PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

PAYETTE SCHOOL DISTRICT #371
TENANT IMPROVEMENT

CAREER TECHNICAL EDUCATION BUILDING

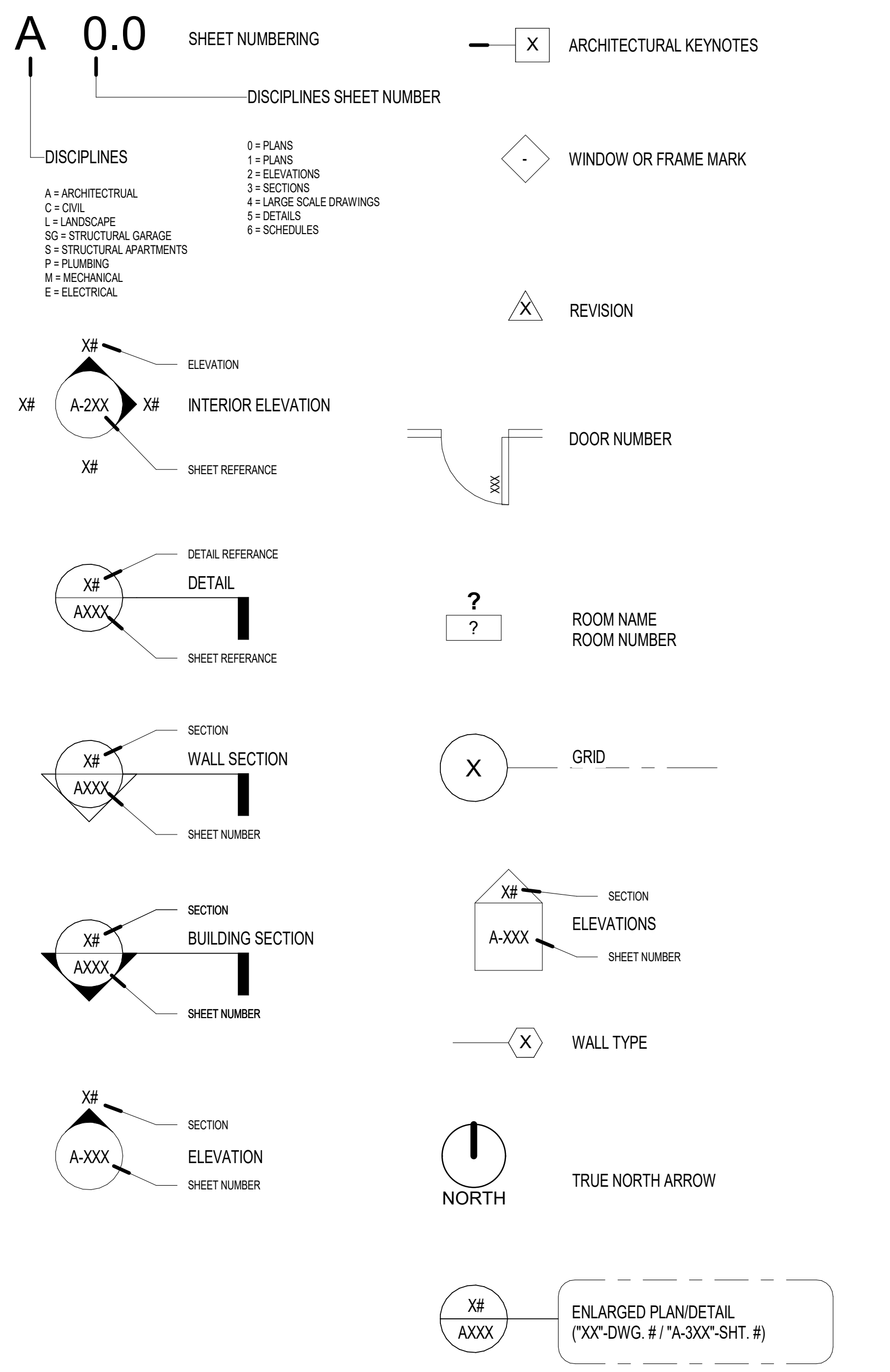
915 S. MAIN STREET, PAYETTE IDAHO

HSA ARCHITECTS
270 N. 27th St. BOISE, ID. 83702 208.338.1212

ABBREVIATIONS

AB	ANCHOR BOLT
AC	ACOUSTIC
AFF	ABOVE FINISH FLOOR
ALUM.	ALUMINUM
ALT.	ALTERNATE
∠	ANGLE
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
BLK'G	BLOCKING
BO	BOTTOM OF
BOC	BACK OF CURB
BRD. OR BD.	BOARD
BTU	BRITISH THERMAL UNITS
BU	BUILT-UP
BUR	BUILT UP ROOFING
CB	CATCH BASIN
CJ	CONTROL JOINT
℄ OR CL	CENTER LINE
CLG.	CEILING
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
CF	CUBIC FEET
CM	CONSTRUCTION MANAGER
COL.	COLUMN
CO	CONCRETE OPENING
CONT.	CONTINUOUS
CT	CERAMIC TILE
CPT.	CARPET
DWG.	DRAWING
DAS	DEFORMED ANCHOR STUD
DBL.	DOUBLE
DET.	DEFORMED ANCHOR STUD
DF	DRINKING FOUNTAIN
DIA.	DIAGONAL
DIM.	DIMENSION
DN	DOWN
DS	DOWNSPOUT
EA.	EACH
EB	EXPANSION BOLT
EJ	EXPANSION JOINT
ELEC.	ELECTRICAL
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EQ.	EQUAL
EXT.	EXTERIOR
EXIST.	EXISTING
FA	FRESH AIR
FE	FIRE EXTINGUISHER
FD	FLOOR DRAIN
FIN. FLR.	FINISH FLOOR
FO	FACE OF
FOC	FACE OF CURB
FOF	FACE OF FOUNDATION
FOW	FACE OF WALL
FF	FACTORY FINISH
FTG	FOOTING
FND	FOUNDATION
FV	FIELD VERIFY
GA.	GAUGE
GALV.	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GLASS
GYP. BD.	GYPSUM BOARD
GWB	GYPSUM BOARD
G.F.R.C.	GLASS FIBER REINFORCED CONCRETE
HAS	HEADED ANCHOR STUD
HC	HANDICAPPED
HDR	HEADER
HM	HOLLOW METAL
HPDL	HIGH PRESSURE DENSITY LAMINATE
HT.	HEIGHT
IC	INTEGRAL COLOR
INSUL.	INSULATION
INT.	INTERIOR
JB	JOIST BEARING
JT	JOINT
JST.	JOIST
MAX.	MAXIMUM
MED.	MEDIUM
MEMB.	MEMBRANE
MIN.	MINIMUM
MB	MACHINE BOLT
MBT	MODIFIED BITUMEN
MH	MAN HOLE
MECH.	MECHANICAL
M.O.	MASONRY OPENING
MFR.	MANUFACTURER
MTL.	METAL
N	NATURAL
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.P.O.I.	OWNER PROVIDED OWNER INSTALLED
O.P.C.I.	OWNER PROVIDED CONTRACTOR INSTALLED
OPP.	OPPOSITE
OPNG.	OPENING
P OR ⅊	PLATE
PT.	PAINT
PJT	PRE-MOLDED JOINT FILLER
PLYWD.	PLYWOOD
PL	PLASTIC LAMINATE
PLAST.	PLASTIC
PP	POWER POLE (EXISTING)
RAP	RETURN AIR PLENUM
R.D.	ROOF DRAIN
REINF.	REINFORCING
REQ'D	REQUIRED
R.O.	ROUGH OPENING
ROW	RIGHT OF WAY
RM.	ROOM
SAC	SUSPENDED ACOUSTICAL CEILING
SAG	SLAB-ABOVE-GRADE
SC	SOLID CORE
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATIONS
SOG	SLAB-ON-GRADE
S/S	STAINLESS STEEL
STL.	STEEL
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
SQ	SQUARE
TG	TEMPERED GLAZING
T.O.	TOP OF
TOC	TOP OF CONCRETE
TOB	TOP OF BLOCK
TOD	TOP OF DECK
TOS	TOP OF STEEL
TOW	TOP OF WALL
TYP.	TYPICAL
UG.	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
VB	VAPOR BARRIER
VCT	VINYL COMPOSITE TILE
VENT.	VENTILATION
V.I.F.	VARIFY IN FIELD
WD.	WOOD
WG	WIRE GLASS
WP	WATERPROOF
WWF	WELDED WIRE FABRIC

LEGEND



DEFFERED SUBMITTALS

FIRE SPRINKLER MODIFICATION

PLANS FOR THE AUTOMATIC FIRE SPRINKLER MODIFICATION SYSTEM SHALL BE SUBMITTED TO THE IDAHO STATE FIRE MARSHAL OFFICE BY A LICENSED CONTRACTOR FOR REVIEW AND ACCEPTANCE PRIOR TO THE INSTALLATION OF ANY SYSTEM COMPONENTS (IDAPA 18.08.02.021)

FIRE ALARM / LIFE SAFETY SYSTEM

SHOP DRAWING FOR THE FIRE ALARM SYSTEM SHALL BE SUBMITTED TO THE IDAHO STATE FIRE MARSHALS OFFICE FOR REVIEW AND APPROVAL PRIOR TO ANY INSTALLATION OF ANY SYSTEM CONPONENTS (IFC 907.1.2

ACCESSIBILITY

THE FOLLOWING ACCESSIBILITY CODES, STANDARDS AND GUIDELINES HAVE BEEN USED IN THE DESIGN OF THIS PROJECT:
AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) INTERNATIONAL BUILDING CODE IBC - 2018
ICC / ANSI A117.1 - 2009 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

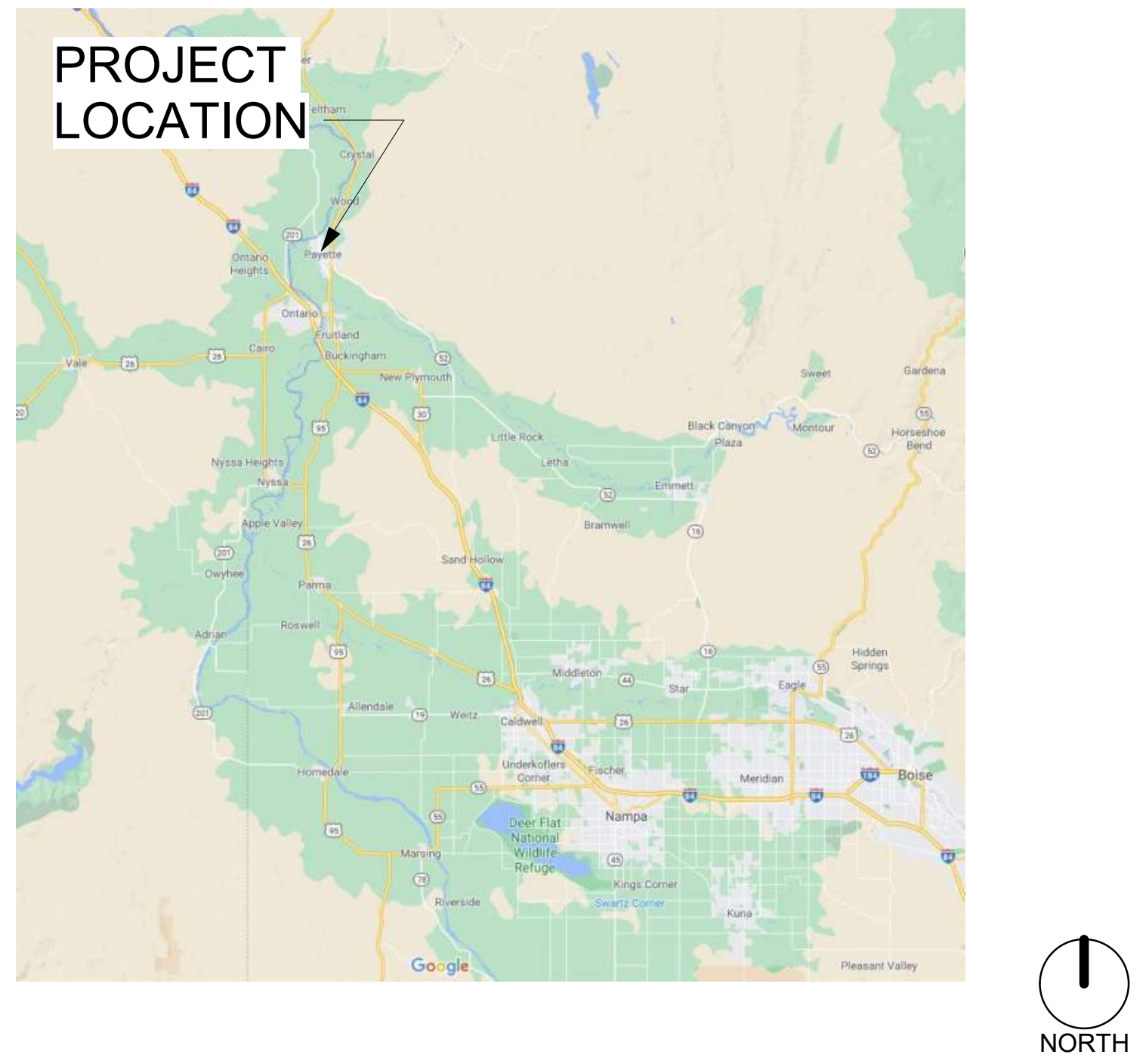
APPLICABLE CODES

CODE ANALYSIS BASED ON:

2018 INTERNATIONAL BUILDING CODE (IBC)
2018 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2018 INTERNATIONAL EXISTING BUILDING CODE
2017 NATIONAL ELECTRICAL CODE (NEC)
2018 INTERNATIONAL MECHANICAL CODE (IMC)
2017 IDAHO STATE PLUMBING CODE
2018 INTERNATIONAL FIRE CODE
2009 ICC/ANSI A117.1

SEE SHEETS A0.1 and A0.2 FOR CODE ANALYSIS

AREA MAP



OWNER

OWNER NAME

PAYETTE SCHOOL DISTRICT #371
1312 1ST AVENUE N
PAYETTE, IDAHO 83661
PHONE (208) 642-9366
CONTACT PERSON - ALVIN HALL
PHONE: (208) 707-0270

CONSULTANTS

MECHANICAL / ELECTRICAL ENGINEERS

NIELSON ENGINEERING INC.
CONSULTING ENGINEERS
156 NORTH TWELFTH AVENUE
POCATELLO, ID 83201
PHONE (208) 232-2577

ELECTRICAL CONTACT PERSON - DANIELS MILES

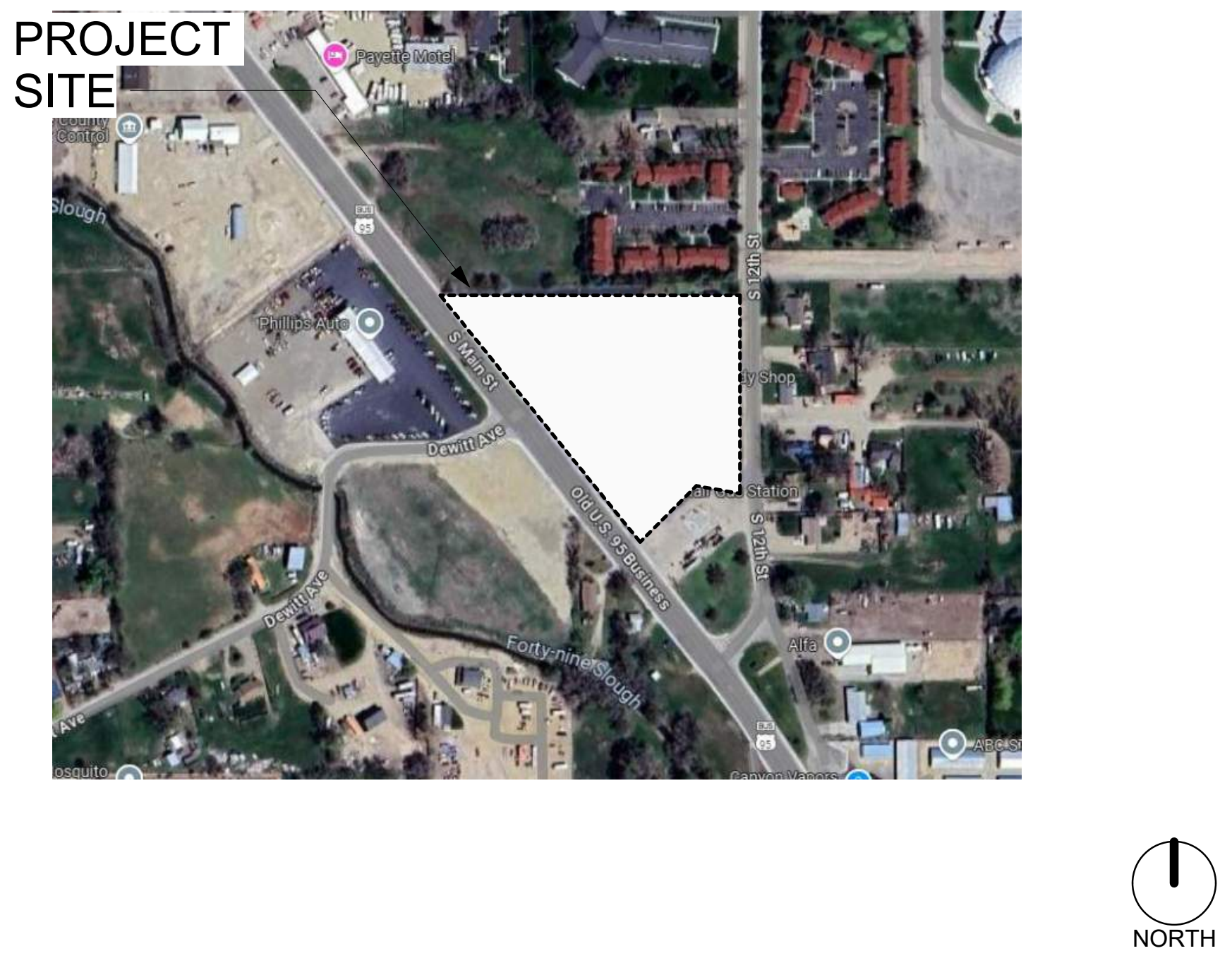
MECHANICAL CONTACT PERSON - TYREL PECK

STRUCTURAL ENGINEERS

ALLY STRUCTURAL CONSULTANTS. LLC
3778 N. PLANTATION RIVER DRIVE #102
BOISE, ID 83703
PHONE (208) 949-5993

CONTACT PERSON - CRAIG BRASHER

VICINITY MAP



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ED.01	ELECTRICAL DETAILS
FA1.00	FLOOR PLAN - FIRE ALARM

HSA ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025

REF NO.
24-106

DRAWN BY.
DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

COVER SHEET

SHEET NO.
G0.00

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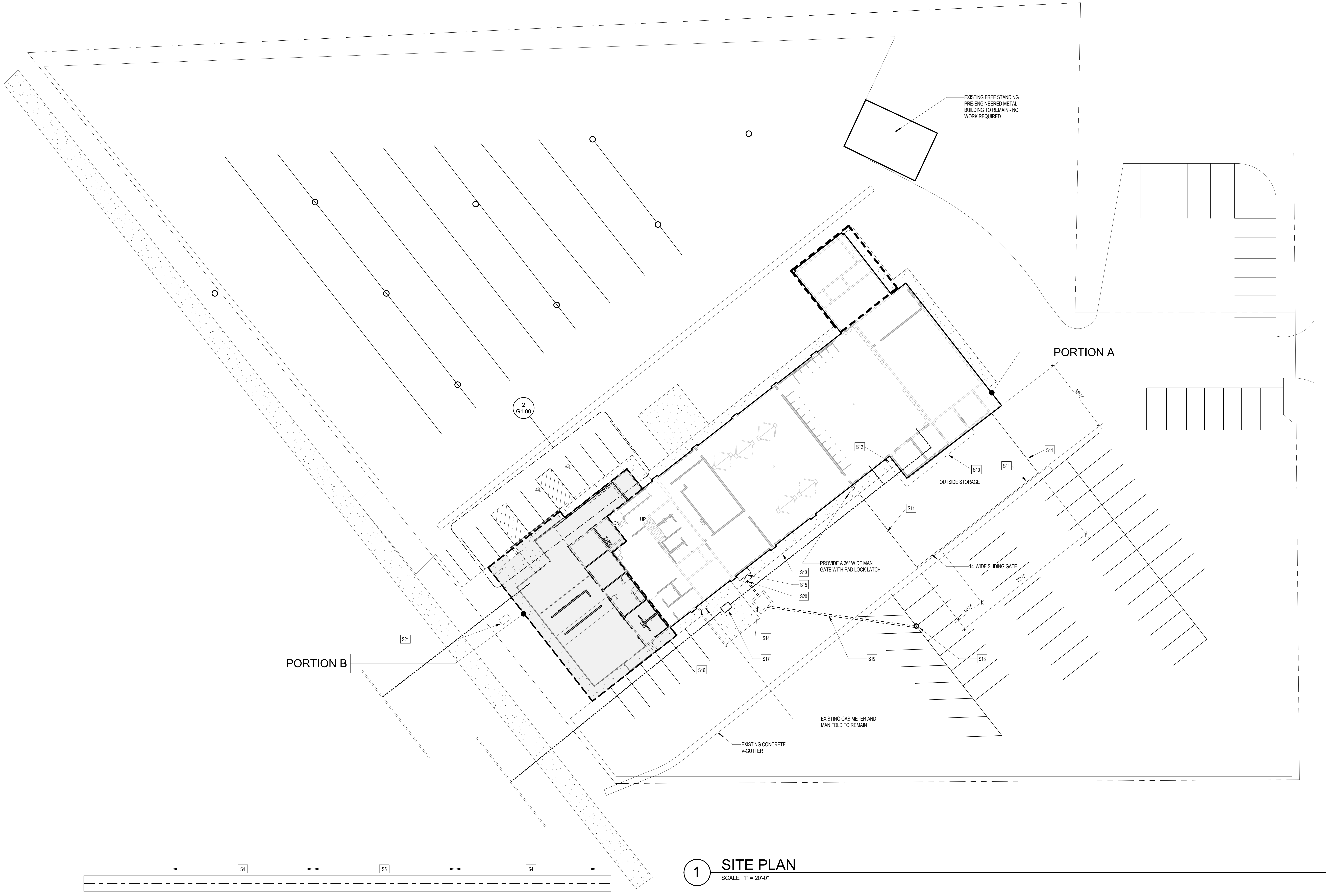
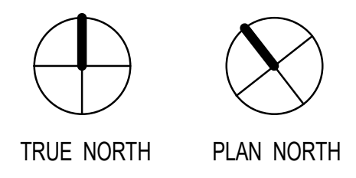
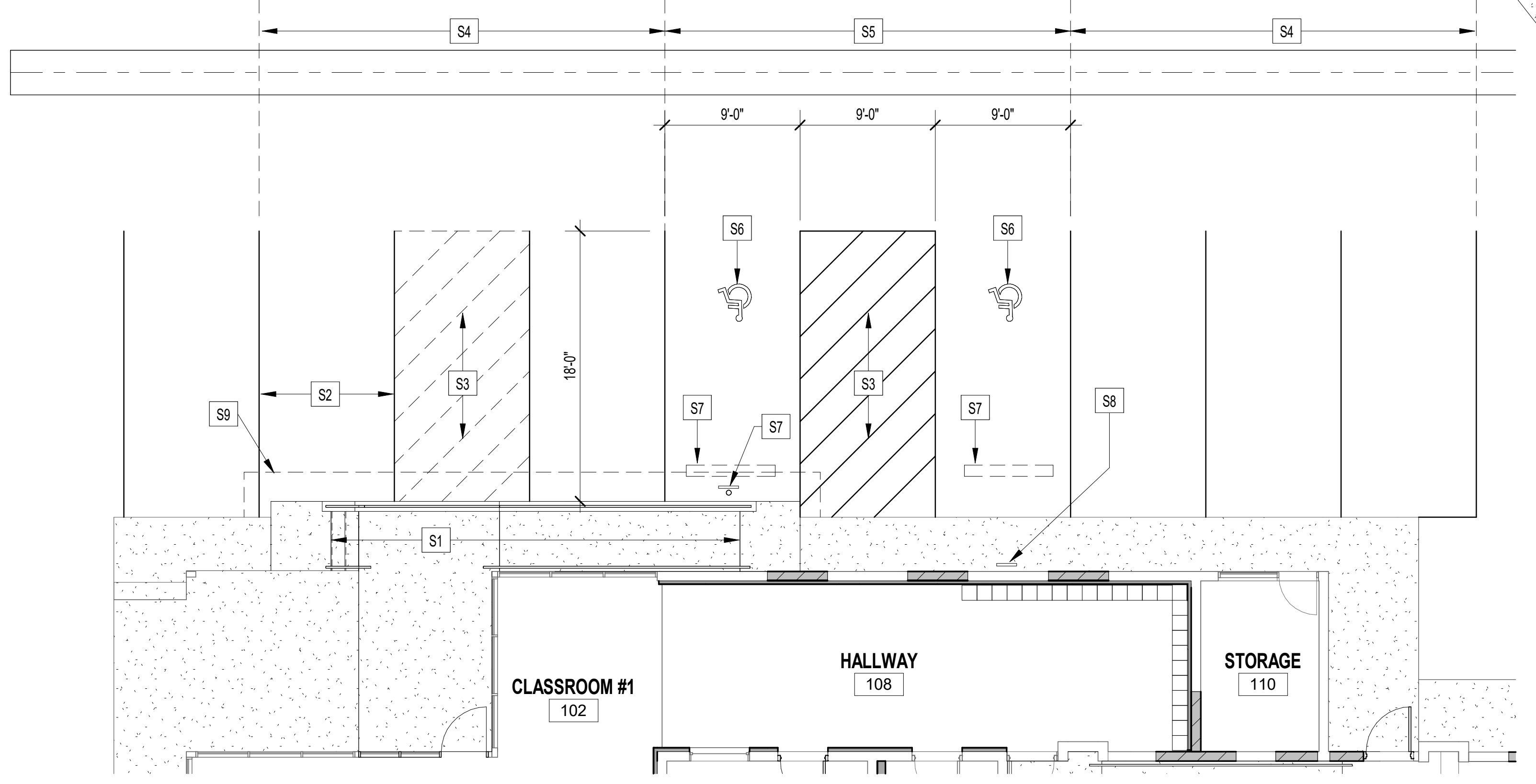

EXISTING FREE STANDING PRE-ENGINEERED METAL BUILDING TO REMAIN - NO WORK REQUIRED
PORTION A
PORTION B
2
G1.00
36'-0"
DN
UP
S12
S10
S11
S11
S11
OUTSIDE STORAGE
PROVIDE A 36" WIDE MAN GATE WITH PAD LOCK LATCH
S13
S15
S20
14' WIDE SLIDING GATE
73'-0"
14'-0"
S14
S17
S16
S19
S18
S21
EXISTING GAS METER AND MANIFOLD TO REMAIN
EXISTING CONCRETE V-GUTTER

1 SITE PLAN

SCALE 1" = 20'-0"





2 ACCESSIBLE PARKING STALLS

SCALE 1/8" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
S1	NEW EXTERIOR ENTRY RAMP AND STAIR AT FRONT ENTRY RE: 4/A1.02 FOR RAMP LAYOUT
S2	EXISTING STRIPING
S3	EXISTING ACCESSIBLE PARKING LOADING ZONE TO BE REMOVED
S4	PARKING STALLS. RE: SITE PLAN FOR BALANCE OF INFORMATION
S5	NEW ACCESSIBLE PARKING STALLS
S6	NEW ACCESSIBLE PARKING SYBOL PAINTED ON PAVEMENT
S7	WHEEL STOP
S8	NEW ACCESSIBLE PARKING STALL SIGNS, MOUNTED ON BUILDING 36" ABV. GRADE
S9	PATCH ASPHALT PAVING AROUNT NEW CONCRETE RAMP
S10	PATCH ASPHALT PAVING AROUNT NEW NEW ADDITION
S11	NEW 6'-0" HIGH FENCE WITH SLATS
S12	PATCH CONCRETE PAVING AROUNT NEW NEW ADDITION
S13	EXISTING CONRETE APPRON
S14	PAD MOUNTED UTILITY TRANSFORMER TO BE APPROVED BY IDAHO POWER. REFER TO ELECTRICAL DRAWINGS
S15	UNDERGROUND FED EXTERIOR RATED SWITCH GEAR REFER TO ELECTRICAL DRAWINGS
S16	EXISTING GAS METER AND MANIFOLD TO REMAIN
S17	EXISTING STORM WATER SEPERATOR TO REMAIN
S18	EXISTING POWER POLE WITH UTILITY TRANSFORMER. EXISTING TRANSFORMERS TO BE UPGRADED BY IDAHO POWER
S19	(2) 4" CONDUITS FFROM POWER POLE TO NEW PAD MOUNTED TRANSFORMER. REFER TO ELECTRICAL DRAWINGS
S20	NEW CONDUITS TO NEW EXTERIOR SWITCH GEAR. COORDINATE EXCAVATION WITH EXISTIN DRAIN LINE.
S21	NEW GREASE INTERCEPTOR. REFER TO PLUMBING DRAWINGS

PROFESSIONAL OF RECORD STAMP

REVISION

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AUTHOR
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CAREEER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

SITE PLAN

SHEET NO.
G1.00

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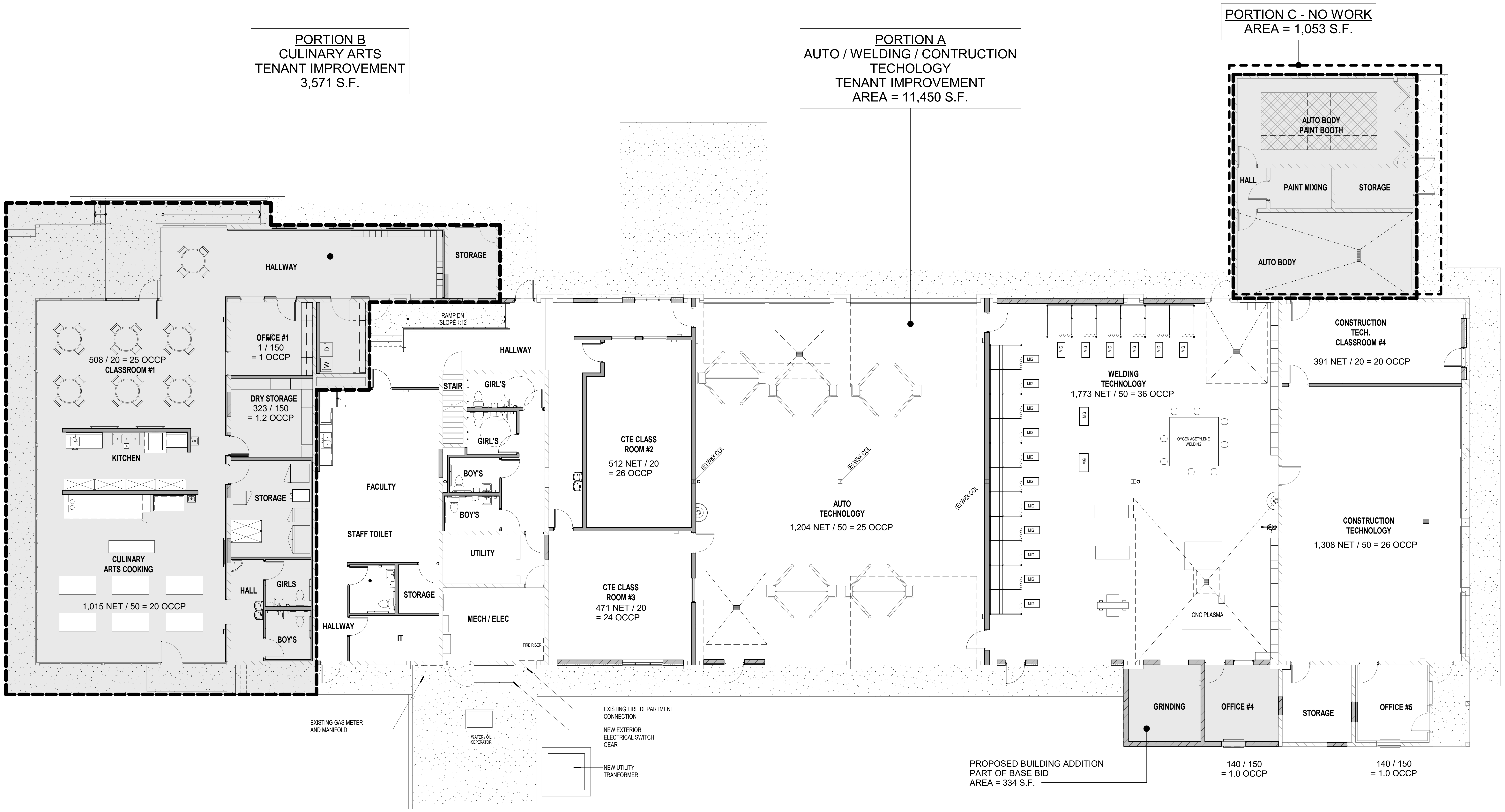

① OVERALL PHASING PLAN / CODE ANALYSIS

SCALE 1/8" = 1'-0"

TRUE NORTH

PLAN NORTH

CURRENT CODE

1. OCCUPANCY:	E
2. CONSTRUCTION TYPE:	TYPE VB
3. AUTOMATIC FIRE SPRINKLER:	FULLY SPRINKLED
4. ALLOWABLE BUILDING HEIGHT:	40
ACTUAL BUILDING HEIGHT:	21
5. ALLOWABLE NUMBER OF STORIES:	2
ACTUAL NUMBER OF STORIES:	1
6. ALLOWABLE AREA: (TABLE 506.2)	38,000 S.F.
7. ACTUAL BUILDING AREA:	16,408 S.F.
8 OCCUPANT LOAD (TABLE 1004.5)	
CLASSROOM #1 (508 NET / 20)	26 OCCP
CLASSROOM #2 (512 NET / 20)	26 OCCP
CLASSROOM #3 (471 NET / 20)	24 OCCP
CLASSROOM #4 (391 NET / 20)	20 OCCP
CULINARY ARTS (1015 NET / 50)	20 OCCP
AUTO TECHNOLOGY (1,204 NET / 50)	25 OCCP
WELDING TECHNOLOGY (1,773 NET / 50)	36 OCCP
CONSTRUCTION TECHNOLOGY (1,308 NET / 50)	26 OCCP
OFFICE #1 (323 NET / 150)	1.0 OCCP
FACULTY (558 NET / 150)	4.0 OCCP
OFFICE #3 (140 NET / 150)	1.0 OCCP
OFFICE #4 (140 NET / 150)	1.0 OCCP
TOTAL OCCUPANCY	210 OCCP

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

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AUTHOR
DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
CODE ANALYSIS / PHASE PLAN

SHEET NO.
G1.01

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GENERAL STRUCTURAL NOTES (G.S.N.)

GENERAL

THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY. THESE STRUCTURAL DRAWINGS ARE INTENDED TO PRESENT SUFFICIENT DIMENSIONS TO INDICATE MAJOR PLAN SIZES AND TO LOCATE PRIMARY STRUCTURAL COMPONENTS. THE CONTRACTOR SHALL COORDINATE LOCATION OF SECONDARY ELEMENTS, WALLS, OR MEMBERS RELATED TO OTHER DISCIPLINES. USE DETAILS MARKED "TYPICAL" WHEREVER APPLICABLE. CHANGES, OMISSIONS OR SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER. REFER TO SPECIFICATIONS FOR FURTHER REQUIREMENTS. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE (IBC). THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, AND HAS NOT BEEN CONSIDERED BY THE STRUCTURAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE PRIOR TO THE COMPLETION OF ALL SHEAR WALLS, ROOF DIAPHRAGMS AND FINISH MATERIALS. THE CONTRACTOR SHALL PROVIDE THE NECESSARY BRACING TO PROVIDE STABILITY PRIOR TO THE APPLICATION OF THE ABOVE-MENTIONED COMPONENTS. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

SHOP DRAWINGS

SHOP DRAWINGS ARE TO BE CHECKED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING FOR STRUCTURAL REVIEW. ANY REQUEST FOR MODIFICATION TO THE DRAWINGS MUST BE SUBMITTED IN WRITING. THIS MAY BE ACCOMPLISHED THROUGH THE SHOP DRAWINGS ONLY IF THE CHANGE IS CLEARLY REPRESENTED, CLOUDED AND NOTED AS BEING A REQUESTED CHANGE REQUIRING THE STRUCTURAL ENGINEER APPROVAL. CHANGES TO THE DRAWINGS BY WAY OF THE SHOP DRAWINGS THAT ARE NOT CLEARLY NOTED AS STATED ABOVE, DO NOT CONSTITUTE AN AUTHORIZED CHANGE EVEN THOUGH THE DRAWINGS HAVE BEEN STAMPED WITH THE STRUCTURAL ENGINEER REVIEW STAMP. GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFICATION AND COORDINATION OF DIMENSIONS AND DETAILS FOR EACH SUBCONTRACTOR.

SHOP DRAWINGS SHALL INCLUDE PLANS AND DETAILS AS NECESSARY TO INDICATE UNDERSTANDING OF THE CONTRACT DOCUMENTS. ENSURE ADEQUATE COPIES OF SHOP DRAWINGS ARE SUBMITTED FOR THE CONTRACTOR, ARCHITECT, AND STRUCTURAL ENGINEER TO RETAIN ONE COPY EACH FOR THEIR FILES.

SHOP DRAWINGS ARE REQUIRED FOR THE FOLLOWING:
* CONCRETE REINFORCING
* MASONRY REINFORCING

INFORMATIONAL SUBMITTALS

SUBMITTALS ARE TO BE CHECKED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING FOR STRUCTURAL REVIEW. SUBMITTALS SHALL INCLUDE CURRENT PRODUCT ICC/IAMPO REPORTS WHERE APPLICABLE AND INDICATED LOCATIONS OF USAGE FOR THE PRODUCT. ENSURE ADEQUATE COPIES OF SUBMITTALS ARE SUBMITTED FOR THE CONTRACTOR, ARCHITECT, AND STRUCTURAL ENGINEER TO RETAIN ONE COPY EACH FOR THEIR FILES.

INFORMATIONAL SUBMITTALS ARE REQUIRED FOR THE FOLLOWING:
* CONCRETE MIX DESIGN
* MASONRY MATERIALS

PRODUCT AND MATERIAL SUBSTITUTIONS

PRODUCTS AND MATERIALS ARE TO BE AS SPECIFIED IN THE CONTRACT DOCUMENTS. SUBSTITUTIONS ARE NOT PERMITTED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER AND ARCHITECT.

DESIGN LOADS

ROOF LIVE LOAD	20 PSF
GROUND SNOW LOAD, P_g	20 PSF
FLAT-ROOF SNOW LOAD, P_f	14 PSF
MINIMUM SNOW LOAD, P_m	25 PSF
SNOW EXPOSURE FACTOR, C_e	0.9
IMPORTANCE FACTOR (SNOW), I_S	1.1
THERMAL FACTOR, C_t	1.1
RISK CATEGORY PER IBC	II
BASIC WIND SPEED, V_{ULT}	101 MPH (3 SEC GUST), EXPOSURE C
IMPORTANCE FACTOR (SEISMIC) I_E	1.0
S_S	0.312
S_1	0.112
SITE CLASS	D
S_{DS}	0.323
S_{D1}	0.178
SEISMIC DESIGN CATEGORY	C
SEISMIC FORCE RESISTING SYSTEM	INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR	C_SW
SEISMIC RESPONSE COEFFICIENT, C_S	0.092
RESPONSE MODIFICATION FACTOR, R	3.5
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE

SEE PLANS FOR SPECIAL MECHANICAL UNIT LOADING.

FOUNDATION

DESIGN ALLOWABLE SOIL BEARING PRESSURE = 1500 PSF ASSUMED. BOTTOM OF ALL FOOTINGS TO BEAR ON COMPETENT, NATIVE, INORGANIC, UNDISTURBED SOIL 1'-0" MINIMUM BELOW EXISTING GRADE OR COMPACTED STRUCTURAL FILL. EXTEND ALL EXTERIOR FOOTINGS 24" MINIMUM BELOW FINISHED GRADE. NO FOOTING SHALL BEAR HIGHER THAN A 1 VERTICAL TO 1.5 HORIZONTAL SLOPE ABOVE ANY EXCAVATION, EXISTING OR PLANNED. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING TO PREVENT MOVEMENT OF WALLS IF BACKFILL IS PLACED BEFORE FLOOR SYSTEM IS IN PLACE. THERE SHALL BE 95% COMPACTION (ASTM D1557 MODIFIED PROCTOR DENSITY) OF ALL BACKFILL SOIL UNDER SLABS ON GRADE.

CAST-IN-PLACE CONCRETE

FOOTINGS:

* ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:	2500 PSI
* MAXIMUM SLUMP:	3" +/- 1"
* MAXIMUM W/C RATIO:	0.50
* AIR ENTRAINMENT:	NO REQUIREMENT
* MAXIMUM AGGREGATE SIZE:	$\frac{3}{4}$"

INTERIOR CONCRETE SLABS:

* ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:	4000 PSI
* MAXIMUM SLUMP:	4" +/- 1"
* MAXIMUM W/C RATIO:	0.45
* AIR ENTRAINMENT:	0%
* MAXIMUM AGGREGATE SIZE:	$\frac{3}{4}$"

FOUNDATION WALLS, PIERS, & EXPOSED CONCRETE SLABS:

* ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:	4000 PSI
* MAXIMUM SLUMP:	4" +/- 1"
* MAXIMUM W/C RATIO:	0.45
* AIR ENTRAINMENT:	6% +/- 1%
* MAXIMUM AGGREGATE SIZE:	$\frac{3}{4}$"

CONSTRUCTION TO BE IN ACCORDANCE WITH ACI 318-14. REFER TO ACI 302.1R-04 FOR SLAB ON GRADE MIX DESIGN. LOCATION OF CONSTRUCTION OR POUR JOINTS MUST BE APPROVED BY THE STRUCTURAL ENGINEER IF DIFFERENT FROM THAT SHOWN ON PLANS.

MASONRY

CONCRETE MASONRY UNITS: ASTM C90, MEDIUM WEIGHT RUNNING BOND. F'_m = 1900 PSI.
MORTAR: ASTM C270, TYPE S, MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.
GROUT: ASTM C476 WITH A MIN. COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS (SEE MASONRY WALL STRENGTHS BELOW).

FILL ALL CELLS CONTAINING REINFORCING WITH GROUT IN LIFTS NOT EXCEEDING 4'-0" IN HEIGHT. FILL OTHER CELLS WITH GROUT AS INDICATED ON DRAWINGS. ALL REINFORCEMENT SHALL BE IN PLACE PRIOR TO GROUTING WITH VERTICAL BARS HELD AT TOP, BOTTOM AND 120 DIAMETERS MAXIMUM ON CENTER. GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACING AND RE-CONSOLIDATED BY MECHANICAL VIBRATION TO MINIMIZE VOIDS DUE TO WATER LOSS. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR MASONRY WALLS, AS REQUIRED, UNTIL CONNECTIONS TO FLOOR AND/OR ROOF DIAPHRAGMS ARE COMPLETED.

THE STRENGTH OF MASONRY ASSEMBLY SHALL BE DETERMINED BY THE UNIT STREGTH METHOD.

REINFORCING STEEL

WELDED WIRE REINFORCING: ASTM A82 AND A185.
DEFORMED BARS: ASTM A615, GRADE 40 FOR #3; GRADE 60 FOR #4 & LARGER.

LAP SPLICES (HORIZONTAL AND VERTICAL STEEL)
* MASONRY: 48-BAR DIA. AT CELLS WITH BARS AT CENTER FOR #5'S & SMALLER.

* CONCRETE: 52-BAR DIA. FOR BEAMS, COLUMNS, RETAINING AND ABOVE-GRADE WALLS FOR #6 & SMALLER.
  40-BAR DIA. OTHER, UNLESS NOTED OTHERWISE FOR #6 & SMALLER.

WELDED WIRE FABRIC SPLICES: WIRE SPACING + 2".

CONCRETE COVER:
UNLESS OTHERWISE NOTED ON THESE DRAWINGS, UTILIZE THE FOLLOWING CLEAR EMBEDMENT AT REINFORCING BARS VALUES FOR CAST-IN-PLACE, NON-PRE-STRESSED CONCRETE TYPICALLY:

CONCRETE CAST AGAINST SOIL = 3".
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER = 1-1/2" (#5 OR LESS)
SLAB ON GRADE = 1-1/2".

SECURELY TIE ALL REINFORCING IN PLACE WITH DOUBLE ANNEALED 16-GAUGE IRON WIRE OR APPROVED CLIPS. SUBMIT SHOP DRAWINGS OF REINFORCING STEEL FOR REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION.

GROUT AND EPOXY ADHESIVES

NON-SHRINK GROUT: "MASTERFLOW 928" AS MANUFACTURED BY BASF BUILDING SYSTEMS OR APPROVED EQUIVALENT.

EPOXYADHESIVES:

* FOR INSTALLATION IN REINFORCED MASONRY:	HILTI 'HIT HY-100'
* FOR INSTALLATION IN CONCRETE:	HILTI 'HIT HY-200'

STRUCTURAL AND MISC. STEEL

WIDE FLANGE SHAPES: ASTM A992, F_y = 50 KSI MINIMUM.

CHANNELS, ANGLES, PLATES AND BARS: ASTM A36, F_y = 36 KSI MINIMUM.

HOLLOW STRUCTURAL SHAPES (HSS): ASTM A500, GRADE B, F_y = 46 KSI (RECTANGULAR SECTIONS), F_y = 42 KSI (ROUND SECTIONS).

PIPE: ASTM A53 OR A501, F_y = 35 KSI MINIMUM.

BOLTS: ASTM A325 HIGH STRENGTH BOLTS (H.S.B.) UNLESS NOTED AS ASTM A307 MACHINE BOLTS (M.B.). WHERE HIGH STRENGTH BOLTS ARE USED, THEY SHALL BE INSTALLED WITH LOAD INDICATOR DEVICES (LOAD INDICTOR WASHERS OR SNAP-OFF HEADS). WHERE AN OVERSIZED OR SHORT SLOTTED HOLE OCCURS IN AN OUTER PLY OF ANY CONNECTION, A HARDENED WASHER SHALL BE USED.

ANCHOR BOLTS (A.B.): ASTM F1554, GRADE 36 KSI. PROVIDE DOUBLE NUT FOR LEVELING AT COLUMNS OR BEAM BASE PLATES.

MECHANICAL BOLTS: IN CONCRETE AND GROUTED MASONRY, SIMPSON {“STRONG-BOLT 2” (ESR-3037, ER-240)|“TITEN HD” (ESR-2713, ESR-1056)} OR APPROVED EQUIVALENT

EPOXY ANCHORS: CARBON STEEL THREADED ANCHOR RODS CONFORMING TO ASTM A307 GRADE C, OR ASTM A193 GRADE B7; OR STAINLESS STEEL THREADED ANCHOR RODS CONFORMING TO ASTM F593, ALLOY GROUP 1, TYPE 304, CONDITION CW. INSTALL RODS USING APPROPRIATE EPOXY ADHESIVE FOR THE BASE MATERIAL ACCORDING TO THE "GROUT AND EPOXY ADHESIVE" SECTION ABOVE.

HEADED ANCHOR STUD (H.A.S.) AND THREADED ANCHOR STUD (T.A.S.): ASTM A108-69T, F_y = 50 KSI, END WELDED PER MANUFACTURER'S RECOMMENDATIONS.

DEFORMED BAR ANCHORS (D.B.A.): ASTM A496, F_y = 70 KSI, ATTACHED WITH NELSON STUD GUN OR ASTM A706, FY = 60 KSI END WELDED WITH 3/16" FILLET ALL-AROUND.

POWDER DRIVEN FASTENERS (PDF): FOR ATTACHMENT TO CONCRETE AND STRUCTURAL STEEL, 0.157"Ø SIMPSON “PDPA” (ESR 2138) OR APPROVED EQUIVALENT.

WELDING ELECTRODES OR WIRES: AWS A5.1 OR A5.5, E70XX; AWS A5.18, E70S-X; AWS A5.20, E7XT-X.

ERECTION AND FABRICATION: IN ACCORDANCE WITH AISC "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". WELDING SHALL CONFORM TO AWS "CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION". ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS. ALL COLUMNS AND BEAMS TO BE FROM UN-SPLICED LENGTHS UNLESS NOTED OTHERWISE ON THE DRAWINGS. SUBMIT SHOP DRAWINGS SHOWING SIZES, DIMENSIONS AND REQUIRED CONNECTION DETAILS FOR REVIEW BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION.

FIELD WELDS: WELDING OF STRUCTURAL STEEL SHALL BE PERFORMED IN THE SHOP WHENEVER PRACTICAL. AN EFFORT HAS BEEN MADE TO INDICATE WELDS THAT CAN BE OR SHOULD BE FIELD WELDED. IT IS, HOWEVER, THE FABRICATORS RESPONSIBILITY TO DECIDE WHERE AND HOW THE WELDING IS TO BE ACCOMPLISHED TO ACHIEVE THE INTENDED RESULT.

COMPLETE JOINT PENTRATION WELD (C.J.P.): PROVIDE BACKER BARS, RUN OFF TABS, AND ACCESS HOLES PER AWS D1.1. BACKER BARS SHALL BE REMOVED AFTER WELDING, THE ROOT WELD BACK GOUGED AND REPAIRED IF NECESSARY AND REINFORCED WITH A FILLET. RUN OFF TABS SHALL BE REMOVED AFTER WELDING WITH THE FLANGE EDGE GROUND SMOOTH.

WOOD

GENERAL:ALL WOOD BEARING DIRECTLY ON CONCRETE OR MASONRY, IF LESS THAN 4'-0" ABOVE GRADE, SHALL BE PRESSURE TREATED DOUGLAS FIR. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, ETC., UNLESS SPECIFICALLY NOTED OR DETAILED.

SAWN LUMBER: NO. 2 & BETTER DOUGLAS FIR-LARCH, WWPA GRADING RULES.

SHEATHING: APA RATED SHEATHING, APA RATED STURD-I-FLOOR, EXPOSURE-1, NER-108.
FRAMING ANCHORS AND CONNECTORS: "SIMPSON STRONG TIE" OR USP PRODUCT THAT MEETS OR EXCEEDS SIMPSON PRODUCTS OR APPROVED EQUIVALENT AS INDICATED ON DRAWINGS. INSTALL AND CONNECT PER MANUFACTURER'S REQUIREMENTS.

NAIL GUNS: ALL NAILED ROOF OR FLOOR DIAPHRAGMS AND SHEAR WALLS ARE DESIGNED USING ALLOWABLE IBC SHEAR VALUES WHICH ARE BASED ON CONVENTIONAL COMMON NAIL SIZES. USE OF PNEUMATIC NAIL GUNS OR STAPLES IS ACCEPTABLE ONLY WITH ENGINEER APPROVAL OF TYPE OF FASTENER AND SPACING IN ORDER TO MEET INTENDED DESIGN LOADS. FOR NAILING NOT SHOWN ON DRAWINGS, USE IBC FASTENING SCHEDULE, TABLE 2304.9.1.

FASTENERS IN CONTACT WITH PRESSURE PRESERVATIVE-TREATED (PPT) AND FIRE-RETARDANT-TREATED WOOD ARE TO BE HOT-DIPPED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. CONNECTIONS SHOULD NOT INCORPORATE DISSIMILAR METALS OR METALLIC COATINGS IN CONTACT WITH EACH OTHER. PRODUCTS IN WHICH THE COATINGS HAVE BEEN DAMAGED OR COMPROMISED DURING SHIPPING, STORAGE OR INSTALLATION SHOULD BE DISCARDED OR OTHERWISE EFFECTIVELY RESTORED (IBC SECTION 2304.9.5, IRC SECTION R317.3).

SPECIAL STRUCTURAL INSPECTIONS

THE OWNER SHALL EMPLOY A SPECIAL INSPECTION SERVICE TO PERFORM INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE 2018 INTERNATIONAL BUILDING CODE. INSPECTION REPORTS FOR THE ITEMS LISTED IN THE SPECIAL INSPECTION TABLES SHALL BE FURNISHED TO THE STRUCTURAL ENGINEER OF RECORD IN A TIMELY MANNER. INSPECTION REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES THAT ARE NOT CORRECTED SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER OF RECORD PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. A FINAL REPORT DOCUMENTING THE REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED TO THE OWNER AND STRUCTURAL ENGINEER OF RECORD.

ABBREVIATIONS

#	POUNDS OR NUMBER
@	AT
A.B.	ANCHOR BOLTS
A.F.F.	ABOVE FINISH FLOOR
ADD'L.	ADDITIONAL
APPLIC.	APPLICABLE
ARCH'L.	ARCHITECTURAL
B.N.	BOUNDARY NAILING
B.O.D.	BOTTOM OF DECK
BLKG.	BLOCKING
B.M.	BEAM
BOT.	BOTTOM
BRNG.	BEARING
BTWN.	BETWEEN
C	CAMBER
C.F.S.	COLD FORMED STEEL
C.J.P.	COMPLETE JOINT PENETRATION
CL.	CENTERLINE
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
COORD.	COORDINATE
D.B.A.	DEFORMED BAR ANCHOR
DBL.	DOUBLE
DET.	DETAIL
DL	DEAD LOAD
D.P.	DEEP
DWLS.	DOWELS
E.A.	EPOXY ANCHOR
E.B.	EXPANSION BOLT
E.N.	EDGE NAILING
EA.	EACH
ELEV.	ELEVATION
E.F.	EDGE FASTENING
EMBED.	EMBEDMENT
EXIST.	EXISTING
(E)	EXISTING
EXT.	EXTERIOR
F.N.	FIELD NAILING
FDN.	FOUNDATION
FIN.	FINISH
FLR.	FLOOR
FRMG.	FRAMING
FTG.	FOOTING
G.S.N.	GENERAL STRUCTURAL NOTES
G.A.	GAUGE
GLB	GLU-LAM BEAM
H.A.S.	HEADED ANCHOR STUD
H.S.B.	HIGH STRENGTH BOLT
HORIZ.	HORIZONTAL
INFO.	INFORMATION
INT.	INTERIOR
J.A.	JOIST BEARING
JST.	JOIST
K	KIPS (1000 POUNDS)
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSL	LAMINATED STRAND LUMBER
LVL	LAMINATED VENEER LUMBER
M.A.	MACHINE BOLT
MAS.	MASONRY
MAX.	MAXIMUM
MECH'L	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N.T.S.	NOT TO SCALE
NO.	NUMBER
O.C.	ON CENTER
O.H.	OPPOSITE HAND
O.W..J.	OPEN WEB STEEL JOIST
OPNG.	OPENING
P.D.F	POWDER DRIVEN FASTENER
P.T.	PRESSURE TREATED
PERP.	PERPENDICULAR
PL.	PLATE
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLAM
PT.	POINT
REINF.	REINFORCING
REQ'D.	REQUIRED
SCHED.	SCHEDULE
SHT.	SHEET
SHTG.	SHEATHING
SIM.	SIMILAR
SJ.	SLAB JOINT
SPECS.	SPECIFICATIONS
SQ.	SQUARE
STAGG.	STAGGERED
STD.	STANDARD
STIFF.	STIFFENER
STL.	STEEL
T.A.S.	THREADED ANCHOR STUD
T.N.	TOE NAIL
T.O.C.	TOP OF CONCRETE
T.O.F.	TOP OF FOOTING
T.O.L.	TOP OF LEDGER
T.O.M.	TOP OF MASONRY
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
W.F.	WIDE FLANGE (BEAM)
W.P.	WORK POINT
W/	WITH
W/O	WITHOUT
WD.	WOOD
W.W.R.	WELDED WIRE REINF.

STRUCTURAL NOTES

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025

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24-106

AUTHOR
DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

GENERAL STRUCTURAL NOTES

SHEET NO.
G1.02

SPECIAL INSPECTION TABLE 1
1705.6 SOILS

YES	NO	MATERIAL/ACTIVITY	CONTINUOUS	PERIODIC
X		1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.		X
X		2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.		X
X		3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.		X
X		4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	
X		5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.		X

SPECIAL INSPECTION TABLE 2
1705.3 CONCRETE CONSTRUCTION

YES	NO	MATERIAL/ACTIVITY	CONTINUOUS	PERIODIC
	X	1. INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT.		X
	X	2. INSPECTION OF REINFORCING STEEL WELDING.		
	X	3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED PER SECTION 1908.5 OR WHERE STRENGTH DESIGN IS USED.		X
X		4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.		X
X		5. VERIFY USE OF REQUIRED DESIGN MIX		X
X		6. AT THE TIME OF FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	
X		7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	
X		8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.		X
	X	9. INSPECTION OF PRESTRESSED CONCRETE:		
		A. APPLICATION OF PRESTRESSING FORCES	X	
		B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM	X	
	X	10. ERECTION OF PRECAST CONCRETE MEMBERS.		X
	X	11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.		X
		12. INSPECTION OF FORMWORK FOR SHAPE, LINES, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		X

SPECIAL INSPECTION TABLE 3
1705.4 SPECIAL INSPECTION FOR MASONRY CONSTRUCTION

YES	NO	MATERIAL/ACTIVITY	CONTINUOUS	PERIODIC
		VERIFICATIONS		
X		1. PRIOR TO CONSTRUCTION:		
		A. VERIFICATION OF COMPLIANCE OF SUBMITTALS		
		B. VERIFICATION OF F'_m AND F'_{AAC}		
X		2. DURING CONSTRUCTION:		
		A. VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI)		
		B. VERIFICATION OF F'_m AND F'_{AAC} FOR EVERY 5,000 SQ. FT.		
		C. VERIFICATION OF PROPORTION OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATION GROUT		
		INSPECTIONS		
X		1. AS MASONRY CONSTRUCTION BEGINS VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:		
		A. PROPORTIONS OF SITE MORTAR		X
		B. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X
		C. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES		X
		D. PRESTRESSING TECHNIQUE		X
		E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	$X^{(B)}$	$X^{(C)}$
		F. SAMPLE PANEL CONSTRUCTION		X
X		2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:		
		A. GROUT SPACE		X
		B. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES		X
		C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS		X
		D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X
X		3. VERIFY DURING CONSTRUCTION:		
		A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS		X
		B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION		X
		C. SIZE AND LOCATION OF STRUCTURAL MEMBERS		X
		D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		X
		E. WELDING REINFORCMENT	X	
		F. PREPORATION, CONSTRCUTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F).	X	
		G. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE		X
		H. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X	
		I. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	$X^{(B)}$	$X^{(C)}$
X		4. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X

A) FREQUENCY REFERS TO FREQUENCY OF INSPECTION, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODICALLY DURING THE TASK , AS DE NED IN THE TABLE.

B) REQUIRED FOR THE RST 500 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY

C) REQUIRED AFTER THE FIRST 500 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY

STRUCTURAL NOTES

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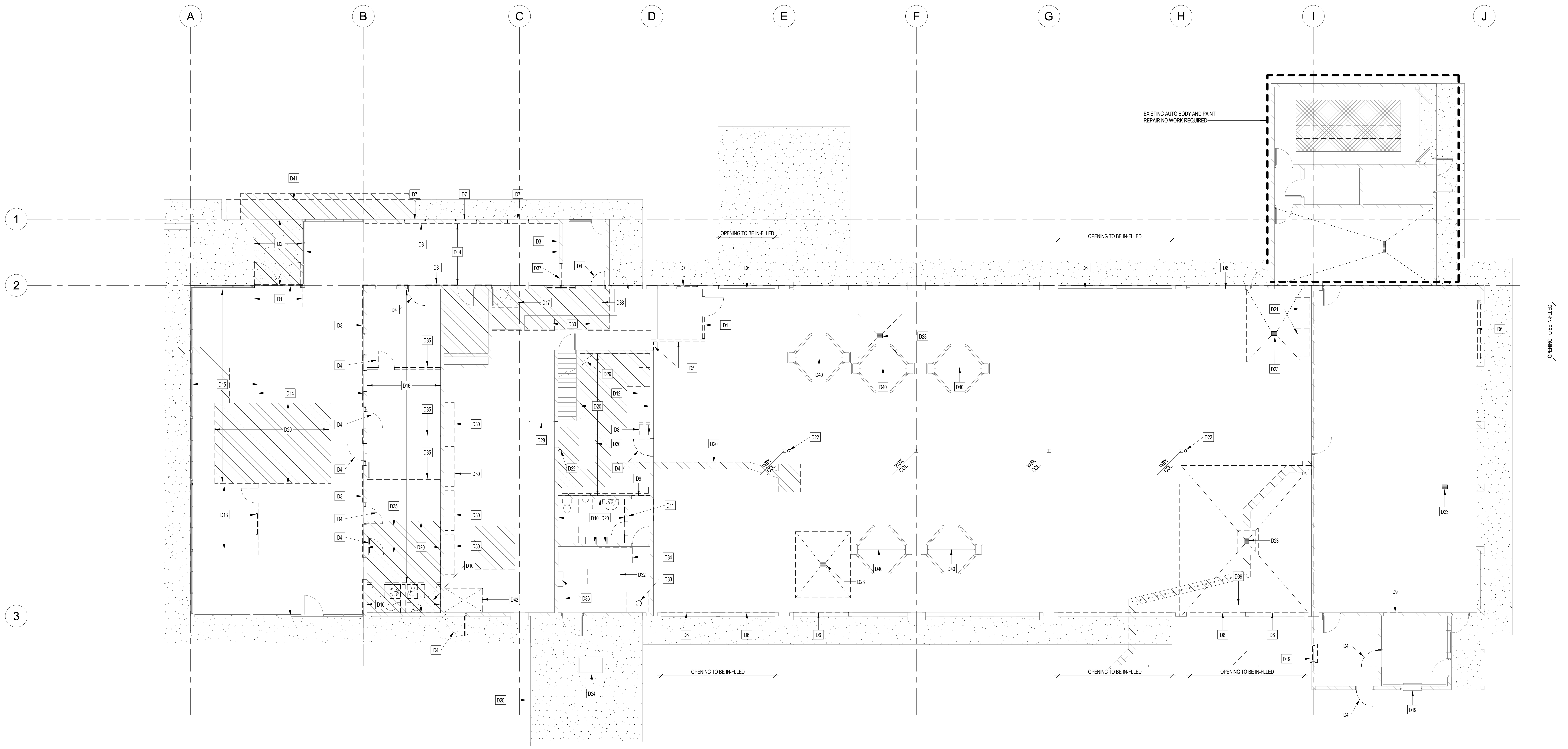
SPECIAL INSPECTION NOTES

SHEET NO.
G1.03



1 DEMOLITION FLOOR PLAN

SCALE 1/8" = 1'-0"

DEMOLITION KEYNOTES

KEYNOTE	DESCRIPTION
D1	REMOVE EXISTING PORTION OF ALUM. WINDOW SYSTEM ALONG WITH DOUBLE DOORS AND ALL ASSOCIATED ITEMS.
D2	REMOVE EXISTING CONCRETE RAMP
D3	REMOVE EXISTING WALL FINISH, FLOOR TO CEILING ALONG WITH ALL ASSOCIATED ITEMS FROM CMU WALL.
D4	REMOVE EXISTING DOOR AND FRAME ALONG WITH ALL ASSOCIATED ITEMS
D5	REMOVE EXISTING CMU WALL AND STORAGE PLAT FORM ALONG WITH ALL ASSOCIATED ITEMS.
D6	REMOVE EXISTING OVERHEAD DOOR ALONG WITH ALL ASSOCIATED
D7	REMOVE EXISTING EXTERIOR WINDOW ALONG WITH ALL ASSOCIATED ITEMS.
D8	REMOVE EXISTING UTILITY SINK ALONG WITH ALL ASSOCIATED ITEMS.
D9	REMOVE EXISTING CMU FOR INSTALLATION OF NEW 3'-0" X 7'-0" HM DOOR AND FRAME. REFER TO FLOOR PLAN SHEET A1.00
D10	REMOVE EXISTING TOILET ROOM ALONG WITH ALL EXISTING FIXTURES
D11	REMOVE EXISTING CMU WALL AND DOOR TO STRUCTURE ABOVE AND BELOW EXISTING FLOOR SLAB ALONG WITH ASSOCIATED ITEMS.
D12	REMOVE EXISTING UPPER AND LOWER CASEWORK ALONG WITH ALL ASSOCIATED ITEMS.
D13	REMOVE EXISTING FREE STANDING WALL PARITIONS FOR ENTIRE SALES OFFICE ALONG WITH ALL ASSOCIATED ITEMS.
D14	REMOVE EXISTING TILE FLOOR FINISH ALONG WITH ALL ASSOCIATED ITEMS AND PREP FLOOR FOR NEW FLOOR FINISH.
D15	REMOVE EXISTING CARPET FLOOR FINISH AND PREPARE FLOOR FOR NEW FINISH.
D16	REMOVE EXISTING NON-BEARING PARTITION WALLS AND FLOOR FINISH ALONG WITH ALL ASSOCIATED ITEMS BETWEEN THE EXISTING CMU WALLS.
D17	REMOVE EXISTING CONCRETE LANDING AND STEP ALONG WITH ALL ASSOCIATED ITEMS.
D19	EXISTING PTAC UNIT TO BE REPLACED. REFER TO MECHANICAL DRAWINGS.
D20	SAW CUT AND REMOVE EXSITNG FLOOR SLAB FOR NEW DRAIN LINES COORDINATE ACTUAL EXTENT OF FLOOR REMOVAL WITH PLUBMING DRAWINGS
D21	USED OIL STORAGE TANKS TO BE REMOVED ALONG WITH ALL ASSOCIATED ITEM. EXISTING USED OIL HEATER THAT IS WALL MOUNTED ABOVE THE STORAGE TANKS TO BE REMOVED. RE: MECHANICAL DRAWINGS.
D22	EXISTING ROOF DRAIN LINE TO REMAIN
D23	EXISTING 10" X 12" FLOOR DRAIN WITH GRATE
D24	EXISTING SAND AND GREASE SEPERATOR TO REMAIN. RE: PLUMBING DRAWINGS FOR BALANCE OF INFORMATION
D25	EXISTING MASONRY LOW WALL TO REMAIN
D28	REMOVE EXISTING METAL GATE ALONG WITH ALL ASSOCIATED ITEMS
D29	REMOVE EXISTING LARGE FORMAT TV AND ALL ASSOCIATED ITEMS
D30	REMOVE EXISTING BUILDING CASEWORK
D32	EXISTING COMPRESSOR SYSTEM TO BE SALVAGED
D33	EXISTING FIRE RISER TO REMAIN
D34	REMOVE EXISTING CENTRAL VACUUM SYSTEM ALONG WITH ALL ASSOCIATED ITEMS.
D35	REMOVE EXISTING PARTITION WALL ALONG WITH ALL ASSOCIATED ITEMS.
D36	EXISTING OVER HEAD FED SWITCH GEAR TO BE REMOVED AND REPACED WITH UNDER FED SWITCH GEAR. RE: ELECTRICAL DRAWINGS FOR BALANCE OF INFORMATION
D37	REMOVE EXISTING INTERIOR WINDOW ALONG WITH ALL ASSOCIATED ITEMS
D38	SAW CUT AND REMOVE EXSITNG SLAB FOR NEW NEW RAMP
D39	SAW CUT AND REMOVE EXSITNG INTERIOR CONCRETE AND EXTERIOR PAVING TO ALLOW FOR THE INSTALLATION ON NEW FOOTING
D40	EXISTING AUTO LIFTS TO BE SALVAGE RE: ELECT. DRAWINGS FOR BALANCE OF INFORMATION
D41	SAW CUT AND REMOVE EXSITNG EXTERIOR CONCRETE / ASPHALT PAVING TO ALLOW FOR THE INSTALLATION OF THE NEW ENTRY RAMP
D42	REMOVE FREIGHT LIFT ALONG WITH ALL ASSOCIATED ITEMS AND IN-FILL EXISTING MEZZANINE OPENING WITH MATCHING SUB-FLOOR AND FRAMING

DEMOLITION NOTES

1. EXISTING CONSTRUCTION SHALL REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED.

2. ALL EXISTING FINISHED WALL SURFACES DAMAGED DURING ANY CONSTRUCTION PHASE OF THIS PROJECT SHALL BE REPAIRED TO MATCH EXISTING WALL SURFACE AND CONDITION. ENTIRE SURFACE OF REPAIRED WALL (FLOOR TO CEILING AND CORNER TO CORNER) SHALL BE REPAINTED. COLOR AS DIRECTED BY INTERIOR DESIGNER.

3. DIMENSIONS ARE FROM FACE OF FINISH UNLESS OTHERWISE NOTED.

4. PRIOR TO COMMENCENT OF WORK DEMOLITION CONTRACTOR SHALL SHALL VERIFY ALL EXISTING CONDITIONS TO DETERMINE EXTENT OF DEMOLITION TO ACCOMODATE NEW CONSTRUCTION. THIS DEMOLITION PLAN IS A GENERAL GUIDE ONLY AND DOES NOT IDENTIFY ALL ITEMS TO BE REMOVED OR MODIFIED. THIS ALSO WILL APPLY TO THE ELECTRICAL. MECHANICAL AND DATA SYSTEMS. REFER TO MECHANICAL, ELECTRICAL AND DATA PLANS FOR BALANCE OF INFORMATION.

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DEMOLITION FLOOR PLAN

SHEET NO.
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PROFESSIONAL OF RECORD STAMP

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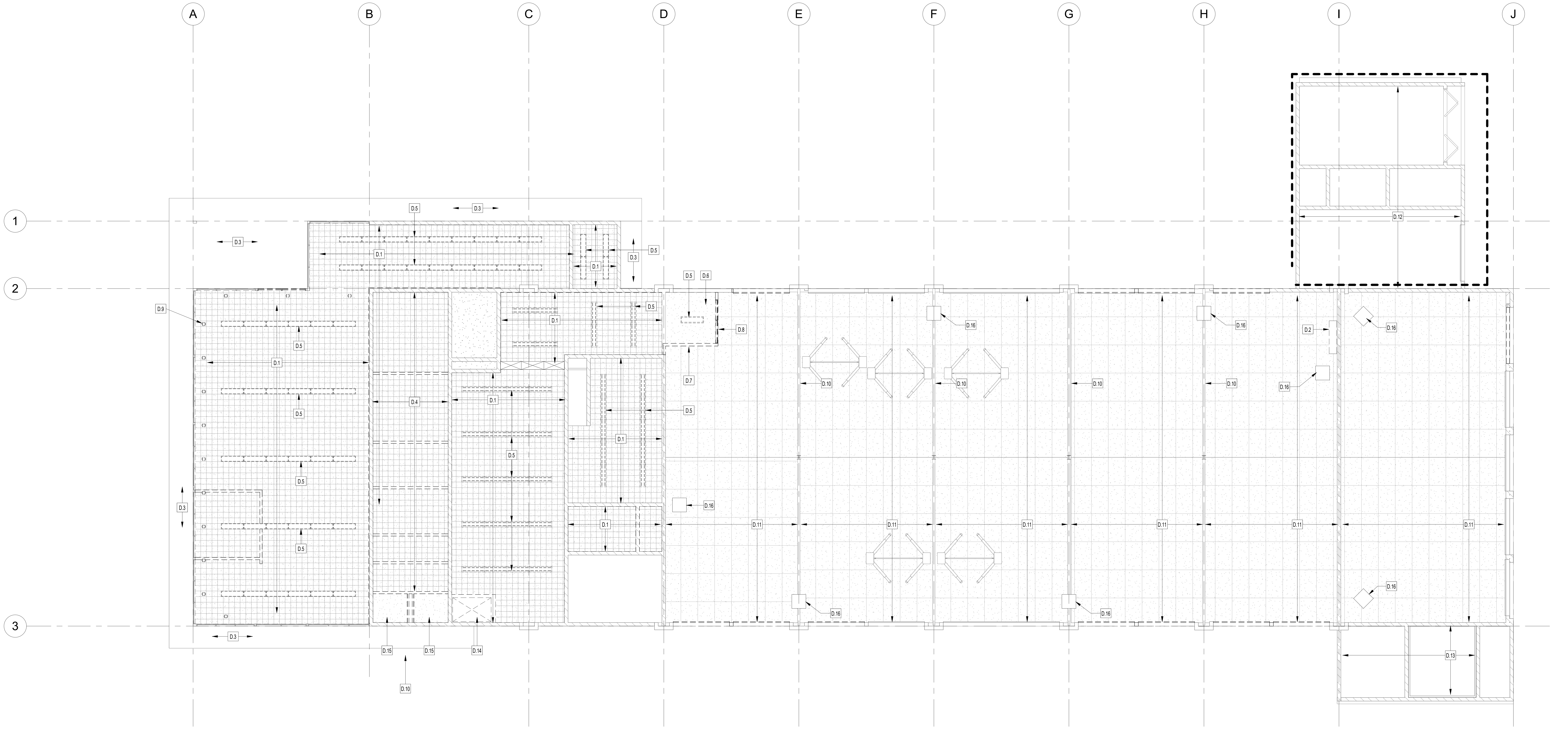
CONST. ESTIMATE SET 1-14-25



1 DEMOLITION REFLECTED CEILING PLAN

SCALE 1/8" = 1'-0"

RCP DEMOLITION KEYNOTES

KEYNOTE	DESCRIPTION
D.1	EXISTING ACOUSTICAL CEILING FINISH TO BE REMOVED
D.2	EXISTING WALL MOUNTED WASTE OIL HEATER TO BE REMOVED ALONG WITH ALL ASSOCIATED ITEMS.
D.3	EXISTING PAINTED PLYWOOD FINISH AT EXTERIOR SOFFIT TO REMAIN
D.4	EXISTING ACOUTICAL CEILING TILES AND ANY RECESSED LIGHT FIXTURE TO BE REMOVED TO ALLOW FOR THE INSTALLATION OF PAINTED AND TEXTURED GYP. BD. CEILING. RE: ELECTRICAL DRAWINGS.
D.5	EXISTING RECESSED 1X4 LIGHT TO BE REMOVED. RE: ELECTRICAL DRAWINGS
D.6	EXISTING CEILING AND PLATFORM FRAMING TO BE REMOVED
D.7	EXISTING CMU WALL TO BE REMOVED
D.8	EXISTING ALUM. WINDOW SYSTEM AND CMU WALL TO BE REMOVED
D.9	INDICATES EXISTNG LIGHT FIXTURE TO BE REMOVED ALONG WITH ALL ASSOCIATED ITEMS. RE: ELECTRICAL DRAWINGS
D.10	EXISTING GLU-LAM BEAM ROOF FRAMING TO REMAIN
D.11	EXISTING TECTUM PANEL FINISH TO REMAIN.
D.12	EXISTING PAINT SHOP (NO-WORK REQUIRED)
D.13	EXISTING CEILING FINISHES TO REMAIN. REFER TO NEW REFLECTED CEILING PLAN FOR NEW WORK IN THIS AREA.
D.14	EXISTING FREIGHT LIFT TO BE REMOVED. INFILL FLOOR OPENING WITH FRAMING WITH MATCH 2X FLOOR JOIST AND PLYWOOD SUB-FLOOR.
D.15	EXISTING GYP. BD. CEILING FINISH TO BE REMOVED ALONG WITH ALL ASSOCIATED ITEMS.
D.16	EXISTING GAS SPACE HEATER SUPPORTED FROM STRUCTURE ABOVE TO BE REMOVED. RE-USE EXISTING NG PIPING OR NEW HEATER. REFER TO MECHANICAL DRAWINGS FOR BALANCE OF INFORMATION

DEMOLITION NOTES

1. EXISTING CONSTRUCTION SHALL REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED.

2. ALL EXISTING FINISHED WALL SURFACES DAMAGED DURING ANY CONSTRUCTION PHASE OF THIS PROJECT SHALL BE REPAIRED TO MATCH EXISTING WALL SURFACE AND CONDITION. ENTIRE SURFACE OF REPAIRED WALL (FLOOR TO CEILING AND CORNER TO CORNER) SHALL BE REPAINTED. COLOR AS DIRECTED BY INTERIOR DESIGNER.

3. DIMENSIONS ARE FROM FACE OF FINISH UNLESS OTHERWISE NOTED.

4. PRIOR TO COMMENCENT OF WORK DEMOLITION CONTRACTOR SHALL SHALL VERIFY ALL EXISTING CONDITIONS TO DETERMINE EXTENT OF DEMOLITION TO ACCOMODATE NEW CONSTRUCTION. THIS DEMOLITION PLAN IS A GENERAL GUIDE ONLY AND DOES NOT IDENTIFY ALL ITEMS TO BE REMOVED OR MODIFIED. THIS ALSO WILL APPLY TO THE ELECTRICAL. MECHANICAL AND DATA SYSTEMS. REFER TO MECHANICAL, ELECTRICAL AND DATA PLANS FOR BALANCE OF INFORMATION.

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
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REF NO.
24-106

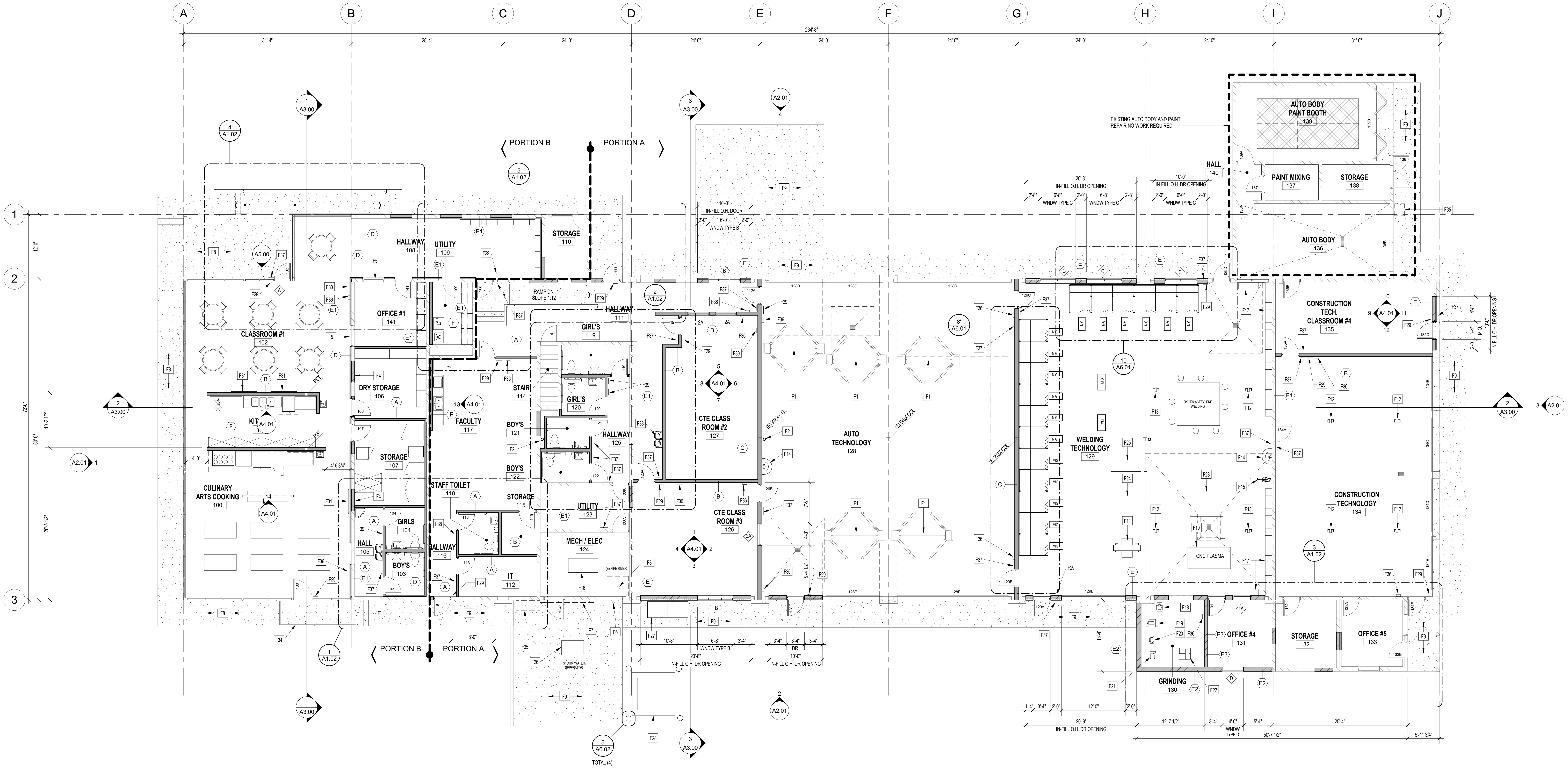
AUTHOR
DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

DEMOLITION REFLECTED CEILING PLAN

SHEET NO.
AD1.01



1 FLOOR PLAN

SCALE 1/8" = 1'-0"

BUILDING ENVELOPE

IECC TABLE C402.1.3
OPAQUE THERMAL ENVELOPE COMPONENTS MINIMUM REQUIREMENTS (CLIMATE ZONE 5):

EXTERIOR MASS WALLS:

WALL TYPE E:
2" CONTINUOUS INSULATION OVER 8" CMU ON EXTERIOR SIDE Rvalue: R10 CONTINUOUS

WALL TYPE E2:
10" CMU HI-R BLOCK Rvalue: R10.82

ALUMINUM WINDOW SYSTEMS

BASIS OF DESIGN: OLD CASTLE SERIES 3000 (Vitro Solarban 60 Soleria + clear)

Min U-Factor:	0.388
Solar Heat Gain:	0.35

ROOF INSULATION ABOVE DECK:

MIN. (2) LAYERS OF 2.6" POLYISOCYANURATE Rvalue: R30 CONTINUOUS

KEYNOTES

KEYNOTE	DESCRIPTION
F1	EXISTING CARLIFT REFER TO ELECTRICAL DRAWING FOR BALANCE OF INFORMATION
F2	EXISTING ROOF DRAIN LINE
F3	EXISTING FIRE RISER FOR PREACTION FIRE SPRINKLER SYSTEM. PROVIDE NEW AIR COMPRESSOR AS A PART OF FIRE SRINKLER UPGRADE
F4	IN-FILL EXISTING CMU OPENING WHERE DOOR WAS REMOVED
F5	EXISITNG WINDOW
F6	EXISTING FIRE DEPARTMENT CONNECTION TO REMAIN.
F7	EXISTING WALL MOUNTED GAS LINE.
F8	EXISTING RAISED CONCRETE
F9	EXISTING CONCRETE FLATWORK ON GRADE
F10	CNC PLASMA WATER TABLE 240 V. 50 AMP (O.P.C.I)
F11	EDWARDS IRON WORKS 55 TON 5 HP. 208/240V / 3P 240 V. 15 AMP (O.P.C.I)
F12	CEILING MOUNTED DROP DOWN POWER CORD ON REAL. 110V / 20 AMP
F13	CEILING MOUNTED DROP DOWN POWER CORD ON REAL. 240V / 20 AMP
F14	HANDWASH STATION
F15	EMERGENCY COMBINATION EYEWASH SHOWER STATION
F16	EXISTING AIR COMPRESSOR TO BE SALVAGED FOR AUTO TECH AND WELDING SHOP. REFER TO PLUMBING DRAWINGS TO BALANCE OF INFORMATION

KEYNOTE	DESCRIPTION
F17	15"W X 15"D X 36"HIGH DOUBLE STACKED LOCKERS (QTY= 80)
F18	SMALL DRILL PRESS 115 V. / 1 PHASE 20 AMP (O.P. C.I.)
F19	LARGE DRILL PRESS 208V / 3 PHASE ?? AMP (O.P.C.I.)
F20	GRINDING WHEEL ON STAND 115V / 1 PHASE 20 AMP (O.P.C.I.)
F21	BELT GRINDER ON STAND 115V / 1 PHASE 20 AMP (O.P.C.I.)
F22	BAND SAW ELEC VOLTAGE TPD (O.P.C.I.)
F23	LASER CUTTING / ENGRAVER (O.P.C.I)
F24	MECHANICAL METAL BREAK NO ELEC. REQ'D (O.P.C.I.)
F25	METAL BAND SAW CUTTER (O.P.C.I.)
F26	EXISTING STORMWATER SEPERATOR TO REMAIN.
F27	NEW UNDER FED EXTERIOR RATED SWITCH GEAR ON 4" CONCRETE HOUSE KEEPING PAD. REFER TO ELECTRICAL DRAWINGS
F28	NEW PAD MOUNTED UTILITY TRANSFORMER TO BE APPROVED BY IDAHO POWER
F29	EXIT SIGN RE: 6/A5.00
F30	OCCUPANCY SIGN RE: 4/A5.00
F31	LARGE FORMAT MONITORS PROVIDE POWER AND DATA. (O.P.C.I.)

KEYNOTE	DESCRIPTION
F32	CEILING MOUNTED DEMONTRATION MIRROR
F33	HI / LOW DRINKING FOUNTAIN WITH BOTTLE FILLER RE: PLUMBING DRAWING. PROVIDE ADDITIONAL CANE GUARD
F34	EXISTING RAILING AND CONCRETE LANDING TO REMAIN
F35	EXISTING GAS METER AND MANIFOLD TO REMAIN
F36	SEMI RECESSED EXTINGHUISER CABINET PROVIDE BY GC. OWNER TO PROVIDE 10 lb 2-A:10-B:C RATED FIRE EXTINGUISHER WALL MOUNTED WITH A 2-A RATING. MAXIMUM SPACING BETWEEN EXTINGUISHERS DO NOT EXCEED 75' AND MOUNTED MAX. 48" A.F.F. EACH EXTINGUISHER TO BE PROVIDED WITH A QUALIFIED APPROVED INSPECTION TAG. FINAL LOCATION TO BE APPROVED BY FIRE DEPARTMENT
F37	CLASSROOM OR ROOM SIGN RE: 2/A5.00
F38	UNISEX TOILET SIGN RE: 3/A5.00
F39	GIRLS TOILET SIGN RE: 7/A5.00

WALL TYPE LEGEND

A	METAL STUD INTERIOR WALL PARTITION - 362S125-33 STUDS AT 16" O.C. WITH 3 ½" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FRAMED TO BOTTOM OF STRUCTURE
B	METAL STUD INTERIOR WALL PARTITION - 600S125-33 STUDS AT 16" O.C. WITH 6" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FULL HEIGHT FRAMED TO BOTTOM OF STRUCTURE ABOVE.
C	METAL STUD INTERIOR WALL PARTITION - 800S125-33 STUDS AT 16" O.C. WITH 8" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FULL HEIGHT FRAMED TO BOTTOM OF STRUCTURE ABOVE.
D	METAL STUD INTERIOR WALL FURRING - 250S125-33 STUDS AT 16" O.C. WITH 5/8" GWB WITH PAINTED AND TEXTURED FINISH. FRAMED TO BOTTOM OF GYP. BD. CEILING.
E	8" CMU IN-FILL WALL AT EXISTING OPENING - WITH PRE-FINISHED EXTERIOR METAL FINISH OVER BUILDING WRAP ATTACHED TO HORIZONTAL Z-CHANNELS AT 48" O.C. OVER 2" RIGID INSULATION CONTINUOUS (R-10). INTERIOR FINISH TO BE PAINTED CMU
F	6" METAL STUD PLUMBING WALL FURRING - 600S125-33 STUDS AT 16" O.C. WITH 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON ONE SIDES WALL FURING AT PLUMBING WALL
E1	EXISTING 8" CMU WALL
E2	10" CMU HI-R WITH #4 RE-BAR AT 24" O.C. VERTICALY AND 24" O.C. HORIZ. (R-12.85)
E3	8" CMU WITH #4 RE-BAR AT 24" O.C. VERTICALY AND 24" O.C. HORIZ.

GENERAL NOTES

1. ALL DIMENSIONS OF NEW WALL ARE TO FACE OF STUD, UNLESS NOTED OTHERWISE.
2. ALL CONTRACTORS ARE REQUIRED TO REVIEW ALL DRAWINGS AND SPECIFICATIONS, SEE ARCHITECTURAL, STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL PROJECT REQUIREMENTS.
3. STAGING AREA FOR CONSTRUCTION WILL BE DETERMINED AT THE PRE BID WITH THE OWNER.
4. ALL DAMAGED AREAS TO BE RESTORED TO ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

HSA
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PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
FLOOR PLAN

SHEET NO.
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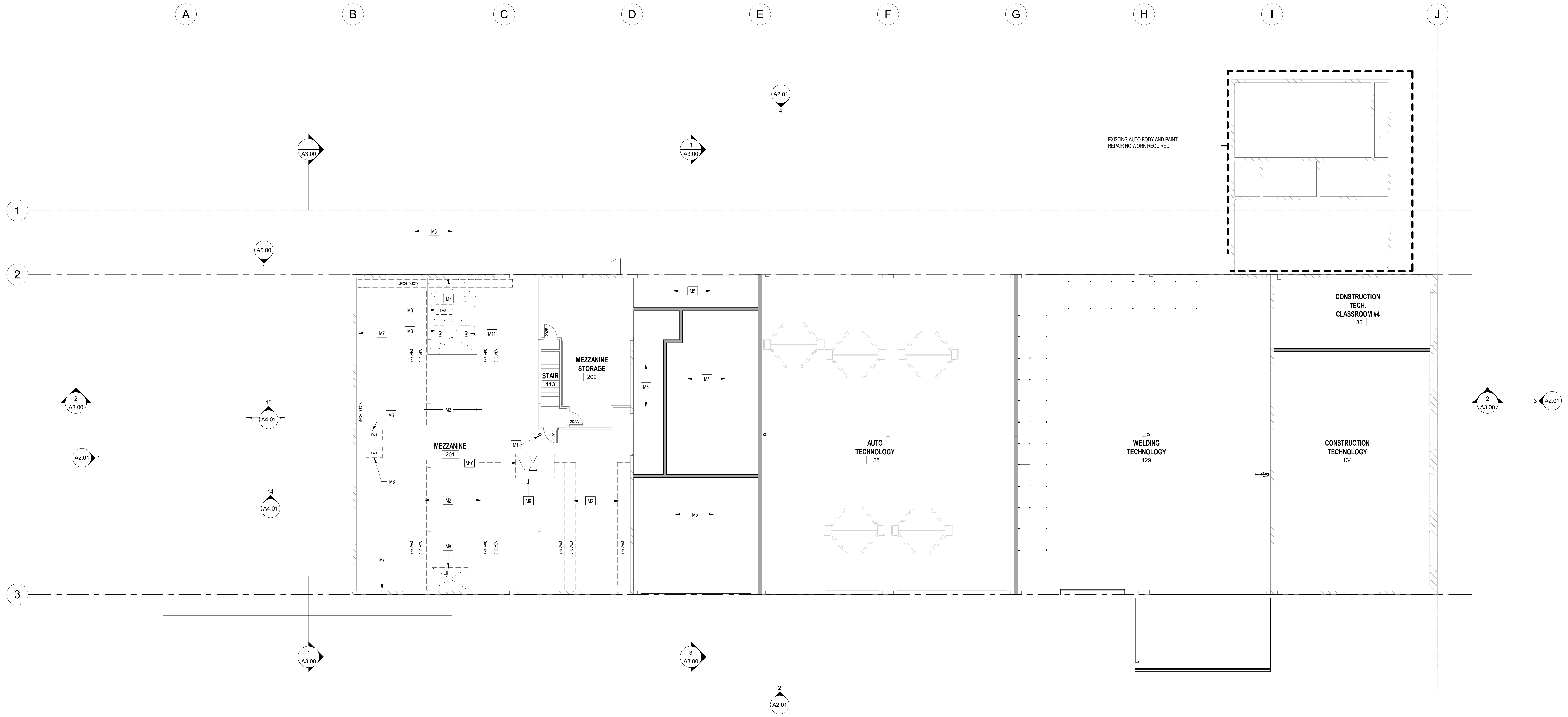

1 MEZZANINE FLOOR PLAN

SCALE 1/8" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
M1	EXISTING ROOF DRAIN DOWNSPOUTS TO REMAIN
M2	EXISTING SHELVING TO REMAIN
M3	EXISTING TO REMAIN. REFER TO MECHANICAL DRAWINGS FOR BALANCE OF INFORMATION
M5	SPACE ABOVE NEW CLASSROOM
M6	EXISTING LOWER ROOF
M7	EXISTING CMU WALL. REPOINT GROUT JOINTS WHERE GROUT HAS FAILED
M8	REMOVE FREIGHT LIFT ALONG WITH ALL ASSOCATED ITEMS AND IN-FILL FLOOR OPENING WITH MATCHING SUB-FLOOR AND FRAMING
M9	NEW ROOF MECHANICAL UNIT. REFER TO MECHANICAL DRAWINGS
M10	SUPPLY AND RETURN DUCT WORK TO EXTEND DOWN FROM ROOF INTO SPACE BELOW
M11	EXISTING MECHANICAL UNIT TO BE REPLACED WITH NEW. REFER TO MECHANICAL DRAWINGS FOR BALANCE OF INFORMATION.

WALL TYPE LEGEND

A	METAL STUD INTERIOR WALL PARTITION - 362S125-33 STUDS AT 16" O.C. WITH 3 ½" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FRAMED TO BOTTOM OF STRUCTURE
B	METAL STUD INTERIOR WALL PARTITION - 600S125-33 STUDS AT 16" O.C. WITH 6" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FULL HEIGHT FRAMED TO BOTTOM OF STRUCTURE ABOVE.
C	METAL STUD INTERIOR WALL PARTITION - 800S125-33 STUDS AT 16" O.C. WITH 8" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FULL HEIGHT FRAMED TO BOTTOM OF STRUCTURE ABOVE.
D	METAL STUD INTERIOR WALL FURRING - 250S125-33 STUDS AT 16" O.C. WITH 5/8" GWB WITH PAINTED AND TEXTURED FINISH. FRAMED TO BOTTOM OF GYP. BD. CEILING.
E	8" CMU IN-FILL WALL AT EXISTING OPENING - WITH PRE-FINISHED EXTERIOR METAL FINISH OVER BUILDING WRAP ATTACHED TO HORIZONTAL Z-CHANNELS AT 48" O.C. OVER 2" RIGID INSULATION CONTINUOUS (R-10). INTERIOR FINISH TO BE PAINTED CMU
F	6" METAL STUD PLUMBING WALL FURRING - 600S125-33 STUDS AT 16" O.C. WITH 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON ONE SIDES WALL FURING AT PLUMBING WALL
E1	EXISTING 8" CMU WALL
E2	10" CMU HI-R WITH #4 RE-BAR AT 24" O.C. VERTICALY AND 24" O.C. HORIZ. (R-12.85)
E3	8" CMU WITH #4 RE-BAR AT 24" O.C. VERTICALY AND 24" O.C. HORIZ.

GENERAL NOTES

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PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

MEZZANINE FLOOR PLAN

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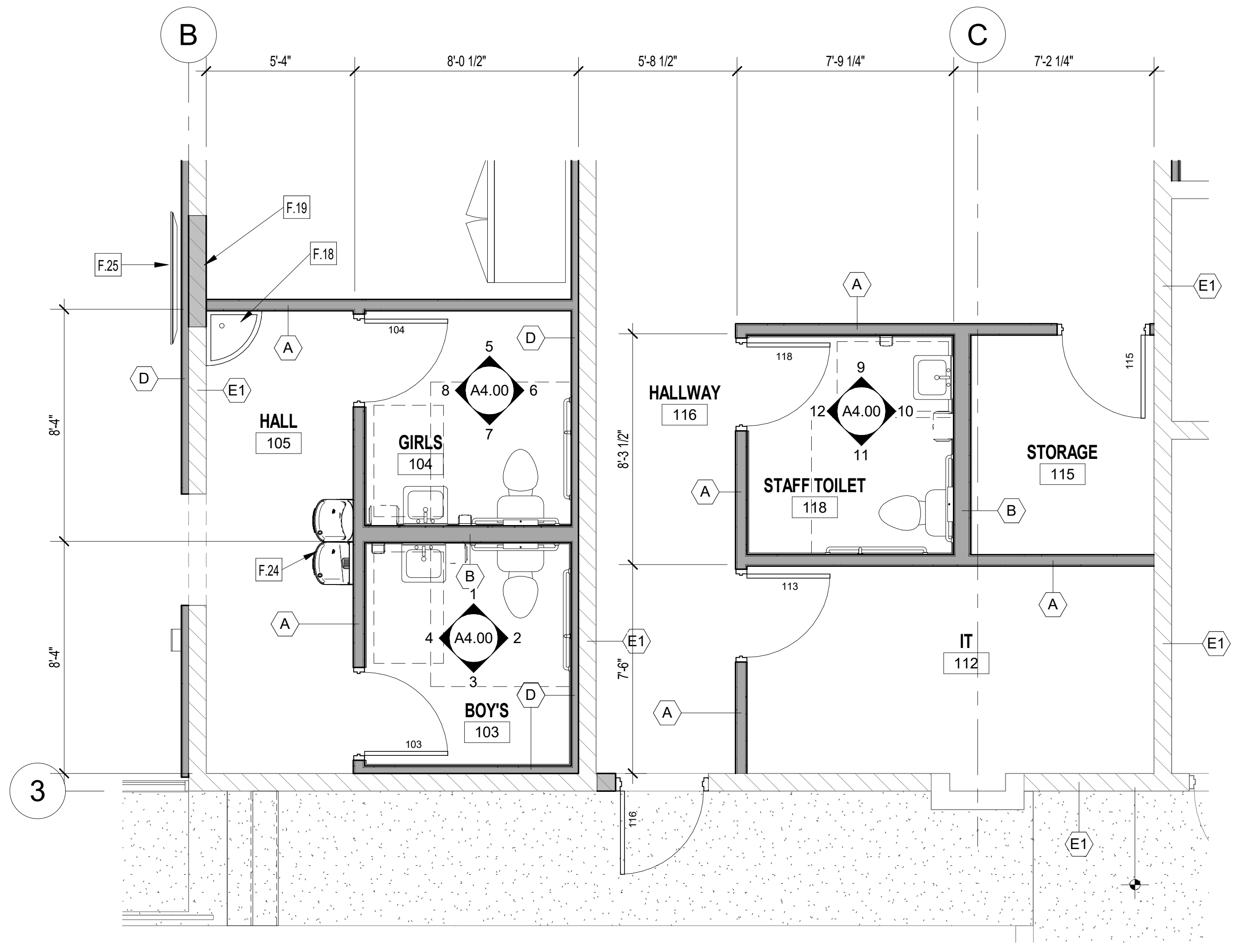
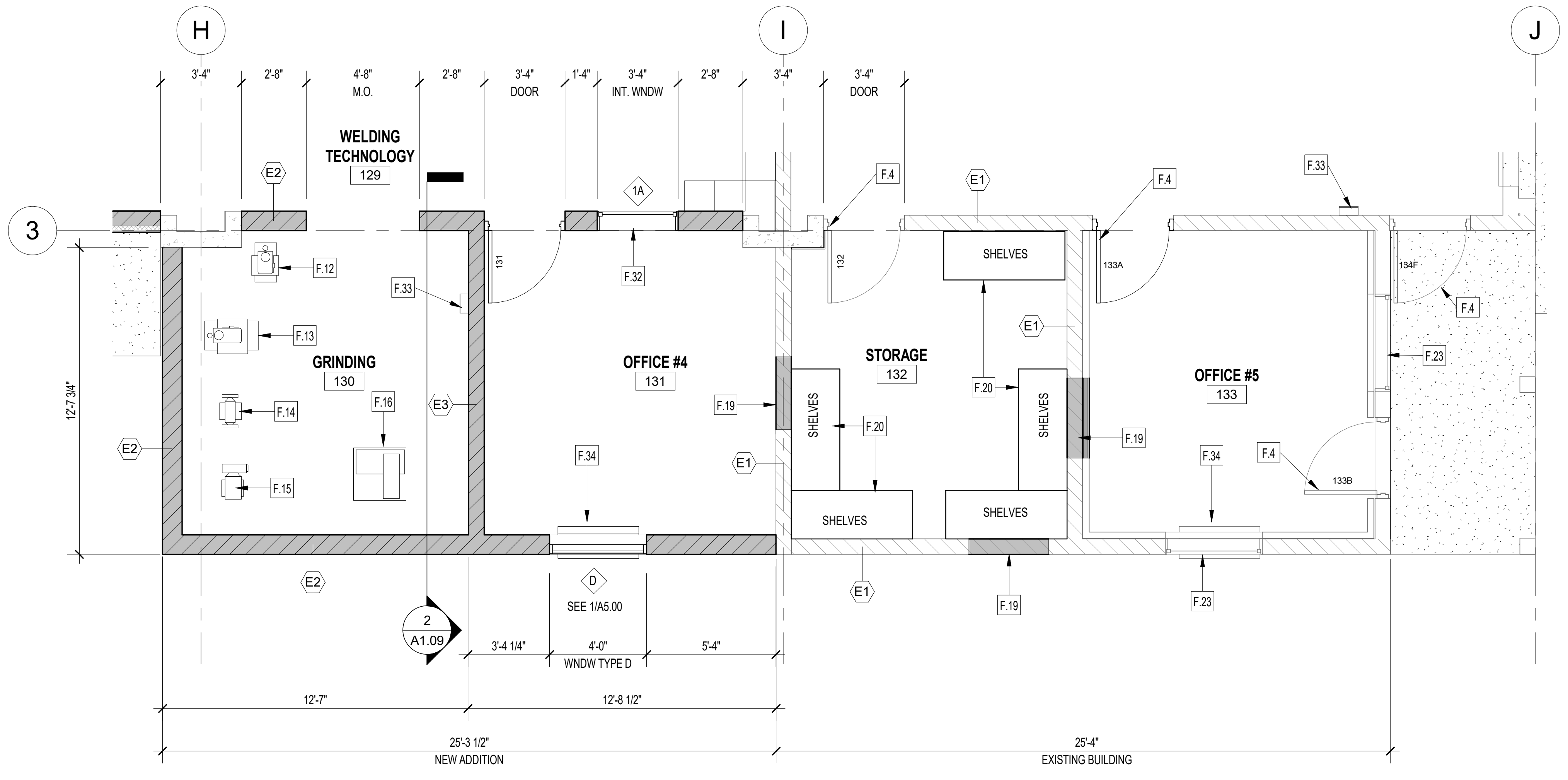


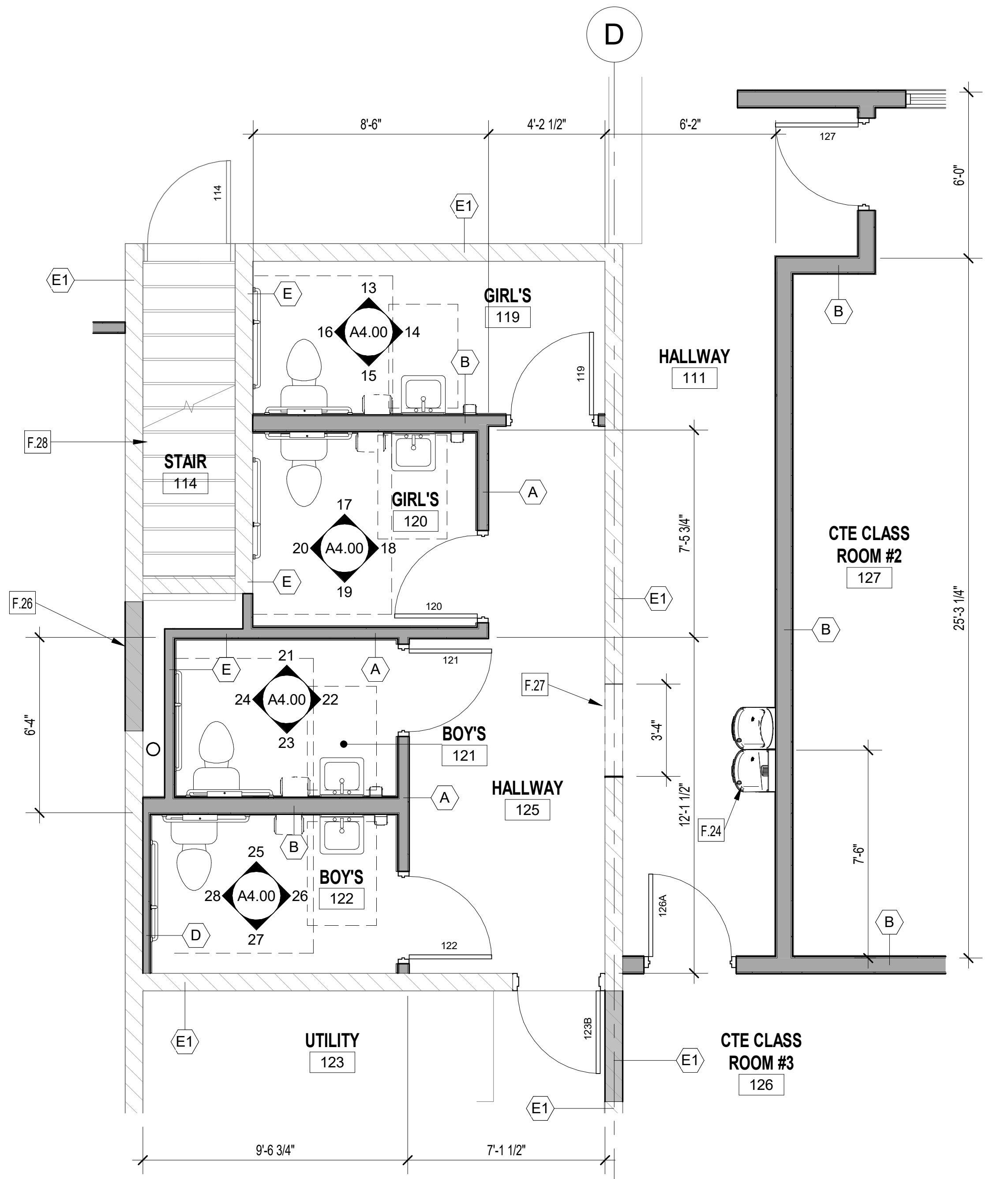
1 ENLARGED TOILET ROOM PLAN
SCALE 1/4" = 1'-0"

PLAN NORTH



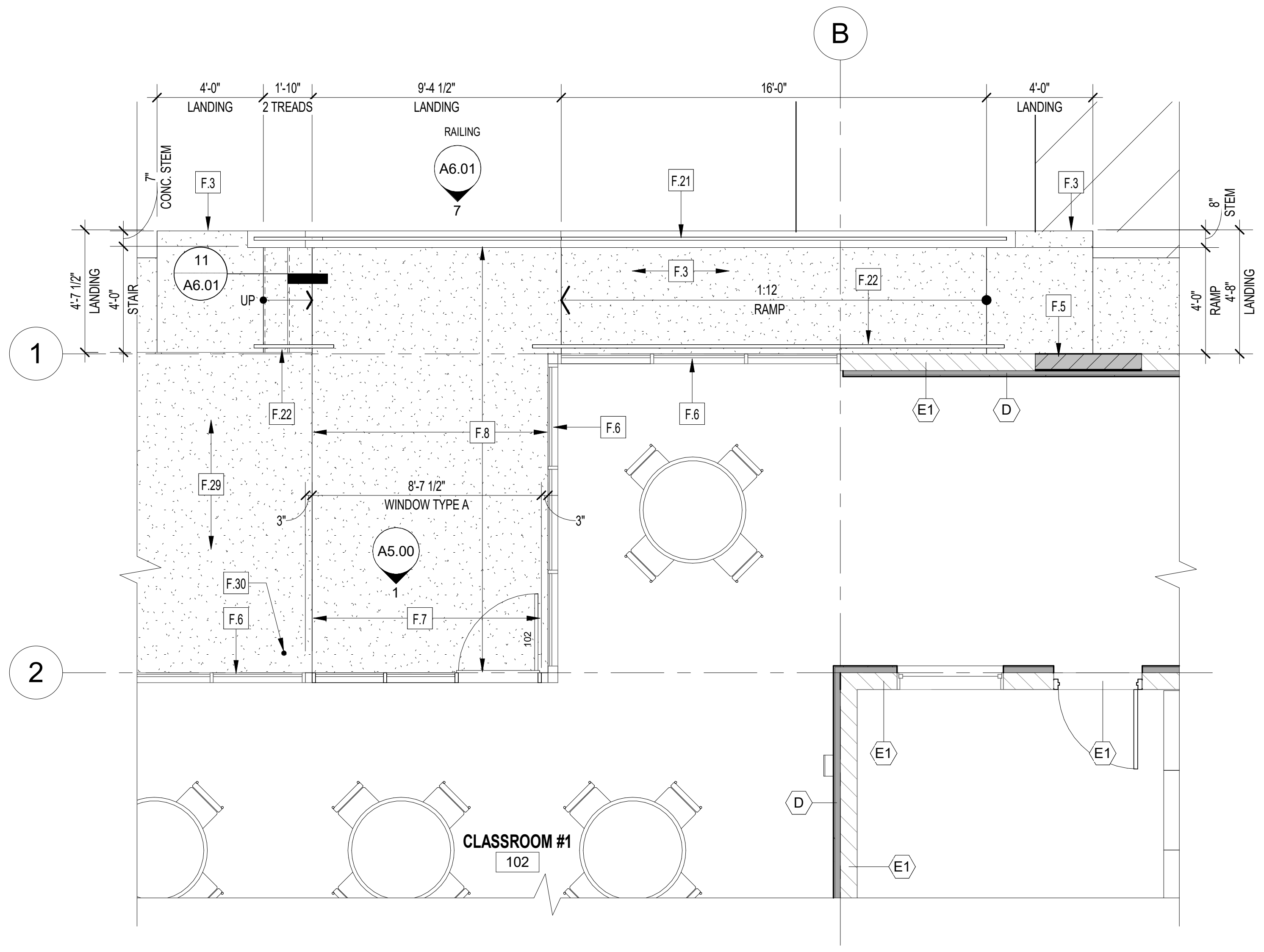
3 ENLARGED TOILET ROOM PLAN
SCALE 1/4" = 1'-0"

PLAN NORTH



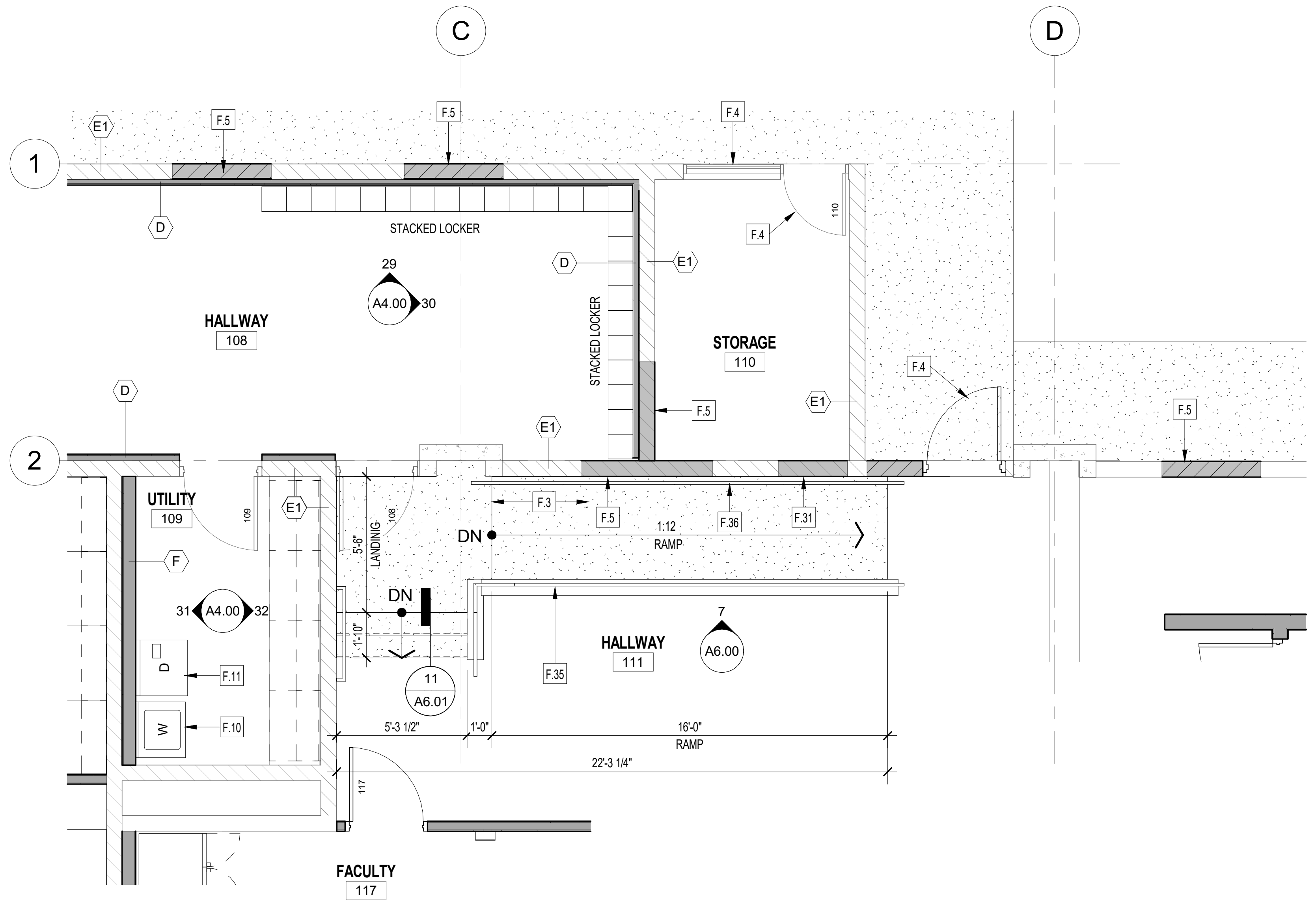
2 ENLARGED TOILET ROOM PLAN
SCALE 1/4" = 1'-0"

PLAN NORTH



4 ENLARGED RAMP / ENTRY PLAN
SCALE 1/4" = 1'-0"

PLAN NORTH



5 ENLARGED PARTIAL FLOOR PLAN
SCALE 1/4" = 1'-0"

PLAN NORTH

KEYNOTES

KEYNOTE	DESCRIPTION
F.3	NEW INTERIOR CONCRETE RAMP
F.4	EXISTING HM DOOR AND FRAME TO REMAIN
F.5	EXISTING WINDOW TO BE REMOVED AND OPENING IN-FILLED WITH MATCHING CMU
F.6	EXISTING ALUM. WINDOW SYSTEM
F.7	NEW ALUM. WINDOW SYSTEM TO REPLACE THE EXISTING ALUM. WINDOW SYSTEM
F.8	NEW RAISED CONCRETE LANDING AT ENTRY. MAXIMUM SLOPE TO BE 1/4"/FT. SLOPE
F.10	WASHING MACHINE (O.P.C.I.)
F.11	ELECTRIC DRYER (O.P.C.I.)
F.12	SMALL DRILL PRESS 115 V. / 1 PHASE 20 AMP (O.P. C.I.)
F.13	LARGE DRILL PRESS 240V / 3 PHASE ?? AMP (O.P.C.I.)
F.14	GRINDING WHEEL ON STAND 115V / 1 PHASE 20 AMP (O.P.C.I.)
F.15	BELT GRINDING ON STAND 115V / 1 PHASE 20 AMP (O.P.C.I.)
F.16	BAND SAW ELEC VOLTAGE TPD (O.P.C.I.)
F.18	CORNER SERVICE SINK. PROVIDE A COMBINATION EYEWASH/DRENCH HOSE ON A WALL MOUNT AND SERVICE SINK FAUCET.
F.19	IN-FILL EXISTING CMU WALL WHERE DOOR WAS REMOVED WITH MATCHING CMU
F.20	NEW FREE STANDING 60" X 30" SHELVING (O.P.C.I.)
F.21	NEW EXTERIOR PIPE RAILING TO BE MOUNTED TO CONC. STEM WALL RE: 11/A6.00
F.22	NEW EXTERIOR PIPE RAILING TO BE MOUNTED TO WALKING SURFRACE RE: SIMLAR 11/A6.01
F.23	EXISTING WINDOW TO REMAIN

KEYNOTE	DESCRIPTION
F.24	BOTTLE FILLER HI / LOW DRINKING FOUNTAIN WITH CANE BARRIER REFER TO PLUMBING DRAWINGS
F.25	LARGE FORMAT MONITOR (O.P.C.I.) PROVIDE POWER, DATA AND 2X BACKING BEHIND DRYWALL FINISH FOR MONITOR SUPPORT
F.26	IN-FILL EXISTING CMU WALL OPENING WITH MATCHING CMU
F.27	OPENING IN CMU WHERE EXISTING DOOR WAS REMOVED
F.28	EXISTING STAIR TO EXISTING STORAGE MEZZANINE NO WORK REQIRED
F.29	EXISTING RAISED CONCRETE FLATWORK
F.30	EXISTING WATER HYDRANT TO REMAIN
F.31	EXISTING DOOR TO BE REMOVED AND OPENING IN-FILLED WITH MATCHING CMU
F.32	INTERIOR WINDOW 3'-4" X 3'-4" RE: 1A/A5.0
F.33	INDICATES A 10 lb 2-A:10-B:C RATED FIRE EXTINGUISHER WALL MOUNTED WITH A 2-A RATING. MAXIMUM SPACING BETWEEN EXTINGUISHERS DO NOT EXCEED 75' AND MOUNTED MAX. 48" A.F.F. EACH EXTINGUISHER TO BE PROVIDED WITH A QUALIFIED APPROVED INSPECTION TAG. FINAL LOCATION TO BE APPROVED BY FIRE DEPARTMENT
F.34	PTAC UNIT BELOW WINDOW REFER TO MECHANICAL DRAWINGS
F.35	NEW INTERIOR PIPE RAILING TO BE MOUNTED TO CONC. STEM WALL RE: 10/A6.00
F.36	NEW INTERIOR PIPE RAILING TO BE MOUNTED TO WALKING SURFRACE RE: SIMLAR 11/A6.01

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B	METAL STUD INTERIOR WALL PARTITION - 600S125-33 STUDS AT 16" O.C. WITH 6" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FULL HEIGHT FRAMED TO BOTTOM OF STRUCTURE ABOVE.
C	METAL STUD INTERIOR WALL PARTITION - 800S125-33 STUDS AT 16" O.C. WITH 8" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FULL HEIGHT FRAMED TO BOTTOM OF STRUCTURE ABOVE.
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GENERAL NOTES

1. ALL DIMENSIONS OF NEW WALL ARE TO FACE OF STUD.
2. ALL CONTRACTORS ARE REQUIRED TO REVIEW ALL DRAWINGS AND SPECIFICATIONS, SEE ARCHITECTURAL, STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL PROJECT REQUIREMENTS.
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ENLARGED FLOOR PLANS

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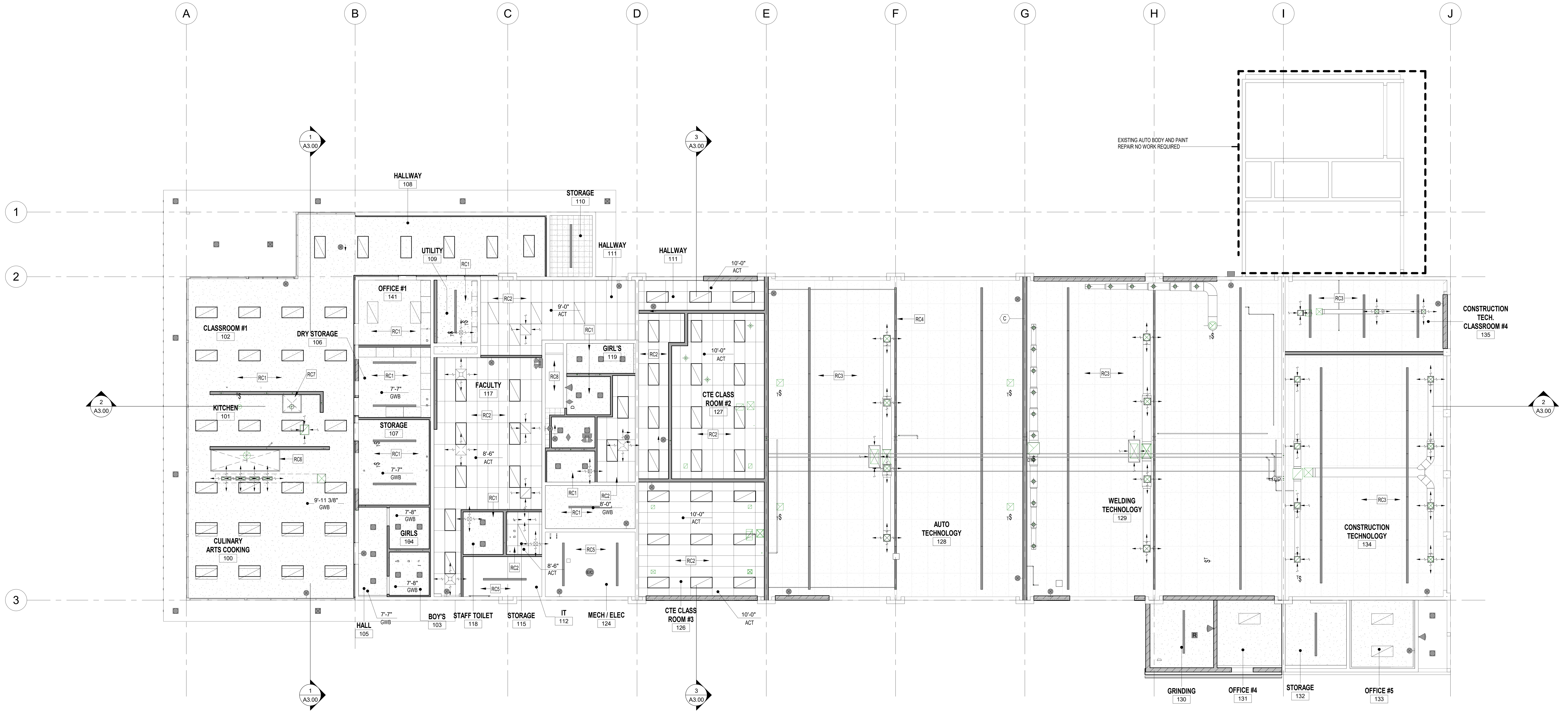

1 REFLECTED CEILING PLAN

SCALE 1/8" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
RC1	PAINTED AND TEXTURED 5/8" GYP. BD. TYPE X FINISH ATTACHED DIRECTLY TO EXISTING FRAMING OVER EXISTING GYP BD. FINISH.
RC2	2X4 SUSPENED ACOUSTICAL CEILING
RC3	EXISTING TECTUM PANELS TO BE PAINTED
RC4	EXISTING GLU LAM BEAM ROOF STRUCTURE
RC5	OPEN TO EXISTING STRUCTURE
RC6	TYPE 1 EXHAUST HOOD OVER COOKING EQUIPMENT
RC7	TYPE 2 STEAM HOOD OVER DISHWASING EQUIPMENT
RC8	EXISTING STAIR TO MEZZANINE. NO WORK REQUIRED

RCP LEGEND

┼	ACOUSTICAL CEILING TILE - NEW 15/16" SUSPENSION SYSTEM - WHITE - NEW CEILING TILE (48"x24")
▨	INDICATED PAINTED AND TEXURED GYP BD. CEILING FINISH
⧄	2X4 SURFACE MOUNTED LED FIXTURE AT GYP BD. CEILINGS 2X4 RECESSED LIGHT FIXTURES AT SUSPENDED ACOUSTICAL CEILINGS RE: ELEC. DRW'GS
▣	RECESSED LIGHT FIXTURE RE: ELEC. DRW'GS
⊗	EXIT SIGN RE: ELEC. DRW'GS
	EMERGENCY EGRESS LIGHTING RE: ELEC. DRW'GS
▭	SUSPENDED LIGHT FIXTURE RE: ELEC. DRW'GS
⧄	EXAUST FANS RE: MECH. DRW'GS
⧄	RETURN AIR REGISTER RE: MECH. DRW'GS
⊠	SUPPLY AIR REGISTER RE: MECH. DRW'GS

GENERAL NOTES

1. MECHANICAL AND ELECTRICAL ITEMS SHOWN ON REFLECTED CEILING ARE FOR REFERENCE ONLY. SEE MECHANICAL AND ELECTRICAL PLANS FOR REQUIREMENTS. EXACT LOCATION OF ITEMS ON OR IN CEILING PANELS SHALL BE COORDINATED PRIOR TO INSTALL.

2. FIRE SPRINKLER HEADS SHALL BE LOCATED IN THE MIDDLE OF CEILING PANELS. FIRE SPRINKLER CONTRACTOR SHALL COORDINATE WITH ALL OTHER DISCIPLINES PRIOR TO STARTING INSTALLATION OF AND / OR REVISIONS TO FIRE SPRINKLER SYSTEM.

3. FIRE SPRINKLERS SHALL ONLY BE LOCATED IN ACOUSTICAL CEILING TILES. FIRE SPRINKLER SHALL COORDINATE THE FIRE SPRINKLER HEAD LOCATIONS SO THAT NONE ARE LOCATED IN ANY GYP. BD. SOFFITS.

4. NOT ALL ELECTRICAL FIXTURES ARE INDICATED ON THIS ARCHICTECTURAL REFLECTED CEILING PLAN. PLANS ARE FOP

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REFLECTED CEILING PLAN

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REVISION

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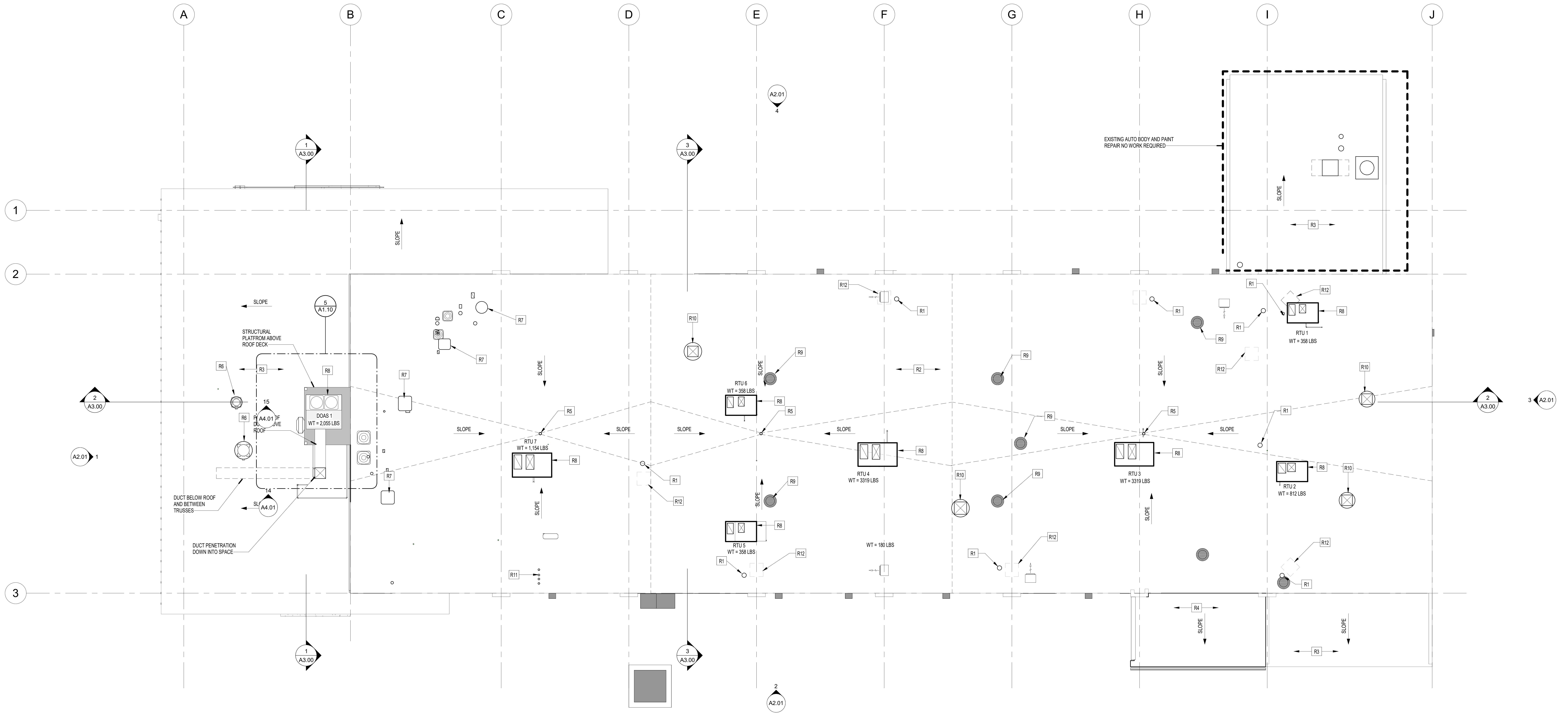


1 ROOF PLAN

SCALE 1/8" = 1'-0"

PLAN NORTH

KEYNOTES

KEYNOTE	DESCRIPTION
R1	REMOVED EXISTING GAS HEATER EXUAST VENT. PATCH AND REPAIR ROOF
R2	UPPER ROOF SYSTEM IS A COATED BUILT-UP MODIFIED BITUMENT SYSTEM. PATCH AND REPAIR ROOF WHERE EQUIPMENT IS BEING REMOVED OR INSTALLED. REFER TO BALANCE OF ROOF PLAN.
R3	EXISTING SINGLE-PLY ROOF SYSTEM
R4	NEW ROOF SINGLE PLY TPO ROOF SYSTEM AT NEW ADDITION
R5	EXISTING ROOF DRAIN
R6	NEW EXHAUST FAN RE: MECHANICAL DRAWINGS FOR BALANCE OF INFORMATION
R7	EXISTING CONDENSOR UNIT TO BE REMOVED ALONG WITH ALL ASSOCIATED ITEM. PATCH AND REPAIR ROOF.
R8	NEW MECHANICAL UNIT ON A FACTORY CURB. RE: MECHANICAL DRAWING
R9	NEW ROOF MOUNTED EXHAUST FAN. RE: MECHANICAL DRAWINGS FOR BALANCE OF INFORMATION
R10	EXISTING EXHAUST FAN TO BE BE REMOVED. PATCH AND REPAIR ROOF
R11	NEW UNDER GROUND FED SWITCH GEAR IS REPLACING THE EXISTING OVERHEAD FED SWITCH GEAR REMOVE ALL ASSOCIATED ITEMS AND PATCH AND REPAIR ROOF. RE: ELECTRICAL DRAWINGS FOR BALANCE OF INFORMATION.
R12	INDICATES EXISTING SUSPENDED UNIT HEATER TO BE REMOVED. RE: RCP DEMO PLAN AD1.01 AND MECHANICAL DRAWINGS FOR BALANCE OF INFORMATION

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025
REF NO.
24-106
AUTHOR
DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
ROOF PLAN

SHEET NO.
A1.04

1/14/2025 6:52:16 PM

ROOM FINISH SCHEDULE

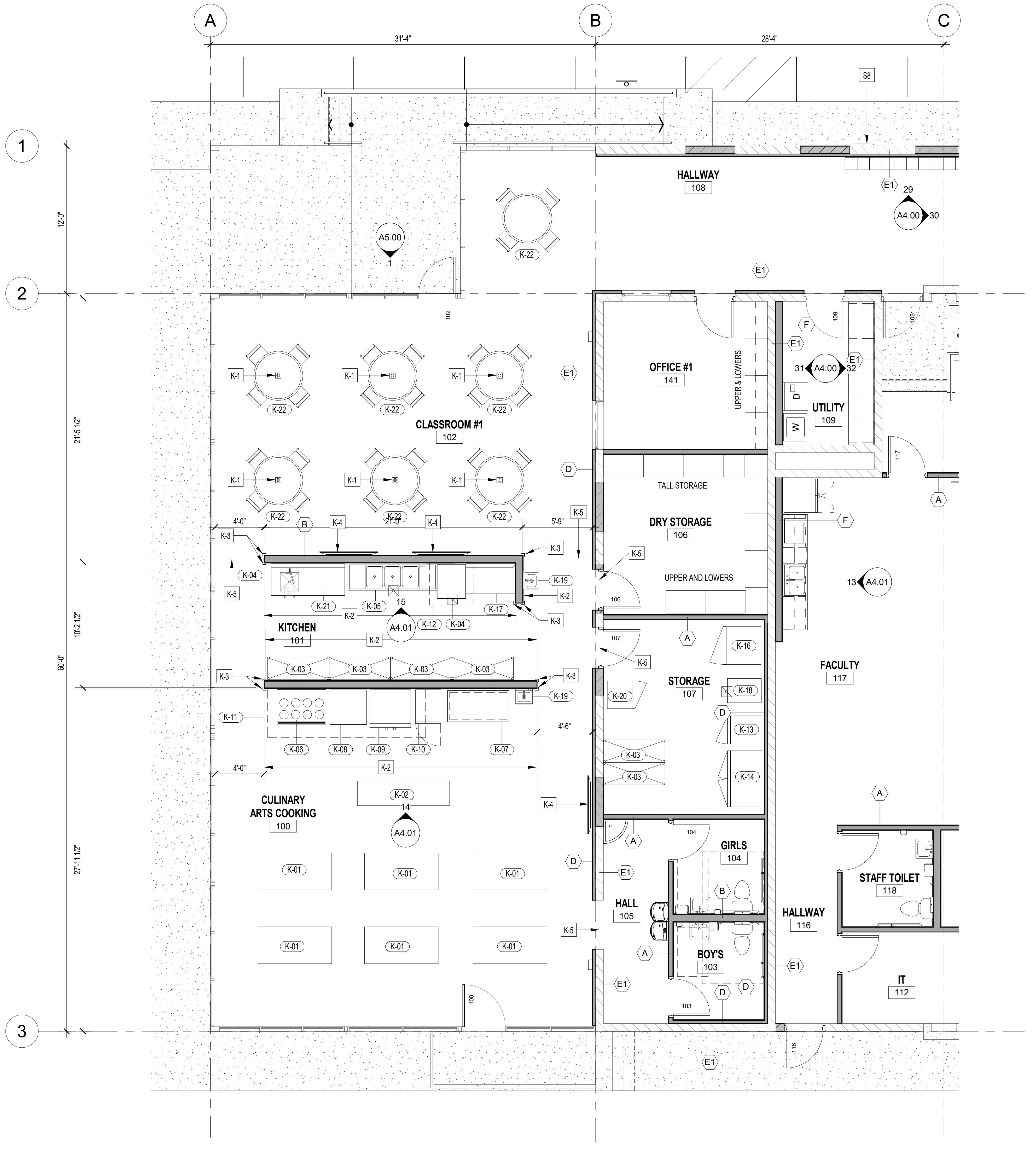
RM#	ROOM NAME	FLOOR FINISH	BASE	CEILING			NORTH WALL		SOUTH WALL		EAST WALL		WEST WALL		NOTE:	RM#
				MATERIAL	FINISH	HEIGHT	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH		
100	CULINARY ARTS COOKING	FF-1	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	--	--	--	--	RE: PLANS FOR ADDITIONAL WALL FINISHES	100
101	KITCHEN	FF-1	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	--	--	RE: PLANS FOR ADDITIONAL WALL FINISHES	101
102	CLASSROOM #1	FF-2	4" R	GWB	P-1	9'-0"	--	--	GWB	P-1	GWB	P-1	--	--		102
103	BOY'S	FF-2	4" R	GWB	P-1	7'-6"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		103
104	GIRLS	FF-2	4" R	GWB	P-1	7'-6"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		104
105	HALL	FF-2	4" R	GWB	P-1	7'-6"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		105
106	DRY STORAGE	FF-1	4" R	GWB	P-1	7'-6"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		106
107	STORAGE	FF-2	4" R	GWB	P-1	7'-6"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		107
108	HALLWAY	FF-2	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		108
109	UTILITY	SC		OS		(E)	(E)	P-1	(E)	P-1	(E)	P-1	GWB	P-1		109
110	STORAGE	FF-2	--	--	--	(E)	--	--	--	P-1	--	P-1	--	P-1	NO WORK REQUIRED	110
111	HALLWAY	FF-2	4" R	ACT	FF	9'-0"	CMU / GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		111
112	IT	FF-2		OS		--	GWB	P-1	CMU	P-1	GWB	P-1	GWB	P-1		112
113	STAIR	--	--	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	113
114	STAIR	--	--	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	114
115	STORAGE	FF-2	4" R	ACT	--	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		115
116	HALLWAY	FF-2	4" R	ACT	--	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		116
117	FACULTY	FF-2	4" R	ACT	--	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB/CMU	P-1		117
118	STAFF TOILET	FF-2	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1	FRP WAINTSCOT	118
119	GIRL'S	FF-2	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1	FRP WAINTSCOT	119
120	GIRL'S	FF-2	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1	FRP WAINTSCOT	120
121	BOY'S	FF-2	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1	FRP WAINTSCOT	121
122	BOY'S	FF-2	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1	FRP WAINTSCOT	122
123	UTILITY	--	--	OS	P-1	9'-0"	(E)	P-1	(E)	P-1	(E)	P-1	--	P-1	FRP WAINTSCOT	123
124	MECH / ELEC	--	--	OS	P-1	9'-0"	(E)	P-1	(E)	P-1	(E)	P-1	--	P-1	--	124
125	HALLWAY	FF-2	4" R	ACT	--	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1	--	125
126	CTE CLASS ROOM #3	FF-2	4" R	ACT	--	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1	--	126
127	CTE CLASS ROOM #2	RTF	4" R	ACT	P-1	9'-0"	(E)	P-1	(E)	P-1	(E)	P-1	(E)	P-1		127
128	AUTO TECHNOLOGY	--	--	(E)	P-1	15'-0"	(E)	P-1	(E)	P-1	(E)	P-1	(E)	P-1		128
129	WELDING TECHNOLOGY	--	--	(E)	P-1	15'-0"	(E)	P-1	(E)	P-1	(E)	P-1	(E)	P-1		129
130	GRINDING	SC	--	ACT	P-1	9'-0"	CMU	P-1	CMU	P-1	CMU	P-1	CMU	P-1		130
131	OFFICE #4	FF-2	4" R	GWB	P-1	9'-0"	CMU	P-1	CMU	P-1	GWB	P-1	CMU	P-1		131
132	STORAGE	SC	--	GWB	P-1	9'-0"	CMU	P-1	CMU	P-1	GWB	P-1	CMU	P-1		132
133	OFFICE #5	FF-2	4" R	GWB	P-1	9'-0"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	P-1		133
134	CONSTRUCTION TECHNOLOGY	--	--	(E)	P-1	15'-0"	CMU	P-1	CMU	P-1	CMU	P-1	GWB	P-1		134
135	CONSTRUCTION TECH. CLASSROOM #4	FF-2	--	(E)	P-1	15'-0"	CMU	P-1	CMU	P-1	CMU	P-1	GWB	P-1		135
136	AUTO BODY	--	--	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	136
137	PAINT MIXING	--	--	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	137
138	STORAGE	--	--	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	138
139	AUTO BODY PAINT BOOTH	--	---	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	139
140	HALL	--	--	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	140
141	OFFICE #1	FF-2	4" R	GWB	P-1	7'-6"	GWB	P-1	GWB	P-1	GWB	P-1	GWB	--		141
201	MEZZANINE	--	--	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	201
202	MEZZANINE STORAGE	--	--	--	--	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	202

SYMB.	COLOR	FINISH	LOCATION
P-1	MATCH SCHOOL STANDARD	EGG SHELL	GYPSUM WALL FINISH
P-2	SCHOOL MATCH STANDARD	SEMI-GLOSS	INTERIOR DOORS AND FRAMES
P-3	SCHOOL MATCH STANDARD	SEMI-GLOSS	EXTERIOR DOORS AND FRAMES

FINISH LEGEND

LEGEND - ROOM FINISH1

ABBRV.	NAME
(E)	EXISTING
(E) GWB	EXISTING GYPSUM WALL BOARD
4"R	4" RUBBER BASE
6"R	6" RUBER BASE
FF	FINISH FLOOR
FF-1	RESILIANT VINYL FLOORING
FF-2	VYNIL COMPOSITE TILE
FRP	FIBER GLASS REINFORCED PLASTIC
GWB	GYPSUM WALL BOARD
HM	HOLLOW METAL
MMR	MOLD AND MOISTURE RESISTANT GYPSUM WALL BOARD
P1	PAINT 1 - SHERWIN WILLIAMS COLOR PER SCHEDULE
P2	PAINT 2 - SHERWIN WILLAMS COLOR PER SCHEDULE
SC	SEAKED CONCRETE
SS	STAINLESS STEEL SHEET FINISH
TBD	TP BE DETERMINED



1 ENLARGED KITCHEN EQUIPMENT PLAN

SCALE 3/16" = 1'-0"

PLAN NORTH

KITCHEN EQUIPMENT

MARK	DESCRIPTION	MANUF.	MODEL NO.	ELEC REQ'D	SIZE	CONNECTIONS			CONTRACT		REMARKS	MARK
						MECH	PLUMB	ELEC	O.F.C.I.	C.F. C.I.		
K-01	STAINLESS STEEL WORK STATION	N/A	N/A	N/A	6'-0"W X 3'-0"D X 36"H	--	--	--	X	--	RELOCATED	K-01
K-02	STAINLESS STEEL WORK STATION	N/A	N/A	N/A	7'-6"W X 2'-0"D X 36"H	--	--	--	X	--	RELOCATED	K-02
K-03	STAINLESS STEEL STORAGE WIRE RACKS	N/A	N/A	N/A	2'-0" X 5'-0" X 60"H	--	--	--	X	--	RELOCATED	K-03
K-04	COMMERCIAL DISHWASHER	MAINSTREET	541HTDT403	208/240V / 3P	28" W X 32"D X 76"H	--	X	X	--	X	NEW	K-04
K-05	THREE COMPARTMENT SINK	N/A	N/A	N/A	87"W X 30"D X 36"H	--	X	--	X	---	RELOCATED	K-05
K-06	8 BURNER GAS STOVE	VULCAN	48SS-8BN	N/A	48"W X 34"D X 58"H	--	X	--	--	X	NEW	K-06
K-07	PREP TABLE	REGENCY	TBD	N/A	72"W X 30" D X 38" H	--	--	--	--	X	NEW	K-07
K-08	ELEC GRILL	AVANTCO	TBD	208/240V 3P	36"W X 20"D X 15"H	--	--	X	--	X	NEW	K-08
K-09	STACKED OVEN	VULCAN	VC5GD-11D1NAT	220V / 1P	29"W X 22 1/8"DX20"H	--	--	X	X	--	RELOCATED	K-09
K-10	PROOFER	RELOCATED	N/A	120V 12.5 amps	26"W X 33" D X 83"H	--	--	X	X	--	RELOCATED	K-10
K-11	CLASS "A" STAINLESS STEEL EXHAUST HOOD	CAPTIVE AIR	TBD	TBD	13'-0" W X 4'-0"	X	--	X	--	X	NEW	K-11
K-12	STAINLESS STEEL EXHAUST HOOD	CAPTIVE AIR	TBD	TBD	3'-6" W X 3'-6	X	--	X	--	X	NEW	K-12
K-13	REFRIGERATION UNIT	AVANTCO	N/A	2/3 HP 115V	29" W X 34" D	--	--	X	X	--	RELOCATED	K-13
K-14	REFRIGERATION UNIT	AVANTCO	N/A	1 2/7 HP 115V	54" W X 34" D	--	--	X	X	--	RELOCATED	K-14
K-15	WAFFLE MAKER	CARNIVAL	382WBM26DGT	120 V 18.3 AMPS	20"W X 12" H X 21" D	--	--	X	X	--	RELOCATED (NO PERMANENT LOCATION)	K-15
K-16	BLAST CHILLER	GEMM	BCB 05US	115V. 2.1 HP 12.8 A	19.5L X 28.75" W X 15" H	--	--	X	--	X	RELOCATED	K-16
K-17	CLEAN DISH TABLE	AVANTCO	600DDT48R	N/A	48"L X 30"W X 36"H	--	--	--	--	X	NEW	K-17
K-18	ICE MAKER	AVANTCO	KMC-F-322-A	110V / 20 AMP	32" D X 22" W X 27" H	--	X	X	--	X	NEW	K-19
K-19	HANDWASH SINK	REGENCE	WALL HUNG	--	17" X 17"	--	X	--	--	X	NEW	K-20
K-20	SANDWHICH PREP TABLE	AVANTCO	SS-PT-27 HC 27"	110V / 20 AMP	27" W X 31" D X 42" H	--	--	X	X	--	RELOCATED	K-21
K-21	RINSE TABLE	REGENCY		N/A	72"L X 30" D X 36" H	--	X	--	--	X	NEW	K-22
K-22	48" DIAMETER TABLES	N/A	N/A	N/A	48" CIRCLE	--	--	--	--	X	O.P.O.I.	K-23

KEYNOTES

KEYNOTE	DESCRIPTION
K-1	FLOOR BOX POWER OUTLET
K-2	PROVIDE FRP FINISH TO 6'-0" A.F.F.
K-3	CORNER WALL PROTECTION
K-4	LARGE FORMAT MONITORS PROVIDE POWER AND DATA. (O.P.C.I.) PRIOVIDE 2X BACKING AT MONITOR SUPPORT BEHIND GYP. BD. FINISH.
K-5	FLOOR FINISH TRANSISTION

WALL TYPE LEGEND

A	METAL STUD INTERIOR WALL PARTITION - 362S125-33 STUDS AT 16" O.C. WITH 3 ½" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FRAMED TO BOTTOM OF STRUCTURE
B	METAL STUD INTERIOR WALL PARTITION - 600S125-33 STUDS AT 16" O.C. WITH 6" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FULL HEIGHT FRAMED TO BOTTOM OF STRUCTURE ABOVE.
C	METAL STUD INTERIOR WALL PARTITION - 800S125-33 STUDS AT 16" O.C. WITH 8" SOUND INSULATION BATTS, AND 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON BOTH SIDES. FULL HEIGHT FRAMED TO BOTTOM OF STRUCTURE ABOVE.
D	METAL STUD INTERIOR WALL FURRING - 250S125-33 STUDS AT 16" O.C. WITH 5/8" GWB WITH PAINTED AND TEXTURED FINISH. FRAMED TO BOTTOM OF GYP. BD. CEILING.
E	8" CMU IN-FILL WALL AT EXISTING OPENING - WITH PRE-FINISHED EXTERIOR METAL FINISH OVER BUILDING WRAP ATTACHED TO HORIZONTAL Z-CHANNELS AT 48" O.C. OVER 2" RIGID INSULATION CONTINUOUS (R-10). INTERIOR FINISH TO BE PAINTED CMU
F	6" METAL STUD PLUMBING WALL FURRING - 600S125-33 STUDS AT 16" O.C. WITH 5/8" GWB WITH PAINTED AND TEXTURED FINISH ON ONE SIDES WALL FURING AT PLUMBING WALL
E1	EXISTING 8" CMU WALL
E2	10" CMU HI-R WITH #4 RE-BAR AT 24" O.C. VERTICALY AND 24" O.C. HORIZ. (R-12.85)
E3	8" CMU WITH #4 RE-BAR AT 24" O.C. VERTICALY AND 24" O.C. HORIZ.

GENERAL NOTES

1. ALL DIMENSIONS OF NEW WALL ARE TO FACE OF STUD.
2. ALL CONTRACTORS ARE REQUIRED TO REVIEW ALL DRAWINGS AND SPECIFICATIONS, SEE ARCHITECTURAL, STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL PROJECT REQUIREMENTS.
3. STAGING AREA FOR CONSTRUCTION WILL BE DETERMINED AT THE PRE BID WITH THE OWNER.
4. ALL DAMAGED AREAS TO BE RESTORED TO ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

HSA ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025
REF NO.
24-106
AUTHOR
DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
ENLARGED KITCHEN PLAN AND FINISH SCHEDULE

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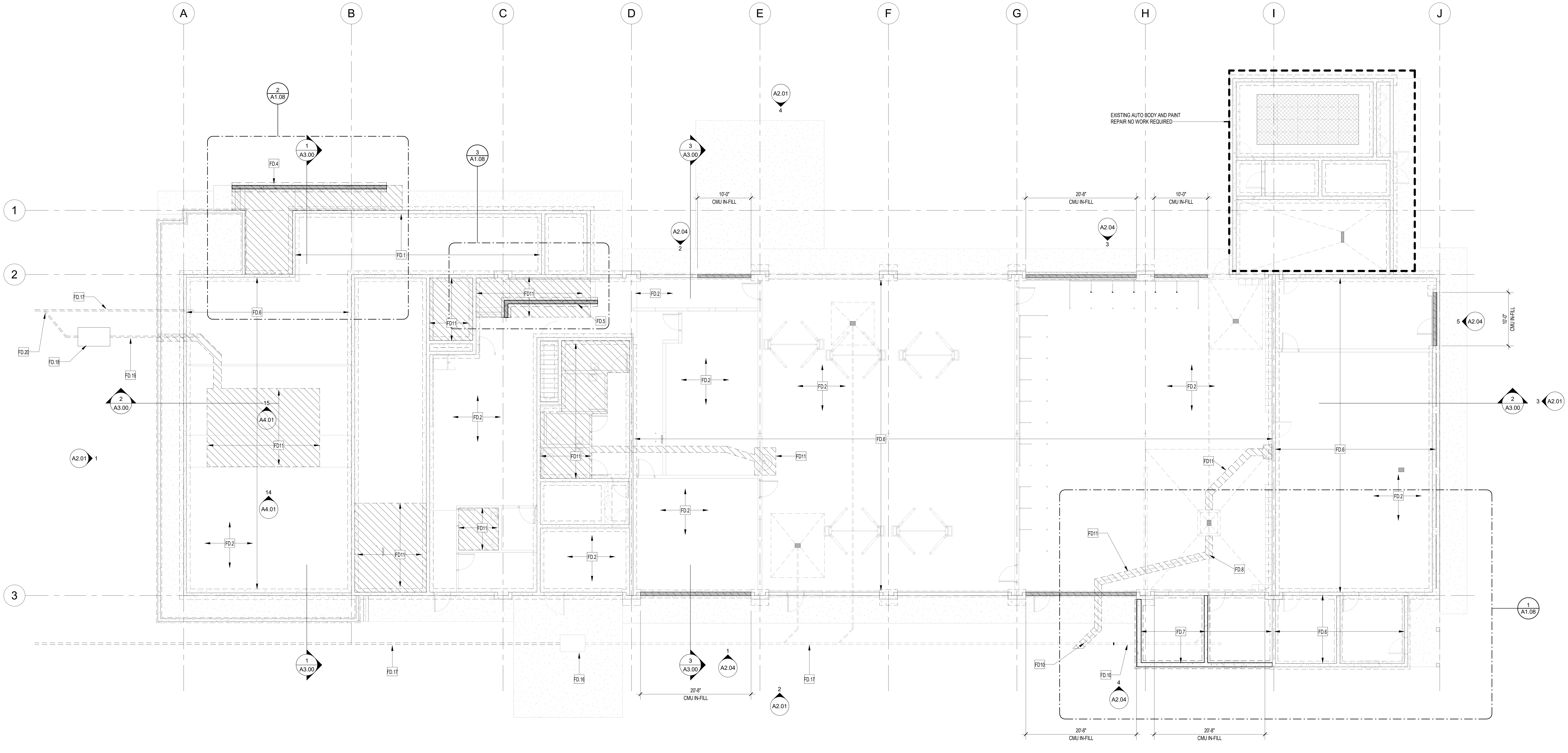

PLAN NORTH

FOUNDATION PLAN

1

SCALE 1/8" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
FD.1	EXISTING BUILDING FOUNDATION
FD.2	EXISTING CONCRETE SLAB
FD.4	NEW ENTRY RAMP WALL
FD.5	NEW INTERIOR RAMP AND STAIR
FD.6	EXISTING BUILDING FOUNDATION
FD.7	NEW BUILDING FOUNDATION
FD.8	INTERCEPT EXISTING DRAIN LINE AND RE-DIRECT TO EXTERIOR
FD.10	PORTION OF EXISTING DRAIN LINE IN FOOT PRINT OF NEW FOUNDATION TO BE ABANDONED
FD.13	INTERCEPT EXISTING DRAIN LINE AND RE-DIRECT TO EXTERIOR
FD.14	EXISTING BELOW SLAB DRAIN VAULT
FD.15	DRAIN LINE FROM NEW HANDWASH SINK TO BE TIED INTO EXISTING VAULT
FD.16	EXISTING STORM WATER SEPERATOR TO REMAIN
FD.17	EXISTING DRAIN LINE TO BE PROTECTED DURING CONSTRUCTION
FD.18	NEW GREASE INTERCEPTOR REFER TO PLUMBING DRAWINGS
FD.19	NEW SEWER LATERIAL FROM KITCHEN AREA. REFER TO PLUMBING DRAWINGSD
FD.20	TIE IN NEW SEWER LATERAL TO EXISTING. REFER TO PLUMBING DRAWINGS

GENERAL NOTES

1. ALL CONTRACTORS ARE REQUIRED TO REVIEW ALL DRAWINGS AND SPECIFICATIONS, SEE ARCHITECTURAL, STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL PROJECT REQUIREMENTS.
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PROFESSIONAL OF RECORD STAMP

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HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

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PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
FOUNDATION PLAN

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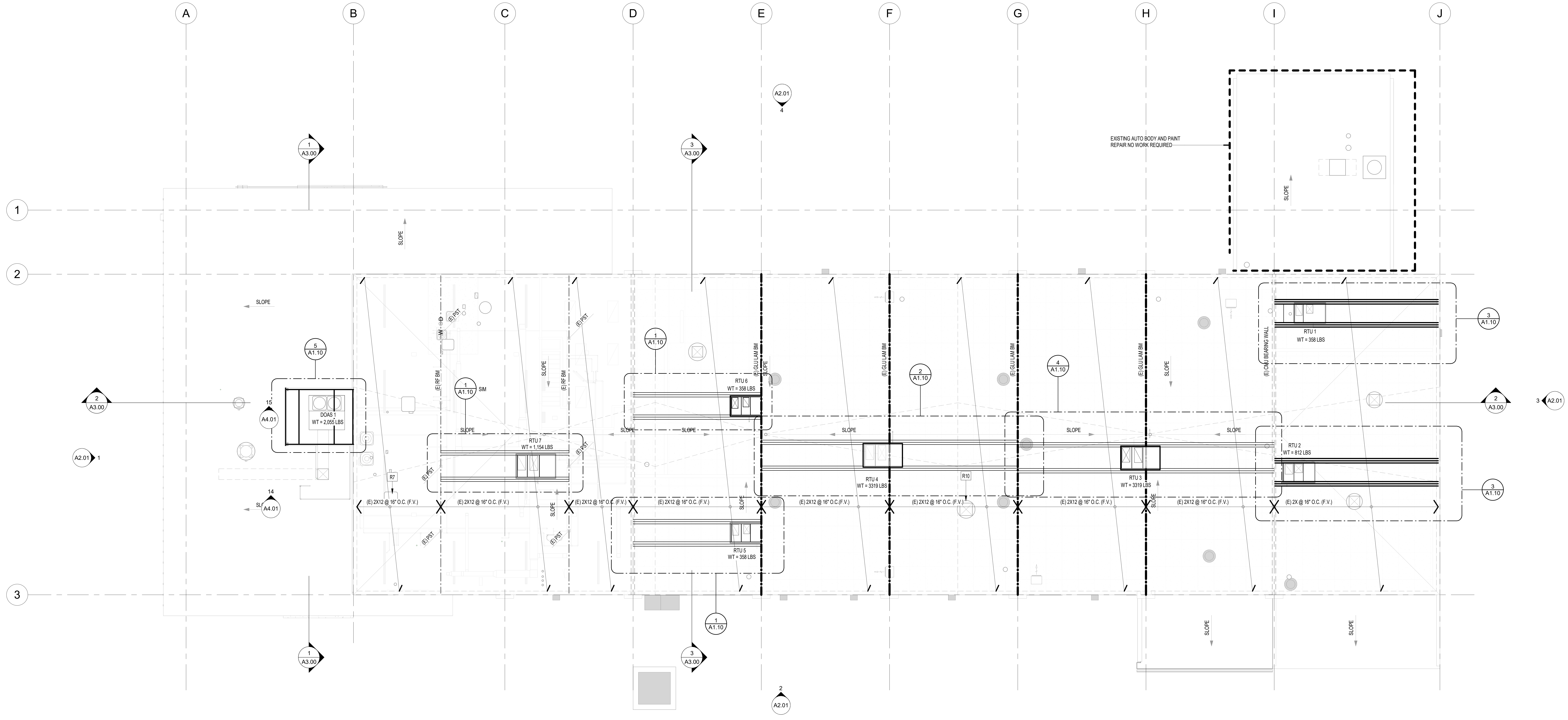

1 ROOF PLAN

SCALE 1/8" = 1'-0"

PLAN NORTH

PROFESSIONAL OF RECORD STAMP

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HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

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DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

ROOF FRAMING PLAN

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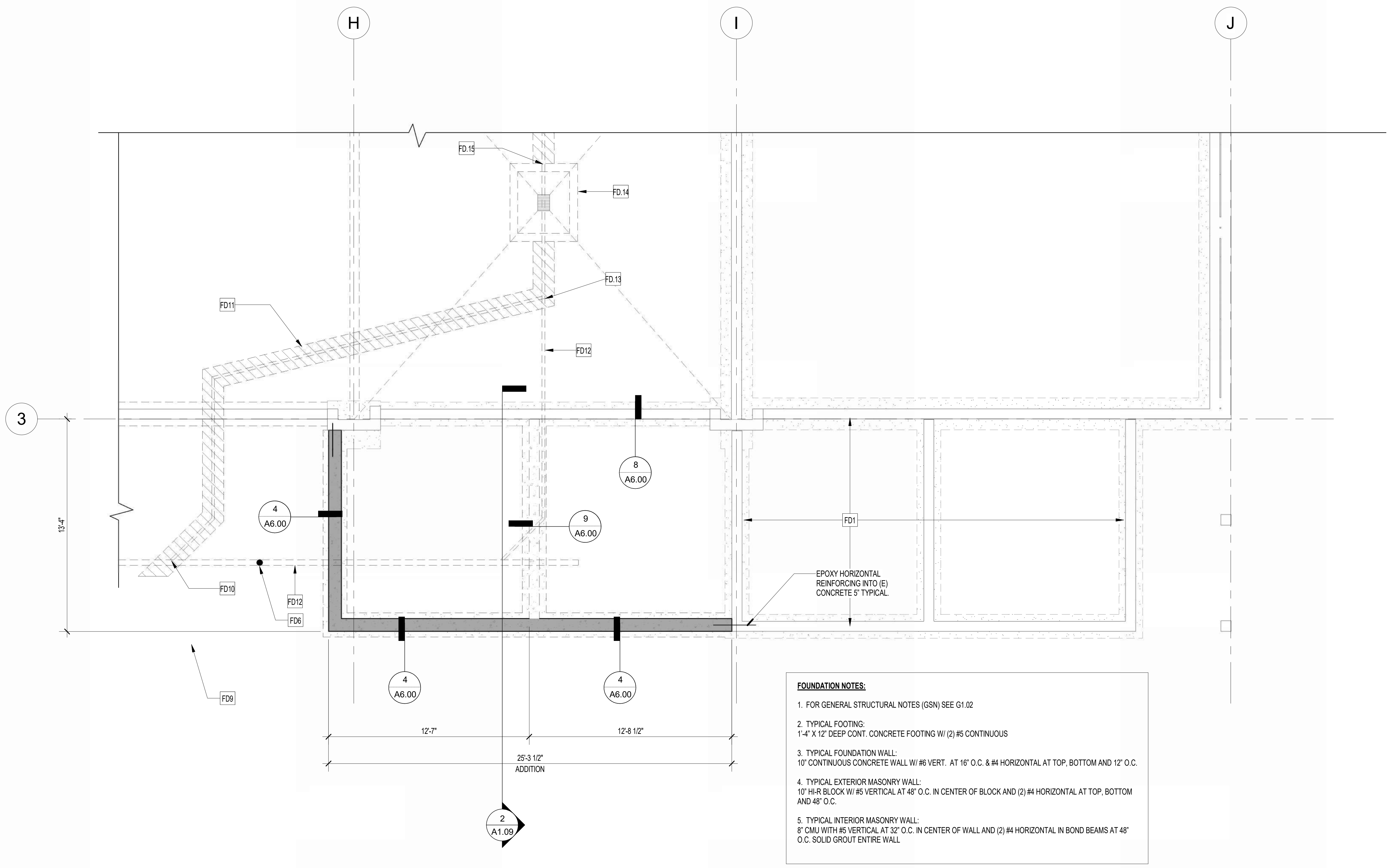


FOUNDATION NOTES:

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE G1.02

2. TYPICAL FOOTING:
1'-4" X 12" DEEP CONT. CONCRETE FOOTING W/ (2) #5 CONTINUOUS

3. TYPICAL FOUNDATION WALL:
10" CONTINUOUS CONCRETE WALL W/ #6 VERT. AT 16" O.C. & #4 HORIZONTAL AT TOP, BOTTOM AND 12" O.C.

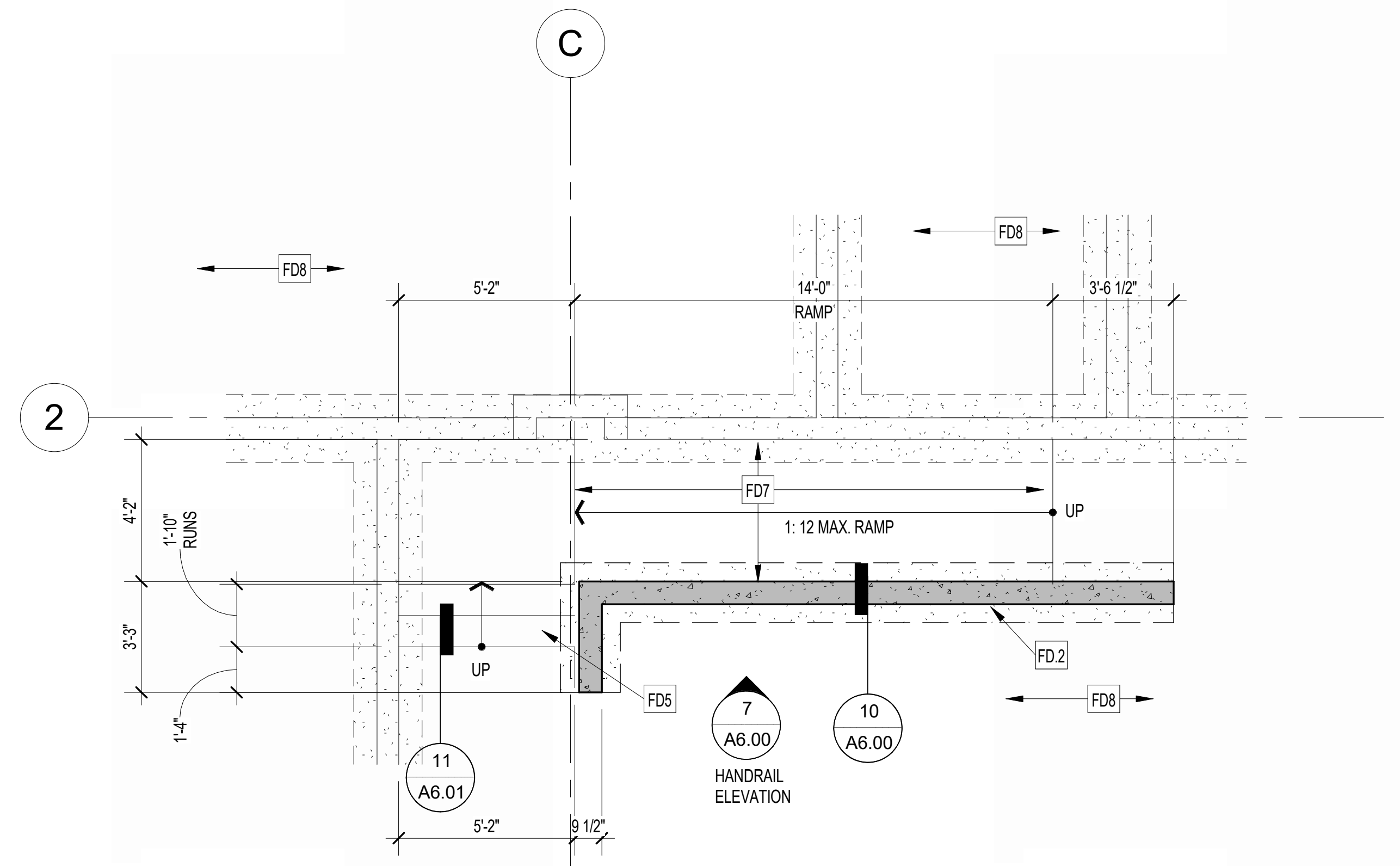
4. TYPICAL EXTERIOR MASONRY WALL:
10" HI-R BLOCK W/ #5 VERTICAL AT 48" O.C. IN CENTER OF BLOCK AND (2) #4 HORIZONTAL AT TOP, BOTTOM AND 48" O.C.

