 , 4 , 5 , 6
R-12 22X22	22X22	18"Ø	1100-1700	1 , 2 , 3 , 4 , 5 , 6
R-13 10X10	10X10	10X10	0-200	1 , 2 , 3 , 4 , 5 , 6
R-14 10X6	10X6	10X6	0-180	2 , 4 , 5 , 6 , 8
R-15 12X6	12X6	12X6	0-200	2 , 4 , 5 , 6 , 7
R-16 36X24	36X24	36X24	0-2500	2 , 4 , 5 , 6 , 8
R-17 18X14	18X14	18X14	0-1000	2 , 4 , 5 , 6 , 8
R-18 12X12	12X12	12X12	0-500	2 , 4 , 5 , 6 , 8
R-19 8X8	8X8	8X8	0-400	2 , 4 , 5 , 6 , 7
R-20 12X8	12X8	12X8	0-160	2 , 4 , 5 , 6 , 8

REMARKS:

1. SIZES BASED ON TITUS MODEL 50F, ALUMINUM EGGCRATE RETURN GRILLE, 1/2" x 1/2" x 1" SPACING (SINGLE CORE). PROVIDE SQUARE TO ROUND TRANSITION (WHERE ROUND RUN-OUT INDICATED). APPROVED ALTERNATE MANUFACTURERS INCLUDE , ANEMOSTAT, CARNES, PRICE, NAILOR, METAL-AIRE, TUTTLE & BAILEY, KRUEGER, J&J REGISTER, AND UNITED ENERTECH.
2. SIZES BASED ON A MAXIMUM NC LEVEL OF 25.
3. ALL GRILLES LOCATED IN LAY-IN CEILING AREAS SHALL HAVE BORDER #3, UNLESS OTHERWISE INDICATED. ALL GRILLES LOCATED IN HARD CEILING AREAS SHALL HAVE BORDER #1, UNLESS OTHERWISE INDICATED. REFER TO ARCHITECTURAL PLANS FOR LOCATIONS OF VARIOUS CEILING TYPES. SHEET METAL DUCTWORK VISIBLE BEHIND GRILLE SHALL BE PAINTED FLAT BLACK.
4. ALL OF THE GRILLES SHOWN IN THIS SCHEDULE MAY NOT BE USED. REFERENCE THE HVAC PLAN FOR GRILLE CALL-OUTS AND THE QUANTITY OF EACH SIZE REQUIRED.
5. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
6. WHITE FINISH.
7. LOW WALL GRILLE SIZES BASED ON TITUS MODEL 33R, HEAVY DUTY STEEL, 14 GAUGE BLADES, 1/2" SPACING, 38° DEFLECTION, ALL-WELDED CONSTRUCTION. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, CARNES, J&J REGISTER, NAILOR, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH.
8. HIGH WALL GRILLE SIZES BASED ON TITUS MODEL 355 RL, STEEL BAR GRILLE, FIXED BLADES, 1/2" SPACING, 35° DEFLECTION, ADJUSTABLE OPPOSED BLADE DAMPER. APPROVED ALTERNATE MANUFACTURERS INCLUDE ANEMOSTAT, CARNES, J&J REGISTER, NAILOR, TUTTLE & BAILEY, KRUEGER, PRICE, AND UNITED ENERTECH.

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CONTROLS LEGEND

SYMBOL	DESCRIPTION
AI	ANALOG INPUT
DI	DIGITAL INPUT
AO	ANALOG OUTPUT
DO	DIGITAL OUTPUT
--	CONTROL ELEMENT TAG
	3-WAY, 2-WAY CONTROL VALVE
	PARALLEL BLADE CONTROL DAMPER
	OPPOSED BLADE CONTROL DAMPER
	OPPOSED BLADE CONTROL DAMPER

CONTROLS LEGEND

SYMBOL	DESCRIPTION
M	MOTOR
	THERMOWELL
	CURRENT SENSING RELAY
	CONTROL RELAY
AS	AIRFLOW MEASURING STATION (EBTRON GOLD SERIES) BY CONTROL CONTRACTOR
DX C	DX REFRIGERANT COOLING COIL
C C	CHILLED WATER COOLING COIL
H C	HOT WATER HEATING COIL
HR C	HEAT RECOVERY COIL
PH C	HOT WATER PREHEAT COIL
RH C	HOT WATER REHEAT COIL
	GAS-FIRED HEAT EXCHANGER
T	THERMOSTAT
S	SPACE TEMPERATURE SENSOR
H	SPACE HUMIDITY SENSOR
CO	SPACE CARBON MONOXIDE SENSOR
PT	SPACE PRESSURE TRANSMITTER
	LOW VOLTAGE SIGNAL
	LINE VOLTAGE POWER

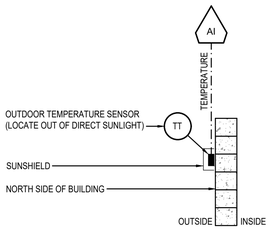
NOTES:
1. ALL DATA THAT IS NOTED TO BE "ADJUSTABLE" ON THE FOLLOWING CONTROL SHEETS SHALL MADE BOTH ADJUSTABLE AND LOCKABLE FROM THE OPERATOR'S WORKSTATION AND IN PARTICULAR, THE GRAPHICAL USER INTERFACE (GUI).
2. GLOBAL CALENDAR SCHEDULING SHALL BE PROVIDED.

CONTROLS LEGEND

SYMBOL	DESCRIPTION
APS	AIRFLOW PROVING SWITCH
BAS	BUILDING AUTOMATION SYSTEM
BCV	BYPASS CONTROL VALVE
C	CONDENSATE
CFL	CONDENSATE FLOAT LEVEL SWITCH
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CR	CONTROL RELAY
CSR	CURRENT SENSING RELAY
D	DAMPER
DA	DAMPER ACTUATOR
DDC	DIRECT DIGITAL CONTROLS
DP	DEW POINT TRANSMITTER
DPT	DAMPER POSITION TRANSMITTER
FM	FLOW METER (TURBINE STYLE)
FS	FLOW SWITCH
GR	GLYCOL RETURN
GS	GLYCOL SUPPLY
HL	HUMIDITY HIGH LIMIT SWITCH
HT	HUMIDITY TRANSMITTER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
LS	LIMIT SWITCH
PDS	PRESSURE DIFFERENTIAL SWITCH
PDT	PRESSURE DIFFERENTIAL TRANSMITTER
PS	PRESSURE SWITCH
PT	PRESSURE TRANSMITTER
RS	ROTATION SENSOR
SV	SOLENOID VALVE
TT	TEMPERATURE TRANSMITTER
TV	TEMPERATURE CONTROL VALVE
WL	WATER LEVEL SWITCH

GENERAL:
ONE OUTSIDE AIR TEMPERATURE SENSOR SHALL BE INSTALLED ON THE NORTH SIDE OF THE BUILDING TO PROVIDE A CONTINUOUS READING OF THE OUTSIDE AIR TEMPERATURE.

OUTSIDE AIR TEMPERATURE SEQUENCE OF OPERATION



OUTSIDE AIR TEMPERATURE CONTROL SCHEMATIC

GENERAL:
THE VESTIBULE ELECTRIC HEATER SHALL CONSIST OF AN ELECTRIC HEATING ELEMENT, A SUPPLY FAN, AND A SPACE TEMPERATURE SENSOR. THE CONTROL CONTRACTOR SHALL PROVIDE A NEW DDC CONTROL PACKAGE DEDICATED TO THE COMPLETE OPERATION OF THE SYSTEM.

THE TEMPERATURE SENSOR SHALL SIGNAL THE DDC CONTROLLER ITS TEMPERATURE AND THE TEMPERATURE OF THE SPACE HEATING SET POINT.

ALL PARAMETERS SHALL BE REMOTELY ADJUSTABLE FROM THE BUILDING AUTOMATION SYSTEM.

OPERATION:
THE ELECTRIC HEATER SHALL BE ENABLED WHENEVER BOTH OF THE FOLLOWING CONDITIONS EXISTS:

1. THE OUTSIDE AIR TEMPERATURE DECREASES TO THE ELECTRIC HEATER OUTSIDE AIR TEMPERATURE ENABLE SET POINT.
2. THE SPACE TEMPERATURE DECREASES 1°F (ADJUSTABLE) BELOW THE SPACE TEMPERATURE HEATING SET POINT.

WHEN THE ABOVE CONDITIONS ARE MET, THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE SUPPLY FAN.
2. SEND AN ENABLE COMMAND TO THE ELECTRIC HEATER.
   a. VALIDATE THE RUNNING STATUS USING SPACE TEMPERATURE.
      1) IF THE SPACE TEMPERATURE FALLS BELOW 50°F (ADJUSTABLE) FOR A PERIOD OF 5 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

THE ELECTRIC HEATER SHALL BE DISABLED WHENEVER ONE OF THE FOLLOWING CONDITIONS EXISTS:

1. THE OUTSIDE AIR TEMPERATURE INCREASES ABOVE THE ELECTRIC HEATER OUTSIDE AIR TEMPERATURE ENABLE SET POINT.
2. THE SPACE TEMPERATURE INCREASES 1°F (ADJUSTABLE) ABOVE THE SPACE TEMPERATURE HEATING SET POINT.

WHEN ONE OF THE ABOVE CONDITIONS IS MET, THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

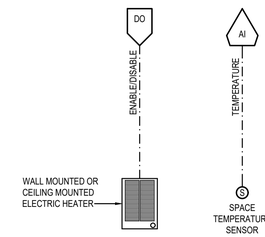
1. SEND A DISABLE COMMAND TO THE ELECTRIC HEATER.
   a. VALIDATE THE RUNNING STATUS USING SPACE TEMPERATURE.
      1) IF THE SPACE TEMPERATURE INCREASES ABOVE 85°F (ADJUSTABLE) FOR A PERIOD OF 5 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.
2. SEND A DISABLE COMMAND TO THE SUPPLY FAN.

THE ELECTRIC HEATER OUTSIDE AIR TEMPERATURE ENABLE SET POINT SHALL BE SET AT 45°F.
THE SPACE TEMPERATURE HEATING SET POINT SHALL BE SET AT 60°F (ADJUSTABLE).

SAFETIES:
1. IF THE SPACE TEMPERATURE DROPS TO 35°F (ADJUSTABLE) FOR A PERIOD OF 120 CONSECUTIVE SECONDS (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

VESTIBULE ELECTRIC HEATER SYSTEM SEQUENCE OF OPERATION

(EH-A1, EH-A2, EH-B1, EH-B2, EH-C1, EH-D1, EH-D2, EH-E1, & EH-F1)



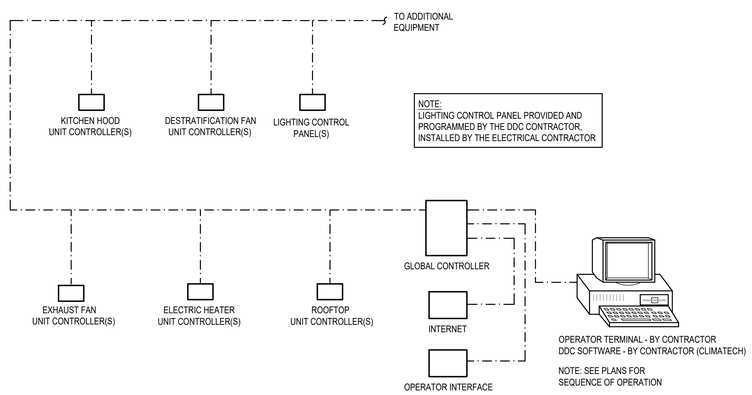
VESTIBULE ELECTRIC WALL HEATER SYSTEM CONTROL SCHEMATIC

(EH-A1, EH-A2, EH-B1, EH-B2, EH-C1, EH-D1, EH-D2, EH-E1, & EH-F1)

GENERAL SPACE TEMPERATURE SENSORS

SPACE TEMPERATURE SENSORS SHALL BE LOCATED THROUGHOUT THE BUILDING AS NOTED ON THE PLANS. LOCATION SHALL INCLUDE:
- KITCHEN FREEZER
- KITCHEN COOLER
- IT ROOMS

THESE SENSORS SHALL MONITOR TEMPERATURE AND PROVIDE ALARMS IF THE SPACE GETS TOO HOT.

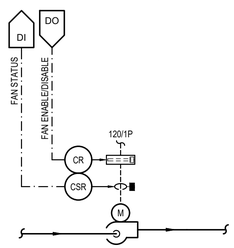


GENERAL
THE DOMESTIC HOT WATER RECIRCULATION PUMPS SHALL OPERATE FROM THE DDC SYSTEM.

OPERATION
THE DDC SYSTEM SHALL ENABLE THE DOMESTIC HOT WATER RETURN PUMP BASED ON THE OCCUPIED BUILDING SCHEDULE. IF THE PUMP IS SIGNALED ON AND DOES NOT PROVIDE PROOF OF OPERATION, THE CONTROL SYSTEM SHALL GENERATE AN ALARM AT THE CENTRAL OPERATOR'S WORKSTATION.

DOMESTIC HOT WATER PUMP SYSTEM SEQUENCE OF OPERATION

(ALL DOMESTIC HOT WATER RECIRCULATION PUMPS)



DOMESTIC HOT WATER PUMP CONTROL SCHEMATIC

(ALL DOMESTIC HOT WATER RECIRCULATION PUMPS)

GENERAL:
THE ELECTRIC HEATER SYSTEM SHALL CONSIST OF A WALL MOUNTED ELECTRIC HEATER, A SUPPLY FAN, AND A SPACE TEMPERATURE SENSOR. THE CONTROL CONTRACTOR SHALL PROVIDE A NEW DDC CONTROL PACKAGE DEDICATED TO THE COMPLETE OPERATION OF THE SYSTEM.

THE INDOOR TEMPERATURE SENSOR SHALL SIGNAL THE DDC CONTROLLER ITS TEMPERATURE AND THE TEMPERATURE OF THE HEATING SET POINT.

ALL PARAMETERS SHALL BE REMOTELY ADJUSTABLE FROM THE BUILDING AUTOMATION SYSTEM.

HEATING MODE OF OPERATION:
THE HEATING MODE OF OPERATION SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE DECREASES BELOW THE SPACE TEMPERATURE HEATING SET POINT.

WHEN THE ABOVE CONDITION IS MET THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE SUPPLY FAN.
2. SEND AN ENABLE COMMAND TO THE ELECTRIC HEATER.
   a. VALIDATE THE RUNNING STATUS USING SPACE TEMPERATURE.
      1) IF THE SPACE TEMPERATURE FALLS BELOW 50°F (ADJUSTABLE) FOR A PERIOD OF 5 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

THE HEATING MODE OF OPERATION SHALL BE DISABLED WHENEVER ONE OF THE FOLLOWING CONDITIONS EXIST:

1. THE SPACE TEMPERATURE INCREASES 2°F (ADJUSTABLE) ABOVE THE SPACE TEMPERATURE HEATING SET POINT.

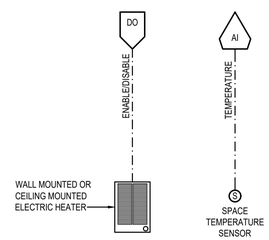
WHEN ONE OF THE ABOVE CONDITION IS MET THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE ELECTRIC HEATER.
   a. VALIDATE THE RUNNING STATUS USING SPACE TEMPERATURE.
      1) IF THE SPACE TEMPERATURE INCREASES ABOVE 85°F (ADJUSTABLE) FOR A PERIOD OF 5 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.
2. SEND A DISABLE COMMAND TO THE SUPPLY FAN.

THE SPACE TEMPERATURE HEATING SET POINT SHALL BE 60°F.

ELECTRIC HEATER SYSTEM SEQUENCE OF OPERATION

NTS



ELECTRIC HEATER SYSTEM CONTROL SCHEMATIC

NTS

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Project No. 22-104

PRELIMINARY
NOT FOR CONSTRUCTION
2/10/23

Jefferson Elementary School
Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

DATE: JANUARY 9, 2023
LKV PROJECT #: -
REVISIONS:

DRAWN BY: JM/CD
CHECKED BY: BC

Design Development

DRAWING NO.
M-8.1

GENERAL:
THE PACKAGED ROOFTOP UNIT W/ CONSTANT VOLUME (CV) CONTROL SHALL CONSIST OF AN OUTSIDE AIR INTAKE W/ MODULATING DAMPERS, A RETURN AIR INTAKE W/ MODULATING DAMPERS, A CONSTANT VOLUME EXHAUST FAN, A SUPPLY FAN, A GAS-FIRED HEAT EXCHANGER, A DX COOLING COIL, AND A SPACE TEMPERATURE SENSOR. THE RTU'S THAT SERVE MULTIPLE AREAS SHALL INCLUDE AVERAGING TEMPERATURE SENSORS (SEE FLOOR PLAN FOR QUANTITY). THE CONTROL CONTRACTOR SHALL PROVIDE A NEW DDC CONTROL PACKAGE DEDICATED TO THE COMPLETE OPERATION OF THE UNIT.

THE SUPPLY FAN SHALL START AND STOP ON THE MASTER WEEKLY AND HOLIDAY SCHEDULE SET AT THE OPERATOR'S WORKSTATION.

ALL PARAMETERS SHALL BE REMOTELY ADJUSTABLE FROM THE BUILDING AUTOMATION SYSTEM.

MORNING WARM-UP / COOLDOWN:
MORNING WARM-UP / COOLDOWN SHALL BE CONTROLLED BY AN OPTIMUM START / STOP MODE PROVIDED BY THE DDC CONTROLLER THAT AIDS IN THE REDUCTION OF ENERGY COSTS DURING A BUILDING'S TRANSITION FROM UNOCCUPIED TO OCCUPIED OR OCCUPIED TO UNOCCUPIED. THIS SCENERIO IS ACCOMPLISHED BY TURNING ON THE PRE-HEATING / PRE-COOLING AS LATE AS POSSIBLE TO REACH COMFORT LEVELS PRIOR TO OCCUPANCY AND TURNING OFF THE HEATING / COOLING AS EARLY AS POSSIBLE WHILE STILL MAINTAINING OCCUPIED ZONE COMFORT UNTIL THE ZONE IS VACANT.

