#### GENERAL NOTES:

PRESSURE FOR COMPONENTS AND CLADDING

- ACCESS TO BUILDING FOR PERSONS IN WHEELCHAIRS IS DESIGNED BY AND FIELD BUILT BY OTHERS AND SUBJECT TO LOCAL JURISDICTION APPROVAL. THE PRIMARY ENTRANCE MUST BE ACCESSIBLE
- ALL DOORS SHALL BE OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY, TOOL, SPECIAL KNOWLEDGE OR EFFORT. MANUALLY OPERATED FLUSH BOLTS OR SURFACE BOLTS SHALL NOT BE USED.
- ALL GLAZING WITHIN A 24 INCH ARC OF DOORS, WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FLOOR, AND ALL GLAZING IN DOORS SHALL BE SAFETY, TEMPERED OR ACRYLIC PLASTIC SHEET.
- ALL STEEL STRAPS REFERENCED ON FLOOR PLAN SHALL BE 1.5 INCH x 26 GA. WITH 7 - 15 GA.  $\times 7/16$  INCH CROWN  $\times 1$  INCH STAPLES EACH END OF STRAP OR EQUIVALENT FROM RIDGE BEAM TO COLUMN, AND COLUMN TO FLOOR.
- PORTABLE FIRE EXTINGUISHER PER N.F.P.A. 10 INSTALLED BY OTHERS ON SITE, AND SUBJECT TO LOCAL JURISDICTION.
- PROVISIONS FOR EXIT DISCHARGE LIGHTING ARE THE RESPONSIBILITY OF THE BUILDING OWNER AND SUBJECT TO LOCAL JURISDICTION APPROVAL WHEN NOT SHOWN ON THE FLOOR PLAN (INCLUDING EMERGENCY LIGHTING, WHEN REQUIRED) WHEN LOW SIDES OF ROOF PROVIDE LESS THAN 6" OF OVERHANG, GUTTERS AND DOWN SPOUTS SHALL BE SITE INSTALLED, DESIGNED BY OTHERS, SUBJECT TO
- LOCAL JURISDICTION APPROVAL. . IN WIND-BORNE DEBRIS REGIONS, EXTERIOR GLAZING SHALL BE IMPACT RESISTANT OR PROTECTED WITH AN IMPACT RESISTANT COVERING MEETING THE REQUIRMENTS OF AN APPROVED IMPACT RESISTANT STANDARD, OR ASTM E1996, WIND-BORNE
- DEBRIS REGIONS ARE DESIGNATED IN SECTION 1609 OF THE IBC AND NCBC WINDOWS AND DOORS MUST BE CERTIFIED FOR COMPLIANCE WITH THE WIND DESIGN

PLUMBING NOTES:

TOILETS SHALL BE ELONGATED WITH NONABSORBENT OPEN FRONT SEATS.

FLOORS SHALL HAVEA SMOOTH, HARD, NONABSORBENT SURFACE THAT EXTENDS

THIS BUILDING SHALL BE CONNECTED TO A PUBLIC WATER SUPPLY AND SEWER SYSTEM IF THESE ARE AVAILABLE.

T & P RELIEF VALVE WITH DRAIN TO EXTERIOR, AND A SHUT OFF VALVE WITHIN

WATER SUPPLY LINES SHALL BE CPVC, OR COPPER, AND SHALL BE INSTALLED IN

BUILDING DRAIN AND CLEANOUTS ARE DESIGNED AND SITE INSTALLED BY OTHERS,

THERMAL EXPANSION DEVICE, IF REQUIRED BY WATER HEATER INSTALLED, AND IF NOT SHOWN ON PLUMBING PLAN, IS DESIGNED AND SITE INSTALLED BY OTHERS,

WATER PIPES INSTALLED IN A WALL EXPOSED TO THE EXTERIOR SHALL BE LOCATED

WATER, SOIL AND WASTE PIPES IN UNCONDITION SPACES SHALL BE INSULATED AND

WHEN RESTROOM FACILITIES AND/OR PLUMBING FIXTURES REQUIRED PER IPC & NCPC

SECTION 403 ARE NOT PROVIDED WITHIN THE BUILDING. IT MUST BE PROVIDED ON

SITE AND BE HANDICAPPED ACCESSIBLE, AND ARE SUBJECT TO THE APPROVAL OF

THE LOCAL JURISDICTION HAVING AUTHORITY (THIS NOTE SHALL BE INDICATED ON

TEMPERATURE ACTUATED MIXING VALVES WHICH ARE INSTALLED TO REDUCE WATER

TEMPERED WATER SHALL BE SUPPLIED THROUGH A WATER TEMP LIMITING DEVICE THAT CONFORMS TO ASSE 1070 AND SHALL LIMIT THE TEMPERED WATER TO A

LAVATORY FAUCETS MUST BE OF THE METERING TYPE (NCPC SECTION 604.4.1)

CUSTOMER ASSUMES ALL RESPONSIBILTY FOR REQUIRED PLUMBING FIXTURES

TEMPERATURE TO DEFINE LIMITS SHALL COMPLY WITH ASSE 1017

WATER CLOSETS ARE TANK TYPE AND URINALS ARE FLUSH TANK TYPE UNLESS

WATER HEATER SHALL HAVE SAFETY PAN WITH 1 INCH DRAIN TO EXTERIOR.

ACCORDANCE WITH THE MANUFACTURERS LIMITATIONS AND INSTRUCTIONS.

SHOWERS SHALL BE CONTROLLED BY AN APPROVED MIXING VALVE WITH A

REST ROOM WALLS SHALL BE COVERED WITH NONABSORBENT MATERIAL

ALL PLUMBING FIXTURES SHALL HAVE SEPARATE SHUTOFF VALVES.

TO A MINIMUM HEIGHT OF 48 INCHES A.F.F.

3 FEET ON A COLD WATER SUPPLY LINE.

SUBJECT TO LOCAL JURISDICTION APPROVAL

ON THE HEATED SIDE OF THE WALL INSULATION.

OTHERWISE SPECIFIED.

SUBJECT TO LOCAL APPROVAL.

PROTECTED FROM FREEZING

WHEN NOT SHOWN ON PLAN.

THE DATA PLATE)

MAX OF 110°F(43°C)

UPWARD ONTO THE WALLS AT LEAST 6 INCHES.

DWV SYSTEM SHALL BE EITHER ABS OR PVC - DWV

MAXIMUM WATER OUTLET TEMPERATURE OF 120°F (48.8°C).

- THIS BUILDING IS DESIGNED FOR NORTH CAROLINA THERMAL ZONE 4a1. A FIRE ALARM MUST BE SITE INSTALLED BY OTHERS, SUBJECT TO APPROVAL BY
- AUTHORITY HAVING JURISDICTION. 2. FOR NC INSTALLATION, REQUIRED EGRESS WINDOWS SHALL HAVE BOTTOM OF CLEAR OPENING NOT GREATER THAN 44" MEASURED FROM THE FLOOR. FOR CLASSROOMS SERVING 5TH GRADE AND LOWER THE BOTTOM OF THE CLEAR OPENING SHALL NOT BE MORE THAN 32" MEASURED FROM THE FLOOR.

#### **ELECTRICAL NOTES:**

ALL CIRCUITS AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE APPROPRIATE ARTICLES OF THE NATIONAL ELECTRICAL CODE (NEC). WHEN LIGHT FIXTURES ARE INSTALLED IN CLOSETS THEY SHALL BE SURFACE MOUNTED OR RECESSED. INCANDESCENT FIXTURES SHALL HAVE COMPLETELY ENCLOSED LAMPS. SURFACE MOUNTED INCANDESCENT FIXTURES SHALL HAVE A MINIMUM CLEARANCE OF 12 INCHES AND ALL OTHER FIXTURES SHALL HAVE

A MINIMUM CLEARANCE OF 6 INCHES FROM "STORAGE AREA" AS DEFINED BY

- NEC 410-8(a) WHEN WATER HEATERS ARE INSTALLED THEY SHALL BE PROVIDED WITH READILY ACCESSIBLE DISCONNECTS ADJACENT TO THE WATER HEATERS SERVED. THE BRANCH CIRCUIT SWITCH OR CIRCUIT BREAKER SHALL BE PERMITTED TO SERVE AS THE DISCONNECTING MEANS ONLY WHERE THE SWITCH OR CIRCUIT BREAKER IS WITHIN SIGHT FROM THE WATER HEATER OR IS CAPABLE OF BEING LOCKED IN THE OPEN POSITION.
- HVAC EQUIPMENT SHALL BE PROVIDED WITH READILY ACCESSIBLE DISCONNECTS ADJACENT TO THE EQUIPMENT SERVED. A UNIT SWITCH WITH A MARKED "OFF POSITION THAT IS A PART OF THE HVAC EQUIPMENT AND DISCONNECTS ALL UNGROUNDED CONDUCTORS SHALL BE PERMITTED AS THE DISCONNECTING MEANS WHERE OTHER DISCONNECTING MEANS ARE ALSO PROVIDED BY A
- READILY ACCESSIBLE CIRCUIT BREAKER. PRIOR TO ENERGIZING THE ELECTRICAL SYSTEM THE INTERRUPTING RATING OF THE MAIN BREAKER MUST BE DESIGNED AND VERIFIED AS BEING IN COMPLI-
- ANCE WITH SECTION 110-9 OF THE NEC BY LOCAL ELECTRICAL CONSULTANT. THE MAIN ELECTRICAL PANEL AND FEEDERS ARE DESIGNED BY OTHERS, SITE INSTALLED AND SUBJECT TO LOCAL JURISDICTION APPROVAL
- ALL CIRCUITS CROSSING OVER MODULE MATING LINE(S) SHALL BE SITE CONNECTED WITH APPROVED ACCESSIBLE JUNCTION BÓXES, OR CABLE CONNECTORS ALL RECEPTACLES INSTALLED IN WET LOCATIONS (EXTERIOR) SHALL BE IN WEATHER PROOF (WP) ENCLOSURES. THE INTEGRITY OF WHICH IS NOT AFFECTED WHEN AN
- ATTACHMENT PLUG CAP IS INSERTED OR REMOVED. THE RECEPT ITSELF SHALL ALSO BE LISTED FOR DAMP AND WET LOCATIONS AS PER NEC AND NCEC EXTERIOR LIGHTS NOT INTENDED FOR 24 HOUR USE SHALL BE CONNECTED TO A PHOTOCELL OR TIMER.
- THE BUILDINGS FIRE ALARM SYSTEM (PROTECTIVE SIGNALING SYSTEMS, FIRE DETECTION SYSTEMS, ETC.) SHALL BE DESIGNED IN ACCORDANCE WITH NFPA 101 AND NFPA 72 AND SITE INSTALLED BY OTHERS SUBJECT TO LOCAL BUILDING OFFICIAL REVIEW AND APPROVAL THE FIRE ALARM CONTROL PANEL MUST BE INSTALLED IN A HIGHLY VISIBLE LOCATION ACCEPTABLE TO THE LOCAL AUTHORITY HAVING JURISDICTION. (THE FACP CANNOT BE INSTALLED IN A CLOSET OR BATHROOM).
- TAMPER RESISTANT RECEPTS SHALL BE INSTALLED IN CHILD CARE FACILITIES WITH KIDS AGE 7 AND YOUNGER.

#### N.C. INSTALLATION INSTRUCTIONS

#### ATTENTION LOCAL INSPECTIONS DEPARTMENT

INSTALLATION INSTRUCTIONS FOR THIS MODULAR BUILDING ARE INCLUDED BY ATTACHMENT TO THESE PLANS. ANY PLANS SET WHICH DOES NOT CONTAIN AN ATTACHMENT ENTITLED "INSTALLATION INSTRUCTIONS" IS INCOMPLETE. REFER TO THE FOLLOWING SECTIONS OF THE PLAN SET AND INSTALLATION FOR IMPORTANT INFORMATION CONCERNING THE INSTALLATION OF THE MODULAR

- THE INTERCONNECTION BETWEEN BUILDING MODULES AT THE FLOOR AND ROOF SHALL BE SPECIFIED ON THE CROSS SECTION DRAWING ON THE PLAN SET. BUILDING TIE DOWN AND ANCHORAGE REQUIREMENTS ARE AS INDICATED ON
- FOUNDATION PLAN. ELECTRICAL INTERCONNECTIONS BETWEEN BUILDING MODULES SHALL BE PER PAGES E1.2, E2.0, E2.1, E2.2, E4.1 OF THE INSTALLATION INSTRUCTIONS
- (IF APPLICABLE) MECHANICAL INTERCONNECTIONS BETWEEN BUILDING MODULES SHALL BE PER
- PAGES E1.0, E2.4, E2.5 OF THE INSTALLATION INSTRUCTIONS (IF APPLICABLE). PLUMBING INTERCONNECTIONS BETWEEN BUILDING MODULES SHALL BE PER PAGES E1.1, E1.2, E2.3, E4.1 OF THE INSTALLATION INSTRUCTIONS (IF APPLICABLE)
- FIRE BLOCKING SHALL BE PROVIDED PER SECTION 716.2 AND 1406.2.4 OF THE
- N.C. BUILDING CODE (AS APPLICABLE). AIR INFILTRATION AT MODULE MATE LINES SHALL BE LIMITED BY INSTALLING SILL TAPE ALONG THE MATE LINES DURING SET UP AND/OR BY INSTALLING CONTINUOUS SHEATHING ACROSS THE MATE LINE JOINTS AFTER SET UP.

## ATTENTION LOCAL INSPECTIONS DEPARTMENT

#### SITE INSTALLED ITEMS

THE FOLLOWING ITEMS HAVE NOT BEEN COMPLETED BY THE MANUFACTURER. HAVE NOT BEEN INSPECTED BY RADCO AND ARE NOT CERTIFIED BY THE STATE MODULAR LABEL. NOTE THAT THIS LIST DOES NOT NECESSARILY LIMIT THE ITEMS OF WORK AND MATERIAL THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SITE RELATED ITEMS ARE SUBJECT TO LOCAL JURISDICTION APPROVAL. CODE COMPLIANCE MUST BE DETERMINED AT

- 1. THE COMPLETE FOUNDATION SUPPORT AND TIE DOWN SYSTEM. 2. RAMPS, STAIRS AND GENERAL ACCESS TO THE BUILDING.
- 3. PORTABLE FIRE EXTINGUISHER(S). 4. BUILDING DRAINS, CLEANOUTS, DRINKING FOUNTAIN,

THE LOCAL LEVEL.

