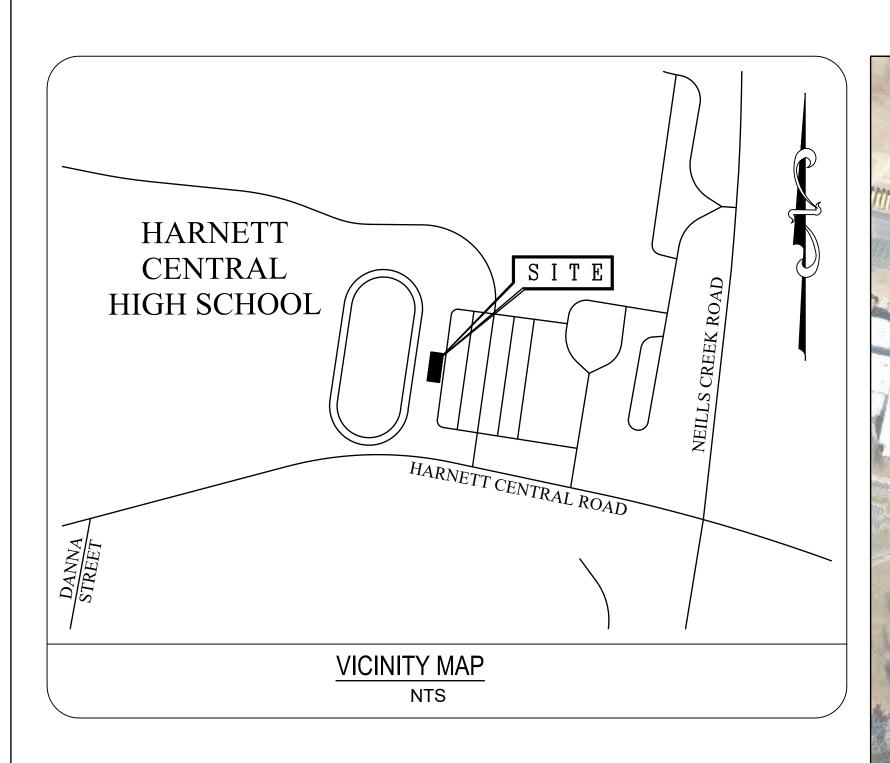
HARNETT CENTRAL PRESS BOX

2911 HARNETT CENTRAL RD, ANGIER, NC 27501





SHEET NUMBER	SHEET TITLE	REVISION NUMBER	REVISION DATE
G-001	COVER SHEET		
G-002	APPENDIX B		
G-003	GENERAL NOTES AND ABBREVIATIONS		
G-101	FLOOR PLANS		
G-111	OVERALL ROOF PLAN		
G-201	EXTERIOR ELEVATIONS		
G-301	BUILDING SECTIONS AND DETAILS		
G-401	ENLARGED FLOOR PLANS AND INTERIOR ELEVATIONS		
G-501	CASEWORK DETAILS		
G-502	GENERAL DETAILS		
G-503	GENERAL DETAILS		
G-601	ROOM FINISH SCHEDULE		
S-001	STRUCTURAL NOTES AND ABBREVIATIONS		
S-101	FOUNDATION PLAN		
S-102	FOUNDATION DETAILS		
S-103	FOUNDATION DETAILS		
S-104	FRAMING PLAN		
P-001	PLUMBING NOTES AND SCHEDULES		
P-101	PLUMBING PLAN		
P-301	PLUMBING DETAILS		
M-001	MECHANICAL NOTES LEGEND AND ABBREVS		
M-101	MECHANICAL PLAN		
M-102	MECHANICAL CONDENSATE PLAN		
M-301	MECHANICAL DETAILS		
E-001	ELECTRICAL NOTES LEGENDS AND ABBREVS		
E-101	ELECTRICAL POWER PLAN		
E-201	ELECTRICAL LIGHTING PLAN		
E-301	ELECTRICAL DETAILS		

CLIENT

HARNETT COUNTY SCHOOL 1008 S 11th ST, LILLINGTON, NC 27546 (910) 893-8151 CONTACT: STEVE MATHEWS

Know what's below.

Call before you dig.

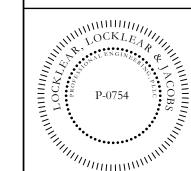


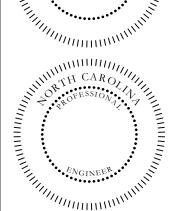


CIVIL | STRUCTURAL | MEP | ENVIRONMENTAL ENGINEERS 114 WEST 3RD. STREET - PEMBROKE, NORTH CAROLINA 28372 (910) 774-9306 WWW.LLANDJ.COM License No. P-0754

OWNER & BUILDER'S NOTES:

- PLANS SHALL NOT BE USED FOR CONSTRUCTION UNTIL STAMPED AND SIGNED BY AN ENGINEER AND APPROVED BY THE LOCAL INSPECTION DEPARTMENT. THE CONTRACTOR IS EXPECTED TO FOLLOW THESE PLANS, APPLICABLE BUILDING CODES AND LOCAL ORDINANCES. CONTRACTOR SHALL VERITY THAT SITE CONDITIONS ARE CONSISTENT WITH PLANS BEFORE STARTING WORK. WHILE PLANS ARE DRAWN TO SHOW THE PROPOSED WORK AS ACCURATELY AS POSSIBLE, SCHEMATIC DETAILS MAY BE USED IN SOME





DRAWN BY: RDH CHECKED BY: JEL

SHEET TITLE

COVER SHEET

SHEET NUMBER G-001



			RAL RD ANGIER, NC	Zip Cod PRESS BOX	de:	27501
Proposed Use: Owner/Authorized Owned By: Code Enforcemen	l Agent:	STEVE MA	THEWS Phone # City/County City	(910) 893-8		State
LEAD DESIGN PF	ROFESSIO	NAL:	LC	OCKLEAR, LOC	KLEAR & JACOBS,	PLLC
DESIGNER Building Civil		FIRM L <u>L&J, PLLC</u>	NAME Robby Locklear, P.E.	LICENSE # NC 028880	TELEPHONE # (910) 774-9306	E-Mail robbylocklear@lland
Electrical Fire Alarm Plumbing		LL&J, PLLC	Robby Locklear, P.E. Robby Locklear, P.E.	NC 028880 NC 028880	(910) 774-9306 (910) 774-9306	robbylocklear@lland
Mechanical Sprinkler-Standpip Structural Retaining Wall >5'		L <u>L&J, PLLC</u> L <u>L&J, PLLC</u>	Robby Locklear, P.E. Jonathan Locklear, P.E.	NC 028880 NC 029469	(910) 774-9306 (910) 774-9306	robbylocklear@lland
Foundation	g	LL&J, PLLC	Jonathan Locklear, P.E.	NC 029469	(910) 774-9306	jonathanlocklear@llan
2018 EDITION OF EXISTING: □ R			■ New Construction □ Alteration	_	ition ☐ Upfit	vation
CONSTRUCTED:		(Date)	ORIGINAL US	` ,	(Chapter 3)	
RENOVATED:		(Date)	CURRENT US PROPOSED U	` '	(Chapter 3) (Chapter 3)	
			BASIC BUILD	ING DATA		
Construction Type			□ II-A	□ III-A	□IV	□ V-A
Sprinklers:	☐ No ☐ I		☐ II-B es ☐ NFPA 13	☐ III-B ☐ NFPA 13	BR □ NFPA	III V-B ∆13D ☐ ESFR
Standpipes:		Yes Cl	lass 🗌 I		☐ Wet ☐ Dry	
Fire District: Building Height: Fe	■ No □ ` eet _	Yes 19'-4"	Flood Haz	ard Area:	■ No ☐ Yes	
Gross Building Are	ea:			NICIAL (CCCC		OUR TOTAL
FLOOR 6th Floor _	EXISTING	(SQFT)		NEW (SQFT)		SUB-TOTAL (SQ
5th Floor	_					
4th Floor _ 3rd Floor _				070		272
2nd Floor _ Mezzanine _	0			279		279
1st Floor _ Basement	0			267		267
TOTAL BUILDI	ING ARFA	:	546 sq. ft.	TOTAL FIR	E AREA:	0 s
	-1	2		E AREA	ational 🔲	
Factory Factory Hazardous Institutional	-1 Moderate H-1 Deto	e	Low H-2 Deflagrate H	ess	H-4 Health	☐ H-5 HPM
Factory Factory Factory Factory Factory Factory Factorial Factorial Factorial Factorial Factory Factorial Factory Factorial Factory Factorial Factory Factorial Factory Factory Factorial Factory Factorial Factory Factorial Factory Factorial Factory Factor	-1 Moderate -1 H-1 Deto	e	Low H-2 Deflagrate H H H H H H H H H H H H H H H H H H H	-3 Combust Mercantil Residenti	H-4 Health	-2 R-3 R-4
Factory Factory Factory Factory Factory Factory Factorian Factoria	-1 Moderate	e	Low H-2 Deflagrate	-3 Combust Mercantil Residentin-piled pair Garage	H-4 Health e	-2 R-3 R-4
Factory	-1 Moderate	e	Low H-2 Deflagrate	-3 Combust Mercantil Residentin-piled pair Garage	H-4 Health e	-2 R-3 R-4
Factory Factor Factory Factor Fac	-1 Moderate	e	Low H-2 Deflagrate	-3 Combust Mercantil Residentin-piled pair Garage	H-4 Health e	-2 R-3 R-4
Factory Factory Factory Factory Factory Factory Factory Factory Factory Institutional Factory Factory Institutional Factory Institutional	-1 Moderate	e	Low H-2 Deflagrate	-3 Combust Mercantil Residenti n-piled pair Garage Educa Educa Mercantil Mercantil	H-4 Health e	-2
Factory F- Hazardous [Institutional I-3 Use Conditi Storage S-1 Par Accessory Occupa Assembly A- Factory F- Hazardous [Institutional I-3 Use Conditi	-1 Moderate	e	A-4	-3 Combust Residenti n-piled pair Garage Educa -3 Combust Mercantil Mercantil Residenti	H-4 Health H-4 Health	-2
Factory Factor	-1 Moderate	e	Low H-2 Deflagrate	-3 Combust Residenti n-piled pair Garage Educa -3 Combust Mercantil Mercantil Residenti	H-4 Health e	-2
Factory Factor	-1 Moderate	e	Low	-3 Combust Mercantil Residenti n-piled eair Garage -3 Combust Mercantil Residenti -3 Combust Mercantil Residenti	H-4 Health H-4 Health	-2
Factory	-1 Moderate	e	Low	-3 Combust Residenti n-piled -3 Combust Mercantill 5 Residenti n-piled Residenti n-piled Garage -3 Combust Mercantill Residenti n-piled Pair Garage	H-4 Health e	-2
Factory Factory Factory Factory Factory Storage S-1 Accessory Occupa Assembly A Factory Facto	-1 Moderate -1 H-1 Deto -1 I-1	e	Low H-2 Deflagrate	-3 Combust Residenti n-piled -3 Combust Mercantill 5 Residenti n-piled Residenti n-piled Garage -3 Combust Mercantill Residenti n-piled Pair Garage	H-4 Health e	-2
Factory Factory Factory Factory Factory Storage S-1 Accessory Occupa Assembly Accessory Factory Facto	-1 Moderate	e	H-2 Deflagrate	-3 Combust Residenti n-piled -3 Combust Mercantill 5 Residenti n-piled Residenti n-piled Garage -3 Combust Mercantill Residenti n-piled Pair Garage	H-4 Health e	-2
Factory Factor	-1 Moderate -1 H-1 Deto -1 I-1	e F-2 Lonate F-2	H-2 Deflagrate	-3 Combust Residenti n-piled eair Garage -3 Combust Mercantil February Residenti n-piled air Garage U per hour inpu 15 psi and 10 h	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate F-2	H-2 Deflagrate	-3 Combust Mercantill Sess	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Mercantill Sess	H-4 Health e	-2
Factory Factor	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Mercantill Sess	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Mercantill Sess	H-4 Health e	-2
Factory Factor	F-1 Moderate H-1 Deto I-1 I-1 I I I Moderate rking Garage ancies: I-1 A-2 I-1 A-2 I-1 Deto I H-1 Deto I H-1 Deto I H-1 Deto I I-1 I I I I Moderate rking Garage Table 509): I where any oilers where achine roor off rooms, re ons not classified and vocation I considerate I considerate I considerate I moderate I considerate I moderate I modera	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenti n-piled -3 Combust Garage -3 Combust Residenti n-piled -3 Residenti n-piled -3 Combust Mercantil 5 Residenti n-piled -3 rage -3 Combust Mercantil 15 psi and 10 h ther than Group cated in a	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenti n-piled lair Garage -3 Combust Mercantil Residenti n-piled lair Garage -3 Combust Mercantil Residenti n-piled lair Garage -10 per hour input 15 psi and 10 h ther than Group cated in a	H-4 Health e	-2
Factory Factor	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenti n-piled lair Garage -3 Combust Mercantil Residenti n-piled lair Garage -3 Combust Mercantil Residenti n-piled lair Garage -10 per hour input 15 psi and 10 h ther than Group cated in a	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenti n-piled lair Garage -3 Combust Mercantil Residenti n-piled lair Garage -3 Combust Mercantil Residenti n-piled lair Garage -10 per hour input 15 psi and 10 h ther than Group cated in a	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenti n-piled lair Garage -3 Combust Mercantil Residenti n-piled lair Garage -3 Combust Mercantil Residenti n-piled lair Garage -10 per hour input 15 psi and 10 h ther than Group cated in a	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenting piled pair Garage Tuper hour input 15 psi and 10 hour cated in a capacity of more of standby power and standby po	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenting piled pair Garage Tuper hour input 15 psi and 10 hour cated in a capacity of more of standby power and standby po	H-4 Health e	-2
Factory	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenting piled pair Garage Tuper hour input 15 psi and 10 hour cated in a capacity of more of standby power and standby po	H-4 Health e	-2
Factory Factor	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenti n-piled air Garage -3 Combust Residenti n-piled air Garage -3 Combust Residenti n-piled air Garage -3 Combust Mercantill 5 Residenti n-piled air Garage -3 Combust Acapacity of more of standby power	H-4 Health e	-2
Factory Factor	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenti n-piled lair Garage Bess	H-4 Health e	-2
Factory Factor	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust Residenti n-piled lair Garage -3 Combust Mercantili Residenti n-piled lair Garage -10 per hour input 15 psi and 10 h ther than Group cated in a	H-4 Health e	-2
Factory Factor	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	Education Educat	H-4 Health e	-2
Factory Factor	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust -3 Combust Residenti n-piled pair Garage -3 Combust Mercantili Residenti n-piled pair Garage -10 per hour input 15 psi and 10 h ther than Group cated in a	H-4 Health e	-2
Factory Factor	-1 Moderate	e F-2 Lonate	H-2 Deflagrate	-3 Combust -3 Combust Residenti n-piled pair Garage -3 Combust Mercantili Residenti n-piled pair Garage -10 per hour input 15 psi and 10 h ther than Group cated in a	H-4 Health e	-2

	Use Calculations						
Actual Are	a: 	A	B +	C	_ +	D = 1	0.00 <
Allowable	Area:	A	В	С	·	D	<u> </u>
		(A)	(B)	(C)	(D)	(E)	(F)
STORY NO.	DESCRIPTION AND USE	AREA PER STORY (ACTUAL)	TABLE 503 ³ AREA	AREA FOR OPEN SPACE INCREASE 1	AREA FOR SPRINKLER INCREASE 2	ALLOWABLE AREA OR UNLIMITED ³	MAXIMUI BUILDING AREA ⁴
1	RESTROOMS	72	UL	N/A	N/A	N/A	N/A
1	CONCESSION	183	UL	N/A	N/A	N/A	N/A
2	PRESSBOX	279	UL	N/A	N/A	N/A	N/A

e. Percent of frontage increase $I_f = 100[F/P-0.25]xW/30 =$ (%)

4. Maximum Building Area = total number of stories in the building x E (506.2).

2. The sprinkler increase per Section 506.2 is as follows:

3. Unlimited area applicable under conditions of Section 507;

5. The maximum area of parking garages must comply with 406.3.4.

a. Multi-story building I_s = 200% b. Single story building I_s = 300%

ALLOWABLE HEIGHT							
	ALLOWABLE	WITH	SHOWN ON	CODE			
	(TABLE 504.3)	SPRINKLERS	PLANS	REFERENCE			
Construction Type:	V-B		Type V-B	TABLE 504.3			
Bldg. Height in Feet	40	60	19'-4"	TABLE 504.3			
Bldg. Height in Stories	UL	UL	2	TABLE 504.3			
			-				

FIRE PROTECTION REQUIREMENTS

			DATING	T	1		
D D: -: -: -:	FIRE SEPARATION		RATING PROVIDED	DETAIL #	DESIGN#	DESIGN#	DESIGN#
BUILDING ELEMENT	DISTANCE (FEET)	REQ'D	(w/ 1A * REDUCTION)	AND SHEET#	FOR RATED ASSEMBLY	FOR RATED PEN.	FOR RATED JOINTS
Structural Frames, including columns, girders, trusses	N/A	0					
Bearing Walls							
Exterior							
South	None	0					
East	None	0					
West	None	0					
South	None	0					
Interior	None	0					
Nonbearing walls and partitions Exterior							
South	None	0					
East	None	0					
West	None	0					
South	None	0					
Interior Walls & Partitions	None	0					
Floor construction:	None	0					
Roof construction	None	0					
Shafts - Exit	None	0					
Shafts - Other	None	0					
Corridor Separation	None	0					
Occupancy Separation	None	0					
Party/Fire Wall Sep.	None	0					
Smoke Barrier Sep.	None	0					
Tenant Separation	None	0					
Incidental Use Separation	None	0					

* Indicate section number permitting reduction

LIFE SAFETY SYSTEM REQUIREMENTS

☐ No Ⅲ Yes
□ No ■ Yes
■ No ☐ Yes
■ No ☐ Yes ☐ Partial
■ No ☐ Yes

<u>SITE PLAN NOTE</u> NEITHER A SURVEY OR SITE PLAN WAS PROVIDED BY THE OWNER AT TIME OF COMPLETION OF THESE PLANS. OWNER MUST VERIFYING INFORMATION ON THIS SHEET IS CORRECT. LL&J, PLLC HAS DONE IT BEST TO VERIFY AND COMPLETE THIS SHEET IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODES WITHOUT THE USE OF SAID INFORMATION.

				LIFE SAFET	Y PLAN REQU	JIREMEN	TS					// OCAL JUBI
LIFE SAFET	ΓY PLAN S	HEET #:										(LOCAL JURI
					NS (CHAPTER	R 7)						
				LINE LOCAT WITH RESP		ANCE TO	ASSU	JMED	PROPEI	RTY	LINES (705.8)	
☐ EXISTIN	G STRUCT	URES V	VITHIN	30' OF THE F	PROPOSED BI	JILDING					. ,	
					RELATES TO C	JCCUPAI	NI LO	AD CA	ALCULA	HON	I (TABLE 1004.1.1)	
EXIT AC												ENERGY REQUIR
COMMO ☐ DEAD EN				ANCE (1014.	3 & 1028.8)							The following da
	EXIT WIDT	HS FOR	EACH	EXIT DOOR						_		energy code sha project informat
	M CALCUL ON EGRES				APACITY EAC	H EXII C	AN AC	COM	MODATE	E		cost for the star
				EACH DOOR								Climate Zone
					WHERE FIRE OSES OF OCC					J/OR		3 4
LOCATIO	ON OF DO	ORS WIT	ΓΗ PAN	IC HARDWAI	RE (1008.1.10))				400	1407	
					SS LOCKS AN MAGNETIC EG					3001	5.1.9.7)	THERMAL ENVEL Roof/ceiling As
LOCATIO	ON OF DO	ORS EQ	UIPPE	WITH HOLE	OPEN DEVIC		`	-	,			Description U-Value of
				APE WINDO\ H FIRE AREA	` ,							R-Value of
THE SQL	JARE FOO	TAGE C	F EAC	H SMOKE CC	MPARTMENT		5 - -					Skylights in U-V
	NY CODE E D REGARD				TES THAT MA	AY HAVE	RFEN					total square
												Exterior Walls Description
			ACC	CESSIBLE DV	VELLING UNIT	S (Sectio	n 1107	7)		_		U-Value of R-Value of
	ESSIBLE JNITS	E ACCESSIBLE TYPE A TYPE B TYPE B TOTAL UNITS UNITS UNITS UNITS ACCESSIBLE						Openings (
	QUIRED	PROVI		REQUIRED		REQUIR			VIDED		IITS PROVIDED	U-V SHO
												proj
												low Doo
					ESSIBLE PARI							Walls below gr
_OT OR	TOTAL ±	# OF PAI	RKING	SPACES	SECTION 1106 # OF ACCE		SPACE	S PR	ROVIDED	, [TOTAL#	Description U-Value of
PARKING	REQUIF			OVIDED	REGULAR V	VITH 5'	V	/AN S	PACES		ACCESSIBLE	R-Value of
AREA NEW	- NEQUII			OVIDED	ACCESS A	ISLE	132" AC AIS	CCESS	96" ACCE AISLE		PROVIDED	Floors over un Description
XISTING												U-Value of
TOTAL												R-Value of Floors slab on
												Description
				STRI	JCTURAL DES	SIGN						U-Value of R-Value of
SIGN LOAI				II				П				Horizontal/
Importance Wind (Iw		1.0		Live Load Roof:	s: 	20	_psf		Ground Snow Lo	ad:	<u>15</u> psf	Slab heate
Snow (Is	,	1.0		Mezza	nine:	100	_psf					
Seismic	, ,	1.0		Floor:		100	_psf					
Wind Load:		Wind Spe ure Cate		12 B	0mph (<i>A</i>	SCE-7)						Thermal Zone winter dry bulb
	•		• •	MWFRS)	Vx =	3,500	lbs	`	√y = _		7,700 lbs	summer dry bu
SEISMIC DI			_		C D							Interior design cor winter dry bulb
	•		•	Parameters: 1604.5) [] I III II] IV					summer dry bu
	ectral Resp				 <u></u>							relative humidi
Sit	e Classifica	,] A							Building heating lo
Ва	Da sic structur	ta Sourc al syster			Presumptive	ve ∐ Hi	storica	al Data	a			Mechanical Spacia
Da		Bearing	y Wall	_ Dua	l w/Special Mo							Unitary
		Building Momen	-		l w/Intermediat rted Pendulum		Specia	l Stee	:I			description heating effi
Se	∟ ismic base			_	lbs Vy = <u>2,9</u>							cooling effic
	alysis Proc				Equivalent L				Dynamic			size catego Boiler
Arc	chitectural,	Mechan	ical, Co	mponents and	chored?	■ No [Yes	3				Size catego
LATERAL D	ESIGN CC	NTROI	:	Earthquake	SOIL BEARI	NG CAPA	CITIF	S:				Chiller Size catego
					<i></i> _/ !! \!	/ 11 /						- in the same of t

Presumptive Bearing Capacity Pile size, type, and capacity ___ SPECIAL INSPECTIONS REQUIRED: No Yes: See below ☐ Fabricators (1704.2) ☐ Vertical Masonry Foundation Elements (1704.11) ☐ Sprayed Fire-resistant Materials (1704.12) ☐ Steel Construction (1704.3) ☐ Mastic and Intumescent Fire-resistant Coatings (1704.13) Construction (1704.4) ☐ Masonry Construction (1704.5) Exterior Insulation and Finish Systems - EFIS (1704.14)

☐ Wood Construction (1704.6)

☐ Verification of Soils (1704.7)

☐ Driven Deep Foundations (1704.8)

☐ Helical Pile Foundations (1704.10)

☐ Cast-in Place Deep Foundations (1704.9)

	F	PLUMBING FI	XTURE RE	EQUIREME	ENTS		
C	CLOSETS	URINALS	LAVAT	ORIES	SHOWERS	DRINKING I	=Ol
	FEMALE	UKINALS	MALE	FEMALE	/ TUBS	REGULAR	A
		0		_	_	_	

☐ Special Cases (1704.15)

Smoke Control (1704.16)

☐ Wind Requirements (1706)

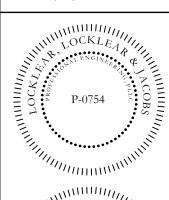
☐ Seismic Resistance (1707)

PLUMBING FIXTURE REQUIREMENTS								
USE	WATERO	CLOSETS	URINALS LAVATORIES		SHOWERS	DRINKING FOUNTAINS		
USE	MALE	FEMALE		MALE	FEMALE	/ TUBS	REGULAR	ACCESSIBLE
REQUIRED	0	0	0	0	0	0	0	0
PROVIDED	1	1	0	1	1	0	0	0
EXISTING	0	0	0	0	0	0	0	0

SPECIAL APPROVALS CTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC ETC, DESCRIBE BELOW) **ENERGY SUMMARY** hall be considered minimum and any special attribute required to meet the so be provided. Each designer shall furnish the required portions of the or the plan data sheet. If performance method, state the annual energy d reference design vs annual energy cost for the proposed design... Method Of Compliance 5 Prescriptive (Energy Code) Prescriptive (ASHRAE 90.1) Performance (Energy Code) Performance (ASHRAE 90.1) bly (each assembly): FILLED CAVITY FIBERGLASS INSULATION 0.041 R-10 AND R-19 FC WITH R-5 THERMAL BLOCKS h assembly: of skylight: tage of skylights in each assembly: METAL WALL PANEL ssembly: assembly ows or doors with glazing) of assembly: n factor: quired, if applicable: 1.45, 1.3 FOR ENTRANCE DOOR itioned space (each assembly) SLAB ON GRADE NOT REQUIRED MECHANICAL SUMMARY CH. SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT 285,000 BTU/HR 28 TON onditioning System HEATPUMP SEE EQUIPMENT SCHEDULES SEE EQUIPMENT SCHEDULES oversized, state reason: f oversized, state reason: _____ List equipment efficiencies: _____ ELECTRICAL SUMMARY ELECTRICAL SYSTEM AND EQUIPMENT Method Of Compliance Energy Code: Prescriptive Performance
ASHRAE 90.1: Prescriptive Performance Lighting schedule: (each fixture type) Lamp type required in fixture: LED Number of lamps in fixture: N/A Ballast type used in the fixture: N/A Number of ballasts in fixture: SEE LIGHTING SCHEDULE Total wattage per fixture: Total interior wattage specified vs allowed: 2,366 VS 10,000 (WHOLE BUILDING) FIRE STATION: 1W PER SQFT (whole building or space by space) 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 System 506.2.4 Higher Efficiency Service Water Heating

506.2.5 On-Site Supply of Renewable Energy 506.2.6 Automatic Daylighting Control Systems

P.O. BOX 3119 PEMBROKE, NC 28372 TELEPHONE: (910)774-9306 FAX: (866)649-7235





PRESS BOX SCHOOLS
RAL RD

ЬR						
REV# - DATE - DESCRIPTION:	T.	2.	<u>~</u> 20222	4.	5.	2022 COPYRIGHT BY LL&J. THIS DRAWING MAY NOT BE COPIED, REUSED OR PUT INTO AN ELECTRONIC DATABASE WITHOUT THE WRITTEN BERAISSTON OF 11 & 1
DF	RAWI	N BY	: C	KD		

CHECKED BY: RL SHEET TITLE

APPENDIX B

SHEET NUMBER G-002 PROJECT# 21-11110

GENERAL NOTES

- ALL WORK TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS.
- 2. NEW CONSTRUCTION, ACCESSORIES AND EQUIPMENT INSTALLATION SHALL BE PROVIDED IN COMPLIANCE WITH ADA ACCESSIBILITY REQUIREMENTS.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL FROM THE SITE AND PROPER DISPOSAL OF ANY DEBRIS ACCUMULATED DURING CONSTRUCTION ON A DAILY
- 4. ALL INTERIOR WALL AND CEILING FINISHES TO MEET FLAME SPREAD AND SMOKE DEVELOPMENT RATING IN ACCORDANCE TO ASTM E 84. ALL INTERIOR FLOOR FINISHES SHALL NOT BE LESS THAN CLASS II (0.22 WATTS/CM SQ) FOR MINIMUM CRITICAL RADIANT FLUX IN ACCORDANCE WITH NFPA 253.
- 5. DOORS SHALL OPERATE FREELY WITHOUT BINDING. ALL DOORS TO BE OFF FACE OF WALL UNLESS OTHERWISE NOTED. DOOR FRAMES SHALL BE SECURED RIGIDLY IN PLACE AND BRACED TO FLOOR AND STRUCTURE ABOVE TO PREVENT BREAK OUT OF PARTITIONS.
- 6. ALL MECHANICAL, ELECTRICAL AND NON-STRUCTURAL SYSTEMS, COMPONENTS, AND ELEMENTS PERMANENTLY ATTACHED TO STRUCTURES, INCLUDING SUPPORTING STRUCTURES AND ATTACHMENTS, AND NON-BUILDING STRUCTURES THAT ARE SUPPORTED BY OTHER STRUCTURES SHALL COMPLY WITH 2018 NORTH CAROLINA BUILDING CODE.
- 7. STORED MATERIALS SHALL BE KEPT DRY AND IN AN ORDERLY FASHION IN AN AREA DESIGNATED BY THE GENERAL CONTRACTOR.
- TYPICAL DIMENSIONS ARE TO THE STRUCTURAL FACE OF PARTITION UNLESS OTHERWISE NOTED.
- 9. CONTRACTOR IS TO PROVIDE METAL/TREATED WOOD BLOCKING AT LOCATIONS RECEIVING CABINETRY OR EQUIPMENT.
- 10. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ALL NEW EQUIPMENT, DEVICES, LIGHTING, AND FOR ADDITIONAL NOTES.
- 11. A DUMPSTER MAY BE LOCATED AS DIRECT FOR THE DISPOSAL OF DEBRIS. PROTECT THE EXISTING BUILDING FROM DAMAGE (INTERIOR AND EXTERIOR), AND ALONG THE PATH OF TRAVEL TO THE DUMPSTER. DAMAGE AS A RESULT OF CONSTRUCTION USE SHALL BE REPAIRED AND/OR REPLACED BY THE CONTRACTOR.

DETAILS:

THESE DRAWINGS AND SPECIFICATIONS REPRESENT THE GENERAL DIMENSIONS, AESTHETIC REQUIREMENTS, AND MATERIALS FOR THE WORK TO BE PERFORMED. IF ANY DETAIL SHOWN ON THESE DRAWINGS APPEARS INCONSISTENT WITH THIS INTENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING AND AWAIT INSTRUCTION FROM ENGINEER BEFORE PROCEEDING WITH WORK. DETAILS PROVIDED DO NOT REPRESENT ALL OF THE DETAILS REQUIRED TO PERFORM THE PROPOSED WORK. ADDITIONAL DETAILS MAY BE FURNISHED BY THE CONTRACTOR ON SUBMITTED SHOP DRAWINGS, OR SCALED DRAWINGS, FOR APPROVAL BY THE ENGINEER.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCEPTABLE CLOSURE AND REPAIR OF ALL AREAS DISTURBED DURING CONSTRUCTION. REPAIR WORK SHALL UTILIZE LIKE MATERIALS WHERE POSSIBLE, OR MATERIALS COMPATIBLE TO EXISTING AND SHALL RESTORE DISTURBED SURFACE TO ORIGINAL CONDITION. UNLESS OTHERWISE NOTED, PAINT EXPOSED PIPING, CONDUITS, AND HANGER ASSEMBLIES TO MATCH EXISTING FEATURES.

CLEANUP & SITE MAINTENANCE:

CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY CLEANING AND MAINTENANCE OF ALL INVOLVED AREAS FROM CONSTRUCTION DEBRIS AND DUST. UPON OVERALL COMPLETION OF THE PROJECT, CONTRACTOR IS RESPONSIBLE FOR FINAL CLEANING/TREATMENT (INCLUDING WINDOW WASH) AS FOLLOWS: DUST INVOLVED SURFACES WITH A TREATED RAG OR CLOTH. USE METHODS, AND CHEMICALS AS RECOMMENDED FOR A SPECIFIC SURFACE BY THE RELATED MANUFACTURERS OF THE SURFACE MATERIAL.

MEANS AND VERIFICATIONS:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND MATERIALS SUPPLIED FOR THE CONSTRUCTION AND INSTALLATION, VERIFICATION OF DIMENSIONS AT THE SITE, AND THE VERIFICATION OF QUANTITIES. THE BUILDER SHALL VERIFY THAT SITE CONDITIONS ARE CONSISTENT WITH THESE PLANS BEFORE STARTING WORK. WORK NOT SPECIFICALLY DETAILED SHALL BE CONSTRUCTED TO THE SAME QUALITY AS SIMILAR WORK THAT IS DETAILED. ALL WORK SHALL BE DONE IN ACCORDANCE WITH INTERNATIONAL BUILDING CODES AND LOCAL CODES.