5. TYPICAL INTERIOR MASONRY WALL:
8" CMU WITH #5 VERTICAL AT 32" O.C. IN CENTER OF WALL AND (2) #4 HORIZONTAL IN BOND BEAMS AT 48" O.C. SOLID GROUT ENTIRE WALL

1 FOUNDATION PLAN AT ADDITION

SCALE 1/4" = 1'-0"

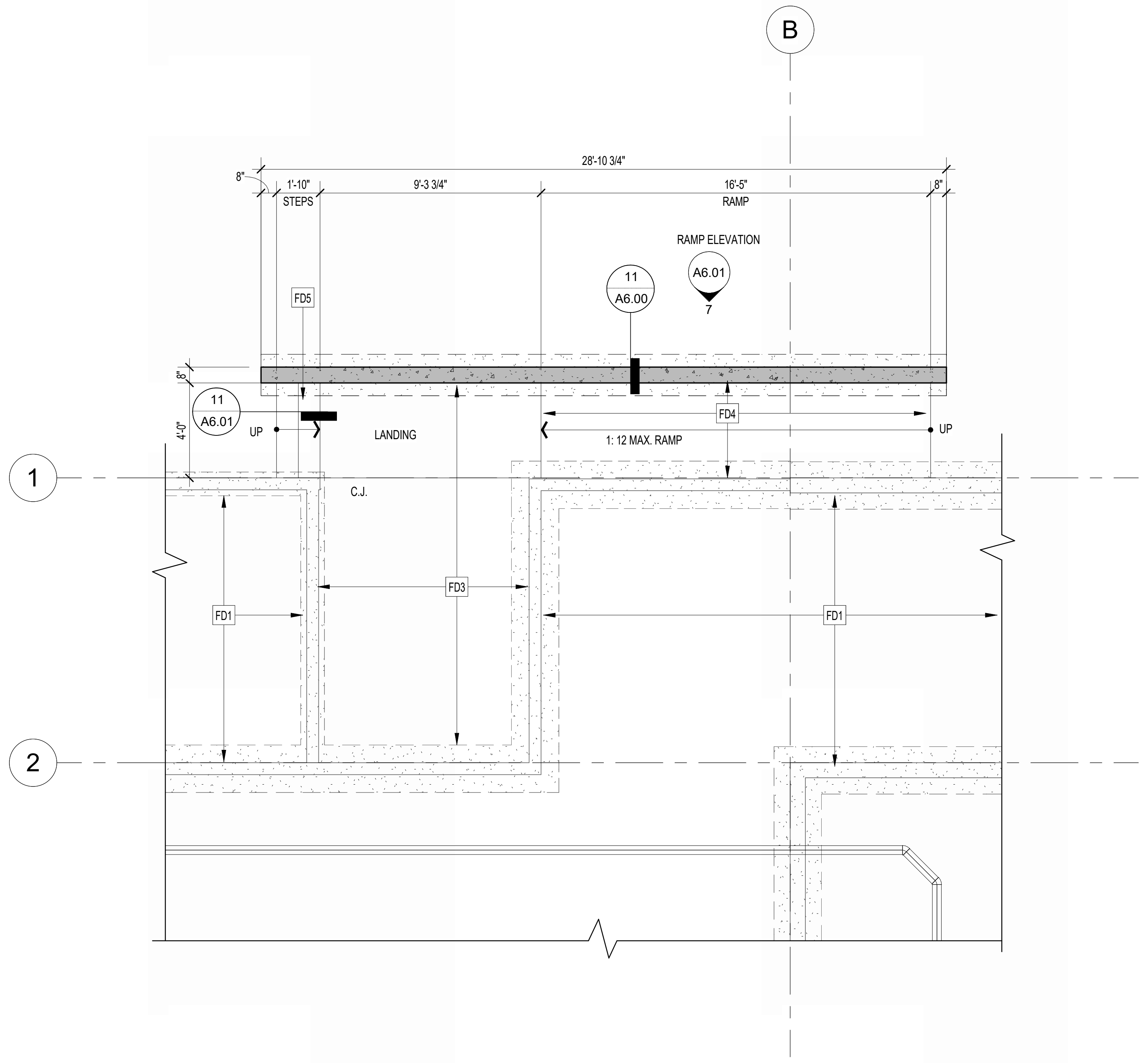
PLAN NORTH



3 FOUNDATION AT INTERIOR RAMP

SCALE 1/4" = 1'-0"

PLAN NORTH



2 FOUNDATION PLAN AT ENTRANCE RAMP

SCALE 1/4" = 1'-0"

PLAN NORTH

KEYNOTES

KEYNOTE	DESCRIPTION
FD1	EXISTING BUILDING FOUNDATION
FD3	NEW 4" CONCRETE LANDING OVER COMPACTED GRAVEL FILL AT BUILDING ENTRANCE WITH MAX. SLOPE NOT TO EXCEED 2% IN ANY DIRECTION
FD4	NEW 4" CONCRETE RAMP WITH MEDIUM BROOMED FINISH IN CROSS DIRECTION OF SLOPED OVER COMPACTED GRAVEL FILL AT BUILDING ENTRANCE WITH MAX. SLOPE NOT TO EXCEED 2% IN ANY DIRECTION
FD5	CONCRETE STEPS WITH MAX. 6" RISER AND 12" RUN PROVIDE 1/2" ROUND BULLNOSE AT STEP EDGE. MEDIUM BROOMED FINISH CROSS DIRECTION OF TRAVEL
FD6	PROVIDE NEW CLEANOUT WITH TRAFFIC RATED COVER
FD7	NEW 4" CONCRETE RAMP WITH TROWELED CONCRETE FINISH OVER COMPACTED GRAVEL FILL AT BUILDING ENTRANCE WITH MAX. SLOPE NOT TO EXCEED 2% IN ANY DIRECTION
FD8	EXISTING CONCRETE SLAB
FD9	INDICATES AREA OF EXISTING CONCRETE SLAB TO BE SAWCUT AND REMOVED TO ALLOW FOR THE INSTALLATION OF NEW CONCRETE RAMP AND STEPS
FD10	RE-CONNECT RE-ROUTED DRAIN LINE TO EXISTING
FD11	INDICATES APPROXIMATE AREA OF EXISTING CONCRETE SLAB TO BE SAWCUT AND REMOVED TO ALLOW FOR THE INSTALLATION OF NEW UNDER SLAB PLUMBING. COORDINATE IN THE FIELD AND WITH PLUMBING DRAWINGS
FD12	PORTION OF EXISTING DRAIN LINE IN FOOT PRINT OF NEW FOUNDATION TO BE ABANDONED

GENERAL NOTES

1. ALL DIMENSIONS OF NEW WALL ARE TO FACE OF STUD.
2. ALL CONTRACTORS ARE REQUIRED TO REVIEW ALL DRAWINGS AND SPECIFICATIONS, SEE ARCHITECTURAL, STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL PROJECT REQUIREMENTS.
3. STAGING AREA FOR CONSTRUCTION WILL BE DETERMINED AT THE PRE BID WITH THE OWNER.
4. ALL DAMAGED AREAS TO BE RESTORED TO ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025

REF NO.
24-106

AUTHOR
DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

ENLARGED FOUNDATION PLAN

SHEET NO.
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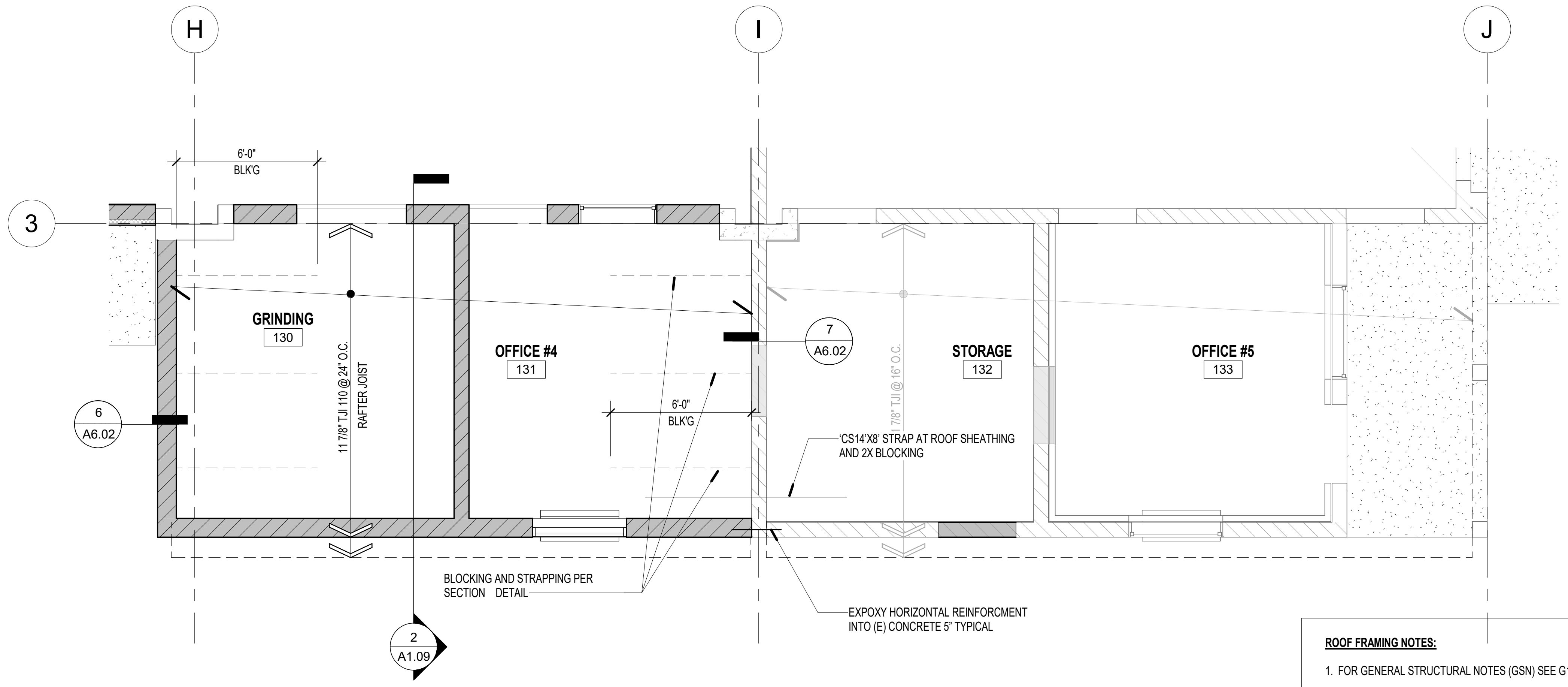

H
I
J
3
6'-0"
BLK'G
GRINDING
130
OFFICE #4
131
STORAGE
132
OFFICE #5
133
11 7/8" TJI 110 @ 24" O.C.
RAFTER JOIST
7/8" TJI @ 16" O.C.
6'-0"
BLK'G
7
A6.02
6
A6.02
'CS14'X8' STRAP AT ROOF SHEATHING AND 2X BLOCKING
BLOCKING AND STRAPPING PER SECTION DETAIL
EXPOXY HORIZONTAL REINFORCMENT INTO (E) CONCRETE 5" TYPICAL
2
A1.09

ROOF FRAMING NOTES:

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE G1.02

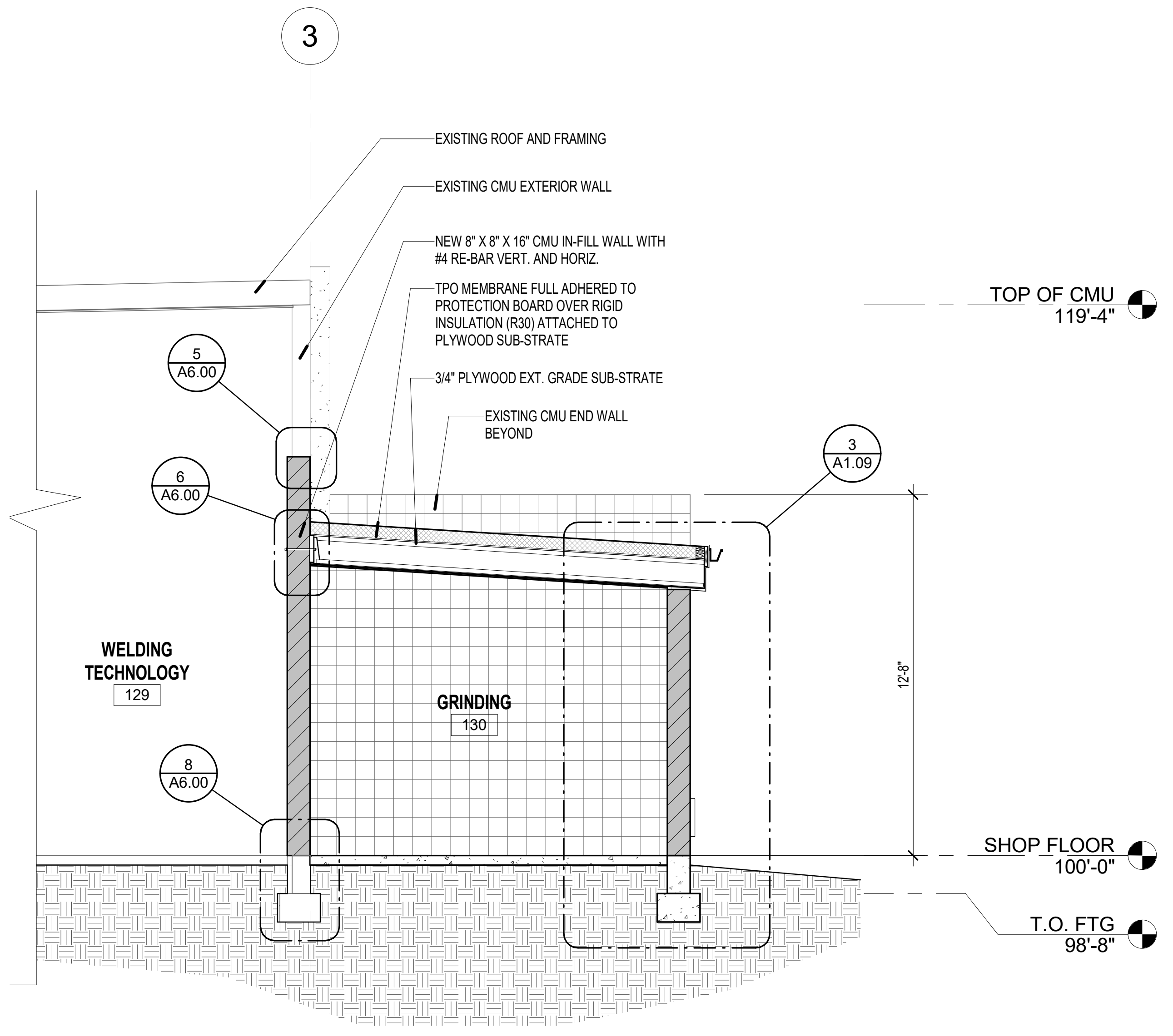
2. TYPICAL MASONRY LINTEL:
8" X 16" DEEP W/ (2) #5 HORIZONTAL AT BOTTOM. PROVIDE 8X16 JAMBS W/ #5 VERTICAL AT EA. FACE.

3. TYPICAL ROOF DECKING:
15/32" APA RATED SHEATHING 32/16 SPAN RATING EXPOSURE 1. PROVIDE 'H' CLIPS AT EACH SPAN. NAIL WITH 10d's AT 6/12

PLAN NORTH

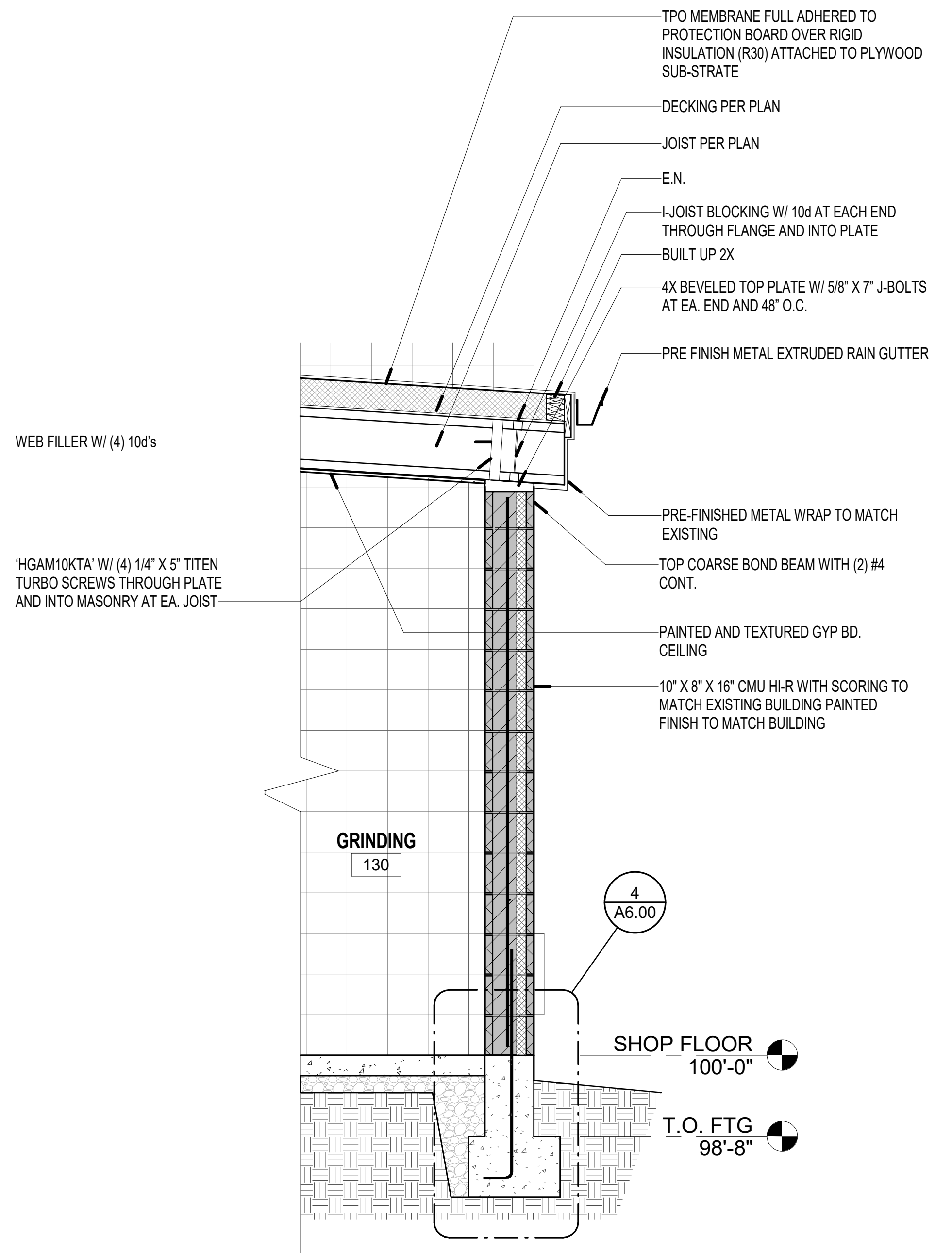
1 ENLARGED FRAMING PLAN

SCALE 1/4" = 1'-0"


3
EXISTING ROOF AND FRAMING
EXISTING CMU EXTERIOR WALL
NEW 8" X 8" X 16" CMU IN-FILL WALL WITH #4 RE-BAR VERT. AND HORIZ.
TPO MEMBRANE FULL ADHERED TO PROTECTION BOARD OVER RIGID INSULATION (R30) ATTACHED TO PLYWOOD SUB-STRATE
3/4" PLYWOOD EXT. GRADE SUB-STRATE
EXISTING CMU END WALL BEYOND
TOP OF CMU
119'-4"
5
A6.00
6
A6.00
3
A1.09
12'-8"
WELDING TECHNOLOGY
129
GRINDING
130
8
A6.00
SHOP FLOOR
100'-0"
T.O. FTG
98'-8"

2 PARTIAL SECTION

SCALE 1/4" = 1'-0"


TPO MEMBRANE FULL ADHERED TO PROTECTION BOARD OVER RIGID INSULATION (R30) ATTACHED TO PLYWOOD SUB-STRATE
DECKING PER PLAN
JOIST PER PLAN
E.N.
I-JOIST BLOCKING W/ 10d AT EACH END THROUGH FLANGE AND INTO PLATE
BUILT UP 2X
4X BEVELED TOP PLATE W/ 5/8" X 7" J-BOLTS AT EA. END AND 48" O.C.
PRE FINISH METAL EXTRUDED RAIN GUTTER
WEB FILLER W/ (4) 10d's
PRE-FINISHED METAL WRAP TO MATCH EXISTING
'HGAM10KTA' W/ (4) 1/4" X 5" TITEN TURBO SCREWS THROUGH PLATE AND INTO MASONRY AT EA. JOIST
TOP COARSE BOND BEAM WITH (2) #4 CONT.
PAINTED AND TEXTURED GYP BD. CEILING
10" X 8" X 16" CMU HI-R WITH SCORING TO MATCH EXISTING BUILDING PAINTED FINISH TO MATCH BUILDING
GRINDING
130
4
A6.00
SHOP FLOOR
100'-0"
T.O. FTG
98'-8"

3 WALL SECTION

SCALE 1/2" = 1'-0"

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270 N. 27th St. BOISE, ID. 83702
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AUTHOR
DK

PROJECT
CAREEER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

ENLARGED FRAMING PLAN

SHEET NO.
A1.09

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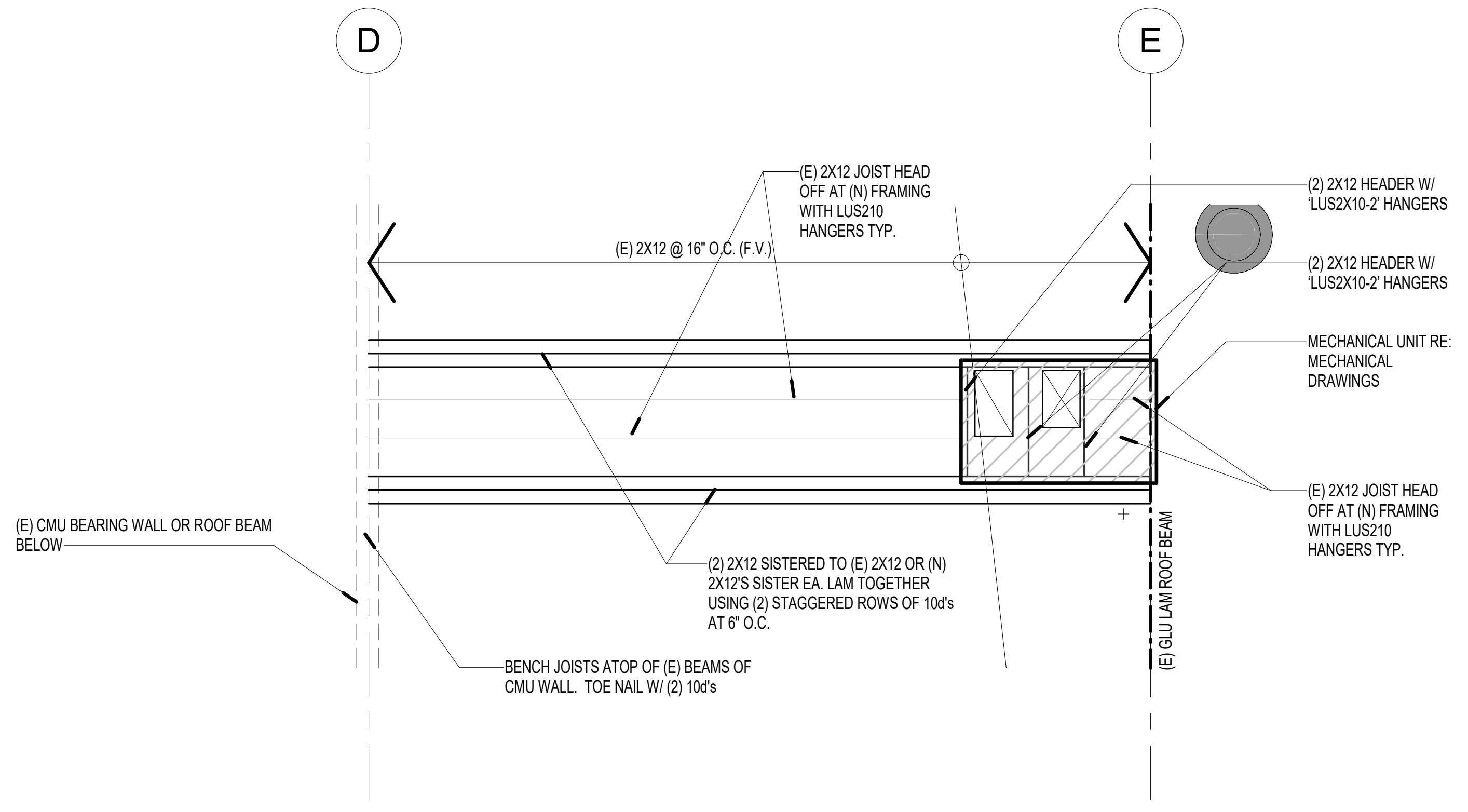
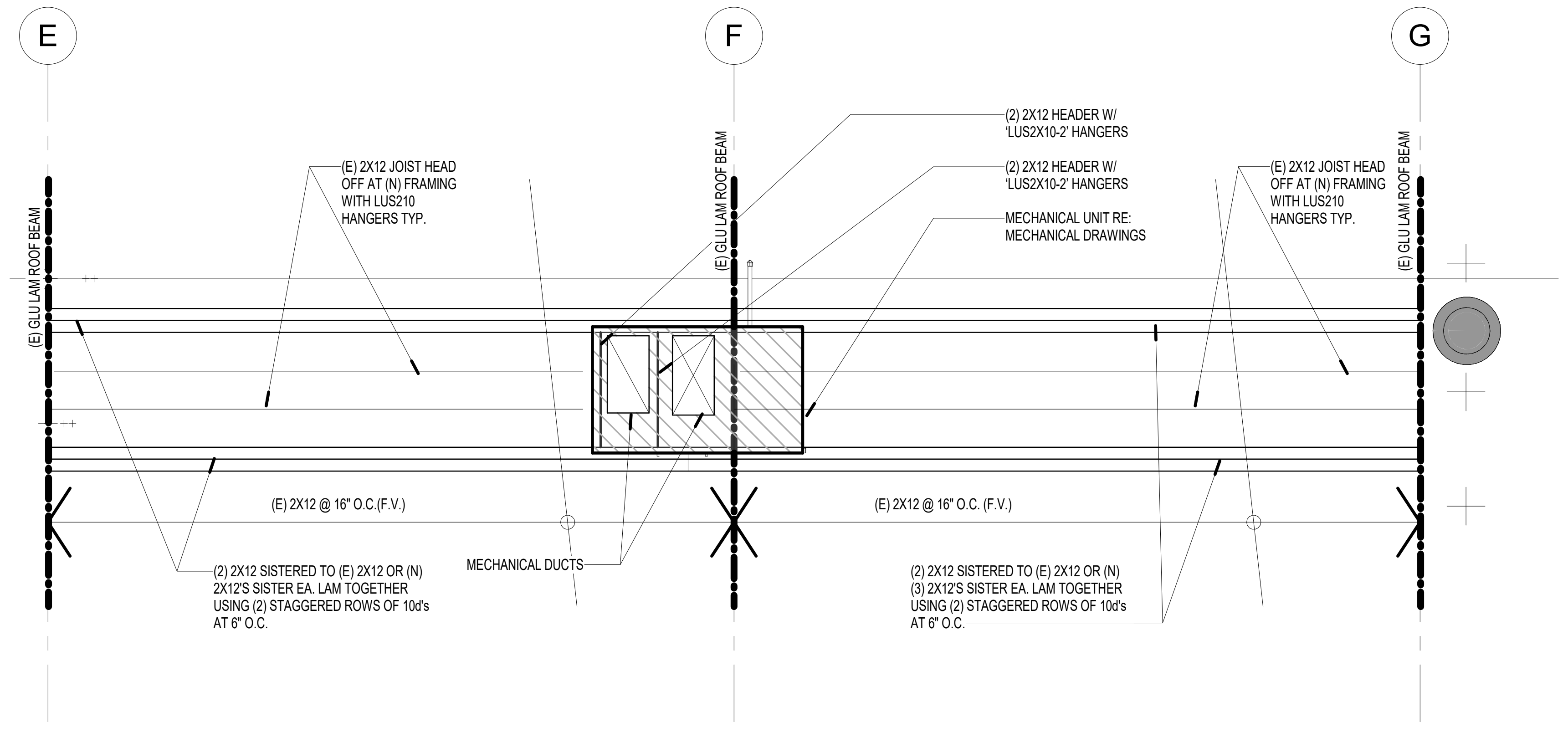

D
E
(E) 2X12 JOIST HEAD OFF AT (N) FRAMING WITH LUS210 HANGERS TYP.
(E) 2X12 @ 16" O.C. (F.V.)
(2) 2X12 HEADER W/ 'LUS2X10-2' HANGERS
(2) 2X12 HEADER W/ 'LUS2X10-2' HANGERS
MECHANICAL UNIT RE: MECHANICAL DRAWINGS
(E) 2X12 JOIST HEAD OFF AT (N) FRAMING WITH LUS210 HANGERS TYP.
(E) CMU BEARING WALL OR ROOF BEAM BELOW
(2) 2X12 SISTERED TO (E) 2X12 OR (N) 2X12'S SISTER EA. LAM TOGETHER USING (2) STAGGERED ROWS OF 10d's AT 6" O.C.
(E) GLU LAM ROOF BEAM
BENCH JOISTS ATOP OF (E) BEAMS OF CMU WALL. TOE NAIL W/ (2) 10d's

1 NEW ROOF MECH. SUPPORT FRAMING

SCALE 1/4" = 1'-0"

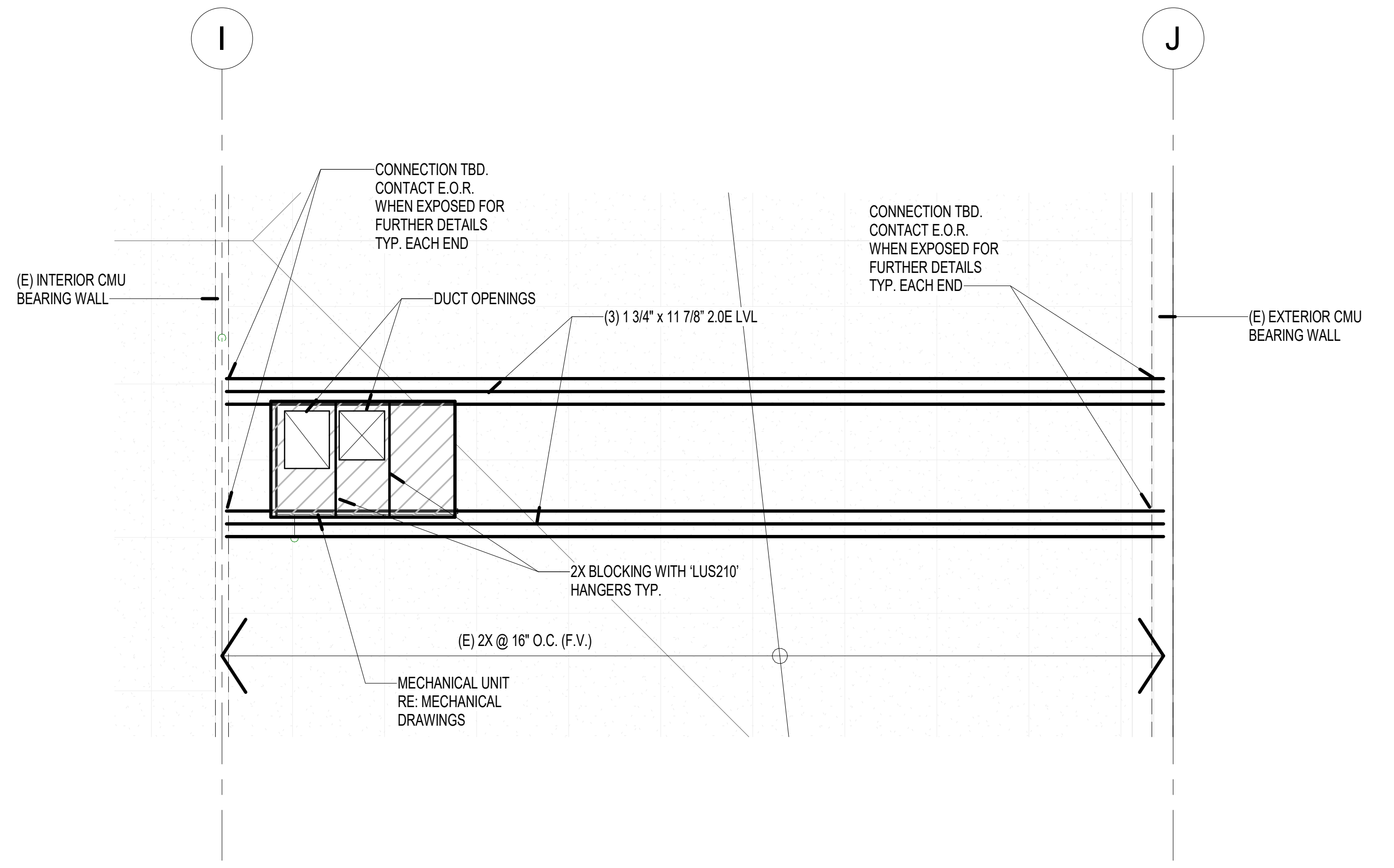
PLAN NORTH


E
F
G
(2) 2X12 HEADER W/ 'LUS2X10-2' HANGERS
(E) 2X12 JOIST HEAD OFF AT (N) FRAMING WITH LUS210 HANGERS TYP.
(2) 2X12 HEADER W/ 'LUS2X10-2' HANGERS
(E) 2X12 JOIST HEAD OFF AT (N) FRAMING WITH LUS210 HANGERS TYP.
MECHANICAL UNIT RE: MECHANICAL DRAWINGS
(E) GLU LAM ROOF BEAM
(E) GLU LAM ROOF BEAM
(E) GLU LAM ROOF BEAM
(E) 2X12 @ 16" O.C.(F.V.)
(E) 2X12 @ 16" O.C. (F.V.)
(2) 2X12 SISTERED TO (E) 2X12 OR (N) 2X12'S SISTER EA. LAM TOGETHER USING (2) STAGGERED ROWS OF 10d's AT 6" O.C.
MECHANICAL DUCTS
(2) 2X12 SISTERED TO (E) 2X12 OR (N) (3) 2X12'S SISTER EA. LAM TOGETHER USING (2) STAGGERED ROWS OF 10d's AT 6" O.C.

2 NEW ROOF MECH. SUPPORT FRAMING

SCALE 1/4" = 1'-0"

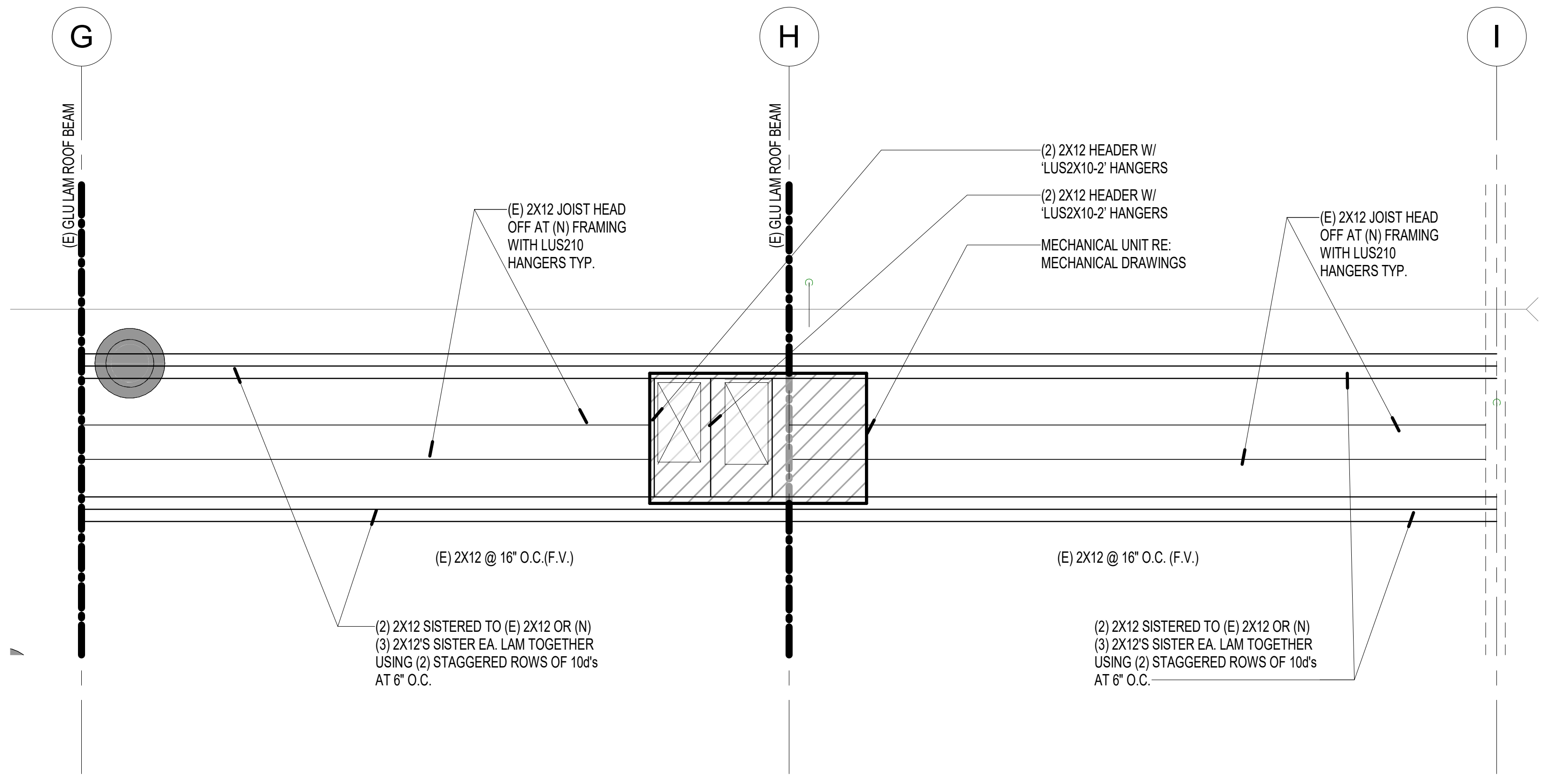
PLAN NORTH


I
J
CONNECTION TBD. CONTACT E.O.R. WHEN EXPOSED FOR FURTHER DETAILS TYP. EACH END
CONNECTION TBD. CONTACT E.O.R. WHEN EXPOSED FOR FURTHER DETAILS TYP. EACH END
(E) INTERIOR CMU BEARING WALL
DUCT OPENINGS
(3) 1 3/4" x 11 7/8" 2.0E LVL
(E) EXTERIOR CMU BEARING WALL
2X BLOCKING WITH 'LUS210' HANGERS TYP.
(E) 2X @ 16" O.C. (F.V.)
MECHANICAL UNIT RE: MECHANICAL DRAWINGS

3 NEW ROOF MECH. SUPPORT FRAMING

SCALE 1/4" = 1'-0"

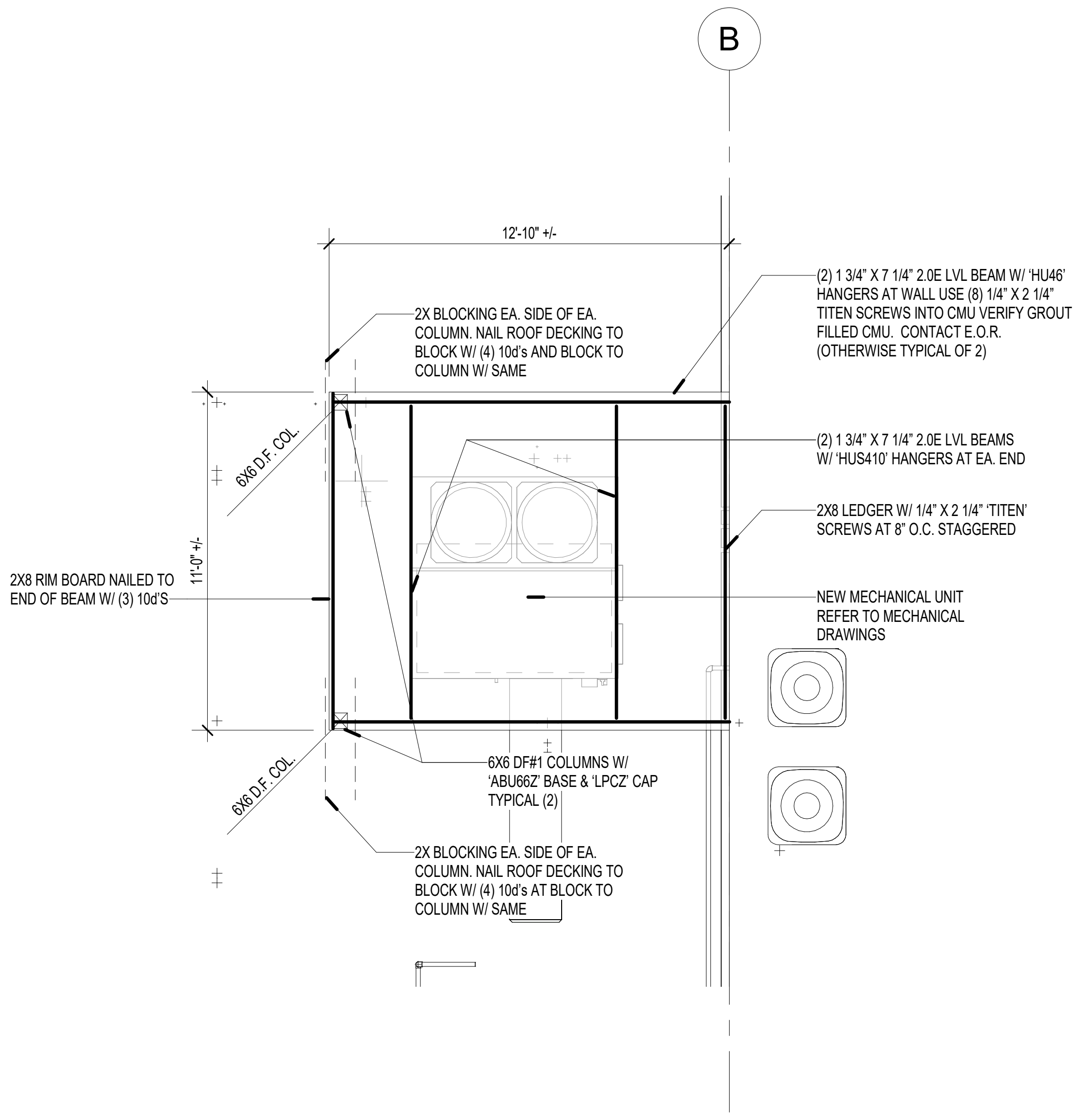
PLAN NORTH


G
H
I
(E) GLU LAM ROOF BEAM
(E) GLU LAM ROOF BEAM
(2) 2X12 HEADER W/ 'LUS2X10-2' HANGERS
(2) 2X12 HEADER W/ 'LUS2X10-2' HANGERS
(E) 2X12 JOIST HEAD OFF AT (N) FRAMING WITH LUS210 HANGERS TYP.
MECHANICAL UNIT RE: MECHANICAL DRAWINGS
(E) 2X12 JOIST HEAD OFF AT (N) FRAMING WITH LUS210 HANGERS TYP.
(E) 2X12 @ 16" O.C.(F.V.)
(E) 2X12 @ 16" O.C. (F.V.)
(2) 2X12 SISTERED TO (E) 2X12 OR (N) (3) 2X12'S SISTER EA. LAM TOGETHER USING (2) STAGGERED ROWS OF 10d's AT 6" O.C.
(2) 2X12 SISTERED TO (E) 2X12 OR (N) (3) 2X12'S SISTER EA. LAM TOGETHER USING (2) STAGGERED ROWS OF 10d's AT 6" O.C.

4 NEW ROOF MECH. SUPPORT FRAMING

SCALE 1/4" = 1'-0"

PLAN NORTH


B
12'-10" +/-
(2) 1 3/4" X 7 1/4" 2.0E LVL BEAM W/ 'HU46' HANGERS AT WALL USE (8) 1/4" X 2 1/4" TITEN SCREWS INTO CMU VERIFY GROUT FILLED CMU. CONTACT E.O.R. (OTHERWISE TYPICAL OF 2)
2X BLOCKING EA. SIDE OF EA. COLUMN. NAIL ROOF DECKING TO BLOCK W/ (4) 10d's AND BLOCK TO COLUMN W/ SAME
6X6 D.F. COL.
(2) 1 3/4" X 7 1/4" 2.0E LVL BEAMS W/ 'HUS410' HANGERS AT EA. END
2X8 LEDGER W/ 1/4" X 2 1/4" 'TITEN' SCREWS AT 8" O.C. STAGGERED
11'-0" +/-
2X8 RIM BOARD NAILED TO END OF BEAM W/ (3) 10d'S
NEW MECHANICAL UNIT REFER TO MECHANICAL DRAWINGS
6X6 D.F. COL.
6X6 DF#1 COLUMNS W/ 'ABU66Z' BASE & 'LPCZ' CAP TYPICAL (2)
2X BLOCKING EA. SIDE OF EA. COLUMN. NAIL ROOF DECKING TO BLOCK W/ (4) 10d's AT BLOCK TO COLUMN W/ SAME

5 NEW ROOF MECH. SUPPORT FRAMING

SCALE 1/4" = 1'-0"

PLAN NORTH

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DK

PROJECT
CAREEER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

ENLARGED ROOF FRAMING PLAN

SHEET NO.
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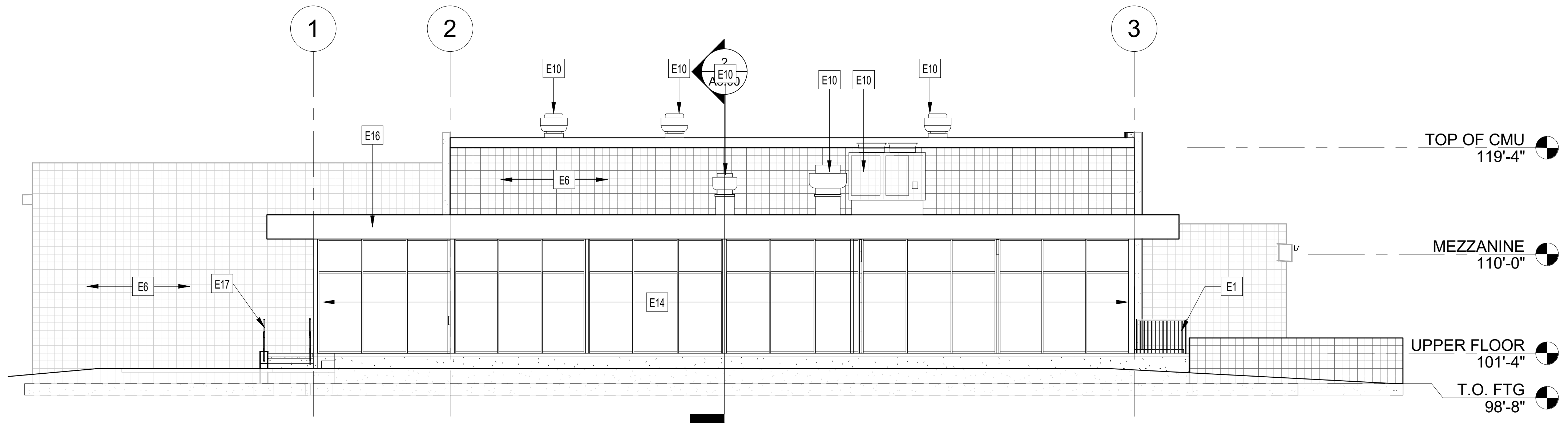
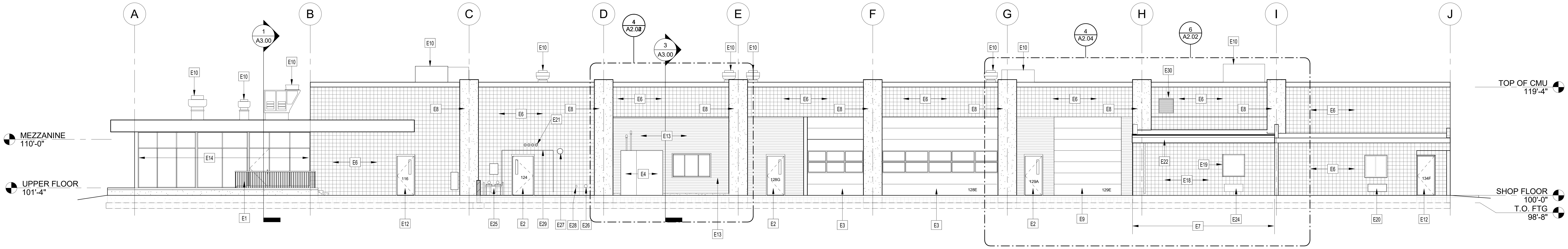


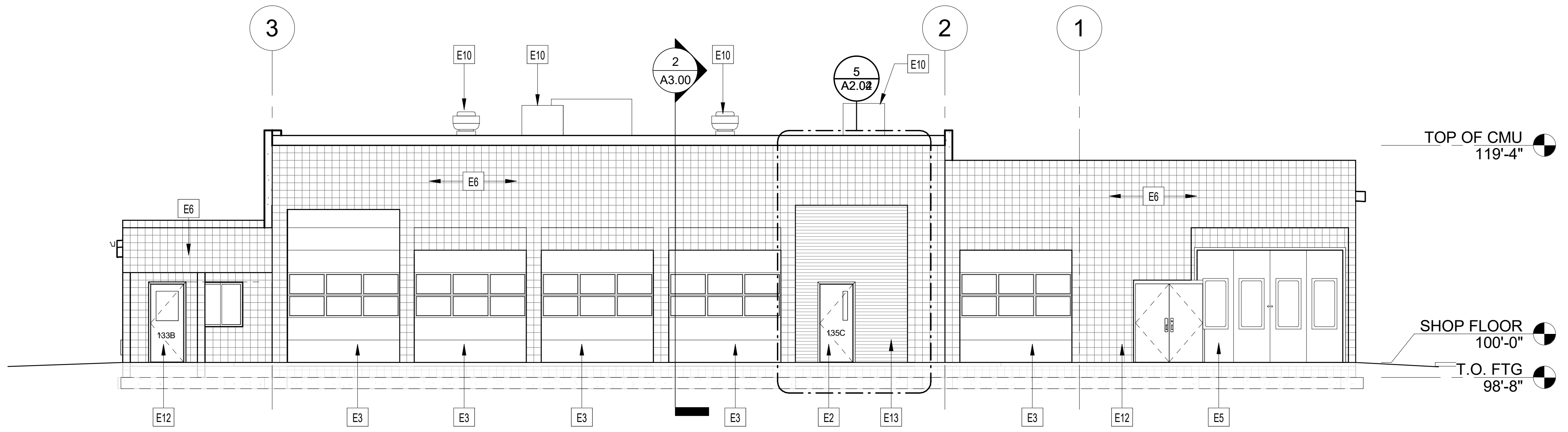
1 WEST ELEVATION

SCALE 1/8" = 1'-0"



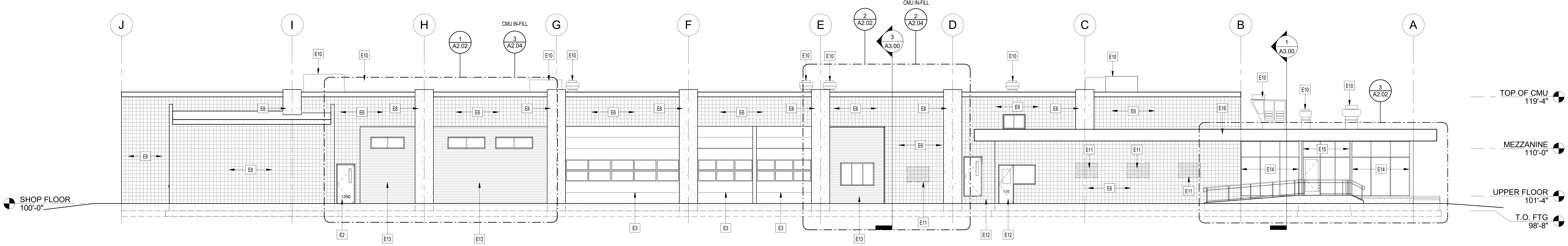
2 SOUTH ELEVATION

SCALE 1/8" = 1'-0"



3 EAST ELEVATION

SCALE 1/8" = 1'-0"



4 NORTH ELEVATION

SCALE 1/8" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
E1	EXISTING RAILING AT SECONDARY ENTRY
E2	NEW EXTERIOR INSULATED METAL DOOR AND FRAME WITH PAINTED
E3	EXISTING OVERHEAD ROLL-UP DOOR TO BE RE-PAINTED
E4	NEW EXTERIOR RATED UNDER FED SWITCH GEAR. REFER TO ELECTRICAL DRAWINGS FOR BALANCE OF INFORMATION
E5	EXISTING BI-FOLD PAINT BOOTH DOORS TO BE RE-PAINTED
E6	EXISTING CMU WALL WITH 8X8 SCORING TO BE RE-PAINTED
E7	NEW ADDITION
E8	EXISTING PRE-CAST CONCRETE COLUMN TO BE PAINTED
E9	NEW 12' X 14' SECTIONAL OVERHEAD DOOR 2 INCH INSULATED
E10	NEW ROOF MOUNTED MECHANICAL EQUIPMENT ON THE ROOF. REFER TO MECHANICAL DRAWINGS FOR BALANCE OF INFORMATOIN
E11	REMOVE EXISTING VYNIL WINDOWS AND IN-FILL CMU OPENING WITH MATCHING CMU AND PAINT TO MATCH WALL
E12	EXISTING EXTERIOR METAL DOOR TO BE RE-PAINTED
E13	REMOVE EXISTING OVERHEAD DOOR AND IN-FILL OPENING CMU IN-FILL. FINISH TO BE METAL PANEL BUILDING WRAP OVER 2" RIGID FOAM
E14	EXISTING ALUMINUM STORE FRONT TO REMAIN. PROVIDE REPAIR DAMAGED MULLIONS OR BROKEN GLASS AND TINT ON ALL PANELS
E15	REMOVE EXISTING DOUBLE DOORS AND REPLACE WITH NEW ALUMINUM WINDOW SYSTEM WITH INSULATED / LOW-E GLASS PANELSS

KEYNOTE	DESCRIPTION
E16	EXISTING WOOD FINISH SOFFIT TO BE PAINTED
E17	NEW CONCRETE STAIR AND LANDING. REFER TO ENLARGED PLAN
E18	NEW CMU SCORING TO MATCH EXISTING AND MATCH PAINT OF EXSTING BUILDING
E19	NEW ALUM. WINDOW WITH INSULATED / LOW-E GLASS PANEL INSTALLED IN CMU WALL
E20	EXISTING PTAC UNIT TO BE REPLACED. REFER TO MECHANICAL DRAWINGS
E21	NEW EXAUST DUCT EXIT AT EXTERIOR WALL OF BUILDING
E22	PRE-FINISHED METAL FASCIA FINISH TO MATCH EXISTING
E24	NEW PTAC UNIT. REFER TO MECHANICAL DRAWINGS
E25	EXISTING GAS METER TO REMAIN
E26	EXISTING FIRE DEPARTMENT CONNECTION
E27	EXISTING FIRE SPRINKLER ALARM BELL TO REMAIN
E28	EXISTING FIRE SPRINKLER DRAIN LINE
E29	EXISTING GAS LINE SURFACE ATTACHED TO WALL
E30	NEW LOUVER FOR EXHAUST FAN MOUNTED IN EXTERIOR WALL

PROFESSIONAL OF RECORD STAMP

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PROJECT
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PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

ELEVATIONS

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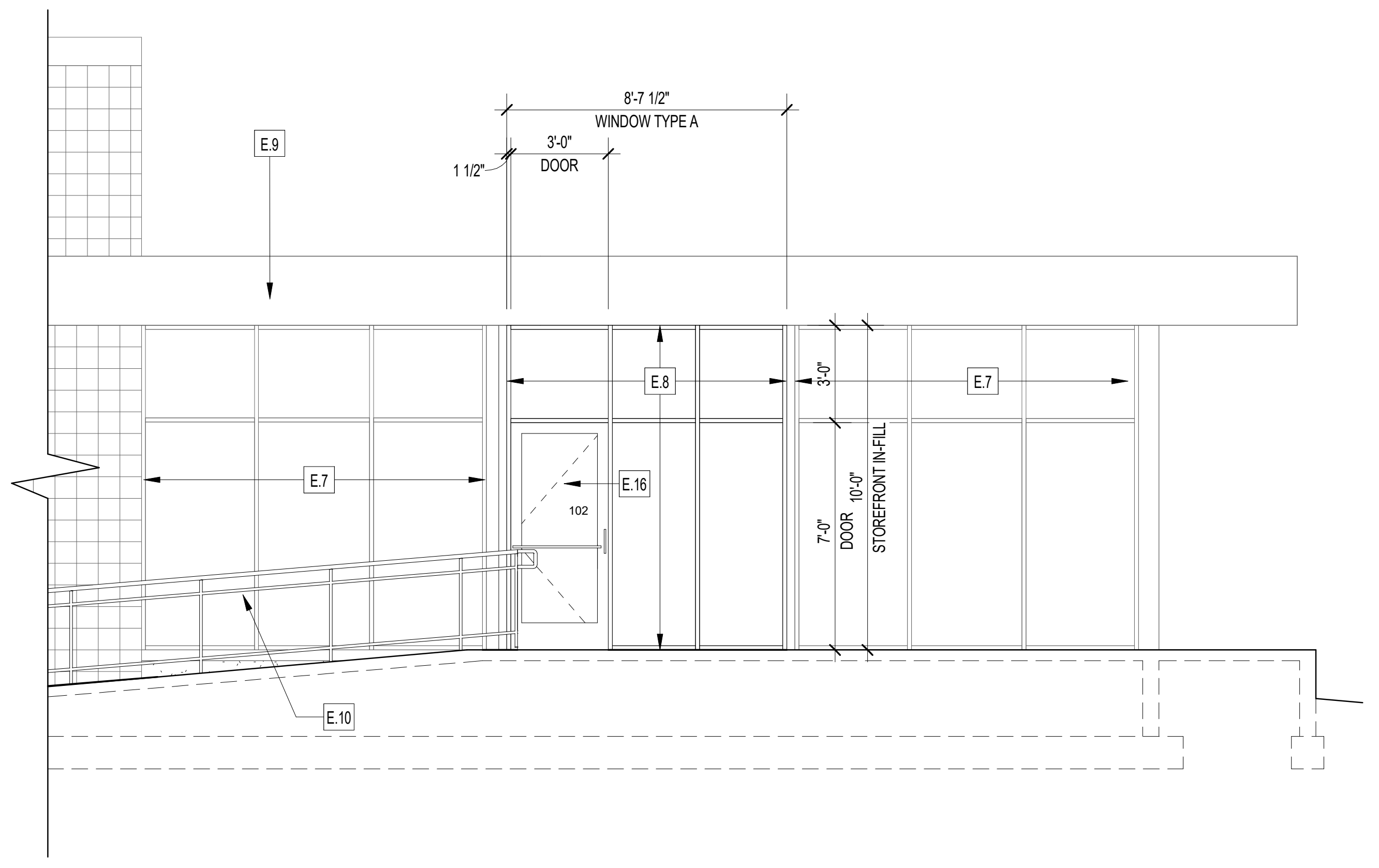
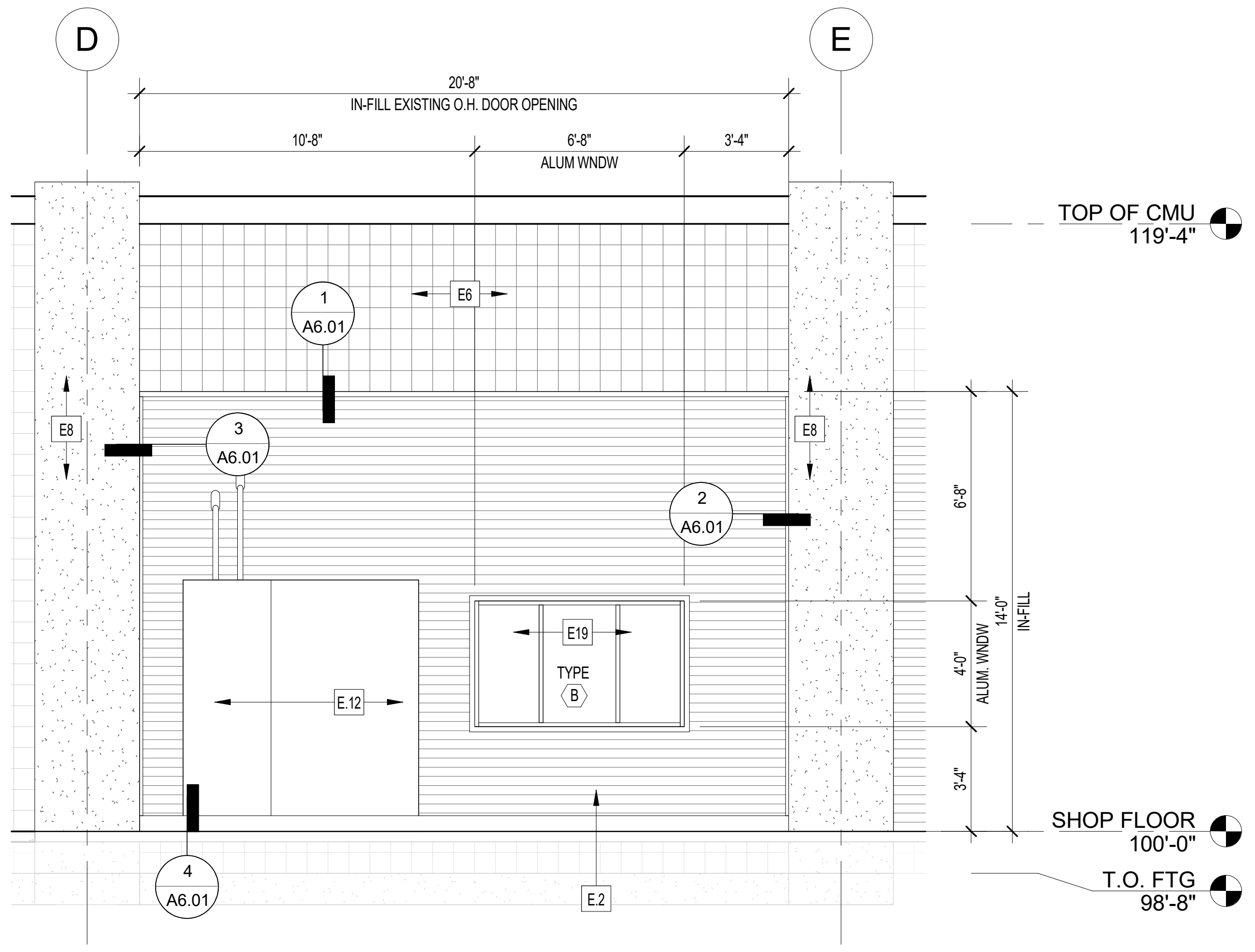
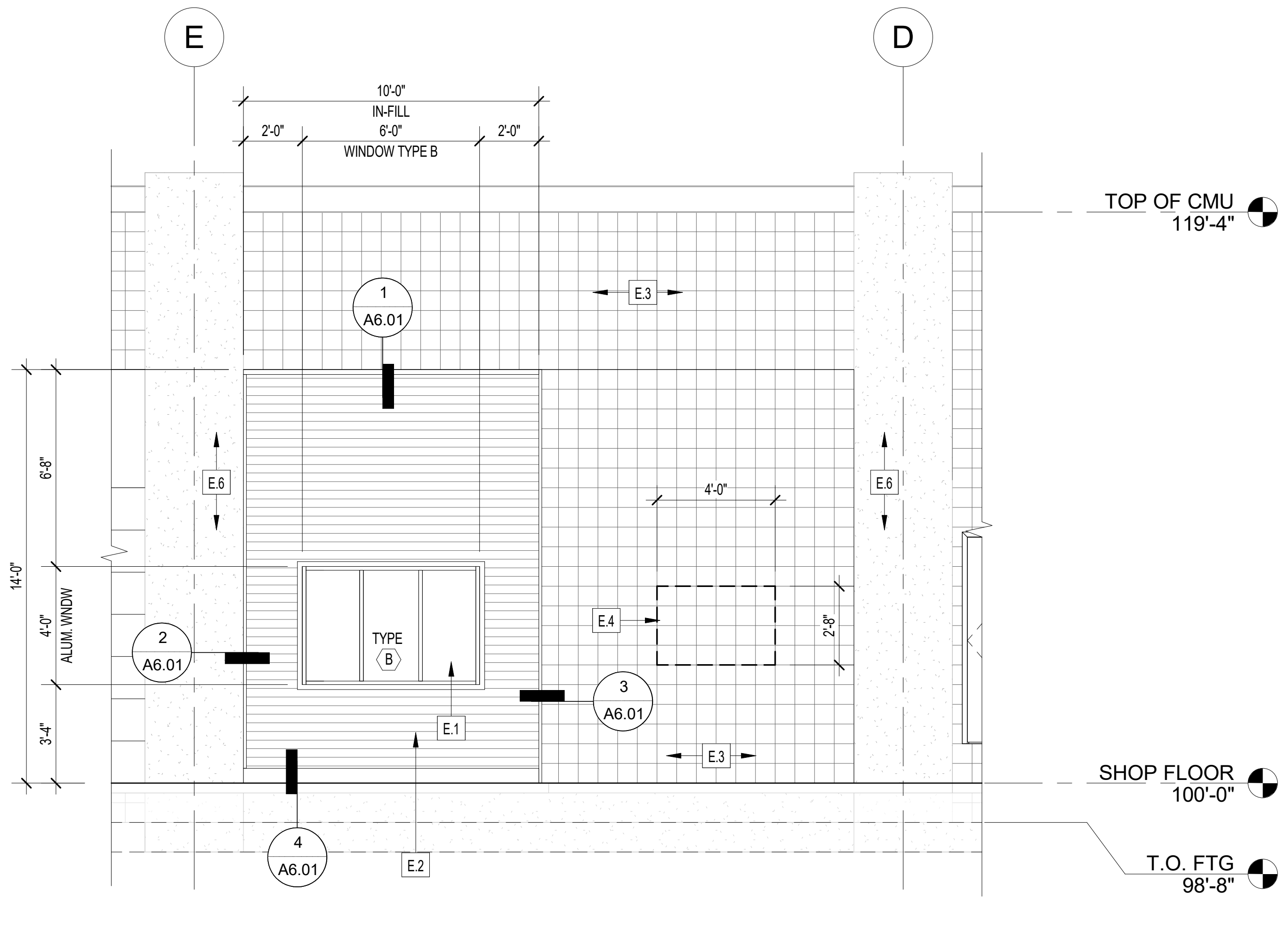


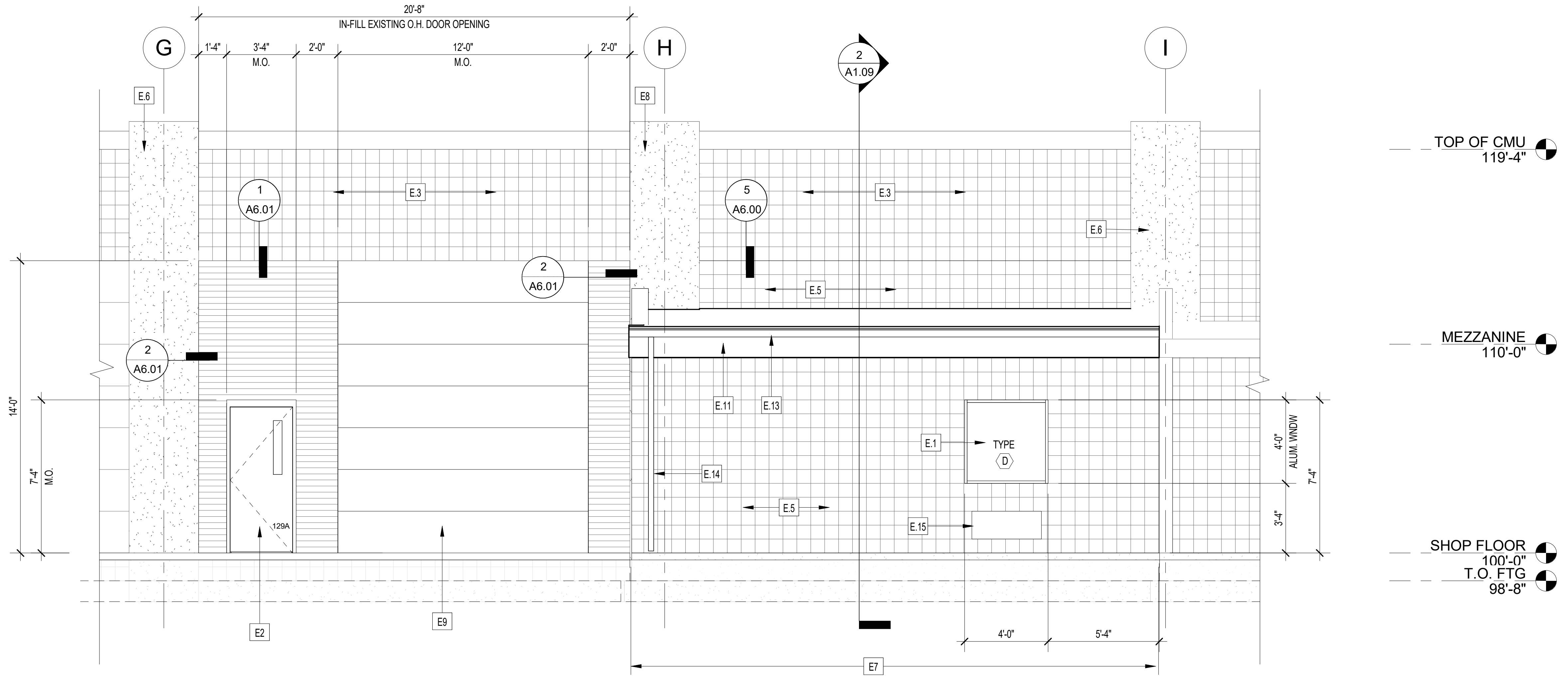
3 ENLARGED ELEVATION
SCALE 1/4" = 1'-0"



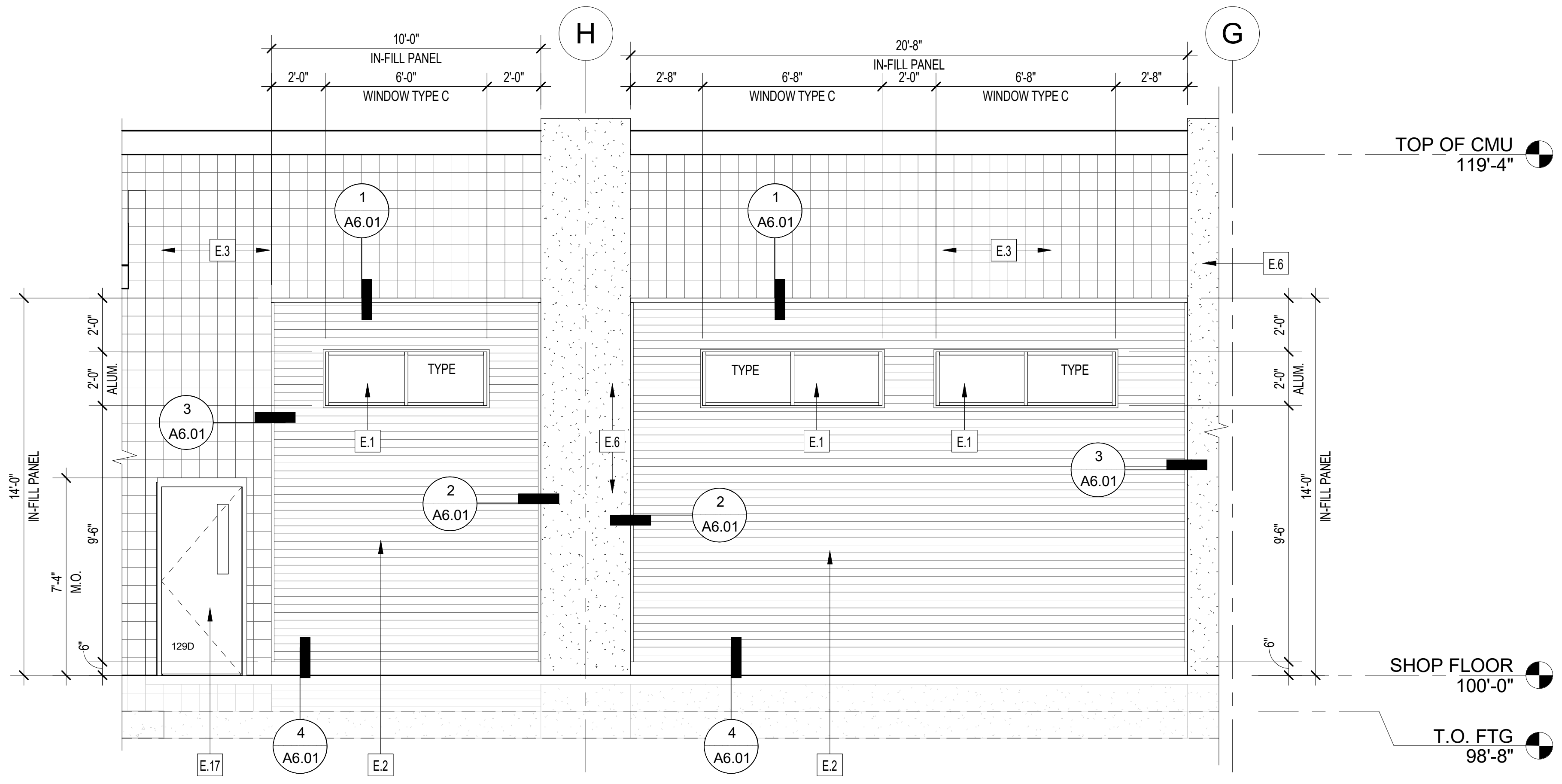
4 ENLARGED ELEVATION
SCALE 1/4" = 1'-0"



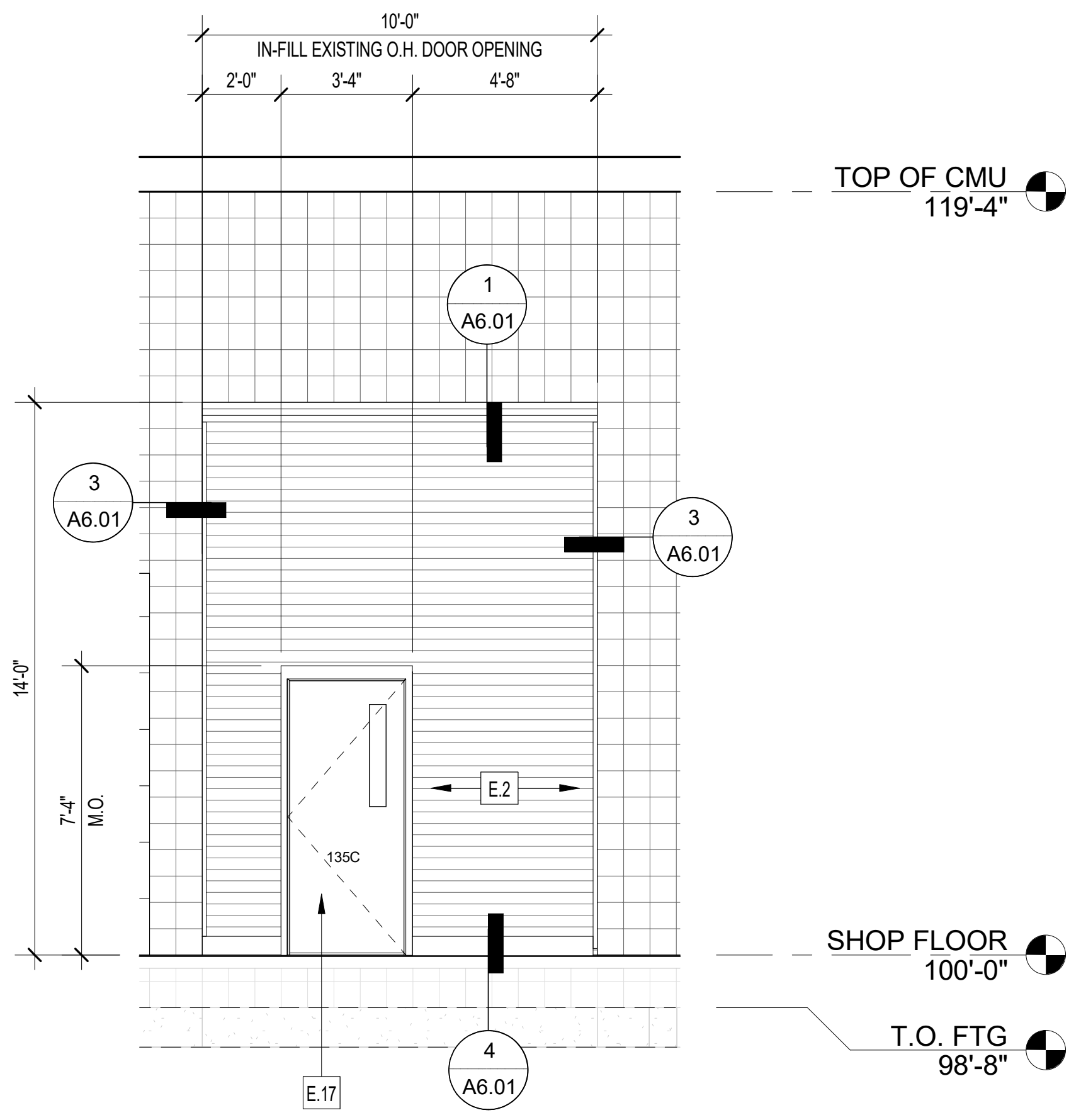
2 PARTIAL ELEVATION 002
SCALE 1/4" = 1'-0"



6 ENLARGED ELEVATION
SCALE 1/4" = 1'-0"



1 ENLARGED ELEVATION
SCALE 1/4" = 1'-0"



5 ENLARGED ELEVATION
SCALE 1/4" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
E.1	FIXED ALUMINUM WINDOWS WITH INSULATED / LOW-E GLASS PANELS
E.2	REMOVE EXISTING OVERHEAD DOOR AND IN-FILL OPENING CMU IN-FILL. FINISH TO BE METAL PANEL BUILDING WRAP OVER 2" RIGID FOAM
E.3	EXISTING CMU WALL WITH 8X8 SCORING TO BE RE-PAINTED
E.4	REMOVE EXISTING VYNIL WINDOWS AND IN-FILL CMU OPENING WITH MATCHING CMU AND PAINT TO MATCH WALL
E.5	REMOVE EXISTING OVERHEAD DOOR AND IN-FILL OPENING WITH 10" HI-R CMU MATCH SCORING
E.6	EXISTING PRE-CAST CONCRETE COLUMN TO BE PAINTED
E.7	EXISTING ALUMINUM STORE FRONT TO REMAIN. PROVIDE REPAIR DAMAGED MULLIONS OR BROKEN GLASS AND TINT ON ALL PANELS
E.8	REMOVE EXISTING DOUBLE DOORS AND REPLACE WITH NEW ALUMINUM WINDOW SYSTEM WITH INSULATED / LOW-E GLASS PANELSS
E.9	EXISTING WOOD FINISH SOFFIT TO BE PAINTED
E.10	HANDRAIL AT NEW ENTRY RAMP
E.11	PRE-FINISHED METAL FASCIA FINISH TO MATCH EXISTING
E.12	NEW EXTERIOR ELECTRICAL SWITCH GEAR. REFER TO ELECTRICAL DRAWINGS
E.13	PRE-FINISHED METAL RAIN GUTTER
E.14	PRE-FINISHED METAL RAIN GUTTER DOWNSPOUT
E.15	PTAC UNIT. REFER TO MECHANICAL DRAWINGS
E.16	HEAVY STILE ALUM ENTRY DOOR
E.17	NEW INSULATED HOLLOW METAL DOOR

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PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
ENLARGED ELEVATION

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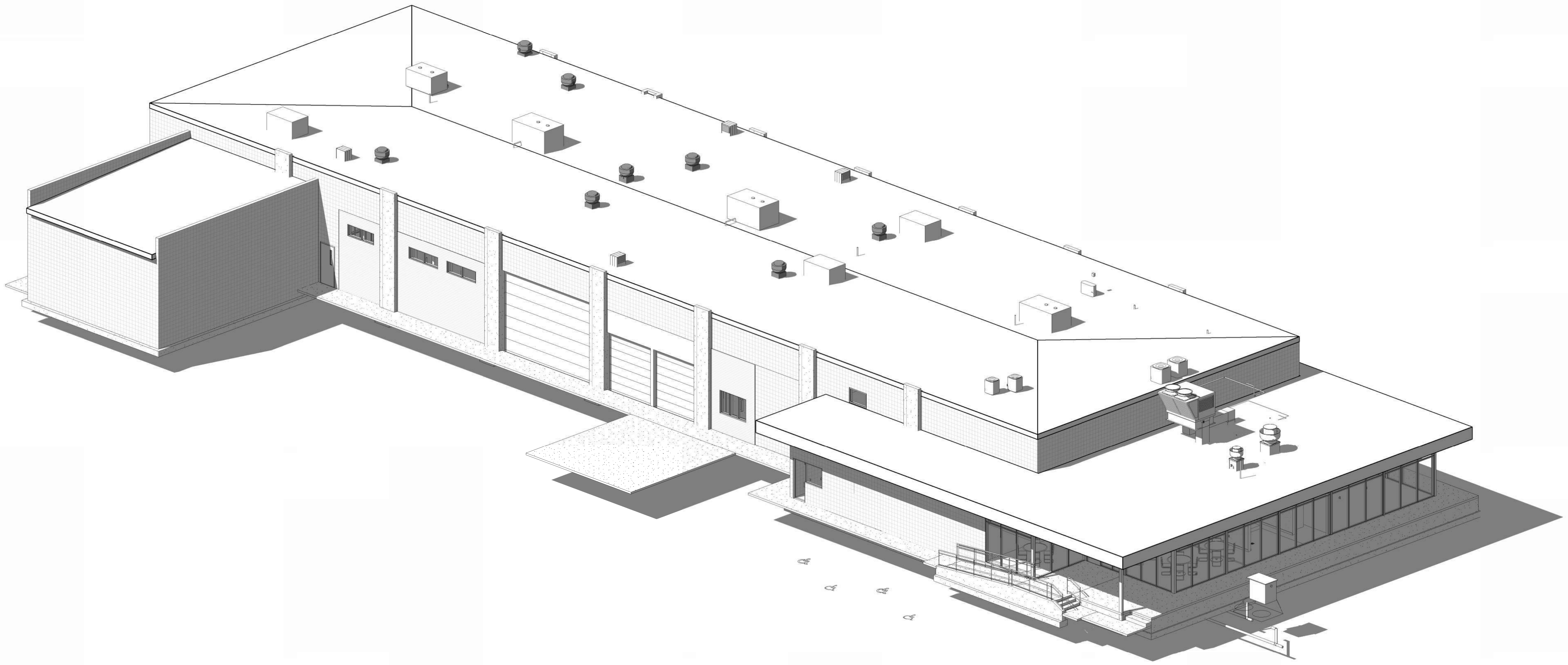
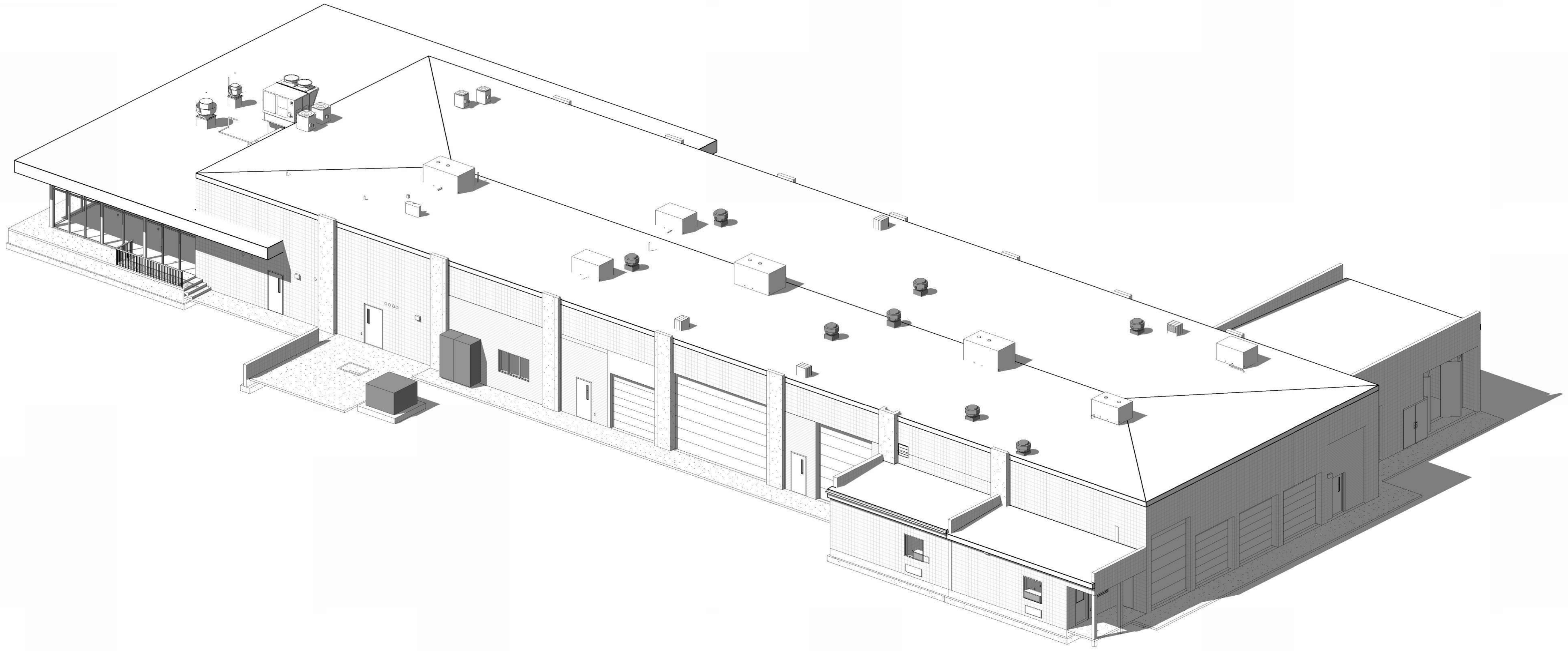


PERSPECTIVE VIEW 001



PERSPECTIVE VIEW 002

HSA ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
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PROJECT
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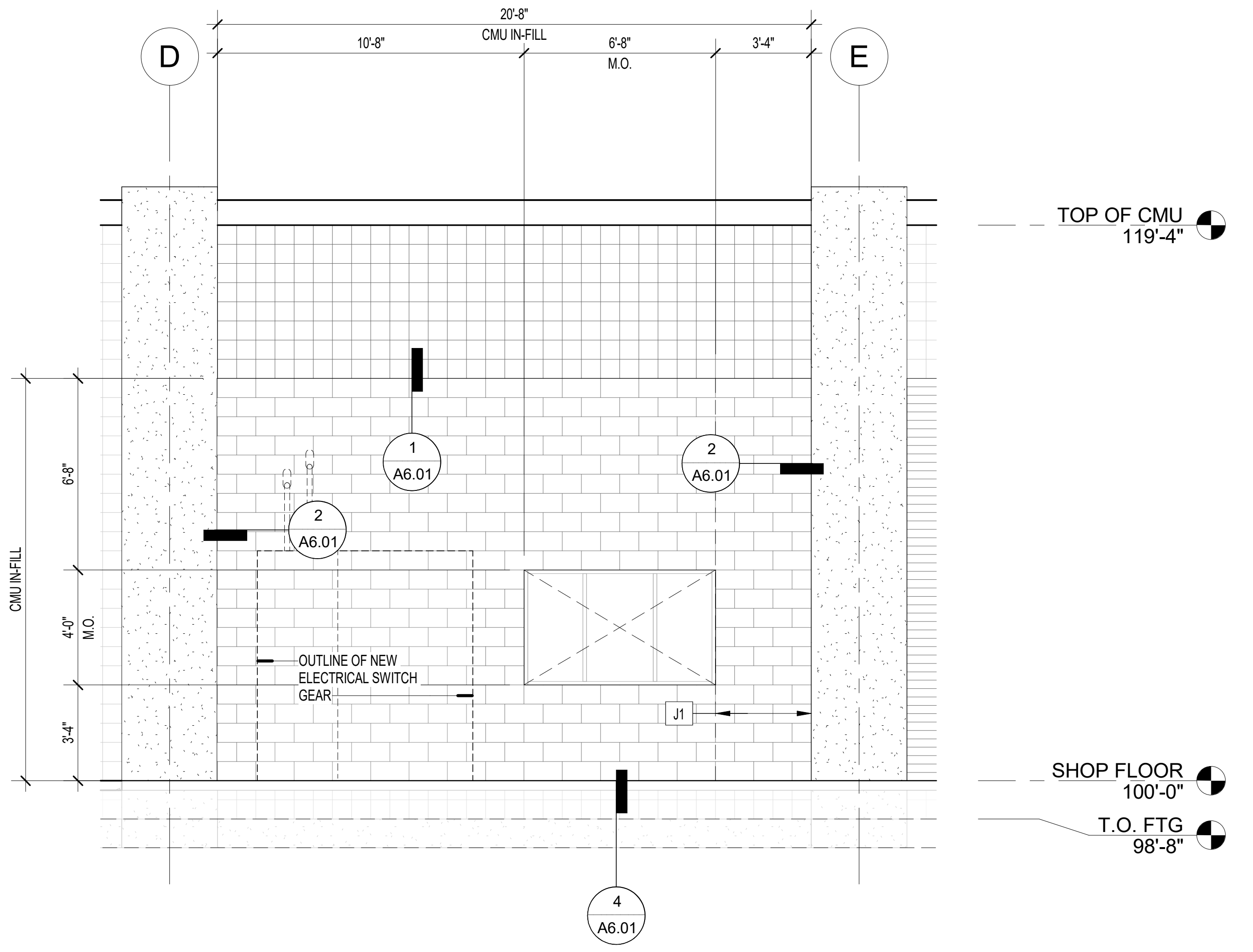
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

PERSPECTIVE

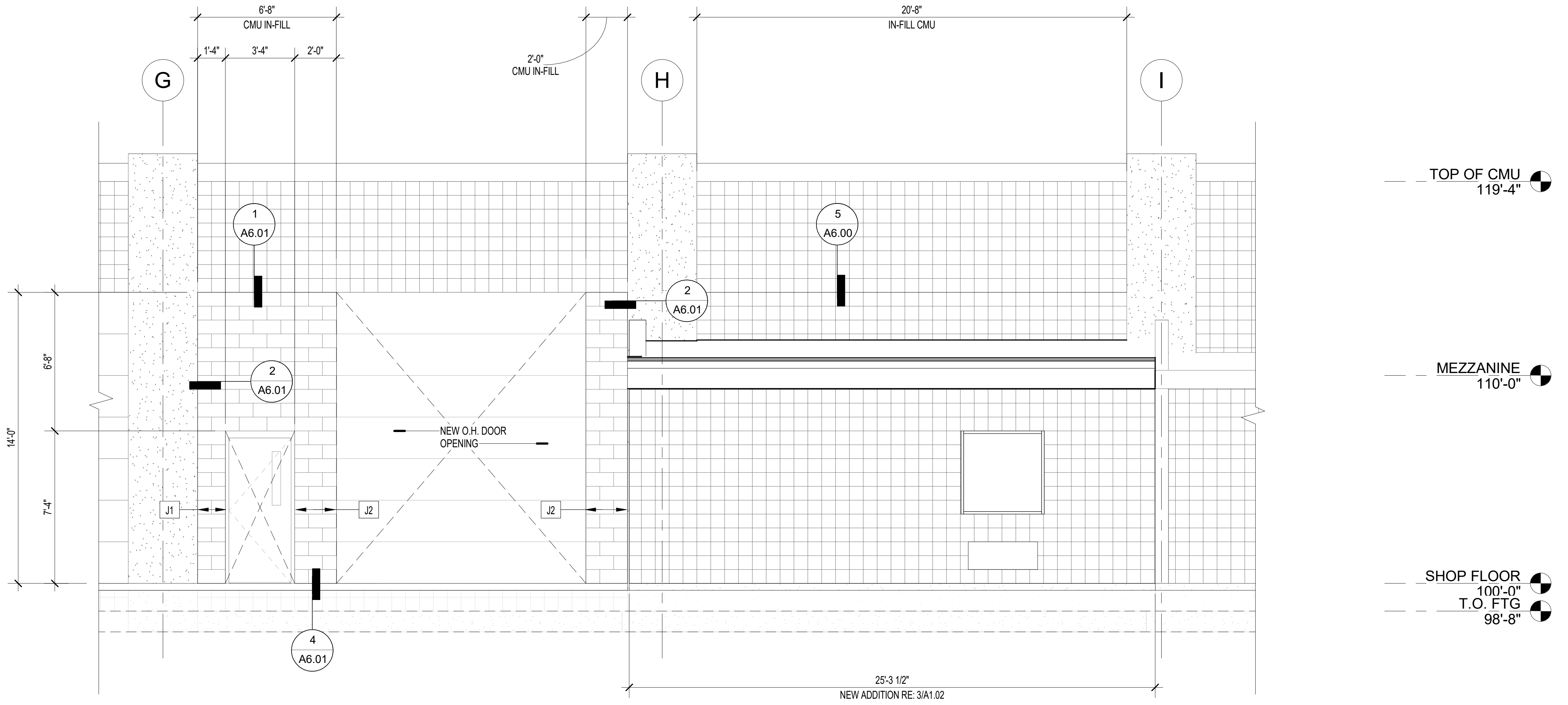
SHEET NO.
A2.03

1/14/2025 6:52:38 PM



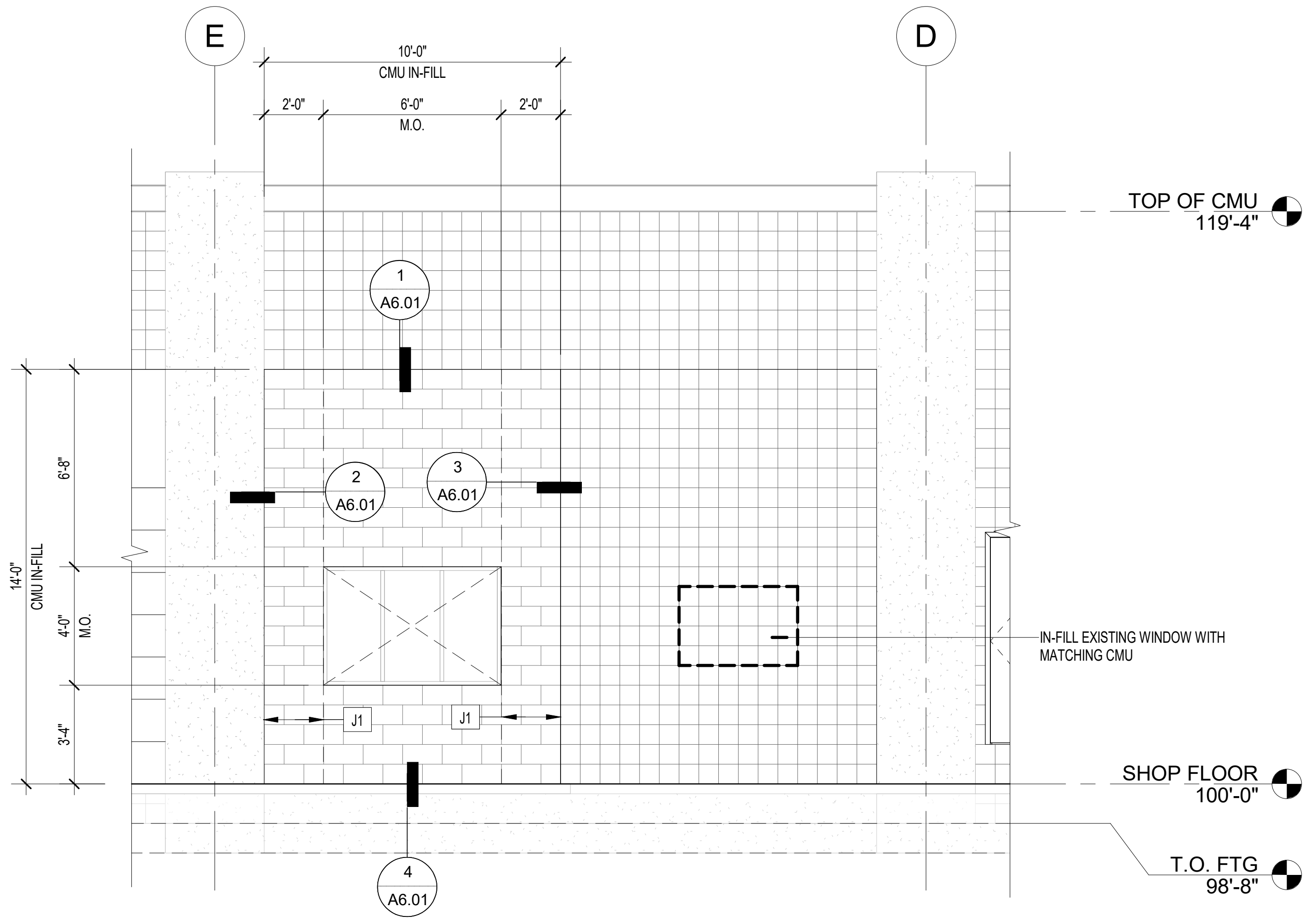
1 CMU IN-FILL

SCALE 1/4" = 1'-0"



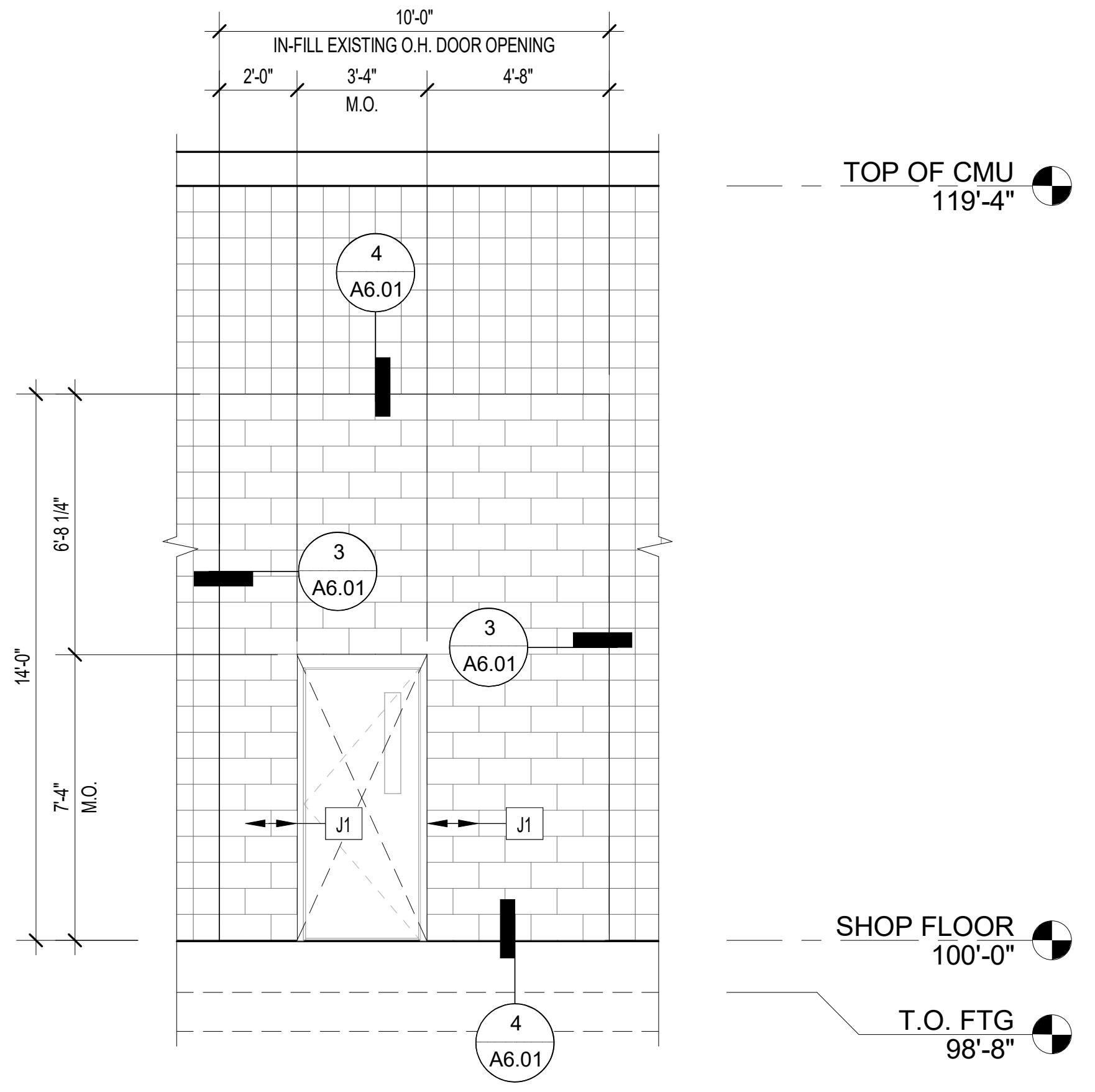
4 CMU IN-FILL

SCALE 1/4" = 1'-0"



2 CMU IN-FILL

SCALE 1/4" = 1'-0"



5 CMU IN-FILL

SCALE 1/4" = 1'-0"

CMU IN-FILL LEGEND

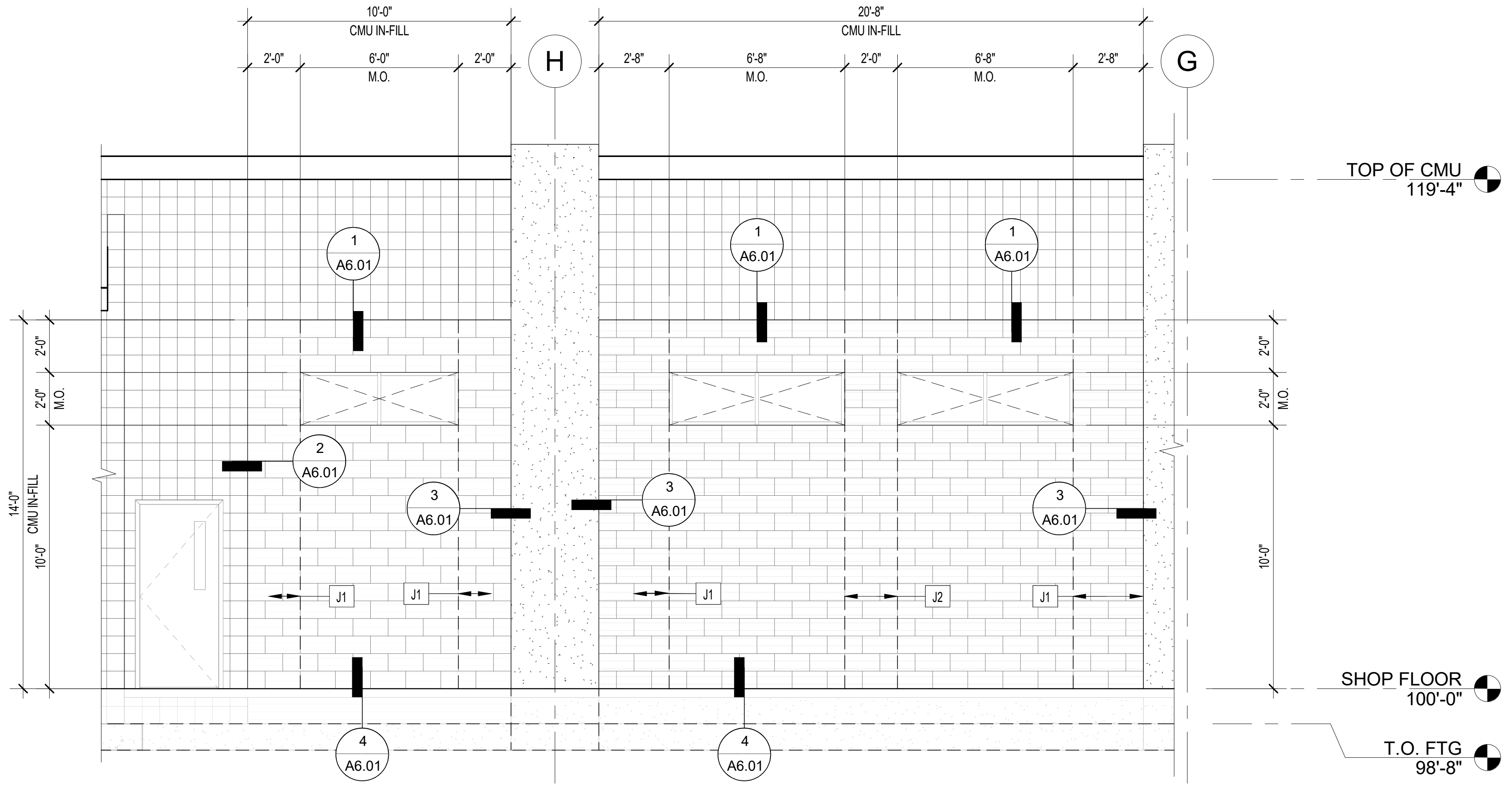
CMU IN-FILL NOTES

1. FOR GENERAL STRUCTURAL NOTES (GSN) SEE S1.1
2. TYPICAL MASONRY IN-FLL WALL

   8" CMU WITH #5 VERTICAL AT 32" O.C. IN CENTER OF WALL AND (2) #4 HORIZONTAL IN BOND BEAMS AT 48" O.C. SOLID GROUT ENTIRE WALL.

JAMB SCHEDULE

MARK	SIZE	VERICAL BARS
J1	8X16	#5 CENTERED IN EACH CELL
J2	8X24	#5 AT EACH FACE OF EACH CELL



3 CMU IN-FILL

SCALE 1/4" = 1'-0"

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CONST. ESTIMATE SET 1-14-25

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025

REF NO.
24-106

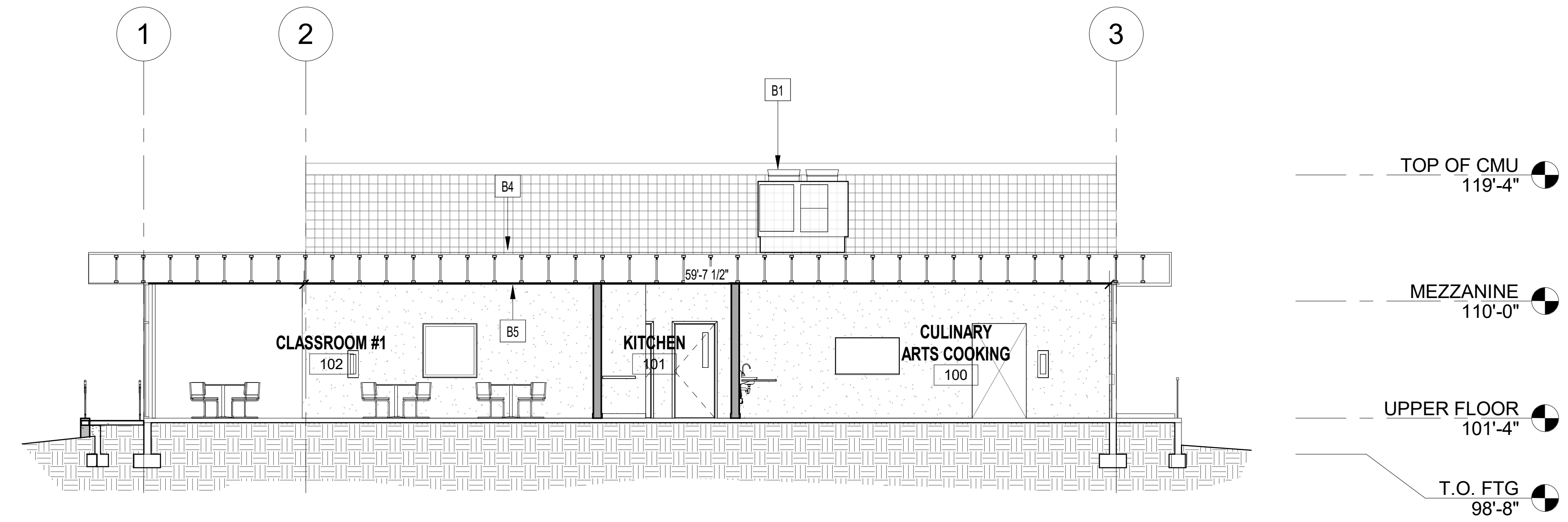
AUTHOR
DK

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

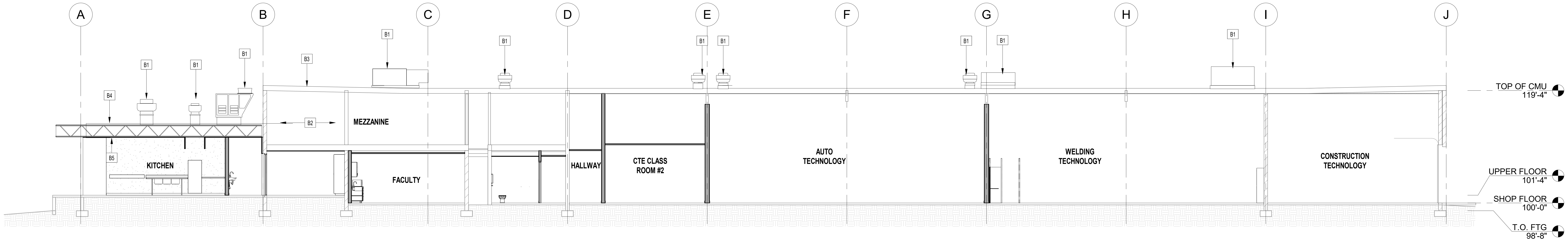
CMU IN-FILL WALLS

SHEET NO.
A2.04



1 BUILDING CROSS SECTION

SCALE 1/8" = 1'-0"



2 BUILDING CROSS SECTION

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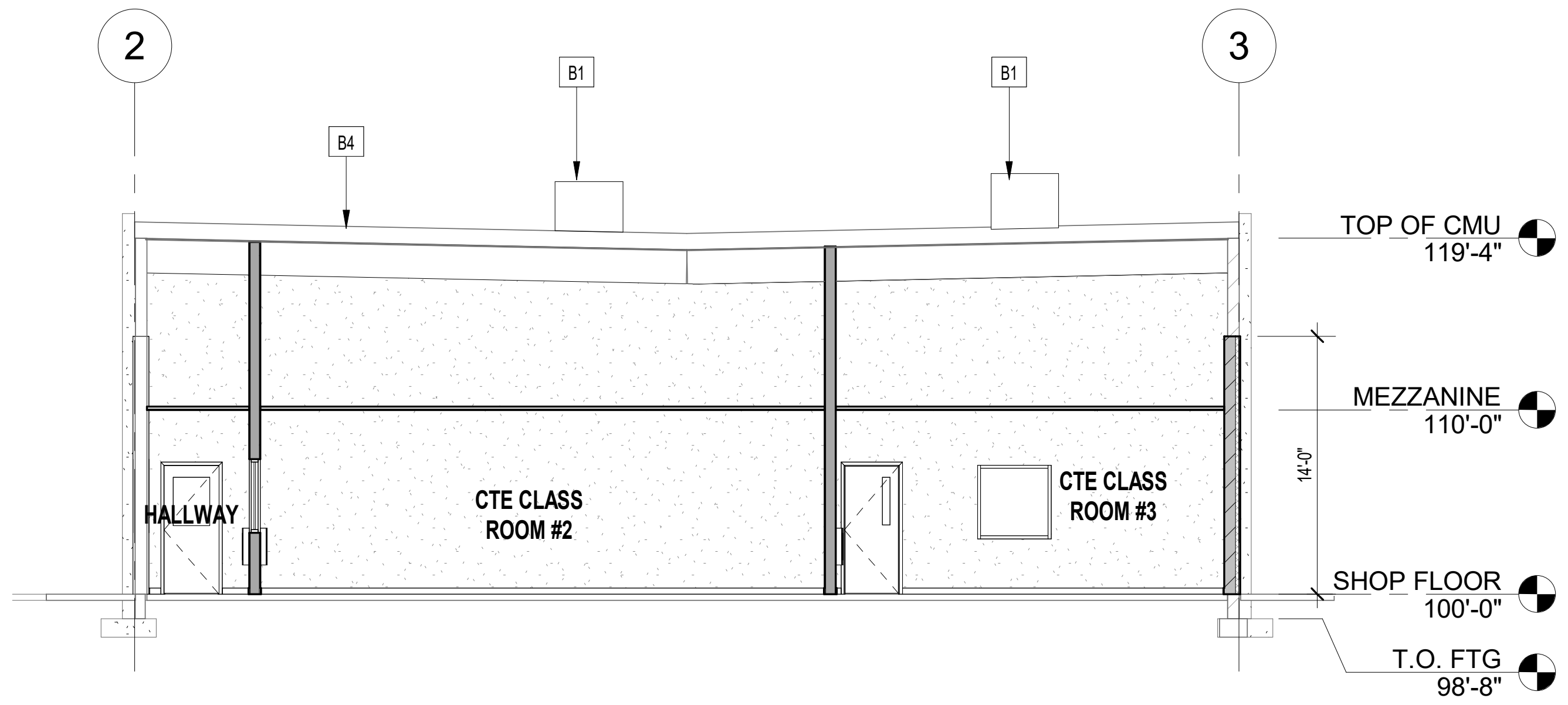

3 BUILDING CROSS SECTION

SCALE 1/8" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
B1	NEW ROOF MOUNTED MECHANICAL EQUIPMENT ON THE ROOF ON FACTORY CURBS. REFER TO MECHANICAL DRAWINGS FOR BALANCE OF INFORMATOIN
B2	EXISTING MEZZANINE MECHANICAL SPACE. REPOINT EXISTING FAILED GROUT JOINTS AT EXPOSED CMU WALLS
B3	EXISTING SINGLE PLY ROOF MEMBRANE OVER SUBTRATE PATCH AND REPAIR WHERE NEW EQUPMENT IS BEING ADDED OR REMOVED
B4	EXISTING SINGLE PLY ROOF MEMBRANE OVER SUBTRATE PATCH AND REPAIR WHERE NEW EQUPMENT IS BEING ADDED OR REMOVED
B5	EXISTING ACOUSTICAL CEILING TILES THAT ARE DIRECTLY ATTACHED TO EXISTING GYP. BD. TO BE REMOVED. INSTALL NEW NEW GYP. BD. FINISH TO BE PAINTED AND TEXTURED.

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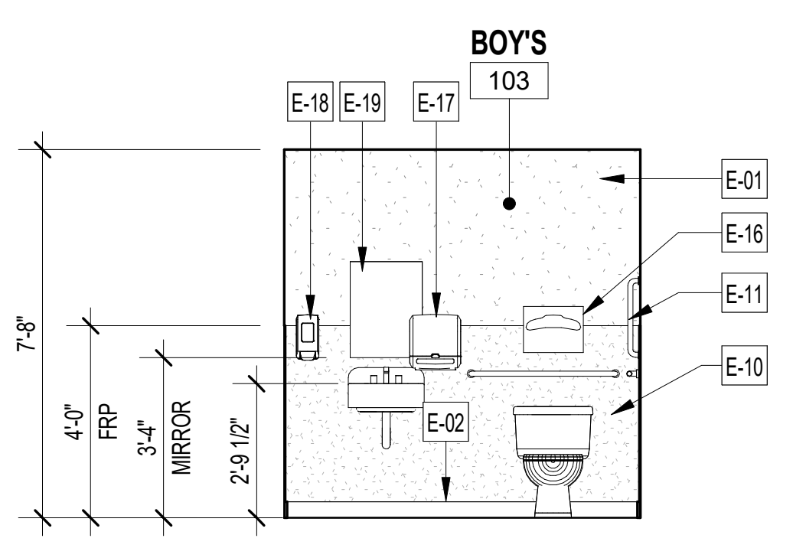
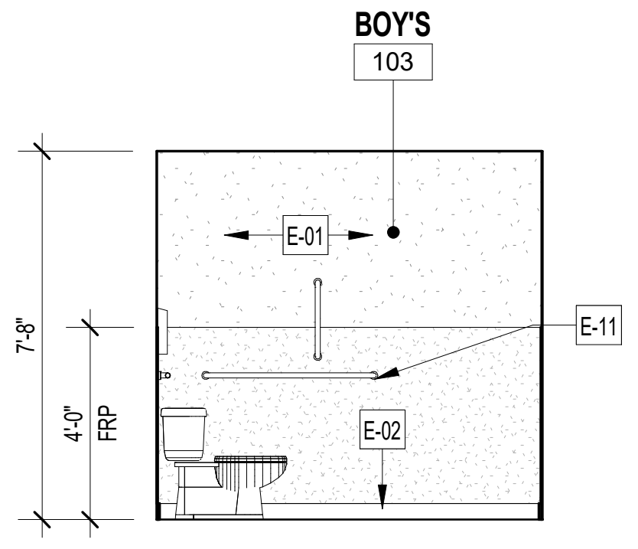
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

BUILDING SECTIONS

SHEET NO.
A3.00



① BOY'S TOILET-103
SCALE 1/4" = 1'-0"



② BOY'S TOILET-103
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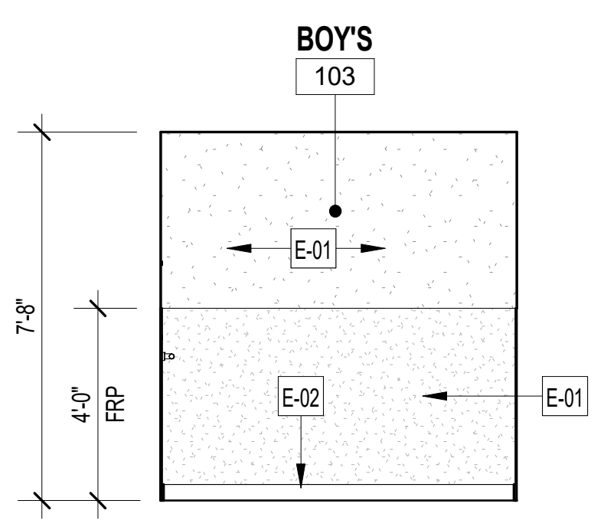

③ BOY'S TOILET-103
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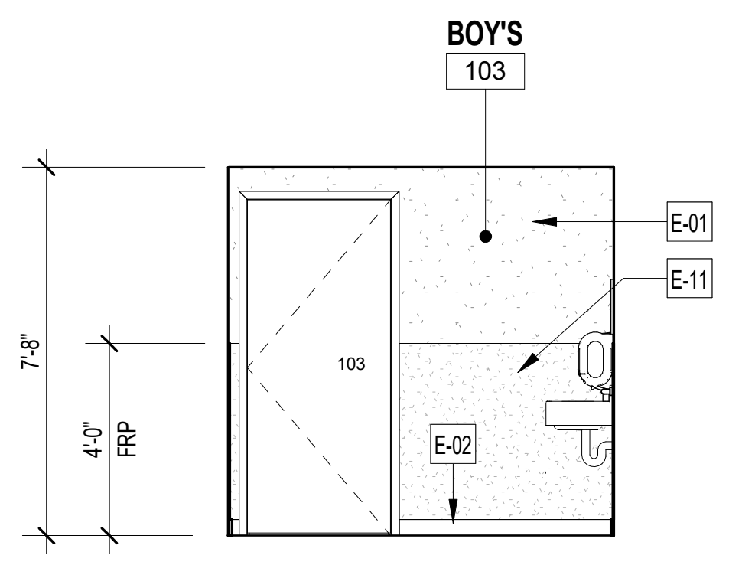

④ BOY'S TOILET-103
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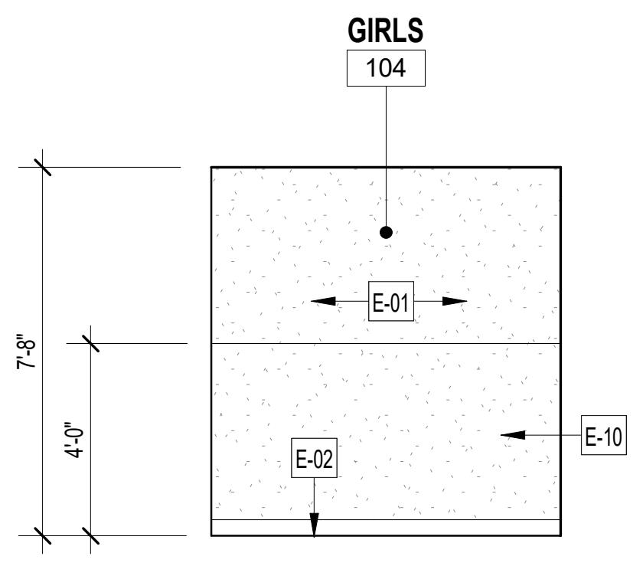

⑤ GIRL'S TOILET-104
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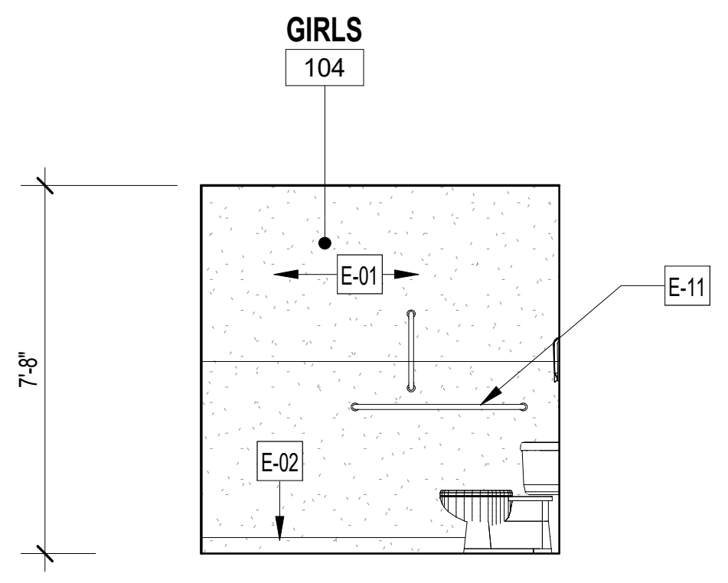

⑥ GIRL'S TOILET-104
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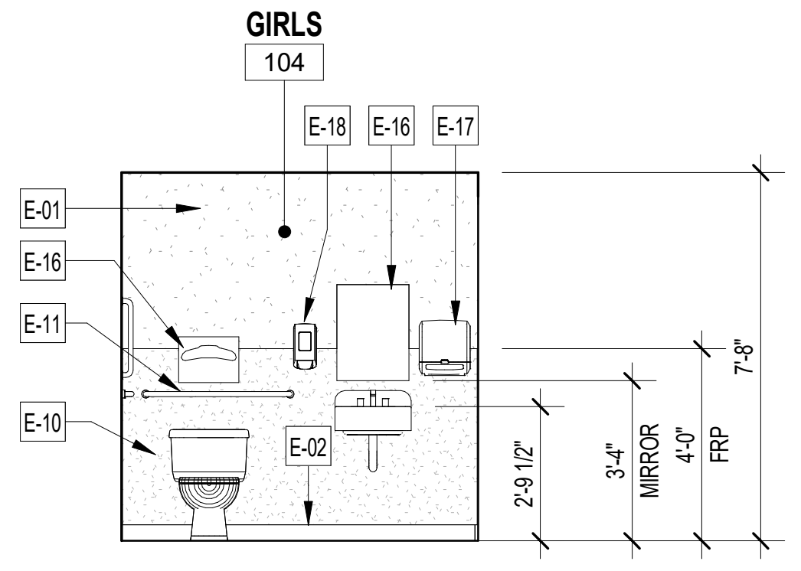

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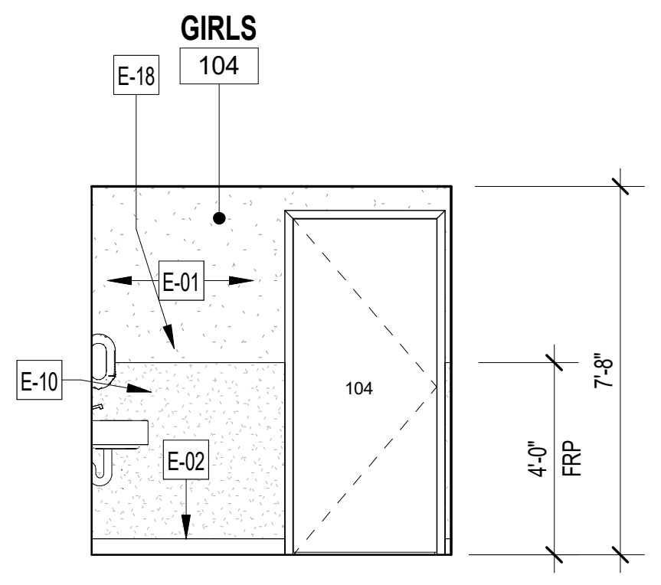

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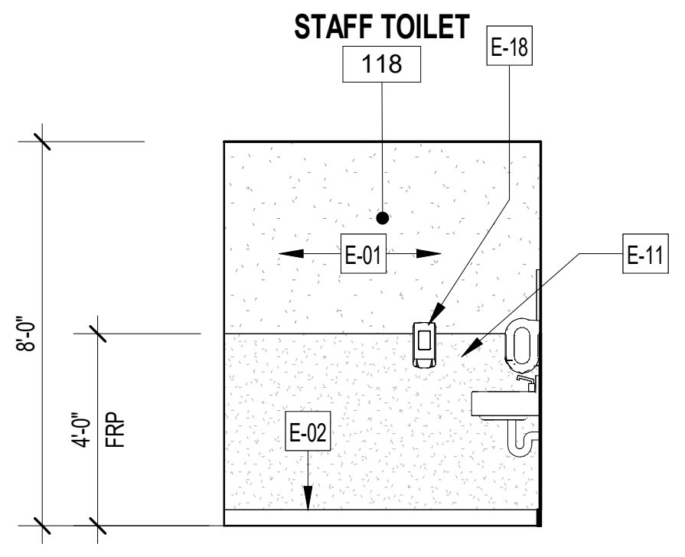

⑨ STAFF TOILET-118
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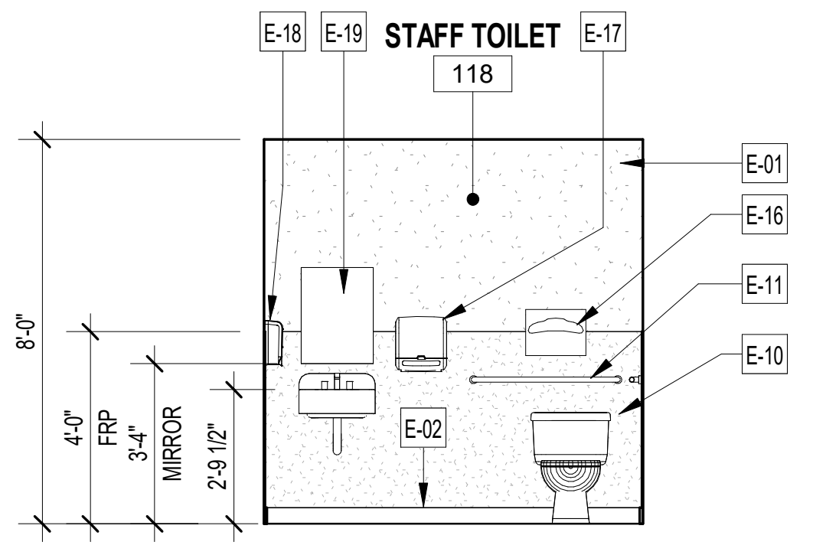

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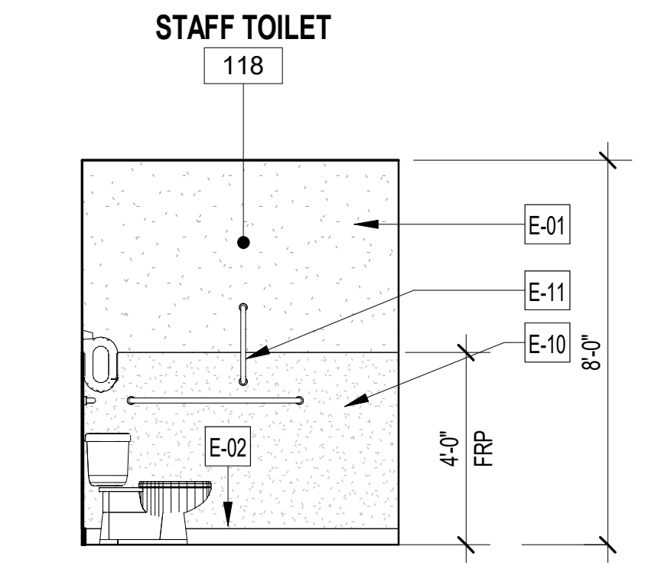

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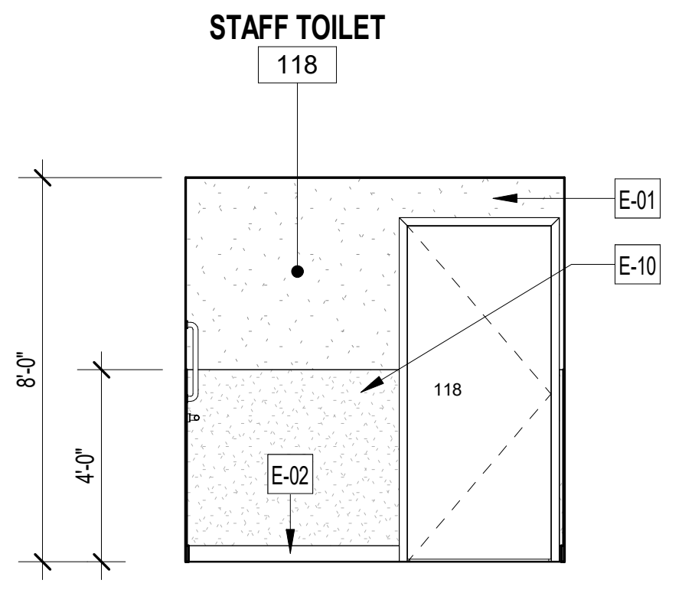

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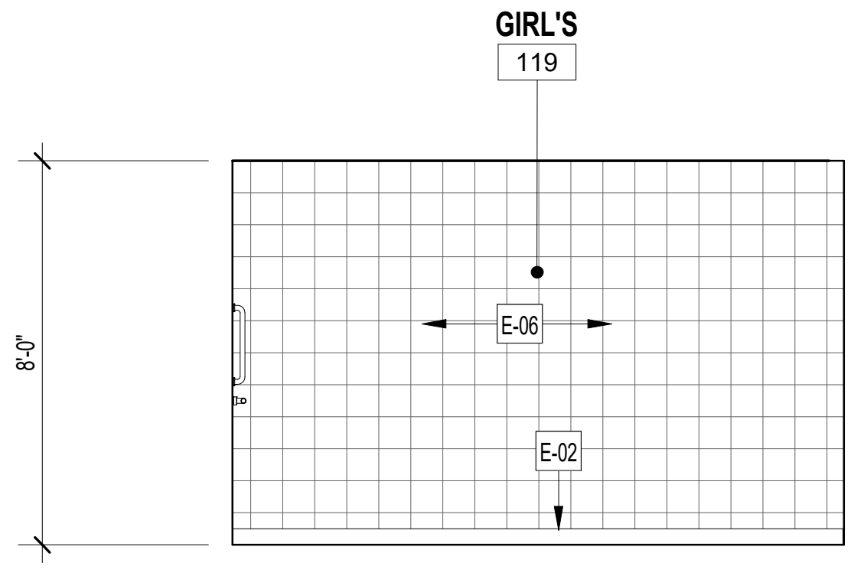

⑬ GIRL'S TOILET-119
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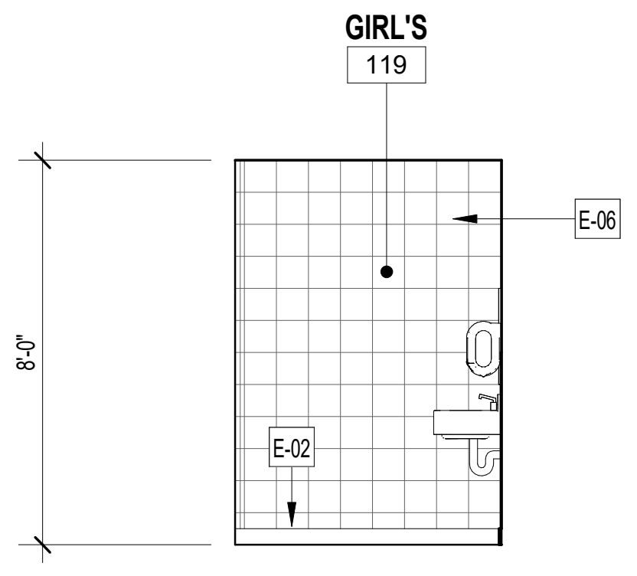

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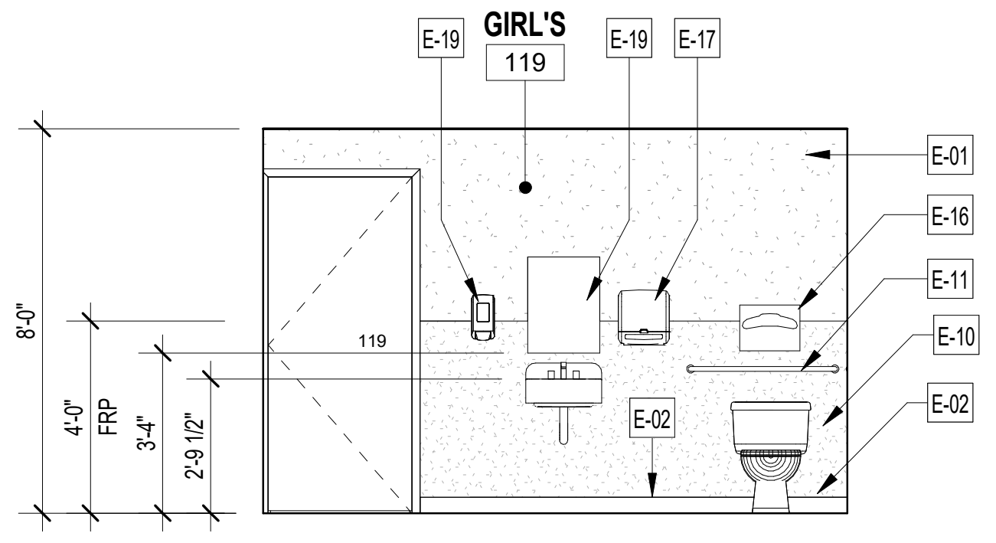

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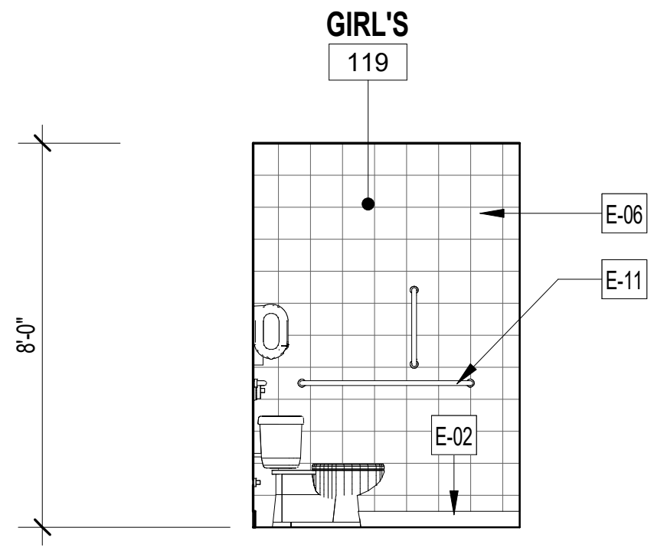

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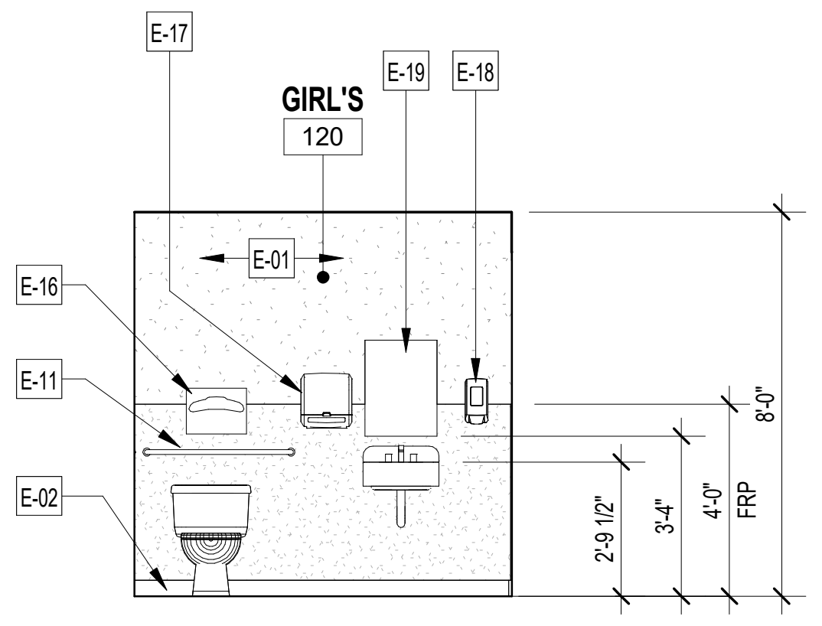

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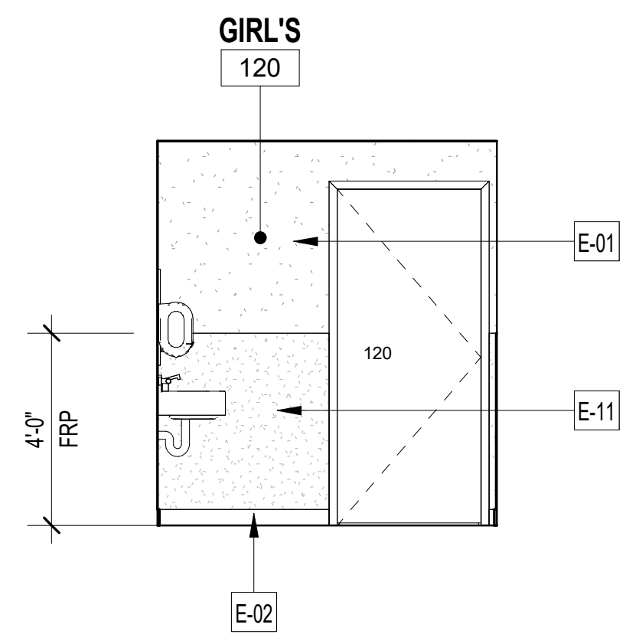

⑱ GIRL'S TOILET-120
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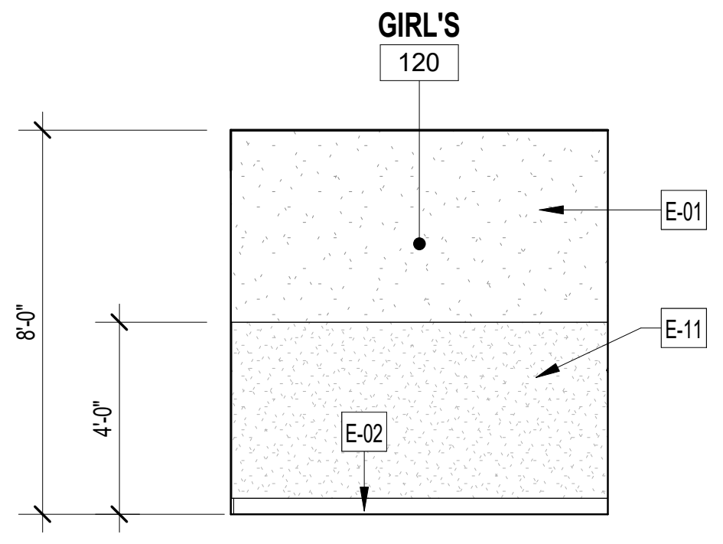

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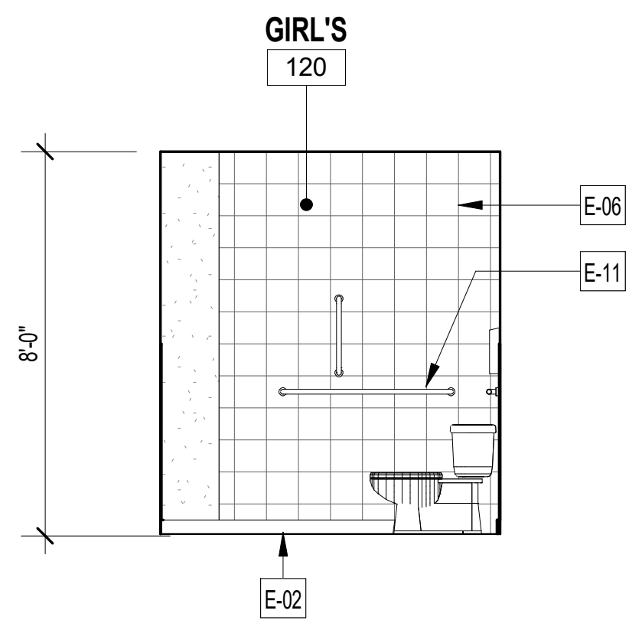

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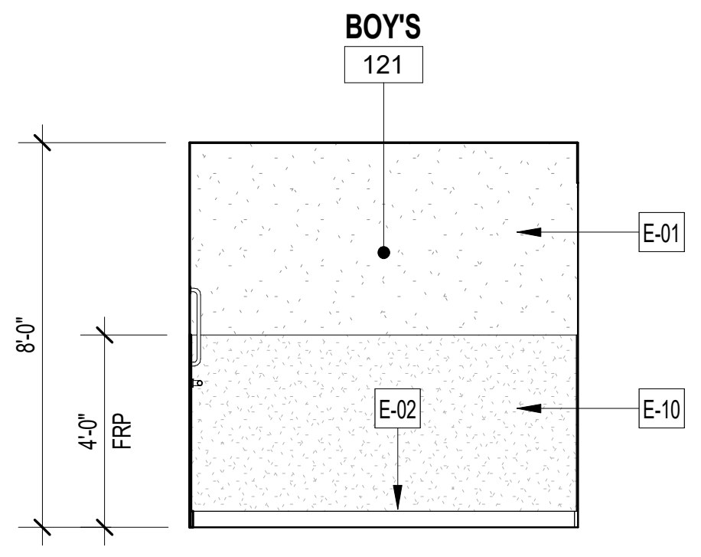

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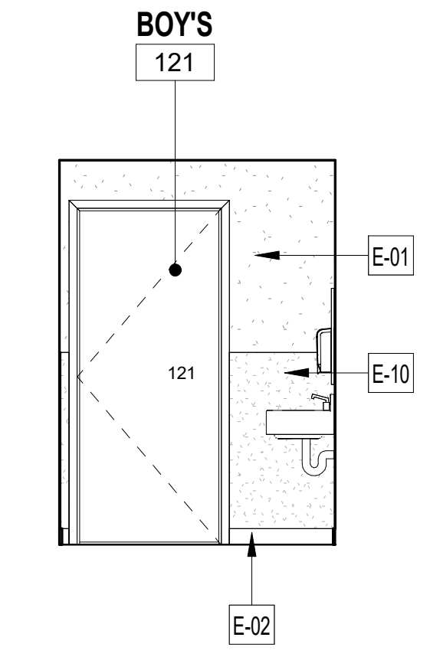

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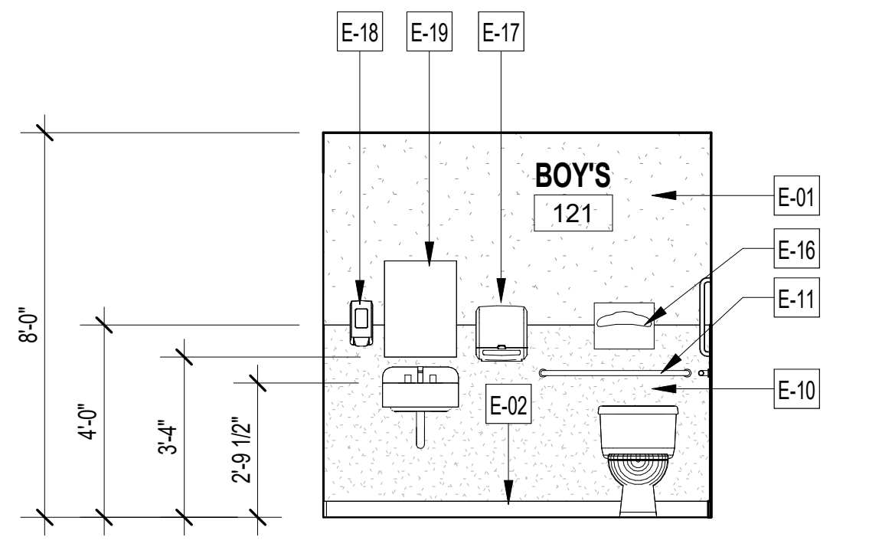

㉓ BOY'S TOILET-121
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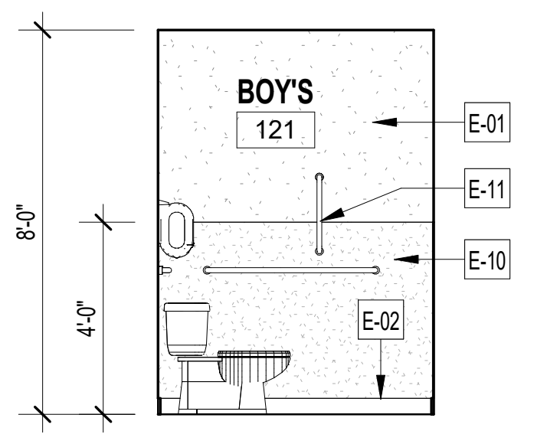

㉔ BOY'S TOILET-121
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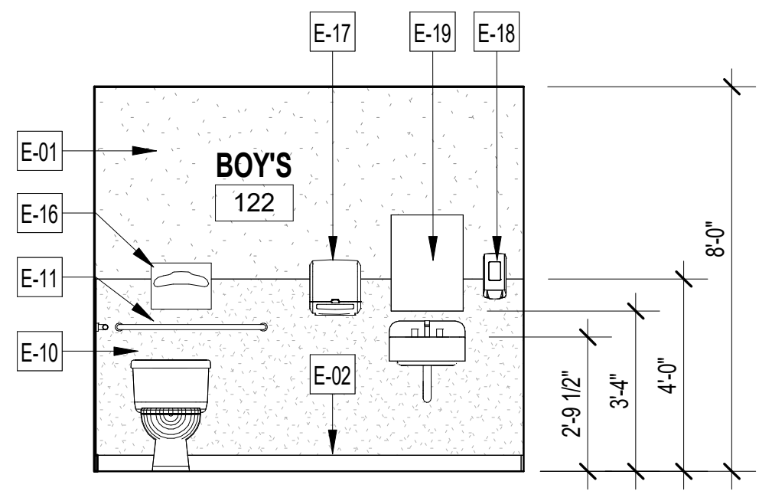

㉕ BOY'S TOILET-122
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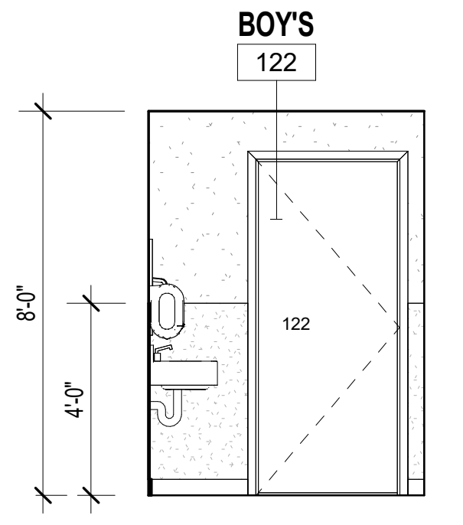

㉖ BOYS TOILET 122
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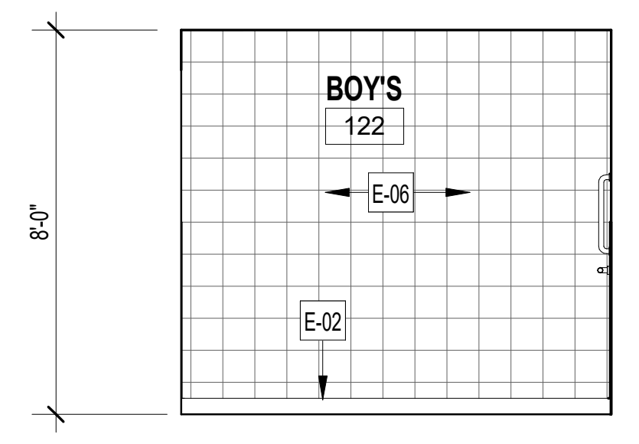

㉗ BOYS TOILET 122
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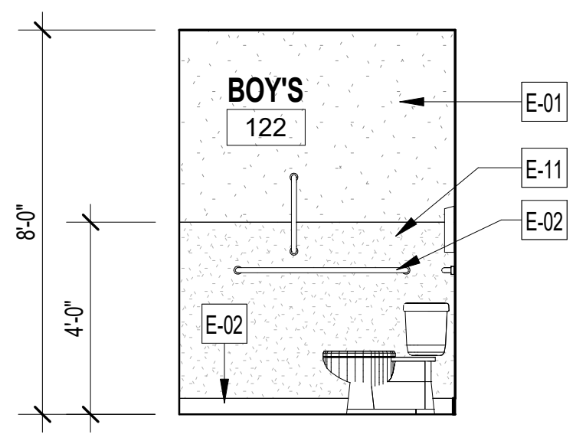

㉘ BOY'S TOILET-122
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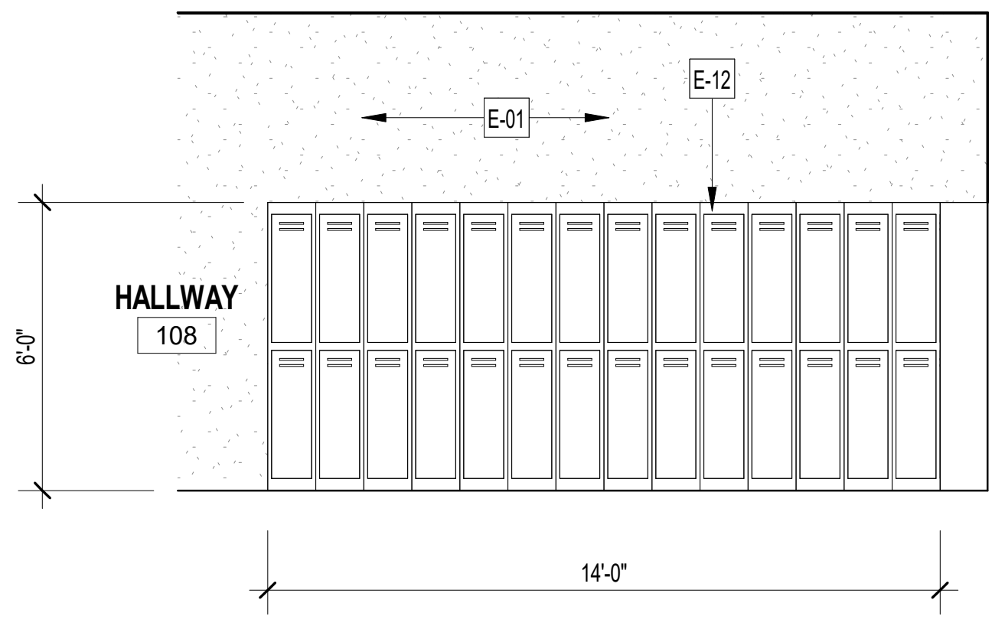

㉙ HALLWAY-108
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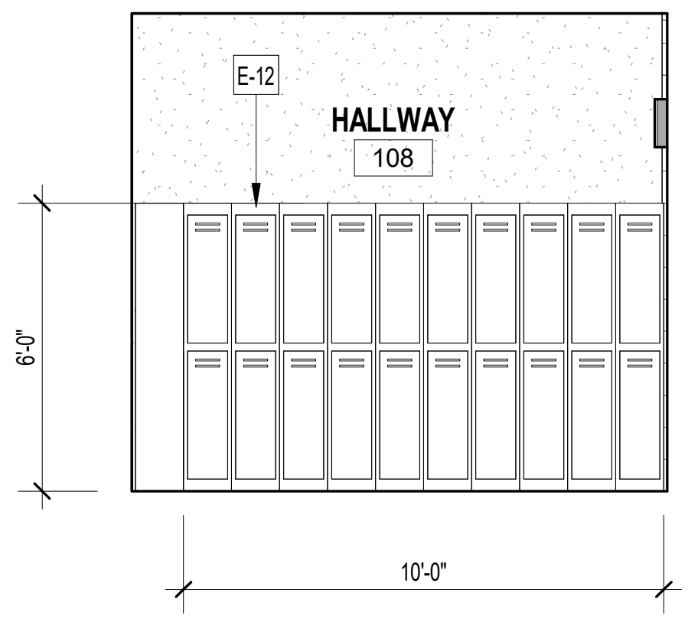

㉚ HALLWAY-108
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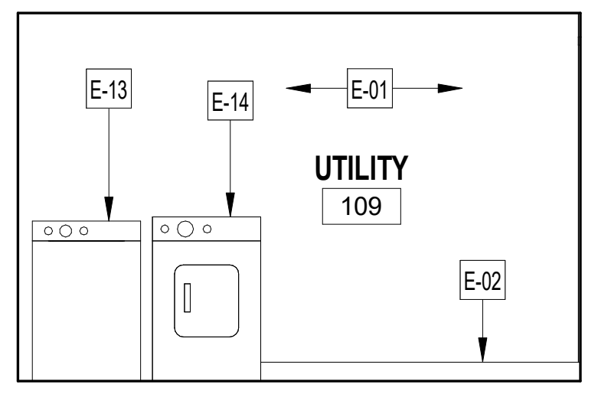
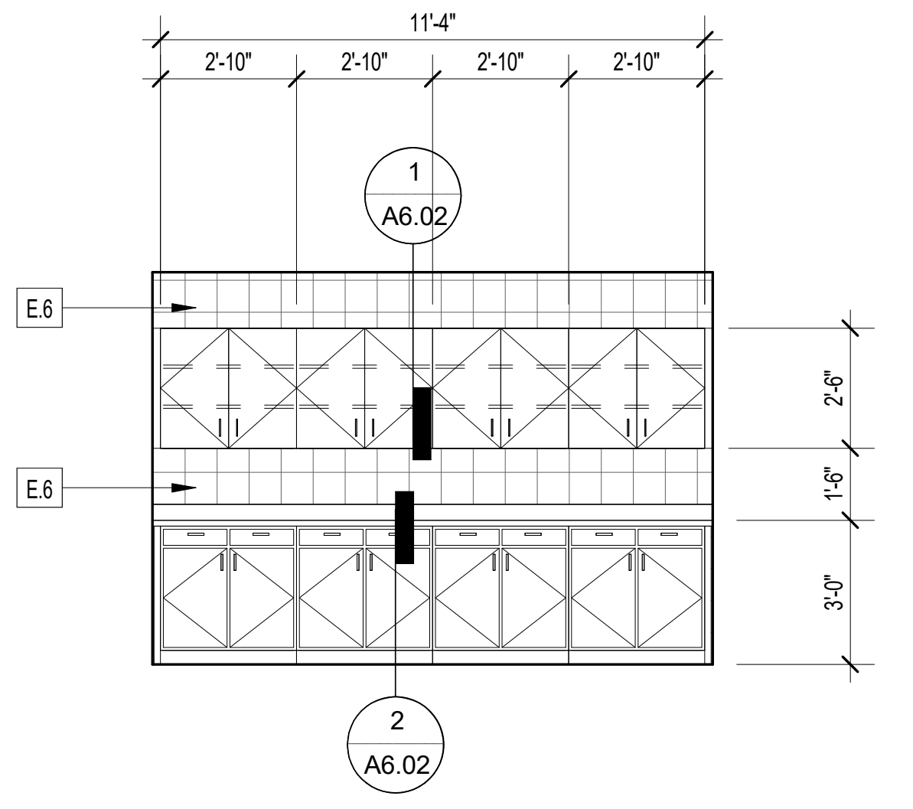


㉛ UTILITY-109
SCALE 1/4" = 1'-0"



㉜ UTILITY-109
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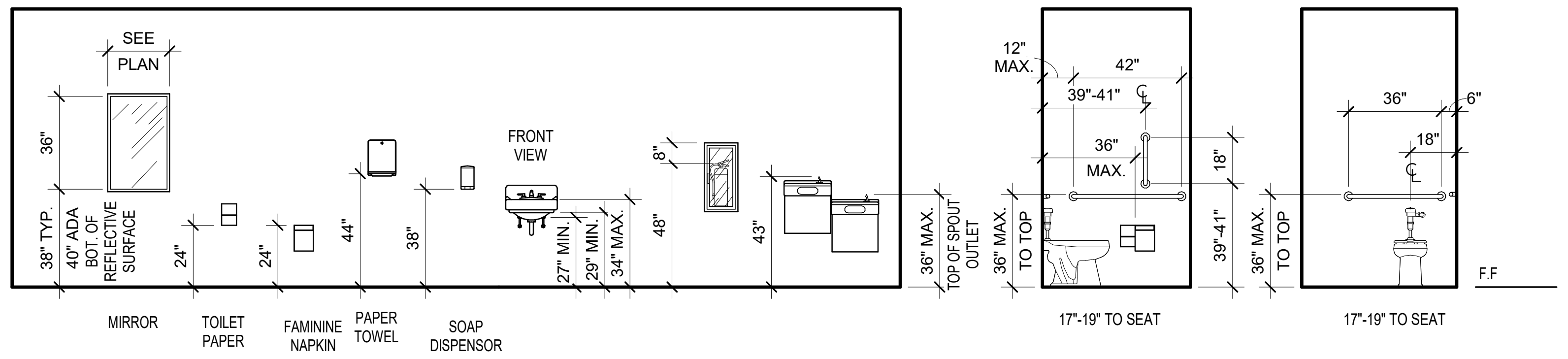

Ⓐ FIXTURE MOUNTING HEIGHTS
SCALE 1/4" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
E-01	PAINTED AND TEXURE GYP. FINISH.
E-02	4" WALL VINYL BASE
E-03	INTERIOR WINDOW TYPE 2A SEE 1A/A5.00
E-04	NEW CMU IN-FILL TO HAVE PAINTED INTERIOR FINISH
E-05	EXTERIOR ALUM. WINDOW SYSTEM WITH INSULATED GLASS PANELS (TYPE B) SEE 1/A5.00
E-06	EXISTING CMU WALL TO BE PAINTED
E-07	IN-FILL EXISTING CMU OPENIG WITH MATCHING CMU AND PAINT TO MATCH WALL
E-08	O.P.O.I REFRIGERATOR
E-09	O.P.O.I COUNTER TOP MICROWAVE OVEN
E-10	FRP WAINSCOT FINISH
E-11	ACCESSIBLE GRAB BARS
E-12	STACKED LOCKERS
E-13	ELECTRIC DRYER (O.P.O.I.)
E-14	WASHER (O.P.O.I.)
E-15	FIRE EXTINGUISHER CABINET
E-16	STAINLESS STEEL SURFACE MOUNTED TOILET SEAT COVER
E-17	PAPER TOWEL DISPENSER
E-18	AUTOMATIC SOAP DISPENSER
E-19	24 X 36 MIRROR IN A STAINLESS STEEL FRAME

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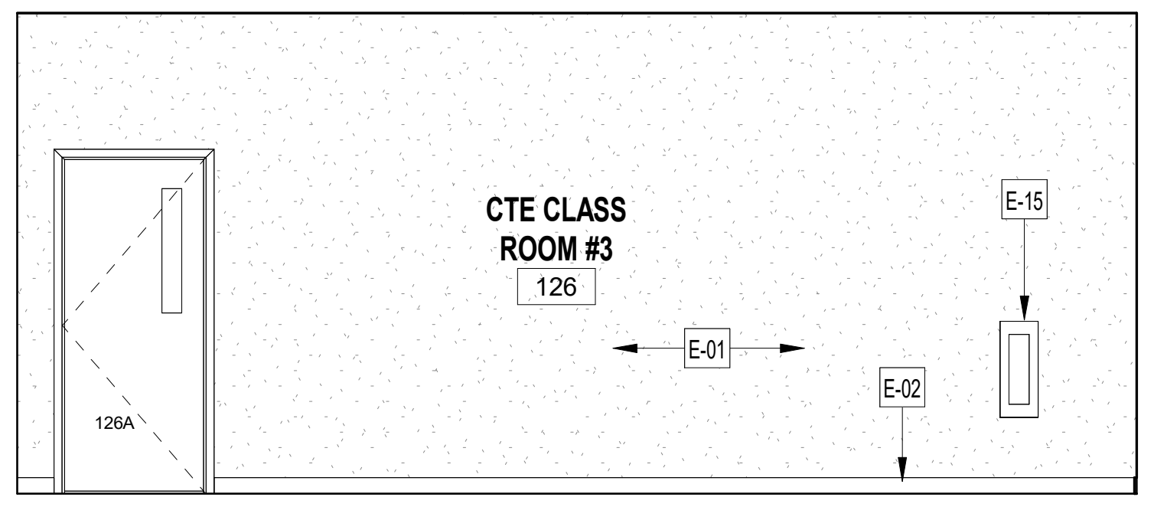
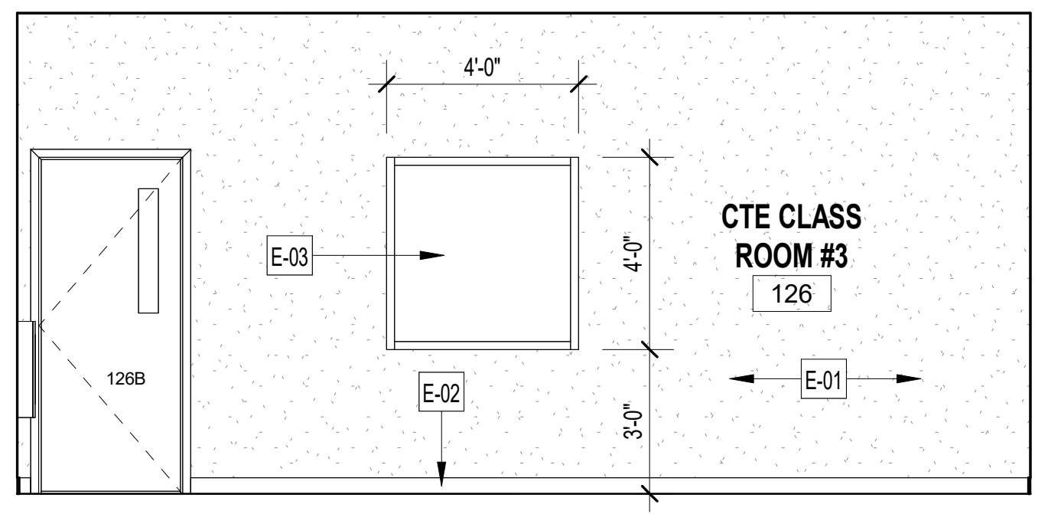
PROJECT
CAREEER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
INTERIOR ELEVATIONS

SHEET NO.
A4.00



1 CTE CLASSROOM #3 - 126
SCALE 1/4" = 1'-0"



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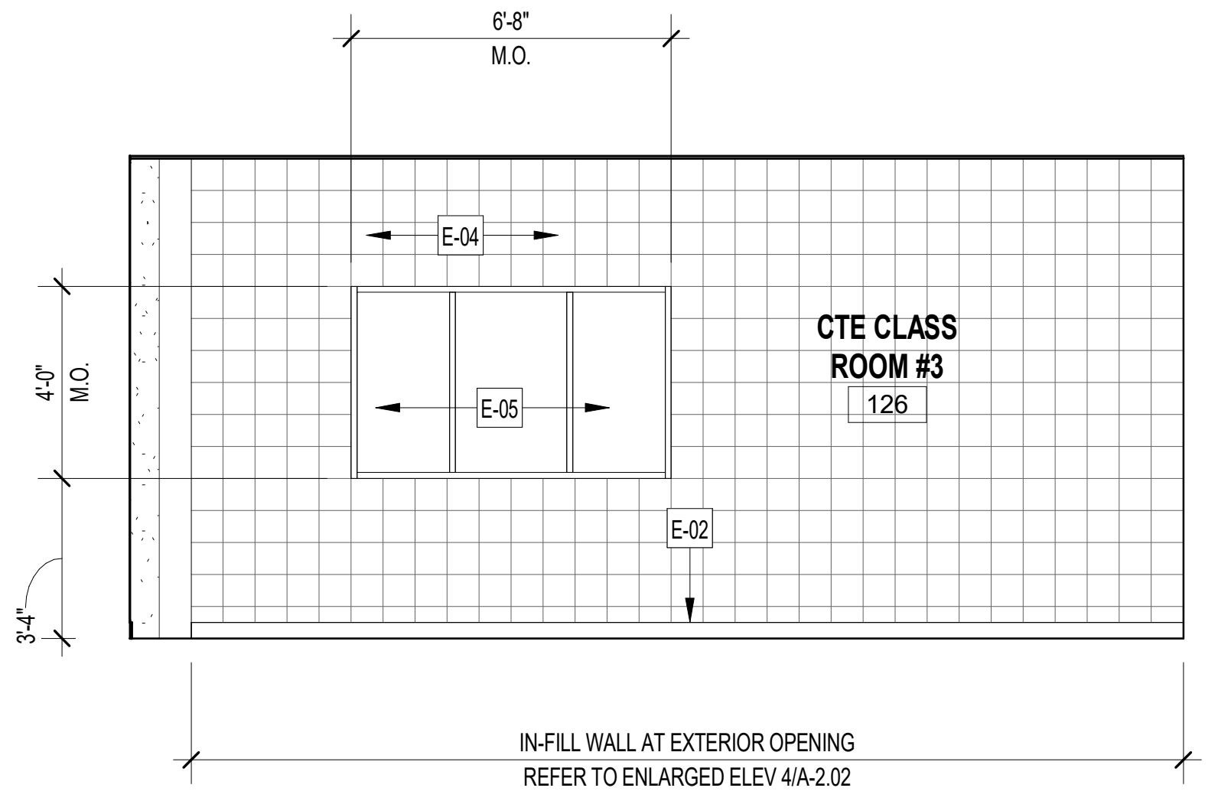
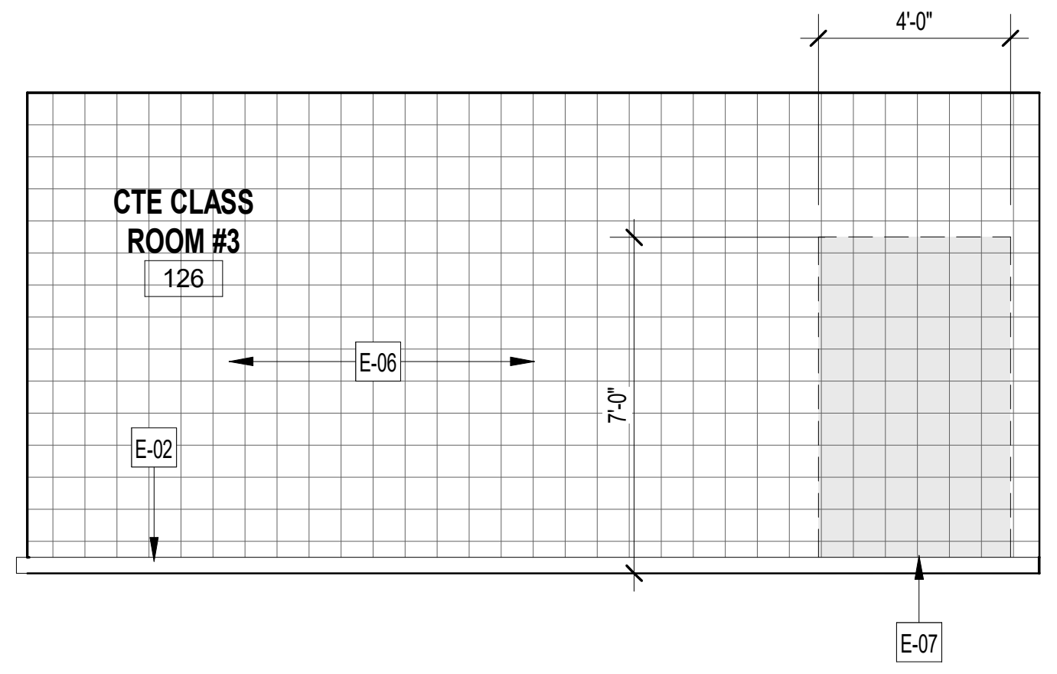

6'-8"
M.O.
E-04
4'-0"
M.O.
E-05
CTE CLASS
ROOM #3
126
E-02
3'-4"
IN-FILL WALL AT EXTERIOR OPENING
REFER TO ENLARGED ELEV 4/A-2.02

