

CONSTRUCTION DOCUMENTS FOR  
**CHOWAN COUNTY**  
**COURTHOUSE RENOVATION**

**PHASE 1**

EDENTON, NC

JKF PROJECT NO. 2023-07

JANUARY 5, 2024



ENGINEERING SOURCE  
MECHANICAL & ELECTRICAL ENGINEERS  
102 REGENCY BLVD., SUITE A2  
GREENVILLE, NC 27834  
252-439-0338

**ROOM FINISH SCHEDULE**  
(SEE FLOOR PLANS)

ROOM NAME	FINISH
IOI	ROOF FINISH
A	WALL FINISH
B	BASE MATERIAL/FINISH
C	FLOOR MATERIAL/FINISH

**FLOOR MATERIALS/FINISH**

CR	CARPET TILE
CT	CERAMIC TILE

**BASE MATERIALS**

CT	CERAMIC TILE
SW	STAINED WOOD

**WALL MATERIALS/FINISH**

CT	CERAMIC TILE GLAZED WALL
P	PAINTED GYPSUM BOARD
WP	WOOD PANELING

**REFLECTED CEILING PLAN LEGEND**

ROOM NAME	FIN. CLG. HEIGHT AFF.	CEILING MATERIAL
IOI	CLG. HEIGHT	INDIRECT LAY-IN LIGHT FIXTURE (SEE ELECTRICAL DRAWINGS FOR SIZE AND TYPE)
A		SUPPLY AIR DIFFUSER
B		RETURN AIR DIFFUSER
C		EXHAUST AIR GRILLE
D		DOWNLIGHT FIXTURE
E		WALL WASHER FIXTURE
F		WALL SCONCE OR MOUNTED FIXTURE
G		EXIT SIGN
H		SIGN FACE
I		DIRECTION ARROW IF NEEDED
J		HEAT DETECTOR
K		SMOKE DETECTOR
L		FIRE ALARM HORN STROBE
M		DATUM ABOVE FIN. FLOOR
N		CEILING MATERIAL (SEE LEGEND)

**CEILING MATERIALS LEGEND**

APC	ACOUSTICAL PANEL CEILING (IF FOLLOWED BY A NUMERAL DENOTES SPECIAL TYPE AS SPECIFIED)
PGB	PAINTED GYPSUM BOARD

**GENERAL PROJECT LEGEND**

A1	REFERENCE NO.
A31	DRAWING NO.
●	DENOTES CHANGE IN FINISHED FLOOR MATERIAL
A1	ELEVATION REFERENCE
A4	DOOR NO.
A41	DOOR ASSEMBLY DESIGNATION
A2	HARDWARE SET NO.
A3	DOOR GROUP NO.
4X	PARTITION TYPE (SEE DRAWING A7.1)
●	DOT DENOTES SIDE W/SPECIAL FINISH
—	1-HOUR RATED FIRE BARRIER
A	GENERAL NOTE REFERENCE NUMBERS DESIGNATE DEMOLITION LETTERS DESIGNATE CONSTRUCTION.
■	NEW CONSTRUCTION

**ARCHITECTURAL ABBREVIATIONS**

APC	ACOUSTICAL PANEL CEILING
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
ALT	ALTERNATE
AN	ANODIZED
ATN	ATTENUATION
BD	BOARD
BIT	BITUMINOUS
BLKG	BLOCKING
BLK	BLANKET
BMT	BEAM
BOP	BOTTOM OF PLATE
BOS	BOTTOM OF STEEL
BRG	BEARING
CAB	CABINET
CAP	CAPACITY
CB	CATCH BASIN
C	CENTERLINE
CJ	CONTROL JOINT
CLG HT	CEILING HEIGHT
CLR	CLEAR
CLG	CEILING
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CT	CERAMIC TILE
DWG	DRAWING
EA	EACH
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
ELEC	ELECTRICAL
ENCL	ENCLOSURE
EOS	EDGE OF SLAB
EWC	ELECTRIC WATER COOLER
EXIST	EXISTING
EXPD	EXPOSED
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FFE	FINISHED FLOOR ELEVATION
FL	FLOOR
FRP	FIBERGLASS REINFORCED POLYESTER
FT	FIRE RETARDANT TREATED
FTG	FOOTING
FUR	FURRING
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GB	GRAB BAR
GC	GENERAL CONTRACTOR
GL	GLASS
GN	GENERAL NOTE
GYP BD	GYPSUM BOARD
HDW	HARDWARE
HM	HOLLOW METAL
HT	HEIGHT
HVAC	HEATING, VENTILATION, AIR CONDITIONING
INT	INTERIOR
INSUL	INSULATION
INV	INVERT
JT	JOINT
LAV	LAVATORY
MANUF	MANUFACTURER
MC	MECHANICAL CONTRACTOR
MH	MANHOLE
MECH	MECHANICAL
MIN	MINIMUM
MO	MASONRY OPENING
MTD	MOUNTED
MTL	METAL
NTS	NOT TO SCALE
NIC	NOT IN CONTRACT
O/C	ON CENTER
OH	OVERHANG
OHD	OVERHEAD
OPNG	OPENING
PART	PARTITION
PC	PLUMBING CONTRACTOR
PCB	PAINTED GYPSUM BOARD
PCGBR	PAINTED GYPSUM BOARD WITH REVEAL
PL	PLATE
P	PAINTED
REF	REFRIGERATOR
REIN	REINFORCE / REINFORCING
REQD	REQUIRED
RM	ROOM
RO	ROUGH OPENING
RSW	RAIL & STILE WOOD
SCHED	SCHEDULE
SF	SQUARE FEET
SIM	SIMILAR
SPECS	SPECIFICATIONS
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURE / STRUCTURAL
SUSP	SUSPENDED
TC	TOP CURB
TF	TRANSPARENT FINISH
IG	TOP GRADE
TEMP	TEMPERED
THK	THICK
TJ	TOP OF JOIST
TOM	TOP OF MASONRY
TOP	TOP OF PLATE
TOS	TOP OF SLAB
TOW	TOP OF WALL
TYP	TYPICAL
T/S	TOP OF STEEL
TS	TUBE STEEL
UNO	UNLESS OTHERWISE NOTED
VAR	VARIABLE
VERT	VERTICAL
VF	VERIFY IN FIELD
WD	WOOD
WDW	WINDOW
WSC	WOOD SOLID CORE
WYF	WELDED WIRE FABRIC
W	WITH

**2018 APPENDIX B BUILDING 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)

Name of Project: CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I  
Address: 101 S BROAD ST., EDENTON, NC Zip Code: 27832  
Owner/Authorized Agent: CHOWAN COUNTY KEVIN HOWARD Phone # (252) 482-8431  
E-Mail: kevin.howard@chowan.nc.gov  
Owned By: County  
Code Enforcement Jurisdiction: County

**CONTACT:** John K. Farkas, AIA  
DESIGNER: JKF NAME: John K. Farkas, AIA LIC/PSB#: NC 5922 TEL: (252) 355-1068 EMAIL: jkf@jkf-arch.com  
Architectural: Architecture AIA  
Electrical: Engineering Wilson Pou, P.E. NC 21993 (252) 439-0338 wilson@engsource.com  
Fire Alarm: Engineering Wilson Pou, P.E. NC 21993 (252) 439-0338 wilson@engsource.com  
Plumbing: Engineering Wilson Pou, P.E. NC 21993 (252) 439-0338 wilson@engsource.com  
Mechanical: Engineering Wilson Pou, P.E. NC 21993 (252) 439-0338 wilson@engsource.com

**2018 NC BUILDING CODE: ALTERATION LEVEL 1**  
CONSTRUCTED: (date) 1977 CURRENT OCCUPANCY(S) (Ch. 3): ASSEMBLY A-3  
RENOVATED: (date) PROPOSED OCCUPANCY(S) (Ch. 3): ASSEMBLY A-3  
OCCUPANCY CATEGORY (Table 1604.5): Current: II Proposed: II

**BASIC BUILDING DATA**  
Construction Type: I-B  
Sprinklers: No  
Standpipes: No  
Primary Fire District: Yes Flood Hazard Area: No  
Special Inspections Required: No

**Gross Building Area Table**

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
2nd Floor	2,205	0	2,205
1st Floor	11,233	0	11,233
TOTAL	13,438	0	13,438

**ALLOWABLE AREA**

Primary Occupancy Classification(s): Assembly - A-3  
Accessory Occupancy Classification(s): BUSINESS  
Incidental Uses (Table 509): NONE  
Special Uses (Chapter 4 - List Code Sections): NONE  
Special Provisions (Chapter 5 - List Code Sections): NONE  
Mixed Occupancy: Yes Separation: NON SEPARATED USE

$Actual Area of Occupancy A + Actual Area of Occupancy B \leq Allowable Area of Occupancy A + Allowable Area of Occupancy B \leq 1,000$

STORY	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2 <sup>1</sup> AREA	(C) AREA FOR FRONTAGE INCREASE <sup>2,3</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>4</sup>
1	ASSEMBLY / BUSINESS	11,900	9,500	7,125	16,625
2	BUSINESS	2,100	9,500	7,125	16,625

<sup>1</sup> Frontage area increases from Section 506.2 are computed thus:  
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 300 (F)  
b. Total Building Perimeter = 300 (P)  
c. Ratio (F/P) = 1 (F/P)  
d. W = Minimum width of public way = 30 (W)

<sup>2</sup> Unlimited area applicable under conditions of Section 507.  
<sup>3</sup> Maximum Building Area - total number of stories in the building x D (maximum 3 stories) (506.2), 2x1,662 = 33,259  
<sup>4</sup> The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.  
<sup>5</sup> Frontage increase is based on the unsprinkled area value in Table 506.2.

**ALLOWABLE HEIGHT**

Building Height in Feet (Table 504.3)	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Stories (Table 504.4)	2	2	

<sup>1</sup> Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4

**FIRE PROTECTION REQUIREMENTS**

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	PROVIDED (W/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	0						
Interior							
Barriers							
Exterior							
North	>30'	0					
East	>30'	0					
West	>30'	0					
South	>30'	0					
Interior							
Nonbearing Walls and Partitions							
Exterior walls							
North	>30'	0					
East	>30'	0					
West	>30'	0					
South	>30'	0					
Interior walls and partitions							
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		1	EXIST.				
Shaft Enclosures - Other		1	EXIST. & NEW	A7.1	UL165		
Corridor Separation		1	EXIST.				
Occupancy/Fire Barrier Separation		N/A					
Party/Fire Wall Separation		N/A					
Smoke Barrier Separation		N/A					
Smoke Partition		N/A					
Tenant Dwelling Unit Sleeping Unit Separation		N/A					
Incidental Use Separation		N/A					

\* Indicate section number permitting reduction

**PERCENTAGE OF WALL OPENING CALCULATIONS**

FIRE SEPARATION DISTANCE (FEET FROM PROPERTY LINES)	DROOPE OF OPENING PROJECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
>30	UL, NS	UL, NS	UL, NS

**LIFE SAFETY SYSTEM REQUIREMENTS**

Emergency Lighting:	Yes
Exit Signs:	Yes
Fire Alarms:	Yes
Smoke Detection Systems:	Select. only
Carbon Monoxide Detection:	No

**LIFE SAFETY PLAN REQUIREMENTS**

Life Safety Plan Sheet #: BCL1

- Fire and/or smoke rated wall locations (Chapter 7)
- Assumed and real property line locations (if not on the site plan)
- Exterior wall opening area with respect to distance to assumed property lines (705.8)
- Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
- Occupant loads for each area
- Exit access travel distances (1017)
- Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
- Dead end lengths (1020.4)
- Clear exit widths for each exit door
- Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- Actual occupant load for each exit door
- A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- Location of doors with panic hardware (1010.1.10)
- Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- Location of doors with electromagnetic egress locks (1010.1.9.9)
- Location of doors equipped with hold-open devices
- Location of emergency escape windows (1030)
- The square footage of each fire area (202)
- The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- Note any code exceptions or table notes that may have been utilized regarding the items above

**ACCESSIBLE DWELLING UNITS - N/A**

**ACCESSIBLE PARKING - N/A**

**PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)**

USE	WATERCLOSURES	URINALS	LAVATORIES	SHOWERS	DRINKING FOUNTAINS			
SPACE	MALE	FEMALE	UNSEX	MALE	FEMALE	UNSEX	REGULAR	ACCESSIBLE
EXIST'G								
NEW								
REQ'D								

**SPECIAL APPROVALS**

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

SCO

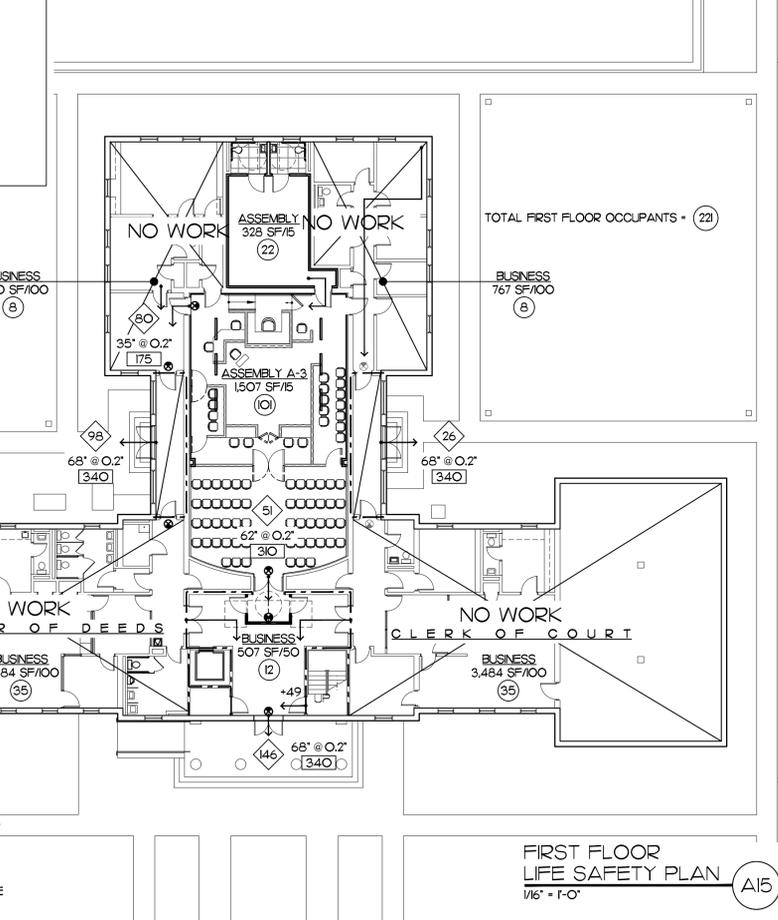
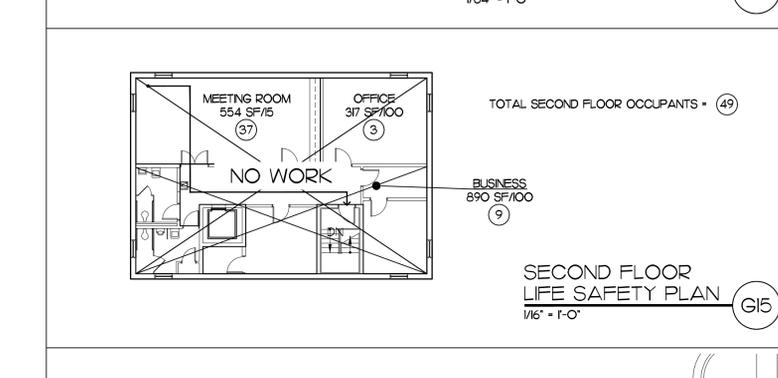
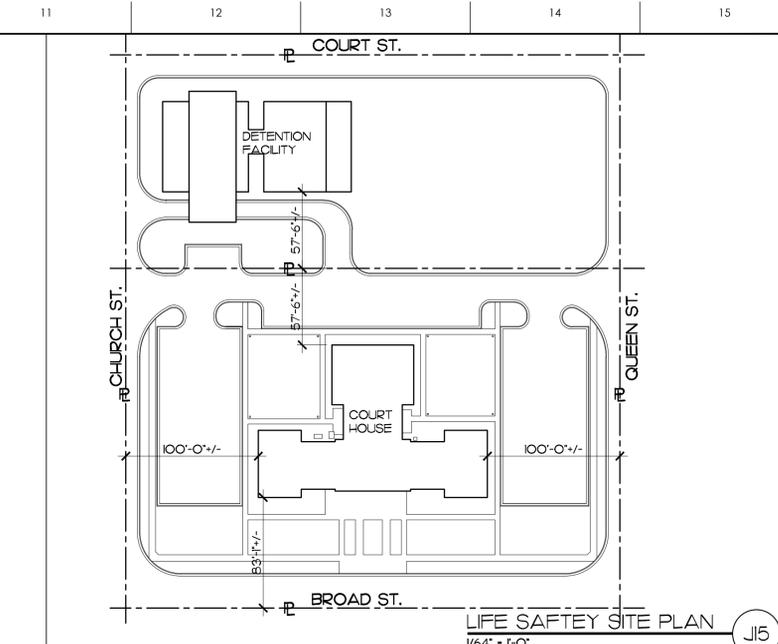
**ENERGY SUMMARY**

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 proposed design.

Existing building envelope complies with code: No  
Exempt Building: No Provide code or statutory reference: N/A  
Climate Zone: 3A  
Method of Compliance: Energy Code - Prescriptive (If "Other" specify source here)  
THERMAL ENVELOPE (Prescriptive method only)  
Roof/Ceiling Assembly - EXISTING TO REMAIN - NO ALTERATION  
Exterior Walls - EXISTING TO REMAIN - NO ALTERATION  
Walls below grade - N/A  
Floors over unconditioned space - N/A  
Floors slab on grade - EXISTING TO REMAIN - NO ALTERATION

**2018 APPENDIX B BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)**

**NO STRUCTURAL ALTERATIONS**



**MATERIALS KEYING LEGEND**

**DRAWING INDEX:**  
TITLE SHEET  
BC1.1 BUILDING CODE ANALYSIS, LEGENDS, SYMBOLS & ABBREVIATIONS

**ARCHITECTURAL**

A0.1	DEMOLITION PLANS
A1.1	FLOOR PLANS
A2.1	BUILDING SECTIONS
A4.1	ENLARGED FLOOR PLAN & INTERIOR ELEVATIONS
A5.1	FIRST FLOOR REFLECTED CEILING PLAN
A7.1	WALL TYPES & UL DETAILS
A7.2	INTERIOR DETAILS & CASEWORK SECTIONS
A8.1	DOOR SCHEDULE, DOOR TYPES AND DETAILS

**PME**

PME1.1 DEMO

**PLUMBING**

P1.1 PLUMBING PLAN

**MECHANICAL**

M0.1	MECHANICAL DETAILS
M1.1	MECHANICAL PLAN

**ELECTRICAL**

E0.1	NOTES & PANEL SCHEDULES
E1.1	POWER PLAN
E1.2	LIGHTING PLAN

**FIRE ALARM**

FA1.1 FIRE ALARM PLAN

**GENERAL NOTES**

**KEY PLAN**

NO REVISION	DATE

SCALE: AS NOTED  
DRAWN: MBD, BTP  
CHECKED: JKF  
DATE: 1-5-2024  
PROJECT NO.: 2023-07

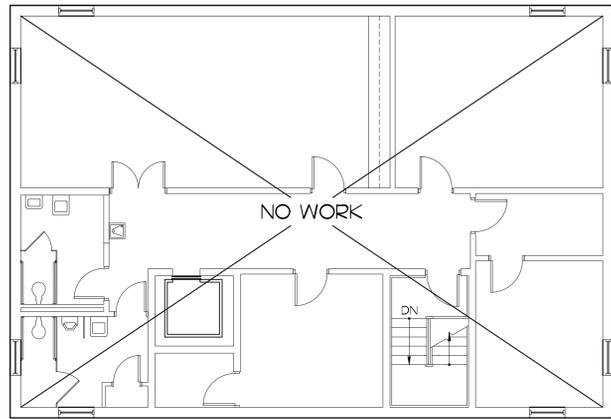
**JOHN K. FARKAS**  
REGISTERED ARCHITECT  
1/31/2024  
5922  
JKF ARCHITECTURE  
625 LYNDALE CT., SUITE F, GREENVILLE, NC 27858 252-355-1068

**CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I**  
EDENTON, NC

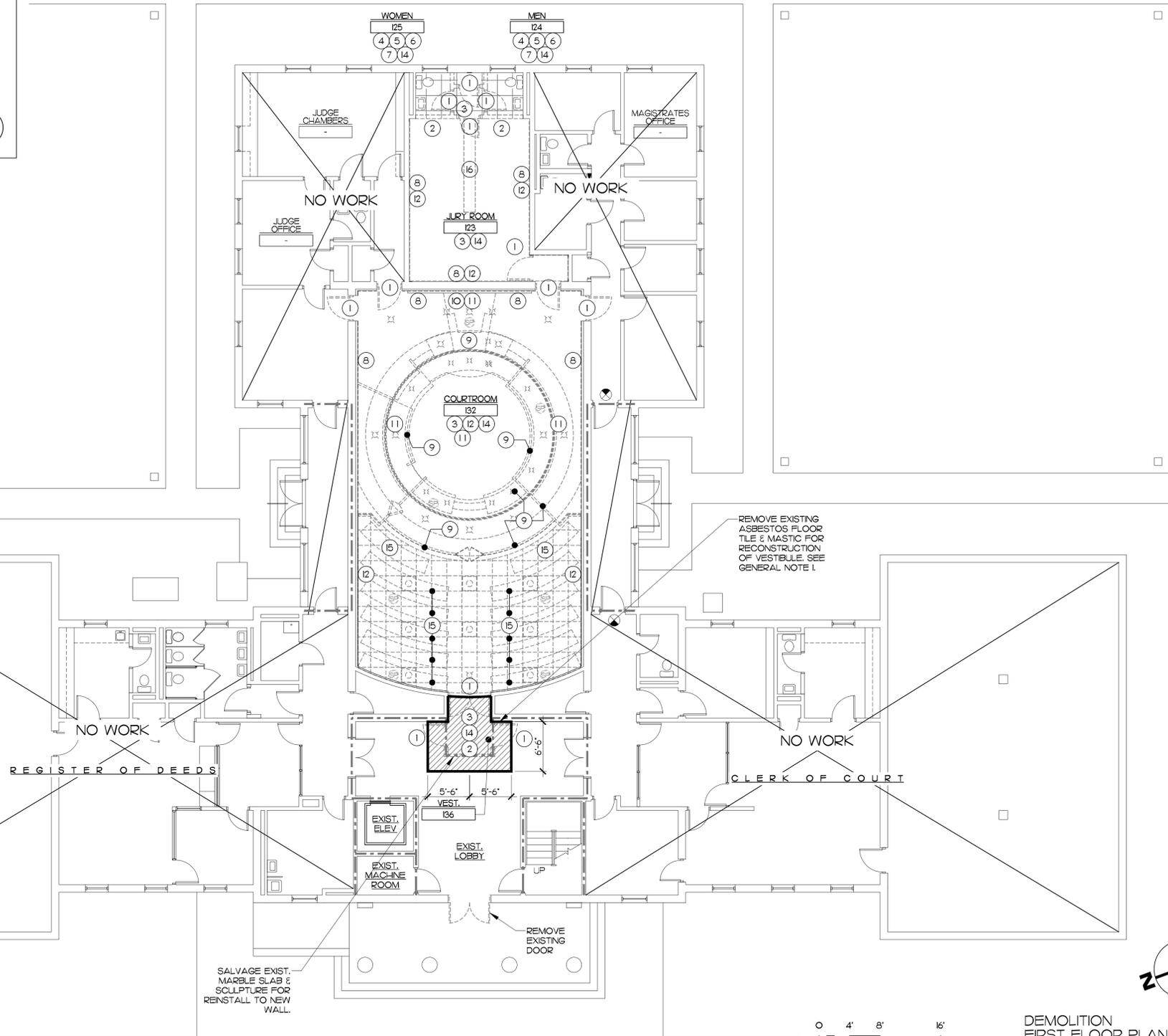
DRAWING TITLE: BUILDING CODE ANALYSIS, LEGENDS, SYMBOLS & ABBREVIATIONS

BC1.1

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SECOND FLOOR PLAN  
1/8" = 1'-0" J5



SALVAGE EXIST. MARBLE SLAB & SCULPTURE FOR REINSTALL TO NEW WALL.

