

# 03/15/2024

# 100% Construction Documents

	GENERAL DRAWINGS
Sheet Number	Sheet Name
G1.0	COVER
<mark>G2.0</mark>	CODE ANALYSIS
<mark>G2.1</mark>	CODE PLAN

AR	CHITECTURAL DRAWINGS
Sheet Number	Sheet Name
A0.1	ABBREVIATIONS, LEGENDS, ASSEMBLIES, GENERAL NOTES
<mark>A1.0</mark>	SITE PLAN
<mark>A2.0</mark>	DEMOLITION PLAN
<mark>A2.1</mark>	NEW CONSTRUCTION PLAN
A4.0	EXTERIOR ELEVATION, SECTIONS, & DETAILS
<mark>A4.1</mark>	EXTERIOR ENLARGED ELEVATION & DETAILS
A9.0	ENLARGED FLOOR PLANS & VERTICAL CIRCULATION
<mark>A10.0</mark>	ROOM FINISH & MATERIAL SCHEDULE
<mark>A10.1</mark>	FINISH PLAN
<mark>A10.2</mark>	INTERIOR ELEVATIONS
<mark>A10.3</mark>	INTERIOR ELEVATIONS
<mark>A10.4</mark>	INTERIOR ELEVATIONS
<mark>A10.5</mark>	INTERIOR SECTIONS
<mark>A10.6</mark>	INTERIOR SECTIONS & DETAILS
<mark>A11.1</mark>	DOOR SCHEDULE & DETAILS
<mark>A11.2</mark>	GLAZING TYPES & DETAILS
<mark>A12.1</mark>	REFLECTED CEILING PLAN
A12.2	REFLECTED CEILING PLAN - DIMENSIONED
A12.3	RCP DETAILS
A13.0	DESIGN ALTERNATES
<mark>A13.1</mark>	DESIGN ALTERNATES
A13.2	DESIGN ALTERNATE DETAILS
A14.1	FFE FLOOR PLAN
AQ1.0	FOOD SERVICE EQUIPMENT ARRANGEMENT PLAN



# ARCHITECTURAL

STUDIO ARCHITECTURE, P.C. 816 N. Walker Ave., Suite 100 Oklahoma City, Oklahoma 73102 TEL: 405-605-1044

### STRUCTURAL

# **360 ENGINEERING GROUP**

800 Dean A McGee Ave. Oklahoma City, Oklahoma 73106 TEL: 405-256-4861 ext. 306 MECHANICAL, ELECTRICAL, & PLUMBING **GUERNSEY** 5555 N. Grand Blvd. Oklahoma City, Oklahoma 73112 TEL: 405-416-83112

# Oklahoma Panhandle State University Student Union Renovation

# 323 Eagle Blvd. Goodwell, OK 73939

DRAWINGS
----------

Sheet Name

M	ECHANICAL DRAWINGS
Sheet Number	Sheet Name
-001	HVAC LEGEND
D101	HVAC DEMOLITION PLAN
-101	HVAC FLOOR PLAN
<mark>-102</mark>	MEZZANINE HVAC PLAN
<mark>-103</mark>	HVAC ROOF PLAN
<mark>-501</mark>	HVAC DETAILS
-601	HVAC SCHEDULES
-901	ALTERNATES

	PLUMBING DRAWINGS	
Sheet Number	Sheet Name	
P-001	PLUMBING LEGEND	
PD101	PLUMBING DEMOLITION PLAN	
P-101	PLUMBING FLOOR PLAN	
P-401	PLUMBING ENLARGED PLAN AND SCHEDULES	

Sheet Nur
E-001
ED101
EL101
EP101
EP102
EP103
T-101
<mark>E-401</mark>
E-501
<mark>E-601</mark>
E-602
E-603

FIRE PROTECTION

**RATED ENGINEERING** 609 S. Kelly Ave., Suite H2 Edmond, Oklahoma 73003 PROJECT LOCATION:



E	LECTRICAL DRAWINGS
er	Sheet Name
	ELECTRICAL ABBREVIATIONS, LEGENDS, AND NOTES
	DEMOLITION PLAN
	LIGHTING PLAN
	POWER PLAN
	MECHANICAL POWER PLAN
	POWER PLAN - ROOF
	TELECOMMUNICATIONS PLAN
	DESIGN ALTERNATES
	ELECTRICAL DETAILS
	ONE-LINE AND SCHEDULES
	PANEL SCHEDULES
	PANEL SCHEDULES

FIRE	PROTECTION DRAWINGS
Sheet Number	Sheet Name
A001	FIRE ALARM NOTES
<mark>A101</mark>	FIRE ALARM PLANS
A500	FIRE ALARM DETAILS
X001	FIRE SPRINKLER NOTES
X101	FIRE SPRINKLER PLANS
X500	FIRE SPRINKLER DETAILS



NAME OF PROJECT	OPSU Student Unio	n Renovation	BASIC BUILDING DATA							
ADDRESS	323 W Eagle Blvd.,	Goodwell, OK. 73939			TYPE OF	TYPE OF				
PROPOSED USE	Mixed Use, Unsepa	rated			CONSTRUCTION	CONSTRUCTION				
OWNER/AGENT	Oklahoma Panhand	lle State University				TYPE 2B				
PHONE NUMBER	580-349-2611						ACTUAL		ALLOWABLE	("A" Occupai Controls)
AUTHORITY HAVING JURISDICTION	Jerry Petre, Oklaho	ma State Fire Marshal			BUILDING HEIGHT	IBC 504.3	20	FT	75	FT
					NUMBER OF STORIES	IBC 504.4	1	Stories	3	Stories
LEAD DESIGN PROFESSIONAL	Studio Architecture	, P.C.			BUILDING AREA	IBC 506	25,699	SF	69,484	SF
	CONTACT	FIRM	PHONE	EMAIL	TYPE COMBUSTABIL-ITY	TYPE 2B				
ARCHITECTURAL	Alanna Brehm	Studio Architecture, P.C.	405-605-1044	abrehm@studioarc.com	RATING					
STRUCTURAL	Ricardo Montoya	360 Engineering Group	405-256-4861	rmontoya@360enggroup.com						
MECHANICAL	Allen Jones	Guernsey	405-416-8312	allen.jones@guernsey.us	SPRINKLERS	YES	Room 41 (A/\	/ & I.T.) not sprinl	lered. 2 HR fire bar	rier provided
PLUMBING	Allen Jones	Guernsey	405-416-8312	allen.jones@guernsey.us	STANDPIPES	NO				
ELECTRICAL	Tristan Lucy	Guernsey	405-416-8312	tristan.lucy@guernsey.us	ТҮРЕ	-				
FIRE PROTECTION	Gus Gagliardi	Rated Engineering	405-921-1859	gus@ratedengineering.com	CLASS	-				
INTERIOR DESIGN	Shelly Stephens	Studio Architecture, P.C.	405-605-1044	<u>sstephens@studioarc.com</u>	FIRE DISTRICT	NO				
					FLOOD HAZARD AREA	NO				
APPLICABLE DESIGN CRITERIA	EDITION				BASEMENT	YES				
INTERNATIONAL BUILDING CODE	2018									
INTERNATIONAL EXIST. BUILDING CODE	2018				LIFE SAFETY REQUIREN	/IENTS			INCLUDED Y/N	
INTERNATIONAL FIRE CODE	2018				AUTOMATIC EMERGEN	ICY LIGHTING	G (1008)		YES	
INTERNATIONAL FUEL GAS CODE	2018				EXIT SIGNS (1013)				YES	
INTERNATIONAL MECHANICAL CODE	2018				FIRE ALARM (907, NFP)	A 72)			YES	
INTERNATIONAL PLUMBING CODE	2018					ON (907)			YES	
NATIONAL ELECTRICAL CODE	2020				SMOKE DETECTION SYS	STEMS (907)			YES	
ICC/ANSI	2017				PANIC HARDWARE (10	10.1.10)			YES	
·					LIFE SAFETY SYSTEMS (	GENERATOR	(2702)		NO	
ADDITIONAL DESIGN CRITERIA	EDITION									
NFPA 10	2010				LIFE SAFETY PLAN REQ	UIREMENTS	(SEE SHEET G2	2.1)	COMPLETED Y/N	
NEPA 13	2019				FIRE AND/OR SMOKE R	ATED WALL		<b>,</b>	VFS	
NEPA 24	2013								N/A	
NEDA 20	2013							ואר		
	2010						. LINE LOCATIO			
NFPA 33	2018					WITHIN 30"			YES	
NFPA 70	2017				OCCUPANCY TYPES FO	R EACH AREA	A (OCC. LOAD P	'LAN)	YES	
NFPA 72	2016				OCCUPANT LOADS FOR	R EACH AREA			YES	
NFPA 220	2018				EXIT ACCESS TRAVEL D	ISTANCES			YES	
AMERICANS WITH DISABILITIES ACT	2010				COMMON PATH OF TR	AVEL DISTAN	ICES		YES	
					DEAD END CORRIDOR I	ENGTHS			YES	
					CLEAR EXIT WIDTHS (D	OORS/HALLV	WAYS/STAIRS/E	TC)	YES	
					LOCATION OF PANIC H	ARDWARE			YES	
					LOCATION OF DELAYED	EGRESS LOO	CKS		N/A	
					LOCATION OF ELECTRO	MAGNETIC	EGRESS LOCKS		N/A	
					LOCATION OF HOLD-OI	PEN DEVICES	;		N/A	
						NCY ESCAPE	WINDOWS		N/A	
							RFA		N/A	
								NT		
								in I	IN/A	
					PORTABLE FIRE EXTING	SUISHER LOC	ATIONS		YES	

NOTE ANY CODE EXCEPTIONS

YES

				SUMMARY								
			BUI	LDING AREA					E	BUILDING OCCU	JPANCY	
	FLOOR	EXIST. (SF)	NEW (SF)	SUBTOTAL				BASEMENT				
	BASEMENT	1631		1631				OCCUPANCY TYPE	OCC. LOAD	NET/GROSS	AREA	OCCUPANT
	LEVEL 1	24844	-776	24068					FACTOR			LOAD
	TOTALS	26475	-776	25699				ACC. STORAGE AREAS, MECH, EQUIP	300	GROSS	1631	5.44
										BASE	MENT TOTAL	6
	PRIMARY OCCUPANCY	Mixed Use										
ľ		Unseparated						LEVEL 1		1		
		1						OCCUPANCY TYPE	OCC. LOAD	NET/GROSS	AREA	OCCUPANT
	OCCUPANCY GROUPS	Assembly (A-3)	Mercantile	Assembly (A-2)					FACTOR			LUAD
		Business	Storage (S-2)					ACC. STORAGE AREAS, MECH, EQUIP	300	GROSS	1922	6.41
								ASSEMBLY - UNCONCENTRATED (TABLES	15	NET	10627	708.47
1			D1111 - 111 -		•				100	GROSS	3976	39.76
		<b>T</b>							200	GROSS	2963	14.82
		107/	AL ALLOWABLE A	KEA (Aa) = [At + (l	vs x II)] x Sa*				60	GROSS	1524	25.40
				FRONTAG	E INCRFASF					LE	VELTIOIAL	/95
	BUILDING STORY					NUMBER OF	TOTAL ALLOWABLE		MEAN	IS OF EGRESS (I	BC 1006.3.2	)
	PER FLOOR IBC 506.2)		IBC 506.2)	) AREA (' <i>NS' PER</i>   1	FRONTAGE (If)	STORIES (Sa)*	AREA		BASEMENT		LEVEL 1	
	BASEMENT	A2 SM	28,500.00	9,500.00	65.70%	1	34,741.90		REQ'D	PROVIDED	REQ'D	PROVIDED
	LEVEL 1	A2 SM	28,500.00	9,500.00	65.70%	1	34,741.90	TOTAL EGRESS WIDTH @ STAIR (IN.)	48	72	159	
						TOTAL	69,483.80	TOTAL EGRESS WIDTH @ OTHER (IN.)	44	N/A	120	REF. PLAN
								TOTAL EGRESS WIDTH @ DOORS (IN.)	32	78	120	1
		FRONTAG	E INCREASE PERC	ENTAGE (IBC 506	.3.3, Equation 5-5	;)				1		
			(If = [(F/	′P-0.25] x W)/30)					REOLIBED			
	GROSS BUILDING	BUILDING PFF	RIMETER THAT	WIDTH OF PU	BLIC WAY (IBC				(FT)	(FT)		
	PERIMETER (P)(FT)	FRONTS PUBL	IC WAY (F) (FT)	506.3.2, Equ	ation 5-4)(FT)	TOTAL (If)		COMMON PATH OF TRAVEL (IBC 1006.2.1)	75			
	710	644		30		65.70%		DEAD END CORRIDORS (1020.4)	50	REF. PLAN		
								EXIT ACCESS TRAVEL DISTANCE (1017.2)	250	1		
		МІ	XED USE OCCUP#	ANCY (IBC 508)							1	
	SEPARATION	0 HR.						SPACES WITH ONE EXIT OR EXIT ACCESS (IB	C 1006.2.1)		1	
	INCIDENTAL USE SEPAR	ATION	IBC 509	]				OCCUPANCY TYPE	MAX. OL			
	ACCESSORY OCCUPANC	IES SEPARATION	IBC 508.2					A, E, M, B, F, U	49			
			IBC 508.2.4	No separation is	required between	accessory occupa	ancies and the	H-1, H-2, H-3	3		1	
				main occupancy				H-4, H-5, I-1, I-2, I-3, I-4, R-1	10		1	
								R-2, R-3, R-4	20		1	
								S	29			
									1	1	1	
								INTERIOR FINISH REQUIREMENTS	BY OCCUPA	NCY (IBC 803.1	3)	
								OCCUPANCY TYPE		SPRINKLERED		1
									EXITS <sup>S</sup>	CORRIDORS	ROOMS <sup>S</sup>	1
								A1 & A2	В	В	С	
								B, E, M, R1	В	с	С	

A1 & A2	В	В	С			
B, E, M, R1	В	с	С			
Р	LUMBING FI	TURE REQUIR	EMENTS (IBC	2902.1)		
	WATER	CLOSETS	LAVA	TORIES	SHOWERS	
OCCOPANCY TYPE	MEN	WOMEN	MEN	WOMEN	OR TUBS	DRINK FINS.
ASSEMBLY (banquet, food court, and kitchen)	4.09	4.09	1.54	1.54	-	1.23
ASSEMBLY (lecture)	0.38	0.73	0.24	0.24	-	0.19
BUSINESS	0.80	0.80	0.50	0.50	-	0.40
MERCANTILE	0.03	0.03	0.02	0.02	-	0.03
STORAGE	0.03	0.03	0.03	0.03	-	0.01
TOTAL REQUIRED	6	6	3	3	-	2

6 6

TOTAL PROVIDED

3 3

	REQUIREM	ENTS FOR BUI	LDING ELEME	NTS (IBC CHA	PTER 6)
BUILDING ELEMENT	REQUIRED RATING	PROVIDED RATING	UL ASSEMBLY DESIGN NO.	UL PENETRATIO N DESIGN NO.	UL JOIN DESIGN N
PRIMARY STRUCTURAL FRAME	OHR	OHR			
BEARING WALLS					
EXTERIOR	OHR	OHR			
INTERIOR	OHR	OHR			
	NON	BEARING WA	LLS/PART.		
EXTERIOR	SEE TABL	E BELOW			
INTERIOR	OHR	OHR			
FLOOR CONSTRUCTION	OHR	OHR			
ROOF CONSTRUCTION	OHR	OHR			
FIRE-RESISTANCE RATIN	G REQ. FOR EX	T. WALLS BASE	D ON FIRE SEP	ARATION DISTA	NCE (IBC 6
DIRECTION AND SEPARATION DISTANCE	REQUIRED RATING	PROVIDED RATING	UL ASSEMBLY DESIGN NO.	UL PENETRATIO N DESIGN NO.	UL JOIN DESIGN N
NORTH (X FT.)	OHR	OHR			
EAST (X FT.)	OHR	OHR			
SOUTH (X FT.)	OHR	OHR			
WEST (X FT.)	OHR	OHR			
FIRE	AND SMOKE P	ROTECTION FE	ATURES (IBC CH	IAPTER 7)	
FEATURE	REQUIRED RATING	PROVIDED RATING	UL ASSEMB. DESIGN NO.	UL PENETRATIO N DESIGN NO.	UL JOIN DESIGN N
CORRIDOR RATING	OHR	OHR			
JIATI LINCLUSUKES	N/A	N/A			
EXIT/ELEVATOR	N/A	N/A N/A			
EXIT/ELEVATOR OTHER	N/A N/A N/A	N/A N/A N/A			
OTHER OCCUPANCY SEPARATION	N/A N/A N/A	N/A N/A N/A N/A			
EXIT/ELEVATOR OTHER OCCUPANCY SEPARATION VERTICAL	N/A N/A N/A N/A	N/A N/A N/A N/A			
EXIT/ELEVATOR OTHER OCCUPANCY SEPARATION VERTICAL HORIZONTAL	N/A N/A N/A N/A OHR	N/A N/A N/A N/A N/A OHR			
EXIT/ELEVATOR OTHER OCCUPANCY SEPARATION VERTICAL HORIZONTAL OPENINGS IN EXTERIOR FIRE RATED WALLS	N/A N/A N/A N/A OHR N/A	N/A N/A N/A N/A OHR N/A			
EXIT/ELEVATOR OTHER OCCUPANCY SEPARATION VERTICAL HORIZONTAL OPENINGS IN EXTERIOR FIRE RATED WALLS PARTY/FIRE WALL	N/A N/A N/A N/A OHR N/A	N/A N/A N/A N/A OHR N/A			
EXIT/ELEVATOR EXIT/ELEVATOR OTHER OCCUPANCY SEPARATION VERTICAL HORIZONTAL OPENINGS IN EXTERIOR FIRE RATED WALLS PARTY/FIRE WALL SMOKE BARRIER	N/A N/A N/A N/A OHR N/A N/A	N/A N/A N/A N/A OHR N/A N/A			
EXIT/ELEVATOR  EXIT/ELEVATOR  OTHER  OCCUPANCY SEPARATION  VERTICAL  HORIZONTAL  OPENINGS IN EXTERIOR FIRE RATED WALLS  PARTY/FIRE WALL  SMOKE BARRIER INCIDENTAL USE	N/A N/A N/A N/A OHR N/A N/A N/A	N/A N/A N/A N/A OHR N/A N/A N/A			
EXIT/ELEVATOR EXIT/ELEVATOR OTHER OCCUPANCY SEPARATION VERTICAL HORIZONTAL OPENINGS IN EXTERIOR FIRE RATED WALLS PARTY/FIRE WALL SMOKE BARRIER INCIDENTAL USE TENANT/UNIT	N/A N/A N/A N/A OHR N/A N/A N/A N/A	N/A N/A N/A N/A OHR N/A N/A N/A N/A			
EXIT/ELEVATOR  EXIT/ELEVATOR  OTHER  OCCUPANCY SEPARATION  VERTICAL  HORIZONTAL  OPENINGS IN EXTERIOR FIRE RATED WALLS  PARTY/FIRE WALL  SMOKE BARRIER  INCIDENTAL USE  TENANT/UNIT	N/A N/A N/A N/A OHR OHR N/A N/A N/A N/A N/A N/A PORTABLE	N/A N/A N/A N/A OHR OHR N/A N/A N/A N/A N/A	HERS (IBC 906.	3)	
EXIT/ELEVATOR  EXIT/ELEVATOR  OTHER  OCCUPANCY SEPARATION  VERTICAL  HORIZONTAL  OPENINGS IN EXTERIOR FIRE RATED WALLS  PARTY/FIRE WALL  SMOKE BARRIER  INCIDENTAL USE  TENANT/UNIT	N/A N/A N/A N/A OHR N/A N/A N/A N/A N/A N/A N/A PORTABLE	N/A N/A N/A N/A OHR OHR N/A N/A N/A N/A N/A N/A	HERS (IBC 906.	3)	
EXIT/ELEVATOR  EXIT/ELEVATOR  OTHER  OCCUPANCY SEPARATION  VERTICAL  HORIZONTAL  OPENINGS IN EXTERIOR FIRE RATED WALLS  PARTY/FIRE WALL  SMOKE BARRIER  INCIDENTAL USE  TENANT/UNIT  HAZARD OCCUPANCY	N/A N/A N/A N/A OHR N/A N/A N/A N/A N/A N/A N/A M/A M/A M/A M/A	N/A N/A N/A N/A N/A OHR N/A N/A N/A N/A N/A EIRE EXTINGUIS	HERS (IBC 906.	3) MAX TRAVEL DISTANCE (FT)	PROVID

1

2



816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM



Student I high Renovation		Sklahoma Panhandle State University	323 Eagle Blvd. Goodwell OK 73939	
#	Des	cription	Date	
P	roiec	t Numbe	r	
2	.3 022	<u>)</u>	•	
S	heet	Title		

CODE ANALYSIS

Date 03/15/2024





Ś

# GENERAL NOTES - LIFE SAFETY

CONTRACTORS SHALL PROVIDE MATERIALS THAT HAVE BEEN TESTED IN THE UL ASSEMBLIES NOTED FOR USE IN THIS PROJECT. IN THE EVENT THAT THE CONTRACTOR OR THEIR SUBCONTRACTORS WISH TO PROVIDE MATERIALS NOT INCLUDED IN THE NOTED UL ASSEMBLY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDED AN ALTERNATIVE UL ASSEMBLY FOR REVIEW.

A. UL ASSEMBLIES CAN BE VIEWED ON WWW.IQ.ULPROSPECTOR.COM. PENETRATIONS THROUGH RATED ASSEMBLIES SHALL HAVE FIRESTOPING EQUIVALENT TO THE FIRE RESISTANT RATING OF THE PENETRATED ASSEMBLY.

ALL FIRE EXTINGUISHERS TO BE CLASS "A" UNO. THE CONTRACTOR IS TO VERIFY THE EXISTENCE AND LOCATION OF ALL EXISTING FIRE EXTINGUISHERS NOTED ON PLAN AND CONFIRM THAT THEY ARE OF A SUITABLE CLASS. IMMEDIATELY NOTIFY ARCHITECT OF ANY DISCREPANCIES.

FIRE RESISTANCE RATING

WALL

HOURLY FIRE RESISTANCE RATING (VARIES - REFER TO HOURLY RATING

SHOWN ON LIFE SAFETY PLANS) INCIDENTAL USE SEPARATION • 1. UL 419

- SHAFT WALL •
- 1. UL U415 NON-SPRINKLERED SPACE SEPARATION 1. UL U301

RATED DOOR (REF. DOOR SCHEDULE)

DOORS W/ PANIC HARDWARE

FIRE EXTINGUISHER CABINET (FULLY RECESSED U.N.O.)

FIRE EXTINGUISHER - BRACKET MOUNTED

**EXISTING FIRE EXTINGUISHER - BRACKET** MOUNTED

SERVICE SINK

HIGH-LOW DRINKING FOUNTAIN

FIRE EXTINGUISHER TRAVEL DISTANCE

COMMON PATH OF TRAVEL DISTANCE

 EXIT ACCESS TRAVEL DISTANCE (TOTALS INCLUDE COMMON PATH OF TRAVEL DISTANCE)

OCCUPANT LOAD TAG

150 SF - AREA 1:OCC. FACTOR - OCCUPANT LOAD FACTOR

O.L. = OCC. LOAD - OCCUPANT LOAD

DOOR EGRESS COMPONENT TAG EGRESS WIDTH EGRESS CAPACITY

STAIR EGRESS COMPONENT TAG EGRESS WIDTH EGRESS CAPACITY STUDIO

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM



t Union Renovation	na Panhandle State Universit	3939
Studen	Oklahom	323 Eagle Blvd. Goodwell, OK 73
Revisi # Des	on scription	323 Eagle Blvd. Goodwell, OK 73
Revisi # Des	on scription	323 Eagle Blvd. Goodwell, OK 73
Revisi	on scription	323 Eagle Blvd. Goodwell, OK 73
Revisi # Des Projec 23 02	on scription ct Number 2	323 Eagle Blvd. Goodwell, OK 75
Revisi # Des 23 02 Sheet COD	on scription ct Number 2 Title E PLAN	323 Eagle Blvd.

Date
03/15/2024





16 :60 ŝ 024

ABBREVIATIONS				
Comments				
ACOUSTICAL CEILING TILE				
ABOVE FINISHED FLOOR				
ALUMINUM				
BLOCK				
BOTTOM OF MASONRY				
BOTTOM OF STRUCTURE				
BOTTOM OF TRUSS				
BRICK PAVERS				
CONTRACTOR FURNISHED, CONTRACTOR INSTALLED				
COLD FORMED METAL FRAMING				
CONTROL JOINT				
CEILING				
CONCRETE MASONRY UNIT				
CONCRETE				
CONTINUOUS				
CARPET				
CERAMIC TILE				
DEMOLISH				
DETENTION				
DRINKING FOUNTAIN				
EXPANSION JOINT				
ELECTRICAL				
ELEVATION				
EXPOSED CEILING / STRUCTURE / WALL				
EXTERIOR				
FLOOR DRAIN				
FIRE EXTINGUISHER BRACKET				
FIRE EXTINGUISHER CABINET				
FINISHED FLOOR				
FLOOR				
GAUGE				
GALVANIZED				
GLASS				
GRANITE				
GROUT				
GLASS TILE				
GYPSUM WALL BOARD				
HARDENED CONCRETE				
MECHANICAL				

ABBREVIATIONS				
Abbreviation	Comments			
MO				
MTI				
PED				
PI	PAINT (INTERIOR)			
PX	PAINT (EXTERIOR)			
QTZ	QUARTZ			
RB	RUBBER BASE			
RFL	RUBBER FLOORING			
RO	ROUGH OPENING			
RS	ROLLER SHADE			
RST	RUBBER STAIR TREAD			
RWP	RECONSTITUTED WOOD PANEL			
SC	SEALED CONCRETE			
SCHED.	SCHEDULE			
SIM	SIMILAR			
SS	SERVICE SINK			
SST	STAINLESS STEEL			
STL	STEEL			
STRUCT	STRUCTURE			
SUSP	SUSPENDED			
ТНК	THICK			
ТК	TACK BOARD			
TOC	TOP OF CONCRETE			
ТОМ	TOP OF MASONRY			
ТОР				
TOS	TOP OF STEEL			
TR				
ТУР				
VVVC				
VVVP	WOOD VENEEK PANELING			

- FURNISH OTHER SUPPLEMENTARY MATERIALS, ACCESSORIES ETC... AS REQUIRED TO COMPLETE THE WORK NO EXPOSED STUDS WILL BE PERMITTED IN ACCESSIBLE AREA
- ALL WOOD BLOCKING IN THE BUILDING SHALL BE FIRE TREATED LUMBER

# **GENERAL NOTES - REMODEL SPECIFIC**

- NOTIFY THE OWNER AND ARCHITECT OF ANY DISCREPENCIES IMMEIDATELY UPON DISCOVERY.

# ADA DOOR CLEARANCE REQUIREMENTS









THESE DRAWINGS ARE THE SOLE PROPERTY OF STUDIO ARCHITECTURE THE USE OR RE-USE OF THESE DRAWINGS IS HEREBY RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED. REPRODUCTION OF THESE DRAWINGS, IN WHOLE OR IN PART, WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT IS HEREBY

IN GENERAL, ALL WORK UNDER THIS CONTRACT INCLUDES: STRUCTURAL WORK AS REQUIRED, INTERIOR PARTITIONS, INTERIOR FINISHES, MECHANICAL, ELECTRICAL, AND PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES HAVING JURSDICTION TO VERIFY LOCATION OF ALL EXISTING LINES AND

MATERIALS OR FINISHES NOTED ON DRAWINGS ARE FOR GENERAL INFORMATION AND TO FACILITATE INTERPRETATION OF THE DRAWINGS. THE CONTRACTOR SHALL

PROVIDE BLOCKING BEHIND ALL SIGNS, FIXTURE, PARTITIONS, ACCESSORIES, ETC. WHERE INDICATED OR REQUIRED TO INSURE PROPER AND SECURE INTALLATION OF ALL GYPSUM BOARD SHALL BE TAPED, BEDDED, AND SANDED, HAVING NO HOLES AND HAVING ALL VOIDS SEALED, UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL PENETRATIONS OF PIPES, CONDUITS, DUCTS, VENTS, ETC, SHALL BE TIGHTLY SEALTED TO PREVENT PASSAGE OF SMOKE AND FIRE COMMENSURATE WITH RATING OF

CONTRACTOR SHALL VERIFY AT THE JOBSITE, ALL EXISTING CONDITIONS AND DIMENSIONS WHICH MAY AFFECT THE WORK PRIOR TO THE STARTING OF THE WORK AND CONTRACTOR SHALL, IN THE WORK OF ALL PERFORM ALL CUTTING, PATCHING, REPAIRING, RESTORING, AND THE LIKE NECESSARY TO COMPLETE THE WORK AND TO RESTORE ANY DAMAGED OR AFFECTED SURFACE, RESULTING FROM THE WORK OF THESE CONTRACTS, TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE

ALL MATERIALS AND FINISHES, INDICATED ON THE DRAWINGS SHALL BE NEW AND UNUSED, UNLESS NOTED OTHERWISE



HINGE APPROACH, PULL SIDE



HINGE APPROACH, PULL SIDE



HINGE APPROACH, PUSH SIDE



HINGE APPROACH, PUSH SIDE,

1'-2 5/8"







4'-0" CLEAR

TYP. ELECTRIC WATER COOLER



LATCH APPROACH, PUSH SIDE

DOOR PROVIDED WITH CLOSER



\_\_\_\_\_

LATCH APPROACH, PULL SIDE

LATCH APPROACH, PULL SIDE, DOOR

PROVIDED WITH CLOSER

MIN.