CONSTRUCTION ACTIVITY NOTES:

CONTRACTOR SHALL OBSERVE THE FOLLOWING INSTRUCTIONS FOR WORKING WITHIN THE BUILDING AREAS. THESE WILL INCLUDE BUT NOT BE LIMITED TO THE

- 1. ALL SHUTDOWNS WILL BE COORDINATED AND APPROVED THROUGH THE OWNER'S REPRESENTATIVE AND WILL REQUIRE ADVANCE NOTICE OF TWO DAYS FOR SHUTDOWNS THAT AFFECT BUILDING OPERATIONS END/OR SYSTEMS. LENGTH OF TIME MAY BE LONGER OR SHORTER FOR SOME SHUTDOWNS AT THE OWNER'S DISCRETION. SOME SHUTDOWNS MAY BE MORE DIFFICULT TO ARRANGE WHERE BUILDING OPERATIONS ARE ADVERSELY AFFECTED. ANY AND ALL SHUTDOWNS WILL BE INITIATED AND CONTROLLED BY BUILDING SYSTEM STAFF. THE CONTRACTOR MAY NOT SHUTDOWN ANY OPERATING SYSTEM. BUILDING FACILITIES MANAGEMENT WILL SHUTDOWN SYSTEMS SCHEDULED, AND AFTER CONTRACTOR HAS PERFORMED THE WORK BUILDING FACILITIES MANAGEMENT WILL COORDINATE AND OBSERVE RE-ACTIVATION.
- AREAS ON THE BUILDING OUTSIDE THE MAIN PROJECT LIMITS, IN WHICH WORK MUST TAKE PLACE WILL BE CLEANED AND RETURNED TO NORMAL CONDITION AT THE END OF EACH DAY. CONTRACTOR SHALL COORDINATE WITH THE OWNER'S REPRESENTATIVE EACH DAY BEFORE LEAVING THE CONTRACT PROJECT LIMITS AND ENTERING THE SITE AND SHALL CHECK OUT EACH DAY WITH SAID REPRESENTATIVE REGARDING THE CLEANLINESS OF THE AREA IN WHICH WORK TOOK PLACE.
- 3. WORK IN OPERATIONAL ROADWAYS AND INTERSECTIONS AND/OR MERGING CONSTRUCTION TRAFFIC WITH THE PUBLIC, AND WHERE SCHEDULED WHETHER LOADING, OR UNLOADING CONSTRUCTION WILL BE IMPLEMENTED ONLY WITH THE USE OF A FLAG MAN DEDICATED FOR THE PURPOSE OF DIRECTING TRAFFIC AT THE FRONT, REAR, OR POINT OF SUCH OPERATION.
- 4. WORK TAKING PLACE IN A WALKWAY OR SIDEWALK ON A DAILY BASIS SHALL BE MARKED AT FRONT AND REAR WITH SAFETY CONES OR OTHER SUITABLE CAUTIONARY DEVICES.
- 5. CONTRACTOR, OR EMPLOYEE OF SAME, ON BUILDING GROUNDS OR ENTERING THE BUILDING TO PERFORM WORK SHALL HAVE WE NAME OF THE COMPANY IDENTIFIED ON THEIR DOTTING, HARD HAT, JACKET. OR OTHER ON THEIR PERSON AT ALL TIMES.
- 6. NO CONSTRUCTION PERSONNEL SHALL BE PERMITTED WITHIN THE BUILDING EXCEPT FOR THE EXPLICIT PURPOSE OF PERFORMING THEIR CONTRACTED WORK. SITE FACILITIES, INCLUDING BUT NOT LIMITED TO TOILETS, BREAK ROOMS, CAFETERIA, ETC., SHALL BE OFF LIMITS EXCEPT THOSE EXPRESSLY DESIGNATED FOR CONTRACTOR USE.
- 7. WORK ACTIVITY MUST NOT JEOPARDIZE BUILDING OPERATIONS. WHERE, IN THE OPINION OF THE ENGINEER OR OWNER, THE CONTRACTOR'S ACTIVITIES ARE SERIOUSLY HAMPERING BUILDING OPERATIONS, OR WHERE OPERATIONS ARE DEEMED AT RISK, THE CONTRACTOR WILL BE DIRECTED BY ENGINEER / OWNER TO CEASE SAID ACTIVITIES UNTIL OTHER MEANS AND METHODS CAN BE MUTUALLY AGREED UPON.
- 8. OWNER WILL NOT RECEIVE, UNLOAD, SIGN FOR, OR STORE ANY DELIVERIES MADE TO ANY CONTRACTOR. CONTRACTOR WILL RECEIVE, UNLOAD, SIGN FOR, AND STORE ALL DELIVERIES FOR THE WORK, AT THE JOB SITE STAGING OR LAY-DOWN AREA, AND BE RESPONSIBLE FOR SAME.
- 9. CONTRACTOR SHALL TURN OVER TO THE OWNER, DESIGNATED PLACE OF STORAGE, A QUANTITY OF SURPLUS MATERIALS, AS APPLICABLE, FOR THE WORK.
- 10. EXISTING STAIRS MAY BE USED FOR CONSTRUCTION ACTIVITIES (DEBRIS REMOVAL, ETC.). INTERIOR SURFACES OF THE STAIRS SHALL BE PROTECTED. DAMAGES AS A RESULT OF CONSTRUCTION USE SHALL BE REPAIRED AND/OR REPLACED BY THE CONTRACTOR.

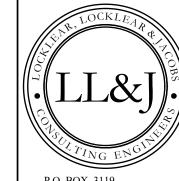
DRAWING REVISIONS

- 1. REVISIONS TO DRAWINGS SHALL BE SHOWN WITH THE REVISION DATE AND DESCRIPTION IN THE TITLE BLOCK. THE REVISION NUMBER AND A TRIANGLE WILL BE SHOWN AT THE LOCATION OF CHANGE ON THE REVISED DRAWING.
- 2. REVISION NUMBERS ARE IN ASCENDING ORDER UNIQUE TO EACH DRAWING. PREVIOUS DATES AND REVISION REMAIN ON THE DRAWINGS REVISED AS A RECORD OF ALL CHANGES TO DRAWINGS.

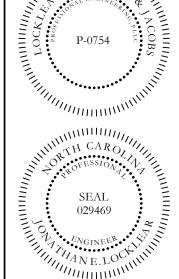
		GENE	RAL ABBREVIATIONS		
AB	ANCHOR BOLT	FDP	FLUID DISTRIBUTION POINT	PLYD	PLYWOOD
AC	ACRE	FE	FIRE EXTINGUISHER	PNL	PANEL
A/C	AIR CONDITIONED	FEC	FIRE EXTINGUISHER CABINET	PP	POWER POLE
ACCH	AIR COOLED CHILLER	FES	FLARED END SECTION	PRESS	PRESSURE
ACM	ASBESTOS CONTAINING	FFE	FINISH FLOOR ELEVATION	PRZ	PRESSURE REDUCING VALVE
ACP	MATERIAL AIR COMPRESSOR	FH FIN	FIRE HYDRANT FINISH	PSF PSI	POUNDS / SQUARE FOOT POUNDS / SQUARE INCH
ACT	ACOUSTICAL CEILING TILE	FLR	FLOOR	PSIG	POUNDS / SQUARE INCH GAGE
AD	AREA DRAIN/ACCESS DOOR	FM	FLOW METER	PTD	PAPER TOWEL DISPENSER
AEL	AIR ELIMINATOR	FMS	FLOW MEASURING STATION	PUX	PUMP/HEAT EXCHANGER
AFF	ABOVE FINISH FLOOR	FND	FOUNDATION		
AHU	AIR HANDLING UNIT	FR	FIRE RATED	QTR	QUARTER
ALT ALUM	ALTERNATE ALUMINUM	FRM FS	FRAME FLOOR SINK	QUAN OVFL	QUANTITY OVERFLOW
AP	ACCESS PANEL	FT	FOOT / FEET	OVEL	OVERFLOW
APPROX	APPROXIMATELY	FTG	FOOTING	R/W	RIGHT OF WAY
ASD	ADJUSTABLE SPEED DRIVES			R	RISER
ASHRAE	AMERICAN SOCIETY OF	GA	GAGE	RA	RETURN AIR
	HEATING, REFRIGERATION, AIR	GAL	GALLON	RAD RCP	RADIUS REINFORCED CONCRETE PIPE
ASME	CONDITIONING ENGINEERS AMERICAN SOCIETY OF	GALV GI	GALVANIZED GRATE INLET	RD	RELIEF DAMPER
ASIVIE	MECHANICAL ENGINEERS	GL	GLASS	REF	REFRIGERANT
ASPE	AMERICAN SOCIETY OF	GND	GROUND	RFG	RETURN FILTER GRILLE
PLUMBING		GOV'T	GOVERNMENT	RND	ROUND
	ENGINEERS	GPH	GALLONS PER HOUR	RDP REC'D.	RESIDENTIAL DRAINAGE PLAN
ASR	AUTOMATIC SPRINKLER RISER	GPM	GALLONS PER MINUTE	RECID. RECIRC	RECESSED RECIRCULATING
BAL	BALANCE	GWB GYP	GYPSUM WALL BOARD GYPSUM	RECP	RECEPTACLE
BC	BACK OF CURB	GII	GTI SOM	REG	REGISTER
BD	BOARD	Н	HIGH	REINF	REINFORCING
BDD	BACK DRAFT DAMPER	НВ	HOSE BIBB	REQ'D.	REQUIRED
BF	BOOSTER FAN	HC	HOLLOW CORE / HEATING COIL	RET DE	RETURN PETLIDN FAN
BFP	REDUCED PRESSURE	HDPE	HIGH DENSITY POLYETHYLENE	RF RGH	RETURN FAN RELIEF GRAVITY HOOD
BACKFLOW	PREVENTER	PIPE HDW	HARDWARE	RGn RH	RELIEF HOOD
ВНР	BREAK HORSEPOWER	HDW HM	HOLLOW METAL	RHC	REHEAT COIL
BLDG	BUILDING	HP	HORSE POWER	RM	ROOM
BOT	BOTTOM	HR	HOUR	RO	ROUGH OPENING
BSP	BLACK STEEL PIPE	HT	HEIGHT	RPM	REVOLUTIONS / MINUTE
		HTG	HEATING	RT RTG	RETURN AIR SENSOR RETURN GRILLE
CB	CATCH BASIN	HVAC	HEATING, VENTILATION & AIR	RIG	RETURN GRILLE
CAB CAP	CABINET CAPACITY	HW	CONDITIONING HEADWALL	S	SUPPLY
CC	COOLING COIL	HVU	HEATING & VENTILATION UNIT	SA	SUPPLY AIR / SOUND
CEM	CEMENT	HYD	HYDRANT		ATTENUATOR
CER	CERAMIC	HORIZ	HORIZONTAL	SCH	SCHEDULE
CF	CUBIC FEET			SECT SEF	SECTION
CFM	CUBIC FEET/MINUTE	ID	INSIDE DIAMETER	SERV	SMOKE EXHAUST FAN SERVICE
CFP CH	CHEMICAL FEED PUMP CHILLER	IH IL	INFRARED HEATER INTAKE LOUVER	SES	SAFETY END SECTION
CHP	CHILLER CHILLED WATER PUMP	IN	INCHES	SEP	SEPARATOR
CIRC	CIRCULATING	INSUL	INSULATION	SF	SUPPLY FAN
CJ	CONTROL JOINT	INT	INTERIOR	SH	SUPPLY HOOD
CK'D	CHECKERED	INV	INVERT	SHT	SHEET
CKT	CIRCUIT	IPF	IRON PIN FOUND	SIH SJ	SUPPLY INTAKE HOOD SLIP JOINT
CL	CENTER LINE	IPS	IRON PIN SET	SPECS	SPECIFICATIONS
CLG CMU	CEILING CONCRETE MASONRY UNIT	JB	JUNCTION BOX	SQ	SQUARE
CMP	CORRUGATED METAL PIPE	JT	JOINT	SQFT	SQUARE FEET
CO	CLEAN OUT	• .		STL	STEEL
COL	COLUMN	KVA	KILOVOLT AMPERE	SS	SANITARY SEWER
CONC	CONCRETE	KW	KILOWATT	SSE	SANITARY SEWER EASEMENT
COND	CONDENSATE	LD	POLIND	STOR STRUC	STORAGE STRUCTURAL
CONN CP	CONNECTION CHANNEL PROTECTION	LB LG	POUND LONG	SUSP	SUSPENDED
OF	/CONDENSATE PUMP	LP	LIGHT POLE	SW	SWITCH
CONST	CONSTRUCTION	LTG	LIGHTING	SWCB	SINGLE WING CATCH BASIN
CONT	CONTINUOUS	LAV	LAVATORY	STD	STANDARD
CONV	CONVERTER			T0.0	TONOLIE & CDOOVE
CRK	CREEK	M	MOTOR	T&G TOIL	TONGUE & GROOVE TOILET
CT	CERAMIC TILE	MAINT MAU	MAINTENANCE MAKE UP AIR UNIT	TEL	TELEPHONE
CTC CWP	CENTER TO CENTER CONDENSER WATER PUMP	MAX	MAXIMUM	TEMP	TEMPERATURE
OWI	CONDENSER WATERT OWN	MDP	MAIN DISTRIBUTION PANEL	THK	THICKNESS
DE	DRAINAGE EASEMENT	MECH	MECHANICAL	THD	THRESHOLD
DET	DETAIL	MH	MANHOLE	TK	TANK
DHC	DUCT RE-HEAT COIL	MET	METAL	TOS TR	TOP OF STEEL THREAD
DIA	DROP INLET DIAMETER	MIN MISC	MINIMUM MISCELLANEOUS	TRF	TRANSFER AIR FAN
DIA DIFF	DIFFUSER	MO	MASONRY OPENING	TRP	TRANSFER PUMP
DIM	DIMENSION	MTD	MOUNTED	TTD	TOILET TISSUE DISPENSER
DISC	DISCONNECT	MTG	MOUNTING	TYP	TYPICAL
DN	DOWN	MV	MECHANICAL VENTILATION	1111	LINIT HEATED
DR	DOOR	NΙΛ	NOT ADDITOADI E	UH UON	UNIT HEATER UNLESS OTHERWISE NOTED
DS DWCB	DOWNSPOUT	NA NIT	NOT APPLICABLE NOT IN CONTRACT	UNO	UNLESS OTHERWISE NOTED UNLESS NOTED OTHERWISE
DWCB DWG(S)	DOUBLE WING CATCH BASIN DRAWING(S)	NO, #	NUMBER		THE STREET OF THE WHOLE
DWG(S) DSB	DOUBLE STRENGTH "B" GLASS	NC, #	NORMALLY CLOSED	V	VOLT
202	_ COLLEGIA D OLAGO	NG	NATURAL GAS	VAV	VARIABLE AIR VOLUME
E/A	EXHAUST AIR	NIC	NOT IN CONTRACT		TERMINAL
EA	EACH	NOM	NOMINAL NOMINATER	VCT VFD	VINYL COMPOSITION TILE VARIABLE FREQUENCY DRIVE
EDH	ELECTRIC DUCT HEATER	NPW NTS	NON POTABLE WATER NOT TO SCALE	VFD XENT	VARIABLE FREQUENCY DRIVE VENTILATION
EF EIP	EXHAUST FAN EXISTING IRON PIPE	CIVI	NOT TO SUALE	VERT	VERTICAL
ELEV	ELEVATION	OA	OUTSIDE AIR	VTR	VENT THRU ROOF
ELEC	ELECTRIC	OC	ON CENTER		
EP	EDGE OF PAVEMENT	OCS	OUTLET CONTROL STRUCTURE	W	WATT
EQUIP	EQUIPMENT	OD	OUTSIDE DIAMETER	W/ WC	WITH
EWC	ELECTRIC WATER COOLER	OH	OVERHEAD	WC WD	WATER CLOSET WOOD
EJ	EXPANSION JOINT	OL OPNG	OVERLOAD OPENING	WG	WATER GAGE
EX EXH	EXISTING EXHAUST	OPNG OPP	OPPOSITE	WM	WATER GAGE WATER METER
EXH	EXTERIOR	OSD	OPEN SIGHT DRAIN	WP	WEATHERPROOF
_/\				WPD	WATER PRESSURE DROP
F	FILTER / FAHRENHEIT	Р	PUMP	WSA	WATER SURFACE AREA
FA	FIRE ALARM	PARTN	PARTITION	WTR WTS	WATER WATER TEMPERATURE SENSOR
FCO	FLOOR CLEANOUT	PD PER	PRESSURE DROP	WV	WATER TEMPERATURE SENSOR WATER VALVE
FCU FCW	FAN COIL UNIT	PER PF	PERIMETER PRE-FILTER	WWF	WELDED WIRE FABRIC
FCW FD	FILTERED COLD WATER FLOOR DRAIN	PIV	POST INDICATOR VALVE	WH	WATER HEATER
FDC	FIRE DEPARTMENT	PL	PLATE		
	CONNECTION	PLBG	PLUMBING	YCO	YARD LIVERANT
				YH	YARD HYDRANT

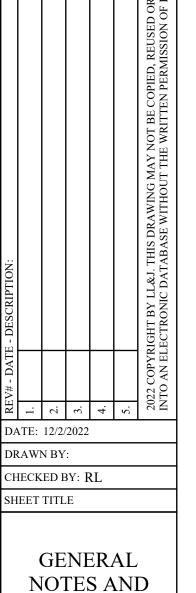
SYMBOL LEGE	END
SYMBOL	DESCRIPTION
DETAIL DESIGNATION AREA TO BE DETAILED SHEET DETAIL IS FOUND ON	DETAIL INDICATOR
SECTION DESIGNATION X X.X. SHEET SECTION IS FOUND ON	SECTION SYMBOL
ELEVATION DESIGNATION SHEET ELEVATION IS FOUND ON	ELEVATION SYMBOL
A	STRUCTURAL GRID
<u> FFE = 0'-0"</u>	ELEVATION TAG
	AREA OF REVISION AND REVISION NUMBER
1	KEY NOTE

	TAG LEGEND
SYMBOL	DESCRIPTION
ROOM NAME	ROOM TAG AND ROOM NUMBER
W-1	WINDOW TAG
(101A)	DOOR TAG
ES	DOOR ELECTRIC STRIKE



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ABBREVIATIONS

G-003

SHEET NUMBER

PLAN

NORTH

ACTUAL

NORTH

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 8</ DATE: 12/2/2022

DRAWN BY: RDH

CHECKED BY: RL

SHEET TITLE

OVERALL ROOF

PROJECT# 21-11110

PLAN

SHEET NUMBER G-111

GENERAL NOTES

- CONSTRUCTION NOTES:

 1. REFER TO SHEET G-101 FOR GENERAL NOTES.
- 2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL REQUIRED BLOCKING WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 3. TRUSS TO LOAD BEARING WALL CONNECTION SHALL BE REVIEWED AND APPROVED BY ENGINEER.

ROOF FRAMING NOTES:

- 1. ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO MAIN GIRDER TO BE PROVIDED BY
- TRUSS MANUFACTURER.
- 2. ALL ROOF TRUSSES INSTALLED @ 16" O.C. 3. ROOF SHALL HAVE A PITCH OF 1:12 UNLESS NOTED OTHERWISE.
- 4. PROVIDE 1" MIN. AIR GAP AT EAVES WITH INSULATION BAFFLES TYPICAL AT ALL TRUSS BAYS. 5. THE OWNER/BUILDER SHALL NOT USE MATERIALS UNLESS THEY MEET CURRENT BUILDING CODE,
- AND ARE APPROVED FOR THAT SPECIFIC USE BY THE BUILDING OFFICIAL.
- 6. CONTRACTOR SHALL INSTALL RAFTER SUPPORT BRACING AS REQUIRED.

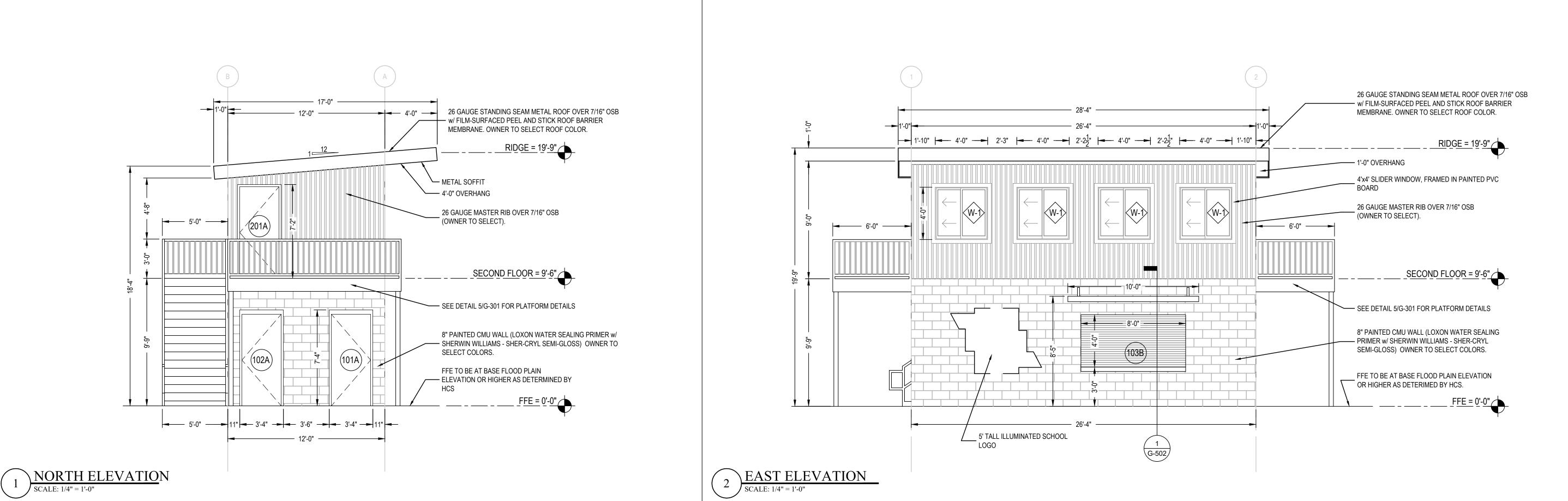
LEGEND

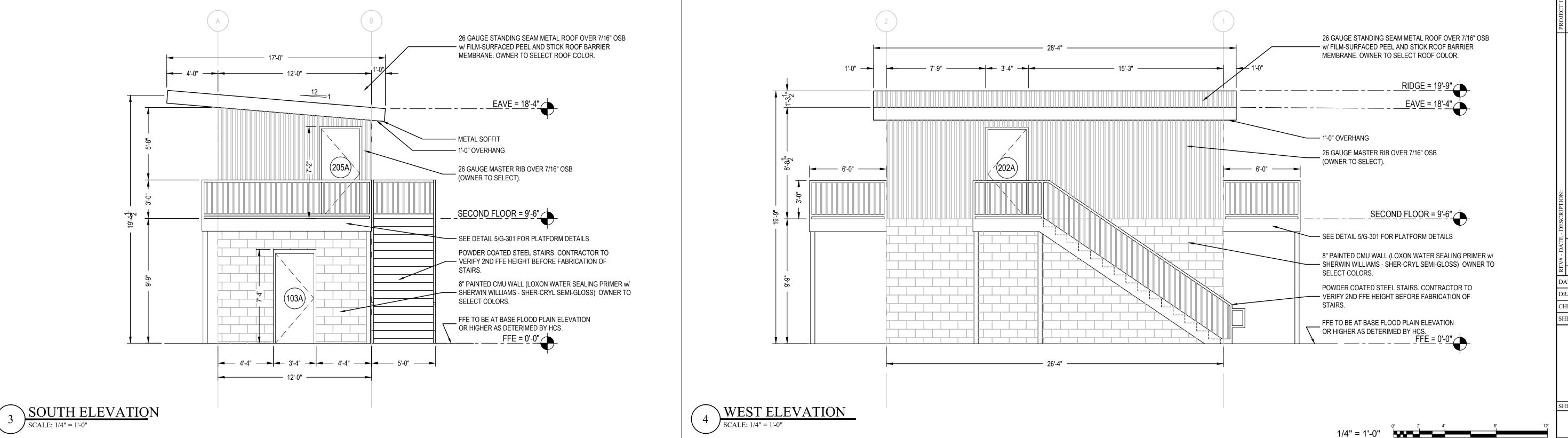


22 GAUGE STANDING SEAM METAL ROOF w/ TITANIUM SYNTHETIC ROOFING UNDERLAYMENT & $\frac{7}{16}$ " OSB (METAL COLOR TO BE SELECTED BY OWNER).

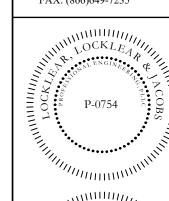
ROOF SLOPE @ 1:12

1/4" = 1'-0"





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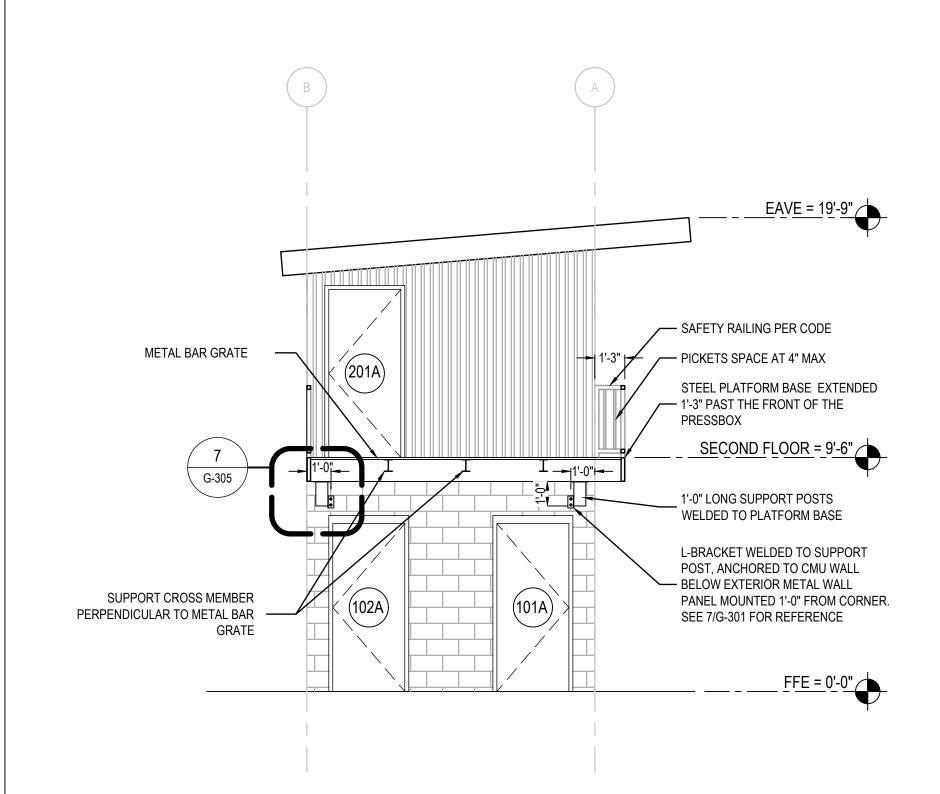
DATE: 12/2/2022 DRAWN BY: RDH

CHECKED BY: JEL SHEET TITLE

> **EXTERIOR ELEVATIONS**

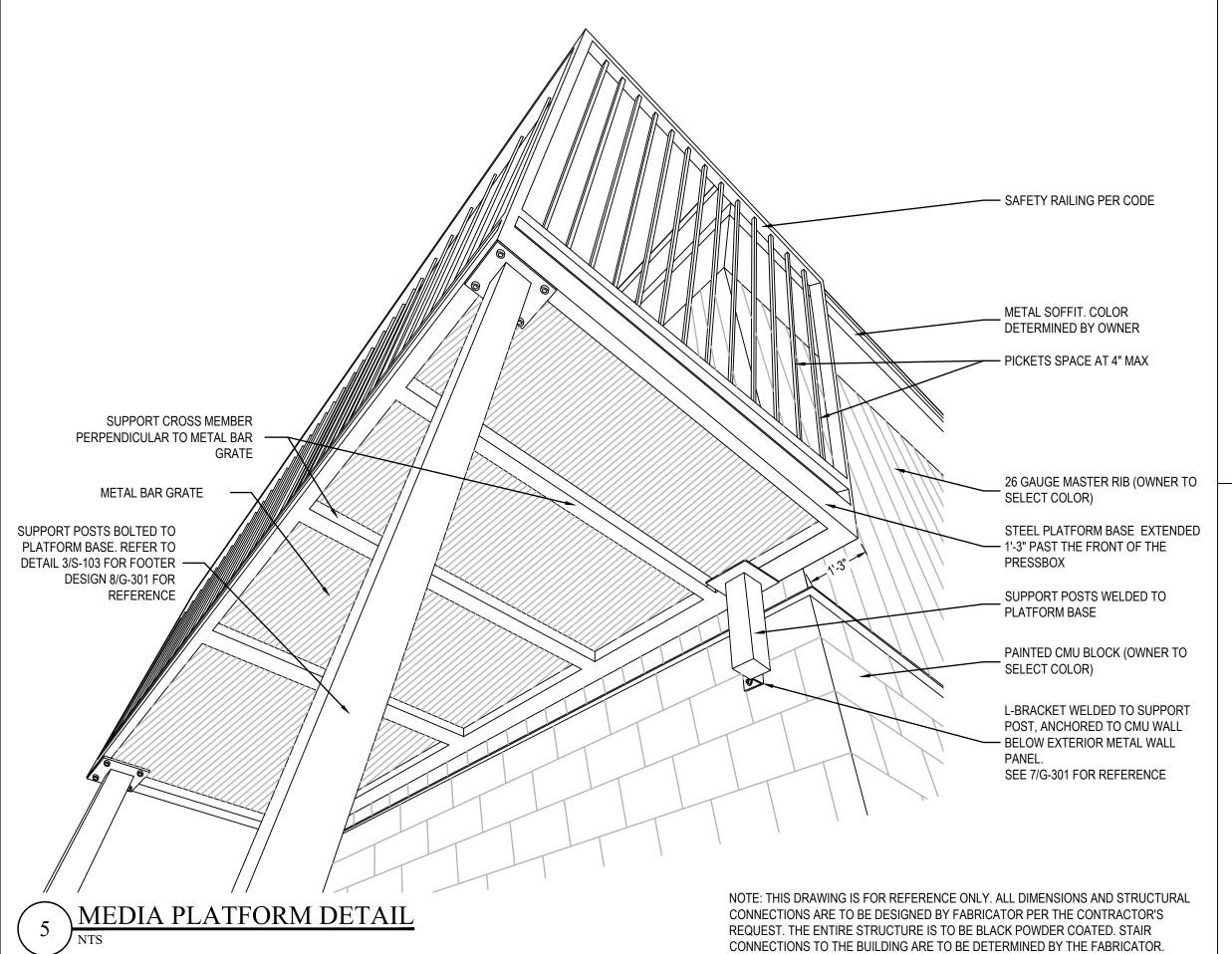
SHEET NUMBER G-201

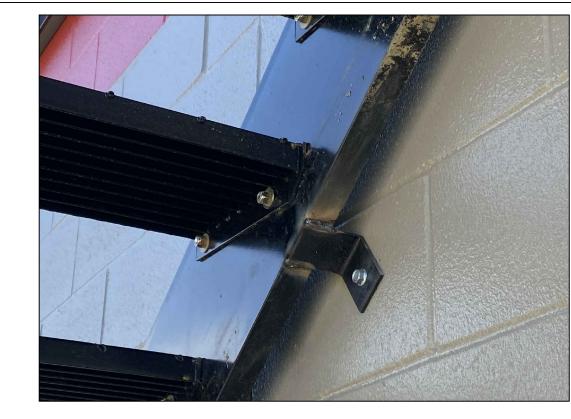
OVERALL BUILDING SECTION



2 MEDIA PLATFORM SECTION
SCALE: 1/4" = 1'-0"

NOTE: WHERE SUPPORT BRACKETS ARE ANCHORED TO THE CMU WALL, THOSE CELLS ARE TO BE GROUT FILLED AND REINFORCED w/ #5 REBAR REINFORCEMENT.