THE DDC CONTROLLER OPTIMUM START / STOP MODE SHALL CONTINUOUSLY MONITOR, CALCULATE AND ADJUST THE FOLLOWING VARIABLES IN ORDER TO DETERMINE THE OPTIMAL START / STOP TIMES:

1. OUTSIDE AIR TEMPERATURE.
2. OPTIMUM ECONOMIZER POSITION (COOLDOWN).
3. RATE OF WARM-UP / COOL-DOWN IN EACH ZONE AFTER EQUIPMENT START-UP.
4. TEMPERATURE DIFFERENCE BETWEEN THE ZONE TEMPERATURE AND THE HEATING / COOLING SET POINTS.
5. AMOUNT OF TIME REQUIRED TO RAISE OR LOWER THE ZONE TEMPERATURE 1°F.
6. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED DURING THE WARM-UP MODE.

OCCUPIED MODE:
WHEN THE UNIT IS SCHEDULED INTO THE OCCUPIED MODE THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE OUTSIDE AIR / RETURN AIR DAMPERS.
   a. THE DAMPERS SHALL MODULATE TO PROVIDE THE MINIMUM AMOUNT OF OUTSIDE AIRFLOW (AS INDICATED IN THE ROOFTOP UNIT SCHEDULE).
   b. VALIDATE THE POSITION THROUGH THE DAMPER POSITION TRANSMITTER.
      1) IF THE DAMPERS FAILS TO PROVIDE THE MINIMUM AMOUNT OF OUTSIDE AIR, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.
2. SEND AN ENABLE COMMAND TO THE SUPPLY FAN.
   a. VALIDATE THE RUNNING STATUS THROUGH THE CURRENT SENSING RELAY.
      1) IF THE FAN FAILS TO START, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

THE OCCUPIED MODE SPACE TEMPERATURE COOLING SET POINT SHALL BE SET AT 75°F (ADJUSTABLE).
THE OCCUPIED MODE SPACE TEMPERATURE HEATING SET POINT SHALL BE SET AT 70°F (ADJUSTABLE).

UNOCCUPIED MODE:
WHEN THE UNIT IS SCHEDULED INTO THE UNOCCUPIED MODE THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE OUTSIDE AIR / RETURN AIR DAMPERS.
   a. THE DAMPERS SHALL MODULATE TO PROVIDE 100% RETURN AIR.
   b. VALIDATE THE POSITION THROUGH THE DAMPER POSITION TRANSMITTER.
      1) IF THE DAMPERS FAIL TO PROVIDE 100% RETURN AIR, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.
2. SEND A DISABLE COMMAND TO THE SUPPLY FAN.
   a. VALIDATE THE RUNNING STATUS THROUGH THE CURRENT SENSING RELAY.
      1) IF THE SUPPLY FAN FAILS TO STOP, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

THE SUPPLY FAN(S) SHALL CYCLE W/ THE HEATING AND COOLING MODES OF OPERATION TO MAINTAIN THE UNOCCUPIED SPACE TEMPERATURE SET POINTS.

THE UNOCCUPIED MODE SPACE TEMPERATURE COOLING SET POINT SHALL BE SET AT 85°F (ADJUSTABLE).
THE UNOCCUPIED MODE SPACE TEMPERATURE HEATING SET POINT SHALL BE SET AT 55°F (ADJUSTABLE).

COOLING MODE OF OPERATION (DRY BULB ECONOMIZER):
THE DRY BULB ECONOMIZER COOLING MODE OF OPERATION SHALL BE ENABLED WHENEVER ALL OF THE FOLLOWING CONDITIONS EXIST:

1. THE SPACE TEMPERATURE INCREASES ABOVE THE SPACE TEMPERATURE COOLING SET POINT.
2. THE OUTSIDE AIR TEMPERATURE IS 2°F (ADJUSTABLE) BELOW THE RETURN AIR TEMPERATURE.

WHEN THE ABOVE CONDITIONS ARE MET THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE OUTSIDE AIR / RETURN AIR DAMPERS.
   a. THE DAMPERS SHALL MODULATE UP TO 100% OUTSIDE AIR TO MAINTAIN THE SPACE TEMPERATURE COOLING SET POINT.

COOLING MODE OF OPERATION (DX COOLING):
THE DX COOLING MODE OF OPERATION SHALL BE ENABLED WHENEVER ALL THE FOLLOWING CONDITIONS EXIST:

1. THE SPACE TEMPERATURE INCREASES 1°F (ADJUSTABLE) ABOVE THE SPACE TEMPERATURE COOLING SET POINT.
2. THE OUTSIDE AIR / RETURN AIR DAMPERS ARE POSITIONED AT EITHER THEIR MINIMUM OR MAXIMUM OUTSIDE AIR SETTINGS.

WHEN THE ABOVE CONDITIONS ARE MET THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE DX COOLING SYSTEM (COMPRESSORS / CONDENSER FANS).
   a. VALIDATE THE RUNNING STATUS THROUGH A TEMPERATURE DECREASE OF 5°F (ADJUSTABLE) IN THE SUPPLY AIR TEMPERATURE.
      1) IF A TEMPERATURE DECREASE CANNOT BE DETECTED FOR A PERIOD OF 2 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.
   b. THE UNIT'S CONTROLLER SHALL STAGE THE COMPRESSORS TO MAINTAIN THE SPACE TEMPERATURE COOLING SET POINT.

THE COOLING MODE OF OPERATION SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE DECREASES 1°F (ADJUSTABLE) BELOW THE SPACE TEMPERATURE COOLING SET POINT FOR A PERIOD OF 30 CONSECUTIVE SECONDS (ADJUSTABLE).

WHEN THE ABOVE CONDITION IS MET THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE DX COOLING SYSTEM (COMPRESSORS / CONDENSER FANS).
   a. VALIDATE THE RUNNING STATUS THROUGH A TEMPERATURE INCREASE OF 5°F (ADJUSTABLE) IN THE SUPPLY AIR TEMPERATURE.
      1) IF A TEMPERATURE INCREASE CANNOT BE DETECTED FOR A PERIOD OF 2 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

HEATING MODE OF OPERATION (GAS-FIRED):
THE HEATING MODE OF OPERATION (GAS-FIRED) SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE DECREASES 1°F (ADJUSTABLE) BELOW THE SPACE TEMPERATURE HEATING SET POINT.

WHEN THE ABOVE CONDITION IS MET THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO STAGE #1 (LOW FIRE) OF THE GAS-FIRED HEATING SYSTEM:
   a. VALIDATE THE RUNNING STATUS THROUGH A TEMPERATURE INCREASE OF 5°F (ADJUSTABLE) IN THE SUPPLY AIR TEMPERATURE.
      1) IF A TEMPERATURE INCREASE CANNOT BE DETECTED FOR A PERIOD OF 2 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

IF THE SPACE TEMPERATURE DECREASES 2°F (ADJUSTABLE) BELOW THE SPACE TEMPERATURE HEATING SET POINT, THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO STAGE #2 (HIGH FIRE) OF THE GAS-FIRED HEATING SYSTEM:
   a. VALIDATE THE RUNNING STATUS THROUGH A TEMPERATURE INCREASE OF 5°F (ADJUSTABLE) IN THE SUPPLY AIR TEMPERATURE.
      1) IF A TEMPERATURE INCREASE CANNOT BE DETECTED FOR A PERIOD OF 2 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

THE SPACE TEMPERATURE HEATING MODE OF OPERATION (GAS-FIRED) SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE SPACE TEMPERATURE INCREASES 1°F (ADJUSTABLE) ABOVE THE SPACE TEMPERATURE HEATING SET POINT.

WHEN THE ABOVE CONDITION IS MET THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE GAS-FIRED HEATING SYSTEM.
   a. VALIDATE THE RUNNING STATUS THROUGH A TEMPERATURE DECREASE OF 5°F (ADJUSTABLE) IN THE SUPPLY AIR TEMPERATURE.
      1) IF A TEMPERATURE DECREASE CANNOT BE DETECTED FOR A PERIOD OF 2 CONSECUTIVE MINUTES (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

EXHAUST SYSTEM:
THE EXHAUST SYSTEM SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITIONS EXIST:

1. THE SUPPLY FAN IS ENABLED.
2. THE ECONOMIZER DAMPER END SWITCH REACHES 50% OPEN (ADJUSTABLE).

WHEN THE ABOVE CONDITIONS ARE MET THE DDC CONTROLLER SHALL ENABLE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE EXHAUST FAN.
   a. VALIDATE THE RUNNING STATUS THROUGH THE CURRENT SENSING RELAY.
      1) IF THE FAN FAILS TO START, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

THE EXHAUST SYSTEM SHALL BE DISABLED WHENEVER ONE OF THE FOLLOWING CONDITIONS EXISTS:

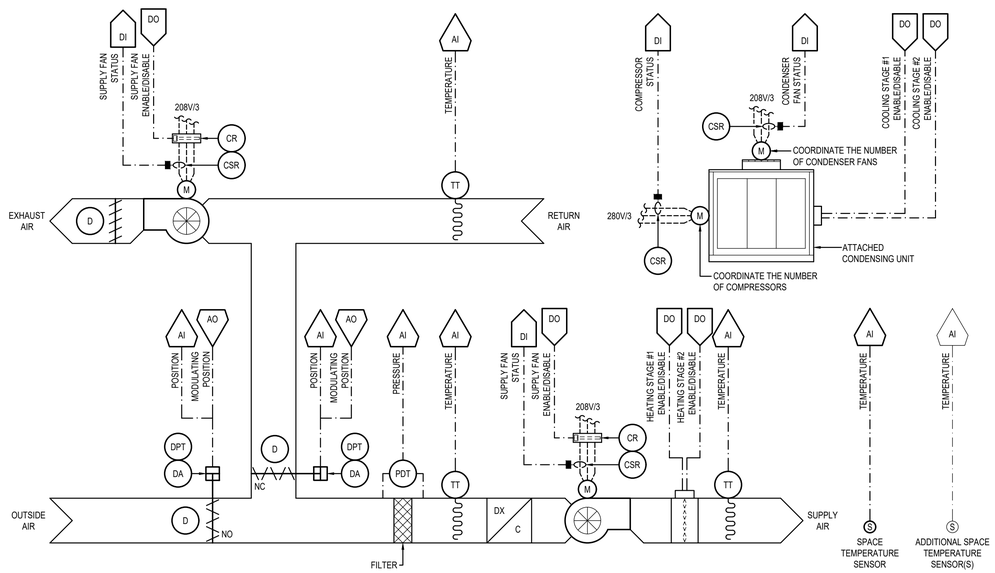
1. THE SUPPLY FAN IS OFF.
2. THE ECONOMIZER DAMPER END SWITCH DROPS BELOW 50% OPEN (ADJUSTABLE).

WHEN ONE OF THE ABOVE CONDITIONS IS MET THE DDC CONTROLLER SHALL ENABLE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE EXHAUST FAN.
   a. VALIDATE THE RUNNING STATUS THROUGH THE CURRENT SENSING RELAY.
      1) IF THE FAN FAILS TO STOP, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

PACKAGED ROOFTOP UNIT W/ CONSTANT VOLUME (CV) CONTROL SEQUENCE OF OPERATION

(RTU-3)



PACKAGED ROOFTOP UNIT W/ CONSTANT VOLUME (CV) CONTROL SYSTEM SCHEMATIC

(RTU-3)

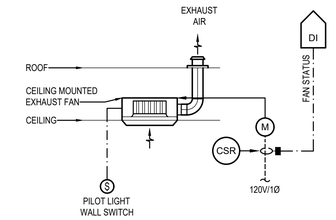
GENERAL:
THE GENERAL EXHAUST FAN SYSTEM SHALL CONSIST OF A CEILING-MOUNTED EXHAUST FAN, AND A PILOT LIGHT WALL SWITCH. THE CONTROL CONTRACTOR SHALL PROVIDE A NEW DDC CONTROL PACKAGE.

THE EXHAUST FAN SHALL BE CONTROLLED THROUGH A WALL SWITCH.

THE DDC CONTROLLER SHALL MONITOR THE STATUS OF THE EXHAUST FAN. IF THE FAN IS ON DURING NORMALLY UNOCCUPIED HOURS, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

GENERAL EXHAUST FAN SEQUENCE OF OPERATION

(EF-A1, EF-B1, EF-D1, & EF-E1)



GENERAL EXHAUST FAN CONTROL SCHEMATIC

(EF-A1, EF-B1, EF-D1, & EF-E1)

GENERAL:
THE DUCTLESS SPLIT SYSTEM SHALL CONSIST OF AN INDOOR FAN COIL UNIT, AN OUTDOOR CONDENSING UNIT, AND A MANUFACTURER PROVIDED WIRELESS CONTROLLER.

OPERATION:
THE WIRELESS CONTROLLER SHALL CONTROL THE OPERATION OF THE DUCTLESS SPLIT SYSTEM.

COOLING MODE OF OPERATION (FC-A1/CU-A1, FC-C1/CU-C1, FC-E1/CU-E1, & FC-F1/CU-F1):
IF COOLING IS REQUIRED, THE WIRED CONTROLLER SHALL ENABLE THE COMPRESSORIZED COOLING SYSTEM TO MAINTAIN THE USER ADJUSTABLE COOLING SPACE SET POINT. IF THE SPACE IS BELOW THE COOLING SET POINT, THE DUCTLESS SPLIT SYSTEM SHALL BE DISABLED.

HEATING MODE OF OPERATION (FC-A1/CU-A1, FC-C1/CU-C1, & FC-E1/CU-E1):
IF HEATING IS REQUIRED, THE WIRED CONTROLLER SHALL ENABLE THE COMPRESSORIZED HEATING SYSTEM TO MAINTAIN THE USER ADJUSTABLE HEATING SPACE SET POINT. IF THE SPACE IS ABOVE THE HEATING SET POINT, THE DUCTLESS SPLIT SYSTEM SHALL BE DISABLED.

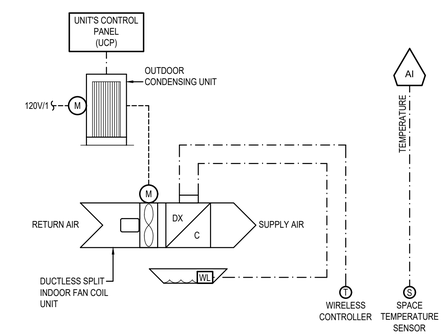
THE SPACE TEMPERATURE COOLING SET POINT SHALL BE SET AT 75°F (ADJUSTABLE).
THE SPACE TEMPERATURE HEATING SET POINT SHALL BE SET AT 70°F (ADJUSTABLE).

FC-F1/CU-F1 SHALL BE LOCKED OUT OF HEATING MODE.

SAFETIES:
1. IF THE SPACE TEMPERATURE INCREASES TO 85°F (ADJUSTABLE), AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.
2. THE SYSTEM SHALL BE DISABLED WHENEVER THE WATER LEVEL OVERFLOW SWITCH INDICATES A HIGH CONDENSATE LEVEL.

DUCTLESS SPLIT SYSTEM SEQUENCE OF OPERATION

(FC-A1/CU-A1, FC-C1/CU-C1, FC-E1/CU-E1, & FC-F1/CU-F1)



DUCTLESS SPLIT SYSTEM CONTROL SCHEMATIC

(FC-A1/CU-A1, FC-C1/CU-C1, FC-E1/CU-E1, & FC-F1/CU-F1)

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REVISIONS:

DRAWN BY: JM/CD
CHECKED BY: BC

Design Development

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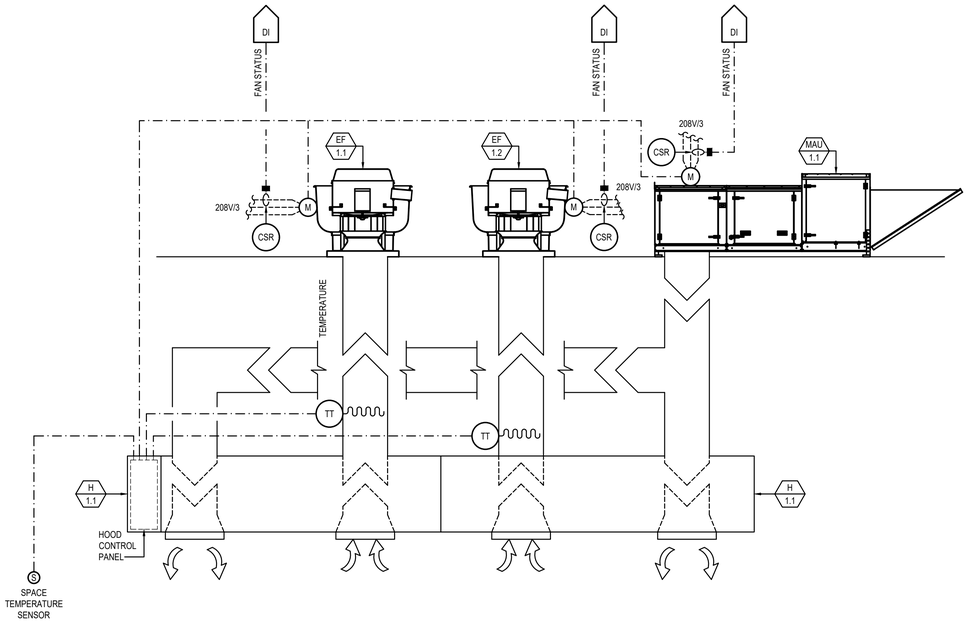
M-8.2



KITCHEN HOOD MAKE-UP AIR / EXHAUST SYSTEM CONTROL SCHEMATIC

(MAU-1.1, EF-1.1, & EF-1.2)

GENERAL:
THE KITCHEN HOOD EXHAUST SYSTEM SHALL CONSIST OF (2) EXHAUST FANS, A MAKE-UP AIR UNIT FURNISHED W/ A GAS-FIRED HEAT EXCHANGER AND A DISCHARGE DAMPER (OPEN / CLOSE), AND TWO HOODS. THE MECHANICAL CONTRACTOR SHALL PROVIDE A COMPLETE CONTROL SYSTEM. THE DDC CONTRACTOR SHALL MONITOR POINTS ONLY.