3 CTE CLASSROOM #3-126
SCALE 1/4" = 1'-0"



4 CTE CLASSROOM #3-126
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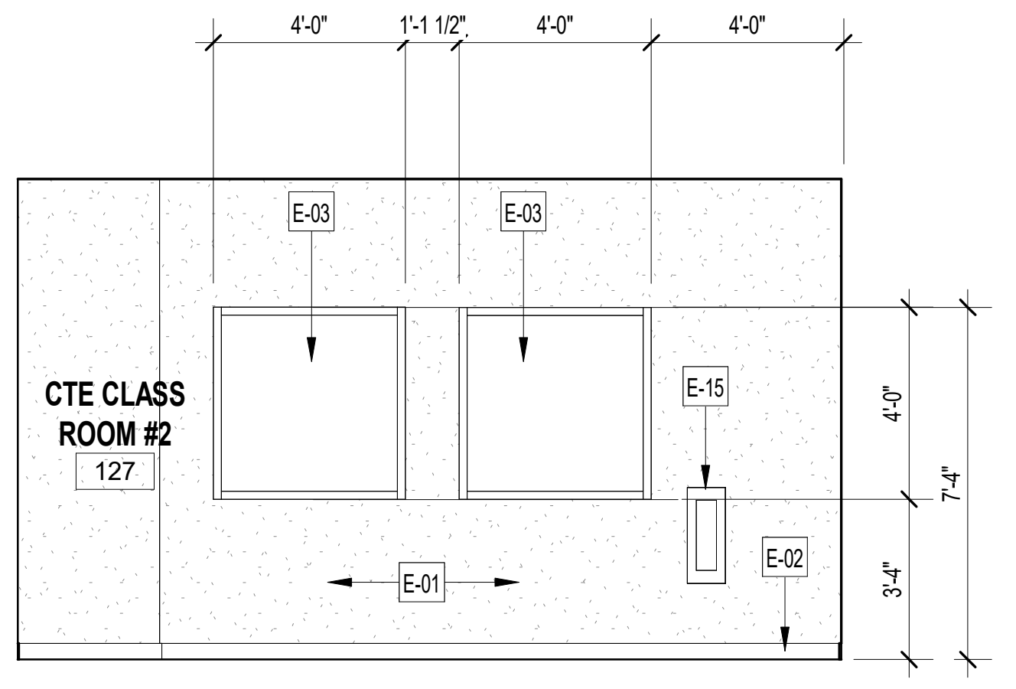

5 CTE CLASSROOM #2-127
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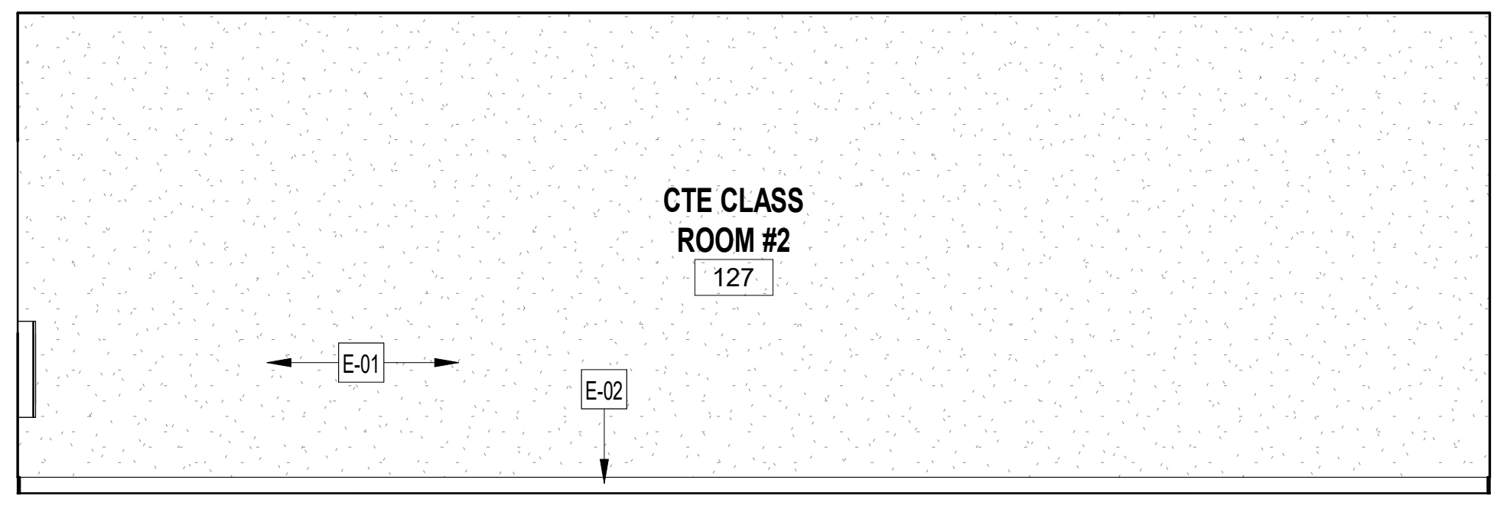

6 CTE CLASSROOM #2-127
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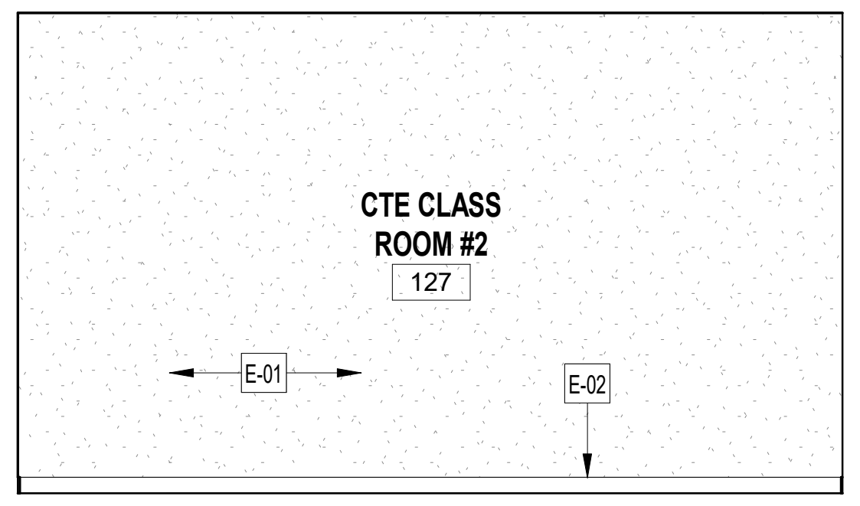

7 CTE CLASSROOM #2-127
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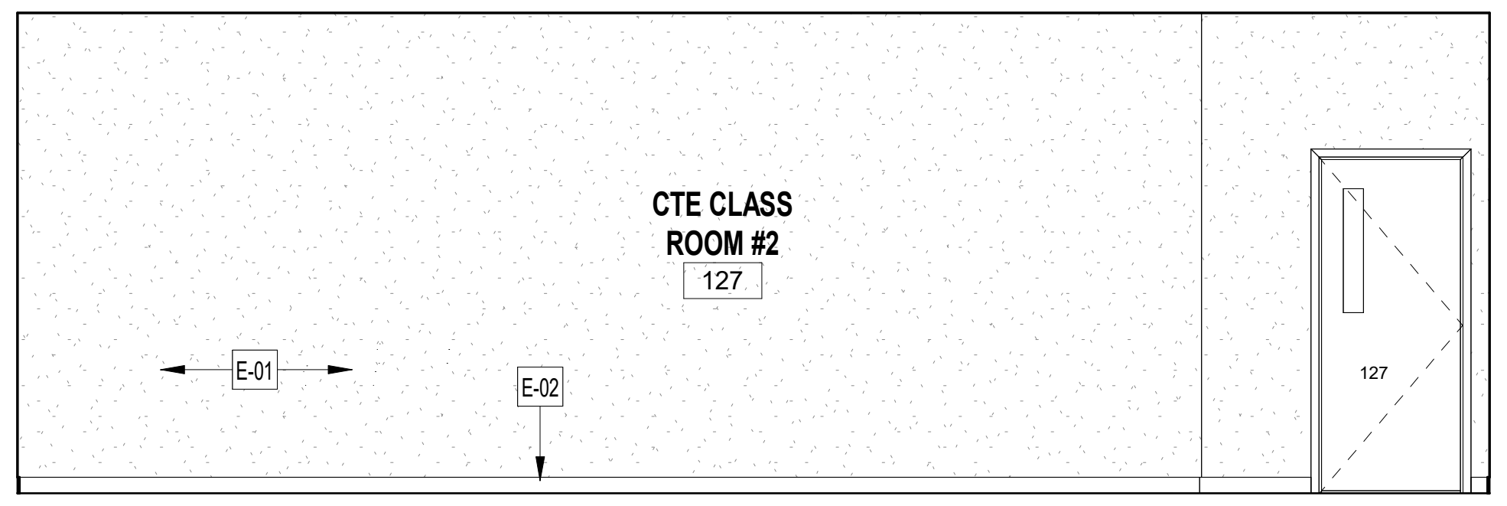

8 CTE CLASSROOM #2-217
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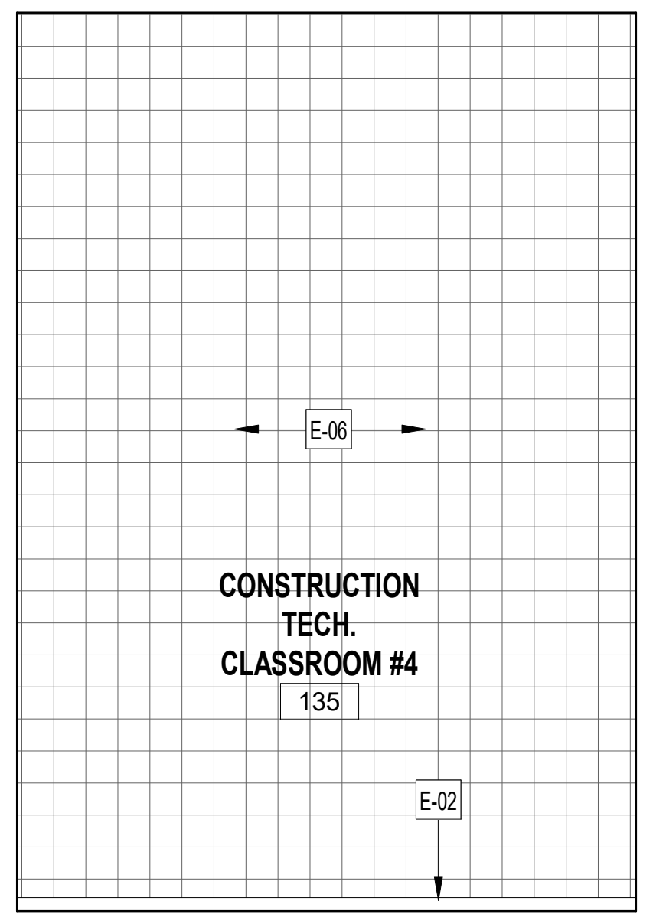

9 CONST TECH CLASSROOM #4-135
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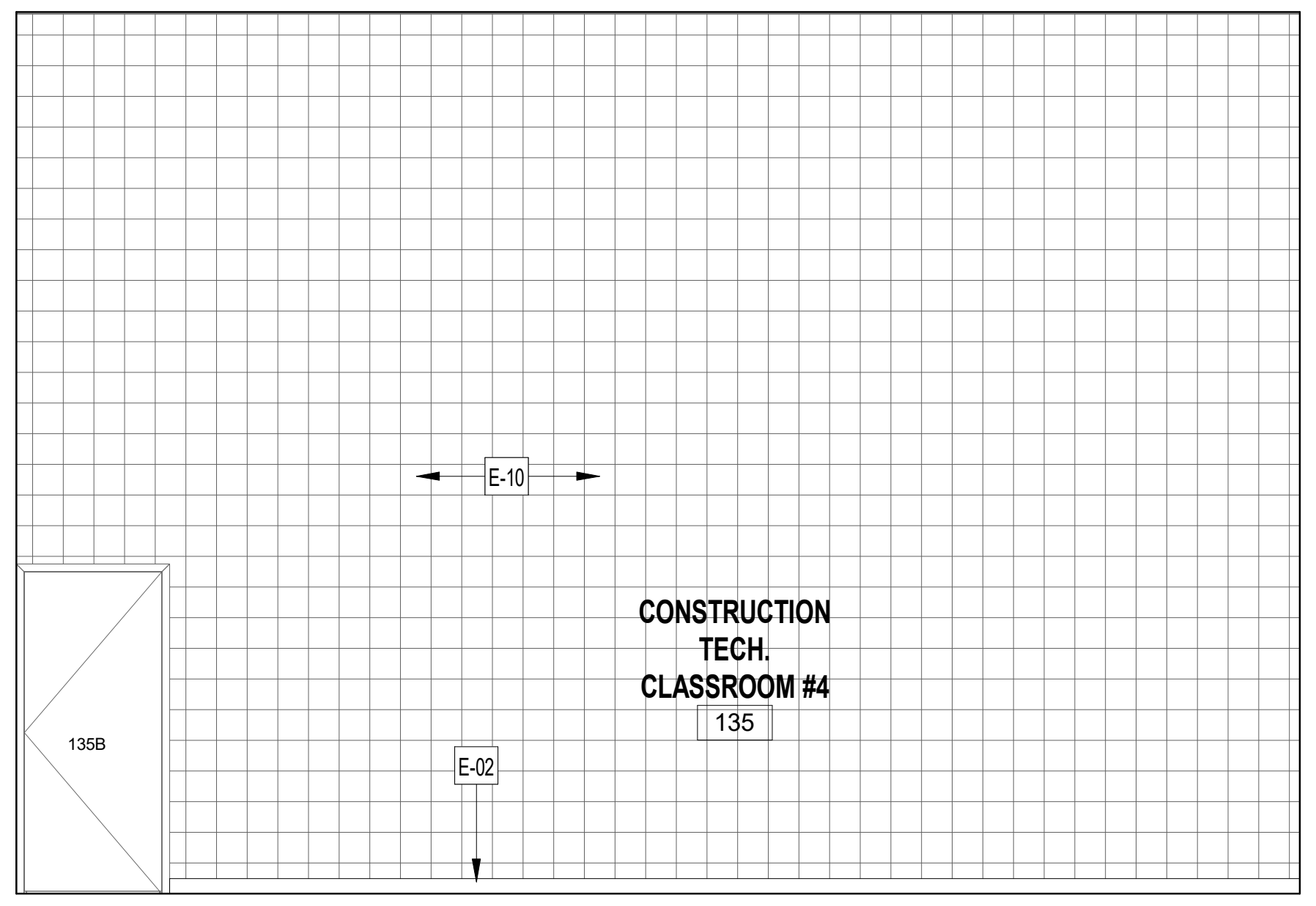

10 CONST TECH CLASSROOM #4-135
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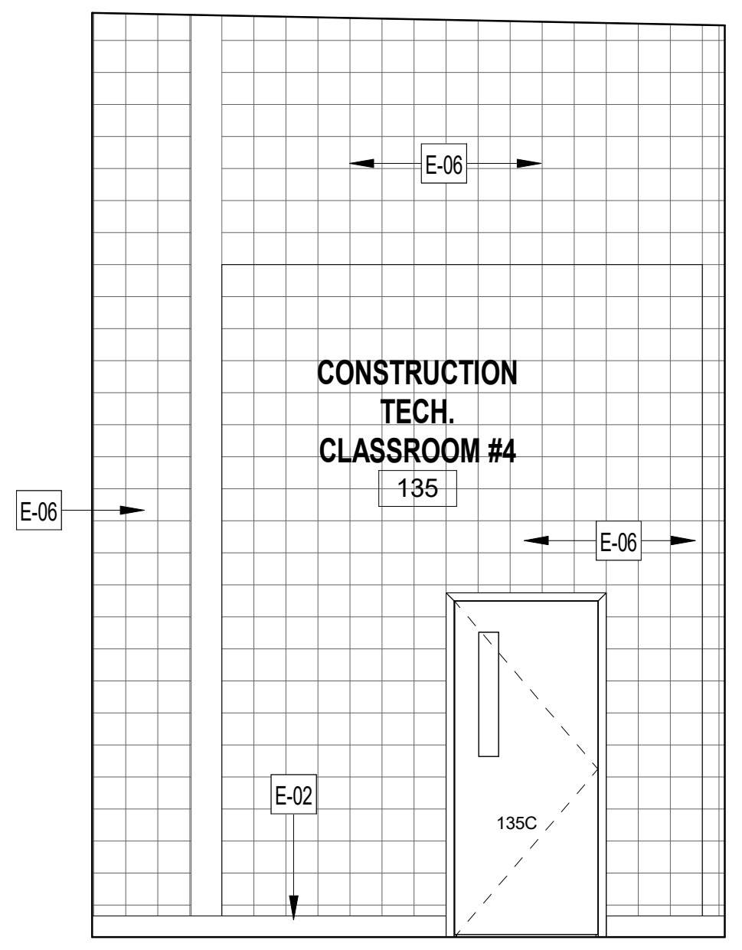
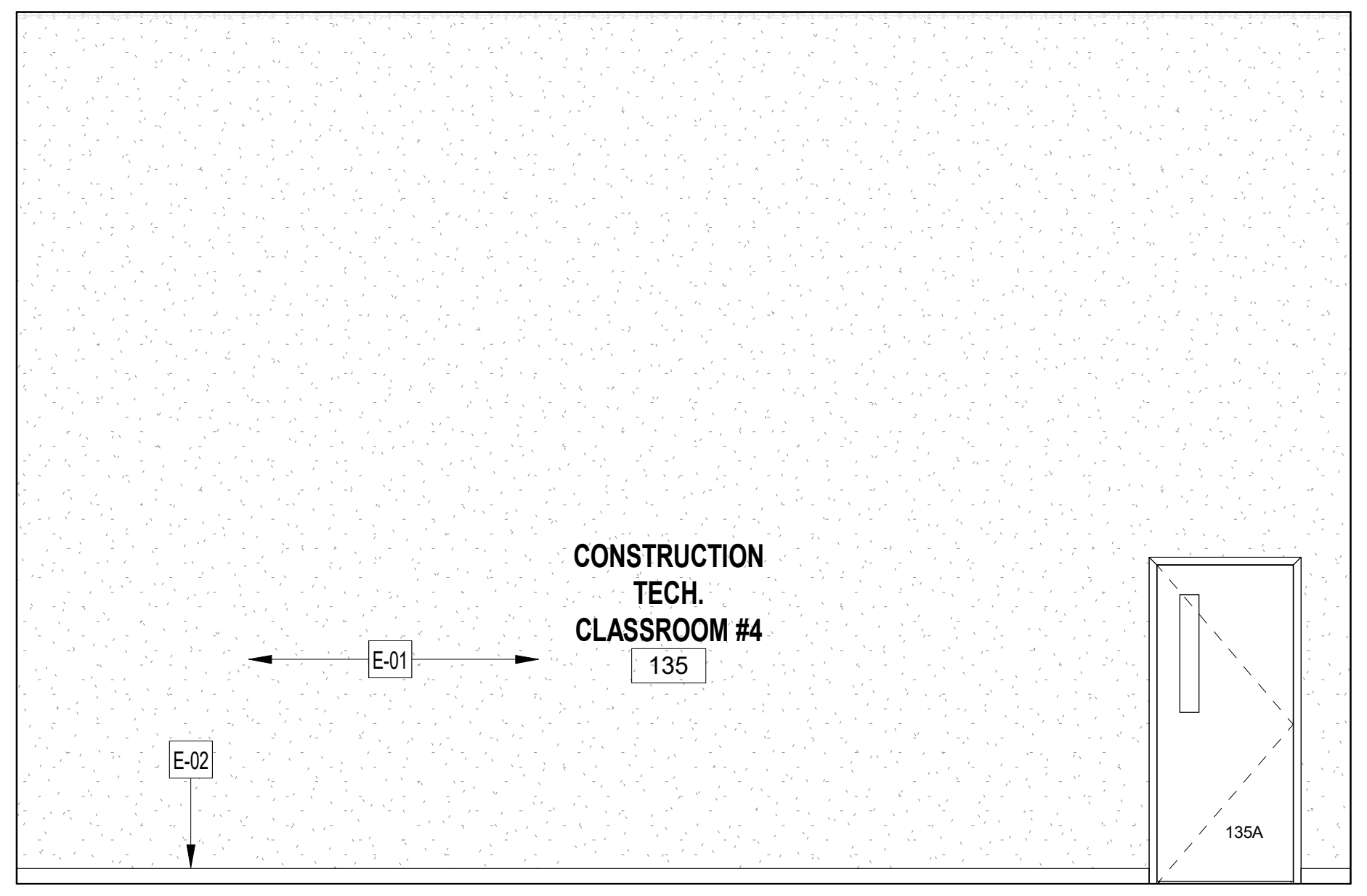
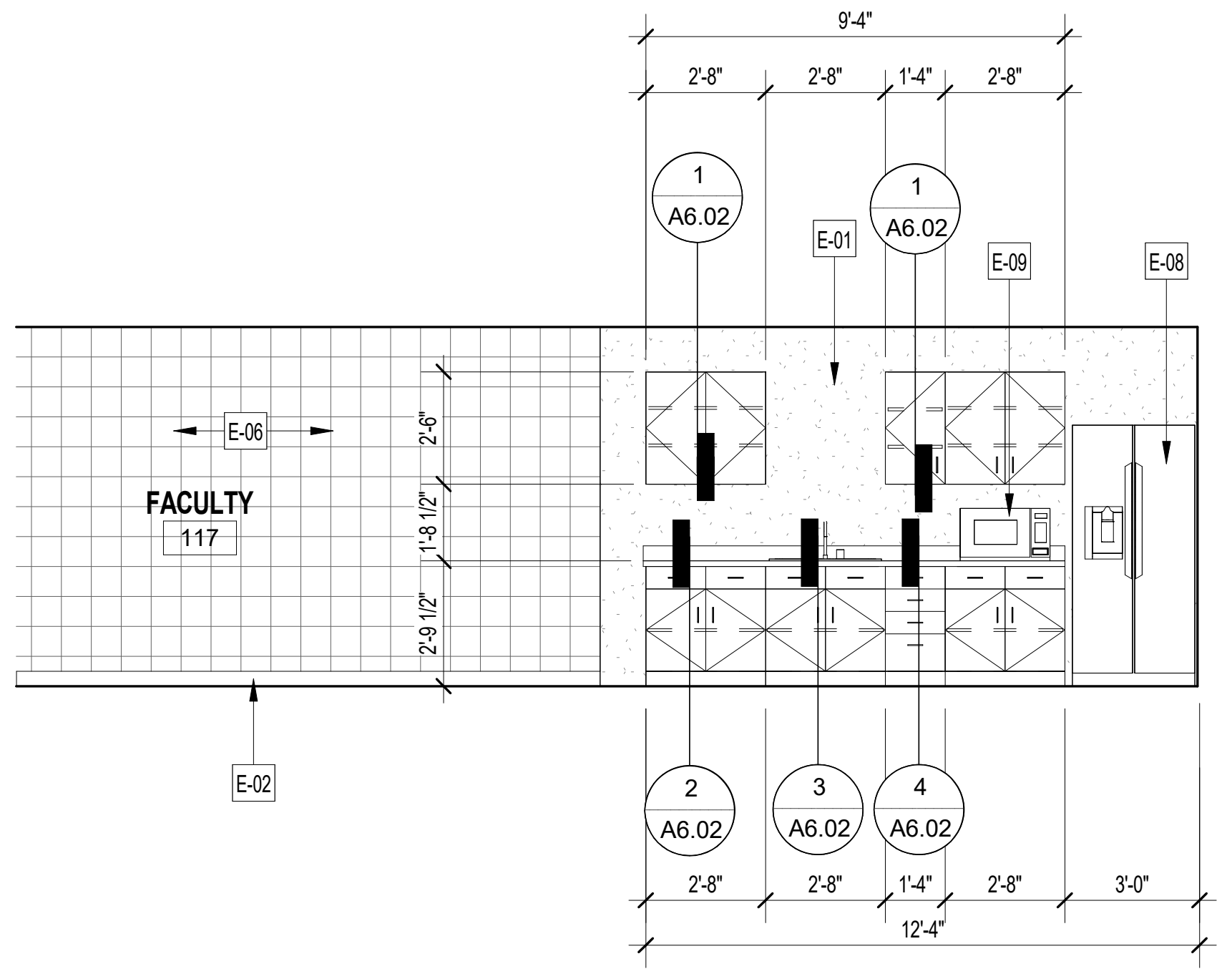


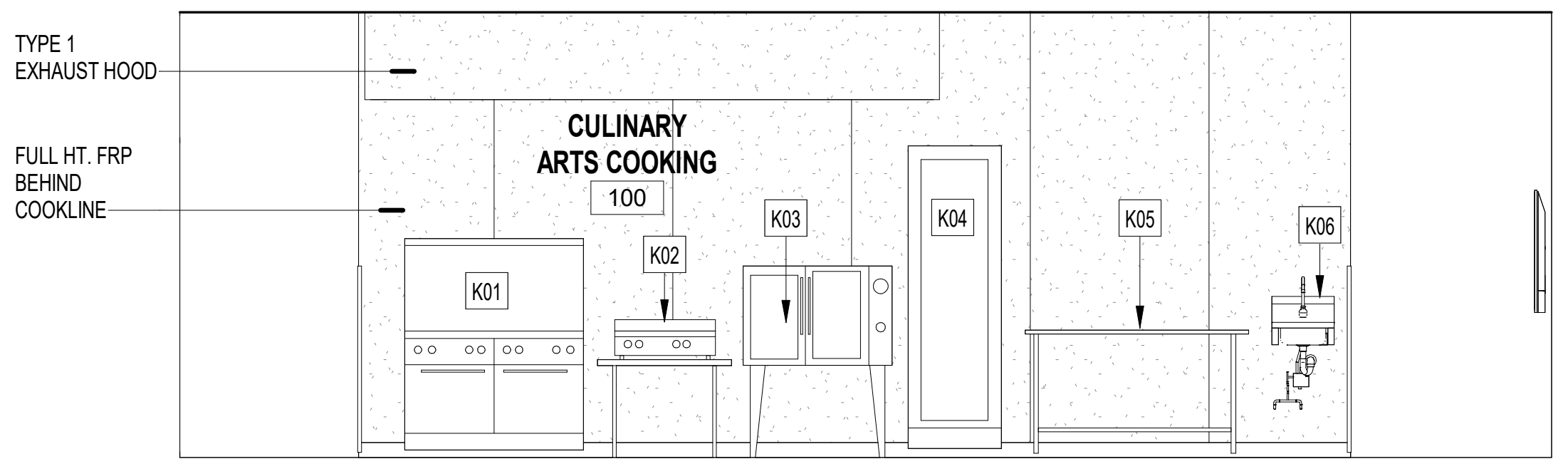
11 CONST TECH CLASSROOM #4-135
SCALE 1/4" = 1'-0"



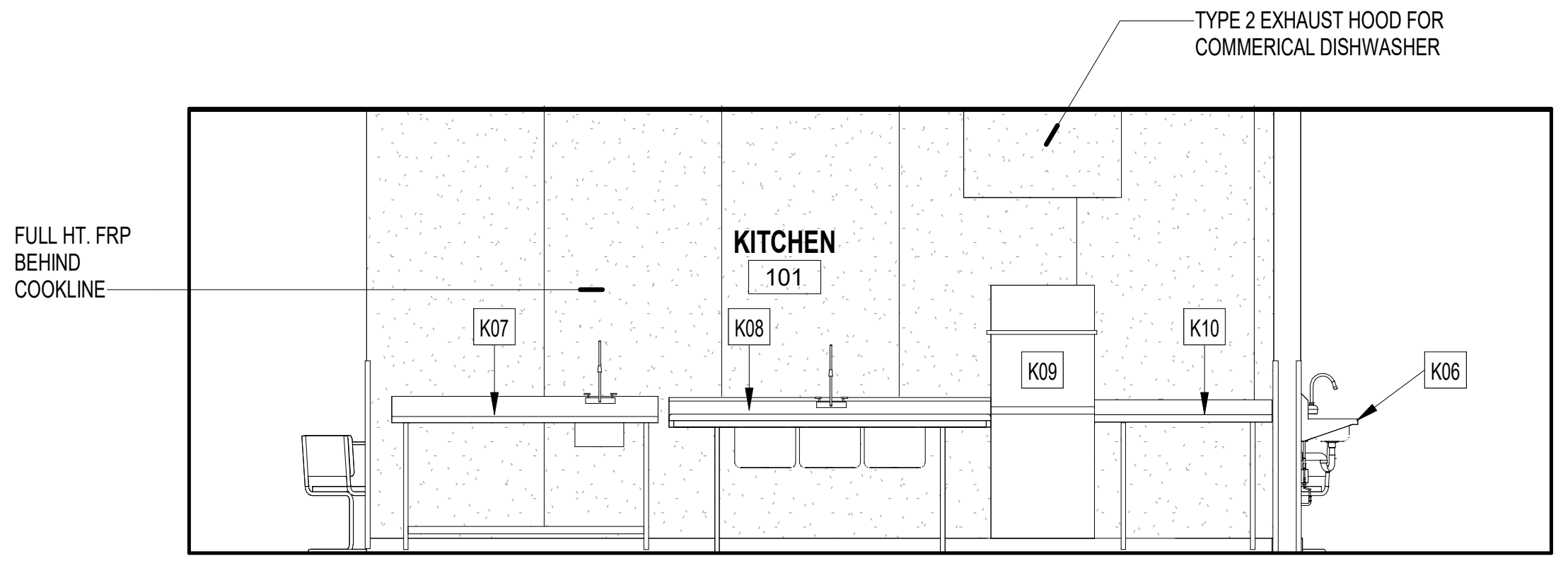
12 CONST TECH CLASSROOM #4-135
SCALE 1/4" = 1'-0"



13 FACUTLY -117
SCALE 1/4" = 1'-0"



14 CULINARY ARTS - 100
SCALE 1/4" = 1'-0"



15 KITCHEN - 101
SCALE 1/4" = 1'-0"

KEYNOTES

KEYNOTE	DESCRIPTION
E-01	PAINTED AND TEXURE GYP. FINISH.
E-02	4" WALL VINYL BASE
E-03	INTERIOR WINDOW TYPE 2A SEE 1A/A5.00
E-04	NEW CMU IN-FILL TO HAVE PAINTED INTERIOR FINISH
E-05	EXTERIOR ALUM. WINDOW SYSTEM WITH INSULATED GLASS PANELS (TYPE B) SEE 1/A5.00
E-06	EXISTING CMU WALL TO BE PAINTED
E-07	IN-FILL EXISTING CMU OPENIG WITH MATCHING CMU AND PAINT TO MATCH WALL
E-08	O.P.O.I REFRIGERATOR
E-09	O.P.O.I COUNTER TOP MICROWAVE OVEN
E-10	FRP WAINSCOT FINISH
E-11	ACCESSIBLE GRAB BARS
E-12	STACKED LOCKERS
E-13	ELECTRIC DRYER (O.P.O.I.)
E-14	WASHER (O.P.O.I.)
E-15	FIRE EXTINGUISHER CABINET
E-16	STAINLESS STEEL SURFACE MOUNTED TOILET SEAT COVER
E-17	PAPER TOWEL DISPENSER
E-18	AUTOMATIC SOAP DISPENSER
E-19	24 X 36 MIRROR IN A STAINLESS STEEL FRAME

KEYNOTE	DESCRIPTION
K01	FLOOR FINISH TRANSISTION - REFER TO ENLARGED KITCHEN PLAN
K02	GRIDDLE ON A STAINLESS STEEL STAND TABLE- REFER TO ENLARGED KITCHEN PLAN
K03	STACKED OVEN- REFER TO ENLARGED KITCHEN PLAN
K04	PROOFER OVEN- REFER TO ENLARGED KITCHEN PLAN
K05	PREP TABLE - REFER TO ENLARGED KITCHEN PLAN
K06	HANDWASH SINK- REFER TO ENLARGED KITCHEN PLAN
K07	STAINLESS STEEL RINSE TABLE - REFER TO ENLARGED KITCHEN PLAN
K08	THREE COMPARTMENT SINK - REFER TO ENLARGED KITCHEN PLAN
K09	COMMERICAL DISHWASHER- REFER TO ENLARGED KITCHEN PLAN

PROFESSIONAL OF
RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025

REF NO.
24-106

AUTHOR
DPW NO

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

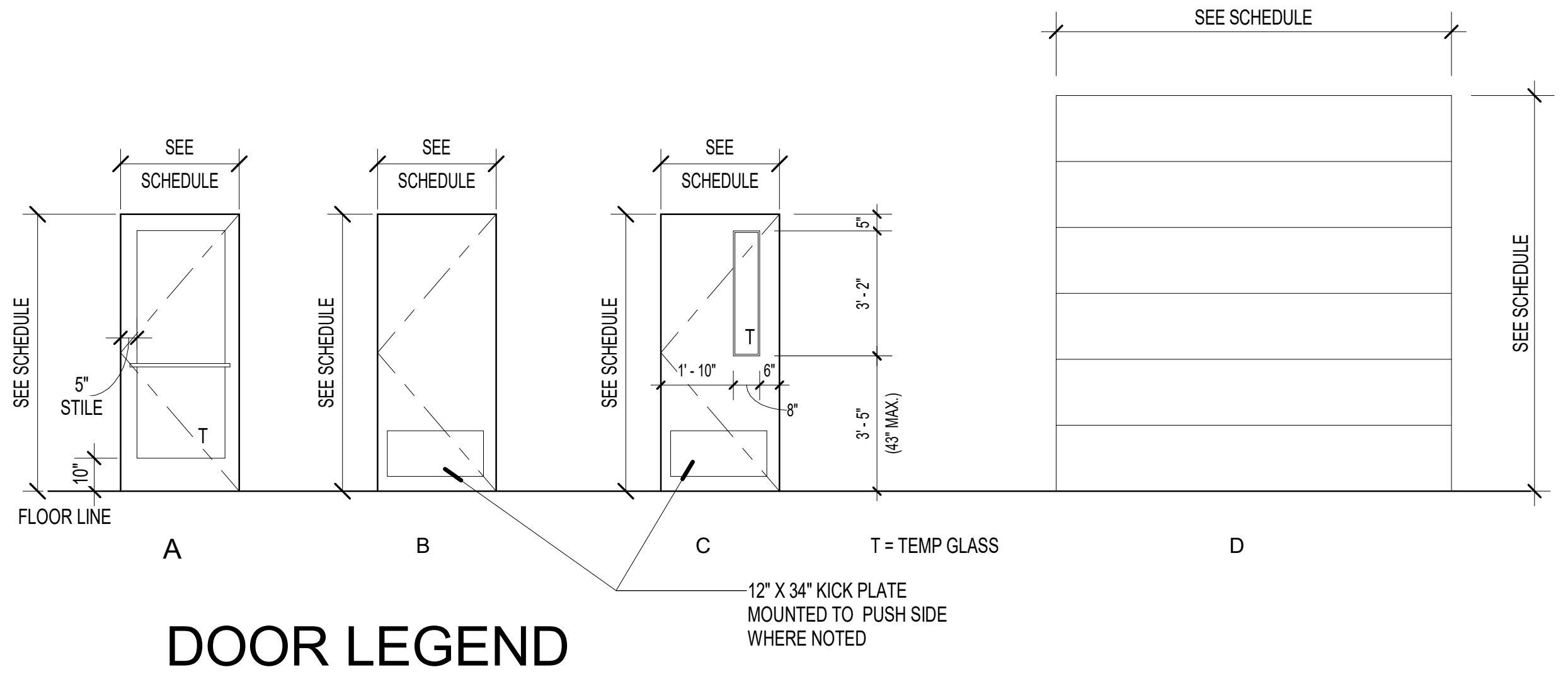
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

INTERIOR ELEVATIONS

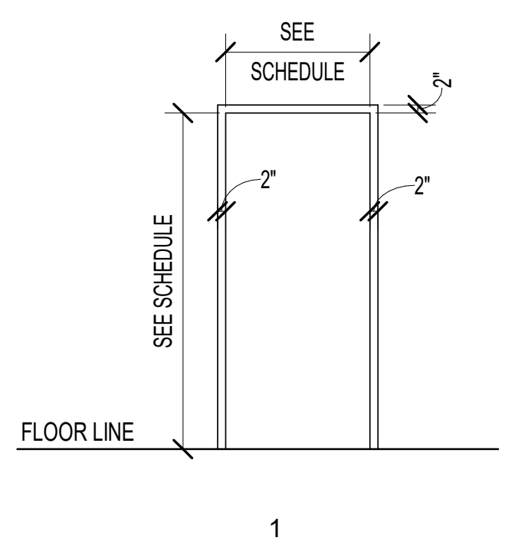
SHEET NO.
A4.01

DOOR SCHEDULE

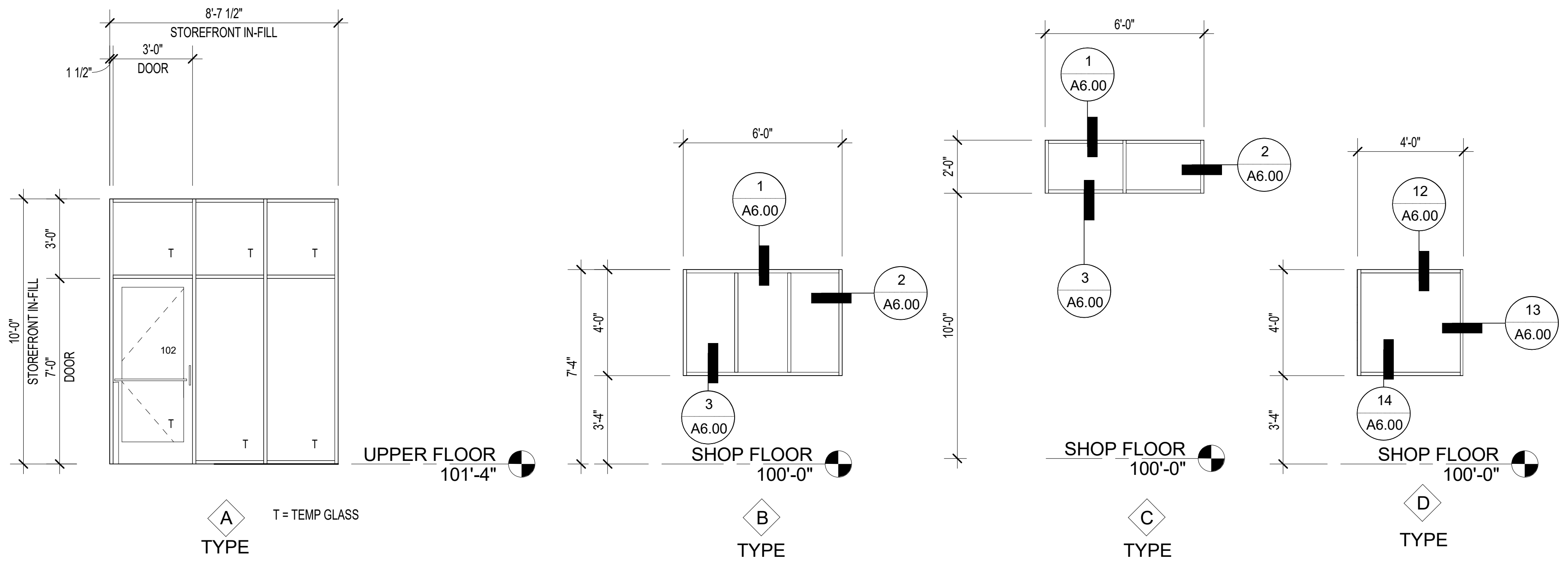
DOOR							FRAME							
		SIZE							DETAIL					
DOOR NUMBER	DOOR TYPE	SIZE	THICKNESS	MATERIAL	FINISH	GLAZING	MATERIAL	FINISH	HEAD	JAMB	THRESHOLD	HARDWARE	NOTES	DOOR NUMBER
100	(E)	3'-0" x 7'-0"	1 3/4"	ALUM	FF	--	ALUM	FF	--	--	--	TBD	PANIC EXIT HARDWARE - RETROFIT EXISTING DOOR	100
102	A	3'-0" x 7'-0"	1 3/4"	ALUM	FF	INSL	ALUM	FF	--	--	11/A5.00	TBD	PANIC EXIT HARDWARE	102
103	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H02		103
104	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H02		104
106	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	11/A6.02	11/A6.02	--	H03		106
107	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	11/A6.02	11/A6.02	--	H03		107
108	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	11/A6.02	11/A6.02	--	H03		108
109	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	P-2	--	HM	P-2	--	--	--	--		109
110	(E)	3'-0" x 7'-0"	1 3/4"	HM	P-2	--	HM	P-2	--	--	--	--		110
111	C	3'-0" X 7'-0" INSL HM	1 3/4"	HM	P-2	INSL	HM	P-2	11/A6.02	11/A6.02	11/A5.00	H01		111
112A	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	10/A6.02	10/A6.02	--	H05		112A
113	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H03		113
114	(E)	3'-0" x 7'-0" HM	1 3/4"	HM	P-2	--	HM	P-2	--	--	--	--		114
115	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H03		115
116	(E)	3'-0" X 7'-0" INSL HM	1 3/4"	HM	P-2	INSL	HM	P-2	--	--	--	H01		116
117	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H04		117
118	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H02		118
119	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H02		119
120	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H02		120
121	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H02		121
122	B	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	8/A6.02	8/A6.02	--	H02		122
123A	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	P-2	--	HM	P-2	--	--	--	H03		123A
123B	(E)	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	11/A6.02	11/A6.02	--	H03		123B
124	(E)	3'-8" X 7'-0" INSL HM	1 3/4"	HM	P-2	--	HM	P-2	--	--	--	H01	DOOR HARDWARE TO BE UPGRADED TO A RIM EXIT HARDWARE	124
126A	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	10/A6.02	10/A6.02	--	H05		126A
126B	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	10/A6.02	10/A6.02	--	H05		126B
127	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	--	HM	P-2	9/A6.02	9/A6.02	--	H05		127
128B	(E)	10' x 10'	2"	--	P-2	--	--	P-2	--	--	--	--		128B
128C	(E)	10' x 10'	2"	--	P-2	--	--	P-2	--	--	--	--		128C
128D	(E)	20' x 14'-0"	2"	--	P-2	--	--	P-2	--	--	--	--		128D
128E	(E)	20' x 14'-0"	2"	--	P-2	--	--	P-2	--	--	--	--		128E
128F	(E)	10' x 10'	2"	--	P-2	--	--	P-2	--	--	--	--		128F
128G	C	3'-0" X 7'-0" INSL HM	1 3/4"	HM	P-2	INSL	HM	P-2	12/A6.02	12/A6.02	11/A5.00	H05		128G
129A	C	3'-0" X 7'-0" INSL HM	1 3/4"	HM	P-2	INSL	HM	P-2	12/A6.02	12/A6.02	11/A5.00	H05		129A
129B	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF		HM	P-2	10/A6.02	10/A6.02	--	H06		129B
129C	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	INSL	HM	P-2	10/A6.02	10/A6.02	--	H06		129C
129D	(E)	3'-0" X 7'-0" INSL HM	1 3/4"	HM	P-2	INSL	HM	P-2	--	--	--	H05		129D
129E	D	12' x 14'	2"	HM	FF	--	--	--	--	--	--	--		129E
131	C	3'-0" X 7'-0" WD	1 3/4"	WD	FF	INSL	HM	P-2	11/A6.02	11/A6.02	--	H04		131
132	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	P-2	--	HM	--	--	--	--	H03		132
133A	C	3'-0" X 7'-0" INSL HM	1 3/4"	HM	P-2	--	HM	P-2	--	--	--	H04	REPLACE EXISTING DOOR WITH DOOR TYPE C	133A
133B	(E)	3'-0" X 7'-0" INSL HM	1 3/4"	HM	P-2	--	HM	P-2	--	--	--	--		133B
134A	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	P-2	--	HM	--	--	--	--	--		134A
134B	(E)	10' x 10'	2"	--	P-2	--	--	--	--	--	--	--		134B
134C	(E)	10' x 10'	2"	--	P-2	--	--	--	--	--	--	--		134C
134D	(E)	10' x 10'	2"	--	P-2	--	--	--	--	--	--	--		134D
134E	(E)	10' x 14'	2"	--	P-2	--	--	--	--	--	--	--		134E
134F	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	P-2	--	HM	P-2	--	--	--	--		134F
135A	C	3'-0" X 7'-0" WD	1 3/4"	HM	FF	--	HM	P-2	9/A6.02	9/A6.02	--	H05		135A
135B	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	P-2	--	--	P-2	--	--	--	--		135B
135C	C	3'-0" X 7'-0" INSL HM	1 3/4"	HM	P-2	--	--	--	--	--	--	H01		135C
136A	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	P-2	--	--	P-2	--	--	--	--		136A
136B	(E)	10' x 9'-0"	2"	--	--	--	--	--	--	--	--	--		136B
137	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	P-2	--	--	P-2	--	--	--	--		137
138	(E)	PR 72" X 84"	1 3/4"	HM	FF	--	--	P-2	--	--	--	--		138
139A	(E)	3'-0" X 7'-0" HM	1 3/4"	HM	--	--	--	--	--	--	--	--		139A
139B	(E)	13'-0" X 10'-0" HM BI-FOLD	3"	HM	P-2	--	--	P-2	--	--	--	--		139B
141	C	3'-0" X 7'-0" WD	1 3/4"	WD	P-2	--	HM	P-2	--	--	--	H04		141
201	(E)	2'-6" x 7'-0" WD	1 3/4"	HM	--	--	--	--	--	--	--	--	NO WORK REQUIRED	201
202A	(E)	2'-6" x 7'-0" WD	1 3/4"	--	--	--	--	--	--	--	--	---	NO WORK REQUIRED	202A
202B	(E)	2'-6" x 7'-0" WD	1 3/4"	--	--	--	--	--	--	--	--	--	NO WORK REQUIRED	202B



DOOR LEGEND

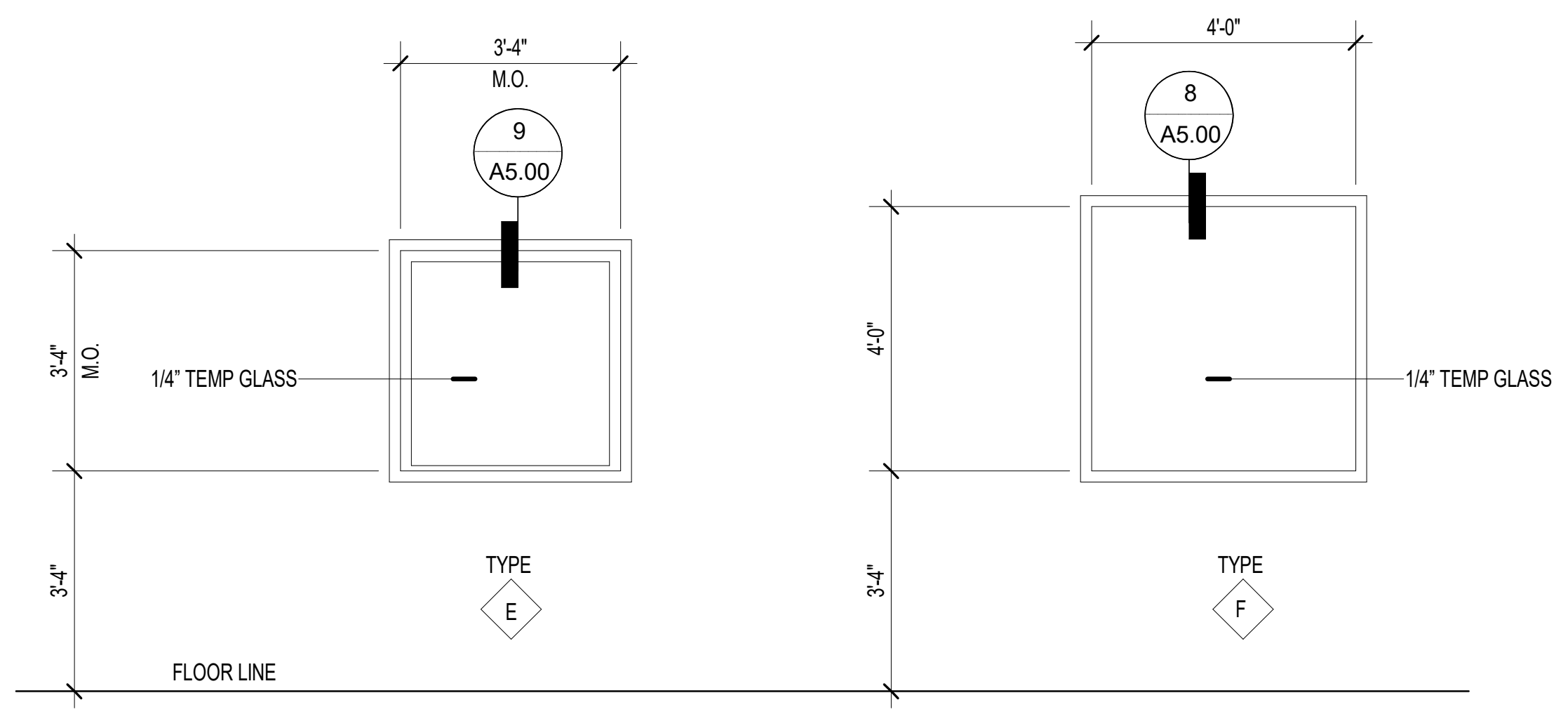


FRAME LEGEND



1 EXTERIOR WINDOWS TYPE LEGEND

SCALE 1/4" = 1'-0"

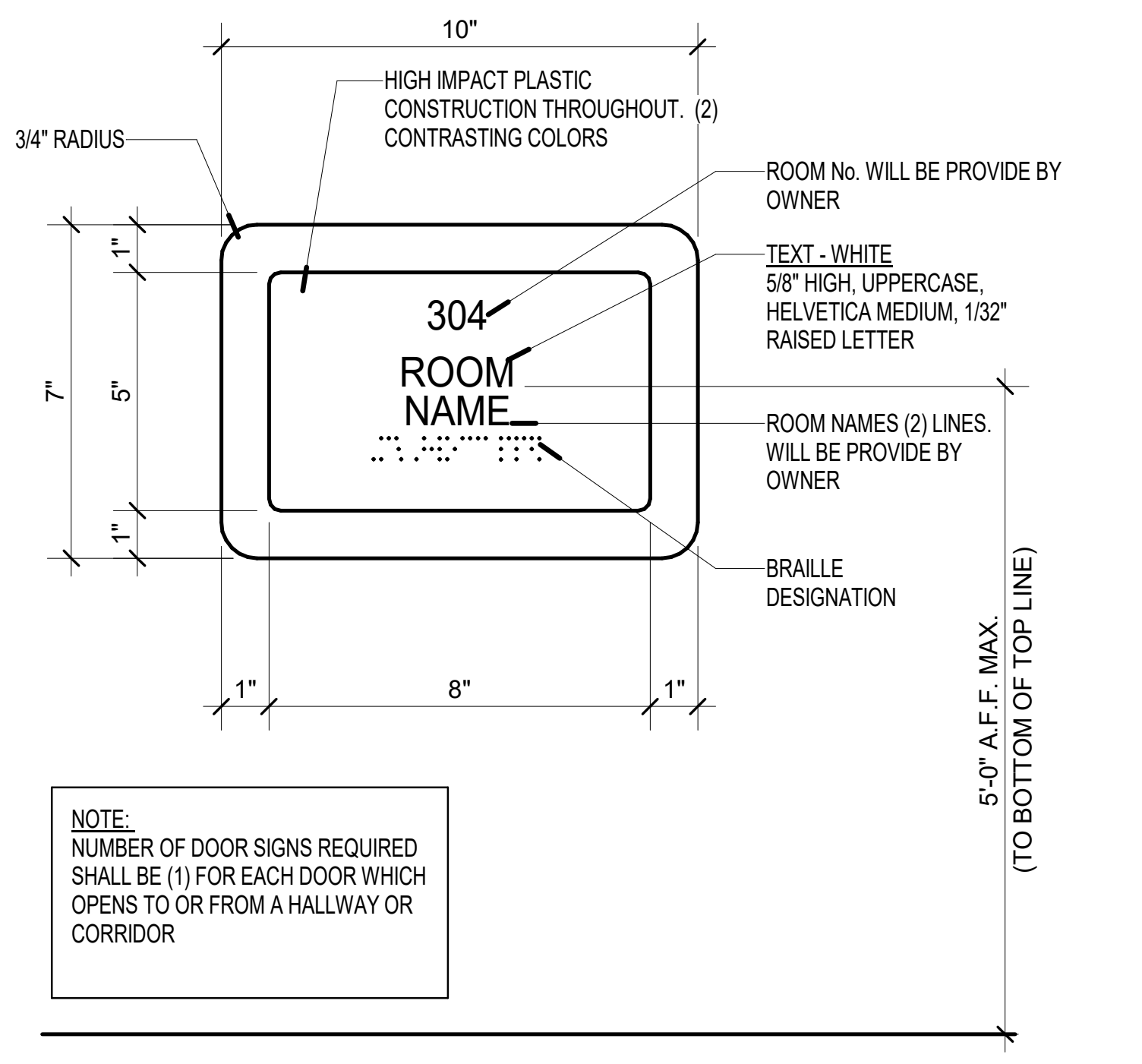


1A INTERIOR WINDOW AT CMU

SCALE 3/8" = 1'-0"

DOOR HARDWARE

H01	3 EA.	HINGES	5BB1HW 4.5 X 4.5 NRP	630	IVE
	1 EA	PANIC HARDWARE	LD-98-L-06	626	VON
	1 EA	SFIC PERMANENT CORE	IC7 (MATCH EXISTING KWY)	626	BES
	1 EA	SURFACE CLOSER	4040XP EDA	689	LCN
	1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
	1 EA	FLOOR STOP	FS18S	BLK	IVE
	1 EA	RAIN DRIP	142AA	AA	ZER
	1 EA	GASKETING	429AA-S	AA	ZER
	1 EA	DOOR SWEEP	39A	A	ZER
	1 EA	THRESHOLD	655A-223	A	ZER
H02	3 EA.	HINGES	5BB1 4.5 X 4.5	630	IVE
	1 EA	PRIVACY LOCK WITH OUTSIDE INDICATOR	ND40S RHO OS-OCC	626	VON
	1 EA	SURFACE CLOSER	4040XP EDA	689	LCN
	1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
	1 EA	WALL STOP	WS406/407CCV	630	IVE
	1 EA	RAIN DRIP	142AA	AA	ZER
	1 EA	GASKETING	488FSBK PSA	BK	ZER
H03	3 EA.	HINGES	5BB1 4.5 X 4.5	630	IVE
	1 EA	STOREROOM LOCK	ND80BD RHO	626	VON
	1 EA	SFIC PERMANENT CORE	IC7 (MATCH EXISTING KWY)	626	BES
	1 EA	SURFACE CLOSER	4040XP EDA	689	LCN
	1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
	1 EA	WALL STOP	WS406/407CCV	630	IVE
	3 EA	SILENCER	SR64	GRY	IVE
H04	3 EA.	HINGES	5BB1 4.5 X 4.5	630	IVE
	1 EA	OFFICE LOCK	ND80?? RHO	626	VON
	1 EA	SFIC PERMANENT CORE	IC7 (MATCH EXISTING KWY)	626	BES
	1 EA	SURFACE CLOSER	4040XP EDA	689	LCN
	1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
	1 EA	WALL STOP	WS406/407CCV	630	IVE
	3 EA	SILENCER	SR64	GRY	IVE
H05	3 EA.	HINGES	5BB1 4.5 X 4.5	630	IVE
	1 EA	CLASSROOM LOCK	ND80?? RHO	626	VON
	1 EA	SFIC PERMANENT CORE	IC7 (MATCH EXISTING KWY)	626	BES
	1 EA	SURFACE CLOSER	4040XP EDA	689	LCN
	1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
	1 EA	WALL STOP	WS406/407CCV	630	IVE
	3 EA	SILENCER	SR64	GRY	IVE
H06	3 EA.	HINGES	5BB1 4.5 X 4.5	630	IVE
	1 EA	PASSAGE	ND10S RHO	626	VON
	1 EA	SURFACE CLOSER	4040XP EDA	689	LCN
	1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
	1 EA	WALL STOP	WS406/407CCV	630	IVE
	3 EA	SILENCER	SR64	GRY	IVE
H07	3 EA.	HINGES	5BB1 4.5 X 4.5	630	IVE
	1 EA	PANIC	LD-98-L-BE-06	626	VON
	1 EA	SFIC RIM HOUSING	80-129	626	BES
	1 EA	SURFACE CLOSER	4040XP EDA	689	LCN
	1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
	1 EA	WALL STOP	WS406/407CCV	630	IVE
	3 EA	SILENCER	SR64	GRY	IVE
R1	ALL HARDWARE BY DOOR SUPPLY / MANUFACTURER				

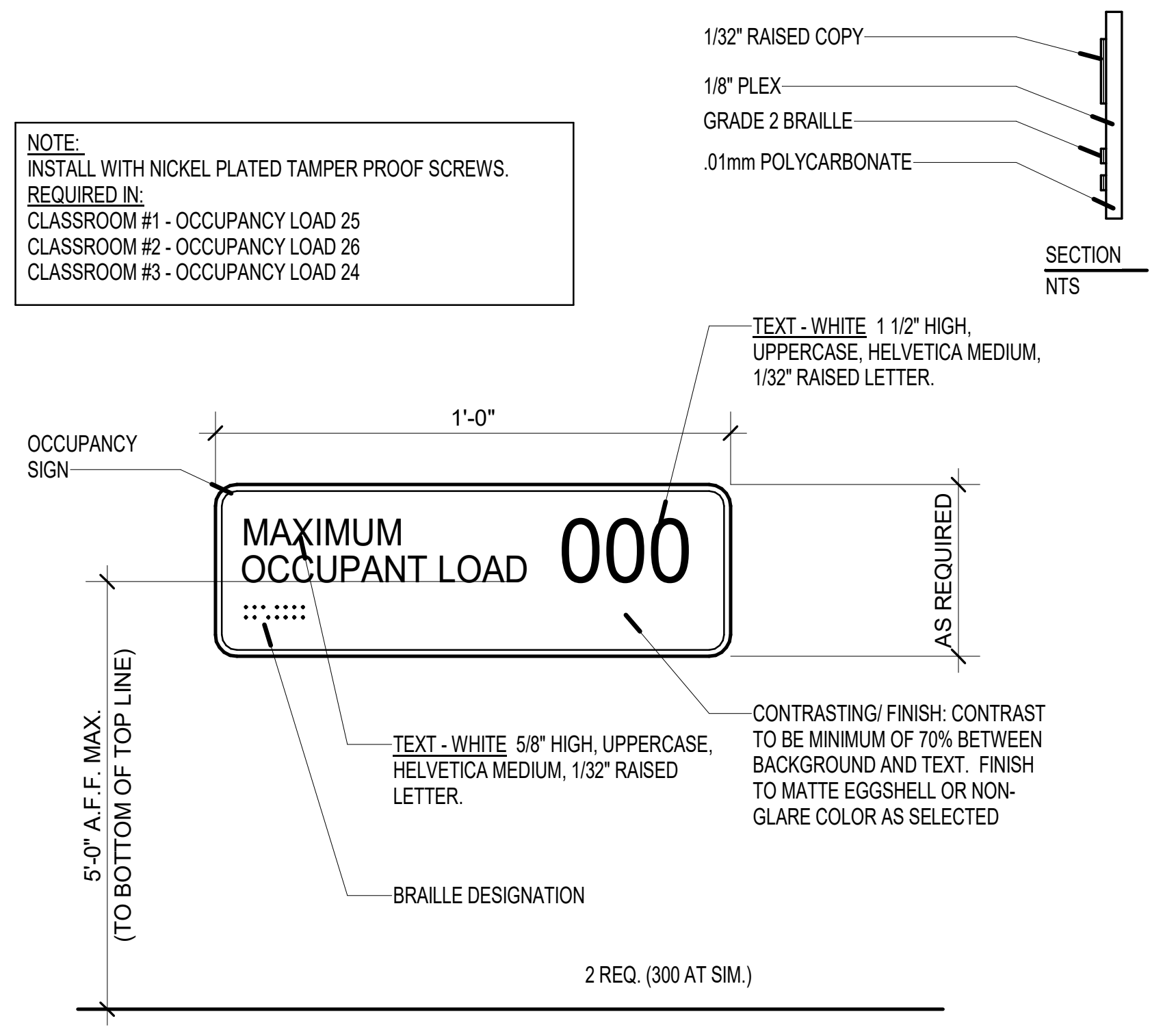

10"
HIGH IMPACT PLASTIC CONSTRUCTION THROUGHOUT. (2) CONTRASTING COLORS
3/4" RADIUS
ROOM No. WILL BE PROVIDE BY OWNER
TEXT - WHITE 5/8" HIGH, UPPERCASE, HELVETICA MEDIUM, 1/32" RAISED LETTER
304
ROOM NAME
ROOM NAMES (2) LINES. WILL BE PROVIDE BY OWNER
BRAILLE DESIGNATION
7"
5"
1"
1"
1"
8"
1"
5'-0" A.F.F. MAX. (TO BOTTOM OF TOP LINE)

NOTE:
NUMBER OF DOOR SIGNS REQUIRED SHALL BE (1) FOR EACH DOOR WHICH OPENS TO OR FROM A HALLWAY OR CORRIDOR

2 ROOM SIGNAGE

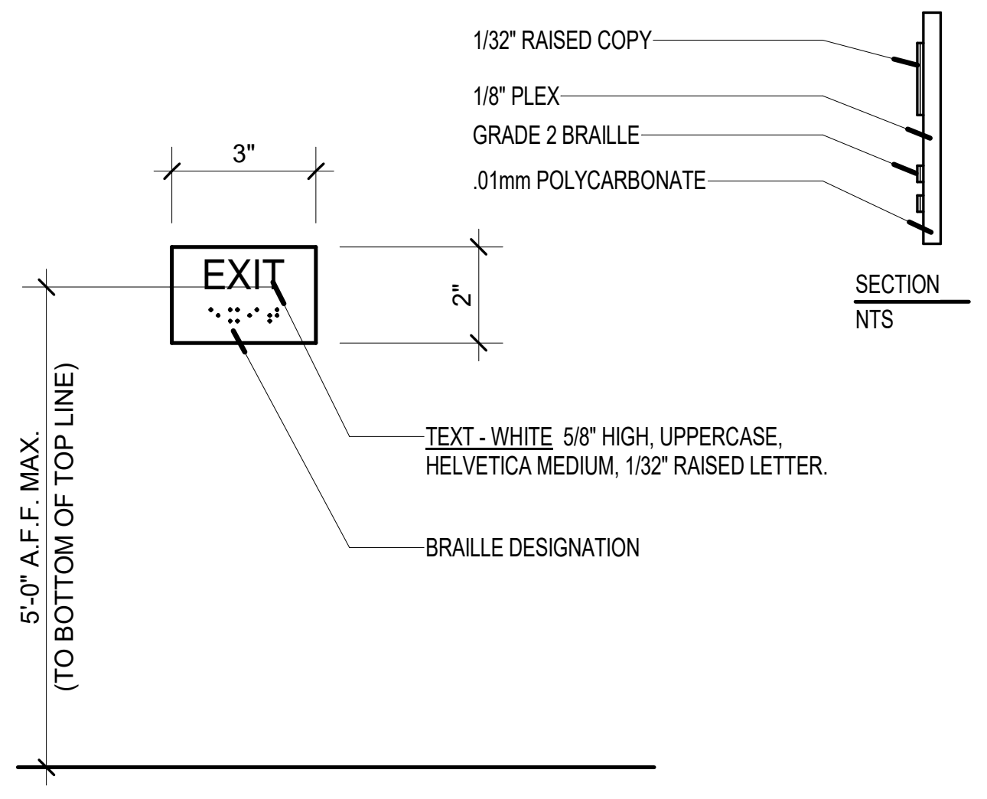
SCALE 3" = 1'-0"

NOTE:
INSTALL WITH NICKEL PLATED TAMPER PROOF SCREWS.
REQUIRED IN:
CLASSROOM #1 - OCCUPANCY LOAD 25
CLASSROOM #2 - OCCUPANCY LOAD 26
CLASSROOM #3 - OCCUPANCY LOAD 24


1/32" RAISED COPY
1/8" PLEX
GRADE 2 BRAILLE
.01mm POLYCARBONATE
SECTION
NTS
TEXT - WHITE 1 1/2" HIGH, UPPERCASE, HELVETICA MEDIUM, 1/32" RAISED LETTER.
1'-0"
OCCUPANCY SIGN
MAXIMUM OCCUPANT LOAD
000
AS REQUIRED
CONTRASTING/ FINISH: CONTRAST TO BE MINIMUM OF 70% BETWEEN BACKGROUND AND TEXT. FINISH TO MATTE EGGSHELL OR NON-GLARE COLOR AS SELECTED
TEXT - WHITE 5/8" HIGH, UPPERCASE, HELVETICA MEDIUM, 1/32" RAISED LETTER.
5'-0" A.F.F. MAX. (TO BOTTOM OF TOP LINE)
BRAILLE DESIGNATION
2 REQ. (300 AT SIM.)

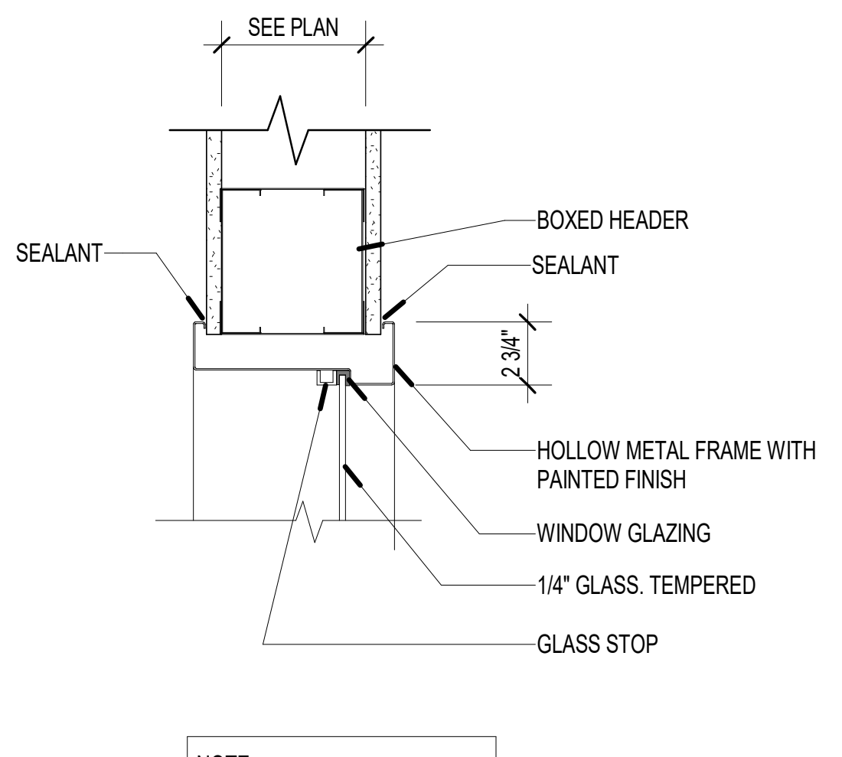
4 OCCUPANCY SIGNAGE

SCALE 3" = 1'-0"


1/32" RAISED COPY
1/8" PLEX
GRADE 2 BRAILLE
.01mm POLYCARBONATE
SECTION
NTS
3"
EXIT
2"
TEXT - WHITE 5/8" HIGH, UPPERCASE, HELVETICA MEDIUM, 1/32" RAISED LETTER.
BRAILLE DESIGNATION
5'-0" A.F.F. MAX. (TO BOTTOM OF TOP LINE)

6 EXIT SIGNAGE

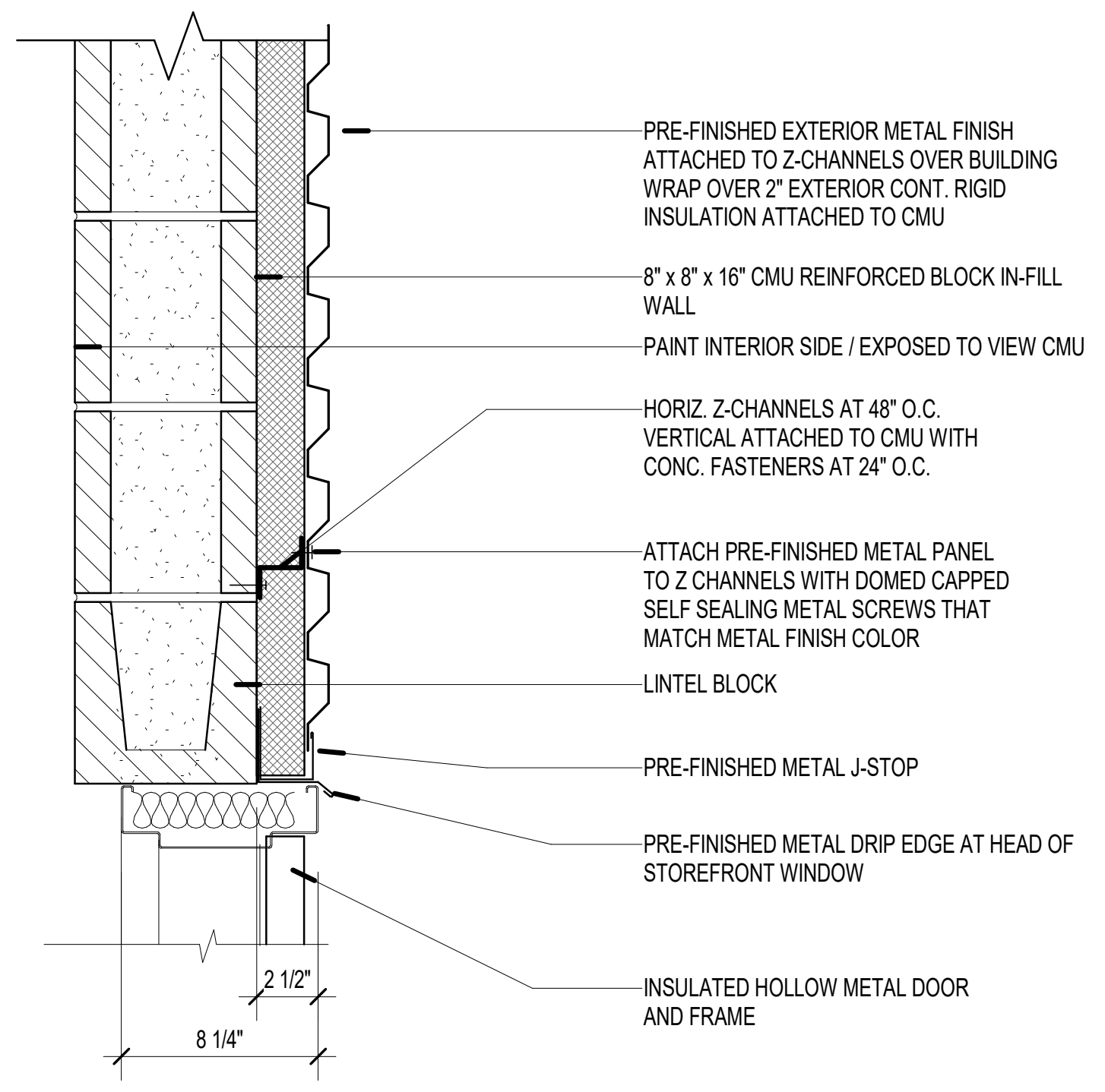
SCALE 3" = 1'-0"



NOTE:
JAMB AND SILLS ARE SIMILAR

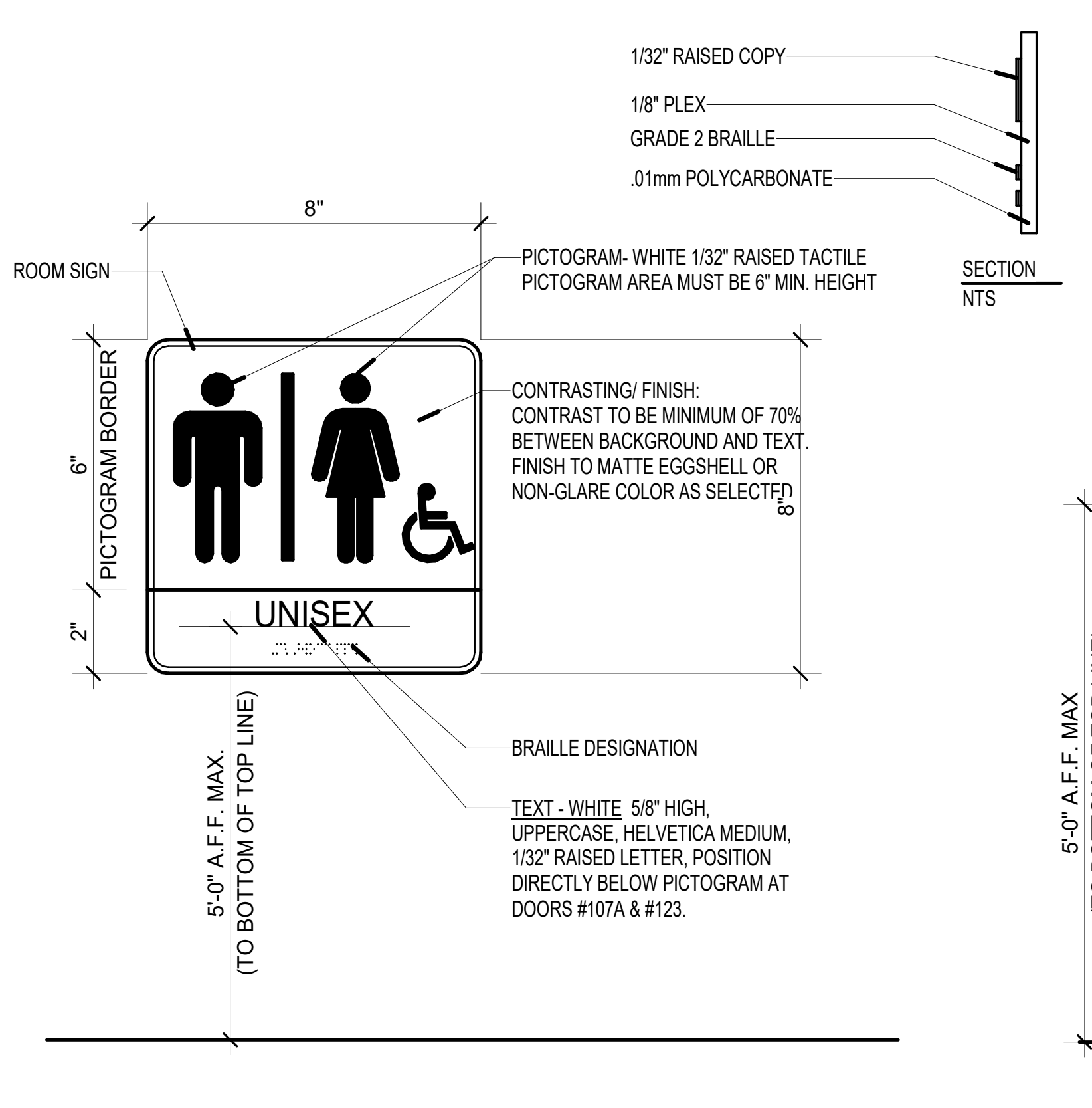
8 INT. HM WNDW

SCALE 1 1/2" = 1'-0"


PRE-FINISHED EXTERIOR METAL FINISH ATTACHED TO Z-CHANNELS OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
8" x 8" x 16" CMU REINFORCED BLOCK IN-FILL WALL
PAINT INTERIOR SIDE / EXPOSED TO VIEW CMU
HORIZ. Z-CHANNELS AT 48" O.C. VERTICAL ATTACHED TO CMU WITH CONC. FASTENERS AT 24" O.C.
ATTACH PRE-FINISHED METAL PANEL TO Z CHANNELS WITH DOMED CAPPED SELF SEALING METAL SCREWS THAT MATCH METAL FINISH COLOR
LINTEL BLOCK
PRE-FINISHED METAL J-STOP
PRE-FINISHED METAL DRIP EDGE AT HEAD OF STOREFRONT WINDOW
INSULATED HOLLOW METAL DOOR AND FRAME
2 1/2"
8 1/4"

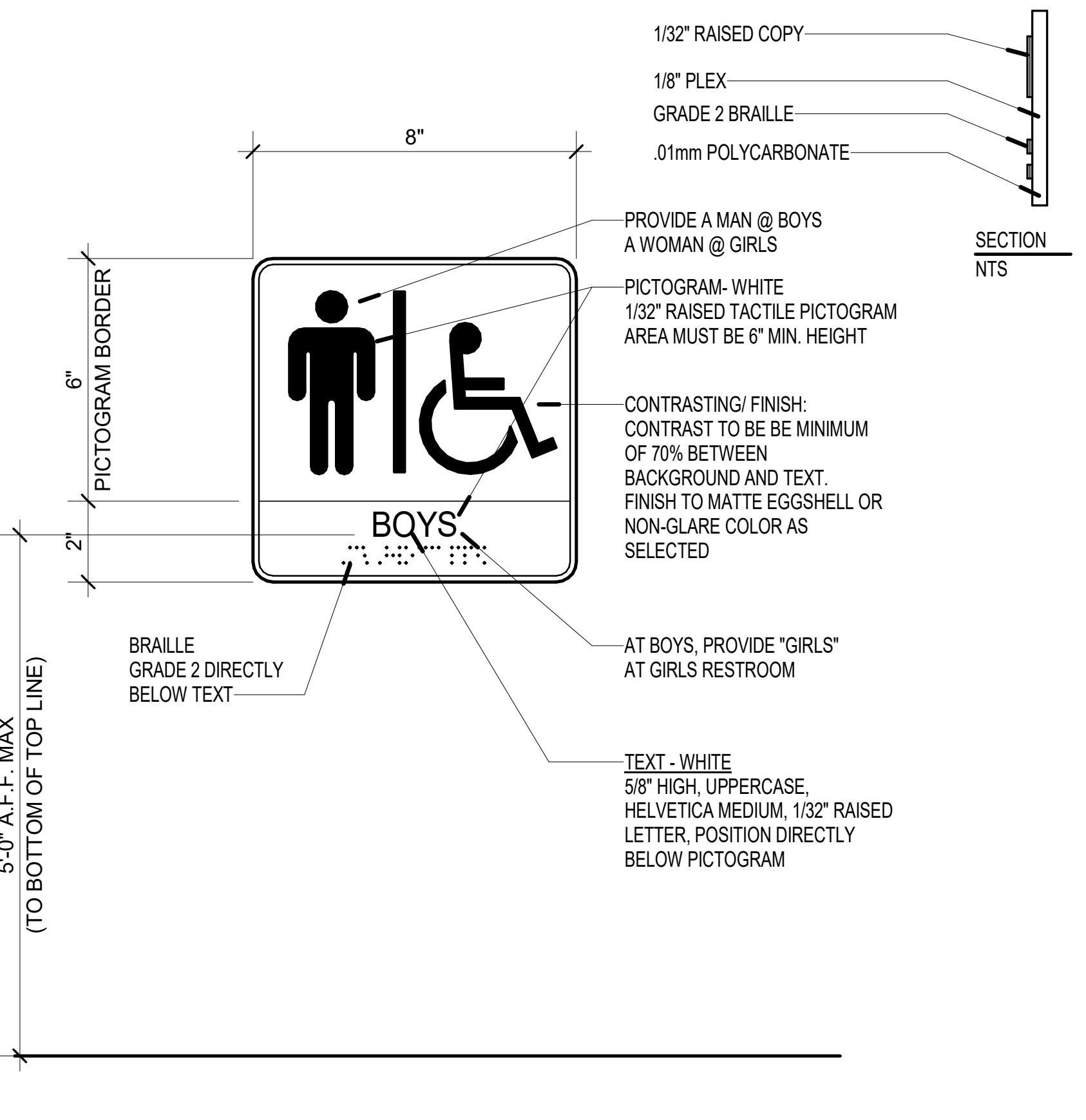
12 ALUM. WINDOW HEAD

SCALE 1 1/2" = 1'-0"


1/32" RAISED COPY
1/8" PLEX
GRADE 2 BRAILLE
.01mm POLYCARBONATE
SECTION
NTS
8"
ROOM SIGN
PICTOGRAM- WHITE 1/32" RAISED TACTILE PICTOGRAM AREA MUST BE 6" MIN. HEIGHT
CONTRASTING/ FINISH: CONTRAST TO BE MINIMUM OF 70% BETWEEN BACKGROUND AND TEXT. FINISH TO MATTE EGGSHELL OR NON-GLARE COLOR AS SELECTED
8"
6" PICTOGRAM BORDER
2"
UNISEX
BRAILLE DESIGNATION
TEXT - WHITE 5/8" HIGH, UPPERCASE, HELVETICA MEDIUM, 1/32" RAISED LETTER, POSITION DIRECTLY BELOW PICTOGRAM AT DOORS #107A & #123.
5'-0" A.F.F. MAX. (TO BOTTOM OF TOP LINE)

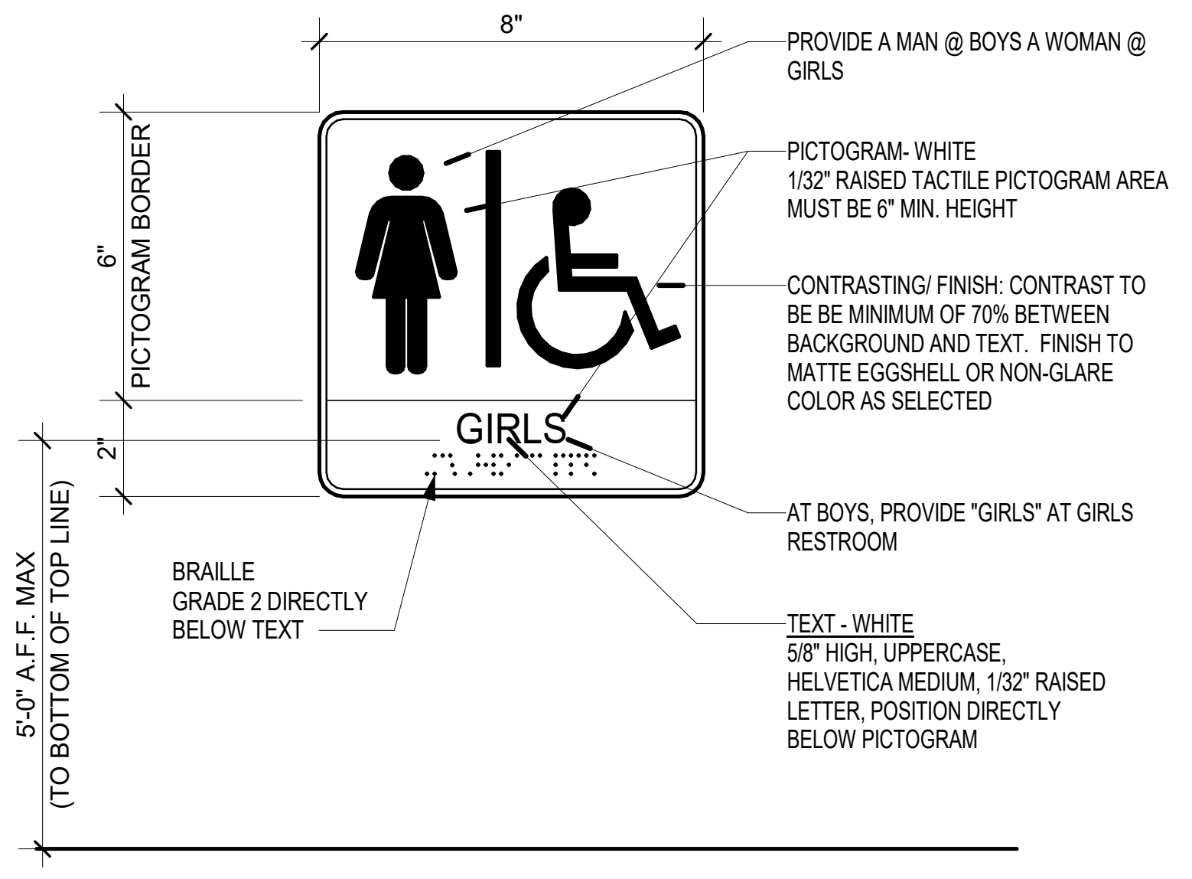
3 UNISEX TOILET SIGNAGE

SCALE 3" = 1'-0"


1/32" RAISED COPY
1/8" PLEX
GRADE 2 BRAILLE
.01mm POLYCARBONATE
SECTION
NTS
8"
PROVIDE A MAN @ BOYS A WOMAN @ GIRLS
PICTOGRAM- WHITE 1/32" RAISED TACTILE PICTOGRAM AREA MUST BE 6" MIN. HEIGHT
CONTRASTING/ FINISH: CONTRAST TO BE BE MINIMUM OF 70% BETWEEN BACKGROUND AND TEXT. FINISH TO MATTE EGGSHELL OR NON-GLARE COLOR AS SELECTED
6" PICTOGRAM BORDER
2"
BOYS
BRAILLE GRADE 2 DIRECTLY BELOW TEXT
AT BOYS, PROVIDE "GIRLS" AT GIRLS RESTROOM
TEXT - WHITE 5/8" HIGH, UPPERCASE, HELVETICA MEDIUM, 1/32" RAISED LETTER, POSITION DIRECTLY BELOW PICTOGRAM
5'-0" A.F.F. MAX (TO BOTTOM OF TOP LINE)

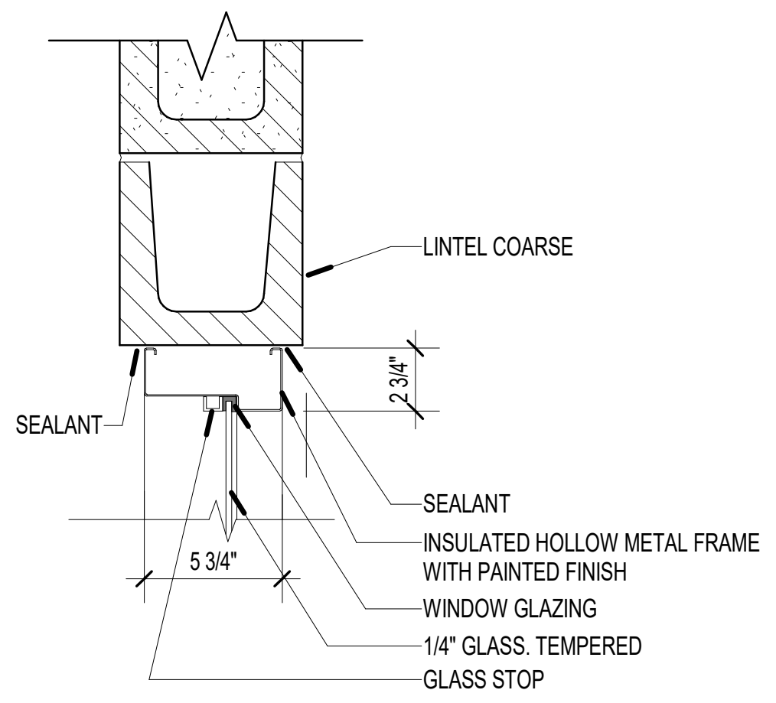
5 BOYS TOILET SIGNAGE

SCALE 3" = 1'-0"


8"
PROVIDE A MAN @ BOYS A WOMAN @ GIRLS
PICTOGRAM- WHITE 1/32" RAISED TACTILE PICTOGRAM AREA MUST BE 6" MIN. HEIGHT
CONTRASTING/ FINISH: CONTRAST TO BE BE MINIMUM OF 70% BETWEEN BACKGROUND AND TEXT. FINISH TO MATTE EGGSHELL OR NON-GLARE COLOR AS SELECTED
6" PICTOGRAM BORDER
2"
GIRLS
AT BOYS, PROVIDE "GIRLS" AT GIRLS RESTROOM
BRAILLE GRADE 2 DIRECTLY BELOW TEXT
TEXT - WHITE 5/8" HIGH, UPPERCASE, HELVETICA MEDIUM, 1/32" RAISED LETTER, POSITION DIRECTLY BELOW PICTOGRAM
5'-0" A.F.F. MAX (TO BOTTOM OF TOP LINE)

7 GIRLS TOILET SIGNAGE

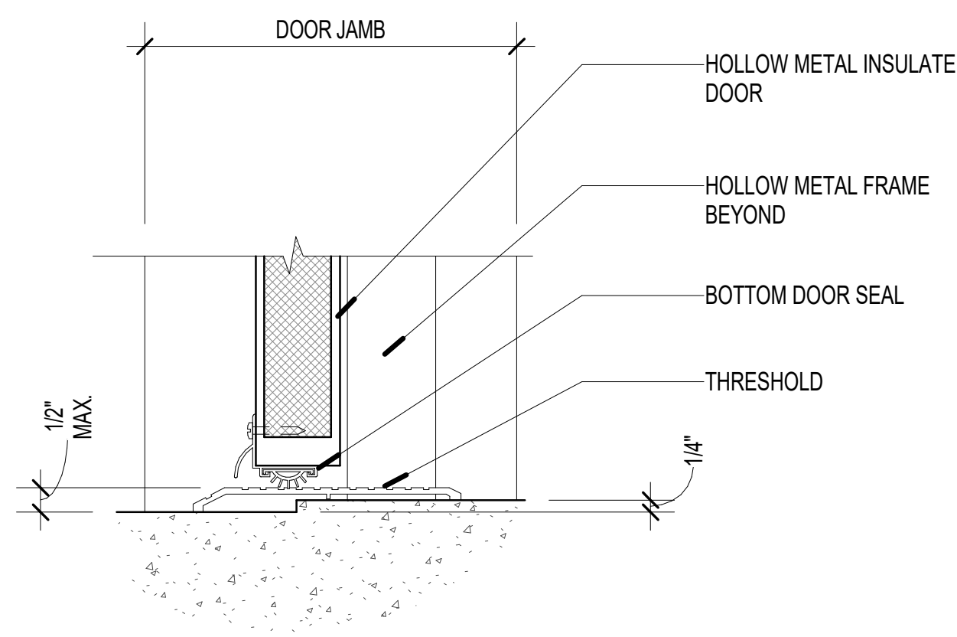
SCALE 3" = 1'-0"



NOTE:
JAMB AND SILLS ARE SIMILAR

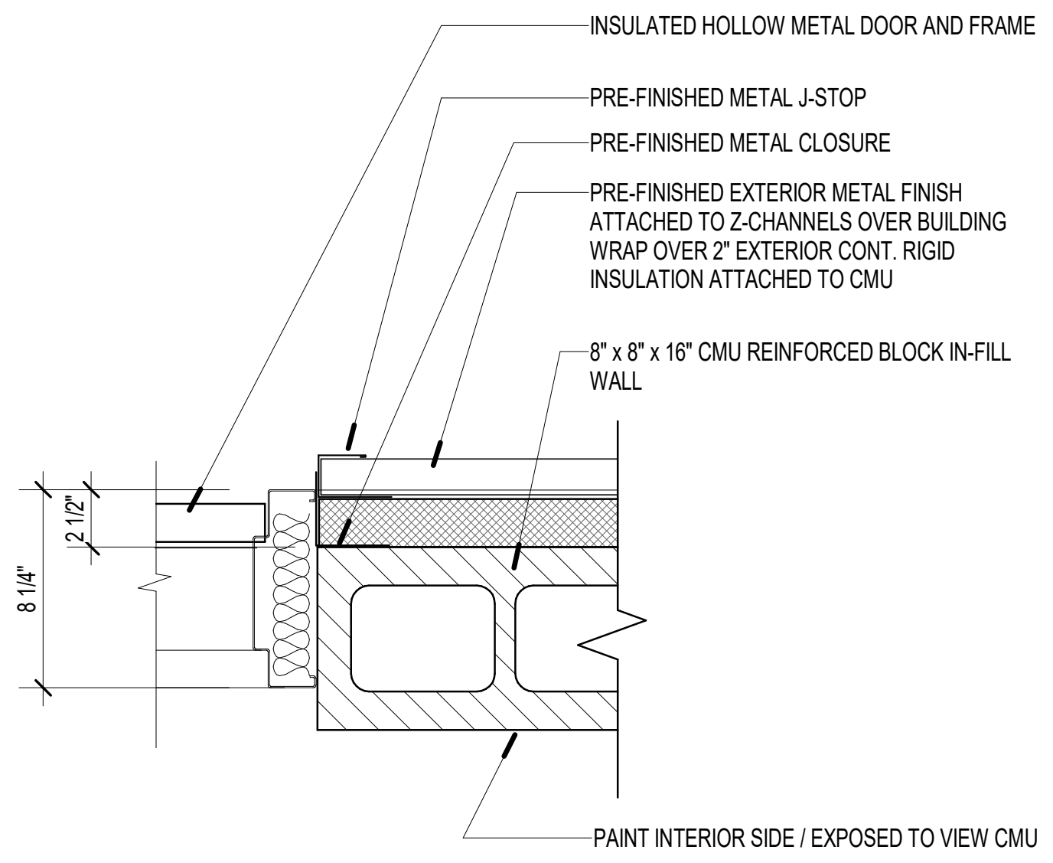
9 INT. HM WNDW

SCALE 1 1/2" = 1'-0"



11 THRESHOLD

SCALE 3" = 1'-0"


INSULATED HOLLOW METAL DOOR AND FRAME
PRE-FINISHED METAL J-STOP
PRE-FINISHED METAL CLOSURE
PRE-FINISHED EXTERIOR METAL FINISH ATTACHED TO Z-CHANNELS OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
8" x 8" x 16" CMU REINFORCED BLOCK IN-FILL WALL
2 1/2"
8 1/4"
PAINT INTERIOR SIDE / EXPOSED TO VIEW CMU

13 HM JAMB

SCALE 1 1/2" = 1'-0"

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

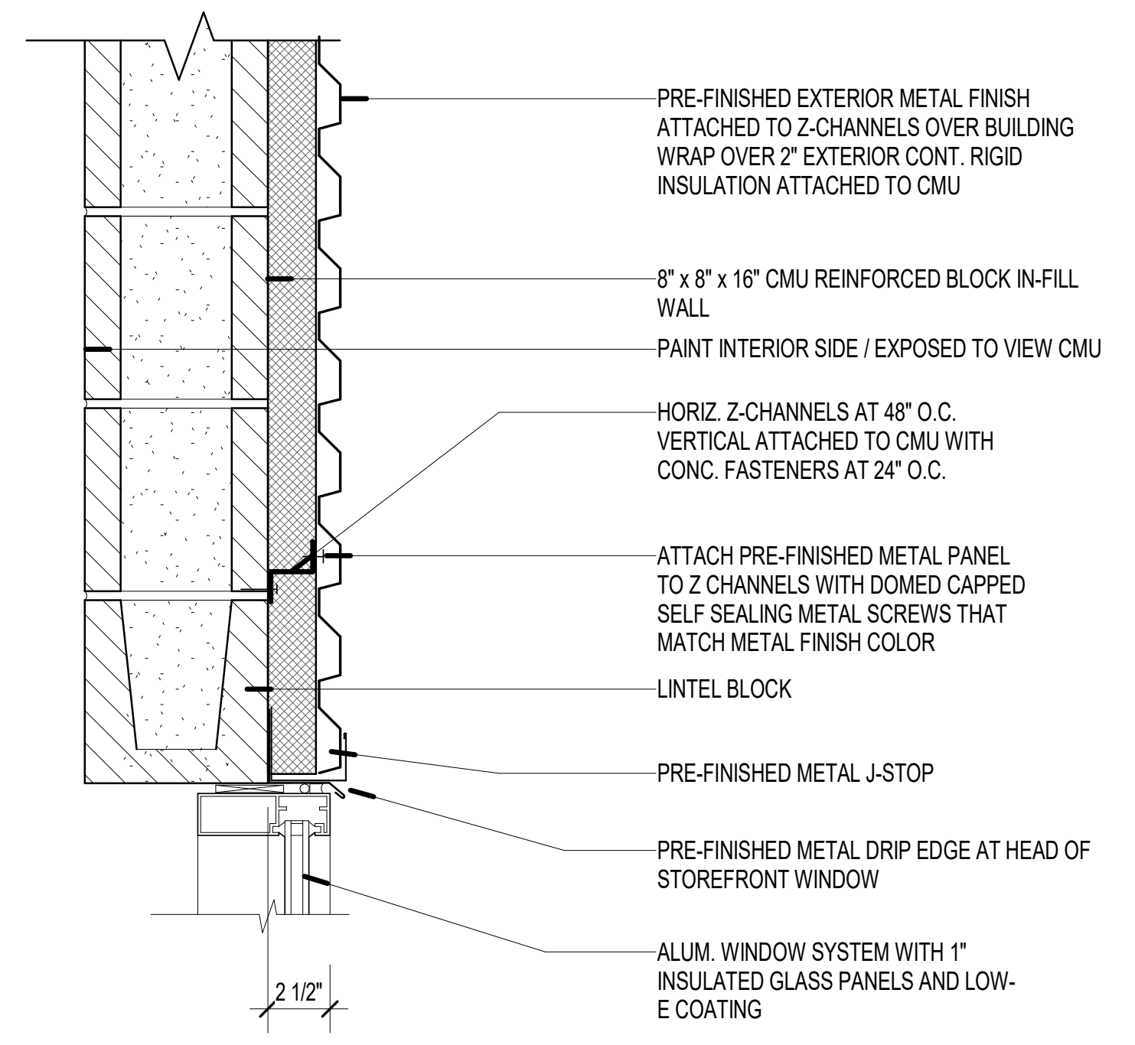
DATE
JAN 9, 2025

REF NO.
24-106

AUTHOR
DPW NO

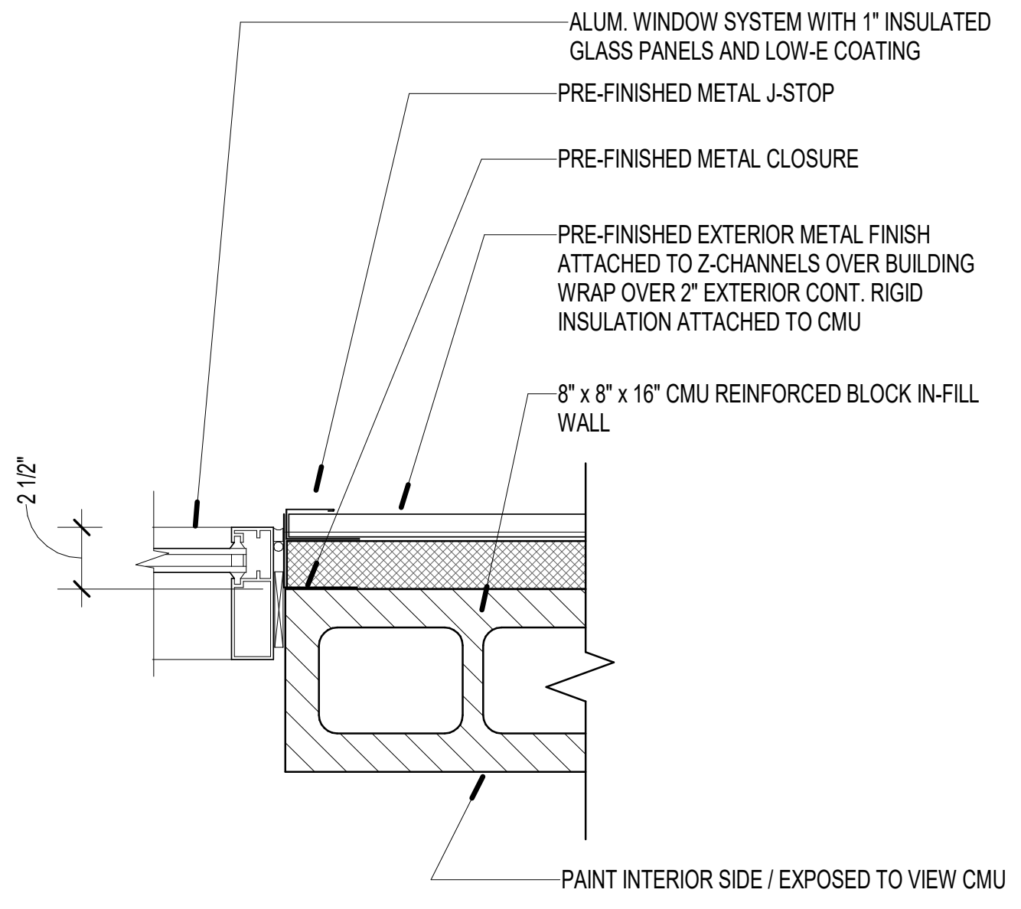
PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
DOOR SCHEDULE, DOOR & WINDOW TYPES

SHEET NO.
A5.00


PRE-FINISHED EXTERIOR METAL FINISH ATTACHED TO Z-CHANNELS OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
8" x 8" x 16" CMU REINFORCED BLOCK IN-FILL WALL
PAINT INTERIOR SIDE / EXPOSED TO VIEW CMU
HORIZ. Z-CHANNELS AT 48" O.C. VERTICAL ATTACHED TO CMU WITH CONC. FASTENERS AT 24" O.C.
ATTACH PRE-FINISHED METAL PANEL TO Z CHANNELS WITH DOMED CAPPED SELF SEALING METAL SCREWS THAT MATCH METAL FINISH COLOR
LINTEL BLOCK
PRE-FINISHED METAL J-STOP
PRE-FINISHED METAL DRIP EDGE AT HEAD OF STOREFRONT WINDOW
ALUM. WINDOW SYSTEM WITH 1" INSULATED GLASS PANELS AND LOW-E COATING
2 1/2"

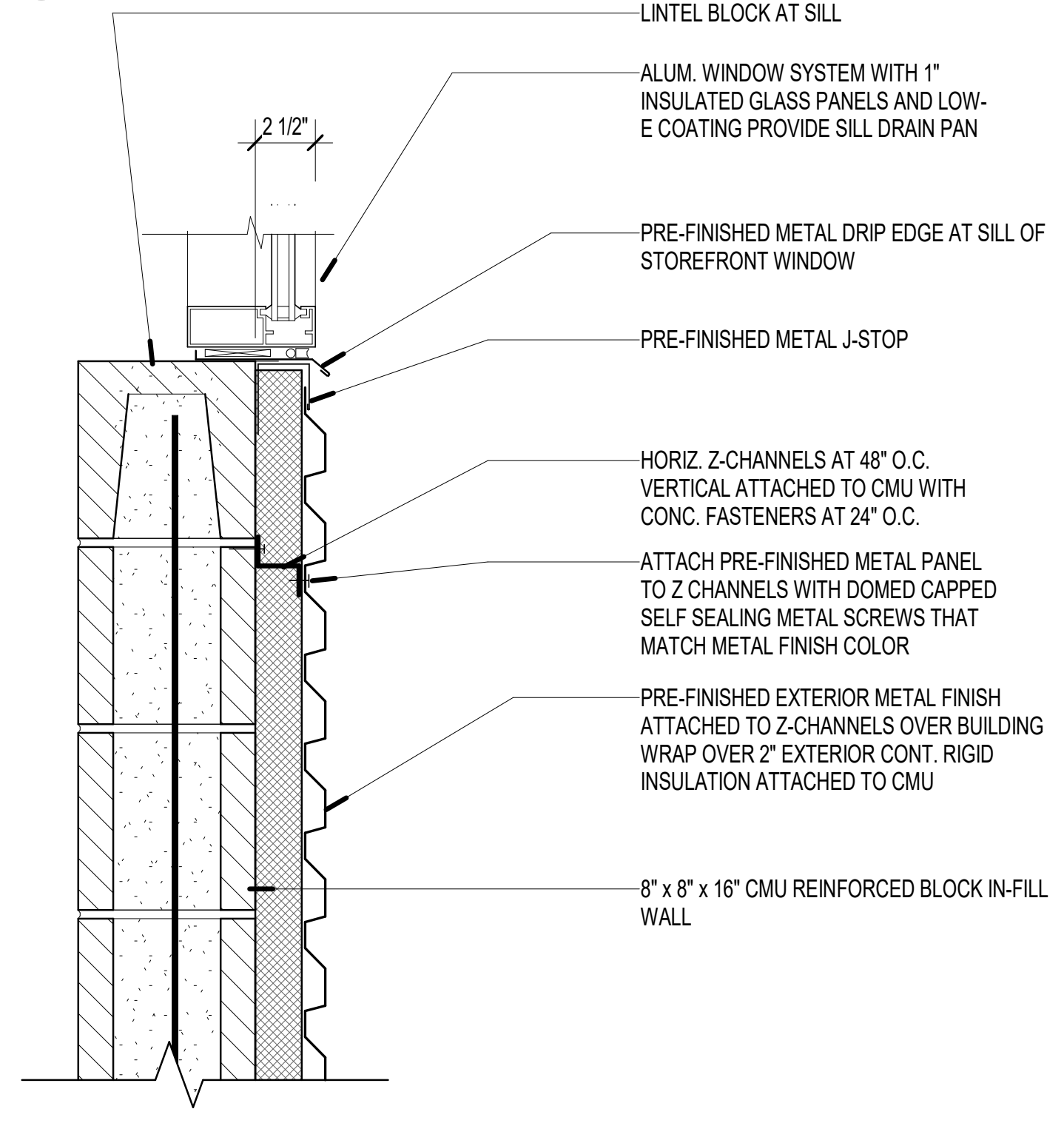
1 ALUM. WINDOW HEAD

SCALE 1 1/2" = 1'-0"


ALUM. WINDOW SYSTEM WITH 1" INSULATED GLASS PANELS AND LOW-E COATING
PRE-FINISHED METAL J-STOP
PRE-FINISHED METAL CLOSURE
PRE-FINISHED EXTERIOR METAL FINISH ATTACHED TO Z-CHANNELS OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
8" x 8" x 16" CMU REINFORCED BLOCK IN-FILL WALL
2 1/2"
PAINT INTERIOR SIDE / EXPOSED TO VIEW CMU

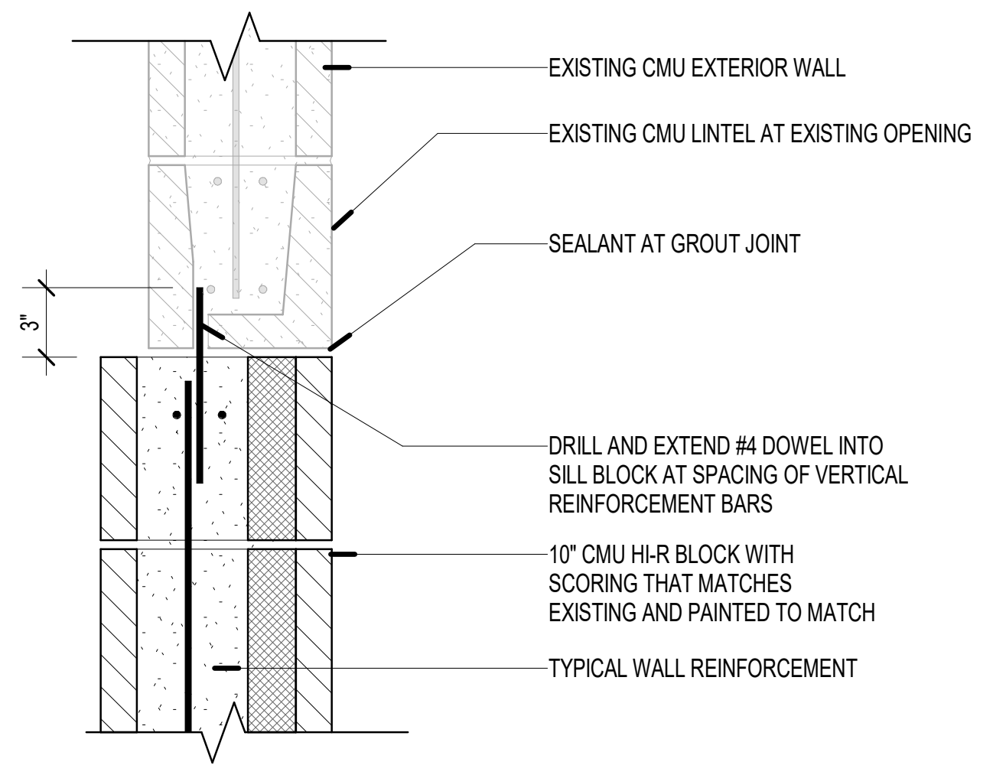
2 ALUM. WINDOW JAMB

SCALE 1 1/2" = 1'-0"


LINTEL BLOCK AT SILL
ALUM. WINDOW SYSTEM WITH 1" INSULATED GLASS PANELS AND LOW-E COATING PROVIDE SILL DRAIN PAN
2 1/2"
PRE-FINISHED METAL DRIP EDGE AT SILL OF STOREFRONT WINDOW
PRE-FINISHED METAL J-STOP
HORIZ. Z-CHANNELS AT 48" O.C. VERTICAL ATTACHED TO CMU WITH CONC. FASTENERS AT 24" O.C.
ATTACH PRE-FINISHED METAL PANEL TO Z CHANNELS WITH DOMED CAPPED SELF SEALING METAL SCREWS THAT MATCH METAL FINISH COLOR
PRE-FINISHED EXTERIOR METAL FINISH ATTACHED TO Z-CHANNELS OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
8" x 8" x 16" CMU REINFORCED BLOCK IN-FILL WALL

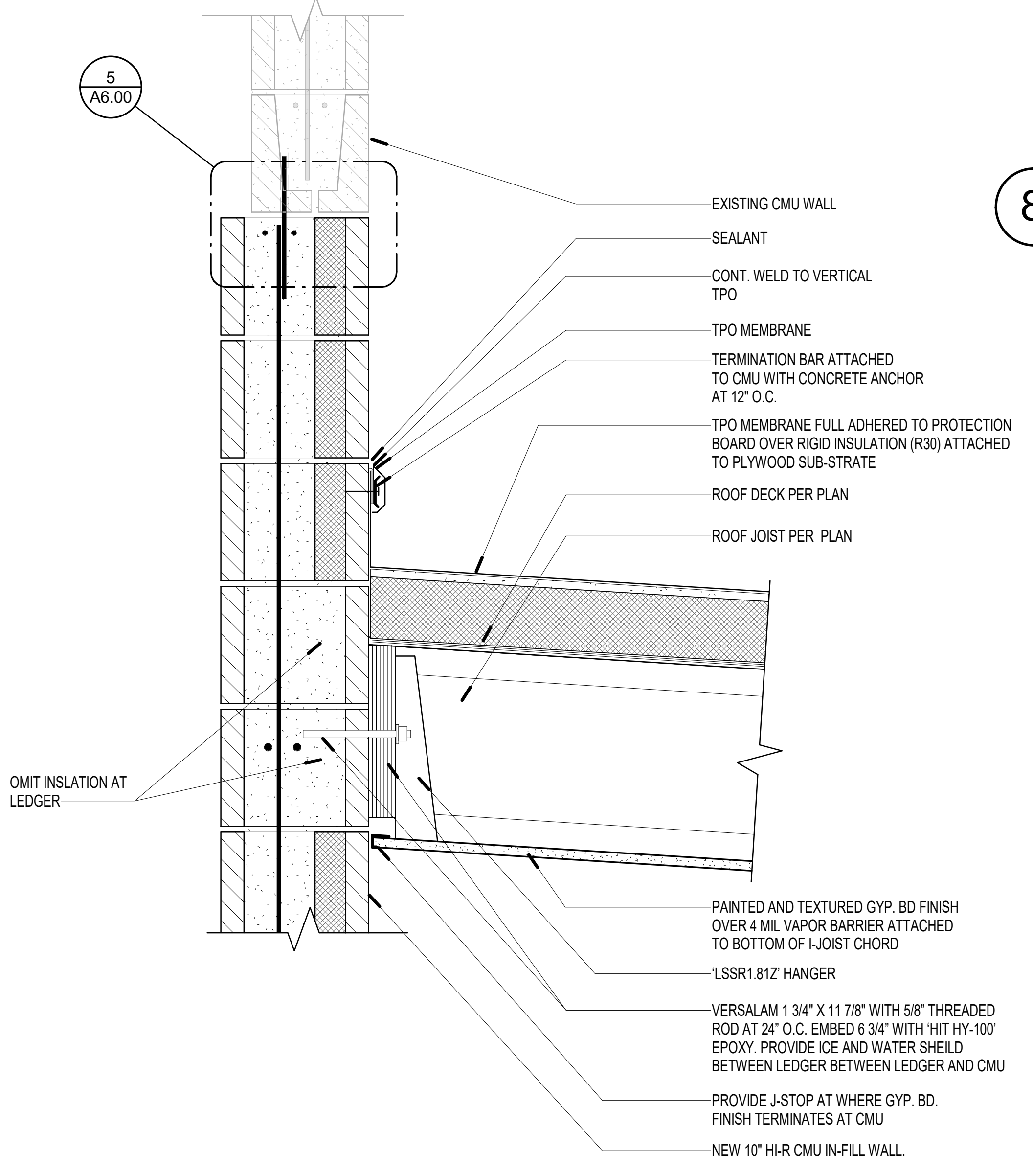
3 ALUM. WINDOW SILL

SCALE 1 1/2" = 1'-0"


EXISTING CMU EXTERIOR WALL
EXISTING CMU LINTEL AT EXISTING OPENING
SEALANT AT GROUT JOINT
3"
DRILL AND EXTEND #4 DOWEL INTO SILL BLOCK AT SPACING OF VERTICAL REINFORCEMENT BARS
10" CMU HI-R BLOCK WITH SCORING THAT MATCHES EXISTING AND PAINTED TO MATCH
TYPICAL WALL REINFORCEMENT

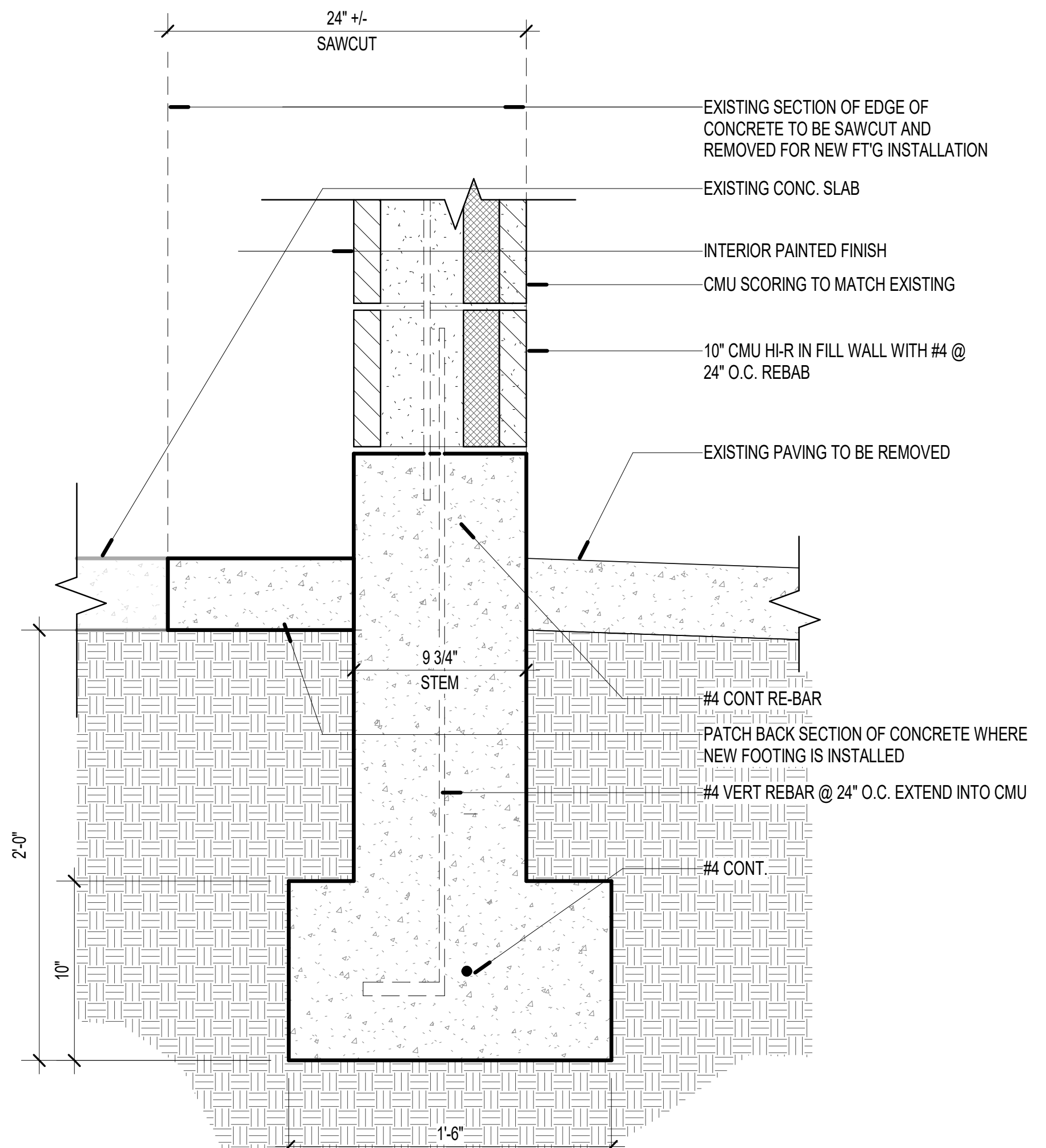
5 CMU IN-FILL HEAD

SCALE 1 1/2" = 1'-0"


5
A6.00
EXISTING CMU WALL
SEALANT
CONT. WELD TO VERTICAL TPO
TPO MEMBRANE
TERMINATION BAR ATTACHED TO CMU WITH CONCRETE ANCHOR AT 12" O.C.
TPO MEMBRANE FULL ADHERED TO PROTECTION BOARD OVER RIGID INSULATION (R30) ATTACHED TO PLYWOOD SUB-STRATE
ROOF DECK PER PLAN
ROOF JOIST PER PLAN
OMIT INSLATION AT LEDGER
PAINTED AND TEXTURED GYP. BD FINISH OVER 4 MIL VAPOR BARRIER ATTACHED TO BOTTOM OF I-JOIST CHORD
'LSSR1.81Z' HANGER
VERSALAM 1 3/4" X 11 7/8" WITH 5/8" THREADED ROD AT 24" O.C. EMBED 6 3/4" WITH 'HIT HY-100' EPOXY. PROVIDE ICE AND WATER SHEILD BETWEEN LEDGER BETWEEN LEDGER AND CMU
PROVIDE J-STOP AT WHERE GYP. BD. FINISH TERMINATES AT CMU
NEW 10" HI-R CMU IN-FILL WALL.

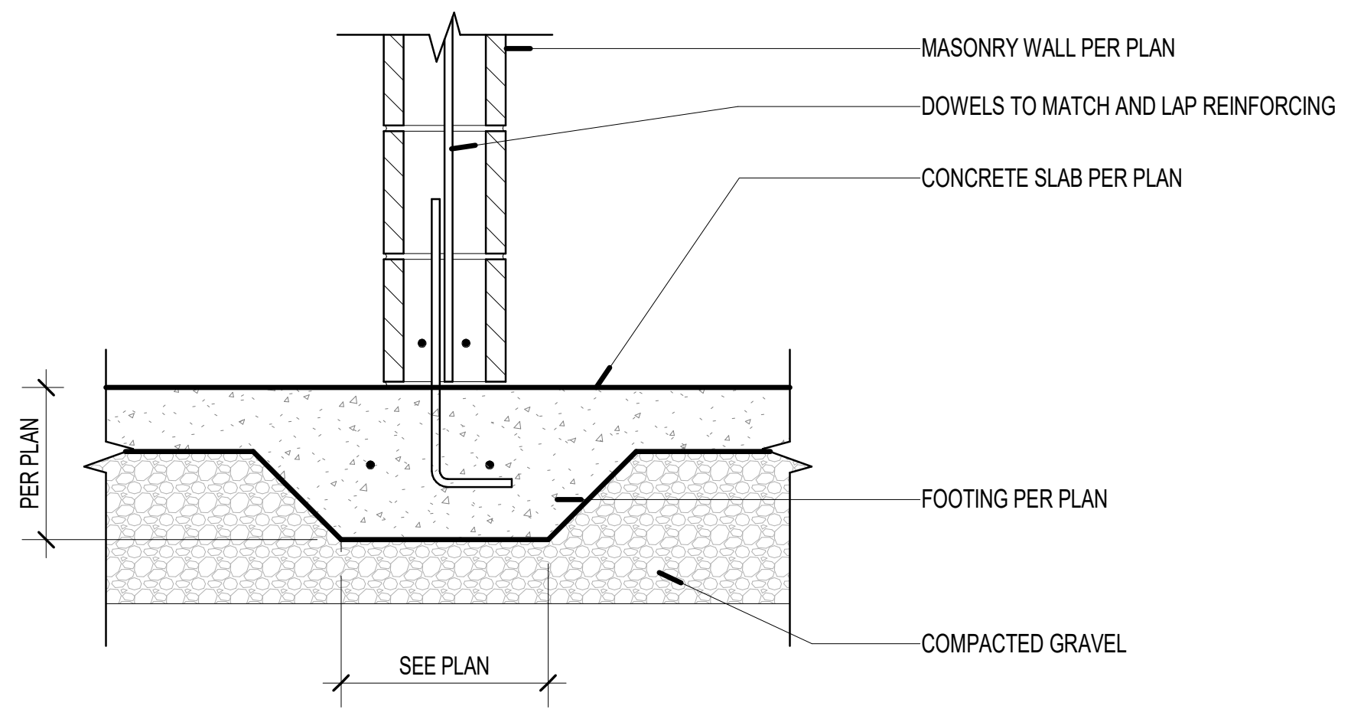
6 ROOF TO CMU

SCALE 1 1/2" = 1'-0"


24" +/-
SAWCUT
EXISTING SECTION OF EDGE OF CONCRETE TO BE SAWCUT AND REMOVED FOR NEW FT'G INSTALLATION
EXISTING CONC. SLAB
INTERIOR PAINTED FINISH
CMU SCORING TO MATCH EXISTING
10" CMU HI-R IN FILL WALL WITH #4 @ 24" O.C. REBAB
EXISTING PAVING TO BE REMOVED
9 3/4"
STEM
#4 CONT RE-BAR
PATCH BACK SECTION OF CONCRETE WHERE NEW FOOTING IS INSTALLED
#4 VERT REBAR @ 24" O.C. EXTEND INTO CMU
#4 CONT.
2'-0"
10"
1'-6"

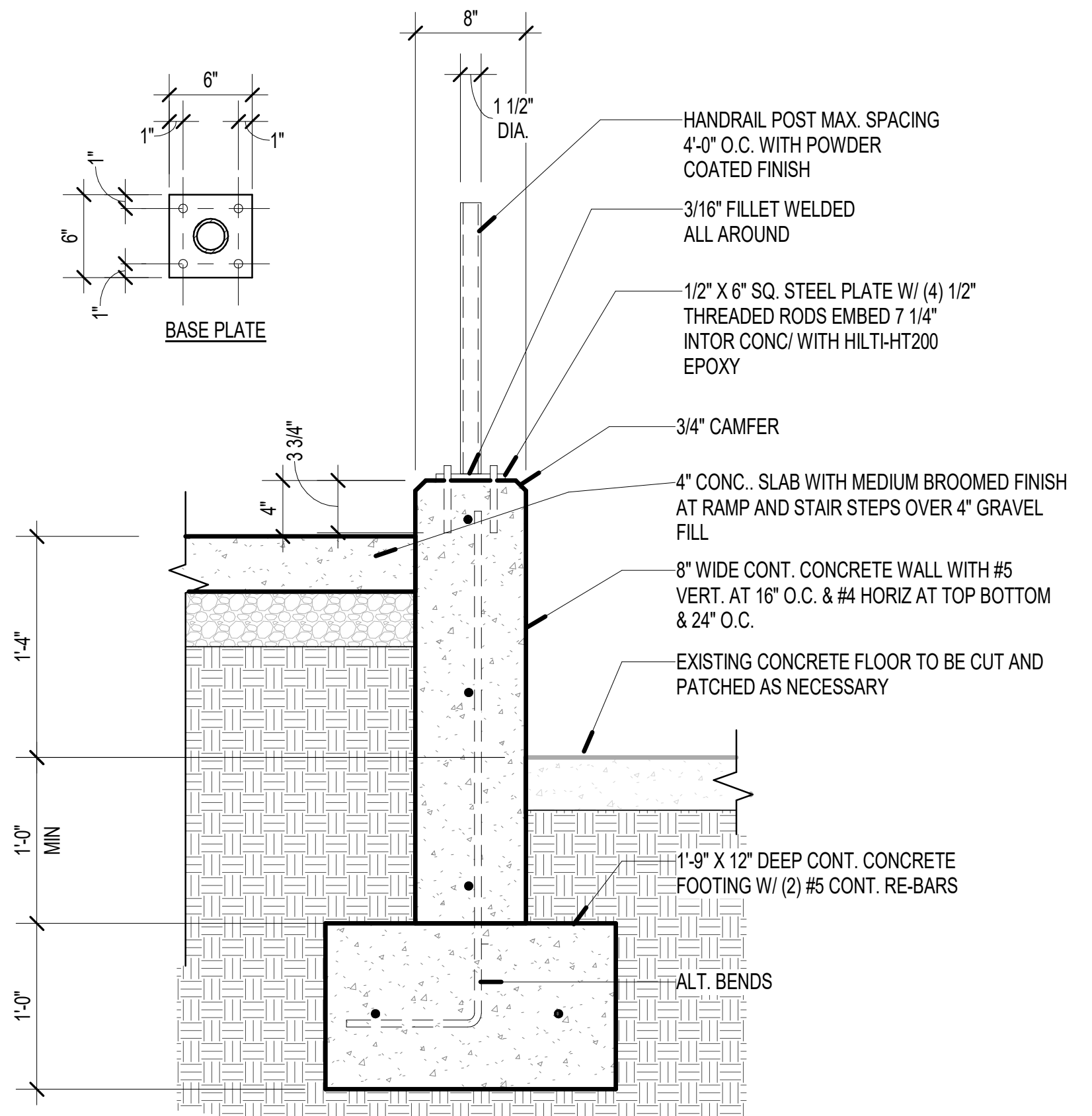
8 CMU IN-FLL WALL

SCALE 1 1/2" = 1'-0"



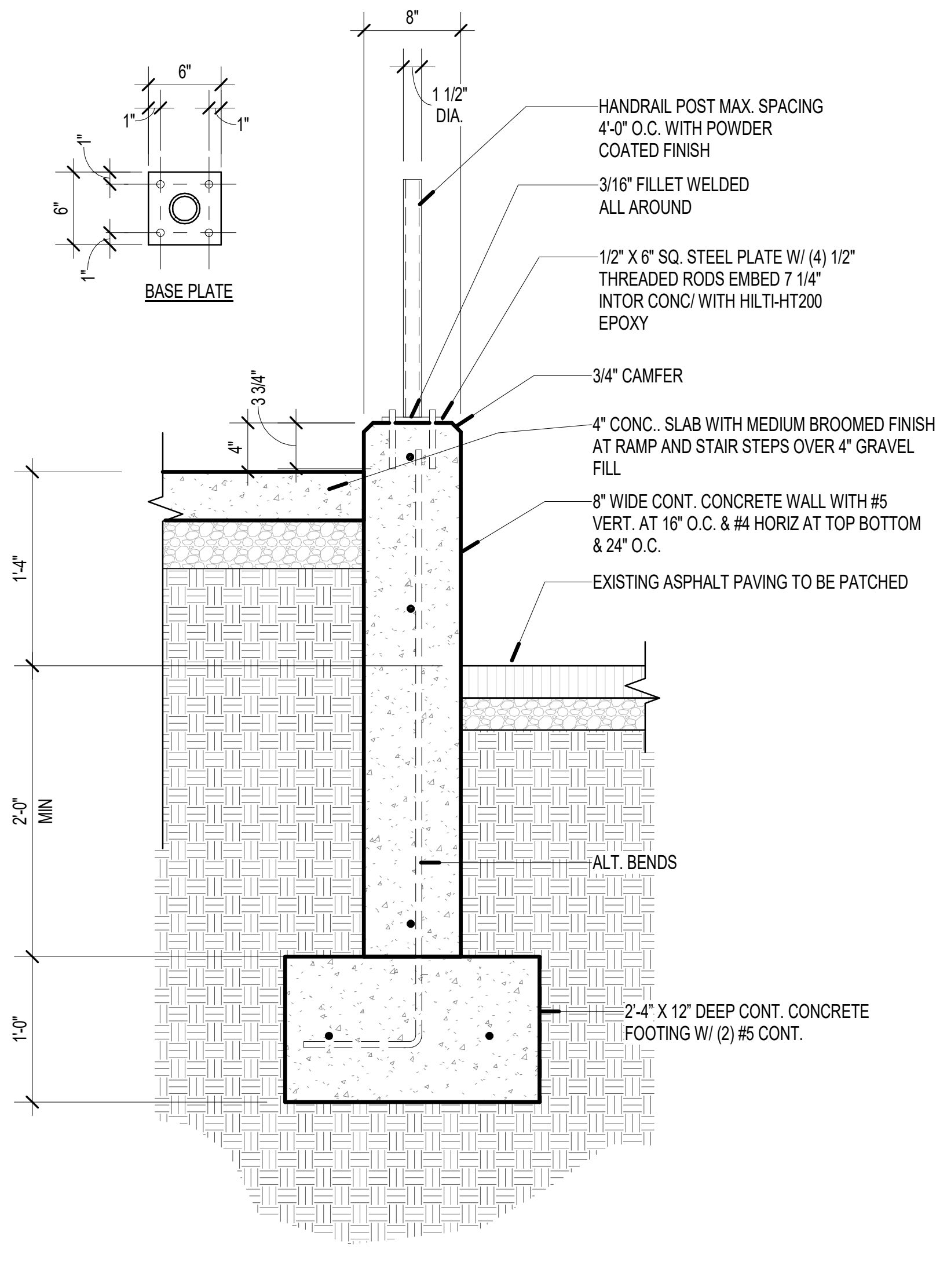
9 CMU PERIMETER FT'G

SCALE 1" = 1'-0"


8"
6"
1"
1"
1"
6"
1"
BASE PLATE
1 1/2" DIA.
HANDRAIL POST MAX. SPACING 4'-0" O.C. WITH POWDER COATED FINISH
3/16" FILLET WELDED ALL AROUND
1/2" X 6" SQ. STEEL PLATE W/ (4) 1/2" THREADED RODS EMBED 7 1/4" INTOR CONC/ WITH HILTI-HT200 EPOXY
3 3/4"
4"
3/4" CAMFER
4" CONC.. SLAB WITH MEDIUM BROOMED FINISH AT RAMP AND STAIR STEPS OVER 4" GRAVEL FILL
8" WIDE CONT. CONCRETE WALL WITH #5 VERT. AT 16" O.C. & #4 HORIZ AT TOP BOTTOM & 24" O.C.
EXISTING CONCRETE FLOOR TO BE CUT AND PATCHED AS NECESSARY
1'-4"
1'-0"
MIN
1'-9" X 12" DEEP CONT. CONCRETE FOOTING W/ (2) #5 CONT. RE-BARS
ALT. BENDS
1'-0"

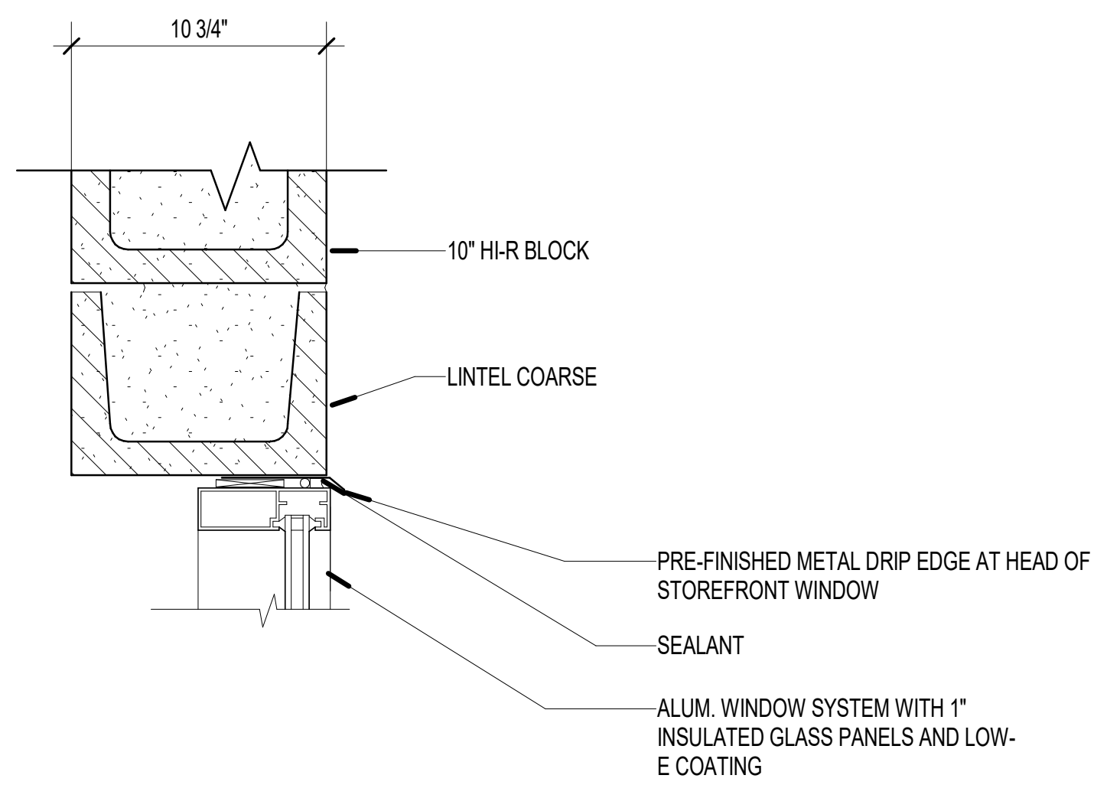
10 INT. FT AT RAMP / STAIR

SCALE 1" = 1'-0"


8"
6"
1"
1"
1"
6"
1"
BASE PLATE
1 1/2" DIA.
HANDRAIL POST MAX. SPACING 4'-0" O.C. WITH POWDER COATED FINISH
3/16" FILLET WELDED ALL AROUND
1/2" X 6" SQ. STEEL PLATE W/ (4) 1/2" THREADED RODS EMBED 7 1/4" INTOR CONC/ WITH HILTI-HT200 EPOXY
3 3/4"
4"
3/4" CAMFER
4" CONC.. SLAB WITH MEDIUM BROOMED FINISH AT RAMP AND STAIR STEPS OVER 4" GRAVEL FILL
8" WIDE CONT. CONCRETE WALL WITH #5 VERT. AT 16" O.C. & #4 HORIZ AT TOP BOTTOM & 24" O.C.
EXISTING ASPHALT PAVING TO BE PATCHED
1'-4"
2'-0"
MIN
ALT. BENDS
2'-4" X 12" DEEP CONT. CONCRETE FOOTING W/ (2) #5 CONT.
1'-0"

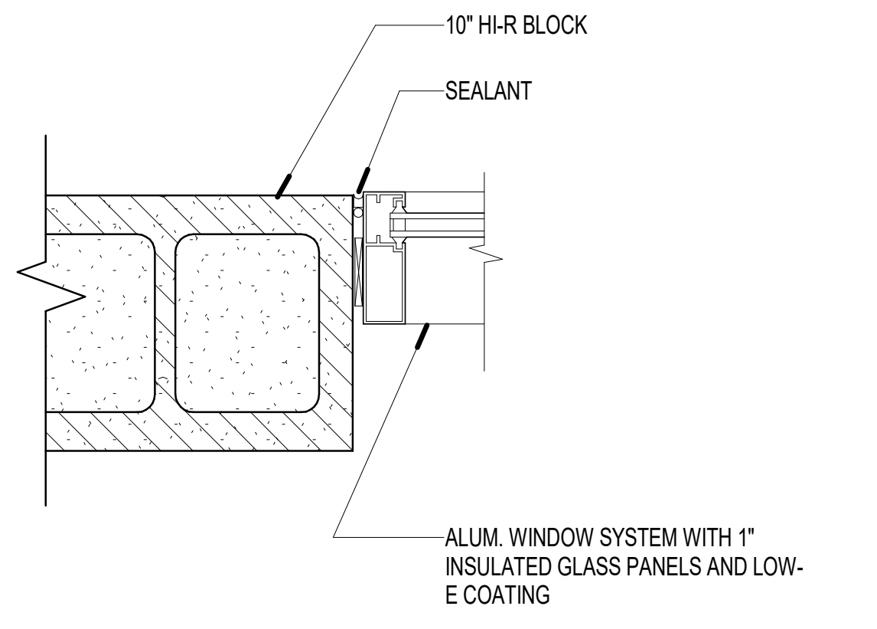
11 EXT. FT'G RAMP / STAIR

SCALE 1" = 1'-0"


10 3/4"
10" HI-R BLOCK
LINTEL COARSE
PRE-FINISHED METAL DRIP EDGE AT HEAD OF STOREFRONT WINDOW
SEALANT
ALUM. WINDOW SYSTEM WITH 1" INSULATED GLASS PANELS AND LOW-E COATING

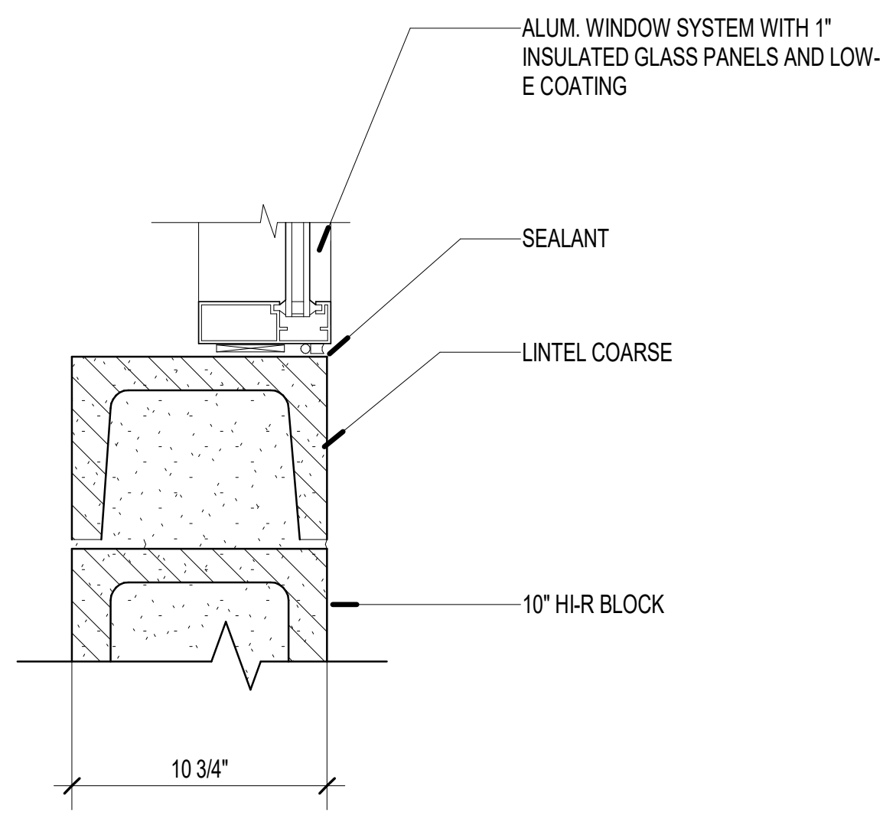
12 EXT. ALUM WINDOW

SCALE 1 1/2" = 1'-0"


10" HI-R BLOCK
SEALANT
ALUM. WINDOW SYSTEM WITH 1" INSULATED GLASS PANELS AND LOW-E COATING

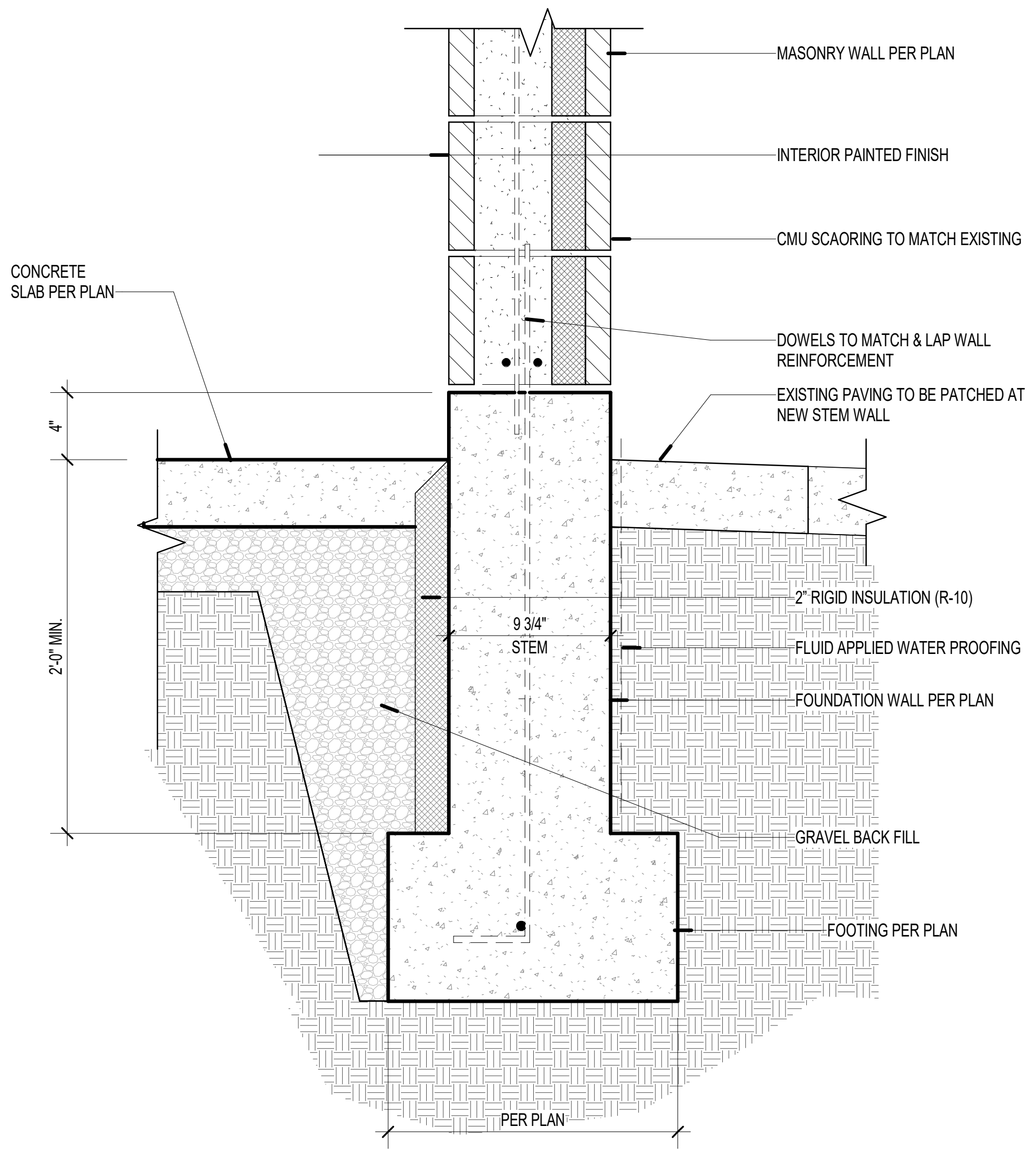
13 EXT. ALUM WINDOW

SCALE 1 1/2" = 1'-0"


ALUM. WINDOW SYSTEM WITH 1" INSULATED GLASS PANELS AND LOW-E COATING
SEALANT
LINTEL COARSE
10" HI-R BLOCK
10 3/4"

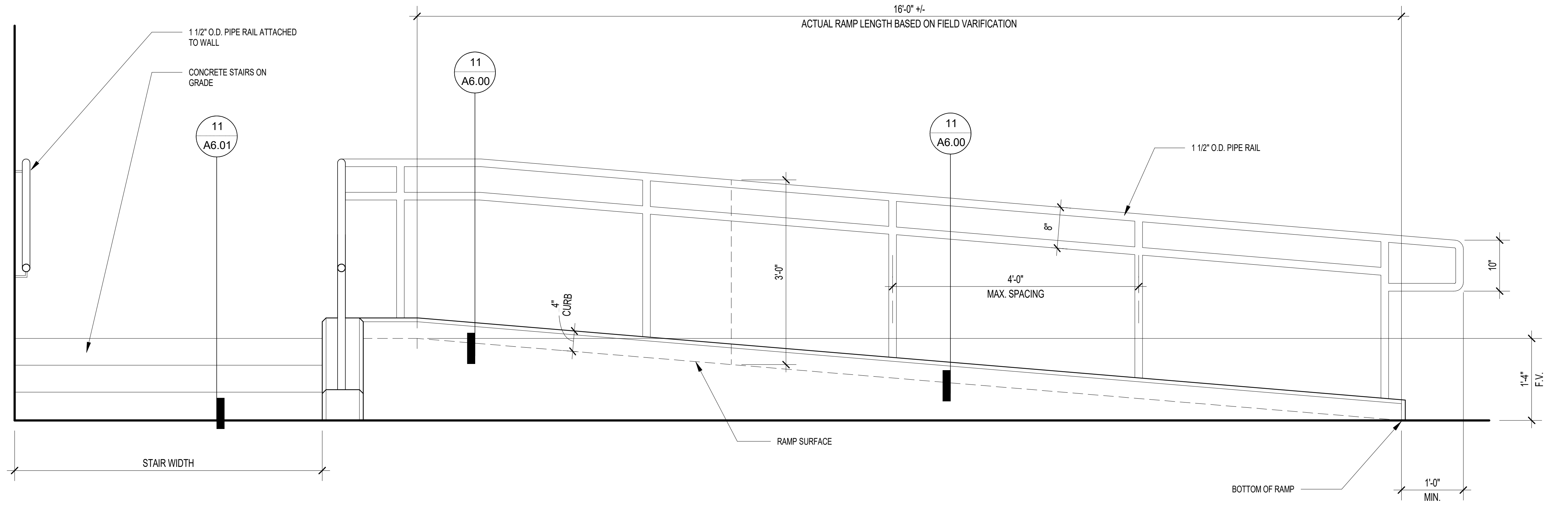
14 EXT. ALUM WINDOW

SCALE 1 1/2" = 1'-0"


MASONRY WALL PER PLAN
INTERIOR PAINTED FINISH
CMU SCAORING TO MATCH EXISTING
CONCRETE SLAB PER PLAN
DOWELS TO MATCH & LAP WALL REINFORCEMENT
EXISTING PAVING TO BE PATCHED AT NEW STEM WALL
4"
2'-0" MIN.
2" RIGID INSULATION (R-10)
9 3/4"
STEM
FLUID APPLIED WATER PROOFING
FOUNDATION WALL PER PLAN
GRAVEL BACK FILL
FOOTING PER PLAN
PER PLAN

4 EXT. FOOTING AT CMU WALL

SCALE 1 1/2" = 1'-0"



7 RAMP AND STAIR

SCALE 3/4" = 1'-0"

1/14/2025 6:52:50 PM

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HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

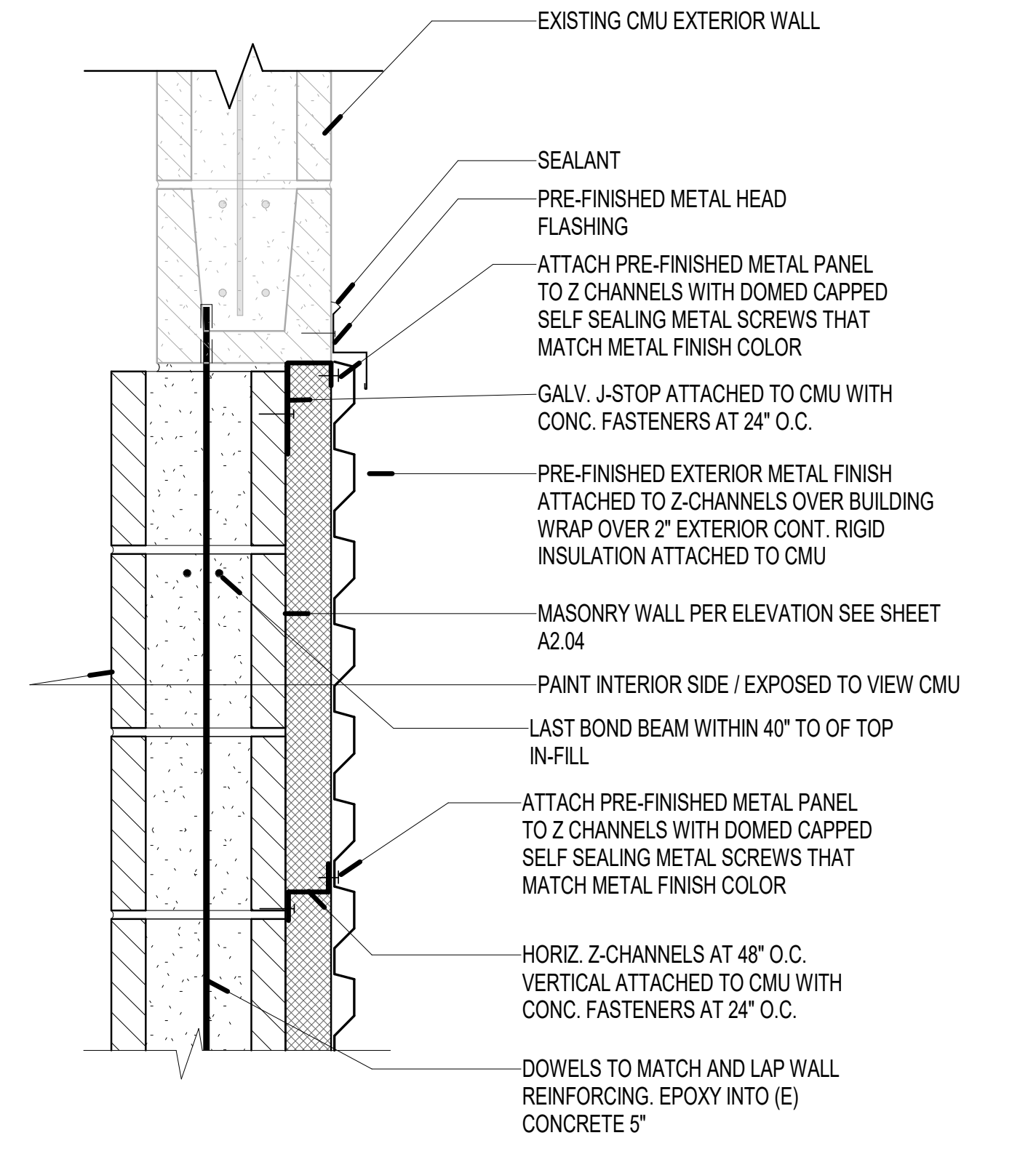
DATE
JAN 9, 2025

REF NO.
24-106

AUTHOR
DKA

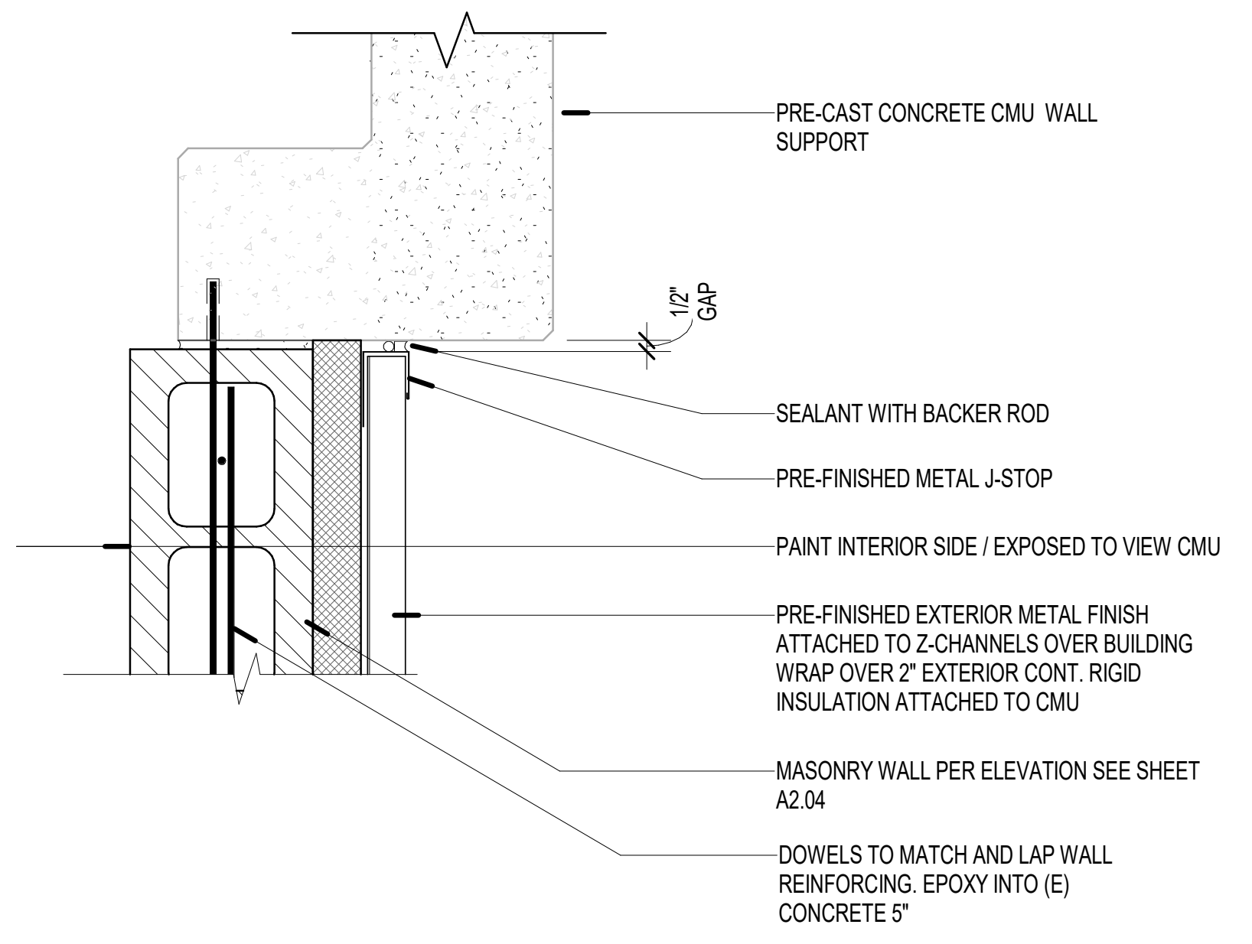
PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
DETAILS

SHEET NO.
A6.00


EXISTING CMU EXTERIOR WALL
SEALANT
PRE-FINISHED METAL HEAD FLASHING
ATTACH PRE-FINISHED METAL PANEL TO Z CHANNELS WITH DOMED CAPPED SELF SEALING METAL SCREWS THAT MATCH METAL FINISH COLOR
GALV. J-STOP ATTACHED TO CMU WITH CONC. FASTENERS AT 24" O.C.
PRE-FINISHED EXTERIOR METAL FINISH ATTACHED TO Z-CHANNELS OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
MASONRY WALL PER ELEVATION SEE SHEET A2.04
PAINT INTERIOR SIDE / EXPOSED TO VIEW CMU
LAST BOND BEAM WITHIN 40" TO OF TOP IN-FILL
ATTACH PRE-FINISHED METAL PANEL TO Z CHANNELS WITH DOMED CAPPED SELF SEALING METAL SCREWS THAT MATCH METAL FINISH COLOR
HORIZ. Z-CHANNELS AT 48" O.C. VERTICAL ATTACHED TO CMU WITH CONC. FASTENERS AT 24" O.C.
DOWELS TO MATCH AND LAP WALL REINFORCING. EPOXY INTO (E) CONCRETE 5"

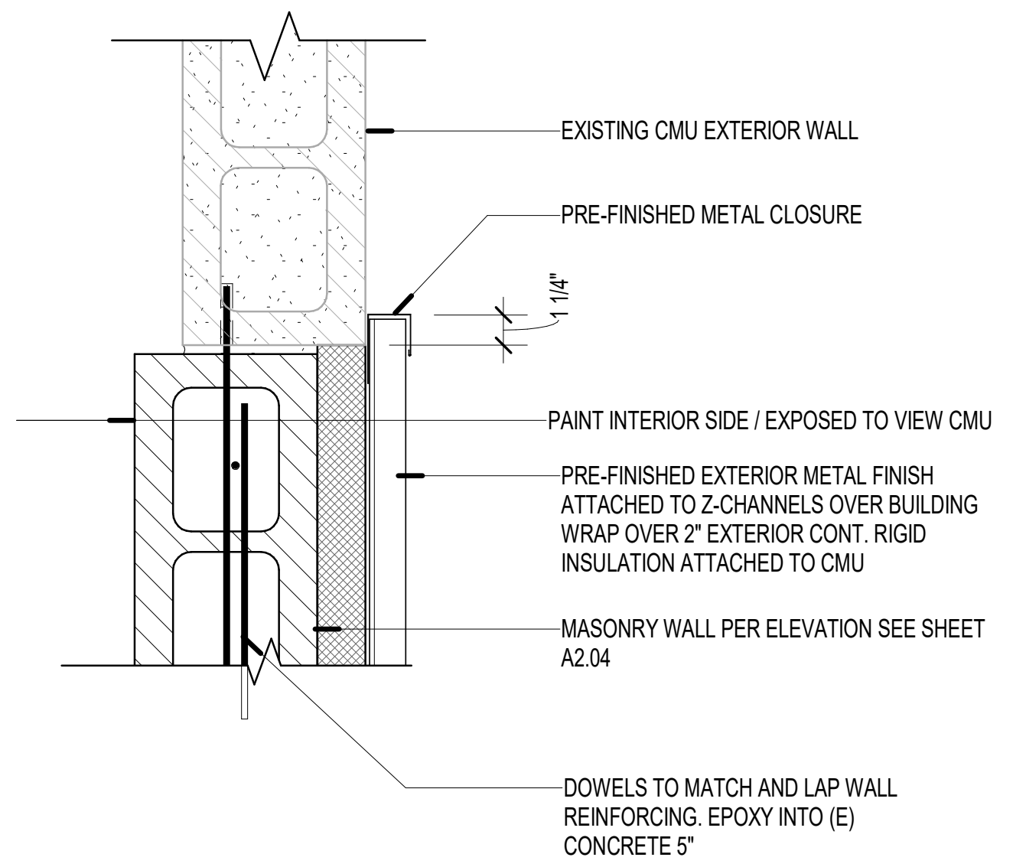
1 FRAMED IN-FILL JAMB AT CMU

SCALE 1 1/2" = 1'-0"


PRE-CAST CONCRETE CMU WALL SUPPORT
1/2" GAP
SEALANT WITH BACKER ROD
PRE-FINISHED METAL J-STOP
PAINT INTERIOR SIDE / EXPOSED TO VIEW CMU
PRE-FINISHED EXTERIOR METAL FINISH ATTACHED TO Z-CHANNELS OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
MASONRY WALL PER ELEVATION SEE SHEET A2.04
DOWELS TO MATCH AND LAP WALL REINFORCING. EPOXY INTO (E) CONCRETE 5"

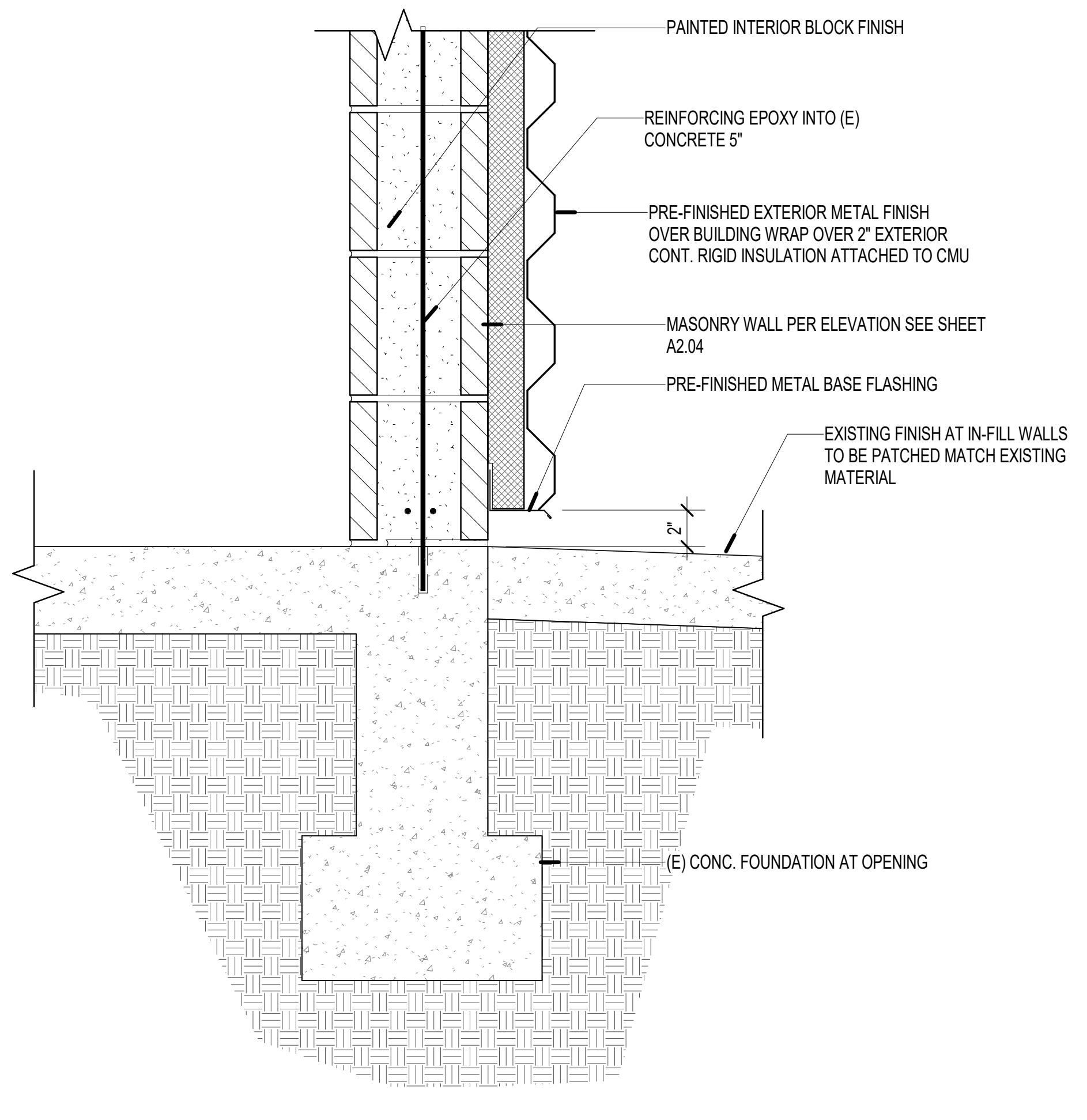
2 IN-FILL MASONRY JAMB

SCALE 1 1/2" = 1'-0"


EXISTING CMU EXTERIOR WALL
PRE-FINISHED METAL CLOSURE
1 1/4"
PAINT INTERIOR SIDE / EXPOSED TO VIEW CMU
PRE-FINISHED EXTERIOR METAL FINISH ATTACHED TO Z-CHANNELS OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
MASONRY WALL PER ELEVATION SEE SHEET A2.04
DOWELS TO MATCH AND LAP WALL REINFORCING. EPOXY INTO (E) CONCRETE 5"

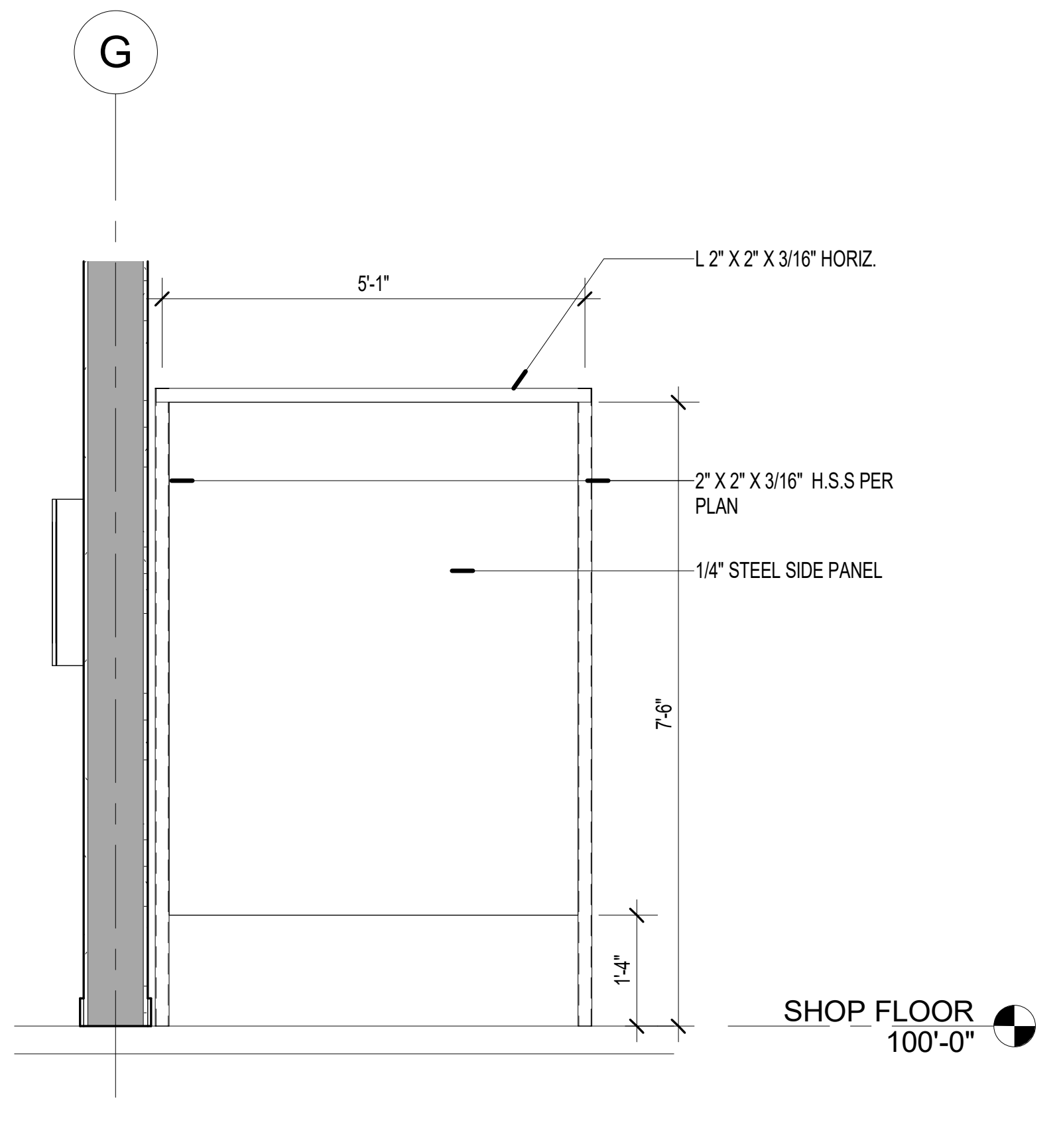
3 IN-FILL AT MASONRY JAMB

SCALE 1 1/2" = 1'-0"


PAINTED INTERIOR BLOCK FINISH
REINFORCING EPOXY INTO (E) CONCRETE 5"
PRE-FINISHED EXTERIOR METAL FINISH OVER BUILDING WRAP OVER 2" EXTERIOR CONT. RIGID INSULATION ATTACHED TO CMU
MASONRY WALL PER ELEVATION SEE SHEET A2.04
PRE-FINISHED METAL BASE FLASHING
EXISTING FINISH AT IN-FILL WALLS TO BE PATCHED MATCH EXISTING MATERIAL
2"
(E) CONC. FOUNDATION AT OPENING

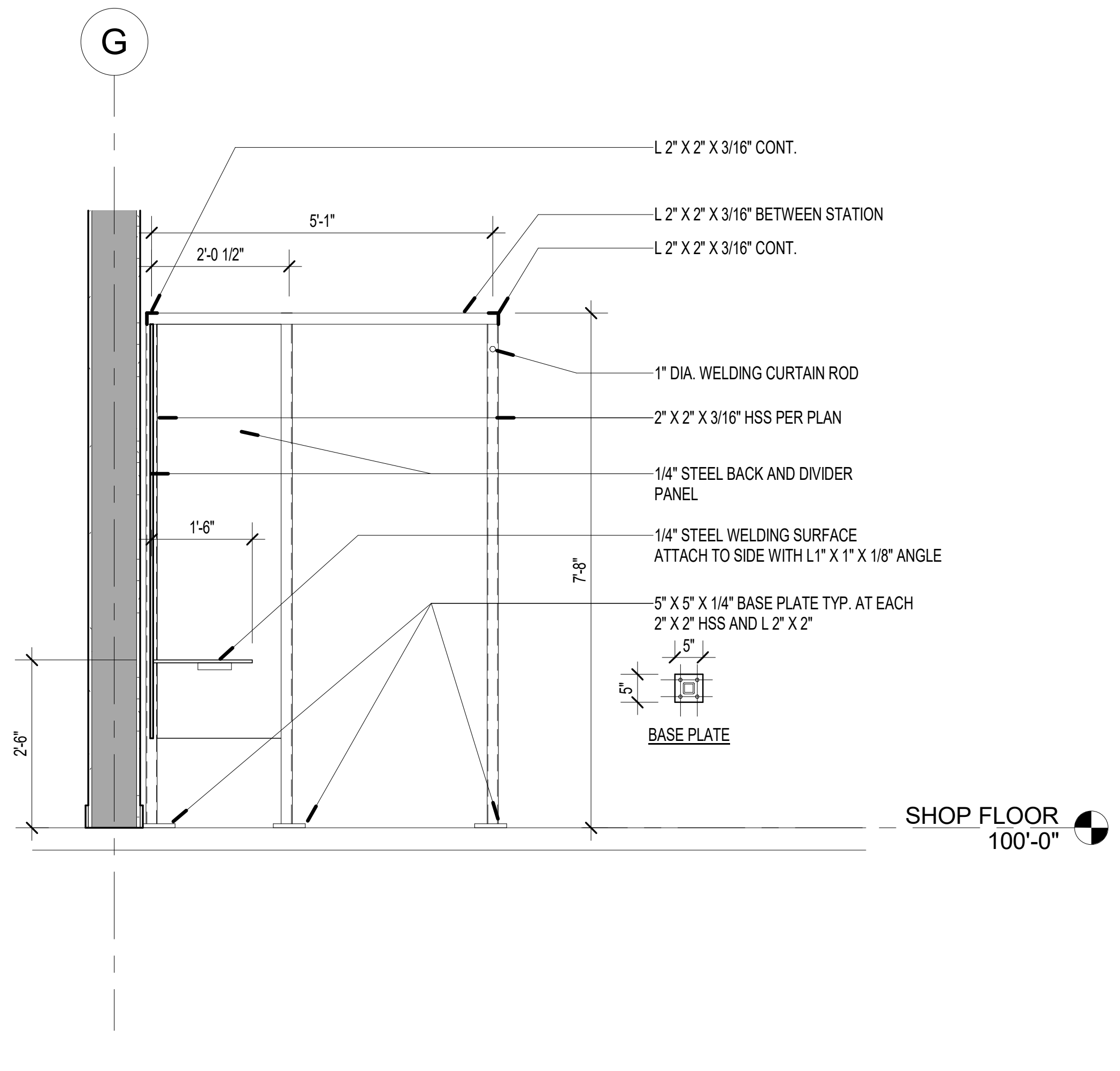
4 IN-FILL AT FOUNDATION

SCALE 1 1/2" = 1'-0"



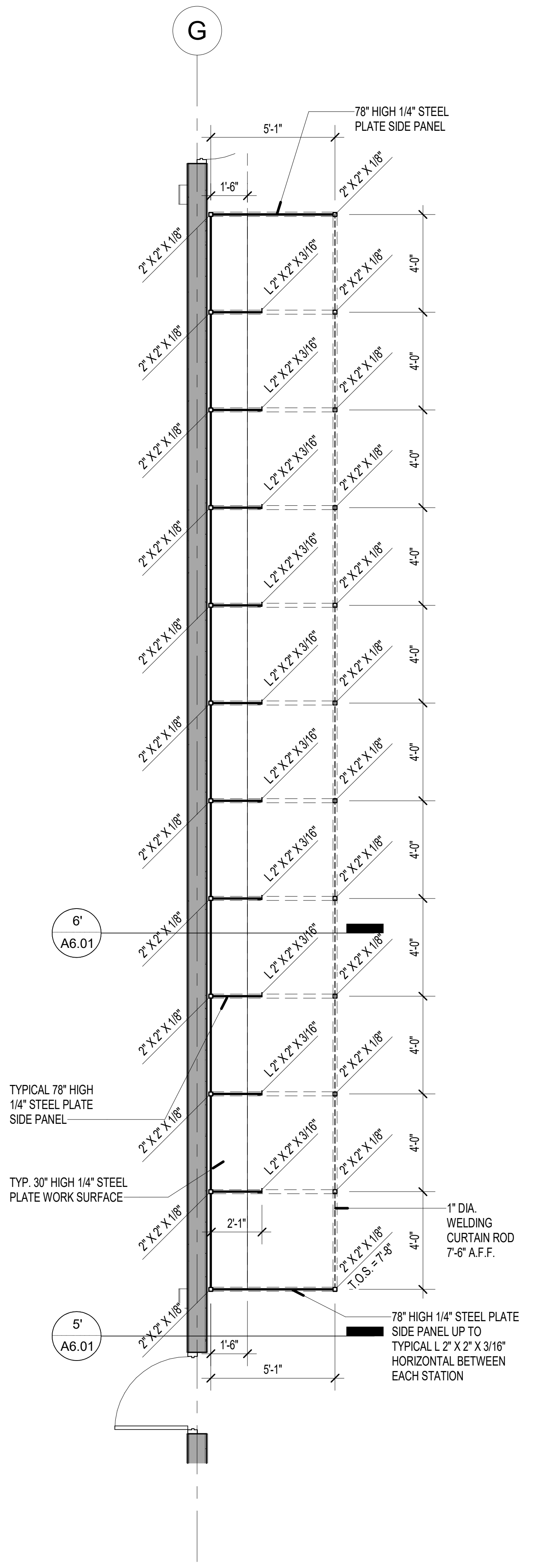
5' WELDING STATION SIDE PANEL

SCALE 1/2" = 1'-0"


G
L 2" X 2" X 3/16" CONT.
L 2" X 2" X 3/16" BETWEEN STATION
L 2" X 2" X 3/16" CONT.
5'-1"
2'-0 1/2"
1" DIA. WELDING CURTAIN ROD
2" X 2" X 3/16" HSS PER PLAN
1/4" STEEL BACK AND DIVIDER PANEL
1'-6"
1/4" STEEL WELDING SURFACE ATTACH TO SIDE WITH L1" X 1" X 1/8" ANGLE
5" X 5" X 1/4" BASE PLATE TYP. AT EACH 2" X 2" HSS AND L 2" X 2"
7'-8"
5"
5"
BASE PLATE
2'-6"
SHOP FLOOR
100'-0"

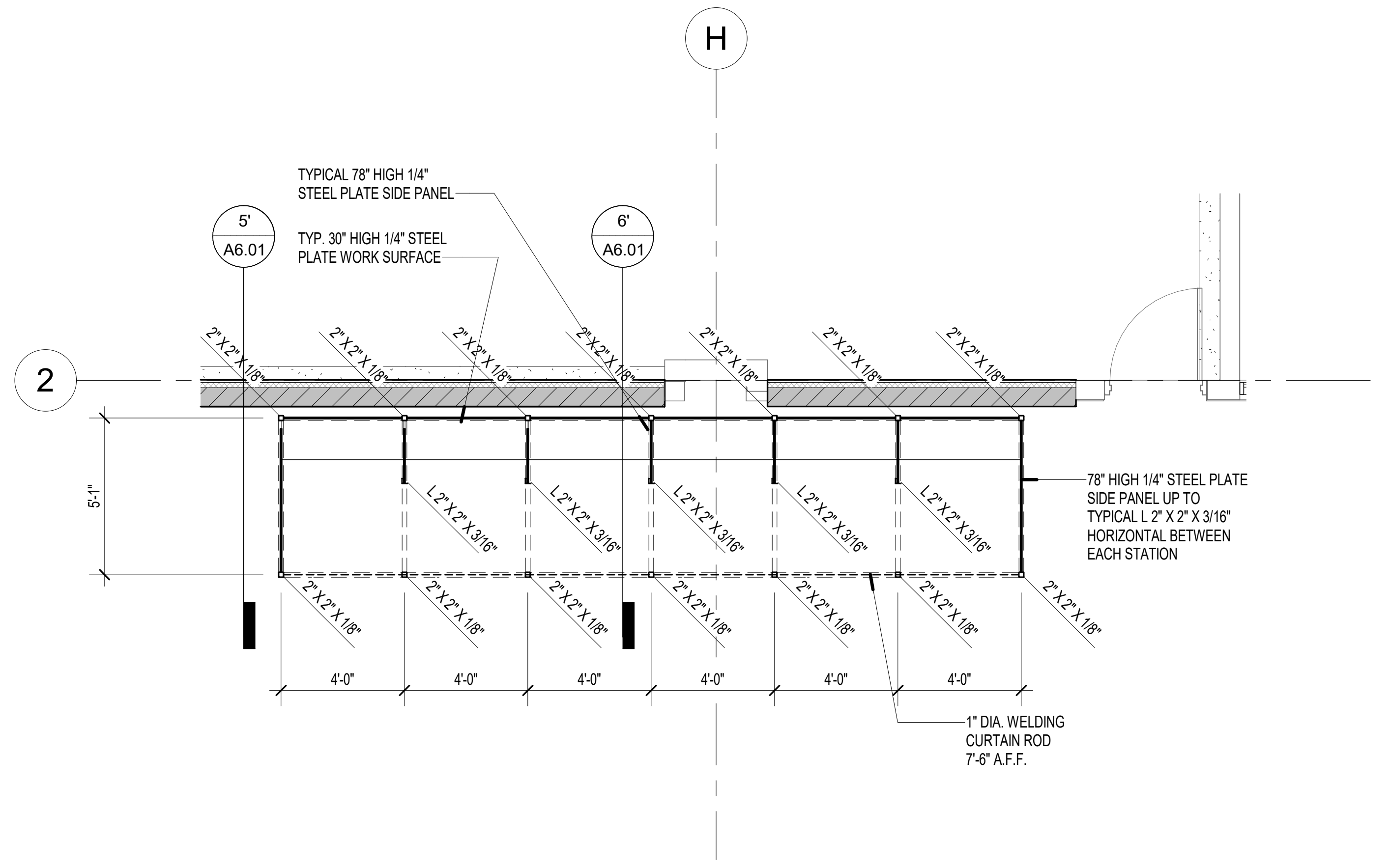
6' WELDING STATION SIDE PANEL

SCALE 1/2" = 1'-0"


G
78" HIGH 1/4" STEEL PLATE SIDE PANEL
5'-1"
1'-6"
2" X 2" X 1/8"
L 2" X 2" X 3/16"
4'-0"
6'
A6.01
TYPICAL 78" HIGH 1/4" STEEL PLATE SIDE PANEL
TYP. 30" HIGH 1/4" STEEL PLATE WORK SURFACE
2'-1"
1" DIA. WELDING CURTAIN ROD 7'-6" A.F.F.
T.O.S. = 7'-8"
78" HIGH 1/4" STEEL PLATE SIDE PANEL UP TO TYPICAL L 2" X 2" X 3/16" HORIZONTAL BETWEEN EACH STATION
5'
A6.01
1'-6"
5'-1"

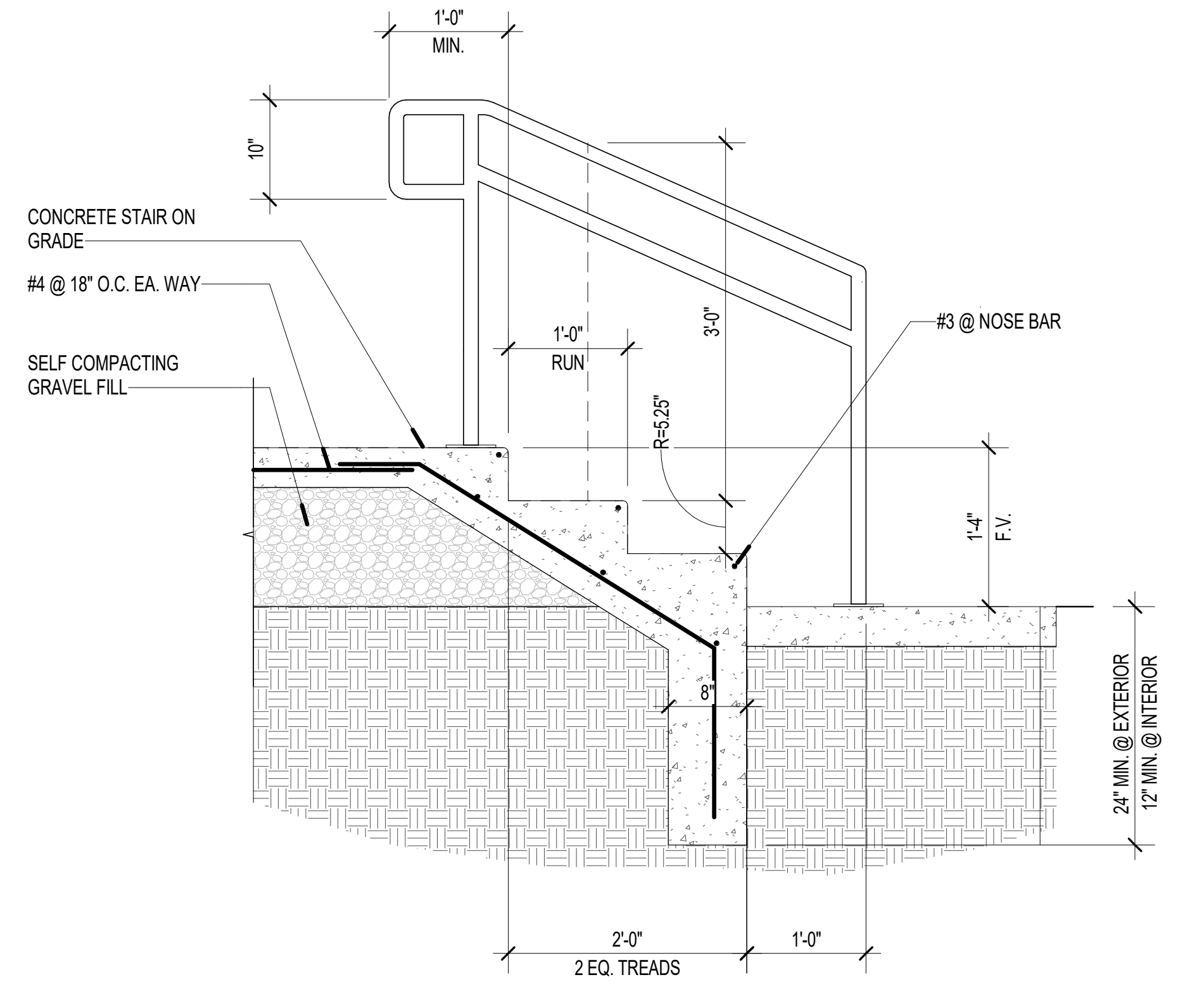
8' WELDING STATIONS 001

SCALE 1/4" = 1'-0"


H
TYPICAL 78" HIGH 1/4" STEEL PLATE SIDE PANEL
5'
A6.01
TYP. 30" HIGH 1/4" STEEL PLATE WORK SURFACE
6'
A6.01
2
2" X 2" X 1/8"
5'-1"
L 2" X 2" X 3/16"
78" HIGH 1/4" STEEL PLATE SIDE PANEL UP TO TYPICAL L 2" X 2" X 3/16" HORIZONTAL BETWEEN EACH STATION
4'-0"
1" DIA. WELDING CURTAIN ROD 7'-6" A.F.F.