2'-0"

MIN.





LJ	
ICH APPROACH, PUSH SIDE,	

2'-6" CLEAR

∣⊨∎O

TYP. URINAL

1'-3"

	ļ	$\vee$
-	<u> </u>	
IA	TCH APPROACH PUSH SI	)F
5		

2'-0"	nion	hand
OACH, PUSH SIDE	$\overline{\mathbf{D}}$	Pal
2'-0" MIN.	tudent	klahoma

0

Ð



Ο

Ŭ,

**D** 



A0.



816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102

VOICE: 405.605.1044 WWW.STUDIOARC.COM



15/2024 3:09:17 PM



(C) Copyright Studio Architecture, P.C.



# **GENERAL NOTES - DEMOLITION**

1. THE GENERAL CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH THE OWNER OR OWNER'S REPRESENTATIVE. NOTICE SHALL BE PROVIDED TO THE

PREP ALL EXISTING WALLS TO RECEIVE NEW FINISHES IN ACCORDANCE WITH THE ROOM SCHEDULE.

ALL PLASTER WALLS UNABLE TO BE REPAIRED TO A DEGREE ACCEPTABLE TO ARCHITECT ARE TO BE REPLACED WITH GYPSUM BOARD OF A SIMILAR

WHERE ADJOINING STRUCTURES ARE TO BE DEMOLISHED, REPAIR PREVIOUS CONNECTION POINTS AT EXISTING WALLS TO REMAIN IN-KIND.

ADJUST SILL HEIGHT OF ALL EXIST. DOORS WHERE NECESSARY TO ACCOMODATE NEW FINISH FLOOR THICKNESS. PATCH AND REPAIR ALL NEW ROOF PENETRATIONS ACCORDING TO THE NATIONAL ROOFING CONTRACTORS ASSOCIATION (NRCA) CONSTRUCTION DETAILS. CONTRACTOR IS TO ERECT TEMPORARY CONSTRUCTION BARRIERS AROUND AREA OF WORK.

THE GENERAL CONTRACTOR IS TO PROVIDE ADEQUATE PROTECTION FOR ALL EXISTING ELEMENTS TO REMAIN. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL THE HANDLING AND DUMPING COSTS FOR THE REMOVAL OF DEMOLISHED MATERIAL, TRASH,

ENSURE THE SPACE AND ALL SURFACES ARE CLEAN UPON COMPLETION OF WORK. ALL DEBRIS REMOVED DURING DEMOLITION SHALL BE DISPOSED OF IN A

VERIFY LOCATION OF BUILDING SYSTEMS AND UTILITIES TO DETERMINE IF IN CONFLICT WITH NEW WORK. IF RELOCATION IS REQUIRED, CONTACT ARCHITECT/ENGINEER FOR FURTHER INSPECTION. CONTRACTOR IS REQUIRED TO MAINTAIN PRESENT BALANCED SYSTEM. CONFER WITH ARCHITECT REGARDING ANY DEMOLITION NOTED AND/OR REQUIRED BEYOND THE WORK PERIMETER PRIOR TO THE START OF DEMOLITION. UPON DEMOLITION AND CAPPING OF SYSTEM THE CONTRACTOR IS TO HAVE THE SYSTEM CERTIFIED.

VERIFY LOCATION OF ALL EXISTING MECHANICAL, PLUMBING, AND FIRE ALARM SYSTEMS TO ENSURE A FULL AND COMPLETE UNDERSTANDING OF THE BUILDING AND SPACE TO RECEIVE WORK. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT AS SOON AS THEY ARISE. REMOVE ALL ABANDONED PIPING, WIRING, EQUIPMENT, ETC...ENCOUNTERED DURING THE COURSE OF CONTRUCTION.

ALL EXISTING TERRAZO FLOORING TO REMAIN; PREP FOR NEW FINISH TO BE APPLIED ON TOP.

EXISTING TERRAZO CURBS TO BE REMOVED WHERE NEW BASE IS TO BE INSTALLED.



PATCH WALLS AND CEILING WHERE SOFFIT IS REMOVED

**DEMO SOFFIT & ADJUST ANYTHING** INSIDE IT TO CREATE ADEQUATE HEIGHT CLEARANCE FOR RELOCATED DOOR; REF. MECH.

APPROX. LOCATION OF RELOCATED DOOR



FINISH FLOOR 100'-0" NOTE: DETAIL APPLIES IN ALL AREAS TO RECEIVE NEW FLOORING OVER EXISTING TERRAZZO, WHETHER INDICATED ON DEMO PLAN OR NOT.





ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM



Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
# Des	scription	Date
Projec 23 02 Sheet DEMC Date 03/15	2 Title DLITION /2024	PLAN
	2.0	



# GENERAL NOTES - FLOOR PLAN

# **GENERAL NOTES - INTERIOR PARTITIONS**

- CONCRETE EDGE, OR CENTER OF STEEL)

- 2 LAYERS 5/8" GWB SINGLE SIDE 1" SHAFT WALL ONE SIDE, A NUMBER OF 5/8" GWB LAYERS ON THE OTHER
- NUMBER TO MEET THE SHOWN
- F. 1" SHAFT WALL ONE SIDE, 2 LAYERS 5/8" GWB ON THE OTHER SIDE

1. KITCHEN EQUIPMENT IS N.I.C. AND SHOWN FOR REFERENCE ONLY. REFER TO SHEET AQ1.0.

ALL PARTITIONS SHALL BE TYPE 1A3 AND EXTEND TO STRUCTURE WITH SOUND-ATTENUATION BLANKET, UNLESS NOTED OTHERWISE (UNO). TYPICAL DIMENSIONS ARE FROM FACE OF STUD TO FACE OF STUD OR STRUCTURAL ELEMENT (EXAMPLES: MASONRY WALL, CONCRETE WALL,

ALL CLEAR DIMENSIONS ARE FROM FACE OF FINISHED MATERIAL TO FACE OF FINISHED MATERIAL. ADJUSTMENTS SHALL BE MADE AS REQUIRED TO MAINTAIN NOTED CLEARANCES. NOTIFY ARCHITECT OF MAJOR DISCREPANCIES. SEE FLOOR PLAN FOR PARTITIONS DENOTING A FIRE-RATED UL ASSEMBLY AND OBSERVE THE UL FIRE-RATING CONSTRUCTION INSTRUCTIONS.

STUDS AND FURRING STRIPS SHALL BE SPACED A MAXIMUM OF 16" O.C. WHERE TILE IS INDICATED IN THE ROOM FINISH SCHEDULE AND ELEVATIONS, PROVIDE TILE BACKER BOARD.

STUD SIZES SHALL CONFORM TO THE SIZES RECOMMENDED BY THE STUD MANUFACTURER FOR THE PARTITION HEIGHT AT EACH LOCATION. EXTEND GWB TO STRUCTURE ON ALL WALLS THAT DO NOT HAVE A CEILING. PROVIDE DEFLECTION TRACK AT ALL PARTITIONS THAT EXTEND TO STRUCTURE. REFER TO DETAILS A THROUGH D ON SHEET A10.1.1.

ALL PARTITIONS WITH SOUND-ATTENUATION BLANKETS ARE TO BE CONSIDERED ACOUSTICAL PARTITIONS. SEAL TOP AND BOTTOM AND SEAL ALL PENETRATIONS TO INCLUDE DUCTWORK, PIPING, AND CONDUIT.

FOR PARTITIONS THAT ABUT CEILING, EXTEND GWB 6" ABOVE CEILING. WALL PARTITION TAG ONLY REFERS TO WALL ASSEMBLY & NOT TO WALL FINISHES.

REFER TO FINISH SCHEDULE & INTERIOR ELEVATIONS FOR EXTENTS OF FINISHES.

INSTALL CONTROL JOINTS IN ACCORDANCE WITH ASTM C840 (OR SPECIFIED STANDARD, WHICHEVER IS MORE RESTRICTIVE) AND IN SPECIFIC LOCATIONS APPROVED BY ARCHITECT FOR VISUAL EFFECT. REFER TO PLANS AND INTERIOR ELEVATIONS FOR LOCATIONS WHERE PLACEMENT OF CONTROL JOINTS MAY BE INDICATED. WHERE QUESTIONS PERSIST, CONSULT ARCHITECT.

WHERE THERE IS AN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING, OR ATTIC SPACE, FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS, AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTIVE OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING IN THE CONCEALED SPACE. REF. IBC 703.7.

PARTITION EXTENDS TO STRUCTURE	WALL TYPE	<u>SIZE</u>	DESIGNATION
PARTITION EXTENDS 6" ABOVE CEILING	STUD	2 1/2" 3 5/8" 4"	2 3 4
		6" 8"	6 8
(I.E. STUD, CMU, CONCRETE STRUCTURE)	SHAFT WALL (UL 415)	2 1/2" 4" 6"	2 4 6
AS WITH SOUND-ATTENUATION BLANKET	FURRING WALL	None 7/8" 1 1/2"	0 1 2
	CMU	5 5/8" 7 5/8" 9 5/8"	6 8 10



ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM



Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939					
Revis # De	ion scription	Date					
Project Number							
23 022 Sheet Title							
NEW CONSTRUCTION							
	PLAN						
Date 03/15/2024							
	2.1						



# 8 024 **N** <u>ک</u>





8 024 5/2







A4.I





816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM



atio Φ tate 0 S P anhan 0 • \_\_\_\_ 323 Eagle Blvd. Goodwell, OK 73939 Ident Oklahoma Stu Revision Date # Description

Project Number 23 022 Sheet Title ENLARGED FLOOR PLANS & VERTICAL CIRCULATION Date 03/15/2024 A9.0

					F	ROOM SCH	IEDULE		
Number	Name	RM_Floor	RM_Base	RM_Wall North	RM_Wall East	RM_Wall South	RM_Wall West	RM_Ceiling	Notes
1	DEAN	CPT1	RB1	PT1	PT1	PT1	PT1	ACT1	
2	HOUSING	CPT1	RB1	PT1	PT1	PT1	PT1	ACT1	
3	RECRUITING	CPT1	RB1	PT1	PT1	PT1	PT1	ACT1	
4	VESTIBULE	WOC1	NONE	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	PATCH/REPAIR EXISTING CEILING: PAINT
5	EXAM ROOM	CPT1	RB1	PT1	PT1	PT1	PT1	ACT1	
6	NURSE	PFT1	RB1	PT1	PT1	PT1	PT1	ACT1	
7	WOMENS RR	PFT1	PTB1	REFER ELEV.	PT1	REFER ELEV.	PT1	GWB1	
8	MENS RR	PFT1	PTB1	REFER ELEV.	PT1	REFER ELEV.	PT1	GWB1	
9	STUDENT LOUNGE	REFER PLANS	RB1	REFER ELEV.	PT1	PT5	PT1	REFER RCP	PROVIDE LEVEL 5 FINISH ON SOUTH WALL FOR OWNER FURNISHED INSTALLED WALL GRAPHIC
10	WORKROOM	CPT1	RB1	PT1	PT1	PT1	PT1	GWB1	PATCH/REPAIR EXISTING CEILING; PAINT
11	VEST.	WOC1	NONE	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	PATCH/REPAIR EXISTING CEILING; PAINT
12	PRE-FUNCTION	REFER PLANS	RB1	EXIST. BRICK NO PAINT	PT1	PT1	REFER ELEV.	REFER RCP	
13	TEAM STORE	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
14	STOR.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
15	STOR.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
16	VEST.	WOC1	NONE	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	PATCH/REPAIR EXISTING CEILING; PAINT
17	CORRIDOR	PFT1	RB1	REFER ELEV.	PT1	PT1	PT1	ACT1	
19	I.T.	EXIST.	RB1	EXIST.	EXIST.	EXIST.	EXIST.	ACT1	THIS ROOM BECOMES STORAGE IF ALT. #3 IS ACCEPTED; REF. A13.
20	GRILL	REFER PLANS	RB1	REFER ELEV.	PT1	REFER ELEV.	REFER ELEV.	REFER RCP	
21	CAFETERIA	REFER PLANS	RB1	PT1	PT1	REFER ELEV.	REFER ELEV.	REFER RCP	
22	GRILL SERVING	PFT3	PTB2	NONE	NONE	FRP1	FRP1	REFER RCP	
23	CAFETERIA SERVING	PFT3	PTB2	NONE	NONE	FRP1	FRP1	REFER RCP	
24	STORAGE	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
25	KITCHEN	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
26	STOR.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
27	STOR.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
28	STOR.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
29	STOR.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
30	STOR.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
31	STOR.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
32	FREEZER	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
33	MENS RR	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
34	JAN.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
35	WOMENS RR	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
36	OFFICE	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
37	RISER ROOM	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	
38	VEST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	EXIST.	



3/15/2024 3:10:11

Class	Material Name	Description	Manufacturer	Model
NTERIOR - BASE	PTB1	PORCELAIN TILE BASE 1	CROSSVILLE STUDIOS	3X12 BULLNOSE, SANDS, GREY
	PTB2	PORCELAIN TILE BASE 2	CROSSVILLE STUDIOS	6X8 COVE BASE, CROSS-COLORS MINGLES, R001 GF
	RB1	RUBBER BASE	JOHNSONITE	4" COVE, 63 BURNT UMBER B
NTERIOR - CEILING	AB1	ACOUSTIC BAFFLES 1	EZO BOARD	CEILING BAFFLES, FILLETED RECTANGLE, 11.5"H, 1/2
	ACC1	ACOUSTIC CEILING CLOUD 1	EZOBORD	GEO CLOUD - 41" CIRCLE, POLAR ICE (PI14), 3/8" THIC
	ACC2	ACOUSTIC CEILING CLOUD 2	EZOBORD	GEO CLOUD - 24" CIRCLE, SILVER GRAY (SG04), 3/8"
	ACT1	ACOUSTIC CEILING TILE 1	ARMSTRONG	2X2, ULTIMA HIGH NRC, WHITE
	ACT2	ACOUSTIC CEILING TILE 2	ARMSTRONG	2X2 KITCHEN ZONE, WHITE
	CG1	CEILING GRID	ARMSTRONG	PRELUDE 15/16", WHITE
	GWB1	GYPSUM WALLBOARD		
NTERIOR - FLOOR	CPT1	CARPET TILE 1	SHAW CONTRACT	24X24 DIFFUSE COLOR 5T478, WARM RED 78727
	CPT2	CARPET TILE 2	SHAW CONTRACT	24X24 COLOR FRAME TILE 5T081, IMPLY 81485
	PFT1	PORCELAIN FLOOR TILE 1	CROSSVILLE STUDIOS	12X24 SANDS, GREY
	PFT2	PORCELAIN FLOOR TILE 2	CROSSVILLE STUDIOS	8X48 JOYFUL PLACE, TAUPE
	PFT3	PORCELAIN FLOOR TILE 3	CROSSVILLE STUDIOS	8X8 CROSS-COLORS MINGLES, ROO1 GREY MINGLE
	WOC1	WALK OFF CARPET 1	PATCRAFT	24X24 MOVING 10536, STROLL 00540
NTERIOR - MISC.	CDG1(1)	CORNER GUARD 1	INPRO	160 HIGH IMPACT CORNER GUARD
	PL1	PLASTIC LAMINATE 1	WILSONART	ASIAN NIGHT
	QTZ1	QUARTZ	WILSONART	Q6023 FROZEN
	RS1	ROLLERSHADE 1	DRAPER	1% MANUAL SHADE
	SS1	SOLID SURFACE	CORIAN	CAMEO WHITE
	SSG1	STAINLESS STEEL CORNER GUARD 1	REFER SPECIFICATION	
	TP1	TOILET PARTITION 1	ASI	PHENOLIC; WILSONART ASIAN NIGHT
	TR1	TRANSITION STRIP 1	SCHLUTER	SCHIENE; BRUSHED STAINLESS
	TR2	TRANSITION STRIP 2	SCHLUTER	RONDEC; BRUSH ANODIZED ALUMINUM
	TR3	TRANSITION STRIP 3	SCHLUTER	DILEX-AHK; SATIN ANODIZED ALUMINUM
	TS1	TACK SURFACE 1	WALLTALKERS BY KOROSEAL	TAC-WALL, COLOR: QUARRY
NTERIOR - WALL	CWT1	CERAMIC WALL TILE 1	DALTILE	8X24 COLOR WHEEL LINEAR, GLOSS, ARCTIC WHITE
	CWT2	CERAMIC WALL TILE 2	DALTILE	8X24 COLOR WHEEL LINEAR, GLOSS, NAVY K189
	CWT3	CERAMIC WALL TILE 3	DALTILE	4X12 COLOR WHEEL LINEAR, GLOSS, NAVY K189
	FRP1	FIBERGLASS REINFORCED PANEL 1	REFER SPEC.	
	PT1	PAINT 1	SHERWIN WILLIAMS	SW7015 REPOSE GRAY
	PT2	PAINT 2	SHERWIN WILLIAMS	SW7004 SNOWBOUND
	PT3	PAINT 3	BENJAMIN MOORE	HC-166 KENDAL CHARCOAL
	PT4	PAINT 4	SHERWIN WILLIAMS	TO MATCH OPSU RED
	PT5	PAINT 5	SHERWIN WILLIAMS	TO MATCH OPSU BLUE
	PT6	PAINT 6	SHERWIN WILLIAMS	SW7016 MINDFUL GRAY
	PWT1	PORCELAIN WALL TILE 1	CROSSVILLE STUDIOS	12X24 SANDS, GREY
	PWT2	PORCELAIN WALL TILE 2	METRO SURFACES	11X12 DIVISION 5 STACKED, WHITE
	WP1	WOOD PANEL 1	SURFACING SOLUTION	WHITE OAK; 1.5" HALF ROUND #693

# GENERAL NOTES - MATERIAL SCHEDULE

- DIRECTIONS ON ROOM FINISH SCHEDULE REFER TO TRUE NORTH AND NOT PLAN NORTH.
- REFER TO INTERIOR FINISH PLAN(S) AND ELEVATION(S) FOR LOCATION OF WALL TILE, PAINT, AND BASE. REFER TO INTERIOR FINISH PLAN(S) FOR FLOORING LOCATIONS, PATTERNS, AND DIRECTION OF FLOORING.
- REFER TO EXTERIOR BUILDING ELEVATION(S) FOR EXTERIOR MATERIAL LOCATIONS AND NOTES.
- REFER TO REFLECTED CEILING PLAN(S) FOR DESIGN AND LAYOUT OF CEILINGS AND CEILING MOUNTED EQUIPMENT. A. IF EQUIPMENT NOT SHOWN FOR ANY REASON, G.C. TO CONTACT ARCHITECT FOR FURTHER INSTRUCTION.
- CONTRACTOR SHALL PROVIDE TRANSITION STRIPS AT ALL FLOORING MATERIAL CHANGES AS INDICATED ON FINISH
- PLAN(S) ALL GYPSUM WALL BOARD CEILINGS AND SOFFITS ARE TO PAINTED PT2, UNLESS NOTED OTHERWISE.
- PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH RB1, U.N.O. ALL EXISTING BRICK IS TO REMAIN UNPAINTED.

9. 10. DIRECTIONS ON ROOM FINISH SCHEDULE REFER TO TRUE NORTH (RIGHT SIDE OF PAGE).

	Comments
REY MINGLE	
2"T, RUBY RED (RR28)	
ICK	
' THICK	
	FIELD CARPET
	ACCENT
E	SERVING LINE
	CABINET FRONTS
	RESTROOMS,WINDOW SILLS
	CARPET TO PFT
	EXPOSED EDGE OF TILE
	COVED TRIM AT WALL TO FLOOR
E 0190	
	FIELD PAINT
	GYP CEILINGS- RESTROOMS
	STRUCTURE - CAFETERIA
	RED ACCENT
	BLUE ACCENT
	ACCENT

S	T	U	D		0
A R	CF	4 I T	ΕC	тι	JRE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM



Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
Revisi # De	on scription	Date
Proje	<u>ct Numbe</u>	er
23 02	2	
Sheet	Title	

MATERIAL SCHEDULE

Date 03/15/2024





LO I



816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM



# S **P** vatio Jniv enov State dle anhan <u>Dio</u> 323 Eagle Blvd. Goodwell, OK 73939 Oklahoma Student Revision

<u> </u>		
#	Description	Date
P	roject Numb	ber
2	3 022	
S	heet Title	
F	INISH PLAN	
<u> </u>	Date	
0	3/15/2024	
	_	
	$\neg$ IU.	, ∎

# LEGEND - FINISH PLAN



REFER TO ROOM FINISH SCHEDULE WHERE NO FLOORING IS INDICATED IN PLAN.

6

ö





![](_page_14_Figure_0.jpeg)

![](_page_15_Figure_1.jpeg)

atio Φ <u>>ic</u> tate 0 Ð S Ð P anhan .0 323 Eagle Blvd. Goodwell, OK 73939 Oklahoma Student Revision # Description Date Project Number 23 022 Sheet Title INTERIOR SECTIONS Date 03/15/2024 AI0.5

![](_page_15_Picture_4.jpeg)

S

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102

S T U D I O

ARCHITECTURE

![](_page_16_Figure_0.jpeg)

![](_page_16_Figure_1.jpeg)

![](_page_17_Figure_1.jpeg)

![](_page_18_Figure_1.jpeg)

![](_page_19_Figure_0.jpeg)

![](_page_19_Figure_1.jpeg)

![](_page_19_Figure_3.jpeg)

![](_page_19_Picture_4.jpeg)

# **GENERAL NOTES - RCP**

REF. MECHANICAL, PLUMBING, & FIRE PROTECTION FOR ALL DUCTWORK AND PIPING LOCATIONS. ALL MECHANICAL AND ELECTRICAL FIXTURES ARE SHOWN FOR PLACEMENT REFERENCE ONLY.

- SUSPENDED CYLINDER DOWNLIGHT
- (L) SUSPENDED PENDANT (SIZE VARIES; RE: ELECT.)
- RECESSED DOWNLIGHT
- SUSPENDED ACOUSTIC CLOUD ACC1
- SUSPENDED ACOUSTIC CLOUD ACC2
- EXISITING CEILING; RE; PLAN FOR NEW FINISH

ACOUSTICAL TILE CEILING; ACT2

S atio Ð N N eno tate Ś N dle nhan .0 Б k Eagle Blvd. odwell, OK 73939 Oklahoma ł Student 323 Goo Revision # Description Date Project Number 23 022

Sheet Title **REFLECTED CEILING** PLAN

Date 03/15/2024

![](_page_19_Picture_19.jpeg)

![](_page_20_Figure_0.jpeg)

![](_page_20_Figure_1.jpeg)

# **GENERAL NOTES - RCP**

# LEGEND - RCP

![](_page_20_Picture_10.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_20_Picture_12.jpeg)

REF. MECHANICAL, PLUMBING, & FIRE PROTECTION FOR ALL DUCTWORK AND PIPING LOCATIONS. ALL MECHANICAL AND ELECTRICAL FIXTURES ARE SHOWN FOR PLACEMENT REFERENCE ONLY.

> SUSPENDED CYLINDER DOWNLIGHT 0 (L) SUSPENDED PENDANT (SIZE VARIES; RE: ELECT.) RECESSED DOWNLIGHT SUSPENDED ACOUSTIC CLOUD - ACC1 SUSPENDED ACOUSTIC CLOUD - ACC2

EXISITING CEILING; RE; PLAN FOR NEW

ACOUSTICAL TILE CEILING; ACT2

ร *'atio* Ð N N enov tate Ŵ  $\boldsymbol{\alpha}$ dle anhan Dio 323 Eagle Blvd. Goodwell, OK 73939 Oklahoma Student Revision # Description Date

Project Number			
23 022			
Sheet Title			
REFLECTED CEILING PLAN -			
DIMENSIONED			

Date 03/15/2024

![](_page_20_Picture_24.jpeg)

![](_page_21_Figure_0.jpeg)

024

5/2

![](_page_21_Figure_1.jpeg)

![](_page_22_Figure_0.jpeg)

![](_page_22_Figure_1.jpeg)

(C) Copyright Studio Architecture, P.C.

![](_page_23_Figure_1.jpeg)

		D.C.T.A.II			
		DETAIL			
RDWARE	SILL	JAMB	HEAD	N	IOTES
		6/ <mark>A11.1</mark>	1/ <mark>A11.1</mark>	ALTERNATE #4	

![](_page_23_Figure_6.jpeg)

![](_page_23_Picture_9.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_23_Picture_11.jpeg)

ิง *'atiol* Ð Jniv enov tate Ŵ  $\boldsymbol{\alpha}$ dle anhan .0 Ω 323 Eagle Blvd. Goodwell, OK 73939 Oklahoma Student Revision # Description Date Project Number 23 022 Sheet Title DESIGN ALTERNATES Date 03/15/2024

AI3.1

![](_page_24_Figure_0.jpeg)

![](_page_24_Figure_1.jpeg)

CARRY NEW PLASTER TO DECK; EXIST. PLASTER TO BE REMOVED PRIOR TO INSTALL

![](_page_24_Figure_8.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_24_Picture_10.jpeg)

![](_page_24_Picture_11.jpeg)

Date 03/15/2024

AI3.2

![](_page_24_Picture_13.jpeg)

5 DETAIL - ALT #1 3" = 1'-0"

076200.A05 FLASHING, SHEET METAL 079200.A00 - JOINT SEALER AND BACKER ROD 081113.A07 - HM FRAME

![](_page_24_Figure_15.jpeg)

![](_page_24_Picture_16.jpeg)

0

5/2024

 $\sim$ 

![](_page_25_Figure_1.jpeg)

C4 T11 T12 T13

![](_page_25_Picture_7.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_25_Picture_9.jpeg)

Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
Revisio # Des	on cription	Date

Project Number 23 022 Sheet Title

FFE FLOOR PLAN

Date 03/15/2024

![](_page_25_Picture_14.jpeg)

Furniture Schedule			
ark	Description	Count	_
	BAR STOOL	36	
	TASK STOOL	3	
	STACK CHAIR	16	
	BAR STOOL	6	
	EXISTING CHAIR (DINING HT) OWNER PROVIDED & INSTALLED	98	
	LOUNGE CHAIR	8	
	SOFA	2	
	LOUNGE CHAIR	8	
	MODULAR SOFA	1	
	STORAGE SHELF	3	
	48" ROUND DINING TABLE	6	
	36" ROUND DINING TABLE	11	
	36" SQUARE DINING TABLE	3	
	36" SQUARE BAR HEIGHT TABLE	9	
	36" SQUARE DINING TABLE, ADA	1	
	36" ROUND DINING TABLE, ADA	2	
	36" SQUARE DINING TABLE	1	
	GATHERING TABLE	1	
	OCCASIONAL TABLE	3	
	OCCASIONAL TABLE	4	
	36" SQUARE DINING TABLE - POWERED	1	
	36" SQUARE DINING TABLE - ADA - POWERED	1	
	36" SQUARE DINING TABLE - ADA	1	

# Legend - FFE

NO WORK IN THIS AREA

ONLY ITEMS THAT ARE TAGGED IN THIS PLAN ARE IN SCOPE.

KITCHEN EQUIPMENT IS NOT IN SCOPE UNLESS NOTED OTHERWISE

C Copyright Studio Architecture, P.C.

![](_page_26_Figure_1.jpeg)

5/2024

FOODSERVICE EQUIPMENT SCHEDULE				
TYPE MARK	DESCRIPTION	MANUFACTURER	MODEL	
GRILL				
G01	SINGLE DOOR FREEZER	FRIGIDAIRE		
G02	SS WALL HUNG CABINET			
G03	SS WORKTABLE, 52"			
G04	COLD PREP TABLE	AVANTCO		
G05	EQUIPMENT STAND, REFRIGERATED			
G06	HEAT LAMP			
G07	SS WORKTABLE, 48"			
G08	COFFEE BREWER	CURTIS		
G09	POS SYSTEM			
G10	PIZZA WARMER	WINCO	EDM-1K	
G11	REFRIGERATOR, UNDERCOUNTER	BEVERAGE-AIR	UCR27AHC	-
G12	FOOD WARMER	HATCO		
G13	SODA MACHINE	CORNELIUS	ED300	
G14	TEA BREWER	CURTIS	RTB	
G15	ESPRESSO MACHINE	BRAVILOR BONAMAT	SEGO 11L/12L	-
G16	JUICE MACHINE	BUNN	JDF-4S	
G17	FROZEN BEVERAGE MACHINE			
G18	COUNTERTOP COOLER	PEPSI	G4-H0234B	
G19	DOUBLE DOOR COOLER, REACH-IN	GLENCO		
G20	SINGLE DOOR COOLER, REACH-IN			-
CAFETERIA				
C01	HOT WELLS			
C02	SINGLE DOOR FREEZER, REACH-IN	ATOSA	MCF8720GR	
C03	PREP TABLE	HOSHIZAKI AMERICA, INC	PR67A	
C04	INDUCTION RANGE, COUNTERTOP	VOLLRATH	59500P	
C05	DOUBLE-STACKED PIZZA IMPINGER	LINCOLN	1130-000-V	
C06	HEATED PASS-THRU	4020-HP	MCCALL	
C07	SODA MACHINE	CORNELIUS	ED300	
C08	JUICE MACHINE	BUNN	JDF-4S	
C09	TEA BREWER	CURTIS	RTB	
C10	CAPPUCCINO MACHINE	CURTIS	PCGT3	
C11	SINGLE COFFEE BREWER	CURTIS	GEMSS63A1000	
C12	MICROWAVE, COUNTERTOP	HAMILTON BEACH	P90D23AL-WRR1	
C13	TOASTER	CUISINART	CPT-14WM	
C14	WAFFLE MAKER	GOLDEN MALTED	RT-P	
C15	BATTER DISPENSER	GOLDEN MALTED		
C16	COLD SYRUP DISPENSER	GOLDEN MALTED		
C17	POWDER DISPENSER	PERFECT SERVINGS	UV-PSDP-5-CTL	
C18	COUNTERTOP COOLER	PEPSI	G4-H0234B	
C19	POS SYSTEM			
C20	COLD WELL, MEDIUM			
C21	COLD WELL, LARGE			

- 2
- 3.

