#2001

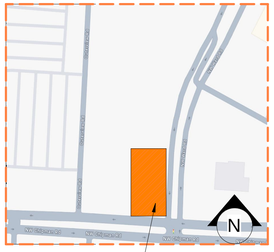
610 NW CHIPMAN ROAD

LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

REVISION A: 08/12/2024

SITE LOCATION MAP

VICINITY MAP



PLUMBING ANALYSIS (IBC TABLE 2902.1 & IPC TABLE 403.1)				
USE GROUP:	OCC. LOAD:	OCCUPANCY:	REQUIRED:	PROVIDED:
B	14	WC - MALE	1 EA 25	1[2]
		WC - FEMALE	1 EA 25	1[2]
		LAV - MALE	1 EA 40	1[2]
		LAV - FEMALE	1 EA 40	1[2]
		DRINKING FOUNTAIN	1 EA 100	0*
		SERVICE SINK	1	1

* PER IBC 2902.6 DRINKING FOUNTAINS SHALL NOT BE REQUIRED FOR AN OCCUPANT LOAD OF 15 OR LESS.
[2] PER IBC 2902.2 EXCEPTION #4 SEPARATE FACILITIES SHALL NOT BE REQUIRED IN STRUCTURES WITH A TOTAL OCCUPANT LOAD, BOTH CUSTOMERS & EMPLOYEES, OF 25 OR FEWER.
[3] PER IBC 2902.1 EXEPTION (e) FOR BUSINESS AND MERCANTILE OCCUPANCYS WITH AN OCCUPANT LOAD OF 15 OR FEWER, SERVICE SINKS ARE NOT REQUIRED.

GC TO LEAVE A COPY OF AS-BUILT DRAWINGS IN MANAGER'S OFFICE AT TURN OVER.

SUBMITTAL SCHEDULE

GC TO LEAVE A COPY OF AS-BUILT DRAWINGS IN MANAGER'S OFFICE AT TURN OVER.

STATUS	ITEM	SPECIFICATION	TIMING	REQUIRED APPROVALS: REVIEW/SUBMIT: GC	APPROVE: ARCHITECT	COORDINATE: SAG PM
DIGITAL SAMPLES		**SEND (1) PHYSICAL COPY TO ARCHITECT AND SAG PM**				
SHOP DRAWINGS AND SPECIFICATIONS		**EMAIL PDF TO ARCHITECT AND SAG PM**				
ARCHITECTURAL						
	CANOPY SHOP DRAWINGS		COORDINATE WITH LEAD TIME AND APPROVAL TIME	X	X	X
	STOREFRONT FIXED WINDOWS (if not installing specified window per drawings)		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD			
STRUCTURAL						
	STEEL PACKAGE		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	X	X	
	TRUSSES		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	X	X	
	CONCRETE FOUNDATION AND REBAR		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	X	X	X
MEP						
	ELECTRICAL SWITCHGEAR/PANELS		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	X	X	X
	HVAC EQUIPMENT (RTUs and Controls)		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	X	X	X
	LIGHT FIXTURES (including Site Lighting)		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	X	X	X
MISCELLANEOUS						
	DOOR HARDWARE		SUBMIT WITHIN 1 WEEK OF CONTRACT AWARD	X	X	X
MOCKUPS		**COORDINATE WITH PM**				
FINISHES						
	MOCKUP AREA OF EXTERIOR FINISHES FOR SAG/PM APPROVAL	SITE/AREA OF MOCKUP TO BE DETERMINE BY SAG PM	PRIOR TO PROCEEDING WITH INSTALLATION			X

ALL SUBMITTALS ARE TO BE CLEARLY MARKED TO INCLUDE THE PROJECT NAME, GENERAL CONTRACTOR NAME AND SUBCONTRACTOR INFORMATION. SAMPLES TO BE CLEARLY LABELLED TO REFERENCE THE MATERIAL CALLOUT FROM THE FINISH SCHEDULE OR APPLICABLE SPECIFICATION SECTION.

NOTE: GC MUST REVIEW AND SIGN SUBMITTALS PRIOR TO SENDING TO ARCHITECT/ENGINEER FOR REVIEW. UNSIGNED SUBMITTALS WILL BE AUTOMATICALLY REJECTED. GC TO INCLUDE PRICES.

SITE ANALYSIS & DATA

ZONING:		C4
SITE AREA:		.7 ACRES
MAX BUILDING HEIGHT:		20' - 2" FT
CONSTRUCTION TYPE:		V-B
OCCUPANCY TYPE:		BUSINESS 'B'
FIRE SPRINKLER:		NOT REQUIRED
FIRE ALARM:		NOT REQUIRED
BUILDING AREA:		1000 SQFT
AWNING AREA:		80 SQFT
DRIVE THRU CANOPY AREA:		60 SQFT
TOTAL COVERED AREA:		1140 SQFT
PROPOSED LOT COVERAGE:		30.7%
TOTAL PARKING: BUSINESS / RESTAURANT (14 SPACE/ 1000 SQFT*) = 14 *EXCLUDING COOLER & RESTROOMS		14 SPACES
ACCESSIBLE SPACES:	REQ: 1 SPACE	1 SPACES

NOTE: THERE IS NO OUTDOOR / INDOOR DINING AREA AVAILABLE AT THIS FACILITY

PROJECT DESCRIPTION

NEW CONSTRUCTION OF A DRIVE-THRU ONLY RESTAURANT (NO DINING SEATING)

BUILDING DATA

		CALCULATED
OCCUPANT LOAD		
BUSINESS AREAS (GROSS)		
TOTAL OCCUPANT LOAD =	(1000 SF / 150) =	6 / 14
*PER IBC 2018 1004.5		
USABLE AREA		
FOOD PREP AREA (NET)		530 SF
OFFICE (NET)		50 SF
TOTAL USABLE AREA =		580 SF

1

DEFERRED SUBMITTALS

- IRRIGATION
- SIGNAGE
- SPRINKLER
- TRUSS DRAWINGS

BID ALTERNATES

ROOF: 5" RIGID INSULATION ABOVE DECK WITH MEMBRANE.
ALTERNATE: SPRAY FOAM WITH BATT INSULATION BELOW DECK BETWEEN JOISTS.
BOTH VERSIONS SHOULD ACHIEVE THE SAME R-VALUE.

DECORATIVE SIGNAGE: DECORATIVE CUTLERY ON FACADE ARE TO BE BID SEPERATE. REF: A201.

CLEARANCE BARS: FOR DRIVE THRU AND MOBILE PICK-UP ARE TO BE BID SEPERATE. REF: AS004

APPLICABLE CODES

BUILDING CODE:	2018 International Building Code
PLUMBING CODE:	2018 International Plumbing Code
MECHANICAL CODE:	2018 International Mechanical Code
ELECTRICAL CODE:	2017 National Electric Code
ENERGY CODE:	2018 International Energy Code
FIRE CODE:	2018 International Fire Code
FUEL GAS CODE:	2018 International Fuel Gas Code
ACCESSIBILITY CODE	2009 ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities

NOTE: ALL CODES WITH LOCAL AMENDMENTS AND SPECIAL INSPECTIONS

FLAME SPREAD CLASSIFICATION

PER IBC TABLE 805.13
INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

NON SPRINKLERED

GROUP	EXIT ENCLOSURE AND PASSAGE WAY	CORRIDORS	ROOMS AND ENCLOSED SPACES
B	N/A	N/A	C

PER IBC SECTION 803.1.2

CLASS A: FLAME SPREAD 0-25; SMOKE DEVELOPED 0-450
CLASS B: FLAME SPREAD 26-75; SMOKE DEVELOPED 0-450
CLASS C: FLAME SPREAD 76-200; SMOKE DEVELOPED 0-450

PROJECT DIRECTORY

OWNER

SALAD AND GO
5555 EAST VAN BUREN STREET, SUITE 215
PHOENIX, AZ 85008
CONTACT: ANDY HULSEY
T: 410.371.1563
ANDY@SALADANDGO.COM

LANDLORD

AND GO CONCEPTS, LLC dba SALAD AND GO
5555 EAST VAN BUREN STREET, SUITE 215
PHOENIX, AZ 85008
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ANDY@SALADANDGO.COM

ARCHITECT

ARCHITECT ON RECORD
STEVEN COX, ARCHITECT
513 MAIN STREET, STE 300
FORT WORTH, TX 76102
CONTACT: JOSEPH JEFFERY
T: 817.820.0433

MECHANICAL

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LN
MILSAP, TX 76066
EOR: CLAYTON LUCAS
T: 817.901.5191

ELECTRICAL

GEMINI ENGINEERING GROUP
101 NIGHTLINGER LN
MILSAP, TX 76066
EOR: CLAYTON LUCAS
T: 817.901.5191

STRUCTURAL

ELLISON GAGE & ASSOCIATES, PLLC
5068 W PLANO PARKWAY SUITE 200
PLANO, TX 75093
EOR: BRIAN KIRK ELLISON, PE, SE
T: 972.354.8858

CIVIL

KIMLEY-HORN
801 CHERRY STREET, SUITE 1300
UNIT 11, FORT WORTH, TX 76102
CONTACT: ZACH D'ALESANDRO, PE
T: 619.234.9411

DRAWING INDEX

SHEET	SHEET NAME	PERMIT	REVISION 1	CB-A	CB-B	CB-C	CB-D
01 GENERAL							
G001	COVER SHEET	●	●	●			
G002	ACCESSIBLITY DETAILS	●					
G003	OCCUPANCY & LIFE SAFETY PLAN	●	●				
G004	SYMBOL, LEGENDS, & GENERAL NOTES	●					
G005	COMCHECK	●					
G006	RESPONSIBILITY MATRIX	●		●			
02 SITE							
AS001	ARCHITECTURAL SITE PLAN	●					
AS002	TRASH ENCLOSURE DETAILS	●					
AS003	SITE DETAILS	●					
AS004	SITE DETAILS	●					
03 STRUCTURAL							
S001	GENERAL STRUCTURAL INFORMATION	●					
S002	GENERAL STRUCTURAL INFORMATION	●					
S003	TYPICAL DETAILS AND SCHEDULES	●					
S004	TYPICAL DETAILS AND SCHEDULES	●					
S005	TYPICAL DETAILS AND SCHEDULES	●					
S101	FOUNDATION PLAN	●					
S201	ROOF FRAMING PLAN	●					
S301	FOUNDATION DETAILS	●					
S401	ROOF FRAMING DETAILS	●					
S402	ROOF FRAMING DETAILS	●					
S501	FRAMING ELEVATIONS AND DETAILS	●					
04 ARCHITECTURAL							
A101	DIMENSION FLOOR PLANS	●					
A111	FLOOR PLANS	●					
A121	REFLECTED CEILING PLAN	●					
A131	ROOF PLAN	●	●				
A201	EXTERIOR ELEVATIONS	●	●				
A301	BUILDING SECTIONS	●					
A302	WALL SECTIONS	●					
A303	WALL SECTIONS	●					
A400	INTERIOR ELEVATIONS (WALL SHEATHING)	●					
A401	INTERIOR ELEVATIONS (KITCHEN)	●	●				
A402	INTERIOR ELEVATIONS (RESTROOM)	●					
A501	PLAN DETAILS	●					
A502	PLAN DETAILS	●					
A503	SECTION DETAILS	●					
A504	ROOF DETAILS	●					
A505	ROOF LADDER DETAILS	●	●				
A506	ELECTRIC PANEL DETAILS	●					
A611	INTERIOR PARTITION TYPES AND DETAILS	●					
A621	EXTERIOR PARTITION TYPES	●					
A631	DOOR SCHEDULE	●	●				
A641	WINDOW SCHEDULE	●					
A800	SPECIFICATIONS	●					
A801	SPECIFICATIONS	●					
A802	SPECIFICATIONS	●					
A803	SPECIFICATIONS	●					
A804	SPECIFICATIONS	●					
A805	SPECIFICATIONS	●					
A806	SPECIFICATIONS	●					
A807	SPECIFICATIONS	●					
A808	SPECIFICATIONS	●					
Q101	EQUIPMENT PLAN	●	●				
05 PLUMBING							
P101	PLUMBING LEGENDS AND NOTES	●					
P102	PLUMBING SCHEDULES	●					
P103	GREASE/SANITARY WASTE PLAN	●					
P104	DOMESTIC WATER PLAN	●	●	●			
P105	PLUMBING DETAILS	●					
P106	PLUMBING SPECIFICATIONS	●					
06 MECHANICAL							
M101	MECHANICAL LEGENDS AND NOTES	●					
M102	MECHANICAL SCHEDULES	●					
M103	MECHANICAL FLOOR PLANS	●					
M104	MECHANICAL DETAILS	●					
M105	MECHANICAL SPECIFICATIONS	●					
M106	MECHANICAL ENERGY FORMS	●					
M107	MECHANICAL ENERGY FORMS	●					
07 ELECTRICAL							
E101	ELECTRICAL LEGEND & NOTES	●					
E102	POWER FLOOR PLAN	●					
E103	LIGHTING FLOOR PLAN	●					
E104	LOW VOLTAGE PLAN	●	●	●			
E105	MECHANICAL POWER ROOF PLAN	●					
E106	ELECTRICAL SITE PLAN	●		●			
E107	PHOTOMETRIC PLAN	●		●			
E108	ELECTRICAL ELEVATIONS	●					
E109	ELECTRICAL DETAILS	●					
E110	ELECTRICAL ONE LINE DIAGRAM	●					
E111	ELECTRICAL SPECIFICATIONS	●					
E112	LIGHTING ENERGY FORMS	●					
E113	LIGHTING ENERGY FORMS	●					

A

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

REVISION CB-A: 10/23/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION
1	06/06/2024	CITY COMMENTS
A	8/09/2024	CONSTRUCTION BULLETIN A

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	04/12/2024
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

SHEET TITLE

COVER SHEET

SHEET NUMBER

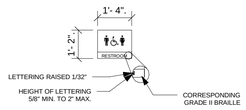
G001

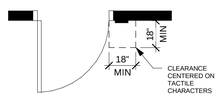
8/13/2024 9:40:45 AM

ACCESSIBILITY NOTES

1. ALL ACCESSIBILITY DIAGRAMS ARE DESIGNED TO COMPLY WITH:
   A. INTERNATIONAL BUILDING CODE STATED ON G001
   B. 2009 ACCESSIBLE AND USUABLE BUILDINGS AND FACILIITIES

NOTE:
WALL MOUNTED SIGNAGE TO BE LOCATED ON LATCH SIDE OF DOOR CLEAR OF DOOR-SWING. MOUNT AT 60" TO BASELINE OF HIGHEST TACTILE CHARACTER FROM FLOOR.





LOCATION OF TACTILE SIGNS AT DOORS

1 TACTILE SIGNS
1/4" = 1'-0"

FIG. 703.2.5
HEIGHT OF RAISED CHARACTERS

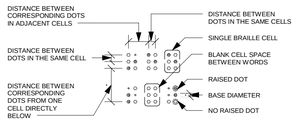
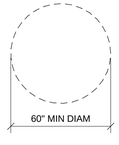
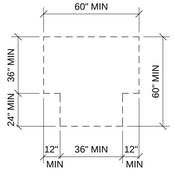


FIG. 703.3.1
BRAILLE MEASUREMENT

4 HEIGHT OF RAISED CHARACTERS
1/4" = 1'-0"

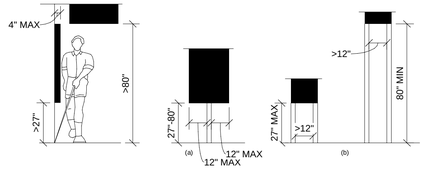


CIRCULAR SPACE



T-SHAPED TURNING SPACE

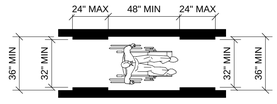
9 TURNING SPACE
1/4" = 1'-0"



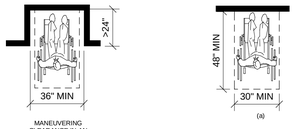
LIMITS OF PROTRUDING OBJECTS

POST MOUNTED PROTRUDING OBJECTS

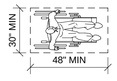
5 PROTRUDING OBJECTS
1/4" = 1'-0"



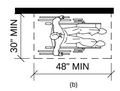
CLEAR WIDTH OF AN ACCESSIBLE ROUTE



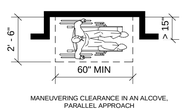
MANEUVERING CLEARANCE IN AN ALCOVE, FORWARD APPROACH



CLEAR FLOOR SPACE

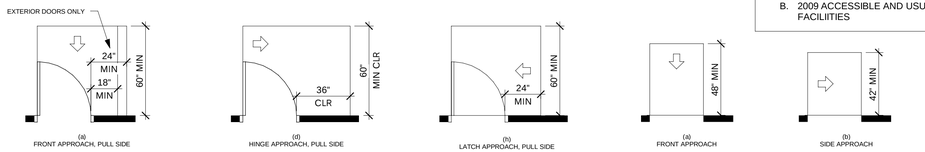


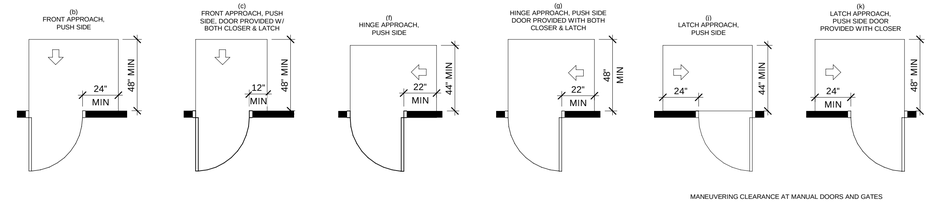
POSITION OF CLEAR FLOOR SPACE



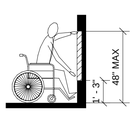
MANEUVERING CLEARANCE IN AN ALCOVE, PARALLEL APPROACH

10 MINIMUM CLEAR FLOOR SPACE
1/4" = 1'-0"

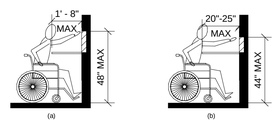




3 DOOR CLEARANCES
1/4" = 1'-0"

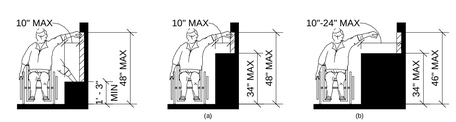


UNOBSTRUCTED FORWARD REACH

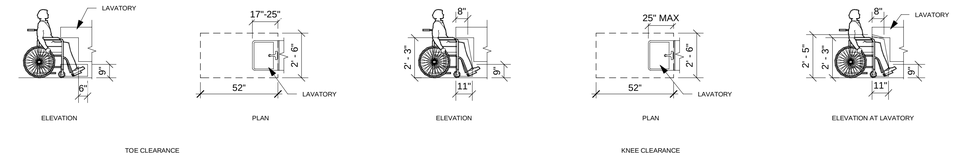


OBSTRUCTED HIGH SIDE REACH

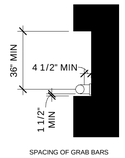
6 FORWARD REACH
1/4" = 1'-0"



7 SIDE REACH
1/4" = 1'-0"

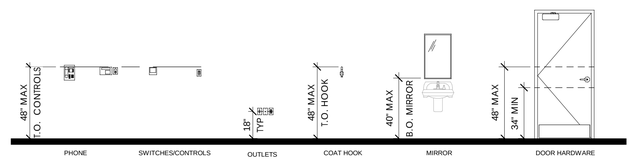


8 LAVATORY KNEE & TOE CLEARANCES
1/4" = 1'-0"

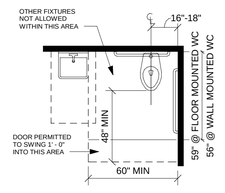


SPACING OF GRAB BARS

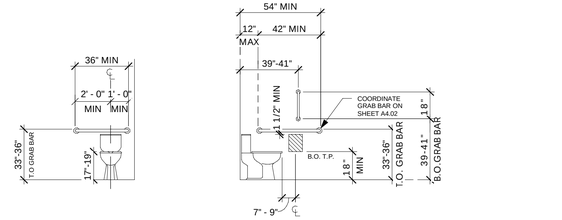
11 GRAB BAR
1/4" = 1'-0"



12 TYPICAL MOUNTING HEIGHTS
1/4" = 1'-0"



13 WATER CLOSET & TOILET COMPARTMENT
1/4" = 1'-0"



14 GRAB BAR & PROTRUDING DISPENSER
1/4" = 1'-0"

SAAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

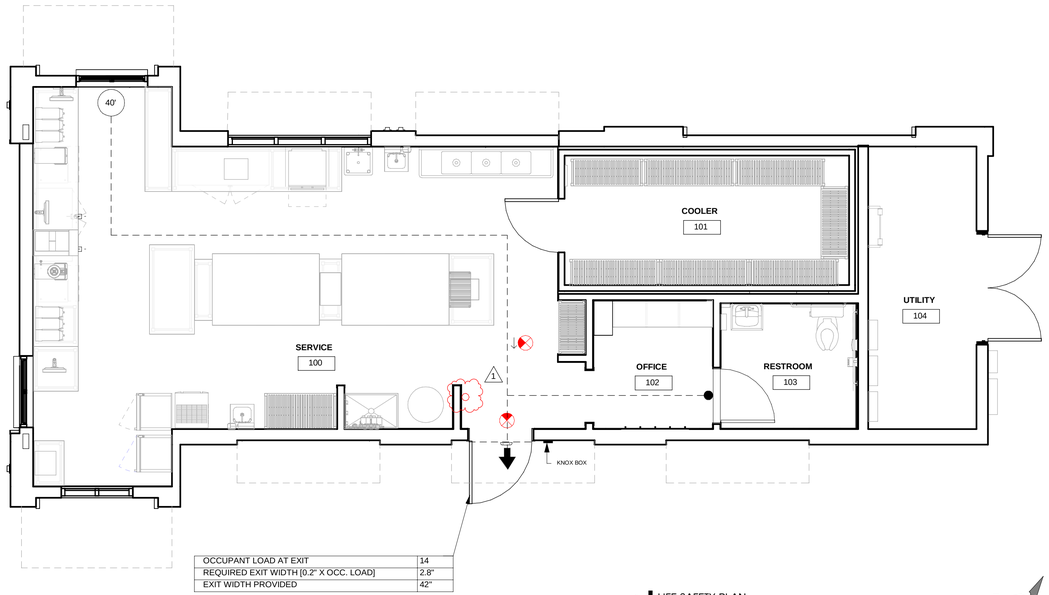
SHEET TITLE

ACCESSIBLITY DETAILS

SHEET NUMBER

G002

4/8/2024 10:50:40 AM



OCCUPANT LOAD AT EXIT	14
REQUIRED EXIT WIDTH [0.2" X OCC. LOAD]	2.8"
EXIT WIDTH PROVIDED	42"

1 LIFE SAFETY PLAN
1/4" = 1'-0"

LEGEND

- XX' — LENGTH OF PATH OF TRAVEL MINIMUM XX' CLEAR UNLESS NOTED OTHERWISE
- EXIT, END POINT
- EXIT LIGHT
- DIRECTIONAL EMERGENCY LIGHT
- FIRE EXTINGUISHER
- RECESSED KNOX BOX

LIFE SAFETY GENERAL NOTES

A. GENERAL CONTRACTOR TO PROVIDE INTERNATIONAL ACCESSIBILITY SYMBOL ON ALL ACCESSIBLE ENTRANCES

B. GENERAL CONTRACTOR TO PROVIDE TACTILE EXIT SIGNAGE, PER CODE

C. APPROVED FIRE EXTINGUISHERS SHALL BE LOCATED WITHIN 75 FT OF ANY INTERIOR LOCATION. FINAL LOCATION SHALL BE VERIFIED PER FIRE MARSHAL.

LIFE SAFETY

EXITS:

REQUIRED	PROVIDED
1 - PUBLIC	1-PUBLIC

EXIT WIDTH REQUIRED = 14 OCC X 0.2 = 2.8 IN.
EXIT WIDTH PROVIDED = 42 IN.

EGRESS CALCULATION:

MAXIMUM ALLOWABLE TRAVEL DISTANCE = 75 FT
MAXIMUM PROVIDED TRAVEL DISTANCE = 40 FT

*NON-SPRINKLERED

FLAME SPREAD RATING:
1. FLAME SPREAD RATING FOR ALL PROPOSED INTERIOR FINISHES SHALL COMPLY WITH LOCAL BUILDING CODE.

INTERIOR FINISH NOTES:
1. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL BE CLASS C WITH FLAME SPREAD RATING LESS THAN 200 AND SMOKE DEVELOPED LESS THAN 450.
2. FLOOR COVERINGS INT HE EXIT PATH OF ALL COMMON AREAS SHALL MEET CLASS A REQUIREMENTS

FURNISHING NOTES:
1. HEIGHT OF COUNTERS SHALL BE 28" MINIMUM - 34" MAXIMUM AFF.
2. MANEUVERING CLEARANCE SHALL BE 30" X 52"
3. KNEE CLEARANCE SHALL BE 27" HIGH, 17" DEEP, AND 30" WIDE

GENERAL NOTES, WHEN APPLICABLE:
1. 67" DIAMETER CLEARANCE FOR WHEELCHAIR ACCESSIBILITY
2. FIRE EXTINGUISHER PLACED PER FIRE INSPECTOR'S REQUIREMENTS

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

REVISION 1: 06/06/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION
1	06/06/2024	CITY COMMENTS

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

OCCUPANCY & LIFE SAFETY PLAN

SHEET NUMBER

G003

6/6/2024 8:09:22 AM

MATERIALS LEGEND

BRICK

METAL PANEL

ARCHITECTURAL PANEL

CONCRETE

DENSGLASS

EARTH - BACKFILL

EARTH - COMPACTED SOIL

EIFS

GRANULAR FILL

GYP

BATT, LOOSE FILL INSULATION

RIGID INSULATION

PLYWOOD

STEEL

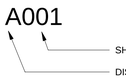
SAND, PLASTER, MORTAR, GROUT

WOOD (ROUGH) BLOCKING

WOOD (ROUGH) CONTINUOUS

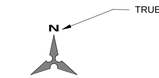
SYMBOLS LEGEND

SHEET NUMBER

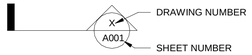


BUILDING SECTION

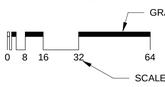
NORTH ARROW



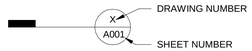
WALL SECTION



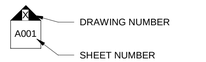
GRAPHIC SCALE



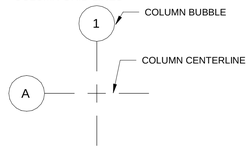
DETAIL SECTION



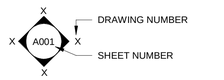
EXTERIOR ELEVATION



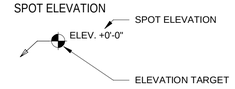
COLUMN GRID LINES



INTERIOR ELEVATION



SPOT ELEVATION



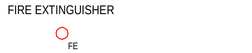
VERTICAL ELEVATION

DATUM POINT

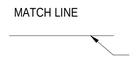
DOOR TAG

WORK POINT

FIRE EXTINGUISHER

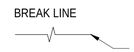


MATCH LINE



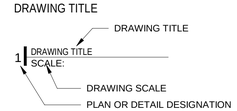
WINDOW TAG

BREAK LINE

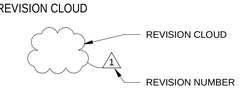


WALL TYPE TAG

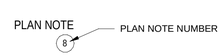
DRAWING TITLE



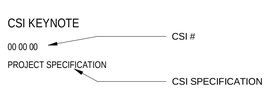
REVISION CLOUD



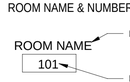
PLAN NOTE



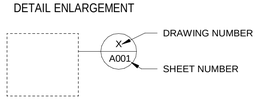
CSI KEYNOTE



ROOM NAME & NUMBER



DETAIL ENLARGEMENT



ARCHITECTURAL ABBREVIATIONS

A/C	AIR CONDITIONING
ABV	ABOVE
ACT	ACOUSTICAL CEILING TILE
ADA	AMERICAN'S W/ DISABILITIES ACT
AFF	ABOVE FINISH FLOOR
ADJ	ADJUSTABLE
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
AWT	ACOUSTICAL WALL TREATMENT
BD	BOARD
BITUM	BITUMINOUS
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BR	BRICK
BRG	BEARING
CBB	CEMENT BACKER BOARD
CFLG	COUNTER FLASHING
CJ	CONTROL JOINT
CL	CENTER LINE
CLG	CEILING
CLG HT	CEILING HEIGHT
CLR	CLEAR
CMPST	COMPOSITE
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
CO	CASED OPENING
COL	COLUMN
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CPT	CARPET
CSK	COUNTERSUNK
CT	CERAMIC TILE
CTR	CENTER
DEG	DEGREES
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DR	DOOR
DR OPNG	DOOR OPENING
DWG	DRAWING
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
EL	ELEVATION
ELEV	ELEVATOR
EMER	EMERGENCY
EQ	EQUAL
EQUIP	EQUIPMENT
ETR	EXISTING TO REMAIN
EXIST	EXISTING
EXH	EXHAUST
EXP	EXPOSED
EXT	EXTERIOR
FA	FIRE ALARM
FBO	FURNISHED BY OTHERS
FC	FIXTURE CONTRACTOR
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF EL	FINISH FLOOR ELEVATION
FIN	FINISH
FIXT	FIXTURE
FLR	FLOOR
FLUOR	FLUORESCENT LIGHTING
FDN	FOUNDATION
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FRT	FIRE RETARDANT TREATED
FT	FOOT (FEET)
F.T.	FIRE TREATED
FTG	FOOTING
FURG	FURRING
GA	GAGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GFRC	GLASS-FIBER REINFORCED CONCRETE
GFRG	GLASS_FIBER REINFORCED GYPSUM
GL	GLASS or GLAZING
GR	GRADE
GWB	GYPSUM WALLBOARD
GYP	GYPSUM
H/C	HANDICAPPED
HC	HOLLOW CORE
HCWD	HOLLOW CORE WOOD DOOR
HDWD	HARDWOOD
HDWR	HARDWARE
HM	HOLLOW METAL
HMF	HOLLOW METAL FRAME
HORIZ	HORIZONTAL
HP	HIGH POINT OF ROOF/SLOPE
HT	HEIGHT
HVAC	HEATING, VENTILATION & COOLING
HW	HOT WATER
IBGC	INSTALLED BY GENERAL CONTRACTOR
ID	INSIDE DIAMETER
IN	INCH
INCL	INCLUDED
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
KPL	KICK PLATE
L	LONG (LENGTH)
L/T	LIGHT TRACK LAM LAMINATE
LAV	LAVATORY
LBS	POUNDS
LF	LINEAR FOOT
LH	LEFT-HANDED
LCC	LEAD COATED COPPER
LL	OWNER
LP	LOW POINT OF ROOF/SLOPE
MAT	MATERIAL
MAX	MAXIMUM
MAHOG	MAHOGANY
MDO	MEDIUM DENSITY OVERLAY
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MSB	MOP SERVICE BASIN
MTD	MOUNTED
MTL	METAL
N	NORTH
NAT	NATURAL
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF/CI	OWNER FURNISHED/ CONTRACTOR INSTALL
OF/OI	OWNER FURNISHED/ OWNER INSTALL
OFI	OWNER FURNISHED & INSTALL
OPP	OPPOSITE
P	PAINT
PLAM	PLASTIC LAMINATE
PLMB	PLUMBING
PLT	PLATE
PLWD	PLYWOOD
PR	PAIR
PRHT	PARTIAL HEIGHT
PT	PRESSURE TREATED
PTN	PARTITION
QT	QUARRY TILE
R	RISER
RAD	RADIUS
REC	RECESSED
REQD	REQUIRED
REF	REFERENCE
RESIL	RESILIENT
REV	REVISION
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RWD	REDWOOD
RWL	RAIN WATER LEADER
SC	SOLID CORE
SD	SMOKE DETECTOR
SECT	SECTION
SF	SQUARE FOOT (FEET)
SHT	SHEET
SIM	SIMILAR
SIPS	STRUCTURAL INSULATED PANEL
SND INS	SOUND INSULATION
SPEC	SPECISQUARE
SSG	STRATEGIC SOURCING GROUP
SST	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STN	STAIN
STO	STONE
SYS	SYSTEM
T	TREAD
TBD	TO BE DETERMINED
T&G	TONGUE & GROOVE
THK	THICKNESS
THR	THRESHOLD
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOJ	TOP OF JOIST
TOM	TOP OF MASONRY
TOS	TOP OF SLAB
TOS	TOP OF STEEL
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TPO	THERMOPLASTIC POLYOLEFIN
TYP	TYPICAL
UC	UNDERCUT
UNO	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VP	VENEER PLASTER
W/	WITH
W/O	WITHOUT
WA	WALL ANCHOR
WC	WATER CLOSET
WD	WOOD
WF	WIDE FLANGE
WFAB	WALL FABRIC
WH	WATER HEATER
WRB	WATER RESISTANT BARRIER

GENERAL NOTES

1. THE DRAWINGS WHICH COMPRISE THIS SET OF CONSTRUCTION DOCUMENTS ARE ADDRESSED TO THE GENERAL CONTRACTOR AND ARE CONSIDERED TO BE ONE WHOLE. INFORMATION INCLUDED ON ONE SHEET SHALL BE AS BINDING AS IF INCLUDED ON ALL, REGARDLESS OF TRADE ASSIGNMENTS. WHERE A CONFLICT OCCURS WITHIN THESE CONSTRUCTION DOCUMENTS, THE MORE EXPENSIVE OR TIME CONSUMING REQUIREMENT SHALL GOVERN. ANY DOUBT AS TO WHETHER ANY WORK IS WITHIN THE SCOPE OF THE CONTRACT SHALL BE RESOLVED IN FAVOR OF AN INTERPRETATION THAT THE WORK IS WITHIN THE SCOPE OF THE CONTRACT. IMMEDIATELY UPON DISCOVERY, NOTIFY THE ARCHITECT OF DOCUMENT CONFLICTS IN WRITING.
2. UNLESS SPECIFICALLY NOTED OTHERWISE HEREIN INSTALL MATERIALS, EQUIPMENT, PRODUCTS, AND SYSTEMS FOR THIS PROJECT IN STRICT ACCORDANCE WITH THE MANUFACTURERS' LATEST PUBLISHED SPECIFICATIONS / RECOMMENDATIONS.
3. WHERE A DIMENSION IS SPECIFICALLY NOTED WITH A "±" DESIGNATION, THE DIMENSION IS TO BE CONTROLLED BY FIELD VERIFIED CONDITIONS. NOTIFY THE ARCHITECT IMMEDIATELY UPON CONFIRMATION OF THE ACTUAL DIMENSION. NO REFERENCE OR DESIGNATION WITHIN THESE DOCUMENTS SHALL BE CONSIDERED TO ESTABLISH A CONSTRUCTION TOLERANCE. THE DIMENSIONS ARE PRECISE AS STATED.
4. PERFORM WORK IN STRICT ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODES/ORDINANCES, AND OSHA REQUIREMENTS.
5. WHERE REFERENCE IS MADE TO "BUILDING SYSTEMS", THIS SHALL INCLUDE MECHANICAL, ELECTRICAL, PLUMBING, HVAC, FIRE PROTECTION, TELEPHONE, SECURITY, INTERCOM, AND FIRE ALARM / LIFE SAFETY COMPONENTS.
6. COORDINATE MOUNTING / INSTALLATION OF LIGHTING FIXTURES, MECH. DIFFUSERS, SPRINKLER HEADS AND OTHER DEVICES WITH TYPE OF CEILINGS TO BE PROVIDED. PROVIDE HANGERS, SUPPORTS, SEISMIC STRUTS AND CLIPS, CUT-OUTS, TRIM RINGS, AND EDGE TRIM REQUIRED FOR A COMPLETE INSTALLATION.
7. CONTRACTOR SHALL PROVIDE ALL MATERIAL AND LABOR REQUIRED TO PRODUCE A COMPLETED, FINISHED PROJECT. FAILURE TO INCLUDE ITEMS INDICATED TO BE PROVIDED, THOUGH NOT DETAILED, SHALL NOT CONSTITUTE THE BASIS FOR A CHANGE ORDER.
8. ALL CONSTRUCTION PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE FIRESTOPPED PER U.L. LISTED DETAILS COMPLYING WITH APPLICABLE CODES AND COUNTY FIRE MARSHAL REQUIREMENTS. CONTRACTOR SHALL SELECT, PROVIDE AND INSTALL SUCH FIRESTOPPING SYSTEMS / DETAILS AND SHALL BE RESPONSIBLE FOR SOLICITING AND OBTAINING THE NECESSARY APPROVAL(S) FROM THE AUTHORITIES HAVING JURISDICTION.
9. WHERE DISSIMILAR METALS WOULD COME IN CONTACT WITH ONE ANOTHER; G.C. SHALL UTILIZE NEOPRENE GASKETS AND / OR WASHERS AS APPROPRIATE TO ENSURE GALVANIC CORROSION OF THE METALS OR FASTENERS IS AVOIDED. SUCH DISSIMILAR METALS INCLUDE BUT ARE NOT LIMITED TO COATED COPPER, STEEL, GALVANIZED STEEL, AND ALUMINUM. AT SUCH CONNECTIONS REQUIRING FASTENERS, STAINLESS STEEL FASTENERS WITH NEOPRENE WASHERS TO ISOLATE THE METALS SHALL BE UTILIZED.
10. DIMENSIONS INDICATED ARE TO STUD FACE, OR COLUMN CENTER LINES, UNLESS NOTED OTHERWISE.
11. WORK SHALL INCLUDE ALL LABOR, ASSEMBLIES, AND FINISH WORK INCLUDING ALL PARTS AND MATERIALS NECESSARY TO MAKE A COMPLETE, IN-PLACE, PROPERLY WORKING AND FINISHED INSTALLATION.
12. ALL CONTRACTORS SHALL VISIT THE PROJECT TO FAMILIARIZE THEMSELVES WITH SITE CONDITIONS PRIOR TO BIDDING OR CONSTRUCTION. BY SUBMITTING A BID, THE CONTRACTOR AND HIS SUBCONTRACTORS ARE CONFIRMING THAT THEY HAVE VISITED THE SITE AND HAVE INCLUDED IN THEIR BID ANY ADDITIONAL ITEMS OF CONSTRUCTION THAT MY BE REQUIRED DUE TO EXISTING SITE CONDITIONS.
13. PRIOR TO PROCEEDING WITH ANY WORK THAT MAY RESULT IN ADDITIONAL COST OR ADDITIONAL TIME TO THE PROJECT, THE CONTRACTOR SHALL DETERMINE THE ADDITIONAL COST OR TIME OR, IF THE EXACT COSTS FOR TIME CANNOT BE DETERMINED, THE CONTRACTOR SHALL MAKE HIS MOST REASONABLE ESTIMATE (AN ESTIMATE OF THE WORST CASE) AND SUBMIT THE ADDITIONS TO THE OWNERS REPRESENTATIVE FOR APPROVAL. SHOULD THE CONTRACTOR FAIL TO ADVISE THE OWNERS REPRESENTATIVE PRIOR TO PROCEEDING WITH THE WORK, ADDITIONAL COST OR TIME SHALL NOT BE APPROVED.
14. BUILDING SPRINKLER SYSTEMS SHALL COMPLY WITH ALL APPLICABLE CODES, NFPA 13, AND THE WTC FIRE PROTECTION ENGINEER. EXACT LAYOUT OF SPRINKLER HEADS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
15. REMOVE ALL CONSTRUCTION DEBRIS AS REQUIRED TO MAINTAIN A CLEAN ENVIRONMENT AND TO PREVENT THE POSSIBILITY OF ACCIDENT OR FIRE. COORDINATE REMOVAL WORK WITH OWNER IN OCCUPIED SPACES. MAINTAIN WORKING FIRE EXTINGUISHERS IN THE PROJECT AREA DURING CONSTRUCTION WHEN SPRINKLER SYSTEM IS UNDERGOING MODIFICATIONS.
16. HEIGHTS OF ELECTRICAL, DATA, AND COMMUNICATION OUTLETS WHEN SURROUNDED BY OR ABUTTING MILLWORK SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGH-IN AND FABRICATION.
17. DOWN LIGHTS, SPRINKLER HEADS, SMOKE DETECTORS AND EXIT SIGNS SHALL BE LOCATED IN THE CENTER OF THE CEILING TILE, UNLESS OTHERWISE NOTED.
18. GC TO SEAL AROUND ALL VISIBLE PIPES

GENERAL ACOUSTICAL NOTES

1. ELECTRICAL AND SERVICE OUTLETS FOR ADJACENT ROOMS ARE TO BE POSITIONED A MINIMUM OF 2 FEET APART AND IN SEPARATE STUD CAVITIES.
2. PARTITIONS ARE TO BE BUILT FULL HEIGHT FROM BUILDING FLOOR TO BUILDING STRUCTURE ABOVE; UNLESS OTHERWISE DETAILED IN SPECIFIC PARTITION TYPE.
3. PROVIDE CONTINUOUS ACOUSTICAL (NON-HARDENING) CAULKING BEADS ON EACH SIDE OF THE BOTTOM STUD RUNNER AT THE THREE WAY INTERSECTION BETWEEN THE RUNNER, FLOOR AND DRYWALL.
4. PROVIDE ACOUSTICAL CAULKING TO CLOSE GAPS BETWEEN SERVICE OUTLETS (ELECTRICAL, TELEPHONE, DATA, ETC) AND DRYWALL. PROVIDE ACOUSTICAL SEALANT AT THE CONNECTION TO THE STRUCTURE ABOVE
5. MULTIPLE LAYERS OF DRYWALL ARE TO BE APPLIED WITH STAGGERED JOINTS
6. PARTITIONS SHALL BE CUT AND SEALED AROUND ALL STRUCTURAL ELEMENTS WITH ACOUSTICAL SEALANT.
7. ALL PENETRATIONS LESS THAN 1.5 FT WIDE ARE TO BE BETWEEN FULL HEIGHT STUDS, OTHERWISE STUDS ARE TO BE FULLY FRAMED AROUND PENETRATION MAINTAINING A NOMINAL 1" GAP AROUND THE PENETRATING ELEMENT.
8. ALL GAPS AROUND PENETRATIONS (PIPES, DUCTS, CONDUIT, ETC) SHALL BE SEALED AS FOLLOWS. NOTE THAT ANY FIRE RATED ASSEMBLY CONSTRUCTION REQUIREMENTS SHALL TAKE PRECEDENCE OVER ACOUSTICAL CONSIDERATIONS: 1" OR LESS GAP FILLED TIGHTLY WITH BATT INSULATION AND/OR FIRE SAFING. GAPS LARGER THAN 1" FILLED WITH HEAVY-DENSITY PUTTY SUCH AS NELSON FSP OR CLK SEALANT, J.M. CLIPPER "DUXSEAL", 3M "MOLDABLE PUTTY".
9. PROVIDE AND INSTALL ALL DETAILS AND MATERIALS AS REQUIRED BY DRYWALL MANUFACTURER TO ACHIEVE LABORATORY SOUND TRANSMISSION CLASS (STC) RATINGS INDICATED.

GENERAL CEILING NOTES

1. CONTRACTOR TO COORDINATE MOUNTING FLANGES OF ALL FIXTURES WITH CEILING TYPE TO RECEIVE FIXTURES.
2. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL MEP AND SPRINKLER WORK WITH HEIGHT AND TYPE OF CEILING FINISHES.
3. REFER TO FINISH PLANS FOR CEILING FINISH DESIGNATIONS.
4. COORDINATE W/ MECH., ELEC., PLUMB. DWGS. FOR SPECIFIC ACCESS PANEL LOCATIONS. NOT ALL ARE SHOWN ON R.C.P.

GENERAL PARTITION NOTES

1. RATED WALL ASSEMBLIES AND "SOUND" WALL ASSEMBLIES SHALL RUN CONTINUOUS AROUND ROOMS INDICATED AND SHALL TAKE PRECEDENCE OVER ADJACENT AND/OR PERPENDICULAR WALLS. RATED WALL ASSEMBLIES SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF THE U.L. ASSEMBLY INDICATED.
2. THE CONTRACTOR SHALL BEAR THE RESPONSIBILITY OF ALIGNING THE FACE OF GYPSUM BOARD AND/OR GYPSUM SHEATHING WHERE THE WALL THICKNESS VARIES DUE TO DIFFERENT PARTITION TYPES. TRANSITIONS ON THE OPPOSITE SIDE OF THESE WALLS SHALL BE HIDDEN AT INTERSECTIONS OF OTHER PARTITIONS OR CORNERS SUCH THAT NO IRREGULARITY EXISTS IN THE SURFACE OF THE WALL.
3. PROVIDE 5/8" G.M.W.R. BOARD IN LIEU OF GYPSUM BOARD ON WALL SURFACES TO RECEIVE CERAMIC OR PORCELAIN TILE.
4. ALL FIRE &/OR SMOKE BARRIER WALLS SHALL BE SEALED SMOKE-TIGHT (VIA PLASTER/ FIRE-STOP SEALANT OVER CONT. BACKING ROD) AT THE ENTIRE PERIMETER (FLOOR, ROOF & WALLS). PROVIDE MINERAL WOOL INSULATION IN INTERSTITIAL SPACE BEHIND SEALANT AND BACKING ROD, INCLUDING FLOOR AND ROOF DECK FLUTES ABOVE MET. WALL CHANNELS AT TOP OF WALL
5. ALL FIRE &/OR SMOKE BARRIER WALLS SHALL BE CONSTRUCTED CONT. THROUGH BLDG. SOFFITS, OVERHANGS AND ANY MISC. INTERSTITIAL SPACES (INCLUDING OTHER PARTITIONS). PROVIDE SEALING OF UTILITY PENETRATIONS OF SMOKE BARRIER WALLS
6. THE GYPSUM BOARD GAP AT THE FLOOR SHALL NOT EXCEED 1/4" AND SHALL NOT BE IN CONTACT WITH THE SLAB.
7. NO GYP. BD. SHALL SPAN OVER 16" W/O FRAMING SUPPORT. ADDITIONAL SUPPORT WILL BE NECESSARY AT ALL OPENINGS AND FL. & CLG. JTS.
8. ALL GYPSUM WALL BOARD SHALL BE INSTALLED VERTICALLY IN SINGULAR CONT. PIECES WITH NO BUTTED END JOINTS.
9. PARTITION DESIGNATION TAG SHALL ALWAYS TAKE PRECEDENCE OVER GRAPHIC REPRESENTATION.
10. UNLESS NOTED OTHERWISE, PARTITION DESIGNATION TAGS REPRESENT THE ENTIRE LENGTH OF THE PARTITION IN WHICH IT IS LOCATED.
11. ALL PARTITIONS SHALL BE CONSTRUCTED PER THE GUIDELINES INDICATED IN THE ACOUSTICAL CONSTRUCTION NOTES
12. ALL PARTITIONS SHALL BE PARTITION TYPE "1" UNLESS NOTED OTHERWISE.
13. ALL METAL STUDS INDICATED IN DETAILS SHALL BE 3-5/8" METAL STUDS AT 16" ON CENTER, UNLESS NOTED OTHERWISE (SEE PARTITION TYPES).
14. METAL STUD CONTRACTOR SHALL BE, OR SHALL CONSULT WITH, A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE. METAL STUD CONTRACTOR SHALL BEAR THE RESPONSIBILITY TO ENGINEER THE STUD GAUGES AND ATTACHMENT METHODS NECESSARY TO PROVIDE THE FRAMING IN THE CONFIGURATIONS INDICATED. MINIMUM STUD GAUGE IS 22 GA. HOWEVER, ALL STUD GAUGES SHALL BE DETERMINED BY THE METAL STUD CONTRACTOR AND SHALL BE APPROPRIATE FOR THE APPLICATION. SUBMIT SIGNED AND SEALED FRAMING SHOP DRAWINGS FOR THE VARIOUS CONDITIONS INDICATING THE STUD SIZE, GAUGE AND CALCULATIONS TO SUPPORT THE DESIGN.
15. SEE TYPICAL DETAILS FOR FRAMING AROUND OBSTRUCTIONS.