- SERVICE SINK, AND HOOK-UP TO PLUMBING SYSTEM. 5. ELECTRICAL SERVICE HOOK-UP (INCLUDING FEEDERS) TO THE BUILDING.
- 5. THE MAIN ELECTRICAL PANEL AND SUB-FEEDERS 7. CONNECTION OF ELECTRICAL CIRCUITS CROSSING OVER MODULE
- MATELINE(S) (MULTI-UNITS ONLY). 8. STRUCTURAL AND AESTHETIC INTERCONNECTIONS BETWEEN MODULES (MULTI-UNITS ONLY).
- 9. FIRE INSPECTION 10. GLAZED OPENING PROTECTION (SEE GENERAL NOTE NO. 8)
- 11. FIRE ALARM 12. DOORS AND HEADERS CROSSING MATELINE (SEE FLOOR PLAN AND SHEET 5 OF 5 FOR FURTHER INFORMATION).

#### WINDOW & DOOR SPECIFICATIONS

- . DBL. PANE WINDOWS ARE REQUIRED FOR ALL CLIMATE ZONES. SEE THE COMCHECK ENERGY CALCULATIONS FOR THE MAXIMUM ALLOWED U-FACTOR AND SHGC.
- 2. THE MAXIMUM ALLOWABLE AIR LEAKAGE RATE FOR WINDOWS IS 0.3 CFM PER SQUARE FEET OF WINDOW AREA.
- 3. THE MAXIMUM ALLOWABLE AIR LEAKAGE RATE FOR EXTERIOR DOORS

IS 0.5 CFM PER SQUARE FEET OF DOOR AREA.

### MECHANICAL NOTES:

- ALL SUPPLY AIR REGISTERS SHALL BE 24 INCHES x 24 INCHES ADJUSTABLE WITH 8 INCHES x 18 INCHES (INSIDE) OVERHEAD FIBERGLASS DUCT, UNLESS OTHERWISE SPECIFIED. DUCTS IN UNCONDITIONED SPACES SHALL HAVE R-5 MINIMUM INSULATION EXCEPT DUCTS EXPOSED TO VENTILATED ATTICS
- AND CRAWL SPACES SHALL HAVE R-6.5 INSULATION. INTERIOR DOORS SHALL BE UNDERCUT 1.5 INCHES ABOVE FINISHED FLOOR FOR AIR RETURN AND/OR AS NOTED ON FLOOR PLAN (FOR UNRATED DOORS) HVAC EQUIPMENT SHALL BE EQUIPPED W/OUTSIDE FRESH AIR INTAKES PROVIDING
- 10 CFM PER PERSON & 0.12 CFM PER S.F. BLDG. AREA PER SECTION 403.3 OF IMC & NCMC. VENT FANS SHALL BE DUCTED TO THE EXTERIOR AND TERMINATE AT AN
- APPROVED VENT CAP EXHAUST FANS SHALL PROVIDE A MINIMUM OF 70 CFM FOR EACH WATER CLOSET AND URINAL.

#### COMPLIANCE WITH LOCAL REQUIREMENTS

RULE 110-2-4-03: ALL INDUSTRIAL BUILDINGS BEARING AN INSIGNIA APPROVAL ISSUED BY THE COMMISSIONER PURSUANT TO THES RULES SHALL BE HELD TO COMPLY WITH THE REQUIREMENTS OF ALL ORDINANCES OR REGULATIONS ENACTED BY ANY LOCAL GOVERNMENT WHICH ARE APPLICABLE TO THE MANUFACTURER AND INSTALLATION OF SUCH BUILDINGS. THE DETERMINATION BY THE COMMISSIONER OF THE SCOPE OF SUCH APPROVAL IS FINAL.

#### THE ENTIRE PERIMETER OF THE BUILDING MUST FRONT ON OPEN SPACE AT LEAST 30 FT. WIDE. SEE ALLOWABLE BUILDING AREA CALCULATION BELOW

#### ALLOWABLE BUILDING AREA

- 1. TABLE 503 ALLOWABLE AREA = 9,500 SQ. FT.
- 2. SECTION 506.2 FRONTAGE INCREASE FOR 30 FT. OPEN SPACE AROUND THE BUILDING IS 75% (9,500 x .75 = 7,125)
- 3. ALLOWABLE AREA: 9,500 + 7,125 = 16,625 > 9621

#### ACCESSIBILITY NOTES:

- THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGN SHALL BE DISPLAYED AT ALL ACCESSIBLE RESTROOM FACILITIES AND AT ACCESSIBLE BUILDING ENTRANCES UNLESS ALL ENTRANCES ARE ACCESSIBLE. INACCESSIBLE ENTRANCES SHALL HAVE DIRECTIONAL SIGNS INDICATING THE ROUTE TO THE NEAREST ACCESSIBLE ENTRANCE.
- ACCESSIBLE DRINKING FOUNTAINS SHALL HAVE A SPOUT HEIGHT NO HIGHER THAN 36 INCHES ABOVE THE FLOOR AND EDGE OF BASIN NO HIGHER THAN 34 INCHES ABOVE THE FLOOR FOR INDIVIDUALS IN WHEELCHAIRS. ADDITIONALLY, DRINKING WATER PROVISIONS SHALL BE MADE FOR INDIVIDUALS WHO HAVE DIFFICULTY BENDING.
- WHERE STORAGE FACILITIES SUCH AS CABINETS, SHELVES, CLOSETS AND DRAWERS ARE PROVIDED AT LEAST ONE TYPE PROVIDED SHALL CONTAIN STORAGE SPACE COMPLYING WITH THE FOLLOWING: DOORS ETC. TO SUCH SPACES SHALL BE ACCESSIBLE (I.E LATCHES, U-SHAPED PULLS); SPACES SHALL BE 15 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FLOOR FOR FORWARD REACH OR SIDE REACH; CLOTHES RODS OR COAT HOOKS SHALL BE A MAXIMUM OF 48 INCHES ABOVE THE FLOOR (46 INCHES MAXIMUM WHEN DISTANCE FROM WHEEL CHAIR TO ROD EXCEEDS 10 INCHES). SHELVES IN KITCHENS OR TOILET ROOMS SHALL BE 40 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE IN FLOOR.
- CONTROLS, DISPENSERS, RECEPTACLES AND OTHER OPERABLE EQUIPMENT SHALL BE NO HIGHER THAN 48 INCHES ABOVE THE FLOOR. RECEPTACLES ON WALLS SHALL BE MOUNTED NO LESS THAN 15 INCHES ABOVE THE FLOOR. EXCEPTION; HEIGHT LIMITATIONS DO NOT APPLY WHERE THE USE OF SPECIAL EQUIPMENT DICTATES OTHERWISE OR WHERE ELECTRICAL RECEPTACLES ARE NOT NORMALLY INTENDED FOR USE BY BUILDING OCCUPANTS.
- WHERE EMERGENCY WARNING SYSTEMS ARE PROVIED, THEY SHALL INCLUDE BOTH AUDIBLE AND VISUAL ALARMS. THE VISUAL ALARMS SHALL BE LOCATED THROUGHOUT, INCLUDING RESTROOM, AND PLACED 80 INCHES ABOVE THE FLOOR OR 6 INCHES BELOW CEILING, WHICH-
- ALL DOORS SHALL BE OPENABLE BY A SINGLE EFFORT. DOOR CLOSERS SHALL BE ADJUSTEI THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DE TO AN OPEN POSITION OF 12 DEGREES SHALL BE 5 SECONDS MINIMUM. THE MAXIMUM FORCE REQUIRED FOR PUSHING OR PULLING OPEN DOORS OTHER THAN FIRE DOORS SHALL NOT EXCEED 5 LBS. FOR ALL SLIDING, FOLDING, AND INTERIOR HINGED DOORS. FLOOR SURFACES SHALL BE STABLE, FIRM, AND SLIP-RESISTANT. CHANGES IN LEVEL BET-

WEEN 0.25 INCH AND 0.5 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:

CHANGES IN LEVEL GREATER THAN 0.5 INCH REQUIRE RAMPS. CARPET PILE THICKNESS SHA

- BE 0.5 MAX. GRATINGS IN FLOOR SHALL HAVE SPACES NO GREATER THAN 0.5 INCH WIDE IN ONE DIRECTION. DOORWAY THRESHOLDS SHALL NOT EXCEED 0.5 INCH IN HEIGHT ACCESSIBLE WATER CLOSETS SHALL BE 17 INCHES TO 19 INCHES, MEASURED FROM THE THE TOP OF THE SEAT. GRAB BARS SHALL BE 36 INCHES LONG MINIMUM WHEN LOCATED BEHIND WATER CLOSET AND 42 INCHES MINIMUM WHEN LOCATED ALONG SIDE OF WATER CLOSET, AND SHALL BE MOUNTED 33 INCHES TO 36 INCHES ABOVE THE FLOOR. IN ADDITION, A VERTICAL GRAB BAR 18 INCHES MINIMUM IN LENGTH SHALL BE MOUNTED ON THE SIDEWALL WITH THE BOTTOM OF THE BAR LOCATED BETWEEN 39 AND 41 INCHES ABOVE THE FLOOR, AND WITH THE CENTER LINE OF THE BAR LOCATED BETWEEN 39
- INCHES AND 41 INCHES FROM THE REAR WALL ACCESSIBLE URINALS SHALL BE STALL-TYPE OR WALL HUNG WITH ELONGATED RIMS AT A MAXIMUM OF 17 INCHES ABOVE THE FLOOR.
- O. ACCESSIBLE LAVATORIES AND SINKS SHALL BE MOUNTED WITH THE RIM NO HIGHER THAN 3-INCHES ABOVE THE FLOOR (THIS EXCLUDES SINKS IN CABINETRY). KNEE CLEARANCE OF AT LEAST 27 INCHES HIGH MUST BE PROVIDED WITH A MINIMUM DEPTH OF 8 INCHES BENEATH THE FIXTURE, AND 9 INCHES HIGH MINIMUM WITH A MINIMUM DEPTH OF 11 INCHES BENEATH THE FIXTURE. THE KNEE SPACE MUST BE AT LEAST 30 INCHES WIDE. 1. HOT WATER AND DRAIN PIPES UNDER ACCESSIBLE LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. INSULATION OR
- PROTECTION MATERIALS MAY BE SITE INSTALLED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER ACCESSIBLE LAVATORIES AND SINKS.
- 2. ACCESSIBLE LAVATORIES AND SINKS SHALL HAVE ACCESIBLE FAUCETS (I.E. LEVER-OPERATED PUSH TYPE, ELECTRONICALLY CONTROLLED) 3. MIRRORS LOCATED ABOVE LAVATORIES, SINKS OR COUNTERS SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE A MAXIMUM OF 40 INCHES ABOVE THE FLOOR.

OTHER MIRRORS IN TOILET ROOMS SHALL BE MOUNTED WITH THE BOTTOM EDGE OF THE

REFLECTING SURFACE 35 INCHES MAXIMUM ABOVE THE FLOOR

- 4. GRAB BARS HAVING A CIRCULAR CROSS SECTION SHALL HAVE AN OUTSIDE DIAMETER OF 1.25 INCHES MINIMUM AND 2.0 INCHES MAXIMUM. THE SPACE BETWEEN THE GRAB BAR AND THE WALL SHALL BE 1.5 INCHES.
- 15. WATER CLOSET FLUSH CONTROL SHALL BE INSTALLED A MAXIMUM OF 36 INCHES ABOVE THE FLOOR AND SHALL BE LOCATED ON THE OPEN SIDE OF THE WATER CLOSET.
- 6. DOORS TO ALL ACCESSIBLE SPACES SHALL HAVE ACCESSIBLE HARDWARE (I.E. LEVER -OPERRATED, PUSHTYPE, U-SHAPED) MOUNTED WITH OPERABLE PARTS BETWEEN 34 INCHES MINIMUM AND 48 INCHES MAXIMUM ABOVE THE FLOOR.
- 7. TOILET STALL DOORS SHALL BE THE SELF-CLOSING TYPE. 18. A TOWEL DISPENSER SHALL BE LOCATED ADJACENT TO ALL ACCESSIBLE LAVTORIES.

#### STRUCTURAL LOAD LIMITATIONS GA, MD, VA,

BUILDING RISK CATEGORY: III

FLOOR LIVE LOAD: A. 40 PSF, 100 PSF CORRIDORS B. 1000 LB. CONCENTRATED LOAD OVER 30 INCH x 30 INCH AREA LOCATED ANYWHERE ON FLOOR

#### ROOF LIVE LOAD: A. 20 PSF

SNOW LOAD: PSF GROUND SNOW LOAD A. Pg = 40B. Pf = 27.3 PSFFLAT ROOF SNOW LOAD SNOW EXPOSURE FACTOR C. Ce = 1.0SNOW IMPORTANCE FACTOR D. Is = 1.1E. Ct = 1.0SNOW THERMAL FACTOR WIND LOAD: ASCE 7-10

A1 Vult = 140 MPH WIND SPEED A2 Vasd = 110 MPH WIND IMPORTANCE FACTOR WIND EXPOSURE CATEGORY D. GCpi= 0.18 INTERNAL PRESSURE COEFFICIENT E. Pr: ZONE 1: 25.6 PSF Pw: ZONE 4: 27.7 PSF

ZONE 2: 43.0 PSF

#### ZONE 3: 64.6 PSF . THIS BUILDING IS NOT DESIGNED FOR PLACEMENT ON THE UPPER HALF OF A HILL OR ESCARPMENT EXCEEDING 15

ZONE 5: 34.3 PSF

FEET IN HEIGHT. SEISMIC LOAD: SEISMIC IMPORTANCE FACTOR A.  $I_{\rm F} = 1.25$ SEISMIC FORCE RESISTING SYSTEM. SEISMIC DESIGN CATEGORY EQUIVALENT LATERAL FORCE ANALYSIS PROCEDURE  $Ss = \leq 0.6$ MAPPED SPECTRAL RESPONSE COEF MAPPED SPECTRAL RESPONSE COFF SPECTRAL RESPONSE COEFFICIENT Sd1 = <\_0.22 SPECTRAL RESPONSE COEFFICIENT V = 13125 LB DESIGN BASE SHEAR K. R = 6.5RESPONSE MODIFICATION COEFFICIENT SEISMIC RESPONSE COEFFICIENT L. Cs = 1.0

FLOOD LOAD: THIS BUILDING IS NOT DESIGNED TO BE LOCATED IN A FLOOD HAZARD AREA.

