PLANS FOR:

DENVER SMOKE HOUSE GRILL - REPAIR

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- 1. ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT, INCLUDING ROOF GEOMETRY. JDS CONSULTING, PLLC ASSUMES NO LIABILITY FOR CHANGES MADE TO THESE PLANS BY OTHERS, OR FOR CONSTRUCTION METHODS, OR FOR ANY DEVIATION FROM THE PLANS. ENGINEER TO BE NOTIFIED PRIOR TO CONSTRUCTION IF ANY DISCREPANCIES ARE NOTED ON THE PLANS.
- 2. DIMENSIONS SHALL GOVERN OVER SCALE, AND CODE SHALL GOVERN OVER DIMENSIONS.
- 3. PLANS MUST HAVE SIGNED SEAL TO BE VALID AND ARE LIMITED TO THE FOLLOWING USES:

NOTES

- A. IF THESE PLANS ARE ISSUED AS A MASTER-PLAN SET, THE SET IS VALID FOR 18 MONTHS FROM THE DATE ON THE SEAL, UNLESS ANY CODE-REQUIRED UPDATES ARE PLACED IN
- EFFECT BY THE MUNICIPALITY. B. IF THESE PLANS ARE NOT ISSUED AS A MASTER-PLAN SET, THE SET IS VALID FOR A CONDITIONAL, ONE-TIME USE FOR THE LOT OR ADDRESS SPECIFIED ON THE TITLE BLOCK.

CODE

ALL CONSTRUCTION, WORKMANSHIP, AND MATERIAL QUALITY AND SELECTION SHALL BE PER:

NORTH CAROLINA STATE BUILDING CODE: **BUILDING CODE**

ENGINEER OF RECORD

JDS CONSULTING, PLLC **ENGINEERING, BUILDING DESIGN, & CONSTRUCTION** CONSULTING SERVICES 8600 'D' JERSEY COURT RALEIGH, NC 27617 FIRM LIC. NO: P-0961 PROJECT REFERENCE: 21900843





28037 BUSINESS, NC-16 2790

21900843

05/05/2021 **FAB**

TITLE SHEET

ABBREVIATIONS

ABV	ABOVE	LVL	LAMINATED VENEER LUMBER
AFF		MAX	MAXIMUM
ALT	ALTERNATE	MECH	MECHANICAL
BRG	BEARING	MFTR	MANUFACTURER
BSMT	BASEMENT	MIN	MINIMUM
CANT	CANTILEVER	NTS	NOT TO SCALE
CJ	CEILING JOIST	OA	OVERALL
CLG	CEILING	ОС	ON CENTER
CMU	CONCRETE MASONRY UNIT	PT	PRESSURE TREATED
СО	CASED OPENING	R	RISER
COL	COLUMN	REF	REFRIGERATOR
CONC	CONCRETE	RFG	ROOFING
CONT	CONTINUOUS	RO	ROUGH OPENING
D	CLOTHES DRYER	RS	ROOF SUPPORT
DBL	DOUBLE	SC	STUD COLUMN
DIAM	DIAMETER	SF	SQUARE FOOT (FEET)
DJ	DOUBLE JOIST	SH	SHELF / SHELVES
DN	DOWN	SHTG	SHEATHING
DP	DEEP	SHW	SHOWER
DR	DOUBLE RAFTER	SIM	SIMILAR
DSP	DOUBLE STUD POCKET	SJ	SINGLE JOIST
EA	EACH	SP	STUD POCKET
EE	EACH END	SPEC'D	SPECIFIED
EQ	EQUAL	SQ	SQUARE
EX	EXTERIOR	T	TREAD
FAU	FORCED-AIR UNIT	TEMP	TEMPERED GLASS
FDN	FOUNDATION	THK	THICK(NESS)
FF	FINISHED FLOOR	TJ	TRIPLE JOIST
FLR	FLOOR(ING)	TOC	TOP OF CURB / CONCRETE
FP	FIREPLACE	TR	TRIPLE RAFTER
FTG	FOOTING	TYP	TYPICAL
HB	HOSE BIBB	UNO	UNLESS NOTED OTHERWISE
HDR	HEADER	W	CLOTHES WASHER
HGR	HANGER	WH	WATER HEATER
JS	JACK STUD COLUMN	WWF	WELDED WIRE FABRIC
KS	KING STUD COLUMN	XJ	EXTRA JOIST

NOTE: ALL CHAPTERS, SECTIONS, TABLES, AND FIGURES CITED WITHOUT A PUBLICATION TITLE ARE FROM THE APPLICABLE BUILDING CODE (SEE TITLE SHEET).

GENERAL

- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION. FURTHERMORE, CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, AND SAFETY ON SITE. NOTIFY JDSfaulkner, PLLC IMMEDIATELY IF DISCREPANCIES ON PLAN EXIST.
- 2. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND WORK.
- 3. NO OPENING SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
- 4. NO CHANGE IN SIZE OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
- 5. OPENINGS 1'-4" OR LESS ON A SIDE ARE GENERALLY NOT SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SUCH
- 6. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOADS APPLIED TO THE STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE APPLIED.
- 7. FIRE PROOFING METHODS AND MATERIALS FOR STRUCTURAL MEMBERS ARE NOT SHOWN ON STRUCTURAL DRAWINGS, UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE PROOFING METHODS AND MATERIALS.
- 8. DO NOT SCALE THESE DRAWINGS; USE DIMENSIONS.

DESIGN CRITERIA

1.	BUILDING CODE: SEE TITLE SHEET
2.	ASSUMED SOIL BEARING-CAPACITY 2,000 PSF
3.	DESIGN LIVE LOADS a. ROOF:
	b. FLOOR (OFFICE) :
4.	SNOW LOADS
	a. GROUND SNOW: 15 PSF
	b. FLAT ROOF SNOW, Pf: 15 PSF
	c. SNOW EXPOSURE FACTOR, Ce: 1.0
	d. IMPORTANCE FACTOR, Is:
	e. THERMAL FACTOR, Ct: 1.0 f. DRIFT SURCHARGE LOAD(S), Pd:
	g. WIDTH OF SNOW DRIFT(S), w:
	g. WIDTH OF SHOW DIGHT(S), W.
5.	WIND
	a. ULTIMATE DESIGN WIND SPEED: 118 MPH
	b. NOMINAL DESIGN WIND SPEED: 89 MPH
	c. RISK CATEGORY: II
	d. WIND EXPOSURE CATEGORY: B e. INTERNAL PRESSURE COEFFICIENT: +/- 0.18
	f. ROOF COMPONENTS AND CLADDING: + 10 PSF, - 31 PSF
	g. WALL COMPONENTS AND CLADDING: + 18 PSF, - 20 PSF
	g. WALL COM CHERTO AND CLADDING 10101, -20101
6.	SEISMIC
	a. RISK CATEGORY: II
	b. IMPORTANCE FACTOR, le:
	c. MAPPED SPECTRAL RESPONSE ACCELERATION, Ss: 0.116 g d. MAPPED SPECTRAL RESPONSE ACCELERATION, S1: 0.058g
	d. MAPPED SPECTRAL RESPONSE ACCELERATION, S1: 0.058g e. SITE CLASS: D
	f. DESIGN SPECTRAL RESPONSE ACCELERATION, Sds: 0.23 g
	g. DESIGN SPECTRAL RESPONSE ACCELERATION, Sds. 0.23 g
	h. SEISMIC DESIGN CATEGORY: B
	i. BASIC SEISMIC FORCE-RESISTING SYSTEM: STEEL MOMENT FRAME
	j. DESIGN BASE SHEAR: V = 8 k
	k. SEISMIC RESPONSE COEFFICIENT, CS: 0.04
	I. RESPONSE MODIFICATION COEFFICIENT, R:

m. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

FOUNDATION

- 1. MINIMUM ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED TO BE 2,000 POUNDS PER SQUARE FOOT (PSF). IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SOIL BEARING CAPACITY IF UNSATISFACTORY CONDITIONS EXIST.
- 2. WOOD SILL PLATES TO BE ANCHORED TO THE FOUNDATION WITH 1/2" DIAMETER ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT, SPACED A MAXIMUM OF 6'-0" OC AND WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. INSTALL MINIMUM (2) ANCHOR BOLTS PER SECTION. SEE DRAWINGS FOR SPECIAL CONDITIONS.
- 3. ALL FOOTINGS TO HAVE MINIMUM 2" PROJECTION ON EACH SIDE OF FOUNDATION WALLS (SEE DETAILS).

STRUCTURAL CONCRETE

- 1. POURED CONCRETE COMPRESSIVE STRENGTH TO BE A MINIMUM 3,000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.
- 2. NORMAL-WEIGHT CONCRETE SHALL HAVE A MAXIMUM UNIT WEIGHT OF 145 POUNDS PER CUBIC FOOT (PCF), UNLESS NOTED
- 3. REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615, GRADE 60, INCLUDING TIES AND STIRRUPS.
- 4. MINIMUM CONCRETE COVER SHALL BE AS FOLLOWS, UNLESS **NOTED OTHERWISE:**
- A. Unformed surfaces in contact with ground: B. Formed surfaces exposed to earth or weather:
- C. Formed surfaces not exposed to earth or weather 5. REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE FINISHES.
- WHERE THE FINISH IS NOT SPECIFIED, CONFORM TO **REQUIREMENTS OF ACI 301.**
- 6. PLUMBING, MECHANICAL, AND ELECTRICAL (PME) DRAWINGS SHALL BE REFERRED TO FOR DRAINS, SLEEVES, OUTLET BOXES, CONDUIT, ANCHORS, ETC. THE VARIOUS TRADES ARE RESPONSIBLE FOR PLACING THEIR RESPECTIVE ITEMS.
- 7. MATERIALS USED TO PRODUCE CONCRETE SHALL COMPLY WITH THE APPLICABLE STANDARDS LISTED IN AMERICAN CONCRETE **INSTITUTE STANDARD ACI 318 OR ASTM C1157.**
- 8. CONCRETE SUBJECT TO MODERATE OR SEVERE WEATHERING PROBABILITY SHALL BE AIR-ENTRAINED WHEN REQUIRED BY THE APPLICABLE CODE.
- 9. WITH CLASS 1 SOILS, VAPOR BARRIER AND CRUSHED STONE MAY BE OMITTED.

STRUCTURAL MASONRY

- 1. COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS (CMU) SHALL BE 1,900 PSI ON NET AREA.
- 2. MORTAR SHALL BE TYPE S AND COMPLY WITH ASTM INTERNATIONAL STANDARD C270.
- 3. COMPRESSIVE STRENGTH OF MORTAR SHALL BE 1,800 PSI AT 28 DAYS.
- 4. COMPRESSIVE STRENGTH OF MASONRY ASSEMBLAGE SHALL BE 1,500 PSI ON NET AREA.
- 5. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE PUBLICATION 530: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMPANION COMMENTARIES AND THE MASONRY SOCIETY PUBLICATION TMS 402/602: BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES.

STRUCTURAL STEEL

- 1. STRUCTURAL STEEL WIDE-FLANGE SHAPES SHALL CONFORM TO ASTM A992. Fy = 50 KSI, UNLESS NOTED OTHERWISE.
- 2. ALL STRUCTURAL STEEL TUBE SHAPES SHALL CONFORM TO ASTM A500, GRADE B, Fy = 46 KSI, UNLESS NOTED OTHERWISE.
- 3. ALL STRUCTURAL STEEL PIPE SHAPES SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B, Fy = 36 KSI, UNLESS NOTED OTHERWISE.
- 4. ALL MISCELLANEOUS STRUCTURAL STEEL SHALL CONFORM TO ASTM A36, Fy = 36 KSI, UNLESS NOTED OTHERWISE.
- 5. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL SHALL CONFORM TO AISC CODE OF STANDARD PRACTICE, SECTION 10.
- 6. BOLTS FOR BOLTED CONNECTIONS SHALL BE 3/4" DIAMETER, ASTM A325, TYPE N, SNUG TIGHT, UNLESS NOTED OTHERWISE.
- 7. FABRICATOR SHALL DESIGN BEAM CONNECTIONS PER LOADS PROVIDED IN AISC UNIFORM LOAD TABLES, UNLESS NOTED OTHERWISE.
- 8. ALL BEAMS AND GIRDERS SHALL HAVE THEIR ROLLING CAMBER PLACED UP.
- 9. NO CHANGE IN SIZE OR POSITION OF THE STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD. HOLES, SLOTS, CUTS, ETC. ARE NOT PERMITTED THROUGH ANY MEMBER UNLESS THEY ARE DETAILED ON THE APPROVED SHOP DRAWINGS.
- 10. SPLICING OF STRUCTURAL STEEL MEMBERS, WHERE NOT DETAILED, IS PROHIBITED WITHOUT WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
- 11. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, UNLESS NOTED OTHERWISE.
- 12. NO FINAL BOLTING OR WELDING SHALL BE DONE UNTIL AS MUCH OF THE STRUCTURE AS WILL BE STIFFENED THEREBY HAS BEEN PROPERLY ALIGNED.
- 13. INDICATED MODEL NUMBERS FOR ALL METAL HANGERS, STRAPS, FRAMING CONNECTORS. AND HOLD-DOWNS ARE SIMPSON STRONG-TIE BRAND. EQUIVALENT USP BRAND PRODUCTS ARE ACCEPTABLE.
- 14. ALL STEEL BEAMS TO BE SUPPORTED AT EACH END WITH A MIN BEARING LENGTH OF 3 1/2" AND FULL FLANGE WIDTH. BEAMS MUST BE ATTACHED AT EACH END WITH A MINIMUM OF FOUR 16d NAILS OR TWO 1/2" x 4" LAG SCREWS, UNO.