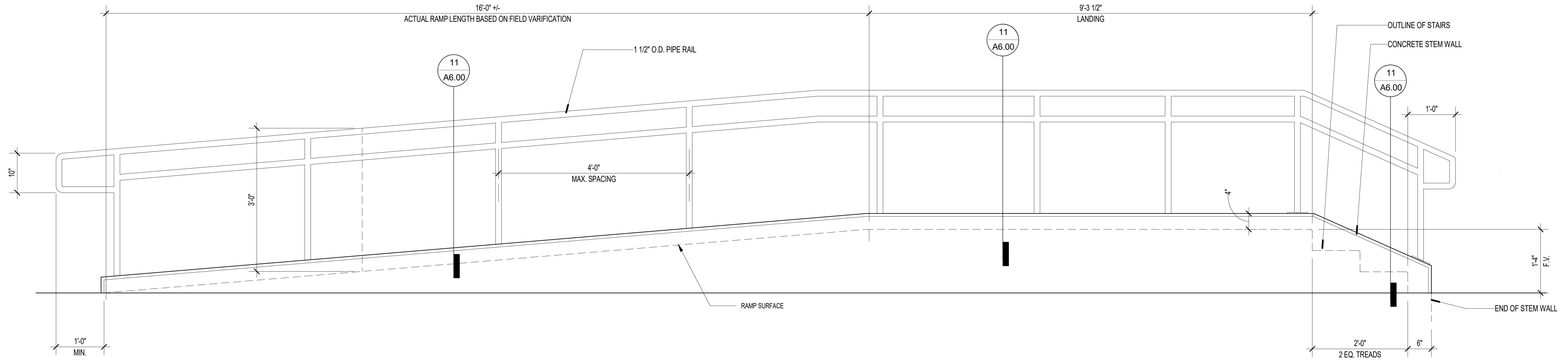
10 WELDING STATIONS 002

SCALE 1/4" = 1'-0"



11 CONC. STAIR SECTION

SCALE 3/4" = 1'-0"



7 RAMP AND STAIR

SCALE 3/4" = 1'-0"

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025

REF NO.
24-106

AUTHOR
DKA

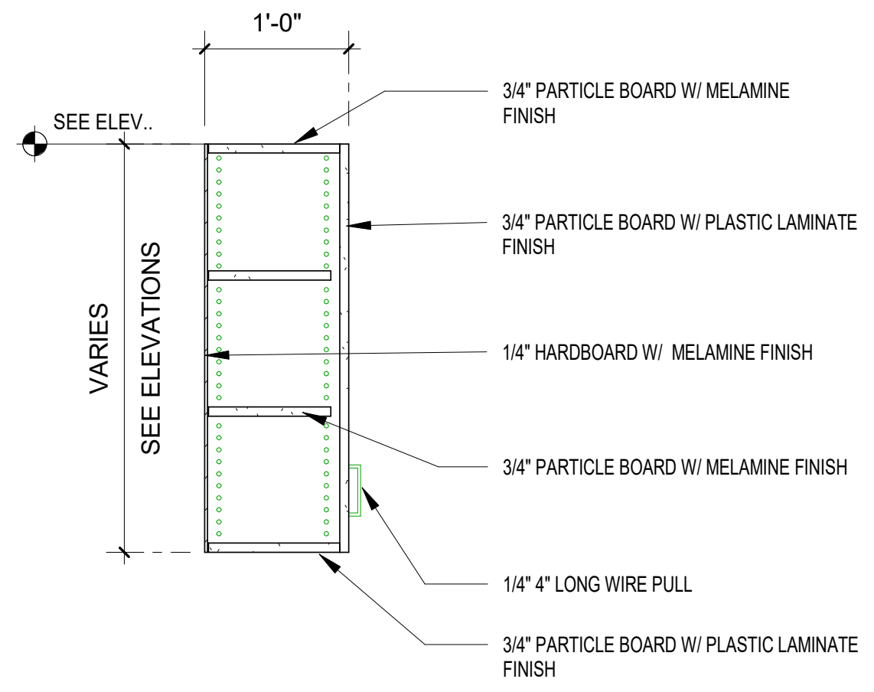
PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

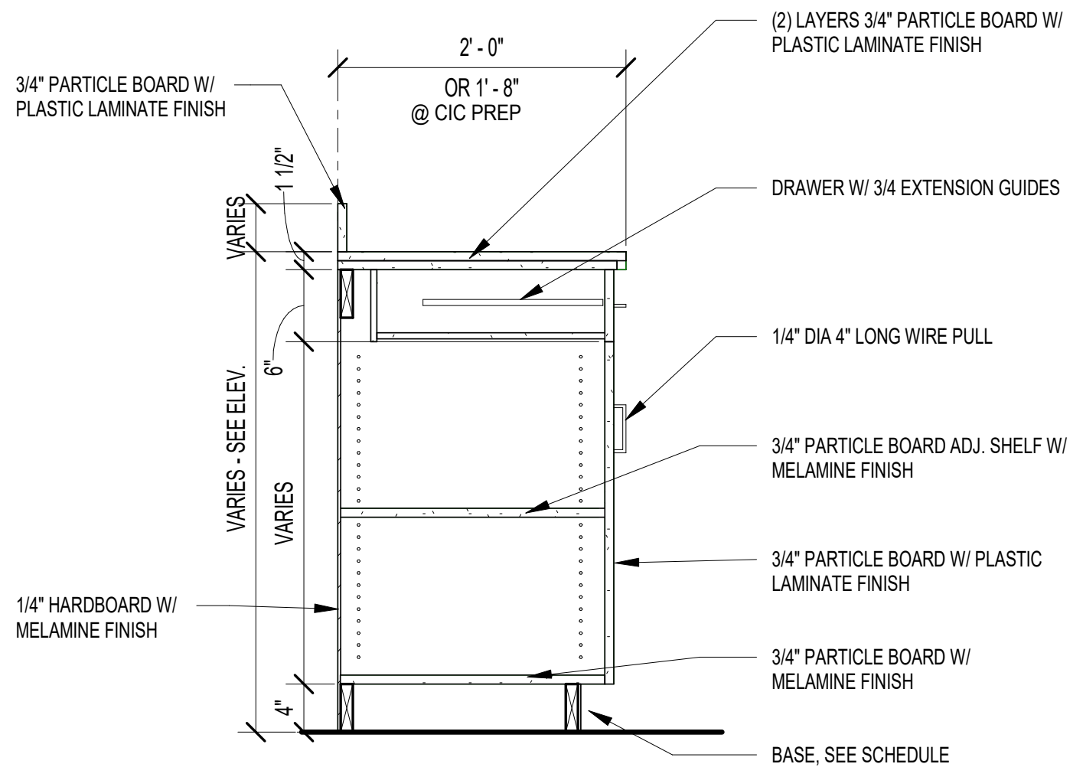
DETAILS

SHEET NO.
A6.01

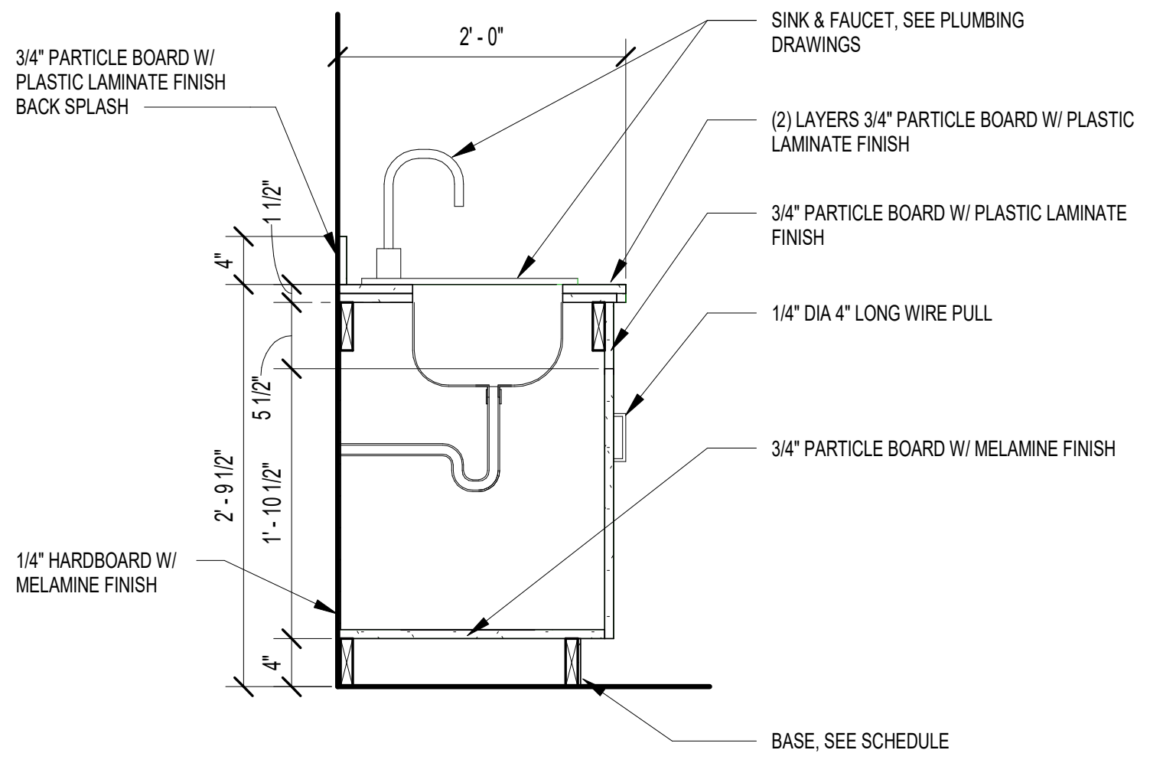
1/14/2025 6:52:51 PM


1'-0"
SEE ELEV..
VARIES
SEE ELEVATIONS
3/4" PARTICLE BOARD W/ MELAMINE FINISH
3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
1/4" HARDBOARD W/ MELAMINE FINISH
3/4" PARTICLE BOARD W/ MELAMINE FINISH
1/4" 4" LONG WIRE PULL
3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH

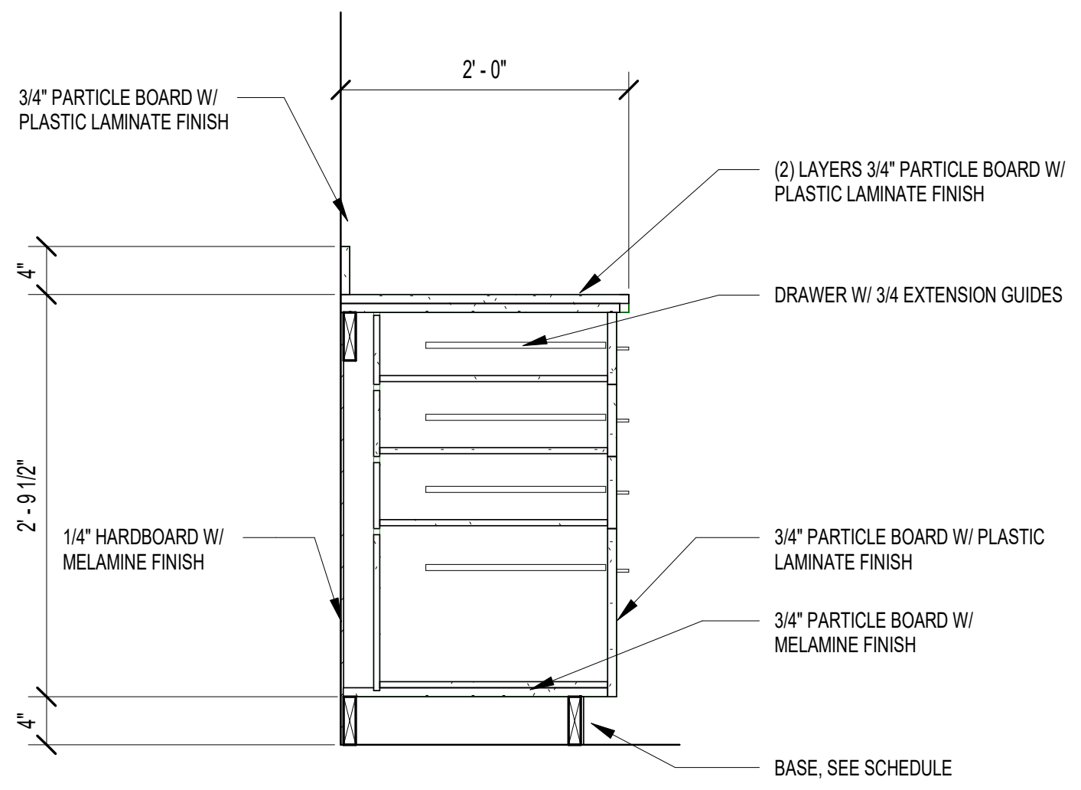
1
UPPER CABINET
SCALE 3/4" = 1'-0"


2' - 0"
OR 1' - 8"
@ CIC PREP
3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
1 1/2"
VARIES
6"
VARIES - SEE ELEV.
VARIES
4"
1/4" HARDBOARD W/ MELAMINE FINISH
(2) LAYERS 3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
DRAWER W/ 3/4 EXTENSION GUIDES
1/4" DIA 4" LONG WIRE PULL
3/4" PARTICLE BOARD ADJ. SHELF W/ MELAMINE FINISH
3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
3/4" PARTICLE BOARD W/ MELAMINE FINISH
BASE, SEE SCHEDULE

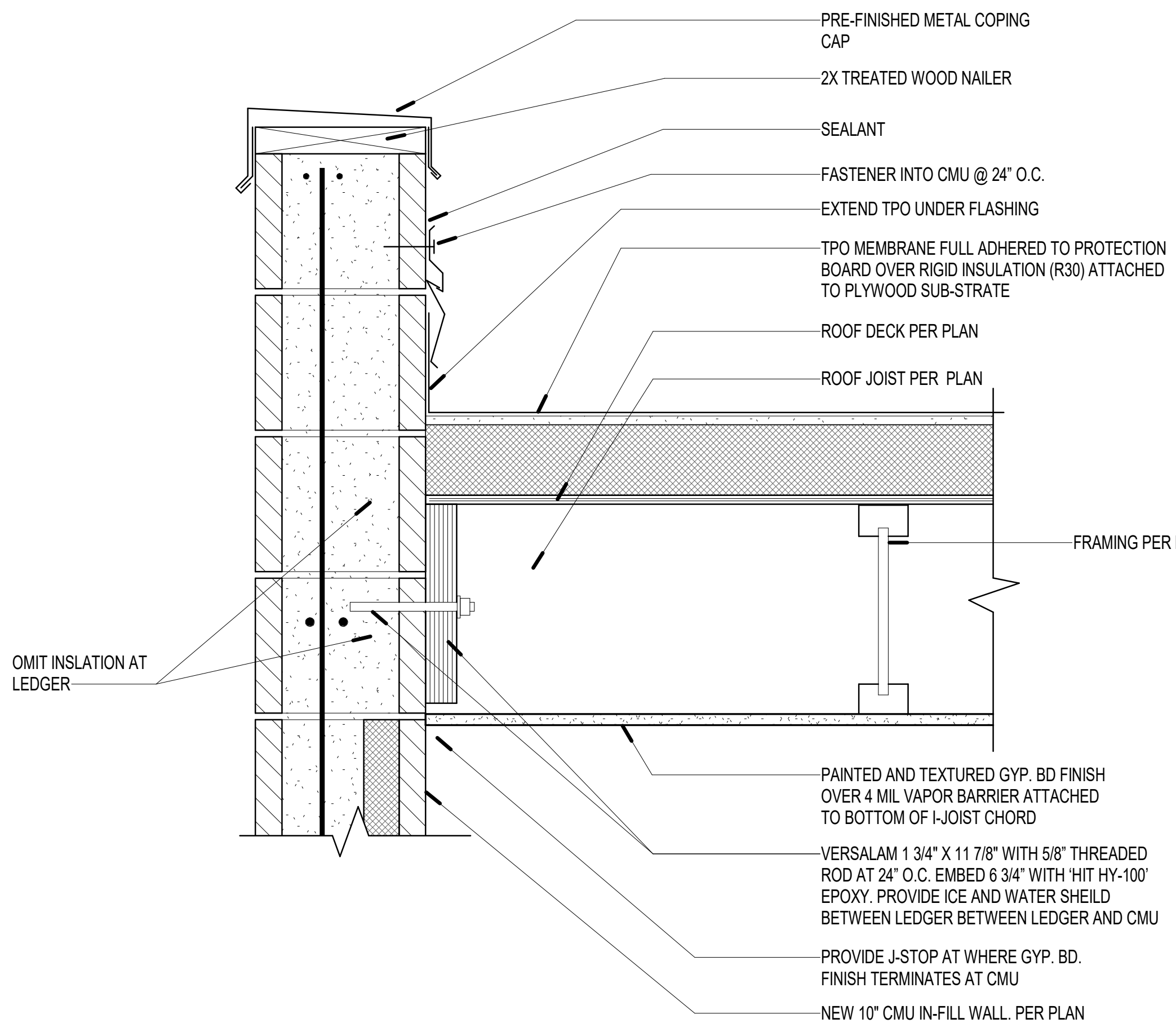
2
BASE CABINET
SCALE 3/4" = 1'-0"


2' - 0"
3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH BACK SPLASH
1 1/2"
4"
5 1/2"
2' - 9 1/2"
1' - 10 1/2"
4"
1/4" HARDBOARD W/ MELAMINE FINISH
SINK & FAUCET, SEE PLUMBING DRAWINGS
(2) LAYERS 3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
1/4" DIA 4" LONG WIRE PULL
3/4" PARTICLE BOARD W/ MELAMINE FINISH
BASE, SEE SCHEDULE

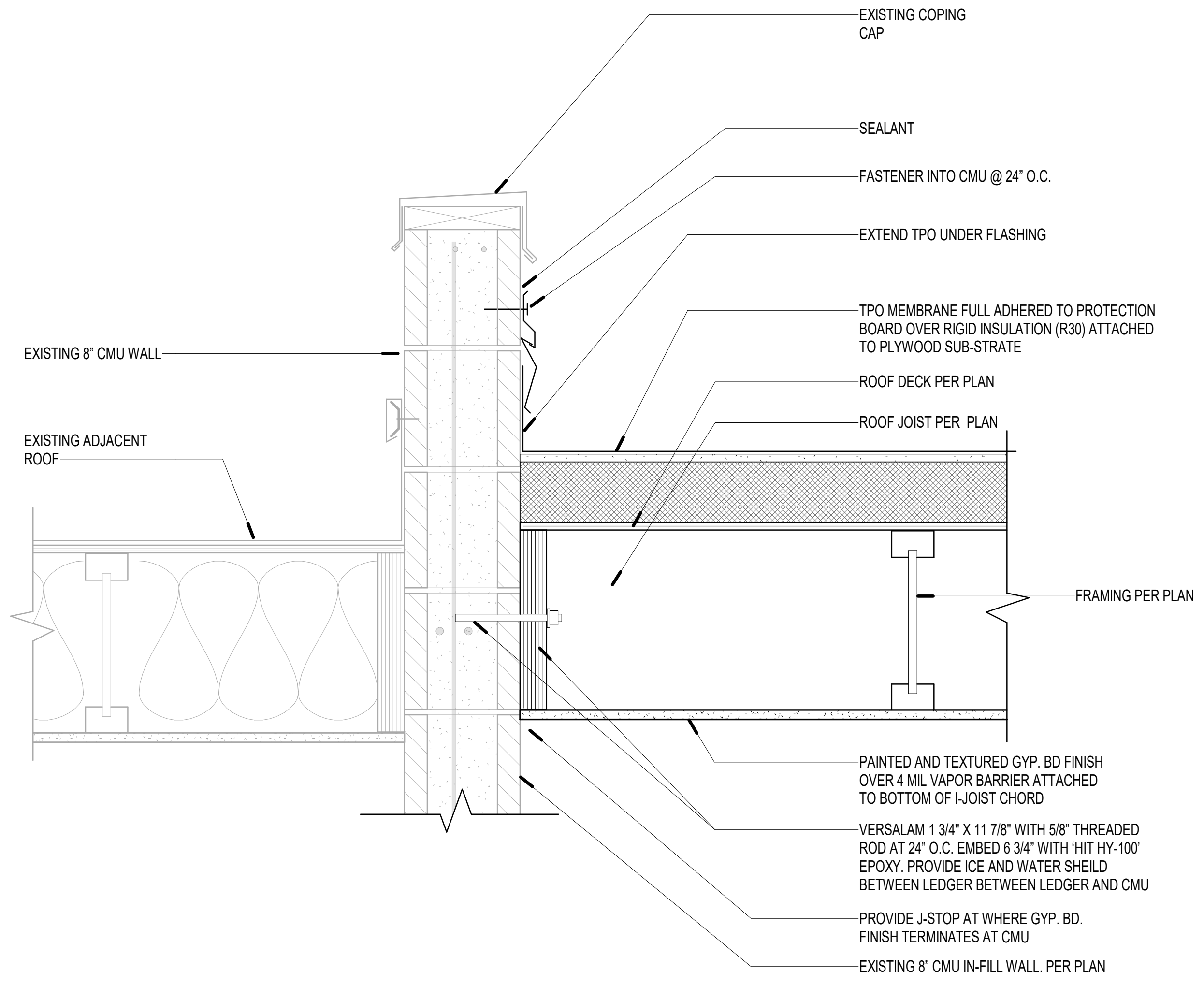
3
BASE CABINET SINK
SCALE 3/4" = 1'-0"


2' - 0"
3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
4"
2' - 9 1/2"
4"
1/4" HARDBOARD W/ MELAMINE FINISH
(2) LAYERS 3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
DRAWER W/ 3/4 EXTENSION GUIDES
3/4" PARTICLE BOARD W/ PLASTIC LAMINATE FINISH
3/4" PARTICLE BOARD W/ MELAMINE FINISH
BASE, SEE SCHEDULE

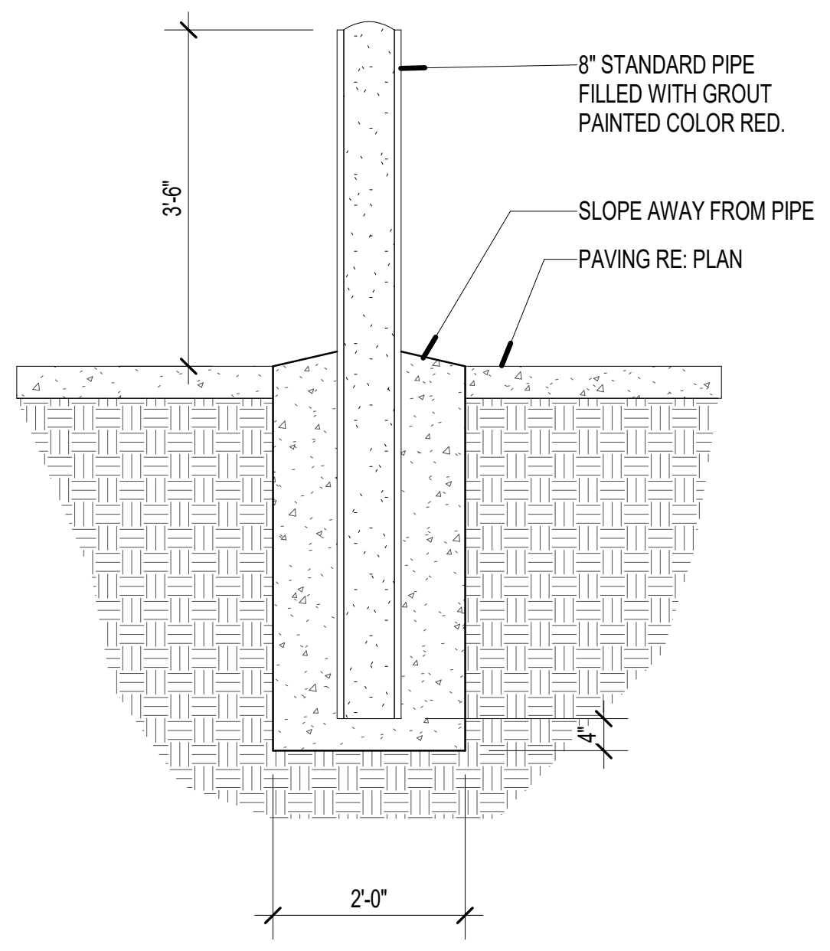
4
BASE CABINET WITH DRAWER
SCALE 3/4" = 1'-0"


PRE-FINISHED METAL COPING CAP
2X TREATED WOOD NAILER
SEALANT
FASTENER INTO CMU @ 24" O.C.
EXTEND TPO UNDER FLASHING
TPO MEMBRANE FULL ADHERED TO PROTECTION BOARD OVER RIGID INSULATION (R30) ATTACHED TO PLYWOOD SUB-STRATE
ROOF DECK PER PLAN
ROOF JOIST PER PLAN
FRAMING PER PLAN
OMIT INSLATION AT LEDGER
PAINTED AND TEXTURED GYP. BD FINISH OVER 4 MIL VAPOR BARRIER ATTACHED TO BOTTOM OF I-JOIST CHORD
VERSALAM 1 3/4" X 11 7/8" WITH 5/8" THREADED ROD AT 24" O.C. EMBED 6 3/4" WITH 'HIT HY-100' EPOXY. PROVIDE ICE AND WATER SHEILD BETWEEN LEDGER BETWEEN LEDGER AND CMU
PROVIDE J-STOP AT WHERE GYP. BD. FINISH TERMINATES AT CMU
NEW 10" CMU IN-FILL WALL. PER PLAN

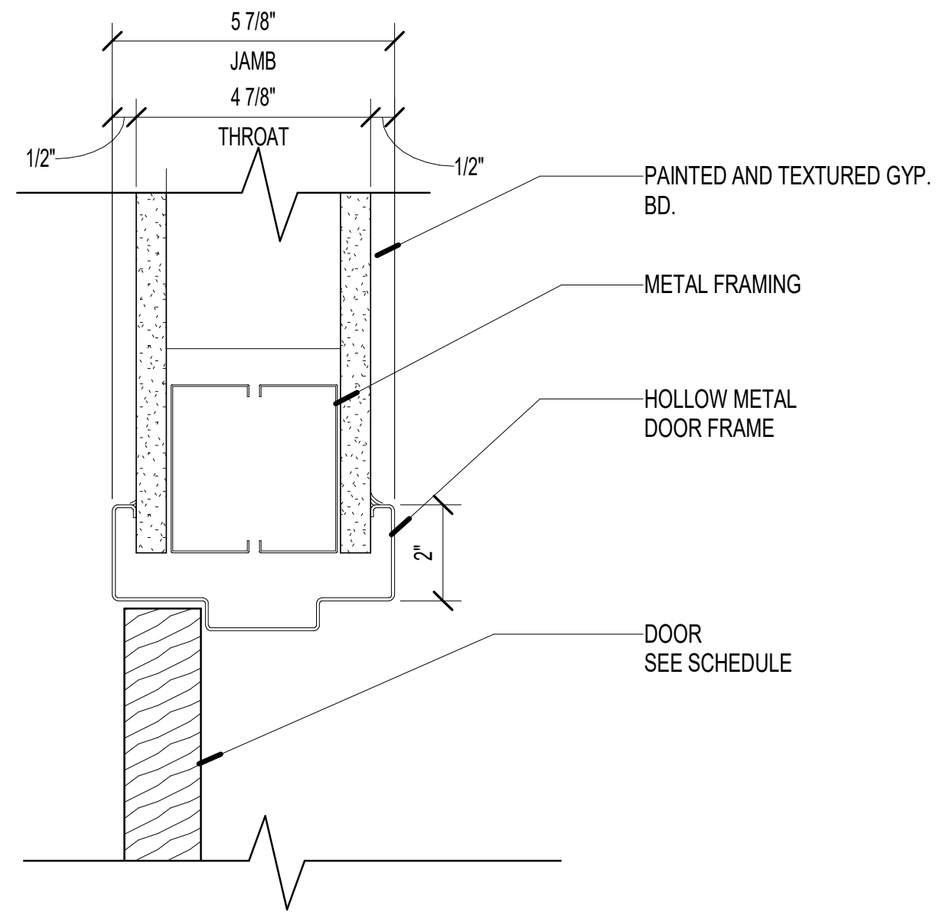
6
ROOF TO CMU
SCALE 1 1/2" = 1'-0"


EXISTING COPING CAP
SEALANT
FASTENER INTO CMU @ 24" O.C.
EXTEND TPO UNDER FLASHING
EXISTING 8" CMU WALL
TPO MEMBRANE FULL ADHERED TO PROTECTION BOARD OVER RIGID INSULATION (R30) ATTACHED TO PLYWOOD SUB-STRATE
ROOF DECK PER PLAN
ROOF JOIST PER PLAN
EXISTING ADJACENT ROOF
FRAMING PER PLAN
PAINTED AND TEXTURED GYP. BD FINISH OVER 4 MIL VAPOR BARRIER ATTACHED TO BOTTOM OF I-JOIST CHORD
VERSALAM 1 3/4" X 11 7/8" WITH 5/8" THREADED ROD AT 24" O.C. EMBED 6 3/4" WITH 'HIT HY-100' EPOXY. PROVIDE ICE AND WATER SHEILD BETWEEN LEDGER BETWEEN LEDGER AND CMU
PROVIDE J-STOP AT WHERE GYP. BD. FINISH TERMINATES AT CMU
EXISTING 8" CMU IN-FILL WALL. PER PLAN

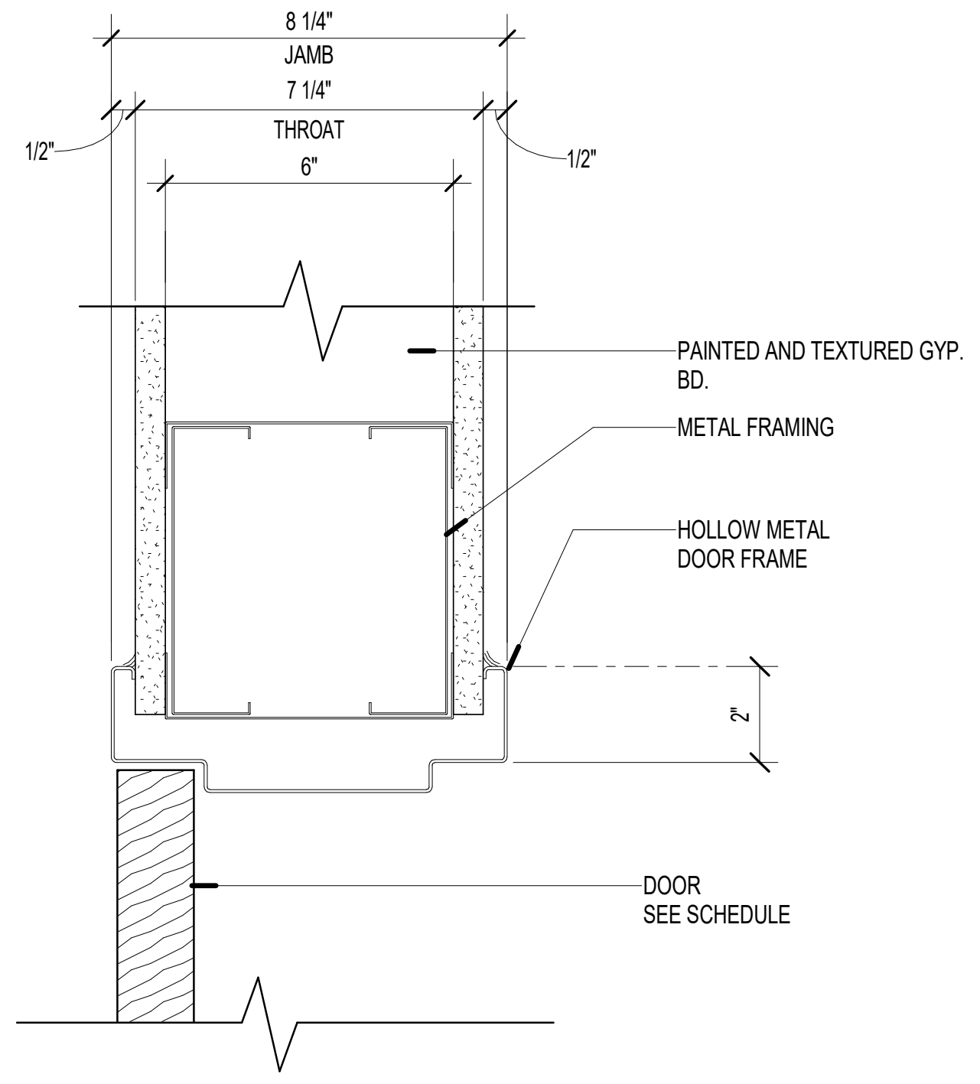
7
ROOF TO CMU
SCALE 1 1/2" = 1'-0"



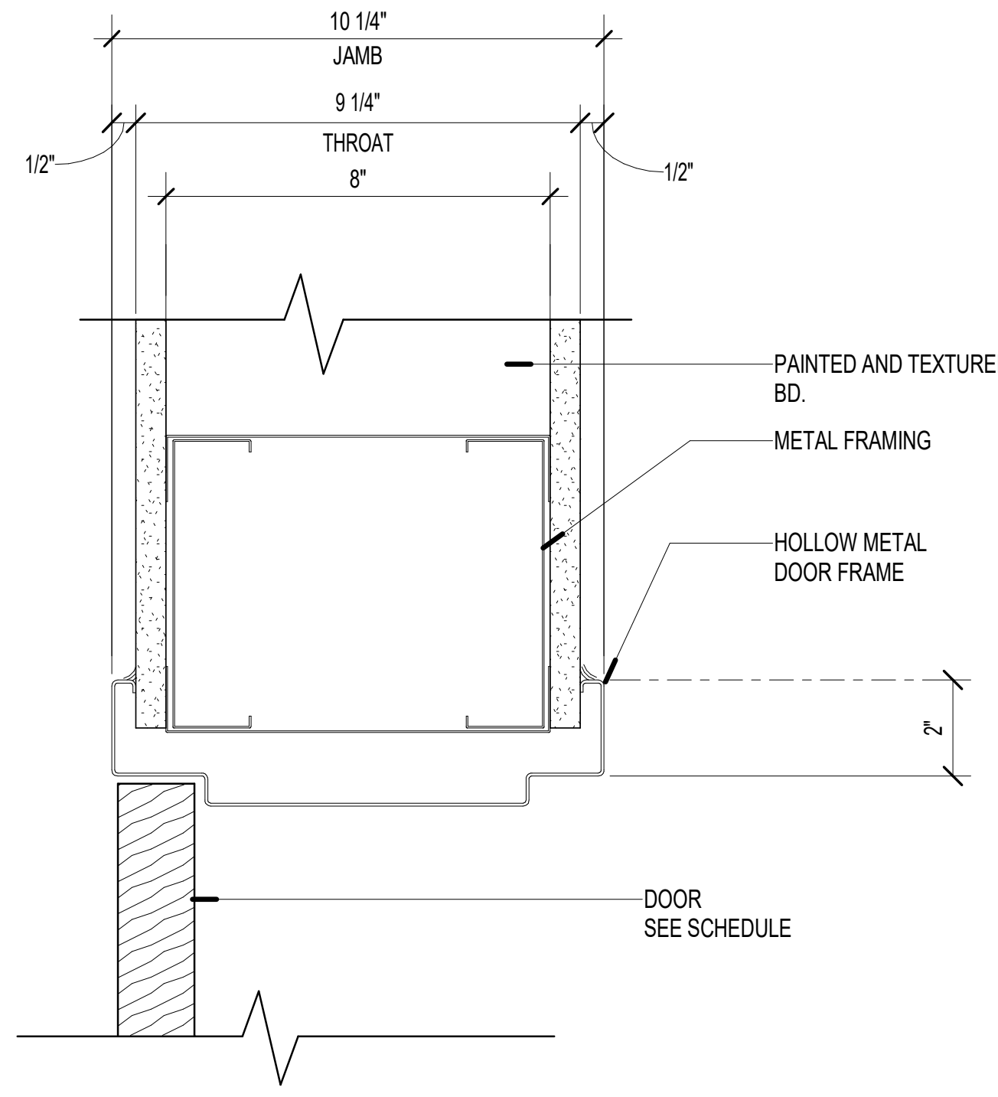
5
TRAFFIC BOLLARD
SCALE 1/2" = 1'-0"



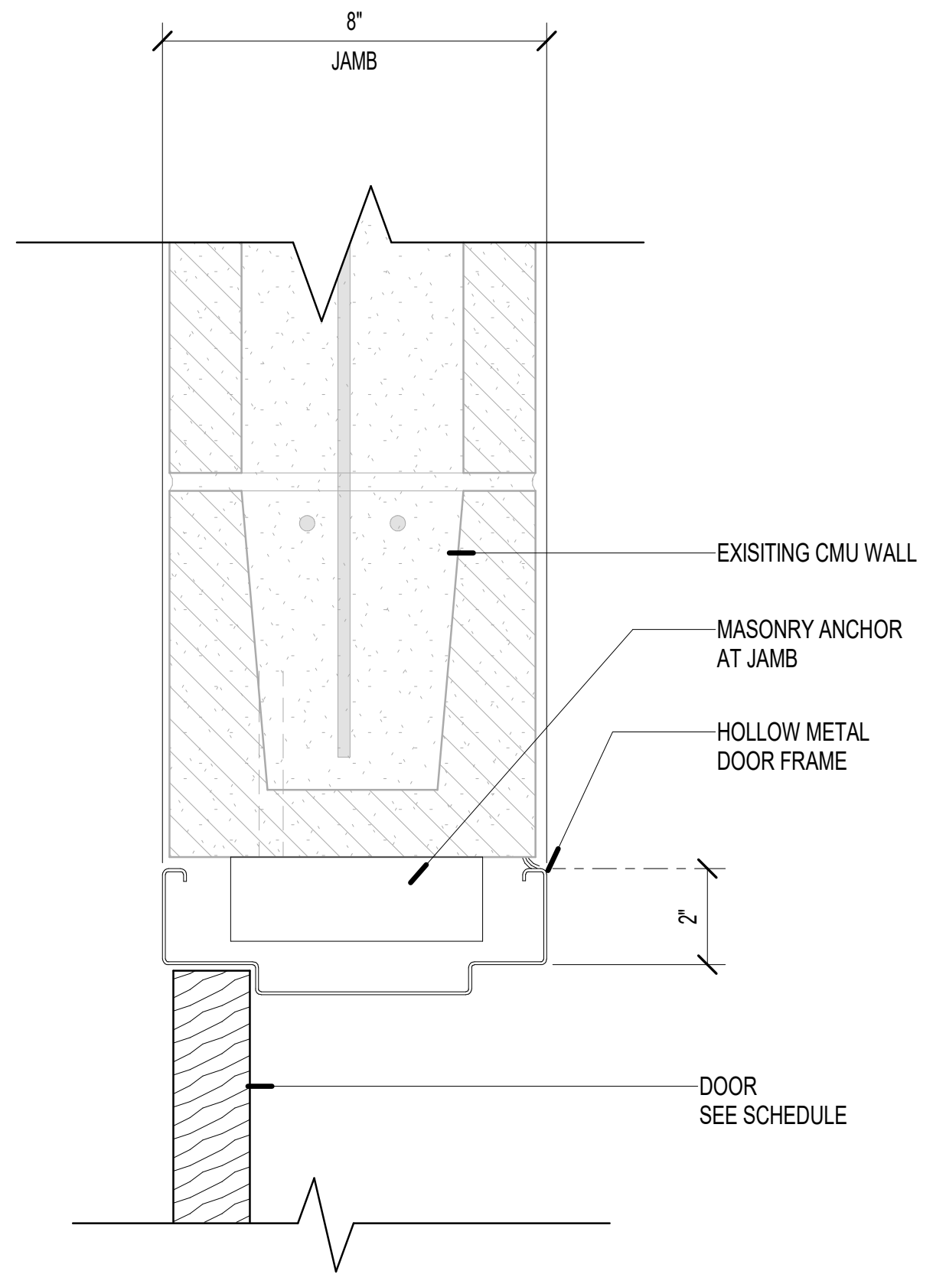
8
DOOR HEAD AND JAMB
SCALE 3" = 1'-0"



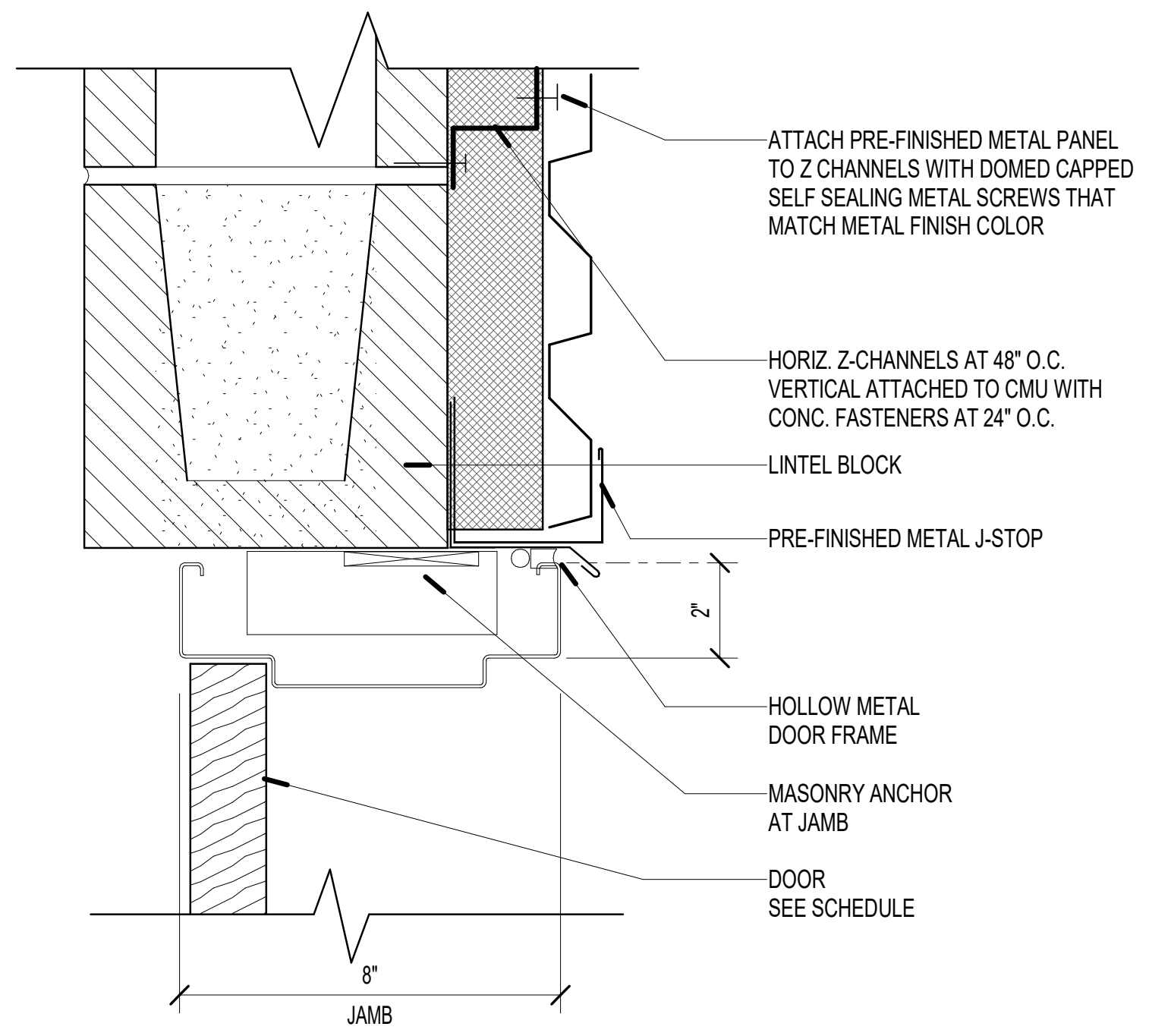
9
DOOR HEAD AND JAMB
SCALE 3" = 1'-0"



10
DOOR HEAD AND JAMB
SCALE 3" = 1'-0"



11
DOOR HEAD AND JAMB
SCALE 3" = 1'-0"


ATTACH PRE-FINISHED METAL PANEL TO Z CHANNELS WITH DOMED CAPPED SELF SEALING METAL SCREWS THAT MATCH METAL FINISH COLOR
HORIZ. Z-CHANNELS AT 48" O.C. VERTICAL ATTACHED TO CMU WITH CONC. FASTENERS AT 24" O.C.
LINTEL BLOCK
PRE-FINISHED METAL J-STOP
2"
HOLLOW METAL DOOR FRAME
MASONRY ANCHOR AT JAMB
DOOR SEE SCHEDULE
8"
JAMB

12
DOOR HEAD AND JAMB
SCALE 3" = 1'-0"

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
JAN 9, 2025

REF NO.
24-106

AUTHOR
DKA

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

DETAILS AND CASEWORK DETAILS

SHEET NO.
A6.02

ROOFTOP UNIT SCHEDULE

TYPE	NO.	MANUF.	MODEL NO.	AREA SERVED	MIN. OA CFM	MAX. OA CFM	TOTAL CFM	ESP IN W.G.	MOTOR H.P.	HEATING INPUT MBH	HEATING OUTPUT MBH	NOM. TONS	TOTAL MBH	SENS MBH	EAT (DB/WB)	NO. COMP.	COMP. RLA	VOLTS	PHASE	HERTZ	MOCP	MCA	EQUIP EER	OPER. WEIGHT (LBS.)	ACCESSORIES	NOTES
RTU	1	TRANE	4YCC4024E1060A	CLASSROOM	231	231	785	.5	1/3	60	48.6	2	23.2	23.2	80/62	1	10.9	208	1	60	25	17	11.0	358	1,3,4,5,6,7,8	ALL NOTES
RTU	2	TRANE	YSK060A3S0H	CLASSROOM	1123	2000	2000	1.078	1	137.11	111.06	5	56.55	54.7	80/62	1	16.5	208	3	60	45	29	12.0	812	1,3,4,5,6,7,8	ALL NOTES
RTU	3	TRANE	HORIZON OAD/N-D017	WELDING	3755	4170	4170	1.57	3.0	500	405	17	218.5	123.4	95/78	2	28.7	208	3	60	110	81.6	11.9	3319	1,3,4,5,6,7,8	ALL NOTES
RTU	4	TRANE	HORIZON OAD/N-D017	AUTO	3755	4170	4170	1.57	3.0	500	405	17	218.5	123.4	95/78	2	28.7	208	3	60	110	81.6	11.9	3319	1,3,4,5,6,7,8	ALL NOTES
RTU	5	TRANE	4YCC4024E1060A	CLASSROOM	231	231	500	.5	1/3	60	48.6	2	23.2	23.2	80/62	1	10.9	208	1	60	25	17	11.0	358	1,3,4,5,6,7,8	ALL NOTES
RTU	6	TRANE	4YCC4024E1060A	CLASSROOM	231	231	495	.5	1/3	60	48.6	2	23.2	23.2	80/62	1	10.9	208	1	60	25	17	11.0	358	1,3,4,5,6,7,8	ALL NOTES
RTU	7	TRANE	YSK072A3S0H	RESTROOMS	530	2500	2500	0.687	1	137.11	111.06	6	74.42	67.84	80/63	2	14.8	208	3	60	50	38	11.0	1154	1,3,4,5,6,7,8	ALL NOTES
DOAS	1	CaptiveAire	CAS-HVAC2-I.300-18-10T	KITCHEN		2475	2475	0.5	2	252	204.5	10	94.5	87.1	95/78	2		208	3	60	80	71.5	18.6	2055	1,3,4,5,6,7,8	ALL NOTES

NOTES:
1. STATIC PRESSURE INDICATED ABOVE IS THE EXTERNAL STATIC PRESSURE WHICH EXCLUDES ANY PRESSURE DROPS WITHIN THE UNIT.
2. UNITS SHALL BE OF SINGLE WALL CONSTRUCTION. UNITS SHALL BE COMPLETE WITH SIDE OUTLET DRAIN, ACCESS DOORS AND LIGHTS.
3. CONTRACTOR TO ENSURE THAT OUTDOOR AIR INTAKES ARE A MINIMUM OF 10'-0" AWAY FROM ANY EXHAUST FAN DISCHARGE, PLUMBING VENT OR OTHER CONTAMINANT SOURCE.
4. MAXIMUM AIR VELOCITY THROUGH COOLING COIL SHALL NOT EXCEED 500 FEET PER MIN.
5. PROVIDE 4 SIDED FACTORY ROOF CURB SUITABLE FOR SEISMIC CONDITIONS, SHALL MEET 1BC 2003 SEISMIC CERTIFICATION.
6. ELECTRICAL CONNECTION TO BE SINGLE POINT AND TO BE THROUGH THE BOTTOM OF THE UNIT.
7. RTU TO RECEIVE 7" WC GAS PRESSURE FROM MAIN.
8. PERFORM TESTING AND BALANCING AND SUBMIT CERTIFIED REPORTS TO THE ENGINEER IN ACCORDANCE WITH SPECIFICATION.
9. REFER TO ROOF FRAMING PLAN FOR EXACT LOCATION OF ROOFTOP UNITS.
10. MECHANICAL CONTRACTOR SHALL AFFIX DESIGNATION DECAL ON EACH UNIT, WITH MIN. 4" HIGH REFLECTIVE LETTERS. DECAL SHALL BE PLACED IN DIRECTION OF ROOF HATCH.
11. ALL UNITS WILL BE FURNISHED WITH CHLORINE FREE R410A REFRIGERANT.
12. PROVIDE CO2 SENSORS. AT LESS THAN 500 PPM VENTILATION RATE WILL BE AT MINIMUM. ABOVE 500 PPM VENTILATION RATE SHALL MODULATE HIGHER UNTIL MAX. OUTSIDE AIR. IF REQUIRED BY LOCAL CODE, THEN PROVIDE AT ALL UNITS.

ACCESSORIES:
1. FACTORY INSTALLED ECONOMIZER (IAQ READY) WITH BAROMETRIC RELIEF, DIFFERENTIAL ENTHALPY CONTROL AND HOOD.
2. POWER EXHAUST
3. FILTERS
4. ROOF CURB - 14" HIGH
5. BOTTOM POWER ENTRY KIT
6. SMOKE DETECTOR IN RETURN (ONLY) FACTORY INSTALLED. IF REQUIRED BY LOCAL CODE, THEN PROVIDE SUPPLY DUCT DETECTOR.
7. DISCONNECT SWITCH (NON FUSED), FACTORY INSTALLED
8. SERVICE OUTLETS (GFCI TYPE, FACTORY MOUNTED, FIELD WIRED BY ELC)
9. CONDENSOR HAIL GUARDS ON UNITS 12.5 TONS AND SMALLER. GUARDS TO BE FIELD INSTALLED.

UNIT HEATER SCHEDULE

TYPE	NUMBER	MANUF.	MODEL	HEATING INPUT (MBH)	FUEL	VOLTAGE	PHASE	MCA	OPER. WEIGHT (LBS.)	REMARKS
UH	1	REZNOR	UBXC-125	120.0	NG	208	1	13	171	
UH	2	REZNOR	UBXC-125	120.0	NG	208	1	13	171	
UH	3	REZNOR	UBXC-125	120.0	NG	208	1	13	171	
UH	4	REZNOR	UBXC-125	120.0	NG	208	1	13	171	

GAS FURNACE SCHEDULE

TYPE	NO.	MANUF.	Model	NOM TONS	CFM	S.P.	H.P.	VOLTAGE	PHASE	MCA	MOCP	FUEL	HEATING INPUT	HEATING OUTPUT	WEIGHT (LBS.)	NOTES
GF	1	LENNOX	ML196UH090XE36C	3	1233	0.5	0.5	208 V	1	22	30	NG	88	85.6	142	
GF	2	LENNOX	ML196UH090XE36C	3	1233	0.5	0.5	208 V	1	22	30	NG	88	85.6	142	
GF	3	LENNOX	ML196UH135XE60D	5	1465	0.5	1	208 V	1	31	50	NG	132	127	174	
GF	4	LENNOX	ML196UH135XE60D	5	1465	0.5	1	208 V	1	31	50	NG	132	127	174	

CONDENSING UNIT SCHEDULE

TYPE	NO.	MANUFACTURER	Model	TONS CAPACITY (NOM.)	VOLTS	PHASE	MCA	TOTAL COOLING	SEER	WEIGHT (LBS.)	NOTES
C	1	LENNOX	MLK14KC1-036-230	3	208	1	22	34,600	14.3	200	
C	2	LENNOX	MLK14KC1-036-230	3	208	1	22	34,600	14.3	200	
C	3	LENNOX	MLK14KC1-060-230	5	208	1	31	57,500	14.3	260	
C	4	LENNOX	MLK14KC1-060-230	5	208	1	31	57,500	14.3	260	

EXHAUST FAN SCHEDULE

TYPE	NO.	MANUF.	Model	CFM	S.P.	H.P.	VOLTAGE	PHASE	WEIGHT (LBS.)	ACCESSORIES	NOTES
EF	1	GREENHECK	CUE-120-VG	1500	1	1/2	120 V	1	74	1,5,6,7	
EF	2	GREENHECK	CUE-160-VG	2750	1	2	208 V	1	117	1,5,6,7	
EF	3	GREENHECK	CUE-120-VG	1000	1	1/2	120 V	1	74	1,5,6,7	
EF	4	GREENHECK	CUE-120-VG	1000	1	1/2	120 V	1	74	1,5,6,7	
EF	5	GREENHECK	CUE-120-VG	1000	1	1/2	120 V	1	74	1,5,6,7	
EF	6	GREENHECK	CUE-120-VG	1000	1	1/2	120 V	1	74	1,5,6,7	
EF	7	GREENHECK	CUE-140-VG	1800	1	3/4	208 V	1	95	1,5,6,7	
EF	8	GREENHECK	CUE-120-VG	1500	1	1/2	120 V	1	74	1,5,6,7	

NOTES:
1. APPROVED MFG; COOK, ACME.
2. PROVIDE SPEED CONTROL
3. 18 X 24 WITH ROOF CURB

ACCESSORIES:
1. CURB
2. DISC
3. MOTORIZED DAMPER
4. V-BELT
5. D-DR
6. SPEED CONTROL
7. BACK DRAFT DAMPER (GRAVITY)

SPLIT SYSTEM SCHEDULE

TYPE	NO.	MANUFACTURER	Model	NOM. TONS	CFM	VOLTS	PHASE	MCA	MOCP	HEATING MBTU	COOLING MBTU (SEN)	SEER	HSPF	OPERATING WT. (LBS.)	ACCESSORIES
FC	1	LENNOX	MWMC018S4-2P	1.5	524	208	1			19000	18000			27	1,2,3,4
HP	1	LENNOX	MPC018S4S-1P	1.5		208	1	17	25			23.5	10.7	95	1,2,3,5

ACCESSORIES:
1. REFRIGERANT R410 A.
2. AT DESIGN CONDITIONS AND 95 DEGREES F & -0 DEGREES F ENT. AIR TEMP TO CONDENSER.
3. SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
4. WALL MOUNTED UNIT. PROVIDE MOUNTING BRACKET AND CONDENSATE PUMP. WIRED CONTROLLER.
5. WITH HEAT PUMP CURB/ANTI-CYCLE/WIRED WALL CONTROL/CASE HEATER.

KITCHEN EXHAUST FAN SCHEDULE

TYPE	NUMBER	MANUF.	Model	CFM	S.P.	HP	VOLTAGE	PHASE	WEIGHT (LBS)	ACCESSORIES	NOTES
KEF	1	CaptiveAire	DU180HFA	2475	1.4	1.5	208	3	178		
KEF	2	CaptiveAire	DU33HFA	600	0.5	0.33	115	1	64		

OUTDOOR AIR VENTILATION SCHEDULE

ZONE IDENTIFICATION			STANDARD CASE: IMC 2018 SECTION 403 VENTILATION RATE PROCEDURE												DESIGN CASE			
AREA NAME	OCCUPANCY CLASSIFICATION	AREA (sq.ft.) (Az)	AREA OUTDOOR AIR RATE (Ra)	AREA OUTDOOR AIR (Ra*Az)	OCCUPANT LOAD RATE (PEOPLE/1000 sq.ft.)	OCCUPANCY (Az*PEOPLE/ 1000 sq.ft.) (Pz)	OCCUPANT OUTDOOR RATE (Rq)	OCCUPANT OUTDOOR AIR (Rz*Pz)	BREATHING ZONE OUTDOOR AIR (VbZ=Rp*Pz+Ra*Az)	ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez)	ZONE OUTDOOR AIR (Voz=Vbz/Ez)	EXHAUST AIRFLOW RATE (CFM/sq.ft.)	EXHAUST AIRFLOW (CFM/sq.ft.)*Az	SUPPLY CFM/sq.ft.	SUPPLY AIR (CFM)	OUTDOOR AIR RATIO (%)	OUTDOOR AIR DESIGN (CFM)	UNIT
100 CULINARY ARTS COOKING	KITCHEN COOKING	1323.0	0.12	158.8	20.0	26.5	7.5	198.5	357.2	0.8	446.5	0.7	926.1	1.5	1984.5	69%	1372.6	-
101 KITCHEN	SEE ROOM 100																	
102 CULINARY CLASSROOM	CLASSROOM 9+	508.0	0.12	61.0	35.0	17.8	10.0	177.8	238.8	0.8	298.5	-	-	1.0	508.0	59%	298.5	-
103 BOYS BATHROOM	TOILET ROOM	1.0	-	-	-	-	-	-	-	-	-	70.0	70.0	0.0	70.0	100%	70.0	-
104 GIRLS BATHROOM	TOILET ROOM	1.0	-	-	-	-	-	-	-	-	-	70.0	70.0	0.0	70.0	100%	70.0	-
105 HALL	CORRIDOR	86.0	0.06	5.2	-	0.0	-	0.0	5.2	0.8	6.5	-	-	1.0	86.0	8%	6.5	-
106 COOLER	FREEZER																	
107 DRY STORAGE	STORAGE	97.0	0.12	11.6	-	0.0	-	0.0	11.6	0.8	14.6	-	-	1.0	97.0	15%	14.6	-
108 OFFICE #1	OFFICE	352.0	0.06	21.1	5.0	1.8	5.0	8.8	29.9	0.8	37.4	-	-	1.0	352.0	11%	37.4	-
109 HALLWAY	CORRIDOR	419.0	0.06	25.1	-	0.0	-	0.0	25.1	0.8	31.4	-	-	1.0	419.0	8%	31.4	-
110 STORAGE	STORAGE	94.0	0.12	11.3	-	0.0	-	0.0	11.3	0.8	14.1	-	-	1.0	94.0	15%	14.1	-
111 STORAGE	STORAGE	159.0	0.12	19.1	-	0.0	-	0.0	19.1	0.8	23.9	-	-	1.0	159.0	15%	23.9	-
112 HALLWAY	CORRIDOR	498.0	0.06	29.9	-	0.0	-	0.0	29.9	0.8	37.4	-	-	1.0	498.0	8%	37.4	-
113 IT	OFFICE	74.0	0.06	4.4	5.0	0.4	5.0	1.9	6.3	0.8	7.9	-	-	1.0	74.0	11%	7.9	-
114 STAIR	CORRIDOR	40.0	0.06	2.4	-	0.0	-	0.0	2.4	0.8	3.0	-	-	1.0	40.0	8%	3.0	-
115 STORAGE	STORAGE	48.0	0.12	5.8	-	0.0	-	0.0	5.8	0.8	7.2	-	-	1.0	48.0	15%	7.2	-
116 HALLWAY	CORRIDOR	78.0	0.06	4.7	-	0.0	-	0.0	4.7	0.8	5.9	-	-	1.0	78.0	8%	5.9	-
117 FACULTY	CORRIDOR	609.0	0.06	36.5	-	0.0	-	0.0	36.5	0.8	45.7	-	-	1.0	609.0	8%	45.7	-
118 TOILET	TOILET ROOM	1.0	-	-	-	-	-		-	-	-	70.0	70.0	-	70.0	100%	70.0	-
119 GIRLS BATHROOM	TOILET ROOM	1.0	-	-	-	-	-		-	-	-	70.0	70.0	-	70.0	100%	70.0	-
120 GIRLS BATHROOM	TOILET ROOM	1.0	-	-	-	-	-		-	-	-	70.0	70.0	-	70.0	100%	70.0	-
121 BOYS BATHROOM	TOILET ROOM	1.0	-	-	-	-	-		-	-	-	70.0	70.0	-	70.0	100%	70.0	-
122 BOYS BATHROOM	TOILET ROOM	1.0	-	-	-	-	-	-	-	-	-	70.0	70.0	-	70.0	100%	70.0	-
123 MECH/ELEC	STORAGE	132.0	0.12	15.8	-	0.0	-	0.0	15.8	0.8	19.8	-	-	1.0	132.0	15%	19.8	-
124 MECH/ELEC	STORAGE	198.0	0.12	23.8	-	0.0	-	0.0	23.8	0.8	29.7	-	-	1.0	198.0	15%	29.7	-
125 HALLWAY	CORRIDOR	115.0	0.06	6.9	-	0.0	-	0.0	6.9	0.8	8.6	-	0.0	1.0	115.0	8%	8.6	-
126 CTE CLASSROOM 3	CLASSROOM 9+	472.0	0.12	56.6	35.0	16.5	10.0	165.2	221.8	0.8	277.3	-	-	1.0	472.0	59%	277.3	-
127 CTE CLASSROOM 2	CLASSROOM 9+	512.0	0.12	61.4	35.0	17.9	10.0	179.2	240.6	0.8	300.8	-	-	1.0	512.0	59%	300.8	-
128 AUTO TECHNOLOGY	SHOP @ 50/1000 sq ft	2773.0	0.18	499.1	50.0	138.7	10.0	1386.5	1885.6	0.8	2357.1	0.5	1386.5	1.5	4159.5	90%	3743.6	-
129 WELDING TECHNOLOGY	SHOP @ 50/1000 sq ft	2781.0	0.18	500.6	50.0	139.1	10.0	1390.5	1891.1	0.8	2363.9	0.5	1390.5	1.5	4171.5	90%	3754.4	-
130 GRINDING	METAL SHOP	131.0	0.18	23.6	20.0	2.6	7.5	19.7	43.2	0.8	54.0	0.5	65.5	1.5	196.5	61%	119.5	-
131 OFFICE #4	OFFICE	137.0	0.06	8.2	5.0	0.7	5.0	3.4	11.6	0.8	14.6	-	0.0	1.0	137.0	11%	14.6	-
132 STORAGE	STORAGE	137.0	0.12	16.4	-	-	-	-	16.4	0.8	20.5	-	-	1.0	137.0	15%	20.5	-
133 OFFICE #5	OFFICE	153.0	0.06	9.2	5.0	0.8	5.0	3.8	13.0	0.8	16.3	-	-	1.0	153.0	11%	16.3	-
134 CONSTR. TECHNOLOGY	SHOP @ 50/1000 sq ft	1321.0	0.18	237.8	50.0	66.1	10.0	660.5	898.3	0.8	1122.9	-	-	1.5	1981.5	57%	1122.9	-
135 CONS TECH CLASSROOM 4	CLASS ROOM 9+	393.0	0.12	47.2	35.0	13.8	10.0	137.6	184.7	0.8	230.9	-	-	1.0	393.0	59%	230.9	-

LOUVER SCHEDULE

MARK	QUANTITY	OPENING SIZE	MANUFACTURER	MODEL	NOTES
L1	1	24 X 24	RUSKIN	BD6	GRAVITY OPERATED

CEILING FAN SCHEDULE

TYPE	NO.	MANUF.	Model	CFM	AMPS	VOLTAGE	PHASE	WEIGHT (LBS.)	ACCESSORIES	NOTES
CF	1	PANASONIC	FV-20VQ3	70	0.35	120 V	1	17	BDD, D-DR	1 & 2
CF	2	PANASONIC	FV-20VQ3	70	0.35	120 V	1	17	BDD, D-DR	1 & 2
CF	3	PANASONIC	FV-20VQ3	70	0.35	120 V	1	17	BDD, D-DR	1 & 2
CF	4	PANASONIC	FV-20VQ3	70	0.35	120 V	1	17	BDD, D-DR	1 & 2
CF	5	PANASONIC	FV-20VQ3	70	0.35	120 V	1	17	BDD, D-DR	1 & 2
CF	6	PANASONIC	FV-20VQ3	70	0.35	120 V	1	17	BDD, D-DR	1 & 2
CF	7	PANASONIC	FV-20VQ3	70	0.35	120 V	1	17	BDD, D-DR	1 & 2
CF	8	PANASONIC	FV-20VQ3	70	0.35	120 V	1	17	BDD, D-DR	1 & 2

NOTES: 1. APPROVED MFG; COOK, ACME.

ACCESSORIES: 1. WITH ROOF VENT.

AUTO SHOP RETRACTABLE HOSE REEL SCHEDULE

MARK	QTY	MANUFACTURER	MODEL	BLOWER	TAIL PIPE ADAPTER	CFM	VOLTAGE	MOTOR HP
HR	2	FUME-A-VENT	HRS-3-0430W	HRF-05-1	TPA-03-0404	350@4"	120 / 1 / 60	1/2

PACKAGE TERMINAL AIR CONDITIONER (PTAC)

TYPE	NO.	MANUF.	Model	NOM. TONS	CFM	VOLTS	PHASE	MCA	HEATING MBTU	TOTAL COOLING (MBTU)	EER	O.A. CFM	DIMESIONS W x D x H (IN)	NOTES
PTAC	1	AMANA	PMH073J15A	0.5	339	208	1	4.4	6.2	6.7	12.6	25	42 x 22 x 16	
PTAC	2	AMANA	PMH073J15A	0.5	339	208	1	4.4	6.2	6.7	12.6	25	42 x 22 x 16	

SYMBOL SCHEDULE

SYMBOL	DESCRIPTION
	DIRECTION OF FLOW
	DUCT SECTION (SUPPLY)
	DUCT SECTION (EXHAUST OR RETURN)
R	INCLINED RISE (R) OR DROP (D) ARROW IN DIRECTION OF AIR FLOW
	TRANSITIONS: GIVES SIZES. NOTE F.O.T. FLAT ON TOP OR F.O.B. FLAT ON BOTTOM IF APPLICABLE
S R	STANDARD BRANCH FOR SUPPLY AND RETURN (NO SPLITTER)
	SPLITTER DAMPER
VD	VOLUME DAMPER MANUAL OPERATION
AP AD	ACCESS DOOR (AD) ACCESS PANEL (AP)
FD AD	FIRE DAMPER: SHOW ▷—— VERTICAL POSITION SHOW ■—— HORIZONTAL POSITION
F/SD AD	FIRE/SMOKE DAMPER: SHOW ▷—— FOR CEILING OF WALL
SD AD	SMOKE DAMPER
	TURNING VANES & ELBOW
	FLEXIBLE DUCT FLEXIBLE CONNECTION
A 700 CFM	SUPPLY GRILLE (SG)
B 700 CFM	RETURN (RG) OR EXHAUST (EG) GRILLE (NOTE AT FLR. OR CLG.)
M	DOOR GRILLE
T	THERMOSTAT
	POWER OR GRAVITY ROOF VENTILATOR EXHAUST (ERV)
	POWER OR GRAVITY ROOF VENTILATOR INTAKE (SRV)
	SUPPLY AIR TOWARD
	SUPPLY AIR AWAY
	RETURN AIR TOWARD
	RETURN AIR AWAY
	AIR FLOW DIRECTION
A 700 CFM	DIFFUSER OR GRILLE AND CFM
12/6	DUCT WIDTH/DEPTH
	TOWARD
	AWAY
10"Ø	DUCT DIAMETER
3	GENERAL NOTES
6	KEY NOTES
A 700 CFM	SUPPLY OUTLET, CEILING, ROUND (TYPE AS SPECIFIED) INDICATE AIR FLOW DIRECTION
	CEILING EXHAUST FAN
S	SENSOR
EA	INDICATES EXHAUST AIR DUCT
	SUPPLY VERTICAL GRILLE
	RETURN VERTICAL GRILLE
H	HUMIDISTAT

GENERAL NOTES

1. THE ARCHITECTURAL, STRUCTURAL, PLUMBING AND ELECTRICAL DRAWINGS AND OTHER RELATED DOCUMENTS SHALL BE CONSIDERED A PART OF THE MECHANICAL CONTRACT, AS FAR AS THEY APPLY TO THE MECHANICAL SYSTEMS, AS IF REFERRED TO IN FULL.
2. ALL FIELD CONDITIONS AND JOB SITE DIMENSIONS ARE TO BE VERIFIED PRIOR TO COMMENCEMENT OF WORK.
3. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE BUILDING CODES.
4. ALL DUCTWORK SHALL CONFORM TO SMACNA STANDARDS. MAXIMUM FLEX DUCT IS 4 FEET.
5. ALL SUPPLY AND RETURN AIR DUCTWORK TO BE INSULATED WITH .75 LBS/FT 1-1/2" THICK 5.2 R-VALUE DENSITY FIBERGLASS (MANVILLE MICROLITE). SUPPLY AND RETURN DUCTWORK SHALL BE LINED.
6. COORDINATE ALL SUPPLY AIR DIFFUSERS, EXHAUST GRILLES, AND RETURN AIR GRILLES WITH ARCHITECTURAL REFLECTED CEILING PLAN AND WITH ELECTRICAL LIGHT FIXTURES.
7. ALL TRANSVERSE JOINTS SHALL BE SEALED WITH TAPE OR MASTIC.
8. ALL SUPPLY AND RETURN AIR DUCTWORK SHALL BE INSULATED PER THE SPECIFICATIONS AND IMC. (ROUND DUCT WRAPPED AND RECTANGULAR LINED).
9. ALL DIMENSIONS ARE NET INTERNAL.
10. MANUAL VOLUME DAMPERS ARE TO BE PROVIDED IN ALL SUPPLY, RETURN AND EXHAUST BRANCH DUCTS. DAMPERS SHALL HAVE LOCKING QUADRANTS, TYPICAL OF DURODYNE MODEL SPEC SEAL/QUAD SEAL.
11. THE LOCATION OF ALL PENETRATIONS SHALL BE COORDINATED WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
12. MECHANICAL CONTRACTOR SHALL PROVIDE LEVELING PLATFORM AND CURBS FOR ALL NECESSARY ROOF EQUIPMENT. COORDINATE WITH ROOF EQUIPMENT SUPPLIER.
13. REFER TO ELECTRICAL PLANS FOR LOCATIONS AND MOUNTING HEIGHT OF THERMOSTATS FOR EQUIPMENT.
14. PLUMBING CONTRACTOR TO PROVIDE CONDENSATE DRAINS TO CODE APPROVED RECEPTACLES.
15. ALL FIELD CONDITIONS AND DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED PRIOR TO SUBMITTING BIDS. NO ALLOWANCE WILL BE MADE FOR NOT COMPLYING WITH THIS REQUIREMENT.
16. RIGID CONTACT BETWEEN CONDUIT, PIPES, CEILING WIRES, AND DUCTWORK WILL NOT BE ALLOWED.
17. THERMOSTATS AND SENSORS SHALL BE SUPPLIED WITH MECHANICAL EQUIPMENT. INSTALLED BY MECHANICAL CONTRACTOR AND FINAL CONNECTIONS BY MECHANICAL CONTRACTOR.
18. ALL MECHANICAL EQUIPMENT SHALL BE FURNISHED WITH MAINTENANCE MANUALS, SCHEDULES, TAGS AND LETTER OF GUARANTEE IN A BINDER (THREE) WITH TABS, AS PER SPECIFICATION BOOK SECTION 01700.
19. PROVIDE AIR BALANCE REPORT. BALANCER SHALL BE NEBB CERTIFIED. SEE AIR BALANCE SCHEDULE.
20. ALL ROOF EQUIPMENT SHALL BE NO CLOSER THEN 10 FEET TO THE ROOF EDGE.

AIR BALANCE SCHEDULE

MARK	SUPPLY AIR	RETURN AIR	OUTSIDE AIR	EXHAUST AIR	RESULTING PRESSURE
RT-1	705	554	+231		+231
RT-2	2000	877	+1123		+1123
RT-3	4170	415	+3755		+3755
RT-4	4170	415	+3755		+3755
RT-5	785	554	+231		+231
RT-6	785	554	+231		+231
RT-7	2240	1710	+530		+530
DOAS-1	2475	0	+2475		+2475
GF-1	1233	1233	0		0
GF-2	1233	965	+268		+268
GF-3	1465	1093	+372		+372
GF-4	1465	1093	+372		+372
EF-1				-1000	-1000
EF-2				-2750	-2750
EF-3				-1000	-1000
EF-4				-1000	-1000
EF-5				-1000	-1000
EF-6				-1000	-1000
EF-7				-1800	-1800
KEF-1				-2475	-2475
KEF-2				-600	-600
CF-1-8				-560	-560
TOTALS			+13343	-13185	+158

NOTE: BUILDING AIR BALANCE IS BASED ON OCCUPIED BUILDING PERIODS. RETURN AIR TOTALS SUPERCEDE PLAN VIEW CFM VALUES.

AIR DEVICE SCHEDULE

MARK	QUANTITY	NECK SIZE	TYPE	PATTERN	DUTY	MANUF.	MODEL
A	7	8 X 8	LAY-IN	4-WAY	SUPPLY	TITUS	300 FL
B	2	10 X 10	LAY-IN	4-WAY	SUPPLY	TITUS	300 FL
C	4	12 X 12	HARD	4-WAY	SUPPLY	TITUS	272 RS
D	8	14 X 14	HARD	4-WAY	SUPPLY	TITUS	272 RS
E	4	10 X 10	LAY-IN	4-WAY	RETURN	TITUS	350 RS
F	4	12 X 12	HARD	4-WAY	RETURN	TITUS	350ZRL
G	8	6 X 6	HARD		SUPPLY	TITUS	272 RS
H	3	8 X 8	HARD		RETURN	TITUS	350 RS
J	3	14 X 14	LAY-IN		RETURN	TITUS	350 RS
K	3	8 X 8	HARD	4-WAY	SUPPLY	TITUS	272 RS
L	1	10 X 10	WALL		SUPPLY	TITUS	272 FS
M	1	10 X 10	HARD		RETURN	TITUS	350 RL
N	2	48 x 24	HARD		RETURN	TITUS	350 RL
P	4	20 X 6	HARD		SUPPLY	TITUS	272 RS
Q	1	20 X18	HARD		RETURN	TITUS	350 RL

ELECTRIC WALL HEATER SCHEDULE

TYPE	NO.	MANUF.	Model	HEATING INPUT	FUEL	VOLTAGE	PHASE	MCA	WEIGHT (LBS.)	REMARKS
EWH	1	QMARK	CWH3408F	2.0 KW	ELEC.	208 V	1	9.6	25	W/INTERNAL STAT, RECESSED MOUNTING

ELECTRIC CEILING HEATER SCHEDULE

TYPE	NO.	MANUF.	Model	CFM	HEATING INPUT	VOLTAGE	PHASE	MCA	WEIGHT (LBS)	NOTES
ECH	1	Q-MARK	CDF 548RE	300	2.0 kW	208	1	9.6	27	WALL STAT

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Nielson Engineering, Inc.
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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ARCHITECTS
270 N. 27th St. BOISE, ID 83702
208.338.1212

DATE
1-9-25

REF NO.
2444

AUTHOR
SVB

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

MECHANICAL SCHEDULES & NOTES

SHEET NO.
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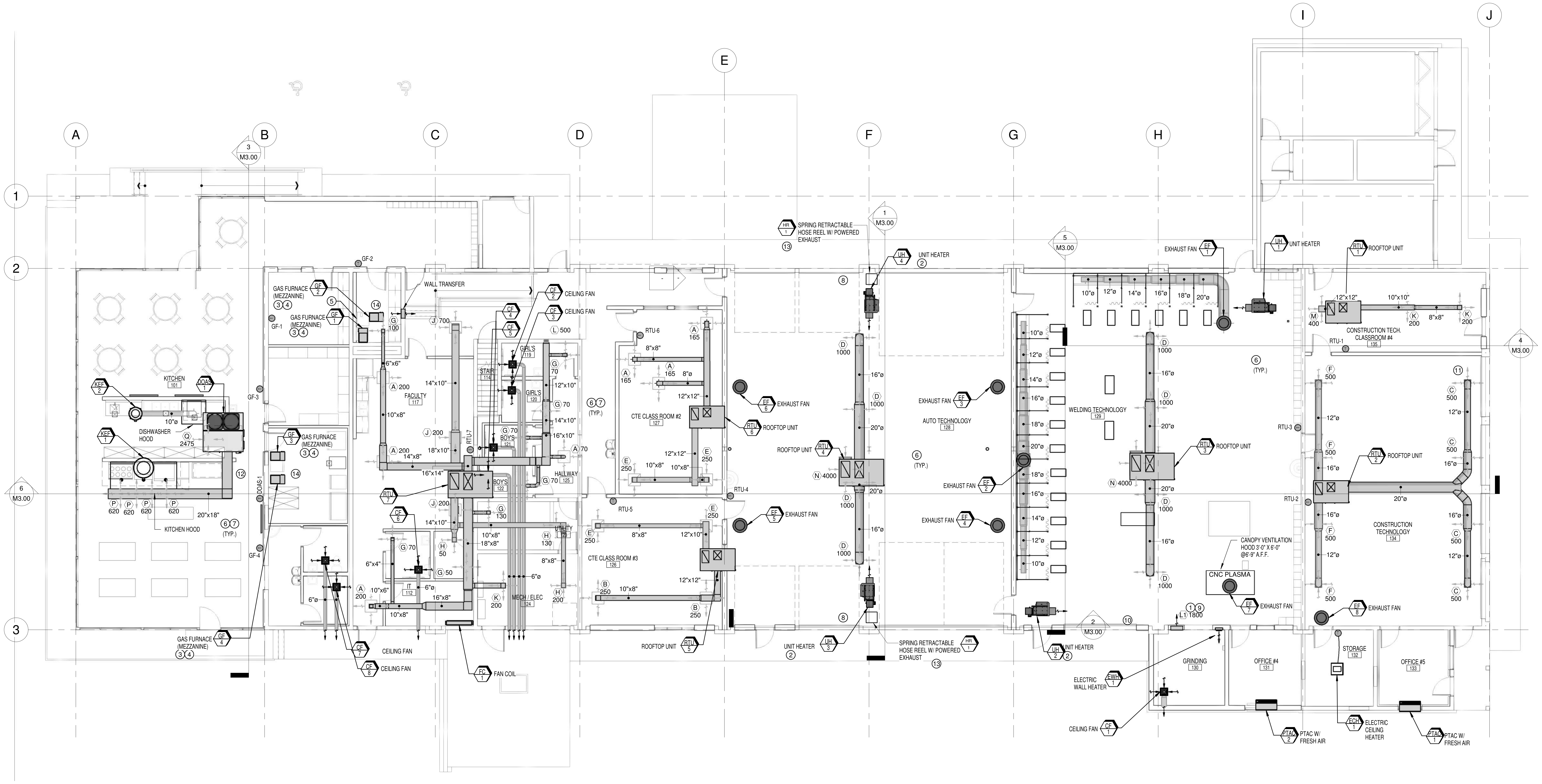
M2.00 KEY NOTES

1	INSTALL BOTTOM OF GRAVITY DAMPER 24" ABOVE ROOF OF ROOM 130.
2	INSTALL UNIT HEATER BELOW OVERHEAD DOOR TRACKS.
3	PER RESULTS OF INPECTION INDICATED ON NOTE 14. INSTALL NEW GAS FURNACE IN SAME LOCATION AS EXISTING. BUILD TRANSITIONS TO CONNECT EXISTING DUCT TO NEW FURNACE (SEE ARCHTECTUAL DEMO DRAWINGS).
4	ROUTE CONDENSATE DRAIN LINE TO CLOSEST AVAILABLE DRAIN.
5	PROVIDE AND INSTALL DRYER VENT BOX, DUCT, AND ROOF VENT PER DETAIL 12/M4.0. COORDINATE WITH GC TO PROVIDE 2x6 WALL CAVITY FOR 4-INCH ROUND VENT. DO NOT USE OVAL DUCT.
6	INSTALL BALANCE DAMPER ON TOP OF DUCT TO HIDE FROM PUBLIC EYE.
7	INSULATE ALL SUPLLY DUCTWORK LOCATED ABOVE CEILINGS IN UNCONDITIONED SPACES WITH DUCTWRAP. INSTALLED R-VALUE OF 6 TO BE PROVIDED PER IECC.
8	WHEN OPERATING AUTO SHOP W/OUT RTU-4 ON. OPEN 10' DOOR AT LEAST 9". TURN ON ALL 4 EXHAUST FANS.
9	WHEN OPERATING CNC PLASMA EXHASUT HOOD. TURN ON EXHAUST FAN AND VERIFY GRAVITY DAMPER OPENS.
10	WHEN OPERATING WELDING SHOP W/OUT RTU-3 ON. OPEN 10' OVERHEAD DOOR AT LEAST 9". TURN ON EF 1 & 2.
11	WHEN OPERATING CONSTRUCTION SHOP W/OUT RTU-2 ON. OPEN 10' OVERHEAD DOOR AT LEAST 9" AND TURN ON EF-8
12	INSULATE DUCT EXPOSED TO OUTDOOR ENVIRONMENT WITH R-14 INSULATION AND ALUMINUM JACKET.
13	MOUNT HOSE REEL PER MANUFACTURER INSTRUCTIONS. EXHAUST DISCHARGE TO PENETRATE WALL OR ROOF. PENETRATION TO BE SEALED WATER TIGHT.
14	EXISTING GAS FURNACES ARE TO BE FULLY INSPECTED BY A LICENSED HVAC TECHNICIAN. IF FURNACES PASS INSPECTION, THEY ARE TO REMAIN. IF THEY FAIL INSPECTIONS, REMOVE AND REPLACE WITH UNIT INDICATED ON THE DRAWING.



1 MECHANICAL - FLOOR PLAN
SCALE 1/8" = 1'-0"

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FLOOR PLAN - MECHANICAL

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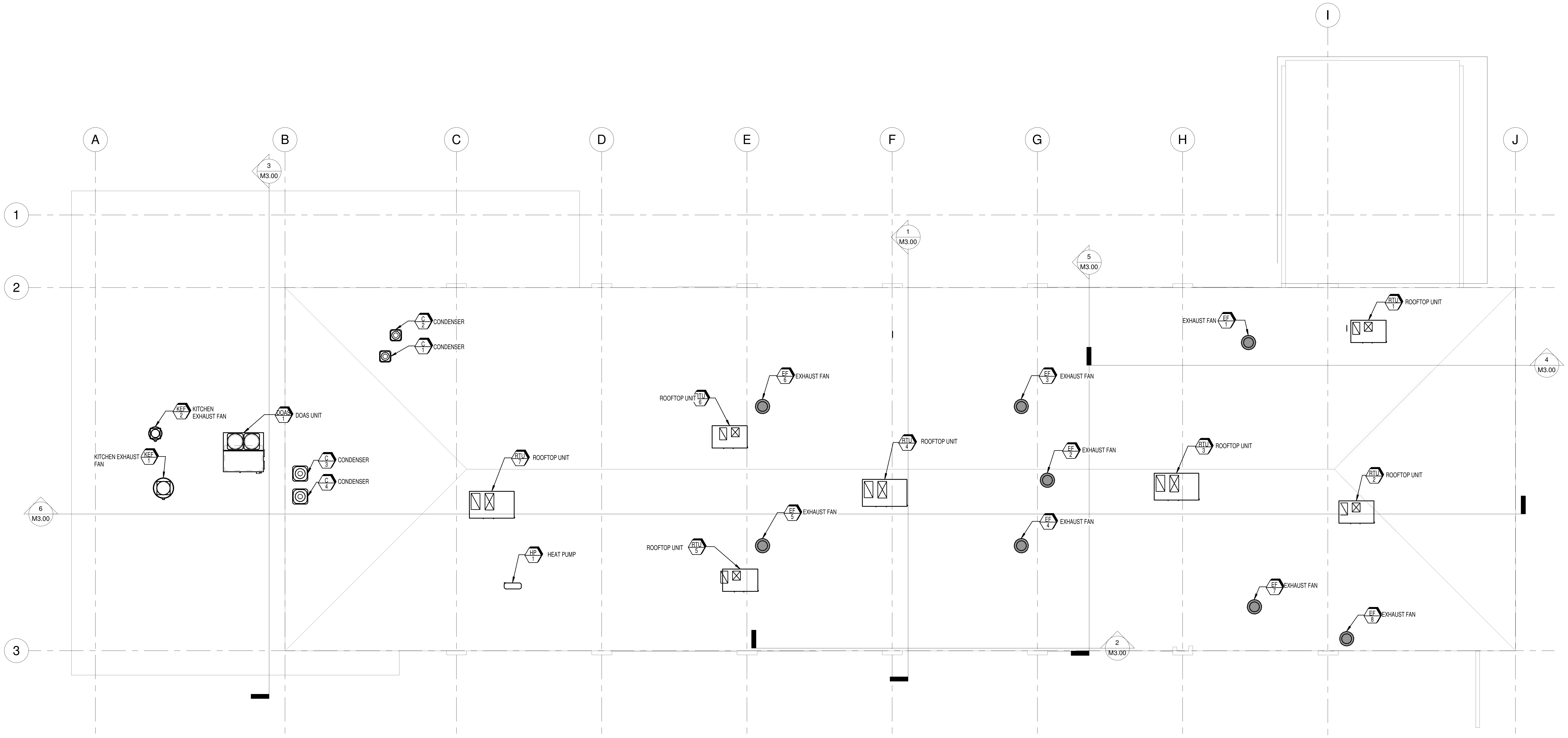

1 MECHANICAL - ROOF PLAN
SCALE 1/8" = 1'-0"

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ROOF PLAN - MECHANICAL

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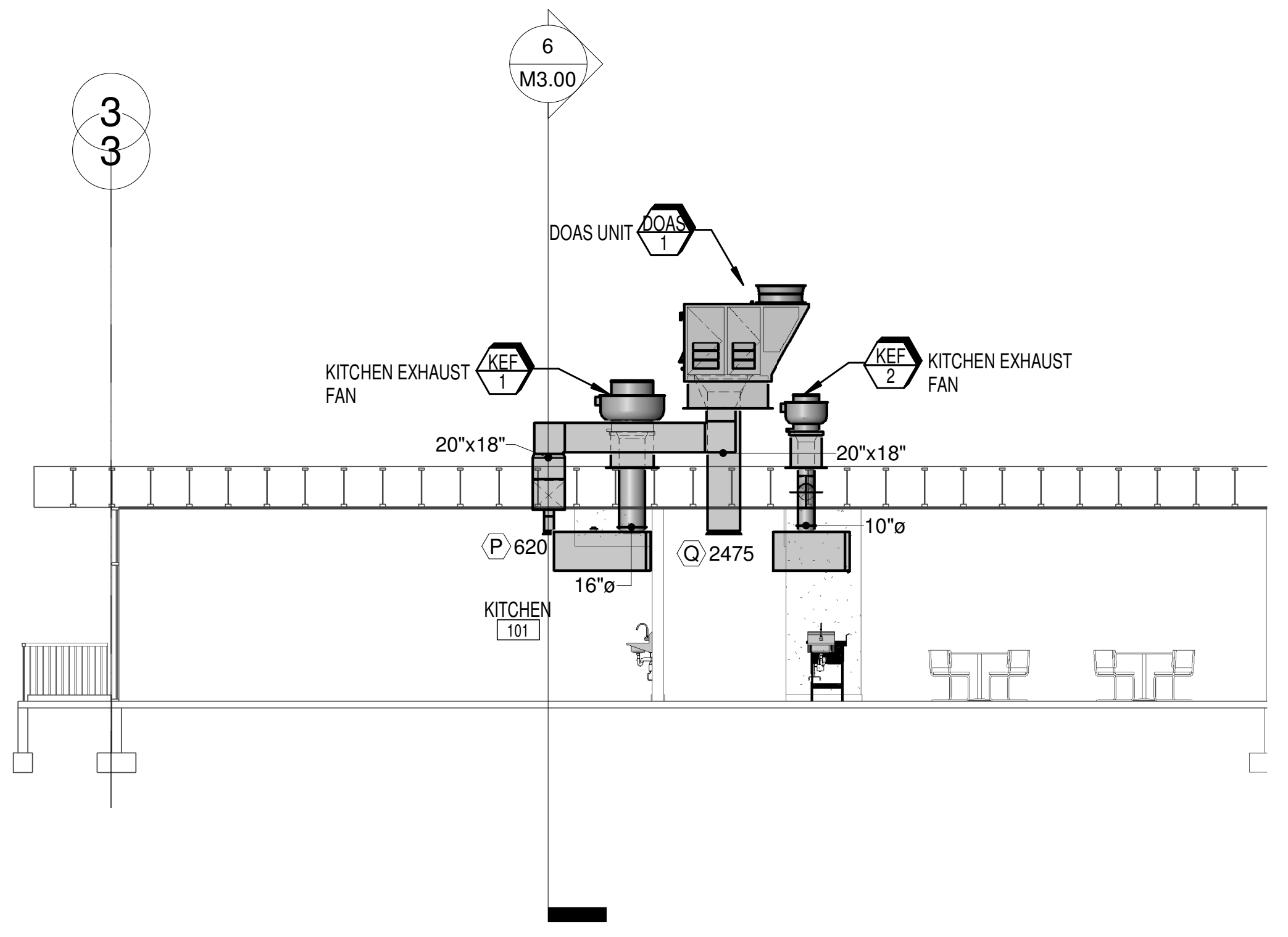

3 KITCHEN HOOD SECTION
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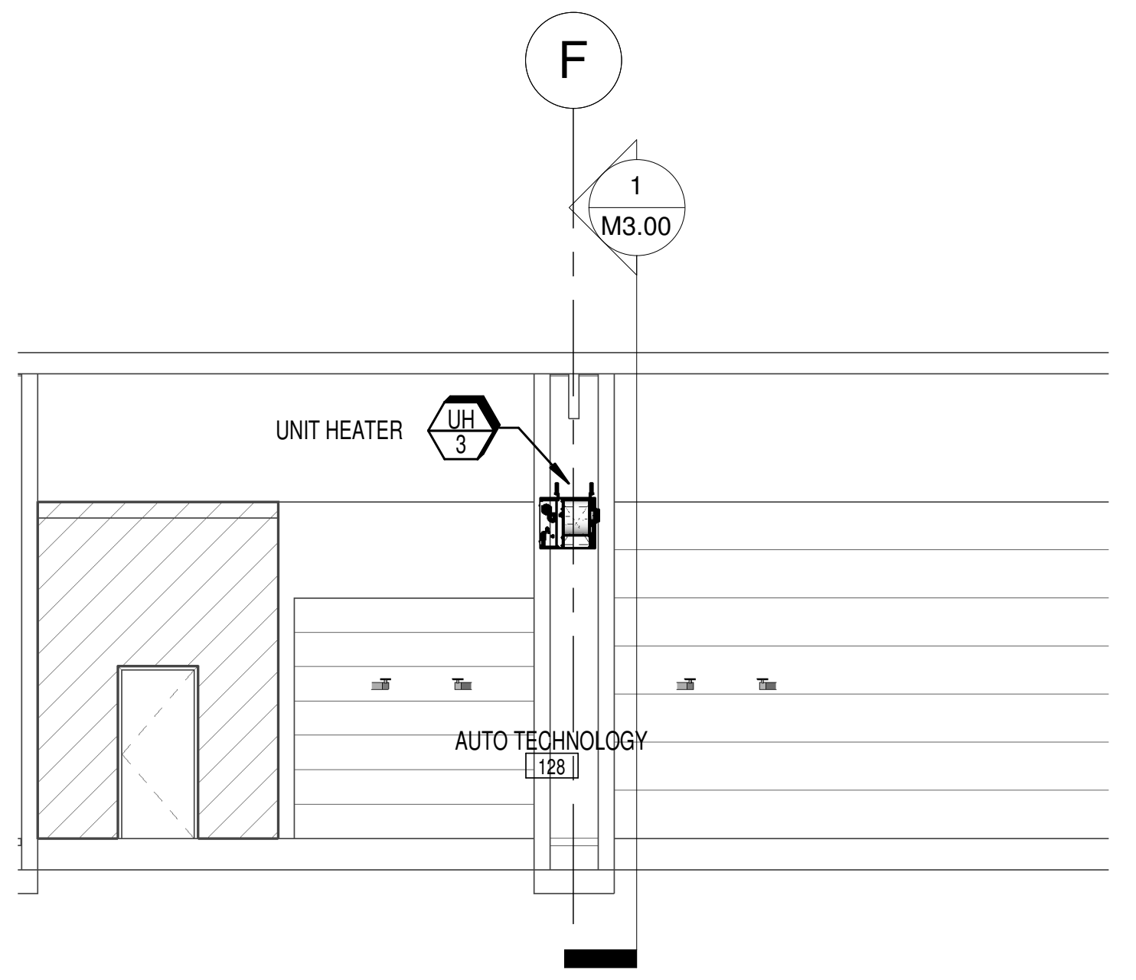
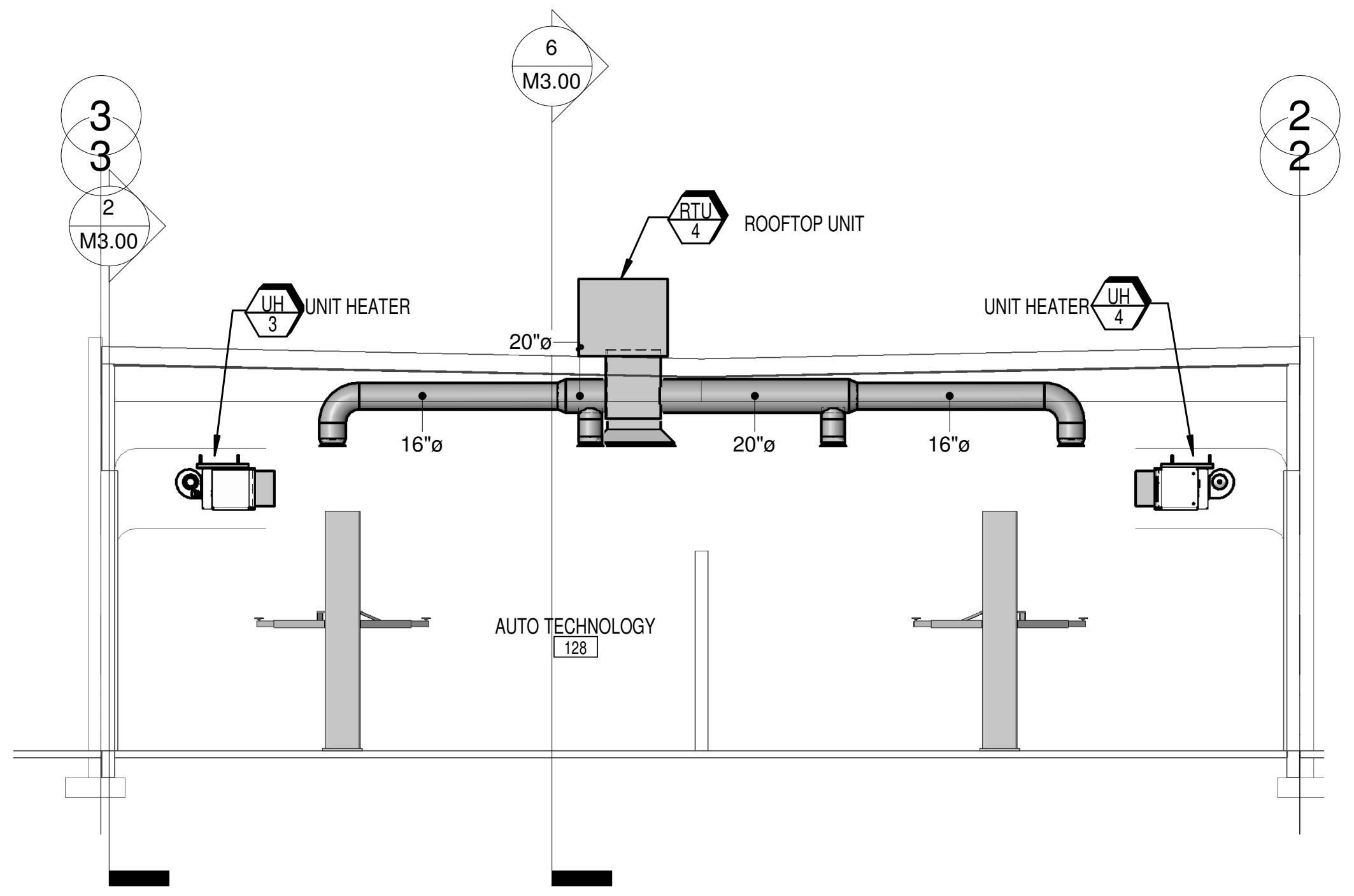


2 UNIT HEATER SECTION 1
SCALE 1/8" = 1'-0"



1 UNIT HEATER SECTION 2
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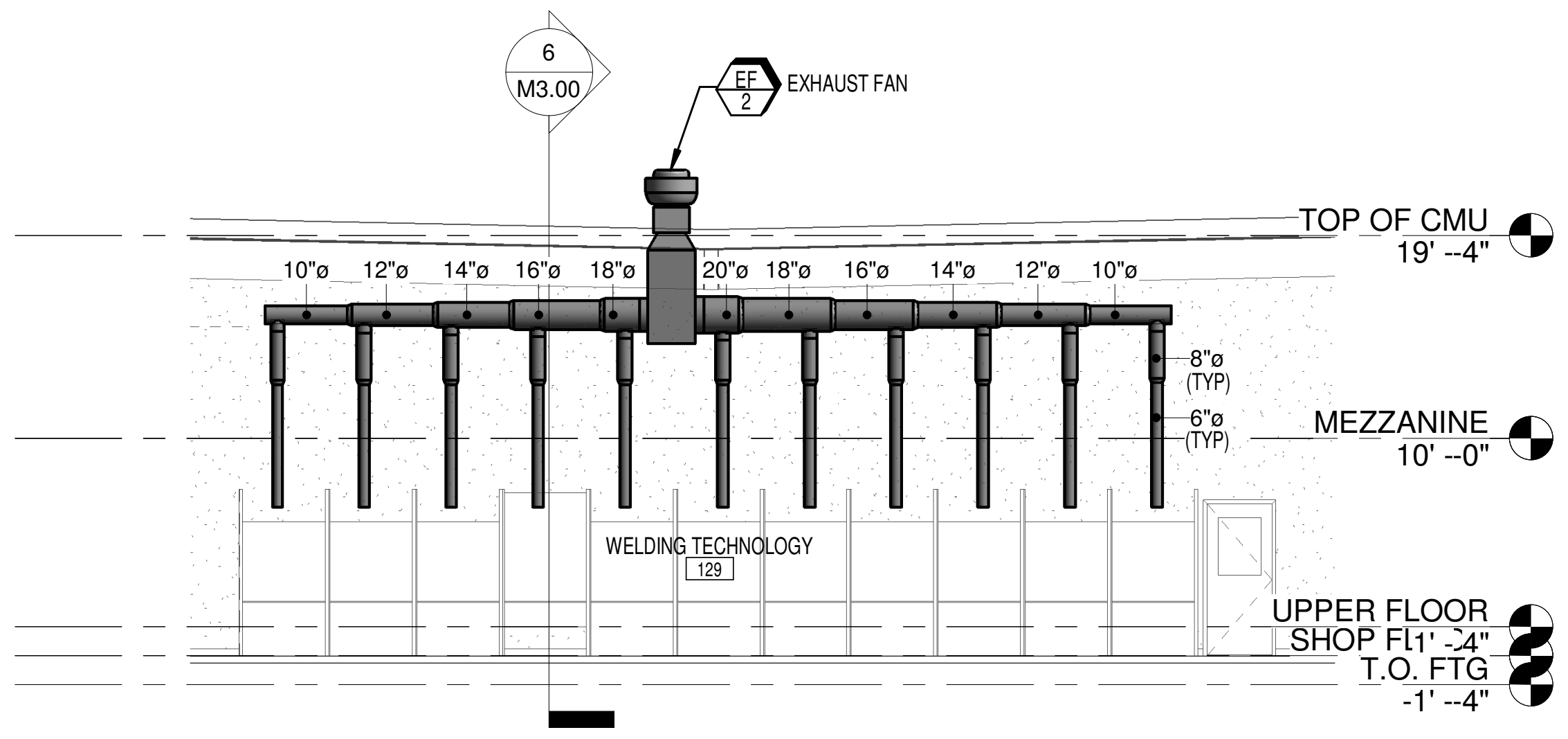
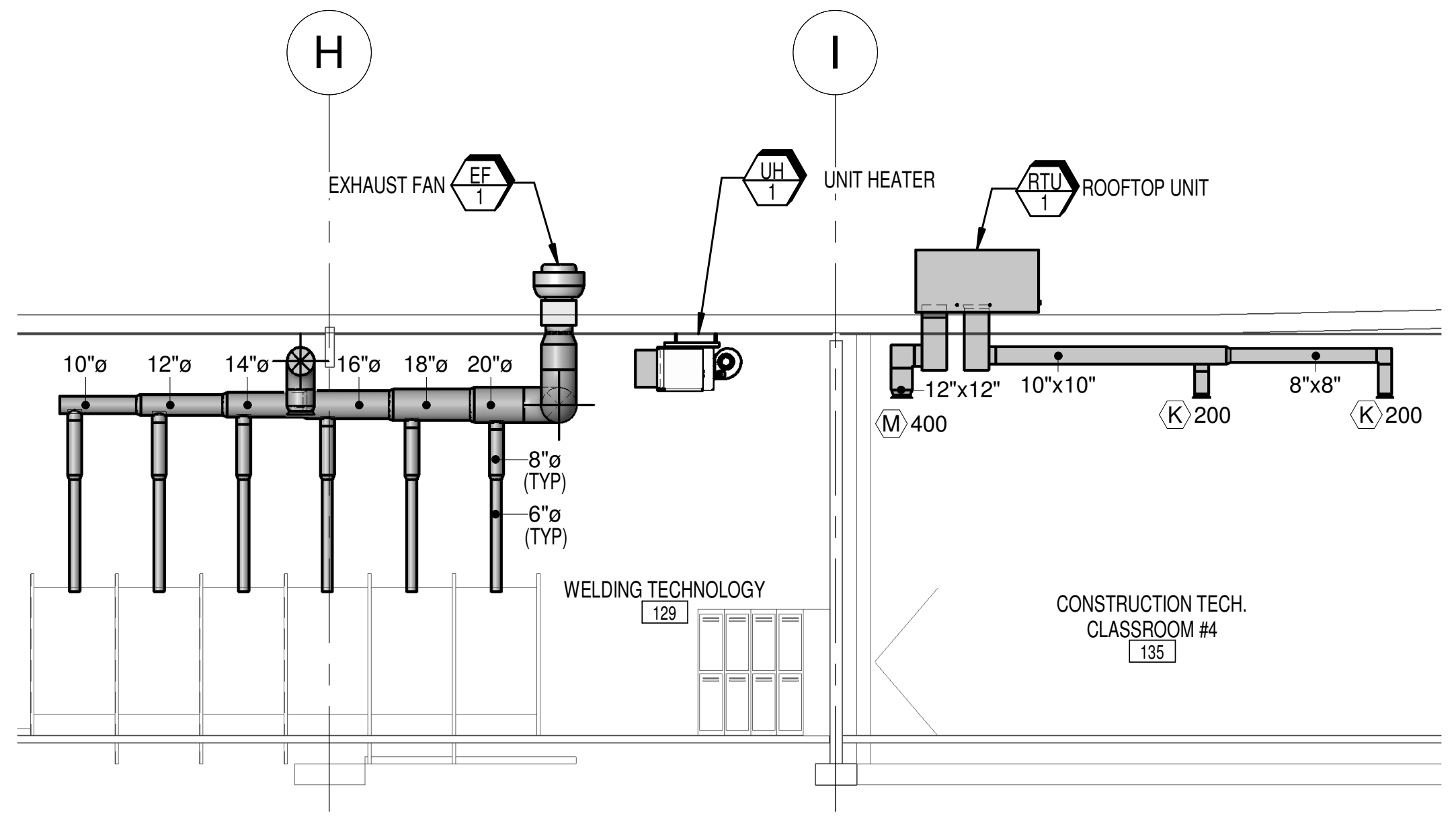
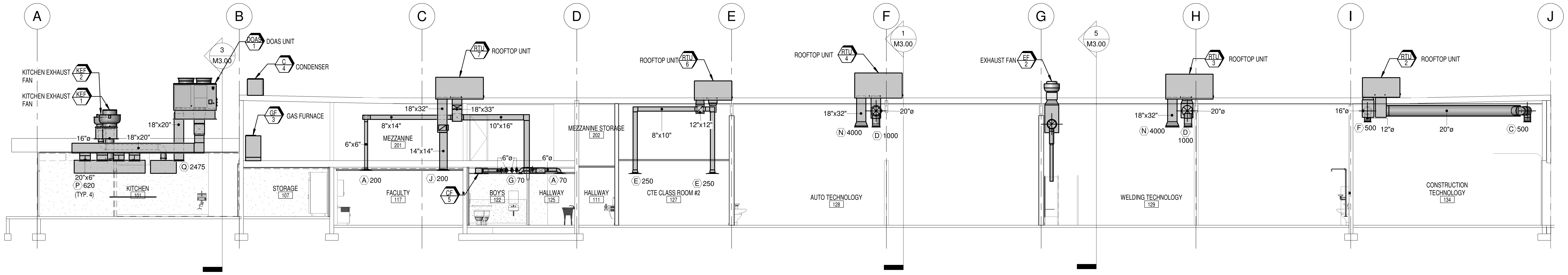


5 WELDING EXHAUST SECTION 1
SCALE 1/8" = 1'-0"



4 WELDING EXHAUST SECTION 2
SCALE 1/8" = 1'-0"



6 ELEVATION
SCALE 1/8" = 1'-0"

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MECHANICAL SECTIONS

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M3.00

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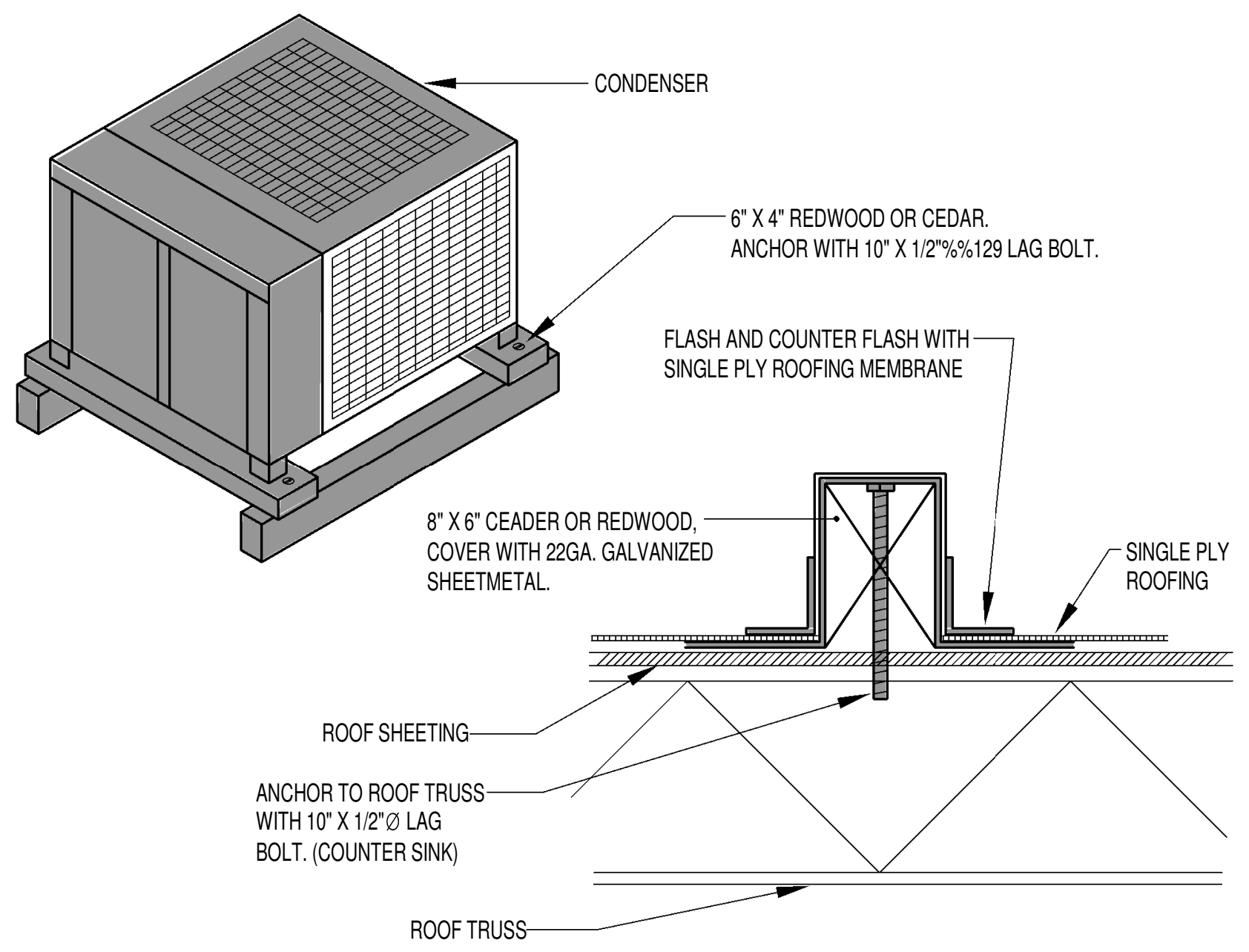
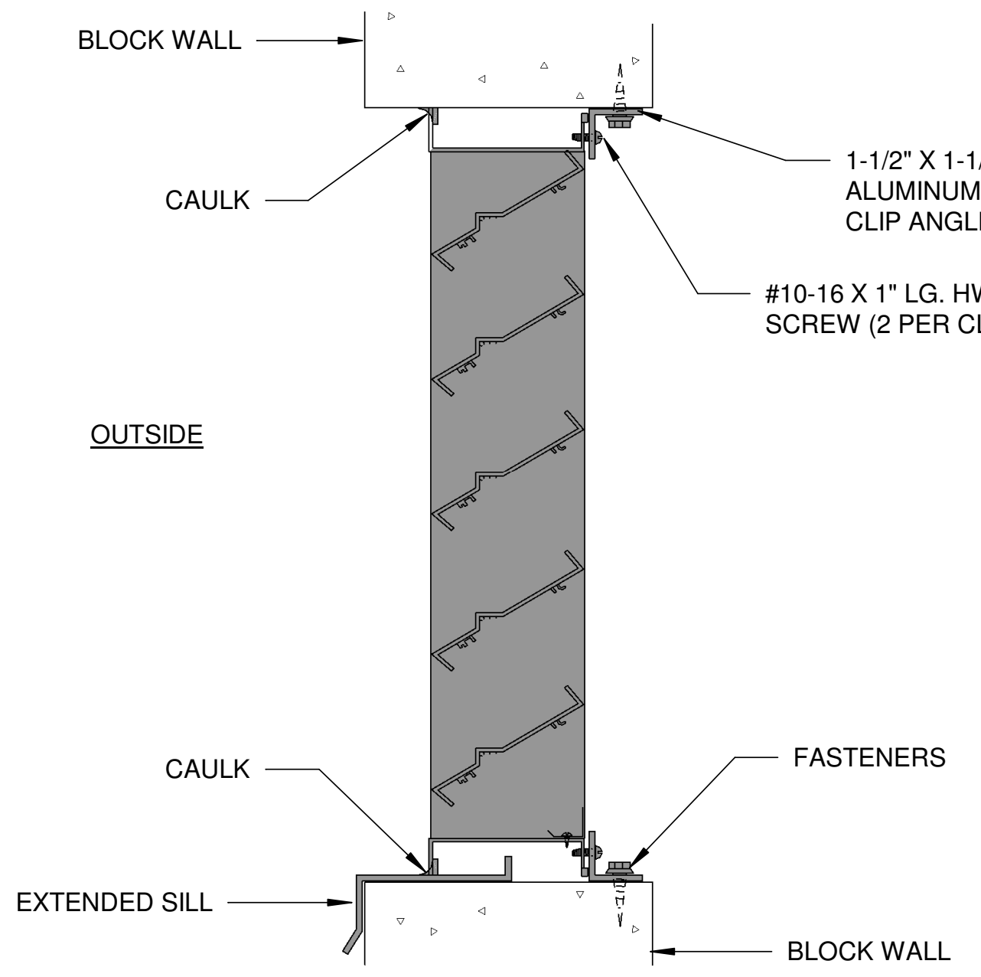
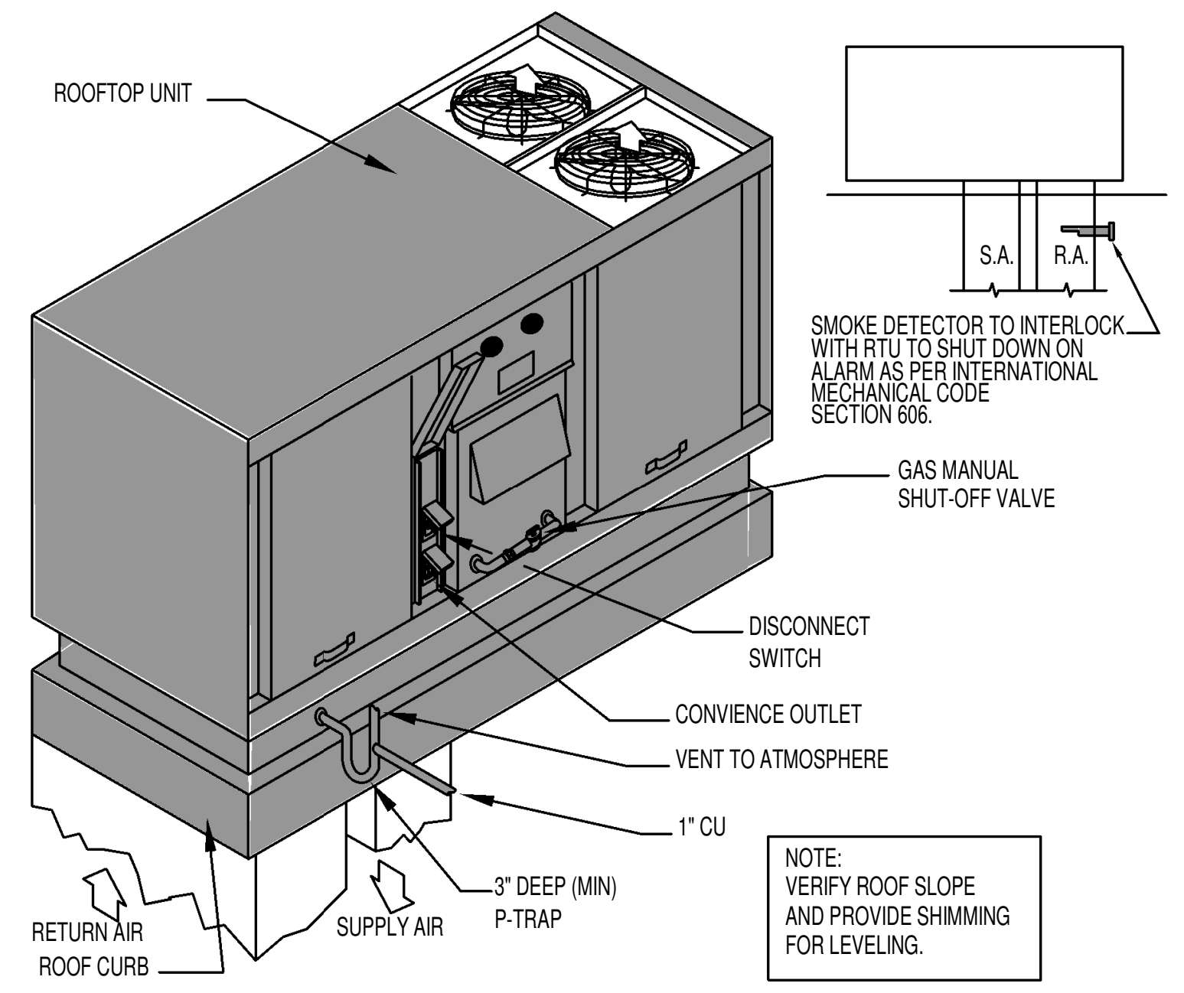

CONDENSER
6" X 4" REDWOOD OR CEDAR.
ANCHOR WITH 10" X 1/2"%%129 LAG BOLT.
FLASH AND COUNTER FLASH WITH
SINGLE PLY ROOFING MEMBRANE
8" X 6" CEADER OR REDWOOD,
COVER WITH 22GA. GALVANIZED
SHEETMETAL.
SINGLE PLY
ROOFING
ROOF SHEETING
ANCHOR TO ROOF TRUSS
WITH 10" X 1/2"Ø LAG
BOLT. (COUNTER SINK)
ROOF TRUSS

13 M4.00 DETAIL - CONDENSER MOUNTING ON ROOF
SCALE: NONE

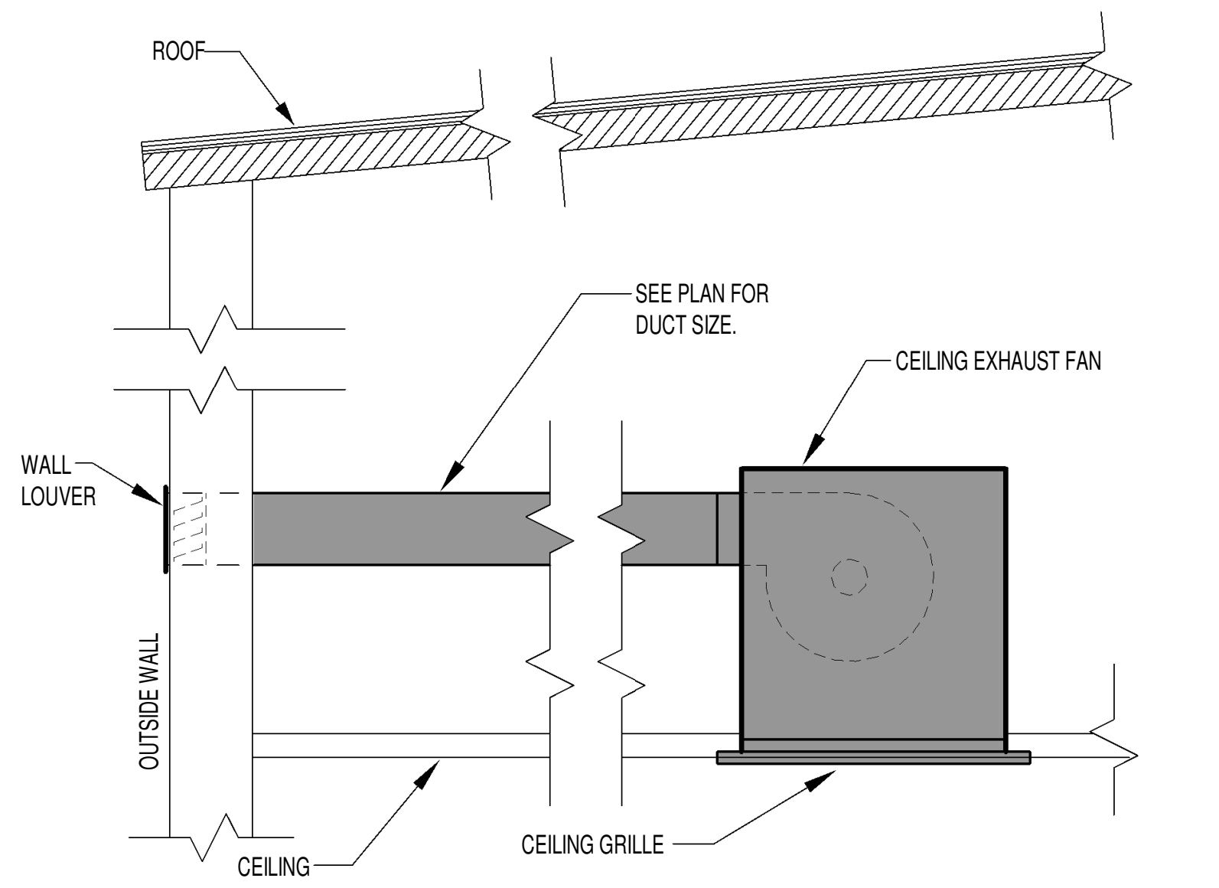


9 M4.00 DETAIL - LOUVER MOUNTING
SCALE: NONE

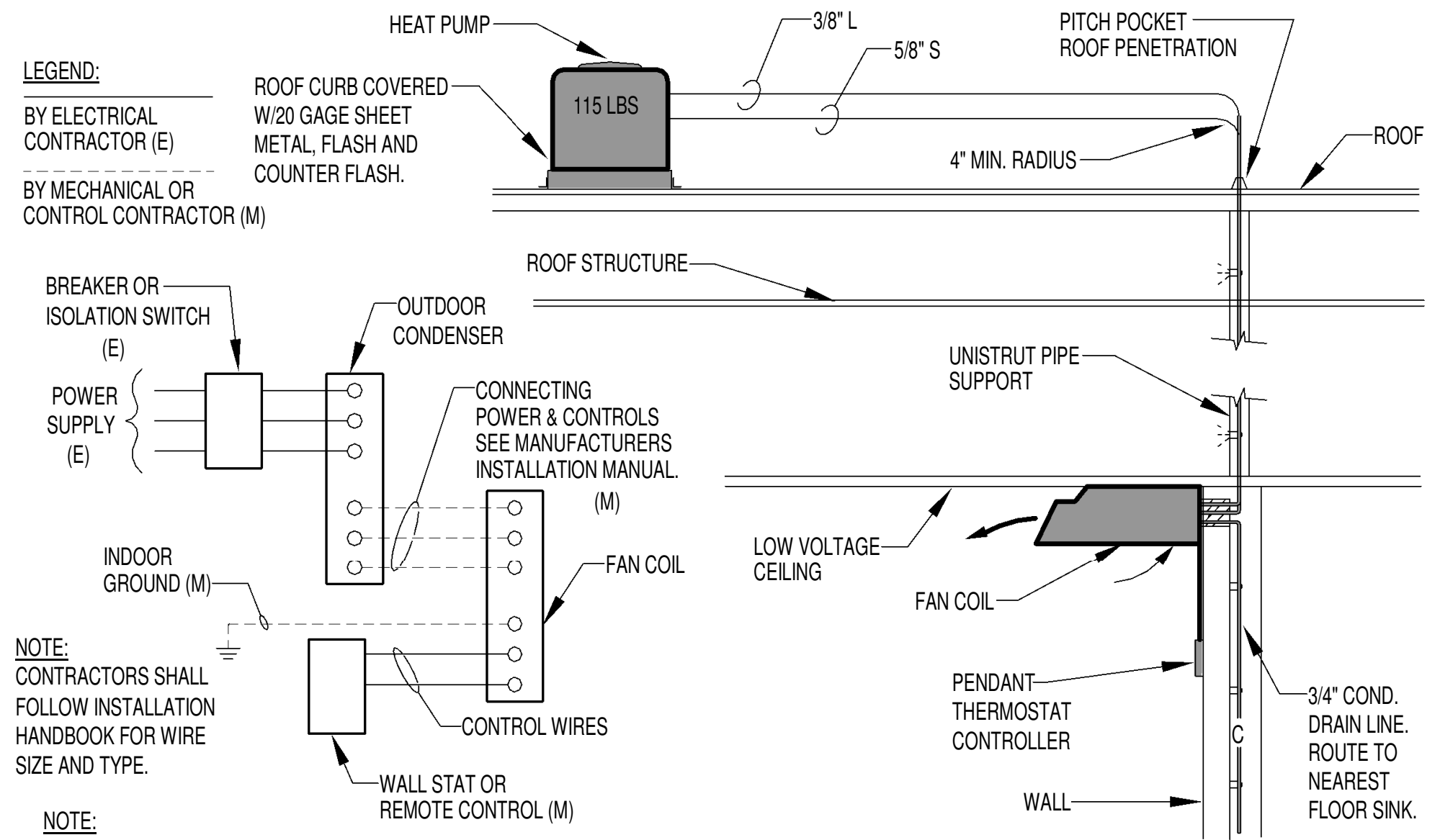


NOTE:
VERIFY ROOF SLOPE
AND PROVIDE SHIMMING
FOR LEVELING.

5 M4.00 DETAIL - DOWNFLOW ROOFTOP MOUNTING
SCALE: NONE



1 M4.00 DETAIL - CEILING EXHAUST FAN TO WALL LOUVER
SCALE: NONE

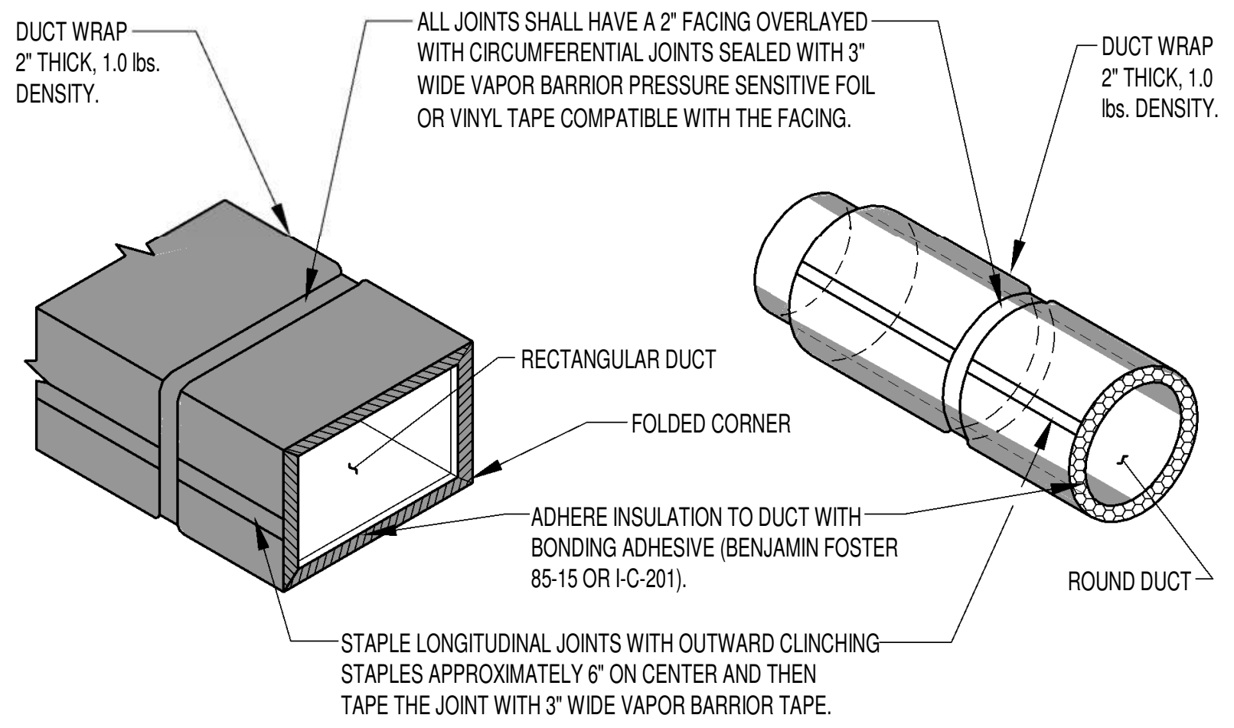


NOTE:
CONTRACTORS SHALL FOLLOW INSTALLATION HANDBOOK FOR WIRE SIZE AND TYPE.

NOTE:
DRY-CHARGED LINE SETS ARE AVAILABLE IN LENGTHS OF 116,22,32 & 49 FEET. LENGTHS ARE TO BE KEPT AS SHORT AS POSSIBLE. COILING OF LINES THAT ARE TOO LONG WILL NOT BE ACCEPTABLE AND WILL BE REPLACED AT CONTRACTORS EXPENCE. OPTIONAL: HARD REFRIGERANT PIPING. ALL CONNECTIONS ARE TO BE FLARED.

HEAT PUMP	UNIT TO HAVE MINIMUM COOLING CAPACITY OF 36,000 BTUH, 2 SPEED MOTOR 208/1Ø/60HZ TO BE COMPLETE WITH ALL CONTROLS. MITSUBISHI SERIES PC-36EK.
A/C UNIT	UNIT TO HAVE COOLING CAPACITY OF 36,000 BTUH AT 95° ENT. AIR TO COND. UNIT, 208/1Ø/60HZ MITSUBISHI SERIES PC-36EK

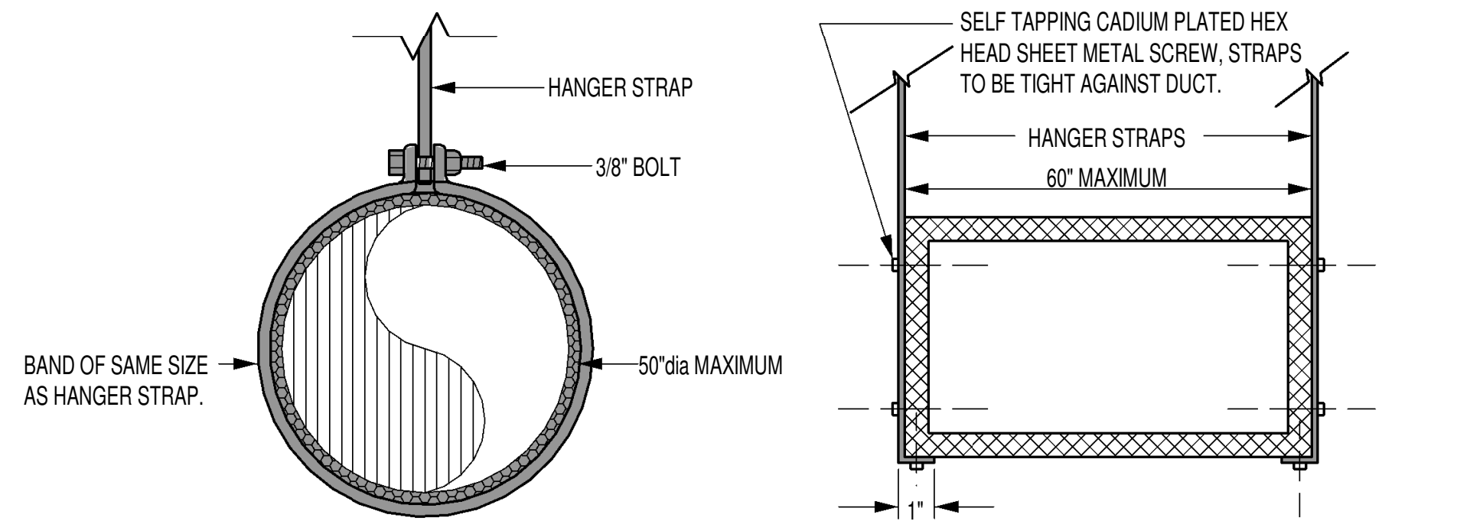
14 M4.00 DETAIL - SPLIT SYSTEM FAN COIL & HEAT PUMP
SCALE: NONE


DUCT WRAP
2" THICK, 1.0 lbs.
DENSITY.
ALL JOINTS SHALL HAVE A 2" FACING OVERLAYED
WITH CIRCUMFERENTIAL JOINTS SEALED WITH 3"
WIDE VAPOR BARRIOR PRESSURE SENSITIVE FOIL
OR VINYL TAPE COMPATIBLE WITH THE FACING.
DUCT WRAP
2" THICK, 1.0
lbs. DENSITY.
RECTANGULAR DUCT
FOLDED CORNER
ADHERE INSULATION TO DUCT WITH
BONDING ADHESIVE (BENJAMIN FOSTER
85-15 OR I-C-201).
ROUND DUCT
STAPLE LONGITUDINAL JOINTS WITH OUTWARD CLINCHING
STAPLES APPROXIMATELY 6" ON CENTER AND THEN
TAPE THE JOINT WITH 3" WIDE VAPOR BARRIOR TAPE.

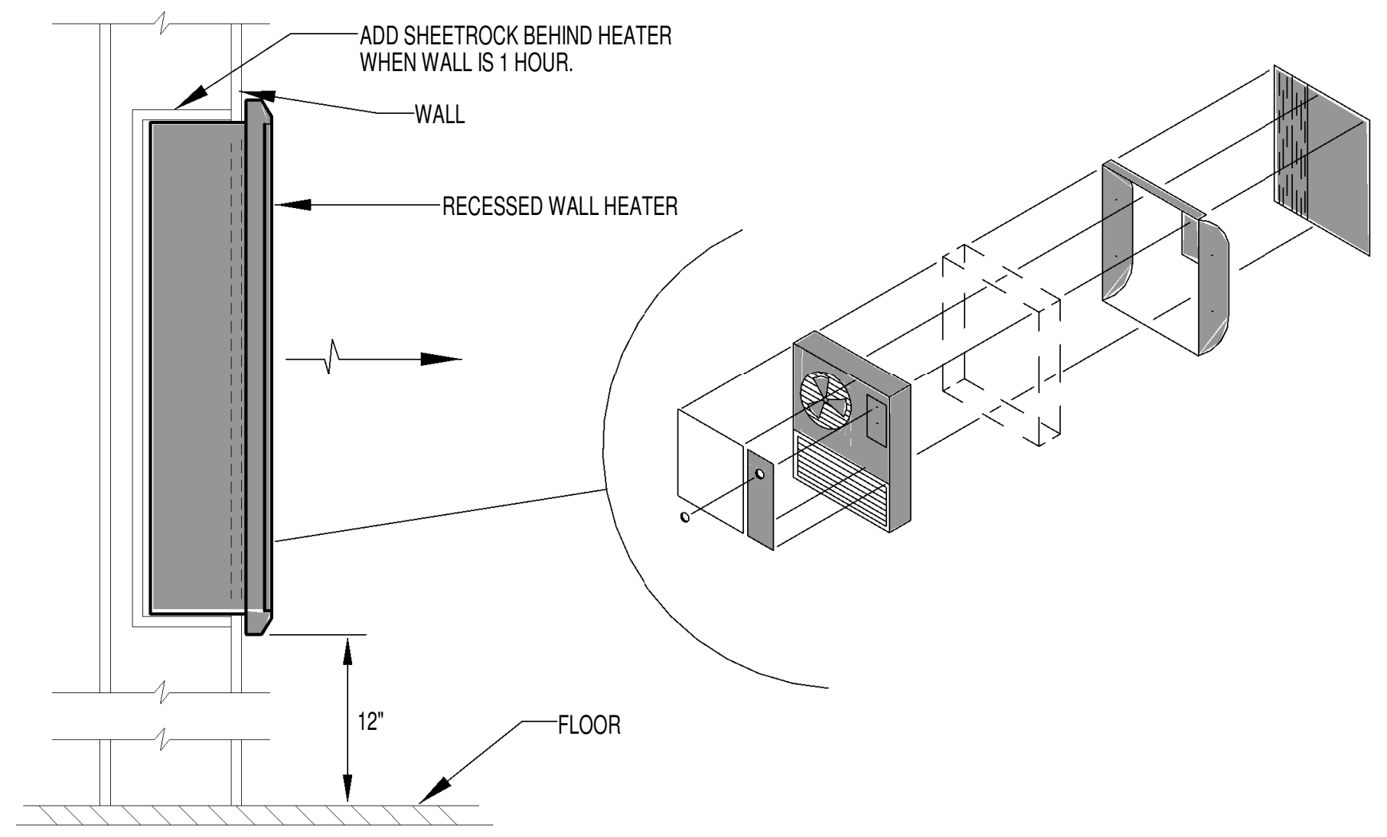
10 M4.00 DETAIL - DUCT INSULATION
SCALE: NONE

HANGER SIZES FOR ROUND DUCT				
DUCT DIAMETER	ROUND HANGERS	STRAP HANGERS	MAXIMUM SPACING	NUMBER OF HANGERS
UP THRU 18"	3/16"ROD	1" X 16 GAUGE	10'-0"	1
19" THRU 38"	1/4" ROD	1" X 12 GAUGE	10'-0"	1

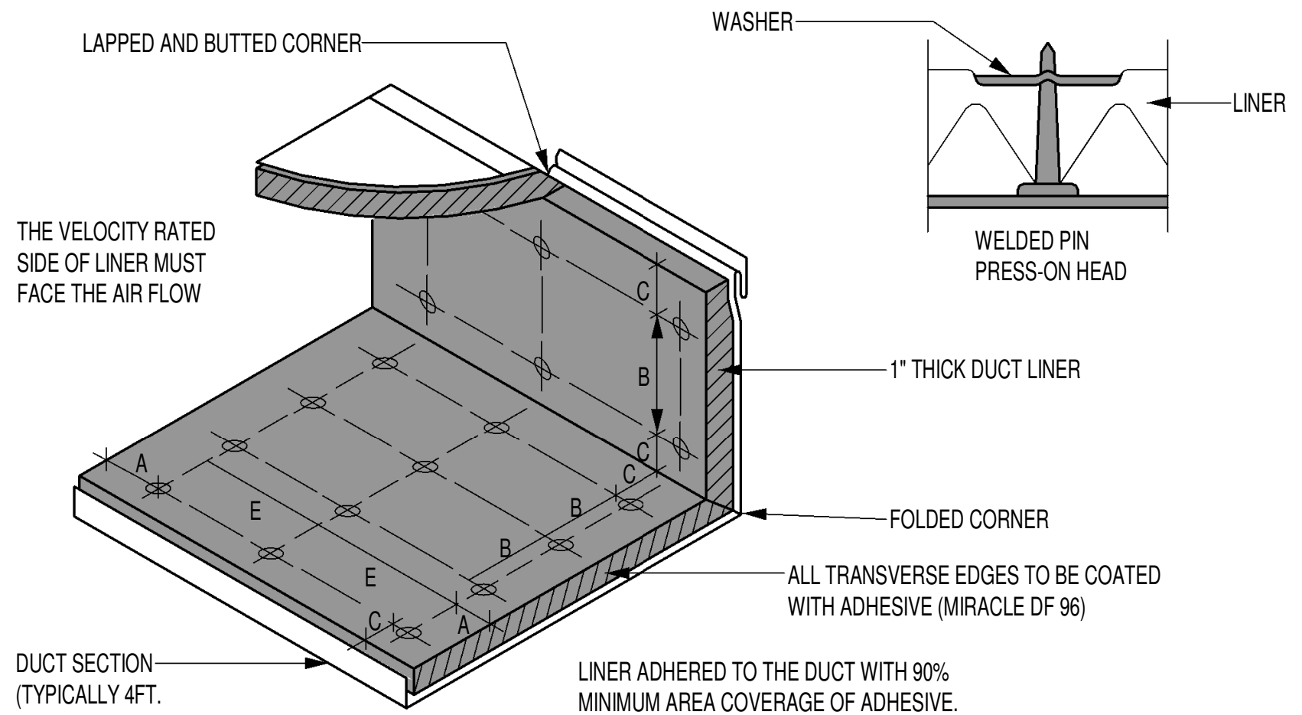
HANGER SIZES FOR RECTANGULAR DUCT				
LONGEST DIMENSION OF DUCT	ROUND HANGERS	STRAP HANGERS	TRAPEZE SHELF ANGLES	MAXIMUM SPACING
UP THRU 18"	3/16"ROD	1" X 16 GAUGE	1" X 1" X 1/8"	10'-0"
19" THRU 30"	1/4" ROD	1" X 16 GAUGE	1" X 1" X 1/8"	10'-0"



6 M4.00 DETAIL - DUCT HANGERS (combined)
SCALE: NONE



2 M4.00 DETAIL -WALL HEATER
SCALE: NONE

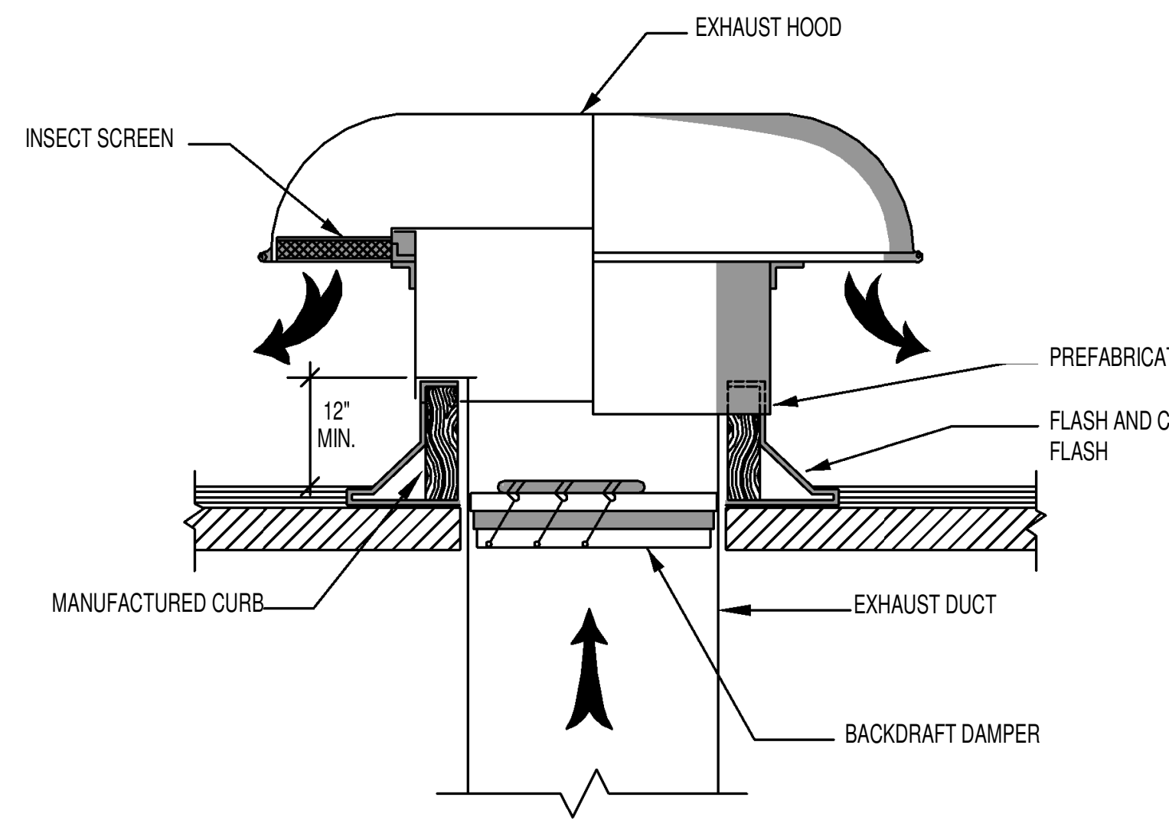


LINER ADHERED TO THE DUCT WITH 90% MINIMUM AREA COVERAGE OF ADHESIVE.

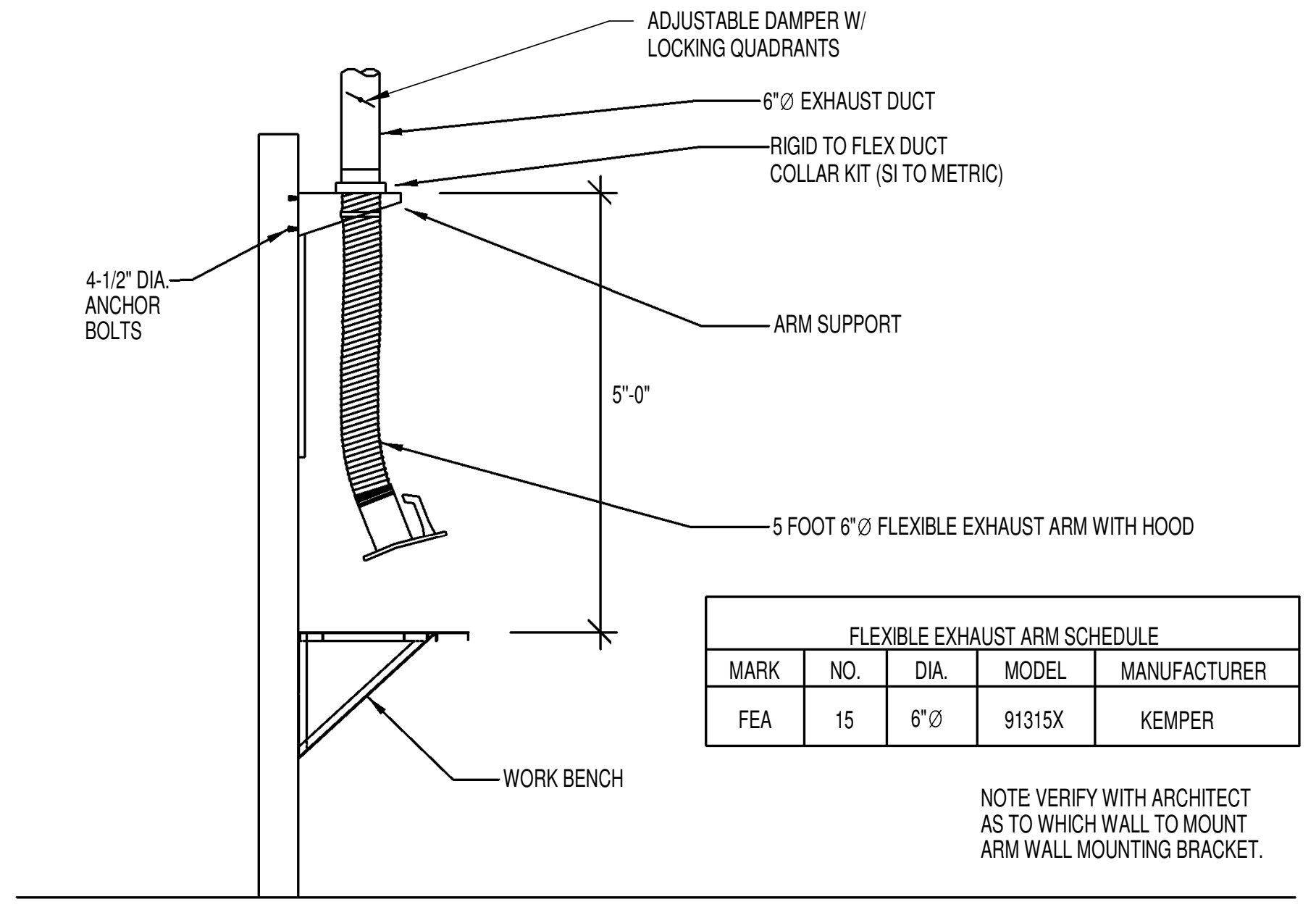
MAXIMUM SPACING FOR FASTENERS.
ACTUAL INTERVALS ARE APPROXIMATE.

VELOCITY	DIMENSIONS			
	A	B	C	E
0-2500 FPM	3"	12"	4"	18"
2501-6000 FPM	3"	6"	4"	16"

11 M4.00 DETAIL - DUCT LINER INSTALLATION
SCALE: NONE



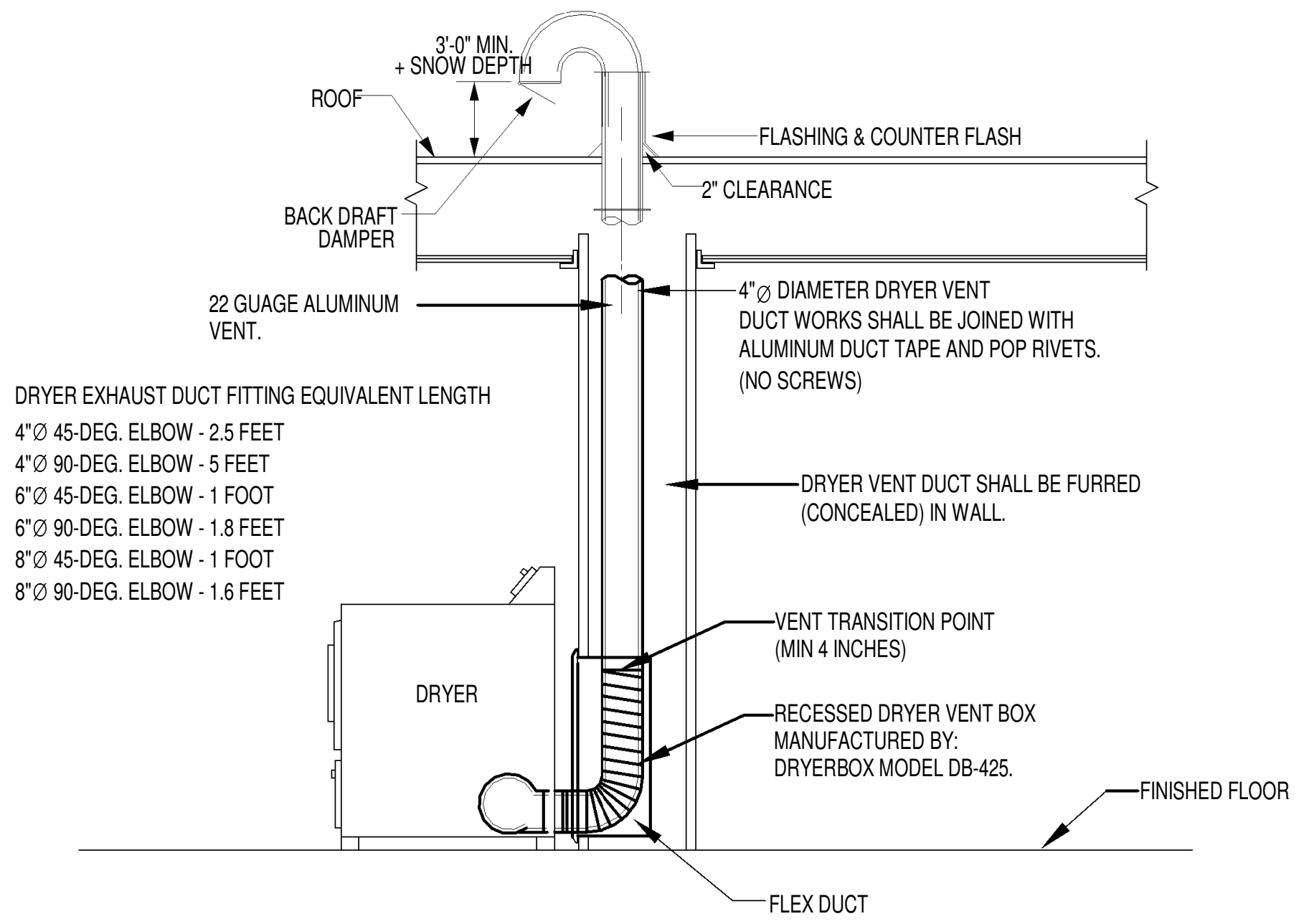
7 M4.00 DETAIL - EXHAUST HOOD
SCALE: NONE



FLEXIBLE EXHAUST ARM SCHEDULE				
MARK	NO.	DIA.	MODEL	MANUFACTURER
FEA	15	6"Ø	91315X	KEMPER

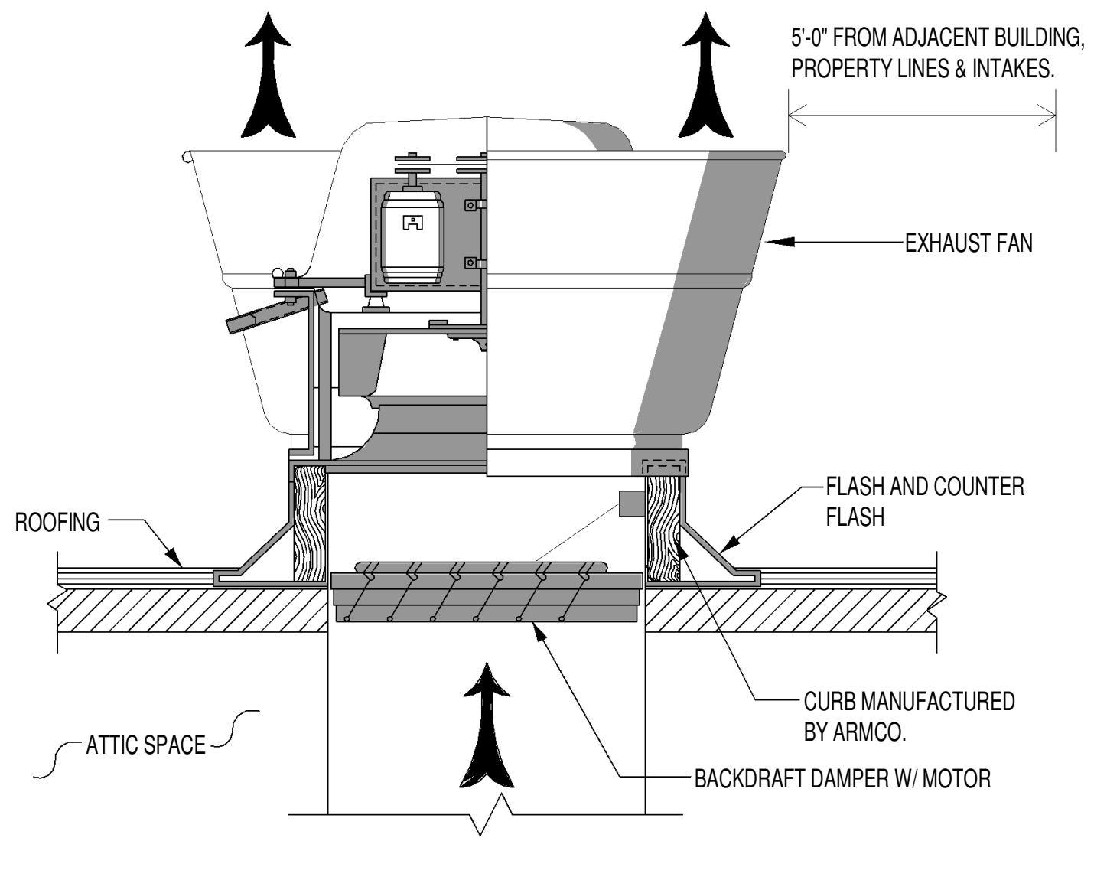
NOTE VERIFY WITH ARCHITECT AS TO WHICH WALL TO MOUNT ARM WALL MOUNTING BRACKET.