![](_page_26_Picture_7.jpeg)

ALL FOODSERVICE EQUIPMENT IS OFCI. ALL EQUIPMENT SHOWN IS FOR PLANNING PURPOSES ONLY. IT IS THE RESPONSIBILTY OF THE CONTRACTOR TO VERIFY THE ACCURACY AND COMPLETENESS OF THE EQUIPMENT SCHEDULE WITH THE OWNER. IT IS THE CONTRACTOR'S RESPONSIBLITY TO COORDINATE THE REMOVAL AND RE-INSTALLATION OF EQUIPMENT WITH THE OWNER.

![](_page_26_Picture_9.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_26_Picture_11.jpeg)

ิง **P** *'atio* Jniv eno tate Ŵ  $\boldsymbol{\alpha}$ dle anhan Dio 0 323 Eagle Blvd. Goodwell, OK 73939 Oklahoma Student Revision # Description Date Project Number 23 022 Sheet Title FOOD SERVICE EQUIPMENT ARRANGEMENT PLAN Date 03/15/2024

![](_page_26_Picture_13.jpeg)

(C) Copyright Studio Architecture, P.C.

# **DESIGN PARAMETERS**

1.	BUILD	ING CODE:	2015 INTERNATIONAL BUILDING CODE
2.	DEAD	LOADS:	•
	A.	FLOOR	SELF-WEIGHT + 20 PSF SUPERIMPOSED
	A.	ROOF	20 PSF
3		OADS:	
0.		ISTORACE	125 DSE
	B.		20 PSF (UNIFORM)
4.	SNOW		
	A.	GROUND SNOW LOAD, Pg	15 PSF
	<u>В.</u>	SNOW IMPORTANCE FACTOR	1.0
	C.	FLAT ROOF SNOW LOAD, Pf	12 PSF
	D.	SNOW EXPOSURE FACTOR, Ce	1.0
	E.	THERMAL FACTOR, Ct	1.0
5.	WIND	LOADS:	
	A.	BASIC WIND SPEED (3 SECOND GUST)	120 MPH
	B.	RISK CATEGORY	
	C.	EXPOSURE CLASSIFICATION	С
	D	INTERNAL PRESSURE COFFFICIENT	0.48
	F	BASIC WIND PRESSURE (ab LINEACTORED)	27 8 PSE
		DESIGN WIND DESSLIDE N EXTEDIOD WALLS (C&C LOAD BASED ON 100ET <sup>2</sup> ADEA	27.01 01
	Г. Г.	DESIGN WIND FRESSORE NEXTERIOR WALLS (CAC LOAD DASED ON 1001 T AREA	
		END ZONES, (a=7.4')	28.1 PSF
		INTERIOR ZONES	31.2 PSF
	G.	DESIGN UPLIFT PRESSURE ON ROOFS (C&C LOAD BASED ON 100FT <sup>2</sup> AREA	
		CORNER ZONES, (a=7.4')	35.6 PSF
		EDGE ZONES, (a=7.4')	35.6 PSF
		INTERIOR ZONES	30.1 PSF
6.	SEISM	NC LOADS:	1
	A	SPECTRAL RESPONSE ACCELERATION: (SHORT PERIOD) SS	0.100
	R R	SPECTRAL RESPONSE ACCELERATION; (LISEC PERIOD) S1	0.041
		SPECTRAL RESPONSE ACCELERATION, (1-SECTEMBED), ST	0.041
		SPECTRAL RESPONSE ACCELERATION, (SHORT PERIOD), SUS	0.107
	<u> </u>	SPECTRAL RESPONSE ACCELERATION, (T-SEC PERIOD), SUT	0.000
		SITE CLASS	D La
	F.		1.25
	G.	SEISMIC DESIGN CATEGORY	A
	H.	BASIC STRUCTURAL SYSTEM AND SEISMIC RESISTING SYSTEM	STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
	Ι.	RESPONSE MODIFICATION FACTOR, R	3
	J.	SYSTEM OVER-STRENGTH FACTOR, Ω	3
	K.	DEFLECTION AMPLIFICATION, Cd	3
	L.	ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
	М.	BASE SHEAR	0.044* WEIGHT OF BUILDING
7.	FOUN	DATIONS:	l
	ISOLA OWNE OR BL DIFFE ENGIN	TED AND CONTINUOUS FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED ALLC R AND/OR CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE ASSUMPTIONS WIT JILD AT THEIR OWN RISK. ACHIEVING AN ALLOWABLE BEARING PRESSURE DOES NOT RENTIAL MOVEMENT. SHOULD THE OWNER BE CONCERNED, THEY SHALL ENGAGE THE RER TO INVESTIGATE AND PROVIDE RECOMMENDATIONS.	WABLE NET BEARING PRESSURE OF 1500 PSF. THE H ACTUAL CONDITIONS PRIOR TO CONSTRUCTION PRECLUDE THE BUILDING FROM BEING SUBJECT TO IE SERVICES OF A LICENSED GEOTECHNICAL
		GENERAL	
1.	STRI ARCI REQ	JCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE HITECTURAL, MECHANICAL, ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. UIREMENTS OF THE CONTRACT DOCUMENTS INTO THE SHOP DRAWINGS AND FIELD V	USED IN CONJUNCTION WITH CIVIL, THE CONTRACTOR SHALL COORDINATE ALL VORK.
2.	WHE NOTI	RE CONFLICT EXISTS AMONG VARIOUS PARTS OF THE STRUCTURAL CONTRACT DOC ES, AND SPECIFICATIONS, THE STRICTEST REQUIREMENTS, AS INDICATED BY THE EN	UMENTS, STRUCTURAL DRAWINGS, GENERAL GINEER, SHALL GOVERN.
3.	WHE	RE MEMBER LOCATIONS ARE NOT SPECIFICALLY DIMENSIONED, THE FOLLOWING RUI	LES SHALL APPLY:

- A. DO NOT SCALE DRAWINGS.
- В. COLUMNS ARE CENTERED ON GRID LINES.
- C. FOOTINGS ARE CENTERED BENEATH COLUMNS.
- D. CONTINUOUS FOOTINGS ARE CENTERED BENEATH WALLS.
- FRAMING MEMBERS ARE EITHER LOCATED ON GRID LINES OR ARE EQUALLY SPACED BETWEEN LOCATED MEMBERS.
- 4. ALL STRUCTURAL ELEMENTS OF THE PROJECT HAVE BEEN DESIGNED BY THE STRUCTURAL ENGINEER TO RESIST THE REQUIRED CODE VERTICAL AND LATERAL FORCES THAT COULD OCCUR IN THE FINAL COMPLETED STRUCTURE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED BRACING DURING CONSTRUCTION TO MAINTAIN THE STABILITY AND SAFETY OF ALL STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PROCESS UNTIL THE LATERAL LOAD RESISTING OR STABILITY-PROVIDING SYSTEM IS COMPLETELY INSTALLED AND THE STRUCTURE IS COMPLETELY TIED TOGETHER.
- THE STRUCTURE HAS BEEN DESIGNED FOR THE LOADS IDENTIFIED WITHIN THESE STRUCTURAL DRAWINGS THAT ARE ANTICIPATED TO BE APPLIED TO THE FINAL STRUCTURE ONCE COMPLETED AND OCCUPIED. THE CONTRACTOR SHALL NOT OVERLOAD THE STRUCTURE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE ADEQUACY OF THE STRUCTURE TO SUPPORT ANY APPLIED CONSTRUCTION LOADS, INCLUDING THOSE DUE TO CONSTRUCTION VEHICLES OR EQUIPMENT, MATERIAL HANDLING OR STORAGE, SHORING AND RESHORING, OR ANY OTHER PROPOSED CONSTRUCTION LOADS THAT ARE IN EXCESS OF THE STATED DESIGN LOADS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE TO DESIGN OR CHECK THE STRUCTURE FOR LOADS APPLIED TO THE STRUCTURE FOR ANY CONSTRUCTION ACTIVITY.
- WEIGHTS OF MECHANICAL EQUIPMENT SHOWN ON THE STRUCTURAL PLANS ARE FOR UNITS SPECIFIED BY THE MECHANICAL ENGINEER. CONTRACTOR SHALL VERIFY THE WEIGHTS. ANY SUBSTITUTIONS THAT RESULT IN INCREASED WEIGHT SHALL BE APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
- THE SIZE AND LOCATION OF EQUIPMENT PADS AND PENETRATIONS THROUGH THE STRUCTURE FOR MECHANICAL, ELECTRICAL, AND PLUMBING WORK SHALL BE VERIFIED BY THE CONTRACTOR. OPENINGS AND PENETRATIONS NOT SPECIFICALLY SHOWN ON THE STRUCTURAL DIRECTION. DRAWINGS SHALL BE SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER OF RECORD.
- PRIOR TO FABRICATION AND/OR ERECTION OF ANY MATERIALS, THE CONTRACTOR SHALL FIELD VERIFY ALL PERTINENT EXISTING DIMENSIONS, ELEVATIONS, AND CONDITIONS AND SHALL REPORT ANY DISCREPANCIES TO THE STRUCTURAL ENGINEER OF RECORD OR THE
- ARCHITECT IMMEDIATELY UPON DISCOVERY. BACKFILL BOTH SIDES OF ALL FOUNDATION AND RETAINING WALLS EQUALLY UNTIL LOW SIDE IS UP TO FINISH GRADE. DO NOT BACKFILL ANY WALLS UNTIL CONCRETE HAS REACHED ITS SPECIFIED 28-DAY COMPRESSIVE STRENGTH.
- CONNECTIONS OF SYSTEMS DESIGNED BY THE CONTRACTOR'S ENGINEER SUCH AS, BUT NOT LIMITED TO, CLADDING, STAIRS, ELEVATORS AND MEP LOADS ARE ASSUMED TO IMPOSE VERTICAL AND/OR HORIZONTAL LOADS ON THE BASE BUILDING STRUCTURAL MEMBERS WITHOUT GENERATING TORSION IN THE SUPPORTING STRUCTURAL MEMBERS. CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL SUPPLEMENTARY BRACING MEMBERS AS REQUIRED TO PREVENT TORSION ON THE BASE BUILDING STRUCTURE.
- ANY MATERIALS OR PRODUCTS SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIAL OR PRODUCTS SPECIFIED IN THE STRUCTURAL CONTRACT DOCUMENTS WILL BE APPROVED ONLY IF THE FOLLOWING CRITERIA ARE SATISFIED:
- A. COST SAVINGS TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST. B. THE MATERIAL OR PRODUCT HAS BEEN APPROVED BY THE INTERNATIONAL CODE COUNCIL (ICC) AND THE ICC REPORT IS SUBMITTED WITH THE REQUEST.
- THE ENGINEER SHALL NOT HAVE CONTROL NOR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF 360 ENGINEERING GROUP, PLLC. IS SOLELY FOR THE PURPOSE OF BECOMING GENERALLY FAMILIAR WITH THE PROGRESS AND QUALITY OF THE WORK COMPLETED AND DETERMINING, IN GENERAL, IF THE WORK OBSERVED IS BEING PERFORMED IN A MANNER INDICATING THAT THE WORK, WHEN FULLY COMPLETED, WILL BE IN ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS AN EXHAUSTIVE OR CONTINUOUS CHECK OF THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

	DIVIS
Foundation W	ALLS SHALL HAVE ADEQUATE TEMP
Them. Tempor	ARY BRACING SHALL NOT BE REMO
EXTERIOR FOO	TINGS FOR STAIRS AND RAMPS SHA
THE CONTRACT	OR IS CAUTIONED AGAINST LOADIN
FOR CONSTRUC	TION EQUIPMENT AND MAY REQUIR
LOADING EXCEI	EDS THE DESIGN LOADS SHOWN IN T
AND SEALED BY	A REGISTERED STRUCTURAL, CIVIL
VERIFYING THE	ADEQUACY OF THE SLAB.
a 15-mil minimu	IM POLYETHYLENE FILM VAPOR RET
All interior s	LABS-ON-GRADE.
OR DETAILED O OTHERWISE.	THERWISE. SUBBASE SHALL MEET O

# ALL CONCRETE SHALL CONFORM TO THE SPECIFIC

- 2. CONTRACTOR SHALL FOLLOW ACI 306.1 FOR COLD ARRANGEMENTS AND DETAIL OF REINFORCING BEN DETAILING MANUAL" AND ACI 318, "BUILDING CODE
- UNLESS NOTED OTHERWISE, BAR SPLICES SHALL B THE LAP LENGTH SCHEDULE, WHERE REQUIRED IN ALTERNATE LAPS ARE SHOWN ON THE REINFORCIN PROFESSIONAL ENGINEER, LICENSED TO PRACTICE LENGTHS.
- PROVIDE SUITABLE WIRE SPACERS, CHAIRS, TIES, E CONCRETE. DO NOT "WET STICK" DOWELS.
- 6. ALL WELDED WIRE FABRIC SHALL BE LAPPED A MIN LOCATIONS AND SIZES OF OPENINGS, SLEEVES, ET CONCRETE.
- ALL SLOTS, SLEEVES, TRENCHES AND OTHER EMBE IS PLACED. SEE ARCHITECTURAL, ELECTRICAL, MEC LOCATIONS, SPACINGS, AND SIZES WITH THE STRU
- AS PART OF THE SUBMITTAL PROCESS, THE ELECT ALL PIPES, CONDUITS, OR OTHER DEVICES TO BE E LOCATIONS OF ALL PROPOSED EMBED ITEMS REFE TO BE EMBEDDED IN THE CONCRETE WITHOUT PRICE
- 10. CONDUITS AND PIPES EMBEDDED IN CONCRETE SL OUTSIDE DIAMETER) AND SHALL HAVE A CENTER-TO DIAMETER, THE MINIMUM CLEAR SPACING BETWEEI NO MORE THAN FOUR CONDUITS MAY BE PLACED A
- STRUCTURAL ENGINEER OF RECORD. 12. NO ALUMINUM CONDUITS, DEVICES, OR FIXTURES I WITH THE CONCRETE.
- 13. CORNER BARS SHALL BE PROVIDED FOR ALL HORIZ FOOTINGS, BEAMS, AND WALLS UNLESS NOTED OTH
- REINFORCING THEY CONNECT. MINIMUM LAP LENG 14. CONTINUE HORIZONTAL WALL BARS THROUGH PIL/ MINIMUM OF TWO #5 BARS OVER, UNDER AND AT T PAST THE OPENING. PROVIDE ONE #5 FOR SINGLE-DIAGONALLY AT EACH CORNER OF ALL OPENINGS. WALL SECTIONS. SLAB BARS SHALL BE HOOKED IN PROVIDE TWO #4, 4'-0" LONG DIAGONALLY AT EACH
- 5. FOR EXTERIOR RETAINING WALLS AND BUILDING ST CONTROL JOINTS AT 15'-0" OC MAX, SEE CONTROL J

- . HEADED SHEAR STUDS SHALL BE NELSON HEADED (D.B.A.) SHALL BE NELSON, TYPE D2L (ICC ESR-2907 MANUFACTURER'S STANDARD EQUIPMENT IN ACCC AND ANGLES SHALL BE HOT-DIPPED GALVANIZED A ON EMBEDDED PLATES OR ANGLES FOR A MINIMUM
- ANCHORS INSTALLED IN HARDENED CONCRETE SHA INSTALLED IN STRICT CONFORMANCE WITH MANUFA CONCRETE DURING INSTALLATION. ANCHORS EXPO GALVANIZING OR USE OF STAINLESS STEEL. THE CO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF PRODUCTS OTHER THAN THOSE SPECIFIED ON CON ENGINEER-OF-RECORD ALONG WITH CALCULATION RESPONSIBLE FOR THEIR PREPARATION AND LICEN
- CRACKING IS INHERENT TO THE MATERIAL PROPER THE EFFECTS OF UNSIGHTLY CRACKING, THE PRES STRUCTURAL ITEMS HAVE BEEN ANALYZED USING DETRIMENTAL TO THE STRUCTURE. CRACKS LARGE PREVENT FUTURE DETERIORATION. AN ALLOWANCI SOME CASES, CRACKS DO NOT APPEAR UNTIL WELL TO MAINTAIN THE STRUCTURE PROPERLY OVER THE AND SEALED TO PREVENT PREMATURE DETERIORATIONATION

# 19. CONTRACTOR TO INCLUDE AN ALLOWANCE OF UP 1

# DIVIS

- CONCRETE MASONRY UNITS SHALL MEET ASTM SPI OF 1900 PSI. THE SPECIFIED DESIGN COMPRESSIVE
- MORTAR SHALL MEET ASTM SPECIFICATION C270 F
- GROUT SHALL MEET ASTM SPECIFICATION C476 ANI GROUT PLACED BY THE LOW LIFT GROUTING METH
- INCH DIAMETER HEAD. HORIZONTAL JOINT REINFORCEMENT SHALL BE LAD INCHES ON CENTER BELOW FINISHED FLOOR AND I
- CONCRETE MASONRY SHALL BE LAID IN RUNNING B CONCRETE MASONRY BELOW FINISHED FLOOR SHA CONCRETE MASONRY ABOVE FINISHED FLOOR SHA
- AND BOND BEAMS. ALL CELLS WITH REINFORCING S SEE WALL SECTIONS AND DETAILS FOR MISCELLAN BLOCK. DO NOT USE THROUGH TYPE BLOCKS FOR I
- REINFORCING STEEL SHALL MEET ASTM SPECIFICAT 10. ANCHORS INSTALLED IN GROUT FILLED CONCRETE BE INSTALLED IN ACCORDANCE WITH THE MANUFAC ANCHORING SYSTEM OR HILTI KWIK BOLT3 EXPANSI TO THE SPECIFIED ANCHORS MUST BE APPROVED I
- CONSTRUCTION BRACING FOR MASONRY WALLS SH WHERE THE PROJECT IS LOCATED.