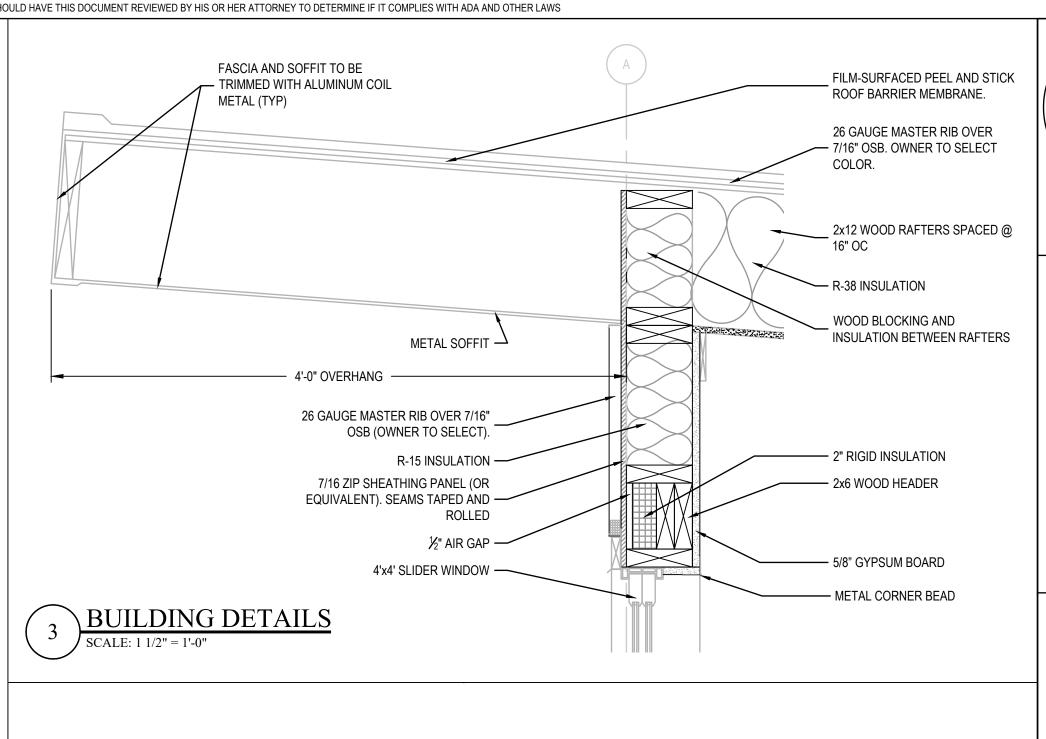


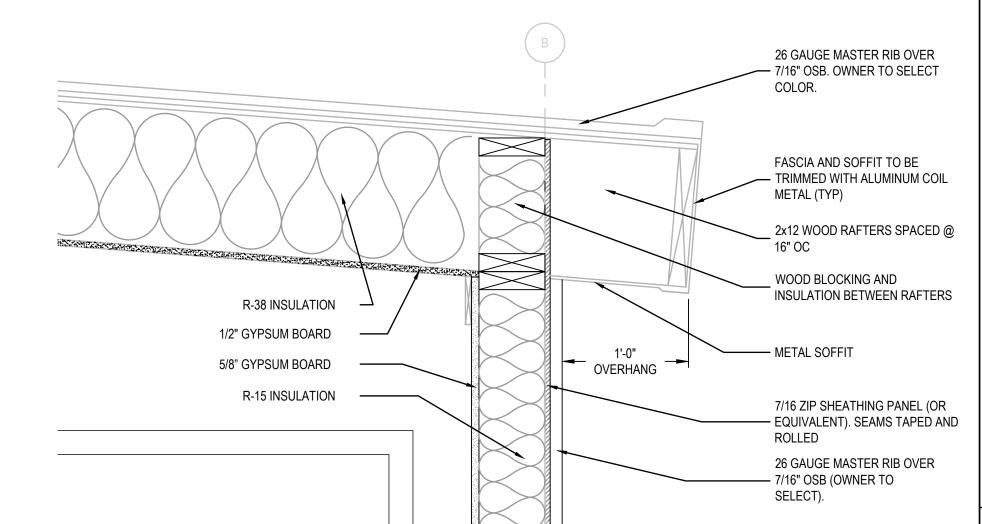


6 STAIR ANCHOR DETAIL



7 PLATFORM BRACKET CONNECTION
NTS

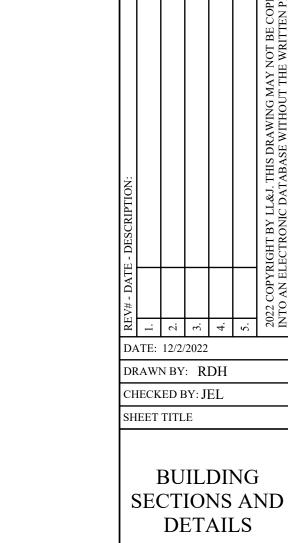




4 BUILDING DETAILS
SCALE: 1 1/2" = 1'-0"



8 SUPPORT POST DETAIL
8 NTS



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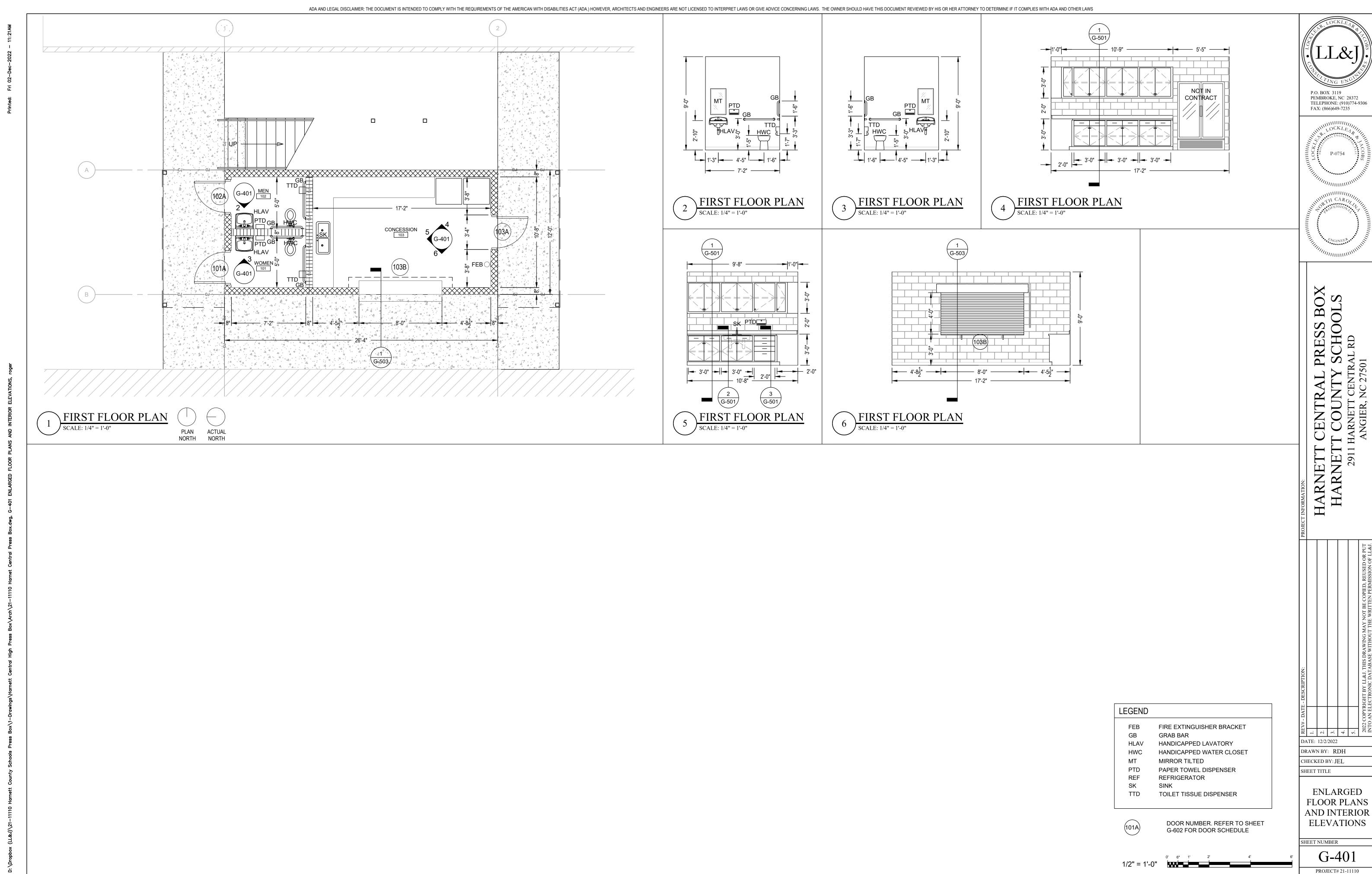
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PRESS BC SCHOOLS

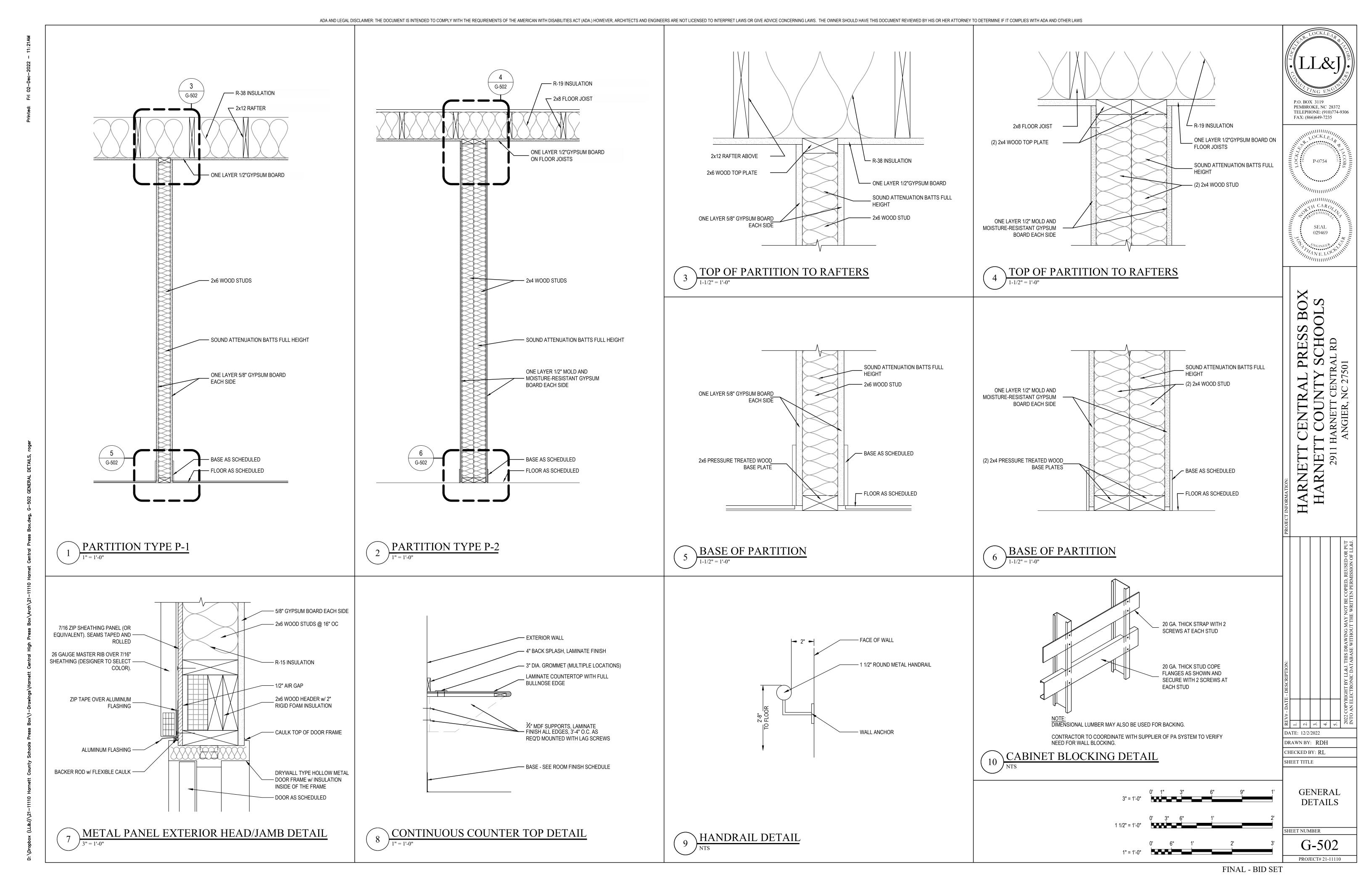
RN

FINAL - BID SET

G-301



FINAL - BID SET



G-503

ROOM AND FINISH SCHEDULE																	
ROOM ROOM NAME	FLOOR	BASE	N	ORTH WALL	S	SOUTH WALL EAST WALL			WES	ST WALL	CEILING			REMARKS	HDW	DOOR SIGNAGE	
NO. ROOW NAME	FLOOR	BASE	MATERIAL	COLOR	MATERIAL	COLOR	MATERIAL	COLOR	MATERIAL	COLOR	MATERIAL	COLOR	HEIGHT	REWARKS	SET	TYPE	NAME
101 WOMEN	CONC		MRGWB	P-2	CMU	P-1	CMU	P-1	MRGWB	P-2	GWB	P-2	9'-0"		5		
102 MEN	CONC		CMU	P-1	MRGWB	P-2	CMU	P-1	MRGWB	P-2	GWB	P-2	9'-0"		5		
103 CONCESSION	CONC		CMU	P-1	CMU	P-1	MRGWB	P-2	CMU	P-1	GWB	P-2	9'-0"		3		
201 MEDIA 1																	
202 COACH ROOM 1	LVT-1	RB-1	GWB	P-2	GWB	P-2	GWB	P-2	GWB	P-2	GWB	P-2	8'-0"				
203 PRESS BOX	LVT-1	RB-1	GWB	P-2	GWB	P-2	GWB	P-2	GWB	P-2	GWB	P-2	8'-0"				
204 COACH ROOM 2	LVT-1	RB-1	GWB	P-2	GWB	P-2	GWB	P-2	GWB	P-2	GWB	P-2	8'-0"				
205 MEDIA 2																	

	DOOR SCHEDULE													
		DO	OR / OPE	NING			FRA	ME		DETAILS		HDW	FIRE	REMARKS
NO.	TYPE	MAT'L	WIDTH	HEIGHT	THK.	FIN.	TYPE	MAT'L	HEAD	JAMB(S)	SILL	SET	RATING	REWARNS
101A	D-1	НМ	6'-0"	7'-0"	13/4"	Р	F-1	НМ	2/S-102	2/S-102	1/S-103	2		
102A	D-1	HM	6'-0"	7'-0"	13/4"	Р	F-1	НМ	2/S-102	2/S-102	1/S-103	2		
103A	D-1	HM	6'-0"	7'-0"	13/4"	Р	F-1	НМ	2/S-102	2/S-102	1/S-103	2		
201A	D-1	HM	3'-0"	7'-0"	13/4"	Р	F-1	НМ	7/G-502			2		
202A	D-2	WD	3'-0"	7'-0"	13/4"	Р	F-2	НМ	2/G-601	3/G-601		1		
203A	D-2	WD	3'-0"	7'-0"	13/4"	Р	F-2	НМ	2/G-601	3/G-601		2		
204A	D-2	WD	3'-0"	7'-0"	13/4"	Р	F-2	НМ	2/G-601	3/G-601		1		
205A	D-1	НМ	3'-0"	7'-0"	13⁄4"	Р	F-1	НМ	7/G-502			2		

	ABBRE	EVIATIONS LEGEND
		NONE OR NOT APPLICABLE
	CONC	SEALED CONCRETE
	GWB	GYPSUM WALL BOARD
	НМ	HOLLOW METAL
	LVT	LUXURY VINYL TILE
	MRGWB	MOISTURE RESISTANT GYPSUM
		WALL BOARD
	Р	PAINTED
	RB	RESILIENT BASE
	TIG	TEMPERED INSULATED GLASS
•		

- 5/8" GYPSUM BOARD EACH SIDE

— 2x6 WOOD STUDS @ 16" OC

- SOUND BATT ATTENUATION

DOOR HARDWARE SCHEDULE

HW SET #1 OFFICE - STC 49

- OFFICE FUNCTION LOCKSET, BEST 45H7A-16H 626 SURFACE-MOUNTED CLOSER, DORMA 8616 AF86 626
- WALL STOP, ROCKWOOD
- THRESHOLD, NGP 412

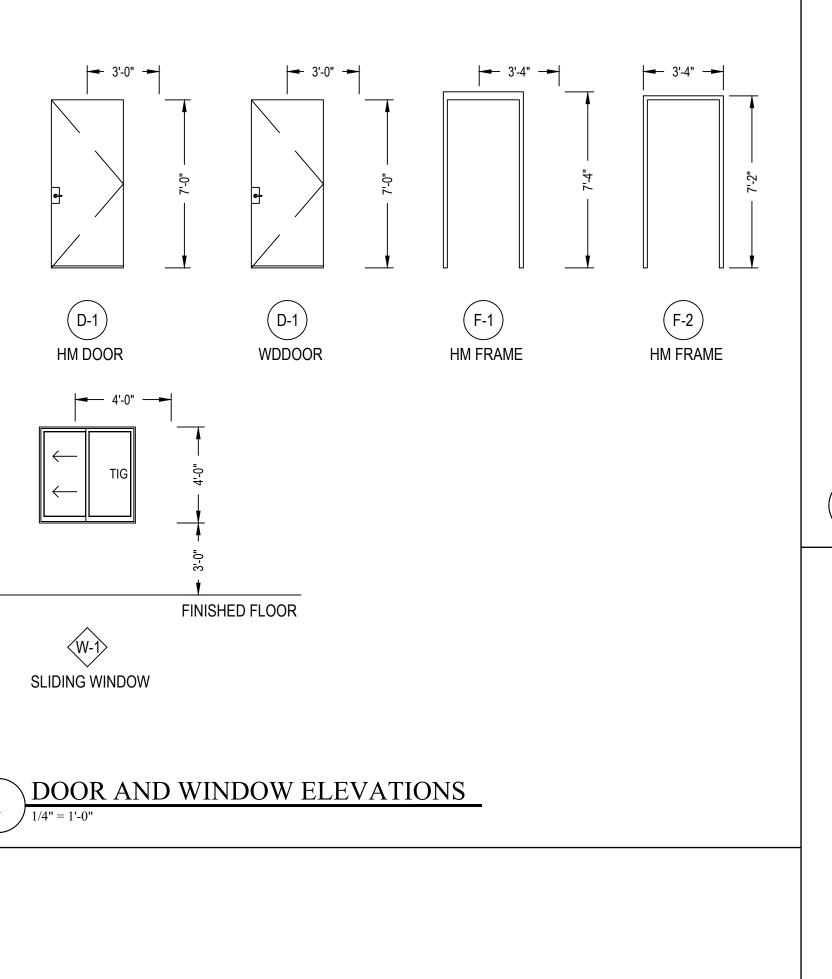
HW SET #2 TYPICAL EXTERIOR DOOR

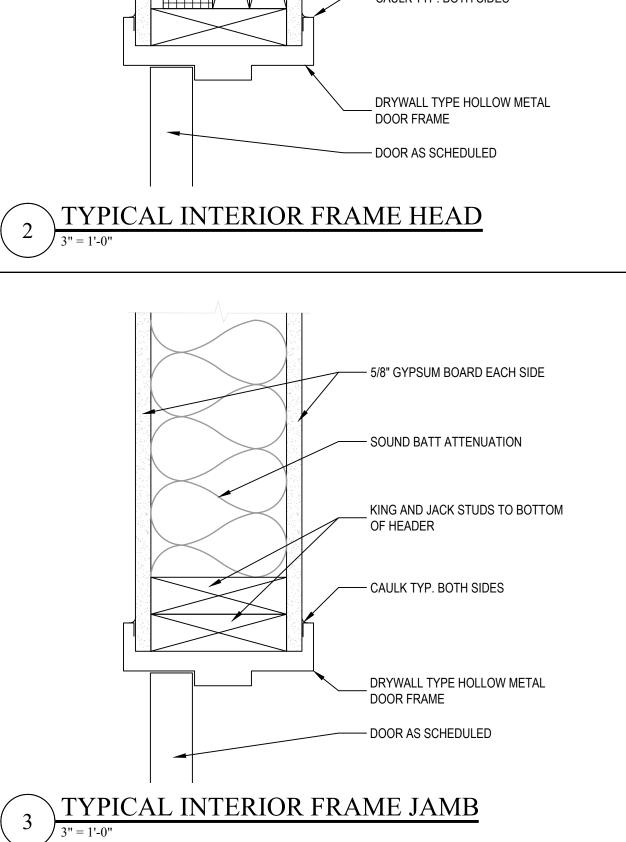
- 1.5 PR HEAVY DUTY HINGES, HAGER BB1168 USP 4 1/2" X 4 1/2" MEDIUM STILE EXIT DEVICE, DORMA 9300-08
- SURFACE-MOUNTED CLOSER, DORMA 8616 AF86P 626 1 SET WEATHERSTRIPPING, NGP 155V
- DOOR SWEEP, NGP 101VA
- THRESHOLD, NGP 426E

MATERIALS LEGEND								
CEILING	CEILING							
GWB	GWB GYPSUM BOARD							
FLOORING								
CONC	SEALED CONCRETE							
LVT-1	ARMSTRONG, NATURAL CREATIONS COMMERCIAL COLLECTION, COLOR (TBD							
	BY OWNER).							
BASE	BASE							
RB-1	ARMSTRONG, 4" HIGH COVE CONTINUOUS ROLL, COLOR (TBD BY OWNER).							
WALLS								
P-1	SHERWIN WILLIAMS - LOXON MASONRY TOPCOAT (OR SIMILAR),							
	COLOR (TBD BY OWNER).							
P-2	SHERWIN WILLIAMS - EMERALD DESIGNER EDITION INTERIOR LATEX PAINT							
	(OR SIMILAR), COLOR TBD BY OWNER.							
DOORS								
P-3	SHERWIN WILLIAMS - FLEXTEMP EXTERIOR ACRYLIC LATEX PAINT (OR SIMILAR),							
	COLOR (TBD BY OWNER).							

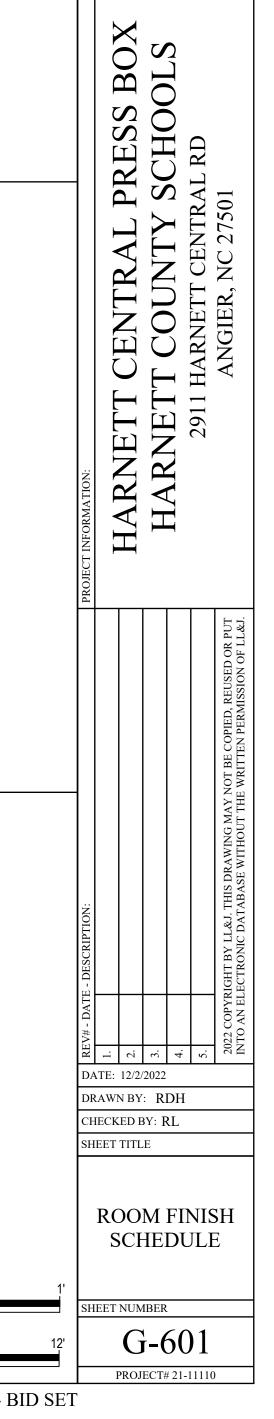
REMARKS LEGEND

- 1. HOLLOW METAL DOORS & FRAMES TO BE PAINTED TO MATCH
- HARNETT CENTRAL SCHOOL COLORS.
- 2. FRAMES AND DOORS ARE TO BE GALVANIZED.
- 3. VON DUPRIN 22 PANIC BAR EXIT DEVICE WITH NIGHT LATCH 230NL TRIM.
- 4. KEYING BY HCS.

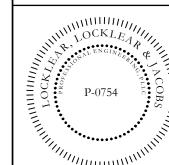








P.O. BOX 3119 PEMBROKE, NC 28372 TELEPHONE: (910)774-9306 FAX: (866)649-7235





STRUCTURAL NOTES

BFF

BELOW FINISH FLOOR

DEMOLITION

FINISH

- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS. ALL DIMENSIONS SHOWN ARE FOR REPRESENTATION ONLY. CONTRACTOR SHALL VERIFY FINAL LOCATION AND ALL REQUIRED CLEARANCES. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS BEFORE STARTING WORK. NOTIFY CONTRACTING OFFICER OF ANY DISCREPANCY.
- 2. DRAWINGS SHOW TYPICAL AND CERTAIN SPECIFIC CONDITIONS ONLY. FOR DETAILS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS SIMILAR TO THOSE SHOWN.
- 3. THE DESIGN, ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC. IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 4. COORDINATE STRUCTURAL CONTRACT DOCUMENTS WITH GENERAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL. NOTIFY CONTRACTING OFFICER OF ANY CONFLICT AND/OR OMISSION. CONTRACTOR SHALL MAKE NO DEVIATION FROM DESIGN DRAWINGS WITHOUT WRITTEN APPROVAL OF THE CONTRACTING OFFICER, FOR ADDITIONAL OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS, SEE GENERAL, MECHANICAL AND PLUMBING DRAWINGS.
- 5. REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE CONTRACTING OFFICER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL TO THE CONTRACTING OFFICER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION.
- ANY BRAND SPECIFIC EQUIPMENT/MATERIALS MAY BE SUBSTITUTED W/ AN EQUIVALENT PRODUCT BY AN ALTERNATE MANUFACTURER IF APPROVED BY THE ENGINEER OF RECORD, UNO.
- THICKENED SLAB LOCATIONS SHALL BE FIELD VERIFIED/LOCATED BELOW FINAL ANCHOR BOLT LOCATIONS. ANCHOR
- BOLTS SHALL BE INSTALLED PER MANUFACTURE'S INSTRUCTIONS. 8. ALL OPENINGS IN THE EXTERIOR BUILDING ENVELOPE SHALL BE SEALED AGAINST AIR INFILTRATION.

ARCHITECT/ENGINEER

- . NO GEOTECHNICAL BORINGS WERE PERFORMED FOR THIS PROJECT. THE DESIGN OF FOUNDATIONS IS BASED ON A PRESUMPTIVE ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSE.
- 2. CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING CONSTRUCTION TO DIRECT WATER AWAY FROM FOUNDATION CONSTRUCTION AREAS. ANY SUB-GRADE SOILS WEAKENED BY THROUGH SATURATION OR DISTURBANCE SHALL BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL. CONTRACTOR SHALL COORDINATE EXTERIOR SITE WORK WITH FOUNDATION WORK.
- AFTER STRIPPING MATERIAL FROM AREA TO BE GRADED, REMOVE ALL UNSUITABLE MATERIAL FROM EXPOSED SUB-GRADE, SUCH AS DEBRIS, TRASH, ORGANIC MATTER OR SOFT SOIL. SOIL SURFACES RECEIVING COMPACTED STRUCTURAL FILL SHALL BE PROOF-ROLLED WITH A LOADED DUMP TRUCK. AREAS EXHIBITING EXCESSIVE PUMPING, WEAVING OR RUTTING SHALL BE EXCAVATED AND REPLACED WITH COMPACTED STRUCTURAL FILL OR SCARIFIED, DRIED AND RECOMPACTED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING
- 4. ALL FILL SHALL BE PLACED IN 6"-8" UNCOMPACTED LIFTS (MAXIMUM) AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY OBTAINED IN ACCORDANCE WITH ASTM D-698 (STANDARD PROCTOR). THE MOISTURE CONTENT OF FILL AT TIME OF PLACEMENT SHALL BE WITHIN +/- 3% OF THE OPTIMUM MOISTURE CONTENT DETERMINED IN THE LABORATORY. COMPACTED FILL SUB-GRADES WITH A SLOPE GREATER THAN 4H:1V SHALL BE BENCHED TO ALLOW PLACEMENT OF HORIZONTAL LIFTS.
- 5. ALL STRUCTURALLY COMPACTED FILL SHALL BE OF MATERIAL CLASSIFIED CL, ML, CS, SM, SP, SW, GC, GM, OR GW ACCORDING TO ASTM D-2487, FREE FROM CLAY BALLS, TRASH, DEBRIS OR OTHER DELETERIOUS MATTER
- 6. A QUALIFIED GEOTECHNICAL ENGINEER SHALL VERIFY CONDITION AND/OR ADEQUACY OF ALL SUBGRADES, FILLS AND BACKFILLS BEFORE PLACEMENT OF FOUNDATIONS, FOOTINGS, SLABS, WALLS, FILLS, BACKFILLS, ETC.

- FLOOR SLAB SHALL BE 4" (MIN) THICK CONCRETE. ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AFTER 28 DAYS. MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.50 WITH MAXIMUM SLUMP OF 4 INCHES. CONCRETE SLAB SHALL CONTAIN A MINIMUM OF 3LBS/CUYD OF FORTA-FERRO FIBER REINFORCEMENT.
- ALL DETAILING, FABRICATION AND PLACEMENT OF REINFORCING STEEL, FORM WORK, MIXING, HANDLING, PLACING, FINISHING AND CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI "MANUAL OF STANDARD PRACTICE FOR DETAILED REINFORCED CONCRETE STRUCTURES" (ACI-315) AND ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI-318).
- 4. ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615, NEW BILLET STEEL DEFORMED BARS, GRADE
- 60 UNLESS NOTED OTHER WISE, ALL REINFORCING BAR SPLICES SHALL BE ACI CLASS B TENSION LAP SPLICES. PRIOR TO CASTING FOUNDATIONS, PREPARE THE SITE IN ACCORDANCE WITH PLANS, SPECIFICATIONS AND REQUIRED COMPACTION.
- ALL CONCRETE WORK SHALL CONFORM TO ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS. DESIGN IS BASED ON ACI 318, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
- 7. UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL BE NORMAL WEIGHT AND HAVE THE FOLLOWING MINIMUM 28-DAY COMPRESSIVE STRENGTHS:

	<u>F'C</u>	W/C RATIO
FOUNDATIONS	3,500 PSI	0.50 MAX
SLABS-ON-GRADE	3,500 PSI/MIN	0.50 MAX
SUSPENDED FLOOR SLAB	3,000 PSI	0.50 MAX

ALL CONCRETE WALLS SHALL BE SUPPORTED LATERALLY DURING BACKFILLING.

- USE OF CALCIUM CHLORIDE, CHLORIDE IONS OR OTHER SALTS IN CONCRETE IS NOT PERMITTED.
- 9. PROVIDE CONTINUOUS REINFORCEMENT WHEREVER POSSIBLE: SPLICE ONLY AS SHOWN OR APPROVED: STAGGER SPLICES WHERE POSSIBLE; USE FULL TENSION SPLICE (CLASS "B") FOR CONTINUOUS REINFORCEMENT AND MATCHING DOWELS UNLESS NOTED OTHERWISE
- 10. REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE COVER UNLESS NOTED OTHERWISE:
 - A. CONCRETE CAST AGAINST EARTH (NOT FORMED)......3"
 - B. FORMED CONCRETE EXPOSED TO THE EARTH OR WEATHER: #6 THROUGH #18 BARS...
 - #5 BARS AND SMALLER..
 - C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER SUSPENDED SLABS AND WALLS: #14 THROUGH #18 BARS.

#11 BARS AND SMALLER.

- BEAMS (STIRRUPS) AND COLUMNS (TIES)... 15. DO NOT PLACE PIPES OR DUCTS EXCEEDING ONE-THIRD THE SLAB OR WALL THICKNESS WITHIN THE SLAB OR WALL UNLESS SPECIFICALLY SHOWN AND DETAILED ON STRUCTURAL DRAWINGS. ANY PIPES SHALL BE BETWEEN THE
- OUTER HORIZONTAL AND VERTICAL LAYERS OF REINFORCEMENT 16. REINFORCE SLAB-ON-GRADE AT ALL PENETRATIONS AND AT RE-ENTRANT CORNERS. PLACE THREE #3X3'-0 AROUND FLOOR DRAINS. PLACE #4X4'-0" (MIN) AT RE-ENTRANT CORNERS. HOLD REINFORCING 1" CLEAR FROM TOP OF
- 17. WALLS AND OTHER INTERSECTING ELEMENTS SHALL HAVE CORNER BARS TO PROVIDE CONTINUITY. USE CRSI STANDARDS OR AS SHOWN ON THE DRAWINGS
- 18. SLAB SHALL BE PLACED IN ACCORDANCE WITH ACI 302.1R AND F-NUMBERS

EINICH EI OOD

- THERE ARE NO LOAD BEARING WALLS DESIGNED AS PART OF THIS PROJECT
- LIGHT GAUGE FRAMING SHALL BE GALVANIZED STEEL, G-60 COATING TO COMPLY WITH ASTM A653, MINIMUM YIELD, SIZES AND GAUGES SHOWN.
- LIGHT GAUGE FRAMING SHALL BE INSTALLED IN COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND THE MANUFACTURER'S RECOMMENDATIONS.
- ALL LIGHT GAUGE FRAMING SHALL BE INSTALLED BY EXPERIENCED WORKMEN SO AS TO PRODUCE RIGID
- ASSEMBLIES. ADD SUFFICIENT CONNECTIONS AS REQUIRED. FOR STUD FRAMING AT WALL OPENINGS, REFER TO DETAILS.
- 6. AT INTERIOR STUD WALLS, ATTACH TRACKS TO CONCRETE WITH ONE POWER DRIVEN FASTENER PER STUD
- 7. WALL BRIDGING SHALL BE PER STRUCTURAL DETAILS.

- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS. ALL DIMENSIONS SHOWN ARE FOR REPRESENTATION ONLY. CONTRACTOR SHALL VERIFY FINAL LOCATION AND ALL REQUIRED CLEARANCES WITH
- ALL ANCHOR BOLTS ARE TO BE ASTM F1554, GRADE 36. THICKENED SLAB LOCATIONS SHALL BE FIELD VERIFIED/LOCATED BELOW FINAL ANCHOR BOLT LOCATIONS. ANCHOR
- BOLTS SHALL BE INSTALLED PER MANUFACTURE'S INSTRUCTIONS.

ROOF FRAMING / TRUSS NOTES TRUSSES MANUFACTURER TO DESIGN ENTIRE ROOFING SYSTEM. TRUSS MANUFACTURER TO BE SELECTED BY

- GENERAL CONTRACTOR. TRUSS DRAWING IS FOR ILLUSTRATION ONLY. ALL TRUSSES SHALL BE INSTALLED & BRACED TO MANUFACTURERS DRAWINGS & SPECIFICATIONS.
- 3. ALL TRUSSES WILL NOT BE FIELD ALTERED WITHOUT PRIOR MANUFACTURER APPROVAL OR APPROVAL OF
- STRUCTURAL ENGINEERING CALCULATIONS.
- ALL TRUSSES SHALL HAVE DESIGN DETAILS & DRAWINGS ON SITE FOR FRAMING INSPECTION. ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO MAIN GIRDER TO BE PROVIDED BY TRUSS
- MANUFACTURER. RAFTER OVERHANGS SHALL NOT EXCEED THE LESSER OF ONE-THIRD OF THE RAFTER SPAN OR 2
- ROOFS SHALL BE SHEATHED WITH A MINIMUM OF 7/16" WOOD STRUCTURAL PANEL SHEATHING WITH ROOF FRAMING MEMBER SPACING OF 24" O.C.
- WOOD ROOF TRUSS SYSTEMS SHALL BE DESIGNED, MANUFACTURED, AND INSTALLED IN ACCORDANCE ANSI/TPI 1 NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION, THE TRUSS DESIGN
- DRAWINGS, AND/OR THE MANUFACTURER'S CODE EVALUATION REPORT. BLOCKING AND CONNECTIONS SHALL BE PROVIDED AT PANEL EDGES PERPENDICULAR TO ROOF FRAMING MEMBERS IN THE FIRST TWO TRUSS OR JOIST SPACES AND SHALL BE SPACED AT A MAXIMUM OF 4 FEET ON
- ALL ROOF PITCH SHALL BE AS SHOWN UNLESS NOTED OTHERWISE

MICRO-LAMINATED

QUANTITY

- 10. PROVIDE 1" MIN. AIR GAP AT EAVES WITH INSULATION BAFFLES AT ALL TRUSS BAYS.
- 11. ALL EXPOSED INSULATION TO HAVE A FLAME SPREAD RATING OF LESS THEN 25 AND A SMOKE DENSITY RATING OF LESS THAN 450.
- 12. THE CONTRACTOR SHALL NOT USE MATERIALS UNLESS THEY MEET CURRENT CODES AND ARE APPROVED FOR THAT SPECIFIC USE BY THE BUILDING OFFICIAL
- 19. HURRICANE STRAPS SHALL BE INSTALLED AS ROOF ANCHORAGE TO LOAD BEARING WALLS. HURRICANE STRAPS SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

THRU BOLT

- . ATTIC SHALL HAVE VENTILATION EQUAL TO 1 SQ. FOOT PER 300 SQ. FEET OF ATTIC SPACE. VENTILATION SHALL BE PROTECTED FROM SNOW AND RAIN AND SHALL BE COVERED WITH GALVANIZED WIRE SCREEN. OPENINGS SHALL BE LOCATED TO PROVIDE CROSS VENTILATION.
- 2. EXHAUST ALL VENTS AND FANS DIRECTLY TO OUTSIDE VIA METAL DUCTS.

ALL OPENINGS IN THE EXTERIOR BUILDING. ENVELOPE SHALL BE SEALED AGAINST AIR INFILTRATION. THE FOLLOWING

- AREAS MUST BE SEALED. * JOINTS AROUND WINDOW AND DOOR FRAMES
- JOINTS BETWEEN WALL CAVITY AND WINDOW/DOOR FRAMES.
- JOINTS BETWEEN WALL AND FOUNDATION JOINTS BETWEEN WALL AND ROOF
- JOINTS BETWEEN WALL PANELS UTILITY PENETRATIONS THROUGH EXTERIOR WALLS

BUILDING CODE: NCSBC 2018, ASCE 7-16 OCCUPANCY CATEGORY: CATEGORY II (NORMAL USE)

2. LIVE LOAD 1ST FLOOR: 100 PSF 2.1.1.

- 2.1.2. 2ND FLOOR: 100 PSF
- 2.1.3. ROOF: 20 PSF 2.1.4. STAIRS: 100 PSF
- SNOW LOAD **GROUND SNOW: 15 PSF** 3.1.1.
- 3.1.2. FLAT ROOF SNOW (Pf): 15 PSF (CONSERVATIVE) 3.1.3. SNOW EXPOSURE FACTOR, (Ce): 0.9 (FULLY)
- SNOW IMPORTANCE FACTOR, (Is): 1.0 3.1.4.
- 3.1.5. THERMAL FACTOR, (Ct): 1.0
- 4. WIND 4.1. 120 MPH
- WIND IMPORTANCE FACTOR, (Iw): 1.0 4.2.
- 4.3. WIND EXPOSURE: B 4.4. INTERNAL PRESSURE COEFFICIENT: +/- 0.18 (ENCLOSED)
- EARTHQUAKE 5.1. RISK CATEGORY: II
- SEISMIC IMPORTANCE FACTOR (Ie): 1.0
- SPECTRAL RESPONSE ACCELERATION: Ss = 0.13 S1 = 0.064 5.4. SITE CLASS: D
- SPECTRAL RESPONSE COEF: SDS = 0.139 SD1 = 0.103
- 5.6. SEISMIC DESIGN CATEGORY: B SEISMIC RESISTING SYSTEM: BEARING WALL
- DESIGN BASE SHEAR: Vx = 1.8 KIPS Vy = 2.9 KIPS5.8.
- SEISMIC RESPONSE COEF (Cs) = 0.0556 RESPONSE MODIFICATION COEF, (R): 3
- ANALYSIS PROCEDURE: SIMPLIFIED PRESUMPTIVE SOILS BARING CAPCITY OF 2000 PSF
- 7. FROST LINE DEPTH: 12-INCHES.