STRUCTURAL WOOD

- 1. ALL STRUCTURAL WOOD SHALL HAVE A MAXIMUM MOISTURE CONTENT OF 19%, UNLESS NOTED OTHERWISE.
- 2. INTERIOR / TRIMMED FRAMING LUMBER SHALL BE #2 SPRUCE-PINE-FIR (SPF) WITH THE FOLLOWING DESIGN PROPERTIES (#2 SOUTHERN YELLOW PINE MAY BE SUBSTITUTED):
- Fb = 875 PSI Fv = 70 PSI E = 1.4E6 PSI
- 3. FRAMING LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND. CONCRETE. OR MASONRY SHALL BE PRESSURE TREATED #2 SOUTHERN YELLOW PINE (SYP) WITH THE FOLLOWING **DESIGN PROPERTIES:**

Fb = 975 PSI Fv = 95 PSI E = 1.6E6 PSI

4. LVL STRUCTURAL MEMBERS TO BE LAMINATED VENEER LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2600 PSI Fv = 285 PSI E = 1.9E6 PSI

5. PSL STRUCTURAL MEMBERS TO BE PARALLEL STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2900 PSI Fv = 290 PSI E = 2.0E6 PSI

6. LSL STRUCTURAL MEMBERS TO BE LAMINATED STRAND LUMBER WITH THE FOLLOWING MINIMUM DESIGN PROPERTIES:

Fb = 2250 PSI Fv = 400 PSI E = 1.55E6 PSI

- 7. REFER TO I-JOIST EQUIVALENCE CHART ON I-JOIST DETAIL SHEET FOR SUBSTITUTION OF MANUFACTURER SERIES.
- 8. ALL BEARING HEADERS TO BE (2) 2x6 SUPPORTED W/ MIN (1) JACK STUD AND (1) KING STUD EACH END, UNO.
- 9. ALL NON-BEARING HEADERS TO BE (2) 2x4, UNO.
- 10. NON-BEARING INTERIOR WALLS NOT MORE THAN 10' NOMINAL HEIGHT AND NOT SHOWN AS BRACED WALLS MAY BE FRAMED WITH 2x4 STUDS @ 24" OC.
- 11. SOLID BLOCKING TO BE PROVIDED AT ALL POINT LOADS THROUGH FLOOR LEVELS TO THE FOUNDATION OR TO OTHER STRUCTURAL COMPONENTS.
- 12. ALL BEAMS SPECIFIED ARE MINIMUM SIZES ONLY. LARGER MEMBERS MAY SUBSTITUTED AS NEEDED FOR EASE OF CONSTRUCTION.
- 13. FACE OF WALL FRAMING TO BE FLUSH WITH FACE OF FOUNDATION WALLS, UNLESS NOTED OTHERWISE.
- 14. ALL ENGINEERED WOOD PRODUCTS (LVL, PSL, LSL, ETC.) SHALL BE INSTALLED WITH CONNECTIONS PER MANUFACTURER SPECIFICATIONS.
- 15. ENGINEERED WOOD FLOOR SYSTEMS AND ROOF TRUSS SYSTEMS: A. SHOP DRAWINGS FOR THE SYSTEMS SHALL BE PROVIDED TO THE ENGINEER OF RECORD FOR REVIEW AND
 - **COORDINATION BEFORE CONSTRUCTION.** B. TRUSS PROFILES SHALL BE SEALED BY THE TRUSS
 - MANUFACTURER. C. INSTALLATION OF THE SYSTEMS SHALL BE PER

DRAWINGS.

- MANUFACTURER'S INSTRUCTIONS. D. TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN IN THESE
- 16. ALL BEAMS TO BE CONTINUOUSLY SUPPORTED LATERALLY AND SHALL BEAR FULL WIDTH ON THE SUPPORTING WALLS OR COLUMNS INDICATED, WITH A MINIMUM OF THREE STUDS, UNO.
- 17. WHEN A 4-PLY LVL BEAM IS USED, ATTACH WITH (1) 1/2" DIAMETER BOLT, 12" OC, STAGGERED TOP AND BOTTOM, 1 1/2" MIN FROM ENDS. ALTERNATE EQUIVALENT ATTACHMENT METHOD MAY BE USED, SUCH AS SDS, SDW, OR TRUSSLOK SCREWS (SEE MANUFACTURER SPECIFICATIONS).
- 18. FOR STUD COLUMNS OF 4-OR-MORE STUDS, INSTALL SIMPSON STRONG-TIE CS16 STRAPS ACROSS STUDS @ 30" OC, 6" MAX FROM PLATES, ON INSIDE FACE OF COLUMN (EXTERIOR WALL), ON BOTH **FACES OF COLUMN (INTERIOR WALL).**
- 19. FLOOR JOISTS ADJACENT AND PARALLEL TO THE EXTERIOR FOUNDATION WALL SHALL BE PROVIDED WITH FULL-DEPTH SOLID BLOCKING, NOT LESS THAN TWO (2) INCHES NOMINAL IN THICKNESS, PLACED PERPENDICULAR TO THE JOIST AT SPACING NOT MORE THAN FOUR (4) FEET. THE BLOCKING SHALL BE NAILED TO THE FLOOR SHEATHING, THE SILL PLATE, THE JOIST, AND THE EXTERIOR RIM JOIST / BOARD.
- 20. PER SECTION 1604 OF THE APPLICABLE CODE (SEE TITLE SHEET), ANCHORAGE OF THE ROOF TO WALLS AND COLUMNS, AND OF WALLS AND COLUMNS TO FOUNDATIONS TO RESIST UPLIFT AND SLIDING FORCES, SHALL BE PROVIDED. REQUIREMENTS OF THE STRUCTURAL DRAWINGS THAT EXCEED THE CODE MINIMUM

ROOF SYSTEMS

TRUSSED ROOF - STRUCTURAL NOTES

- 1. FABRICATION AND ERECTION OF WOOD TRUSSES SHALL BE PER THE LATEST EDITION OF THE AMERICAN FOREST AND PAPER ASSOCIATION PUBLICATION NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, AND ANSI/TPI 1.
- 2. PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.

DENOTES OVER-FRAMED AREA

- 4. MINIMUM 7/16" OSB ROOF SHEATHING
- 5. TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN. TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- 6. TRUSS MANUFACTURER SHALL FURNISH SHOP DRAWINGS AND **DESIGN CALCULATIONS PREPARED BY A PROFESSIONAL** ENGINEER. SHOP DRAWINGS SHALL INDICATE TRUSS END REACTIONS FOR CONNECTION VERIFICATION BY ENGINEER-OF-RECORD.
- 7. MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTION.
- 8. PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH TRUSS-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, **UNLESS NOTED OTHERWISE.**
- 9. UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR
- 10. WOOD MEMBERS SHALL NOT BE CUT FOR PLUMBING OR WIRING UNLESS DETAILED ON THE APPROVED SHOP DRAWINGS.

FASTENER SCHEDULE					
CONNECTION	3" x 0.131" NAIL	3" x 0.120" NAIL			
JOIST TO SILL PLATE	(4) TOE NAILS	(4) TOE NAILS			
SOLE PLATE TO JOIST / BLOCKING	NAILS @ 8" OC (typical) (4) PER 16" SPACE (at braced panels) NAILS @ 8" OC (typical) (4) PER 16" SPACE (at braced panels)				
STUD TO SOLE PLATE	(4) TOE NAILS (4) TOE NAILS				
TOP OR SOLE PLATE TO STUD	(3) FACE NAILS	(4) FACE NAILS			
RIM JOIST OR BAND JOIST TO TOP PLATE OR SILL PLATE	TOE NAILS @ 6" OC	TOE NAILS @ 4" OC			
BLOCKING BETWEEN JOISTS TO TOP PLATE OR SILL PLATE	(4) TOE NAILS	(4) TOE NAILS			
DOUBLE STUD	NAILS @ 8" OC	NAILS @ 8" OC			
DOUBLE TOP PLATES	NAILS @ 12" OC NAILS @ 12"				
DOUBLE TOP PLATES LAP (24" MIN LAP LENGTH)	(12) NAILS IN LAPPED AREA, EA SIDE OF JOINT	(12) NAILS IN LAPPED AREA, EA SIDE OF JOINT			
TOP PLATE LAP AT CORNERS AND INTERSECTING WALLS	(3) FACE NAILS	(3) FACE NAILS			
OPEN-WEB TRUSS BOTTOM CHORD TO TOP PLATES OR SILL PLATE (PARALLEL TO WALL)	NAILS @ 6" OC	NAILS @ 4" OC			
BOTTOM CHORD OF TRUSS TO TOP PLATES OR SILL PLATE (PERPENDICULAR TO WALL)	(3) TOE NAILS	(3) TOE NAILS			

DETAILS AND NOTES ON DRAWINGS GOVERN.



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| 05/05/2021 | FAB

GENERAL NOTES

2018 APPENDIX B BUILDIN

ING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES) (Reproduce the following data on the building plans sheet 1 or 2)

	DENVER SMOKE					
Owner/Authorize	- 16 BUSINESS DENVE	IR, NC			Zip	Code
	ed Agent: _JDS Con	sulting Ph	one # (<u>919</u>	<u> </u>	_ E-I	Mail <u>FBOJDO@JDSCONSULTING</u>
Owned By:		City/Co	ounty	Private		State
Code Enforceme	nt Jurisdiction:	City		County LING	COLN	State
CONTACT						
CONTACT: DESIGNER	FIRM		AME	LICENSE #	TELEPHONE	
Architectural Civil			HARLES E. TEAL	045403	(<u>919</u>) <u>280-20</u> (<u></u>)	
Electrical Fire Alarm			HARLES E. TEAL	045403	(<u>919</u>) 280-20 ()	
Plumbing Mechanical	JDS C	<u>_</u>	HARLES E. TEAL	045403 045403	(919)280-20 (919)280-20	
Sprinkler-Standp Structural	JDS C	<u> </u>	HARLES E. TEAL	045403	(<u>919</u>)280-20	23 CTEAL@JDSCONSULTING.N
Other	>5' High					designers etc.)
Other should	nclude firms and i	naividuais s	uch as truss, p	precast, pre-engine	ered, interior	designers, etc.)
	ING BUILDING	procedures Phased Co possible ac CODE: EX	s and requirements and requirements on struction - Sidditional processing the structure of	nents hell/Core- Contactedures and required Prescriptive Level I Historic Proper	t the local instance. Repair Level II	Change of Use
CONSTRU RENOVAT	CTED: (date) ED: (date)	<u>1996</u> 2018		NT OCCUPANC SED OCCUPANO		_
	PRY (Table 1604.5		Current:		I	•
		P	roposed:	I 🛛 II 🔲 II	I 🗌 IV	
Standpipes: Fire District: Special Inspection	⊠ No □ Yes □ No ⊠ Yes ons Required: ⊠		ood Hazard A Yes (Contact th			or additional
FLOOR	Existing (oss Building	Area Table (SQ FT)		SUB-TOTAL
3 rd Floor	BIIISTING (11277	(5411)		
2 nd Floor	1200 SC). FT.				
Mezzanine 1st Floor	7800 S					2550 SQ. FT.
Basement	7,000 3					2000 04. 11.
TOTAL	9000 S	Q. FT.				
			ALLOWABL	E AREA		
	ancy Classificatio		ALLO WADL	E AREA		
Primary Occup	\square A-1 \square A-2	2	☐ A-4 ☐	A-5		
Primary Occup Assembly Business Educational						
Assembly Business Educational Factory	F-1 Moderate	=		H-3 Combust 🔲	H-4 Health 「	Л н₋5 нрм
Assembly Business Educational	F-1 Moderate H-1 Detonate I-1 Condition	H-2 De		H-3 Combust 🔲	H-4 Health] H-5 HPM
Assembly Business Educational Factory Hazardous	F-1 Moderate H-1 Detonate I-1 Condition I-2 Condition I-3 Condition	H-2 Den H-2 De	eflagrate 🔲 H	H-3 Combust 4 5	H-4 Health] Н-5 НРМ
Assembly Business Educational Factory Hazardous	F-1 Moderate H-1 Detonate I-1 Condition I-2 Condition	H-2 Den H-2 De	eflagrate		H-4 Health] Н-5 НРМ
Assembly Business Educational Factory Hazardous Institutional	F-1 Moderate H-1 Detonate I-1 Condition I-2 Condition I-3 Condition	H-2 Den	eflagrate		H-4 Health] Н-5 НРМ
Assembly Business Educational Factory Hazardous Institutional Mercantile Residential Storage	F-1 Moderate H-1 Detonate I-1 Condition I-2 Condition I-3 Condition I-4 R-1 R-2 S-1 Moderate	H-2 Den	eflagrate	□ 4 □ 5] Н-5 НРМ
Assembly Business Educational Factory Hazardous Institutional Mercantile Residential Storage Utility and Maccessory Occu	F-1 Moderate H-1 Detonate H-1 Condition I-2 Condition I-3 Condition I-4 R-1 R-2 S-1 Moderate Parking Garage Miscellaneous pancy Classificat	H-2 Don	eflagrate	☐ 4 ☐ 5 Iigh-piled] Н-5 НРМ
Assembly Business Educational Factory Hazardous Institutional Mercantile Residential Storage Utility and M Accessory Occu Incidental Uses	F-1 Moderate H-1 Detonate H-1 Condition I-2 Condition I-3 Condition I-4 R-1 R-2 S-1 Moderate Parking Garage Miscellaneous pancy Classificat	H-2 Don	eflagrate	☐ 4 ☐ 5 Iigh-piled ☐ Repair Gara] H-5 HPM
Assembly Business Educational Factory Hazardous Institutional Mercantile Residential Storage Utility and M Accessory Occu Incidental Uses Special Uses (Cl	F-1 Moderate H-1 Detonate H-1 Condition I-2 Condition I-3 Condition I-4 R-1 R-2 S-1 Moderate Parking Garage Miscellaneous pancy Classificat (Table 509): hapter 4 – List Cons: (Chapter 5 –	H-2 Don	eflagrate	☐ 4 ☐ 5 Iigh-piled ☐ Repair Gara	ge	H-5 HPM
Assembly Business Educational Factory Hazardous Institutional Mercantile Residential Storage Utility and M Accessory Occu Incidental Uses Special Uses (Cl Special Provision Mixed Occupant	F-1 Moderate H-1 Detonate H-1 Condition I-2 Condition I-3 Condition I-4 R-1 R-2 S-1 Moderate Parking Garage Miscellaneous pancy Classificat (Table 509): hapter 4 – List Cons: (Chapter 5 –	H-2 Don 1	eflagrate	Iigh-piled Repair Gara N/A :2 Hr. of construction fout and area limitation entire building.	Exception: r the building ons for each of	shall be determined by of the applicable ictive type of
Assembly Business Educational Factory Hazardous Institutional Mercantile Residential Storage Utility and M Accessory Occu Incidental Uses Special Uses (Cl Special Provisio Mixed Occupan	F-1 Moderate H-1 Detonate H-1 Detonate I-1 Condition I-2 Condition I-3 Condition I-4 R-1 R-2 S-1 Moderate Parking Garage Miscellaneous pancy Classificat (Table 509): hapter 4 – List Cons: (Chapter 5 – hey: No -Separated Use (50)	H-2 Don 1	eflagrate	Iigh-piled Repair Gara N/A 2 Hr. of construction for tand area limitation etermined, shall applications for each standard and area shall applications for each standard area shall applications for	Exception: r the building ons for each of the most restroply to the ent tory, the area oftual floor area	shall be determined by of the applicable ictive type of ire building. of the occupancy shall
Assembly Business Educational Factory Hazardous Institutional Mercantile Residential Storage Utility and M Accessory Occu Incidental Uses Special Uses (Cl Special Provisio Mixed Occupan Non	F-1 Moderate H-1 Detonate H-1 Detonate I-1 Condition I-2 Condition I-3 Condition I-4 R-1 R-2 S-1 Moderate Parking Garage Miscellaneous pancy Classificat (Table 509): hapter 4 – List Cons: (Chapter 5 – hey: No -Separated Use (50)	H-2 Don 1	eflagrate	Iigh-piled Repair Gara N/A : 2 Hr. of construction fout and area limitation entire building. The electron in the retire building is the ratios of the action of the action in the retire of the ret	Exception: The building ons for each of the most restroply to the entatory, the area of the total floor area not exceed 1. $B \leq 1$	shall be determined by of the applicable ictive type of ire building.