DIVISION 2 - FOUNDATIONS	CONCRETE REINFORCING TENSION CONTACT SPLICE LENGTHS			REQUIRED CONCRETE COVER FOR NON-FIRE-RATED ASSEMBLIES										
FOOTINGS SHALL BEAR EITHER ON COMPETENT NATIVE SOIL OR COMPACTED STRUCTURAL FILL.						CONCRE	TE COMPRES	SION STRENG	TH (PSI)			ASSEMBLY		COVER (IN)
EXTERIOR AND EXTERIOR PERIMETER FOOTINGS SHALL BEAR NOT LESS THAN 24 INCHES BELOW FINISH GRADE UNLESS OTHERWISE SPECIFIED BY A GEOTECHNICAL ENGINEER AND/OR BUILDING OFFICIAL. IF THE SOIL AT THE BEARING ELEVATIONS SHOWN IS OF		1	i		3,000	4,	,000	5,000		8,000	CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO	EARTH		3
QUESTIONABLE BEARING VALUE, THE STRUCTURAL ENGINEER OF RECORD OR ARCHITECT SHALL BE NOTIFIED IMMEDIATELY.			BARS ≤#6	TOP OTHER	57 DB 44 DB	49	9 DB 8 DB	57 DB 44 DB		35 DB 27 DB	CONCRETE EXPOSED TO EAR	TH OR #6 AND	O GREATER	2
PROVIDE A MINIMUM OF A 4-INCH CLEAN, FREE-DRAINING GRANULAR SUBBASE FILL BELOW ALL INTERIOR SLABS-ON-GRADE UNLESS NOTED OR DETAILED OTHERWISE. SUBBASE SHALL MEET GRADATION REQUIREMENTS OF ASTM C-33 SIZE NO. 67, UNLESS SPECIFICALLY NOTED		CASE #1	BARS >#7	TOP OTHER	57 DB 44 DB	57 44	7 DB 4 DB	57 DB 44 DB		44 DB 34 DB		#5 ANL WALLS	) SMALLER 6, SLABS #14 AND GRE/	TER 1 1/2
OTHERWISE.	CLASS A		BARS	TOP	57 DB	57	7 DB	57 DB		53 DB	OR WEATHER	COLUN	SLABS #11 AND SMALL INS, BEAMS, GIRDERS	ER 3/4 1 1/2
A 13-WILL MINIMUM POLITETTILENE FILM VAFOR RETARDER, MEETING THE REQUIREMENTS IN THE SPECIFICATIONS, SHALL BE PLACED BELOW ALL INTERIOR SLABS-ON-GRADE.		CASE #2	≤#6 BARS	OTHER TOP	44 DB 57 DB	44	4 DB 7 DB	44 DB 57 DB		41 DB 66 DB	NOTES:			
THE CONTRACTOR IS CAUTIONED AGAINST LOADING SLAB-ON-GRADE WITH CONSTRUCTION EQUIPMENT. THE SLAB HAS NOT BEEN DESIGNED FOR CONSTRUCTION EQUIPMENT AND MAY REQUIRE AN INCREASE IN SLAB THICKNESS AND/OR REINFORCEMENT. IF THE CONSTRUCTION			≥#7	OTHER	44 DB	44	4 DB	44 DB		51 DB	1. PRIMARY REINFORCEMEN	IT, TIES, STIRRUF	PS, AND SPIRALS	
LOADING EXCEEDS THE DESIGN LOADS SHOWN IN THE DESIGN CRITERIA, THE CONTRACTOR IS REQUIRED TO SUBMIT CALCULATIONS SIGNED AND SEALED BY A REGISTERED STRUCTURAL CIVIL OR GEOTECHNICAL ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED		CASE #1	BARS ≤#6	OTHER	44 DB	44	4 DB	44 DB		40 DB 35 DB			MATERIALS DESI	GNATION
VERIFYING THE ADEQUACY OF THE SLAB.			BARS ≥#7	TOP OTHER	57 DB 44 DB	57 44	7 DB 4 DB	57 DB 44 DB		57 DB 44 DB	MATERIAL			STANDARD
EXTERIOR FOOTINGS FOR STAIRS AND RAMPS SHALL BEAR AT OR BELOW MINIMUM BEARING DEPTH.	CLASS D		BARS ≤#6	TOP OTHER	57 DB 44 DB	57 44	7 DB 4 DB	57 DB 44 DB		68 DB 53 DB	PORTLAND CEMENT		ASTM C150, TYPE	OR TYPE II
THEM. TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL WALL IS PERMANENTLY BRACED.		CASE #2	BARS	TOP	57 DB	57	7 DB	57 DB		86 DB	FLY ASH		ASTM C618, CLASS	C OR F
DIVISION 3 - CONCRETE	WHERE:		2#1	UTHER	44 DD	44		44 DB		00 DB	AGGREGATE		ASTM C33	
	DB:	DIAMETER OF REIN	NFORCING BAR									F	POTABLE	
CONTRACTOR SHALL FOLLOW ACI 306.1 FOR COLD WEATHER CONCRETE PLACEMENT AND CURING GUIDELINES.	CLASS A	CLASS A TENSION	SPLICE								HIGH RANGE WATER REDUCIN		ASTM C494, TYPE F	OR G
ARRANGEMENTS AND DETAIL OF REINFORCING BENDS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF PUBLICATION SP-66, "ACI	CLASS B	CLASS B TENSION	SPLICE					<b>-</b>			ACCELERATOR ADMIXTURE		ASTM C290, TYPE (	C OR E
UNLESS NOTED OTHERWISE, BAR SPLICES SHALL BE CLASS B TENSION LAPS AND SHALL BE LAPPED WITH MINIMUM LENGTHS AS LISTED IN	CASE #1	CLEAR SPACING G		R EQUAL TO 2* db		EATER THAN	N OR EQUAL T	O db.			AIR ENTRAINING ADMIXTURE		ASTM C260	
THE LAP LENGTH SCHEDULE, WHERE REQUIRED IN REINFORCING. SHORTER LAPS MAY BE ACCEPTABLE IF SPECIFIC LOCATIONS OF ALTERNATE LAPS ARE SHOWN ON THE REINFORCING PLACEMENT DRAWINGS AND CALCULATIONS ARE SUBMITTED BY A REGISTERED	TOP	WHERE HORIZONT	AL REINFORCEM	ENT IS PLACED SU	JCH THAT MORE	THAN 12 IN	CHES OF FRE	SH CONCRETE	E IS CAST BE	LOW THE	-			
PROFESSIONAL ENGINEER, LICENSED TO PRACTICE IN THE STATE IN WHICH THE PROJECT IS LOCATED, JUSTIFYING THE ALTERNATE LAP LENGTHS.		DEVELOPMENT LE	NGTH OR SPLICE										ASTM C309, TYPE I	
PROVIDE SUITABLE WIRE SPACERS, CHAIRS, TIES, ETC. FOR SUPPORTING REINFORCING STEEL IN THE PROPER POSITION BEFORE PLACING	GENERAL CO	DITHER CONDITION	TES:	J TOP QUALIFICAT		URIZUNTAL	REINFORGING	כ)			WEIDED REINFORCING BARS		ASTM A615 GRADE	60 (SPECIFIED YIELD STRENGTH = 60 KSI)
CONCRETE, DO NOT "WET STICK" DOWELS.	1.	ALL TENSION SPLI	CES SHALL BE CO	ONTACT CLASS B S	SPLICES UNLESS	NOTED OTH	HERWISE. SPL	LICE LENGTH S	Shall not e	E LESS THAN	EPOXY COATED REINFORCING	G BARS	EPOXY COATED R	EINFORCING BARS
LOCATIONS AND SIZES OF OPENINGS, SLEEVES, ETC. REQUIRED FOR OTHER TRADES MUST BE VERIFIED BY THESE TRADES BEFORE PLACING	2.	SPLICE LENGTHS I	N TABLE ARE FOR	R SINGLE BAR SPL	LICES WITH MAX	MUM YIELD	STRENGTH O	F 60 KSI NON-I	EPOXY REIN	FORCING	1			
CONCRETE. ALL SLOTS, SLEEVES, TRENCHES AND OTHER EMBEDDED ITEMS SHALL BE SET AND SECURED AGAINST MOVEMENT BEFORE THE CONCRETE	3.	BARS.	WITH A SPECIFI	ED YIELD STRENG	TH GREATER TH	IAN 60 KSI M	ULTIPLY SPLI	CE LENGTH B	Y (SPECIFIEI	) YIELD	VAPOR RETARDER BELOW SL	AB-ON-GRADE	ASTM E1745 CLASS	A
IS PLACED. SEE ARCHITECTURAL, ELECTRICAL, MECHANICAL, PLUMBING, AND VENDOR DRAWINGS FOR SIZES, AND LOCATIONS. COORDINATE	4	STRENGTH/ 60 KSI									NOTES:			
AS PART OF THE SUBMITTAL PROCESS, THE ELECTRICAL AND MECHANICAL CONTRACTOR(S) SHALL SUBMIT PROPOSED ROUTING PLAN FOR	4.	BUNDLES. INDIVIDUAL B	UAL SPLICES WIT	NDLE LAB LENGT HIN A BUNDLE SH	AS SHALL BE MU	AP. ENTIRE E	BUNDLE SHAL	L NOT BE LAP	SPLICED.	THREE BAR	1. TYPE III PORTLAND CEME	NT MAY BE USED	) IF ACCEPTABLE TO TH	IE ARCHITECT.
ALL PIPES, CONDUITS, OR OTHER DEVICES TO BE EMBEDDED IN THE CONCRETE. THE SUBMITTAL SHALL SHOW SPECIFIC SIZES AND LOCATIONS OF ALL PROPOSED EMBED ITEMS REFERENCING PROXIMITY TO BEAM, COLUMN, AND SLAB EDGES. NO ITEMS SHALL BE ALLOWED	5.	BARS LARGER THA	AN #11 SHALL NO <sup>-</sup> CES SHALL HAVI	T BE LAP SPLICED E STRENGTH GRE	. FOR BARS LAR ATER THAN OR I	GER THAN # EQUAL TO 12	11, MECHANIC 25% THE YIELI	CAL SPLICE SH D STRENGTH (	IALL BE USE OF THE REIN	D. FORCING BAR	AF	PROVED PO	ST INSTALLED A	NCHORSold
TO BE EMBEDDED IN THE CONCRETE WITHOUT PRIOR WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER OF RECORD.		MECHANICAL SPLI	CES SHALL BE S	TAGGERED.							EXPANSION ANCHORS	CONCRETE	E SCREW ANCHORS	ADHESIVE ANCHORS
OUTSIDE DIAMETER) AND SHALL HAVE A CENTER-TO-CENTER SPACING NO LESS THAN THREE (3) CONDUIT DIAMETERS. REGARDLESS OF	6.	WHERE BAR OF DI	FFERENT SIZE AF	re lap spliced in The smaller bai	N TENSION THE N R, OR THE LENG	/INIMUM SPL TH OF A CLA	LICE LENGTH ASS A TENSIO	Shall be the N lap splice (	E LARGER OF OF THE LAR	THE LENGTH GER BAR.	HILTI KWIK BOLT TZ (ICC ESR-1917)	HILTI KWIK BO	OLT TZ (ICC ESR-1917)	HILTI HIT RE-200 (ICC ESR 3963)
DIAMETER, THE MINIMUM CLEAR SPACING BETWEEN CONDUITS OR REINFORCING SHALL BE (1) INCH. NO MORE THAN FOUR CONDUITS MAY BE PLACED ADJACENT TO EACH OTHER WITHOUT PRIOR APPROVAL IN WRITING FROM THE	7.	LAP SPLICES ARE I	NOT PERMITTED	WHERE MINIMUM	CLEARANCE BE	TWEEN REIN	NFORCING CAI	NNOT BE MAIN	ITAINED.		SIMPSON STRONG BOLT 2(IC	C SIMPSON TIT	EN HD (ICC ESR-2713)	SIMPSON SET-XP (ICC ESR-2508)
STRUCTURAL ENGINEER OF RECORD. NO ALLIMINUM CONDUITS, DEVICES, OR FIXTURES MAY BE EMBEDDED INTO THE CONCRETE SO THAT THE ALLIMINUM IS IN DIRECT CONTACT.	8.	LAP SPLICE LENGT	"H SHALL NOT BE ILTIPLIED BY ALL	LESS THAN THE L APPLICABLE MUL	LARGER OF 12 IN TIPLIERS.	CHES MULT	IPLIED BY ALL	APPLICABLE	MULTIPLIER	S OR THE	DEWALT POWER STUD+SD1 (I	CC DEWALT SCF	REW BOLT + (ICC ESR	DEWALT PURE 110 + (ICC ESR-3889)
WITH THE CONCRETE.		•	С		X DESIGN RE		FNTS				ESR 2818)		3889)	
CORNER BARS SHALL BE PROVIDED FOR ALL HORIZONTAL REINFORCING BARS AT THE INTERSECTIONS AND CORNERS OF ALL STRIP FOOTINGS, BEAMS, AND WALLS UNLESS NOTED OTHERWISE. CORNER BARS SHALL BE OF THE SAME SIZE AND GRADE AS THE HORIZONTAL			•						CLUMD		1. THE SPECIFIC APPLICATIO	ON OF EACH POS	T INSTALLED TO BE AF	PROVED BY ENGINEER BEFORE USE.
REINFORCING THEY CONNECT. MINIMUM LAP LENGTHS SHALL BE AS INDICATED ABOVE UNLESS NOTED OTHERWISE. CONTINUE HORIZONTAL WALL BARS THROUGH PILASTERS, COLUMNS AND INTERSECTING WALLS. AT SLAB AND WALL OPENINGS PROVIDE A		ELEME	ENT	ť	f'c (psi) CEMI TYF	PE W/C	MAX AGG	(NOTE 1)	(NOTE 2)	(NOTE 3)	2. PLACED AT THE ENGINEER	E AN ALLOWANCE RS DIRECTION.	E OF UP TO 2 TONS OF	INSTALLED REINFORGING STEEL TO BE
MINIMUM OF TWO #5 BARS OVER, UNDER AND AT THE SIDES OF THE OPENINGS. EXTEND THESE BARS LAP DISTANCE OR A MINIMUM OF 2'-0" PAST THE OPENING, PROVIDE ONE #5 FOR SINGLE-LAYER REINFORCING AND TWO #5 FOR DOUBLE-LAYER REINFORCING, 4'-0" LONG	DRILLED PIEF	RS		3	000, NW II	0.55	1 1/2"		6"	NOTE 4				
DIAGONALLY AT EACH CORNER OF ALL OPENINGS. REFER TO TYPICAL DETAILS FOR DISPOSITION OF CORNER BARS AND BARS IN SMALL WALL SECTIONS. SLAB BARS SHALL BE HOOKED INTO WALLS, OR HOOKED DOWELS SHALL BE PROVIDED TO MATCH SLAB REINFORCING	FOOTINGS A	ND GRADE BEAMS		3	500, NW I/I	0.55	1 1/2"	4.5%	4"	NOTE 4				
PROVIDE TWO #4, 4-0" LONG DIAGONALLY AT EACH RE-ENTRANT CORNER IN SLABS. PROVIDE HOOKED DOWELS FROM FOOTINGS TO MATCH		N WALLS AND PILAS"	TERS	4	500, NW I/I	0.45	1"	4.5%	3" 2"	NOTE 5.6.7				
VERTICAL WALL REINFORCING.	INTERIOR SL	AB ON GRADE DI UMNS, SHFAR WA	I I S AND BEARING	ى GWALLS 5000	0 UNO. NW 1/1	0.55	ı 1"	1.5%	ა 3"	NUTE 5,0,7				
CONTROL JOINTS AT 15'-0" OC MAX, SEE CONTROL JOINT DETAIL.	INSULATED C	CONCRETE FORM W	ALLS (ICF)	4	.000, NW I/I	0.55	NOTE 11		4"					
HEADED SHEAR STUDS SHALL BE NELSON HEADED ANCHORS WITH FLUXED ENDS (ICC ESR-2856) OR APPROVED. DEFORMED BAR ANCHORS (D.B.A.) SHALL BE NELSON, TYPE D2L (ICC ESR-2907), OR APPROVED. STUDS AND D.B.A. SHALL BE AUTOMATICALLY END-WELDED WITH THE	ELEVATED SI	LAB, BEAMS, AND JO	DISTS	5000	0 UNO, NW I/I	0.40	1"	1.5%	3"	NOTE 5,6,7				
MANUFACTURER'S STANDARD EQUIPMENT IN ACCORDANCE WITH THEIR RECOMMENDATIONS. PERMANENTLY EXPOSED EMBEDDED PLATES AND ANGLES SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION, UNLESS OTHERWISE NOTED. NO LOADS OR WELDS SHALL BE PLACED	INTERIOR EL	EVATED SLAB ON M	ETAL DECK	3	000, NW I/I	0.50	1/2"	1.5%	3"	NOTE 5,6,7,8				
ON EMBEDDED PLATES OR ANGLES FOR A MINIMUM OF 7 DAYS AFTER CASTING.	LW INTERIOF	R ELEVATED SLAB O	N METAL DECK	3	8000, LW I/I	0.50	1/2"	5.5%	3"	NOTE 5,7,8				
INSTALLED IN HARDENED CONCRETE SHALL BE USED WHERE SPECIFIED ON THE CONTRACT DRAWINGS. ALL ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS. DO NOT CUT REINFORCING IN NEW OR EXISTING		LEVATED SLAB	CTC	5	5000, NW 1/1	0.40	1/2"	7.0%	3" 2"	NOTE 4				
CONCRETE DURING INSTALLATION. ANCHORS EXPOSED TO EARTH OR WEATHER SHALL BE PROTECTED FROM CORROSION BY HOT-DIP GALVANIZING OR USE OF STAINLESS STEEL. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO				+	JUO, INVV 1/1	0.45	I	4.570	J	NOTE 4				
INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED ON CONTRACT DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE														
ENGINEER-OF-RECORD ALONG WITH CALCULATIONS THAT ARE SIGNED AND SEALED BY THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION AND LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.		NCE ON AIR CONTEN		1 5%	LOWS:									
CRACKING IS INHERENT TO THE MATERIAL PROPERTIES OF CONCRETE CONSTRUCTION WHILE EVERY EFFORT HAS BEEN MADE TO MINIMIZE	FOR fc G	REATER THAN 5000	PSI = +/- 1.0%	- 1.0 /0										
THE EFFECTS OF UNSIGHTLY CRACKING, THE PRESENCE OF CRACKS ARE NORMAL AND UNAVOIDABLE. THE DESIGN OF THE CONCRETE STRUCTURAL ITEMS HAVE BEEN ANALYZED USING A "CRACKING SECTION." THE PRESENCE OF THE CRACKING SHOULD NOT BE CONSIDERED	2. SLUMP T	OLERANCES AS FOL	LOWS (ACI 117):											
DETRIMENTAL TO THE STRUCTURE. CRACKS LARGER THAN 5 MILS SHALL BE FILLED AND SEALED WITH AN APPROVED CRACK FILLER TO PREVENT FUTURE DETERIORATION. AN ALLOWANCE SHALL BE MADE IN THE CONSTRUCTION BUDGET FOR SEALING OF SUCH CRACKS. IN	SPECIFIE	ED SLUMP LESS THA	N OR EQUAL TO 4	4" = +/- 1"										
SOME CASES, CRACKS DO NOT APPEAR UNTIL WELL AFTER CONSTRUCTION HAS BEEN COMPLETED. ITS THE RESPONSIBILITY OF THE OWNER TO MAINTAIN THE STRUCTURE PROPERLY OVER THE LIFE OF THE STRUCTURE. CONCRETE CRACKS, SHOULD THEY OCCUR, SHALL BE FILLED	SPECIFIE	ED SLUMP GREATER	THAN 4"= +/- 1 1/2	2"										
AND SEALED TO PREVENT PREMATURE DETERIORATION OF THE STRUCTURE.	SPECIFIE	ED SLUMP OF CONCI			STICIZERS OR H	IGH-RANGE	WATER REDU	CING ADMIXTU	JRES.					
CONTRACTOR TO INCLUDE AN ALLOWANCE OF UP TO 2 TONS OF INSTALLED REINFORCING STEEL TO BE PLACED AT THE ENGINEERS DIRECTION.	<ol> <li>MAXIMUN</li> <li>MAXIMUN</li> </ol>	M WATER-SOLUABLE	CHLORIDE ION (	CL-) CONTENT IN	CONCRETE BY %		F CEMENT IS 1	1.0 UNO. 1.3						
DIVISION 4 - MASONRY	5. CONCRE	TE FOR SLABS SHAL		CEMENTITIOUS	MATERIALS CON	TENT AS FO	LLOWS:							
	MAX AGO	GREGATE SIZE LESS	THAN 1" = 610 LB	8/ CU YD										
OF 1900 PSI. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF THE CONCRETE MASONRY ASSEMBLY SHALL BE 1,900 PSI.	MAX AGO	GREGATE SIZE GREA	ATER THAN OR EC	QUAL TO 1" = 540 L	_B/ CU YD									
MORTAR SHALL MEET ASTM SPECIFICATION C270 FOR TYPE "S" MORTAR.	6. NW CONC CONTEN	CRETE FOR SLABS 1 T GREATER THAN 39	FO RECEIVE A HA %.	RD-TROWELED FI	NISH SHALL NOT	CONTAIN A	IR-ENTRAININ	G ADMIXTURE	OR HAVE A	TOTAL AIR				
GROUT SHALL MEET ASTM SPECIFICATION C476 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,000 PSI. GROUT PLACED BY THE LOW LIFT GROUTING METHOD SHALL BE MECHANICALLY CONSOLIDATED USING A VIBRATOR WITH A MAXIMUM 3/4	7. WHEN FL	Y ASH IS USED IN S	LABS, IT SHOULD	BE 25% MAX BY V	VEIGHT OF TOTA	L CEMENTIT	TIOUS MATERI	ALS.						
	8. ADMIXTU	IRES CONTAINING (	CHLORIDE SALTS	SHALL NOT BE US	SED ON METAL D	ECKS.								
INCHES ON CENTER BELOW FINISHED FLOOR AND IN PARAPETS, AND 16 INCHES ON CENTER ABOVE FINISHED FLOOR.	9. MAXIMUN	M WATER-SOLUBLE	CHLORIDE ION (C	L-) CONTENT IN C	ONCRETE BY %	WEIGHT OF	CEMENT IS 0.	15.						
CONCRETE MASONRY SHALL BE LAID IN RUNNING BOND.	10. LIMITS O	N SUPPLEMENTARY	CEMENTITIOUS	MATERIALS TO CC		TABLE 26.4.2	2.2(b).							
CONCRETE MASONRY BELOW FINISHED FLOOR SHALL BE NORMAL WEIGHT UNITS AND SHALL HAVE ALL THE CELLS FULLY GROUTED. CONCRETE MASONRY ABOVE FINISHED FLOOR SHALL BE MEDIUM WEIGHT UNITS AND SHALL HAVE ALL THE CELLS FULLY GROUTED.	FOR COR		CONCRETE CORE	TO 4" = 3/8" MAX	OLLOWS:									
AND BOND BEAMS. ALL CELLS WITH REINFORCING SHALL BE GROUTED SOLID. SEE WALL SECTIONS AND DETAILS FOR MISCELLANEOUS BOND BEAM LOCATIONS AND EMBEDDED ITEMS. USE OPEN KNOCK OUT BOND BEAM	FOR COF	RE THICKNESS LESS	THAN OR EQUAL	. TO 6" = 1/2" MAX										
BLOCK. DO NOT USE THROUGH TYPE BLOCKS FOR BOND BEAMS. DO NOT CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS.	FOR COF	RE THICKNESS LESS	THAN OR EQUAL	. TO 8" = 1" MAX										
REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A615, GRADE 60.	GENERAL C	ONCRETE MIX NOTE	S:											
ANCHORS INSTALLED IN GROUT FILLED CONCRETE MASONRY UNITS SHALL BE USED WHERE SPECIFIED ON THE DRAWINGS. ANCHORS MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS. USE HILTI HY-270 ADHESIVE	1. MIX DESI	GNS SHALL BE IN A	CCORDANCE WIT	H ACI 301.										
ANCHORING SYSTEM OR HILTI KWIK BOLT3 EXPANSION ANCHOR, REFERENCE DETAILS FOR ANCHOR SIZE AND EMBEDMENT. SUBSTITUTIONS TO THE SPECIFIED ANCHORS MUST BE APPROVED BY THE ENGINEER OF RECORD.	2. STRENG	TH (f'c) IS THE 28 DA	Y COMPRESSIVE	STRENGTH UNO		/E STRENGT	TH AT THE SPE	ECIFIED AGE.						
CONSTRUCTION BRACING FOR MASONRY WALLS SHALL BE DESIGNED AND DETAILED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED.	<ol> <li>CONCRE</li> <li>LIGHT WI</li> </ol>	TE IS NORMAL WEIG	שׂדו (NW) CONCRI .W) SHALL HAVE ו	LIE UNU. NORMAL A DRY DENSITY OI	∟ vveiGHT CONC F 110 PCF MAX.	keie(NW)S	SHALL HAVE A	UKY DENSITY	UF 150 PCF	wax UNO.				
	5. MIX DESI		ED, SUCH AS THO	SE REQUIRING SU	JLFATE RESISTA	NCE OR EXF	POSED TO DE-	ICING CHEMIC	ALS, SHALL	BE FOUND IN				
											J			

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_27_Picture_50.jpeg)

![](_page_27_Picture_51.jpeg)

360 Engineering Group, PLLC www.360enggroup.com 918.518.1124 1201 East 3rd Street Tulsa, OK 74120 Certificate of Authorization: OK #5996 | EXP 6.30.2024

t Union Renovatio	a Panhandle State Univers	d. 73939
Revis # Der	sion scription	323 Eagle Blve Goodwell, OK
Revis	sion scription	323 Eagle Blv Goodwell, OK
Revis	sion scription	323 Eagle Blve Goodwell, OK
Revis # Dec Proje	sion scription ct Number	323 Eagle Blve Goodwell, OK
Revis # Devise Proje 2330 Shee	sion scription ct Numbe 9 t Title	323 Eagle Blve Goodwell, OK
Revis # Des 2330 Shee GEN	sion scription ct Numbe 9 t Title ERAL NC	Date Brodwell, OK

Date 03/15/2024

S0.1

### SPECIAL INSPECTION NOTES (2015)

SPECIAL INSPECTION SHALL BE PROVIDED BY THE OWNER ACCORDING TO SECTION 1705 OF IBC 2015. THE APPROVED SPECIAL INSPECTOR SHALL DEMONSTRATE COMPETENCE FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE SPECIAL INSPECTOR SHALL SEND REPORTS TO THE OWNER, THE BUILDING OFFICIAL, THE ARCHITECT, THE STRUCTURAL ENGINEER OF RECORD, AND TO THE CONTRACTOR. THE SPECIAL INSPECTOR SHALL BRING NON-CONFORMING ITEMS TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR AND NOTE ALL SUCH ITEMS IN THE REPORTS. ANY UNRESOLVED ITEM ABOUT TH COVERED WORK SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S CONSTRUCTION MANAGER AS WELL AS THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER OR NOT THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE SPECIAL INSPECTION AGENCY REGARDING INDIVIDUAL INSPECTIONS FOR ITEMS LISTED ON THE SCHEDULE AND AS NOTED ON THE BUILDING DEPARTMENT APPROVED PLANS. ADEQUATE NOTICE AND ACCESS TO APPROVED PLANS SHALL BE PROVIDED SO THAT THE SPECIAL INSPECTOR HAS TIME TO BECOME FAMILIAR WITH THE PROJECT.

2. SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING CONSTRUCTION DOCUMENTS FOR ADDITIONAL... 3. IN ACCORDANCE WITH IBC CHAPTER 17, THE FOLLOWING TYPES OF WORK REQUIRE SPECIAL INSPECTIONS AND...

SPECIAL INSPECTION AND VERIFICATION OF STEEL PRIOR TO WELDING REFERENCE AISC 360-10, TABLE N5.4-1	CONSTRUCTI	ON
VERIFICATION AND INSPECTION TASK	PERFORM	OBSERV
WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	Х	
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	Х	
MATERIAL IDENTIFICATION (TYPE/GRADE)		Х
WELDER IDENTIFICATION SYSTEM		Х
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) A. JOINT PREPARATION B. DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) C. CLEANLINESS (CONDITION OF STEEL SUBFACES)		Х

C. CLEANLINESS (CONDITION OF STEEL SURFACES) D. TACKING (TACK WELD QUALITY AND LOCATION) E. BACKING TYPE AND FIT (IF APPLICABLE)	
CONFIGURATION AND FINISH OF ACCESS HOLES	 Х
FIT-UP OF FILLET WELDS A. DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) B. CLEANLINESS (CONDITION OF STEEL SURFACES) C. TACKING (TACK WELD QUALITY AND LOCATION)	 Х
CHECK WELDING EQUIPMENT	 Х

SPECIAL INSPECTION AND VERIFICATION OF STEEL CONSTRUCTION DURING WELDING REFERENCE AISC 360-10, TABLE N5.4-2				
VERIFICATION AND INSPECTION TASK	PERFORM	OBSERVE		
USE OF QUALIFIED WELDERS		Х		
CONTROL AND HANDLING OF WELDING CONSUMABLES A. PACKAGING B. EXPOSURE CONTROL		Х		
NO WELDING OVER CRACKED TACK WELDS		Х		
ENVIRONMENTAL CONDITIONS A. WIND SPEED WITHIN LIMITS B. PRECIPITATION AND TEMPERATURE	-	Х		
<ul> <li>WPS FOLLOWED</li> <li>A. SETTINGS ON WELDING EQUIPMENT</li> <li>B. TRAVEL SPEED</li> <li>C. SELECTED WELDING MATERIALS</li> <li>D. SHIELDING GAS TYPE/FLOW RATE</li> <li>E. PREHEAT APPLIED</li> <li>F. INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.)</li> <li>G. PROPER POSITION</li> </ul>		Х		
FIT-UP OF FILLET WELDS A. INTERPASS AND FINAL CLEANING B. EACH PASS WITHIN PROFILE LIMITATIONS C. EACH PASS MEETS QUALITY REQUIREMENTS		Х		

SPECIAL INSPECTION AND VERIFICATION OF STEEL CONSTRUCTION AFTER WELDING REFERENCE AISC 360-10, TABLE N5.4-3				
VERIFICATION AND INSPECTION TASK	PERFORM	OBSERVE		
WELDS CLEANED		Х		
SIZE, LENGTH AND LOCATION OF WELDS	Х			
<ul> <li>WELDS MEET VISUAL ACCEPTANCE CRITERIA</li> <li>A. CRACK PROHIBITION</li> <li>B. WELD/BASE-METAL FUSION</li> <li>C. CRATER CROSS SECTION</li> <li>D. WELD PROFILES</li> <li>E. WELD SIZE</li> <li>F. UNDERCUT</li> <li>G. POROSITY</li> </ul>	x			
ARC STRIKES	Х			
K-AREA <sup>1</sup>	Х			
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	Х			
REPAIR ACTIVITIES	X			
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	Х			

VERIFICATION AND INSPECTION TASK

MANUFACTURER'S CERTIFICATIONS AVAILABLE FASTENERS MARKED IN ACCORDANCE WITH AST PROPER FASTENERS SELECTED FOR THE JOINT I

LENGTH IF THREADS ARE TO BE EXCLUDED FROM PROPER BOLTING PROCEDURE SELECTED FOR CONNECTING ELEMENTS, INCLUDING THE APPRO CONDITION AND HOLE PREPARATION, IF SPECIFIE REQUIREMENTS

PRE-INSTALLATION VERIFICATION TESTING BY IN OBSERVED AND DOCUMENTED FOR FASTENER A USFD

PROPER STORAGE PROVIDED FOR BOLTS, NUTS, FASTENER COMPONENTS

SPECIAL INSPECTION AND VERIFICATION OF STEEL CONSTRUCTION DURING BOLTING REFERENCE AISC 360-10, TABLE N5.6-2				
VERIFICATION AND INSPECTION TASK	PERFORM	OBSERVE		
FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED		Х		
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION		Х		
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING		Х		
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID TOWARD THE FREE EDGES		Х		

SPECIAL	INSPECTIO	IN AND

```
REFEREN
```

VERIFICATION AND INSPECTION TASK

```
DURING ACCEPTANCE OR REJECTION OF BOLT
```

SPECIAL INSPECTION AND VERIFICATION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT REFERENCE AISC 360-10, TABLE N6.1					
ICATION AND INSPECTION TASK	PERFORM	OBSERVE			
EMENT AND INSTALLATION OR STEEL DECK	Х				
EMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	Х				
MENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	Х				

VERIF

PLACE PLACE DOCUN

SPECIAL INSPECTION AND VERIFICATION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS REFERENCE IBC 2015, TABLE 1705.2.3				
ND INSPECTION TASK	CONTINUOUS	PERIODIC		
DF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS ECTIONS - WELDING OR BOLTED HORIZONTAL OR DIAGONAL	 	X X		
DGING		Х		
DIFFERS FROM THE SJI SPECIFICATIONS LISTED IN SECTION		Х		

VERIFICATION A

INSTALLATION O . END CONNE B. BRIDGING -

STANDARD BRID

BRIDGING THAT 2207.1

1. WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS WITHIN 3" OF THE WELD.

### SPECIAL INSPECTION AND VERIFICATION OF STEEL CONSTRUCTION PRIOR TO BOLTING REFERENCE AISC 360-10, TABLE N5.6-1

		-
	PERFORM	OBSERVE
FOR FASTENER MATERIALS	Х	
TM REQUIREMENTS		Х
DETAIL (GRADE, TYPE, BOLT M SHEAR PLANE)		Х
JOINT DETAIL		Х
OPRIATE FAYING SURFACE IED, MEET APPLICABLE		Х
NSTALLATION PERSONNEL ASSEMBLIES AND METHODS		Х
S, WASHERS AND OTHER		Х

D VERIFICATION OF STEEL CONSTRUCTION AFTER BOLTING INCE AISC 360-10, TABLE N5.6-3				
	PERFORM	OBSERVE		
ED CONNECTIONS	Х			

### SPECIAL INSPECTION AND VERIFICATION OF CONCRETE CONSTRUCTION REFERENCE IBC 2015, TABLE 1705.3

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT		Х
REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706 B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16" C. INSPECT ALL OTHER WELDS	  X	X X 
INSPECT ANCHORS CAST IN CONCRETE	Х	
<ul> <li>INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.</li> <li>A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.</li> <li>B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN A</li> </ul>	X 	 X
VERIFY USE OF REQUIRED DESIGN MIX.		Х
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	Х	
INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	Х	
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.		Х
INSPECT PRESTRESSED CONCRETE FOR: A. APPLICATION OF PRESTRESSING FORCES B. GROUTING OF BONDED PRESTRESSING TENDONS	X X	
INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.		Х
VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.		Х
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		Х

LEVEL B SPECIAL INSPECTION AND VERIFICATION OF M REFERENCE TMS 402-13, TABLE 3.1.2	IASONRY CONST	RUCTION
VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
VERIFICATION OF SLUMP FLOW AND VSI AS DELIVERED TO THE SITE IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.5B.1.b.3 FOR SELF- CONSOLIDATING GROUT.		х
VERIFICATION OF fm AND faac PRIOR TO CONSTRUCTION EXCEPT WHERE SPECIFICALLY EXEMPTED BY TMS 402-13.		Х
VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS		Х
AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE.	I	
A. PROPORTIONS OF SITE-PREPARED MORTAR		Х
B. CONSTRUCTION OF MORTAR JOINTS		X
D. LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING		X
TENDONS AND ANCHORAGES		X
F. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X <sup>1</sup>	X <sup>2</sup>
PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:		х
B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND		Х
PRESTRESSING TENDONS AND ANCHORAGES C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING		х
TENDONS AND ANCHORAGES D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT		Х
E. CONSTRUCTION OF MORTAR JOINTS		Х
VERIFY DURING CONSTRUCTION:		Y
<ul> <li>B. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, ERAMES, OR</li> </ul>	F	X
	v	
C. WELDING OF REINFORCEMENT D. PREPARATION. CONSTRUCTION. AND PROTECTION OF MASONRY DURING	G	
COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER		Х
(TEMPERATURE ABOVE 90°F (32.2°C))	x	
F. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED	x x	
TENDONS IS IN COMPLIANCE		
G. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	′ X <sup>1</sup>	X <sup>2</sup>
OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		Х

1. REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY. 2. REQUIRED AFTER THE FIRST 5000 SQUARE FEET OF AAC MASONRY.

SPECIAL INSPECTION AND VERIFICATION OF SOILS REFERENCE IBC 2015, TABLE 1705.6				
VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC		
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.		Х		
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.		Х		
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.		Х		
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	Х			
PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.		Х		

![](_page_28_Picture_43.jpeg)

(C) Copyright Studio Architecture, P.C.

![](_page_29_Figure_1.jpeg)

1/4SEE BASE PLATE SCHED - S501/4SEE BASE PLATE SCHED - S501	
/4 SEE BASE PLATE SCHED - S501	1/4
	/4
/4 SEE BASE PLATE SCHED - S501	/4

	SIZE		
IGTH	WIDTH	DEPTH	REINFORCEMENT
- 6"	2' - 6"	1' - 6"	(8) #4 BOT BARS, EW

![](_page_29_Figure_25.jpeg)

S2.1

03/15/2024

23309

Date

Sheet Title

FOUNDATION PLAN

![](_page_30_Figure_1.jpeg)

![](_page_30_Figure_3.jpeg)

**GENERAL ROOF FRAMING NOTES (S)** 

SOME GENERAL SHEET NOTES MAY NOT APPLY TO THIS SHEET.

- 1 SEE SHEET S001 FOR GENERAL NOTES.
- 2 SEE ARCHITECTURAL PLANS FOR DIMENSIONS NOT SHOWN.
- 3 SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR SIZES AND LOCATION OF PENETRATIONS NOT INDICATED ON STRUCTURAL DRAWINGS.
- 4 "DBE" INDICATES DECK BEARING ELEVATION. 5 NO HANGING LOADS SHALL BE APPLIED TO THE ROOF
- DECK. 6 CONCENTRATED LOADS AT STEEL JOIST BOTTOM CHORD OR TOP CHORD MAY OCCUR UP TO 1'-0" AWAY FROM LOCATION SHOWN. LOADS INDICATED ARE FACTORED FOR USE WITH ALLOWABLE STRESS DESIGN (ASD) METHOD. SEE TYPICAL MECHANICAL UNIT SUPPORT DETAIL. REFERENCE MECHANICAL FOR EXACT LOCATIONS.
- 7 STEEL JOIST MANUFACTURER SHALL COORDINATE MECHANICAL DUCT LOCATIONS TO AVOID CONFLICT WITH BRIDGING.
- 8 JOIST BRIDGING AND ERECTION STABILITY SHALL BE PROVIDED IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HAZARD ADMINISTRATION (OSHA) AND THE STEEL JOIST INSTITUTE (SJI) SPECIFICATIONS OF LATEST ADOPTION TYPICAL FOR GRAVITY AND UPLIFT LOADS SUPERIMPOSED ON ALL JOISTS . DIAGONAL BRIDGE SHALL BE PROVIDED BETWEEN ADJACENT JOISTS WHENEVER BOTTOM CHORD HORIZONTAL BRIDGING DISCONTINUES.
- 9 STEEL FABRICATOR SHALL DESIGN BEAM CONNECTIONS TO COLUMNS OR TO BEAMS FOR THE TOTAL REACTIONS SHOWN ON THE PLANS. REACTIONS INDICATED ARE FACTORED FOR USE WITH ALLOWABLE STRESS DESIGN (ASD) METHOD. IF NO REACTION IS SHOWN ON THE PLANS, DESIGN FOR THE ASD FACTORED REACTION SHOWN IN THE STEEL BEAM MINIMUM CONNECTION SCHEDULE.
- 10 ADDITIONAL PLATES, INCLUDED BUT NOT LIMITED TO DOUBLER PLATES AND STIFFENER PLATES, ARE THE RESPONSIBILITY OF THE CONNECTIONS ENGINEER.
- 11 ALL ROOF SHEATHING SHALL BE APA RATED EXPOSURE 1 SHEATHING WITH A MINIMUM THICKNESS OF 15/32", DOC PS-1 OR PS-2, WITH A SPAN RATING OF AT LEAST 32/16, SEE SCHEDULE.

### PLAN NOTES - ROOF FRAMING (R)

- R1 MECH SUPPORT FRAMING, SEE 1/<mark>S5.1</mark>.
- R2 POCKET BEAM INTO EXISTING WALL PER 1/S5.2. R3 SEE 5/<mark>S5.2</mark> FOR BEAM ATTACHMENT TO COLUMN.
- R4 COORDINATE FINAL TOS FOR DOOR PLACEMENT WITH
- MANUFACTURER PRIOR TO INSTALLATION. R5 ALT. #1 AND ALT. #2: 9'-4" COLUMN TYP; PROVIDE LOOP AT TOPS FOR STRING ATTACHMENT. PROVIDE CAP PLATE AT TOP OF COLUMN.

AND EXISTING STRUCTURAL
LD PRIOR TO FABRICATION OF
TING PORTION OF THE PLANS
FIELD SURVEY, WHICH MAY
TUAL AS-BUILT CONDITIONS
DISCREPANCIES ARE FOUND
N ON THE DRAWINGS AND WHAT
TACT THE ARCHITECT TO
D BE DONE TO MATCH EXISTING
D. BEGINNING OF FABRICATION
EXISTING CONDITIONS.