3 M4.00 DETAIL - WELDING BOOTH FLEXIBLE EXHAUST ARM
SCALE: NONE

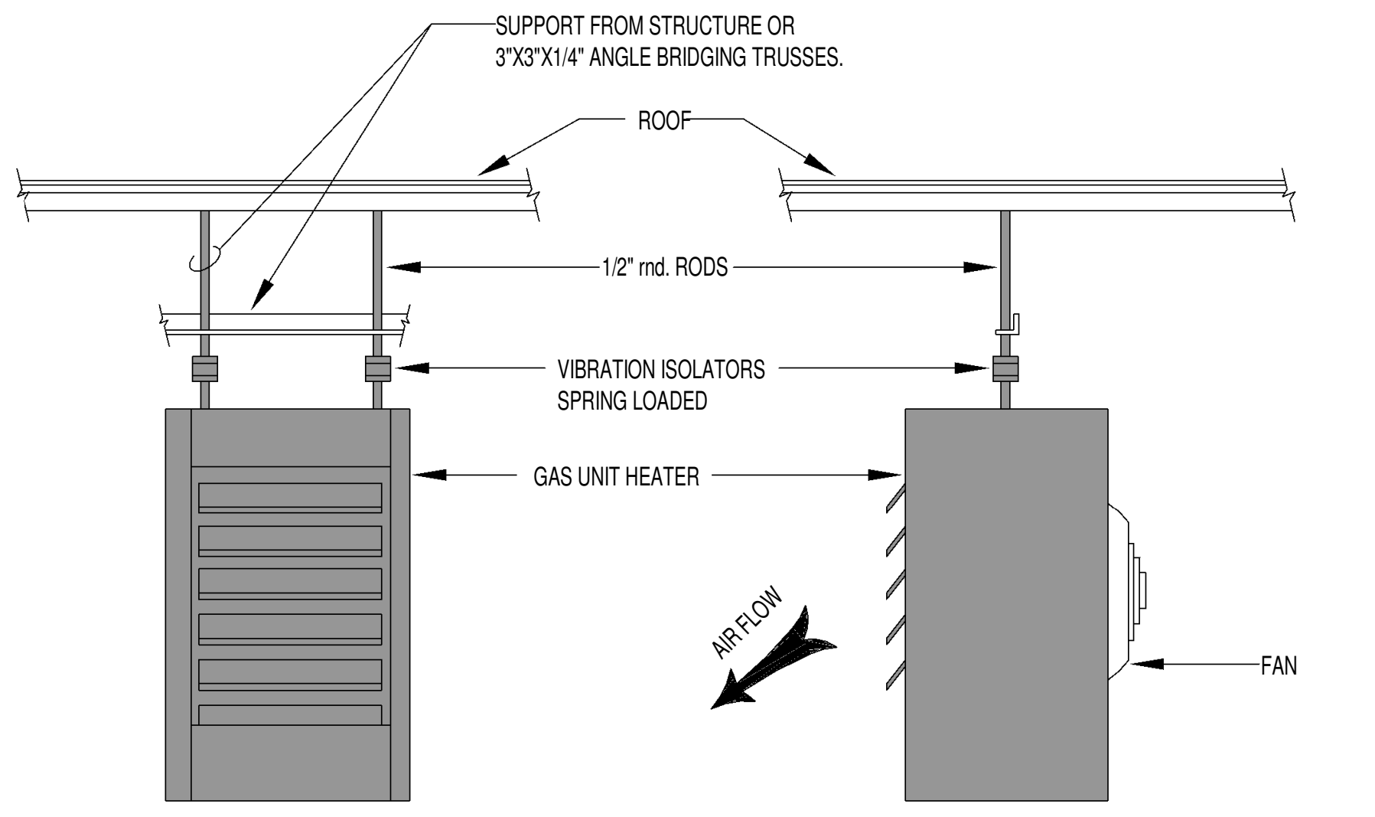


DRYER EXHAUST DUCT FITTING EQUIVALENT LENGTH
4"Ø 45-DEG. ELBOW - 2.5 FEET
4"Ø 90-DEG. ELBOW - 5 FEET
6"Ø 45-DEG. ELBOW - 1 FOOT
6"Ø 90-DEG. ELBOW - 1.8 FEET
8"Ø 45-DEG. ELBOW - 1 FOOT
8"Ø 90-DEG. ELBOW - 1.6 FEET

12 M4.00 DETAIL - DRYER W/ VENT BOX TO ROOF
SCALE: NONE


5'-0" FROM ADJACENT BUILDING,
PROPERTY LINES & INTAKES.
EXHAUST FAN
ROOFING
FLASH AND COUNTER
FLASH
CURB MANUFACTURED
BY ARMCO.
ATTIC SPACE
BACKDRAFT DAMPER W/ MOTOR

8 M4.00 DETAIL - EXHAUST FAN MOUNTING - UPBLAST
SCALE: NONE



4 M4.00 DETAIL - GAS UNIT HEATER
SCALE: NONE

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Consulting Engineers
156 North Twelfth Avenue
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PHONE (208) 232-2577
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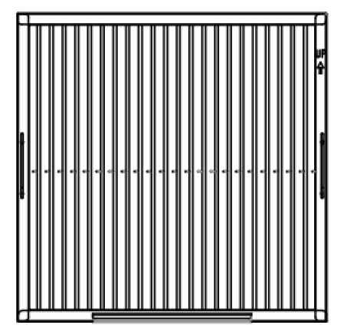
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
1-9-25
REF NO.
2444
AUTHOR
SVB

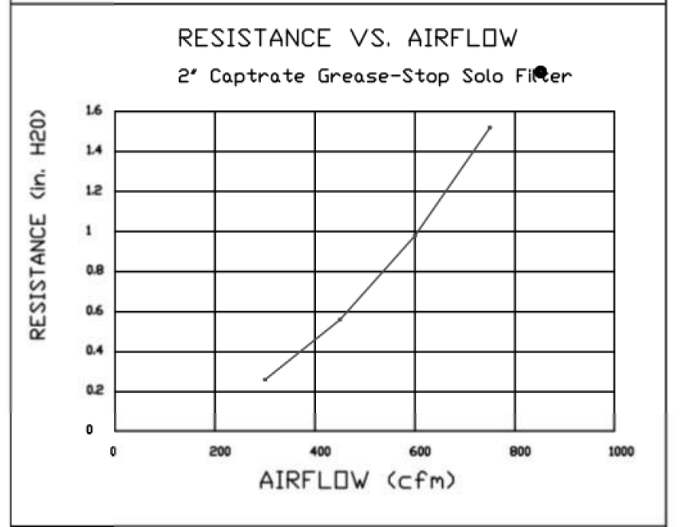
PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
MECHANICAL DETAILS

SHEET NO.
M4.00

1/10/2025 11:12:09 AM



Captrate
Grease-Stop Solo Filter



Filter Detail

CAPTRATE®

EXHAUST CFM=LENGTH OF HOOD X CFM/LIN.FT. (LOAD)

SUPPLY CFM=EXHAUST CFM X PERCENTAGE REQUIRED

$$\text{TOTAL DUCT AREA}=144 \times \frac{\text{CFM}}{\text{FPM}(*)}$$

$$\text{DUCT LENGTH}=\frac{\text{TOTAL DUCT AREA}}{\text{DUCT DEPTH}}$$

*CAPTIVE-AIRE VENTILATOR DUCT SIZES ARE CALCULATED USING AN EXHAUST VELOCITY OF 1600-1800 FPM AND A SUPPLY VELOCITY OF 1000 FPM PLEASE CONSULT FACTORY FOR MAXIMUM ALLOWABLE DUCT SIZES

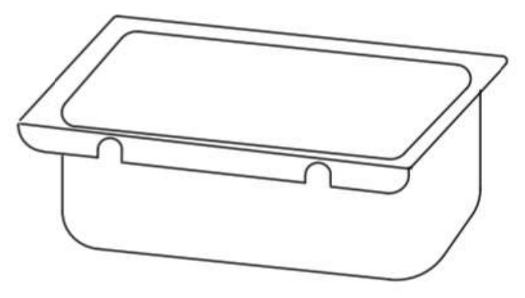
CALCULATIONS UTILIZED

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH:

- NFPA #96
- ETL SANITATION
- E.T.L. LISTED 3054804-001
- ETL IS LISTED TO ULC STANDARDS
- NSF

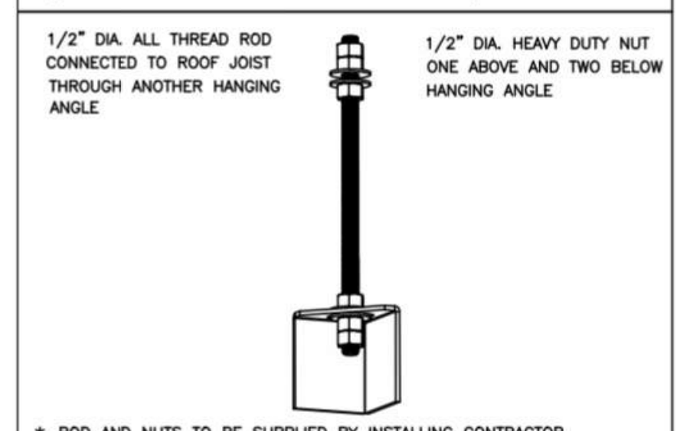
Intertek

BUILDING CODES



Grease Cup will be supported by 2 studs on the inside wall of the hood The grease will drain through a concealed grease trough and into this removable cup.

1/2 Pint Grease Cup Detail


1/2" DIA. ALL THREAD ROD CONNECTED TO ROOF JOIST THROUGH ANOTHER HANGING ANGLE
1/2" DIA. HEAVY DUTY NUT ONE ABOVE AND TWO BELOW HANGING ANGLE

* ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR HANGING ANGLE IS PRE-PUNCHED AT FACTORY

ND-2 HANGING ANGLE DETAIL

HANGING ANGLES WILL BE LOCATED IN THE FOLLOWING LOCATIONS FOR WALL CANOPIES

HOOD STYLE		DIM FROM REAR	DIM FROM FRONT (24" High Hood)	DIM FROM FRONT (30" High Hood)
Wall	Exhaust Only	4.166"	2.25"	2.25"
	With MUA		2.25"	2.25"
Back Shelf	Exhaust Only	4.166"	2.25"	2.25"
	With MUA		2.25"	2.25"
Condensate		2.25"	2.25"	

HANGING ANGLE LOCATIONS

FOR QUESTIONS, CALL THE
Utah Office
REGION 87
PHONE: (801) 878 - 3677
EMAIL: reg87@captiveaire.com

PATENT NUMBERS

EXHAUST HOODS ND-2/BD-2/SND-2 (CANADA) - CA PATENT 2520435 C.

HOOD INFORMATION - JOB#7156194

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM							HOOD CONSTRUCTION	HOOD CONFIG	
										RISER(S)									
										WIDTH	LENG	HEIGHT	DIA	CFM	VEL	SP		END TO END	ROW
1		6024 ND-2	CAPTIVEAIRE	11' 0"	600 DEG	I	HEAVY	225	2475			4"	16"	2475	1773	-0.872"	430 SS WHERE EXPOSED	ALONE	ALONE

HOOD INFORMATION

HOOD NO	TAG	FILTER(S)					LIGHT(S)			UTILITY CABINET(S)						FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
												FIRE SYSTEM		ELECTRICAL	SWITCHES		
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	TYPE	SIZE	MODEL #	QUANTITY		
1		CAPTRATE SOLO FILTER	8	20"	16"	85% SEE FILTER SPEC	3	RECESSED ROUND	NO	RIGHT	12"x60"x24"	TANK FS	4.0/4.0	DCV-1111	1 LIGHT 1 FAN	YES	899 LBS

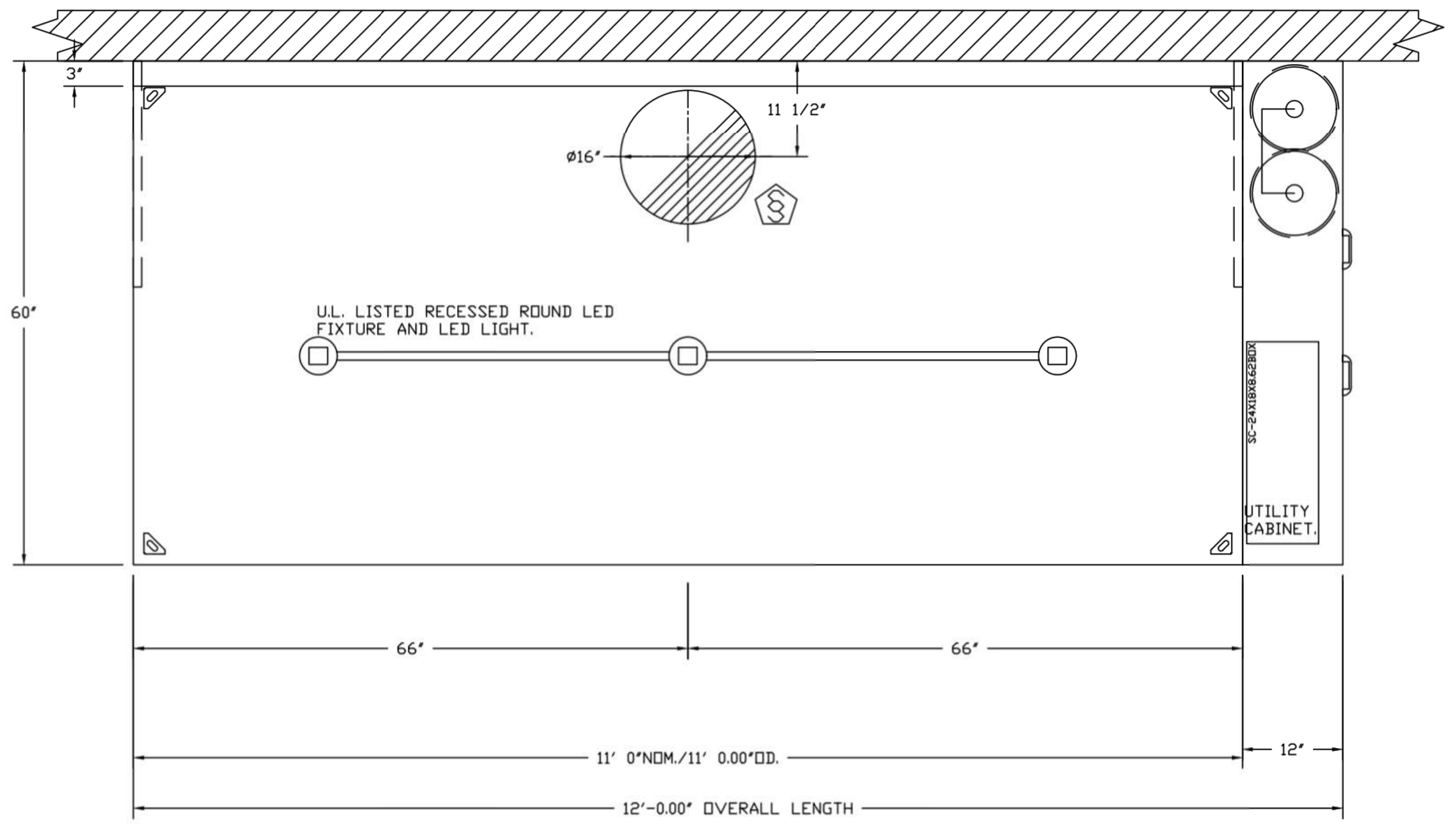
HOOD OPTIONS

HOOD NO	TAG	OPTION
1		RIGHT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.
		LEFT VERTICAL END PANEL 27" TOP WIDTH, 21" BOTTOM WIDTH, 80" HIGH INSULATED 430 SS.

CLEARANCE TO COMBUSTIBLES

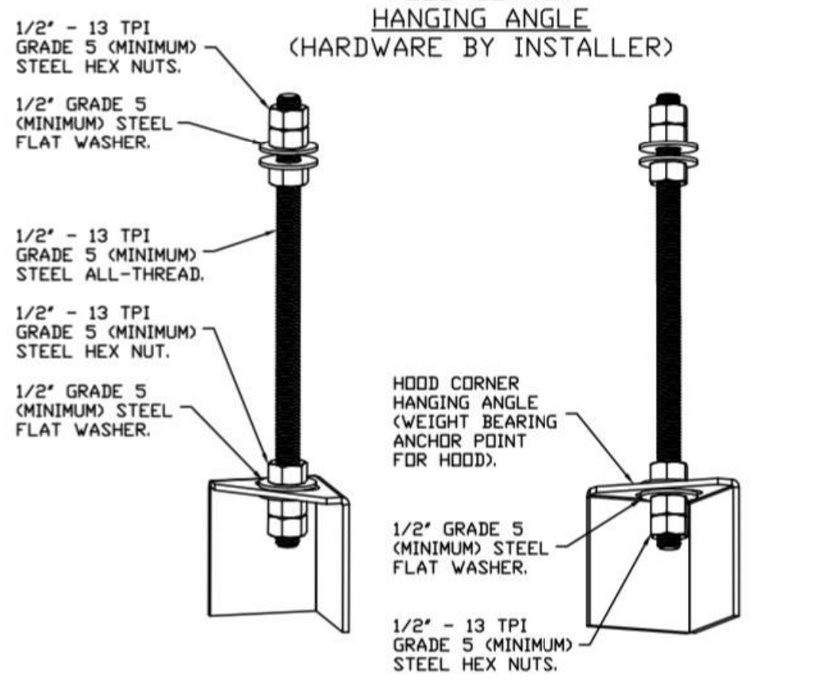
HOODS #	SURFACE	*CLEARANCE
1	TOP	18"
	FRONT	0"
	BACK	18"
	LEFT	18"
	RIGHT	0"

- *0" CLEARANCE TO COMBUSTIBLES CONFORMS TO UL710 STANDARD.
- HOOD MOUNTED UTILITY CABINETS REQUIRE 36" SERVICE CLEARANCE.



PLAN VIEW - HOOD #1
11' 0.00" LONG 6024ND-2

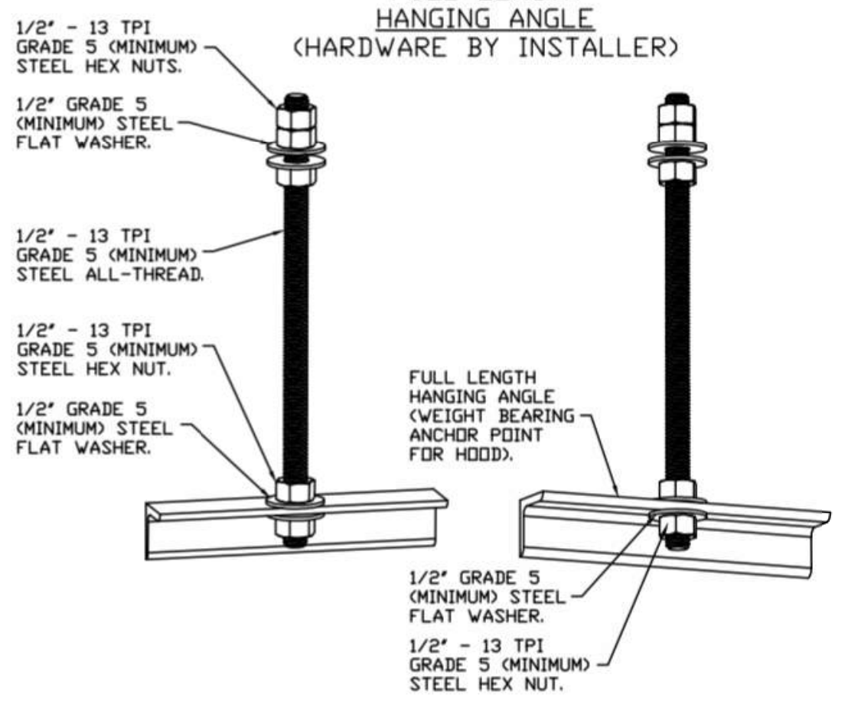
HOOD CORNER
HANGING ANGLE
(HARDWARE BY INSTALLER)


1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUTS.
1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.
1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL ALL-THREAD.
1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUT.
1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.
HOOD CORNER HANGING ANGLE (WEIGHT BEARING ANCHOR POINT FOR HOOD).
1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.
1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUTS.

ASSEMBLY INSTRUCTIONS

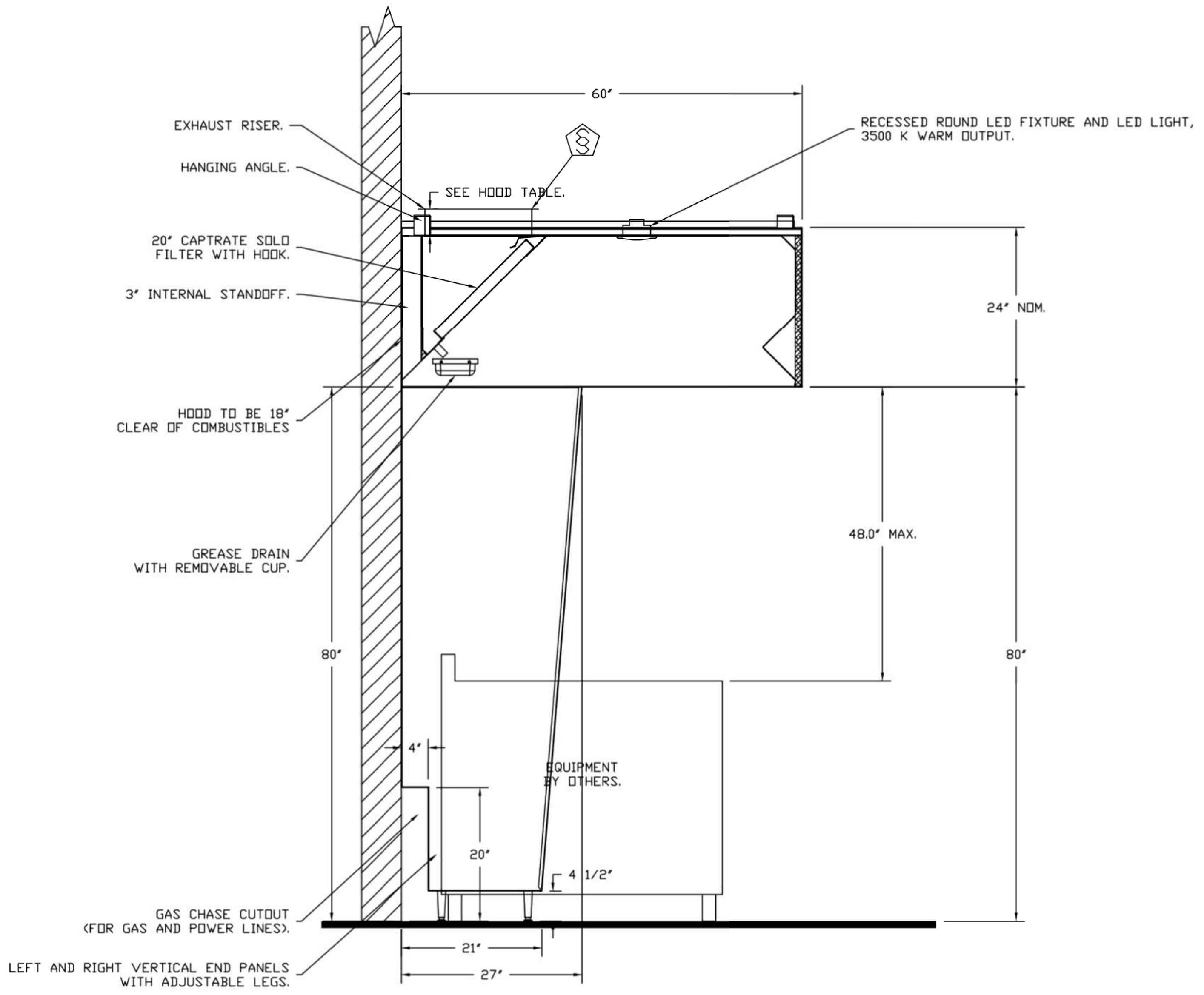
HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

FULL LENGTH
HANGING ANGLE
(HARDWARE BY INSTALLER)


1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUTS.
1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.
1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL ALL-THREAD.
1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUT.
1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.
FULL LENGTH HANGING ANGLE (WEIGHT BEARING ANCHOR POINT FOR HOOD).
1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHER.
1/2" - 13 TPI GRADE 5 (MINIMUM) STEEL HEX NUT.

ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION ABOVE CEILING ANCHORS. SINGLE HEX NUT BENEATH HANGING ANGLE IS ACCEPTABLE FOR FULL LENGTH HANGING ANGLES. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.


60"
EXHAUST RISER.
HANGING ANGLE.
SEE HOOD TABLE.
RECESSED ROUND LED FIXTURE AND LED LIGHT, 3500 K WARM OUTPUT.
20" CAPTRATE SOLO FILTER WITH HOOK.
3" INTERNAL STANDOFF.
24" NOM.
HOOD TO BE 18" CLEAR OF COMBUSTIBLES
GREASE DRAIN WITH REMOVABLE CUP.
48.0" MAX.
80"
80"
4"
EQUIPMENT BY OTHERS.
20"
4 1/2"
GAS CHASE CUTOUT (FOR GAS AND POWER LINES).
LEFT AND RIGHT VERTICAL END PANELS WITH ADJUSTABLE LEGS.
21"
27"

SECTION VIEW - MODEL 6024ND-2
HOOD - #1

REVISIONS	
DESCRIPTION	DATE:
△	
△	
△	
△	

www.captiveaire.com

Utah Office
2698 S. Redwood Rd., Suite S, West Valley, UT, 84119 PHONE: (801) 878 - 3677 FAX: 9192275953 EMAIL: reg87@captiveaire.com

Payette SD CTE - Payette, ID R1
PAYETTE, ID, 83661

DATE: 12/11/2024

DWG.#: 7156194

DRAWN BY: EH

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 1

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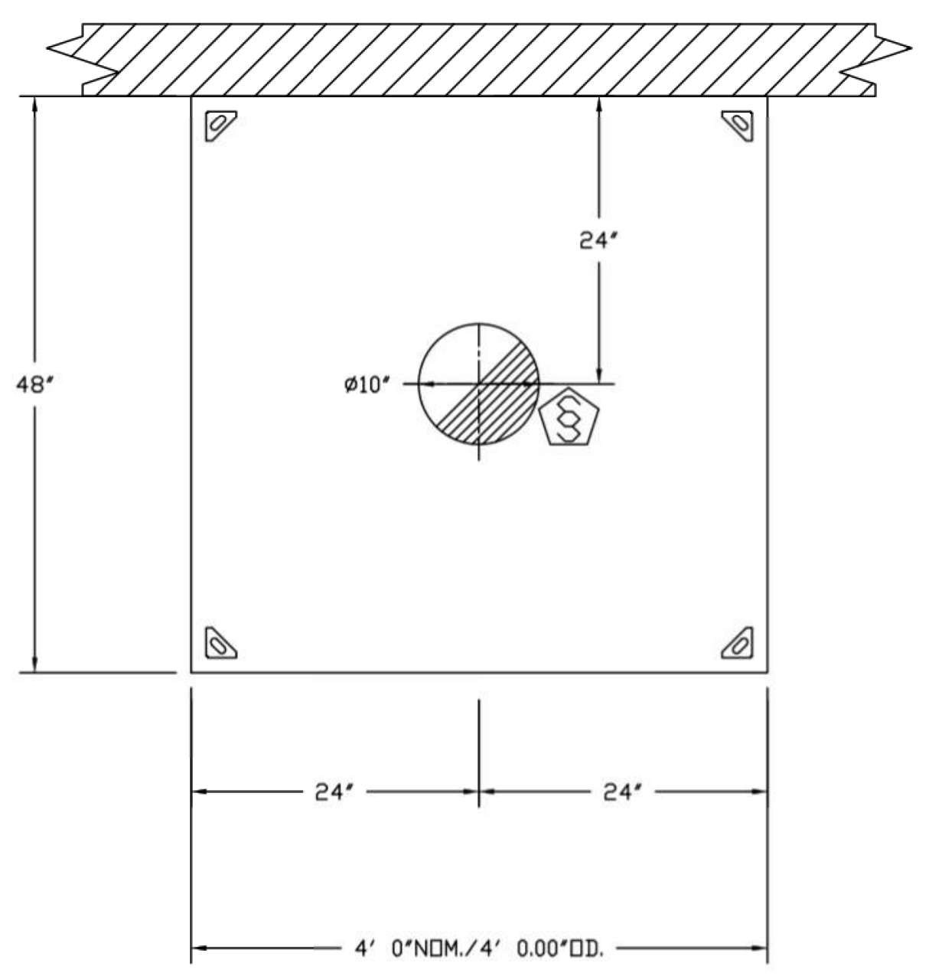
208.338.1212

DATE 1-9-25
REF NO. 2444
AUTHOR Author

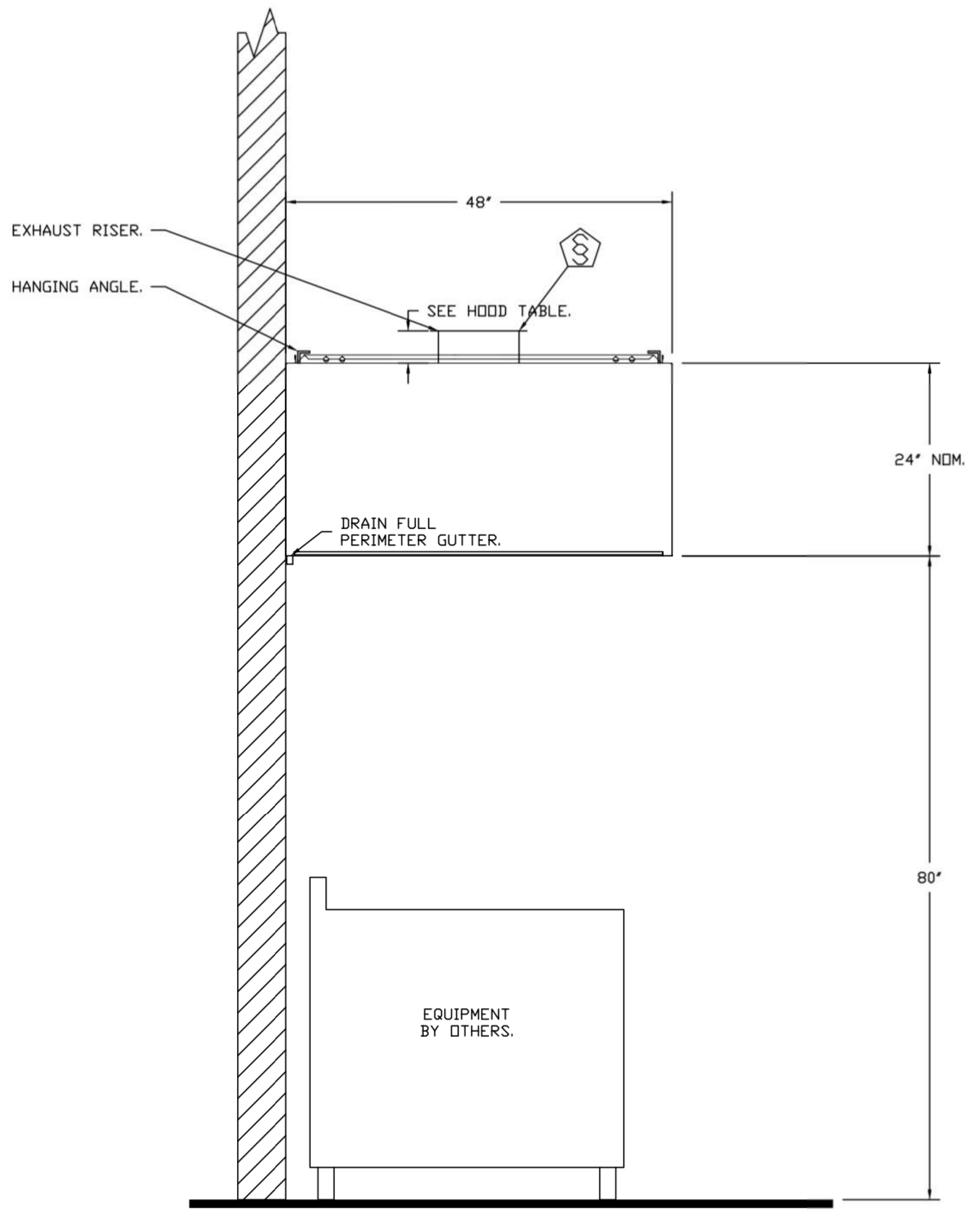
PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
KITCHEN HOOD DRAWINGS

SHEET NO.
M5.00

1/10/2025 11:12:11 AM



PLAN VIEW - HOOD #2
4' 0.00" LONG 4824VHB-G



SECTION VIEW - MODEL 4824VHB-G
HOOD - #2

REVISIONS

	DESCRIPTION	DATE:
△		
△		
△		
△		

CAPTIVEAIRE
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Utah Office
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Payette SD CTE - Payette, ID R1
PAYETTE, ID, 83661

DATE: 12/11/2024

DWG.#:
7156194

DRAWN BY: EH

SCALE:
3/4" = 1'-0"

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2

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Author

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PROJECT ADDRESS
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KITCHEN HOOD DRAWINGS

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M5.01

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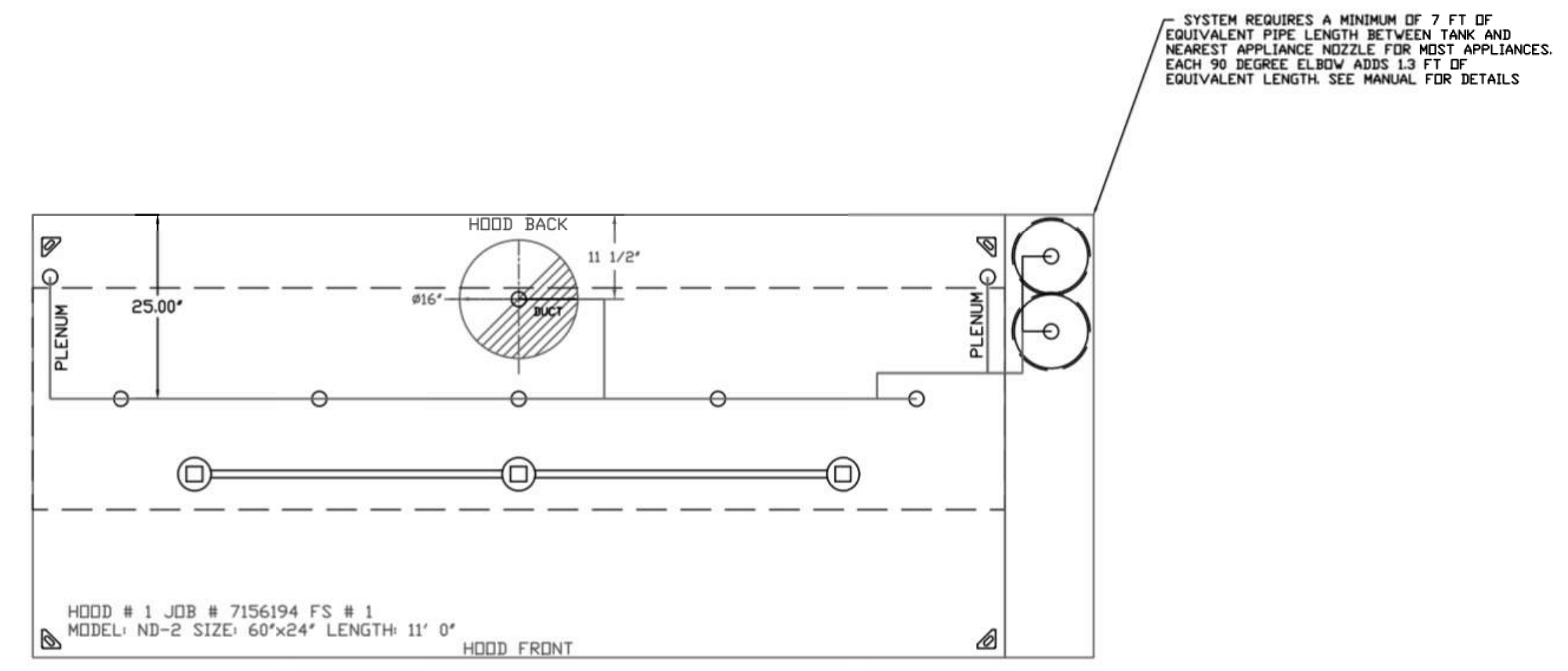
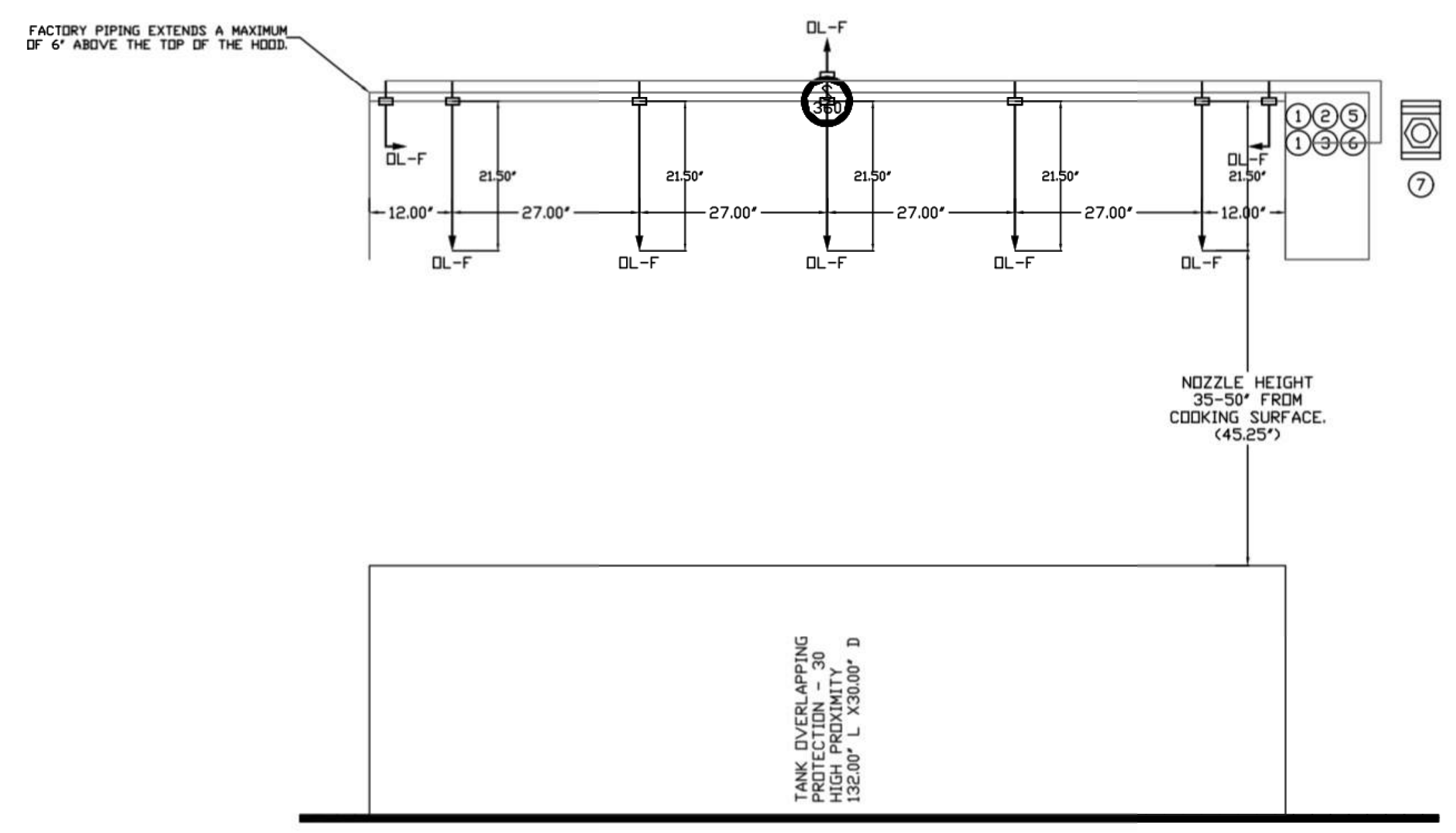
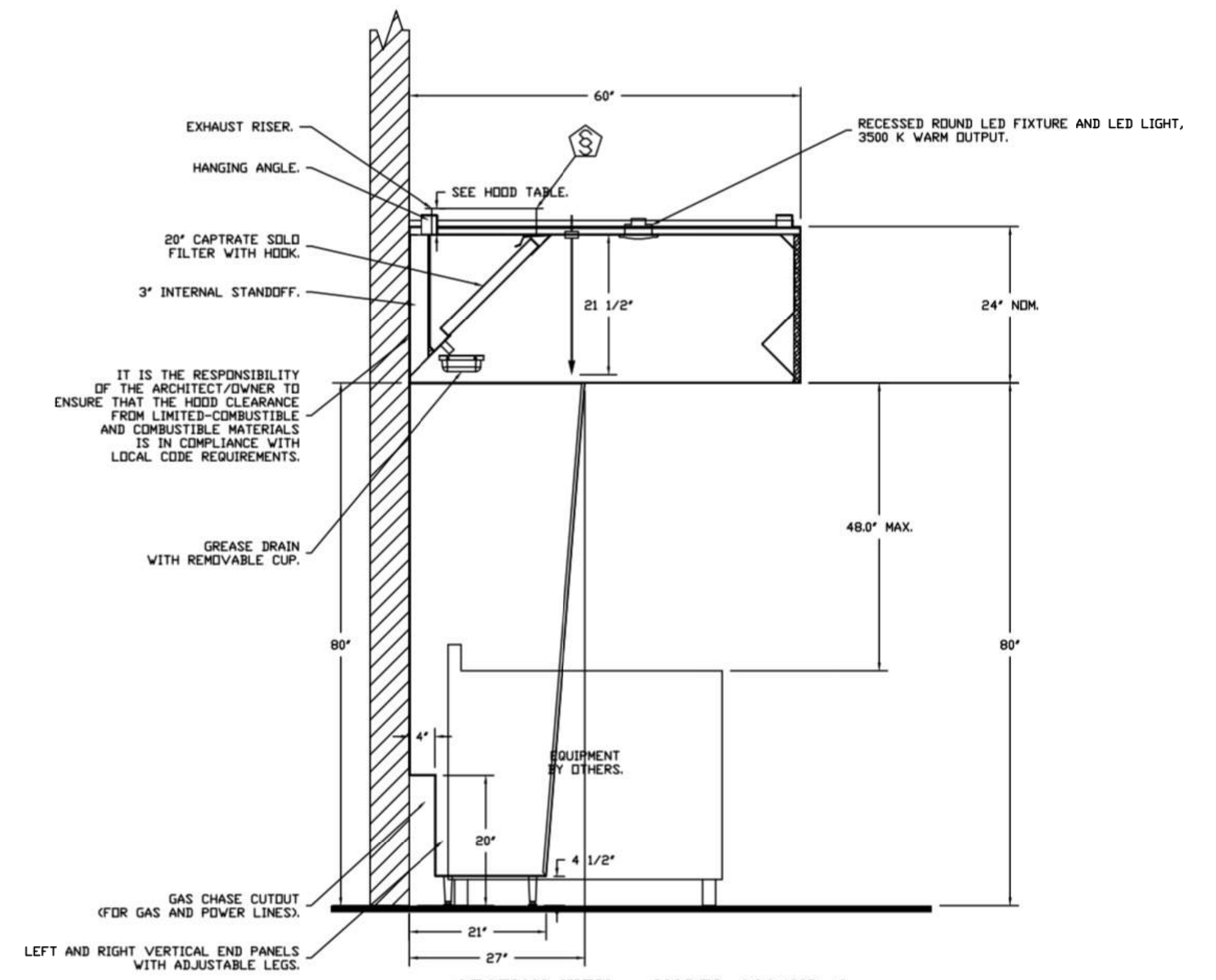

SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS
HOOD BACK
11 1/2"
ø16"
DUCT
25.00"
PLENUM
PLENUM
HOOD # 1 JOB # 7156194 FS # 1
MODEL: ND-2 SIZE: 60"x24" LENGTH: 11' 0"
HOOD FRONT


FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.
DL-F
360
DL-F
21.50"
12.00"
27.00"
1 2 5
1 3 6
7
NOZZLE HEIGHT 35-50" FROM COOKING SURFACE. (45.25")
TANK OVERLAPPING PROTECTION - 30 HIGH PROXIMITY 132.00" L X30.00" D


EXHAUST RISER.
HANGING ANGLE.
20" CAPTRATE SOLO FILTER WITH HOOK.
3" INTERNAL STANDOFF.
IT IS THE RESPONSIBILITY OF THE ARCHITECT/OWNER TO ENSURE THAT THE HOOD CLEARANCE FROM LIMITED-COMBUSTIBLE AND COMBUSTIBLE MATERIALS IS IN COMPLIANCE WITH LOCAL CODE REQUIREMENTS.
GREASE DRAIN WITH REMOVABLE CUP.
GAS CHASE CUTOUT (FOR GAS AND POWER LINES).
LEFT AND RIGHT VERTICAL END PANELS WITH ADJUSTABLE LEGS.
60"
S
SEE HOOD TABLE.
RECESSED ROUND LED FIXTURE AND LED LIGHT, 3500 K WARM OUTPUT.
21 1/2"
24" NOM.
48.0" MAX.
80"
80"
4"
EQUIPMENT BY OTHERS.
20"
4 1/2"
21"
27"

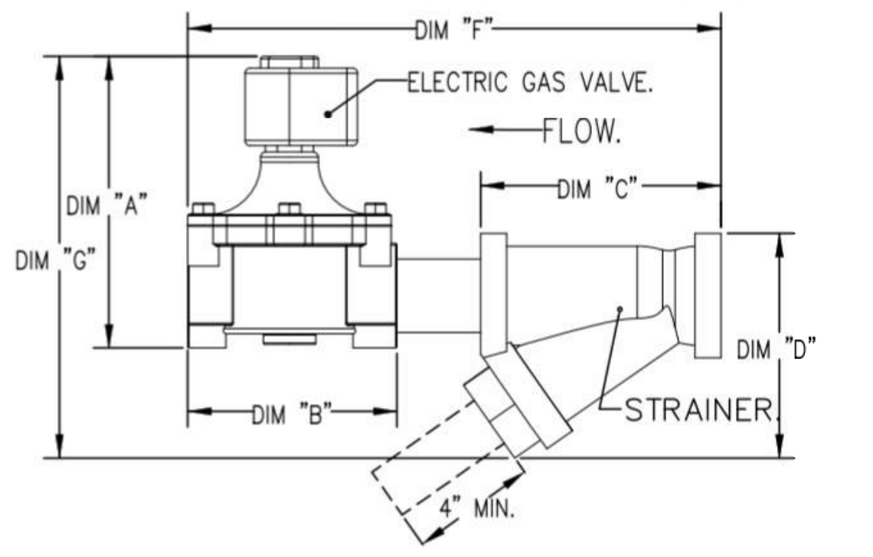
SECTION VIEW – MODEL 6024ND-2
HOOD – #1

GAS VALVES AND STRAINERS																
	GAS VALVE SIZING							GAS VALVE DIMENSIONS						INSTALLATION	PART NUMBERS		
	TYPE	SIZE	VOLTAGE	MIN. INLET PRESSURE	MAX. INLET PRESSURE	FLOW AT 1 IN.W.C. DROP NATURAL GAS	FLOW AT 1 IN.W.C. DROP PROPANE	DIM "A"	DIM "B"	DIM "C"	DIM "D"	DIM "F"	DIM "G"	MOUNTING ORIENTATION	GAS VALVE PART NUMBER	STRAINER PART NUMBER	GAS VALVE/STRAINER KIT
GAS VALVE FOR FS#1→	ELECTRICAL	3/4"	120 VAC	0 PSI (0 IN.W.C.)	5 PSI (138 IN.W.C.)	593,200 BTU/HR	384,919 BTU/HR	6-15/16"	5-15/16"	4"	4-1/2"	11-15/16"	9-7/8"	HORIZONTAL	8214235	4417K64	(SC)EGVA3/4

ELECTRIC GAS VALVES ONLY:
3/4"-2" 120VAC GAS VALVES CAN BE MOUNTED WITH THE SOLENOID IN ANY POSITION ABOVE HORIZONTAL.
2 1/2"-3" 120VAC GAS VALVES MUST BE MOUNTED WITH THE SOLENOID VERTICAL AND UPRIGHT.
24VDC GAS VALVES MUST BE MOUNTED WITH THE SOLENOID VERTICAL AND UPRIGHT.

ALL GAS VALVES/STRAINERS
PROPER CLEARANCE MUST BE PROVIDED IN ORDER TO SERVICE THE STRAINERS A MINIMUM OF 4" CLEARANCE DISTANCE MUST BE PROVIDED AT THE BASE OF THE STRAINER CUSTOMER MUST VERIFY BTU CONSUMPTION AS WELL AS PRESSURE RATING SPECIFIC GRAVITY OF NATURAL GAS = 0.64, SPECIFIC GRAVITY OF LP = 1.52.

CALCULATIONS
TO CALCULATE GAS FLOW FOR OTHER THAN 1 IN.W.C. PRESSURE DROP
NEW BTU/HR = (BTU/HR AT 1 IN.W.C. PRESSURE DROP) X NEW PRESSURE DROP$^{0.5}$
TO CALCULATE GAS FLOW FOR OTHER THAN 0.64 SPECIFIC GRAVITY
NEW BTU/HR = (BTU/HR AT 0.64) X (0.64 / NEW SPECIFIC GRAVITY)$^{0.5}$.



NOTES
- FIELD PIPE DROPS AS SHOWN
  PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
- SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

- DL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

JOB #: 7156194.
JOB NAME: PAYETTE SD CTE - PAYETTE, ID.

SYSTEM SIZE: TANK-SP-2 DESIGN FP: 37. MAXIMUM FP: 40.
HOOD # 1 11' 0.00" LONG x 60" WIDE x 24" HIGH.
RISER # 1 SIZE: 16" DIA.
HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

AGENT DISTRIBUTION PIPING LIMITATIONS	
PIPE SECTION	MAX PIPE LENGTH (FT)
MAX SUPPLY LINE TO FIRST OVERLAPPING NOZZLE	42
OVERLAPPING NOZZLE APPLIANCE BRANCH	10
DEDICATED NOZZLE APPLIANCE BRANCH	10

LEGEND – FIRE CABINET TANK SYSTEM

1 4 GALLON TANK.
2 PRIMARY ACTUATOR RELEASE.
3 SECONDARY ACTUATOR RELEASE.
4 PRESSURE SUPERVISION SWITCH.
5 PRIMARY HOSE ASSEMBLY.
6 SECONDARY HOSE ASSEMBLY.
7 REMOTE MANUAL ACTUATION DEVICE.

FIRE SYSTEM INFORMATION – JOB#7156194

FIRE SYSTEM NO	TAG	TYPE	SIZE	MAX FP	DESIGN FP	INSTALLATION	
						SYSTEM	LOCATION ON HOOD
1		TANK FS	4.0/4.0	40	37	FIRE CABINET RIGHT	RIGHT, HOOD 1

GAS VALVE(S)

FIRE SYSTEM NO	TAG	TYPE	SIZE	SUPPLIED BY
1		SC ELECTRICAL	0.750	CAPTIVEAIRE SYSTEMS

FIRE SYSTEM PARTS LIST KEY

FIRE SYSTEM NO	TAG	KEY NUMBER – PART DESCRIPTION	QTY BY FACTORY	QTY BY DIST
1		0 – 0 – TANK FIRE SUPPRESSION POST-DISCHARGE PROCEDURE UTILITY CABINET LABEL SHEET.	1	0
		0 – 0 – TANK FIRE SUPPRESSION MAINTENANCE GUIDE UTILITY CABINET LABEL SHEET.	1	0
		0 – 0 – 12-F28021-32144-DT-360 DUCT FIRE THERMOSTAT WITH 12 FOOT WIRE LEADS. NO, CLOSE ON TEMP RISE AT 360°F. (A0034310).	1	0
		0 – 0 – 32-00002 QUIK SEAL – 1/2" (UL).	1	0
		0 – 0 – 4429K153 1/2" MALE NPT TO 1/2" FEMALE NPT ELBOW, BRASS.	2	0
		0 – 0 – 4429K422 1/2" X 1/4" BRASS REDUCING BUSHING.	1	0
		0 – 0 – 79525 1/2" 90 PRO-PRESS ELBOW WITH 1/2" NPT FEMALE CONNECTION, VIEGA.	1	0
		0 – 0 – 79580 1/2" X 1/2" PRO-PRESS TEE X 1/2" NPT FEMALE CONNECTION, VIEGA.	2	0
		0 – 0 – 87-120042-001 SECONDARY ACTUATOR VALVE (SVA) – SINGLE ACTUATOR, REQUIRES PRIMARY RELEASE ACTUATOR, TANK FIRE SUPPRESSION.	1	0
		0 – 0 – 87-120045-001 HOSE, SECONDARY ACTUATOR HOSE, 7.5" BRAIDED STAINLESS STEEL, TANK FIRE SUPPRESSION.	1	0
		0 – 0 – 87-300001-001 TANK – PRESSURIZED TANK USED FOR TANK FIRE SUPPRESSION.	2	0
		0 – 0 – 87-300030-001 PRIMARY ACTUATOR KIT (PAK) – ACTUATOR AND RELEASE SOLENOID ASSEMBLY, ONE NEEDED PER FIRE SYSTEM, SUPERVISED, TANK FIRE SUPPRESSION.	1	0
		0 – 0 – 87-300152-001 HARDWARE, SVA BOLTS, TANK FIRE SUPPRESSION.	8	0
		0 – 0 – 9055455PC PRO PRESS 1/2 PRESS X PRESS 90 ELBOW LD.	7	0
		0 – 0 – 9097200PC PRO PRESS PC611 1/2 PRESS TEE LD.	7	0
		0 – 0 – 98694A115 HARDWARE, DATANKLOCK LOCKING BRACKET SQUARE NUTS 5/16" ZINC, TANK FIRE SUPPRESSION.	4	0
		0 – 0 – A0034332 JUNCTION BOX FOR MANUAL PULL STATION. 1.5" DEEP BACK BOX, RED COLOR.	1	0
		0 – 0 – A31484 1/4" NPT SCHRADER VALVE AND CAP, JB INDUSTRIES. 1/4" FLARE X 1/4" MPT HALF UNION. USED ON TANK SERVICE PORT.	1	0
		0 – 0 – BI145 3/8" BLACK IRON 90 ELL.	3	0
		0 – 0 – DATANKLOCK DISCHARGE ADAPTER TANK LOCKING PLATE FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 – 0 – TANK STRAP TANK STRAP – USED FOR TANK FIRE SUPPRESSION.	6	0
		0 – 0 – TFS-UCTANKBRACKET TANK BRACKET FOR FIRE SYSTEM TANK INSTALLATION IN UTILITY CABINETS, TANK FIRE SUPPRESSION.	2	0
		0 – 0 – WK-283952-000 DISCHARGE ADAPTER, TANK FIRE SUPPRESSION.	2	0
		16 – 16 – 79210 1/2" X 3/8" NPT MALE ADAPTER, VIEGA.	8	0
		16 – 16 – DL-F NOZZLE – TANK PROTECTION APPLIANCE COVERAGE NOZZLE (INCLUDES METAL BLOW OFF CAP, LANYARD, USED WITH CHROME-PLATED PIPE).	8	0
		26 – 26 – QSA-3/8 QUIK SEAL – 3/8" (UL).	8	0
		34 – 34 – A0034331 24VDC SINGLE ACTION MANUAL ACTUATION DEVICE (PUSH/PULL STATION) WITH PROTECTIVE COVER, ONE (1) NORMALLY OPEN CONTACT. RED COLOR.	1	0

REVISIONS		
	DESCRIPTION	DATE:
△		
△		
△		
△		

www.captiveaire.com

Utah Office
2698 S. Redwood Rd., Suite S, West Valley, UT, 84119 PHONE: (801) 878 - 3677 FAX: 9192275953 EMAIL: reg87@captiveaire.com

Payette SD CTE - Payette, ID R1
PAYETTE, ID, 83661

DATE: 12/11/2024
DWG.#: 7156194
DRAWN BY: EH
SCALE: 1/2" = 1'-0"
MASTER DRAWING
SHEET NO. 3

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

Nielson Engineering, Inc.
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE 1-9-25
REF NO. 2444
AUTHOR Author

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
KITCHEN HOOD DRAWINGS

SHEET NO.
M5.02

EXHAUST FAN INFORMATION – JOB#7156194

FAN UNIT NO	TAG	QTY	FAN UNIT MODEL #	MANUFACTURER	CFM	ESP	RPM	MOTOR ENCL	HP	BHP	PHASE	VOLT	FLA	DISCHARGE VELOCITY	WEIGHT (LBS)	SONES
1		1	DU180HFA	CAPTIVEAIRE	2475	1.400	1234	ODP,PREMIUM	1.500	1.1980	3	208	6.6	572 FPM	178	17.4
3		1	DU33HFA	CAPTIVEAIRE	600	0.500	1279	TEAO-ECM	0.333	0.1190	1	115	4.3	297 FPM	64	11.4

DOAS/RTU FAN SCHEDULE – JOB#7156194

Fan and electrical information:

				FAN INFORMATION								ELECTRICAL INFORMATION				
FAN UNIT NO	TAG	QTY	DOAS/RTU MODEL #	MANUFACTURER	BLOWER	RETURN AIR CFM	MAX OUTSIDE AIR CFM	TOTAL CFM	WEIGHT (LBS)	ESP	HP	PHASE	VOLT	MCA	MOCP
2		1	CAS-HVAC2-I.300-18-10T	CAPTIVEAIRE	18MF-2-RTU	0	2475	2475	2055	0.500	2.00	3	208	71.5A	80A

Cooling information:

FAN UNIT NO	OUTSIDE AIR DB	OUTSIDE AIR WB	MIXED AIR DB	MIXED AIR WB	LEAVING AIR DB	LEAVING AIR WB	LEAVING AIR DP	CAPACITY TOTAL	CAPACITY SENS.	IEER	ISMRE
2	92.0°F	68.3°F	92.0°F	68.3°F	55.2°F	55.1°F	55.1°F	94.5 MBH	87.1 MBH	18.6	4.3

Reheat, gas heat, A2L minimum room volume and notes:

FAN UNIT NO	REHEAT DISCHARGE DB	REHEAT DISCHARGE WB	REHEAT CAPACITY DESIRED	REHEAT CAPACITY MAX	MOISTURE REMOVAL RATE	GAS TYPE	INPUT BTUs	OUTPUT BTUs	TEMP RISE	REQUIRED INPUT GAS PRESSURE	ROOM AREA (FT2)	AIRFLOW (CFM)	HEIGHT (FT)	NOTES
2	70.0°F	60.4°F	37.5 MBH	96 MBH	6.7 LBS/HR	NATURAL	252505	204529	75°F	7 IN. W.C. - 14 IN. W.C.	403.8	727	7.2	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16

NOTES:
1. INVERTER SCROLL COMPRESSOR WITH INTEGRATED OIL SENSOR. DIGITAL OR STAGED SCROLL NOT AN APPROVED EQUAL
2. DIRECT DRIVE PLENUM BLOWER. BELT DRIVEN BLOWERS ARE NOT ACCEPTABLE
3. INTEGRATED MONITORING VIA CELLULAR CONNECTION BY MANUFACTURER
4. REFRIGERATION PRESSURE MONITORING ON HIGH AND LOW PRESSURE SIDE OF SYSTEM INCLUDED THROUGH DIGITAL INTERFACE
5. EC MOTOR CONDENSING FANS
6. ELECTRONIC EXPANSION VALVE. TXV NOT ACCEPTABLE
7. SUCTION LINE ACCUMULATOR
8. FACTORY COMMISSIONING WITH 5 YEAR PARTS WARRANTY, 25 YEAR WARRANTY ON STAINLESS STEEL HEAT EXCHANGER
9. AVERAGING INTAKE, EVAP AND DISCHARGE TEMPERATURE SENSORS (DISCHARGE SENSOR TO BE FACTORY MOUNTED WITHIN UNIT)
10. 2" EXTERIOR DUAL-WALL CONSTRUCTION W/ R-13 INSULATION-MINIMUM 20GA EXTERIOR W/ 14GA BASE
11. 81% EFFICIENT FURNACE, WITH MODULATING INDUCER TO MAINTAIN CONSTANT COMBUSTION EFFICIENCY ACROSS FIRING RANGE. 14:1 TURNDOWN WITH NG AND 12:1 TURNDOWN WITH LP
12. SUPPLY CFM MONITORING INTEGRAL TO UNIT WITH CFM MEASUREMENT INCLUDED THROUGH DIGITAL INTERFACE
13. FULLY MODULATING HOT GAS REHEAT
14. 15 DEGREE LOW AMBIENT OPERATION
15. DOWN DISCHARGE/DOWN RETURN
16. MINIMUM ROOM AREA ASSUMED 7.2' SUPPLY DIFFUSER HEIGHT AND IS CALCULATED PER UL60335-2-40 4TH ED. VALUES BASED ON FACTORY CHARGE. ACTUAL SITE CHARGE MAY DIFFER.

FAN OPTIONS

FAN UNIT NO	TAG	QTY	DESCRIPTION
1		1	GREASE BOX
		1	FAN BASE CERAMIC SEAL - DU/DR180HFA - INSTALLED AT PLANT - FOR GREASE DUCTS
		1	2 YEAR PARTS WARRANTY
2		1	INLET PRESSURE GAUGE, 0-35"
		1	SHIP LOOSE GAS STRAINER 3/4"
		1	SINGLE POINT ELECTRICAL CONNECTION FOR RTU. 750VA TRANSFORMER USED. IF A NON-DCV PREWIRE CONTROLS THIS UNIT, THE #28, #47, "MA", OR "E2" PREWIRE OPTION MUST BE SELECTED. DOES NOT PROVIDE SUPPLY STARTER IN PREWIRE
		1	CASLINK BUILDING MONITORING SYSTEM - INTERNET OR CELLULAR CONNECTION REQUIRED
		1	RTU BLOWER DOOR SWITCH
		1	RTU2 DOWN DISCHARGE
		1	2" MERV 13 FILTERS FOR RTU2 (QTY. 4)
		1	2" MERV 8 FILTERS FOR RTU2 (QTY. 4)
		1	OVERHEAT STAT
		1	TOTAL CFM MONITORING
		1	SPECIAL ORIFICES FOR IF HEATERS ABOVE 2,000'
		1	OCCUPIED SCHEDULING
		1	INTAKE FIRESTAT SET TO 135°F
		1	FREEZESTAT
		1	DISCHARGE FIRESTAT SET TO 240°F
		1	RTU2 CURB DUCT HANGER
		1	24VAC FIRE INPUT
		1	COMMERCIAL SMOKE DETECTOR/ALARM INTERLOCK - ALARM SUPPLIED BY OTHERS
		1	HIGH TURNDOWN OPTION FOR DOAS UNITS
		1	MANIFOLD PRESSURE GAUGE, 0 TO 10" WC, 2 FURNACES
		1	LOW AMBIENT COOLING OPERATION - DOWN TO 0F AMBIENT
		1	HIGH AMBIENT - 10 TON MODULATING COOLING OPTION, 208/230V. R454B REFRIGERANT, VARIABLE SPEED COMPRESSOR, ECM CONDENSING FANS. USED FOR SUMMER CONDITIONS ABOVE 100F DEGREES
		1	R454B LEAK DETECTOR OPTION FOR RTUS
		1	10 TON MODULATING REHEAT OPTION - SPACE DEWPOINT CONTROL - R454B
		1	RTU INTAKE/RETURN DAMPER - MANUAL CONTROL VIA HMI
		1	RTU2 DOWN RETURN
		1	UNIT MOUNTED VFD CONFIGURED FOR DCV
		1	5 YEAR ENTIRE UNIT PARTS WARRANTY, 10 YEAR ENTIRE UNIT PARTS WARRANTY WITH REMOTE MONITORING AND CAPTIVEAIRE SERVICE CONTRACT, 25 YEAR STAINLESS STEEL FURNACE PARTS WARRANTY (SEE ADDITIONAL DETAILS)
		1	EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET
3		1	ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION
		1	2 YEAR PARTS WARRANTY

FAN ACCESSORIES

FAN UNIT NO	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1		YES						

CURB ASSEMBLIES

NO	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	34 LBS	CURB	26.500"W X 26.500"L X 22.000"H VENTED HINGED.
2	# 2	111 LBS	CURB	49.500"W X 75.000"L X 20.000"H INSULATED.
3	# 3	20 LBS	CURB	19.500"W X 19.500"L X 18.000"H.

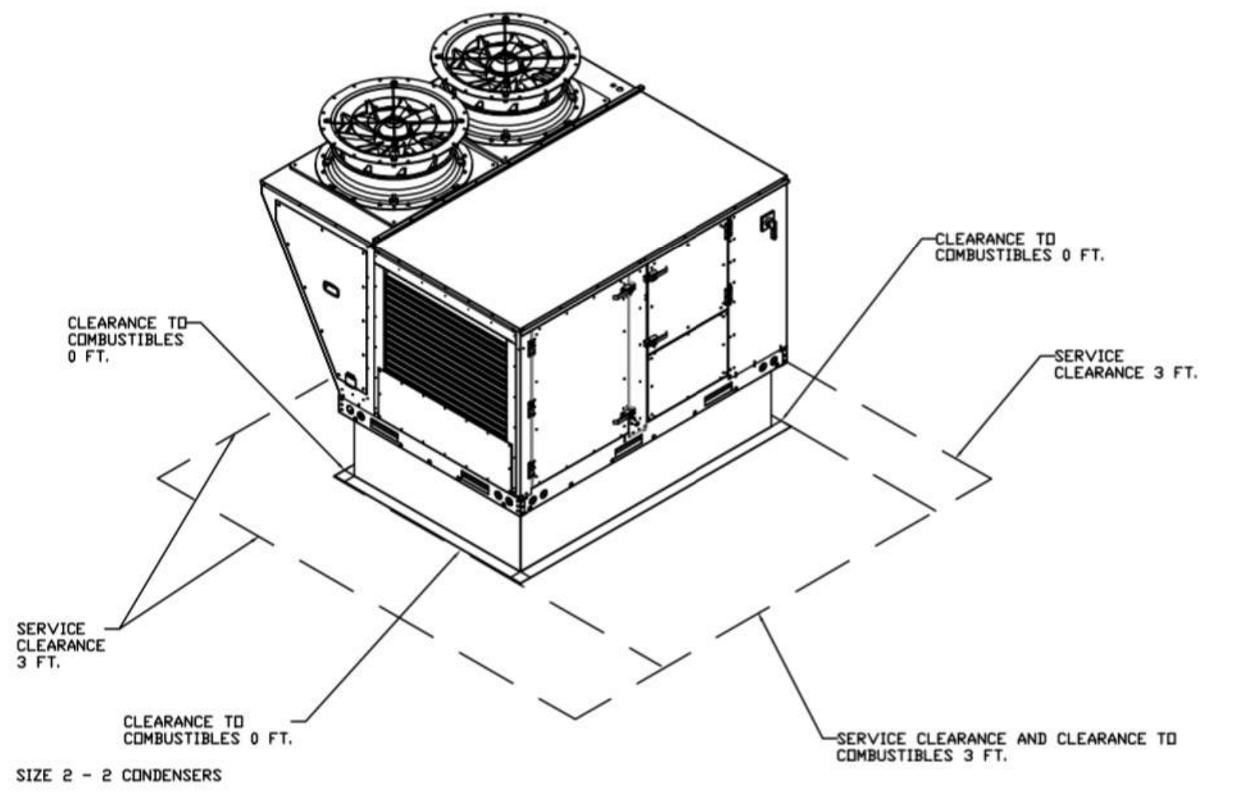
HMI SCHEDULE

UNIT NUMBER	HMI #	HMI LOCATION	TEMP AVERAGING	MODBUS ADDRESS
FAN #2	HMI #1 - UNIT	IN UNIT	NOT AVERAGED	55
FAN #2	HMI #2 - SPACE		AVERAGED	56

FAN #2 CAS-HVAC2-I.300-18MF-10T - HEATER

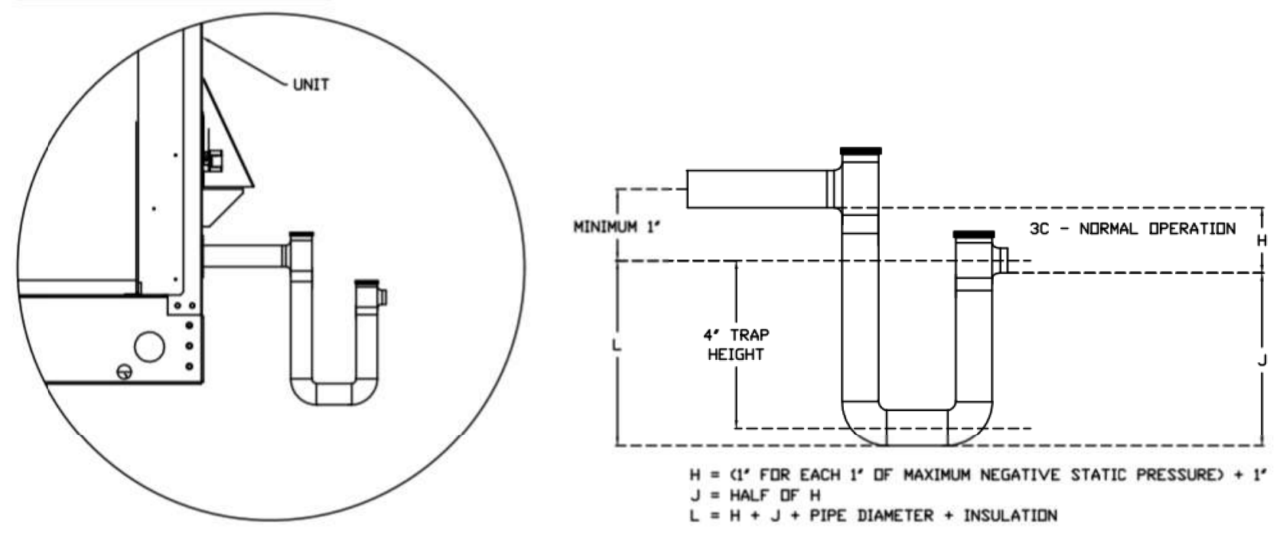
NOTES:
1. DO NOT OBSTRUCT OUTSIDE AIR INLET, OUTSIDE AIR COIL OR OUTSIDE AIR FAN.
2. ( ) DENOTES CORNER WEIGHT.
3. ROOF OPENING MUST BE 2" SMALLER THAN CURB DIMENSIONS IN BOTH DIRECTIONS.
4. CONNECTION FROM BREAKER TO UNITS SAFETY DISCONNECT SWITCH TO BE COPPER WIRE ONLY.
5. EXTERIOR GAS CONNECTION PROVIDED BY FACTORY WITH QUICK SEAL AND ANTI-ROTATION BRACKET.

*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT.
SUGGESTED STRAIGHT DUCT SIZE IS 24" x 30.25".

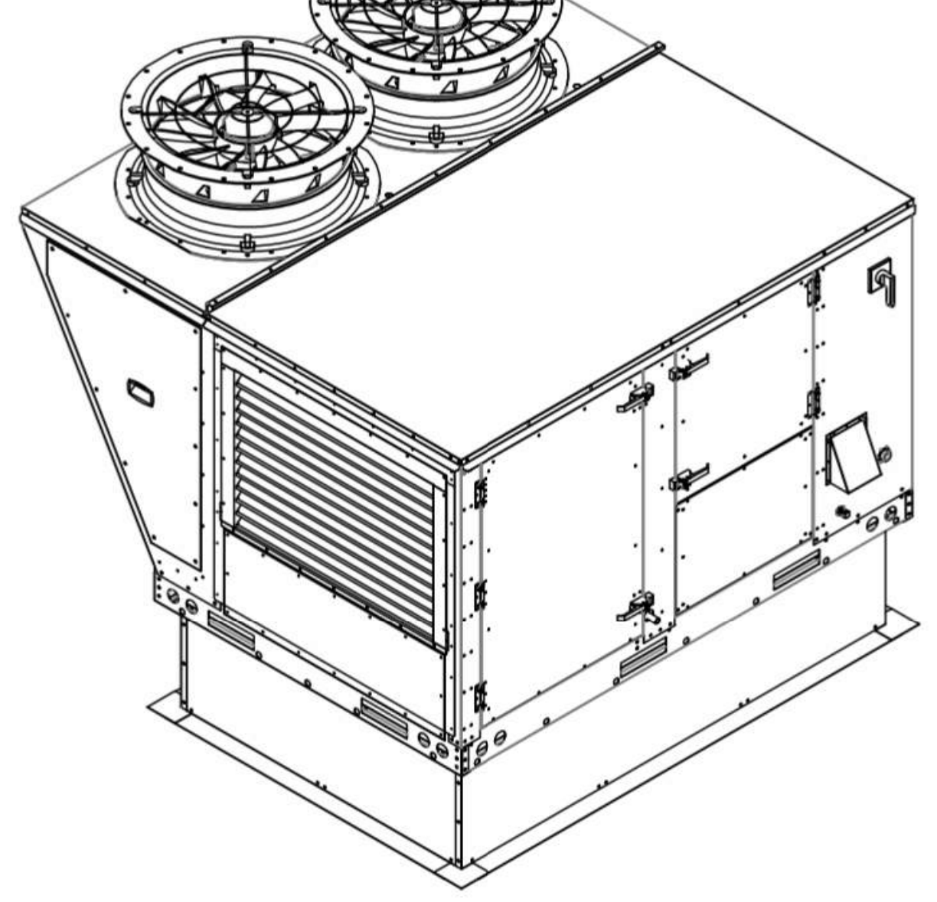

CLEARANCE TO COMBUSTIBLES 0 FT.
CLEARANCE TO COMBUSTIBLES 0 FT.
SERVICE CLEARANCE 3 FT.
SERVICE CLEARANCE 3 FT.
CLEARANCE TO COMBUSTIBLES 0 FT.
SERVICE CLEARANCE AND CLEARANCE TO COMBUSTIBLES 3 FT.

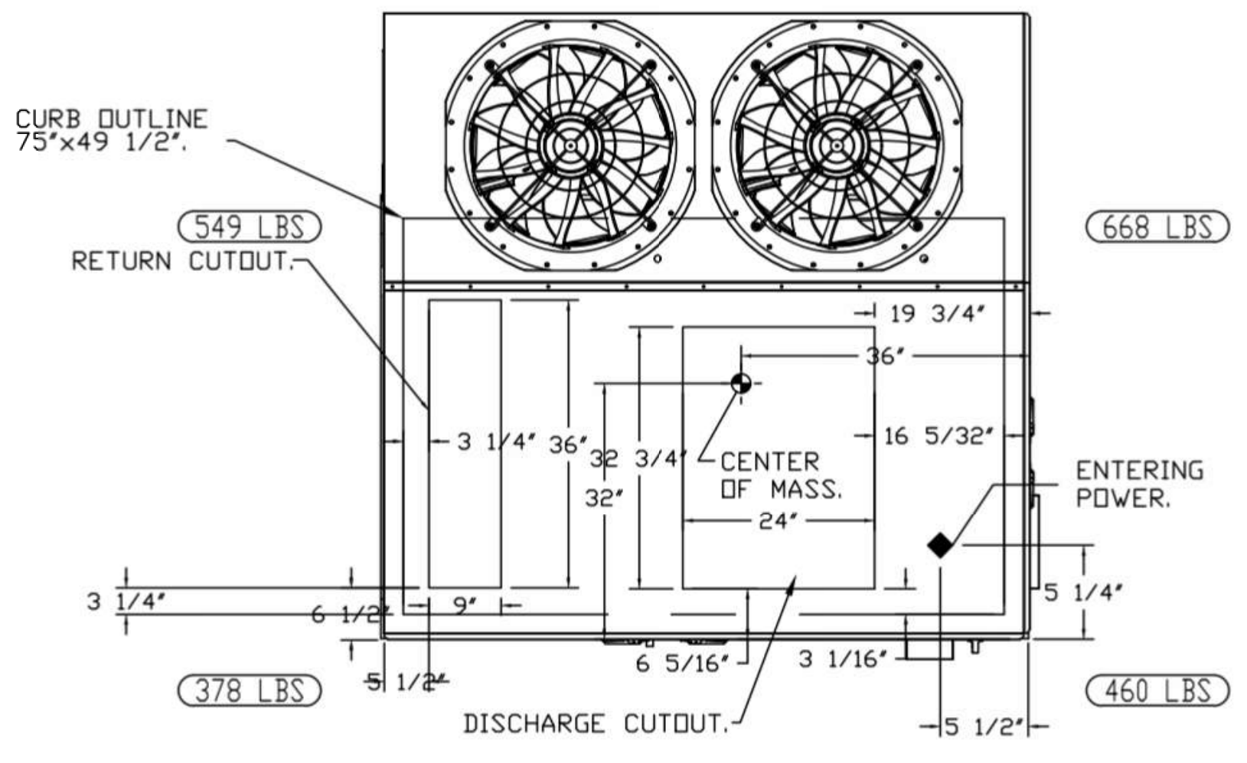
SIZE 2 - 2 CONDENSERS

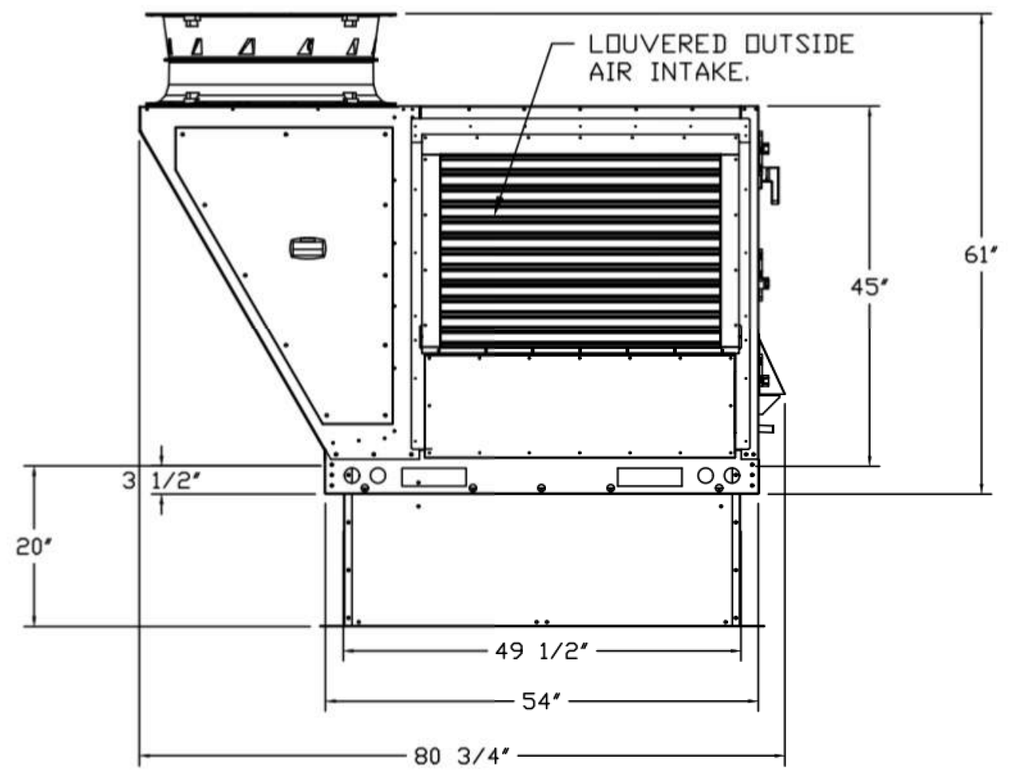
RTU CONDENSATE DRAIN TRAP DETAIL

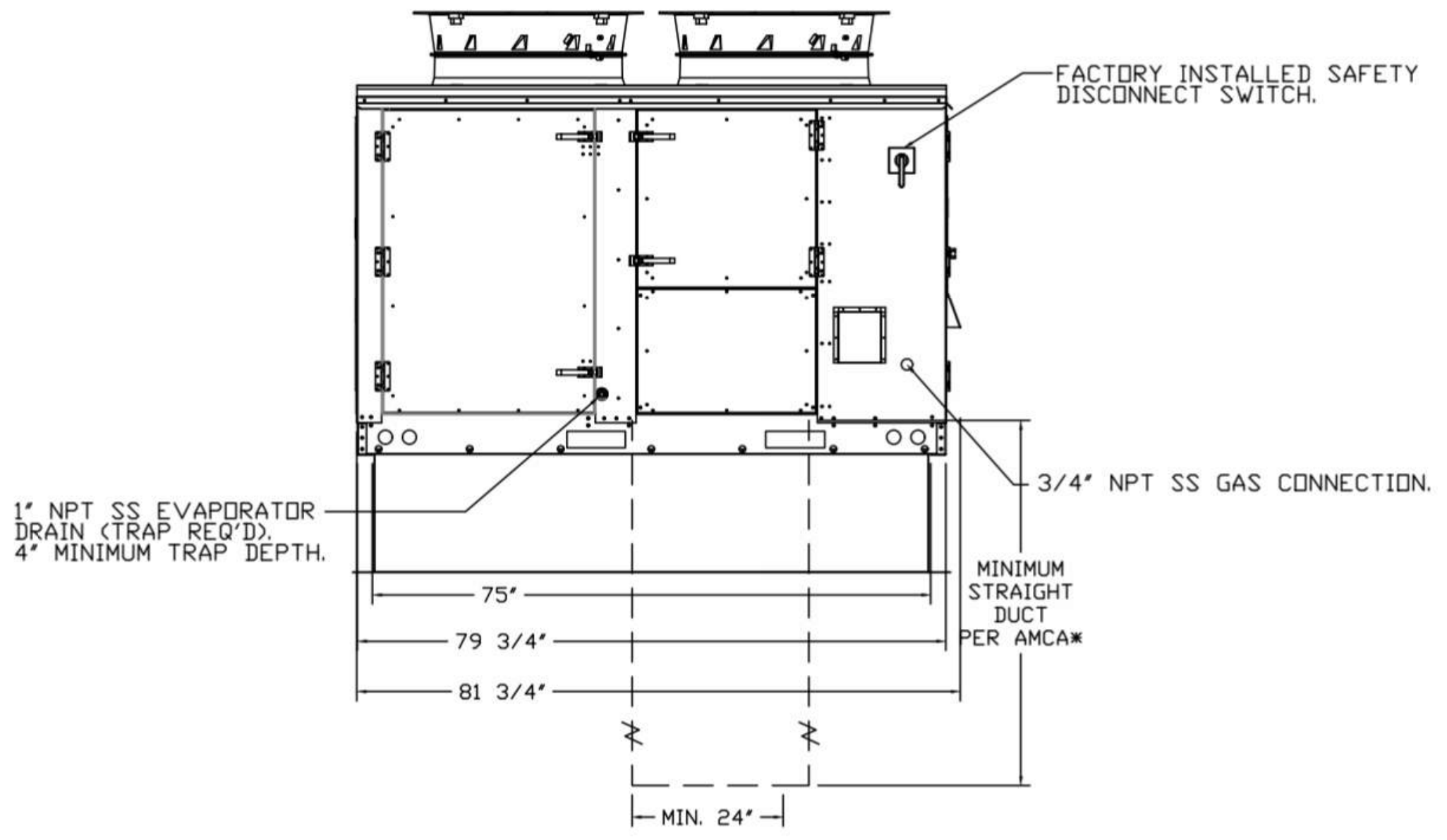


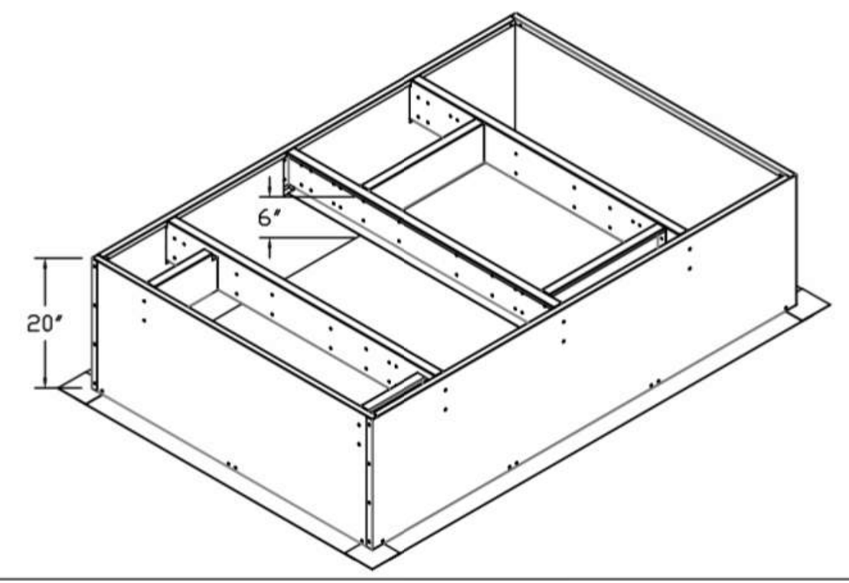
H = (1" FOR EACH 1" OF MAXIMUM NEGATIVE STATIC PRESSURE) + 1"
J = HALF OF H
L = H + J + PIPE DIAMETER + INSULATION

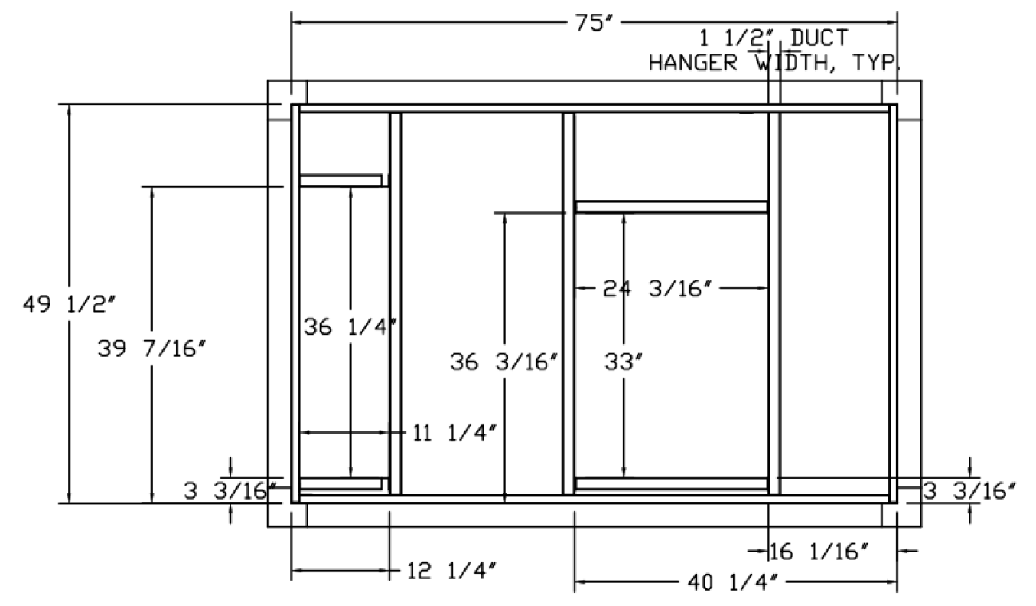







FACTORY INSTALLED SAFETY DISCONNECT SWITCH.
3/4" NPT SS GAS CONNECTION.
1" NPT SS EVAPORATOR DRAIN (TRAP REQ'D). 4" MINIMUM TRAP DEPTH.
MINIMUM STRAIGHT DUCT PER AMCA*
75"
79 3/4"
81 3/4"
MIN. 24"





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Payette SD CTE - Payette, ID R1
PAYETTE, ID, 83661

DATE: 12/11/2024

DWG.#: 7156194

DRAWN BY: EH

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

MASTER DRAWING

SHEET NO. 4

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REVISION

CONST. ESTIMATE SET 1-14-25

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Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
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270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE 1-9-25
REF NO. 2444
AUTHOR Author

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
KITCHEN HOOD DRAWINGS

SHEET NO.
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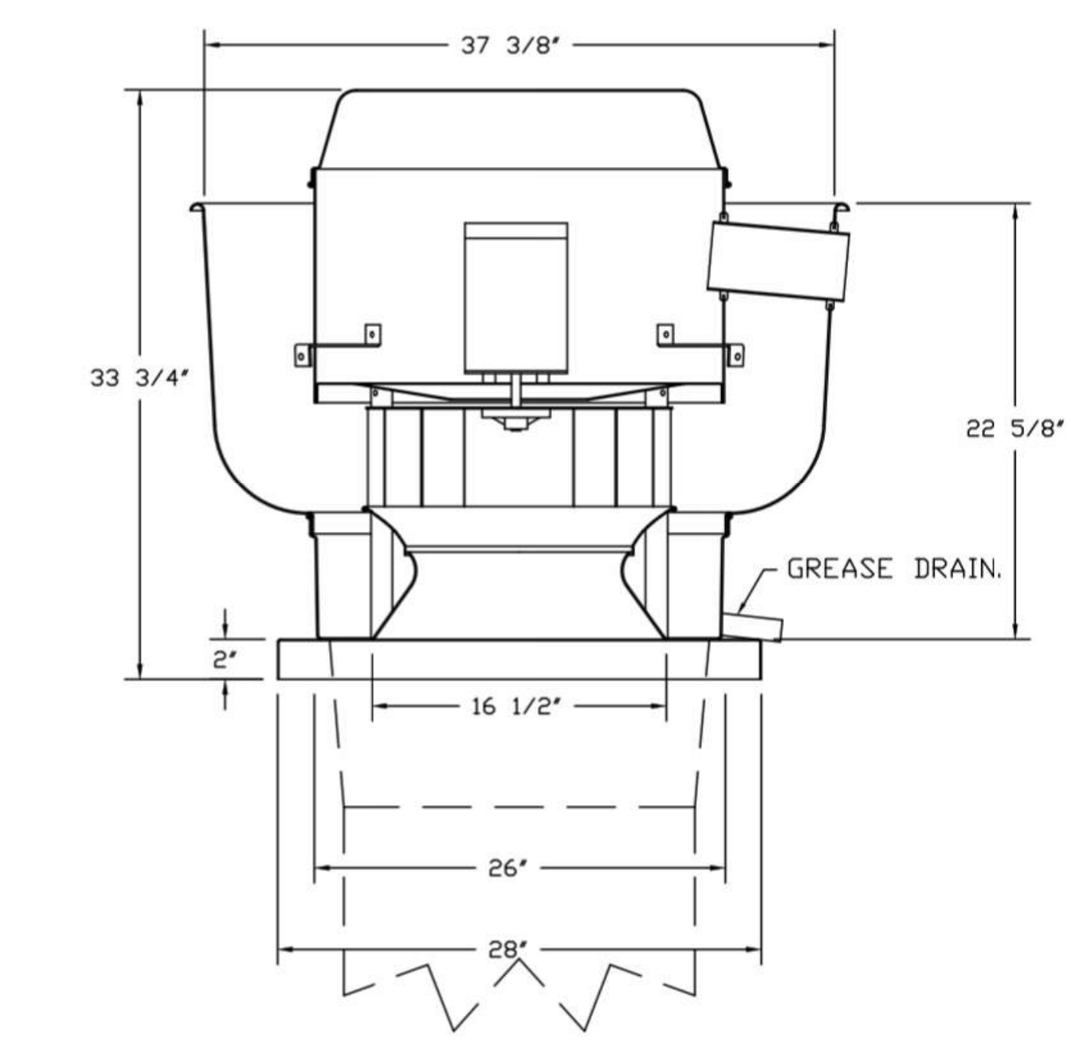
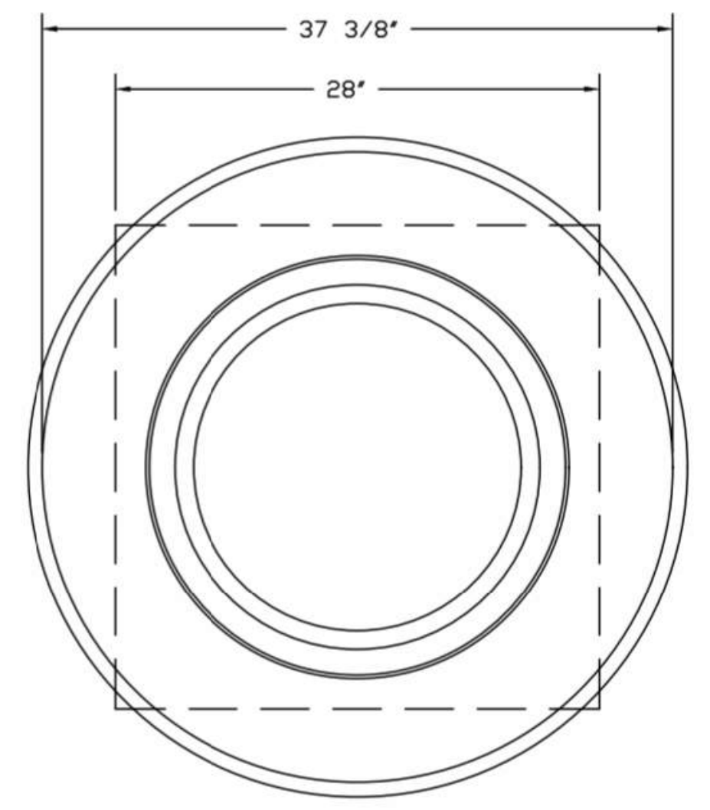
1/10/2025 11:12:16 AM

FAN #1 DU180HFA - EXHAUST FAN





TOP VIEW

FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705 AND UL762 AND ULC-S645
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).
- GREASE CLASSIFICATION TESTING.
- NEMA 3R SAFETY DISCONNECT SWITCH.

NORMAL TEMPERATURE TEST

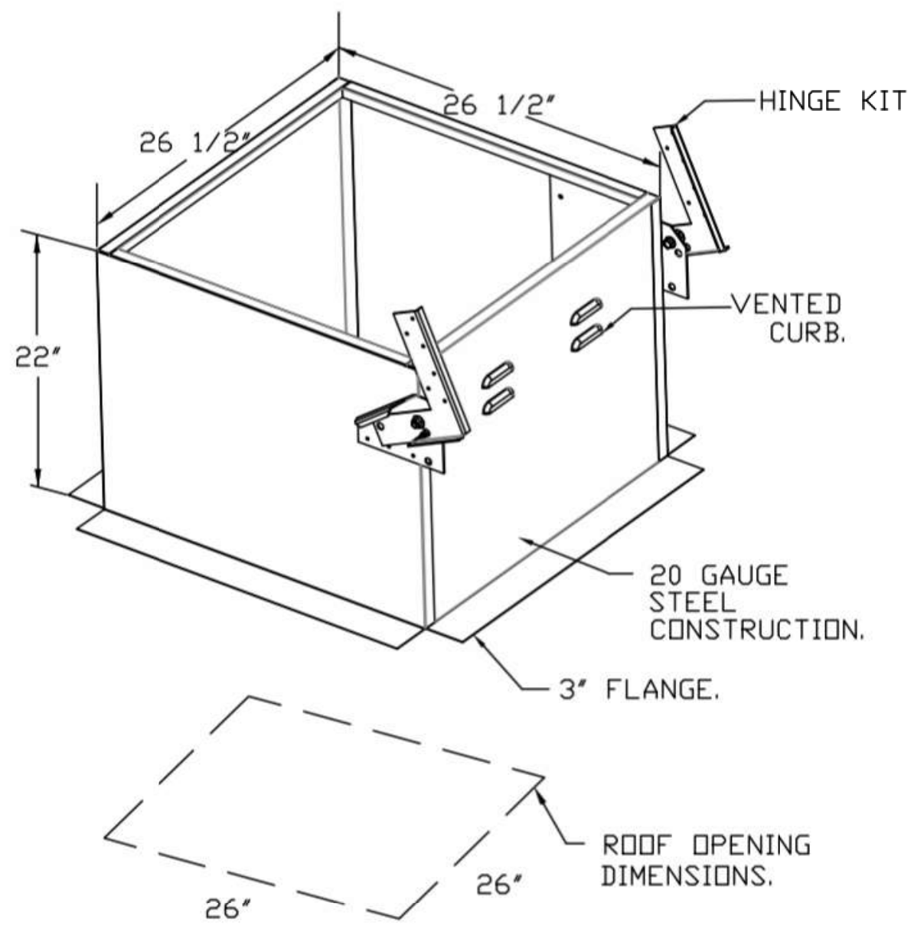
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

ABNORMAL FLARE-UP TEST

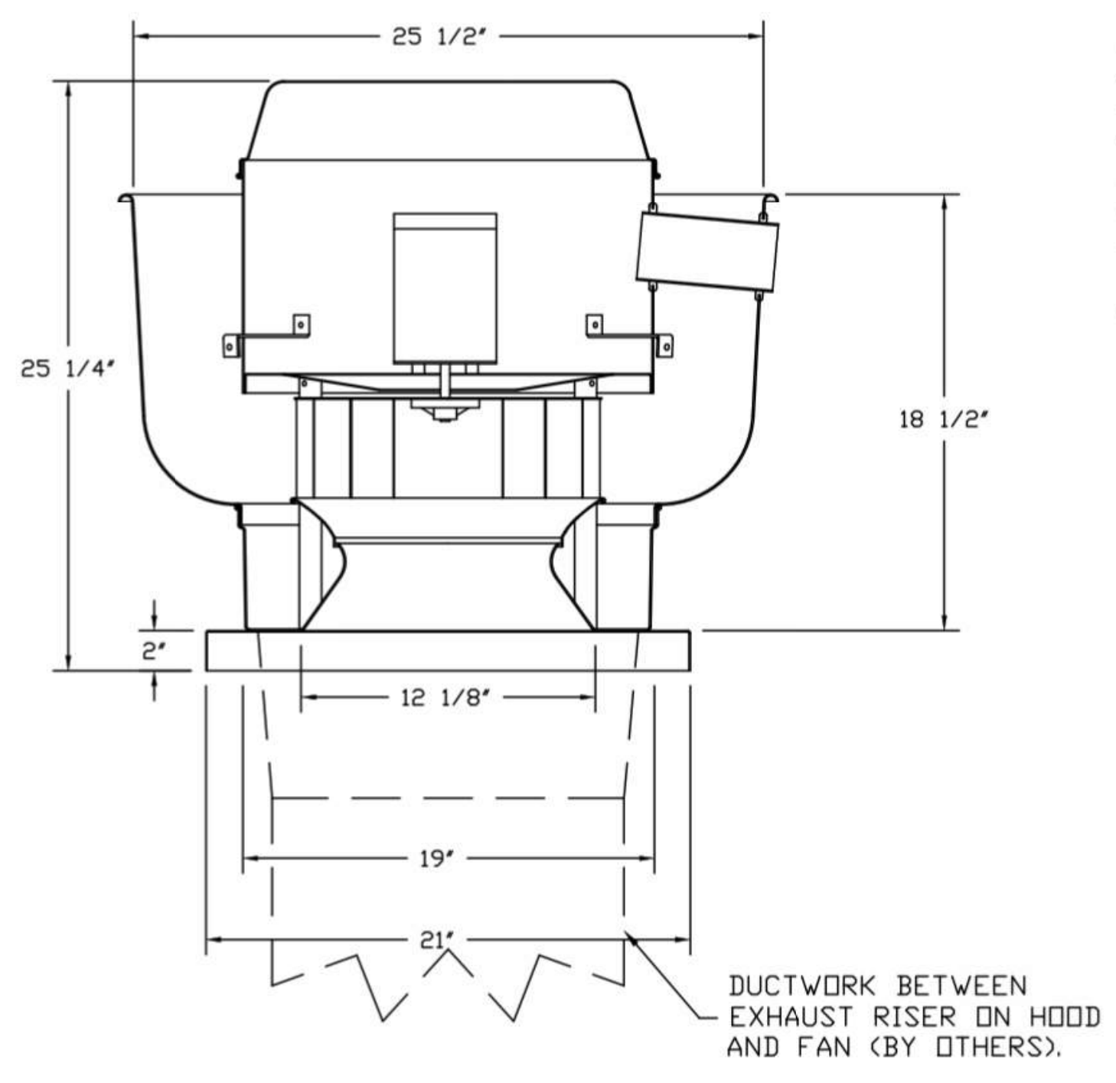
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

OPTIONS

- GREASE BOX.
- FAN BASE CERAMIC SEAL - DU/DR180HFA
- INSTALLED AT PLANT - FOR GREASE DUCTS.
- 2 YEAR PARTS WARRANTY.



FAN #3 DU33HFA - EXHAUST FAN



FEATURES:

- DIRECT DRIVE CONSTRUCTION (NO BELTS/PULLEYS).
- ROOF MOUNTED FANS.
- RESTAURANT MODEL.
- UL705
- VARIABLE SPEED CONTROL.
- INTERNAL WIRING.
- THERMAL OVERLOAD PROTECTION (SINGLE PHASE).
- HIGH HEAT OPERATION 300°F (149°C).

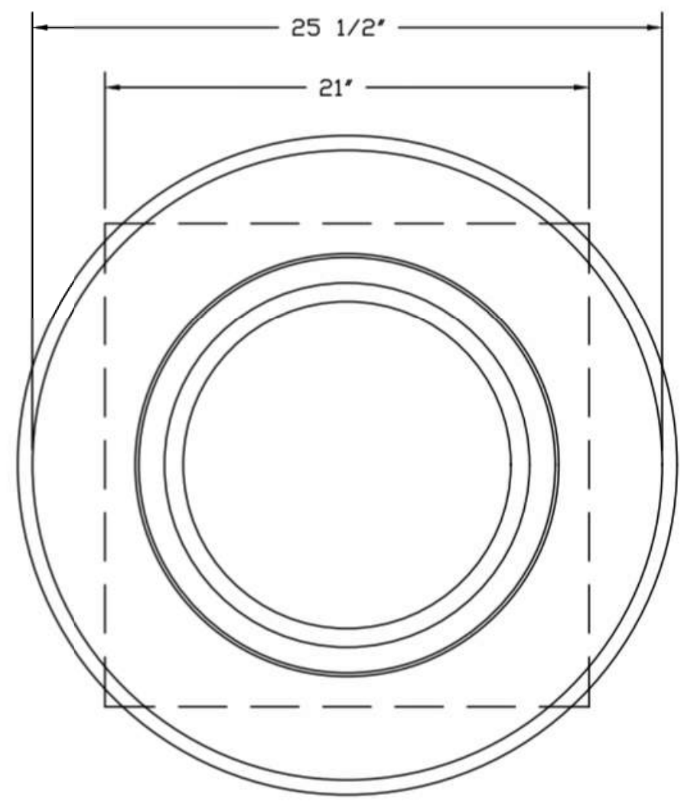
- NEMA 3R SAFETY DISCONNECT SWITCH.

NORMAL TEMPERATURE TEST

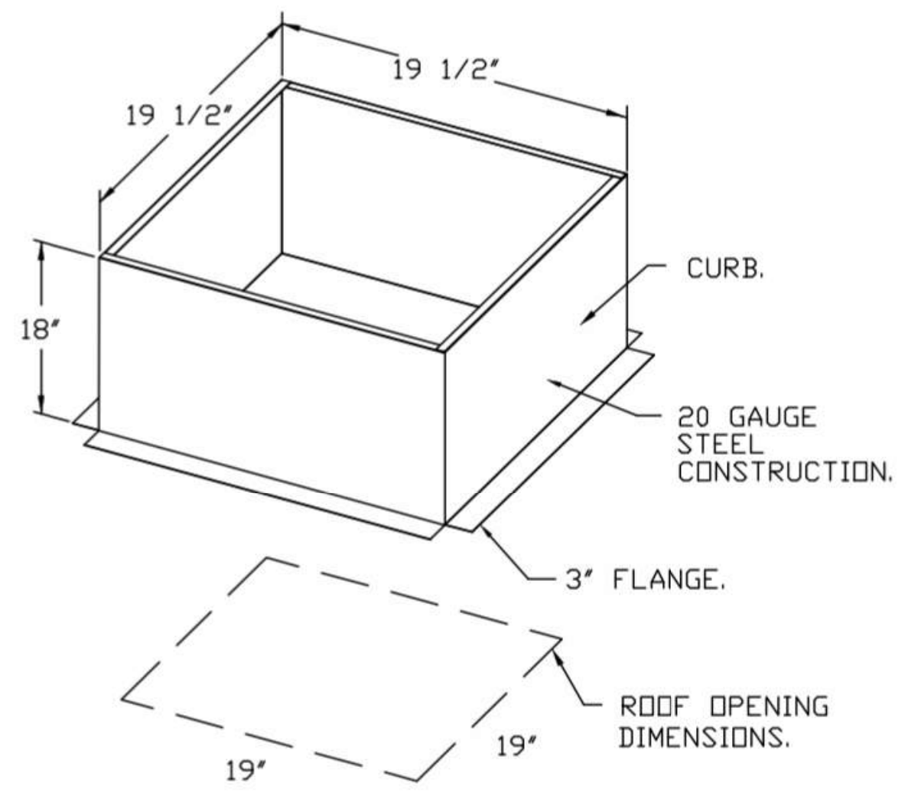
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

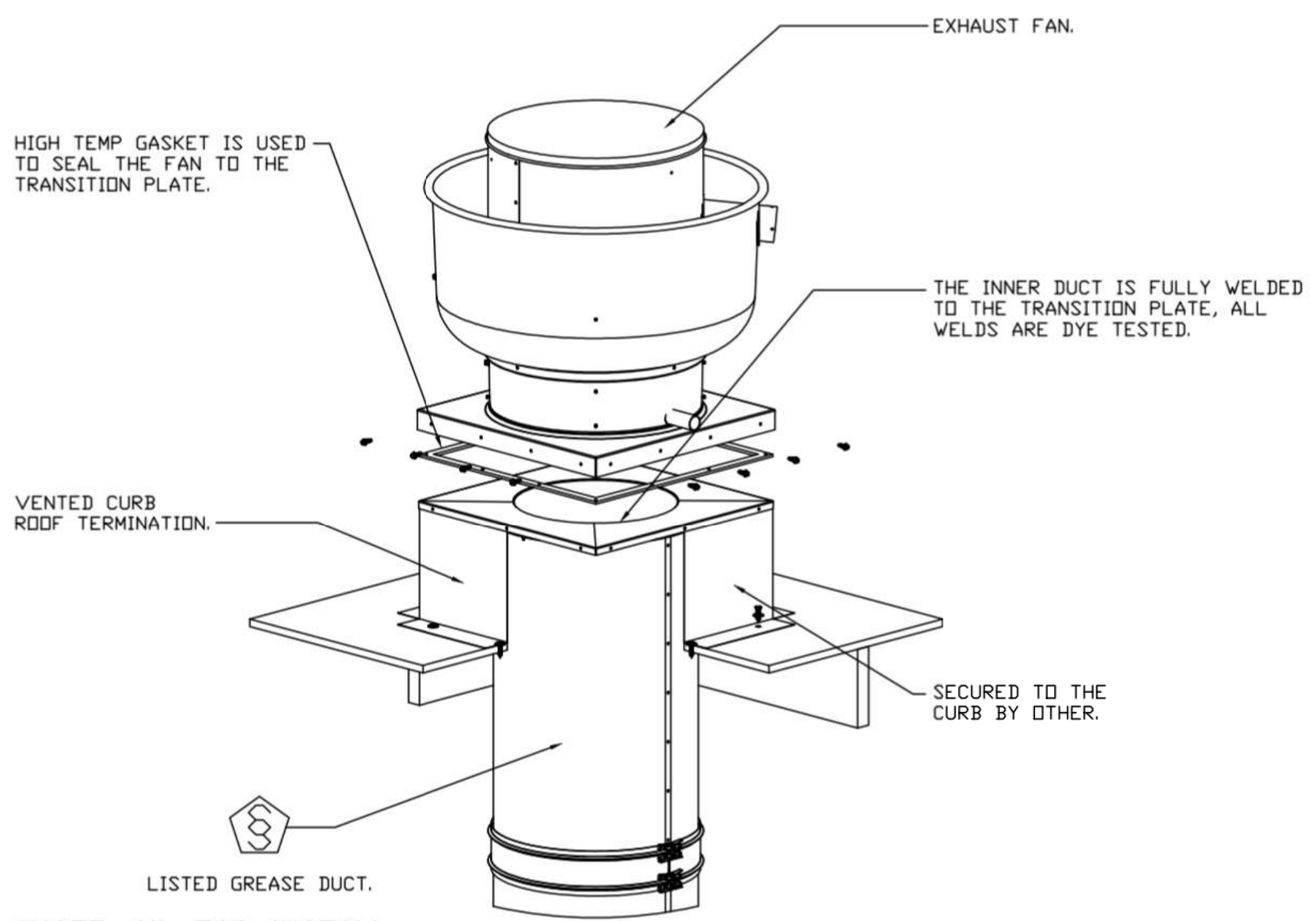
OPTIONS

- ECM WIRING PACKAGE - MANUAL OR 0-10VDC REFERENCE SPEED CONTROL -RTC- (TELCO MOTOR), CCW ROTATION.
- 2 YEAR PARTS WARRANTY.



TOP VIEW




EXHAUST FAN.
HIGH TEMP GASKET IS USED TO SEAL THE FAN TO THE TRANSITION PLATE.
THE INNER DUCT IS FULLY WELDED TO THE TRANSITION PLATE, ALL WELDS ARE DYE TESTED.
VENTED CURB ROOF TERMINATION.
SECURED TO THE CURB BY OTHER.
LISTED GREASE DUCT.

*NOTE: UL 762 INSTALL.

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Payette SD CTE - Payette, ID R1
PAYETTE, ID, 83661

DATE: 12/11/2024

DWG.#: 7156194

DRAWN BY: EH

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 5

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270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE 1-9-25
REF NO. 2444
AUTHOR Author

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
KITCHEN HOOD DRAWINGS

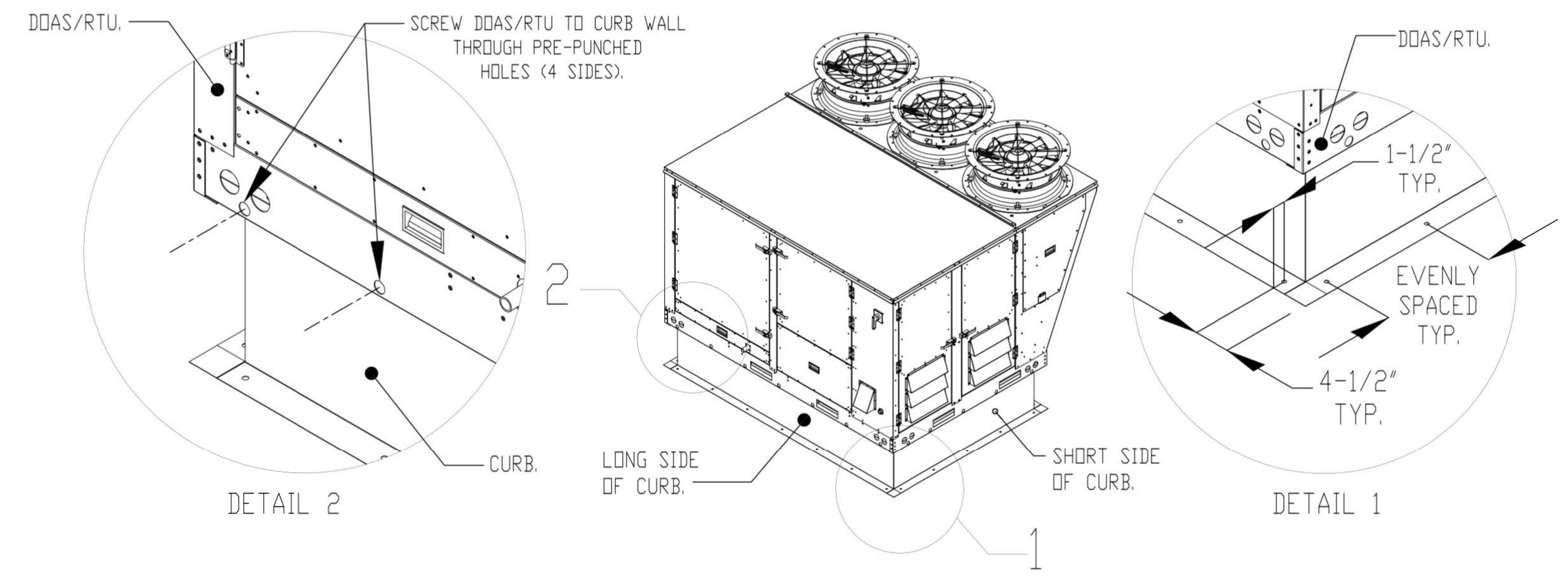
SHEET NO. **M5.04**

1/10/2025 11:12:18 AM

TYPICAL DOAS/RTU ROOF MOUNTING INSTALLATION INSTRUCTIONS

1. SECURE THE CURB TO THE ROOF FRAMING MEMBERS BY DRILLING 1/4" PILOT HOLES IN THE CURB FLANGES AT LOCATIONS SHOWN IN THE DIAGRAM BELOW. USING 3/8" X 2" ZINC PLATED STEEL LAG BOLTS, AND ZINC PLATED WASHERS, SCREW THROUGH THE CURB FLANGES AND INTO THE ROOF FRAMING MEMBERS. A MINIMUM OF (5) LAG BOLTS ON EACH SHORT SIDE, AND (7) LAG BOLTS ON EACH LONG SIDE IS REQUIRED.

2. SECURE THE UNIT BASE TO THE SIDE WALLS OF THE CURB USING (24) 1/4"-14 X 2" SELF-DRILLING, STEEL ZINC PLATED SCREWS. PRE-PUNCHED HOLES HAVE BEEN PROVIDED FOR EACH SCREW LOCATION.



GREASE BOX INSTALLATION

GREASEBOX
REV.#2 08/19/02

PARTS INCLUDED

GREASE BOX.
GREASE BOX COVER.
GREASE PIPE.

SHEET METAL SCREWS
3 - LONG (3/4" LG.).

GREASE BOX FIELD INSTALLATION

STEP 1)

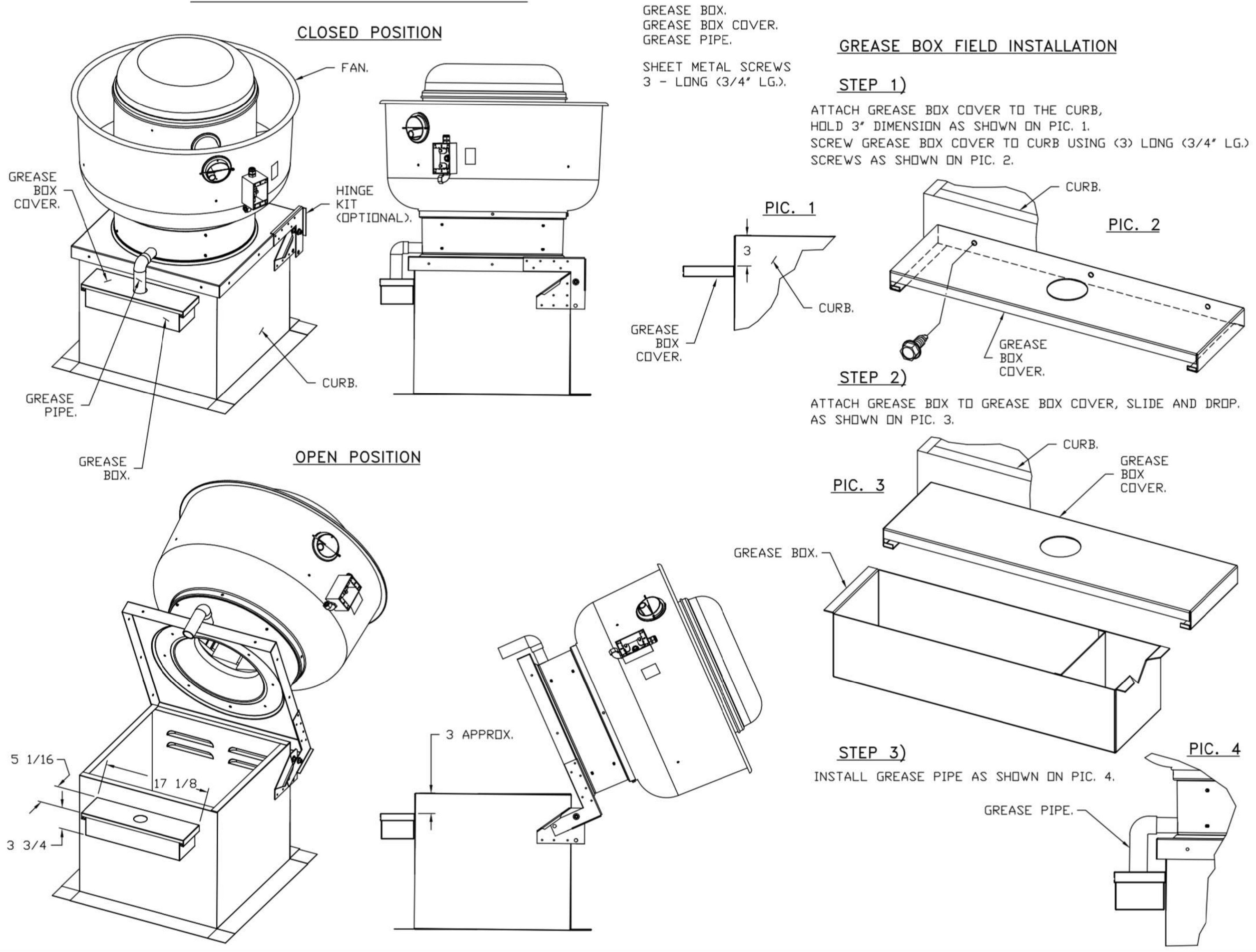
ATTACH GREASE BOX COVER TO THE CURB, HOLD 3" DIMENSION AS SHOWN ON PIC. 1. SCREW GREASE BOX COVER TO CURB USING (3) LONG (3/4" LG.) SCREWS AS SHOWN ON PIC. 2.

STEP 2)

ATTACH GREASE BOX TO GREASE BOX COVER, SLIDE AND DROP. AS SHOWN ON PIC. 3.

STEP 3)

INSTALL GREASE PIPE AS SHOWN ON PIC. 4.



*NOTE: UL 705 INSTALL.

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DWG.#: 7156194
DRAWN BY: EH
SCALE: 3/4" = 1'-0"
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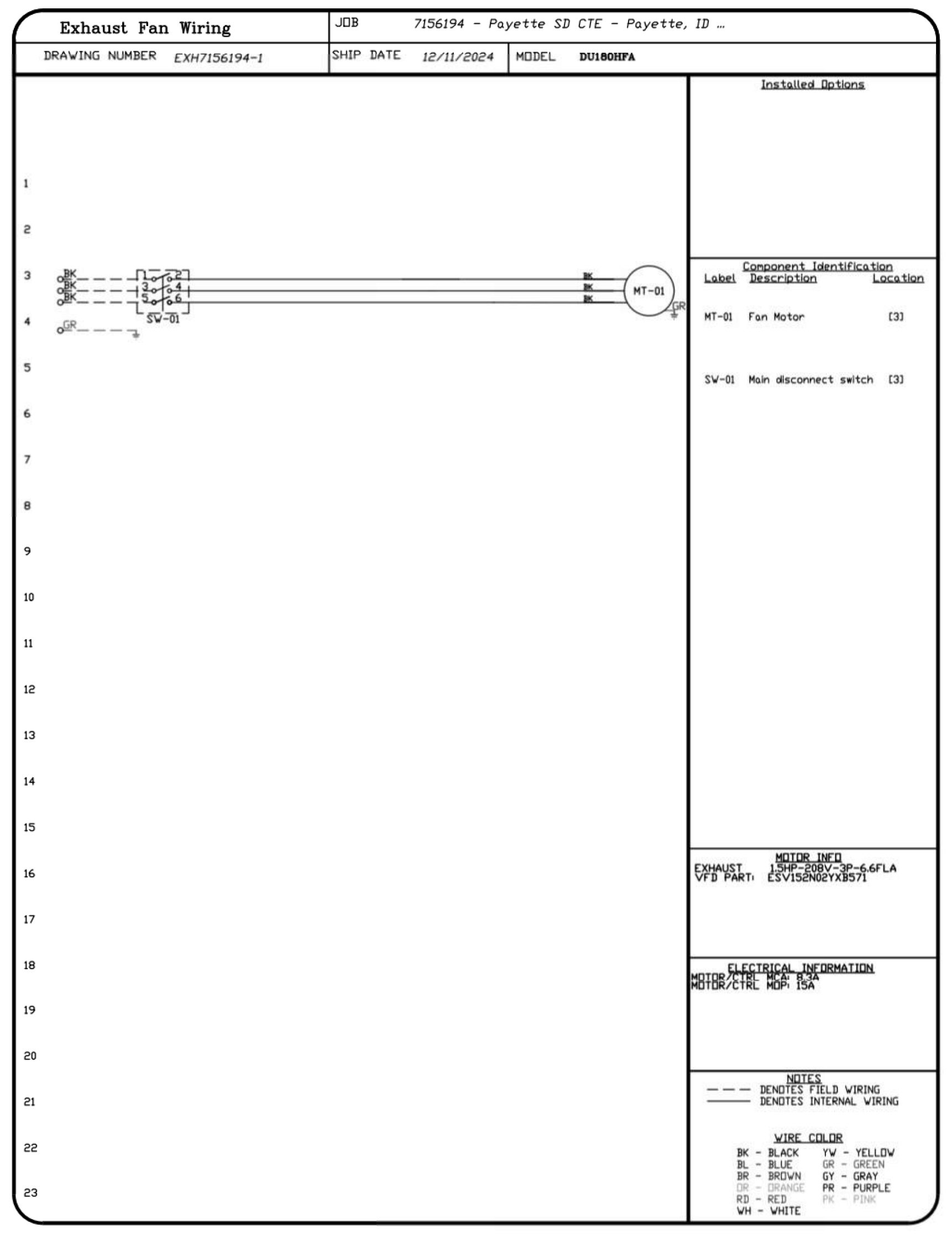


Exhaust Fan Wiring

JOB 7156194 - Payette SD CTE - Payette, ID …

DRAWING NUMBER EXH7156194-1

SHIP DATE 12/11/2024

MODEL **DU180HFA**

Installed Options

Component Identification

Label	Description	Location
MT-01	Fan Motor	[3]
SW-01	Main disconnect switch	[3]

MOTOR INFO

EXHAUST 1.5HP-208V-3P-6.6FLA
VFD PART: ESV152N02YXB571

ELECTRICAL INFORMATION

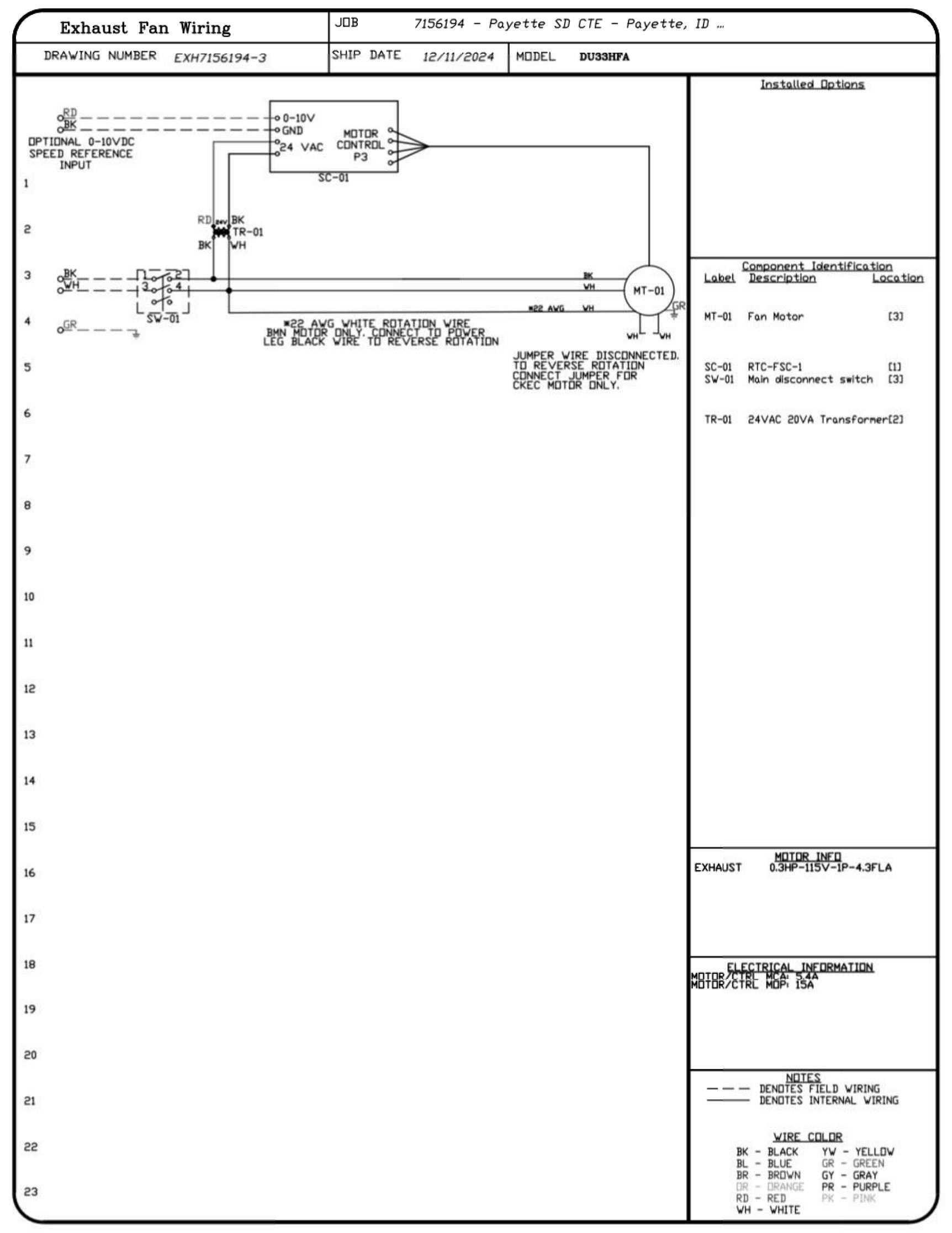
MOTOR/CTRL MCA: 8.3A
MOTOR/CTRL MOP: 15A

NOTES

— — — DENOTES FIELD WIRING
——— DENOTES INTERNAL WIRING

WIRE COLOR

BK - BLACK	YW - YELLOW
BL - BLUE	GR - GREEN
BR - BROWN	GY - GRAY
OR - ORANGE	PR - PURPLE
RD - RED	PK - PINK
WH - WHITE	



Exhaust Fan Wiring

JOB 7156194 - Payette SD CTE - Payette, ID …

DRAWING NUMBER EXH7156194-3

SHIP DATE 12/11/2024

MODEL **DU33HFA**

RD
BK
OPTIONAL 0-10VDC SPEED REFERENCE INPUT
0-10V
GND
24 VAC
MOTOR CONTROL P3
SC-01
RD
24V
BK
TR-01
BK
WH
BK
WH
GR
SW-01
BK
WH
#22 AWG
WH
MT-01
GR
WH
WH
#22 AWG WHITE ROTATION WIRE BMN MOTOR ONLY. CONNECT TO POWER LEG BLACK WIRE TO REVERSE ROTATION
JUMPER WIRE DISCONNECTED. TO REVERSE ROTATION CONNECT JUMPER FOR CKEC MOTOR ONLY.

Installed Options

Component Identification

Label	Description	Location
MT-01	Fan Motor	[3]
SC-01	RTC-FSC-1	[1]
SW-01	Main disconnect switch	[3]
TR-01	24VAC 20VA Transformer	[2]

MOTOR INFO

EXHAUST 0.3HP-115V-1P-4.3FLA

ELECTRICAL INFORMATION

MOTOR/CTRL MCA: 5.4A
MOTOR/CTRL MOP: 15A

NOTES

— — — DENOTES FIELD WIRING
——— DENOTES INTERNAL WIRING

WIRE COLOR

BK - BLACK	YW - YELLOW
BL - BLUE	GR - GREEN
BR - BROWN	GY - GRAY
OR - ORANGE	PR - PURPLE
RD - RED	PK - PINK
WH - WHITE	

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PAYETTE, ID, 83661

DATE: 12/11/2024

DWG.#: 7156194

DRAWN BY: EH

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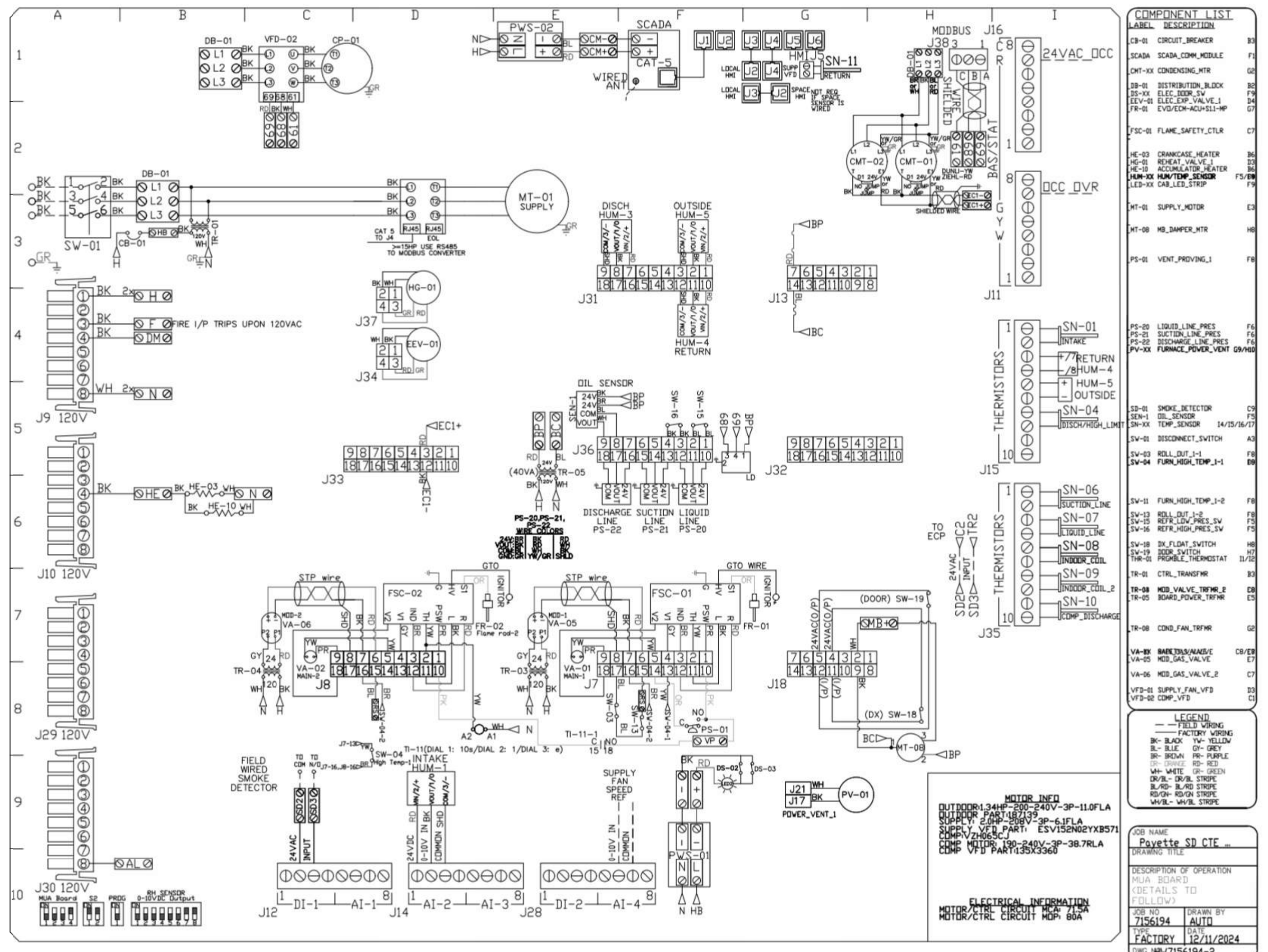
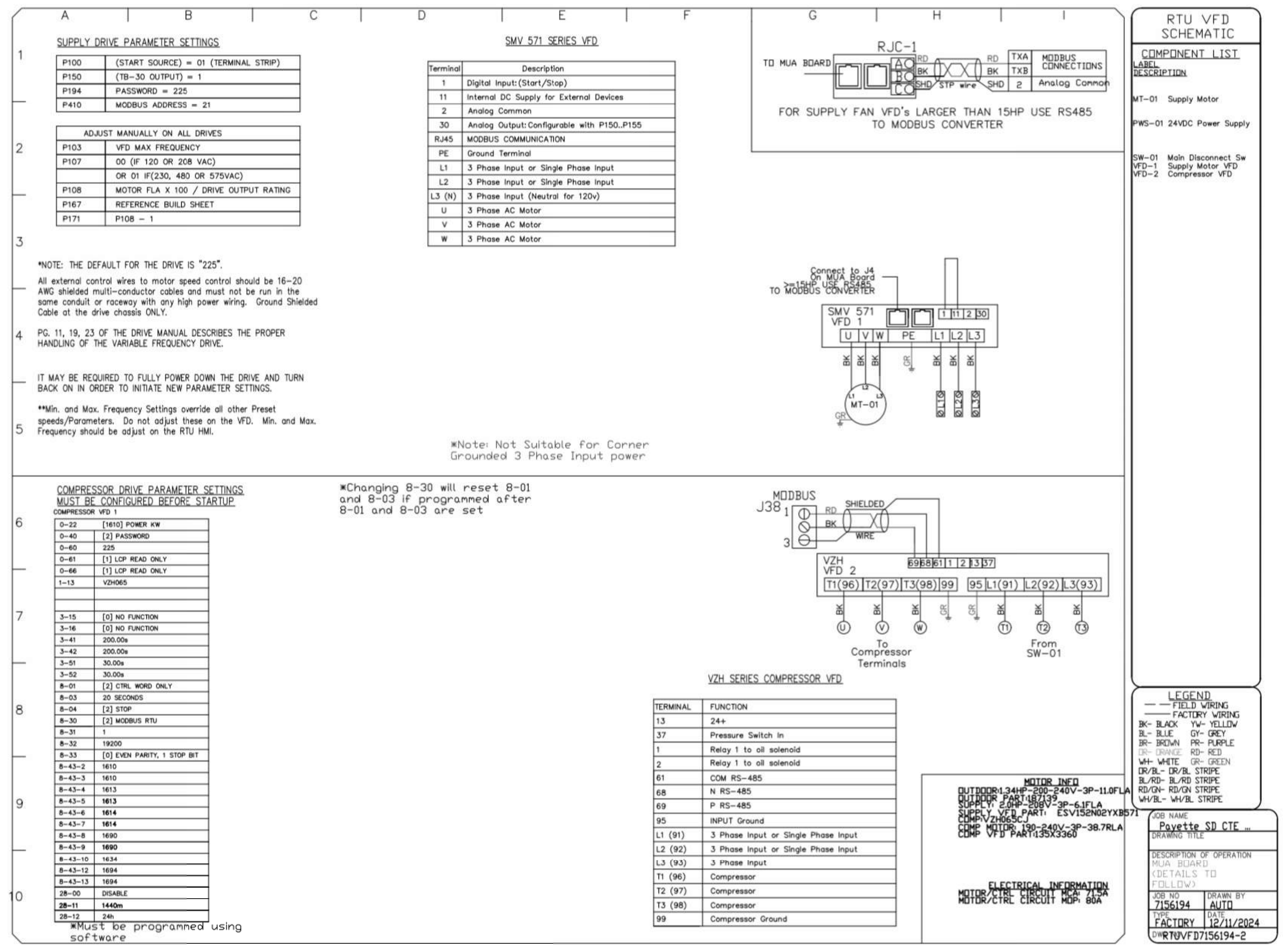
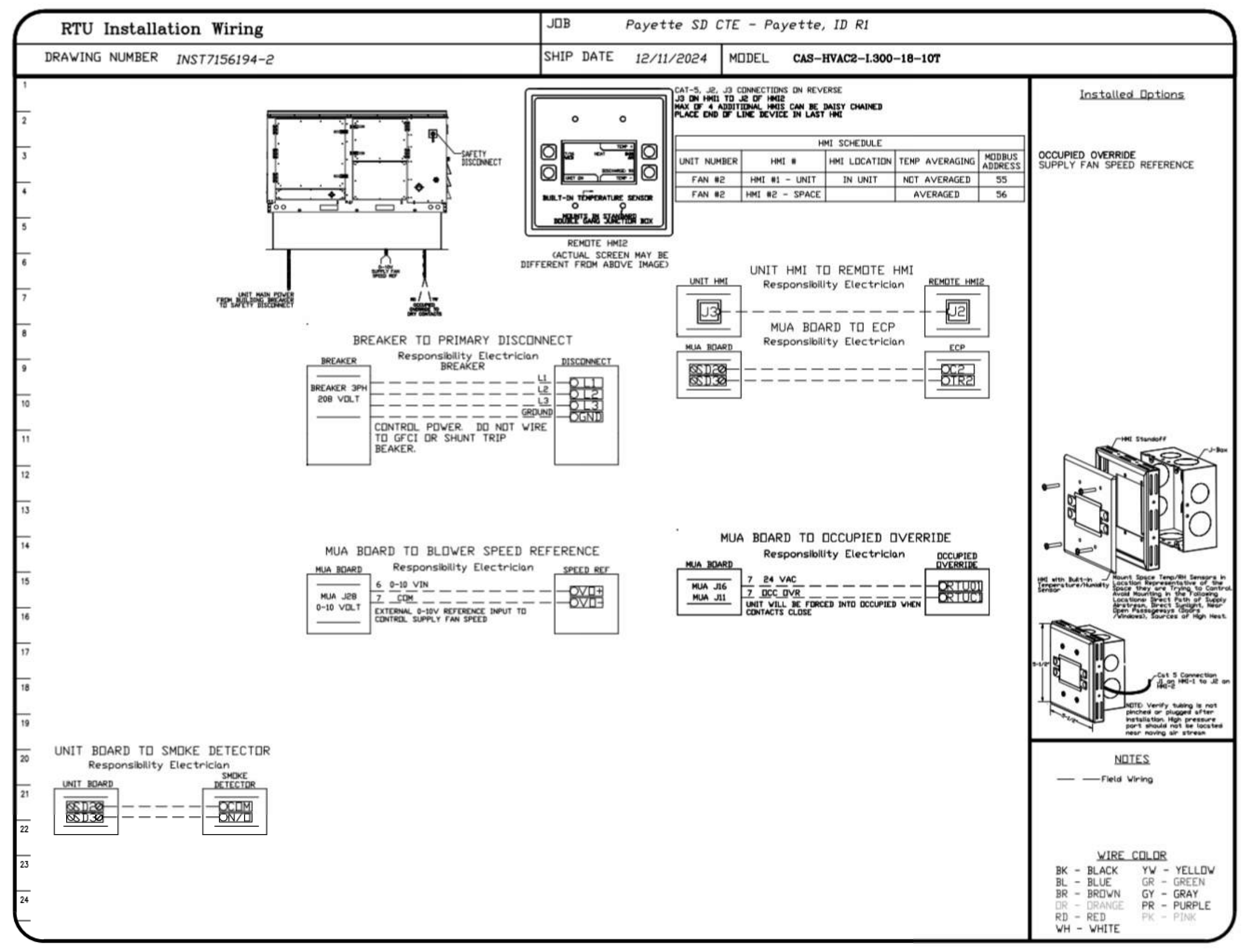



SUPPLY DRIVE PARAMETER SETTINGS
SMV S71 SERIES VFD
TO MUA BOARD
RJC-1
MODBUS CONNECTIONS
FOR SUPPLY FAN VFD's LARGER THAN 15HP USE RS485 TO MODBUS CONVERTER
SMV S71 VFD 1
MT-01
*Note: Not Suitable For Corner Grounded 3 Phase Input power
COMPRESSOR DRIVE PARAMETER SETTINGS MUST BE CONFIGURED BEFORE STARTUP
*Changing 8-30 will reset 8-01 and 8-03 if programmed after 8-01 and 8-03 are set
MODBUS J38
VZH VFD 2
To Compressor Terminals
From SW-01
VZH SERIES COMPRESSOR VFD
RTU VFD SCHEMATIC
COMPONENT LIST
LEGEND
MOTOR INFO
ELECTRICAL INFORMATION
Payette SD CTE
7156194
FACTORY 12/11/2024
MWVFD7156194-2


RTU Installation Wiring

JOB Payette SD CTE - Payette, ID R1

DRAWING NUMBER INST7156194-2

SHIP DATE 12/11/2024

MODEL CAS-HVAC2-I.300-18-10T

CAT-5, J2, J3 CONNECTIONS ON REVERSE
J3 ON HMI1 TO J2 OF HMI2
MAX OF 4 ADDITIONAL HMIS CAN BE DAISY CHAINED
PLACE END OF LINE DEVICE IN LAST HMI

HMI SCHEDULE				
UNIT NUMBER	HMI #	HMI LOCATION	TEMP AVERAGING	MODBUS ADDRESS
FAN #2	HMI #1 - UNIT	IN UNIT	NOT AVERAGED	55
FAN #2	HMI #2 - SPACE		AVERAGED	56

REMOTE HMI2
(ACTUAL SCREEN MAY BE DIFFERENT FROM ABOVE IMAGE)

Installed Options

OCCUPIED OVERRIDE
SUPPLY FAN SPEED REFERENCE

BREAKER TO PRIMARY DISCONNECT
Responsibility Electrician

CONTROL POWER. DO NOT WIRE TO GFCI OR SHUNT TRIP BEAKER.

UNIT HMI TO REMOTE HMI
Responsibility Electrician

MUA BOARD TO ECP
Responsibility Electrician

MUA BOARD TO BLOWER SPEED REFERENCE
Responsibility Electrician

MUA BOARD TO OCCUPIED OVERRIDE
Responsibility Electrician

UNIT BOARD TO SMOKE DETECTOR
Responsibility Electrician

NOTES

——— Field Wiring

WIRE COLOR

SYSTEM DESIGN VERIFICATION (SDV)

IF ORDERED, CAS SERVICE WILL PERFORM A SYSTEM DESIGN VERIFICATION (SDV) ONCE ALL EQUIPMENT HAS HAD A COMPLETE START UP PER THE OPERATION AND INSTALLATION MANUAL. TYPICALLY, THE SDV WILL BE PERFORMED AFTER ALL INSPECTIONS ARE COMPLETE.

ANY FIELD RELATED DISCREPANCIES THAT ARE DISCOVERED DURING THE SDV WILL BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND CORRESPONDING TRADES ON SITE. THESE ISSUES WILL BE DOCUMENTED AND FORWARDED TO THE APPROPRIATE SALES OFFICE. IF CAS SERVICE HAS TO RESOLVE A DISCREPANCY THAT IS A FIELD ISSUE, THE GENERAL CONTRACTOR WILL BE NOTIFIED AND BILLED FOR THE WORK. SHOULD A RETURN TRIP BE REQUIRED DUE TO ANY FIELD RELATED DISCREPANCY THAT CANNOT BE RESOLVED DURING THE SDV, THERE WILL BE ADDITIONAL TRIP CHARGES.

DURING THE SDV, CAS SERVICE WILL ADDRESS ANY DISCREPANCY THAT IS THE FAULT OF THE MANUFACTURER. SHOULD A RETURN TRIP BE REQUIRED, THE GENERAL CONTRACTOR AND APPROPRIATE SALES OFFICE WILL BE NOTIFIED. THERE WILL BE NO ADDITIONAL CHARGES FOR MANUFACTURER DISCREPANCIES.

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DRAWN BY: EH

SCALE: 3/4" = 1'-0"

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270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
1-9-25

REF NO.
2444

AUTHOR
Author

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

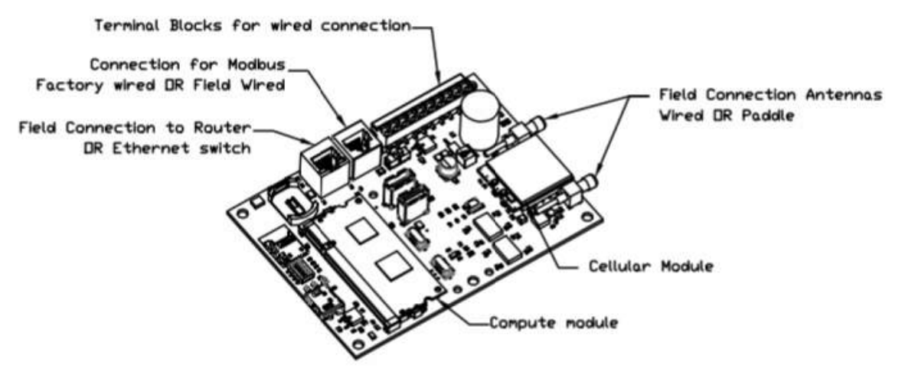
KITCHEN HOOD DRAWINGS

SHEET NO.
M5.07

1/10/2025 11:12:23 AM

ELECTRICAL PACKAGE – JOB#7156194

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	ϕ	HP	VOLT	FLA
1		DCV-1111	UTILITY CABINET RIGHT	UTILITY CABINET RIGHT	1 LIGHT	SMART CONTROLS DCV	EXHAUST	3	1.500	208	6.6
				HOOD # 1	1 FAN		SUPPLY	3	2.000	208	6.1


Terminal Blocks for wired connection
Connection for Modbus Factory wired OR Field Wired
Field Connection to Router OR Ethernet switch
Field Connection Antennas Wired OR Paddle
Cellular Module
Compute module

CASlink Monitor and Control

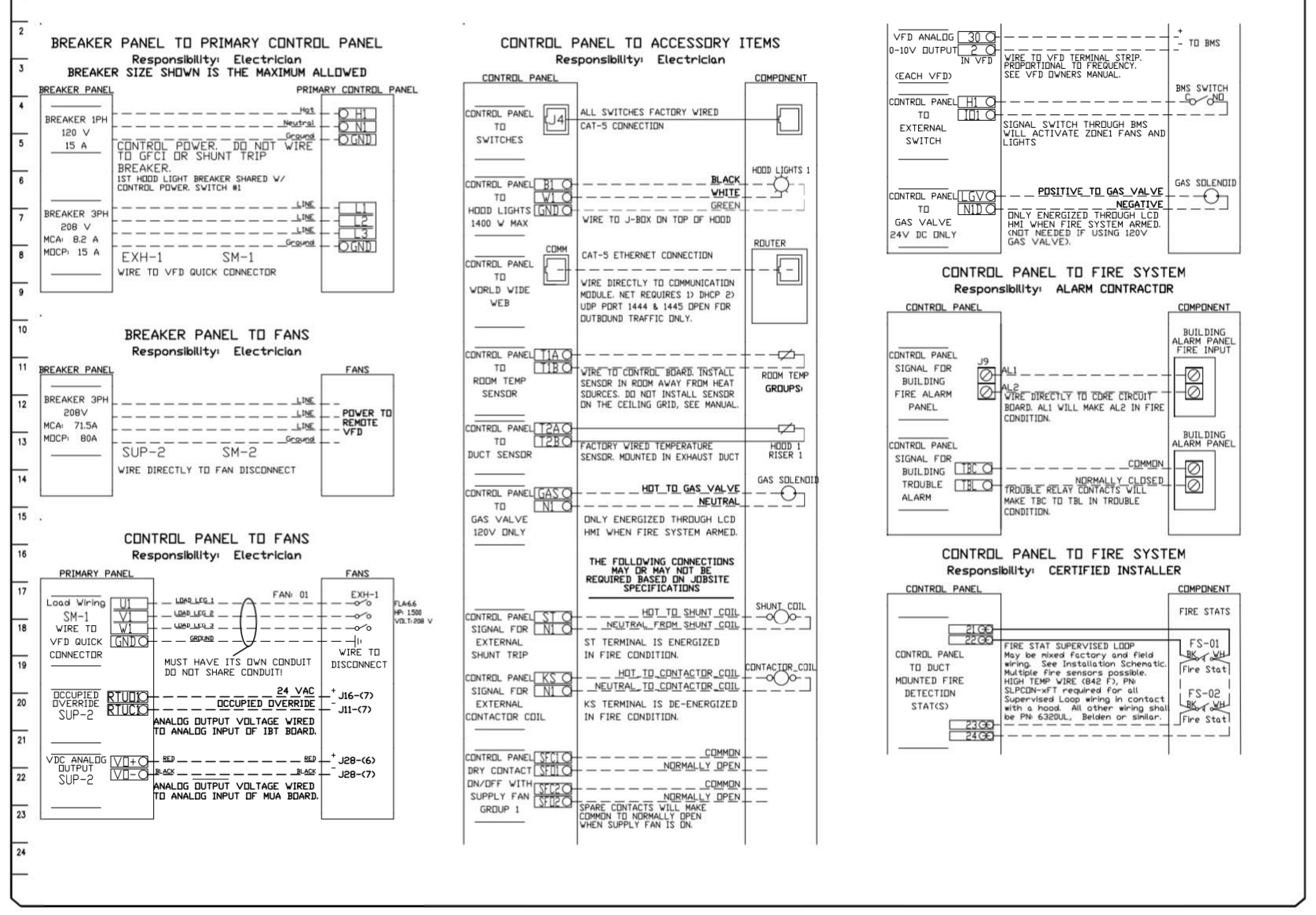
- *Hood control panel to support communications to cloud-based Building Management System.*
- *Hood Control Panel to allow cloud-based Building Management System to monitor real time parameters outlined as MONITOR in the points list.*
- *Hood Control Panel to allow cloud-based Building Management System to control parameters outlined as CONTROL in the points list.*
- *Hood Control Panel to allow cloud-based Building Management System to implement SYSTEM ECONOMIZER control strategies for fully integrated Building Management.*

MONITORING AND CONTROL POINTS LIST

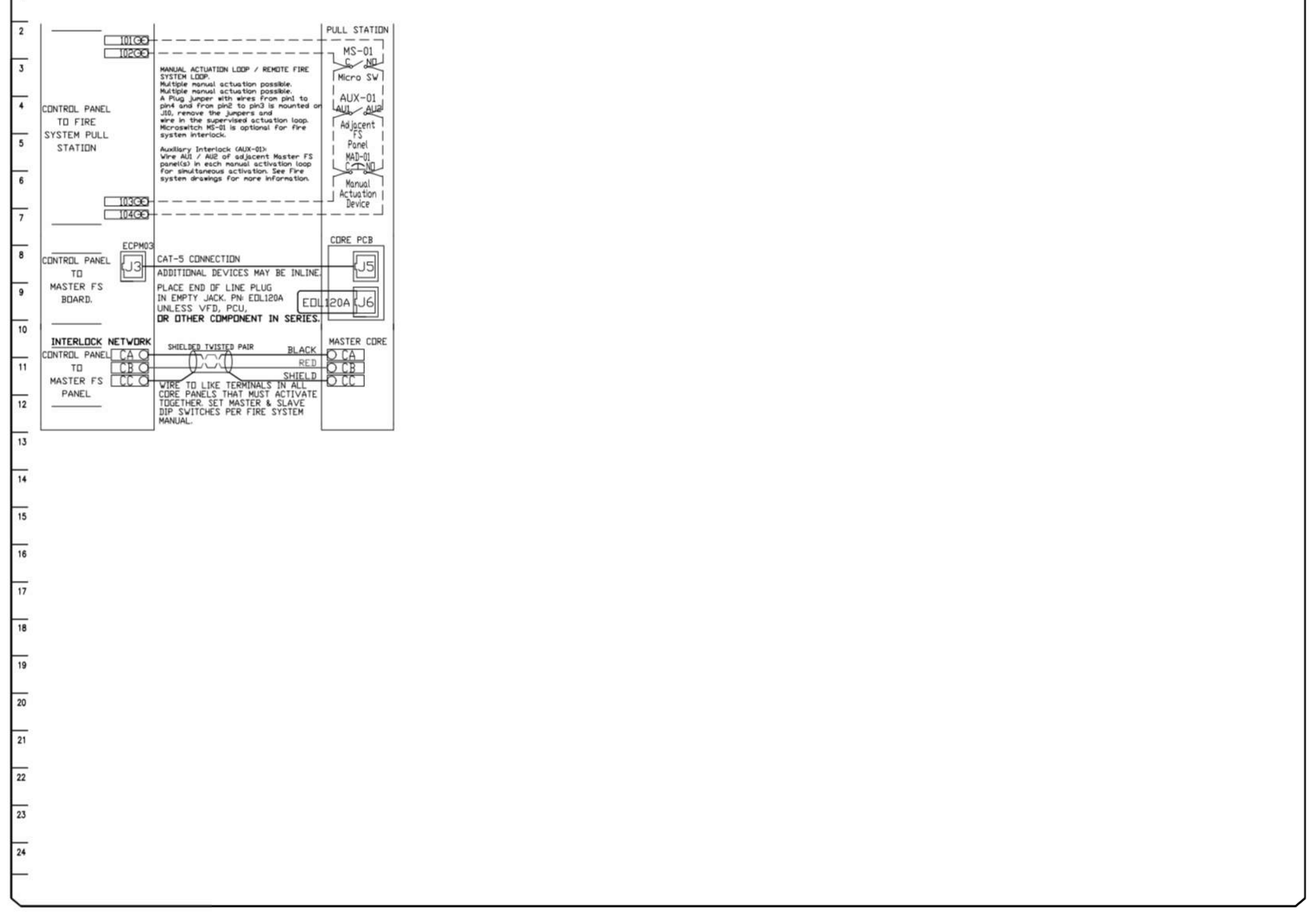
DCV Packages	*Function*
Room Temperature	*MONITOR*
Duct Temperature(s)	*MONITOR*
MUA Discharge Temperature	*MONITOR*
Kitchen RTU Discharge Temperature	*MONITOR*
Fan Speed	*MONITOR*
Fan Amperage	*MONITOR*
Fan Power	*MONITOR*
VFD Faults	*MONITOR*
Controller Faults	*MONITOR*
Fan Faults	*MONITOR*
Fan Status	*MONITOR*
PCU Faults	*MONITOR*
PCU Filter Clog Percentages	*MONITOR*
Fire Condition	*MONITOR*
CORE Fire System	*MONITOR*
Building Pressures	*MONITOR*
Prep Time Button	*MONITOR & CONTROL*
Fans Button	*MONITOR & CONTROL*
Lights Button	*MONITOR & CONTROL*
Wash Button	*MONITOR & CONTROL*

SC Packages	*Function*
Room Temperature(s)	*MONITOR*
Duct Temperature(s)	*MONITOR*
MUA Discharge Temperature	*MONITOR*
Kitchen RTU Discharge Temperature	*MONITOR*
Controller Faults	*MONITOR*
Fan Faults	*MONITOR*
Fan Status	*MONITOR*
PCU Faults	*MONITOR*
PCU Filter Clog Percentages	*MONITOR*
Fire Condition	*MONITOR*
CORE Fire System	*MONITOR*
Building Pressures	*MONITOR*
Fans Button(s)	*MONITOR & CONTROL*
Lights Button(s)	*MONITOR & CONTROL*
Wash Button	*MONITOR & CONTROL*

JOB NO 7156194
MODEL NUMBER DCV-1111
JOB NAME Payette SD CTE - Payette, ID ...
DRAWN BY
DATE 12/11/2024
SCHEMATIC TYPE INSTALL
DWG NO ECP #1-1
DESCRIPTION OF OPERATION: Demand Control Ventilation, w/ control for 1 Exhaust Fan, 1 Supply Fan, Exhaust on in Fire, Lights out in Fire, Fans modulate based on duct temperature. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD. Room temperature sensor shipped loose for field installation.Verify distance between VFD and Motor; additional cost could apply if distance exceeds 50 feet.


BREAKER PANEL TO PRIMARY CONTROL PANEL
Responsibility: Electrician
BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED
BREAKER PANEL
PRIMARY CONTROL PANEL
BREAKER 1PH 120 V 15 A
Hot
Neutral
Ground
H1
N1
GND
CONTROL POWER. DO NOT WIRE TO GFCI OR SHUNT TRIP BREAKER.
1ST HOOD LIGHT BREAKER SHARED W/ CONTROL POWER. SWITCH #1
BREAKER 3PH 208 V MCA: 8.2 A MOCP: 15 A
LINE
L1
L2
L3
EXH-1
SM-1
WIRE TO VFD QUICK CONNECTOR
BREAKER PANEL TO FANS
Responsibility: Electrician
FANS
BREAKER 3PH 208V MCA: 71.5A MOCP: 80A
POWER TO REMOTE VFD
SUP-2
SM-2
WIRE DIRECTLY TO FAN DISCONNECT
CONTROL PANEL TO FANS
Responsibility: Electrician
PRIMARY PANEL
Load Wiring SM-1 WIRE TO VFD QUICK CONNECTOR
U1
V1
W1
LOAD LEG 1
LOAD LEG 2
LOAD LEG 3
GROUND
FAN: 01
EXH-1
FLA:6.6 HP: 1.500 VOLT: 208 V
MUST HAVE ITS OWN CONDUIT DO NOT SHARE CONDUIT!
WIRE TO DISCONNECT
OCCUPIED OVERRIDE SUP-2
RTUO
RTUC
24 VAC
OCCUPIED OVERRIDE
J16-(7)
J11-(7)
ANALOG OUTPUT VOLTAGE WIRED TO ANALOG INPUT OF IBT BOARD.
VDC ANALOG OUTPUT SUP-2
VO+
VO-
RED
BLACK
J28-(6)
J28-(7)
ANALOG OUTPUT VOLTAGE WIRED TO ANALOG INPUT OF MUA BOARD.
CONTROL PANEL TO ACCESSORY ITEMS
Responsibility: Electrician
CONTROL PANEL
COMPONENT
CONTROL PANEL TO SWITCHES
J4
ALL SWITCHES FACTORY WIRED
CAT-5 CONNECTION
CONTROL PANEL TO HOOD LIGHTS 1400 W MAX
B1
W1
BLACK
WHITE
GREEN
HOOD LIGHTS 1
WIRE TO J-BOX ON TOP OF HOOD
COMM
CONTROL PANEL TO WORLD WIDE WEB
CAT-5 ETHERNET CONNECTION
ROUTER
WIRE DIRECTLY TO COMMUNICATION MODULE. NET REQUIRES 1) DHCP 2) UDP PORT 1444 & 1445 OPEN FOR OUTBOUND TRAFFIC ONLY.
CONTROL PANEL TO ROOM TEMP SENSOR
T1A
T1B
WIRE TO CONTROL BOARD. INSTALL SENSOR IN ROOM AWAY FROM HEAT SOURCES. DO NOT INSTALL SENSOR ON THE CEILING GRID, SEE MANUAL.
ROOM TEMP GROUPS:
CONTROL PANEL TO DUCT SENSOR
T2A
T2B
FACTORY WIRED TEMPERATURE SENSOR. MOUNTED IN EXHAUST DUCT
HOOD 1 RISER 1
CONTROL PANEL TO GAS VALVE 120V ONLY
GAS
N1
HOT TO GAS VALVE
NEUTRAL
GAS SOLENOID
ONLY ENERGIZED THROUGH LCD HMI WHEN FIRE SYSTEM ARMED.
THE FOLLOWING CONNECTIONS MAY OR MAY NOT BE REQUIRED BASED ON JOBSITE SPECIFICATIONS
CONTROL PANEL SIGNAL FOR EXTERNAL SHUNT TRIP
ST
HOT TO SHUNT COIL
NEUTRAL FROM SHUNT COIL
SHUNT COIL
ST TERMINAL IS ENERGIZED IN FIRE CONDITION.
CONTROL PANEL SIGNAL FOR EXTERNAL CONTACTOR COIL
KS
HOT TO CONTACTOR COIL
NEUTRAL TO CONTACTOR COIL
CONTACTOR COIL
KS TERMINAL IS DE-ENERGIZED IN FIRE CONDITION.
CONTROL PANEL DRY CONTACT ON/OFF WITH SUPPLY FAN GROUP 1
SFC1
SFO1
SFC2
SFO2
COMMON
NORMALLY OPEN
SPARE CONTACTS WILL MAKE COMMON TO NORMALLY OPEN WHEN SUPPLY FAN IS ON.
VFD ANALOG 0-10V OUTPUT (EACH VFD)
30
2
IN VFD
TO BMS
WIRE TO VFD TERMINAL STRIP. PROPORTIONAL TO FREQUENCY. SEE VFD OWNERS MANUAL.
CONTROL PANEL TO EXTERNAL SWITCH
H1
ID1
BMS SWITCH
SIGNAL SWITCH THROUGH BMS WILL ACTIVATE ZONE1 FANS AND LIGHTS
CONTROL PANEL TO GAS VALVE 24V DC ONLY
LGV
N1D
POSITIVE TO GAS VALVE
NEGATIVE
GAS SOLENOID
ONLY ENERGIZED THROUGH LCD HMI WHEN FIRE SYSTEM ARMED. (NOT NEEDED IF USING 120V GAS VALVE).
CONTROL PANEL TO FIRE SYSTEM
Responsibility: ALARM CONTRACTOR
CONTROL PANEL SIGNAL FOR BUILDING FIRE ALARM PANEL
J9
AL1
AL2
BUILDING ALARM PANEL FIRE INPUT
WIRE DIRECTLY TO CORE CIRCUIT BOARD. AL1 WILL MAKE AL2 IN FIRE CONDITION.
CONTROL PANEL SIGNAL FOR BUILDING TROUBLE ALARM
TBC
TBL
COMMON
NORMALLY CLOSED
BUILDING ALARM PANEL
TROUBLE RELAY CONTACTS WILL MAKE TBC TO TBL IN TROUBLE CONDITION.
CONTROL PANEL TO FIRE SYSTEM
Responsibility: CERTIFIED INSTALLER
CONTROL PANEL TO DUCT MOUNTED FIRE DETECTION STAT(S)
21
22
23
24
FIRE STATS
FS-01
FS-02
Fire Stat
FIRE STAT SUPERVISED LOOP May be mixed factory and field wiring. See Installation Schematic. Multiple fire sensors possible. HIGH TEMP WIRE (842 F), PN: SLPCON-xFT required for all Supervised Loop wiring in contact with a hood. All other wiring shall be PN: 6320UL, Belden or similar.

JOB NO 7156194
MODEL NUMBER DCV-1111
JOB NAME Payette SD CTE - Payette, ID ...
DRAWN BY
DATE 12/11/2024
SCHEMATIC TYPE INSTALL
DWG NO ECP #1-2
DESCRIPTION OF OPERATION: Demand Control Ventilation, w/ control for 1 Exhaust Fan, 1 Supply Fan, Exhaust on in Fire, Lights out in Fire, Fans modulate based on duct temperature. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD. Room temperature sensor shipped loose for field installation.Verify distance between VFD and Motor; additional cost could apply if distance exceeds 50 feet.


CONTROL PANEL TO FIRE SYSTEM PULL STATION
101
102
103
104
PULL STATION
MS-01
Micro SW
AUX-01
AU1
AU2
Adjacent FS Panel
MAD-01
Manual Actuation Device
MANUAL ACTUATION LOOP / REMOTE FIRE SYSTEM LOOP. Multiple manual actuation possible. Multiple manual actuation possible. A Plug jumper with wires from pin1 to pin4 and from pin2 to pin3 is mounted on J10, remove the jumpers and wire in the supervised actuation loop. Microswitch MS-01 is optional for fire system interlock.
Auxiliary Interlock (AUX-01): Wire AU1 / AU2 of adjacent Master FS panel(s) in each manual activation loop for simultaneous activation. See Fire system drawings for more information.
ECPM03
CONTROL PANEL TO MASTER FS BOARD.
J3
CAT-5 CONNECTION
ADDITIONAL DEVICES MAY BE INLINE.
PLACE END OF LINE PLUG IN EMPTY JACK. PN: EOL120A UNLESS VFD, PCU, OR OTHER COMPONENT IN SERIES.
CORE PCB
J5
EOL120A
J6
INTERLOCK NETWORK
CONTROL PANEL TO MASTER FS PANEL
CA
CB
CC
SHIELDED TWISTED PAIR
BLACK
RED
SHIELD
MASTER CORE
WIRE TO LIKE TERMINALS IN ALL CORE PANELS THAT MUST ACTIVATE TOGETHER. SET MASTER & SLAVE DIP SWITCHES PER FIRE SYSTEM MANUAL.

JOB NO 7156194
MODEL NUMBER DCV-1111
JOB NAME Payette SD CTE - Payette, ID ...
DRAWN BY
DATE 12/11/2024
SCHEMATIC TYPE INSTALL
DWG NO ECP #1-3
DESCRIPTION OF OPERATION: Fire System #1 TANK FS - 4.0/4.0.

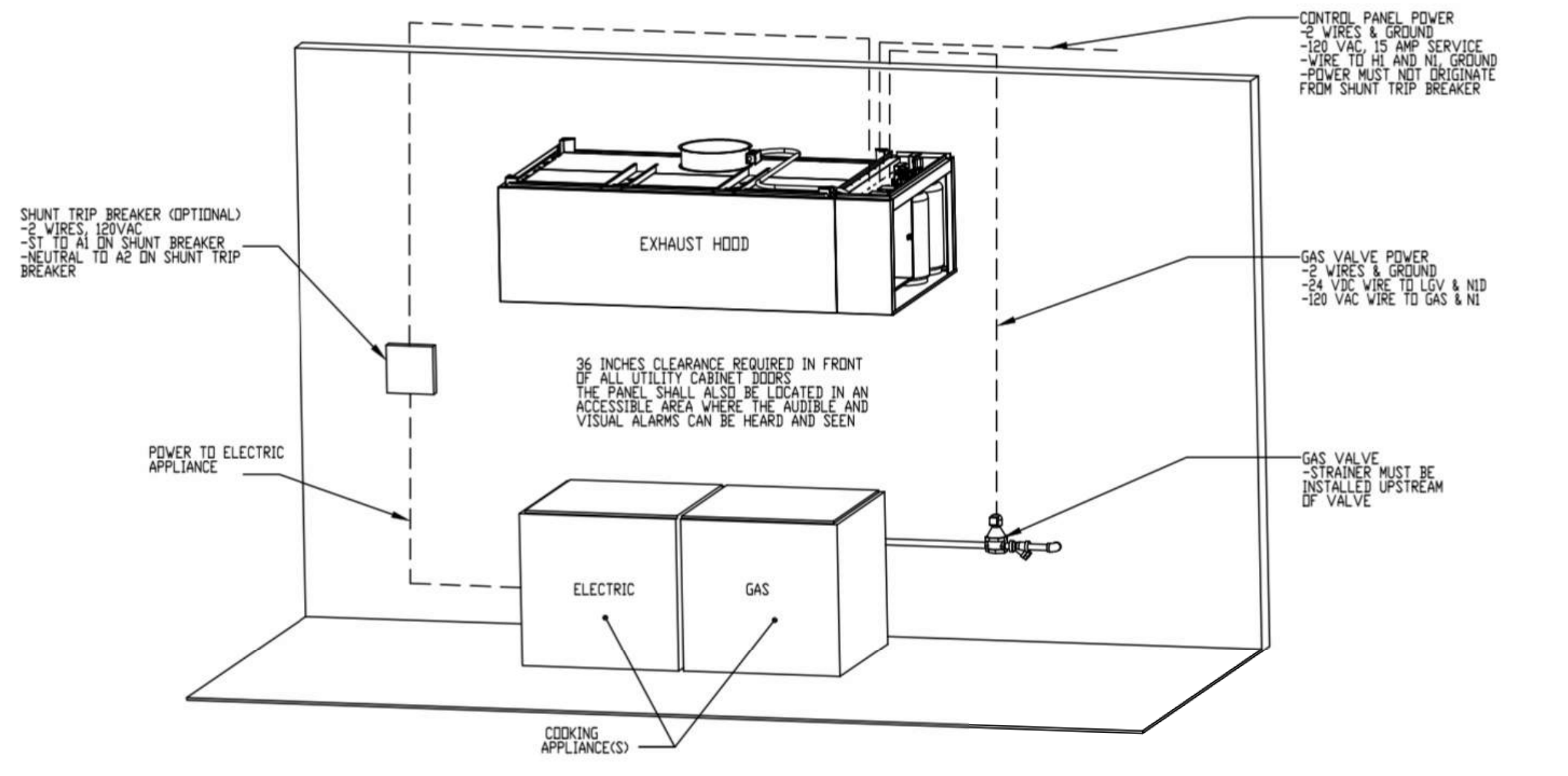
TANK PROTECTION ELECTRICAL DETAIL

02/10/2021 Rev. 2

FS-1: MASTER

ELECTRICIAN:
1. WIRE MAIN CONTROL PANEL PER INCLUDED SCHEMATIC
2. WIRE ALL FANS PER INCLUDED SCHEMATIC
3. WIRE SHUNT TRIP BREAKER (OPTIONAL)
4. WIRE UDS APPLIANCE KILL SWITCH, IF EQUIPPED (OPTIONAL)
5. WIRE GAS VALVE

ELECTRICAL CONTRACTOR REQUIREMENT					
ITEM	CONNECTION IN PANEL	CONNECTION IN DEVICE	VOLTAGE	AMPERAGE	COMMENTS
SHUNT TRIP BREAKER (OPTIONAL)	ST & N1	BREAKER COIL (A1 & A2)	120 VAC	< 4 AMPS	ST TO A1 ON SHUNT BREAKER COIL, AND NEUTRAL TO A2 ON SHUNT TRIP BREAKER COIL
CONTROL PANEL POWER	H1 & N1 + GROUND	CIRCUIT BREAKER	120 VAC	15 AMPS	CONTROL PANEL POWER MUST NOT BE RUN THROUGH SHUNT TRIP BREAKER
UDS APPLIANCE KILL SWITCH (OPTIONAL)	KTS & N1	KTS & N1	120 VAC	< 4 AMPS	KILL SWITCH TERMINALS MUST BE IN SERIES WITH OTHER KILL SWITCHES
REMOTE 120VAC ANSUL AUTOMAN (OPTIONAL)	AU1, AU2	SOLENOID	120 VAC	< 6 AMPS	120V TO AU1, AU2 TO ANSUL ELECTRIC AUTOMAN, ANSUL SOLENOID TO NEUTRAL
GAS VALVE	LGV & N1D (IF 24 VDC) GAS & N1 (IF 120 VAC)	RED/RED/GREEN	24 VDC OR 120 VAC	< 1.0 AMPS	IF 24 VDC - 2 WIRES & GROUND, N1D TO RED, LGV TO RED, AND GREEN TO GROUND IF 120 VAC - 2 WIRES & GROUND GAS TO RED, N1 TO RED, AND GREEN TO GROUND


CONTROL PANEL POWER
-2 WIRES & GROUND
-120 VAC, 15 AMP SERVICE
-WIRE TO H1 AND N1, GROUND
-POWER MUST NOT ORIGINATE FROM SHUNT TRIP BREAKER
EXHAUST HOOD
SHUNT TRIP BREAKER (OPTIONAL)
-2 WIRES, 120VAC
-ST TO A1 ON SHUNT BREAKER
-NEUTRAL TO A2 ON SHUNT TRIP BREAKER
GAS VALVE POWER
-2 WIRES & GROUND
-24 VDC WIRE TO LGV & N1D
-120 VAC WIRE TO GAS & N1
36 INCHES CLEARANCE REQUIRED IN FRONT OF ALL UTILITY CABINET DOORS
THE PANEL SHALL ALSO BE LOCATED IN AN ACCESSIBLE AREA WHERE THE AUDIBLE AND VISUAL ALARMS CAN BE HEARD AND SEEN
POWER TO ELECTRIC APPLIANCE
GAS VALVE
-STRAINER MUST BE INSTALLED UPSTREAM OF VALVE
ELECTRIC
GAS
COOKING APPLIANCE(S)

NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

JOB NO 7156194
MODEL NUMBER DCV-1111
JOB NAME Payette SD CTE - Payette, ID ...
DRAWN BY
DATE 12/11/2024
SCHEMATIC TYPE INSTALL
DWG NO ECP #1-4
DESCRIPTION OF OPERATION: Fire System #1 TANK FS - 4.0/4.0.