THE SPACE TEMPERATURE SENSOR SHALL SIGNAL THE HOOD CONTROLLER ITS TEMPERATURE.

THE EXHAUST TEMPERATURE SENSOR SHALL SIGNAL THE HOOD CONTROLLER ITS TEMPERATURE. THE HOOD SHALL INCLUDE AUTOMATIC CONTROL OF THE EXHAUST FANS AND MAKEUP AIR UNITS BASED ON A TEMPERATURE DIFFERENTIAL BETWEEN THE SPACE TEMPERATURE SENSOR AND EXHAUST DUCT TEMPERATURE SENSOR. THE HOOD CONTROLLER SHALL BE PROGRAMMED AS A DYNAMIC SYSTEM TO MODULATE THE EXHAUST AND SUPPLY FANS AS REQUIRED TO MAINTAIN THE SET TEMPERATURE DIFFERENTIAL.

INTERLOCK:
THE MAKE-UP AIR UNIT SHALL BE INTERLOCKED TO THE EXHAUST FANS. WHEN THE EXHAUST FANS ARE ENABLED, THE MAKE-UP AIR UNIT SHALL BE ENABLED. WHEN THE EXHAUST FAN IS DISABLED, THE MAKE-UP AIR UNIT SHALL BE DISABLED.

OPERATION:
THE KITCHEN HOOD EXHAUST SYSTEM SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE TEMPERATURE IN THE EXHAUST DUCT INCREASES TO THE KITCHEN HOOD EXHAUST SYSTEM ENABLE SET POINT OF 10°F ABOVE THE SPACE TEMPERATURE SET POINT (ADJUSTABLE) FOR A PERIOD OF 10 CONSECUTIVE SECONDS (ADJUSTABLE).

WHEN THE ABOVE CONDITION IS MET, THE HOOD CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE EXHAUST FANS.
2. SEND AN OPEN COMMAND TO THE MAKE-UP AIR UNIT DISCHARGE DAMPER.
3. SEND AN ENABLE COMMAND TO THE MAKE-UP AIR UNIT SUPPLY FAN.

THE KITCHEN HOOD EXHAUST SYSTEM SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE TEMPERATURE IN THE EXHAUST DUCT DECREASE BELOW THE KITCHEN HOOD EXHAUST SYSTEM ENABLE SET POINT FOR A PERIOD OF 30 CONSECUTIVE SECONDS (ADJUSTABLE).

WHEN THE ABOVE CONDITION IS MET, THE HOOD CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE MAKE-UP AIR UNIT SUPPLY FAN.
2. SEND A CLOSE COMMAND TO THE MAKE-UP AIR UNIT DISCHARGE DAMPER.
3. SEND A DISABLE COMMAND TO THE EXHAUST FANS.

SUPPLY AIR TEMPERATURE CONTROL HEATING MODE OF OPERATION (GAS-FIRED HEATING SYSTEM):
THE SUPPLY AIR TEMPERATURE CONTROL HEATING MODE OF OPERATION (GAS-FIRED HEATING SYSTEM) SHALL BE ENABLED WHENEVER BOTH OF THE FOLLOWING CONDITIONS EXIST:

1. THE MAKE-UP AIR UNIT SUPPLY FAN IS ENABLED.
2. THE SUPPLY AIR TEMPERATURE DECREASES TO THE MINIMUM SUPPLY AIR TEMPERATURE SET POINT OF 60°F (ADJUSTABLE) FOR A PERIOD OF 10 CONSECUTIVE SECONDS (ADJUSTABLE).

WHEN THE ABOVE CONDITIONS ARE MET, THE HOOD CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE MAKE-UP AIR UNIT DIRECT GAS-FIRED HEATING SYSTEM.
   a. THE HOOD CONTROLLER SHALL MODULATE THE GAS-FIRED HEATING SYSTEM TO MAINTAIN THE MINIMUM SUPPLY AIR TEMPERATURE SET POINT.

THE SUPPLY AIR TEMPERATURE CONTROL HEATING MODE OF OPERATION (GAS-FIRED HEATING SYSTEM) SHALL BE DISABLED WHENEVER ONE OF THE FOLLOWING CONDITIONS EXISTS:

1. THE MAKE-UP AIR UNIT SUPPLY FAN IS DISABLED.
2. THE SUPPLY AIR TEMPERATURE INCREASES ABOVE THE MINIMUM SUPPLY AIR TEMPERATURE SET POINT FOR A PERIOD OF 30 CONSECUTIVE SECONDS (ADJUSTABLE).

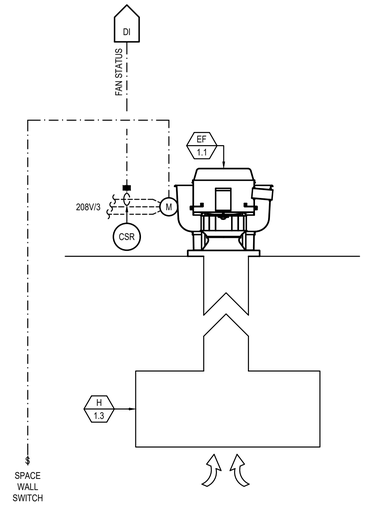
WHEN ONE OF THE ABOVE CONDITIONS IS MET, THE HOOD CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE MAKE-UP AIR UNIT GAS-FIRED HEATING SYSTEM.

ADDITIONAL ITEMS
1. THIS SYSTEM SHALL MEET ALL IECC 403.7.5 REQUIREMENTS.
2. THE DDC CONTRACTOR SHALL MONITOR STATUS OF THE EXHAUST FANS AND SUPPLY FAN OF THE MAKEUP AIR UNIT USING CURRENT SENSING RELAYS. IF THE FANS ARE RUNNING DURING UNOCCUPIED HOURS, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

KITCHEN HOOD MAKE-UP AIR / EXHAUST SYSTEM SEQUENCE OF OPERATION

(MAU-1.1, EF-1.1, & EF-1.2)



DISHWASHER HOOD EXHAUST SYSTEM CONTROL SCHEMATIC

(EF-1.3)

GENERAL:
THE DISHWASHER HOOD EXHAUST SYSTEM SHALL CONSIST OF AN EXHAUST FAN AND A WALL SWITCH. THE MECHANICAL CONTRACTOR SHALL PROVIDE A COMPLETE CONTROL SYSTEM. THE DDC CONTRACTOR SHALL MONITOR POINTS ONLY.

OPERATION:
THE DISHWASHER HOOD EXHAUST SYSTEM SHALL BE ENABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE WALL SWITCH IS ENABLED.

WHEN THE ABOVE CONDITION IS MET, THE FAN INTERLOCK SHALL SEQUENCE THE FOLLOWING:

1. SEND AN ENABLE COMMAND TO THE EXHAUST FAN.

THE DISHWASHER HOOD EXHAUST SYSTEM SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE WALL SWITCH IS DISABLED.

ADDITIONAL ITEMS
1. THE DDC CONTRACTOR SHALL MONITOR STATUS OF THE EXHAUST FAN USING A CURRENT SENSING RELAY. IF THE FAN IS RUNNING DURING UNOCCUPIED HOURS, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

DISHWASHER HOOD EXHAUST SYSTEM CONTROL SEQUENCE OF OPERATION

(EF-1.3)

GENERAL:
THE DESTRATIFICATION FAN SYSTEM CONSISTS OF A CEILING MOUNTED FAN, TWO SPACE TEMPERATURE SENSORS, AND A WALL-MOUNTED OVERRIDE SWITCH. THE CONTROL CONTRACTOR SHALL PROVIDE A NEW DIGITAL CONTROL PACKAGE. A SEPARATE SYSTEM SHALL BE INSTALLED IN THE GYM AND THE CAFETERIA.

THE NEW SPACE TEMPERATURE SENSORS SHALL SIGNAL THE DDC CONTROLLER THEIR TEMPERATURES AND THE TEMPERATURE OF THE HEATING SET POINT.

DESTRATIFICATION MODE OF OPERATION:
THE DESTRATIFICATION FAN SYSTEM SHALL BE ENABLED AND THE FANS SHALL MODULATE WHENEVER THE FOLLOWING CONDITION EXISTS BASED ON INTERVALS OF TEMPERATURE RISE:

1. THE HIGH SPACE TEMPERATURE RISES ABOVE THE LOW SPACE TEMPERATURE BY:
   a. 0-3°F (ADJUSTABLE) - 50% FAN SPEED
   b. 3-6°F (ADJUSTABLE) - 75% FAN SPEED
   c. 6°F+ (ADJUSTABLE) - 100% FAN SPEED

WHEN THE ABOVE CONDITION EXISTS THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING BASED ON INTERVALS OF TEMPERATURE RISE:

1. SEND AN ENABLE COMMAND TO THE DESTRATIFICATION FANS.
   a. VALIDATE THE STATUS OF THE FANS THROUGH THE CURRENT SENSING RELAYS.
      1) IF ANY FAN FAILS TO ENABLE, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

THE DESTRATIFICATION FAN SHALL CONTINUE TO MODULATE TO MAINTAIN THE ABOVE MENTIONED TEMPERATURE INTERVALS.

THE DESTRATIFICATION MODE OF OPERATION SHALL BE DISABLED WHENEVER THE FOLLOWING CONDITION EXISTS:

1. THE HIGH SPACE TEMPERATURE IS EQUAL TO OR BELOW THE LOW SPACE TEMPERATURE.

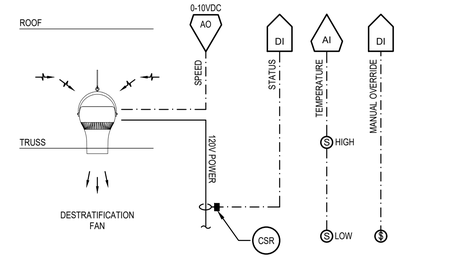
WHEN THE ABOVE CONDITION EXISTS THE DDC CONTROLLER SHALL SEQUENCE THE FOLLOWING:

1. SEND A DISABLE COMMAND TO THE DESTRATIFICATION FANS.
   a. VALIDATE THE STATUS OF THE FANS THROUGH THE CURRENT SENSING RELAYS.
      1) IF ANY FAN FAILS TO DISABLE, AN ALARM OF THE EVENT SHALL BE SENT TO THE OPERATOR'S WORKSTATION.

THE OVERRIDE SWITCHES SHALL ENERGIZE EACH FAN AT 100% SPEED (ADJUSTABLE) REGARDLESS OF THE CURRENT STATE OF THE FAN. THIS OVERRIDE SHALL LAST FOR (2) HOURS (ADJUSTABLE). AFTERWARDS THE FAN CONTROL SHALL REVERT BACK TO THE ORIGINAL OPERATION.

DESTRATIFICATION FAN SEQUENCE OF OPERATION

(DF-1, DF-2, DF-3, DF-4, DF-5, & DF-6)



DESTRATIFICATION FAN CONTROL SCHEMATIC

(DF-1, DF-2, DF-3, DF-4, DF-5, & DF-6)

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600 N. Fillmore Street, Jerome, Idaho

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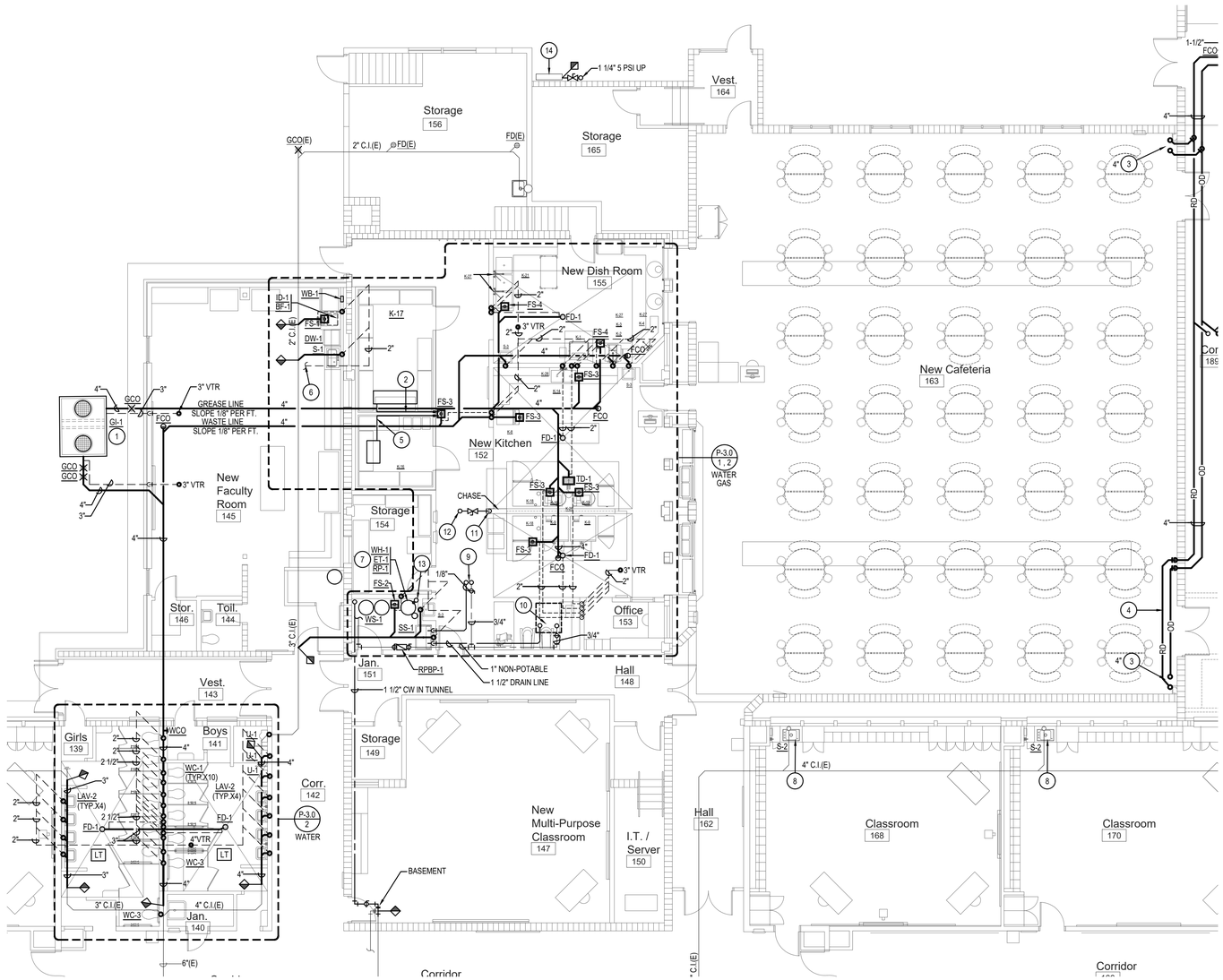
LKV PROJECT #: -
REVISIONS:

DRAWN BY: JM/CD
CHECKED BY: BC

Design Development

DRAWING NO.
M-8.4



KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. SEE GREASE INTERCEPTOR DETAIL.
2. ROUTE CONDENSATE DRAIN LINE FROM FREEZER EVAPORATIVE COIL TO FLOOR SINK, HEAT TRACE LINE AND WRAP WITH INSULATION. TERMINATE AT FLOOR SINK.
3. ROOF DRAINS FROM ABOVE, SEE ROOF PLAN FOR CONTINUATION.
4. ROUTE ROOF DRAIN AND OVERFLOW DRAIN HIGH THROUGH EXISTING STRUCTURE.
5. ROUTE CONDENSATE DRAIN LINE FROM COOLER EVAPORATIVE COIL TO FLOOR SINK, TERMINATE AT FLOOR SINK.
6. CONNECT NEW VENT PIPE TO EXISTING SAME SIZE OR LARGER VENT PIPE IN THIS AREA. FIELD VERIFY EXACT CONDITIONS.
7. SEE WATER HEATER CONNECTION PIPING DETAIL.
8. INSTALL NEW CLASSROOM SINK AT PREVIOUS SINK LOCATION, PROVIDE NEW TRIM AND RE-CONNECT TO EXISTING WASTE/VENT AND WATER PIPING.
9. CONNECT NON POTABLE AND DRAIN LINE TO ROOF HYDRANT.
10. CONNECT NON POTABLE AND DRAIN LINE TO EVAPORATIVE SECTION OF MAU. SEE DETAIL. SET VALVES AT ACCESSIBLE LOCATION NEAR CEILING.
11. FOR CONTINUATION SEE COOK LINE GAS RISER.
12. FOR CONTINUATION SEE MECHANICAL ROOF PLAN.
13. FOR CONTINUATION SEE MECHANICAL ROOF PLAN AND WATER HEATER DETAIL.
14. EXISTING 5 PSI METER SET, CONTACT LOCAL GAS COMPANY FOR ADDITIONAL LOAD CONNECTION OF 2346.0 MBH

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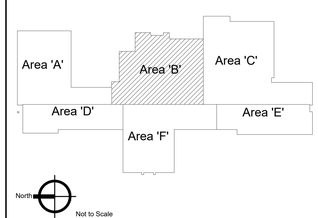
Key Plan