REMOVE EXISTING ASBESTOS FLOOR TILE & MASTIC FOR RECONSTRUCTION OF VESTIBULE. SEE GENERAL NOTE I.

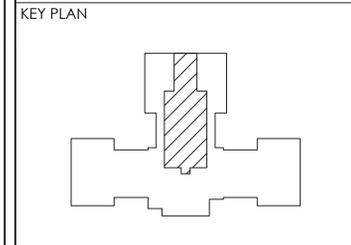


DEMOLITION FIRST FLOOR PLAN  
1/8" = 1'-0" A15

- MATERIALS KEYING LEGEND**
- 1 REMOVE EXISTING DOOR & FRAME/CASING.
  - 2 REMOVE EXISTING WALL CONSTRUCTION COMPLETELY.
  - 3 REMOVE EXISTING FLOOR FINISHES & WALL BASE COMPLETELY TO CONCRETE SLAB.
  - 4 REMOVE EXISTING PLUMBING FIXTURES. SEE PLUMBING DRAWINGS.
  - 5 REMOVE EXISTING GRAB BARS, TOILET ACCESSORIES.
  - 6 REMOVE EXISTING TILE FLOOR SYSTEM COMPLETELY TO CONCRETE SLAB.
  - 7 REMOVE CERAMIC TILE AND WALL BASE FOR NEW WALL CONSTRUCTION. PATCH & REPAIR EXISTING GYP. BD. WALLS AS REQ. FOR NEW CONSTRUCTION.
  - 8 REMOVE EXISTING WOOD WALL PANELING TO FLOORING.
  - 9 REMOVE EXISTING CASEWORK.
  - 10 EXISTING MARBLE WALL PANEL TO REMAIN.
  - 11 REMOVE ALL RAISED PLATFORMS IN ITS ENTIRETY TO CONCRETE SLAB.
  - 12 PATCH & PREPARE EXISTING GYP. BD. WALLS TO RECEIVE NEW PAINT FINISH. PROVIDE NEW GYP. BD. TO MATCH EXISTING AS REQ. TO FILL VOIDS.
  - 13 REMOVE & STORE EXISTING WOOD BENCHES. REFINISH & REINSTALL WITH NEW CONSTRUCTION.
  - 14 REMOVE EXISTING CEILINGS AND LIGHT FIXTURES IN THEIR ENTIRETY.
  - 15 REMOVE EXISTING BENCH & SALVAGE TO OWNER.
  - 16 SAW CUT EXISTING FLOOR CONCRETE AS REQUIRED FOR NEW FLOOR BOXES. PATCH AND REPAIR CONCRETE AS REQUIRED. SEE ELECTRICAL DRAWINGS AND SEE DETAIL.
- EXIST. 1 HOUR FIRE BARRIER

**GENERAL NOTES**

I. ABATEMENT NOTES  
 ASBESTOS ABATEMENT CONTRACTOR SHALL REMOVE ASBESTOS-CONTAINING FLOOR TILES AND MASTIC WHERE SHOWN.  
 THE CONTRACTOR SHALL REGULATE THE AREA AND COMPLY WITH OSHA REGULATIONS PER 29 CFR 1926.92.  
 NONFRAMBLE NONREGULATED REMOVAL TECHNIQUES SHALL BE DEMONSTRATED BY THE CONTRACTOR AND APPROVED BY THE DESIGNER AND INDUSTRIAL HYGIENE FIRM.  
 A NO-ODOR SOLVENT SHALL BE USED TO REMOVE THE FLOORING MASTIC. THE WORK SHALL BE VENTILATED USING HEPA FILTERED NEGATIVE AIR MACHINES TO THE OUTSIDE.  
 THE ABATEMENT CONTRACTOR WILL BE RESPONSIBLE FOR HANGING THE INDUSTRIAL HYGIENE FROM AT THE COMPLETION OF ABATEMENT ACTIVITIES. THE INDUSTRIAL HYGIENE FIRM SHALL BE NOTIFIED TO PERFORM A FINAL VISUAL INSPECTION AND OR CLEARANCE TESTING ANALYZED USING PHASE CONTRAST MICROSCOPY. THE DESIGNER SHALL BE NOTIFIED OF CLEARANCE RESULTS WITH A FINAL WRITTEN REPORT AVAILABLE WITHIN 24-HOURS OF SAMPLE COLLECTION.



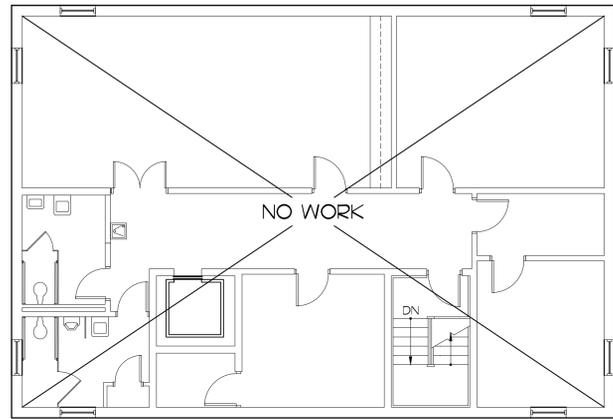
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**JKF**  
 ARCHITECTURE

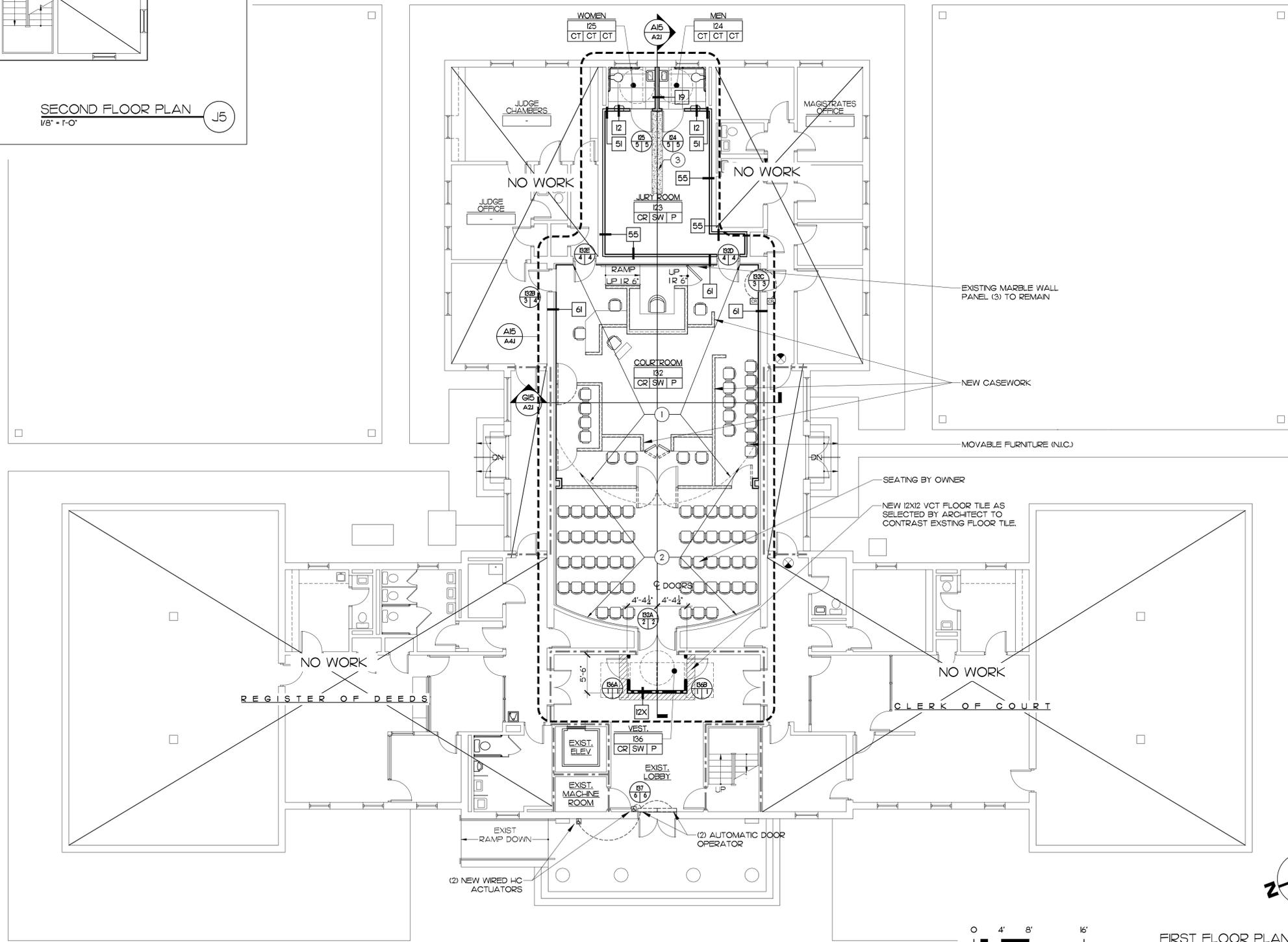
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**CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I**  
 EDENTON, NC

DRAWING TITLE	
DEMOLITION PLANS	
SCALE	DRAWING NO.
1/8" = 1'-0"	A15
DRAWN	JKF
CHECKED	JKF
DATE	1-5-2024
PROJECT NO.	2023-07



SECOND FLOOR PLAN  
1/8" = 1'-0" J5



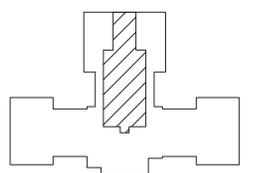
FIRST FLOOR PLAN A15  
1/8" = 1'-0"

- MATERIALS KEYING LEGEND**
- (1) NEW COMPACT FILL WITH 4" CONC. SLAB
  - (2) POUR OVER EXISTING CONC. TO LEVEL.
  - (3) RUN NEW CONDUIT LINES, CONC. FILL

- EXIST. 1 HOUR FIRE BARRIER
- NEW 1 HOUR FIRE BARRIER

**GENERAL NOTES**

**KEY PLAN**



NO	REVISION	DATE



**JKF**  
ARCHITECTURE

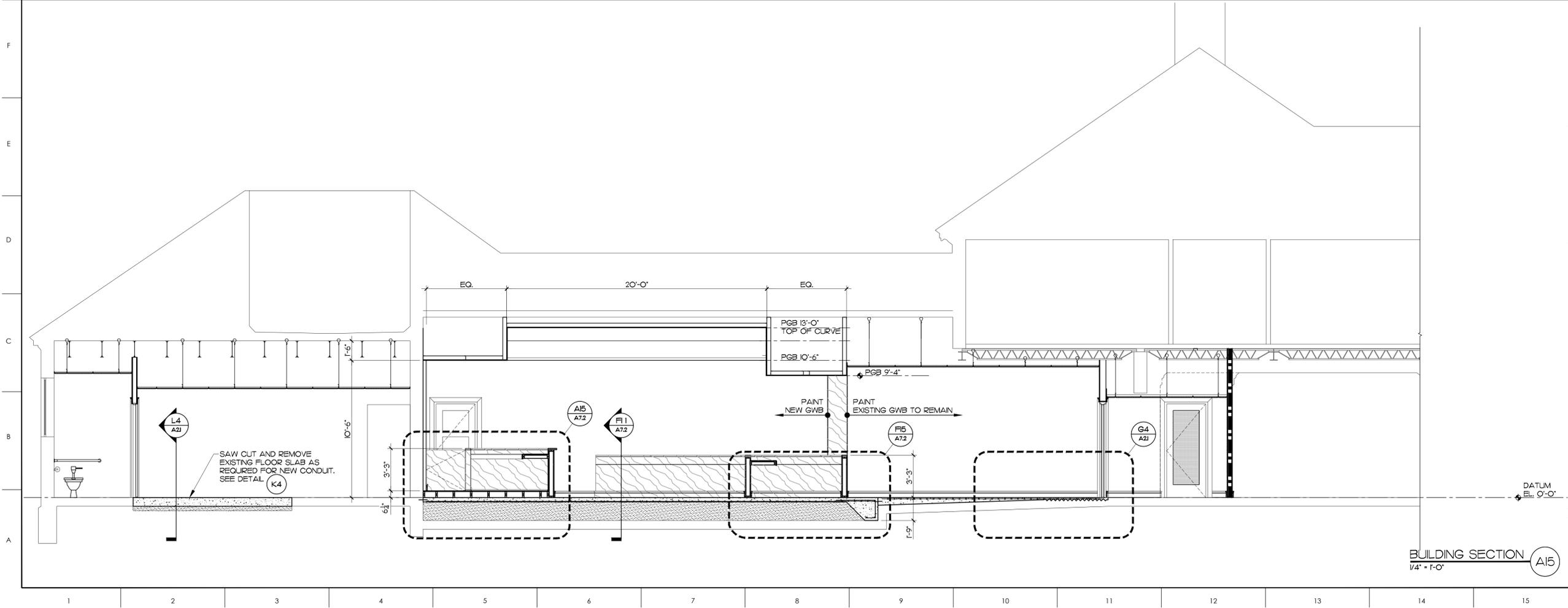
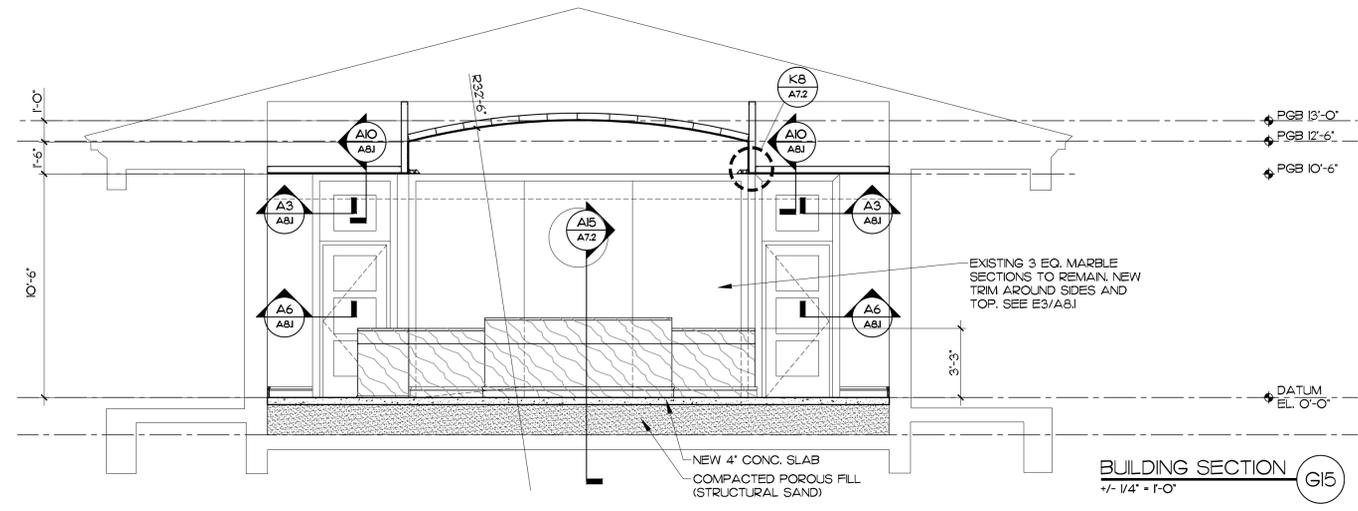
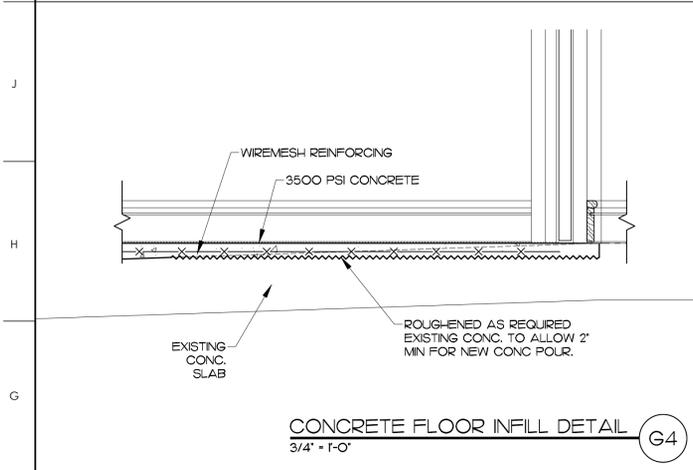
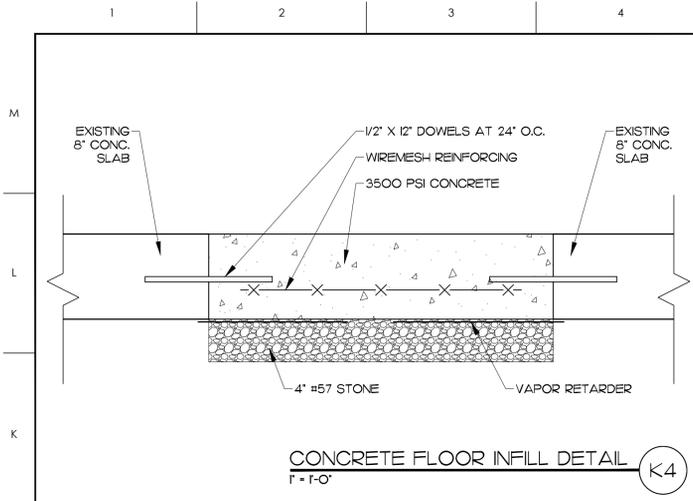
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**CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I**  
EDENTON, NC

DRAWING TITLE  
**FLOOR PLANS**

SCALE	1/8" = 1'-0"
DRAWN	JRH, BTP
CHECKED	JKF
DATE	1-5-2024
PROJECT NO.	2023-07

A.I.I



MATERIALS KEYING LEGEND

GENERAL NOTES

KEY PLAN

NO	REVISION	DATE

JOHN K. FARKAS  
REGISTERED ARCHITECT  
1/31/2024  
5927

**JKF**  
ARCHITECTURE

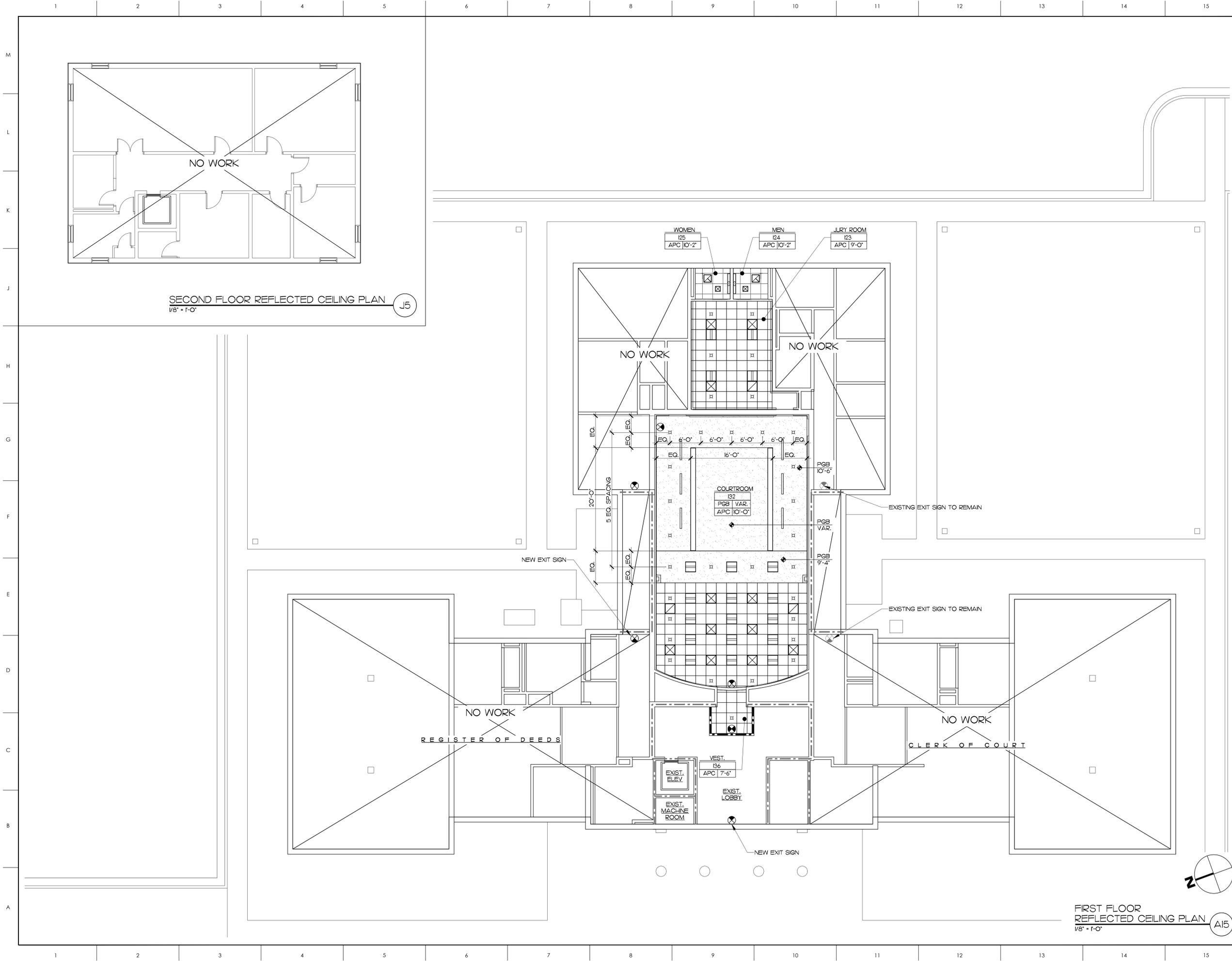
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CHOWAN COUNTY  
COURTHOUSE  
RENOVATION PHASE I  
EDENTON, NC

BUILDING SECTIONS

SCALE	1/4" = 1'-0"	DRAWING NO.	A2.1
DRAWN	JRH		
CHECKED	JKF		
DATE	1-5-2024		
PROJECT NO.	2023-07		





SECOND FLOOR REFLECTED CEILING PLAN  
1/8" = 1'-0" J5

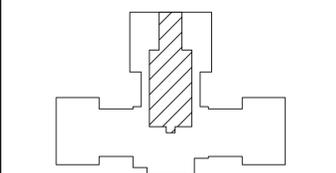
FIRST FLOOR REFLECTED CEILING PLAN  
1/8" = 1'-0" A15

MATERIALS KEYING LEGEND

- EXIST. 1 HOUR FIRE BARRIER
- NEW 1 HOUR FIRE BARRIER

GENERAL NOTES  
 1 NEW APC CEILING SYSTEM WITH • DENOTES 1-HR FLOOR-CEILING ASSEMBLY PER U.L. DESIGN NO. G201, AS SHOWN ON DRAWING A71.

KEY PLAN



NO	REVISION	DATE

JOHN K. FARKAS  
REGISTERED ARCHITECT  
1/31/2018  
5982  
EDENTON, NC

JKF

ARCHITECTURE

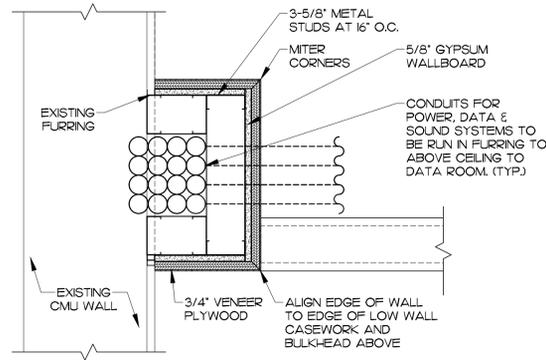
625 LYNNDALE CT., SUITE F, GREENVILLE, NC 27858 252-355-1048

CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I  
EDENTON, NC

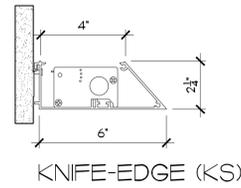
DRAWING TITLE  
FIRST FLOOR REFLECTED CEILING PLAN

SCALE	1/8" = 1'-0"	DRAWING NO.	A5.1
DRAWN	JRH, BTP		
CHECKED	JKF		
DATE	1-5-2024		
PROJECT NO.	2023-07		

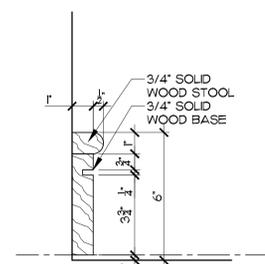




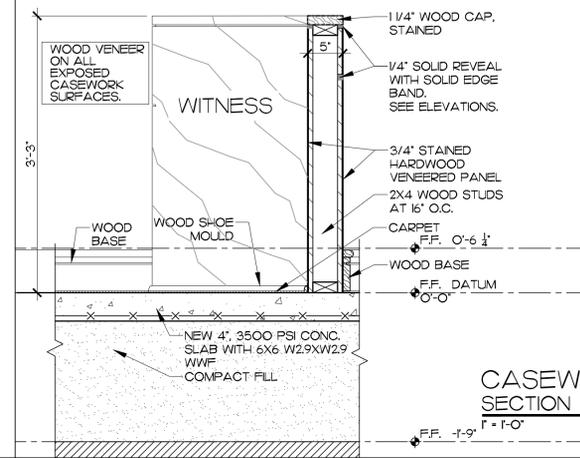
COLUMN DETAIL  
1 1/2' - 1'-0"



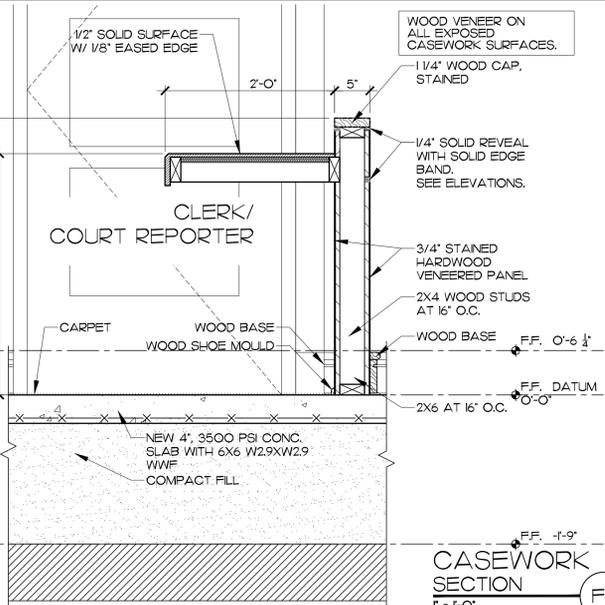
KNIFE-EDGE (KS)  
3' - 1'-0"



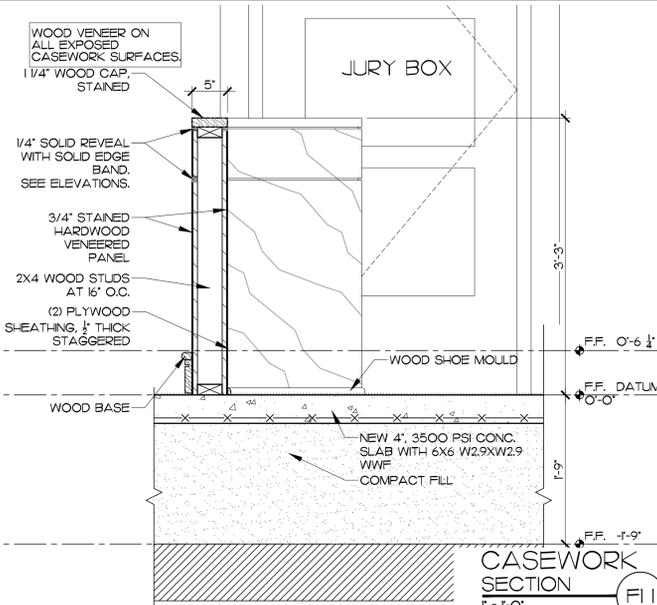
WOOD BASE DETAIL  
3' - 1'-0"



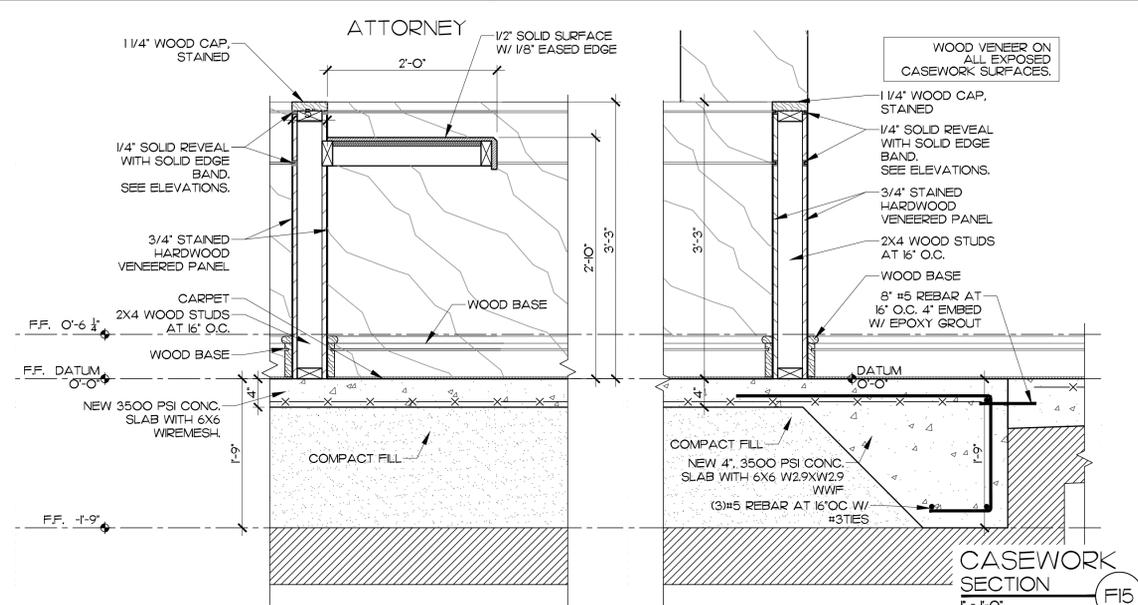
CASEWORK SECTION  
1' - 1'-0"



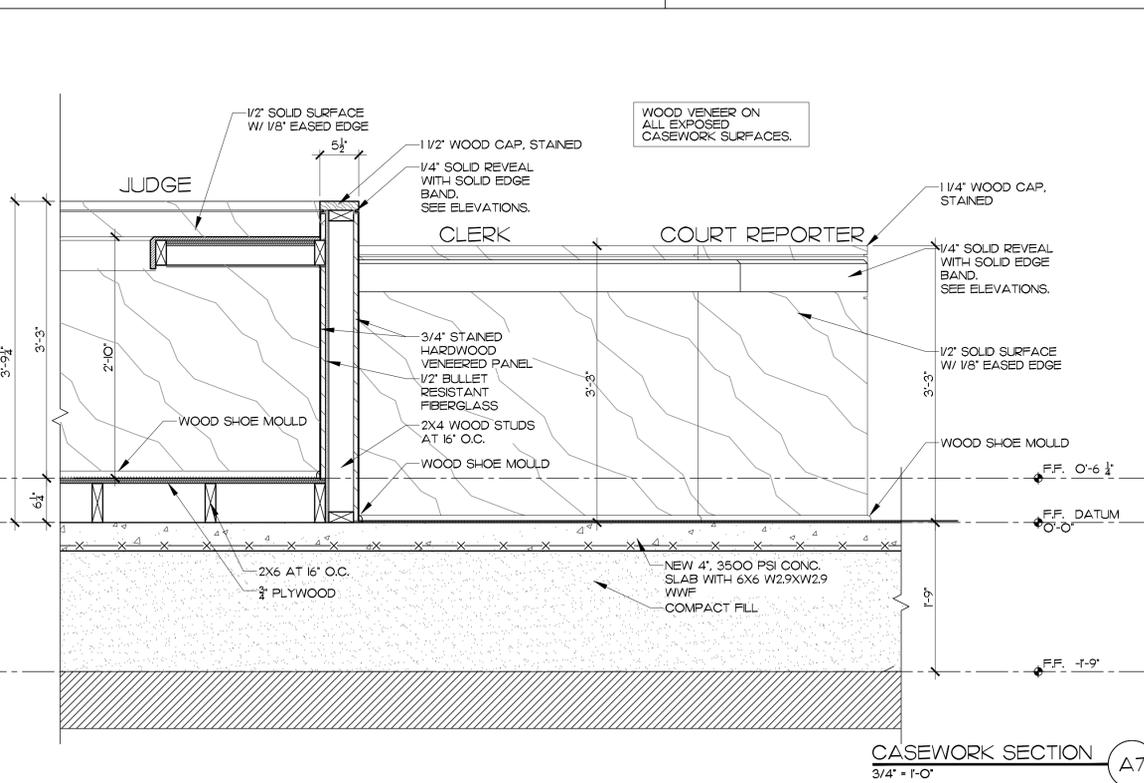
CASEWORK SECTION  
1' - 1'-0"



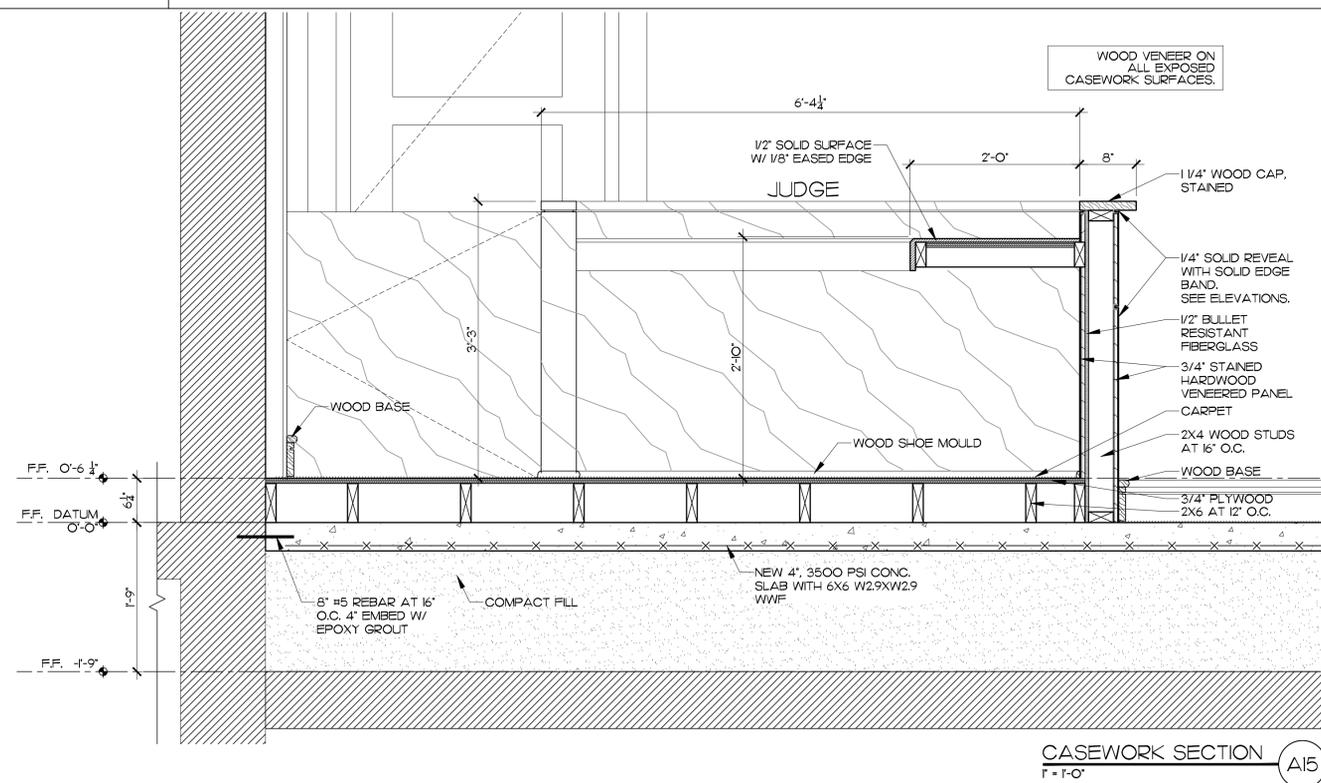
CASEWORK SECTION  
1' - 1'-0"



CASEWORK SECTION  
1' - 1'-0"



CASEWORK SECTION  
3/4' - 1'-0"



CASEWORK SECTION  
1' - 1'-0"

MATERIALS KEYING LEGEND

GENERAL NOTES

1. COMPACT FILL SHALL BE STRUCTURAL SAND FILL THAT IS CLASSIFIED SM OR SC COMPACTED TO 95%.

KEY PLAN

NO REVISION DATE



**JKF**  
ARCHITECTURE

625 LYNDALE CT., SUITE F, GREENVILLE, NC 27838 252-355-1048

CHOWAN COUNTY  
COURTHOUSE  
RENOVATION PHASE I  
EDENTON, NC

INTERIOR DETAILS &  
CASEWORK SECTIONS

SCALE AS NOTED

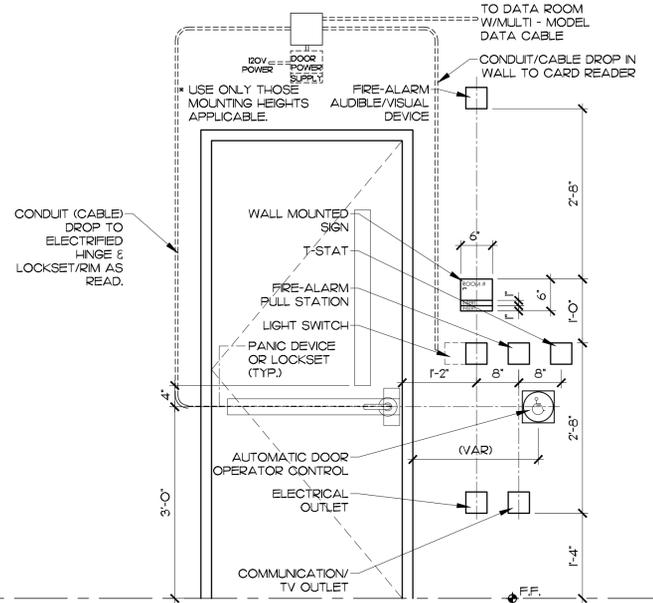
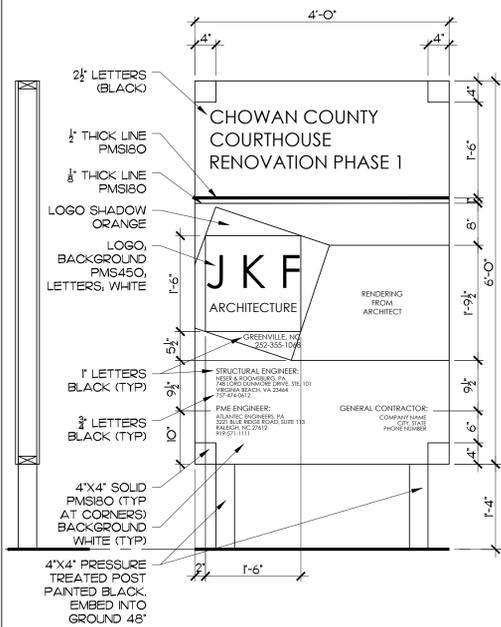
DRAWN JRH

CHECKED JKF

DATE 1-5-2024

PROJECT NO. 2023-07

A7.2



**DOOR SCHEDULE**

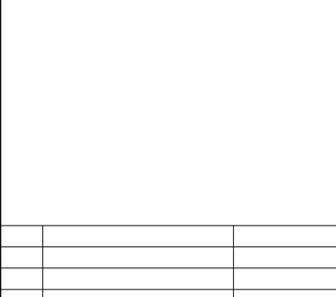
DOOR GROUP NO.	DOOR OPENING SIZE (W X H)	DOOR				FRAME				GLASS	FIRE RATING (HRS)	REMARKS		
		DOOR TYPE	THICKNESS (1-3/4" U.N.O.)	MATERIAL	FINISH	FRAME ELEVATION	MATERIAL	FINISH	DETAILS					
		J	H	S										
1	3'-0" X 7'-0"	C	175'	SWC	SF	F1	H-M	P	E6	E6	-	5/16" FR	3/4	-
2	2(2'-8" X 7'-0")	B	175'	SWC	SF	F2	H-M	P	E6	E6	-	-	-	-
3	3'-0" X 7'-2"	A	175'	SWC	SF	F1	H-M	P	A6	A6	-	-	-	-
4	3'-0" X 7'-2"	A	175'	SWC	SF	F3	H-M	P	A6	A10	-	-	-	-
5	3'-0" X 7'-2"	A	175'	SWC	SF	F1	H-M	P	E6	E6	-	-	-	-
6	2(2'-6" X 9'-0")	DD	175'	SWC	P	EX	EX	P	-	-	-	-	-	NEW DOOR HINGE LOCATIONS TO MATCH EXISTING

**MATERIALS KEYING LEGEND**

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**GENERAL NOTES**

**KEY PLAN**



NO	REVISION	DATE
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JOHN K. FARKAS  
REGISTERED ARCHITECT  
1/31/2018  
388  
GREENVILLE, NC

**JKF ARCHITECTURE**

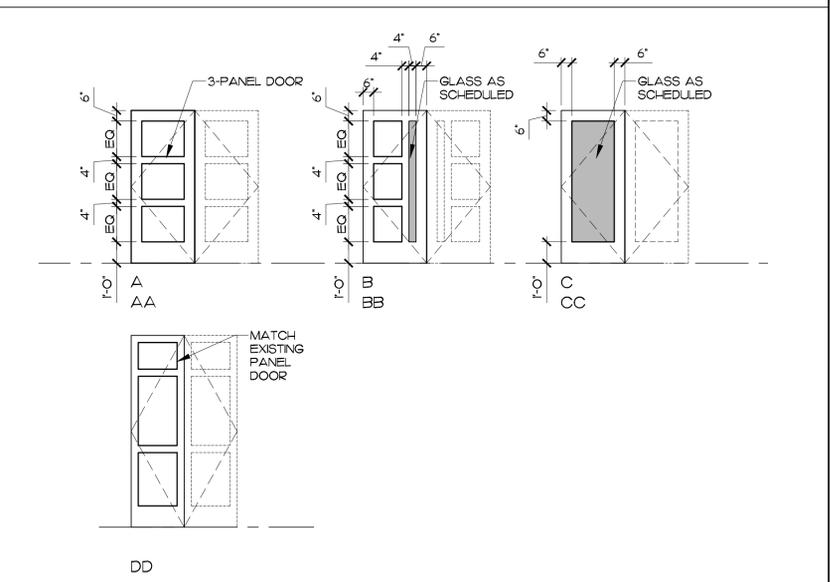
625 LYNDALE CT., SUITE F, GREENVILLE, NC 27858 252-355-1048

**CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I**  
EDENTON, NC

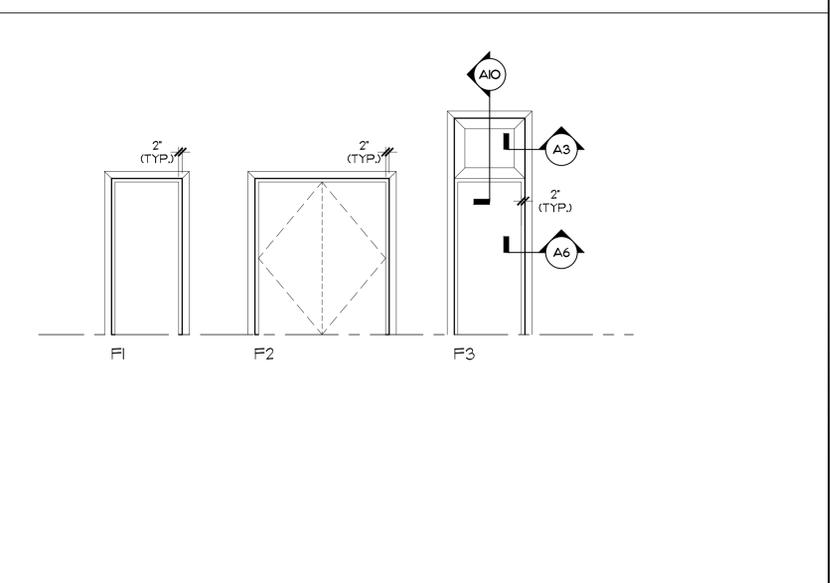
DOOR SCHEDULE, DOOR TYPES, AND DETAILS

SCALE	AS NOTED	DRAWING NO.	A8.1
DRAWN	JRH		
CHECKED	JKF		
DATE	1-5-2024		
PROJECT NO.	2023-07		

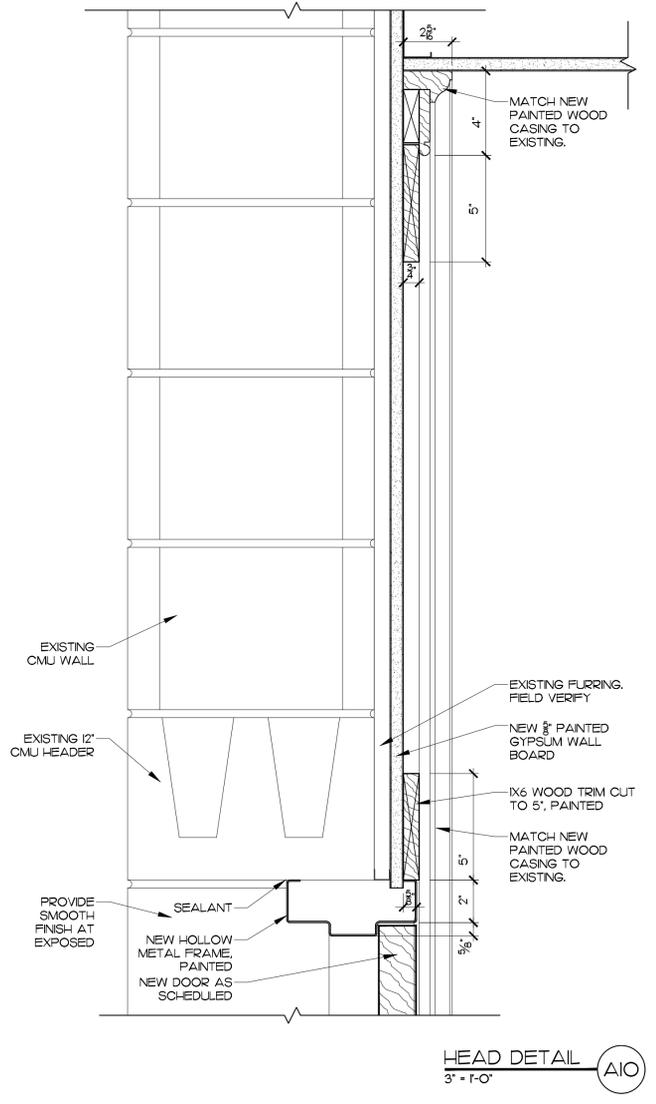
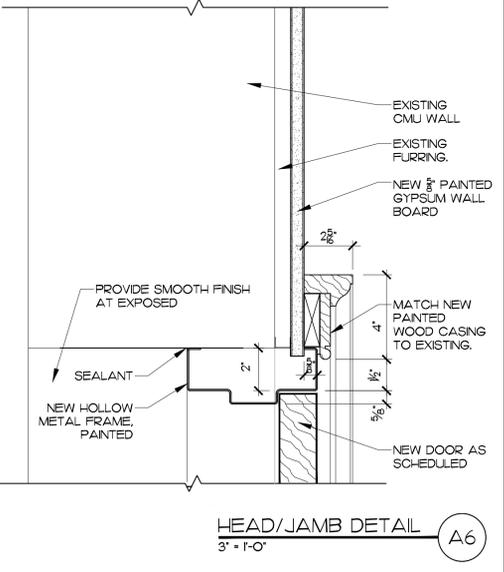
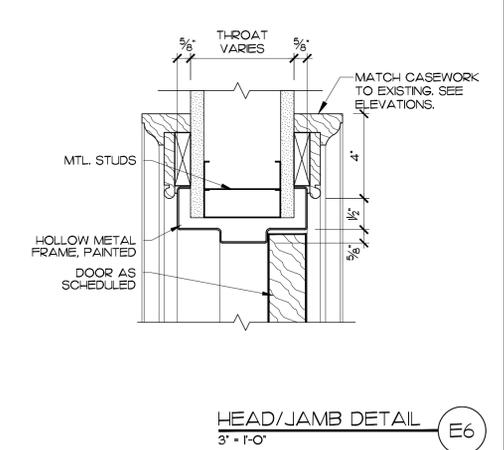
**DOOR TYPES**