STORY	DESCRIPTION AND	(A)	(B)		(D)
NO.	USE	BLDG AREA PER	TABLE 506.2^4	AREA FOR PONTA E	ALLOWABLE AREA PE
		STORY (ACTUAL)	AREA	INC FAS.	STORY OR UNLIMITED ²

¹ Fron	tage area increases from Sect	ion 506.3 ar	e compute thus.		
a.	Perimeter which fronts a p	ublic way or	r open spice v	ing 20 feet minimum width	=(F)
b.	Total Building Perimeter	=	(P)		
	$\mathbf{D} \cdot \mathbf{C} \cdot (\mathbf{E}/\mathbf{D})$	$(\mathbf{\Gamma}/\mathbf{D})$			

c. Ratio (F/P) = _____ (F/P)

d. W = Minimum width of public way

e. Percent of frontage increase $I_f = 100[F/X] = 0.25] \times W/30 =$ _____ (%)

² Unlimited area applicable under conditions of Section 507.

³ Maximum Building Area = total number of stories in the building x D (maximum3 stories) (506.2).

⁴ The maximum area of open parking garages must comply with Table 406.5.4.

⁵ Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE ¹
Building Height in Feet (Table 504.3) ²	40 FT	31 FT	
Building Height in Stories (Table 504.4) ³	2 STORIES	2 STORIES	

- ¹ Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

 ² The maximum height of air traffic control towers must comply with Table 412.3.1.

 ³ The maximum height of open parking garages must comply with Table 406.5.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE		RATING	DETAIL#	DESIGN#	SHEET # FOR	SHEET #
	SEPARATION	REQ'D	PROVIDED	AND	FOR	RATED	FOR
	DISTANCE (FEET)		(W/* REDUCTION)	SHEET #	RATED ASSEMBLY	PENETRATION	RATED JOINTS
Structural Frame,							
including columns, girders,							
trusses		0.110					
Bearing Walls	>30FT	0 HR					
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North							
East							
West							
South							
Interior walls and partitions	\bigvee						
Floor Construction							
Including supporting beams							
and joists							
Floor Ceiling Assembly							
Columns Supporting Floors							
Roof Construction, including supporting beams and joists							
Roof Ceiling Assembly							
Columns Supporting Roof							
Shaft Enclosures - Exit							
Shaft Enclosures - Other							
Corridor Separation			0.110	11272/D2			
Occupancy/Fire Barrier Separat	101	2 HR N/A	2 HR	U373/B2			
Party/Fire Wall Separation		1	N/A	 			
Smoke Barrier Separation		N/A N/A		+			
Smoke Partition				 			
Tenant/Dwelling Unit/ Sleeping Unit Separation		2 HR	2 HR	U373/B2			
Incidental Use Separation Indicate section number perm		N/A					

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	Degree of openings Protection (Table 705.8)	AL OWA TAREA	ACTUAL SHOWN ON PLANS (%)

I	LIFE SALETY YSTEM REQUIREMENTS
Emergency Lighting:] N L res
Exit Signs:	₹ No Tes
Fire Alarm:	Yes
Smoke Detection Systems:	No Yes Partial
Carbon Monoxide Detection:	□ No □ Yes
L	JIFE SAFETY PLAN REQUIREMENTS
Life Safety Plan Sheet #:	
Fire and/or smoke rated wall lo	ocations (Chapter 7)
Assumed and real property line	e locations (if not on the site plan)
Exterior wall opening area with	h respect to distance to assumed property lines (705.8)
Occupancy Use for each area a	as it relates to occupant load calculation (7 able 1004.1.2)
Occupant loads for each area	
Exit access travel distances (10	
Common path of travel distanc	res (Tables 1006.2.1 & 100c 3 2(1))
Dead end lengths (1020.4)	
Clear exit widths for each exit	
Maximum calculated occupant	
Actual occupant load for each of	
A separate schematic plan indic purposes of occupancy separati	
Location of doors with panic has	
_	d egre locks and the amount of delay (1010.1.9.7)
	magnetic egress locks (1010.1.9.9)
Location of doors equipped with	
Location of emergency escape	-
The square footage of each fire	
= '	oke compartment for Occupancy Classification I-2 (407.5)
Note any code exceptions or ta	ble notes that may have been utilized regarding the items above
· ·	
	ACCESSIBLE DWELLING UNITS
•	(SECTION 1107)

Total	Accessible	Accessible	Түре А	Түре А	Түре В	Түре В	TOTAL
Units	Units	Units	Units	Units	Units	Units	ACCESSIBLE UNITS
	Required	Provided	Required	Provided	Required	Provided	PROVIDED

ACCESSIBLE PARKIN

(SECTION 1106

LOT OR PARKING	TOTAL # OF PA	RKING SPACES	# C AC	VIDED	TOTAL#			
AREA	REQUIRED	PROVIDED	REGULAR	VAN SPACI	ACCESSIBLE			
			5' ACCESS AISLL	132" ACCESS	8' ACCESS	PROVIDED		
				AISLE	AISLE			
		,						
TOTAL								

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE		WATERCLOSETS			URINALS	LAVATORIL			SHOWERS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE FEMAL		UNISEX	/TUBS	REGULAR	ACCESSIBLE
SPACE	EXIST'G										
	NEW										
	REQ'D										

Special approval: (Local Jurisdiction, Depertment of Insurance, OSC, DPI, DHHS, etc., describe below)



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CODE SUMMARY

APP.B1

ENERGY SUMMARY

ENERGY REQUIREMENTS: The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the

oposed design.
xisting building envelope complies with code: No Yes (The remainder of this section is not applicable)
xempt Building: No Yes (Provide code or statutory reference):
Climate Zone: 3A 4A 5A
Method of Compliance: Energy Code Performance Prescriptive ASHRAE 90.1 Performance Prescriptive (If "Other" specify source here)
HERMAL ENVELOPE (Prescriptive method only)
Roof/ceiling Assembly (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation: Skylights in each assembly: U-Value of skylight: total square footage of skylights in each assembly: Exterior Walls (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation: Openings (windows or doors with gliving) U-Value of assembly: Solar heat gain coefficient: projection factor: Door R-Values:
Walls below grade (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation: Floors over unconditioned space (each assembly) Description of assembly: U-Value of total assembly: R-Value of insulation:
Floors slab on grade Description of assembly: U-Value of total assembly: R-Value of insulation: Horizontal/vertical requirement: slab heated:

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS STRUCTURAL DESIGN

(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE) **DESIGN LOADS:**

Importance Factors:	$\begin{array}{ccc} \text{Snow} & (I_S) & \underline{\qquad 1.0} \\ \text{Seismic} & (I_E) & \underline{\qquad 1.0} \end{array}$
Live Loads:	Roof psf Mezzanine N/A psf Floor 100 psf
Ground Snow Load:	15 psf
	imate Wind Speed 109 mph (ASCE-7) bosure Category B
SEISMIC DESIGN CATEGORY	Y: □A ⋈B □C □D
Provide the following Seismic Desi	
Risk Category (Table 160	•
Spectral Response Accel	
Site Classification (ASCE Data Sou	
Basic structural system	☐ Bearing Wall ☐ Dual w/Special Moment Frame
•	☐ Building Frame ☐ Dual w/Intermediate R/C or Special Stee.
	☐ Moment Frame ☐ Inverted Pendulum
Analysis Procedure:	☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanic	al, Components anchored?
LATERAL DESIGN CONTROL	Earthquake ☐ Wind ⊠
SOIL BEARING CAPACITIES:	
	of test report) psf
Presumptive Bearing capa Pile size, type, and capacit	city psf
i ne size, type, and capacit	

2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS MECHANICAL DESIGN

(PROVIDE ON THE MECHANICAL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECH

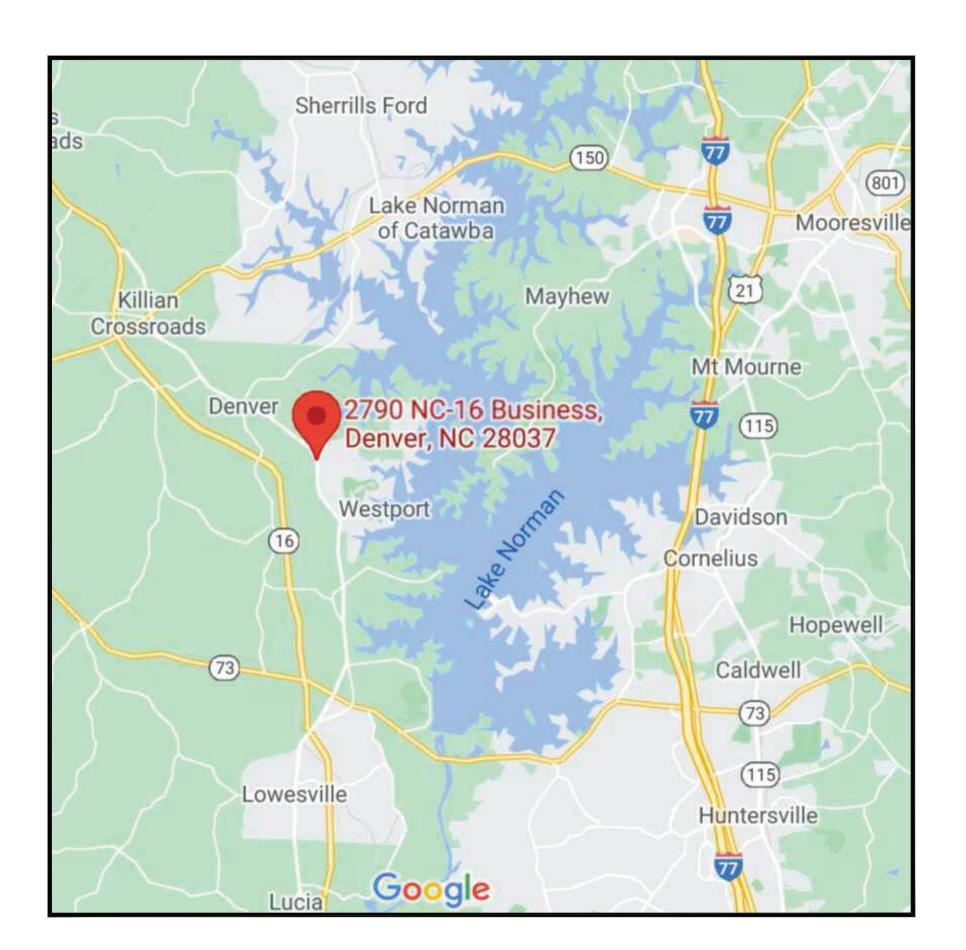
	Zone	
	summer dry bulb:	
Interio	design conditions winter dry bulb: summer dry bulb: relative humidity:	,
Buildi	heating load:	
Buildi	cooling load:	
Mecha	cal Spacing Conditioning System	
Mecha	cal Spacing Conditioning System Unitary	
Mecha		
Mecha	Unitary description of unit: heating efficiency:	
Mecha	Unitary description of unit: heating efficiency: cooling efficiency:	
Mecha	Unitary description of unit: heating efficiency: cooling efficiency: size category of unit:	
Mecha	Unitary description of unit: heating efficiency: cooling efficiency:	
Mecha	Unitary description of unit: heating efficiency: cooling efficiency: size category of unit: Boiler Size category. If oversized, state reason.:	
Mecha	Unitary description of unit: heating efficiency: cooling efficiency: size category of unit: Boiler	

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS **ELECTRICAL DESIGN** (PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

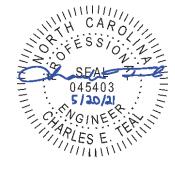
ELECTRICAL SUMMARY

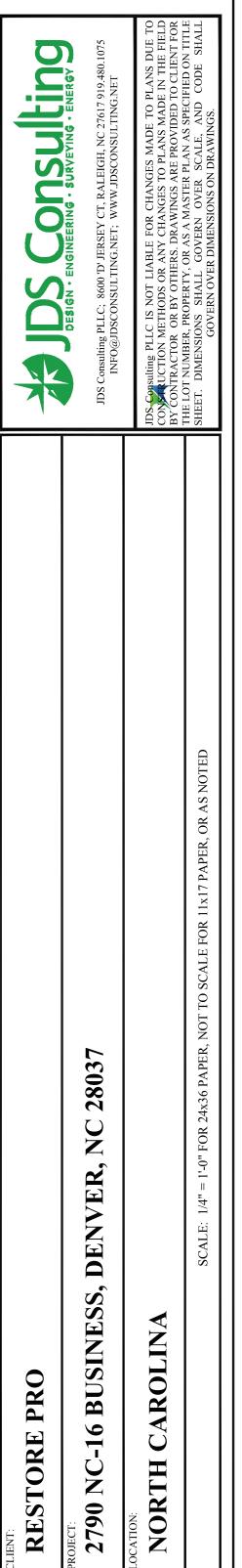
ELECTRICAL SYSTEM AND EQUIPMENT
Method of Compliance: Energy Code Performance Prescriptive ASHRAE 90.1 Trformance Prescriptive
Lighting schedule (each fixture typt) lamp type required in fix tre number of lamps in the ixture number of ballasts in fixture total wattage per fixture total interior wattage specified vandlowed (where brilding or space by take) total exterior wattage specified vs. sllowed
Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASSAE 90.1
C406.2 More Efficient HVAC Equipment Performance C406.3 Reduced Lighting Power Density C406.4 Enhanced Digital Lighting Controls C406.5 On-Site Renewable Energy C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating



VICINITY MAP

SCALE: NTS



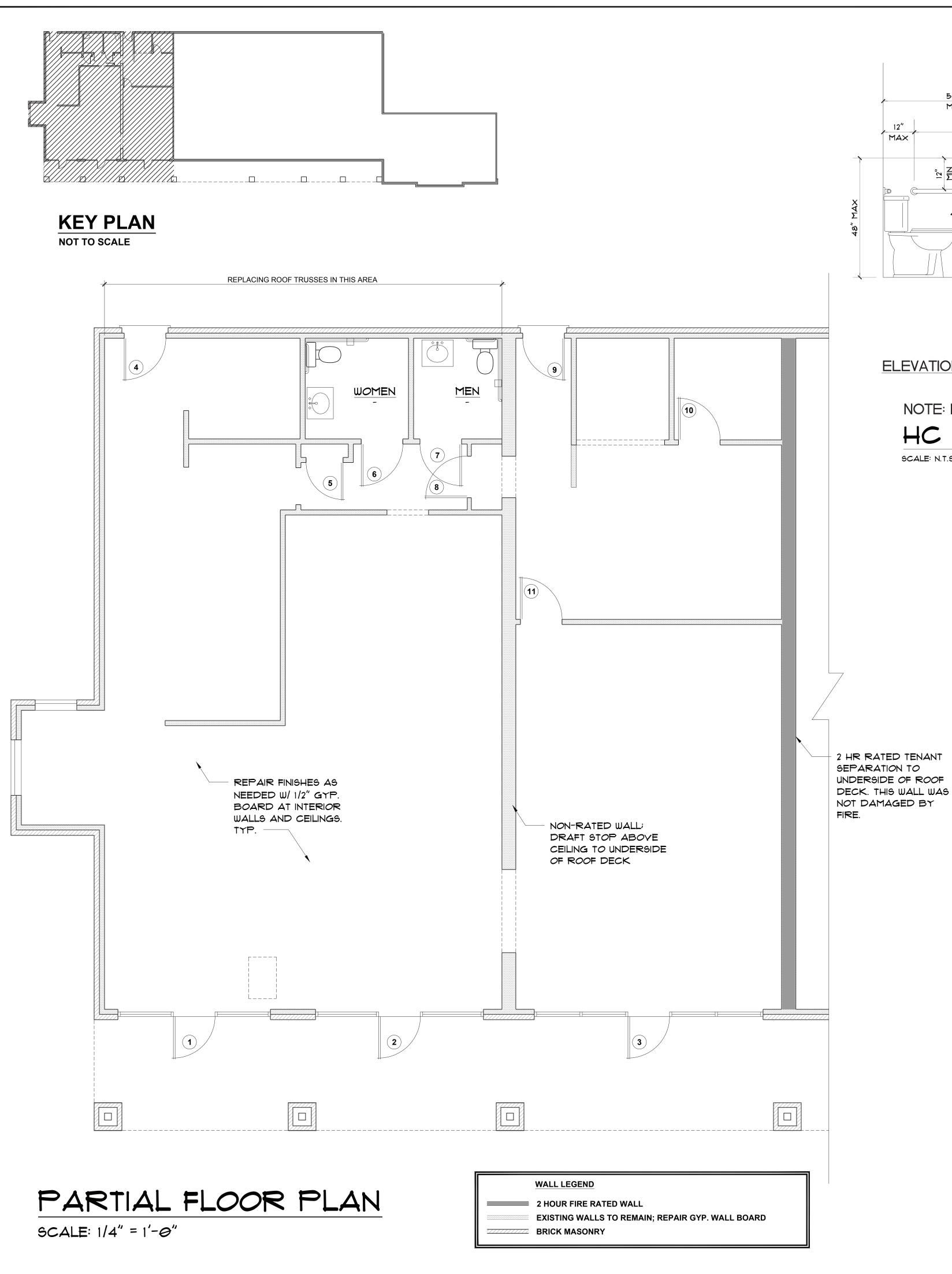


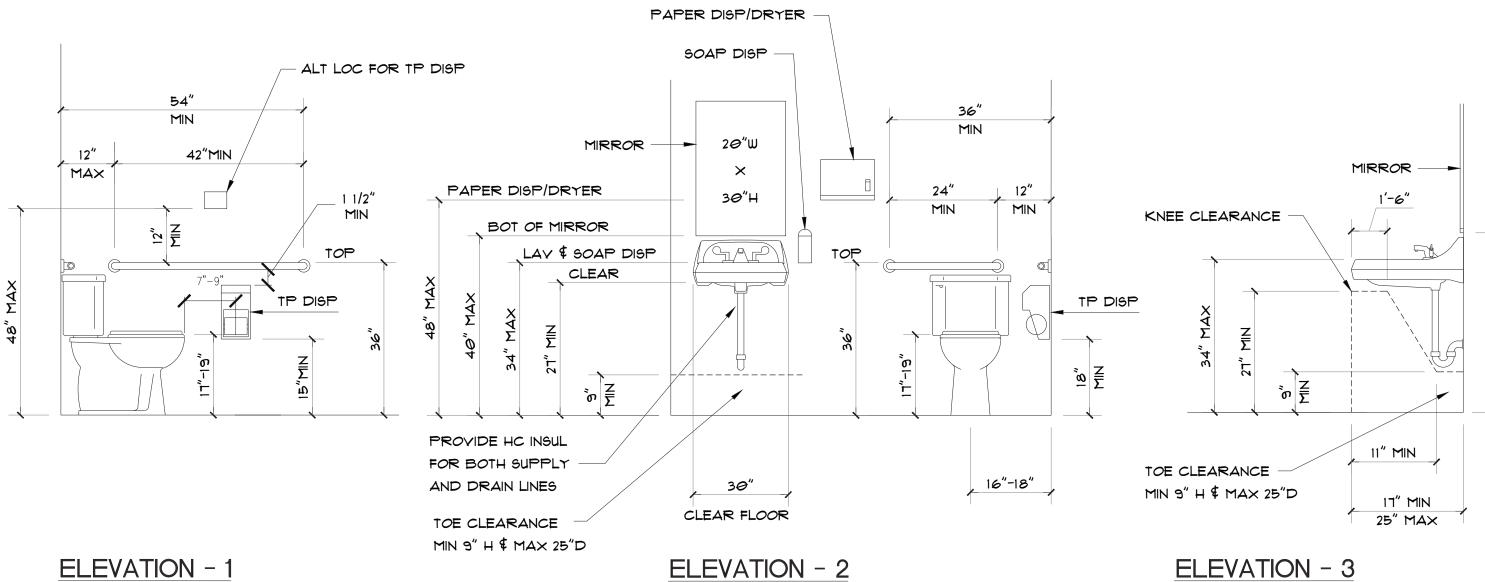
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CODE SUMMARY

APP.B2





NOTE: FINISH DIMENSIONS

HC RESTROOM ELEVATIONS

SCALE: N.T.S.

NOTE

ALL PLUMBING FIXTURES \$ ACCESSORIES TO MEET IBC/ANSI BARRIER FREE CODE. CLEAR FLOOR SPACES, CLEARANCES AT FIXTURES, AND TURNING SPACES SHALL BE PERMITTED TO OVERLAP. DOORS SHALL NOT SWING INTO THE CLEAR FLOOR SPACE OR CLEARANCE FOR ANY FIXTURE.

		FIRE				FRAME		
NO.	DESCRIPTION	RATED	ELEV	SIZE	FINISH	TYPE	HARDWARE	REMARKS
1	ALUM. & GLASS	-	-	3/0 x 7/0	AL	ALUMINUM	EXISTING	NO CHANGES
2	ALUM. & GLASS	-	1	3/0 x 7/0	AL	ALUMINUM	EXISTING	NO CHANGES
3	ALUM. & GLASS	-	ı	3/0 x 7/0	AL	ALUMINUM	EXISTING	NO CHANGES
4	WOOD	-	1	3/0 x 6/8		WOOD	KL, FED,T,WS	STYLE TO MATCH OTHER UNIT EXT. DOORS
5	WOOD	-	-	2/8 x 6/8		WOOD		EXISTING TO REMAIN
6	WOOD	-	-	3/0 x 6/8		WOOD	PL	EXISTING TO REMAIN
7	WOOD	-	-	3/0 x 6/8		WOOD	PL	EXISTING TO REMAIN
8	WOOD	-	-	3/0 x 6/8		WOOD		EXISTING TO REMAIN
9	WOOD	-	-	3/0 x 6/8		WOOD	KL, FED,T	EXISTING TO REMAIN
10	WOOD	-	-	3/0 x 6/8		WOOD	KL	EXISTING TO REMAIN
11	WOOD	-	-	3/0 x 6/8		WOOD		EXISTING TO REMAIN

GL	ACOUSTICAL TREATMENT	DS	DOOR GASKET SEAL
	GLASS LAMINATE	WS	WEATHER STRIPPING
KL	KEYED LOCKSET	PP	PUSH, PULL
LA	LATCH SET	DP	DUST PROOF STRICK
PL	PRIVACY SET	LG	LOCK GUARDS
PS	PASSAGE SET	KP	KICK PLATE
DB	DEAD BOLT	KS	KICK STOP
SC	SECURITY COMBO LOCK	CR	PROXIMITY CARD READER
FED	FIRE EXIT DEVICE	ES	ELECTRIC STRIKE
CL	CLOSER	DD	DOOR BOTTOM DROP
AS	ASTRAGAL	1	SEAL GASKET
FB	FLUSH BOLTS	KF	KEY FOB
Т	THRESHOLD, ALUMINUM	ML	MAGNETIC LOCK
MT	MARBLE THRESHOLD	TH	THREE HINGES
МН	MAGNETIC HOLD OPEN	WB	WALL BUMPER
SB	SLIDE BOLT	MS	MOTION SENSOR, IF REQ'D

DOOR SCHEDULE

NOTE

1. THESE DRAWINGS ARE FOR THE SHELL ONLY -TENANT/OWNER TO INSTALL WALL FINISHES, APPLIANCES CABINETRY, ETC.

2. NO WALLS OR OPENINGS WERE REVISED. EXISTING LIFE SAFETY PLAN TO REMAIN IN EFFECT.

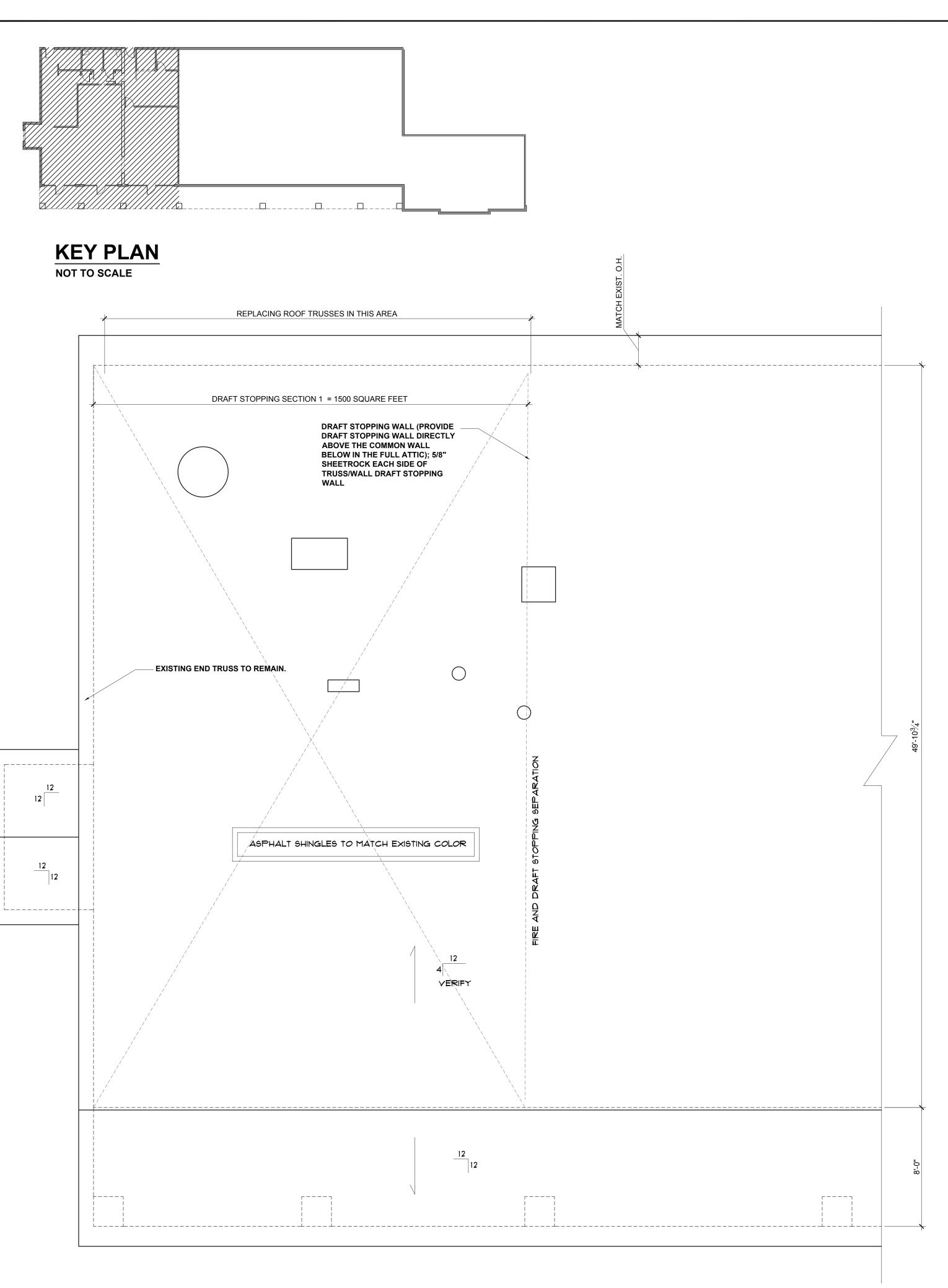
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FLOOR PLAN

B1.0



PARTIAL ROOF PLAN

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

Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
 Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for
- compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
 Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.