GENERAL FINISH NOTES

1. PROVIDE ANODIZED ALUMINUM STRIP AT ALL TRANSITIONS FROM CONCRETE TO TILE FLOOR FINISH U.N.O.
2. PROVIDE ALL FINISH ACCESSORY PIECES REQUIRED FOR FULL AND COMPLETE INSTALLATION OF FINISH MATERIALS.
3. ALL PAINTED WALLS TO HAVE AN EGGSHELL FINISH, U.N.O.
4. INTERIOR FINISHES SHALL BE AT LEAST EQUAL TO (OR BETTER THAN) CLASS B WHERE INSTALLED IN CORRIDORS AND EXIT PASSAGEWAYS, AND CLASS C WHERE INSTALLED IN ROOMS / ENCLOSED SPACES.
5. PROVIDE 3 PERCENT OVERAGE ON FINISH MATERIAL QUANTITIES AS ATTIC STOCK. COORDINATE STORAGE WITH OWNER PRIOR TO PROJECT COMPLETION.
6. REFER TO SPECIFICATIONS AND FINISH SCHEDULE FOR ADDITIONAL FINISH INFORMATION.
7. G.C. TO PROVIDE TRANSITION STRIPS AND THRESHOLDS AS REQUIRED. ARCHITECT TO APPROVE.
8. ALL FINISH LOCATIONS AND START/STOP POINTS TO BE REVIEWED BY ARCHITECT PRIOR TO INSTALLATION.
9. USE LOW VOC ADHESIVE, FOLLOWING MANUFACTURERS RECOMMENDED PRODUCTS, FOR ALL CARPET AND LAMINATE FLOORING.
10. USE LOW VOC PAINTS, AS SPECIFIED, THROUGHOUT, U.N.O.
11. ADD CAULKING JOINT TO ALL DISSIMILAR MATERIALS.

GENERAL ACCESSIBILITY NOTES

1. IN ALL CASES THE GENERAL CONTRACTOR SHALL BEAR RESPONSIBILITY FOR COMPLIANCE WITH THE CLEARANCES AND DIMENSIONS INDICATED ON THE ACCESSIBILITY STANDARDS DRAWING AND WITHIN THE BALANCE OF THE CONTRACT DOCUMENTS
2. THE SPECIFIC DIMENSIONS AND/ OR RANGES INDICATED IN THE ACCESSIBILITY STANDARDS DRAWING ARE A REGULATORY REQUIREMENT; NO ADDITIONAL TOLERANCES EITHER PLUS OR MINUS WILL BE ACCEPTED.
3. THE FULL TEXT OF THE 2010 ADA STANDARDS FOR ACCESSIBILITY DESIGN MAY BE FOUND AT THE WEBSITE: https://www.ada.gov/regs2010/2010ADAStandards/2010ADAStandards_prt.pdf
4. THE FULL TEXT OF THE 2012 ADA STANDARDS FOR ACCESSIBILITY DESIGN MAY BE FOUND AT THE WEBSITE: https://www.tdlr.texas.gov/ab/abtas.htm

SALAD AND GO

#2001

610 NW CHIPMAN ROAD

LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS

513 MAIN STREET #300

FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

SYMBOL, LEGENDS, & GENERAL NOTES

SHEET NUMBER

G004

4/8/2024 10:50:43 AM

PROJECT R-VALUES	
COMPONENT	R-VALUE
ROOF INSUL.	30
WALLS CAVITY	21
WALLS CONT. INSUL.	4.5
FLOOR	N/A

COMcheck Software Version COMcheckWeb

Envelope Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	2001 Chipman and NW Ward - Lee's Summit MO
Location:	Lees Summit, Missouri
Climate Zone:	4a
Project Type:	New Construction
Vertical Glazing / Wall Area:	6%

Construction Site:
NW Chipman and NW Ward
Lee's Summit, Missouri

Owner/Agent:
Andy Hulsey
Salad and Go
5555 East Van Buren Street
Phoenix, Arizona 85008
410-371-1563
Andy@SaladandGo.com

Designer/Contractor:
Steven Cox
Rogue Architects
513 Main Street
Fort Worth, Texas 76102
817-820-0433
Joseph@Roguearchitects.com

Additional Efficiency Package(s)
Credits: 1.0 Required 1.0 Proposed
Enhanced Interior Lighting Controls, 1.0 credit

Building Area	Floor Area
1-Dining: Cafeteria/Fast Food : Nonresidential	1000

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	900	---	30.0	0.032	0.032
Floor: Unheated Slab-On-Grade, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (c)	130	---	---	0.730	0.540
NORTH					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	355	21.0	4.5	0.046	0.064
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.48, PF 0.13, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	65	---	---	0.380	0.380
Window: Metal Frame: Operable, Perf. Specs.: Product ID N/A, SHGC 0.48, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	15	---	---	0.450	0.450
EAST					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	687	21.0	4.5	0.046	0.064
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.36, PF 1.33, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	15	---	---	0.380	0.380
Window: Metal Frame: Operable, Perf. Specs.: Product ID N/A, SHGC 0.36, PF 0.60, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	15	---	---	0.450	0.450
SOUTH					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	256	21.0	4.5	0.046	0.064

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
WEST					
Ext. Wall: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	698	21.0	4.5	0.046	0.064
Window: Metal Frame: Fixed, Perf. Specs.: Product ID N/A, SHGC 0.36, PF 0.64, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	15	---	---	0.380	0.380
Door: Uninsulated Single-Layer Metal, Swinging, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	28	---	---	0.610	0.610

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.
(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Envelope PASSES: Design 3% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Steven Cox - Senior Project Manager — Name - Title
Signature
04.10.24 — Date

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

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DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

COMCHECK

SHEET NUMBER

G005

4/10/2024 9:31:04 AM

RESPONSIBILITY MATRIX

REVISION DATE: 2024.08.08 - DB

THIS SCHEDULE IS PROVIDED FOR QUICK REFERENCE ONLY.
THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL WORK DESCRIBED IN THE CONSTRUCTION DOCUMENTS.
CONFLICTS BETWEEN THIS SCHEDULE AND THE REST OF THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO BEGINNING WORK.

DESCRIPTION	FURNISHED: GENERAL CONTRACTOR	FURNISHED: OWNER	FURNISHED: LANDLORD	INSTALLED: GENERAL CONTRACTOR	INSTALLED: OWNER	INSTALLED: LANDLORD	REMARKS
DIVISION 01: GENERAL REQUIREMENTS							
1.1 PERMITS AND FEES							
1.1.1 PERMIT FEES		•			•		GENERAL CONTRACTOR TO PULL PERMITS FOR THE BUILDING, DEMO, MECHANICAL, ELECTRICAL, PLUMBING, HEALTH, AND/OR ENVIRONMENT AS REQUIRED BY AHJ - GC TO COORDINATE WITH SALAD AND GO PRECONSTRUCTION MANAGER
1.1.2 OTHER PERMTIS AND FEES	•			•			GENERAL CONTRACTOR TO SECURE AND PAY FOR OTHER REQUIRED PERMITS AND FEES NOT NOTED IN LINE ITEM 1.1.1 E.G. DUST CONTROL
1.2 TEMPORARY UTILITIES	•			•			
1.3 TEMPORARY BARRICADES OR SITE FENCING	•			•			
1.3.1 BARRICADE GRAPHICS	•			•			SALAD AND GO TO PROVIDE SALAD AND GO BRANDED GRAPHICS/SIGNAGE (OFCI) - GC TO PROVIDE AHJ REQUIRED SIGNAGE
1.4 CONSTRUCTION DUMPSTERS AND TRASH BINS	•			•			GENERAL CONTRACTOR TO COORDINATE WITH LANDLORD, WASTE MANAGEMENT, CITY AND COUNTY
1.5 FINAL CLEANING	•			•			SITE TO BE PROFRESSIONALLY CLEANED PRIOR TO STOCKING, TRAINING AND OPENING
1.6 CERTIFICATE OF OCCUPANCY	•			•			TO INCLUDE BUILDING, FIRE AND HEALTH INSPECTIONS - ALL REQUIRED BY AHJ
1.7 SITE PREPERATION FOR NEW PAD	•			•			
DIVISION 02: EXISTING CONDITIONS							
2.1 DEMOLITION	•			•			
DIVISION 03: CONCRETE							
3.1 CONCRETE SLAB AND FOUNDATION	•			•			REFER TO STRUCTUAL DRAWINGS AND ARCHITECTURALS FOR ADDITIONAL INFORMATION
3.2 CONCRETE CUTTING AND CORING	•			•			
DIVISION 04: MASONRY							
4.1 MASONRY AND STUCCO	•			•			
DIVISION 05: METALS							
5.1 STRUCTURAL STEEL	•			•			SCOPE OF WORK INCLUDES ROOF AND WALL PENETRATIONS
5.2 CLEARANCE BARS	•			•			VENDOR NO. 22
5.3 ROOF LADDER AND HATCH	•			•			
5.4 FRAMING	•			•			
5.5 REVEALS AND TRIMS	•			•			
5.6 UNISTRUT, THREADED ROD	•			•			
5.7 RAILINGS	•			•			
5.8 STRUCTURAL FRAMING	•			•			SCOPE OF WORK TO INCLUDE REINFORCEMENT IN ROOF PENETRATIONS
5.9 CANOPIES AND AWNINGS							
5.9.1 DRIVE THRU CANOPY	•			•			
5.9.2 AWNINGS	•			•			
DIVISION 06: WOOD, PLASTICS AND COMPOSITES							
6.1 FINISH CARPENTRY							
6.1.1 MANAGER'S DESK & LAMINATE	•			•			
DIVISION 07: THERMAL AND MOISTURE PROTECTION							
7.1 INSULATION	•			•			
7.2 ROOF PENETRATIONS	•			•			
7.3 PRE-FINISHED PARAPET COPING	•			•			
7.4 SEALANTS AND CAULKING	•			•			
7.5 EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)	•			•			
DIVISION 08: OPENINGS							
8.1 DOORS AND FRAMES	•			•			INCLUDES DOOR VIEWER
8.2 STOREFRONT SYSTEMS	•			•			
8.3 DOOR HARDWARE	•			•			
8.4 DRIVE THRU WINDOWS	•			•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 9
DIVISION 09: FINISHES							
9.1 GYPSUM WALLBOARD AND ACCESSORIES	•			•			
9.2 PLYWOOD WALLBOARD	•			•			
9.3 CEMENT BOARD	•			•			
9.4 SUSPENDED "T" BAR LAY-IN CEILING	•			•			
9.5 EXTERIOR CLADDING - MODULAR THIN BRICK	•			•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 12 VENDOR SUBSTITUTION IS NOT PERMITTED
9.6 FLOORING							
9.6.1 TILE FLOORING AND COVE BASE	•			•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 4 VENDOR SUBSTITUTION IS NOT PERMITTED
9.6.2 THRESHOLDS	•			•			
9.6.3 REDUCERS	•			•			
9.6.4 WALK-IN COOLER AND FREEZER TILE	•			•			ALL TILE TO BE INSTALLED PRIOR TO INSTALLATION OF COOLER. GC TO MAKE FINAL ELECTRICAL CONNECTION
9.7 PAINT	•			•			GENERAL CONTRACTOR TO UTILIZE NATIONAL ACCOUNT VENDOR NO. 23
DIVISION 10: SPECIALTIES							
10.1 IDENTIFICATION DEVICES							
10.1.1 EXTERIOR MOUNTED BUILDING SIGNAGE		•			•		GENERAL CONTRACTOR TO COORDINATE AND REVIEW SIGN PACKAGE WITH VENDOR NO. 20 FOR ADDITIONAL SCOPE OF WORK (E.G. PROVIDING POWER AND BLOCKING)
10.1.2 TACTILE SIGNAGE	•			•			
10.1.3 SERVICE DOOR IDENTIFICATION	•			•			
10.1.4 ACCESSIBILITY AND MISCELLANEOUS RESTROOM SIGNAGE	•			•			
10.1.5 BAND LETTERS (CANOPY)		•			•		GENERAL CONTRACTOR TO COORDINATE AND REVIEW SIGN PACKAGE WITH VENDOR NO. 20 FOR ADDITIONAL SCOPE OF WORK (E.G. PROVIDING POWER, BLOCKING, AND SUPPORT)
10.1.6 MENU BOARD		•		•			GENERAL CONTRACTOR TO COORDINATE WITH VENDOR NO. 15 FOR ADDITIONAL SCOPE OF WORK (E.G. PROVIDING BLOCKING), POWER, DATA CONDUIT
10.1.7 MENU BOARD PAD/ISLAND & FOOTING W/ANCHOR BOLTS		•		•			GENERAL CONTRACTOR TO INSTALL PER DRAWINGS AND CONFIRM LOCATION WITH SAG PM AND CONFIRM BOLT SIZE AND PATTERN NEEDED, ANCHOR BOLTS ARE OFCI
10.1.8 CLEARANCE BARS	•			•			GENERAL CONTRACTOR TO INSTALL PER DRAWINGS AND CONFIRM LOCATION WITH SAG PM AND CONFIRM BOLT SIZE AND PATTERN NEEDED, ANCHOR BOLTS ARE OFCI
10.2 FIRE PROTECTION DEVICES							
10.2.1 FIRE EXTINGUISHERS AND HANGING HARDWARE	•			•			GENERAL CONTRACTOR TO COORDINATE WITH THE FIRE DEPARTMENT, NO CABINET
10.2.2 RISER ROOM IDENTIFICATION	•			•			GENERAL CONTRACTOR TO COORDINATE WITH THE FIRE DEPARTMENT
10.2.3 KNOX BOX	•			•			GENERAL CONTRACTOR TO COORDINATE WITH THE FIRE DEPARTMENT
10.3 TOILET ROOMS							
10.3.1 TOILET ROOM ACCESSORIES	•			•			REFER TO RR ACCESSORIES SCHEDULE FOR OFCI ITEMS
10.3.2 TOILET ROOM HARDWARE	•			•			SUPPLIED BY VENDOR NO. 18
10.4 KITCHEN DISPLAY SYSTEM (KDS) MOUNTS		•			•		
10.5 OFFICE SAFE		•			•		VENDOR NO. 14
10.6 FIBERGLASS REINFORCED PLASTIC (FRP) PANELS AND ACCESSORIES	•			•			
10.7 STAINLESS STEEL KITCHEN CORNER GUARDS AND END CAPS	•			•			
10.8 CHEMICAL DISPENSING		•			•		VENDOR NO. 7

DESCRIPTION	FURNISHED: GENERAL CONTRACTOR	FURNISHED: OWNER	FURNISHED: LANDLORD	INSTALLED: GENERAL CONTRACTOR	INSTALLED: OWNER	INSTALLED: LANDLORD	REMARKS
DIVISION 11: EQUIPMENT							
11.1 FOOD SERVICE EQUIPMENT		•			•		SUPPLIED BY VENDOR NO. 17 GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE FINAL UTILITY CONNECTIONS, REFER TO KITCHEN EQUIPMENT SCHEDULE FOR CLARIFICATION
11.2 FOOD SERVICE EQUIPMENT STARTUP	•				•		GENERAL CONTRACTOR RESPONSIBLE FOR INSTALLATION, FINAL CONNECTION, AND STARTUP OF ALL KITCHEN EQUIPMENT WITH THE EXCEPTION OF WIB AND STOETLING, REFER TO KITCHEN EQUIPMENT SCHEDULE FOR CLARIFICATION
11.3 STAINLESS STEEL FABRICATED COUNTERS		•			•		SUPPLIED BY VENDOR NO. 17. GENERAL CONTRACTOR TO COORDINATE DELIVERY AND INSTALL, REFER TO KITCHEN EQUIPMENT SCHEDULE FOR CLARIFICATION
11.4 STORAGE RACKS, SHELVING, AND OVERHEAD SHELVING		•		•			GENERAL CONTRACTOR TO COORDINATE WITH VENDOR NO. 17 FOR ADDITIONAL SCOPE OF WORK (E.G. PROVIDING BLOCKING), REFER TO KITCHEN EQUIPMENT SCHEDULE FOR CLARIFICATION
DIVISION 12: FURNISHINGS							
12.1 NON-PERISHABLE DELIVERY #1		•		•			INCLUDING BUT NOT LIMITED TO: HAIR NET HOLDER, MAGNETIC KNIFE HOLDER, SOAP DISPENSERS, CLEAR FILE HOLDER, FIRST AID KIT, ICE SCOOPS, ETC...
12.1.1 PAPER TOWEL DISPENSERS	•			•			GC TO PROCURE AND INSTALL ALL PAPER TOWEL DISPENSERS. ONE PER HANDWASH SINK. CONFIRM QUANTITY WITH SAG PM. SPEC FROM AMAZON: SAN JAMAR T8000TBK, CLASSIC BLACK 11 3/4 x 9 1/8 x 14 7/16
12.2 OFFICE SUPPLIES		•			•		VENDOR NO. 25
12.3 WALL MOUNT COAT RACK		•		•			GENERAL CONTRACTOR TO INSTALL OFCI, PROVIDED WITH OFFICE SUPPLIES VENDOR NO. 25
12.4 INTERIOR TRASH RECEPTACLES		•			•		SUPPLIED AND INSTALLED BY VENDOR NO. 17
12.5 EMPLOYEE STORAGE		•			•		
DIVISION 13: SPECIAL CONSTRUCTION							
13.1 WALK-IN COOLER		•			•		GENERAL CONTRACTOR TO COORDINATE INSTALLATION DETAILS WITH VENDOR NO. 17 AND PM
DIVISION 21: FIRE SUPPRESSION							
21.1 FIRE SUPPRESSION IDENTIFICATION							
21.1.1 PIPING SYSTEM IDENTIFICATION	•			•			
21.1.2 VALVE TAGS	•			•			
21.2 SPRINKLER STANDPIPE	•			•			AS REQUIRED BY AHJ
21.2.1 BACKFLOW PREVENTER	•			•			AS REQUIRED BY AHJ
21.2.2 ISOLATION VALVE	•			•			AS REQUIRED BY AHJ
21.3 AUTOMATIC SPRINKLER SYSTEM							AS REQUIRED BY AHJ
21.3.1 SYSTEM ENGINEERING (E.G. STAMPED PLANS AND CALUCATIONS)	•			•			AS REQUIRED BY AHJ
21.3.2 SPRINKLER COVERAGE	•			•			AS REQUIRED BY AHJ
21.3.3 SPRINKLER GRID APPURTENANCES (E.G. AIR VALVES AND DRAINS)	•			•			AS REQUIRED BY AHJ
DIVISION 22: PLUMBING							
22.1 PLUMBING IDENTIFICATION							
22.1.1 PIPING SYSTEM IDENTIFICATION	•			•			MATERIAL TO CONSIST OF 2" VINYL LETTERING, UNLESS OTHERWISE NOTED IN SPECIFICATIONS
22.1.2 UTILITY SHUT OFF IDENTIFICATION IN KITCHEN	•			•			MATERIAL TO CONSIST OF 2" VINYL RED LETTERING, UNLESS OTHERWISE NOTED IN SPECIFICATIONS
22.1.3 VALVE TAGS AND CHART	•			•			
22.2 DRAINS AND CLEANOUTS							
22.2.1 DRAINS AND FLOOR SINKS	•			•			
22.2.2 THROUGH DRAIN FOR ICE MACHINE	•			•			REFER TO KITCHEN AND PLUMBING SHEET FOR SPECIFICATIONS
22.3 PIPING SYSTEMS AND SPECIALTIES							
22.3.1 STORM DRAINAGE	•			•			
22.3.2 STORM DETENTION SYSTEM	•			•			REFER TO CONTRACT; PURCHASED BY GC UNLESS LEAD TIME PROHIBITS IN WHICH SALAD AND GO PURCHASES DIRECTLY FROM VENDOR NO. 6
22.3.3 DOMESTIC WATER	•			•			
22.3.4 GREASE WASTE	•			•			
22.3.5 CONDENSATE	•			•			
22.3.6 VENT	•			•			
22.3.7 SANITARY WASTE	•			•			
22.3.8 PIPING FITTINGS	•			•			
22.3.9 VALVES AND SHUT OFF VALVES	•			•			
22.3.10 WATER BOOSTER PUMP	•			•			AS REQUIRED BY AHJ
22.3.11 GREASE INTERCEPTOR	•			•			GENERAL CONTRACTOR TO PURCHASE FROM NATIONAL ACCOUNT VENDOR NO. 26
22.4 INCOMING WATER FILTER SYSTEM	•			•			GENERAL CONTRACTOR TO FURNISH AND INSTALL 1 4"X10" CANISTER FILTER HOUSING WITH 30 MICRON SEDIMENT FILTER. SPEC: HOUSING: GXWH35F, FILTER: FXHSC, COORDINATE WITH PLANS AND SAG PM FOR LOCATION
22.5 WATER HEATER	•			•			GENERAL CONTRACTOR TO PURCHASE FROM NATIONAL ACCOUNT VENDOR NO. 13
22.6 MOP SINK							
22.6.1 FLOOR MOUNTED MOP SINK	•			•			REFER TO KITCHEN AND PLUMBING SHEET FOR SPECIFICATION
22.6.2 SERVICE FAUCET FOR MOP SINK	•			•			
22.7 PLUMBING FIXTURES							
22.7.1 TOILETS, URINAL, AND LAVATORIES	•			•			GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE ALL NECESSARY FITTINGS (E.G. FLUSH VALVES, FAUCETS, AND FITTINGS)
22.7.2 KITCHEN FAUCETS		•		•			SUPPLIED BY VENDOR NO.17 - GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE FINAL UTILITY CONNECTIONS
22.8 WATER SOFTENER	•			•			IF CALLED OUT IN DRAWINGS
DIVISION 23: HEATING, VENTILATING, AND AIR CONDITIONING							
23.1 HVAC DUCTWORK AND PIPING IDENTIFICATION	•			•			
23.2 ROOF CURBS		•		•			
23.3 HVAC DUCTWORK SYSTEM COMPONENTS	•			•			
23.4 MECHANICAL PIPING SYSTEM COMPONENTS							
23.4.1 WALK-IN COOLER REFRIGERATION		•			•		WALK-IN COOLER SUPPLIED BY VENDOR NO. 17
23.4.2 WIB CONDENSATION LINE	•			•			
23.4.3 REFRIGERATION FOR OTHER HVAC EQUIPMENT	•			•			
23.4.4 WIB FINAL ELECTRICAL CONNECTION	•			•			
23.4.5 WIB PENETRATIONS AND FINAL SEALING	•			•			
23.5 HVAC EQUIPMENT							GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE RIGGING FOR ALL ROOFTOP EQUIPMENT
23.5.1 SUPPLY FAN	•			•			
23.5.2 TOILET EXHAUST FAN	•			•			
23.5.3 KITCHEN EXHAUST FAN	•			•			
23.5.4 DUCTED AND NON-DUCTED HEATING AND COOLING UNITS		•			•		PROVIDED BY VENDOR NO. 02
23.5.5 HVAC CONDENSING UNITS		•			•		PROVIDED BY VENDOR NO. 02
23.5.6 REFRIGERATION CONDENSING UNITS		•			•		WALK-IN COOLER SUPPLIED BY VENDOR NO. 17
23.5.7 REFRIGERATION CONDENSING UNIT CURB		•			•		WALK-IN COOLER CURB FURNISHED BY OWNER AND INSTALLED BY GENERAL CONTRACTOR. COORDINATE WITH SAG PM AND VENDOR NO. 17
23.6 COMMISSIONING ACTIVITIES							
23.6.1 TESTING AIR BALANCE (TAB) REPORT	•			•			
23.7 AIR CURTAINS	•			•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 3
23.8 DEHUMIDIFIER	•			•			*ONLY FOR HOUSTON AREA STORES GC TO PROVIDE AND INSTALL DRAIN LINE RAN TO FLOOR SINK.

DESCRIPTION	FURNISHED: GENERAL CONTRACTOR	FURNISHED: OWNER	FURNISHED: LANDLORD	INSTALLED: GENERAL CONTRACTOR	INSTALLED: OWNER	INSTALLED: LANDLORD	REMARKS
DIVISION 26: ELECTRICAL							
26.1 ELECTRICAL IDENTIFICATION	•			•			
26.2 POWER DISTRIBUTION SYSTEM							
26.2.1 MAIN SERVICE GEAR AND TRANSFORMERS		•		•			
26.2.2 MAIN SERVICE CONDUIT	•			•			
26.2.3 MAIN SERVICE WIRING	•			•			
26.2.4 MAIN SERVICE FUSES		•		•			
26.2.5 TRANSFORMER	•			•			TYPICALLY PROVIDED BY UTILITY PROVIDER. GENERAL CONTRACTOR TO VERIFY. IF NOT PROVIDED BY UTILITY GENERAL CONTRACTOR TO PROVIDE AND INSTALL.
26.2.6 TENANT DISTRIBUTION PANELS AND BREAKERS		•		•			
26.2.7 CONDUIT, WIRE, OUTLETS, AND SWITCHES	•			•			
26.2.8 KITCHEN EQUIPMENT FINAL CONNECTION	•			•			
26.2.9 SIGNAGE CONDUIT AND WIRING	•			•			
26.3 LIGHTING DEVICES							
26.3.1 PARKING LOT LIGHTING		•		•			GENERAL CONTRACTOR SCOPE OF WORK TO INCLUDE POWER TO LIGHTING FIXTURES
26.3.2 INTERIOR AND EXTERIOR LIGHTING		•		•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 1 VENDOR SUBSTITUTION IS NOT PERMITTED
26.3.3 EMERGENCY LIGHTING		•		•			GENERAL CONTRACTOR TO PURCHASE FROM VENDOR NO. 1 VENDOR SUBSTITUTION IS NOT PERMITTED SCOPE OF WORK TO INCLUDE INTERIOR AND EXTERIOR
26.4 LOW VOLTAGE							
26.4.1 CONDUIT AND WIRING	•			•			INCLUDE CAMERA CONDUIT
26.4.2 DEVICES AND COVERPLATES	•			•			
26.5 CAMERA WIRING		•			•		
DIVISION 27: COMMUNICATIONS							
27.1 TELECOMMUNICATIONS IDENTIFICATION		•			•		
27.2 TELECOMMUNICATIONS							
27.2.1 DATA TERMINATIONS	•			•			
27.2.2 WIFI EXTENDER (EXTERIOR MOUNTED)		•			•		
27.2.3 LOW VOLTAGE WIP FOR WIFI EXTENDER	•			•			ROOF PENETRATION WITH CONDUIT PER DETAIL
27.2.4 DATA PATCH PANEL	•			•			SPEC: TRIPP LITE 24-PORT 1U RACKMOUNT CAT6 110 PATCH PANEL 568B, RJ45 ETHERNET(N252-024)
27.2.5 IT RACK AND SHELVES	•			•			SPEC FOR RACK: NAVEPOINT 15U WALL MOUNT IT OPEN FRAME 19 INCH RACK WITH SWING OUT HINGED GATE BLACK SPEC FOR SHELVES 3 MIN: STARTECH CABSHELF116V (REQUIRED 3 TOTAL) GENERAL CONTRACTOR TO COORDINATE WITH SALAD AND GO PM FOR EXACT FIELD INSTALLATION LOCATION
27.3 MONITORS							
27.3.1 CONDUIT AND WIRING	•			•			
27.3.2 MOUNTS		•			•		
27.3.3 DEVICES		•			•		
27.4 DRIVE THRU LOOPS		•		•			GENERAL CONTRACTOR TO COORDINATE WITH SALAD AND GO PM FOR EXACT INSTALLATION LOCATION
DIVISION 28: ELECTRONIC SAFETY AND SECURITY							
28.1 SECURITY ALARM SYSTEM							
28.1.1 CONDUIT	•			•			
28.1.2 WIRING AND DEVICES		•			•		
28.2 SECURITY CAMERAS		•			•		
28.2.1 WIRING		•			•		
28.2.2 DEVICES		•			•		
28.3 MENU SPEAKERS							
28.3.1 CONDUIT	•			•			GENERAL CONTRACTOR TO FURNISH AND INSTALL 1 POWER AND 2 DATA CONDUIT TO EACH MENU BOARD. EACH CONDUIT TO BE DEDICATED BACK TO BUILDING. DATA CONDUIT TO BE STUBBED FROM MENU BOARD TO ABOVE CEILING IN BUILDING. CLARIFY WITH SAG PM PRIOR TO INSTALLATION
28.3.2 WIRING	•			•			
28.3.3 DEVICES		•			•		
28.3.4 MENU SPEAKER FOUNDATION	•			•			
28.4 FIRE ALARM SYSTEM							AS REQUIRED BY AHJ
28.4.1 SYSTEM ENGINEER	•			•			
28.4.2 CONNECTION TO BASE BUILDING SYSTEM	•			•			AS NEEDED
28.4.3 DEVICES	•			•			
DIVISION 32: EXTERIOR IMPROVEMENTS							
32.1 IRRIGATION SYSTEM	•			•			
32.2 PARKING LOT PATCH SEAL, AND STRIPE	•			•			
32.3 RAMPS	•			•			
32.4 PAVING AND HARDSCAPE	•			•			
32.5 CONCRETE CURBS	•			•			
32.6 TRASH ENCLOSURE	•			•			
32.7 LANDSCAPE PLANT MATERIAL	•			•			

NATIONAL ACCOUNT AND OWNER-VENDOR LIST

REVISION DATE: 2024.03.25

NOTE TO DESIGN CONSULTANTS:
If a item category has multiple options noted as a, b, c, etc. only one vendor will be selected.

1 Lighting
Consolidated Electrical Distributors (CED)
David Rash
P 817-480-1171
E david.rash@ced.com

2 HVAC Units
Trane
Cameron Peck
P 623-980-5012
E cameron.peck@trane.com

3 Air Curtains
Mars Air Systems
Frank Cuademo
P 310-532-1555 Ext. 1221
E frankc@marsair.com

4 Tile
DalTile
David Santibañez
P 562-644-4360
E david.santibanez@daltile.com

5 Door Hardware
Allegion Brands
Earl Thompson
P 480-340-1829
E earl.thompson@allegion.com

6 Stormwater Management
Contech Engineered Systems
Mitchell Begg
P 470-599-9065
E mitchell.begg@conteches.com

7 Chemical Dispensing
EcoLab
Patrick Aiello
P 480-226-9252
E patrick.aiello@ecolab.com

8 Keying & Locks
[Company]
[Contact Name]
P
E

9 Operable (Drive-Thru) Windows
QuikServ
Brian McCloskey
P 832-792-2646
E bmcdoskey@quikserv.com

10 Awnings (Prefabricated)
TBD
[Contact Name]
P
E

11 Electrical Switchgear
Consolidated Electrical Distributors (CED)
David Rash
P 817-480-1171
E david.rash@ced.com

12 Roofing Membrane System
[Company]
[Contact Name]
P
E

13 Water Heaters
AO Smith
Chris Murphy
P 615-305-7074
E cmurphy@hotwater.com

14 Safe
Brinks
Ashley Bynum
P
E ashley.bynum@brinksinc.com

15 Menu Boards
Howard Company
Grant Gutske
P 262-853-6600
E grant@howardcompany.com

16 Intercom System
Midwest Systems
Kent Meake
P 480-626-3104
E kmeake@midsyswerv.com

17 Kitchen Equipment
Concept Services
Maura Richardson
P 281-761-4099
E mrichardson@conceptserv.com

18 Restroom Fixtures
Bobrick
[Contact Name]
P
E

19 Security System
Liberty Alarm
Cameron Brown
P 480-734-8340
E cameron@libertyalarmaz.com

20 Signage Contractors

20a Signage Contractor - West Region
Atlas Sign
Lori Watkins
P 561-301-2516
E lori.w@atlasbtw.com

20b Signage Contractor - Central Region
SSC Signs & Lighting
Todd Elledge
P 336-429-1236
E telledge@sscsigns.com

21 Decorative Wall Panels
Nichiha
Ben Dalziel
P 404-432-5866
E bdalziel@nichiha.com

22 Clearance Bars
Unistructures
Shannon Holcomb
P 678-974-1780
E s.holcomb@unistructures.com

23 Paint
Sherwin-Williams
Michael Barden
P 480-244-0949
E michael.p.barden@sherwin.com

24 FRP Wall Panels
TBD
[Contact Name]
P
E

25 Office Supplies
TBD
[Contact Name]
P
E

25 Grease Interceptor
Schier
Sean Molen - National Accounts
P 913-951-3300
E nationalaccounts@schierproducts.com

8/13/2024 9:43:25 AM

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

REVISION CB-A: 10/23/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION
A	8/09/2024	CONSTRUCTION BULLETIN A

PROJECT INFORMATION

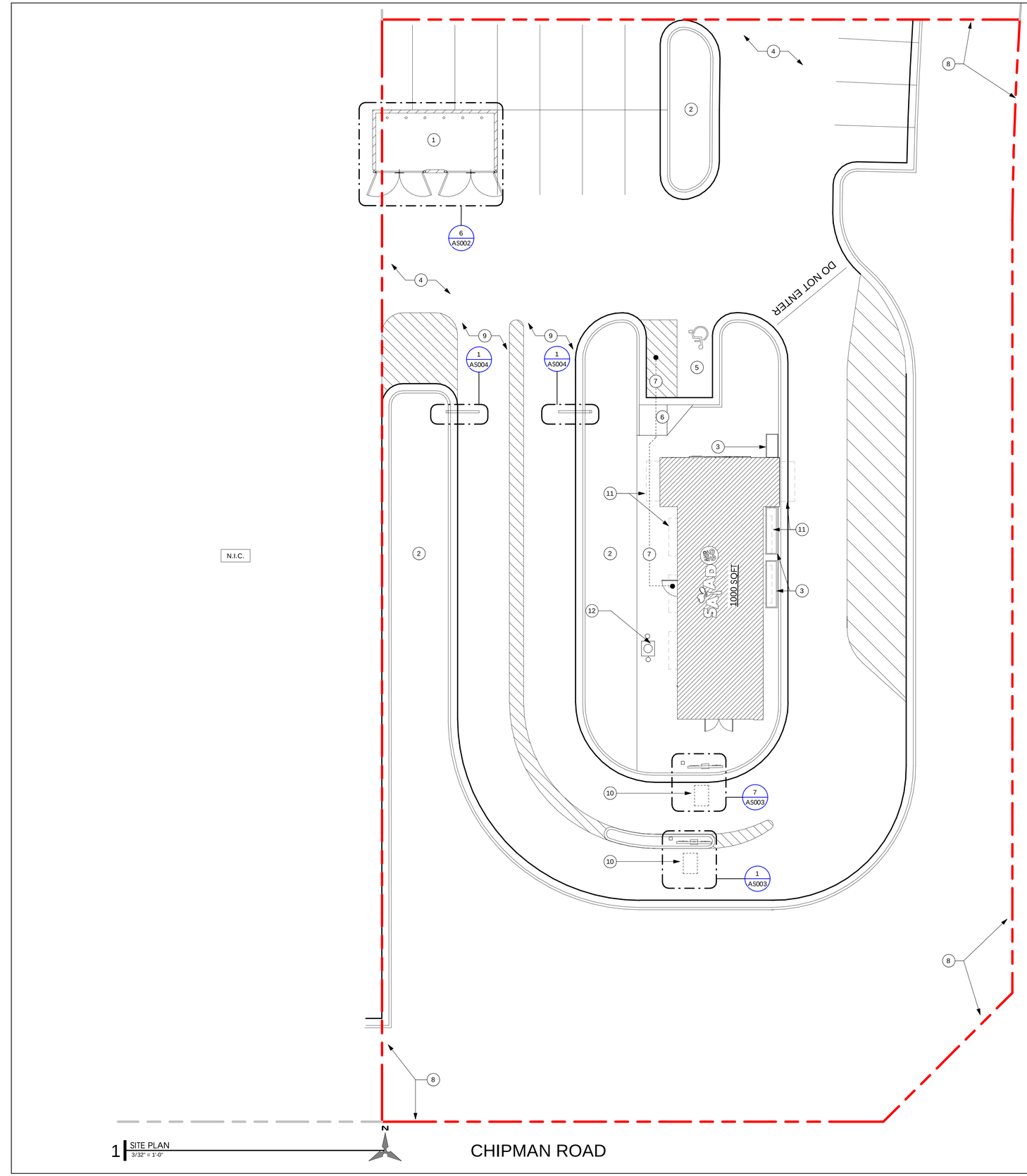
PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

SHEET TITLE

RESPONSIBILITY MATRIX

SHEET NUMBER

G006



SITE PLAN GENERAL NOTES

A. COORDINATE SITE PLAN WITH LANDSCAPE, ARCHITECTURAL, CIVIL, MECHANICAL, AND ELECTRICAL SITE PLAN. REPORT ANY DISCREPANCIES TO THE ARCHITECT.

B. SIGNAGE TO BE DIFFERED SUBMITTAL. REF: TO SHEET A201 FOR BUILDING MOUNTED SIGNAGE LOCATIONS. REF: ELEC FOR ELECTRICAL INFORMATION.

C. DRIVE-THRU EQUIPMENT INCLUDING WIRELESS COMMUNICATION AND MONITORS SHALL BE COORDINATED BY GENERAL CONTRACTOR. REF: ELEC FOR ELECTRICAL INFORMATION.

D. GENERAL CONTRACTOR TO APPLY CONCRETE SEALER TO ALL EXTERIOR CONCRETE PATIO AND WALKWAY SURFACES.

E. PROVIDE DETECTABLE WARNING (IF APPLICABLE PER LOCAL CODE) AT TRANSITION FROM SIDEWALK TO DRIVE AISLE.

F. ACCESSIBLE PARKING SPACE AND ACCESS AISLE SHALL HAVE SURFACE SLOPE NOT TO EXCEED 2% IN ALL DIRECTIONS.

G. REFER TO ELECTRICAL DRAWINGS FOR SITE RELATED ELECTRICAL WORK.

H. UTILITY BOXES, PEDESTALS AND METER PANELS SHALL BE PAINTED TO BLEND IN WITH SURROUNDINGS. ALL UTILITY BOXES AND METER PANELS ON WALLS SHALL BE PAINTED TO MATCH THE BUILDING WALLS WITH UTILITY COMPANY APPROVALS

I. REFERENCE LANDSCAPE DRAWNINGS IN CIVIL SET FOR LANDSCAPING DESIGN.

REF: CIVIL FOR LEGAL DESCRIPTION, DIMENSIONS AND UTILITY LOCATIONS.