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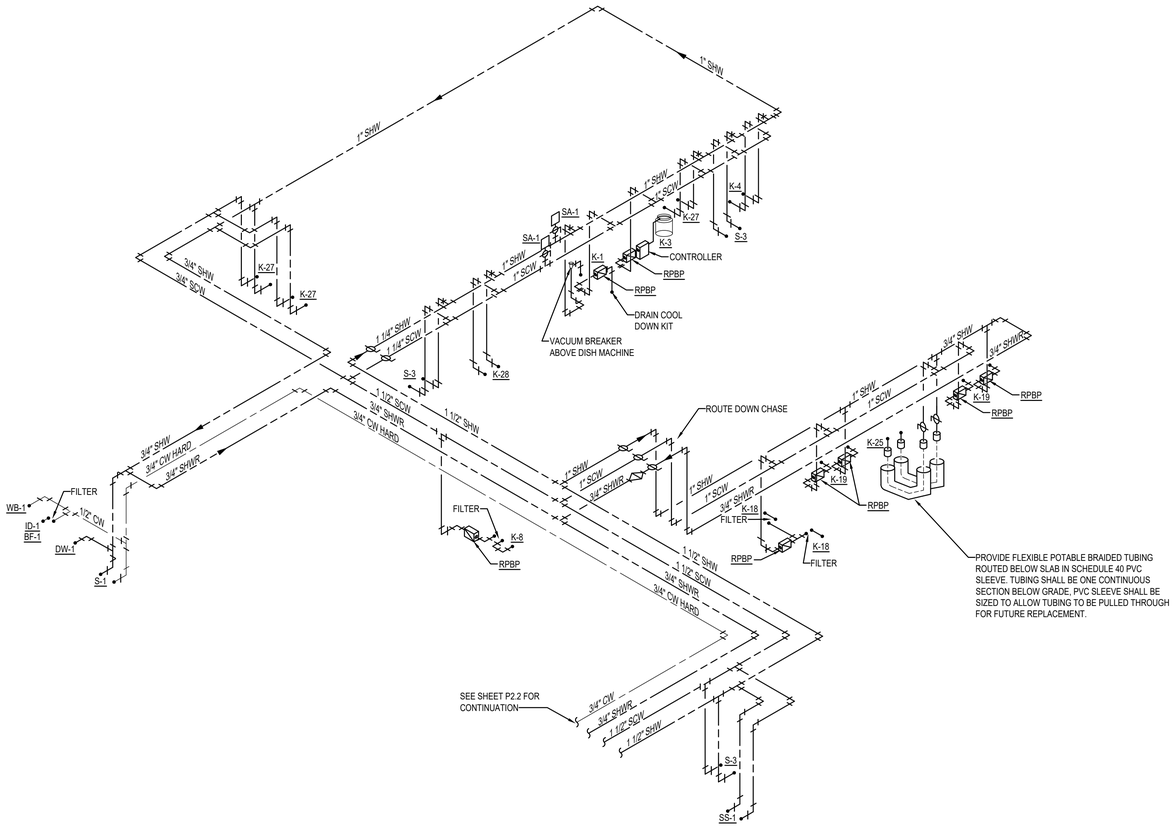
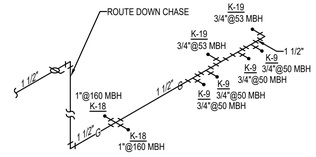


1 KITCHEN WATER RISER DIAGRAM
NOT TO SCALE



2 COOK LINE GAS RISER DIAGRAM
NOT TO SCALE

3 RESTROOM WATER RISER DIAGRAM
NOT TO SCALE

4 RESTROOM WATER RISER DIAGRAM
NOT TO SCALE

5 RESTROOM WATER RISER DIAGRAM
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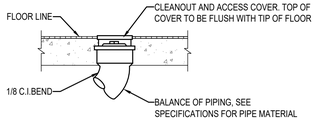
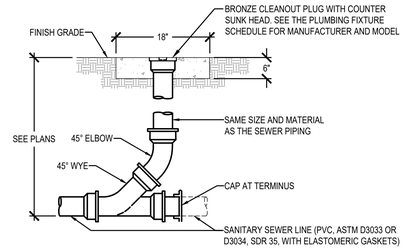
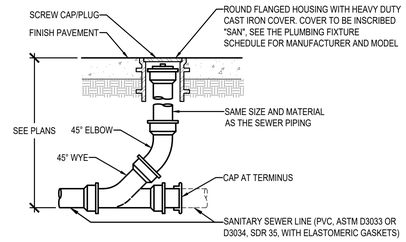


NOTE:
1. CLEANOUTS SHALL BE PROVIDED AT EACH HORIZONTAL DRAINAGE PIPE AT ITS UPPER TERMINAL, AND EACH RUN OF PIPING WHICH IS MORE THAN 100 FEET, AND SHALL BE PROVIDED FOR EACH 100 FEET DEVELOPED LENGTH, OR FRACTION THEREOF OF SUCH PIPING. AN ADDITIONAL CLEANOUT SHALL BE PROVIDED FOR EACH AGGREGATE HORIZONTAL CHANGE OF DIRECTION EXCEEDING ONE HUNDRED THIRTY-FIVE DEGREES, PER APPLICABLE PLUMBING CODE. THIS SHALL BE PROVIDED REGARDLESS OF WHAT IS SHOWN ON THE DRAWINGS.

1 FLOOR CLEANOUT (FCO) DETAIL
NOT TO SCALE

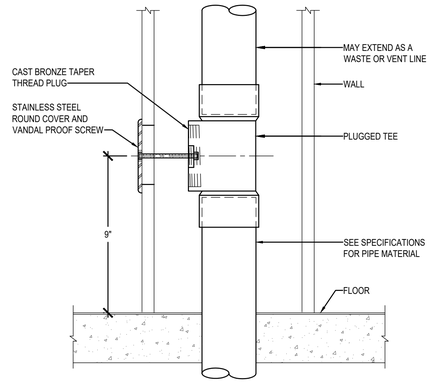


PEDESTRIAN TRAFFIC AREAS / NON-PAVED AREAS



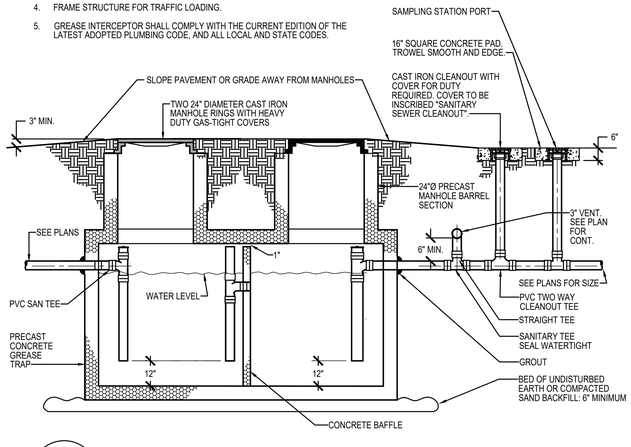
VEHICULAR TRAFFIC AREAS / PAVED AREAS

2 GRADE CLEANOUT (GCO) DETAIL
NOT TO SCALE



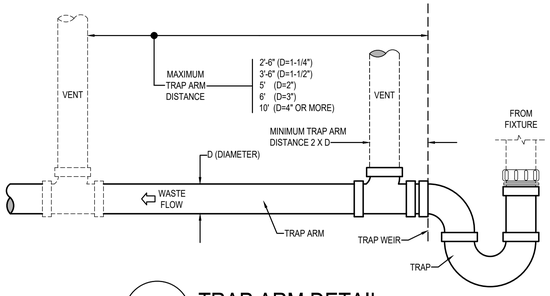
3 WALL CLEANOUT (WCO) DETAIL
NOT TO SCALE

NOTES:
1. ALL DIMENSIONS SHOWN SHALL BE VERIFIED WITH LOCAL AUTHORITY HAVING JURISDICTION.
2. INTERCEPTOR EXCEEDING 6'-6" IN DEPTH MUST BE CONSTRUCTED OF REINFORCED CONCRETE.
3. ALL SURFACE WATER TO DRAIN AWAY FROM INTERCEPTOR.
4. FRAME STRUCTURE FOR TRAFFIC LOADING.
5. GREASE INTERCEPTOR SHALL COMPLY WITH THE CURRENT EDITION OF THE LATEST ADOPTED PLUMBING CODE, AND ALL LOCAL AND STATE CODES.

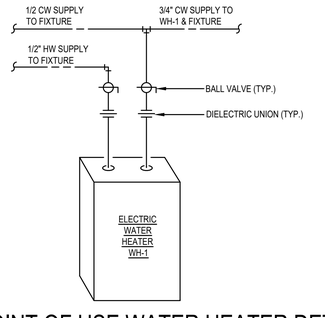


4 GREASE INTERCEPTOR DETAIL (1500 GALLONS)
NOT TO SCALE

NOTES:
1. MAINTAIN ONE-FOURTH (1/4) INCH PER FOOT SLOPE.
2. THE DEVELOPED LENGTH BETWEEN THE TRAP OF A WATER CLOSET OR SIMILAR FIXTURE (MEASURED FROM THE TOP OF THE CLOSET FLANGE TO THE INNER EDGE OF THE VENT) AND IT'S VENT SHALL NOT EXCEED SIX (6) FEET.
3. ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADOPTED PLUMBING CODE, AND ALL LOCAL AND STATE CODES.



5 TRAP ARM DETAIL
NOT TO SCALE



6 POINT OF USE WATER HEATER DETAIL
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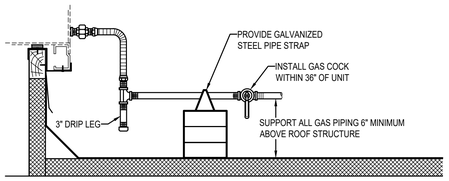
NOTES:
1. INSTALL FLEX CONNECTION AT ALL ROOF TOP UNITS WHICH HAVE SPRING ISOLATION CURBS (36" MAXIMUM).
2. INSTALL SOLID PIPE CONNECTION TO ALL ROOF TOP UNITS WHICH DO NOT HAVE SPRING ISOLATION CURBS.
3. PAINT PIPE WITH RUST RESISTANT PRIMER, RED OR GRAY. SHERWIN WILLIAMS PRO INDUSTRIAL DTM OR APPROVED EQUAL.



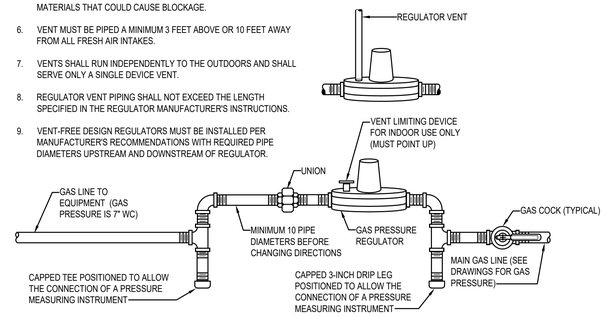
APPROVED PIPE SUPPORT SYSTEMS:

- MIRO MODEL 1.5 WITH SPACERS
- ADVANCED SUPPORT PRODUCTS
- VERSABLOCK BY FREEDOM INC

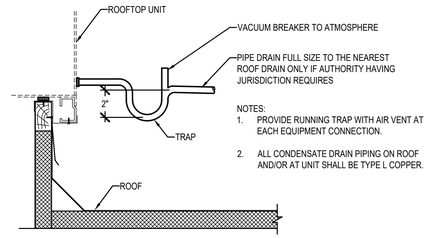
PIPE SUPPORT REQUIREMENTS	
SIZE OF PIPE	SUPPORT REQUIRED
1/2"	6' O.C.
3/4" - 1"	8' O.C.
1-1/4" OR LARGER	10' O.C.

1 ROOFTOP UNIT - GAS PIPING DETAIL
NOT TO SCALE

NOTES:
1. VENT REGULATORS PER MANUFACTURER'S AND LOCAL GAS COMPANY'S REQUIREMENTS.
2. DO NOT REDUCE THE VENT PIPE SIZE FROM THE REGULATOR.
3. TO LIMIT THE CONSEQUENCES OF RAIN, SNOW OR DEBRIS GETTING INTO THE VENT, ALWAYS TURN THE OUTLET OF THE VENT DOWN AND ABOVE POTENTIAL WATER OR SNOW LINES.
4. PROVIDE A BUG SCREEN ON THE VENT OUTLET TO DETER INSECTS FROM NESTING IN THE LINE. NEVER PAINT OVER THE BUG SCREEN.
5. A VENT LINE PROTECTOR MAY BE USED IN OUTDOOR APPLICATIONS TO PREVENT ENTRY OF WATER, INSECTS OR OTHER FOREIGN MATERIALS THAT COULD CAUSE BLOCKAGE.
6. VENT MUST BE PIPED A MINIMUM 3 FEET ABOVE OR 10 FEET AWAY FROM ALL FRESH AIR INTAKES.
7. VENTS SHALL RUN INDEPENDENTLY TO THE OUTDOORS AND SHALL SERVE ONLY A SINGLE DEVICE VENT.
8. REGULATOR VENT PIPING SHALL NOT EXCEED THE LENGTH SPECIFIED IN THE REGULATOR MANUFACTURER'S INSTRUCTIONS.
9. VENT-FREE DESIGN REGULATORS MUST BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS WITH REQUIRED PIPE DIAMETERS UPSTREAM AND DOWNSTREAM OF REGULATOR.



2 GAS PRESSURE REGULATOR DETAIL
NOT TO SCALE



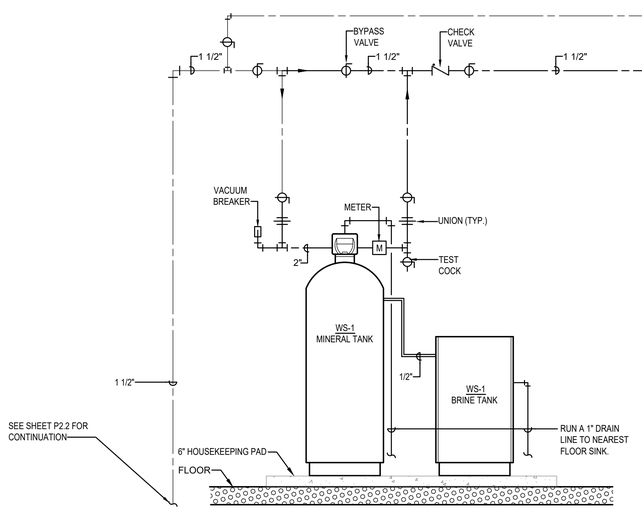
NOTES:
1. PROVIDE RUNNING TRAP WITH AIR VENT AT EACH EQUIPMENT CONNECTION.
2. ALL CONDENSATE DRAIN PIPING ON ROOF AND/OR AT UNIT SHALL BE TYPE L COPPER.

APPROVED PIPE SUPPORT SYSTEMS:

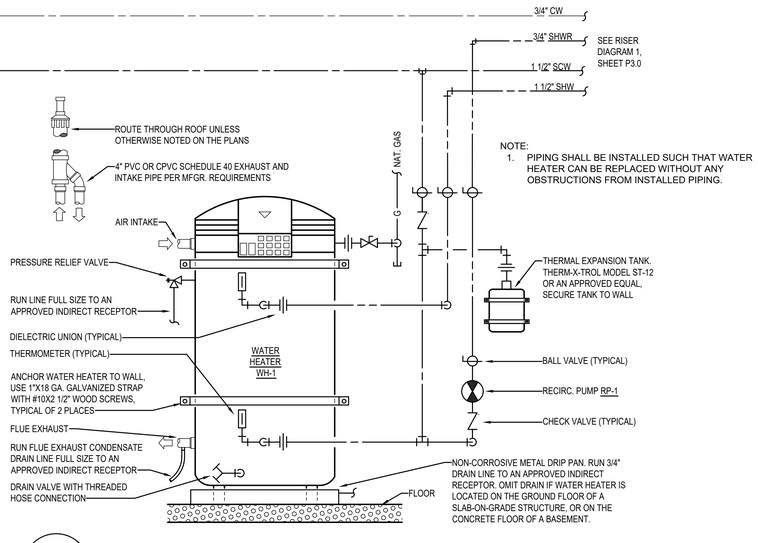
- MIRO MODEL 1.5 WITH SPACERS
- ADVANCED SUPPORT PRODUCTS
- VERSABLOCK BY FREEDOM INC.

PIPE SUPPORT REQUIREMENTS	
SIZE OF PIPE	SUPPORT REQUIRED
1/2"	6' O.C.
3/4" - 1"	8' O.C.
1-1/4" OR LARGER	10' O.C.

3 ROOFTOP UNIT - CONDENSATE DRAIN DETAIL
NOT TO SCALE



4 WATER SOFTENER PIPING DETAIL
NOT TO SCALE



NOTE:
1. PIPING SHALL BE INSTALLED SUCH THAT WATER HEATER CAN BE REPLACED WITHOUT ANY OBSTRUCTIONS FROM INSTALLED PIPING.