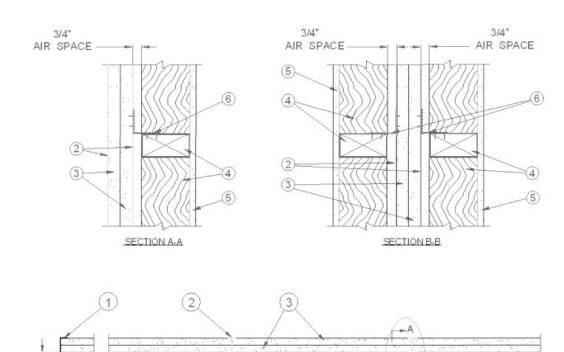
Fire Resistance Ratings - ANSI/UL 263

See General Information for Fire Resistance Ratings - ANSI/UL 263

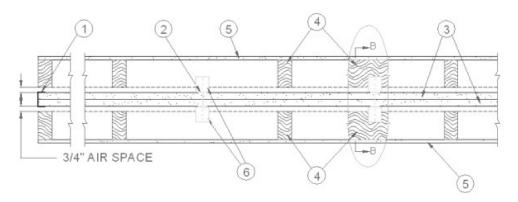
Design No. U373 August 19, 2008

Wall Rating - 2 Hr (See Items 4, 4A and 4B)

Finish Rating - 120 Min (See Item 4)



CONFIGURATION A EXPOSED TO FIRE FROM AREA SEPARATION WALL SIDE ONLY



CONFIGURATION B EXPOSED TO FIRE FROM EITHER SIDE

AREA SEPARATION WALL: — (Nonbearing, Max Height - 44 ft)

___ 3/4" AIR SPACE

1. **Floor, Intermediate or Top Wall** — 2-3/16 in. wide channel shaped with 1 in. long legs formed from No. 25 MSG galv steel, secured with suitable fasteners spaced 24 in. OC.

2. **Steel Studs** — Steel members formed from No. 25 MSG galv steel having "H" - shaped flanges spaced 24 in. OC; overall depth 2-1/8 in. and flange width 1-1/2 in.

3. **Gypsum Board*** — Two layers of 1 in. thick gypsum wallboard liner panels, supplied in nom 24 in. widths. Vertical edges of panels friction fitted into "H" - shaped studs. GEORGIA-PACIFIC GYPSUM LLC- Types TRSL, DGUSL

PROTECTED WALL: — (Bearing or Nonbearing Wall, as indicated in Items 4, 4A and 4B)

4. Wood Studs — For 2 Hr. Bearing or Nonbearing Wall Rating - Nom 2 by 4 in., max spacing 24 in. OC. Studs cross-braced at midheight where necessary for clip attachment. Min 3/4 in. separation between wood framing and area separation wall. Finish rating evaluated for wood studs only.

4A. **Steel Studs** — (As an alternate to Item 4, not shown) — For 2 Hr. Bearing Wall Rating - Corrosion protected steel studs, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min 3- 1/2 in. wide, min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, cold formed, shall Structural Members by the American Iron and Steel Institute, All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs, shall be as specified by the steel stud designer and/or producer, and shall meet the requirements of all applicable local code agencies. The max stud spacing of wall assemblies shall not exceed 24 in. OC. Studs attached to floor and ceiling tracks with 1/2 in. long Type S-12 steel screws on both sides of studs or by welded or bolted connections designed

in accordance with the AISI specifications. Top and bottom tracks shall consist of steel members, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, that provide a sound structural connection between steel studs, and to adjacent assemblies such as a floor, ceiling, and/or other walls. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 24 in. O.C. Studs cross-braced with stud framing at midheight where rating has not been evaluated for Steel Studs.

4B. **Steel Studs** — (As an alternate to Items 4 and 4A, for use in Configuration B only, not shown) — For 2 Hr. Nonbearing Wall Rating - Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min 3-1/2 in. wide, min 1-1/4 in. flanges and 1/4 in. return, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. Top and bottom tracks shall be channel shaped, fabricated from min 25 MSG corrosion-protected steel, min width to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max. Studs cross-braced with stud framing at midheight where necessary for clip attachment. Min 3/4 in. separation between steel framing and area separation wall. Finish rating has not been evaluated for Steel Studs.

5. **Gypsum Board** — Classified or Unclassified - Min 1/2 in thick, 4 ft wide, applied either horizontally or vertically. Wallboard attached to wood studs (Item 4) with 1-1/4 in. long steel drywall nails spaced 12 in. OC. Wallboard attached to steel studs (Item 4A or 4B) with 1 in. long Type S steel screws spaced 12 in. OC. Vertical joints located over studs. (Optional) Joints covered with paper tape and joint compound. Nail or screw

6. Attachment Clips — Aluminum angle, 0.062 in. thick, min 2 in. wide with min 2 in. and 2-1/2 in. legs. Clips secured with one Type S screw 3/8 in. long to "H" studs and with one Type W screw 1-1/4 in. long to wood framing or steel framing through holes provided in clip. Clips spaced a max of 10 ft OC vertically between wood or steel framing and "H" studs for separation walls up to 23 ft high. For separation walls up to 44 ft high, clips spaced as described above for the upper 24 ft. and the remaining wall area below requires clips spaced a max 5 ft OC vertically between wood or steel framing and "H" studs.

insulation, max 3.0 pcf density, bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified

*Bearing the UL Classification Mark

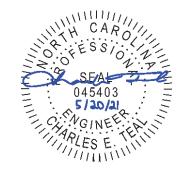
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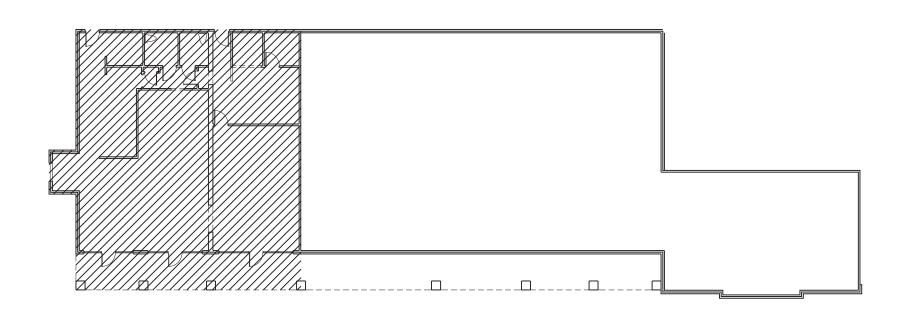




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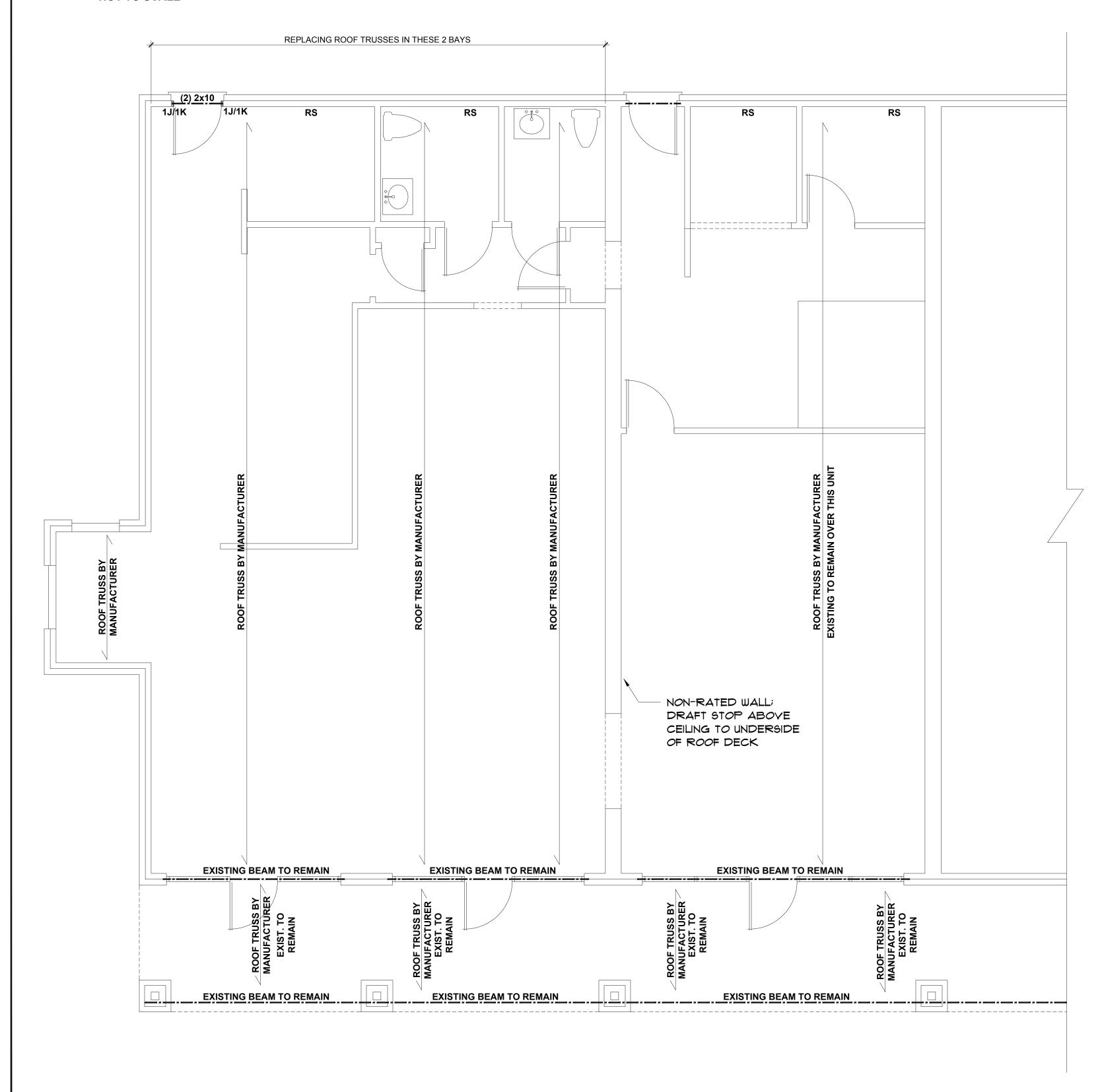
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05/05/2021 **FAB**



KEY PLAN

NOT TO SCALE



BEAM & POINT LOAD LEGEND

INTERIOR LOAD BEARING WALL
ROOF RAFTER / TRUSS SUPPORT
DOUBLE RAFTER / DOUBLE JOIST
STRUCTURAL BEAM / GIRDER

WINDOW / DOOR HEADER

□ POINT LOAD TRANSFER

POINT LOAD FROM ABOVE BEARING ON BEAM / GIRDER

TRUSSED ROOF - STRUCTURAL NOTES

- 1. PROVIDE CONTINUOUS BLOCKING THROUGH STRUCTURE FOR ALL POINT LOADS.
- 2. DENOTES OVER-FRAMED AREA
- 3. MINIMUM 7/16" OSB ROOF SHEATHING
- 4. TRUSS LAYOUT AND PLACEMENT BY MANUFACTURER TO COINCIDE WITH THE SUPPORT LOCATIONS SHOWN. TRUSS PROFILES SHALL BE SEALED BY THE TRUSS MANUFACTURER. TRUSS PLANS TO BE COORDINATED WITH THE SEALED STRUCTURAL DRAWINGS. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- MANUFACTURER TO PROVIDE REQUIRED UPLIFT CONNECTION.
- 6. PROVIDE H2.5A (MINIMUM) OR EQUIVALENT AT EACH TRUSS-TO-TOP PLATE CONNECTION AT OVER-FRAMED AREAS, UNLESS NOTED OTHERWISE.
- UPLIFT CONNECTION TO BE CARRIED THROUGH TO FLOOR SYSTEM.



P-0961

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R BY OTHERS. DRAWINGS ARE PROVIDED TO CLIENT FO

JDS. Consulting PLLC IS NOT LIABLE FOR CONTRACTON METHODS OR ANY CHABY CONTRACTOR OR BY OTHERS. DRAY THE LOT NUMBER, PROPERTY, OR AS A SHEET. DIMENSIONS SHALL GOVERN GOVERN OVER DIMENSIONS

2790 NC-16 BUSINESS, DENVER, NC 28037

CATION:

NORTH CAROLINA

SCALE: 1/4" = 1'-0" FOR 24x36 PAPER, NOT TO SCALE FOR 11x17 PAPER, OR AS NOTED

21900843

DATE: DRAWN BY: FAB

FIRST FLOOR CEILING FRAMING PLAN

S1.0

								HEA	T PUMP	AIR HANI	DLING U	NIT WITH	ELECTRIC HEAT											
	EVAPORATOR FAN				COOLING					HEATING			ELECTRICAL											
SCHEDULE	CEM		CFM		LIL E		OFM				TEMP (F)	TOT	SEN	EER/	LVG AIR	MBH	ALIV	,	VOLTAG		MAX	MODEL#	REMARK
SCHEDULE	CF	IVI	HP	ESP (IN)	BLOWER	LVG	. AIR	O.D.	CAP	CAP			IVIDI	AUX		AUX		WOLIAG MCA	FUSE	WODEL#	S			
	SA	OA			SPEED RPM	DB	WB	AMB	MBH	MBH	SEER	DB	KW	MBH K	W			FUSE						
GOODMAN AH-1	1200	0	1/3	0.32	HI	78.4	64.3	93	36	15.7	14	64.1	14.4			240/1/60	53	40	AEUF37B14AA/HKSC15XBAA					
GOODMAN AH-2	1200	0	1/3	0.32	HI	78.4	64.3	93	36	15.7	14	64.1	14.4			240/1/60	53	40	AEUF37B14AA/HKSC15XBAA					
GOODMAN AH-3	1200	0	1/3	0.32	HI	78.4	64.3	93	36	15.7	14	64.1	14.4			240/1/60	53	40	AEUF37B14AA/HKSC15XBAA					

REMARKS:

- 1. FACTORY INSTALLED HORIZONTAL DRAIN PAN
- 2. FACTORY INSTALLED THERMAL EXPANSION VALVE
- 3. FIELD INSTALLED ELECTRIC HEATER
- 4. FIELD INSTALLED PROGRAMMABLE THERMOSTAT
- 5. FIELD INSTALLED LOW AMBIENT KIT
- FIELD INSTALLED BOLT-ON TXV KIT
 FIELD INSTALLED VERTICAL SUSPENSION KIT.