**FRAME TYPES**



**TRIM DETAIL AT MARBLE PANELS**  
3' x 1'-0" (E3)



**CASING DETAIL**  
3' x 1'-0" (A3)

**GENERAL PLUMB, MECH & ELEC DEMOLITION PLAN NOTES:**

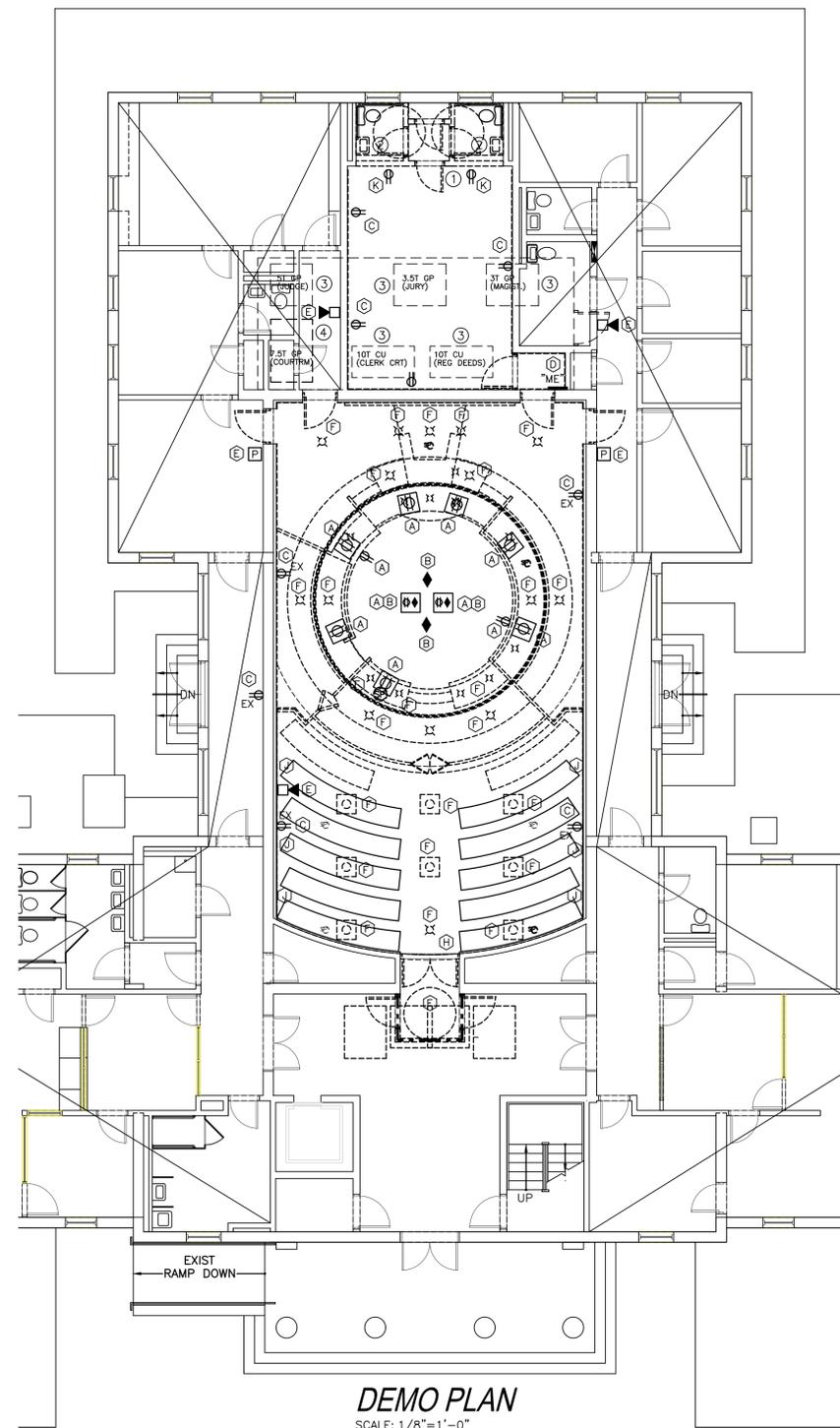
1. ANY EXISTING HVAC DEVICE OR SYSTEM NOT REMOVED SHALL REMAIN OPERATIONAL FOLLOWING COMPLETION OF PROJECT.
2. EXISTING EQUIPMENT & PIPING IS SHOWN IN APPROXIMATE LOCATIONS TAKEN FROM AS-BUILTS. FIELD VERIFY PRIOR TO CONSTRUCTION.
3. ANY EXISTING ELECTRICAL FIXTURE, DEVICE, GEAR OR SYSTEM NOT REMOVED SHALL REMAIN OPERATIONAL AT COMPLETION OF PROJECT.
4. EXISTING ELEC. GEAR AND CIRCUITING IS SHOWN IN APPROXIMATE LOCATIONS AND TAKEN FROM AS-BUILTS. FIELD VERIFY PRIOR TO CONSTRUCTION.

**POWER, LTG & FA DEMO KEY NOTES:**

- (A) APPROX LOCATION OF EXISTING POWER OUTLET TO BE REMOVED. REMOVE WIRING TO CLOSEST J-BOX ABOVE CEILING AND MAINTAIN CKT FOR REUSE.
- (B) APPROX LOCATION OF EXISTING DATA OUTLET TO BE REMOVED. TEMPORARILY COIL SECURE DATA CABLE IN AN AREA OUTSIDE OF RENOVATION. LABEL EACH CABLE WITH ROUTER PORT ADDRESS. REUSE IN NEW COURTROOM LAYOUT WHERE POSSIBLE. SEE E1.1
- (C) MAINTAIN POWER TO ALL EXISTING RECEPTACLES TO REMAIN. REWORK FEEDS AS NECESSARY. SEE E1.1
- (D) EXISTING PANEL TO BE REMOVED. MAINTAIN CIRCUITS FOR REUSE. SEE E1.1 AND PANEL SCHEDULES.
- (E) EXISTING FA DEVICE TO REMAIN
- (F) EXISTING LIGHT TO BE REMOVED. MAINTAIN UN-SWITCHED LEG OF CKT AT J-BOX ABOVE CEILING FOR REUSE.
- (G) APPROX LOCATION OF EXISTING LIGHTING DEVICE TO BE REMOVED WITH ASSOCIATED SWITCHED LEG WIRING. SEE E1.2 FOR NEW SWITCH ARRANGEMENT.
- (H) EXISTING EXIT LIGHT TO BE REMOVED.
- (J) EXISTING EMERGENCY WALL MOUNTED ISLE LIGHTS TO BE REMOVED.
- (K) FIELD VERIFY APPROX LOCATION OF EXISTING POWER OUTLET WITH NEW BATHROOM DOOR CONFIGURATION TO CONFIRM IF NEEDING TO BE REMOVED. IF SO, REMOVE WIRING TO CLOSEST J-BOX ABOVE CEILING AND MAINTAIN POWER TO ALL DOWNSTREAM DEVICES.

**PLUMB & MECH DEMO KEY NOTES:**

- (1) P.C. SHALL REWORK EXISTING BELOW SLAB PIPING AS NECESSARY TO ADD THE FLOOR MOUNTED WC FIXTURES AND TIE BACK TO EXISTING MAIN.
- (2) OPEN WALL AS REQUIRED AND MODIFY EXISTING PIPING TO CAP LAVATORY PIPING AND RECONNECT NEW WATER CLOSEST.
- (3) REMOVE EXISTING HVAC UNIT AND ALL ASSOCIATED AIR DISTRIBUTION DUCT WORK SERVING THE COURTROOM.
- (4) EXISTING UNIT TO REMAIN.

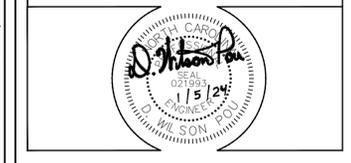


**DEMO PLAN**  
SCALE: 1/8"=1'-0"

**MATERIALS KEYING LEGEND**

**ENGINEERING**  
SOURCE OF NC, P.A.

102-A2 Regency Blvd., Greenville, NC 27834  
E-Mail Address: generalmail@engsource.com  
Voice (252) 439-0338 • Fax (252) 439-0462 • Firm# C-1973



**GENERAL NOTES**

**KEY PLAN**

SCO ID# 18-19445-01A

NO	REVISION	DATE

SEAL

**J K F**  
ARCHITECTURE

P.O. BOX 20442 GREENVILLE, NC 27858 PHONE 252-355-1048

**CHOWAN COUNTY COURTHOUSE**  
RENOVATION PHASE I  
EPENTON, NC

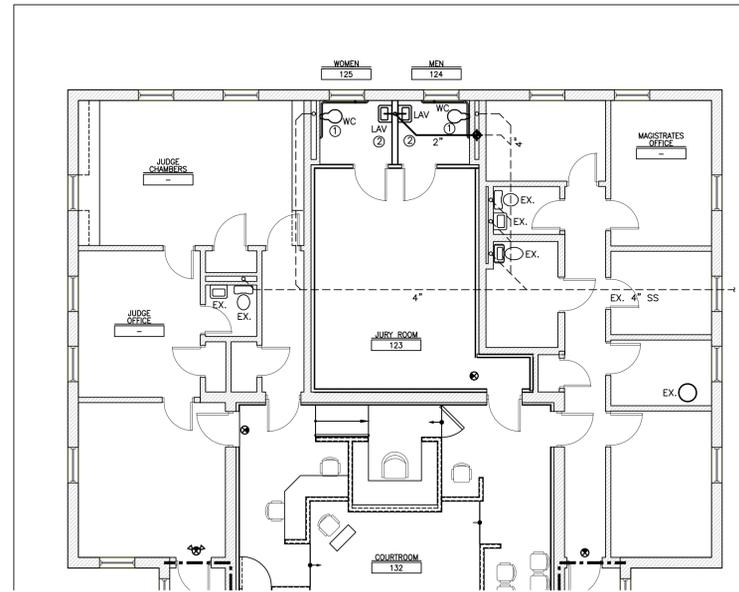
DRAWING TITLE  
**DEMO PLAN**

SCALE 1/8" = 1'-0"	DRAWING NO.
DRAWN	<b>PMEI.I</b>
CHECKED	
DATE 01/05/2014	
PROJECT NO. 2013-01	
ENGINEERING SOURCE PROJECT NO. ES12061	

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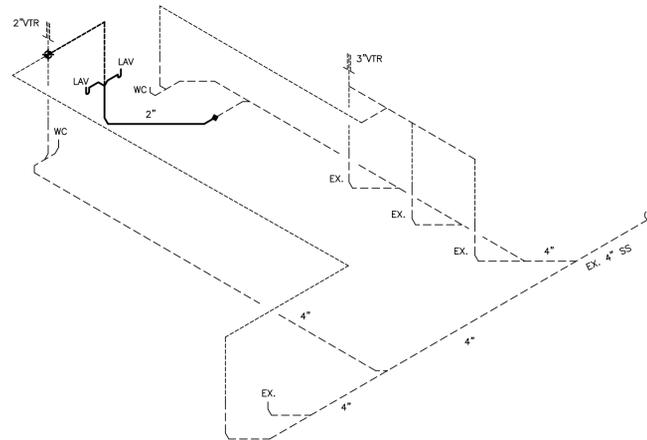
**PLUMBING GENERAL NOTES:**

1. THE ENTIRE PLUMBING SYSTEM SHALL BE IN ACCORDANCE WITH N.C. PLUMBING CODE AND LOCAL PLUMBING INSPECTOR.
2. ALL WORK SHALL BE COORDINATED WITH ALL OTHER TRADES PRIOR TO INSTALLATION. CONTRACTOR SHALL COORDINATE ROUTING OF ALL PIPING WITH EXISTING CONDITIONS AND SHALL PROVIDE ANY NECESSARY OFFSETS, TEES, REROUTING, ETC. REQUIRED FOR A COMPLETE AND COORDINATED INSTALLATION.
3. THESE PLANS ARE DIAGRAMMATIC. CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS, TEES, ELBOWS, ETC. FOR A COMPLETE WORKING PLUMBING SYSTEM.
4. THE CONTRACTOR SHALL OBTAIN AND PAY ALL FEES RELATED TO PERMITTING, INSPECTIONS, TAPS, ETC.
5. CONTRACTOR SHALL COORDINATE ANY PLUMBING SYSTEM REQUIRING SHUTDOWN WITH THE OWNER 48 HOURS IN ADVANCE.
6. ALL DOMESTIC WATER PIPING SHOWN IS ABOVE BETWEEN FLOOR JOIST/WITHIN WALLS, AND IN CRAWL SPACES UNLESS OTHERWISE NOTED.
7. ALL DOMESTIC WATER PIPING (ABOVE SLAB) SHALL BE COPPER TUBING. PIPING BELOW SLAB SHALL BE SOFT COPPER TUBING, 10'-0" MINIMUM, WITH NO JOINTS. COPPER TUBING BELOW GRADE SHALL BE UTILIZED AS THE ELECTRICAL SYSTEM GROUNDING ELECTRODE.
8. ALL WATER PIPING SHALL BE INSULATED WITH PREFORMED FIBERGLASS TYPE INSULATION WITH THE FLAME DENSITY RATING NOT EXCEEDING 25 & THE SMOKE DENSITY RATING NOT EXCEEDING 50. THICKNESS FOR COLD WATER PIPING SHALL BE 1/2" THICK. THICKNESS FOR HOT WATER & RETURN PIPING SHALL BE 1" THICK. INSTALL SADDLES AS REQUIRED IN ALL LOCATIONS TO PREVENT COMPRESSION OF INSULATION.
9. ALL BRANCH LINES SHALL HAVE SHUT-OFF VALVES. ALL DOMESTIC WATER BALL VALVES SHALL BE BRASS BODY, FULL PORT, CHROME PLATED BALL. TEFLON SEATS 150 # WSP, FOR SIZES 1/2" THRU 2". PROVIDE VALVE HANDLE EXTENSIONS AS REQUIRED FOR INSULATION.
10. ALL SANITARY SEWER PIPING SHOWN IS BELOW SLAB/WITHIN WALLS UNLESS NOTED OTHERWISE. ALL SANITARY VENT PIPING SHOWN IS ABOVE CEILING/WITHIN WALLS UNLESS NOTED OTHERWISE.
11. ALL WASTE AND VENT PIPING SHALL BE SCHEDULE 40 PVC-DWV CONFORMING TO ASTM D 2661. ALL JOINTS SHALL BE SOLVENT WELDED TYPE CONFORMING TO ASTM D 2665/2949/3034, ASTM F 891, CSA B182.2, CSA CAN/CSA-B182.4
12. ALL PIPING SYSTEMS SHALL BE SUPPORTED AS REQUIRED BY NC PLUMBING CODE AND MANUFACTURERS RECOMMENDATIONS.
13. ALL PIPING PENETRATIONS THRU NEW AND EXISTING WALLS SHALL BE SEALED TO EQUAL RATING OF THE NEW/EXISTING WALL.
14. ALL PLUMBING SYSTEMS SHALL BE TESTED AS REQUIRED PER N.C. PLUMBING CODE.
15. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL UNDER SLAB PIPING WITH ALL STRUCTURAL FOUNDATIONS, P.C. SHALL COORDINATE ALL UNDER SLAB PLUMBING WITH ELEVATION INVERTS WITH THE SITE UTILITY INVERTS.
16. ALL EXPOSED WATER SUPPLY AND WASTE LINES UNDER OPEN SINKS/LAVATORIES SHALL HAVE PROTECTIVE DEVICES INSTALLED TO MEET LATEST NCSBC AND ADA REQUIREMENTS.
17. THE ENTIRE PLUMBING SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH NC PLUMBING CODE.
18. ROOF DECKING SHALL NOT BE PENETRATED TO SUPPORT WASTE LINES, VENT LINES, AND WATER SUPPLY LINES.
19. ALL FLOOR DRAINS, HUB DRAINS, AND FLOOR SINKS SHALL HAVE TRAP PRIMERS OR HOSE BIBBS, INSTALLED AS SPECIFIED IN THE N.C. PLUMBING CODE SECTION 412.6.
20. P.C. SHALL VERIFY AND SET THE MAXIMUM OUTLET TEMPERATURES AT ALL HAND SINKS TO NOT EXCEED 120°F BY INSTALLATION OF POINT OF USE ANTI-SCALD MIXING VALVES IF NECESSARY.
21. ALL ACCESS COVERS INCLUDING BUT NOT LIMITED TO IN-GRADE CLEANOUTS, MANHOLES, AND WATER METER BOXES SHALL BE FLUSH WITH FINISHED GRADE UNLESS OTHERWISE SPECIFIED.
22. ALL VERTICAL WASTE STACKS SERVING MULTI-STORY BUILDINGS OR DWELLINGS SHALL BE CONSTRUCTED OF CAST IRON PIPE CONFORMING TO ASTM A 74, ASTM A 888, CISPI 301. JOIN CAST IRON WASTE STACKS TO HORIZONTAL PVC WASTE PIPING USING APPROPRIATE FITTINGS MEETING CORRESPONDING ASTM STANDARDS.
23. P.C. SHALL PROTECT ALL PLUMBING PIPE AS IT COMES UP THROUGH CONCRETE PER SECTION 305.1 OF THE N.C. PLUMBING CODE.



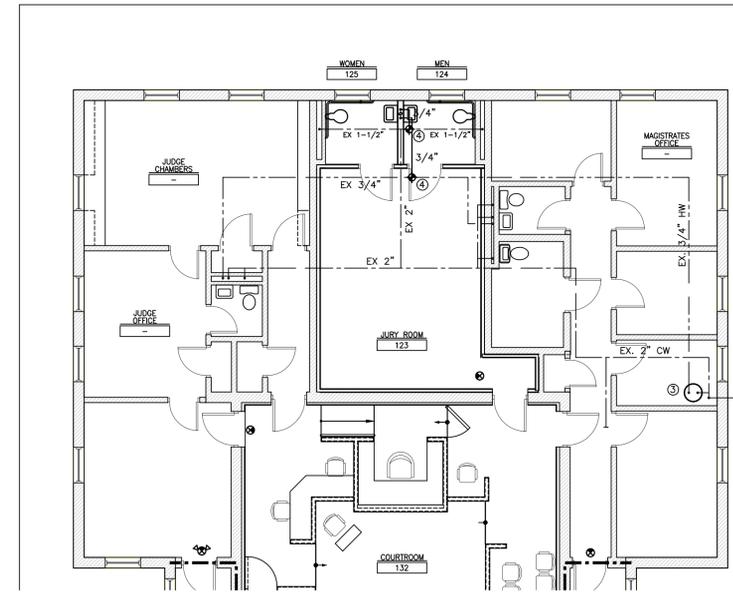
**SANITARY SEWER PLAN**

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



**DWV RISER DIAGRAM**

SCALE: N.T.S.

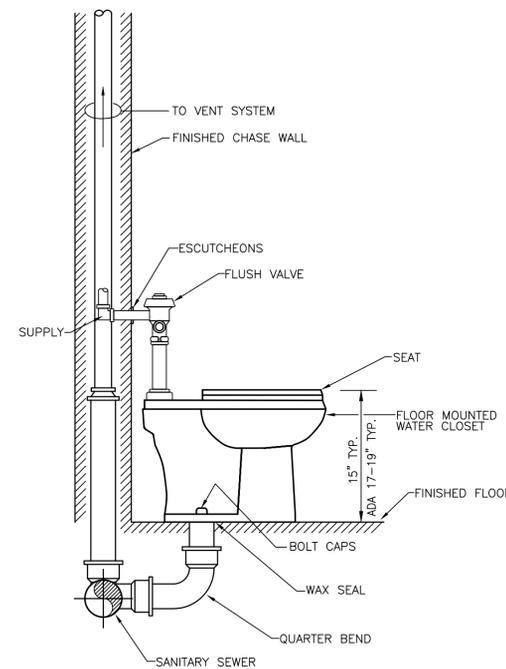


**POTABLE WATER PLAN**

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

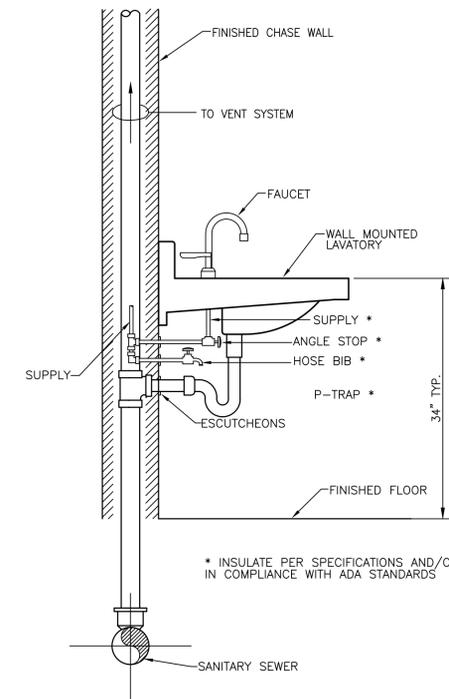
**PLUMBING PLAN KEY NOTES:**

1. MODIFY EXISTING WASTE PIPING AS REQUIRED TO THE NEW WC BACK INTO EXIST WASTE AND VENT LINES BELOW FLOOR AND IN WALL.
2. THE NEW LAV FIXTURES INTO EXISTING WASTE PIPING BELOW SLAB AND VENT PIPING ABOVE CEILING. G.C. PATCH AND FINISH WALLS & FLOORS.
3. EXISTING WATER HEATER TO REMAIN.
4. APPROX. LOC. OF EXISTING HOT & COLD WATER LINES ABOVE CEILING. THE NEW LAV FIXTURES IN TO EXISTING WATER PIPING AS INDICATED.