5 HIGH EFFICIENCY WATER HEATER PIPING DETAIL
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PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE DESCRIPTION	CONNECTION SIZE					MANUFACTURER / MODEL NUMBER / DESCRIPTION / ADDITIONAL COMMENTS
		WASTE	VENT	TRAP	CW	HW	
BF-1	BACK FLOW DEVICE FOR COFFEE MAKERS AND ICE AND WATER DISPENSERS.	--	--	--	1/2	--	WATTS SD-3 DUAL CHECK VALVE
DF-1	DRINKING FOUNTAIN WITH BOTTLE FILLING STATION (INTERIOR DUAL BUBBLERS) (ELECTRIC WATER COOLER) (ADA COMPLIANT) (HIGH/LOW)	1 1/2	1 1/2	1 1/2	1/2	--	MODEL EZSTL8WSVRSK (NON-FILTERED) BI-LEVEL ADA COOLER WITH BOTTLE FILLING STATION FURNISHED WITH FLEXI-GUARD SAFETY BUBBLER. BUBBLER ACTIVATED BY PUSHBAR. BOTTLE FILLER ACTIVATED BY ELECTRONIC SENSOR WITH AUTOMATIC 30-SECOND SHUT-OFF TIMER. 115 VOLT, 5.0 AMPS, 60 HERTZ. PROVIDE WITH JAY R. SMITH 0834 FLOOR MOUNTED SUPPORT CARRIER. OPTION - CANE APRON TO BE INSTALLED ON HIGH COOLER.
DN-1	DOWN SPOUT NOZZLE (CAST IRON)	SEE PLANS	--	--	--	--	JAY R. SMITH FIGURE NUMBER 1770-NB CAST IRON NOZZLE WITH WALL FLANGE, NICKEL-BRONZE FINISH.
ET-1	EXPANSION TANK	--	--	--	3/4	--	AMTROL THERM-X-TROL ST-12, OR APPROVED EQUAL, NON-ASME SERIES THERMAL EXPANSION ABSORBER, ANTI-MICROBIAL LINER, AND 5 YEAR WARRANTY.
EYE-1	EMERGENCY EYE WASH (WALL MOUNTED w/ RECOIL HOSE) (USED WITH SERVICE SINK)	--	--	--	1/2	1/2	ACORN SAFETY MODEL 9040E-CH12-BFP, WALL MOUNTED WITH DUAL 45° ANGLED HEADS AND RECOIL HOSE. PROVIDE WITH FLIP TOP DUST COVERS, UNIVERSAL EMERGENCY SIGN. DOUBLE CHECK VALVE. STAINLESS STEEL 90° WITH SHEET NIPPLE, AND ACORN MODEL ET71-1-BVS-OTG LEAD-FREE EMERGENCY THERMOSTATIC MIXING VALVE WITH 1/2" NPT INLETS & OUTLET, 4 GPM @ 5 PSID. PROVIDE WITH LOCKABLE INLET BALL VALVES, STANDARD OUTLET TEMPERATURE GAUGE, AND SELECTABLE TEMPERATURE RANGE FROM 60°F TO 95°F.
FD-1	FLOOR DRAIN (PVC BODY) (CONCRETE FLOOR)	2	2	2	--	--	SIOUX CHIEF SERIES NUMBER 832-2PNR, POST- CONSTRUCTION LEVELING FLOOR DRAIN, NO-HUB OUTLET, 6-1/2" ROUND, ADJUSTABLE NICKEL BRONZE STRAINER AND TRAP PRIMER PORT. INSTALL TOP OF DRAIN 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-1	FLOOR SINK (6" DEEP) (HALF GRATE, FOOT TRAFFIC RATED)	2	2	2	--	--	JAY R. SMITH FIGURE NUMBER 3100Y-12, CAST IRON RECEPTOR, ALUMINUM DOME STRAINER, NICKEL BRONZE GRATE, AND TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-2	FLOOR SINK (10" DEEP) (HALF GRATE, FOOT TRAFFIC RATED)	4	2	4	--	--	JAY R. SMITH FIGURE NUMBER 3160Y-12, CAST IRON RECEPTOR, ALUMINUM DOME STRAINER, NICKEL BRONZE GRATE, AND TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-3	FLOOR SINK (6" DEEP) (HALF GRATE, FOOT TRAFFIC RATED) COMMERCIAL KITCHEN, BAR, OR PROCESSING LOCATIONS	2	2	2	--	--	JAY R. SMITH FIGURE NUMBER 3002Y-12, STAINLESS STEEL RECEPTOR, DOME STRAINER AND GRATE WITH TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
FS-4	FLOOR SINK (10" DEEP) (HALF GRATE, FOOT TRAFFIC RATED) COMMERCIAL KITCHEN, BAR, OR PROCESSING LOCATIONS	4	2	4	--	--	JAY R. SMITH FIGURE NUMBER 3004Y-12, STAINLESS STEEL RECEPTOR, DOME STRAINER AND GRATE WITH TRAP PRIMER. INSTALL TOP OF SINK 1/8" BELOW FINISH FLOOR AND CAULK EDGE.
GCO	GRADE CLEANOUT (NON-PAVED AREAS)	SEE PLANS	--	--	--	--	JAY R. SMITH 4220 SERIES, ROUND EXTRA HEAVY DUTY CAST IRON TOP. FURNISH WITH WITH ABS PLUG. COVER TO BE INSCRIBED "SAN".
GCO	GRADE CLEANOUT (PAVED AREAS) (VEHICULAR TRAFFIC)	SEE PLANS	--	--	--	--	JAY R. SMITH 4250 SERIES, ROUND FLANGED HOUSING WITH HEAVY DUTY CAST IRON COVER. FURNISH WITH ABS PLUG. COVER TO BE INSCRIBED "SAN".
GI-1	GREASE INTERCEPTOR (1500 GALLONS)	4	3	--	--	--	PRE-CAST CONCRETE, 1500 GALLON CAPACITY, GREASE INTERCEPTOR. SEE DRAWING FOR DETAILS. NO SPLIT DESIGN VAULTS WITH GASKETS BELOW FLUID LEVEL ALLOWED.
HB-1	HOSE BIBB (EXTERIOR) (NON-FREEZE)	--	--	--	3/4	--	WOODFORD MODEL 67 - EXPOSED STYLE WITH MODEL 50HA BACKFLOW PREVENTER, 3/4" INLET , AND CHROME PLATED. PROVIDE WITH TEE KEY AND INSTALL AT 18" ABOVE FINISH GRADE.
ID-1	ICE AND WATER DISPENSER	INDIRECT FULL SIZE TO FLOOR SINK			1/2		PROVIDED BY OTHERS, ROUGH IN AND CONNECTED BY PLUMBING CONTRACTOR. PROVIDE AND INSTALL WITH BF-1.
LAV-1	MOTION SENSOR LAVATORY (WALL MOUNTED) (ELECTRIC OPERATED) (ADA COMPLIANT)	1 1/2	1 1/2	1 1/4	1/2	1/2	KOHLER KINGSTON MODEL K-2005: VITREOUS CHINA, WALL MOUNTED, HOLES ON 4" CENTERS, AND GRID STRAINER. SLOAN OPTIMA ELECTRONIC HAND WASHING FAUCET MODEL ETF-600 WITH PLUG-IN TRANSFORMER (120 VAC/24 VAC). PROVIDE WITH JAY R. SMITH FIGURE NUMBER 0700-Z SUPPORT WITH CONCEALED ARMS. PROVIDE WITH LS-1 LAV SHIELD.
LAV-2	MOTION SENSOR LAVATORY (WALL MOUNTED) (ELECTRIC OPERATED) (ADA COMPLIANT)	1 1/2	1 1/2	1 1/4	1/2	1/2	KOHLER KINGSTON MODEL K-2005: VITREOUS CHINA, WALL MOUNTED, HOLES ON 4" CENTERS, AND GRID STRAINER. SLOAN OPTIMA ELECTRONIC HAND WASHING FAUCET MODEL ETF-600 WITH PLUG-IN TRANSFORMER (120 VAC/24 VAC). WATTS SERIES LFUSG-B LEAD-FREE, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F. PROVIDE WITH JAY R. SMITH FIGURE NUMBER 0700-Z SUPPORT WITH CONCEALED ARMS. PROVIDE WITH LS-1 LAV SHIELD.
LS-1	LAVATORY SHIELD (WALL MOUNTED SHIELD FOR CONCEALING PIPING, VALVES, AND INSTANTANEOUS WATER HEATERS)	--	--	--	--	--	TRUEBRO "LAV SHIELD" ADA COMPLIANT, TOTAL ENCLOSURE. SINGLE-PIECE CONSTRUCTION, SLOAN OPTISHIELD ETF-529, OR APPROVED EQUAL.
OD-1	OVERFLOW ROOF DRAIN (METAL GRATE)	SEE PLANS	--	--	--	--	JAY R. SMITH FIGURE NUMBER 1070Y GENERAL PURPOSE DRAIN WITH LOW PROFILE DOME. PROVIDE WITH SUMP RECEIVER, UNDERDECK CLAMP, CAST IRON DOME, INTERNAL DAM STANDPIPE, AND RAIN SHIELD.
RD-1	ROOF DRAIN (LOW PROFILE DOME STYLE) (METAL GRATE)	SEE PLANS	--	--	--	--	JAY R. SMITH FIGURE NUMBER 1010Y GENERAL PURPOSE DRAIN WITH LOW PROFILE DOME. PROVIDE WITH SUMP RECEIVER, UNDERDECK CLAMP, AND CAST IRON DOME.
RH-1	ROOF HYDRANT (NON-FREEZE) (DRAIN LINE REQUIRED)	--	--	--	3/4	--	WOODFORD MODEL RHY2-MS NON-FREEZE STYLE ROOF HYDRANT WITH 3/4" HOSE CONNECTION AND INTEGRAL DOUBLE CHECK BACKFLOW PREVENTER. REQUIRES 1/8" DRAIN LINE PIPED TO APPROVED INTERCEPTOR.
RP-1	RECIRCULATION PUMP (HOT WATER RETURN SYSTEM) (MEDIUM SIZED SYSTEM)	--	--	--	--	3/4	BELL AND GOSSETT BRONZE MODEL NBF-22, 115 VOLT, 0.8 AMPS, 92 WATTS, AND SHALL PROVIDE 7 GPM AT 10 FEET HEAD. INCLUDE 7-DAY PROGRAMMABLE ELECTRONIC TIME CLOCK WITH BATTERY BACKUP, INTERMATIC MODEL GM40AVE-RD89. APPROVED ALTERNATE: ARMSTRONG, TACO, GRUNDFOS.
RPBP-1	REDUCED PRESSURE BACKFLOW PREVENTER NON POTABLE	INDIRECT			1	--	WATTS SERIES LF009 LEAD-FREE REDUCED PRESSURE ZONE ASSEMBLY WITH QUARTER-TURN BALL VALVES, STRAINER, AND AIR GAP. CAST COPPER BODY CONSTRUCTION - 1/2" THRU 2".
S-1	SINK - DOUBLE COMPARTMENT (14" X 14" X 6 1/2" - EACH) (ADA COMPLIANT)	2	1 1/2	1 1/2	1/2	1/2	ELKAY LUSTERTONE MODEL LRAD331965: 6-1/2" DEEP, STAINLESS STEEL SINK. PROVIDE AND INSTALL ELKAY MODEL LK3001CR SINGLE LEVER CHROME FAUCET WITH SWING SPOUT AND HOSE SPRAY, ELKAY MODEL LK35 STAINLESS STEEL STRAINER BASKET AND TAILPIECE, AND WATTS SERIES LFUSG-B LEAD-FREE, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F.
S-2	SINK - CLASSROOM WITH BUBBLER (22"X19 1/2"X5 1/2") (ADA COMPLIANT) (SEE PLANS FOR LEFT AND RIGHT CONFIGURATIONS)	2	1 1/2	1 1/2	1/2	1/2	JUST CLASSROOM SINK # CRA-ADA-1725-A-GR (SEE PLANS FOR LEFT AND RIGHT LEDGES)(2 HOLES ON 4" CENTERS AND 1 BUBBLE HOLE FRONT OPPOSITE SIDE) 5 1/2" DEEP STAINLESS STEEL SINK, J-ADA-35 STAINLESS STEEL DRAIN WITH STRAINER AND STOPPER, CHICAGO FAUCETS MODEL 2302-ABCP/ SINGLE LEVER FAUCET AND SWING SPOUT, CHICAGO FAUCETS MODEL 748-665FHABCP/ BUBBLER, JUST MODEL JSB-10-VR-FLX BUBBLER. SWING SPOUT IS TO BE LOCKED IN PLACE.
S-3	SINK - KITCHEN HANDWASH (19" X 12" X 6") (WALL MOUNTED)	2	1 1/2	1 1/2	1/2	1/2	ELKAY HANDWASH SINK MODEL CHS1716C: 6" DEEP, WALL MOUNTED, STAINLESS STEEL SINK. PROVIDE AND INSTALL ELKAY MODEL LK940GN04L2H HIGH GOOSENECK SPOUT FAUCET WITH 8" CENTERS AND LEVER HANDLES, ELKAY MODEL LK8 GRID STRAINER AND TAILPIECE, ELKAY MODEL LK500 P-TRAP WITH CLEANOUT PLUG, AND WATTS SERIES LFUSG-B LEAD-FREE, THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 80°F TO 120°F. PROVIDE WITH FAUCET-MOUNTED EYEWASH EYE-2.
SS-1	SERVICE SINK (36" X 24" X 10") (FLOOR MOUNTED)	3	2	3	1/2	1/2	ACORN TERRAZZO-WARE MODEL TRH-242410: PROVIDE AND INSTALL WITH MODEL KFC CHROME UTILITY FAUCET, STAINLESS STEEL BUMPER GUARD, DRAIN GASKET, 36" HOSE AND WALL HANGER, MOP HANGER, AND (2) STAINLESS STEEL WALL GUARDS. MOUNT FAUCET 36" AFF.
SS-2	SERVICE SINK (28" RADIUS CORNER X 12") (FLOOR MOUNTED)	3	2	3	1/2	1/2	ACORN TERRAZZO-WARE MODEL TCR-28: PROVIDE AND INSTALL WITH MODEL KFC CHROME UTILITY FAUCET, STAINLESS STEEL BUMPER GUARD, DRAIN GASKET, 36" HOSE AND WALL HANGER, MOP HANGER, AND (2) STAINLESS STEEL WALL GUARDS. MOUNT FAUCET 36" AFF.
TD-1	TROUGH DRAIN	2	2	2	--	--	EAGLE GROUP FT-1218-SG 12X18 TROUGH DRAIN WITH STAINLESS STEEL GRATING. 14 GAUGE, TYPE 304 STAINLESS STEEL, CENTER BOTTOM DRAIN CONNECTION.
TP-1	TRAP PRIMER (PRESSURE ACTIVATED) (1 TO 4 TRAPS)	--	--	--	1/2"	--	PRECISION PLUMBING PRODUCTS MODEL CPO-500 WITH DU DISTRIBUTION UNIT IF REQUIRED FOR SERVING MORE THAN ONE TRAP.
TP-1	TRAP PRIMER (FLUSH VALVE PRIMER) (1 TRAP)	--	--	--	1/2"	--	PRECISION PLUMBING PRODUCTS MODEL FVP-1VB WITH VACUUM BREAKER. TRAP PRIMER TUBING SHALL BE INSTALLED OFF BACK OF FLUSH VALVE.
U-1	URINAL (MOTION SENSOR / BATTERY OPERATED) (SEE ARCH FOR MOUNTING HEIGHT)	2	1 1/2	INT.	3/4	--	KOHLER BARDON MODEL K-4991-ET WALL MOUNTED URINAL WITH 3/4" TOP SPUD. SLOAN REGAL 186 SFSM-0.5 SIDE MOUNT OPERATOR WITH MANUAL OVERRIDE FLUSH BUTTON, 0.5 GPF. INCLUDE BEEHIVE STRAINER AND JAY R. SMITH FIGURE NUMBER 0637 ADJUSTABLE FIXTURE SUPPORT.
WB-1	WALL BOX (WATER SUPPLY TO ICE MAKER)	--	--	--	1/2	--	OATEY FIREMASTER MODEL 39121 WITH FACEPLATE AND ADJUSTABLE METAL SUPPORT BRACKETS. FIRE-RATED, LOW LEAD, OR APPROVED EQUAL.
WC-1	WATER CLOSET (16-3/16" SEAT HEIGHT) (MOTION SENSOR / HARD WIRED) (FLOOR MOUNTED)	4	2	INT.	1	--	KOHLER WELLCOMME MODEL K-96053 / FLOOR MOUNTED, WITH ELONGATED BOWL. KOHLER LUSTRA MODEL K-4666-C / ELONGATED OPEN FRONT SEAT WITH HINGE. SLOAN ROYAL 186 ESS-1.6-TMO-HW FLUSHOMETER WITH MANUAL OVERRIDE FLUSH BUTTON, 1.6 GPF. PROVIDE WITH EL-154 TRANSFORMER (120 VAC / 24 VAC), EL-485-A FLUSHOMETER ELECTRICAL BOX. PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW VOLTAGE WIRING, CONDUIT, BOXES, TRANSFORMERS AND ASSOCIATED PARTS. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V CONNECTION AT TRANSFORMER(S)
WC-2	WATER CLOSET (MOTION SENSOR / HARD WIRED) (WALL MOUNTED) (SEE ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT)	4	2	INT.	1	--	KOHLER KINGSTON MODEL K-4325 WALL MOUNTED WITH ELONGATED BOWL. KOHLER LUSTRA MODEL K-4666-C ELONGATED OPEN FRONT SEAT WITH HINGE. SLOAN ROYAL 186 ESS-1.6-TMO-HW FLUSHOMETER WITH MANUAL OVERRIDE FLUSH BUTTON, 1.6 GPF. PROVIDE WITH EL-154 TRANSFORMER (120 VAC / 24 VAC), EL-485-A FLUSHOMETER ELECTRICAL BOX. PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW VOLTAGE WIRING, CONDUIT, BOXES, TRANSFORMERS AND ASSOCIATED PARTS. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V CONNECTION AT TRANSFORMER(S)JAY R. SMITH FIGURE NUMBER 0211Y-MS4 ADJUSTABLE FIXTURE SUPPORT WITH LEG KIT AND 8" NIPPLE.
WC-3	WATER CLOSET (17-1/2" SEAT HEIGHT) (MOTION SENSOR / HARD WIRED) (FLOOR MOUNTED) (COMFORT HEIGHT / ADA COMPLIANT)	4	2	INT.	1	--	KOHLER HIGHCLIFF ULTRA MODEL K-96057 FLOOR MOUNTED WITH ELONGATED BOWL. KOHLER LUSTRA MODEL K-4666-C ELONGATED OPEN FRONT SEAT WITH HINGE. SLOAN ROYAL 186 ESS-1.6-TMO-HW FLUSHOMETER WITH MANUAL OVERRIDE FLUSH BUTTON, 1.6 GPF. PROVIDE WITH EL-154 TRANSFORMER (120 VAC / 24 VAC), EL-485-A FLUSHOMETER ELECTRICAL BOX. PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL ALL LOW VOLTAGE WIRING, CONDUIT, BOXES, TRANSFORMERS AND ASSOCIATED PARTS. ELECTRICAL CONTRACTOR SHALL PROVIDE 120V CONNECTION AT TRANSFORMER(S)
WCO	WALL CLEANOUT	SEE PLANS	--	--	--	--	JAY R. SMITH 4472T SERIES WITH CAST BRONZE TAPER THREAD PLUG, STAINLESS STEEL ROUND COVER, AND A STAINLESS STEEL VANDAL PROOF SCREW.
WH-1	WATER HEATER (NOMINAL 100 GALLON) (NATURAL GAS - HIGH EFFICIENCY)	--	--	--	SEE PLANS	SEE PLANS	BRADFORD WHITE MODEL EF-100T-199E-3N. 199 MBH INPUT, 110V/1Ø, 1.8 AMPS, 28" DIAMETER, 78" TALL WITH SIDE CONNECTIONS. PROVIDE WITH PVC CONCENTRIC INTAKE/VENT KIT AND SEISMIC STRAP. PROVIDE WATER HEATER WITH HEAT TRAP.
WH-2	WATER HEATER (POINT OF USE) (ELECTRIC)	--	--	--	SEE PLANS	SEE PLANS	CHRONOMITE CMI SERIES MODEL CMI-20L/208, 208/1, 20 AMPS, 4.2 KW, WITH INTEGRAL MIXING VALVE, MODELKWIK-CON DISCONNECT, AND SHALL PROVIDE 57°F TEMPERATURE RISE AT 0.5 GPM. PROVIDE WITH LS-1 LAV SHIELD.
WS-1	WATER SOFTENER (DUPLEX SYSTEM)	INDIRECT			2	--	KINETICO COMMERCIAL DUPLEX WATER SOFTENER SYSTEM: SHALL MEET THE FOLLOWING CRITERIA: EXCHANGE CAPACITY OF 100-150 GRAINS, 60 GPM @ 15 PSI MAX PRESSURE DROP. 2000 GPD, 7 HOURS PER DAY, 5 DAYS A WEEK. ELECTRICAL SHALL PROVIDE 120V/1Ø PLUG OUTLET.