ARCHITECTURAL SITE PLAN KEYNOTES

1. TRASH ENCLOSURE, REF: DETAILS ON SHEET AS002
2. LANDSCAPING, REF: CIVIL.
3. PLANTER BOXES: OLD TOWN FIBERGLASS, STANDARD RECTANGLE, FINISH: FLAME 28 (SAND), 18" HIGH, REF: LANDSCAPING.
4. SITE ACCESS, REF: CIVIL.
5. ACCESSIBLE PARKING, REF: CIVIL.
6. ACCESSIBLE PARKING RAMP, REF: CIVIL.
7. 36" WIDE MINIMUM ACCESSIBLE PATH OF TRAVEL TO ACCESSIBLE PARKING. NO ABRUPT CHANGES IN ELEVATION ALONG THE PATH OF TRAVEL SHOWN. THE SLOPE AND CROSS SLOPE ALONG THE PATH OF TRAVEL SHALL NOT EXCEED 5% AND 2% RESPECTIVELY, REF: CIVIL.
8. PROPERTY LINE.
9. DRIVE THRU LANE.
10. CONDUIT STUB UNDER CURB TO LOOP VERTICAL DETECTION BY GC. REF: ELEC
11. OUTLINE OF CANOPY ABOVE.
12. GREASE TRAP, REF: CIVIL AND PLUMBING

SAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

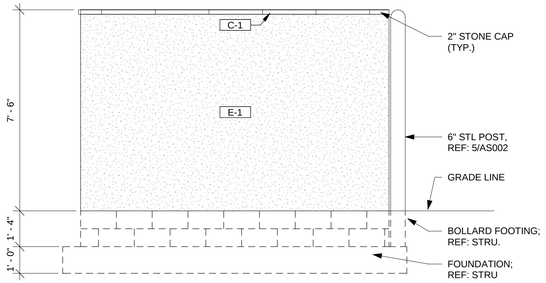
SHEET TITLE

ARCHITECTURAL SITE PLAN

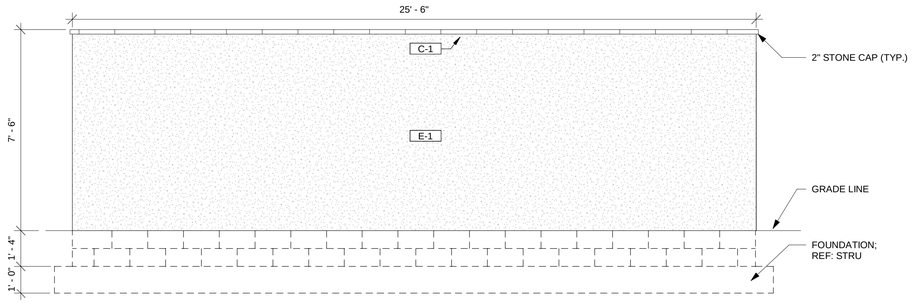
SHEET NUMBER

AS001

4/8/2024 10:51:08 AM

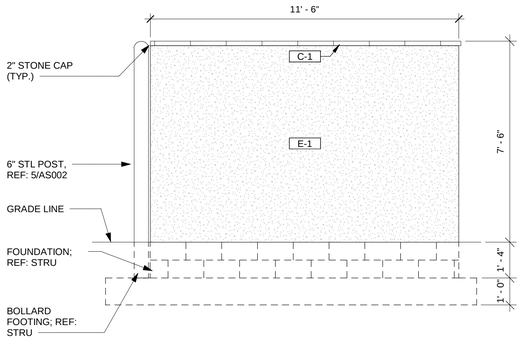


1 SIDE ELEVATION "B"
3/8" = 1'-0"

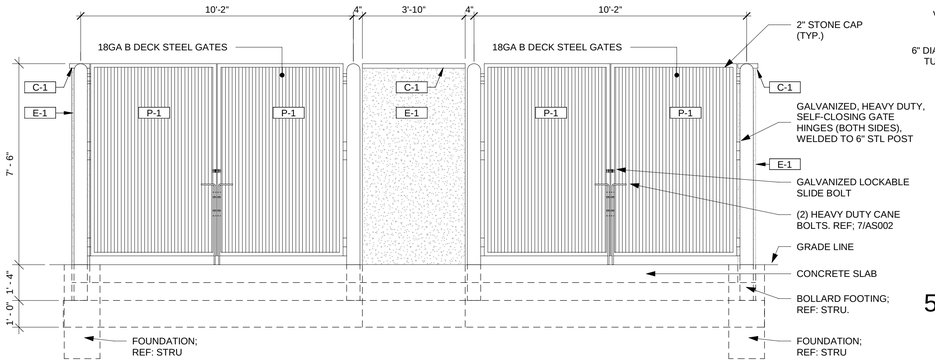


2 BACK ELEVATION
3/8" = 1'-0"

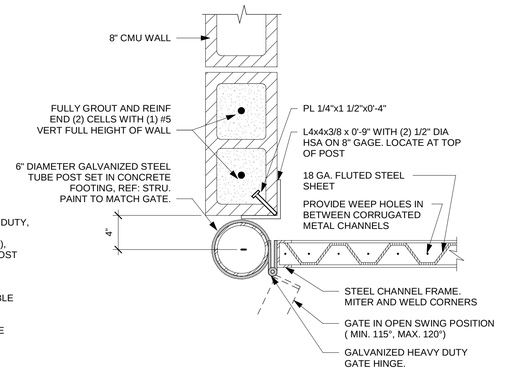
TRASH ENCLOUSURE FINISH SCHEDULE			
MARK	MATERIAL	DESCRIPTION	
E-1	E.I.F.S.	**PRODUCT:** DRYVIT CCP-2 **FINISH:** SAND **COLOR:** MATCH SHERWIN WILLIAMS SW-6095 TOASTY	
P-1	PAINT	**COLOR:** SW-7048 URBANE BRONZE	
C-1	STONE CAP	**PRODUCT:** CORONADO STONE **FINISH:** FLAGSTONE WALL CAP **COLOR:** CHARCOAL	



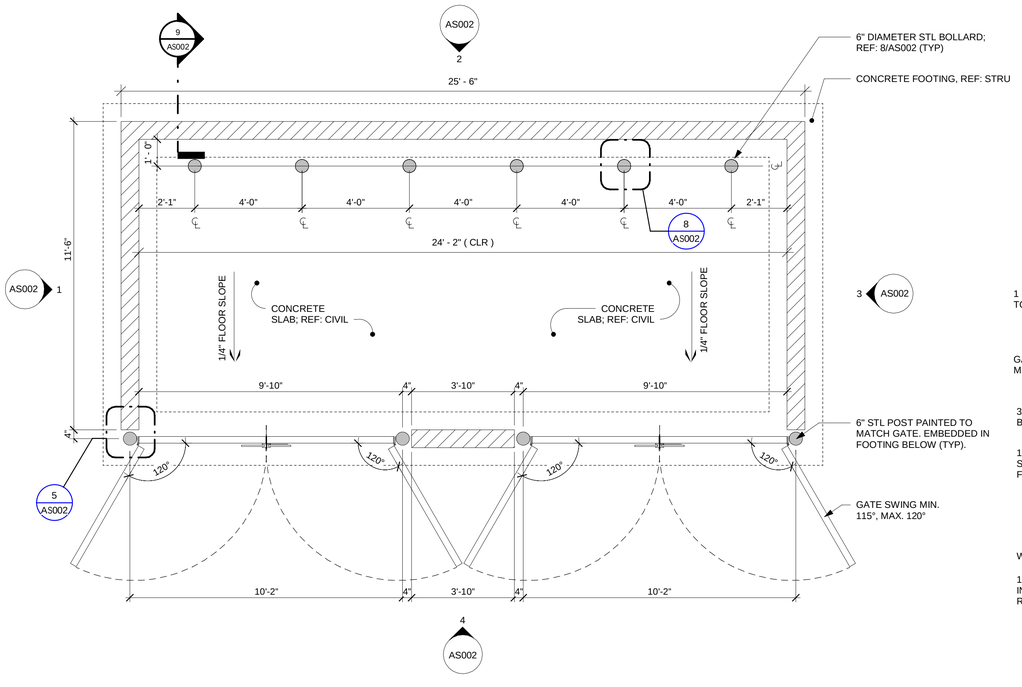
3 SIDE ELEVATION "A"
3/8" = 1'-0"



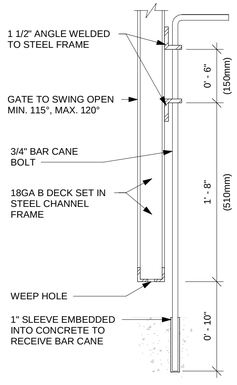
4 FRONT ELEVATION
3/8" = 1'-0"



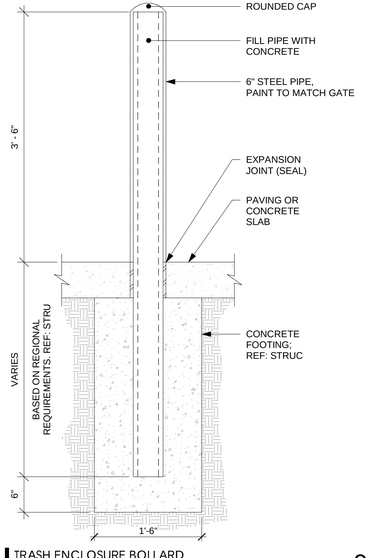
5 GATE HINGE DETAIL
1 1/2" = 1'-0"



6 FLOOR PLAN
3/8" = 1'-0"



7 SECTION AT CANE BOLT
1 1/2" = 1'-0"



8 TRASH ENCLOSURE BOLLARD
1" = 1'-0"

9 TYPICAL CMU WALL SECTION
1" = 1'-0"

SAAD AND GO

#2001
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ROGUE ARCHITECTS
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FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION	
PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

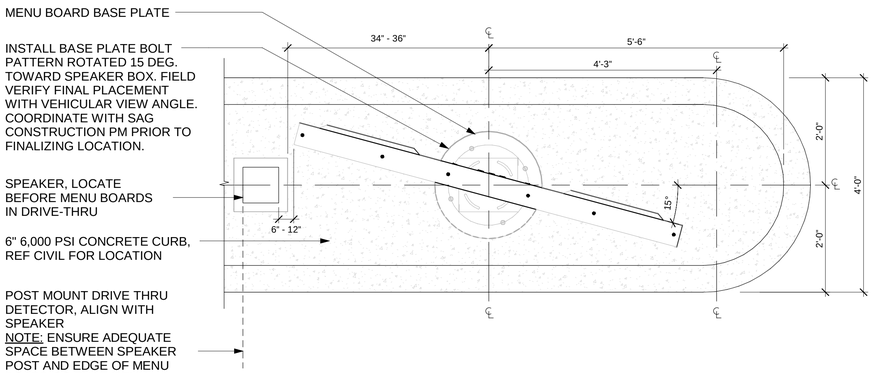
SHEET TITLE

TRASH ENCLOSURE DETAILS

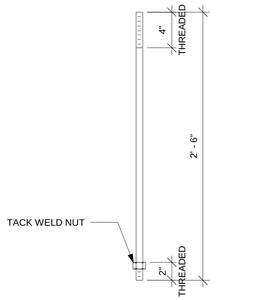
SHEET NUMBER

AS002

4/8/2024 10:51:10 AM

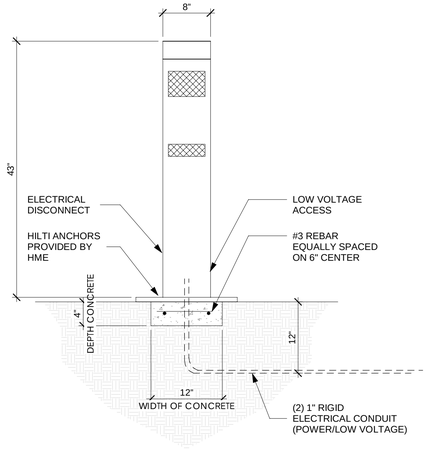


1 MENU BOARD AND SPEAKER ISLAND
3/4" = 1'-0"



DIA. 3/4" AASHTO M314-90 GR.55 STEEL CAN USE EITHER STYLE ANCHOR BOLT

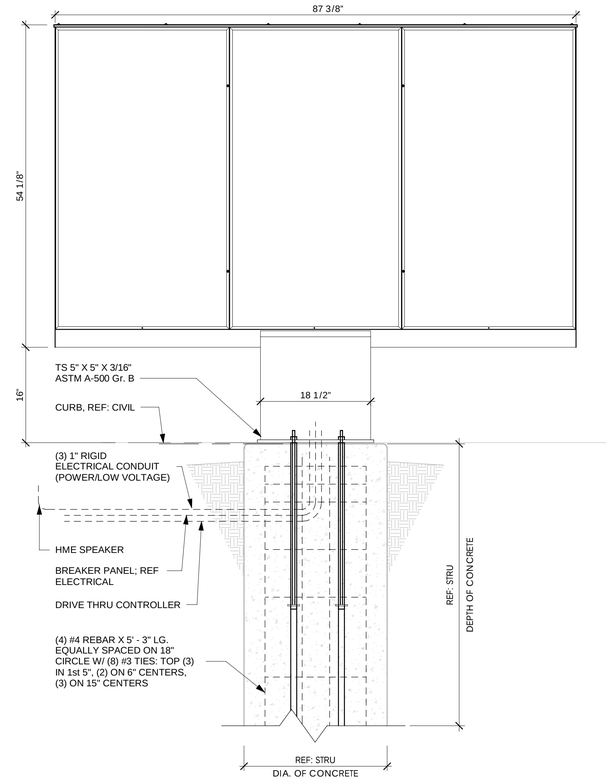
2 ANCHOR BOLT DETAIL
1 1/2" = 1'-0"



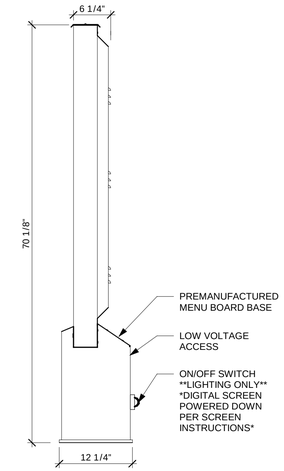
NOTE: IF 6000 PSI COMPRESSIVE STRENGTH CONCRETE IS USED, REBAR IS NOT REQUIRED. SPEAKER TO BE PLACED BEFORE MENU BOARD 1' - 6" MAX.

FRONT ELEVATION

3 DT SPEAKER BOX ELEVATION VIEW
1" = 1'-0"

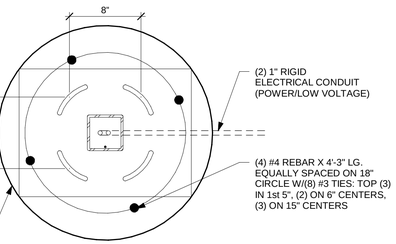


FRONT ELEVATION



SIDE VIEW

4 DT MENU BOARD SIDE ELEVATION
1" = 1'-0"

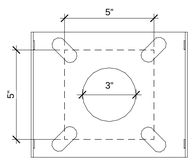


PLAN VIEW

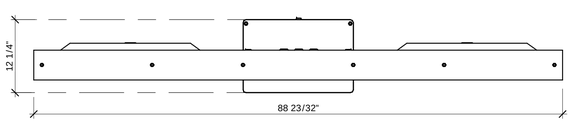
NOTE: IF 6000 PSI COMPRESSIVE STRENGTH CONCRETE IS USED, REBAR IS NOT REQUIRED.

QTY. CONCRETE: 0.7 CU. YDS.

5 DT MENU BOARD BASE PLATE
1 1/2" = 1'-0"

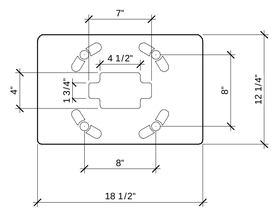


6 DT SPEAKER BOX BASE PLATE
3" = 1'-0"



PLAN VIEW

7 DT MENU BOARD ELEVATION
1" = 1'-0"



8 DT MENU BASE PLATE
1 1/2" = 1'-0"

GENERAL NOTES:

1. REFERENCE STRUCTURAL DRAWINGS FOR FOOTING SIZING AND DETAILS.
2. GC TO FOLLOW MANUFACTURERS WRITTEN INSTRUCTIONS FOR INSTALLATION OF ALL EQUIPMENT, FIXTURES, FURNISHINGS, FINISHES, ETC.
3. GC TO COORDINATE ALL SITE WORK WITH CIVIL DRAWINGS.
4. FINISH TO BE PAINTED BLACK. MATCH SW 6991 BLACK MAGIC.

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

SHEET TITLE

SITE DETAILS

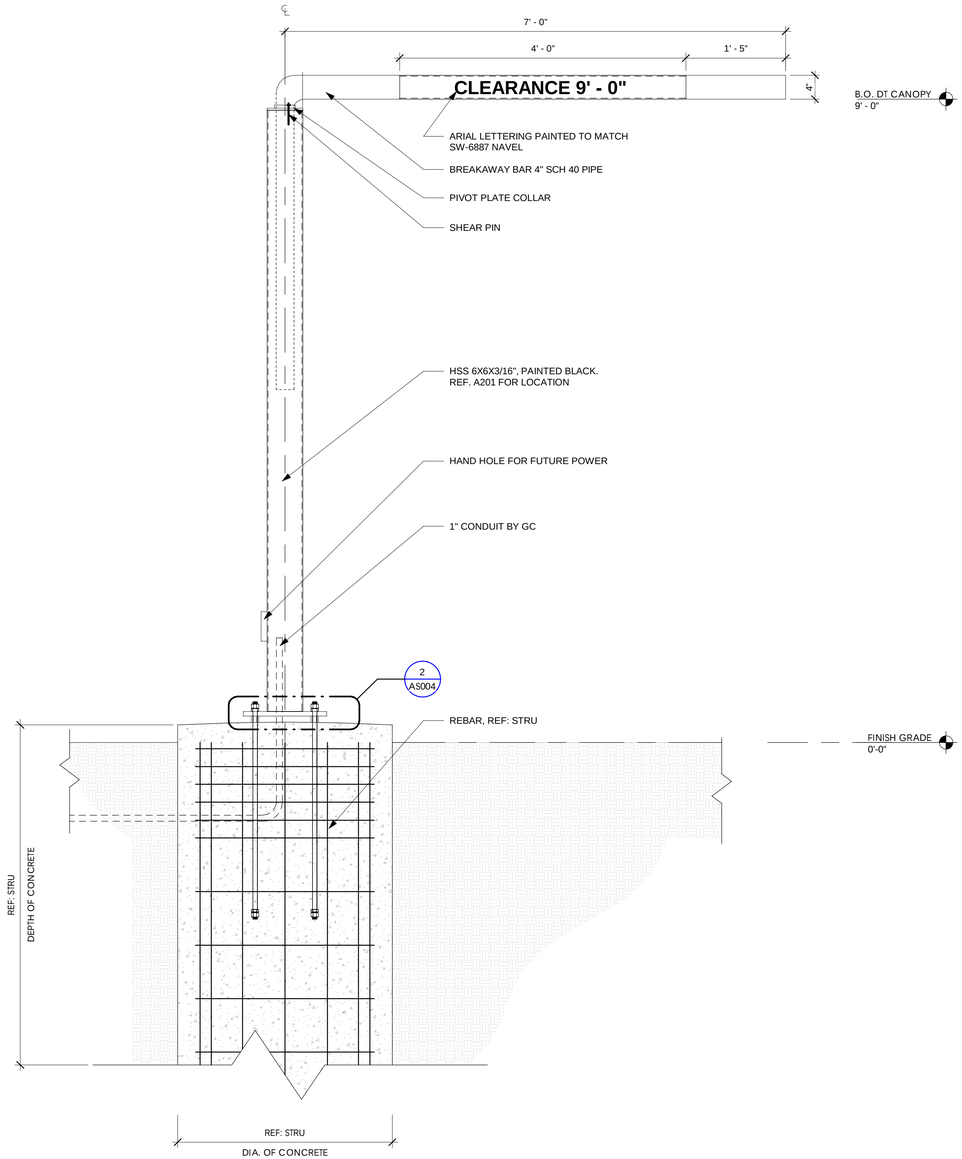
SHEET NUMBER

AS003

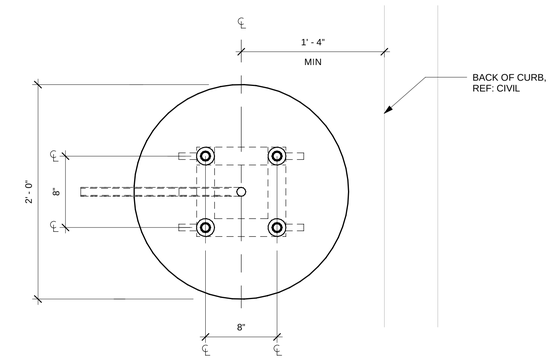
4/8/2024 10:51:11 AM

GENERAL NOTES:

1. REFERENCE STRUCTURAL DRAWINGS FOR FOOTING SIZING AND DETAILS.
2. GC TO FOLLOW MANUFACTURERS WRITTEN INSTRUCTIONS FOR INSTALLATION OF ALL EQUIPMENT, FIXTURES, FURNISHINGS, FINISHES, ETC.
3. GC TO COORDINATE ALL SITE WORK WITH CIVIL DRAWINGS.
4. FINISH TO BE PAINTED BLACK. MATCH SW 6991 BLACK MAGIC.

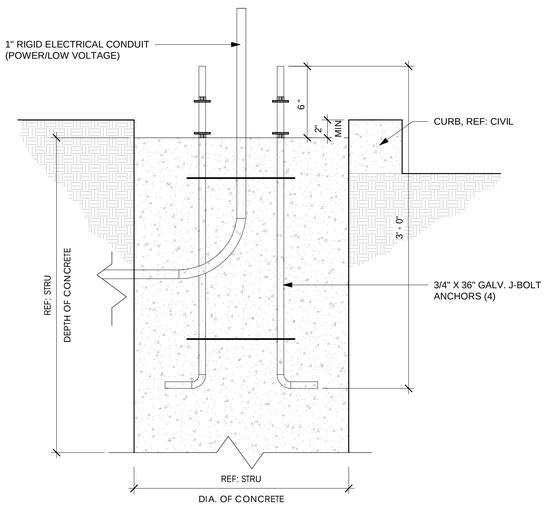


1 DT CLEARANCE BAR
1" = 1'-0"



NOTE: SET ANCHOR BOLTS PARALLEL TO BACK OF CURB

2 DT CLEARANCE BAR BASE PLATE
1 1/2" = 1'-0"



3 DT CLEARANCE BAR BASE PLATE - ELEVATION
1 1/2" = 1'-0"

SAAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

SHEET TITLE

SITE DETAILS

SHEET NUMBER

AS004

4/8/2024 10:51:12 AM

GENERAL NOTES

1 - GENERAL

G1. CODE: ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PROVISIONS OF THE APPLICABLE BUILDING CODE OF LATEST ADOPTION AND THE STANDARDS REFERENCED THEREIN.

G2. GENERAL DETAILS: ALL NOTES ON THESE SHEETS SHALL APPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS. ALL WORK OR CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES, REGULATIONS AND SAFETY REQUIREMENTS.

G3. DISCREPANCIES: THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ENGINEER WILL SEND WRITTEN INSTRUCTIONS TO ALL CONCERNED. ANY SUCH DISCREPANCY, OMISSION, OR VARIATION NOT REPORTED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND WORK SHALL BE PERFORMED IN A MANNER AS DIRECTED BY THE ENGINEER.

G4. SHORING: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING ADEQUATE SHORING, BRACING, AND FORMWORK, PROPERLY DESIGNED UNDER THE SUPERVISION OF A LICENSED STRUCTURAL ENGINEER, AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING ALL PHASES OF CONSTRUCTION.

G5. BRACING: THESE DRAWINGS ILLUSTRATE THE PRIMARY STRUCTURAL SYSTEM IN ITS COMPLETED FORM. TEMPORARY BRACING, PROPERLY DESIGNED UNDER THE SUPERVISION OF A LICENSED STRUCTURAL ENGINEER, SHALL BE PROVIDED AS REQUIRED TO HOLD ALL COMPONENTS OF THE STRUCTURE IN-PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.

G6. EXCAVATION: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES, INCLUDING LAGGING, SHORING, AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT AND OSHA.

G7. OTHER TRADES: SEE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF PIPE, VENT, DUCT AND OTHER OPENINGS AND DETAILS NOT SHOWN ON THESE STRUCTURAL DRAWINGS. ALL DIMENSIONS ARE TO BE CHECKED AND VERIFIED WITH THE ARCHITECTURAL DRAWINGS.

G8. WELDING: ALL WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED FOR THE WELDS TO BE MADE. WELDING OF REINFORCING STEEL FOR USE IN STRUCTURAL CONCRETE OR STRUCTURAL MASONRY SHALL BE PERMITTED ONLY WHERE SPECIFICALLY DESIGNATED ON THESE PLANS OR WHERE SPECIFICALLY APPROVED BY THE ENGINEER.

G9. SAFETY: THE CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK, ADJACENT PROPERTY, AND THE PUBLIC, AND BE RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLIGENCE.

G10. INSPECTIONS: ANY INSPECTIONS, SPECIAL OR OTHERWISE, THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS, OR THESE PLANS, SHALL BE PERFORMED BY AN INDEPENDENT INSPECTION COMPANY. JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE OR SUBSTITUTE FOR THESE INSPECTIONS.

G11. SHOP DRAWINGS: SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT, AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.

G12. SHOP DRAWING CHECK: THE CONTRACTOR SHALL SUPPLY THE ENGINEER WITH CHECKED SHOP DRAWINGS BEARING THE CONTRACTOR'S STAMP OF APPROVAL A MINIMUM FIVE (5) WEEKS PRIOR TO FABRICATION. THE REVIEW OF SHOP DRAWINGS BY THE ENGINEER IS ONLY FOR GENERAL COMPLIANCE WITH THE STRUCTURAL DRAWINGS AND SPECIFICATIONS. THIS REVIEW DOES NOT GUARANTEE IN ANY WAY THAT THE SHOP DRAWINGS ARE CORRECT, COMPLETE, NOR DOES IT INFER THAT THEY SUPERSEDE THE STRUCTURAL DRAWINGS.

G13. PRINCIPAL OPENINGS ARE SHOWN ON THE DRAWINGS. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SLEEVES, CURBS, INSERTS AND OTHER OPENINGS NOT SHOWN. THE CONTRACTOR SHALL PROVIDE FOR ALL OPENINGS WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT. SIZE AND LOCATION OF ALL OPENINGS SHALL BE VERIFIED WITH THE MECHANICAL CONTRACTOR. ANY DEVIATION FROM OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR APPROVAL PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.

G14. LOADINGS FOR MECHANICAL EQUIPMENT ARE BASED ON THE UNITS SHOWN ON THE STRUCTURAL DRAWINGS. ANY CHANGES IN TYPE, SIZE, OR NUMBER OF PIECES OF EQUIPMENT SHALL BE REPORTED TO THE ARCHITECT FOR VERIFICATION OF THE ADEQUACY OF SUPPORTING MEMBERS PRIOR TO THE PLACEMENT OF SUCH EQUIPMENT.

G15. THE CONTRACTOR SHALL ENSURE THAT CONSTRUCTION MATERIALS WHOSE WEIGHT EXCEEDS THE DESIGN LIVE LOADS INDICATED ON THE STRUCTURAL DRAWINGS ARE NOT STORED ON STRUCTURALLY SUPPORTED FLOOR OR ROOF FRAMING.

G16. CONTRACTOR SHALL COORDINATE GRADES WITH CIVIL ENGINEER'S GRADING PLANS AND ARCHITECT'S PLANS.

2 - FOUNDATION

F1. FOUNDATION DESIGNS ARE BASED ON A NET ALLOWABLE BEARING PRESSURE OF 2,100 PSF FOR CONTINUOUS FOOTINGS BEARING ON PROPERLY COMPACTED STRUCTURAL FILL OR PROPERLY PREPARED EXISTING CLAY SOILS IN ACCORDANCE WITH SOILS REPORT NO. 24-28620 DATED APRIL 11, 2024, PREPARED BY RONE ENGINEERING. CAPACITY SHALL BE VERIFIED BY AN INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT.

F2. THE CONTRACTOR MUST READ THE SOILS REPORT AND BE THOROUGHLY FAMILIAR WITH SITE AND SUBGRADE INFORMATION GIVEN THEREIN. ALL SUBGRADE PREPARATION, FILL PLACEMENT, AND FOUNDATION CONSTRUCTION SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE STRUCTURAL DOCUMENTS AND THE SOILS REPORT, AND SHALL BE OBSERVED, TESTED, AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO PROCEEDING.

F3. ALL FILL PLACEMENT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS REPORT. PRIOR TO FILL PLACEMENT, SCARIFY, MOISTURE-CONDITION, AND COMPACT THE EXPOSED GRADE AS DETAILED IN THE SOILS REPORT.

F4. THE FLOOR SLAB SHALL SUPPORTED BY 24 INCHES MINIMUM OF LOW VOLUME CHANGE STRUCTURAL FILL MEETING THE REQUIREMENTS OF THE SOILS REPORT.

F4. IF EXISTING STRUCTURES, FOUNDATIONS, UTILITIES, UNDOCUMENTED FILL, ETC. ARE ENCOUNTERED, THEY SHALL BE REMOVED AND THE RESULTING EXCAVATION DEEPENED AND WIDENED AS NECESSARY TO REMOVE UNSUITABLE MATERIALS.

F5. FOOTINGS SHALL BEAR AT OR BELOW MINIMUM BEARING DEPTH. MINIMUM BEARING DEPTH IS AT LEAST 12" BELOW ADJACENT EXTERIOR FINISHED GRADE AND/OR FINISHED FLOOR ELEVATION, WHICHEVER IS LOWER. FOOTINGS SHALL NOT BEAR ON EXISTING FILL MATERIAL.

F6. FOOTING DIMENSIONS AND/OR LOCATIONS MAY NOT BE ALTERED WITHOUT APPROVAL OF THE ENGINEER OF RECORD.

F7. ALL FOOTING EXCAVATIONS SHALL BE NEAT, CLEAN AND SQUARE. IF EARTH-FORMING OF FOOTINGS CANNOT BE PERFORMED IN THIS MANNER AND TO THE SATISFACTION OF THE AOR/EOR, CONVENTIONAL WOOD/STEEL FORMS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

F8. THE FINAL BUILDING PAD SHALL BE APPROVED BY THE OWNERS' GEOTECHNICAL REPRESENTATIVE PRIOR TO POURING CONCRETE.

F9. HORIZONTAL BARS IN FOOTINGS AND STEM WALLS SHALL BE CONTINUOUS. PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS. REFERENCE TYPICAL CORNER BAR DETAIL.

F10. STANDARD PROCEDURES OF FROST PROTECTION FOR FOUNDATIONS AND EXCAVATIONS SHALL BE EMPLOYED FOR WINTER CONSTRUCTION. BACKFILLING OF EXCAVATIONS SHALL BE PERFORMED AS SOON AS POSSIBLE TO PROTECT FOUNDATIONS FROM FROST.

F11. FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER.

3 - SLAB-ON-GRADE

SOG1. SLABS-ON-GRADE ARE REINFORCED CONCRETE. REFERENCE FOUNDATION PLAN FOR SIZE AND SPACING OF REINFORCEMENT.

SOG2. SLABS-ON-GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE 'GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION', ACI 302.1.

SOG3. THE FLOOR SLAB SHALL BEAR ON A 4-INCH THICK COMPACTED LAYER OF 3/4" CLEAN LIMESTONE OR AB-3, WITH VAPOR RETARDER, OVER PROPERLY PREPARED AND COMPACTED LOW VOLUME CHANGE (LVC) MATERIAL. THE 4" LAYER MAY BE COUNTED AS PART OF THE LVC ZONE. REFER TO THE SOILS REPORT FOR ALL BUILDING PAD PREPARATION REQUIREMENTS.

SOG4. THE FINAL BUILDING PAD SHALL BE APPROVED BY THE OWNERS' GEOTECHNICAL REPRESENTATIVE PRIOR TO POURING CONCRETE.

SOG5. A VAPOR RETARDER MEETING THE REQUIREMENTS OF ASTM E-1745 CLASS A SHALLBE PLACED BELOW THE FLOOR SLAB. REFER TO THE FOUNDATION PLAN FOR RETARDER THICKNESS AND THE SOILS REPORT FOR LOCATION OF THE RETARDER BELOW THE SLAB.

SOG6. ANY STANDING WATER ON THE SURFACE OF THE VAPOR RETARDER SHALL BE REMOVED PRIOR TO CONCRETE PLACEMENT.

SOG7. INSTALL AND INSPECT VAPOR RETARDER IN ACCORDANCE WITH ASTM E-1643 AND MANUFACTURER'S RECOMMENDATIONS. JOIN SECTIONS OF VAPOR RETARDER AND SEAL PENETRATIONS WITH MASTIC TAPE, LAPPING JOINTS A MINIMUM OF 6". SEAL ALL PUNCTURES AND TEARS IN MEMBRANE AND SEAL AROUND ALL PIPE PENETRATIONS. TURN VAPOR RETARDER DOWN AT PERIMETER WALLS AND SEAL TO WALL. ENSURE ALL SURFACES TO RECEIVE MASTIC OR MASTIC TAPE ARE CLEAN AND DRY.

SOG8. PROVIDE SAW CUT JOINTS AT A MAXIMUM SPACING OF 12'-0" OC EACH WAY UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS.

S0G9. PROVIDE (2) #4 x 2'-0" BARS PLACED 1 1/2" BELOW TOP OF SLAB AND LOCATED DIAGONALLY AT SLAB RE-ENTRANT CORNERS. REFERENCE TYPICAL RE-ENTRANT CORNER BAR DETAIL.

SOG10. INTERIOR FLOOR SLABS-ON-GRADE SHALL BE CONSTRUCTED WITH AN OVERALL FLATNESS AND LEVELNESS VALUE OF FF=35 AND FL=25, AND A MINIMUM LOCAL VALUE OF FF=24 AND LL=17. REFER TO ACI 117 AND ASTM E-1155.

4 - CONCRETE AND REINFORCING STEEL

C1. ALL CONCRETE SHALL BE LABORATORY TESTED AND CONTROLLED AND MEET THE REQUIREMENTS OF ACI 318. UNLESS NOTED OTHERWISE, ALL CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:

INTERIOR SLABS-ON-GRADE AND FOOTINGS - 28 DAY STRENGTH = 4,000 PSI, SLUMP = 3" - 5", MAX W/C RATIO = 0.50, MAX AGGREGATE SIZE = 3/4", ACI EXPOSURE CLASS = F0.

C2. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150, TYPE I OR II.

C3. AGGREGATE SHALL CONFORM TO ASTM C-33 H.R. AND BE FROM A SINGLE SOURCE.

C4. THE CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR REVIEW A MINIMUM OF TWO WEEKS PRIOR THE FIRST CONCRETE POUR.

C5. REFER TO ACI 318 FOR CONCRETE COVER, ACI 315 FOR DETAILING PRACTICES AND FABRICATION, AND ACI 301 FOR STANDARD PRACTICE FOR MIXING AND PLACING CONCRETE.

C6. REINFORCING STEEL SHALL MEET ASTM SPECIFICATION A-615, LATEST REVISION. BARS SHALL BE GRADE 60.

C7. DETAILING OF CONCRETE REINFORCEMENT AND ACCESSORIES SHALL CONFORM TO ACI 315.

C8. SPLICE REINFORCING BARS AS INDICATED ON DRAWINGS. PROVIDE STANDARD ACI HOOK FOR CONTINUOUS BARS AT DISCONTINUOUS ENDS.

5 - CONCRETE MASONRY UNITS

M1. ALL MASONRY WORK SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6).

M2. CONCRETE MASONRY UNITS SHALL MEET ASTM SPECIFICATION C 90. THE SPECIFIED DESIGN COMPRESSIVE STRENGTH OF CONCRETE MASONRY (f'm) SHALL BE 1,500 PSI AND A 2,000 PSI NET AREA COMPRESSIVE STRENGTH CONCRETE MASONRY UNIT.

M3. MORTAR SHALL MEET THE PROPERTY SPECIFICATIONS OF ASTM C 270 TYPE "S" MORTAR. MASONRY CEMENT SHALL NOT BE USED FOR MORTAR.

M4. GROUT SHALL MEET ASTM SPECIFICATION C 476 AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,000 PSI.

M5. GROUT SHALL BE MECHANICALLY CONSOLIDATED USING A VIBRATOR WITH A MAXIMUM 3/4" DIAMETER HEAD.

M6. CONCRETE MASONRY SHALL BE LAID IN RUNNING (COMMON) BOND.

M7. ALL HORIZONTAL JOINT REINFORCEMENT SHALL BE HOT-DIPPED GALVANIZED 9 GAGE WIRE REINFORCEMENT (LADDER TYPE) EMBEDDED IN MORTAR JOINTS AT 16" O.C. JOINT REINFORCEMENT SHALL COMPLY WITH ASTM A 951 AND SHALL BE LAPPED 6" WITH AT LEAST ONE CROSS WIRE WITHIN LAP. USE OPEN KNOCK OUT BOND BEAM BLOCK. DO NOT USE TROUGH TYPE BLOCKS FOR BOND BEAMS. DO NOT CONTINUE BOND BEAM REINFORCING THROUGH CONTROL JOINTS, UNO.

GENERAL NOTES

6 - STRUCTURAL STEEL

S1. STRUCTURAL STEEL SHALL BE NEW AND CONFORM TO AISC 'SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS', LATEST APPROVED EDITION.

S2. ALL STEEL SHALL MEET THE FOLLOWING MINIMUM YIELD STRENGTHS AND SPECIFICATIONS:
WIDE FLANGE STEEL SHAPES, A992----------50 KSI
HOLLOW STRUCTURAL SECTIONS (HSS), SQUARE AND RECTANGULAR, A500 GRADE C----------50 KSI
HOLLOW STRUCTURAL SECTIONS (HSS), ROUND, A500 GRADE C----------46 KSI
CHANNELS, ANGLES, BARS AND PLATES, A36----------36 KSI
HEADED STUD ANCHORS (HSA), A108 GRADE DESIGNATIONS 1010 TO 1020 INCLUSIVE----------50 KSI
BOLTS (HEAVY-HEX), A325----------92 KSI
NUTS (HEAVY-HEX), A563
WASHERS, HARDENED, F436
WASHERS, PLAIN, F844
ANCHOR BOLTS AND RODS, F1554, GRADE 36----------36 KSI

S3. BOLTS FOR STEEL BEAM AND COLUMN CONNECTIONS SHALL BE 3/4" DIAMETER ASTM A 325-N HIGH-STRENGTH BOLTS, UNO. ALL BOLTED CONNECTIONS ARE BEARING TYPE. ALL BOLTS SHALL BE TIGHTENED SNUG TIGHT, UNO.

S4. PROVIDE HARDENED WASHERS FOR ALL HIGH STRENGTH BOLTS, UNO.

S5. PROVIDE DOUBLE NUTS AND DOUBLE WASHERS FOR STEEL COLUMN ANCHOR BOLTS TO ALLOW FOR ADJUSTMENT IN BASE PLATE ELEVATION. PROVIDE HIGH STRENGTH, NON-SHRINK, NON-METALLIC GROUT BELOW BASE PLATES.

S6. THE FABRICATOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ADEQUACY OF CONNECTIONS THAT ARE NOT DESIGNED OR FULLY DETAILED ON THE CONTRACT DOCUMENTS.

S7. STEEL MEMBERS SHALL NOT BE SPLICED EXCEPT WHERE SHOWN ON THE DRAWINGS, UNLESS APPROVED BY THE ENGINEER.

S8. WELDING SHALL MEET ANSI/AWS D1.1 STRUCTURAL WELDING CODE. ELECTRODES SHALL BE 70 KSI LOW HYDROGEN.

S9. HOT DIP GALVANIZE ALL STRUCTURAL STEEL EXPOSED TO WEATHER.

S10. ALL STRUCTURAL STEEL, EXCEPT EMBEDDED OR GALVANIZED ITEMS, SHALL BE PAINTED WITH ONE SHOP COAT OF RUST INHIBITIVE PAINT.

7 - WOOD SHEATHING

WS1. ROOF SHEATHING SHALL BE 19/32" THICK EXPOSURE I RATED PANEL (PLYWOOD OR OSB) WITH MINIMUM SPAN INDEX 40/20. BLOCKING OF UNSUPPORTED EDGES SHALL NOT BE REQUIRED, UNO. H-CLIPS SHALL BE USED TO SUPPORT EDGES OF THE PLYWOOD SHEATHING BETWEEN THE JOISTS.

WS2. MINIMUM ROOF DIAPHRAGM NAILING SHALL BE AS INDICATED IN THE TYPICAL ROOF SHEATHING FASTENING DIAGRAM.

WS3. LAY ROOF PANELS WITH FACE GRAIN PERPENDICULAR TO FRAMING AS INDICATED IN THE PLANS.

WS4. EXTERIOR WALL SHEATHING SHALL BE MINIMUM 15/32" THICK EXPOSURE I RATED PANEL (PLYWOOD OR OSB) WITH MINIMUM SPAN RATING OF 32/16. WOOD PANELS SHALL CONFORM TO DOC PS-1 AND PS-2.

WS5. EXTERIOR SHEAR WALL SHEATHING SHALL BE AS INDICATED IN THE SHEAR WALL SCHEDULE. REF ARCH FOR ALL OTHER WALL SHEATHING.

WS6. ALL SHEATHING PANEL EDGES AT SHEAR WALL LOCATIONS SHALL BE BLOCKED AS INDICATED IN THE SHEAR WALL SCHEDULE.

WS7. REFER TO THE SHEAR WALL SCHEDULE FOR REQUIRED ATTACHMENT AT EXTERIOR SHEAR WALLS. WHERE EXTERIOR WALLS ARE NOT CLASSIFIED AS SHEAR WALLS, MINIMUM EXTERIOR WALL SHEATHING ATTACHMENT SHALL BE 8d NAILS SPACED AT 6" ALONG PANEL EDGES AND AT 12" IN THE FIELD.

8 - WOOD FRAMING

W1. ALL ROUGH CARPENTRY SHALL PRODUCE JOINTS TRUE AND TIGHT AND WELL NAILED WITH MEMBERS ASSEMBLED IN ACCORDANCE WITH THE DRAWINGS AND WITH ALL PERTINENT BUILDING CODES. THE SHIMMING OF SILLS, JOISTS, SHORT STUDS, TRIMMERS, HEADERS, OR OTHER FRAMING MEMBERS SHALL NOT BE PERMITTED. ALL WALLS AND PARTITIONS SHALL BE STRAIGHT, PLUMB, AND ACCURATELY LOCATED. CAREFULLY SELECT ALL STRUCTURAL MEMBERS. INDIVIDUAL PIECES SHALL BE SELECTED SO THAT KNOTS AND OBVIOUS MINOR DEFECTS WILL NOT BE INTERFERE WITH THE PLACING OF BOLTS, OR PROPER NAILING, OR THE MAKING OF THE SOUND CONNECTION. LUMBER MAY BE REJECTED BY THE ENGINEER OR ARCHITECT FOR EXCESSIVE WARP, TWIST, BOW OR CROOK, MILDEW, FUNGUS OR MOLD AS WELL AS IMPROPER GRADE MARKING. DEFECTS WHICH RENDER A PIECE UNABLE TO SERVE ITS INTENDED FUNCTION SHALL BE DISCARDED.

W2. EACH PIECE OF STRUCTURAL LUMBER, SHEATHING, AND TIMBER SHALL BE RATED AND MARKED WITH THE GRADE BY SUCH COMPETENT AND RELIABLE ORGANIZATION WHOSE REGULAR BUSINESS IS TO ESTABLISH LUMBER GRADES. THE ORGANIZATION, GRADING AND MARKING SUBJECTED TO APPROVAL BY THE ENGINEER.

W3. ALL LUMBER, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, SHALL BE MILL SIZED AND SURFACED ON 4 SIDES. ALL SHALL BE STRAIGHT STOCK, FREE FROM WARP OR CUP, AND SINGLE LENGTH PIECES.

W4. BUILDING PAPER: SHALL BE THE STANDARD PRODUCT OF A MAJOR MANUFACTURER, SUITABLE FOR THE USES INTENDED, AND WEIGHING AT LEAST 14 POUNDS PER 100 SQUARE FEET.

W5. ROUGH HARDWARE: JOIST HANGERS, STRAPS, HOLD DOWNS, ETC., SHALL BE AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUIVALENT. THE MAXIMUM SIZE AND NUMBER OF FASTENERS SPECIFIED BY THE MANUFACTURER SHALL BE USED UNLESS NOTED OTHERWISE.

W6. INSTALL ALL BLOCKING AS REQUIRED TO SUPPORT ALL ITEMS OF FINISH SUCH AS BULK HEADS AND DOOR BUCKS. PROVIDE FIRE BLOCKING TO CUT OFF ALL CONCEALED DRAFT OPENINGS, BOTH VERTICAL AND HORIZONTAL BETWEEN CEILING AND FLOOR AREAS. VERIFY ALL REQUIRED BLOCKING WITH LOCAL BUILDING OFFICIAL.

W7. BOLTS SHALL BE INSTALLED IN HOLES BORED WITH A BIT 1/16" LARGER THAN THE DIAMETER OF THE BOLT. BOLTS AND NUTS SEATING ON WOOD SHALL HAVE CUT STEEL WASHERS UNDER HEADS AND NUTS. NUTS SHALL BE PULLED TIGHT AND AGAIN CHECKED TIGHTENED JUST PRIOR TO ENCLOSING BOLTED MEMBERS. COUNTER BORE FOR BOLTED HEADS OR NUTS ONLY WHERE SO INDICATED ON THE DRAWINGS, AND THEN ONLY TO SUFFICIENT DEPTH TO HOUSE THE BOLT OR HEAD OR NUT AND WASHER. CUT OFF EXCESSIVE PROJECTIONS WHERE NECESSARY. NICK THREADS TO PREVENT LOOSENING.

W8. LAG SCREWS SHALL BE SCREWED AND NOT DRIVEN INTO PLACED. LAG SCREWS FASTENING ONE WOOD MEMBER TO ANOTHER SHALL HAVE A PENETRATION INTO FAR MEMBER OF NOT LESS THAN 2/3 OF THE LENGTH OF THE LAG SCREW MEASURED UNDER THE HEAD. IN PLACING LAG SCREWS IN WOOD, A HOLE SHALL FIRST BE BORED OF THE SAME DIAMETER AND DEPTH OF THE SHANK OF THE SCREW, AFTER WHICH THE HOLE SHALL BE CONTINUED TO A DEPTH EQUAL TO THE LENGTH OF THE LAG SCREW WITH A DIAMETER EQUAL TO THE DIAMETER OF THE SCREW AT THE ROOT OF THE THREAD.

W9. COMMON NAILS SHALL BE USED WHEN NAILING IS SPECIFIED ON THESE PLANS, SUCH AS AT SHEAR WALLS AND DIAPHRAGMS. ALL OTHER NAILING SHALL BE SUBMITTED TO THE ENGINEER WITH APPROPRIATE TESTING CERTIFICATION PRIOR TO CONSTRUCTION FOR APPROVAL. COMMON NAIL SIZES ARE AS FOLLOWS:
- 6d – 2" x 0.113" DIAMETER
- 8d – 2 1/2" x 0.131" DIAMETER
- 10d – 3" x 0.148" DIAMETER
- 12d – 3 1/4" x 0.148" DIAMETER
- 16d – 3 1/2" x 0.162" DIAMETER
- 20d – 4" x 0.192" DIAMETER

W10. ALL MEMBER SIZES GIVEN IN THE DRAWINGS ARE NOMINAL DIMENSIONS.

W11. HEADERS SHALL BEAR FULLY ON JACK STUDS.

W12. WOOD JOISTS SHALL BEAR ON THE FULL WIDTH OF SUPPORTING MEMBERS (STUD WALLS, BEAMS, ETC.) UNLESS OTHERWISE NOTED.

W13. BOTTOM PLATES OF ALL GROUND FLOOR STUD WALLS IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED IMPREGNATED WITH WATERBORNE PRESERVATIVE IN ACCORDANCE WITH THE AMERICAN WOOD PRESERVATIVE BUREAU (AWPB) STANDARD LP-2, OF LATEST ADOPTION.

W14. BOTTOM PLATES AT CONCRETE SLABS SHALL BE ATTACHED WITH GALV 1/2" DIA SIMPSON TITEN HD (Hnom=5") AT 24" OC, REFER TO SHEAR WALL AND TYPICAL DETAILS.

W15. ALL LUMBER SHALL BE SEASONED TO A MOISTURE CONTENT OF 19 PERCENT OR LESS, WITH THE INDICATION OF 'S-DRY' ON THE GRADE STAMP.

W16. LUMBER SHALL BE PROTECTED FROM THE ELEMENTS UNTIL SUCH TIME IT IS USED IN CONSTRUCTION.

W17. ALL BOLTS AND LAG BOLTS SHALL BE FITTED WITH GALVANIZED, MALLEABLE IRON OR STEEL PLATE WASHERS.

W18. AT ALL LOCATIONS, WALL STUDS, JAMB STUDS AND BEAM SUPPORT STUDS SHALL HAVE ADEQUATE SOLID MEMBERS PLACED BELOW TO CARRY ALL VERTICAL LOADS.

W19. INSTALL ROUGH CARPENTRY WORK TO COMPLY WITH APPLICABLE CODE STANDARDS UNLESS OTHERWISE INDICATED. FOR SHEATHING, UNDERLAYMENT AND OTHER PRODUCTS NOT COVERED IN ABOVE STANDARDS. COMPLY WITH RECOMMENDATIONS OF MANUFACTURER OF PRODUCT INVOLVED FOR USE INTENDED. SET CARPENTRY WORK TO REQUIRED LEVELS AND LINES, WITH MEMBERS PLUMB AND TRUE AND CUT TO FIT.

W20. SECURELY ATTACH CARPENTRY WORK TO SUBSTRATES AND SUPPORTING MEMBERS USING FASTENERS OF SIZE THAT WILL NOT PENETRATE MEMBERS WHERE OPPOSITE SIDE WILL BE EXPOSED TO VIEW OR RECEIVE FINISH MATERIALS. INSTALL FASTENERS WITHOUT SPLITTING WOOD; FASTEN PANEL PRODUCTS TO ALLOW FOR EXPANSION AT JOINTS UNLESS OTHERWISE INDICATED.

W21. PROVIDE WOOD FRAMING MEMBERS OF SIZE AND SPACING INDICATED. DO NOT SPLICE STRUCTURAL MEMBERS BETWEEN SUPPORTS.

W22. FASTEN 2-PLY AND 3-PLY DIMENSION LUMBER BEAMS TOGETHER USING 2 ROWS OF 10d NAILS STAGGERED AT 6" O.C. WOOD HEADERS OR POSTS MADE UP OF 2 OR MORE 2x's SHALL BE SPIKED TOGETHER.

W23. PROVIDE A SINGLE PLATE AT THE BOTTOM AND A DOUBLE PLATE AT THE TOP OF ALL STUD WALLS.

9 - PREFABRICATED WOOD TRUSSES

WT1. ALL PREFABRICATED WOOD TRUSSES SHALL BE FURNISHED IN ACCORDANCE WITH DESIGNS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT, USING THE DESIGN LOADS AND SPAN CONSIDERATION INDICATED ON THE CONTRACT DOCUMENTS. NO DEVIATION OF TRUSS SHAPE, MEMBER SIZE, BEARING POINT LOCATIONS, OR SUPERIMPOSED LOADS FROM THE CONTRACT DOCUMENTS SHALL BE PERMITTED WITHOUT APPROVAL OF THE ARCHITECT AND/OR ENGINEER.

WT2. SHOP DRAWINGS, INCLUDING AN OVERALL ERECTION PLAN, INDICATING EACH TYPE OF TRUSS, TRUSS BEARING POINT LOCATIONS AND REACTIONS, REQUIRED LATERAL BRACING, EACH TRUSS MEMBER'S SIZE AND STRESS, AND CONNECTION DETAILS SHALL BE SUBMITTED FOR PRIOR APPROVAL TO THE CONTRACTOR.

WT3. CERTIFIED CALCULATIONS SHALL BE PROVIDED FOR EACH TRUSS DESIGN. ALL WET STAMPED CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND DESIGN ENGINEER FOR REVIEW AND BUILDING DEPARTMENT APPROVAL PRIOR TO FABRICATION.

WT4. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROPERLY BRACE TRUSSES DURING LIFTING AND ERECTION.

WT5. OVERALL TRUSS DIMENSIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS PRIOR TO FABRICATION.

WT6. THE MOISTURE CONTENT OF ALL LUMBER SHALL BE WITHIN PROPER LIMITS, AS STATED IN THE REFERENCE SPECIFICATIONS, BUT SHALL NOT IN ANY CASE, EXCEED 19 PERCENT NOR BE LESS THAN 7 PERCENT AT THE TIME OF FABRICATION.

WT7. ALL TRUSS MEMBERS SHALL BE ACCURATELY CUT TO LENGTH, ANGLE, AND TRUE LINE TO ASSURE TIGHT JOINTS FOR FINISHED TRUSS.