### APPROVED-STATE OF GEORGIA INDUSTRIALIZED BUILDINGS PROGRAM DESIGN APPROVAL AGENCY: RADCO

CONST. TYPE OCCUPANCY 40/100 FLOOR LL (PSF) 140/110 WIND VELOCITY (MPH) SEISMIC DESIGN CATEGORY

EXTERIOR WALL FIRE RATING (HRS) 4882

PLAN NUMBER APPROVAL DATE

#### STRUCTURAL LOAD LIMITATIONS NORTH CAROLINA

OCCUPANCY CATEGORY: III FLOOR LIVE LOAD:

A. 40 PSF, 100 PSF CORRIDORS B. 1000 LB. CONCENTRATED LOAD OVER 30 INCH x 30 INCH AREA LOCATED ANYWHERE ON FLOOR

ROOF LIVE LOAD: A. 20 PSF SNOW LOAD:

A. Pg = 40 PSF GROUND SNOW LOAD PSF FLAT ROOF SNOW LOAD C. Ce = 1.0SNOW EXPOSURE FACTOR SNOW IMPORTANCE FACTOR E. Ct = 1.0SNOW THERMAL FACTOR ASCF 7-05 WIND LOAD:

A. 110 WIND SPEED B. lw = 1.15WIND IMPORTANCE FACTOR WIND EXPOSURE CATEGORY D. GCpi= 0.18 INTERNAL PRESSURE COEFFICIENT E. Pw: ZONE 4: 27.3 PSF ZONE 5: 32.9 PSF

Pr: ZONE 1: 24.8 PSF ZONE 2: 39.4 PSF ZONE 3: 66.6 PSF

F. THIS BUILDING IS NOT DESIGNED FOR PLACEMENT ON THE UPPER HALF OF A HILL OR ESCARPMENT EXCEEDING 15

A.  $I_E = 1.25$  SEISMIC IMPORTANCE FACTOR SITE CLASS SEISMIC FORCE RESISTING SYSTEM. . A13 SEISMIC DESIGN CATEGORY

EQUIVALENT LATERAL FORCE ANALYSIS PROCEDURE MAPPED SPECTRAL RESPONSE COEF Ss = < 0.6MAPPED SPECTRAL RESPONSE COFF. SPECTRAL RESPONSE COEFFICIENT Sd1 = <\_0.22 SPECTRAL RESPONSE COEFFICIENT V = 13125 LB DESIGN BASE SHEAR RESPONSE MODIFICATION COEFFICIENT K. R = 6.5SEISMIC RESPONSE COEFFICIENT  $\cdot$  Cs = 1.0

THIS BUILDING IS NOT DESIGNED TO BE LOCATED IN A FLOOD HAZARD AREA.

## BUILDING DESIGN PARAMETERS

1. USE/OCCUPANCY: AGE GRUOP:

2. CONSTRUCTION TYPE: YES SPRINKLER SYSTEM: 4. BUILDING AREA: 5. BUILDING HEIGHT:

15 7. NUMBER OF MODULES: 8. OCCUPANT LOAD 290 BASED ON 20 NET SF/PERSON

9. EXTERIOR WALL FIRE RATING: \_\_\_ NOT RATED

10. THIS BUILDING MUST BE INSTALLED WITH THE FIRE

SEPARATION DISTANCES REQUIRED BY IBC 602 AND SECTION 705.3

CALCULATIONS. MANUFACTURERS DATA PLATE, STATE LABELS AND RADCO LABELS ARE TO BE LOCATED ADJACENT TO ELECTRICAL PANEL.

Professional Certification

hereby certify that these document

that I am a duly licensed profession

Maryland. License No.17823,

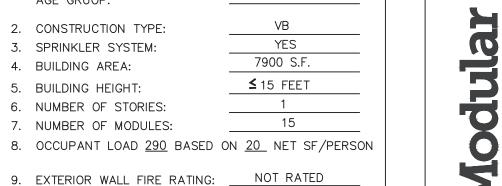
Expiration Date: Jun. 05, 2022

were prepared or approved by me, and

engineer under the laws of the State of

**EDUCATION** SCHOOL AGE

7900 S.F. ≤15 FEET



1

11. ENGERGY CODE COMPLIANCE: SEE ATTACHED ENERGY

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NRMAT THE SECK THIS ATION F BE SED I. TENT ENIUS TTEN US, IN

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. REFER TO STATE PACKAGE PAGE NO. C32.0 FOR REQUIRED DUCT PROTECTION AT CONNECTION TO HVAC UNIT. . THE FOLLOWING NOTE SHALL BE ON THE BLDG. DATA PLATE: THIS BUILDING HAS NOT BEEN DESIGNED FOR AND IS NOT APPROVED FOR INSTALLATION IN THE FOLLOWING MARYLAND

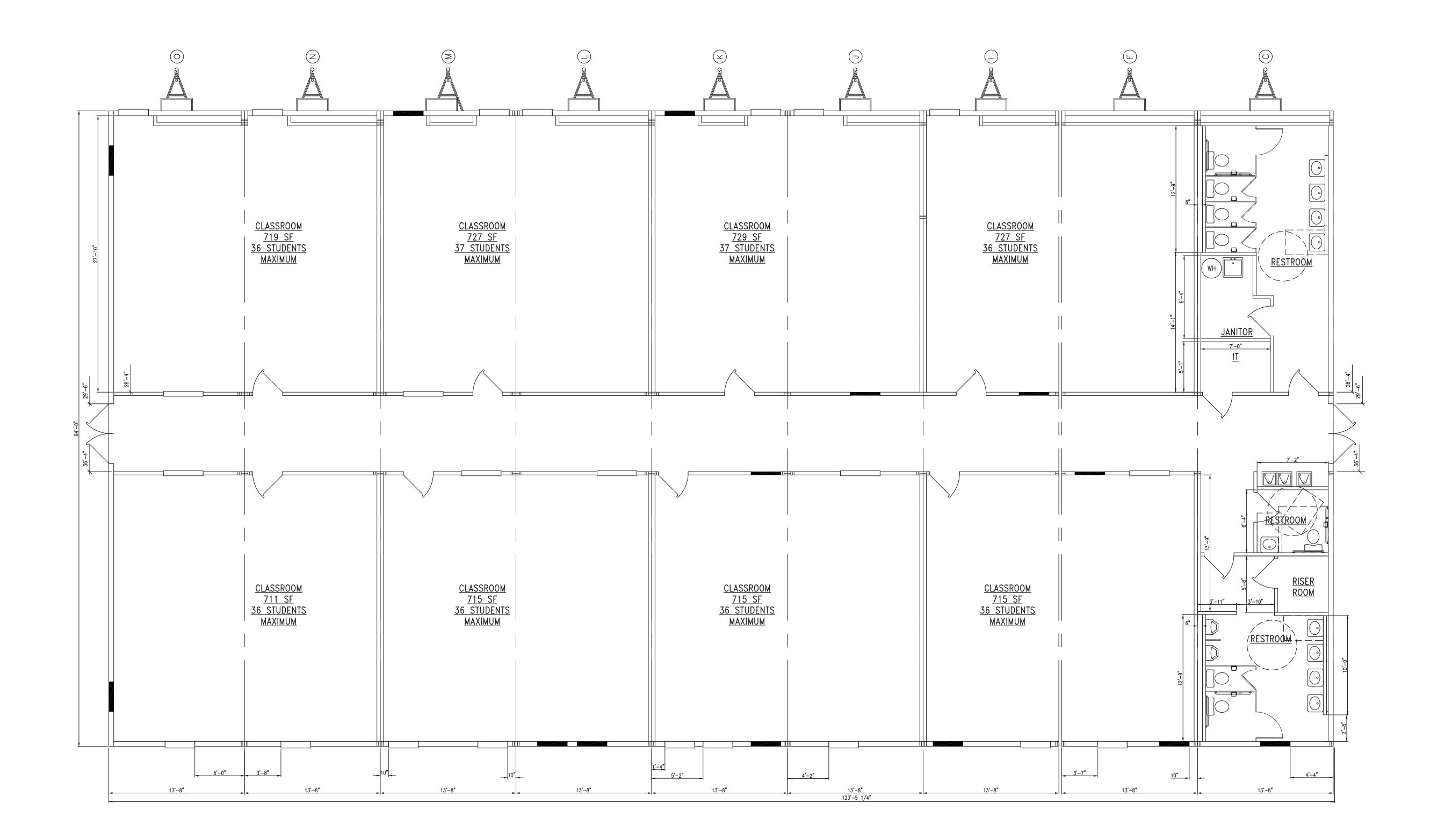
GARRETT, ALLEGANY 3. HVAC SYSTEM SHALL COMPLY WITH NFPA 90B WHEN BUILDING VOLUME DOES NOT EXCEED 25,000 CUBIC FEET. OTHERWISE HVAC SYSTEM SHALL COMPLY WITH NFPA 90A.

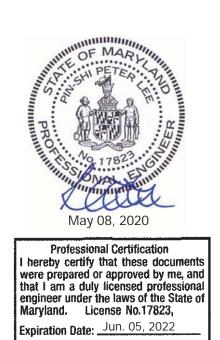
THESE PLANS ARE PREPARED TO FACILITATE CONSTRUCTION OF THE PRE-ENGINEERED FACTORY BUILT MODULAR BUILDING. AND THEY INCLUDE MINIMUM ON-SITE SUPPORT AND TIE DOWN REQUIREMENTS FOR THE MODULAR BUILDING. THE PROJECT ARCHITECT OF RECORD IS RESPONSIBLE FOR INCORPORATION AND COORDINATION OF THESE PLANS INTO

THE OVERALL PROJECT DESIGN. . TO LOCAL BUILDER AND/OR SITE DEVELOPER: ALL SITE WORK INCLUDING THE LOCATION OF THE BUILDING, IS REQUIRED TO BE REVIEWED AND APPROVED BY A MD. REG. ARCH. OR ENG. TO VERIFY CODE COMPLIANCE INCLUDING BUT NOT LIMITED TO FIRE RESISTANCE RATINGS FOR EXTERIOR PROTECTION. MEANS OF EGRESS, HEIGHT AND AREA LIMITATIONS, OTHER PERTINENT SITE RELATED MATTERS. DOCUMENTS RALATED TO SITE WORK. INCLUDING SITE AND DEVELOPMENT DRAWINGS, SHALL BE SUBMITTED TO THE LOCAL GOVERMENT AGENCY FOR REVIEW

THE INITIAL INSTALLATION OF THIS BUILDING WILL NOT BE IN STATE OF MARYLAND, THEREFORE A MD. SPECIFIC SITE PLAN CANNOT BE PROVDED WITH THE SUBMITTAL TO THE STATE OF MARYLAND. SHOULD THE BUILDING BE SHIPPED TO MARYLAND AT A LATER DATE, A SITE PLAN WILL NEED TO BE SUBMITTED TO THE LOCAL BUILDING DEPARTMENT AS PART OT THE PERMIT APPLICATION.