<b>360 En</b> <i>www.3</i> 918.51 1201 E Tulsa, ( c	gineering Group 60enggroup.com 8.1124 ast 3rd Street DK 74120 ertificate of Authorizat DK 74120	C p, PLLC n ion: i24
n Renovatic	Indle State Unive	

Revision					
#	Description	Date			
	1	)			

Oklahoma

Student

323 Eagle Blvd. Goodwell, OK 73939

Project Number 23309

Sheet Title **ROOF FRAMING** 

PLAN

Date 03/15/2024

![](_page_30_Picture_29.jpeg)

![](_page_31_Figure_0.jpeg)

![](_page_31_Figure_1.jpeg)

15/2024 11:32:35 /

FIELD VERIFICATION NOTE VERIFY ALL DIMENSIONS AND EXISTING STRUCTURAL

MEMBER SIZES IN THE FIELD PRIOR TO FABRICATION OF STRUCTURAL ITEMS. EXISTING PORTION OF THE PLANS ARE FROM A PRELIMINARY FIELD SURVEY, WHICH MAY OR MAY NOT REFLECT ACTUAL AS-BUILT CONDITIONS AND DIMENSIONS. IF ANY DISCREPANCIES ARE FOUND BETWEEN WHAT IS SHOWN ON THE DRAWINGS AND WHAT EXISTS IN THE FIELD, CONTACT THE ARCHITECT TO DETERMINE WHAT SHOULD BE DONE TO MATCH EXISTING CONDITIONS AS REQUIRED. BEGINNING OF FABRICATION MEANS ACCEPTANCE OF EXISTING CONDITIONS.

STUD ARCHITE 816 NORTH WALKER OKLAHOMA CITY, OK VOICE: 405.605.1044 WWW.STUDIOARC.CO	CTURE SUITE 100 73102 M (15/2024
Student University Student University Student University Coklahoma Panhandle State University Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
Revision          #       Description         #       Description         Project Numb         23309         Sheet Title         BASEMENT I         Date         03/15/2024	Date er PLAN
03/15/2024	

![](_page_32_Figure_1.jpeg)

⊊ COL

![](_page_32_Picture_9.jpeg)

![](_page_33_Figure_0.jpeg)

![](_page_33_Figure_1.jpeg)

![](_page_33_Picture_2.jpeg)

C3x6 AT 2'-6" OC MAX -

COUNTER, SEE ARCH

PLATE -WF OR HSS COL

![](_page_33_Picture_6.jpeg)

![](_page_33_Figure_7.jpeg)

![](_page_33_Figure_8.jpeg)

![](_page_33_Figure_9.jpeg)

	MINIMUM BOLT SCHEDULE					
SECTION	SHEAR PLATE	FASTENERS				
W8	3/8" x 3 1/2" x 0'-6"	(2) 3/4" DIA A325 BOLTS				
W10	3/8" x 3 1/2" x 0'-6"	(2) 3/4" DIA A325 BOLTS				
W12	3/8" x 3 1/2" x 0'-9"	(3) 3/4" DIA A325 BOLTS				
W14	3/8" x 3 1/2" x 0'-9"	(3) 3/4" DIA A325 BOLTS				
W16	3/8" x 3 1/2" x 1'-0"	(4) 3/4" DIA A325 BOLTS				
W18	3/8" x 3 1/2" x 1'-3"	(5) 3/4" DIA A325 BOLTS				
W21	3/8" x 3 1/2" x 1'-6"	(6) 3/4" DIA A325 BOLTS				
W24	3/8" x 3 1/2" x 1'-9"	(7) 3/4" DIA A325 BOLTS				
W27	3/8" x 3 1/2" x 2'-0"	(8) 3/4" DIA A325 BOLTS				

NEW MASONRY OPENING SCHEDULE OPENING BEARING WIDTH LENGTH SHAPE WELD TYPE WELD SIZE SPACING 5'-0" 4" WT6x8 FILLET 1/4" 2@12 22'-4" NOTE #1 W16x36 FILLET 1/4" 4@12

1. ATTACH TO COLUMN PER 5/S5.2.

![](_page_33_Figure_13.jpeg)

![](_page_33_Figure_14.jpeg)

(4)

![](_page_33_Figure_16.jpeg)

- 8" (MIN) BOND BEAM X 4'-0" LONG, MIN REINF W/ (2) #5

![](_page_33_Figure_18.jpeg)

CMU BEARING PLATE SCHEDULE				
BEAM SIZE	EMBED PLATE (TxWxL)	NUMBER OF ANCHORS		
W8 - W14	5/8" x W x 1'-0"	2		
W16 - W24	5/8" x W x 1'-4"	4		

**TYPICAL BEAM BEARING POCKET** 1 3/4" = 1'-0"

![](_page_33_Figure_21.jpeg)

![](_page_33_Figure_22.jpeg)

![](_page_33_Figure_23.jpeg)

![](_page_33_Figure_24.jpeg)

![](_page_33_Figure_25.jpeg)

<u>TYPE B</u>

<u> TYPE A</u>

### BASE PLATE SCHEDULE

DAGE FEATE SCHEDOLL							
MVDK	RK TYPE	TYPE THICKNESS DIMENSIONS		THICKNESS		ANCHOR RODS	
			"A"	"B"	"C"	"D"	(DIAxEMB)
B1	А	1/2"	0'-10"	0'-10"	1 1/2"	-	1/2" x 0'-2 3/4"
B2	А	1/2"	1'-0"	1'-0"	1 1/2"		1/2" x 0'-2 3/4"
B3	С	1/2"	0'-7"	0'-7"	1"	4"	1/2" x 0'-2 3/4"
B4	В	1/2"	1'-0"	0'-7 1/2"	1"	2 1/2"	1/2" x 0' -2 3/4"
B5	А	1/2"	0'-6"	0'-6"	1 1/4"		1/2" x 0'-2 1/2"
B6	А	1/2"	1'-0"	1'-0"	1 1/2"		3/4" x 1'-0"
B7	D	1/2"	0'-4"	0'-8"	1 1/2"		1/2" x 0'-2 1/2"

### NOTES:

- 1. USE OVERSIZED HOLES AND WASHERS FOR ANCHORS RODS
- ACCORDING TO AISC MANUAL (14 ED.) TABLE 14.2 UNO.
- EMBED ANCHORS WITH HILTI HIT-HY 200 V3 EPOXY ADHESIVE SYSTEM. HILTI KWIK BOLT TZ2 MECHANICAL ANCHOR TO BE USED AT B5 AND B7.
- \* INDICATES MINIMUM FILLET WELD PER AISC.
- HSS4 AND SMALLER USE B1 UNO.
- HSS6 USE B2.
- HSS7 USE B3. 8. HSS12 USE B4.
- 9. C3 USE B5 UNO.
- 10. AT 3 5/8" WALL USE B7.

# COLUMN BASE PLATE SCHEDULE

1. W= NOMINAL WIDTH OF CMU LESS 1"

- BEARING PLATES TO BE CENTERED WITHIN THE WALL
- 3. WHERE BEAM POCKET INTERRUPTS JAMB REINFORCEMENT PROVIDE ADDITIONAL JAMB TO SPAN BETWEEN FLOORS ADJACENT TO BEAM POCKET
- 4. ANCHORS SHALL BE 1/2" DIA x 1'-2" DBA (6" GAGE SPACING), UNO

![](_page_33_Picture_45.jpeg)

Α

# **ABBREVIATIONS**

AC	ABOVE CEILING
ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
ACC	
	B
BDD	BACKDRAFT DAMPER
BV	BALL VALVE
BFF	BELOW FINISHED FLOOR
BTU	BRITISH THERMAL UNIT
	C
CLG	CEILING
CV	CHECK VALVE
CHWP	CHILLED WATER PUMP
CWR	
CWS	
CONC	
COND	CONDENSATE
CD	CONDENSATE DRAIN
CWP	CONDENSER WATER PUMP
CR	CONDENSER WATER RETURN
CS	CONDENSER WATER SUPPLY
CU	
CEM	
DPR	DAMPER
DR	DEW POINT
DIFF	DIFFUSER
DN	DOWN
DT	DRAW THROUGH
DB	DRY BULB
ECC	E
EUC FLEC	FLECTRIC
EAT	ENTERING AIR TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
ES	EQUAL SPLIT
EXH	EXHAUST
FF .	EXHAUSTEAN
EAG	EXHAUST GRILLE
EAG EXIST EXT	EXHAUST GRILLE EXISTING EXTERNAL
EAG EXIST EXT	EXHAUST GRILLE EXISTING EXTERNAL F
EAG EXIST EXT FCU	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL
EAG EXIST EXT FCU FT	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET
EAG EXIST EXT FCU FT FPM	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE EVER DAMPER
EAG EXIST EXT FCU FT FPM FDPR F/SDPR	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER
EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC
EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T F&T	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF
EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FR FR	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM
EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR FR	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G
EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPM	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE
EAG EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR FR GPH GPM G	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS
EAG EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPM G GC	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR
EAG EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR FR GPH GPM G GC GR	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE
EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPM G GC GC GR	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H
EAG EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPH GC GC GR HVU HHWP	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PLIMP
EAG EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN
EAG EAG EXIST EXT FCU FT FPM FDPR FJSDPR F&T FTR FR GPH GPH GPM G GC GC GR HVU HHWP HWR HWS	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY
EAG EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER
EAG EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPH GPM G GC GR HVU HHWP HWR HWS HP	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I
EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES
EAG EAG EXIST EXT FCU FT FPM FDPR FJSDPR F&T FR FR GPH GPH GPM G GC GR HVU HHWP HWR HWS HP IN	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K
EAG EXIST EXT FCU FT FPM FDPR F/SDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KILOWATTS L
EAG EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HPWS HP IN KW LAT	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET FER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KILOWATTS L LEAVING AIR TEMPERATUE
EAG EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW LAT LWT	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING AND VENTILATING UNIT HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K K KLOWATTS L LEAVING AIR TEMPERATUE LEAVING AIR TEMPERATUE
EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FR GPH GPM G GC GR HVU HHWP HWR HPWS HP IN KW LAT LWT LD	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KILOWATTS L LEAVING AIR TEMPERATUE LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATUE LEAVING WATER TEMPERATUE LINEAR DIFFUSER
EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW LAT LWT LD MBH	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE
EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW LAT LWT LD MBH MAU	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FLOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KILOWATTS L LEAVING AIR TEMPERATUE LEAVING AIR TEMPERATUE LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATURE LINEAR DIFFUSER M 1000 BTU PER HOUR MAKE-UP AIR UNIT
EI EAG EXIST EXT FCU FT FPM FDPR FJSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW LAT LWT LD MBH MAU MBD	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FICAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KLIOWATTS L LEAVING AIR TEMPERATUE LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATUE LEAVING WATER TEMPERATURE LINEAR DIFFUSER M 1000 BTU PER HOUR MAKE-UP AIR UNIT MANUAL BALANCING DAMPER
EI EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW LAT LWT LD MBH MAU MBD MAX	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FILOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING AND VENTILATING UNIT HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KILOWATTS L LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATUE LEAVING WATER TEMPERATUE LEAVING WATER TEMPERATUE LINEAR DIFFUSER M 1000 BTU PER HOUR MAKE-UP AIR UNIT MANUAL BALANCING DAMPER MAXIMUM
EI EAG EXIST EXT FCU FT FPM FDPR FJPR FVDPR F&T FR GPH GPM G GC GR HVU HHWP HWR HPW IN KW LAT LWT LD MBH MAU MBD MAX MC	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER ALLONS PER HOUR GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING AND VENTILATING UNIT HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KLIOWATTS L LEAVING AIR TEMPERATUE LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATUE LINEAR DIFFUSER M 1000 BTU PER HOUR MAKE-UP AIR UNIT MANUAL BALANCING DAMPER MAXIMUM MECHANICAL CONTRACTOR
EI EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW LAT LWT LD MBH MAU MBD MAX MC MIN	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FILOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KILOWATTS L LEAVING AIR TEMPERATUE LEAVING AIR TEMPERATUE LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATUE LINEAR DIFFUSER M 1000 BTU PER HOUR MAKE-UP AIR UNIT MANUAL BALANCING DAMPER MAXIMUM MECHANICAL CONTRACTOR MINIMUM
EI EAG EXIST EXT FCU FT FPM FDPR FDPR F&T FR GPH GPM G GC GR HVU HHWP HWR HP IN KW LAT LWT LD MBH MAU MBD MAX MC MIN MTZ	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE
EI EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW LAT LWT LD MBH MAU MBD MAX MC MIN MTZ MTD	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FET FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FICAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KILOWATTS L LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATURE LINEAR DIFFUSER M 1000 BTU PER HOUR MAKE-UP AIR UNIT MANUAL BALANCING DAMPER MAXIMUM MECHANICAL CONTRACTOR MINIMUM MOTORIZED MOUNTED N
EI EAG EXIST EXT FCU FT FPM FDPR FJPR F&T FR GPH GPM G GC GR HVU HHWP HWR HP IN KW LAT LWT LD MBH MAU MBD MAX MC MIN MTZ MTD	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FET FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FIRE/SMOKE DAMPER FILOAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER HOUR GALLONS PER HOUR GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER RETURN HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K KILOWATTS L LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATURE LINEAR DIFFUSER M 1000 BTU PER HOUR MAKELP AIRUNT MANUAL BALANCING DAMPER MAXIMUM MECHANICAL CONTRACTOR MINIMUM MOTORIZED N NECK DIAMETER
EI EAG EXIST EXT FCU FT FPM FDPR FSDPR F&T FTR FR GPH GPM G GC GR HVU HHWP HWR HWS HP IN KW LAT LWT LD MBH MAU MBD MAX MC MIN MTZ MTD ND NC	EXHAUST GRILLE EXISTING EXTERNAL F FAN COIL FEET FAN COIL FEET FEET PER MINUTE FIRE DAMPER FIRE/SMOKE DAMPER FICAT & THERMOSTATIC FLUE THRU ROOF FROM G GALLONS PER MINUTE GAS GENERAL CONTRACTOR GRILLE H HEATING AND VENTILATING UNIT HEATING HOT WATER PUMP HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY HORSEPOWER I INCHES K K KUCWATTS L LEAVING AIR TEMPERATUE LEAVING WATER TEMPERATURE LINEAR DIFFUSER M 1000 BTU PER HOUR MAKE-UP AIR UNIT MANUAL BALANCING DAMPER MAXIMUM MECHANICAL CONTRACTOR N NECK DIAMETER NORMALLY CLOSED

NO	NORMALLY OPEN
NIC	NOT IN CONTRACT
	0
00	ON CENTER
OR	ON ROOF
	OPEN SIGHT DRAIN
03D	
00	
0A .	
OS&Y	OUTSIDE, SCREW & YOKE
	Р
PSI	POUNDS PER SQUARE INCH
PRESS	PRESSURE
PD	PRESSURE DROP
	R
REC	
REC	
REG	
KH	
RA	RETURN AIR
RAG	RETURN AIR GRILLE
RAO	RETURN AIR OPENING
RAR	RETURN AIR REGISTER
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
	S
50	
200	
SUPR	
SF	
SS	STAINLESS STEEL
ST	STATIC PRESSURE
STM	STEAM
SA	SUPPLY AIR
SAG	SUPPLY AIR GRILLE
SAR	SUPPLY AIR REGISTER
SF	SUPPLY FAN
	Т
TD	TEMPERATURE DIFFERENCE
THERM	THERMOMETER
TG	TRANSEER GRILLE
UV	
UF	
UG	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
	V
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VEL	VELOCITY
VF	VENTILATION FAN
	W
WG	WATER GALICE
WU	
VVB	

HPS	STEAM, HIGH PRESSURE		3-WAY VALVE (PNELIMATIC)	1. THE MECHANICAL INSTALLATION SHALL 2. CONNECTION TO EQUIPMENT SHALL BE
MPS	STEAM, MEDIUM PRESSURE			3. DIMENSIONS SHALL BE VERIFIED AND PROVIDED FOR TRADES INVOLVED. FIELD MODIFICATION
LPS	STEAM, LOW PRESSURE		3-WAY VALVE (ELECTRIC)	INTERFERENCES SHALL BE PROVIDED A 4. SEE SPECIFICATIONS FOR DUCT PRESS 5. PROVIDE AIR TURNING VANES IN ALL 90
HPC	CONDENSATE RETURN HIGH PRESSURE	<i>₹</i>	ASME RELIEF VALVE	6. COORDINATE DIFFUSER, GRILLE AND RI AND DOOR SWINGS.
MPC	CONDENSATE RETURN MEDIUM PRESSURE		GATE VALVE	8. LOCATE THERMOSTATS, TEMPERATURE FLOOR UNLESS NOTED OTHERWISE. CO
LPC	CONDENSATE RETURN LOW PRESSURE		GATE VALVE W/OUTSIDE SCREW & YOKE	9. ALL DUCT SIZES ARE SHOWN ARE INSID 10. DAMPERS AND INTERIOR OF DUCT VIS
———— HWS ——	HEATING HOT WATER SUPPLY		CHECK VALVE	11. PROVIDE TRAPPED CONDENSATE DRA 12. ACCESS PANELS IN DUCT WORK AND ( MAINTENANCE OF ALL MECHANICAL EQ
HWR	HEATING HOT WATER RETURN	——— I Г ———	BUTTERFLY VALVE	13. ALL DUCTWORK AND PIPING IS SHOWN ALLOW SMOOTH FLOWS. ALL DUCT SPL 14. PROVIDE CONCRETE HOUSEKEEPING
00	BOILER FEED WATER		GLOBE VALVE	REQUIREMENTS. 15. VERIFY FINISHES WITH ARCHITECT PR
	BOILER BLOW OFF	——IQI——	BALL VALVE	16. PROVIDE DUCT FLEX CONNECTIONS O 17. PROVIDE TRANSITIONS AT DIFFUSER N
	REFRIGERANT SUCTION LINE		BALANCING VALVE	18. SLEEVE AND/OR FIRESTOP ALL PENET FIRESTOP ASSEMBLIES SHALL BE EQUA FOR FINAL FINISHES. ALL FIRESTOP MAT
RL	REFRIGERANT LIQUID LINE	—— <del>—    </del>	STRAINER	19. INTERRUPTIONS TO EXISTING SERVICE INTERRUPTIONS TO SERVICES SHALL N PROPER COORDINATION WITH OTHER T
RH	REFRIGERANT HOT GAS LINE		UNION	POSSIBLE. 20. MAINTAIN A MINIMUM CLEARANCE OF (
CWS	CHILLED WATER SUPPLY	T	NIGHT SETBACK THERMOSTAT	RATED ASSEMBLIES TO ALLOW FOR INS 21. WATER PRESSURE DROPS THROUGH 22. SLEEVE AND SEAL ALL PIPING PENETR
CWR	CHILLED WATER RETURN	(T)	THERMOSTAT	DRAWINGS FOR PARTITION RATINGS. 23. ANY DEVIATIONS IN ELECTRICAL REQU RESPONSIBILITY OF THE MECHANICAL C
CS	CONDENSER WATER SUPPLY		TEMPERATURE SENSOR	WIRE SIZE, CONDUITS, DISCONNECTS, F 24. PROVIDE MANUAL AIR VENTS IN ALL FI 25. PROVIDE LID STREAM AND DOWN STRE
CR	CONDENSER WATER RETURN	s (H)	HUMIDISTAT	25. PROVIDE UP-STREAM AND DOWN-STR 26. THESE CONTRACT DOCUMENTS HAVE COORDINATION BETWEEN THE CONTRA
CD	CONDENSATE DRAIN LINE	(H)	HUMIDITY SENSOR	THESE DRAWINGS AS A RESULT OF THE ARE THE RESPONSIBILITY OF THE CONT 27. THESE CONTRACT DOCUMENTS DETA
		(P)	PRESSURE SENSOR	DIFFERENT SYSTEMS OR PRODUCTS SE
		(5)	EMERGENCY SHUTDOWN SWITCH	
AIR DEVIC	Е — В	(C)	CO2 SENSOR	
DESIGNAT	CION 230 - CFM	<u> </u>		
			ECCENTRIC REDUCER, WATER	
			CONCENTRIC REDUCER	
<u> </u>			DIRECTION OF FLOW	
	DROP IN DUCTWORK		SLOPE DOWN	
R		ð	PRESSURE REDUCING VALVE	
	RISE IN DUCTWORK	— <u>×</u> —	ANCHOR	
	MANUAL BALANCING DAMPER IN DUCT	— <del>E 3 —</del>	EXPANSION JOINT	
		— <u>—</u> —	PIPE GUIDE	
	AIR FLOW MEASUREMENT STATION	$\bigcirc$	CONNECT TO EXISTING	
(P)				
	STATIC PRESSURE SENSOR	i <sup>¥</sup> i	PRESSURE GAUGE	
		Ļ		
	FIRE DAMPER		THERMOMETER	
•		——————————————————————————————————————	STEAM TRAP	
	FIRE/SMOKE DAMPER	—][	THERMOMETER WELL	
		_		
7 33				•

![](_page_34_Figure_5.jpeg)

![](_page_34_Figure_6.jpeg)

## **SYMBOLS**

L COMPLY WITH THE CURRENT LOCAL MECHANICAL CODE.

E VERIFIED WITH MANUFACTURER'S CERTIFIED DRAWINGS. TRANSITIONS TO ALL EQUIPMENT R EQUIPMENT FURNISHED. COORDINATED PRIOR TO PROCUREMENT OR FABRICATION. COORDINATE THE WORK WITH OTHER ONS SUCH AS OFFSETS IN PIPING OR DUCTWORK NEEDED DUE TO OBSTRUCTIONS OR

AT NO ADDITIONAL COST.

**GENERAL NOTES** 

SURE CLASS. 00 DEGREE RECTANGULAR DUCT ELBOWS.

REGISTER LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS, EQUIPMENT, FURNITURE

CORDANCE WITH THE LATEST EDITION OF THE SMACNA HVAC DUCT CONSTRUCTION STANDARD. RE SENSORS, HUMIDISTATS, CO2 SENSORS AND HUMIDITY SENSORS AT 48" ABOVE FINISHED COORDINATE LOCATIONS WITH OTHER EQUIPMENT, FURNITURE, DOOR SWINGS AND LIGHT

IDE CLEAR DIMENSIONS.

ISIBLE THOUGH AIR DEVICES SHALL BE PAINTED FLAT BLACK. RAINS WITH APPROPRIATE DEPTH FOR ALL COOLING COILS.

D CEILINGS SHALL BE PROVIDED WHERE REQUIRED FOR OPERATION, BALANCING, OR QUIPMENT.

/N SCHEMATICALLY. PROVIDE ALL TRANSITIONS, TURNING VANES, ELBOWS, FITTINGS, ETC. TO PLITS SHALL TRANSITION TO FULL SIZE OF THE SUM OF BOTH BRANCHES, UPSTREAM OF SPLIT. G PADS UNDER ALL FLOOR MOUNTED EQUIPMENT. REFER TO SPECIFICATIONS FOR DETAILED

PRIOR TO PURCHASING GRILLES, REGISTERS, DIFFUSERS, LOUVERS AND OTHER AIR DISTRIBUTION

ON ALL DUCTWORK CONNECTING TO EACH FAN, AIR HANDLING UNIT, AND FAN COIL UNIT. R NECKS AS REQUIRED TO MATCH SIZES OF FLEX DUCTS TO BE CONNECTED. ETRATIONS THROUGH RATED WALLS, CEILINGS, AND FLOORS WITH UL LISTED ASSEMBLIES. JAL TO OR EXCEED THE RATING OF THE WALL, CEILING OR FLOOR. SEE ARCHITECTURAL DRAWINGS ATERIAL TO BE PROVIDED BY A SINGLE MANUFACTURER. CES SHALL BE SCHEDULED FOR TIMES OTHER THAN NORMAL OPERATING HOURS. SUCH

NOT BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF THE OWNER'S REPRESENTATIVE AND TRADES. PRE-WORK SHALL BE PERFORMED TO MAKE THE SHUTDOWN PERIOD AS BRIEF AS

6" BETWEEN DUCTWORK, PIPING, EQUIPMENT, ETC. AND ALL FIRE RATED AND FIRE/SMOKE SPECTION OF ASSEMBLY.

H COIL CONTROL VALVES SHALL NOT EXCEED 12 FEET OF WATER. RATIONS THROUGH BUILDING PARTITIONS AND MAINTAIN STC RATINGS. SEE ARCHITECTURAL

UIREMENTS FROM THE BASIS OF DESIGN FOR MECHANICAL EQUIPMENT SHALL BE THE CONTRACTOR TO ENSURE COORDINATION WITH THE ELECTRICAL CONTRACTOR FOR PROPER FUSES, STARTERS, VFD'S, ETC. AT NO ADDITIONAL COST.

FINISHED AREAS AT ALL HIGH POINTS IN HYDRONIC PIPING SYSTEMS.

REAM TEST PLUGS FOR ALL COILS, BOILERS, CHILLERS, AND PUMPS. E BEEN SUBMITTED FOR CONTRACTOR DEVELOPMENT OF THE CONSTRUCTION WORK PLAN. ACTOR AND SUBCONTRACTORS IS THE RESPONSIBILITY OF THE CONTRACTOR. CHANGES TO E CONSTRUCTION COORDINATION AND THE DEVELOPMENT OF THE CONSTRUCTION WORK PLAN ITRACTOR.

AIL THE CONCEPT OF THE WORK. COORDINATION OF CONCEPTUALLY EQUAL BUT NOMINALLY ELECTED BY CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR.

# UID I O

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_34_Picture_31.jpeg)

![](_page_34_Picture_32.jpeg)

## guernsey 5555 N GRAND BLVD

OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

ersity atio <u>ni<</u> tate en S **(**) Panhandl Union 323 Eagle Blvd. Goodwell, OK 73939 Student Oklahoma

0

R

R	levision	
#	Description	Date
Ρ	Project Numb	ber
C	OK70205-033	3
S	heet Title	
F		ND
C	Date	
1	5 MAR 2024	
-		
_		_
		/

![](_page_35_Figure_1.jpeg)

# 13/2024 8-09-58 AM

## **#** <u>DEMOLITION NOTES:</u>

- 1. ZONE 3-1: REMOVE DUCTWORK AND SUPPLY DEVICES FOR ENTIRE ZONE. 2. ZONE 3-2: REMOVE DUCTWORK AND SUPPLY DEVICES FOR ENTIRE ZONE.
- ZONE 3-3: REMOVE DUCTWORK AND SUPPLY DEVICES FOR ENTIRE ZONE.
   EXISTING GRILLE HOOD AND ASSOCIATED DUCT AND FANS TO REMAIN.
- 5. REMOVE EXISTING RELIEF HOOD AND PATCH ROOF TO MATCH EXISTING.
- 6. EXISTING 5 TON RTU TO REMAIN. 7. EXISTING 7.5 TON RTU TO REMAIN.
- 8. EXISTING 7.5 TON RTU TO REMAIN.
- 9. EXISTING RELIEF HOOD TO REMAIN.
- 10. INFILL EXISTING RETURN AIR FLOOR TRENCH. REFER TO STRUCTURAL. 11. IF ALTERNATE #3 IS TAKEN, REMOVE THIS AIR DEVICE AND CAP DUCT.
- 12. REMOVE DUCT SHOWN DARK AND DASHED BACK TO THIS POINT AND CAP. REMOVE SIDEWALL GRILLE, CLEAN AND STORE TO BE RECONNECTED IN NEW LOCATION.
- REMOVE DUCT DOWNSTREAM OF THIS POINT.
   REMOVE TAP TO AIR DEVICE AND REPAIR DUCT.
- 15. ALTERNATE #4: REMOVE 24 RECTANGULAR AIR DEVICES IN THIS AREA TO INSTALL NEW AIR DEVICES.
- 16. ALTERNATE #4: REMOVE 6 LINEAR DEVICES IN THIS AREA TO INSTALL NEW AIR DEVICES.
- 17. ALTERNATE #4: REMOVE 4 RECTANGULAR AIR DEVICES IN THIS AREA TO INSTALL NEW AIR DEVICES. 18. REMOVE UPSTREAM DUCT. DOWNSTREAM DUCT TO REMAIN.

![](_page_35_Picture_16.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_35_Picture_19.jpeg)

![](_page_35_Picture_20.jpeg)

# guernsey

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
Revisi	scription	Date
Project OK70 Sheet HVA0 PLAN	ct Numbe 205-033 Title C DEMOI	er
Date	AR 2024	
M	DI	

SCALE: 3/32" = 1'-0"

![](_page_36_Figure_1.jpeg)

5/2024

### SHEET GENERAL NOTES

- UNLESS OTHERWISE NOTED.

- $\langle \# \rangle$  <u>SPECIFIC NOTES:</u>
  - 1. ZONE 4-2: REBALANCE AIR FLOW IN ZONE. NEW AIR DEVICES. 2. ZONE 4-3A: REBALANCE AIR FLOW IN ZONE. NEW AIR DEVICES. 3. ZONE 4-4: REBALANCE AIR FLOW IN ZONE. NEW AIR DEVICES.
  - RESTROOMS AND NURSE/EXAM.

  - 9. DÚCT NOT INSULATED.
  - REFER 1/<mark>M-901</mark>

  - 13. CONNECT NEW DIFFUSER TO EXISTING DUCT. 14. EXISTING THERMOSTAT TO REMAIN.

1. REFER TO M-001 FOR NOTES APPLICABLE TO THIS SHEET.

2. SUPPLY DUCTS TO BE THE SAME SIZE AS DIFFUSER/GRILLE NECKS UNLESS OTHERWISE NOTED. 3. MAINTAIN 10'-0" CLEARANCE BETWEEN INTAKE AND EXHAUST OPENINGS.