			CO	NDENSING	UNIT HE	AT PUMP	<u> </u>			
SCHEDULE	CC	OLING		ELE	CTRICAL	_		MODEL#		
	TEMP (F)	CAP	EER/			MAX	REFRIGERANT		REMARK	
	OUTDOOR	TOTAL	SEER	VOLTAGE	MCA		REFRIGERANT		S	
	AMBIENT	MBH	SEEK			FUSE				
GOODMAN HP-1	95	30	14	240/1/60	17.8	30	R-410A	GSZ140301AA	3.0-TON	
GOODMAN HP-2	95	30	14	240/1/60	17.8	30	R-410A	GSZ140301AA	3.0-TON	
GOODMAN HP-3	95	30	14	240/1/60	17.8	30	R-410A	GSZ140301AA	3.0-TON	

NOTES:

- 1. PER MANUFACTURER INDOOR BLOWER MOTOR POWERED FROM HEATER
- 2. MECHANICAL AND ELECTRICAL CONTRACTORS SHALL VERIFY ALL
- ELECTRICAL COMPONENTS FOR CONDENSING AND AIR HANDLING UNITS PRIOR TO PURCHASING AND INSTALLATION.
- 3. PROVIDE UNIT SHUT-DOWN THROUGH CONNECTION TO LOCAL SMOKE/FIRE DETECTOR.

EXHAUST FAN SCHEDULE											
SYM	MAKE	MODEL#	STATIC	CFM	WATTS	REMARKS	LOCATION				
EF 1	F1 BROAN HD80L		0.125 80 8		80	1 FLUSHING FIXTURE	BATHROOMS				

REMARK

- 1. FACTORY INSTALLED HORIZONTAL DRAIN PAN
- 2. FACTORY INSTALLED THERMAL EXPANSION VALVE

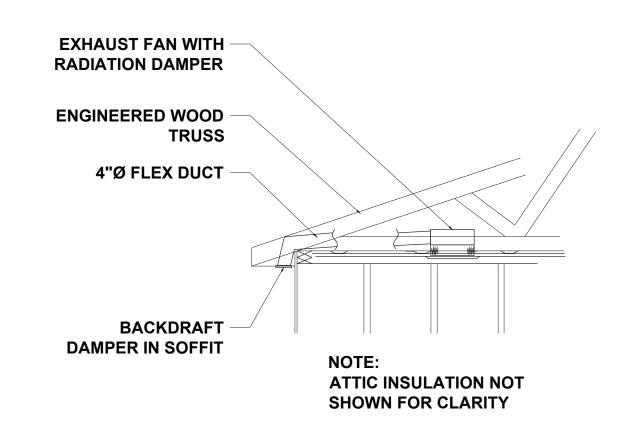
EXHUAST GRILL W/ WALL CAP BACKDRAFT DAMPER AND INSECT SCREEN CONNECTING DUCTWORK EXHAUST FAN CABINET WITH RADIATION DAMPER INTAKE GRILL NOTE: REDUCE 6" DUCT DOWN TO 4" DUCT AT LAST

POSSIBLE LOCATION AND DUCT RUN

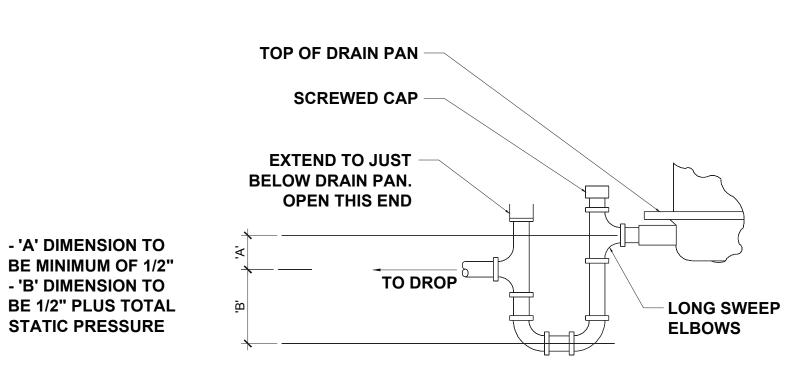
CEILING EXHAUST FAN DETAIL

USE OF FLEXIBLE DUCT LIMITED TO MAX 5' BELLMOUTH OF CONICAL AND CANNOT BE USED IN LIEU OF ELBOWS **TAKEOFF FITTING, FACTORY FABRICATED, SECURE TO** 4'-0" MAX Ø.C. SUPPORTS & AT DUCT W/ SELF-ADHESIVE **GASKET & SHEET METAL** ELBOW\$ ROUND RUNOUT TRUNK DUCT SCREWS (MIN. OF 4) (OR PLENUM) **COMPRESSION FITTING** (PROVIDE REDUCER AT THIS POINT WHEN DUCT SIZE IS LARGER THAN **DIFFUSER NECK)** IF JOINT REQUIRED, RIGID ROUND DUCT **USE MALE FITTING REQUIRED AT THIS POINT;** W/ COMPRESSION **RUSKIN CFD7T UL555C PROVIDE BALANCING COUPLING RADIATION CEILING** DAMPER IN RIGID DUCT AT DAMPER OR EQUIV. **DIFFUSER TAKEOFF** MAX. FLEXIBLE DUCT LENGTH 8'-0" **CEILING (SEE ROOM FINISH DIFFUSER** SCHEDULE FOR TYPE) (CONFIGURATION MAY

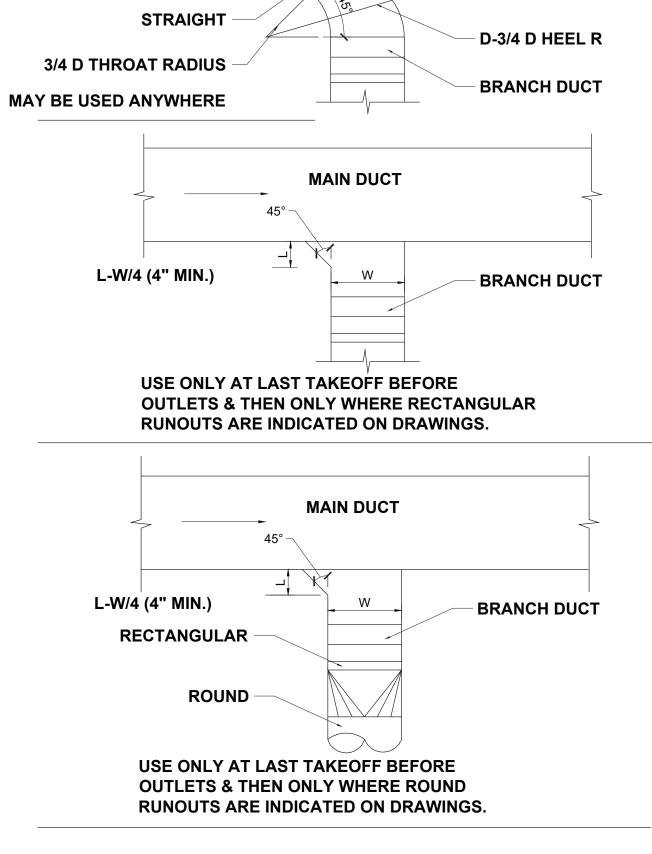
ROUND DUCT BRANCH TAKEOFF



EXHAUST FAN DUCT DETAIL



DRAIN TRAP FOR COOLING COILS (PRIMARY DRAIN PIPE)



MAIN DUCT

TYPICAL BRANCH TAKEOFF

MECHANICAL NOTES AND SPECIFICATIONS



28037 NC-16

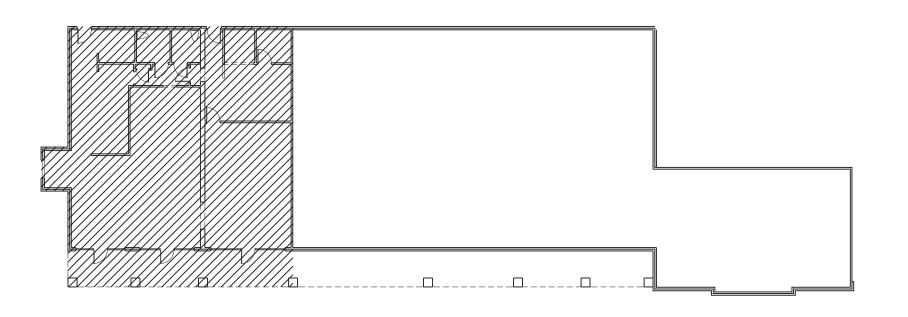
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DATE: DRAWN BY: FAB

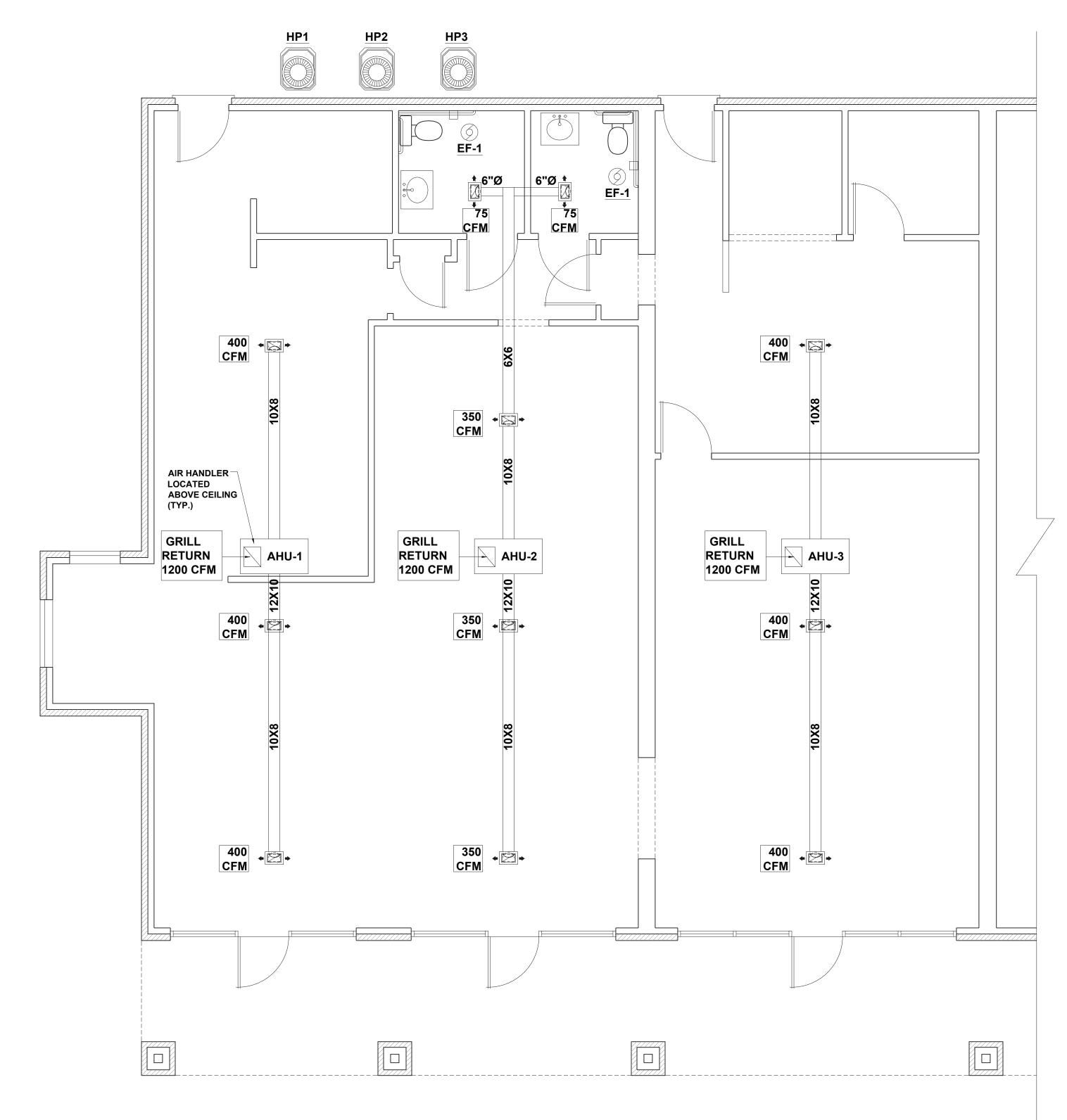
MECHANICAL DETAILS/SCHEDULES

M1.0



KEY PLAN

NOT TO SCALE



HVAC PLAN

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

MECHANICAL GENERAL NOTES

- 1. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING DIFFUSER.
- 2. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS. ALL RECTANGULAR SUPPLY AND RETURN DUCTWORK AND ALL ROUND DUCT SHALL MEET THE
- REQUIREMENTS OF INTERNATIONAL ENERGY CODE SECTION 503.

 3. CONDENSATE DRAIN PIPING SHALL BE HARD DRAWN COPPER (TYPE 'L'), PVC ACCEPTED.
- 4. ALL PIPING, DUCTS, VENTS, ETC. EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED COUNTER-FLASHED IN A WATERPROOF MANNER. ALL PENETRATIONS IN WALLS OR CEILINGS THAT ARE FIRE RATED SHALL BE SEALED TO THE FIRE RATING OF WALL OR CEILING EVEN IF NOT SHOWN ON PLANS IN A UL LISTED METHOD.
- 5. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
- 6. ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT.
- 7. LOCATE ALL THERMOSTATS AND SWITCHES 48" AFF TO MEET ACCESSIBILITY CODE LATEST ADDITION.
- MECHANICAL CONTRACTOR SHALL BALANCE SYSTEM TO AIR QUANTITIES INDICATED ON PLANS.
 CONTRACTOR SHALL COORDINATE DESIGN DRAWINGS WITH ARCHITECTURAL DRAWINGS AND NOTIFY ENGINEER OF ANY

DISCREPANCIES. THESE DESIGNS ARE BASED ON ARCHITECTURAL PLANS RECEIVED 04/08/2020.

ADDITIONAL MECHANICAL NOTES

- 1. CLEAR AREA DIMENSION. INTERIOR DUCT INSULATION MUST HAVE AN R-VALUE OF 5.0. ANY FLEX DUCT THAT RUNS OVER 10 FEET SHALL HAVE AN R-VALUE OF 6.0. ANY FLEX DUCT WHICH RUNS IN THE ATTIC SPACE SHALL HAVE AN R-VALUE OF 8.0. ALL DUCTWORK OUTSIDE BUILDING SHALL HAVE A MIN. R-8 VALUE.
- . COORDINATE ELECTRICAL REQUIREMENTS OF THE UNITS WITH ELECTRICAL CONTRACTOR.
- 3. PROVIDE RETURN AIR GRILL WITH FILTER.
- 4. ALL EQUIPMENT AND DUCTWORK SHALL BE INSTALLED PER MANUFACTURER AND IN ACCORDANCE WITH STATE AND LOCAL CODES AS WELL AS SMACNA STANDARDS.
- 5. ALL UNITS TO BE WIRED FOR SINGLE SOURCE POWER. ALL AHU SHALL HAVE AN AUTOMATIC SHUT DOWN SWITCH
- 6. BATHROOM TO BE EQUIPPED WITH EXHAUST FANS PROVIDED BY THE MECHANICAL CONTRACTOR. MECHANICAL
- CONTRACTOR TO PROVIDE AND INSTALL DUCT TO OUTSIDE. FANS SHALL BE WIRED BY ELECTRICAL CONTRACTOR.

 7. MECHANICAL CONTRACTOR TO COORDINATE DUCTWORK LAYOUT WITH ALL TRADES.
- 8. REFRIGERANT LINES TO BE SIZED BY MANUFACTURER FOR LENGTH OF RUN BETWEEN COIL AND CONDENSER.
- 9. VERIFY THERMOSTAT LOCATIONS WITH OWNER.10. MECHANICAL SYSTEM TO BE BALANCED AND TESTED AFTER INSTALLATION TO ASSURE PROPER OPERATION.

MECHANICAL ABBREVIATIONS

ABV ABOVE

FF ABOVE FINISHED FLOOR

AHU AIR HANDLING UNIT
CFM CUBIC FEET PER MINUTE

EF ELECTRIC FAN FA FRESH AIR

HP HEAT PUMP

TWH INLINE WATER HEATER

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

THERMAL ZONE 2A
WINTER DRY BULB: 25
SUMMER DRY BULB: 95

INTERIOR DESIGN CONDITIONS
WINTER DRY BULB: 70
SUMMER DRY BULB: 74

RELATIVE HUMIDITY: 50

BUILDING HEATING LOAD: SEE PLANS
BUILDING COOLING LOAD: SEE PLANS

MECHANICAL SPACING CONDITIONING SYSTEM

UNITARY

DESCRIPTION OF UNIT: HEAT PUMP SPLIT SYSTEM HEATING EFFICIENCY: SEE PLANS COOLING EFFICIENCY: 14.0 SEER

SIZE CATEGORY OF UNIT:

BOILER

SIZE CATEGORY. IF OVERSIZED, STATE REASON : N/A

ILLER
SIZE CATEGORY. IF OVERSIZED, STATE REASON: N/A

LIST EQUIPMENT EFFICIENCIES: __

SEAL OLD SEA

P-096

ESIGN • ENGINEERING • SURVEYING • ENERGY

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OJECT:
2790 NC-16 BUSINESS, DENVER, NC 28037
SCATION:
NORTH CAROLINA
SCALE: 1/4" = 1-0" FOR 24x36 PAPER, NOT TO SCALE FOR 11x17 PAPER, OR AS NOTED

DJECT NO.: 21900843

DATE: DRA

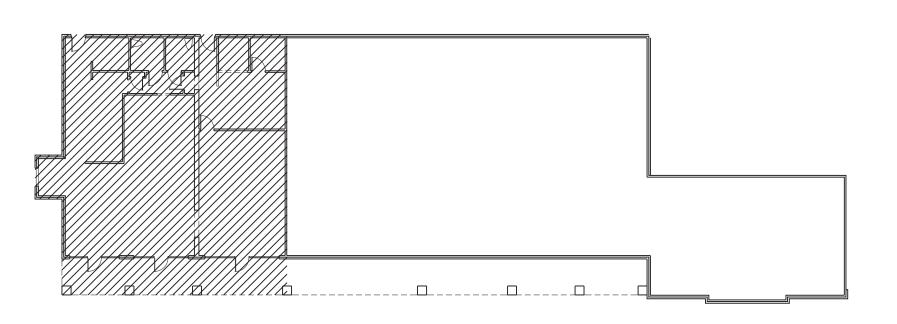
05/05/2021

FIRST FLOOR HVAC PLAN

FAB

M2.0

MECHANICAL NOTES AND SPECIFICATIONS



KEY PLAN

ABOVE ABOVE FINISHED FLOOR

ELECTRICAL ABBREVIATIONS

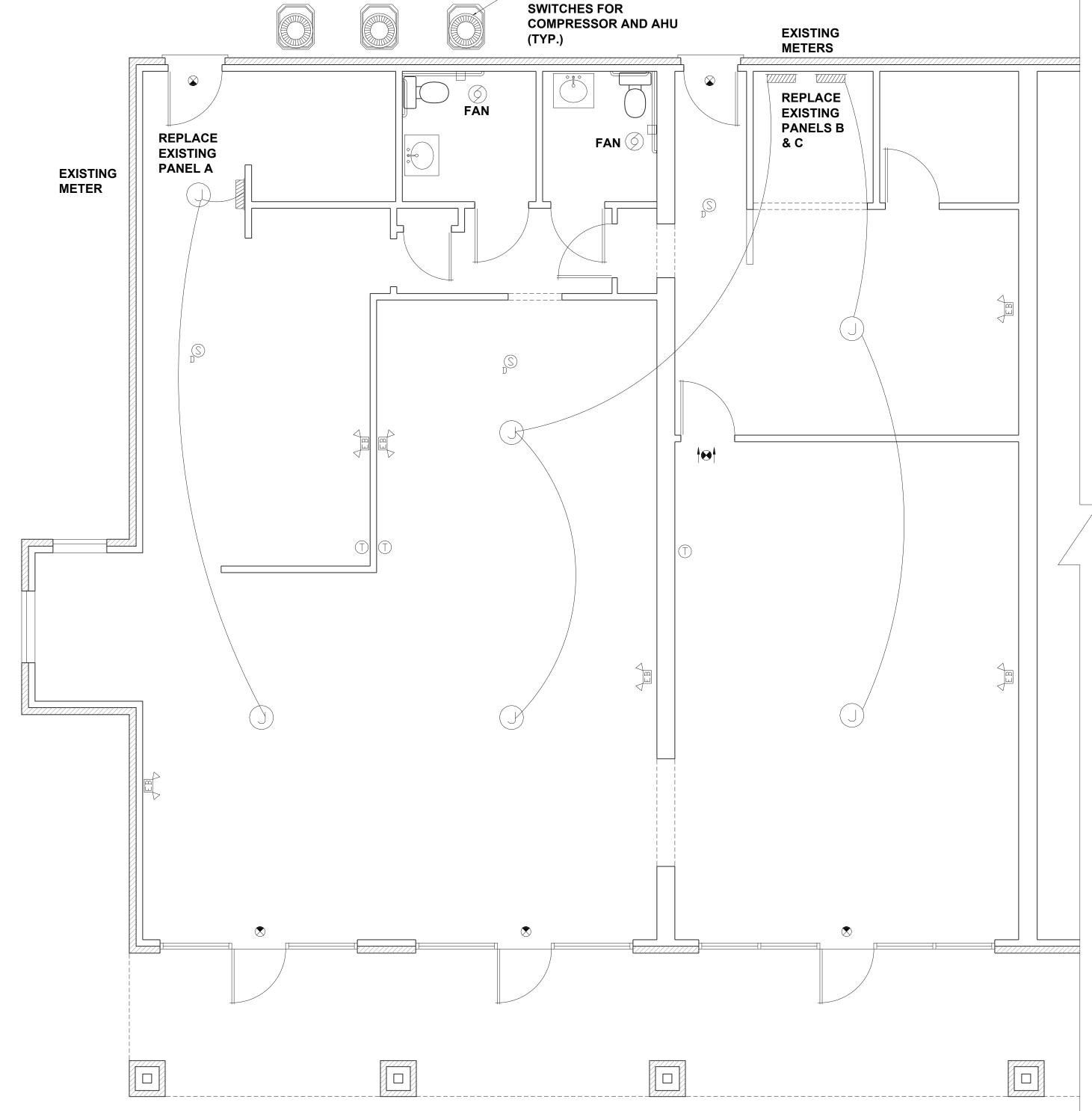
COPPER WIRE ELECTRIC FAN EMERGENCY LIGHTING EMERGENCY EXIT SIGN GROUND FAULT INTERRUPTER

GROUND **HEAT PUMP JUNCTION BOX**

MINIATURE CIRCUIT BREAKER **MOTION SENSOR**

INLINE WATER HEATER

NOT TO SCALE



PROVIDE DISCONNECT

ELECTRICAL PLAN

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

ELECTRICAL POWER LEGEND

	SYMBOL		DESCRIPTION
	S	\$	SWITCH, SINGLE POLE, 120/277V, 20A, 48" AFF
•	S ₃	\$3	SWITCH, THREE WAY, 120/277V, 20A, 48" AFF
	OS		OCCUPANCY SENSOR SWITCH, 120/277V, 20A, 48" AFF
	\Leftrightarrow		RECEPTACLE, DUPLEX, 120V, 20A, 18" AFF
	φ ^{GFI}		RECEPTACLE, DUPLEX GFI, 120V, 20A, ABOVE CABINET COUNTER TOP, GROUND FAULT INTERRUPTOR LEVITON 6898 (EXTERIOR IN NEMA 3R ENCLOSURE)
	•		RECEPTACLE, SINGLE, 220V, 18" AFF
			JUNCTION BOX
			SMOKE DETECTORS INTERCONNECTED WITH BATTERY BACK UP AND CARBON MONOXIDE DETECTOR
			EXHAUST FAN WITH NO LIGHT
			ELECTRICAL PANEL
(a)		•	LIGHTED EMERGENCY EXIT SIGN WITH BATTERY BACKUP
	EB		EMERGENCY LIGHTS WITH BATTERY BACKUP
	181		LIGHTED EMERGENCY EXIT SIGN WITH ARROWS & BATT. BACKUP
	Ī		THERMOSTAT
	//		

INDIVIDUAL COMPRESSORS FOR EACH UNIT AND EQUIPMENT ROOM

ELECTRICAL NOTES

- **ELECTRICAL CONTRACTOR IS TO REVIEW COMPLETE DRAWING SET BEFORE ANY WORK** AND/OR INSTALLATION IS STARTED.
- 2. ELECTRICAL CONTRACTOR IS TO REPORT ON ANY DISCREPANCY(S) TO ENGINEER PRIOR TO WORK/INSTALLATION FOR CLARIFICATION AND/OR SOLUTION.
- 3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK EXPLICITLY SHOWN AND **WORK IMPLIED UNLESS OTHERWISE NOTED**
- 4. THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL
- 5. ELECTRICAL CONTRACTOR SHALL COORDINATE CLOSELY WITH ALL OTHER TRADES TO AVOID CONFLICTS AND MISTAKES. AND TO ENSURE OTHER TRADES PROVIDE MEASURES TO ACCOMMODATE ELECTRICAL WORK (I.E. ACCESS DOORS, SLAB/WALL/ROOF **OPENINGS, ETC.)**
- 6. ELECTRICAL CONTRACTOR TO VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING ELECTRICAL SERVICE WITH LOCAL POWER COMPANY PRIOR TO PROJECT START-UP, NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.
- 7. FINAL ELECTRICAL CONNECTION(S) TO ALL EQUIPMENT, AND/OR FURNITURE (I.E. CUBICLES, WORKSTATIONS, ETC.) IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 8. ALL CONDUCTORS SHALL BE COPPER AND TYPE NM #12AWG MINIMUM WIRE SIZES SHALL BE BASED ON 75 DEGREE WIRE & TERMINALS.
- 9. ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE. 10. ELECTRICAL CONTRACTOR SHALL VERIFY AVAILABLE FAULT CURRENT WITH **ELECTRICAL**
- UTILITY PRIOR TO PURCHASING DISTRIBUTION EQUIPMENT. 11. ALL EQUIPMENT AND COMPONENTS INSTALLED AS PART OF THIS FACILITY SHALL BE NEW U.L. LISTED AND LABELED, AND INSTALLED PER THE 2008 NEC, ANY
- JURISDICTIONAL REQUIREMENTS AND PER THE MANUFACTURERS REQUIREMENTS. 12. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADE DISCIPLINE TO AVOID INTERFERENCE AND RE-WORK.
- 13. ALL CONDUCTORS TO BE INSTALLED UNDERGROUND SHALL BE INSTALLED 24" B.F.G AND IN SCHEDULE 40 PVC CONDUIT.
- 14. ALL FLUORESCENT LAMPS SHALL BE T-8 SP 41 OR APPROVED EQUAL LAMPS SHALL BE ENVIRONMENTALLY SAFE.
- 15. ELECTRICAL CONTRACTOR SHALL CHECK FOR ELIMINATE SHORTS PRIOR TO
- CIRCUITS. FAILURE TO DO SO WILL RESULT IN REPAIRS TO BE MADE AT NO EXPENSE TO OWNERS OR REPRESENTATIVES.
- 16. ELECTRICAL CONTRACTORS OR DESIGNATED TELECOMMUNICATIONS SUBCONTRACTOR SHALL COORDINATE LOCATION AND REQUIREMENTS FOR TELEPHONE SERVICE WITH THE **TELEPHONE COMPANY.**
- 17. FIRESTOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS, AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED. INSTALL THE DEVICE(S) OR SYSTEM(S) IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING, PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN "F" RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.
- 18. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL BATHROOM EXHAUST FAN MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL BATHROOM EXHAUST
- 19. ELECTRICAL CONTRACTOR SHALL PROVIDE RACEWAY SEALS TO MAIN DISTRIBUTION PANELS PER NEC 225.27.
- 20. ALL DEVICES TO BE INSTALLED FOR ADA ACCESSIBILITY PER ANSI A117.1
- 21. CONDUIT ENTERING COOLER AND FREEZER TO BE SEALED PER NEC 300.7
- 22. ELECTRICAL CONTRACTOR TO PROVIDE AIC PLAQUES PER NEC 110.24. WHERE APPLICABLE, PLAQUES SHALL ALSO INDICATE THAT THE BUILDING HAS TWO, OR MORE SERVICES IF TWO, OR MORE EXIST FOR THE BUILDING.
- 23. ALL EMERGENCY LIGHTS TO BE CONNECTED TO UNSWITCHED SIDE OF NEAREST LIGHT
- 24. ALL EXTERNAL LIGHTING TO BE CONNECTED TO TIMER AND PHOTO -CELL IF NOT
- 25. WHENEVER AND WHEREVER APPLICABLE ALL OUTLETS/RECEPTICLES INSIDE OF ALL AMENITY STRUCTURES SHALL BE TAMPER RESISTANT.