CODE SUMMARY: MECHANICAL STATE **ELECTRICAL** ACCESSIBILTY ENERGY CODE BUILDING PLUMBING 2012 IBC W/2014 2015, 2017 GA. AMEND. GA. ACCESS. 2009 IECC W/2011 2012 IMC W/2014 | 2012 IPC W/2014 2014 NEC CHAPTER 120-3-3 CODE, CHAPTER 2015 GA. AMEND. 2015 GA. AMEND. 2012 GA. AMENDS. NO AMEND 2012 LIFE SAFETY 120-3-20 GEORGIA CODE. 2010 ADA FIRE 2012 IFC W/2014 GA. AMEND. 2015 IBC ADAAG MARYLAND 2015 IPC 2014 NEC 2015 IMC. 2015 IECC 2012 M.A.C. 2015 NFPA 101 W/ MD. AMENDMENTS 2012 VA. UNIFORM ICC/ANSI STATEWIDE BLDG. CD. 2011 NEC 2012 IECC VIRGINIA 2012 IMC. 2012 IPC A117.1-2010 2012 IBC W/VA. AMEND. 2012 IFC NCBC 2012 CHPT. 2014 N.C. 2012 NCPC 2012 NC 2012 NCMC N. CAROLINA ELECT. CODE 2012 NCFC AND ICC/ANSI ENERGY CODE A117.1-2009







PROJECT NAME:
PINEY ORCHARD

BUILDING TYPE: CLASSROOM COMPLEX

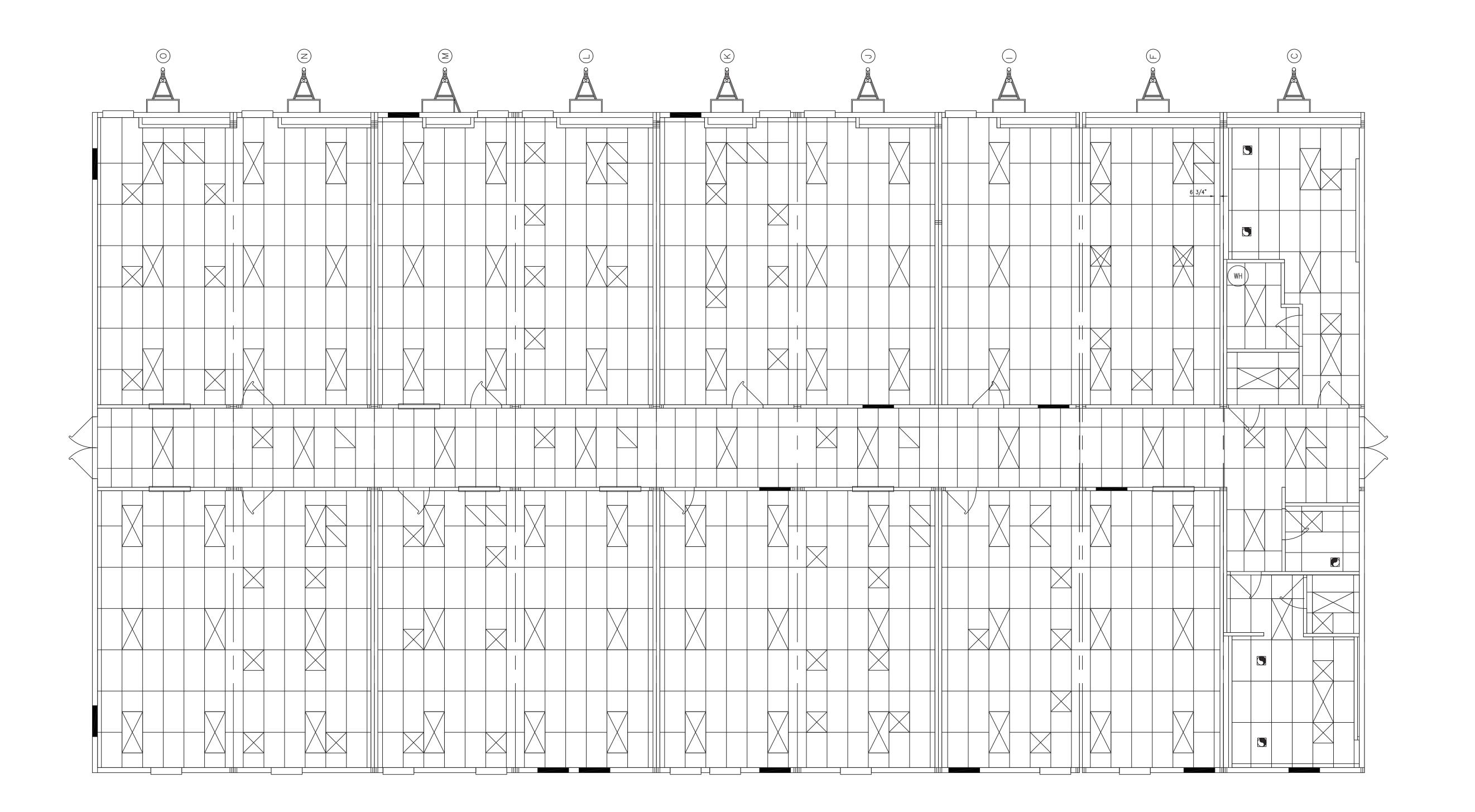
DRAWING NAME: RESTROOM PLAN

DATE: 4/30/20

DRAWN BY: HAS JOB NUMBER:

20-0019 PRINT DATE 5/4/20 4:51PM

SCALE: 3/16" = 1'-0" SHEET: A1









BUILDING TYPE: CLASSROOM COMPLEX

PROJECT NAME:
PINEY ORCHARD DRAWING NAME:

REFLECTIVE **CEILING PLAN** 

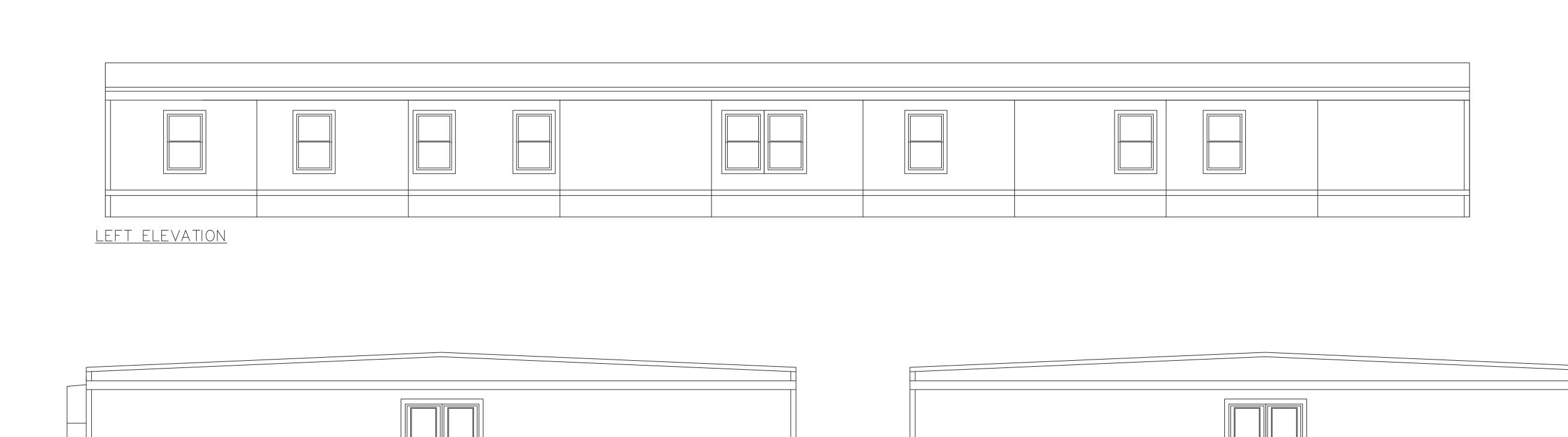
DATE: 4/30/20

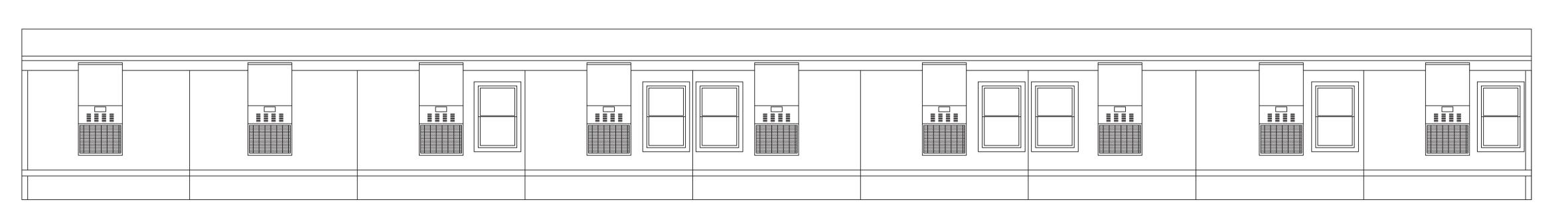
DRAWN BY: HAS

JOB NUMBER: 20-0019 PRINT DATE

5/4/20 4:51PM

SCALE: 3/16" = 1'-0" A2





FRONT ELEVATION

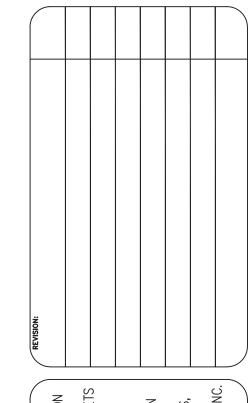
<u>right elevation</u>

REAR ELEVATION



Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No.17823,

Expiration Date: Jun. 05, 2022





BUILDING TYPE:
CLASSROOM COMPLEX PROJECT NAME:
PINEY ORCHARD
ADDRESS

DRAWING NAME: **EXTERIOR ELEVATIONS** 

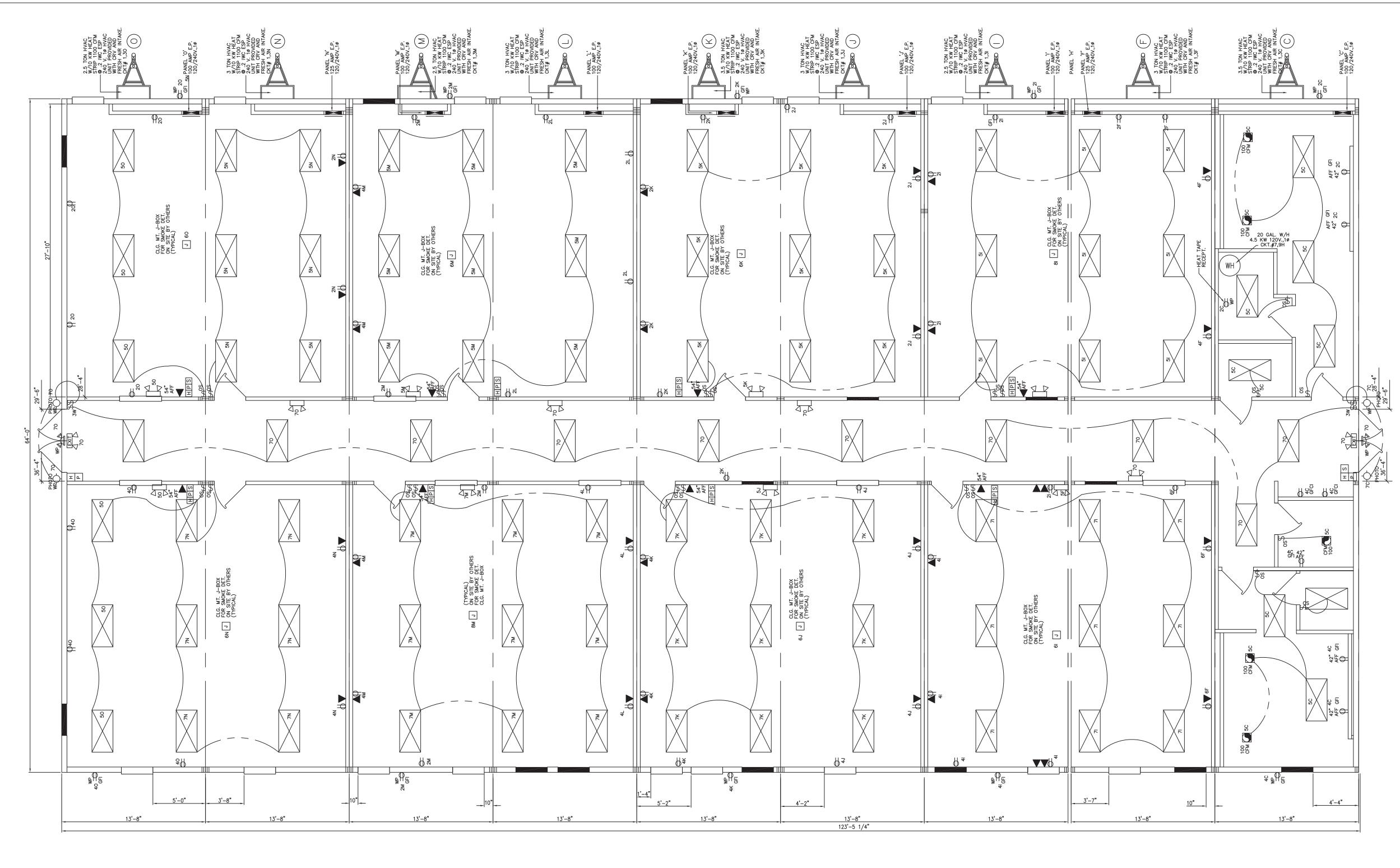
DATE: 4/30/20

DRAWN BY: HAS

JOB NUMBER: 20-0019 PRINT DATE

5/4/20 4:51PM SCALE: 3/16" = 1'-0"

A5





	elID: "0" Breaker: 150		ge: Ted typ NCE/Flu:	E	120/208 FLUSH	ı	PHASE: SINGLE, 3 WRE INTERIOR/EXTERIOR: INTERIOR LOCATION: PER PRINT					
/ATTS	AREA SERVED	WIRE	BRK	СКТ	А	В	CKT	BRK	WIRE	AREA SERVED	WATTS	
6032	HVAC UNIT	6	60	1	Т		2 ,	15	12	RECEPTS	900	
6032	HVAC UNII	6	60	3	ľ	$\top$	4	15	12	RECEPTS	900	
370	LIGHTING	12	15	_ 5		ľ	6	15	12	DED CEILING J-BOX	1440	
815	LIGHTING	12	15	7			8		-	SPACE	0	
0	SPACE	-	0	9	$\Box$	ľ	10	$\overline{}$	- 1	SPACE	0	
0	SPACE	-	0	_ 11	_	$\neg$	12	$\overline{}$	- I	SPACE	0	
	ION OF CONTINUOUS LOA IUM LIGHTING LOAD:					TOTAL	FOR PHA		8742 VA 7747 VA			
	(1758 SQUARE	FEET) x	3.0 =		5274 VA		CONNECT		:	16489 VA		
CTUAL L	IGHTING LOAD:				1120 VA		TUAL MOT IGLOAD:	OR &		15120 VA		
SE LARG	ER OF NEC OR ACTUAL:				5274 VA	MOTOR	& LIGHTI	NG LOAD	):	5585 VA		
ARGEST	SINGLE MOTOR LOAD:				249 VA		us gener PTS over			0 VA		
MOTOR	LOAD: AT 125%		1.25		311 VA	TOTAL	LOAD:			20705		
	TOTAL MOTOR	/ LIGHTIN	IG LOAD		5585 VA	1	OTAL LOA	D/208 1	100 Amps			