TEMPODADY

SYMBOL LEGEND

KEY NOTE

ABBREVIATIONS HEET NUMBER

STRUCTURAL NOTES AND

2 - 2 - 6 - 7 - 6

DATE: 12/2/2022 DRAWN BY: CKD CHECKED BY: JEL

SHEET TITLE

S-001PROJECT# 21-11110

INICITIDED

MISCELLANEOUS

STRUCTURAL ABBREVIATIONS

A/E	ARCHITECT/ENGINEER	BKG	BACKING	DET	DETAIL	FIN FLR	FINISH FLOOR	INCL	INCLUDED	ML	MICRO-LAMINATED,			TEMP	TEMPORARY
AB	ANCHOR BOLT	BKGD	BACKGROUND	DEV	DEVELOPMENT	FLG	FLANGE	INFO	INFORMATION		MONOLITHIC	R	RADIUS, RISER	THD	THREAD
ABBRV	ABBREVIATION	BLDG	BUILDING	DIA	DIAMETER	FLR	FLOOR	IN-LB	INCH-POUND	MO	MASONRY OPENING	RC	REINFORCED CONCRETE	THK	THICKNESS
ACI	AMERICAN CONCRETE	BLK	BLOCK/BLOCKING	DIAG	DIAGONAL	FLR SK	FLOOR SINK	IN-LBF	INCH-POUND FORCE	MS	MACHINE SCREW	RD	ROAD, ROOF DRAIN	THRU	THROUGH
	INSTITUTE	BLVD	BOULEVARD	DIFF	DIFFERENCE, DIFFERENTIAL	FOC	FACE OF CONCRETE	INSTL	INSTALL	MSL	MEAN SEA LEVEL	REC	RECESSED	TJI	TRUSS JOIST INSTITUTE
ACP	ASPHALTIC CONCRETE PAVING	BLW	BELOW	DIM	DIMENSION	FOF	FACE OF FINISH	INSUL	INSULATION	MTL	METAL	REF	REFERENCE	TO	TOP OF
AD	AREA DRAIN	BM	BEAM	DIST	DISTANCE	FOM	FACE OF MASONRY	INT	INTERIOR			REINF	REINFORCED	TOB	TOP OF BEAM
ADA	AMERICANS WITH DISABILITIES	ВО	BOTTOM OF	DIV	DIVIDE	FOS	FACE OF SLAB, FACE OF STUD	IR	INSIDE RADIUS	N	NORTH	REQ	REQUIRE	TOC	TOP OF CONCRETE
	ACT	BOS	BOTTOM OF STEEL	DJ	DOUBLE JOIST	FOW	FACE OF WALL			NA	NOT APPLICABLE	REQD	REQUIRED	TOC	WALL TOP OF CONCRETE WALL
ADDL	ADDITIONAL	BOT	BOTTOM	DL	DEAD LOAD	FR	FRAME	K	KIP, THOUSAND	NF	NEAR FACE	REV	REVISION	TOF	TOP OF FOOTING
ADDM	ADDENDUM	B PL	BASE PLATE	DOC	DOCUMENT	FRMG	FRAMING	KB	KNEE BRACE	NIC	NOT IN CONTRACT	RGD INS	RIGID INSULATION	TOG	TOP OF GRATE
ADJ	ADJACENT/ADJOINING	BRCG	BRACING	DWG	DRAWING	FS	FAR SIDE	KCJ	KEYED CONTROL JOINT	NO	NUMBER	RND	ROUND	TOJ	TOP OF JOIST
ADMIN	ADMINISTRATION	BRDG	BRIDGING	5110	Bivitino	FSTNR	FASTENER	KIP	THOUSAND POUNDS	NOM	NOMINAL	RO	ROUGH OPENING	TOL	TOLERANCE
AFF	ABOVE FINISHED FLOOR	BRG	BEARING	EA	EACH	FT	FOOT / FEET	KIP FT	THOUSAND FOOT/POUNDS	NS	NEAR SIDE	RT	RIGHT	TOM	TOP OF MASONRY
AFG	ABOVE FINISHED GRADE	BRG PL	BEARING PLATE	EE	EACH END	FT/LB	FOOT/POUND	KLF	KIPS PER LINEAL FOOT	NTS	NOT TO SCALE	RVL	REVEAL	TOP	TOP OF PARAPET
AGGR	AGGREGATE	BS	BOTH SIDES	EF	EACH FACE	FT/LBF	FOOT/POUND FORCE	KO	KNOCK OUT	1110	NOT TO GOALE	IVL	NE VEAL	TOS	TOP OF SLAB
AHR	ANCHOR	BSMT	BASEMENT	EIFS	EXTERIOR INSULATION AND	FTG	FOOTING	KOP	KNOCK OUT PANEL	O/O	OUT TO OUT	S	SOUTH	TOS	TOP OF STEEL
AIA	AMERICAN INSTITUTE OF	BT WLD	BUTT WELD	LII O	FINISH SYSTEM	FUT	FUTURE	KSF	KIPS PER SQUARE FOOT	OA	OVERALL	SCHEM	SCHEMATIC	TOW	TOP OF WALL
AIA	ARCHITECTS	BTWN	BETWEEN	EJ	EXPANSION JOINT	FUI	FUTURE	KSI	KIPS PER SQUARE INCH	OC	ON CENTER	SD	SHOP DRAWINGS	TRANS	TRANSVERSE
AICC		DIVVIN	DETVVEEN	EL	ELEVATION	0	GIRDER	NOI	KIPS PER SQUARE INCH	OD		SDI			TURNBUCKLE
AISC	AMERICAN INSTITUTE OF STEEL	0	CHANNEL			G			ANGLE	OF	OUTSIDE DIAMETER		STEEL DECK INSTITUTE	TRNBKL	
AICI	CONSTRUCTION	0/0	CHANNEL	ELAST	ELASTOMERIC	GA GALV	GAGE	L	ANGLE		OUTSIDE FACE OF CTUP	SE	STRUCTURAL ENGINEER	TYP	TYPICAL
AISI	AMERICAN IRON AND STEEL	C/C	CENTER TO CENTER	ELEC	ELECTRIC	GALV	GALVANIZED	LAM	LAMINATE	OFS	OUTSIDE FACE OF STUD	SECT	SECTION	LIBO	LINUEODM DUIU DINIO CODE
AUTO	INSTITUTE	CD	CONSTRUCTION DOCUMENTS,	ELEM	ELEMENTARY	GALV STL	GALVANIZED STEEL	LATL	LATERAL	OPH	OPPOSITE HAND	SF	SQUARE FEET (FOOT)	UBC	UNIFORM BUILDING CODE
AITC	AMERICAN INSTITUTE OF	0514	CONTRACT DOCUMENTS	ELEV	ELEVATOR	GR BM	GRADE BEAM	LBF	POUND-FORCE	OPNG	OPENING	SHT	SHEET, SHAFT	UNO	UNLESS NOTED OTHERWISE
	TIMBER CONSTRUCTION	CEM	CEMENT	EMBED	EMBEDDED/EMBEDMENT	GC	GENERAL CONTRACTOR	LBR	LUMBER	OPP	OPPOSITE	SIM	SIMILAR	=	
ALNMT	ALIGNMENT	CHFR	CHAMFER	ENCL	ENCLOSURE	GEN	GENERAL	LBS	POUND	OPT	OPTIONAL	SJI	STEEL JOIST INSTITUTE	VAR	VARIES
ALT	ALTERNATE, ALTERNATIVE	CI	CAST IRON	ENGR	ENGINEER	GLU LAM	GLUED LAMINATED WOOD	LD BRG	LOAD BEARING	OR	OUTSIDE RADIUS	SLNT	SEALANT	VERT	VERTICAL
ALUM	ALUMINUM	CIP	CAST-IN-PLACE	EOS	EDGE OF SLAB	GLZ	GLAZING	LF	LINEAR FEET (FOOT)			SM	SMOOTH	VIF	VERIFY IN FIELD
AMT	AMOUNT	CJ	CONSTRUCTION JOINT,	EPA	ENVIRONMENTAL PROTECTION	GOVT	GOVERNMENT	LIN	LINEAR	PAR	PARALLEL, PARAPET	SPEC	SPECIFICATION	VNR	VENEER
ANSI	AMERICAN NATIONAL		CONTRACTION JOINT,		AGENCY	GRTG	GRATING	LL	LIVE LOAD	PC	PIECE, PORTLAND CEMENT	SQ	SQUARE	VR	VAPOR RETARDER
	STANDARDS INSTITUTE		CONTROL JOINT	EQ	EQUAL	GT	GROUT	LLBB	LONG LEG BACK TO BACK	PCC	PRECAST CONCRETE	SQ IN	SQUARE INCH	VRFY	VERIFY
APA	AMERICAN PLYWOOD	CL	CENTER LINE	EQUIP	EQUIPMENT			LLH	LONG LEG HORIZONTAL	PCF	POUNDS PER CUBIC FOOT	SQ YD	SQUARE YARD		
	ASSOCIATION	CLG	CEILING	EQUIV	EQUIVALENT	Н	HIGH	LLV	LONG LEG VERTICAL	PED	PEDESTAL	SSPC	STRUCTURAL STEEL PAINTING	W	WEST, WIDE
APPD	APPROVED	CLR	CLEAR	EST	ESTIMATE	HAS	HEADED ANCHOR STUD	LONG	LONGITUDINAL	PEN	PENETRATE		COUNCIL	W/	WITH
APPROX	APPROXIMATE	CM	CENTIMETER	ETC	ET CETERA	HC	HOLLOW-CORE	LT GA	LIGHT GAGE	PERIM	PERIMETER	ST	STAIRS	W/O	WITHOUT
APPX	APPENDIX	CMU	CONCRETE MASONRY UNIT	EW	EACH WAY	HCP	HANDICAPPED	LT WT	LIGHT WEIGHT	PH	PHASE	STAG	STAGGERED	WBL	WOOD BLOCKING
ARCH	ARCHITECT	COL	COLUMN	EX	EXAMPLE	HD	HEAVY DUTY	LVR	LOUVER	PIL	PILASTER	STD	STANDARD	WD	WOOD
ASCE	AMERICAN SOCIETY OF CIVIL	COM	COMMON	EXC	EXCAVATE	HGR	HANGER	LWC	LIGHTWEIGHT CONCRETE	PL	PLATE	STL	STEEL	WF	WIDE FLANGE
	ENGINEERS	CONC	CONCRETE	EXCL	EXCLUDE	HLDN	HOLDDOWN			PLAT	PLATFORM	STR	STRINGERS	WF BM	WIDE FLANGE BEAM
ASSN	ASSOCIATION	CONN	CONNECTION	EXIST	EXISTING	HORIZ	HORIZONTAL	М	MOMENT	PLBG	PLUMBING	STRUCT	STRUCTURAL	WL	WIND LOAD
ASTM	AMERICAN SOCIETY FOR	CONSTR	CONSTRUCTION	EXP	EXPANSION	HS	HIGH STRENGTH	MAINT	MAINTENANCE	PLF	POUNDS PER LINEAR FOOT	SUB	SUBSTITUTE	WLD	WELDED
	TESTING AND MATERIALS	CONT	CONTINUOUS, CONTINUE	EXT	EXTERIOR	HSKPG	HOUSEKEEPING	MATL	MATERIAL	POS	POSITION	SUF	SUFFICIENT	WM	WIRE MESH
ATCH	ATTACHMENT	COORD	COORDINATE	27(1	EXTERIOR	HSS	HOLLOW STRUCTURAL	MAX	MAXIMUM	PP	PANEL POINT	SUP	SUPPLEMENTARY	WP	WATERPROOFING
ATTN	ATTENTION	CTR	CENTER	F/F	FACE TO FACE	1100	SECTIONS	MB	MACHINE BOLT	PRCST	PRECAST	SUPPL	SUPPLEMENT	WSCT	WAINSCOT
AWS	AMERICAN WELDING SOCIETY	CTRL	CONTROL	FAB	FABRIC	HST	HOIST	MC	MOMENT CONNECTION	PREFAB	PREFABRICATE	SYM	SYMBOL	WT	WEIGHT
AWO	ANIEMONIA WELDING SOCIETY	CU	CUBIC	FB	FLAT BAR	HT	HEIGHT	MCJ	MASONRY CONTROL JOINT	PRELIM	PRELIMINARY	SYMM	SYMMETRICAL	WWF	WELDED WIRE FABRIC
DØE	BELL AND FLANGE	CU YD C		FD	FLOOR DRAIN	111	HEIGH	MD	METAL DECK	PREV	PREVIOUS			WWM	WELDED WIRE MESH
B&F		ט זוו טט	UBIC YARD	FDTN	FOUNDATION	IDC	INTERNATIONAL DIJURINO	MECH	MECHANICAL		POUNDS PER SQUARE FOOT	SYS	SYSTEM	VVVVIVI	AAEFDED AAIVE MESU
BAL	BALANCE BACK TO BACK	D	DEED DEDTH			IBC	INTERNATIONAL BUILDING			PSF		-	TDEAD	V DDACE	CDOSS BDACING
B/B	BACK TO BACK	DDI	DEEP, DEPTH	FF	FAR FACE	ID	CODE	MEZZ	MEZZANINE	PSI	POUNDS PER SQUARE INCH	I	TREAD	X BRACE	CROSS BRACING
BC	BOTTOM CHORD	DBL	DOUBLE	FF EL	FINISH FLOOR ELEVATION	ID	INSIDE DIAMETER	MFR	MANUFACTURER	PTN	PARTITION	T&B	TOP AND BOTTOM	XXH	DOUBLE EXTRA HEAVY
BD BEV	BOARD	DEG	DEGREE	FIN GR	FINISH GRADE	IF.	INSIDE FACE	MID	MIDDLE	PVG	PAVING	T&G	TONGUE AND GROOVE	VD	VADD
BEV	BEVEL	DEL	DELETE	FH	FLAT HEAD	IFS	INSIDE FACE OF STUD	MIN	MINIMUM			TAN	TANGENT	YD	YARD

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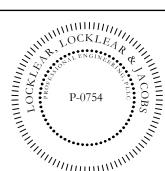
- FINISH FLOOR ELEVATION SHALL BE FIELD DETERMINED BASED ON EXISTING GRADES AND DESIRED STORMWATER RUNOFF PATTERNS.
- 2. CONTRACTOR SHALL WORK WITH OWNER AND ENGINEER TO ESTABLISH FINIAL SLOPES AND GRADING PATTERNS FOR STORMWATER RUNOFF AROUND THE BUILDING.

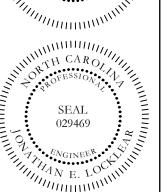
ALL FILL SHALL BE PLACED IN 6"-8" UN-COMPACTED LIFTS (MAXIMUM) AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY OBTAINED IN ACCORDANCE WITH ASTM D-698 (STANDARD PROCTOR). THE MOISTURE CONTENT OF FILL AT TIME OF PLACEMENT SHALL BE WITHIN +/- 3% OF THE OPTIMUM MOISTURE CONTENT DETERMINED IN THE LABORATORY. COMPACTED FILL SUB-GRADES WITH A SLOPE GREATER THAN 4H:1V SHALL BE BENCHED TO ALLOW PLACEMENT OF HORIZONTAL

- 1. A CONTINUOUS TURNED DOWN SLAB FOOTING SHALL BE USED TO SUPPORT THE BUILDING
- WALLS. THE FOOTING SHALL BE 16-INCHES WIDE AND SHALL BE A MINIMUM OF 12-INCHES DEEP. 2. ALL SIDEWALKS SHALL BE A MIN. OF 4-INCH THICK AND SHALL HAVE EXPANSION JOINTS LOCATED
- AT ALL LOCATION ADJACENT TO EXISTING SIDEWALKS, CURBS AND PROPOSED BUILDING. 3. ALL CONCRETE SHALL HAVE FORTA-FERRO FIBER AT 3LBS/YD MIXED AT THE PLANT PER
- MANUFACTURES RECOMMENDATION. 4. CONCRETE FINISHES:
- 4.1. SIDEWALKS BROOM
- 4.2. INTERIOR SLAB SMOOTH AND SEALED WITH ARDEX MOISTURE TREATMENT
- 4.3. NOTE: ALL FIBER PROTRUDING OUT OF CONCRETE AFTER FINISH AND CONCRETE HAS CURED SHALL BE REMOVED FROM THE SURFACE VIA BURNING OR OTHER
- NON-DESTRUCTIVE METHOD.
- 5. ALL BACKFILL AND SOIL BELOW SLABS AND FOOTINGS MUST BE COMPACTED TO 2000 PSF MIN. 6. CONTRACTOR TO CONFIRM FOOTERS ARE BELOW FROST LINE. THE MINIMUM DEPTH OF
- FOOTINGS BELOW THE UNDISTURBED GROUND SURFACE SHALL BE 12 INCHES.
- MASONRY UNITS SHALL BE INSTALLED WITH TYPE "M" OR "S" MORTAR.
- ALL DETAILING, FABRICATION AND PLACEMENT OF REINFORCING STEEL, FORM WORK, MIXING, HANDLING, PLACING, FINISHING AND CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI "MANUAL OF STANDARD PRACTICE FOR DETAILED REINFORCED CONCRETE STRUCTURES" (ACI-315) AND ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI-318).
- CONCRETE SHALL CONFORM TO ASTM C94. MINIMUM STRENGTH AT 28 DAYS SHALL BE 3000 PSI MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.60 WITH MAXIMUM SLUMP OF 4 INCHES. MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4 INCH AND ALL AGGREGATES SHALL CONFORM TO
- 10. EXTERIOR CONCRETE SHALL BE AIR ENTRAINED WITH AIR CONTENT TO BE BETWEEN 5 AND 7 PERCENT BY VOLUME.
- 11. ALL REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 (S1), NEW BILLET STEEL DEFORMED BARS, GRADE 60. UNLESS NOTED OTHER WISE, ALL REINFORCING BAR SPLICES SHALL
- BE ACI CLASS B TENSION LAP SPLICES. REBAR LAPS SHALL BE A MINIMUM OF 24". 12. THE FOLLOWING CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT NEAREST THE
- DESCRIBED SURFACE, UNLESS NOTED OTHERWISE: A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 INCHES
- B. CONCRETE CAST NOT EXPOSED TO EARTH OR WEATHER: 1 1/2 INCHES
- C. CONCRETE EXPOSED TO EARTH OR WEATHER: i. #6 OR LARGER BARS: 2 INCHES
- ii. #5 OR SMALLER BARS: 1 1/2 INCHES

- **COLUMN FOOTER NOTES** ALL COLUMN SUPPORT FOOTERS SHALL BE 2-FT X 2-FT X 16-INCH DEPTH.
- 2. ALL COLUMN FOOTERS SHALL BE CENTER UNDER COLUMNS.
- 3. ALL COLUMN FOOTERS REQUIRE #5 REBAR @ 18 O/C EACH WAY, TOP AND BOTTOM.

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DATE: 12/2/2022 DRAWN BY: CKD

CHECKED BY: JEL SHEET TITLE

FOUNDATION **PLAN**

SHEET NUMBER S-101 PROJECT# 21-11110

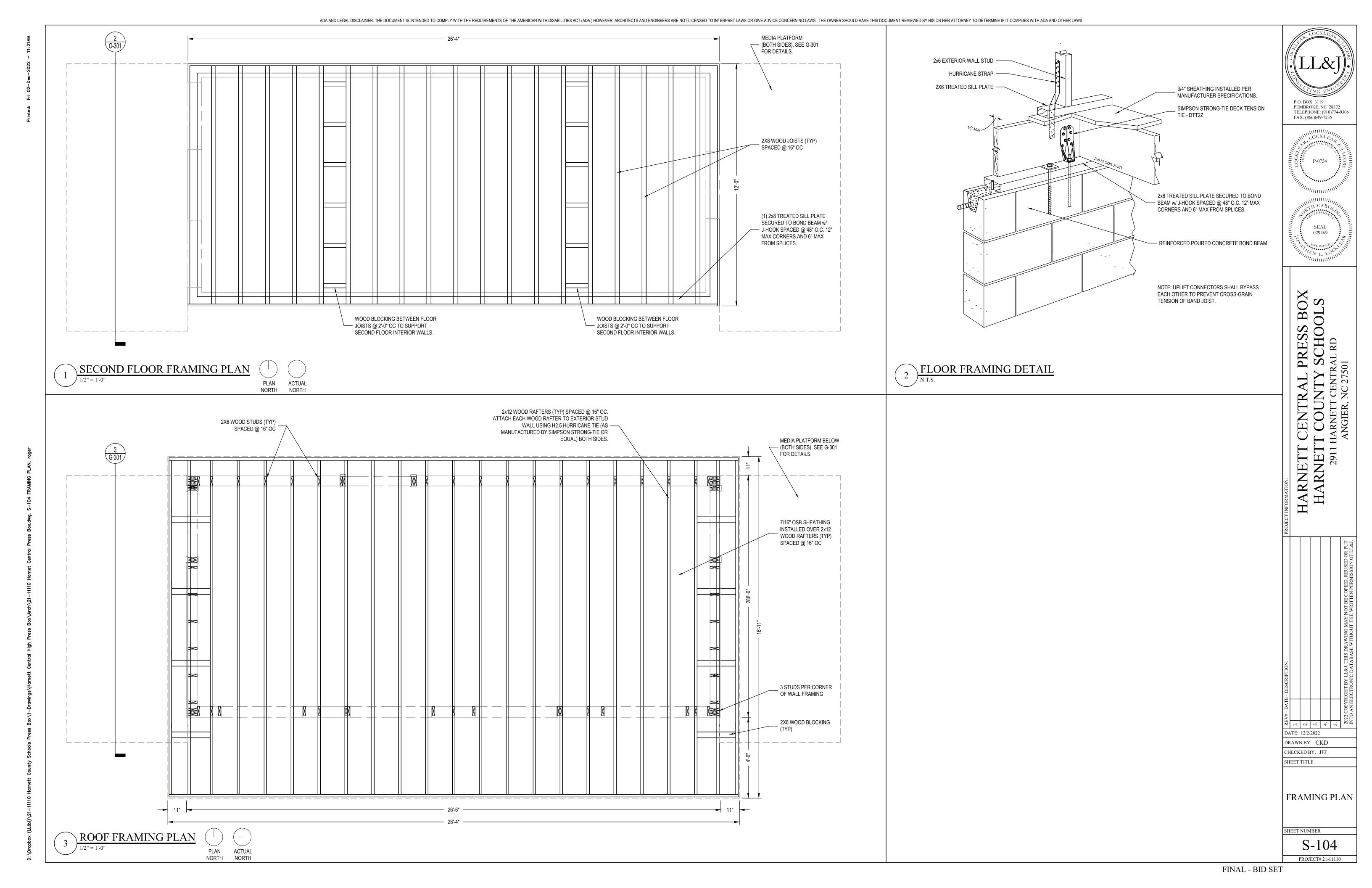
FINAL - BID SET

FOUNDATION PLAN PLAN ACTUAL NORTH

Know what's below.

Call before you dig.

1/2" = 1'-0"



INSIDE DIAMETER INVERT ELEVATION

ICE MAKER BOX

IRRIGATION WATER

ISOLATION VALVE

INDIRECT WASTE

KILOWATT-HOUR

LITER PER SECOND

INTERNATIONAL PLUMBING CODE

INSTANTANEOUS WATER HEATER

INDUSTRIAL WATER RETURN

INDUSTRIAL WATER SUPPLY

INVERT

IMB

IRW

IV

IWS

	PLUMBING AI	RRREVIATION NECESTRALIZATION NECESTRALIZ	ONS.
	PLUMDING AI	ו אוא דעוחר	UNU
A/E AAV AD AFF	ARCHITECT / ENGINEER AUTOMATIC AIR VENT AREA DRAIN/ACCESS DOOR ABOVE FINISH FLOOR	LA LAV LBS/HR LCW	LABORATORY AIR LAVATORY POUNDS PER HOUR LABORATORY COLD WATER
AFG AG	ABOVE FINISH GRADE AIR GAP	LHW LNG	LABORATORY HOT WATER LIQUID NATURAL GAS
AP AS ASD	ACCESS PANEL AUTOMATIC SPRINKLER ADJUSTABLE SPEED DRIVES	LOX LPG LV	LIQUID OXYGEN LIQUEFIED PROPANE GAS LABORATORY VACUUM
ASD ASHRAE	AUTOMATIC SPRINKLER DRAIN AMERICAN SOCIETY OF HEATING,	LW	LOW WATER
ASME	REFRIGERATION, AIR CONDITIONING ENGINEERS AMERICAN SOCIETY OF MECHANICAL	M MA MAV	METER MEDICAL AIR MANUAL AIR VENT
ASPE	ENGINEERS AMERICAN SOCIETY OF PLUMBING	MBH MED	1000 BTUH MEDICAL
ASR AV	ENGINEERS AUTOMATIC SPRINKLER RISER ACID VENT	MH MS MV	MANHOLE MOP SINK MEDICAL VACUUM
AW BFP	ACID WASTE BACKFLOW PREVENTER	N2 N20	NITROGEN NITROUS OXIDE
BFF BFV	BELOW FINISH FLOOR BUTTERFLY VALVE	NC NG	NORMALLY CLOSED NATURAL GAS
BHP BSP	BRAKE HORSEPOWER BLACK STEEL PIPE	NIC NO	NOT IN CONTRACT NORMALLY OPEN
BT BV	BATHTUB BALL VALVE	NOM NPW NTS	NOMINAL NON POTABLE WATER NOT TO SCALE
C CA	CELSIUS COMPRESSED AIR	O2 OC	OXYGEN ON CENTER
CFM CGA CHWR	CUBIC FEET PER MINUTE COMPRESSED GAS ASSOCIATION CHILLED WATER RETURN	OD OFD	ON CENTER OUTSIDE DIAMETER OVERFLOW DRAIN
CHWS CO	CHILLED WATER SUPPLY CLEANOUT	OR OVFL	OPERATING ROOM OVERFLOW
CS CV CWR	CLINICAL SINK CONTROL VALVE CONDENSER WATER RETURN	PA	PASCAL
CWS	CONDENSER WATER SUPPLY	PD	PRESSURE DROP OR DIFFERENCE
DCW DF DFU	DOMESTIC COLD WATER DRINKING FOUNTAIN DRAINAGE FIXTURE UNITS	PDI PG	PLUMBING AND DRAINAGE INSTITUTE PRESSURE GAUGE
DHW DHWR	DOMESTIC HOT WATER DOMESTIC HOT WATER RETURN	PP PPM	PLUMBING PUMP PARTS PER MILLION
DHWS DI	DOMESTIC HOT WATER SUPPLY DEIONIZED WATER	PRS PRV	PRESSURE REDUCING STATION PRESSURE REDUCING VALVE
DN DOE	DOWN DEPARTMENT OF ENERGY	PSI PSIA	POUNDS PER SQUARE INCH POUNDS PER SQUARE INCH
DS DW DWG	DOWNSPOUT DISHWASHER DRAWING	PSIG	ATMOSPHERE POUNDS PER SQUARE INCH GAUGE
DWH DWR DWS	DOMESTIC WATER HEATER DRINKING WATER RETURN DRINKING WATER SUPPLY	PTRV PW	PRESSURE TEMPERATURE RELIEF VALVE POTABLE WATER
DWV EL	DRAIN WASTE VENT ELEVATION	RD RDL RL	ROOF DRAIN ROOF DRAIN LEADER ROOF LEADER
EPA EPACT	ENVIRONMENTAL PROTECTION AGENCY ENERGY POLICY ACT	RP RPZ	RECIRCULATION PUMP REDUCED PRESSURE ZONE BACKFLOW
ESC ESH ET	ESCUTCHEON EMERGENCY SHOWER EXPANSION TANK	RO RWL	DEVICE REVERSE OSMOSIS WATER RAIN WATER LEADER
EWH EWS EWS/SH	ELECTRIC WATER HEATER EYE WASH STATION EYE WASH/DRENCH SHOWER	SA SC	SHOCK ARRESTOR SWING CHECK VALVE
EXX	EXISTING	SS SCW	SANITARY SEWER SOFTENED COLD WATER
F FCO FCW	FAHRENHEIT FLOOR CLEANOUT	SDMH SNK SMH	STORM DRAIN MANHOLE SINK SANITARY MANHOLE
FD FDC	FILTERED COLD WATER FLOOR DRAIN FIRE DEPARTMENT CONNECTION	SMF SP SPR	SUMP PUMP SPRINKLER LINE
FM FS	FLOW METER FLOOR SINK	SQFT/SF SST	
FS FU	FLOW SWITCH FIXTURE UNITS	ST SW	STORAGE TANK STORM WATER
GAL GCO	GALLON GRADE CLEANOUTS	TCV	TEMPERATURE CONTROL VALVE
GPD GPH GPM	GALLONS PER DAY GALLONS PER HOUR GALLONS PER MINUTE	TD TD TDH	TEMPERATURE DIFFERENCE TRENCH DRAIN TOTAL DYNAMIC HEAD
GPR GRS	GAS PRESSURE REGULATOR GAS REGULATOR STATION	TEMP TMV	TEMPERATURE THERMOSTATIC MIXING VALVE
GT GV	GREASE TRAP GATE VALVE	TP TSTAT	TRAP PRIMER THERMOSTAT
GVTR GWH	GAS VENT THROUGH ROOF GAS FIRED WATER HEATER	TWR TWS TYP	TEMPERED WATER RETURN TEMPERED WATER SUPPLY TYPICAL
HB HD HEX	HOSE BIBB HUB DRAIN HEAT EXCHANGER	UR	URINAL
HHWR HHWS	HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY	V VAC	VENT VACUUM
HP HS	HORSEPOWER HAND SINK	VB VCO	VACUUM BREAKER VACUUM CLEANER OUTLET
HST HWB	HOT WATER STORAGE TANK HOT WATER BOILER	VP VS	VACUUM PUMP VENT STACK
HWCP HWP HYD	HOT WATER CIRCULATING PUMP HOT WATER PUMP HYDRANT	VSD VTR	VARIABLE SPEED DRIVE VENT THROUGH ROOF
ID	INSIDE DIAMETER	W WC	WASTE WATER CLOSET

WALL CLEANOUT WATER GAGE

WALL HYDRANT

WATER HEATER

WATER LINE

WATER METER

WASTE STACK

YARD CLEANOUT

YARD HYDRANT

ZONE VALVE

WATER HAMMER ARRESTER

WATER SUPPLY FIXTURE UNITS

WATER PRESSURE DROP

WH

ΖV

WHA

F	PLUMBING LEGEND
SYMBOL	DESCRIPTION
	SANITARY WASTE
SD	STORM DRAIN
——OD——	STORM OVERFLOW DRAIN
	SANITARY VENT
	DOMESTIC COLD WATER (CW)
	DOMESTIC HOT WATER (H.W)
—— DHWR ——	DOMESTIC HOT WATER RETURN (HWR)
—— G ——	GAS PIPE
	CAP
	DIRECTION OF SLOPE
	DIRECTION OF FLOW
— D —	DRAIN (INDIRECT)
С— о—	RISE AND DROP IN PIPING
——-I·CO	CLEANOUT
	GATE VALVE
δ	BALL VALVE
—[BUTTERFLY VALVE
	CHECK VALVE
——	UNION
	SHOCK ABSORBER (TYPE 'A')
	STRAINER W/ BLOW DOWN VALVE
——▼	GAS COCK
4	PRESSURE REDUCING VALVE
—— 	PRESSURE RELIEF VALVE
×	TEMPERATURE AND PRESSURE RELIEF VALVE
	GAUGE COCK
φ	PRESSURE GAUGE W/ GAUGE COCK
Q.	THERMOMETER
	WALL HYDRANT
+	HOSE BIBB
	SOLENOID VALVE
8	FLOW SWITCH
\oplus	FLOOR DRAIN
	ROOF DRAIN
—— A ——	COMPRESSED AIR
— F —	FIRE LINE
SP	FIRE SPRINKLER PIPING
	WET FIRE SPRINKLER VALVE ASSEMBLY
	OS&Y GATE VALVE
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
BTC	BRANCH TO CONNECTION
Ę	FLOW LINE ELEVATION
'L SPU	STORM PIPING UNDERSLAB
<u> </u>	FIRE SPRINKLER RISER
<u> </u>	SYMBOLS SHOWN ARE NECESSARILY USED