WT8. DEAD KNOTS AND WANES ON LUMBER SHALL NOT BE PRESENT UNDER THE CONNECTION PLATES.

WT9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE COVER AND PROTECTION FROM WEATHER, CORROSION, BENDING, DAMAGE, AND DETERIORATION WHEN STORED ON THE JOBSITE.

WT10. WT10.THE SIZE AND CONFIGURATION OF THE TRUSS WEB AND CHORD MEMBERS SHALL BE DETERMINED BY THE TRUSS MANUFACTURER.

WT11. TRUSSES SHALL BE DESIGNED FOR THE LOADING AS NOTED ON THESE PLANS.

GENERAL NOTES

WT12. MAXIMUM LIVE LOAD DEFLECTIONS SHALL BE SPAN LENGTH/240 FOR THE ROOF TRUSSES AND SPAN LENGTH/360 FOR FLOOR, BALCONY, AND BREEZEWAY/CORRIDOR TRUSSES. THE MAXIMUM DEFLECTION SHALL NOT EXCEED 1 INCH.

WT13. THE TRUSS MANUFACTURER SHALL DESIGN ALL TRUSS HEADERS, CONTINUOUS BEARING MEMBERS, AND SHEAR PANELS FOR ALL GRAVITY, WIND LOADS NOTED ON THESE PLANS.

WT14. ALL TRUSS-TO-TRUSS AND TRUSS-TO-BEAM CONNECTIONS SHALL BE DESIGNED AND SUPPLIED BY THE TRUSS MANUFACTURER.

WT15. ALL TRUSS REPAIRS MADE IN THE FIELD SHALL BE DOCUMENTED BY THE CONTRACTOR. A SIGNED AND SEALED ENGINEERED REPAIR SHALL BE REQUIRED IN ALL CASES

WT16. ALL MULTI-PLY TRUSSES SHALL BE ATTACHED TOGETHER WITH A-307 BOLTS AT A SPACING OF 12 INCHES OR AS PER THE RECOMMENDATIONS OF THE TRUSS MANUFACTURER.

WT17. FIELD NOTCHING OR CUTTING OF TRUSSES IS PROHIBITED. ANY MODIFICATIONS, IF REQUIRED, SHALL BE MADE UNDER THE DIRECTION OF THE TRUSS ENGINEER.

WT18. PROVIDE A MINIMUM OF ONE STUD UNDER EACH TRUSS PLY AT GIRDERS UNLESS NOTED OTHERWISE ON STRUCTURAL DRAWINGS.

WT19. REFER TO STANDARD PERMANENT BRACING SHEET FOR ATTACHMENT OF ALL REQUIRED PERMANENT BRACING FOR TRUSSES.

WT20. FINGER JOINTED MATERIAL SHALL NOT BE USED AS PERMANENT WEB OR DIAGONAL BRACES.

WT21. THE DESIGN, MATERIAL AND FABRICATION CRITERIA OF PREFABRICATED WOOD TRUSSES SHALL BE IN ACCORDANCE WITH THE STRICTER OF THE FOLLOWING DESIGN STANDARDS:
A. TRUSS PLATE INSTITUTE, TPI-14, "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES".
B. THE REFERENCE BUILDING CODE.

10 - WOOD PROPERTIES

ALL DIM

SPECIAL INSPECTIONS AND TESTING

1. THE OWNER SHALL EMPLOY QUALIFIED SPECIAL INSPECTORS TO PERFORM INSPECTIONS IN ACCORDANCE WITH THE BUILDING CODE. INSPECTORS SHALL PERFORM ALL DUTIES AND RESPONSIBILITIES AS REQUIRED BY THE BUILDING CODE. JOB SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AND ARE NOT A SUBSTITUTE FOR SPECIAL INSPECTIONS.
2. THE FOLLOWING SCHEDULE CONTAINS A LIST OF THE SPECIAL INSPECTION ACTIVITIES RELATED TO THE QUALITY ASSURANCE PLAN REQUIRED BY IBC CHAPTER 17 FOR THE FABRICATION, ERECTION AND CONSTRUCTION OF THE STRUCTURAL SYSTEMS AS DESCRIBED IN THE SPECIFICATION AND DRAWINGS FOR THE PROJECT. ALL INSPECTORS SHALL BE QUALIFIED BY TRAINING AND EXPERIENCE FOR THE REQUIRED INSPECTIONS AND TEST PROCEDURES. REFER TO IBC CHAPTER 17 AND THE PROJECT SPECIFICATIONS FOR SPECIFIC TEST PROCEDURES.
3. TESTING AND INSPECTION REPORTS SHALL BE PREPARED FOR EACH INSPECTION ITEM ON A DAILY BASIS WHENEVER INSPECTIONS ARE MADE ON THAT ITEM. REPORTS SHALL BE DISTRIBUTED TO THE OWNER, CONTRACTOR, ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING OFFICIAL (IF REQUESTED), FOR THEIR REVIEW, COMMENT, AND ACTION, AS NECESSARY.
4. ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS REQUIRING SPECIAL INSPECTIONS PER SECTION 1705 OF THE IBC HAVE NOT BEEN LISTED HERE. REFER TO THE ARCHITECT AND MECHANICAL ENGINEER FOR SPECIAL INSPECTION REQUIREMENTS FOR THESE COMPONENTS.
5. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THESE TESTS AND INSPECTIONS ARE PERFORMED.
6. REFER TO THE PROJECT SPECIFICATIONS FOR MORE SPECIFIC INSPECTION AND TESTING INFORMATION.

IBC 1704.2.5
REQUIRED FABRICATOR APPROVAL

1. WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTIONS OF THE FABRICATED ITEMS SHALL BE PERFORMED DURING FABRICATION, EXCEPT WHERE THE FABRICATOR HAS BEEN APPROVED TO PERFORM WORK WITHOUT SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1704.2.5.1.

   EXCEPTION: SPECIAL INSPECTIONS SHALL NOT BE REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED ON REVIEW OF THE FABRICATOR'S WRITTEN FABRICATION PROCEDURES AND QUALITY CONTROL MANUALS THAT PROVIDE A BASIS FOR CONTROL OF MATERIALS AND WORKMANSHIP, WITH PERIODIC AUDITING OF FABRICATION AND CONTROL PRACTICES BY AN APPROVED AGENCY OR THE BUILDING OFFICIAL. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER OR THE OWNER'S AUTHORIZED AGENT FOR SUBMITTAL TO THE BUILDING OFFICIAL AS SPECIFIED IN SECTION 1704.5 STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

IBC TABLE 1705.6
REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS

	TYPE	CONTINUOUS	PERIODIC
1.	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	---	X
2.	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	---	X
3.	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	---	X
4.	VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL AND OTHER GRADING ACTIVITIES REQUIRING SPECIAL INSPECTION.	---	X
	A. ALL SOILS NOT MEETING THE REQUIREMENTS OF CATEGORY B.	---	X
	B. MODERATELY, HIGHLY OR CRITICALLY EXPANSIVE SOILS, HYDROCOLLAPSIBLE SOILS, SOLUBLE SOILS, AND/OR SOILS REQUIRING CHEMICAL OR MECHANICAL (GEOSYNTHETICS) STABILIZATION ARE ENCOUNTERED. CONSTRUCTION OR STABILIZATION OF CUT OR FILL SLOPES EXCEEDING 5 FEET IN HEIGHT, OR ANY SITE REQUIRING THAT FILL BE PLACED ON A NATURAL SLOPE, AN EXISTING CUT SLOPE, OR AN EXISTING FILL SLOPE STEEPER THAN 5:1.	X	---
5.	PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	---	X

IBC TABLE 1705.3
REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

	TYPE	CONTINUOUS	PERIODIC	REFERENCED STANDARD	IBC REFERENCE
1.	INSPECT REINFORCEMENT AND VERIFY PLACEMENT.	---	X	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2.	REINFORCING BAR WELDING:				
	A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706.	---	X	AWS D1.4 ACI 318: 26.6.4	---
	B. INSPECT SINGLE-PASS FILLET WELDS NO LARGER THAN 5/16".	---	X		
3.	INSPECT ANCHORS CAST IN CONCRETE.	---	X	ACI 318: 17.8.2	---
4.	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. REFER TO THE RESEARCH REPORT LISTED IN THE GENERAL NOTES FOR SPECIFIC REQUIREMENTS OF SPECIAL INSPECTION FOR EACH PRODUCT.				
	A. ADHESIVE ANCHORS INSTALLED HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	---	ACI 318: 17.8.2.4	---
	B. MECHANICAL OR ADHESIVE ANCHORS NOT DEFINED IN 4A.	---	X	ACI 318: 17.8.2	---
5.	VERIFY USE OF REQUIRED DESIGN MIX.	---	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF CONCRETE.	X	---	ASTM C172 ASTM C31 ACI 318: 26.4, 26.12	1908.10
7.	INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	---	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	---	X	ACI 318: 26.5.3, 26.5.5	1908.9
9.	NOT APPLICABLE	---	---	---	---
10.	NOT APPLICABLE	---	---	---	---
11.	VERIFY IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL OF SHORES AND FORMS FOR BEAMS AND STRUCTURAL SLABS.	---	X	ACI 318: 26.11.2	---
12.	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	---	X	ACI 318: 26.11.1.2 (b)	---

IBC 1704.2.5
REQUIRED WOOD TRUSS FABRICATOR APPROVAL

1. WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE PREMISES OF A FABRICATOR'S SHOP, SPECIAL INSPECTIONS OF THE FABRICATED ITEMS SHALL BE PERFORMED DURING FABRICATION. SPECIAL INSPECTIONS DURING FABRICATION ARE NOT REQUIRED WHERE THE FABRICATOR MAINTAINS APPROVED DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO THE APPROVED CONSTRUCTION DOCUMENTS AND BUILDING CODE. APPROVAL SHALL BE BASED UPON REVIEW OF FABRICATION AND QUALITY CONTROL PROCEDURES AND PERIODIC INSPECTION OF FABRICATION PRACTICES BY THE BUILDING OFFICIAL.

   EXCEPTION: SPECIAL INSPECTIONS SHALL NOT BE REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. APPROVAL SHALL BE BASED UPON REVIEW OF THE FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND PERIODIC AUDITING OF FABRICATION PRACTICES BY AN APPROVED AGENCY. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER OR OWNER'S AUTHORIZED AGENT FOR SUBMITTAL TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

IBC SECTION 1705.11
REQUIRED SPECIAL INSPECTIONS FOR WIND RESISTANCE

	TYPE	CONTINUOUS	PERIODIC
1.	WOOD CONSTRUCTION: INSPECTION OF SCREW ATTACHMENTS, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE MAIN WINDFORCE RESISTING SYSTEM, INCLUDING SHEAR WALLS, BRACES, DIAPHRAGMS, COLLECTORS (DRAG STRUTS) AND HOLD-DOWNS.	---	X
2.	WIND-RESISTING COMPONENTS: INSPECTION OF FASTENING OF ROOF COVERING, ROOF DECK, AND ROOF FRAMING CONNECTIONS, AND EXTERIOR WALL COVERING AND WALL CONNECTIONS TO ROOF AND FLOOR DIAGPHRAGMS AND FRAMING.	---	X

IBC SECTION 1705.2, AISC 360 CHAPTER N
REQUIRED SPECIAL INSPECTIONS AND TESTS OF STEEL CONSTRUCTION

STEEL - WELDING	QC INSPECTION TYPE	REFERENCED STANDARD
INSPECTION TASKS PRIOR TO WELDING		AISC 360, TABLE N5.4-1
WELDING PROCEDURE SPECIFICATIONS (WPSS) AVAILABLE	PERFORM	AWS D1.1-6.3
MANUFACTURER CERTIFICATION FOR WELDING CONSUMABLES AVAILABLE	PERFORM	AWS D1.1-6.2
MATERIAL IDENTIFICATION (TYPE/GRADE)	OBSERVE	AWS D1.1-6.2
WELDER IDENTIFICATION SYSTEM	OBSERVE	AWS D1.1-6.4
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY JOINT PREPARATION DIMENSIONS (ALIGNMENT, ROOD OPENING, ROOT FACE, BEVEL) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELD QUALITY AND LOCATION) BACKING TYPE AND FIT (IF APPLICABLE)	OBSERVE	AWS D1.1-6.5.2 AWS D1.1-5.22 AWS D1.1-5.15 AWS D1.1-5.18 AWS D1.1-5.10, 5.22.1.1
CONFIGURATION AND FINISH OF ACCESS HOLES	OBSERVE	AWS D1.1-6.5.2, 5.17
FIT UP OF FILLET WELDS DIMENSIONS (ALIGNMENT, GAPS AT ROOT) CLEANLINESS (CONDITION OF STEEL SURFACES) TACKING (TACK WELD QUALITY AND LOCATION)	OBSERVE	AWS D1.1-5.22.1 AWS D1.1-5.15 AWS D1.1-5.18
CHECK WELDING EQUIPMENT	OBSERVE	AWS D1.1-6.2, 5.11
INSPECTION TASKS DURING WELDING		AISC 360, TABLE N5.4-2
USE OF QUALIFIED WELDERS	OBSERVE	AWS D1.1-6.4
CONTROL AND HANDLING OF WELDING CONSUMABLES PACKING EXPOSURE CONTROL	OBSERVE	AWS D1.1-6.2 AWS D1.1-5.3.1 AWS D1.1-5.3.2, 5.3.3
NO WELDING OVER CRACKED TACK WELDS	OBSERVE	AWS D1.1-5.18
ENVIRONMENTAL CONDITIONS WIND SPEED WITHIN LIMITS PRECIPITATION AND TEMPERATURE	OBSERVE	AWS D1.1-5.12.1 AWS D1.1-5.12.2
WPS FOLLOWED SETTINGS ON WELDING EQUIPMENT TRAVEL SPEED SELECTED WELDING MATERIALS SHIELDING GAS TYPE/FLOW RATE PREHEAT APPLIED INTERPASS TEMPERATURE MAINTAINED (MIN/MAX) PROPER POSITION (F,V,H,OH)	OBSERVE	AWS D1.1-6.3.3,6.5.2, 5.5, 5.21 AWS D1.1-5.6, 5.7
WELDING TECHNIQUES INTERPASS AND FINAL CLEANING EACH PASS WITHIN PROFILE LIMITATIONS EACH PASS MEETS QUALITY REQUIREMENTS	OBSERVE	AWS D1.1-6.5.2, 6.5.3, 5.24 AWS D1.1-5.30.1
INSPECTION TASKS AFTER WELDING		AISC 360, TABLE N5.4-3
WELDS CLEANED	OBSERVE	AWS D1.1-5.30.1
SIZE, LENGTH, AND LOCATION OF WELDS	PERFORM	AWS D1.1-6.5.1
WELDS MEET VISUAL ACCEPTANCE CRITERIA CRACK PROHIBITION WELD/BASE-METAL FUSION CRATER CROSS SECTION WELD PROFILES WELD SIZE UNDERCUT POROSITY	PERFORM	AWS D1.1-6.5.3 TABLE 6.1 (1) TABLE 6.1 (2) TABLE 6.1 (3) TABLE 6.1 (4), 5.24 TABLE 6.1 (6) TABLE 6.1 (7) TABLE 6.1 (8)
ARC STRIKES	PERFORM	AWS D1.1-5.29
K-AREA – WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CRACKS	PERFORM	---
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	PERFORM	AWS D1.1-5.10, 5.31
REPAIR ACTIVITIES	PERFORM	AWS D1.1-6.5.3, 5.26
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	PERFORM	AWS D1.1-6.5.4, 6.5.5

STEEL - BOLTING	QC INSPECTION TYPE	REFERENCED STANDARD
INSPECTION TASKS PRIOR TO BOLTING		AISC 360, TABLE N5.6-1
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	OBSERVE	RSCS 2.1, 9.1
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	OBSERVE	RSCS 2.1, 9.1 , ASTM STANDARDS
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	OBSERVE	RSCS 2.3.2, 2.7.2, 9.1
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	OBSERVE	RCSC 4, 8
CONNECTING ELEMENTS INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATIONS, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	OBSERVE	RCSC 3, 9.1, 9.3
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	PERFORM	RCSC 7, 9.3
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	OBSERVE	RCSC 2.2, 8, 9.1
INSPECTION TASKS DURING BOLTING		AISC 360, TABLE N5.6-2
FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	OBSERVE	RCSC 8.1, 9.1
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	OBSERVE	RCSC 8.1, 9.1
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	OBSERVE	RCSC 8.2, 9.2
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARDS THE FREE EDGES	OBSERVE	RCSC 8.2, 9.2
INSPECTION TASKS AFTER BOLTING		AISC 360, TABLE N5.6-3
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	PERFORM	---

STEEL - GENERAL	QC INSPECTION TYPE	REFERENCED STANDARD
STEEL AND OTHER STEEL VERIFICATIONS AND INSPECTIONS		AISC 360: N5.7, AISC 341
MATERIAL VERIFICATION OF STRUCTURAL STEEL -IDENTIFICATION MARKINGS TO CONFORM TO AISC 360 -MANUFACTURER'S CERTIFIED MILL REPORTS	OBSERVE	---
STRUCTURAL STEEL DETAILS ALL FABRICATED STEEL OR STEEL FRAMES SHALL BE INSPECTED TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN IN THE CONSTRUCTION DOCUMENTS, SUCH AS BRACES, STIFFENERS, MEMBER LOCATIONS, AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION	OBSERVE	---
ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL SHALL BE ON THE PREMISES DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS; VERIFY THE DIAMETER, GRADE, TYPE AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT PRIOR TO PLACEMENT OF CONCRETE	OBSERVE	---

DEFINITIONS:

PERFORM: PERFORM THESE TASKS FOR EACH WELD, FASTENER OR BOLTED CONNECTION, AND REQUIRED VERIFICATION.

OBSERVE: OBSERVE THESE ITEMS ON A RANDOM SAMPLING BASIS TO INSURE THE APPLICABLE REQUIREMENTS ARE MET. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS AT CONTRACTOR'S RISK.

NOTES:

1. REFER TO AISC 360 FOR MORE SPECIFIC INFORMATION REGARDING QUALITY CONTROL AND QUALITY ASSURANCE FOR STRUCTURAL STEEL.

ABBREVIATIONS LEGEND

ABBR	DEFINITION	ABBR	DEFINITION
AB	ANCHOR BOLT	LLH	LONG LEG HORIZONTAL
ACI	AMERICAN CONCRETE INSTITUTE	LLV	LONG LEG VERTICAL
AFF	ABOVE FINISHED FLOOR	LONG	LONGITUDINAL
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LSH	LONG SIDE HORIZONTAL
AISI	AMERICAN IRON AND STEEL INSTITUTE	LSV	LONG SIDE VERTICAL
ARCH	ARCHITECTURAL	MAX	MAXIMUM
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MECH	MECHANICAL
AWS	AMERICAN WELDING SOCIETY	MFR	MANUFACTURER
BFF	BELOW FINISHED FLOOR	MIN	MINIMUM
BO	BOTTOM OF	MISC	MISCELLANOUS
BOS	BOTTOM OF STEEL	MTL	METAL
BOT	BOTTOM	NIC	NOT IN CONTRACT
BRG	BEARING	NO	NUMBER
BTWN	BETWEEN	NS	NEAR SIDE
CJ	CONTRACTION JOINT	NTS	NOT TO SCALE
CL	CENTER LINE	OC	ON CENTER
CLR	CLEAR	OH	OPPOSITE HAND
CMU	CONCRETE MASONRY UNIT	PAF	POWER ACTUATED FASTENER
COL	COLUMN	PCF	POUNDS PER CUBIC FOOT
CONC	CONCRETE	PL	PLATE
CONN	CONNECTION	PLF	POUNDS PER LINEAR FOOT
CONST	CONSTRUCTION	PMEJ	PREMOLDED EXPANSION JOINT
CONT	CONTINUOUS	PSF	POUNDS PER SQUARE FOOT
DIA	DIAMETER	PSI	POUNDS PER SQUARE INCH
EA	EACH	REF	REFER TO
EF	EACH FACE -or- EXHAUST FAN	REINF	REINFORCING
EIFS	EXTERIOR INSULATION AND FINISH SYSTEM	RO	ROUGH OPENING
EJ	EXPANSION JOINT	RTU	ROOF TOP UNIT
EL	ELEVATION	SCHED	SCHEDULE
ELEC	ELECTRICAL	SDI	STEEL DECK INSTITUTE
EQ	EQUAL	SIM	SIMILAR
EW	EACH WAY	SJI	STEEL JOIST INSTITUTE
FDN	FOUNDATION	SPECS	SPECIFICATIONS
FF	FINISHED FLOOR	STL	STEEL
FS	FAR SIDE	STRUC	STRUCTURAL
FTG	FOOTING	T&B	TOP AND BOTTOM
FV	FIELD VERIFY	THK	THICKNESS
GA	GAUGE	TO	TOP OF
GC	GENERAL CONTRACTOR	TOC	TOP OF CONCRETE
H	HEIGHT	TOF	TOP OF FOOTING
HORIZ	HORIZONTAL	TOGB	TOP OF GRADE BEAM
HSA	HEADED STUD ANCHOR	TOM	TOP OF MASONRY
HSS	HOLLOW STRUCTURAL SHAPE	TOS	TOP OF STEEL
JBE	JOIST BEARING ELEVATION	TOW	TOP OF WALL
JST	JOIST	TRANS	TRANSVERSE
JT	JOINT	TYP	TYPICAL
KSI	KIPS PER SQUARE INCH	UNO	UNLESS NOTED OTHERWISE
L	LENGTH	VERT	VERTICAL
LB	POUNDS	W	WIDTH

DESIGN LOADS

1. GOVERNING CODES
   A. 2018 INTERNATIONAL BUILDING CODE (ASCE 7-16)

2. GRAVITY LOADS
   A. FLOOR LIVE LOAD — 150 PSF
   B. ROOF LOADS
   1. ROOF DEAD LOAD
   - TRUSS TOP CHORD — 15 PSF
   - TRUSS BOTTOM CHORD — 10 PSF
   2. ROOF LIVE LOAD — 20 PSF
   C. SNOW LOADS
   1. IMPORTANCE FACTOR (I) — 1.0
   2. SNOW EXPOSURE FACTOR (Ce) — 1.0
   3. ROOF THERMAL FACTOR (Ct) — 1.0
   1. GROUND SNOW LOAD (Pg) — 20 PSF
   5. FLAT ROOF SNOW LOAD (Pf) — 14 PSF
   6. RAIN-ON-SNOW SURCHARGE — 5 PSF
   7. MINIMUM SNOW LOAD (Pmin) — 20 PSF
   DESIGN ROOF SNOW LOAD — 20 PSF

3. LATERAL LOADS
   A. WIND LOAD CRITERIA
   1. ULTIMATE DESIGN WIND SPEED (Vult, 3-SECOND GUST) — 110 MPH
   2. NOMINAL DESIGN WIND SPEED (Vasd) — 85 MPH
   3. RISK CATEGORY — II
   4. EXPOSURE CATEGORY — C
   5. INTERNAL PRESSURE COEFFICIENT — +/- 0.18
   B. COMPONENTS AND CLADDING DESIGN WIND PRESSURES
   1. EXTERIOR WALLS (ULTIMATE, BASED ON 50 SQ FT)
   - INTERIOR AND EXTERIOR ZONE — 26.3 PSF
   - PARAPETS — 64.7 PSF
   2. WALL OPENINGS (ULTIMATE)
   - 0 TO 19 SQ FT — 31.2 PSF
   - 20 TO 49 SQ FT — 29.1 PSF
   - 50 TO 99 SQ FT — 26.3 PSF
   - 100 TO 199 SQ FT — 24.3 PSF
   - 200 TO 499 SQ FT — 22.2 PSF
   - GREATER THAN 500 SQ FT — 19.5 PSF
   3. ROOF ASSEMBLY UPLIFT (ULTIMATE)
   REFER TO ASCE 7-16, FIGURE 30.3-2A, 0.6h=9.0'
   - ZONE 1' — 23.4 PSF
   - ZONE 1 — 40.7 PSF
   - ZONE 2 — 53.7 PSF
   - ZONE 3 — 53.7 PSF
   4. UPLIFT ON ROOF TRUSSES
   - GROSS TRUSS UPLIFT (ULTIMATE) — 43.1 PSF
   - NET TRUSS UPLIFT SATISFYING EQUATION 0.6D + 0.6W (ASD) — 19.9 PSF
   C. SEISMIC LOADS
   1. RISK CATEGORY — II
   2. SEISMIC IMPORTANCE FACTOR (Ie) — 1.0
   3. 0.2 SEC. MAPPED ACCELERATION PARAMETER (Ss) — 0.099
   4. 1 SEC. MAPPED ACCELERATION PARAMETER (S1) — 0.068
   5. SOIL SITE CLASS — D
   6. 0.2 SEC. DESIGN ACCELERATION PARAMETER (SDS) — 0.106
   7. 1 SEC. DESIGN ACCELERATION PARAMETER (SD1) — 0.109
   8. SEISMIC DESIGN CATEGORY — B
   9. BUILDING - BASIC SEISMIC FORCE-RESISTING SYSTEM — STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
   10. BUILDING - DESIGN BASE SHEAR — 0.035W
   11. BUILDING - SEISMIC RESPONSE COEFFICIENT (Cs) — 0.035
   12. BUILDING - RESPONSE MODIFICATION COEFFICIENT (R) — 3.0
   13. BUILDING - ANALYSIS PROCEDURE — EQUIVALENT LATERAL FORCE
   14. MTL AWNINGS - COMPONENT IMPORTANCE FACTOR (Ip) — 1.0
   15. MTL AWNINGS - RESPONSE MODIFICATION COEFFICIENT (Rp) — 2.5
   16. MTL AWNINGS - COMPONENT AMPLICATION FACTOR (ap) — 1.0
   17. DUMPSTER SCREENWALL - COMPONENT IMPORTANCE FACTOR (Ie) — 1.0
   18. DUMPSTER SCREENWALL - RESPONSE MODIFICATION COEFFICIENT (R) — 1.25
   19. DUMPSTER SCREENWALL - COMPONENT DEFLECTION AMPLICATION FACTOR (Cd) — 2.5
   20. DUMPSTER SCREENWALL - DESIGN BASE SHEAR — 0.084W
   21. DUMPSTER SCREENWALL - DESIGN BASE SHEAR — 0.084

SAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

JOB #24-011

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ENGINEER OF RECORD

SEAL

STATE OF MISSOURI · BRIAN KIRK ELLISON · 04/29/24 · NUMBER PE-2009007270 · PROFESSIONAL ENGINEER

PERMIT SET: 04/12/24

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	04/12/2024
SCALE:	AS NOTED
DRAWN BY:	EGA
CHECKED BY:	RBG

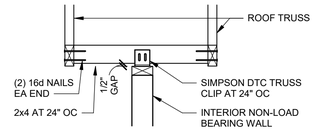
SHEET TITLE

GENERAL STRUCTURAL INFORMATION

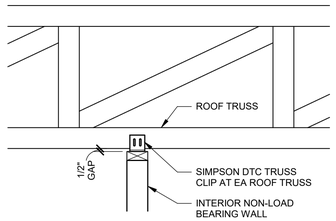
SHEET NUMBER

S002

4/30/2024 2:53:41 PM



TRUSSES PARALLEL TO WALL



TRUSSES PERPENDICULAR TO WALL

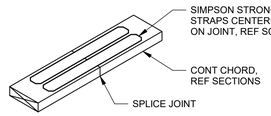
NOTE(S):
1. ATTACH EACH TRUSS CLIP WITH (4) 8d NAILS AT BASE AND (1) 8d NAIL IN EACH VERTICAL SLOT.
2. NAILS SHALL NOT BE DRIVEN COMPLETLY FLUSH AGAINST THE SLOTTED CONNECTOR TO ALLOW FOR VERTICAL MOVEMENT.
3. ALLOW 1/16" GAP BETWEEN NAIL HEAD AND TRUSS CLIP SLOTTED HOLE.
4. CENTER NAILS IN VERTICALLY SLOTTED HOLE.

10 TYPICAL PARTITION WALL CONNECTION
1" = 1'-0"

CHORD SPLICE SCHEDULE

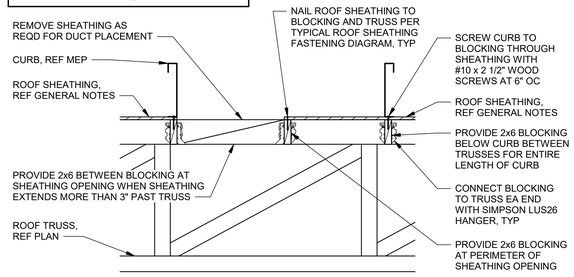
CHORD SIZE	SIMPSON STRONG-TIE STRAP		
	TYPE	QUANTITY	FASTENERS PER STRAP
2x	MST136	2	(36) 0.148 DIA x 1 1/2" NAILS EA STRAP

NOTE(S):
1. WHEN DOUBLE STRAPS ARE INDICATED IN SCHEDULE, POSITION STRAPS ADJACENT TO EACH OTHER. DO NOT OVERLAP STRAPS.
2. REFER TO SIMPSON STRONG-TIE FOR ALTERNATE FASTENERS MEETING OR EXCEEDING ALLOWABLE LOADS OF FASTENERS NOTED. ALTERNATE FASTENERS WITH A REDUCED ALLOWABLE LOAD ARE NOT ALLOWED.



9 TYPICAL CHORD SPLICE DIAGRAM AND SCHEDULE
1" = 1'-0"

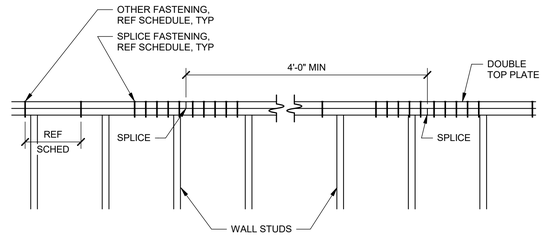
NOTE:
FOR OPENINGS WIDER THAN ROOF TRUSS SPACING, TRUSS MFR TO PROVIDE HEADER AND GIRDER TRUSSES AS REQUIRED AT OPENING.



8 ROOF EQUIPMENT SUPPORT FRAMING
3/4" = 1'-0"

TOP PLATE SPLICE SCHEDULE

TOP PLATE SIZE	SPLICE FASTENING	OTHER FASTENING
2x	(2) ROWS OF (5) 16d NAILS AT 2 1/2" OC EA SIDE OF SPLICE	(2) ROWS OF 16d NAILS AT 12" OC



7 TYPICAL TOP PLATE SPLICE DIAGRAM AND SCHEDULE
3/4" = 1'-0"

FASTENING SCHEDULE

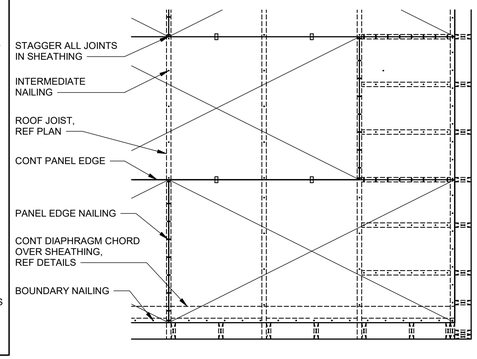
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
FLOOR		
JOIST TO SILL, TOP PLATE, OR GIRDER	(3) 8d COMMON	TOENAIL
RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8d COMMON	6" OC, TOENAIL
1"x6" SUBFLOOR OR LESS TO EA JOIST	(2) 8d COMMON	FACE NAIL
2" SUBFLOOR TO JOIST OR GIRDER	(2) 16d COMMON	FACE NAIL
2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	(2) 16d COMMON	EA BEARING, FACE NAIL
BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	20d COMMON AND: (2) 20d COMMON	32" OC, FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES ENDS AND AT EA SPLICE, FACE NAIL
BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	(2) 8d COMMON	EA END, TOENAIL
JOIST TO BAND JOIST OR RIM JOIST	(3) 16d COMMON	END NAIL
LEDGER STRIP SUPPORTING JOIST OR RAFTERS	(3) 16d COMMON	EA JOIST OR RAFTER, FACE NAIL
ROOF		
BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	(3) 8d COMMON	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT WALL TOP PLATE, TO RAFTER OR TRUSS	(2) 8d COMMON OR (2) 16d COMMON	EACH END, TOENAIL END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON AT 6" OC	FACE NAIL
CEILING JOISTS TO TOP PLATE	(3) 8d COMMON	EACH JOIST, TOENAIL
CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST)	(3) 16d COMMON	FACE NAIL
CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	SEE SECTIONS / DETAILS	FACE NAIL
COLLAR TIE TO RAFTER	(3) 10d COMMON	FACE NAIL
RAFTER OR ROOF TRUSS TO TOP PLATE	(3) 10d COMMON	TOENAIL
ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	(2) 16d COMMON OR (3) 10d COMMON	END NAIL TOENAIL
WALL		
STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON	24" OC FACE NAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16d COMMON	16" OC FACE NAIL
BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON	16" OC EA EDGE, FACE NAIL
CONTINUOUS HEADER TO STUD	(4) 8d COMMON	TOENAIL
TOP PLATE TO TOP PLATE	16d COMMON	16" OC FACE NAIL
TOP PLATE TO TOP PLATE, AT END JOINTS	(8) 16d COMMON	EA SIDE OF END JOINT, FACE NAIL (MIN 24" LAP SPLICE LENGTH EA SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON	16" OC FACE NAIL
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING AT BRACED WALL PANELS	(2) 16d COMMON	16" OC FACE NAIL
STUD TO TOP OR BOTTOM PLATE	(4) 8d COMMON OR (2) 16d COMMON	TOENAIL END NAIL
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	(2) 16d COMMON	FACE NAIL
1" BRACE TO EA STUD AND PLATE	(2) 8d COMMON	FACE NAIL
1"x6" SHEATHING TO EA BEARING	(2) 8d COMMON	FACE NAIL
1"x8" AND WIDER SHEATHING TO EA BEARING	(3) 8d COMMON	FACE NAIL

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	EDGES (INCHES)	INTERMEDIATE SUPPORTS (INCHES)
OTHER EXTERIOR WALL SHEATHING			
1/2" FIBERBOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL (7/16" DIAMETER HEAD)	3	6
25/32" FIBERBOARD SHEATHING	1 3/4" GALVANIZED ROOFING NAIL (7/16" DIAMETER HEAD)	3	6
PANEL SIDING TO FRAMING			
1/2" OR LESS	6d CORROSION-RESISTANT SIDING (1 7/8" x 0.106"); OR 6d CORROSION-RESISTANT CASING (2" x 0.099")	6	12
5/8"	8d CORROSION-RESISTANT SIDING (2 3/8" x 0.128"); OR 8d CORROSION-RESISTANT CASING (2 1/2" x 0.133")	6	12
WOOD STRUCTURAL PANELS (WSP), SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL SHEATHING TO FRAMING			
3/8" TO 1/2"	6d COMMON (SUBFLOOR AND WALL)	6	12
19/32" TO 3/4"	8d COMMON	6	12
7/8" TO 1 1/4"	10d COMMON	6	12
WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING			
1 1/8" TO 1 1/4"	10d COMMON	6	12
3/4" AND LESS	8d COMMON	6	12
7/8" TO 1"	8d COMMON	6	12

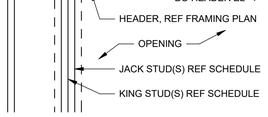
NOTE(S):
1. THIS SCHEDULE INDICATES THE MINIMUM FASTENING REQUIREMENTS. FASTENER SIZES AND QUANTITIES NOTED IN SECTIONS AND DETAILS SHALL TAKE PRECEDENCE OVER THIS FASTENING SCHEDULE.
2. COMMON NAILS SHALL BE USED EXCEPT WHERE OTHERWISE INDICATED. REFER TO GENERAL NOTES FOR COMMON NAIL LENGTHS AND DIAMETERS.

1 TYPICAL FASTENING SCHEDULE
12" = 1'-0"

SHEATHING NOTES:
1. ATTACH ROOF SHEATHING TO SUPPORTS WITH MINIMUM 10d COMMON NAILS (ASTM F1667) WITH A MINIMUM 1 1/2" PENETRATION INTO SUPPORT FRAMING AS FOLLOWS:
   - DIAPHRAGM BOUNDARIES - 6" OC
   - SUPPORTED PANEL EDGES - 6" OC
   - INTERMEDIATE FASTENING - 8" OC
2. PROVIDE 3/8" MINIMUM EDGE DISTANCE FOR SCREWS.
3. SCREWS SHALL BE LOCATED AT CENTER OF SUPPORTS AND BLOCKING, EXCEPT AT ADJOINING PANEL EDGES WHERE 3/8" MINIMUM EDGE DISTANCE SHALL BE REQUIRED.
4. SCREWS AT PANEL EDGES SHALL EXTEND THROUGH CONTINUOUS ANGLES OR STRAPS TO JOISTS OR BLOCKING.
5. SCREWS MUST PENETRATE THROUGH THE SUPPORTING STEEL WITH A MINIMUM OF THREE THREADS PROTRUDING PAST THE BACK SIDE OF THE SUPPORTING STEEL.
6. LONG DIMENSION OF SHEATHING SHALL RUN PERPENDICULAR TO SUPPORTS AND SHALL HAVE A MINIMUM OF 2 SPANS CONTINUOUS.
7. PROVIDE 1/8" GAP BETWEEN ALL SHEETS.
8. PANELS SHALL NOT BE LESS THAN 4' x 8' EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING, WHERE THE MINIMUM DIMENSION SHALL BE 24" UNLESS ALL EDGES OF THE UNDERSIZED PANELS ARE SUPPORTED AND FASTENED TO FRAMING MEMBERS OR BLOCKING.
9. PROVIDE STEEL H-CLIPS ONE PER SPAN.



6 TYPICAL ROOF SHEATHING FASTENING DIAGRAM
1/2" = 1'-0"

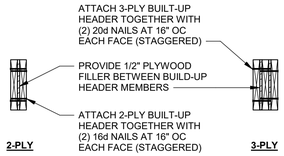


HEADER TO JAMB WITH JACK STUDS

LOAD-BEARING HEADER AND JAMB SCHEDULE

MARK	HEADER	JACK STUDS	KING STUDS
H-1	(3) 2x6	(1) 2x6	(1) 2x6
H-2	(3) 2x8	(1) 2x6	(2) 2x6
H-3	(3) 2x12 #1	(1) 2x6	(3) 2x6
H-4	(3) 1 3/4x9 1/2 LVL*	(1) 2x6	(3) 2x6

* LVL's SHALL HAVE A MINIMUM GRADE OF 1.8E.
NOTE: ALL 2x12's SHALL BE GRADE #1 OR SELECT STRUCTURAL.

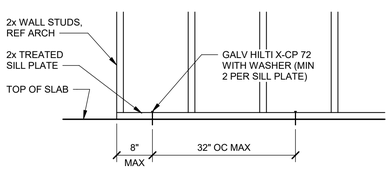


BUILT-UP HEADER

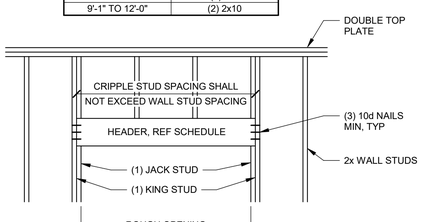
5 TYPICAL LOAD-BEARING WALL HEADER DIAGRAM
3/4" = 1'-0"

NON-LOAD BEARING HEADER SCHEDULE

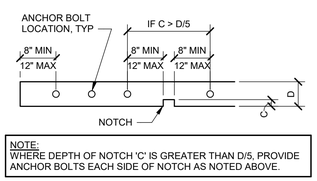
OPENING SIZE	HEADER SIZE
3'-1" TO 6'-0"	(2) 2x6
6'-1" TO 9'-0"	(2) 2x8
9'-1" TO 12'-0"	(2) 2x10



4 TYPICAL INTERIOR NON-STRUCTURAL PARTITION SILL PLATE CONNECTION
3/4" = 1'-0"

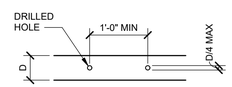


3 TYPICAL NON-LOAD BEARING HEADER DIAGRAM AND SCHEDULE
1/2" = 1'-0"



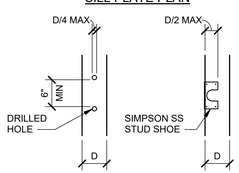
NOTE:
WHERE DEPTH OF NOTCH 'C' IS GREATER THAN D/5, PROVIDE ANCHOR BOLTS EACH SIDE OF NOTCH AS NOTED ABOVE.

SILL PLATE PLAN

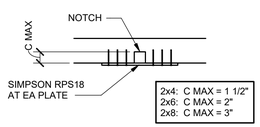


NOTE:
NOTCHING OF JOISTS AND HEADERS IS NOT PERMITTED. RAFTERS MAY BE NOTCHED TO A DEPTH OF D/4 AT ENDS ONLY.

JOIST, RAFTER AND BEAM ELEVATION



STUD ELEVATION



DOUBLE TOP PLATE PLAN

2 HOLES AND NOTCHES IN WOOD FRAMING
3/4" = 1'-0"

SAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

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CERTIFICATE OF AUTHORITY E-2012009242
Brian Kirk Ellison, P.E.
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ENGINEER OF RECORD

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CHECKED BY:	RBG

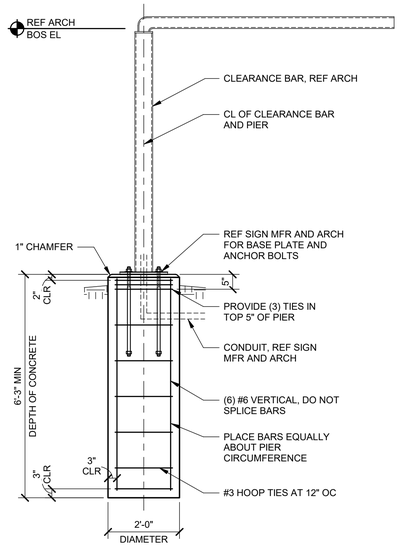
SHEET TITLE

TYPICAL DETAILS AND SCHEDULES

SHEET NUMBER

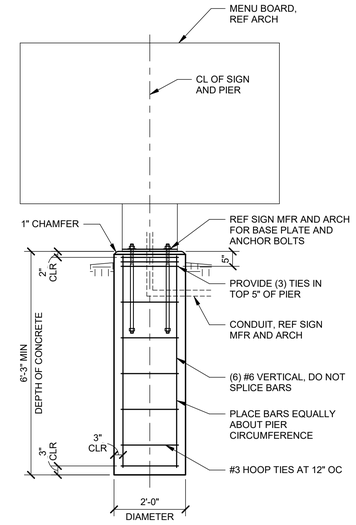
S003

4/30/2024 2:53:50 PM



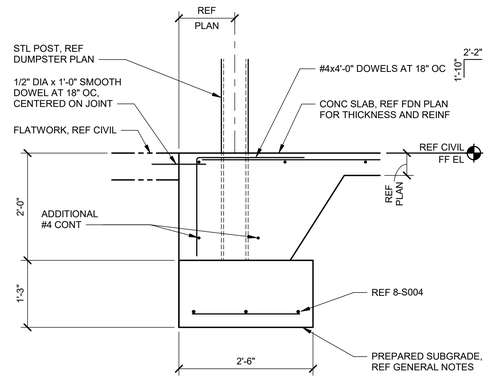
11 CLEARANCE BAR BASE

1/2" = 1'-0"



10 MENU BOARD BASE

1/2" = 1'-0"

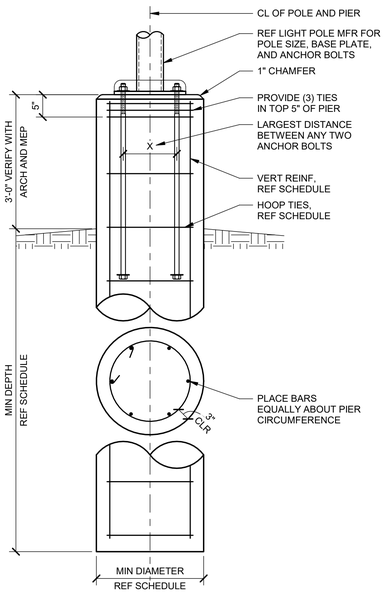


9 DUMPSTER AT GATE

3/4" = 1'-0"

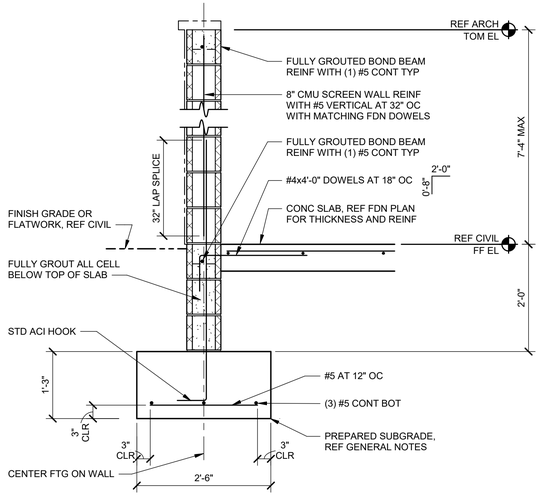
LIGHT POLE BASE SCHEDULE				
MAX POLE HT	MIN PIER DIAMETER	MIN DEPTH	VERTICAL REINF	HOOP TIES
15'-0"	24"	8'-0"	(6) #6	#3 AT 12" OC

NOTE(S):
1. REF MEP DRAWINGS FOR EMBEDDED CONDUIT, WIRES, ETC.
2. MINIMUM PIER DIAMETER SHALL BE THE GREATER OF 'X' PLUS 9" OR THE MINIMUM PIER DIAMETER IN THE SCHEDULE.
3. SPLICE VERTICAL PIER REINFORCING A MINIMUM OF 57 BAR DIAMETERS. LAP HOOP TIES A MINIMUM OF 48 BAR DIAMETERS.



