

Office Alteration for:

# City of Wilson Operations Center

Herring Avenue  
Wilson, NC 27896

## 2018 APPENDIX B BUILDING CODE SUMMARY

Name of Project: Office Alteration for City of Wilson Operations Center

Address: Herring Avenue, Wilson, NC Zip Code: 27896  
 Owner or Authorized Agent: Robert Bartlett, PE  
Bartlett Engineering & Surveying Phone # 252.399.0704 E-Mail robert@bartletteng.com

Owned By:  City / County  Private  State

Code Enforcement Jurisdiction:  City - Wilson  County  State

CONTACT: Robert Bartlett 252.399.0704 robert@bartletteng.com

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Building	Bartlett Engineering & Surveying	Robert Bartlett	020106	252.399.0704	robert@bartletteng.com
Civil	Bartlett Engineering & Surveying	Robert Bartlett	020106	252.399.0704	robert@bartletteng.com
Electrical	Bartlett Engineering & Surveying	Robert Bartlett	020106	252.399.0704	robert@bartletteng.com
Fire Alarm					
Plumbing					
Mechanical	Bartlett Engineering & Surveying	Robert Bartlett	020106	252.399.0704	robert@bartletteng.com
Sprinkler-Standpipe					
Struct. - Metal Bldg.					
Struct. - Framing	Bartlett Engineering & Surveying	Robert Bartlett	020106	252.399.0704	robert@bartletteng.com
Structural - Fnd.					
Other					

2018 NC BUILDING CODE:  New Building  Addition  Renovation  
 1st Time Interior Completion  
 Shell/Core completion only - (Contact the local inspection jurisdiction for possible additional procedures and requirements.)  
 Phased Construction - (Contact the local inspection jurisdiction for possible additional procedures and requirements.)

2018 NC EXISTING BUILDING CODE:  Prescriptive  Repair  Chapter 14  
 Level I  Level II  Level III  Historic  Change of Use  
 Historic Property  Change of Use

CONSTRUCTED (date) \_\_\_\_\_ CURRENT USE(S) (Ch. 3) Business  
 RENOVATED (date) \_\_\_\_\_ PROPOSED USE(S) (Ch. 3) Business

RISK CATEGORY: (Table 1604.5) Current:  I  II  III  IV  
 Proposed:  I  II  III  IV

**BASIC BUILDING DATA**

Construction Type:  I-A  II-A  III-A  IV  V-A  
 I-B  II-B  III-B  V-B

Sprinklers:  NO  Partial  YES  NFPA 13  NFPA 13R  NAPA 13D

Standpipes:  NO  YES Class  I  II  III  Wet  Dry

Fire Drivert:  NO  YES  Flood Hazard Area:  No  YES

Special Inspections Required:  NO  YES (Contact the local inspection jurisdiction for possible additional procedures and requirements.)

FLOOR	EXISTING (SQ. FT.)	NEW (SQ. FT.)	SUB-TOTAL
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor	42,358 B + 9,977 F-2	0	52,335
Basement			
TOTAL:	42,358 B + 9,977 F-2	0	52,335

**ALLOWABLE AREA**

Primary Occupancy Classification(s): (check all that apply)

Assembly (303)  A-1  A-2  A-3  A-4  A-5  
 Business (304)  B  
 Educational (305)   
 Factory (306)  F-1 Moderate  F-2 Low  
 Hazards (307)  H-1 Detonate  H-2 Dehlagrate  H-3 Combust  H-4 Health  H-5 HPM  
 Institutional (308)  I-1  I-2  I-3  I-4  
 I-3 Condition  1  2  3  4  5  
 Mercantile (309)   
 Residential (310)  R-1  R-2  R-3  R-4  
 Storage (311)  S-1 Moderate  S-2 Low  High-Piled  
 Parking Garage  Open  Enclosed  Repair Garage  
 Utility and Misc. (312)

Accessory Occupancy Classification(s): \_\_\_\_\_

Incidental Uses: (Table 509) \_\_\_\_\_

Special Provisions: (Chapter 5 - List Code Sections) \_\_\_\_\_

Mixed Occupancy:  NO  YES Separation: 2 Hour Exception: \_\_\_\_\_  
 Non-Separated Mixed Occupancy (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, as determined, shall apply to the entire building.  
 Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.  
 Actual Area of Occupancy A \_\_\_\_\_ Actual Area of Occupancy B \_\_\_\_\_ Actual Area of Occupancy C \_\_\_\_\_  
 Allowable Area of Occupancy A \_\_\_\_\_ Allowable Area of Occupancy B \_\_\_\_\_ Allowable Area of Occupancy C \_\_\_\_\_ ≤ 1.0

EXISTING BUILDING, NO CHANGE TO SQUARE FOOTAGE, OCCUPANCY TYPE, OR OCCUPANCY AMOUNT

STORY NO.	DESCRIPTION AND USE	(A) BLDG. AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1,2</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>3,5</sup>
1st	B - Admin Bldg. - non-sprinklered	33,508	23,000	13,248	36,248
1st	B - Building 100 - non-sprinklered	8,850	23,000	8,417	31,417
1st	F-2 - Both Line Truck Bldgs. - sprinklered	9,977	92,000	N/A	92,000
Totals	Entire Building	52,335			158,630

<sup>1</sup>Footage space area increases from Section 506.3 are computed thus:  
 a. Perimeter which fronts a public way or open space having 20 feet minimum width =  $0.650 \times (P)$   
 b. Total Building Perimeter =  $787 \times (P)$   
 c. Ratio  $(F/P) = 0.820 \times (F/P)$   
 d.  $W =$  Minimum width of public way =  $30 \times (W)$   
 e. Percent of footage increase  $I_1 = 100 [F/P - 0.25] \times W/30 = 0.576 \times (I_1)$   
<sup>2</sup>Unlimited area applicable under conditions of Sections (507)  
<sup>3</sup>Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).  
<sup>4</sup>The maximum area of open parking garages must comply with Table 406.5.4.  
<sup>5</sup>Footage increase is based on the unsprinklered area value in Table 506.2.

**ALLOWABLE HEIGHT**

BUILDING HEIGHT IN FEET (Table 504.3) <sup>1</sup>	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE <sup>2</sup>
Building Height in Feet (Table 504.3) <sup>1</sup>	55'	<16'	
Building Height in Stories (Table 504.4) <sup>2</sup>	3	1	

<sup>1</sup> Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.  
<sup>2</sup> The maximum height of air traffic control towers must comply with Table 412.3.1.  
<sup>3</sup> The maximum height of open parking garages must comply with Table 406.5.4.

**FIRE RESISTANCE RATINGS** N/A EXISTING BUILDING

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQUIRED	PROVIDED (W, D, A)				
Structural frame, including columns, girders, trusses							
Bearing walls							
Exterior							
North							
East							
West							
South							
Interior							
Nonbearing walls and partitions							
Exterior							
North							
East							
West							
South							
Interior walls and partitions							
Floor Construction including supporting beams and joists							
Floor Ceiling assembly							
Column Supporting Floor							
Roof Construction including supporting beams and joists							
Roof Ceiling assembly							
Column Supporting Roof							
Shafts Enclosures - Exit							
Shafts Enclosures - Other							
Corridor Separation							
Occupancy Fire Barrier Separation							
Party/Wall Separation							
Smoke Barrier Separation							
Smoke Partition							
Tenant Dwelling Unit/ Sleeping Unit Separation							
Incidental Use Separation							

**PERCENTAGE OF WALL OPENING CALCULATIONS**

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
>30'	Unprotected, Non-sprinklered	Unlimited	N/A

**LIFE SAFETY SYSTEM REQUIREMENTS**

Emergency Lighting:  No  Yes  
 Exit Signs:  No  Yes  
 Fire Alarm:  No  Yes Automatic Sprinkler System  
 Smoke Detection Systems:  No  Yes  Partial, HVAC UNITS ≥ 5.0 TONS  
 Carbon Monoxide Detection:  No  Yes

**LIFE SAFETY PLAN REQUIREMENTS**

Lift Safety Plan Sheet #: LS-1

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 (705.5)  
 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 (1039)  
 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** (SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**ACCESSIBLE PARKING (SEE SITE PLAN)** EXISTING BUILDING

LOT OR PARKING AREA DESIGNATION	TOTAL # PARKING SPACES				TOTAL # ACCESSIBLE SPACES PROVIDED		
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	132" ACCESS AISLE	8' ACCESS AISLE	5' ACCESS AISLE	ACCESSIBLE SPACES PROVIDED
TOTAL							

**PLUMBING FIXTURE REQUIREMENTS** EXISTING BUILDING (TABLE 2902.1)

USE	WATER CLOSETS			URINALS	LAVATORIES			SHOWERS & TUBS	DRINKING FOUNTAINS	
	MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
EXISTING										
NEW										
REQUIRED										

**SPECIAL APPROVALS**

Special approval: (Local Jurisdiction, Department of Insurance, OIG, DFL, DBRS, ICC, etc., describe below)

**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  YES (Provide code or statutory reference) \_\_\_\_\_

Exempt Building:  NO  YES (Provide code or statutory reference) \_\_\_\_\_

Climate Zone:  3A  4A  5A

Method of Compliance: Energy Code  Prescriptive  Performance  
 ASHRAE 90.1  Prescriptive  Performance

Roof/Ceiling Assembly (each assembly) \_\_\_\_\_

**MECHANICAL SUMMARY** SEE MECHANICAL DRAWINGS FOR MECHANICAL SYSTEMS SERVICE SYSTEMS AND EQUIPMENT:

Thermal Zone  
 Winter dry bulb \_\_\_\_\_  
 Summer dry bulb \_\_\_\_\_

Interior Design Conditions  
 Winter dry bulb \_\_\_\_\_  
 Summer dry bulb \_\_\_\_\_  
 Relative humidity \_\_\_\_\_

Building Heating Load \_\_\_\_\_  
 Building Cooling Load \_\_\_\_\_

Mechanical Spacing Conditioning System  
 Utility  
 Description of unit \_\_\_\_\_  
 Heating efficiency \_\_\_\_\_  
 Cooling efficiency \_\_\_\_\_  
 Size category of unit \_\_\_\_\_

Boiler Size category, if oversized, state reason \_\_\_\_\_  
 Chiller Size category, if oversized, state reason \_\_\_\_\_

List Equipment Efficiencies  
 Equipment Schedules with Motors (mechanical systems)  
 Motor horsepower \_\_\_\_\_  
 Number of phases \_\_\_\_\_  
 Minimum efficiency \_\_\_\_\_  
 Motor type \_\_\_\_\_  
 # of poles \_\_\_\_\_

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 Winter dry bulb \_\_\_\_\_  
 Summer dry bulb \_\_\_\_\_

Interior Design Conditions  
 Winter dry bulb \_\_\_\_\_  
 Summer dry bulb \_\_\_\_\_  
 Relative humidity \_\_\_\_\_

Building Heating Load \_\_\_\_\_  
 Building Cooling Load \_\_\_\_\_

Mechanical Spacing Conditioning System  
 Utility  
 Description of unit \_\_\_\_\_  
 Heating efficiency \_\_\_\_\_  
 Cooling efficiency \_\_\_\_\_  
 Size category of unit \_\_\_\_\_

Boiler Size category, if oversized, state reason \_\_\_\_\_  
 Chiller Size category, if oversized, state reason \_\_\_\_\_

List Equipment Efficiencies  
 Equipment Schedules with Motors (mechanical systems)  
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 Number of phases \_\_\_\_\_  
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Mechanical Spacing Conditioning System  
 Utility  
 Description of unit \_\_\_\_\_  
 Heating efficiency \_\_\_\_\_  
 Cooling efficiency \_\_\_\_\_  
 Size category of unit \_\_\_\_\_

Boiler Size category, if oversized, state reason \_\_\_\_\_  
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List Equipment Efficiencies  
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 Number of phases \_\_\_\_\_  
 Minimum efficiency \_\_\_\_\_  
 Motor type \_\_\_\_\_  
 # of poles \_\_\_\_\_

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Thermal Zone  
 Winter dry bulb \_\_\_\_\_  
 Summer dry bulb \_\_\_\_\_

Interior Design Conditions  
 Winter dry bulb \_\_\_\_\_  
 Summer dry bulb \_\_\_\_\_  
 Relative humidity \_\_\_\_\_

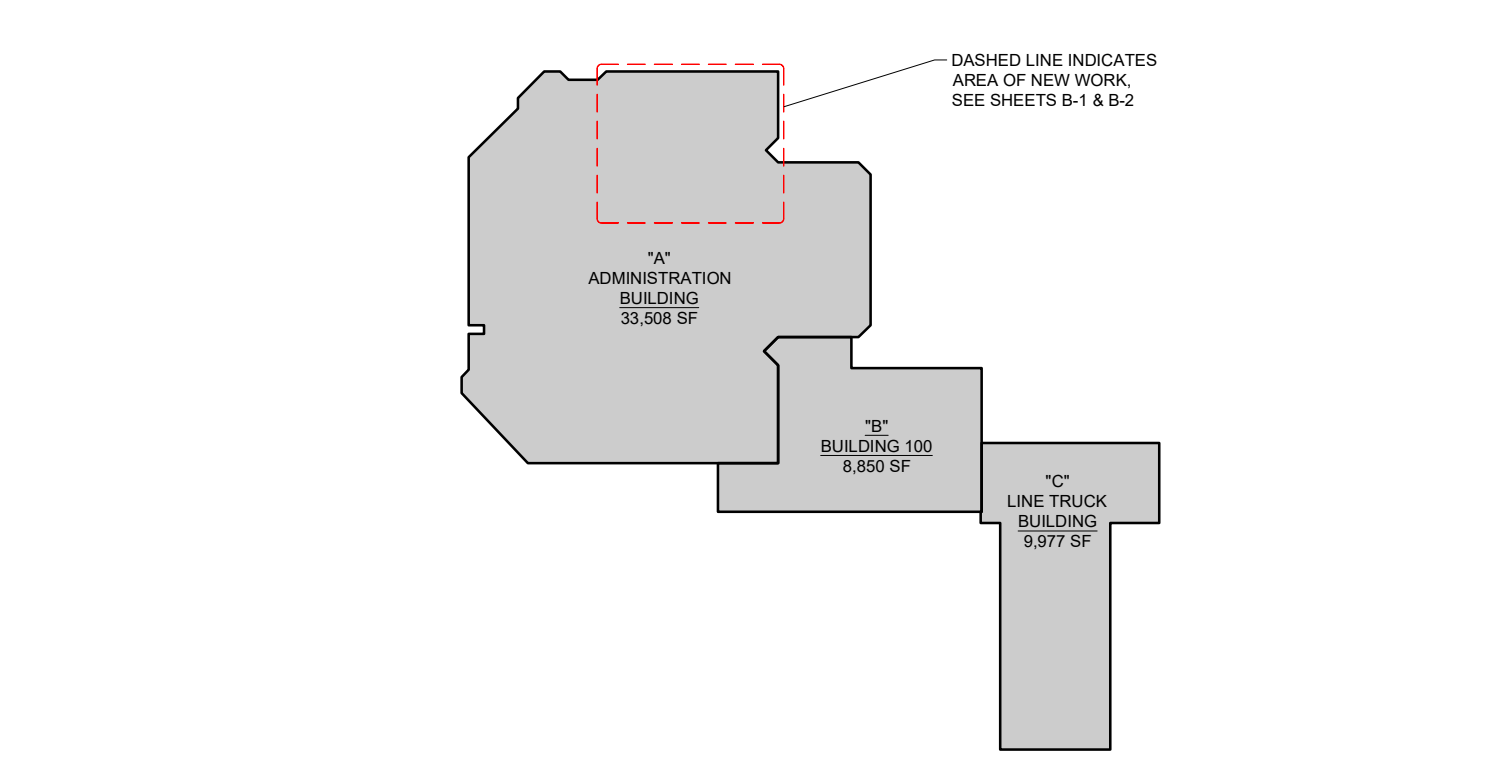
Building Heating Load \_\_\_\_\_  
 Building Cooling Load \_\_\_\_\_

Mechanical Spacing Conditioning System  
 Utility  
 Description of unit \_\_\_\_\_  
 Heating efficiency \_\_\_\_\_  
 Cooling efficiency \_\_\_\_\_  
 Size category of unit \_\_\_\_\_

Boiler Size category, if oversized, state reason \_\_\_\_\_  
 Chiller Size category, if oversized, state reason \_\_\_\_\_

List Equipment Efficiencies  
 Equipment Schedules with Motors (mechanical systems)  
 Motor horsepower \_\_\_\_\_  
 Number of phases \_\_\_\_\_  
 Minimum efficiency \_\_\_\_\_  
 Motor type \_\_\_\_\_  
 # of poles \_\_\_\_\_

## KEY PLAN



## SHEET INDEX

**COVER**

CS-1 CODE SUMMARY INDEX SHEET KEY PLAN

**LIFE SAFETY PLAN**

LS-1 LIFE SAFETY PLAN

**BUILDING**

B-1 FLOOR PLAN - EXISTING CONDITIONS

B-2 FLOOR PLAN - DEMOLITION & NEW WORK DOOR & FRAME SCHEDULE DOOR HARDWARE SCHEDULE ROOM FINISH SCHEDULE WALL LEGEND DEMOLITION NOTES

B-3 COLD FORMED FRAMING DETAILS

**MECHANICAL**

M-1 MECHANICAL PLAN

M-2 MECHANICAL SCHEDULES & DETAILS

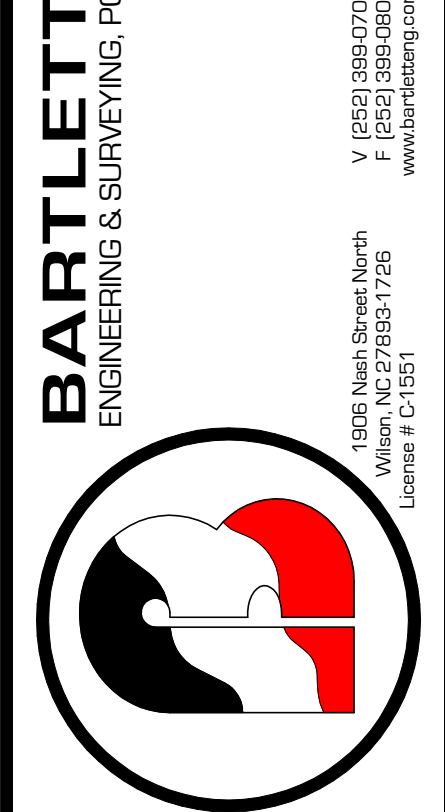
**ELECTRICAL**

E-1 ELECTRICAL LIGHTING PLAN

E-2 ELECTRICAL POWER PLAN

E-3 ELECTRICAL SCHEDULES & NOTES

City of Wilson  
 Operations Center  
 Herring Ave. Wilson, NC 27896



Rev:	Date:	Description:
1	10/28/2021	Added information to plans for construction bidding process.

Title Sheet: **COVER SHEET & CODE SUMMARY**

Project: **Office Alteration**  
 Operations Center City of Wilson  
 Herring Ave. Wilson, NC 27896

Drawn by:	M. Morgan
Issue Date:	8-18-2021
Project Number:	21-106
Sheet:	<b>CS-1</b>

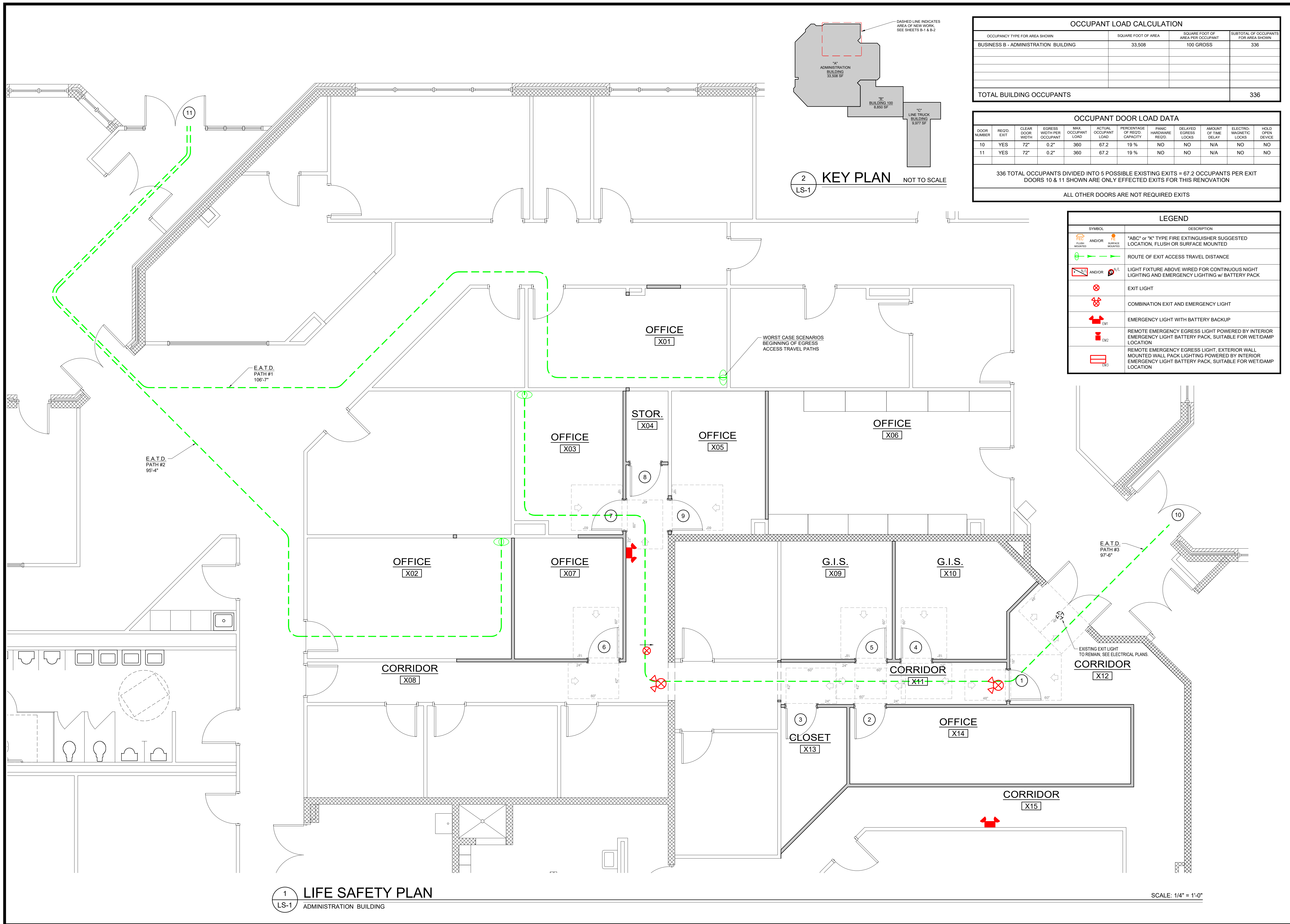
BUILDING & LEAD DESIGN PROFESSIONAL, PLUMB MECH ELEC

**BARTLETT**  
 ENGINEERING & SURVEYING, PC

1906 Nash Street North Wilson, NC 27893-1726 License # C-1551

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2 KEY PLAN NOT TO SCALE

OCCUPANT LOAD CALCULATION			
OCCUPANCY TYPE FOR AREA SHOWN	SQUARE FOOT OF AREA	SQUARE FOOT OF AREA PER OCCUPANT	SUBTOTAL OF OCCUPANTS FOR AREA SHOWN
BUSINESS B - ADMINISTRATION BUILDING	33,508	100 GROSS	336
TOTAL BUILDING OCCUPANTS			336

OCCUPANT DOOR LOAD DATA											
DOOR NUMBER	RETD. EXIT	CLEAR DOOR WIDTH	EGRESS WIDTH PER OCCUPANT	MAX. OCCUPANT LOAD	ACTUAL OCCUPANT LOAD	PERCENTAGE OF RETD. CAPACITY	PANIC HARDWARE REQD.	DELAYED EGRESS LOCKS	AMOUNT OF TIME DELAY	ELECTRO-MAGNETIC LOCKS	HOLD OPEN DEVICE
10	YES	72"	0.2"	360	67.2	19%	NO	NO	N/A	NO	NO
11	YES	72"	0.2"	360	67.2	19%	NO	NO	N/A	NO	NO

336 TOTAL OCCUPANTS DIVIDED INTO 5 POSSIBLE EXISTING EXITS = 67.2 OCCUPANTS PER EXIT  
DOORS 10 & 11 SHOWN ARE ONLY EFFECTED EXITS FOR THIS RENOVATION

ALL OTHER DOORS ARE NOT REQUIRED EXITS

SYMBOL	DESCRIPTION
FEC (FLUSH MOUNTED) AND/OR SFC (SURFACE MOUNTED)	"ABC" or "K" TYPE FIRE EXTINGUISHER SUGGESTED LOCATION, FLUSH OR SURFACE MOUNTED
Green dashed line with arrow	ROUTE OF EXIT ACCESS TRAVEL DISTANCE
Light fixture symbol	LIGHT FIXTURE ABOVE WIRED FOR CONTINUOUS NIGHT LIGHTING AND EMERGENCY LIGHTING w/ BATTERY PACK
Circle with X	EXIT LIGHT
Circle with X and arrow	COMBINATION EXIT AND EMERGENCY LIGHT
Red arrow with battery symbol	EMERGENCY LIGHT WITH BATTERY BACKUP
Red arrow with battery symbol and 'E1'	REMOTE EMERGENCY EGRESS LIGHT POWERED BY INTERIOR EMERGENCY LIGHT BATTERY PACK, SUITABLE FOR WET/DAMP LOCATION
Red arrow with battery symbol and 'E2'	REMOTE EMERGENCY EGRESS LIGHT, EXTERIOR WALL MOUNTED WALL PACK LIGHTING POWERED BY INTERIOR EMERGENCY LIGHT BATTERY PACK, SUITABLE FOR WET/DAMP LOCATION

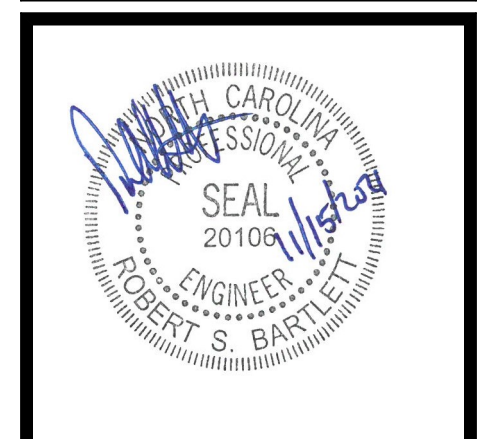
1 LIFE SAFETY PLAN  
LS-1 ADMINISTRATION BUILDING

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

Owner:

**BARTLETT**  
ENGINEERING & SURVEYING, PC

1100B North Street North  
Fayetteville, NC 28404  
Phone: 910.438.1788  
Fax: 910.438.1789  
License # C-1551



Rev	Date	Description
1	19-08-2021	Issue information to plans for construction building purposes.

**LIFE SAFETY PLAN**

**Office Alteration**  
Operations Center City of Wilson  
Herring Ave. Wilson, NC 27896

Title Sheet:  
Project:

Drawn by:	M. Morgan
Issue Date:	8-18-2021
Project Number:	21-106
Sheet:	<b>LS-1</b>





**2 PHOTO** NOT TO SCALE  
B-1 EXISTING CONDITIONS



**3 PHOTO** NOT TO SCALE  
B-1 EXISTING CONDITIONS



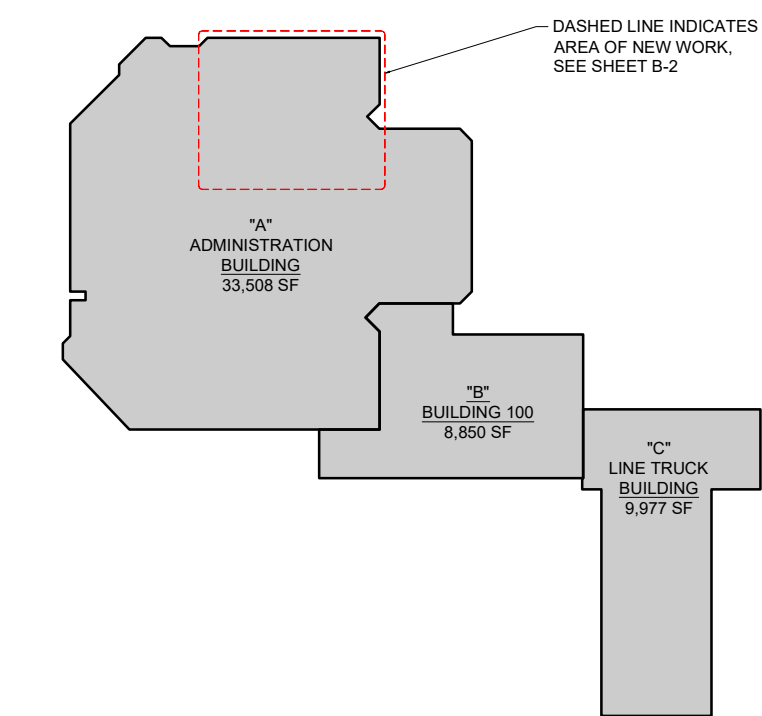
**4 PHOTO** NOT TO SCALE  
B-1 EXISTING CONDITIONS



**5 PHOTO** NOT TO SCALE  
B-1 EXISTING CONDITIONS



**6 PHOTO** NOT TO SCALE  
B-1 EXISTING CONDITIONS



Owner: **City of Wilson**  
Operations Center  
Herring Ave. Wilson, NC 27786

**BARTLETT**  
ENGINEERING & SURVEYING, PC

Professional Seal: **ROBERT S. BARTLETT**, ENGINEER, SEAL 20106

Rev: $\Delta$	Date: 19-08-2021	Description: Address information to plans for construction building purposes.
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Title Sheet: **FLOOR PLAN - EXISTING CONDITIONS**

Project: **Office Alteration**  
Operations Center City of Wilson  
Herring Ave. Wilson, NC 27786

Drawn by: **M. Morgan**  
Issue Date: **8-18-2021**  
Project Number: **21-106**  
Sheet: **B-1**



ROOM FINISH SCHEDULE				
FLOOR	BASE	WALLS	CEILING	
1	CARPET MOWHAWK GROUP OR EQUAL, 24"x24" TILES. QUALITY, COLOR & PATTERN TO MATCH EXISTING IN ADJACENT AREAS	4" HIGH RUBBER COVE BASE ROPPE 700 SERIES COLOR TO MATCH EXISTING IN ADJACENT AREAS	NEW 5/8" TYPE "X" DRYWALL PAINTED 3 COATS (1 COAT PRIMER & 2 COATS FINISH) LATEX PAINT, EGGSHELL SHEEN COLOR BY OWNER	2' x 2' ACOUSTICAL TILE STYLE & HEIGHT TO MATCH EXISTING. CEILING HGT. @ +/-9'-0" SEE SHEET "E-1" FOR PROJECTED AREAS FOR NEW REQUIRED CEILING FINISH.
2	12"x12" VINYL COMPOSITE TILE (VCT) EXISTING TO REMAIN WHERE POSSIBLE.	4" HIGH RUBBER COVE BASE EXISTING TO REMAIN WHERE POSSIBLE.	EXISTING DRYWALL PAINTED 2 COATS (2 COATS FINISH) LATEX PAINT, EGGSHELL SHEEN COLOR BY OWNER	
			EXISTING CMU PAINTED 2 COATS (2 COATS FINISH) LATEX PAINT, EGGSHELL SHEEN COLOR BY OWNER	

NOTES:  
 1. ALL FINISHES TO BE AS SPECIFIED, UNLESS OTHERWISE NOTED.  
 2. FOR CLARITY, THE LETTERS "1, O, S, & Z" ARE NOT USED.  
 3. SAMPLES OF ALL COLORS & PATTERNS FOR FINISHES TO BE SUBMITTED BY G.C. TO OWNER FOR FINAL SELECTION.

### INTERIOR FINISH NOTES

QUALITY AND STYLES OF ALL NEW MATERIALS TO MATCH EXISTING IN ADJACENT AREAS, G.C. VERIFY ON SITE. SAMPLES OF ALL COLORS & PATTERNS FOR FINISHES TO BE SUBMITTED BY G.C. TO OWNER FOR FINAL SELECTION.

FLOORS:  
 EXISTING CONCRETE. CLEAN, PATCH AND REPAIR AS REQUIRED FOR SMOOTH FINISH TO RECEIVE NEW CARPET.

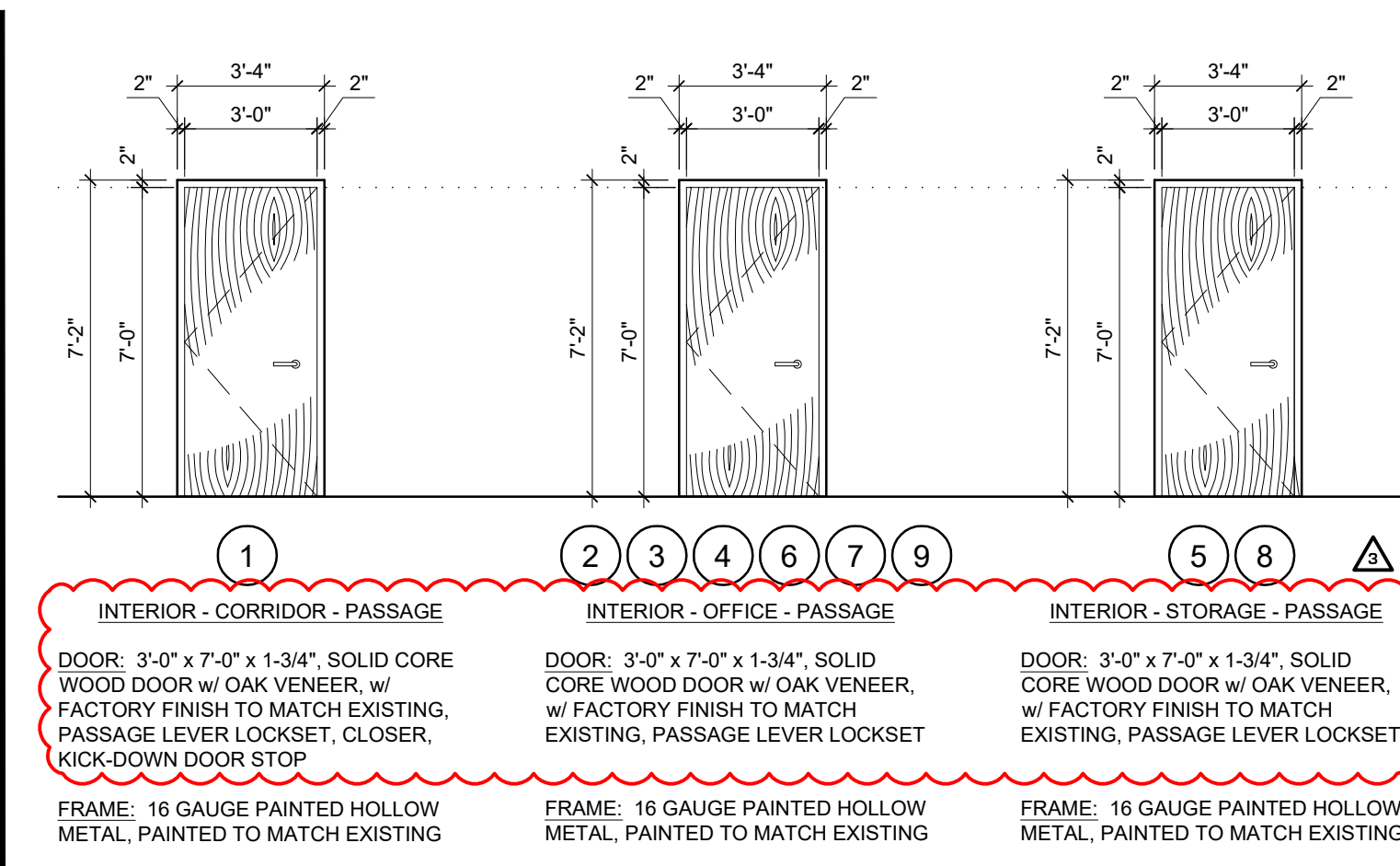
CARPET:  
 MOWHAWK GROUP OR EQUAL  
 24"x24" TILES

BASE:  
 ROPPE 700 SERIES  
 4" HIGH RUBBER COVE BASE

WALLS:  
 PAINT - SHERWIN WILLIAMS OR EQUAL, SEMI-PERMEABLE EGGSHELL SHEEN  
 ALL NEW AND EXISTING WALL SURFACES TO BE PREPARED AND PRIMED PER PAINT MANUF. SPECIFICATIONS.

CEILING:  
 ARMSTRONG OR EQUAL, ACOUSTICAL LAY-IN SYSTEM  
 TILES: 2' x 2' x 3/4", SQUARE EDGE, MINERAL FIBER  
 GRID: 15/16" GRID SYSTEM.

INTERIOR WOOD DOORS & FRAMES:  
 DOORS: VIT INDUSTRIES, ARCHITECTURAL WOOD DOORS OR EQUAL, FACTORY STAINED & SEALED FINISH  
 FRAMES: PRIMED AND PAINTED SEMI-GLOSS FINISH SHEEN



### DOOR HARDWARE SCHEDULE

ALL HARDWARE TO HAVE "BRUSHED NICKEL" FINISH.

LOCKSET:  
 "YALE" 4600LN, GRADE 2 SERIES CYLINDRICAL LOCKSET

CLOSERS:  
 GRADE 1 w/ FULL COVER, 2500 OR EQUAL.

INTERIOR DOOR HINGES:  
 BALL BEARING HINGES WITH 32D FINISH OR EQUAL, 3 PER DOOR

DOOR STOPS:  
 "MCKINNEY" WROUGHT WALL STOPS No. WS02 OR EQUAL.

PANIC EXIT DEVICE:  
 NONE

KICK-DOWN DOOR STOP:  
 "ROCKWOOD", #460

MAGNETIC DOOR CATCH:  
 NONE

NOTE: EACH DOOR TO HAVE DOOR STOPS, SEE HARDWARE SCHEDULE

NOTE: MANUFACTURER SHALL SUPPLY MASTER KEY TO FIT ALL DOORS - VERIFY KEYING SCHEMES w/ OWNER

T = TEMPERED GLASS  
 TN = TINTED  
 WG = WIRE GLASS  
 SWG = SAFETY WIRE GLASS

### DOOR & FRAME SCHEDULE

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

VERIFY ALL DOOR SWING DIRECTIONS ON FLOOR PLAN

### WALL LEGEND

SYMBOL	DESCRIPTION
	EXISTING FRAMED WALLS - TO REMAIN. SEE FLOOR PLAN FOR LOCATIONS.
	EXISTING CMU WALLS - TO REMAIN. SEE FLOOR PLAN FOR LOCATIONS.
	DEMOLISHED: EXISTING METAL STUD FRAMED WALLS, OTHER STRUCTURES & FIXTURES TO BE DEMOLISHED.
	INTERIOR LOW HEIGHT WALL: LIGHT GAUGE METAL STUD FRAMED WALLS 10'-0" HIGH, w/ R-11 BATTS BETWEEN STUDS. 362S162-33 (3) STUDS SPACED @ 16" O.C. 362T125-33 TOP & BOTTOM TRACKS BRACING @ MID-POINT ALONG SPAN TYPICAL HEADER: (2) 362S162-43 (3) BOX HEADER 362T125-33 TOP & BOTTOM TRACK (1) 362S162-33 JACK STUD EACH END (1) 362S162-33 KING STUD EACH END MAX. CLEAR SPAN 3'-6" SEE FLOOR PLAN FOR LOCATIONS.

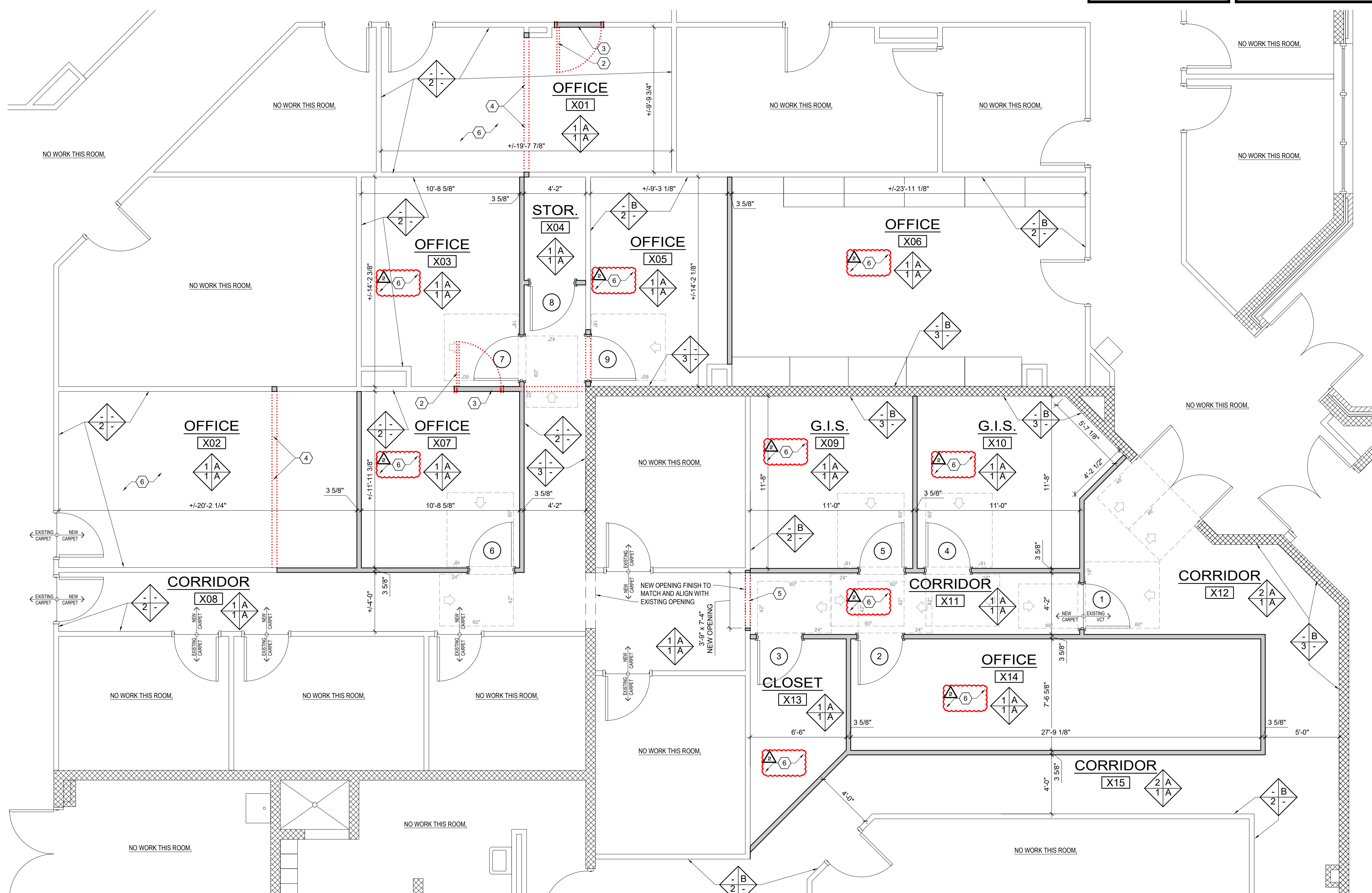
NOTES:  
 1. ALL NEW INTERIOR METAL FRAMED WALLS TO HAVE SOUND BATT INSULATION.  
 2. ALL NEW INTERIOR METAL FRAMED WALLS TO BE BRACED SECURELY ALONG TOP OF WALL TO EXISTING BUILDING STRUCTURE FRAME ABOVE AS REQUIRED.  
 3. EXISTING WALL LOCATION & ASSEMBLY TYPE INFORMATION SHOWN OBTAINED FROM A COMBINATION OF BUILDING SURVEY AND ORIGINAL CONSTRUCTION DRAWINGS PROVIDED BY CLIENT.

### DEMOLITION NOTES

- REMOVE EXISTING ACOUSTICAL CEILING TILE AND GRID SYSTEM AS REQUIRED. A.C.T. MATERIALS THAT ARE SUITABLE FOR RE-USE ARE TO BE STORED ON SITE.
- REMOVE EXISTING DOOR, FRAME AND ALL RELATED HARDWARE. PREPARE REMAINING WALL TO RECEIVE INFILL FRAMING.
- REMOVE PORTION EXISTING METAL STUD FRAMED WALL AS SHOWN.
- REMOVE ENTIRE OF EXISTING METAL STUD FRAMED WALL AS SHOWN.
- CUT NEW OPENING IN EXISTING METAL STUD FRAMED WALL AS SHOWN.
- REMOVE EXISTING FLOOR FINISH IN ROOM SHOWN ONLY UP TO DOOR OPENING. PREPARE REMAINING CONCRETE SLAB TO RECEIVE NEW FLOOR FINISH PER FINISH SCHEDULE.

TYPICAL DEMOLITION NOTES:

- ALL MATERIALS RESULTING FROM DEMOLITION WORK TO BE DISPOSED OF PROPERLY.
- BEFORE DEMOLISHING WALLS SEE PROPOSED FLOOR PLAN DRAWINGS FOR DIMENSIONS TO DETERMINE PORTIONS TO BE REMOVED.
- REPAIR OR REPLACE ALL STRUCTURAL MEMBERS THAT ARE DISCOVERED TO BE DAMAGED FROM WATER EXPOSURE, INSECT INFESTATION, ETC.
- ALL STRUCTURAL FRAMING OF ROOFS AND FLOORS THAT ARE POSSIBLY SUPPORTED BY LOAD BEARING WALLS BENEATH THEM ARE TO BE SHORED UP WITH "TEMPORARY BRACING WALL" BEFORE REMOVING ANY FRAMING MEMBERS OF WALLS.
- "TEMPORARY BRACING WALL" TO BE OF SIMILAR CONSTRUCTION OF LOAD BEARING WALL THAT IS BEING DEMOLISHED, AND IS TO BE LOCATED IN A MANNER TO PROVIDE AN ADEQUATE LOAD PATH DOWN TO FOUNDATION BELOW.
- ALL EXISTING PIPING OF PLUMBING SYSTEMS BELOW CONCRETE SLAB AFFECTED BY DEMOLITION WORK TO BE PROPERLY CAPPED OFF BELOW FINISH FLOOR LEVEL.
- ALL ELECTRICAL AND MECHANICAL SYSTEMS AFFECTED BY DEMOLITION WORK TO BE PROPERLY REMOVED. ABANDONMENT OF EXISTING ROUGH-IN WORK IS NOT ALLOWED.
- REPORT ALL DISCREPANCIES TO DESIGNER IMMEDIATELY.



1  
B-2 FLOOR PLAN - DEMOLITION & NEW WORK

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

Owner: City of Wilson  
 Operations Center  
 Herring Ave. Wilson, NC 27896

Owner: BARTLETT  
 ENGINEERING & SURVEYING, PC  
 1100B North Street North  
 Raleigh, NC 27603  
 License # C-1551

Professional Engineer  
 SEAL  
 2010  
 ROBERT S. BARTLETT

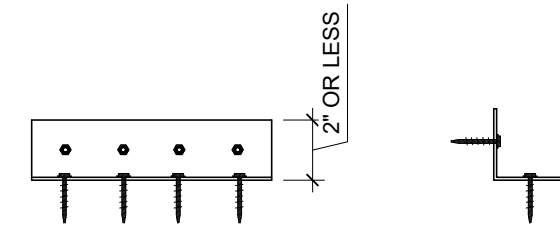
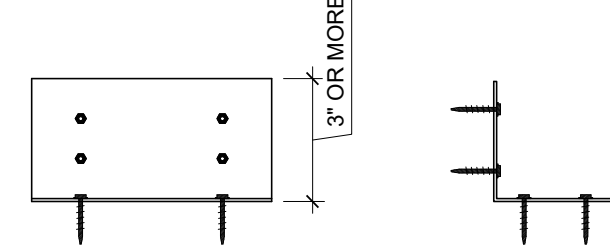
Description:  
 Date: 10-28-2021  
 Rev: 10-28-2021  
 11-15-2021

Title Sheet: FLOOR PLAN - NEW WORK  
 Project: Office Alteration  
 Operations Center City of Wilson  
 Herring Ave. Wilson, NC 27896

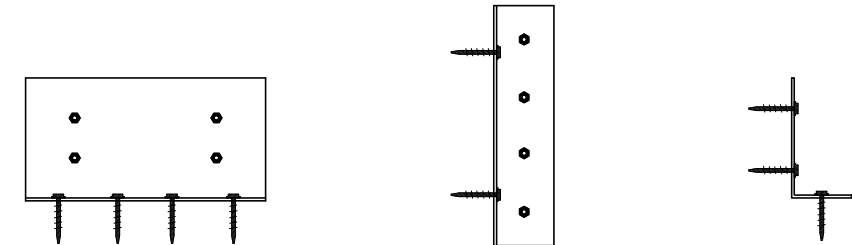
Drawn by: M. Morgan  
 Issue Date: 8-18-2021  
 Project Number: 21-106  
 Sheet: B-2



**EQUAL LEG**

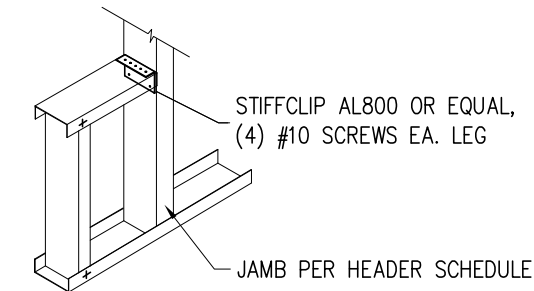


**UNEQUAL LEG**

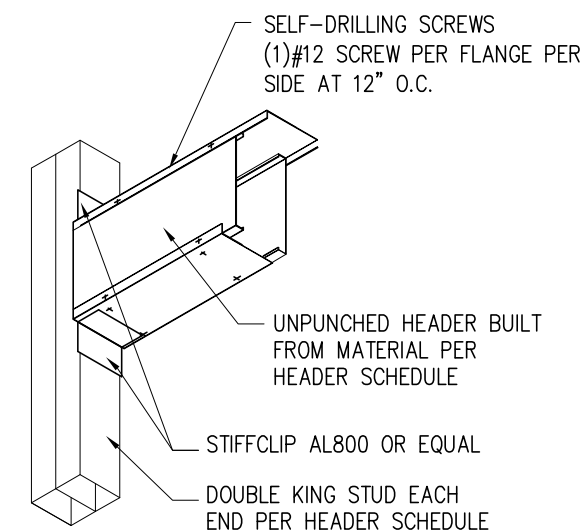


-EQUAL SPACING  
-SYMMETRIC FASTENER PLACEMENT  
-USE GUIDE HOLES WHEN AVAILABLE  
-1.5 X D EDGE DISTANCE, 3 X D SPACING, D = SDS DIAMETER

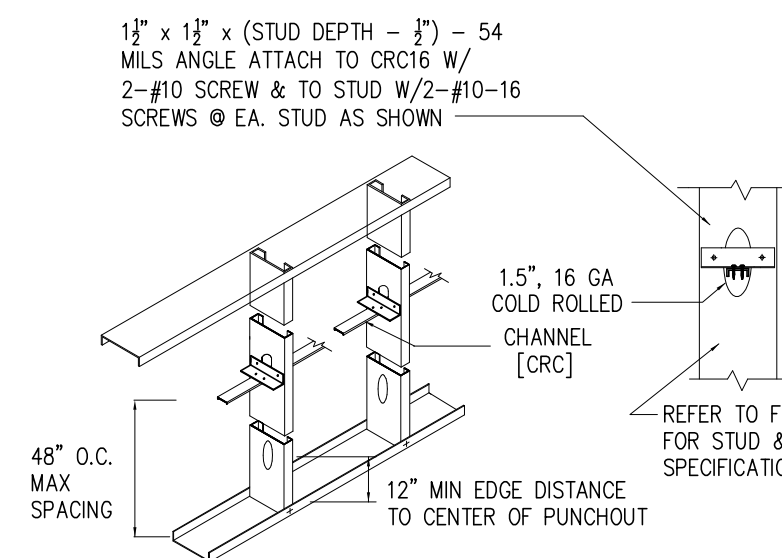
**TYPICAL FASTENER PLACEMENT - ANGLE**  
\*UNLESS SHOWN OTHERWISE



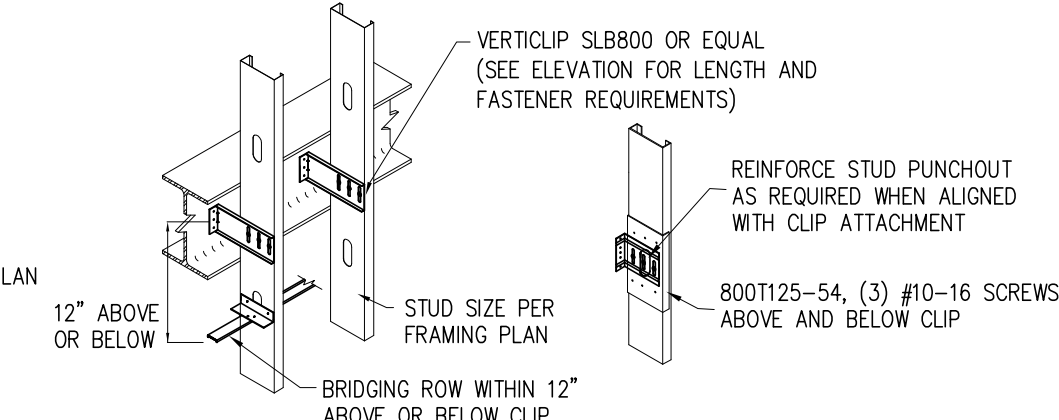
**SILL TO JAMB**  
NOT TO SCALE



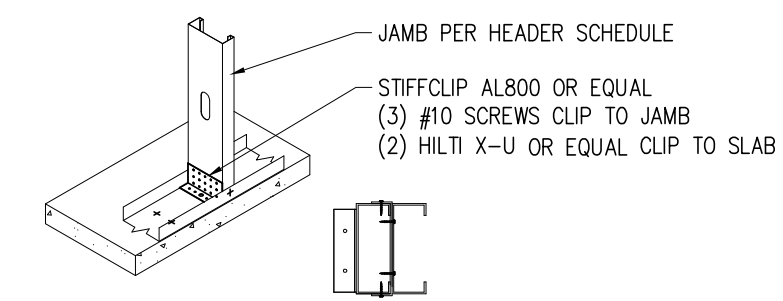
**HEADER TO TUBE COLUMN ATTACHMENT**  
NOT TO SCALE



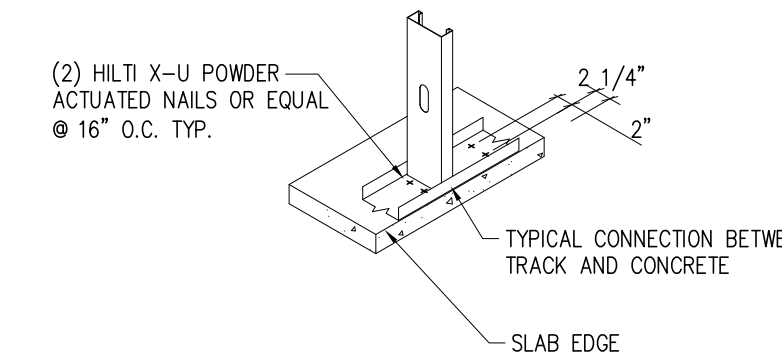
**TYPICAL WALL BRIDGING (REQUIRED PER SECTION)**  
NOT TO SCALE



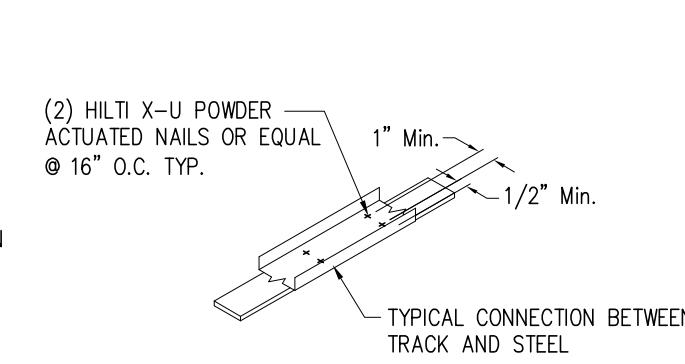
**BYPASS BEAM CONNECTION**  
NOT TO SCALE



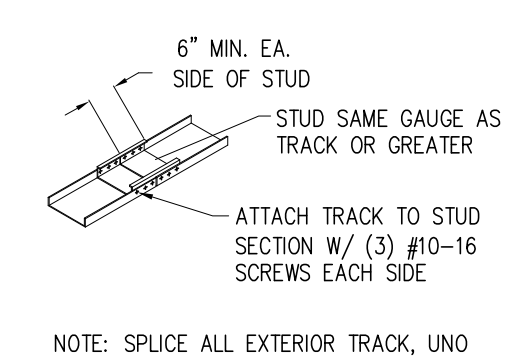
**JAMB BASE CONNECTION**  
NOT TO SCALE



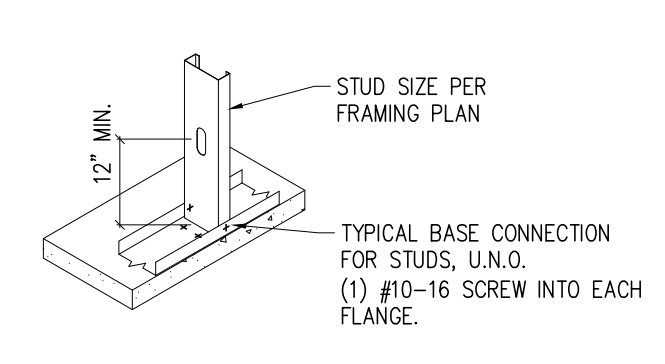
**TRACK TO CONCRETE**  
NOT TO SCALE



**TRACK TO STEEL**  
NOT TO SCALE



**TRACK SPLICE**  
NOT TO SCALE



**STUD TO TRACK**  
NOT TO SCALE

1  
B-3

**COLD FORMED FRAMING DETAILS**

NOT TO SCALE

**GENERAL NOTES:**

**DESIGN**  
LIGHT GAGE STEEL ELEMENTS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2018 NORTH CAROLINA BUILDING CODE (BC 2015) AND THE 2001/04 SUPPLEMENT AISI NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL MEMBERS WITH THE FOLLOWING PARAMETERS:

**MATERIALS**

- DESIGNATIONS FOR STUDS AND ACCESSORIES ARE BASED ON THE STANDARD DESIGNATIONS FOR THE STEEL STUD MANUFACTURERS ASSOCIATION (SMA) & THE STEEL NETWORK, INC.
- STEEL STUDS AND TRACKS SHALL MEET THE REQUIREMENTS OF ASTM C955 AND SHALL BE GALVANIZED WITH G90 COATING OR THICKER.
- STEEL STUDS AND TRACKS OF LESS THAN 16 GAGE (54 MIL) SHALL HAVE A MINIMUM YIELD STRENGTH OF 33 KSI, GREATER THAN OR EQUAL TO 54 MIL SHALL HAVE MINIMUM YIELD STRENGTH OF 50 KSI
- STEEL STUDS AND TRACKS OF HEAVIER GAGE OR LARGER FLANGE THAN SPECIFIED ON THESE DRAWINGS MAY BE SUBSTITUTED WITHOUT APPROVAL.
- ALL PLATE MATERIAL SHALL HAVE A YIELD STRENGTH OF 50 KSI
- ALL WELDS ARE TO BE PERFORMED BY AN A.W.S. CERTIFIED WELDER USING E70XX ELECTRODES

**FASTENERS**

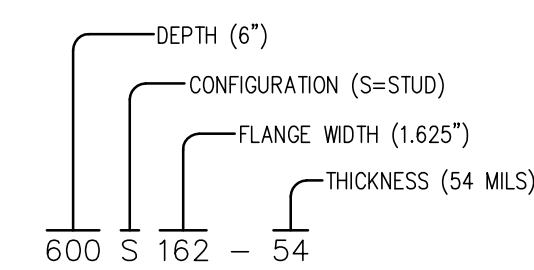
- FRAMING SCREWS SHALL BE CORROSION RESISTANT, SELF-DRILLING SCREWS OF THE SIZE DESIGNATED ON THE DRAWINGS. WHERE SPECIFIC SIZE SCREWS ARE NOT SPECIFIED, #10 SCREWS ARE TO BE USED.
- PAF'S (POD'S) SHALL BE:  
CONCRETE - HILTI X-U 0.157" DIAMETER. MINIMUM EMBEDMENT IS 1"  
STEEL - HILTI X-U 0.157" DIAMETER. MINIMUM EMBEDMENT IS 1/4"
- THIS SUBMITTAL IS BASED ON FASTENER TENSILE AND SHEAR VALUES FROM THE 2011 HILTI TECHNICAL MANUAL. OTHER FASTENERS OF EQUAL CAPACITY MAY BE SUBSTITUTED.
- MINIMUM SPACING OF FRAMING SCREWS: FASTENER TO EDGE OF STEEL - 1.5D, FASTENER TO FASTENER - 3D, WHERE D IS THE DIAMETER OF THE FRAMING SCREW

**EXECUTION**

- THIS SUBMITTAL SHOWS THE INTENDED APPLICATION OF THE COLD FORMED STEEL FRAMING. THE CONTRACTOR SHALL REFER TO THE CONTRACT DOCUMENTS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIAL OR BEGINNING ANY ASSEMBLY OR ERECTION.
- ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS OR AS REQUIRED FOR AN ANGULAR FIT AGAINST ADJUTING MEMBERS. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED.
- ALL FIELD CUTTING OF STUDS AND TRACKS MUST BE DONE BY SAWING OR SHEARING. NO TORCH CUTTING PERMITTED.
- NO SPLICES IN STUDS, HEADERS, OR OTHER LOAD CARRYING MEMBERS ARE ALLOWED WITHOUT DETAILS SUPPLIED BY THE ENGINEER OF RECORD.
- THE FOLLOWING SHALL BE USED FOR PAF UNLESS OTHERWISE NOTED:  
CONCRETE: MIN. EDGE DISTANCE = 2.75" MIN. EDGE DISTANCE = 0.5"  
STEEL: MIN. CENTERLINE SPACING = 2.75" MIN. CENTERLINE SPACING = 1"  
MIN. EMBEDMENT = 1" MIN. EMBEDMENT = 1/4"
- STRUCTURAL FRAMING AT WINDOWS AND DOORS IS NOT DESIGNED TO SUPPORT BRICK DEAD LOADS NOR PROVIDE BEARING END SUPPORT FOR BRICK SHELVES.
- ANY DISCREPANCIES IN THESE SHOP DRAWINGS MUST BE MADE KNOWN TO ENGINEERS FOR REVIEW AND CORRECTION.
- DEVIATIONS FROM THESE SHOP DRAWINGS SHALL NOT BE MADE IN THE FIELD. MODIFICATIONS SHALL BE DESIGNED AND DETAILED BY ENGINEERS PRIOR TO IMPLEMENTATION.
- THE INSTALLATION OF COLD-FORMED CONNECTORS AND ASSOCIATED FASTENERS SHALL FOLLOW MANUFACTURER'S RECOMMENDATIONS.

**CFS ABBREVIATIONS**

CONT	CONTINUOUS
EA	EACH
MIN	MINIMUM
OC	ON CENTER
PAF	POWDER ACTUATED FASTENER
REF	REFERENCE
SDS	SELF DRILLING SCREWS
SER	STRUCTURAL ENGINEER OF RECORD
SIM	SIMILAR
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE



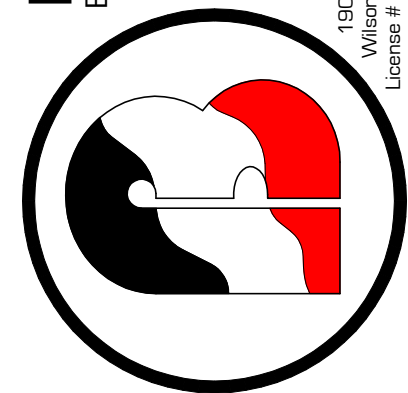
CONFIGURATION TABLES	
S	SMA CEE STUD
T	TRACK
CRC	COLD-ROLLED CHANNEL
FS	FLAT STRAP

MILS	GAGE
33	20
43	18
54	16
68	14
97	12
118	10

Owner:

**City of Wilson  
Operations Center**  
Herring Ave. Wilson, NC 277896

**BARTLETT**  
ENGINEERING & SURVEYING, PC



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Rev: Description: Add information to plans for construction bidding purposes.

Date: 19-08-2021

Title Sheet: **COLD FORMED FRAMING DETAILS**

Project: **Office Alteration**  
Operations Center City of Wilson  
Herring Ave. Wilson, NC 277896

Drawn by: M. Morgan

Issue Date: 8-18-2021

Project Number: 21-106

Sheet:

**B-3**

**GENERAL MECHANICAL NOTES:**

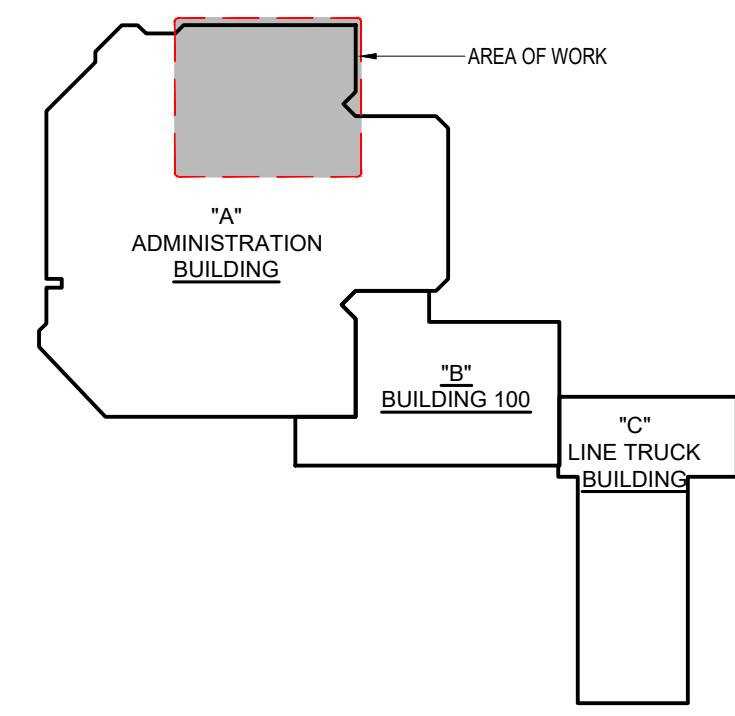
1. ALL WORK SHALL BE IN COMPLIANCE WITH LOCAL, STATE, AND NATIONAL CODES.
2. DUCTWORK LAYOUTS ARE SCHEMATIC. ALL RISES, DROPS, OFFSETS, AND TRANSITIONS REQUIRED BUT NOT SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE IN CONSTRUCTED IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW VELOCITY DUCTWORK.
3. ALL HARD ROUND DUCTWORK SHALL BE GALVANIZED STEEL AS OR APPROVED EQUAL. LOCK FORMING SHALL MEET ASTM A-527 STANDARDS. DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. FLEXIBLE SHALL BE CLEVAFLEX, TYPE 12 FV. FLEXIBLE RUN OUTS SHALL NOT EXCEED 10'-0" AND SHALL NOT BE USED TO FORM ELBOWS. CONNECTIONS FROM RECTANGULAR TO ROUND DUCT SHALL BE MADE WITH MANUFACTURED 45 DEG. LATERAL TAPS.
4. SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-8 AND AN ATTACHED VAPOR BARRIER. DIFFUSERS SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH VAPOR BARRIER. ALL JOINTS SHALL BE TAPED TO PROVIDE A CONTINUOUS VAPOR BARRIER.
5. DUCT SIZES SHOWN ARE NET DIMENSIONS. DUCT SIZES SHOULD BE INCREASED TO ALLOW FOR LINING WHEN USED. DUCT LINER SHALL BE INSTALLED FROM THE A.H.U. RETURN TO THE FIRST 90 DEG. ELBOW OR IF NO ELBOW, FROM UNIT RETURN TO 10'-0" DOWNSTREAM. ACOUSTICAL LINER SHALL BE 1" THICK X 1/2LB. DENSITY. ALL DUCTWORK SHALL BE SEALED AIR TIGHT WITH SEALING COMPOUND.
6. MECHANICAL CONTRACTOR TO PROVIDE AN AIR BALANCE REPORT UPON COMPLETION OF WORK TO OWNER AND LOCAL BUILDING INSPECTOR.

**OUTSIDE AIR SUMMARY**

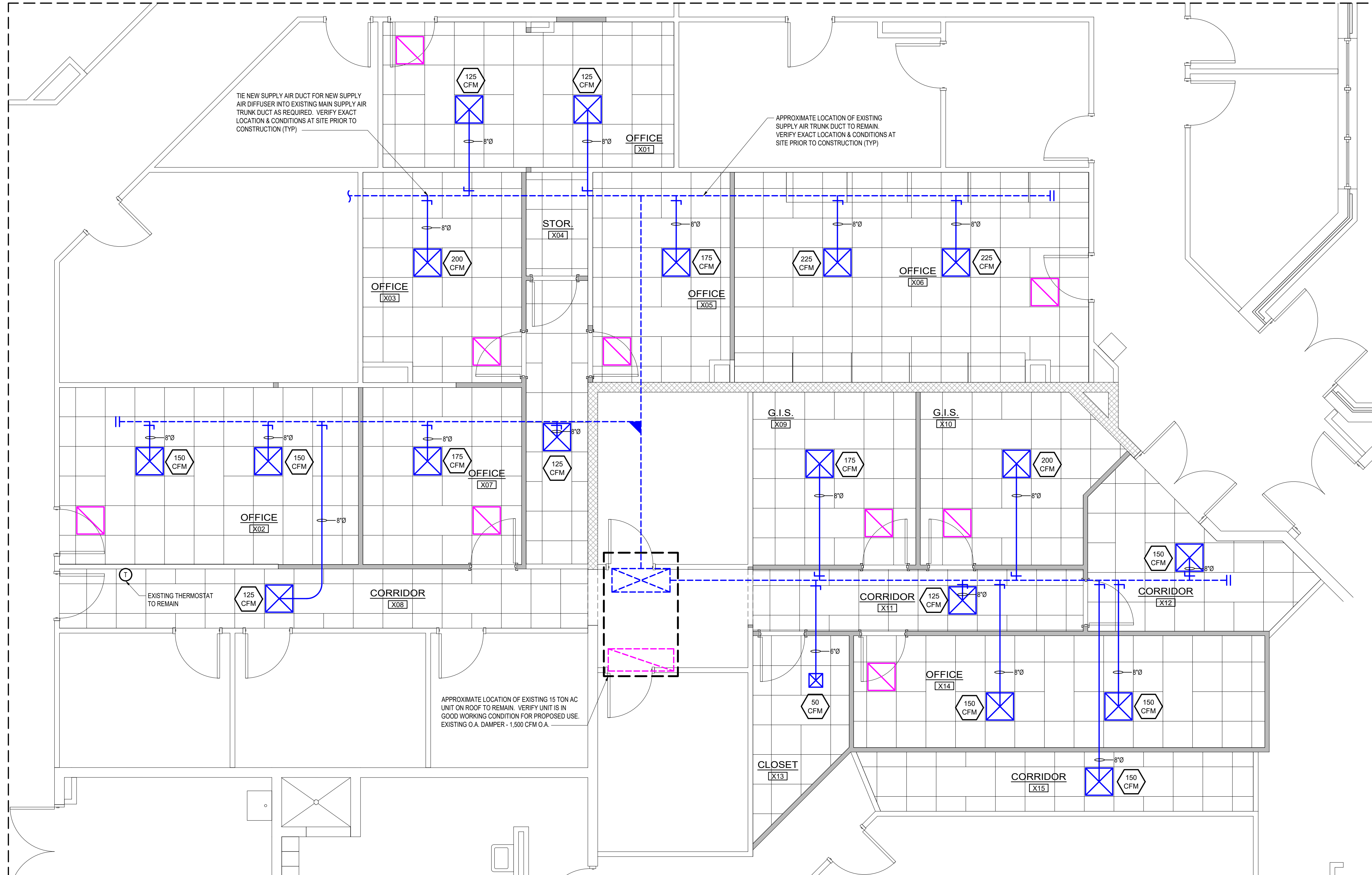
**OUTSIDE AIR REQUIRED:**

OFFICE		
25 PEOPLE x 5 CFM / PERSON =		125 CFM
2,425 SF x 0.06 CFM / SF =		146 CFM
<b>TOTAL OUTSIDE AIR REQUIRED=</b>		<b>271 CFM</b>
<b>TOTAL OUTSIDE AIR PROVIDED=</b>		<b>1,500 CFM</b>

NOTE:  
ALL AREAS WITH NO WORK SHOWN  
ARE EXISTING TO REMAIN



**KEY PLAN**  
NTS



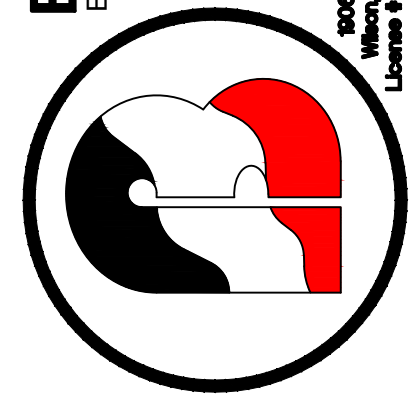
**MECHANICAL PLAN**  
SCALE 1/4" = 1'-0"

**GENERAL HVAC DEMO NOTE:**  
REMOVE ALL EXISTING UNUSED HVAC EQUIPMENT, DUCTWORK, GRILLES, ETC. AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.

Prepared for:

**City of Wilson**  
**Operations Center**  
Herring Ave. Wilson, NC 27786

**BARTLETT**  
ENGINEERING & SURVEYING, PC



Rev:      Date:      Description:

Title Sheet:      MECHANICAL PLAN

Project:      **Office Alteration**  
Operations Center City of Wilson  
Herring Ave. Wilson, NC 27786

Drawn by:      JLT  
Issue Date:      08-18-21  
Project Number:      21-106  
Sheet:

**M-1**

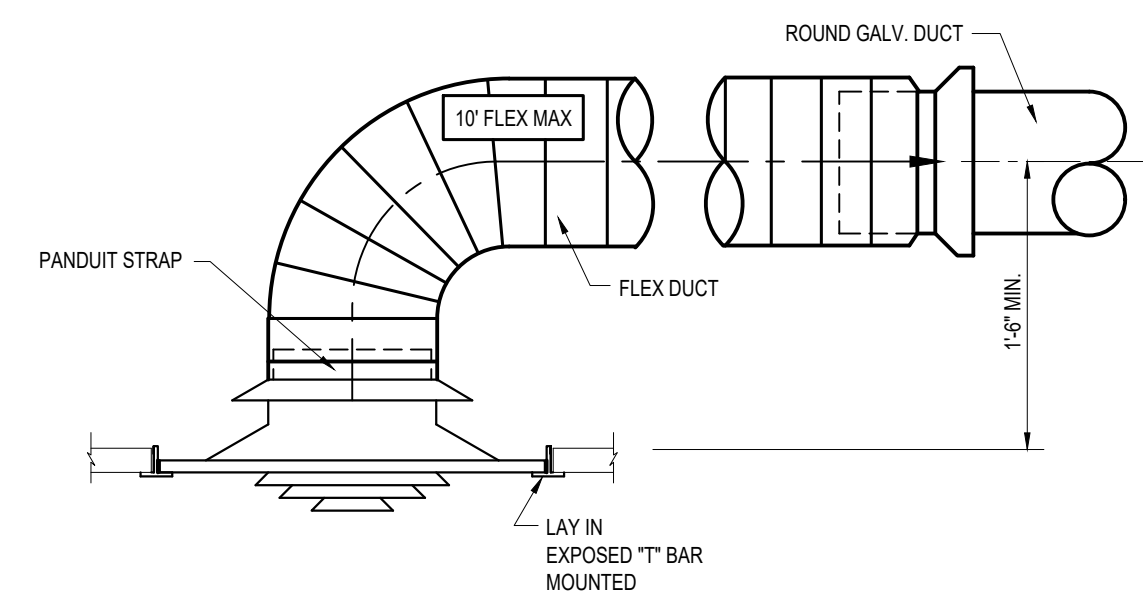


DIFFUSER / GRILLE SCHEDULE						
CFM	NECK SIZE	MAKE *	MODEL	MATERIAL	TYPE	DUCT SIZE
50-100	6x6	METAL-AIRE	SERIES 5000	EXTRUDED ALUMINUM	SUPPLY	6" RND
125-225	9x9	METAL-AIRE	SERIES 5000	EXTRUDED ALUMINUM	SUPPLY	8" RND
100-1000	24X24 FACE	METAL-AIRE	SERIES RH	ALUMINUM	RETURN	

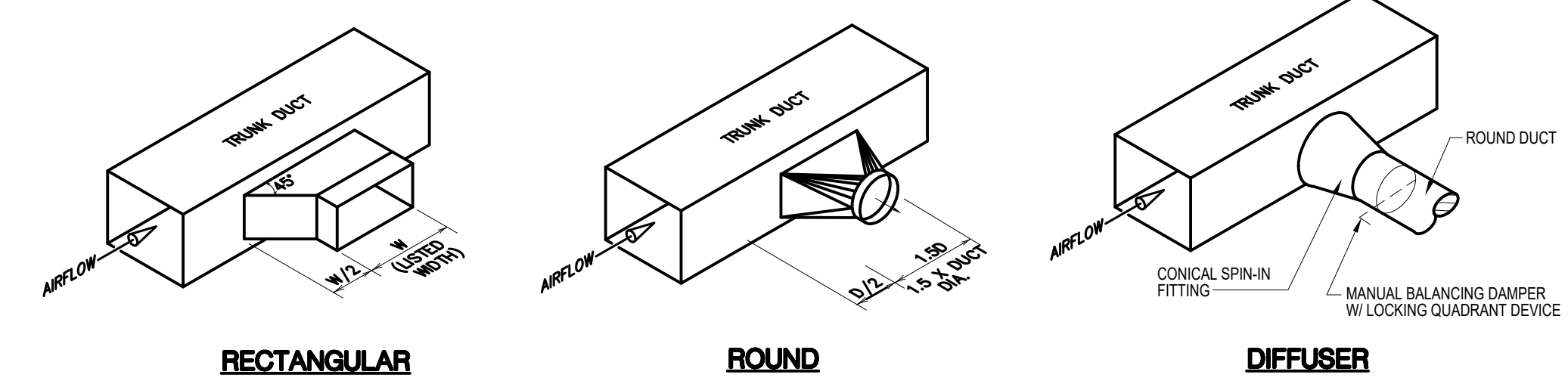
- NOTES:
1. ALL BRANCH DUCTS AND RUN OUTS SHALL HAVE MANUAL LOCKING QUADRANT BALANCING DAMPERS.
  2. ALL DIFFUSERS SHALL BE FACTORY INSULATED.
  3. PANEL / FACE SHALL BE SUITABLE FOR CEILING TYPE.
  4. NC LEVEL MAX. - 20
  - \* - EQUAL BY ANEMOSTAT OR TITUS

MECHANICAL SYMBOL LEGEND		
SINGLE LINE	DOUBLE LINE	DESCRIPTION
		TAKE OFF TO SUPPLY AIR REGISTER
		BRANCH TAKEOFF FROM MAIN TRUNK DUCT
		END CAP
		DUCT INSULATED WITH 2" EXTERNAL INSULATION. SEE GENERAL MECHANICAL NOTES
		VOLUME CONTROL DAMPER (TYP) SUPPLY AIR CEILING DIFFUSER. THROW TO MATCH CEILING HEIGHT. FLEXIBLE DUCTWORK (10' MAX.)
		RETURN AIR GRILLE (OPEN PLENUM RETURN)
		SUPPLY AIR DIFFUSER. THROW TO MATCH CEILING HEIGHT
		(1) CUSHION HEAD @ BRANCH OR DIFFUSER RUNOUT (2) CUSHION HEAD IS EQUAL TO 1/2 WIDTH OF THE BRANCH DUCT OR DIFFUSER RUNOUT
		MANUAL VOLUME CONTROL DAMPER W/ QUADRANT LOCKING DEVICE

MECHANICAL SUMMARY	
MECHANICAL SYSTEMS SERVICE SYSTEMS AND EQUIPMENT:	
Thermal Zone	III
Winter dry bulb	16 deg. F
Summer dry bulb	92 deg. F
Interior Design Conditions	
Winter dry bulb	68 deg. F
Summer dry bulb	75 deg. F
Relative humidity	50 %
Building Heating Load	EXISTING TO REMAIN
Building Cooling Load	EXISTING TO REMAIN
Mechanical Spacing Conditioning System	
Unitary	
Description of unit	EXISTING 15 TON AC TO REMAIN (AREA OF WORK)
Heating efficiency	EXISTING
Cooling efficiency	EXISTING
Size category of unit	228,000 BTU/HR
Boiler	
Size category, if oversized, state reason	N/A
Chiller	
Size category, if oversized, state reason	N/A
List Equipment Efficiencies	
Equipment Schedules with Motors (mechanical systems)	
Motor horsepower	N/A
Number of phases	
Minimum efficiency	
Motor type	
# of poles	



**DETAIL-CEILING DIFFUSER CONNECTION**  
NOT TO SCALE

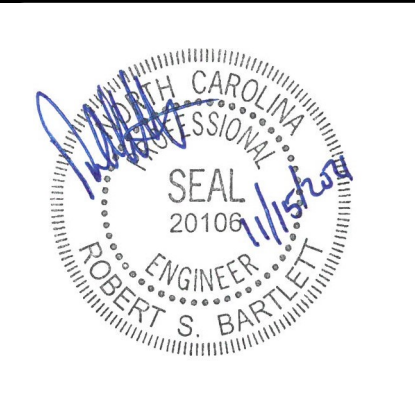
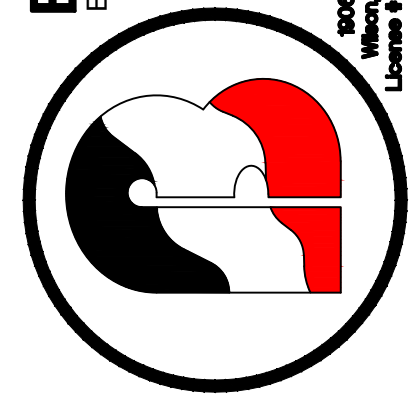


**DETAIL-LATERAL TO REGISTER OR BRANCH DUCT**  
NOT TO SCALE

Prepared for:

**City of Wilson**  
**Operations Center**  
Herring Ave. Wilson, NC 27786

**BARTLETT**  
ENGINEERING & SURVEYING, PC



Rev.	Date:	Description:

Title Sheet: **MECHANICAL SCHEDULES & DETAILS**

Project: **Office Alteration**  
Operations Center City of Wilson  
Herring Ave. Wilson, NC 27786

Drawn by: JLT  
Issue Date: 08-18-21  
Project Number: 21-106  
Sheet:

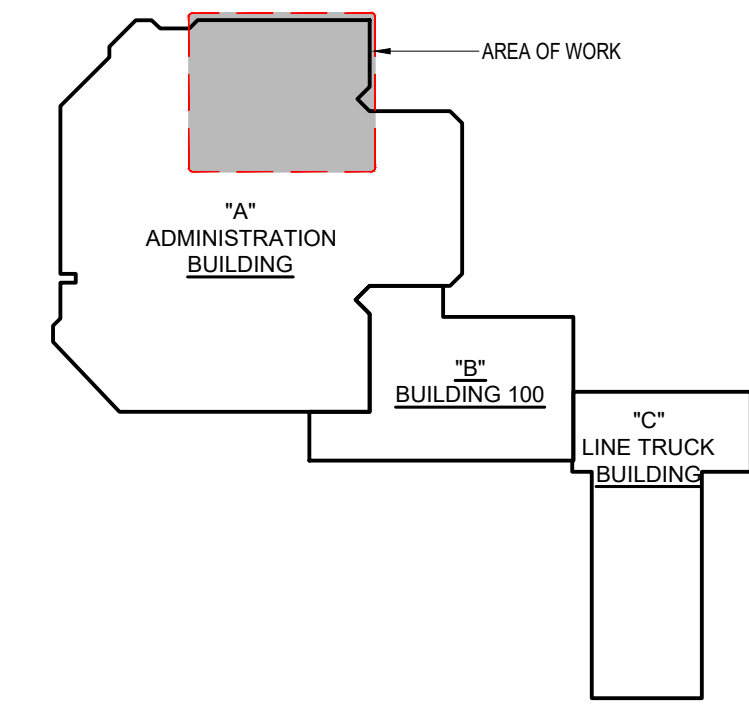
**M-2**

**SPECIFIC ELECTRICAL NOTES**

- ① TIE NEW LIGHTING BRANCH CIRCUIT INTO EXISTING LOCAL LIGHTING CIRCUIT WHERE POSSIBLE. PROVIDE AND INSTALL NEW 20 AMP 1 POLE BRANCH CIRCUIT BREAKER IN EXISTING 277/480V 3Ø ELECTRICAL PANEL "LP" AS REQUIRED. VERIFY EXACT LOCATION & CONDITIONS AT SITE PRIOR TO CONSTRUCTION (SEE SHEET E-1)
- ② TIE NEW POWER BRANCH CIRCUIT INTO EXISTING LOCAL POWER BRANCH CIRCUIT WHERE POSSIBLE (8 RECEPT. PER CIRCUIT MAX.). PROVIDE AND INSTALL NEW 20 AMP 1 POLE BRANCH CIRCUIT BREAKER IN EXISTING 120/208V 3Ø ELECTRICAL PANEL AS REQUIRED. VERIFY EXACT LOCATION & CONDITIONS AT SITE PRIOR TO CONSTRUCTION (SEE SHEET E-2)

NOTE: E.C. TO VERIFY LOADS ON EXISTING ELECTRICAL PANELS TO BE WITHIN PANEL RATINGS

NOTE:  
ALL AREAS WITH NO WORK SHOWN  
ARE EXISTING TO REMAIN



**KEY PLAN**  
NTS



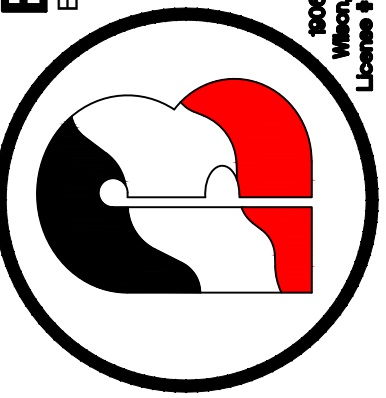
**ELECTRICAL - LIGHTING PLAN**  
SCALE: 1/4" = 1'-0"

**GENERAL DEMO NOTE:**  
REMOVE ALL EXISTING UNUSED ELECTRICAL DEVICES, FIXTURES, BOXES, SWITCHES, WIRING, DISCONNECTS, CONDUIT, ETC. AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.

Prepared for:

**City of Wilson**  
**Operations Center**  
Herring Ave. Wilson, NC 27786

**BARTLETT**  
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Rev:      Date:      Description:

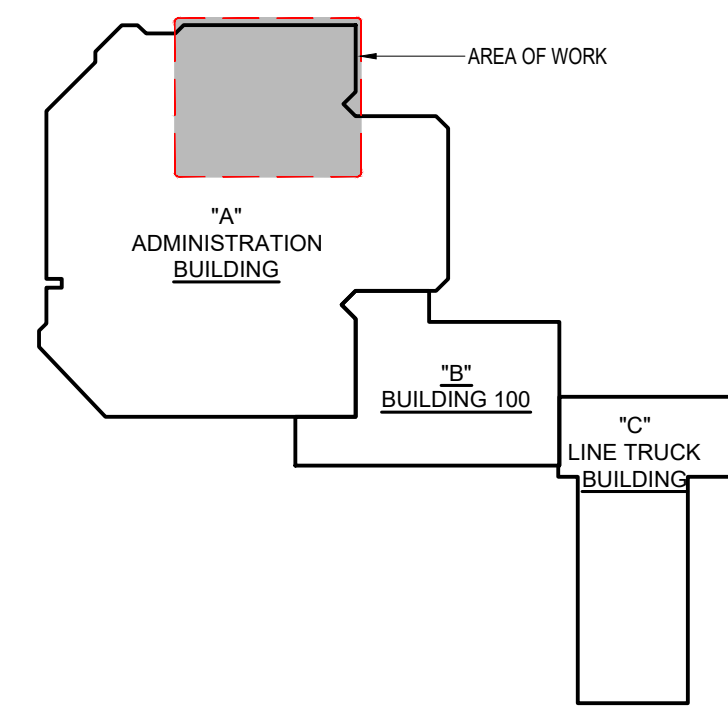
Title Sheet: **ELECTRICAL - LIGHTING PLAN**

Project: **Office Alteration**  
Operations Center City of Wilson  
Herring Ave. Wilson, NC 27786

Drawn by: JLT  
Issue Date: 08-18-21  
Project Number: 21-106  
Sheet:

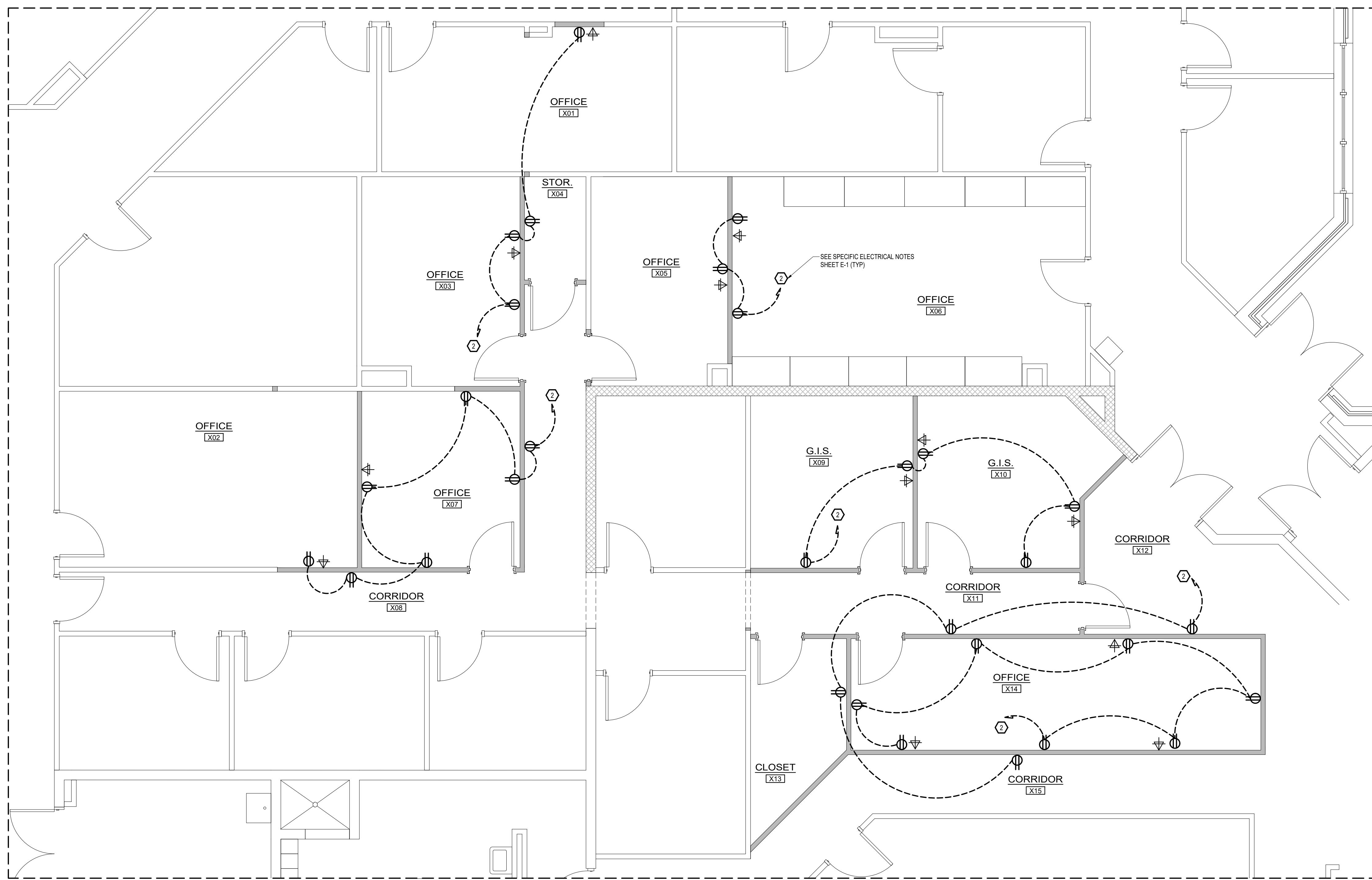
**E-1**





**KEY PLAN**  
NTS

NOTE:  
ALL AREAS WITH NO WORK SHOWN  
ARE EXISTING TO REMAIN



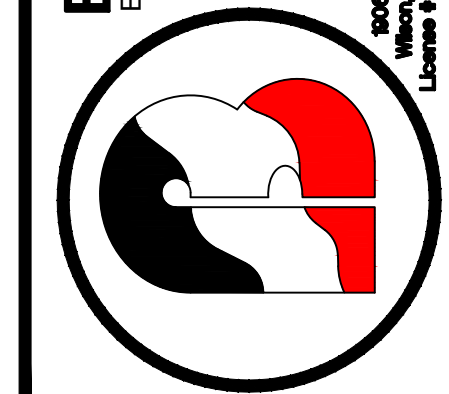
**ELECTRICAL - POWER PLAN**  
SCALE: 1/4" = 1'-0"

**GENERAL DEMO NOTE:**  
REMOVE ALL EXISTING UNUSED  
ELECTRICAL DEVICES, FIXTURES,  
BOXES, SWITCHES, WIRING,  
DISCONNECTS, CONDUIT,  
ETC. AS REQUIRED. DISPOSE OF ALL  
MATERIALS PROPERLY.

Prepared for:

**City of Wilson**  
**Operations Center**  
Herring Ave. Wilson, NC 27786

**BARTLETT**  
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Rev.	Date:	Description:

Title Sheet: **ELECTRICAL - POWER PLAN**

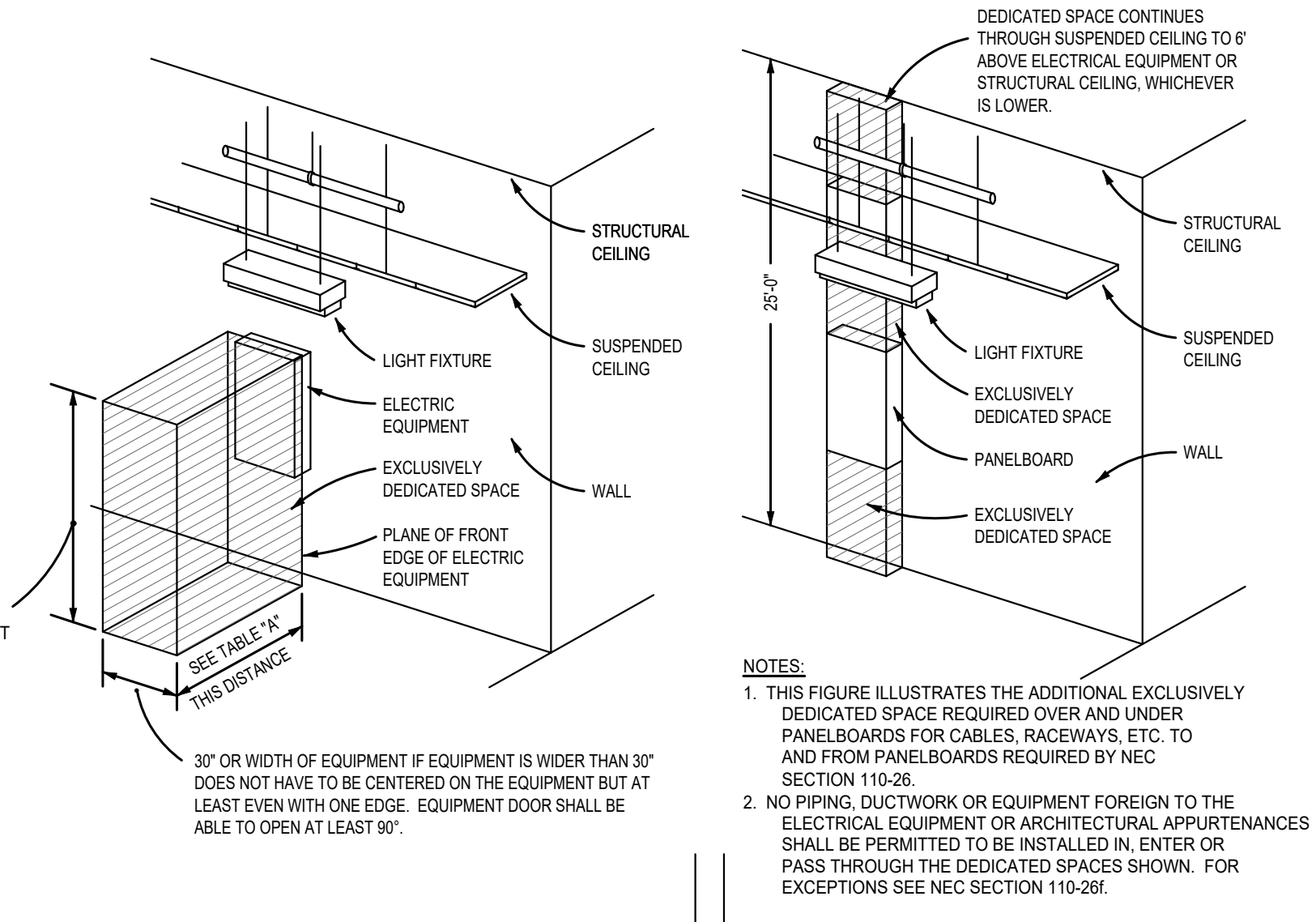
Project: **Office Alteration**  
Operations Center City of Wilson  
Herring Ave. Wilson, NC 27786

Drawn by: JLT  
Issue Date: 08-18-21  
Project Number: 21-106  
Sheet:



VOLTAGE TO GROUND (NOMINAL)	CONDITION	1	2	3
0-150	(MINIMUM CLEAR DISTANCE)	3'	3'	3'
151-600		3'	3 1/2'	4'

- WHERE THE "CONDITIONS" ARE AS FOLLOWS:
- 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 300 VOLTS SHALL NOT BE CONSIDERED LIVE PARTS.
  - EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.
  - EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.



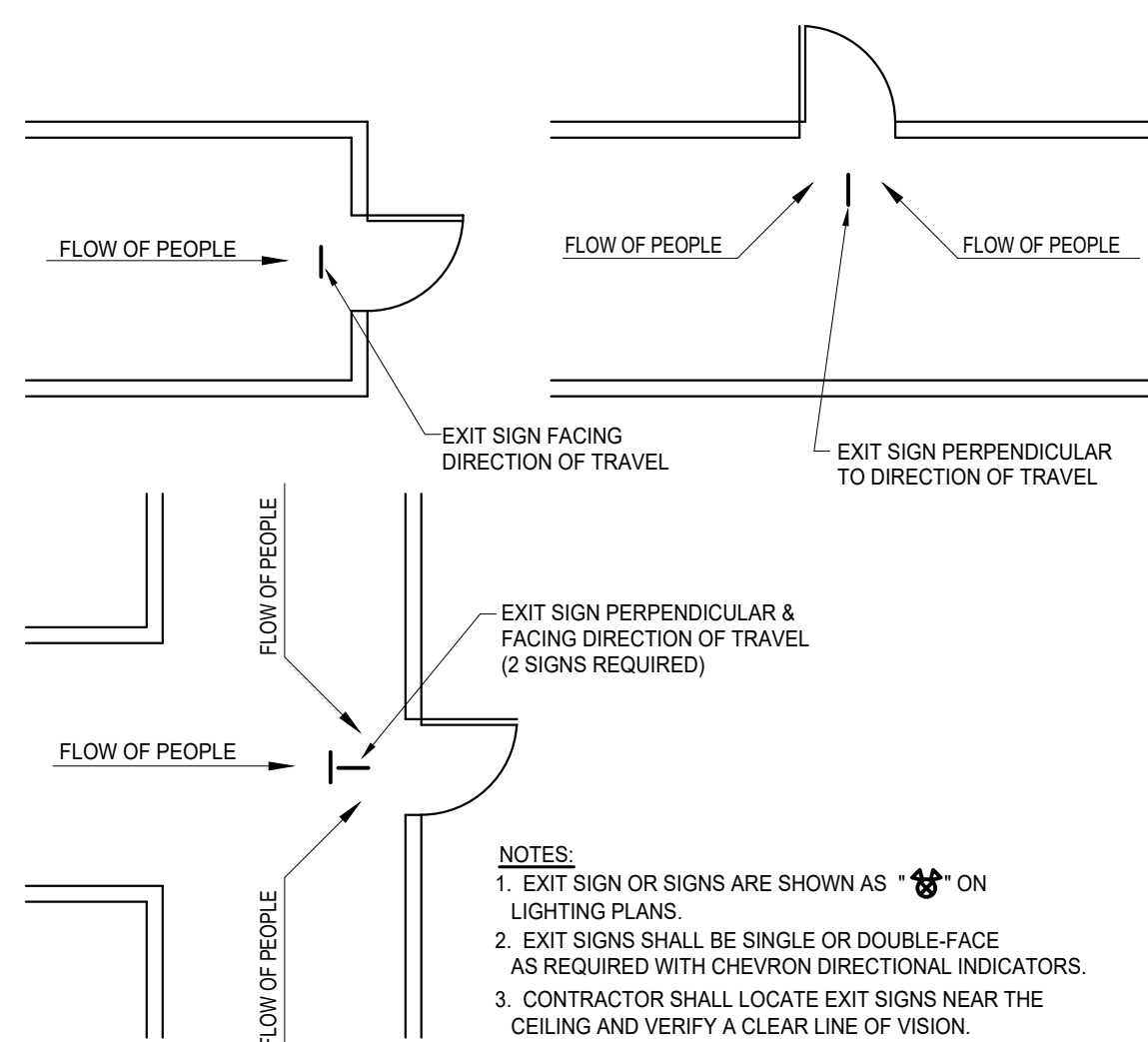
**NOTES:**

- THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF ELECTRICAL EQUIPMENT REQUIRED BY NEC SECTION 110-26.
- THIS INCLUDES BUT IS NOT LIMITED TO PANELBOARDS, SAFETY SWITCHES, MOTOR STARTERS, JUNCTION BOXES AND OTHER ELECTRICAL EQUIPMENT.

**NOTES:**

- THIS FIGURE ILLUSTRATES THE ADDITIONAL EXCLUSIVELY DEDICATED SPACE REQUIRED OVER AND UNDER PANELBOARDS FOR CABLES, RACEWAYS, ETC. TO AND FROM PANELBOARDS REQUIRED BY NEC SECTION 110-26.
- NO PIPING, DUCTWORK OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THROUGH THE DEDICATED SPACES SHOWN. FOR EXCEPTIONS SEE NEC SECTION 110-26f.

**DEDICATED WORKING SPACE REQUIREMENTS  
NO SCALE**



**NOTES:**

- EXIT SIGN OR SIGNS ARE SHOWN AS ON LIGHTING PLANS.
- EXIT SIGNS SHALL BE SINGLE OR DOUBLE-FACE AS REQUIRED WITH CHEVRON DIRECTIONAL INDICATORS.
- CONTRACTOR SHALL LOCATE EXIT SIGNS NEAR THE CEILING AND VERIFY A CLEAR LINE OF VISION.

**LOCATIONS OF EXIT SIGNS  
NO SCALE**

Method of Compliance:	
<input checked="" type="checkbox"/> Prescriptive (Energy Code)	<input type="checkbox"/> Prescriptive (ASHRAE 90.1)
<input type="checkbox"/> Performance (Energy Code)	<input type="checkbox"/> Performance (ASHRAE 90.1)
Lighting Schedule	
Lamp type required in fixture	THIS SHEET
Number of lamps in fixture	
Ballast type used in fixture	
Number of ballasts in fixture	
Total wattage per fixture	
Total interior wattage specified -vs- allowed	
Total exterior wattage specified -vs- allowed	
Additional Prescriptive Compliance	
<input type="checkbox"/> 506.2.1 More Efficient Mechanical Equipment	
<input type="checkbox"/> 506.2.2 Reduced Lighting Power Density	
<input type="checkbox"/> 506.2.3 Energy Recovery Ventilation Systems	
<input type="checkbox"/> 506.2.4 Higher Efficiency Service Water Heating	
<input type="checkbox"/> 506.2.5 On-Site Supply of Renewable Energy	
<input type="checkbox"/> 506.2.6 Automatic Daylighting Control Systems	

SYMBOL	MANUFACTURER	DESCRIPTION	LAMPS		MOUNTING
			NO.	WATTS	
	EELP OR EQUAL	VersaLED 2X4 LED LIGHTING PANEL WITH ACRYLIC LENS. 277V 4,652 LUMENS, 4,000K COLOR TEMP.	-	50	LED'S LAY-IN
	EELP OR EQUAL	VersaLED 2X2 LED LIGHTING PANEL WITH ACRYLIC LENS. 277V 4,154 LUMENS, 4,000K COLOR TEMP.	-	40	LED'S LAY-IN
	LITHONIA OR EQUAL	LED EXITEMERGENCY COMBO LIGHT WITH BATTERY BACKUP. 277V DUAL REMOTE READY	-	-	LED'S WALL
	LITHONIA OR EQUAL	EMERGENCY LIGHT WITH BATTERY BACKUP. 277V	-	-	LED'S WALL

NOTES:  
NOTE (1) - FIXTURES SHALL HAVE DISCONNECTING MEANS MEETING THE REQUIREMENTS OF NEC ARTICLE 410.130(G).  
NOTE (2) - COORDINATE ALL FIXTURE REQUIREMENTS, COLOR TEMP, CRI (COLOR RENDERING INDEX), ETC. WITH OWNER PRIOR TO INSTALLATION.  
NOTE (3) - SHIFT LOCATIONS OF FIXTURES IN MECHANICAL AREAS (FIAS REQUIRED) TO BEST LIGHT SPACES & AVOID CONFLICTS WITH DUCTS, PIPING, ETC.  
NOTE (4) - PROVIDE CHANNEL SUPPORTS WITH HANGER RODS, ETC. WHERE NECESSARY TO SUSPEND FIXTURES BENEATH DUCTWORK, PIPING, ETC.

AREA USE	SQ. FT.	WATTS PER SQ.FT. ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER
OFFICE	2,425	0.89	2,158.25	1,800	268.25

- GENERAL ELECTRICAL NOTES:**
- WORK SHALL COMPLY WITH NATIONAL ELECTRICAL CODE (NEC) STATE BUILDING CODE, AND ALL REQUIREMENTS OF THE LOCAL INSPECTOR. ALL WORK SHALL BE BY LICENSED ELECTRICAL CONTRACTOR.
  - ALL BRANCH CIRCUITS SHALL BE E.M.T., RIGID CONDUIT OR MC CABLE AS PERMITTED OR REQUIRED. RIGID CONDUIT SHALL BE USED FOR CIRCUITS UNDER SLAB ON GRADE, OR WHERE APPROVED SCHEDULE 80 PVC MAY BE USED. EXPOSED CONDUIT SHALL BE PAINTED PER OWNER'S DIRECTION.
  - ALL CONDUCTORS SHALL BE COPPER.
  - ALL EQUIPMENT LOADS SHALL BE VERIFIED BEFORE EQUIPMENT AND/OR CIRCUIT INSTALLATION. VERIFY LOCATION OF ALL RECEPTACLES & DATA / TELE. BOXES WITH OWNER PRIOR TO INSTALLATION
  - PROVIDE GREEN GROUNDING CONDUCTOR CONTINUOUS FROM DEVICE TO PANEL GROUND BAR.
  - EMT FITTINGS SHALL BE HEXAGONAL ALL STEEL, COMPRESSION TYPE.
  - NEW RECEPTACLES AND SWITCHES SHALL BE COMMERCIAL GRADE BRYANT, SIERRA, LEVITON BRAND EXCEPT AS SPECIFIED.
  - NEW WALL OUTLET BOXES SHALL BE STEEL CITY OR RACO WITH PLATES.
  - ALL NEW CIRCUITS SHALL BE TESTED WITH 500 VOLT TESTER PRIOR TO ENERGIZING.
  - MOUNTING HEIGHTS FOR ALL NEW SWITCHES & RECEPTACLES TO BE ADA COMPLIANT PER ANSI A117.1

MARK	DESCRIPTION	MARK	DESCRIPTION
	"LED" LIGHT FIXTURE		PASSIVE DUAL TECHNOLOGY OCCUPANCY WALL SENSOR SWITCH
	"LED" UNSWITCHED LIGHT FIXT. WITH BATTERY STANDBY (SECURITY/ EMERGENCY LT.)		DUPLEX RECEPTACLE
	COMBO EXITEM. LIGHT		SWITCHED BRANCH CIRCUIT
	EXIT LIGHT WITH DIRECTIONAL ARROW		UNSWITCHED BRANCH CIRCUIT
	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)		HOMERUN
	3-WAY SWITCH (4-WAY)		VOICE/DATA 1" CONDUIT TO ABV. CEILING

Prepared for:  
**City of Wilson  
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Rev:	Date:	Description:

Title Sheet: **ELECTRICAL SCHEDULES & NOTES**  
Project: **Office Alteration  
Operations Center City of Wilson**  
Herring Ave. Wilson, NC 27786

Drawn by: JLT  
Issue Date: 08-18-21  
Project Number: 21-106  
Sheet: **E-3**