PLUMBING NOTES

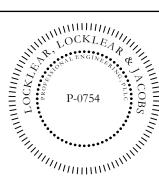
- 1. ALL SITE UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR VERIFY EXACT LOCATION AND INVERT ELEVATION IN FIELD BEFORE BEGINNING WORK. DRAWINGS AND RISERS ARE DIAGRAMMATIC AND ARE NOT INTENDED TO SHOW ALL REQUIRED FITTINGS AND OFFSETS REQUIRED FOR ACTUAL INSTALLATION. PROVIDE OFFSETS IN PIPING AS NEEDED TO AVOID CONFLICTS WITH OTHER TRADES.
- 2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE NC STATE PLUMBING CODE AS WELL AS ALL LOCAL AND OTHER APPLICABLE CODES.
- THE PLUMBING CONTRACTOR SHALL REVIEW ALL UTILITY SITE PLANS AND DRAWINGS FOR WORK BY OTHERS. LOCATION OF UTILITIES (WASTER AND WATER LINES, MANHOLES ETC) THAT ARE TO BE CONNECTED TO ARE ASSUMED. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO VERIFY THESE LOCATIONS AND MAKE THE FINAL CONNECTION AS REQUIRED. COORDINATE ALL WORK WITH OTHER TRADES.
- 4. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN.
- 5. ALL FIXTURES ARE TO BE INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE NC PLUMBING CODE AS WELL AS ALL LOCAL AND OTHER APPLICABLE CODES.
- 6. WATER SUPPLY LINES ARE TO BE TYPE L COPPER. ALL DRAIN AND VENT PIPING MATERIAL TO BE SCH 40 PVC. VENTS WILL BE COMBINED BEFORE PENETRATING ROOF TO REDUCE ROOF
- PENETRATIONS. 7. SHUT OFF VALVES SHALL BE PROVIDED ON HOT AND COLD WATER LINES. ALL FIXTURES SHALL BE COMPLETE AND INCLUDE ALL STOPS, SUPPLIES, FAUCETS, DRAINS, TRAPS, ESCUTCHEONS,
- 8. HOT WATER LINES TO BE INSULATED FULL LENGTH WITH 1" INSULATION THAT MEETS 2018 NC ENERGY CODE.
- 9. ADA COMPLIANT UNDER SINK PIPE COVERS SHALL BE INSTALLED ON ALL LAVS.
- 10. THE ENTIRE WATER SYSTEM SHALL BE DISINFECTED PRIOR TO PLACING IN SERVICE. WATER LINES SHALL BE TESTED IN ACCORDANCE THE INDUSTRY STANDARDS AND DOMESTIC WATER SHALL BE STERILIZED IN COMPLIANCE WITH LOCAL STANDARDS.
- 11. HOSE BIBS SHALL BE MOUNTED 1' 6" ABOVE FINISHED FLOOR. HOSE BIBS SHALL BE PROVIDED WITH A NON-REMOVABLE VACUUM BREAKER.
- 12. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL OPENINGS REQUIRED FOR THE PLUMBING WORK AND SHALL INSTALL FIRE RATED SLEEVES WHEREVER PENETRATIONS OF RATED WALLS OR FLOORS ARE MADE. ANNULAR SPACES BETWEEN SLEEVES AND PIPES SHALL BE SEALED AS REQUIRED BY LOCAL AUTHORITY. THE PATCHING SHALL BE BY THE PLUMBING CONTRACTOR. FIRE STOP ALL PENETRATIONS OF FIRE RATED ASSEMBLIES AS NECESSARY TO MAINTAIN THE RATING OF WALL. REFER TO FLOOR PLAN DRAWINGS FOR ASSEMBLY RATINGS.
- 13. ALL SOIL. WASTE, AND STORM PIPING SHALL BE INSTALLED BELOW THE FLOOR UNLESS NOTED OTHERWISE.
- 14. PROVIDE CLEANOUTS AT THE BASE OF ALL SOIL, WASTE, VENT, AND STORM RISER OVER ONE STORY IN HEIGHT. PROVIDE CLEANOUTS AT EVERY 100 FT.
- 15. ALL STORM AND OVERFLOW DRAIN LINES DISCHARGING ONTO SPLASH BLOCKS SHALL DO SO THROUGH DOWNSPOUT NOZZLES.
- 16. PIPING PENETRATING A VAULT ENCLOSURE SHALL BE SLEEVED AND SEALED.
- 17. PROVIDE ACCESS PANELS FOR VALVES LOCATED ABOVE INACCESSIBLE CEILINGS.
- 18. ALL VENT-THRU-ROOF (VTR) TERMINATIONS SHALL BE COLOR-KEYED TO THE MATCH THE ADJACENT ROOFING COLOR. VENTS TO BE INSTALLED WITH DOUBLE FLASHING TO ALLOW MOVEMENT.
- 19. ALL HOLES AND NOTCHES FOR HORIZONTAL PLUMBING PIPES TO BE OVERSIZED TO COMPENSATE FOR SHRINKAGE.
- 20. ALL WATER HAMMER ARRESTORS MAY NOT BE SHOWN ON DRAWINGS. CONTRACTOR IS REQUIRED TO SIZE, PROVIDE AND LOCATE ALL WATER HAMMER ARRESTORS IN ACCORDANCE WITH PDI WH 201. APPROPRIATELY-SIZED ACCESS DOORS OR REMOVABLE PANELS SHALL BE PROVIDED WHERE WATER HAMMER ARRESTORS ARE CONCEALED. WATER HAMMER SHOCK ARRESTORS SHALL BE INSTALLED FOR FIXTURES WITH QUICK CLOSING VALVES. WATER HAMMER SHOCK ARRESTOR SHALL BE A HYDROTROL 5020 AS MANUFACTURED BY JAY R SMITH OR EQUAL BY SIOUX CHIEF / WATTS.
- 21. PIPING INSTALLED IN PLENUM SPACES SHALL MEET ASTM E-84, ASTM E-136 AND UL 723 STANDARDS FOR FLAME SPREAD AND SMOKE GENERATION. COORDINATE PLENUM LOCATIONS WITH MECHANICAL CONTRACTOR.
- 22. ALL FLOOR AND HUB DRAINS SHALL BE PROVIDED WITH INLINE TRAP SEAL DEVICES (IE TRAP GUARD/SEAL).
- 23. PROVIDE DRAIN VALVES AT ALL LOW POINTS IN ALL WATER PIPING SYSTEMS.
- 24. ALL WATER, VENT AND GAS PIPING SHALL BE INSTALLED ABOVE THE CEILING UNLESS NOTED OTHERWISE.
- 25. SLIP JOINTS SHALL NOT BE USED FOR DRAIN CONNECTIONS IN CONCEALED LOCATIONS, USE SOLDERED OR SCREWED JOINTS ONLY.
- 26. DIELECTRIC CONNECTIONS SHALL BE USED BETWEEN FERROUS AND NON-FERROUS PIPING.
- 27. ALL SUSPENDED MATERIALS AND EQUIPMENT SHALL BE INDIVIDUALLY SUPPORTED FROM THE BUILDING STRUCTURE. DO NOT SUSPEND ITEMS FROM THE CEILING OR ITS SUPPORT SYSTEM.
- 28. WATER AND WASTE PIPES SHALL BE A MINIMUM OF 5 FT APART. WHEN PIPES CROSS OR ARE CLOSER THAN 5 FT, WATER PIPE SHALL BE 12 INCHES ABOVE CROWN OF SEWER PIPE.
- 29. ALL PIPING SHALL BE RUN IN AREAS NOT SUBJECT TO FREEZING TEMPERATURES. PIPING IN EXTERIOR WALLS SHALL BE INSULATED AND RUN ON THE CONDITIONED SIDE OF THE WALL INSULATION. IF ROUTED IN UNCONDITIONED AREAS, PIPING MUST BE INSULATED WITH A MINIMUM OF R-6.5.
- 30. PROVIDE PRESSURE REDUCING VALVE AT ALL BUILDINGS WHERE PRESSURE EXCEEDS 80 PSI.

PLUMBING FIXTURE LEGEND										
				WATER LINE SIZES						
MARK	SYMBOL	DESCRIPTION	MANUFACTURER / MODEL	COLD	НОТ	VENT (MIN)				
LAV		LAVATORY	AMERICAN STANDARD MODEL # 4869.004.020 WITH METERING FAUCET OR APPROVED EQUAL BY ZURN OR KOHLER	1/2"	1/2"	1-1/2"				
WC		WATER CLOSET	AMERICAN STANDARD - FLUSH VALVE ADA TOILET MODEL #2857.128.020, OR APPROVED EQUAL BY ZURN OR TOTO WITH ELONGATED SEAT	1"	N/A	2"				
SNK		DOUBLE SINK	ELKAY CR2918 DOUBLE BOWL STAINLESS WITH DELTA 400 FAUCET OR APPROVED EQUAL BY AMERICAN STANDARD OR MOEN	1/2"	1/2"	1-1/2"				
СО	(CLEAN-OUT	PVC CLEAN-OUT	N/A	N/A	N/A				
FD	I	FLOOR DRAIN	ZURN, MODEL ZN415B, STRAINER & TRAP GUARD OR APPROVED EQUAL BY WATTS OR JONES STEPHENS	N/A	N/A	N/A				
IWH	IWH	INSTANTANEOUS WATER HEATER	EEMAX SPEX4208T	3/4"	3/4"	N/A				
IMB	IMB	ICE MAKER BOX	OATEY MODEL# 38689 OR APPROVED EQUAL BY SIOUX CHIEF OR EASTMAN	1/2"	N/A	N/A				
REF		REFRIGERATOR	BY OWNER	N/A	N/A	N/A				

	DRAWING INDEX		
SHEET	SHEET TITLE	REV#	DATE
P-001	PLUMBING NOTES AND SCHEDULES	-	
P-101	PLUMBING PLAN	-	
P-301	PLUMBING DETAILS	-	

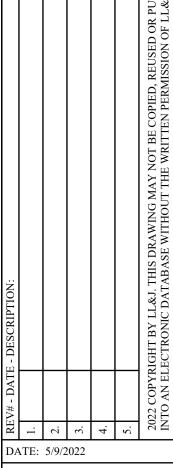


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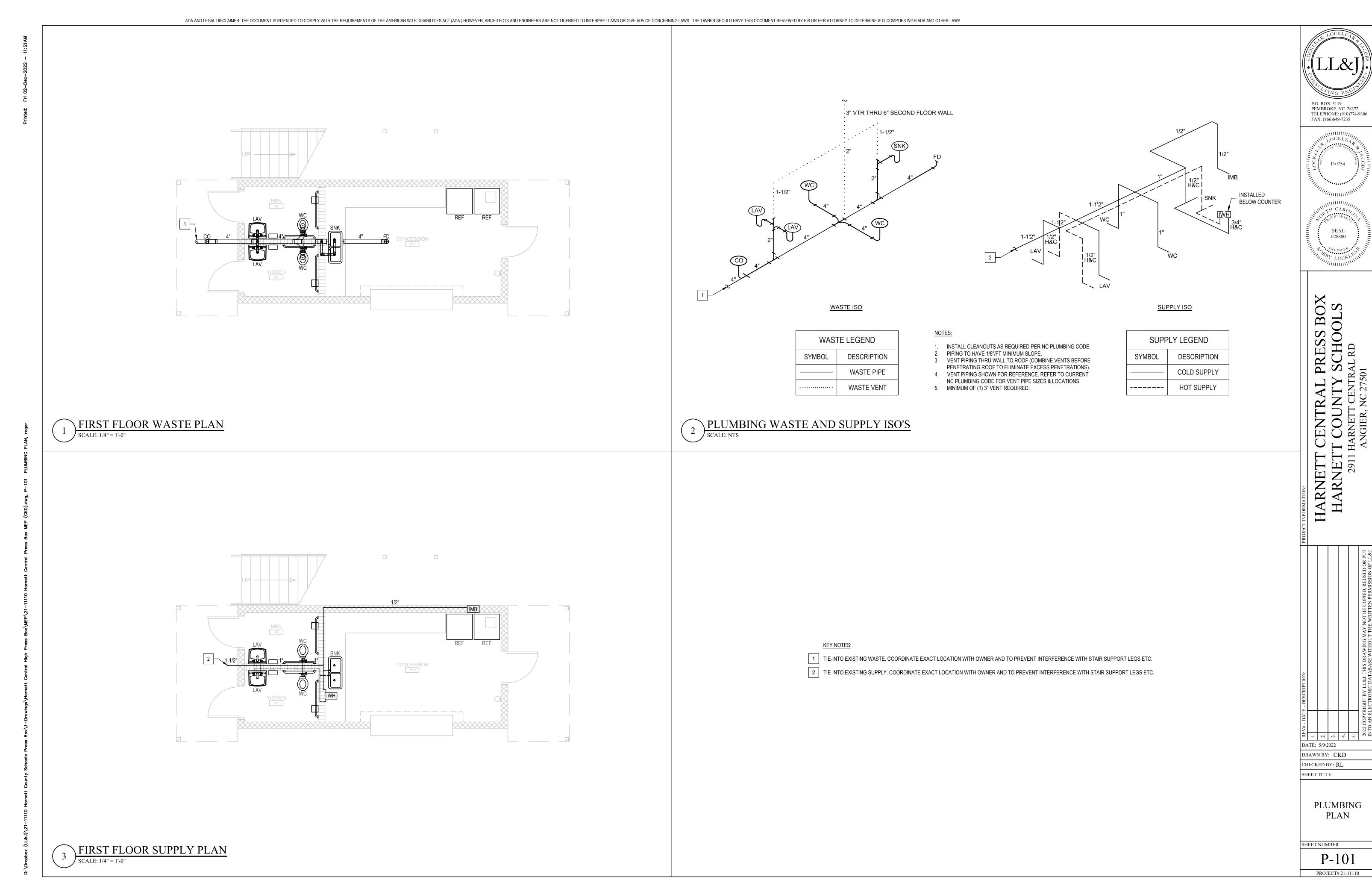
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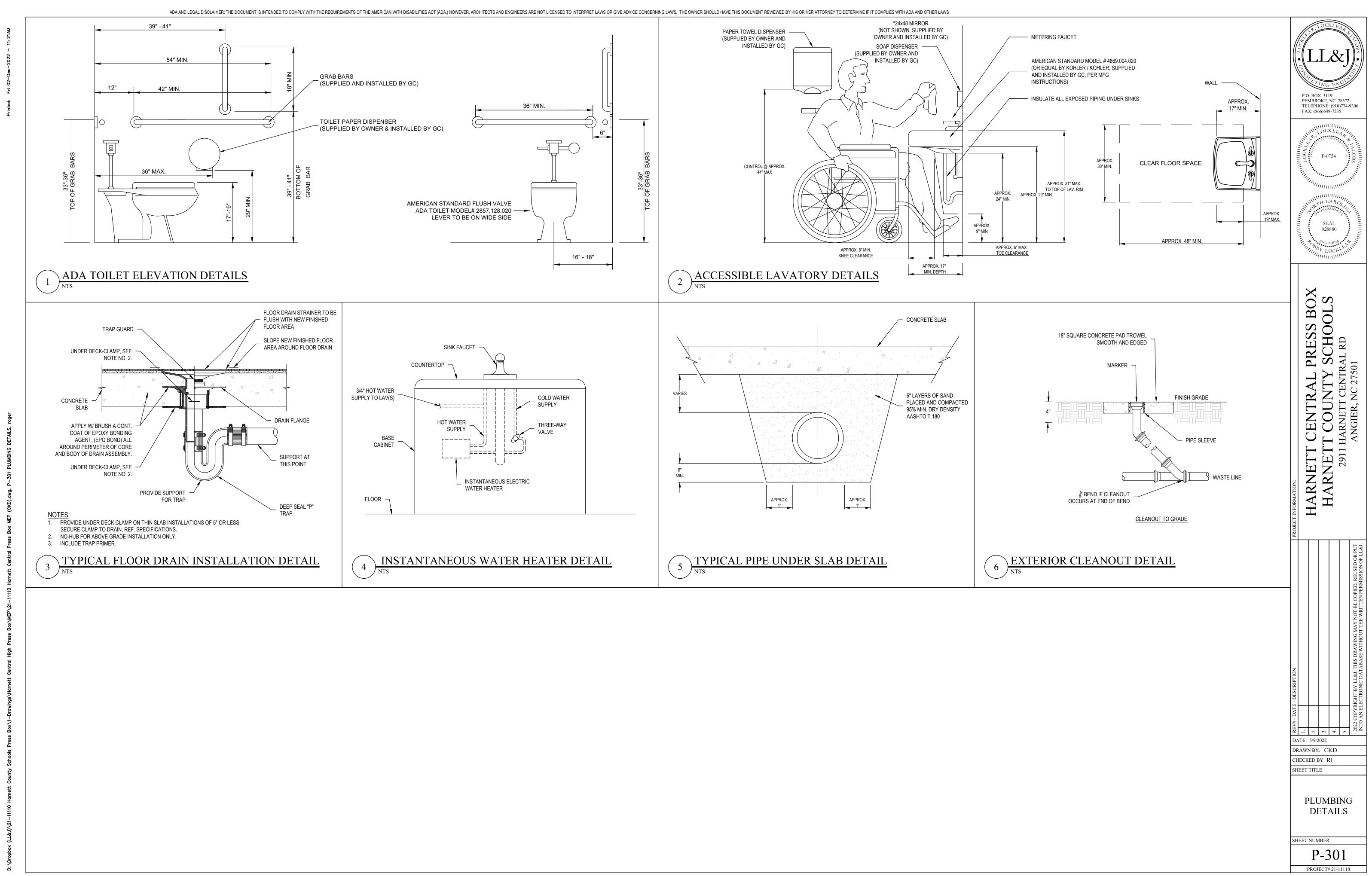
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> **PLUMBING NOTES AND SCHEDULES**

P-001 PROJECT# 21-11110

SHEET NUMBER





MECHANICAL NOTES

- 1. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF THE VENTILATION AND AIR CONDITIONING SYSTEMS. DETAILS OF CONSTRUCTION AND OF WORKMANSHIP WHERE NOT SPECIFICALLY DESCRIBED HEREIN OR INDICATED ON THE DRAWINGS SHALL BE SUBJECT TO THE ENGINEER'S APPROVAL. IT IS THE INTENT OF THESE SPECIFICATIONS TO PROVIDE COMPLETE SYSTEMS, LEFT IN GOOD WORKING ORDER, READY FOR OPERATION, INCLUDING NECESSARY LABOR AND MATERIALS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS OR MENTIONED HEREIN. IT IS NOT THE INTENTION OF THESE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, OBSTRUCTIONS OR STRUCTURAL CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK IN SUCH A MANNER TO AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR WITHOUT FURTHER COST OR INSTRUCTIONS.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST APPLICABLE CODES AND STANDARDS LISTED BELOW. IN ADDITION THE WORK SHALL COMPLY WITH ANY LOCAL, STATE OR FEDERAL CODES, STANDARDS, AND REGULATIONS, HAVING JURISDICTION IN THE AREA WHERE THE EQUIPMENT OR WORK WILL BE INSTALLED.
 - AABC AMERICAN AIR BALANCE COUNCIL

AMCA

- AIR MOVING AND CONTROL ASSOCIATION, INC.
- ANSI AMERICAN NATIONAL STANDARD INSTITUTE
 ARI AIR CONDITIONING AND REFRIGERATION INSTITUTE
- ASHARE AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR CONDITIONING ENGINEERS
- ASME AMERICAN SOCIETY OF MECHANICAL ENGINEERS
- ASTM AMERICAN SOCIETY OF TESTING AND MATERIALS
- NEC NATIONAL ELECTRICAL CODE
- NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
 SMACNA SHEET METAL AND AIR CONDITION CONTRACTORS NATIONAL ASSOCIATION

DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AS EXAMINATION.

- UL UNDERWRITERS LABORATORY
- BOCA THE BOCA NATIONAL MECHANICAL CODE LATEST EDITION
- ALL CONDITIONS ARE NOT COMPLETELY DETAILED ON THE DRAWINGS. CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND EQUIPMENT LOCATIONS PRIOR TO FABRICATION AND PURCHASE OF NEW EQUIPMENT. (I.E. DIFFUSERS, ETC...)
- 3. THE CONTRACTOR SHALL SURVEY THE SITE AND MAKE ALL NECESSARY CHANGES REQUIRED BASED ON EXISTING CONDITIONS FOR PROPER INSTALLATION OF NEW WORK, AND INCLUDE ALL MATERIALS AND LABOR IN HIS BID PRICE. NO ALLOWANCE WILL BE MADE FOR FAILURE TO DO SO.
- 4. THE CONTRACTOR SHALL EXAMINE THE CONTRACT DOCUMENTS, CONDUCT A COMPLETE FIELD SURVEY TO FAMILIARIZE THEMSELVES WITH ALL THE REQUIREMENTS OF THE PROJECT,
- AND SHALL NOTIFY THE OWNER/ENGINEER OF ANY OBSERVED FAULTS AND AMBIGUITY IN THE CONTRACT DOCUMENTS.

 5. BY SUBMISSION OF BID, THE CONTRACTOR SHALL ACKNOWLEDGE ACCEPTANCE OF THE CONTRACT DOCUMENTS AS AN ADEQUATE DEFINITION OF THE SCOPE OF WORK AND EXTRA
- COST CLAIMS BASED ON INADEQUACY OF CONTRACT DOCUMENTS WILL NOT BE CONSIDERED.

 6. SUBMISSION OF A PROPOSAL SHALL BE CONSTRUCTED AS EVIDENCE THAT EXAMINATION OF PLANS HAVE BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. LATER CLAIMS SHALL NOT BE MADE FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF
- 7. ALL APPLICABLE CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER/ENGINEER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIALS WHICH VIOLATE ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED BY THE CONTRACTOR. PROVIDE ALL REQUIRED LABOR, MATERIALS, EQUIPMENT, AND SERVICES NECESSARY FOR A COMPLETE AND SAFE INSTALLATION OF HVAC SYSTEMS IN FULL CONFORMITY WITH REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION. INCLUDE ALL COSTS FOR PERMITS, LICENSES, CERTIFICATES, FILING AND INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION; AS INDICATED ON DRAWINGS AND/OR HEREIN SPECIFIED FOR THE SYSTEMS INCLUDED.
- 8. WORK SHALL BE INSTALLED IN A NEAT, WORKMANLIKE MANNER. INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL. ALL SYSTEMS SHALL BE CLEAN OF FOREIGN MATERIAL AND ROUGH SPOTS PRIOR TO BEING PLACES IN SERVICE AND BEFORE OPERATIONAL TESTS ARE PERFORMED. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL AIR HANDLING UNITS AND REPLACE FILTERS, AS WELL AS REMOVE ALL TRASH AT COMPLETION OF WORK.
- 9. INSTALLATION OF ALL EQUIPMENTS AND THIS ACCESSORIES SHALL BE PER MANUFACTURER'S PUBLISHED RECOMMENDATIONS.
- 10. THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF ACCEPTANCE BY OWNER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO PROVIDE THAT WHERE DEFECTS OCCUR, THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENTS SUPPLIED BY THE CONTRACTOR.
- 11. SUPPORT ALL DUCTWORK FROM BUILDING STRUCTURE AND/OR FRAMING IN AN APPROVED MANNER. WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING OF SUPPORTS FOR EQUIPMENT, FURNISH ADDITIONAL FRAMING.
- 12. FOR EXACT LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS REFER TO REFLECTED CEILING PLAN AND DETAILS. OBTAIN FROM THE ENGINEER THE LOCATION OF ANY APPARATUS NOT DEFINITELY LOCATED ON THE DRAWINGS. LOCATE EQUIPMENT AND ACCESSORIES IN SUCH A MANNER AS TO PROVIDE EASY ACCESS FOR PROPER SERVICE AND MAINTENANCE OF ALL EQUIPMENT AND ITEMS REQUIRING MAINTENANCE.
- 13. REVIEW WITH THE ENGINEER ANY CONDITION WHICH PREVENT ADEQUATE ACCESSIBILITY FOR MAINTENANCE PRIOR TO INSTALLATION OF THE WORK. ALL EQUIPMENT AND/OR ACCESSORIES THAT ARE INSTALLED WITHOUT PROPER ACCESS, IN THE OPINION OF THE ENGINEER, AND INSTALLED WITHOUT THE ENGINEER'S APPROVAL, SHALL BE REMOVED AND REVISED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO OWNER.
- 14. ALL WALL AND ROOF OPENINGS SHALL BE WATER PROOFED AND AIR TIGHT SEALED AND SHALL BE PROVIDED BY THE MECHANICAL CONTRACTOR.
- 15. ALL DUCTS SHALL BE FABRICATED OF GALVANIZED LOCK FORMING QUALITY STEEL, AND INSTALLED IN STRICT COMPLIANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) BULLETIN 90A, THE SHEET METAL AND AIR CONDITIONING CONTRACTORS AND NATIONAL ASSOCIATION (SMACNA) DUCT CONSTRUCTION STANDARDS. SHEET METAL DUCTS SHALL BE FABRICATED USING THE FOLLOWING MINIMUM GAUGES FOR RECTANGULAR DUCT:

DIMENSION OF LONGEST SIDE OF DUCT	MINIMUM GAUGE ALL FOUR SIDES
UP THRU 12"	26 (0.022")

13" THRU 30" 24 (0.028") 31" THRU 54" 22 (0.034")

- 16. ALL DUCT DIMENSIONS SHOWN ARE INSIDE METAL DIMENSIONS AND ARE IN INCHES. DUCT SIZES HAVE BEEN INCREASED, WHERE REQUIRED, TO ALLOW FOR LINING.
- 17. MECHANICAL CONTRACTOR SHALL TAKE ACTUAL MEASUREMENTS IN THE FIELD BEFORE FABRICATION AND SHEET METAL WORK AND SHALL OBSERVE AND ALLOW FOR CLEARANCES AND SPACE REQUIREMENTS FOR PIPING AND EQUIPMENT, OR OTHER OBSTRUCTIONS.
- 18. THE DUCTWORK SHALL INCLUDE FURNISHING AND INSTALLING GALVANIZED SHEET METAL DUCTS, FLEXIBLE CONNECTIONS ROOF/WALL EXHAUST CAP, DUCT SUPPORTERS, REGISTERS, GRILLES, DAMPERS, BRACING AND OTHER ACCESSORIES TO MAKE A COMPLETE AND OPERABLE SYSTEM.
- 19. PROVIDE SQUARE ELBOWS WITH TURNING VANES, AND SPLITTER DAMPERS IN BRANCHES, ALL TURNING VANES SHALL BE 16-GAUGE SINGLE THICKNESS METAL WITH A 4-INCH RADIUS. DOUBLE WALL TURNING VANES ARE NOT ACCEPTABLE.
- 20. ALL JOINTS IN DUCTS, CASINGS, AND PLENUMS SHALL BE SEALED TO PREVENT AIR LEAKAGE. ALL SEALANT AND TAPES SHALL HAVE A FLAME RATING UNDER 25 AND A SMOKE DEVELOPED BY HARDCAST, INC., UNITED SHEET METAL DUCT SEALER OR APPROVED EQUAL, DUCTWORK TAPE SHALL BE HARDCAST, INC., TYPE DT-5300 OR DT-5400 OR APPROVED EQUAL. TAPE ADHESIVE SHALL BE HARDCAST, INC, TYPE FTA-20, OR APPROVED EQUAL.
- 21. BRANCH TAKE-OFF TO THE CEILING MOUNTED DIFFUSERS, NOT EXCEEDING 8FT. IN LENGTH, SHALL BE BY PRE-INSULATED FLEXIBLE DUCT. FLEXIBLE DUCTS SHALL HAVE A R-6 MINIMUM VALUE AND COVERED WITH AN OUTER VAPOR BARRIER JACKET. FLEXIBLE DUCTS SHALL BE ATTACHED TO SHEET METAL MAIN DUCTS USING SPIN-IN CONICAL BELLMOUTH FITTINGS WITH DAMPERS AND LOCKING QUADRANTS.
- 22. ALL HVAC PENETRATIONS THROUGH FIRE RATED WALLS AND CEILING SHALL BE PROTECTED WITH FIRE DAMPERS, CLASSIFIED UNDER UL STANDARD 555.
- 23. A FLEXIBLE CONNECTION AT THE INLET AND OUTLET OF EACH FAN AND AIR CONDITIONING EQUIPMENT SHALL BE PROVIDED. CONNECTION SHALL BE VENTLAS (VENTFABRIC, INC.) OR APPROVED EQUAL, NOT LESS THAN 4 INCHES LONG, INSTALL IN ANGLE OR SHEET METAL FRAMES SECURELY FASTENED TO DUCTS AND EQUIPMENT. JOINTS IN FABRIC SHALL BE SEWN AND MADE AIRTIGHT WITH AN APPROVED SEALER.
- 24. ACCESS DOORS SHALL BE PROVIDED AT EACH FIRE DAMPER LOCATION. ACCESS DOORS SHALL BE RUSKIN (OR APPROVED EQUAL).
- 25. FURNISH AND INSTALL FULL SIZE COIL CONDENSATE DRAIN LINES FROM ALL AIR CONDITIONING UNITS AS INDICATED ON THE MECHANICAL DRAWINGS AND APPROVED BY THE ENGINEER. PIPE SHALL BE TYPE "L" COPPER.
- 26. REFER TO MANUFACTURER GUIDELINES FOR COPPER REFRIGERANT LINES WALL THICKNESS, TEMPER GRADES, AND INSTALLATION. FLUSH ALL LINES WITH NITROGEN.
- 27. REFER TO MANUFACTURER GUIDELINES FOR INSULATING REFRIGERANT LINES.
- 28. MECHANICAL CONTRACTOR SHALL FURNISH SUBMITTALS CONTAINING EQUIPMENT, DUCTWORK AND CONTROL DRAWINGS FOR APPROVAL PRIOR TO ORDERING ANY EQUIPMENT, OR MATERIAL.
- 29. DUCT INSULATION: R-8 INSULATION FOR ALL SUPPLY AND RETURN DUCT LOCATED IN BUILDING. DUCTWORK OUTSIDE THE BUILDING SHALL BE INSULATED EXTERNALLY USING 2" POLY ISO FOAM BOARD.
- 30. ALL NECESSARY OFFSETS AND ELEVATION CHANGES ARE NOT SHOWN ON THE DRAWINGS. CONTRACTOR TO REFLECT/COORDINATE THE REQUIRED RISE/DROPS WITH FIELD CONDITIONS.
 31. ALL DUCTWORK SHALL BE RUN CONCEALED ABOVE CEILINGS AS HIGH AS POSSIBLE AND CONCEALED IN WALLS, CHASES, OR FURROUTS IN GENERAL LOCATIONS SHOWN, UNLESS NOTED OTHERWISE.
- 32. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMEN.
- 33. THE MECHANICAL CONTRACTOR SHALL PROVIDE ALL OPENINGS REQUIRED FOR THE REQUIRED PLUMBING WORK FOR HVAC EQUIPMENT AND SHALL INSTALL FIRE RATED SLEEVES WHEREVER PENETRATIONS OF RATED WALLS OR FLOORS ARE MADE. THE PATCHING REQUIRED FOR HVAC WORK SHALL BE BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL REVIEW ALL UTILITY SITE PLANS AND CIVIL SITE PLANS FOR WORK BY OTHERS.
- 34. ALL AIR HANDLING SYSTEMS TO BE TESTED AND BALANCED BY A NEBB OR AABC CERTIFIED FIRM.