**WATER CLOSET**

SCALE: N.T.S.



**LAVATORY - WALL MOUNTED**

SCALE: N.T.S.

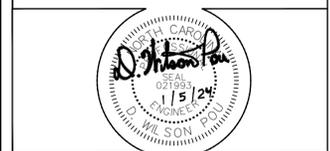
PLUMBING FIXTURE SCHEDULE							
ITEM	DESCRIPTION	FINISH	COLD	HOT	VENT	WASTE	ADA
WC	WATER CLOSET - KOHLER HIGHCLIFF 17 1/2" MOUNTING HEIGHT EL 1.6 ELONGATED FLUSH VALVE WC	WHITE			2"	4"	YES
	SEAT - KOHLER K-4666-SA ANTI-MICROBIAL OPEN FRONT SEAT W/ SELF SUSTAINING CHECK HINGE	WHITE					YES
	FLUSH VALVE - ZURN Z6000AV-WS1 OR EQUAL	CHROME	1"				
LAV	LAVATORY - KOHLER "HUDSON" WALL HUNG LAVATORY MODEL NO. K-2867 ENAMELED CAST IRON				2"	3"	
	FAUCET - MOEN 8886 TWO HANDLE METERING		3/4"	3/4"			
	(OR EQUAL PRODUCT FROM MANUFACTURERS IN SPECIFICATION.)						

\*MODEL NUMBERS ARE PROVIDED TO ESTABLISH A LEVEL OF QUALITY. EQUAL QUALITY PRODUCTS ARE ACCEPTABLE.

**MATERIALS KEYING LEGEND**

**ENGINEERING**  
SOURCE OF NC, P.A.

102-A2 Regency Blvd., Greenville, NC 27834  
E-Mail Address: generalmail@engsource.com  
Voice (252) 439-0338 • Fax (252) 439-0462 • Firm# C-1973

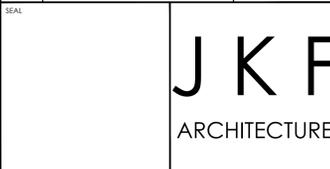


**GENERAL NOTES**

**KEY PLAN**

SCO ID# 18-19445-01A

NO	REVISION	DATE



P.O. BOX 20442 GREENVILLE, NC 27858 PHONE 252-355-1048

**CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I**

EPENTON, NC

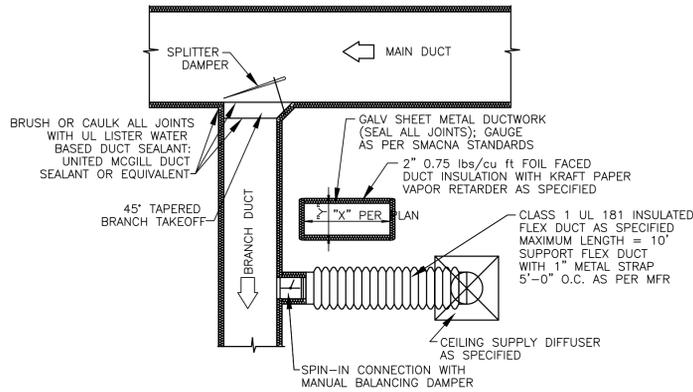
**PLUMBING PLAN**

SCALE	DRAWING NO
1/8" = 1'-0"	
DRAWN	
CHECKED	P.I.
DATE	
01/05/2014	
PROJECT NO.	ENGINEERING SOURCE PROJECT NO.
2013-07	ES12067

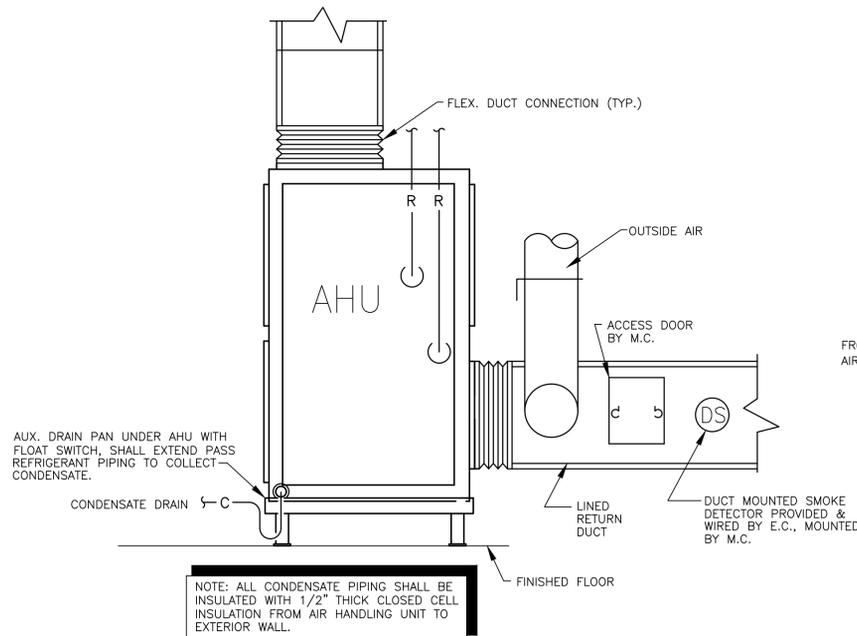
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**MECHANICAL GENERAL NOTES:**

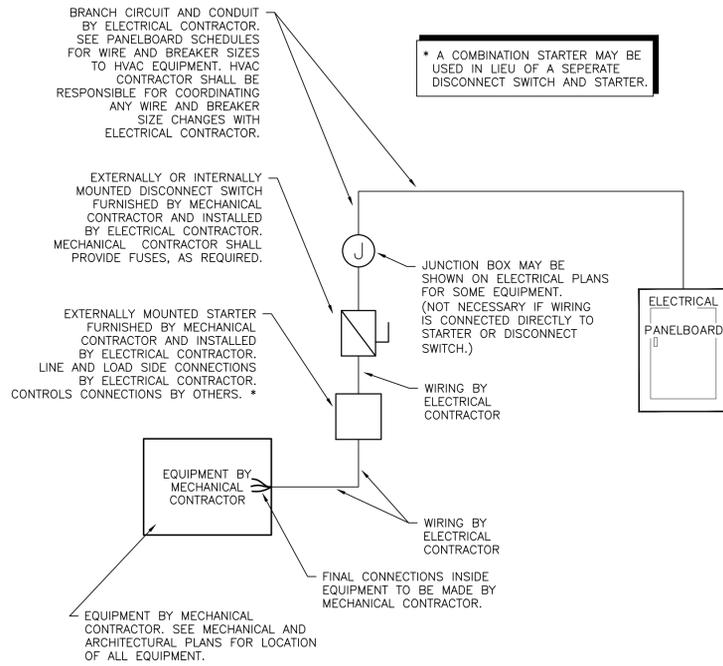
- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE NC BUILDING CODE & CONTR. SHALL NOTIFY ENGINEER IN WRITING REGARDING ANY CODE DISCREPANCIES FOUND ON PLANS. CONTR. IS RESPONSIBLE FOR PERMITS, INSPECTIONS AND FEES.
- SYSTEMS INDICATED ON PLANS ARE DIAGRAMMATIC IN NATURE. CONTRACTOR SHALL PROVIDE NECESSARY HANGERS, FASTENERS ETC. TO PROVIDE A COMPLETE AND WORKING SYSTEM.
- CONTRACTOR SHALL SEAL ALL DUCTWORK WITH A PAINT ON MASTIC. ALL WALL PENETRATIONS SHALL BE SEALED AIR TIGHT.
- CONTRACTOR SHALL FIELD MEASURE ACTUAL INSTALLED CONDITIONS AND COORDINATE DUCT SIZES PRIOR TO FABRICATION OR INSTALLATION OF EQUIP. & DUCTWORK.
- CONTRACTOR SHALL COORDINATE ALL DUCTWORK, DIFFUSER AND GRILLE LOCATION WITH OTHER CEILING MOUNTED DEVICES SHOWN ON THE ARCHITECTURAL REFLECTED CEILING PLAN.
- CONTRACTOR SHALL INSTALL BALANCING DAMPERS IN EACH BRANCH DUCT TO PROVIDE PROPER AIRFLOW TO EACH ZONE.
- LOCATE THERMOSTATS AND TEMPERATURE SENSORS AT 4'-0" A.F.F. (CENTER OF BOX FOR GYP BRD, TOP OF BOX FOR MASONRY) IN LOCATION INDICATED ON PLANS.
- ALL DUCT DIMENSIONS ARE INSIDE CLEAR DIMENSIONS.
- CONTRACTOR SHALL COORDINATE ALL ROOF AND FLOOR PENETRATION LOCATIONS AND SIZES.
- FABRICATE AND INSTALL ALL DUCT WORK PER SMACNA 1.5" W.C. PRESSURE. ALL ELBOWS SHALL HAVE 1.5R CENTERLINE. ALL DUCT UNDER SLAB SHALL BE FIBERGLASS.
- ALL FLEXIBLE ROUND DUCT SHALL BE PRE-INSULATED DOUBLE WALLED WITH SPIRAL METAL RIB, AND SHALL HAVE MIN. RESISTANCE VALUE OF R-6. MAXIMUM LENGTH SHALL BE 10'-0" UNLESS SHOWN SPECIFICALLY OTHERWISE IN PLAN. SECURE ENDS WITH NYLON BANDS AND TAPE.
- ALL SUPPLY AND RETURN DUCT SHALL BE INSULATED WITH A MINIMUM OF 2-3/16" 3/4 LB. OR 2" OF 1.0 LB. DENSITY FIBERGLASS WRAP. PIPING INSULATION (REFRIGERANT OR WATER) SHALL BE A MINIMUM OF 1-1/2" THICK OR PER LATEST NC ENERGY CODE, WHICHEVER IS GREATER.
- MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALUMINUM JACKET PROTECTIVE COVERING FOR ALL REFRIGERANT PIPE INSULATION INSTALLED ON THE BUILDING EXTERIOR.
- PROVIDE FLEXIBLE CONNECTORS ON SUPPLY AND RETURN CONNECTIONS TO HVAC UNITS.
- PROVIDE AUXILIARY CONDENSATE DRAIN PAN FOR ALL AIR HANDLING UNITS, FAN COIL UNITS, FURNACE WITH COOLING COIL, ETC. CONTRACTOR SHALL PROVIDE AND INSTALL WATER LEVEL FLOAT SWITCH IN AUXILIARY DRAIN PAN. FLOAT SWITCH SHALL SHUT DOWN INDOOR AND ASSOCIATED OUTDOOR UNIT WHEN ACTIVATED. DRAIN PAN OUTLET SHALL BE PIPED TO BUILDING EXTERIOR.
- CONDENSATE PIPE SHALL BE SCHEDULE 40 PVC OR HARD DRAWN COPPER. INSTALL WITH PROPER SLOPE AND NO SAGS. COPPER PIPE SHALL BE INSULATED WITH 1/2" THICK CLOSED CELL INSULATION. SCHEDULE 40 PVC PIPE SHALL BE INSULATED WITH 1/2" THICK CLOSED CELL INSULATION.
- ALL DUCTWORK AND PIPING SHALL BE CONCEALED ABOVE CEILINGS, TRUSSES AND SOFFITS EXCEPT IN MECHANICAL ROOMS, UTILITY PLATFORMS AND WHERE NOTED OTHERWISE.
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL WIRING & CONNECTIONS TO HIS EQUIPMENT. COOR'D. FEEDER AND FUSE SIZES FOR SPECIFIC EQUIPMENT PROVIDED WITH ELECTRICIAN. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL WORK AND EQUIPMENT REQUIRED TO PROVIDE FEEDERS FOR EQUIPMENT THAT EXCEEDS THE AMP RATINGS LISTED IN THE SCHEDULE.
- MECHANICAL CONTRACTOR MAY USE ROUND DUCT OF EQUIV. AREA IN LIEU OF RECTANGULAR. COOR'D. ROUND DUCT SIZES W/ ENGR. USE INSULATED DOUBLE WALLED SPIRAL DUCT WITH PAINT GRIP FINISH WHERE DUCT IS TO BE EXPOSED.
- MECHANICAL CONTRACTOR SHALL PROVIDE ENGR. WITH AN AIR BALANCE REPORT INDICATING INITIAL AND FINAL READINGS AT EACH DIFFUSER AND TOTAL CFM PER UNIT, INCLUDE IN DOCUMENTS PROVIDED TO OWNER AT JOB CLOSEOUT.
- MECHANICAL CONTRACTOR SHALL LABEL ALL EQUIPMENT WITH ENGRAVED PLASTIC LAMINATE, SCREWED TO PIECE OF EQUIPMENT.
- UNIT CONTROLLER OR PROGRAMMABLE THERMOSTAT SHALL HAVE 7 DAY PROGRAMING, TIMED OVER-RIDE AND THE ABILITY TO RUN FANS IN OCCUP. MODE & CYCLE FANS IN UN-OCCUP. MODE.
- MECHANICAL CONTRACTOR SHALL CHANGE UNIT FILTERS AFTER EACH TWO WEEKS OF RUN TIME, AND SHALL LEAVE ONE CHANGE OF FILTERS FOR OWNER TO USE FOR NEXT FILTER CHANGE.
- MECHANICAL CONTRACTOR SHALL NOT ALLOW DUCTWORK TO CONTACT LAY-IN LIGHT FIXTURES. ROUTE ACCORDINGLY.
- MECHANICAL CONTRACTOR SHALL INSTALL DUCT MOUNTED SMOKE DETECTORS WHERE INDICATED ON PLANS. COORDINATE WITH E.C. IF DUCT DETECTOR IS PROVIDED AS PART OF BUILDING FIRE ALARM SYSTEM. IF NOT, PROVIDE DETECTOR & ASSOCIATED HORN/STROBE ALARM (HONEYWELL RTS2-AOS MULTI-SIGNALING) AS REQUIRED BY N.C. MECHANICAL CODE SECTION 606.4.1. M.C. IS RESPONSIBLE FOR DUCT ACCESS DOORS UNDER ALL CIRCUMSTANCES.
- PROVIDE HEAT PUMP WITH CONTROLS TO PREVENT HEAT STRIP FROM OPERATING WHEN OUTSIDE AIR TEMP. IS ABOVE 40°F. (C403.2.4.1.1 NCEC)



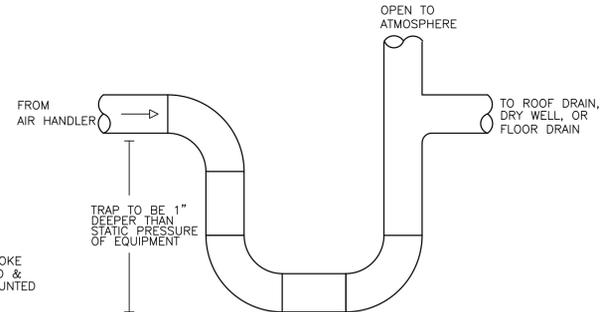
**DUCT CONSTRUCTION DETAIL**  
SCALE: NTS



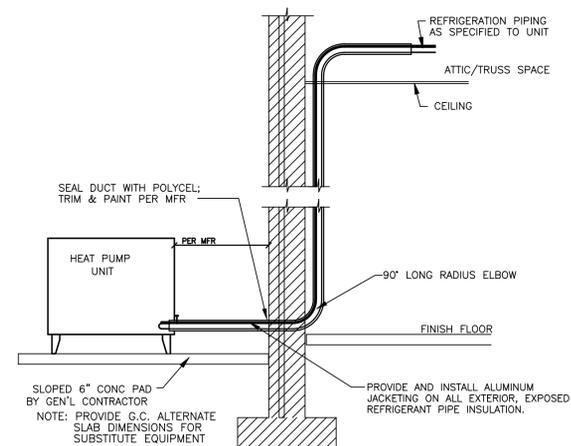
**AHU DETAIL**  
SCALE: NTS



**MECHANICAL EQUIPMENT ELECTRICAL CONNECTION DETAIL**  
SCALE: N.T.S.



**CONDENSATE TRAP DETAIL**  
SCALE: NTS



**HEAT PUMP INSTALLATION DETAIL**  
SCALE: NTS

SPLIT-SYSTEM HEAT PUMP SCHEDULE																
SUPPLY FAN									COOLING				HEATING			
MARK	OA	CFM	ESP (IN. W.G.)	FAN HP	VOLT/PH	MCA	MOCP	STRIP KW @ 208V	MARK	VOLT/PH	MCA	MOCP	NOM. TC (BTUH)	NOM. SC (BTUH)	EER/SEER	MIN. BTUH
AHU-C1	325	1600	.50	1/2	208/3	28.0	30	7.2	HP-C1	208/1	28.0	50	48,000	33,600	16.0	24,600
AHU-C2	325	1600	.50	1/2	208/3	28.0	30	7.2	HP-C2	208/1	28.0	50	48,000	33,600	16.0	24,600

- HEATING AND COOLING CAPACITIES ARE MINIMUM ACCEPTABLE VALUES
- PROVIDE WITH FILTERS AND FILTER FRAMES.
- PROVIDE WITH SINGLE POINT OF CONNECTION KIT.
- "TRANE" AND "LENNOX" EQUIPMENT ACCEPTABLE.
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH E.C. FUSES REQUIRED FOR EQUIPMENT PURCHASED.
- AMP RATINGS GIVEN ARE MAXIMUM VALUES.
- ESP INCLUDES .35" FOR DIRTY FILTER ALLOWANCE.

**MATERIALS KEYING LEGEND**

**ENGINEERING**  
SOURCE OF NC, P.A.

102-A2 Regency Blvd., Greenville, NC 27834  
E-Mail Address: generalmail@engsource.com  
Voice (252) 439-0338 • Fax (252) 439-0462 • Firm# C-1973

Professional Engineer Seal for John K. Farkas, AIA, License No. 11512.

**GENERAL NOTES**

**KEY PLAN**

SCO ID# 18-19A45-01A

NO	REVISION	DATE

JKF ARCHITECTURE

P.O. BOX 20442 GREENVILLE, NC 27858 PHONE 252-355-1048

CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I  
EPENTON, NC

MECHANICAL DETAILS

SCALE: 1/8" = 1'-0"	DRAWING NO: MO.1
DRAWN: DEW	CHECKED: DWP
DATE: 01/05/2014	PROJECT NO: 2013-07
ENGINEERING SOURCE PROJECT NO: ES12067	

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**MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT**  
METHOD OF COMPLIANCE:

PRESCRIPTIVE  ENERGY COST BUDGET

CLIMATE ZONE: IBC - 3A  
THERMAL ZONE  
WINTER DRY BULB: 18°F  
SUMMER DRY BULB: 93°F

INTERIOR DESIGN CONDITIONS  
WINTER DRY BULB: 70°F  
SUMMER DRY BULB: 75°F  
RELATIVE HUMIDITY: 50%

BUILDING HEATING LOAD: 67.2 MBH  
BUILDING COOLING LOAD: 96.0 MBH

MECHANICAL SPACE CONDITIONING SYSTEM  
UNITARY  
DESCRIPTION OF UNIT: SPLIT-SYSTEM HEAT PUMP  
HEATING EFFICIENCY: 3.0 COP  
COOLING EFFICIENCY: 16.0 SEER  
HEAT OUTPUT OF UNIT: SEE SCHEDULE  
COOLING OUTPUT OF UNIT: SEE SCHEDULE

BOILER  
TOTAL BOILER OUTPUT: (If oversized, state reason)  
CHILLER  
TOTAL CHILLER OUTPUT: (If oversized, state reason)

LIST EQUIPMENT EFFICIENCIES

EQUIPMENT SCHEDULES WITH MOTORS (Not used for mechanical systems)

MOTOR HORSEPOWER:  
NUMBER OF PHASES:  
MINIMUM EFFICIENCY:  
MOTOR TYPE:  
# OF POLES:

DESIGNER STATEMENT:

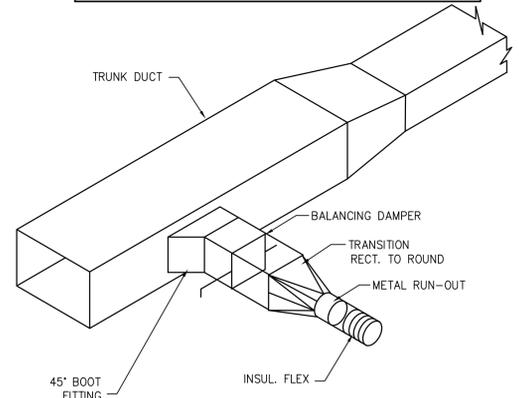
To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the 2018 North Carolina energy conservation code.