NOTES:

1. ALL ADA COMPLIANT FIXTURES MUST COMPLY WITH ICC/ANSI A117.1. SEE ARCHITECTURAL PLANS FOR HANDICAPPED FIXTURE DESIGNATIONS, LOCATIONS, CLEARANCES, AND MOUNTING HEIGHTS.
2. ALL EXPOSED HW PIPING, CW PIPING, AND DRAIN LINES BENEATH ALL LAVATORIES AND ALL ADA COMPLIANT SINKS MUST BE INSULATED TO PREVENT INJURY. REFER TO ARCHITECTURAL PLANS. INSULATE WITH MOLDED CLOSED CELL VINYL INSULATION - TRUEBRO, PLUMBEREX, OR EQUAL.
3. PROVIDE P-TRAP PRIMERS FOR ALL FLOOR DRAINS AND FLOOR SINKS (TRAP PRIMERS ARE NOT INDICATED ON PLANS - REFERENCE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION). PROVIDE A BALL TYPE SHUT-OFF VALVE UPSTREAM OF PRIMER VALVE. SEE SPECIFICATIONS.
4. SEE SPECIFICATIONS FOR ALTERNATE APPROVED MANUFACTURERS.
5. HIGH EFFICIENCY WATER HEATERS: PROVIDE WITH CONDENSATE NEUTRALIZATION KIT BY JJM BOILER WORKS MODEL JM (OR EQUAL), SIZED PER EQUIPMENT CAPACITY.

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PRELIMINARY

NOT FOR CONSTRUCTION
2/10/23

Jefferson Elementary School Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

DATE: JANUARY 9, 2023
LKV PROJECT #: -
REVISIONS:

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CHECKED BY: BC

Design Development

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KITCHEN PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE DESCRIPTION	CONNECTION SIZE (INCHES)							MANUFACTURER / MODEL NUMBER / DESCRIPTION / ADDITIONAL COMMENTS	REMARKS
		WASTE	VENT	TRAP	HARD CW	SOFT CW	SOFT HW	NAT. GAS		
K-1	DISH WASHER HIGH TEMP. WITH BUILT ON BOOSTER AND VACUUM BREAKER	ROUTE DRAIN LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	--	3/4	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	5 , 11
K-2	DISH TABLE WITH TROUGH DRAIN	ROUTE DRAIN LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	--	--	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	--
K-3	GARBAGE DISPOSER - SINK	3	2	3	--	1/2	--	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	1
K-4	PRE-RINSE UNIT	--	--	--	--	1/2	1/2	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	13
K-8	ICE MAKER / ICE BIN	ROUTE DRAIN LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	1/2	--	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	1
K-9	DOUBLE STACK CONVECTION OVEN	ROUTE DRAIN LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	--	--	3/4 (2)	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	8
K-14	COUNTER WITH DBL. SINK	ROUTE DRAIN LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	--	--	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	--
K-16	WALK IN COOLER	ROUTE CONDENSATE LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	--	--	--	EQUIPMENT PROVIDED BY OTHERS, CONDENSATE DRAIN LINE ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	--
K-17	WALK IN FREEZER	ROUTE CONDENSATE LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	--	--	--	EQUIPMENT PROVIDED BY OTHERS, CONDENSATE DRAIN LINE ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	10
K-18	COMBI OVEN WITH WATER FILTER	--	--	--	--	1/2	--	1	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	7
K-19	STEAM KETTLE WITH DRAIN STAND DRAWER	ROUTE DRAIN LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	--	--	3/4	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	--
K-21	COUNTER WITH TRIPLE SINK	ROUTE DRAIN LINE FULL SIZE, TERMINATE INDIRECTLY TO FS			--	--	--	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	1 , 12
K-25	PEDESTAL POT AND KETTLE FILLER	--	--	--	--	1/2	1/2	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	--
K-27	PRE RINSE UNIT	--	--	--	--	1/2	1/2	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	13
K-28	DOUBLE SINK MIXING FAUCET	--	--	--	--	1/2	1/2	--	EQUIPMENT PROVIDED BY OTHERS, ROUGH IN AND CONNECTION BY PLUMBING CONTRACTOR.	--

NOTES: FT = FLOOR TROUGH, FS = FLOOR SINK

1. PLUMBING CONTRACTOR TO PROVIDE WITH REDUCED PRESSURE BACKFLOW PREVENTER WATTS, SERIES 009 LEAD FREE REDUCED PRESSURE ZONE ASSEMBLY, MODEL NO. 009 SERIES WITH QUARTER TURN BALL VALVES, BRONZE STRAINER, AND AIR GAP, BRONZE BODY CONSTRUCTION, ROUTE DRAIN FULL SIZE TO FLOOR SINK, TERMINATE INDIRECTLY. SEE POINT OF USE REDUCED PRESSURE BACKFLOW PREVENTER DETAIL.
2. PLUMBING CONTRACTOR TO PROVIDE WITH WATTS SERIES USG-B THERMOSTATIC MIXING VALVE, ASSE STANDARD 1070 LISTED, BRONZE BODY, INTEGRAL CHECK VALVES, AND SELECTABLE TEMPERATURE RANGE FROM 90°F TO 120°F.
3. PROVIDE SLIDE GATE FOR EACH BASIN DRAIN, MANIFOLD TOGETHER AND ROUTE TO FS.
4. NOT USED.
5. PLUMBING CONTRACTOR TO PROVIDE COOL DOWN KIT ON DISH MACHINE DRAIN LINE WITH 1/2" CW LINE AND RPBP WATTS SERIES 009 LEAD FREE REDUCED PRESSURE ZONE ASSEMBLY WITH SHUT OFF VALVES, BRONZE STRAINER, AND AIR GAP, BRONZE BODY CONSTRUCTION- 1/2" THRU 2", ROUTE DRAIN FULL SIZE TO FLOOR SINK, TERMINATE INDIRECTLY. SEE POINT OF USE REDUCED PRESSURE BACKFLOW PREVENTER DETAIL.
6. NOT USED.
7. CONNECT FILTER AND FILTER LINE FROM FILTER, FILTER PROVIDED BY OTHERS.
8. SEE GAS SIZING CHART FOR FURTHER INFORMATION AND GAS RISER DIAGRAMS.
9. PLUMBING CONTRACTOR TO PROVIDE WATTS SD-3 DUAL CHECK VALVE ON WATER LINE CONNECTED TO SODA GUN, SIZE SAME AS LINE.
10. HEAT TRACE AND INSULATION CONDENSATE DRAIN LINE FROM EVAPORATIVE COOLER COIL IN FREEZER.
11. CONNECT BOOSTER TO DISH MACHINE.
12. NOT USED.
13. PROVIDE CHECK VALVES ABOVE CEILING ON HOT AND COLD WATER LINES TO FAUCET.
14. PROVIDE P-TRAP PRIMERS FOR ALL FLOOR DRAINS, FLOOR TROUGH AND FLOOR SINKS. PROVIDE A BALL TYPE SHUT-OFF VALVE UPSTREAM OF PRIMER VALVE.

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2/10/23

Jefferson Elementary School
Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

DATE: JANUARY 9, 2023
LKV PROJECT #: -
REVISIONS:

DRAWN BY: JM/CD
CHECKED BY: BC

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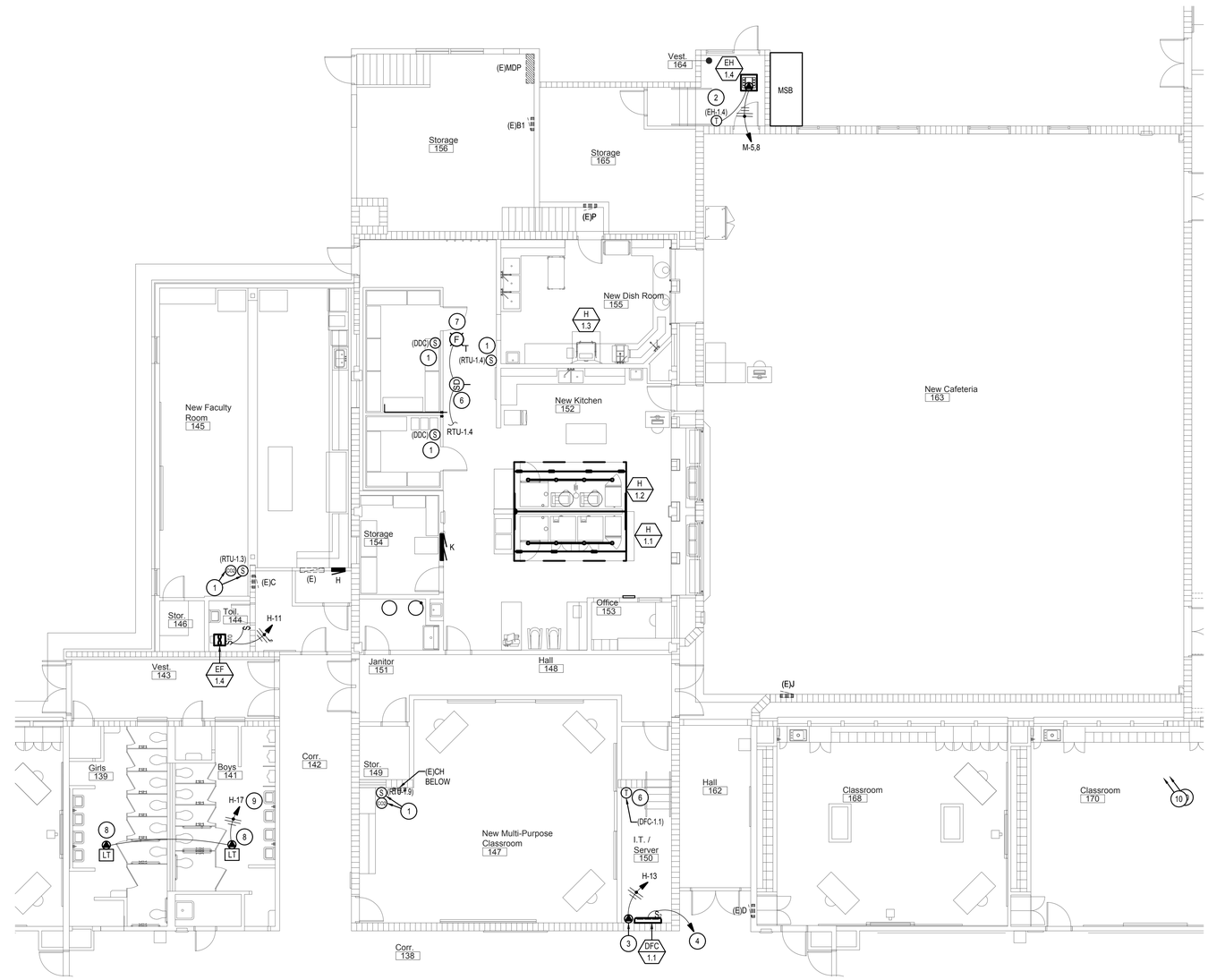


N. 1 Mechanical Power Plan - Area 'B'

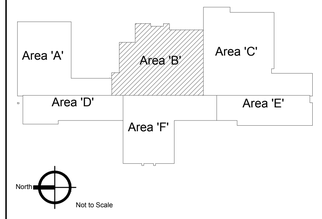
Scale: 1/8" = 1'-0"

KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. HVAC SYSTEM SENSOR(S). BOX(ES) AND CONDUIT TO BE PROVIDED BY ELECTRICAL CONTRACTOR. SENSOR AND ALL CABLING TO BE FURNISHED AND INSTALLED BY THE DDC CONTRACTOR. PROVIDE A JUNCTION BOX AT 48" AFF FOR EACH SENSOR INDICATED AND 1/2" CONDUIT FROM THE SENSOR JUNCTION BOX TO ABOVE THE NEAREST ACCESSIBLE CEILING. COORDINATE BOX SIZE AND LOCATION AND THE CONDUIT REQUIREMENTS WITH DDC CONTRACTOR.
2. LINE VOLTAGE HEAT RISE T-STAT. 1/2" CONDUIT TO ASSOCIATED MECHANICAL UNIT. BOX, CONDUIT, AND CONDUCTORS TO BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. COORDINATE WITH MECHANICAL CONTRACTOR.
3. CONNECTION FOR CONDENSATION PUMP. COORDINATE LOCATION AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
4. PROVIDE AND INSTALL LINE VOLTAGE AND CONTROL CABLING TO THE CORRESPONDING OUTDOOR UNIT. COORDINATE REQUIREMENTS WITH THE MECHANICAL CONTRACTOR.
5. 1/2" CONDUIT TO CORRESPONDING MECHANICAL UNIT. BOX, CONDUIT, AND CONDUCTORS TO BE PROVIDED BY ELECTRICAL CONTRACTOR. LEAVE 12" SLACK AT BOX AND MECHANICAL UNIT. MECHANICAL CONTRACTOR TO MAKE FINAL CONNECTIONS. COORDINATE BOX SIZE AND QUANTITY OF CONDUCTOR(S) WITH MECHANICAL CONTRACTOR. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
6. ELECTRICAL CONTRACTOR TO PROVIDE AND CONNECT DUCT DETECTOR. PROVIDE CONNECTION FOR MECHANICAL UNIT SHUT DOWN UPON ACTIVATION OF DUCT DETECTOR. MECHANICAL CONTRACTOR TO MOUNT DUCT DETECTOR IN RETURN SIDE OF DUCT WORK. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.
7. MOUNT DUCT DETECTOR INDICATOR LED/ANNUNCIATOR IN CEILING BELOW UNIT. LABEL TO IDENTIFY THE RTU IT IS ASSOCIATED WITH.
8. PROVIDE CONNECTION FOR PLUMBING FIXTURE TRANSFORMER. TRANSFORMER(S) PROVIDED BY PLUMBING CONTRACTOR. COORDINATE CONNECTION REQUIREMENTS AND BACKBOX LOCATIONS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN TO PROVIDE COMPLETE SYSTEM. RE: PLUMBING SCHEDULES.
9. PROVIDE GFCI BREAKER IN PANEL FOR CIRCUIT INDICATED.