SYMBOL	DESCRIPTION
 	- — TYPE OF SERVICE: S = SUPPLY R = RETURN E = EXHAUST T = TRANSFER - — INSTALLED LOCATION: C = CEILING D = DUCT DEVICE NO F = FLOOR H = HIGH SIDEWALL L = LOW SIDEWALL
	IN CFM — — — EQUIPMENT DESIGNATION
1	— — — UNIT NUMBER
X	- — — — SECTION NUMBER - — — — SHEET WHERE LOCATED
T ₂₋₃	THERMOSTAT (UNIT & ZONE DESIGNATION)
1	KEYED NOTE
<u>\$</u>	SMOKE DETECTOR
	CEILING SUPPLY DIFFUSER, REGISTER OR GRILLE AS SCHEDULED
	CEILING RETURN GRILLE OR REGISTER AS SCHEDULED
	SLOT DIFFUSER AS SCHEDULED
	SIDEWALL GRILLE OR REGISTER AS SCHEDULED
DUCT SIZE	ROUND DUCT (INTERNAL SIZE INDICATED)
# x #	DUCT SIZE, FIRST FIGURE IS SIDE SHOWN (INTERNAL SIZE INDICATED)
	FLEXIBLE DUCT
	MANUAL VOLUME DAMPER
	MOTORIZED DAMPER
	FIRE DAMPER (1-1/2 HR RATED)
	SMOKE DAMPER
	TURNING VANES
—— CD ——	CONDENSATE DRAIN LINE
	FLOW IN DIRECTION OF ARROW
	SLOPE DOWN IN DIRECTION OF ARROW
	GATE VALVE BUTTERFLY VALVE
	BALL VALVE
<u>_</u>	UNION
<u>'</u>	CAP
	RISE AND DROP IN PIPING
C.R	CONCENTRIC REDUCER
E.R	ECCENTRIC REDUCER
① ₂₋₃	HUMIDISTAT (UNIT & ZONE DESIGNATION)
<u> </u>	TEMPERATURE SENSOR
\$	SMOKE DETECTOR
(RT)	RETURN AIR THERMOSTAT

MECHANICAL ABBREVIATIONS

	ND 00 00NDD50050 ND				DUMB
A AC	AIR OR COMPRESSED AIR AIR CONDITIONING	FF FLA	FINAL FILTER FULL LOAD AMPS	P PCF	PUMP
ACCH	AIR CONDITIONING AIR COOLED CHILLER	FLEX	FLEXIBLE	PD	POUNDS PER CUBIC FOOT PRESSURE DROP
ACD	AUTOMATIC CONTROL DAMPER	FLRDR	FLOOR DRAIN	PF	PRE-FILTER
ACP	AIR COMPRESSOR	FMS	FLOW MEASURING STATION	PH	PHASE
AD	ACCESS DOOR	FPM	FEET PER MINUTE	PHC	PRE-HEAT COIL
AEL	AIR ELIMINATOR	FPS	FEET PER SECOND	PRV	PRESSURE REDUCING VALVE
AF	AIR FOIL	FRP	FIBERGLASS REINFORCED PLASTIC	PSI	POUNDS PER SQUARE INCH
AFF	ABOVE FINISHED FLOOR	FS	FLOW SWITCH	PSIA	POUNDS PER SQUARE INCH -
AFG	ABOVE FINISHED GRADE	FT	FEET		ABSOLUTE
AHU	AIR HANDLING UNIT	FTK	FLASH TANK	PSID	POUNDS PER SQUARE INCH -
AMP	AMPERE	FTR	FIN TUBE RADIATION		DIFFERENTIAL
AP	ACCESS PANEL		0.4.0	PSIG	POUNDS PER SQUARE INCH - GAUGE
APD	AIR PRESSURE DROP	G CA	GAS	PUX	PUMP/HEAT EXCHANGER
AS ATC	AIR STREAM AUTOMATIC TEMPERATURE CONTROL	GA GAL	GAUGE GALLONS	PVC	POLYVINYL CHLORIDE
ATM	ATMOSPHERE	GALV	GALVANIZED	R	RADIUS
ATIVI	ATMOSFIERE	GFU	GLYCOL FEED UNIT	RA	RETURN AIR
BDD	BACK-DRAFT DAMPER	GLYP	GLYCOL PUMP	RD	RELIEF DAMPER
BF	BOOSTER FAN	GPH	GALLONS PER HOUR	RE	RELOCATE EXISTING
BHP	BRAKE HORSEPOWER	GPM	GALLONS PER MINUTE	RET	RETURN
BI	BACKWARDS INCLINED	GR	GRADE	REF	REFRIGERANT
BOD	BOTTOM OF DUCT	GX	GENERAL EXHAUST	RF	RETURN FAN
BTU	BRITISH THERMAL UNIT			RGH	RELIEF GRAVITY HOOD
BTUH	BTU PER HOUR	Н	HUMIDIFIER	RH	RELATIVE HUMIDITY OR RELIEF HOOD
		HB	HOSE BIB (CONNECTION)	RHC	REHEAT COIL
CC	COILING COIL	HC	HEATING COIL	RL	RELIEF LOUVER
CENT	CENTER OR CENTRIFUGAL	HD	HEAD	RLA	RUNNING LOAD AMPS
CF	CUBIC FEET	HOA	HAND OFF AUTOMATIC	RLF	RELIEF
CFM	CUBIC FEET PER MINUTE	HP	HORSEPOWER OR HIGH POINT	RPM	REVOLUTIONS PER MINUTE
CFP	CHEMICAL FEED PUMP	HR	HOUR	RT	RETURN AIR THERMOSTAT
CH	CHILLED OR CHILLER	HRU	HEAT RECOVERY UNIT	RTU	ROOF-TOP UNIT
CHW	CHILLED WATER	HTG	HEATING		
CHP	CHILLED WATER PUMP	HV	HEATING AND VENTILATION UNIT	SA	SUPPLY AIR OR SOUND ATTENUATOR
CHWR	CHILLED WATER RETURN	HWR	HOT WATER RETURN	SCR	SCREEN
CHWS	CHILLED WATER SUPPLY	HWS	HOT WATER SUPPLY	SCT	SATURATED CONDENSING
CO	CARBON MONOXIDE	HZ	HERTZ (CYCLES PER SECOND)	0.0	TEMPERATURE
CONN	CONNECTION	ID	INOIDE DIAMETED	SD	SMOKE DETECTOR OR SMOKE DAMPER
CONV	CONVERTER	ID	INSIDE DIAMETER	SE	SMOKE EXHAUST
CP CRAC	CONDENSATE PUMP COMPUTER ROOM AC UNIT	IH ''	INFRARED HEATER	SEF	SMOKE EXHAUST FAN
	COOLING TOWER	IL IN	INTAKE LOUVER INCHES	SEN SEP	SENSIBLE SEPARATOR
CT CTBD	COOLING TOWER COOLING TOWER BLOW DOWN	IIN	INCHES	SEP	SUPPLY FAN
CTBD	CABINET UNIT HEATER	KW	KILOWATT	SFD	COMBINATION SMOKE / FIRE DAMPER
CWP	CONDENSER WATER PUMP	KVU	KITCHEN VENTILATION UNIT	SH	SUPPLY HOOD
CWR	CONDENSER WATER RETURN	RVO	KITOHEN VENTIEATION ONT	SHC	SENSIBLE HEAT CAPACITY
CWS	CONDENSER WATER SUPPLY	LAT	LEAVING AIR TEMPERATURE	SIH	SUPPLY INTAKE HOOD
0110	CONSTRUCTIVE WATER COLLET	LB	POUND	SP	STATIC PRESSURE
D	DRAIN	LF	LINEAR FEET	SF	SQUARE FEET
DB	DRY BULB (TEMPERATURE)	LD	LINEAR DIFFUSER	SS	STAINLESS STEEL
DEG	DEGREE	LP	LOW POINT	SSF	SMOKE SUPPLY FAN
DDC	DIRECT DIGITAL CONTROL	LPS	LOW PRESSURE STEAM	SUP	SUPPLY
DHC	DUCT RE-HEAT COIL	LRA	LOCKED ROTOR AMPS		
DIA	DIAMETER	LVR	LOUVER	Т	TEMPERATURE OR THERMOSTAT
DIM	DIMENSION	LVDR	LOUVERED DOOR	TEFC	TOTALLY ENCLOSED FAN COOLED
DP	DIFFERENTIAL PRESSURE	LVG	LEAVING	TEMP	TEMPERATURE
		LWT	LEAVING WATER TEMPERATURE	TK	TANK
EA	EACH OR EXHAUST AIR		MAKE UB AB USST	TON	12,000 BTUH (COOLING CAPACITY)
EAHU	EXHAUST AIR HANDLING UNIT	MAU	MAKE UP AIR UNIT	TRF	TRANSFER AIR FAN
EAT	ENTERING AIR TEMPERATURE	MAX	MAXIMUM	TRP	TRANSFER PUMP
EDH	ELECTRIC DUCT HEATER	MBH	1000 BTUH	TSP	TOTAL STATIC PRESSURE
EF EMER	EXHAUST FAN	MCA MCP	MINIMUM CIRCUIT AMPS	TSTAT	THERMOSTAT
EMS	EMERGENCY ENERGY MANAGEMENT SYSTEM	MD	MAIN CONDENSATE PUMP MOTORIZED DAMPER	TX TYP	TOILET EXHAUST TYPICAL
ERU	ENERGY MANAGEMENT SYSTEM ENERGY RECOVERY OUTSIDE AIR	MECH	MECHANICAL	ITP	TTPICAL
LINO	PRE-CONDITIONER UNIT	MIN	MINIMUM	UC	UNDERCUT (DOOR)
ESP	EXTERNAL STATIC PRESSURE	MU	MAKE-UP WATER	UH	UNIT HEATER
ET	EXPANSION TANK	MUA	MAKE-UP AIR	OH	ONIT HEATER
EUH	ELECTRICAL UNIT HEATER	WOT	White or him	V	VOLTS
EWT	ENTERING WATER TEMPERATURE	N	NEW	VAV	VARIABLE AIR VOLUME
EX	EXISTING	NC	NOISE CRITERIA OR NORMALLY	VD	VOLUME DAMPER
EXH	EXHAUST		CLOSED	VEL	VELOCITY
EXT	EXTERNAL	NO	NORMALLY OPEN	VFD	VARIABLE FREQUENCY DRIVE
EXP	EXPANSION	NOM	NOMINAL		· · · · -
				WB	WET BULB TEMPERATURE
F	FAHRENHEIT OR FILTER	OA	OUTSIDE AIR	WC	WATER COLUMN
FA	FREE AREA OR FIRE ALARM	OAI	OUTSIDE AIR INTAKE	WCCH	WATER COOLED CHILLER
FC	FLEXIBLE CONNECTION	OC	ON CENTER	WG	WATER GAUGE
FCU	FAN COIL UNIT	OD	OUTSIDE DIAMETER	WPD	WATER PRESSURE DROP
FD	FLOOR DRAIN, FIRE DAMPER, OR FIRE	ODP	OPEN DRIP PROOF	WTD	WATER TEMPERATURE DIFFERENCE
	DEPARTMENT	OV	OUTLET VELOCITY	WTS	WATER TEMPERATURE SENSOR
FDP	FLUID DISTRIBUTION POINT				
		NOTE: NOT	ALL ADDDEVIATIONS MAY ADDLY TO DLA	NC	

NOTE: NOT ALL ABBREVIATIONS MAY APPLY TO PLANS

MECH. SYSTE	MECHANICAL SUMMARY MS, SERVICE SYSTEMS AND EQU	JIPMENT
THERMAL ZONE WINTER DRY BULB: SUMMER DRY BULB:	21° F 92° F	
INTERIOR DESIGN CONDITIONS WINTER DRY BULB: SUMMER DRY BULB: RELATIVE HUMIDITY:	70° F 75° F 50%	
BUILDING HEATING LOAD:	15,000 BTU/HI	R
BUILDING COOLING LOAD:	2.6 TONS	
MECHANICAL SPACING CONDITIONI UNITARY	NG SYSTEM	
DESCRIPTION OF UNIT:	HEAT PUM	IP
HEATING EFFICIENCY:	SEE EQUIPMENT SO	CHEDULES
COOLING EFFICIENCY:	SEE EQUIPMENT SO	CHEDULES
SIZE CATEGORY OF UNIT:		
BOILER		
SIZE CATEGORY. IF OVERSIZ	ED, STATE REASON:	N/A
CHILLER		
SIZE CATEGORY. IF OVERSIZ	ED, STATE REASON:	N/A
LIST EQUIPMENT EFFICIENCIES:		

	DRAWING INDEX							
SHEET	SHEET TITLE	REV#	DATE					
M-001	MECHANICAL NOTES LEGEND AND ABBREVS	-						
M-101	MECHANICAL PLAN	-						
M-102	MECHANICAL CONDENSATE PLAN	-						
M-301	MECHANICAL DETAILS	-						



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P-0754

P-0754

P-0754

P-0754

SEAL 028880

SEAL 028880

SEAL 028880

HARNETT CENTRAL PRE
HARNETT COUNTY SCE

DATE: 5/9/2022

DRAWN BY: CKD

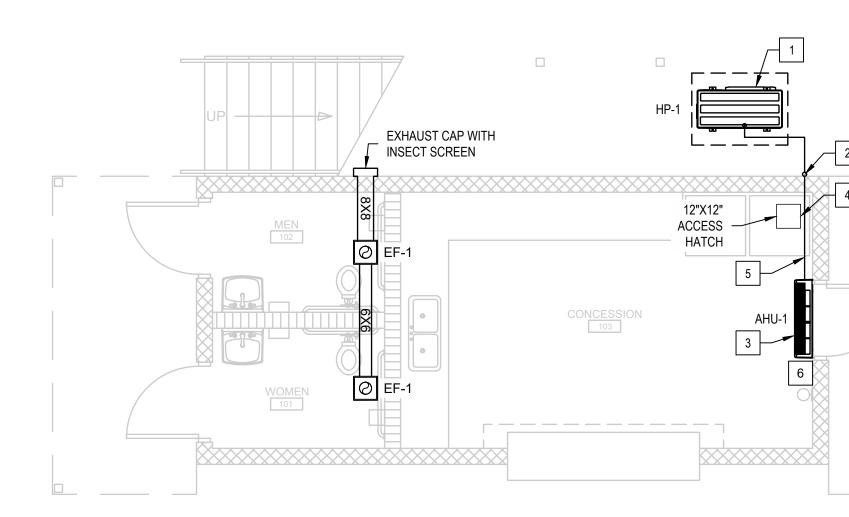
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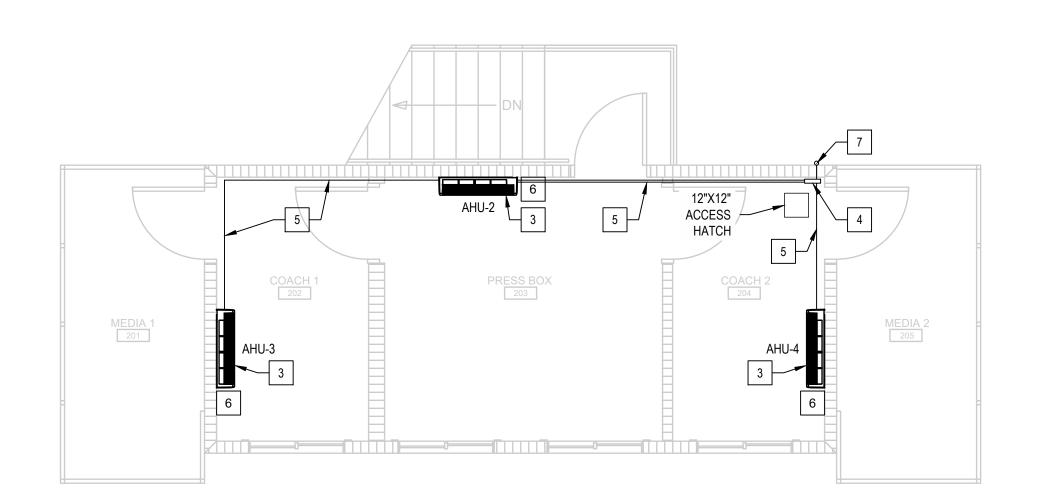
MECHANICAL NOTES LEGEND AND ABBREVS

M-001

HEET NUMBER



FIRST FLOOR MECHANICAL PLAN



SECOND FLOOR MECHANICAL PLAN

-										
				EQUIPMENT	SCHEDULE					
TAG	MITISUBISHI MODEL#	DESCRIPTION	VOLT, φ, Hz	MCA	MOCP	AIRFLOW (CFM)	NOMINAL COOLING CAPACITY	NOMINAL HEATING CAPACITY @ 17°F	SEER	EER
HP-1	NTXMSM36A142AA	HEAT PUMP	208-230, 1, 60	29	40	N/A	36,000 BTU/H	26,400 BTU/H	23	15
AHU-1,2	TPKFYP012LM140A	WALL MTD.	208-230, 1, 60	0.24	15	152-297	12,000 BTU/H	13,500 BTU/H	N/A	N/A
AHU-3,4	TPKFYP008LM140A	WALL MTD.	208-230, 1, 60	0.24	15	141-237	8,000 BTU/H	9,000 BTU/H	N/A	N/A

- 1. EQUIPMENT AS MANUFACTURED BY MITSUBISHI OR APPROVED EQUAL BY FUJITSU / LG / CARRIER.
- 2. LINE SET COVERS AS MANUFACTURED BY DIVERSITECH OR EQUAL BY RECTORSEAL / FORTRESS.
- 3. HARD WIRED THERMOSTATS FOR FOR EACH AREA (TOTAL OF 4 WIRED THERMOSTATS).
 4. REFRIGERANT LINES TO BE HARD COPPER, REFRIGERANT LINE SIZING PER MANUFACTURER'S GUIDELINES.
- 5. AHU'S 2,3,4 TO REQUIRE CONDENSATE PUMP.

EXHAUST FAN SCHEDULE									
TAG	MAKE	MODEL	MOUNTINGTY PE	CFM	EXT STATIC AT MAX FLOW (IN. WG)	MAX INPUT WATTS	AMPS	RPM	NOTES
EF-1	GREENHECK	SP-A90	CEILING	80	.25	16.9	0.14	870	1, 2

1. ACCEPTABLE ALTERNATE MANUFACTURES ARE BROAN AND PENN.
2. PROVIDE FAN WITH INSULATED HOUSING, FLEXIBLE DUCT CONNECTORS AND GRAVITY BACK DRAFT DAMPER.

KEY NOTES:

- 1 HEAT PUMP-1 (INSTALLED ON 4" CONCRETE PAD). COORDINATE LOCATION WITH OWNER/ENGINEER.
- 2 LINE SET TO TRANSITION UP EXTERIOR WALL TO THE FIRST LEVEL AND PENETRATE EXTERIOR WALL BELOW CEILING(COORDINATE LOCATION).
- 3 AHU (WALL MOUNTED). COORDINATE LOCATION WITH OWNER/ENGINEER.
- 4 BRANCH JOINT ABOVE ACCESS HATCH. COORDINATE LOCATION WITH OWNER/ENGINEER.
- LINE SET(S) TO BE INSTALLED TIGHT AGAINST CEILING/WALL IN LINE SET COVER. LINE SET COVER TO CONTAIN ALL LINE SET(S), POWER, CONTROL, AND CONDENSATE. CONTRACTOR TO ENSURE LINE SET COVERS ARE ADEQUATELY SIZED.
- 6 INSTALL 7 DAY PROGRAMMABLE THERMOSTAT(TO BE MOUNTED ON THERMAL BLOCK). COORDINATE LOCATION WITH OWNER/ENGINEER.
- 7 LINE SET TO TRANSITION UP EXTERIOR WALL TO THE SECOND LEVEL AND PENETRATE EXTERIOR WALL BELOW CEILING(COORDINATE LOCATION).



P.O. BOX 3119 PEMBROKE, NC 28372 TELEPHONE: (910)774-9306 FAX: (866)649-7235



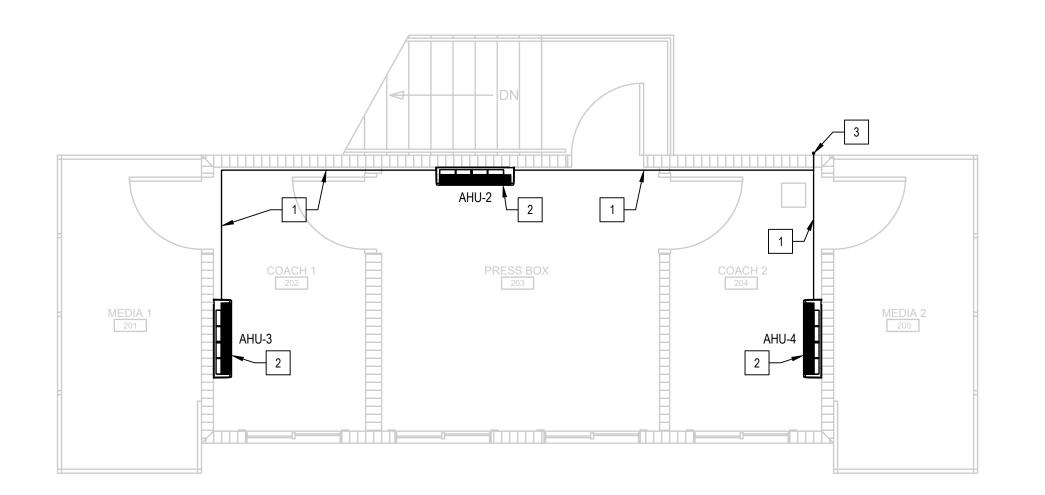
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MECHANICAL PLAN

M-101

SHEET NUMBER

\FIRST FLOOR MECHANICAL CONDENSATE PLAN



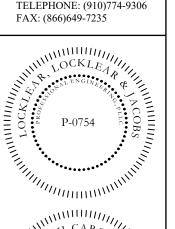
SECOND FLOOR MECHANICAL CONDENSATE PLAN

KEY NOTES:

LINE SET(S) TO BE INSTALLED TIGHT AGAINST CEILING/WALL IN LINE SET COVER. LINE SET COVER TO CONTAIN ALL LINE SET(S), POWER, CONTROL, AND CONDENSATE. CONTRACTOR TO ENSURE LINE SET COVERS ARE ADEQUATELY SIZED..

2 AHU TO INCLUDE CONDENSATE PUMP. COORDINATE CONDENSATE ROUTE WITH OWNER/ENGINEER.

3 CONDENSATE TO PENETRATE EXTERIOR WALL AND TRANSITION DOWN EXTERIOR WALL. COORDINATE CONDENSATE DISCHARGE WITH OWNER/ENGINEER. CONDENSATE SIZE AND MATERIAL PER MANUFACTURER. EXTERIOR CONDENSATE TO HAVE FULL LENGTH ALUMINUM COVER. P.O. BOX 3119 PEMBROKE, NC 28372 TELEPHONE: (910)774-9306 FAX: (866)649-7235





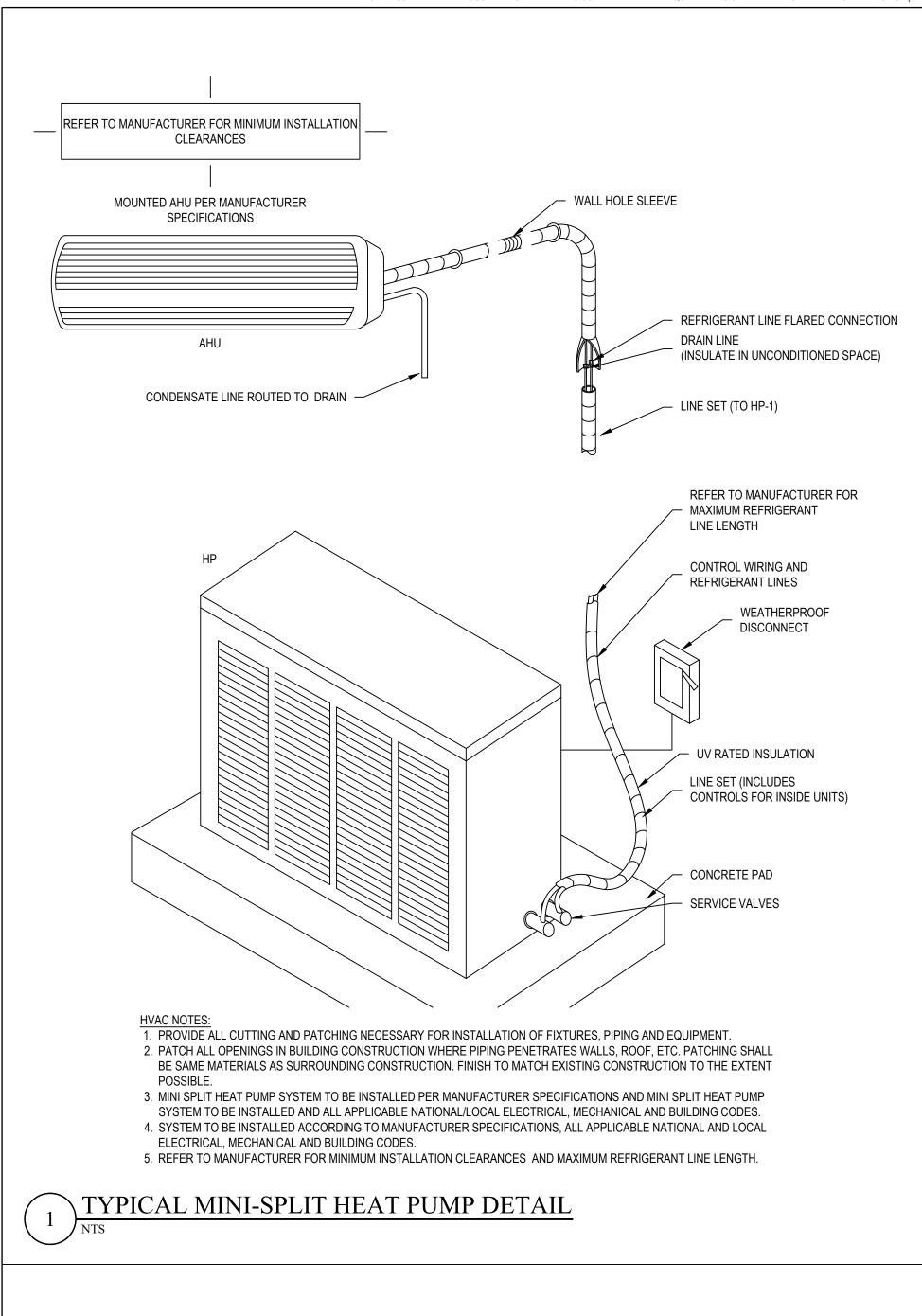
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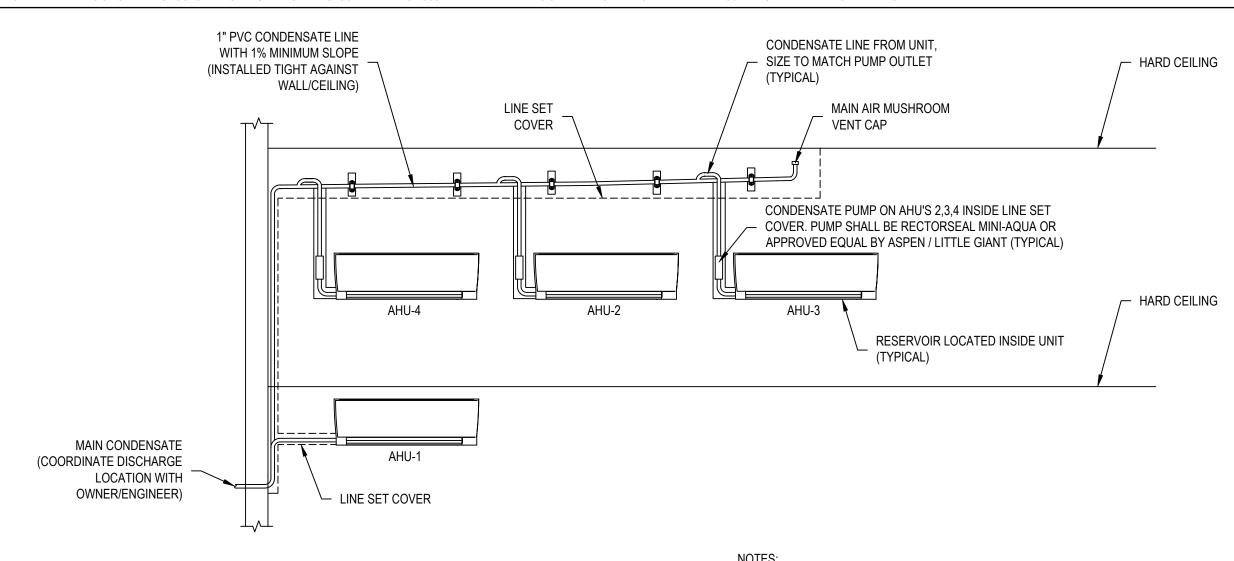
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SHEET NUMBER

MECHANICAL CONDENSATE **PLAN**

M-102





TYPICAL CONDENSATE DRAINAGE DETAIL

TYPICAL LINE SET PITCH POCKET DETAIL

4-1/2" CORE DRILLED HOLE THRU EXTERIOR WALL WITH 4" STEEL PIPE SLEEVE (BELOW CEILING) DIVERSITECH SPEEDICHANNEL LINE SET COVER OR EQUAL BY RECTORSEAL / 1. MECHANICAL CONTRACTOR SHALL INSTALL THE LINE SET COVER BY SPEEDICHANNEL OR EQUAL BY AIRTEC OR JOHNSTONE. 2. MECHANICAL CONTRACTOR SHALL INSTALL THE LINE SET COVER WITH 3/16" x 1-1/4" @ 15" TAPCON OR EQUAL BY HILTI OR SIMPSON STRONG-TIE. 3. MECHANICAL CONTRACTOR SHALL INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

THIS DRAWING IS SCHEMATIC IN NATURE. FINAL ROUTING OF PIPING AND WIRING SHALL BE DETERMINED BY THE INSTALLING CONTRACTOR NTXMSM36A142AA [HP-1] AND/OR DESIGNER OF RECORD ADDITIONAL REFRIGERANT CHARGE IS NEEDED DEPENDING ON THE SIZE AND LENGTH OF EXTENDED PIPING. PLEASE REFER THE AMOUNT OF PRE-CHARGE AND THE FORMULA OF CALCULATION WHICH IS MENTIONED ON THE DATA BOOK. 1.25MM²(16AWG): 1.25MM²(16AWG) OR MORE. 0.75MM²(20AWG): DIP SWITCH 3-7 OFF BETWEEN 0.5MM²(24AWG) AND 0.75MM²(20AWG). 1 AHU-3 GP4

1. RESERVOIR TO HAVE HIGH LIMIT, AHU TO SHUT DOWN WHEN HIGH LIMIT IS REACHED.

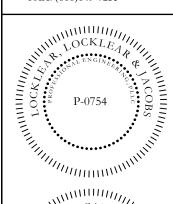
2. ALL AHU'S TO BE SURFACE MOUNTED BELOW CEILING.

TYPICAL DUCTLESS SYSTEM PIPING SCHEMATIC DETAIL

TPKFYP012LM140A TPKFYP008LM140A TPKFYP012LM140A TPKFYP008LM140A

AHU-2

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028880

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> **MECHANICAL DETAILS**

M-301PROJECT# 21-11110

SHEET NUMBER

- THE CONTRACT DOCUMENTS CONSIST OF DRAWINGS, SPECIFICATIONS AND DESIGN INFORMATION PREPARED BY MULTIPLE DISCIPLINES AND MUST BE USED AS A WHOLE AND IN COORDINATION WITH EACH OTHER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY APPARENT DISCREPANCIES OR OMISSION OF INFORMATION NOT SHOWN ON THE ELECTRICAL DRAWINGS. SHOP DRAWINGS SHALL BE PROVIDED WHERE NECESSARY FOR COORDINATION. THE CONTRACTOR IS RESPONSIBLE FOR CORRECTING ERRORS RESULTING FROM LACK OF COORDINATION OF DOCUMENTS.
- THE CONTRACTOR SHALL BRING ANY CONFLICTS OR DISCREPANCIES TO THE ATTENTION OF THE ENGINEER IN WRITING PRIOR TO PROCEEDING WITH WORK.

YEAR IN WRITING COMMENCING UPON ACCEPTANCE OF INSTALLATION BY OWNER.