4. PROVIDE A RETURN AIR CANOPY OVER ALL RETURN AIR GRILLES THAT DO NOT HAVE A SOUND BOOT.

5. PROVIDE MANUAL BALANCING DAMPERS IN ALL DUCT RUNOUTS TO DIFFUSERS. 6. DUCT INLET AND DISCHARGES CONNECTED TO MECHANICAL EQUIPMENT SHALL BE THE SAME AS THE EQUIPMENT CONNECTIONS

7. REFRIGERANT PIPING SIZING AND CONFIGURATION MAY VARY BASED UPON ACTUAL EQUIPMENT PROVIDED AND FINAL PIPE ROUTING. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS FOR ACTUAL INSTALLED CONDITIONS. 8. FLEX DUCT SHALL NOT BE INSTALLED IN EXPOSED FINSHED SPACES.

9. DEVICES IN HARD CEILINGS SHALL HAVE BUTTERFLY DAMPERS WITH ACTUATOR ACCESSIBLE FROM THE FACE OF THE DEVICE. 10. RETURN AIR DEVICES IN DUCTWORK: PAINT INTERIOR OF DUCTWORK BLACK.

4. ZONE 4-5: REBALANCE AIR FLOW IN ZONE. NEW AIR DEVICES. REVISE PORTIONS OF DUCT/DIFFUSER IN 5. ZONE 4-6: REBALANCE AIR FLOW IN ZONE. NEW AIR DEVICES.

6. MITERED FLAT OVAL ELBOW WITH TURNING VANES.

7. (6) 24x24 RETURN AIR GRILLES (R2) INTO 78x32 PLENUM TO CHASE WITH FIRE DAMPER(S) AT CHASE WALL. 8. (6) 24x24 RETURN AIR GRILLES (R2) INTO 148x18 PLENUM TO CHASE WITH FIRE DAMPER(S) AT CHASE WALL. 10. BASE BID LOCATION FOR FCU-02 AND HP-02. IF ALTERNATE #3 IS TAKEN, THE LOCATION WILL CHANGE.

11. DOUBLE WALLED DUCT WITH 1" INSULATION. SIZES INDICATED ARE INTERNAL CLEAR AIRFLOW. MOUNT DUCT AS HIGH AS POSSIBLE COORDINATING WITH PENDANT LIGHTS AND CEILING CLOUDS. 12. NEW 72x48 GRILLES TO REPLACE EXISTING 60x48 GRILLE. CONNECT TO EXISTING ROOF HOOD.

15. RELOCATED EXISTING THERMOSTAT.

![](_page_36_Picture_33.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_36_Picture_36.jpeg)

![](_page_36_Picture_37.jpeg)

## guernsey 5555 N GRAND BLVD

OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
<b>n</b> ription	Date
Numbe 05-033 Title FLOOR	er PLAN
	Oklahoma Panhandle State University

12'	6'	0	12

SCALE: 3/32" = 1'-0"

![](_page_37_Figure_1.jpeg)

54 60 ö 3/13/2024

![](_page_37_Picture_4.jpeg)

12'	6'	0	12'
L	SCA	LE: 3/32" = 1'-0"	

![](_page_38_Figure_1.jpeg)

![](_page_38_Figure_2.jpeg)

1. REFER TO M-001 FOR NOTES APPLICABLE TO THIS SHEET. 2. MAINTAIN 10'-0" CLEARANCE BETWEEN INTAKE AND EXHAUST OPENINGS. 3. DUCT INLET AND DISCHARGES CONNECTED TO MECHANICAL EQUIPMENT SHALL BE THE SAME AS THE EQUIPMENT CONNECTIONS UNLESS OTHERWISE NOTED.
4. REFRIGERANT PIPING SIZING AND CONFIGURATION MAY VARY BASED UPON ACTUAL EQUIPMENT PROVIDED AND FINAL PIPE ROUTING. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS FOR ACTUAL INSTALLED CONDITIONS.

1. NEW CASSETTE MINISPLIT AND HEAT PUMP ON ROOF. ALTERNATE #3, REFER 8/<mark>A13.0</mark> FOR ALTERNATES. 2. BASE BID LOCATION FOR FCU-02 AND HP-02. IF ALTERNATE #3 IS TAKEN, THE LOCATION WILL CHANGE AS

![](_page_38_Picture_6.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_38_Picture_9.jpeg)

![](_page_38_Picture_10.jpeg)

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
Revis # De	ion scription	Date
Proje OK70 Sheet HVA0	ct Numbe 0205-033 : Title C ROOF F	er PLAN
Date	AR 2024	
M	_10	S

12'	6'	0	12'				
SCALE: 3/32" = 1'-0"							

![](_page_39_Figure_0.jpeg)

024 2 ŝ

# SECTION AT RETURN 7

![](_page_39_Figure_4.jpeg)

### SQUARE OR RECTANGULAR ELBOWS 4 NOT TO SCALE

4. FOR VELOCITES OVER 1500 FPM, WELD EVERY 6TH VANE TO RUNNER.

DIAMETERS ON THE DOWNSTREAM SIDE OF THE ELBOW.

![](_page_39_Figure_7.jpeg)

NOTES:

![](_page_39_Figure_8.jpeg)

WIDTH(W)

FRONT VIEW

### **FLEXIBLE DUCT DIFFUSER** 2 NOT TO SCALE

![](_page_39_Figure_10.jpeg)

![](_page_39_Figure_11.jpeg)

![](_page_39_Figure_12.jpeg)

![](_page_39_Figure_14.jpeg)

TYPICAL ELBOW

1. ALL SQUARE OR RECTANGULAR ELBOWS SHALL HAVE ONE OF THE TWO TYPES OF TURNIG VANES SHOWN ABOVE. 2. VANES SHALL BE CONSTRUCTED, SUPPORTED AND FASTENED AS RECOMMENDED BY SMACNA. 3. ALL SQUARE AND RECTANGULAR ELBOWS SHOWN ON PLANS FOR SUPPLY DUCT MAY BE MADE WITH RADIUSED ELBOWS PROVIDED SPACE PERMITS RADIUS INSTALLATION AND/OR THERE ARE NO OUTLETS OR TAKE-OFFS WITHIN 5

![](_page_39_Picture_23.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_39_Picture_25.jpeg)

![](_page_39_Picture_26.jpeg)

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

'ersit) enovation Jniv tate Ś Φ anhandle Jnion 323 Eagle Blvd. Goodwell, OK 73939 Oklahoma Student Revision # Description Date Project Number OK70205-033 Sheet Title HVAC DETAILS Date 15 MAR 2024

![](_page_39_Picture_29.jpeg)

![](_page_40_Figure_1.jpeg)

	AIR DISTRIBUTION DEVICE SCHEDULE							
		NECK SIZE	RA	NGE MIN/MAX				
MARK	DESCRIPTION	(IN)	CFM	THROW (FT)	NC	MAX. P.D.	BASIS OF DESIGN	REMARKS
E1	EXHAUST REGISTER	10x10	200/230	-	<25	0.05"	PRICE 630	
R1	RETURN GRILLE	22x10	0/700	-	25	0.04"	PRICE 610Z	
R2	RETURN GRILLE	22x22	0/1790	-	25	0.04"	PRICE 610Z	
R4	RELIEF GRILLE	70x46	-	-	<25	0.05"	PRICE 610Z	
S1	24x24 PLAQUE DIFFUSER	6"ø	100/150	6'	<25	0.05"	PRICE SPD	
S2	24x24 PLAQUE DIFFUSER	8"ø	155/250	9'	<25	0.05"	PRICE SPD	
S3	24x24 PLAQUE DIFFUSER	10"ø	255/425	11'	<25	0.08"	PRICE SPD	
S4	24x24 PLAQUE DIFFUSER	12"ø	430/600	13'	<25	0.12"	PRICE SPD	
S5	2'-0" LINEAR SLOT DIFFUSER - (2) 3/4" SLOTS	6"ø	70/80	15'	<25	0.08"	PRICE SDS	NOTE 3
S6	5'-0" LINEAR SLOT DIFFUSER - (2) 3/4" SLOTS	6"ø	130	13'	<25	0.05"	PRICE SDS	NOTE 3
S7	5'-0" LINEAR SLOT DIFFUSER - (2) 1" SLOTS	8"ø	160/170	20'	<25	0.05"	PRICE SDS	NOTE 3
S8	4'-0" LINEAR SLOT DIFFUSER - (2) 1.5" SLOTS	8"ø	240	29'	<25	0.08"	PRICE SDS	
S9	SUPPLY REGISTER	10x5	120/200	19'	<25	0.075"	PRICE 620L	NOTE 2
S10	SUPPLY REGISTER	12x5	200/270	24'	<25	0.075"	PRICE 620L	NOTE 2
S11	SUPPLY REGISTER	14x8	340/415	30'	<25	0.075"	PRICE 620L	NOTE 2

1. DEVICES IN HARD CEILINGS SHALL HAVE BUTTERFLY DAMPERS WITH ACTUATOR ACCESSIBLE FROM THE FACE OF THE DEVICE. 2. WITH SDF SPIRAL DUCT FRAME AND OPPOSED BLADE DAMPER AND CLEAR ANODIZED FINISH. 3. WITH TYPE 16 SPIRAL DUCT MOUNT FRAME.

### HVAC CONTROLS

- ECONOMIZER.
- THERMOSTAT.

### SCHEDULE GENERAL NOTES

				1
	ELECTRICAL DATA			
VOLT/PHASE	MCA (A)	MOP (A)	BASIS OF DESIGN	REMARKS
208/3	38.0	50.0	TRANE YHJ072	
208/3	38.0	50.0	TRANE YHJ072	
208/3	54.0	70.0	TRANE YHJ120	

1. RTU-1, 2, AND 3 SHALL RECEIVE SPACE TEMPERATURE FROM SPACE MOUNTED SENSOR WITH USER ADJUSTMENT. UNITS SHALL OPERATE ON THEIR OWN INTERNAL CONTROLS TO MAINTAIN SPACE TEMPERATURE AND UTILIZE

2. UH-1 AND 2: UNITS SHALL BE ENABLED WHEN THE OUTSIDE TEMPERATURE IS BELOW 40 °F (ADJ). FAN SHALL RUN CONTINUOUSLY AND THE ELECTRIC HEAT SHALL CYCLE TO MAINTAIN THE SPACE TEMPERATURE VIA ADJUSTABLE

3. HP-01/FCU-01 AND HP-02/FCU-02: UNITS SHALL OPERATE ON THEIR OWN INTERNAL CONTROLS TO MAINTAIN SPACE TEMPERATURE FROM SPACE MOUNTED THERMOSTATS WITH USER ADJUSTABLE CONTROLS.

1. FURNISH APPROPRIATE MOTOR STARTER FOR ALL MOTORS.

2. FOR ALL MOTORS - MOTOR BRAKE HORSEPOWER SHALL NOT EXCEED 85% OF NORMAL NAMEPLATE HORSEPOWER. 3. FAN RPM AT DESIGN CONDITION SHALL NOT EXCEED 85% OF MANUFACTURER'S MAXIMUM FOR THE CLASS OF CONSTRUCTION. 4. EQUIPMENT CAPACITIES SHALL BE BASED ON AN ELEVATION OF 3226 FEET ABOVE SEA LEVEL.

![](_page_40_Picture_22.jpeg)

Date 15 MAR 2024

M-601

![](_page_41_Figure_1.jpeg)

![](_page_41_Figure_2.jpeg)

![](_page_41_Picture_3.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100

OTLANON

guernsey

OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044

WWW.STUDIOARC.COM

LS ISI

### $\langle \# \rangle$ <u>SPECIFIC NOTES:</u>

- 1. NEW CASSETTE MINI SPLIT WITH HEAT PUMP ON ROOF. ALTERNATE #3. REFER 8/A13.0 FOR ALTERNATES. 2. REPLACEMENT OF AIR DEVICES IN THE BALL ROOM AREA IS PART OF ALTERNATE #4. IF ALTERNATE IS NOT
- TAKEN, EXISTING DEVICES TO REMAIN.
- 3. REPLACEMENT OF LINEAR AIR DEVICES UNDER MEZZANINE IS PART OF ALTERNATE #4. IF ALTERNATE IS NOT TAKEN, EXISTING DEVICES TO REMAIN. 4. IF ALTERNATE #3 IS TAKEN RELOCATE DEVICE TO THE NORTH TO AVOID WALL.

![](_page_41_Picture_9.jpeg)

ABV

ACC

CLG

CO

CON

CV

DCV

DFU

DHV

DHV

GPN

### **PLUMBING ABBREVIATIONS**

	ABOVE	NIC	NOT IN CONTRACT
	ABOVE CEILING	NPW	NON-POTABLE WATER
	ACCESS		
	ABOVE FINISHED FLOOR	OC	ON CENTER
	AIR HANDLING UNIT	OD	OVERFLOW DRAIN
		OR	ON ROOF
		0587	OUTSIDE SCREW AND YOKE
,	DELOW	0.501	OUTSIDE, SOILEW AND TOKE
		חח	
,	BALL VALVE	PD	PRESSURE DROP
/	BACK WATER VALVE	PRES	PRESSURE
		PRV	PRESSURE RELIEF VALVE
	CONDENSATE DRAIN	PSI	POUNDS PER SQUARE INCH
	CAST IRON	RD	ROOF DRAIN
	CEILING	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
	CLEAN OUT	RPM	REVOLUTIONS PER MINUTE
ID	CONDENSATE		
	CHECK VALVE	SD	SHOWER DRAIN
		SF	SUPPLY FAN
V	DOMESTIC COLD WATER	SH	SHOWER
•		SK	SINK
u.		50	
V VD		30	
VR	DOMESTIC HUT WATER RETURN	55	SANITARY SEWER
	DOWN	IMV	THERMOSTATIC MIXING VALVE
	DOWN SPOUT	TYP	TYPICAL
	FCCENTRIC	LIE	
, r			
0			
,		UH	
, 		UR	URINAL
51	EXISTING		
	EXTERNAL	W	WASTE
		WC	WATER CLOSET
	FAN COIL UNIT	WCO	WALL CLEANOUT
	FLOOR DRAIN	WHA	WATER HAMMER ARRESTOR
	FLOW LINE	WM	WATER METER
	FLOOR	YH	YARD HYDRANT
	FROM		
	FLOOR SINK		
	FEET		
	GAS		
	GENERAL CONTRACTOR		
	GALLONS PER FLUSH		
	GALLONS PER HOUR		
1	GALLONS PER MINUTE		
	GREASE WASTE		
	HOSE BIBB		
	HORSEPOWER		
	INCHES		
	LAVATORY		
ί.	MAXIMUM		
	MINIMUM		
	MOP SERVICE BASIN		
	MOUNTED		
,			

### **PLUMBING SYMBOLS**

SS	SANITARY SEWER	+3 <sup>f</sup>	SHUT OFF VALVE IN DROP
RD	ROOF DRAIN	——————————————————————————————————————	AIR OUTLET
OD	OVERFLOW DRAIN	+©	COLD WATER OUTLET
	PLUMBING VENT	+G	GAS OUTLET
	COLD WATER	——————————————————————————————————————	HOT WATER OUTLET
	DOMESTIC HOT WATER SUPPLY	+0	OXYGEN OUTLET
	DOMESTIC HOT WATER RETURN	+(V)	VACUUM INLET
<u> </u>	DOMESTIC 120 H.W. SUPPLY	——————————————————————————————————————	BREATHING AIR OUTLET
<u> </u>	DOMESTIC 120 H.W. RETURN		ECCENTRIC REDUCER, WATER
<u> </u>	DOMESTIC 140 H.W. SUPPLY		CONCENTRIC REDUCER
	DOMESTIC 140 H.W. RETURN		DIRECTION OF FLOW
G	GAS		SLOPE DOWN
———— A ————	COMPRESSED AIR	——Ď——	PRESSURE REDUCING VALVE
CD	CONDENSATE DRAIN LINE	— <u>X</u> —	ANCHOR
GW	GREASE WASTE	— <del>— — —</del>	EXPANSION JOINT
ACID	ACID WASTE		PIPE GUIDE
NPW	NON-POTABLE WATER (GREY WATER)		CONNECT TO EXISTING
F	FIRE WATER	M	WATER METER
	CHECK VALVE	×	GAS PRESSURE REGULATOR
	PLUG COCK	$\bigcirc$	CAST RECORDER RECORDING
	BUTTERFLY VALVE		FLOOR SINK
	BALL VALVE		FLOOR DRAIN
	BALANCING VALVE	0.	
+ <u>-</u> +	STRAINER	V	P-IRAP
<b> </b>	UNION		
$\neg \neg \neg \vdash \neg$	GAS COCK		

# **GENERAL NOTES**

1. THE PLUMBING INSTALLATION SHALL COMPLY WITH THE CURRENT LOCAL PLUMBING CODES. 2. PIPE ROUTING SHOWN IS SCHEMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTING. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS AND FITTINGS REQUIRED FOR PROPER INSTALLATION AND TO MAINTAIN CLEARANCES. COORDINATE WITH OTHER DISCIPLINES TO AVOID WHEN ROUTING PIPING. 3. PROVIDE ALL FITTINGS AND OFFSETS REQUIRED TO MAKE CONNECTION TO SITE UTILITIES. 4. CONCEAL PIPING ABOVE CEILING AND WITHIN WALLS OR CHASES, EXCEPT IN MECHANICAL SPACES OR WHEN OTHERWISE NOTED.

5. PROVIDE ACCESS PANELS FOR ALL VALVES CONCEALED IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS. 6. SLEEVE AND/OR FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS, CEILINGS, AND FLOORS WITH UL LISTED ASSEMBLIES. FIRESTOP ASSEMBLIES SHALL BE EQUAL TO OR EXCEED THE RATING OF THE WALL, CEILING OR FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FINAL FINISHES. ALL FIRESTOP MATERIAL TO BE PROVIDED BY A SINGLE MANUFACTURER.

7. SEE ARCHITECTURAL DRAWINGS FOR FIXTURE LOCATIONS AND MOUNTING HEIGHTS.

8. PROVIDE TRAP PROTECTION FOR ALL FLOOR DRAINS. 9. PROVIDE AN AIR GAP, WHEN REQUIRED BY CODE, SERVING INDIVIDUAL FIXTURES, DEVICES, APPLIANCES AND APPARATUS.

10. ALL EXPOSED PIPE AND FITTINGS IN FINISHED AREAS SHALL BE CHROME PLATED, UNLESS OTHERWISE

11. MOUNT HOSE BIBBS 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. 12. MOUNT WALL HYDRANTS 18" ABOVE GRADE, UNLESS OTHERWISE NOTED. COORDINATE WITH ARCHITECTURAL DRAWINGS.

13. PROVIDE CLEANOUTS IN ACCORDANCE WITH THE PLUMBING CODE. INSTALL CLEANOUT WITH COVER FLUSH TO FINISHED SURFACE.

14. COORDINATE EXACT FLOOR DRAIN LOCATIONS WITH ARCHITECTURAL DRAWINGS. INSTALL FLOOR DRAINS WITH GRATE FLUSH WITH FINISHED FLOOR.

15. COORDINATE PIPING WITH ELECTRICAL EQUIPMENT (PANELS , TRANFORMERS, ETC) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES. ANY PIPING ROUTED OVER PANELS SHALL BE RE-ROUTED AT NO ADDITIONAL COST.

16. ALL WALL MOUNTED LAVATORIES SHALL BE ATTACHED TO A FLOOR MOUNTED CARRIER. 17. CONTRACTOR SHALL INSULATE ALL DOMESTIC WATER PIPING. INSULATION SHALL COMPLY WITH THE SPECIFICATIONS.

18. INSTALL SHOCK ARRESTORS PER PDI WH-201.

NOTED.

19. INSTALL ALL CONDENSATE DRAIN PIPING WITH INSULATION PER SPECIFICATIONS. 20. INSULATE ALL HORIZONTAL FLOOR DRAIN PIPING FOR FLOOR DRAINS RECEIVING CONDENSATE ABOVE GRADE WITH INSULATION PER SPECIFICATIONS.

21. ANY DEVIATIONS IN ELECTRICAL REQUIREMENTS FROM THE BASIS OF DESIGN FOR PLUMBING EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO ENSURE COORDINATION WITH THE ELECTRICAL CONTRACTOR FOR PROPER WIRE SIZE, CONDUITS, DISCONNECTS, FUSES, STARTERS, VFD'S,

ETC. AT NO ADDITIONAL COST. 22. PROVIDE CONCRETE HOUSEKEEPING PADS UNDER ALL FLOOR MOUNTED EQUIPMENT. REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.

23. THESE CONTRACT DOCUMENTS HAVE BEEN SUBMITTED FOR CONTRACTOR DEVELOPMENT OF THE CONSTRUCTION WORK PLAN. COORDINATION BETWEEN THE CONTRACTOR AND SUBCONTRACTORS IS THE RESPONSIBILITY OF THE CONTRACTOR. CHANGES TO THESE DRAWINGS AS A RESULT OF THE CONSTRUCTION COORDINATION AND THE DEVELOPMENT OF THE CONSTRUCTION WORK PLAN ARE THE RESPONSIBILITY OF THE CONTRACTOR.

24. THESE CONTRACT DOCUMENTS DETAIL THE CONCEPT OF THE WORK. COORDINATION OF CONCEPTUALLY EQUAL BUT NOMINALLY DIFFERENT SYSTEMS OR PRODUCTS SELECTED BY CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR.

![](_page_42_Picture_23.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_42_Picture_26.jpeg)

![](_page_42_Picture_27.jpeg)

### 5555 N GRAND BLVD OKC, OK

GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

ersity atio N N tate 0 en S **(**) anhand Union 323 Eagle Blvd. Goodwell, OK 73939 Oklahoma Student Revision # Description Date Project Number OK70205-033 Sheet Title

PLUMBING LEGEND

Date 15 MAR 2024

P-001

![](_page_43_Figure_1.jpeg)

# 024 $\sim$ m

1. EXISTING FLOOR DRAIN TO BE REMOVED AND REPLACED WITH FLOOR SINK. 2. EXISTING CLEANOUT TO REMAIN. 3. EXISTING FLOOR DRAIN TO REMAIN. REPLACE GRATE.

![](_page_43_Picture_5.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_43_Picture_8.jpeg)

![](_page_43_Picture_9.jpeg)

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
Revision # Des	on scription	Date
Project OK70 Sheet PLUM DEMC	t Numbe 205-033 Title IBING DLITION	PLAN
Date 15 MA	AR 2024	

12' 6' SCALE: 3/32" = 1'-0"

12'

![](_page_44_Figure_1.jpeg)

# /13/2024 8:11:12 AP

![](_page_44_Figure_3.jpeg)

![](_page_44_Figure_4.jpeg)

![](_page_44_Figure_5.jpeg)

![](_page_45_Figure_1.jpeg)

![](_page_45_Figure_2.jpeg)

PLUMBING FIXTURE SCHEDULE								
						BAS	SIS OF DESIGN	
MARK	DESCRIPTION	CW	Н₩	WASTE	VENT	FIXTURE BOD	VALVE BOD	REMARK
P-1	WALL MOUNTED WATER CLOSET	1-1/4"	-	4"	2"	AMERICAN STANDARD 3351.101	TOTO TET1LA32#CP	
P-2	WALL MOUNTED WATER CLOSET - ADA	1-1/4"	-	4"	2"	AMERICAN STANDARD 3351.101	TOTO TET1LA32#CP	MOUNT AT HANDICAPPED HEIGHT
P-3	URINAL	1"	-	2"	1-1/2"	AMERICAN STANDARD 6590.001EC	TOTO TEU1UA12#CP	
P-4	URINAL - ADA	1"	-	2"	1-1/2"	AMERICAN STANDARD 6590.001EC	TOTO TEU1UA12#CP	MOUNT AT HANDICAPPED HEIGHT
P-5	INTEGRAL UNDERMOUNT LAVATORY	1/2"	1/2"	2"	1-1/2"	BY OTHERS	TOTO TEL105	NOTE 1 AND 2
P-6	BI-LEVEL RECESSEDFOUNTAIN W/BOTTLE FILLER	1/2"	-	2"	1-1/2"	WILLOUGHBY CWBFD-3WM	ELKAY ECHB REMOTE COOLER	COLOR BY ARCHITECT. PROVIDE FILTER ON WATER SUPPLY
		·		·	•			· · · · · · · · · · · · · · · · · · ·

1. ROUGH-IN AND CONNECT. 2. PROVIDE WITH POINT OF USE ASSE MIXING VALVE

	FLOOR DRAIN SCHEDULE							
MARK	DESCRIPTION							
FD-A	5" ROUND, NICKEL BRONZE							
FD-B	5" ROUND, NICKEL BRONZE WITH RIM							
FS-1	12x12x8 STAINLESS STEEL FLOOR SINK - 2" OUTLET							
FS-2	8x8x6 CAST IRON FLOOR SINK W/A.R.E.							
FS-3	12x12x10 CAST IRON FLOOR SINK W/A.R.E.							

![](_page_45_Figure_6.jpeg)

 $\mathbf{\omega}$ ö 3/13/2024

![](_page_45_Figure_10.jpeg)

![](_page_45_Figure_11.jpeg)

![](_page_45_Figure_12.jpeg)

1. PROVIDE NEW GRATE ON EXISTING FLOOR DRAIN.

![](_page_45_Picture_14.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_45_Picture_17.jpeg)

![](_page_45_Picture_18.jpeg)

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

Revision#DescriptionDate	Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
	Revisi # Des	on scription	Date
	Projec OK70 Sheet PLUM ENLA AND	ct Numbe 205-033 Title 1BING RGED PI SCHEDU	er _AN JLES
Project Number OK70205-033 Sheet Title PLUMBING ENLARGED PLAN AND SCHEDULES	Date		

P-401

		]

## **ABBREVIATIONS**

ABV.	DESCRIPTION	ABV.	DESCRIF
А	AMPERES OR TRIP AMPERES	KWH	KILOWATT HO
AC	ABOVE COUNTER	MH	MANHOLE
AFF	ABOVE FINISHED FLOOR	NEC	NATIONAL EL
AFG	ABOVE FINISHED GRADE	NEMA	NATIONAL EL
AIC	SYMMETRICAL AMPS INTERRUPTING CAPACITY	N	NEUTRAL
AV	AUDIBLE AND VISUAL	NIC	NOT IN THIS
С	CONDUIT	ОН	OVERHEAD
СКТ	CIRCUIT	PH	PHASE
CP	COMPUTER	PNL	PANELBOARI
EMCS	EMERGENCY MONITORING AND CONTROL SYSTEM	PVC	POLYVINYL CHLORIDE
EMT	ELECTRICAL METALIC TUBING	REA	RURAL ELEC
EP	EXPLOSION PROOF	REQ'D	REQUIRED
EWC	ELECTRIC WATER COOLER	RM	ROOM
F	FIXED TEMPERATURE	SPARE	SPARE BREA
FACP	FIRE ALARM CONTROL PANEL	SPECS	CONTRACT S
EX	EXISTING	SWBD	SWITCHBOAF
FT	FEET	ТВ	TELEPHONE
GFI	GROUND FAULT INTERRUPTER	UL	UNDERWRITE
GND	GROUND	UON	UNLESS OTH
GRC	GALVANIZED RIGID STEEL CONDUIT	V	VOLTS
HPS	HIGH PRESSURE SODIUM	VA	VOLTS-AMPE
HD	HEAVY DUTY	W	WATTS
К	KEYED	WP	WEATHERPR
KV KVA	KILOVOLTS	+	USED WITH A INDICATES H AFF LEVEL
		1/C	SINGLE CONI
rvak	NILUVULI AIVIPO KEAUTIVE	3/C	THREE CONE

	DESCRIPTION
ł	KILOWATT HOURS
	MANHOLE
;	NATIONAL ELECTRIC CODE
4	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
	NEUTRAL
	NOT IN THIS CONTRACT
	OVERHEAD
	PHASE
	PANELBOARD
	POLYVINYL CHLORIDE RURAL ELECTRIFICATION
L.	ADMINISTRATION
D	REQUIRED
	ROOM
E	SPARE BREAKER OR DEVICE
S	CONTRACT SPECIFICATIONS
D	SWITCHBOARD
	TELEPHONE BACKBOARD
	UNDERWRITERS LABORATORIES
l	UNLESS OTHERWISE NOTED
	VOLTS
	VOLTS-AMPERES
	WATTS
	WEATHERPROOF
	USED WITH A NUMERAL, WHICH INDICATES HEIGHT OF ITEM IN INCHES AFF LEVEL
	SINGLE CONDUCTOR CABLE

DUCTOR CABLE

J	JUNCTION BOX, WALL MOUNTED
$\bigcirc$	JUNCTION BOX, CEILING MOUNTED
Ū	JUNCTION BOX, FLOOR MOUNTED
P	PUSH BUTTON
 4]	SWITCH, SAFETY, 30A , NON-FUSED, NEMA 3R (EXTERIOR) / NEMA 1 (INTERIOR), UO
$\boxtimes$	MOTOR STARTER OR LIGHTING CONTACTOR, SURFACE MOUNTED
	OVERHEAD DOOR MOTOR AND CONTROLS
	PANELBOARD, SURFACE MOUNTED WITH COPPER BUS
	PANELBOARD, RECESSED WITH COPPER BUS
]	CONDUIT STUB OFF BELOW GROUND, CAPPED, UON
M	MOTOR CONNECTION
<i>∕</i> ₩+,×	POWER WIRING AND CONDUIT RUN, LONG HASH MARK INDICATES QUANTITY OF PHASE CONDUCTORS AND SWITCH LEG CONDUCTORS. SHORT HASH MARKS INDICATE NUMBER OF NEUTRAL CONDUCTORS. ALL CIRCUITS SHALL HAVE EQUIPMENT GROUND CONDUCTOR. NO HASH MARKS INDICATE TWO CONDUCTORS PLUS GROUND. CONDUCTOR SIZES GREATER THAN No. 12 AWG ARE NOTED AT POSITION "X"
T"X"	TRANSFORMER, DRY-TYPE, DESIGNATOR SHOWN IN POSITION "X" INDICATES EQUIPMENT IDENTIFIER
W-X,Y,Z	CIRCUIT HOMERUN TO PANEL OR CABINET NOTED; W=PANEL NAME; X,Y,Z,=CIRCUIT NUMBERS; SYMBOL CAN BE USED WITH LONE CONDUIT OR WIRING SYMBOLS
Φ	RECEPTACLE, DUPLEX, NEMA 5-20R, 18" AFF, UON
$\Phi_{(S)}$	RECEPTACLE, DUPLEX, NEMA 5-20R, 18" AFF, UON. "S" INDICATES THE RECEPTACLE IS SWITCHED BY THE OCCUPANCY SENSOR IN THE ROOM.
$\Phi_{(\text{TR})}$	RECEPTACLE, DUPLEX, NEMA 5-20R, 18" AFF, UON. "TR" INDICATES THE RECEPTACLE IS TAMPER RESISTANT.
Φ	RECEPTACLE, GFCI, NEMA 5-20R, 18" AFF, UON
₿	RECEPTACLE, QUADRUPLEX, NEMA 5-20R, 18" AFF, UON
Φ	RECEPTACLE, DUPLEX, MOUNTED IN FLOOR
₽	RECEPTACLE, QUADRUPLEX, MOUNTED IN FLOOR
( b )	RECEPTACLE, DUPLEX, MOUNTED IN CEILING
	RECEPTACLE, QUADRUPLEX, MOUNTED IN CEILING
۲¢	RECEPTACLE , SINGLE SPECIAL PURPOSE, MOUNTED 48" AFF, UON NUMBER IN POSITION "X" INDICATES TYPE (SEE SCHEDULE)
$\bigtriangledown \varphi$	RECEPTACLE , RECESSED, FLOOR MOUNTED QUADRUPLEX OUTLET, NEMA 5-20R, AND VOICE/DATA OUTLET
PP	SWITCHED POWER PACK ABOVE CEILING, UON
S	WALL MOUNTED SWITCH
s <sub>M</sub>	SWITCH, MOTOR RATED, WITH THERMAL OVERLOADS
s <sub>D</sub>	DIMMER SWITCH
S <sub>OS</sub>	OCCUPANCY SENSOR, WALL MOUNTED
OS	OCCUPANCY SENSOR, CEILING MOUNTED

OCCUPANCY SENSOR, CEILING MOUNTED RECESSED SPLIT BOX MOUNTED 72" AFF, UON, WITH 1.25" RACEWAY STUBOUT FOR CATV TO ACCESSIBLE CEILING SPACE. BOX SHALL INCLUDE POWER (SIMPLEX 5-20R), COAX CABLE WITH F CONNECTOR, DATA, VGA, AND HDMI. ROUTE BACK TO MAIN SERVER ROOM. ROUND, RECESSED, SURFACE, OR PENDANT LIGHT FIXTURE

 $\bigcirc$ 2'X4' LIGHTING FIXTURE 1'X4' LIGHTING FIXTURE

TV

 $\bigotimes$ 

 $\otimes$ 

PC

4

LIGHTING FIXTURE WITH EMERGENCY LIGHTING CAPABILITY

EXIT SIGN, LIGHTED, WALL MOUNTED; FACES ARE SOLID CHEVRON'S INDICATED EGRESS PATH

EXIT SIGN, LIGHTED, CEILING MOUNTED; FACES ARE SOLID CHEVRON'S INDICATED EGRESS PATH

EMERGENCY LIGHTING UNIT

PHOTO-CONTROLLER, INTEGRAL PHOTOELECTRIC CELL AND RELAY

LO I

## ELECTRICAL LEGEND

## **SYMBOLS**

		DATA OUTLET. RECESSED. MOUNTED 18"AFF. UON. "X" INDICATES	•	INDICATES NEW OVERHEAD POLE		VERIFY PHYSICAL
	<b>-+</b> ⊲(X)	NUMBER OF OUTLETS. A BLANK IN "X" LOCATION INDICATES 2 PORT	0		2	ALL MATERIALS PI
		TELEPHONE TERMINAL BOARD (4' x 8' x 3/4", UON)	PB-X	PULL BOX , NEW, "X" INDICATES PULL BOX NUMBER	3 4	ALL VORK PERFO ALL PENETRATION APPLICATION FOR
	<b>−+</b> ⊲ (X)	DATA OUTLET, INSTALLED IN FLOOR, "X" INDICATES NUMBER OF OUTLETS	РВ-Х	PULL BOX , EXISTING, "X" INDICATES PULL BOX NUMBER	5	SYSTEMS PENETR EQUIPMENT INTER
	$\neg$	ANTENNA	MH-X	MANHOLE , NEW, "X" INDICATES PULL BOX NUMBER		LOAD SIDE OF THE SHALL NOT BE RE
DN.	SP	SPEAKER, CEILING MOUNTED	MH-X	MANHOLE , EXISTING, "X" INDICATES PULL BOX NUMBER	6 7	CONTROL WIRING RISER AND ONE-LI
	HSP	SPEAKER, WALL MOUNTED	HH-X	HAND HOLE , NEW, "X" INDICATES PULL BOX NUMBER	8	ALL CONDUCTOR
	CR	CARD READER	HH-X	HAND HOLE , EXISTING, "X" INDICATES PULL BOX NUMBER	10 11	NOT ALL SYMBOLS CONTRACTOR TO
	MS	MOTION SENSOR		CONDUIT, CONCRETE ENCASED (DUCT) SYSTEM; QUANTITY OF CIRCLES	10	PLASTIC LINE WIT
	RX	REQUEST TO EXIT		DARKENED CIRCLE INDICATES CONDUIT WITH CONDUCTORS	12	
	ıı⊫	GROUND ROD LOCATION		- CONDUIT AND WIRING RUN, UNDERGROUND; QUANTITY AND SIZE AS NOTED	13 14 15	ALL EXISTING ELE
	۲	LIGHTNING PROTECTION SYSTEM AIR TERMINAL	2-3 ◀		16	MATERIALS AND L REMOVE EXISTING
		GROUND BAR WITH PHENOLIC STAND-OFFS; SIZE AS SPECIFIED	eر ا	NEW RISER (PRIMARY OR SECONDARY)	17	NOTIFY OWNER O TILES CAUSED BY
		POWER TRANSFORMER, RATINGS ARE SHOWN IN TRANSFORMER SCHEDULE	0	EXISTING RISER (PRIMARY OR SECONDARY)	18 19	BRANCH CIRCUIT SYMBOL ORIENTA
		GROUNDING CONNECTION; WHEN USED WITH TRANSFORMER WINDING SYMBOL IT INDICATES A NEUTRAL GROUNDING CONNECTION (ON SECONDARY SIDE ONLY)	OHE	- ELECTRICAL OVERHEAD	20 21	PLANS FOR LIGHT SYMBOL SIZE DOE LOWER CASE LET
	$\wedge$	DELTA WINDING CONNECTION	——UE ——	- UNDERGROUND ELECTRICAL		
	<b></b>	CONDUCTOR CONNECTION	——UC ——	- UNDERGROUND COMMUNICATIONS		
		CIRCUIT BREAKER, MOLDED CASE, TRIP CURRENT [A] AND QUANTITY OF POLES [P] SHOWN NEXT TO THE SYMBOL				
E		SWITCH, DISCONNECT, NON-FUSED, LOAD BREAK; CONTINUOUS CURRENT RATING [A] AND QUANTITY OF POLES [P] SHOWN NEXT TO SYMBOL				
		SWITCH, DISCONNECT, FUSED, LOAD BREAK; FUSE AMPERE RATING [A] AND FUSE TYPE SHOWN NEXT TO SYMBOL				
		FUSE, AMPERE RATING [A] AND FUSE TYPE SHOWN NEXT TO SYMBOL				
	$\swarrow^{\pm}$	INTEGRAL PHOTOELECTRIC CELL AND RELAY (PHOTOCONTROL)				
	WH	WATT-HOUR METER				
	$\langle x \rangle$	FEEDER NUMBER; SEE FEEDER SCHEDULE				
	VSD	VARIABLE SPEED DRIVE				

—————— MOTOR THERMAL OVERLOAD PROTECTOR οН 00 ΔA **C** 

ATS

J

 $\sim$ 

SWITCH, SELECTOR, HAND-OFF AUTOMATIC

EQUIPMENT ENCLOSURE

MOTORIZED GENERATOR

NEXT TO SYMBOL

AUTOMATIC TRANSFER SWITCH

CONTACTOR OR RELAY COIL, LETTER(S) INSIDE OF SYMBOL MATCH CONTACTS CONTROLLED

POTENTIAL TRANSFORMER, PRIMARY TO SECONDARY RATIO SHOWN

CURRENT TRANSFORMER, TURNS RATIO SHOWN NEXT TO SYMBOL

SEPARABLE CONNECTOR OR CONNECTION FOR DRAWOUT ASSEMBLIES

KEYED NOTE, NUMBER IN POSITION "1" INDICATES NOTE NUMBER

# **GENERAL ELECTRICAL NOTES**

1 ALL WORK SHALL BE COORDINATED WITH THE OTHER TRADES BEFORE INSTALLATION. MATERIALS INSTALLED IN AN ARBITRARY MANNER OR CREATES AN UNFAIR CONDITION OR HARDSHIP FOR ANOTHER TRADE WILL NOT BE ACCEPTED. CONTRACTOR SHALL L CHARACTERISTICS, VOLTAGE, LOAD, AND WIRING REQUIREMENTS FOR ALL EQUIPMENT PRIOR TO ROUGH-IN. PROVIDED FOR CONSTRUCTION SHALL BE UL LISTED AND NEW, UNLESS OTHERWISE NOTED (UON). ORMED SHALL BE BY AN OKLAHOMA LICENSED ELECTRICIAN.

ONS THROUGH WALL, FLOOR, OR CEILING ASSEMBLIES SHALL BE SEALED WITH SEALANT APPROVED FOR THE R WHICH IT IS BEING USED. FIRE STOP SHALL BE PROVIDED AT ALL LOCATIONS WHERE ELECTRICAL EQUIPMENT OR TRATE FIRE RATED WALLS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.

ERRUPTING CAPACITIES SPECIFIED IN THE CONTRACT DOCUMENTS ARE BASED UPON EQUIPMENT

CS AND IMPEDANCES. THE CONTRACTOR SHALL INCREASE THE INTERRUPTING CAPACITIES OF ALL ITEMS ON THE HE DEVIANT EQUIPMENT IN DIRECT PROPORTION TO THE CHANGED CHARACTERISTICS. INTERRUPTING CAPACITIES EDUCED TO VALUES LESS THAN THOSE REQUIRED BY THE CONTRACT DOCUMENTS. G FOR MECHANICAL EQUIPMENT IS NOT SHOWN ON THESE SHEETS (RE: MECHANICAL).

LINE DIAGRAMS ARE MEANT TO SHOW ONLY ELECTRICAL RELATIONSHIPS, AND THEREFORE MAY NOT INCLUDE ALL PMENT, DEVICES, AND ACCESSORIES.

R SIZES ARE BASED ON THE USE OF COPPER CONDUCTORS, UNLESS OTHERWISE NOTED. L BE COPPER, UNLESS OTHERWISE NOTED.

LS AND ABBREVIATIONS SHOWN ARE USED ON THIS PROJECT.

O INSTALL PULL WIRE IN EMPTY RACEWAY AND INNER-DUCTS. USE #14 ZINC-COATED STEEL OR MONOFILAMENT TH NO LESS THAN 200LBS TENSILE STRENGTH. LEAVE AT LEAST 24-INCHES OF SLACK AT THE END OF PULL WIRE

ENTIFICATION FOR THE LOCATION OF OTHER END. ING SWITCHES INDICATED IN A ROOM WITH LED FIXTURES INDICATES MULTIPLE LEVEL SWITCHING. UNLESS

CHES ARE INDICATED IN THE ROOM WITH LED FIXTURES, THE LED FIXTURES SHALL HAVE DIMMING DRIVERS.

ECTRICAL ITEMS SHALL REMAIN AND BE MAINTAINED IN SERVICE, UNLESS OTHERWISE NOTED. E WIRING BEING REMOVED SERVES ONLY THE ITEM SHOWN TO BE REMOVED ON THESE DRAWINGS. PROVIDE ALL LABOR REQUIRED TO RESTORE CONTINUITY TO CIRCUITS DISRUPTED BY DEMOLITION.

NG CEILING TILE AS REQUIRED FOR INSTALLATION OF ELECTRICAL WORK. REINSTALL TILES AS WORK IS COMPLETED. OF ANY BROKEN OR DAMAGED CEILING TILE BEFORE PERFORMING WORK. ALL DAMAGED AND BROKEN CEILING Y CONTRACTOR'S PERSONNEL SHALL BE REPLACED AT NOT ADDITIONAL COST TO OWNER.

STING UNUSED WIRING, CONDUIT, BOXES, DEVICES, ETC. UNCOVERED DURING DEMOLITION.

T NUMBERS MAY BE SHOWN NEXT TO SYMBOLS IN MULTIWIRE CIRCUITS.

ATION DOES NOT IMPLY DEVICE OR EQUIPMENT ORIENTATION UNLESS NOTED AS SUCH. SEE REFLECTED CEILING IT FIXTURE POSITIONS AND ORIENTATIONS.

DES NOT IMPLY EQUIPMENT SIZE, UON

TTER IN POSITION "X" INDICATES FIXTURES CONTROLLED BY SAME LETTERED SWITCH.

![](_page_46_Picture_41.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_46_Picture_44.jpeg)

![](_page_46_Picture_45.jpeg)

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

5 • `\_\_\_\_ S atio Φ <u>ni</u> tate 0 eD S 2 **(**) σ Inhan Dio J 39 39 ma ent Blvd. OK lahoi σ Eagle | Stu Ň 232 Goc Revision # Description Date Project Number OK70205-033 Sheet Title ELECTRICAL ABBREVIATIONS, LEGEND, AND NOTES Date 15 MAR 2024

E-001

![](_page_47_Figure_1.jpeg)

 $\hat{\mathbf{c}}$ Ś

![](_page_47_Picture_8.jpeg)

![](_page_48_Figure_1.jpeg)

5/2024

		LIGHTING FIXTURE SCHEDULE		
Туре	Manufacturer	Model	Mounting	Type Comments
H1	Prudential Lighting	P3920-LED35-SO_SO-FWA-TMW-D1-SC-UNV-MCPA48"-X1-ND	SUSPENDED - 3'-0"	
H2	Prudential Lighting	P3930-LED35-SO_SO-FWA-TMW-D1-SC-UNV-MCPA48"-X1-ND	SUSPENDED - 3'-0"	
H3	Prudential Lighting	P3940-LED35-SO_SO-FWA-TMW-D1-SC-UNV-MCPA48"-X1-ND	SUSPENDED - 3'-0"	
A	WILLIAMS	BP 22 LS 40W 8 CCT UNV	RECESSED	
A1	WILLIAMS	BP 22 LS 25W 8 CCT UNV	RECESSED	
В	WILLIAMS	S4DR -TL L30 9 35	RECESSED	
С	WILLIAMS	4CR L25 9 3500 ALUM DIM UNV	PENDANT	
D	ELLIPTIPAR	S315-S-6-S-00-M-00-0-935-EL	SURFACE	COVE LIGHTING
F	WILLIAMS	AVX 4 L36 9 35 WPC	SURFACE	
J	PURE EDGE	TW2-T1-1RE-30IN-35K-WH	WALL	24 VDC FIXTURE WITH 120 VAC TO 24VDC TRANSFORMER
К	PERFORMANCE IN LIGHTING	BS4-O-30-AM-35K-UNV-NA	SURFACE	
К1	PERFORMANCE IN LIGHTING	BS4-O-10-AM-35K-UNV-NA	SURFACE	LOW OUTPUT FOR VESTIBULES
L	WILLIAMS	75L-8-L76/835-DMA-ACF/D24-DIM-120	SURFACE	
Ρ	CAL	OPSU-LOGO-91"x95"-40K-(0-10V)	SURFACE	CUSTOM OPSU LOGO FIXTURE
X	WILLIAMS	EDGE LITE		

![](_page_48_Figure_4.jpeg)

D. GRILL [20]
3. LIGHTING FIXTURES IN ROOM/AREA ARE PART OF ALTERNATIVE #3 AND #4. IF ALTERNATE IS NOT TAKEN, EXISTING ARE TO REMAIN.

![](_page_48_Picture_10.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_48_Picture_13.jpeg)

![](_page_48_Picture_14.jpeg)

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

Student Union Renovation	Oklahoma Panhandle State University	232 Eagle Blvd. Goodwell. OK 73939
Revisi # De	i <b>on</b> scription	Date
Proje OK7( Sheet LIGH	ct Numbe )205-033 : Title TING PL/	er AN
Date	AR 2024	
EL	_10	

PLAN NORTH

![](_page_48_Figure_18.jpeg)

![](_page_49_Figure_0.jpeg)

![](_page_49_Figure_1.jpeg)

| 5/2024

à

S T U D I O ARCHITECTURE 816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM guernsey 5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024 University Renovation State Φ anhandle Union 232 Eagle Blvd. Goodwell. OK 73939 Student Oklahoma Revision # Description Date Project Number OK70205-033 Sheet Title POWER PLAN Date 15 MAR 2024

EP101

PLAN NORTH

![](_page_49_Figure_7.jpeg)

![](_page_50_Figure_0.jpeg)

![](_page_50_Figure_1.jpeg)

3/15/2024

![](_page_50_Picture_3.jpeg)

 (#) <u>KEYED NOTES:</u>
 1. AHU ELECTRICAL CONNECTION TO BE DEMOLISHED TO SOURCE. RELABEL BREAKER AS SPARE. CONDUIT AND CONDUCTORS MAY BE ABANDONED IN PLACE. LABEL JUNCTION BOXES "ABANDONED"
 2. CASSETTE TO BE POWERED BY ASSOCIATED ROOFTOP HEAT PUMP. ROUTE CONDUIT AND CONDUCTOR AS INDICATED BY MANUFACTURER. RE: EP103 3. ALTERNATE LOCATION FOR HP-02

![](_page_50_Figure_5.jpeg)

# 2 MECHANICAL POWER PLAN - MEZZANINE

S T	UD	0 0
A R C H 816 NORT OKLAHOMA VOICE: 40! WWW.STU	H I T E ( H WALKER, CITY, OK 5.605.1044 DIOARC.CO	C T U R I SUITE 100 73102 M
Selection of the select	GARY ALAN LYNN 10877 ALANDAR V 4 Z.C	124 224
<b>gu</b> 5555 G CA ENG	N GRANE OKC, OF UERNSEY GINEERING 6/30/202	Sey DBLVD CUS G #10 EXP
udent Union Renovation	dahoma Panhandle State University	Eagle Blvd. Jwell. OK 73939
Revisi	Ŏ	232 E Good
# Des	scription	Date
Projec OK70 Sheet MECH POW	t Numbe 205-033 Title HANICA ER PLAN	er L
Date 15 MA	AR 2024	
EF	P10	2

![](_page_51_Figure_0.jpeg)

![](_page_51_Figure_1.jpeg)

:57:00 ы. 3/15/2024

	MECHANICAL POWER SCHEDULE								
Туре	Electrical Data	Wire Size	Conduit Size	Disconnect Size	Disconnect Enclosure	Panel	Circuit Number	Notes	
EF-1	208 V/2-1872 VA	#10	3/4"	15 A	NEMA 3R	М	56,58		
HP-02	208 V/2-2496 VA	#10	3/4"	20 A	NEMA 3R	М	60,62		
REMOTE CHILLER	120 V/1-370 VA	#12	3/4"	5 A	NEMA 3R	М	69		
RTU-01	208 V/3-13690 VA	#6	3/4"	60 A	NEMA 3R	MDP	18		
RTU-02	208 V/3-13690 VA	#6	3/4"	60 A	NEMA 3R	MDP	19		
RTU-03	208 V/3-19454 VA	#4	1"	100 A	NEMA 3R	MDP	20		
UH-01	208 V/3-7681 VA	#10	1"	25 A	NEMA 3R	М	73,75,77		
UH-01	208 V/3-7681 VA	#10	1"	25 A	NEMA 3R	М	68,70,72		

![](_page_51_Picture_5.jpeg)

![](_page_51_Picture_6.jpeg)

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

![](_page_51_Picture_8.jpeg)

#KEYED NOTES:1.ALTERNATE LOCATION FOR HP-02.

![](_page_52_Figure_0.jpeg)

![](_page_52_Figure_1.jpeg)

8 5/2024

Infosys, Division of OESCO Primary Contact – Rebecca Barney Office Phone – (405) 525-9900 ext. 117 Email – rbarney@oesco.com

**Telco Supply Company** Primary Contact – Chase Honea Office Phone - (580) 622-0243 Cell Phone - (580) 222-3207

Email – chonea@chickasawphone.net

LynxSystem, LLC Primary Contact – David Ayers Office Phone – (918)728-6000 Cell Phone - (918) 576-6846 Email – david.ayers@lynxsystemusa.com

GENERAL NOTES: 1. COORDINATE CARD READER, CAMERA, AND TV CABLE TYPES WITH OWNER.

 $\langle \# \rangle$  KEYED NOTES: EXISTING CARD READER TO REMAIN 2. INFRASTRUCTURE ONLY - FOR FUTURE USE. 3. NEW BUILDING ETHERNET SWITCHING DESTINATION. COORDINATE WITH OWNER IT GROUP FOR ROUTING OF NEW AND EXISTING CAT 6 CABLING. 4. EXISTING DROP TO REMAIN. FIELD VERIFY DROPS ARE IN WORKING CONDITION. PROVIDE NEW IF NEEDED 5. EXISTING DROPS TO BE REUSED AFTER CONSTRUCTION IN AREA. DURING RENOVATION CAREFULLY REMOVE BOX AND CABELS OF EXISTING ETHERNET AND REINSTALL IN THE SAME APPROXIMATE LOCATION

# Oklahoma State University (Stillwater) Approved Ethernet Contractor List:

<u>Wachter</u> Primary Contact – Beau Brown Office Phone – (479) 725-5585 Cell Phone - (479) 361-7923 Email – beau.brown@wachter.com

RFIP Contact Person – Ben Matson Cell Phone - (405) 308-1339 Email – bmatson@rfip.com

Lighthouse Integrated Systems **Contact Person – Scott Davis** Office Phone – (918) 609-8440 Cell Phone – (918) 892-8650 Email – SCOTTD#@LISTULSA.COM

![](_page_52_Picture_18.jpeg)

SCALE: 3/32" = 1'-0"

![](_page_52_Picture_20.jpeg)

F	Revision	
#	Description	Date
<b>F</b>	Project Numb	er
0	OK70205-033	3
S	heet Title	
T	ELECOMMU	
F	'LAN	

Date 15 MAR 2024

T-101

![](_page_53_Figure_0.jpeg)

![](_page_53_Figure_3.jpeg)

![](_page_54_Figure_1.jpeg)

![](_page_54_Picture_4.jpeg)

![](_page_55_Figure_1.jpeg)

<u>GENERAL NOTES:</u> 1. HALFTONE ITEMS INDICATE EXISTING TO REMAIN. 2. DASHED ITEMS INDICATE EXISTING TO BE DEMOLISHED.

![](_page_55_Figure_4.jpeg)

KEYED NOTES:

- EXISTING PANEL TO BE DEMOLISHED. RETAIN ALL FEEDERS AND BRANCH
- CIRCUITS FOR REUSE, UON. RECONNECT NEW PANEL IN KIND. 2. EXISTING PANEL AND FEEDER CIRCUIT, TO BE DEMOLISHED AND REPLACED WITH NEW 3-PHASE PANEL & FEEDER. RETAIN ALL BRANCH CIRCUITS REMAINING FROM DEMOLITION PHASE FOR RECONNECTION TO NEW PANEL,
- IN KIND. 3. NEW PANEL AND FEEDER CIRCUIT. #2 AWG TO BE USED TO SERVE THE NEW PANEL

I-LINE:	MDP
Location:	Basement
Supply From:	Service Breaker
Mounting:	Surface
Enclosure:	Туре 1

Phases: 3 Wires: 4

СКТ	Circuit Description	# of Poles	Frame Size	Trip Rating	Load	Remarks
1	EXISTING LOAD	3	70 A	70 A	0 VA	
2	EXISTING LOAD	3	70 A	70 A	0 VA	
3	EXISTING LOAD	3	20 A	20 A	0 VA	
4	EXISTING LOAD	3	20 A	20 A	0 VA	
5	EXISTING LOAD	3	50 A	50 A	0 VA	
6	EXISTING LOAD	3	70 A	70 A	0 VA	
7	EXISTING LOAD	3	70 A	70 A	0 VA	
8	EXISTING LOAD	3	70 A	70 A	0 VA	
9	EXISTING LOAD	3	30 A	30 A	0 VA	
10	EXISTING LOAD	3	50 A	50 A	0 VA	
11	EXISTING LOAD	3	400 A	400 A	0 VA	
12	EXISTING PANEL C	3	200 A	200 A	0 VA	
13	EXISTING PANEL B	2	200 A	200 A	0 VA	
14	EXISTING PANEL M	2	225 A	225 A	0 VA	
15	EXISTING PANEL N	2	225 A	225 A	0 VA	
16	EXISTING PANEL K	3	100 A	20 A	0 VA	
17	EXISTING PANEL L	3	100 A	20 A	0 VA	
18	RTU-01	3	50 A	50 A	13690 VA	
19	RTU-02	3	50 A	50 A	13690 VA	
20	RTU-03	3	70 A	70 A	19454 VA	
			Additio	nal Conn. Load:	46833 VA	
			A	dditional Amps:	130 A	

### Legend:

Connected Load	Demand Factor	Estimated Demand	Panel	Totals
46833 VA	80.00%	37467 VA		
			Additional Conn. Load:	46833 VA
			Additional Est. Demand:	37467 VA
			Additional Conn. Current:	130 A
			Additional Est. Demand	104 A
	Connected Load 46833 VA	Connected Load     Demand Factor       46833 VA     80.00%	Connected Load       Demand Factor       Estimated Demand         46833 VA       80.00%       37467 VA	Connected LoadDemand FactorEstimated DemandPanel46833 VA80.00%37467 VA11Additional Conn. Load:111Additional Est. Demand:111Additional Conn. Current:111 <td< td=""></td<>

AIR RATING BASED UPON RATING OF EXISTING MDP BEING REPLACED

![](_page_55_Picture_16.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_55_Picture_18.jpeg)

5555 N GRAND BLVD OKC, OK GUERNSEY.US CA ENGINEERING #10 EXP 6/30/2024

![](_page_55_Picture_20.jpeg)

Sheet Title ONE-LINE AND SCHEDULES

Date 15 MAR 2024

E-601

Volts: 120/208 WYE

A.I.C. Rating: EXISTING Mains Type: COPPER Mains Rating: 800 A MCB Rating: MLO

### Branch Panel: N Location: Grill Serving 22 Supply From: MDP Mounting: Flush Enclosure: Type 1

Volts: 120/208 WYE Phases: 3 Wires: 4

Notes:

СКТ	Circuit Description	Trip	Poles		4	E	3			Poles	Trip	Circuit Description	СКТ
1	PIZZA OVEN - [23]	70 A	2	5000	180					1	20 A	DRINK COUNTER - [21]	2
3						5000	180			1	20 A	DRINK COUNTER - [21]	4
5	RECEPTACLES - [22]	20 A	1					180	180	1	20 A	DRINK COUNTER - [21]	6
7	RECEPTACLES - [22]	20 A	1	180	180					1	20 A	DRINK COUNTER - [21]	8
9	FOOD WARMER - [22]	20 A	1			1000	180			1	20 A	DRINK COUNTER - [21]	10
11	FOOD WARMER - [22]	20 A	1					1000	180	1	20 A	DRINK COUNTER - [21]	12
13	UNDERCOUNTER - [22]	20 A	1	500	500					1	20 A	FREEZER - [23]	14
15	UNDERCOUNTER RECEPTACLES - [22]	20 A	1			400	500			1	20 A	FREEZER - [23]	16
17	GARBAGE DISPOSAL - [22]	20 A	1					180	540	1	20 A	RECEPTACLES - [23]	18
19	COOLER - [20]	20 A	1	500	360					1	20 A	MILK COOLERS - [21]	20
21	COOLER - [20]	20 A	1			500	1500			1	20 A	RECEPTACLES - [21]	22
23	COOLER - [20]	20 A	1					500	1500	1	20 A	RECEPTACLES - [21]	24
25	FOOD WARMER - [23]	20 A	1	1000	1500					1	20 A	RECEPTACLES - [21]	26
27	INDUCTION BURNER - [23]	20 A	1			1000	1500			1	20 A	RECEPTACLES - [21]	28
29	INDUCTION BURNER - [23]	20 A	1					1000	1500	1	20 A	MICROWAVE - [21]	30
31	PIZZA PREP - [23]	20 A	1	1000						1		SPACE	32
33	FOOD WARMER - [23]	20 A	1			1000				1		SPACE	34
35	ABOVE COUNTER - [20]	20 A	1					360		1		SPACE	36
37	ABOVE COUNTER - [20]	20 A	1	360						1		SPACE	38
39	ESPRESSO - [20]	20 A	1			1000				1		SPACE	40
41	TEA BREW - [20]	20 A	1					1000		1		SPACE	42
43	SOFT DRINK - [20]	20 A	1	1000						1		SPACE	44
45	SPACE		1							1		SPACE	46
47	SPACE		1							1		SPACE	48
49	SPACE		1							1		SPACE	50
51	SPACE		1							1		SPACE	52
53	SPACE		1							1		SPACE	54
55	SPACE		1							1		SPACE	56
57	SPACE		1							1		SPACE	58
59	SPACE		1							1		SPACE	60
	1	Tot	al Load:	1226	O VA	1376	0 VA	8120	) VA				
		Tota	Amps:	10	7 A	120	D A	68	3 A	1			

anel Totals	Panel Totals	Estimated Demand	Demand Factor	Connected Load	Load Classification
		17070 VA	70.71%	24140 VA	RECEPTACLES
.oad: 34140 VA	Total Conn. Load: 34140 VA	0 VA	0.00%	0 VA	MOTOR 80%
and: 27070 VA	Total Est. Demand: 27070 VA	10000 VA	100.00%	10000 VA	RECEPTACLES 100%
rent: 95 A	Total Conn. Current: 95 A				
rent: 75 A	Total Est. Demand Current: 75 A				
and: 32484 VA	Future Est. Demand: 32484 VA				
ł		· · · · ·			Notes:
					Notes:

# A.I.C. Rating: 10,000 Mains Type: COPPER Mains Rating: 100 A MCB Rating: MLO

	Location: Pre-Function 12 Supply From: MDP Mounting: Surface Enclosure: Type 1					Volts: Phases: Wires:	120/208 3 4	WYE				A.I.C. Rating: EXISTING Mains Type: COPPER Mains Rating: 225 A MCB Rating: 225 A	
Notes:													
СКТ	Circuit Description	Trip	Poles	1	A	1	B	(		Poles	Trip	Circuit Description	CKT
1		20 A	1	0	0	0	0			1	20 A		2
3		20 A	1			0	0	0	0	1	20 A		4
5 7		20 A	1	0	0			0	0	1	20 A		0
7 Q		20 A	1	0	0	0	0			1	20 A		10
11		20 A	1			0	0	0	0	1	20 A		10
13		20 A	1	0	0			0	0	1	20 A	EXISTING CIRCUIT	12
15	EXISTING CIRCUIT	20 A	1	<u> </u>		0	0			1	20 A	EXISTING CIRCUIT	16
17	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT	18
19	EXISTING CIRCUIT	20 A	1	0	0				-	1	20 A	EXISTING CIRCUIT	20
21	EXISTING CIRCUIT	20 A	1			0	0			1	20 A	EXISTING CIRCUIT	22
23	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT	24
25	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT	26
27	EXISTING CIRCUIT	20 A	1			0	0			1	20 A	EXISTING CIRCUIT	28
29	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT	30
31	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT	32
33	EXISTING CIRCUIT	20 A	1			0	0			1	20 A	EXISTING CIRCUIT	34
35	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT	36
37	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT	38
39	FESTOON LIGHTING	20 A	1			180	0			1	20 A	EXISTING CIRCUIT	40
41	RECEPTACLES RM 9, 10	20 A	1					430	1150	1	20 A	RECEPTACLES RM 8, 9	42
43	RECEPTACLES RM 9 SOUTH	20 A	1	1300	930					1	20 A	RECEPTACLES CORR 12	44
45	SPARE	20 A	1			0	180			1	20 A	DRINK FOUNTAIN CORR 12	46
47	RECEPTACLES RM 6, 7	20 A	1	400	0.00			360	830	1	20 A	RECEPTACLES 20 SOUTH	48
49	RECEPTACLE - [19]	20 A	1	180	360	500	000			1	20 A		50
51	LIGHTING CORR 17	20 A	1			520	638	074	0.00	1	20 A	LIGHTING RM 21 WEST	52
55		20 A	1	1014	026			074	820	1	20 A		54
57		20 A	1	1014	930	557	036			2	20 A	MOTOR 60%	58
50		20 A	1			557	930	840	12/18		20.4		60
61		20 A	1	918	1248			045	1240				62
63	LIGHTING RM 22_23_21 NORTH	20 A	1	010	1240	1031	900			2	30 A	L 6-30R - [19]	64
65	L6-30R - [19]	30 A	2			1001		900	900				66
67				900	2560					3	30 A	MOTOR 80%	68
69	MOTOR 80%	20 A	1			370	2560						70
71	RECEPTACLES	20 A	1					540	2560				72
73	MOTOR 80%	20 A	3	2560									74
75						2560							76
77								2560					78
79													80
81													82
83													84
		Add	tl Load:	1290	)6 VA	1043	32 VA	1402	7 VA	1			

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel	Totals
LIGHTING	7227 VA	61.98%	4479 VA		
RECEPTACLES	10040 VA	99.80%	10020 VA	Additional Conn. Load:	37366 VA
MOTOR 80%	20099 VA	80.00%	16079 VA	Additional Est. Demand:	30579 VA
				Additional Conn. Current:	104 A
				Additional Est. Demand	85 A
				Additional Future Est. Demand:	36694 VA

S T	U	)	0
A R C H 816 NORT OKLAHOMA VOICE: 40 WWW.STU	HITE HWALKE CITY, OF 5.605.104 DIOARC.CO GARY ALAN LYNN 1087 MLAND CALAND	C T R, SUIT ( 7310 4 DM	URE EIOO 2
gu 5555 G CA ENG	N GRAN OKC, C UERNSE GINEERIN 6/30/20	ID BL\ NOK Y.US NG #10 24	<b>2У</b> /D ) EXP
Student Union Renovation	Oklahoma Panhandle State University	232 Eadle Rivd	Goodwell. OK 73939
Revisi # Des	on scription	D	ate
Projec OK70 Sheet PANE	<u>et Numł</u> 205-03: Title EL SCHE	Der 3 EDUL	ES
Date 15 MA	AR 2024		
E-	60	L	

# Branch Panel: L Location: KITCHEN

Supply From: MDP Mounting: FLUSH Enclosure: Type 1

Volts: 120/208 WYE Phases: 3 Wires: 4

A.I.C. Rating: EXISTI Mains Type: COPPE Mains Rating: 100 A MCB Rating: MLO

Notes:								
NEW PANEL TO REPLACE EXISTING FLUSH MOUNTED PANEL L. FIELD VERIFY DIMENSIONS FOR FLU								
							/	
скт	Circuit Description	Trip	Poles		4	E	3	
<b>СКТ</b>	Circuit Description	Trip 20 A	Poles	0	<b>A</b> 0	E	3	
СКТ 1 3	Circuit Description EXISTING CIRCUIT EXISTING CIRCUIT	<b>Trip</b> 20 A 20 A	<b>Poles</b> 1 1	0	<b>A</b> 0	<b>E</b>	<b>B</b>	
<b>CKT</b> 1 3 5	Circuit Description EXISTING CIRCUIT EXISTING CIRCUIT EXISTING CIRCUIT	<b>Trip</b> 20 A 20 A 20 A	<b>Poles</b> 1 1 1 1	0	<b>A</b> 0	0	<b>3</b> 0	

NEW PA	ANEL TO REPLACE EXISTING FLUSH MOUNTED TS MARKED "EXISTING CIRCUIT" ARE EXISTING	) PANEL G CIRCUI	L. FIELD TS TO BI	VERIFY E RERO	/ DIMEN	SIONS F O NEW F	OR FLU	SH MOU NAMES A	NTED IN	ISTALLA <sup>-</sup> ADS ARE	tion. Unknc	WN. FIELD VERIFY EXIS	TING.	
СКТ	Circuit Description	Trip	Poles		Α		В	-	C	Poles	Trip	Circuit De	escription	СКТ
1	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT		2
3	EXISTING CIRCUIT	20 A	1			0	0			1	20 A	EXISTING CIRCUIT		4
5	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT		6
7	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT		8
9	EXISTING CIRCUIT	20 A	1			0	0			1	20 A	EXISTING CIRCUIT		10
11	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT		12
13	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT		14
15	EXISTING CIRCUIT	20 A	1			0	0			1	20 A	EXISTING CIRCUIT		16
17	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT		18
19	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT		20
21	EXISTING CIRCUIT	20 A	1			0	0			1	20 A	EXISTING CIRCUIT		22
23	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT		24
25	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT		26
27	EXISTING CIRCUIT	20 A	1			0	0			1	20 A	EXISTING CIRCUIT		28
29	EXISTING CIRCUIT	20 A	1					0	0	1	20 A	EXISTING CIRCUIT		30
31	EXISTING CIRCUIT	20 A	1	0	0					1	20 A	EXISTING CIRCUIT		32
33	EXISTING CIRCUIT	30 A	2			0	0			1	20 A	EXISTING CIRCUIT		34
35								0	0	2	30 A	EXISTING CIRCUIT		36
37	EXISTING CIRCUIT	30 A	2	0	0									38
39						0								40
41	EXISTING CIRCUIT	30 A	1					0						42
		Add	Itl Load:	0	VA	0	VA	0	VA		1	1		ł
		Addt	tl Amps:	C	A	C	) A	0	А	_				
Legend Load Cl	assification	Con	nected I	Load	De	mand Fa	actor	Estin	nated De	emand		Panel	Totals	
		_										Additional Conn. Load:	0 VA	
												Additional Est. Demand:	0 VA	
											A	dditional Conn. Current:	0 A	
											A	dditional Est. Demand	0 A	
											Additio	nal Future Est. Demand:	0 VA	
Notes:														

Legend

Load Classification	Connected Load	Demand Factor	Estimated Demand	Pan
				Additional Conn. Loa
				Additional Est. Deman
				Additional Conn. Curren
				Additional Est. Demand
				Additional Future Est. Deman
Notes:				

53 Ň 3/15/2024

ING	
FR	

![](_page_57_Picture_12.jpeg)

![](_page_58_Figure_0.jpeg)

![](_page_58_Figure_1.jpeg)

![](_page_58_Figure_2.jpeg)

20 1/2024

	× × SEND HVAC SHUTDOWN SIGNAL TO MECHANICAL CONTROLS SYSTEM	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION VIA IP COMMUNICATOR	AUTOMATICALLY TRANSFER TO SECONDARY POWER	DISABLE ALL LEVELS NOTIFICATION APPLIANCES, AHU SHUTDOWN & ALARM SIGNAL TRANSMISSION	DISABLE ALL LEVELS NOTIFICATION APPLIANCES	DISABLE LEVEL 1 NOTIFICATION APPLIANCES & ALARM SIGNAL TRANSMISSION	DISABLE BASEMENT NOTIFICATION APPLIANCES & ALARM SIGNAL TRANSMISSION	
	X X							
	Х							
		Х	Х					
		X						
		X						
	1	1						
		Х		Х				
		X			Х	X		
		X				X	x	
		×					^	

# FIRE ALARM GENERAL NOTES

### 1. SYSTEM DESCRIPTION

- THIS SYSTEM INDICATED HEREIN IS AN IN-BUILDING FIRE ALARM AND VOICE EVACUATION SYSTEM AS DEFINED BY NFPA 72. UPON AUTOMATIC OR MANUAL ACTIVATION, THE SYSTEM MUST
- AUTOMATICALLY NOTIFY OCCUPANTS THROUGHOUT THE PROTECTED PREMISES. THE SCOPE OF THE PROJECT INCLUDEDS A NEW INSTALLATION OF A FIRE ALARM SYSTEM FOR THE B. ENTIRE FACILITY. THE BUILDING DOES NOT HAVE AN EXISTING VOICE FIRE ALARM SYSTEM. THE PROJECT INCLUDES FIRE ALARM SYSTEM INSTALLATION TO ACHIEVE COMPLIANT NOTIFICATION AND INITIATION DEVICE COVERAGE IN ALL AREAS OF THE BUILDING INCLUDING THOSE NOT IMPACTED BY OTHER DISCIPLINES.
- PURPOSE OF PLANS

2.

3.

5.

7.

8.

9.

- THESE PLANS ARE INTENDED TO DEMONSTRATE CRITERIA, DEMONSTRATE CODE COMPLIANCE, AND SOLICIT COMPETITIVE BIDS.
- THESE PLANS ARE INTENDED TO DEMONSTRATE COORDINATED AND COMPLIANT LOCATIONS, TYPES, AND SETTINGS OF INITIATING DEVICES, NOTIFICATION APPLIANCES, ANNUNCIATORS, CONTROL UNITS, AND ASSOCIATED MAJOR COMPONENTS.
- THESE PLANS ARE NOT INTENDED TO BE USED FOR CONSTRUCTION.
- THESE PLANS ARE NOT INTENDED TO SHOW ALL CIRCUITS, COMPONENTS, ACCESSORIES, AND D. OTHER DETAILS WHICH MUST BE DOCUMENTED IN THE CONTRACTOR'S SHOP DRAWINGS,
- CALCULATIONS, AND PRODUCT DATA SELECTIONS. MODIFICATIONS MADE BY THE CONTRACTOR RESULTANT FROM COORDINATION, CALCULATIONS, OR E. CONTRACTOR ROUTING AND INSTALLATION PREFERENCES MUST BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
- UNLESS SPECIFICALLY NOTED OTHERWISE, ALL MANUFACTURER AND MODEL DATA INDICATED HEREIN IS A BASIS OF DESIGN AND IS NOT SOLE-SOURCED. THE CONTRACTOR MAY SELECT THEIR
- OWN MANUFACTURER AND MODEL, EXCEPT WHERE EXPLICITLY NOTED OTHERWISE. NOTE: OKLAHOMA STATE UNIVERSITY REQUIRES THE FIRE ALARM SYSTEM MANUFACTURER TO BE EITHER NOTIFIER OR SIMPLEX FOR CONSISTENCY WITH EXISTING SYSTEMS AND
- MAINTENANCE CONTINUITY. APPLICABLE CRITERIA
- INTERNATIONAL FIRE CODE, 2018 WITH OUBCC AMENDMENTS
- NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE, 2016 NFPA 70 NATIONAL ELECTRICAL CODE, 2017
- OKLAHOMA STATE UNIVERSITY ENVIRONMENTAL HEALTH & SAFETY ADDRESSABLE FIRE ALARM D. SYSTEM STANDARD, OCTOBER 2018
- SPECIFICATIONS 4. REFER TO PROJECT SPECIFICATIONS FOR MANY QUALIFICATIONS, SUBMITTAL, PRODUCT, Α. INSTALLATION, TESTING, AND DOCUMENTATION CRITERIA. THE PROJECT SPECIFICATIONS ARE
  - WRITTEN WITH INTENT AND WILL BE ENFORCED. SPECIFICATION CRITERIA STATED ON THESE PLANS IS INTENDED TO SUMMARIZE MAJOR SYSTEM CRITERIA. REFER TO SPECIFICATIONS FOR ALL DETAILS.
  - NOTIFICATION THIS SYSTEM IS DESIGNED TO PROVIDE TOTAL EVACUATION. NEITHER PARTIAL EVACUATION NOR
  - OCCUPANT RELOCATION ARE SPECIFIED. PUBLIC MODE AUDIBLE NOTIFICATION IS REQUIRED THROUGHOUT ALL "OCCUPIABLE AREAS" AS
  - DEFINED BY NFPA 72. VISUAL NOTIFICATION IS REQUIRED THROUGHOUT ALL PUBLIC AND COMMON WORK AREAS. С NOTIFICATION ZONING IS TOTAL EVACUATION. D
- 6. MANUAL PULL STATIONS 907.2.1 IN THE IBC PROIVDES AN EXCEPTION FOR GROUP A OCCUPANCIES TO EXCLUDE THE Α.
  - INSTALLATION OF MANUAL PULL STATIONS PROVIDED THAT THE BUILDING IS FULLY SPRINKLERED. ONLY ONE MANUAL PULL STATION IS PROVIDE FOR THE RENOVATION. THE PULL STATION IS LOCATED AT THE PANEL AND IS FOR TESTING AND MAINTENANCE PURPOSES. CIRCUITS AND PATHWAYS
- CIRCUITS MUST BE CLASS B OR MORE RESILIENT.
- ALL CIRCUITS MUST BE PROVIDED IN 3/4-INCH MINIMUM METALLIC CONDUIT. FLEXIBLE METALLIC CONDUIT IS PERMITTED IN LENGTHS NOT EXCEEDING 6 FEET WHERE CONNECTING TO CEILING-MOUNT DEVICES OR SPRINKLER SYSTEM DEVICES.
- INSTALLATION ALL COMPONENTS MUST BE COORDINATED WITH OTHER TRADES AND INSTALLED PARALLEL OR Α. PERPINDICULAR TO THE BUILDING STRUCTURE.
- SYSTEM INSTALLATION MUST BE PERFORMED IN A NEAT, WORKMAN-LIKE MANNER. ALL INSTALLATION AND TESTING MUST COMPLY WITH THE APPLICABLE CRITERIA AND
- MANUFACTURER'S INSTRUCTIONS.
- THE SYSTEM MUST BE TURNED OVER TO THE OWNER IN LIKE-NEW CONDITION. THE CONTRACTOR D. MUST REPLACE DAMAGED COMPONENTS WITH NEW COMPONENTS IF DAMAGED BEFORE TURNOVER.
- PERMITTING A. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING AND ASSOCIATED FEES.

# FIRE ALARM LEGEND

С

С

С

ACU	FIRE ALARM CONTROL UNIT
FAA	FIRE ALARM ANNUNCIATOR
	SPEAKER STROBE CEILING MOUNTED
S	SPEAKER CEILING MOUNTED
X	STROBE CEILING MOUNTED
X	WATERFLOW HORN STROBE WEATHER PROOF
VS	VALVE SUPERVISORY SWITCH
WF	SPRINKLER WATERFLOW SWITCH
	ADDRESSABLE INPUT MODULE
F	FIRE ALARM MANUAL PULL STATION

![](_page_58_Picture_53.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_58_Picture_56.jpeg)

 $\leq$ 

S

C

÷

![](_page_58_Picture_57.jpeg)

# σ U C +σ T C σ σ $\overline{\mathbf{U}}$ B 0 X 0 S

: Blvd. OK 73939 323 Eagle I Goodwell, (

F	Revision						
#	Description	Date					
	•						
F	Project Numb	ber					
S	Sheet Title						
F	FIRE ALARM NOTES						
L	Date						
0	3/11/2024						

FA001

![](_page_59_Figure_0.jpeg)

AM 3/11/2024 11:49

![](_page_59_Figure_3.jpeg)

# FIRE ALARM PLAN - BASEMENT

![](_page_59_Picture_5.jpeg)

0	4'	8'	16'

![](_page_59_Figure_7.jpeg)

![](_page_59_Picture_8.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_59_Picture_10.jpeg)

![](_page_59_Picture_11.jpeg)

![](_page_59_Figure_12.jpeg)

FIRE ALARM ACOUSTICALLY DISTINGUISHABLE SPACE (ADS) SCHEDULE									
FA.ADS Code (SP)	Key Name	FA.ADS Ceiling Height	FA.ADS Ceiling Material	FA.ADS Floor Finish	FA.ADS Wall Finish	FA.ADS Audible Notification Mode	FA.ADS Ambient SPL (dBA)	FA.ADS Required SPL (dBA)	
A	TYPICAL OFFICE / CIRCULATION SPACE	≤10'	ABSORBING (ACOUSTICAL TILE, E.G.)	ABSORBING (CARPET, E.G.)	REFLECTIVE (GYPSUM, METAL, CONCRETE, E.G.)	PUBLIC	54 - BUSINESS	69	
В	TYPICAL STORAGE SPACE	> 10'	REFLECTIVE (NON-ACOUSTIC TILE, OPEN TO STRUCTURE, E.G.)	REFLECTIVE (VCT, CONCRETE, E.G.)	REFLECTIVE (GYPSUM, METAL, CONCRETE, E.G.)	PUBLIC	30 - STORAGE	45	
C	TYPICAL RESTROOM	≤10'	REFLECTIVE (NON-ACOUSTIC TILE, OPEN TO STRUCTURE, E.G.)	REFLECTIVE (VCT, CONCRETE, E.G.)	REFLECTIVE (GYPSUM, METAL, CONCRETE, E.G.)	PUBLIC	54 - BUSINESS	69	
D	TYPICAL CONFERENCE AREA	≤10'	ABSORBING (ACOUSTICAL TILE, E.G.)	ABSORBING (CARPET, E.G.)	REFLECTIVE (GYPSUM, METAL, CONCRETE, E.G.)	PUBLIC	60 - ASSEMBLY	75	
E	TYPICAL COMM / ELECTRICAL ROOM	> 10'	REFLECTIVE (NON-ACOUSTIC TILE, OPEN TO STRUCTURE, E.G.)	REFLECTIVE (VCT, CONCRETE, E.G.)	REFLECTIVE (GYPSUM, METAL, CONCRETE, E.G.)	PUBLIC	70 - COMM & ELECTRICAL	85	

![](_page_60_Figure_3.jpeg)

024 1/2( 3/1

![](_page_60_Figure_5.jpeg)

NOTES: 1. THIS DETAIL IS DIAGRAMMATIC. PANELS MAY BE INSTALLED ABOVE AND BELOW EACH OTHER WHERE NECESSARY DUE TO LIMITED WALL SPACE.

2 FIRE ALARM EQUIPMENT MOUNTING HEIGHTS

![](_page_60_Picture_9.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_60_Picture_11.jpeg)

![](_page_60_Figure_12.jpeg)

FA500

![](_page_60_Figure_13.jpeg)

![](_page_60_Picture_14.jpeg)

# FIRE SUPPRESSION GENERAL NOTES

А.	THE AUTOMATIC
	PIPE SPRINKLER
	DESIGN IS NOT F
	STUDENT UNION
_	SYSTEM.
В.	THE SCOPE OF
	ENTIRE BUILDING
2. PUR	RPOSE OF PLANS
Α.	THESE PLANS A
_	AND SOLICIT CO
В.	THESE PLANS A
	CONTRACTOR N
	COMPLIANCE W
-	AND KEYNOTES
C.	THESE PLANS A
D.	THE CONTRACT
_	PART OF THE SH
E.	MODIFICATIONS
	OR CONTRACTO
_	ADDITIONAL CO
F.	UNLESS SPECIFI
	HEREIN IS A BAS
0	
G.	
2 400	
J. APP	
A.	
Б.	
0.	
П	
D.	STANDARD SEP
4 SPE	
н. ог <u>с</u>	REFER TO PROJ
<i>,</i>	INSTALLATION 1
	WRITTEN WITH I
В.	SPECIFICATION
	CRITERIA REFE
5. INST	TALLATION
А.	ALL COMPONEN
	PERPINDICULAR
В.	SYSTEM INSTAL
С.	ALL INSTALLATIO
	MANUFACTURE
D.	THE SYSTEM MU
	MUST REPLACE
	TURNOVER.
E.	FLEXIBLE SPRIN
	SUSPENDED CE
6. FLO	WTEST
Α.	A FLOW TEST W
	CONTRACTOR M
	THE NEW SPRIN
	a. STATIC F
7 550	D. RESIDUA
1. DES	
А.	

1. SYSTEM DESCRIPTION FIRE SUPPRESSION SYSTEMS IN THIS BUILDING CONSIST OF AN AUTOMATIC WET R SYSTEM. THE STUDENT UNION BUILDING IS EXISTING AND AT THE TIME OF PROVIDED WITH AN AUTOMATIC SPRINKLER SYSTEM. THE RENOVATION OF THE I INCLUDES THE DESIGN AND INSTALLATION OF A NEW WET PIPE SPRINKLER

> THIS PROJECT INCLUDES INSTALLATING A FIRE SPRINKLER SYSTEM FOR THE NG INCLUDING THE BASEMENT AND MECHANICAL ATTIC SPACE.

ARE INTENDED TO DEMONSTRATE CRITERIA, DEMONSTRATE CODE COMPLIANCE, OMPETITIVE BIDS.

RE INTENDED TO DEMONSTRATE A COORDINATED PROOF-OF-CONCEPT. THE 1AY DEVIATE FROM THE LAYOUT INDICATED HEREIN BUT MUST MAINTAIN ITH THE APPLICABLE CRITERIA, PROJECT SPECIFICATIONS, AND SPECIFIC NOTES S ON THESE DRAWINGS.

RE NOT INTENDED TO BE USED FOR CONSTRUCTION. OR MUST PERFORM THEIR OWN COORDINATED LAYOUT WITH OTHER TRADES AS HOP DRAWING PROCESS AS FURTHER DETAILED IN THE SPECIFICATIONS. S MADE BY THE CONTRACTOR RESULTANT FROM COORDINATION, CALCULATIONS, OR ROUTING AND INSTALLATION PREFERENCES MUST BE PERFORMED AT NO OST TO THE OWNER.

FICALLY NOTED OTHERWISE, ALL MANUFACTURER AND MODEL DATA INDICATED SIS OF DESIGN AND IS NOT SOLE-SOURCED. THE CONTRACTOR MAY SELECT THEIR TURER AND MODEL, EXCEPT WHERE EXPLICITLY NOTED OTHERWISE. OUPLING TYPE INDICATED ON PLANS IS NOT CONTRACTUALLY BINDING; REFER TO IS FOR FITTING AND COUPLING REQUIREMENTS.

FIRE CODE, 2018 WITH OUBCC AMENDMENTS

ARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2016

ARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR ES, 2016 ATE UNIVERSITY ENVIRONMENTAL HEALTH & SAFETY FIRE SPRINKLER SYSTEM TEMBER 2018

DJECT SPECIFICATIONS FOR MANY QUALIFICATIONS, SUBMITTAL, PRODUCT, TESTING, AND DOCUMENTATION CRITERIA. THE PROJECT SPECIFICATIONS ARE INTENT AND WILL BE ENFORCED. I CRITERIA STATED ON THESE PLANS IS INTENDED TO SUMMARIZE MAJOR SYSTEM

ER TO SPECIFICATIONS FOR ALL DETAILS. NTS MUST BE COORDINATED WITH OTHER TRADES AND INSTALLED PARALLEL OR

TO THE BUILDING STRUCTURE. LATION MUST BE PERFORMED IN A NEAT, WORKMAN-LIKE MANNER. ION AND TESTING MUST COMPLY WITH THE APPLICABLE CRITERIA AND

ER'S INSTRUCTIONS.

IUST BE TURNED OVER TO THE OWNER IN LIKE-NEW CONDITION. THE CONTRACTOR E DAMAGED COMPONENTS WITH NEW COMPONENTS IF DAMAGED BEFORE

IKLER HOSE MUST BE USED WHERE PENDENT SPRINKLERS ARE INSTALLED IN EILINGS.

NAS PERFORMED ON MARCH 8TH AND THE RESULTS ARE INDICATED BELOW. THE MUST PERFORM A NEW FLOW TEST WITHIN SIX MONTHS OF THE INSTALLATION OF NKLER SYSTEM TO BE USED AS THE BASIS OF HYDRAULIC DESIGN. PRESSURE WAS MEASURED AT 59 PSI.

JAL PRESSURE MEASURED AT 45 PSI FLOWING 748 GPM.

ATE UNIVERSITY ENVIRONMENTAL HEALTH & SAFETY FIRE SPRINKLER SYSTEM STANDARD STATES THAT NO SPACE MAY HAVE A HAZARD DESIGNATION LESS THAN ORDINARY HAZARD GROUP I. ALL SPRINKLERED SPACES WITHIN THE FACILITY MUST BE DESIGNED AT A DENSITY, DESIGN AREA, AND SPRINKLER COVERAGE COMPLIANT WITH ORDINARY HAZARD GROUP

![](_page_61_Picture_22.jpeg)

![](_page_61_Picture_23.jpeg)

ARCHITECTURE

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_61_Picture_26.jpeg)

#     Description     Date       #     Description     Date       Project Number	Student Union Renovation	Oklahoma Panhandle State University	323 Eagle Blvd. Goodwell, OK 73939
Project Number	# Des	scription	Date
Project Number			
Project Number			
	Proje	ct Numb	ber
Sheet Title	Shee	t Title	

Goodwell, OK 73939

F	Project Numb	ber
S	Sheet Title	
F	TIRE SPRINI NOTES	KLER
Ľ	Date	
0	3/11/2024	

![](_page_61_Picture_30.jpeg)

![](_page_62_Figure_1.jpeg)

### FIRE SPRINKLER PLAN - GROUND FLOOR 1 3/32" = 1'-0"

Stude Oklaho	323 Eagle Blv 3oodwell, OK
Revision # Description	Date
Project Number	
Sheet Title	
FIRE SPRINKLER PLANS	
Date	
03/11/2024	
FX101	

![](_page_62_Figure_5.jpeg)

SCALE: 3/32" = 1'-0"

![](_page_63_Figure_1.jpeg)

DETAIL NOTES:

INSTALL SPRINKLERS IN 2' X 4' AND 2' X 2' CEILING TILES AS 1. INDICATED ABOVE.

ALIGN SPRINKLERS AMONGST ADJACENT CEILING TILES

WHERE IN THE SAME FIELD OF VIEW INCLUDING THROUGH

OPEN DOORS AND GLASS PARTITIONS. WHERE SPRINKLERS ARE INSTALLED IN CEILINGS OTHER 3.

THAN 2' X 4' AND 2' X 2' CEILING TILES, ALIGN WITH LIGHTS,

DIFFUSERS, AND ARCHITECTURAL FEATURES.

FIRE SPRINKLER CEILING TILE INSTALLATION DETAIL 1 NTS

:50:33 -1/2024 3/1

![](_page_63_Figure_15.jpeg)

![](_page_63_Figure_16.jpeg)

![](_page_63_Picture_17.jpeg)

816 NORTH WALKER, SUITE 100 OKLAHOMA CITY, OK 73102 VOICE: 405.605.1044 WWW.STUDIOARC.COM

![](_page_63_Picture_19.jpeg)

![](_page_63_Picture_20.jpeg)

![](_page_63_Picture_21.jpeg)

0 1' 2'

SCALE: 1/2" = 1'-0"