Key Plan



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Addition and Remodel

600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022
LKV PROJECT #: -
REVISIONS:

DRAWN BY: AN
CHECKED BY: KL

Design Development

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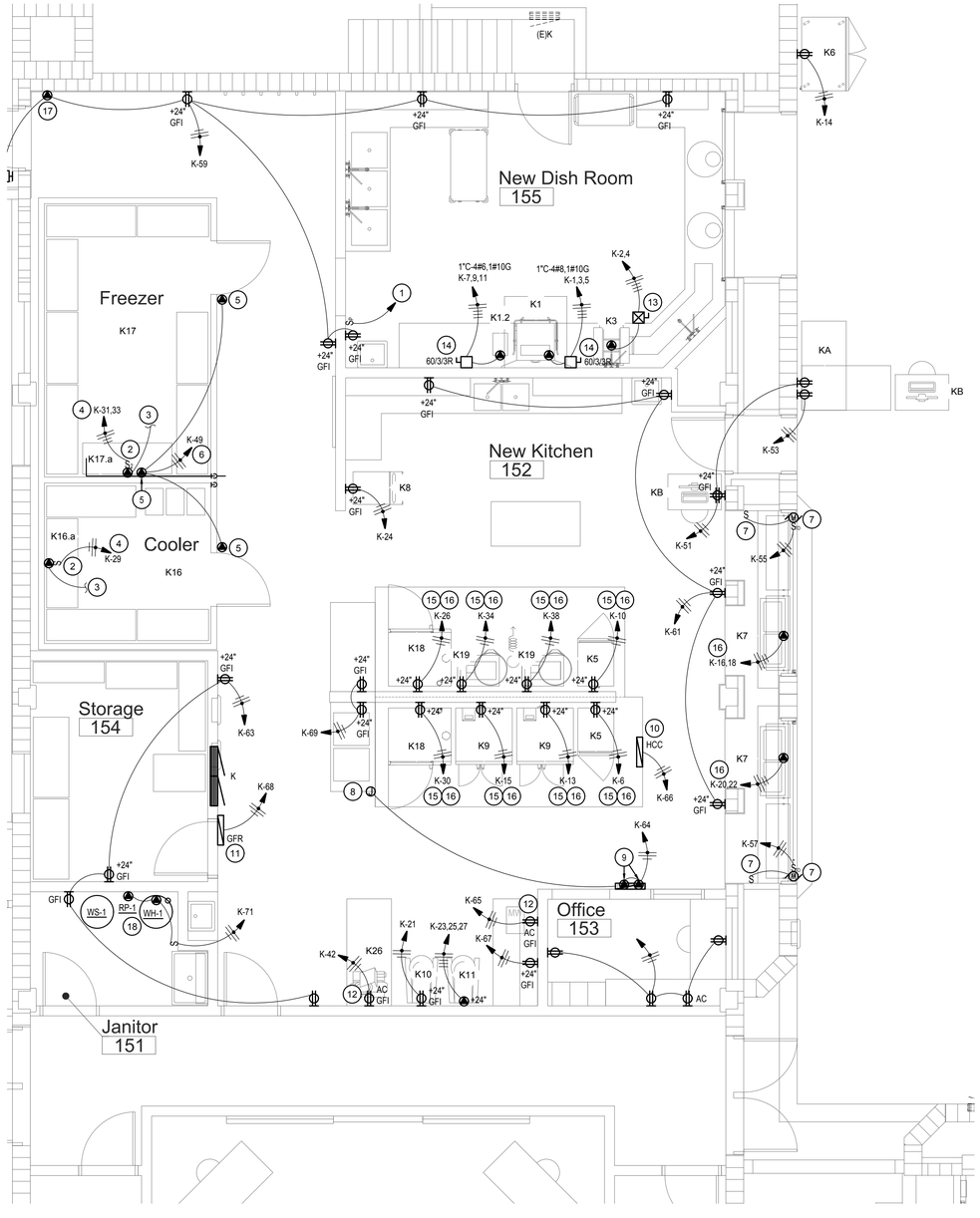
E-5.2

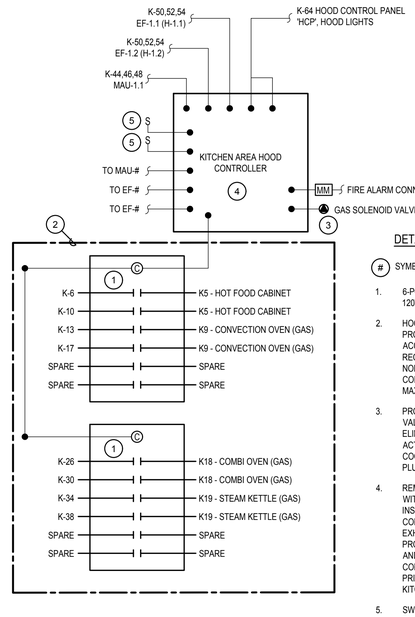


Electrical Enlarged Kitchen Plan - Area 'F'

Scale: 1/4" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE

ITEM #	DESCRIPTION	MANUFACTURER	CONNECTION TYPE	ELECTRICAL DATA
K1	DISHWASHER	ADS	DIRECT CONNECT	
K1.2	DISHWASHER BOOSTER (EXTERNAL)	ADS	DIRECT CONNECT	
K3	GARBAGE DISPOSAL	HOBART	DIRECT CONNECT	
K5	HOT FOOD CABINET	METRO	PLUG	
K5	HOT FOOD CABINET	METRO	PLUG	
K6	REACH-IN FRIDGE	BEVERAGE-AIR	PLUG	
K7	STEAM DROP-IN	TABCO	PLUG	
K7	STEAM DROP-IN	TABCO	PLUG	
K8	ICE MAKER	MANITOWOC	PLUG	
K9	CONVECTION OVEN (GAS DBL STACK)	VULCAN	PLUG	
K9	CONVECTION OVEN (GAS DBL STACK)	VULCAN	PLUG	
K10	30 QUART MIXER	HOBART	PLUG	
K11	60 QUART MIXER	HOBART	DIRECT CONNECT	
K16	WALK-IN COOLER (FAN COIL)		DIRECT CONNECT	
K16a	WALK-IN COOLER (CONDENSER)		DIRECT CONNECT	
K17	WALK-IN FREEZER (FAN COIL)		DIRECT CONNECT	
K17a	WALK-IN FREEZER (CONDENSER)		DIRECT CONNECT	
K18	COMBI OVEN (GAS SINGLE STACK)	RATIONAL	PLUG	
K18	COMBI OVEN (GAS SINGLE STACK)	RATIONAL	PLUG	
K19	STEAM KETTLE (GAS)	CLEVLAND	PLUG	
K19	STEAM KETTLE (GAS)	CLEVLAND	PLUG	
K26	FOOD SLICER	HOBART	PLUG	
KA	OWNER FURNISHED MILK COOLER		PLUG	
KB	OWNER FURNISHED POS MACHINE		PLUG	



KITCHEN HOOD CONTACTOR PANEL DETAIL

NTS

DETAIL KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. 6-POLE, 20AMP RATED CONTACTOR WITH 120V COIL.
2. HOOD CONTACTOR CABINET 'HCC'. PROVIDE NEMA 1 ENCLOSURE SIZED TO ACCOMMODATE ALL COMPONENTS AS REQUIRED. PROVIDE 240V RATED, CABINET NORMALLY OPEN, CONTACTS WITH 120V COIL. GE OR EQUAL. MAXIMUM WIDTH 24", MAXIMUM DEPTH 12".
3. PROVIDE CONNECTION TO GAS SOLENOID VALVE. VALVE SHALL CLOSE TO ELIMINATE SUPPLY OF GAS UPON ACTIVATION OF ANSUL SYSTEM. COORDINATE VALVE LOCATION WITH PLUMBING CONTRACTOR.
4. REMOTE HOOD CONTROL PANEL 'HCP' WITH REMOTE MOUNTED SWITCHES INSTALLED BY BY ELECTRICAL CONTRACTOR FOR HOOD LIGHTS AND EXHAUST FAN CONTROL. CONTROL PANEL PROVIDED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR. FIELD VERIFY LOCATION PRIOR TO ROUGH-IN. RE: ENLARGED KITCHEN PLAN.
5. SWITCHES FOR HOOD LIGHTS AND HOOD EXHAUST FAN CONTROL TO BE REMOTE MOUNTED BY ELECTRICAL CONTRACTOR. VERIFY SWITCH TYPE AND LOCATION WITH HOOD INSTALLER PRIOR TO ROUGH-IN.

KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. 2-POLE PILOT SWITCH FOR DISHWASHER HOOD FAN. SWITCH LIT IN ON POSITION. ROUTE TO DISHWASHER HOOD FAN LOCATED ON ROOF. VERIFY SWITCH LOCATION PRIOR TO ROUGH-IN. LABEL SWITCH "DISHWASHER EXHAUST". RE: ELECTRICAL ROOF PLAN – AREA 'B'.
2. CONNECTION FOR COOLER/FREEZER FAN COILS. COORDINATE CONNECTION REQUIREMENTS WITH EQUIPMENT SUPPLIER/INSTALLER PRIOR TO ROUGH-IN. PROVIDE DISCONNECTING MEANS AS REQUIRED.
3. PROVIDE 3/4" CONDUIT AND CONTROL CONDUCTORS AS NECESSARY BETWEEN THE INTERIOR AND EXTERIOR MECHANICAL UNITS. COORDINATE WITH MECHANICAL CONTRACTOR AND KITCHEN WALK-IN COOLER/FREEZER SUPPLIER.
4. PROVIDE LOCKOUT BREAKER IN PANEL AT POSITION INDICATED.
5. FURNISH AND INSTALL HEAT TAPE FOR WALK-IN DOOR AND CONDENSATE LINE DEFROST. COORDINATE CONNECTION AND HEAT TAPE REQUIREMENTS FOR BOTH FREEZER AND COOLER WITH WALK-IN SUPPLIER/INSTALLER PRIOR TO ROUGH-IN.
6. PROVIDE GFEP BREAKER IN PANEL FOR EQUIPMENT PROTECTION (30mA.)
7. PROVIDE CONNECTION FOR MOTORIZED ROLLUP DOOR AND CONTROL SWITCH. VERIFY SWITCH LOCATION PRIOR TO ROUGH-IN.
8. JUNCTION BOX FOR HOOD LIGHTS AND FAN CONTROLS MOUNTED AT 46" AFF. VERIFY CONTROL INTERFACE LOCATION AND BOX REQUIREMENTS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
9. CONNECTION FOR HOOD CONTROL PANEL AND LIGHTS. COORDINATE CONNECTION LOCATIONS WITH HOOD INSTALLER PRIOR TO ROUGH-IN. RE:KITCHEN HOOD CONTACTOR CABINET DETAIL. GROUND FAULT RELAY CABINET 'GFR' TO BE FLUSH MOUNTED NEXT TO PANEL 'K'.
10. HOOD CONTACTOR CABINET 'HCC'. CABINET TO BE LOCATED ABOVE ACCESSIBLE CEILING OR IN HOOD. COORDINATE LOCATION AND CONNECTION REQUIREMENTS WITH HOOD INSTALLER/SUPPLIER PRIOR TO ROUGH-IN.
11. GROUND FAULT RELAY CABINET 'GFR'. CABINET TO BE LOCATED ABOVE ACCESSIBLE CEILING NEAR PANEL 'K'. RE: GROUND FAULT RELAY CABINET DETAIL.
12. ABOVE COUNTER RECEPTACLE. COORDINATE HEIGHT WITH COUNTER SUPPLIER TO ENSURE RECEPTACLE IS ABOVE STAINLESS BACKSPLASH PRIOR TO ROUGH-IN.
13. CONNECTION FOR FOOD WASTE DISPOSAL. PROVIDE WITH 'INSINKERATOR' CC-101 CONTROLLER. COORDINATE WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN AND ORDERING CONTROL BOX BASED ON WATER TIMER SELECTION CIRCUIT.
14. DISCONNECTING MEANS TO BE LOCATED BELOW THE COUNTER. COORDINATE LOCATION TO ENSURE ACCESSIBILITY.
15. ROUTE CIRCUIT THROUGH HOOD CONTACTOR CABINET 'HCC'. RE: HOOD CONTACTOR CABINET DETAIL.
16. ROUTE CIRCUIT THROUGH THE GROUND FAULT RELAY PANEL 'GFR'. RE: GROUND FAULT RELAY CABINET DETAIL.
17. DOOR CHIME AND PUSH BUTTON. PROVIDE DOOR CHIME, TRANSFORMER AND EXTERIOR RATED PUSH BUTTON. PUSH BUTTON TO BE MOUNTED AT 46" AFG. PROVIDE ALL CONDUIT, JUNCTION BOXES AND CONDUCTORS AS REQUIRED FOR A FULLY FUNCTIONING SYSTEM.
18. CONNECT WATER HEATER AND ALL ASSOCIATED DEVICES AND EQUIPMENT. COORDINATE WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.

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208.384.0585
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OVER 40 YEARS OF EXCELLENCE

Project No: 22-104

PRELIMINARY

NOT FOR CONSTRUCTION
2/10/2023

Jefferson Elementary School Addition and Remodel

600 N. Fillmore Street, Jerome, Idaho

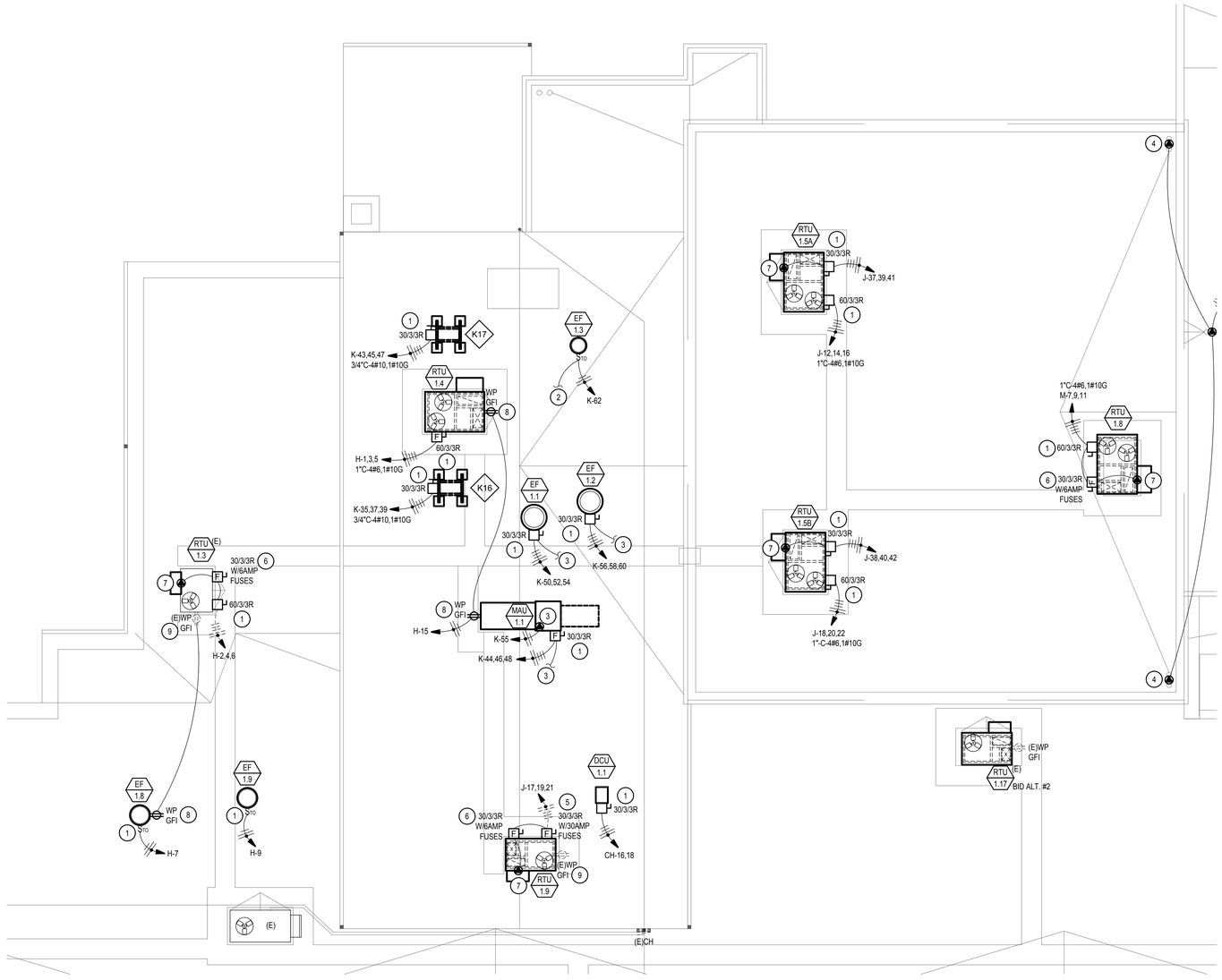
DATE: December 9, 2022
LKV PROJECT #: -
REVISIONS:

DRAWN BY: AN
CHECKED BY: KL

Design Development

DRAWING NO.

E-6.6



N. 1 Electrical Roof Plan - Area 'B'

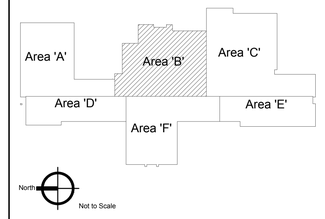
Scale: 1/8" = 1'-0"

KEYED NOTES:

(#) SYMBOL USED FOR NOTE CALLOUT.

1. FIELD COORDINATE DISCONNECT AND MECHANICAL UNIT LOCATION WITH MECHANICAL CONTRACTOR TO MAINTAIN ALL REQUIRED CLEARANCES.
2. ROUTE TO DISHWASHER HOOD FAN PILOT SWITCH LOCATED IN KITCHEN. RE: ENLARGED KITCHEN PLAN - AREA 'F'.
3. CONNECTION FOR PLUMBING CONTROLS VALVES. COORDINATE CONNECTION REQUIREMENTS WITH PLUMBING CONTRACTOR PRIOR TO ROUGH-IN.
4. INTERLOCK WITH KITCHEN HOOD CONTROL PANEL 'HCP'. ROUTE CIRCUIT THROUGH 'HCP' AND PROVIDE ALL CONNECTIONS AND HARDWARE REQUIRED FOR A COMPLETE INSTALLATION. COORDINATE WITH MECHANICAL CONTRACTOR FOR REQUIREMENTS AND EXACT LOCATION. RE: KITCHEN HOOD CONTACTOR CABINET DETAIL.
5. FUSED MAIN DISCONNECT AS INDICATED. FIELD COORDINATE FUSED DISCONNECT AND MECHANICAL UNIT LOCATION WITH MECHANICAL CONTRACTOR TO MAINTAIN ALL REQUIRED CLEARANCES.
6. FUSED DISCONNECT AS INDICATED FOR SEPARATE POWERED EXHAUST CONNECTION. COORDINATE LOCATION AND MOUNTING WITH MECHANICAL CONTRACTOR TO MAINTAIN ALL REQUIRED CLEARANCES. CONNECT TO THE LINE SIDE OF THE MAIN DISCONNECT. PROVIDE GUTTER, JUNCTION BOX(ES), WIRE TAPS AS REQUIRED, MAXIMUM LENGTH OF CONDUCTORS SHALL BE 10 FEET. LABEL THE DISCONNECT AS "POWERED EXHAUST DISCONNECT".
7. CONNECTION FOR POWERED EXHAUST UNIT. COORDINATE LOCATION AND ROUTING OF CONDUIT WITH MECHANICAL CONTRACTOR.
8. MOUNT RECEPTACLE ON RIGID CONDUIT 12" ABOVE ROOF DECK OR ON MECHANICAL UNIT WHERE APPLICABLE
9. EXISTING RECEPTACLE NEAR NEW MECHANICAL UNIT. EXTEND EXISTING CIRCUIT CONDUIT AND CONDUCTORS FROM EXISTING CONVENIENCE RECEPTACLE TO NEW LOCATION ON/NEAR NEW MECHANICAL UNIT. MOUNT RECEPTACLE ON RIGID CONDUIT 12" ABOVE ROOF DECK OR ON MECHANICAL UNIT WHERE APPLICABLE

Key Plan



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Project No: 22-104

PRELIMINARY

NOT FOR CONSTRUCTION
2/12/2023

Jefferson Elementary School
Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022
LKV PROJECT #: -
REVISIONS:

DRAWN BY: AN
CHECKED BY: KL

Design Development

DRAWING NO.