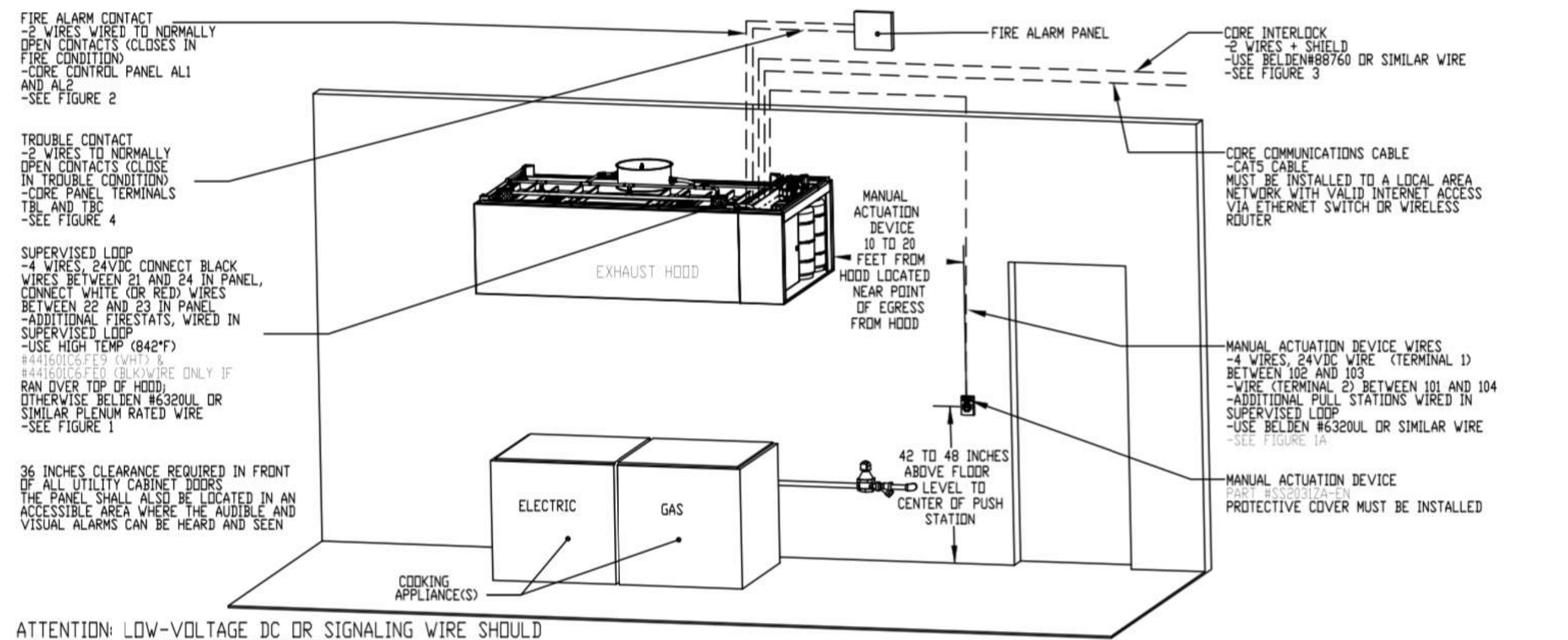
TANK PROTECTION LOW-VOLTAGE DETAIL

10/01/2023 Rev. 3

FS-1: MASTER

ALARM CONTRACTOR:
1. WIRE MANUAL ACTUATION DEVICE(S), REMOTE FIRESTAT(S), CORE INTERLOCK(S), FIRE SENSOR(S) AND FIRE ALARM CONTACTS
2. COMPLETE FINAL HOOKUP OF SYSTEM
3. VERIFY FINAL FIRE SYSTEM TEST

ALARM CONTRACTOR REQUIREMENT					
ITEM	CONNECTION IN PANEL	CONNECTION ON DEVICE	VOLTAGE	AMPERAGE	COMMENTS
MANUAL ACTUATION DEVICE(S)	101 AND 104 102 AND 103	1 & 2	24 VDC	< 1.0 AMPS	WIRE MANUAL ACTUATION DEVICE TERMINAL 1 BETWEEN CORE PANEL TERMINALS 102 AND 103 WIRE MANUAL ACTUATION DEVICE TERMINAL 2 BETWEEN CORE PANEL TERMINALS 101 AND 104 JUMPER 101 TO 104 AND 102 TO 103 IF NO MANUAL ACTUATION DEVICE IS INSTALLED
MANUAL ACTUATION DEVICE COVER	N/A	N/A	N/A	N/A	MANUAL ACTUATION DEVICE COVER MUST BE INSTALLED IF SURFACE MOUNTED, USE COVER EXTENSION STI-6531B
REMOTE FIRESTAT SENSOR(S)	21 AND 24 22 AND 23	BLACK AND WHITE	24 VDC	< 1.0 AMPS	WIRE FIRE SENSOR WHITE WIRES BETWEEN HOOD CORE PANEL TERMINALS 22 AND 23 WIRE FIRE SENSOR BLACK WIRE BETWEEN HOOD CORE PANEL TERMINALS 21 AND 24 HIGH TEMP (842°F) #441601C6.FE9 (WHT) & #441601C6.FE0 (BLK)WIRE OR SIMILAR ONLY IF RAN OF HOOD; OTHERWISE BELDEN #6320UL OR SIMILAR PLENUM RATED WIRE; SEE FIGURE 1
FIRE ALARM CONTACT	AL1, AL2	VARIES	50V MAX (AC/DC)	UP TO 1 AMP	FIRE ALARM RELAY CONTACTS FOR BUILDING FIRE ALARM LOCATED IN THE CORE ELECTRICAL CONTROL PANEL
CORE INTERLOCK(S)	CA, CB, CC	CA, CB, CC	RS-485 COMMUNICATIONS SIGNAL		CORE SYSTEM (1) CA, TO CORE SYSTEM (2) CA. CORE SYSTEM (1) CB, TO CORE SYSTEM (2) CB. CORE SYSTEM (1) CC, TO CORE SYSTEM (2) CC. USE BELDEN# 88760 OR SIMILAR WIRE
TROUBLE CONTACT	TBC, TBL, TOK	VARIES	MAX 120 VAC	UP TO 6 AMPS	WIRE TO TBL & TBC NORMALLY OPEN CONTACT, CLOSES IN TROUBLE CONDITION
CORE COMMUNICATIONS CABLE	RJ-45 Jack	INTERNET CONNECTION	SIGNAL	<1.0 AMPS	TYPICAL CONNECTION CAT5 CABLE TO LOCAL AREA NETWORK VIA ETHERNET SWITCH OR WIRELESS ROUTER WITH VALID INTERNET CONNECTION


FIRE ALARM CONTACT
-2 WIRES WIRED TO NORMALLY OPEN CONTACTS (CLOSES IN FIRE CONDITION)
-CORE CONTROL PANEL AL1 AND AL2
-SEE FIGURE 2
FIRE ALARM PANEL
CORE INTERLOCK
-2 WIRES + SHIELD
-USE BELDEN#88760 OR SIMILAR WIRE
-SEE FIGURE 3
TROUBLE CONTACT
-2 WIRES TO NORMALLY OPEN CONTACTS (CLOSE IN TROUBLE CONDITION)
-CORE PANEL TERMINALS TBL AND TBC
-SEE FIGURE 4
CORE COMMUNICATIONS CABLE
-CAT5 CABLE
MUST BE INSTALLED TO A LOCAL AREA NETWORK WITH VALID INTERNET ACCESS VIA ETHERNET SWITCH OR WIRELESS ROUTER
EXHAUST HOOD
MANUAL ACTUATION DEVICE 10 TO 20 FEET FROM HOOD LOCATED NEAR POINT OF EGRESS FROM HOOD
SUPERVISED LOOP
-4 WIRES, 24VDC CONNECT BLACK WIRES BETWEEN 21 AND 24 IN PANEL, CONNECT WHITE (OR RED) WIRES BETWEEN 22 AND 23 IN PANEL
-ADDITIONAL FIRESTATS, WIRED IN SUPERVISED LOOP
-USE HIGH TEMP (842°F) #441601C6.FE9 (WHT) & #441601C6.FE0 (BLK)WIRE ONLY IF RAN OVER TOP OF HOOD; OTHERWISE BELDEN #6320UL OR SIMILAR PLENUM RATED WIRE
-SEE FIGURE 1
MANUAL ACTUATION DEVICE WIRES
-4 WIRES, 24VDC WIRE (TERMINAL 1) BETWEEN 102 AND 103
-WIRE (TERMINAL 2) BETWEEN 101 AND 104
-ADDITIONAL PULL STATIONS WIRED IN SUPERVISED LOOP
-USE BELDEN #6320UL OR SIMILAR WIRE
-SEE FIGURE 1A
36 INCHES CLEARANCE REQUIRED IN FRONT OF ALL UTILITY CABINET DOORS
THE PANEL SHALL ALSO BE LOCATED IN AN ACCESSIBLE AREA WHERE THE AUDIBLE AND VISUAL ALARMS CAN BE HEARD AND SEEN
42 TO 48 INCHES ABOVE FLOOR LEVEL TO CENTER OF PUSH STATION
MANUAL ACTUATION DEVICE
PART #SS2031ZA-EN
PROTECTIVE COVER MUST BE INSTALLED
ELECTRIC
GAS
COOKING APPLIANCE(S)

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES

NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

REVISIONS

	DESCRIPTION	DATE:
△		
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△		
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www.captiveaire.com

Utah Office
2698 S. Redwood Rd., Suite S, West Valley, UT, 84119 PHONE: (801) 878 - 3677 FAX: 9192275953 EMAIL: reg87@captiveaire.com

Payette SD CTE - Payette, ID R1
PAYETTE, ID, 83661

DATE: 12/11/2024
DWG.#: 7156194
DRAWN BY: EH
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 9

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

Nielson Engineering, Inc.
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
KITCHEN HOOD DRAWINGS

SHEET NO.
M5.08

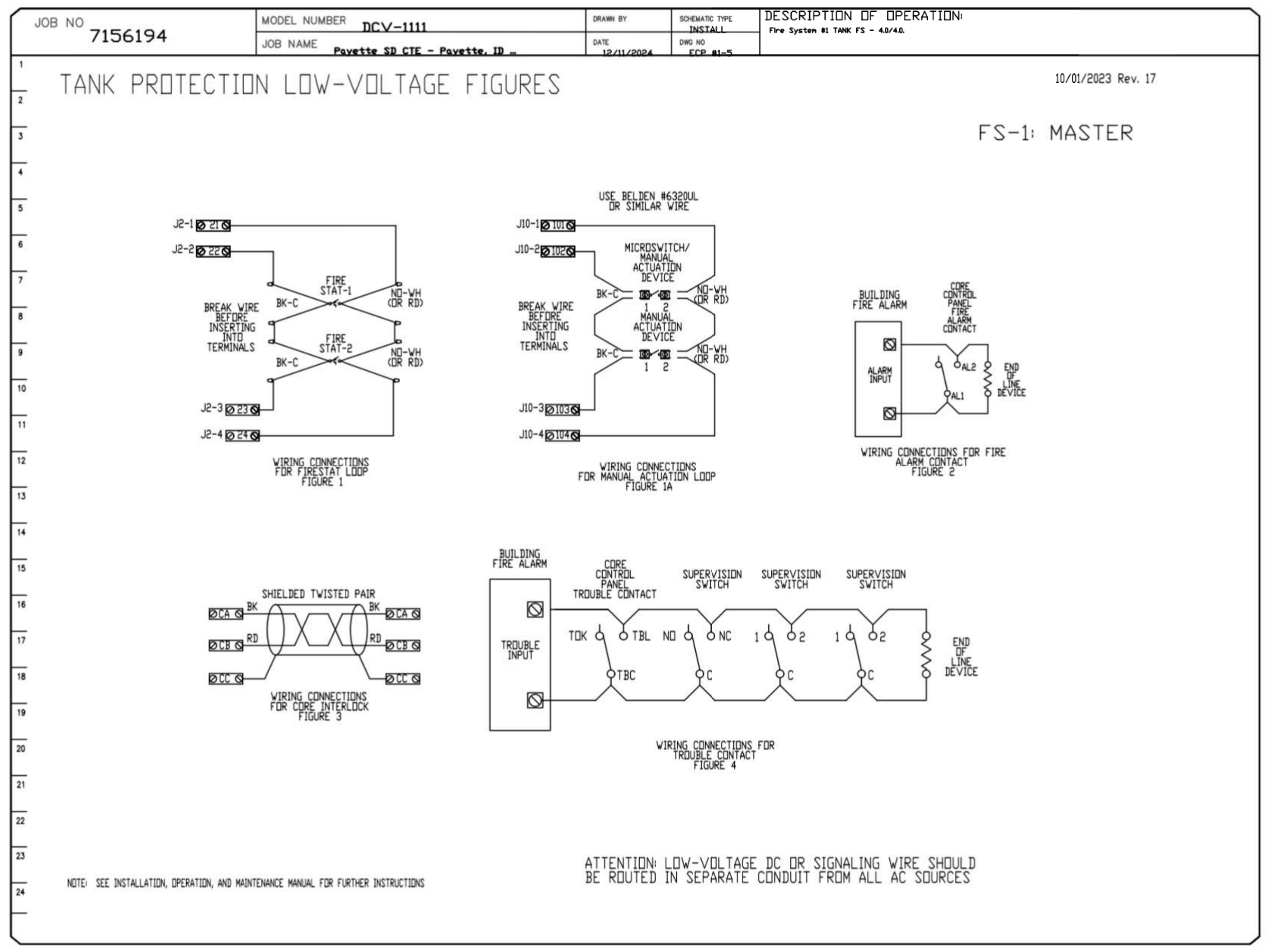
1/10/2025 11:12:25 AM

JOB NO	MODEL NUMBER	DRAWN BY	SCHEMATIC TYPE	DESCRIPTION OF OPERATION:
7156194	DCV-1111		INSTALL	Fire System #1 TANK FS - 4.0/4.0.
	JOB NAME: Payette SD CTE - Payette, ID ...	DATE: 12/11/2024	DWG NO: ECP #1-5	

TANK PROTECTION LOW-VOLTAGE FIGURES

10/01/2023 Rev. 17

FS-1: MASTER



WIRING CONNECTIONS FOR FIRESTAT LOOP FIGURE 1

WIRING CONNECTIONS FOR MANUAL ACTUATION LOOP FIGURE 1A

WIRING CONNECTIONS FOR FIRE ALARM CONTACT FIGURE 2

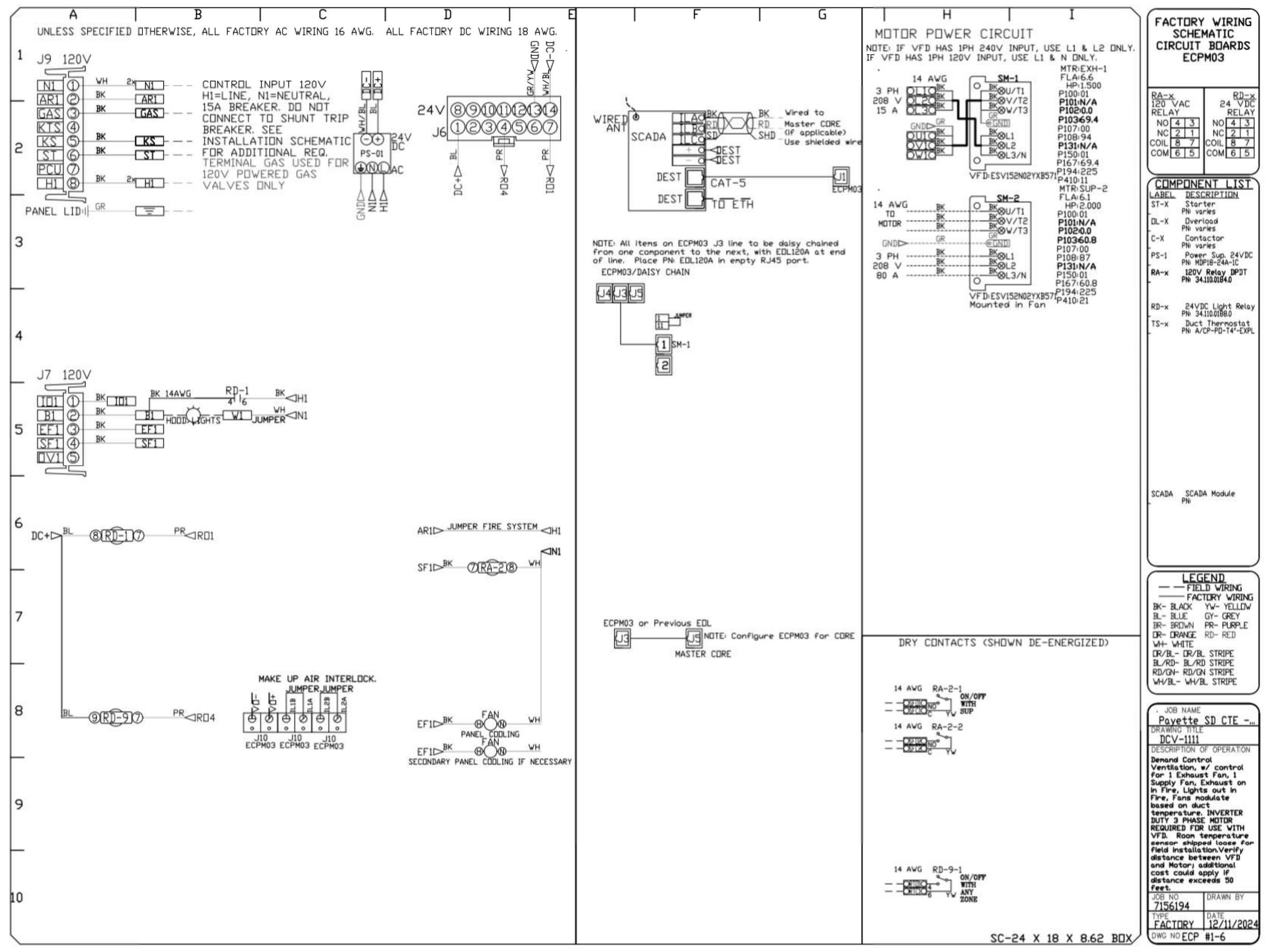
WIRING CONNECTIONS FOR CORE INTERLOCK FIGURE 3

WIRING CONNECTIONS FOR TROUBLE CONTACT FIGURE 4

NOTE: SEE INSTALLATION, OPERATION, AND MAINTENANCE MANUAL FOR FURTHER INSTRUCTIONS

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES

UNLESS SPECIFIED OTHERWISE, ALL FACTORY AC WIRING 16 AWG. ALL FACTORY DC WIRING 18 AWG.



CONTROL INPUT 120V H1=LINE, N1=NEUTRAL, 15A BREAKER. DO NOT CONNECT TO SHUNT TRIP BREAKER. SEE INSTALLATION SCHEMATIC FOR ADDITIONAL REQ.

TERMINAL GAS USED FOR 120V POWERED GAS VALVES ONLY

BK / RD / SHD Wired to Master CORE (if applicable) Use shielded wire

NOTE: All items on ECPM03 J3 line to be daisy chained from one component to the next, with EOL120A at end of line. Place PN: EOL120A in empty RJ45 port.

NOTE: Configure ECPM03 for CORE

MOTOR POWER CIRCUIT

NOTE: IF VFD HAS 1PH 240V INPUT, USE L1 & L2 ONLY. IF VFD HAS 1PH 120V INPUT, USE L1 & N ONLY.

MTR: EXH-1
FLA: 6.6
HP: 1.500
P100: 01
P101: N/A
P102: 0.0
P103: 69.4
P107: 00
P108: 94
P131: N/A
P150: 01
P167: 69.4
P194: 225
P410: 11

MTR: SUP-2
FLA: 6.1
HP: 2.000
P100: 01
P101: N/A
P102: 0.0
P103: 60.8
P107: 00
P108: 87
P131: N/A
P150: 01
P167: 60.8
P194: 225
P410: 21

DRY CONTACTS (SHOWN DE-ENERGIZED)

SC-24 X 18 X 8.62 BOX

FACTORY WIRING SCHEMATIC CIRCUIT BOARDS ECPM03

RA-x 120 VAC RELAY			RD-x 24 VDC RELAY		
NO	4	3	NO	4	3
NC	2	1	NC	2	1
COIL	8	7	COIL	8	7
COM	6	5	COM	6	5

COMPONENT LIST

LABEL	DESCRIPTION
ST-X	Starter PN: varies
OL-X	Overload PN: varies
C-X	Contactor PN: varies
PS-1	Power Sup. 24VDC PN: MDP18-24A-1C
RA-x	120V Relay DPDT PN: 34.110.0184.0
RD-x	24VDC Light Relay PN: 34.110.0188.0
TS-x	Duct Thermostat PN: A/CP-PD-T4'-EXPL
SCADA	SCADA Module PN:

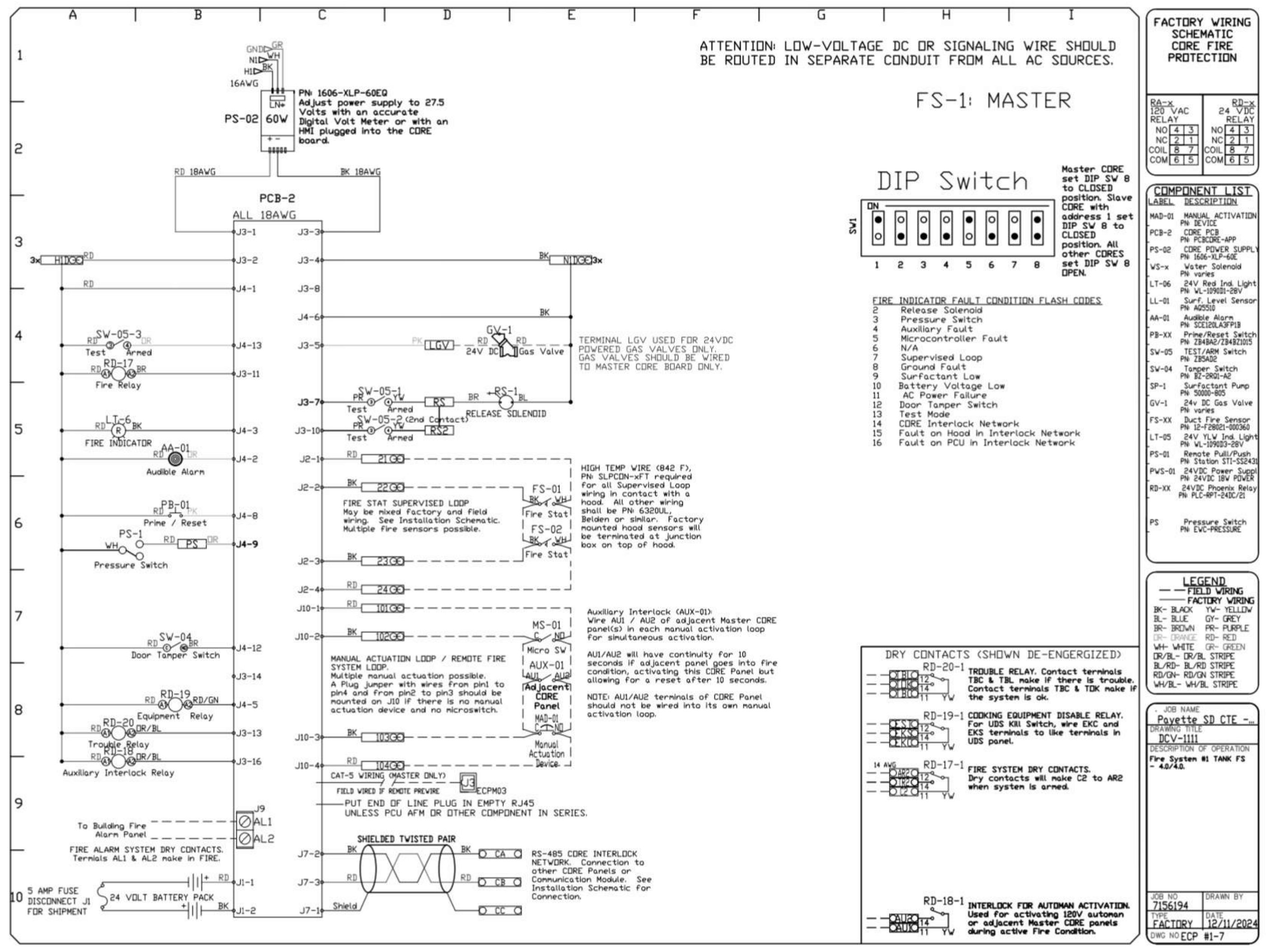
LEGEND
— — FIELD WIRING
——— FACTORY WIRING

BK- BLACK	YW- YELLOW
BL- BLUE	GY- GREY
BR- BROWN	PR- PURPLE
OR- ORANGE	RD- RED
WH- WHITE	
OR/BL- OR/BL STRIPE	
BL/RD- BL/RD STRIPE	
RD/GN- RD/GN STRIPE	
WH/BL- WH/BL STRIPE	

JOB NAME: Payette SD CTE -...
DRAWING TITLE: DCV-1111
DESCRIPTION OF OPERATION: Demand Control Ventilation, w/ control for 1 Exhaust Fan, 1 Supply Fan, Exhaust on in Fire, Lights out in Fire, Fans modulate based on duct temperature. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD. Room temperature sensor shipped loose for field installation. Verify distance between VFD and Motor; additional cost could apply if distance exceeds 50 feet.
JOB NO: 7156194
DRAWN BY:
TYPE: FACTORY
DATE: 12/11/2024
DWG NO: ECP #1-6

ATTENTION: LOW-VOLTAGE DC OR SIGNALING WIRE SHOULD BE ROUTED IN SEPARATE CONDUIT FROM ALL AC SOURCES.

FS-1: MASTER



PN: 1606-XLP-60EQ
Adjust power supply to 27.5 Volts with an accurate Digital Volt Meter or with an HMI plugged into the CORE board.

TERMINAL LGV USED FOR 24VDC POWERED GAS VALVES ONLY. GAS VALVES SHOULD BE WIRED TO MASTER CORE BOARD ONLY.

FIRE STAT SUPERVISED LOOP
May be mixed factory and field wiring. See Installation Schematic. Multiple fire sensors possible.

HIGH TEMP WIRE (842 F), PN: SLPCON-xFT required for all Supervised Loop wiring in contact with a hood. All other wiring shall be PN: 6320UL, Belden or similar. Factory mounted hood sensors will be terminated at junction box on top of hood.

MANUAL ACTUATION LOOP / REMOTE FIRE SYSTEM LOOP.
Multiple manual actuation possible.
A Plug jumper with wires from pin1 to pin4 and from pin2 to pin3 should be mounted on J10 if there is no manual actuation device and no microswitch.

Auxiliary Interlock (AUX-01):
Wire AU1 / AU2 of adjacent Master CORE panel(s) in each manual activation loop for simultaneous activation.

AU1/AU2 will have continuity for 10 seconds if adjacent panel goes into fire condition, activating this CORE Panel but allowing for a reset after 10 seconds.

NOTE: AU1/AU2 terminals of CORE Panel should not be wired into its own manual activation loop.

PUT END OF LINE PLUG IN EMPTY RJ45 UNLESS PCU AFM OR OTHER COMPONENT IN SERIES.

To Building Fire Alarm Panel

FIRE ALARM SYSTEM DRY CONTACTS. Termials AL1 & AL2 make in FIRE.

RS-485 CORE INTERLOCK NETWORK. Connection to other CORE Panels or Communication Module. See Installation Schematic for Connection.

5 AMP FUSE DISCONNECT J1 FOR SHIPMENT

DIP Switch

Master CORE set DIP SW 8 to CLOSED position. Slave CORE with address 1 set DIP SW 8 to CLOSED position. All other CORES set DIP SW 8 OPEN.

FIRE INDICATOR FAULT CONDITION FLASH CODES

2	Release Solenoid
3	Pressure Switch
4	Auxiliary Fault
5	Microcontroller Fault
6	N/A
7	Supervised Loop
8	Ground Fault
9	Surfactant Low
10	Battery Voltage Low
11	AC Power Failure
12	Door Tamper Switch
13	Test Mode
14	CORE Interlock Network
15	Fault on Hood in Interlock Network
16	Fault on PCU in Interlock Network

DRY CONTACTS (SHOWN DE-ENGERGIZED)

RD-20-1 TROUBLE RELAY. Contact terminals TBC & TBL make if there is trouble. Contact terminals TBC & TDK make if the system is ok.

RD-19-1 COOKING EQUIPMENT DISABLE RELAY. For UDS Kill Switch, wire EKC and EKS terminals to like terminals in UDS panel.

RD-17-1 FIRE SYSTEM DRY CONTACTS. Dry contacts will make C2 to AR2 when system is armed.

RD-18-1 INTERLOCK FOR AUTOMAN ACTIVATION. Used for activating 120V automan or adjacent Master CORE panels during active Fire Condition.

FACTORY WIRING SCHEMATIC CORE FIRE PROTECTION

RA-x 120 VAC RELAY			RD-x 24 VDC RELAY		
NO	4	3	NO	4	3
NC	2	1	NC	2	1
COIL	8	7	COIL	8	7
COM	6	5	COM	6	5

COMPONENT LIST

LABEL	DESCRIPTION
MAD-01	MANUAL ACTIVATION PN: DEVICE
PCB-2	CORE PCB PN: PCBCORE-APP
PS-02	CORE POWER SUPPLY PN: 1606-XLP-60E
WS-x	Water Solenoid PN: varies
LT-06	24V Red Ind. Light PN: WL-1090D1-28V
LL-01	Surf. Level Sensor PN: AQ5510
AA-01	Audible Alarm PN: SCE120LA3FP1B
PB-XX	Prime/Reset Switch PN: ZB4BA2/ZB4BZ1015
SW-05	TEST/ARM Switch PN: ZB5AD2
SW-04	Tamper Switch PN: BZ-2RQ1-A2
SP-1	Surfactant Pump PN: 50000-805
GV-1	24v DC Gas Valve PN: varies
FS-XX	Duct Fire Sensor PN: 12-F28021-000360
LT-05	24V YLW Ind. Light PN: WL-1090D3-28V
PS-01	Remote Pulll/Push PN: Station STI-SS2431
PWS-01	24VDC Power Suppl PN: 24VDC 18W POWER
RD-XX	24VDC Phoenix Relay PN: PLC-RPT-24DC/21
PS	Pressure Switch PN: EWC-PRESSURE

LEGEND
— — FIELD WIRING
——— FACTORY WIRING

BK- BLACK	YW- YELLOW
BL- BLUE	GY- GREY
BR- BROWN	PR- PURPLE
OR- ORANGE	RD- RED
WH- WHITE	GR- GREEN
OR/BL- OR/BL STRIPE	
BL/RD- BL/RD STRIPE	
RD/GN- RD/GN STRIPE	
WH/BL- WH/BL STRIPE	

JOB NAME: Payette SD CTE -...
DRAWING TITLE: DCV-1111
DESCRIPTION OF OPERATION: Fire System #1 TANK FS - 4.0/4.0.
JOB NO: 7156194
DRAWN BY:
TYPE: FACTORY
DATE: 12/11/2024
DWG NO: ECP #1-7

REVISIONS	
DESCRIPTION	DATE:
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△	
△	
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Utah Office
2698 S. Redwood Rd., Suite S, West Valley, UT, 84119 PHONE: (801) 878 - 3677 FAX: 9192275953 EMAIL: reg87@captiveaire.com
www.captiveaire.com

Payette SD CTE - Payette, ID R1
PAYETTE, ID, 83661

DATE: 12/11/2024

DWG.#: 7156194

DRAWN BY: EH

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 10

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Nielson Engineering, Inc.
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE 1-9-25

REF NO. 2444

AUTHOR Author

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

KITCHEN HOOD DRAWINGS

SHEET NO.
M5.09

DEMAND CONTROL VENTILATION HOOD CONTROL PANEL SPECIFICATIONS:

- CONTROLS SHALL BE LISTED BY ETL (UL 508A) AND SHALL COMPLY WITH DEMAND VENTILATION SYSTEM TURNDOWN REQUIREMENTS OUTLINED IN IECC 403.7.5 (2021).

- THE CONTROL ENCLOSURE SHALL BE NEMA 1 RATED AND LISTED FOR INSTALLATION INSIDE OF THE EXHAUST HOOD UTILITY CABINET. THE CONTROL ENCLOSURE MAY BE CONSTRUCTED OF STAINLESS STEEL OR PAINTED STEEL.

- TEMPERATURE PROBE(S) LOCATED IN THE EXHAUST DUCT RISER(S) SHALL BE CONSTRUCTED OF STAINLESS STEEL.

- A DIGITAL CONTROLLER SHALL BE PROVIDED TO ACTIVATE THE HOOD EXHAUST FANS DYNAMICALLY BASED ON A FIXED DIFFERENTIAL BETWEEN THE AMBIENT AND DUCT TEMPERATURES SENSORS. THIS FUNCTION SHALL MEET THE REQUIREMENTS OF IMC 507.1.1.

- A DIGITAL CONTROLLER SHALL PROVIDE ADJUSTABLE HYSTERESIS SETTINGS TO PREVENT CYCLING OF THE FANS AFTER THE COOKING APPLIANCES HAVE BEEN TURNED OFF AND/OR THE HEAT IN THE EXHAUST SYSTEM IS REDUCED.

- A DIGITAL CONTROLLER SHALL PROVIDE AN ADJUSTABLE MINIMUM FAN RUN-TIME SETTING TO PREVENT FAN CYCLING.

- VARIABLE FREQUENCY DRIVES (VFDS) SHALL BE PROVIDED FOR FANS AS REQUIRED. THE DIGITAL CONTROLLER SHALL MODULATE THE VFDS BETWEEN A MINIMUM SETPOINT AND A MAXIMUM SETPOINT ON DEMAND. THE DUCT TEMPERATURE SENSOR INPUT(S) TO THE DIGITAL CONTROLLER SHALL BE USED TO CALCULATE THE SPEED REFERENCE SIGNAL.

- THE VFD SPEED RANGE OF OPERATION SHALL BE FROM 0% TO 100% FOR THE SYSTEM, WITH THE ACTUAL MINIMUM SPEED SET AS REQUIRED TO MEET MINIMUM VENTILATION REQUIREMENTS.

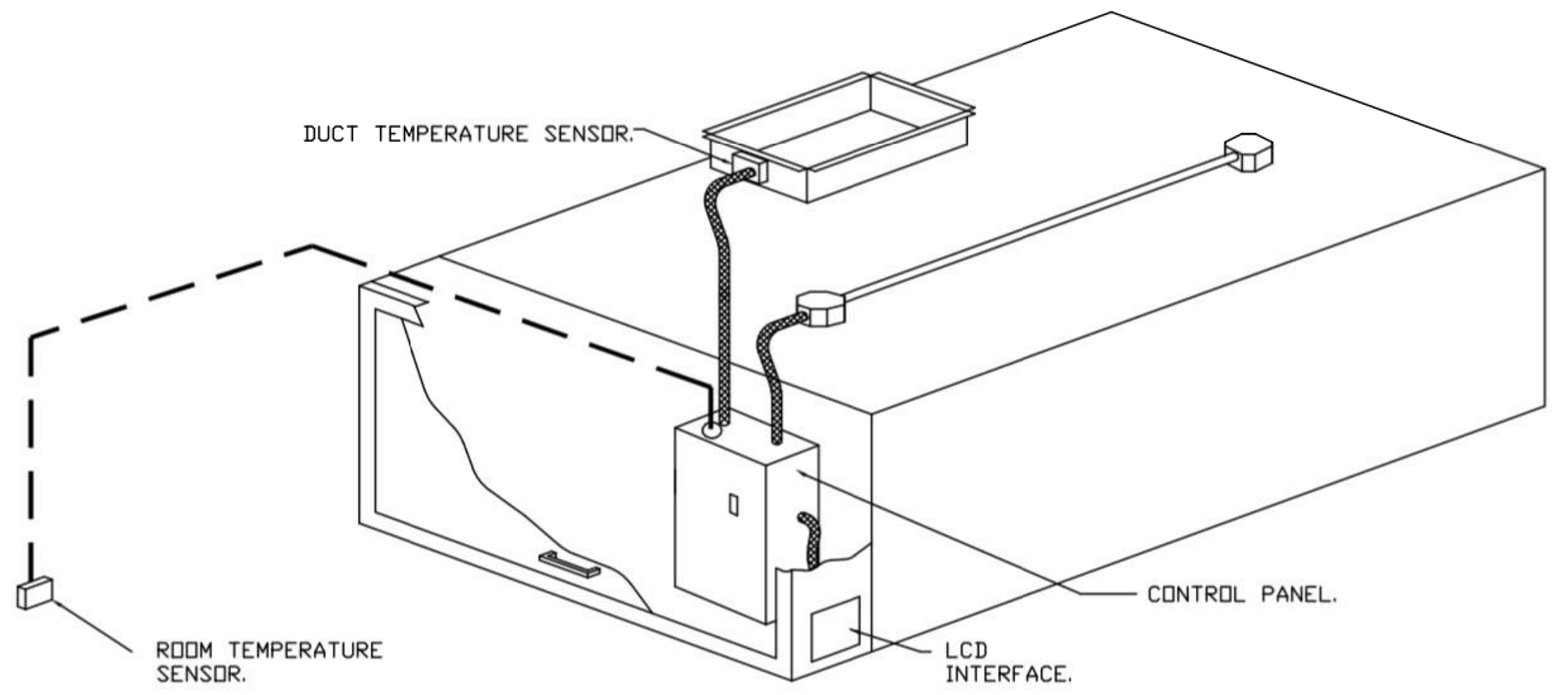
- AN INTERNAL ALGORITHM TO THE DIGITAL CONTROLLER SHALL MODULATE SUPPLY FAN VFD SPEED PROPORTIONAL TO ALL EXHAUST FANS THAT ARE LOCATED IN THE SAME FAN GROUP AS THE SUPPLY FAN.

- THE SYSTEM SHALL OPERATE IN PREP MODE DURING LIGHT COOKING LOAD OR COOL DOWN MODE WHEN SUFFICIENT HEAT REMAINS UNDERNEATH THE HOOD SYSTEM AFTER COOKING OPERATIONS HAVE COMPLETED. OPERATION DURING EITHER OF THESE PERIODS WILL DISABLE THE SUPPLY FANS AND PROVIDE AN EXHAUST FAN SPEED THAT IS EQUAL TO THE MINIMUM VENTILATION REQUIREMENT.

- A DIGITAL CONTROLLER SHALL DISABLE THE SUPPLY FAN(S), ACTIVATE THE EXHAUST FAN(S), ACTIVATE THE APPLIANCE SHUNT TRIP, AND DISABLE AN ELECTRIC GAS VALVE AUTOMATICALLY WHEN FIRE CONDITION IS DETECTED ON A COVERED HOOD.

- A DIGITAL CONTROLLER SHALL ALLOW FOR EXTERNAL BMS FAN CONTROL VIA DRY CONTACT (EXTERNAL CONTROL SHALL NOT OVERRIDE FAN OPERATION LOGIC AS REQUIRED BY CODE).

- AN LCD INTERFACE SHALL BE PROVIDED WITH THE FOLLOWING FEATURES:
  A. ON/OFF PUSH BUTTON FAN & LIGHT SWITCH ACTIVATION.
  B. INTEGRATED GAS VALVE RESET FOR ELECTRONIC GAS VALVES (NO RESET RELAY REQUIRED).
  C. VFD FAULT DISPLAY WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
  D. DUCT TEMPERATURE SENSOR FAILURE DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
  E. MIS-WIRED DUCT TEMPERATURE SENSOR DETECTION WITH AUDIBLE & VISUAL ALARM NOTIFICATION.
  F. A SINGLE LOW VOLTAGE CAT-5 RJ45 WIRING CONNECTION.
  G. AN ENERGY SAVINGS INDICATOR THAT UTILIZES MEASURED KWH FROM THE VFDS.



TYPICAL HOOD CONTROL PANEL INSTALLATION

SEQUENCE OF OPERATIONS:

THE HOOD CONTROL PANEL IS CAPABLE OF OPERATING IN ONE OR MORE OF THE FOLLOWING STATES AT ANY GIVEN TIME:

- AUTOMATIC: THE SYSTEM OPERATES BASED ON THE DIFFERENTIAL BETWEEN ROOM TEMPERATURE AND THE TEMPERATURE AT THE HOOD CAVITY OR EXHAUST DUCT COLLAR. FANS ACTIVATE AT A CONFIGURABLE TEMPERATURE DIFFERENTIAL THRESHOLD. DEPENDING ON THE JOB CONFIGURATION EACH FAN ZONE CAN BE CONFIGURED AS STATIC OR DYNAMIC. THESE TERMS REFER TO WHETHER A VARIABLE MOTOR (SUCH AS EC MOTORS OR VFD DRIVEN MOTORS) MODULATE WITH TEMPERATURE. IF THE PANEL IS EQUIPPED WITH VARIABLE SPEED FANS AND THE ZONE IS DEFINED AS "DYNAMIC", THESE WILL MODULATE WITHIN A USER-DEFINED RANGE BASED ON THE TEMPERATURE DIFFERENTIAL. PANELS EQUIPPED WITH VARIABLE SPEED FANS AND A FAN ZONE DEFINED AS "STATIC", FANS WILL RUN AT A SET SPEED CALCULATED FOR THE DRIVE. DEMAND CONTROL VENTILATION SYSTEMS ARE CAPABLE OF MODULATING EXHAUST AND MAKE UP AIR FAN SPEEDS PER THE REQUIREMENTS OUTLINED IN IECC 403.7.5 (2021).

- MANUAL: THE SYSTEM OPERATES BASED ON HUMAN INPUT FROM AN HMI.

- SCHEDULE: A WEEKLY SCHEDULE CAN BE SET TO RUN FANS FOR A SPECIFIED PERIOD THROUGHOUT THE DAY. THERE ARE THREE OCCUPIED TIMES PER DAY TO ALLOW FOR THE USER TO SET UP A TIME THAT IS SUITABLE TO THEIR NEEDS. ANY TIME THAT IS WITHIN THE DEFINED OCCUPIED TIME, THE SYSTEM WILL RUN AT MODULATION MODE AND FOLLOW THE FAN PROCEDURE ALGORITHM BASED ON TEMPERATURE DURING THIS TIME. DURING UNOCCUPIED TIME, THE SYSTEM WILL HAVE AN EXTRA OFFSET TO PREVENT UNINTENDED ACTIVATION OF THE SYSTEM DURING A TIME WHERE THE SYSTEM IS NOT BEING OCCUPIED.

- OTHER: THE SYSTEM OPERATES BASED ON THE INPUT FROM AN EXTERNAL SOURCE (DDC, BMS OR HARD-WIRED INTERLOCK).

- FIRE: UPON ACTIVATION OF THE HOOD FIRE SUPPRESSION SYSTEM, THE EXHAUST FAN WILL COME ON OR CONTINUE TO TO RUN, THE HOOD MAKEUP AIR WILL SHUTDOWN, AND A SIGNAL WILL BE SENT FOR ACTIVATING THE SHUNT TRIP BREAKER PROVIDED BY THE ELECTRICIAN. FUEL GAS WILL SHUT OFF VIA A MECHANICAL/ELECTRICAL GAS VALVE ACTUATED BY THE HOOD FIRE SUPPRESSION SYSTEM.

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Utah Office
2698 S. Redwood Rd., Suite S, West Valley, UT, 84119 PHONE: (801) 878 - 3677 FAX: 9192275953 EMAIL: reg87@captiveaire.com

Payette SD CTE - Payette, ID R1
PAYETTE, ID, 83661

DATE: 12/11/2024

DWG.#: 7156194

DRAWN BY: EH

SCALE: 3/4" = 1'-0"

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SHEET NO. 11

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Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
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ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE 1-9-25

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AUTHOR Author

PROJECT
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KITCHEN HOOD DRAWINGS

SHEET NO.
M5.10

DUCTWORK #1 PARTS – JOB#7156194 DOUBLE WALL

TAG	PART #	CFM	GPM	ZONE	COVEREDBY	SP	WEIGHT	VELOCITY	QTY	DESCRIPTION
H1-E1	DW20DWRISER-2R-S	2475				-0.8715	8.36	0.00	1	DOUBLE WALL RISER COVER - USED ON 16″ INNER RISER, 4″ LONG - 2 LAYERS REDUCED CLEARANCE - 20″ STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
P1	DW1645DWASY-2R-S	2475				-0.0508	22.06	1772.59	1	DOUBLE WALL DUCT - 16″ INNER 45 DUCT - 2 LAYERS REDUCED CLEARANCE - 20″ STAINLESS STEEL OUTER SHELL.
P2	DW1645DWASY-2R-S	2475				-0.0725	22.06	1772.59	1	DOUBLE WALL DUCT - 16″ INNER 45 DUCT - 2 LAYERS REDUCED CLEARANCE - 20″ STAINLESS STEEL OUTER SHELL.
P3 ASSEMBLED W/P4	DW16DWTEASY-2R-S	2475		1		-0.011	49.32	1772.59	1	DOUBLE WALL DUCT - 16″ INNER TEE DUCT - 2 LAYERS REDUCED CLEARANCE - 20″ STAINLESS STEEL OUTER SHELL.
P4 ASSEMBLED W/P3 O=T	DW16DWACCDOORCOV-2R-S						21.48		1	DOUBLE WALL DUCT - 16″ INNER ACCESS DOOR & 20″ ACCESS DOOR COVER WITH CLAMPS - 2 LAYERS REDUCED CLEARANCE - 20″ STAINLESS STEEL OUTER SHELL.
P5	DW1647DWAJD-2R-S	2475				-0.017	103.34	1772.59	1	DOUBLE WALL ADJUSTABLE DUCT - 16″ INNER DUCT - 2 LAYERS REDUCED CLEARANCE - 20″ STAINLESS STEEL OUTER SHELL. MIN LENGTH = 11″ / MAX LENGTH = 48.5″ / ADJUSTMENT = 30.5″ / ADJUSTABLE SECTION MAY NEED TO BE CUT. INCLUDES SINGLE AND DOUBLE WALL "V" CLAMPS.
P6 ASSEMBLED W/P7	DW1635DWLTTP-2R-S	2475				-0.014	53.98	1772.59	1	DOUBLE WALL DUCT - 16″ INNER DUCT, 35″ LONG - 2 LAYERS REDUCED CLEARANCE - 20″ STAINLESS STEEL OUTER SHELL - USED WITH TRANSITION PLATE.
P7 ASSEMBLED W/P6 O=T	DW2616TPDBEX	2475					9.00	1772.59	1	DUCT TO CURB TRANSITION 3/4″ DOWN TURN, 26 1/2″ CURB TO 16″ DUCT, 16 GA ALUMINIZED. USED ON NCA16FA / NCA16HPFA & NCA18FA / NCA18HPFA. TRANSITION PLATE OD IS 27.00″ DESIGNED FOR USE WITH EXHAUST FAN.
SYSTEM AT P7						-1.0368	0.00			
RC1	DW20DWRISER-2R-S						8.36		1	DOUBLE WALL RISER COVER - USED ON 16″ INNER RISER, 4″ LONG - 2 LAYERS REDUCED CLEARANCE - 20″ STAINLESS STEEL OUTER RISER SHELL ASSEMBLY. INCLUDES INSULATION & SINGLE V CLAMPS FOR INNER & OUTER CONNECTIONS.
	3M-2000PLUS						0.80		2	DUCT - 3M FIRE BARRIER 2000 PLUS SILICONE - USED AS SEALANT TO SEAL DUCT JOINTS.
	DW16DWCLASY-2R-S						7.96		2	DUCT - 16″ DUCT - 20″ DOUBLE "V" CLAMP - 2R INSULATION & SINGLE "V" CLAMP INCLUDED - REDUCED CLEARANCE.
TOTAL WEIGHT							315.48			

DOUBLE WALL FACTORY BUILT DUCTWORK

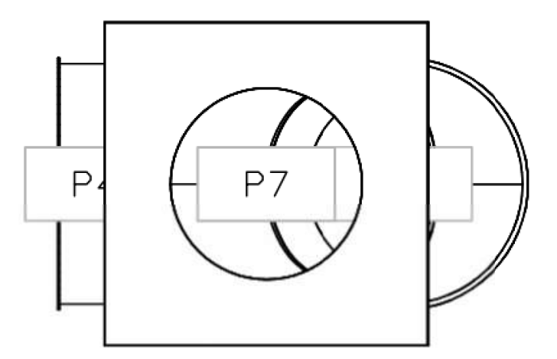
- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE ENTIRE INSTALLATION AND OPERATION MANUAL
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16″ PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16″ PER LINEAR FOOT.

HORIZONTAL	
DUCT DIAMETER	SUPPORT SPACING (FT)
5″	7′
6″	7′
7″	7′
8″	7′
10″	7′
12″	7′
14″	7′
16″	7′
18″	5′
20″	5′
22″	5′
24″	5′
26″	5′
28″	5′
30″	5′
32″	5′
34″	5′
36″	5′

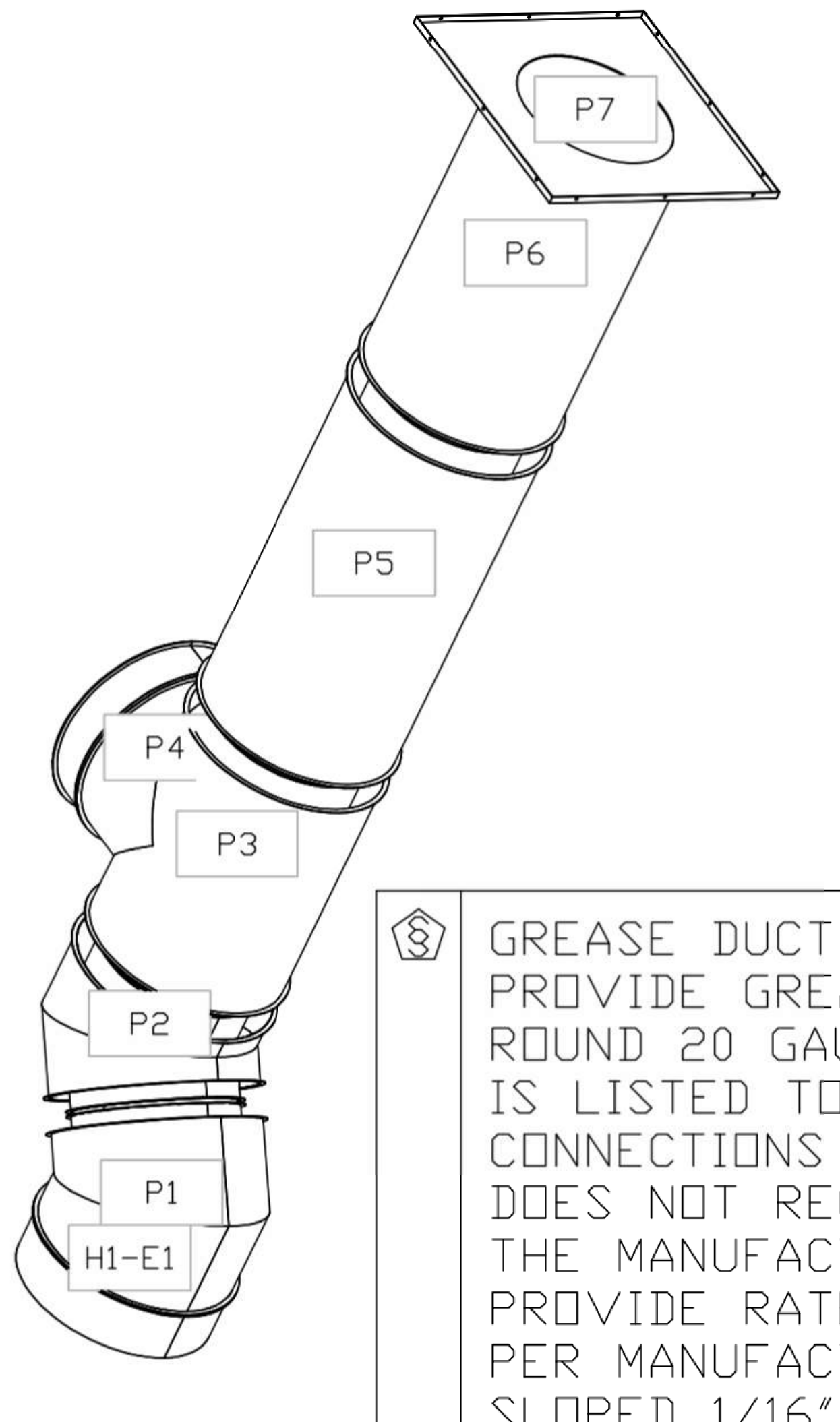
VERTICAL			
TYPE	WALL SUPPORT (FT)	CURB SUPPORT (FT)	FLOOR SUPPORT (FT)
2R & 2R HT (5″-16″)	20′	24′	24′
2R (18″)	18′	24′	24′
3R & 3Z (5″-24″)	10′	24′	24′
3Z (26″ -36″)	10′	20′	20′

DO NOT LEAK TEST USING SMOKE BOMBS CONTAINING CHLORINES/CHLORIDES. CONSULT WITH CAPTIVEAIRE FOR PROPER LEAK TESTING METHODS.

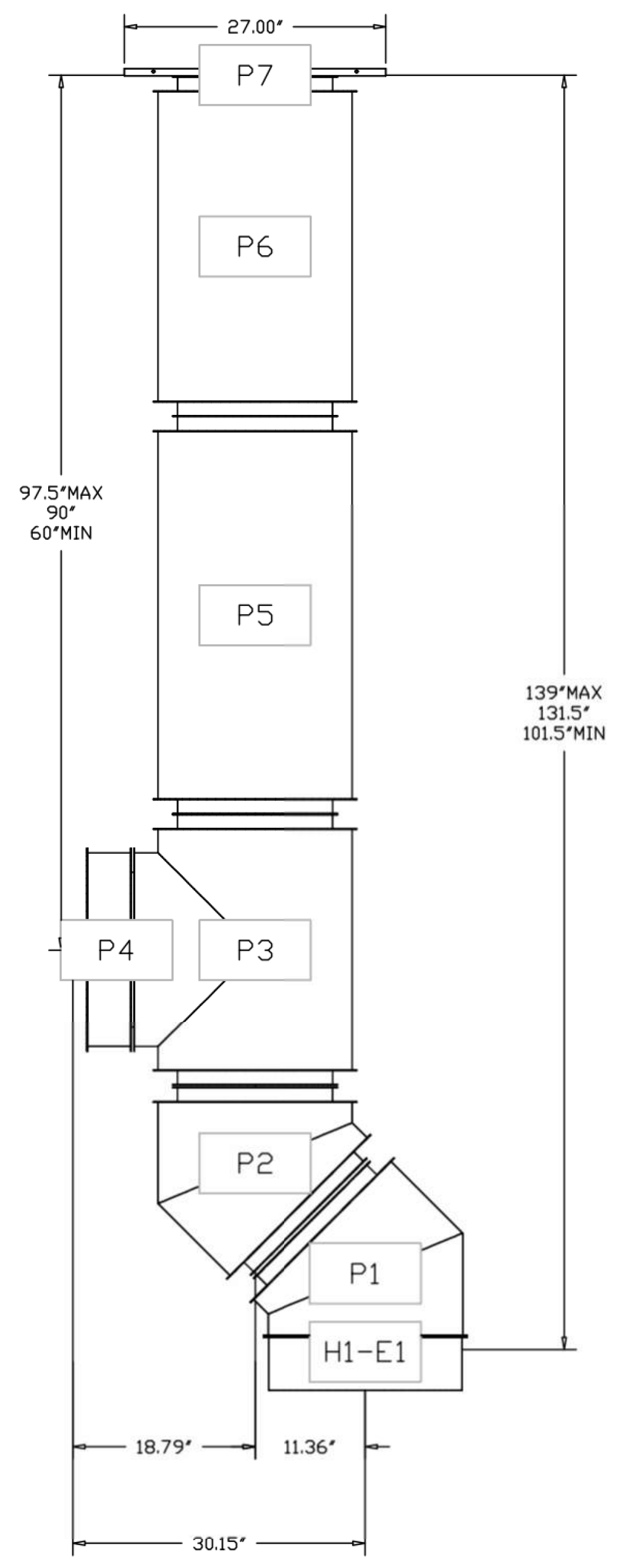
DUCTWORK #1 TOP VIEW



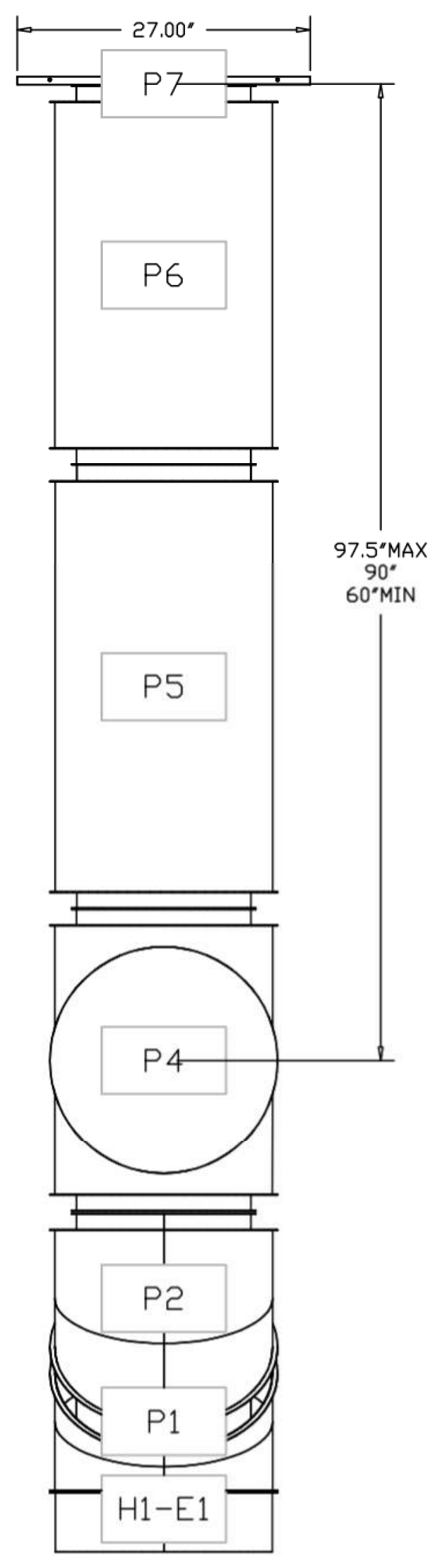
DUCTWORK #1 SE VIEW



DUCTWORK #1 FRONT VIEW



DUCTWORK #1 SIDE VIEW



8

GREASE DUCT & CHIMNEY SPECIFICATIONS:
PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURES INSTALLATION GUIDE.
PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12′ ON CENTER.
PER MANUFACTURES LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16″ PER 12″, HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16″ PER 12″. DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.

IF THE DUCT OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

CUSTOMER APPROVAL TO MANUFACTURE:

APPROVED AS NOTED ☐
APPROVED WITH NO EXCEPTION TAKEN ☐
REVISE AND RESUBMIT ☐
SIGNATURE ____________________
YOUR TITLE ____________ DATE ____________ ________

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www.captiveaire.com
Utah Office
2698 S. Redwood Rd., Suite S, West Valley, UT, 84119 PHONE: (801) 878 - 3677 FAX: 9192275953 EMAIL: reg87@captiveaire.com

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Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
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KITCHEN HOOD DRAWINGS

SHEET NO.
M5.11

1/10/2025 11:12:31 AM

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Mechanical Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	PSD CTE Payette, ID
Location:	Payette, Idaho
Climate Zone:	5b
Project Type:	Alteration

Construction Site:
915 S. Main Street
Payette, Idaho 83661

Owner/Agent:

Designer/Contractor:
Nielson Engineering Inc.
156 N. 12th Avenue
Pocatello, Idaho 83201
2082322477
nei@nielsoneng.com

Mechanical Systems List

Quantity System Type & Description

3 RT 1, 5, &6 (Single Zone):
Heating: 3 each - Central Furnace, Gas, Capacity = 60 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 3 each - Single Package DX Unit, Capacity = 23 kBtu/h, Air-Cooled Condenser, Unknown Economizer
Proposed Efficiency = 14.00 SEER, Required Efficiency = 14.00 SEER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00
Fan System: RT 1,5,&6 | Classroom -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 1 Supply, Single-Zone VAV, 785 CFM, 0.3 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

1 RT 2 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 137 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 56 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 14.00 SEER, Required Efficiency = 14.00 SEER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00
Fan System: RT 2 | Const. Shop -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 2 Supply, Single-Zone VAV, 2000 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

2 RT 3 & 4 (Single Zone):
Heating: 2 each - Central Furnace, Gas, Capacity = 500 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et
Cooling: 2 each - Single Package DX Unit, Capacity = 218 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.90 EER, Required Efficiency = 10.80 EER
Proposed Part Load Efficiency = 12.20 IEER, Required Part Load Efficiency = 12.20 IEER
Fan System: RT 3 & 4 | Welding Shop -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 3 Supply, Single-Zone VAV, 4170 CFM, 3.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

1 RT 7 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 137 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 74 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.00 EER, Required Efficiency = 11.00 EER

Quantity System Type & Description

Proposed Part Load Efficiency = 12.60 IEER, Required Part Load Efficiency = 12.60 IEER
Fan System: RT 7 | Restrooms -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 5 Supply, Single-Zone VAV, 2240 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

2 Gas Furnace 3 Ton (Single Zone):
Heating: 2 each - Central Furnace, Gas, Capacity = 88 kBtu/h
Proposed Efficiency = 97.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 2 each - Single Package DX Unit, Capacity = 36 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 14.30 SEER, Required Efficiency = 14.00 SEER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00
Fan System: Furnace 3 Ton | Office -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 6 Supply, Single-Zone VAV, 1233 CFM, 0.5 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

1 Gass Furnace 5 Ton (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 132 kBtu/h
Proposed Efficiency = 97.00% Et, Required Efficiency: 80.00 % Et or 80% AFUE
Cooling: 1 each - Single Package DX Unit, Capacity = 60 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 14.30 SEER, Required Efficiency = 14.00 SEER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00
Fan System: Furnace 5 Ton | Kitchen -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 7 Supply, Single-Zone VAV, 1465 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

1 RT 8 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 252 kBtu/h
Proposed Efficiency = 81.00% Et, Required Efficiency: 80.00 % Et
Cooling: 2 each - Single Package DX Unit, Capacity = 94 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 11.00 EER, Required Efficiency = 11.00 EER
Proposed Part Load Efficiency = 18.60 IEER, Required Part Load Efficiency = 12.60 IEER
Fan System: RT-8 | Kitchen -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 8 Supply, Single-Zone VAV, 2475 CFM, 2.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

2 PTAC (Single Zone):
Heating: 1 each - Other, Electric, Capacity = 6 kBtu/h
No minimum efficiency requirement applies
Cooling: 1 each - Single Package Vertical AC Unit, Capacity = 7 kBtu/h, Air-Cooled Condenser, Unknown Economizer
Proposed Efficiency = 12.60 EER, Required Efficiency = 9.00 EER
Proposed Part Load Efficiency = 0.00 , Required Part Load Efficiency = 0.00
Fan System: PTAC | Offic -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 10 Supply, Single-Zone VAV, 339 CFM, 1.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

1 Unit Heaters (Unknown w/ PerimeterSystem):
Heating: 1 each - Unit Heater, Gas, Capacity = 125 kBtu/h
Proposed Efficiency = 83.00% Ec, Required Efficiency: 80.00 % Ec
Fan System: Unit Heater | Shops -- Compliance (Motor nameplate HP and fan efficiency method) : Passes

Fans:
FAN 9 Supply, Constant Volume, 2049 CFM, 0.8 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Tyrel Peck - Engineer
Name - Title

Tyrel Peck
Signature

12-16-2024
Date

COM*check* Software Version COMcheckWeb
Inspection Checklist
Energy Code: 2018 IECC

Requirements: 26.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.12.2, C403.12.3 [FO9][3]	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature. future connection to controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41][3]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.11.3 [ME61][2]	HVAC piping insulation insulated in accordance with Table C403.11.3. Insulation exposed to weather is protected from damage and is provided with shielding from solar radiation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.4 [ME142][2]	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.8.5 [ME143][2]	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.12.1 [ME71][2]	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5.5 [ME113][2]	Fault detection and diagnostics installed with air-cooled unitary DX units having economizers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.2 [ME59][1]	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.1 [ME59][1]	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.2 [ME115][3]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.6 [ME141][3]	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.7.4 [ME57][1]	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.7.5 [ME116][3]	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.11.1, C403.11.2 [ME60][2]	HVAC ducts and plenums insulated in accordance with C403.11.1 and constructed in accordance with C403.11.2, verification may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5, C403.5.1, C403.5.2 [ME62][1]	Air economizers provided where required, meet the requirements for design capacity, control signal, ventilation controls, high-limit shut-off, integrated economizer control, and provide a means to relieve excess outside air during operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5.3.3 [ME124][1]	Air economizers automatically reduce outdoor air intake to the design minimum outdoor air quantity when outdoor air intake will not reduce cooling energy usage. See Table C403.5.3.3 for applicable device types and climate zones.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5.3.4 [ME125][1]	System capable of relieving excess outdoor air during air economizer operation to prevent overpressurizing the building. The relief air outlet located to avoid recirculation into the building.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5.3.5 [ME126][1]	Return, exhaust/relief and outdoor air dampers used in economizers have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Reference section C403.7.7 for details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.1.4 [ME63][2]	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.3.3 [ME35][1]	Hot gas bypass limited to: <=240 kBtu/h – 50% >240 kBtu/h – 25%	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.2.1 [ME53][3]	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.5, C403.5.1, C403.5.2 [ME123][3]	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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Nielson Engineering, Inc.
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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208.338.1212

DATE
1-9-25

REF NO.
2444

AUTHOR
CKW

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

MECHANICAL COMCHECK

SHEET NO.
M6.00

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.3 [FI8]^3	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.2 [FI27]^3	HVAC systems and equipment capacity does not exceed calculated loads.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.1 [FI47]^3	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.4.1.2 [FI38]^3	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.1.3 [FI20]^3	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.2 [FI39]^3	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.2.1, C403.2.4.2.2 [FI40]^3	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.2.3 [FI41]^3	Systems include optimum start controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.1.1 [FI57]^1	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.1 [FI28]^1	Commissioning plan developed by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.3.1 [FI31]^1	HVAC equipment has been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.2.3.2 [FI10]^1	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.3.3 [FI32]^1	Economizers have been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.4 [FI29]^1	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.1 [FI7]^3	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.3 [FI43]^1	An air and/or hydronic system balancing report is provided for HVAC systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C408.2.5.4 [FI30]^1	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26]^2	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.7 [EL27]^2	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28]^2	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.9 [EL29]^2	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

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Nielson Engineering, Inc.
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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270 N. 27th St. BOISE, ID. 83702
208.338.1212

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1-9-25

REF NO.
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AUTHOR
CKW

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PROJECT ADDRESS
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MECHANICAL COMCHECK

SHEET NO.
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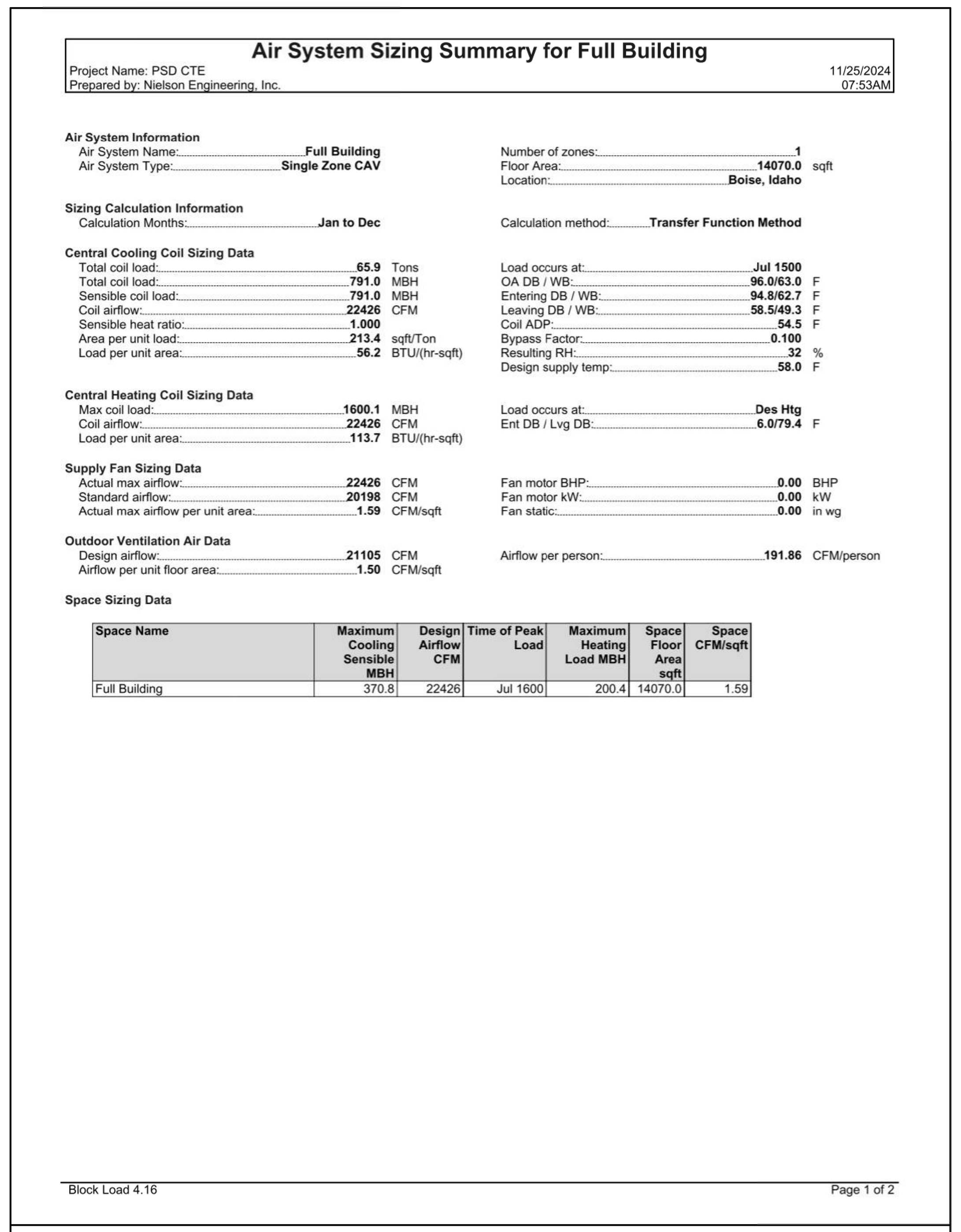
1/10/2025 11:12:35 AM



Air System Sizing Summary for Full Building

Project Name: PSD CTE
Prepared by: Nielson Engineering, Inc.
11/25/2024
07:53AM

Air System Information

Air System Name:	**Full Building**		Number of zones:	**1**	
Air System Type:	**Single Zone CAV**		Floor Area:	**14070.0**	sqft
			Location:	**Boise, Idaho**	

Sizing Calculation Information

Calculation Months:	**Jan to Dec**		Calculation method:	**Transfer Function Method**	

Central Cooling Coil Sizing Data

Total coil load:	**65.9**	Tons	Load occurs at:	**Jul 1500**	
Total coil load:	**791.0**	MBH	OA DB / WB:	**96.0/63.0**	F
Sensible coil load:	**791.0**	MBH	Entering DB / WB:	**94.8/62.7**	F
Coil airflow:	**22426**	CFM	Leaving DB / WB:	**58.5/49.3**	F
Sensible heat ratio:	**1.000**		Coil ADP:	**54.5**	F
Area per unit load:	**213.4**	sqft/Ton	Bypass Factor:	**0.100**	
Load per unit area:	**56.2**	BTU/(hr-sqft)	Resulting RH:	**32**	%
			Design supply temp:	**58.0**	F

Central Heating Coil Sizing Data

Max coil load:	**1600.1**	MBH	Load occurs at:	**Des Htg**	
Coil airflow:	**22426**	CFM	Ent DB / Lvg DB:	**6.0/79.4**	F
Load per unit area:	**113.7**	BTU/(hr-sqft)			

Supply Fan Sizing Data

Actual max airflow:	**22426**	CFM	Fan motor BHP:	**0.00**	BHP
Standard airflow:	**20198**	CFM	Fan motor kW:	**0.00**	kW
Actual max airflow per unit area:	**1.59**	CFM/sqft	Fan static:	**0.00**	in wg

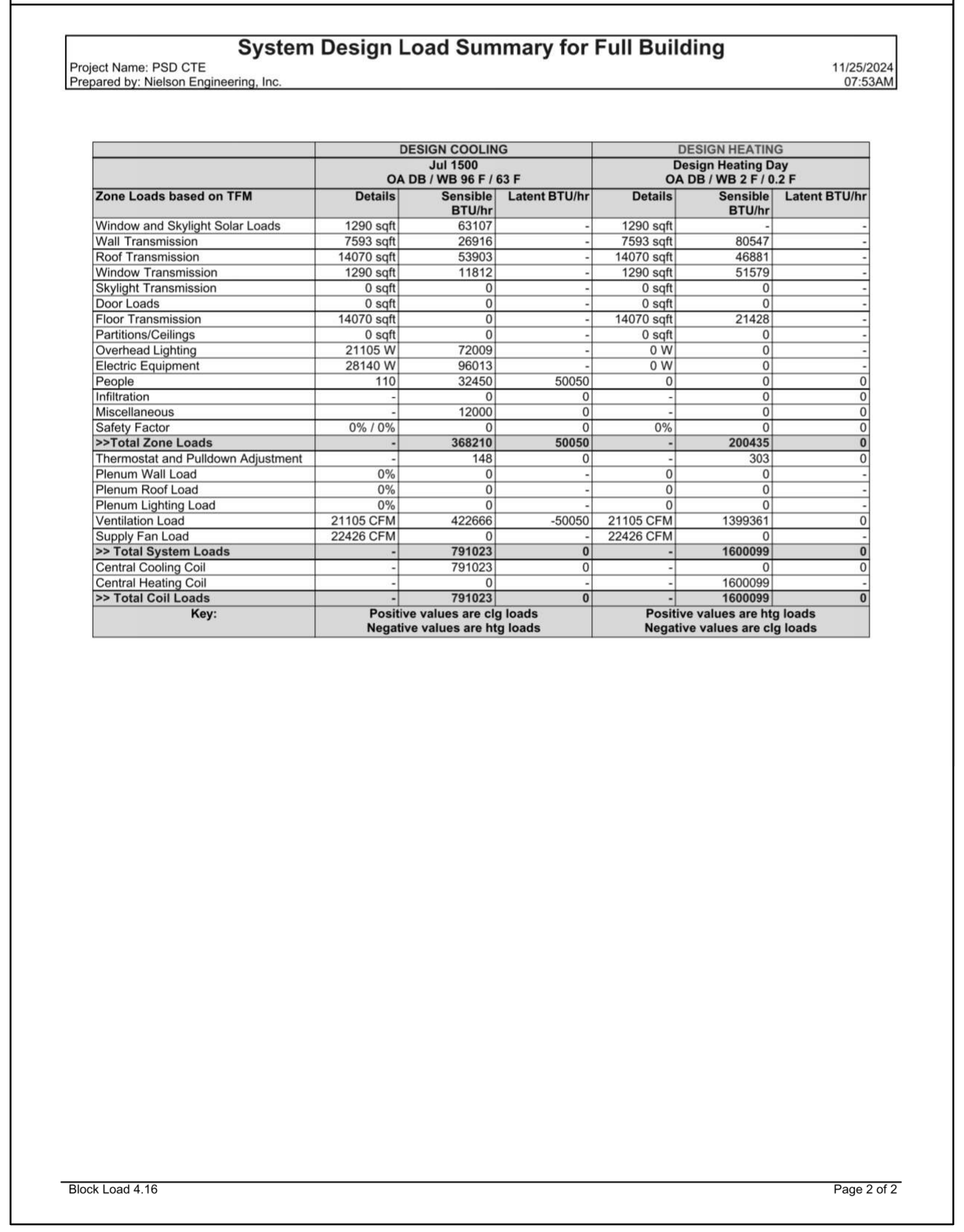
Outdoor Ventilation Air Data

Design airflow:	**21105**	CFM	Airflow per person:	**191.86**	CFM/person
Airflow per unit floor area:	**1.50**	CFM/sqft			

Space Sizing Data

Space Name	Maximum Cooling Sensible MBH	Design Airflow CFM	Time of Peak Load	Maximum Heating Load MBH	Space Floor Area sqft	Space CFM/sqft
Full Building	370.8	22426	Jul 1600	200.4	14070.0	1.59

Block Load 4.16
Page 1 of 2



System Design Load Summary for Full Building

Project Name: PSD CTE
Prepared by: Nielson Engineering, Inc.
11/25/2024
07:53AM

	DESIGN COOLING			DESIGN HEATING		
	Jul 1500 OA DB / WB 96 F / 63 F			Design Heating Day OA DB / WB 2 F / 0.2 F		
Zone Loads based on TFM	**Details**	**Sensible BTU/hr**	**Latent BTU/hr**	**Details**	**Sensible BTU/hr**	**Latent BTU/hr**
Window and Skylight Solar Loads	1290 sqft	63107	-	1290 sqft	-	-
Wall Transmission	7593 sqft	26916	-	7593 sqft	80547	-
Roof Transmission	14070 sqft	53903	-	14070 sqft	46881	-
Window Transmission	1290 sqft	11812	-	1290 sqft	51579	-
Skylight Transmission	0 sqft	0	-	0 sqft	0	-
Door Loads	0 sqft	0	-	0 sqft	0	-
Floor Transmission	14070 sqft	0	-	14070 sqft	21428	-
Partitions/Ceilings	0 sqft	0	-	0 sqft	0	-
Overhead Lighting	21105 W	72009	-	0 W	0	-
Electric Equipment	28140 W	96013	-	0 W	0	-
People	110	32450	50050	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	12000	0	-	0	0
Safety Factor	0% / 0%	0	0	0%	0	0
>>Total Zone Loads	**-**	**368210**	**50050**	**-**	**200435**	**0**
Thermostat and Pulldown Adjustment	-	148	0	-	303	0
Plenum Wall Load	0%	0	-	0	0	-
Plenum Roof Load	0%	0	-	0	0	-
Plenum Lighting Load	0%	0	-	0	0	-
Ventilation Load	21105 CFM	422666	-50050	21105 CFM	1399361	0
Supply Fan Load	22426 CFM	0	-	22426 CFM	0	-
>> Total System Loads	**-**	**791023**	**0**	**-**	**1600099**	**0**
Central Cooling Coil	-	791023	0	-	0	0
Central Heating Coil	-	0	-	-	1600099	-
>> Total Coil Loads	**-**	**791023**	**0**	**-**	**1600099**	**0**
Key:	**Positive values are clg loads Negative values are htg loads**			**Positive values are htg loads Negative values are clg loads**		

Block Load 4.16
Page 2 of 2

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Nielson Engineering, Inc.
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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208.338.1212

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CKW

PROJECT
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PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

MECHANICAL HEATLOAD CALCS

SHEET NO.
M6.02

ABBREVIATION SCHEDULE

SYMBOL	DESCRIPTION
A/C	AIR CONDITIONING
ASR	AUTOMATIC SPRINKLER RISER
AVG	AVERAGE
BFP	BACKFLOW PREVENTER
BTU	BRITISH THERMAL UNITS
CB	CATCH BASIN
CFH	CUBIC FEET PER HOUR
CL	CENTERLINE
CO	CLEANOUT
CONC	CONCRETE
CONT'D	CONTINUED
CONTR	CONTRACTOR
COTG	CLEANOUT TO GRADE
DN	DOWN
DS	DOWNSPOUT
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
EXIST	EXISTING
(E)	EXISTING
(ER)	EXISTING TO BE REMOVED
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FE & CABINET
FHB	FLOOR HOSE BOX
FHC	FIRE HOSE AND CABINET
FL	FLOOR
FPS	FEET PER SECOND
FS	FLOOR SINK
FT.HD	FEET OF HEAD
FTR	FLUE THRU ROOF
FU	FIXTURE UNIT
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GR	GRADE
HB	HOSE BIBB
HD	HUB DRAIN
HTR	HEATER
IE	INVERT ELEVATION
IW	INDIRECT WASTE
MAX	MAXIMUM
MBH	THOUSAND BTU'S PER HOUR
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
(N)	NEW
NIC	NOT IN CONTRACT
OD	OVERFLOW DRAIN
PC	PLUMBING CONTRACTOR
PIV	POST INDICATOR VALVE
POC	POINT OF CONNECTION
PSI	POUNDS PER SQUARE INCH
PSIL	PSI LOSS
RD	ROOF DRAIN
REG	REGULATOR
REQ'D	REQUIRED
RI & C	ROUGH-IN AND CONNECT
STA	STATION
VEL	VELOCITY
VTR	VENT THRU ROOF
w/	WITH
WCO	WALL CLEANOUT
WF	WALL FAUCET
WTR	WATER

GENERAL PLUMBING AND CONSTRUCTION NOTES

1. PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO CONSTRUCT A COMPLETE, OPERATIONAL PLUMBING SYSTEM FOR THE ENTIRE PROJECT AS SHOWN ON THESE DRAWINGS, INCLUDING ALL NECESSARY FEES AND PERMITS.
2. THE ENTIRE INSTALLATION SHALL CONFORM TO THE MOST RECENTLY ADOPTED REQUIREMENTS OF THE INTERNATIONAL MECHANICAL CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL BUILDING CODE, & ALL OTHER APPLICABLE CITY, COUNTY & STATE CODES AND REGULATIONS IN EFFECT AT THE DATE OF THE BID.
3. COORDINATE THE INSTALLATION OF ALL PLUMBING PIPING AND ALL PLUMBING EQUIPMENT WITH MECHANICAL EQUIPMENT, ALL DUCTWORK, REFRIGERATION TRENCHES, REFRIGERATION PIPING, AND ALL OTHER TRADES INCLUDING BUT NOT LIMITED TO THE MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR, REFRIGERATION CONTRACTOR, AND GENERAL CONTRACTOR PRIOR TO FABRICATION AND INSTALLATION. WHERE CONFLICTS MAY OCCUR, THEY SHALL BE RESOLVED PRIOR TO INSTALLATION.
4. THE DRAWINGS SHOW THE GENERAL DESIGN, ARRANGEMENTS AND EXTENT OF THE SYSTEM. IT SHALL BE THE WORK OF THE CONTRACTOR TO MAKE SUCH SLIGHT ALTERATIONS AS MAY BE NECESSARY TO MAKE THE SYSTEM COMPLETE AND OPERATIONAL IN ACCORDANCE WITH THE DESIGN INTENT. MAJOR DEVIATIONS SUCH AS CHANGES IN COMPONENT SIZES, QUANTITIES OR MATERIAL REQUIRE PRIOR APPROVAL BY THE CONSULTING ENGINEER.
5. ALL PLUMBING INFORMATION IS NOT SHOWN ON THE PLUMBING DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND REFRIGERATION DRAWINGS.
6. THE WORKING DRAWINGS ARE DIAGRAMMATIC. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR PLUMBING EQUIPMENT SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL, MECHANICAL, STRUCTURAL AND ELECTRICAL DRAWINGS.
7. THE DRAWINGS AND SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH ITEMS SHOWN ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN BOTH.
8. ANY PART OF THIS INSTALLATION THAT FAILS, IS UNFIT OR BECOMES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
9. ALL EQUIPMENT SHALL PROVIDE THE SCHEDULED PERFORMANCE AT THE SITE ALTITUDE.
10. ALL EQUIPMENT, FIXTURES AND ACCESSORIES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, VALVES AND OTHER DEVICES OR ACCESSORIES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
11. P.C. IS RESPONSIBLE FOR PLUMBING EQUIPMENT CHECK-IN, SAFEKEEPING & DAMAGE.
12. ALL INVERTS SHOWN ON PLUMBING DRAWINGS ARE REFERENCED FROM THE FINISHED FLOOR ELEVATION.
13. COORDINATE ALL INVERTS WITH CIVIL DRAWINGS PRIOR TO INSTALLATION.
14. ALL EQUIPMENT AND PIPING MUST BE SEISMICALLY BRACED FOR APPLICABLE SEISMIC ZONE, IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IBC, ASHRAE AND SMACNA. PROVIDE SEISMIC PRODUCTS BY AMBER-BOOTH OR MASON INDUSTRIES.
15. INSTALL DRAIN LINES WITH A SLOPE OF 2%. A SLOPE OF 1% MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE AUTHORITY HAVING JURISDICTION. THE PLUMBING DESIGN ON THE DRAWINGS ASSUMES THAT A 2% SLOPE WILL BE USED. MAKE NECESSARY ADJUSTMENTS TO INVERTS IF A 1% SLOPE IS USED & COORD. WITH ALL CIVIL DRAWINGS.
16. CLEAN AND DISINFECT WATER PIPING PER AWWA C651 OR C652 PROCEDURES.
17. PROVIDE PROPER PROVISIONS FOR EXPANSION OR MOVEMENT OF ALL PIPING.
18. PROVIDE WALL CLEANOUTS IN ALL VENTS FOR COMBINATION WASTE AND VENT SYSTEMS AS REQUIRED BY LOCAL AND NATIONAL CODES.
19. ALL PIPE HANGERS AND EQUIPMENT SUPPORTS SHALL BE LOCATED A MINIMUM DISTANCE OF 2" FROM ANY REFRIGERANT PIPE.
20. ALL VENT FITTINGS FOR WASTE SYSTEMS BELOW OVERFLOWS OF FIXTURES SHALL BE DRAINAGE TYPE.
21. NO TYPE 'M' OR DWV COPPER IS TO BE USED IN THIS PROJECT FOR DOMESTIC WASTE OR WATER.
22. CONTRACTOR TO COMPLY WITH 2000 UPC, APPENDIX B, PARAGRAPH B4 WHEN SIZING TRAP ARMS ON COMBINATION WASTE AND VENT SYSTEMS. THE DRAWINGS INDICATE THE WASTE LINE SIZE AND THE SIZE OF THE REQUIRED TRAP.
23. PROVIDE CLEANOUTS IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL AND NATIONAL PLUMBING CODES. FLOOR CLEANOUTS SHALL BE LOCATED OUT OF TRAFFIC AREAS.
24. LOCATE ALL PLUMBING VENTS AT LEAST 3 FEET ABOVE OR 10 FEET AWAY FROM ALL OUTSIDE AIR INTAKES INTO THE BUILDING.
25. SEE "PLUMB. FIXT. EQUIP. SCHED." FOR FIXTURE MAKE & TYPE, & SIZE OF INDIVIDUAL TRAPS, WASTE VENT, & DOMESTIC WATER PIPING TO INDIVIDUAL FIXTURES.
26. ALL PLUMBING FIXTURES CONNECTED TO A POTABLE WATER SYSTEM WITH HOSE CONNECTIONS ON THE OUTLET SIDE AND OWNER FURNISHED EQUIPMENT WITH DIRECT CONNECTIONS, SHALL BE PROVIDE WITH BACKFLOW PREVENTION.
27. PROVIDE AND INSTALL CARRIERS AS REQUIRED FOR FLOOR OR WALL MOUNTED PLUMBING FIXTURES. INSTALL ALL FIXTURES WITH ACCESSORIES AS REQUIRED TO PROVIDE A COMPLETE, WORKABLE INSTALLATION.
28. PLUMBING FIXTURES SHALL INCLUDE COMPRESSION STOPS ABOVE FLOOR IN SUPPLIES TO ALL FIXTURES AND A MINIMUM 17 GAUGE P-TRAP.
29. ALL PLUMBING EQUIP. SHALL BE LISTED LABELED BY AN APPROVED TESTING AGENCY.
30. EQUIP. INST. SHALL MEET NATIONAL SANITATION FOUNDATION (NSF) STANDARDS, OR EQ.
31. ALL JANITORIAL SINK FAUCETS MUST BE PROVIDED WITH AN APPROVED BACKFLOW PREVENTION DEVICE.
32. NATURAL GAS PIPING ABOVE GROUND OR INSIDE BUILDINGS SHALL BE STANDARD WEIGHT SCHEDULE 40 BLACK STEEL WITH WELDED OR MALLEABLE IRON FITTINGS.
33. PROVIDE GAS SHUT OFF VALVE AT EACH PIECE OF EQUIPMENT.
34. UPON COMPLETION OF THE WORK, REMOVE ALL SURPLUS MATERIALS AND RUBBISH, MAKE ALL REQUIRED PATCHING AND REPAIRS OF OTHER TRADES' WORK DAMAGED BY THIS CONTRACTOR, AND LEAVE THE PREMISES IN A CLEAN, ORDERLY CONDITION.
35. THE CONTRACTOR SHALL OPERATE THE SYSTEM FOR A PERIOD OF THREE DAYS TO PROVE OPERATION OF THE SYSTEM.
36. THE CONTRACTOR SHALL GUARANTEE THE ENTIRE PLUMBING SYSTEM FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
37. THE CONTRACTOR SHALL, DURING CONSTRUCTION, MAINTAIN A SET OF AS-BUILT REDLINED RECORD DRAWINGS AT THE PROJECT SITE. ALL CHANGES IN LAYOUT, ROUTING, EQUIPMENT, COMPONENTS AND ACCESSORIES SHALL BE RECORDED. THESE REDLINES SHALL BE GIVEN TO THE ARCHITECT/ENGINEER AFTER FINAL INSPECTION.
38. CORRECTNESS OF SCALE, LAYOUT, MATERIAL, LOCATION, OR CONTINUATION OF PIPING FROM SHEET TO SHEET SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR. ANY DISCREPANCY SHOULD BE BROUGHT TO THE ATTENTION OF THE CONSULTING ENGINEER BEFORE CONSTRUCTION.
39. CONTRACTOR SHALL PROVIDE SUBMITTAL FOR ALL PLUMBING FIXTURES AND EQUIPMENT TO BE REVIEWED BY CONSULTING ENGINEER BEFORE PURCHASE OF ANY EQUIPMENT.
40. CONDENSATE LINES FREEZE UNITS (INSULATED & HEAT TAPE.), COOLER UNITS (NOT INSULATED) ROOF TOP UNITS (LINES RUN BELOW THE ROOF IF ACCEPTABLE BY LOCAL AUTHORITY). FAN COIL UNIT- RUN PIPING TO THE NEAREST FLOOR DRAIN OR FLOOR SINK WITH 3" P-TRAP FOR EACH UNIT. (IF IN COLD CEILING SPACE - INSULATE AS YOU WOULD THE WATER LINES.
41. PROVIDE INDIRECT WASTE LINES TO ALL PRESSURE RELIEF VALVES, BACKFLOW DEVICES, KITCHEN SINKS, CONDENSATE LINES, KITCHEN EQUIPMENT, DRINK DISPENSERS, & ETC. AS REQUIRED BY LOCAL CODE REQUIREMENTS.
42. ALL EXPOSED PIPES, EXCEPT AS OTHERWISE DESCRIBED PASSING THROUGH WALLS, FLOORS, CEILING, ETC. IN FINISHED SPACES, SHALL BE PROVIDED WITH SOLD PATTERN HEAVY CEILING, FLOOR OR WALL ESCUTCHEONS WITH SET SCREW. ESCUTCHEONS END PLATES SHALL BE OF STEEL OR MALLEABLE IRON WITH PRIME COAT READY FOR PAINTING. ESCUTCHEONS WILL NOT BE PROVIDED WHERE SLEEVES INTENTIONALLY EXTEND ABOVE FINISHED FLOOR.
43. ALL EXPOSED PLUMBING SHORT BRANCH CONNECTIONS TO FIXTURES AND/OR EQUIPMENT PASSING THROUGH WALL OR FLOORS SHALL BE EQUIPPED WITH PRESSED BRASS CHROMIUM PLATED, SOLID ESCUTCHEONS.
44. THE SYSTEMS OF PIPING AS INSTALLED BY THIS CONTRACTOR MUST BE TESTED WITH WATER OR AIR AND PROVEN TIGHT TO THE SATISFACTION OF REPRESENTATIVE OF THE ARCH. TESTING INSTRUMENTS MUST BE FURNISHED BY THE PLUMBING CONTRACTOR.
45. TESTS MUST BE MADE WITH WATER EXCEPT WHEN THERE IS DANGER FROM FREEZING THEN TESTS MAY BE MADE WITH AIR. WOODEN PLUGS ARE NOT TO BE USED IN MAKING TESTS.
46. BEFORE BEING PLACED IN SERVICE ALL WATER LINES SHALL BE CHLORINATED TO THE SATISFACTION OF THE ARCH. IN ACCORDANCE WITH A.W.W.A. SPECIFICATIONS C601-537.
47. IF CEILING SPACE IS BEING USED AS A RETURN AIR PLENUM NO PLASTIC PIPING IS ALLOWED IN THIS AREA.
48. CONFIRM THE EXACT LOCATION OF ALL EQUIP. PRIOR TO MAKING PLUMBING ROUGH-IN.
49. ALL WATER AND DRAIN LINES OUTSIDE OF THE BUILDING STRUCTURE SHALL BE A MIN. OF 36" BELOW AVERAGE ANNUAL FROST LINE REFERENCED TO FINISHED GRADE (MIN. DEPTH 60" WHERE AVERAGE ANNUAL FROST LINE IS LESS THAN 30".)
50. CONFIRM THE EXACT LOCATION WHERE SEWER, WATER & GAS LINES LEAVE THE BUILDING.
51. THE P.C. SHALL INSTALL WATER PIPING ABOVE THE CEILING SUCH THAT THE PIPING WILL BE BETWEEN THE BUILDING INSULATION AND THE CEILING TO PREVENT FREEZING. SEE DETAILS AND SPECIFICATIONS.
52. THE TERM "ROUGH-IN" INCLUDES AT PROPOSED FIXTURE LOCATIONS 1) SHUTOFF VALVES OR STOPS AT HOT AND COLD WATER STUB OUTS. 2) VENT PIPE THRU ROOF OR CONNECTED TO VENT SYSTEM. 3) DRAIN LINE, TRAPPED & VENTED, STUBBED THRU WALL, OR FLOOR, & CAPPED.
53. ANY PENETRATIONS THRU OR TRENCHES IN CONCRETE FLOORS OR PARTITIONS SHALL BE SAW CUT OR CORE DRILLED.
54. ANY PENETRATIONS THRU FIRE RATED PARTITIONS SHALL BE SEALED WITH SCOTCH-3M #FS195 WRAP AND #CP25 CAULK AS PER MANUFACTURER'S RECOMMENDATIONS.
55. THE P.C. SHALL NOT INSTALL EXPOSED PIPING ABOVE OR WITHIN THE CODE REQUIRED WORKING CLEARANCES OF ANY ELECTRICAL PANEL BOARD OR SWITCH GEAR (30" WIDE OR THE WIDTH OF THE PANEL, WHICH EVER IS GREATER AND 36" IN FRONT - FLOOR TO CEILING). COORDINATE WITH ELECTRICAL CONTRACTOR.
56. P.C. SHALL MAKE ALL FINAL CONNECTIONS TO OWNER SUPPLIED EQUIPMENT REQUIRING PLUMBING CONNECTIONS.
57. PROVIDE & INSTALL MANUAL SHUTOFF COCKS AT ALL GAS CONNECTIONS TO GAS FIRED EQUIPMENT.
58. UNDER FLOOR PLUMBING LINES SHALL NOT BE ROUTED UNDERNEATH FREEZERS.
59. ALL WATER LINES LOCATED IN OR NEAR OUTSIDE WALLS SHALL BE RUN BETWEEN WARM SIDE OF WALL & BUILDING INSULATION TO HELP PREVENT FREEZING OF LINES.
60. EXCAVATION OF TRENCHES SHALL COMPLY WITH SECTION 315.O OF UPC.
61. INSULATION SHALL HAVE FLAME SPREAD NOT TO EXCEED 25 & A SMOKE DEVELOPED RATING NOT TO EXCEED 50.
62. PIPE HANGER SPACING FOR PIPES LESS THAN 2" DIA. SHALL NOT EXCEED 6'-0" CENTERS.
63. GAS PIPING SHALL BE PRESSURE TESTED AT 10 PSI PER UPC SECT. 1204.3. PRESSURE SHALL BE MAINTAINED FOR A LENGTH OF TIME SATISFACTORY TO THE ADMINISTRATIVE AUTHORITY (MIN. 15 MIN.). WELDED PIPE SHALL BE TESTED AT 60 PSI (MIN) FOR 30 MINUTES (MIN).

* 64. ALL GAS APPLIANCES SHALL BE CONNECTED PER UPC 1212.0.

* 65. CLEANOUTS TO BE SIZED PER, TABLE 7-6 SEC. 707.0 UPC.

* 66. VENTS UNDER FLOOR - OFFSETS HORIZONTALLY LESS THAN 6" ABOVE THE FLOOD RIM SHALL BE INSTALLED IN SAME MANNER AND MATERIAL AS DRAINAGE PIPING.

* 67. THE P.C. SHALL PROVIDE & INSTALL ALL FIXTURES & EQUIPMENT AS SHOWN ON THE P' (PLUMBING) DRAWINGS.

* 68. ONLY BALLVALVES SHALL BE PERMITTED TO BE USED FOR ZONE & AREA VALVES.

* 69. ALL TRENCHING SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL CONTRACTOR, COORDINATED WITH THE GENERAL CONTRACTOR.

70. IF LOCAL CODE DOES NOT REQUIRE TRAP PRIMERS USE DEEP-SEAL "P" TRAPS ON ALL FD & FS INSTEAD.
71. ALL EXPOSED COPPER, ABS, PVC PIPING, VENT LINES, WASTE LINES, & ETC., INSIDE OF BUILDING WHICH ARE EXPOSED WILL BE PAINTED SILVER OR AS DIRECTED, WITH TWO COATS OF PAINT, PROTECT ALL SURROUND MATERIALS.
72. ALL INDIRECT WASTE LINES WILL BE INSTALLED IN SUCH A MANNER AS TO PREVENT WATER FROM SPLASHING OUT OF THE DRAIN RECEPTACLE.
73. ARMAFLEX INSULATION OR SIMILAR MATERIALS WHICH REACT TO THE SUN UV RAYS WILL BE PAINTED WITH "CHILDERS" #CP-50, WHITE, FLEXIBLE SEALER PAINT OR THE INSULATION MAY BE COVERED.
74. HOT WATER CIRCULATION LINES WILL NOT BE INSTALLED WITH LESS THAT 3/4" PIPE. THE PUMP WILL BE SIZED FOR LOW FLOW (3 TO 5 GPM), LOW VELOCITY, AND BE INSULATED.

* GENERAL NOTES INDICATED (*) SHALL SUPERSEDE SPECIFICATIONS.

PIPE SPECIFICATIONS

1. DOMESTIC WATER:	TYPE 'K' SOFT COPPER BELOW FLOOR OR GRADE w/ WROUGHT COPPER FITTINGS (BRAZED). TYPE 'L' HARD DRAWN COPPER TUBING w/ WROUGHT COPPER (95/5 SOLDER). FITTINGS ABOVE FLOOR OR GRADE.
BELOW GRADE:	3/4" - 2 1/2" TYPE "K" SOFT COPPER 3" + DUCTILE IRON OR PVC CONFORMING TO AWWA STANDARDS
2. WASTE & VENT, RAIN WATER	SERVICE WEIGHT NO-HUB CAST IRON w/ MG' OR 'IDEAL' FITTINGS. SCHEDULE 40 GALV. STEEL FOR EXPOSED VENT LINES. ALL DRAINS & TRAPS TO BE CAST BRASS, CAST IRON OR GALV, STEEL. PLASTIC PIPING CONFORMING TO IAPMO AND ASTM SPECIFICATIONS IS ACCEPTABLE WHERE PERMITTED BY LOCAL CODES. NO PLASTIC PIPE IS PERMITTED IN RETURN PLENUM ATTIC.
3. GAS	SCHEDULE 40 BLACK STEEL w/ BLACK MALLEABLE IRON SCREWED FITTINGS, OR WELD FITTINGS.
4. CONDENSATE DRAINS:	TYPE 'L' HARD DRAWN COPPER w/ WROUGHT COPPER SOLDER JOINT FITTINGS. WALK-IN COOLERS/FREEZERS: MINIMUM OF TYPE M COPPER PIPE WITH 95/5 SOLDER FITTING AND MEET NSF STANDARDS.
5. AIR:	GALV. SCHEDULE 40 STEEL w/ GALV STEEL SCREWED FITTINGS ABOVE AND BELOW FLOOR OR GRADE WHERE ALLOWED BY LOCAL CODES. TYPE 'L' HARD DRAWN COPPER w/ WROUGHT COPPER SILFOS JOINT FITTINGS ABOVE AND BELOW FLOOR OR GRADE WHERE GALVANIZED IS NOT ALLOWED BY CODE.

NO COMBUSTIBLE PIPING OR MATERIAL SHALL BE RUN IN RETURN AIR PLENUM SPACE ABOVE CEILING. ALL UNDERGROUND WATER PIPING SHALL BE WRAPPED &/OR INSULATED PER SPECIFICATIONS.

INSULATION SCHEDULE

SYSTEM TYPE	FLUID TEMP. RANGE (° F)	INSULATION TYPE	
DOMESTIC HOT & COLD WATER ABOVE FLOOR	40° - 180°	FIBERGLASS w/ VAPOR BARRIER	
DOMESTIC HOT & COLD WATER BELOW SLAB	40° - 180°	1/2" ARMAFLEX OR IMCOA	
ROOF DRAIN & OVERFLOW DRAIN	35° - 100°	FIBERGLASS w/ VAPOR BARRIER	
REFRIGERANT	35° - 140°	1/2" ARMAFLEX OR IMCOA	
HEAT TRACED DOMESTIC HOT WATER ABOVE FLOOR	100° - 140°	PIPE SIZES	FIBERGLASS INS. THICKNESS
DOMESTIC HOT WATER ABOVE FLOOR WITH HEAT TRACE NOTE: FOR PIPE SIZES 1 1/4" & SMALLER, USE INSULATION SIZED FOR A 1/4" LARGER PIPE TO ALLOW ROOM FOR INSULATION OVER HEAT TRACE CABLE.		1/2" - 1" 1 1/4" - 1 1/2" 2" 2 1/2" 3" OR LARGER	1" 1 1/2" 2" 2 1/2" SAME SIZE AS PIPE
DOMESTIC HOT WATER ABOVE FLOOR WITHOUT HEAT TRACE		1/2" - 1" 1 1/4" - 2" 2" OR LARGER	1" 1 1/2" 2"
DOMESTIC COLD WATER ABOVE FLOOR		ALL	1"
ROOF DRAIN & OVERFLOW DRAIN ABOVE FLOOR		ALL	1"

NOTE: ALL UNDERGROUND AIR, HOT & COLD WATER, HOT WATER RETURN & SUPPLY, REFRIGERANT, STEAM & CONENSATE PIPING TO BE INSULATED, ALSO SEE SPECIFICATIONS.

PLUMBING SYMBOL SCHEDULE

SYMBOL	ABBREVIATION	DESCRIPTION
○——	UP	PIPE RISER UP (VIEWED CEILING TO FLOOR)
⊂——	DN	PIPE RISER DOWN (VIEWED CEILING TO FLOOR
—⋈—	SOV / GV	SHUT-OFF VALVE / GATE VALVE
—⦶—	SOV / BV	SHUT-OFF VALVE / BALL VALVE
—⧓—	SOV / GV (NC)	SOV / GV (NORMALLY CLOSED)
—⊕—	SOV /BV (NC)	SOV / BV (NORMALLY CLOSED)
—▽—	SOV / GC	SHUT-OFF VALVE /GAS COCK
—▷—	CK V	CHECK VALVE
—‖—	UN	UNION
—⬢—	PRV	PRESSURE REGULATING VALVE
—◇—	T&P	TEMP. & PRESS. RELIEF VALVE
—⋎—	STR	'Y' STRAINER
—⍜—	PR GA	PRESSURE GAUGE
—○—	WTR MTR	WATER METER
—□—	GAS MTR	GAS METER
— —	RW	RAIN WATER LINE (ABOVE FLOOR)
— —	LP	LIQUID PROPANE LINE
—⊕	SOV IN YB	SHUT-OFF VALVE IN YARD BOX
—○	FH	FIRE HYDRANT
—<	FDC	FIRE DEPT. CONNECTION
◖—	WMG	WATER MOTOR GONG
—⊂○	PIV	POST INDICATOR VALVE
—⊗—	POC	POINT OF CONNECTION
—W—8"—	W	UTILITY WATER MAIN - SIZE
—SAN—8"—	SAN	SANITARY SEWER MAIN - SIZE
—G —4"—	G	UTILITY GAS MAIN - SIZE
—SD—8"—	SD	UTILITY STORM DRAIN - SIZE
△	FSZV	FIRE SPRINKLER ZONE VALVE

FIXTURE UNIT CALCULATIONS

FIXTURE	QUANTITY	WATER FU	CW FU	HW FU	WASTE FU	TOTAL FU
P1 WC (ADA)	7	5.0	35.0	-	4.0	4.0
P2 LAV (ADA)	7	2.0	10.5	10.5	1.0	7.0
P3 BREAK SINK	1	2.0	1.5	1.5	1.0	1.0
P4 MOP SINK	1	3.0	2.25	2.25	3.0	3.0
P5 WA. COOLER	2	.5	1.0	-	.5	1.0
P5 WASH. MACH.	1	4.0	3.0	3.0	3.0	3.0
P7 KIT. HAND SINK	2	2.0	3.0	3.0	2.0	4.0
P8 ICE MAKER	2	1.0	2.0	-	-	IW
P9 WATER HEAT.	1	-	-	-	-	-
P10 3 COMP. SINK	1	2.0	1.5	1.5	1.0	IW
K04 DISHWASHER	1	1.5	-	1.5	1.0	IW
K21 RINSE TABLE	1	2.0	-	2.0	2.0	IW
FD1	11	-	-	-	2.0	22.0
FS1	4	-	-	-	3.0	12.0
FD3	1	-	-	-	-	-
HB1	1	2.5 + 1	2.5	-	-	-
			62.25	25.25		
TOTALS			87.5			55.0

WATER PRESSURE FRICTION LOSS CALCULATIONS

BUILDING ADDRESS 915 S. MAIN STREET, PAYETTE ID
WATER UTILITY COMPANY CITY OF PAYETTE PHONE NO. 1-208-642-6024
WATER METER SIZE 1 1/2 " CONTACT: LANE G.
WATER PRESSURE: HIGH 55 PSI LOW N/A
IF MAXIMUM WATER PRESSURE IS OVER 60 PSI
THEN A PRESSURE REGULATING VALVE IS REQUIRED
PRV REQUIRED: YES
MAKE: WATTS MODEL NO.: U5B
SIZE: 2 " PRESSURE: 43 PSI

DOMESTIC WATER FIXTURE UNITS: 87 (FU) = 40 GPM (FLUSH TANK)
(IRRIGATION WILL BE CONDUCTED DURING OFF-PEAK HOURS)

AVAILABLE WATER PRESSURE	=	55.0	PSI
PRESSURE LOSS DUE TO ELEVATION (24 FT. X 0.43)	=	10.4	PSI
PRESSURE LOSS THRU METER	=	5.8	PSI
PRESSURE LOSS THRU PRESSURE REGULATOR VALVE	=	0.0	PSI
PRESSURE LOSS THRU BACKFLOW PREVENTER	=	0.0	PSI
PRESSURE REQUIRED AT MOST REMOTE FIXTURE	=	15.0	PSI
TOTAL AVAILABLE PRESSURE	=	18.2	PSI

DEVELOPED LENGTH 405' X 1.4 = 567.0
AVAILABLE FRICTION LOSS PER 100 FT.
100 FT. X 6.8 / 568.0 = 3.2 PSI

PIPE SIZING SCHEDULE (BASED ON FLUSH VALVES)

PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
MAX. FIXT. UNITS	0	0	0	6	21	139			
VELOCITY (FPS)	2.7	3.5	4.2	4.8	5.4	6.4			
PSI/100 FT	3.2	→	→	→	→	→			
FLOW (GPM)	1.5	4.7	10.2	18.3	29.0	60.4			

PIPE SIZING SCHEDULE (BASED ON FLUSH TANKS)

PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
MAX. FIXT. UNITS	1	6	13	26	51	175			
VELOCITY (FPS)	2.7	3.5	4.2	4.8	5.4	6.4			
PSI/100 FT	3.2	→	→	→	→	→			
FLOW (GPM)	1.5	4.7	10.2	18.3	29.0	60.4			

PLUMBING FIXTURE SCHEDULE

EQUIPMENT AND INSTALLATION BY PLUMBING CONTRACTOR
PROVIDE SPECIFIED ITEMS OR APPROVED EQUALS. (REFER TO SPECIFICATIONS)

SYMBOL	DESCRIPTION	W	V	CW	HW
P1	WATER CLOSET (ADA) - WATER CLOSET (A.D.A.): KOHLER K-3493-0 PRESSURE LITE "HIGHLINE" WHITE, ELONGATED BOWL, FLOOR MOUNTED WATER CLOSET, VITREOUS CHINA, BOLT CAPS, 1.6 GALLONS PER FLUSH, SLOAN FLUSHMATE SYSTEM, 17 1/8" FROM FINISHED FLOOR TO CLOSET BOWL RIM, WITH KOHLER K-4670-C WHITE SEAT, OPEN FRONT/LESS COVER. BRASSCRAFT KTCR19X C STOP, ESCUTCHEON, AND STAINLESS-STEEL BRAIDED SUPPLY. SUPPLY FLUSH HANDLE ON THE WIDE SIDE OF THE STALL (RIGHT OR LEFT HAND TRIP LEVERS).	4"	2"	1"	-
P2	LAVATORY (ADA) - KOHLER K-20000-0 "CAXTON" WHITE, VITREOUS CHINA, UNDERMOUNT, 17-5/8" X 13-1/8" X 5-5/16" LAVATORY. PROVIDE AND INSTALL KOHLER K-13461 "INSIGHT" TOUCHLESS FAUCET, .5 GPM, CHROME BATTERY POWERED, KOHLER K-7715-CP BRASS GRID STRAINER, BRASSCRAFT KTSCR19X C STOPS, STAINLESS STEEL BRAIDED SUPPLIES, ESCUTCHEONS, 1 1/4" 17 GA. SYMMONS MODEL 7-210-CK THERMOSTATIC MIXING VALVE UNDER EACH LAVATORY, BRASS P-TRAP, AND TRUE-BRO 102W INSULATION KIT.	2"	1 1/2"	1/2"	1/2"
P3	BREAKROOM SINK - ELKAY MODEL LR2219-1 22" X 19-1/2" X 7-5/8", SINGLE COMPARTMENT, SELF-RIMMING, STAINLESS STEEL SINK. PROVIDE AND INSTALL KOHLER K-596-VS "SIMPLICE" SINGLE HOLE FAUCET W/ PULL DOWN SPRAY HEAD, 1.5 GPM, SINGLE LEVER, BRASSCRAFT KTSCR19X C STOPS, ESCUTCHEONS, STAINLESS STEEL BRAIDED SUPPLIES, ELKAY LK35 STRAINER, EVERGRIND E101 DISPOSAL W/ AIR SWITCH, DEARBORN PLASTIC DISPOSER WASTE, GD-1 D.W. CONNECTOR AND 1 1/2" 17 GA. TAILPIECE, AND 1 1/2" 17 GA. P-TRAP.	2"	1 1/2"	1/2"	1/2"
P4	MOP SINK - KOHLER K-6710-0 "WHITBY" CORNER, CAST IRON, W/K-8940 COATED WIRE RIM GUARD, K-9146-CP PERFORATED 3" STRAINER, & K-8928-CP SINK FAUCET WITH VACUUM BREAKER W/HOSE & WALL HOOK FLOOR MOUNTED SERVICE SINK (INSTALL SINK AGAINST ROUGH WALL), (USE DEEP SEAL P-TRAP). PROVIDE AND INSTALL HAWS 8905 WALL MOUNT EYE WASH WITH RECOIL HOSE. MOUNT TO SIDE OF MOP SINK FAUCET AT THE SAME LEVEL W/ A VACUUM BREAKER.	3"	2"	3/4"	3/4"
P5	WATER COOLER W/ BOTTLE FILLER (ADA) - ELKAY VRCTL8WSK BI-LEVEL VANDAL-RESISTANT WATER COOLER AND BOTTLE FILLING STATION, SPLIT LEVEL, WALL MOUNTED WATER COOLER, 8.0 GPH OF 50 F DRINKING WATER AT 90 F AMBIENT AIR TEMP. PROVIDE AND INSTALL BRASSCRAFT KTSCR 19-C STOP, ESCUTCHEON, S. S. BRAIDED SUPPLY, AND 1 1/4" 17GA. P-TRAP. MOUNTING HEIGHT 38 3/8" HIGH UNIT AND 32 7/8" ADA UNIT FROM FLOOR LEVEL TO ORIFICE OUTLET.	2"	1 1/2"	1/2"	-
P6	WASHING MACHINE BOX - GUY GRAY WASHING MACHINE BOW, MODEL WB200 WASHER CONNECTION W/ DUAL CLOSING BALL TYPE VALVE THAT CONTROLS THE HOT AND THE COLD WATER SIMULATEOUSLY AND 2" DRAIN. PROVIDE & INSTALL (2) WATTS NO. 8 VACUUM BREAKERS ON THE HOSE CONNECTIONS. WATER BOX IS 11-5/8"W X 9-1/2"H X 3-1/2"D, MOUNT THE BOX @ 42" A.F.F. TO THE BOTTOM OF THE WATER BOX.	2"	1 1/2"	1/2"	1/2"
P7	HANDWASH SINK (KITCHEN) - SINK AND FAUCET TO BE PROVIDED BY KITCHEN SUPPLIER, AND INSTALLED BY PLUMBING CONTRACTOR. PROVIDE AND INSTALL BRASSCRAFT KTSCR19X C STOPS, ESCUTCHEONS, STAINLESS STEEL BRAIDED SUPPLIES, 1 1/2" 17 GA. P-TRAP, AND TRUE-BRO 102W INSULATION KIT. MOUNT SINK @ 34" ABOVE FINISHED FLOOR TO LIP OF RIM OF SINK.	2"	1 1/2"	1/2"	1/2"
P8	WATER COOLER/ICEMAKER - THE P.C. SHALL PROVIDE AND INSTALL GUY GRAY #BIM875, 18 GUAGE ICE MAKER HOOK-UP BOX WITH 1/2" X 1/4" COMPRESSION VALVE AND STAINLESS STEEL ICE MAKER HOSE TO THE REFRIGERATOR OR ICEMAKER. MOUNT BOX AT 12" A.F.F.	-	-	1/2"	-
P9	WATER HEATER - A. O. SMITH GOLD XI DVE-52, 50 GALLON TANK, 27 KW INPUT, 123 GALLON PER HOUR @ 90°F RISE. INSTALL THE FACTORY PROVIDED HEAT TRAP NIPPLES ON THE HOT AND COLD WATER INLETS. PROVIDE AND INSTALL AMTROL ST-12 THERMAL EXPANSION TANK, INSTALLED ON THE COLD INLET TO TANK BETWEEN THE SHUT OFF VALVE AND THE INLET NIPPLE TO THE TANK. SET THE WATER HEATER ON 14" STAND WITH A WATER HEATER PAN. PROVIDE SEISMIC WALL BRACKETS BOTH TOP AND BOTTOM OF TANK. PIPE T & P VALVE & WATER HEATER PAN TO THE MOP SINK WITH AN AIR GAP. SEE SHEET P-3.1, DETAIL 12. SET THE OUTLET TEMPERATURE TO 120F. THE HEIGHT IS 55 3/4" X 22" DIAMETER, SHIPPING WEIGHT 265 POUNDS.	-	-	-	-
P10	3-COMPARTMENT SINK - SINK AND FAUCETS TO BE PROVIDED BY KITCHEN SUPPLIER, AND INSTALLED BY PLUMBING CONTRACTOR. PROVIDE AND INSTALL BRASSCRAFT KTSCR19X C STOPS, ESCUTCHEONS, STAINLESS STEEL BRAIDED SUPPLIES, AND 1 1/2" 17 GA. P-TRAP. INDIRECT DRAIN SINK INTO FLOOR SINK WITH PROPER AIR GAP.	IW	-	1/2"(2)	1/2"(2)
P11	HOT WATER RECIRC PUMP - B & G MODEL B & G NBF-12U/LW, 3/4" UNION, 2,800 RPM, 55 WATTS, .48 F.L. AMPS, 115V 1/PHASE 9.3 LBS, ALL BRONZE PUMP WITH CONTROL, HONEYWELL L4008B1013 AQUASTAT, MOUNT PUMP MINIMUM OF 6'-0" A.F.F.	-	-	-	-
P12	GREASE INTERCEPTOR- PRE-BUILT OR POUR-IN PLACE, 1,250 GALLON GREASE INTERCEPTOR TANK, THE P.C. SHALL PROVIDE AND INSTALL THE TANKS, VENTS TRAFFIC RATED BOLTED LIDS, GRADE RINGS TO GROUND LEVEL WASTE PIPING TO THE TANK AND 5'-0" OUT OF TANK, AND CLEANOUTS TO GRADE AS REQUIRED. CONFORM TO ALL LOCAL AND STATE CODE REQUIREMENTS.	4"	3" 2"	-	-
P13	WASH FOUNTAIN - BRADLY SN2004/AST4 54" SEMI-CIRCULAR WASH FOUNTAIN WITH (A) TYPE DRAIN, STANDARD HEIGHT, FOOT CONTROLS, (LSD) LIQUID SOAP DISPENSER, ARCHITECT TO PICK COLOR. PROVIDE VALVES UNDER UNIT FOR SHUTOFFS.	2"	1 1/2"	1/2"	1/2"
P14	EMERGENCY COMBINATION SHOWER/EYEWASH (ADA) - ACORN SAFETY MODEL S2160-PE21-RA-PAN-ET71-2-BVS-OTG RECESSED EMERGENCY SHOWER AND EYE /FACE WASH WITH DRAIN PAN, THERMOSTATIC MIXING VALVE, FLOW RATE 1 GPM TO 31 GPM, COLD WATER BYPASS, FACTORY SET POINT 85 F, 1 1/4" COLD & HOT WATER INLETS, 1 1/4" OUTLET (MOUNT THE TMV IN THE CEILING THE CLASSROOM WITH AN ACCESS TO THE VALVE), MOUNT THE SHOWER PER MANUFACTURER INSTALLATION INSTRUCTIONS.	3"	2"	1 1/4"	1 1/4"
FS1	FLOOR SINK - J.R. SMITH MODEL #3140Y03-PDBS, 12-1/2" X 12-1/2" X 6", 2" OUTLET. POLISHED ALUMINUM DOME STRAINER. USE DEEP SEAL P-TRAPS ON FLOOR SINKS W/ TRAP PRIMER. IF APPROVED BY AUTHORITY HAVING JURISDICTION, THE P.C. MAY USE PROSET TRAP GUARDS IN LIEU OF TRAP PRIMERS.	2"	1 1/2"	-	-
FD1	FLOOR DRAIN - J. R. SMITH #2005Y02-A06-P050 CAST IRON FLOOR DRAIN WITH 6" DIA. NICKEL BRONZE ROUND STRAINER AND TRAP PRIMER TAPPING. PROVIDE AND INSTALL TRAP PRIMER J.R. SMITH 2699A1-CP TRAP PRIMER OR TRAP GUARDS, IF APPROVED BY THE LOCAL AUTHORITY. TRAP GUARDS WILL ELIMINATE THE NEED FOR A TRAP PRIMER. MUST MEET PLUMBING CODE REQUIREMENTS.	2"	1 1/2"	-	-
WHA	WATER HAMMER ARRESTERS - J. R. SMITH "HYDROTROL" HEAVY DUTY WATER HAMMER ARRESTERS, #5005 PDI-A 1-11 FIXTURE UNITS, 3/4" OR #5010 PDI-B 12-32 FIXTURE UNITS, 1".	-	-	3/4" 1"	3/4" 1"

GAS REGULATORS

GAS REGULATORS 2 PSI GAS MAIN PRESSURE		GAS LOAD	CFH LOAD	ACUMM. CFH LOAD	REGULATOR	PIPE MAIN	OUTLET
	BUILDING GAS APPLIANCES						5-8.5 W.C.
GPR# 1	RTU #1	60,000 BTU	58 CFH		30051	3/4"	"
GPR# 2	RTU #2	137,110 BTU	133 CFH		30051	1"	"
GPR# 3	RTU #3	500,000 BTU	484 CFH		30052	1-1/4"	"
GPR# 4	RTU #4	500,000 BTU	484 CFH		30052	1-1/4"	"
GPR# 5	RTU #5	60,000 BTU	58 CFH		30051	3/4"	"
GPR# 6	RTU #6	60,000 BTU	58 CFH		30051	3/4"	"
GPR# 7	RTU #7	137,110 BTU	133 CFH		30051	1"	"
GPR# 8	DOAS #1	252,500 BTU	244 CFH		30052	1-1/4"	"
GPR# 9	UH #1	125,000 BTU	221 CFH		30051	3/4"	"
GPR# 10	UH #2	125,000 BTU	221 CFH		30051	3/4"	"
GPR# 11	UH #3	125,000 BTU	221 CFH		30051	3/4"	"
GPR# 12	UH #4	125,000 BTU	221 CFH		30051	3/4"	"
GPR# 13	GAS FURNACE #1	88,000 BTU	86 CFH		30051	3/4"	"
GPR# 14	GAS FURNACE #2	88,000 BTU	86 CFH		30051	3/4"	"
GPR# 15	GAS FURNACE #3	132,000 BTU	128 CFH		30051	3/4"	"
GPR# 16	GAS FURNACE #4	132,000 BTU	128 CFH		30051	3/4"	"
	TOTAL BUILDING			2,964 CFH		1"	"

TOTAL BUILDING DEVELOPED LENGTH: 100 FEET (ADDED 25%), MULTIPLIER: 1,034

NOTE: ALL GAS REGULATORS WILL NOT BE CONCEALED, MUST BE ACCESSIBLE AND VENTED TO THE OUTSIDE ATMOSPHERE. PROTECT AGAINST MOISTURE ENTERING THE VALVE BY PROVIDING THE PROPER TURN DOWNS AND PROPER HEIGHT ABOVE THE ROOF LINE. USE GOVERNOR GAS PRESSURE REGULATORS. PROVIDE A 6" DIRT LEG, A GAS VALVE AND A UNION AT EACH REGULATOR, THEY MUST BE ACCESSIBLE. MUST MEET NFGC & NFPA 54, CHAPTER 2.9 OVERPRESSURE PROTECTION. GOVERNOR 1-888-618-8787. ALL GAS PIPE OVER 2" MUST BE WELDED.

LOCAL GAS UTILITY: INTERMOUNTAIN GAS PHONE #: 1-800-548-3679

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Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
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2444
AUTHOR
CLE

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
PLUMBING NOTES & SCHEDULES

SHEET NO.
P1.00

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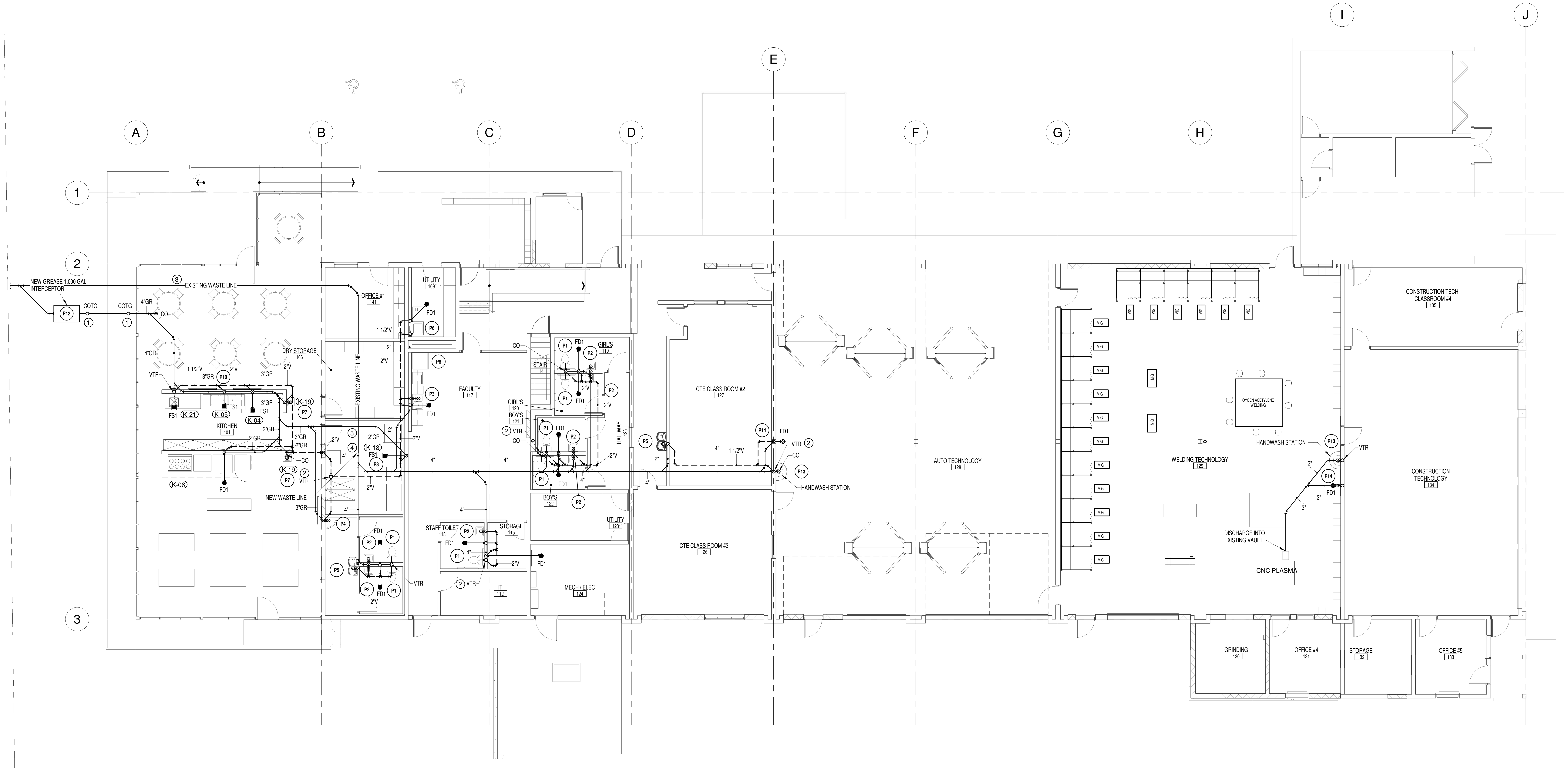
GENERAL WASTE & VENT NOTES

1. SLOPE BUILDING SANITARY WASTE LINES IN THE BUILDING AT A 1/4" TO THE FOOT. THE P.C. MAY RUN 4" AND LARGER AT 1/8" TO THE FOOT WITH THE APPROVAL OF THE BUILDING INSPECTOR. FIELD VERIFY THE INVERT OF THE BUILDING SEWER BEFORE RUNNING ANY PIPING INSIDE OF THE BUILDING.
2. RISE UP 6" ABOVE THE FLOOD RIM OF THE HIGHEST FIXTURE BEFORE RUNNING VENT LINES HORIZONTALLY. RISE UP WITH A VENT LINE FROM ALL FIXTURES. COMBINE VENTS TOGETHER AND THEN RISE UP TO THE ROOF.
3. P.C. IS TO PROVIDE ALL CLEANOUTS AT THE BASE OF EVERY STACK AND AS REQUIRED BY CODE. PROVIDE THE PROPER CLEARANCE AND ACCESS TO EACH OF THEM. PROVIDE A CHROME OR STAINLESS STEEL COVER PLATE WITH A BRONZE OR STAINLESS STEEL SCREW.
4. HANG ALL WASTE AND VENT LINES, AS SHOWN, WITH CLEVIS HANGERS, ALL THREAD ROD AND SIDE BEAM ATTACHMENTS OR EPOXY COATED UNISTRUT CHANNEL WITH CLAMPS. KEEP THE PIPING AS TIGHT AS POSSIBLE TO THE TRUSSES TO PROVIDE ROOM FOR THE OTHER TRADES AND WASTE LINES.
5. PROVIDE & INSTALL TRAP PRIMER OR TRAP GUARD ON ALL FLOOR DRAINS & SINKS. ALL FLOOR DRAINS & SINKS SHALL HAVE DEEP SEAL P-TRAP INSTALLED ON THE DISCHARGE SIDE OF THE FLOOR DRAIN & SINK. TRAP SEAL DEVICE: J.R. SMITH 2692 OR PROSET TRAP GUARDS.
6. ALL FLOOR SINKS AND FLOOR DRAINS IN THE BUILDING SHALL HAVE AN INDIVIDUAL P-TRAP AND BE VENTED TO THE BUILDING VENT SYSTEM.
7. INDIRECT WASTE THE EACH PIECE OF KITCHEN EQUIPMENT TO THE NEAREST FLOOR SINK. SEE THE CONVENIENCE STORE EQUIPMENT SCHEDULE.
8. P.C. SHALL ROUTE ALL DRAIN LINES FROM THE KITCHEN EQUIPMENT, ICE BINS, & ETC. TO INDIRECT WASTE INTO A FLOOR SINK W/AIR GAP. THE P.C. SHALL COORDINATE THESE DRAINS WITH KITCHEN EQUIPMENT SUPPLIER AND INSTALLER.
9. THE P.C. SHALL PROVIDE AND INSTALL A FULL SIZE DRAIN ON ALL BACKFLOW DEVICES. PROVIDE AND INSTALL THE PROPER AIR GAP AND A FULL SIZE DRAIN TO AN APPROVED DISCHARGE RECEPTACLE.
10. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE INSTALLATION OF ALL FLOOR DRAINS, FLOOR SINKS AND TRAP PRIMERS. SEE THE DIMENSIONS ON THE ARCHITECTURAL SHEET(S) FOR THE EXACT LOCATION OF EACH OF THESE DRAINS. IF ANY DISCREPANCIES OCCUR THE ARCHITECT SHOULD BE CONTACTED IMMEDIATELY.
11. ALL DRAINS FROM THE ICE MAKER AND THE STORAGE BINS SHALL BE A MINIMUM OF 3/4", NO EXCEPTIONS.
12. CONNECT THE BUILDING VENTS TOGETHER HORIZONTALLY INSIDE THE BUILDING AND THEN RISING UP WITH A BUILDING VENT THRU THE ROOF. THE VTR'S SHALL RISE TO THE HEIGHT OF THE PARAPET WALL ON THE ROOF. KEEP VENTS 10'-0" MINIMUM FROM ALL ROOF TOP UNITS AND FRESH AIR INTAKES ON ROOF. SECURE ALL VENT PIPING.

P1.01 KEY NOTES

1	INSTALL A C.O.T.G. ON THE BUILDING GREASE, ROOF DRAIN AND SEWER LINES AS SHOWN ON THE DRAWINGS. RISE EACH C.O.T.G. LEVEL WITH FINISH GRADE. INSTALL A NICKEL BRONZE CLEANOUT (J.R. SMITH 4220) ON EACH RISER. POUR A 16" X 16" x 4" CONCRETE PAD AROUND EACH CLEANOUT, UNLESS THE CLEANOUT IS LOCATED IN A SIDEWALK OR DRIVEWAY.
2	THE P.C. SHALL INSTALL THE VENT THRU THE ROOF, SECURE THE PIPING AND PROVIDE A WEATHER-TIGHT ROOF FLASHING. P.C. IS RESPONSIBLE TO PATCH ALL PENETRATIONS THRU THE WALLS & ROOF AND SEAL THEM WEATHER-TIGHT.
3	THE EXISTING BUILDING GREASE WASTE LINE IS IN THIS APPROXIMATE LOCATION. THE CONTRACTOR SHALL FIELD VERIFY THE INVERT ELEVATION AND THEIR EXACT LOCATIONS. CONNECT ONTO THIS LINE AND RUN TO THE KITCHEN FIXTURES IN THIS PROJECT. THE P.C. SHALL PROVIDE ALL THE NECESSARY CONCRETE CUTTING, EXCAVATION, BACKFILLING AND COMPACTION TO INSTALL THE BUILDING GREASE AND SANITARY WASTE LINES IN THIS PROJECT.
4	CONNECT IN TO THE EXISTING SANITARY WASTE IN THIS APPROXIMATE LOCATION. THE P.C. SHALL ENSURE THE EXISTING SANITARY WASTE LINE IS AND REMAINS FULLY FUNCTIONAL AND OPERATIONAL.



① FLOOR PLAN - PLUMBING WASTE & VENT

SCALE 1/8" = 1'-0"

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Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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208.338.1212

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AUTHOR
CLE

PROJECT
CAREEER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

FLOOR PLAN - PLUMBING WASTE & VENT

SHEET NO.
P1.01

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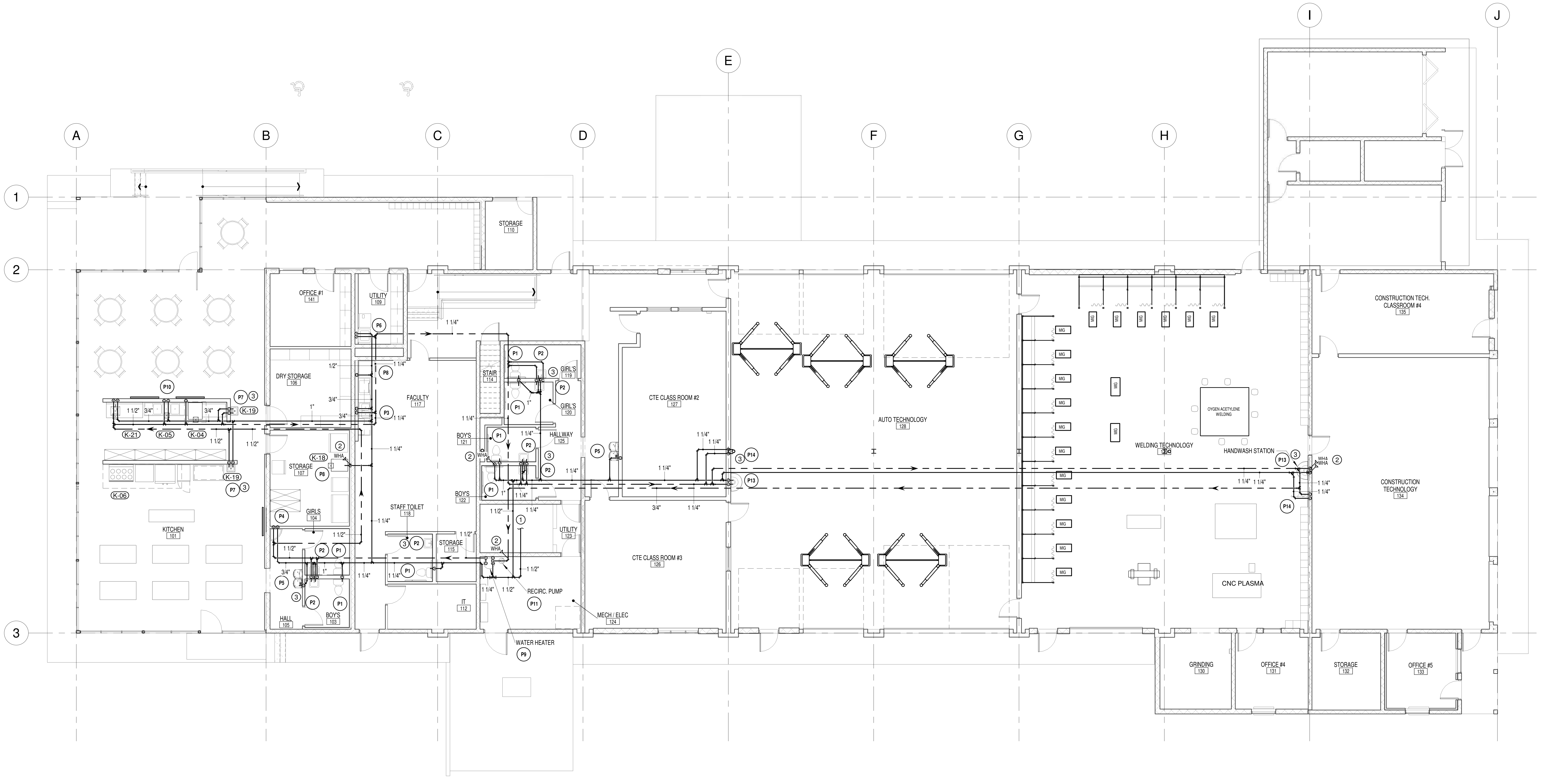
GENERAL WATER NOTES

1. ALL WATER LINES SHALL BE HUNG USING COATED CLEVIS HANGERS, ALL THREAD ROD & SIDE BEAM ATTACHMENTS OR EPOXY COATED UNISTRUT CHANNEL, ALL THREAD ROD & SIDE BEAM ATTACHMENTS, SECURE PIPE WITH INSULATED CLAMPS.
2. ALL WATER PIPING, HOT AND COLD DOMESTIC LINES SHALL BE INSULATED. SEE INSULATION SCHEDULE ON SHEET P100 FOR THE THICKNESS AND TYPE OF INSULATION.
3. ALL KITCHEN EQUIPMENT, OWNER PROVIDED EQUIPMENT, AND BAR SINKS INDIRECT WASTE DRAINS SHALL BE PIPED TO THE FLOOR SINK W/PROPER AIR GAP. PROVIDE CLEAN OUT ACCESS TO THESE FLOOR DRAINS WHICH LOCATED UNDER CABINETS.
4. EACH FLOOR DRAIN & FLOOR SINK SHALL BE PROVIDED WITH A TRAP PRIMER OR TRAP SEAL DEVICE. TRAP PRIMER: INSTALL 1/2" SOFT "K" COPPER OR ENGLE'S METHOD PEX PIPE, ENCASED IN PLASTIC PIPE SLEEVE, TO EACH OF THE FLOOR SINKS & FLOOR DRAINS. TRAP SEAL DEVICES: NO PIPING REQUIRED. PROSET TRAP GUARDS OR J. R. SMITH 2692 TRAP SEALS. SEE DETAIL.
5. INSTALL WATER BALLVALVE SHUTOFF STOPS TO ALL OWNER PROVIDED KITCHEN EQUIPMENT. THESE VALVES SHALL TO BE LOCATED AS PER MANUFACTURES RECOMMENDATIONS. PROVIDE & INSTALL ALL BACKFLOW PROTECTION NECESSARY AS REQUIRED BY LOCAL OR PLUMBING CODES.
6. SEE SHEET PD100, PLUMBING FIXTURE SCHEDULE FOR A LISTING OF ALL THE PLUMBING FIXTURES AND EACH FIXTURE'S TRIM.
7. ANY & ALL PENETRATIONS THROUGH THE BUILDING ROOF OR WALLS SHALL BE SEALED WITH "DECK-MATE" FLASHING FOR ROOF & WALL SYSTEMS. G.C. SHALL PROVIDE, INSTALL & PAINT TO MATCH BUILDING. SUBCONTRACTOR SHALL COORDINATE WITH THE G.C. ALL PENETRATIONS AND SIZES. THE ARCHITECT SHALL HAVE THE FINAL INPUT ON HOW ALL PENETRATIONS SHALL BE SEALED. THE P.C. AND THE G.C. SHALL VERIFY WITH THE ARCHITECT WHAT SHALL BE REQUIRED OF THEM.
8. THE P.C. SHALL PROVIDE A LAMINATED VALVE TAG (BEFORE THE STORE HAS A FINAL WALK THRU) TO BE PERMANENTLY SECURED TO EACH OF THE COLD & HOT WATER VALVES WHICH WILL SERVE THE EQUIPMENT, WHICH NEED COLD OR HOT WATER.
9. ALL THE WATER VALVES ABOVE THE HARD LID OR THE DROP IN CEILING SHALL BE INSTALLED BETWEEN 1'-0" TO 1'-6" ABOVE THE CEILING. MAINTENENCE PERSONAL NEED TO ACCESS THESE VALVES USING A LADDER AND CANNOT REACH THEM IF THEY ARE INSTALLED UP CLOSE TO THE TRUSSES. PROVIDE BIG ENOUGH ACCESS DOOR TO ACCESS EACH VALVE AT EACH LOCATION.
10. **THE P.C. SHALL MEET ALL LOCAL, STATE, AND HEALTH DEPARTMENT CODES AS THEY RELATE TO BACKFLOW PROTECTION. EACH PIECE OF EQUIPMENT THAT IS PROVIDED BY THE P.C. AND HE OWNER SHALL HAVE THE PROPER BACKFLOW PROTECTION. FIELD VERIFY WITH STATE, CITY & HEALTH DEPARTMENT WHAT IS REQUIRED FOR THE PROTECTION OF THIS STORE AND THE EQUIPMENT BEING INSTALLED. THE P.C. SHALL BE RESPONSIBLE TO PROVIDE THE NECESSARY DEVICES TO PROTECT EACH PIECE OF EQUIPMENT. PROVIDE FULL SIZE DRAINS TO AN APPROVED RECEPTACLE WITH THE PROPER AIR GAP.**

P1.02 KEY NOTES

1	THE P.C. SHALL CONNECT TO EXISTING 1 1/2" WATER LINE IN THIS APPROXIMATE LOCATION. FIELD VERIFY EXACT LOCATION. PROVIDE AND INSTALL A NEW 1-1/2" FULLPORT BALLVALVE SHUTOFF VALVE, BACKFLOW PREVENTER(IF REQUIRED, FOLLOW CITY REQUIREMENTS) AND 0-200 PSI LIQUID FILLED PRESSURE GAUGE. FIELD VERILY THE EXACT LOCATION OF THE PIPING AND THE WATER PRESSURE INTO THIS SPACE.
2	THE PLUMBING CONTRACTOR SHALL INSTALL WATER HAMMER ARRESTORS, SIZED ON WATER FIXTURE UNITS. SEE MANUFACTURES SIZING CHART TO SELECT EACH WATER HAMMER ARRESTER.
3	THE PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL THE THERMOSTATIC MIXING VALVE AT EACH FIXTURE (LAVATORIES AND HAND SINKS) WHERE THE CODES REQUIRES 110 DEG. F. WATER.



1 FLOOR PLAN - PLUMBING DOMESTIC WATER

SCALE 1/8" = 1'-0"

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Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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AUTHOR
CLE

PROJECT
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PROJECT ADDRESS
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FLOOR PLAN - PLUMBING DOMESTIC WATER

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P1.02

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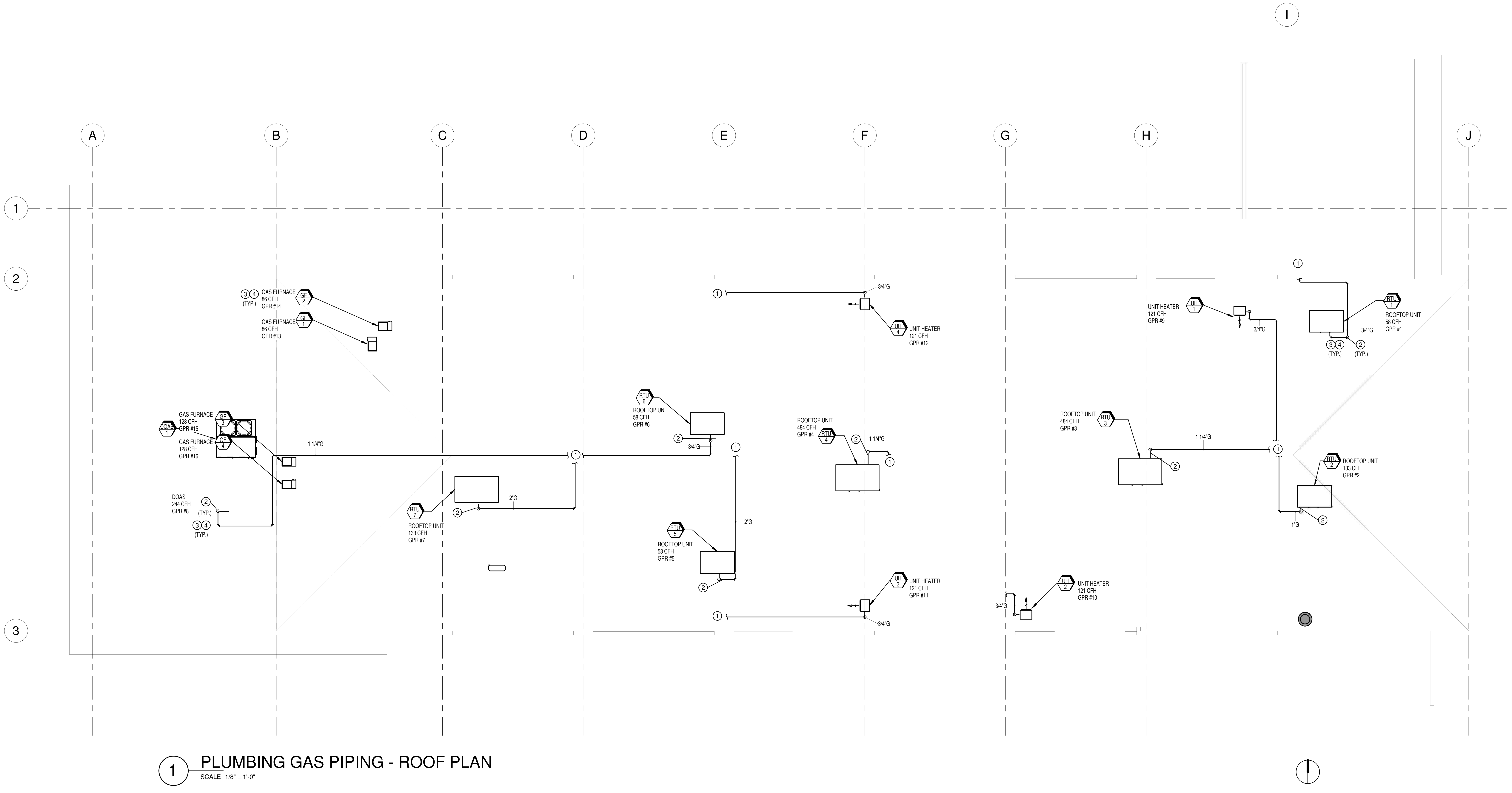
P1.03 KEY NOTES	
1	ROUTE NEW PIPING TO CLOSEST TIE IN TO EXISTING PIPING. TIE IN MUST BE LARGER THAN OR EQUAL TO NEW PIPING SIZE.IF NOT MAKE NEW TIE IN TO EXISTING MAIN LINE.
2	SEAL ALL PENETRATIONS THRU THE WALLS OR ROOF WEATHER-TIGHT AND PAINT ALL EXPOSED GAS PIPING. PROVIDE AN ESCUTCHEON ON THE PIPING AS IT GOES THRU THE WALL.
3	CONNECT THE GAS PIPING TO EACH GAS APPLIANCES, PROVIDE AND INSTALL A GAS SHUTOFF VALVE, GAS PRESSURE REGULATOR & UNION AND MINIMUM OF A 6" DIRT LEG. ALL UNIONS SHALL BE ACCESSIBLE.
4	THE GAS CONTRACTOR SHALL SUPPORT OR ANCHOR ALL THE GAS PIPING. THE CONTRACTOR SHALL USE MIRO GAS & MECHANICAL SUPPORTS OR MAKE ALL THE PIPING SOLID.


I
A
B
C
D
E
F
G
H
J
1
2
3
③④ (TYP.) GAS FURNACE 86 CFH GPR #14
GF 2
GAS FURNACE 86 CFH GPR #13
GF 1
GAS FURNACE 128 CFH GPR #15
GF 3
DOAS 1
GAS FURNACE 128 CFH GPR #16
GF 4
1 1/4"G
DOAS 244 CFH GPR #8
② (TYP.)
③④ (TYP.)
RTU 7
ROOFTOP UNIT 133 CFH GPR #7
2"G
②
①
RTU 6
ROOFTOP UNIT 58 CFH GPR #6
②
3/4"G
①
RTU 5
ROOFTOP UNIT 58 CFH GPR #5
2"G
②
①
3/4"G
UH 4
UNIT HEATER 121 CFH GPR #12
ROOFTOP UNIT 484 CFH GPR #4
RTU 4
②
1 1/4"G
①
①
UH 3
UNIT HEATER 121 CFH GPR #11
3/4"G
UH 2
UNIT HEATER 121 CFH GPR #10
3/4"G
ROOFTOP UNIT 484 CFH GPR #3
RTU 3
②
1 1/4"G
①
UNIT HEATER 121 CFH GPR #9
UH 1
3/4"G
①
RTU 1
ROOFTOP UNIT 58 CFH GPR #1
3/4"G
③④ (TYP.)
② (TYP.)
RTU 2
ROOFTOP UNIT 133 CFH GPR #2
1"G
②

1 PLUMBING GAS PIPING - ROOF PLAN

SCALE 1/8" = 1'-0"

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Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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208.338.1212

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1-9-25
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2444
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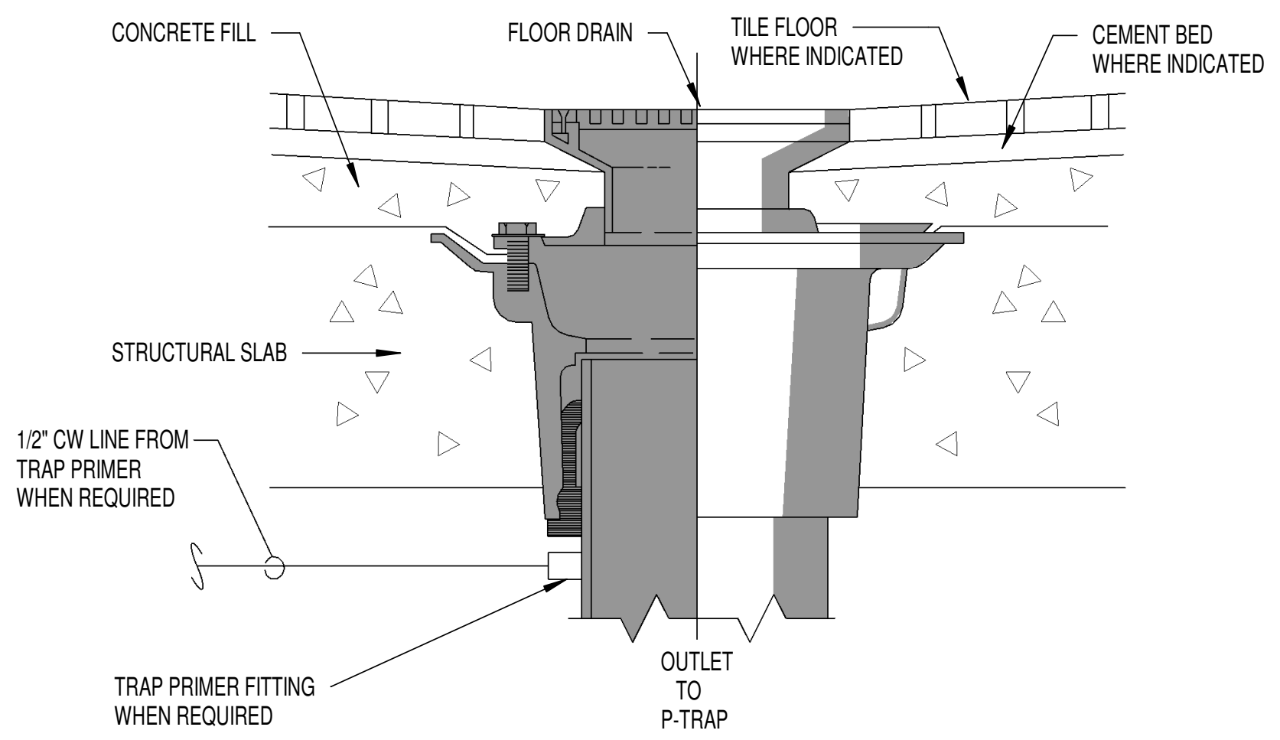
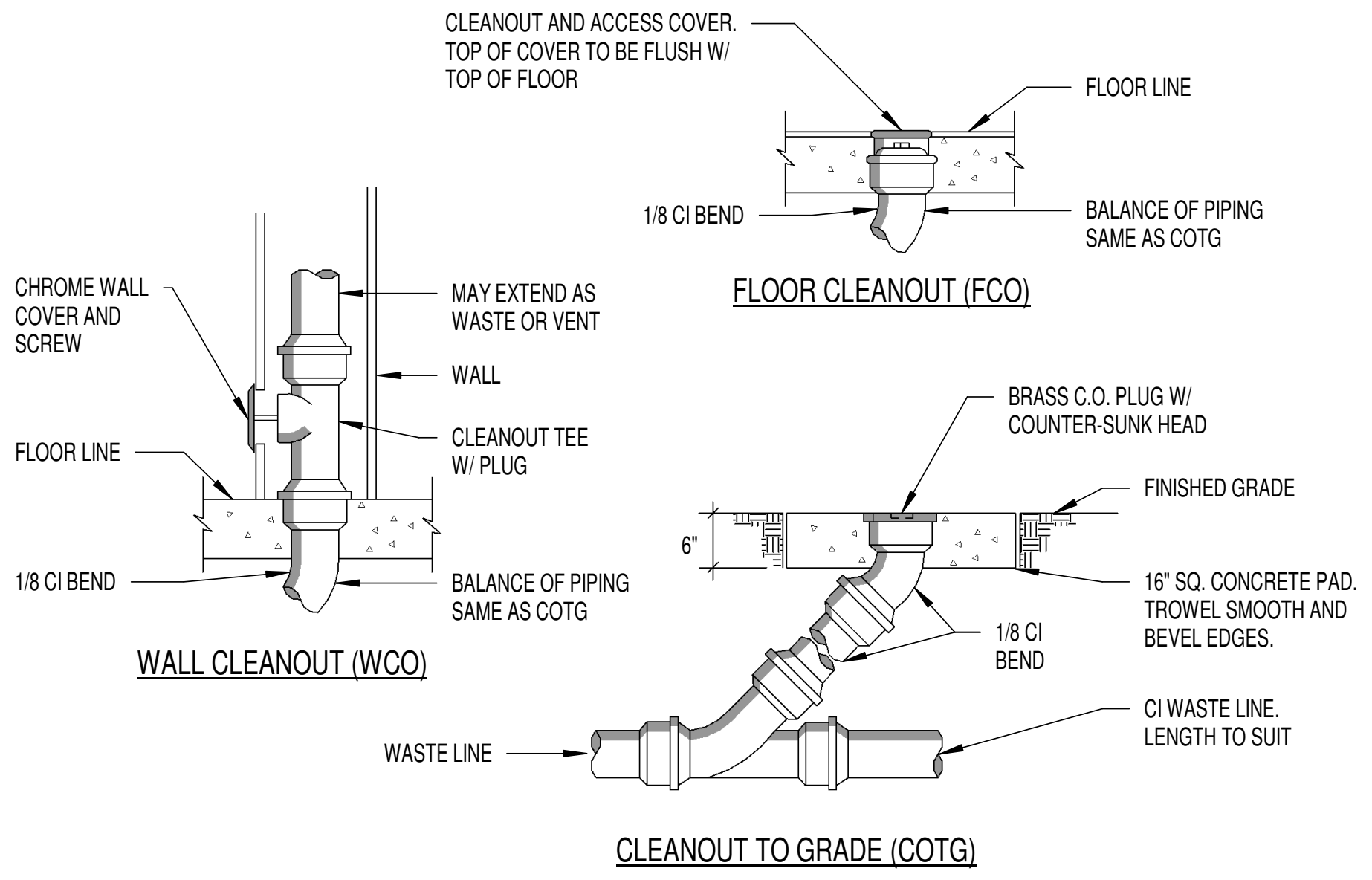
PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
FLOOR PLAN - PLUMBING NATURAL GAS

SHEET NO.
P1.03


CONCRETE FILL
FLOOR DRAIN
TILE FLOOR WHERE INDICATED
CEMENT BED WHERE INDICATED
STRUCTURAL SLAB
1/2" CW LINE FROM TRAP PRIMER WHEN REQUIRED
TRAP PRIMER FITTING WHEN REQUIRED
OUTLET TO P-TRAP

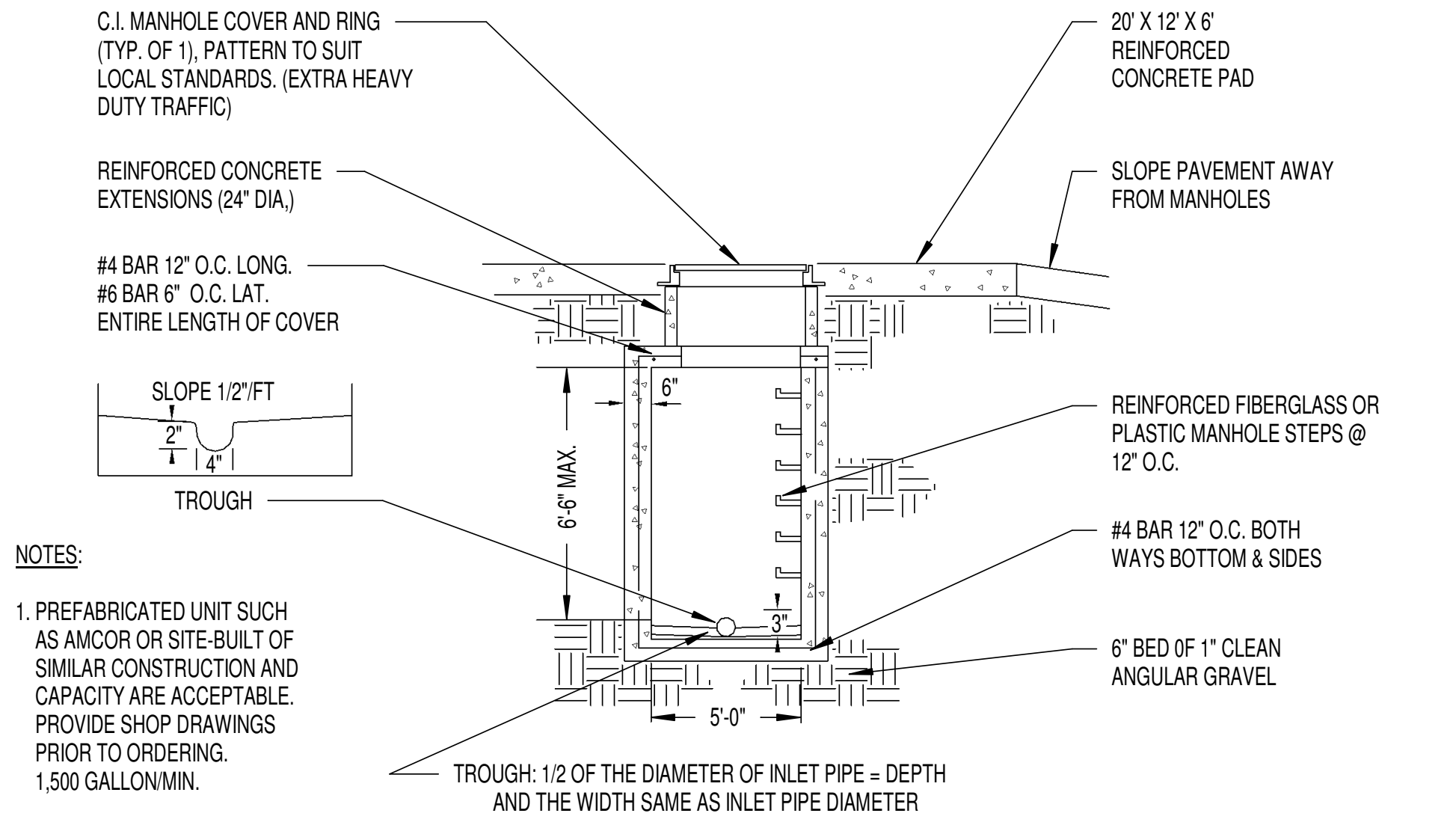
4 P2.00 DETAIL-FLOOR DRAIN W/ TRAP PRIMER (FD1)

SCALE: NONE


CLEANOUT AND ACCESS COVER. TOP OF COVER TO BE FLUSH W/ TOP OF FLOOR
FLOOR LINE
1/8 CI BEND
BALANCE OF PIPING SAME AS COTG
FLOOR CLEANOUT (FCO)
CHROME WALL COVER AND SCREW
MAY EXTEND AS WASTE OR VENT
WALL
CLEANOUT TEE W/ PLUG
FLOOR LINE
1/8 CI BEND
BALANCE OF PIPING SAME AS COTG
WALL CLEANOUT (WCO)
BRASS C.O. PLUG W/ COUNTER-SUNK HEAD
FINISHED GRADE
6"
16" SQ. CONCRETE PAD. TROWEL SMOOTH AND BEVEL EDGES.
1/8 CI BEND
CI WASTE LINE. LENGTH TO SUIT
WASTE LINE
CLEANOUT TO GRADE (COTG)

3 DETAIL-CLEANOUTS

SCALE 1/8" = 1'-0"


C.I. MANHOLE COVER AND RING (TYP. OF 1), PATTERN TO SUIT LOCAL STANDARDS. (EXTRA HEAVY DUTY TRAFFIC)
20' X 12' X 6' REINFORCED CONCRETE PAD
REINFORCED CONCRETE EXTENSIONS (24" DIA,)
SLOPE PAVEMENT AWAY FROM MANHOLES
#4 BAR 12" O.C. LONG. #6 BAR 6" O.C. LAT. ENTIRE LENGTH OF COVER
SLOPE 1/2"/FT
2"
4"
TROUGH
6"
6'-6" MAX.
3"
5'-0"
REINFORCED FIBERGLASS OR PLASTIC MANHOLE STEPS @ 12" O.C.
#4 BAR 12" O.C. BOTH WAYS BOTTOM & SIDES
6" BED 0F 1" CLEAN ANGULAR GRAVEL
TROUGH: 1/2 OF THE DIAMETER OF INLET PIPE = DEPTH AND THE WIDTH SAME AS INLET PIPE DIAMETER

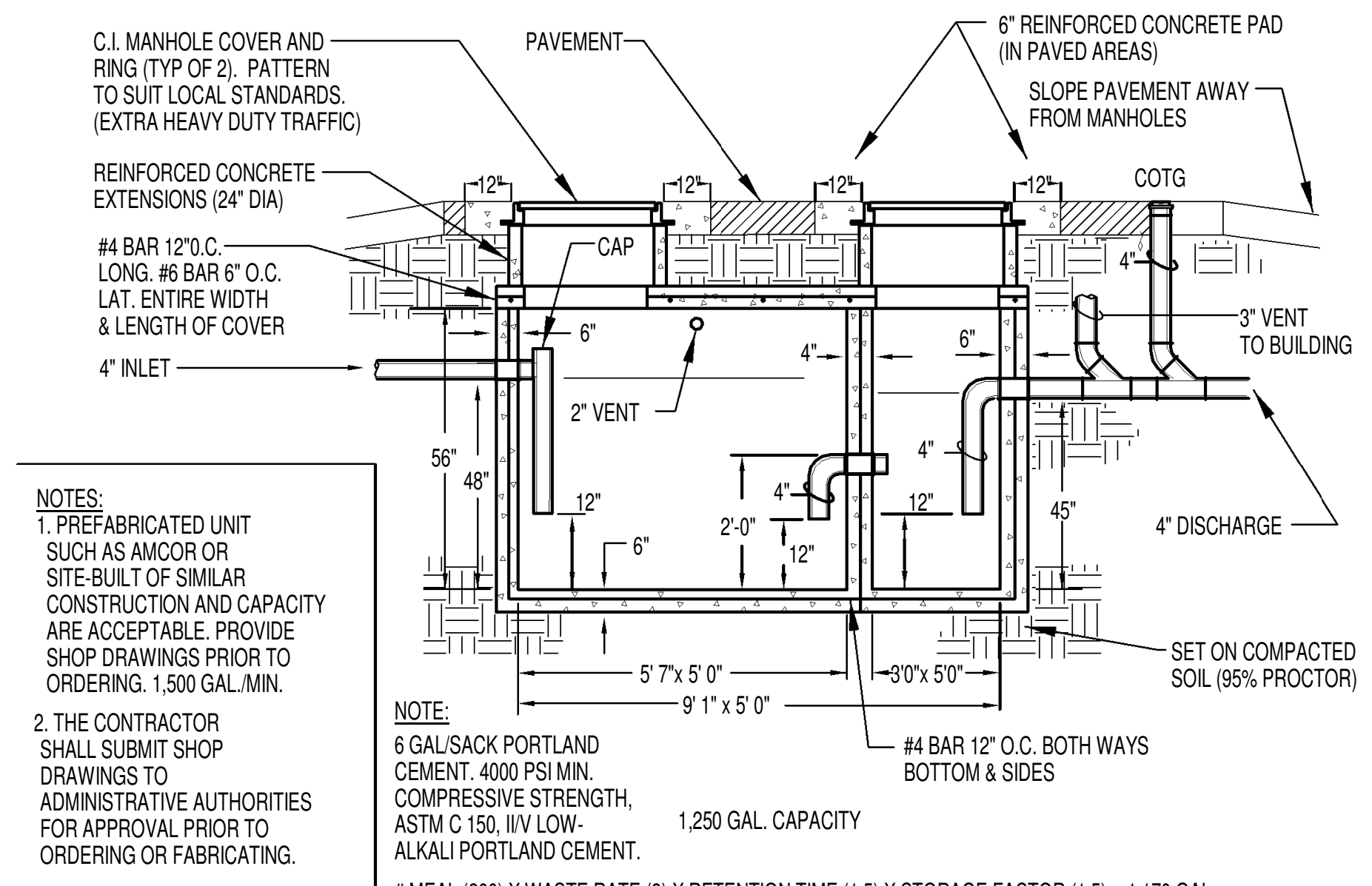
NOTES:

1. PREFABRICATED UNIT SUCH AS AMCOR OR SITE-BUILT OF SIMILAR CONSTRUCTION AND CAPACITY ARE ACCEPTABLE. PROVIDE SHOP DRAWINGS PRIOR TO ORDERING. 1,500 GALLON/MIN.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ADMINISTRATIVE AUTHORITIES FOR APPROVAL PRIOR TO ORDERING OR FABRICATING.

NOTE:
PROVIDE ONE SAMPLING MANHOLE 3' TO 7' DEEP. MUST BE INSTALLED IN ACCORDANCE WITH LOCAL REGULATIONS. IF DEEPER MANHOLE REQUIRED, VERIFY WITH THE LOCAL AUTHORITY.

2 P2.00 DETAIL - SAMPLING MANHOLE

SCALE: NONE


C.I. MANHOLE COVER AND RING (TYP OF 2). PATTERN TO SUIT LOCAL STANDARDS. (EXTRA HEAVY DUTY TRAFFIC)
PAVEMENT
6" REINFORCED CONCRETE PAD (IN PAVED AREAS)
SLOPE PAVEMENT AWAY FROM MANHOLES
REINFORCED CONCRETE EXTENSIONS (24" DIA)
12"
12"
12"
12"
COTG
#4 BAR 12"0.C. LONG. #6 BAR 6" O.C. LAT. ENTIRE WIDTH & LENGTH OF COVER
CAP
4"
3" VENT TO BUILDING
4" INLET
6"
2" VENT
4"
6"
56"
48"
4"
4"
12"
6"
2'-0"
12"
12"
45"
4" DISCHARGE
5' 7"x 5' 0"
3'0"x 5'0"
9' 1" x 5' 0"
SET ON COMPACTED SOIL (95% PROCTOR)
#4 BAR 12" O.C. BOTH WAYS BOTTOM & SIDES

NOTES:
1. PREFABRICATED UNIT SUCH AS AMCOR OR SITE-BUILT OF SIMILAR CONSTRUCTION AND CAPACITY ARE ACCEPTABLE. PROVIDE SHOP DRAWINGS PRIOR TO ORDERING. 1,500 GAL./MIN.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ADMINISTRATIVE AUTHORITIES FOR APPROVAL PRIOR TO ORDERING OR FABRICATING.

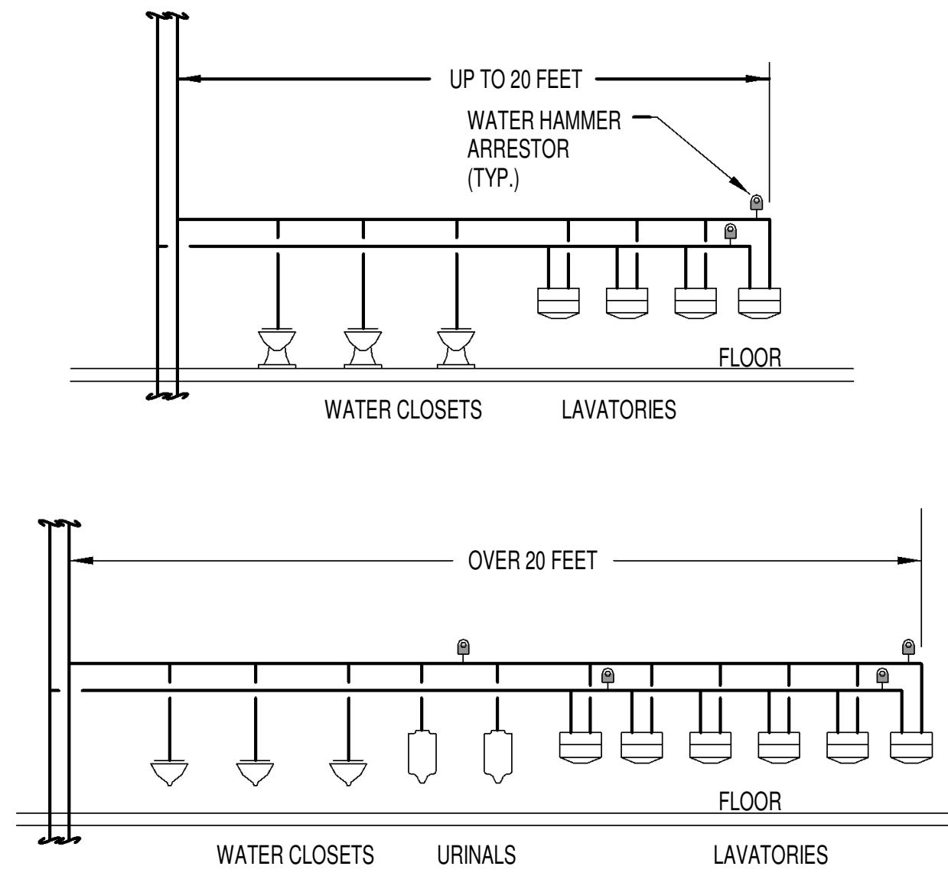
NOTE:
6 GAL/SACK PORTLAND CEMENT. 4000 PSI MIN. COMPRESSIVE STRENGTH, ASTM C 150, II/V LOW-ALKALI PORTLAND CEMENT.