		ELID: "N" BREAKER: 150			ge: Ted type NCE/Flush:		120/2 FLUSH	_	INT	ASE: ERIOR/EI CATION:	SINGLE, 3 W TERIOR: INTERIOR PER PRINT	IRE
гтs	WATTS	AREA SERVED	WIRE	BRK	скт	4	В	СКТ	BRK	WIRE	AREA SERVED	WATTS
10	6032	HVAC UNIT	6	60	1	Г	Т	2	15	12	RECEPTS	360
10	6032	HVAC UNII	6	60	3		$\Box$	4	15	12	RECEPTS	360
40	360	LIGHTING	12	15	5		ľ	6	15	12	DED CEILING J-BOX	1440
)	360	LIGHTING	12	15	7		$\neg$	8		-	SPACE	0
	0	SPACE	-	0	9		ľ	10		-	SPACE	0
	0	SPACE	-	0			$\Box$	12		-	SPACE	0
	0	SPACE	-	0	13		ľ	14	_ 0	-	SPACE	0
	 0	SPACE	-	0	15		$\neg$	16		-	SPACE	0
	0	SPACE	-	T .	17	Г	Ť	18		-	SPACE	0
	0	SPACE	-	T .	19		T	20		-	SPACE	0
	0	SPACE	-	0	21	Г	Ť	22		- I	SPACE	0
	0	SPACE	-		23		$\Box$	24	$\overline{}$	-	SPACE	0
							_					
	_	TON OF CONTINUOUS LOA	<u>D:</u>				TOTA	L FOR PHA	SE "A":		8192 VA	
	NEC MININ	NUM LIGHTING LOAD:					TOTA	L FOR PHA	SE "B":		6752 VA	
		(938 SQUARE	FEET) x	3.0 =	2814	VA		L CONNECT		:	14944 VA	
	ACTUAL L	IGHTING LOAD:			720	VA		nctual mot fingload:	OR &c		13975 VA	
	USE LARG	ER OF NEC OR ACTUAL:			2814	VA	мото	OR & LIGHTI	NG LOAD	):	3125 VA	
	LARGEST	SINGLE MOTOR LOAD:			249	VA		INUS GENEF CEPTS OVER			0 VA	
	1 MOTOR	LOAD: AT 125%		1.25	311	VA	TOTA	L LOAD:			17100	
		TOTAL MOTOR	/ LIGHTIN	IG LOAD	3125	VA		TOTAL LOA	D/208 \	/OLTS =	82 Amps	

***MAIN BI	REAKER: 150			ge: Ted Type NCE/Flus	Ε	120/206 Flush	l	PH INT LO	TERIOR: SINGLE, 3 WINTERIOR PER PRINT	MRE	
WATTS	AREA SERVED	WIRE	BRK	СКТ	Α	В	СКТ	BRK	WIRE	AREA SERVED	WATTS
6032	10/40 1007	6	60	1	Т		2	15	12	RECEPTS	720
6032	HVAC UNIT	6	60	3	T	$\neg$	4	15	12	RECEPTS	720
545	LIGHTING	12	15		丁	T	6	15	12	DED CEILING J-BOX	1440
545	LIGHTING	12	15	7	T	$\top$	8	15	12	DED CEILING J-BOX	1440
0	SPACE	-	0	_ 9	$\neg \vdash$	T	10	$\overline{}$	- 1	SPACE	0
0	SPACE	-	0		_	$\rightarrow$	12		- 1	SPACE	0
CALCULATIO	ON OF CONTINUOUS LOA	ND:				TOTAL	FOR PHA	SE "A":		8737 VA	
NEC MINIMU	JM LIGHTING LOAD:					TOTAL	FOR PHA	SE "B":		8737 VA	
	(1540 SQUARE	FEET) x	3.0 =	4	4620 VA TOTAL CONNECTED LOAD: 17474 V						
ACTUAL LIG	SHTING LOAD:			1	1080 VA		TUAL MO' IGLOAD:	TOR &		16145 VA	
use large	R OF NEC OR ACTUAL:			4	1620 VA	MOTOR	& LIGHT	ING LOAD	):	4931 VA	
LARGEST S	INGLE MOTOR LOAD:				249 VA		us gener Pts over			0 VA	
1 MOTOR L	OAD: AT 125%		1.25		311 VA	TOTAL	LOAD:			21076	
	TOTAL MOTOR	/ LIGHTIN	IG LOAD		4931 VA	l 1	OTAL LOA	MD /208 V	VOLTS =	101 Amps	1

	ELID: "L" BREAKER: 150	MOUNTED TYPE			120/208 PHASE: INTERIOR/EX FLUSH LOCATION:				SINGLE, 3 WIRE INTERIOR: PER PRINT		
WATTS	AREA SERVED	WIRE	BRK	СКТ	Α	В	СКТ	BRK	WIRE	AREA SERVED	WATTS
6032	HVAC UNIT	6	60	1	$\top$		2 ,	15	12	RECEPTS	720
6032	HVAC UNII	6	60	3	ľ	$\Box$	4	15	12	RECEPTS	540
0	SPACE	12	15	5		ľ	6	_ 0	-	SPACE	0
0	SPACE	12	15	7			8	$\overline{}$	- 1	SPACE	0
0	SPACE	-	0	_ 9	$\top$	Ţ	10	$\overline{}$	-	SPACE	0
0	SPACE	-	0	_ 11	_		12		-	SPACE	0
	ION OF CONTINUOUS LOA	<u>D:</u>					FOR PHA			6752 VA 6572 VA	
	(0 SQUARE	FEET) x	3.0 =		0 VA	TOTAL CONNECTED LOAD:				13324 VA	İ
ACTUAL L	IGHTING LOAD:				O VA	- ACTUAL MOTOR & LIGHTINGLOAD:				13075 VA	
USE LARG	ER OF NEC OR ACTUAL:				O VA	MOTOR	& LIGHT	ING LOAD	):	311 VA	
LARGEST	ARGEST SINGLE MOTOR LOAD:						us genei Pts over			0 VA	
1 MOTOR	MOTOR LOAD: AT 125% 1.25					TOTAL	LOAD:			]	
	TOTAL MOTOR	TOTAL MOTOR / LIGHTING LOAD					OTAL LO	AD/208 \	/OLTS =	64 Amps	]

SINGLE, 3 W INTERIOR PER PRINT	IRE			el ID: "K" Breaker: 150			ge: Ted type Ace/flush:		120/208 FLUSH	l	INT	ASE: ERIOR/E CATION:
REA SERVED	WATTS		WATTS	AREA SERVED	WIRE	BRK	скт	Α	В	скт	BRK	WIRE
RECEPTS	720		6032	HVAC UNIT	6	60	1	Г		2 0	15	12
RECEPTS	540		6032	HVAC UNII	6	60	3	T	T	4 0	15	12
SPACE	0		545	LIGHTING	12	15				6	15	12
SPACE	0		545	LIGHTING	12	15	7	T	T	8	0	-
SPACE	0		0	SPACE	-	T .	9	Г	T	10	0	-
SPACE	0		0	SPACE	-	T .	_11	•	$\top$	12	0	-
6752 VA			CALCULAT	ION OF CONTINUOUS LOA	<u>D:</u>				TOTAL	FOR PHASE	"A":	
6572 VA			NEC MININ	IUM LIGHTING LOAD:					TOTAL	FOR PHASE	"B":	
13324 VA				(1540 SQUARE	FEET) x	3.0 =	4620	VA (	TOTAL	CONNECTED	LOAD:	:
13075 VA			ACTUAL L	IGHTING LOAD:			1080	VA	– AC LIGHTIN	TUAL MOTO IGLOAD:	R &c	
311 VA			USE LARG	ER OF NEC OR ACTUAL:			4620 V			& LIGHTING	3 LOAD	:
0 VA		П	LARGEST	SINGLE MOTOR LOAD:			249	VA		us genera PTS over 1		
13386			1 MOTOR	LOAD: AT 125%		1.25	311	VA	TOTAL	LOAD:		
64 Amps				TOTAL MOTOR	/ LIGHTIN	IG LOAD	4931	VA	T	OTAL LOAD	/208 V	OLTS =

8917 VA 7297 VA 16214 VA 14885 VA 4931 VA

	PIID: "J" BREAKER: 150			GE: IED TYPE ICE/FLUS	. '	120/208 FLUSH		INT	ASE: ERIOR/EI CATION:	SINGLE, 3 W KTERIOR: INTERIOR PER PRINT	IRE
TTS	AREA SERVED	WIRE	BRK	СКТ	А	В	СКТ	BRK	WIRE	AREA SERVED	WATTS
32	HVAC UNIT	6	60	1			2	15	12	RECEPTS	720
32	HVAC UNIT	6	60	3	ľ		4	15	12	RECEPTS	720
)	SPACE	-	0	_5		ľ	6	15	12	DED CEILING J-BOX	1440
)	SPACE	-		7	ľ	$\Box$	8		-	SPACE	0
,	SPACE	-	<u> </u>	_ 9	$\top$	T	10	$\overline{}$	-	SPACE	0
,	SPACE	-	<u> </u>		_	$\neg \Gamma$	12		-	SPACE	0
ZULAT	ION OF CONTINUOUS LOA	<u>D:</u>				TOTAL	FOR PHA	SE "A":		8192 VA	
MININ	IUM LIGHTING LOAD:			TOTAL FOR PHASE "B": 6752 \							
	(0 SQUARE	FEET) x	3.0 =		0 VA	TOTAL	CONNECT	ED LOAD	:	14944 VA	
JAL L	IGHTING LOAD:				O VA	– AC1 LIGHTIN	TUAL MOT GLOAD:	TOR &		14695 VA	
LARG	ER OF NEC OR ACTUAL:			O VA	MOTOR	& LIGHTI	NG LOAD	):	311 VA		
EST	SINGLE MOTOR LOAD:	·		249 VA		US GENER PTS OVER			O VA		
TOR	LOAD: AT 125%		1.25		311 VA	TOTAL	LOAD:			15006	
	TOTAL MOTOR	/ LIGHTIN	IG LOAD		311 VA	T	OTAL LOA	D/208 \	/OLTS =	72 Amps	

	I ID: "I" BREAKER: 150			ge: Ted type Ice/flus		120/208 FLUSH		INT	ASE: Terior/e) Cation:	SINGLE, 3 W INTERIOR: INTERIOR PER PRINT	MRE
WATTS	AREA SERVED	WIRE	BRK	скт	А	В	СКТ	BRK	WIRE	AREA SERVED	WATT
6032	HVAC UNIT	6	60	1	$\top$		2	15	12	RECEPTS	900
6032	HVAC UNII	6	60	3	ľ		4	15	12	RECEPTS	900
545	LIGHTING	12	15	_ 5			6	15	12	DED CEILING J-BOX	1440
545	LIGHTING	12	15	7			8	15	12	DED CEILING J-BOX	1440
0	SPACE	-	0	9			10		-	SPACE	0
0	SPACE	-	0		•		12	_ 0	-	SPACE	0
	ON OF CONTINUOUS LO. UM LIGHTING LOAD:					TOTAL	FOR PHA	SE "B":		8917 VA 8917 VA	
	(1540 SQUARE	FEET) x	3.0 =	4	1620 VA	TOTAL	CONNECT	ED LOAD	:	17834 VA	
ACTUAL LI	GHTING LOAD:			1	1080 VA	- AC	TUAL MOT GLOAD:	FOR &		16505 VA	
USE LARG	ER OF NEC OR ACTUAL:			4	1620 VA	MOTOR	& LIGHTI	ING LOAD	):	4931 VA	
LARGEST S	SINGLE MOTOR LOAD:				249 VA		US GENER PTS OVER			0 VA	
1 MOTOR I	OAD: AT 125%		1.25		311 VA	TOTAL	LOAD:			21436	1
	TOTAL MOTOR	/ LIGHTIN	IG LOAD		4931 VA	ī	OTAL LOA	ND /208 1	VOLTS =	103 Amps	

	IID: "F" BREAKER: 150			ge: Ted type Ace/flusi		120/208 Flush	i	INT	ASE: TERIOR/E) CATION:	CTERIOR: SINGLE, 3 WINTERIOR PER PRINT	MRE
WATTS	AREA SERVED	WIRE	BRK	скт	Α	В	скт	BRK	WIRE	AREA SERVED	WATT
6032	HVAC UNIT	6	60	1	$\top$		2	15	12	RECEPTS	720
6032	HVAC UNIT	6	60	3	ľ		4	15	12	RECEPTS	540
0	SPACE	-	0	_ 5		ľ	6	0	-	SPACE	0
0	SPACE	-	0	7	Ĭ		8	0	-	SPACE	0
0	SPACE	-	0	_ 9	$\top$	Ť	10	▔	-	SPACE	0
0	SPACE	-	0		ľ	$\Box$	12		-	SPACE	0
0	SPACE	-	0	13	$\top$	ľ	14		-	SPACE	0
0	SPACE	-	0	15	T	$\top$	16		-	SPACE	0
0	SPACE	-	0	17	$\top$	ľ	18		-	SPACE	0
0	SPACE	-	0		T	$\top$	20		-	SPACE	0
0	SPACE	-	0	21	$\top$	T	22	$\overline{}$	-	SPACE	0
0	SPACE	-	0	23	_	↴	24	0	-	SPACE	0
CALCULATI	ON OF CONTINUOUS LOA	<u>D:</u>				TOTAL	FOR PHA	SE "A":		6752 VA	
NEC MINIM	UM LIGHTING LOAD:					TOTAL	FOR PHA	SE "B":		6572 VA	
	(0 SQUARE	FEET) x	3.0 =		O VA	TOTAL	CONNECT	ED LOAD		13324 VA	
ACTUAL LI	GHTING LOAD:				O VA	- AC	TUAL MOT IGLOAD:	TOR &c		13075 VA	
USE LARG	ER OF NEC OR ACTUAL:				O VA	MOTOR	& LIGHTI	NG LOAD	):	311 VA	
LARGEST S	SINGLE MOTOR LOAD:		249 VA	MIN	us gener Pts over	RAL PURI	POSE 9 50%	0 VA			
1 MOTOR I	OAD: AT 125%	1.25		311 VA	TOTAL	LOAD:			13386		
	TOTAL MOTOR	IG LOAD		311 VA	T T	OTAL LOA	D/208 \	VOLTS =	64 Amps		