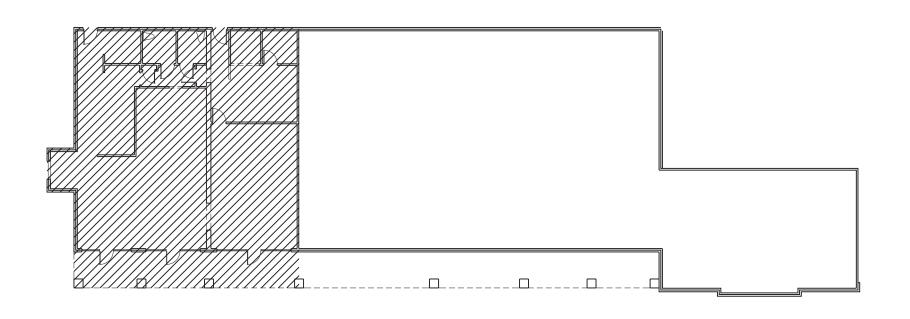
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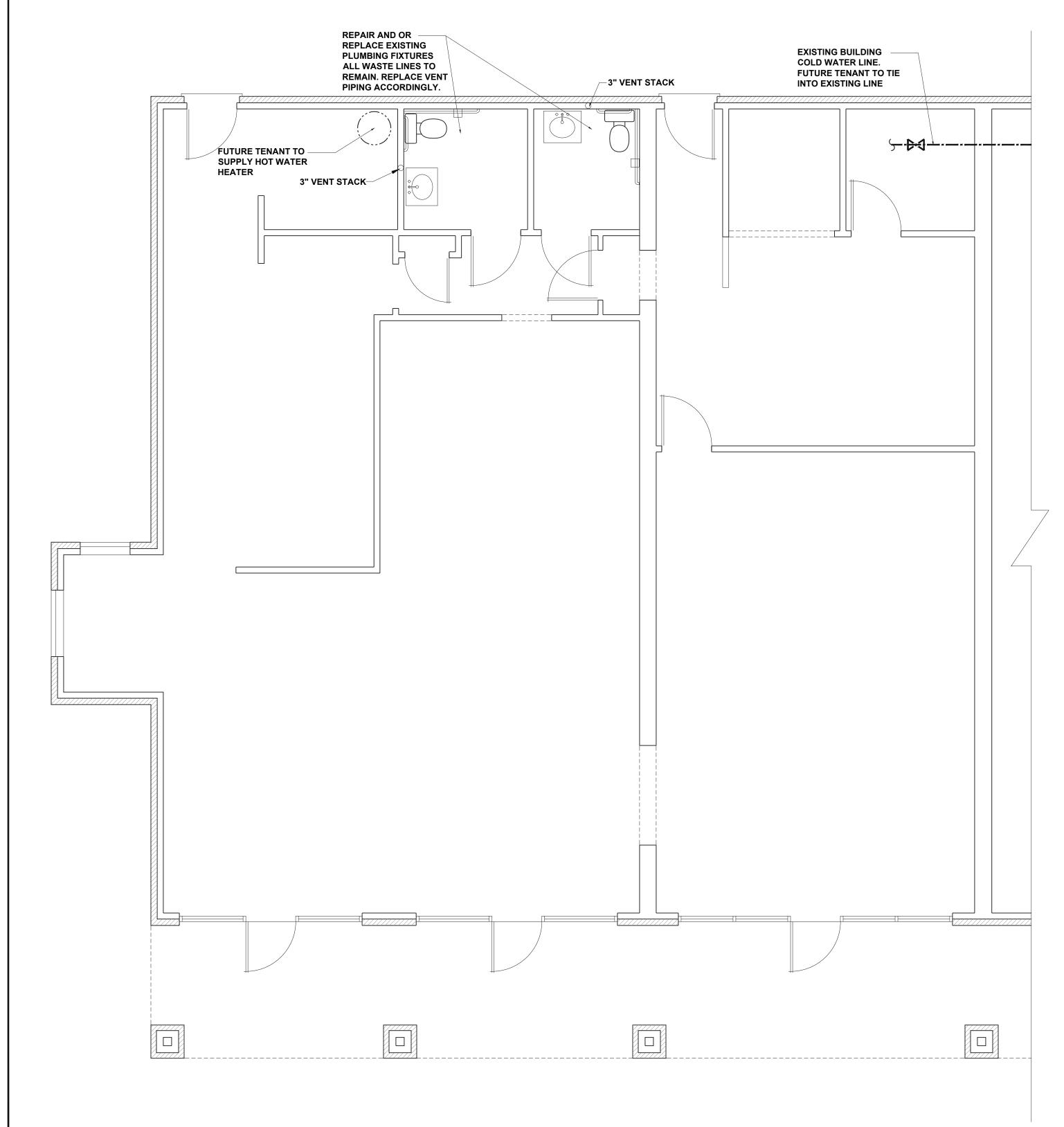
05/05/2021 **FAB**

ELECTRICAL PLAN

E1.0



KEY PLAN NOT TO SCALE



PLUMBING PLAN

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

PLUMBING NOTES

- 1. PLUMBING CONTRACTOR SHALL FURNISH AND PAY FOR ALL LABOR, MATERIAL, AND EQUIPMENT, PERMITS, FEES, AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION FOR THE PROPER AND CORRECT COMPLETION AND OPERATION OF ALL SYSTEMS IN THIS SECTION OF WORK IN ACCORDANCE WITH THE APPROVED EDITIONS OF THE 2015 INTERNATIONAL PLUMBING CODE (IPC), THE LOCAL ADMINISTRATIVE AUTHORITY AND ALL OTHER APPLICABLE NFPA CODES.
- 2. ACREAGE CHARGES, BONDS, PROPERTY ASSESSMENTS AND FACILITIES CHARGE SHALL NOT BE CONSTRUED TO BE A PART OF THIS CONTRACT.
- 3. PLUMBING CONTRACTOR IS TO COORDINATE WITH GENERAL CONTRACTOR AND/OR WORK WITH ALL OTHER CONTRACTORS OR OTHER TRADES, IN REGARDS TO PROJECT TIMELINE, WORK HOURS, AS WELL AS ANY BONDING OR INSURANCE REQUIREMENTS.
- 4. ALL PLUMBING FIXTURES, MATERIALS, AND EQUIPMENT PROVIDED AND/OR INSTALLED SHALL BE PROVIDED COMPLETE WITH ALL ACCESSORIES, HANGERS, VALVES, STOPS, TAILPIECES, TRAPS, FAUCETS, STRAINERS ETC. REGARDLESS OF PRESENCE ON PLANS (SEE FIXTURE SCHEDULE). FURTHERMORE, ALL SAID INSTALLED FIXTURES, MATERIALS, AND EQUIPMENT WITH ALL ACCESSORIES SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF TURNOVER OF THE WORK TO THE OWNER, OR IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD GUARANTEE, IF LONGER EXISTING EQUIPMENT IS INCLUDED FROM WARRANTY REQUIREMENT.
- THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK PERMIT.
- 6. DO NOT SCALE DRAWINGS FOR MEASUREMENT.
- 7. FIRESTOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OR FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSYTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814. INSTALL THE DEVICE(S) OR SYSTEM(S) IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING, PROVIDE A DEVICE(S) OR SYSTEMS(S) PENETRATED.
- ALL PLUMBING FIXTURES ARE TO BE EQUIPPED WITH WATER HAMMER ARRESTORS AS PER IPC 604.9. ARRESTORS ARE EXEMPT IF PLASTIC PIPE USED, IPC 604.9. PLUMBING CONTRACTOR AND GENERAL CONTRACTOR TO VERIFY.
- 9. ALL PLUMBING MATERIALS USED WILL COMPLY WITH 2015 INTERNATIONAL PLUMBING CODE.
 9.1. ANY ABOVE-GROUND DRAINAGE AND VENT PIPING SHALL COMPLY WITH SECTION 702.1.
 - 9.2. ANY UNDERGROUND SANITARY DRAINAGE AND VENT PIPING SHALL COMPLY WITH SECTION 702.2.
 - 9.3 ANY WATER SERVICE PIPE SHALL COMPLY WITH SECTION 605.3.
 - 9.4 ANY WATER DISTRIBUTION PIPE SHALL COMPLY WITH SECTION 605.4.
- 10. INFORMATION GIVEN IN SCHEDULES INCLUDES BOTH DESCRIPTION OF PRODUCT AND MANUFACTURER'S MODEL NUMBER (#). IF CONFLICT IS PRESENT BETWEEN DESCRIPTION AND MODEL NUMBER (#), EQUIPMENT DESCRIPTION SHALL TAKE PRECEDENCE, IN CASE OF CONFLICT BETWEEN THE PLANS AND NOTES/SPECIFICATIONS OR CONFLICT BETWEEN INFORMATION PRESENTED ON THE PLANS OR IN THE NOTES/SPECIFICATIONS, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENT.
- 11. BEFORE BID PLUMBING CONTRACTOR IS RESPONSIBLE FOR CLARIFYING WITH GENERAL CONTRACTOR ANY CONFUSION IN REGARDS TO RESPONSIBILITY OF WORK TO BE PERFORMED OR MATERIALS TO BE PROVIDED. THE SUBMITTAL OF THE BID BY THE CONTRACTOR WILL BE HELD AS PROOF THAT THE CONTRACTOR UNDERSTANDS AND FORTHWITH UNDERTAKES THOROUGHLY AND COMPLETELY THE SCOPE OF THE WORK INVOLVED, AND HAS INCLUDED ON THE BID ALL NECESSARY ITEMS TO CARRY OUT THIS SECTION OF WORK.
- 12. ALL EXISTING EQUIPMENT AND SYSTEMS ARE ASSUMED BY ENGINEER TO BE IN GOOD WORKING ORDER. BEFORE BEGINNING WORK PLUMBING CONTRACTOR IS TO ENSURE ANY EQUIPMENT AND SYSTEMS TO REMAIN ARE PROPERLY FUNCTIONING. NOTIFY GENERAL CONTRACTOR IMMEDIATELY IF PROBLEMS ARE DISCOVERED.
- 13. ALL QUESTIONS MUST BE SUBMITTED IN RFI FORMAT TO THE ARCHITECT AND MUST BE ADDRESSED BY THE APPROPRIATE DESIGNER OF RECORD PRIOR TO BECOMING A PROPOSED CHANGE ORDER.
- 14. PLUMBING CONTRACTOR IS TO REVIEW COMPLETE DRAWING SET. PLUMBING CONTRACTOR IS RESPONSIBLE FOR WORK EXPLICITLY SHOWN AND WORK IMPLIED. UNLESS OTHERWISE NOTED, FINAL PLUMBING CONNECTION TO ALL EQUIPMENT, FIXTURES, ETC. IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.
- 15. ALL MATERIALS SHALL BE NEW UNLESS OTHERWISE SHOWN OR SPECIFIED.
- 16. THE PLUMBING CONTRACTOR SHALL COORDINATE CLOSELY WITH ALL OTHER TRADES TO AVOID CONFLICT AND ENSURE OTHER TRADES PROVIDE MEASURES TO ACCOMMODATE PLUMBING WORK (I.E. ACCESS DOORS, SLAB/WALL/ROOF OPENINGS, ELECTRICAL CONNECTIONS, ETC.)
- 17. PLUMBING CONTRACTOR TO FOLLOW MANUFACTURER'S INSTRUCTIONS WHEN INSTALLING PLUMBING EQUIPMENT AND SHARE REQUIRED MAINTENANCE ACCESS AND CLEARANCES ARE MAINTAINED. IF ANY KIND OF CONFLICT EXISTS BETWEEN THESE PLANS AND MANUFACTURER INSTRUCTIONS CONTACT ENGINEER FORTHWITH.
- 18. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLUMBING EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPACKLE, ETC.). UPON COMPLETION OF WORK THE PLUMBING CONTRACTOR SHALL CLEAN, WASH, ETC. ALL ITEMS AND EQUIPMENT IN HIS SCOPE OF WORK AND LEAVE ALL ITEMS BRIGHT AND CLEAN.
- 19. PLUMBING CONTRACTOR TO VERIFY ALL REQUIREMENTS AND COORDINATE EXACT LOCATION OF INCOMING PLUMBING SERVICE WITH LOCAL WATER COMPANY PRIOR TO PROJECT START-UP. NOTIFY ENGINEER OF ANY CHANGES AS MAY BE REQUIRED.



PLUMBING NOTES AND DETAILS



P-09

1 - ENGINEERING - SURVEYING - ENERGY
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S OR ANY CHANGES TO PLANS MADE IN THE FIELD
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RTY, OR AS A MASTER PLAN AS SPECIFIED ON TITLE
ALL GOVERN OVER SCALE, AND CODE SHALL

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SINESS, DENVER, NC 28037

LINA

OJECT NO.:

21900843

05/05/2021 FAB

PLUMBING PLAN

P1.0