E-8.2

LIGHTING FIXTURE SCHEDULE (22-104)

TYPE	DESCRIPTION	MTG.	LAMPS	WATTS	MFG. & CATALOG NUMBER	OR EQUAL BY	NOTES
	4' LED STRIP FIXTURE WITH LENS	CEILING	LED		LITHONIA NO.	LIGHTOLIER	
BL1	FINISH WHITE	SURFACE	3000 LUMENS	20.3	CLX-L48-3000LM-SEF-RDL-MVOLT-GZ10-40K-80CRI-WH	METALUX	1
			4000K		(PROVIDE WITH 'PS1050-SP'D' OPTION FOR EMERGENCY FIXTURES)	H.E.WILLIAMS	
	4' LED STRIP FIXTURE WITH LENS	CHAIN	LED		LITHONIA NO.	LIGHTOLIER	
BL2	FINISH MATTE BLACK, 1% DIMMING	HUNG	3000 LUMENS	20.3	CLX-L48-3000LM-SEF-RDL-MVOLT-EZ1-40K-80CRI-MB-THCLXMB-HC36M12	METALUX	1
	STAGE LIGHTING		4000K		(PROVIDE WITH 'PS1050-SP'D' OPTION FOR EMERGENCY FIXTURES)	H.E.WILLIAMS	
	SINGLE FACED, THERMOPLASTIC EXIT SIGN,	AS			LITHONIA NO.	COMPASS	
EX1	GREEN LETTERING WITH CADMIUM BATTERY	NOTED ON	LED	0.7	LQM-S-W.3-G-MVOLT-ELN-SD	MULE	1
	AND SELF DIAGNOSTIC	DRAWINGS				H.E.WILLIAMS	
	2X4 LED VOLUMETRIC TROFFER	CEILING	LED		LITHONIA NO.	LIGHTOLIER	
GL1		GRID	4000 LUMENS	31.7	2BLT4-40L-ADP-GZ1-LP840	METALUX	1
			4000K		(PROVIDE WITH 'EL14LSD' OPTION FOR EMERGENCY FIXTURES)	H.E.WILLIAMS	
	2X4 LED VOLUMETRIC TROFFER	CEILING	LED		LITHONIA NO.	LIGHTOLIER	
GL2		GRID	3000 LUMENS	23.6	2BLT4-30L-ADP-GZ1-LP840	METALUX	1
			4000K		(PROVIDE WITH 'EL14LSD' OPTION FOR EMERGENCY FIXTURES)	H.E.WILLIAMS	
	2X4 LED FLAT PANEL, SELECTABLE OUTPUT	CEILING	LED		LITHONIA NO.	LIGHTOLIER	
GL3		GRID	4000 LUMENS	32.3	2GTL4-40L-GZ1-LP840	METALUX	
			4000K		(PROVIDE WITH 'EL10WLCP' OPTION FOR EMERGENCY FIXTURES)	H.E.WILLIAMS	
	LED HIGH BAY, CABLE HUNG, WIRE GUARD	AIRCRAFT	LED		LITHONIA NO.		
HB1		CABLE	15000 LUMENS	105	IBE-L24-15000LM-SD080-MD-MVOLT-GZ10-40K-80CRI-DWH-IBAC120M20-WGIBE		
			4000K		(PROVIDE WITH 'E15WCP' OPTION FOR EMERGENCY FIXTURE)		
	LED HIGH BAY, CABLE HUNG, WIRE GUARD	AIRCRAFT	LED		LITHONIA NO.		
HB2		CABLE	15000 LUMENS	105	IBE-L24-15000LM-SD080-MD-MVOLT-GZ10-40K-80CRI-DWH-IBAC120M20		
			4000K		(PROVIDE WITH 'E15WCP' OPTION FOR EMERGENCY FIXTURE)		
	LED ROUND RECESSED, 6" APERATURE	CEILING	LED		LITHONIA NO.		
RL1		RECESSED	1000 LUEMNS	10.4	LDN6-40/10-L06AR-LSS-MVOLT-GZ1		
			4000K		(PROVIDE WITH 'ELSD' OPTION FOR EMERGENCY FIXTURES)		
	LED ROUND RECESSED, 6" APERATURE	CEILING	LED		LITHONIA NO.		
RL2		RECESSED	2000 LUMENS	22.5	LDN6-40/20-L06AR-LSS-MVOLT-GZ1		
			4000K		(PROVIDE WITH 'ELSD' OPTION FOR EMERGENCY FIXTURES)		
		CEILING	LED		LITHONIA NO.		
SL1	4' LED SURFACE FIXTURE	SURFACE	3000 LUMENS	25	BLWP4-3-0L-ADP-GZ1-LP840		
			4000K		(PROVIDE WITH 'EL10WLCP' OPTION FOR EMERGENCY FIXTURES)		
		CEILING	LED		LITHONIA NO.		
SL2	2' LED SURFACE WRAP AROUND	SURFACE	2000 LUMENS	17	LBL2-2000LM-80CRI-40K-MIN10-GZT-MVOLT		
			4000K				
		CEILING	LED		LITHONIA NO.		
SL3	LED ROUND SURFACE, 7" APERATURE	SURFACE	1000 LUMENS	13	JSF-7IN 10LM-40K-90CRI-MVOLT ZT-WH		
			4000K				
	8' TRACK LIGHTING, 2-CIRCUIT, 2-NEAUTRALS, (6)		LED		LITHONIA NO.		
TL1	DIMMABLE LED FIXTURES, (3) COLOR FILTERS,	SURFACE	1023 LUMENS	15W PER	TRACK: TEK412-BL FIXTURE HEAD: T254L-TEK-G2-40K-80CRI-PDIM-NFL-BL		
	24-DEGREE FOCAL BEAM, BLACK FINISH		4000K	HEAD			
	4' LED WALL MOUNTED FIXTURE	WALL MOUNTED	LED		LITHONIA NO.		
WB1		ABOVE	2000 LUMENS	18.7	WL4-20L-EZ1-LP840		
		VANITY	4000K				
	2' LED WALL MOUNTED FIXTURE	WALL MOUNTED	LED		LITHONIA NO.		
WB2		ABOVE	1800 LUMENS	12.2	WL2-18L-EZ1-LP840		
		VANITY	400K				
	LED WALL PACK	WALL	LED		LITHONIA NO.		
WP1		MOUNTED	1227 LUMENS	10	WDGE1 LED-P1-40K-80CRI-VF-MVOLT-DDBXD		
		+10'-6' UNO	4000K		PROVIDE WITH 'E4WH' OPTION FOR EMERGENCY FIXTURES)		

LIGHTING FIXTURE SCHEDULE NOTES:

1 SUBSTITUTIONS WILL BE ALLOWED IF SUBMITTED PRIOR TO BID DATE BY THE GREATER OF: 7 BUSINESS DAYS OR THE TIME PERIOD SPECIFIED BY

LIGHTING CONTROL PANEL SCHEDULE

ZONE	DESCRIPTION	CKTS
1		
2		
3		
4		

NOTES:
1. PROVIDE UNSWITCHED LEG TO EGRESS FIXTURES.
2. PROVIDE TIMECLOCK PROGRAMMING AS REQUIRED
COORDINATE TIME SCHEDULE WITH OWNER.

PANEL: K

PROJECT: JEFFERSON ELEMENTARY SCHOOL ADDITION AND REMODEL

VOLTAGE: 208 / 120 V | 3 PH | 4 WIRE | AMPERE RATING: 400A | WITH 400A MLO | MOUNTING: FLUSH
BASIS OF DESIGN PANEL TYPE: PANEL BOARD | NEMA ENCLOSURE TYPE: 1 | PANEL AIC RATING: 10000 AIC

CKT NOTES:
1. GFCI FOR PERSONNEL PROTECTION (5mA)
2 GFEP FOR EQUIPMENT PROTECTION (30mA)
3. RED HANDLE, LOCKABLE BREAKER
4. SHUNT TRIP BREAKER
6. LOCKOUT HASP

REMARKS:
TWO SECTION BOARD. PROVIDE SECTION 1 WITH FEED THROUGH LUGS.
MAINTAIN SPECIFIED CONDUIT AND FEEDER SIZE FROM SECTION 1 TO SECTON 2

CKT	DESCRIPTION	CKT NOTE	LOAD VA	LOAD AMPS	AMPS/ POLES		LOAD (VA) A	LOAD (VA) B	LOAD (VA) C	AMPS/ POLES		LOAD AMPS	LOAD VA	CKT NOTE	DESCRIPTION	CKT
1	K1-DISHWASHER		3936	32.8	40	3	4851.2			20	3	10.6	915		K3-DISPOSAL	2
3	***		3936	32.8	**	*		4851.2		**	*	10.6	915		***	4
5	***		3936	32.8	**	*			5936	20	2	9.6	2000	4	K5-HOT FOOD CABINET	6
7	K1.2-BOOSTER HEATER (EXTERNAL)		4000	33.3	50	3	4000			**	*			4	K5-SHUNT TRIP	8
9	***		4000	33.3	**	*		6000		20	2	9.6	2000	4	K5-HOT FOOD CABINET	10
11	***		4000	33.3	**	*			4000	**	*			4	K5-SHUNT TRIP	12
13	K9-CONVECTION OVEN (GAS DBL STACK)	4	1920	16.0	20	1	2640			20	1	6.0	720		K6-REACH-IN FRIDGE	14
15	K9-SHUNT TRIP	4			*	*		800		20	2	7.7	800		K7-2 WELL STEAM DROP-IN	16
17	K9-CONVECTION OVEN (GAS DBL STACK)	4	1920	16.0	20	1			2720	**	*	7.7	800		***	18
19	K9-SHUNT TRIP	4			**	*	800			20	1	6.7	800		K7-2 WELL STEAM DROP-IN	20
21	K10-30 QUART MIXER		1140	9.5	20	1		1940		20	1	6.7	800		***	22
23	K11-60 QUART MIXER		1200	10.0	20	3			1920	20	1	6.0	720		K8-ICE MAKER	24
25	***		1200	10.0	**	*	3120			20	2	16.0	1920	4	K18-COMBI OVEN (GAS SINGLE STACK)	26
27	***		1200	10.0	**	*		1200		**	*			4	K18-SHUNT TRIP	28
29	K16a-WALK-IN COOLER (FAN COIL)	6	500	4.2	20	1			2420	20	2	16.0	1920	4	K18-COMBI OVEN (GAS SINGLE STACK)	30
31	SPARE			0.0	20	1	0			**	*			4	K18-SHUNT TRIP	32
33	K17a-WALK-IN FREEZER (FAN COIL)	6	250	2.4	20	2		850		20	2	5.0	600	4	K19-STEAM KETTLE (GAS)	34
35	***	6	250	2.4	**	*			250	**	*			4	K19 - SHUNT TRIP	36
37	K16-WALK-IN COOLER (CONDENSER)		2880	24.0	30	3	3480			20	2	5.0	600	4	K19-STEAM KETTLE (GAS)	38
39	***		2880	24.0	**	*		2880		**	*			4	K19 - SHUNT TRIP	40
41	***		2880	24.0	**	*			3600	20	1	6.0	720		K26-FOOD SLICER	42
43	K17-WALK-IN FREEZER (CONDENSER)		2800	23.3	30	3	4228			20	3	11.9	1428		MAU-1.1	44
45	***		2800	23.3	**	*		4228		**	*	11.9	1428		***	46
47	***		2800	23.3	**	*			4228	**	*	11.9	1428		***	48
49	WALK-IN COOLER/FREEAER HEAT TAPE	2	900	7.5	20	1	1452			20	1	4.6	552		EF-1.1 (H-1.1)	50
51	POS MACHINES, KITCHEN/CAFETERA		720	6.0	20	1		1272		20	1	4.6	552		***	52
53	MLK COOLER, CAFETERA		720	6.0	20	1			1272	20	1	4.6	552		***	54
55	MOTORIZED ROLLUP DOOR		540	4.5	20	1	1092			20	1	4.6	552		EF-1.2 (H-1.2)	56
57	MOTORIZED ROLLUP DOOR		540	4.5	20	1		1092		20	1	4.6	552		***	58
59	REC-KITCHEN 152/DISHROOM 155		900	7.5	20	1			1452	20	1	4.6	552		***	60
61	REC-KITCHEN 152/DISHROOM 155		720	6.0	20	1	1593			20	1	7.3	873		EF-1.3	62
63	REC-KITCHEN 152/JAN 151/STOR.154		720	6.0	20	1		1320		20	1	5.0	600		HOOD CONTROL PANEL 'HCP' & HOOD LTS	64
65	REC-MICROWAVE		1200	10.0	20	1			1800	20	1	5.0	600		HOOD CONTACTOR CABINET 'HCC'	66
67	REC-KITCHEN 152		180	1.5	20	1	780			20	1	5.0	600		GROUND FAULT RELAY CABINET 'GFR'	68
69	REC-KITCHEN 152		360	3.0	20	1		360		20	1	0.0			SPARE	70
71	WH-1, JANITOR 151		360	3.0	20	1			360	20	1	0.0			SPARE	72
73	SPARE			0.0	20	1	0			20	1	0.0			SPARE	74
75	SPARE			0.0	20	1		0		20	1	0.0			SPARE	76
77	SPARE			0.0	20	1			0	20	1	0.0			SPARE	78
79	SPARE			0.0	20	1	0			20	1	0.0			SPARE	80
81	SPARE			0.0	20	1		0		20	1	0.0			SPARE	82
83	SPARE			0.0	20	1			0	20	1	0.0			SPARE	84
							28036.2	26793.2	29958.0	VA						
							233.6	223.3	249.7	AMPS					84787 TOTAL VA	

PANEL: H

PROJECT: JEFFERSON ELEMENTARY SCHOOL ADDITION AND REMODEL

VOLTAGE: 208 / 120 V | 3 PH | 4 WIRE | AMPERE RATING: 200A | WITH 200A MLO | MOUNTING: SURFACE
BASIS OF DESIGN PANEL TYPE: PANEL BOARD | NEMA ENCLOSURE TYPE: 1 | PANEL AIC RATING: 10000 AIC

CKT NOTES:
1. GFCI FOR PERSONNEL PROTECTION (5mA)
2 GFEP FOR EQUIPMENT PROTECTION (30mA)
3. RED HANDLE, LOCKABLE BREAKER

REMARKS:
NEW PANEL WITH MAIN LUG ONLY.
EXTEND CONDUITS AND CONDUCTORS FROM DEMOLISHED PANEL 'H1' TO NEW PANEL 'H' LOCATION.

CKT	DESCRIPTION	CKT NOTE	LOAD VA	LOAD AMPS	AMPS/ POLES		LOAD (VA) A	LOAD (VA) B	LOAD (VA) C	AMPS/ POLES		LOAD AMPS	LOAD VA	CKT NOTE	DESCRIPTION	CKT
1	RTU-1.4 (KITCHEN)		4680	39.0	50	3	7908			40	3	26.9	3228		(E)RTU-1.3 W/ (N) POWER EXHAUST	2
3	***		4680	39.0	**	*		7908		**	*	26.9	3228		***	4
5	***		4680	39.0	**	*			7908	**	*	26.9	3228		***	6
7	EF-1.8, ROOF		506	4.2	20	1	6866			70	3	53.0	6360		RTU-1.5A	8
9	EF-1.9, ROOF		667	5.6	20	1		7027		**	*	53.0	6360		***	10
11	EF-1.4, TOILET 144		46.5	0.4	20	1			6406.5	**	*	53.0	6360		***	12
13	CONDENSATE (DFC 1.1)		60	0.5	20	1	6420			70	3	53.0	6360		RTU-1.5B	14
15	REC-ROOF		360	3.0	20	1		6720		**	*	53.0	6360		***	16
17	PLUMBING XFORMER, RR 139/141	1	180	1.5	20	1			6540	**	*	53.0	6360		***	18
19	SPARE			0.0	25	1	0			20	1	0.0			SPARE	20
21	SPARE			0.0	20	1		0		20	1	0.0			SPARE	22
23	SPARE			0.0	20	1			0	20	1	0.0			SPARE	24
25	SPARE			0.0	20	1	0			20	1	0.0			SPARE	26
27	SPARE			0.0	20	1		0		20	1	0.0			SPARE	28
29	SPARE			0.0	20	1			0	20	1	0.0			SPARE	30
31	SPARE			0.0	20	1	0			20	1	0.0			SPARE	32
33	SPARE			0.0	20	1		0		20	1	0.0			SPARE	34
35	SPARE			0.0	20	1			0	20	1	0.0			SPARE	36
37	SPARE			0.0	20	1	0			20	1	0.0			SPARE	38
39	SPARE			0.0	20	1		0		20	1	0.0			SPARE	40
41	SPARE			0.0	20	1			0	20	1	0.0			SPARE	42
43	SPARE			0.0	20	1	0			20	1	0.0			SPARE	44
45	SPARE			0.0	20	1		0		20	1	0.0			SPARE	46
47	SPARE			0.0	20	1			0	20	1	0.0			SPARE	48
49	SPARE			0.0	20	1	0			20	1	0.0			SPARE	50
51	SPARE			0.0	20	1		0		20	1	0.0			SPARE	52
53	SPARE			0.0	20	1			0	20	1	0.0			SPARE	54
55	SPARE			0.0	20	1	0			20	1	0.0			SPARE	56
57	SPARE			0.0	20	1		0		20	1	0.0			SPARE	58
59	SPARE			0.0	20	1			0	20	1	0.0			SPARE	60
							21194.0	21655.0	20854.5	VA						
							176.6	180.5	173.8	AMPS					63704 TOTAL VA	

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2/10/2023

Jefferson Elementary School Addition and Remodel
600 N. Fillmore Street, Jerome, Idaho

DATE: December 9, 2022
LKV PROJECT #: -
REVISIONS:

DRAWN BY: AN
CHECKED BY: KL

Design Development

DRAWING NO.
E-10.0