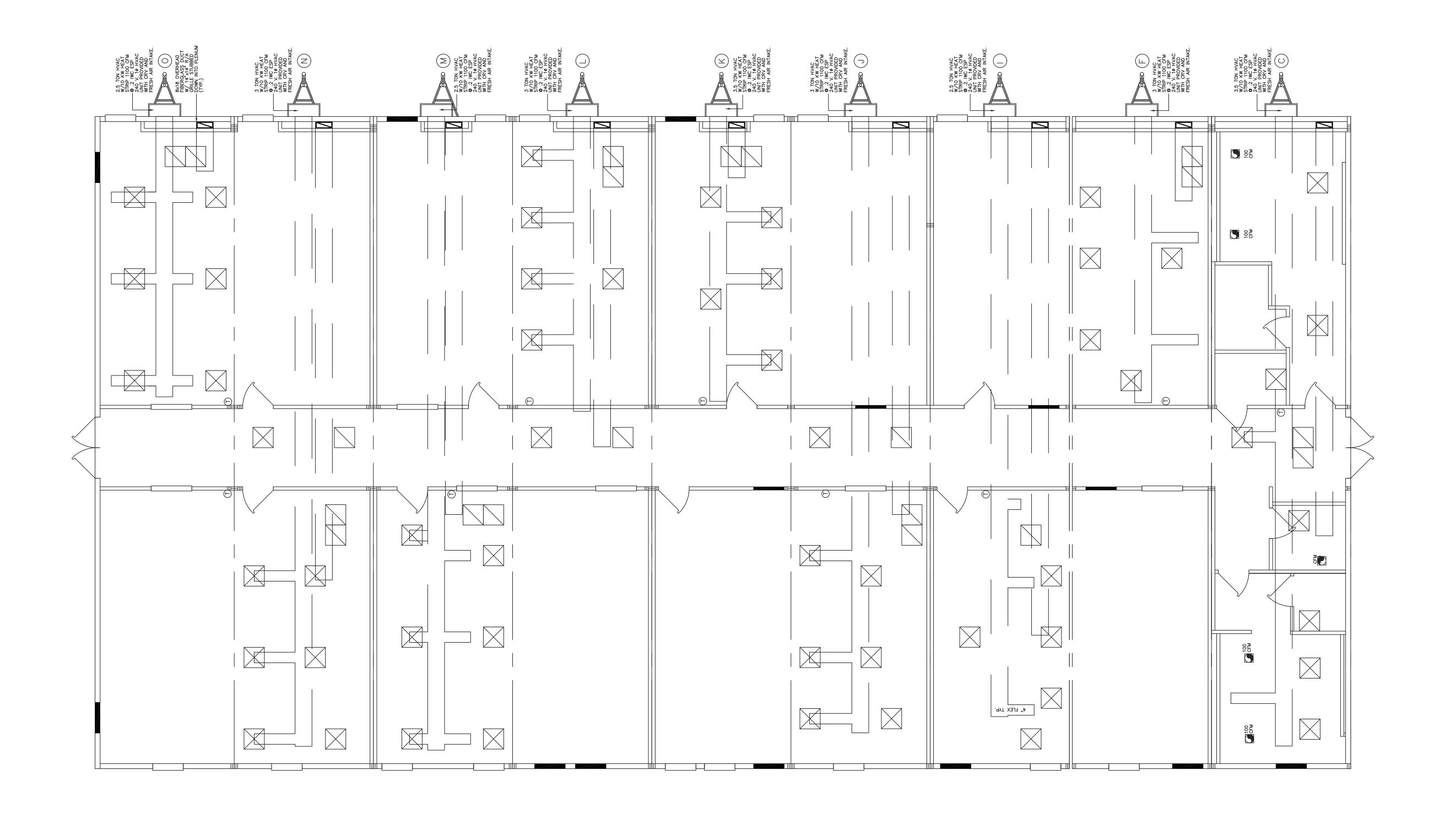
	el ID: "C" Breaker: 150		MOUN	OLTAGE: 120/208 PHASE: IOUNTED TYPE INTERIOR/EXTERIOR: URFACE/FLUSH: FLUSH LOCATION:							SINGLE, 3 WRE INTERIOR PER PRINT	
WATTS	AREA SERVED	WIRE	BRK	СКТ	Α	E	скт	BRK	WIRE	AREA SERVED	WATTS	
6032	HVAC UNIT	6	60	1	Г	П	2	15	12	RECEPTS	720	
6032	HVAC UNII	6	60	3	T		. 4	15	12	RECEPTS	900	
1080	LIGHTING/EXHAUST FAN	12	15		Г	٦	6	~	-	SPACE	0	
2250			15	7	T		. 8	0	-	SPACE	0	
2250	WATER HEATER	12	15	_ 9	Γ	٦	10		-	SPACE	0	
2250			15		•		12	_ 0	1-1	SPACE	0	
CALCULAT	TON OF CONTINUOUS LOA	<u>):</u>				тот	AL FOR PH	IASE "A":		10082 VA		
NEC MINII	NUM LIGHTING LOAD:					тот	AL FOR PH	ASE "B":		11432 VA		
	(770 SQUARE	feet) x	3.0 =	O VA	TOT	AL CONNEC	TED LOAD	):	21514 VA			
ACTUAL L	JGHTING LOAD:			480	VA		ACTUAL MITTINGLOAD:	OTOR &		20661 VA		
USE LARG	ER OF NEC OR ACTUAL:			2310	VA	мот	OR & LIGH	ITING LOAI	D:	2776 VA		
LARGEST	SINGLE MOTOR LOAD:			373	3 VA		MINUS GEN CEPTS OVI			0 VA		
1 MOTOR	LOAD: AT 125%		1.25	466	S VA	тот	AL LOAD:			23437		
	TOTAL MOTOR ,	/ LIGHTIN	IG LOAD	2776	S VA		TOTAL LO	DAD/208	VOLTS =	113 Amps		





Modular Genius SMART BUILDING REFURB COMPLEX ORCHARD BUILDING TYPE: CLASSROOM **PINEY** DRAWING NAME: **ELECTRICAL** PLAN DATE: 4/30/20 DRAWN BY: HAS JOB NUMBER: 20-0019 PRINT DATE 5/7/20 1:22PM SCALE: 3/16" = 1'-0" SHEET: REV: E1

1201 South Mountain I Joppa, MD 21085 P: 888-420-1113 www.modulargenius.co







PROJECT NAME:
PINEY ORCHARD REFURB

BUILDING TYPE:
CLASSROOM COMPLEX

DRAWING NAME: MECHANICAL PLAN

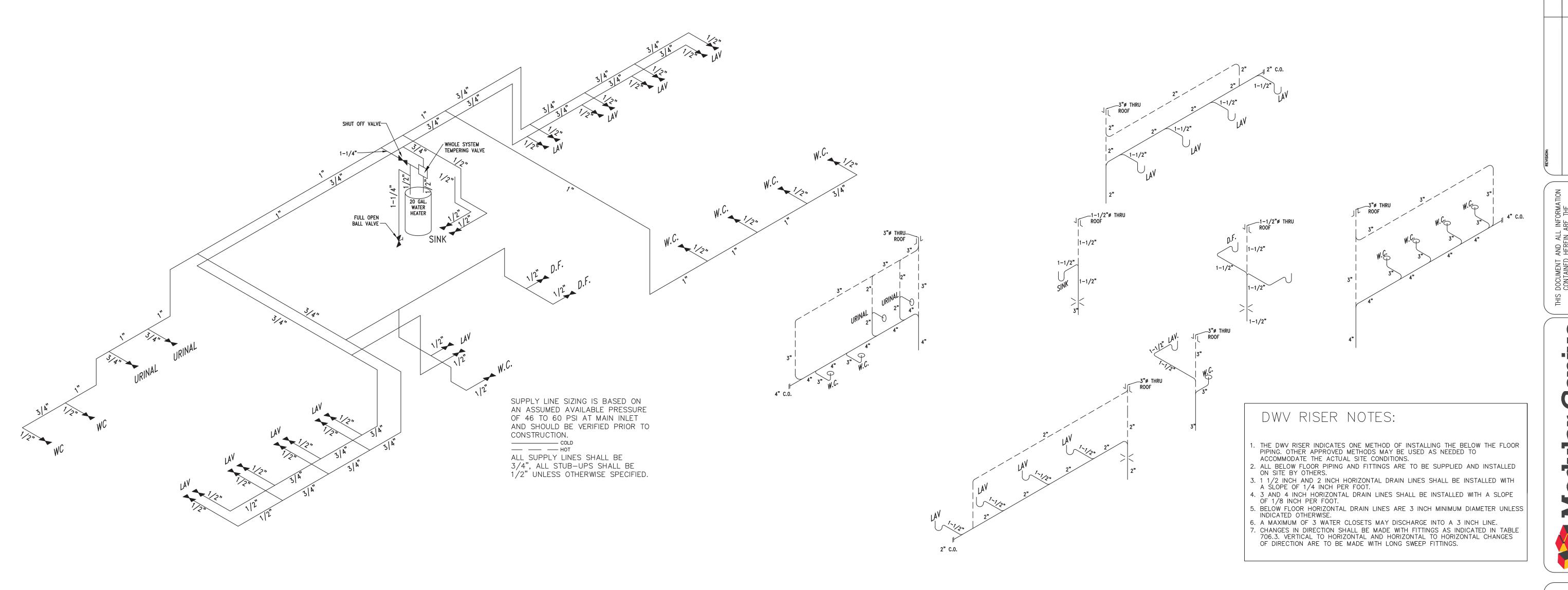
DATE: 4/30/20

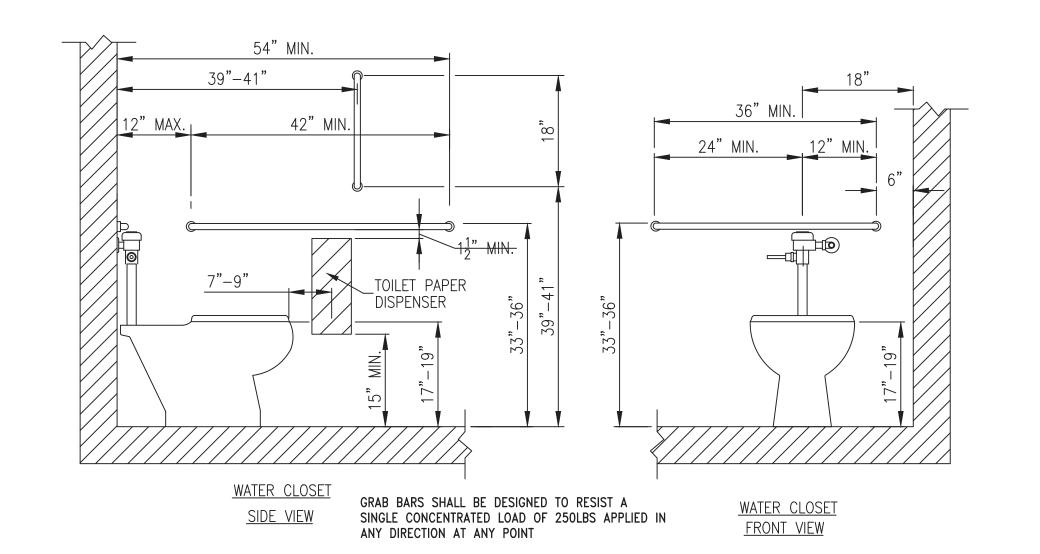
DRAWN BY:

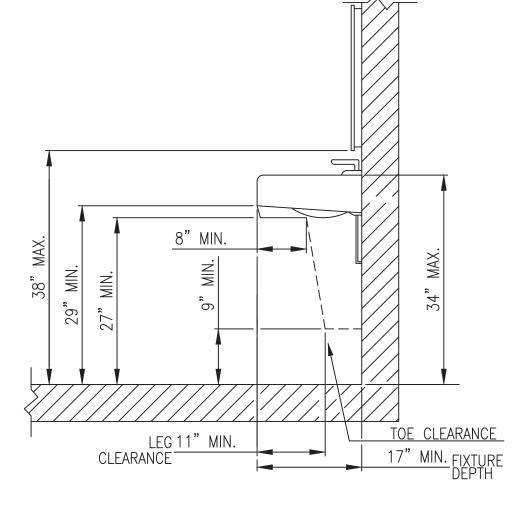
HAS JOB NUMBER: 20-0019

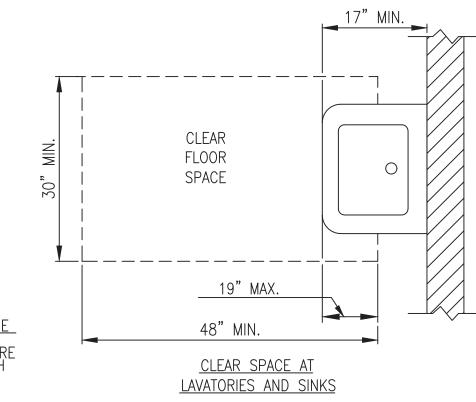
PRINT DATE 5/4/20 4:51PM SCALE:

3/16" = 1'-0" MI









<u>NOTE:</u> DASHED LINE INDICATES DIMENSIONAL CLEARANCE OF OPTIONAL UNDER FIXTURE ENCLOSURE.



Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No.17823, Expiration Date: Jun. 05, 2022



PROJECT NAME:
PINEY ORCHARD REFURB

BUILDING TYPE:

CLASSROOM COMPLEX

DRAWING NAME:

PLUMBING DETAILS & SCHEMATICS

DATE: 4/30/20

DRAWN BY: HAS

JOB NUMBER: 20-0019 PRINT DATE

5/4/20 4:51PM SCALE: 3/4" = 1'-0"

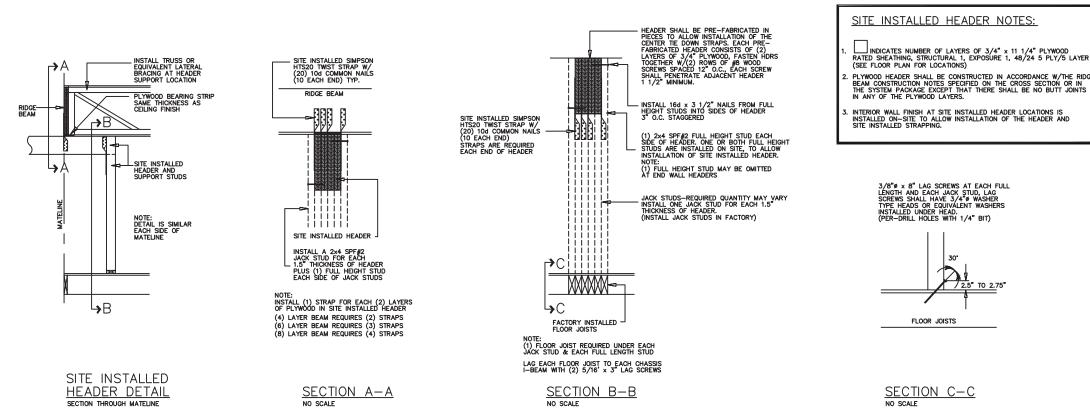
SHEET: P1 INTERIOR FINISH MATERIAL:

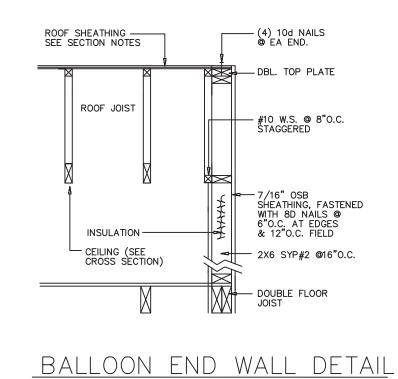
- T-GRID CEILING INSTALLED PER MANUFACTURERS SPECS.

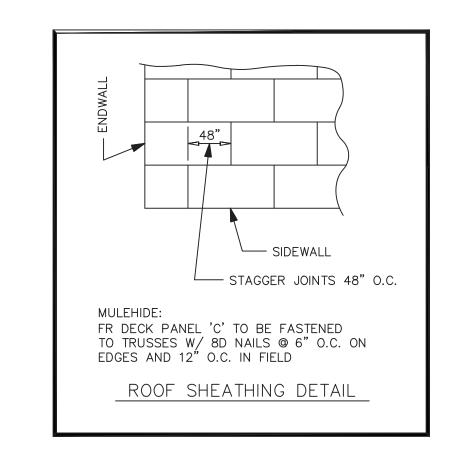
- 5/8" TYPE 'X' GYPSUM BOARD (VINYL COVERED) INSTALLED PER MANUFACTURES SPECIFICATIONS.

- FLOOR FINISHES SHALL BE NO LESS THAN CLASS II LISTED PRODUCT

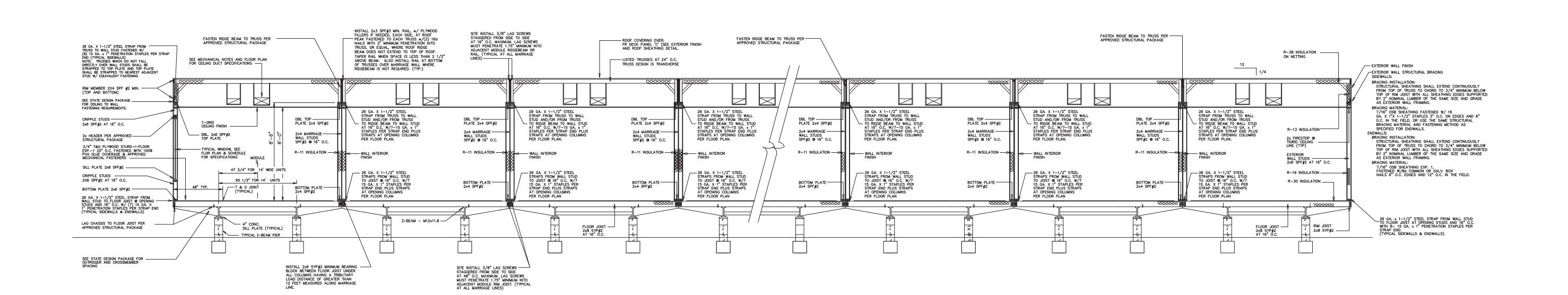
INTERIOR FINISHES SHALL BE CLASS 'A' FOR EXITS AND OTHER THAN EXITS SHALL BE 'A' OR 'B'





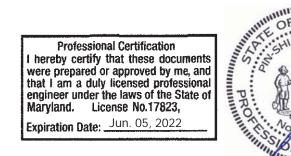


APPROVED TRUSS DESIGN: TRUSS MANUF # : \_\_UNIVERSAL TRUSS DRAWING. # F446901 TRUSS DRAWING. # \_ SEE ATTACHED DWG.



GENERAL CROSS-SECTION NOTES:

- I. UNLESS OTHERWISE SPECIFIED, ALL STEEL MUST COMPLY W/ ASTM A36,
- YIELD STRENGTH = 36 KSI.
- 2. ALL LAG SCREWS MUST COMPLY W/ ANSI/ ASME B18.2.1. FYB= 60 KSI MINIMUM. 3. SEE FOUNDATION PLAN FOR PIER AND TIE-DOWN STRAPPING LOCATIONS, ORIENTATIONS, AND SPECIFICATIONS.





MICROLAM BEAM CONSTRUCTION

 $_{1}$  LAYER(S)  $_{1}$   $_{3}$ / $_{4}$ "  $_{x}$   $_{2}$ 4" MICROLAM, EACH MODULE.

MICROLAM F = 2750 PSI

MICROLAM MUST BE CONTINUOUS OVER CLEARSPAN(S). BEAMS SUPPORTED BY ENDWALL COLUMNS MUST EXTEND CONTINUOUS OVER COLUMNS TO EXTERIOR FACE OF ENDWALL.

FASTEN ROOF SHEATHING INTO TOP EDGE OF MICROLAM TO PROVIDE CONTINUOUS LATERAL SUPPORT OF BEAM.

INSTALL (2 X 4) X 20" SPF# 3 RIDGE BEAM BEARING STIFFENER OVER SUPPORT COLUMNS WHEN SPECIFIED ON FLOOR PLAN; FASTEN THE FACE OF THE STIFFENER TO THE RIDGE BEAM WITH 100% GLUE COVERAGE AND 6-16 GA. STAPLES WITH 3/4" MINIMUM PENETRATION INTO

WHEN MORE THAN ONE LAYER OF MICROLAM IS INSTALLED ON EITHER SIDE OF THE MATING LINE, LAYERS ON THAT SIDE OF THE MATING LINE MUST BE FASTENED TOGETHER WITH 16 GA. STAPLES X 7/16" MINIMUM CROWN (INSTALLED PARALLEL TO BEAM SPAN) X 3/4" MINIMUM PENETRATION INTO CONNECTING LAYER STAPLES SHALL BE PLACED AT 6" O.C. MAXIMUM VERTICALLY AND HORIZONTALLY WITH FIRST AND LAST ROW OF STAPLES LOCATED 1" FROM TOP AND BOTTOM EDGE OF BEAM RESPECTIVELY.

EXTERIOR FINISH MATERIAL:

ROOF - MULE-HIDE 45 MIL (BLACK) EPDM FULLY ADHERED IN ACCORDANCE WITH ESR 1776 OVER 7/16" MULE-HIDE FR DECK PANEL 'C' INSTALLED PER MANUFACTURES SPECIFICATIONS.

WALL - 7/16" HARDI PANEL (SIERRA W/VERT GROOVES) SIDING OVER APPROVED MOISTURE BARRIER INSTALLED PER MANUFACTURES SPECIFICATIONS.

Genius



COMPLE ASSROOM

ORCHARD **PINEY** 

DRAWING NAME: **CROSS SECTION** 

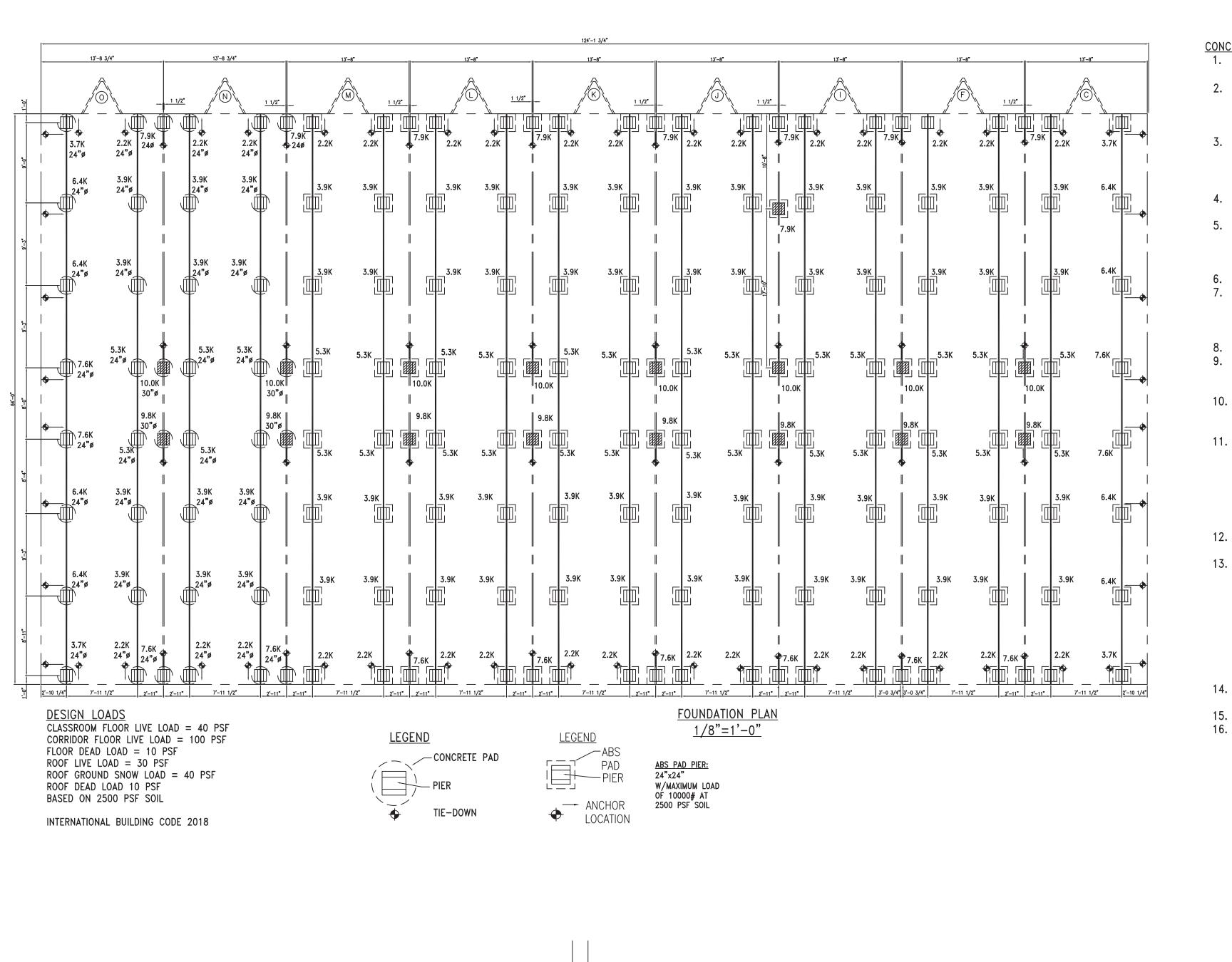
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**CONCRETE FOOTING FOUNDATION NOTES:** 