- 3. THE CONTRACTOR SHALL FIELD VISIT THE SITE PRIOR TO BID TO FAMILIARIZE HIMSELF WITH THE SCOPE OF WORK. 4. ALL WORK SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER BY A LICENSED ELECTRICAL CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A SAFE, CLEANLY, AND
- UNDISRUPTIVE JOB SITE THAT DOES NOT IMPEDE EGRESS PATHS OR OTHER TENANTS. DISRUPTIONS TO POWER AFFECTING OTHER TENANTS OR AREAS OUTSIDE THE SCOPE OF WORK SHALL BE COORDINATED WITH THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF HIS WORK. WHEN THE WORK IS COMPLETE, ALL ELECTRICAL DEVICES SHALL BE VACUUMED CLEAN. THE FINAL PRODUCT SHALL BE A FULLY FUNCTIONAL SYSTEM MEETING THE INTENT OF THE DRAWINGS/DOCUMENTS. WORKMANSHIP AND ALL MATERIALS AND EQUIPMENT SHALL BE GUARANTEED FOR A MINIMUM OF ONE
- WITHIN 30 DAYS AFTER THE DATE OF THE SYSTEM ACCEPTANCE, RECORD DRAWINGS OF THE ACTUAL INSTALLATION SHALL BE PROVIDED TO THE BUILDING OWNER, INCLUDING A SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM AND FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION. ADDITIONALLY, AN OPERATING MANUAL AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE BUILDING OWNER INCLUDING THE FOLLOWING: SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE, OPERATION MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE INCLUDING CLEARLY IDENTIFIED ROUTINE MAINTENANCE ACTIONS, AND NAMES AND ADDRESSES OF AT LEAST
- 6. UNLESS PROVIDED WITH DIMENSIONS OR NOTED OTHERWISE, ELECTRICAL PLANS ARE STRICTLY DIAGRAMMATIC ONLY. REFER TO THE DRAWINGS FOR ALL DIMENSIONS, MOUNTING HEIGHTS, ETC. EFFORT HAS BEEN MADE TO PROPERLY ACCOUNT FOR ALL SPACE REQUIREMENTS, CLEARANCES, ETC. BUT SITE CONDITIONS AND PRODUCTS SELECTED MAY VARY AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN PROPER ARRANGEMENTS AND CLEARANCES. DRAWINGS SHALL NOT BE SCALED.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PAYING ALL ASSOCIATED FEES, AND DOCUMENTING AND FILING ALL PAPERWORK ASSOCIATED WITH THIS SCOPE OF WORK. WHEN THE WORK IS COMPLETE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CERTIFICATES OF INSPECTION.
- 8. THE CONTRACTOR IS EXPECTED TO HAVE A FULL FUNCTIONAL KNOWLEDGE OF ELECTRICAL SYSTEMS AND WHETHER INDICATED ON THE DRAWINGS OR NOT SHALL PROVIDE THE CORRECT NUMBER OF WIRES, AT NO ADDITIONAL CHARGE, TO FACILITATE PROPER OPERATION OF ALL EQUIPMENT. QUANTITY OF WIRES WILL ONLY BE INDICATED WHERE NECESSARY FOR CLARIFICATION.
- 9. THE INSTALLATION SHALL BE IN COMPLIANCE WITH THE AMERICAN WITH DISABILITIES ACT (ADA), UNLESS INSTALLED FOR SPECIFIC USES EXEMPT FROM ADA OR IN AREAS NOT NORMALLY ACCESSED BY BUILDING OCCUPANTS.
- 10. THE ELECTRICAL CONTRACTOR SHALL REFER TO THE MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS OF EQUIPMENT. PRIOR TO ORDERING ELECTRICAL EQUIPMENT SERVING MECHANICAL & PLUMBING EQUIPMENT, THE ELECTRICAL CONTRACTOR SHALL CONFIRM THE EQUIPMENT BEING ORDERED BY THE HVAC OR PLUMBING CONTRACTORS AND PROVIDE WIRING, CONDUIT, AND OVERCURRENT PROTECTION MEETING THE REQUIREMENTS AT NO ADDITIONAL COST. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING AND COORDINATING WITH THE HVAC CONTRACTOR FOR PROVIDING ANY NECESSARY LINE AND LOW VOLTAGE WIRING. FINAL TERMINATION TO BE MADE BY THE HVAC CONTRACTOR. ALL BREAKERS SUPPLYING HVAC LOADS SHALL BE HACR TYPE.
- 11. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW (UNLESS NOTED OTHERWISE) AND BEAR THE U.L. LISTING FOR THEIR INTENDED USE. MATCH BUILDING STANDARDS FOR MANUFACTURER AND TYPE OF EQUIPMENT FOR LIGHTS, EXIT SIGNS, FIRE ALARM DEVICES, WIRING DEVICES, AND ELECTRICAL DISTRIBUTION EQUIPMENT. WHERE NO BUILDING STANDARD EXISTS FOR ELECTRICAL EQUIPMENT, EQUIPMENT SHALL BE MANUFACTURED BY G.E., SQUARE-D. EATON CUTLER-HAMMER OR SIEMENS, INSTALL A PLASTIC-LAMINATE SIGN ON EACH NEW UNIT OF ELECTRICAL EQUIPMENT WITH 1/2" ENGRAVED LETTERING FOR IDENTIFICATION. IDENTIFICATION SHALL MATCH CONTRACT DOCUMENTS AND/OR INDICATE SOURCE FED (FOR DISCONNECTS, ETC).
- 12. THE FAULT CURRENT RATING OF ALL EQUIPMENT ADDED TO THE ELECTRICAL DISTRIBUTION SHALL MEET THE AVAILABLE FAULT CURRENT. EQUIPMENT SHALL BE FULLY RATED UNLESS NOTED OTHERWISE.
- 13. THE CONTRACTOR SHALL GIVE PERMISSION FOR THE AHJ, ENGINEER, INSPECTOR, ETC. TO PERFORM TESTS OF THE ELECTRICAL SYSTEM AS REQUIRED.
- 14. SWITCH OUTLETS SHALL NOT BE OBSTRUCTED BY DOOR SWINGS AND OCCUPANCY SENSORS SHALL HAVE FULL VIEW OF THE INTENDED SPACE. 15. SWITCH AND RECEPTACLES INDICATED IN THE SAME LOCATION SHALL BE MOUNTED UNDER A COMMON COVERPLATE UNLESS OTHERWISE NOTED
- 16. EVEN IF THE PLANS INDICATE, OUTLETS SHALL NOT BE INSTALLED PRECISELY BACK TO BACK ON COMMON WALLS. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT MOUNTING METHODS AND LOCATIONS.
- 17. JUNCTION AND PULL BOXES ARE ONLY INDICATED WHERE REQUIRED FOR LARGE SCALE COORDINATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING JUNCTION AND PULL BOXES AS REQUIRED BY THE CODE AND PER A STANDARD INSTALLATION, AND SHALL INCLUDE THIS IN THEIR BID. BOXES SHALL BE STEEL AND INCLUDE EARS INSIDE TO ATTACH COVERS. OUTLET BOXES SHALL BE FOUR INCH SQUARE DEEP TYPE. OUTLET BOXES FOR 120V OR HIGHER CIRCUITS SHALL INCLUDE A #12 AWG SOLID COPPER PIGTAIL. OUTLET BOXES LOCATED OUTDOOR OR EXPOSED TO WET CONDITIONS SHALL INCLUDE GASKETED COVERS. THE MAXIMUM GAP AROUND BOXES SHALL BE 1/8" OR SMALLER ON ALL EDGES. JUNCTION BOXES SHALL BE COLOR CODED WITH PAINT TO INDICATE THEIR USE AS FOLLOWS: NORMAL POWER - BLACK, STANDBY POWER - ORANGE, FIRE ALARM - RED, TELEPHONE/DATA - YELLOW, HVAC CONTROLS - BLUE.
- 18. CONDUCTORS SHALL BE LOOPED AROUND SCREW POSTS SO THAT ROTATION OF THE SCREW TENDS TO FURTHER WRAP THE CONNECTION. SCREW TERMINALS SHALL BE WRAPPED IN ELECTRICAL TAPE. AT LEAST 6" OF FREE CONDUCTOR SHALL BE LEFT AT EACH J-BOX, OUTLET AND SWITCH BACK-BOX, ETC FOR FUTURE SPLICING.
- 19. THE CONTRACTOR SHALL MAINTAIN THE FIRE RATING OF ALL FIRE-RATED PARTITIONS. IF A DEVICE WILL VOID THE FIRE RATING OF A WALL, IT SHALL BE INSTALLED IN AN ALTERNATE LOCATION PER THE ARCHITECT OR ENGINEER'S DIRECTION. ALL VOIDS AROUND CONDUITS AND/OR CORE DRILLS PENETRATING FIRE RATED PARTITIONS SHALL BE FILLED WITH FIRE-SAFING MATERIAL OR UL APPROVED FIRE RATING DEVICE. THE FIRE RATING OF A PARTITION SHALL NEVER BE COMPROMISED.
- 20. THE CONTRACTOR SHALL MAINTAIN THE INSULATION RATING AND VAPOR BARRIERS ON ALL PERIMETER WALLS. IF A DEVICE WILL DAMAGE OR COMPROMISE THE VAPOR BARRIER OR INSULATION, IT SHALL BE INSTALLED IN AN ALTERNATE LOCATION PER THE ARCHITECT OR ENGINEER'S DIRECTION.
- 21. ALL EQUIPMENT REQUIRING ACCESS SUCH AS J-BOXES, PULL BOXES, TRANSFORMERS, DRIVERS, ETC. SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. EXISTING ELECTRICAL DEVICES WHICH ARE LOCATED BEHIND INACCESSIBLE LOCATIONS DUE TO THE RENOVATION SHALL BE REROUTED AND MADE ACCESSIBLE.
- 22. CONDUITS AND/OR MATERIALS LOCATED IN ENVIRONMENTAL AIR PLENUMS SHALL BE PROPERLY LISTED FOR THE APPLICATION. INTERIOR CONCEALED RACEWAYS MAY BE AC OR MC CABLE IF ALLOWED BY THE AHJ. EXPOSED RACEWAYS, INCLUDING RACEWAYS EXPOSED IN THE BACK OF HOUSE SHALL BE GALVANIZED STEEL OR ALUMINUM EMT. MOTOR CONNECTIONS SHALL BE FLEXIBLE METAL CONDUIT FOR INTERIOR APPLICATIONS AND LIQUID TIGHT FLEX FOR EXTERIOR APPLICATIONS. ALL OTHER EXTERIOR CONDUITS SHALL BE GALVANIZED STEEL, ALUMINUM EMT OR RIGID STEEL IF EXPOSED TO STRIKING. EXTERIOR CONDUITS SHALL UTILIZE COMPRESSION CONNECTORS. AC/MC CABLE SHALL NOT TERMINATE AT PANELBOARDS. A GUTTER ABOVE THE ELECTRICAL PANELS SHALL BE PROVIDED WITH CONDUIT FROM THE
- 23. CABLE AND CONDUIT ROUTING SHALL BE DONE IN A NEAT AND ORDERLY FASHION. LINES SHALL BE RUN PARALLEL TO ALL BUILDING FEATURES, AND SHALL BE GROUPED TOGETHER TO CREATE AN AESTHETICALLY PLEASING AND EASY TO FOLLOW ROUTE. CABLES SHALL BE PERMITTED TO BE BUNDLED BUT SHALL NOT EXCEED TEN IN QUANTITY. ROUTING SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT.
- 24. CONDUITS SHALL BE RIGIDLY SUPPORTED TO THE BUILDING STRUCTURE. AC AND MC CABLES SHALL BE SUPPORTED WITHIN 12" OF EVERY BOX, FITTING, ETC. AND SUPPORT SPACINGS SHALL NOT EXCEED 6' INTERVALS. RIGID CONDUIT SUPPORT SPACINGS FOR ALL CONDUIT TYPES SHALL BE IN ACCORDANCE WITH THE NEC. COUPLINGS AND FITTINGS SHALL BE STEEL WITH COMPRESSION OR SET STEEL SCREW CONNECTIONS. THERE SHALL NOT BE MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) BETWEEN PULL POINTS FOR POWER (120V OR HIGHER) CIRCUITS AND NOT MORE THAN THE EQUIVALENT OF TWO QUARTER BENDS (180 DEGREES TOTAL) BETWEEN PULL FOR LOW VOLTAGE (TELEPHONE, DATA, ETC) CIRCUITS. LOW VOLTAGE CONDUIT RUNS SHALL ALSO NOT EXCEED 100' BETWEEN PULL POINTS. ALL CONDUITS SHALL BE FASTENED AT BOTH ENDS. EXPANSION FITTINGS SHALL BE PROVIDED AT ALL BUILDING EXPANSION JOINTS OR WHERE NEEDED TO ALLOW FOR THERMAL EXPANSION.
- 25. CONDUIT SIZES INDICATED IN PANEL SCHEDULES AND ON THE SINGLE LINE ARE BASED ON TYPE THHN IN EMT. AS OTHER TYPES OF CONDUIT AND CONDUCTORS ARE PERMISSIBLE IN THIS PROJECT, THE CONTRACTOR SHALL ADJUST THE DIMENSION OF THE CONDUIT TO COMPLY WITH CHAPTER 9, TABLE 1 IN THE NEC. ADJUSTMENTS TO THE CONDUIT SIZE SHALL BE PART OF THE BID AND SHALL BE AT NO ADDITIONAL EXPENSE TO THE OWNER.
- WIRE SIZES INDICATED ARE BASED UPON DIRECT ORTHOGONAL PATHS TO THE PANELBOARD. FEEDERS ARE SIZED FOR A MAXIMUM OF 2% VOLTAGE DROP, AND BRANCH CIRCUITS ARE DESIGNED FOR A MAXIMUM OF 3% VOLTAGE DROP. IF FIELD CONDITIONS DO NOT ALLOW THESE PATHS OR IF THE CONTRACTOR RUNS ADDITIONAL LENGTHS, THEY SHALL BE RESPONSIBLE FOR INCREASING WIRE SIZE TO ACCOUNT FOR VOLTAGE DROP AT NO ADDITIONAL COST. 20 AMP, 120 VOLT HOMERUNS EXCEEDING 57' SHALL BE A MINIMUM OF #10 AWG. 20 AMP, 277 VOLT HOMERUNS EXCEEDING 131' SHALL BE A MINIMUM OF #10 AWG. WIRING
- SMALLER THAN #12 AWG SHALL NOT BE USED FOR ANY INSTALLATIONS. 27. THE CONTRACTOR SHALL CIRCUIT PANELBOARDS EXACTLY AS INDICATED IN THE PANEL SCHEDULES. IF ANY DEVIATIONS ARE NECESSARY, THE ENGINEER SHALL BE NOTIFIED. TYPED DIRECTORY CARDS SHALL BE PROVIDED AT EACH PANELBOARD INDICATING LOAD SERVED AND FINAL ROOM NUMBERS PER THE NEC. WHEN EXISTING DIRECTORIES ARE REPLACED FOR RENOVATION WORK, EXISTING LOAD INFORMATION
- SHALL BE DIRECTLY TRANSFERRED TO THE NEW DIRECTORY CARDS. 28. NEUTRAL CONDUCTORS SHALL ONLY BE SHARED WHEN INDICATED ON THE DRAWINGS. WHERE NEUTRALS ARE INDICATED TO BE SHARED, THE NEUTRAL SHALL BE A MINIMUM OF #10 AWG.
- 29. CONDUCTORS SHALL BE COPPER. CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID, AND CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. CONDUCTORS SHALL BE CODE TYPE THW, THHN, THWN, OR XHHW UNLESS OTHERWISE REQUIRED BY THE NEC. CONDUCTORS SHALL BE MARKED WITH INSULATION CODE, VOLTAGE RATING, AWG SIZE, AND MANUFACTURER AND INCLUDE A CONTINUOUS COLOR CODING FROM PANEL TO LOAD SERVED. WHERE CONTINUOUS MARKINGS ARE NOT AVAILABLE, USE COLOR CODED TAPE AT EACH TERMINATION. #8 AWG AND SMALLER CONDUCTORS SHALL BE SPLICED WITH SPRING
- CONNECTORS. #6 AWG AND LARGER SHALL BE SPLICED WITH BARREL CONNECTORS REQUIRING COMPRESSION ON EACH END. 30. ALL EMERGENCY EGRESS, STANDBY LIGHTING, AND EXIT LIGHTING SHALL HAVE A BATTERY WITH RUN TIME MEETING OR EXCEEDING 90 MINUTES. THE BATTERY SHALL NOT BE CAPABLE OF BEING DISCONNECTED. REGARDLESS OF MODEL NUMBER SPECIFIED, LIGHT FIXTURES SPECIFIED WITH BACKUP BATTERY SHALL HAVE THE TEST BUTTON INTEGRALLY MOUNTED WHERE POSSIBLE. WHERE FIXTURES ARE NOT AVAILABLE
- WITH INTEGRALLY MOUNTED TEST BUTTONS, THE TEST BUTTONS SHALL BE LOCATED IN A DISCRETE LOCATION AS DETERMINED BY THE ENGINEER, UP TO 50' AWAY FROM THE FIXTURE. 31. ALL LIGHT FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURAL SYSTEM BY SUPPORT WIRES, INDEPENDENT OF CEILING GRID SYSTEMS. TROFFER TYPE FIXTURES SHALL BE SUPPORTED BY WIRES. AT ALL FOUR CORNERS. RECESSED DOWNLIGHTS SHALL BE SUPPORTED VIA HANGER BARS SUPPORTED BY WIRES AT ALL FOUR CORNERS. SUPPORT MEANS SHALL BE IN ACCORDANCE WITH LOCAL SEISMIC
- 32. THE EQUIPMENT GROUNDING SYSTEM SHALL CONSIST OF AN ELECTRICALLY CONTINUOUS METALLIC CONDUIT SYSTEM TOGETHER WITH INSULATED EQUIPMENT GROUNDING CONDUCTORS. EVERY ITEM SERVED BY THE ELECTRICAL SYSTEM SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH NEC ARTICLE 250. THIS SHALL INCLUDE RACEWAYS, JUNCTION/OUTLET BOXES, MACHINE FRAMES, ETC. ALL BRANCH CIRCUITS AND FEEDERS SHALL HAVE A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR OR GROUND ELECTRODE SIZED IN ACCORDANCE WITH THE NEC. PROVIDE BONDING JUMPERS FOR ALL NON-CURRENT CARRYING CONDUCTORS OF DIFFERENT SYSTEMS TO ENSURE NO VOLTAGE POTENTIAL, METAL GAS PIPING SHALL ONLY BE GROUNDED AT EQUIPMENT HOUSING BOTH ELECTRICAL CIRCUITS AND UTILIZING GAS VIA THE EQUIPMENT GROUND ROUTED WITH THE CIRCUIT. ALL GROUND WIRES SHALL BE COPPER.
- 33. SUBMITTALS SHALL BE SUBMITTED ELECTRONICALLY, IN PDF FORMAT. THE CONTRACTOR SHALL ALLOW FOR A TOTAL OF 10 BUSINESS DAYS FOR REVIEW BY THE ENGINEER. SUBMITTALS SHALL INCLUDE PANELBOARDS, DISCONNECTS, WIRING DEVICES AND LIGHT FIXTURES. SUBMITTALS SHALL ONLY INCLUDE DATA RELEVANT TO THIS PROJECT; DATA SHEETS INDICATING SEVERAL PRODUCTS SHALL HAVE THE RELEVANT PRODUCTS HIGH-LITED OR CLEARLY IDENTIFIED. SIMILAR EQUIPMENT SHALL BE SUBMITTED IN ONE COMPLETE SUBMITTAL PACKAGE (I.E. ALL PANELBOARDS, ALL LIGHTING FIXTURES, ETC.).
- 34. PROVIDE PAD LOCKING HARDWARE ON CIRCUIT BREAKERS FOR EQUIPMENT WHICH IS HARDWIRED WITHOUT A LOCAL DISCONNECTING MEANS THAT ARE NOT WITHIN SIGHT OF THE PANELBOARD. 35. DUPLEX RECEPTACLES SHALL BE NEMA 5-20R.
- 36. WALL MOUNTED OCCUPANCY SENSORS SHALL BE ACUITY WSD PDT OR APPROVED EQUAL. CEILING MOUNTED OCCUPANCY SENSORS FOR CONFERENCE ROOMS, LOBBIES, AND OTHER SIMILAR AREAS SHALL BE DUAL TECHNOLOGY PASSIVE INFRARED AND ULTRASONIC SIMILAR TO ACUITY EMR PDT9. DEVICES SHALL BE MOUNTED SUCH THAT THE SENSORS HAVE FULL COVERAGE OF THE INTENDED AREAS AND PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL ACCESSORIES NECESSARY FOR A FULLY FUNCTIONING SYSTEM, INCLUDING POWER PACKS, CONTROL AND POWER WIRING, BACKBOXES, ETC. POWER PACKS FOR CEILING MOUNTED SENSORS SHALL BE PROVIDED, SIMILAR TO WATT STOPPER BZ-150. SENSORS SHALL BE WATT STOPPER, HUBBEL, COOPER, OR LUTRON PROVIDED IT IS EQUIVALENT OR EXCEEDS THE REQUIREMENTS LISTED HEREIN. THE CONTRACTOR SHALL FULLY COMMISSION THE OCCUPANCY SENSORS SYSTEM TO CONFIRM IT IS FUNCTIONING AS INTENDED.
- 37. MOLDED CASE CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC AND AMBIENT COMPENSATED INVERSE TIME-DELAY OVERLOAD AND INSTANTANEOUS SHORT CIRCUIT PROTECTED, FULL SIZE, BOLT-ON, WITH A QUICK-MAKE, QUICK-BREAK OVER-CENTER SWITCHING MECHANISM THAT IS MECHANICALLY TRIP-FREE FROM THE HANDLE SUCH THAT THE CONTACTS CAN NOT BE CLOSED AGAINST SHORT CIRCUITS. CONTACTS SHALL BE NON-WELDING SILVER ALLOY. TRIPPING DUE TO OVERLOAD OR SHORT CIRCUIT SHALL BE INDICATED BY THE BREAKER RESTING AT A MID POINT BETWEEN THE ON AND OFF POSITIONS. AMPERE AND FAULT CURRENT RATINGS SHALL BE CLEARLY VISIBLE. WHERE NEUTRALS ARE SHARED AMONG CIRCUITS, THE CONTRACTOR SHALL PROVIDE MULTI-POLE BREAKERS TO SIMULTANEOUSLY DISCONNECT ALL CIRCUITS IN THE EVENT OF ONE TRIPPING; IN THIS CASE SINGLE POLE BREAKERS MAY BE CONNECTED BY A COMMON TRIP HANDLE.
- 38. ALL FUSES SHALL BE DUAL-ELEMENT LOW PEAK CLASS RK1 AS MANUFACTURED BY BUSSMAN OR LITTLE FUSE. FUSE VOLTAGE RATING SHALL BE 250 VOLT FOR 120/208 VOLT SYSTEM.
- 39. DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE, HIGH I2T RATED, APPROVED FOR SERVICE ENTRANCE APPLICATIONS. DISCONNECT SWITCHES SPECIFIED FOR 208 VOLT CIRCUITS SHALL BE RATED AT 240 VOLT. ALL DISCONNECTS SHALL BE QUICK-MAKE, QUICK-BREAK TYPE AND HAVE PROVISIONS FOR ACCOMMODATING R TYPE FUSES. SWITCHES IN EXTERIOR LOCATIONS SHALL BE NEMA TYPE 4X, AND INDOOR SWITCHES EXPOSED TO WET OR DAMP CONDITIONS SHALL BE NEMA TYPE 3R. SWITCHES SHALL HAVE PROVISIONS FOR PADLOCKING. SWITCHES SHALL BE PREVENTED FROM OPENING WHILE SWITCH IS ON. FUSED DISCONNECTS SHALL BE PROVIDED WHEN REQUIRED BY THE MANUFACTURER OR BY THE LOCAL INSPECTING AUTHORITY.
- 40. ALL 15 AND 20A RECEPTACLES LOCATED IN KITCHENS, WITHIN 6' OF SINKS, BATHROOMS, IN EXTERIOR LOCATIONS, IN AREAS EXPOSED TO WET CONDITIONS, ROOFTOPS SHALL BE GFI TYPE. IF A SIMPLEX RECEPTACLE IS REQUIRED, THE CIRCUIT BREAKER SHALL BE GFI TYPE.
- 41. PANELBOARDS SHALL HAVE COPPER FULL SIZE PHASE BUSSES, NEUTRAL BUSSES, AND BOLTED ON COPPER GROUNDING BUS WITH MAIN LUGS. BUS BAR CONNECTIONS SHALL BE COLUMN CONSECUTIVE PHASE-SEQUENCE TYPE. BUS BARS SHALL BE DRILLED AND EQUIPPED FOR BOLT-ON MOLDED CASE CIRCUIT BREAKERS. SHORT CIRCUIT BRACING AND BREAKER INTERRUPTING CAPACITY SHALL BE AS INDICATED ON THE PANEL SCHEDULES, BUT SHALL NOT BE BELOW 10,000 A.I.C. FOR 120/208V PANELS AND 14,000 A.I.C. FOR 277/480V PANELS. PANEL CONSTRUCTION SHALL BE HINGED DOOR IN DOOR COVERS WITH MASTER-KEYED DOOR LOCKS, GALVANIZED SHEET STEEL CABINETS WITH MULTIPLE KNOCKOUTS, WIRING GUTTERS, AND SPACE FOR A TYPED CIRCUIT DIRECTORY. MAIN BREAKERS OR MAIN LUGS ONLY SHALL BE PROVIDED AS INDICATED IN THE PANEL SCHEDULES. PANELS SHALL BE PROVIDED WITH FEED THRU LUGS UNLESS OTHERWISE NOTED.
- 42. UNDERGROUND CONDUIT SHALL BE PVC, EXTERIOR EXPOSED CONDUIT SHALL BE RIGID AND INTERIOR CONDUIT SHALL BE EMT.

S SINGLE POLE SWITCH \$ 3 THREE WAY WALL MOUNTED SWITCH \$ 4 WALL MOUNTED OCCUPANCY SENSOR \$ CELLING MOUNTED OCCUPANCY SENSOR \$ CELLING MOUNTED OCCUPANCY SENSOR \$ CELLING MOUNTED OCCUPANCY SENSOR \$ EMERGENCY LIGHT \$ EMERGENCY LIGHT \$ EMERGENCY LIGHT \$ EMENTE HEAD \$ WALL PACK LIGHT FIXTURE \$ 2X2 LED TROFFER LIGHT FIXTURE \$ 2X4 LED TROFFER LIGHT FIXTURE \$ ENHAUST FAN THERMOSTAT \$ MAIN DISTRIBUTION PANEL \$ POWER PANEL '_' \$ TRANSFORMER \$ BOX 8 "CONDUIT ABOVE CELLING \$ AT SON DUT ABOVE CELLING \$ AT SON DUT ABOVE CELLING \$ AND DEPACK \$ OCCUPANT AND THE SENSOR \$ OCCUP		ELECTRICAL LEGEND
SO WALL MOUNTED OCCUPANCY SENSOR SO WALL MOUNTED OCCUPANCY SENSOR SEXT EMERGENCY LIGHT EMERGENCY LIGHT REM REMOTE HEAD WE WALL PACK LIGHT FIXTURE 2X2 LED TROFFER LIGHT FIXTURE 2X4 LED TROFFER LIGHT FIXTURE 2X5 LED TROFFER LIGHT FIXTURE 2X6 LED TROFFER LIGHT FIXTURE 2X7 LED TROFFER LIGHT FIXTURE 2X8 LED TROFFER LIGHT FIXTURE 2X9	SYMBOL	DESCRIPTION
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EXTENSION DE LIGHT EMERGENCY LIGHT REMOTE HEAD WITH REMOTE HEAD WALL PACK LIGHT FIXTURE 2XZ LED TROFFER LIGHT FIXTURE 2XZ-LED TROFFER LIGHT FIXTURE 2XZ-LED TROFFER LIGHT FIXTURE EXHAUST FAN THERMOSTAT MDP MAIN DISTRIBUTION PANEL PP_ POWER PANEL '_' TXTI TRANSFORMER BC BOX 8.1' CONDUIT ABOVE CEILING ATSI AUTOMATIC TRANSFER SWITCH WITSI MANUAL TRANSFER SWITCH DEP POWER PACK CH 120V DUPLEX RECEPTACLE GFI CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER ACG CH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITWEATHERPROOF INJUSE COVER FLOOR MOUNTED QUAD RECEPTACLE WITWOCCHDATA (DUAL DATA BOVE CEILING GRID) CELLING MOUNTED QUAD RECEPTACLE WITWOCCHDATA (DUAL DATA BOVE CEILING GRID) CELLING MOUNTED WIRELESS ACCESS POINT WIT POWER OVER ETHERNET (BOX 8. 34" EMT CONDUIT ABOVE CEILING GRID) CELLING MOUNTED WIRELESS ACCESS POINT WITPOWER OVER ETHERNET (BOX 8. 34" EMT CONDUIT ABOVE CEILING GRID) CELLING MOUNTED WIRELESS ACCESS POINT WITPOWER OVER ETHERNET (BOX 8. 34" EMT CONDUIT ABOVE CEILING GRID) TO ONTROL TRANSFORMEN 120V INJUST, COOR		WALL MOUNTED OCCUPANCY SENSOR
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EXALLED TROFFER LIGHT FIXTURE EXHAUST FAN THERMOSTAT MOP MAIN DISTRIBUTION PANEL PP_ POWER PANEL'_' TX1 TRANSFORMER BC BOX & 1+ CONDUIT ABOVE CEILING ATS AUTOMATIC TRANSFER SWITCH MTS MANUAL TRANSFER SWITCH MTS MANUAL TRANSFER SWITCH PP POWER PACK GFI GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WP GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WP GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER TO ON MOUNTED ON STANLESS STEEL COVER) FLOOR MOUNTED GRID DUPLEX RECEPTACLE W/ VOICE/DATA (DUAL DATA DROP, BOX & 34* EMT CONDUIT IN WALL TABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 34* EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 34* EMT CONDUIT ABOVE CEILING WERE ETHERNET (BOX & 34* EMT CONDUIT ABOVE CEILING DUPLEX RECEPTACLE W/ (MOUNTED UNDER RESK) CONTROL TRANSFORMER 120* INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER RESK) DOOR ENTRY - CARD SWIPE JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNTED GRID AND ART	WP	WALL PACK LIGHT FIXTURE
EXHAUST FAN EXHAUST FAN THERMOSTAT MDP MAND DISTRIBUTION PANEL PP		2'X2' LED TROFFER LIGHT FIXTURE
EXHAUST FAN THERMOSTAT MDP MAIN DISTRIBUTION PANEL PP		2'X4' LED TROFFER LIGHT FIXTURE
MDP	Ø	EXHAUST FAN
PP_ POWER PANEL '_' ITXI TRANSFORMER BC BOX & 1" CONDUIT ABOVE CEILING ATS AUTOMATIC TRANSFER SWITCH MTS MANUAL TRANSFER SWITCH PP POWER PACK ☐ 120V DUPLEX RECEPTACLE GFI GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WP GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACC GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACC GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WINTERPROOF IN-USE COVER ACT INTERPROOF IN-USE COVER ACC GROUND FAULT INTERPROOF IN-USE COVER ACT INTERPROOF IN-USE COVER ACT INTERPROOF IN-USE COVER ACT INTERPROOF IN-USE COVER IN-USE COVER ACT INTERPROOF IN-USE COVER IN-USE COVER IN-USE COVER ACT INTERPROOF IN-USE COVER IN-USE COVER IN-USE COVER ACT INTERPROOF IN-USE COVER		EXHAUST FAN THERMOSTAT
TXT TRANSFORMER BC BOX & 1° CONDUIT ABOVE CEILING ATS AUTOMATIC TRANSFER SWITCH MTS MANUAL TRANSFER SWITCH PP POWER PACK ☐ 1200 DUPLEX RECEPTACLE GFI ☐ GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/WEATHERPROOF IN-USE COVER ACG ☐ GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/WEATHERPROOF IN-USE COVER ACG ☐ GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/WEATHERPROOF IN-USE COVER L6-30R ☐ 30 AMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE W/WEATHERPROOF IN-USE COVER L6-30R ☐ JOAMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE W/WEATHERPROOF IN-USE COVER CFI ☐ QUAD RECEPTACLE GFI ☐ PLOOR MOUNTED GFI DUPLEX RECEPTACLE (PLASTIC FLOOR BOX W/S STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE W/VOICE/DATA (DUAL DATA DROP & PLASTIC FLOOR BOX W/S STAINLESS STEEL COVER) VOICE/ DATA (DUAL DATA DROP, BOX & 34° EMT CONDUIT IN WALL TA BOVE CEILING GRID) © CEILING MOUNTED WIRELESS ACCESS POINT W/POWER OVER ETHERNET (BOX & 34° EMT CONDUIT ABOVE CEILING) © CEILING MOUNTED WIRELESS ACCESS POINT W/POWER OVER ETHERNET (BOX & 34° EMT CONDUIT ABOVE CEILING) © DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CT CONTROL TRANSFORMER 120/ INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE DOOR ENTRY - CARD SWIPE JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLOOR MOUNTED GFI QUAD PACECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/ ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	MDP	MAIN DISTRIBUTION PANEL
BOX & 1° CONDUIT ABOVE CEILING ATS AUTOMATIC TRANSFER SWITCH MTS MANUAL TRANSFER SWITCH POWER PACK CHAPTER SWITCH GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WITCH WEATHERPROOF INJUSE COVER ACG CHAPTER SWITCH SWI	PP_	POWER PANEL ''
ATS AUTOMATIC TRANSFER SWITCH MTS MANUAL TRANSFER SWITCH POWER PACK □ 120V DUPLEX RECEPTACLE GFI □ GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WP □ GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG □ GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER L5-30R □ 30 AMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE W/ WEATHERPROOF IN-USE COVER L5-30R □ 10 AMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE W/ WEATHERPROOF IN-USE COVER L5-30R □ 01 AMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE W/ WEATHERPROOF IN-USE COVER L5-30R □ 10 AMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE W/ (INSTALLED 80° ABOVE FINISHED FLOOR) FLOOR MOUNTED GFI DUPLEX RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE W/ VOICE/DATA (DUAL DATA DROP & PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) VOICE/ DATA (DUAL DATA DROP, BOX & 34° EMT CONDUIT IN WALL TA DROP & PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) CEILING DUAL DATA DROP (BOX & 34° EMT CONDUIT ABOVE CEILING) © CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 34° EMT CONDUIT ABOVE CEILING) © DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE © PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) © CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE © ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) 3 DOOR ENTRY - CARD SWIPE JINCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING) FLOOR MOUNTED OFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	TX1	TRANSFORMER
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PP POWER PACK T20V DUPLEX RECEPTACLE GFI GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WP GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WI WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WI WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WI WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WI WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WI WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WI WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WI WEATHERPROOF IN-USE COVER ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WI WEATHERPROOF IN-USE COVER ALLES ON A BAOVE FINISHED FLOORS AND PLASTIC FLOOR BOX WI STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE WI VOICE/DATA (DUAL DATA DROP BOX WI STAINLESS STEEL COVER) CEILING MOUNTED QUAD RECEPTACLE WI VOICE/DATA (DUAL DATA BOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT WI POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WIRELESS ACCESS POINT WI POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WIRELESS ACCESS POINT WI POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WIRELESS ACCESS POINT WI POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WIRELESS ACCESS POINT WI POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT WI POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT WI POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT WI POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING CEILING MOUNTED WIRELS ACCESS TO AND	ATS	AUTOMATIC TRANSFER SWITCH
## T20V DUPLEX RECEPTACLE GFI	MTS	MANUAL TRANSFER SWITCH
GFI GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE WIND FAULT INTERRUPTER DUPLEX RECEPTACLE (INSTALLED 80° ABOVE FINISHED FLOOR) GET ON AMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE (INSTALLED 80° ABOVE FINISHED FLOOR) FLOOR MOUNTED QUAD RECEPTACLE WIND FOR LOCKING RECEPTACLE (PLASTIC FLOOR BOX WIND STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE WIND FOR LOOP AND ADAPT ADROP APLASTIC FLOOR BOX WIND STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE WIND FOR DOUBLIT IN WALL TO ABOVE CEILING GRID) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING) CEILING MOUNTED WINELESS ACCESS POINT WIND FOWER OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING OVER) TO DOOR ENTRY - CARD SWIP ETHERNET OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEILING OVER ETHERNET (BOX 8 3/4° EMT CONDUIT ABOVE CEI	PP	POWER PACK
WP ← GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER ACG ← GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER L5-30R ← 30 AMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE (INSTALLED 80° ABOVE FINISHED FLOOR) GUAD RECEPTACLE FLOOR MOUNTED GFI DUPLEX RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE W/ VOICE/DATA (DUAL DATA DROP & PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) VOICE/ DATA (DUAL DATA DROP, BOX & 3/4° EMT CONDUIT IN WALL TABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 3/4° EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 3/4° EMT CONDUIT ABOVE CEILING) DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE P USH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CT CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE CJB ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING) FLOOR MOUNTED STAINLESS STEEL COVER) FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/ ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	_	120V DUPLEX RECEPTACLE
ACG GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER L5-30R SIMPLES AND SIMPLE	GFI⊕	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE
L5-30R 30 AMP, NEMA L5-30R SINGLE, LOCKING RECEPTACLE (INSTALLED 80° ABOVE FINISHED FLOOR) QUAD RECEPTACLE FLOOR MOUNTED GFI DUPLEX RECEPTACLE (PLASTIC FLOOR BOX W STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE W VOICE/DATA (DUAL DATA DROP & PLASTIC FLOOR BOX W STAINLESS STEEL COVER) VOICE/ DATA (DUAL DATA DROP, BOX & 3/4" EMT CONDUIT IN WALL T ABOVE CEILING GRID) CEILING DUAL DATA DROP (BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W ELECTRIC DOOR STRIKE ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) COMPANDED TO THE COAD OF	$^{WP} \! \bigoplus \!$	
GFI	ACG _	
FLOOR MOUNTED GFI DUPLEX RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE W/ VOICE/DATA (DUAL DATA DROP & PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) VOICE/ DATA (DUAL DATA DROP, BOX & 3/4" EMT CONDUIT IN WALL TABOVE CEILING GRID) CEILING DUAL DATA DROP (BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JB JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	L5-30R ⊕	
FLOOR MOUNTED QUAD RECEPTACLE W VOICE/DATA (DUAL DATA DROP & PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED QUAD RECEPTACLE W VOICE/DATA (DUAL DATA DROP & PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) VOICE/ DATA (DUAL DATA DROP, BOX & 3/4" EMT CONDUIT IN WALL TABOVE CEILING GRID) CEILING DUAL DATA DROP (BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CT CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE DABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JB JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/		QUAD RECEPTACLE
VOICE/ DATA (DUAL DATA DROP, BOX & 3/4" EMT CONDUIT IN WALL TABOVE CEILING GRID) CEILING DUAL DATA DROP (BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	GFI 🔯	
ABOVE CEILING GRID) CEILING DUAL DATA DROP (BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JB JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT OISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	\Box	FLOOR MOUNTED QUAD RECEPTACLE W/ VOICE/DATA (DUAL DATA DROP & PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER)
(BOX & 3/4" EMT CONDUIT ABOVE CEILING GRID) CEILING MOUNTED WIRELESS ACCESS POINT W/ POWER OVER ETHERNET (BOX & 3/4" EMT CONDUIT ABOVE CEILING) DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE CJB ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	A	VOICE/ DATA (DUAL DATA DROP, BOX & 3/4" EMT CONDUIT IN WALL TO ABOVE CEILING GRID)
DOOR ENTRY - NUMBER PAD ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	\bigcirc	
ELECTRICAL DOOR STRIKE PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE CJB ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	AP	
PUSH BUTTON FOR DOOR ENTRY (MOUNTED UNDER DESK) CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JB JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	₽□	DOOR ENTRY - NUMBER PAD
CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE CJB ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/		ELECTRICAL DOOR STRIKE
CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/ ELECTRIC DOOR STRIKE ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JB JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	(P)	
HOT WATER CIRCULATOR PUMP TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JB JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/		CONTROL TRANSFORMER 120V INPUT, COORDINATE OUTPUT W/
TV OUTLET (RECEPTACLE, DUAL DATA & COAX) DOOR ENTRY - CARD SWIPE JB JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	CJB	ABOVE CEILING MOUNTED JUNCTION BOX FOR PROCEDURE LIGHT
DOOR ENTRY - CARD SWIPE JB JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLR FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	$\overline{\mathcal{O}}$	HOT WATER CIRCULATOR PUMP
JUNCTION BOX WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	TV	TV OUTLET (RECEPTACLE, DUAL DATA & COAX)
WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLR FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	 S□	DOOR ENTRY - CARD SWIPE
MOUNT DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	JB	JUNCTION BOX
DISCONNECT (NEMA 1 INSIDE BUILDING & NEMA 3R OUTSIDE BUILDING) FLR FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLR FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/		WALL MOUNTED TELEVISION W/ FULL MOTION ARTICULATING WALL MOUNT
FLR FLOOR MOUNTED GFI QUAD RECEPTACLE (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) FLR (PLASTIC FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/		DISCONNECT
FLR FLOOR MOUNTED VOICE/ DATA (PLASTIC FLOOR BOX W/ STAINLESS STEEL COVER) ALTRONIX AL1012ULACMCB, POWER SUPPLY/ CHARGES W/	FLR	FLOOR MOUNTED GFI QUAD RECEPTACLE
		FLOOR MOUNTED VOICE/ DATA
MULTI-OUTPUT ACCESS POWER CONTROLLER	PS	