5 TYPICAL LIGHT POLE BASE

3/4" = 1'-0"



8 CMU DUMPSTER WALL

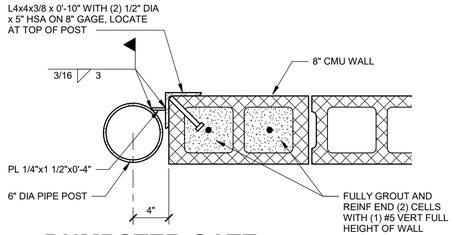
3/4" = 1'-0"

STEEL REINF LAP SCHEDULE						
BAR SIZE	CONCRETE LAP SPLICE (CLASS B) (IN)					CMU LAP SPLICE (IN)
	f'c = 3,000psi	f'c = 3,500psi	f'c = 4,000psi	f'c = 4,500psi	f'c = 5,000psi	
3	17	16	15	14	13	20
4	23	21	20	19	18	26
5	28	26	25	23	22	32
6	34	31	29	28	26	39
7	49	45	43	40	38	45
8	56	52	49	46	44	52

4 REINFORCING LAP SCHEDULE

12" = 1'-0"

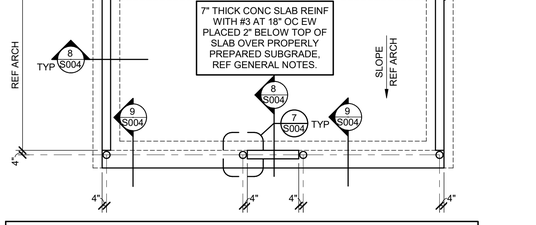
NOTE:
PROVIDE 3/16" CLOSURE PL AT TOP OF POST WITH SEAL WELD.



DUMPSTER GATE COLUMN CONNECTION

7

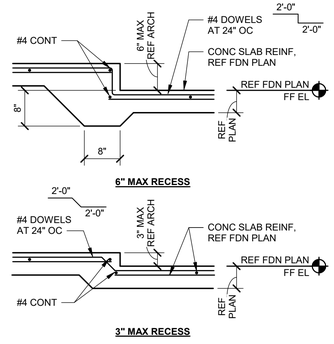
1 1/2" = 1'-0"



NOTES:
1. PREPARE SOIL BELOW DUMPSTER SLAB AND FOOTINGS AS INDICATED IN THE SOILS REPORT.
2. BOTTOM OF FOUNDATION SHALL BEAR A MINIMUM OF 24" BELOW FINISH GRADE, REF CIVIL.
3. REF ARCH/CIVIL FOR DUMPSTER PAD LOCATION. VERIFY ALL DIMENSIONS SHOWN WITH ARCH.
4. REF ARCH FOR SLOPE OF DUMPSTER ENCLOSURE SLAB.

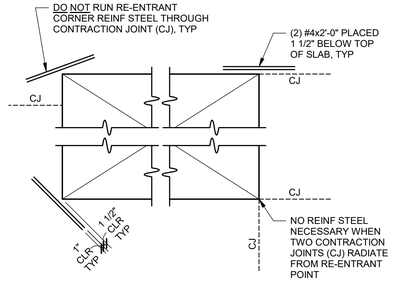
6 DUMPSTER ENCLOSURE PLAN

3/16" = 1'-0"



3 TYPICAL SLAB RECESS

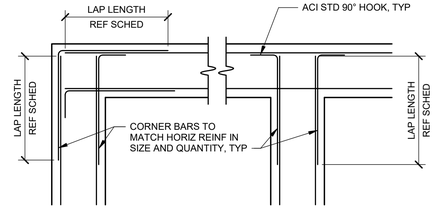
3/4" = 1'-0"



TYPICAL RE-ENTRANT CORNER REINFORCING

2

NTS



TYPICAL CORNER BAR REINFORCING DIAGRAM

1

3/4" = 1'-0"

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION V2-B

JOB #24-011
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License No. 2009007270
ENGINEER OF RECORD

SEAL

STATE OF MISSOURI · BRIAN KIRK ELLISON · 04/29/24 · NUMBER PE-2009007270 · PROFESSIONAL ENGINEER

PERMIT SET: 04/12/24

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION	
PROJECT NO:	24-0087
ORIGINAL ISSUE:	04/12/2024
SCALE:	AS NOTED
DRAWN BY:	EGA
CHECKED BY:	RBG

SHEET TITLE

TYPICAL DETAILS AND SCHEDULES

SHEET NUMBER

S004

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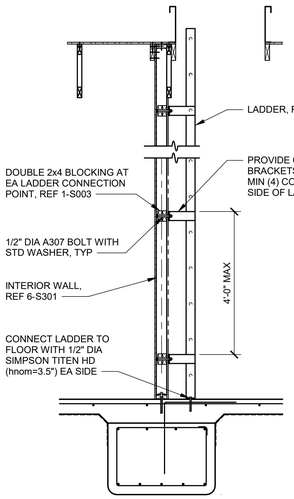
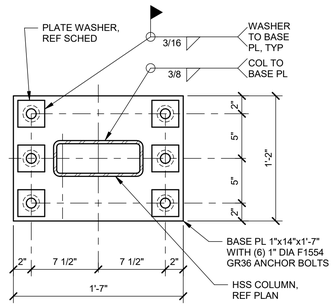


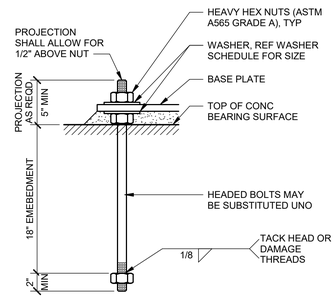
6 LADDER ATTACHMENT

1/2" = 1'-0"



BASE PLATE

NOTE(S):
1. SIZE WELDS PER AISC MINIMUM FILLET REQUIREMENTS (4 SIDES).
2. ANCHOR BOLTS WITH FORGED HEADS MEETING THE REQUIREMENTS OF ASTM A307 MAY BE SUBSTITUTED FOR 3/4" DIA ANCHOR BOLTS.

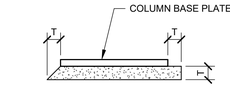


ANCHOR BOLT DIAGRAM

ANCHOR BOLT HOLE AND WASHER SCHEDULE

ANCHOR BOLT DIA	MAX BASE PL HOLE DIA	PLATE WASHER		
		MIN SIZE	MIN THICKNESS	HOLE DIA
3/4"	1 5/16"	2"	1/4"	13/16"
7/8"	1 9/16"	2 1/2"	5/16"	15/16"
1"	1 13/16"	3"	3/8"	1 1/16"
1 1/4"	2 1/16"	3"	1/2"	1 5/16"
1 1/2"	2 5/16"	3 1/2"	1/2"	1 9/16"
1 3/4"	2 3/4"	4"	5/8"	1 13/16"
2"	3 1/4"	5"	3/4"	2 1/16"

NOTE(S):
1. CIRCULAR OR SQUARE WASHERS MEETING THE SIZE SHOWN ARE ACCEPTABLE.
2. WHEN BASE PLATES ARE LESS THAN 1 1/4" THICK, PUNCHING OF HOLES MAY BE AN ECONOMICAL OPTION. IN THIS CASE, 3/4" ANCHOR RODS AND 1 1/16" DIAMETER PUNCHED HOLES MAY BE USED WITH ASTM F844 (USS STANDARD) WASHERS IN PLACE OF FABRICATED PLATE WASHERS.

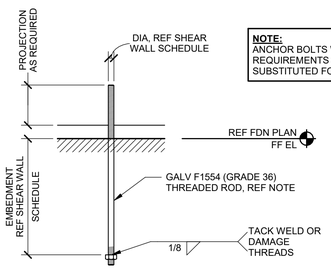


GROUT MAY BE BEVELED OR FORMED BUT SHALL EXTEND A MIN OF "T" BEYOND FACE OF BASE PLATE. "T" = 1 1/2" FOR ANCHOR BOLT DIA UP TO 1" AND 2 1/2" FOR 1 1/4" DIA ANCHOR BOLT.

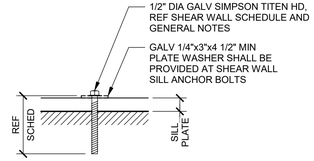
GROUT PLACEMENT

5 TYP BASE PLATE AND ANCHOR BOLT DIAGRAMS

NTS



SHEAR WALL HOLD-DOWN ANCHOR BOLT

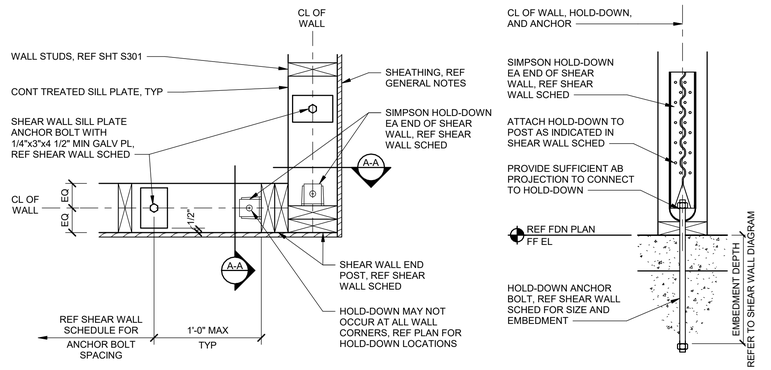


SILL ANCHOR BOLT

NOTE:
ANCHOR BOLTS WITH FORGED HEADS MEETING THE REQUIREMENTS OF ASTM A307 MAY BE SUBSTITUTED FOR THREADED ROD ANCHOR BOLTS

4 TYPICAL SHEAR WALL ATTACHMENT

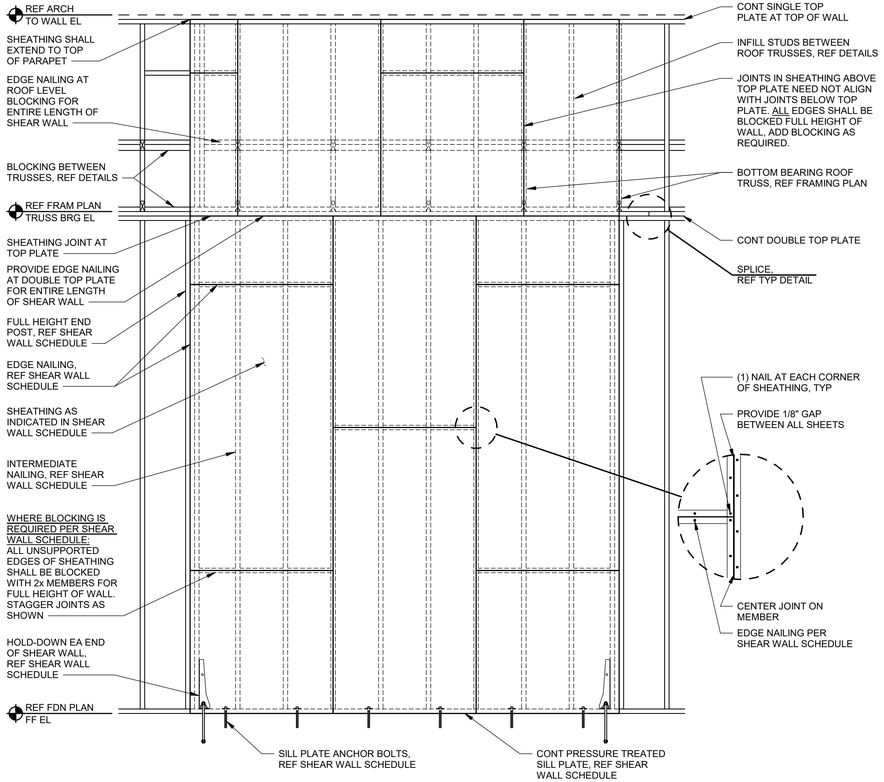
1 1/2" = 1'-0"



A-A

3 TYPICAL HOLD-DOWN DIAGRAM

1 1/2" = 1'-0"



2 TYPICAL SHEAR WALL DIAGRAM

1/2" = 1'-0"

WOOD SHEAR WALL SCHEDULE

MARK	SHEAR WALL TYPE	MIN NOMINAL PANEL THICKNESS (INCHES)	MIN NOMINAL PENETRATION IN FRAMING (INCHES)	NAIL SIZE	NAIL SPACING (INCHES)		SILL PLATE		END POST SIZE	HOLD-DOWNS AT ENDS OF SHEAR WALL, REF 3-S005			
					PANEL EDGES	INTERMEDIATE FRAMING	SIZE	ANCHOR BOLT, REF 4-S005		TYPE	CONNECTION TO END POST	ANCHOR BOLT	ANCHOR BOLT EMBEDMENT
SW-1	BLOCKED	15/32	1 1/2	10d	4	12	2x TREATED SILL	1/2" DIA SIMPSON TITEN HD (hnom=5.5") AT 24" OC	(2) 2x6	SIMSPON HDU8-SDS2.5	(20) SIMPSON 1/4"x2.5" SDS SCREWS	7/8" DIA GALV	18"
SW-2	BLOCKED	15/32	1 1/2	10d	6	12	2x TREATED SILL	1/2" DIA SIMPSON TITEN HD (hnom=5.5") AT 24" OC	(2) 2x6	SIMSPON HDU8-SDS2.5	(20) SIMPSON 1/4"x2.5" SDS SCREWS	7/8" DIA GALV	18"

NOTE(S):
1. REF SHEAR WALL DIAGRAM AND TYPICAL SHEAR WALL HOLD-DOWN DIAGRAM.
2. ALL SHEAR WALL SHEATHING SHALL BE C-D APA RATED STRUCTURAL SHEATHING.
3. PANELS SHALL NOT BE LESS THAN 4' x 8' EXCEPT AT BOUNDARIES AND CHANGES IN FRAMING, WHERE MINIMUM PANEL SHALL BE 24" IN ALL DIRECTIONS (24"x24"). WHERE "BLOCKED" SHEAR WALL TYPE IS INDICATED, ALL EDGES OF ALL PANELS SHALL BE SUPPORTED BY AND FASTENED TO FRAMING MEMBERS OR BLOCKING.
4. NAILS SHALL BE LOCATED AT CENTER OF SUPPORTS AND BLOCKING, EXCEPT AT ADJOINING PANEL EDGES WHERE 3/8" MINIMUM EDGE DISTANCE SHALL BE REQUIRED.
5. THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS AND BLOCKING SHALL BE 2" NOMINAL OR GREATER.
6. ALL SHEATHING NAILING SHALL BE COMMON NAILS WITH MINIMUM PENETRATION INTO FRAMING AS INDICATED IN THE SHEAR WALL SCHEDULE.
7. NAILING SHALL NOT RUPTURE OUTER VENEER OF SHEATHING.
8. PROVIDE 1/8" GAP BETWEEN ALL SHEETS.
9. WHERE PANELS ARE APPLIED ON BOTH FACES OF SHEAR WALL AND NAIL SPACING IS LESS THAN 6 INCHES ON CENTER ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS. ALTERNATIVELY, THE WIDTH OF THE NAILED FACE OF FRAMING MEMBERS SHALL BE 3 INCHES NOMINAL OR GREATER AT ADJOINING PANEL EDGES AND NAILS AT ALL PANEL EDGES SHALL BE STAGGERED.
10. IN ADDITION TO THE ON CENTER SPACING OF SILL ANCHOR BOLTS, THERE SHALL BE AT LEAST (2) ANCHOR BOLTS PER PIECE OF SILL PLATE WITH A MINIMUM OF (1) ANCHOR BOLT LOCATED NOT GREATER THAN 12 INCHES, AND NOT LESS THAN 4 INCHES FROM EACH PIECE END.
11. HOLD-DOWNS SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION REQUIREMENTS.
12. HOLES ARE NOT ALLOWED IN SHEAR WALLS, UNLESS APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION. IF A HOLE IS APPROVED, IT IS TO BE ENTIRELY WITHIN ONE SHEET. PROVIDE BLOCKING AND EDGE NAILING AROUND OPENING.

1 SHEAR WALL SCHEDULE

1/2" = 1'-0"

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION V2-B

JOB #24-011
ELLISON GAGE & ASSOCIATES, LLC
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ENGINEER OF RECORD

SEAL

STATE OF MISSOURI BRIAN KIRK ELLISON 04/29/24 NUMBER PE-2009007270 PROFESSIONAL ENGINEER

PERMIT SET: 04/12/24

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	04/12/2024
SCALE:	AS NOTED
DRAWN BY:	EGA
CHECKED BY:	RBG

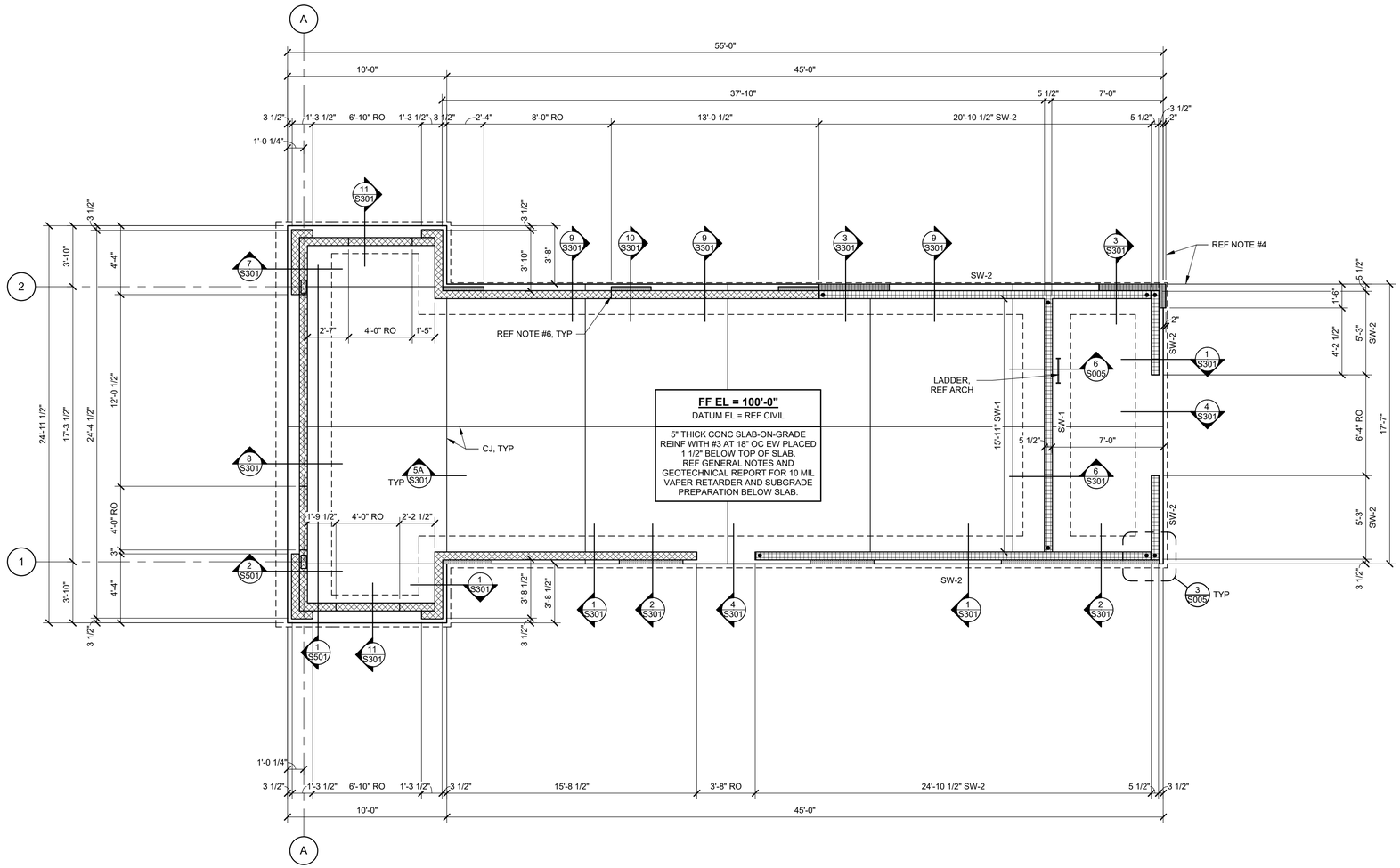
SHEET TITLE

TYPICAL DETAILS AND SCHEDULES

SHEET NUMBER

S005

4/30/2024 2:54:07 PM



1 FOUNDATION PLAN

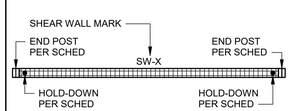
1/4" = 1'-0"

FOUNDATION PLAN NOTES

1. REFER TO SHEETS S001 AND S002 FOR GENERAL NOTES, DESIGN CRITERIA, AND SPECIAL INSPECTIONS.
2. REFER TO SHEETS S003, S004, AND S005 FOR TYPICAL DETAILS AND SCHEDULES.
3. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
4. DIMENSIONS ARE TO EXTERIOR FACE OF CONCRETE SLAB AND FACE OF STUD, REFER TO DETAILS.
5. VERIFY ALL WALL OPENING DIMENSIONS AND LOCATIONS WITH ARCHITECTURAL DRAWINGS.
6. REFER TO 5-S003 FOR JAMB EACH SIDE OF OPENING AT LOAD BEARING WALLS.
7. REFER TO ARCH SLAB PLAN AND PLUMBING DRAWINGS FOR DRAIN LOCATIONS AND SLAB DEPRESSIONS AT DRAINS.
8. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR SIZE AND LOCATION OF ALL EXTERIOR PADS, IF APPLICABLE.

LEGEND

- INDICATES 2x6 WOOD SHEAR WALLS, REF SHEAR WALL SCHEDULE ON SHEET S005.
- INDICATES 2x6 LOAD BEARING WALLS.
- DENOTES HOLD-DOWN LOCATION, REF SHEAR WALL SCHEDULE ON SHEET S005.
- INDICATES WALL FURRING



SHEAR WALL LEGEND

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
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PROTOTYPE VERSION V2-B

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PROJECT INFORMATION	
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ORIGINAL ISSUE:	04/12/2024
SCALE:	AS NOTED
DRAWN BY:	EGA
CHECKED BY:	RBG

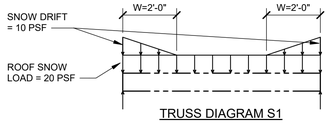
SHEET TITLE

FOUNDATION PLAN

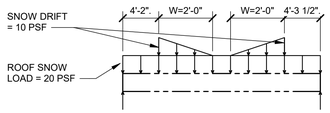
SHEET NUMBER

S101

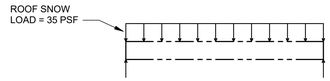
4/30/2024 2:54:13 PM



TRUSS DIAGRAM S1



TRUSS DIAGRAM S2

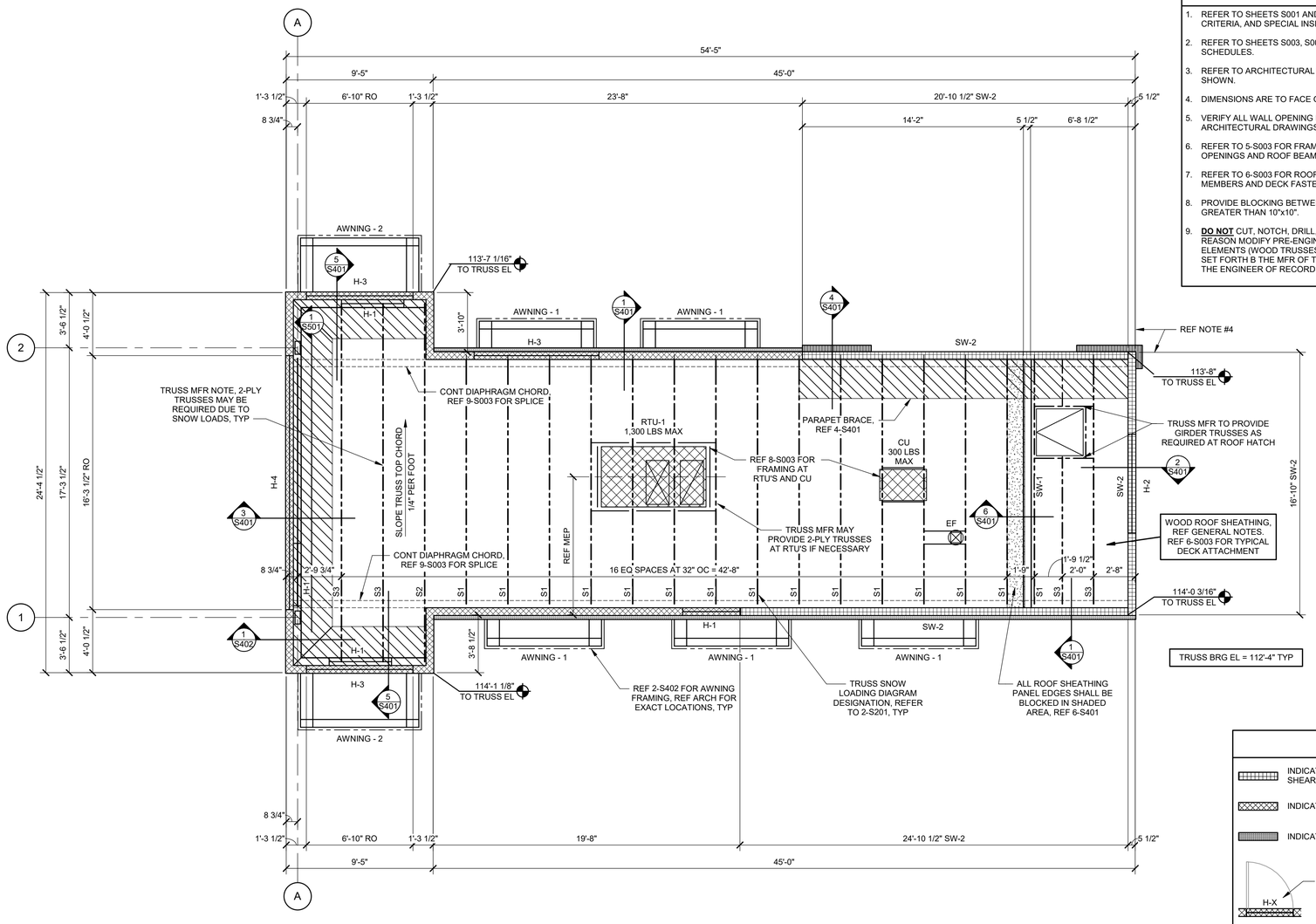


TRUSS DIAGRAM S3

NOTES:
1. LOADS SHOWN ARE SNOW LOADS ONLY. REFER TO THE DESIGN LOADS TABLE ON SHEET S002, FRAMING PLAN, AND DETAILS FOR ALL OTHER LOADS.
2. TRUSSES SHALL RESIST THE MOST CRITICAL EFFECTS FROM THE LOAD COMBINATIONS LISTED IN THE APPLICABLE BUILDING CODE.
3. PROVIDE TWO-PLY TRUSSES AS NECESSARY BASED ON THE GOVERNING LOAD COMBINATION.

2 TRUSS SNOW LOAD DIAGRAMS

3/4" = 1'-0"



1 ROOF FRAMING PLAN

1/4" = 1'-0"

ROOF FRAMING PLAN NOTES

1. REFER TO SHEETS S001 AND S002 FOR GENERAL NOTES, DESIGN CRITERIA, AND SPECIAL INSPECTIONS.
2. REFER TO SHEETS S003, S004 AND S005 FOR TYPICAL DETAILS AND SCHEDULES.
3. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
4. DIMENSIONS ARE TO FACE OF WOOD STUDS, UNO.
5. VERIFY ALL WALL OPENING DIMENSIONS AND LOCATIONS WITH ARCHITECTURAL DRAWINGS.
6. REFER TO 5-S003 FOR FRAMING AT ALL LOAD-BEARING WALL OPENINGS AND ROOF BEAMS.
7. REFER TO 6-S003 FOR ROOF SHEATHING ATTACHMENT TO FRAMING MEMBERS AND DECK FASTENER TYPE, SIZE AND SPACING.
8. PROVIDE BLOCKING BETWEEN JOISTS AT ALL OPENINGS IN ROOF GREATER THAN 10"x10".
9. **DO NOT** CUT, NOTCH, DRILL, BORE, SHAVE, TAPER OR FOR ANY REASON MODIFY PRE-ENGINEERED / MANUFACTURED STRUCTURAL ELEMENTS (WOOD TRUSSES) UNLESS WRITTEN PARAMETERS ARE SET FORTH B THE MFR OF THAT PRODUCT, THE MFR'S ENGINEER, OR THE ENGINEER OF RECORD FOR THE PROJECT.

LEGEND

- INDICATES 2x6 WOOD SHEAR WALLS, REF SHEAR WALL SCHEDULE ON SHEET S005.
- INDICATES 2x6 LOAD BEARING WALLS.
- INDICATES WALL FURRING
- INDICATES LOAD BEARING HEADER, REFER TO 5-S003 (H-X)

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION V2-B

JOB #24-011
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Fax: (972) 354-8859
www.ellisongage.com
CERTIFICATE OF AUTHORITY
E-2012009242
Brian Kirk Ellison, P.E.
License No. 2009007270
ENGINEER OF RECORD

SEAL

STATE OF MISSOURI BRIAN KIRK ELLISON 04/29/24 NUMBER PE-2009007270 PROFESSIONAL ENGINEER

PERMIT SET: 04/12/24

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CHECKED BY:	RBG

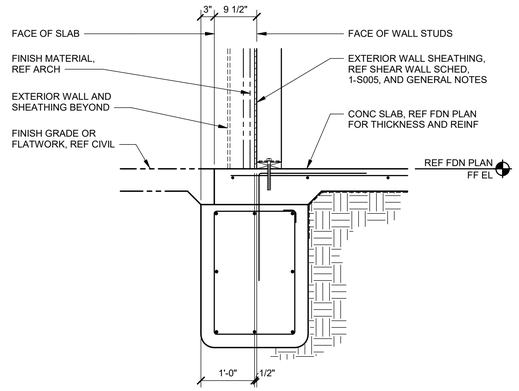
SHEET TITLE

ROOF FRAMING PLAN

SHEET NUMBER

S201

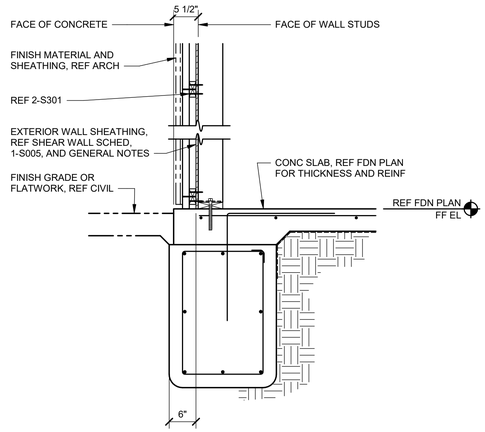
4/30/2024 2:54:20 PM



REF 1-S301 FOR ITEMS SHOWN BUT NOT NOTED.

11 FOUNDATION AT EXTERIOR

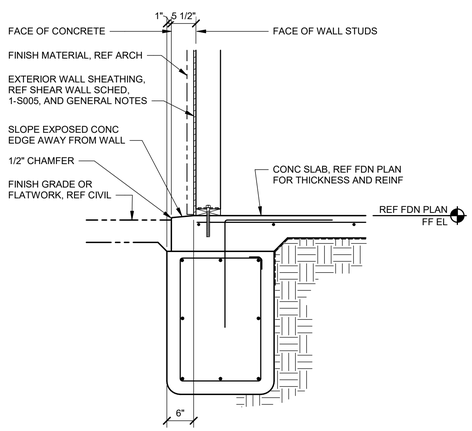
3/4" = 1'-0"



REF 2-S301 FOR ITEMS SHOWN BUT NOT NOTED.

10 FOUNDATION AT EXTERIOR

3/4" = 1'-0"



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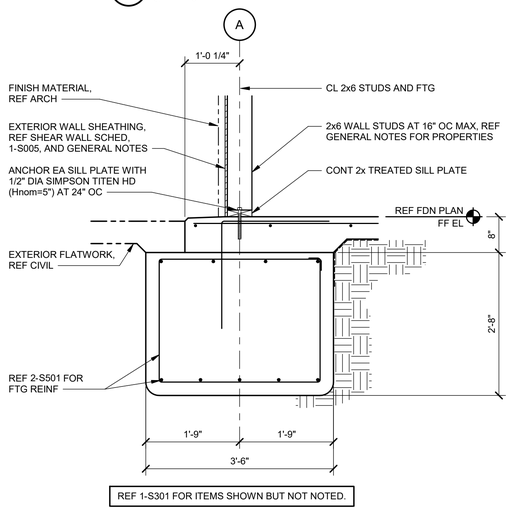
9 FOUNDATION AT EXTERIOR

3/4" = 1'-0"



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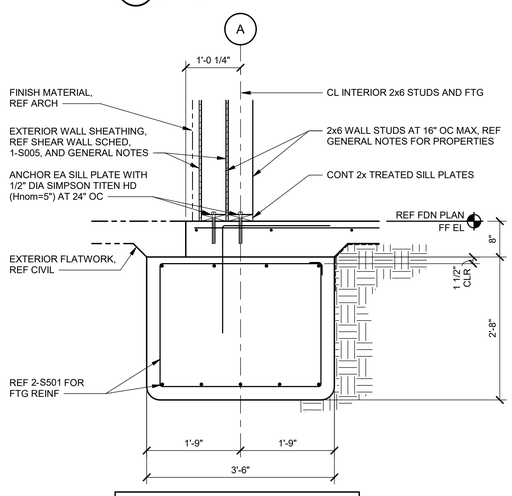
8 FOUNDATION AT EXTERIOR

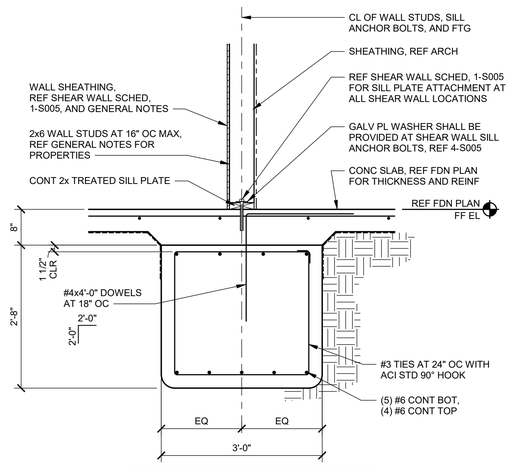
3/4" = 1'-0"



REF 1-S301 FOR ITEMS SHOWN BUT NOT NOTED.

7 FOUNDATION AT EXTERIOR

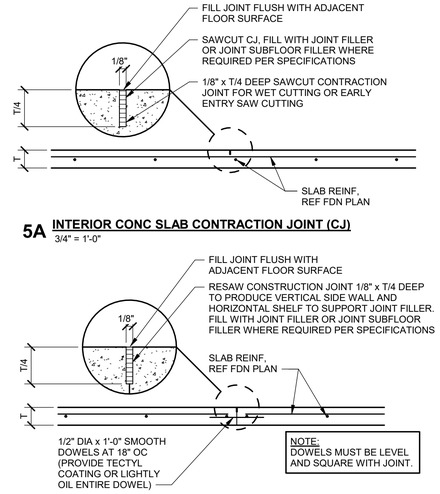
3/4" = 1'-0"



REF 1-S301 FOR ITEMS SHOWN BUT NOT NOTED.

6 FOUNDATION AT INTERIOR SHEAR WALL

3/4" = 1'-0"



5A INTERIOR CONC SLAB CONTRACTION JOINT (CJ)

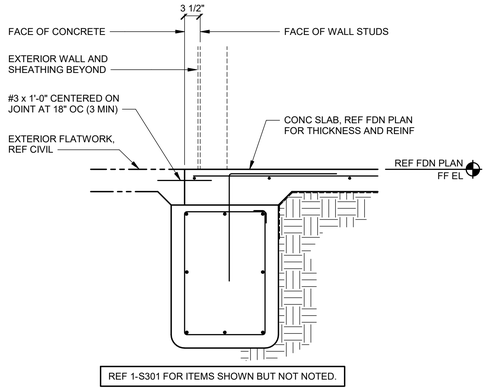
3/4" = 1'-0"

5B INTERIOR CONC SLAB CONSTRUCTION JOINT (CONST JT)

3/4" = 1'-0"

5 INTERIOR CONC SLAB JOINTS

3/4" = 1'-0"



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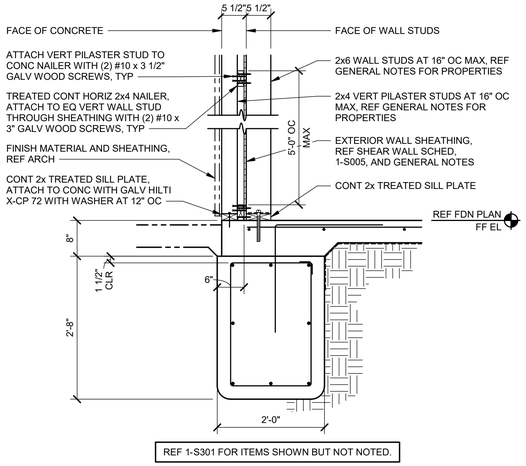
4 FOUNDATION AT DOOR

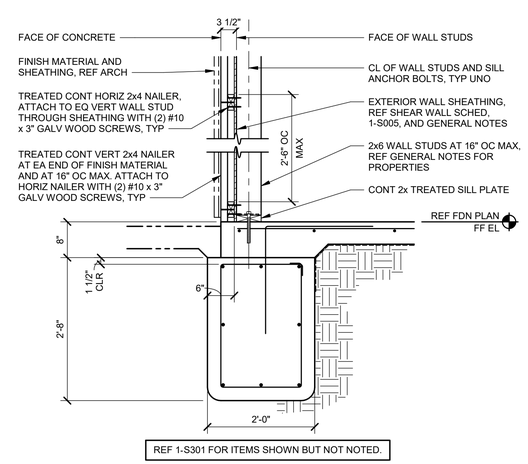
3/4" = 1'-0"



REF 1-S301 FOR ITEMS SHOWN BUT NOT NOTED.

3 FOUNDATION AT EXTERIOR PILASTER

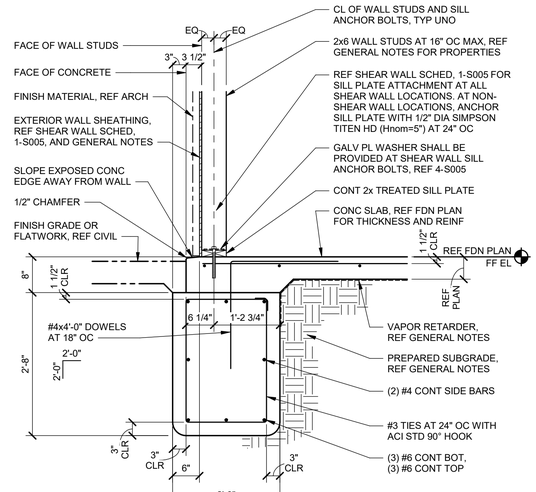
3/4" = 1'-0"



REF 1-S301 FOR ITEMS SHOWN BUT NOT NOTED.

2 FOUNDATION AT EXTERIOR

3/4" = 1'-0"



1 FOUNDATION AT EXTERIOR

3/4" = 1'-0"

4/30/2024 2:54:27 PM

SAND AND GO

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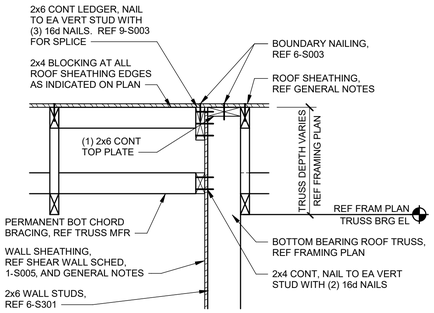
FOUNDATION DETAILS

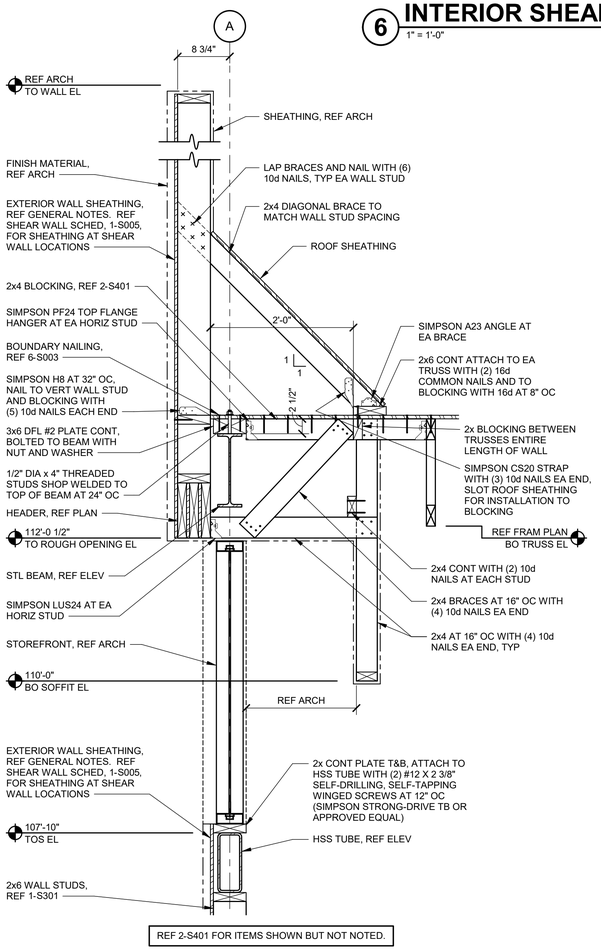
SHEET NUMBER

S301



6 INTERIOR SHEAR WALL AT ROOF

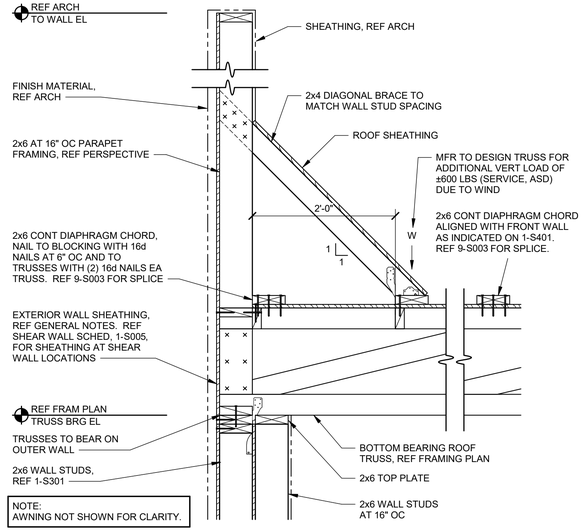
1" = 1'-0"



REF 2-S401 FOR ITEMS SHOWN BUT NOT NOTED.

3 TRUSS AND BEAM AT FRONT WALL

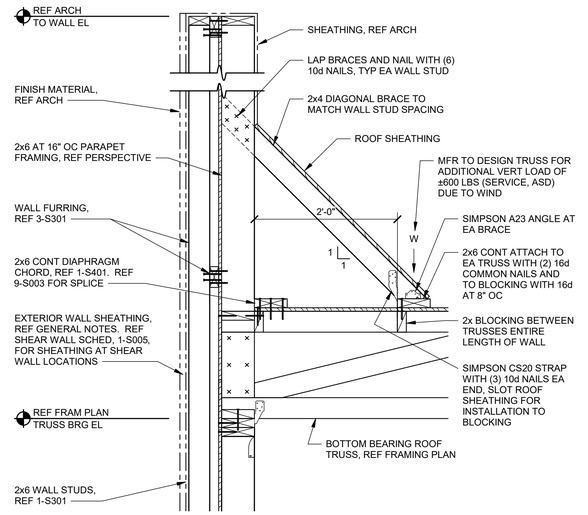
1" = 1'-0"



REF 1-S401 AND 4-S401 FOR ITEMS SHOWN BUT NOT NOTED.

5 ROOF TRUSS AT EXTERIOR WALL

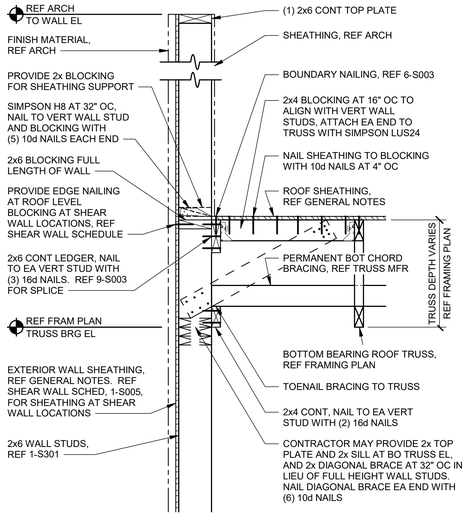
1" = 1'-0"



REF 1-S401 FOR ITEMS SHOWN BUT NOT NOTED.