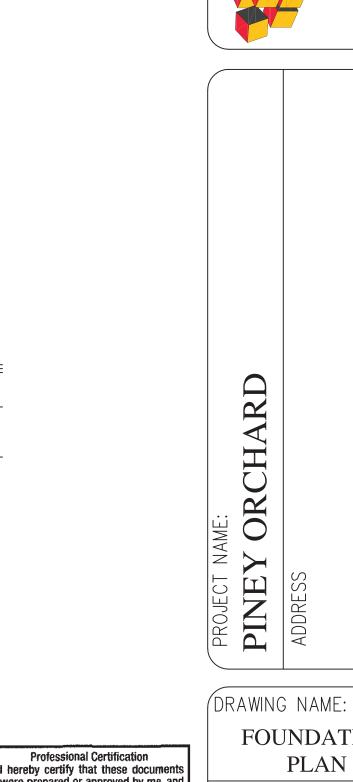
- 1. ALL FOUNDATION CONSTRUCTION, MATERIALS, AND INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES
- TIE-DOWN STRAPS TO BE 1-1/4"X.035" TYPE-1, FINISH B, GRADE1 ZINC COATED STEEL STRAPPING CERTIFIED BY A REGISTERED ENGINEER OR ARCHITECT AS CONFORMING WITH ASTM D3953-91. TIE DOWN STRAPS AND CONNECTING HARDWARE SHALL HAVE 3150# MINIMUM WORKING CAPACITY.
- 3. EACH GROUND ANCHOR SHALL HAVE A WORKING CAPACITY NO LESS THAN THE SUM OF THE REQUIRED WORKING CAPACITIES OF ALL THE TIE DOWN STRAPS CONNECTED TO THE GROUND ANCHOR, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
- 4. THE FIRST TIE-DOWN STRAP FROM THE ENDWALLS SHALL NOT EXCEED 1/2 THE MAXIMUM SPACING INDICATED
- 5. ALL PIERS SHALL BE CONSTRUCTED OF CONCRETE MASONRY UNITS CONFORMING TO ASTM 90. MASONRY UNITS MAY BE DRYSTACK OR LAID IN TYPE M OR S MORTAR OR COVERED WITH SURFACE BONDING CEMENT INSTALLED IN ACCORDANCE WITH ITS LISTING. PIER FOOTINGS SHALL BE A DESCRIBED ABOVE.
- MINIMUM CONCRETE FOOTING COMPRESSIVE STRENGTH 2,500 PSI AT 28 DAYS. ALL REINFORCEMENT BARS IF REQUIRED BY ENGINEER AND IF SHOWN ON DETAILS SHALL COMPLY WITH ASTM A615, GRADE 60. REINFORCEMENT BARS SHALL BE EQUALLY SPACED AND PLACED WITH 3" CLEARANCE FROM BOTTOM AND SIDES OF FOOTING.
- SEE THIS SHEET FOR DESIGN LOADS
- 9. SOFT, AND OTHERWISE UNSATISFACTORY, SOILS BENEATH PROPOSED FOUNDATION ELEMENTS, AS APPROVED BY THE BUILDING OFFICIAL HAVING JURISDICTION SHALL BE REMOVED AND BACKFILLED WITH PROPERLY COMPACTED SOILS
- 10. STRUCTURAL MATE LINE CONNECTIONS ARE TO BE MADE ACCORDING TO THE APPROVED MANUFACTURERS INSTRUCTIONS OR AS APPROVED BY THE LOCAL AUTHORITY HAVING JURISDICTION.
- 11. THE FOUNDATION DIMENSIONS SHOWN ON THE ABOVE LAYOUT ARE NOMINAL DIMENSIONS OF THE FACTORY BUILT MODULAR'S AND DO NOT ACCOUNT FOR GAPS BETWEEN MODULES THAT MAY OCCUR DURING INSTALLATION. THE FOUNDATION DESIGNER, FOUNDATION CONTRACTOR AND MODULAR BUILDING INSTALLED MUST CONSULT TO DETERMINE IF ADJUSTMENTS TO PIER LOCATIONS ARE NEEDED TO ACCOUNT FOR TOLERANCES NEEDED DURING INSTALLATION OF THE BUILDING MODULES.
- 12. THE AREA UNDER FOOTING AND FOUNDATIONS SHALL HAVE ALL VEGETATION, STUMPS, ROOTS, AND FOREIGN MATERIALS REMOVED PRIOR TO THEIR CONSTRUCTION.
- 13. CRAWL SPACE VENTILATION SHALL BE PROVIDED VIA VENTS SPACED AROUND THE PERIMETER OF THE SPACE WITH A FREE AREA OF 1/150TH OF THE AREA IN SQUARE FEET. THE TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1,500 OF THE UNDER-FLOOR AREA WHERE THE GROUND SURFACE IS COVERED WITH A CLASS I VAPOR RETARDER MATERIAL (0.1 PERM OR LESS) AND THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS VENTILATION OF THE SPACE THE INSTALLATION OF OPERABLE LOUVER SHALL NOT BE PROHIBITED. MECHANICAL VENTILATION MAY BE PROVIDED WITH AN EXHAUST RATE OF 0.02 CFM MINIMUM PER SQUARE FOOT.
- 14. ALTERNATE ANCHORING METHOD MAY BE USED AS APPROVED BY THE BUILDING AUTHORITY HAVING JURISDICTION.
- 15. FIELD VERIFY ALL DIMENSIONS.
- 16. FOOTINGS SIZE BASED ON INDICATED KIP LOAD REACTIONS VS, THE SOIL BEARING CAPACITY. THE DEAD LOAD OF THE PIER & FOOTINGS TO BE CARRIED BY THE SKIN FRICTION OF THE GROUND TO FOOTING.

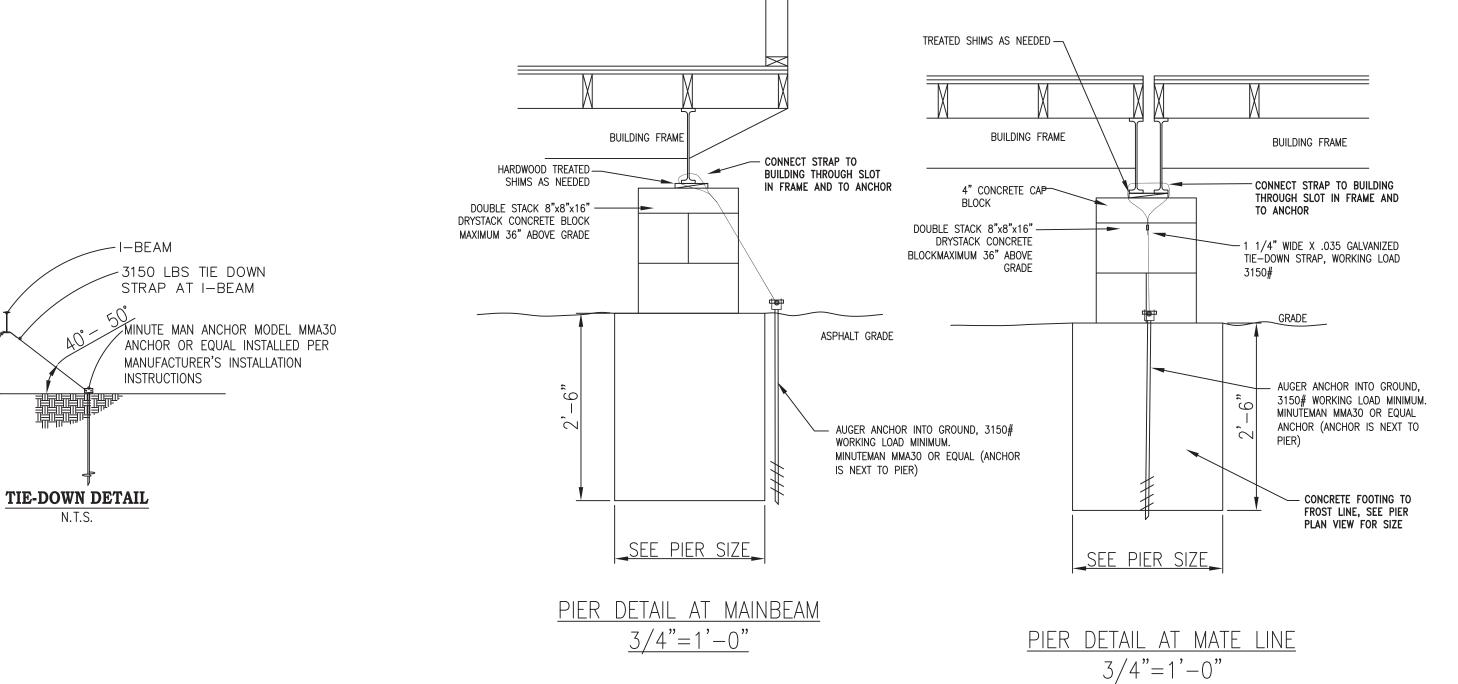
PIER PAD FOUNDATION NOTES:

- 1. THE ABOVE FOUNDATION IS DESIGNED AS PER SECTION 104.11 OF THE 2015/2018 IBC USING AN ALTERNATIVE DESIGN OR METHOD OF CONSTRUCTION. THIS DESIGN MEETS OR EXCEEDS THE WIND LOAD AND SOIL BEARING REQUIREMENTS OF THE 2015/2018 IBC. THE APPROVAL OF THIS FOUNDATION IS SUBJECT TO THE LOCAL AUTHORITY HAVING JURISDICTION.
- 2. TIE-DOWN STRAPS TO BE 1-1/4"X.035" GALVANIZED STEEL FEDERAL SPECIFICATION QQS-871-H TYPE-1, FINISH-B, GRADE-1. TIE-DOWN STRAPS AND CONNECTING HARDWARE SHALL HAVE A WORKING CAPACITY OF 3150#. TESTED LOAD OF 4725#
- 3. ALL TIE DOWN ANCHORS SHALL HAVE A MINIMUM WORKING LOAD 3,150# CAPACITY AND SHALL BE INSTALLED PER THEIR MANUFACTURER'S SPECIFICATIONS. THE TYPE OF GROUND ANCHOR, INCLUDING SHAFT LENGTH, NUMBER AND DIAMETER OF HELIXES, ETC. TO BE SPECIFIED BY THE GROUND ANCHOR MANUFACTURER FOR THE ACTUAL SOIL TYPE THAT IS ENCOUNTERED AT THE SITE.
- 4. SEE FOUNDATION PLAN FOR LOCATION AND SPACING OF TIE-DOWNS
- 5. ALL PIERS SHALL BE 8"X8"X16" SINGLE OR DOUBLE STACK MASONRY BLOCKS ON MINIMUM A 24"X24"X3/4" ABS PAD OR 16"X16"X4" SOLID CONCRETE PADS, EXCEPT AS NOTED ON FOUNDATION PLAN. SEE PIER DETAIL AND NOTES FOR ADDITIONAL
- MINIMUM SOIL BEARING CAPACITY IS 2,500 PSF. TO BE VERIFIED BY BUILDING'S OWNER OR SOILS REPORTS.
- 7. INSURE THAT ALL GRASS, LOOSE DEBRIS, ETC. ARE REMOVED FROM UNDER THE BUILDING, AND THAT THE GROUND IS LEVELED WITHIN 6" AND FIRMLY COMPACTED.
- 8. SEE THIS SHEET FOR DESIGN LOADS

ABS PAD —

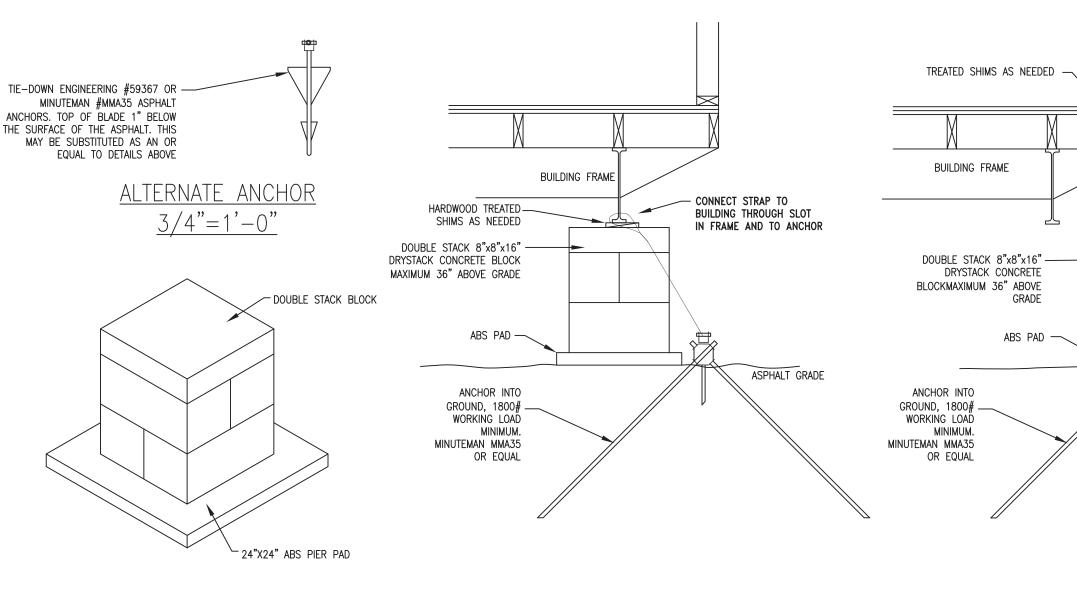
- TREATED WOOD SHIMS MAY BE INSTALLED WHEN NECESSARY BETWEEN THE MODULAR STEEL FRAME AND THE TOP OF THE PIER. SHIMS SHALL BE FREE OF KNOTS, CHECKS, SPLITS, AND SIMILAR IMPERFECTIONS. SHIMS SHALL BE OF P.T. LUMBER OR CEDAR AND BEARING AT ALL CONTACT POINTS AND SHALL NOT BE LESS THAN 2/3 OF THE BEARING PRIOR TO ADDING SHIMS.
- 10. MASONRY PIERS MAY BE INSTALLED IN A DRY STOCK SUBJECT TO LOCAL JURISDICTION AND APPROVAL
- 11. OVERALL WIDTH DIMENSION IS NOMINAL WITH 1" GROWTH ALLOWED FOR BETWEEN UNITS AND IS BASED ON UNIT WIDTH X NUMBERS OF MODULES. ACTUAL OVERALL WIDTH MAY INCREASE DUE TO SITE CONDITIONS AND MATERIAL TOLERANCES. FAILURE TO REMOVE CLOSE-UP MATERIAL AND/OR OTHER FACTORS BEYOND THE CONTROL OF THE BUILDING MANUFACTURER.
- 12. SINGLE DRY STACK PIERS ARE LIMITED TO 34" AND FROM 34" TO 54" SHALL BE DOUBLE STACK. FROM 54" TO 66" ARE REQUIRED TO HAVE SURFACE BONDING TO (ALL PIERS OVER 66" HIGH WILL REQUIRE SEPARATE ENGINEERING TO BE COMPLETED)
- 13. WHERE REQUIRED BY LOCAL JURISDICTION ALL MASONRY PIERS MAY BE LAID IN TYPE "M" OR "S" MORTAR IN COMPLIANCE W/ASTM C887, OR SHALL HAVE SURFACE BONDING MORTAR IN COMPLIANCE W/ASTM C 946





MINUTE MAN -FRAME CLIP OR EQUAL -

GRADE



3/4"=1'-0"

PIER DETAIL AT MAINBEAM  $\frac{\text{PIER DETAIL}}{3/4"=1'-0"}$ 

were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No.17823, Expiration Date: Jun. 05, 2022 PIER DETAIL AT COLUMN

3/4"=1'-0"

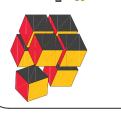
ASPHALT GRADE

BUILDING FRAME



6/29/20 11:26AM SCALE:

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COMPLEX

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**FOUNDATION PLAN** 

6/29/20

DRAWN BY: HAS JOB NUMBER:

20-0019 PRINT DATE

AS NOTED

SHEET: