

LIFE SAFETY PLAN REQUIREMENTS:

- ☒ FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7) – SEE NOTE 1
☒ ASSUMED AND REAL PROPERTY LINE LOCATIONS – SEE NOTE 2
☒ EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8) – SEE NOTE 3
☒ OCCUPANCY TYPES 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 (1006.2.1 & 1006.3.2(1))
☒ DEAD END LENGTHS (1020.4) – SEE NOTE 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. SEE NOTE 5
☒ LOCATION OF DOORS WITH PANIC HARDWARE (1008.1.10) – SEE NOTE 6
☒ LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND AND THE AMOUNT OF DELAY (1008.1.9.7) – SEE NOTE 7
☒ LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1008.1.9.8) – SEE NOTE 7
☒ LOCATION OF DOORS EQUIPPED WITH HOLD-OPEN DEVICES – SEE NOTE 7
☒ LOCATION OF EMERGENCY ESCAPE WINDOWS (1029) – SEE NOTE 7
☒ THE SQUARE FOOTAGE OF EACH FIRE AREA (902) – SEE NOTE 8
☒ THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT (407.5) – SEE NOTE 9
□ NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

LIFE SAFETY PLAN NOTES:

1. NO RATED WALLS.
2. ALL ASSUMED AND REAL PROPERTY LINES $\geq 30'$
3. ASSUMED PROPERTY LINES = 35'; UNLIMITED; 705.8.1 EXC. 2
4. NO DEAD ENDS OVER 20'; 20' ALLOWED
5. NO RATING REQUIRED FOR THIS STRUCTURE.
6. PANIC HARDWARE NOT REQUIRED.
7. NO DELAYED EGRESS LOCKS, ELECTROMAGNETIC LOCKS, HOLD OPEN DEVICES, OR EMERGENCY ESCAPE WINDOWS
8. FIRE AREAS DO NOT EXCEED CODE ALLOWANCE
9. BUILDING MEETS CODE REQUIREMENTS WITHOUT SUBDIVISION INTO SMOKE COMPARTMENTS; NO SMOKE COMPARTMENTS

EXIT REQUIREMENTS:
NUMBER AND ARRANGEMENTS OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM ² NO. OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS ^{1,3} (SECTION 1016-1021)	
	REQ'D.	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
BUILDING 1	2	2	200'	132'-0"	85'-6"	145'-6"
OFFICE	1	2	200'	48'-6"	31'-3"	36'

1. CORRIDOR DEAD ENDS (SECTION 1020.4)
2. BUILDINGS W/SINGLE EXITS (TABLE 1006.3.2(2)), SPACES W/ONE EXIT OR EXIT ACCESS DOORWAY (TABLE 1006.2.1)
3. COMMON PATH OF TRAVEL (SECTION 1029.8)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a)	(b)	(c)		EXIT WIDTH (in)			
	AREA ¹ SQ. FT.	AREA ¹ PER OCCUPANT (TABLE 1004.1.2)	CALCULATED OCCUPANT LOAD (c/b)	EGRESS WIDTH PER OCCUPANT (TABLE 1006.1)	REQUIRED WIDTH (SECTION 1005.1) (a/b) x c	STAIR	LEVEL	ACTUAL WIDTH SHOWN ON PLANS
BUILDING 1	9,800	500 GROSS	20	N/A	.2	N/A	4.4"	94"
OFFICE	1,200	100 GROSS	12	N/A	.2	N/A	2.4"	108"
TOTAL	10,800							

1. SEE TABLE 1004.1.2 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE
SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002, DEFINED IN CHAPTER 2)
2. MINIMUM STAIRWAY WIDTH (SECTION 1011.2); MIN. CORRIDOR WIDTH (SECTION 1020.2); MIN. DOOR WIDTH (SECTION 1010.1.1)
3. MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1024)
4. SEE SECTION 1005.6 FOR CONVERGING EXITS.
5. THE LOSS OF ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50% OF THE TOTAL REQUIRED (SECTION 1005.5)
6. ASSEMBLY OCCUPANCIES (SECTION 1029)

MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY
EACH EXIT DOOR CAN ACCOMMODATE BASED ON
EGRESS WIDTH (1005.1)

47" CLEAR WIDTH DIVIDED BY .2" = 235 OCCUPANTS
CALCULATED OCCUPANCY PER EXIT = 10 PEOPLE
CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM
CAPACITY OF EXIT.

47" CLEAR WIDTH DIVIDED BY .2" = 235 OCCUPANTS
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NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes
and is subject to field inspection and verification.

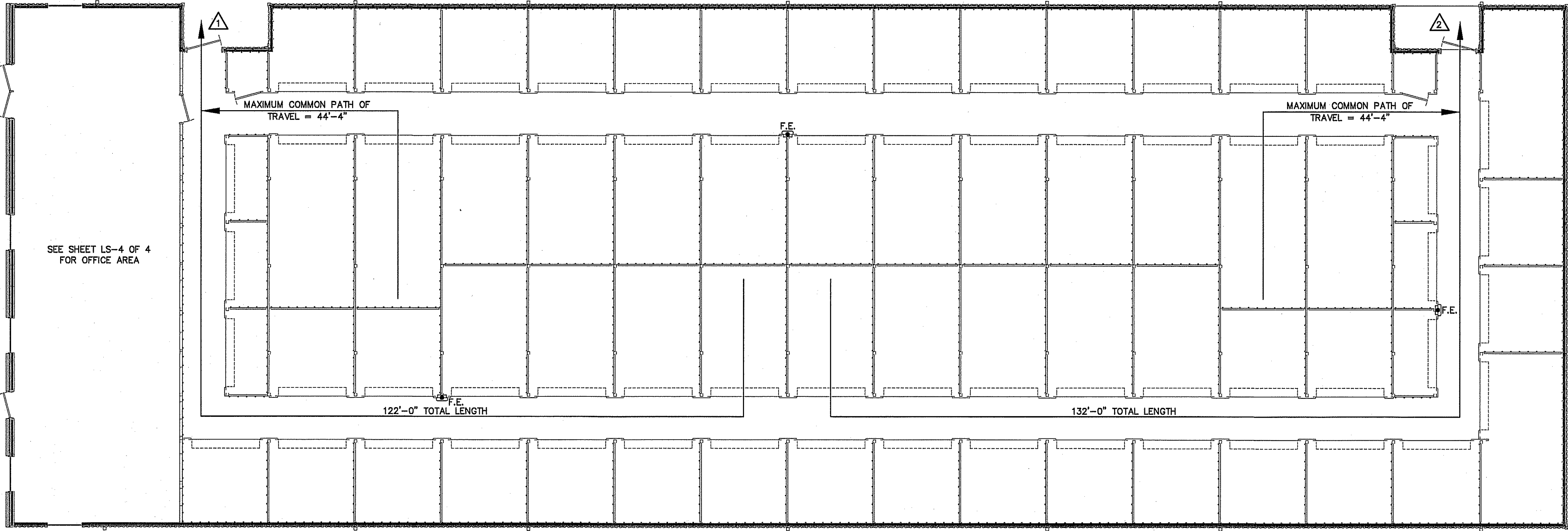
Reviewed for Code
Compliance

05/13/2025

Bradford



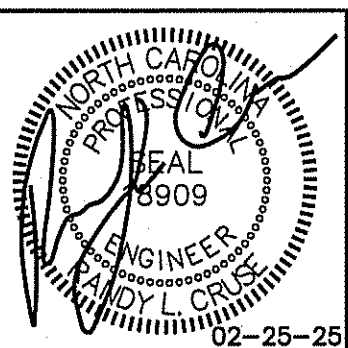
BUILDING 3 ONLY



NOTE:
AREA/ROOM/SPACE DESIGNATIONS USED ON
LIFE SAFETY PLANS ARE EXCLUSIVE TO LIFE
SAFETY PLAN ONLY, AND ARE NOT INDICATIVE
OF ANY ACTUAL SPACE DESIGNATIONS USED
ELSEWHERE.

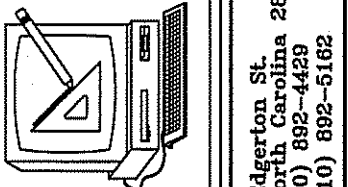
LEGEND
F.E. FIRE EXTINGUISHER
CLASS ABC 10 POUNDS

LIFE SAFETY PLAN BUILDING "1"
SCALE: 1/8" = 1'-0"



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	



Cruse
And
Associates, P.A.

114 E. Kingston St.
Raleigh, NC 27601
TEL: (919) 882-4489
FAX: (919) 882-5168

LICENSE NO.: C-1721

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DATE 02-25-25
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JOB NO. 24-31

SHEET NO.
LS-1 OF 4

LIFE SAFETY PLAN REQUIREMENTS:

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LIFE SAFETY PLAN NOTES:

1. SEE LEGEND FOR RATED WALLS.
2. ALL ASSUMED AND REAL PROPERTY LINES $\geq 30'$
3. ASSUMED PROPERTY LINES = 10'; UNLIMITED; 705.8.1 EXC. 2
4. NO DEAD ENDS OVER 20'; 20' ALLOWED
5. NO RATING REQUIRED FOR THIS STRUCTURE.
6. PANIC HARDWARE NOT REQUIRED.
7. NO DELAYED EGRESS LOCKS, ELECTROMAGNETIC LOCKS, HOLD OPEN DEVICES, OR EMERGENCY ESCAPE WINDOWS
8. FIRE AREAS DO NOT EXCEED CODE ALLOWANCE
9. BUILDING MEETS CODE REQUIREMENTS WITHOUT SUBDIVISION INTO SMOKE COMPARTMENTS; NO SMOKE COMPARTMENTS

EXIT REQUIREMENTS:
NUMBER AND ARRANGEMENTS OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	NO. OF EXITS REQ'D.	TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS ^{1,3} (SECTION 1016-1021)	
		SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
BUILDING 2 (AREA 1)	2	2	200'	142'-9"	106'-0"
BUILDING 2 (AREA 2)	2	2	200'	102'-0"	140'-0"

1. CORRIDOR DEAD ENDS (SECTION 1020.4)
2. BUILDINGS W/SINGLE EXITS (TABLE 1006.3.2(2)), SPACES W/ONE EXIT OR EXIT ACCESS DOORWAY (TABLE 1006.2.1)
3. COMMON PATH OF TRAVEL (SECTION 1029.8)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a)	(b)	(c)		EXIT WIDTH (in)			
	AREA ¹ SQ. FT.	AREA ¹ PER OCCUPANT (TABLE 1004.1.2)	CALCULATED OCCUPANT LOAD (a/b)	EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)	REQUIRED WIDTH (SECTION 1005.1) (c/d) x c	ACTUAL WIDTH SHOWN ON PLANS		
BUILDING 2 (AREA 1)	12,000	500 GROSS	24	N/A	.2	N/A	4.8"	N/A
BUILDING 2 (AREA 2)	11,700	500 GROSS	24	N/A	.2	N/A	4.8"	N/A
TOTAL	23,700		48					

1. SEE TABLE 1004.1.2 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE
SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002, DEFINED IN CHAPTER 2)
2. MINIMUM STAIRWAY WIDTH (SECTION 1011.2); MIN. CORRIDOR WIDTH (SECTION 1020.2); MIN. DOOR WIDTH (SECTION 1010.1.1)
3. MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1024)
4. SEE SECTION 1005.6 FOR CONVERGING EXITS.
5. THE LOSS OF ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50% OF THE TOTAL REQUIRED (SECTION 1005.5)
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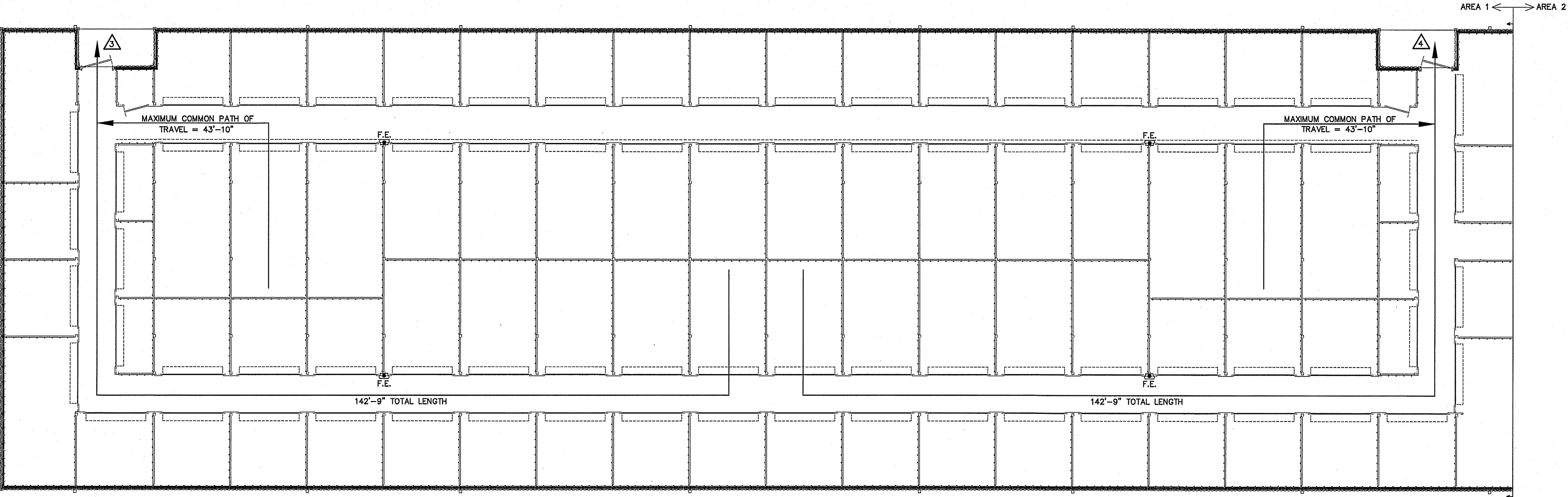
MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.1)

△ 47" CLEAR WIDTH DIVIDED BY .2" = 235 OCCUPANTS
CALCULATED OCCUPANCY PER EXIT = 12 PEOPLE
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LEGEND

----- 3 HOUR RATED WALL
U419

NOTE:
AREA/ROOM/SPACE DESIGNATIONS USED ON LIFE SAFETY PLANS ARE EXCLUSIVE TO LIFE SAFETY PLAN ONLY, AND ARE NOT INDICATIVE OF ANY ACTUAL SPACE DESIGNATIONS USED ELSEWHERE.

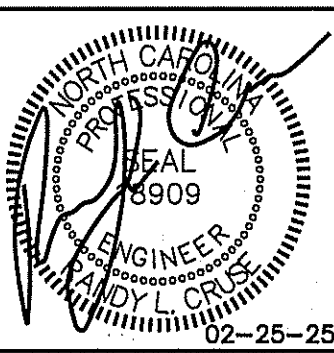
LEGEND

F.E. FIRE EXTINGUISHER
CLASS ABC 10 POUNDS

LIFE SAFETY PLAN BUILDING "2"
SCALE: 1/8" = 1'-0"

AREA 1 AREA 2

KEYPLAN



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	
1.	03/10/2025

Cruse and Associates, P.A.

1415 E. BAYVIEW BL.
DURHAM, NORTH CAROLINA 28834
TEL: (919) 982-4489
FAX: (919) 982-5125

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DATE	02-25-25
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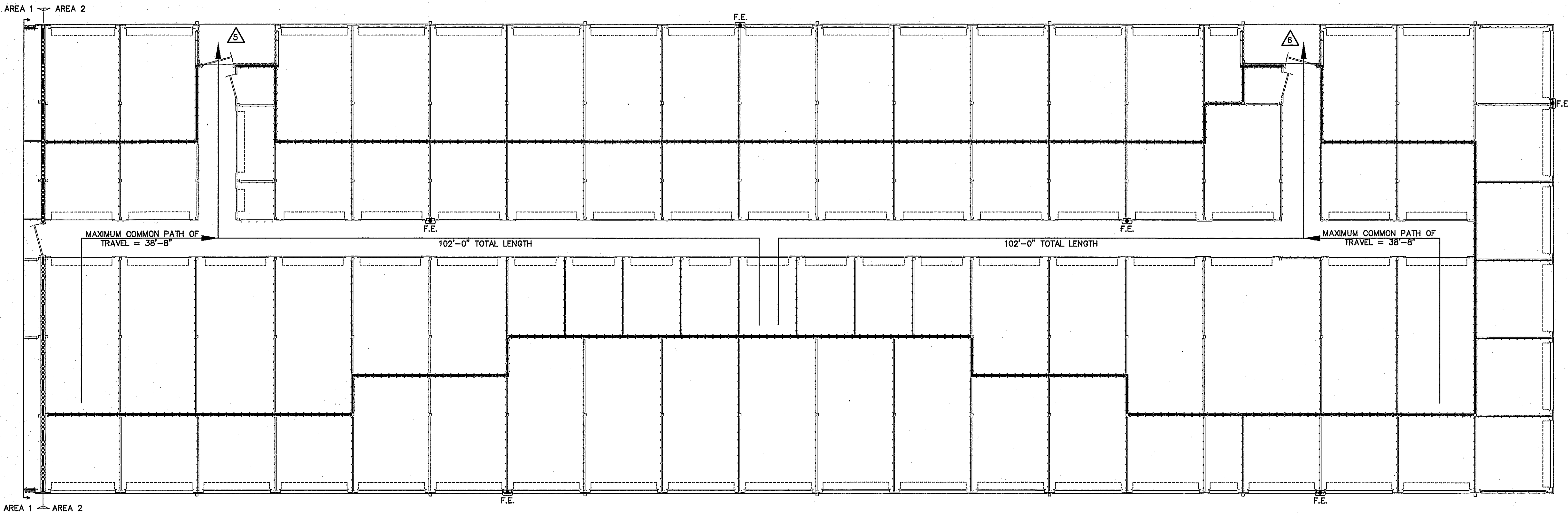
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USE GROUP OR SPACE DESCRIPTION	(a)	(b)	(c)		EXIT WIDTH (n)				
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				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
BUILDING 2 (AREA 1)	12,000	500 GROSS	24	N/A	.2	N/A	4.8"	N/A	94"
BUILDING 2 (AREA 2)	11,700	500 GROSS	24	N/A	.2	N/A	4.8"	N/A	94"
TOTAL	23,700		48						

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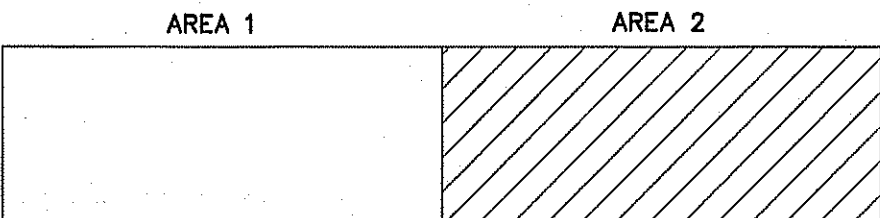


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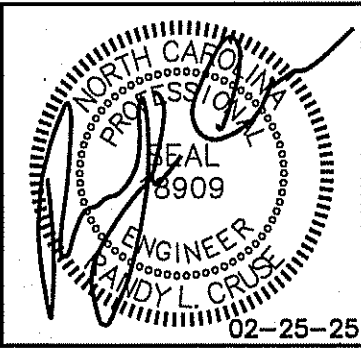
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LEGEND
F.E. FIRE EXTINGUISHER
CLASS ABC 10 POUNDS

LIFE SAFETY PLAN BUILDING "2"
SCALE: 1/8" = 1'-0"

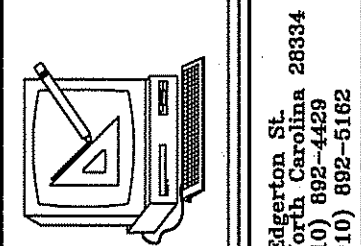


KEYPLAN



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	
1.	03/10/2025



Cruse
And
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SHEET NO.
LS-3 OF 4

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3. ASSUMED PROPERTY LINES = 35'; UNLIMITED; 705.8.1 EXC. 2
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9. BUILDING MEETS CODE REQUIREMENTS WITHOUT SUBDIVISION INTO SMOKE COMPARTMENTS; NO SMOKE COMPARTMENTS

EXIT REQUIREMENTS:
NUMBER AND ARRANGEMENTS OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM ² NO. OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS ^{1,3} (SECTION 1018-1021)	
	REQ'D.	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
BUILDING 1	2	2	200'	132'-0"	85'-6"	145'-6"
OFFICE	1	2	200'	48'-6"	31'-3"	36"

1. CORRIDOR DEAD ENDS (SECTION 1020.4)
2. BUILDINGS W/SINGLE EXITS (TABLE 1006.3.2(2)), SPACES W/ONE EXIT OR EXIT ACCESS DOORWAY (TABLE 1006.2.1)
3. COMMON PATH OF TRAVEL (SECTION 1029.5)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a)	(b)	CALCULATED OCCUPANT LOAD (a/b)	(c) EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		EXIT WIDTH (n)			
	AREA ¹ SQ. FT.	AREA ¹ PER OCCUPANT (TABLE 1004.1.2)		STAIR	LEVEL	REQUIRED WIDTH (SECTION 1005.1) (a/b) x c	STAIR	LEVEL	ACTUAL WIDTH SHOWN ON PLANS
BUILDING 1	9,600	500 GROSS	20	N/A	.2	N/A	4.4"	N/A	94"
OFFICE	1,200	100 GROSS	12	N/A	.2	N/A	2.4"	N/A	108"
TOTAL	10,800								

1. SEE TABLE 1004.1.2 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE. SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002, DEFINED IN CHAPTER 2)
2. MINIMUM STAIRWAY WIDTH (SECTION 1011.2); MIN. CORRIDOR WIDTH (SECTION 1020.2); MIN. DOOR WIDTH (SECTION 1010.1.1)
3. MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1024)
4. SEE SECTION 1005.6 FOR CONVERGING EXITS.
5. THE LOSS OF ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50% OF THE TOTAL REQUIRED (SECTION 1005.5)
6. ASSEMBLY OCCUPANCIES (SECTION 1029)

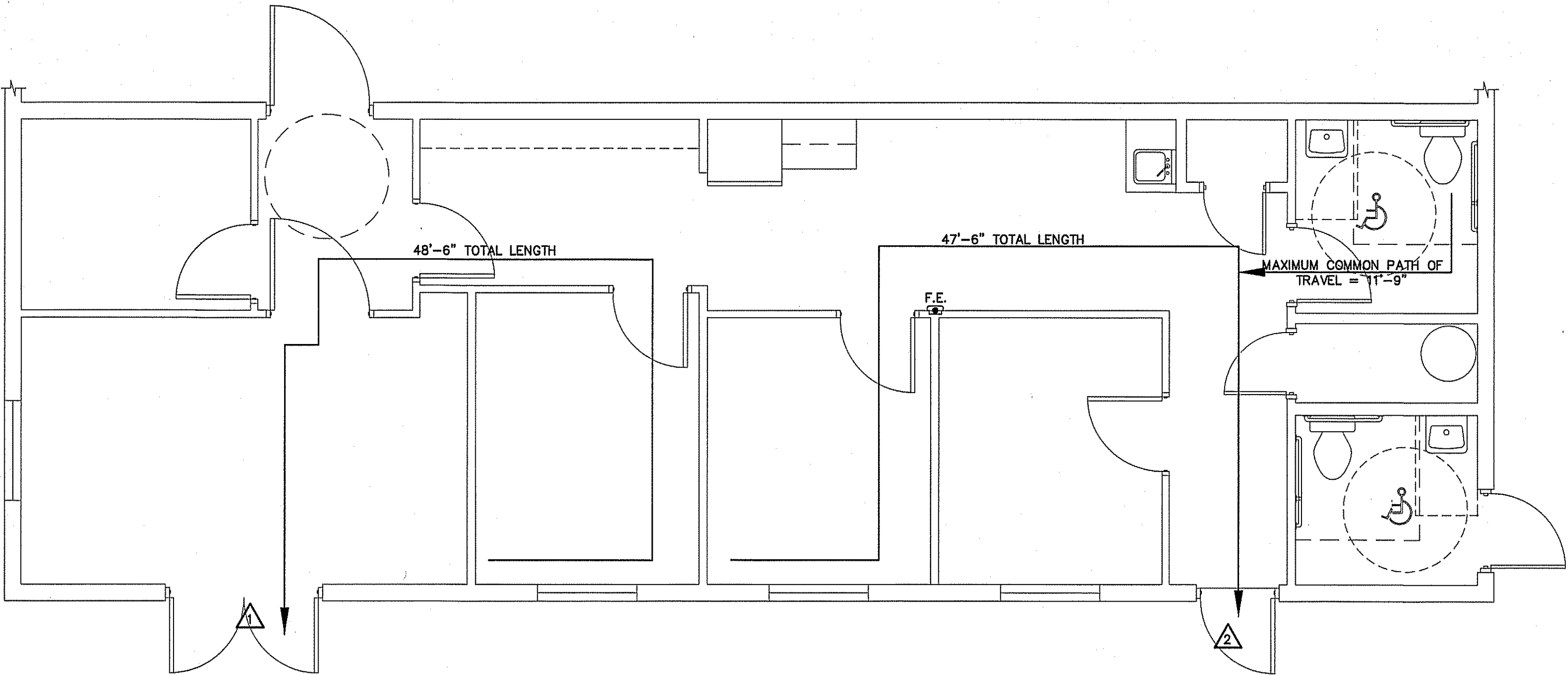
MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.1)

1

35" CLEAR WIDTH DIVIDED BY .2" = 175 OCCUPANTS
CALCULATED OCCUPANCY PER EXIT = 6 PEOPLE
CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT.

2

70" CLEAR WIDTH DIVIDED BY .2" = 350 OCCUPANTS
CALCULATED OCCUPANCY PER EXIT = 6 PEOPLE
CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT.

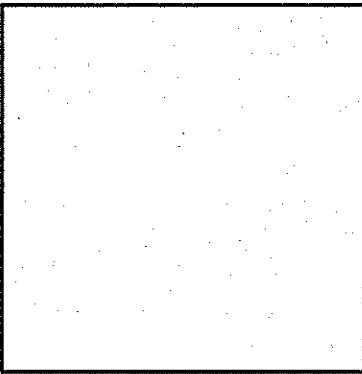
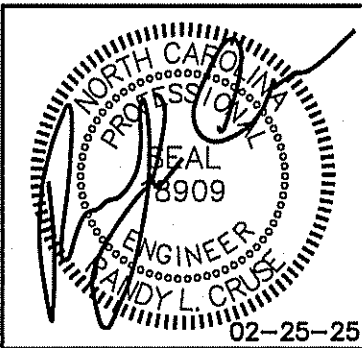


LIFE SAFETY PLAN BUILDING "1" (OFFICE)
SCALE: 1/4" = 1'-0"

NOTE:
AREA/ROOM/SPACE DESIGNATIONS USED ON LIFE SAFETY PLANS ARE EXCLUSIVE TO LIFE SAFETY PLAN ONLY, AND ARE NOT INDICATIVE OF ANY ACTUAL SPACE DESIGNATIONS USED ELSEWHERE.

LEGEND

F.E. FIRE EXTINGUISHER
CLASS ABC 10 POUNDS



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	

Cruse
And
Associates, P.A.

414 E. Robertson St., 28284
HOLLY SPRINGS, NC 28228
PH: (910) 882-4429
FAX: (910) 882-5169

LICENSE NO.: C-1721

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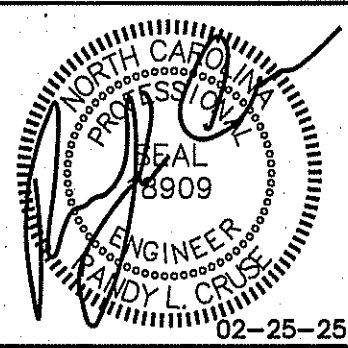
SHEET NO.
LS-4 OF 4

ROOM	ROOM NAME	FLOOR			BASE			WALLS			CEIL. HT.		CLG.	REMARKS
		CONCRETE	CARPET	TILE	WOOD	CERAMIC TILE	BRICK	5/8" DRYWALL	FRP	2X4 CEILING TILE	2X4 CEILING TILE	2X4 CEILING TILE		
100	SALES OFFICE			X		X		X		8'-0" +/-		X		
101	MECHANICAL ROOM			X		X		X		8'-0" +/-		X		
102	LOCKER ROOM			X		X		X		8'-0" +/-		X		
103	OFFICE #1			X		X		X		8'-0" +/-		X		
104	OFFICE #2			X		X		X		8'-0" +/-		X		
105	OFFICE #3			X		X		X		8'-0" +/-		X		
106	KITCHENETTE			X		X		X		8'-0" +/-		X		
107	CLOSET			X		X		X		8'-0" +/-		X		
108	RESTROOM #1			X		X		X		8'-0" +/-		X		
109	CLOSET			X		X		X		8'-0" +/-		X		
110	RESTROOM #2			X		X		X		8'-0" +/-		X		

OWNER TO VERIFY ALL COLORS AND FINISHES BEFORE ORDERING MATERIALS
COORDINATE ALL CEILING HEIGHTS WITH DUCTWORK

DOOR SCHEDULE				
DOOR NO.	DOOR SIZE			REMARKS
	WIDE	HIGH	THICK.	
001	6'-0"	7'-0"	1 3/4"	EXTERIOR STOREFRONT DOOR WITH H.M. FRAME
002	4'-0"	7'-0"	1 3/4"	INTERIOR METAL DOOR WITH H.M. FRAME
003	3'-0"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
004	4'-0"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
005	3'-0"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
006	3'-0"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
007	3'-0"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
008	3'-0"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
009	2'-6"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
010	3'-0"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
011	2'-6"	7'-0"	1 3/4"	INTERIOR WOOD DOOR WITH H.M. FRAME
012	3'-0"	7'-0"	1 3/4"	EXTERIOR METAL DOOR WITH H.M. FRAME
013	3'-0"	7'-0"	1 3/4"	EXTERIOR STOREFRONT DOOR WITH H.M. FRAME

VERIFY TYPES AND SIZES WITH OWNER BEFORE ORDERING.
PROVIDE ALL HARDWARE AS REQUIRED. ALL HARDWARE TO BE A.D.A. COMPLIANT.
VERIFY HARDWARE FINISHES & STYLES WITH OWNER BEFORE ORDERING.



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

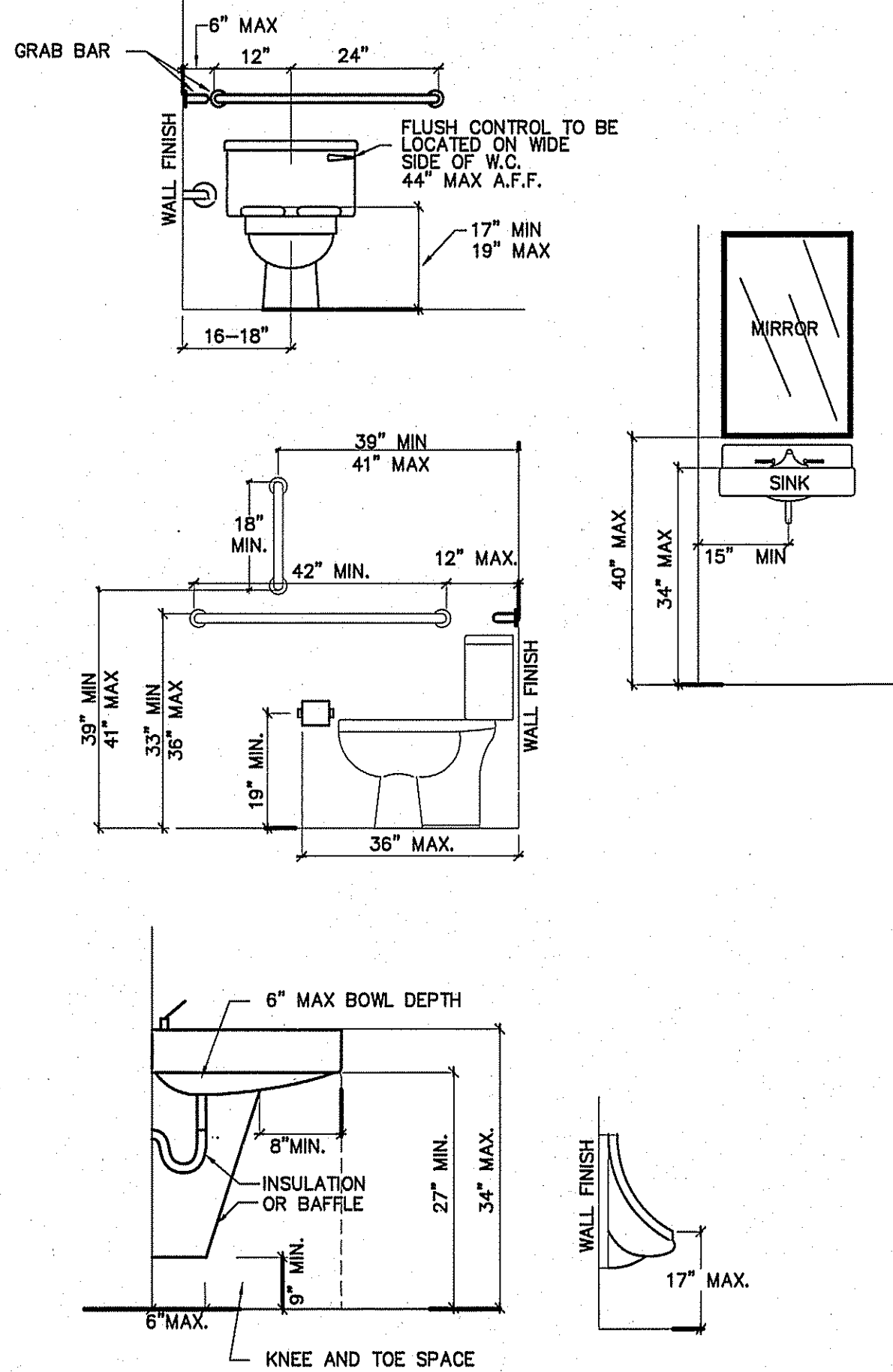
REVISIONS	
NO.	

414 E. Blount St., Ste. 200
Holly Springs, NC 27560
PH: (919) 882-4420
FAX: (919) 882-5182
LICENSE NO.: C-1721

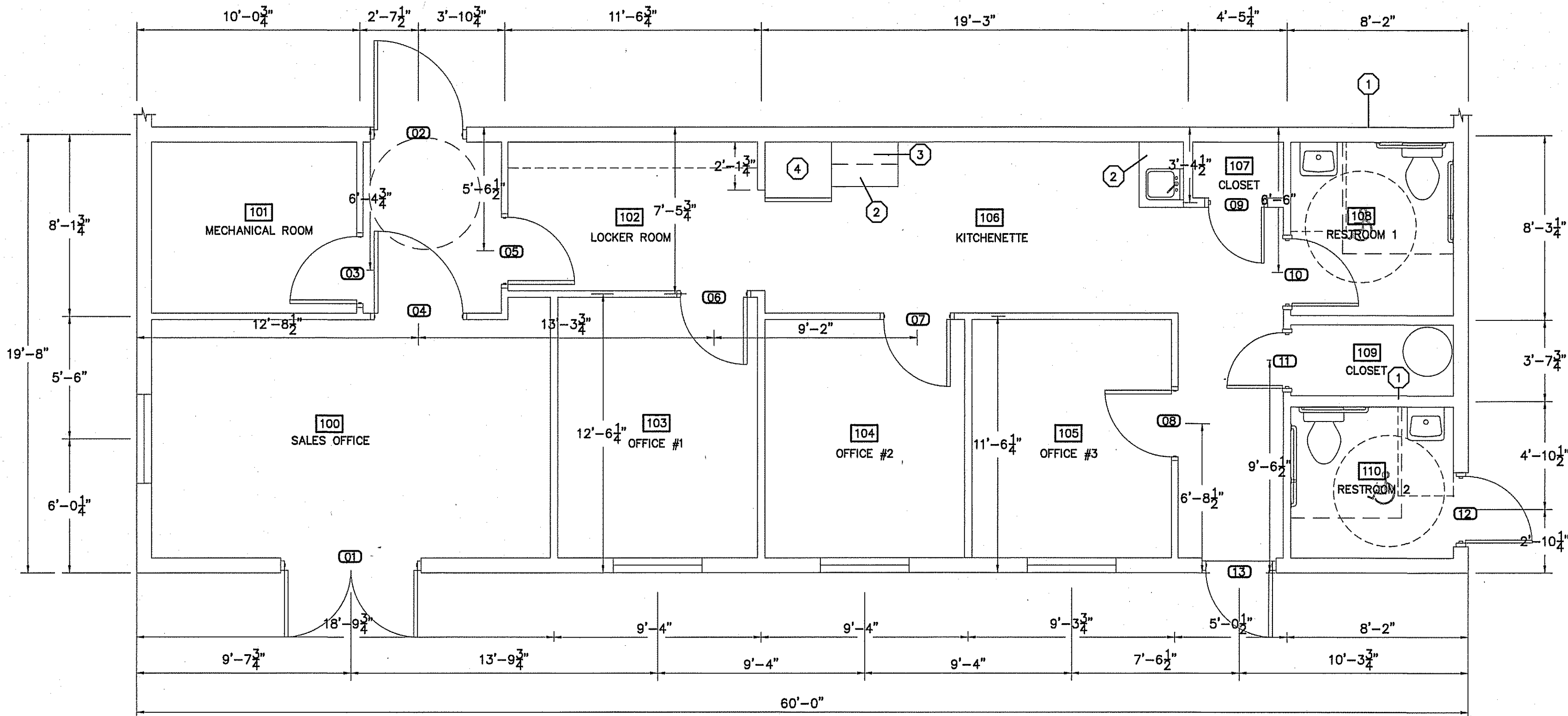
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SHEET NO.
F-1 OF 1



RESTROOM ACCESSIBILITY DETAILS
SCALE: 1/2" = 1'-0"



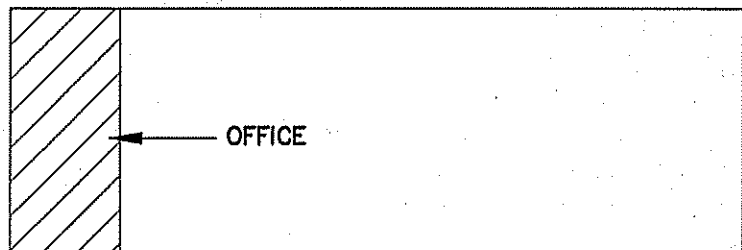
PROPOSED FLOOR PLAN BUILDING "1" (OFFICE)
SCALE: 1/4" = 1'-0"

KEY NOTES:

- 1 WET WALLS. SEE NOTES.
- 2 BASE CABINET SELECTED BY OWNER
- 3 WALL CABINET SELECTED BY OWNER
- 4 REFRIGERATOR, SELECTED BY OWNER

NOTES:

INTERIOR WALLS; 3-5/8", 20 GA. METAL STUDS @ 16" O.C.
"WET WALLS" 1: 6", 20 GA METAL STUDS @ 16" O.C.



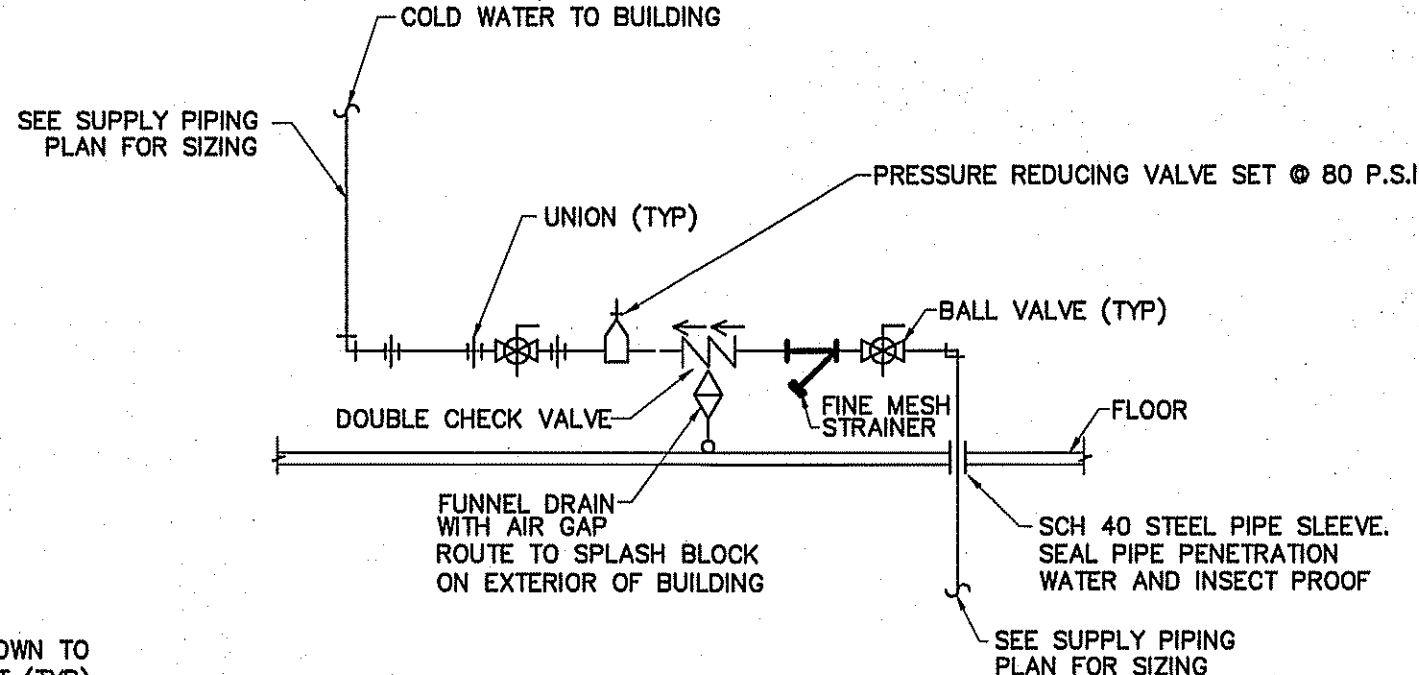
KEY PLAN
SCALE: NTS

PLUMBING LEGEND	
DESCRIPTION	SYMBOL
COLD WATER	CW
HOT WATER	HW
COLD WATER (FILTERED)	
RECIRCULATED WATER	HWR
VENT PIPING	V
WASTE PIPING	NEW EXISTING W
CLEAN OUT IN GRADE	C.O.I.G.
FLOOR CLEAN OUT	F.C.O.
NON FREEZE HOSE BIBB	NFHB
FLOOR DRAIN	F.D.
CHECK VALVE	
BALL VALVE	
GATE VALVE	
SHUT-OFF VALVE	
DOUBLE CHECK VALVE	
FIXTURE DESIGNATION	P--
MOUNTING HEIGHT	MH
POINT OF CONNECTION NEW TO EXISTING	
FLOOR SINK	
SHOCK ABSORBER W/BALL VALVE SHUT-OFF	SA SIZE PER MANUF. RECOMMENDATIONS
CHANGE IN PIPE SIZE	

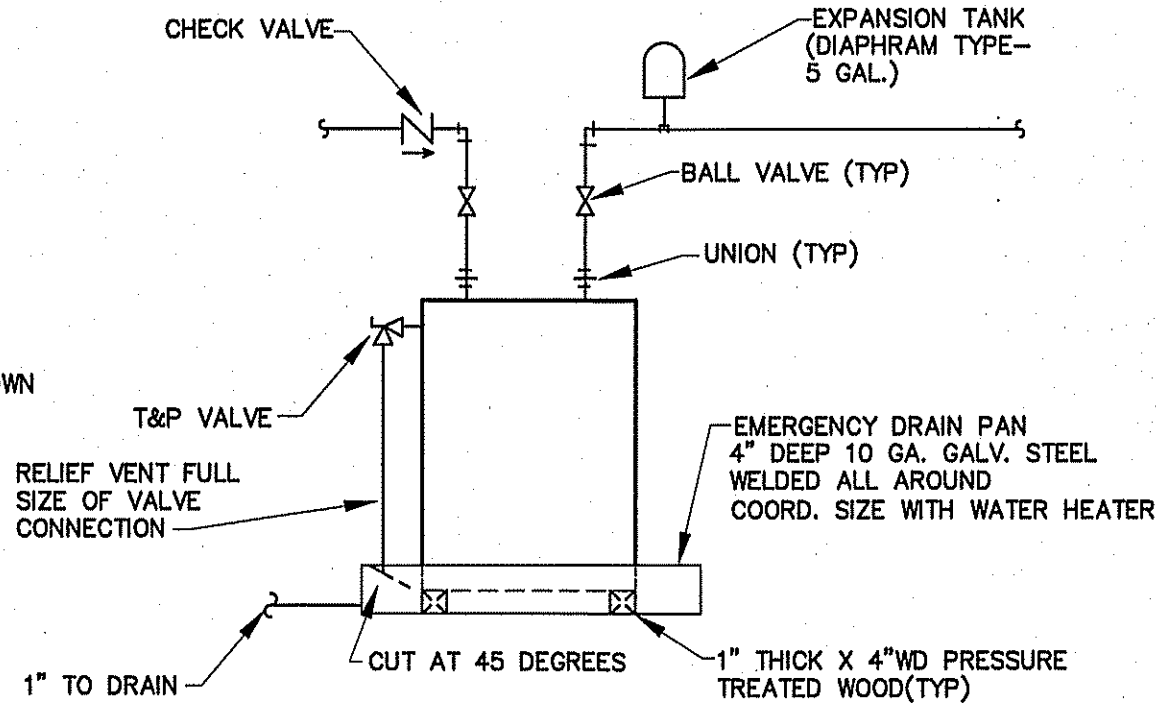
PLUMBING FIXTURE SCHEDULE				
MARK	MAKE	MODEL	DESCRIPTION	NOTES
P-1	AMERICAN STANDARD	CADET 2377.100	EL. 1.6/PA 16.5"HC ELONGATED WATER CLOSET HC ACCESSIBLE, TANK TYPE	WHITE 5311.012 SEAT
P-2	AMERICAN STANDARD	LUCERNE 0355	WALL HUNG LAVATORY	1340.225 FAUCET, PROVIDE W/BASKET DRAIN FAUCET HOLES 4" O.C.
P-3	-	-	SINGLE BOWL SINK	VERIFY SIZE, TYPE, & MOUNTING W/OWNER BEFORE ORDERING FIXTURE. COORDINATE WITH COUNTER TOP SUPPLIER, PROVIDE WITH FAUCET & DRAIN.
P-4	STATE	4.5KW WATER HEATER		240V, 1Ø

* VERIFY ALL FIXTURES WITH OWNER BEFORE PURCHASE OR INSTALLATION

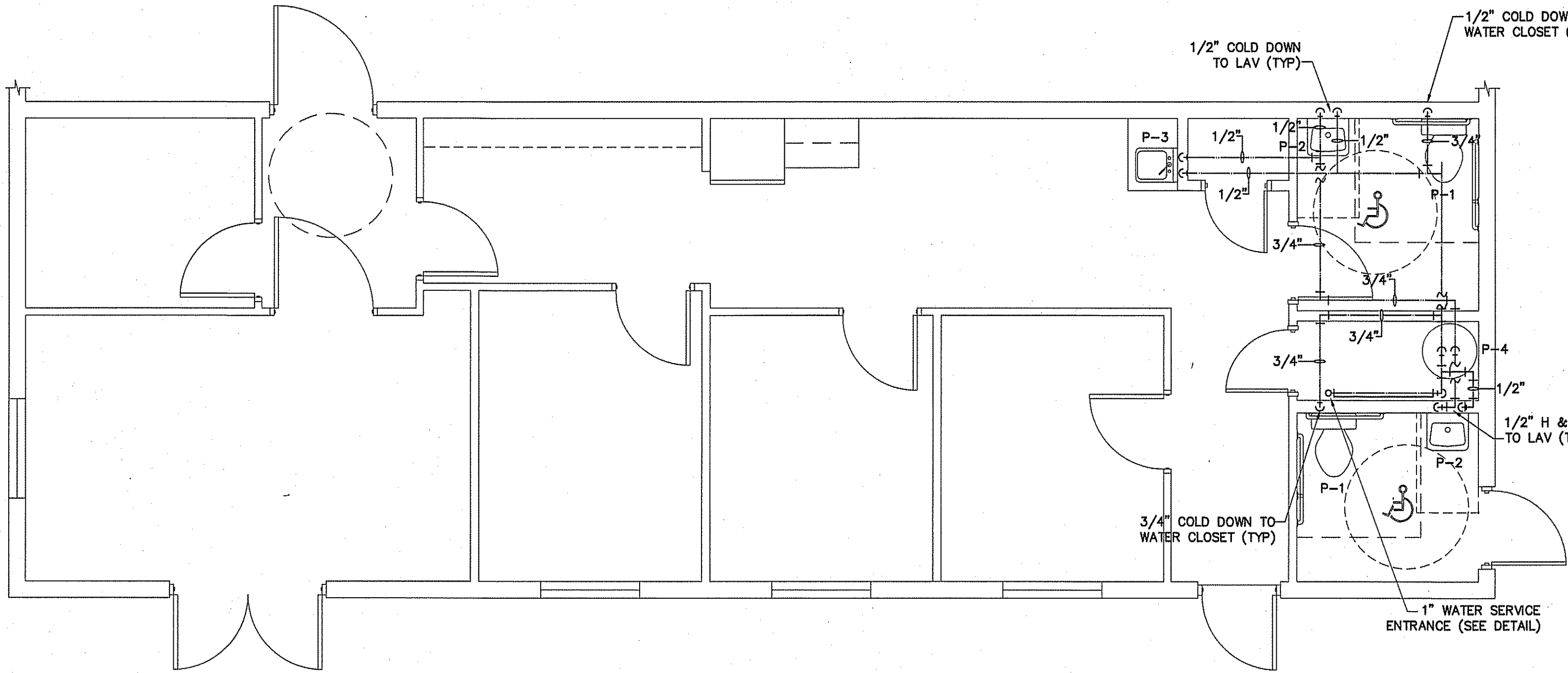
PLUMBING CALCULATIONS							
ITEM	# OF	FIXTURE UNITS (EACH)			FIXTURE UNITS (TOTAL)		
		COLD	HOT	TOTAL	COLD	HOT	TOTAL
FLUSH TANK WATER CLOSET	2	5.0	-	5.0	10.0	-	10.0
LAVATORY	3	1.5	1.5	2	4.5	4.5	6.0
							1/3
TOTAL		-	-	-	14.5	4.5	16.0
18.0 GPM WATER SUPPLY PIPE SIZE: MINIMUM 1"							



DETAIL-WATER SERVICE ENTRANCE
NOT TO SCALE

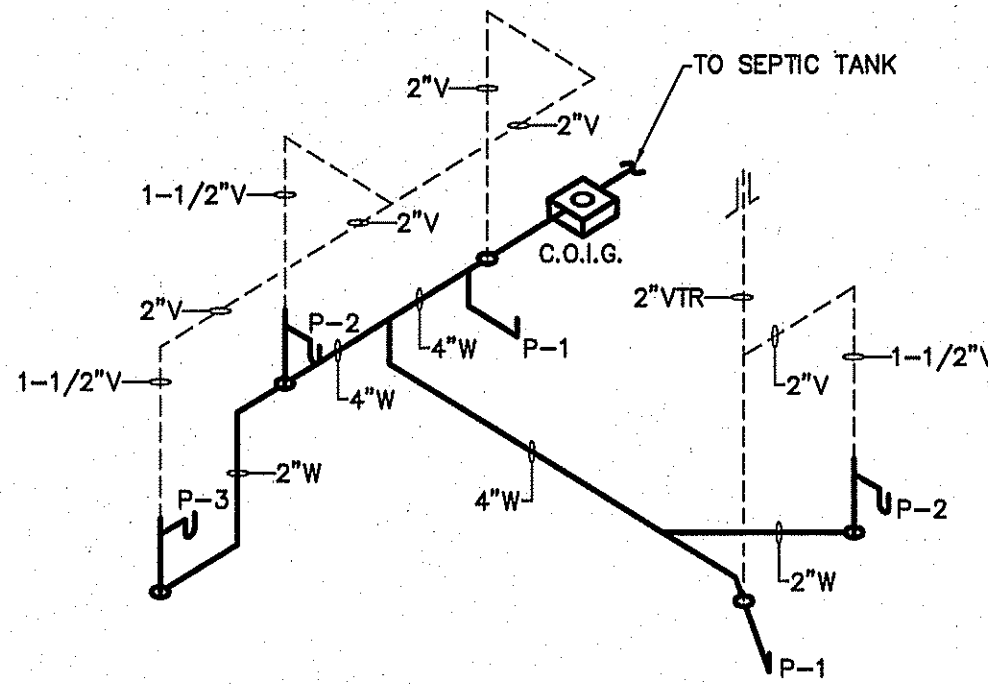


DETAIL-WATER HEATER
NOT TO SCALE

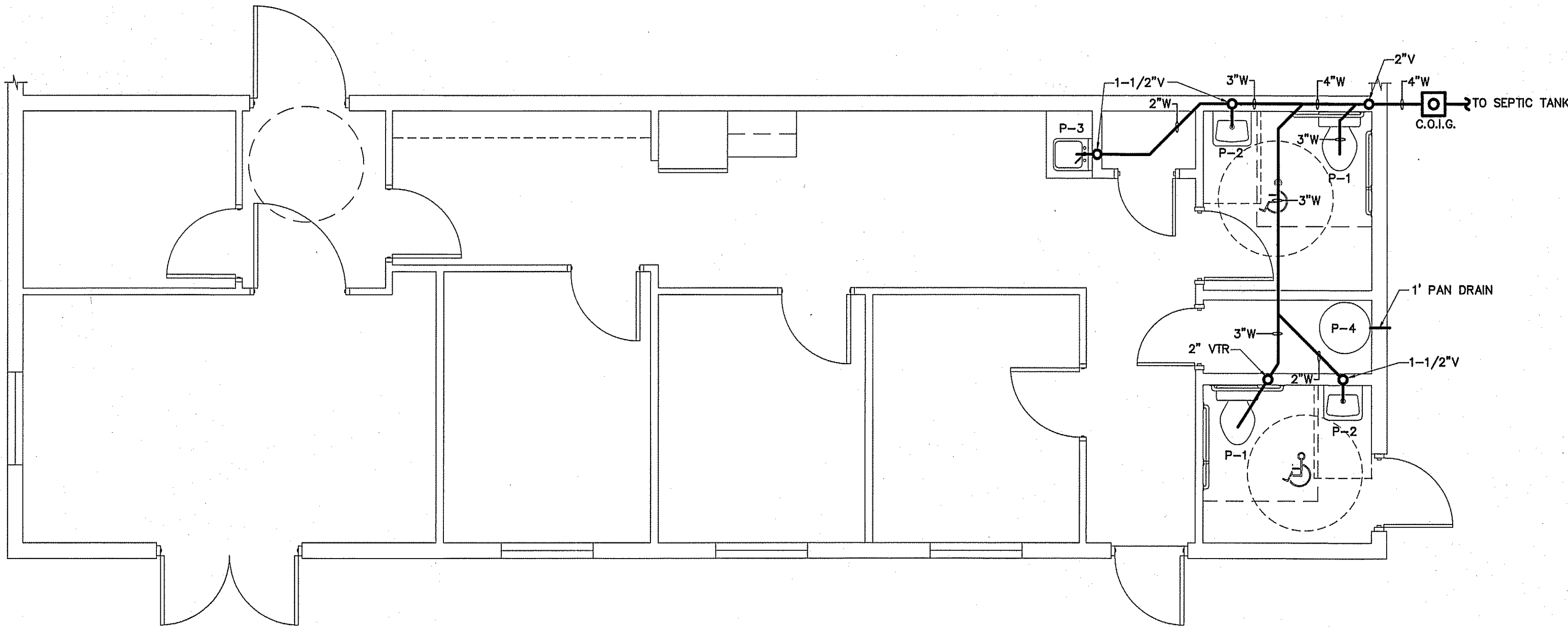


PLUMBING SUPPLY PLAN BUILDING "1" (OFFICE)

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

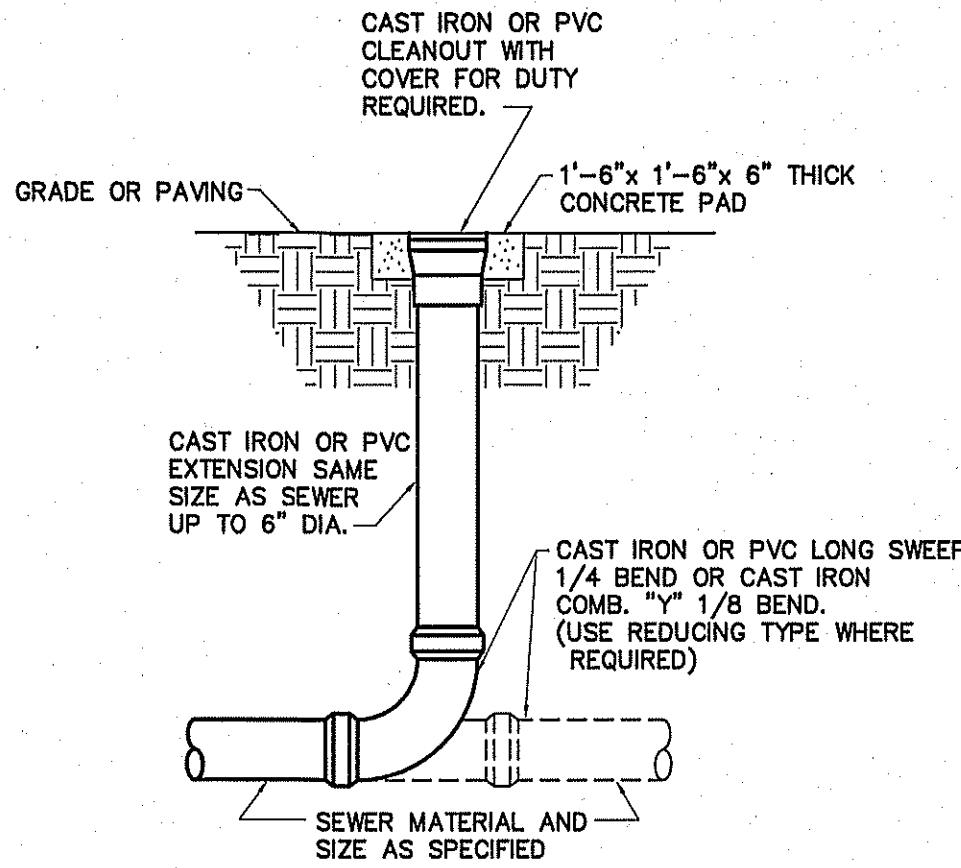


WASTE & VENT RISER DIAGRAM
NOT TO SCALE



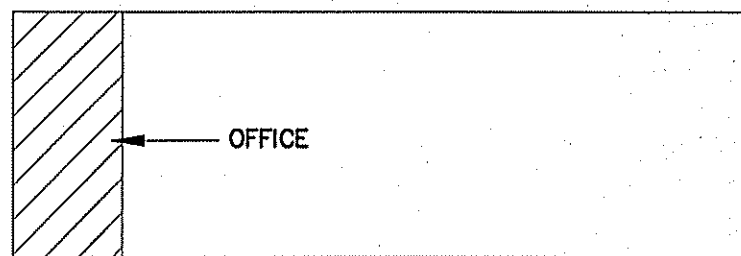
PLUMBING WASTE PLAN BUILDING "1" (OFFICE)

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



DETAIL-CLEAN OUT AT GRADE
NOT TO SCALE

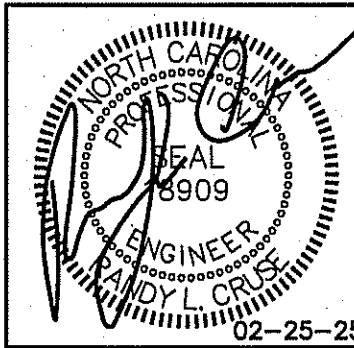
PLUMBING CONNECTION SCHEDULE				
FIXTURE	C.W.	H.W.	WASTE	VENT
FLUSH TANK WATER CLOSET	1/2"	-	3"	2"
LAVATORY	1/2"	1/2"	2"	1 1/2"
FLOOR DRAIN			3"	2"



KEY PLAN
SCALE: NTS

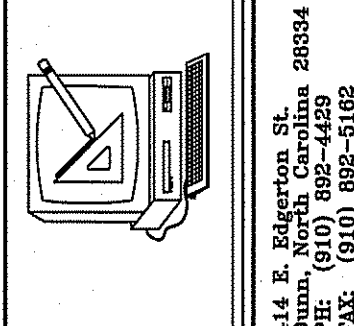
GENERAL PLUMBING NOTES

- ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE LOCAL, STATE, AND NATIONAL CODES.
- CONTRACTORS SHALL COORDINATE PIPING WITH ALL OTHER TRADES.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL/STRUCTURAL DRAWINGS FOR DIMENSIONS.
- CONTRACTOR SHALL FURNISH AND INSTALL DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR METALS.
- CONTRACTOR SHALL FURNISH AND INSTALL ESCUTCHEONS AND COVER PLATES AT ALL FINISHED WALLS, CEILINGS AND FLOOR OPENINGS.
- PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH STATE AND LOCAL CODE. (REFER TO SPECIFICATIONS.)
- ALL PIPING SHALL BE TESTED FOR LEAKS. IF ANY LEAKS ARE DETECTED THE PIPING SHALL BE REPAIRED, RESOLDERED OR REPLACED AND RETESTED.
- ALL SOLDER SHALL BE OF THE LEAD FREE TYPE.
- WATER HEATER SHALL BE SUPPLIED WITH FACTORY INSTALLED T&P VALVES AND SHALL HAVE UNIONS AND ISOLATION VALVES.
- DOMESTIC WATER SUPPLY PIPING SHALL BE COPPER OR CPVC. PEX IS ALLOWED WHERE PERMITTED BY CODE.
- WASTE AND VENT PIPING SHALL BE SCH. 40 PVC OR HEAVY DUTY CAST IRON UNDER TRAFFIC AREAS.
- INSTALL THERMOSTATICALLY CONTROLLED MIXING VALVES AS NEEDED TO ENSURE HOT WATER TEMPERATURE TO ALL HAND WASHING LOCATIONS DOES NOT EXCEED 110°F.
- ALL FLOOR DRAINS & HUB DRAINS SHALL BE PROVIDED WITH TRAP PRIMER EXCEPT FLOOR DRAINS IN TOILETS WHERE HOSE BIBS ARE PROVIDED.
- HOT WATER PIPING SHALL BE INSULATED WITH 1" THICK FIBROUS GLASS INSULATION. COLD WATER PIPING SHALL BE INSULATED WITH 1/2" FIBROUS GLASS INSULATION. VAPOR BARRIER SHALL BE APPLIED TO EACH.



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
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Cruse
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Associates, P.A.

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JOB NO. 24-31

SHEET NO.
P-1 OF 1

TO PANEL BY E.C.

STARTER, COMBINATION STARTER/DISCONNECT, AND DISCONNECTING MEANS, SUPPLIED BY E.C., INSTALLED BY E.C.

TO MECHANICAL DEVICE, BY M.C.

ALL STARTERS, COMBINATION STARTER/DISCONNECT AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

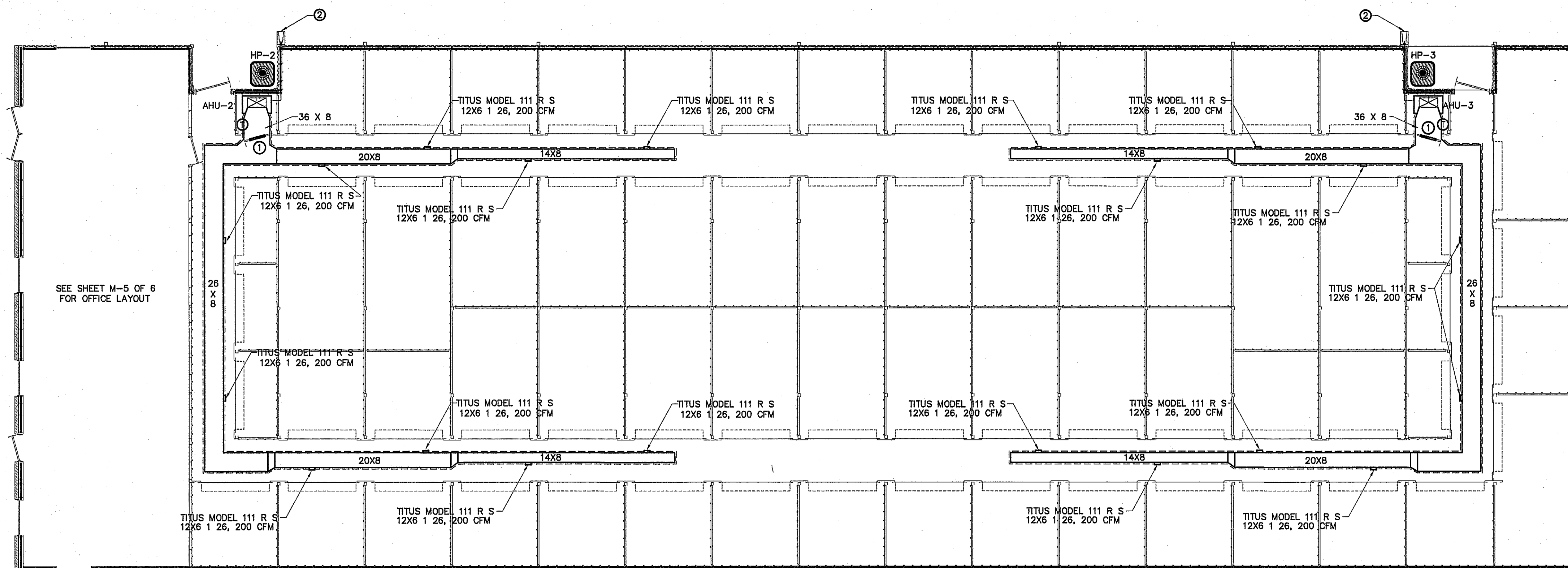
- 1 RUN ALL DUCTWORK TIGHT TO CEILING INSULATION.
- 2 FASTEN ALL CONDENSATE LINES TO WALLS OR CEILINGS WHERE APPLICABLE.
- 3 7-DAY PROGRAMMABLE T'STAT WITH LOCKING COVER.
- 4 PROVIDE AND INSTALL CONCRETE SPLASH BLOCK, ONE PER 3 HEAT PUMPS MIN.
- 5 INSTALL FLOAT SWITCH IN AUXILIARY PAN TO STOP UNIT IN EVENT OF CONDENSATE OVERFLOW.

NOTE:
VERIFY THERMOSTAT LOCATION WITH OWNER PRIOR TO
INSTALLING.

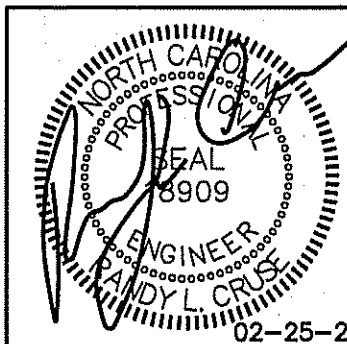
MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES
FOR ALL HVAC EQUIPMENT.

SINGLE LINE	DOUBLE LINE	DESCRIPTION	SINGLE LINE	DOUBLE LINE	DESCRIPTION	SINGLE LINE	DOUBLE LINE	DESCRIPTION			
		TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK			VOLUME CONTROL DAMPER (TYP)			SUPPLY AIR CEILING DIFFUSER, ARROW INDICATES DIRECTION OF BLOW & ACTIVE DIFFUSER SIDES			ELECT. DUCT INSERT HEATER WITH CONTROL PANEL
		BRANCH TAKEOFF FROM MAIN TRUNK DUCT WITH EXT. INSUL. DUCTWORK			CEILING DIFFUSER FLEXIBLE DUCTWORK (14' MAX.)			(1) CUSHION HEAD @ BRANCH OR DIFFUSER RUNOUT (2) CUSHION HEAD IS EQUAL TO 1-1/2 WIDTH OF THE BRANCH DUCT OR DIFFUSER RUNOUT			AHU W/FLEXIBLE CONNECTION AT SUPPLY AND RETURN DUCT
		END CAP			F.D. (1-1/2) F.D.=FIRE DAMPER (1-1/2)=RATED FOR 1-1/2 HRS.			R.A. OR EXHAUST DUCT TURNS DOWN @ 90 DEGS.			KEY NOTE
		DUCT SMOKE DETECTOR			RETURN AIR OR EXHAUST GRILLE			MANUAL VOLUME CONTROL DAMPER W/ QUADRANT LOCKING DEVICE			CFM-DIFFUSER, REGISTER OR GRILLE (SEE SCHEDULE)
		ACCESS DOOR DOOR SIZE DUCT HEIGHT 8X8 10" 10X10 12" 12X12 14" & LARGER			TWO SIDED TRANSITION			TWO SIDED TRANSITION			EXHAUST FAN

① 16" X 16" TRANSFER GRILL INSTALLED IN DOOR (TYPICAL)
② 3/4" CONDENSATE LINE FROM EACH AHU TO SPLASH BLOCKS

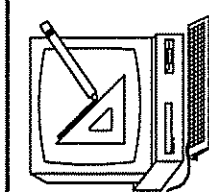


SCALE: 1/8" = 1'-0"



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	



114 E. Edgerton St.
Dunn, North Carolina 28334
PH: (910) 892-4429

**Cruse
And
Associates, P.A.**

LICENSE NO: C-1591

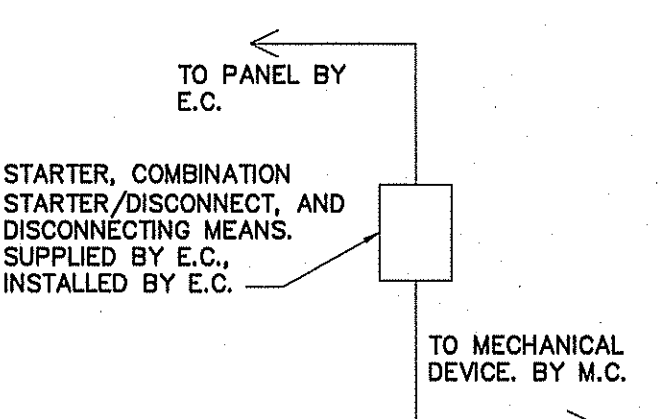
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SHEET NO.
M-1 OF 5

CONNECTION SCHEDULE



ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

NOTE:
VERIFY THERMOSTAT LOCATION WITH OWNER PRIOR TO INSTALLING.

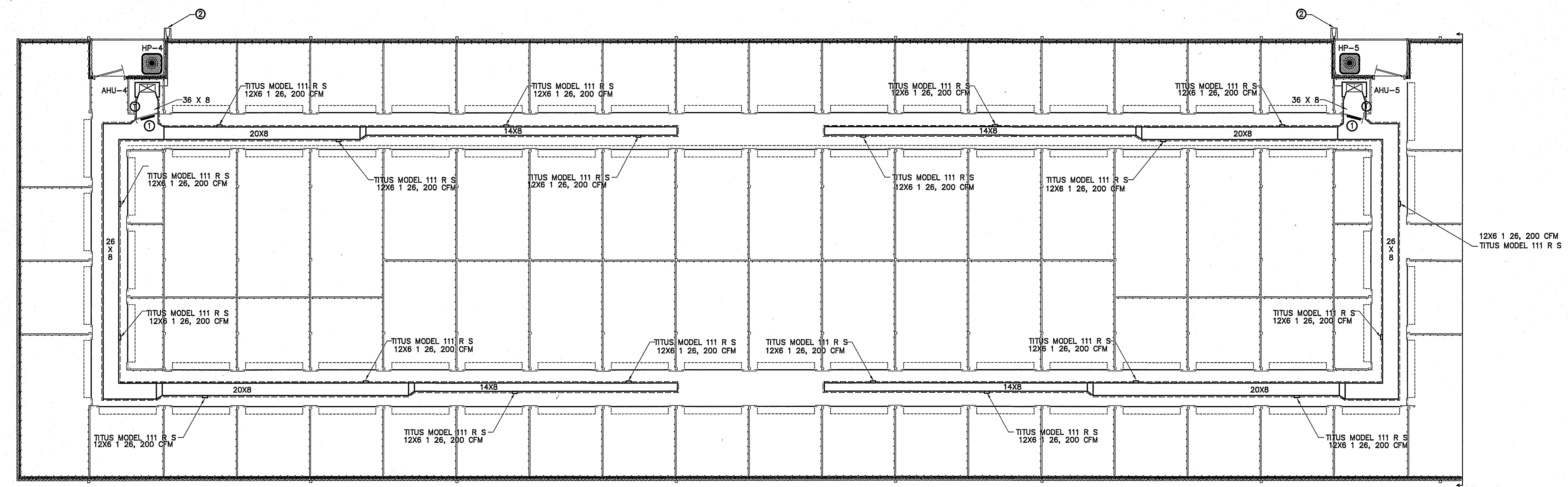
GENERAL NOTE:
MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES FOR ALL HVAC EQUIPMENT.

- GENERAL NOTES:
- 1 RUN ALL DUCTWORK TIGHT TO CEILING INSULATION.
 - 2 FASTEN ALL CONDENSATE LINES TO WALLS OR CEILINGS WHERE APPLICABLE.
 - 3 7-DAY PROGRAMMABLE T'STAT WITH LOCKING COVER.
 - 4 PROVIDE AND INSTALL CONCRETE SPLASH BLOCK, ONE PER 3 HEAT PUMPS MIN.
 - 5 INSTALL FLOAT SWITCH IN AUXILIARY PAN TO STOP UNIT IN EVENT OF CONDENSATE OVERFLOW.

MECHANICAL SYMBOL LEGEND

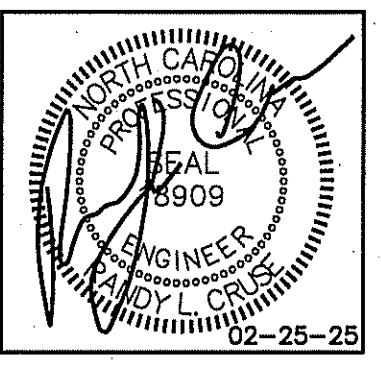
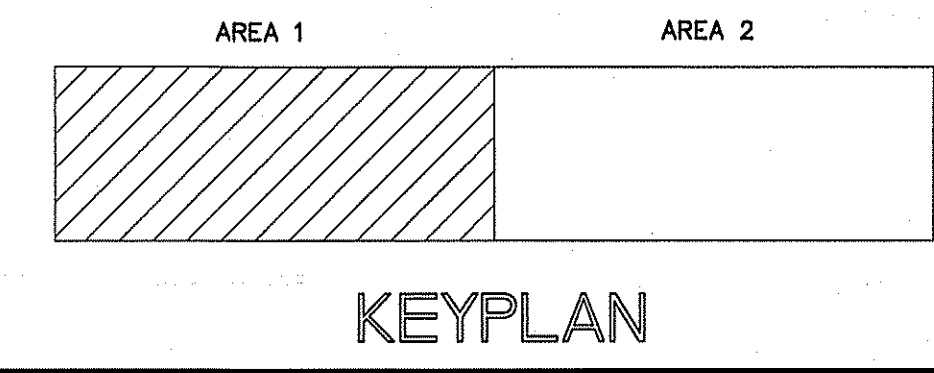
SINGLE LINE	DOUBLE LINE	DESCRIPTION	SINGLE LINE	DOUBLE LINE	DESCRIPTION	SINGLE LINE	DOUBLE LINE	DESCRIPTION											
		TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK			VOLUME CONTROL DAMPER (TYP) CEILING DIFFUSER FLEXIBLE DUCTWORK (14' MAX.)			SUPPLY AIR CEILING DIFFUSER, ARROW INDICATES DIRECTION OF BLOW & ACTIVE DIFFUSER SIDES			ELECT. DUCT INSERT HEATER WITH CONTROL PANEL								
		BRANCH TAKEOFF FROM MAIN TRUNK DUCT WITH EXT. INSUL. DUCTWORK			ONE SIDED REDUCING TRANSITION			(1) CUSHION HEAD @ BRANCH OR DIFFUSER RUNOUT (2) CUSHION HEAD IS EQUAL TO 1-1/2 WIDTH OF THE BRANCH DUCT OR DIFFUSER RUNOUT			AHU W/FLEXIBLE CONNECTION AT SUPPLY AND RETURN DUCT								
		END CAP			F.D. (1-1/2) F.D.=FIRE DAMPER (1-1/2)=RATED FOR 1-1/2 HRS.			R.A. OR EXHAUST DUCT TURNS DOWN @ 90 DEGS.			KEY NOTE								
		DUCT SMOKE DETECTOR			RETURN AIR OR EXHAUST GRILLE			MANUAL VOLUME CONTROL DAMPER W/ QUADRANT LOCKING DEVICE			MARK CFM-DIFFUSER, REGISTER OR GRILLE (SEE SCHEDULE)								
		ACCESS DOOR <table border="1"><tr><th>DOOR SIZE</th><th>DUCT HEIGHT</th></tr><tr><td>8X8</td><td>10"</td></tr><tr><td>10X10</td><td>12"</td></tr><tr><td>12X12</td><td>14" & LARGER</td></tr></table>	DOOR SIZE	DUCT HEIGHT	8X8	10"	10X10	12"	12X12	14" & LARGER			TWO SIDED TRANSITION			TWO SIDED TRANSITION			EXHAUST FAN
DOOR SIZE	DUCT HEIGHT																		
8X8	10"																		
10X10	12"																		
12X12	14" & LARGER																		

- KEY NOTES:
- 1 16" X 16" TRANSFER GRILL INSTALLED IN DOOR (TYPICAL)
 - 2 3/4" CONDENSATE LINE FROM EACH AHU TO SPLASH BLOCKS
 - 3 PROVIDE CONDENSATE PUMP IF GRAVITY DRAIN IS NOT AVAILABLE. COORDINATE ELECTRICAL REQUIREMENTS WITH E.C. AS APPLICABLE.



MECHANICAL HVAC PLAN BUILDING "2"
SCALE: 1/8" = 1'-0"

LEGEND
----- 3 HOUR RATED WALL
U419



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

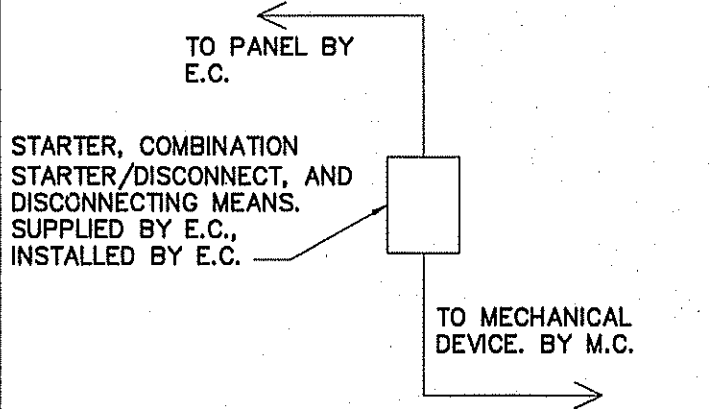
REVISIONS	
NO.	DATE
1.	03/11/2025

Cruise And Associates, P.A.
114 E. Johnston St.
Raleigh, NC 27601
TEL: (919) 882-4499
FAX: (919) 882-5162
LICENSE NO.: C-1721

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DATE 02-25-25
DRAWN BY BAM
JOB NO. 24-31
SHEET NO. M-2 OF 5

CONNECTION SCHEDULE



ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

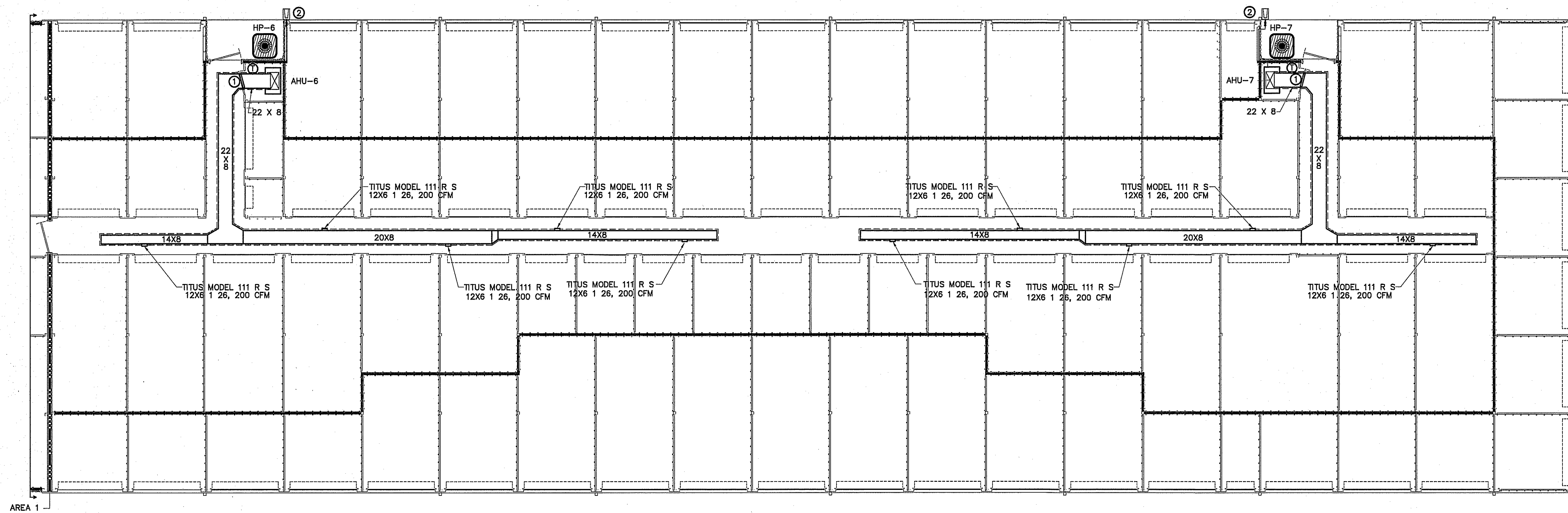
NOTE:
VERIFY THERMOSTAT LOCATION WITH OWNER PRIOR TO INSTALLING.

GENERAL NOTE:
MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES FOR ALL HVAC EQUIPMENT.

- GENERAL NOTES:
- 1 RUN ALL DUCTWORK TIGHT TO CEILING INSULATION.
 - 2 FASTEN ALL CONDENSATE LINES TO WALLS OR CEILINGS WHERE APPLICABLE.
 - 3 7-DAY PROGRAMMABLE T'STAT WITH LOCKING COVER.
 - 4 PROVIDE AND INSTALL CONCRETE SPLASH BLOCK, ONE PER 3 HEAT PUMPS MIN.
 - 5 INSTALL FLOAT SWITCH IN AUXILIARY PAN TO STOP UNIT IN EVENT OF CONDENSATE OVERFLOW.

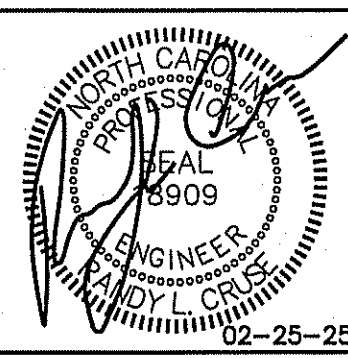
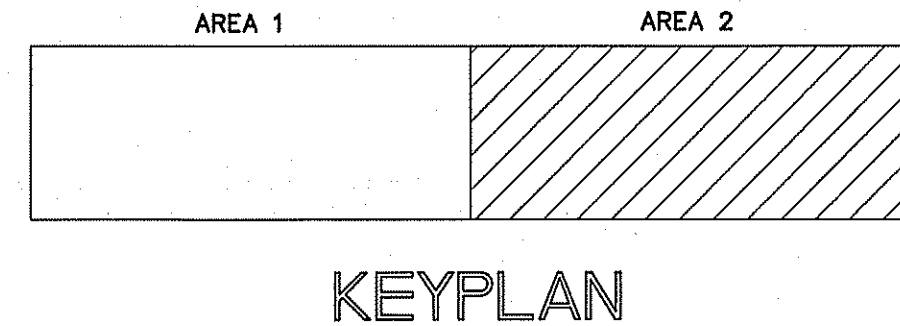
MECHANICAL SYMBOL LEGEND											
SINGLE LINE	DOUBLE LINE	DESCRIPTION		SINGLE LINE	DOUBLE LINE	DESCRIPTION		SINGLE LINE	DOUBLE LINE	DESCRIPTION	
		TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK				CEILING DIFFUSER				FLEXIBLE DUCTWORK (14' MAX.)	
		BRANCH TAKEOFF FROM MAIN TRUNK DUCT WITH EXT. INSUL. DUCTWORK				ONE SIDED REDUCING TRANSITION				(1) CUSHION HEAD @ BRANCH OR DIFFUSER RUNOUT (2) CUSHION HEAD IS EQUAL TO 1-1/2" WIDTH OF THE BRANCH DUCT OR DIFFUSER RUNOUT	
		END CAP				F.D.=FIRE DAMPER (1-1/2)=RATED FOR 1-1/2 HRS.				R.A. OR EXHAUST DUCT TURNS DOWN @ 90 DEGS.	
		DUCT SMOKE DETECTOR				RETURN AIR OR EXHAUST GRILLE				MANUAL VOLUME CONTROL DAMPER W/ QUADRANT LOCKING DEVICE	
		ACCESS DOOR				TWO SIDED TRANSITION				EXHAUST FAN	
		DOOR SIZE DUCT HEIGHT									
		8X8 10"									
		10X10 12"									
		12X12 14" & LARGER									

- KEY NOTES:
- 1 16" X 16" TRANSFER GRILL INSTALLED IN DOOR (TYPICAL)
 - 2 3/4" CONDENSATE LINE FROM EACH UNIT TO SPLASH BLOCKS
 - 3 PROVIDE CONDENSATE PUMP IF GRAVITY DRAIN IS NOT AVAILABLE. COORDINATE ELECTRICAL REQUIREMENTS WITH E.C. AS APPLICABLE.



MECHANICAL HVAC PLAN BUILDING "2"
SCALE: 1/8" = 1'-0"

LEGEND
3 HOUR RATED WALL
U419



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	
1.	03/11/2025

Cruse
And
Associates, P.A.

444 E. Kingston St.
Raleigh, NC 27601
TEL: (919) 882-4429
FAX: (919) 882-5102

LICENSE NO.: C-1721

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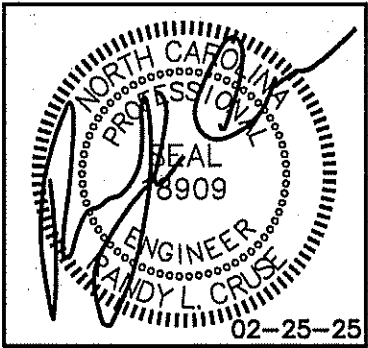
DATE 02-25-25
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JOB NO. 24-31
SHEET NO. M-3 OF 5

MECHANICAL SYMBOL LEGEND												
SINGLE LINE		DOUBLE LINE		DESCRIPTION		SINGLE LINE		DOUBLE LINE		DESCRIPTION		
	-		TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK			-		VOLUME CONTROL DAMPER (TYP)			CEILING DIFFUSER	
											FLEXIBLE DUCTWORK (14' MAX.)	
	-		BRANCH TAKEOFF FROM MAIN TRUNK DUCT WITH EXT. INSUL. DUCTWORK			-		ONE SIDED REDUCING TRANSITION			(1) CUSHION HEAD @ BRANCH OR DIFFUSER RUNOUT	
											(2) CUSHION HEAD IS EQUAL TO 1-1/2 WIDTH OF THE BRANCH DUCT OR DIFFUSER RUNOUT	
	-		END CAP			-		F.D.=FIRE DAMPER (1-1/2)=RATED FOR 1-1/2 HRS.			R.A. OR EXHAUST DUCT TURNS DOWN @ 90 DEGS.	
	-		DUCT SMOKE DETECTOR			-		RETURN AIR OR EXHAUST GRILLE			MANUAL VOLUME CONTROL DAMPER W/ QUADRANT LOCKING DEVICE	
	-		ACCESS DOOR			-		TWO SIDED TRANSITION			TWO SIDED TRANSITION	
			DOOR SIZE DUCT HEIGHT									
			8X8 10"									
			10X10 12"									
			12X12 14" & LARGER									

NOTE:
VERIFY THERMOSTAT LOCATION WITH OWNER PRIOR TO
INSTALLING. FILTER ALL OUTSIDE AIR.

GENERAL NOTE
MAINTAIN MANUFACTURER'S REQUIRED CLEARANCES
FOR ALL HVAC EQUIPMENT.

OUTSIDE AIR REQUIREMENTS
OFFICE - 0.06 CFM/SF X 1200 SF = 72 CFM
12 PEOPLE X 5 CFM/PERSON = 60 CFM
132 CFM FOR OFFICE AHU-1.

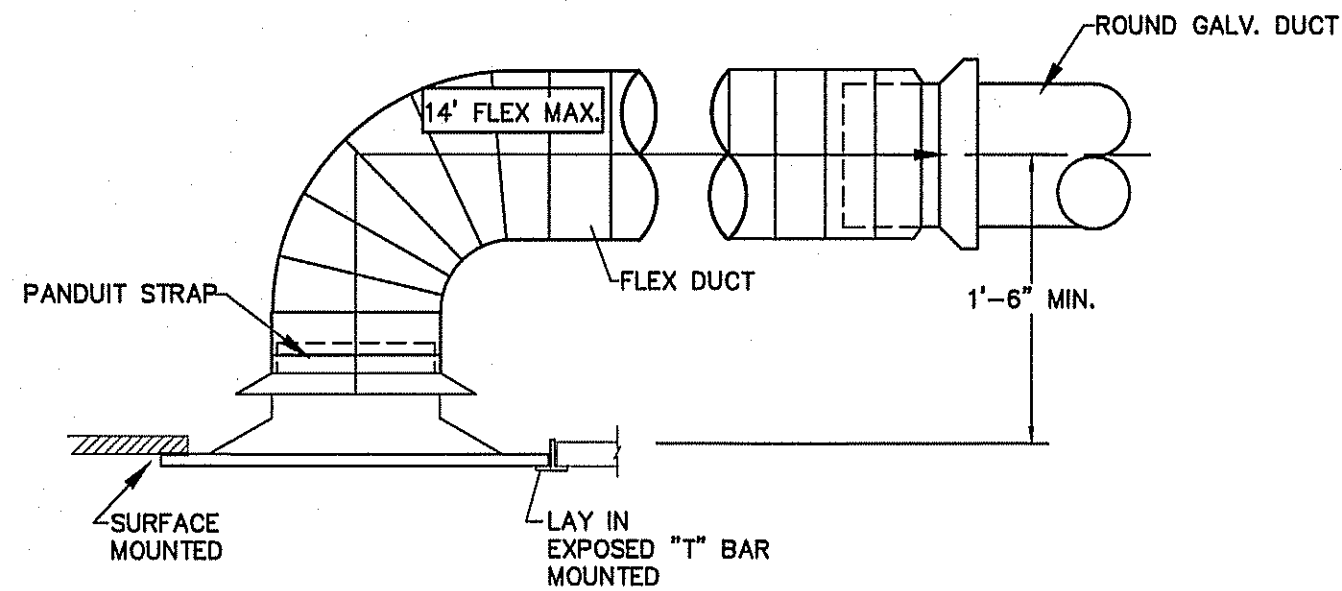


REGISTER, GRILLE, & DIFFUSER SCHEDULE*									
MARK	DESCRIPTION	MAX. NC	NECK	BORDER TYPE	MATERIAL	FINISH	MANUFACTURER	MODEL NUMBER	ACCESSORIES / NOTES
A	DIFFUSER-4-WAY	30	6"X6"	LAY-IN	STEEL	WHITE	TITUS	TDC 6X6 3 26 4	SQ-TO-RND
B	DIFFUSER-2-WAY	30	6"X6"	LAY-IN	STEEL	WHITE	TITUS	TDC 6X6 3 26 2	SQ-TO-RND
R1	RETURN GRILLE	30	20"X20"	LAY-IN	STEEL	WHITE	TITUS	23RL 20X20 24X24 3 26	SQ-TO-RND

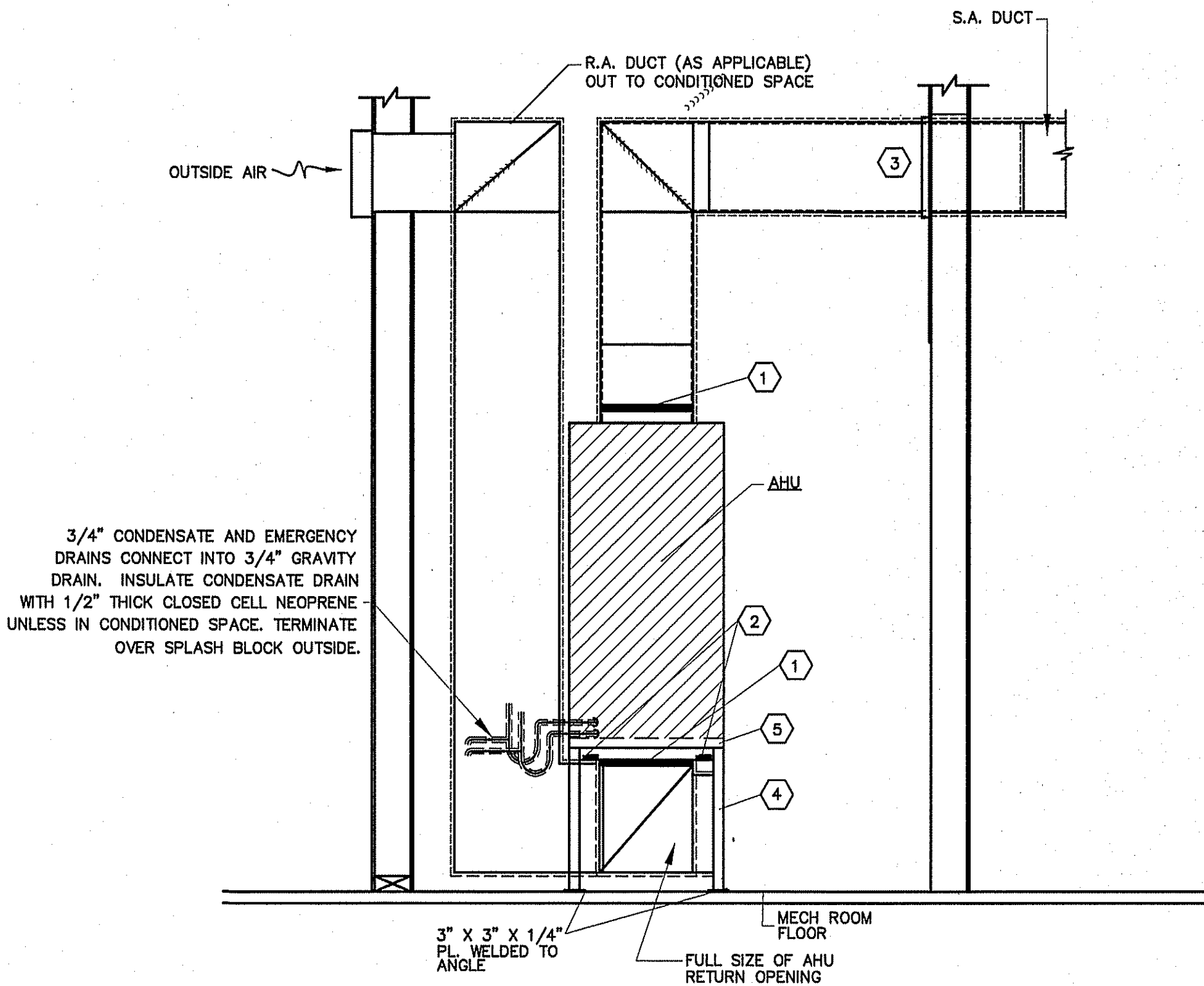
* VERIFY CEILING TYPE BEFORE ORDERING, NARROW TEE REQUIREMENTS, PLASTER FRAMES ETC. TO BE INCLUDED WITH DIFFUSERS AT NO ADDITIONAL COST TO OWNER

EXHAUST FAN SCHEDULE											
MARK	MAKE	MODEL	TYPE	CFM	EXTERNAL S.F. IN (W.G.)	AMPS	ELECTRICAL			NOTES	
							VOLT	PH	HZ		
EF-1,2	GREENHECK	SP-A90	CEILING FAN	70	.125	.34	115	1ø	60	WC-8 WALL CAP	

LOUVER SCHEDULE					
MARK	DESCRIPTION	SERVES	CFM	APPROXIMATE OUTSIDE DIMENSIONS (W X H)	MODEL
L1	OUTSIDE AIR LOUVER	VARIES	*	12"X12"	HART & COOLEY 1530ZF 12X12 W/ INSECT SCREEN



DIFFUSER DETAIL
NOT TO SCALE

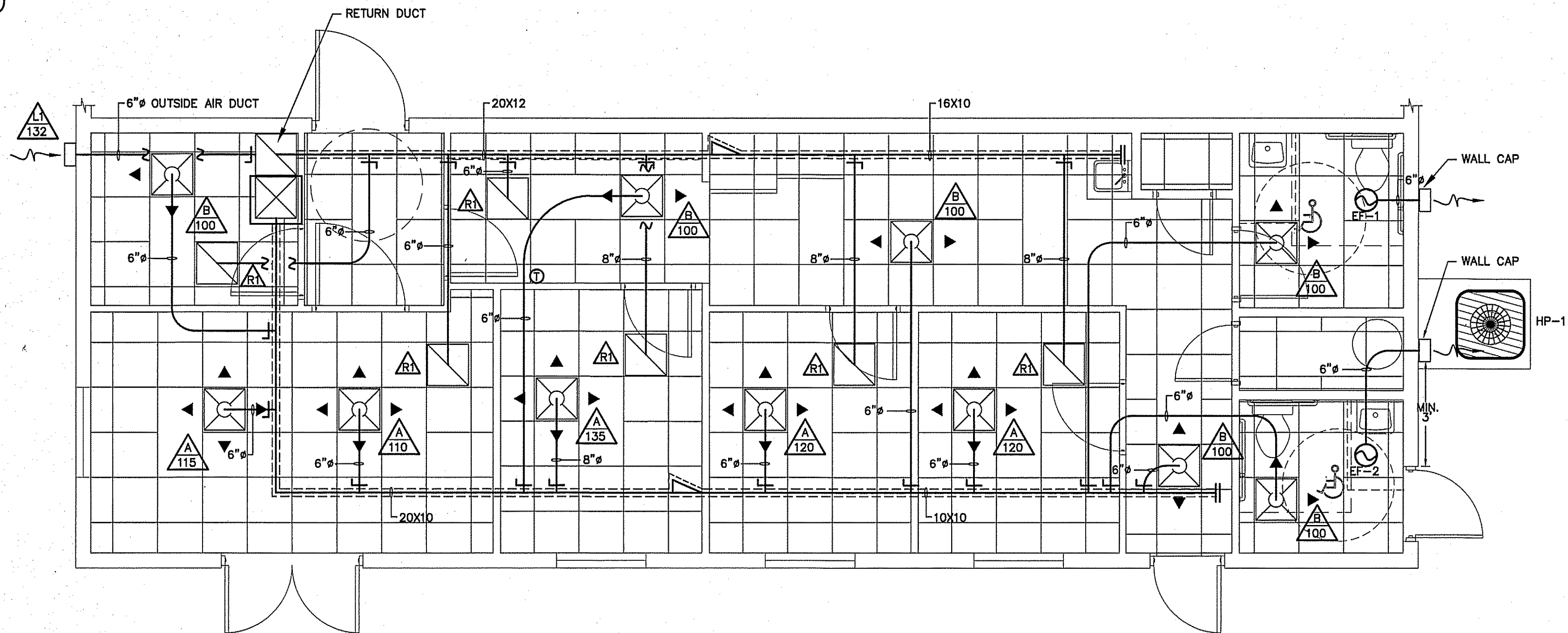


TYPICAL DETAIL-FLOOR MOUNTED AHU (OFFICE)
NOT TO SCALE

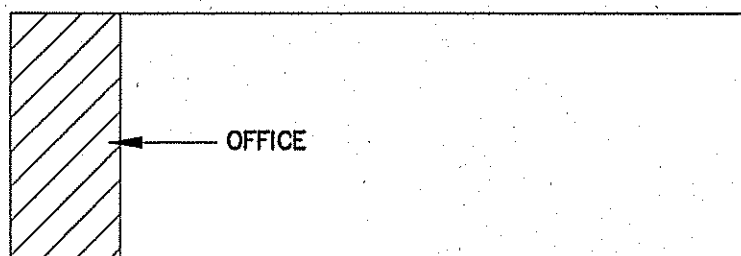
NOTES:

- FLEXIBLE CONNECTION
- NEOPRENE-IN-SHEAR VIBRATION ISOLATORS
- SHEET METAL COLLAR AT WALL PENETRATION
- 1-1/2" X 1-1/2" X 3/16" ANGLE AHU SUPPORT STAND WITH ALL WELDED CONSTRUCTION. PAINT WITH 1 COAT OF PRIMER AND FINISH WITH (2) COATS GRAY HIGH GLOSS MACHINE ENAMEL, MARTIN SENOUR OR EQUAL. PROVIDE PROGRAMMABLE THERMOSTAT FOR EACH SYSTEM.
- 1" PLEATED FILTER

GENERAL NOTE:
COORDINATE CEILING HEIGHT WITH TRUNK DUCT HEIGHT.
CEILING COULD REQUIRE LOWERING TO LESS THAN 8' IN
SOME AREAS.



HVAC MECHANICAL PLAN BUILDING "1" (OFFICE)
SCALE: 1/4" = 1'-0"



KEY PLAN
SCALE: NTS

PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	

414 E. Ragsdale St.
Fayetteville, NC 28304
TEL: (910) 882-4489
FAX: (910) 882-5182

Cruse And Associates, P.A.

LICENSE NO.: C-1721

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DATE 02-25-25
DRAWN BY BAM
JOB NO. 24-31

SHEET NO.
M-4 OF 5

AIR HANDLER UNIT																			SPLIT SYSTEM HEAT PUMP UNITS								
AHU NO.	MANUFACTURER	MODEL	VOLTAGE	E.S.P.	OUTSIDE AIR (CFM)	CFM	UNIT FLA	REF LINES		SEER	HTR KW (240)	COOLING CAPACITY (MBH)		HEATING CAPACITY (MBH)		HSPF	MIN. CIRC. AMPACITY	M.O.C.P.	MARK	MANUF.	MODEL	VOLTAGE	# COMP.	MIN. CIRC. AMPACITY	M.O.C.P.	UNIT FLA.	ACCESSORIES
								GAS	LIQ.			TOTAL	SENS.	HIGH	LOW												
AHU-6,7	TRANE	TEM4A0B31M31	240/1/60	.46	—	1000	32.0	3/4	3/8	14.3	7.68	28.4	22.4	27.2	18.5	8.5	43	45	HP-6,7	TRANE	4TWR5030N1000A	240/1/60	1	17	25	13.6	EXCLUDE 8,18
AHU-1	TRANE	TEM4A0B42S41	240/1/60	.46	N/A	1200	32.0	7/8	3/8	14.8	7.68	38.4	26.8	34.0	22.4	9.0	45	45	HP-1	TRANE	4TWR5036N1000A	240/1/60	1	18	30	14.8	EXCLUDE 8,18
AHU-2,3	TRANE	TEM4A0C61M51	240/1/60	.46	—	2000	32.0	1-1/8	3/8	14.5	7.68	56.8	42.8	54.9	36.2	8.5	48	50	HP-2,3	TRANE	4TWR5048N1000A	240/1/60	1	26	40	21.3	EXCLUDE 8,18
AHU-4,5	TRANE	TEM4A0C61M51	240/1/60	.46	—	2000	32.0	1-1/8	3/8	14.5	7.68	56.8	42.8	54.9	36.2	8.5	48	50	HP-4,5	TRANE	4TWR5060H1000A	240/1/60	1	32	50	26.5	EXCLUDE 8,18

** PROVIDE OUTDOOR THERMOSTAT TO LOCK OUT SUPPLEMENTAL ELECTRIC HEAT AT OUTDOOR TEMPERATURES ABOVE 40°.

GENERAL NOTE:

ELECTRICAL & MECHANICAL CONTRACTORS TO COORDINATE & VERIFY ALL EQUIPMENT REQUIREMENTS BEFORE ORDERING EQUIPMENT.

ACCESSORIES

- 1 TIME-DELAY RELAY
- 2 CYCLE PROTECTOR
- 3 EVAPORATOR FREEZE PROTECTOR
- 4 ISOLATION RELAY
- 5 TXV
- 6 HIGH PRESSURE SWITCH

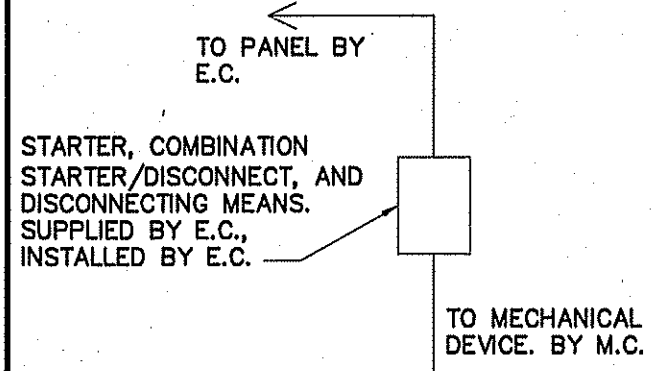
- 7 LIQUID SOLENOID VALVE
- 8 LOW-AMBIENT CONTROLLER
- 9 FILTER DRIER (LIQUID LINE)
- 10 OUTDOOR T-STAT TO LOCK OUT AUX. HT. (SET @ 40° F ADJ)
- 11 LOW PRESSURE CONTROL
- 12 CRANKCASE HEATER

- 13 DISCHARGE LINE MUFFLER
- 14 SUCTION AND LIQUID LINE SHUT OFF VALVES
- 15 THERMOSTAT (SEE NOTE)
- 16 SUPPORT FEET
- 17 COIL GUARDS
- 18 HUMIDISTAT

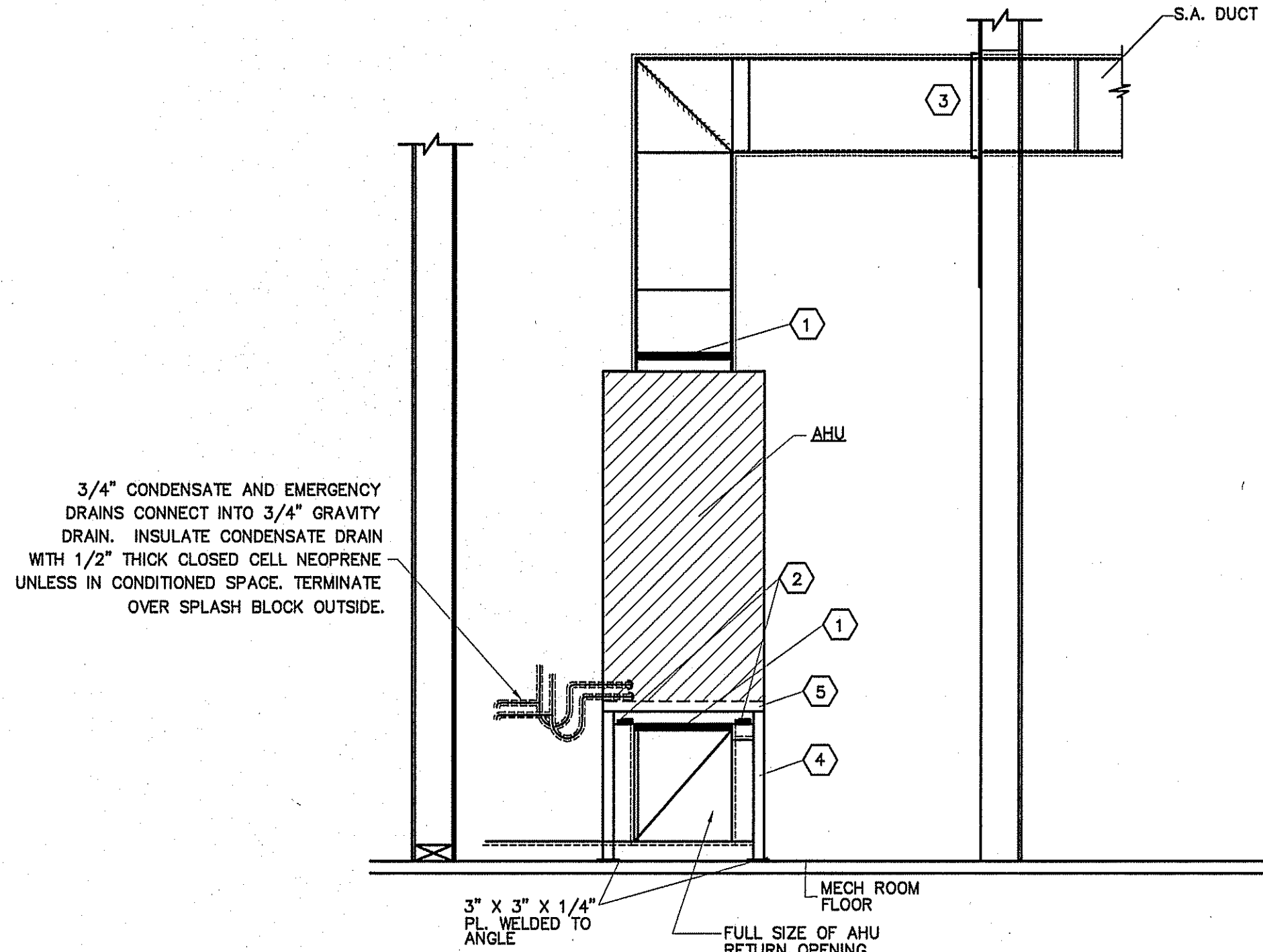
COOLING CAPACITY @ 80 DEG. F DB/67 DEG WB AIR ENTERING INDOOR UNIT & 95 DEG. F DB AIR ENTERING OUTDOOR UNIT
HEATING CAPACITY: HIGH TEMP = 70 DEG F DB INDOOR EAT & 47 DEG F DB/43 DEG F WB AIR ENTERING OUTDOOR UNIT
LOW TEMP = 70 DEG F DB INDOOR EAT & 17 DEG F DB/15 DEG F WB ENTERING OUTDOOR UNIT

T-STAT: THE NUMBER OF STAGES OF HEATING/COOLING SHALL MATCH THE NUMBER OF STAGES OF HEAT AVAILABLE IN THE HPU OR THE NUMBER OF STAGES OF COOLING AVAILABLE IN THE HPOU. PROVIDE WITH T-STAT; 7 DAY PROGRAMMABLE, DIGITAL.

CONNECTION SCHEDULE



ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.



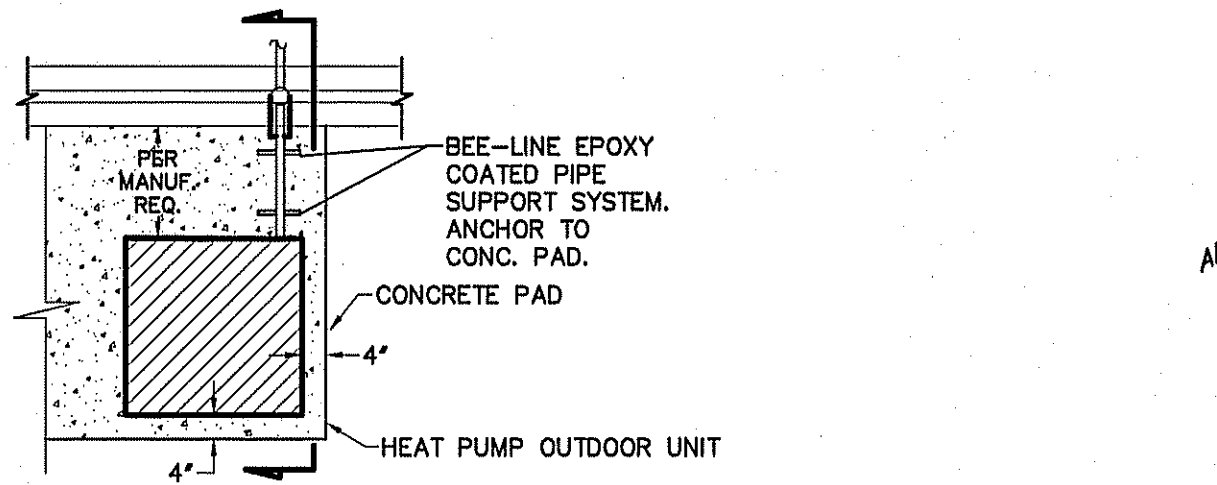
TYPICAL DETAIL - FLOOR MOUNTED AHU (STORAGE UNITS)

NOT TO SCALE

NOTES:

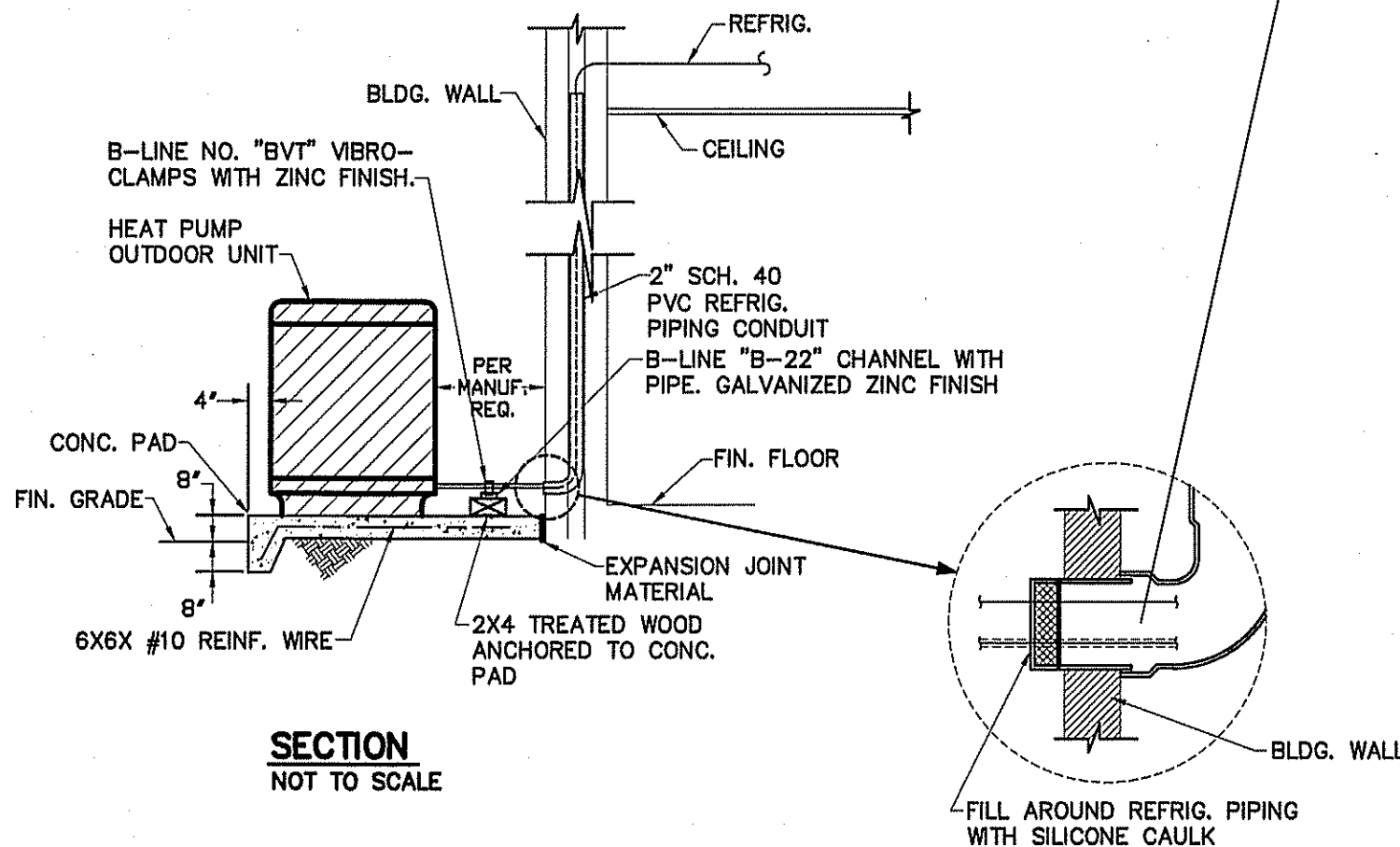
- 1 FLEXIBLE CONNECTION
- 2 NEOPRENE-IN-SHEAR VIBRATION ISOLATORS
- 3 SHEET METAL COLLAR AT WALL PENETRATION
- 4 1-1/2" X 1-1/2" X 3/16" ANGLE AHU SUPPORT STAND WITH ALL WELDED CONSTRUCTION. PAINT WITH 1 COAT OF PRIMER AND FINISH WITH (2) COATS GRAY HIGH GLOSS MACHINE ENAMEL, MARTIN SENOUR OR EQUAL.
- 5 1" PLEATED FILTER

PROVIDE PROGRAMMABLE THERMOSTAT FOR EACH SYSTEM.



PLAN VIEW

NOT TO SCALE

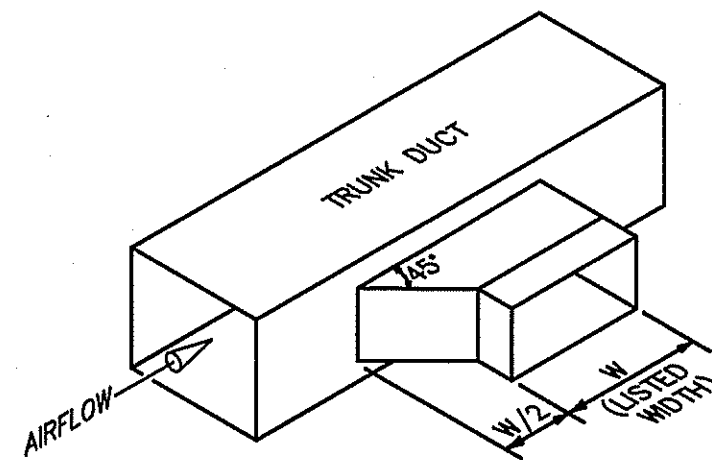


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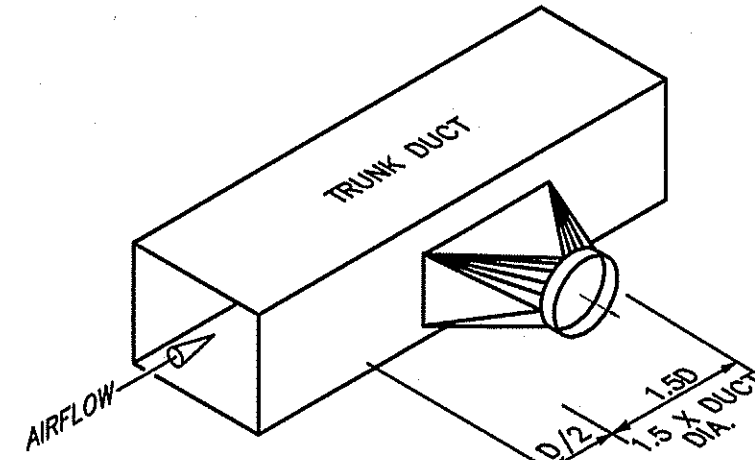
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DETAIL-TYPICAL HEAT PUMP OUTDOOR UNIT

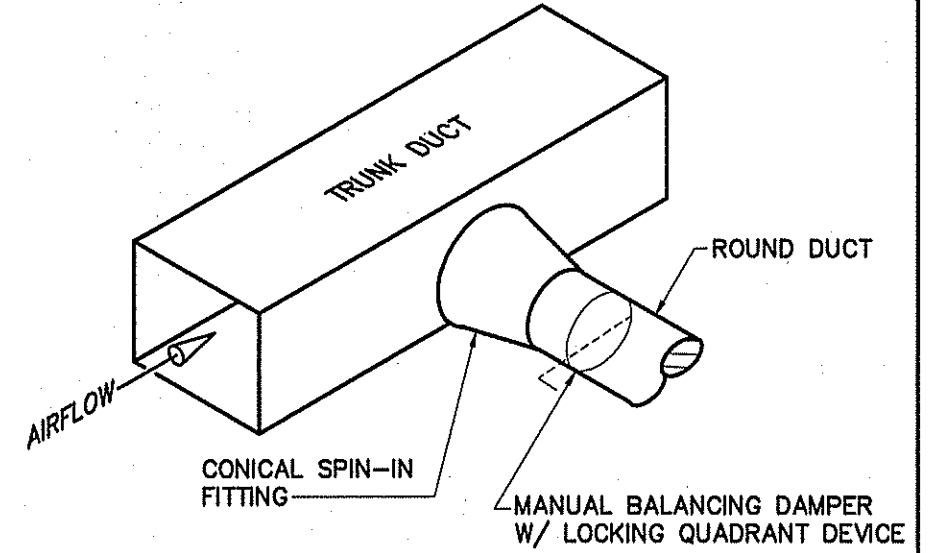
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RECTANGULAR



ROUND



DIFFUSER

TYPICAL LATERAL TO REGISTER OR BRANCH DUCT

NOT TO SCALE

"OFFICE" MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT THERMAL ZONE 4A - HARNETT COUNTY, NC EXTERIOR DESIGN CONDITIONS

WINTER DRY BULB 22 DEG. F.
SUMMER DRY BULB 96 DEG. F.

INTERIOR DESIGN CONDITIONS

WINTER DRY BULB 70 DEG. F.
SUMMER DRY BULB 75 DEG. F.

RELATIVE HUMIDITY 55%

BUILDING HEATING LOAD 26 MBH

BUILDING COOLING LOAD 3 TONS

MECHANICAL SPACE CONDITIONING SYSTEM

UNITARY DESCRIPTION OF UNIT - HEAT PUMP
HEATING EFFICIENCY - 9.0 HSPF
COOLING EFFICIENCY - 14.8 SEER
SIZE CATEGORY OF UNIT - ≤ 65,000 BTUH

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

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

LIST EQUIPMENT EFFICIENCIES SEE SCHEDULE

BUILDING "1" MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT THERMAL ZONE 4A - HARNETT COUNTY, NC EXTERIOR DESIGN CONDITIONS

WINTER DRY BULB 22 DEG. F.
SUMMER DRY BULB 96 DEG. F.

INTERIOR DESIGN CONDITIONS

WINTER DRY BULB 59 DEG. F.
SUMMER DRY BULB 80 DEG. F.

RELATIVE HUMIDITY 55%

BUILDING HEATING LOAD 64 MBH

BUILDING COOLING LOAD 8.0 TONS

MECHANICAL SPACE CONDITIONING SYSTEM

UNITARY DESCRIPTION OF UNIT - HEAT PUMP
HEATING EFFICIENCY - 8.5 HSPF
COOLING EFFICIENCY - 14.5 SEER
SIZE CATEGORY OF UNIT - ≤ 65,000 BTUH

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

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

LIST EQUIPMENT EFFICIENCIES SEE SCHEDULE

BUILDING "2" MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT THERMAL ZONE 4A - HARNETT COUNTY, NC EXTERIOR DESIGN CONDITIONS

WINTER DRY BULB 22 DEG. F.
SUMMER DRY BULB 96 DEG. F.

INTERIOR DESIGN CONDITIONS

WINTER DRY BULB 59 DEG. F.
SUMMER DRY BULB 80 DEG. F.

RELATIVE HUMIDITY 55%

BUILDING HEATING LOAD 142 MBH

BUILDING COOLING LOAD 15.0 TONS

MECHANICAL SPACE CONDITIONING SYSTEM

UNITARY DESCRIPTION OF UNIT - HEAT PUMP
HEATING EFFICIENCY - 8.5 HSPF
COOLING EFFICIENCY - 15.0 SEER
SIZE CATEGORY OF UNIT - ≤ 65,000 BTUH

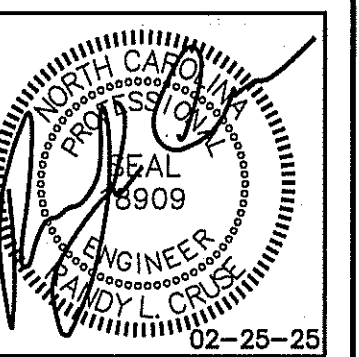
BOILER SIZE CATEGORY. IF OVERSIZED, STATE REASON: N/A

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

LIST EQUIPMENT EFFICIENCIES SEE SCHEDULE

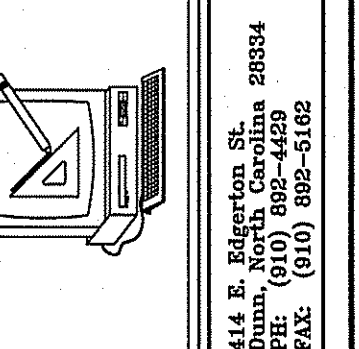
MECHANICAL NOTES (GENERAL)

1. DUCTWORK LAYOUTS ARE SCHEMATIC. ALL RISES, DROPS, OFFSETS, AND TRANSITIONS REQUIRED BUT ARE NOT SHOWN SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
2. DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW VELOCITY DUCTWORK. DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. FLEXIBLE RUNOUTS SHALL NOT EXCEED 15' AND SHALL NOT BE USED TO FORM ELBOWS. CONNECTIONS FROM RECTANGULAR TO ROUND DUCT SHALL BE MADE WITH MANUFACTURED 45 DEG. LATERAL TAPS.
3. ALL DUCTWORK SHALL BE SEALED AIR TIGHT WITH SEALING COMPOUND.
4. ALL ELBOWS IN DUCTWORK SHALL BE RADIUS ELBOWS, UNLESS NOTED OTHERWISE. WHERE SQUARE ELBOWS ARE SHOWN, INSTALL TURNING VANES. DUCT SIZES SHOWN ARE NET INTERIOR DIMENSIONS.
5. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES PRIOR TO INSTALLATION OF ANY OF HIS PIPING, DUCTWORK, OR EQUIPMENT.
6. THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION OF THE MECHANICAL SYSTEMS AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.
7. IT WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO ENSURE THAT ITEMS TO BE FURNISHED UNDER HIS CONTRACT WILL FIT THE SPACE AVAILABLE. HE SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE AND INTENT MEANING OF THE PLANS AND SPECIFICATIONS. HE SHALL PROVIDE THE ENGINEER SCALED DRAWINGS OF ALL MECHANICAL DRAWINGS.
8. ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED TO PROVIDE MAXIMUM SPACE FOR MAINTENANCE AND SERVICE.
9. PROVIDE FACTORY OR FIELD INSTALLED DRAIN PANS UNDER ALL COOLING COIL UNITS. INSTALL DRAIN PAN FLOAT TO SHUT DOWN UNIT FAN IN EVENT THAT CONDENSATE BEGINS TO FILL EMERGENCY DRAIN PAN. RUN ALL CONDENSATE DRAIN LINES TO APPROPRIATE DRAIN.



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	

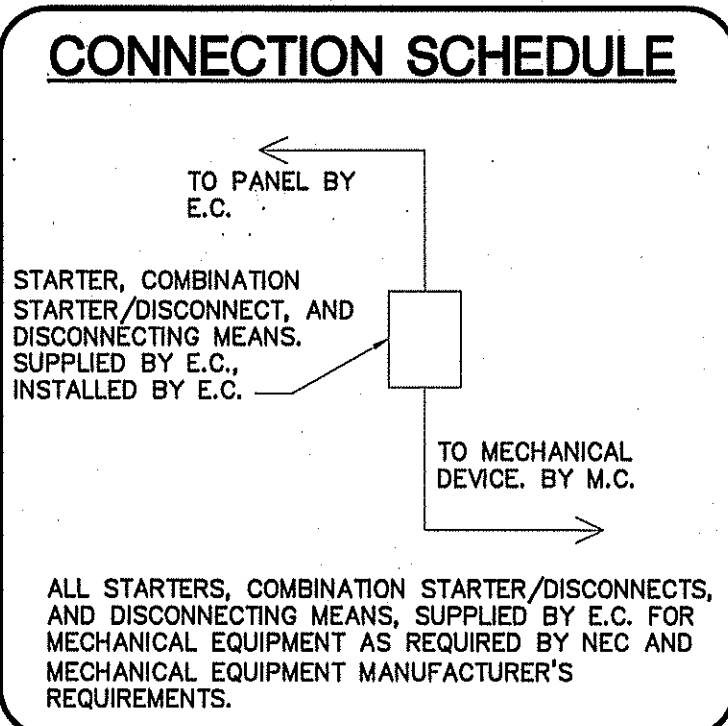


Cruse and Associates, P.A.
1115 E. Main St., Suite 200
Holly Springs, NC 27534
TEL: (919) 982-4429
FAX: (919) 982-3122
LICENSE NO.: C-1721

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DATE 02-25-25
DRAWN BY BAM
JOB NO. 24-31

SHEET NO.
M-5 OF 5



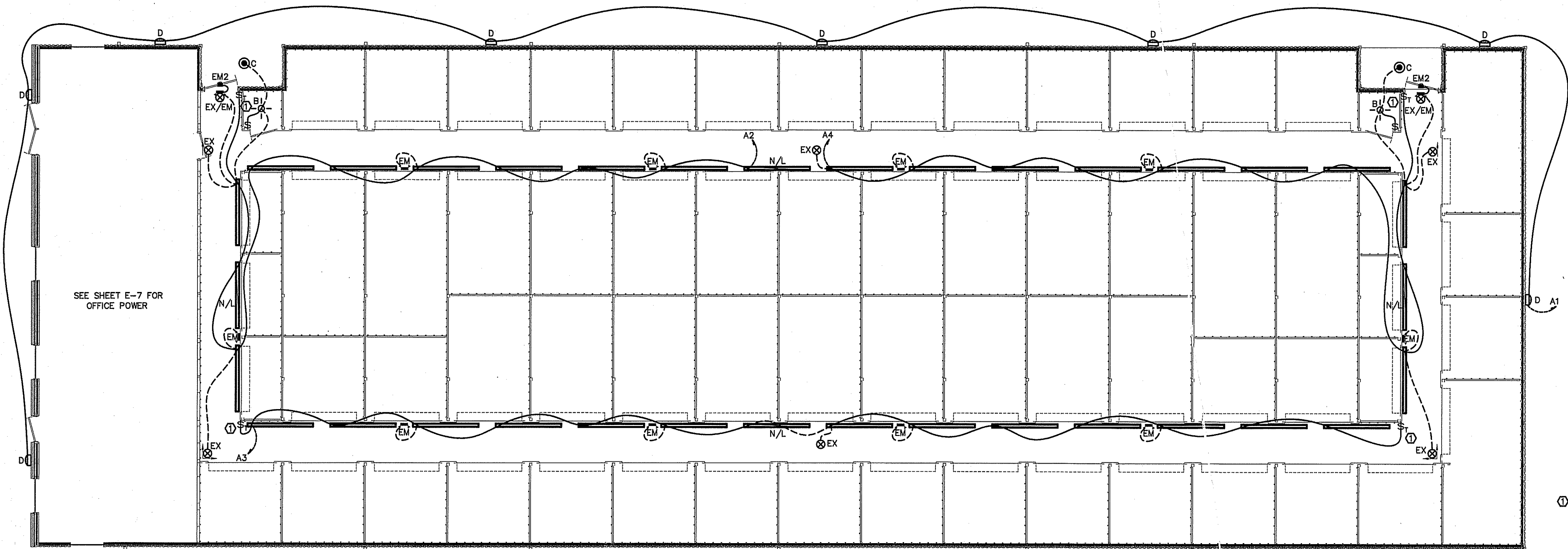
LIGHT FIXTURE SCHEDULE						
MARK	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMPS	BALLASTS	WATTAGE
A	8' LED STRIP W/WIRE GUARD	DAYBRITE	CLX L96 10000LM SEF WD MVOLT 40K 80 CRI WH	LED		71.0
B	KEYLESS FIXTURE WITH WIREGUARD AND LED LAMP	-	-	LED A19	-	13
C	3" LED RECESSED DOWNLIGHT	ACULUX	AX3 D G4 12LM 35K 80CRI 50D GZ1 120 ICAT 30P CS SF WET	LED		11.0
D	LED WALL PACKS	LITHONIA	TWR1 LED 3 50K MVOLT ON TIMER	18 LEDS	LED	58.4
EM	EMERGENCY LIGHT WITH BATTERY BACKUP	MCPHILBEN	CAXR6L24W6			
EX	LED TYPE EXIT LIGHT WITH BATTERY BACKUP	MCPHILBEN	CXXL3RW			
EM2	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)	MCPHILBEN	CR2CSWA			

1. ALL FIXTURE SELECTIONS TO BE VERIFIED BY OWNER BEFORE PURCHASE.
2. SIGN LETTERING TO BE ON TIMECLOCK OR PHOTOCELL.
3. LED WALLPACKS ON PHOTOCELL.

LIGHTING DATA FOR N.C. ENERGY CODE (BUILDING "1")					
AREA USE	AREA FT ²	WATTS PER FT ² ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER
STORAGE	9,600	0.63	11,520	2,440	9,080
OFFICE	1,200	1.3	1,560	552	1,008
TOTAL	10,800		13,080	2,992	10,088

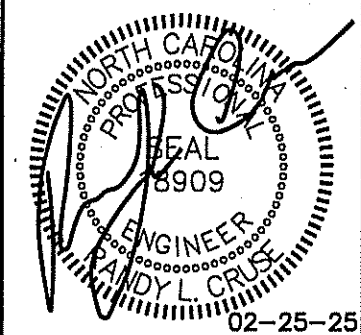
- NOTE:**
1. VERIFY LOCATION OF LIGHTS & RECEPTACLES WITH OWNER BEFORE CONSTRUCTION.
 2. COORDINATE LOCATION OF 8' STRIP LIGHTS IN CORRIDOR WITH DUCT WORK WHERE APPLICABLE.
 3. ALL LIGHT FIXTURES IN CORRIDORS TO BE MOUNTED ON THE WALLS WHERE APPLICABLE.
 4. ALL CORRIDOR LIGHTS TO BE SWITCHED BY MOTION SENSORS OR TIMERS LOCATED AS SHOWN. PROVIDE 30 MINUTE RUN TIME SETTING AND NO HOLD CAPABILITY. VERIFY WHICH TYPE OF DEVICE AND ITS CAPABILITIES WITH THE OWNER BEFORE ORDERING EQUIPMENT.

ELECTRICAL LEGEND	
MARK	DESCRIPTION
⊕	QUAD RECEPTACLE
⊕	DUPLEX RECEPTACLE
⊕	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
⊕	HIGH WALL MOUNTED DUPLEX RECEPTACLE APPROXIMATELY 12" BELOW CEILING
⊕	FLUORESCENT FIXTURE
⊕	SWITCHED BRANCH CIRCUIT
⊕	UNSWITCHED BRANCH CIRCUIT
⊕	120/208 VOLT CIRCUIT
⊕	MOTION DETECTING SINGLE-POLE SWITCH ON TIMER
⊕	'EXIT' LIGHT FIXTURE, TYPE 'EX'
⊕	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)
⊕	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER
⊕	FUSED DISCONNECT SWITCH
⊕	CEILING MOUNTED FUSED DISCONNECT SWITCH
⊕	TELEPHONE
⊕	JUNCTION BOX
⊕	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
⊕	UNSWITCHED FIXTURE
⊕	OCCUPANCY SENSING SINGLE-POLE SWITCH NOT ON TIMER
⊕	280V RECEPTACLE
⊕	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)



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

KEY NOTE:
① SEE NOTE 4.



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	

Cruse And Associates, P.A.

414 E. Edgerton St.
Durham, NC 27601
Phone: (919) 882-4400
Fax: (919) 882-5182

LICENSE NO.: C-1721

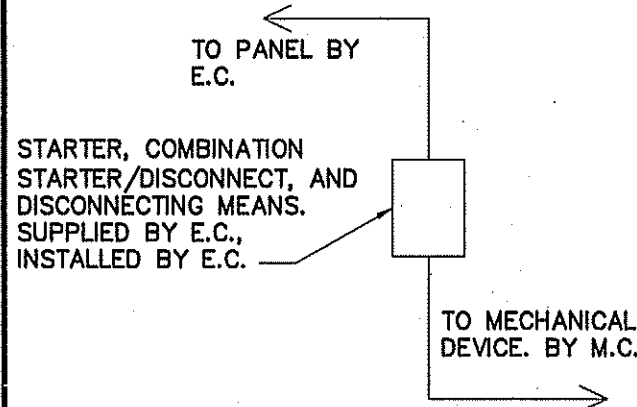
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DATE 02-25-25
DRAWN BY BAM
JOB NO. 24-31

SHEET NO.
E-1 OF 8

CONNECTION SCHEDULE



ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMPS	BALLASTS	WATTAGE	REMARKS
A	8' LED STRIP W/WIRE GUARD	DAYBRITE	CLX L96 10000LM SEF WD MVOLT 40K 80 CRI WH	LED		71.0	WITH (2) 48" WIRE GUARDS WGCLX48
B	KEYLESS FIXTURE WITH WIREGUARD AND LED LAMP	-	-	LED A19	-	13	WITH WIRE GUARD
C	3" LED RECESSED DOWNLIGHT	ACULUX	AX3 D G4 12LM 35K 80CRI 50D G21 120 ICAT 30P CS SF WET	LED		11.0	TO BE ON PHOTOCELL
D	LED WALL PACKS	LITHONIA	TWR1 LED 3 50K MVOLT ON TIMER	18 LEDS	LED	58.4	W/CUTOFF
EM	EMERGENCY LIGHT WITH BATTERY BACKUP	MCPHILBEN	CAXR6L24W6				
EX	LED TYPE EXIT LIGHT WITH BATTERY BACKUP	MCPHILBEN	CXXL3RW				
EM2	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)	MCPHILBEN	CR2C5WA				

1. ALL FIXTURE SELECTIONS TO BE VERIFIED BY OWNER BEFORE PURCHASE.
2. SIGN LETTERING TO BE ON TIMECLOCK OR PHOTOCELL
3. LED WALLPACKS ON PHOTOCELL.

LIGHTING DATA FOR N.C. ENERGY CODE (BUILDING "2")

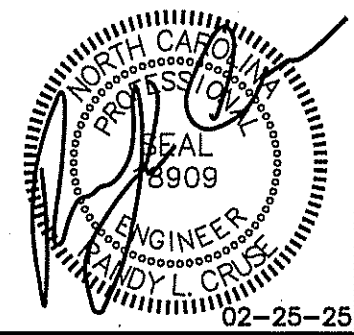
AREA USE	AREA FT ²	WATTS PER FT ² ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER
STORAGE	23,700	1.2	28,440	4,470	23,970
TOTAL	23,700		28,440	4,470	23,970

NOTE:

1. VERIFY LOCATION OF LIGHTS & RECEPTACLES WITH OWNER BEFORE CONSTRUCTION.
2. COORDINATE LOCATION OF 8' STRIP LIGHTS IN CORRIDOR WITH DUCT WORK WHERE APPLICABLE.
3. ALL LIGHT FIXTURES IN CORRIDORS TO BE MOUNTED ON THE WALLS WHERE APPLICABLE.
4. ALL CORRIDOR LIGHTS TO BE SWITCHED BY MOTION SENSORS OR TIMERS LOCATED AS SHOWN. PROVIDE 30 MINUTE RUN TIME SETTING AND NO HOLD CAPABILITY. VERIFY WHICH TYPE OF DEVICE AND IT'S CAPABILITIES WITH THE OWNER BEFORE ORDERING EQUIPMENT.

ELECTRICAL LEGEND

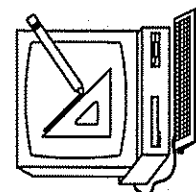
MARK	DESCRIPTION
	QUAD RECEPTACLE
	DUPLEX RECEPTACLE
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	HIGH WALL MOUNTED DUPLEX RECEPTACLE APPROXIMATELY 12" BELOW CEILING
	FLUORESCENT FIXTURE
	SWITCHED BRANCH CIRCUIT
	UNSWITCHED BRANCH CIRCUIT
	120/208 VOLT CIRCUIT
	MOTION DETECTING SINGLE-POLE SWITCH ON TIMER
	'EXIT' LIGHT FIXTURE, TYPE 'EX'
	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)
	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER
	FUSED DISCONNECT SWITCH
	CEILING MOUNTED FUSED DISCONNECT SWITCH
	TELEPHONE
	JUNCTION BOX
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	UNSWITCHED FIXTURE
	OCCUPANCY SENSING SINGLE-POLE SWITCH NOT ON TIMER
	280V RECEPTACLE
	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS

NO.	DESCRIPTION
1.	03/11/2025



414 E. Edgerton St.
Durham, NC 27604
PHONE: (919) 882-1162
FAX: (919) 882-1162

Cruse
And
Associates, P.A.

LICENSE NO.: C-1721

KEY NOTE:

- ① SEE NOTE 4.

ELECTRICAL LIGHTING PLAN BUILDING "2"

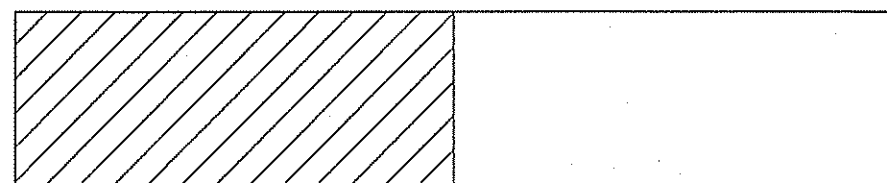
SCALE: 1/8" = 1'-0"

LEGEND

3 HOUR RATED WALL
U419

AREA 1

AREA 2



KEYPLAN

DATE 02-25-25

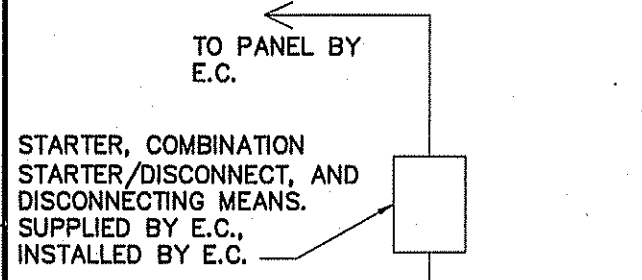
DRAWN BY BAM

JOB NO. 24-31

SHEET NO.

E-2 OF 8

CONNECTION SCHEDULE



ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

LIGHT FIXTURE SCHEDULE						
MARK	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMPS	BALLASTS	WATTAGE
A	8' LED STRIP W/WIRE GUARD	DAYBRITE	CLX L96 10000LM SEF WD MVOLT 40K 80 CRI WH	LED		71.0
B	KEYLESS FIXTURE WITH WIREGUARD AND LED LAMP	-	-	LED A19	-	13
C	3" LED RECESSED DOWNLIGHT	ACULUX	AX3 D G4 12LM 35K 80CRI 50D G21 120 ICAT 3DP CS SF WET	LED		11.0
D	LED WALL PACKS	LITHONIA	TWR1 LED 3 50K MVOLT ON TIMER	18 LEDS	LED	58.4
EM	EMERGENCY LIGHT WITH BATTERY BACKUP	MCPHILBEN	CAXR6L24W6			
EX	LED TYPE EXIT LIGHT WITH BATTERY BACKUP	MCPHILBEN	CXXL3RW			
EM2	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)	MCPHILBEN	CR2CSWA			

- ALL FIXTURE SELECTIONS TO BE VERIFIED BY OWNER BEFORE PURCHASE.
- SIGN LETTERING TO BE ON TIMELOCK OR PHOTOCELL
- LED WALLPACKS ON PHOTOCELL.

LIGHTING DATA FOR N.C. ENERGY CODE (BUILDING "2")

AREA USE	AREA FT ²	WATTS PER FT ² ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER
STORAGE	23,700	1.2	28,440	4,470	23,970
TOTAL	23,700		28,440	4,470	23,970

NOTE:

- VERIFY LOCATION OF LIGHTS & RECEPTACLES WITH OWNER BEFORE CONSTRUCTION.
- COORDINATE LOCATION OF 8' STRIP LIGHTS IN CORRIDOR WITH DUCT WORK WHERE APPLICABLE.
- ALL LIGHT FIXTURES IN CORRIDORS TO BE MOUNTED ON THE WALLS WHERE APPLICABLE.
- ALL CORRIDOR LIGHTS TO BE SWITCHED BY MOTION SENSORS OR TIMERS LOCATED AS SHOWN. PROVIDE 30 MINUTE RUN TIME SETTING AND NO HOLD CAPABILITY. VERIFY WHICH TYPE OF DEVICE AND IT'S CAPABILITIES WITH THE OWNER BEFORE ORDERING EQUIPMENT.

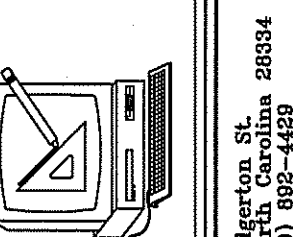
ELECTRICAL LEGEND

MARK	DESCRIPTION
⊕	QUAD RECEPTACLE
⊕	DUPLEX RECEPTACLE
⊕	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
⊕	HIGH WALL MOUNTED DUPLEX RECEPTACLE APPROXIMATELY 12" BELOW CEILING
⊕	FLUORESCENT FIXTURE
⊕	SWITCHED BRANCH CIRCUIT
⊕	UNSWITCHED BRANCH CIRCUIT
⊕	120/208 VOLT CIRCUIT
⊕	MOTION DETECTING SINGLE-POLE SWITCH ON TIMER
⊕	'EXIT' LIGHT FIXTURE, TYPE 'EX'
⊕	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)
⊕	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER
⊕	FUSED DISCONNECT SWITCH
⊕	CEILING MOUNTED FUSED DISCONNECT SWITCH
⊕	TELEPHONE
⊕	JUNCTION BOX
⊕	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
⊕	UNSWITCHED FIXTURE
⊕	OCCUPANCY SENSING SINGLE-POLE SWITCH NOT ON TIMER
⊕	280V RECEPTACLE
⊕	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)

PROPOSED BUILDINGS FOR:

HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	
1.	03/11/2025



Cruse
And
Associates, P.A.

444 E. Ragsdale St.
Durham, North Carolina 28834
TEL: (919) 882-5188
FAX: (919) 882-5188

LICENSE NO.: C-1721

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DATE 02-25-25
DRAWN BY BAM
JOB NO. 24-31

SHEET NO.
E-3 OF 8

LEGEND

3 HOUR RATED WALL
U419

ELECTRICAL LIGHTING PLAN BUILDING "2"

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

AREA 1 AREA 2

KEYPLAN

CONNECTION SCHEDULE

TO PANEL BY E.C.

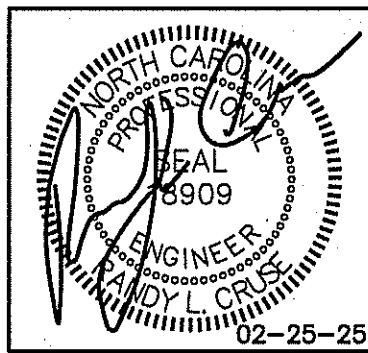
STARTER, COMBINATION STARTER/DISCONNECT, AND DISCONNECTING MEANS, SUPPLIED BY E.C., INSTALLED BY E.C.

TO MECHANICAL DEVICE, BY M.C.

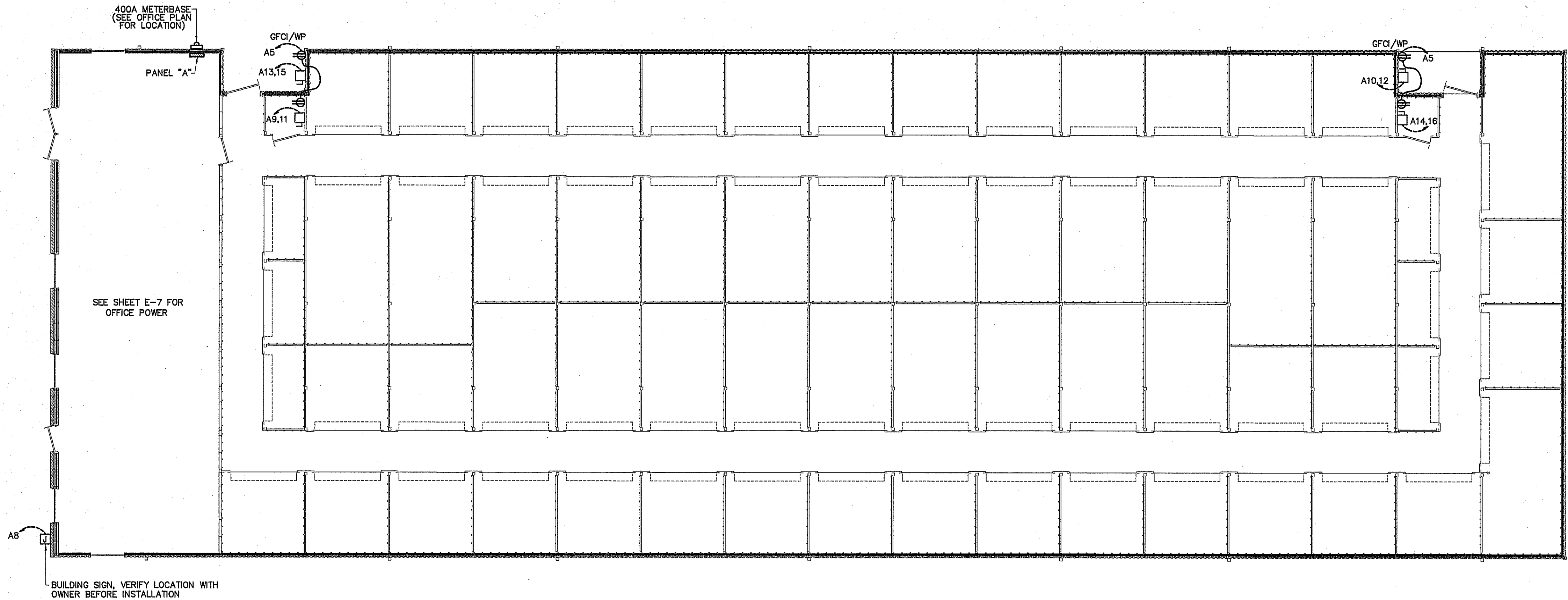
ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

- NOTE:
1. VERIFY LOCATION OF LIGHTS & RECEPTACLES WITH OWNER BEFORE CONSTRUCTION.
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ELECTRICAL LEGEND	
MARK	DESCRIPTION
	QUAD RECEPTACLE
	DUPLEX RECEPTACLE
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	HIGH WALL MOUNTED DUPLEX RECEPTACLE APPROXIMATELY 12" BELOW CEILING
	FLUORESCENT FIXTURE
	SWITCHED BRANCH CIRCUIT
	UNSWITCHED BRANCH CIRCUIT
	120/208 VOLT CIRCUIT
	MOTION DETECTING SINGLE-POLE SWITCH ON TIMER
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	CEILING MOUNTED FUSED DISCONNECT SWITCH
	TELEPHONE
	JUNCTION BOX
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	UNSWITCHED FIXTURE
	OCCUPANCY SENSING SINGLE-POLE SWITCH NOT ON TIMER
	280V RECEPTACLE
	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA



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

REVISIONS	
NO.	

Cruse
And
Associates, P.A.

414 E. Edgewood St. 28384
FELM, NC 28034
TEL: (910) 882-4489
FAX: (910) 882-5183

LICENSE NO.: C-1721

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JOB NO.	24-31

SHEET NO.
E-4 OF 8

CONNECTION SCHEDULE

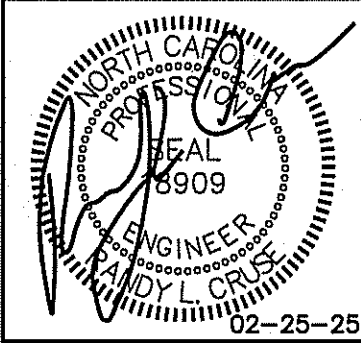
TO PANEL BY E.C.

STARTER, COMBINATION STARTER/DISCONNECT, AND DISCONNECTING MEANS, SUPPLIED BY E.C., INSTALLED BY E.C.

TO MECHANICAL DEVICE BY M.C.

ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

ELECTRICAL LEGEND	
MARK	DESCRIPTION
	QUAD RECEPTACLE
	DUPLEX RECEPTACLE
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	HIGH WALL MOUNTED DUPLEX RECEPTACLE APPROXIMATELY 12" BELOW CEILING
	FLUORESCENT FIXTURE
	SWITCHED BRANCH CIRCUIT
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	TELEPHONE
	JUNCTION BOX
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	UNSWITCHED FIXTURE
	OCCUPANCY SENSING SINGLE-POLE SWITCH NOT ON TIMER
	280V RECEPTACLE
	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	DESCRIPTION
1.	03/11/2025

412 E. Main Street, Suite 203
Holly Springs, NC 28334
PH: (910) 892-4429
FAX: (910) 892-5102

Cruise
And
Associates, P.A.

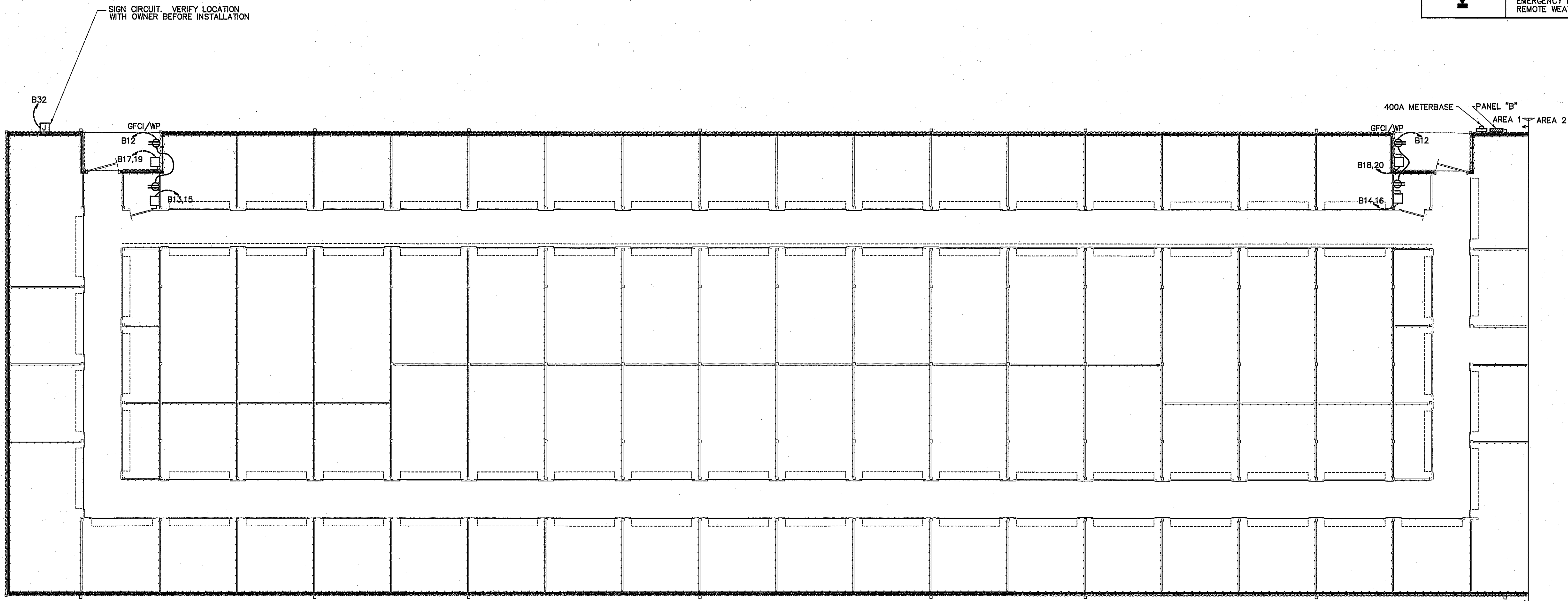
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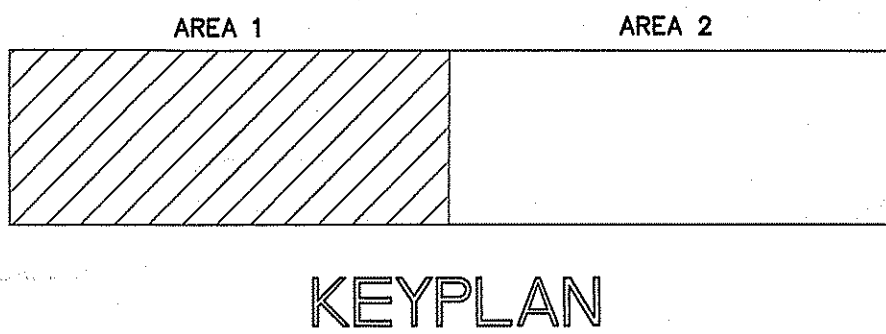
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DRAWN BY BAM
JOB NO. 24-31

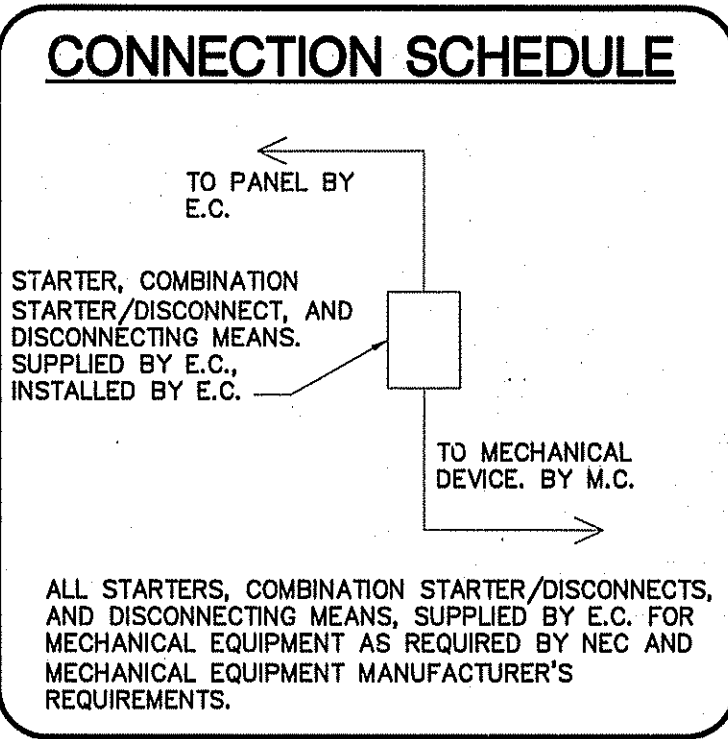
SHEET NO.
E-5 OF 8



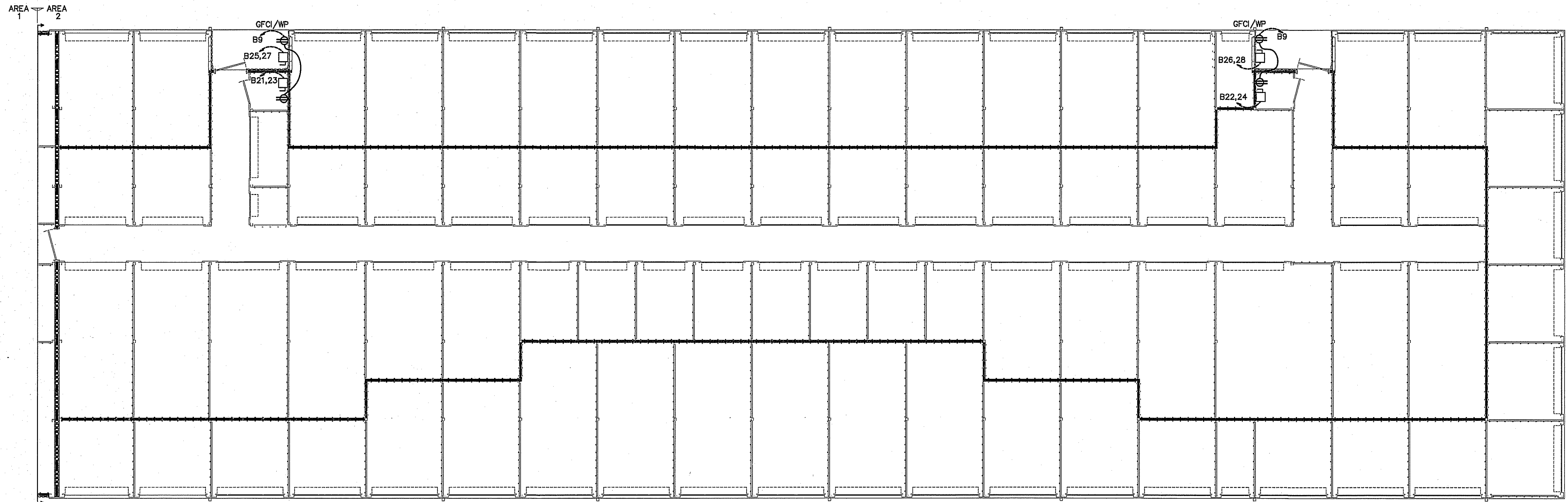
ELECTRICAL POWER PLAN BUILDING "2"
SCALE: 1/8" = 1'-0"

LEGEND
3 HOUR RATED WALL
U419





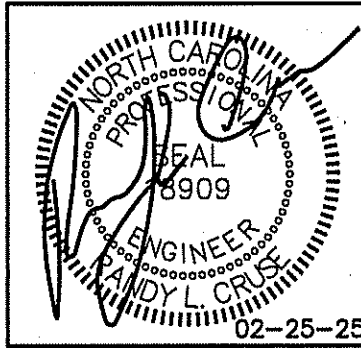
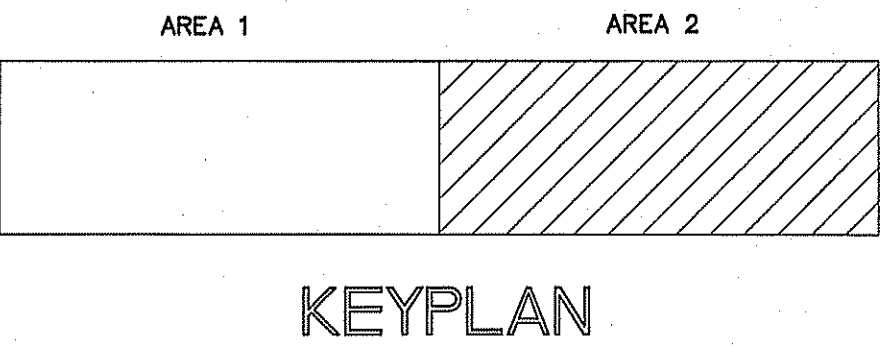
ELECTRICAL LEGEND	
MARK	DESCRIPTION
	QUAD RECEPTACLE
	DUPLEX RECEPTACLE
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	HIGH WALL MOUNTED DUPLEX RECEPTACLE APPROXIMATELY 12' BELOW CEILING
	FLUORESCENT FIXTURE
	SWITCHED BRANCH CIRCUIT
	UNSWITCHED BRANCH CIRCUIT
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	MOTION DETECTING SINGLE-POLE SWITCH ON TIMER
	'EXIT' LIGHT FIXTURE, TYPE 'EX'
	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)
	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER
	FUSED DISCONNECT SWITCH
	CEILING MOUNTED FUSED DISCONNECT SWITCH
	TELEPHONE
	JUNCTION BOX
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	UNSWITCHED FIXTURE
	OCCUPANCY SENSING SINGLE-POLE SWITCH NOT ON TIMER
	280V RECEPTACLE
	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)



LEGEND

3 HOUR RATED WALL
U419

ELECTRICAL POWER PLAN BUILDING "2"
SCALE: 1/8" = 1'-0"



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	DESCRIPTION
1.	03/11/2025

Cruse And Associates, P.A.

414 E. 1st Street, Suite 203
Fayetteville, NC 28534
TEL: (910) 882-4429
FAX: (910) 882-5162

LICENSE NO.: C-1721

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JOB NO. 24-31
SHEET NO. E-6 OF 8

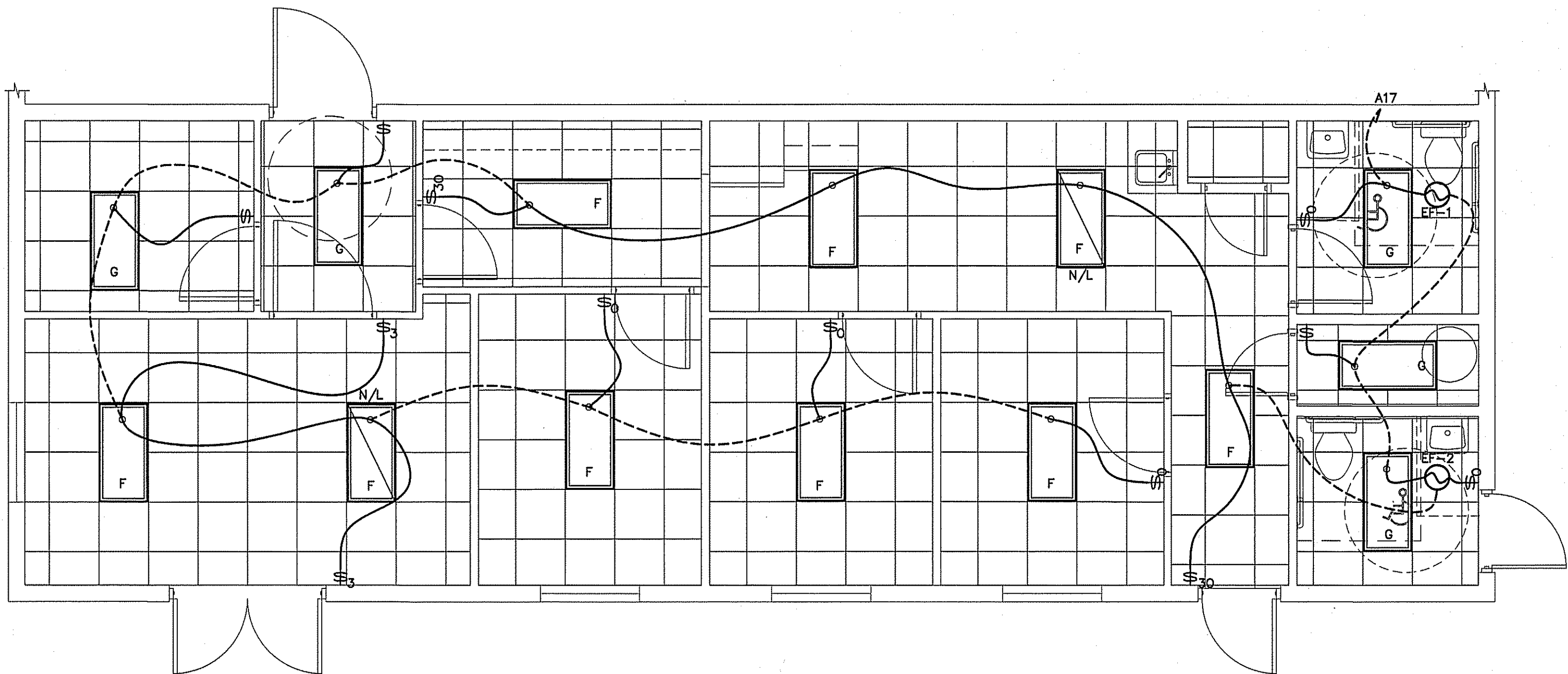
LIGHT FIXTURE SCHEDULE						
MARK	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMPS	BALLASTS	WATTAGE
A	8' LED STRIP W/WIRE GUARD	DAYBRITE	CLX L96 10000LM SEF WD MVOLT 40K 80 CRI WH	LED		71.0
B	KEYLESS FIXTURE WITH WIREGUARD AND LED LAMP	—	—	LED	—	13
C	3" LED RECESSED DOWNLIGHT	ACULUX	AX3 D G4 12LM 35K 80CRI 50D GZ1 120 ICAT 3DP CS SF WET	LED		11.0
D	LED WALL PACKS	LITHONIA	TWR1 LED 3 50K MVOLT ON TIMER	18 LEDS	LED	58.4
F	SURFACE MOUNTED 2X4 LED FLAT PANEL	LITHONIA	CPANL 2X4 40/50/60LM 35K-40LM	LED		42.0
G	SURFACE MOUNTED 2X4 LED FLAT PANEL	LITHONIA	CPANL 2X4 40/50/60LM 35K-40LM	LED		32.0
EM	EMERGENCY LIGHT WITH BATTERY BACKUP	MCPHILBEN	CAXR6L24W6			
EX	LED TYPE EXIT LIGHT WITH BATTERY BACKUP	MCPHILBEN	CXXL3RW			
EM2	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)	MCPHILBEN	CR2CSWA			

1. ALL FIXTURE SELECTIONS TO BE VERIFIED BY OWNER BEFORE PURCHASE.
2. SIGN LETTERING TO BE ON TIMELOCK OR PHOTOCELL
3. LED WALLPACKS ON PHOTOCELL.

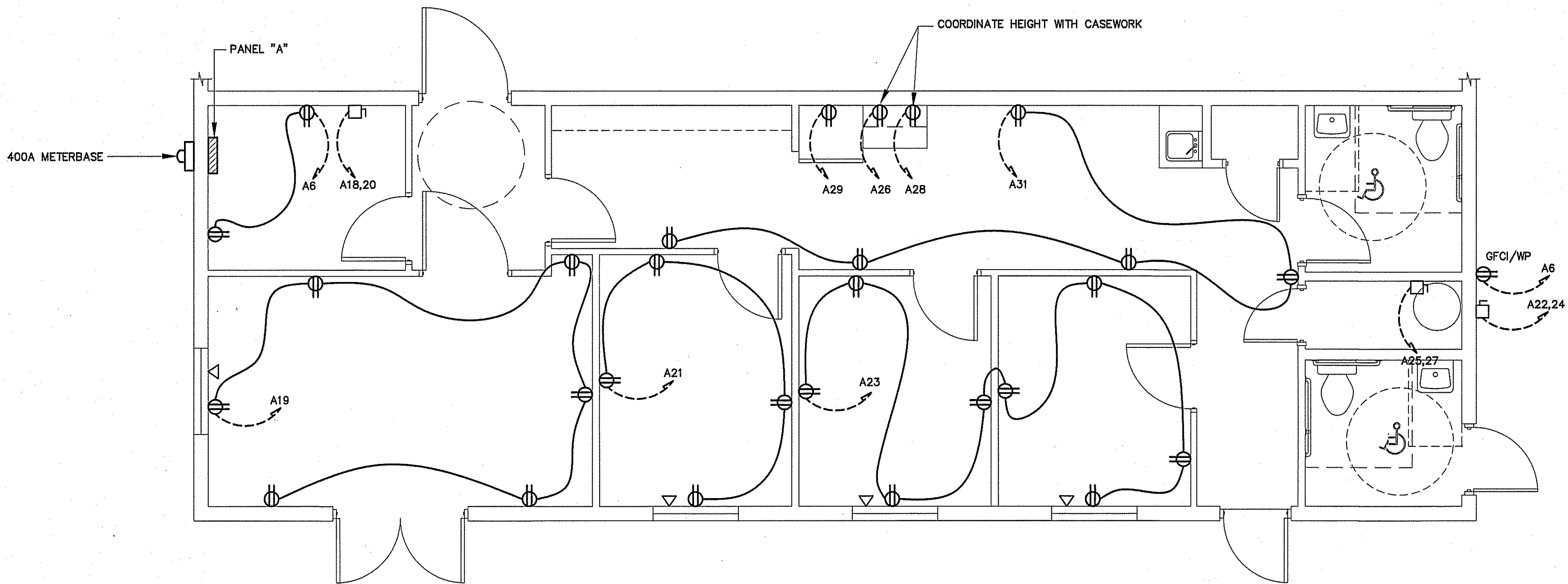
LIGHTING DATA FOR N.C. ENERGY CODE (BUILDING "1")					
AREA USE	AREA FT ²	WATTS PER FT ² ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER
STORAGE	9,600	0.63	11,520	2,440	9,080
OFFICE	1,200	1.3	1,560	538	1,022
TOTAL	10,800		13,080	2,978	10,102

NOTE:
COORDINATE LOCATION OF SECURITY, CATV,
INTERNET, PHONE, OR OTHER SYSTEMS OUTLETS
WITH OWNER BEFORE BEGINNING CONSTRUCTION.

ELECTRICAL LEGEND	
MARK	DESCRIPTION
	QUAD RECEPTACLE
	DUPLEX RECEPTACLE
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	HIGH WALL MOUNTED DUPLEX RECEPTACLE APPROXIMATELY 12" BELOW CEILING
	FLUORESCENT FIXTURE
	SWITCHED BRANCH CIRCUIT
	UNSWITCHED BRANCH CIRCUIT
	120/208 VOLT CIRCUIT
	MOTION DETECTING SINGLE-POLE SWITCH ON TIMER
	'EXIT' LIGHT FIXTURE, TYPE 'EX'
	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)
	MOTION DETECTING 3-WAY SWITCH (4-WAY SWITCH) WITH TIMER
	FUSED DISCONNECT SWITCH
	CEILING MOUNTED FUSED DISCONNECT SWITCH
	TELEPHONE/DATA
	JUNCTION BOX
	SINGLE POLE SWITCH OR TIMER AS APPLICABLE
	UNSWITCHED FIXTURE
	OCCUPANCY SENSING SINGLE-POLE SWITCH NOT ON TIMER
	280V RECEPTACLE
	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)

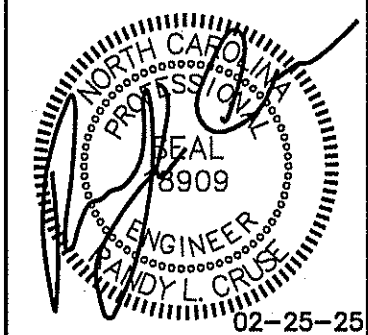
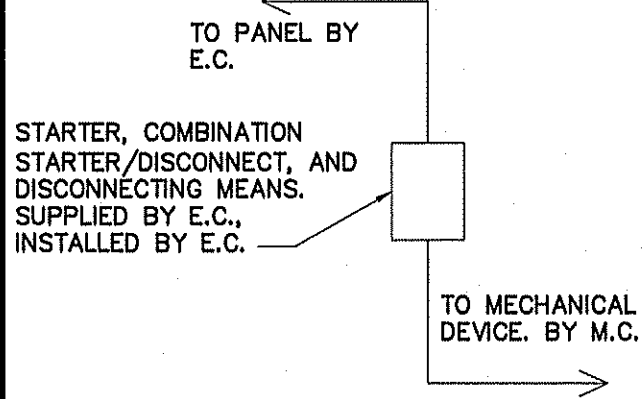


ELECTRICAL LIGHTING PLAN OFFICE
SCALE: 1/4" = 1'-0"



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

CONNECTION SCHEDULE



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

REVISIONS	
NO.	

Cruse And Associates, P.A.

414 E. Raleigh St., 28834
Holly Springs, NC 28853
PH: (910) 892-4429
FAX: (910) 892-5182

LICENSE NO.: C-1721

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DATE 02-25-25
DRAWN BY BAM
JOB NO. 24-31

SHEET NO.
E-7 OF 8

ELECTRICAL NOTES (GENERAL)

- THE ELECTRICAL INSTALLATION, EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL, AS A MINIMUM, BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), ALL APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL CODES, LAWS, AND ORDINANCES, AND RULINGS OF THE INSPECTION AUTHORITIES HAVING JURISDICTION. ALL FEES, PERMITS, ETC., ASSOCIATED WITH THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- THE DRAWINGS GENERALLY INDICATE THE WORK TO BE INSTALLED, BUT DO NOT SHOW ALL BENDS, BOXES, FITTINGS, AND SPECIALTIES WHICH MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SUCH ITEMS REQUIRED TO COMPLETE THE INSTALLATION ACCORDING TO INDUSTRY ACCEPTED PRACTICES SHALL BE INCLUDED IN THE BID.
- ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND LISTED AND LABELED BY UNDERWRITERS LABORATORIES, INC.
- ALL PENETRATIONS OF FIRE WALLS SHALL BE SEALED WITH APPROVED SEALING MATERIALS TO MAINTAIN THE FIRE RATING OF THE WALLS.
- THE CONTRACTOR SHALL VERIFY WIRE AND FUSE/CIRCUIT BREAKER SIZING FOR ALL MECHANICAL EQUIPMENT PRIOR TO PURCHASING MATERIALS AND INSTALLING BRANCH CIRCUITS.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND CONFLICTS. APPARENT INTERFERENCES OR CONFLICTS SHALL BE REPORTED TO THE PRIME CONTRACTOR AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.
- THE ELECTRICAL CONTRACTOR SHALL CONNECT BRANCH CIRCUITS TO THE MAIN LINE TERMINALS OF EQUIPMENT FURNISHED BY OTHER CONTRACTORS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY NECESSARY SWITCHES, DISCONNECTS, OR OVERCURRENT PROTECTION AHEAD OF SUCH EQUIPMENT.
- RACEWAYS ARE SHOWN SCHEMATICALLY AND MAY BE REROUTED IN THE FIELD. THEY SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL WITH BUILDING LINES. THEY SHALL BE RUN CONCEALED WITHIN WALLS OR BUILDING STRUCTURES WHEREVER POSSIBLE.
- ALL RACEWAYS, EQUIPMENT, ETC., ABOVE A SUSPENDED CEILING SHALL BE MOUNTED A MINIMUM OF 18" ABOVE THE CEILING SO AS NOT TO BLOCK ANY TILE OR FIXTURE ACCESS.
- THE MINIMUM ALLOWABLE SIZE FOR ANY CONDUIT, IMC, OR EMT SHALL BE 1/2" AND MAY BE USED FOR 2#12 WIRE SWITCHLEGS ONLY. A SWITCHLEG SHALL BE DEFINED AS THE RUN OF CONDUIT FROM THE SWITCH OUTLET BOX TO THE FIRST OUTLET BEING SWITCHED.
- FULL WEIGHT GALVANIZED RIGID STEEL CONDUIT SHALL BE USED IN THE FOLLOWING AREAS:
 - ON THE EXTERIOR OF THE BUILDING OR ROOF,
 - VERTICAL DROPS WHERE THE CONDUIT CANNOT BE ANCHORED TO WALLS OR OTHER SUPPORT STRUCTURES,
 - WHERE SUBJECT TO MECHANICAL DAMAGE.
- ALL WIRE AND CABLE SHALL BE COPPER AND HAVE 600 VOLT THHN-THWN INSULATION. ALUMINUM WIRING SHALL NOT BE PERMITTED.
- THE MINIMUM WIRE SIZE SHALL BE #12 AWG EXCEPT FOR CONTROL WIRING, WHICH MAY BE #14 AWG. CONTROL WIRING SHALL USE STRANDED CONDUCTORS UNLESS OTHERWISE NOTED.
- ALL METAL RACEWAY SYSTEMS SHALL BE MADE ELECTRICALLY CONTINUOUS. THE RACEWAY SYSTEM SHALL NOT BE THE SOLE GROUNDING METHOD. AN INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED FOR ALL FEEDERS AND BRANCH CIRCUITS. AT RECEPTACLES, A GREEN GROUND CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL OF THE RECEPTACLE.
- THE ELECTRICAL CONTRACTOR SHALL COORDINATE FUSE AND DISCONNECT SWITCH SIZES WITH THE MECHANICAL EQUIPMENT SUPPLIER PRIOR TO PURCHASE AND INSTALLATION OF BRANCH CIRCUIT EQUIPMENT. IF EQUIPMENT SIZING CHANGES FROM DESIGN SIZES, CIRCUITS SHALL BE RESIZED ACCORDINGLY.
- LIGHT FIXTURES FOR INSTALLATION IN A SUSPENDED CEILING SHALL BE SECURELY FASTENED TO THE CEILING SUSPENSION SYSTEM IN A MANNER TO PREVENT FIXTURES FROM FALLING. IN ADDITION, 16 GAGE WIRE HANGERS SHALL BE FASTENED TO THE FOUR CORNERS OF THE FIXTURES.
- CONNECTIONS TO FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE MADE WITH FLEXIBLE METAL CONDUIT TO ALLOW THE FIXTURE TO BE LIFTED OUT OF THE GRID AND MOVED TO AN ADJACENT GRID LOCATION.
- BREAKERS SUPPLYING HVAC OR REFRIGERATION EQUIPMENT SHALL BE HACR TYPE.
- 3/4" CONDUIT IS MINIMUM ALLOWABLE SIZE EXCEPT AS INDICATED IN #10. CONDUIT FILL NOT TO EXCEED 40% AS PERMITTED BY THE NATIONAL ELECTRIC CODE.
- ALL CONDUCTORS TO BE INSTALLED IN CONDUIT (EXCEPT WHERE ROMEX IS INSTALLED). EMT FITTINGS TO BE COMPRESSION TYPE, INSULATED THROAT.
- NOT USED
- DATA, SECURITY, THEATRICAL, AND VIDEO SYSTEMS TO BE PROVIDED BY OWNER. ROUGH-IN OF OUTLETS AND CONDUIT WILL BE BY CONTRACTOR AS SHOWN ON DRAWINGS.
- NOT USED
- NO. 10 CU AWG CONDUCTORS SHALL BE USED FOR 20 AMP BRANCH CIRCUIT HOMERUNS EXCEEDING 50 FT. TO THE JUNCTION POINT. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 10 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 100 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 8 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 200 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 6 CU AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 400 FEET TOTAL LENGTH. 20 AMP BRANCH CIRCUIT SHALL BE NOT EXCEED 500' FEET IN TOTAL LENGTH. (UNLESS MARKED OTHERWISE)
- CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. SPLICES WILL NOT BE MADE EXCEPT WITHIN ACCESSIBLE OUTLET OR JUNCTION BOXES, TROUGHS, OR GUTTERS.
- MAKE CONDUCTOR LENGTHS FOR PARALLEL CIRCUITS EQUAL.
- INSTALL TELEPHONE OUTLETS WITH 3/4" EMPTY CONDUIT AND PULL CORD. STUB OUT ABOVE CEILING. PHONE SYSTEM INSTALLED BY OWNER.
- ALL CONDUIT WITHOUT CONDUCTORS SHALL HAVE NYLON PULLCORDS INSTALLED.
- THE CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION, AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES FOR PERMITS AND INSPECTIONS. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR ELECTRIC UTILITY CONNECTION FEES AND LINE EXTENSION FEES.
- ELECTRICAL CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION WHICH DEVELOPS OBJECTIONABLE NOISES SHALL BE MADE FROM THE CONDUIT SYSTEM WITH SHORT LENGTHS OF FLEXIBLE "LIQUID-TITE" CONDUIT.
- ALL WIRE TERMINATIONS AND EQUIPMENT TO BE RATED FOR 75° C MINIMUM.
- ELECTRICAL CONTRACTOR TO MAINTAIN 2' OF SEPARATION ON RECEPTACLES ON OPPOSITE SIDES OF ANY FIRE RATED WALL PER 2021 N.E.C. 300.21.
- WIRING TO DISCONNECT SWITCH AND DISCONNECT SWITCH SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. WIRING FROM THE DISCONNECT TO THE EQUIPMENT SHALL BE BY THE MECHANICAL CONTRACTOR.

ELECTRICAL SYSTEM AND EQUIPMENT METHOD OF COMPLIANCE:

ENERGY CODE: PRESCRIPTIVE ☒ PERFORMANCE ☐
ASHRAE 90.1: PRESCRIPTIVE ☐ PERFORMANCE ☐

REFER TO DRAWINGS FOR RISER DIAGRAM AND PANEL SCHEDULES

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE: SEE SCHEDULE
NUMBER OF LAMPS IN FIXTURE: _____
BALLASTS 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

- 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 ☐

BUILDING 1

ELECTRICAL LOAD CALCULATIONS 10,800 SQUARE FEET VA.

NONCONTINUOUS LOADS:

30 RECEPTACLES @ 180 VA EA. 5400
1ST 10000 5400
REMAINDER @ 50% 0
TOTAL 5400

CONTINUOUS LOADS:

GENERAL LIGHTING LOAD VA/SQ. FT. 1.2 11520
9600 SQ. FT. 11520 x 1.25 14400

GENERAL LIGHTING LOAD VA/SQ. FT. 1.3 1560
1200 SQ. FT. 1560 x 1.25 1950

AIR HANDLER UNIT 23040
HEAT PUMPS 13776

EQUIPMENT: 7760
25% OF LARGEST MOTOR 1092

GRAND TOTAL 67418

281 AMPS @ 120/240V, 1φ, 60HZ

BUILDING 2

ELECTRICAL LOAD CALCULATIONS 23,700 SQUARE FEET VA.

NONCONTINUOUS LOADS:

8 RECEPTACLES @ 180 VA EA. 1440
1ST 10000 1440
REMAINDER @ 50% 0
TOTAL 1440

CONTINUOUS LOADS:

GENERAL LIGHTING LOAD VA/SQ. FT. 0.25 5925
23,700 SQ. FT. 5925 x 1.25 7406

AIR HANDLER UNIT 30720

HEAT PUMPS 19248

EQUIPMENT: 600

25% OF LARGEST MOTOR 1092

GRAND TOTAL 60506

252 AMPS @ 120/240V, 1φ, 60HZ

PANEL: "A" SCHEDULE: MANUFACTURER: SQ. D. NO. OF SPACES 42
VOLTS 120/240 AMPS 400 TYPE: "NOD" MOUNTING: SURFACE
ENCLOSURE: NEMA 1: Ø1 SHORT CIRCUIT RATING: 22,000
MAIN: MLO: TOP FEED: BOTTOM FEED: COPPER BUS: GROUND BAR KIT: NEUTRAL BAR KIT:

L1	L2	CIRCUIT	POLES	TRIP	ASSIGNMENT	PHASE	ASSIGNMENT	TRIP	POLES	CIRCUIT	L1	L2
3.4		1	1	20	WALLPACKS	o	LEFT FRONT CORRIDOR LTS.	20	1	2	6.1	
	8.3	3	1	20	REAR CORRIDOR LIGHTS	o	RIGHT FRONT CORRIDOR LTS.	20	1	4		6.1
3.0		5	1	20	HVAC UNITS #2 CONV. RECS.	o	HVAC #1/MECH. RM. RECS.	20	1	6	4.5	
	X	7	1	20	SPARE	o	BUILDING SIGN	20	1	8		5.0
32.0		9	2	50	AHU-2	o	HP-3	40	2	10	21.3	
	32.0	11				o				12		21.3
21.3		13	2	40	HP-2	o	AHU-3	50	2	14	32.0	
	21.3	15				o				16		32.0
5.8		17	1	20	OFFICE LIGHTING	o	AHU-1	45	2	18	32.0	
	9.0	19	1	20	RECEPTIONIST	o				20		32.0
6.0		21	1	20	OFFICE 1 RECEPTACLES	o	HP-1	30	2	22	14.8	
	12.0	23	1	20	OFFICES 2 & 3 RECEPT.	o				24		14.8
18.8		25	2	30	WATER HEATER	o	MICROWAVE	20	1	26	12.5	
	18.8	27				o	COFFEE MAKER	20	1	28		8.0
6.7		29	1	20	REFRIGERATOR	o	SPARE	20	1	30	X	
	7.5	31	1	20	BREAK ROOM RECEPTACLES	o	SPARE	20	1	32	X	X
X		33	1	20	SPARE	o	SPARE	20	1	34	X	
	X	35	1	20	SPARE	o	SPARE	20	1	36	X	X
X		37	1	20	SPARE	o	SPARE	20	1	38	X	
	X	39	1	20	SPARE	o	SPARE	20	1	40	X	X
X		41	1	20	SPARE	o	GATE OPENER	20	1	42	5.0	

L1 = 225.2 A
L2 = 228.1 A

NOTE:
VERIFY AIC RATING & LUG SPACE
WITH UTILITY COMPANY BEFORE
ORDERING PANELS.

VERIFY LOCATION

PANEL: "B" SCHEDULE: MANUFACTURER: SQ. D. NO. OF SPACES 42
VOLTS 120/240 AMPS 400 TYPE: "NOD" MOUNTING: SURFACE
ENCLOSURE: NEMA 3R: Ø1 SHORT CIRCUIT RATING: 22,000
MAIN: MLO: TOP FEED: BOTTOM FEED: COPPER BUS: GROUND BAR KIT: NEUTRAL BAR KIT:

L1	L2	CIRCUIT	POLES	TRIP	ASSIGNMENT	PHASE	ASSIGNMENT	TRIP	POLES	CIRCUIT	L1	L2
5.8		1	1	20	WALLPACKS	o	RIGHT FRONT CORRIDOR LTS.	20	1	2	7.2	
	5.8	3	1	20	WALLPACKS	o	RIGHT FRONT CEN. CORR. LTS.	20	1	4		6.7
10.1		5	1	20	REAR RIGHT SIDE CORR. LTS.	o	LEFT FRONT CEN. CORR. LTS.	20	1	6	6.1	
	X	7	1	20	SPARE	o	LEFT FRONT CORRIDOR LTS.	20	1	8		6.7
6.0		9	1	20	HVAC UNITS 6/7 CONV. RECS.	o	SPARE	20	1	10	X	
	X	11	1	20	SPARE	o	HVAC UNITS 4/5 CONV RECS	20	1	12		6.0
32.0		13	2	50	AHU-4	o	AHU-5	50	2	14	32.0	
	32.0	15				o				16		32.0
26.5		17	2	25	HP-4	o	HP-5	50	2	18	26.5	
	26.5	19				o				20		26.5
32.0		21	2	45	AHU-6	o	AHU-7	45	2	22	32.0	
	32.0	23				o				24		32.0
13.6		25	2	25	HP-6	o	HP-7	25	2	26	13.6	
	13.6	27				o				28		13.6
X		29	1	20	SPARE	o	SPARE	20	1	30	X	
	X	31	1	20	SPARE	o	BUILDING SIGN	20	1	32		5.0
X		33	1	20	SPARE	o	SPARE	20	1	34	X	
	X	35	1	20	SPARE	o	SPARE	20	1	36	X	X
X		37	1	20	SPARE	o	SPARE	20	1	38	X	
	X	39	1	20	SPARE	o	SPARE	20	1	40	X	X
X		41	1	20	SPARE	o	SPARE	20	1	42	X	

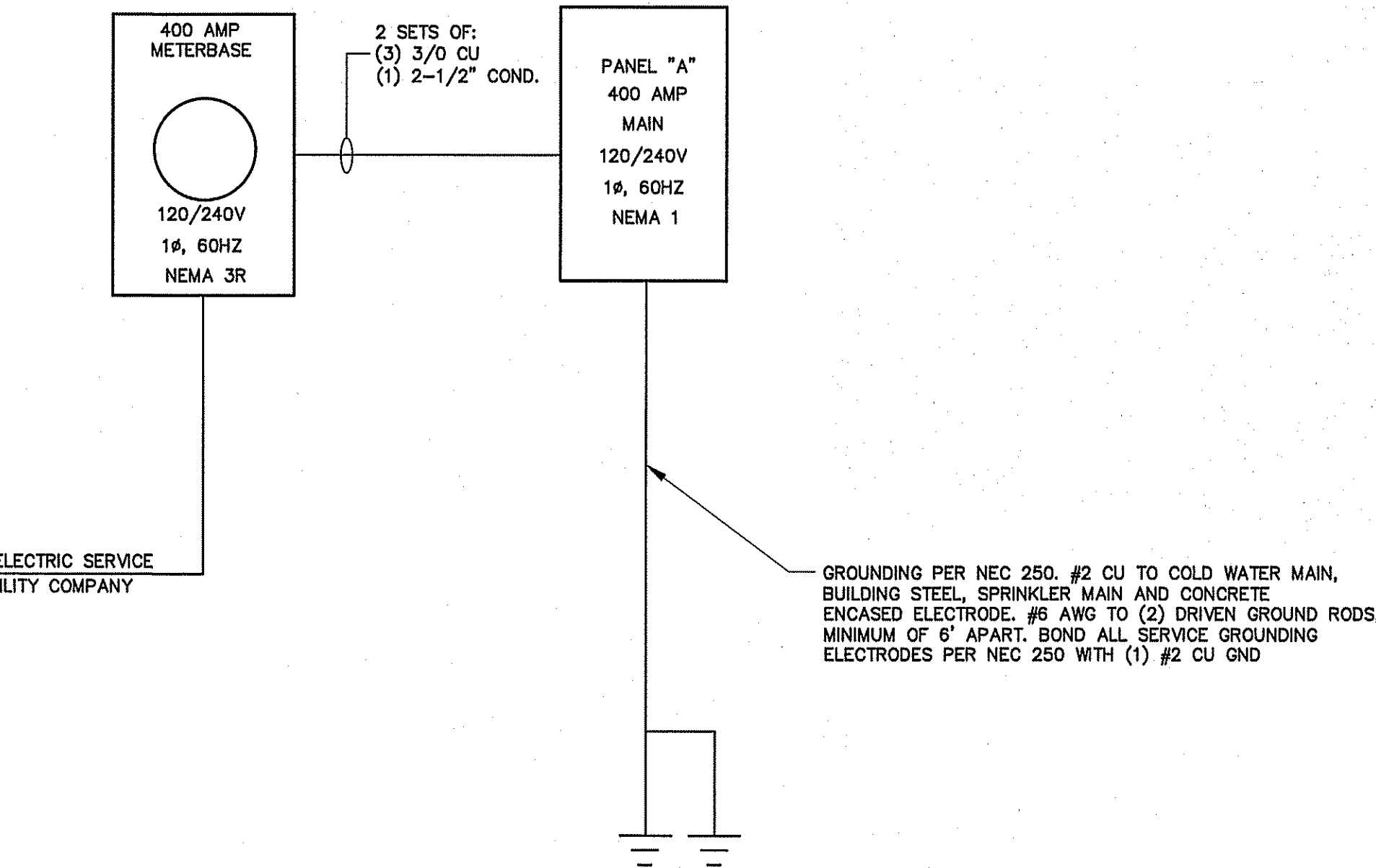
L1 = 243.4 A
L2 = 238.4 A

UNDERGROUND ELECTRIC SERVICE
BY ELECTRIC UTILITY COMPANY

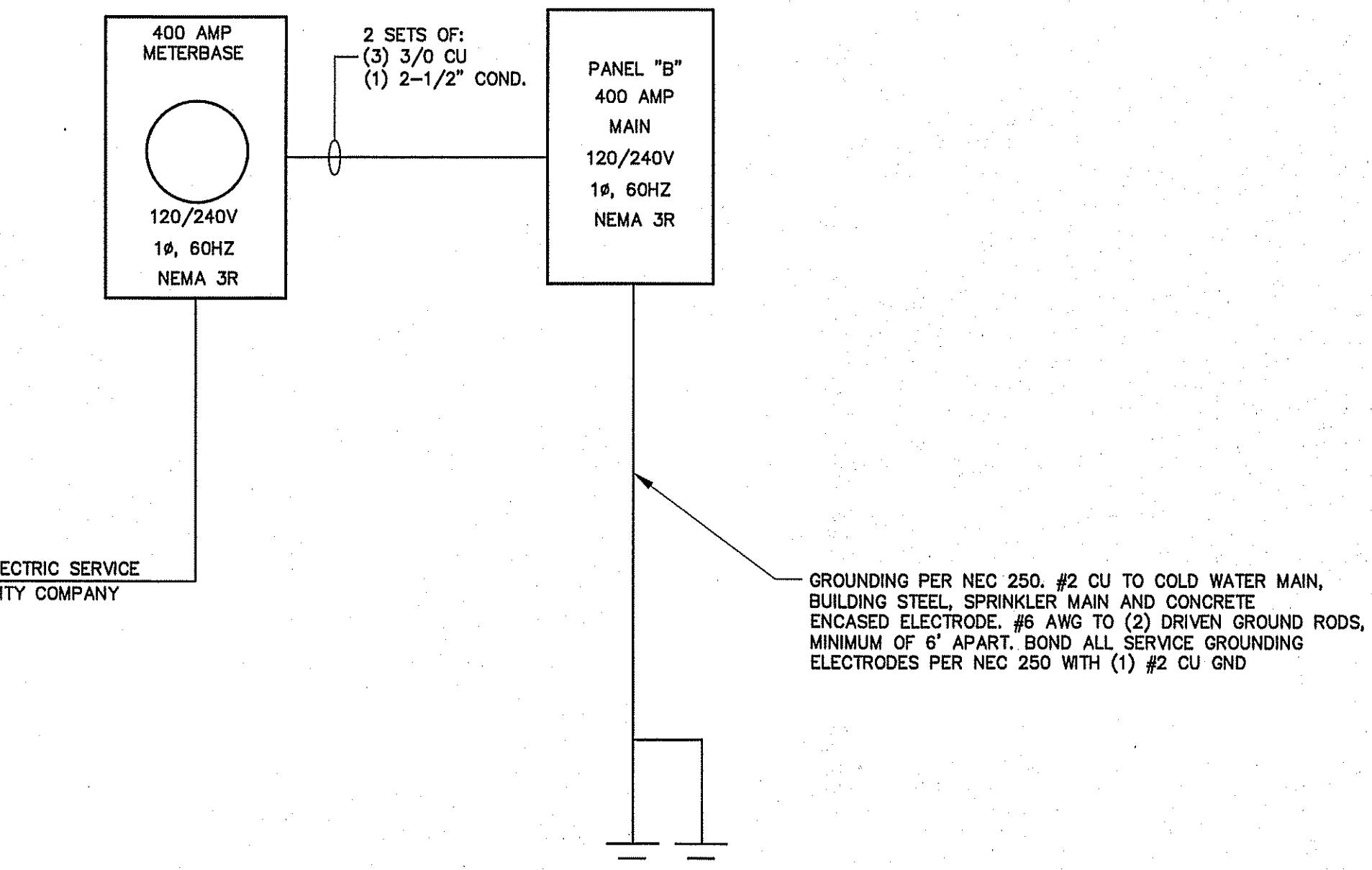
UNDERGROUND ELECTRIC SERVICE
BY ELECTRIC UTILITY COMPANY

FEEDER SCHEDULE

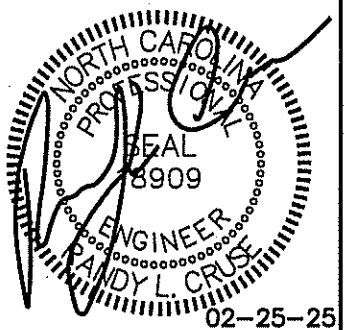
UNIT	FEEDERS	FUSED DISCONNECT	CONDUIT
AHU-1,2,5,6	2#8 CU, 1#10 CU GND	60	3/4"
AHU-3,4,7	2#6 CU, 1#8 CU GND	60	3/4"
HEAT PUMP 1,6	2#12 CU, 1#12 CU GND	30	3/4"
HEAT PUMP 2,7	2#10 CU, 1#12 CU GND	30	3/4"
HEAT PUMP 3,4,5	2#8 CU, 1#10 CU GND	60	3/4"



ELECTRICAL RISER DIAGRAM NOT TO SCALE (BUILDING 1)



ELECTRICAL RISER DIAGRAM NOT TO SCALE (BUILDING 2)



PROPOSED BUILDINGS FOR:
HIGHWAY 42 STORE ALL
HOLLY SPRINGS, NORTH CAROLINA

NO.	REVISIONS

Cruse And Associates, P.A.
414 E. Robertson St.
Raleigh, NC 27601
TEL: (919) 882-1420
FAX: (919) 882-5162
LICENSE NO.: C-1721

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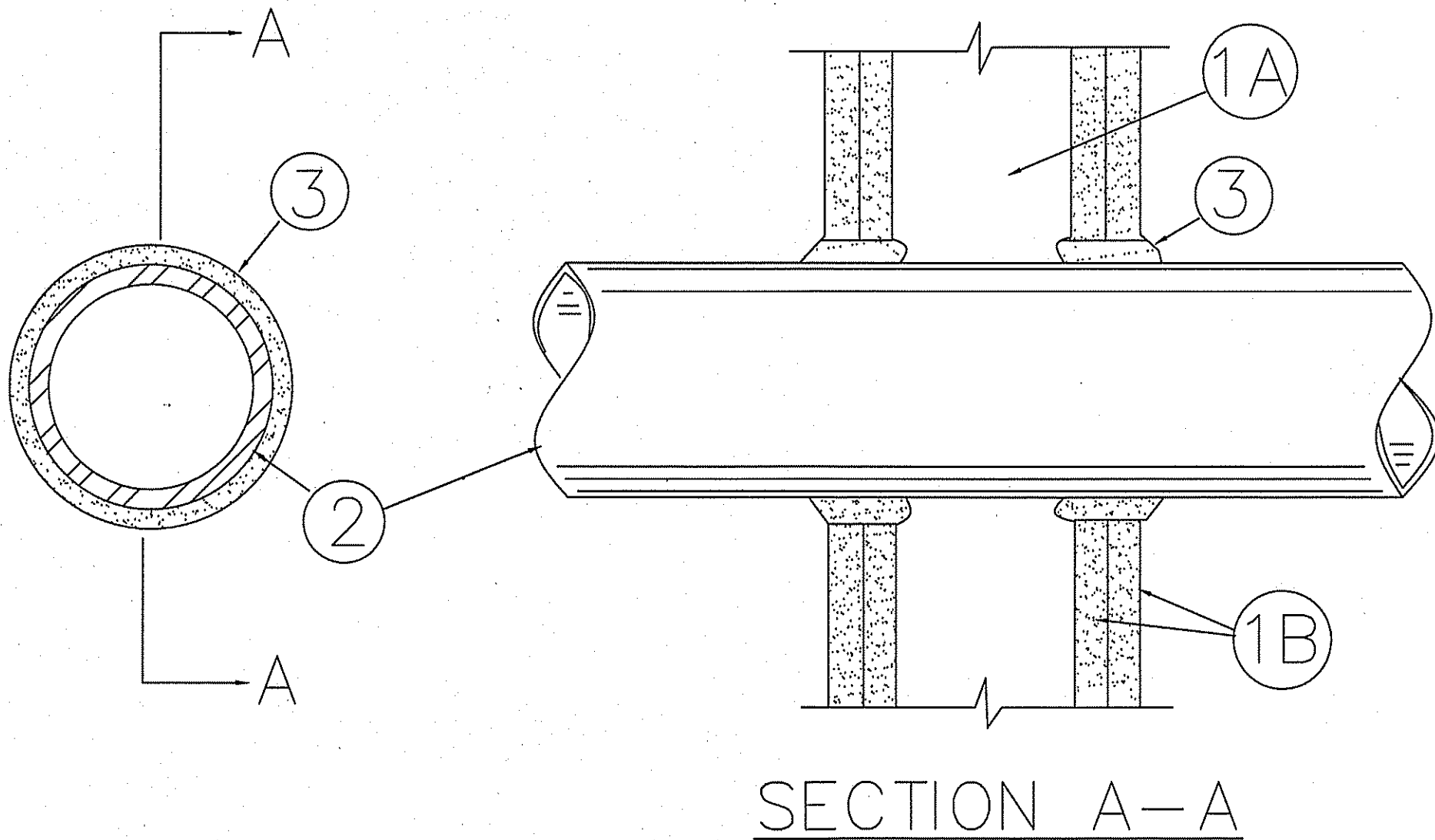
DATE 02-25-25
DRAWN BY BAM
JOB NO. 24-31

SHEET NO.
E-8 OF 8

System No. W-L-1001

June 15, 2005

F Ratings — 1, 2, 3 and 4 Hr (See Items 2 and 3)
T Ratings — 0, 1, 2, 3, and 4 Hr (See Item 3)
L Rating At Ambient — less than 1 CFM/sq ft
L Rating At 400 F — less than 1 CFM/sq ft



1. Wall Assembly — The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the Individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs (max 2 h fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.

B. Gypsum Board* — Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft. (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the Individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm).

2. Through-Penetrant — One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm). (point contact) to max 2 in. (51 mm) Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. Steel Pipe — Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Iron Pipe — Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.

C. Conduit — Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in (102 mm) diam (or smaller) steel electrical metallic tubing

D. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing

E. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

F. Through Penetrating Product* — Flexible Metal Piping The following types of steel flexible metal gas piping may be used:

1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

OMEGA FLEX INC

2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

GASTITE, DIV OF TITFLEX

3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

WARD MFG L L C

3. Fill, Void or Cavity Material* — Caulk or Sealant — Min 5/8. , 1-1/4,1-7/8 and 2-1/2 in. (16, 32, 48 and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

Max Pipe or Conduit Diam in (mm)	F Rating Hr	T Rating Rating Hr
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

+When copper pipe is used, T Rating is 0 h.

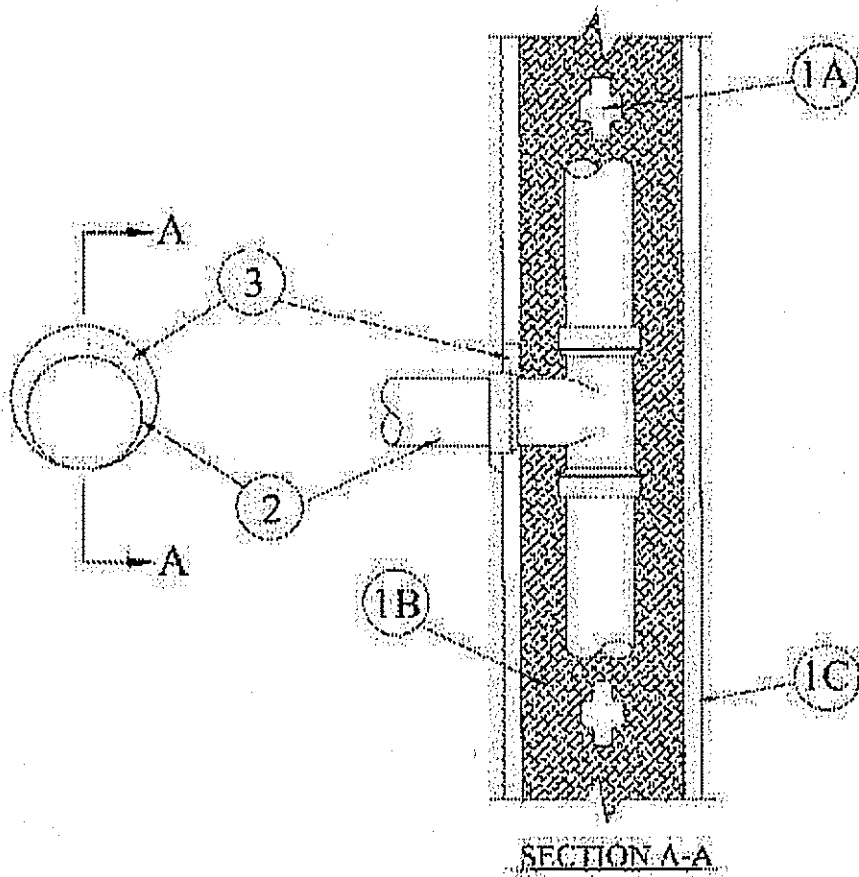
3M COMPANY ? CP 25WB+ or FB-3000 WT.

*Bearing the UL Classification Mark

System No. W-L-2179

September 17, 2001

F Ratings — 1 Hr
T Rating — 1 Hr



1. Wall Assembly — The fire rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the Individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced max 16 in. OC. The steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC.

B. Insulation, Glass Fiber* — R-13 fiber glass insulation installed entirely within single stud cavity of nonmetallic pipe (Item 2).

C. Gypsum Board* — One layer of nom 5/8 in. thick gypsum wallboard, as specified in the Individual Wall and Partition Design. Max diam of opening is 3-3/4 in.

2. Nonmetallic Pipe — Nonmetallic pipe, installed within stud cavity and connected to nonmetallic tee. Nonmetallic pipe penetrating wall assembly on one side of wall to be installed either concentrically or eccentrically within the firestop system. The annular space between pipe and periphery of opening shall be min 0 in. (point contact) to max 1 in. Pipe to be rigidly supported on penetrating side of wall assembly. The following types and sizes of nonmetallic pipes and tees may be used:

A. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. diam (or smaller) Schedule 40 cellular core or solid core PVC pipe and tee for use in vented (drain, waste or vent) or closed (process and supply) piping systems.

B. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. diam (or smaller) SDR17 CPVC pipe and tee for use in vented (drain, waste or vent) or closed (process and supply) piping systems.

C. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 2 in. diam (or smaller) Schedule 40 cellular or solid core ABS pipe and tee for use in vented (drain, waste or vent) or closed (process and supply) piping systems.

3. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall. At point contact locations between wallboard and pipe, a min 1/2 in. diam bead of fill material shall be applied at the pipe/wallboard interface.

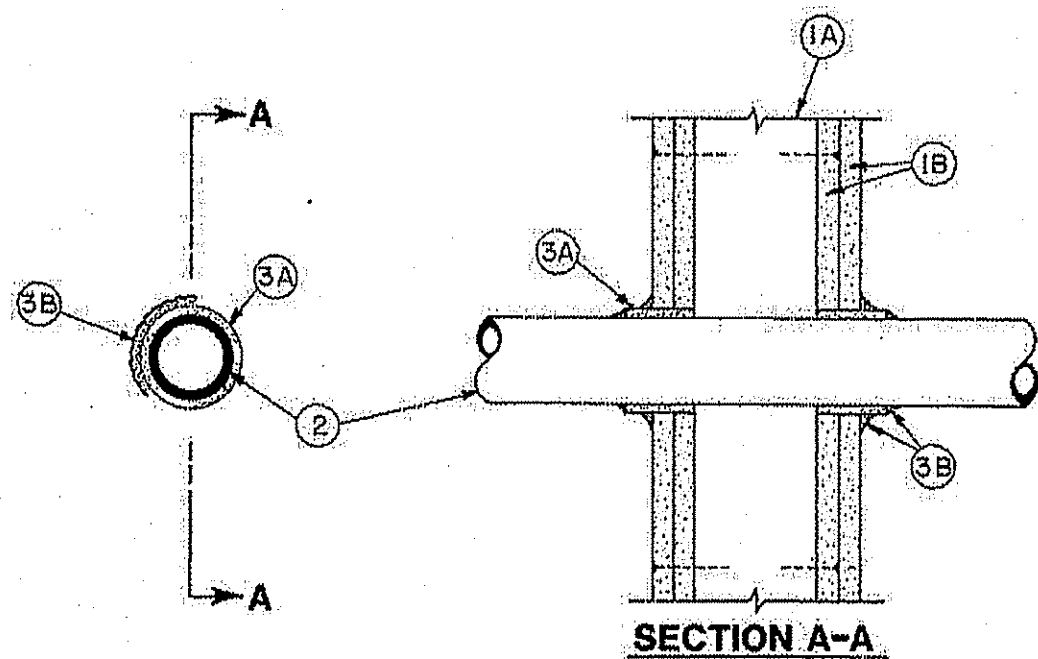
JOHNS MANVILLE INTERNATIONAL INC — FireTemp™ CI, FireTemp™ CE

*Bearing the UL Classification Mark

System No. W-L-2003

November 20, 2009

F Ratings — 1 and 2 Hr (See Item 3)
T Ratings — 1 and 2 Hr (See Item 3)
L Rating At Ambient — 7 CFM/sq ft (See Item 3B)
L Rating At 400 F — less than 1 CFM/sq ft (See Item 3B)



1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the Individual U300, U400 or V400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.

B. Gypsum Board* — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the Individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 3-1/8 in. (79 mm).

2. Through Penetrants — One nonmetallic pipe or conduit to be centered in the through opening. The annular space between pipe or conduit and periphery of opening shall be min 1/4 in. (6 mm) and max 3/8 in. (10 mm). Pipe or conduit to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of nonmetallic pipes or conduits may be used:

A. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

B. Rigid Nonmetallic Conduit++ — Nom 2 in. (51 mm) diam (or smaller)(Schedule 40 or 80) PVC conduit installed in accordance with the National electric Code (NFPA No. 70).

C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

D. Cellular Core Polyvinyl Chloride (ccPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

E. Acrylonitrile Butadiene Styrene (ABS) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

F. Cellular Core Acrylonitrile Butadiene Styrene (ccABS) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

3. Firestop System — Installed symmetrically on both sides of wall assembly. The hourly F and T Ratings for the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed. The details of the firestop system shall be as follows.

A. Fill, Void or Cavity Materials* — Wrap Strip — Nom 1/4 in. (6 mm) thick intumescent elastomeric material faced on one side with aluminum foil, supplied in 2 in. (51 mm) wide strips. Nom 2 in. (51 mm) wide strip tightly wrapped around nonmetallic pipe (foil side out) with seam butted. Wrap strip layer securely bound with steel wire or aluminum foil tape and slid into annular space approx 1-1/4 in. (32 mm) such that approx 3/4 in. (19 mm) of the wrap strip protrudes from the wall surface.

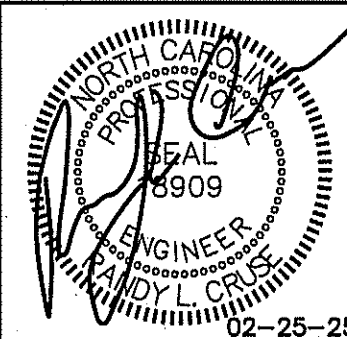
3M COMPANY — FS-195+

B. Fill, Void or Cavity Materials* — Caulk, Sealant or Putty — Min 5/8 in. (16 mm) thickness of caulk or putty applied into annular space between wrap strip and periphery of opening. A nom 1/4 in. (6 mm) diam bead of caulk or putty to be applied to the wrap strip/wall interface and to the exposed edge of the wrap strip layers approx 3/4 in. (19 mm) from the wall surface.

3M COMPANY — CP 25WB+ caulk or MP+ Stix putty, IC 15WB+ caulk, FireDam 150+ caulk or FB-3000 WT sealant. (Note: L Ratings apply only when Type CP 25WB+ caulk or FB-3000 WT sealant is used. CP 25WB+ and FireDam 150+ not suitable for use with CPVC pipes.)

C. Foil Tape — (not shown) — Nom 4 in. (102 mm) wide, 3 mil thick aluminum tape wrapped around pipe prior to the installation of the wrap strip (Item 3A). Min of one wrap, flush with both sides of wall and proceeding outward. Tape is not required for pipes shown in Items 2A, 2B and 2C.

*Bearing the UL Classification Mark



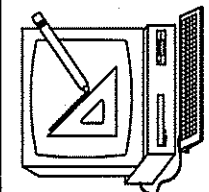
PROPOSED BUILDINGS FOR:

HIGHWAY 42 STORE ALL

HOLLY SPRINGS, NORTH CAROLINA

REVISIONS

NO.	



Cruse and Associates, P.A.

414 E. Main Ave. Ste. 200
Holly Springs, NC 28044
TEL: (919) 862-4469
FAX: (919) 862-0162

LICENSE NO.: C-1721

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DATE 02-25-25

DRAWN BY BAM

JOB NO. 24-31

SHEET NO.

PME 1 OF 1

PENETRATION DETAILS
NOT TO SCALE



BETCO

HWY 42 STORE ALL HOLLY SPRINGS, NORTH CAROLINA

SUBMITTED TO :

F & S LAND DEVELOPMENT LLC.
ATTN: DREW STEPHENSON
460 AUSLEY ROAD
FUQUAY VARINA, NORTH CAROLINA 27526

PHONE: (919) 730-7802

NOTE: DETAIL LABELS CONTAINED WITHIN THIS SET OF PLANS MAY
REFERENCE THE ERECTION DRAWINGS MARKED IN THIS SCHEDULE.
EXAMPLE: DETAIL A/900 REFERS TO DETAIL "A" LOCATED ON ERC900X.

ERECTION DRAWINGS

ERC010X	ERC200X	ERC420X	ERC619X	ERC752X
ERC016X	ERC201X	ERC500X	ERC620X	ERC753X
ERC100X	ERC202X	ERC505X	ERC621X	ERC754X
ERC105X	ERC203X	ERC506X	ERC622X	ERC800X
ERC106X	ERC204X	ERC515X	ERC623X	ERC900X
ERC110X	ERC206X	ERC600X	ERC624X	ERC901X
ERC112X	ERC207X	ERC601X	ERC625X	ERC902X
ERC115X	ERC208X	ERC602X	ERC626X	ERC903X
ERC125NXT	ERC209X	ERC603X	ERC630X	ERC904X
ERC130X	ERC250X	ERC604X	ERC631X	ERC905X
ERC150X	ERC250XPHF	ERC605X	ERC650X	ERC907X
ERC151X	ERC251X	ERC606X	ERC651X	ERC908X
ERC152X	ERC251XPHF	ERC607X	ERC652X	ERC910X
ERC153X	ERC252X	ERC608X	ERC700X	ERC911X
ERC154X	ERC252XPHF	ERC609X	ERC710X	ERC912X
ERC155X	ERC253X	ERC610X	ERC711NXT	ERC913X
ERC175X	ERC254X	ERC611X	ERC713NXT	ERC914X
ERC176X	ERC255X	ERC612X	ERC720X	ERC915X
ERC177X	ERC256X	ERC613X	ERC730X	ERC916X
ERC178X	ERC257X	ERC614X	ERC731X	ERC917X
ERC179X	ERC260X	ERC615NXT	ERC731XPHF	ERC918X
ERC180X	ERC262X	ERC616X	ERC732X	ERC919X
ERC181X	ERC302X	ERC617X	ERC732XPHF	
ERC182X	ERC410XFL	ERC618X	ERC750X	
ERC183X	ERC411X	ERC618XALT	ERC751X	

SCHEDULE OF DRAWINGS

DRAWING NO.	DESCRIPTION
CS1	COVER SHEET
CS2	BUILDING NOTES
CS3	APPENDIX B
CS4	UL SPECIFICATIONS
F1	FOUNDATION PLAN, DETAIL & NOTES
F2	FOUNDATION PLANS & NOTES
F3	FOUNDATION PLAN & NOTES
F4	FOUNDATION PLAN & NOTES
F5	FOUNDATION DETAILS
S1	ELEVATIONS & NOTES
S2	FLOOR PLAN, SECTION, DETAIL & NOTES
S3	FLOOR PLAN & NOTES
S4	FLOOR PLAN, & NOTES
S5	CROSS SECTION, & DETAILS
S6	FLOOR PLAN, CROSS SECTION, DETAILS & NOTES
S7	BUILDING DETAILS
S8	FRAMING ELEVATIONS

WIND LOAD DESIGN DATA:

ULTIMATE DESIGN WIND SPEED (V_{ULT}): 115 MPH
NOMINAL DESIGN WIND SPEED (V_{ASD}): 90 MPH
RISK CATEGORY: II
WIND EXPOSURE: B
INTERNAL PRESSURE COEFFICIENT: ± 0.18

SNOW LOAD DESIGN DATA:

GROUND SNOW LOAD (P_g): 15.0 PSF
FLAT-ROOF SNOW LOAD (P_f): 12.1 PSF
SNOW EXPOSURE FACTOR (C_e): 1.2
SNOW LOAD IMPORTANCE FACTOR (I_s): 1.0
THERMAL FACTOR (C_t): 1.2

EARTHQUAKE LOAD DESIGN DATA:

- RISK CATEGORY: II
- SEISMIC IMPORTANT FACTOR (I_g): 1.0
- SEISMIC DESIGN CATEGORY: C
- ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE (ASCE 7-10 SECTION 12.8)
- BASIC SEISMIC-FORCE-RESISTING SYSTEM: LIGHT FRAMED WALLS WITH STEEL SHEAR PANELS
- SITE CLASS: D
- DESIGN BASE SHEAR:
 - BUILDING "1": 1.837^K
 - BUILDING "2": 3.200^K
 - BUILDING "3": 0.729^K
- RESPONSE MODIFICATION FACTOR (R): 7.0
- SEISMIC RESPONSE COEFFICIENT (C_s): 0.027
- MAPPED SPECTRAL RESPONSE ACCELERATION:
 - (S_s): 17.4% G
 - (S_1): 8.4% G
- SPECTRAL RESPONSE COEFFICIENTS:
 - (S_{DS}): 18.6% G
 - (S_{D1}): 13.4% G

BUILDING DATA :

BUILDING DESCRIPTION:

SINGLE STORY METAL BUILDINGS BOLTED
TO CONCRETE SLAB FOUNDATIONS.

BUILDING SIZE:

BUILDING "1" 60' x 180' = 10,800 sq. ft. 9'-4" EAVE HGT.
BUILDING "2" 60' x 395' = 23,700 sq. ft. 9'-4" EAVE HGT.
BUILDING "3" 20' x 270' = 5,400 sq. ft. 8'-6" EAVE HGT.
TOTAL = 39,900 sq. ft.

PARKING DATA:

SEE SITE PLAN BY OTHERS

BUILDING CODE:

THE 2018 NORTH CAROLINA BUILDING CODE

DESIGN CRITERIA:

THESE BUILDINGS HAVE BEEN DESIGNED TO
CONFORM TO THE STRUCTURAL REQUIREMENTS
OF THE 2018 NORTH CAROLINA BUILDING CODE
WITH CURRENT REVISIONS.

THESE BUILDINGS HAVE BEEN DESIGNED
FOR THE FOLLOWING LIVE LOADINGS
IN ADDITION TO THE DEAD LOADINGS :

ROOF LIVE LOADING: 20 psf

FLOOR LIVE LOADING: 125 psf

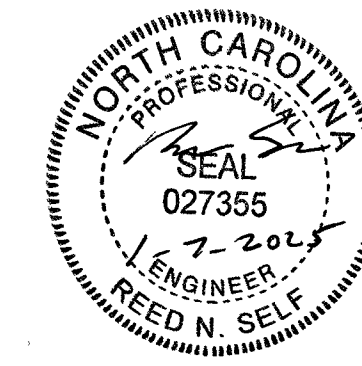
USE GROUP: S-1

TYPE OF CONSTRUCTION: II-B

IT IS THE RESPONSIBILITY OF THE BUYER/OWNER
TO VERIFY THE FIREWALL, LIVE LOAD AND WIND LOAD
REQUIREMENTS WITH THE LOCAL CODE AUTHORITY.

PROJECT NUMBER:

NC24204



BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

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1. CONCRETE FOUNDATIONS AND FLOOR SLABS ARE TO BE SUPPLIED AND INSTALLED BY OTHERS. WEDGE ANCHORS FOR INTERIOR AND EXTERIOR FOOTINGS SUPPLIED AND INSTALLED BY BETCO.
2. EXTERIOR OPENINGS, NOT DESIGNATED AS DOOR LOCATIONS, TO BE COMPLETED USING EXTERIOR WALL PANELS FURNISHED BY BETCO.
3. USE DOW 191 SILICONE CAULK AND 1/2" WIDE BUTYL RUBBER TAPE SEALANT FOR ROOF INSTALLATION. USE DOW 199 SILICONE CAULK AT DOWNSPOUT TO GUTTER JOINT.
4. INTERIOR PARTITIONS PERPENDICULAR TO BEAM (EY'S) MUST BE COMPLETED BEFORE ROOF PANELS ARE INSTALLED. USE PARTITION FRAMING TO PLUMB AND SQUARE COLLINS AND HEADER SECTIONS. CHECK BUILDING WIDTH AT TOP OF COLLINS PRIOR TO ROOF INSTALLATION.
5. THOROUGHLY SUEEP ROOF PANELS FOLLOWING INSTALLATION TO REMOVE METAL DRILLINGS.
6. THIS DESIGN IS BASED ON USING ONLY METAL BUILDING COMPONENTS WHICH ARE PROPRIETARY TO BETCO. FURTHER, THE PROFESSIONAL ENGINEER'S SEAL IS INVALID UNLESS ONLY BETCO METAL BUILDING COMPONENTS ARE UTILIZED.
7. METAL STUDS (IF APPLICABLE) MAY REQUIRE FIELD CUTTING DEPENDING UPON THE EAVE HEIGHT OF THE STRUCTURE.
8. UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.
9. THESE DRAWINGS ARE THE PROPERTY OF BETCO, INC. AND MAY NOT BE USED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN CONSENT OF BETCO, INC.
10. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS AND OTHER CONTRACT DOCUMENTS.
11. THE GENERAL CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL SLEEVES, PADS, DEPRESSIONS, OPENINGS, ETC. AS REQUIRED BY THE VARIOUS TRADES.

1. THE FOUNDATION DESIGN IS BASED ON A PRESUMED ALLIQUABLE SOIL, BEARING PRESSURE OF 3000 PSF. NOTIFY ENGINEER IF SITE CONDITIONS DIFFER FROM DESIGN ASSUMPTIONS SPECIFIED.
2. IF FOOTING ELEVATIONS SHOWN OCCUR IN A DISTURBED, UNSTABLE OR UNSUITABLE SOIL, THE ENGINEER SHALL BE NOTIFIED.
3. TOP OF FOOTING ELEVATIONS ARE SHOWN ON THE DRAWINGS ARE TO BE DETERMINED BY THE CONTRACTOR IN THE FIELD IN ACCORDANCE WITH THE GUIDE LINES SET FORTH IN THE DRAWINGS AND SPECIFICATIONS.
4. FILL MATERIAL SHALL BE FREE OF ROOTS, WOOD OR OTHER ORGANIC MATERIAL, AND COMPLY WITH THE REQUIREMENTS OF THE GEOTECHNICAL MATERIALS USED FOR FOOTINGS AND WITHIN BUILDING LIMITS SHALL BE TESTED AND APPROVED FOR THE USE BY THE GEOTECHNICAL TESTING AGENCY.
5. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE STRUCTURAL ENGINEER'S APPROVAL.
6. FOUNDATION WALLS RETAINING EARTH SHALL BE BRACED AGAINST BACK FILLING PRESSURES UNTIL FLOOR SLAB IS TOP AND EXIST ARE IN PLACE.
7. FOUNDATION WALLS OR GRADE BEAMS HAVING EARTH PLACED ON EACH SIDE SHALL HAVE BOTH FILLED SIMULTANEOUSLY TO MAINTAIN A COMMON ELEVATION.
8. DO NOT PLACE CONCRETE IN ANY EXCAVATION CONTAINING ICE, FROST, FROZEN GROUND OR FREE WATER. FROZEN SUB GRADES MUST BE THAWED AND RECOMPACTED PRIOR TO PLACING CONCRETE.
9. EARTH FORMED FOOTINGS SHALL CONFORM TO THE SHAPE, LINES, AND DIMENSIONS AS SHOWN ON THE FOUNDATION PLAN. ALL WATER SHALL BE REMOVED BEFORE DEPOSITING CONCRETE.
10. BEFORE PLACING CONCRETE, ALL EMBEDDED ITEMS SHALL BE PROPERLY LOCATED, ACCURATELY POSITIONED, AND MAINTAINED SECURELY IN PLACE.
11. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL DIMENSIONS PRIOR TO STARTING CONSTRUCTION, AND ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
12. PERIMETER FOUNDATION MUST NOT EXCEED 1/4" ELEVATION VARIATION ALONG ANY 50' DISTANCE OF BUILDING LENGTH.
13. PERIMETER FOUNDATION TO EXTEND BELOW FROST LINE. VERIFY REQUIRED DEPTH WITH LOCAL BUILDING OFFICIALS PRIOR TO PROCEEDING WITH FOUNDATION WORK AND NOTIFY ENGINEER OF DEVIATION FROM DRAWING.
14. THE AMERICAN CONCRETE INSTITUTE DOES NOT RECOGNIZE FIBERGLASS AS A SUBSTITUTE FOR WIRE MESH REINFORCED CONCRETE WHEN SUBJECTED TO TENSILE STRESS.
15. SAW CUT CONTROL JOINTS IN SLAB SURFACE AT APPROXIMATELY 10'-0" INTERVALS ... OFFSET CUTS 2'-6" MINIMUM FROM INTERIOR COLUMN LINES.

1. REINFORCING STEEL SHALL BE NEW BILLET STEEL, DEFORMED BARS CONFORMING TO ASTM A-615, GRADE 60 (FY-60,000 PSI).
2. FIELD BENDING OF CONCRETE REINFORCING STEEL IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
3. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 807-66 "ACI DETAILING MANUAL-1934" AND THE "CRSI MANUAL OF STANDARD PRACTICE", LATEST EDITION.
4. PLACE REINFORCEMENT AND TIES IN GROUT SPACES PRIOR TO GROUTING.
5. CONCRETE COVERAGE OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE UNLESS NOTED OTHERWISE.

A. FOOTING AND GRADE BEAMS	
1. IN GROUND CONTACT	3 INCHES
B. BEAMS AND COLUMNS	2 INCHES
C. SLABS, WALLS, AND JOISTS	3/4 INCH - NOT EXPOSED TO EARTH, LIQUID OR WEATHER
D. SLABS ON GRADE	2 INCHES FROM TOP
E. FORMED SURFACES IN GROUND CONTACT	2 INCHES
6. DEVELOPMENT LENGTHS AND LAP SPLICES SHALL BE IN ACCORDANCE WITH ACI 318-14 CHAPTER 12 AND AS INDICATED ON THE DRAWINGS. WHERE SPLICES ARE NOT CALLED OUT ON THE DRAWINGS, USE CLASS "B", BUT IN NO CASE SHALL ANY SPLICE BE LESS THAN 12 INCHES. FOR BARS AS INDICATED BELOW THE BASIC DEVELOPMENT SHALL BE MULTIPLIED BY THE FACTORS AS INDICATED FOR TENSION OR COMPRESSION AND THEN ROUNDED UP TO THE NEAREST WHOLE INCH. THE FACTORS INDICATED BELOW ARE CUMULATIVE FOR EACH OF THE CONDITIONS AFFICABLE.

1. WELDED WIRE MAT/FABRIC SHALL CONFORM TO ASTM A184 AND A185 RESPECTIVELY AND BE LAPPED 1'-0" AT ALL SPLICES.
2. ALL REINFORCING TERMINATING AT THE TOPS OF COLUMNS AND PILASTERS SHALL BE HOOKED UNLESS OTHERWISE NOTED.
3. SUBMIT SHOP DRAWINGS FOR FABRICATION, BENDING, AND PLACEMENT OF CONCRETE REINFORCEMENT. CONFORM WITH ACI DETAILING MANUAL (807-66) SHOWING BAR SCHEDULES, STRIPPING, DETAILING, DIAGRAMS OF BENT BARS, ARRANGEMENT OF CONCRETE REINFORCEMENT. INCLUDE SPECIAL REINFORCEMENT REQUIRED AT OPENINGS THROUGH CONCRETE STRUCTURES. INCLUDE ALL ACCESSORIES SPECIFIED/REQUIRED TO SUPPORT REINFORCING.
4. SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION. DRAWINGS SHALL BEAR THE CONTRACTOR'S APPROVAL STAMP ACCEPTING RESPONSIBILITY FOR DIMENSIONS, QUANTITIES AND COORDINATION WITH THE OTHER TRADES.
5. CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER AND TESTING AGENCY A MINIMUM OF 48 HOURS PRIOR TO ALL CONCRETE POURS IN ORDER TO PERMIT REINFORCING STEEL REVIEW AS REQUIRED BY THE INSPECTION SCHEDULE.
6. REINFORCING IN ALL CONTINUOUS STRIP FOOTINGS SHALL HAVE CORNER BARS OR DOVELS PROVIDE AT ALL CORNERS AND INTERSECTIONS.

1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL SAFETY REGULATIONS, PROGRAMS AND PRECAUTIONS RELATED TO ALL WORK ON THIS PROJECT.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROTECTION OF PERSONS AND PROPERTY EITHER ON OR ADJACENT TO THE PROJECT AND SHALL PROTECT SAME AGAINST INJURY, DAMAGE OR LOSS.
3. MEANS AND METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIALS ARE SOLELY THE CONTRACTORS RESPONSIBILITY.
4. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE DRAWINGS OF OTHER CONSULTANTS AND UNDER THE CONTRACTOR SHALL COORDINATE THE VARIOUS REQUIREMENTS.
5. NO CHANGES OR ANY CHANGES IN SIZE, DIMENSION OR LOCATION SHALL BE MADE IN ANY STRUCTURAL ELEMENTS WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.
6. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE STRUCTURE. SUCH LOADS SHALL NOT EXCEED THE CAPACITY OF THE STRUCTURE AT ANY TIME.
7. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION, AND ANY TEMPORARY BRACING OR SUPPORT REQUIRED TO ACCOMMODATE THE CONTRACTORS MEANS AND METHODS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
8. THE CONTRACTOR SHALL INFORM THE STRUCTURAL ENGINEER, CLEARLY AND EXPLICITLY IN WRITING, OF ANY DEVIATION OR SUBSTITUTION OF REQUIREMENTS OF THE CONTRACT DOCUMENTS. CONTRACTOR IS NOT RELIEVED OF HIS RESPONSIBILITY OF THE CONTRACT DOCUMENTS BY VIRTUE OF THE STRUCTURAL ENGINEERS REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS CLEARLY AND EXPLICITLY INFORMED THE STRUCTURAL ENGINEER IN WRITING OF ANY DEVIATIONS OR SUBSTITUTIONS AT THE OF SUBMISSION, AND THE STRUCTURAL ENGINEER HAS GIVEN WRITTEN APPROVAL FOR THE SPECIFIC DEVIATIONS OR SUBSTITUTIONS.
9. ALL THINGS WHICH, IN THE OPINION OF THE CONTRACTOR, APPEAR TO BE DEFICIENCIES, OMISSIONS, CONTRADICTIONS OR AMBIGUITIES IN THE DRAWINGS OR SPECIFICATIONS, SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER. CORRECTIONS OR WRITTEN INTERPRETATIONS SHALL BE ISSUED BEFORE AFFECTED WORK MAY PROCEED.
10. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH NEW WORK. IF A DISCREPANCY IS DETECTED BETWEEN THE EXISTING CONDITIONS, STRUCTURAL ENGINEER SHALL BE INFORMED IMMEDIATELY. DISCREPANCIES BETWEEN EXISTING AND PROPOSED NEW CONSTRUCTION.
11. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL DIMENSIONS SHOWN ON THE CONTRACT DOCUMENTS. INCONSISTENCIES ON THE STRUCTURAL DRAWINGS OR BETWEEN THE STRUCTURAL DRAWINGS AND ANY OTHER CONTRACT, SHOP, FABRICATION, OR OTHER DRAWINGS OR INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING WITH AFFECTED WORK.
12. DO NOT SCALE THESE DRAWINGS, USE THE DIMENSIONS SHOWN.

1. SUBMIT WRITTEN REPORTS TO EACH PROPOSED CONCRETE DESIGN MIX NOT LESS THAN 15 DAYS PRIOR TO THE START OF WORK. DESIGN MIXES PREPARED MORE THAN TWELVE (12) MONTHS PRIOR TO THE DATE THE SUBMITTAL ARE NOT PERMITTED.
2. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14).
3. ALL CONCRETE SHALL BE TESTED BY AN INDEPENDENT TESTING AGENCY FOR STANDARD PARAMETERS (SLUMP, COMPRESSIVE STRENGTH, ETC.). TWO COPIES OF ALL REPORTS SHALL BE SUBMITTED TO THE ENGINEER/ARCHITECT.
4. ALL NORMAL WEIGHT CONCRETE SHALL HAVE ASTM C-33 AGGREGATE WITH MAXIMUM UNIT WEIGHT OF 150 PCF. COMPRESSIVE STRENGTH SHALL BE 3000 PSI AT 28 DAYS. MINIMUM FOR FOUNDATIONS AND SLABS ON GRADE. ALL CONCRETE FOR FLOOR SLABS ON METAL DECK FORMS SHALL BE NORMAL WEIGHT CONCRETE WITH COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
5. MIX DESIGNS, INCLUDING WATER/CEMENT RATIOS AND SLUMPS, SHALL BE PREPARED IN ACCORDANCE WITH MOST CURRENT ACI 301 CHAPTER 3, EXCEPT WHERE NOTED OTHERWISE. THE PREVIOUS EDITIONS OF ACI 301 SHALL CONFORM TO ASTM C 150 TYPE I OR AT CONTRACTOR'S OPTION, ASTM C 595 TYPE II IF WHERE FLY ASH IS PERMITTED. NORMAL WEIGHT CONCRETE SHALL CONFORM TO ASTM C 33 AGGREGATE WITH MAXIMUM UNIT WEIGHT OF 150 PCF AND LIGHT WEIGHT CONCRETE SHALL CONFORM TO ASTM C 330 AGGREGATE. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED IN ANY CONCRETE.

AGGREGATE SIZES SHALL BE:

I. FORMED CONCRETE ELEMENTS, UNO.	¾" STONE (3/4" MAX)
II. GRADE SLABS AND EARTH FORMED ELEMENTS.	1" STONE (1" MAX)
III. COARSE MASONRY GROUT REQUIRED	¾" STONE (3/4" MAX)
IV. FINE MASONRY GROUT REQUIRED	NO STONE (3/8" MAX)

6. WATER REDUCING ADMIXTURE SHALL BE USED IN ALL CONCRETE.
7. AIR ENTRAINING ADMIXTURE IN ACCORDANCE WITH ACI 301-84 TABLE 3.4.1 SHALL BE USED IN ALL CONCRETE EXPOSED TO FREEZING AND THAWING DURING CONSTRUCTION OR SERVICE CONDITIONS.
8. WATER/CEMENT RATIO SHALL NOT EXCEED 0.45 FOR ANY CONCRETE SUBJECTED TO FREEZING/THAWING.
9. ALL PUMPED CONCRETE SHALL HAVE A WATER/CEMENT RATIO LESS THAN 0.45 AND SHALL CONTAIN A HIGH RANGE WATER REDUCING ADMIXTURE (SUPERPLASTICIZER).
10. IN NO CASE SHALL A WATER/CEMENT RATIO EXCEED THE FOLLOWING:

I. ALL FOUNDATION CONCRETE TO 3500 PSI.	0.55 MAX. W/C RATIO
II. EXTERIOR PAVING CONCRETE TO 3500 PSI.	0.50 MAX. W/C RATIO
III. ALL EXPOSED C/P, WATERABLE, PIER'S, ETC., TO 3500 PSI.	0.45 MAX. W/C RATIO
IV. SLABS ON GRADE TO 3000 PSI.	0.45 MAX. W/C RATIO
11. LIQUID MEMBRANE CURING COMPOUND WITH A MINIMUM 30% SOLIDS CONTENT SHALL BE APPLIED WITHIN TWO (2) HOURS AFTER COMPLETION OF FINISHING TO ALL CONCRETE FLATWORK AND WALLS, UNO, OTHER THAN FOOTINGS AND GRADE BEAMS.
12. FLOORS IN AREAS RECEIVING QUARRY TILE, CERAMIC TILE AND LIQUID FLOOR HARDENER SHALL BE CURED WITH DISPERGATING LIQUID MEMBRANE CURING COMPOUND OR SET CURED BY USE OF MOISTURE RETAINING COVER. DISPERGATING CURING COMPOUND SHALL BE THOROUGHLY BROOMED AND WASHED OFF PRIOR TO APPLICATION OF FLOOR FINISH.
13. USE A NON-CORROSIVE, NON-CHLORIDE ACCELERATING ADMIXTURE IN CONCRETE EXPOSED TO TEMPERATURES BELOW 40 DEGREES. UNIFORMITY HEAT THE WATER AND AGGREGATES TO A TEMPERATURE OF NOT LESS THAN 50 DEGREES. PLACE AND CURE CONCRETE IN ACCORDANCE WITH ACI 308.
14. ALL CONSTRUCTION JOINTS SHOWN ON THE DRAWINGS SHALL BE INCORPORATED INTO THE STRUCTURE UNLESS THEIR ELIMINATION IS APPROVED BY THE STRUCTURAL ENGINEER.
15. REINFORCING IN ALL ABUTTING CONCRETE, INCLUDING FOOTINGS, SHALL BE CONTINUOUS THROUGH OR AROUND ALL CORNERS OR INTERSECTIONS. DOUELS OR SPLICES SHALL BE EQUAL IN SIZE AND SPACING TO THE REINFORCING IN THE ABUTTING MEMBERS.
16. REFER TO ARCHITECTURAL DRAWINGS FOR DOOR AND WINDOW OPENINGS, DRIPS, REGLETS, WASHES, MASONRY ANCHORS, BRICK LEDGE ELEVATIONS, SLAB DEPRESSIONS AND MISCELLANEOUS EMBEDDED PLATES, BOLTS, ANCHORS, ANGLES, ETC.
17. FORMS FOR ROUND COLUMNS SHALL BE ONE PIECE FIBERGLASS FORM TO PRODUCE SMOOTH FINISH ON EXPOSED COLUMNS.
18. REFER TO ARCHITECTURAL DRAWINGS FOR CONCRETE FINISHES. WHERE FINISH IS NOT SPECIFIED, CONFORM TO REQUIREMENTS OF ACI 301.
19. BASE PLATES, ANCHOR RODS, SUPPORT ANGLES AND OTHER STEEL EXPOSED TO EARTH OR GRANULAR FILL SHALL BE COVERED WITH A MINIMUM OF 3" OF CONCRETE.
20. FINISHING TOLERANCE SHALL BE WITHIN CLASS B IN ACCORDANCE WITH ACI 301 AND CONSIDERATION SHALL BE GIVEN TO SEQUENCING OF CONCRETE PLACEMENT TO FACILITATE CONTROL OF FINISH ELEVATIONS.
21. NON-SHRINK GROUT SHALL BE PRE-MIXED, NON-CORROSIVE, NON-METALLIC, NON-STAINING CONTAINING SILICA SANDS, PORTLAND CEMENT, SHRINKAGE COMPENSATING AND WATER REDUCING AGENTS. PRODUCTS SHALL ONLY REQUIRE THE ADDITION OF WATER. MINIMUM COMPRESSIVE STRENGTH SHALL BE 5000 PSI AT 28 DAYS. GROUT SHALL BE FREE OF GAS FORMING OR AIR RELEASING AND OXIDIZING AGENTS AND CONTAIN NO CORROSIVE IRON, ALUMINUM OR GYPSUM.
22. PROVIDE CONCRETE GROUT - NOT MORTAR - FOR REINFORCING MASONRY LINTEL AND BOND BEAMS WHERE INDICATED ON DRAWINGS OR AS SCHEDULED.
23. TOLERANCE FOR ANCHOR RODS AND OTHER EMBEDDED ITEMS SHALL BE PER THE AISI CODE OF STANDARD PRACTICE SECTION 15.
24. UNLESS OTHERWISE SHOWN IN THE ARCHITECTURAL DRAWINGS, PROVIDE 3/4" CHAMFERS AT ALL CORNERS, WALL, SLAB, OR BEAM EDGES THAT ARE EXPOSED TO VIEW IN THE FINISHED STRUCTURE.

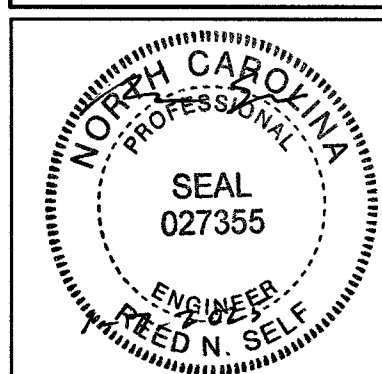
1. AIR SPACE:
 - a. 2 in (51 mm) MINIMUM AIR SPACE RECOMMENDED ± 1 in (25.4 mm) MINIMUM AIR SPACE REQUIRED.
 - b. 4 1/2 in (114 mm) MAXIMUM DISTANCE REQUIRED BETWEEN BACK OF BRICK VENEER AND STEEL FRAMING UNLESS ANCHORS ARE RATIONALLY DESIGNED.
2. FLASHING:
 - a. DO NOT STOP FLASHING BEHIND FACE OF THE BRICKWORK.
 - b. PLACE FLASHING AT ALL POINTS WHERE AIR SPACE IS INTERRUPTED.
 - c. EXTEND FLASHING VERTICALLY UP TO THE BACKING TO 8 in (203 mm) MINIMUM HEIGHT.
 - d. LAF FLASHING 4 in (102 mm) MINIMUM HEIGHT UNDER WATER-RESISTANT BARRIER OR BEHIND SHEATHING ABOVE GRADE.
 - e. INSTALL BASE FLASHING MINIMUM 6 in (152 mm) ABOVE GRADE.
 - f. TURN UP FLASHING ENDS INTO HEAD JOINT A MINIMUM OF 1 in (25.4 mm) FOR FORM END DAM.
3. WEEPS:
 - a. OPEN HEAD JOINT WEEPS SPACED AT NO MORE THAN 24 in (610 mm) O.C. RECOMMENDED.
 - b. MOST BUILDING CODES PERMIT WEEPS NO LESS THAN 3/16" in (4.8 mm) DIAMETER AND SPACED NO MORE THAN 33 in (838 mm) O.C.
 - c. WICK AND TUBE WEY SPACING RECOMMENDED AT NO MORE THAN 16 in (406 mm) O.C.
4. ANCHORS:
 - a. CORRODATED ANCHORS NOT PERMITTED WITH STEEL STUD BLOCKING.
 - b. MINIMUM W11 (3 gage) ADJUSTABLE WIRE ANCHORS, HOT-DIPED GALVANIZED, TWO PIECE PER ASTM A183 CLASS B-2.
 - c. VERTICAL SPACING: MAXIMUM 16 in (406 mm) O.C.
 - d. HORIZONTAL SPACING: MAXIMUM 24 in (610 mm) O.C.
 - e. SECURELY ATTACH ANCHORS TO THE STEEL STUDS THROUGH THE SHEATHING, NOT THE SHEATHING ALONE.
5. SHELF ANGLES AND LINTELS:
 - a. SHELF ANGLES LOCATED ABOVE THE HEIGHT LIMIT MAY SUPPORT NO MORE THAN 1 STORY OF BRICK.
 - b. SIZE HORIZONTAL LEG OF ALL SHELF ANGLES AND LINTELS TO PROVIDE A MINIMUM BEARING OF 2/3 THICKNESS OF THE BRICK WTHIE.
6. SHEATHING:
 - a. EXTERIOR GRADE GYPSUM SHEATHING OR OSB OR GLASS FIBER MAT-FACED SHEATHING OR CEMENT BOARD, MINIMUM 1/2 in (12.7 mm) THICK.
7. WATER-RESISTANT BARRIER:
 - a. WATER-RESISTANT BARRIERS INCLUDE 15 ASPHALT FELT, BUILDING PAPER, QUALIFYING HIGH-DENSITY POLYETHYLENE OR POLYPROPYLENE PLASTICS (HOUSEBRAPS).
 - b. INSTALL WATER-RESISTANT BARRIER OVER SHEATHING.
 - c. SEAL WATER-RESISTANT SHEATHING PER MANUFACTURER TO PERFORM AS WATER-RESISTANT BARRIER.
 - d. SHIP LAF WATER-RESISTANT BARRIER PIECES MINIMUM 6 in (152 mm).
8. STEEL STUDS:
 - a. GALVANIZED STEEL STUDS WITH MINIMUM G-90 COATING.
 - b. RESTRICT ALLOWABLE OUT-OF-PLANE DEFLECTION OF STEEL STUDS TO L/600 USING SERVICE LEVEL LOADS.
 - c. MINIMUM \varnothing 243 in (16 gage \times 129 mm) STUDS FOR EXTERIOR WALLS.
 - d. DO NOT FIELD WELD STEEL STUDS.
9. MORTAR:
 - a. COMPLY WITH ASTM C270.
 - b. TYPE N RECOMMENDED \pm TYPE S AND TYPE A.
10. EXPANSION JOINTS:
 - a. PROVIDE VERTICAL AND HORIZONTAL EXPANSION JOINTS THROUGH BRICK VENEER.