1,250 GAL. CAPACITY

# MEAL (260) X WASTE RATE (2) X RETENTION TIME (1.5) X STORAGE FACTOR (1.5) = 1.170 GAL.

1 P2.00 DETAIL - GREASE INTERCEPTOR (1,250 GAL.)

SCALE: NONE



NOTES

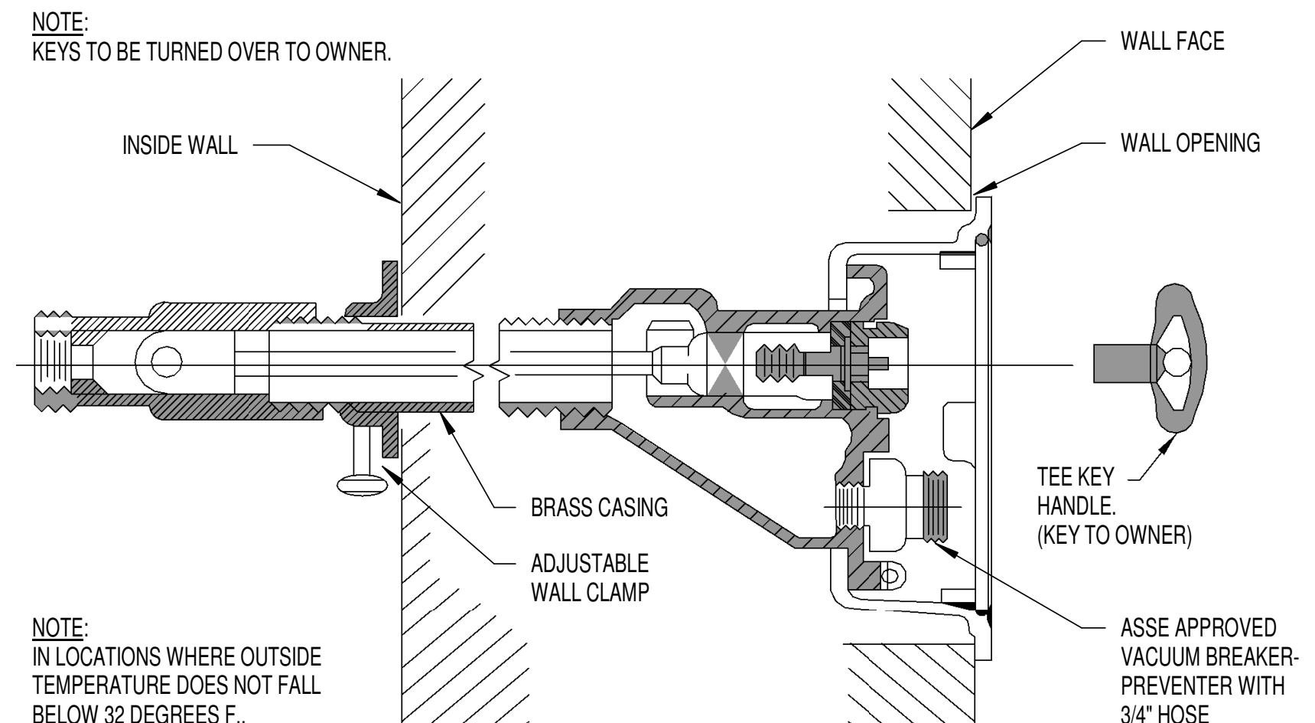
① ON MULTIPLE FIXTURE BRANCH LINES UP TO 20 FEET IN LENGTH, THE ARRESTOR SHOULD BE INSTALLED ON THE BRANCH LINE BETWEEN THE LAST TWO FIXTURES BEING SERVED. THE ARRESTOR SHOULD HAVE A FIXURE-UNIT RATING EQUAL TO OF GREATER THAN THE TOTAL FIXTURE-UNITS CONNECTED TO THE BRANCH LINE.

② ON MULTIPLE FIXTURE BRANCH LINES OVER 20 FEET IN LENGTH, TWO ARRESTORS SHOULD BE USED ON EACH LINE WITH THE SECOND UNIT PLACED AT THE APPROXIMATE MIDPOINT OF THE LINE. THE SUM OF THE FIXTURE-UNITS RATINGS OF THE ARRESTOR ON EACH BRANCH SHOULD BE EQUAL TO OR GREATER THAN THE TOTAL FIXTURE-UNITS CONNECTED TO THE BRANCH LINE.

8 P2.00 DETAIL-WATER HAMMER ARRESTOR INSTALLATION

SCALE: NONE

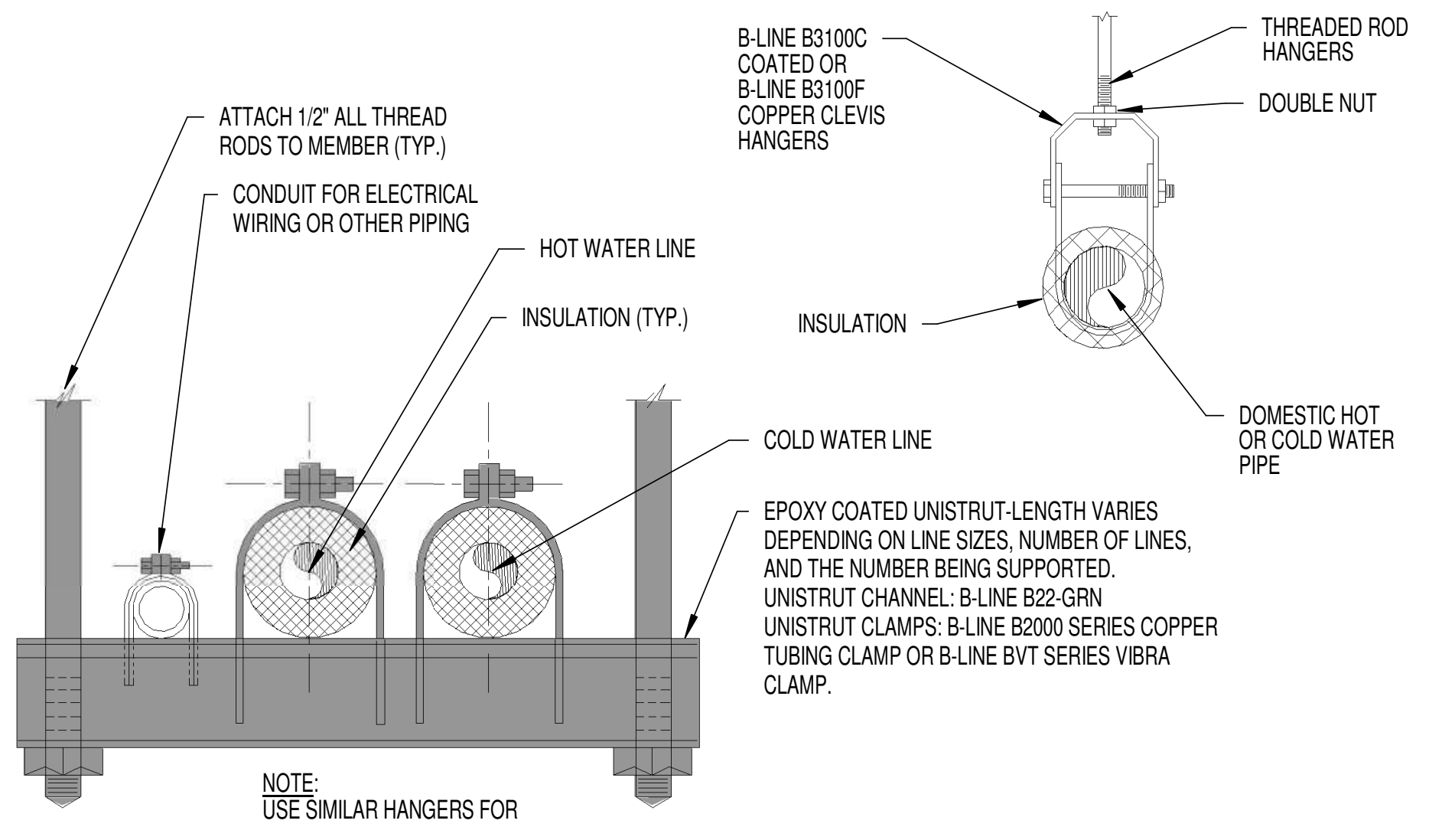
NOTE:
KEYS TO BE TURNED OVER TO OWNER.


INSIDE WALL
WALL FACE
WALL OPENING
BRASS CASING
ADJUSTABLE WALL CLAMP
TEE KEY HANDLE. (KEY TO OWNER)
ASSE APPROVED VACUUM BREAKER-PREVENTER WITH 3/4" HOSE CONNECTION

NOTE:
IN LOCATIONS WHERE OUTSIDE TEMPERATURE DOES NOT FALL BELOW 32 DEGREES F., INSTALLATION OF HOSE BIBB WITHOUT FREEZE PROTECTION IS ACCEPTABLE. REFER TO PLUMBING FIXTURE SCHEDULE. (CONFIRM WITH ENGINEER)

7 P2.00 DETAIL-HOSE BIBB

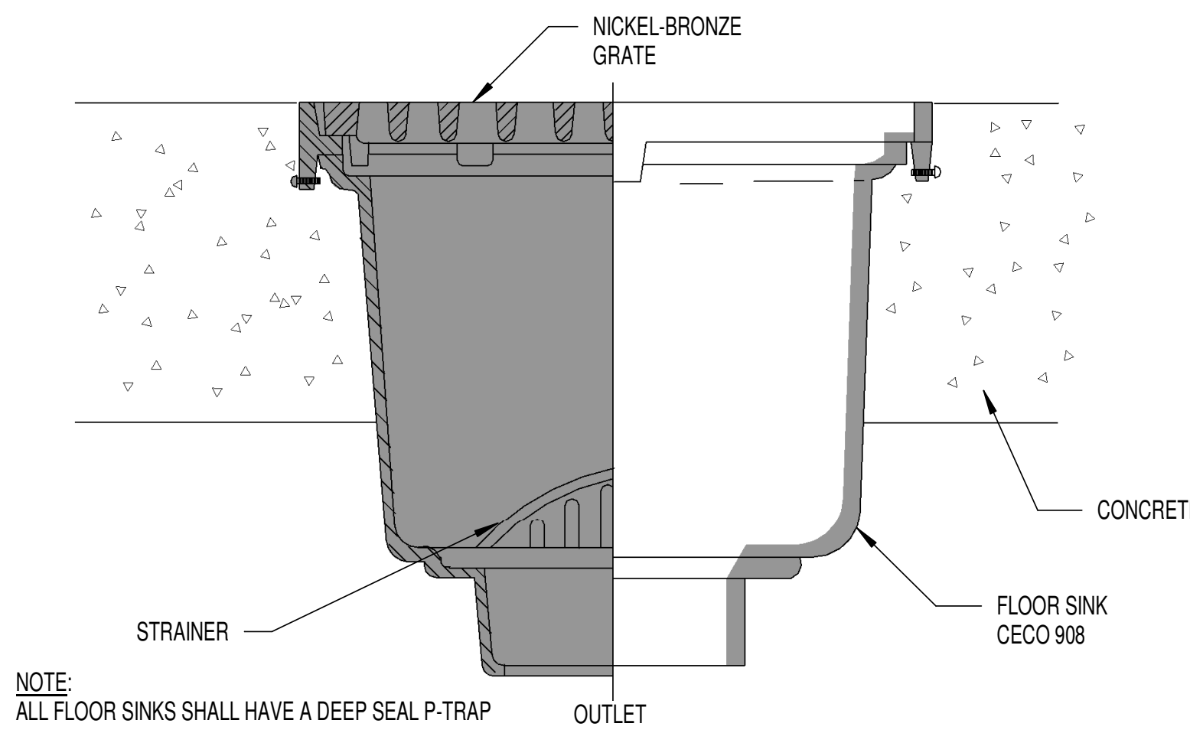
SCALE: NONE


B-LINE B3100C COATED OR B-LINE B3100F COPPER CLEVIS HANGERS
THREADED ROD HANGERS
DOUBLE NUT
ATTACH 1/2" ALL THREAD RODS TO MEMBER (TYP.)
CONDUIT FOR ELECTRICAL WIRING OR OTHER PIPING
HOT WATER LINE
INSULATION (TYP.)
INSULATION
DOMESTIC HOT OR COLD WATER PIPE
COLD WATER LINE
EPOXY COATED UNISTRUT-LENGTH VARIES DEPENDING ON LINE SIZES, NUMBER OF LINES, AND THE NUMBER BEING SUPPORTED. UNISTRUT CHANNEL: B-LINE B22-GRN UNISTRUT CLAMPS: B-LINE B2000 SERIES COPPER TUBING CLAMP OR B-LINE BVT SERIES VIBRA CLAMP.

NOTE:
USE SIMILAR HANGERS FOR STEAM, CONDENSATE, AND AIR LINES.

6 P2.00 DETAIL - PIPE HANGING METHODS

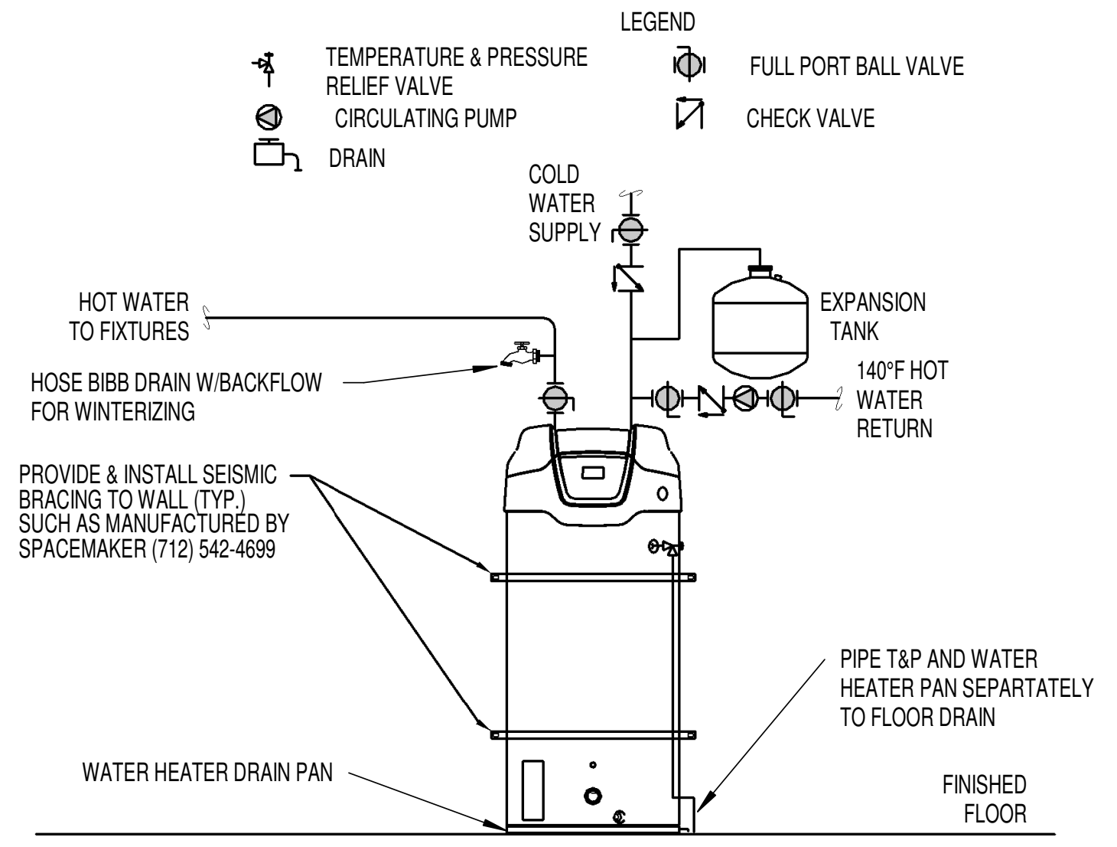
SCALE: NONE



NOTE:
ALL FLOOR SINKS SHALL HAVE A DEEP SEAL P-TRAP OR A TRAP PRIMER AS PER CODE REQUIREMENT. IF APPROVED BY LOCAL AUTHORITY HAVING JURISDICTION PROSET TRAP GUARD MAY BE INSTALLED.

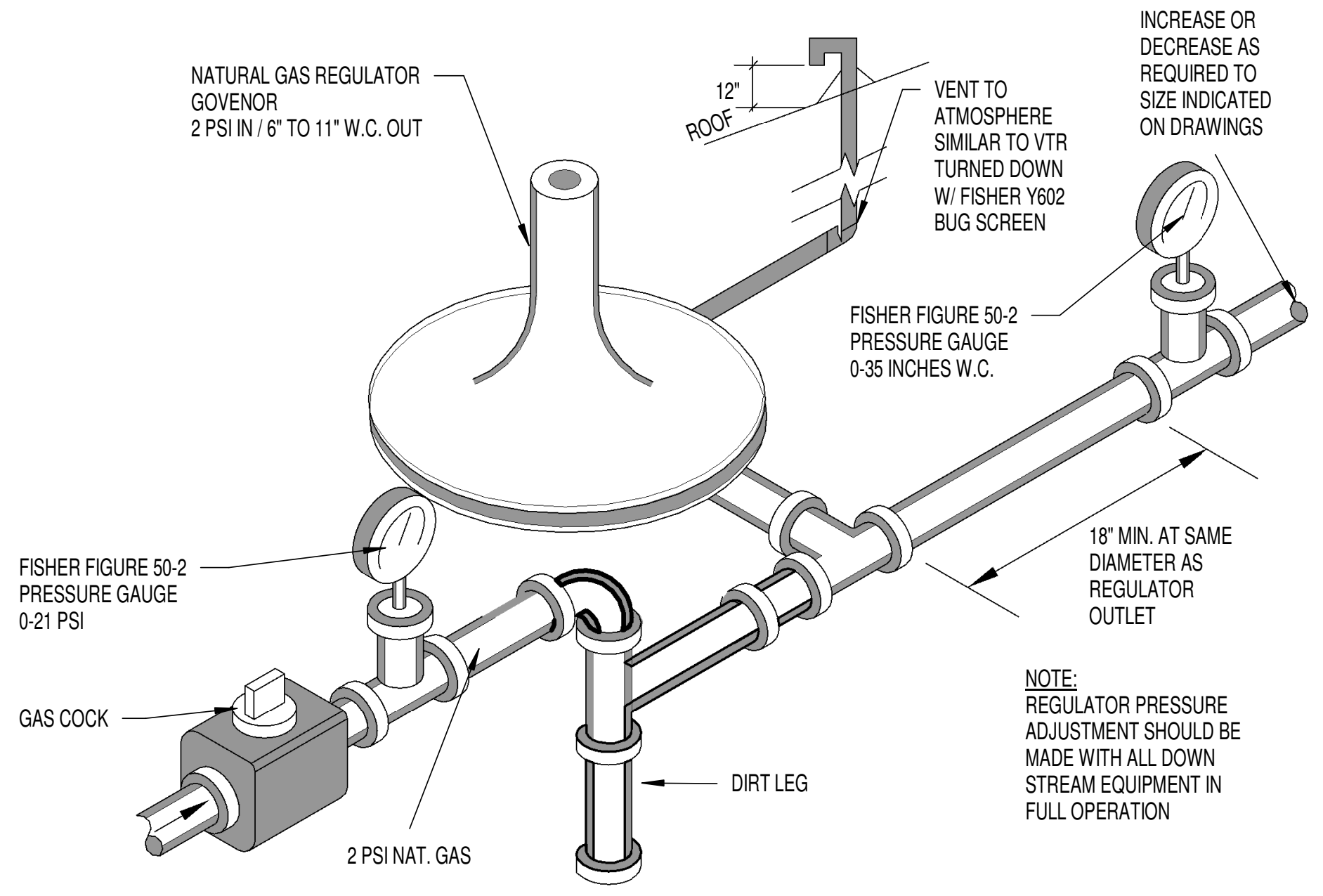
5 P2.00 DETAIL-FLOOR SINK (FS1)

SCALE: NONE


LEGEND
TEMPERATURE & PRESSURE RELIEF VALVE
CIRCULATING PUMP
DRAIN
FULL PORT BALL VALVE
CHECK VALVE
COLD WATER SUPPLY
HOT WATER TO FIXTURES
EXPANSION TANK
HOSE BIBB DRAIN W/BACKFLOW FOR WINTERIZING
140°F HOT WATER RETURN
PROVIDE & INSTALL SEISMIC BRACING TO WALL (TYP.) SUCH AS MANUFACTURED BY SPACEMAKER (712) 542-4699
PIPE T&P AND WATER HEATER PAN SEPARTATELY TO FLOOR DRAIN
WATER HEATER DRAIN PAN
FINISHED FLOOR

10 P2.00 DETAIL-ELECTRIC WATER HEATER

SCALE: NONE


NATURAL GAS REGULATOR GOVENOR 2 PSI IN / 6" TO 11" W.C. OUT
12"
ROOF
VENT TO ATMOSPHERE SIMILAR TO VTR TURNED DOWN W/ FISHER Y602 BUG SCREEN
INCREASE OR DECREASE AS REQUIRED TO SIZE INDICATED ON DRAWINGS
FISHER FIGURE 50-2 PRESSURE GAUGE 0-35 INCHES W.C.
18" MIN. AT SAME DIAMETER AS REGULATOR OUTLET
FISHER FIGURE 50-2 PRESSURE GAUGE 0-21 PSI
GAS COCK
DIRT LEG
2 PSI NAT. GAS

NOTE:
REGULATOR PRESSURE ADJUSTMENT SHOULD BE MADE WITH ALL DOWN STREAM EQUIPMENT IN FULL OPERATION

9 P2.00 GAS PRESSURE REGULATOR DETAIL

SCALE: NONE

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Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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DATE
1-9-25

REF NO.
2444

AUTHOR
CLE

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

PLUMBING DETAILS

SHEET NO.
P2.00

1/9/2025 5:11:53 PM

ABBREVIATION SCHEDULE

SYMBOL	DESCRIPTION
A/C	AIR CONDITIONING
ASR	AUTOMATIC SPRINKLER RISER
AVG	AVERAGE
BFP	BACKFLOW PREVENTER
BTU	BRITISH THERMAL UNITS
CB	CATCH BASIN
CFH	CUBIC FEET PER HOUR
CL	CENTERLINE
CO	CLEANOUT
CONC	CONCRETE
CONT'D	CONTINUED
CONTR	CONTRACTOR
COTG	CLEANOUT TO GRADE
DN	DOWN
DS	DOWNSPOUT
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION
EXIST	EXISTING
(E)	EXISTING
(ER)	EXISTING TO BE REMOVED
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FE & CABINET
FHB	FLOOR HOSE BOX
FHC	FIRE HOSE AND CABINET
FL	FLOOR
FPS	FEET PER SECOND
FS	FLOOR SINK
FT.HD	FEET OF HEAD
FTR	FLUE THRU ROOF
FU	FIXTURE UNIT
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GR	GRADE
HB	HOSE BIBB
HD	HUB DRAIN
HTR	HEATER
IE	INVERT ELEVATION
IW	INDIRECT WASTE
MAX	MAXIMUM
MBH	THOUSAND BTU'S PER HOUR
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MH	MANHOLE
MIN	MINIMUM
(N)	NEW
NIC	NOT IN CONTRACT
OD	OVERFLOW DRAIN
PC	PLUMBING CONTRACTOR
PIV	POST INDICATOR VALVE
POC	POINT OF CONNECTION
PSI	POUNDS PER SQUARE INCH
PSIL	PSI LOSS
RD	ROOF DRAIN
REG	REGULATOR
REQ'D	REQUIRED
RI & C	ROUGH-IN AND CONNECT
STA	STATION
VEL	VELOCITY
VTR	VENT THRU ROOF
w/	WITH
WCO	WALL CLEANOUT
WF	WALL FAUCET
WTR	WATER

GENERAL PLUMBING AND CONSTRUCTION NOTES

1. PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO CONSTRUCT A COMPLETE, OPERATIONAL PLUMBING SYSTEM FOR THE ENTIRE PROJECT AS SHOWN ON THESE DRAWINGS, INCLUDING ALL NECESSARY FEES AND PERMITS.
2. THE ENTIRE INSTALLATION SHALL CONFORM TO THE MOST RECENTLY ADOPTED REQUIREMENTS OF THE INTERNATIONAL MECHANICAL CODE, INTERNATIONAL PLUMBING CODE, INTERNATIONAL BUILDING CODE, & ALL OTHER APPLICABLE CITY, COUNTY & STATE CODES AND REGULATIONS IN EFFECT AT THE DATE OF THE BID.
3. COORDINATE THE INSTALLATION OF ALL PLUMBING PIPING AND ALL PLUMBING EQUIPMENT WITH MECHANICAL EQUIPMENT, ALL DUCTWORK, REFRIGERATION TRENCHES, REFRIGERATION PIPING, AND ALL OTHER TRADES INCLUDING BUT NOT LIMITED TO THE MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR, REFRIGERATION CONTRACTOR, AND GENERAL CONTRACTOR PRIOR TO FABRICATION AND INSTALLATION. WHERE CONFLICTS MAY OCCUR, THEY SHALL BE RESOLVED PRIOR TO INSTALLATION.
4. THE DRAWINGS SHOW THE GENERAL DESIGN, ARRANGEMENTS AND EXTENT OF THE SYSTEM. IT SHALL BE THE WORK OF THE CONTRACTOR TO MAKE SUCH SLIGHT ALTERATIONS AS MAY BE NECESSARY TO MAKE THE SYSTEM COMPLETE AND OPERATIONAL IN ACCORDANCE WITH THE DESIGN INTENT. MAJOR DEVIATIONS SUCH AS CHANGES IN COMPONENT SIZES, QUANTITIES OR MATERIAL REQUIRE PRIOR APPROVAL BY THE CONSULTING ENGINEER.
5. ALL PLUMBING INFORMATION IS NOT SHOWN ON THE PLUMBING DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING INFORMATION ON ALL OTHER CONSTRUCTION DOCUMENTS INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND REFRIGERATION DRAWINGS.
6. THE WORKING DRAWINGS ARE DIAGRAMMATIC. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW NECESSARY FOR THE COMPLETE INSTALLATION IN THE SPACE PROVIDED. ALL LOCATIONS FOR PLUMBING EQUIPMENT SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL, MECHANICAL, STRUCTURAL AND ELECTRICAL DRAWINGS.
7. THE DRAWINGS AND SPECIFICATIONS HAVE BEEN PREPARED TO SUPPLEMENT EACH OTHER AND THEY SHALL BE INTERPRETED AS AN INTEGRAL UNIT WITH ITEMS SHOWN ON ONE AND NOT THE OTHER BEING FURNISHED AND INSTALLED AS THOUGH SHOWN AND CALLED OUT IN BOTH.
8. ANY PART OF THIS INSTALLATION THAT FAILS, IS UNFIT OR BECOMES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
9. ALL EQUIPMENT SHALL PROVIDE THE SCHEDULED PERFORMANCE AT THE SITE ALTITUDE.
10. ALL EQUIPMENT, FIXTURES AND ACCESSORIES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, VALVES AND OTHER DEVICES OR ACCESSORIES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
11. P.C. IS RESPONSIBLE FOR PLUMBING EQUIPMENT CHECK-IN, SAFEKEEPING & DAMAGE.
12. ALL INVERTS SHOWN ON PLUMBING DRAWINGS ARE REFERENCED FROM THE FINISHED FLOOR ELEVATION.
13. COORDINATE ALL INVERTS WITH CIVIL DRAWINGS PRIOR TO INSTALLATION.
14. ALL EQUIPMENT AND PIPING MUST BE SEISMICALLY BRACED FOR APPLICABLE SEISMIC ZONE, IN ACCORDANCE WITH THE LATEST EDITIONS OF THE IBC, ASHRAE AND SMACNA. PROVIDE SEISMIC PRODUCTS BY AMBER-BOOTH OR MASON INDUSTRIES.
15. INSTALL DRAIN LINES WITH A SLOPE OF 2%. A SLOPE OF 1% MAY BE USED IF PRIOR APPROVAL IS OBTAINED FROM THE AUTHORITY HAVING JURISDICTION. THE PLUMBING DESIGN ON THE DRAWINGS ASSUMES THAT A 2% SLOPE WILL BE USED. MAKE NECESSARY ADJUSTMENTS TO INVERTS IF A 1% SLOPE IS USED & COORD. WITH ALL CIVIL DRAWINGS.
16. CLEAN AND DISINFECT WATER PIPING PER AWWA C651 OR C652 PROCEDURES.
17. PROVIDE PROPER PROVISIONS FOR EXPANSION OR MOVEMENT OF ALL PIPING.
18. PROVIDE WALL CLEANOUTS IN ALL VENTS FOR COMBINATION WASTE AND VENT SYSTEMS AS REQUIRED BY LOCAL AND NATIONAL CODES.
19. ALL PIPE HANGERS AND EQUIPMENT SUPPORTS SHALL BE LOCATED A MINIMUM DISTANCE OF 2" FROM ANY REFRIGERANT PIPE.
20. ALL VENT FITTINGS FOR WASTE SYSTEMS BELOW OVERFLOWS OF FIXTURES SHALL BE DRAINAGE TYPE.
21. NO TYPE 'M' OR DWV COPPER IS TO BE USED IN THIS PROJECT FOR DOMESTIC WASTE OR WATER.
22. CONTRACTOR TO COMPLY WITH 2000 UPC, APPENDIX B, PARAGRAPH B4 WHEN SIZING TRAP ARMS ON COMBINATION WASTE AND VENT SYSTEMS. THE DRAWINGS INDICATE THE WASTE LINE SIZE AND THE SIZE OF THE REQUIRED TRAP.
23. PROVIDE CLEANOUTS IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL AND NATIONAL PLUMBING CODES. FLOOR CLEANOUTS SHALL BE LOCATED OUT OF TRAFFIC AREAS.
24. LOCATE ALL PLUMBING VENTS AT LEAST 3 FEET ABOVE OR 10 FEET AWAY FROM ALL OUTSIDE AIR INTAKES INTO THE BUILDING.
25. SEE "PLUMB. FIXT. EQUIP. SCHED." FOR FIXTURE MAKE & TYPE, & SIZE OF INDIVIDUAL TRAPS, WASTE VENT, & DOMESTIC WATER PIPING TO INDIVIDUAL FIXTURES.
26. ALL PLUMBING FIXTURES CONNECTED TO A POTABLE WATER SYSTEM WITH HOSE CONNECTIONS ON THE OUTLET SIDE AND OWNER FURNISHED EQUIPMENT WITH DIRECT CONNECTIONS, SHALL BE PROVIDE WITH BACKFLOW PREVENTION.
27. PROVIDE AND INSTALL CARRIERS AS REQUIRED FOR FLOOR OR WALL MOUNTED PLUMBING FIXTURES. INSTALL ALL FIXTURES WITH ACCESSORIES AS REQUIRED TO PROVIDE A COMPLETE, WORKABLE INSTALLATION.
28. PLUMBING FIXTURES SHALL INCLUDE COMPRESSION STOPS ABOVE FLOOR IN SUPPLIES TO ALL FIXTURES AND A MINIMUM 17 GAUGE P-TRAP.
29. ALL PLUMBING EQUIP. SHALL BE LISTED LABELED BY AN APPROVED TESTING AGENCY.
30. EQUIP. INST. SHALL MEET NATIONAL SANITATION FOUNDATION (NSF) STANDARDS, OR EQ.
31. ALL JANITORIAL SINK FAUCETS MUST BE PROVIDED WITH AN APPROVED BACKFLOW PREVENTION DEVICE.
32. NATURAL GAS PIPING ABOVE GROUND OR INSIDE BUILDINGS SHALL BE STANDARD WEIGHT SCHEDULE 40 BLACK STEEL WITH WELDED OR MALLEABLE IRON FITTINGS.
33. PROVIDE GAS SHUT OFF VALVE AT EACH PIECE OF EQUIPMENT.
34. UPON COMPLETION OF THE WORK, REMOVE ALL SURPLUS MATERIALS AND RUBBISH, MAKE ALL REQUIRED PATCHING AND REPAIRS OF OTHER TRADES' WORK DAMAGED BY THIS CONTRACTOR, AND LEAVE THE PREMISES IN A CLEAN, ORDERLY CONDITION.
35. THE CONTRACTOR SHALL OPERATE THE SYSTEM FOR A PERIOD OF THREE DAYS TO PROVE OPERATION OF THE SYSTEM.
36. THE CONTRACTOR SHALL GUARANTEE THE ENTIRE PLUMBING SYSTEM FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
37. THE CONTRACTOR SHALL, DURING CONSTRUCTION, MAINTAIN A SET OF AS-BUILT REDLINED RECORD DRAWINGS AT THE PROJECT SITE. ALL CHANGES IN LAYOUT, ROUTING, EQUIPMENT, COMPONENTS AND ACCESSORIES SHALL BE RECORDED. THESE REDLINES SHALL BE GIVEN TO THE ARCHITECT/ENGINEER AFTER FINAL INSPECTION.
38. CORRECTNESS OF SCALE, LAYOUT, MATERIAL, LOCATION, OR CONTINUATION OF PIPING FROM SHEET TO SHEET SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR. ANY DISCREPANCY SHOULD BE BROUGHT TO THE ATTENTION OF THE CONSULTING ENGINEER BEFORE CONSTRUCTION.
39. CONTRACTOR SHALL PROVIDE SUBMITTAL FOR ALL PLUMBING FIXTURES AND EQUIPMENT TO BE REVIEWED BY CONSULTING ENGINEER BEFORE PURCHASE OF ANY EQUIPMENT.
40. CONDENSATE LINES FREEZE UNITS (INSULATED & HEAT TAPE.), COOLER UNITS (NOT INSULATED) ROOF TOP UNITS (LINES RUN BELOW THE ROOF IF ACCEPTABLE BY LOCAL AUTHORITY). FAN COIL UNIT- RUN PIPING TO THE NEAREST FLOOR DRAIN OR FLOOR SINK WITH 3" P-TRAP FOR EACH UNIT. (IF IN COLD CEILING SPACE - INSULATE AS YOU WOULD THE WATER LINES.
41. PROVIDE INDIRECT WASTE LINES TO ALL PRESSURE RELIEF VALVES, BACKFLOW DEVICES, KITCHEN SINKS, CONDENSATE LINES, KITCHEN EQUIPMENT, DRINK DISPENSERS, & ETC. AS REQUIRED BY LOCAL CODE REQUIREMENTS.
42. ALL EXPOSED PIPES, EXCEPT AS OTHERWISE DESCRIBED PASSING THROUGH WALLS, FLOORS, CEILING, ETC. IN FINISHED SPACES, SHALL BE PROVIDED WITH SOLD PATTERN HEAVY CEILING, FLOOR OR WALL ESCUTCHEONS WITH SET SCREW. ESCUTCHEONS END PLATES SHALL BE OF STEEL OR MALLEABLE IRON WITH PRIME COAT READY FOR PAINTING. ESCUTCHEONS WILL NOT BE PROVIDED WHERE SLEEVES INTENTIONALLY EXTEND ABOVE FINISHED FLOOR.
43. ALL EXPOSED PLUMBING SHORT BRANCH CONNECTIONS TO FIXTURES AND/OR EQUIPMENT PASSING THROUGH WALL OR FLOORS SHALL BE EQUIPPED WITH PRESSED BRASS CHROMIUM PLATED, SOLID ESCUTCHEONS.
44. THE SYSTEMS OF PIPING AS INSTALLED BY THIS CONTRACTOR MUST BE TESTED WITH WATER OR AIR AND PROVEN TIGHT TO THE SATISFACTION OF REPRESENTATIVE OF THE ARCH. TESTING INSTRUMENTS MUST BE FURNISHED BY THE PLUMBING CONTRACTOR.
45. TESTS MUST BE MADE WITH WATER EXCEPT WHEN THERE IS DANGER FROM FREEZING THEN TESTS MAY BE MADE WITH AIR. WOODEN PLUGS ARE NOT TO BE USED IN MAKING TESTS.
46. BEFORE BEING PLACED IN SERVICE ALL WATER LINES SHALL BE CHLORINATED TO THE SATISFACTION OF THE ARCH. IN ACCORDANCE WITH A.W.W.A. SPECIFICATIONS C601-537.
47. IF CEILING SPACE IS BEING USED AS A RETURN AIR PLENUM NO PLASTIC PIPING IS ALLOWED IN THIS AREA.
48. CONFIRM THE EXACT LOCATION OF ALL EQUIP. PRIOR TO MAKING PLUMBING ROUGH-IN.
49. ALL WATER AND DRAIN LINES OUTSIDE OF THE BUILDING STRUCTURE SHALL BE A MIN. OF 36" BELOW AVERAGE ANNUAL FROST LINE REFERENCED TO FINISHED GRADE (MIN. DEPTH 60" WHERE AVERAGE ANNUAL FROST LINE IS LESS THAN 30".)
50. CONFIRM THE EXACT LOCATION WHERE SEWER, WATER & GAS LINES LEAVE THE BUILDING.
51. THE P.C. SHALL INSTALL WATER PIPING ABOVE THE CEILING SUCH THAT THE PIPING WILL BE BETWEEN THE BUILDING INSULATION AND THE CEILING TO PREVENT FREEZING. SEE DETAILS AND SPECIFICATIONS.
52. THE TERM "ROUGH-IN" INCLUDES AT PROPOSED FIXTURE LOCATIONS 1) SHUTOFF VALVES OR STOPS AT HOT AND COLD WATER STUB OUTS. 2) VENT PIPE THRU ROOF OR CONNECTED TO VENT SYSTEM. 3) DRAIN LINE, TRAPPED & VENTED, STUBBED THRU WALL, OR FLOOR, & CAPPED.
53. ANY PENETRATIONS THRU OR TRENCHES IN CONCRETE FLOORS OR PARTITIONS SHALL BE SAW CUT OR CORE DRILLED.
54. ANY PENETRATIONS THRU FIRE RATED PARTITIONS SHALL BE SEALED WITH SCOTCH-3M #FS195 WRAP AND #CP25 CAULK AS PER MANUFACTURER'S RECOMMENDATIONS.
55. THE P.C. SHALL NOT INSTALL EXPOSED PIPING ABOVE OR WITHIN THE CODE REQUIRED WORKING CLEARANCES OF ANY ELECTRICAL PANEL BOARD OR SWITCH GEAR (30" WIDE OR THE WIDTH OF THE PANEL, WHICH EVER IS GREATER AND 36" IN FRONT - FLOOR TO CEILING). COORDINATE WITH ELECTRICAL CONTRACTOR.
56. P.C. SHALL MAKE ALL FINAL CONNECTIONS TO OWNER SUPPLIED EQUIPMENT REQUIRING PLUMBING CONNECTIONS.
57. PROVIDE & INSTALL MANUAL SHUTOFF COCKS AT ALL GAS CONNECTIONS TO GAS FIRED EQUIPMENT.
58. UNDER FLOOR PLUMBING LINES SHALL NOT BE ROUTED UNDERNEATH FREEZERS.
59. ALL WATER LINES LOCATED IN OR NEAR OUTSIDE WALLS SHALL BE RUN BETWEEN WARM SIDE OF WALL & BUILDING INSULATION TO HELP PREVENT FREEZING OF LINES.
60. EXCAVATION OF TRENCHES SHALL COMPLY WITH SECTION 315.O OF UPC.
61. INSULATION SHALL HAVE FLAME SPREAD NOT TO EXCEED 25 & A SMOKE DEVELOPED RATING NOT TO EXCEED 50.
62. PIPE HANGER SPACING FOR PIPES LESS THAN 2" DIA. SHALL NOT EXCEED 6'-0" CENTERS.
63. GAS PIPING SHALL BE PRESSURE TESTED AT 10 PSI PER UPC SECT. 1204.3. PRESSURE SHALL BE MAINTAINED FOR A LENGTH OF TIME SATISFACTORY TO THE ADMINISTRATIVE AUTHORITY (MIN. 15 MIN.). WELDED PIPE SHALL BE TESTED AT 60 PSI (MIN) FOR 30 MINUTES (MIN).

* 64. ALL GAS APPLIANCES SHALL BE CONNECTED PER UPC 1212.0.

* 65. CLEANOUTS TO BE SIZED PER, TABLE 7-6 SEC. 707.0 UPC.

* 66. VENTS UNDER FLOOR - OFFSETS HORIZONTALLY LESS THAN 6" ABOVE THE FLOOD RIM SHALL BE INSTALLED IN SAME MANNER AND MATERIAL AS DRAINAGE PIPING.

* 67. THE P.C. SHALL PROVIDE & INSTALL ALL FIXTURES & EQUIPMENT AS SHOWN ON THE P' (PLUMBING) DRAWINGS.

* 68. ONLY BALLVALVES SHALL BE PERMITTED TO BE USED FOR ZONE & AREA VALVES.

* 69. ALL TRENCHING SHALL BE THE RESPONSIBILITY OF THE INDIVIDUAL CONTRACTOR, COORDINATED WITH THE GENERAL CONTRACTOR.

70. IF LOCAL CODE DOES NOT REQUIRE TRAP PRIMERS USE DEEP-SEAL "P" TRAPS ON ALL FD & FS INSTEAD.
71. ALL EXPOSED COPPER, ABS, PVC PIPING, VENT LINES, WASTE LINES, & ETC., INSIDE OF BUILDING WHICH ARE EXPOSED WILL BE PAINTED SILVER OR AS DIRECTED, WITH TWO COATS OF PAINT, PROTECT ALL SURROUND MATERIALS.
72. ALL INDIRECT WASTE LINES WILL BE INSTALLED IN SUCH A MANNER AS TO PREVENT WATER FROM SPLASHING OUT OF THE DRAIN RECEPTACLE.
73. ARMAFLEX INSULATION OR SIMILAR MATERIALS WHICH REACT TO THE SUN UV RAYS WILL BE PAINTED WITH "CHILDERS" #CP-50, WHITE, FLEXIBLE SEALER PAINT OR THE INSULATION MAY BE COVERED.
74. HOT WATER CIRCULATION LINES WILL NOT BE INSTALLED WITH LESS THAT 3/4" PIPE. THE PUMP WILL BE SIZED FOR LOW FLOW (3 TO 5 GPM), LOW VELOCITY, AND BE INSULATED.

* GENERAL NOTES INDICATED (*) SHALL SUPERSEDE SPECIFICATIONS.

PIPE SPECIFICATIONS

1. DOMESTIC WATER:	TYPE 'K' SOFT COPPER BELOW FLOOR OR GRADE w/ WROUGHT COPPER FITTINGS (BRAZED). TYPE 'L' HARD DRAWN COPPER TUBING w/ WROUGHT COPPER (95/5 SOLDER). FITTINGS ABOVE FLOOR OR GRADE.
BELOW GRADE:	3/4" - 2 1/2" TYPE "K" SOFT COPPER 3" + DUCTILE IRON OR PVC CONFORMING TO AWWA STANDARDS
2. WASTE & VENT, RAIN WATER	SERVICE WEIGHT NO-HUB CAST IRON w/ MG' OR 'IDEAL' FITTINGS. SCHEDULE 40 GALV. STEEL FOR EXPOSED VENT LINES. ALL DRAINS & TRAPS TO BE CAST BRASS, CAST IRON OR GALV, STEEL. PLASTIC PIPING CONFORMING TO IAPMO AND ASTM SPECIFICATIONS IS ACCEPTABLE WHERE PERMITTED BY LOCAL CODES. NO PLASTIC PIPE IS PERMITTED IN RETURN PLENUM ATTIC.
3. GAS	SCHEDULE 40 BLACK STEEL w/ BLACK MALLEABLE IRON SCREWED FITTINGS, OR WELD FITTINGS.
4. CONDENSATE DRAINS:	TYPE 'L' HARD DRAWN COPPER w/ WROUGHT COPPER SOLDER JOINT FITTINGS. WALK-IN COOLERS/FREEZERS: MINIMUM OF TYPE M COPPER PIPE WITH 95/5 SOLDER FITTING AND MEET NSF STANDARDS.
5. AIR:	GALV. SCHEDULE 40 STEEL w/ GALV STEEL SCREWED FITTINGS ABOVE AND BELOW FLOOR OR GRADE WHERE ALLOWED BY LOCAL CODES. TYPE 'L' HARD DRAWN COPPER w/ WROUGHT COPPER SILFOS JOINT FITTINGS ABOVE AND BELOW FLOOR OR GRADE WHERE GALVANIZED IS NOT ALLOWED BY CODE.

NO COMBUSTIBLE PIPING OR MATERIAL SHALL BE RUN IN RETURN AIR PLENUM SPACE ABOVE CEILING. ALL UNDERGROUND WATER PIPING SHALL BE WRAPPED &/OR INSULATED PER SPECIFICATIONS.

INSULATION SCHEDULE

SYSTEM TYPE	FLUID TEMP. RANGE (° F)	INSULATION TYPE	
DOMESTIC HOT & COLD WATER ABOVE FLOOR	40° - 180°	FIBERGLASS w/ VAPOR BARRIER	
DOMESTIC HOT & COLD WATER BELOW SLAB	40° - 180°	1/2" ARMAFLEX OR IMCOA	
ROOF DRAIN & OVERFLOW DRAIN	35° - 100°	FIBERGLASS w/ VAPOR BARRIER	
REFRIGERANT	35° - 140°	1/2" ARMAFLEX OR IMCOA	
HEAT TRACED DOMESTIC HOT WATER ABOVE FLOOR	100° - 140°	PIPE SIZES	FIBERGLASS INS. THICKNESS
DOMESTIC HOT WATER ABOVE FLOOR WITH HEAT TRACE NOTE: FOR PIPE SIZES 1 1/4" & SMALLER, USE INSULATION SIZED FOR A 1/4" LARGER PIPE TO ALLOW ROOM FOR INSULATION OVER HEAT TRACE CABLE.		1/2" - 1" 1 1/4" - 1 1/2" 2" 2 1/2" 3" OR LARGER	1" 1 1/2" 2" 2 1/2" SAME SIZE AS PIPE
DOMESTIC HOT WATER ABOVE FLOOR WITHOUT HEAT TRACE		1/2" - 1" 1 1/4" - 2" 2" OR LARGER	1" 1 1/2" 2"
DOMESTIC COLD WATER ABOVE FLOOR		ALL	1"
ROOF DRAIN & OVERFLOW DRAIN ABOVE FLOOR		ALL	1"

NOTE: ALL UNDERGROUND AIR, HOT & COLD WATER, HOT WATER RETURN & SUPPLY, REFRIGERANT, STEAM & CONENSATE PIPING TO BE INSULATED, ALSO SEE SPECIFICATIONS.

PLUMBING SYMBOL SCHEDULE

SYMBOL	ABBREVIATION	DESCRIPTION
	UP	PIPE RISER UP (VIEWED CEILING TO FLOOR)
	DN	PIPE RISER DOWN (VIEWED CEILING TO FLOOR
	SOV / GV	SHUT-OFF VALVE / GATE VALVE
	SOV / BV	SHUT-OFF VALVE / BALL VALVE
	SOV / GV (NC)	SOV / GV (NORMALLY CLOSED)
	SOV /BV (NC)	SOV / BV (NORMALLY CLOSED)
	SOV / GC	SHUT-OFF VALVE /GAS COCK
	CK V	CHECK VALVE
	UN	UNION
	PRV	PRESSURE REGULATING VALVE
	T&P	TEMP. & PRESS. RELIEF VALVE
	STR	'Y' STRAINER
	PR GA	PRESSURE GAUGE
	WTR MTR	WATER METER
	GAS MTR	GAS METER
	RW	RAIN WATER LINE (ABOVE FLOOR)
	LP	LIQUID PROPANE LINE
	SOV IN YB	SHUT-OFF VALVE IN YARD BOX
	FH	FIRE HYDRANT
	FDC	FIRE DEPT. CONNECTION
	WMG	WATER MOTOR GONG
	PIV	POST INDICATOR VALVE
	POC	POINT OF CONNECTION
—W—8"—	W	UTILITY WATER MAIN - SIZE
—SAN—8"—	SAN	SANITARY SEWER MAIN - SIZE
—G—4"—	G	UTILITY GAS MAIN - SIZE
—SD—8"—	SD	UTILITY STORM DRAIN - SIZE
△	FSZV	FIRE SPRINKLER ZONE VALVE

FIXTURE UNIT CALCULATIONS

FIXTURE	QUANTITY	WATER FU	CW FU	HW FU	WASTE FU	TOTAL FU
P1 WC (ADA)	7	5.0	35.0	-	4.0	4.0
P2 LAV (ADA)	7	2.0	10.5	10.5	1.0	7.0
P3 BREAK SINK	1	2.0	1.5	1.5	1.0	1.0
P4 MOP SINK	1	3.0	2.25	2.25	3.0	3.0
P5 WA. COOLER	2	.5	1.0	-	.5	1.0
P5 WASH. MACH.	1	4.0	3.0	3.0	3.0	3.0
P7 KIT. HAND SINK	2	2.0	3.0	3.0	2.0	4.0
P8 ICE MAKER	2	1.0	2.0	-	-	IW
P9 WATER HEAT.	1	-	-	-	-	-
P10 3 COMP. SINK	1	2.0	1.5	1.5	1.0	IW
K04 DISHWASHER	1	1.5	-	1.5	1.0	IW
K21 RINSE TABLE	1	2.0	-	2.0	2.0	IW
FD1	11	-	-	-	2.0	22.0
FS1	4	-	-	-	3.0	12.0
FD3	1	-	-	-	-	-
HB1	1	2.5 + 1	2.5	-	-	-
			62.25	25.25		
TOTALS			87.5			55.0

WATER PRESSURE FRICTION LOSS CALCULATIONS

BUILDING ADDRESS 915 S. MAIN STREET, PAYETTE ID
WATER UTILITY COMPANY CITY OF PAYETTE PHONE NO. 1-208-642-6024
WATER METER SIZE 1 1/2 " CONTACT: LANE G.
WATER PRESSURE: HIGH 55 PSI LOW N/A
IF MAXIMUM WATER PRESSURE IS OVER 60 PSI
THEN A PRESSURE REGULATING VALVE IS REQUIRED
PRV REQUIRED: YES
MAKE: WATTS MODEL NO.: U5B
SIZE: 2 " PRESSURE: 43 PSI

DOMESTIC WATER FIXTURE UNITS: 87 (FU) = 40 GPM (FLUSH TANK)
(IRRIGATION WILL BE CONDUCTED DURING OFF-PEAK HOURS)

AVAILABLE WATER PRESSURE = 55.0 PSI
PRESSURE LOSS DUE TO ELEVATION (24 FT. X 0.43) = 10.4 PSI
PRESSURE LOSS THRU METER = 5.8 PSI
PRESSURE LOSS THRU PRESSURE REGULATOR VALVE = 0.0 PSI
PRESSURE LOSS THRU BACKFLOW PREVENTER = 0.0 PSI
PRESSURE REQUIRED AT MOST REMOTE FIXTURE = 15.0 PSI
TOTAL AVAILABLE PRESSURE = 18.2 PSI
DEVELOPED LENGTH 405' X 1.4 = 567.0
AVAILABLE FRICTION LOSS PER 100 FT.
100 FT. X 6.8 / 568.0 = 3.2 PSI

PIPE SIZING SCHEDULE (BASED ON FLUSH VALVES)

PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
MAX. FIXT. UNITS	0	0	0	6	21	139			
VELOCITY (FPS)	2.7	3.5	4.2	4.8	5.4	6.4			
PSI/100 FT	3.2	→							
FLOW (GPM)	1.5	4.7	10.2	18.3	29.0	60.4			

PIPE SIZING SCHEDULE (BASED ON FLUSH TANKS)

PIPE SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"
MAX. FIXT. UNITS	1	6	13	26	51	175			
VELOCITY (FPS)	2.7	3.5	4.2	4.8	5.4	6.4			
PSI/100 FT	3.2	→							
FLOW (GPM)	1.5	4.7	10.2	18.3	29.0	60.4			

PLUMBING FIXTURE SCHEDULE

EQUIPMENT AND INSTALLATION BY PLUMBING CONTRACTOR
PROVIDE SPECIFIED ITEMS OR APPROVED EQUALS. (REFER TO SPECIFICATIONS)

SYMBOL	DESCRIPTION	W	V	CW	HW
P1	WATER CLOSET (ADA) - WATER CLOSET (A.D.A.): KOHLER K-3493-0 PRESSURE LITE “HIGHLINE” WHITE, ELONGATED BOWL, FLOOR MOUNTED WATER CLOSET, VITREOUS CHINA, BOLT CAPS, 1.6 GALLONS PER FLUSH, SLOAN FLUSHMATE SYSTEM, 17 1/8” FROM FINISHED FLOOR TO CLOSET BOWL RIM, WITH KOHLER K-4670-C WHITE SEAT, OPEN FRONT/LESS COVER. BRASSCRAFT KTCR19X C STOP, ESCUTCHEON, AND STAINLESS-STEEL BRAIDED SUPPLY. SUPPLY FLUSH HANDLE ON THE WIDE SIDE OF THE STALL (RIGHT OR LEFT HAND TRIP LEVERS).	4"	2"	1"	-
P2	LAVATORY (ADA) - KOHLER K-20000-0 "CAXTON" WHITE, VITREOUS CHINA, UNDERMOUNT, 17-5/8" X 13-1/8" X 5-5/16" LAVATORY. PROVIDE AND INSTALL KOHLER K-13461 "INSIGHT" TOUCHLESS FAUCET, .5 GPM, CHROME BATTERY POWERED, KOHLER K-7715-CP BRASS GRID STRAINER, BRASSCRAFT KTSCR19X C STOPS, STAINLESS STEEL BRAIDED SUPPLIES, ESCUTCHEONS, 1 1/4" 17 GA. SYMMONS MODEL 7-210-CK THERMOSTATIC MIXING VALVE UNDER EACH LAVATORY, BRASS P-TRAP, AND TRUE-BRO 102W INSULATION KIT.	2"	1 1/2"	1/2"	1/2"
P3	BREAKROOM SINK - ELKAY MODEL LR2219-1 22" X 19-1/2" X 7-5/8", SINGLE COMPARTMENT, SELF-RIMMING, STAINLESS STEEL SINK. PROVIDE AND INSTALL KOHLER K-596-VS "SIMPLICE" SINGLE HOLE FAUCET W/ PULL DOWN SPRAY HEAD, 1.5 GPM, SINGLE LEVER, BRASSCRAFT KTSCR19X C STOPS, ESCUTCHEONS, STAINLESS STEEL BRAIDED SUPPLIES, ELKAY LK35 STRAINER, EVERGRIND E101 DISPOSAL W/ AIR SWITCH, DEARBORN PLASTIC DISPOSER WASTE, GD-1 D.W. CONNECTOR AND 1 1/2" 17 GA. TAILPIECE, AND 1 1/2" 17 GA. P-TRAP.	2"	1 1/2"	1/2"	1/2"
P4	MOP SINK - KOHLER K-6710-0 "WHITBY" CORNER, CAST IRON, W/K-8940 COATED WIRE RIM GUARD, K-9146-CP PERFORATED 3" STRAINER, & K-8928-CP SINK FAUCET WITH VACUUM BREAKER W/HOSE & WALL HOOK FLOOR MOUNTED SERVICE SINK (INSTALL SINK AGAINST ROUGH WALL), (USE DEEP SEAL P-TRAP). PROVIDE AND INSTALL HAWS 8905 WALL MOUNT EYE WASH WITH RECOIL HOSE. MOUNT TO SIDE OF MOP SINK FAUCET AT THE SAME LEVEL W/ A VACUUM BREAKER.	3"	2"	3/4"	3/4"
P5	WATER COOLER W/ BOTTLE FILLER (ADA) - ELKAY VRCTL8WSK BI-LEVEL VANDAL-RESISTANT WATER COOLER AND BOTTLE FILLING STATION, SPLIT LEVEL, WALL MOUNTED WATER COOLER, 8.0 GPH OF 50 F DRINKING WATER AT 90 F AMBIENT AIR TEMP. PROVIDE AND INSTALL BRASSCRAFT KTSCR 19-C STOP, ESCUTCHEON, S. S. BRAIDED SUPPLY, AND 1 1/4" 17GA. P-TRAP. MOUNTING HEIGHT 38 3/8" HIGH UNIT AND 32 7/8" ADA UNIT FROM FLOOR LEVEL TO ORIFICE OUTLET.	2"	1 1/2"	1/2"	-
P6	WASHING MACHINE BOX - GUY GRAY WASHING MACHINE BOW, MODEL WB200 WASHER CONNECTION W/ DUAL CLOSING BALL TYPE VALVE THAT CONTROLS THE HOT AND THE COLD WATER SIMULATEOUSLY AND 2" DRAIN. PROVIDE & INSTALL (2) WATTS NO. 8 VACUUM BREAKERS ON THE HOSE CONNECTIONS. WATER BOX IS 11-5/8"W X 9-1/2"H X 3-1/2"D, MOUNT THE BOX @ 42" A.F.F. TO THE BOTTOM OF THE WATER BOX.	2"	1 1/2"	1/2"	1/2"
P7	HANDWASH SINK (KITCHEN) - SINK AND FAUCET TO BE PROVIDED BY KITCHEN SUPPLIER, AND INSTALLED BY PLUMBING CONTRACTOR. PROVIDE AND INSTALL BRASSCRAFT KTSCR19X C STOPS, ESCUTCHEONS, STAINLESS STEEL BRAIDED SUPPLIES, 1 1/2" 17 GA. P-TRAP, AND TRUE-BRO 102W INSULATION KIT. MOUNT SINK @ 34" ABOVE FINISHED FLOOR TO LIP OF RIM OF SINK.	2"	1 1/2"	1/2"	1/2"
P8	WATER COOLER/ICEMAKER - THE P.C. SHALL PROVIDE AND INSTALL GUY GRAY #BIM875, 18 GUAGE ICE MAKER HOOK-UP BOX WITH 1/2" X 1/4" COMPRESSION VALVE AND STAINLESS STEEL ICE MAKER HOSE TO THE REFRIGERATOR OR ICEMAKER. MOUNT BOX AT 12" A.F.F.	-	-	1/2"	-
P9	WATER HEATER - A. O. SMITH GOLD XI DVE-52, 50 GALLON TANK, 27 KW INPUT, 123 GALLON PER HOUR @ 90°F RISE. INSTALL THE FACTORY PROVIDED HEAT TRAP NIPPLES ON THE HOT AND COLD WATER INLETS. PROVIDE AND INSTALL AMTROL ST-12 THERMAL EXPANSION TANK, INSTALLED ON THE COLD INLET TO TANK BETWEEN THE SHUT OFF VALVE AND THE INLET NIPPLE TO THE TANK. SET THE WATER HEATER ON 14" STAND WITH A WATER HEATER PAN. PROVIDE SEISMIC WALL BRACKETS BOTH TOP AND BOTTOM OF TANK. PIPE T & P VALVE & WATER HEATER PAN TO THE MOP SINK WITH AN AIR GAP. SEE SHEET P-3.1, DETAIL 12. SET THE OUTLET TEMPERATURE TO 120F. THE HEIGHT IS 55 3/4" X 22" DIAMETER, SHIPPING WEIGHT 265 POUNDS.	-	-	-	-
P10	3-COMPARTMENT SINK - SINK AND FAUCETS TO BE PROVIDED BY KITCHEN SUPPLIER, AND INSTALLED BY PLUMBING CONTRACTOR. PROVIDE AND INSTALL BRASSCRAFT KTSCR19X C STOPS, ESCUTCHEONS, STAINLESS STEEL BRAIDED SUPPLIES, AND 1 1/2" 17 GA. P-TRAP. INDIRECT DRAIN SINK INTO FLOOR SINK WITH PROPER AIR GAP.	IW	-	1/2"(2)	1/2"(2)
P11	HOT WATER RECIRC PUMP - B & G MODEL B & G NBF-12U/LW, 3/4" UNION, 2,800 RPM, 55 WATTS, .48 F.L. AMPS, 115V 1/PHASE 9.3 LBS, ALL BRONZE PUMP WITH CONTROL, HONEYWELL L4008B1013 AQUASTAT, MOUNT PUMP MINIMUM OF 6'-0" A.F.F.	-	-	-	-
P12	GREASE INTERCEPTOR- PRE-BUILT OR POUR-IN PLACE, 1,250 GALLON GREASE INTERCEPTOR TANK, THE P.C. SHALL PROVIDE AND INSTALL THE TANKS, VENTS TRAFFIC RATED BOLTED LIDS, GRADE RINGS TO GROUND LEVEL WASTE PIPING TO THE TANK AND 5'-0" OUT OF TANK, AND CLEANOUTS TO GRADE AS REQUIRED. CONFORM TO ALL LOCAL AND STATE CODE REQUIREMENTS.	4"	3" 2"	-	-
P13	WASH FOUNTAIN - BRADLY SN2004/AST4 54" SEMI-CIRCULAR WASH FOUNTAIN WITH (A) TYPE DRAIN, STANDARD HEIGHT, FOOT CONTROLS, (LSD) LIQUID SOAP DISPENSER, ARCHITECT TO PICK COLOR. PROVIDE VALVES UNDER UNIT FOR SHUTOFFS.	2"	1 1/2"	1/2"	1/2"
P14	EMERGENCY COMBINATION SHOWER/EYEWASH (ADA) - ACORN SAFETY MODEL S2160-PE21-RA-PAN-ET71-2-BVS-OTG RECESSED EMERGENCY SHOWER AND EYE /FACE WASH WITH DRAIN PAN, THERMOSTATIC MIXING VALVE, FLOW RATE 1 GPM TO 31 GPM, COLD WATER BYPASS, FACTORY SET POINT 85 F, 1 1/4" COLD & HOT WATER INLETS, 1 1/4" OUTLET (MOUNT THE TMV IN THE CEILING THE CLASSROOM WITH AN ACCESS TO THE VALVE), MOUNT THE SHOWER PER MANUFACTURER INSTALLATION INSTRUCTIONS.	3"	2"	1 1/4"	1 1/4"
FS1	FLOOR SINK - J.R. SMITH MODEL #3140Y03-PDBS, 12-1/2" X 12-1/2" X 6", 2" OUTLET. POLISHED ALUMINUM DOME STRAINER. USE DEEP SEAL P-TRAPS ON FLOOR SINKS W/ TRAP PRIMER. IF APPROVED BY AUTHORITY HAVING JURISDICTION, THE P.C. MAY USE PROSET TRAP GUARDS IN LIEU OF TRAP PRIMERS.	2"	1 1/2"	-	-
FD1	FLOOR DRAIN - J. R. SMITH #2005Y02-A06-P050 CAST IRON FLOOR DRAIN WITH 6" DIA. NICKEL BRONZE ROUND STRAINER AND TRAP PRIMER TAPPING. PROVIDE AND INSTALL TRAP PRIMER J.R. SMITH 2699A1-CP TRAP PRIMER OR TRAP GUARDS, IF APPROVED BY THE LOCAL AUTHORITY. TRAP GUARDS WILL ELIMINATE THE NEED FOR A TRAP PRIMER. MUST MEET PLUMBING CODE REQUIREMENTS.	2"	1 1/2"	-	-
WHA	WATER HAMMER ARRESTERS - J. R. SMITH "HYDROTROL" HEAVY DUTY WATER HAMMER ARRESTERS, #5005 PDI-A 1-11 FIXTURE UNITS, 3/4" OR #5010 PDI-B 12-32 FIXTURE UNITS, 1".	-	-	3/4" 1"	3/4" 1"

GAS REGULATORS

GAS REGULATORS 2 PSI GAS MAIN PRESSURE		GAS LOAD	CFH LOAD	ACUMM. CFH LOAD	REGULATOR	PIPE MAIN	OUTLET
	BUILDING GAS APPLIANCES						5-8.5 W.C.
GPR# 1	RTU #1	60,000 BTU	58 CFH		30051	3/4"	"
GPR# 2	RTU #2	137,110 BTU	133 CFH		30051	1"	"
GPR# 3	RTU #3	500,000 BTU	484 CFH		30052	1-1/4"	"
GPR# 4	RTU #4	500,000 BTU	484 CFH		30052	1-1/4"	"
GPR# 5	RTU #5	60,000 BTU	58 CFH		30051	3/4"	"
GPR# 6	RTU #6	60,000 BTU	58 CFH		30051	3/4"	"
GPR# 7	RTU #7	137,110 BTU	133 CFH		30051	1"	"
GPR# 8	DOAS #1	252,500 BTU	244 CFH		30052	1-1/4"	"
GPR# 9	UH #1	125,000 BTU	221 CFH		30051	3/4"	"
GPR# 10	UH #2	125,000 BTU	221 CFH		30051	3/4"	"
GPR# 11	UH #3	125,000 BTU	221 CFH		30051	3/4"	"
GPR# 12	UH #4	125,000 BTU	221 CFH		30051	3/4"	"
GPR# 13	GAS FURNACE #1	88,000 BTU	86 CFH		30051	3/4"	"
GPR# 14	GAS FURNACE #2	88,000 BTU	86 CFH		30051	3/4"	"
GPR# 15	GAS FURNACE #3	132,000 BTU	128 CFH		30051	3/4"	"
GPR# 16	GAS FURNACE #4	132,000 BTU	128 CFH		30051	3/4"	"
	TOTAL BUILDING			2,964 CFH		1"	"

TOTAL BUILDING DEVELOPED LENGTH: 100 FEET (ADDED 25%), MULTIPLIER: 1,034

NOTE: ALL GAS REGULATORS WILL NOT BE CONCEALED, MUST BE ACCESSIBLE AND VENTED TO THE OUTSIDE ATMOSPHERE. PROTECT AGAINST MOISTURE ENTERING THE VALVE BY PROVIDING THE PROPER TURN DOWNS AND PROPER HEIGHT ABOVE THE ROOF LINE. USE GOVERNOR GAS PRESSURE REGULATORS. PROVIDE A 6" DIRT LEG, A GAS VALVE AND A UNION AT EACH REGULATOR, THEY MUST BE ACCESSIBLE. MUST MEET NFGC & NFPA 54, CHAPTER 2.9 OVERPRESSURE PROTECTION. GOVERNOR 1-888-618-8787. ALL GAS PIPE OVER 2" MUST BE WELDED.

LOCAL GAS UTILITY: INTERMOUNTAIN GAS PHONE #: 1-800-548-3679

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CONST. ESTIMATE SET 1-14-25

Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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208.338.1212

DATE
1-9-25

REF NO.
2444

AUTHOR
CLE

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

PLUMBING NOTES & SCHEDULES

SHEET NO.
P1.00

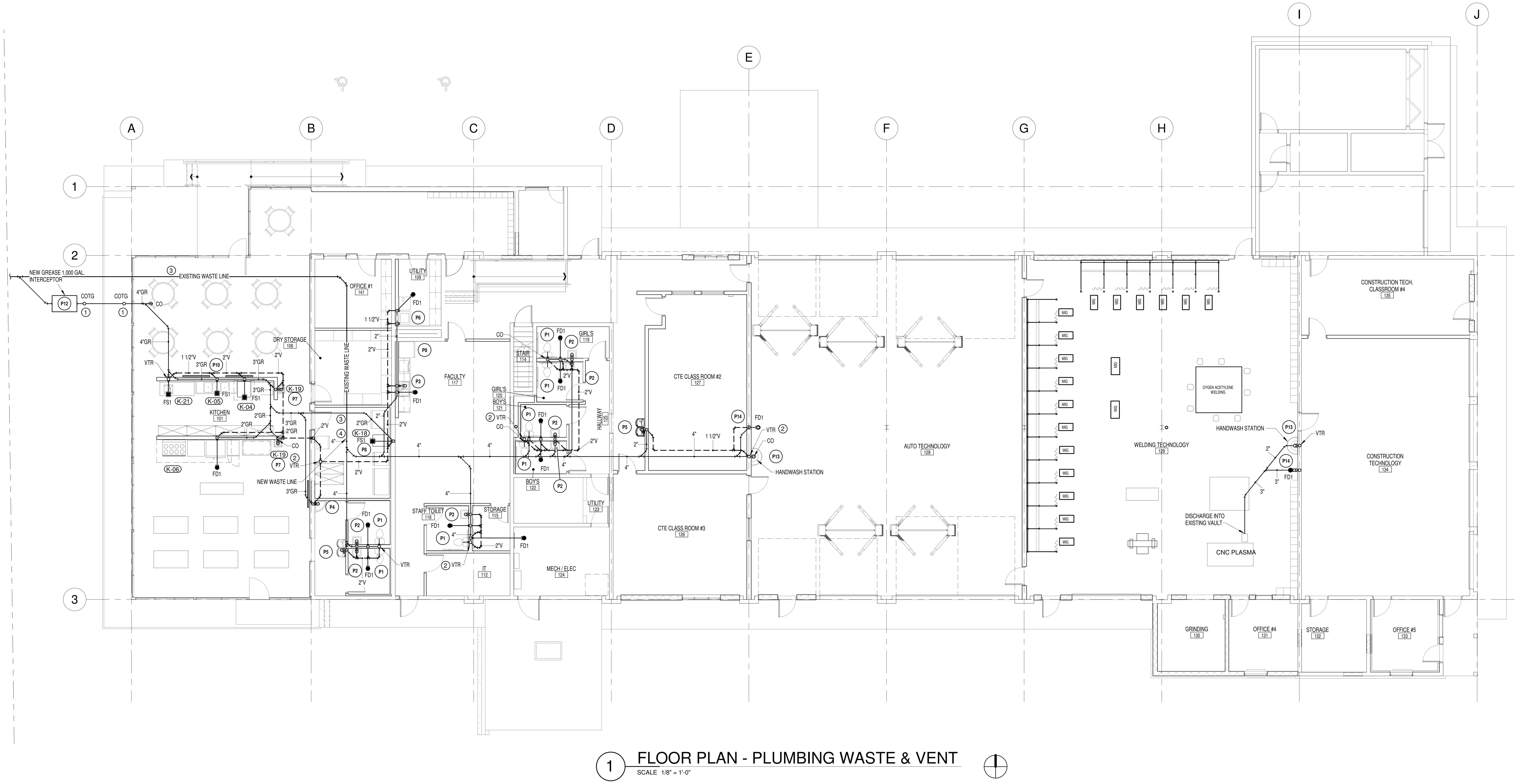
1/9/2025 5:11:46 PM

GENERAL WASTE & VENT NOTES

1. SLOPE BUILDING SANITARY WASTE LINES IN THE BUILDING AT A 1/4" TO THE FOOT. THE P.C. MAY RUN 4" AND LARGER AT 1/8" TO THE FOOT WITH THE APPROVAL OF THE BUILDING INSPECTOR. FIELD VERIFY THE INVERT OF THE BUILDING SEWER BEFORE RUNNING ANY PIPING INSIDE OF THE BUILDING.
2. RISE UP 6" ABOVE THE FLOOD RIM OF THE HIGHEST FIXTURE BEFORE RUNNING VENT LINES HORIZONTALLY. RISE UP WITH A VENT LINE FROM ALL FIXTURES. COMBINE VENTS TOGETHER AND THEN RISE UP TO THE ROOF.
3. P.C. IS TO PROVIDE ALL CLEANOUTS AT THE BASE OF EVERY STACK AND AS REQUIRED BY CODE. PROVIDE THE PROPER CLEARANCE AND ACCESS TO EACH OF THEM. PROVIDE A CHROME OR STAINLESS STEEL COVER PLATE WITH A BRONZE OR STAINLESS STEEL SCREW.
4. HANG ALL WASTE AND VENT LINES, AS SHOWN, WITH CLEVIS HANGERS, ALL THREAD ROD AND SIDE BEAM ATTACHMENTS OR EPOXY COATED UNISTRUT CHANNEL WITH CLAMPS. KEEP THE PIPING AS TIGHT AS POSSIBLE TO THE TRUSSES TO PROVIDE ROOM FOR THE OTHER TRADES AND WASTE LINES.
5. PROVIDE & INSTALL TRAP PRIMER OR TRAP GUARD ON ALL FLOOR DRAINS & SINKS. ALL FLOOR DRAINS & SINKS SHALL HAVE DEEP SEAL P-TRAP INSTALLED ON THE DISCHARGE SIDE OF THE FLOOR DRAIN & SINK. TRAP SEAL DEVICE: J.R. SMITH 2692 OR PROSET TRAP GUARDS.
6. ALL FLOOR SINKS AND FLOOR DRAINS IN THE BUILDING SHALL HAVE AN INDIVIDUAL P-TRAP AND BE VENTED TO THE BUILDING VENT SYSTEM.
7. INDIRECT WASTE THE EACH PIECE OF KITCHEN EQUIPMENT TO THE NEAREST FLOOR SINK. SEE THE CONVENIENCE STORE EQUIPMENT SCHEDULE.
8. P.C. SHALL ROUTE ALL DRAIN LINES FROM THE KITCHEN EQUIPMENT, ICE BINS, & ETC. TO INDIRECT WASTE INTO A FLOOR SINK W/AIR GAP. THE P.C. SHALL COORDINATE THESE DRAINS WITH KITCHEN EQUIPMENT SUPPLIER AND INSTALLER.
9. THE P.C. SHALL PROVIDE AND INSTALL A FULL SIZE DRAIN ON ALL BACKFLOW DEVICES. PROVIDE AND INSTALL THE PROPER AIR GAP AND A FULL SIZE DRAIN TO AN APPROVED DISCHARGE RECEPTACLE.
10. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE INSTALLATION OF ALL FLOOR DRAINS, FLOOR SINKS AND TRAP PRIMERS. SEE THE DIMENSIONS ON THE ARCHITECTURAL SHEET(S) FOR THE EXACT LOCATION OF EACH OF THESE DRAINS. IF ANY DISCREPANCIES OCCUR THE ARCHITECT SHOULD BE CONTACTED IMMEDIATELY.
11. ALL DRAINS FROM THE ICE MAKER AND THE STORAGE BINS SHALL BE A MINIMUM OF 3/4", NO EXCEPTIONS.
12. CONNECT THE BUILDING VENTS TOGETHER HORIZONTALLY INSIDE THE BUILDING AND THEN RISING UP WITH A BUILDING VENT THRU THE ROOF. THE VTR'S SHALL RISE TO THE HEIGHT OF THE PARAPET WALL ON THE ROOF. KEEP VENTS 10'-0" MINIMUM FROM ALL ROOF TOP UNITS AND FRESH AIR INTAKES ON ROOF. SECURE ALL VENT PIPING.

P1.01 KEY NOTES

1	INSTALL A C.O.T.G. ON THE BUILDING GREASE, ROOF DRAIN AND SEWER LINES AS SHOWN ON THE DRAWINGS. RISE EACH C.O.T.G. LEVEL WITH FINISH GRADE. INSTALL A NICKEL BRONZE CLEANOUT (J.R. SMITH 4220) ON EACH RISER. POUR A 16" X 16" x 4" CONCRETE PAD AROUND EACH CLEANOUT, UNLESS THE CLEANOUT IS LOCATED IN A SIDEWALK OR DRIVEWAY.
2	THE P.C. SHALL INSTALL THE VENT THRU THE ROOF, SECURE THE PIPING AND PROVIDE A WEATHER-TIGHT ROOF FLASHING. P.C. IS RESPONSIBLE TO PATCH ALL PENETRATIONS THRU THE WALLS & ROOF AND SEAL THEM WEATHER-TIGHT.
3	THE EXISTING BUILDING GREASE WASTE LINE IS IN THIS APPROXIMATE LOCATION. THE CONTRACTOR SHALL FIELD VERIFY THE INVERT ELEVATION AND THEIR EXACT LOCATIONS. CONNECT ONTO THIS LINE AND RUN TO THE KITCHEN FIXTURES IN THIS PROJECT. THE P.C. SHALL PROVIDE ALL THE NECESSARY CONCRETE CUTTING, EXCAVATION, BACKFILLING AND COMPACTION TO INSTALL THE BUILDING GREASE AND SANITARY WASTE LINES IN THIS PROJECT.
4	CONNECT IN TO THE EXISTING SANITARY WASTE IN THIS APPROXIMATE LOCATION. THE P.C. SHALL ENSURE THE EXISTING SANITARY WASTE LINE IS AND REMAINS FULLY FUNCTIONAL AND OPERATIONAL.



① FLOOR PLAN - PLUMBING WASTE & VENT

SCALE 1/8" = 1'-0"

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Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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1-9-25

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AUTHOR
CLE

PROJECT
CAREEER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

FLOOR PLAN - PLUMBING WASTE & VENT

SHEET NO.
P1.01

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GENERAL WATER NOTES

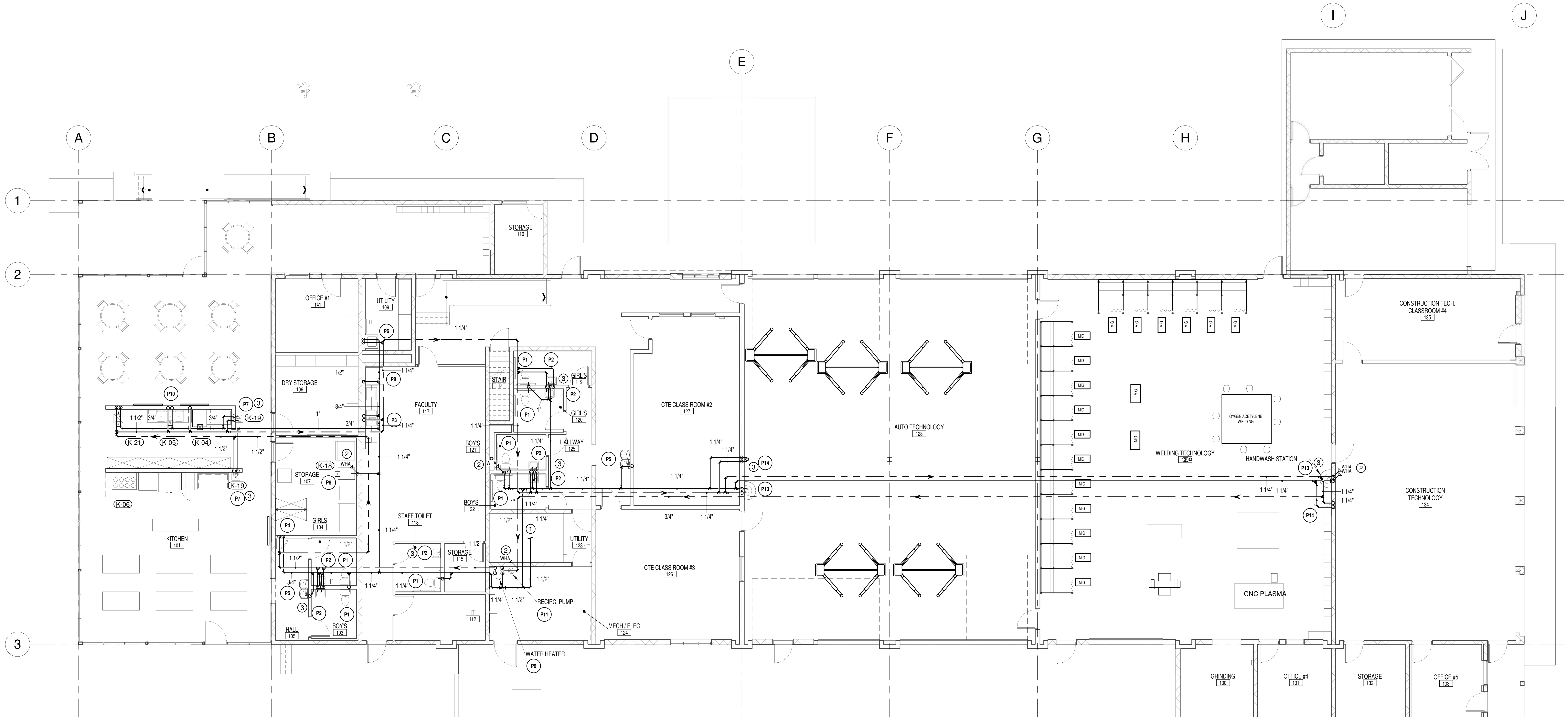
1. ALL WATER LINES SHALL BE HUNG USING COATED CLEVIS HANGERS, ALL THREAD ROD & SIDE BEAM ATTACHMENTS OR EPOXY COATED UNISTRUT CHANNEL, ALL THREAD ROD & SIDE BEAM ATTACHMENTS, SECURE PIPE WITH INSULATED CLAMPS.
2. ALL WATER PIPING, HOT AND COLD DOMESTIC LINES SHALL BE INSULATED. SEE INSULATION SCHEDULE ON SHEET P100 FOR THE THICKNESS AND TYPE OF INSULATION.
3. ALL KITCHEN EQUIPMENT, OWNER PROVIDED EQUIPMENT, AND BAR SINKS INDIRECT WASTE DRAINS SHALL BE PIPED TO THE FLOOR SINK W/PROPER AIR GAP. PROVIDE CLEAN OUT ACCESS TO THESE FLOOR DRAINS WHICH LOCATED UNDER CABINETS.
4. EACH FLOOR DRAIN & FLOOR SINK SHALL BE PROVIDED WITH A TRAP PRIMER OR TRAP SEAL DEVICE. TRAP PRIMER: INSTALL 1/2" SOFT "K" COPPER OR ENGLE'S METHOD PEX PIPE, ENCASED IN PLASTIC PIPE SLEEVE, TO EACH OF THE FLOOR SINKS & FLOOR DRAINS. TRAP SEAL DEVICES: NO PIPING REQUIRED. PROSET TRAP GUARDS OR J. R. SMITH 2692 TRAP SEALS. SEE DETAIL.
5. INSTALL WATER BALLVALVE SHUTOFF STOPS TO ALL OWNER PROVIDED KITCHEN EQUIPMENT. THESE VALVES SHALL TO BE LOCATED AS PER MANUFACTURES RECOMMENDATIONS. PROVIDE & INSTALL ALL BACKFLOW PROTECTION NECESSARY AS REQUIRED BY LOCAL OR PLUMBING CODES.
6. SEE SHEET PD100, PLUMBING FIXTURE SCHEDULE FOR A LISTING OF ALL THE PLUMBING FIXTURES AND EACH FIXTURE'S TRIM.
7. ANY & ALL PENETRATIONS THROUGH THE BUILDING ROOF OR WALLS SHALL BE SEALED WITH "DECK-MATE" FLASHING FOR ROOF & WALL SYSTEMS. G.C. SHALL PROVIDE, INSTALL & PAINT TO MATCH BUILDING. SUBCONTRACTOR SHALL COORDINATE WITH THE G.C. ALL PENETRATIONS AND SIZES. THE ARCHITECT SHALL HAVE THE FINAL INPUT ON HOW ALL PENETRATIONS SHALL BE SEALED. THE P.C. AND THE G.C. SHALL VERIFY WITH THE ARCHITECT WHAT SHALL BE REQUIRED OF THEM.
8. THE P.C. SHALL PROVIDE A LAMINATED VALVE TAG (BEFORE THE STORE HAS A FINAL WALK THRU) TO BE PERMANENTLY SECURED TO EACH OF THE COLD & HOT WATER VALVES WHICH WILL SERVE THE EQUIPMENT, WHICH NEED COLD OR HOT WATER.
9. ALL THE WATER VALVES ABOVE THE HARD LID OR THE DROP IN CEILING SHALL BE INSTALLED BETWEEN 1'-0" TO 1'-6" ABOVE THE CEILING. MAINTENENCE PERSONAL NEED TO ACCESS THESE VALVES USING A LADDER AND CANNOT REACH THEM IF THEY ARE INSTALLED UP CLOSE TO THE TRUSSES. PROVIDE BIG ENOUGH ACCESS DOOR TO ACCESS EACH VALVE AT EACH LOCATION.
10. **THE P.C. SHALL MEET ALL LOCAL, STATE, AND HEALTH DEPARTMENT CODES AS THEY RELATE TO BACKFLOW PROTECTION. EACH PIECE OF EQUIPMENT THAT IS PROVIDED BY THE P.C. AND HE OWNER SHALL HAVE THE PROPER BACKFLOW PROTECTION. FIELD VERIFY WITH STATE, CITY & HEALTH DEPARTMENT WHAT IS REQUIRED FOR THE PROTECTION OF THIS STORE AND THE EQUIPMENT BEING INSTALLED. THE P.C. SHALL BE RESPONSIBLE TO PROVIDE THE NECESSARY DEVICES TO PROTECT EACH PIECE OF EQUIPMENT. PROVIDE FULL SIZE DRAINS TO AN APPROVED RECEPTACLE WITH THE PROPER AIR GAP.**

P1.02 KEY NOTES

1 THE P.C. SHALL CONNECT TO EXISTING 1 1/2" WATER LINE IN THIS APPROXIMATE LOCATION. FIELD VERIFY EXACT LOCATION. PROVIDE AND INSTALL A NEW 1-1/2" FULLPORT BALLVALVE SHUTOFF VALVE, BACKFLOW PREVENTER(IF REQUIRED, FOLLOW CITY REQUIREMENTS) AND 0-200 PSI LIQUID FILLED PRESSURE GAUGE. FIELD VERILY THE EXACT LOCATION OF THE PIPING AND THE WATER PRESSURE INTO THIS SPACE.

2 THE PLUMBING CONTRACTOR SHALL INSTALL WATER HAMMER ARRESTORS, SIZED ON WATER FIXTURE UNITS. SEE MANUFACTURES SIZING CHART TO SELECT EACH WATER HAMMER ARRESTER.

3 THE PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL THE THERMOSTATIC MIXING VALVE AT EACH FIXTURE (LAVATORIES AND HAND SINKS) WHERE THE CODES REQUIRES 110 DEG. F. WATER.



1 FLOOR PLAN - PLUMBING DOMESTIC WATER
SCALE 1/8" = 1'-0"

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208.338.1212

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AUTHOR
CLE

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

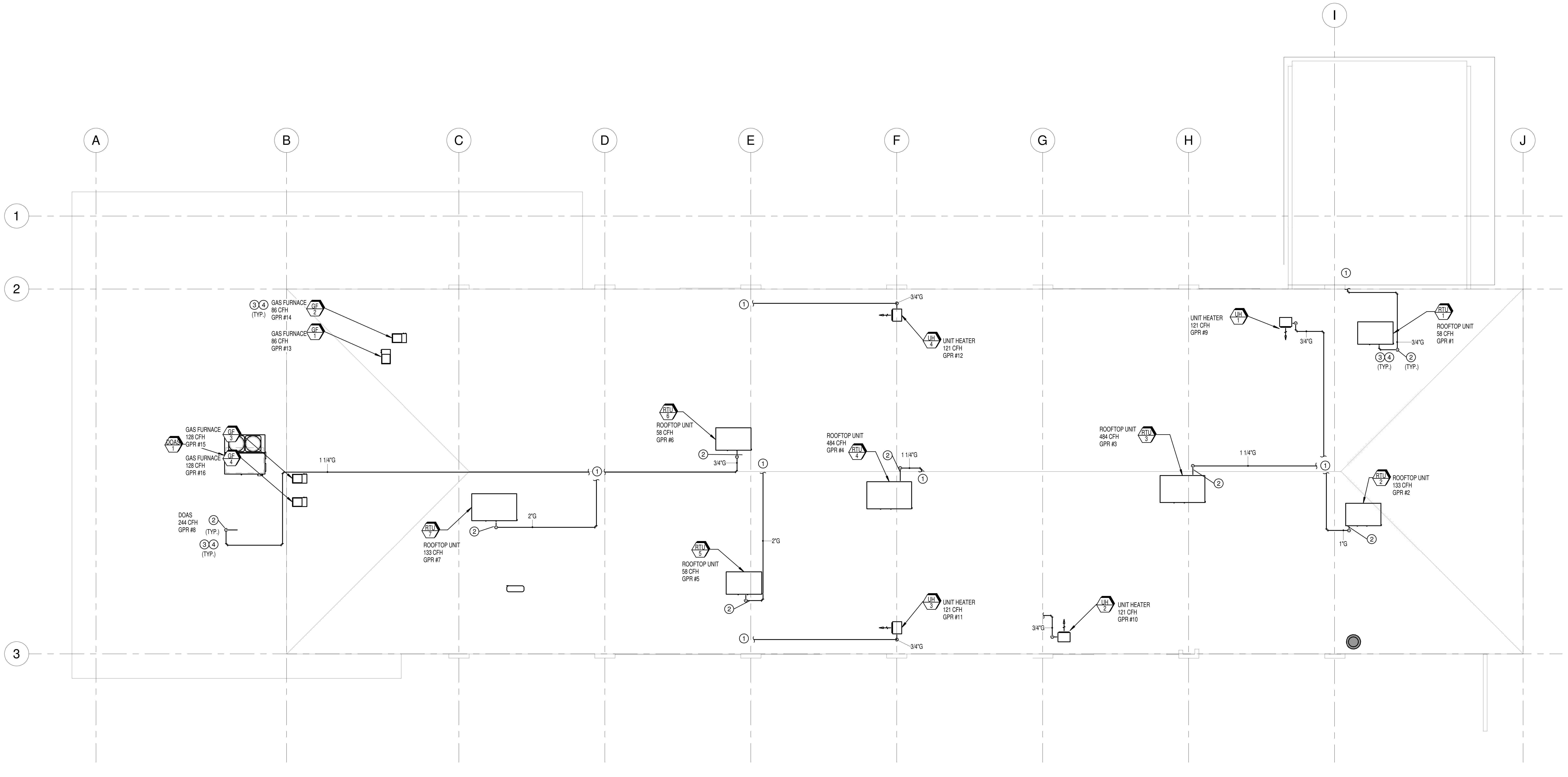
FLOOR PLAN - PLUMBING DOMESTIC WATER

SHEET NO.
P1.02

1/9/2025 5:11:50 PM

P1.03 KEY NOTES

1	ROUTE NEW PIPING TO CLOSEST TIE IN TO EXISTING PIPING. TIE IN MUST BE LARGER THAN OR EQUAL TO NEW PIPING SIZE.IF NOT MAKE NEW TIE IN TO EXISTING MAIN LINE.
2	SEAL ALL PENETRATIONS THRU THE WALLS OR ROOF WEATHER-TIGHT AND PAINT ALL EXPOSED GAS PIPING. PROVIDE AN ESCUTCHEON ON THE PIPING AS IT GOES THRU THE WALL.
3	CONNECT THE GAS PIPING TO EACH GAS APPLIANCES, PROVIDE AND INSTALL A GAS SHUTOFF VALVE, GAS PRESSURE REGULATOR & UNION AND MINIMUM OF A 6" DIRT LEG. ALL UNIONS SHALL BE ACCESSIBLE.
4	THE GAS CONTRACTOR SHALL SUPPORT OR ANCHOR ALL THE GAS PIPING. THE CONTRACTOR SHALL USE MIRO GAS & MECHANICAL SUPPORTS OR MAKE ALL THE PIPING SOLID.


I
A
B
C
D
E
F
G
H
J
1
2
3
③④ GAS FURNACE 86 CFH GPR #14 GF 2 (TYP.)
GAS FURNACE 86 CFH GPR #13 GF 1
DOAS 1
GAS FURNACE 128 CFH GPR #15 GF 3
GAS FURNACE 128 CFH GPR #16 GF 4
1 1/4"G
DOAS 244 CFH GPR #8
② (TYP.)
③④ (TYP.)
RTU 7 ROOFTOP UNIT 133 CFH GPR #7
②
2"G
①
RTU 6 ROOFTOP UNIT 58 CFH GPR #6
②
3/4"G
①
2"G
RTU 5 ROOFTOP UNIT 58 CFH GPR #5
②
① 3/4"G
UH 4 UNIT HEATER 121 CFH GPR #12
ROOFTOP UNIT 484 CFH GPR #4 RTU 4
② 1 1/4"G ①
UH 3 UNIT HEATER 121 CFH GPR #11
① 3/4"G
UH 2 UNIT HEATER 121 CFH GPR #10
3/4"G
UNIT HEATER 121 CFH GPR #9 UH 1
3/4"G
ROOFTOP UNIT 484 CFH GPR #3 RTU 3
1 1/4"G
②
①
RTU 1 ROOFTOP UNIT 58 CFH GPR #1
3/4"G
③④ (TYP.) ② (TYP.)
RTU 2 ROOFTOP UNIT 133 CFH GPR #2
1"G
②

① PLUMBING GAS PIPING - ROOF PLAN

SCALE 1/8" = 1'-0"

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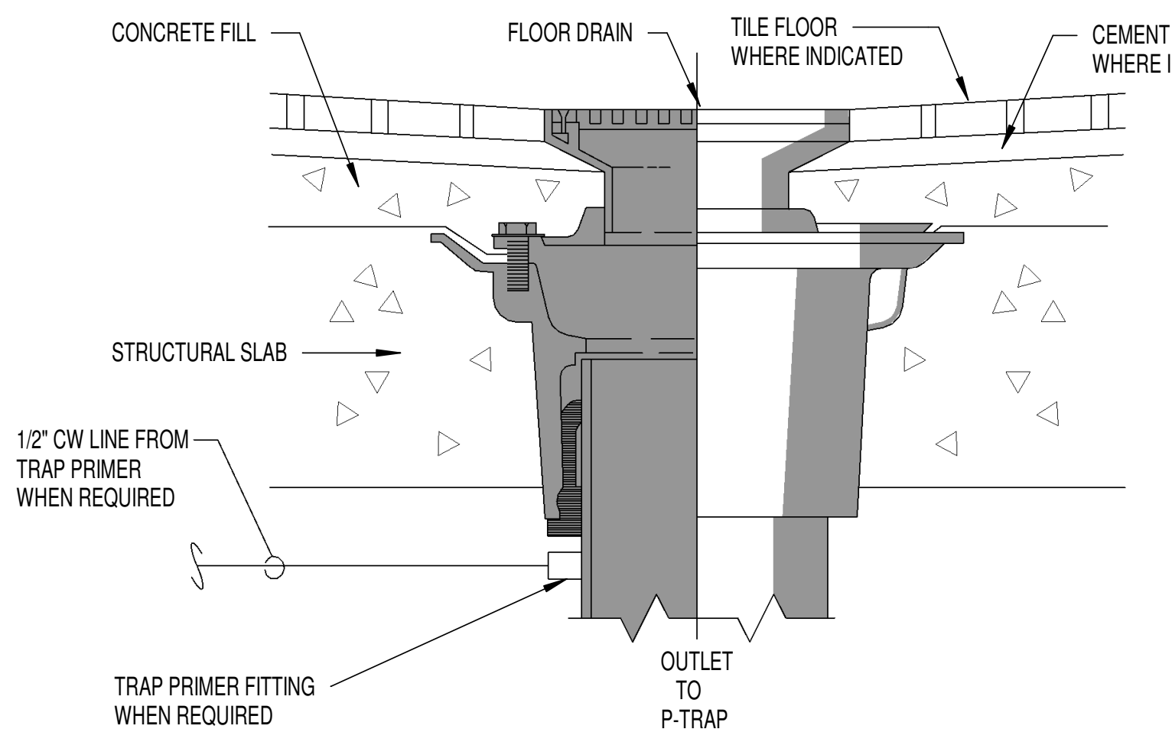
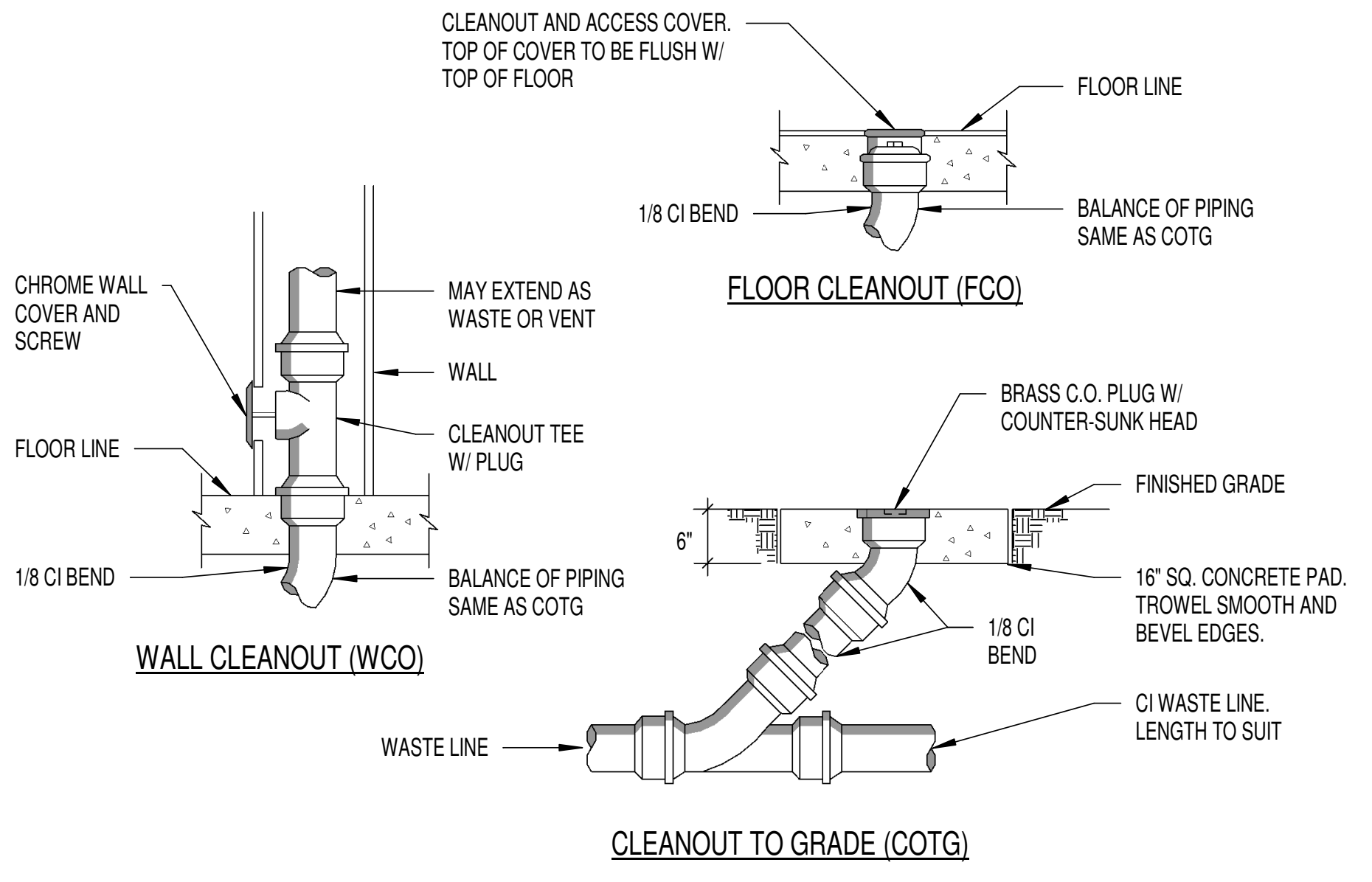
FLOOR PLAN - PLUMBING NATURAL GAS

SHEET NO.
P1.03


CONCRETE FILL
FLOOR DRAIN
TILE FLOOR WHERE INDICATED
CEMENT BED WHERE INDICATED
STRUCTURAL SLAB
1/2" CW LINE FROM TRAP PRIMER WHEN REQUIRED
TRAP PRIMER FITTING WHEN REQUIRED
OUTLET TO P-TRAP

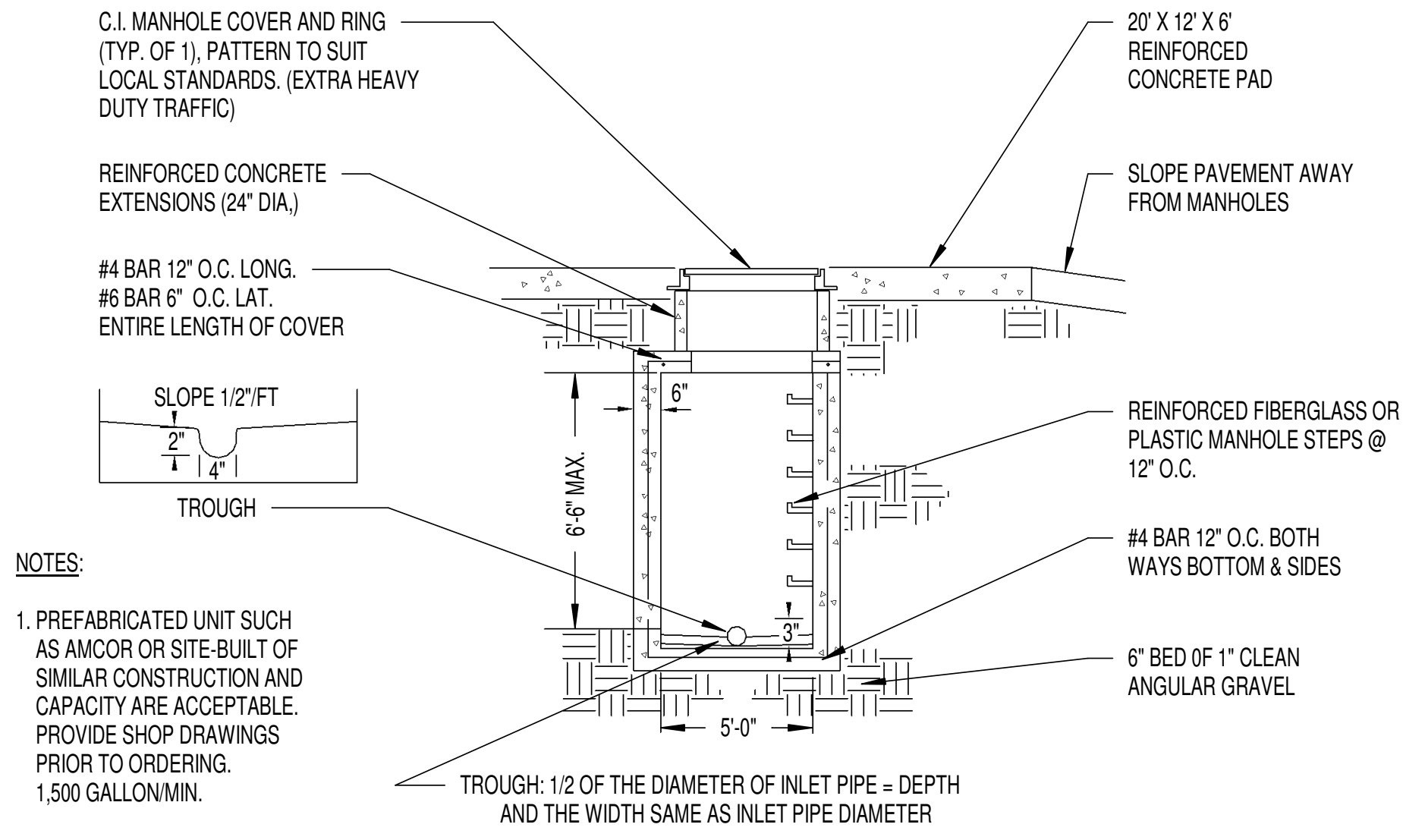
4 P2.00 DETAIL-FLOOR DRAIN W/ TRAP PRIMER (FD1)

SCALE: NONE


CLEANOUT AND ACCESS COVER. TOP OF COVER TO BE FLUSH W/ TOP OF FLOOR
FLOOR LINE
1/8 CI BEND
BALANCE OF PIPING SAME AS COTG
FLOOR CLEANOUT (FCO)
CHROME WALL COVER AND SCREW
MAY EXTEND AS WASTE OR VENT
WALL
CLEANOUT TEE W/ PLUG
FLOOR LINE
1/8 CI BEND
BALANCE OF PIPING SAME AS COTG
WALL CLEANOUT (WCO)
BRASS C.O. PLUG W/ COUNTER-SUNK HEAD
FINISHED GRADE
6"
16" SQ. CONCRETE PAD. TROWEL SMOOTH AND BEVEL EDGES.
1/8 CI BEND
CI WASTE LINE. LENGTH TO SUIT
WASTE LINE
CLEANOUT TO GRADE (COTG)

3 DETAIL-CLEANOUTS

SCALE 1/8" = 1'-0"


C.I. MANHOLE COVER AND RING (TYP. OF 1), PATTERN TO SUIT LOCAL STANDARDS. (EXTRA HEAVY DUTY TRAFFIC)
REINFORCED CONCRETE EXTENSIONS (24" DIA,)
#4 BAR 12" O.C. LONG. #6 BAR 6" O.C. LAT. ENTIRE LENGTH OF COVER
SLOPE 1/2"/FT
2"
4"
TROUGH
20' X 12' X 6' REINFORCED CONCRETE PAD
SLOPE PAVEMENT AWAY FROM MANHOLES
6"
6'-6" MAX.
REINFORCED FIBERGLASS OR PLASTIC MANHOLE STEPS @ 12" O.C.
#4 BAR 12" O.C. BOTH WAYS BOTTOM & SIDES
3"
6" BED 0F 1" CLEAN ANGULAR GRAVEL
5'-0"
TROUGH: 1/2 OF THE DIAMETER OF INLET PIPE = DEPTH AND THE WIDTH SAME AS INLET PIPE DIAMETER

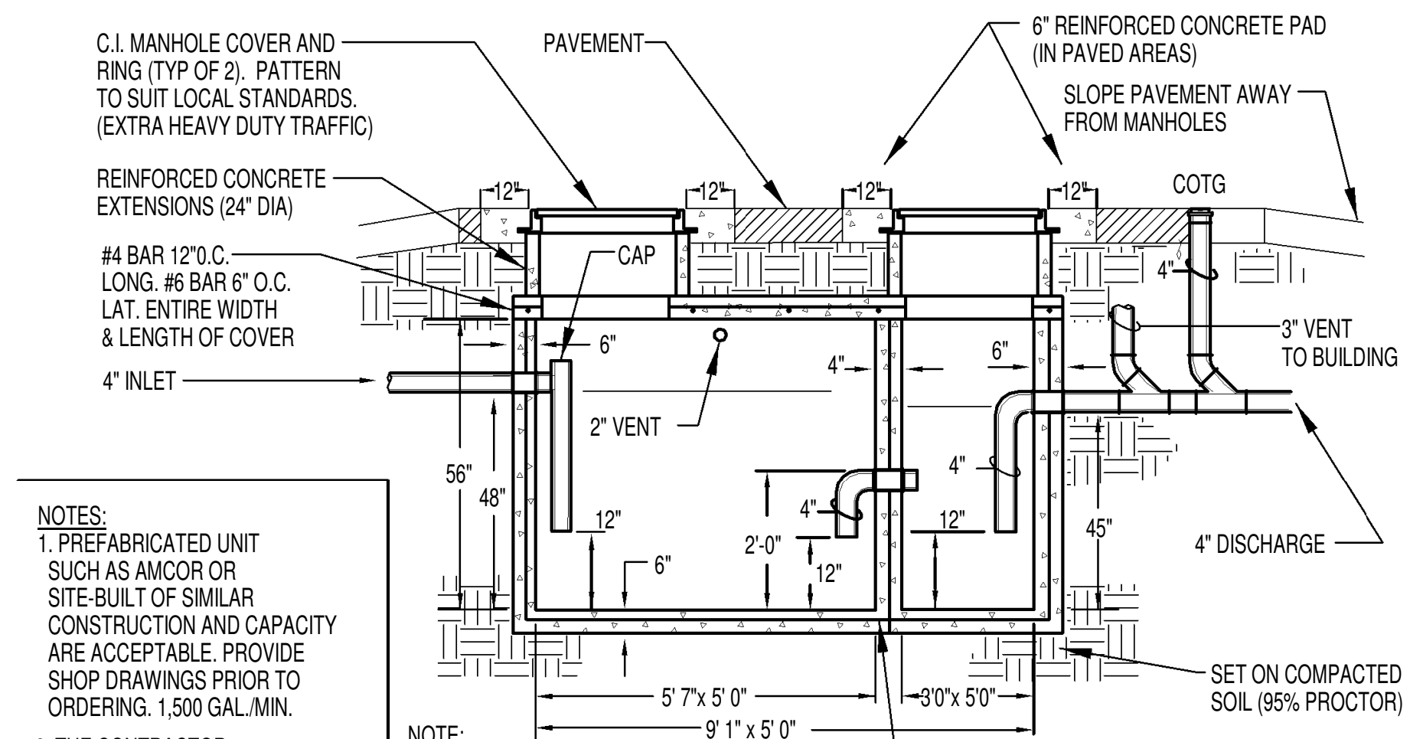
NOTES:

1. PREFABRICATED UNIT SUCH AS AMCOR OR SITE-BUILT OF SIMILAR CONSTRUCTION AND CAPACITY ARE ACCEPTABLE. PROVIDE SHOP DRAWINGS PRIOR TO ORDERING. 1,500 GALLON/MIN.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ADMINISTRATIVE AUTHORITIES FOR APPROVAL PRIOR TO ORDERING OR FABRICATING.

NOTE:
PROVIDE ONE SAMPLING MANHOLE 3' TO 7' DEEP. MUST BE INSTALLED IN ACCORDANCE WITH LOCAL REGULATIONS. IF DEEPER MANHOLE REQUIRED, VERIFY WITH THE LOCAL AUTHORITY.

2 P2.00 DETAIL - SAMPLING MANHOLE

SCALE: NONE


C.I. MANHOLE COVER AND RING (TYP OF 2). PATTERN TO SUIT LOCAL STANDARDS. (EXTRA HEAVY DUTY TRAFFIC)
PAVEMENT
6" REINFORCED CONCRETE PAD (IN PAVED AREAS)
SLOPE PAVEMENT AWAY FROM MANHOLES
REINFORCED CONCRETE EXTENSIONS (24" DIA)
12"
12"
12"
12"
COTG
#4 BAR 12"O.C. LONG. #6 BAR 6" O.C. LAT. ENTIRE WIDTH & LENGTH OF COVER
CAP
4"
3" VENT TO BUILDING
4" INLET
6"
2" VENT
4"
6"
56"
48"
4"
4"
12"
2'-0"
12"
12"
6"
45"
4" DISCHARGE
SET ON COMPACTED SOIL (95% PROCTOR)
5' 7"x 5' 0"
3'0"x 5'0"
9' 1" x 5' 0"
#4 BAR 12" O.C. BOTH WAYS BOTTOM & SIDES

NOTES:

1. PREFABRICATED UNIT SUCH AS AMCOR OR SITE-BUILT OF SIMILAR CONSTRUCTION AND CAPACITY ARE ACCEPTABLE. PROVIDE SHOP DRAWINGS PRIOR TO ORDERING. 1,500 GAL./MIN.
2. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ADMINISTRATIVE AUTHORITIES FOR APPROVAL PRIOR TO ORDERING OR FABRICATING.

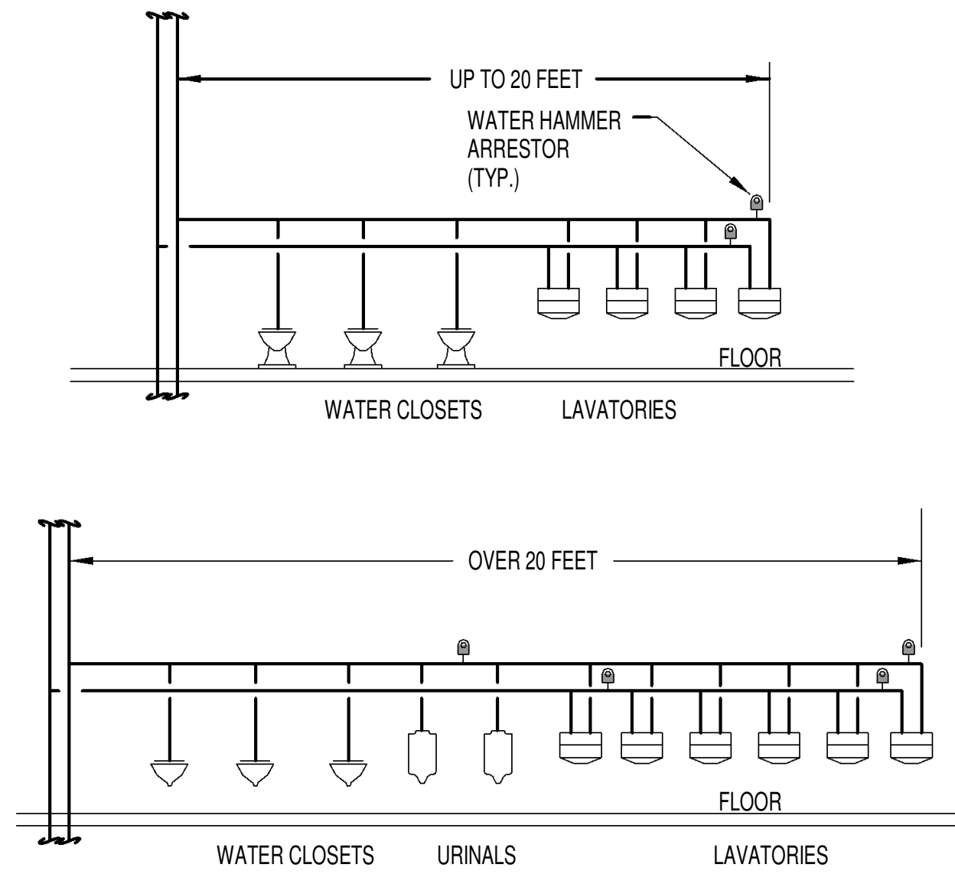
NOTE:
6 GAL/SACK PORTLAND CEMENT. 4000 PSI MIN. COMPRESSIVE STRENGTH, ASTM C 150, II/V LOW-ALKALI PORTLAND CEMENT.

1,250 GAL. CAPACITY

# MEAL (260) X WASTE RATE (2) X RETENTION TIME (1.5) X STORAGE FACTOR (1.5) = 1.170 GAL.

1 P2.00 DETAIL - GREASE INTERCEPTOR (1,250 GAL.)

SCALE: NONE



NOTES

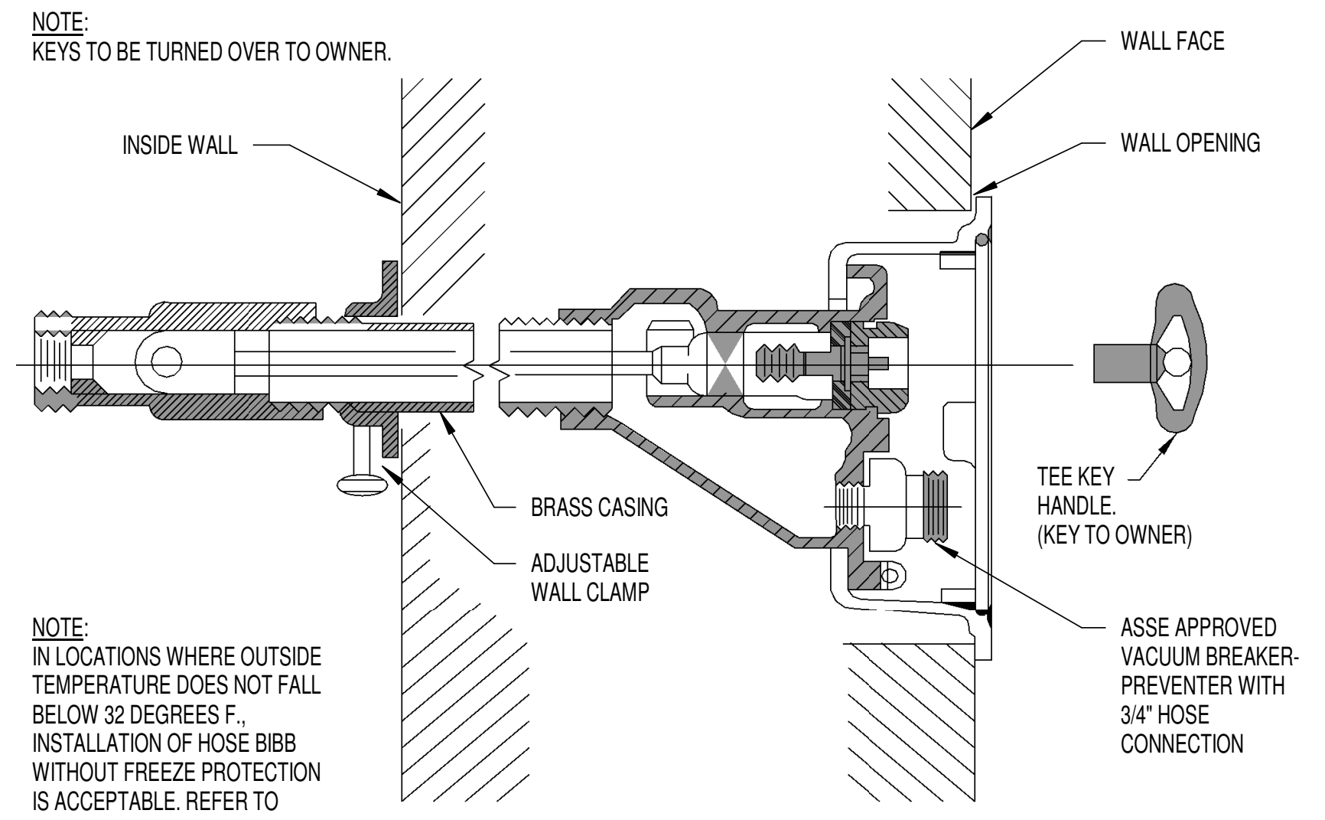
① ON MULTIPLE FIXTURE BRANCH LINES UP TO 20 FEET IN LENGTH, THE ARRESTOR SHOULD BE INSTALLED ON THE BRANCH LINE BETWEEN THE LAST TWO FIXTURES BEING SERVED. THE ARRESTOR SHOULD HAVE A FIXURE-UNIT RATING EQUAL TO OF GREATER THAN THE TOTAL FIXTURE-UNITS CONNECTED TO THE BRANCH LINE.

② ON MULTIPLE FIXTURE BRANCH LINES OVER 20 FEET IN LENGTH, TWO ARRESTORS SHOULD BE USED ON EACH LINE WITH THE SECOND UNIT PLACED AT THE APPROXIMATE MIDPOINT OF THE LINE. THE SUM OF THE FIXTURE-UNITS RATINGS OF THE ARRESTOR ON EACH BRANCH SHOULD BE EQUAL TO OR GREATER THAN THE TOTAL FIXTURE-UNITS CONNECTED TO THE BRANCH LINE.

8 P2.00 DETAIL-WATER HAMMER ARRESTOR INSTALLATION

SCALE: NONE

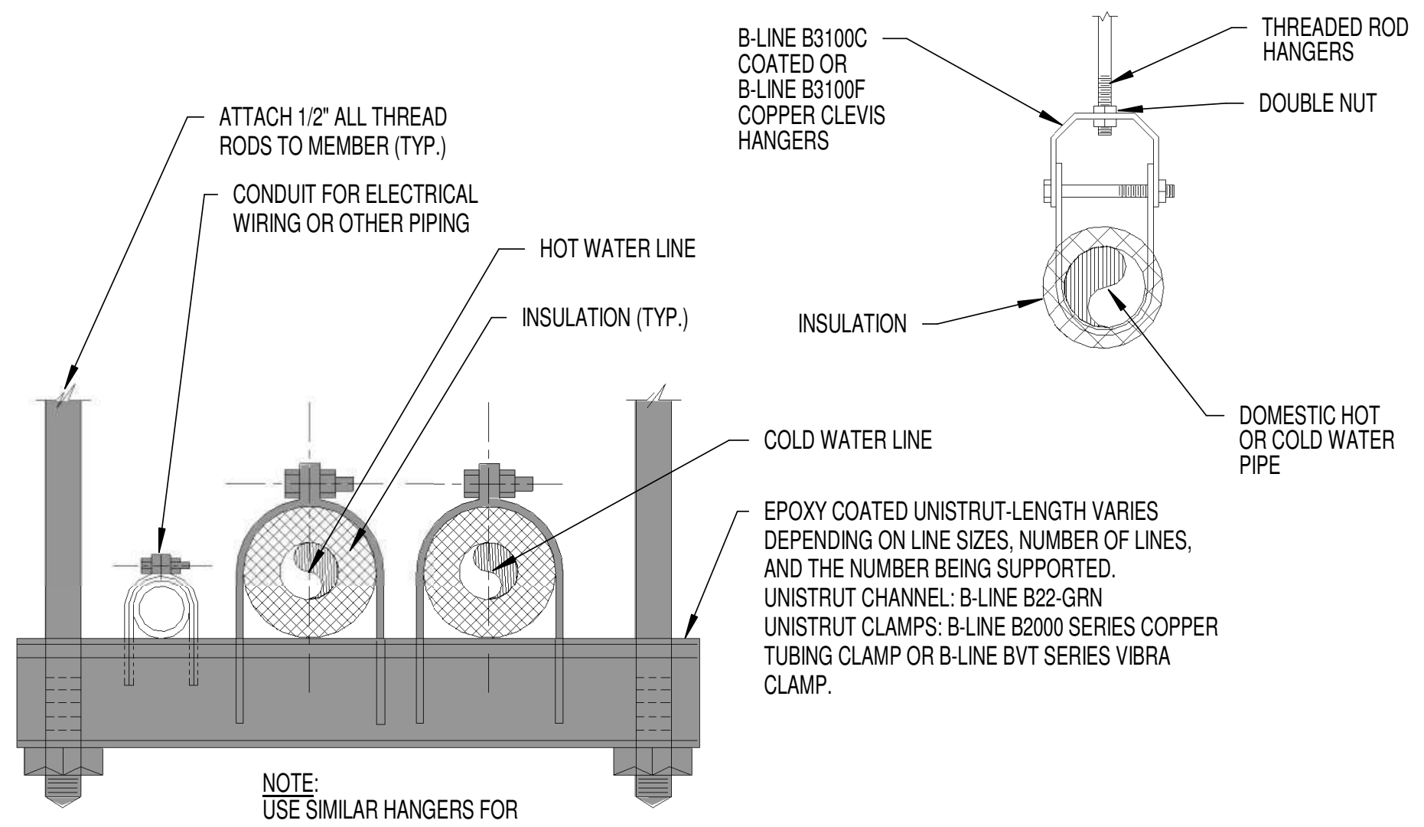
NOTE:
KEYS TO BE TURNED OVER TO OWNER.


INSIDE WALL
WALL FACE
WALL OPENING
BRASS CASING
ADJUSTABLE WALL CLAMP
TEE KEY HANDLE. (KEY TO OWNER)
ASSE APPROVED VACUUM BREAKER-PREVENTER WITH 3/4" HOSE CONNECTION

NOTE:
IN LOCATIONS WHERE OUTSIDE TEMPERATURE DOES NOT FALL BELOW 32 DEGREES F., INSTALLATION OF HOSE BIBB WITHOUT FREEZE PROTECTION IS ACCEPTABLE. REFER TO PLUMBING FIXTURE SCHEDULE. (CONFIRM WITH ENGINEER)

7 P2.00 DETAIL-HOSE BIBB

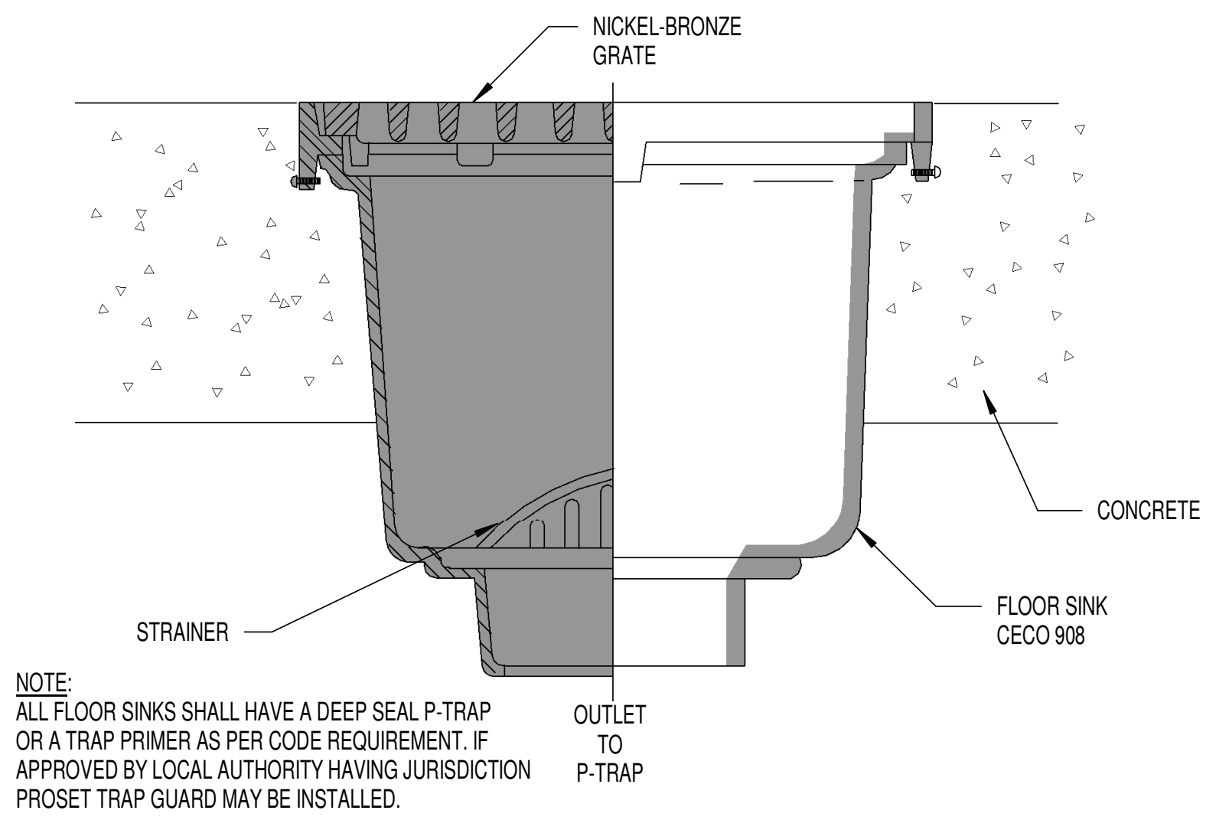
SCALE: NONE


ATTACH 1/2" ALL THREAD RODS TO MEMBER (TYP.)
CONDUIT FOR ELECTRICAL WIRING OR OTHER PIPING
HOT WATER LINE
INSULATION (TYP.)
COLD WATER LINE
EPOXY COATED UNISTRUT-LENGTH VARIES DEPENDING ON LINE SIZES, NUMBER OF LINES, AND THE NUMBER BEING SUPPORTED. UNISTRUT CHANNEL: B-LINE B22-GRN UNISTRUT CLAMPS: B-LINE B2000 SERIES COPPER TUBING CLAMP OR B-LINE BVT SERIES VIBRA CLAMP.
B-LINE B3100C COATED OR B-LINE B3100F COPPER CLEVIS HANGERS
THREADED ROD HANGERS
DOUBLE NUT
INSULATION
DOMESTIC HOT OR COLD WATER PIPE

NOTE:
USE SIMILAR HANGERS FOR STEAM, CONDENSATE, AND AIR LINES.

6 P2.00 DETAIL - PIPE HANGING METHODS

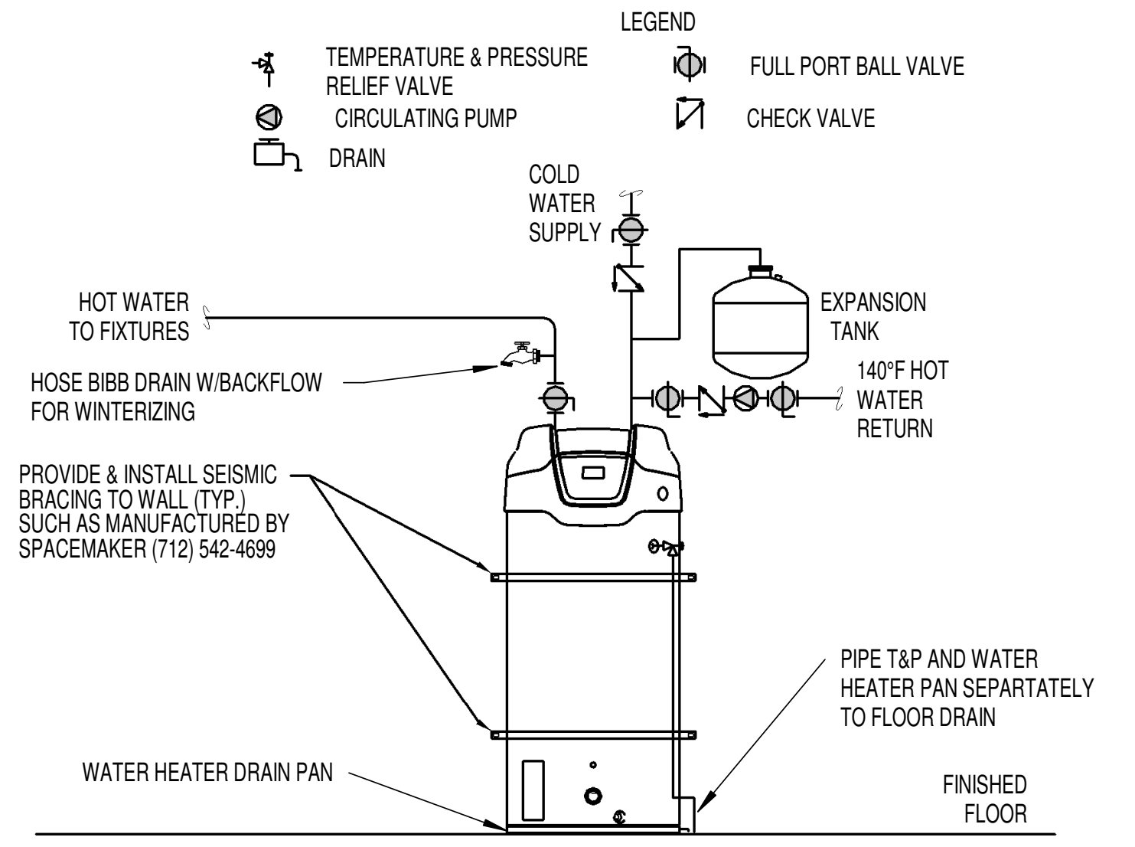
SCALE: NONE



NOTE:
ALL FLOOR SINKS SHALL HAVE A DEEP SEAL P-TRAP OR A TRAP PRIMER AS PER CODE REQUIREMENT. IF APPROVED BY LOCAL AUTHORITY HAVING JURISDICTION PROSET TRAP GUARD MAY BE INSTALLED.

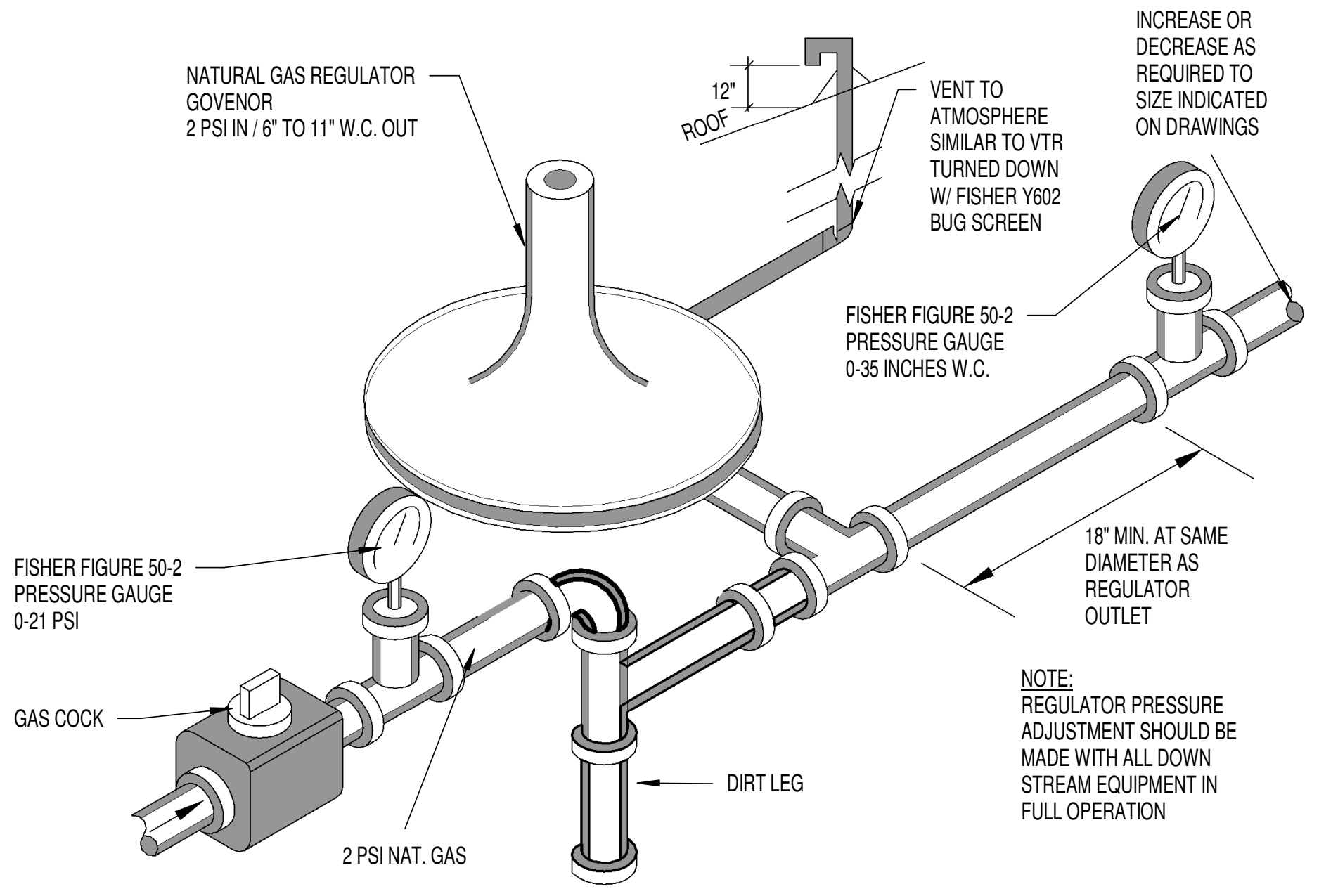
5 P2.00 DETAIL-FLOOR SINK (FS1)

SCALE: NONE


LEGEND
TEMPERATURE & PRESSURE RELIEF VALVE
CIRCULATING PUMP
DRAIN
FULL PORT BALL VALVE
CHECK VALVE
COLD WATER SUPPLY
HOT WATER TO FIXTURES
EXPANSION TANK
140°F HOT WATER RETURN
HOSE BIBB DRAIN W/BACKFLOW FOR WINTERIZING
PROVIDE & INSTALL SEISMIC BRACING TO WALL (TYP.) SUCH AS MANUFACTURED BY SPACEMAKER (712) 542-4699
PIPE T&P AND WATER HEATER PAN SEPARTATELY TO FLOOR DRAIN
WATER HEATER DRAIN PAN
FINISHED FLOOR

10 P2.00 DETAIL-ELECTRIC WATER HEATER

SCALE: NONE


NATURAL GAS REGULATOR GOVENOR 2 PSI IN / 6" TO 11" W.C. OUT
12"
ROOF
VENT TO ATMOSPHERE SIMILAR TO VTR TURNED DOWN W/ FISHER Y602 BUG SCREEN
INCREASE OR DECREASE AS REQUIRED TO SIZE INDICATED ON DRAWINGS
FISHER FIGURE 50-2 PRESSURE GAUGE 0-35 INCHES W.C.
18" MIN. AT SAME DIAMETER AS REGULATOR OUTLET
FISHER FIGURE 50-2 PRESSURE GAUGE 0-21 PSI
GAS COCK
DIRT LEG
2 PSI NAT. GAS

NOTE:
REGULATOR PRESSURE ADJUSTMENT SHOULD BE MADE WITH ALL DOWN STREAM EQUIPMENT IN FULL OPERATION

9 P2.00 GAS PRESSURE REGULATOR DETAIL

SCALE: NONE

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
1-9-25

REF NO.
2444

AUTHOR
CLE

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
PLUMBING DETAILS

SHEET NO.
P2.00

1/9/2025 5:11:53 PM

MASTER LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	MANUF.	CATALOG #	VOLTS	MOUNTING	LAMPS	WATTS	REMARKS
T-1	DIRECT LIT LED FLAT PANEL, LOW GLARE, EXTERNAL DRIVER	LITHONIA	CPX 2X4 5000LM 80CRI 40K SWL MIN1 MVOLT NLTAIR **	120	CEILING	LED (INCLUDED)	40 W	** = SENSOR (#APIR) OR CONTROL INPUT FUNCTION ONLY. ALL LIGHTS SHALL BE CONTROL INPUT FUNCTION ONLY UNLESS SENSOR "S" IS NOTED AT LIGHT
T-1A	SAME AS T-1 EXCEPT 3000 LUMEN PACKAGE						25 W	
T-1AB	SAME AS T-1A EXCEPT WITH SURFACE MOUNT KIT						25 W	<varies>
T-1B	SAME AS T-1 EXCEPT WITH SURFACE MOUNT KIT						40 W	#2X4SMKSH
T-2	96" LINEAR LED STRIP, LENSED	LITHONIA	CLX L96 10000LM RDL WD MVOLT EZ1 40K 80CRI NLTAIR2 ** WH	120	SURFACE OR CHAIN HUNG AT INDICATED HEIGHT	LED (INCLUDED)	64 W	** = SENSOR (#RES7) OR CONTROL INPUT FUNCTION ONLY (#RIO). ALL LIGHTS SHALL BE CONTROL INPUT FUNCTION ONLY UNLESS SENSOR "S" IS NOTED AT LIGHT. FOR MOUNTING HEIGHTS GREATER THAN 15'-0" USE SENSOR #RES7PDT45
T-2A	SAME AS T-2B EXCEPT WITH 8000 LUMEN PACKAGE						64 W	
T-3	7" SURFACE MOUNTED DOWNLIGHT, SELECTABLE CCT, WET LOCATION	JUNO	JSF 7IN 10LM SWW5 90CRI MVOLT ZT WH	120	RECESSED	LED (INCLUDED)	12 W	
T-4	2' SURFACE MOUNTED LED, LENSED	LITHONIA	WL2 08L EZ1 LP840	120	WALL ABOVE MIRROR	LED (INCLUDED)	8 W	
T-5E	THERMOPLASTIC, LED EXIT SIGN, GREEN LETTERS, SELF DIAGNOSTIC	LITHONIA	LQM S W 3 G MVOLT EL N AELR	120	WALL/CEILING	LED (INCLUDED)	1 W	
T-6AE	THERMOPLASTIC, LED EMERGENCY EGRESS, SELF DIAGNOSTIC	LITHONIA	ELM6L UVOLT LTP AELR HO	120	WALL @ 96" A.F.F.	LED (INCLUDED)	22 W	
T-6E	SAME AS T-6AE EXCEPT ELM4L						22 W	
T-7AE	EXTERIOR REMOTE EMERGENCY EGRESS HEAD	LITHONIA	ELMRW SP640L DDBTXD SGL	120	WALL @ 96" A.F.F.	LED (INCLUDED)	1 W	
T-7C							1 W	
T-7E	INTERIOR REMOTE EMERGENCY EGRESS HEAD	LITHONIA	ELMRE SP640L SGL	120	WALL @ 96" A.F.F.		1 W	
T-8	4" CANLESS ROUND DOWNLIGHT	JUNO	JPDZ4 DB AL010 SWW5WD 90CRI JPDZRMJBX MVOLT ZT10 WWH	120	RECESSED	LED (INCLUDED)	16 W	
T-8E	SAME AS T-8 EXCEPT FED FROM INVERTER						16 W	
T-9	ARCHITECTURAL WALL PACK	LITHONIA	WDGE P2 40K 80CRI T3M MVOLT SRM AWS PIR DDBXD	120	WALL @ 8'-0" A.F.G.	LED (INCLUDED)	19 W	
T-10	ARCHITECTURAL WALL PACK	LITHONIA	WDGE P3 40K 80CRI R3 MVOLT SRM AWS PIRH DDBXD	120	WALL @ 15'-0" A.F.G.	LED (INCLUDED)	71 W	

CONDUIT/CONDUCTOR SCHEDULE (3)

(XYYZ) 'X' DENOTES NUMBER OF CONDUCTORS
'Y' DENOTES CONDUCTOR SIZE
'Z' (WHEN INDICATED) DENOTES GROUND CONDUCTOR TYPE
-"G" FOR CODE SIZE GROUND
-"IG" FOR CODE SIZE ISOLATED GROUND

SYM.	AMPS (1)(5)	CONDUCTORS		EQUIP. GND SIZE (5)(6)	CONDUIT SIZE (2)(5)	GEC SIZE (5)
		QTY (7)	SIZE (1)			
(214)	15	2	14	14	1/2"	8
(314)		3				
(414)	↓	4	↓	↓	↓	
(212)	20	2	12	12	3/4"	
(312)		3				
(412)	↓	4	↓	↓		
(210)	30	2	10	10		
(310)		3				
(410)	↓	4	↓			
(28)	40	2	8			
(38)		3				
(48)	↓	4	↓			
(26)	55	2	6			
(36)		3			↓	
(46)	↓	4	↓	↓	1"	
(24)	70	2	4	8		
(34)		3			↓	
(44)	↓	4	↓		1 1/4"	
(23)	85	2	3			
(33)		3				
(43)	↓	4	↓			
(22)	95	2	2			
(32)		3				
(42)	↓	4	↓			↓
(31)	100	3	1		↓	6
(41)	↓	4		↓	1 1/2"	
(31*)	130	3		6		
(41*)	↓	4	↓		↓	
(31o)	150	3	1/0		2"	
(41o)	↓	4	↓			↓
(32o)	175	3	2/0			4
(42o)	↓	4	↓			
(33o)	200	3	3/0			
(43o)	↓	4	↓	↓	↓	↓
(34o)	230	3	4/0	4	2 1/2"	2
(44o)	↓	4	↓			
(325)	250	3	250			
(425)	↓	4	↓			
(330)	270	3	300			
(430)	↓	4	↓	↓	↓	
(335)	310	3	350	3	3"	
(435)	↓	4	↓			↓
(340)	335	3	400			1/0
(440)	↓	4	↓			
(350)	380	3	500			
(450)	↓	4	↓	↓	↓	
(360)	420	3	600	2	3 1/2"	
(460)	↓	4	↓	↓	↓	↓

NOTES:

1. CONDUCTOR SIZE BASED ON TABLE NEC TABLE 310.16, 60 DEG. C INSULATION RATING FOR LOADS 0-100 AMPS AND 75 DEG. C RATING FOR LOADS GREATER THAN 100 AMPS PER 110.14(C)(1).
2. CONDUIT SIZE IS BASED ON NEC ANNEX C TABLE C.1 FOR EMT. CONTRACTOR SHALLREFERENCE NEC ANNEX C TABLE C3 (FMC), TABLE C4 (IMC), TABLE C7 (LFMC), TABLE C8 (RMC), TABLE C9 (PVC-SCHED. 80), TABLE C10 (PVC-SCHED. 40), AND TABLE C11 (RIGID PVC-TYPE A) WHEN CONDUIT OTHER THAN EMT IS REFERENCED ON THE DRAWINGS. EXCLUDES TABLES C2,C5,C6,C12.
3. UNLESS NOTED OTHERWISE IN CONSTRUCTION DOCUMENTS, FOR COMMERCIAL, INDUSTRIAL, MUNICIPAL, ETC. APPLICATIONS, ALL BRANCH CIRCUIT CONDUCTORS (PHASE, NEUTRAL, GROUND) AND FEEDERS SHALL BE COPPER. ALL CONDUCTORS SHALL HAVE TYPE THHN INSULATION FOR DRY/DAMP LOCATIONS AND TYPE THWN FOR WET LOCATIONS PER NEC. BRANCH CIRCUIT CONDUCTORS SHALL BE PERMITTED TO BE TYPE NM CABLE.
4. SITE CONDUIT SHALL BE MINIMUM 1" DIA.
5. FOR AMPERAGE GREATER THAN 420 AMPS OR FOR SINGLE OR PARALLEL SETS OF CONDUCTORS, CONTRACTOR SHALL REFERENCE NEC 250.66 FOR GROUNDING ELECTRODE CONDUCTOR(GEC) AND 250.122 FOR EQUIPMENT GROUND.
6. UNLESS OTHERWISE NOTED, ALL CIRCUITS SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR.
7. QUANTITY VALUES REPRESENT NUMBER OF PHASE OR PHASE + NEUTRAL CONDUCTORS ONLY. GROUNDING CONDUCTOR IS NOT COUNTED IN QUANTITY.

ELECTRICAL SYMBOL & OUTLET SCHEDULE

SYMBOL	DESCRIPTION	MOUNTING HEIGHT *	WIRING DEVICE	NOTES
⊙	CEILING LUMINAIRE	CEILING	SEE MASTER LUMINAIRE SCHEDULE	(1)
⊢○	WALL LUMINAIRE	(AS NOTED)	SEE MASTER LUMINAIRE SCHEDULE	(1)
▢	RECESSED LUMINAIRE	RECESSED	SEE MASTER LUMINAIRE SCHEDULE	(1)
▭	LED LUMINAIRE	(AS NOTED)	SEE MASTER LUMINAIRE SCHEDULE	(1)
⊠	LED EMERGENCY LUMINAIRE	(AS NOTED)	SEE MASTER LUMINAIRE SCHEDULE	(1)
⊢⊗	WALL MOUNTED EXIT SIGN (NOT SWITCHED)	(AS NOTED)	SEE MASTER LUMINAIRE SCHEDULE	(1) (3)
⊗	CEILING MOUNTED MOUNTED EXIT SIGN (NOT SWITCHED)	CEILING	SEE MASTER LUMINAIRE SCHEDULE	(1) (3)
◁	FLOOD LUMINAIRE	(AS NOTED)	SEE MASTER LUMINAIRE SCHEDULE	(1)
■-○-■	POLE MOUNTED LUMINAIRE (SINGLE, DOUBLE, TRIPLE, ETC.)	(AS NOTED)	SEE MASTER LUMINAIRE SCHEDULE	(1)
$	SINGLE-POLE SWITCH 20A 120-277V	4'-0"	HUBBELL DS120W	(4) (5)
$D	DOUBLE-POLE SWITCH 20A 120-277V	4'-0"	HUBBELL DS220W	(4) (5)
$3	THREE WAY SWITCH 20A 120-277V	4'-0"	HUBBELL DS320W	(4) (5)
$4	FOUR WAY SWITCH 20A 120-277V	4'-0"	HUBBELL DS420W	(4) (5)
$	VARIABLE INTENSITY SWITCH	4'-0"	AS NOTED	
$F	FAN SWITCH	4'-0"	HUBBELL #DS120ILW	(5)
$T	THERMAL OVERLOAD SWITCH W/ PILOT LIGHT	4'-0"	SQUARE "D" #2510 FG IP	(6)
$TD	DOUBLE-POLE THERMAL OVERLOAD SWITCH W/PILOT LIGHT	4'-0"	SQUARE "D" #2510 FG 2P	(6)
$M	MOTION SENSOR SWITCH	4'-0"	WATT STOPPER #WS-250	(11)
$2M	DOUBLE-POLE MOTION SENSOR SWITCH	4'-0"	WATT STOPPER #PW-200-W	(11)
◆	LOW VOLTAGE/KEYED SWITCH	4'-0"	(SEE DRAWING/SPEC)	
⦶	120V, 20A, GROUNDING TYPE DUPLEX OUTLET. 5-20R	18"	HUBBELL SNAP5362WA/SNAP2RA	(5)
⦶C	120V, 20A, CONTROLLED DUPLEX OUTLET. 5-20R	18"	HUBBELL DR20C1WHI	(5)
⊕W.P.	WEATHERPROOF GFI CONVENIENCE OUTLET & COVER	24"	HUBBELL GFTR5362WSGW/ AI#DSHBIBRC	(5)
⊕	DUPLEX CONVENIENCE OUTLET - GFI	18"	HUBBELL GFR5362SGW	(5)
⊕	DOUBLE DUPLEX 120V, 20A, GRD. TYPE OUTLET. 5-20R	18"	HUBBELL SNAP5362WA/SNAP2RA	(5) (2 EACH)
⦶C	120V, 20A, DUPLEX RECEPTACLE, 5-20, TR	18"	P&S TR26262CDW	(5)
⦶R	120V, 20A, DUPLEX RECEPTACLE, 5-20, RF	18"	P&S RF26252CDW	(5)
⦶	SINGLE CONVENIENCE OUTLET	18"	HUBBELL HBL8310W	(5)
⊜#	SPECIAL OUTLET W\CAP (PROVIDE WATCHING PLUG)	18"	HUBBELL	(5)

	VOLT.	AMP.	PLUG	RECEPT.	PH.	WIRE
1.	125	20 A.	HBL2311	HBL2310	1	3W
2.	250	20 A.	HBL2421	HBL2420	3	4W
3.	250	30 A.	HBL2721	HBL2720	3	4W
4.	250	50 A.	CS8365C	CS8369	3	4W
5.	125	30 A.	HBL2611	HBL2610	1	3W
6.	125/250	30 A.	HBL2711	HBL2710	1	4W
7.	250	50 A.	CS8265C	CS8269	1	3W
8.	125/250	50 A.	CS6365C	CS6369	1	4W

SYMBOL	DESCRIPTION	MOUNTING HEIGHT *	WIRING DEVICE	NOTES
Ⓙ⊣	WALL MOUNTED JUNCTION BOX	(AS NOTED)		
Ⓙ	JUNCTION BOX (CEILING, FLOOR OR EQUIPMENT)	(AS NOTED)		
Ⓕ	FAN MOTOR OUTLET (CEILING OR AS NOTED)	(AS NOTED)		
Ⓜ	MOTOR OUTLET	(AS PER EQUIP.)		
⊡▽	FLOOR OUTLET WITH 20-AMP DEVICE POWER/DATA/TELE	FLOOR	HUBBELL CFB2G30CR/24G*CVR****	(5) (10)
⊡▽ ⊡▽	DOUBLE FLOOR OUTLET WITH 20-AMP DEVICE POWER(2)/DATA/TELE	FLOOR	HUBBELL CFB4G30CR/24G*CVR****	(5) (10)
⊡	FLOOR OUTLET POWER ONLY	FLOOR	HUBBELL #B2503/SF3925	(2) (5)
▢	DISCONNECT SWITCH ("F" = FUSED)	+4'-0"	SQUARE "D" GENERAL DUTY	(6) (7) SIZE TO EQUIP.
◩	MAGNETIC STARTER	+4'-0"	SQUARE "D" #8536	(6) (7) SIZE TO EQUIP.
◩	MAGNETIC STARTER / DISCONNECT	+4'-0"	SQUARE "D" #8538	(6) (7) SIZE TO EQUIP.
⊠	MAGNETIC STARTER COMBINATION	+4'-0"	SQUARE "D" #8539	(6) (7) SIZE TO EQUIP.
▢HD	HAND DRYER	WALL @ 45"	(SEE DRAWING/SPEC)	
▬	MAIN ELECTRICAL PANEL BOARD		SEE SCHEDULE	
▭	ELECTRICAL PANEL BOARD	TOP @ 6'-6"	SEE SCHEDULE	
Ⓔ	ELECTRONIC EYE WITH RELAY	(AS NOTED)	INTERMATIC #EK4236S	(9)
T	TIMED SWITCH	4'-0"	INTERMATIC #EK4236S	(9)
⊡	PUSH BUTTON	4'-0" OR AS SHOWN	SQUARE "D" 9001-BF201	
R	RELAY	AS NOTED	(SEE DRAWING/SPEC)	
Ⓣ	THERMOSTAT	4'-0"	(SEE MECHANICAL)	
Ⓢ	MOTION SENSOR	CEILING	WATTSTOPPER WT-2250	(11)
Ⓢ	MOTION SENSOR	CEILING	WATTSTOPPER WT-1100	(11)
⊢Ⓢ	WALL SENSOR	WALL	WATTSTOPPER DT-200	(8) (11)
◣	TELEPHONE AND OR DATA PANEL	TOP @ 6'-6"	AS NOTED	
▽	TELEPHONE	18"	HUBBELL HXJ6OR/IFP11W	(10)
▼	TELEPHONE/DATA	18"	HBL HXJ6OR/HXJ6B/IFP12W	(10)
▼	TELEPHONE/DATA	FLOOR	HUBBELL SF3925-S3082	(10)
⊢○	CLOCK OUTLET (BATTERY CLOCK)	8'-0" OR AS NOTED	HUBBELL 5235	
● IC	INTERCOM	(AS NOTED)	(SEE DRAWING/SPEC)	
●M	MICROPHONE OUTLET	12"	(SEE DRAWING/SPEC)	
✗	PRIVACY ANNUNCIATOR SWITCH	4'-6"	(SEE DRAWING/SPEC)	
∘	VOLUME CONTROL	4'-6"	(SEE DRAWING/SPEC)	
●	SOUND SYSTEM SPEAKER OUTLET	8'-0" OR CEILING	(SEE DRAWING/SPEC)	
⊢●	WALL SPEAKER	8'-0" OR CEILING	(SEE DRAWING/SPEC)	
◑	COMPUTER OUTLET (CONDUIT INTO CORRIDOR CEILING)	18"	HUBBELL HXJ6B/IFP11E	(10)
FA	FIRE ALARM CONTROL CABINET		(SEE DRAWING/SPEC)	
F	FIRE ALARM BREAK GLASS STATION	4'-0"	(SEE DRAWING/SPEC)	
F◁#	FIRE ALARM SIGNAL HORN WITH STROBE (# = CANDELAS)	7'-6" OR AS NOTED	(SEE DRAWING/SPEC)	
M◁#	FIRE ALARM SIGNAL HORN WITH STROBE (# = CANDELAS)	7'-6" OR AS NOTED	(SEE DRAWING/SPEC)	
⊙H	THERMAL SENSOR	CEILING	(SEE DRAWING/SPEC)	
⊙S	PHOTOELECTRONIC SMOKE SENSOR	CEILING	(SEE DRAWING/SPEC)	
⊙CO	CARBON MONOXIDE DETECTOR	CEILING	(SEE DRAWING/SPEC)	
⊙D	PHOTOELECTRIC DUCT SMOKE SENSOR	DUCTWORK	(SEE DRAWING/SPEC)	
●	DOOR HOLD OPEN	DOOR	SEE DRAWING/SPEC.	

* STANDARD MOUNTING HEIGHT, UNLESS NOTED OTHERWISE (ON PLANS)

——▶	ARROWHEAD DENOTES HOME RUN TO PANEL TWO WIRE
—///—▶▶	TWO CIRCUIT; ONE NEUTRAL PER CIRCUIT
—////—▶▶▶	THREE CIRCUIT; ONE NEUTRAL PER CIRCUIT
—o—▶	#12 YELLOW ISOLATED GROUND WIRE (SEE SPECS)
(A) (B)	CONDUIT RUN (A) IN WALL OR CEILING, (B) IN FLOOR OR GROUND
(A) (B)	CONDUIT (A) - UP, CONDUIT (B) - DOWN

CONDUIT SHALL BE INSTALLED AS DIAGRAMMED ON THE PLANS, EXCEPT WRITTEN AUTHORIZED CHANGES ARE ISSUED BY THE DESIGNER.

(1) SEE MASTER LUMINAIRE SCHEDULE FOR TYPE, MOUNTING, AND WATTAGE
(2) VERIFY COVER STYLE(FLUSH/SURFACE) AND COLOR WITH ARCHITECT.
(3) REFER TO DRAWINGS FOR DIRECTIONAL ARROWS
(4) SUBSCRIPT IDENTIFIES WHICH LUMINAIRES CONTROLLED.
(5) EQUALS OF 'BRYANT', 'P&S', OR 'EATON', ARE ACCEPTABLE
(6) EQUALS OF 'EATON', 'G.E., OR A-B, ARE ACCEPTABLE.
(7) NEMA TYPE "L" UNFUSED, UNLESS NOTED "F" (FUSED); USE "HD" FOR 480-VOLT
(8) WALL MOUNT 2" BELOW FIXTURE
(9) EQUALS OF 'PARAGON' AND 'INTERMATIC' ARE ACCEPTABLE
(10) HUBBELL JACKS - TELEPHONE HXJ60R, DATA HXJ6B
(11) EQUALS OF 'HUBBLE', 'SENSOR SWITCH', AND 'LUTRON' ARE ACCEPTABLE

▬▬ TANDEM WIRE BALLAST'S.

ABBREVIATIONS

E.C.-	ELECTRICAL CONTRACTOR
M.C.-	MECHANICAL CONTRACTOR
P.C.-	PLUMBING CONTRACTOR
G.C.-	GENERAL CONTRACTOR
A.F.F.-	ABOVE FINISHED FLOOR
A.F.G.-	ABOVE FINISHED GRADE
B.F.G.-	BELOW FINISHED GRADE
P.O.C.-	POINT OF CONNECTION
P.O.S.-	POINT OF SALES
A.I.C.-	AMPS INTERRUPTING CAPACITY
S.C.A.-	SHORT CIRCUIT AMPS
V.I.F.-	VERIFY IN FIELD

GENERAL NOTES

1. THE ELECTRICAL NETWORKS DESIGNED HEREIN ARE TO BE CONSTRUCTED AS COMPLETE AND OPERABLE SYSTEMS. POWER, LIGHTING, AUXILIARIES, ETC. SHALL BE BID AND INSTALLED WITH THIS INTENT AND PURPOSE. THE CONTRACTOR AND THE EQUIPMENT SUPPLIER SHALL VISIT THE SITE AND READ ALL THE RELEVANT DOCUMENTS (ARCHITECTURAL, MECHANICAL, ELECTRICAL, ETC.) AND BECOME FAMILIAR WITH THE TYPE OF CONSTRUCTION AND THE WORK TO BE ACCOMPLISHED. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PURPOSE FOR WHICH THE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED; AS THE PLANS AND SPECIFICATIONS TOGETHER COVER AND DEFINE THE INSTALLATION OF EACH SYSTEM AND THE TOTAL FACILITY. FOLLOW THE DOCUMENTS WITH THE INTENT AND PURPOSE TO PRODUCE A COMPLETE AND OPERABLE ELECTRICAL FACILITY, SHOULD ANY ERROR, OMISSION OR CONFLICT EXIST IN EITHER OR BOTH THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER BEFORE SUBMITTING HIS BID PRICE SO A CHANGE CAN BE ISSUED VIA ADDENDUM, BEFORE THE BID DATE. OTHERWISE, THE CONTRACTOR AND/OR EQUIPMENT SUPPLIER SHALL SUPPLY THE PROPER MATERIALS AND LABOR TO INSTALL A COMPLETE AND OPERABLE SYSTEM AT THEIR OWN EXPENSE. WHEN AN ELECTRICAL NETWORK IS COMPLETE, TESTS SHALL BE MADE TO ESTABLISH THIS CONDITION. ANY INCOMPLETE SYSTEM SHALL BE MADE OPERABLE.
2. THIS PROJECT IS TO BE INSTALLED IN STRICT ACCORDANCE WITH LOCAL, STATE AND NEC CODES. IF AT ANYTIME DURING CONSTRUCTION OR THEREAFTER, SOMETHING IS FOUND TO BE INSTALLED IN VIOLATION OF THE "STATED CODES", IT SHALL BE CORRECTED AT THE CONTRACTORS EXPENSE.
3. THE CONTRACTOR SHALL GROUND THE ELECTRICAL NETWORK IN STRICT ACCORDANCE WITH LOCAL AND NATIONAL CODES. SEE DETAIL 7/ED.01.
4. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING EQUIPMENT, MATERIALS AND LABOR FOR THE CONNECTION OF ALL EQUIPMENT SHOWN ON THE PLANS - ARCHITECTURAL, MECHANICAL, ETC.
5. BEFORE ROUGH-IN, THE CONTRACTOR SHALL ALLOW THE MOVEMENT OF ANY ELECTRICAL PANEL, DEVICE, LUMINAIRE, ETC. A DISTANCE OF 10 FEET WITHOUT REQUIRING A COST ADDITION TO THE PROJECT.
6. BEFORE ANY ELECTRICAL CONDUIT, BOXES, ETC. ARE COVERED (GROUND, CEILINGS, WALLS, ETC.), THEY SHALL RECEIVE THE APPROVAL OF THE INSPECTING OFFICER (INSPECTOR). THE COST OF UNCOVERING AND REPLACEMENT OF THE ELECTRICAL WORK FOR INSPECTION PURPOSES WILL BE AT THE COST OF THE ELECTRICAL CONTRACTOR.
7. ELECTRICAL CONTRACTOR SHALL PROVE MINIMUM CODE (NEC 110.26(A)) WORKING CLEARANCE BEFORE INSTALLING ANY ELECTRICAL PANELS OR CABINETS AND SHALL MOVE THE PANELS AT HIS EXPENSE IF REJECTED BY AN INSPECTOR. IF CLEARANCE IS IMPOSSIBLE, THE DESIGNER SHALL BE NOTIFIED IMMEDIATELY IN WRITING. HE SHALL ALSO PROTECT THE SPACE ABOVE THE PANEL IN STRICT ACCORDANCE WITH NEC ARTICLE 110.26(E).
8. THE ELECTRICAL CONTRACTOR SHALL SURE ALL CONDUIT TO THE STRUCTURE AS IT IS SET IN PLACE. DO NOT DELAY, AS FIXING IT TO THE STRUCTURE IS SOMETHING FORGOTTEN AS THE WORK PROGRESSES. SEE SPECIFICATIONS FOR METHODS OF SUPPORT.
9. TO ASSURE THE DEVICES ARE RIGIDLY SET, THE ELECTRICAL CONTRACTOR SHALL SET ALL DEVICE BOXES IN STRICT ACCORDANCE WITH THE DETAIL 14/ED.01.
10. ELECTRICAL CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR BUILDING EQUIPMENT, CABINETS, FURNITURE, ETC. AND THE MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL MECHANICAL EQUIPMENT. NO ADDITIONS TO THE CONTRACT BID WILL BE ALLOWED FOR CHANGES MADE NECESSARY BY INTERFERENCE'S WITH OTHER WORK. NOR WILL ANY EXTRA COST BE ALLOWED IF EQUIPMENT DIMENSIONS ARE LONGER THAN SPECIFIED AND/OR DIMENSIONED ON THE PLANS.
11. LENGTHS OF FLEXIBLE CONDUIT GREATER THAN 48 INCHES SHALL NOT BE INSTALLED ON THIS PROJECT, EXCEPT WHIPS ON LUMINAIRES, WHICH MAY BE TWICE THAT LENGTH. FLEXIBLE CONDUIT SHALL NOT BE CONCEALED.
12. ALL BATTERY POWERED LUMINAIRES SUCH AS EXIT OR EMERGENCY LUMINAIRES, INDICATED ON THE DRAWINGS, SHALL BE CONNECTED TO THE UNSWITCHED LEG OF THE LIGHTING CIRCUIT FEEDING THAT AREA.
13. ALL SURFACE MOUNTED LUMINAIRES SHALL BE MOUNTED ON CODE DEFINED SPACERS OR HAVE BALLASTS/DRIVERS SUITABLE FOR MOUNTING ON LOW DENSITY TYPE CEILINGS.
14. INSTALL ALL LUMINAIRES IN MECHANICAL ROOM AFTER THE MECHANICAL EQUIPMENT IS IN PLACE. ARRANGE SO THAT ALL EQUIPMENT IS ADEQUATELY ILLUMINATED.
15. INSTALL A 3/4" CONDUIT WITH ONE (1) #6 BARE CONDUCTOR FROM TELEPHONE BOARD TO THE MAIN GROUNDING BUS.
16. CONTINUOUS EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSTALLED WITH ALL PHASE CONDUCTORS. BOND GROUNDING CONDUCTORS TO GROUND LUGS, BUSSING, SWITCHES, RECEPTACLES, EQUIPMENT FRAMES, ETC. PER THE NATIONAL ELECTRICAL CODE. WHEN THE MAIN PREMISE GROUNDING SYSTEM HAS BEEN INSTALLED, E.C. SHALL TEST THE GROUND TO PROVE SYSTEM TO GROUND MEASUREMENTS ARE 5 OHMS OR LESS. ADD ADDITIONAL GROUNDING AS REQUIRED TO ESTABLISH THIS CONDITION.
17. ELECTRICAL CONTRACTOR SHALL VERIFY EXACT LOCATION OF DATA/TELEPHONE OUTLETS WITH OWNER, PRIOR TO ROUGH-IN. DATA/TELEPHONE OUTLETS SHALL BE LOCATED WITHIN 6" OF 120V RECEPTACLE (EXCEPTION: WALL HUNG TELEPHONE OUTLET).
18. ELECTRICAL RACEWAY INSTALLED WITHIN 1 1/2" OF THE BOTTOM OF ROOF DECK SHALL BE RMC OR IMC PER NEC 300.4(E).
19. ALL FIRE WALL PENETRATIONS SHALL BE SEALED WITH UL LISTED SEALANT. DEVICES INSTALLED IN WALL SHALL BE WRAPPED WITH PUTTY PADS, WHEN REQUIRED BY AHJ.
20. WHEN THE FACILITY IS COMPLETE AND BEEN IN FULL OPERATION FOR 10 DAYS, THE "ELECTRICAL CONTRACTOR" SHALL RECORD THE UTILITY DEMAND READING AND VOLTAGE AND AMMETER (EACH PHASE) ON THE MAIN AND SUB-FEEDERS. MECHANICAL EQUIPMENT (SHOWN IN THE MECHANICAL EQUIPMENT SCHEDULE), ETC. AND RECORD AND COMPLETE THE FORMS NOTED IN THE SPECIFICATIONS UNDER THE HEADING "TESTING AND FINALIZATION".
21. ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATIONS OF POWER COMPANY SUPPLIED TRANSFORMER BEFORE INSTALLING SERVICE CONDUIT.
22. CONFIRM ROUTING AND SIZE OF TELEPHONE SERVICE CONDUIT AND THE EXACT LOCATION OF THE MAIN TELEPHONE DEMARCATION WITH THE TELEPHONE COMPANY.
23. UNDERGROUND CONDUIT FOR PARKING LOT LUMINAIRES SHALL BE BURIED 24" B.F.G. AND SHALL HAVE ONE (1) #10 THWN GREEN GROUND CONDUCTOR TO GROUND ALL LUMINAIRES.
24. ELECTRICAL CONTRACTOR SHALL CONFIRM THE EXACT LOCATION OF UTILITY (POWER, TELEPHONE, CABLE TV, ETC.) SERVICE POINT, PRIOR TO ELECTRICAL ROUGH-IN.
25. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND/OR RELOCATING ANY EXISTING ELECTRICAL EQUIPMENT THAT IS IN CONFLICT WITH THE REMODEL OR ADDITION. ALL EQUIPMENT THAT IS NOT BEING REUSED SHALL BE BOXED UP AND TURNED OVER TO THE OWNER.
26. ALL EXISTING LUMINAIRES INDICATED TO REMAIN SHALL BE CLEANED AND RELAMPED.
27. WHEN ANY EXISTING ELECTRICAL EQUIPMENT IS REMOVED, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ELECTRICAL CONTINUITY TO DOWNSTREAM EQUIPMENT THAT IS TO REMAIN.