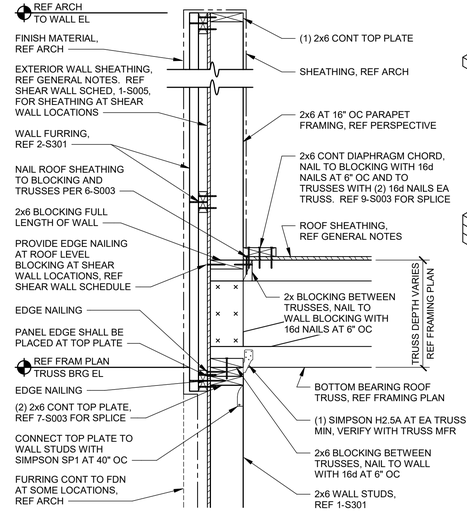
4 PARAPET BRACING AT EXTERIOR WALL

1" = 1'-0"



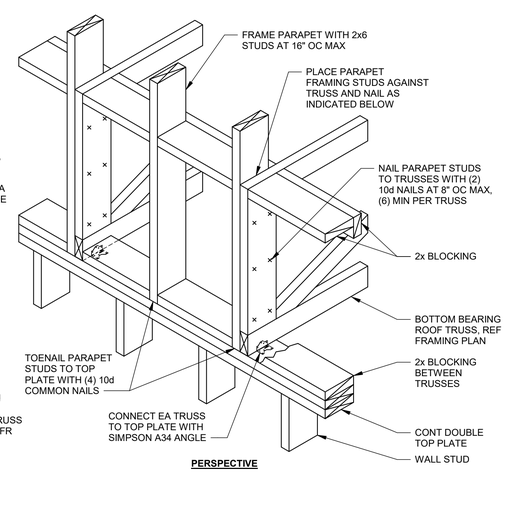
2 TRUSS PARALLEL TO WALL

1" = 1'-0"



1 ROOF TRUSS AT EXTERIOR WALL

1" = 1'-0"



PERSPECTIVE

#2001 610 NW CHIPMAN ROAD

LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION V2-B

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ROOF FRAMING DETAILS

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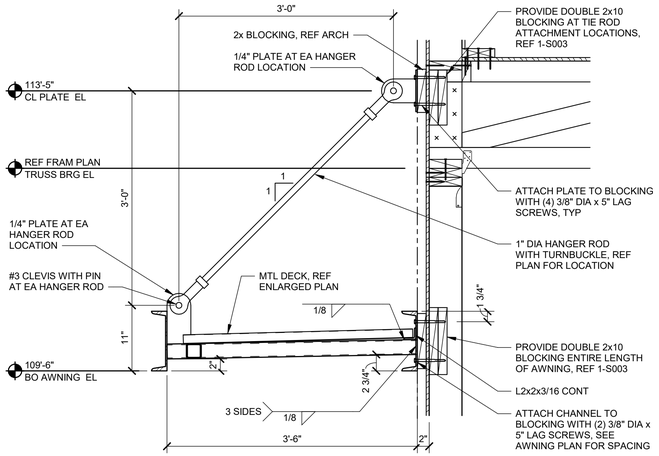
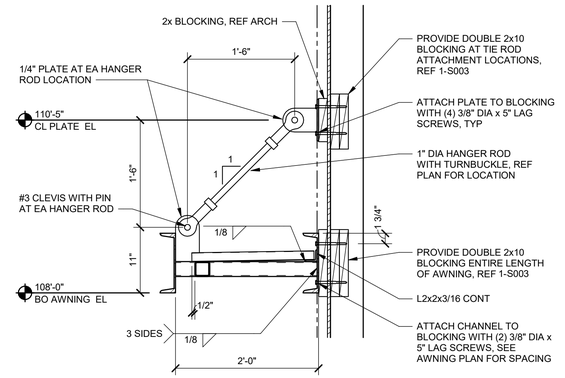
S401

4/30/2024 2:54:38 PM



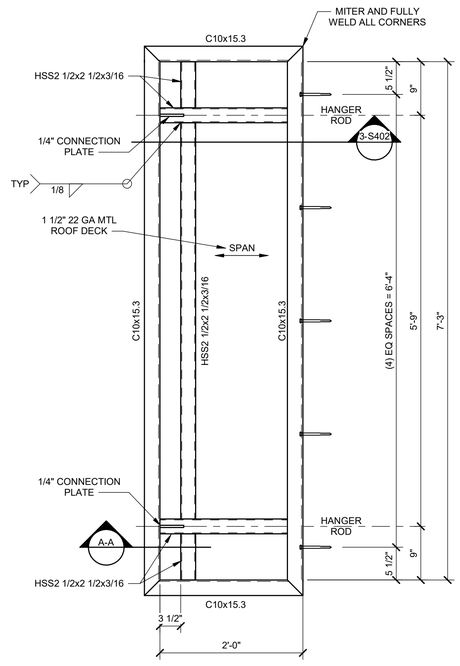
4 SECTION AT AWNING

1" = 1'-0"

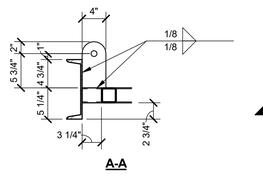


3 SECTION AT AWNING

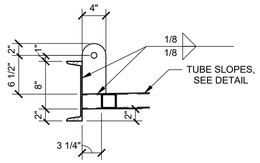
1" = 1'-0"



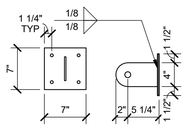
AWNING - 1



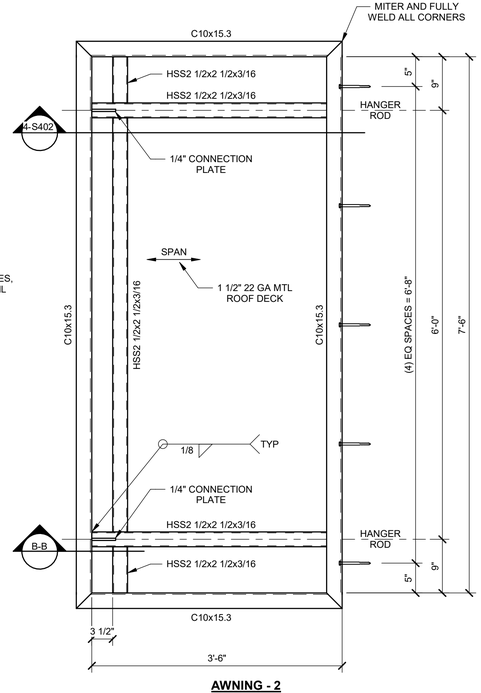
A-A



B-B



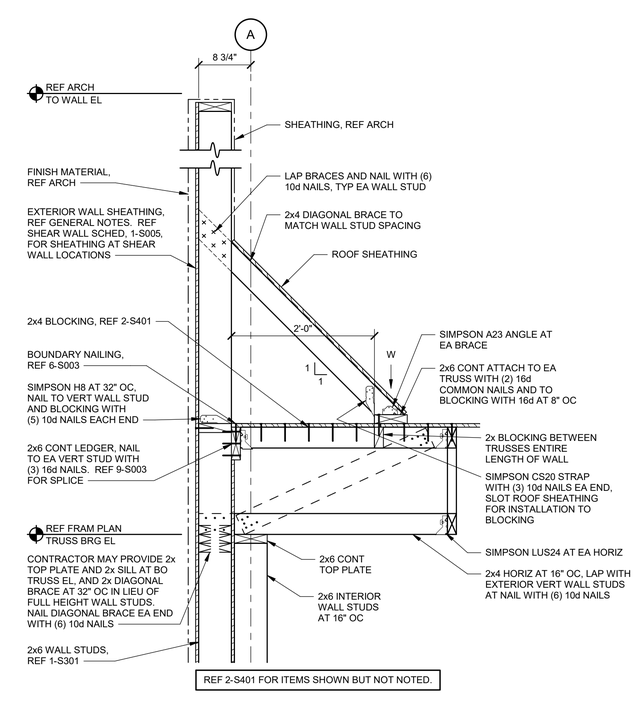
TYPICAL UPPER CONNECTION PLATE



AWNING - 2

2 ENLARGED AWNING PLANS

1" = 1'-0"



REF 2-S401 FOR ITEMS SHOWN BUT NOT NOTED.

1 TRUSS AT FRONT WALL

1" = 1'-0"

SAYAD AND GO

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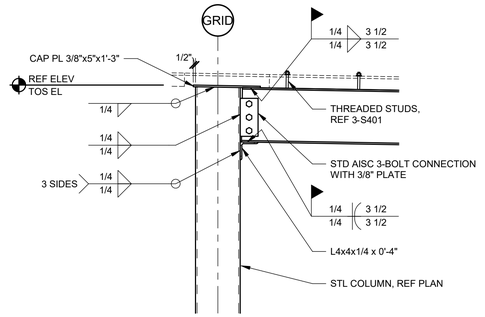
SHEET TITLE

ROOF FRAMING DETAILS

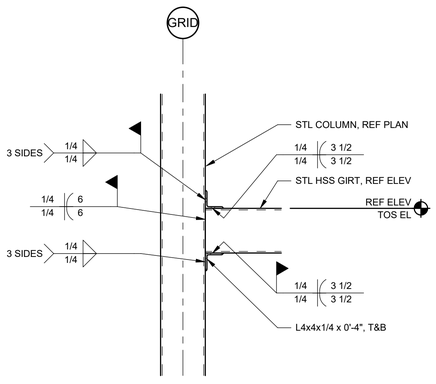
SHEET NUMBER

S402

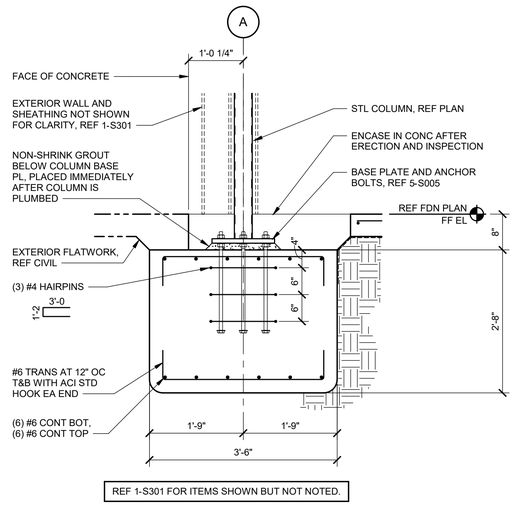
4/30/2024 2:54:48 PM



4 HSS CONNECTION
3/4" = 1'-0"

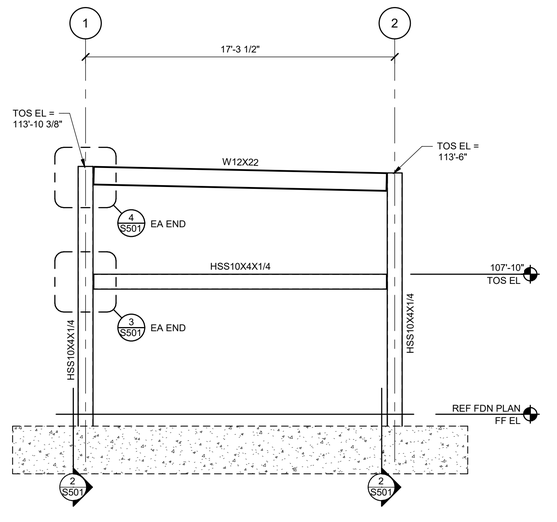


3 HSS CONNECTION
3/4" = 1'-0"



REF 1-S301 FOR ITEMS SHOWN BUT NOT NOTED.

2 FOUNDATION AT MOMENT FRAME
3/4" = 1'-0"



1 MOMENT FRAME ELEVATION - GRID A
1/4" = 1'-0"

SAD AND GO

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SHEET TITLE

FRAMING ELEVATIONS AND DETAILS

SHEET NUMBER

S501

4/30/2024 2:54:55 PM

SLAB PLAN GENERAL NOTES

A. CONTRACTOR TO COORDINATE THE LOCATION OF ALL FLOOR DRAINS AND FLOOR SINKS WITH PLUMBING DRAWINGS AND KITCHEN DRAWINGS.

B. CONTRACTOR TO COORDINATE THE LOCATION OF ALL FLOOR OUTLETS WITH OWNER, ARCHITECT AND ELECTRICAL DRAWINGS.

C. COORDINATE FLOOR SINK ELEVATION WITH LOCAL JURISDICTION, TYP.

SLAB PLAN KEYNOTES

1. SLAB EDGE DIMENSION START POINT.
2. FLOOR DRAIN, REF: PLUMBING.
3. PRE-MANUFACTURED WALK IN COOLER BY OWNER.
4. MOP SINK PENETRATION LOCATION, INSTALL PER MANUFACTURER SPECIFICATIONS.
5. FLOOR SINK TYP, REF: PLUMBING. ALIGN TO FINISH FLOOR.
6. WASTELINE IN CENTER OF WALL FOR SINK, REF: PLUMBING.
7. TOILET PENETRATION, REF: PLUMBING.
8. 1" HME CONDUIT STUBBED THROUGH SLAB INTO WALL
9. COLUMN EMBEDDED IN WALL, REF. STRU. DIMENSIONED TO CENTER.
10. FLOOR CLEAN OUT, TYP. REF: PLUMBING

DIMENSION NOTES

1. ALL PLAN DIMENSIONS, UNLESS OTHERWISE NOTED, ARE TO:
   A. FACE OF STUD
   B. CENTERLINE OF DOOR OR WINDOW
   C. EDGE OF SLAB EDGE
2. NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS; DETAILS OVER SMALLER SCALE DRAWINGS.
3. "FINISH FLOOR" REFERS TO TOP OF SLAB.
4. VERIFY ALL ROUGH-IN, CONCRETE PAD, OR PLATFORM DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS PROJECT OR BY OTHERS.
5. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES, UNLESS NOTED OTHERWISE.

FLOOR PLAN GENERAL NOTES:

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.

B. APPROVED SIGN INDICATING MAXIMUM OCCUPANCY FOR THE ROOM SHALL BE LOCATED NEAR MAIN EXIT. FINAL LOCATION SHALL BE VERIFIED BY FIRE MARSHAL.

C. DO NOT SCALE DRAWINGS.

D. PROVIDE BLOCKING IN WALLS FOR WALL MOUNTED EQUIPMENT/ACCESSORIES PER PLAN.

E. REFER TO EQUIPMENT PLAN SHEET FOR ALL EQUIPMENT SCHEDULE INFORMATION AND LAYOUT.

F. DIMENSION SHOWN ON THIS PLAN IS FROM FACE OF STUD TO FACE OF STUD AT INTERIOR, UNO.

G. GENERAL CONTRACTOR TO COORDINATE ALL FLOOR SINKS AND FLOOR DRAINS WITH EQUIPMENT PLAN PRIOR TO PLACEMENT

H. PROVIDE INTERNAL WALL BLOCKING FOR LADDERS, GRAB BARS, MIRRORS, COUNTERTOPS, CEILING FANS, AND OVERHEAD SHELVING.

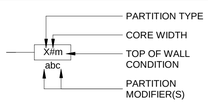
I. COORDINATE WITH STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, CIVIL DRAWINGS AND SOIL REPORTS.

J. WALL DIMENSIONS SHOWN FROM FACE OF STUD TO FACE OF STUD, UNO.

K. WALLS SHOWN ON ALIGNMENT ARE IN ALIGNMENT WITH FINISH SURFACE

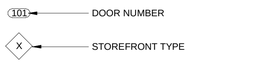
L. FLOOR LEVEL 0'-0" IS TOP OF SLAB PER ARCHITECTURAL PLAN AND ELEVATION. THIS DOES NOT INCLUDE FLOOR FINISH. REFER TO CIVIL DRAWINGS FOR ACTUAL GRADE LEVEL.

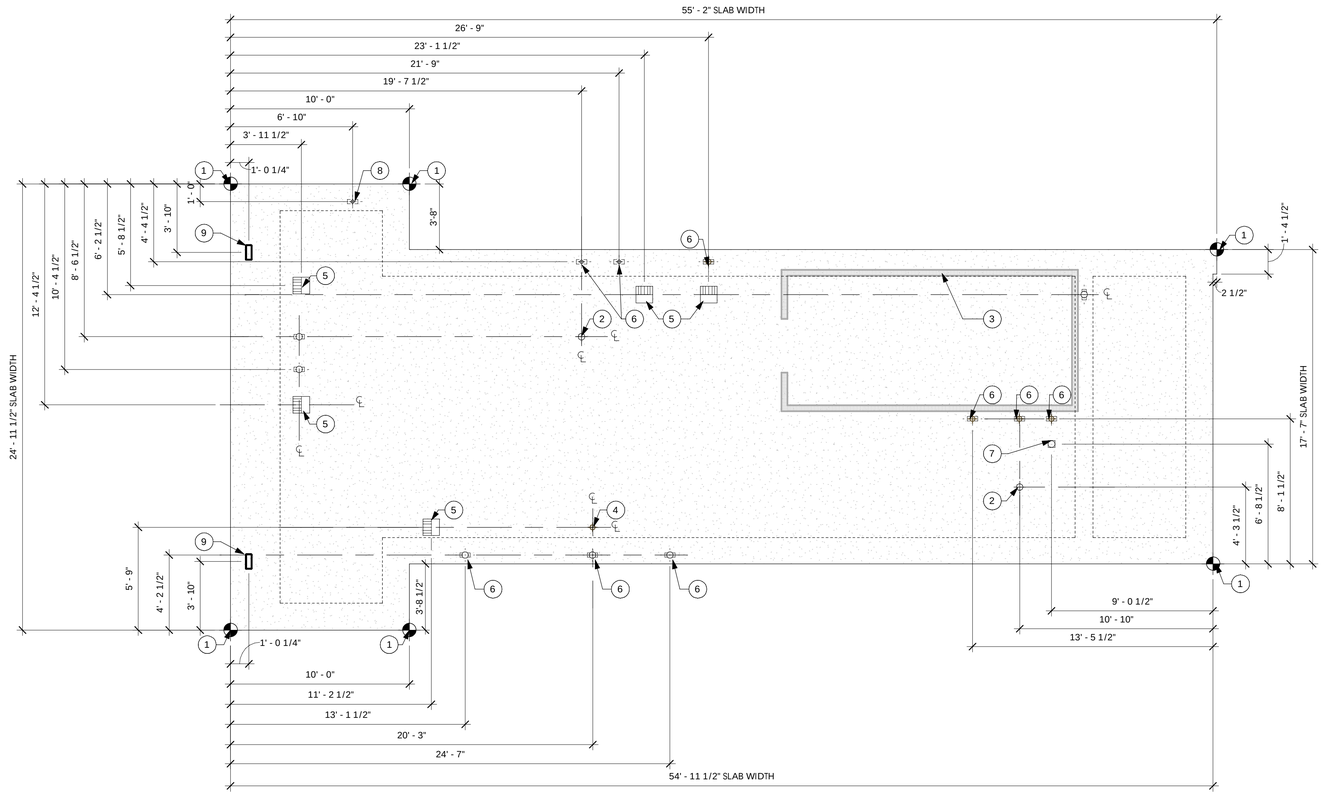
WALL TAG*



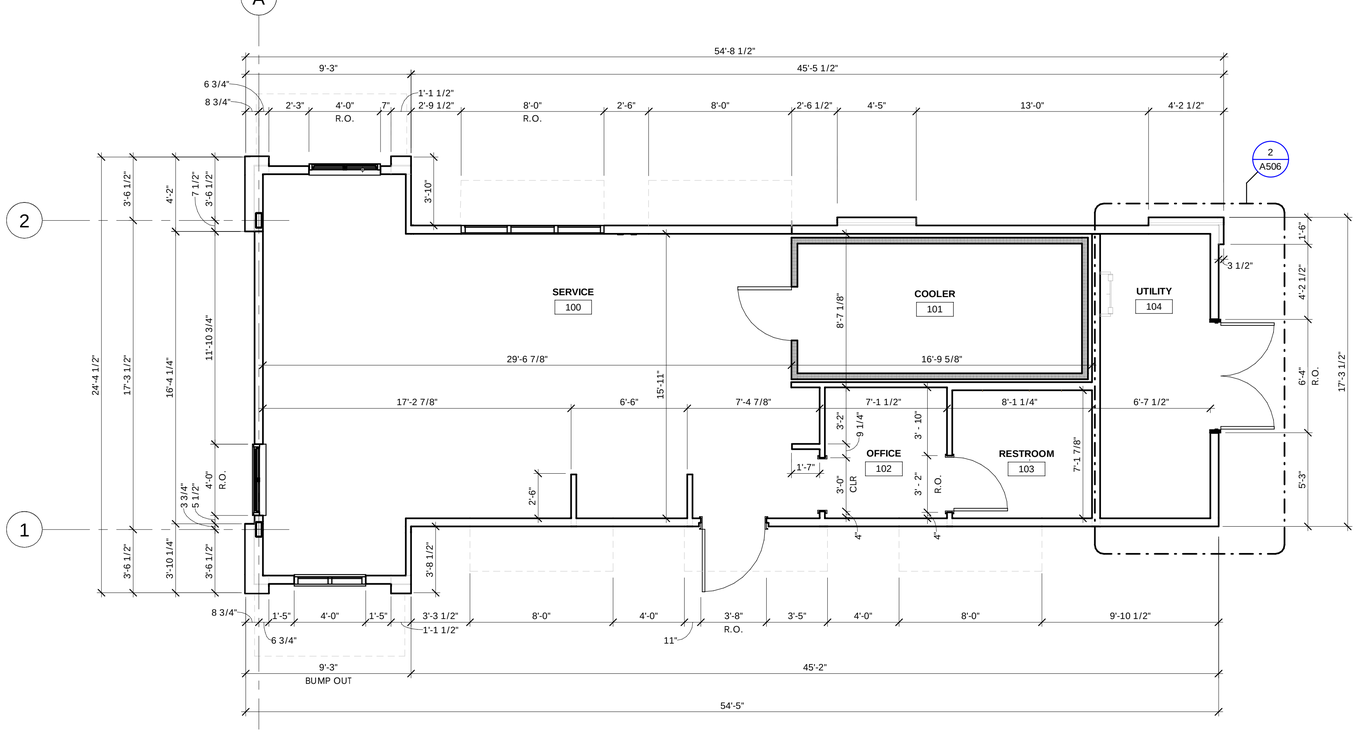
*REFER TO A611 FOR INTERIOR WALL ASSEMBLIES
*REFER TO A621 FOR EXTERIOR WALL ASSEMBLIES

DOOR & WINDOW TAGS, REFER TO A631& A641





1 SLAB PENETRATION PLAN
1/4" = 1'-0"



2 DIMENSION FLOOR PLAN
1/4" = 1'-0"

SAVADO AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

SHEET TITLE

DIMENSION FLOOR PLANS

SHEET NUMBER

A101

5/2/2024 2:31:37 PM

FLOOR PLAN GENERAL NOTES:

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.

B. APPROVED SIGN INDICATING MAXIMUM OCCUPANCY FOR THE ROOM SHALL BE LOCATED NEAR MAIN EXIT. FINAL LOCATION SHALL BE VERIFIED BY FIRE MARSHAL.

C. DO NOT SCALE DRAWINGS.

D. PROVIDE BLOCKING IN WALLS FOR WALL MOUNTED EQUIPMENT/ACCESSORIES PER PLAN.

E. REFER TO EQUIPMENT PLAN SHEET FOR ALL EQUIPMENT SCHEDULE INFORMATION AND LAYOUT.

F. DIMENSION SHOWN ON THIS PLAN IS FROM FACE OF STUD TO FACE OF STUD AT INTERIOR, UNO.

G. GENERAL CONTRACTOR TO COORDINATE ALL FLOOR SINKS AND FLOOR DRAINS WITH EQUIPMENT PLAN PRIOR TO PLACEMENT

H. PROVIDE INTERNAL WALL BLOCKING FOR LADDERS, GRAB BARS, MIRRORS, COUNTERTOPS, CEILING FANS, AND OVERHEAD SHELVING.

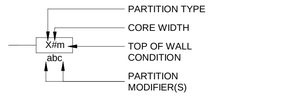
I. COORDINATE WITH STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, CIVIL DRAWINGS AND SOIL REPORTS.

J. WALL DIMENSIONS SHOWN FROM FACE OF STUD TO FACE OF STUD, UNO.

K. WALLS SHOWN ON ALIGNMENT ARE IN ALIGNMENT WITH FINISH SURFACE

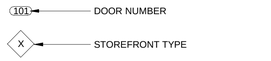
L. FLOOR LEVEL 0'-0" IS TOP OF SLAB PER ARCHITECTURAL PLAN AND ELEVATION. THIS DOES NOT INCLUDE FLOOR FINISH. REFER TO CIVIL DRAWINGS FOR ACTUAL GRADE LEVEL.

WALL TAG*



*REFER TO A611 FOR INTERIOR WALL ASSEMBLIES
*REFER TO A621 FOR EXTERIOR WALL ASSEMBLIES

DOOR & WINDOW TAGS, REFER TO A631& A641

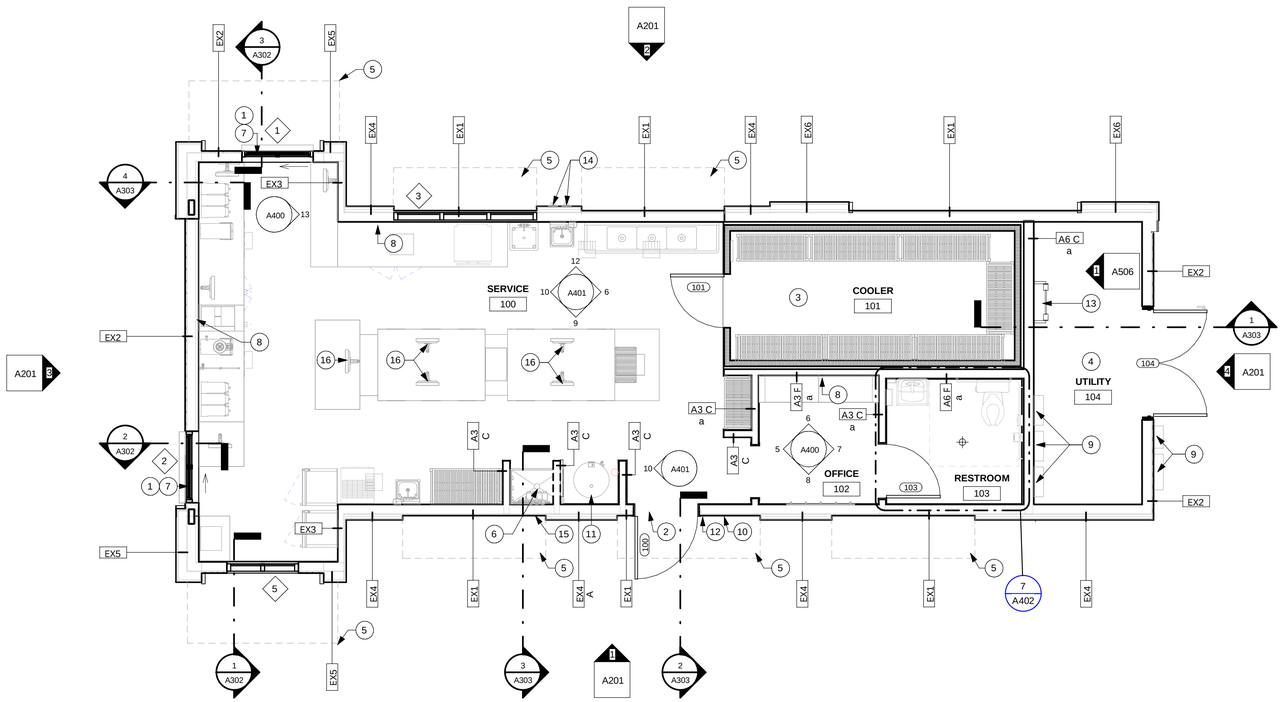


DIMENSION NOTES

1. ALL PLAN DIMENSIONS, UNLESS OTHERWISE NOTED, ARE TO:
   A. FACE OF STUD
   B. CENTERLINE OF DOOR ON CENTERLINE OF ROOM OR CORRIDOR.
2. NOTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE DIMENSIONS; DETAILS OVER SMALLER SCALE DRAWINGS.
3. "T.O.SLAB" REFERS TO TOP OF SLAB
4. VERIFY ALL ROUGH-IN, CONCRETE PAD, OR PLATFORM DIMENSIONS FOR EQUIPMENT PROVIDED IN THIS PROJECT, OR BY OTHERS.
5. CEILING HEIGHT DIMENSIONS ARE TO FINISHED SURFACES, UNLESS NOTED OTHERWISE.

FLOOR PLAN KEYNOTES

1. SERVICE WINDOW.
2. ADA COMPLIANT THRESHOLD, REF: A631.
3. PRE-MANUFACTURED WALK IN COOLER BY OWNER.
4. CONCRETE SLAB WITH BROOM FINISH.
5. DASHED LINE INDICATES CANOPY ABOVE.
6. MOP SINK PENETRATION LOCATION, INSTALL PER MANUFACTURER SPECIFICATIONS.
7. SERVICE WINDOW W/ 4" DEEP SOLID SURFACE SHELF. REF: 11/A503
8. PROVIDE IN-WALL BLOCKING TO INSTALL COUNTERTOP SUPPORTS. REFER TO A400
9. ELECTRICAL SERVICE ENTRY AND TELEPHONE SERVICE LOCATION, REF: ELEC.
10. 3200 SERIES RECESSED KNOXBOX AT 60" AFF
11. WATER HEATER WITH MOP SINK BELOW
12. "NO SMOKING" SIGN LOCATION
13. ROOF ACCESS LADDER; REF: A506
14. ROOF DRAIN LEADERS
15. RECESSED COVERED HOSE BIB, ZURN WALL HYDRANT Z1350. REF: PLUMB, REF: 9/A504
16. POS MONITOR MOUNTED ON STAINLESS STEEL SHELVES BY OWNER. REF: EQUIPMENT PLAN, TYP



1 FLOOR PLAN
1/4" = 1'-0"

FINISH FLOOR PLAN GENERAL NOTES

A. FLOOR FINISHES ARE CONTINUOUS. ALL FLOORING IS TO CONTINUE BENEATH ALL ELEMENTS IN CONTACT WITH THE FLOOR. CONTRACTOR TO COORDINATE OPENINGS AND PROVIDE FLOORING WITHIN OPENINGS NOT SPECIFICALLY IDENTIFIED.

B. ALL PRODUCTS ARE TO BE PROVIDED AND INSTALLED PER MANUFACTURERS PUBLISHED REQUIREMENTS AND FASTENED AND ADHERED ACCORDING TO APPROVED METHODS.

C. ALL EXPOSED SURFACES ARE TO BE PREPARED TO RECEIVE NEW FINISHES.

D. ALL WIRE FRAMES, CONDUIT, ACCESS PANELS, GILLES, FIRE EXTINGUISHER CABINETS, ELECTRICAL PANELS AND MECHANICAL DEVICES SHALL BE FINISHED TO MATCH THE ADJACENT SURFACE UNLESS NOTED OTHERWISE.

E. CONTRACTOR TO REPORT ANY DISCREPANCIES IN PRODUCT QUALITY TO ARCHITECT FOR REVIEW.

F. COMMENCEMENT OF WORK ON ANY SURFACE BY THE CONTRACTOR MEANS ACCEPTANCE OF THOSE SURFACES.

G. FLOOR TRANSITION HEIGHTS NOT TO EXCEED 1/4" MAXIMUM. PROVIDE APPROPRIATE TRANSITION AT EACH LOCATION WHERE FLOOR MATERIAL CHANGES.

H. RUN FLOORING UP TO MILLWORK AND UNDER OPEN COUNTERTOPS.

I. COORDINATE COUNTERTOP FINISHES WITH OWNER

J. THE PAINT COATING SYSTEM SHALL INCLUDE A PRIMER THAT SHALL CONTRAST WITH THE WHITE OR SPECIAL COLOR SELECTED FOR THE INTERMEDIATE AND FINISH COATS TO ALLOW OWNER AND CONTRACTOR TO VERIFY EACH COAT OF PAINT HAS BEEN INSTALLED

K. COMPLY WITH REQUIREMENTS OF IBC SECTION 803.1.2, TABLE 805.13 FOR INTERIOR FINISH FLAME SPREAD CLASSIFICATION. CLASS C RATING FOR NON-SPRINKLERED SPACES.

L. WALK IN COOLER SHALL COMPLY WITH IBC SECTION 2603 CENTER AND FREEZER WALLS. FOAM PLASTIC INSTALLED IN A MAXIMUM THICKNESS OF 10 INCHES IN COOLER AND FREEZER WALL SHALL:
   a. HAVE FLAME SPREAD INDEX OF 25 OR LESS AND SMOKE DEVELOPED INDEX OF NOT MORE THAN 450, WHERE TESTED IN 4 INCHES (102mm) THICKNESS
   b. HAVE FLASH IGNITION AND SELF-IGNITION TEMPERATURES OF NOT LESS THAN 600 DEG F TO 800 DEG F.
   c. HAVE A COVERING OF NOT LESS THAN 0.032 INCH ALUMINUM OR CORROSION RESISTANT STEEL HAVE A BASE METAL THICKNESS NOT LESS THAN 0.0160 INCH (0.4mm) AT ANY POINT.

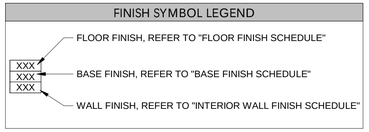
FLOOR FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
QT-1	QUARRY TILE	DALTILE - HARVEST RED BLEND 0Q70(1) 6x6 SMOOTH MATTE FINISH GROUT - MAPEI KERACOLOR GROUT 10 BLACK 3/8" GROUT LINE

BASE FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
QT-B	QUARRY TILE	DALTILE - HARVEST RED BLEND 5x6 COVE BASE Q-3565

FINISH SYMBOL LEGEND



HEALTH DEPARTMENT NOTES

A. WALK IN COOLER WALLS, CEILINGS, AND FLOOR / WALL JUNCTURES SHALL BE METAL OR EQUAL AND PROPERLY COVED.

B. PROVIDE 2/3" RADIUS QUARRY TILE COVE BASE.

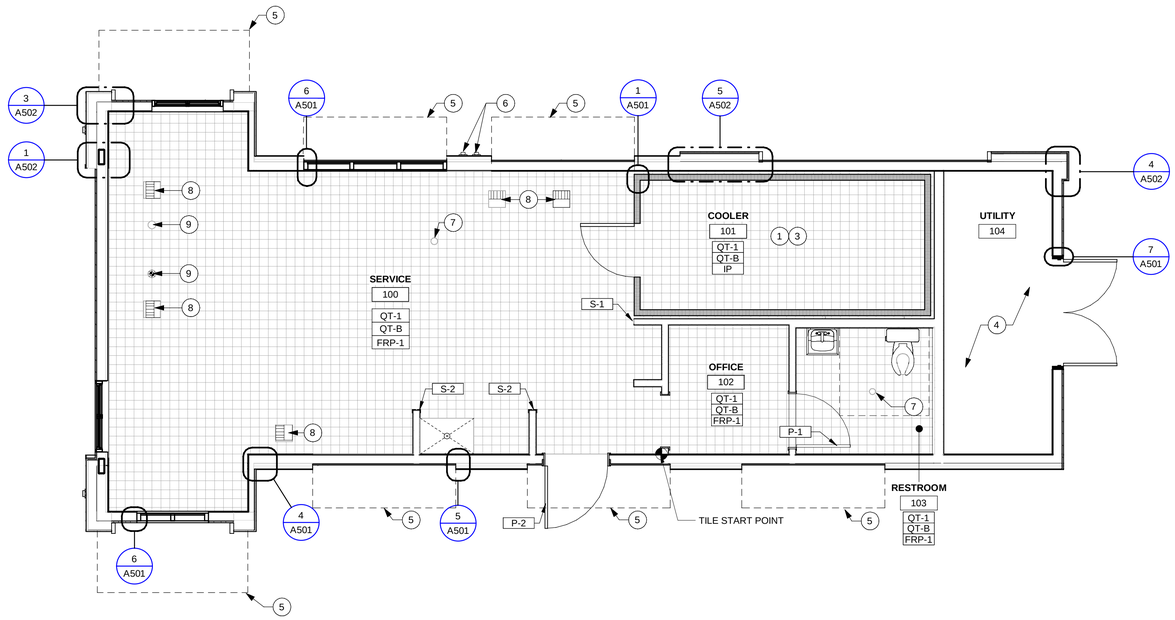
C. GROUT AND MORTAR SHALL BE SEALED, SMOOTH AND FINISHED FLUSH WITH THE SURFACE OF ALL TILES, BRICK, STONE, AND OTHER SIMILAR SURFACES. IF EPOXY GROUT NOT USED, GROUT NEEDS TO BE SEALED.

FINISH FLOOR PLAN KEYNOTES

1. TILE TO CONTINUE UNDER COOLER WALLS.
2. ADA COMPLIANT THRESHOLD, REF: A631.
3. PRE-MANUFACTURED WALK IN COOLER BY OWNER.
4. CONCRETE SLAB WITH BROOM FINISH.
5. DASHED LINE INDICATES CANOPY ABOVE.
6. ROOF DRAIN LEADERS.
7. FLOOR DRAIN, REF: PLUMBING.
8. FLOOR SINK TYP, REF: PLUMBING.
9. FLOOR CLEAN OUT, TYP. REF: PLUMBING

INTERIOR WALL FINISH SCHEDULE

MARK	MATERIAL	DESCRIPTION
FRP-1	FRP (WHITE)	MARLITE S100G WHITE SMOOTH SURFACE, CLASS C
P-1	PAINT	DOORS; 1 COAT PRIMER WITH 2 COATS SEMI GLOSS LATEX. SHERWIN WILLIAMS SW-7004 SNOWBOUND WHITE
P-2	PAINT	STEEL; GLOSS LATEX. DOORS; 1 COAT EXTERIOR PRIMER, 2 COATS EXTERIOR SEMI GLOSS. SHERWIN WILLIAMS SW-7048 URBANE BRONZE
IP	INSULATED PANELS	INSULATED WALL PANELS BY COOLER MANUFACTURER
S-1	SS U-CHANNEL	FULL HEIGHT STAINLESS STEEL U-CHANNEL WITH 2" WING SIZE; 18 GAUGE; #4 SATIN FINISH; 90° ANGLES
S-2	SS CORNER GUARD	4' - 0" HEIGHT STAINLESS STEEL CORNER GUARD WITH 2" WING SIZE; 18 GAUGE; #4 SATIN (BRUSHED) FINISH; 90° ANGLE. TYPE 304



2 FINISH FLOOR PLAN
1/4" = 1'-0"

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SAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

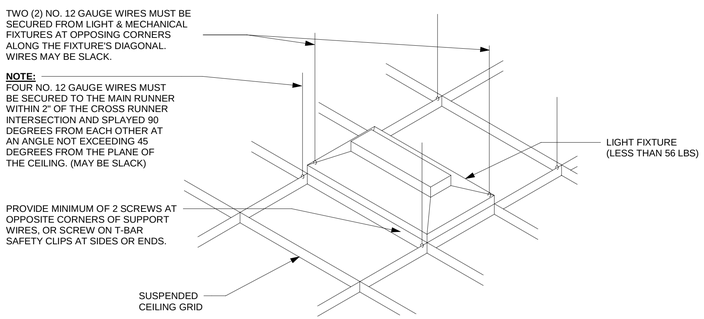
SHEET TITLE

FLOOR PLANS

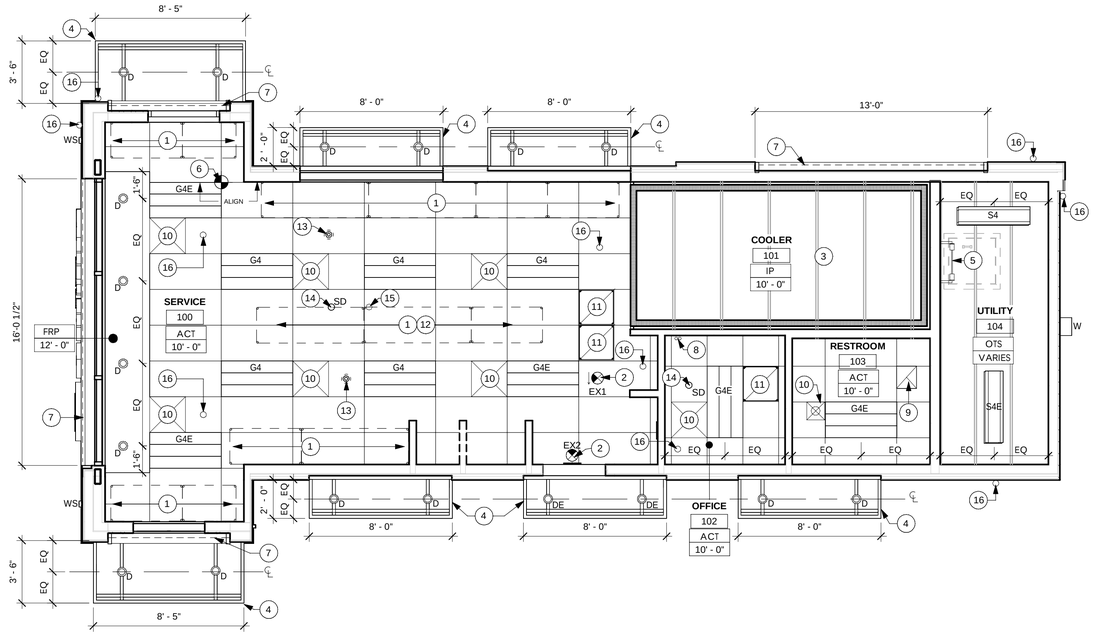
SHEET NUMBER

A111

LATERAL FORCE BRACING MEMBERS MUST BE SPACED A MIN OF 6" FROM ALL HORIZONTAL PIPING OR DUCT WORK THAT IS NOT PROVIDED W/ BRACING RESTRAINTS FOR HORIZ FORCES. BRACING WIRES MUST BE ATTACHED TO THE GRID & TO THE STRUCTURE IN SUCH A MANNER THAT THEY CAN SUPPORT A DESIGN LOAD OF NOT LESS THAN 200 POUNDS OR THE ACTUAL LOAD, WHICHEVER IS GREATER, WITH A SAFETY FACTOR OF 2.



2 CEILING LIGHT DETAIL
3/8" = 1'-0"



1 REFLECTED CEILING PLAN
1/4" = 1'-0"

REFLECTED CEILING PLAN GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND ASSEMBLIES PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE OWNER AND ARCHITECT.

B. MECHANICAL, PLUMBING, ELECTRICAL, FIRE SPRINKLER, AND CEILING SUBCONTRACTORS SHALL COORDINATE THEIR WORK. IN CASE OF CONFLICT, THE REFLECTED CEILING PLAN SHALL TAKE PRECEDENCE.

C. COORDINATE WITH MECHANICAL AND ELECTRICAL FOR ADDITIONAL REQUIREMENTS.

D. CEILING HEIGHTS SHOWN ARE ABOVE FINISH FLOOR

E. DO NOT SCALE DRAWINGS.

F. ALL ELECTRICAL EQUIPMENT SHALL BE NEW. SUB-CONTRACTOR TO PROVIDE COPY OF DATED SALES RECEIPT IF REQUIRED BY THE OWNER.

G. INSTALL EXHAUST FAN PER MANUFACTURER'S INSTRUCTION. PROVIDE BLOCKING AS REQUIRED PER MANUFACTURER'S RECOMMENDATION.

H. GC TO COORDINATE SECURITY CAMERA AND SPEAKER LOCATIONS SHOWN WITH ELEC.

REFLECTED CEILING PLAN GENERAL NOTES

FRP	FIBER REINFORCED PANELS - MARLITE S100G, SMOOTH WHITE
ACT	WHITE CEILING TILE - 2X4 VINYL WASHABLE TILE IN SURFACE MOUNTED GRID. GRID TO BE SUSPENDED. USG OR APPROVED EQUIVALENT
IP	INSULATED PANELS: INSULATED PANEL BY COOLER MANUFACTURER
OTS	OPEN TO STRUCTURE. PAINT AND PRIME EXPOSED SURFACES WHITE

CEILING TAG

C-1 / 1'-0" — CEILING MATERIAL / CEILING HEIGHT

1'-0" — CEILING HEIGHT

MATERIAL TAG

E-1 — MATERIAL TYPE PER SCHEDULE

NO SUSPENDED LIGHT FIXTURE, DECORATIVE ITEM OR SIMILAR DECORATIVE ITEMS SHALL BE INSTALLED LOWER THAN 80" A.F.F. AT ANY CIRCULATION PATH OR ACCESSIBLE ROUTE

NO DEVICE OR DECORATIVE OBJECT LESS THAN 80" A.F.F. SHALL PROJECT MORE THAN 4" FROM ANY WALL IN ANY CIRCULATION PATH OR ACCESSIBLE ROUTE

ELECTRICAL/MECHANICAL LEGEND

NOTE: COORDINATE WITH ELECTRICAL AND MECHANICAL DRAWINGS

G4	2x4 LED BACKLIT FLAT PANEL MODEL # NUVO 65-572
S4	1x4 LED BACKLIT FLAT PANEL MODEL # NUVO 65-573
D	6" ROUND DIRECT MOUNT RECESSED LED MODEL # SMD6R129SWHE /SMD6RTRMWH
W	LED WALL PACK MODEL # SLIM18N
WS	WALL SCONCE - CAMMAN MODEL # W425 | LANE, TO BE MOUNTED 5' - 0" AFF
	TAPE LIGHT - NOVA FLEX - WET LOCATION 24VDC HIGH DENSITY LED: NF-PRO-O-60-24V-4100K
	AIR SUPPLY DIFFUSER
	AIR RETURN REGISTER
	EXHAUST FAN
SD	SMOKE DETETCTOR

REFLECTED CEILING PLAN KEYNOTES

1. STAINLESS STEEL SHELVES SUSPENDED FROM TRUSSES. SEE EQUIPMENT PLAN.
2. WALL/CEILING MOUNTED EMERGENCY/EXIT SIGN.
3. PRE-MANUFACTURED WALK IN COOLER WITH INTEGRAL CEILING.
4. CANOPY ABOVE.
5. ROOF ACCESS LADDER.
6. ACT START POINT.
7. TAPE LIGHT ON ALL THREE SIDES.
8. ELECTRICAL CONDUIT THROUGH CEILING, TYP. REFER TO LOW VOLTAGE PLAN.
9. EXHAUST FAN, REF: MECHANICAL.
10. AIR SUPPLY, REF: MECHANICAL.
11. AIR RETURN, REF: MECHANICAL.
12. ISO CORD FASTENED TO VERTICAL, FED FROM OVERHEAD, HANGING 4" AFF.
13. CEILING MOUNTED OCCUPANCY SENSOR.
14. SMOKE DETECTOR
15. THERMOSTAT SENSOR
16. CONDUIT FOR SECURITY CAMERA

SALAD AND GO

#2001
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LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

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STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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PROJECT INFORMATION

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ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

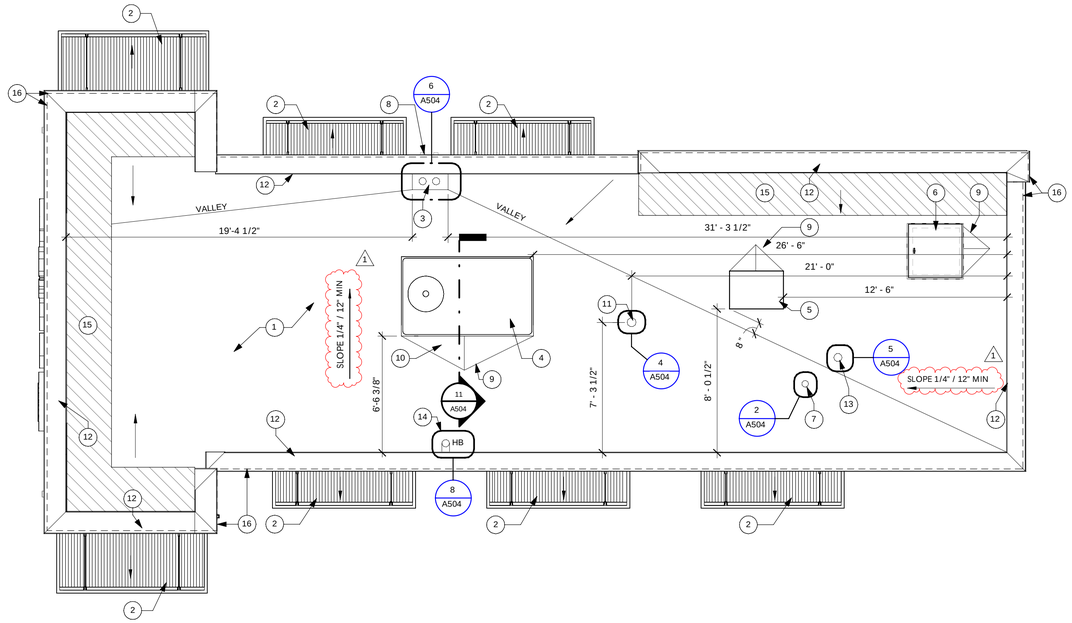
SHEET TITLE

REFLECTED CEILING PLAN

SHEET NUMBER

A121

5/2/2024 2:31:41 PM



1 ROOF PLAN
1/4" = 1'-0"

ROOF PLAN GENERAL NOTES

A. REFER TO ELECTRICAL, MECHANICAL, PLUMBING, AND STRUCTURAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

B. RIDGE AND VALLEY OF ROOF SLOPES OCCUR BY SLOPING ROOF FRAMING AND WARPED DECK (TYPICAL), EXCEPT WHERE TAPERED INSULATION IN INDICATED. PROVIDE CRICKETS OF TAPERED INSULATION AT EQUIPMENT CURBS, ROOF DRAINS, SCUPPERS OR ANY OTHER INTERRUPTIONS IN THE SLOPE OF THE ROOF TO MAINTAIN 1/4" SLOPE PER FOOT.

C. REFER TO PLUMBING DRAWINGS FOR ROOF DRAIN/LEADER SIZES

D. CONTRACTOR WILL ENSURE POSITIVE DRAINAGE OF THE ROOF DRAINS AND SCUPPERS WITHOUT PONDING.

E. INSTALLATION OF ROOFING SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND PER THE DETAILS ON THE ROOF PLAN.

F. FLASHING TO BE 24 GAUGE GALVANIZED STEEL

ROOF PLAN KEYNOTES

1. TPO ROOFING SYSTEM INSTALLED PER MANUFACTURERS INSTRUCTIONS. JOHNS MANVILLE STERM-SI, 60 MIL MEMBRANE (OR EQUAL) OVER RIGID INSULATION BOARD, MIN R-25 INSULATION VALUE WITH 20 YEAR WARRANTY.
2. 22 GA MIN THICKNESS CORROSION RESISTANT METAL ROOF DECK, REF: STRU.
3. ROOF DRAIN AND OVERFLOW DRAIN.
4. RTU, REF: MECH.
5. WALK-IN COOLER CONDENSING UNIT ON 6" CURB, REF: MECH & 1/A504
6. ROOF ACCESS HATCH.
7. EXHAUST VENT, WATER-PROOF AROUND PENETRATION.
8. ROOF DRAIN LEADER. DRAINS TO DAYLIGHT.
9. ROOF CRICKETS, TYP.
10. MECHANICAL UNIT CURB. PROVIDE CRICKET AT BASE.
11. CELL BOOSTER.
12. METAL COPING AT PARAPET, TYP.
13. EXHAUST FAN. WATER-PROOF AROUND PENETRATION.
14. HOSE BIB THROUGH PARAPET: ZURN WALL HYDRANT Z1350. WATER-PROOF AROUND PENETRATION.
15. AREA OF PARAPET BRACING, REF: STRU
16. TAPE LIGHT UNDER COPING, REF: ELEC AND WALL SECTIONS.

SALAD AND GO

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REVISION 1: 06/06/2024

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1	06/06/2024	CITY COMMENTS

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SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

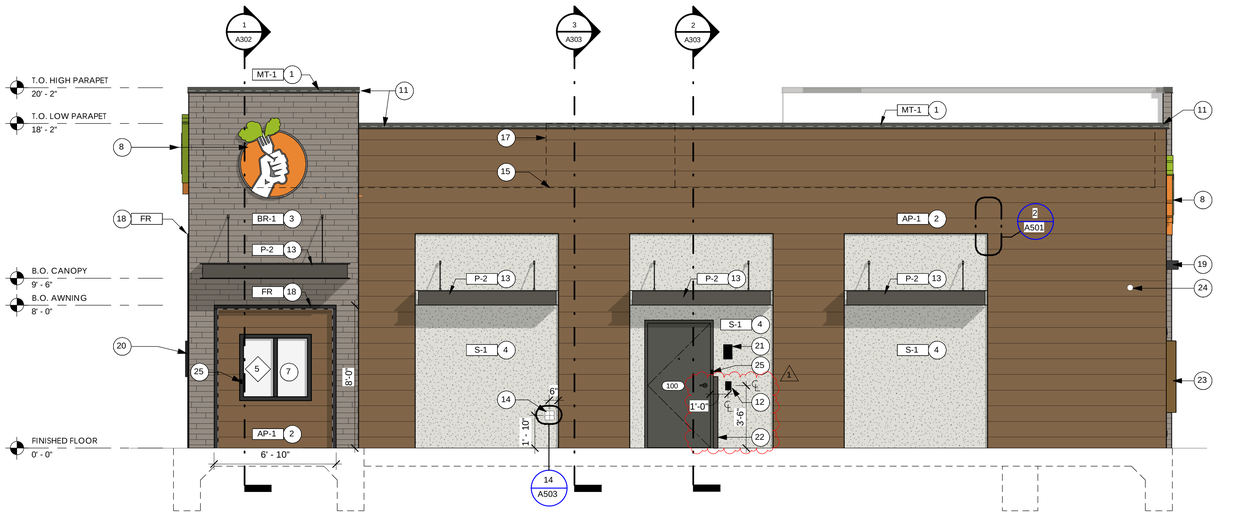
SHEET TITLE

ROOF PLAN

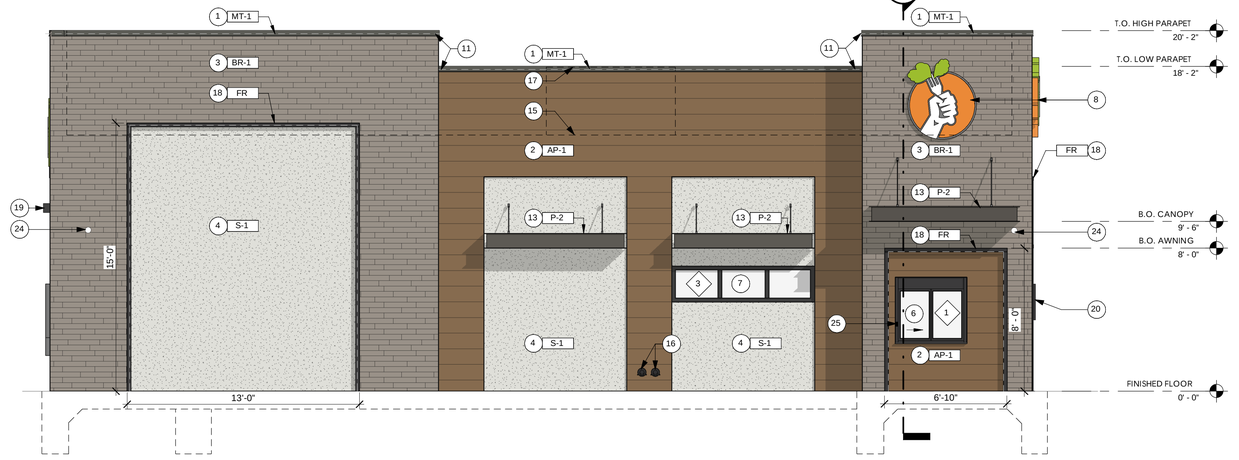
SHEET NUMBER

A131

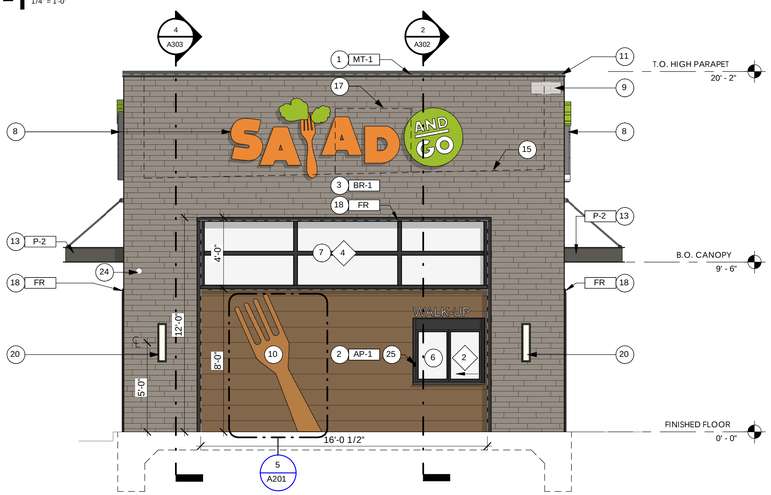
6/6/2024 8:09:23 AM



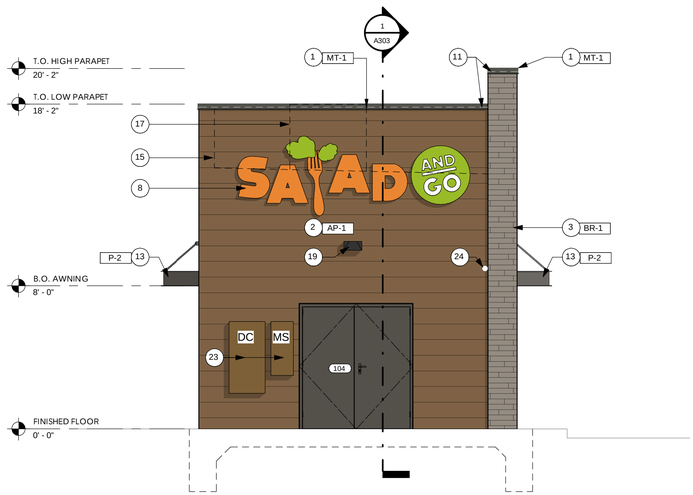
1 WALK-UP ELEVATION- WEST
1/4" = 1'-0"



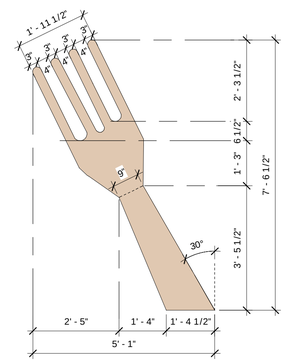
2 DRIVE THRU ELEVATION- EAST
1/4" = 1'-0"



3 FRONT ELEVATION- NORTH
1/4" = 1'-0"



4 REAR ELEVATION- SOUTH
1/4" = 1'-0"



5 GRAPHIC WALL ITEMS - REF SIGNAGE
1/2" = 1'-0"

EXTERIOR FINISH SCHEDULE			
MARK	MATERIAL	DESCRIPTION	
AP-1	ARCHITECTURAL PANELS	**PRODUCT:** JAMES HARDIE PLANK LAP SIDING, SELECT CEDARMILL **COLOR:** PAINT MATCH SW6095 TOASTY	
BR-1	THIN BRICK	**PRODUCT:** INTERSTATE BRICK - THIN MODULAR **TEXTURE:** MATTE **COLOR:** PLATINUM **GROUT:** SPECTRUM - MASONRY CEMENT - TYPE N - WHITE	
S-1	STUCCO	**PRODUCT:** DRYVIT CCP-2 **FINISH:** SAND **COLOR:** MATCH SHERWIN WILLIAMS SW-6196 FROSTY WHITE	
MT-1	METAL COPING	**FINISH:** PAINT **COLOR:** SW-7048 URBANE BRONZE	
P-2	PAINT	**FINISH:** PAINT **COLOR:** SW-7048 URBANE BRONZE	
FR	FRAME	**PRODUCT:** SNAP FRAME **FINISH:** STEEL - PREFABRICATED **COLOR:** MATTE BLACK	

GENERAL NOTES

A. CONSIDERATION WILL NOT BE GRANTED FOR ANY ALLEGED MISUNDERSTANDINGS OF THE AMOUNT OF WORK TO BE PERFORMED, TENDER OF PROPOSAL SHALL CONVEY FULL AGREEMENT TO THE ITEMS AND CONDITIONS INDICATED ON THE DRAWINGS. SHOULD THE CONTRACTOR FIND DISCREPANCIES OR OMISSIONS IN THE CONTRACT DOCUMENT OR BE IN DOUBT AS TO THE INTENT THEREOF, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE PRIOR TO SUBMITTING A PROPOSAL FOR WORK.

B. WATERPROOFING MEMBRANE TO BE TWO LAYERS TYVEK COMMERCIAL WRAP WITH TAPED SEAMS, INSTALLED PER MANUFACTURER SPECIFICATIONS. SPECIAL INSPECTION NEEDED FOR WRB.

C. FLASHING TO BE 24 GA GALVANIZED STEEL, UNO.

ELEVATION KEYNOTES

1. METAL PARAPET CAP, PAINTED. TAPE LIGHTS UNDER COPING, REF: ELEC.
2. ARCHITECTURAL PANELS. REF: A501, A502, A503, A504.
3. THIN BRICK
4. STUCCO, REF: TO A501 & A502
5. CONTROL JOINTS, REF: A501.
6. OPERABLE WINDOW, REF: A641 FOR WINDOW SCHEDULE.
7. FIXED WINDOW, REF: A641 FOR WINDOW SCHEDULE.
8. BUILDING SIGNAGE SHOWN FOR PLACEMENT AND SCALE ONLY. SIGNAGE UNDER SEPARATE PERMIT. GC TO PROVIDE BLOCKING AS REQUIRED.
9. 6" TALL BUILDING NUMBER WITH 0.5" STROKE WIDTH. ARIAL FONT, CONTRASTING COLOR. COORDINATE LOCATION WITH FIRE MARSHALL. (2018 IFC 505.1)
10. DECORATIVE METAL CUTOUTS. REF: SEPARATE SIGNAGE PERMIT FOR DETAILS.
11. TAPE LIGHT UNDER COPING, REF: ELEC
12. BUILDING ACCESS KEYPAD
13. C-CHANNEL AWNING, ALL EXPOSED STEEL TO BE FIELD-PAINTED.
14. RECESSED COVERED HOSE BIB, REF: A503.
15. ROOF LINE, BEHIND.
16. ROOF DRAIN.
17. RTU, REF: ELEC & MECH.
18. METAL ACCENT FRAME WITH TAPE LIGHT. REF: ELEC.
19. WALL PACK LIGHTS, REF: ELEC.
20. WALL SCONCE, TO BE MOUNTED 40" AFF. REF: ELEC.
21. FIRE DEPARTMENT RECESSED KNOX BOX 3200. MOUNTED 60" AFF.
22. S.S CORNER GUARDS. PAINTED SW 7048 URBANE BRONZE
23. ELECTRICAL PANELS, COLOR MATCH TO BUILDING. REF: ELEC
24. CONDUIT FOR SECURITY CAMERA. REF: ELEC
25. WIRELESS DOORBELL. AVANTEK, LD-DB-21-A

SAYAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

REVISION 1: 06/06/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION
1	06/06/2024	CITY COMMENTS

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

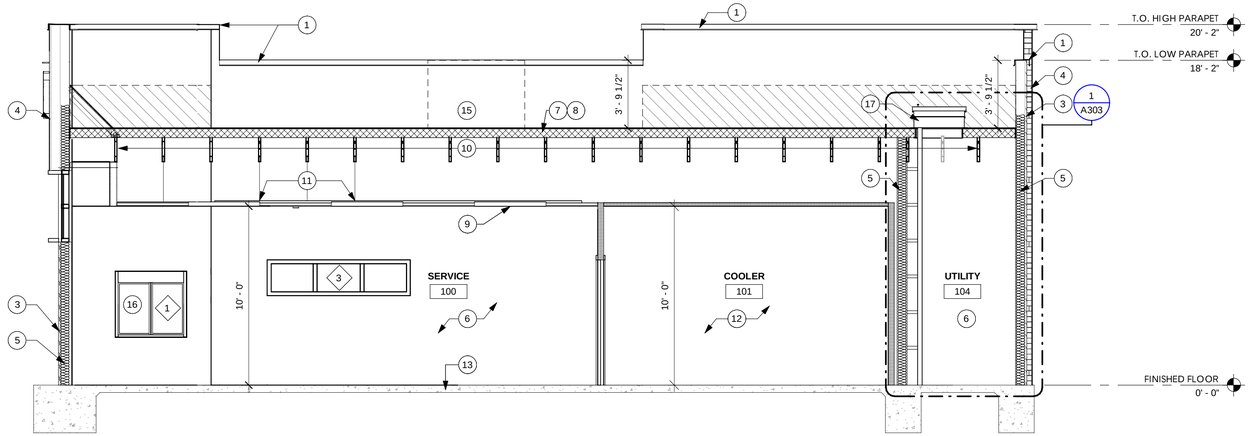
SHEET TITLE

EXTERIOR ELEVATIONS

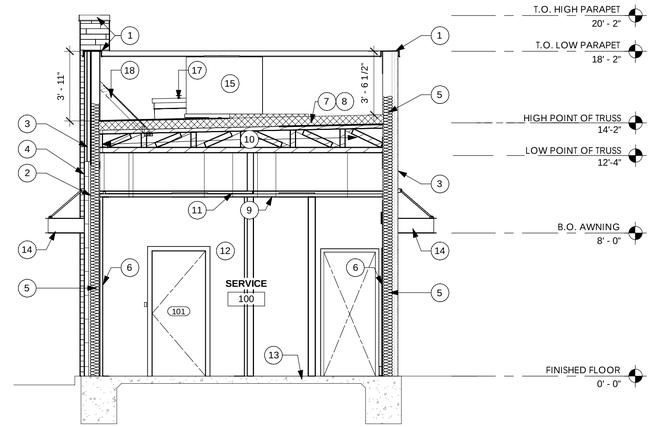
SHEET NUMBER

A201

6/6/2024 8:09:32 AM



1 BUILDING SECTION
1/4" = 1'-0"



2 BUILDING SECTION
1/4" = 1'-0"

GENERAL NOTES

A. ALL DIMENSIONS ARE SHOWN TO FINISH FACE OF WALLS UNLESS NOTED OTHERWISE

B. GC TO COORDINATE AND PROVIDE ALL BLOCKING FOR EQUIPMENT, MILLWORK, AND FIXTURES.

C. WALLS TO STRUCTURAL DECK MUST BE THOROUGHLY SEALED AROUND PENETRATIONS

D. REFER TO WALL TYPE LEGEND FOR ALL NEW WALLS.

E. ALL INSTALLED INTERIOR FINISHES SHALL COMPLY WITH THE FLAME SPREAD REQUIREMENTS OF ADOPTED IBC, CHAPTER 8.

F. GC TO PROVIDE MOISTURE RESISTANT GYPSUM BOARD AT ALL LOCATIONS WHERE WALL TILE IS PRESENT.

BUILDING SECTION KEYNOTES

1. METAL PARAPET CAP PER WALL PANEL MANUFACTURER.
2. STUCCO ON WATER RESISTIVE BARRIER.
3. LAP SIDING.
4. THIN BRICK.
5. INSULATION AT WALL CAVITY; REF: G005.
6. FRP ON INTERIOR SHEATHING.
7. TPO ROOFING SYSTEM. SINGLE PLY WATERPROOF MEMBRANE.
8. ROOF INSULATION TO BE RIGID INSULATION OR APPROVED EQUAL SPRAY FOAM INSULATION. REF: G005
9. ACOUSTICAL CEILING TILE SUSPENDED FROM STRUCTURE.
10. WOOD TRUSS, REF: STRU.
11. SHELVING SUSPENDED FROM UNISTRUT AND THREADED RODS FROM STRUCTURE.
12. INSULATED WALL & CEILING BY COOLER MANUFACTURER.
13. CONCRETE FLOOR SLAB, REF: STRU.
14. 22 GA. MIN. THICKNESS CORROSION RESISTANT METAL DECK ON 2X STEEL TUBES AT 6'-0" OC. SLOPE DECK TO DRAIN, REF: STRU
15. MECHANICAL UNITS ON 8" MAX CURBS, REF: MECH.
16. SERVICE WINDOW.
17. ROOF ACCESS HATCH
18. PARAPET BRACE, REF: STRU

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

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ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

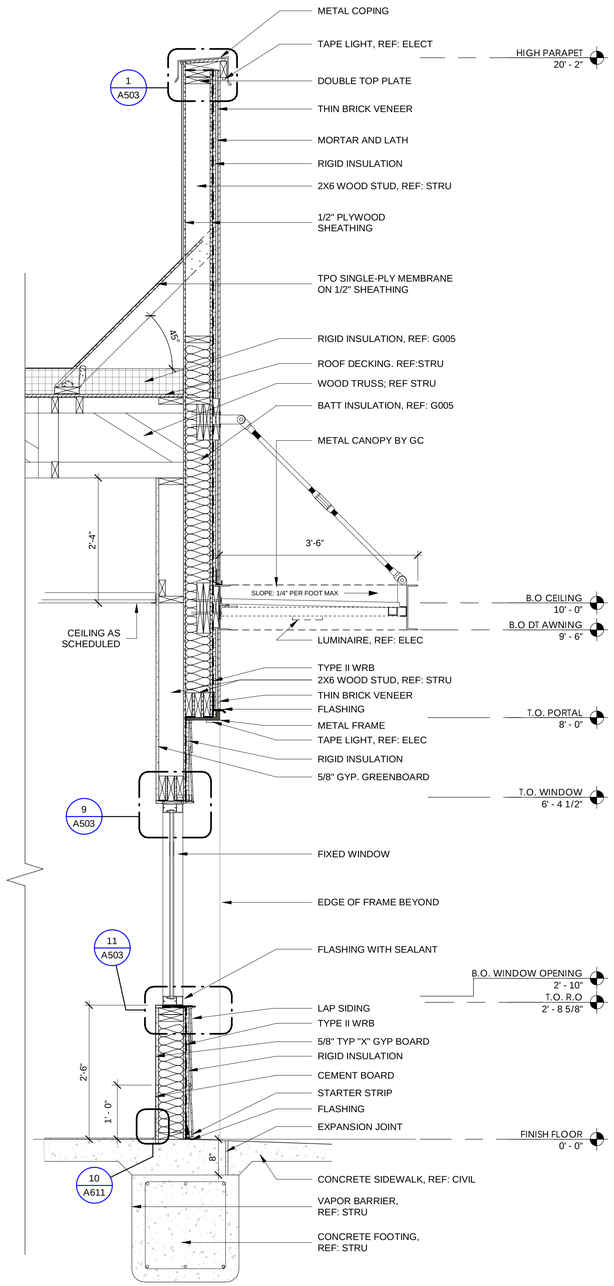
SHEET TITLE

BUILDING SECTIONS

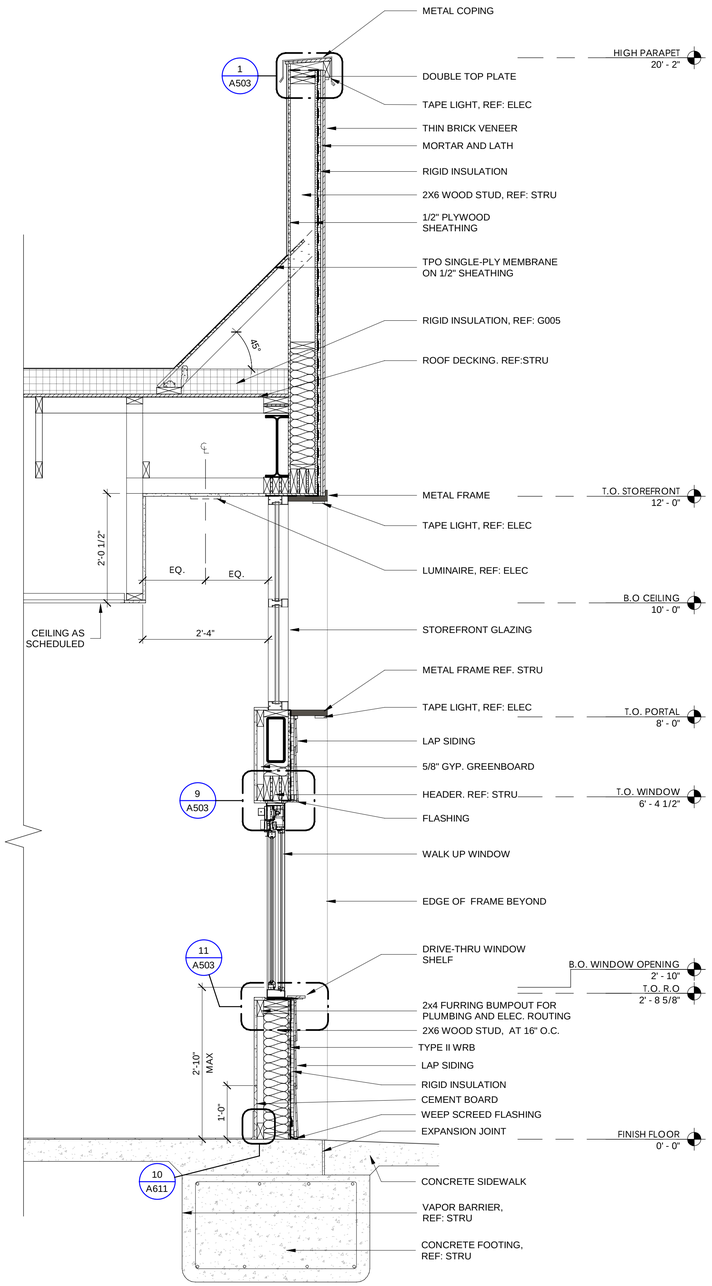
SHEET NUMBER

A301

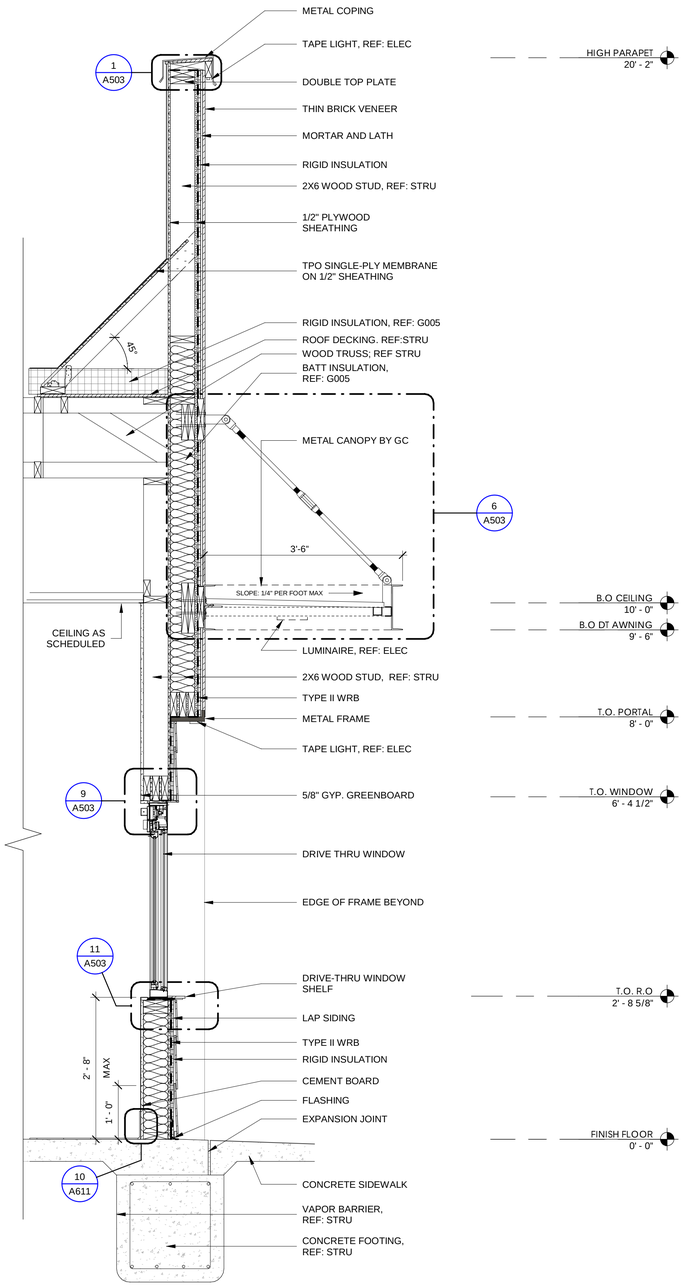
5/2/2024 2:31:56 PM



1 WALL SECTION AT WINDOW
3/4" = 1'-0"



2 WALL SECTION AT WALK UP WINDOW
3/4" = 1'-0"



3 WALL SECTION AT DRIVE THRU WINDOW
3/4" = 1'-0"

SALAD AND GO

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610 NW CHIPMAN ROAD
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ROGUE ARCHITECTS
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SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

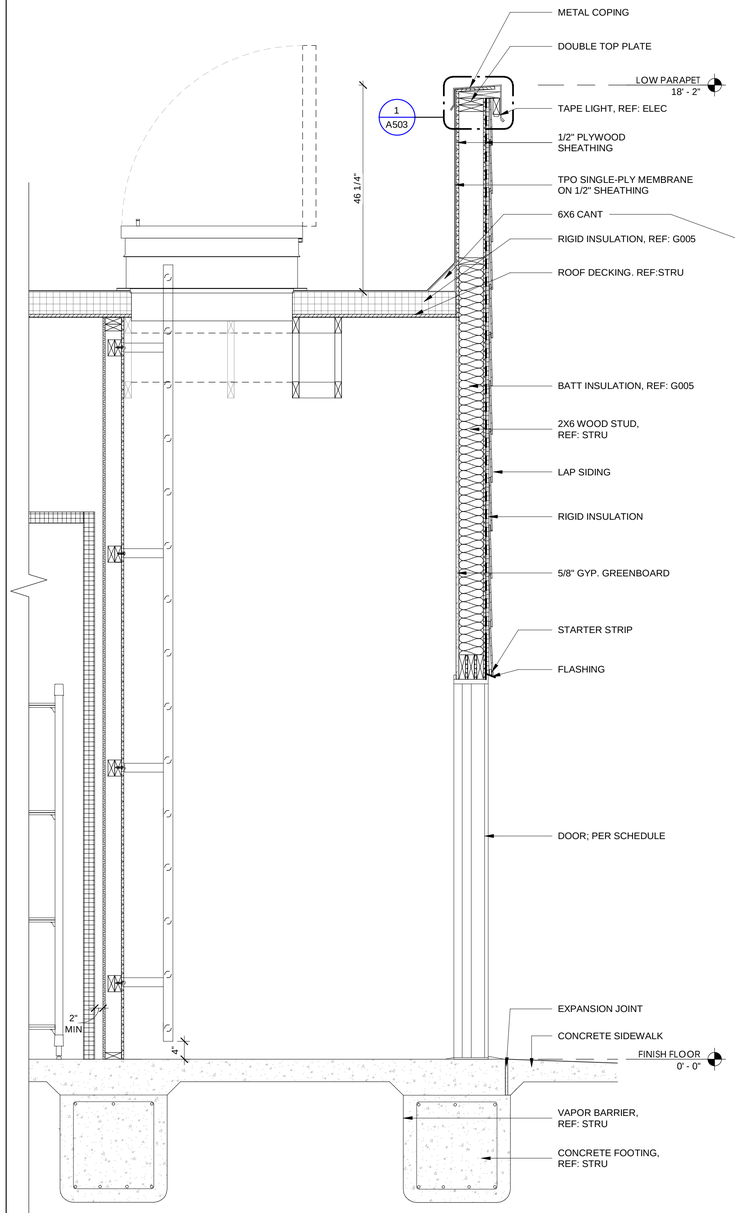
SHEET TITLE

WALL SECTIONS

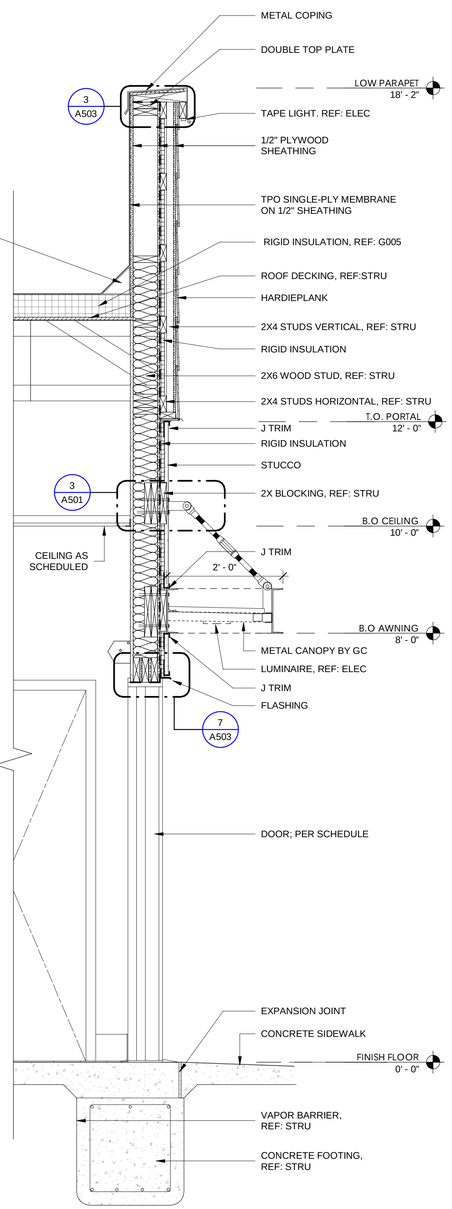
SHEET NUMBER

A302

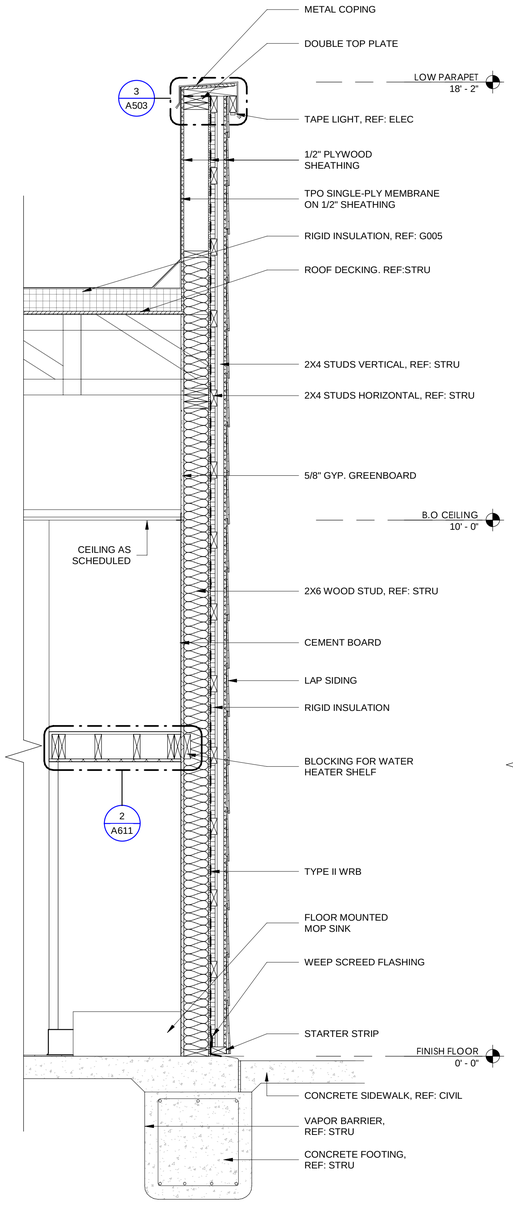
4/8/2024 10:51:34 AM



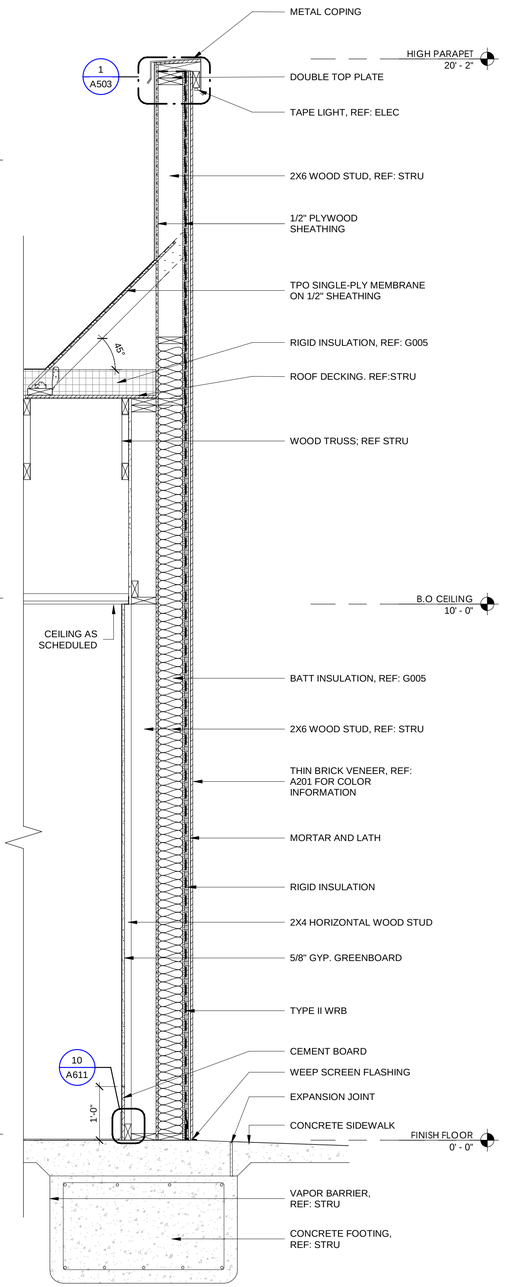
1 WALL SECTION AT COOLER AND ROOF LADDER
3/4" = 1'-0"



2 WALL SECTION AT DOOR
3/4" = 1'-0"



3 WALL SECTION AT MOP SINK
3/4" = 1'-0"



4 WALL SECTION AT DOUBLE STUD BUMP OUT
3/4" = 1'-0"

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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PROJECT INFORMATION

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ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

SHEET TITLE

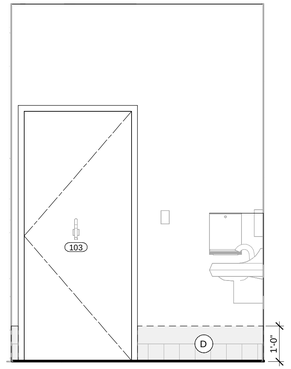
WALL SECTIONS

SHEET NUMBER

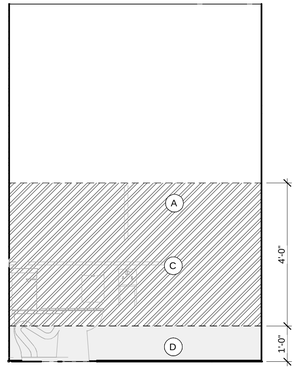
A303

4/8/2024 10:51:35 AM

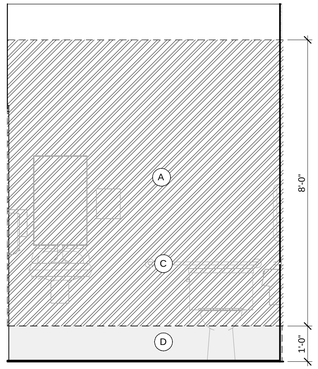
WALL BLOCKING SCHEDULE	
ITEM	DESCRIPTION
(A) PLYWOOD BACKING	PLYWOOD BACKING PER WALL TYPE CONSTRUCTION
(B) 2X BACKING	BLOCKING BETWEEN STUDS FULL WIDTH & HEIGHT AS SHOWN
(C) RESTROOM GRAB BARS	COORDINATE WITH DETAIL
(D) CEMENT BOARD BACKING	DURAROCK CEMENT BOARD BACKING PER WALL TYPE CONSTRUCTION



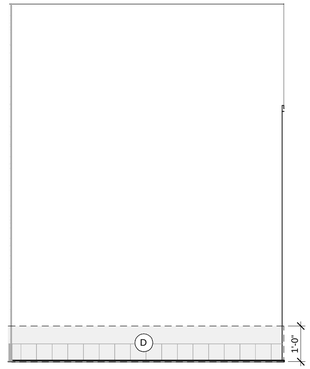
1 ELEVATION AT RESTROOM DOOR
1/2" = 1'-0"



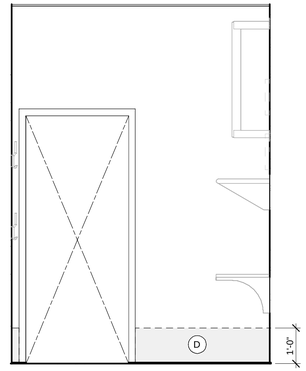
2 ELEVATION AT RESTROOM FIXTURES
1/2" = 1'-0"



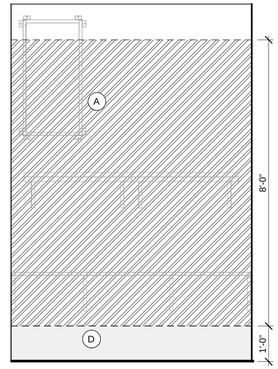
3 ELEVATION AT RESTROOM SINK
1/2" = 1'-0"



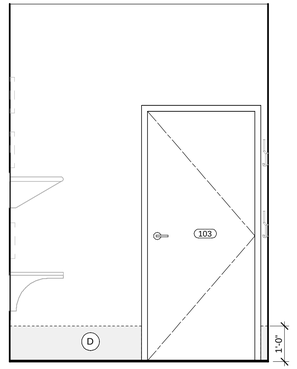
4 ELEVATION AT RESTROOM WALL
1/2" = 1'-0"



5 ELEVATION AT OFFICE
1/2" = 1'-0"



6 ELEVATION AT OFFICE
1/2" = 1'-0"



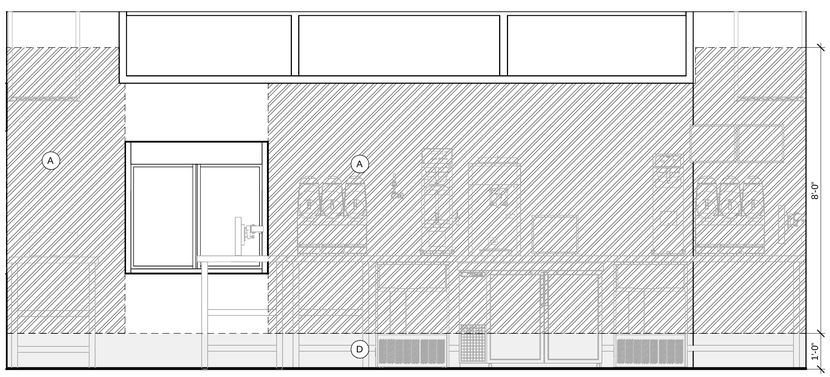
7 ELEVATION AT OFFICE
1/2" = 1'-0"

8 ELEVATION AT OFFICE
1/2" = 1'-0"

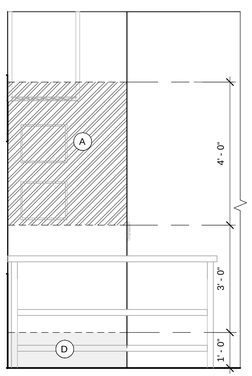
9 ELEVATION AT DOORS
1/2" = 1'-0"

10 ELEVATION AT SWITCH BANK
1/2" = 1'-0"

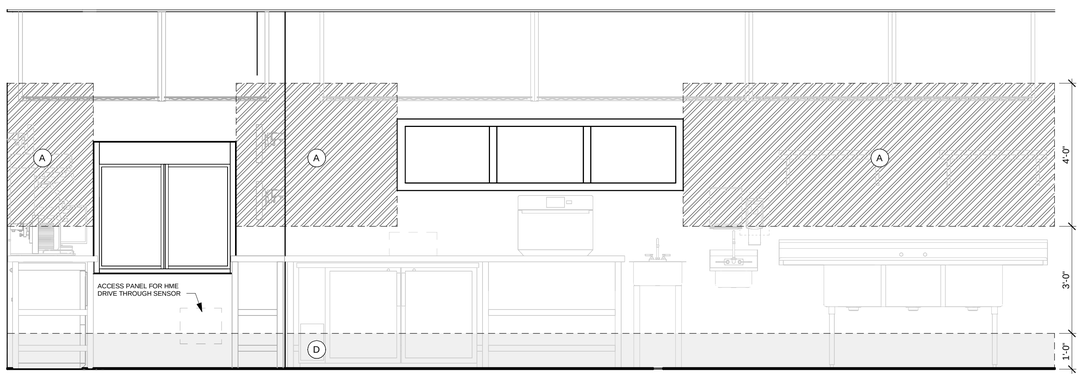
11 ELEVATION AT MOP SINK
1/2" = 1'-0"



12 ELEVATION AT PREP AREA
1/2" = 1'-0"



13 ELEVATION AT COMMAND CENTER
1/2" = 1'-0"



14 ELEVATION AT DT WINDOW
1/2" = 1'-0"

SALAD AND GO

#2001
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SEAL

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STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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PROJECT INFORMATION	
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ORIGINAL ISSUE:	06/01/2023
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DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

INTERIOR ELEVATIONS (WALL SHEATHING)

SHEET NUMBER

A400

4/8/2024 10:51:45 AM

MATERIAL TAG

E-1 — MATERIAL TYPE PER SCHEDULE

FIXTURE TAG

— EQUIPMENT PER SCHEDULE

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND ASSEMBLIES PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.

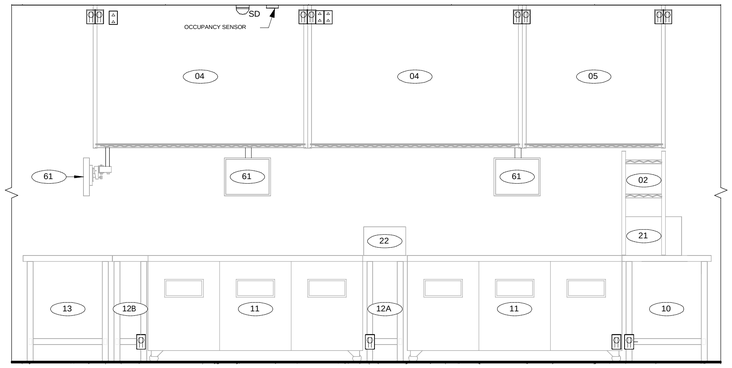
B. COORDINATE INSTALLATIONS OF ALL AFTER CONTRACT ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.

C. ALL RESTROOM ACCESSORY MOUNTING HEIGHTS AND CLEARANCES SHALL COMPLY WITH THE ACCESSIBILITY REQUIREMENTS OF THE LOCAL JURISDICTION.