	4511
	1PH 1P 2/C
H	3/C 3PH 4/C
PR	4/C 4W
OR	A/C A/E
	AAP AC
	ACC ADD ADJ
	ADC AF
	AFC
	AFF AFG
	AH AHJ AIC
	ALT AME
	AMF AP ARC
	ASC AT
	ATS AUT AV
	BAT
	BC BD BFF
	BIL BLD BPIF
	BRK
	BYP C
	CAB CAL
EPTACLE	CAP CAT CAT
PTACLE W/	CCF CCT
PTACLE W/	cd CD CF
EPTACLE	CF/0
DR)	CFE
	CHV CHV
ACLE COVER)	CTB CKT
ATA (DUAL DATA	CKT CLF CLG
EEL COVER)	CML COA CON
IDUIT IN WALL TO	COV
GRID)	CON CON
<u>, </u>	CPT CRI CT
POWER OVER CEILING)	CTV CU
	CU F
	DB DC DCP
	DEG DEG
TE OUTPUT W/	DEM DIAC DISC
	DIST DIST DJB
OCEDURE LIGHT	DJB
COAX)	
	SHEET
	E-001
CULATING WALL	E-101 E-201
: BUILDING)	E-301
CLE	
COVER)	
COVER)	
CHARGES W/ DLLER	
SED	

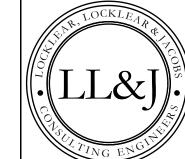
4W	TWO-CONDUCTOR THREE-CONDUCTOR THREE-PHASE	DN DPDT	DOWN DOUBLE POLE, DOUBLE THROW	MECH MG	MECHANICAL
3PH 4/C 4W			DOLLDLE DOLE DOLLDLE THDOW	MC	LOTOD OFFICE ATOR
4/C 4W	IUKEE-LUASE	DDCT		-	MOTOR GENERATOR
4W	FOUR-CONDUCTOR	DPST DR	DOUBLE POLE, SINGLE THROW DOOR CARD READER / PUSH TO EXIT	MH MIN	MANHOLE MINIMUM
A/C UNIT	FOUR-WIRE		BUTTON	MOCP	MAXIMUM OVERCURRENT
	AIR CONDITIONING UNIT	DRSW DS	DOOR SWITCH DISCONNECT SWITCH	MLO	PROTECTION MAIN LUGS ONLY
A/E OINIT	ARCHITECT/ENGINEER	DWG	DRAWING	MT	MOUNT
AAP	ALARM ANNUNCIATOR PANEL	20	Bru Willia	MTD	MOUNTED
AC	ALTERNATING CURRENT OR	EC	EMPTY CONDUIT	MTG	MOUNTING
	ARMORED CABLE	ED	ELECTRIC EXIT DEVICE	MTS	MANUAL TRANSFER SWITCH
ACC	ACCESSIBLE	EG	EQUIPMENT GROUND	MV	MEDIUM VOLTAGE
ADDL ADJ	ADDITIONAL ADJACENT, ADJOINING	EL ELEC	ELEVATION ELECTRIC OR ELECTRICAL	MVA MW	MEGAVOLT-AMPERE MEGAWATT MICROWAVE
ADO	AUTOMATIC DOOR OPENER	ELEV	ELECTRIC OR ELECTRICAL ELEVATOR	IVIVV	WEGAWATT WICKOWAVE
AF	AMPERE FRAME OR AMP FUSE	EMCP	EMERGENCY MONITORING	NA	NOT APPLICABLE
AFC	ABOVE FINISHED COUNTER,		CONTROL PANEL	NEC	NATIONAL ELECTRICAL CODE
	AUTOMATIC FREQUENCY CONTROL,	EMER	EMERGENCY	NEMA	NATIONAL ELECTRICAL
	OR AVAILABLE FAULT CURRENT	EMI	ELECTROMAGNETIC INTERFERENCE	NEUTODA	MANUFACTURERS ASSOCIATION
AFF AFG	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE	EMT ENCL	ELECTRICAL METALLIC TUBING ENCLOSURE	NEUT OR N NFPA	NEUTRAL NATIONAL FIRE PROTECTION
AH	AMPERE HOUR	EPO	EMERGENCY POWER OFF	NIIA	ASSOCIATION
AHJ	AUTHORITY HAVING JURISDICTION	EPRF	EXPLOSION PROOF	NIC	NOT IN CONTRACT
AIC	AMPERE INTERRUPTING CAPACITY	ESMT	EASEMENT	NL	NIGHT LIGHT
ALT	ALTERNATE	EWC	ELECTRIC WATER COOLER	NO	NORMALLY OPEN
AMB OR A	AMBIENT	EWH	ELECTRIC WATER HEATER	NS	NO SCALE
AMP AP	AMPERE WIRELESS ACCESS POINT	EXIST	EXISTING	NTS	NOT TO SCALE
ARCH	ARCHITECT	FA	FIRE ALARM	ОС	ON CENTER
ASC	AMPS SHORT CIRCUIT	FAAP	FIRE ALARM ANNUNCIATOR PANEL	OD	OUTSIDE DIAMETER
AT	AMPERE TRIP	FABL	FIRE ALARM BELL	OL	OVERLOAD
ATS	AUTOMATIC TRANSFER SWITCH	FABX	FIRE ALARM BOX		
AUTO	AUTOMATIC	FACP	FIRE ALARM CONTROL PANEL	P	POLE
AV	AUDIO VISUAL	FC	FOOTCANDLE	PA DB	PUBLIC ADDRESS
BAT	BATTERY	FI FIXT	FILM ILLUMINATOR FIXTURE	PB PBPU	PANELBOARD, PULL BOX, OR PUSHE PREFABRICATED BEDSIDE PATIENT
BC	BARE COPPER	FLA	FULL LOAD AMPS	PCB	POLYCHLORINATED BIPHENYL
BD	BOARD	FLEX	FLEXIBLE METALLIC CONDUIT	PEC	PHOTOELECTRIC CELL
BFF	BELOW FINISH FLOOR	FLT	FLOODLIGHT	PED	PEDESTAL
	BASIC INSULATION LEVEL	FLUOR	FLUORESCENT	PEND	PENDANT
	BUILDING	FLUOR FIX	FLUORESCENT FIXTURE	PF	POWER FACTOR
BPIP	BOILER PLANT INSTRUMENTATION PANEL	FOUTT FP	TELEPHONE FLOOR OUTLET FIRE PROTECTION	PH PNL	PHASE PANEL
BRKR	BREAKER	FP FT	FIRE PROTECTION FEET OR FOOT	POD	PANEL POWER OPERATED DAMPER
	BY PASS	FU SW	FUSED SWITCH	PT	POWER TRANSFER HINGE
		FVNR	FULL VOLTAGE NON-REVERSING	PTRV	POWER TYPE ROOF VENTILATION
С	CONDUIT	FVR	FULL VOLTAGE REVERSING	PVC	POLYVINYL CHLORIDE (PLASTIC)
CAB	CABINET	0.05.0::-	ODOLIND OR OFFICE ATOM	PWR	POWER
CALC CAP	CALCULATE CAPACITY	G OR GND GEN	GROUND OR GENERATOR GENERATOR	RCP	REFLECTED CEILING PLAN
CAP	CATALOG	GEN GFCI	GROUND FAULT CIRCUIT	REC	RECESSED
CATV	COMMUNITY ANTENNA TELEVISION	OI OI	INTERRUPTER	RECPT	RECESSED
CCR	CONTROL CONTACTOR	GTB	GROUND TERMINAL BOX	RGS	RIGID GALVANIZED STEEL
CCTV	CLOSED CIRCUIT TELEVISION			RM	ROOM
cd	CANDELA	HID	HIGH INTENSITY DISCHARGE	RMS	ROOT MEAN SQUARE
CD CF	CONSTRUCTION DOCUMENTS	HOA	HAND-OFF-AUTOMATIC	REQD	REQUIRED
CF/CI	CONTRACTOR FURNISHED/	HP HT	HORSEPOWER HEIGHT	SCC	SHORT CIRCUIT CAPACITY
31 7 31	CONTRACTOR FORMISHED/	HZ	HERTZ	SES	SERVICE ENTRANCE SECTION
CF/OI	CONTRACTOR FURNISHED/	: : -		SD	SMOKE DETECTOR
	OWNER INSTALLED	IESNA	ILLUMINATION ENGINEERING	SF	SQUARE FOOT (FEET)
CFE	CONTRACTOR FURNISHED		SOCIETY OF NORTH AMERICA	SHT	SHEET
OL IVA	EQUIPMENT	IMC	INTERMEDIATE METAL CONDUIT	SI	INTERNATIONAL SYSTEM OF UNITS
CHW CHWP	CHILLED WATER CHILLED WATER PUMP	INCAND IR	INCANDESCENT INFRARED	SPEC SPST	SPECIFICATION
CHWP	CEILING JUNCTION BOX	IK IWH	INSTANTANEOUS WATER HEATER	SURF	SINGLE POLE, SINGLE THROW SURFACE
CKT	CIRCUIT	1 V V I I		SW	SWITCH
CKT BRKR	CIRCUIT BREAKER	J-BOX	JUNCTION BOX	SWBD	SWITCHBOARD
CLF	CURRENT LIMITING FUSE			SWGR	SWITCHGEAR
CLG	CEILING	kV	KILOVOLT	T 0	TIME OF COL
CMU COAX	CONCRETE MASONRY UNIT COAX CABLE	kVA kVAH	KILOVOLT AMPERE KILOVOLT AMPERE PER HOUR	TC TEL	TIME CLOCK TELEPHONE
COAX	COAX CABLE COMMUNICATION	kVAH kVAR	KILOVOLT AMPERE PER HOUR KILOVOLT AMPERE REACTIVE	TP	TELEPHONE TWISTED PAIR
COMPT	COMPARTMENT	kW kW	KILOVOLT AMPERE REACTIVE KILOWATT	TPS	TWISTED PAIR TWISTED PAIR SHIELDED
CONC	CONCRETE	kWH	KILOWATT HOUR	TTB	TELEPHONE TERMINAL BOARD
CONT	CONTINUE	kWHM	KILOWATT HOUR METER	TV	TELEVISION
CONTR	CONTRACTOR			TYP	TYPICAL
COORD	CONTROL DOWER TRANSFORMER	LED	LIGHT EMITTING DIODE	LIED	LINDEDEL COR BUCT
CPT CRI	CONTROL POWER TRANSFORMER COLOR RENDERING INDEX	LF LM	LINEAR FEET (FOOT) LUMEN	UFD UGND	UNDERFLOOR DUCT UNDERGROUND
CRI	CURRENT TRANSFORMER	LM LP	LUMEN LIGHT POLE	UGND UL	UNDERGROUND UNDERWRITERS LABORATORY
CTV	CABLE TELEVISION	LPS	LOW PRESSURE SODIUM	UON	UNLESS OTHERWISE NOTED
CU	COPPER	LRA	LOCKED ROTOR AMPS	UPS	UNINTERRUPTIBLE POWER SUPPLY
CU FT	CUBIC FEET	LTCP	LOCAL TEMPERATURE CONTROL	UTIL	UTILITY
CUR	CURRENT		PANEL		VOLT
חם	DECIDEL OF DIRECT BURNA	LT	LIGHT	V	VOLT
	DECIBEL OR DIRECT BURIAL DIRECT CURRENT	LTG LTG PNL	LIGHTING LIGHTING PANEL	VA VAR	VOLT AMPERE VOLT AMPERE REACTIVE
	DIMMER CONTROL PANEL	LTNG	LIGHTNING PANEL LIGHTNING	VAR VFD	VARIABLE FREQUENCY DRIVE
	DEGREES CELSIUS	LV	LOW VOLTAGE	VOLT	VOLTAGE
DEG F	DEGREES FAHRENHEIT				
	DEMOLITION	MATV	MASTER ANTENNA TELEVISION	W	WATT
	DIAGRAM		SYSTEM	WH	WATER HEATER
	DISCONNECT	MAX	MAXIMUM	WP	WEATHERPROOF
-	DISTRIBUTION DISTRIBUTION PANEL	MC MCA	METAL-CLAD MINIMUM CIRCUIT AMPS	XFER	TRANSFER
-	DOOR JUNCTION BOX	MCA MCB	MAIN CIRCUIT BREAKER	XFER XFMR	TRANSFER TRANSFORMER
200	250110011011 DOX	IVIOD	III OII OOII DILLAILII	VI IAILY	TO WHO OTHER

ELECTRICAL ABBREVIATIONS

DRAWING INDEX					
SHEET TITLE	REV#	DATE			
ELECTRICAL NOTES LEGENDS AND ABBREVS	-				
ELECTRICAL POWER PLAN	-				

ELECTRICAL LIGHTING PLAN

ELECTRICAL DETAILS



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028880

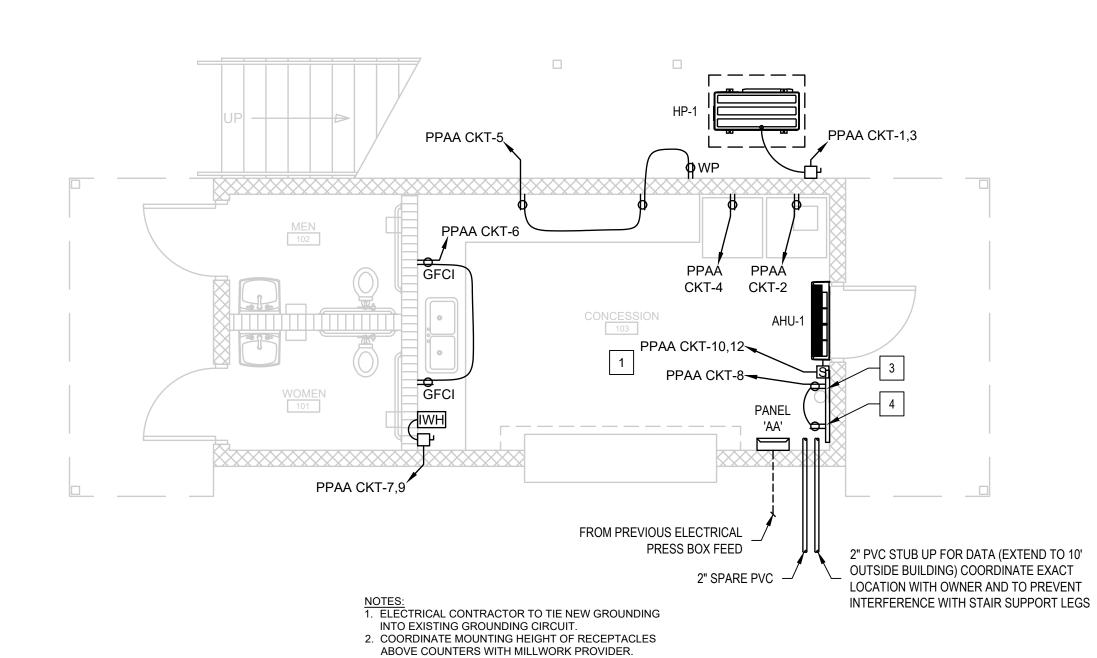
DRAWN BY: CKD CHECKED BY: RL SHEET TITLE ELECTRICAL NOTES

LEGENDS AND

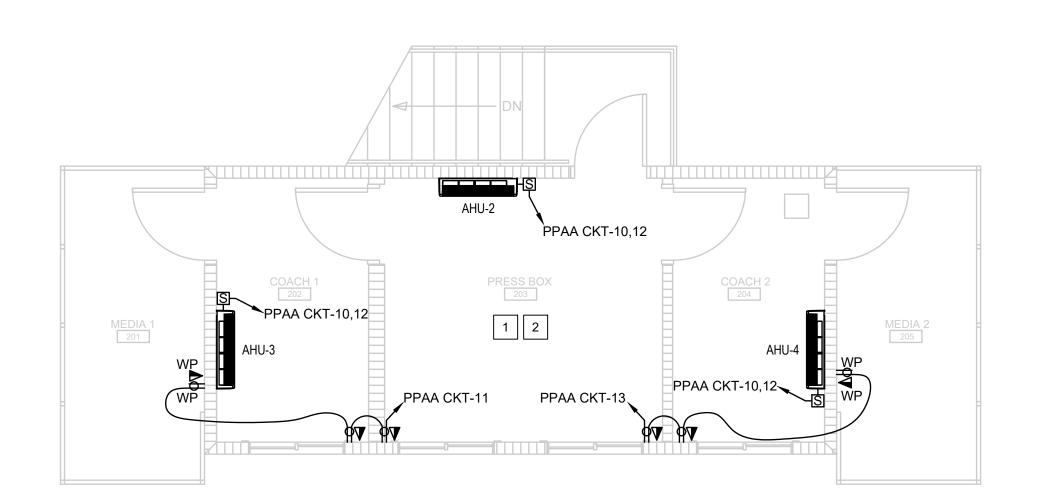
ABBREVS

PROJECT# 21-11110

HEET NUMBER E-001



\FIRST FLOOR ELECTRICAL POWER PLAN



SECOND FLOOR ELECTRICAL POWER PLAN

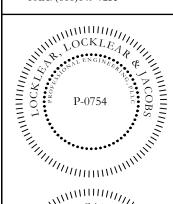
	ELECTRICAL SYMBOL LEGEND								
SYMBOL	DESCRIPTION								
=	120V DUPLEX RECEPTACLE								
wP	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE W/ WEATHERPROOF IN-USE COVER								
GFCI ←	GROUND FAULT INTERRUPTER DUPLEX RECEPTACLE								
A	DATA (DUAL DATA DROP, BOX AND 3/4" EMT CONDUIT IN WALL TO ABOVE CEILING)								
WP ▼	DATA (DUAL DATA DROP, BOX AND 3/4" EMT CONDUIT IN WALL TO ABOVE CEILING) W/ WEATHERPROOF IN-USE COVER								
	DISCONNECT (NEMA 1 INSIDE BUILDING AND NEMA 3R OUTSIDE BUILDING)								
	100A, SINGLE PHASE 208V, PANEL 'AA'								
S	MOTOR RATED SWITCH								
[IWH]	ELECTRIC INSTANTANEOUS WATER HEATER								

KEY NOTES:

- 1 OWNER TO PROVIDE AND INSTALL ALL DATA CABLES.
- 2 LINE SET(S) TO BE INSTALLED TIGHT AGAINST CEILING/WALL IN LINE SET COVER. LINE SET COVER TO CONTAIN ALL LINE SET(S), POWER, CONTROL, AND CONDENSATE. CONTRACTOR TO ENSURE LINE SET COVERS ARE ADEQUATELY SIZED.
- 3 3'X4' PAINTED FIRE RATED PLYWOOD COMM BOARD.
- EXTEND (1) 2" CONDUIT FROM COMM BOARD TO ABOVE SECOND FLOOR CEILING (ROUTE CONDUIT INSIDE BLOCK WALL UP THRU SECOND FLOOR FRAMED WALL).



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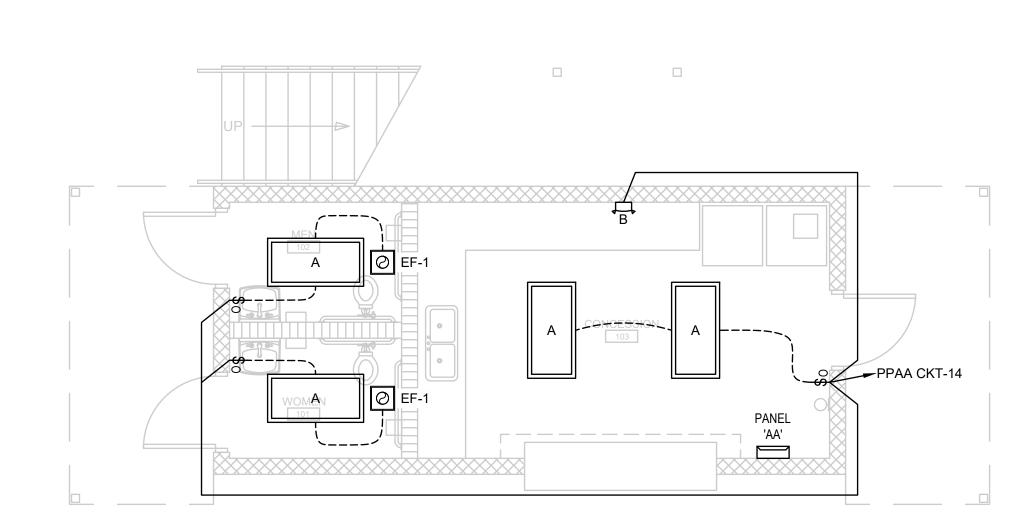


DATE: 5/9/2022 DRAWN BY: CKD CHECKED BY: RL

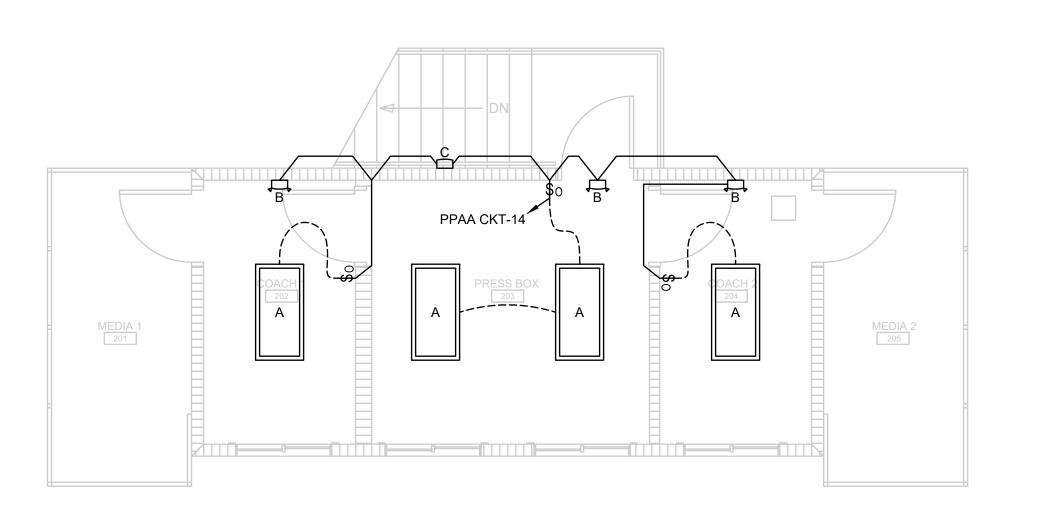
SHEET TITLE

ELECTRICAL POWER PLAN

SHEET NUMBER E-101



\FIRST FLOOR ELECTRICAL LIGHTING PLAN



SECOND FLOOR ELECTRICAL LIGHTING PLAN

LIGHT FIXTURE SCHEDULE							
TAG	DESCRIPTION	MOUNTING	VOLTS / WATTS	LUMENS	LAMP TYPE	MANUFACTURER	MODEL#
Α	2'X4' LED LIGHT FIXTURE	SURFACE	120V / 42W	4550	LED	COOPER	24FP4740C
В	EMERGENCY LIGHT	WALL	120V / 1W	N/A	LED	COOPER	CU2-LED
С	OUTDOOR EMERGENCY LIGHT	WALL	120V / 2W	300	LED	COOPER	SELDWA50

NOTES:

1. LIGHT FIXTURES TO BE MANUFACTURED BY COOPER, LITHONIA OR METALUX.

2. ALL LIGHTING FIXTURES SHALL BE U.L. LISTED.

3. VERIFY ALL MOUNTING HEIGHTS WITH PRIOR TO ROUGH-IN.

4. COORDINATE ALL COLORS/FINISH OPTIONS OF LIGHT FIXTURES WITH THE OWNER/ENGINEER PRIOR TO PURCHASING.

5. ALL LIGHTING FIXTURES INDICATED WITHIN THE LIGHTING FIXTURE SCHEDULE BE PROVIDED WITH ALL REQUIRED MOUNTING HARDWARE, CONNECTORS AND ANY OTHER NEEDED FIXTURE OPTIONS FOR A COMPLETE AND OPERATIONAL INSTALLATION AS INTENDED ON THE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED COMPONENTS AT NO ADDITIONAL COST TO THE OWNER.

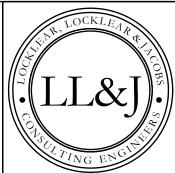
6. THE E.C. SHALL COORDINATE CLOSELY WITH THE ENGINEER AND/OR GENERAL CONTRACTOR FOR THE DESIRED MOUNTING METHODS OF THE LED LIGHT FIXTURES IN ALL LOCATIONS OF THE BUILDING AS SHOWN ON THE PLANS. THE E.C. SHALL COORDINATE AND VERIFY THE EXACT LOCATIONS FOR THE POWER SUPPLY (LOW-VOLTAGE TRANSFORMERS) WITH THE ENGINEER AND/OR GENERAL CONTRACTOR

PRIOR TO ROUGH-IN. CONTRACTOR SHALL PROVIDE ALL MOUNTING HARDWARE AS REQUIRED TO MOUNT THESE FIXTURES AS DIRECTED BY THE ENGINEER. 7. ALL LIGHT SWITCH COVER PLATES TO BE STAINLESS STEEL.

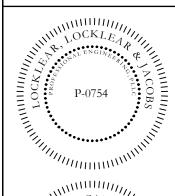
ELECTRICAL SYMBOL LEGEN						
SYMBOL	DESCRIPTION					
\$ ₀	WALL MOUNTED OCCUPANCY SEN					
	100A, SINGLE PHASE 208V, PANEL					
	OUTDOOR EMERGENCY LIGHT					
	EMERGENCY LIGHT					
	2'X4' LED LIGHT FIXTURE					
0	EXHAUST FAN					

TYPICAL DEVICE MOUNTING	HEIGHT
RECEPTACLES— LIGHT SWITCHES— EXIT SIGNS— EMERGENCY LIGHTS— DATA OUTLETS—	48" AFF
NOTES: 1. DIMENSIONS ARE TO DEVICE CENTERLINE OTHERWISE NOTED. 2. REFER TO POWER SYMBOLS FOR ADDITION MOUNTING REQUIREMENTS. 3. WHERE SHOWN WALL MOUNTED, EXIT SIGN MOUNTED 8'-0" AFF OR 1' ABOVE DOOR TO	DNAL DEVICE

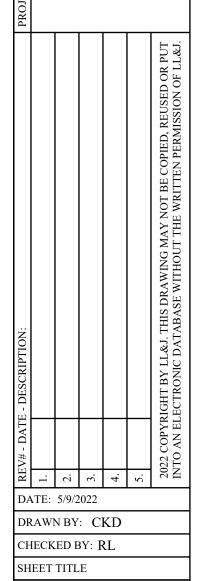
LINE OF FIXTURE UNLESS OTHERWISE NOTED.



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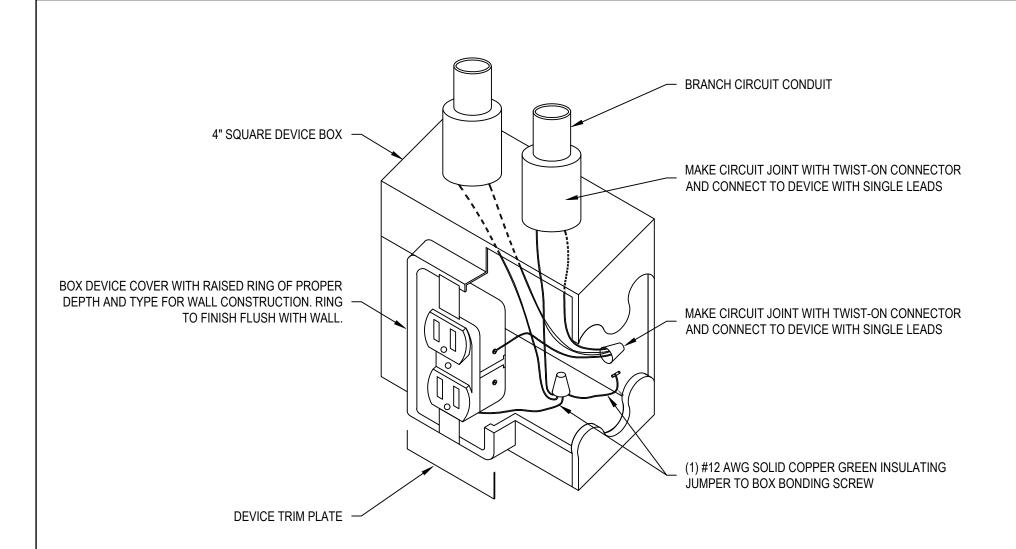


ELECTRICAL LIGHTING PLAN

E-201

PROJECT# 21-11110

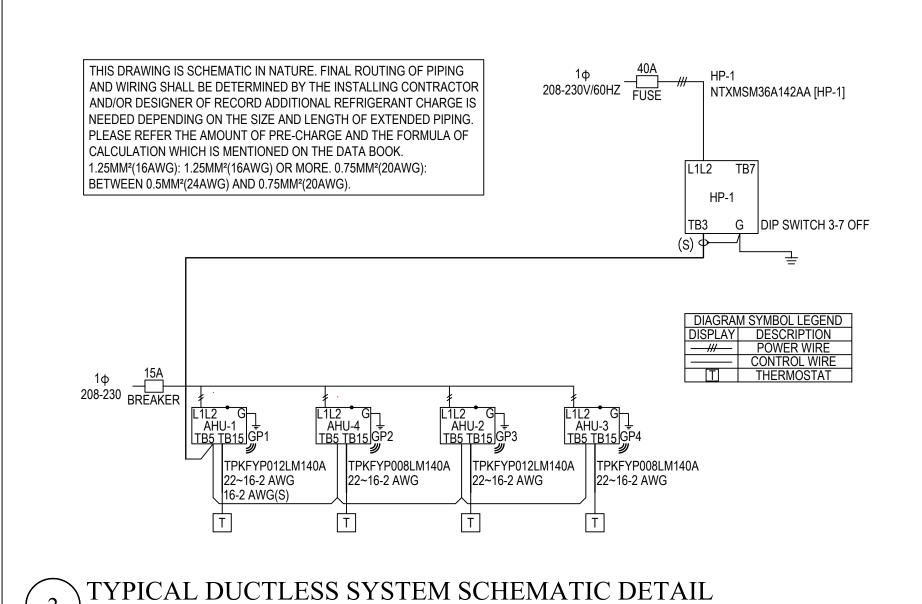
SHEET NUMBER

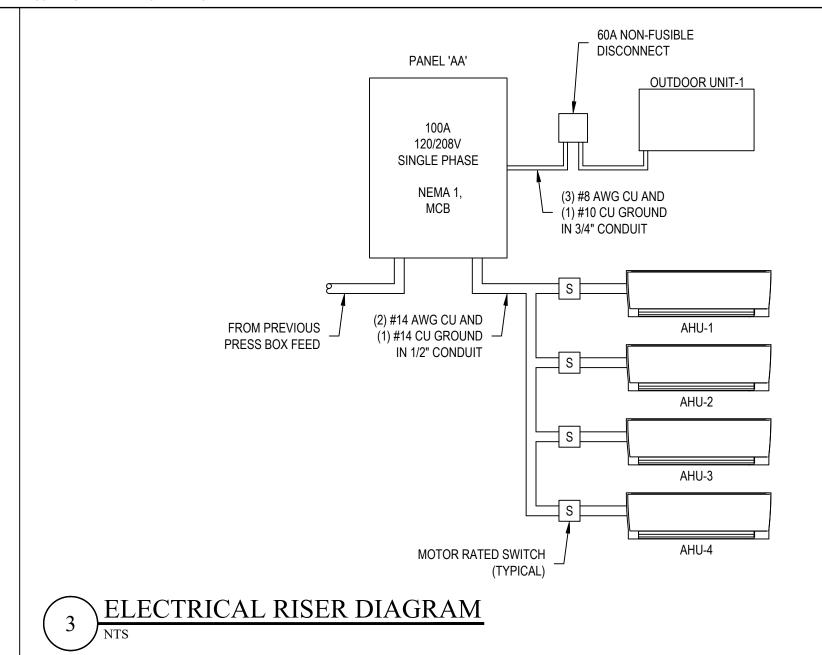


RECEPTACLE GROUNDING DETAIL

MIN. PANEL 'AA'				l	AMP IASE				GROUND BAR	MIN.		
WIRE PANEL A		AA	A.		MAIN BREAKER					NEUTRAL	WRE	WIRE
SIZE	DESCRIPTION	Watts	Bkr.	#	Leg 'A'	Leg 'B'	#	Bkr.	Watts	DESCRIPTION	SIZE	
8	HEAT PUMP-1	3640	— 40 L	1	4140		2	20	500	REFRIGERA TOR	12	
	TILAT FOWE-T	3640		3		4140	4	20	500	REFRIGERA TOR	12	
12	FIRST FLOOR RECP.	360	20	5	720		6	20	360	FIRST FLOOR RECP.	12	
8	WATER HEATER	4160	40	7		4520	8	20	360	COMM BOARD	12	
	WATERIER	4160	40	9	4160.5		10 15 0.5	0.5	AIR HANDLER UNITS	12		
12	SECOND FLOOR RECP.	540	20	11		540.5	12	10	0.5	AIRTANDLLIKONIO	12	
12	SECOND FLOOR RECP.	540	20	13	915		14	20	375	LIGHTS	12	
				15		0	16					
				17	0		18					
				19		0	20					
				21	0		22					
				23		0	24					
		TOT	AL Watts	Leg 'A'	9935.5							
		101	AL Watts	Leg B		9200.5		101	tal Watts	19136		
BUIL							LDING TOTAL LOADS					
TOTAL Watts Leg 'A' 9935.5						SERVICE ENTRAIN						
					тот	AL Watts L	eg 'B'		9201	CONDUCTOR S		
										GROUND S		
										CONDUIT S	ZE 1 1/2 I	NCH
						TOTAL W		191				
						TOTAL A	MPS	53.	12			

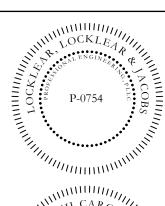








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SEAL 028880

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> ELECTRICAL **DETAILS**

SHEET NUMBER E-301 PROJECT# 21-11110