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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ARCHITECTS
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208.338.1212

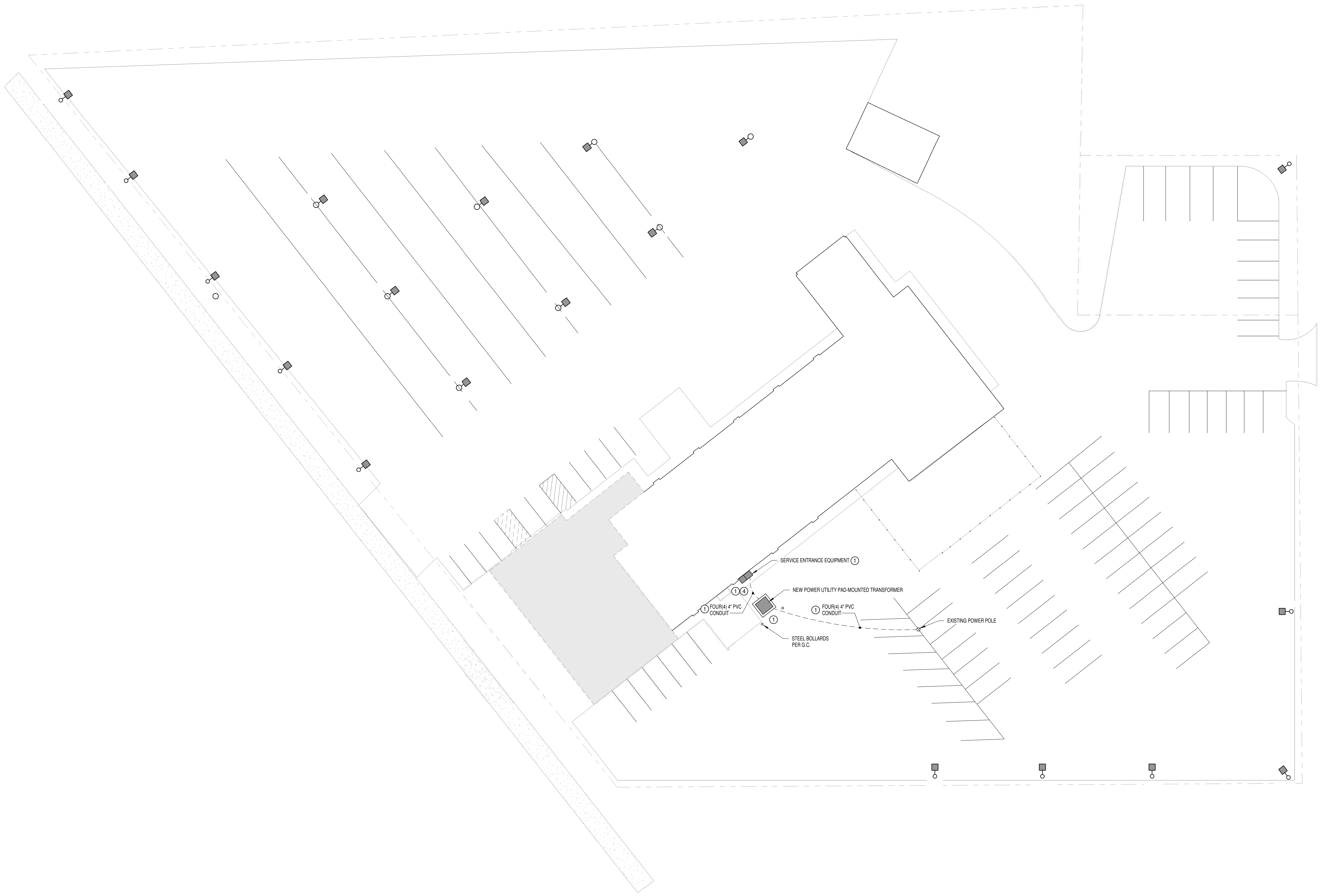
DATE 1-9-25
REF NO. 2444
AUTHOR MJE

PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
ELECTRICAL SCHEDULES AND NOTES

SHEET NO.
E0.00

⌗ E1.00 KEY NOTES

1	COORDINATE NEW SERVICE (GEAR, LOCATION, CONDUIT SIZE/ QUANTITY/ROUTING, ETC.) WITH POWER UTILITY COMPANY PRIOR TO INSTALLATION. INSTALLATION SHALL MEET OR EXCEED ALL POWER UTILITY REQUIREMENTS.
4	SERVICE ENTRANCE AND METERING EQUIPMENT SHALL COMPLY WITH ALL POWER SERVICE UTILITY REQUIREMENTS.



① SITE PLAN - ELECTRICAL

SCALE 1" = 20'-0"

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Consulting Engineers
156 North Twelfth Avenue
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MJE

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PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

SITE PLAN - ELECTRICAL

SHEET NO.
E1.00

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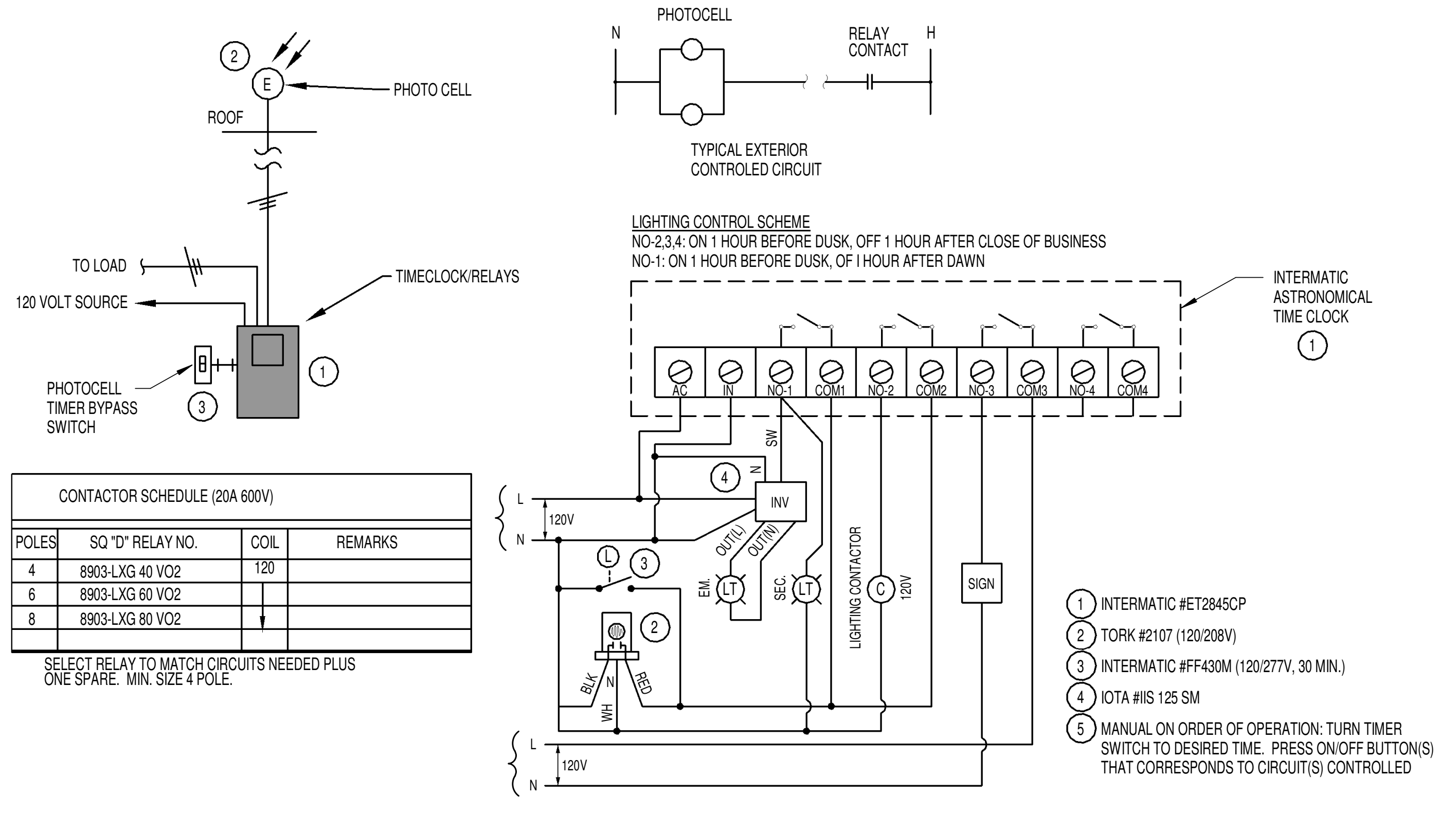


LIGHTING CONTROL SCHEME
NO-2,3,4: ON 1 HOUR BEFORE DUSK, OFF 1 HOUR AFTER CLOSE OF BUSINESS
NO-1: ON 1 HOUR BEFORE DUSK, OF I HOUR AFTER DAWN

CONTACTOR SCHEDULE (20A 600V)			
POLES	SQ "D" RELAY NO.	COIL	REMARKS
4	8903-LXG 40 VO2	120	
6	8903-LXG 60 VO2		
8	8903-LXG 80 VO2		

SELECT RELAY TO MATCH CIRCUITS NEEDED PLUS ONE SPARE. MIN. SIZE 4 POLE.

① INTERMATIC #ET2845CP
② TORK #2107 (120/208V)
③ INTERMATIC #FF430M (120/277V, 30 MIN.)
④ IOTA #IIS 125 SM
⑤ MANUAL ON ORDER OF OPERATION: TURN TIMER SWITCH TO DESIRED TIME. PRESS ON/OFF BUTTON(S) THAT CORRESPONDS TO CIRCUIT(S) CONTROLLED

2 E2.00 DETAIL - EXTERIOR LIGHTING AND SIGNAGE CONTROL
SCALE: NONE

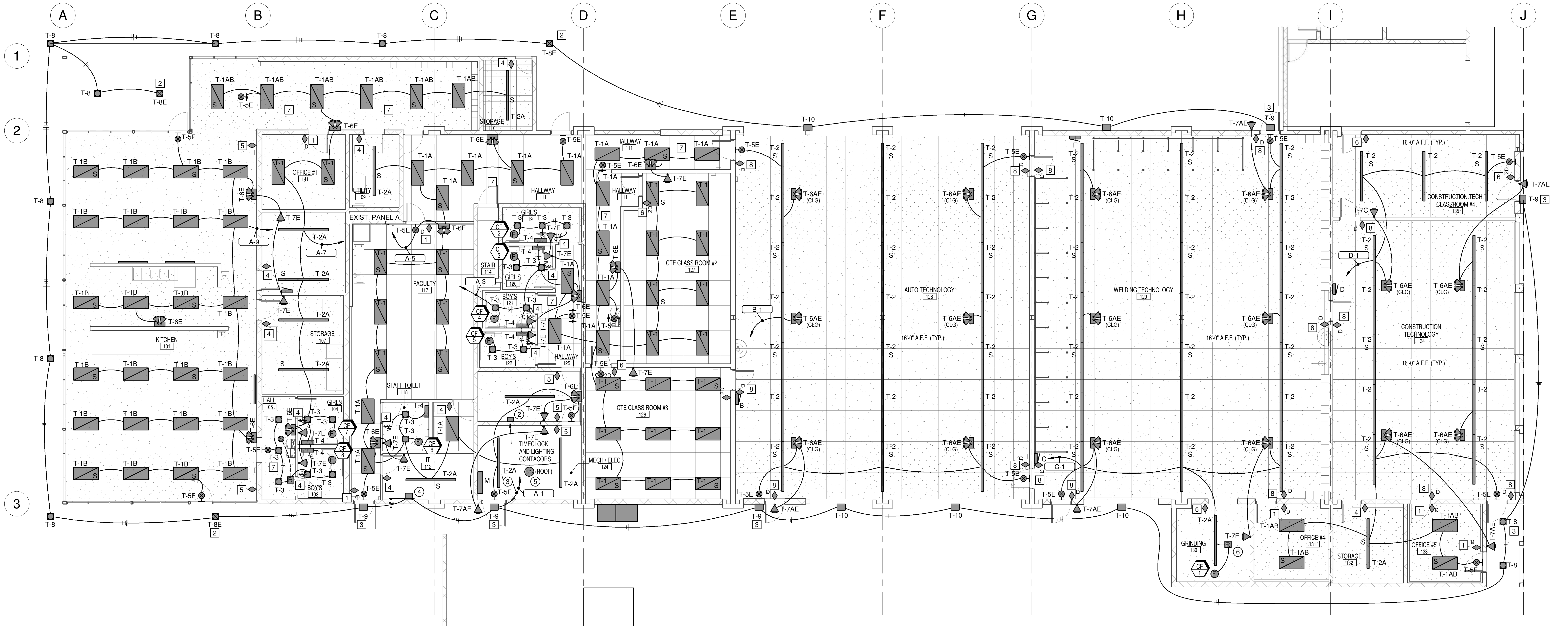
LIGHTING CONTROL SYMBOLS (nLIGHT AIR)			
SYM.	DESCRIPTION	HEIGHT	MANUFACTURE/MODEL
◆	SINGLE POLE, BATTERY POWERED, WIRELESS SWITCH WITH ON/OFF, MULTI-WAY	4'-0"	ACUITY BRANDS #RPODBA-WH-G2
◆2	2-SCENE, BATTERY POWERED, WIRELESS SWITCH WITH ON/OFF, MULTI-WAY	4'-0"	ACUITY BRANDS #RPODBA-2S-WH-G2
◆D	SINGLE POLE, BATTERY POWERED, WIRELESS SWITCH WITH ON/OFF, DIM CONTROL, MULTI-WAY	4'-0"	ACUITY BRANDS #RPODBA-DX-WH-G2
◆2D	2-SCENE, BATTERY POWERED, WIRELESS SWITCH WITH ON/OFF, DIM CONTROL, MULTI-WAY	4'-0"	ACUITY BRANDS #RPODBA-2S-DX-WH-G2

(#) E2.00 KEY NOTES

1	EMERGENCY BATTERY DRIVER IN EMERGENCY LUMINAIRES DENOTED WITH "E" SUFFIX SHALL BE CONNECTED TO A NON-SWITCHED POWER SOURCE.
2	PROVIDE AND INSTALL 4-RELAY ASTRONOMICAL TIME CLOCK (INTERMATIC #ET2845CP) FOR EXTERIOR BUILDING LIGHTING CONTROL. OBTAIN POWER FROM EXTERIOR LIGHTING CIRCUIT AND MAKE CONNECTIONS PER DETAIL 2 THIS SHEET.
3	ROUTE CIRCUIT THROUGH HOUSE TIME CLOCK/LIGHTING CONTACTOR LOCATED IN ELECTRICAL ROOM PER DETAIL 2 THIS SHEET AND MANUFACTURER'S SPECIFICATIONS.
4	PROVIDE AND INSTALL 125W EMERGENCY LIGHTING INVERTER (IOTA #IIS 125 SM OR APPROVED EQUIVALENT) TO PROVIDE BATTERY BACKUP TO TYPE T-8E FIXTURES. MOUNT INVERTER ON WALL AT 6'-0" AFF IN ROOM FOR EASY ACCESSIBILITY AND TESTING AND WIRE PER MANUFACTURER'S SPECIFICATIONS AND PER DETAIL 3/ED.01.
5	PROVIDE AND INSTALL 120/277V PHOTOCELL (INTERMATIC #EK4036S) 12" ABOVE ROOF LINE FACING NORTH FOR EXTERIOR DOWNLIGHT PHOTO CONTROL PER MANUFACTURER'S SPECIFICATIONS AND DETAIL 2 THIS SHEET.
6	ROUTE POWER FOR CEILING FAN THROUGH RELAY POWER PACK TO CONTROL FAN WITH LIGHTS.
7	EXISTING LIGHTING (FIXTURES, LAMPS, AND BALLASTS) LIGHTING CONTROLS, CONDUIT/CONDUCTORS, MOUNTING HARDWARE, ETC. SHALL BE DISCONNECTED, REMOVED AND DISPOSED OF PER PAYETTE SCHOOL DISTRICT POLICY AND EPA REGULATIONS. EXISTING RACEWAY MAY BE USED FOR NEW LIGHTING AS LONG AS IT IS NOT IN CONFLICT WITH REMODEL, IN EXCELLENT CONDITION, AND SUITABLE FOR APPLICATION AND NEC FILL REQUIREMENTS.

E2.00 LIGHTING CONTROL KEYNOTES

1	MANUAL ON/OFF/DIM. AUTO DAYLIGHT HARVENSTING. AUTO OFF UPON VACANCY AFTER 15 MINUTE TIME DELAY. AUTO ON UPON OCCUPANCY DETECTION IF MANUAL OFF IS NOT SELECTED. MULTIWAY.
2	ALWAYS ON SECURITY LIGHT. CONTROL PER TIME CLOCK.
3	ALWAYS ON SECURITY LIGHT. CONTROL PER TIME CLOCK. STEP DIMMING BASED ON OCCUPANCY DETECTION INCLUDED.
4	MANUAL ON/OFF. AUTO OFF UPON VACANCY AFTER 5 MINUTE TIME DELAY. AUTO ON UPON OCCUPANCY DETECTION IF MANUAL OFF IS NOT SELECTED. MULTIWAY.
5	MANUAL ON/MANUAL OFF. MULTIWAY
6	SCENE 1: FRONT OF ROOM MANUAL ON/ MANUAL OFF/ MANUAL DIM. AUTO DAYLIGHT HARVENSTING. AUTO OFF AFTER UPON VACANCY AFTER 15 MINUTE TIME DELAY. AUTO TO 100% UPON OCCUPANCY DETECTION IF MANUAL OFF ISN'T SELECTED. SCENE 2: REMAINING LIGHTS MANUAL ON/ MANUAL OFF/ MANUAL DIM. AUTO DAYLIGHT HARVENSTING. AUTO OFF AFTER UPON VACANCY AFTER 15 MINUTE TIME DELAY. AUTO TO 100% UPON OCCUPANCY DETECTION IF MANUAL OFF ISN'T SELECTED. MULTIWAY.
7	AUTO ON/ AUTO DIM LIGHTS TO 25% FOR VACANCY AFTER 5 MINUTE TIME DELAY. AUTO DAYLIGHT HARVENSTING.
8	MANUAL ON/OFF/DIM. AUTO DAYLIGHT HARVENSTING. AUTO OFF UPON VACANCY AFTER 30 MINUTE TIME DELAY. AUTO ON UPON OCCUPANCY DETECTION IF MANUAL OFF IS NOT SELECTED. MULTIWAY.



1 FLOOR PLAN - LIGHTING ① ⑦
SCALE 1/8" = 1'-0"

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Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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ARCHITECTS
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208.338.1212

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AUTHOR
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PROJECT
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PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

FLOOR PLAN - LIGHTING

SHEET NO.
E2.00

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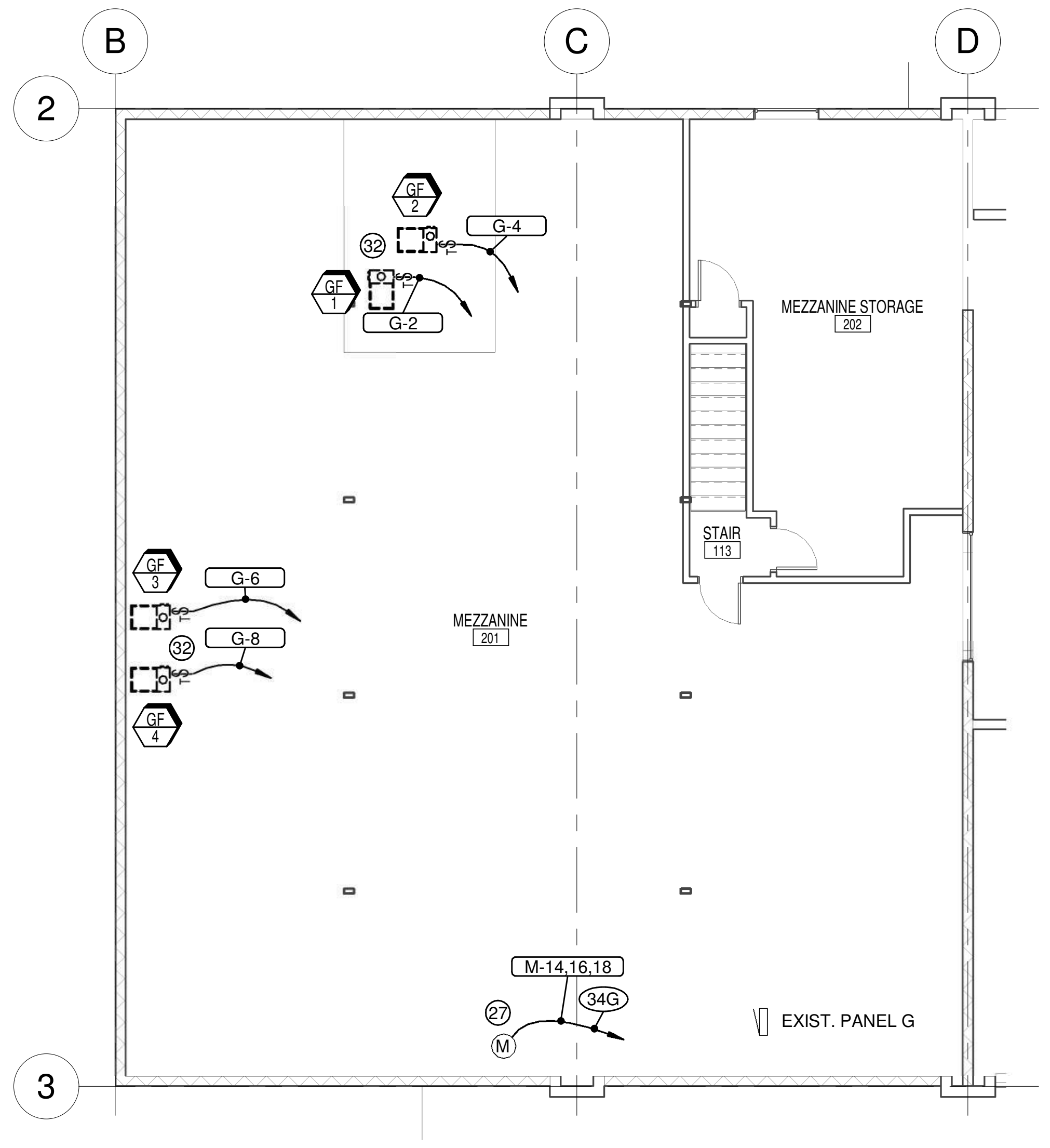


2 MEZZANINE FLOOR PLAN - POWER

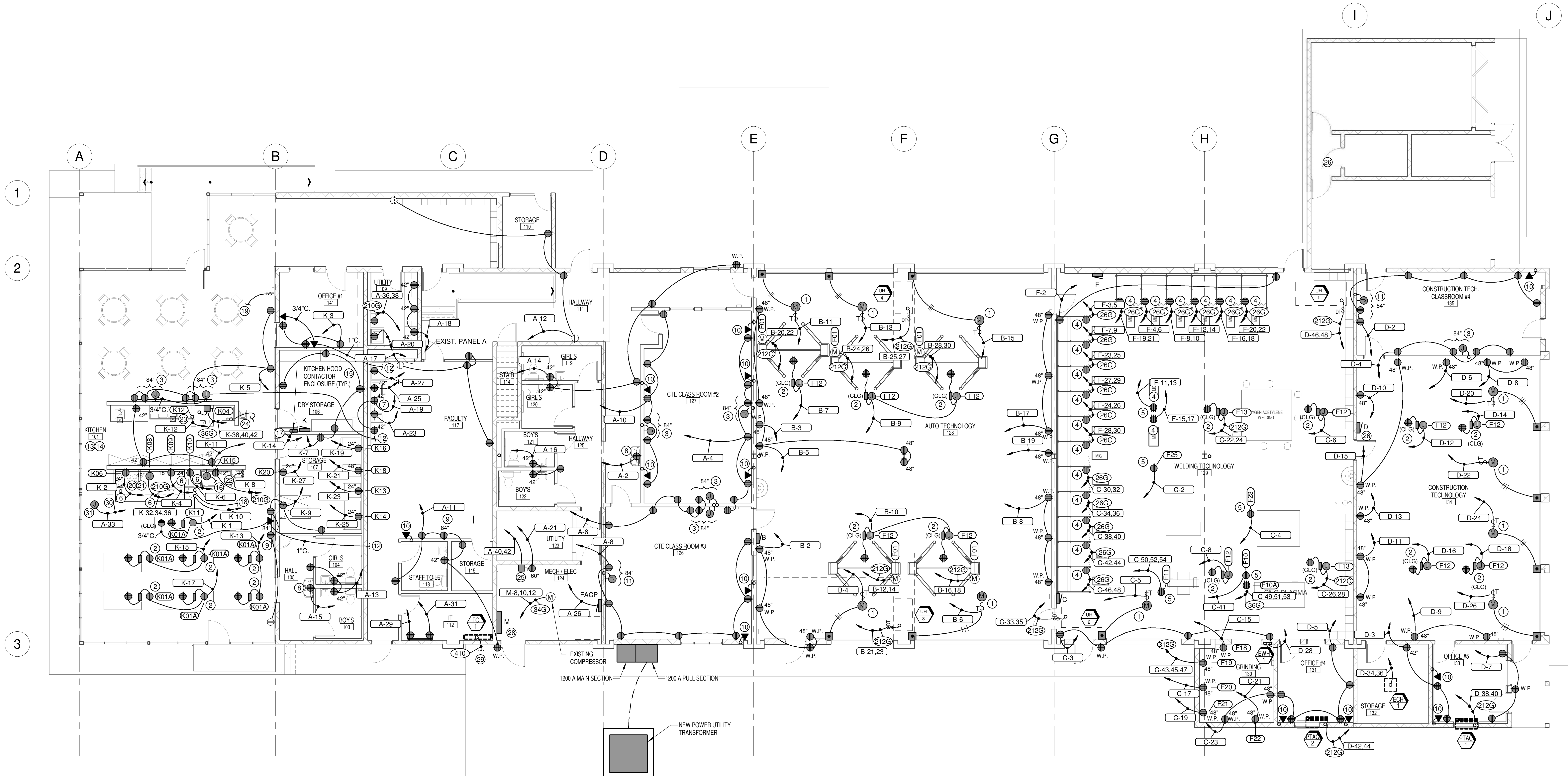
SCALE 1/8" = 1'-0"

EQUIPMENT SCHEDULE

ITEM NUMBER AND DESCRIPTION	LOCATION	A.F.F.	VOLTAGE	AMPS	WATTS	CONNECTION (NEMA)	CIRCUIT	GFI BKR	POLE	BREAKER	WIRE SIZE	REMARKS
F01-CAR LIFT	AUTO TECH 128	EXIST.	208 V	15 A	3078 W	DIRECT	B-12,14		2	20 A	212G	
F01-CAR LIFT	AUTO TECH 128	EXIST.	208 V	15 A	3078 W	DIRECT	B-16,18		2	20 A	212G	
F01-CAR LIFT	AUTO TECH 128	EXIST	208 V	15 A	3078 W	DIRECT	B-20,22		2	20 A	212G	
F01-CAR LIFT	AUTO TECH 128	EXIST.	208 V	15 A	3078 W	DIRECT	B-24,26		2	20 A	212G	
F01-CAR LIFT	AUTO TECH 128	EXIST.	208 V	15 A	3078 W	DIRECT	B-28,30		2	20 A	212G	
F10-CNC TABLE	WELD TECH 129	VIF	120 V	15 A	1800 W	5-20R	C-41		1	20 A	12	
F10A-CNC PLASMA CUTTER	WELD TECH 129	VIF	208 V	34 A	12200 W	15-50R	C-49,51,53		3	50 A	36G	
F11-EDWARDS PRESS	WELD TECH 129	VIF	208 V	14 A	5050 W	L15-20R	C-50,52,54		3	20 A	312G	
F12-CORD REEL	CONST. TECH 134	ROOF DECK	120 V	3 A	360 W	DIRECT	D-12		1	20 A	12	HUBBELL #HBLI35123Y, FIX CORD END WITH INDICATED RECEPTACLE
F12-CORD REEL	CONST. TECH 134	ROOF DECK	120 V	3 A	360 W	DIRECT	D-14		1	20 A	12	HUBBELL #HBLI35123Y, FIX CORD END WITH INDICATED RECEPTACLE
F12-CORD REEL	CONST. TECH 134	ROOF DECK	120 V	3 A	360 W	DIRECT	D-16		1	20 A	12	HUBBELL #HBLI35123Y, FIX CORD END WITH INDICATED RECEPTACLE
F12-CORD REEL	WELD TECH 129	ROOF DECK	120 V	2 A	180 W	DIRECT	C-6		1	20 A	12	HUBBELL #HBLI35123Y, FIX CORD END WITH INDICATED RECEPTACLE
F12-CORD REEL	WELD TECH 129	ROOF DECK	120 V	2 A	180 W	DIRECT	C-8		1	20 A	12	HUBBELL #HBLI35123Y, FIX CORD END WITH INDICATED RECEPTACLE
F12-CORD REEL	AUTO TECH 128	ROOF DECK	120 V	3 A	360 W	DIRECT	B-7		1	20 A	12	HUBBELL #HBLI35123Y, FIX CORD END WITH INDICATED RECEPTACLE
F12-CORD REEL	AUTO TECH 128	ROOF DECK	120 V	6 A	720 W	DIRECT	B-9		1	20 A	12	HUBBELL #HBLI35123Y, FIX CORD END WITH INDICATED RECEPTACLE
F12-CORD REEL	AUTO TECH 128	ROOF DECK	120 V	6 A	720 W	DIRECT	B-10		1	20 A	12	HUBBELL #HBLI35123Y, FIX CORD END WITH INDICATED RECEPTACLE
F12-CORD REEL			120 V	3 A	360 W		D-18		1	20 A	12	
F13-CORD REEL	WELD TECH 129	ROOF DECK	208 V	1 A	180 W	DIRECT	C-22,24		2	20 A	212G	HUBBELL #HBLI35123Y, FIX CORD END WITH 6-20R RECEPTACLE
F13-CORD REEL	WELD TECH 129	ROOF DECK	208 V	1 A	180 W	DIRECT	C-26,28		2	20 A	212G	HUBBELL #HBLI35123Y, FIX CORD END WITH 6-20R RECEPTACLE
F18-DRILL PRESS	GRINDING 130	48"	120 V	8 A	960 W	5-20R	C-15		1	20 A	12	
F19-DRILL PRESS	GRINDING 130	48"	208 V	10 A	3600 W	L15-20R	C-43,45,47		3	20 A	312G	
F20-GRINDING WHEEL	GRINDING 130	48"	120 V	10 A	1200 W	5-20R	C-17		1	20 A	12	
F21-BELT GRINDER	GRINDING 130	48"	120 V	10 A	1200 W	5-20R	C-19		1	20 A	12	
F22-BAND SAW	GRINDING 130	48"	120 V	10 A	1200 W	5-20R	C-21		1	20 A	12	
F23-LASER CUT/ENGRAVER	WELD TECH 129	VIF	120 V	10 A	1200 W	5-20R	C-4		1	20 A	12	
K01A-SS WK STN CORD	CAC 100	CLG	120 V	6 A	720 W	5-20R	K-13	X	1	20 A	12	KITCHEN LEASH #KL152012-D WITH FIELD VERIFIED MOUNTING BRACKET
K01A-SS WK STN CORD	CAC 100	CLG	120 V	7 A	810 W	5-20R	K-15	X	1	20 A	12	KITCHEN LEASH #KL152012-D WITH FIELD VERIFIED MOUNTING BRACKET
K01A-SS WK STN CORD	CAC 100	CLG	120 V	7 A	810 W	5-20R	K-17	X	1	20 A	12	KITCHEN LEASH #KL152012-D WITH FIELD VERIFIED MOUNTING BRACKET
K01A-SS WORK STATION CORD REEL			120 V	3 A	360 W		K-1	X	1	20 A	12	
K04-DISHWASHER	KITCHEN 101	VIF	208 V	32 A	11640 W	DIRECT	K-38,40,42	X	3	50 A	36G	4-POLE GFP (SQ. D #M9R81463) MOUNTED IN NEMA 12 BOX
K06-GAS STOVE	KITCHEN 101	24"	120 V	5 A	600 W	5-20R	K-2	X	1	20 A	12	ROUTE THROUGH KITCHEN HOOD CONTACTOR PANEL
K08-ELECTRIC GRILL	KITCHEN 101	48"	208 V	21 A	7488 W	DIRECT	K-32,34,36	X	3	30 A	310G	ROUTE THROUGH KITCHEN HOOD CONTACTOR PANEL
K09-GAS OVEN	KITCHEN 101	18"	120 V	5 A	600 W	5-20R	K-4	X	1	20 A	12	ROUTE THROUGH KITCHEN HOOD CONTACTOR PANEL
K10-PROOFER	KITCHEN 101	24"	120 V	15 A	1800 W	5-20R	K-6	X	1	20 A	12	ROUTE THROUGH KITCHEN HOOD CONTACTOR PANEL
K11-CLASS "A" EX HOOD	KITCHEN 101	V.I.F.	120 V	0 A	0 W	DIRECT	K-10		1	20 A	12	
K12-EXHAUST HOOD	KITCHEN 101	V.I.F.	120 V	0 A	0 W	DIRECT	K-12		1	20 A	12	
K13-REF. UNIT	STORAGE 107	24"	120 V	3 A	300 W	5-20R	K-23	X	1	20 A	12	
K14-REF. UNIT	STORAGE 107	24"	120 V	2 A	276 W	5-20R	K-25	X	1	20 A	12	
K15-WAFFLE MAKER	KITCHEN 101	42" (VIF)	120 V	18 A	2200 W	5-30R	K-8	X	1	30 A	210G	
K16-BLAST CHILLER	STORAGE 107	24"	120 V	13 A	1536 W	5-20R	K-19	X	1	20 A	12	
K18-ICE MAKER -K18	STORAGE 107	48"	120 V	12 A	1440 W	5-20R	K-21	X	1	20 A	12	
K20-SANDWICH PREP	STORAGE 107	24"	120 V	3 A	360 W	5-20R	K-27	X	1	20 A	12	

(#) E3.00 KEY NOTES

1	VERIFY THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS OF OVERHEAD DOOR MOTOR AND CONTROL WITH DOOR CONTRACTOR PRIOR TO ROUGH-IN.
2	MOUNT CORD REEL TO STRUCTURE USING UNISTRUT CHANNEL SIMILAR TO DETAIL 1/ED.01.
3	PROVIDE AND INSTALL DUPLEX POWER RECEPTACLE AND DATE J-BOX AS IN 3-GANG, CPCI RECESSED A/V BOX EQUIPPED WITH LOW VOLTAGE FEED THROUGH COMPARTMENT (ARLINGTON #TVBU507 OR EQUIVALENT) WITH 2" OR INDICATED SIZE "SMURF TUBE" OR APPROVED RACEWAY WITH PULL STRING STUBBED UP TO ACCESSIBLE CEILING SPACE OR TRUSS SPACE FOR TV. DATA/PHONE JACK, CABLE, TERMINATIONS, TESTING, ETC. PER OWNER. PROVIDE ALL BLOCKING AND BRACING NECESSARY TO ENSURE A SECURE INSTALLATION.
4	PROVIDE AND INTALL NEMA 6-50R RECEPTACLE FOR WELDER ON WELDING CUBICLE FRAME AT 48" AFF. VERIFY WELDER PLUG WITH OWNER PRIOR TO PURCHASE OF RECEPTACLES.
5	PROVIDE AND INSTALL 6 FT. TALL UNISTRUT RACK SECURED TO CONCRETE FLOOR TO SUPPORT EQUIPMENT RECEPTACLES, DISCONNECTS, OVERHEAD CONDUIT, ETC. FOR SINGLE OR BACK TO BACK RECEPTACLES TWO(2) STANDARD UNISTRUT BARS MOUNTED BACK TO BACK FOR RIGIDITY IS PERMITTED FOR USE. FOR LARGER ELECTRICAL EQUIPMENT, VERIFY IN FIELD REQUIRED WIDTH OF RACK PRIOR TO INSTALLATION AND BUILDING ACCORDINGLY.
6	ROUTE CIRCUIT THROUGH KITCHEN HOOD CONTACTOR ENCLOSURE FOR EQUIPMENT SHUTDOWN UPON ANSUL SYSTEM ACTIVATION. INSTALL AND MAKE CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS AND DETAILS 2 & 3/ED.01.
7	OUTLET BELOW SINK FOR DISPOSAL AND DISPOSAL AIR SWITCH. SEE PLUMBING DRAWINGS FOR DETAILS.
8	LOCATE GFCI RECEPTACLE FOR DRINKING FOUNTAIN ADJACENT TO ACCESSIBLE PANEL. COORDINATE EXACT LOCATION WITH DRINKING FOUNTAIN SHOP DRAWINGS PRIOR TO ROUGH-IN.
9	PROVIDE AND INSTALL 5-20R RECEPTACLE AT HEIGHT INDICATED FOR TV AND SCREEN SHARING DEVICE SUCH AS APPLE TV OR FIRESTICK TO BE PROVIDED AND INSTALLED BY OWNER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
10	PROVIDE AND INSTALL SINGLE GANG LOW VOLTAGE DATA BOX RECESSED IN WALL WITH 3/4" OR INDICATED SIZE "SMURF TUBE" OR APPROVED RACEWAY WITH PULL STRING STUBBED UP TO ACCESSIBLE CEILING SPACE OR TRUSS SPACE. DATA/PHONE JACK, CABLE, TERMINATIONS, TESTING, ETC. PER OWNER.
11	PROVIDE AND INSTALL INDICATED SURFACE MOUNTED POWER OUTLET AND/OR DATA JACK AT HEIGHT INDICATED WITH 2" OR INDICATED SIZE "SMURF TUBE" OR APPROVED RACEWAY WITH PULL STRING STUBBED UP TO ACCESSIBLE CEILING SPACE OR TRUSS SPACE FOR TV. DATA/PHONE JACK, CABLE, TERMINATIONS, TESTING, ETC. PER OWNER.
12	ROUTED TO INDICATED RACEWAY IN ACCESSBLE CEILING SPACE.
13	VERIFY EXACT LOCATION OF KITCHEN EQUIPMENT WITH EQUIPMENT SUPPLIER, PRIOR TO ROUGH-IN.
14	ALL CORD AND PLUG KITCHEN EQUIPMENT SHALL HAVE READILY ACCESSIBLE GFI PROTECTION PER NEC.
15	PROVIDE AND INSTALL CODE-SIZED, NEMA-1, HINGED DOOR, STEEL ENCLOSURE WITH BACK PLANE, DIN RAIL, MOUNTING HARDWARE, AND ALL COMPONENTS DEFINED IN DETAILS 2 AND 3 ON SHEET ED.01. PROVIDE AND INSTALL A BLACK MICARTA LABEL ENGRAVED WITH IN 1/2" WHITE LETTERS "KITCHEN HOOD CONTACTOR ENCLOSURE".
16	CONNECT GAS SHUT-OFF VALVE TO HOOD CONTROLS AND MAKE CONNECTIONS PER HOOD MANUFACTURER'S SPECIFICATIONS.
17	ROUTE 120V POWER THROUGH N.O. CONTACT "r.a." ON CONTROL RELAY TO POWER CONTACTOR AND SOLENOID VALVE COILS.
18	ROUTE CABLE SPECIFIED BY HOOD MANUFACTURER FROM "SIGNAL FOR EXTERNAL CONTACTOR COIL" POINT OF CONNECTION TO CONTROL RELAY IN KITCHEN HOOD CONTACTOR ENCLOSURE. MAKE CONNECTIONS PER DETAILS 2 & 3/ED.01.
19	EC TO INSTALL HOOD KILL SWITCH. PROVIDE AND INSTALL RED MICARTA LABEL WITH "HOOD SHUT-DOWN" IN 1/2"WHITE LETTERS . INSTALL A 3/4" CONDUIT WITH TWO(2) #12 AWG WIRES TO HOOD CONTROL PANEL.
20	CONNECT HOOD LIGHTS TO HOOD CONTROL PANEL PER MANUFACTURER'S SPECIFICATIONS.
21	PROVIDE AND INSTALL ALL LOW VOLTAGE CABLING FROM HOOD CONTROL PANEL TO DUCT AND ROOM TEMPERATURE SENSORS. ENSURE CONTACTS IN HOOD CONTROLLER ARE INTERLOCKED WITH EXHAUST FANS AND MAKE-UP AIR SO THAT WHEN HEAT SENSORS AREA ACTIVATED, MECHANICAL EQUIPMENT TURNS ON.
22	PROVIDE AND INSTALL TWO(2) #12 AWG IN 3/4" CONDUIT FROM SWITCH TO HOOD CONTROL PANEL FOR REMOTE SWITCH TO ACTIVATE HOOD LIGHTS AND FANS.
23	INTERLOCK DISHWASHER CONTROLS WITH DISHWASHER EXHAUST HOOD SUCH THAT EXHAUST FAN OPERATES WHEN DISHWASHER IS ON.
24	PROVIDE AND INSTALL TWO(2) #12 AWG CONDUCTORS IN 3/4" CONDUIT TO HOOD CONTROL PANEL FOR DISHWASHING EXHAUST SYSTEM MANUAL CONTROL. PROVIDE AND INSTALL A BLACK MICARTA LABEL WITH "DISHWASHER EXHAUST HOOD" ENGRAVED IN 1/2" WHITE LETTERING.
25	PROVIDE AND INSTALL 240V, 2-POLE, 60 AMP, NEMA 1, GENERAL DUTY FUSED DISCONNECT (SQ. D #D222N OR APPROVED EQUIVALENT) WITH 40 AMP FUSES FOR WATER HEATER DISCONNECTING MEANS.
26	PAINT BOOTH EQUIPMENT TO REMAIN. EC SHALL REFEED ALL EXISTING PAINT BOOTH CIRCUITS FROM NEW PANEL D. PROVIDE AND INSTALL ADDITIONAL BREAKERS, RACEWAY, CONDUIT, ETC. AS NECESSARY TO ENSURE PAINT BOOTH IS 100% OPERATIONAL.
27	EXISTING ELEVATOR MOTOR/CONTROLLER. REFEED FROM NEW PANEL M. VERIFY LOADING DOES NOT EXCEED 60% OF BREAKER RATING PRIOR TO PURCHASE OF BREAKER.
28	UNLESS NOTED OTHERWISE AND EXCEPT FOR EXISTING PANELS A AND EXISTING RENAMED PANEL G, ALL EXISTING POWER DISTRIBUTION SHALL BE REMOVED AND DISPOSED OF PER PAYETTE SCHOOL DISTRICT POLICY AND EPA REQUIREMENTS. THIS INCLUDES, BUT IS NOT LIMTED TO SWITCHBOARDS, PANEL BOARDS, DISCONNECTS, RECEPTACLES, TIME CLOCKS, RACEWAY, CONDUCTORS, CONTROL CABINETS, MOTORS, AND STARTERS. EXISTING RACEWAY MAY BE USED FOR NEW POWER DISTRIBUTION AS LONG AS IT IS NOT IN CONFLICT WITH REMODEL, IN EXCELLENT CONDITION, AND SUITABLE FOR APPLICATION AND NEC FILL REQUIREMENTS. EXISTING CIRCUIT BREAKERS, RECEPTACLES, FUSES, AND THERMAL OVERLOADS SHALL BE REPLACED WITH NEW EQUIVALENT COMPONENTS. EMTY BOXES, ENCLOSURES, ETC. SHALL BE COVERED WITH APPROVED COVER PLATES.
29	TO HP-1 ON ROOF.
30	ROUTE CIRCUIT THROUGH HOUSE TIME CLOCK/LIGHTING CONTACTOR LOCATED IN ELECTRICAL ROOM PER DETAIL 2/E2.00 AND MANUFACTURER'S SPECIFICATIONS.
31	COORDINATE EXACT EXTERIOR SIGNAGE LOCATION, MOUNTING HEIGHT, AND ELECTRICAL SPECIFICATIONS WITH OWNER PRIOR TO ROUGH-IN.
32	GAS FURNACES ARE EXISTING. CIRCUIT TO EXISTING PANEL G. IF EXISTING FURNACES FAIL INSPECTION, FOLLOW PLANS FOR THE NEW GAS FURNACES INDICATED ON THIS SHEET.



1 FLOOR PLAN - POWER & AUXILIARY ㉙

SCALE 1/8" = 1'-0"

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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208.338.1212

DATE
1-9-25

REF NO.
2444

AUTHOR
MJE

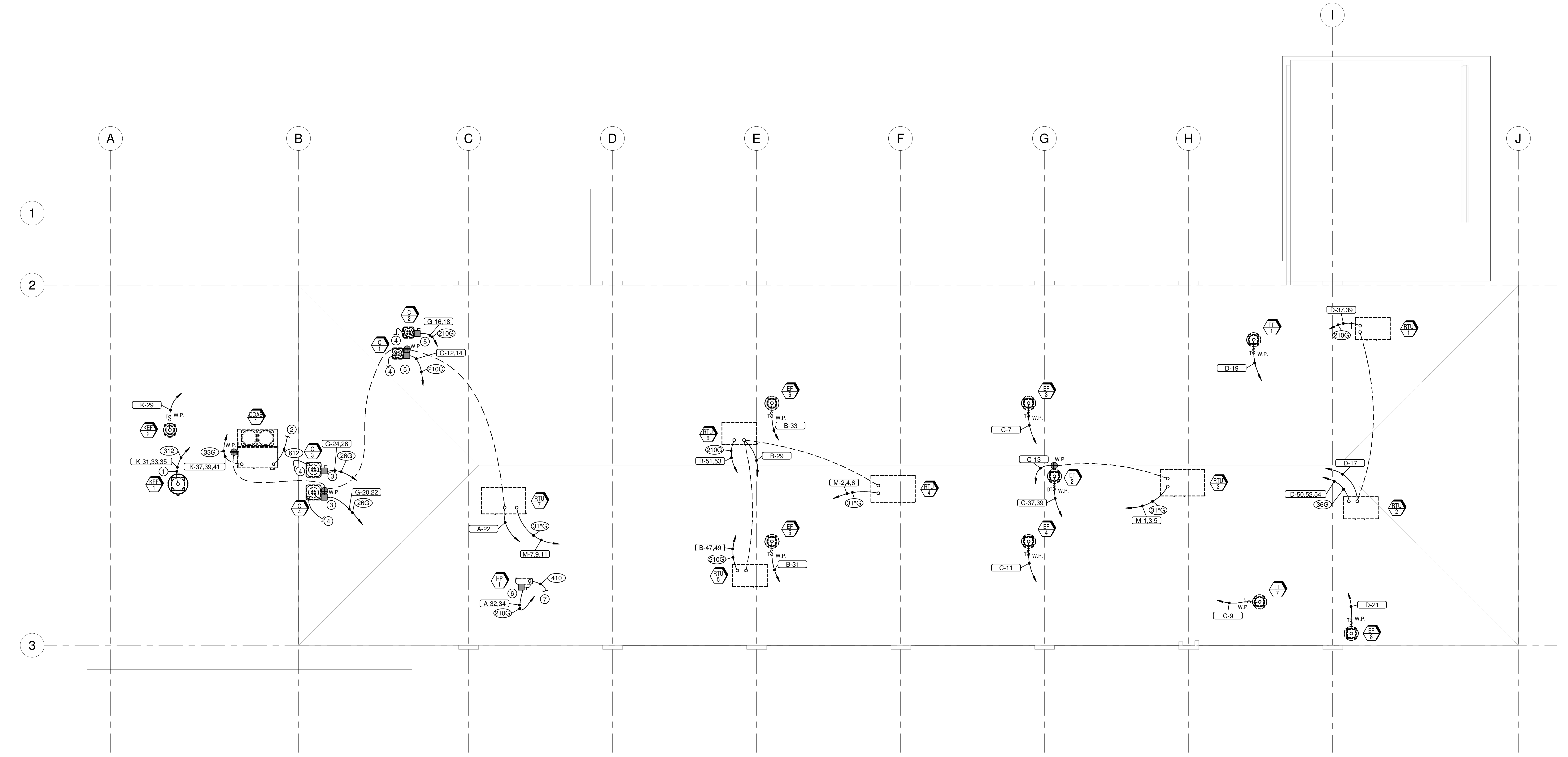
PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
FLOOR PLAN - POWER & AUXILIARY

SHEET NO.
E3.00

1/13/2025 2:05:23 PM

㊊ E3.01 KEY NOTES

1	ROUTE CIRCUIT THROUGH HOOD CONTROL PANEL BELOW IN KITCHEN.
2	PROVIDE AND INSTALL SIGNAL WIRING IN 3/4" CONDUIT FROM UNIT TO HOOD CONTROL PANEL BELOW IN KITCHEN.
3	PROVIDE AND INSTALL 240V, 2-POLE, 60 AMP, MEDIUM DUTY, NEMA 3R, FUSED DISCONNECT (SQ. D #D222NRB OR APPROVED EQUIVALENT) WITH 50 AMP FUSES FOR CONDENSER DISCONNECTING MEANS.
4	PROVIDE AND INSTALL 3/4" CONDUIT WITH PULL STRING FROM CONDENSER UNIT TO CORRESPONDING FURNACE BELOW IN MEZZANINE.
5	PROVIDE AND INSTALL 240V, 2-POLE, 30 AMP, MEDIUM DUTY, NEMA 3R, FUSED DISCONNECT (SQ. D #D221NRB OR APPROVED EQUIVALENT) WITH 30 AMP FUSES FOR CONDENSER DISCONNECTING MEANS.
6	PROVIDE AND INSTALL 240V, 2-POLE, 30 AMP, MEDIUM DUTY, NEMA 3R, FUSED DISCONNECT (SQ. D #D221NRB OR APPROVED EQUIVALENT) WITH 25 AMP FUSES FOR SPLIT SYSTEM DISCONNECTING MEANS.
7	TO FAN COIL 1 IN IT ROOM 112 BELOW.



① ROOF PLAN - ELECTRICAL

SCALE 1/8" = 1'-0"

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Pocatello, Idaho 83201
PHONE (208) 232-2577
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MJE

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CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

ROOF PLAN - ELECTRICAL

SHEET NO.
E3.01

1/13/2025 2:05:25 PM

Branch Panel: C

Location: WELDING TECHNOLOGY...
Supply From: M
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 22,000 AMPS
Mains Type:
Mains Rating: 225 A
MCB Rating: 1 A

CKT	Circuit Description	Wire	Amp	P	A		B		C		P	Amp	Wire	Circuit Description	CKT
C-1	WELDING TECH LTS	12	20 A	1	1207	1800					1	20 A	12	METAL BAND SAW-F25	C-2
C-3	WELDING TECH CO	12	20 A	1			720	1200			1	20 A	12	F23-LASER CUT/ENGRAVER	C-4
C-5	OH DOOR	12	20 A	1					600	180	1	20 A	12	F12-CORD REEL	C-6
C-7	EF-3	12	20 A	1	600	180					1	20 A	12	F12-CORD REEL	C-8
C-9	EF-7	12	20 A	1			1000	0			1	20 A		SPARE	C-10
C-11	EF-4	12	20 A	1					600	0	1	20 A		SPARE	C-12
C-13	ROOF C.O.	12	20 A	1	360	0					1	20 A		SPARE	C-14
C-15	F18-DRILL PRESS	12	20 A	1			960	0			1	20 A		SPARE	C-16
C-17	F20-GRINDING WHEEL	12	20 A	1					1200	0	1	20 A		SPARE	C-18
C-19	F21-BELT GRINDER	12	20 A	1	1200	0					1	20 A		SPARE	C-20
C-21	F22-BAND SAW	12	20 A	1			1200	90			2	20 A	212G	F13-CORD REEL	C-22
C-23	GRINDING CO	12	20 A	1					360	90					C-24
C-25	SPARE		20 A	1	0	90					2	20 A	212G	F13-CORD REEL	C-26
C-27	SPARE		20 A	1			0	90							C-28
C-29	SPARE		20 A	1					0	4160	2	50 A	26G	WELDER	C-30
C-31	SPARE		20 A	1	0	4160									C-32
C-33	UH-2	212G	20 A	2			1082	4160			2	50 A	26G	WELDER	C-34
C-35									1082	4160					C-36
C-37	EF-2	12	20 A	2	750	4160					2	50 A	26G	WELDER	C-38
C-39							750	4160							C-40
C-41	F10-CNC TABLE	12	20 A	1					1800	4160	2	50 A	26G	WELDER	C-42
C-43	F19-DRILL PRESS	312G	20 A	3	1200	4160									C-44
C-45							1200	4160			2	50 A	26G	WELDER	C-46
C-47									1200	4160					C-48
C-49	F10A-CNC PLASMA CUTTER	36G	50 A	3	4067	1683					3	20 A	312G	F11-EDWARDS PRESS	C-50
C-51							4067	1683							C-52
C-53									4067	1683					C-54

Load: 25617 W 26522 VA 29502 VA
Amps: 213 A 222 A 247 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	1157 VA	100.00%	1157 VA		
Other	6043 VA	100.00%	6043 VA	Total Conn. Load:	82 kW
Power	650 VA	100.00%	650 VA	Total Est. Demand:	75 kW
Receptacles	3780 VA	100.00%	3780 VA	Total Conn. Current:	227 A
EQUIP.	28410 VA	100.00%	28410 VA	Est. Demand Current:	207 A
WELDER	41600 VA	83.00%	34528 VA		

Notes:

Branch Panel: K

Location: DRY STORAGE 106
Supply From: M
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 22,000 AMPS
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: 1 A

CKT	GFI	Circuit Description	Wire	Amp	P	A		B		C		P	Amp	Wire	Circuit Description	GFI	CKT
K-1	X	K01A-SS WORK STATIO...	12	20 A	1	360	600					1	20 A	12	K06-GAS STOVE	X	K-2
K-3		KITCHEN OFFICE CO	12	20 A	1			900	600			1	20 A	12	K09-GAS OVEN	X	K-4
K-5	X	KITCHEN CO	12	20 A	1					1080	1800	1	20 A	12	K10-PROOFER	X	K-6
K-7		DRY STOR. CO	12	20 A	1	900	2200					1	30 A	210G	K15-WAFFLE MAKER	X	K-8
K-9		KITCH/STOR CO	12	20 A	1			900	0			1	20 A	12	K11-CLASS "A" EX HOOD		K-10
K-11		KITCHEN CO	12	20 A	1					540	0	1	20 A	12	K12-EXHAUST HOOD		K-12
K-13	X	K01A-SS WK STN CORD	12	20 A	1	720	0					1	20 A		HOOD CONTACTOR		K-14
K-15	X	K01A-SS WK STN CORD	12	20 A	1			810	0			1	20 A		SPARE		K-16
K-17	X	K01A-SS WK STN CORD	12	20 A	1					810	0	1	20 A		SPARE		K-18
K-19	X	K16-BLAST CHILLER	12	20 A	1	1536	0					1	20 A		SPARE		K-20
K-21	X	K18-ICE MAKER -K18	12	20 A	1			1440	0			1	20 A		SPARE		K-22
K-23	X	K13-REF. UNIT	12	20 A	1					300	0	1	20 A		SPARE		K-24
K-25	X	K14-REF. UNIT	12	20 A	1	276	0					1	20 A		SPARE		K-26
K-27	X	K20-SANDWICH PREP	12	20 A	1			360	0			1	20 A		SPARE		K-28
K-29		KEF-2	12	20 A	1					600	0	1	20 A		SPARE		K-30
K-31		KEF-1	312G	20 A	3	859	2496					3	30 A	310G	K08-ELECTRIC GRILL	X	K-32
K-33								859	2496								K-34
K-35										859	2496						K-36
K-37		DOAS-1	336	80 A	3	6869	3880					3	50 A	36G	K04-DISHWASHER	X	K-38
K-39								6869	3880								K-40
K-41										6869	3880						K-42

Load: 20696 W 19114 VA 19234 VA
Amps: 173 A 159 A 160 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	23784 VA	100.00%	23784 VA		
Power	0 VA	0.00%	0 VA	Total Conn. Load:	59 kW
KITCHEN EQUIP.	28960 VA	65.00%	18824 VA	Total Est. Demand:	49 kW
Receptacles	6300 VA	100.00%	6300 VA	Total Conn. Current:	164 A
EQUIP.	0 VA	0.00%	0 VA	Est. Demand Current:	136 A

Notes:

Branch Panel: B

Location: AUTO TECHNOLOGY 128
Supply From: M
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 22,000 AMPS
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: 1 A

CKT	Circuit Description	Wire	Amp	P	A		B		C		P	Amp	Wire	Circuit Description	CKT
B-1	AUTO TECH LTS	12	20 A	1	1475	720					1	20 A	12	AUTO TECH CO	B-2
B-3	DEDICATED CKT	12	20 A	1			180	600			1	20 A	12	OH DOOR	B-4
B-5	AUTO TECH CO	12	20 A	1					900	600	1	20 A	12	OH DOOR	B-6
B-7	F12-CORD REEL	12	20 A	1	360	540					1	20 A	12	AUTO TECH CO	B-8
B-9	F12-CORD REEL	12	20 A	1			720	720			1	20 A	12	F12-CORD REEL	B-10
B-11	OH DOOR	12	20 A	1					600	1539	2	20 A	212G	F01-CAR LIFT	B-12
B-13	OH DOOR	12	20 A	1	600	1539									B-14
B-15	OH DOOR	12	20 A	1			600	1539			2	20 A	212G	F01-CAR LIFT	B-16
B-17	AUTO TECH CO	12	20 A	1					540	1539					B-18
B-19	DEDICATED CKT	12	20 A	1	180	1539					2	20 A	212G	F01-CAR LIFT	B-20
B-21	UH-3	212G	20 A	2			1082	1539							B-22
B-23									1082	1539	2	20 A	212G	F01-CAR LIFT	B-24
B-25	UH-4	212G	20 A	2	1082	1539									B-26
B-27							1082	1539			2	20 A	212G	F01-CAR LIFT	B-28
B-29	ROOF C.O.	12	20 A	1					540	1539					B-30
B-31	EF-5	12	20 A	1	600	--					1	--		BLANK	B-32
B-33	EF-6	12	20 A	1			600	--			1	--		BLANK	B-34
B-35	SPARE		20 A	1					0	--	1	--		BLANK	B-36
B-37	BLANK		--	1	--	--					1	--		BLANK	B-38
B-39	BLANK		--	1			--	--			1	--		BLANK	B-40
B-41	BLANK		--	1					--	--	1	--		BLANK	B-42
B-43	BLANK		--	1	--	--					1	--		BLANK	B-44
B-45	BLANK		--	1			--	--			1	--		BLANK	B-46
B-47	RTU-5	210G	25 A	2					1415	--	1	--		BLANK	B-48
B-49					1415	--					1	--		BLANK	B-50
B-51	RTU-6	210G	25 A	2			1415	--			1	--		BLANK	B-52
B-53									1415	--	1	--		BLANK	B-54

Load: 11588 W 11615 VA 13247 VA
Amps: 97 A 97 A 110 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	1475 VA	100.00%	1475 VA		
Other	11724 VA	100.00%	11724 VA	Total Conn. Load:	36 kW
Power	3000 VA	100.00%	3000 VA	Total Est. Demand:	36 kW
Receptacles	4860 VA	100.00%	4860 VA	Total Conn. Current:	101 A
EQUIP.	15390 VA	100.00%	15390 VA	Est. Demand Current:	101 A

Notes:

Branch Panel: EXIST. PANEL G

Location: MEZZANINE 201
Supply From: M
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/240 Single
Phases: 1
Wires: 3
A.I.C. Rating: 22,000 AMPS
Mains Type: MLO
Mains Rating: 125 A
MCB Rating: 1 A

CKT	Circuit Description	Wire	Amp	P	A		C		P	Amp	Wire	Circuit Description	CKT
G-1	SPARE		20 A	1	0	600			1	20 A	12	GAS FURNACE GF-1	G-2
G-3	SPARE		20 A	1			0	600	1	20 A	12	GAS FURNACE GF-2	G-4
G-5	SPARE		20 A	1	0	600			1	20 A	12	GAS FURNACE GF-3	G-6
G-7	SPARE		20 A	1			0	600	1	20 A	12	GAS FURNACE GF-4	G-8
G-9	SPARE		20 A	1	0	0			1	20 A		SPARE	G-10
G-11	SPARE		20 A	1			0	1830	2	20 A	210G	CONDENSER C-1	G-12
G-13	SPARE		20 A	1	0	1830							G-14
G-15	SPARE		20 A	1			0	1830	2	20 A	210G	CONDENSER C-2	G-16
G-17	SPARE		20 A	1	0	1830							G-18
G-19	SPARE		20 A	1			0	2579	2	20 A	26G	CONDENSER C-3	G-20
G-21	SPARE		20 A	1	0	2579							G-22
G-23	EXISTING		--	1			--	2579	2	20 A	26G	CONDENSER C-4	G-24
G-25	EXISTING		--	1	--	2579							G-26
G-27	EXISTING		--	1			--	--	1	--		EXISTING	G-28
G-29	EXISTING		--	1	--	--			1	--		EXISTING	G-30
G-31	EXISTING		--	1			--	--	1	--		EXISTING	G-32
G-33	EXISTING		--	1	--	--			1	--		EXISTING	G-34
G-35	EXISTING		--	1			--	--	1	--		EXISTING	G-36
G-37	EXISTING		--	1	--	--			1	--		EXISTING	G-38
G-39	EXISTING		--	1			--	--	1	--		EXISTING	G-40
G-41	EXISTING		--	1	--	--			1	--		EXISTING	G-42

Load: 10018 W 10018 VA
Amps: 83 A 83 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	0 VA	0.00%	0 VA		
Other	2400 VA	100.00%	2400 VA	Total Conn. Load:	20 kW
Power	17636 VA	100.00%	17636 VA	Total Est. Demand:	20 kW
				Total Conn. Current:	83 A
				Est. Demand Current:	83 A

Notes:

Branch Panel: EXIST. PANEL A

Location: FACULTY 117
Supply From: M
Mounting: RECESSED
Enclosure: TYPE1
Volts: 120/240 Single
Phases: 1
Wires: 3
A.I.C. Rating: 22,000 AMPS
Mains Type:
Mains Rating: 225 A
MCB Rating: 1 A

CKT	Circuit Description	Wire	Amp	P	A		B		P	Amp	Wire	Circuit Description	CKT
A-1	EXTERIOR LTS	10	20 A	1	634	500			1	20 A	12	DRINKING FOUNTAIN	A-2
A-3	CLASSROOM LTS	12	20 A	1			1305	1260	1	20 A	12	CLASS #2 C.O.	A-4
A-5	STAFF/FAC/IT LTS	12	20 A	1	925	1080			1	20 A	12	CLASS #2/3 C.O.	A-6
A-7	OFF/STOR/REST LTS	12	20 A	1			785	1260	1	20 A	12	CLASS #3 C.O.	A-8
A-9	KITCHEN LTS	12	20 A	1	1027	1080			1	20 A	12	CTE CLASS #2 C.O.	A-10
A-11	STOR/FAC/STAFF C.O.	12	20 A	1			1080	720	1	20 A	12	CORR./STOR CO	A-12
A-13	GIRLS/BOYS/HALL C.O.	12	20 A	1	540	900			1	20 A	12	HALL/REST C.O.	A-14
A-15	WATER FOUNTAIN	12	20 A	1			500	540	1	20 A	12	HALL/REST C.O.	A-16
A-17	FACULTY C.O.	12	20 A	1	720	540			1	20 A	12	UTILITY C.O.	A-18
A-19	FACULTY KIT. C.O.	12	20 A	1			360	180	1	20 A	12	WASHER	A-20
A-21	RECIRC. PUMP P11	12	20 A	1	180	720			1	20 A	12	ROOF C.O.	A-22
A-23	DISPOSAL	12	20 A	1			180	500	1	20 A	12	SPEAKER AMPLIFIER	A-24
A-25	MICROWAVE	12	20 A	1	180	200			1	20 A	12	FACP	A-26
A-27	FRIDGE	12	20 A	1			180	0	1	20 A		SPARE	A-28
A-29	TELEPHONE BOARD	12	20 A	1	360	0			1	20 A		SPARE	A-30
A-31	TELEPHONE BOARD	12	20 A	1			360	0	2	25 A	210G	HP-1, FC-1	A-32
A-33	EXTERIOR SIGN	12	20 A	1	1500	0							A-34
A-35	SPARE		20 A	1			0	2500	2	30 A	210G	DRYER	A-36
A-37	SPARE		20 A	1	0	2500							A-38
A-39	SPARE		20 A	1			0	3380	2	40 A	28G	WATER HEATER P9	A-40
A-41	SPARE		20 A	1	0	3380							A-42

Load: 16914 W 15051 VA
Amps: 141 A 125 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	4321 VA	100.00%	4321 VA		
Other	180 VA	100.00%	180 VA	Total Conn. Load:	32 kW
Power	9110 VA	100.00%	9110 VA	Total Est. Demand:	28 kW
Receptacles	18240 VA	77.41%	14120 VA	Total Conn. Current:	132 A
				Est. Demand Current:	115 A

Notes:

Branch Panel: F

Location: WELDING TECHNOLOGY...
Supply From: M
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000 AMPS
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: 1 A

CKT	Circuit Description	Wire	Amp	P	A		B		C		P	Amp	Wire	Circuit Description	CKT
F-1	SPARE		20 A	1	0	360					1	20 A	12	WELDING TECH CO	F-2
F-3	WELDER	26G	50 A	2			4160	4160			2	50 A	26G	WELDER	F-4
F-5									4160	4160					F-6
F-7	WELDER	26G	50 A	2	4160	4160					2	50 A	26G	WELDER	F-8
F-9							4160	4160							F-10
F-11	WELDER	26G	50 A	2					4160	4160	2	50 A	26G	WELDER	F-12
F-13					4160	4160									F-14
F-15	WELDER	26G	50 A	2			4160	4160			2	50 A	26G	WELDER	F-16
F-17									4160	4160					F-18
F-19	WELDER	26G	50 A	2	4160	4160					2	50 A	26G	WELDER	F-20
F-21							4160	4160							F-22
F-23	WELDER	26G	50 A	2					4160	4160	2	50 A	26G	WELDER	F-24
F-25					4160	4160									F-26
F-27	WELDER	26G	50 A	2			4160	4160			2	50 A	26G	WELDER	F-28
F-29									4160	4160					F-30

Load: 33640 W 41600 VA 41600 VA
Amps: 280 A 357 A 357 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Receptacles	360 VA	100.00%	360 VA		
WELDER	116480 VA	68.21%	79456 VA	Total Conn. Load:	117 kW
				Total Est. Demand:	80 kW
				Total Conn. Current:	324 A
				Est. Demand Current:	222 A

Notes:

Branch Panel: M

Location: MECH / ELEC 124
Supply From:
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 65,000 AMPS
Mains Type: MCB
Mains Rating: 1200 A
MCB Rating: 1200 A

CKT	Circuit Description	Wire	Amp	P	A		B		C		P	Amp	Wire	Circuit Description	CKT
M-1	RTU-3	31*G	110 A	3	7839	7839					3	110 A	31*G	RTU-4	M-2
M-3							7839	7839							M-4
M-5									7839	7839					M-6
M-7	RTU-7	31*G	110 A	3	7839	3367					3	60 A	34G	COMPRESSOR	M-8
M-9							7839	3367							M-10
M-11									7839	3367					M-12
M-13	EXIST. PANEL A	33oG	200 A	2	16914	4751					3	60 A	34G	ELEVATOR	M-14
M-15							15051	4751							M-16
M-17	EXIST. PANEL G (1)	31*G	125 A	2					10018	4751					M-18
M-19					10018	20696					3	200 A	43oG	PANEL K	M-20
M-21	PANEL B	43oG	200 A	3			11588	19114							M-22
M-23									11615	19234					M-24
M-25					13247	--					1	--		BLANK	M-26
M-27	PANEL C	44oG	225 A	3			25617	--			1	--		BLANK	M-28
M-29									26522	--	1	--		BLANK	M-30
M-31					29502	--					1	--		BLANK	M-32
M-33	PANEL D	43oG	200 A	3			23493	--			1	--		BLANK	M-34
M-35									21794	--	1	--		BLANK	M-36
M-37					18898	--					1	--		BLANK	M-38
M-39	PANEL F	44oG	225 A	3			33640	--			1	--		BLANK	M-40
M-41									41600	--	1	--		BLANK	M-42
M-43					41600	--					1	--		BLANK	M-44
M-45	BLANK		--	1			--	--			1	--		BLANK	M-46
M-47	BLANK		--	1					--	--	1	--		BLANK	M-48
M-49	MCB		1200 A	3	0	--					1	--		SPD (#HL2IMA12C)	M-50
M-51							0	--			1	--		SPD	M-52
M-53									0	--	1	--		SPD	M-54
M-55	MCB		--	1	--	--					1	--		SPD	M-56
M-57	MCB		--	1			--	--			1	--		SPD	M-58
M-59	MCB		--	1					--	--	1	--		SPD	M-60
M-61	MCB		--	1	--	--					1	--		SPD	M-62
M-63	MCB		--	1			--	--			1	--		SPD	M-64
M-65	MCB		--	1					--	--	1	--		SPD	M-66

Load: 182503 W 160134 VA 162417 VA
Amps: 1524 A 1334 A 1356 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	7991 VA	100.00%	7991 VA		
Other	167471 VA	100.00%	167471 VA	Total Conn. Load:	505 kW
Power	57148 VA	100.00%	57148 VA	Total Est. Demand:	425 kW
KITCHEN EQUIP.	28960 VA	65.00%	18824 VA	Total Conn. Current:	1401 A
Receptacles	41460 VA	62.06%	25730 VA	Est. Demand Current:	1181 A
EQUIP.	43800 VA	100.00%	43800 VA		
WELDER	158080 VA	66.05%	104416 VA		

Notes:
(1) VERIFY EXISTING BREAKER SIZE FOR EXISTING PANEL PRIOR TO PURCHASE OF PANEL

Branch Panel: D

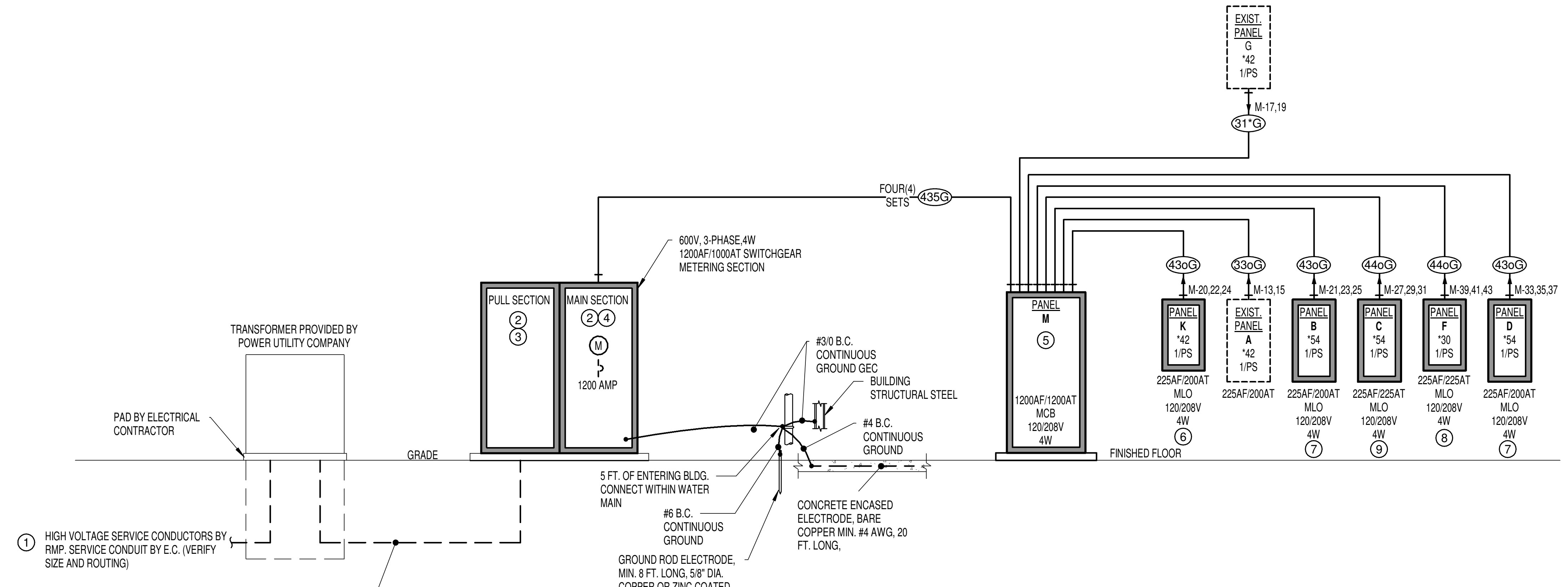
Location: CONSTRUCTION...
Supply From: M
Mounting: SURFACE
Enclosure: TYPE 1
Volts: 120/208 Wye
Phases: 3
Wires: 4
A.I.C. Rating: 10,000 AMPS
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: 1 A

CKT	Circuit Description	Wire	Amp	P	A		B		C		P	Amp	Wire	Circuit Description	CKT
D-1	CONSTRUCTION TECH LTS	12	20 A	1	1081	1080					1	20 A	12	CONSTR. TECH. CLASS CO	D-2
D-3	REST./OFFICE CO	12	20 A	1			900	720			1	20 A	12	CONSTR. TECH. CLASS CO	D-4
D-5	OFFICE #4 CO	12	20 A	1					1260	180	1	20 A	12	CONSTR. TECH. DED. CKT	D-6
D-7	OFFICE CO	12	20 A	1	540	360					1	20 A	12	CONSTRUCTION TECH CO	D-8
D-9	CONSTRUCTION TECH CO	12	20 A	1			360	180			1	20 A	12	CONSTR. TECH. DED. CKT	D-10
D-11	CONSTRUCTION TECH CO	12	20 A	1					360	360	1	20 A	12	F12-CORD REEL	D-12
D-13	CONSTR. TECH DED. CKT	12	20 A	1	180	360					1	20 A	12	F12-CORD REEL	D-14
D-15	CONSTRUCTION TECH CO	12	20 A	1			360	360			1	20 A	12	F12-CORD REEL	D-16
D-17	ROOF C.O.	12	20 A	1					360	360	1	20 A	12	F12-CORD REEL	D-18
D-19	EF-1	12	20 A	1	600	600					1	20 A	12	OH DOOR	D-20
D-21	EF-8	12	20 A	1			600	600			1	20 A	12	OH DOOR	D-22
D-23	SPARE		20 A	1					0	600	1	20 A	12	OH DOOR	D-24
D-25	SPARE		20 A	1	0	600					1	20 A	12	OH DOOR	D-26
D-27	SPARE		20 A	1			0	1381			1	20 A	12	EWH-1	D-28
D-29	SPARE		20 A	1					0	0	1	20 A		SPARE	D-30
D-31	SPARE		20 A	1	0	0					1	20 A		SPARE	D-32
D-33	SPARE		20 A	1			0	998			2	20 A	212G	ECH-1	D-34
D-35	SPARE		20 A	1					0	998					D-36
D-37	RTU-1	210G	25 A	2	1415	1664					2	20 A	212G	OFFICE 5 PTAC-1	D-38
D-39							1415	1664							D-40
D-41	PAINT BOOTH LIGHTS	12	20 A	1					500	1664	2	20 A	212G	OFFICE 4 PTAC-2	D-42
D-43	PAINT BOOTH	28G	40 A	1	3840	1664									D-44
D-45	PAINT BOOTH	212G	20 A	2			1664	1082			2	20 A	212G	UH-1	D-46
D-47									1664	1082					D-48
D-49	PAINT BOOTH	34G	70 A	3	6725	2786					3	45 A	36G	RTU-2	D-50
D-51							6725	2786							D-52
D-53									6725	2786					D-54

Load: 23493 W 21794 VA 18898 VA
Amps: 199 A 185 A 157 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Lighting	1081 VA	100.00%	1081 VA		
Other	52785 VA	100.00%	52785 VA	Total Conn. Load:	64 kW
Power	2400 VA	100.00%	2400 VA	Total Est. Demand:	64 kW
Receptacles	7920 VA	100.00%	7920 VA	Total Conn. Current:	178 A
EQUIP.	0 VA	0.00%	0 VA	Est. Demand Current:	178 A

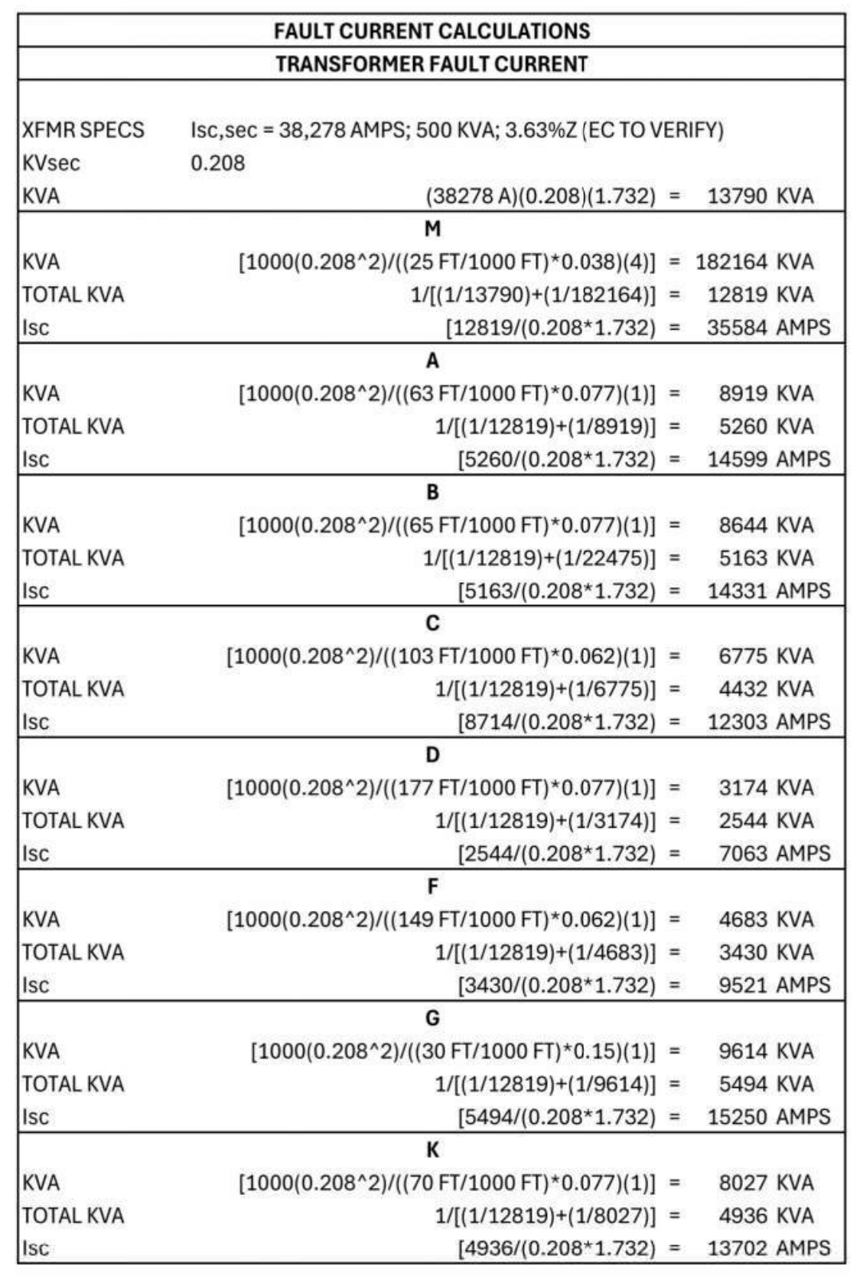
Notes:


EXIST. PANEL G *42 1/PS
M-17,19
31*G
FOUR(4) SETS
435G
600V, 3-PHASE,4W
1200AF/1000AT SWITCHGEAR
METERING SECTION
PULL SECTION
2
3
MAIN SECTION
2
4
M
1200 AMP
TRANSFORMER PROVIDED BY POWER UTILITY COMPANY
PAD BY ELECTRICAL CONTRACTOR
GRADE
#3/0 B.C. CONTINUOUS GROUND GEC
BUILDING STRUCTURAL STEEL
#4 B.C. CONTINUOUS GROUND
5 FT. OF ENTERING BLDG. CONNECT WITHIN WATER MAIN
#6 B.C. CONTINUOUS GROUND
GROUND ROD ELECTRODE, MIN. 8 FT. LONG, 5/8" DIA. COPPER OR ZINC COATED STEEL
CONCRETE ENCASED ELECTRODE, BARE COPPER MIN. #4 AWG, 20 FT. LONG,
1
HIGH VOLTAGE SERVICE CONDUCTORS BY RMP. SERVICE CONDUIT BY E.C. (VERIFY SIZE AND ROUTING)
1
METER SECTION SERVICE CONDUCTORS BY RMP. SERVICE CONDUIT BY E.C. (VERIFY SIZE AND ROUTING)
PANEL M
5
1200AF/1200AT MCB 120/208V 4W
FINISHED FLOOR
43oG
M-20,22,24
PANEL K *42 1/PS
225AF/200AT MLO 120/208V 4W
6
33oG
M-13,15
EXIST. PANEL A *42 1/PS
225AF/200AT
43oG
M-21,23,25
PANEL B *54 1/PS
225AF/200AT MLO 120/208V 4W
7
44oG
M-27,29,31
PANEL C *54 1/PS
225AF/225AT MLO 120/208V 4W
9
44oG
M-39,41,43
PANEL F *30 1/PS
225AF/225AT MLO 120/208V 4W
8
43oG
M-33,35,37
PANEL D *54 1/PS
225AF/200AT MLO 120/208V 4W
7

① POWER RISER
SCALE 1/4" = 1'-0"

POWER RISER KEY NOTES

1	VERIFY SIZE/QUANTITY OF CONDUIT(S) FROM POWER UTILITY POINT OF SERVICE TO WITH POWER UTILITY COMPANY PRIOR TO INSTALLATION. SEE SHEET E1.00 FOR APPROXIMATE LOCATIONS.
2	ALL SERVICE ENTRANCE/METERING EQUIPMENT AND INSTALLATION SHALL COMPLY WITH POWER UTILITY REQUIREMENTS. COORDINATE REQUIREMENTS WITH POWER UTILITY COMPANY PRIOR TO BID.
3	PROVIDE AND INSTALL 600V, 3-PHASE, 4-WIRE, 1200 AMP FRAME MINIMUM, NEMA 3R PULL SECTION (SQ D TYPE CMM OR APPROVED EQUIVALENT).
4	PROVIDE AND INSTALL 600V, 3-PHASE, 4-WIRE, 1200AF/1200AT, NEMA 3R, MAIN CIRCUIT BREAKER SECTION (SQ D TYPE CMM OR APPROVED EQUIVALENT).
5	PROVIDE AND INSTALL 600V, 3-PHASE, 4-WIRE, 1200AF/1200AT, NEMA 1, 65 KAIC, MAIN CIRCUIT BREAKER LOAD CENTER (SQ D I-LINE #HCP508612N HCW86TSD HC4286DB OR APPROVED EQUIVALENT) WITH ALL BREAKERS AND ACCESSORIES AS NOTED ON THE PANEL SCHEDULE ON THIS SHEET.
6	PROVIDE AND INSTALL 240V, 3-PHASE, 4-WIRE, 225AF/200AT, NEMA 1, INDICATED KAIC, 42-SPACE, MAIN LUGS ONLY PANEL (SQ D #NQ442L2 MH38 NC38SHR OR APPROVED EQUIVALENT) WITH ALL BREAKERS AND ACCESSORIES AS NOTED ON THE PANEL SCHEDULE.
7	PROVIDE AND INSTALL 240V, 3-PHASE, 4-WIRE, 225AF/200AT, NEMA 1, INDICATED KAIC, 54-SPACE, MAIN LUGS ONLY PANEL (SQ D #NQ454L2 MH38 NC38SHR OR APPROVED EQUIVALENT) WITH ALL BREAKERS AND ACCESSORIES AS NOTED ON THE PANEL SCHEDULE.
8	PROVIDE AND INSTALL 240V, 3-PHASE, 4-WIRE, 225AF/225AT, NEMA 1, INDICATED KAIC, 30-SPACE, MAIN LUGS ONLY PANEL (SQ D #NQ430L2 MH32 NC32SHR OR APPROVED EQUIVALENT) WITH ALL BREAKERS AND ACCESSORIES AS NOTED ON THE PANEL SCHEDULE.
9	PROVIDE AND INSTALL 240V, 3-PHASE, 4-WIRE, 225AF/225AT, NEMA 1, INDICATED KAIC, 54-SPACE, MAIN LUGS ONLY PANEL (SQ D #NQ454L2 MH38 NC38SHR OR APPROVED EQUIVALENT) WITH ALL BREAKERS AND ACCESSORIES AS NOTED ON THE PANEL SCHEDULE.



FAULT CURRENT CALCULATIONS		
TRANSFORMER FAULT CURRENT		
XFMR SPECS	Isc,sec = 38,278 AMPS; 500 KVA; 3.63%Z (EC TO VERIFY)	
KVsec	0.208	
KVA	(38278 A)(0.208)(1.732) =	13790 KVA
	M	
KVA	[1000(0.208^2)/((25 FT/1000 FT)*0.038)(4)] =	182164 KVA
TOTAL KVA	1/[(1/13790)+(1/182164)] =	12819 KVA
Isc	[12819/(0.208*1.732) =	35584 AMPS
	A	
KVA	[1000(0.208^2)/((63 FT/1000 FT)*0.077)(1)] =	8919 KVA
TOTAL KVA	1/[(1/12819)+(1/8919)] =	5260 KVA
Isc	[5260/(0.208*1.732) =	14599 AMPS
	B	
KVA	[1000(0.208^2)/((65 FT/1000 FT)*0.077)(1)] =	8644 KVA
TOTAL KVA	1/[(1/12819)+(1/22475)] =	5163 KVA
Isc	[5163/(0.208*1.732) =	14331 AMPS
	C	
KVA	[1000(0.208^2)/((103 FT/1000 FT)*0.062)(1)] =	6775 KVA
TOTAL KVA	1/[(1/12819)+(1/6775)] =	4432 KVA
Isc	[8714/(0.208*1.732) =	12303 AMPS
	D	
KVA	[1000(0.208^2)/((177 FT/1000 FT)*0.077)(1)] =	3174 KVA
TOTAL KVA	1/[(1/12819)+(1/3174)] =	2544 KVA
Isc	[2544/(0.208*1.732) =	7063 AMPS
	F	
KVA	[1000(0.208^2)/((149 FT/1000 FT)*0.062)(1)] =	4683 KVA
TOTAL KVA	1/[(1/12819)+(1/4683)] =	3430 KVA
Isc	[3430/(0.208*1.732) =	9521 AMPS
	G	
KVA	[1000(0.208^2)/((30 FT/1000 FT)*0.15)(1)] =	9614 KVA
TOTAL KVA	1/[(1/12819)+(1/9614)] =	5494 KVA
Isc	[5494/(0.208*1.732) =	15250 AMPS
	K	
KVA	[1000(0.208^2)/((70 FT/1000 FT)*0.077)(1)] =	8027 KVA
TOTAL KVA	1/[(1/12819)+(1/8027)] =	4936 KVA
Isc	[4936/(0.208*1.732) =	13702 AMPS

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
1-9-25

REF NO.
2444

AUTHOR
MJE

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

PANEL SCHEDULES & POWER RISER

SHEET NO.
E4.00

COM*check* Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: PSD CTE Payette, ID
Project Type: Alteration

Construction Site:
915 S. Main Street
Payette, Idaho 83661

Owner/Agent:

Designer/Contractor:
Nielson Engineering Inc.
156 N. 12th Avenue
Pocatello, Idaho 83201
2082322477
nei@nielsoneng.com

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-School/University	16408	0.81	13290
		Total Allowed Watts =	13290

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
School/University (16408 sq.ft.)				
LED: T-1/1B: 2X4 LED LIGHT PANEL, 5000 LUMEN: Other:	1	54	40	2160
LED: T-1A/1AB: 2X4 LED LIGHT PANEL, 3000 LUMEN: Other:	1	27	25	675
LED: T-2: 8 FT. LED STRIP, 10000 LUMENS: Other:	1	55	64	3520
LED: T-2A: 8 FT. LED STRIP, 8000 LUMENS: Other:	1	26	50	1300
LED: T-3: 7" SURFACE MOUNT DOWNLIGHT: Other:	1	18	12	216
LED: T-4: 2 FT. LED STRIP, 800 LUMENS: Other:	1	7	8	52
			Total Proposed Watts =	7924

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Jill Eames - Drafter
Name - Title

Jill Eames
Signature

12-19-24
Date

COM*check* Software Version COMcheckWeb

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 26.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4]^{1}	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22]^{1}	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.1 [EL18]^{1}	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1.2 [EL19]^{1}	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.1.3 [EL20]^{1}	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21]^{2}	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Lighting that is related to means of egress in stairways, ramps, corridors, or emergency routes.

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23]^{2}	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL26]^{1}	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL27]^{1}	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.3 [EL6]^{1}	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.6 [EL26]^{2}	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.7 [EL27]^{2}	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28]^{2}	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.9 [EL29]^{2}	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17]^{3}	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.4.1 [FI18]^{1}	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C408.1.1 [FI57]^{1}	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI16]^{3}	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.3 [FI33]^{1}	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

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Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

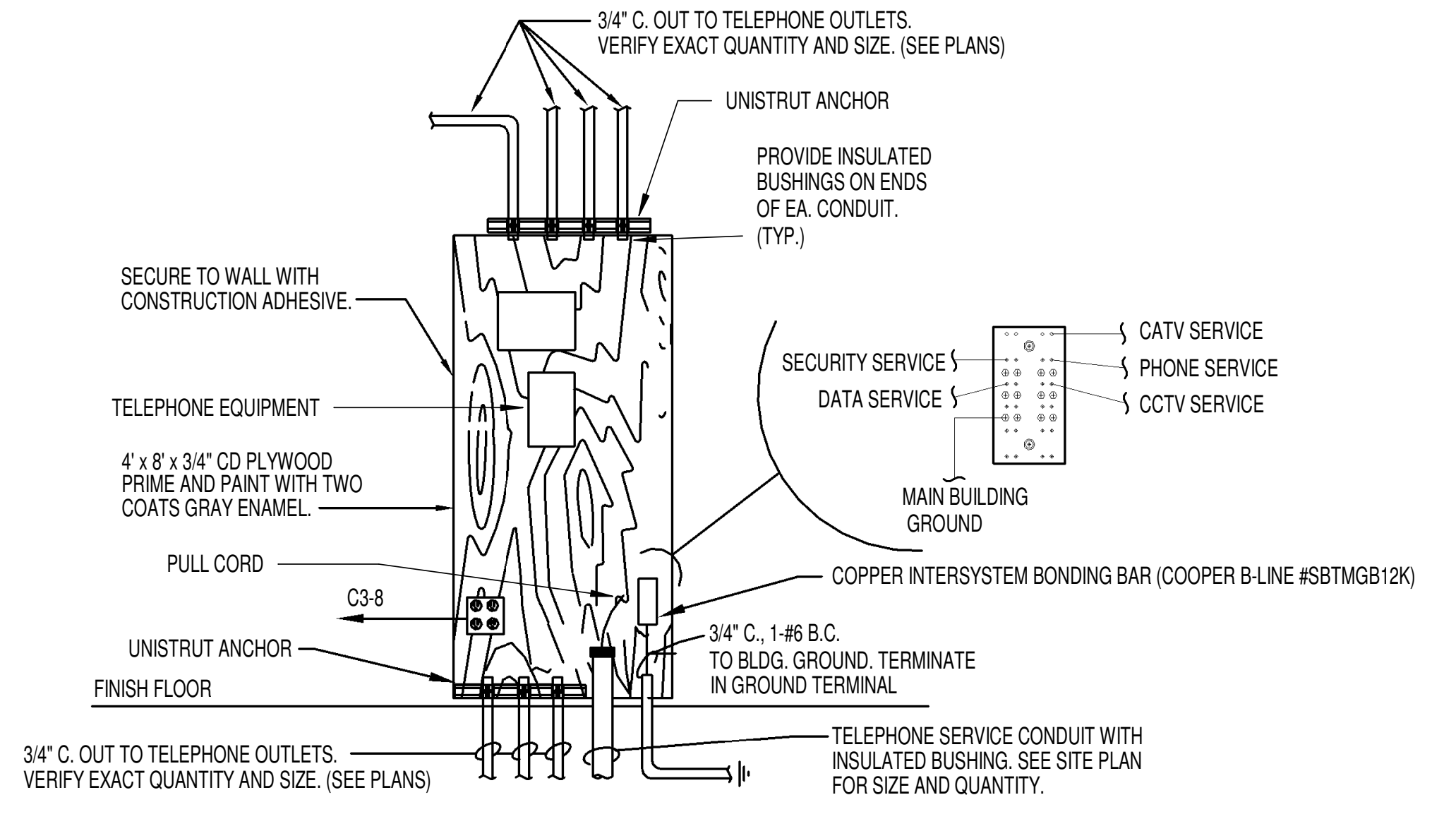
DATE
1-9-25

REF NO.
2444

AUTHOR
MJE

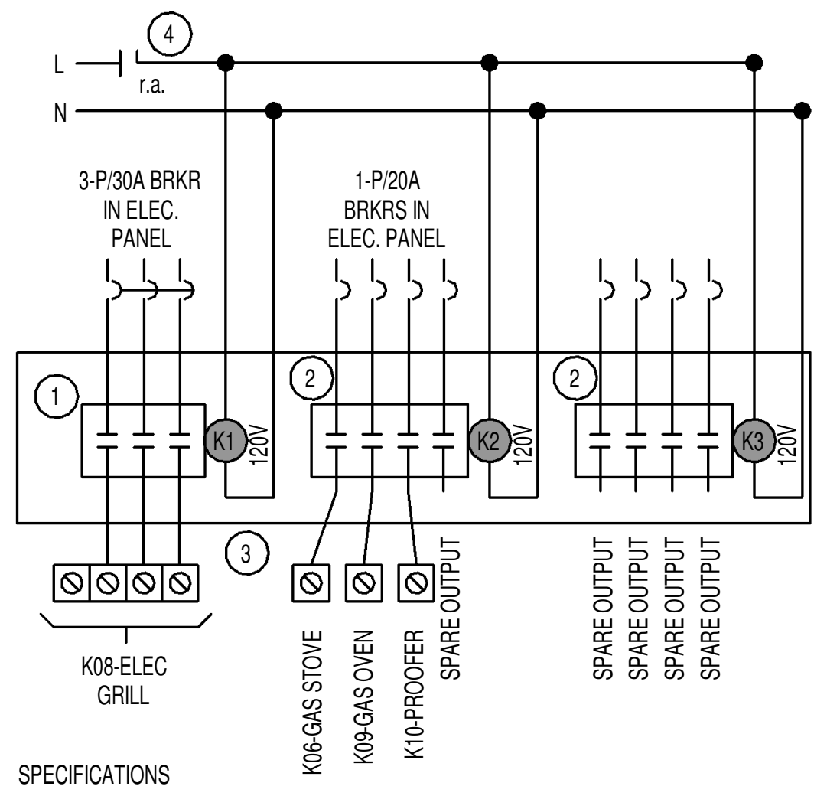
PROJECT
CAREER TECHNICAL EDUCATION BUILDING
PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO
ELECTRICAL COMCHECK

SHEET NO.
E5.00


3/4" C. OUT TO TELEPHONE OUTLETS. VERIFY EXACT QUANTITY AND SIZE. (SEE PLANS)
UNISTRUT ANCHOR
PROVIDE INSULATED BUSHINGS ON ENDS OF EA. CONDUIT. (TYP.)
SECURE TO WALL WITH CONSTRUCTION ADHESIVE.
TELEPHONE EQUIPMENT
4' x 8' x 3/4" CD PLYWOOD PRIME AND PAINT WITH TWO COATS GRAY ENAMEL.
SECURITY SERVICE
DATA SERVICE
CATV SERVICE
PHONE SERVICE
CCTV SERVICE
MAIN BUILDING GROUND
PULL CORD
C3-8
COPPER INTERSYSTEM BONDING BAR (COOPER B-LINE #SBTMGB12K)
UNISTRUT ANCHOR
FINISH FLOOR
3/4" C., 1-#6 B.C. TO BLDG. GROUND. TERMINATE IN GROUND TERMINAL
3/4" C. OUT TO TELEPHONE OUTLETS. VERIFY EXACT QUANTITY AND SIZE. (SEE PLANS)
TELEPHONE SERVICE CONDUIT WITH INSULATED BUSHING. SEE SITE PLAN FOR SIZE AND QUANTITY.

4 ED.01 DETAIL - VERTICAL TELEPHONE BOARD

SCALE: NONE



SPECIFICATIONS

① 480V, 3-P, 32 AMP, 120V COIL CONTACTOR (SCHNEIDER ELECTRIC #LC1D18G7).

② 480V, 4-P, 20 AMP, 120V COIL CONTACTOR (SCHNEIDER ELECTRIC #LC1DT20G7).

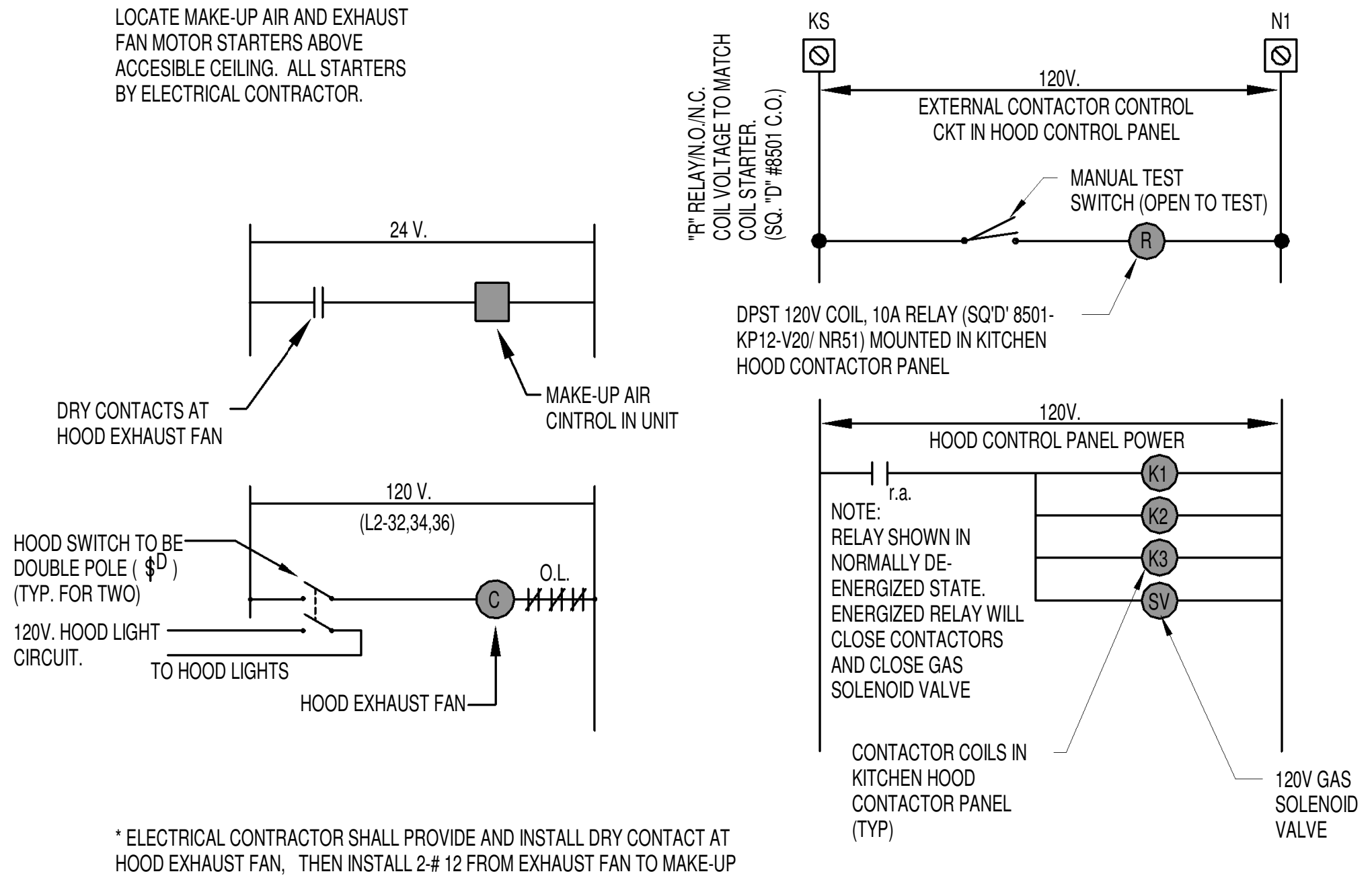
③ NEMA 1 CONTACTOR ENCLOSURE WITH HINGED FRONT. SIZE PER NEC. PROVIDE AND INSTALL BACK PLANE, DIN RAIL, AND ANY ADDITIONAL HARDWARE NECESSARY TO MOUNT CONTROL RELAY AND CONTACTORS. PROVIDE AND INSTALL BLACK MICARTA LABLE WITH WHITE LETTERING ON FRONT THAT STATES "KITCHEN HOOD CONTACTOR PANEL".

④ SEE KITCHEN HOOD DETAIL 2/ED.01 FOR ADDITIONAL CONTROL REQUIREMENTS.

3 ED.01 DETAIL - KITCHEN HOOD CONTACTOR PANEL

SCALE: NONE

ELECTRICAL CONTRACTOR SHALL LOCATE MAKE-UP AIR AND EXHAUST FAN MOTOR STARTERS ABOVE ACCESIBLE CEILING. ALL STARTERS BY ELECTRICAL CONTRACTOR.

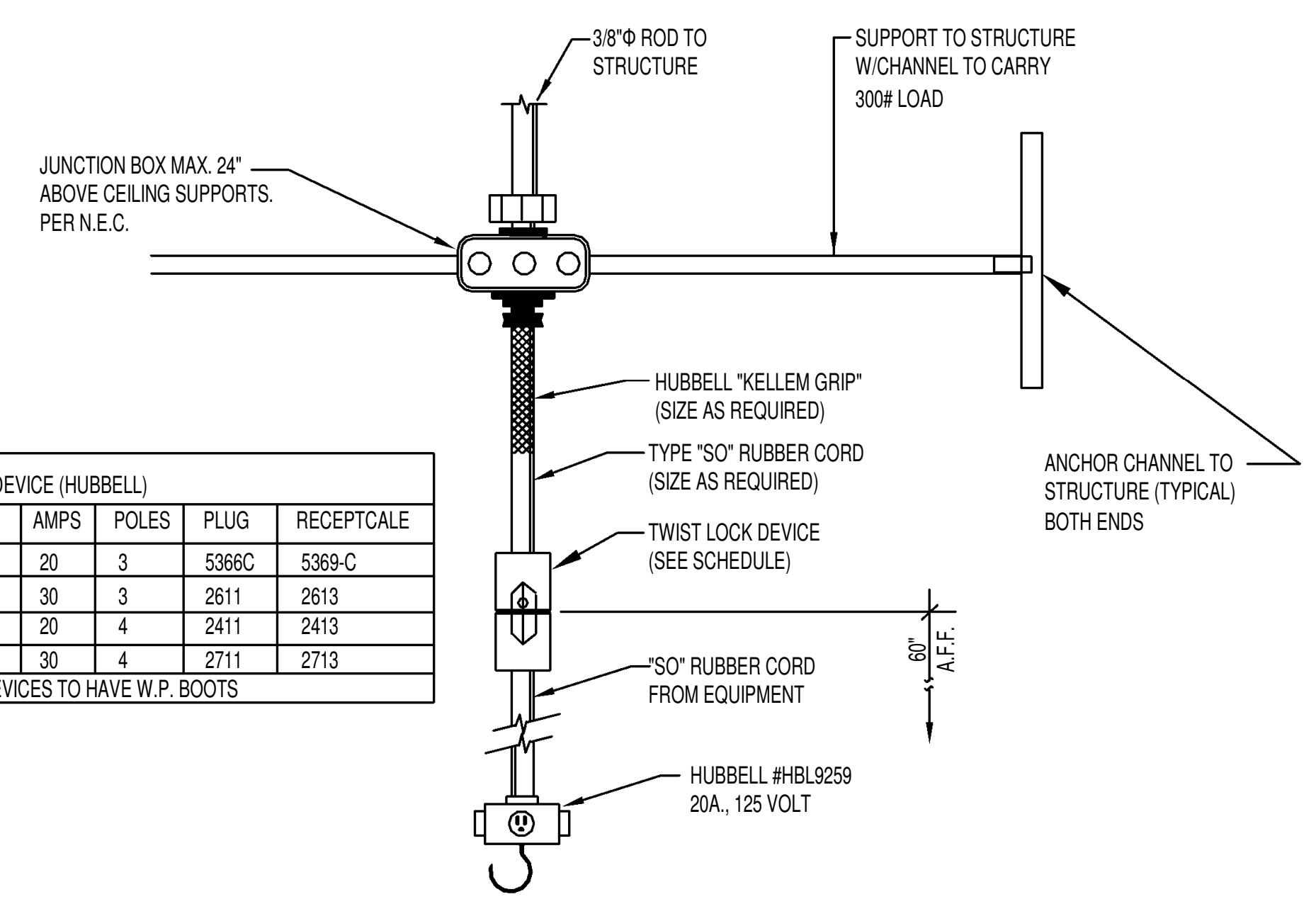

KS
N1
"R" RELAY/N.O./N.C. COIL VOLTAGE TO MATCH COIL STARTER. (SQ. "D" #8501 C.O.)
120V.
EXTERNAL CONTACTOR CONTROL CKT IN HOOD CONTROL PANEL
MANUAL TEST SWITCH (OPEN TO TEST)
R
24 V.
DRY CONTACTS AT HOOD EXHAUST FAN
MAKE-UP AIR CINTROL IN UNIT
DPST 120V COIL, 10A RELAY (SQ'D' 8501-KP12-V20/ NR51) MOUNTED IN KITCHEN HOOD CONTACTOR PANEL
120V.
HOOD CONTROL PANEL POWER
r.a.
K1
K2
K3
SV
120 V.
(L2-32,34,36)
HOOD SWITCH TO BE DOUBLE POLE ($D) (TYP. FOR TWO)
O.L.
C
120V. HOOD LIGHT CIRCUIT.
TO HOOD LIGHTS
HOOD EXHAUST FAN
NOTE: RELAY SHOWN IN NORMALLY DE-ENERGIZED STATE. ENERGIZED RELAY WILL CLOSE CONTACTORS AND CLOSE GAS SOLENOID VALVE
CONTACTOR COILS IN KITCHEN HOOD CONTACTOR PANEL (TYP)
120V GAS SOLENOID VALVE

* ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL DRY CONTACT AT HOOD EXHAUST FAN, THEN INSTALL 2-# 12 FROM EXHAUST FAN TO MAKE-UP AIR UNIT FOR CONNECTION BY CONTROL CONTRACTOR.

KITCHEN HOOD FIRE - ELECTRICAL SHUTDOWN

2 ED.01 DETAIL - KITCHEN HOOD W/CONTACTOR PANEL

SCALE: NONE


3/8"Φ ROD TO STRUCTURE
SUPPORT TO STRUCTURE W/CHANNEL TO CARRY 300# LOAD
JUNCTION BOX MAX. 24" ABOVE CEILING SUPPORTS. PER N.E.C.
HUBBELL "KELLEM GRIP" (SIZE AS REQUIRED)
TYPE "SO" RUBBER CORD (SIZE AS REQUIRED)
ANCHOR CHANNEL TO STRUCTURE (TYPICAL) BOTH ENDS
TWIST LOCK DEVICE (SEE SCHEDULE)
60" A.F.F.
"SO" RUBBER CORD FROM EQUIPMENT
HUBBELL #HBL9259 20A., 125 VOLT

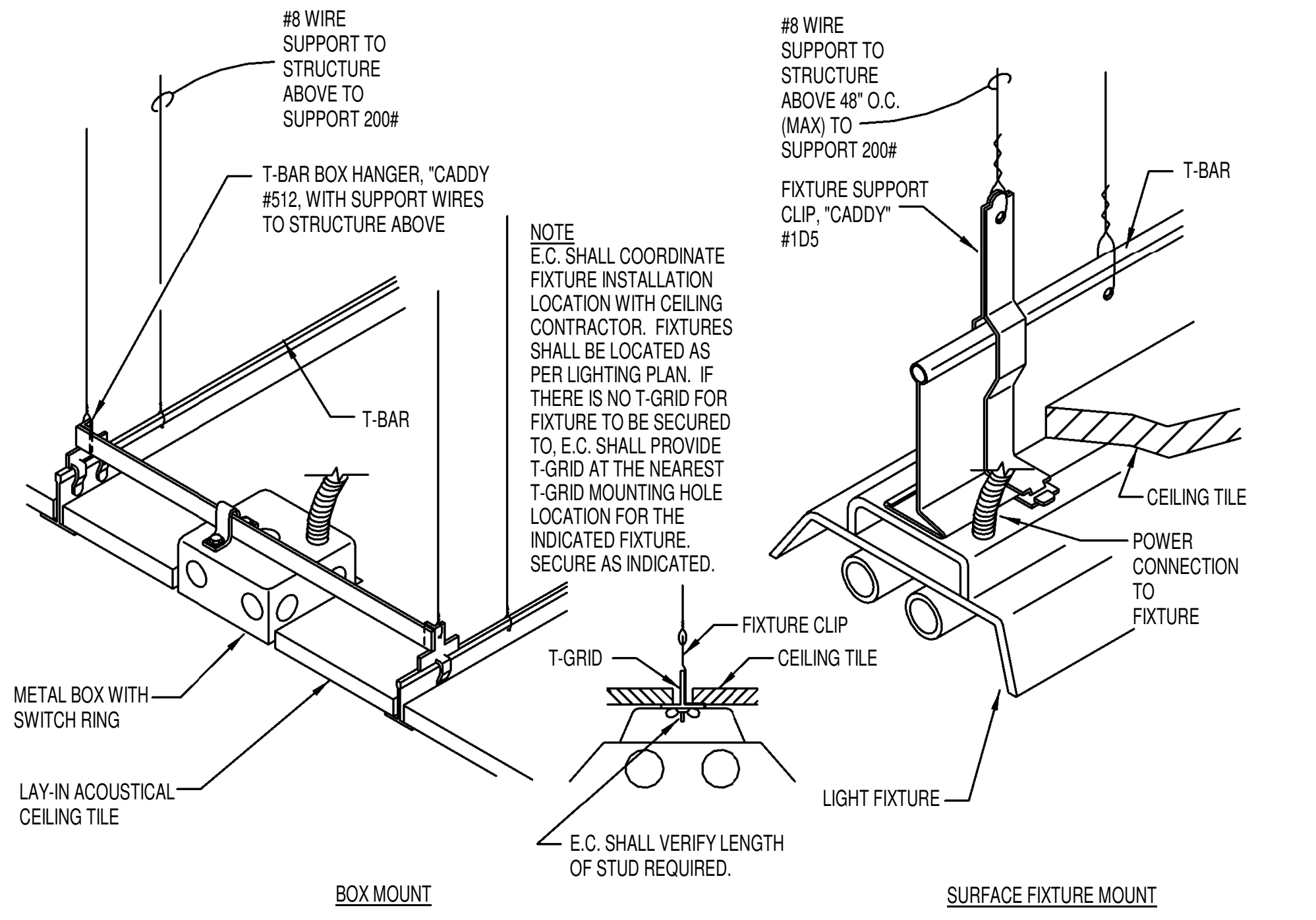
TWIST LOCK DEVICE (HUBBELL)

TYPE	VLTS	AMPS	POLES	PLUG	RECEPTCALE
A	125	20	3	5366C	5369-C
B	125	30	3	2611	2613
C	250	20	4	2411	2413
D	250	30	4	2711	2713

NOTE: ALL DEVICES TO HAVE W.P. BOOTS

1 ED.01 DETAIL - DROP CORD

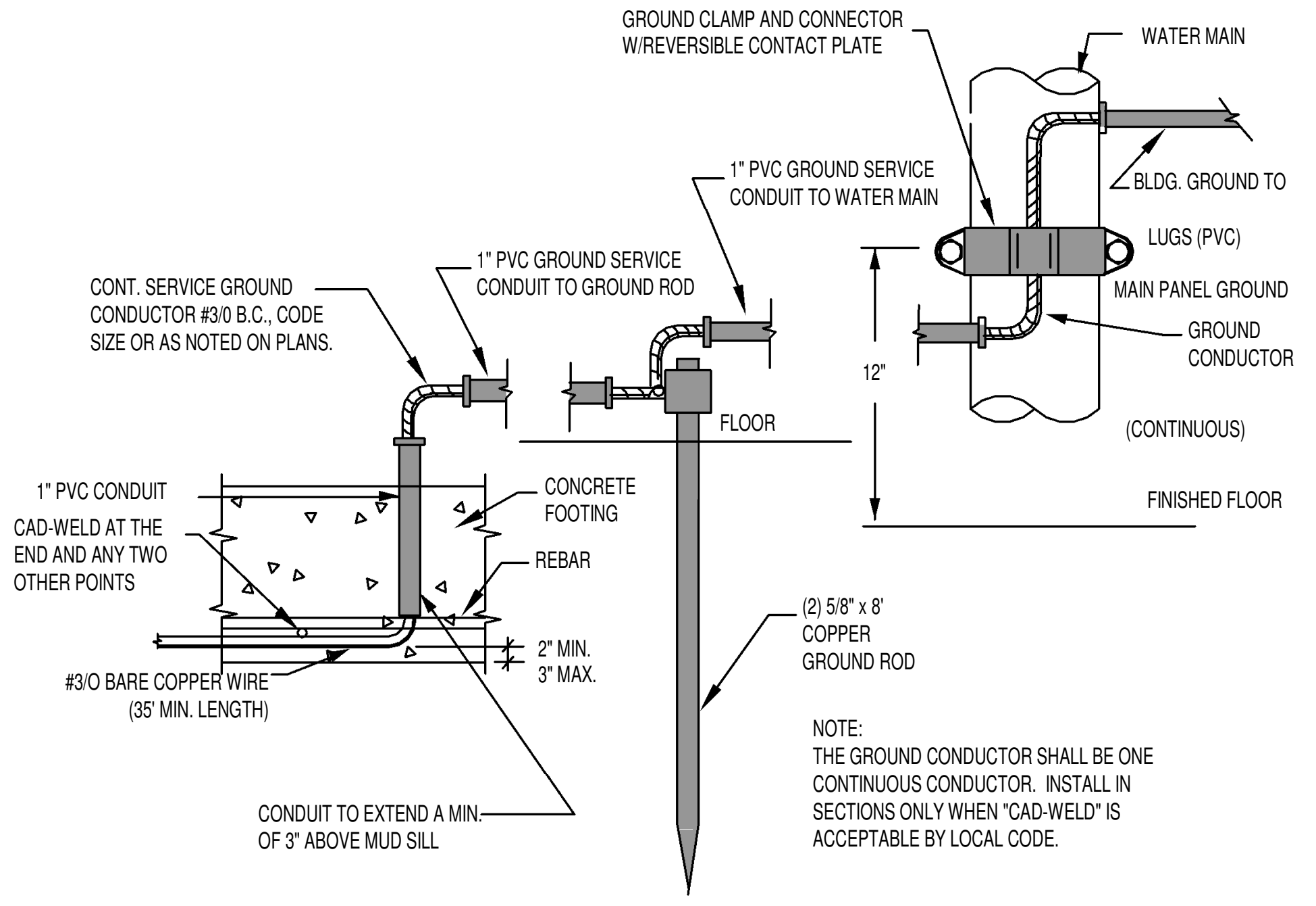
SCALE: NONE


#8 WIRE SUPPORT TO STRUCTURE ABOVE TO SUPPORT 200#
T-BAR BOX HANGER, "CADDY #512, WITH SUPPORT WIRES TO STRUCTURE ABOVE
T-BAR
METAL BOX WITH SWITCH RING
LAY-IN ACOUSTICAL CEILING TILE
#8 WIRE SUPPORT TO STRUCTURE ABOVE 48" O.C. (MAX) TO SUPPORT 200#
FIXTURE SUPPORT CLIP, "CADDY" #1D5
T-BAR
CEILING TILE
POWER CONNECTION TO FIXTURE
FIXTURE CLIP
T-GRID
CEILING TILE
LIGHT FIXTURE
E.C. SHALL VERIFY LENGTH OF STUD REQUIRED.
BOX MOUNT
SURFACE FIXTURE MOUNT

NOTE
E.C. SHALL COORDINATE FIXTURE INSTALLATION LOCATION WITH CEILING CONTRACTOR. FIXTURES SHALL BE LOCATED AS PER LIGHTING PLAN. IF THERE IS NO T-GRID FOR FIXTURE TO BE SECURED TO, E.C. SHALL PROVIDE T-GRID AT THE NEAREST T-GRID MOUNTING HOLE LOCATION FOR THE INDICATED FIXTURE. SECURE AS INDICATED.

8 ED.01 DETAIL - LAY-IN CEILING MOUNTS

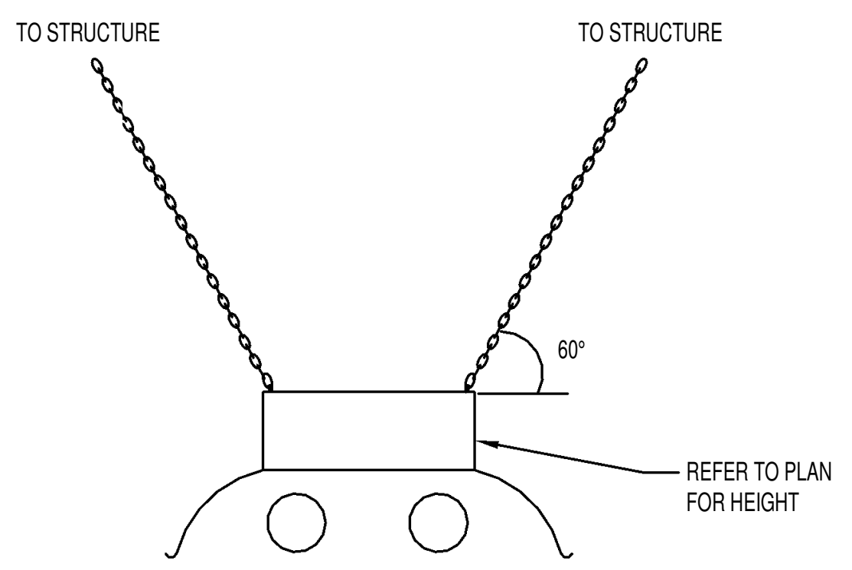
SCALE: NONE


GROUND CLAMP AND CONNECTOR W/REVERSIBLE CONTACT PLATE
WATER MAIN
1" PVC GROUND SERVICE CONDUIT TO WATER MAIN
BLDG. GROUND TO
LUGS (PVC)
MAIN PANEL GROUND
GROUND CONDUCTOR
(CONTINUOUS)
FINISHED FLOOR
12"
1" PVC GROUND SERVICE CONDUIT TO GROUND ROD
CONT. SERVICE GROUND CONDUCTOR #3/0 B.C., CODE SIZE OR AS NOTED ON PLANS.
FLOOR
1" PVC CONDUIT
CONCRETE FOOTING
CAD-WELD AT THE END AND ANY TWO OTHER POINTS
REBAR
2" MIN. 3" MAX.
#3/O BARE COPPER WIRE (35' MIN. LENGTH)
(2) 5/8" x 8' COPPER GROUND ROD
CONDUIT TO EXTEND A MIN. OF 3" ABOVE MUD SILL

NOTE:
THE GROUND CONDUCTOR SHALL BE ONE CONTINUOUS CONDUCTOR. INSTALL IN SECTIONS ONLY WHEN "CAD-WELD" IS ACCEPTABLE BY LOCAL CODE.

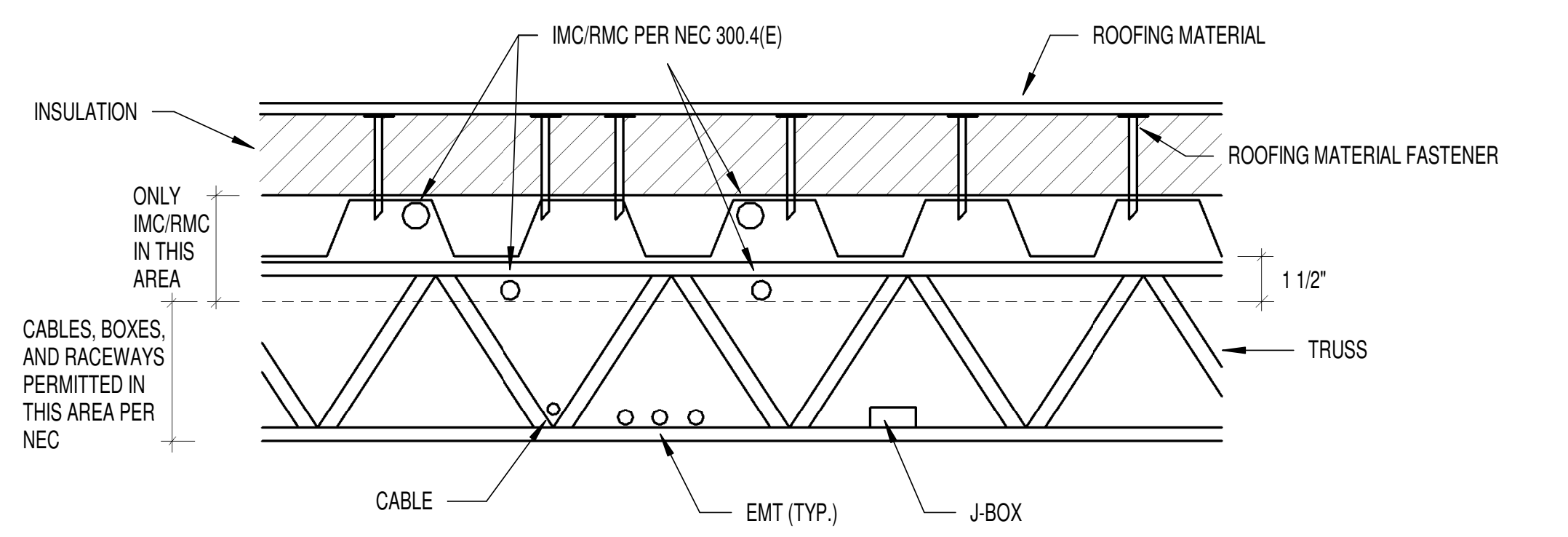
7 ED.01 DETAIL - GROUND SYSTEM

SCALE: NONE



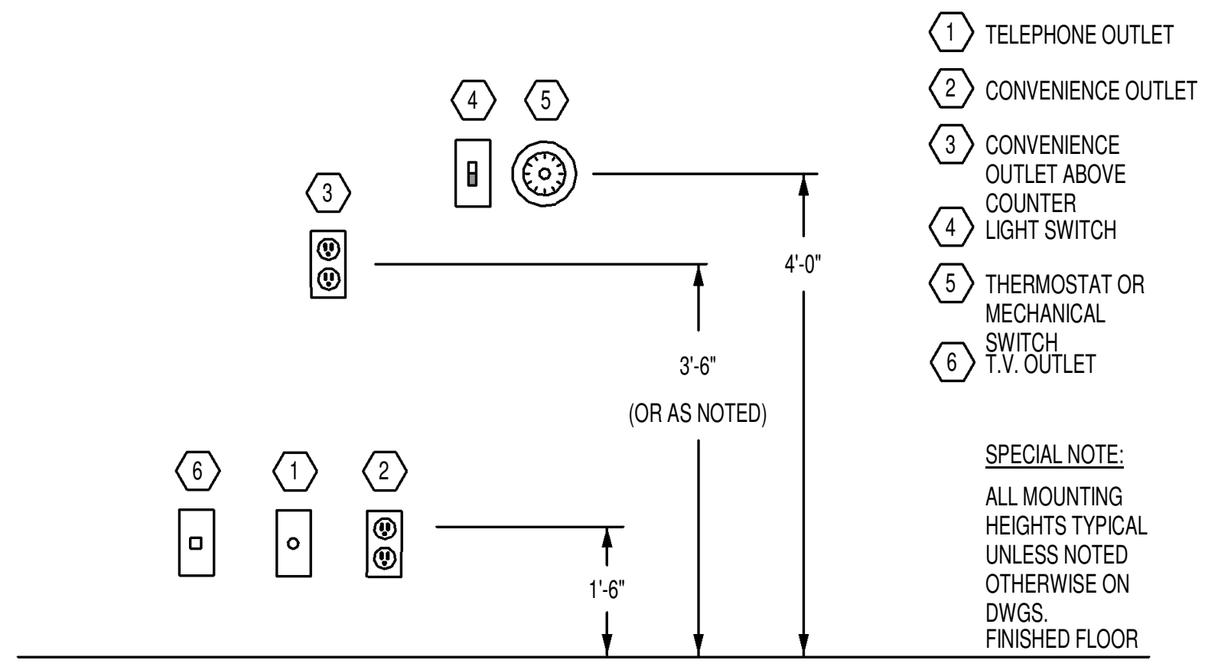
6 ED.01 DETAIL - CHAIN HUNG FIXTURE

SCALE: NONE


IMC/RMC PER NEC 300.4(E)
ROOFING MATERIAL
INSULATION
ROOFING MATERIAL FASTENER
ONLY IMC/RMC IN THIS AREA
1 1/2"
CABLES, BOXES, AND RACEWAYS PERMITTED IN THIS AREA PER NEC
TRUSS
CABLE
EMT (TYP.)
J-BOX

5 ED.01 DETAIL - CABLES, RACEWAYS, OR BOXES IN TRUSS SPACE

SCALE: NONE



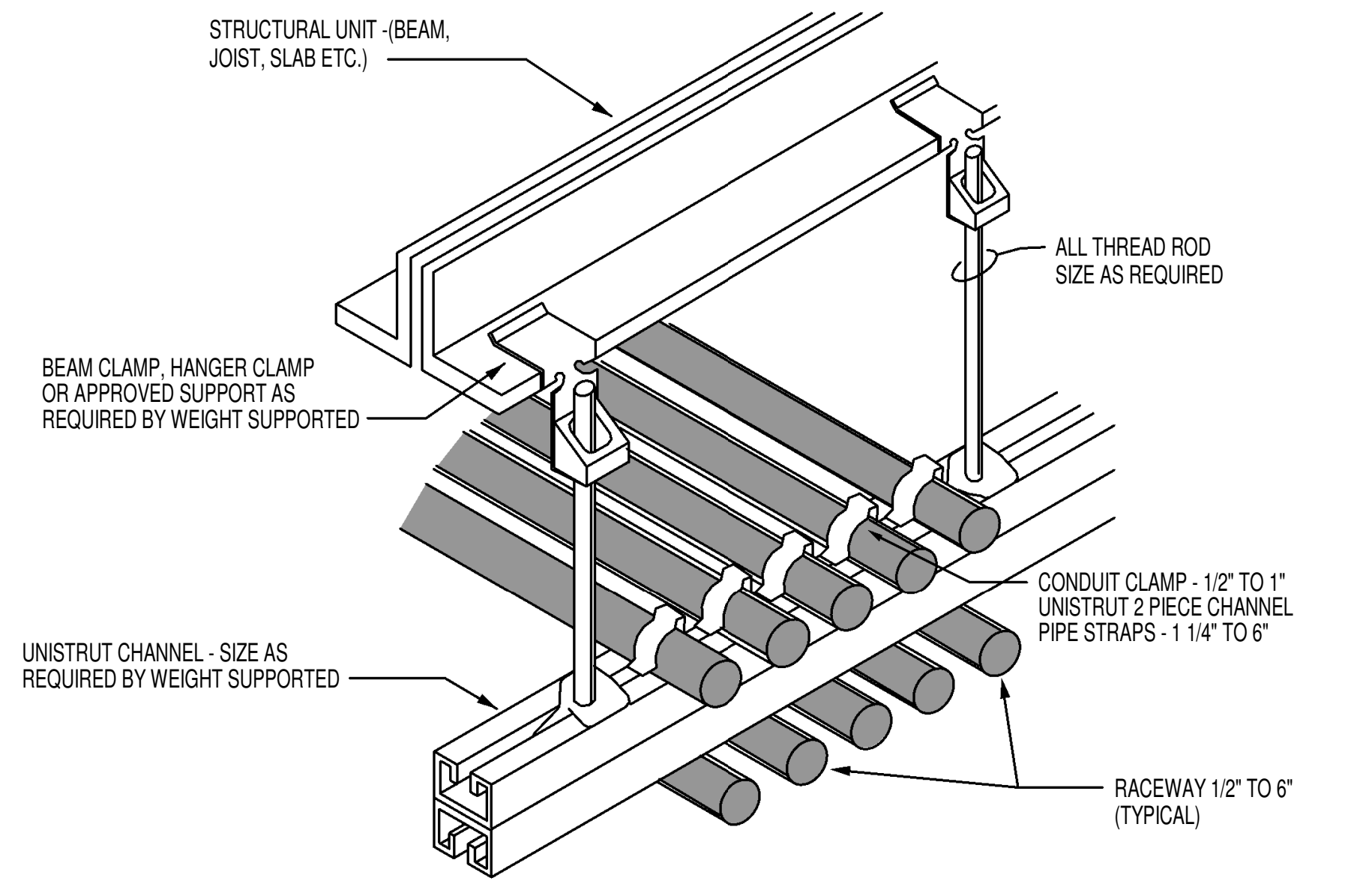
1. TELEPHONE OUTLET
2. CONVENIENCE OUTLET
3. CONVENIENCE OUTLET ABOVE COUNTER
4. LIGHT SWITCH
5. THERMOSTAT OR MECHANICAL SWITCH
6. T.V. OUTLET

SPECIAL NOTE:
ALL MOUNTING HEIGHTS TYPICAL UNLESS NOTED OTHERWISE ON DWGS.

NOTE:
ALL SWITCHES AND THERMOSTATS TO BE MOUNTED AS CLOSE TO DOOR JAMB AS POSSIBLE. COORDINATE ALL DEVICES WITH ARCHITECTURAL PLANS AND DETAILS.

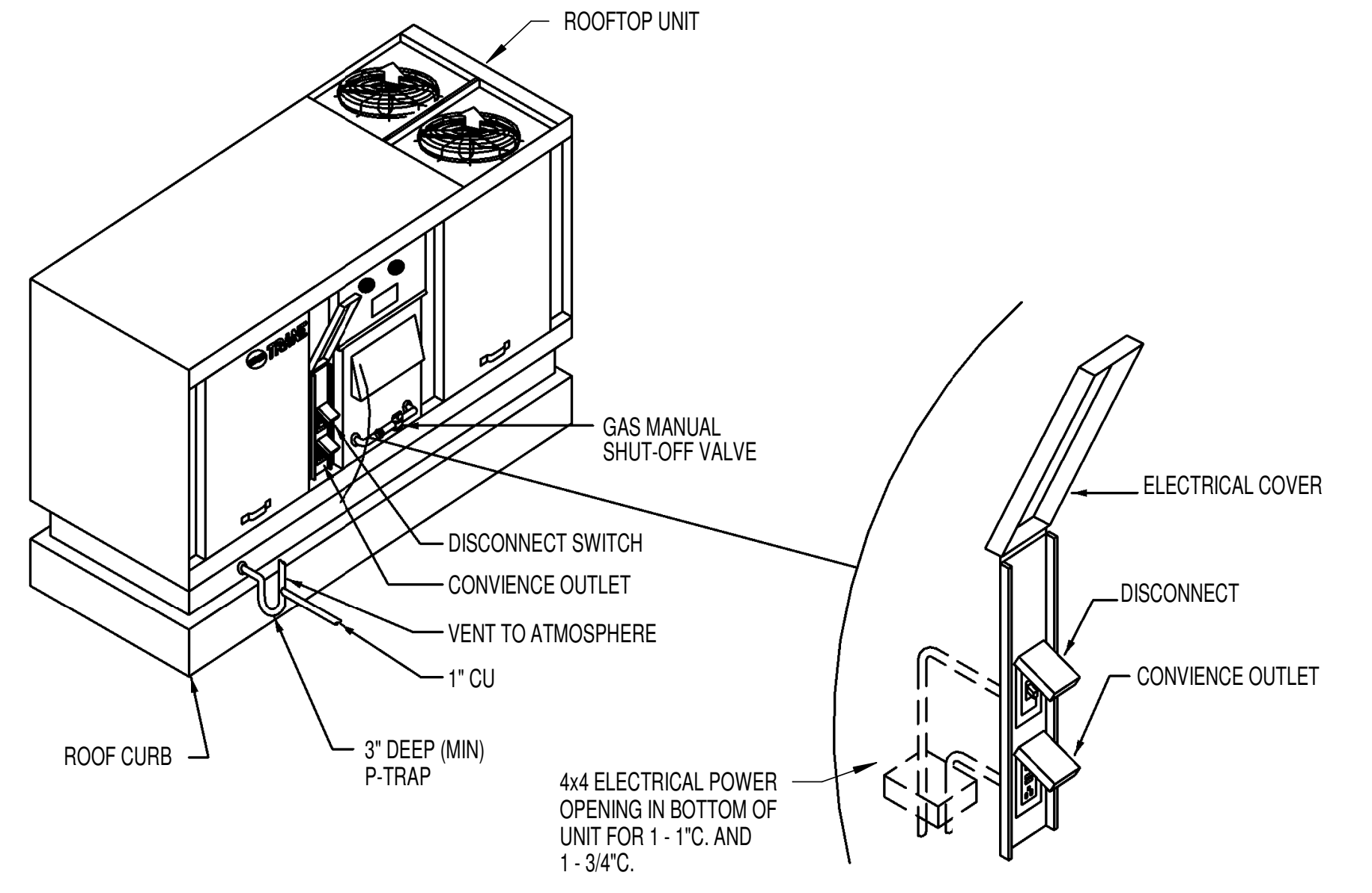
12 ED.01 DETAIL - TYPICAL DEVICE MOUNTING HEIGHTS

SCALE: NONE


STRUCTURAL UNIT -(BEAM, JOIST, SLAB ETC.)
ALL THREAD ROD SIZE AS REQUIRED
BEAM CLAMP, HANGER CLAMP OR APPROVED SUPPORT AS REQUIRED BY WEIGHT SUPPORTED
CONDUIT CLAMP - 1/2" TO 1" UNISTRUT 2 PIECE CHANNEL PIPE STRAPS - 1 1/4" TO 6"
UNISTRUT CHANNEL - SIZE AS REQUIRED BY WEIGHT SUPPORTED
RACEWAY 1/2" TO 6" (TYPICAL)

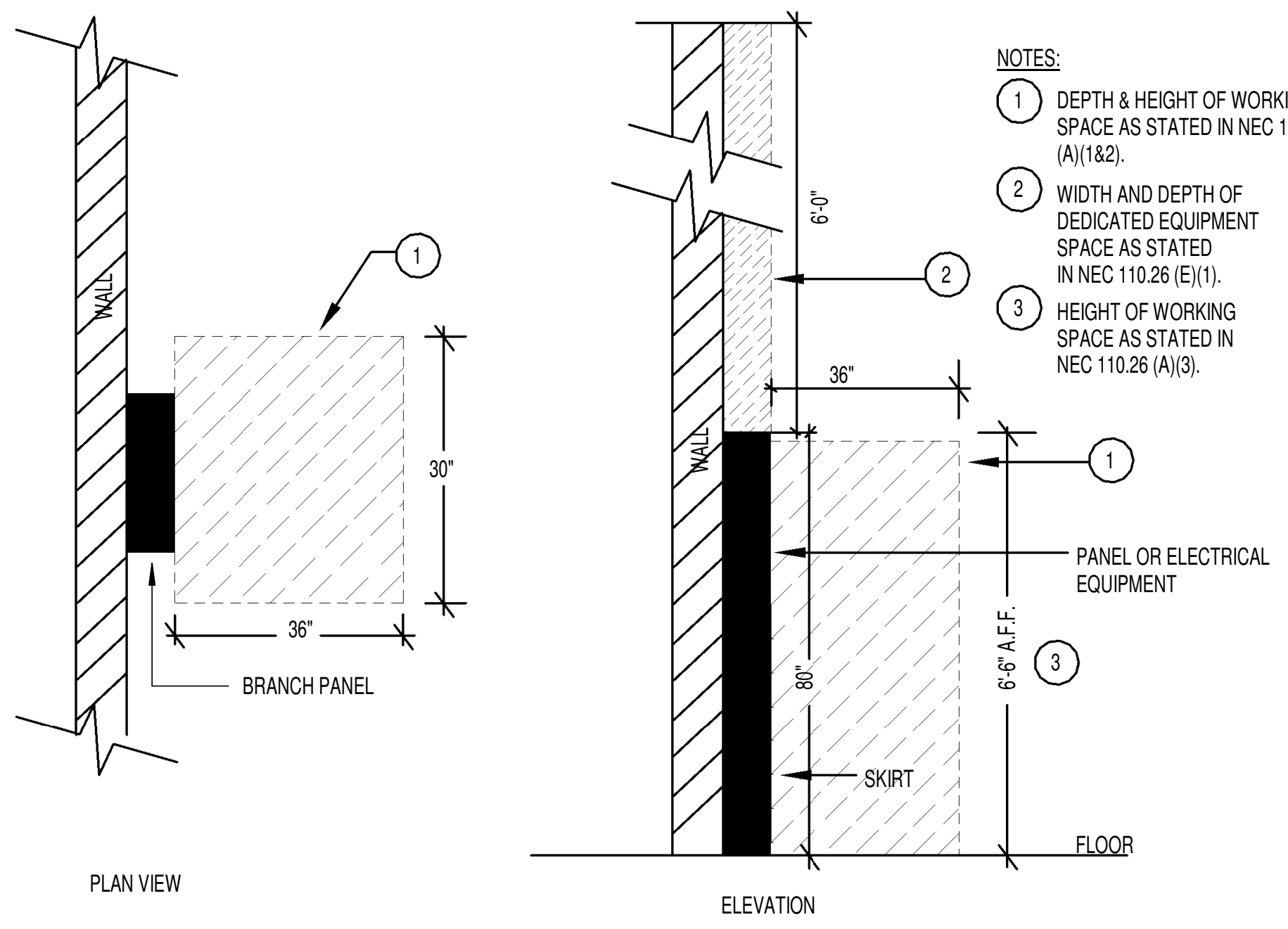
11 ED.01 DETAIL - TYPICAL CONDUIT RACK

SCALE: NONE



10 ED.01 DETAIL - POWER WIRING TO ROOF TOP UNIT

SCALE: NONE



NOTES:

① DEPTH & HEIGHT OF WORKING SPACE AS STATED IN NEC 110.26 (A)(1&2).

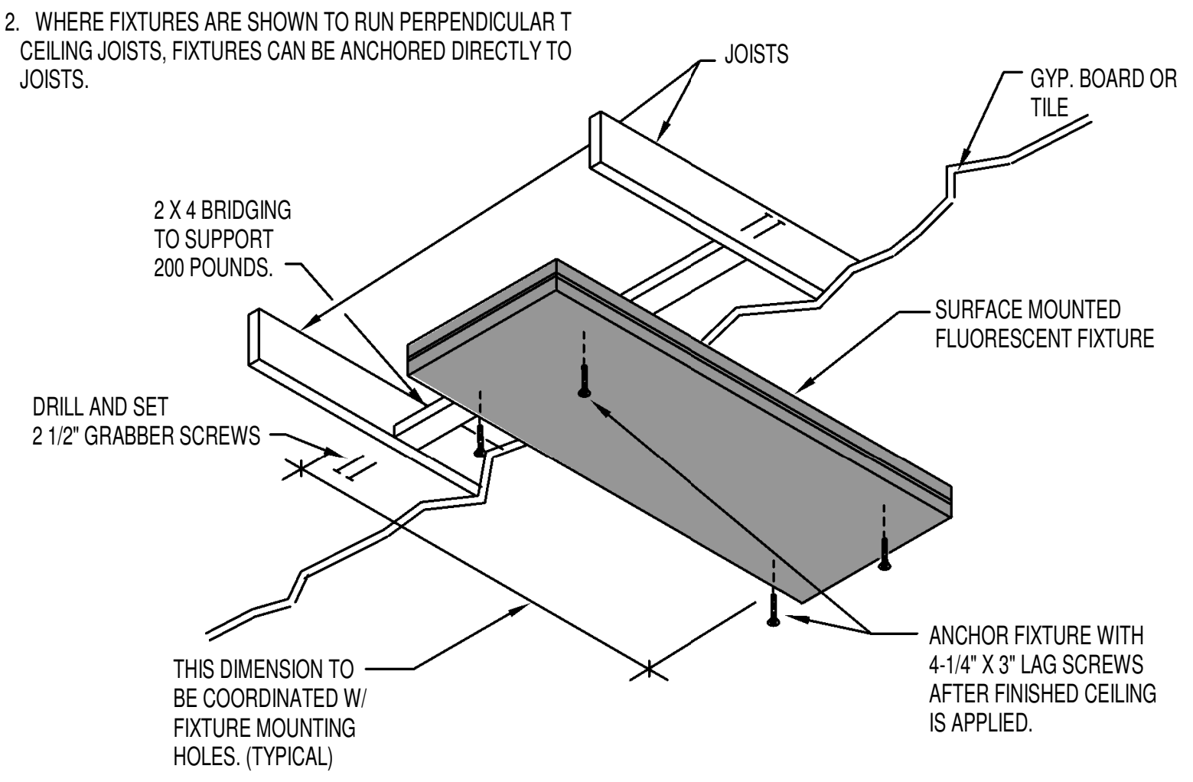
② WIDTH AND DEPTH OF DEDICATED EQUIPMENT SPACE AS STATED IN NEC 110.26 (E)(1).

③ HEIGHT OF WORKING SPACE AS STATED IN NEC 110.26 (A)(3).

9 ED.01 DETAIL - NEC CLEARANCE FOR PANELS & EQUIPMENT

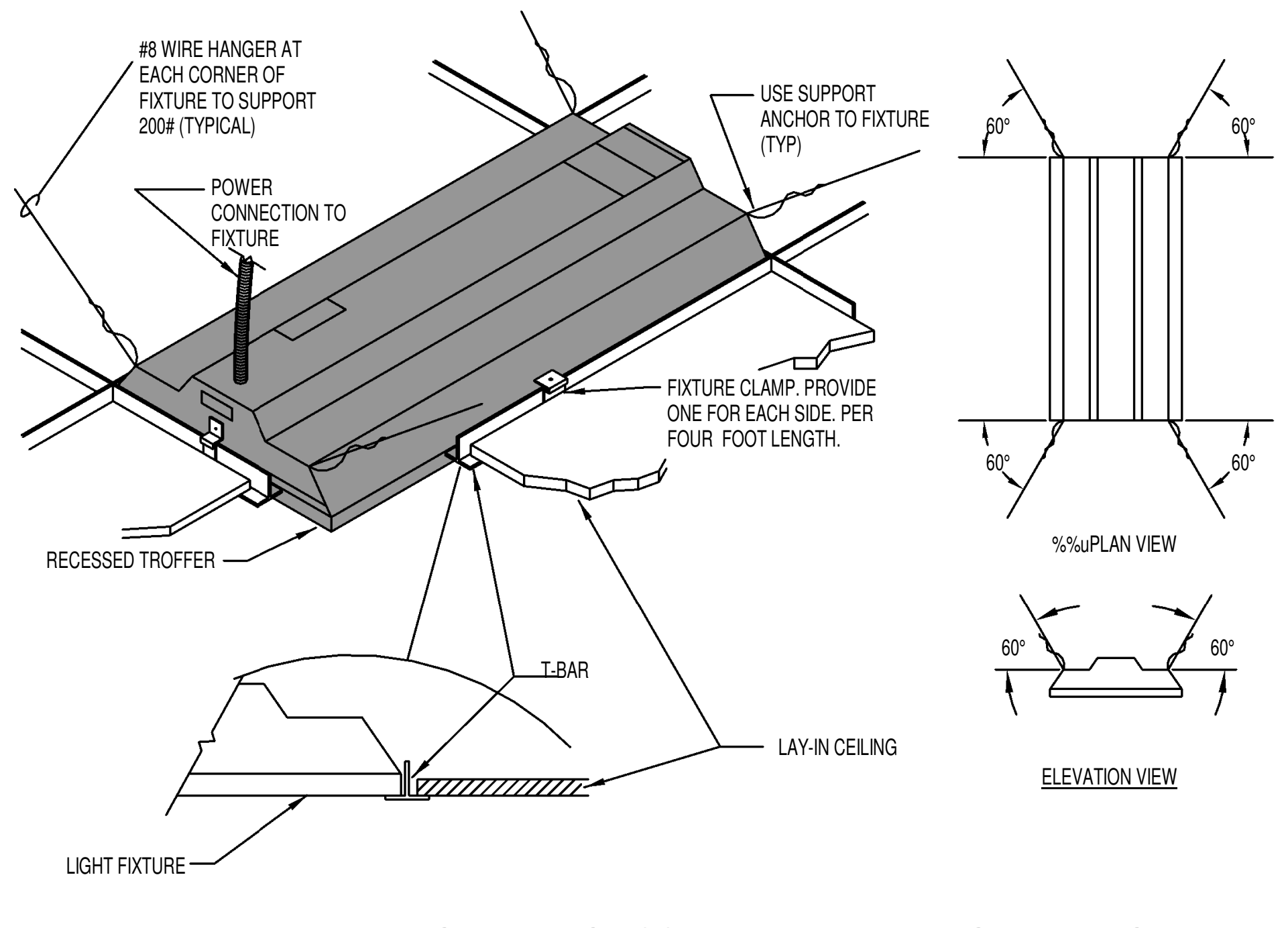
SCALE: NONE

NOTES:
1. ELEC. CONTR. TO DRILL OUT 2 X 4 W/ DRILL PRIOR TO INSTALLING LAG SCREWS TO PREVENT SPLITTING OF WOOD BRIDGING.
2. WHERE FIXTURES ARE SHOWN TO RUN PERPENDICULAR T CEILING JOISTS, FIXTURES CAN BE ANCHORED DIRECTLY TO JOISTS.


JOISTS
GYP. BOARD OR TILE
2 X 4 BRIDGING TO SUPPORT 200 POUNDS.
SURFACE MOUNTED FLUORESCENT FIXTURE
DRILL AND SET 2 1/2" GRABBER SCREWS
THIS DIMENSION TO BE COORDINATED W/ FIXTURE MOUNTING HOLES. (TYPICAL)
ANCHOR FIXTURE WITH 4-1/4" X 3" LAG SCREWS AFTER FINISHED CEILING IS APPLIED.

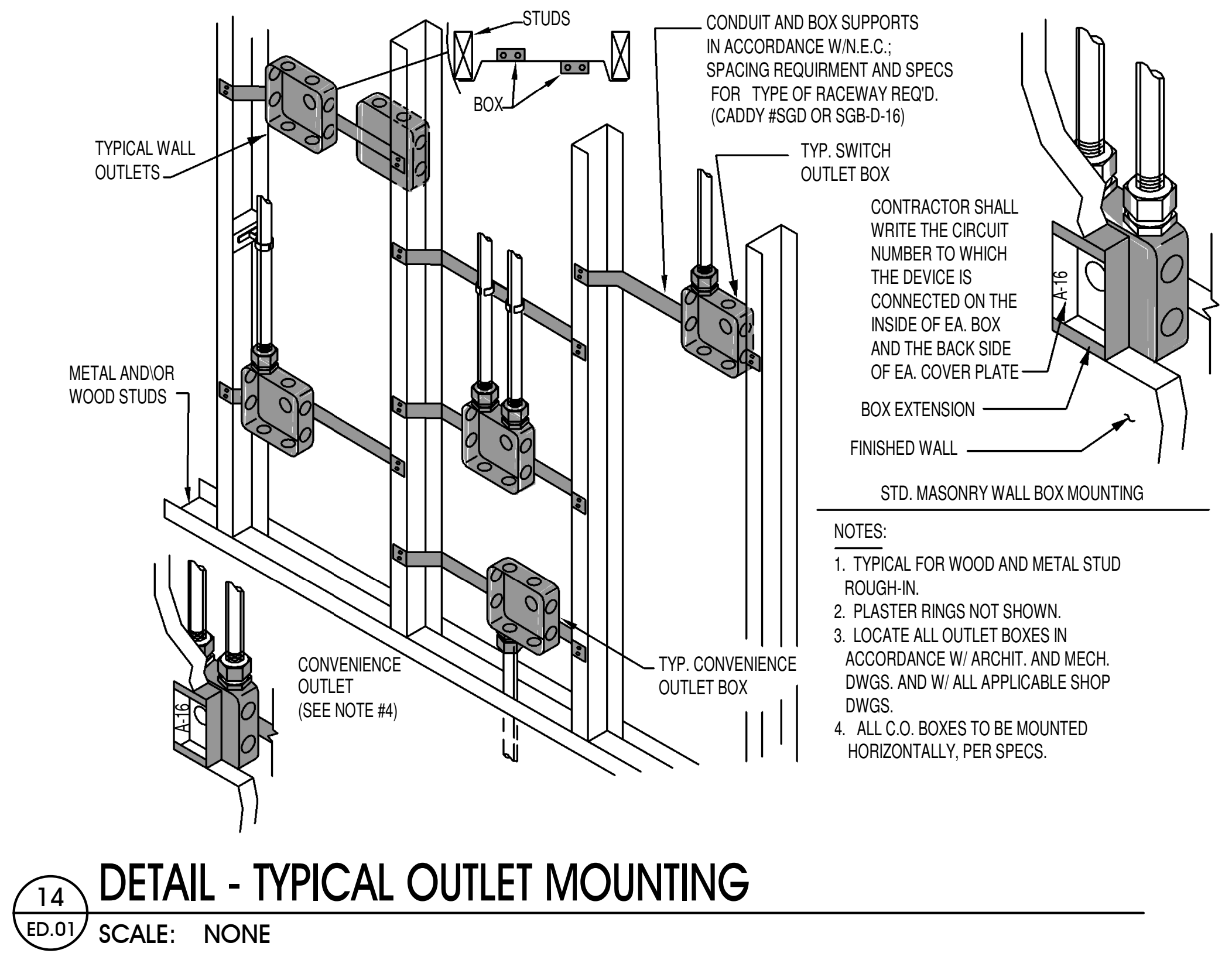
16 ED.01 DETAIL - TYPICAL SURFACE FIXTURE MOUNTING

SCALE: NONE


#8 WIRE HANGER AT EACH CORNER OF FIXTURE TO SUPPORT 200# (TYPICAL)
POWER CONNECTION TO FIXTURE
USE SUPPORT ANCHOR TO FIXTURE (TYP)
FIXTURE CLAMP. PROVIDE ONE FOR EACH SIDE. PER FOUR FOOT LENGTH.
RECESSED TROFFER
T-BAR
LAY-IN CEILING
LIGHT FIXTURE
60°
60°
60°
60°
%%uPLAN VIEW
60°
60°
ELEVATION VIEW

15 ED.01 DETAIL - TYPICAL RECESSED FIXTURE MOUNTING

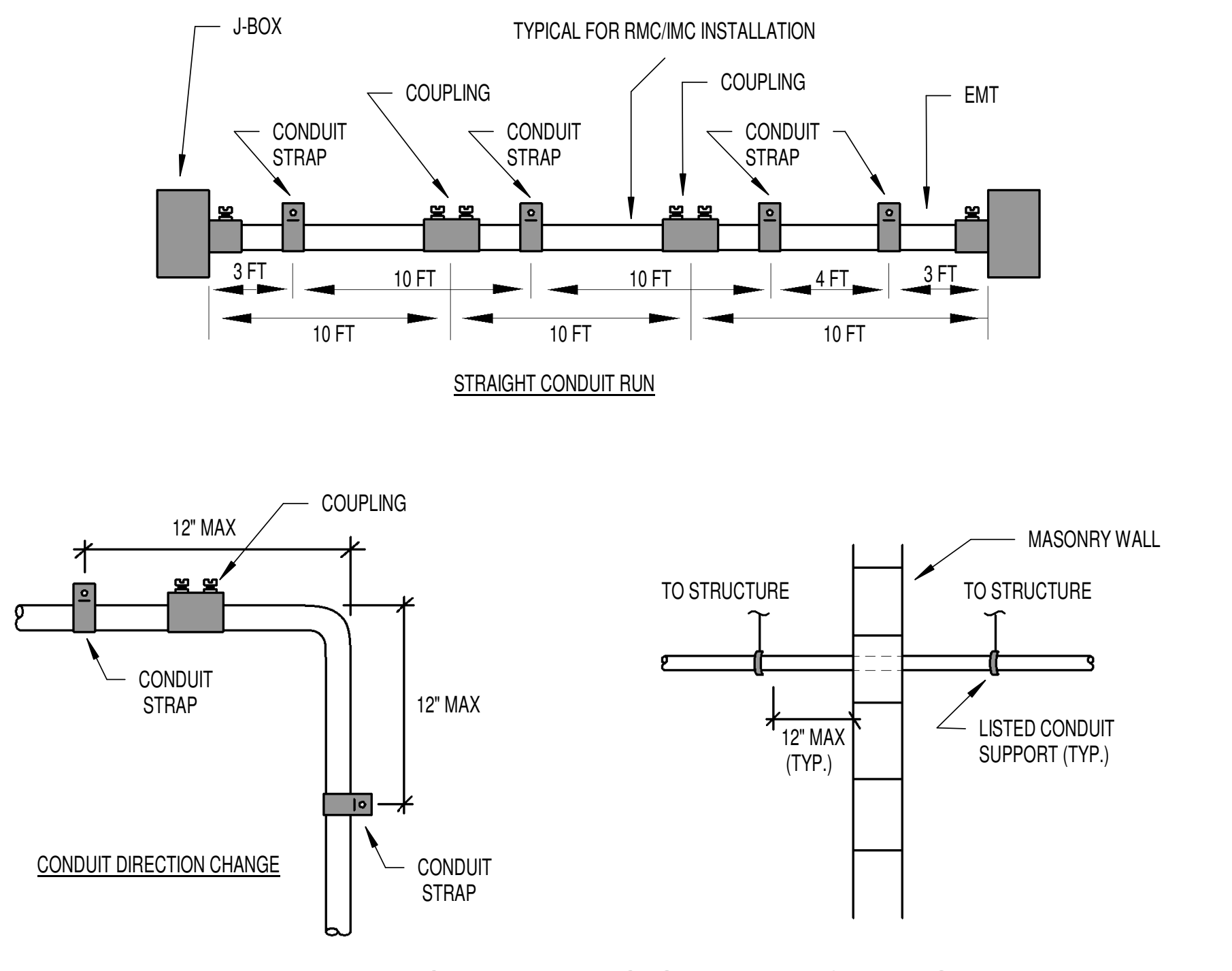
SCALE: NONE


STUDS
BOX
CONDUIT AND BOX SUPPORTS IN ACCORDANCE W/N.E.C.; SPACING REQUIRMENT AND SPECS FOR TYPE OF RACEWAY REQ'D. (CADDY #SGD OR SGB-D-16)
TYPICAL WALL OUTLETS
TYP. SWITCH OUTLET BOX
CONTRACTOR SHALL WRITE THE CIRCUIT NUMBER TO WHICH THE DEVICE IS CONNECTED ON THE INSIDE OF EA. BOX AND THE BACK SIDE OF EA. COVER PLATE
A-16
BOX EXTENSION
FINISHED WALL
STD. MASONRY WALL BOX MOUNTING
METAL AND\OR WOOD STUDS
CONVENIENCE OUTLET (SEE NOTE #4)
A-16
TYP. CONVENIENCE OUTLET BOX

NOTES:
1. TYPICAL FOR WOOD AND METAL STUD ROUGH-IN.
2. PLASTER RINGS NOT SHOWN.
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE W/ ARCHIT. AND MECH. DWGS. AND W/ ALL APPLICABLE SHOP DWGS.
4. ALL C.O. BOXES TO BE MOUNTED HORIZONTALLY, PER SPECS.

14 ED.01 DETAIL - TYPICAL OUTLET MOUNTING

SCALE: NONE



13 ED.01 DETAIL - TYPICAL EMT CONDUIT SUPPORT

SCALE: NONE

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Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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208.338.1212

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AUTHOR
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PROJECT
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PROJECT ADDRESS
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ELECTRICAL DETAILS

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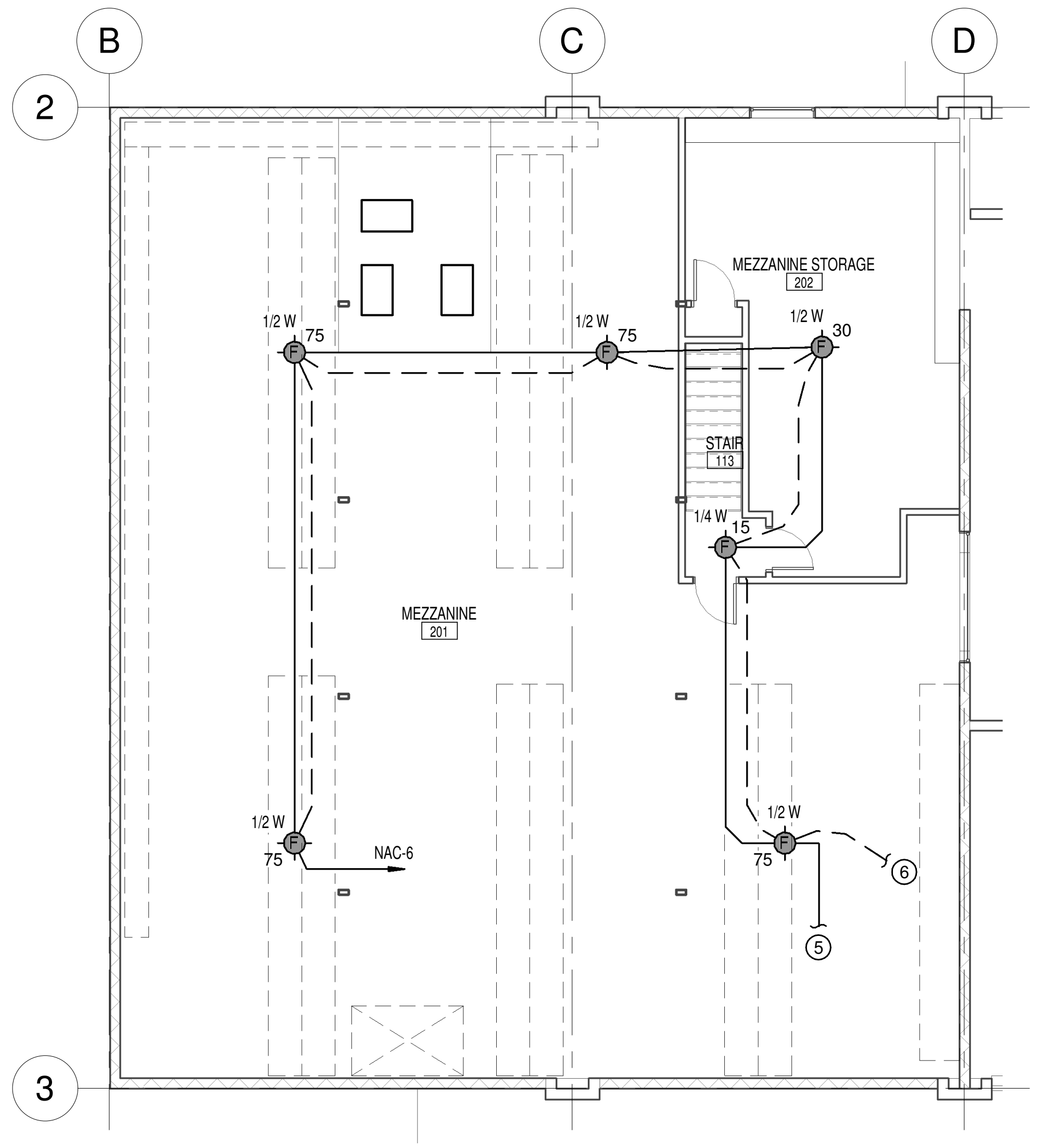


2 MEZZANINE FLOOR PLAN - FIRE ALARM

SCALE 1/8" = 1'-0"

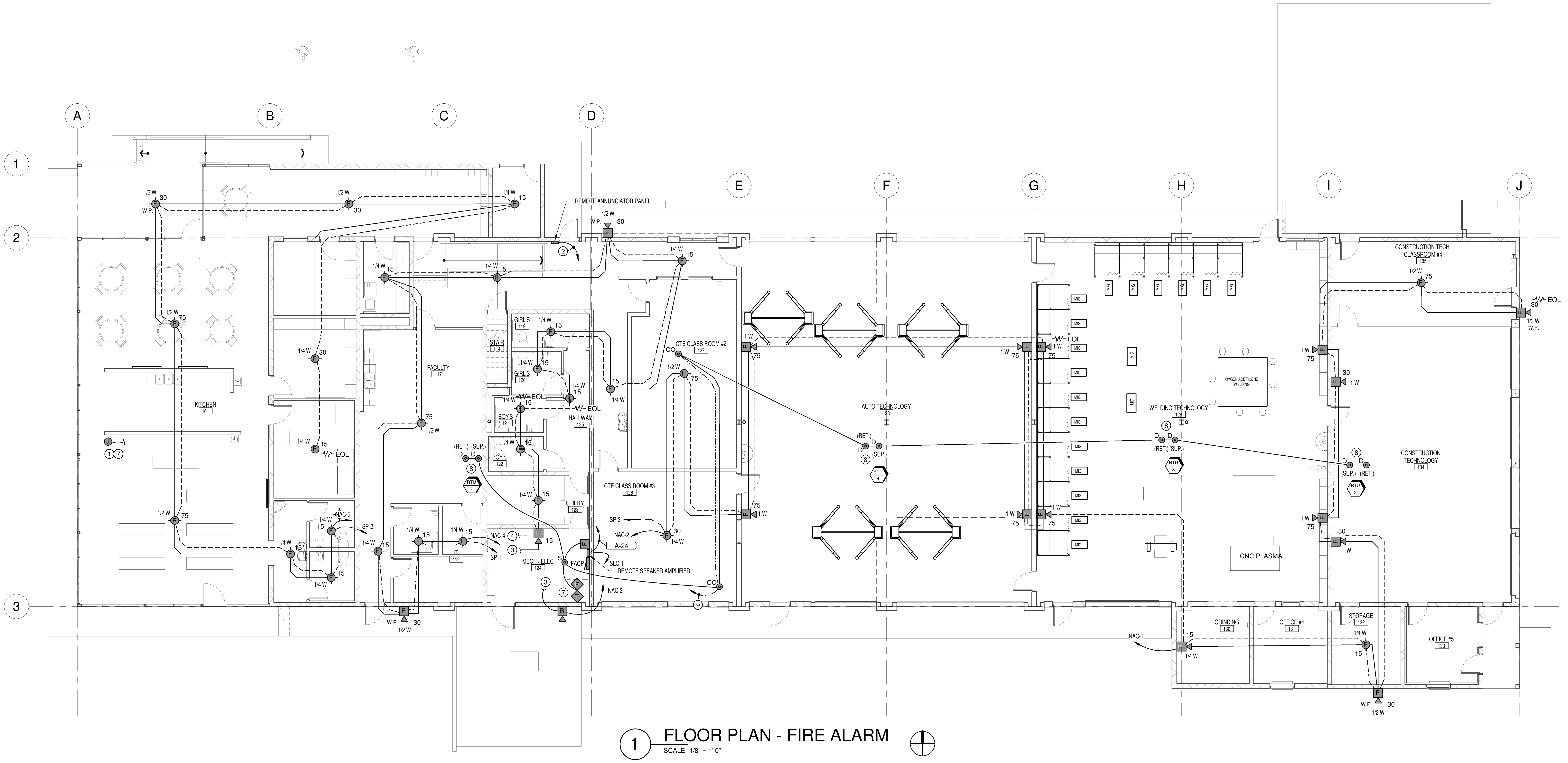
FIRE ALARM SYMBOLS		
SYMBOL	DESCRIPTION	REMARKS
◎S	SMOKE DETECTOR	
◎H	HEAT DETECTOR	
◎D	DUCT SMOKE DETECTOR	
CANDELA SPEAKER TAP	FIRE SPEAKER/STROBE	
CANDELA SPEAKER TAP	CEILING MOUNTED SPEAKER/STROBE	
F	MANUAL PULL STATION	
F	FLOW SWITCH	
T	VALVE POSITION MONITOR	
FACP	FIRE ALARM PANEL	
FSD	FIRE SMOKE DAMPER	
-W- EOL	END OF LINE RESISTOR	PER MANUFACTURER
———	NAC: #16/2 TWISTED PAIR FA CABLE	
———	SLC: #16/2 TWISTED PAIR FA CABLE	
– – – – – –	VOICE: #16/2 SHIELDED TWISTED PAIR	
—··—··—	24VDC OR SIGNAL" #14/2 AWG	

FIRE ALARM GENERAL NOTES

1. INSTALLATION SHALL BE IN STRICT CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE , NFPA 72 2016, LOCAL CODES, AND/OR AUTHORITY HAVING JURISDICTION.
2. FIRE ALARM SYSTEM SHALL BE ADDRESSABLE WITH THE FOLLOWING. SINGLE ADDRESSABLE LOOP FIRE ALARM CONTROL PANELS ARE NOT ACCEPTABLE.
3. INSTALL FIRE ALARM SYSTEM PER FIRE ALARM SYSTEM PROVIDER'S SPECIFICATIONS AND REQUIREMENTS. ALL WIRING MUST BE 100% COMPLETE. ALL WIRING SHALL BE TESTED FREE OF SHORTS, OPENS, AND GROUNDS.
4. WIRING POLARITY SHALL BE OBSERVED THROUGHOUT THE ENTIRE SYSTEM AND SHALL RUN CONTINUOUS FROM FACP TO FIRST DEVICE AND THEN FROM DEVICE TO DEVICE WITHOUT SPLICING IN PULL BOXES OR OTHER BACK BOXES OF DIFFERENT CIRCUITS.
5. NO PARALLEL BRANCHING (T-TAPPING) IS ALLOWED ON NOTIFICATION APPLIANCE CIRCUITS.
6. SMOKE DETECTORS SHALL NOT BE MOUNTED WITHIN 3 FT. OF AIR STREAM OF AIR SUPPLY OR RETURN OUTLETS PER NFPA 72.
7. DETECTORS SHALL NOT BE INSTALLED UNTIL AFTER THE CONSTRUCTION CLEAN-UP OF ALL TRADES IS COMPLETE WITH THE EXCEPTION OF THE AUTHORITY HAVING JURISDICTION REQUIRING FIRE PROTECTION DURING CONSTRUCTION. DETECTORS THAT HAVE BEEN INSTALLED DURING CONSTRUCTION SHALL BE REPLACED.
8. ALL DEVICES, APPLIANCES AND WIRING SHALL BE MARKED WITH A PERMANENT LABEL INDICATING ADDRESS OR NAC AND TO-AND-FROM LOCATIONS.
9. NAC CIRCUITS SHALL BE MINIMUM #14 CONDUCTOR AND BE SEPARATED FROM POWER LIMITED OR SLC CIRCUITS MINIMUM 1". DO NOT INSTALL MORE THAN 12 HORN/STROBES ON 400 FT. OF #14 WIRE.
10. SUBMIT FINAL DESIGN, INCLUDING RISER DIAGRAMS, BATTERY AND VOLTAGE DROP CALCULATIONS PERFORMED BY FIRE SAFETY ENGINEER TO FIRE MARSHAL FOR APPROVAL PRIOR TO INSTALLATION.
11. LAMINATE A COPY OF THE INSTALLED FIRE ALARM SYSTEM AND SUBMIT TO THE OWNER WHEN WORK IS COMPLETE.
12. INSTALL CONDUCTOR QUANTITIES PER FIRE ALARM SUPPLIER.
13. FREE AIR WIRING OF THE SIGNAL LINE CIRCUIT (SLC) SHALL BE INSTALLED PER NEC VIA THE USE OF J-HOOKS OR LISTED SUPPORTS.
14. FIRE ALARM CONDUIT SHALL BE RED (260533-2.1(G)(1)) BUT WHEN IT IS EXPOSED IN A FINISHED SPACE IT SHALL BE PAINTED TO MATCH WALL/CEILING.

FA1.00 KEY NOTES

1	PROVIDE AND INSTALL A ¾" CONDUIT WITH TWO(2) #12 AWG CONDUCTOR FROM ANSUL SYSTEM TO FIRE ALARM PANEL OR NEAREST SIGNAL LINE CIRCUIT ADDRESSABLE DEVICE.
2	PROVIDE AND INSTALL A 1" CONDUIT WITH MULTI-CONDUCTOR CONTROL CABLE FROM FIRE ALARM ANNUNCIATOR TO FIRE ALARM PANEL. CABLE PER MANUFACTUER'S SPECIFCATIONS.
3	UP TO NOTIFICATION APPLIANCE STROBE ABOVE IN MEZZANINE.
4	UP TO NOTIFICATION APPLIANCE SPEAKER ABOVE IN MEZZANINE.
5	DOWN TO NOTIFICATION APPLIANCE STROBE BELOW IN MECHANICAL/ELECTRICAL ROOM BELOW.
6	DOWN TO NOTIFICATION APPLIANCE SPEAKER BELOW IN MECHANICAL/ELECTRICAL ROOM BELOW.
7	PROVIDE AND INSTALL ALL ADDRESSABLE SYSTEM MONITORING DEVICES NECESSARY FOR COMMUNICATION BACK TO THE FIRE ALARM PANEL.
8	DUCT DETECTOR SYMBOL REPRESENTS THE DETECTOR HOUSING, ADDRESSABLE SMOKE DETECTOR, AND ADDRESSABLE RELAY MODULE. MOUNT DUCT DETECTOR ON DUCT DOWNSTREAM OF UNIT FILTERS BUT BEFORE FIRST SUPPLY/RETURN AIR OPENING. CONNECT FORM-C N/C CONTACT ON RELAY MODULE TO HVAC UNIT FIRE ALARM POINT OF CONNECTION TO OPERATE PER FIRE ENGINEER SPECIFICATIONS.
9	CO DETECTORS REQUIRE SEPARATE 24V DC POWER. OBTAIN POWER FROM FACP AUXILIARY 24VDC OUTPUT POWER.



1 FLOOR PLAN - FIRE ALARM

SCALE 1/8" = 1'-0"

PROFESSIONAL OF RECORD STAMP

REVISION

CONST. ESTIMATE SET 1-14-25

Nielson Engineering
Consulting Engineers
156 North Twelfth Avenue
Pocatello, Idaho 83201
PHONE (208) 232-2577
FAX (208) 234-0918

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HSA
ARCHITECTS
270 N. 27th St. BOISE, ID. 83702
208.338.1212

DATE
1-9-25

REF NO.
2444

AUTHOR
MJE

PROJECT
CAREER TECHNICAL EDUCATION BUILDING

PROJECT ADDRESS
915 S. MAIN STREET, PAYETTE IDAHO

FLOOR PLAN - FIRE ALARM

SHEET NO.
FA1.00