SIGNED: D. Wilson  
NAME: D. WILSON, P.O.U., P.E.  
TITLE: PRESIDENT

**MECHANICAL LEGEND**

- G.C. GEN. CONTR.
- E.C. ELEC. CONTR.
- P.C. PLUMB. CONTR.
- AFF ABOVE FINISH FLOOR
- AFG ABOVE FINISH GRADE
- 18x16 WRAPPED RIGID DUCT
- INSULATED FLEXIBLE DUCT
- SUPPLY DIFFUSER
- RETURN AIR GRILLE
- CEILING EXHAUST GRILLE OR FAN
- Ⓜ AHU-1 THERMOSTAT & UNIT SERVED.
- Ⓜ AHU-1 HUMIDISTAT & UNIT SERVED.
- A-400 DIFFUSER TYPE-CFM
- MANUAL DAMPER
- DUCT MOUNTED SMOKE DETECTOR
- CEILING MOUNTED SMOKE DETECTOR
- FIRE ALARM HORN/STROBE (SEE GENERAL NOTES)
- CONN. TO EXIST.
- REFRIGERANT LINE SET
- SPRING LOADED FIRE DAMPER
- Ⓜ AHU-1 CO2 SENSOR (800 PPM) & UNIT SERVED.
- Ⓜ TWIST TIMER SWITCH
- Ⓜ 120V MOTORIZED DAMPER
- Ⓜ CO & NO SENSOR & UNIT SERVED. CONSPEC CNS0-CON02

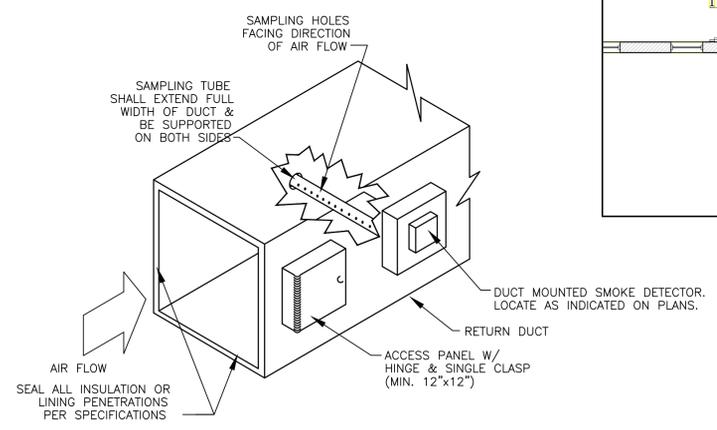
NCBC VENTILATION CALCULATIONS					
OCCUPANCY TYPE	SQ. FT.	O.A. PER SQ. FT.	# OF OCCUPANTS	O.A. PER PERSON	TOTAL O.A. CFM
COURTROOM	1,582	0.06	110	5	645
TOTAL REQUIRED FOR BUILDING					645
TOTAL PROVIDED FOR BUILDING					650



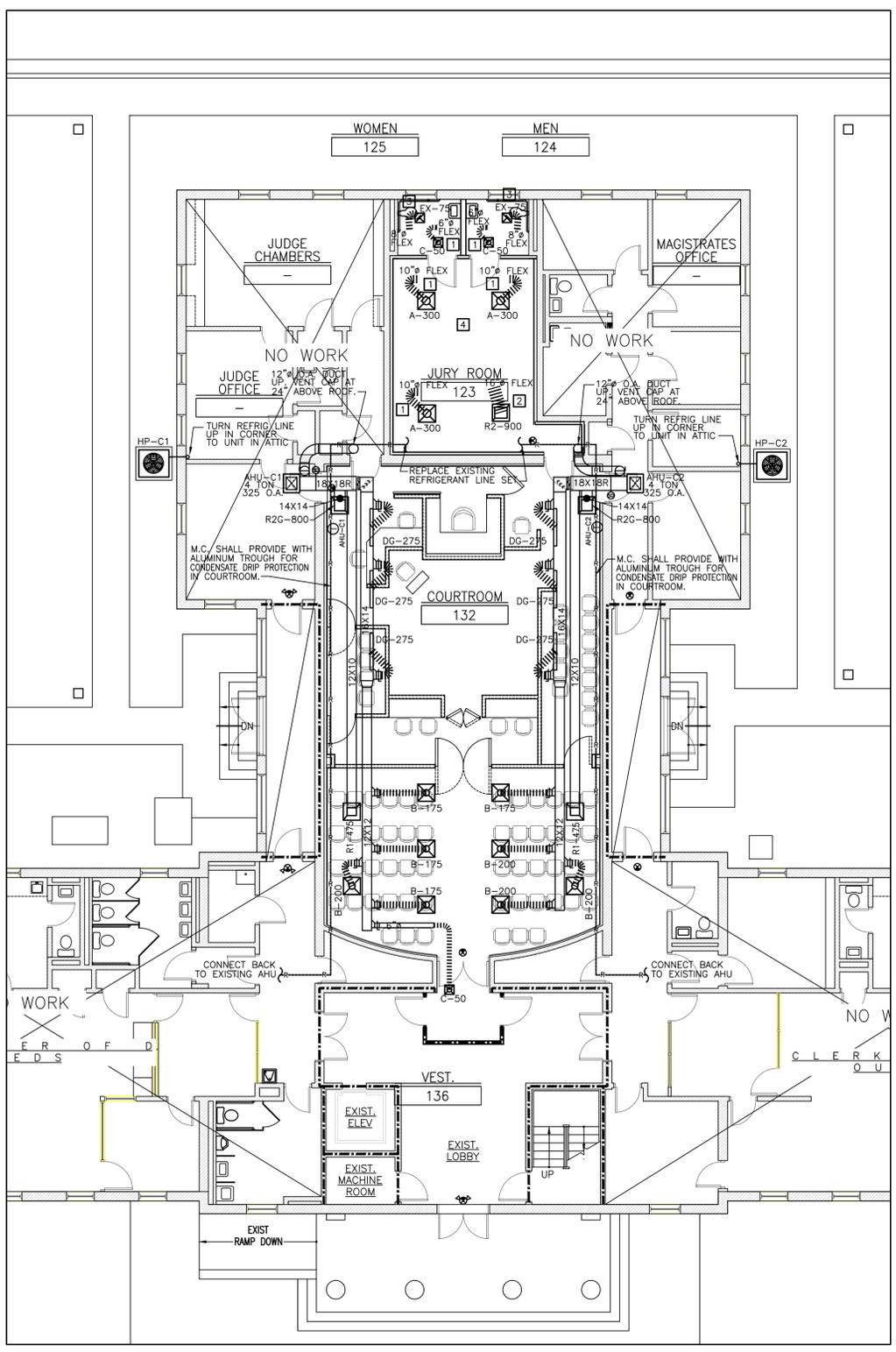
**LOW PRESSURE BRANCH CONNECTION**  
SCALE: NTS

AIR DISTRIBUTION						
MARK	MAX. CFM	FRAME	NECK SIZE	MODEL	MANUF.	REMARKS
A/AG	400	T-BAR/GYP.	10"ø	SMD	PRICE	1,2,3,5,7,8
B/BG	200	T-BAR/GYP.	8"ø	SMD	PRICE	1,2,3,5,7,8
C	100	T-BAR	12x12 6"ø	SMD	PRICE	2,3,5,7
DG	400	GYP.	4x48 10"ø	LBPH26B	PRICE	2,3,5,7,8
R1	550	T-BAR	12x12	80TB	PRICE	1,2,4,5,6
R2/R2G	1400	T-BAR/GYP.	22x22	80TB/80	PRICE	1,2,4,5,6
EX	100	T-BAR	12x12	80TB	PRICE	2,4,5,6

1. ALL GRILLES SHALL HAVE 24"x24" FACE.
2. NC SHALL NOT EXCEED NC 25.
3. MAX. SP SUPPLY - 0.10" W.G.
4. MAX. SP RETURN - 0.05" W.G.
5. ALL RUN-OUTS AND FLEX TO BE EQUAL TO NECK SIZE FOR GRILLE.
6. PAINT INSIDE PAN FLAT BLACK.
7. CONTRACTOR SHALL INSULATE BACK OF SUPPLY GRILLE PAN.
8. "G" FOLLOWING THE DIFFUSER DESIGNATION LETTER INDICATES THAT DIFFUSER WILL BE INSTALLED IN A GYP. BOARD CEILING WITH THROAT DAMPER.



**DUCT MOUNTED SMOKE DETECTOR DETAIL**  
SCALE: N.T.S.



**MECHANICAL PLAN**  
SCALE: 1/8"=1'-0"

PLAN KEY NOTES:

1. INSTALL NEW SUPPLY AIR DIFFUSER IN LOCATION INDICATED. RUN NEW FLEX DUCT BACK TO EXISTING MAIN DUCT IN ATTIC SPACE. CONTRACTOR MAY RE-USE AN EXISTING TAP IF IT IS IN GOOD REPAIR AND OF APPROPRIATE SIZE. CUT IN NEW TAP IF NO ADEQUATE TAP IS AVAILABLE.
2. INSTALL NEW RETURN AIR GRILL AND CONNECT BACK TO EXISTING MAIN DUCT. TAP EXISTING RETURN AS NECESSARY FOR NEW DUCT.
3. INSTALL NEW EXHAUST AIR GRILL AND CONNECT BACK TO EXISTING MAIN DUCT. TAP EXISTING EXHAUST AS NECESSARY FOR NEW DUCT.
4. M.C. SHALL BALANCE EACH SYSTEM, NEW AND EXISTING, TO CFM'S INDICATED. PROVIDE A TEST & BALANCE REPORT FROM AN INDEPENDENT COMPANY TO THE OWNER AND ENGINEER PRIOR TO JOB CLOSE-OUT.

MATERIALS KEYING LEGEND

**ENGINEERING**  
SOURCE OF NC, P.A.

102-A2 Regency Blvd., Greenville, NC 27834  
E-Mail Address: generalmail@engsource.com  
Voice (252) 439-0338 • Fax (252) 439-0462 • Firm# C-1973

1524

GENERAL NOTES

KEY PLAN

SCO ID# 18-19445-01A

NO	REVISION	DATE

J K F  
ARCHITECTURE

P.O. BOX 20462 GREENVILLE, NC 27858 PHONE 252-355-1048

CHOWAN COUNTY COURTHOUSE  
RENOVATION PHASE I

EPENTON, NC

MECHANICAL PLAN

SCALE	1/8" = 1'-0"	DRAWING NO.	
DRAWN	DEW	CHECKED	DWP
DATE	01/05/2014	PROJECT NO.	2013-07
ENGINEERING SOURCE PROJECT NO.	ES12067		

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**ELECTRICAL NOTES:**

- DO NOT SCALE THESE DRAWINGS; REFER TO LARGEST SCALE ARCHITECTURAL PLANS.
- THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND ARE NOT INTENDED TO SHOW MINOR DETAILS AND EXACT LOCATIONS. DESIGN ADJUSTMENTS SHALL BE ANTICIPATED BY THE CONTRACTOR TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH CURRENT NEC/NFPA 70. CONTRACTOR SHALL NOTIFY ENGINEER REGARDING ANY CODE DISCREPANCIES SHOWN ON PLAN. ANY PERMIT OR INSPECTION FEES ARE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- CONTRACTOR SHALL INSTALL, GROUND AND BOND SYSTEM PER THE CURRENT NEC.
- CONTRACTOR SHALL NOT PUT MORE THAN SIX (6) DUPLEX RECEPTACLES ON ANY GIVEN 1P-20A CIRCUIT UNLESS SHOWN OTHERWISE.
- MINIMUM WIRE SIZE SHALL BE #12 AWG., MINIMUM CONDUIT SIZE SHALL BE 3/4".
- CONTRACTOR SHALL COORDINATE TELEPHONE AND DATA OUTLETS REQUIRED WITH OWNER PRIOR TO GYP. BOARD BEING INSTALLED.
- HALLWAY AND MAINTENANCE RECEPTACLES SHALL NOT BE CIRCUITED WITH OFFICE OR OTHER GENERAL PURPOSE RECEPTACLES.
- ELECTRICAL CONTRACTOR SHALL PROVIDE HACR RATED CIRCUIT BREAKERS ON ALL HVAC EQUIPMENT.
- CONDUCTORS SHALL BE TYPE THHN, THWN, OR THW. BRANCH CIRCUIT CONDUCTOR SHALL NOT BE SMALLER THAN NO. 12 AWG., EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. HOME RUNS ORIGINATING MORE THAN 80' AT 120V FROM PANEL LOCATION SHALL BE NO. 10 AWG MINIMUM SIZE. WIRES NO. 10 AWG AND SMALLER SHALL BE SOLID; WIRES NO. 8 AWG AND LARGER SHALL BE STRANDED. PROVISIONS OF CURRENT NEC SECTION 210-5 COLOR CODE SHALL BE STRICTLY COMPLIED WITH AND BE CONSISTENT THROUGHOUT ENTIRE SYSTEM.
- ALL CIRCUITS SHALL BE PROVIDED WITH AN INSULATED EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH CURRENT NEC TABLE 250-122. HASHMARK FOR GROUNDING CONDUCTOR IS NOT INDICATED ON THESE DRAWINGS. RACEWAY SHALL NOT BE USED AS EQUIPMENT GROUND.
- IN ADDITION TO MECHANICAL FASTENING TO CEILING TRACK, SUPPORT LIGHT FIXTURES AT EACH CORNER INDEPENDENTLY OF SUSPENDED CEILING WITH 12 GAUGE WIRE. CONNECT TO STRUCTURAL SYSTEM OF BUILDING.
- ALL CONDUIT SHALL BE CONCEALED UNLESS OTHERWISE NOTED. ALL EMPTY CONDUIT SHALL HAVE A PULL WIRE.
- ALL CONDUIT FITTINGS SHALL BE COMPRESSION TYPE WITH INSULATED THROATS. ALL EXTERIOR CONDUIT FITTINGS SHALL BE LISTED FOR USE IN WET LOCATIONS PER 2020 NEC ARTICLE 314.
- SERVICE ENTRANCE CONDUCTORS SHALL BE IN CONDUIT (RIGID OR PVC). EXTERIOR CONDUIT EXPOSED ABOVE SLAB SHALL BE RIGID. INTERIOR CONDUIT EXPOSED SHALL BE ELECTRICAL METALLIC TUBING (EMT). EMT SHALL BE COLD-ROLLED STEEL TUBING WITH A COATING ON THE OUTSIDE AND PROTECTED ON THE INSIDE BY A ZINC, ENAMEL, OR EQUIVALENT CORROSION RESISTANT COATING AND CONFORMING TO THE REQUIREMENTS OF ANSI C 80.3-1996 OR LATER EDITION. ALL UNDERGROUND CONDUIT SHALL BE UL LISTED SCHED 40 PVC CONFORMING TO ARTICLES 352 & 300 OF THE NEC. WHERE SCHED 40 PVC IS INSTALLED BELOW GRADE OR UNDER FLOOR SLABS, THE ELBOWS REQUIRED TO TURN THE RACEWAY UP INTO CABINETS, EQUIPMENT, ETC., SHALL BE OF RIGID STEEL AND SHALL CONTINUE AS RIGID STEEL TO THE CABINET, EQUIPMENT, ETC. BRANCH AND FEEDER CIRCUITS SHALL BE IN CONDUIT. MC CABLE IS ONLY ALLOWED WHERE NECESSARY TO FEED INTO AN EXISTING WALL PER SCO REQ'TS.
- ALL JUNCTION OR DEVICE BOXES SHALL HAVE A COVER.
- ALL 1P-20A CIRCUITS SHALL BE 2-#12 & 1-#12G IN 3/4" C U.N.O.
- ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH ALL VOLUMES OF THE NCSBC, INSPECTORS HAVING JURISDICTION, AND ALL OTHER APPLICABLE CODES AND ORDINANCES.
- EACH PIECE OF ELECTRICAL GEAR, EQUIPMENT, ETC., SHALL BEAR A "UL" LABEL.
- METAL ROOF DECKING SHALL NOT BE PENETRATED TO SUPPORT ELECTRICAL ITEMS.
- ALL EMERGENCY AND EXIT LIGHTS SHALL BE CONNECTED TO THE UNINTERRUPTED SIDE OF THE LOCAL LIGHTING CIRCUIT.
- PROVIDE AND INSTALL ENGRAVED PHENOLIC LABELS ON ALL ELECTRICAL GEAR, DISCONNECTS, ETC. FASTEN WITH SCREW FASTENERS.
- E.C. SHALL INSTALL HEAVY DUTY NEMA-1 DISCONNECTS AT ALL INTERIOR LOCATIONS INDICATED AND HEAVY DUTY NEMA-3R DISCONNECTS AT ALL EXTERIOR LOCATIONS INDICATED ON THESE DRAWINGS.
- VERIFY WITH OWNER LOCATION/TYPE OF ALL FIXTURES, PANEL BOXES, OUTLET PLACEMENT, ETC. BY HOLDING AN ELECTRICAL WALKTHROUGH ON THE BUILDING SITE ONCE FRAMING IS COMPLETED.
- ELECTRICAL BOXES INSTALLED IN U.L. RATED WALLS SHALL BE LOCATED A MINIMUM OF 2"-0" FROM ANY OTHER ELECTRICAL BOX IN THAT WALL.
- LIGHTING SWITCHES, RECEPTACLES AND/OR DATA OUTLETS SHALL NOT BE MOUNTED BACK TO BACK IN ANY WALL.
- CABLE LOCATED IN PLENUMS SHALL BE PLENUM-RATED. ALL CABLE INSTALLED IN AREAS WITH EXPOSED STRUCTURE SHALL BE IN CONDUIT.
- E.C. SHALL INSTALL COMPLY WITH ANSI A117.1 FOR OUTLET AND CONTROL SWITCH MOUNTING HEIGHTS FOR ADA ACCESSIBILITY.
- E.C. SHALL BE RESPONSIBLE FOR ALL LINE SIDE AND LOAD SIDE WIRING ON ALL EQUIPMENT REQUIRING ELECTRICAL POWER. EXTERNALLY MOUNTED DISCONNECT SWITCHES AND ALL REQUIRED FUSES SHALL BE FURNISHED BY THE CONTRACTOR PROVIDING THE EQUIPMENT. E.C. SHALL BE RESPONSIBLE FOR INSTALLING EXTERNALLY MOUNTED DISCONNECT SWITCHES AND PROVIDING LOAD SIDE WIRING AND CONDUIT TO EQUIPMENT. ALL FINAL CONNECTIONS TO EQUIPMENT SHALL BE DONE BY THE CONTRACTOR PROVIDING THE EQUIPMENT. SEE "ELECTRICAL CONNECTION DETAIL".
- E.C. IS RESPONSIBLE FOR DEMOLITION OF EXISTING LIGHTS FIXTURES THAT ARE INDICATED TO BE REPLACED. E.C. SHALL FIELD VERIFY EXISTING SWITCH CIRCUITING AND REWORK SWITCH WIRING TO PROVIDE CONTROL OF LIGHTS AS INDICATED ON PLANS.

MAIN: 100		VOLTAGE: 208/120		PHASE: 3		WIRE: 4		MOUNTING: RECESSED		AIC: 22,000		BUS BARS: COPPER									
CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA)				LOAD (KVA)				DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #		
						LTG	REC	MTR	A/C	HTG	KIT	MISC	ABC							LTG	REC
1	20	1	12	3/4"	LTG - COURT RM.	0.9								1.5					20	2	
3	20	1	12	3/4"	LTG - COURT RM.	0.8								1.5					20	4	
5	20	1			SPARE									1.5					20	6	
7	20	1			SPARE														20	8	
9	20	1			SPARE									1.4					20	10	
11	20	1			SPARE									0.8					20	12	
13	20	1	12	3/4"	LTG - COURT RM.	0.8								1.0					20	14	
15	20	1			SPARE									1.0					20	16	
17	20	1	12	3/4"	RECEPTS					1.0				1.0					20	18	
19	20	1	12	3/4"	DO					1.0				1.0					20	20	
21	20	1	12	3/4"	DO					0.8				0.8					20	22	
23	20	1	12	3/4"	RECEPT - COURT RM.					1.0									20	24	
25	20	1	12	3/4"	RECEPT - COURT RM.					1.2				0.4					20	26	
27	20	1			SPARE									0.6					20	28	
29	20	1			SPARE									0.5					20	30	
LIGHTING (KVA):						9.1	2.4	5.0	0.0	0.0	0.0	0.0	0.0	6.7	5.8	0.0	0.0	0.0	0.0	20.4	
RECEPTACLES (KVA):						10.8															22.3
MOTORS (KVA):						0.0															
A/C (KVA):						0.0															56.7
HEATING (KVA):						0.0															61.9
KITCHEN (KVA):						0.0															
MISCELLANEOUS (KVA):						0.5															
NOTES: * INDICATES A REPURPOSED EXISTING SPARE CIRCUIT BREAKER																					

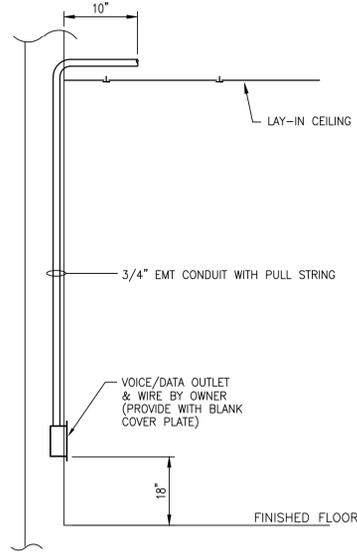
MAIN: 100		VOLTAGE: 208/120		PHASE: 3		WIRE: 4		MOUNTING: RECESSED		AIC: 22,000		BUS BARS: COPPER										
CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA)				LOAD (KVA)				DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #			
						LTG	REC	MTR	A/C	HTG	KIT	MISC	ABC							LTG	REC	MTR
1	20	1	12	3/4"	LTG - JURY RM.	0.4								1.0					20	2		
3	20	1			SPARE									1.0					20	4		
5	20	1			SPARE									1.2					20	6		
7	20	1	12	3/4"	DO - OFFICE					1.0				1.2					20	8		
9	20	1	12	3/4"	DO - OFFICE					1.2				1.2					20	10		
11	20	1	12	3/4"	DO - CORR & TLT.	0.4								0.4					20	12		
13	20	1	12	3/4"	RECEPTS					1.0				1.4					20	14		
15	20	1	12	3/4"	DO					1.2				1.2					20	16		
17	20	1	12	3/4"	DO					1.5				1.5					20	18		
19	20	1	12	3/4"	DO									1.5					20	20		
21	20	1	12	3/4"	BSBO HEAT					1.0									20	22		
23	20	1	12	3/4"	SPARE														20	24		
25	20	1	12	3/4"	SPARE														20	26		
27	20	1			SPACE														20	28		
29	20	1			SPACE														20	30		
LIGHTING (KVA):						3.0	3.0	5.1	0.0	1.0	0.0	0.0	0.0	0.0	8.6	1.5	0.0	3.0	0.0	0.0	22.1	
RECEPTACLES (KVA):						13.7																21.0
MOTORS (KVA):						1.5																
A/C (KVA):						1.0															61.4	
HEATING (KVA):						3.0															58.3	
KITCHEN (KVA):						0.0																
MISCELLANEOUS (KVA):						0.0																
NOTES:																						

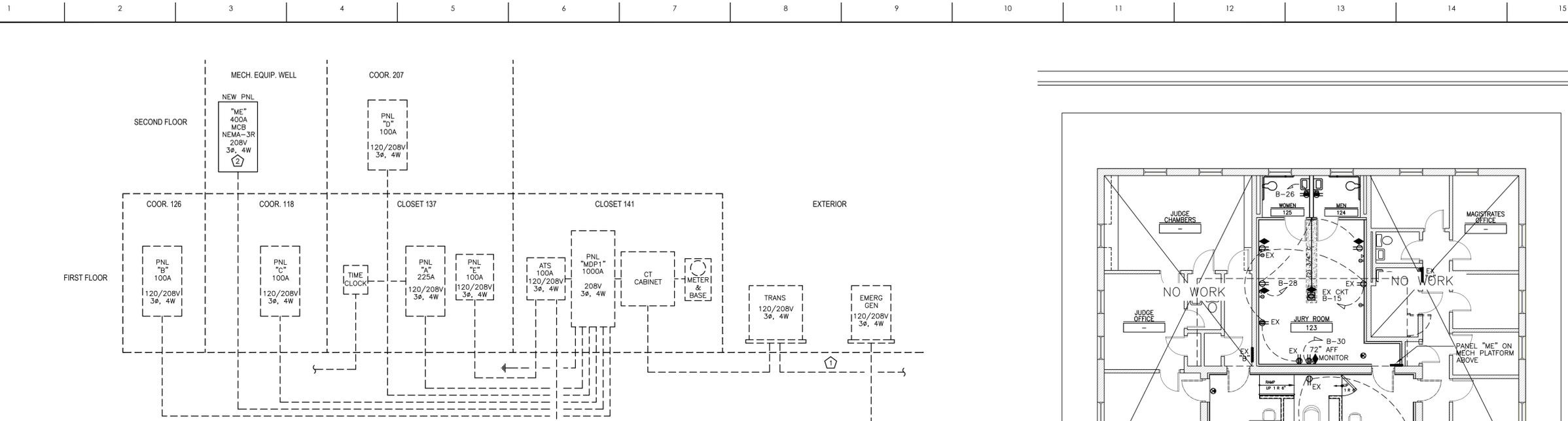
MAIN: 600A		VOLTAGE: 208/120		PHASE: 3		WIRE: 4		MOUNTING: RECESSED		AIC: 22,000		BUS BARS: COPPER										
CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA)				LOAD (KVA)				DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #			
						LTG	REC	MTR	A/C	HTG	KIT	MISC	ABC							LTG	REC	MTR
1														5.6						2		
3	60	3	4	1 1/4"	ACU-1					5.6				5.6						4		
5										5.6				5.6						6		
7										8.7				4.6						8		
9	90	3	3	1 1/4"	ACU-2					8.7				4.6						10		
11										8.7				4.6						12		
13		1			SPACE					2.9				2.9						14		
15	70	2	4	1 1/4"	ACU-3					1.9				2.9						16		
17										1.9				2.9						18		
19										3.4				2.9						20		
21	30	3	10	3/4"	AHU-C1					3.4										22		
23										3.4										24		
25										3.4										26		
27	30	3	10	3/4"	AHU-C2					3.4										28		
29										3.4										30		
31		1			SPACE															32		
33		1			SPACE															34		
35		1			SPACE															36		
LIGHTING (KVA):						0.0	0.0	0.0	0.0	66.8	0.0	0.0	0.0	0.0	0.0	0.0	45.6	0.0	0.0	0.0	112.4	
RECEPTACLES (KVA):						0.0																112.4
MOTORS (KVA):						0.0																
A/C (KVA):						112.4															312.0	
HEATING (KVA):						0.0															312.0	
KITCHEN (KVA):						0.0																
MISCELLANEOUS (KVA):						0.0																
NOTES:																						

B DEMAND CALCS	
LIGHTING	9.12 KVA X 125 % = 11.4 KVA
RECEPTAC TOTAL	10.80 KVA
1ST	10.00 KVA X 100 % = 10.0 KVA
REMAIN	0.80 KVA X 50 % = 0.4 KVA
MOTORS	0.00 KVA X 100 % = 0.0 KVA
LARGEST	0.00 KVA X 125 % = 0.0 KVA
A/C	0.00 KVA X 100 % = 0.0 KVA
HEATING	0.00 KVA X 100 % = 0.0 KVA
EXIST CKTS	0.00 KVA X 100 % = 0.0 KVA
KITCHEN	0.00 KVA X 85 % = 0.0 KVA
MISCELLANEOUS	0.50 KVA X 100 % = 0.5 KVA
TOTAL	61.9 amps = 22.3 KVA

C DEMAND CALCS	
LIGHTING	2.96 KVA X 125 % = 3.7 KVA
RECEPTAC TOTAL	13.70 KVA
1ST	10.00 KVA X 100 % = 10.0 KVA
REMAIN	3.70 KVA X 50 % = 1.9 KVA
MOTORS	1.45 KVA X 100 % = 1.5 KVA
LARGEST	0.00 KVA X 125 % = 0.0 KVA
A/C	1.00 KVA X 100 % = 1.0 KVA
HEATING	3.00 KVA X 100 % = 3.0 KVA
EXIST CKTS	0.00 KVA X 100 % = 0.0 KVA
KITCHEN	0.00 KVA X 65 % = 0.0 KVA
MISCELLANEOUS	0.00 KVA X 100 % = 0.0 KVA
TOTAL	58.3 amps = 21.0 KVA

ME DEMAND CALCS	
LIGHTING	0.00 KVA X 125 % = 0.0 KVA
RECEPTAC TOTAL	0.00 KVA
1ST	10.00 KVA X 100 % = 10.0 KVA
REMAIN	0.00 KVA X 50 % = 0.0 KVA
MOTORS	0.00 KVA X 100 % = 0.0 KVA
LARGEST	0.00 KVA X 125 % = 0.0 KVA
A/C	112.43 KVA X 100 % = 112.4 KVA
HEATING	0.00 KVA X 100 % = 0.0 KVA
EXIST CKTS	0.00 KVA X 100 % = 0.0 KVA
KITCHEN	0.00 KVA X 65 % = 0.0 KVA
MISCELLANEOUS	0.00 KVA X 100 % = 0.0 KVA
TOTAL	312.0 amps = 112.4 KVA



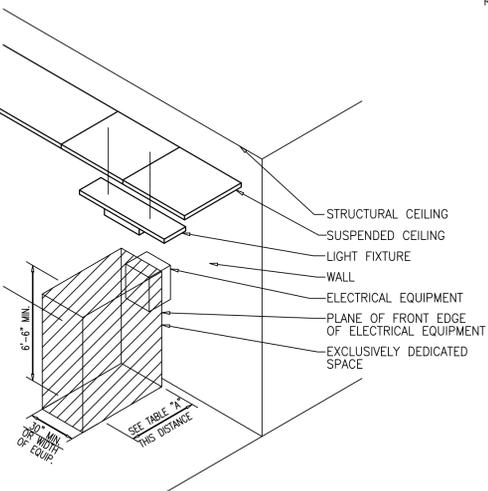


**POWER RISER DIAGRAM**  
SCALE: NTS

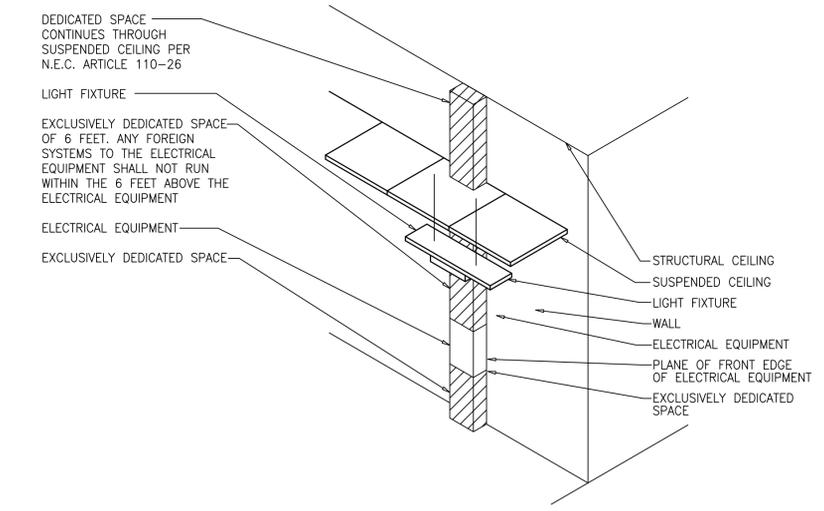
- ELECTRICAL RISER NOTES:**
- ① EXIST. GROUND SERVICE ENTRANCE
  - ② REPLACING EXIST 600A PANEL WITH 400A PANEL. REUSE EXISTING C/B AND FEEDERS.

- WHERE THE "CONDITIONS" ARE AS FOLLOWS:
- 1) EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR OTHER INSULATING MATERIALS, INSULATED WIRE OR INSULATED BUSBARS OPERATING AT NOT OVER 300V SHALL NOT BE CONSIDERED LIVE PARTS
  - 2) EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE
  - 3) EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN

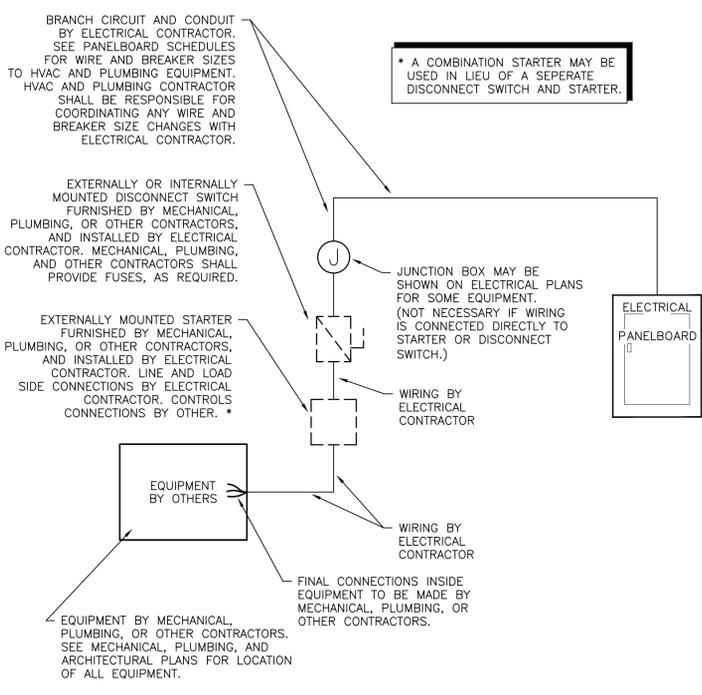
TABLE A-WORKING CLEARANCES		
VOLTAGE TO GROUND NOMINAL	CONDITION	MINIMUM CLEAR DISTANCE (FEET)
0-150	1	3
	2	3
	3	3
151-600	3	3 1/2
	4	4



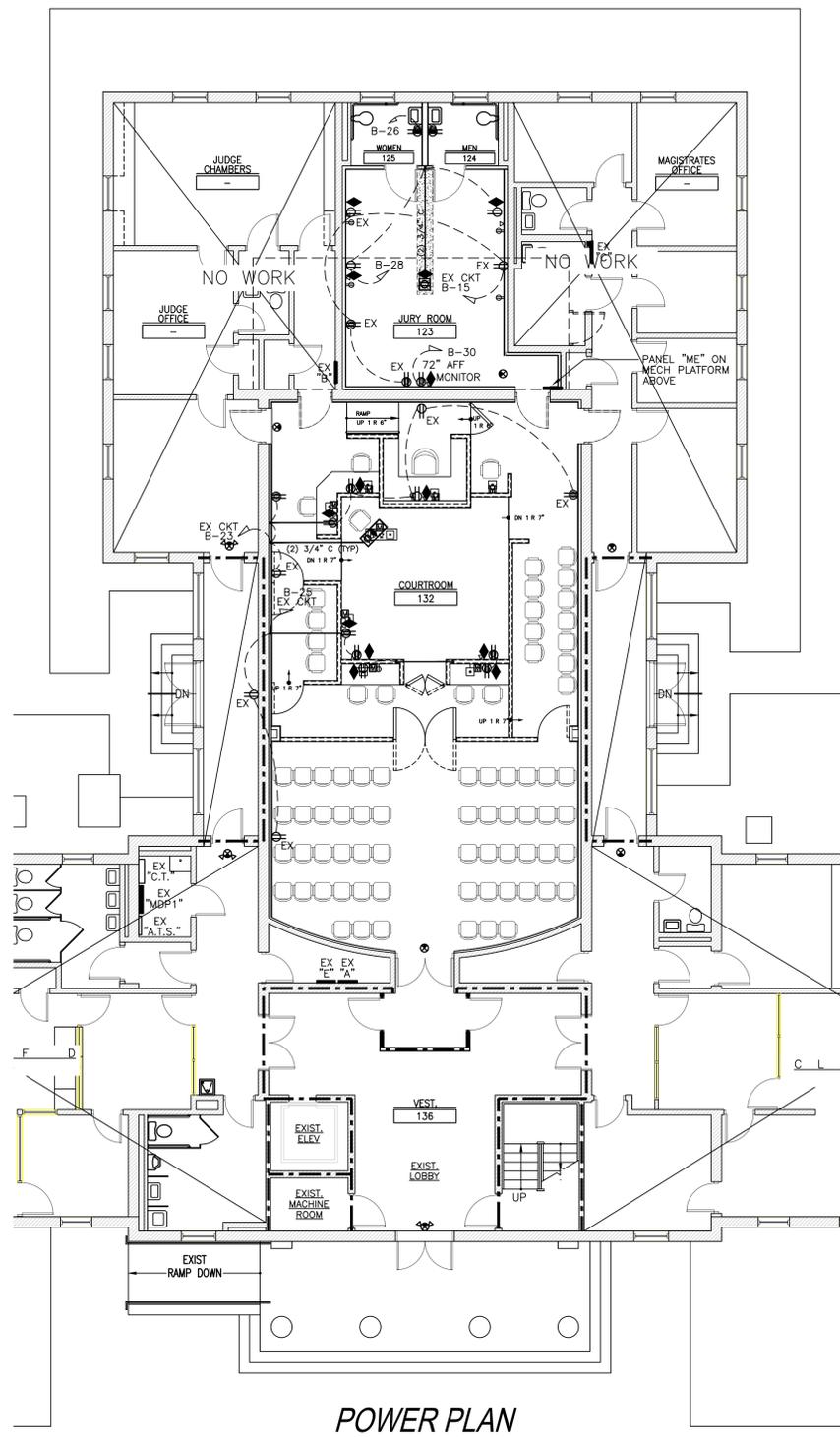
**ELECTRICAL EQUIPMENT WORKING CLEARANCE DETAIL**  
SCALE: NTS



**ELECTRICAL EQUIPMENT DEDICATED SPACE DETAIL**  
SCALE: NTS



**ELECTRICAL CONNECTION DETAIL**  
SCALE: N.T.S.



**POWER PLAN**  
SCALE: 1/8" = 1'-0"

EC SHALL COORDINATE REMOVING AND REPLACING THE CURRENT "ME" PANEL WITH A NEW NEMA-3 600A 36 BREAKER PANEL. RECIRCULATE EXISTING CIRCUITS INTO NEW "ME" PANEL ALONG WITH NEW CIRCUITS ACCORDING TO THE "ME" PANEL SCHEDULE ON E0.1.

**MATERIALS KEYING LEGEND**

**ENGINEERING**  
SOURCE OF NC, P.A.

102-A2 Regency Blvd., Greenville, NC 27834  
E-Mail Address: generalmail@engsource.com  
Voice (252) 439-0338 • Fax (252) 439-0462 • Firm# C-1973

Professional Engineer Seal: JOHN K. FARRAS, P.E., No. 115124, State of North Carolina.

**GENERAL NOTES**

**KEY PLAN**

SCO ID# 18-19A45-01A

NO	REVISION	DATE

**J K F**  
ARCHITECTURE

P.O. BOX 20442 GREENVILLE, NC 27858 PHONE 252-355-1048

**CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I**

EPENTON, NC

**POWER PLAN**

SCALE	1/8" = 1'-0"	DRAWING NO.	E.I.
DRAWN	CDP		
CHECKED			
DATE	01/05/2014		
PROJECT NO.	2013-07	ENGINEERING SOURCE PROJECT NO.	ES12067

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### ELECTRICAL LEGEND (REFER TO MOUNTING HEIGHT SCHEDULE FOR MOUNTING HEIGHT INFORMATION)

	FLUORESCENT LIGHT FIXTURE, 2x4 FT.		WALL SWITCH, SINGLE POLE, 20 AMP, 120 V., "SPEC. GRADE"
	FLUORESCENT LIGHT FIXTURE NIGHT LIGHT		WALL SWITCH, DIMMER, 20 AMP, 120 V., "SPEC. GRADE"
	FLUORESCENT STRIP LIGHT, 8 FT.		WALL SWITCH, 3-WAY, 20 AMP, 120 V., "SPEC. GRADE"
	FLUORESCENT STRIP LIGHT, 4 FT.		MANUAL MOTOR STARTER, 20A, 120V
	FLUORESCENT LIGHT FIXTURE, 1x4 FT.		DOUBLE GANG WALL SWITCH, 20 AMP, 120V., "SPEC. GRADE"
	FLUORESCENT LIGHT FIXTURE, 2'x2'		WALL MOUNTED OCCUPANCY SENSOR
	POLE MOUNTED LIGHT FIXTURE, AS SPECIFIED		CEILING MOUNTED OCCUPANCY SENSOR
	FLUORESCENT LIGHT FIXTURE WALL SCONCE		NON-FUSED DISCONNECT SWITCH, 240V, 30A, U.N.O.
	OWNER SELECTED PENDANT MOUNTED		FUSED DISCONNECT SWITCH
	EXTERIOR TWO-HEAD LIGHT		DISCONNECT FUSE SIZE
	EXTERIOR DOOR LIGHT		DISCONNECT FRAME SIZE
	LIGHT AND EXHAUST FAN COMBINATION		FIRE ALARM MANUAL PULL STATION
	EXHAUST FAN		FIRE ALARM HORN/STROBE
	H.I.D. LIGHT FIXTURE, AS SPECIFIED.		FIRE ALARM STROBE
	RECESSED OR SURFACE MOUNTED ROUND FIXTURE		SMOKE DETECTOR
	RECESSED NIGHT LIGHT		HEAT DETECTOR, CEILING MOUNTED
	H.I.D. WALL PACK		DUCT SMOKE DETECTOR
	BOLLARD EXTERIOR LIGHT		FIRE ALARM CONTROL PANEL, FLUSH MOUNTED.
	EXTERIOR GROUND MOUNTED FLOOD LIGHT		GROUND - EXTEND AND CONNECT TO APPROVED GROUND
	JUNCTION BOX		ELECTRICAL PANEL - SURFACE MOUNTED.
	TELEPHONE OUTLET WITH COVER. SEE DETAIL FOR INSTALLATION INSTRUCTIONS.		ELECTRICAL PANEL - FLUSH MOUNTED.
	DATA/LAN OUTLET WITH COVER. SEE DETAIL FOR INSTALLATION INSTRUCTIONS.		UNSWITCHED CIRCUIT, 2#12 & 1#12 G. IN 3/4" C., U.N.O.
	JUNCTION BOX FOR MICROPHONE. PROVIDE WITH BLANK PLATE. ROUTE UNDER FLOOR CABLE IN LOW VOLTAGE CONDUIT WITH DATA CABLE.		SWITCHED CIRCUIT
	EXIT LIGHT		PANEL NAME-CIRCUIT #
	EMERGENCY EXIT LIGHT		WP WEATHER PROOF
	EMERGENCY LIGHT WALL MOUNTED UNLESS NOTED OTHERWISE.		GFI GROUND FAULT INTERRUPTER
	DUPLEX RECEPTACLE, 20 AMP, 120 V., "SPEC. GRADE"		A.F.F. ABOVE FINISHED FLOOR
	GFI DUPLEX RECEPTACLE, 20 AMP, 120 V., "SPEC. GRADE"		NL NIGHT LIGHT
	220 V. RECEPTACLE, MATCH APPLIANCE PLUG		U.N.O. UNLESS NOTED OTHERWISE
	FLUSH MOUNTED FLOOR DUPLEX RECEPTACLE		IG ISOLATED GROUND
	FLUSH MOUNTED FLOOR DATA/LAN OUTLET		LC LIGHTING CONTACTOR
	QUAD RECEPTACLE, 20 AMP, 120 V., "SPEC. GRADE"		EWG ELECTRIC WATER COOLER
			AC ABOVE COUNTER
			BC BELOW COUNTER

# LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	LAMPS	VOLTS	WATTS	B.F.
A	2'x2' LED RECESSED MOUNTED LED CENTER LENS WITH MEDIUM LUMEN OUTPUT (3,500-4,000 LUMENS) AND ACRYLIC LENS. PROVIDE COLUMBIA #: CCL22-LSCS OR APPROVED EQUAL.	LED	UNV	35W	-
AE	"AE" - SAME AS "A", EXCEPT WITH BATTERY BACKUP				
B	6" RECESSED LED LIGHTING FIXTURE WITH 4000K COLOR TEMP AND SLOPE CEILING ADAPTER AS REQD. PROVIDE WILLIAMS - 6DR-TL-L40-9-40-SCA-DIM-UNV-M OR APPROVED EQUAL.	LED	120	36W	N/A
BE	"BE" - SAME AS "B", EXCEPT WITH BATTERY BACKUP				
C	4' LED LINEAR WALL FIXTURE WITH CLEAR PRISMATIC ACRYLIC LENS. PROVIDE SAYLITE - 555-A-48L-F30W4100L-DMV-35K-WH OR APPROVED EQUAL.	LED	UNV	30W	N/A
E	4' LED ADJUSTABLE CONCEALED COVE LIGHT WITH MEDIUM LUMEN OUTPUT (3,500-4,000 LUMENS) AND FROSTED ACRYLIC LENS WITH OPTIONAL COVE SYSTEM. PROVIDE LITE CONTROL #: 30-CC-AI-20-4-WHS-40K9-I060-DO1-UNV OPTIONAL KNIFE EDGE COVE SYSTEM #: CS-KS-20-WHS-EC FIELD MEASURE BEFORE ORDERING LIGHTS AND COVE SYSTEM	LED	UNV	20W	-
	CEILING OR WALL MOUNTED LED EXIT LIGHT CONFORMING TO NFPA 101 STANDARDS, w/ BATTERY & SOLID STATE CHARGER, SELF-DIAGNOSTICS w/ A TEST CYCLE EVERY 30 DAYS MINIMUM, SELF-CONTAINED, DOUBLE OR SINGLE WHITE FACE/BODY, ABS THERMOPLASTIC HOUSING, PILOT & STATUS INDICATING LIGHTS, TEST SWITCH, & 90 MIN. EMERGENCY RUN TIME; EXIT SIGN SHALL HAVE 5 YEAR WARRANTY. PROVIDE EXITRONIX VEX-U-BP-WB-WH-G2 OR WILLIAMS #: EXIT-R-EM-WHT-SDT OR HUBBELL #: CER50	RED LED	UNV 277/6V	3.5W	N/A
	CEILING OR WALL MOUNTED LED EXIT & 2-HEAD EMERGENCY LIGHT CONFORMING TO NFPA 101 STANDARDS, w/ BATTERY & SOLID STATE CHARGER, SELF-DIAGNOSTICS w/ A TEST CYCLE EVERY 30 DAYS MINIMUM, SELF-CONTAINED, DOUBLE OR SINGLE WHITE FACE/BODY, ABS THERMOPLASTIC HOUSING, PILOT & STATUS INDICATING LIGHTS, TEST SWITCH, & 90 MIN. EMERGENCY RUN TIME; EXIT LIGHT SHALL CONTINUE TO OPERATE FOR 24 HOURS FOLLOWING POWER OUTAGE; EXIT SIGN SHALL HAVE 5 YEAR WARRANTY. PROVIDE EXITRONIX #: VLED-U-WH-EL90-G2 OR HUBBELL #: CCRSD OR WILLIAMS #: EXIT/EM/LED-SF-R-WHT-HL-SDT	RED LED 2-10W HALOGEN	UNV 277/6V	20	N/A

### ELECTRICAL SUMMARY

#### ELECTRICAL SYSTEM AND EQUIPMENT

**METHOD OF COMPLIANCE:**  
 ENERGY CODE: PRESCRIPTIVE  PERFORMANCE   
 ASHRAE 90.1: PRESCRIPTIVE  PERFORMANCE

**LIGHTING SCHEDULE**  
 LAMP TYPE REQUIRED IN FIXTURE: VARIES (SEE LIGHT FIXTURE SCHEDULE THIS DRAWING)  
 NUMBER OF LAMPS IN FIXTURE: VARIES (SEE LIGHT FIXTURE SCHEDULE THIS DRAWING)  
 BALLAST TYPE IN FIXTURE: VARIES (SEE LIGHT FIXTURE SCHEDULE THIS DRAWING)  
 NUMBER OF BALLASTS IN FIXTURE: VARIES (SEE LIGHT FIXTURE SCHEDULE THIS DRAWING)  
 TOTAL WATTAGE PER FIXTURE: VARIES (SEE LIGHT FIXTURE SCHEDULE THIS DRAWING)  
 TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED: **2,077W VS. 3,120W**  
 EXTERIOR LIGHTING ZONE: 3  
 EXTERIOR LIGHTING WATTAGE SPECIFIED VS. ALLOWED: **N/A**

**ADDITIONAL PRESCRIPTIVE COMPLIANCE**

- 506.2.1 More Efficient Mechanical Equipment
- 506.2.2 Reduced Lighting Power Density
- 506.2.3 Energy Recovery Ventilation Systems
- 506.2.4 Higher Efficiency Service Water Heating
- 506.2.5 On-Site Supply of Renewable Energy
- 506.2.6 Automatic Daylighting Control Systems

**DESIGNER STATEMENT:**  
 To the best of my knowledge and belief, the design of this building complies with the electrical system and equipment requirements of the North Carolina Building Code, Energy Conservation Code.

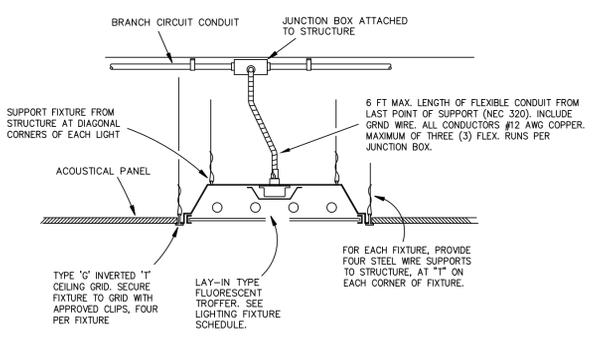
SIGNED:   
 NAME: D. WILSON, P.E.  
 TITLE: PROFESSIONAL ENGINEER

**\* (INTERIOR WATTS ALLOWED COMPLY WITH SECTION 506 REDUCED LIGHTING DENSITY)  
 \*\* 1.72 W/SQFT FOR 1,508 SQFT COURTROOM, .68 W/SQFT FOR 59 SQFT CORRIDOR, 1.23 W/SQFT FOR 332 SQFT CONFERENCE/MEETING/MULTIPURPOSE ROOM, .98 W/SQFT FOR 81 SQFT RESTROOM \*\***

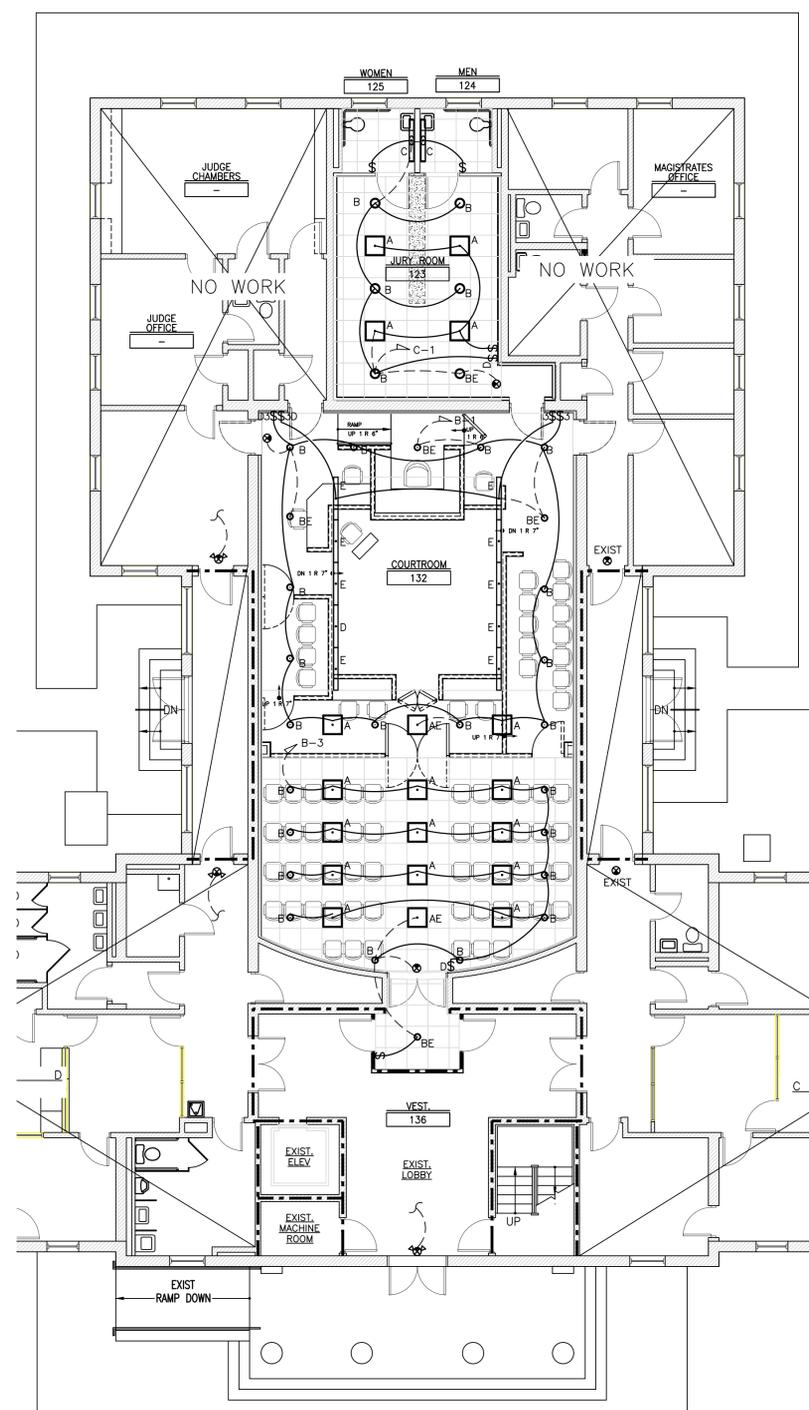
### ELECTRICAL EQUIPMENT MOUNTING HEIGHTS

DEVICE	MT HEIGHT	TO
PANEL BOARDS	6'-6" AFF	TOP
TOGGLE SWITCH (GYP BOARD)	4'-0" AFF	C
TOGGLE SWITCH (MASONRY)	4'-0" AFF	TOP
RECEPTACLES	1'-6" AFF	C
RECEPTACLES (AT BASE CABINETS)	7" ACT	C
VOICE/DATA OUTLETS	1'-6" AFF	C
FIRE ALARM PULL STATIONS	4'-6" AFF	TOP
EMERGENCY LIGHTS	12" BFC	TOP
STROBE/HORNS	12" BFC OR 96" AFF MAX	TOP
REMOTE ANNUNCIATOR PANEL	4'-8" AFF	C
THERMOSTATS (GYP BRD)	4'-0" AFF	C
THERMOSTATS (MASONRY)	4'-0" AFF	TOP
MANUAL HVAC SHUTDOWN SW (GYP BRD)	4'-0" AFF	C
MANUAL HVAC SHUTDOWN SW (MASONRY)	4'-0" AFF	TOP

**NOTES:**  
 1) TYPICAL MOUNTING HEIGHTS ARE LISTED U.N.O.  
 2) BFC=BELOW FINISHED CEILING, ACT=ABOVE CABINET TOP  
 3) THE ABOVE LISTED EQUIPMENT IS SHOWN FOR CLARITY OF MOUNTING HEIGHT ONLY. ALL DEVICES MAY NOT BE USED ON THIS PROJECT OR SHOWN ON THESE DRAWINGS.



**FLUORESCENT / LED TROFFER INSTALLATION**  
 SCALE: NONE



**LIGHTING PLAN**  
 SCALE: 1/8" = 1'-0"

### MATERIALS KEYING LEGEND

**ENGINEERING**  
 SOURCE OF NC, P.A.

102-A2 Regency Blvd., Greenville, NC 27834  
 E-Mail Address: generalmail@engsource.com  
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### GENERAL NOTES

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### KEY PLAN

SCO ID# 18-19A45-01A

NO	REVISION	DATE

ARCHITECTURE

J K F

P.O. BOX 20462 GREENVILLE, NC 27858 PHONE 252-355-1048

### CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I

EPENTON, NC

DRAWING TITLE: LIGHTING PLAN

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

DRAWING NO: E1.2

CHECKED:

DATE: 01/05/2014

PROJECT NO: 2013-07

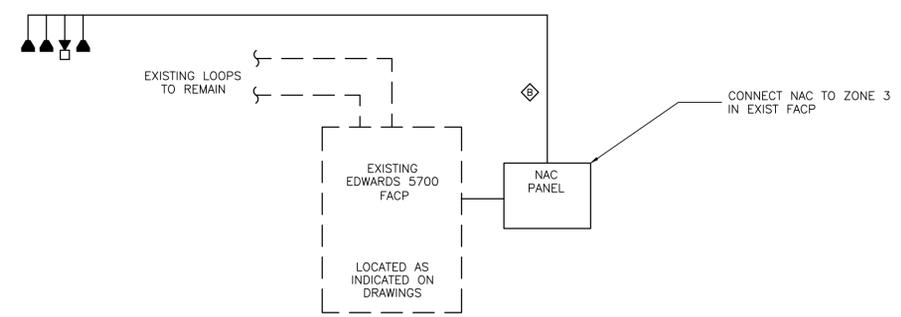
ENGINEERING SOURCE PROJECT NO: ES12067

**FIRE ALARM SYMBOL LEGEND**  
(SEE MOUNTING HEIGHT SCHEDULE FOR MOUNTING INFORMATION UNLESS NOTED OTHERWISE)

	FIRE ALARM MANUAL PULL STATION
	FIRE ALARM HORN/STROBE
	VOICE NOTIFICATION FIRE ALARM/STROBE
	VOICE NOTIFICATION SPEAKER
	FIRE ALARM STROBE
	SMOKE DETECTOR
	HEAT DETECTOR, CEILING MOUNTED
	FIRE ALARM CONTROL PANEL, FLUSH MOUNTED.
	REMOTE ANNUNCIATOR PANEL, FLUSH MOUNTED
	NAC BOOSTER PANEL
	DUCT MOUNTED SMOKE DETECTOR, PROVIDED AND WIRED BY E.C., INSTALLED BY M.C.
	SHUT DOWN RELAY PROVIDED AND WIRED BY E.C.
	DUCT MOUNTED SMOKE DETECTOR REMOTE INDICATOR LIGHT MOUNTED IN CEILING PROVIDED AND INSTALLED BY E.C., LABEL ACCORDING TO MECHANICAL UNIT SERVED.
	FSPRINKLER RISER WATER FLOW SENSOR, PROVIDED & WIRED BY E.C., INSTALLED BY SPRINKLER CONTRACTOR.
	SPRINKLER RISER TAMPER SWITCH, PROVIDED AND WIRED BY E.C., INSTALLED BY SPRINKLER CONTRACTOR.
	SPRINKLER RISER WATER VALVE SHUT-OFF SENSOR, PROVIDED & WIRED BY E.C., INSTALLED BY SPRINKLER CONTRACTOR.
	MONITOR MODULE
	KITCHEN HOOD FIRE SUPPRESSION SYSTEM
	AREA OF RESCUE ASSISTANCE BASE STATION WITH VISUAL LOCATION INDICATOR. RATH 2500-205FMC (OR EQUAL)
	AREA OF RESCUE ASSISTANCE 2-WAY COMMUNICATION REMOTE STATION. RATH 2100 FLUSH MTD (OR EQUAL)
	MAGNETIC DOOR HOLD OPEN DEVICE (POE)
	CARBON MON-OXIDE SENSOR
	CLEAR PROTECTIVE POLYCARB GUARD

**WIRE LEGEND**

	1 PAIR #16 UNSHIELDED CABLE
	2 COND. #14 THHN
	4 COND. #14 THHN
	2 PAIR #18 SHIELDED + 2 COND. # 14 THHN



**FIRE ALARM RISER**  
SCALE: NTS

INITIATING DEVICE OR CONDITION	FIRE ALARM SYSTEM ACTION MATRIX	SYSTEM ACTION																		
		ACTUATE COMMON ALARM SIGNAL INDICATOR	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE TROUBLE SIGNAL	ACTUATE APPROPRIATE LOCATION INDICATOR	ACTUATE ALL AUDIBLE EVACUATION SIGNALS	ACTUATE ALL VISIBLE EVACUATION SIGNALS	DISPLAY / PRINT CHANGE OF STATUS	TRANSMIT ALARM SIGNAL TO SUPERVISING STATION	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	FAN SHUT DOWN (UNIVERSAL)	MUSIC & SPECIALTY LTG SHUT DOWN	DAMPER SHUT DOWN	RECALL ELEVATOR TO LOWEST SAFE FLOOR	SHUNT ALL GAS & POWER UNDER HOOD	COMMENTS/REMARKS
MANUAL ALARM STATION		X	X					X	X	X	X	X			X	X	X			
SMOKE SENSOR / DETECTOR		X	X					X	X	X	X	X			X	X	X			
DUCT SENSOR / DETECTOR				X	X			X	X	X	X	X			X	X	X			
ELEVATOR SMOKE SENSORS (SHAFT & LOBBIES)		X	X					X	X	X	X	X			X	X	X	X		
KITCHEN HOOD SUPPRESSION SYS		X	X					X	X	X	X	X			X	X	X		X	
WATERFLOW SWITCH		X	X					X	X	X	X	X			X	X	X			
TAMPER SWITCH				X	X			X				X								
POST INDICATOR VALVE SWITCH				X	X			X				X								
FIRE ALARM AC POWER FAILURE						X	X							X						
FIRE ALARM SYSTEM LOW BATTERY						X	X							X						
OPEN CIRCUIT						X	X							X						
GROUND FAULT						X	X							X						
NOTIFICATION APPLIANCE CIRCUIT																				
WIRE-TO-WIRE SHORT						X	X							X						

**MATERIALS KEYING LEGEND**

**ENGINEERING**  
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E-Mail Address: generalmail@engsource.com  
Voice (252) 439-0338 • Fax (252) 439-0462 • Firm# C-1973

**GENERAL NOTES**

**KEY PLAN**

SCO ID# 18-19445-01A

NO	REVISION	DATE
----	----------	------

SEAL

**J K F**  
ARCHITECTURE

P.O. BOX 20442 GREENVILLE, NC 27858 PHONE 252-355-1048

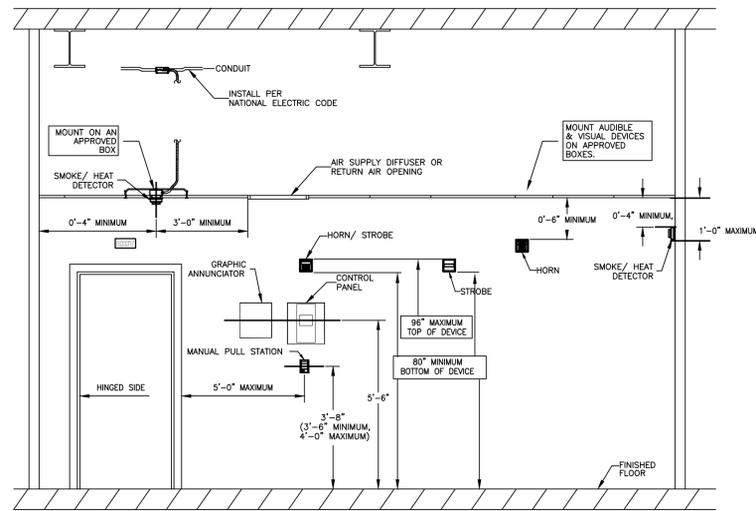
**CHOWAN COUNTY COURTHOUSE RENOVATION PHASE I**  
EPENTON, NC

DRAWING TITLE  
**FIRE ALARM SCHED. & DETAIL**

SCALE 1/8" = 1'-0"	DRAWING NO.
DRAWN CDP	FAO.1
CHECKED	
DATE 01/05/2014	
PROJECT NO. 2013-01	
ENGINEERING SOURCE PROJECT NO. ES12061	

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NFPA 72 AND ADA DEVICE  
INSTALLATION REQUIREMENTS



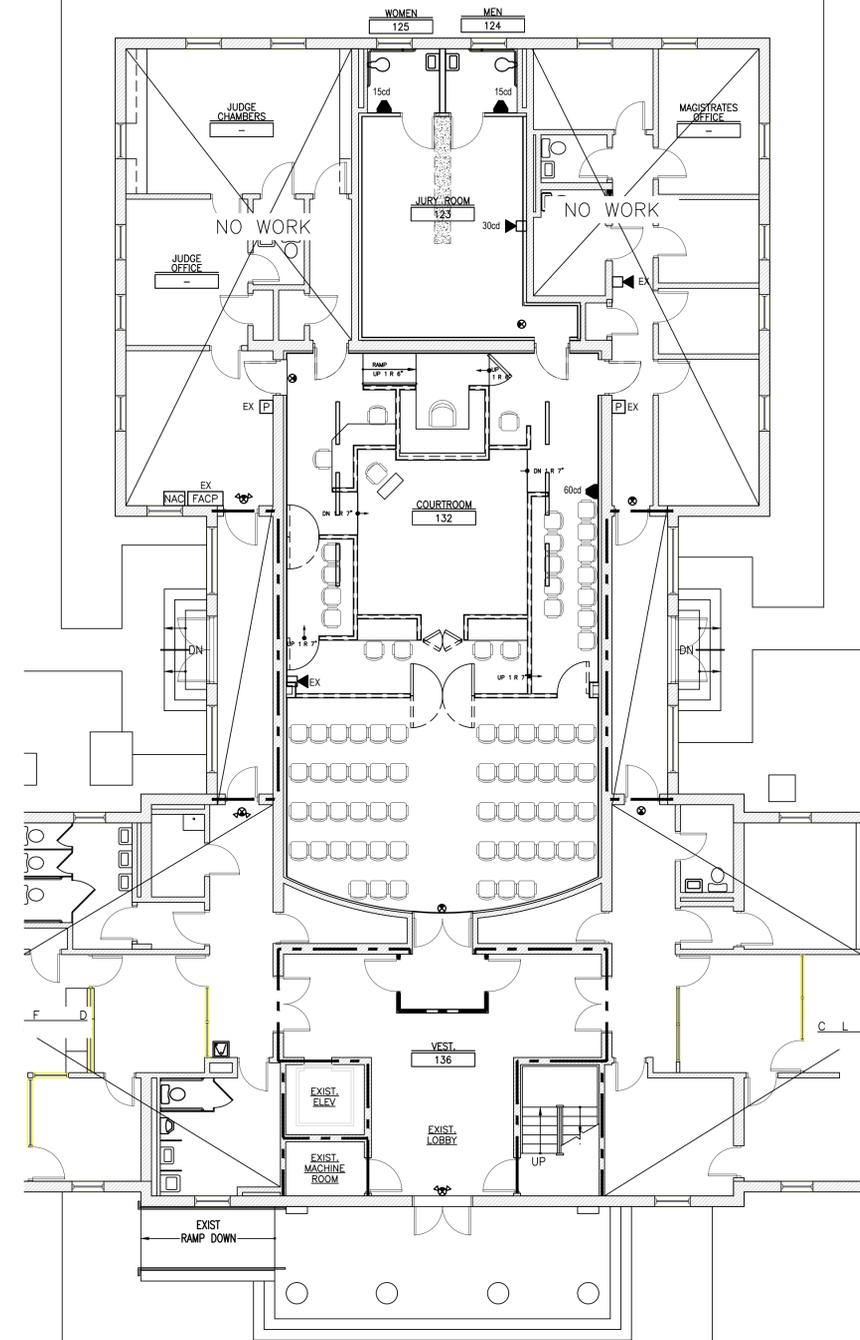
**DEVICE MOUNTING DETAIL**  
SCALE: NTS

**FIRE ALARM INSTALLATION NOTES:**

1. FIRE ALARM SHALL BE INSTALLED BY A MANUFACTURER APPROVED INSTALLATION COMPANY.
2. E.C. OR E.C.'S REPRESENTATIVE SHALL PERFORM THOROUGH TRAINING WITH OWNER'S REPRESENTATIVES PRIOR TO OWNER OCCUPANCY OF THE BUILDING.
3. FIRE ALARM SYSTEM SHALL BE INSTALLED IN ACCORDANCE TO ALL APPLICABLE STATE AND LOCAL LAWS AND IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 72.
4. ALARM SHALL HAVE A SOUND LEVEL MEETING THE dB REQUIREMENTS OF 907.6.2.1.1 OF THE NC FIRE PREVENTION CODE AND NOT LESS THAN 20 dB ABOVE AMBIENT NOISE LEVELS. (TYPICALLY, 55 dB AMBIENT NOISE PER BUSINESS/EDUCATION OCCUPANCY. ADJUST FOR NOISY ENVIRONMENTS).
5. ALL WIRING SHALL BE IN CONDUIT.
6. FIRE ALARM CONTRACTOR SHALL PROVIDE A FULL SET OF SHOP DRAWINGS, INCLUDING BATTERY CALCULATIONS, WIRING DIAGRAMS, AND DEVICE PRODUCT DATA TO THE AHJ FOR REVIEW AND APPROVAL PRIOR TO STARTING ROUGH-INS.
7. E.C. SHALL PROVIDE AN UPDATED FRAMED BUILDING LAYOUT NEXT TO MAIN ENTRANCE. BUILDING LAYOUT SHALL SHOW ALL FIRE ALARM DEVICE LOCATIONS. INCLUDE THEIR RESPECTIVE ADDRESSES IF IT IS AN ADDRESSABLE SYSTEM.
8. NEW FIRE ALARM SYSTEM DEVICES SHALL BE ABLE TO BE INTEGRATED WITH EXISTING FACP AND INSTALLED IN ACCORDANCE TO ALL APPLICABLE STATE AND LOCAL LAWS AND IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 72.
9. EXISTING FIRE ALARM SYSTEM IN EDWARDS 5700 SERIES. NEW COMPONENTS SHALL BE EDWARDS OR MAY BE NOTIFIER, GAMEWELL, OR SILENT KNIGHT SO LONG AS THEY CAN FULLY INTEGRATE IN WITH THE EXISTING FACP FOR PROPER FUNCTION.

**WALL LEGEND**

- ===== 12" CMU WALL
- ===== 8" CMU WALL
- ===== 6 CMU WALL
- ===== 8" METAL STUD WALL WITH GYPBOARD EACH SIDE WITH SOUND ATTENUATION BATTS
- ===== 6" METAL STUD WALL WITH GYPBOARD EACH SIDE WITH SOUND ATTENUATION BATTS
- ===== 3 5/8" METAL STUD WALL WITH GYPBOARD EACH SIDE WITH SOUND ATTENUATION BATTS
- DEMOUNTABLE PARTITION WITH SOUND ATTENUATION BATTS
- ONE HOUR RATED FIRE BARRIER (PRIORITY 5 - LOWEST)
- TWO HOUR RATED FIRE BARRIER (PRIORITY 3)



**FIRE ALARM PLAN**  
SCALE: 1/8" = 1'-0"

**MATERIALS KEYING LEGEND**

**ENGINEERING**  
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**GENERAL NOTES**

**KEY PLAN**

SCO ID# 18-19445-01A

NO	REVISION	DATE

SCALE

**JKF**  
ARCHITECTURE

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**CHOWAN COUNTY COURTHOUSE  
RENOVATION PHASE I**

EPENTON, NC

DRAWING TITLE

**FIRE ALARM PLAN**

SCALE DRAWING NO.

1/8" = 1'-0"

DRAWN: **CDP**

CHECKED:

DATE: **01/05/2014**

PROJECT NO. **2013-07**

ENGINEERING SOURCE PROJECT NO. **ES12067**

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