BRICK LINTEL SCHEDULE	
MAX OPENING WIDTH	STEEL ANGLE
4'-0"	L 3" x 3 1/2" x 1/4" LLH
6'-0"	L 4" x 3 1/2" x 1/4" LLV
8'-0"	L 5" x 3 1/2" x 1/4" LLV
10'-0"	L 6" x 3 1/2" x 5/16" LLV
12'-0"	L 7" x 4" x 3/8" LLV
14'-0"	L 7" x 4" x 3/8" LLV

NOTES:

1. PROVIDE 8" MINIMUM BEARING.
2. ALL EXPOSED LINTELS TO BE HOT DIP GALVANIZED.
3. ABOVE SCHEDULE FOR LOOSE LINTELS. (NOT BY BETCO)

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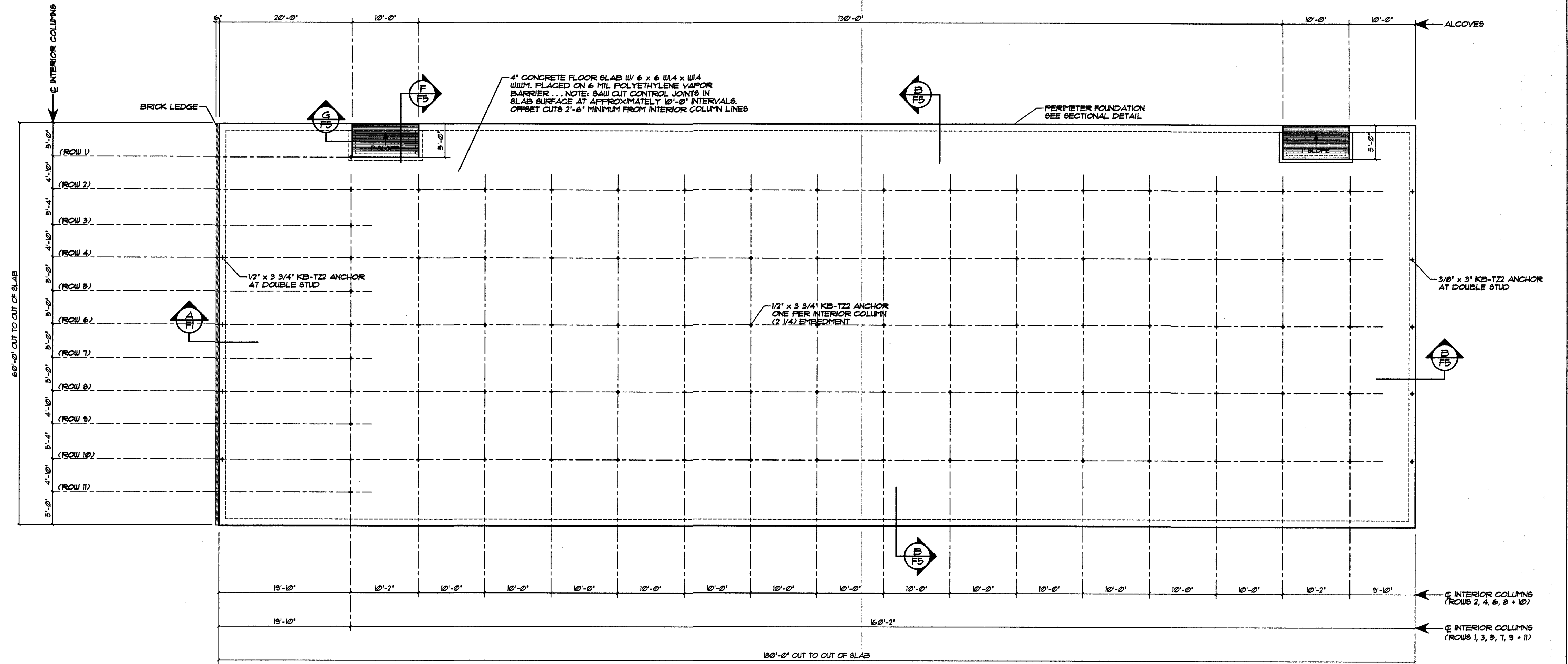


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			DRAWN BY:	R. KEATH
			SCALE:	AS NOTED
			APPROVED BY:	
REVISIONS			DATE	BY



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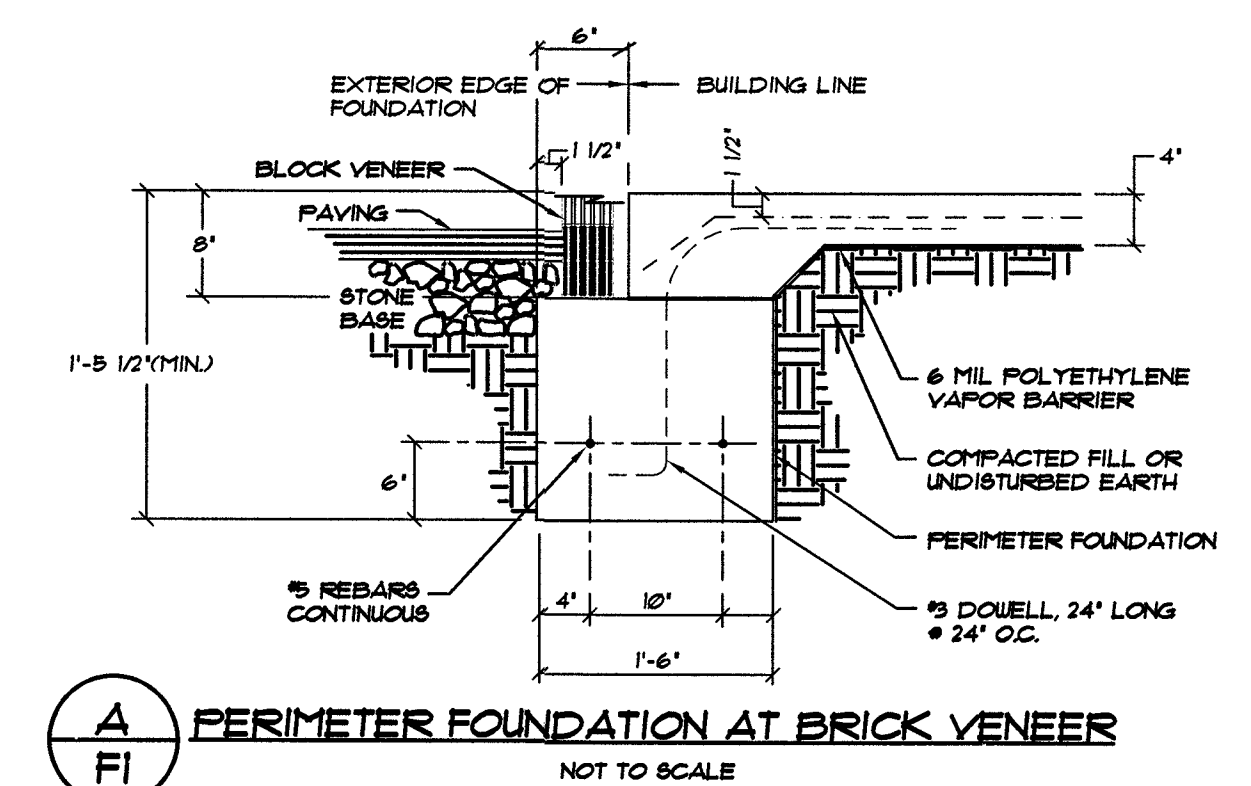
PROJECT NAME:		HWY 42 STORE ALL	
PROJECT ADDRESS:		HOLLY SPRINGS, NORTH CAROLINA	
OWNER:	F & S LAND DEVELOPMENT LLC.	PROJECT NO.:	NC24204
SHEET TITLE:	BUILDING NOTES	DRAWING NUMBER:	CS2 OF 4



FOUNDATION PLAN... BUILDING "I"

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

SAW CUT CONTROL JOINTS IN SLAB SURFACE AT APPROXIMATELY 10'-0" INTERVALS . . . OFFSET CUTS 2'-6" MINIMUM FROM INTERIOR COLUMN LINES.



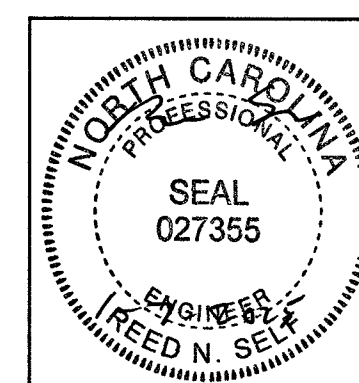
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PERIMETER FOUNDATION AT BRICK VENEER
NOT TO SCALE

ACI 318 — TABLE 19.3.1.1				
EXPOSURE CATEGORIES AND CLASSES				
CATEGORY	SEVERITY	CLASS	CONDITION	
F FREEZING AND THAWING	NOT APPLICABLE	FO	CONCRETE NOT EXPOSED TO FREEZING- AND-THAWING CYCLES	
S SULFATE	NOT APPLICABLE	SO	WATER-SOLUBLE SULFATE (SO ₄) IN SOIL, PERCENT BY WEIGHT	DISSOLVED SULFATE (SO ₄) IN WATER, ppm
			SO ₄ < 0.10	SO ₄ < 150
W REQUIRING LOW PERMEABILITY	NOT APPLICABLE	WO	CONCRETE DRY IN SERVICE, CONCRETE IN CONTACT WITH WATER AND LOW PERMEABILITY IS NOT REQUIRED	
C CORROSION PROTECTION OF REINFORCEMENT	MODERATE	CI	CONCRETE EXPOSED TO MOISTURE BUT NOT TO EXTERNAL SOURCES OF CHLORIDES	
NOTE: ABOVE REPRESENTS "ASSUMED" CONDITIONS BY ENGINEER. IF CONTRACTOR KNOWS OR HAS REASON TO BELIEVE OTHERWISE, ENGINEER SHALL BE NOTIFIED IN WRITING PRIOR TO CONSTRUCTION.				
REFERENCE ACI 318-14 — TABLE 19.3.1.1 FOR REQUIREMENTS FOR CONCRETE BY EXPOSURE CLASS.				

NOTE:
KB-T2Z ANCHORS ARE PROVIDED BY BETCO.
EMBEDDED ANCHOR BOLTS IN SLAB ARE
NOT REQUIRED BY BUYER.

NOTE TO OWNER / CONTRACTOR:
DO NOT CUT SAW JOINTS ALONG COLUMN LINES.
DOING SO WILL REDUCE THE STRUCTURAL CAPACITY
OF THE BUILDING ANCHORAGE TO THE CONCRETE AND
MAY RESULT IN ADDITIONAL MATERIAL AND LABOR
CHARGES. SAW CUTS MUST BE OFFSET 2'-6" MINIMUM
FROM COLUMN LINES.



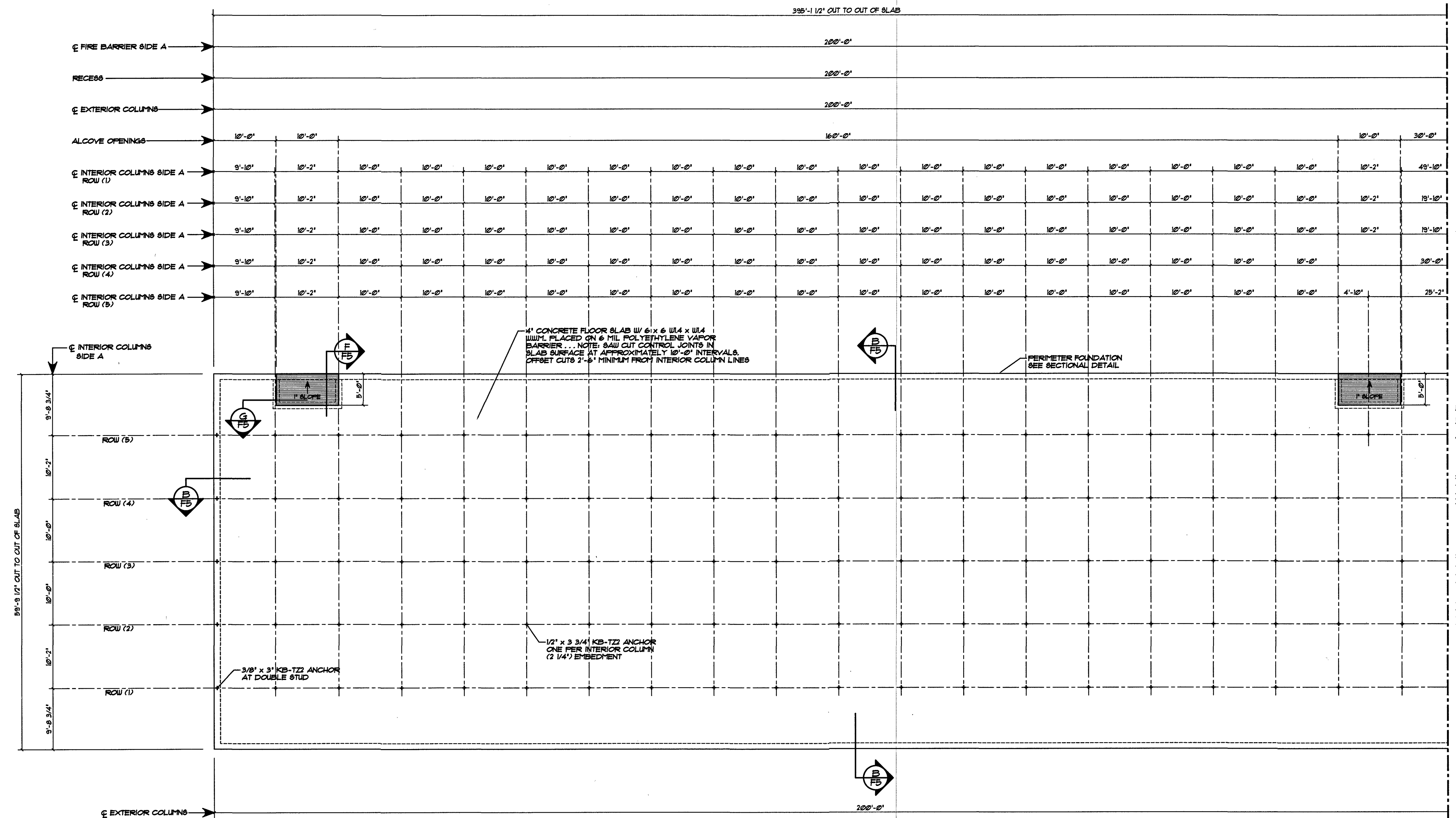
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DATE: 12/9/2024
DRAWN BY: R. KEATH
SCALE: AS NOTED
APPROVED BY:

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PROJECT NAME: HWY 42 STORE ALL		PROJECT NO.: NC24204
PROJECT ADDRESS: HOLLY SPRINGS, NORTH CAROLINA		DRAWING NUMBER: F1 of 5
OWNER: F & S LAND DEVELOPMENT LLC	SHEET TITLE: FOUNDATION PLAN, DETAIL & NOTES - BUILDING "I"	

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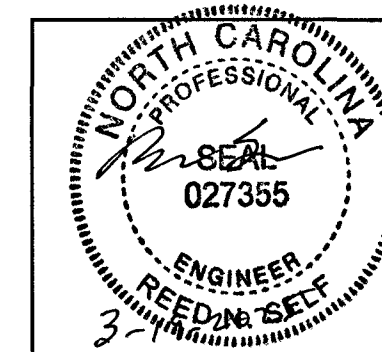
FOUNDATION PLAN ... BUILDING '2A'

SCALE: 1/8" = 1'-0" OR 1/4" = 1'-0"

SAW CUT CONTROL JOINTS IN SLAB SURFACE AT APPROXIMATELY 10'-0" INTERVALS ... OFFSET CUTS 2'-6" MINIMUM FROM INTERIOR COLUMN LINES.

NOTE:
KB-TZ ANCHORS ARE PROVIDED BY BETCO.
EMBEDDED ANCHOR BOLTS IN SLAB ARE
NOT REQUIRED BY BUYER.

NOTE TO OWNER / CONTRACTOR:
DO NOT CUT SAW JOINTS ALONG COLUMN LINES.
DOING SO WILL REDUCE THE STRUCTURAL CAPACITY
OF THE BUILDING ANCHORAGE TO THE CONCRETE AND
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CHARGES. SAW CUTS MUST BE OFFSET 2'-6" MINIMUM
FROM COLUMN LINES.

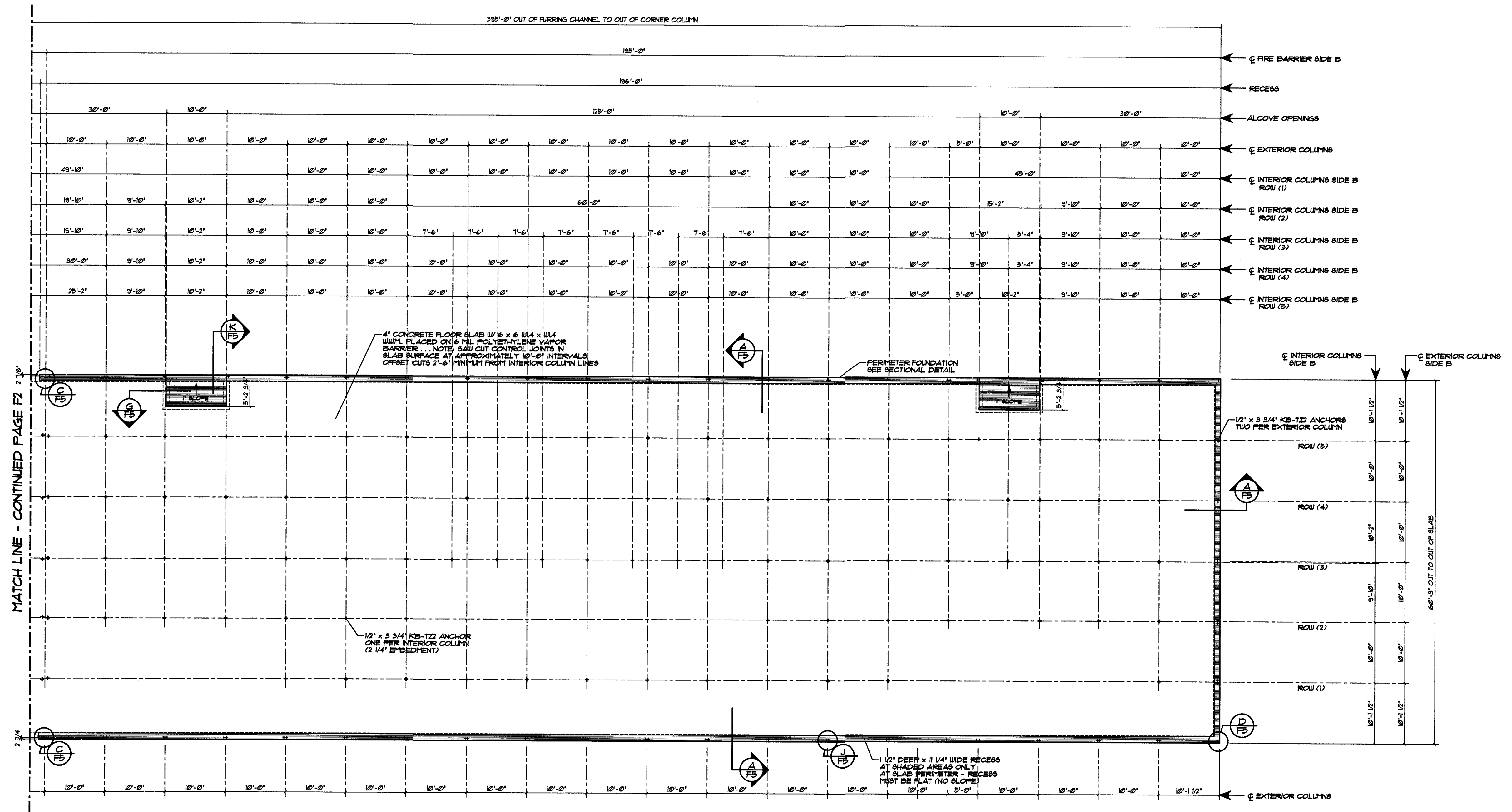


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ADJUSTED DIMENSIONS	3/14/25 KEM

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PROJECT NAME:	HWY 42 STORE ALL	
PROJECT ADDRESS:	HOLLY SPRINGS, NORTH CAROLINA	
OWNER:	F & S LAND DEVELOPMENT LLC	PROJECT NO.: NC24204
SHEET TITLE:	FOUNDATION PLAN & NOTES - BUILDING "2"	DRAWING NUMBER: F2 OF 5

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FOUNDATION PLAN... BUILDING '2B'

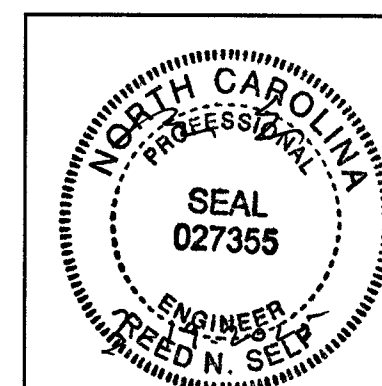
SAW CUT CONTROL JOINTS IN SLAB SURFACE AT APPROXIMATELY 10'-0" INTERVALS . . . OFFSET CUTS 2'-6" MINIMUM FROM INTERIOR COLUMN LINES.

NOTE:
KB-T22 ANCHORS ARE PROVIDED BY BETCO.
EMBEDDED ANCHOR BOLTS IN SLAB ARE
NOT REQUIRED BY BUYER.

NOTE TO OWNER / CONTRACTOR:
DO NOT CUT SAW JOINTS ALONG COLUMN LINES.
DOING SO WILL REDUCE THE STRUCTURAL CAPACITY
OF THE BUILDING ANCHORAGE TO THE CONCRETE AND
MAY RESULT IN ADDITIONAL MATERIAL AND LABOR
CHARGES. SAW CUTS MUST BE OFFSET 2'-6" MINIMUM
FROM COLUMN LINES.

NOTE:
FIELD LOCATE WEDGE ANCHORS AT
3 HOUR FIRE BARRIER.

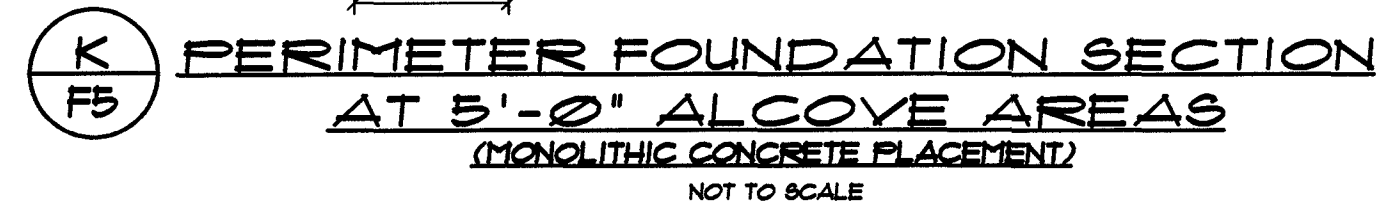
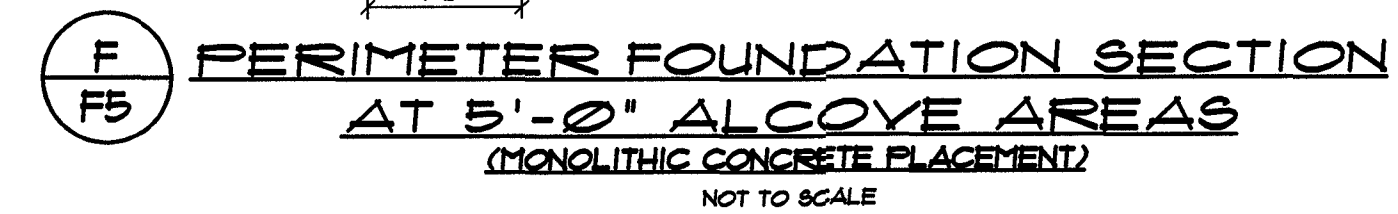
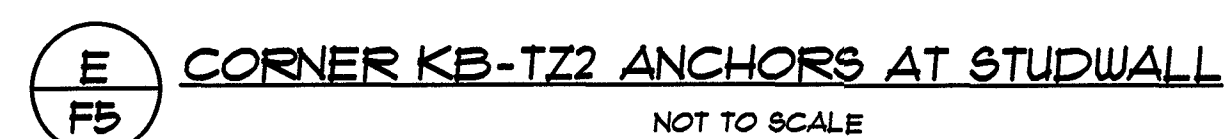
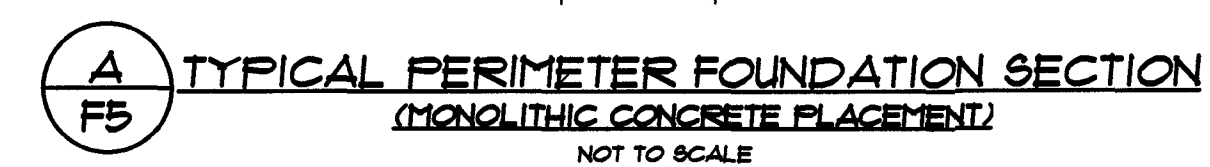
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REVISIONS	DATE BY

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PROJECT NAME:	HWY 42 STORE ALL	
PROJECT ADDRESS:	HOLLY SPRINGS, NORTH CAROLINA	
OWNER:	F & S LAND DEVELOPMENT LLC	PROJECT NO.: NC24204
SHEET TITLE:	FOUNDATION PLAN & NOTES - BUILDING "2"	DRAWING NUMBER: F3 OF 5

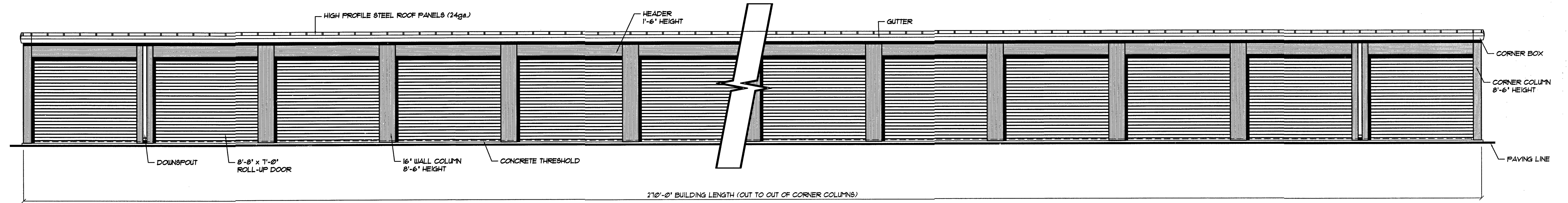


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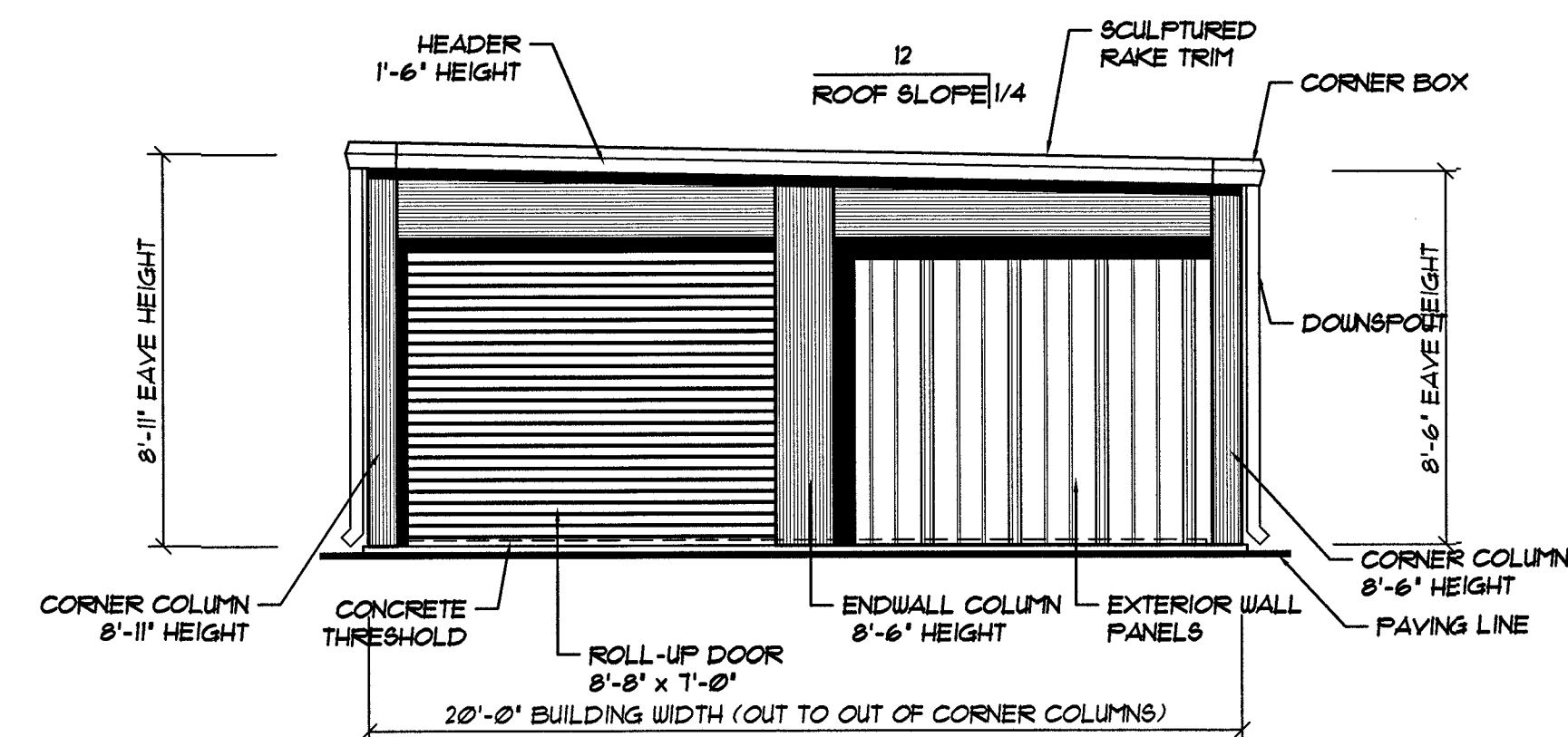
PROJECT NAME: HWY 42 STORE ALL

PROJECT ADDRESS: HOLLY SPRINGS, NORTH CAROLINA

5 OF 5



A SIDEWALL ELEVATION ... BUILDING "3"
 S1 SCALE: 1/4" = 1'-0"

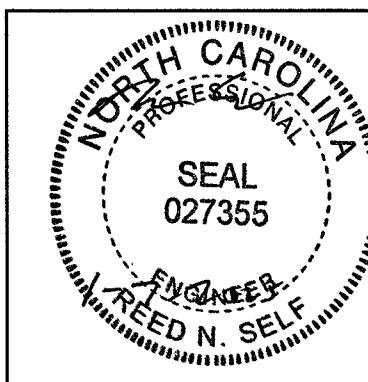


B ENDWALL ELEVATION ... BUILDING "3"
 S1 SCALE: 1/4" = 1'-0"

NOTE:
 DOWNSPOUTS LOCATIONS SHOWN FOR
 ELEVATION PURPOSE ONLY. REFER
 TO FLOOR PLAN SHEETS FOR LOCATIONS

NOTE: ... SEE OWNER FOR
 BUILDING ORIENTATION ON SITE

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REVISIONS	DATE BY

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PROJECT NAME:	HWY 42 STORE ALL
PROJECT ADDRESS:	HOLLY SPRINGS, NORTH CAROLINA
OWNER:	F & S LAND DEVELOPMENT LLC.
SHEET TITLE:	ELEVATIONS & NOTES BUILDING "3"
PROJECT NO.:	NC24204
DRAWING NUMBER:	S1 OF 8

1 EXTERIOR STUDIWALL CONSTRUCTION • FLAT SLAB:

- 3 5/8" x 1 5/8" FLANGE METAL STUDS @ 24" O.C. - 20ga.
- 3 5/8" CONTINUOUS CEILING TRACK - 18ga.
- (SECURE FLOOR TRACK w/ 3/8" x 3" KB-TZ ANCHORS (2" MIN. EMBEDMENT) @ 30" O.C. MAX.)
- 2 ROUS CONTINUOUS 20ga. FURRING CHANNELS
- PRE-PAINTED EXTERIOR 236A WALL PANELS
- WALL PANEL BASE SUPPORT
- DRAIN CAP (#160202)
- 4" THICK FIBERGLASS INSULATION
- 4 MIL POLYETHYLENE VAPOR BARRIER
- *-230 LINER PANELS • INTERIOR (ATTACH EACH PANEL TO BASE 4 TOP TRACK WITH 4 EACH 1/2" x 5/8" SDF'S)
- *-J-TRIM • TOP OF LINER PANELS

5 EXTERIOR STUDIWALL CONSTRUCTION • HVAC INSET/ALCOVE:

- 3 5/8" x 1 5/8" FLANGE METAL STUDS @ 24" O.C. - 20ga.
- 3 5/8" CONTINUOUS CEILING TRACK - 18ga.
- 3 5/8" CONTINUOUS FLOOR TRACK - 18ga.
- (SECURE FLOOR TRACK w/ 3/8" x 3" KB-TZ ANCHORS (2" MIN. EMBEDMENT) @ 30" O.C. MAX.)
- 3 ROUS CONTINUOUS 20ga. FURRING CHANNELS
- PRE-PAINTED EXTERIOR 236A WALL PANELS
- DRAIN CAP (#160202)
- 4" THICK FIBERGLASS INSULATION
- 4 MIL POLYETHYLENE VAPOR BARRIER
- *-230 LINER PANELS • INTERIOR (ATTACH EACH PANEL TO BASE 4 TOP TRACK WITH 4 EACH 1/2" x 5/8" SDF'S)
- *-J-TRIM • TOP OF LINER PANELS

13 INTERIOR STUDIWALL CONSTRUCTION

- 3 5/8" x 1 5/8" FLANGE METAL STUDS @ 24" O.C. - 20ga.
- 3 5/8" CONTINUOUS FLOOR AND CEILING TRACK - 18 ga.
- (SECURE FLOOR TRACK w/ 3/8" x 3" KB-TZ ANCHORS @ 30" O.C.)
- *-230 LINER PANELS • STORAGE SIDE (ATTACH EACH PANEL AT BASE AND TOP w/ (4) EACH 1/2" SDF'S)

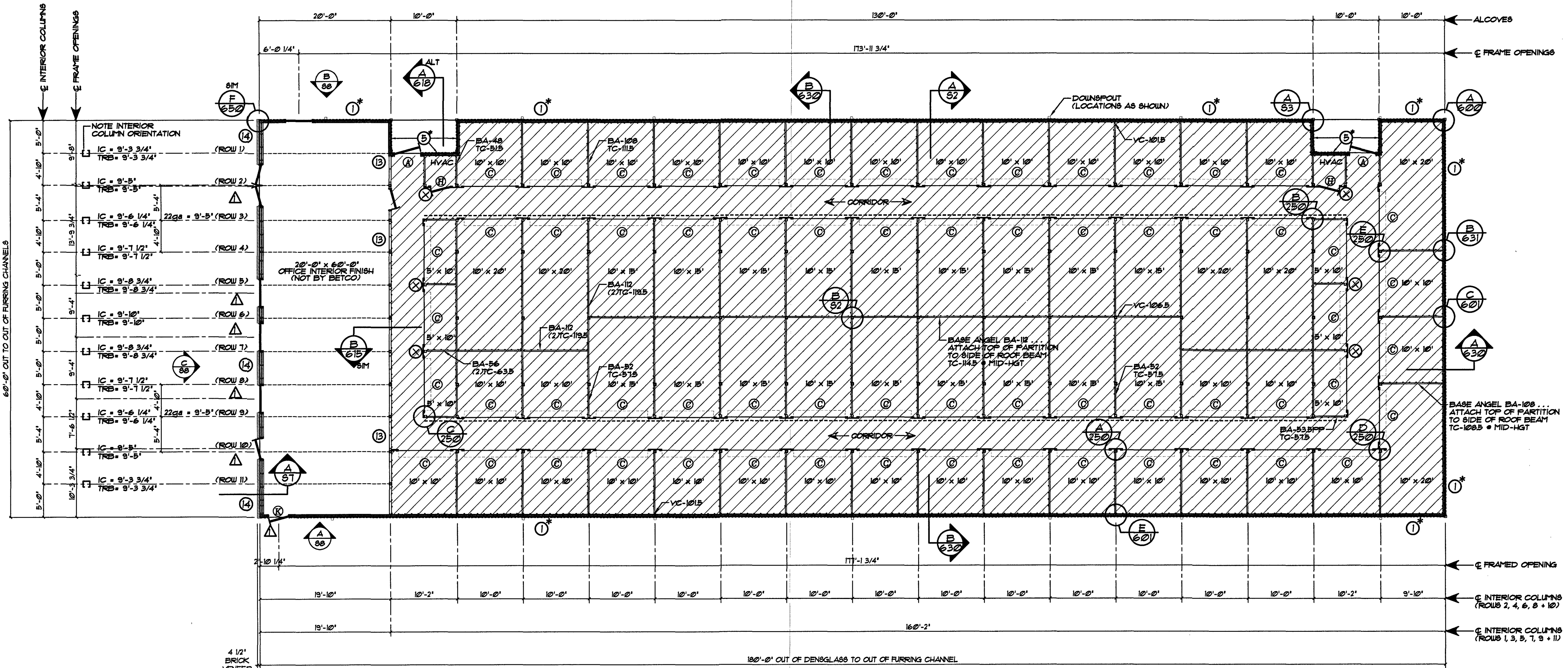
14 EXTERIOR STUDIWALL CONSTRUCTION • BRICK VENEER:

- 5 1/2" x 2" FLANGE METAL STUDS @ 24" O.C. - 18ga.
- 6" CONTINUOUS FLOOR AND CEILING TRACK - 18 ga.
- (SECURE FLOOR TRACK w/ 3/8" x 3" KB-TZ ANCHORS @ 30" O.C.)
- DOUBLE STUD AT ENDWALL (TYPICAL AT ALL ROOF BEAM LOCATIONS)
- HORIZONTAL 136 PANELS • EXTERIOR
- BRICK VENEER AND BRICK TIES NOT BY BETCO
- BLOCK STUDS AS SHOWN ON DETAIL C-80
- 236A PANELS AT BACK OF PARAPET
- 20ga. FURRING CHANNELS AT BACK OF PARAPET (2 ROUS)
- *-6" THICK FIBERGLASS INSULATION (NOT BY BETCO)
- *-4 MIL VAPOR BARRIER (NOT BY BETCO)
- INTERIOR FINISH (NOT BY BETCO)

NOTE: GENERAL STUDIWALL CONSTRUCTION:

- A) -ATTACH STUDS w/ 1/2" x 5/8" SDF'S EACH SIDE OF TRACK (4 PER STUD)
- B) -WALLS MUST EXTEND FROM ROOF TO FLOOR DECK AND INTO WALL COLUMN CAVITY.
- C) -TOP TRACK MUST FOLLOW SLOPE OF ROOF LINE.

KEY TO ABBREVIATIONS:
IC = INTERIOR COLUMN
TC = TOP CHANNEL
VC = VERTICAL CHANNEL
BA = BASE ANGLE
TC = TOP CHANNEL
VC = VERTICAL CHANNEL



FLOOR PLAN... BUILDING "1"

SCALE: 1" = 10'-0"

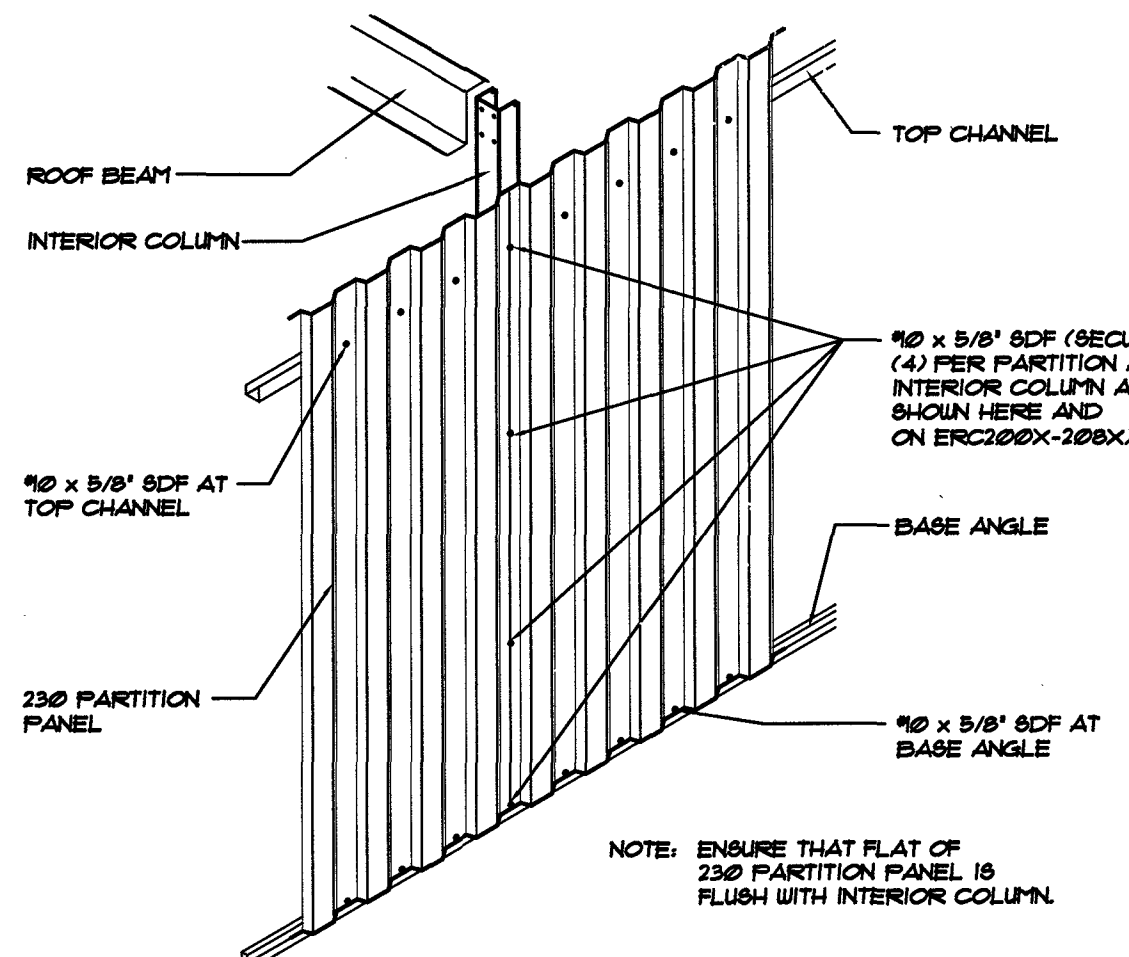
NOTE COLUMN ORIENTATION
• CORRIDORS PARALLEL TO ROOF BEAMS

LEGEND:

22ga. INTERIOR COLUMN

22ga. INTERIOR DOOR STRUCTURE

CLIMATE CONTROL



B PARTITION ATTACHMENT
• INTERIOR COLUMNS

NOT TO SCALE

NOTES:

- 6" ROOF INSULATION (R-19) INCLUDED AT ENTIRETY OF BUILDING "1".
- 4" WALL INSULATION (R-19) INCLUDED AT STUD WALL OF BUILDING "1".
- 4" x 5" KICK-OUT DOWNSPOUTS ARE INCLUDED.
- CORRIDOR WIDTH WILL BE A MINIMUM OF APPROXIMATELY 56" FROM FACE TO FACE OF DOOR JAMBS.
- ATTACH ALL STUDS TO TRACKS WITH 1/2" x 5/8" SDF (4 PER STUD).
- BURGULAR BARS ARE PROVIDED ABOVE INTERIOR ROLL-UP DOORS AS REQUIRED.
- INTERIOR DOOR FRAMES AND PARTITIONS AT HALLWAYS ARE PREPAINTED.
- ALL PERSONNEL DOORS ARE GLOBAL AND INCLUDE LOCK-OFF TYPE CLOSERS.
- ALL ROLL-UP DOORS ARE BY BETCO & INCLUDE TENSION ADJUSTERS & BEARINGS.
- SECURE INTERIOR PARTITION TO INTERIOR COLUMNS WITH (4) 1/2" x 5/8" SDF'S AS SHOWN ON ERC200X - ERC200X.
- INTERIOR DOOR JAMBS INCLUDE PARTITION CLOSURE ANGLES.
- NOTE FOR INTERIOR BEARING STUDWALLS: (SECURE BOTTOM TRACK w/ 3/8" x 3" KB-TZ ANCHORS (2" MIN. EMBEDMENT @ 30" O.C. MAXIMUM))
- NOTE FOR ALL EXTERIOR STUDWALLS: (SECURE FLOOR TRACK w/ 3/8" x 3" KB-TZ ANCHORS (2" MIN. EMBEDMENT @ 30" O.C. MAXIMUM))

NOTE:
SEE ERC602X FOR EXTERIOR SWING DOOR FRAMING IN STUDWALL.

NOTE:
UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.

NOTE:
20ft. ROOF BEAMS ARE 3' x 12' x 12ga. ZEE'S.

STUDWALL LEGEND BUILDING #1

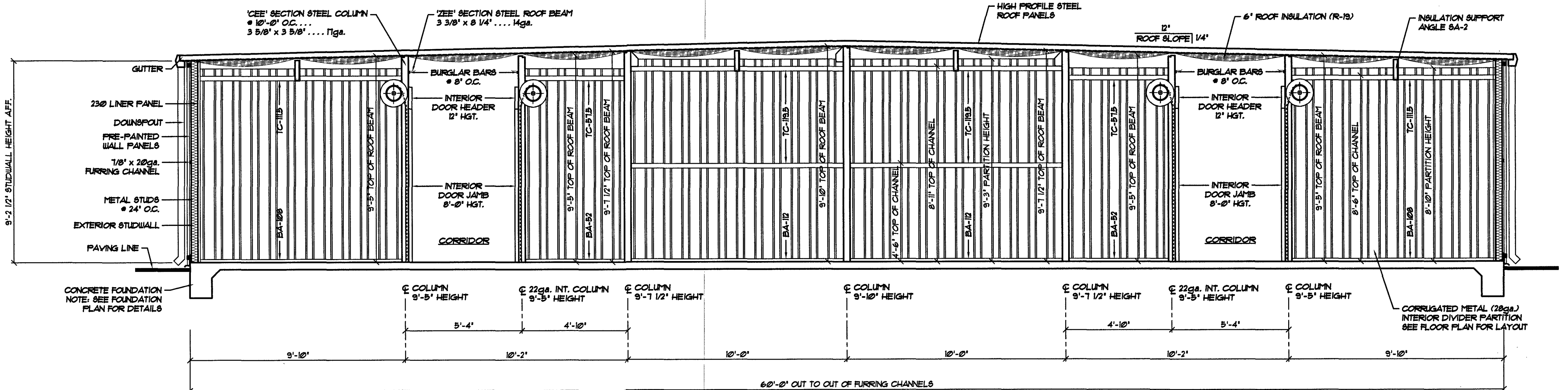
DESCRIPTION	UNINSULATED	INSULATED*
1 EXTERIOR STUDIWALL CONSTRUCTION AT FLAT SLAB (BLOCK • MID-HGT.)	0 L.F.	400 L.F.
5 EXTERIOR STUDIWALL CONSTRUCTION AT HVAC (BLOCK • MID-HGT.)	0 L.F.	40 L.F.
13 NON-LOAD BEARING STUDIWALL	55 L.F.	0 L.F.
14 PARAPET STUDIWALL w/ BLOCK VENEER	0 L.F.	60 L.F.

NOTE #1: SEE BLOCKING DETAIL A/631 ON ERC631X

JAMB	ROLL-UP HEADER	SWING DOOR HEADER
8'-0"	12'	10 1/2'

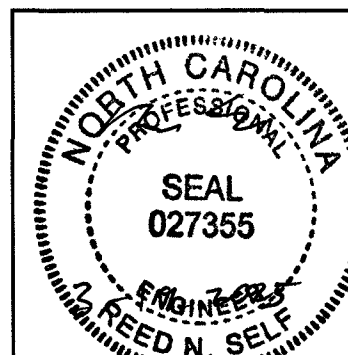
ID	DOOR SIZE	TYPE
A	4'-0" x 7'-0" (4070 - 2 - G) (ERC254X)	1/2 GLASS PERSONNEL
B	3'-0" x 7'-0"	INTERIOR ROLL-UP
C	8'-0" x 7'-0"	INTERIOR ROLL-UP
D	5'-6" x 7'-0"	INTERIOR ROLL-UP
E	3'-8" x 7'-10"	EXTERIOR ROLL-UP
F	8'-8" x 7'-10"	EXTERIOR ROLL-UP
G	8'-4" x 7'-10"	EXTERIOR ROLL-UP
H	3'-0" x 7'-0" w/ LOUVER	INTERIOR SWING DOOR
I	4'-0" x 7'-0" (4070 - 1 - A) (ERC254X)	A-LABEL FIRE DOOR
J	3'-0" x 7'-0" (3070 - 1) (ERC254X)	SOLID PERSONNEL

NOTE: BLOCK ALL LOAD-BEARING INTERIOR & EXTERIOR STUD WALLS AS SHOWN IN DETAIL A OF ERC631X



A 60'-0" WIDE CROSS SECTION... BUILDING "1"

SCALE: 3" = 10'-0"



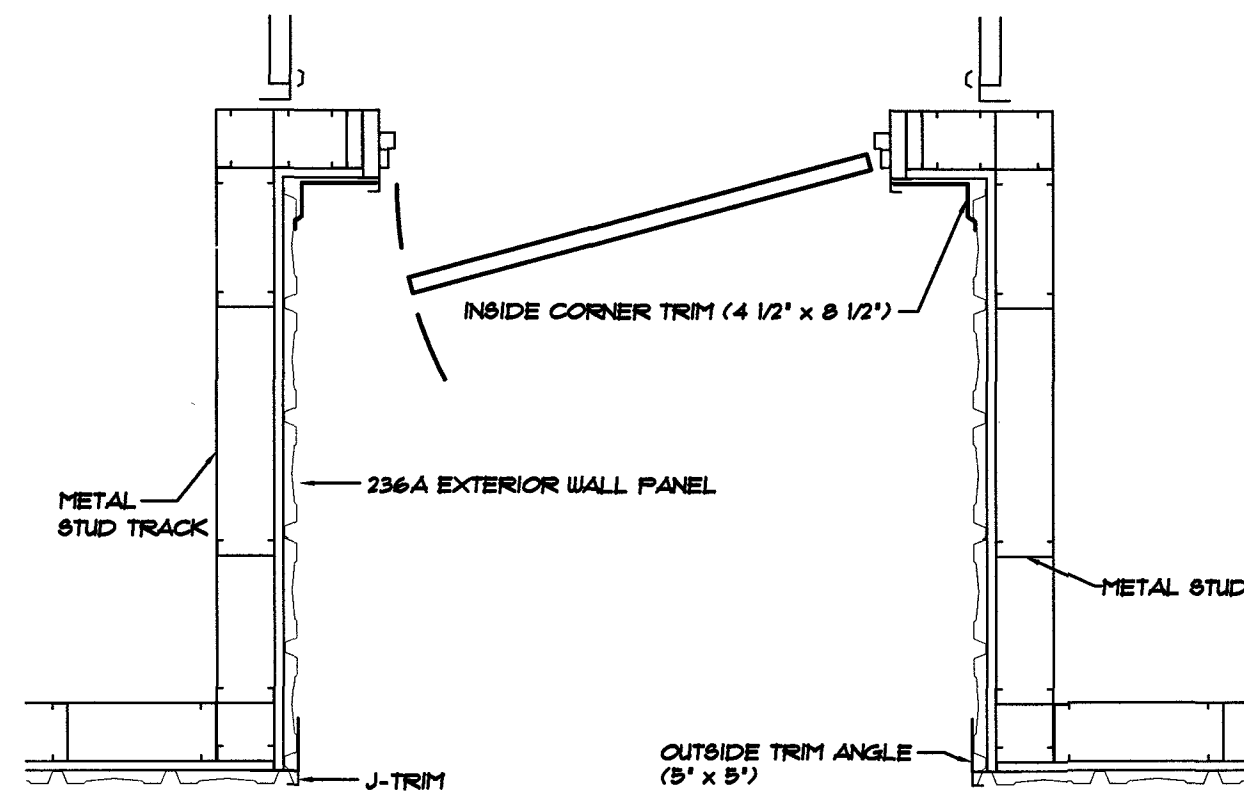
DATE:	12/9/2024
DRAWN BY:	R. KEATH
SCALE:	AS NOTED
APPROVED BY:	
LOCATED WINDOWS/DOORS • OFFICE	3/14/25 KEM
REVISIONS	DATE BY

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

PROJECT NAME:	HWY 42 STORE ALL
PROJECT ADDRESS:	HOLLY SPRINGS, NORTH CAROLINA
OWNER:	F & S LAND DEVELOPMENT LLC.
SHEET TITLE:	FLOOR PLAN, SECTION, DETAIL, & NOTES - BUILDING "1"
PROJECT NO.:	NC24204
DRAWING NUMBER:	S2 of 8

BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

KEY TO ABBREVIATIONS:
EC = ENDWALL COLUMN
IC = INTERIOR COLUMN
TB = TOP OF BEAM
BA = BASE ANGLE
TC = TOP CHANNEL
VC = VERTICAL CHANNEL



A TRIM AT ALCOVE
NOT TO SCALE

JAMB	ROLL-UP HEADER	SWING DOOR HEADER
8'-0"	12'	10' 1/2"

NOTE:
SEE ERC602X FOR EXTERIOR SWING
DOOR FRAMING IN STUDWALL.

LEGEND:

(X) 22ga. INTERIOR COLUMN

(-----) 22 ga. INTERIOR DOOR STRUCTURE

CLIMATE CONTROL

NOTES:

- 6" ROOF INSULATION (R-19) INCLUDED AT ENTIRETY OF BUILDING "2".
- 4" WALL INSULATION (R-13) INCLUDED AT STUD WALL OF BUILDING "2".
- 4" x 5" KICK-OUT DOWNSPOUTS ARE INCLUDED.
- CORRIDOR WIDTH WILL BE A MINIMUM OF APPROXIMATELY 56" FROM FACE TO FACE OF DOOR JAMBS.
- ATTACH ALL STUDS TO TRACKS WITH #10 x 5/8" SDF (4 PER STUD).
- BURGLAR BARS ARE PROVIDED ABOVE INTERIOR ROLL-UP DOORS AS REQUIRED.
- INTERIOR DOOR FRAMES AND PARTITIONS AT HALLWAYS ARE PREFRAMED.
- ALL PERSONNEL DOORS ARE GLOBAL AND INCLUDE LOCK-OPEN TYPE CLOSERS.
- ALL ROLL-UP DOORS ARE BY BETCO & INCLUDE TENSION ADJUSTERS & BEARINGS.
- SECURE INTERIOR PARTITION TO INTERIOR COLUMNS WITH (4) #10 x 5/8" SDF'S AS SHOWN ON ERC208X - ERC208X.
- INTERIOR DOOR JAMBS INCLUDE PARTITION CLOSURE ANGLES.
- NOTE FOR INTERIOR BEARING STUDWALLS: (SECURE BOTTOM TRACK w/ 3/8" x 3" KB-T22 ANCHORS (2" MIN. EMBEDMENT @ 30" O.C. MAXIMUM).
- NOTE FOR ALL EXTERIOR STUDWALLS: (SECURE FLOOR TRACK w/ 3/8" x 3" KB-T22 ANCHORS (2" MIN. EMBEDMENT @ 30" O.C. MAXIMUM).

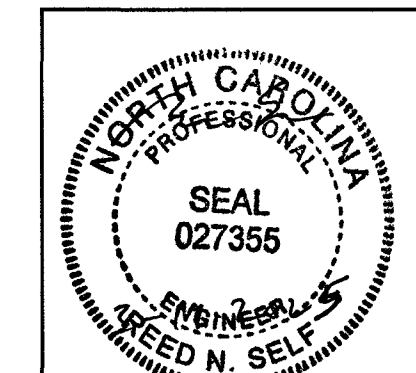
STUDWALL LEGEND BUILDING "2"		
DESCRIPTION	BUILDING "2"	
	INTERIOR STUDWALL	EXTERIOR STUDWALL
① EXTERIOR STUDWALL CONSTRUCTION AT FLAT SLAB (BLOCK @ MID-HGT.)	0 L.F.	440 L.F.
③ INTERIOR LOAD BEARING STUDWALL	0 L.F.	350 L.F.
④ INTERIOR NON-LOAD BEARING STUDWALL	0 L.F.	35 L.F.
⑤ EXTERIOR STUDWALL CONSTRUCTION AT HVAC (BLOCK @ MID-HGT.)	20 L.F.	60 L.F.
⑥ 3 HOUR FIRE RESISTANT PARTITION (STUD AND TRACK BY BETCO)	35 L.F.	25 L.F.

NOTE #1: SEE BLOCKING DETAIL A/681 ON ERC891X

DOOR SCHEDULE		
ID	DOOR SIZE	TYPE
①	4'-0" x 7'-0" (4070 - 2 - G) (ERC254X)	1/2 GLASS PERSONNEL
②	3'-0" x 7'-0"	INTERIOR ROLL-UP
③	8'-0" x 7'-0"	INTERIOR ROLL-UP
④	5'-8" x 7'-0"	INTERIOR ROLL-UP
⑤	3'-8" x 7'-10"	EXTERIOR ROLL-UP
⑥	8'-8" x 7'-10"	EXTERIOR ROLL-UP
⑦	8'-4" x 7'-10"	EXTERIOR ROLL-UP
⑧	3'-0" x 7'-0" w/ LOUVER	INTERIOR SWING DOOR
⑨	4'-0" x 7'-0" (4070 - 1 - A) (ERC254X)	A-LABEL FIRE DOOR

NOTE: BLOCK ALL LOAD-BEARING INTERIOR & EXTERIOR STUD WALLS AS SHOWN IN DETAIL A OF ERC891X

NOTE: UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.

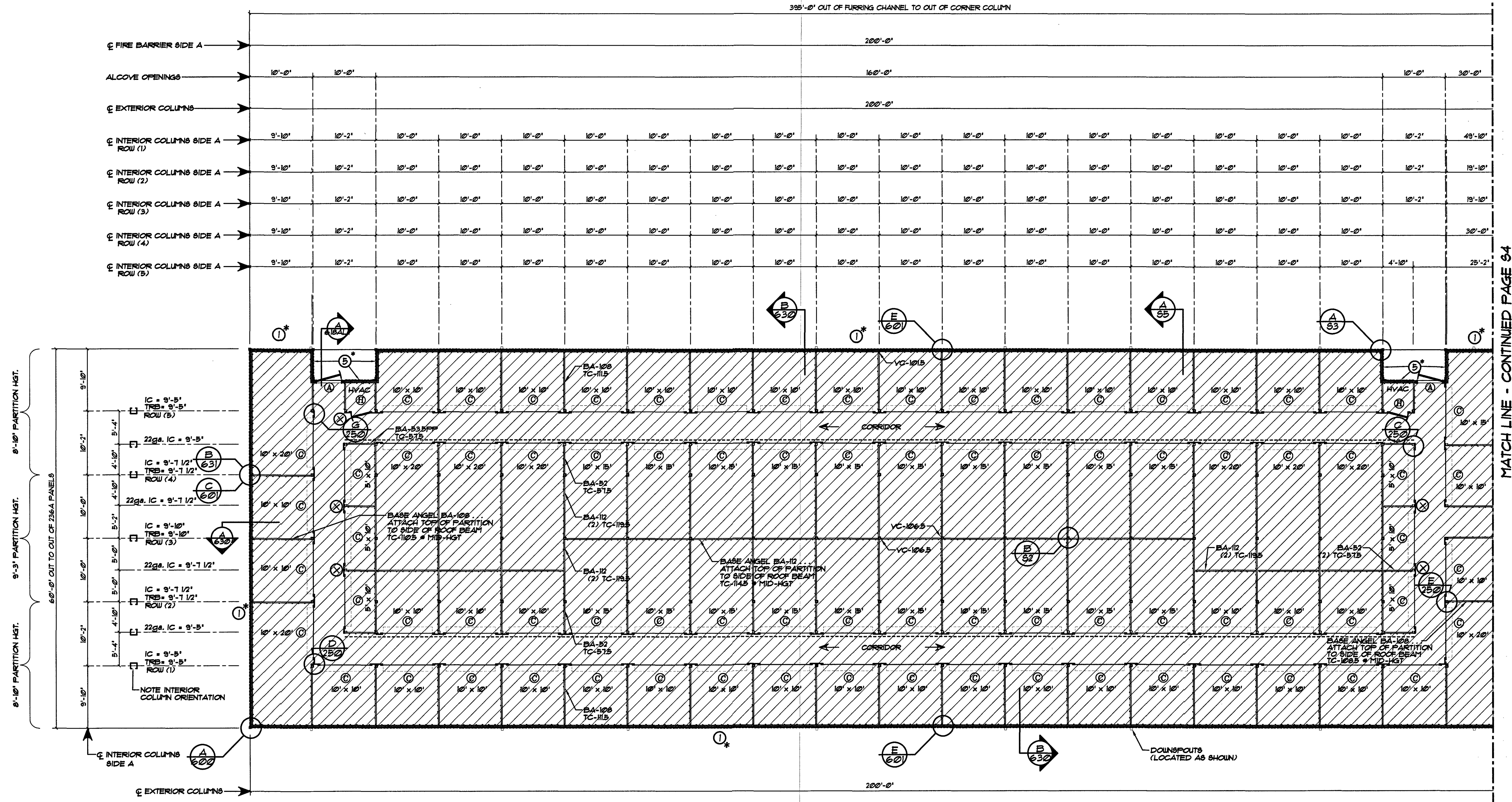


DATE:	12/9/2024
DRAWN BY:	R. KEATH
SCALE:	AS NOTED
APPROVED BY:	
DATE:	3/14/25
BY:	KEM

FLIPPED FLOOR PLAN

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

PROJECT NAME: HWY 42 STORE ALL	
PROJECT ADDRESS: HOLLY SPRINGS, NORTH CAROLINA	
OWNER: F & S LAND DEVELOPMENT LLC.	PROJECT NO.: NC24204
SHEET TITLE: FLOOR PLAN, DETAIL & NOTES - BUILDING "2"	DRAWING NUMBER: S3 of 8



FLOOR PLAN... BUILDING "2" - SIDE A
SCALE: 1" = 10'-0"

1 EXTERIOR STUDWALL CONSTRUCTION - FLAT SLAB:

- 3 5/8" x 1 5/8" FLANGE METAL STUDS @ 24" O.C. - 20ga.
- 3 5/8" CONTINUOUS CEILING TRACK - 18ga.
- 3 5/8" CONTINUOUS FLOOR TRACK - 18ga.
- (SECURE FLOOR TRACK W/ 3/8" x 3" KE-TZ ANCHORS (2" MIN. EMBEDMENT) @ 30" O.C. MAX.)
- 3 ROUS CONTINUOUS 20ga. FURRING CHANNELS
- PRE-PAINTED EXTERIOR 236A WALL PANELS
- WALL PANEL BASE SUPPORT
- DRIP CAP (180222)
- 4" THICK FIBERGLASS INSULATION
- 4 MIL POLYETHYLENE VAPOR BARRIER
- 236 LINER PANELS @ INTERIOR (ATTACH EACH PANEL TO BASE & TOP TRACK WITH 4 EACH 10 x 5/8" SDF's)
- J-TRIM @ TOP OF LINER PANELS

3 INSULATED LOAD BEARING STUDWALL:

- 3 5/8" x 1 5/8" FLANGE METAL STUDS @ 24" O.C. - 20ga.
- 3 5/8" CONTINUOUS CEILING TRACK - 18ga.
- 3 5/8" CONTINUOUS FLOOR TRACK - 18ga.
- (SECURE FLOOR TRACK W/ 3/8" x 3" KE-TZ ANCHORS (2" MIN. EMBEDMENT) @ 30" O.C. MAX.)
- 4" THICK FIBERGLASS INSULATION
- 4 MIL POLYETHYLENE VAPOR BARRIER
- 236 LINER PANELS (EACH SIDE - ATTACH EACH PANEL TO BASE & TOP TRACK WITH 4 EACH 10 x 5/8" SDF's)
- J-TRIM @ TOP OF LINER PANELS

4 INSULATED NON-LOAD BEARING STUDWALL:

- 3 5/8" x 1 5/8" FLANGE METAL STUDS @ 24" O.C. - 20ga.
- 3 5/8" CONTINUOUS FLOOR AND CEILING TRACK - 20ga.
- (SECURE FLOOR TRACK TO CONCRETE FLOOR SLAB WITH 10" P.D.F.s @ 24" O.C.)
- 4" THICK FIBERGLASS INSULATION
- 4 MIL POLYETHYLENE VAPOR BARRIER
- 236 LINER PANELS (EACH SIDE - ATTACH EACH PANEL TO BASE & TOP TRACK WITH 4 EACH 10 x 5/8" SDF's)
- J-TRIM @ TOP OF LINER PANELS

5 EXTERIOR STUDWALL CONSTRUCTION - HVAC INSET/ALCOVE:

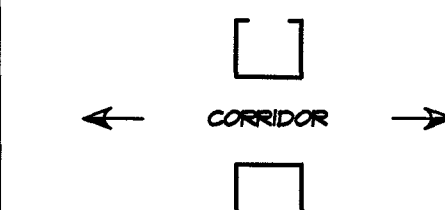
- 3 5/8" x 1 5/8" FLANGE METAL STUDS @ 24" O.C. - 20ga.
- 3 5/8" CONTINUOUS CEILING TRACK - 18ga.
- 3 5/8" CONTINUOUS FLOOR TRACK - 18ga.
- (SECURE FLOOR TRACK W/ 3/8" x 3" KE-TZ ANCHORS (2" MIN. EMBEDMENT) @ 30" O.C. MAX.)
- 3 ROUS CONTINUOUS 20ga. FURRING CHANNELS
- PRE-PAINTED EXTERIOR 236A WALL PANELS
- DRIP CAP (180222)
- 4" THICK FIBERGLASS INSULATION
- 4 MIL POLYETHYLENE VAPOR BARRIER
- 236 LINER PANELS @ INTERIOR (ATTACH EACH PANEL TO BASE & TOP TRACK WITH 4 EACH 10 x 5/8" SDF's)
- J-TRIM @ TOP OF LINER PANELS

11 FIRE RESISTANT PARTITION - 3 HOUR RATED UL-555 (NON-LOAD BEARING) (SEE SHEET C84)

- 3 5/8" METAL STUDS @ 24" O.C. - 16ga.
- 3 5/8" CONTINUOUS FLOOR AND CEILING TRACK - 20ga.
- (TOP TRACK MUST FOLLOW SLOPE OF ROOF DECK)
- (SECURE BOTTOM TRACK W/ 10" P.D.F.s AT 24" O.C.)
- 5/8" GYPSUM BOARD (X-RATED) 3 LAYERS EACH SIDE IT MUST BE PLACED SUCH THAT ALL JOINTS ARE VERTICAL
- GYPSUM BOARD (NOT BY BETCO) SHALL BE ATTACHED TO STUDS, FLOOR AND CEILING TRACK USING TYPE "S" SELF-TAPPING SCREWS ALONG EDGES OF BOARD SPACED 8" O.C. AND 12" O.C. IN THE FIELD
- VINYL OR CASE-IN, DRY OR FIRE-MIXED JOINT COMPOUND APPLIED IN TWO COATS TO JOINTS SCREW-HEADS, PERFORATED PAPER TAPE, 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS
- 4" THICK FIBERGLASS INSULATION
- 4 MIL POLYETHYLENE VAPOR BARRIER

NOTE: GENERAL STUDWALL CONSTRUCTION:
A) - ATTACH STUDS W/ 10 x 5/8" SDF'S
B) - WALLS MUST EXTEND FROM ROOF TO FLOOR DECK AND INTO WALL COLUMN CAVITY.
C) - TOP TRACK MUST FOLLOW SLOPE OF ROOF LINE.

NOTE COLUMN ORIENTATION
CORRIDORS PARALLEL TO ROOF BEAMS



LEGEND:

- (X) 22ga. INTERIOR COLUMN
- (---) 22 ga. INTERIOR DOOR STRUCTURE
- (Hatched) CLIMATE CONTROL

NOTES:

- 6" ROOF INSULATION (R-19) INCLUDED AT ENTIRETY OF BUILDING "2".
- 4" WALL INSULATION (R-13) INCLUDED AT STUD WALL OF BUILDING "2".
- 4" x 5" KICK-OUT DOWNSPOUTS ARE INCLUDED
- CORRIDOR WIDTH WILL BE A MINIMUM OF APPROXIMATELY 56" FROM FACE TO FACE OF DOOR JAMBS.
- ATTACH ALL STUDS TO TRACKS WITH 10 x 5/8" SDF (4 PER STUD).
- BURGULAR BARS ARE PROVIDED ABOVE INTERIOR ROLL-UP DOORS AS REQUIRED.
- INTERIOR DOOR FRAMES AND PARTITIONS AT HALLWAYS ARE PREPAINTED.
- ALL PERSONNEL DOORS ARE GLOBAL AND INCLUDE LOCK-OPEN TYPE CLOSERS.
- ALL ROLL-UP DOORS ARE BY BETCO & INCLUDE TENSION ADJUSTERS & BEARINGS.
- SECURE INTERIOR PARTITION TO INTERIOR COLUMNS WITH (4) 10 x 5/8" SDF'S AS SHOWN ON ERC200X - ERC208X.
- INTERIOR DOOR JAMBS INCLUDE PARTITION CLOSURE ANGLES.
- NOTE FOR INTERIOR BEARING STUDWALLS: (SECURE BOTTOM TRACK W/ 3/8" x 3" KE-TZ ANCHORS (2" MIN. EMBEDMENT @ 30" O.C. MAXIMUM).
- NOTE FOR ALL EXTERIOR STUDWALLS: (SECURE FLOOR TRACK W/ 3/8" x 3" KE-TZ ANCHORS (2" MIN. EMBEDMENT @ 30" O.C. MAXIMUM).

NOTE:

SEE ERC602X FOR EXTERIOR SWING DOOR FRAMING IN STUDWALL.

NOTE:

UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR DIMENSIONS INSIDE UNITS MAY VARY ACCORDING TO FINAL DESIGN OF COMPONENTS.

NOTE:

15ft. ROOF BEAMS ARE 3' x 10' x 12ga. ZEE'S.

STUDWALL LEGEND

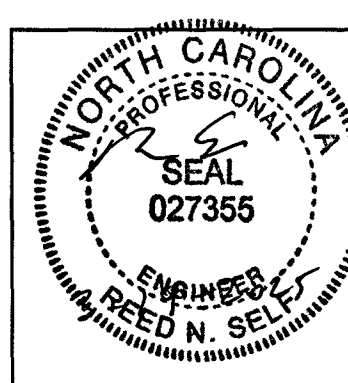
BUILDING # 2		
INTERIOR STUDWALL		EXTERIOR STUDWALL
DESCRIPTION	UNINSULATED	INSULATED*
1 EXTERIOR STUDWALL CONSTRUCTION AT FLAT SLAB (BLOCK @ MID-HGT.)	0 L.F.	440 L.F.
3 INTERIOR LOAD BEARING STUDWALL	0 L.F.	350 L.F.
4 INTERIOR NON-LOAD BEARING STUDWALL	0 L.F.	95 L.F.
5 EXTERIOR STUDWALL CONSTRUCTION AT HVAC (BLOCK @ MID-HGT.)	20 L.F.	60 L.F.
11 3 HOUR FIRE RESISTANT PARTITION (STUD AND TRACK BY BETCO)	35 L.F.	25 L.F.

NOTE #1: SEE BLOCKING DETAIL A/631 ON ERC631X

JAMB	ROLL-UP DOOR	SWING DOOR
	HEADER	HEADER
8'-0"	12'	10 1/2'

DOOR SCHEDULE		
ID	DOOR SIZE	TYPE
1	4'-0" x 7'-0" (4070 - 2 - G) (ERC254X)	1/2 GLASS PERSONNEL
2	3'-0" x 7'-0"	INTERIOR ROLL-UP
3	8'-0" x 7'-0"	INTERIOR ROLL-UP
4	5'-6" x 7'-0"	INTERIOR ROLL-UP
5	3'-8" x 7'-10"	EXTERIOR ROLL-UP
6	8'-8" x 7'-10"	EXTERIOR ROLL-UP
7	8'-4" x 7'-10"	EXTERIOR ROLL-UP
8	3'-0" x 7'-0" w/ LOUVER	INTERIOR SWING DOOR
9	4'-0" x 7'-0" (4070 - 1 - A) (ERC254X)	A-LABEL FIRE DOOR

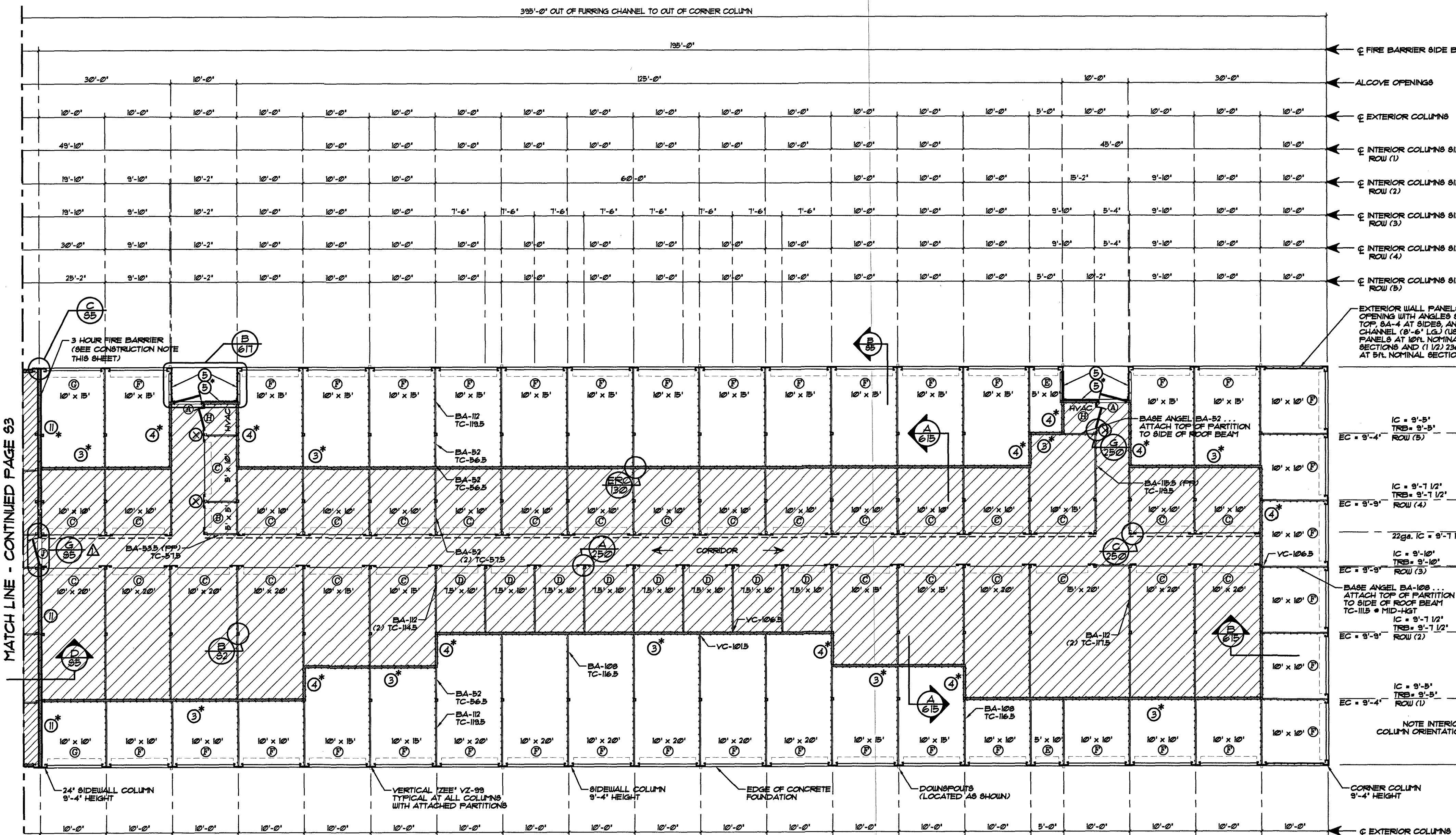
NOTE: BLOCK ALL LOAD-BEARING INTERIOR & EXTERIOR STUD WALLS AS SHOWN IN DETAIL A OF ERC631X



REVISIONS		DATE	BY
FLIPPED FLOOR PLAN, ADDED FIRE DOOR		3/14/25	KEM

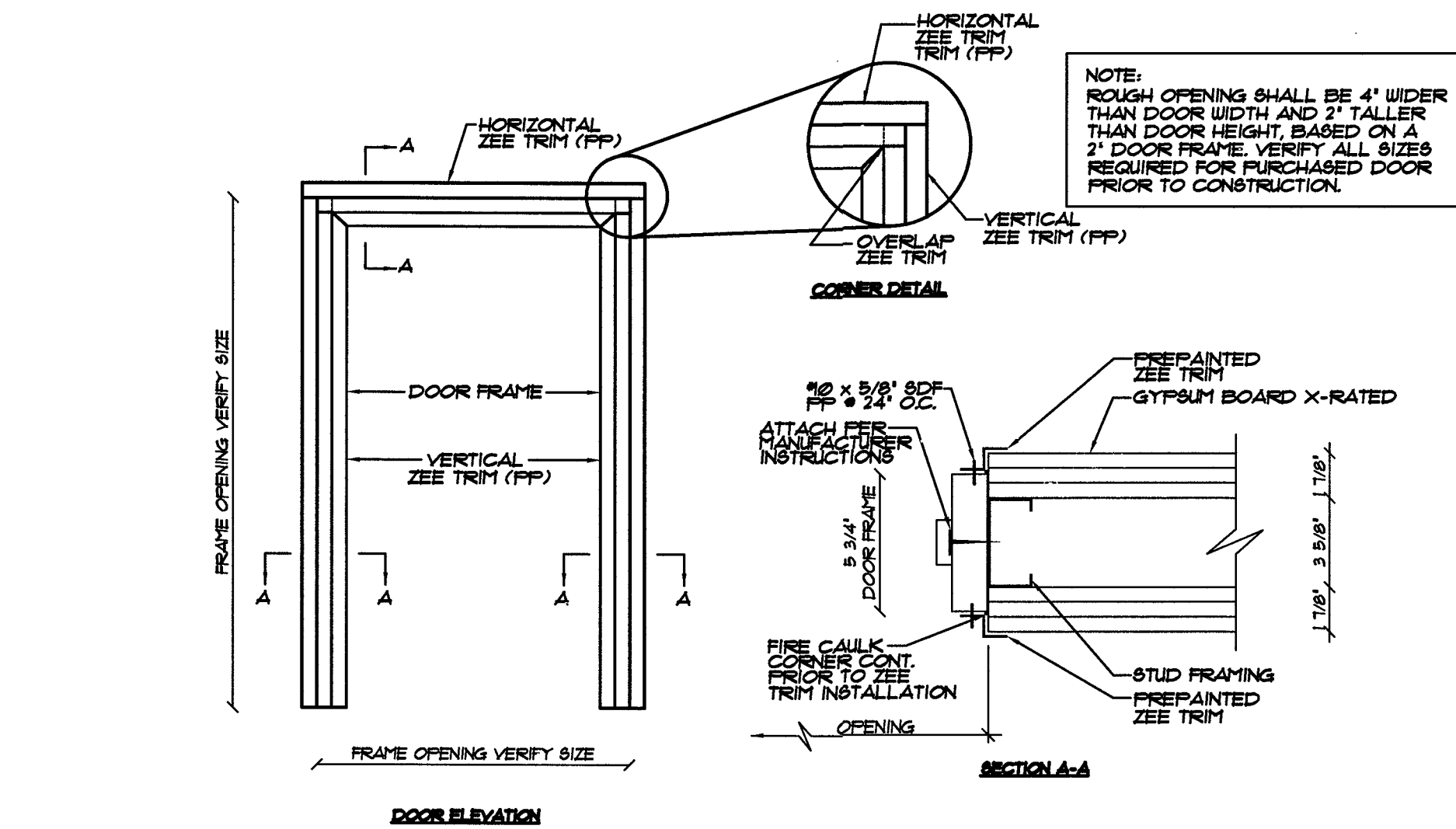
BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

PROJECT NAME: HWY 42 STORE ALL		PROJECT NO.: NC24204	
PROJECT ADDRESS: HOLLY SPRINGS, NORTH CAROLINA		DRAWING NUMBER: S4 OF 8	
OWNER: F & S LAND DEVELOPMENT LLC.		SHEET TITLE: FLOOR PLAN & NOTES - BUILDING "2"	

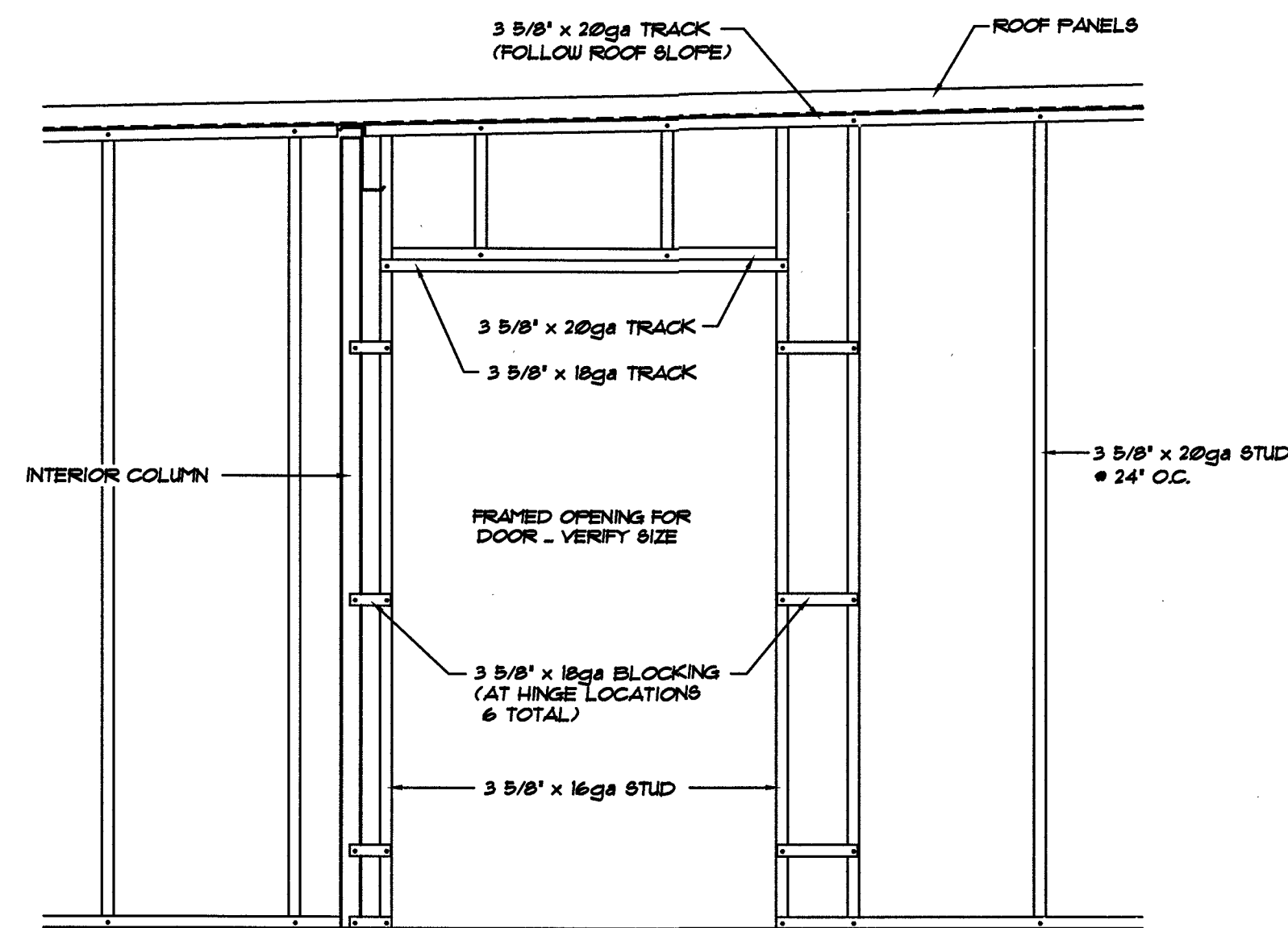


FLOOR PLAN... BUILDING "2" - SIDE B
SCALE: 1" = 10'-0"

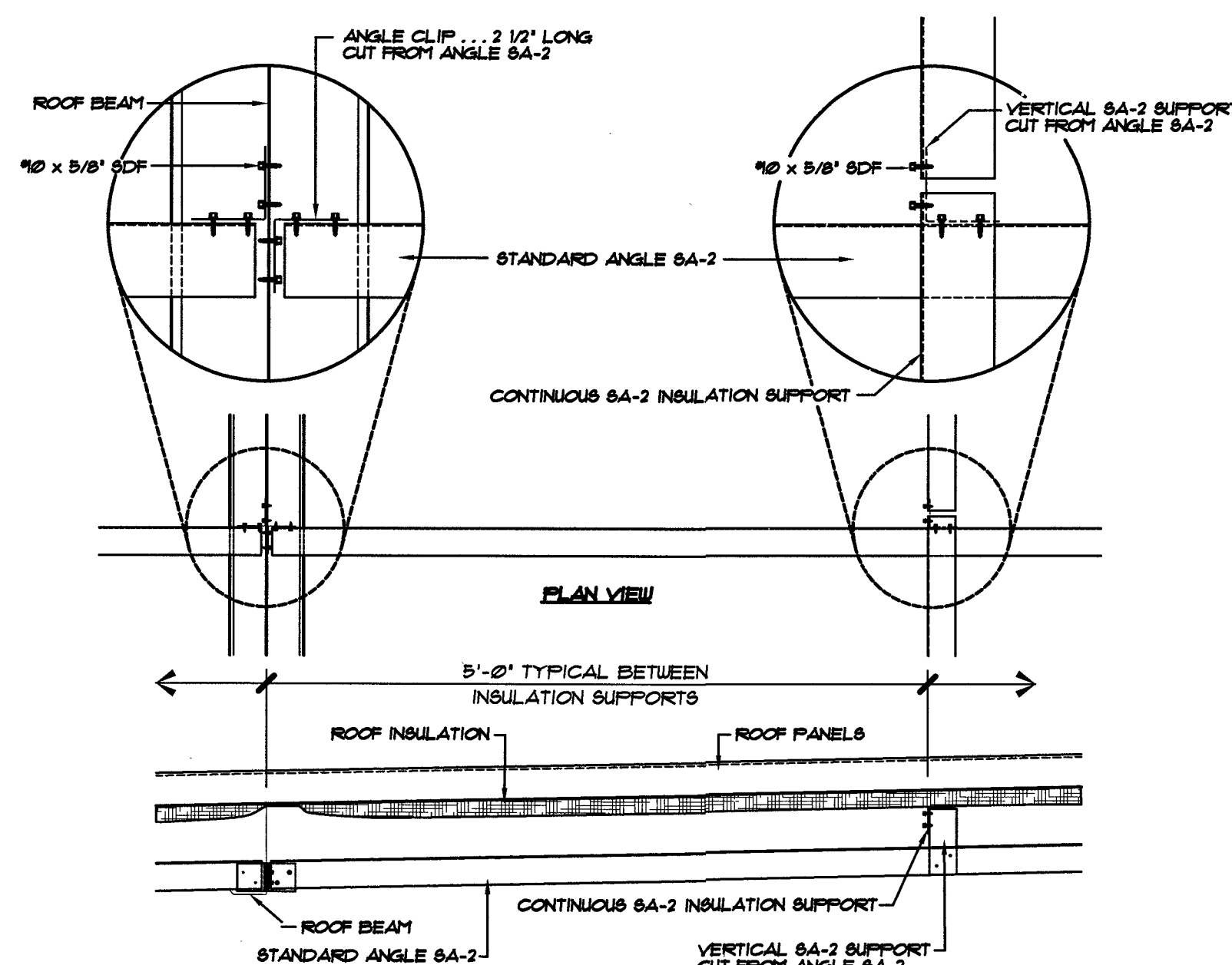
NOTE: BUILDING "2" IS PROVIDED W/ (4) ADJUSTABLE CONTROL JOINT COLUMNS. 9'-4" HEIGHT



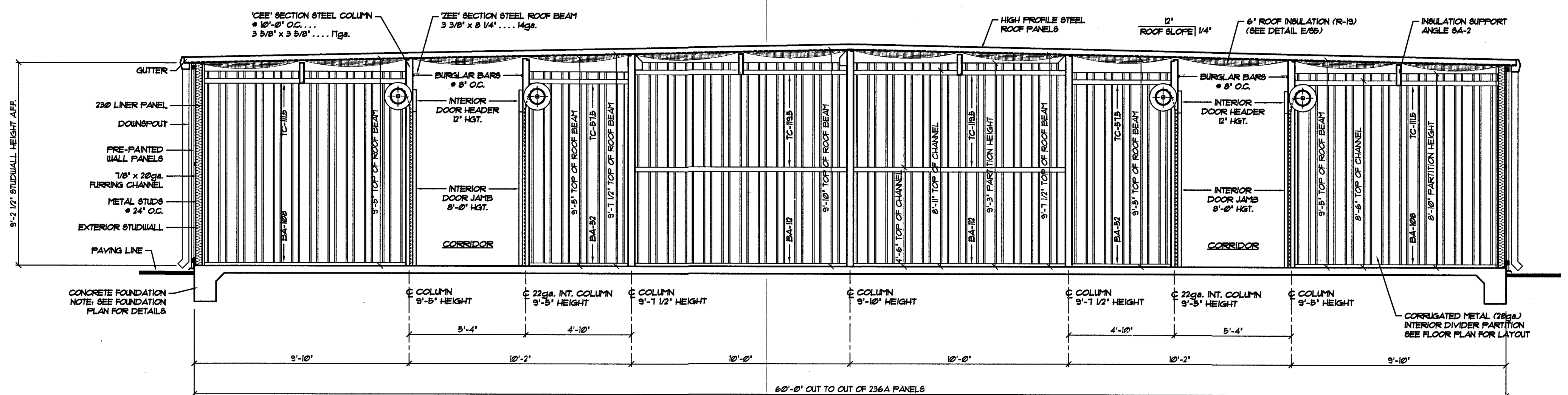
G 3 HOUR FIRE RATED DOOR INSTALLATION DETAIL
NOT TO SCALE



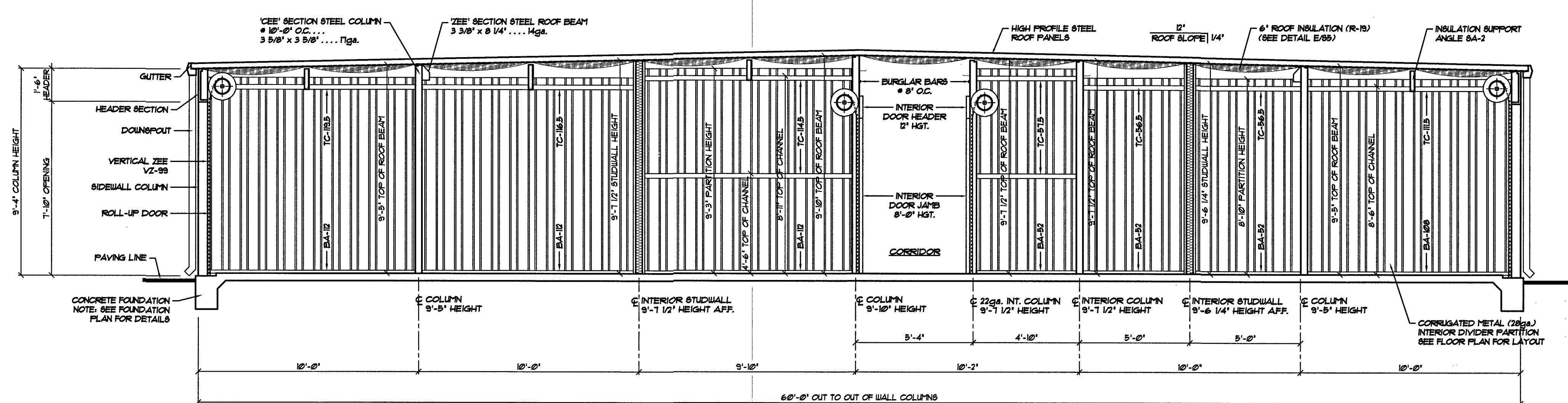
H INTERIOR DOOR FRAMING DETAIL FOR 4'-0\"/>



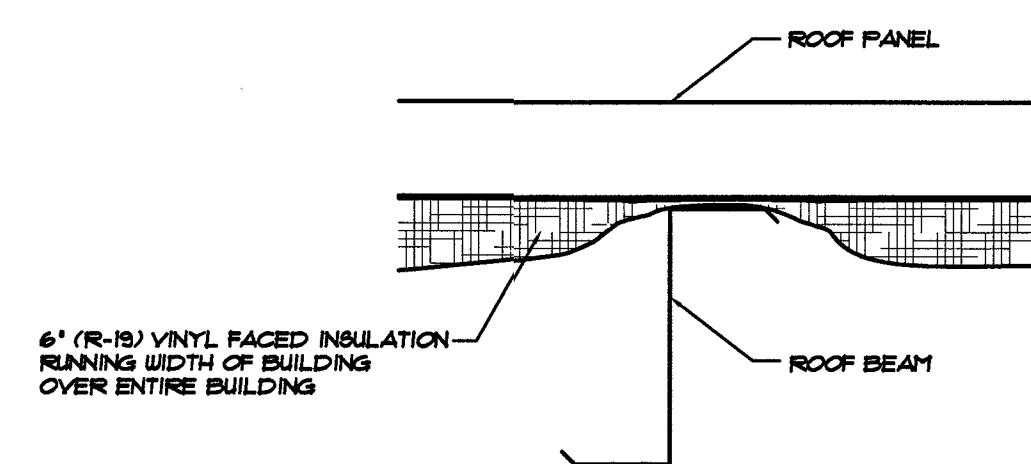
F INTERMEDIATE INSULATION SUPPORT ELEVATION
NOT TO SCALE



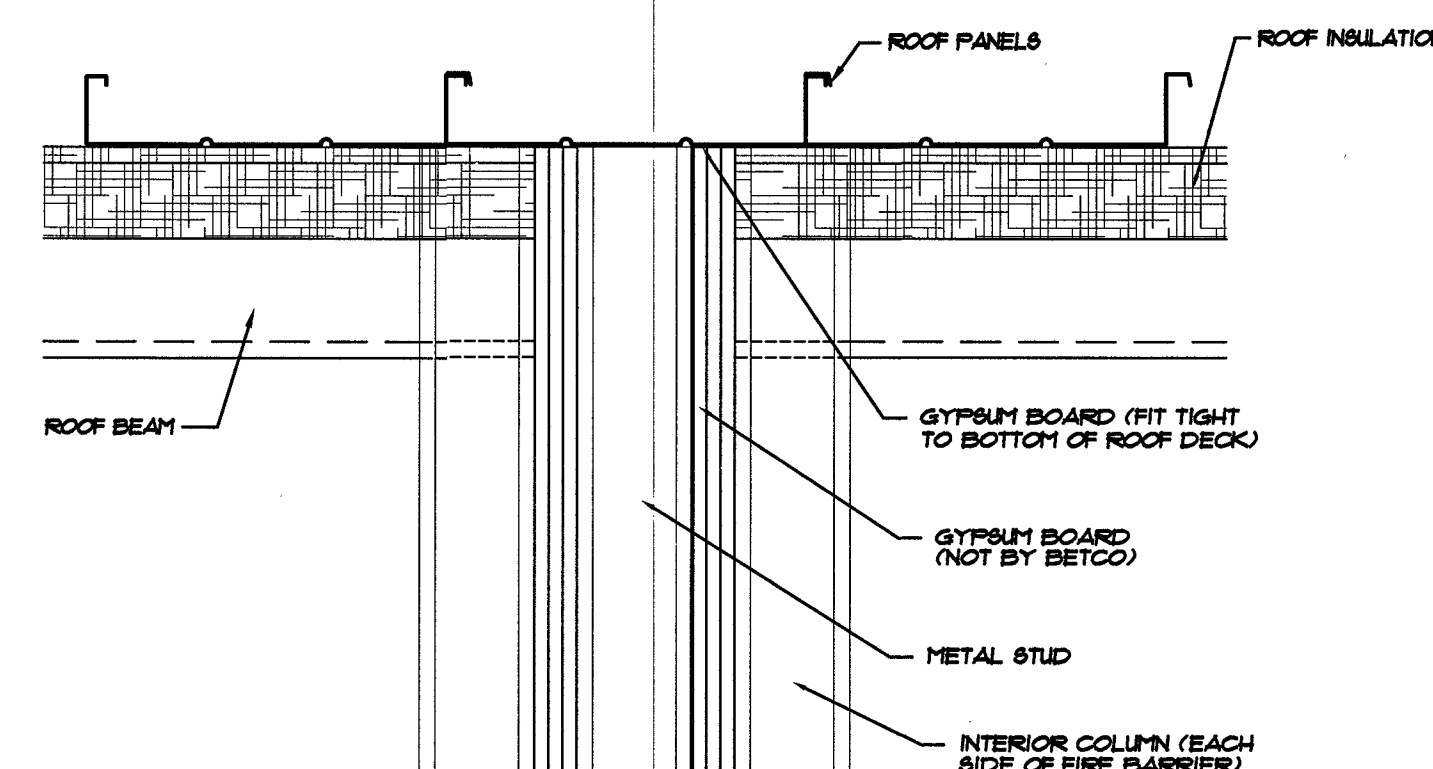
A 60'-0\"/>



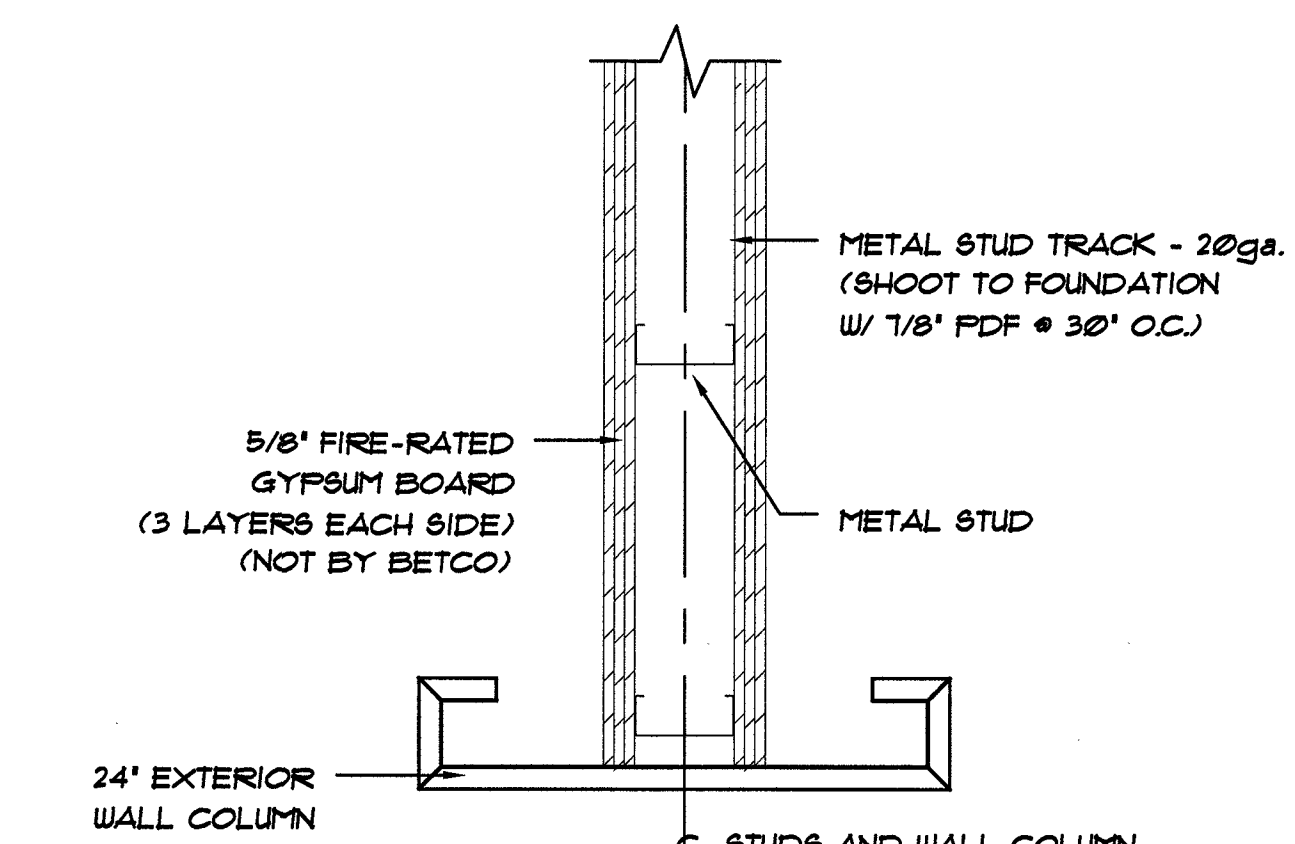
B 60'-0\"/>



E INSULATION @ ROOF BEAM
NOT TO SCALE



D SECTION AT 3 HOUR FIRE BARRIER
NOT TO SCALE



C 3-HOUR FIRE BARRIER @ SIDEWALL COLUMN
NOT TO SCALE

BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140



DATE:	12/9/2024
DRAWN BY:	R. KEATH
SCALE:	AS NOTED
APPROVED BY:	
ADDED DETAILS	3/14/25 KEM
REVISIONS	DATE BY

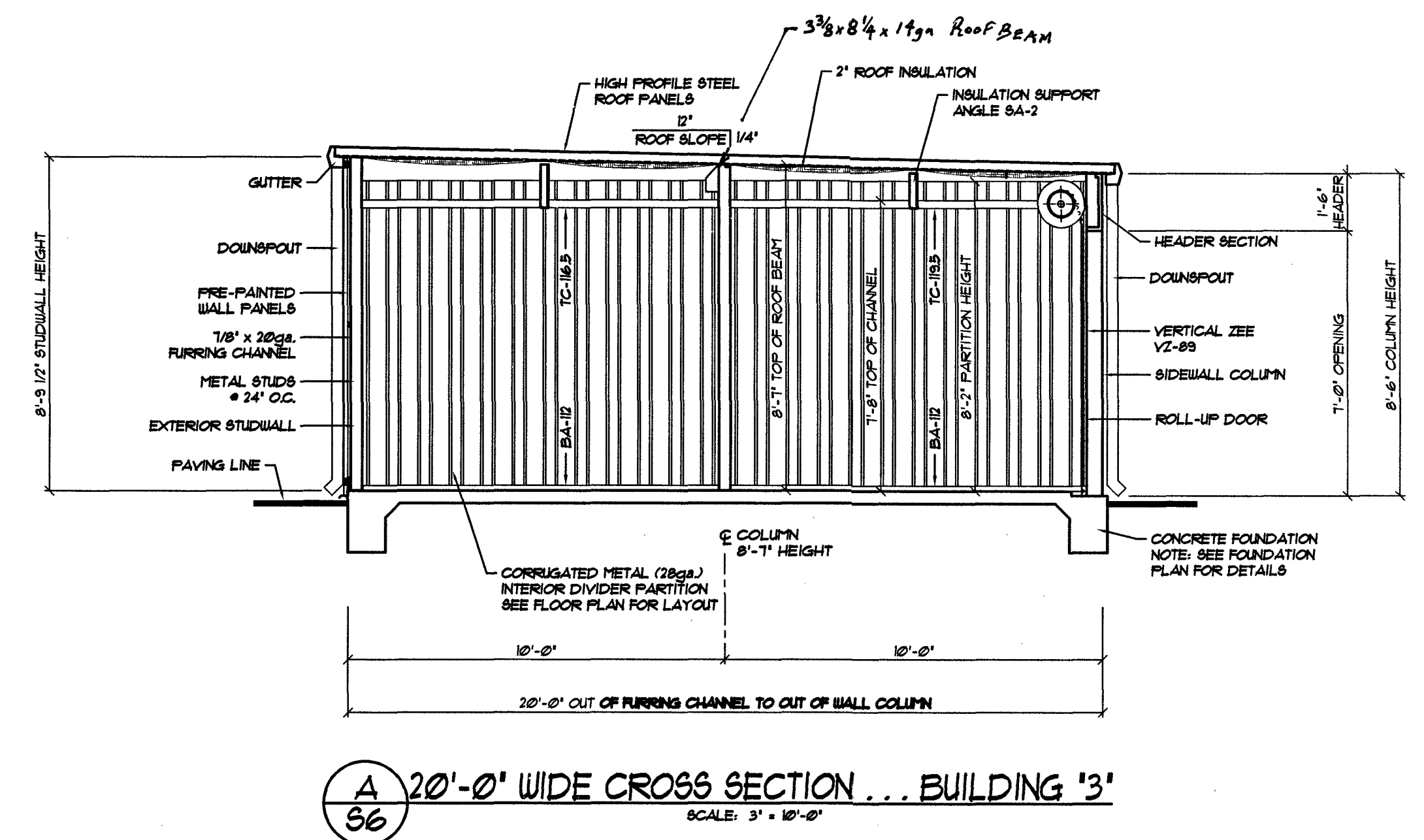
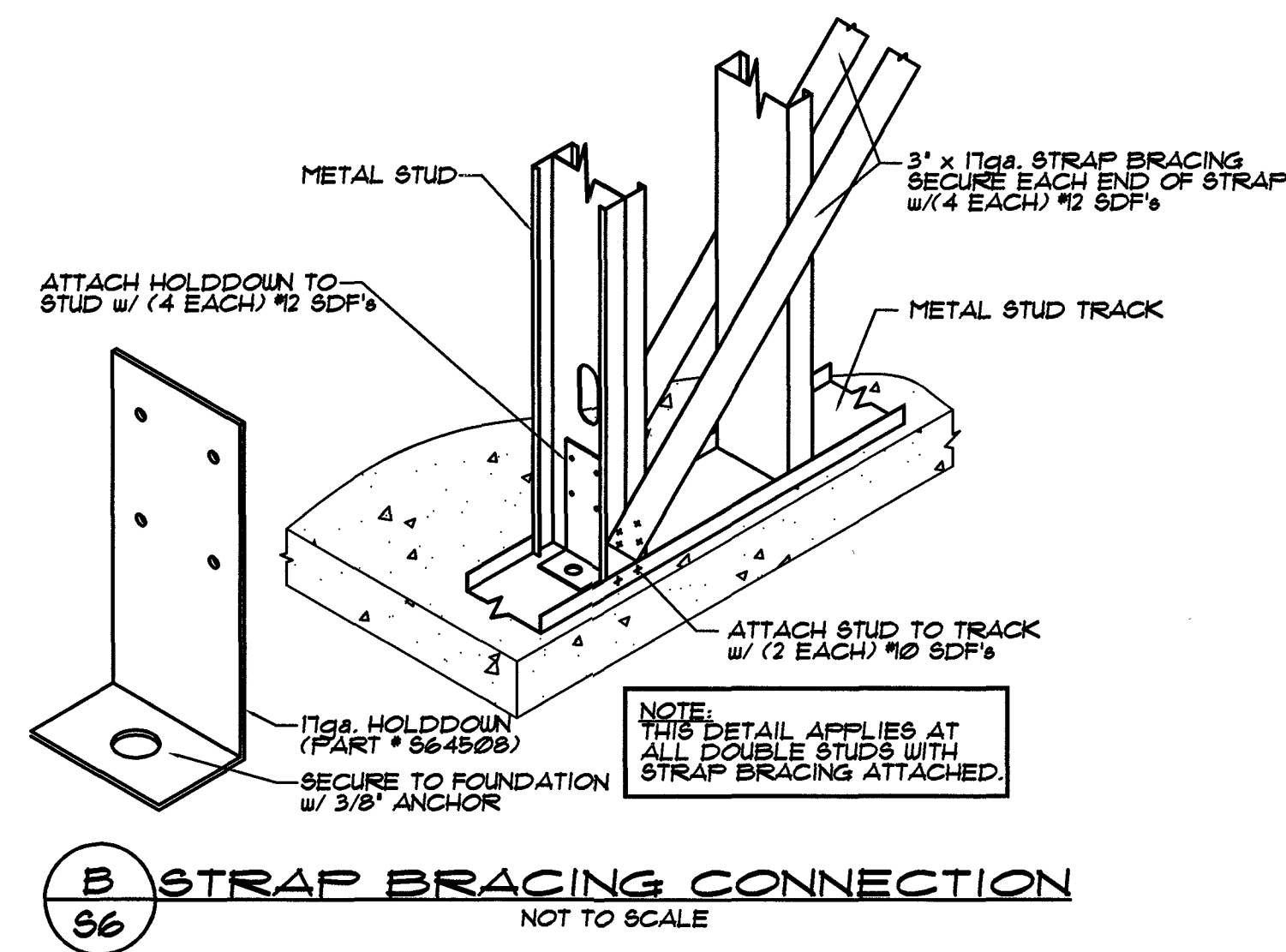
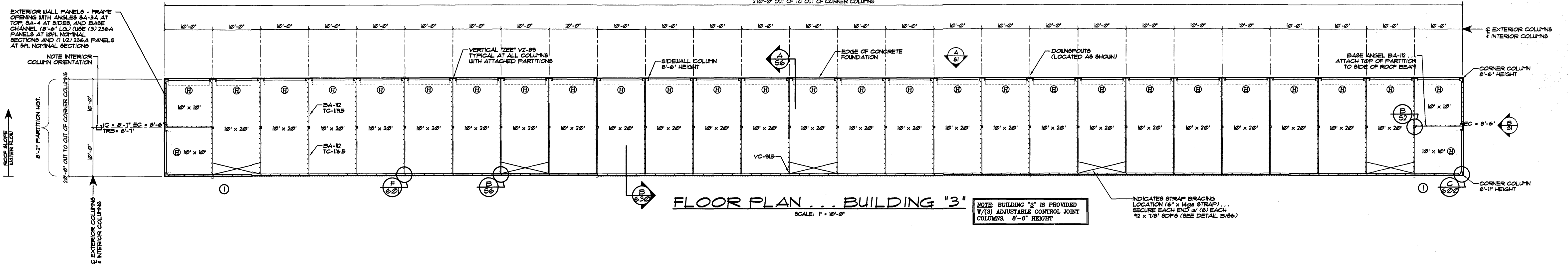
BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

PROJECT NAME:	HWY 42 STORE ALL
PROJECT ADDRESS:	HOLLY SPRINGS, NORTH CAROLINA
OWNER:	F & S LAND DEVELOPMENT LLC.
SHEET TITLE:	CROSS SECTION & DETAILS - BUILDING "2"
PROJECT NO.:	NC24204
DRAWING NUMBER:	S5 of 8

KEY TO ABBREVIATIONS:
EC = EXTERIOR COLUMN
IC = INTERIOR COLUMN
TB = TOP OF BEAM
BA = BASE ANGLE
TC = TOP CHANNEL
VC = VERTICAL CHANNEL

GENERAL STUDWALL CONSTRUCTION:
A) - ATTACH STUDS W/ 1/2" X 5/8" SDF'S
EACH SIDE OF TRACK (4 PER STUD)
B) - WALLS MUST EXTEND FROM ROOF TO FLOOR
DECK AND INTO WALL COLUMN CAVITY.
C) - TOP TRACK MUST FOLLOW SLOPE OF ROOF LINE.

- 1 EXTERIOR STUDWALL CONSTRUCTION - FLAT SLAB:
- 3 5/8" x 1 5/8" FLANGE METAL STUDS @ 24" O.C. - 20ga.
 - 3 5/8" CONTINUOUS CEILING TRACK - 10ga.
 - 3 5/8" CONTINUOUS FLOOR TRACK - 10ga.
 - (SECURE FLOOR TRACK W/ 3/8" x 3" KE-TZ ANCHORS
(2" MIN. EMBEDMENT) @ 36" O.C. MAX.)
 - 2 ROLLS CONTINUOUS 20ga. FURRING CHANNELS
 - PRE-PAINTED EXTERIOR 236A WALL PANELS
 - WALL PANEL BASE SUPPORT
 - DRAIN CAP (1/2" DIA.)

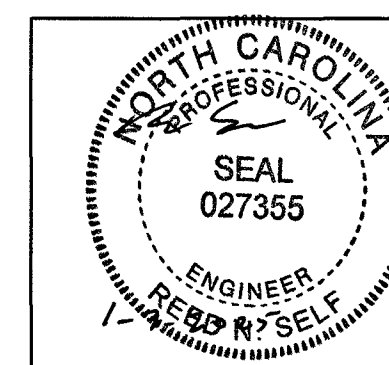


NOTE: BLOCK ALL
LOAD-BEARING INTERIOR
& EXTERIOR STUD WALLS
AS SHOWN IN DETAIL A
OR EROCSIX.

STUDWALL LEGEND			BUILDING # 3	
INTERIOR STUDWALL		EXTERIOR STUDWALL		
DESCRIPTION	UNINSULATED	INSULATED*		
1 EXTERIOR STUDWALL CONSTRUCTION AT FLAT SLAB (BLOCK @ MID-HGT.)	212 L.F.	2 L.F.		
NOTE #1: SEE BLOCKING DETAIL A/631 ON EROCSIX				

DOOR SCHEDULE		
ID	DOOR SIZE	TYPE
A	4'-0" x 7'-0" (4070 - 2 - G) (ERC254X)	1/2 GLASS PERSONNEL
B	3'-0" x 7'-0"	INTERIOR ROLL-UP
C	8'-0" x 7'-0"	INTERIOR ROLL-UP
D	5'-6" x 7'-0"	INTERIOR ROLL-UP
E	3'-8" x 7'-10"	EXTERIOR ROLL-UP
F	8'-8" x 7'-10"	EXTERIOR ROLL-UP
G	8'-4" x 7'-10"	EXTERIOR ROLL-UP
H	8'-8" x 7'-0"	EXTERIOR ROLL-UP

NOTE:
UNIT SIZES SHOWN ARE NOMINAL. ACTUAL CLEAR
DIMENSIONS INSIDE UNITS MAY VARY ACCORDING
TO FINAL DESIGN OF COMPONENTS.

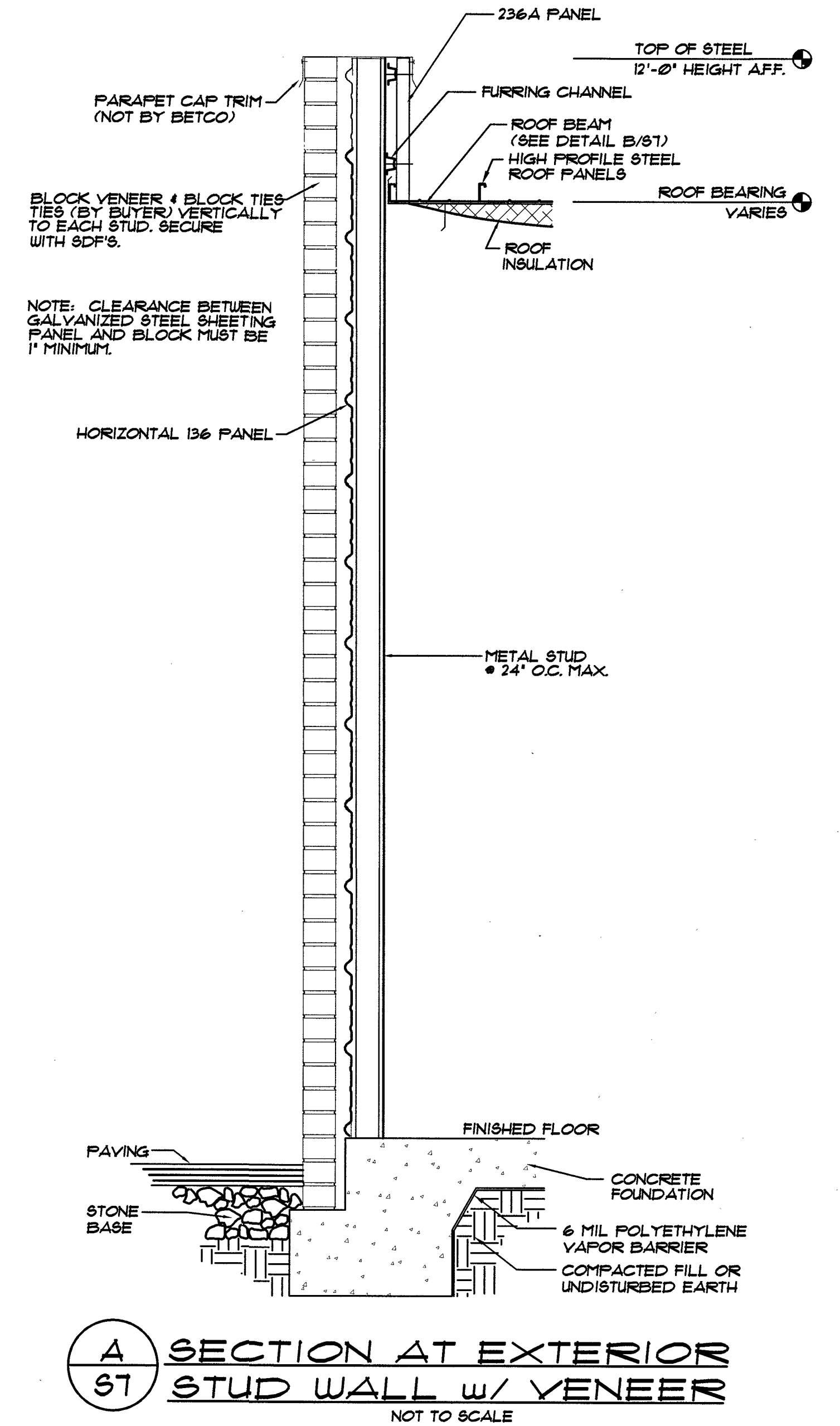
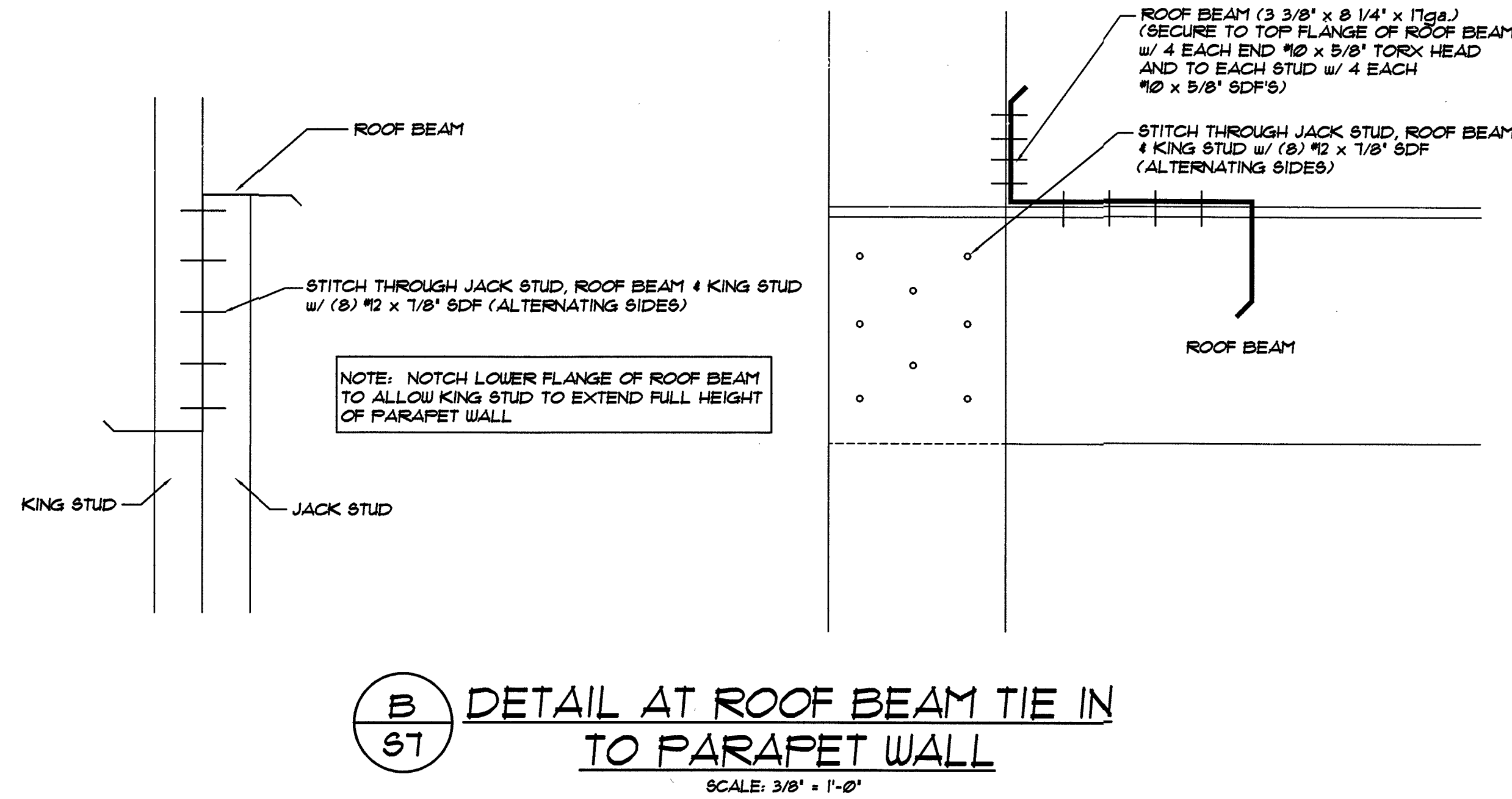
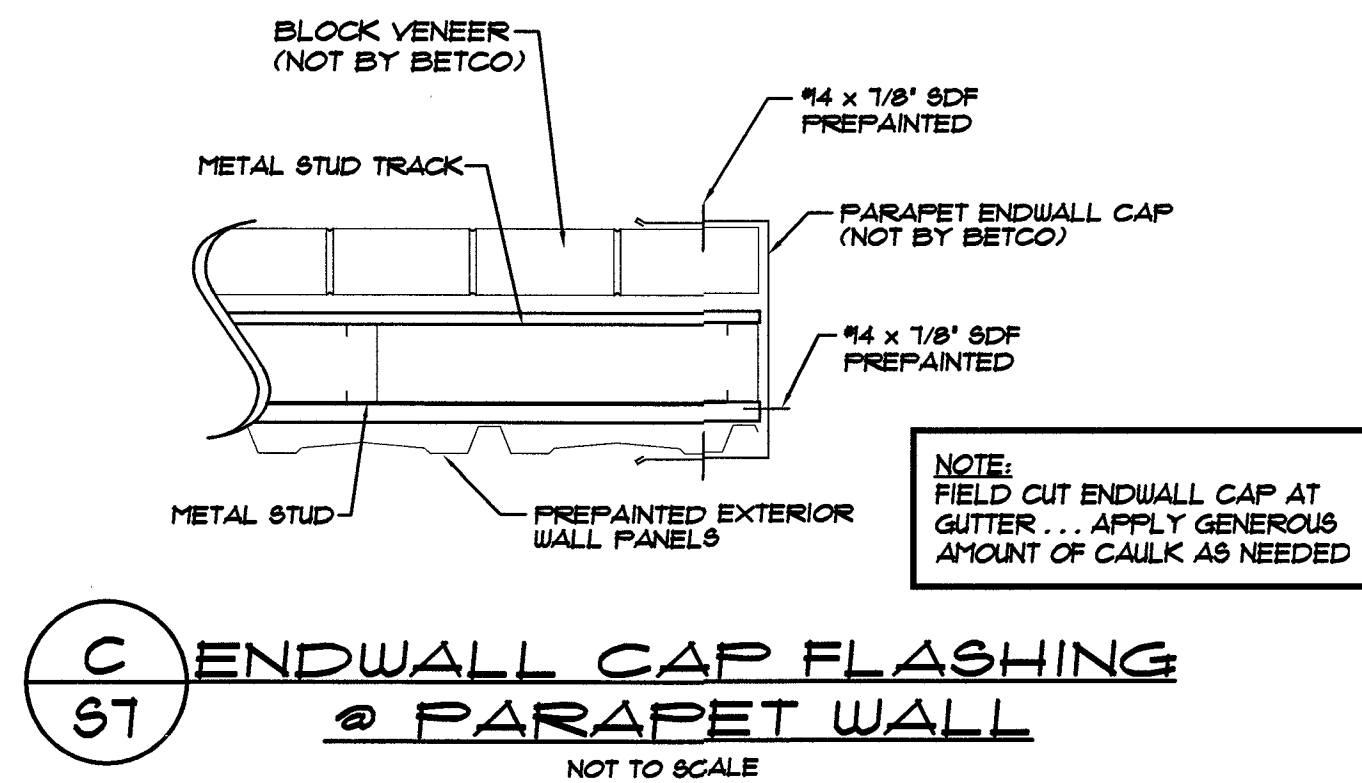


REVISIONS	DATE	BY
	12/9/2024	R. KEATH
	AS NOTED	
	APPROVED BY:	

BETCO
228 COMMERCE BLVD.
STATESVILLE, NC 28625
(800)654-7813

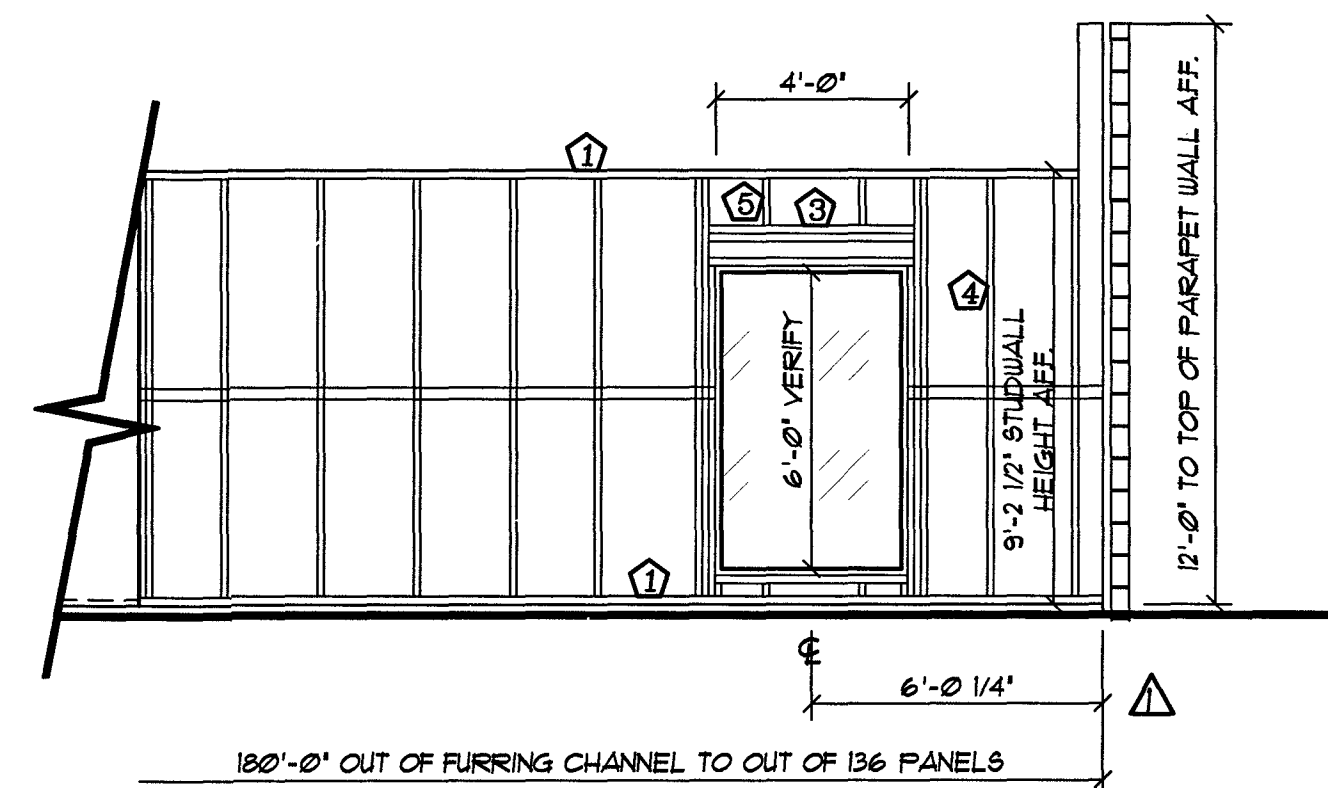
PROJECT NAME: HWY 42 STORE ALL	
PROJECT ADDRESS: HOLLY SPRINGS, NORTH CAROLINA	
OWNER: F & S LAND DEVELOPMENT LLC.	PROJECT NO.: NC24204
SHEET TITLE: FLOOR PLAN, CROSS SECTION, DETAIL & NOTES - BUILDING "3"	
DRAWING NUMBER: S6 OF 8	

BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140

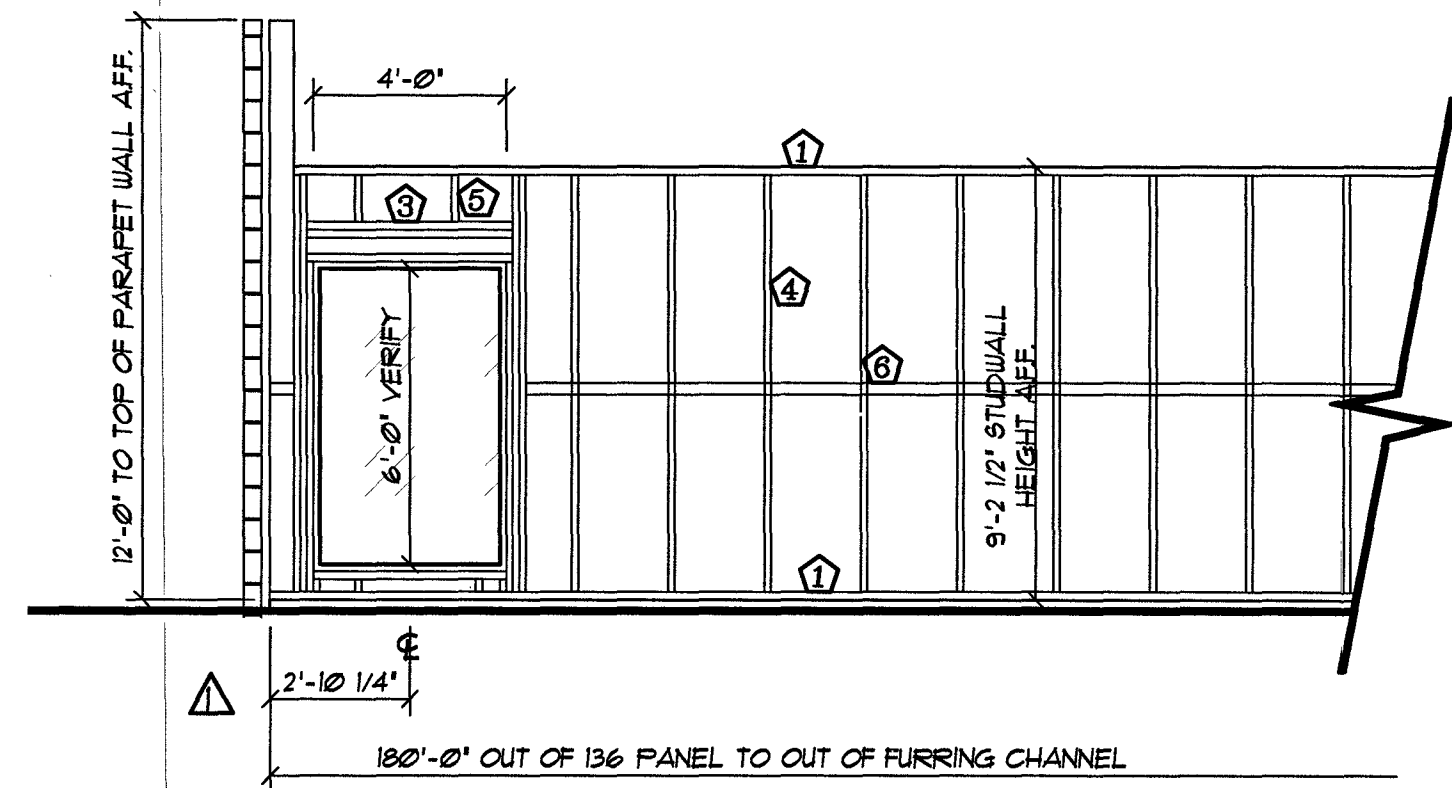


	DATE:	12/9/2024	<p>228 COMMERCE BLVD. STATESVILLE, NC 28625 (800)654-7813</p>	PROJECT NAME:	HWY 42 STORE ALL HOLLY SPRINGS, NORTH CAROLINA		
	DRAWN BY:	R. KEATH		OWNER:	F & S LAND DEVELOPMENT LLC.	PROJECT NO.:	NC24204
	SCALE:	AS NOTED		SHEET TITLE:	BUILDING DETAILS BUILDING "1"	DRAWING NUMBER:	S7 OF 8
	APPROVED BY:						
	REVISIONS	DATE		BY			

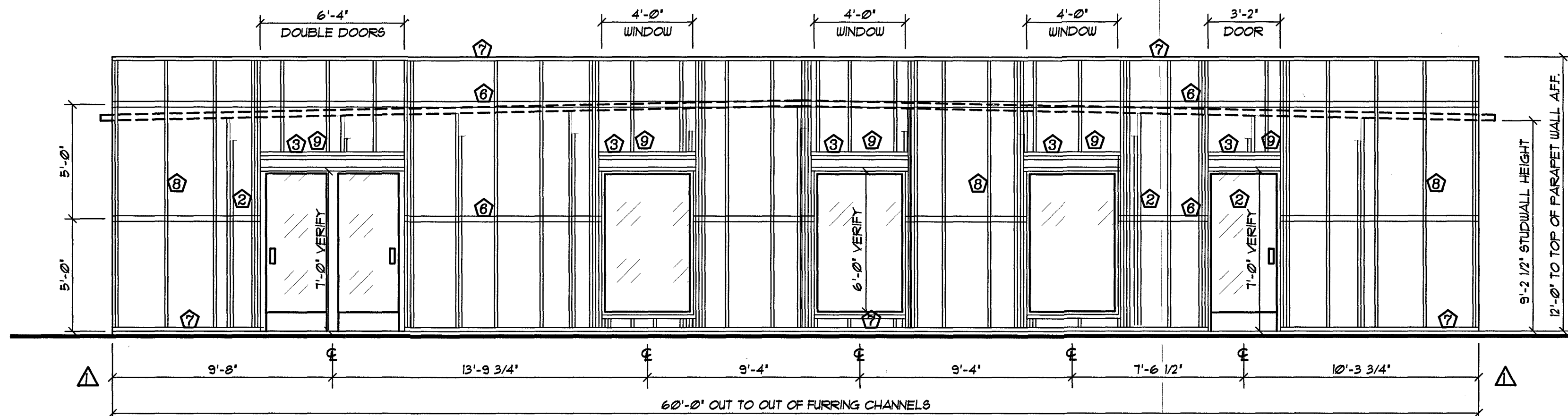
BETCO, Inc.
228 Commerce Blvd.
Statesville, NC 28625
Limited Engineering License # D-0140



B FRAMING ELEVATION SIDEWALL . . . BUILDING "1"
 S8 SCALE: 1/4" = 1'-0" (NOTE: VERIFY ALL ROUGH OPENING LOCATIONS AND SIZES)

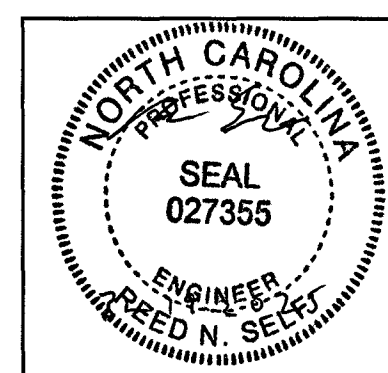


A FRAMING ELEVATION SIDEWALL . . . BUILDING "1"
 S8 SCALE: 1/4" = 1'-0" (NOTE: VERIFY ALL ROUGH OPENING LOCATIONS AND SIZES)



C FRAMING ELEVATION ENDWALL . . . BUILDING "1"
 S8 SCALE: 1/4" = 1'-0" (NOTE: VERIFY ALL ROUGH OPENING LOCATIONS AND SIZES)

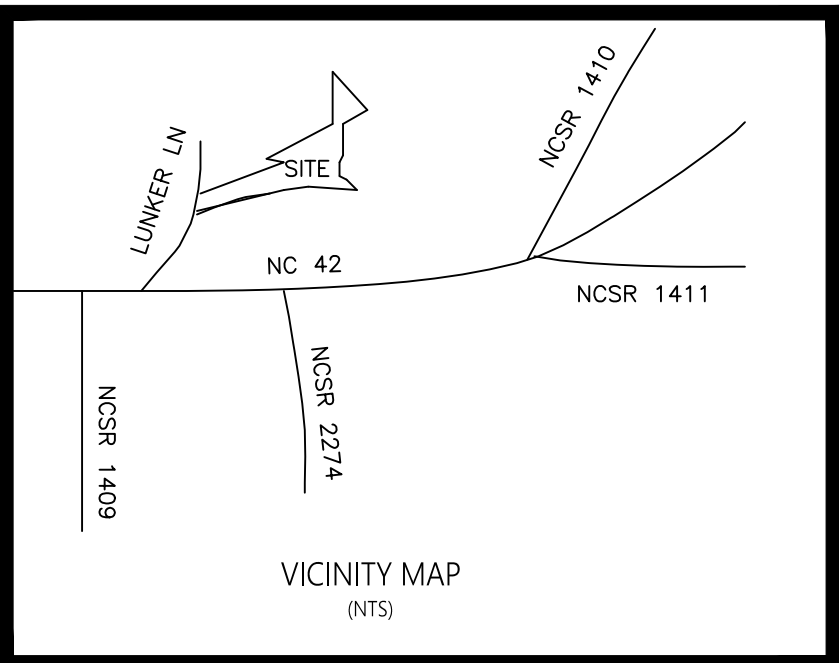
- LEGEND:**
- ① METAL STUD TRACK (3 5/8" x 1 1/4" LEG x 18ga) FASTEN TO EACH METAL STUD WITH 2 EACH #10 x 5/8" SDF PER FLANGE
 - ② 2 EACH - METAL STUD AT EACH ROOF BEAM LOCATION - SIMILAR TO C/60IX.
 - ③ DH-1 - DOUBLE CEE BOXED HEADER - 6" (SEE ERC60IX) w/ 16ga STUDS. USE 14ga AT OPENINGS OVER 5'-0" WIDE.
 - ④ 1 EACH - METAL STUD (3 5/8" x 1 5/8" x 18ga)
 - ⑤ METAL STUD TRACK ABOVE HEADER (3 5/8" x 1 1/4" x 18ga) FASTEN TO EACH METAL STUD WITH 2 EACH #10 x 5/8" SDF PER FLANGE - FASTEN TO TOP OF DH-1 WITH 2 EACH #2 x 7/8" SDF AT 12" O.C.
 - ⑥ STRAP BRACING FOR BLOCKING (SEE DETAIL 'A' ON ERC63IX)
 - ⑦ METAL STUD TRACK (6" x 1 1/4" LEG x 18ga) FASTEN TO EACH METAL STUD WITH 2 EACH #10 x 5/8" SDF PER FLANGE
 - ⑧ 1 EACH - METAL STUD (6" x 2" x 16ga)
 - ⑨ METAL STUD TRACK ABOVE HEADER (6" x 1 1/4" x 18ga) FASTEN TO EACH METAL STUD WITH 2 EACH #10 x 5/8" SDF PER FLANGE - FASTEN TO TOP OF DH-1 WITH 2 EACH #2 x 7/8" SDF AT 12" O.C.



DATE:	12/9/2024
DRAWN BY:	R. KEATH
SCALE:	AS NOTED
APPROVED BY:	
LOCATED WINDOWS/DOORS @ OFFICE	3/14/25 KEM
REVISIONS	DATE BY



PROJECT NAME:	HWY 42 STORE ALL		
PROJECT ADDRESS:	HOLLY SPRINGS, NORTH CAROLINA		
OWNER:	F & S LAND DEVELOPMENT LLC.	PROJECT NO.:	NC24204
SHEET TITLE:	FRAMING ELEVATIONS BUILDING "1"	DRAWING NUMBER:	S8 OF 8



TYPE D BUFFER
1. MINIMUM WIDTH OF 15 FEET (APPLIES TO PROPERTY LINES ADJACENT TO PUBLIC RIGHT-OF-WAY OR AS OTHERWISE NOTED WITHIN THIS ORDINANCE)
2. OPTION 1
A ROW OF EVERGREEN SHRUBS, 10 SHRUBS FOR EVERY REQUIRED LARGE MATURING TREE, PLACED NOT MORE THAN FOUR (4) FEET APART WHICH WILL GROW TO FORM A CONTINUOUS HEDGE OF AT LEAST SIX (6) FEET IN HEIGHT WITHIN TWO (2) YEARS OF PLANTING; OR
3. OPTION 2
AN OPAQUE FENCE LOCATED WITHIN THE REQUIRED BUFFER AREA; SUCH FENCE SHALL BE A MINIMUM HEIGHT OF SIX (6) FEET IN HEIGHT.

IN ADDITION TO THE TYPE D BUFFER, ALL BUFFER AREAS SHALL INCLUDE AT LEAST:
1) A STAGGERED ROW OF LARGE MATURING TREES, SPACED NOT MORE THAN 30' APART; AND
2) LOW-GROWING EVERGREEN SHRUBS OR MULCH COVERING THE BALANCE OF THE BUFFER AREA.

HARNETT REGIONAL WATER NOTES:

WATER LINE CONSTRUCTION AND TIE-IN WILL NEED TO BE COORDINATED AND INSPECTED BY HRW CONSTRUCTION INSPECTOR CHAD EVERETTE

WATER USAGE: 25GAL/EMPLOYEE/SHIFT = 25 GAL/DAY

SITE DATA

PROPERTY ADDRESS: NC 42 HIGHWAY
HOLLY SPRINGS, NC
HARNETT COUNTY

OWNER: F & S LAND DEVELOPMENT, LLC
460 AUSLEY RD.
FUQUAY-VARINA, NC 27526

ZONING: RA-30 (HARNETT COUNTY)
R-30 (WAKE COUNTY)

SETBACKS
FRONT - 35'
SIDE - 10'
SIDE CORNER - 20'
REAR - 25'

LAND USE: LOW DENSITY RESIDENTIAL
LAND USE CLASSIFICATION: LOW DENSITY RESIDENTIAL
SPECIAL USE PERMIT # BOA2211-0007, APPROVED 01-09-2023

P.I.N.: 0646-10-0367.000
DEED BOOK/PAGE 4177/867
MAP# 2009/775

AREAS:
TOTAL TRACT AREA: 14.941 ACRES (650,863SF)
AREA IN RAILROAD R/W: 0.796 ACRES (34,680SF)
AREA NORTH OF RAILROAD R/W: 2.231 ACRES (97,198SF)
AREA SOUTH OF RAILROAD R/W: 11.915 ACRES (518,985SF)

THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA PER FEMA MAP#3720064600J, EFF. DATE 10/03/2006 ZONE X NOT PRINTED, MAP#3720064500J, EFF. DATE 10/03/2006 ZONE X NOT PRINTED, AND MAP#3720062400J, EFF. DATE 10/03/2006 ZONE X.

PUBLIC WATER IS AVAILABLE
PUBLIC SEWER IS NOT AVAILABLE
PORTION OF PROPERTY IS LOCATED IN HQW WATERSHED DISTRICT AND SHALL NOT EXCEED THIRTY-SIX PERCENT (36%) BUILT-UPON AREA WITHOUT A PERMITTED BMP.
PROPERTY IS LOCATED WITHIN ONE MILE OF A VOLUNTARY AGRICULTURE DISTRICT
ALL BUFFERS AND EASEMENTS AR TO BE MAINTAINED BY INDIVIDUAL LOT OWNERS
LOT OWNERS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE PARKING AREAS, DRIVE AISLES, AND ALL LANDSCAPE BUFFERING.
GATES WILL REMAIN CLOSED AND ACCESS VIA PRIVATE CODE
IF PROVIDED SIGN SHOULD BE SETBACK AT LEAST 10' FROM ACCESS EASEMENTS & RIGHT-OF-WAYS;AND WILL REQUIRE AN ADDITIONAL REVIEW.
SIGHT LIGHTING SHALL BE LOCATED IN SUCH A MANNER AS TO PREVENT DIRECT GLARE AND LIGHTING ONTO ADJACENT PROPERTY OR INTO THE PUBLIC RIGHT(S)-OF-WAY. ALL FLOOD LIGHTS SHALL BE INSTALLED SUCH THAT THE FIXTURE SHALL BE AIMED DOWN AT LEAST 45 DEGREES FROM VERTICAL.

BUSINESS OPERATING HOURS SHALL BE 6:00 AM TO 11:00 PM EVERY DAY.
TRASH WILL BE COLLECTED BY A COMMERCIAL TRASH COLLECTION SERVICE

HIGH DENSITY OPTION FOR STORMWATER - BMP'S ARE REQUIRED

BMP#1
TOTAL DRAINAGE AREA = 152,760SF (3.51 AC.)
IMPERVIOUS AREA = 88,127SF
% IMPERVIOUS = 57.7%

BMP#1
TOTAL DRAINAGE AREA = 343,848SF (7.89 AC.)
IMPERVIOUS AREA = 195,105SF
% IMPERVIOUS = 56.7%

STORMWATER BMP'S TO BE OPERATED AND MAINTAINED BY:
F & S LAND DEVELOPMENT, LLC
460 AUSLEY RD.
FUQUAY-VARINA, NC 27526

OWNER'S CONSENT FORM

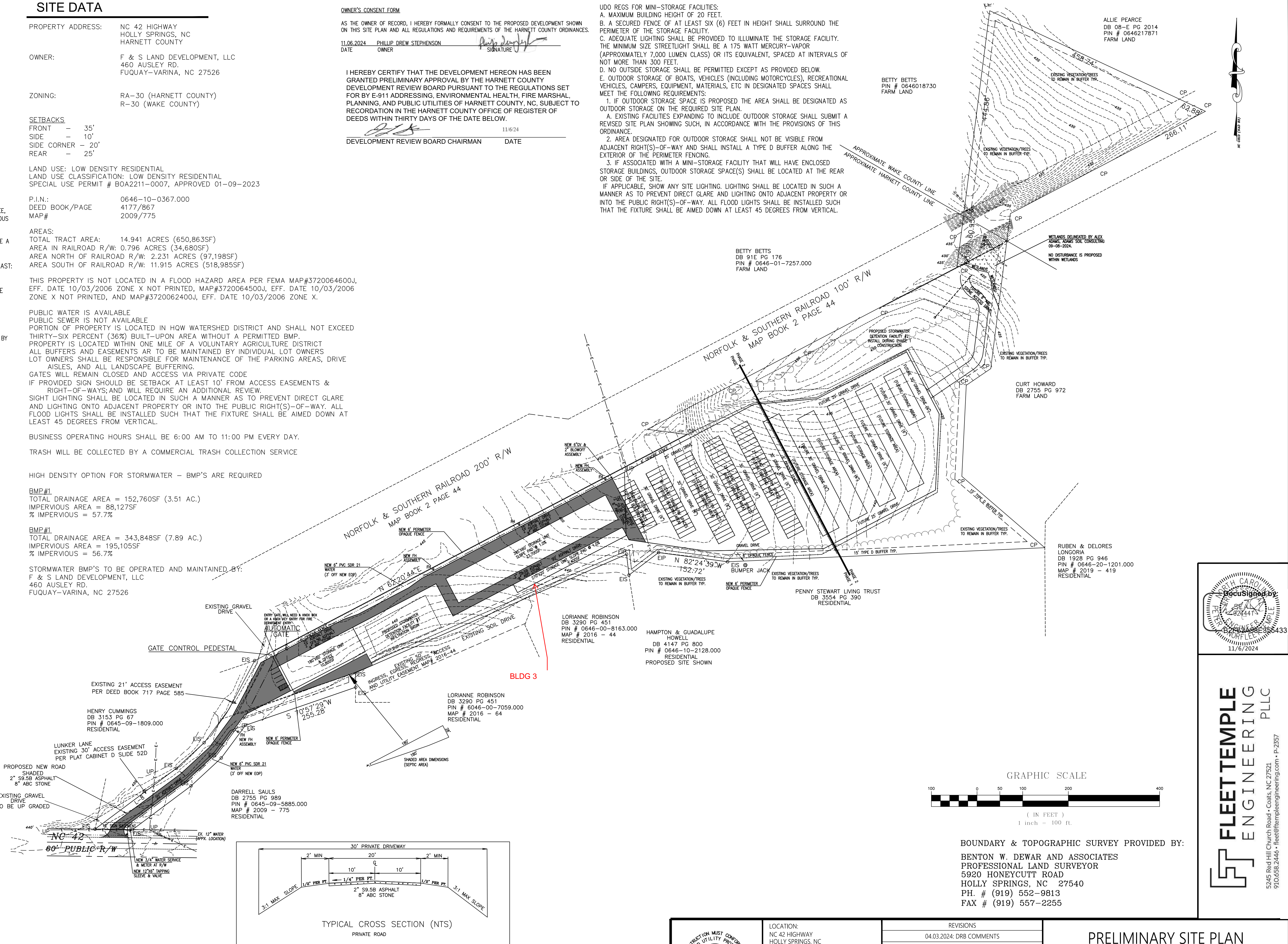
AS THE OWNER OF RECORD, I HEREBY FORMALLY CONSENT TO THE PROPOSED DEVELOPMENT SHOWN ON THIS SITE PLAN AND ALL REGULATIONS AND REQUIREMENTS OF THE HARNETT COUNTY ORDINANCES.

11.06.2024 PHILLIP DREW STEPHENSON
DATE OWNER SIGNATURE

I HEREBY CERTIFY THAT THE DEVELOPMENT HEREON HAS BEEN GRANTED PRELIMINARY APPROVAL BY THE HARNETT COUNTY DEVELOPMENT REVIEW BOARD PURSUANT TO THE REGULATIONS SET FOR BY E-911 ADDRESSING, ENVIRONMENTAL HEALTH, FIRE MARSHAL, PLANNING, AND PUBLIC UTILITIES OF HARNETT COUNTY, NC, SUBJECT TO RECORDATION IN THE HARNETT COUNTY OFFICE OF REGISTER OF DEEDS WITHIN THIRTY DAYS OF THE DATE BELOW.

11/6/24
DEVELOPMENT REVIEW BOARD CHAIRMAN DATE

UDO RECS FOR MINI-STORAGE FACILITIES:
A. MAXIMUM BUILDING HEIGHT OF 20 FEET.
B. A SECURED FENCE OF AT LEAST SIX (6) FEET IN HEIGHT SHALL SURROUND THE PERIMETER OF THE STORAGE FACILITY.
C. ADEQUATE LIGHTING SHALL BE PROVIDED TO ILLUMINATE THE STORAGE FACILITY. THE MINIMUM SIZE STREETLIGHT SHALL BE A 175 WATT MERCURY-VAPOR (APPROXIMATELY 7,000 LUMEN CLASS) OR ITS EQUIVALENT, SPACED AT INTERVALS OF NOT MORE THAN 300 FEET.
D. NO OUTSIDE STORAGE SHALL BE PERMITTED EXCEPT AS PROVIDED BELOW.
E. OUTDOOR STORAGE OF BOATS, VEHICLES (INCLUDING MOTORCYCLES), RECREATIONAL VEHICLES, CAMPERS, EQUIPMENT, MATERIALS, ETC IN DESIGNATED SPACES SHALL MEET THE FOLLOWING REQUIREMENTS:
1. IF OUTDOOR STORAGE SPACE IS PROPOSED THE AREA SHALL BE DESIGNATED AS OUTDOOR STORAGE ON THE REQUIRED SITE PLAN.
A. EXISTING FACILITIES EXPANDING TO INCLUDE OUTDOOR STORAGE SHALL SUBMIT A REVISED SITE PLAN SHOWING SUCH, IN ACCORDANCE WITH THE PROVISIONS OF THIS ORDINANCE.
2. AREA DESIGNATED FOR OUTDOOR STORAGE SHALL NOT BE VISIBLE FROM ADJACENT RIGHT(S)-OF-WAY AND SHALL INSTALL A TYPE D BUFFER ALONG THE EXTERIOR OF THE PERIMETER FENCING.
3. IF ASSOCIATED WITH A MINI-STORAGE FACILITY THAT WILL HAVE ENCLOSED STORAGE BUILDINGS, OUTDOOR STORAGE SPACE(S) SHALL BE LOCATED AT THE REAR OR SIDE OF THE SITE.
IF APPLICABLE, SHOW ANY SITE LIGHTING. LIGHTING SHALL BE LOCATED IN SUCH A MANNER AS TO PREVENT DIRECT GLARE AND LIGHTING ONTO ADJACENT PROPERTY OR INTO THE PUBLIC RIGHT(S)-OF-WAY. ALL FLOOD LIGHTS SHALL BE INSTALLED SUCH THAT THE FIXTURE SHALL BE AIMED DOWN AT LEAST 45 DEGREES FROM VERTICAL.



LOCATION:
NC 42 HIGHWAY
HOLLY SPRINGS, NC
BUCKHORN TOWNSHIP
HARNETT COUNTY, NC

PROPERTY OWNER/DEVELOPER:
F & S LAND DEVELOPMENT, LLC
460 AUSLEY RD
FUQUAY VARINA, NC 27526

REVISIONS	
04.03.2024: DRB COMMENTS	
06.04.2024: DRB COMMENTS	
07.28.2024: NCDEQ/HRW SUBMITTALS	
09.05.2024: HRW COMMENTS	
09.11.2024: NCDEQ STORMWATER COMMENTS	
10.14.2024: NCDEQ EROSION COMMENTS	
11.06.2024: FOR PRELIM DRB APPROVAL	

PRELIMINARY SITE PLAN FOR 42 MINI STORAGE

HORIZONTAL SCALE: 1" = 100'
VERTICAL SCALE: N/A
DATE: 07.26.2023

C1.0