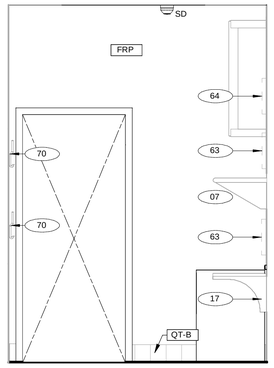
D. LAVATORY AND WATER CLOSET FITTINGS MUST BE OPERABLE WITH NO MORE THAN 5 POUNDS EFFORT, WITH USING ONE HAND, AND WITH SINGLE EFFORT WITH NO TWISTING OR GRASPING OF HARDWARE.

E. WATER PIPING AND DRAIN PIPES UNDER LAVATORIES MUST BE INSULATED. ABRASIVE OR SHARP SURFACES NOT PERMITTED UNDER LAVATORIES.

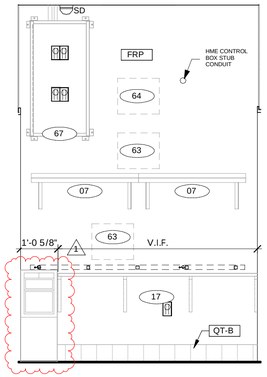
F. DIMENSIONS AND REQUIRED CLEARANCES ARE TO FACE OF FINISHED SURFACE.



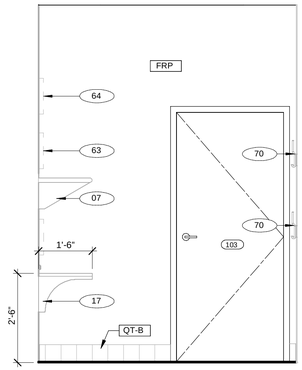
1 ELEVATION AT PREP AREA
1/2" = 1'-0"



2 ELEVATION AT OFFICE
1/2" = 1'-0"



3 ELEVATION AT OFFICE
1/2" = 1'-0"



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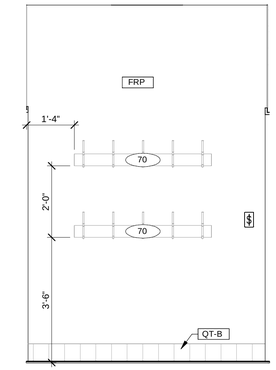
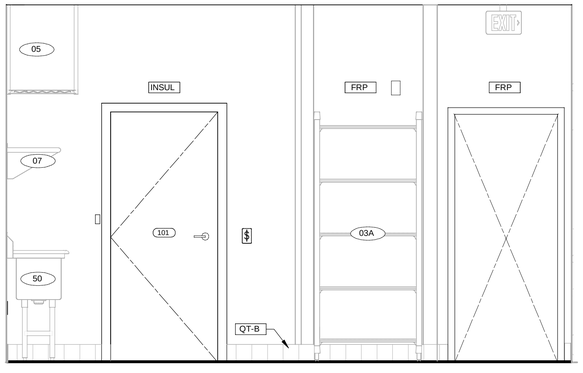
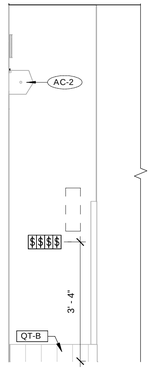


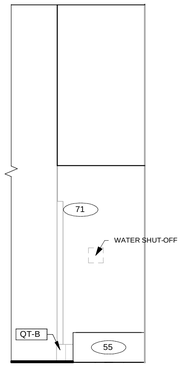
5 ELEVATION AT OFFICE
1/2" = 1'-0"



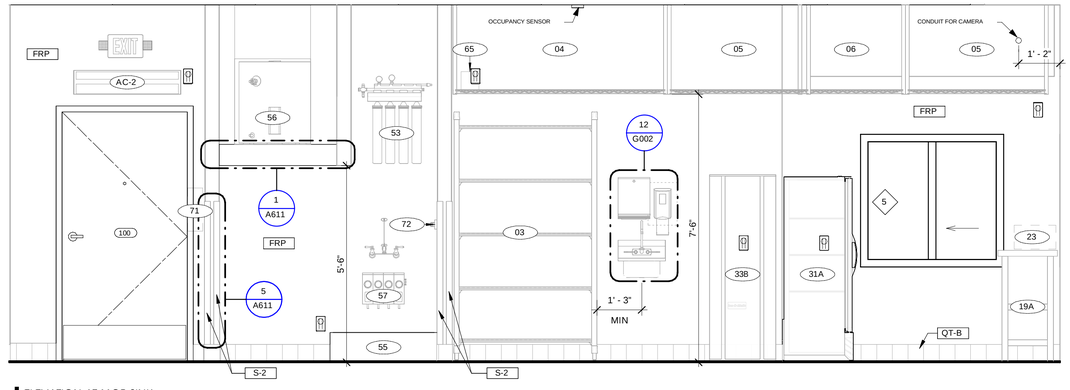
6 ELEVATION AT DOORS
1/2" = 1'-0"



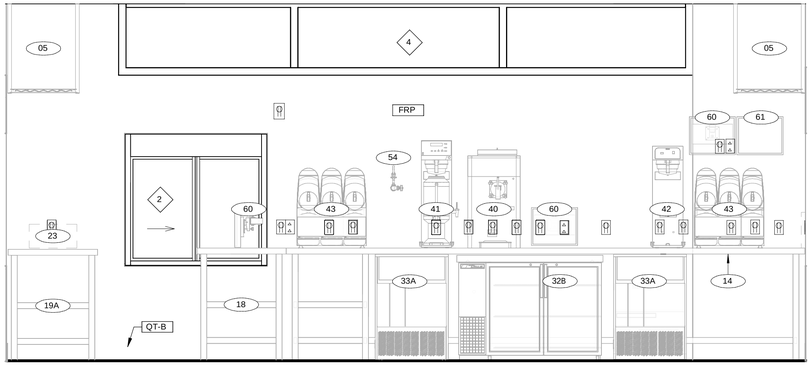
7 ELEVATION AT SWITCHBANK
1/2" = 1'-0"



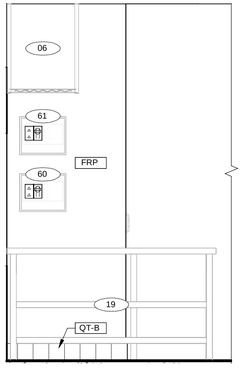
8 ELEVATION AT SHUT-OFF
1/2" = 1'-0"



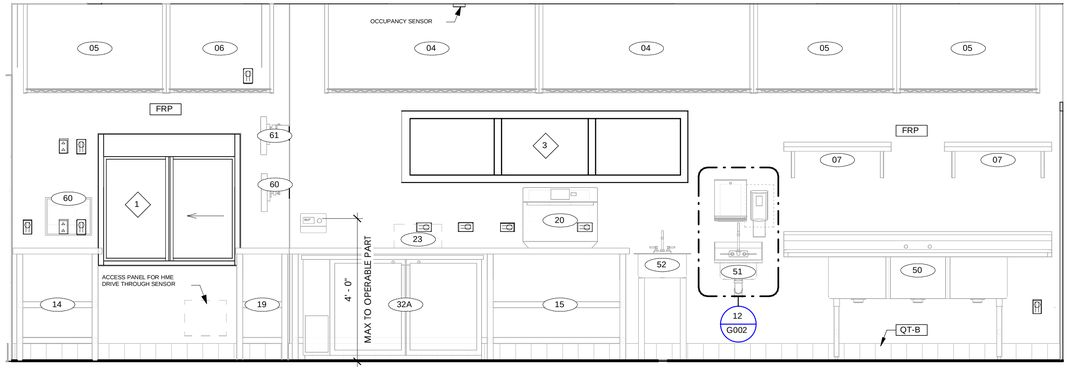
9 ELEVATION AT MOP SINK
1/2" = 1'-0"



10 ELEVATION AT PREP AREA
1/2" = 1'-0"



11 ELEVATION AT COMMAND CENTER
1/2" = 1'-0"



12 ELEVATION AT DT WINDOW
1/2" = 1'-0"

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

REVISION 1: 06/06/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION
1	06/06/2024	CITY COMMENTS

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

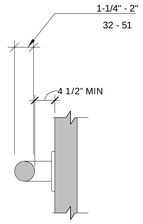
SHEET TITLE

INTERIOR ELEVATIONS (KITCHEN)

SHEET NUMBER

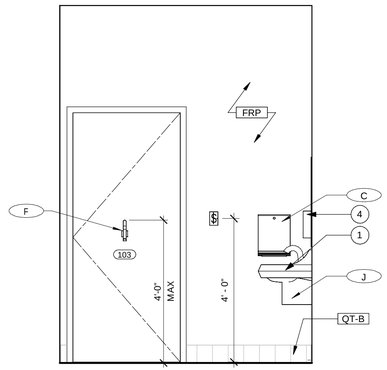
A401

6/6/2024 8:09:43 AM

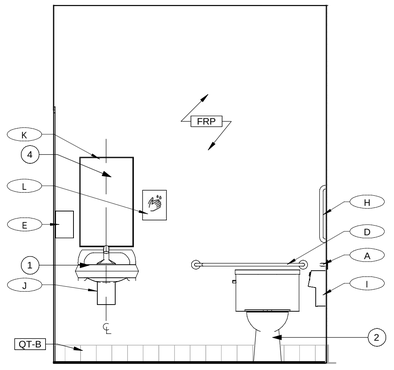


(A) CIRCULAR

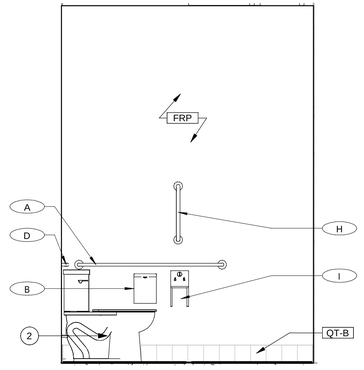
GRAB BARS



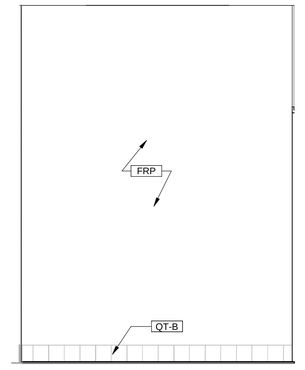
1 ELEVATION AT RESTROOM DOOR
1/2" = 1'-0"



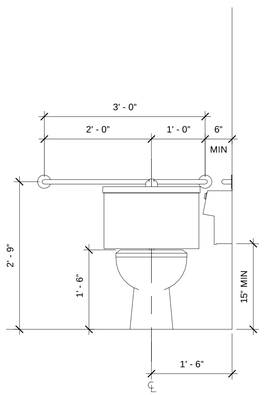
2 ELEVATION AT RESTROOM SINK
1/2" = 1'-0"



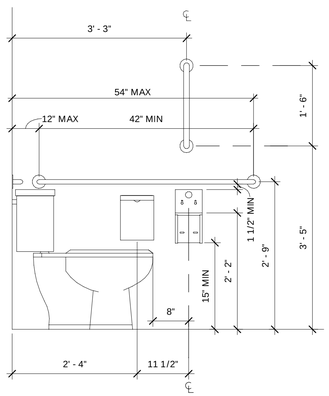
3 ELEVATION AT RESTROOM FIXTURES
1/2" = 1'-0"



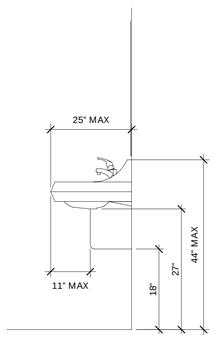
4 ELEVATION AT RESTROOM WALL
1/2" = 1'-0"



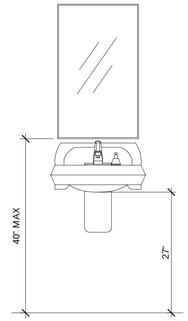
TOILET
FRONT ELEVATION



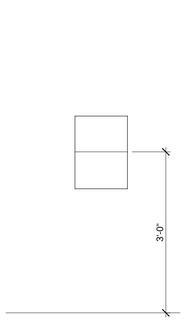
TOILET
SIDE ELEVATION



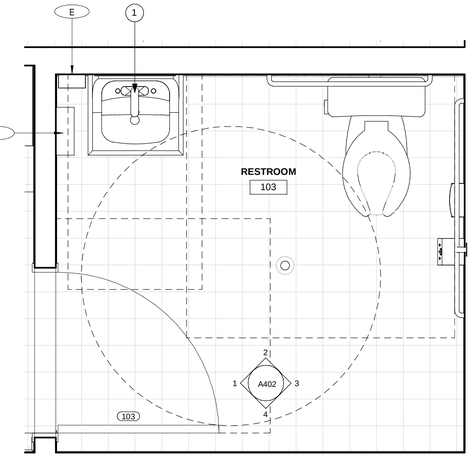
HAND SINK
SIDE ELEVATION



HAND SINK
FRONT ELEVATION



PAPER TOWEL DISPENSER
FRONT ELEVATION



7 ENLARGED RESTROOM PLAN
3/4" = 1'-0"

5 TOILET PLACEMENT
3/4" = 1'-0"

6 HAND SINK MOUNTING LOCATIONS
3/4" = 1'-0"

TOILET ACCESSORY NOTES

A. ALL REFERENCE DIMENSIONS ARE TO FACE OF WALL FINISH, UNO

B. ALL APPLICABLE ACCESSORIES SHALL COMPLY WITH AMERICAN DISABILITIES STANDARDS ACT (ADA) OF 2012

C. EXAMINE ROUGH OPENINGS FOR CORRECT DIMENSIONS, PLUMBING, AND FOR DEFECTS THAT WOULD PREVENT PROPER INSTALLATION OF ACCESSORIES. DO NOT PROCEED WITH INSTALLATION UNTIL DEFECTS ARE CORRECTED.

D. EACH ITEM SHALL BE INSTALLED PLUMB, LEVEL, SECURE, AND IN PROPER RELATION TO FLOORS, PARTITIONS, AND OTHER FIXTURES.

MATERIAL TAG

E-1 — MATERIAL TYPE PER SCHEDULE

FIXTURE TAG

— EQUIPMENT PER SCHEDULE

GENERAL NOTES

A. GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS, AND ASSEMBLIES PRIOR TO CONSTRUCTION. REPORT ANY SIGNIFICANT DISCREPANCIES TO THE ARCHITECT.

B. COORDINATE INSTALLATIONS OF ALL AFTER CONTRACT ASSEMBLIES WITH OWNER PRIOR TO CONSTRUCTION OF ADJOINING OR RELATED STRUCTURES.

C. ALL RESTROOM ACCESSORY MOUNTING HEIGHTS AND CLEARANCES SHALL COMPLY WITH THE ACCESSIBILITY REQUIREMENTS OF THE LOCAL JURISDICTION.

D. LAVATORY AND WATER CLOSET FITTINGS MUST BE OPERABLE WITH NO MORE THAN 5 POUNDS EFFORT, WITH USING ONE HAND, AND WITH SINGLE EFFORT WITH NO TWISTING OR GRASPING OF HARDWARE.

E. WATER PIPING AND DRAIN PIPES UNDER LAVATORIES MUST BE INSULATED. ABRASIVE OR SHARP SURFACES NOT PERMITTED UNDER LAVATORIES.

F. DIMENSIONS AND REQUIRED CLEARANCES ARE TO FACE OF FINISHED SURFACE.

RESTROOM FIXTURE SCHEDULE

TAG	Count	DESCRIPTION	MANUFACTURER	MODEL NUMBER
A	1	42" GRAB BAR	BOBRICK WASHROOM EQUIPMENT, INC	B-6806 x 42
B	1	SANITARY NAPKIN DISPOSAL BIN	BOBRICK WASHROOM EQUIPMENT, INC	B-270
C	1	PAPER TOWEL DISPENSER	EMPRESS	EMP7400
D	1	36" GRAB BAR	BOBRICK WASHROOM EQUIPMENT, INC	B-6806 x 36
E	1	WALL MOUNTED SOAP DISPENSER	BY OWNER	BY OWNER
F	1	COAT HOOK	BOBRICK WASHROOM EQUIPMENT, INC	B-233
H	1	18" VERTICAL GRAB BAR	BOBRICK WASHROOM EQUIPMENT, INC	B-6806 x 18
I	1	TOILET PAPER DISPENSER	SAN JAMER	R-1200XC
J	1	PIPE INSULATION BOOT	-	-
K	1	SURFACE MOUNTED MIRROR WITH FRAME	BOBRICK WASHROOM EQUIPMENT, INC	B-165 1836
L	1	WALL MOUNTED HAND WASH SIGNAGE	SETON	L-0715GGVPLYVAD

RESTROOM KEYNOTES

1. ADA COMPLIANT SINK & FAUCET, REFER TO PLUMBING
2. ADA COMPLIANT TOILET, REFER TO PLUMBING
3. 67" CLEAR FLOOR SPACE
4. CENTER MIRROR OVER SINK

SALAD AND GO

#2001
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ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

INTERIOR ELEVATIONS (RESTROOM)

SHEET NUMBER

A402

4/8/2024 10:51:56 AM

GENERAL NOTES

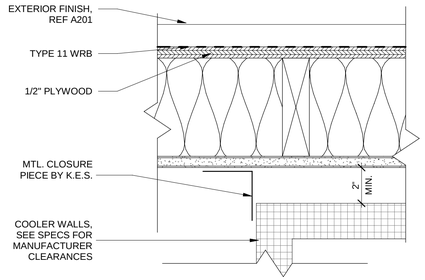
1. GC TO SUBMIT SEALANT SAMPLE TO CONSTRUCTION MANAGER FOR APPROVAL PRIOR TO PURCHASE & INSTALLATION.

2. ALL COMPONENTS, PRODUCTS, EQUIPMENT, FASTENERS, FINISHES, ETC TO BE INSTALLED PER MANUFACTURERS WRITTEN INSTRUCTIONS.

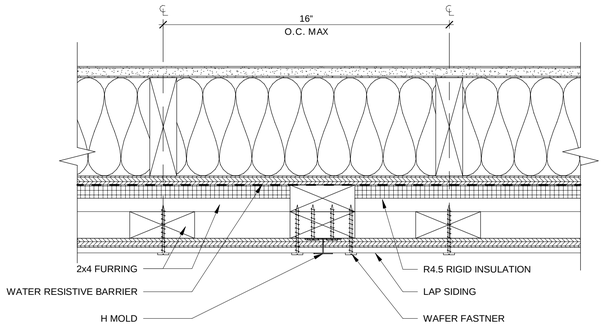
3. ANY DIMENSIONAL IRREGULARITIES OR CONFLICTS ARE TO BE BROUGHT TO THE ARCHITECTS ATTENTION IMMEDIATELY & PRIOR TO COMMENCEMENT OF WORK.

4. GC TO COORDINATE WORK WITH SPECIFICATIONS FOR PROPER INSTALLATION & ADDITIONAL REQUIREMENTS.

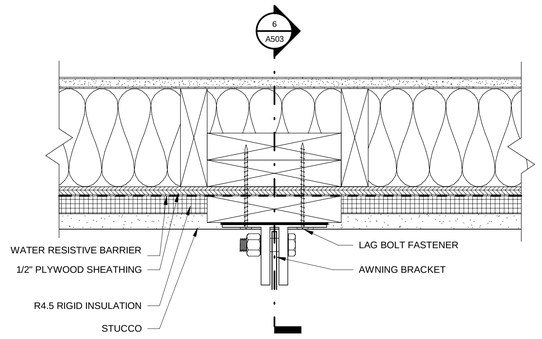
5. COLOR OF TRIM PIECES SPECIFIED WITHIN THE DETAILS ON THIS SHEET TO MATCH COLOR OF ADJACENT WALL.



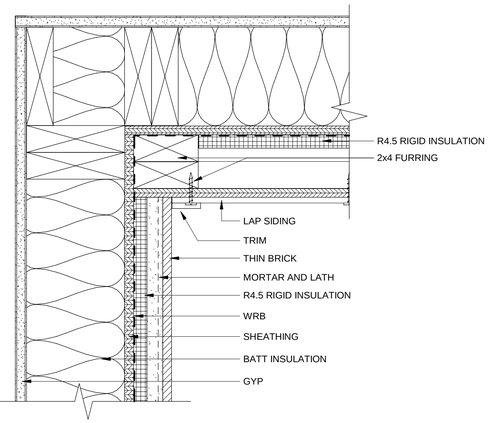
1 CLOSURE DETAIL AT COOLER
3" = 1'-0"



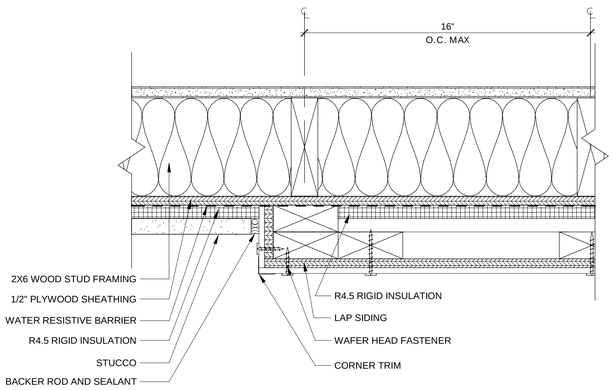
2 TYP. PANEL AT VERTICAL JOINT - PLAN
3" = 1'-0"



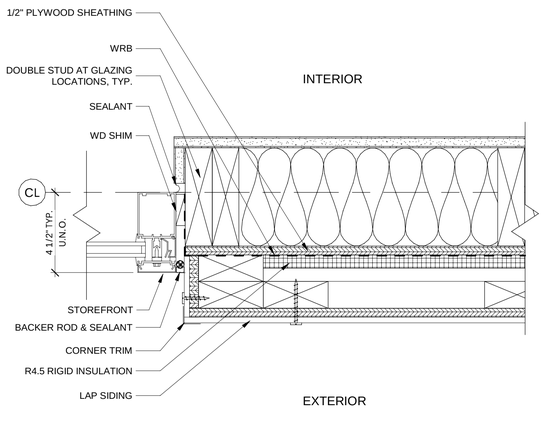
3 CANOPY TIEBACK CONNECTION - PLAN
3" = 1'-0"



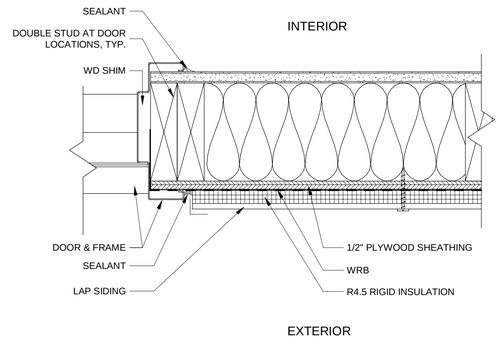
4 PANEL AT CORNER EXPRESS BUMP OUT - PLAN
3" = 1'-0"



5 PANEL AT TERMINATION - PLAN
3" = 1'-0"



6 PANEL AT WINDOW JAMB - PLAN
3" = 1'-0"



7 PANEL AT REAR DOOR JAMB - PLAN
3" = 1'-0"

SAD AND GO

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PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
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SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

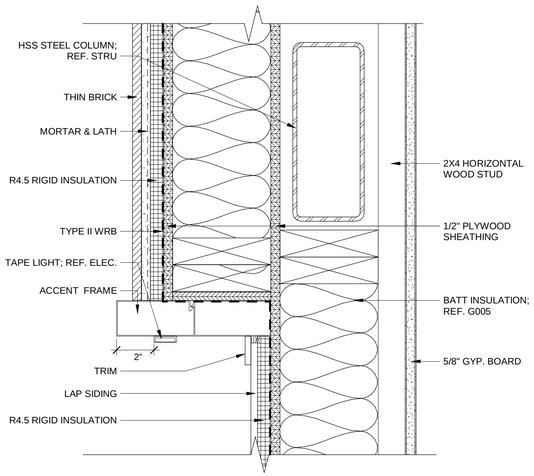
SHEET TITLE

PLAN DETAILS

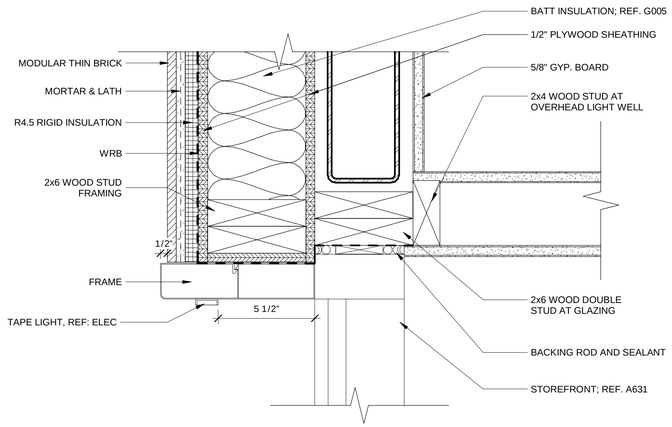
SHEET NUMBER

A501

4/8/2024 10:51:57 AM



1 EMBEDDED COLUMN AT FRONT FACADE - PLAN
3" = 1'-0"



2 LIGHT WELL AT STOREFRONT - PLAN
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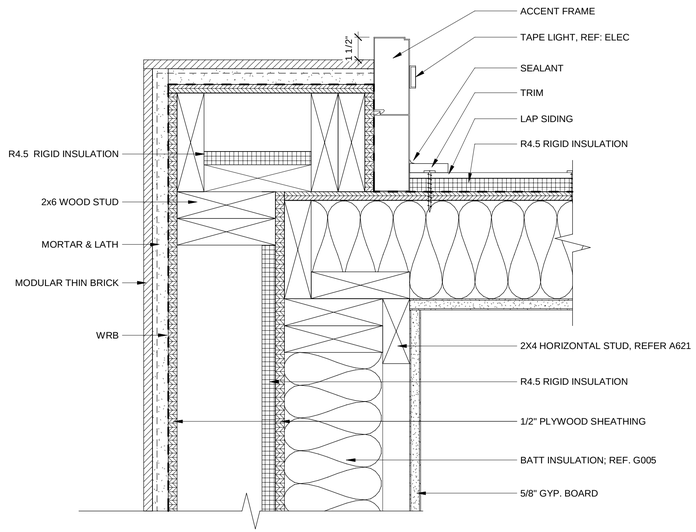
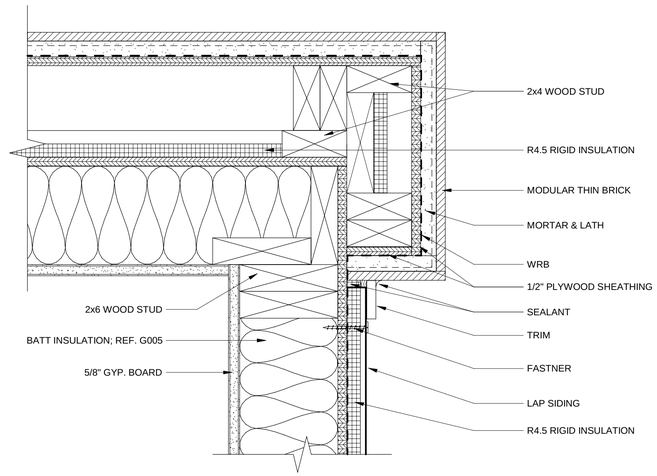
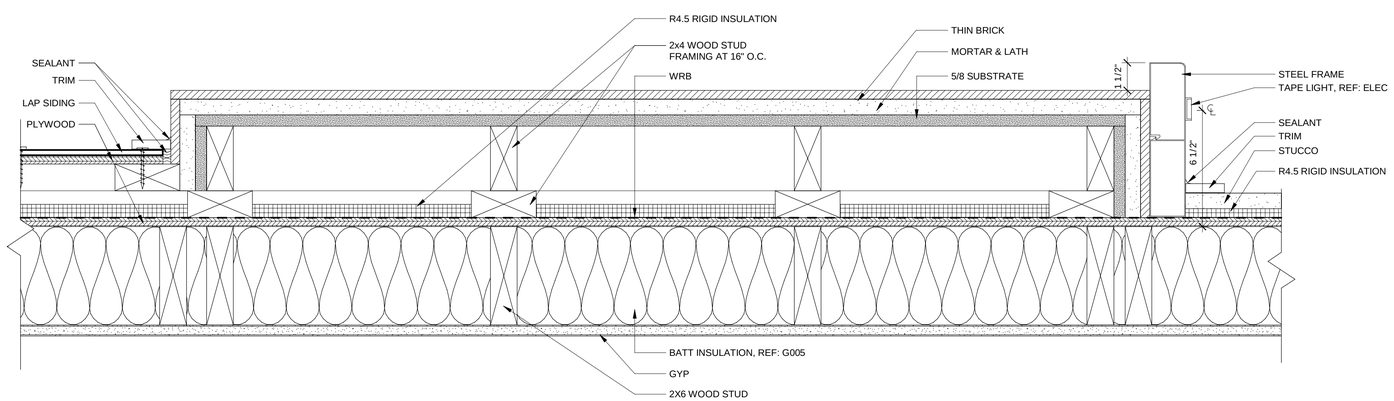


3 DRIVE THRU/FRONT CORNER- PLAN
3" = 1'-0"



4 DRIVE THRU/REAR CORNER- PLAN
3" = 1'-0"



5 BUMP OUT BY COOLER
3" = 1'-0"

4/8/2024 10:51:58 AM

SAAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
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ARCHITECT

PERMIT SET: 04/12/2024

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PROJECT INFORMATION

PROJECT NO:	24-0087
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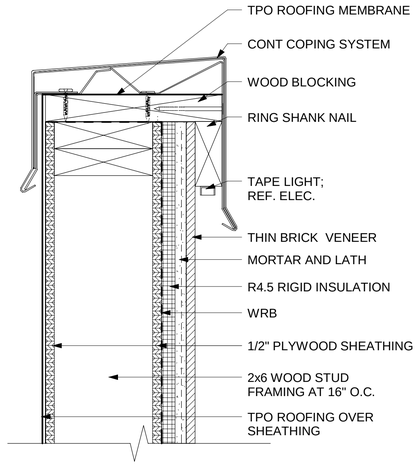
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

SHEET TITLE

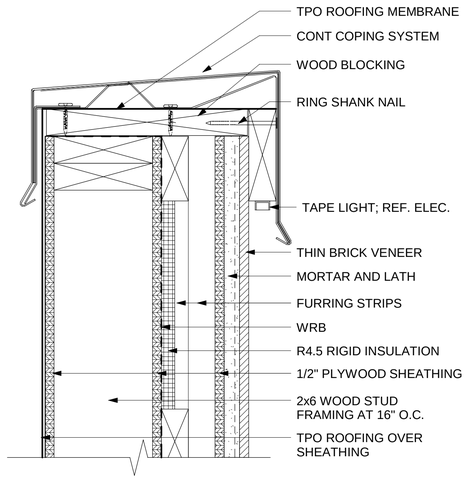
PLAN DETAILS

SHEET NUMBER

A502



1 THIN BRICK ROOF COPING -SINGLE STUD
3" = 1'-0"



2 THIN BRICK ROOF COPING
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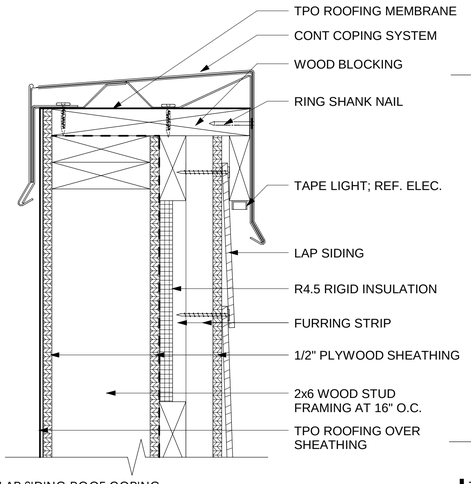
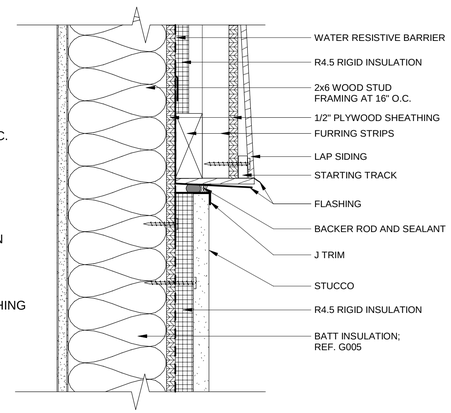
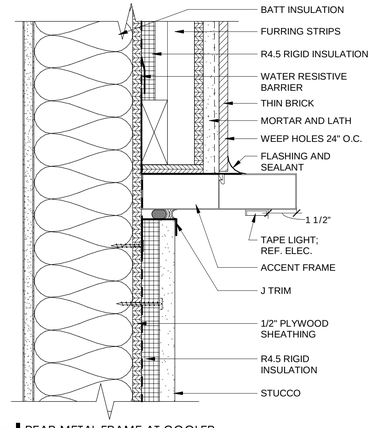


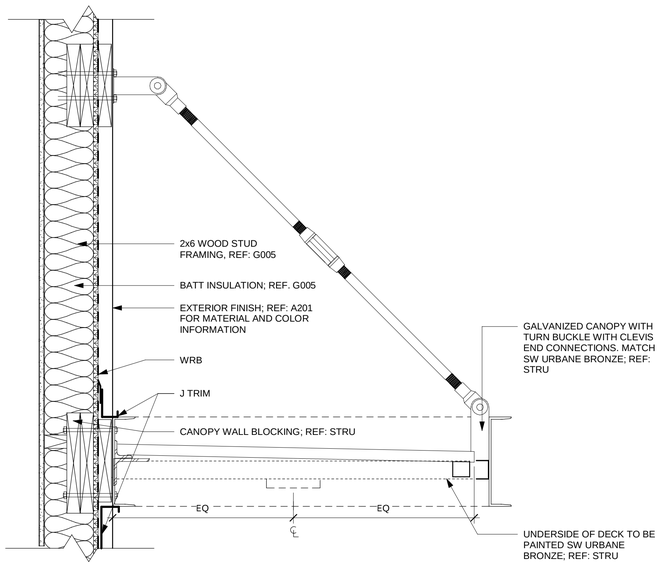
3 LAP SIDING ROOF COPING
3" = 1'-0"



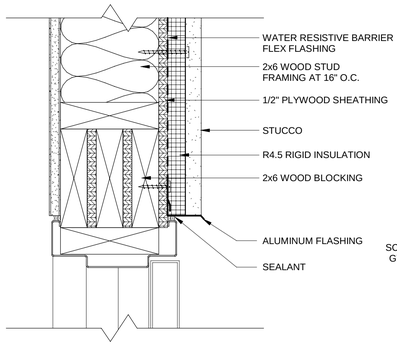
4 TYP. PANEL AT EIFS TRANSITION SECTION
3" = 1'-0"



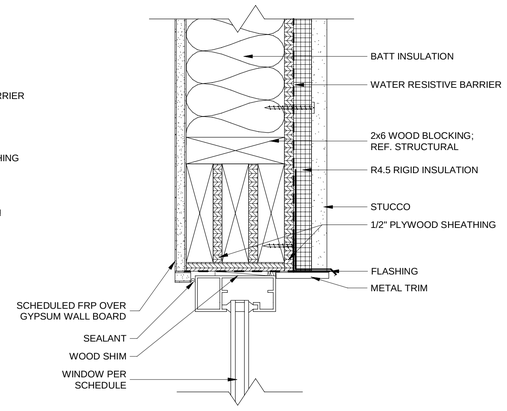
5 REAR METAL FRAME AT COOLER
3" = 1'-0"



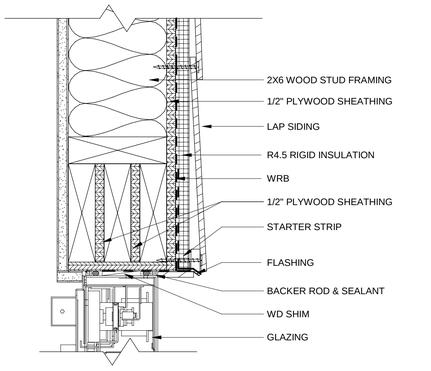
6 TYPICAL METAL CANOPY
1 1/2" = 1'-0"



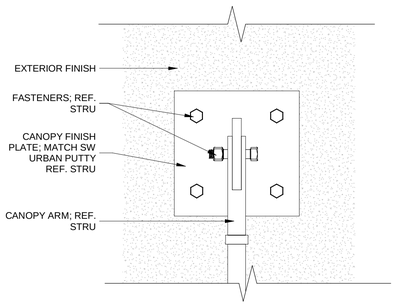
7 PANEL AT DOOR HEADER - SECTION
3" = 1'-0"



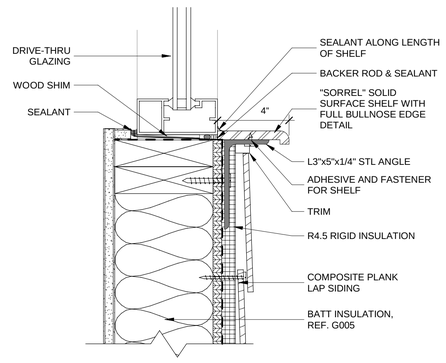
8 EXTERIOR STUCCO WINDOW HEAD - JAMB SIM.
3" = 1'-0"



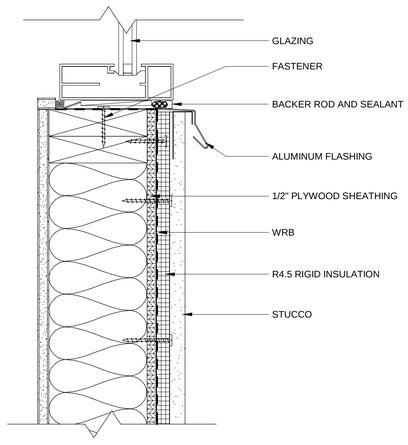
9 PANEL AT WINDOW HEADER - SECTION
3" = 1'-0"



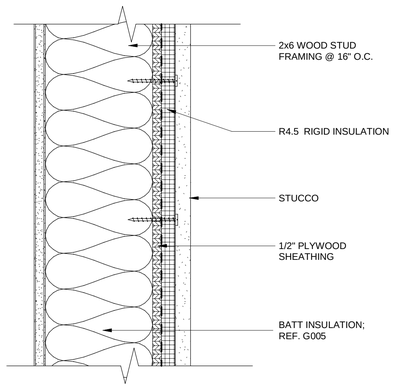
10 ELEVATION AT CANOPY BRACKET
3" = 1'-0"



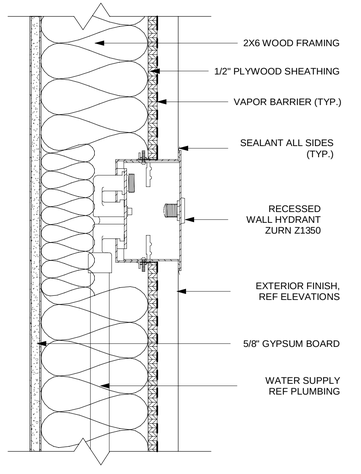
11 WINDOW SILL TRANSITION
3" = 1'-0"



12 PANEL AT FIXED WINDOW SILL - SECTION
3" = 1'-0"



13 PANEL AT HORIZONTAL REVEAL - SECTION
3" = 1'-0"



14 REAR HOSE BIB
3" = 1'-0"

4/8/2024 10:52:00 AM

SAAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

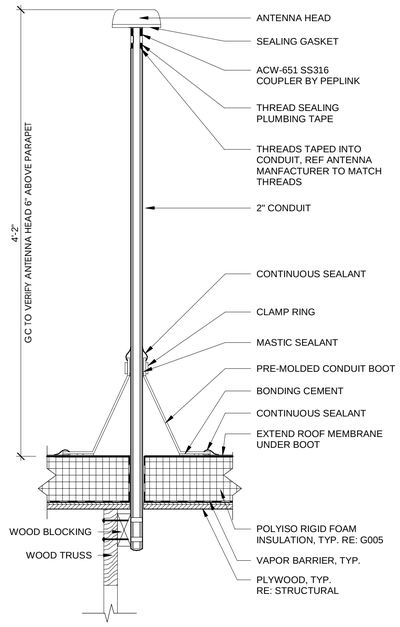
PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	V. PEREZ
CHECKED BY:	J. JEFFERY

SHEET TITLE

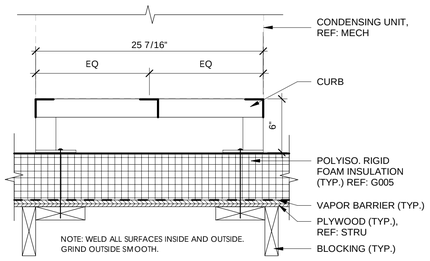
SECTION DETAILS

SHEET NUMBER

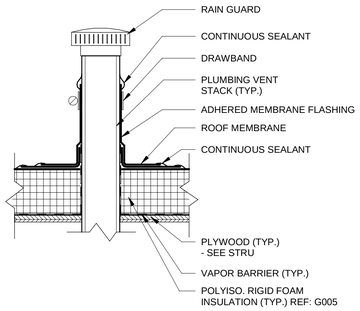
A503



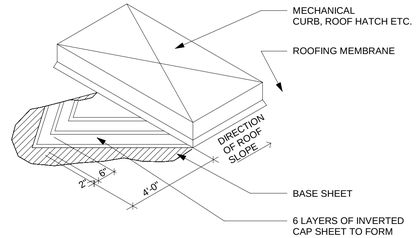
4 ROOFTOP CELL BOOSTER
1 1/2" = 1'-0"



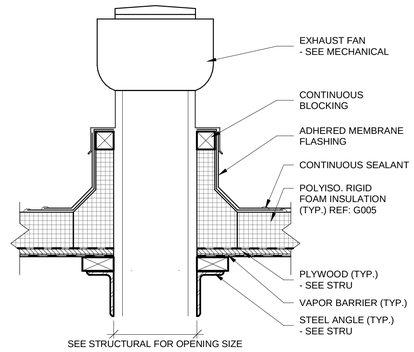
1 CONDENSING UNIT CURB
1 1/2" = 1'-0"



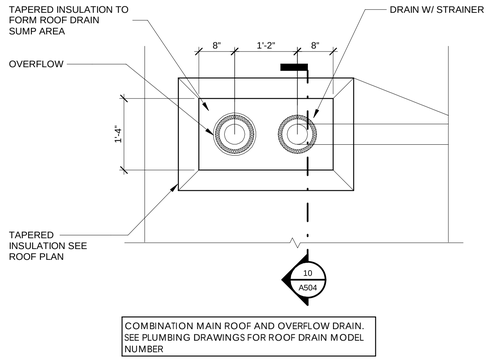
2 VENT PENETRATION (TYP.)
1 1/2" = 1'-0"



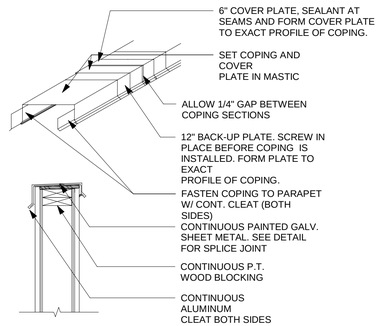
3 BUILT-UP ROOFING CRICKET
1/8" = 1'-0"



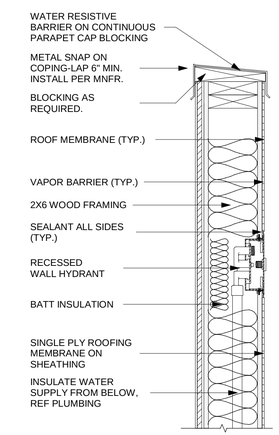
5 EXHAUST FAN PENETRATION (TYP.)
1 1/2" = 1'-0"



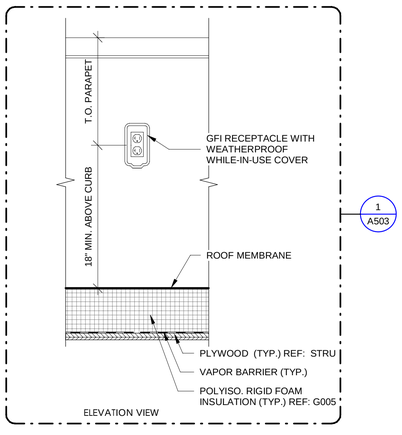
6 ROOF DRAIN DETAIL PLAN
3/4" = 1'-0"



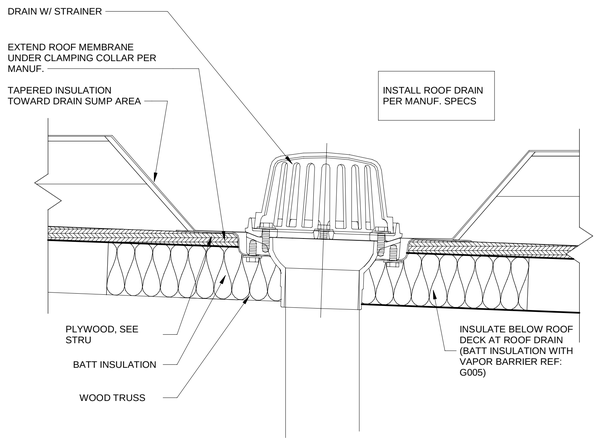
7 METAL COPING DETAIL
1 1/2" = 1'-0"



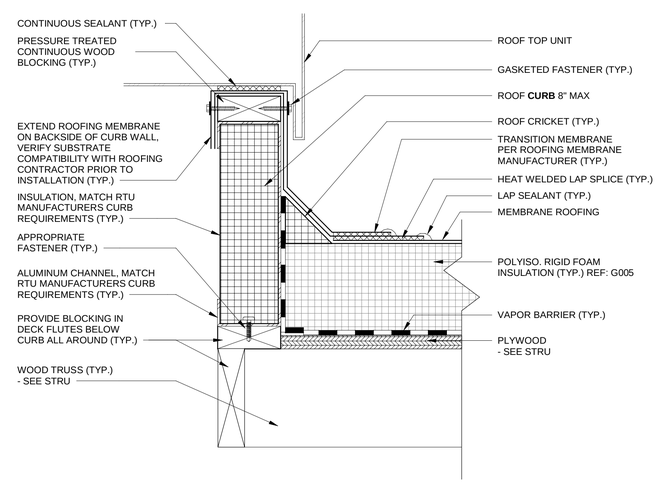
8 ROOFTOP HOSE BIB
1 1/2" = 1'-0"



9 ROOFTOP RECEPTACLE (TYP.)
1 1/2" = 1'-0"



10 ROOF DRAIN DETAIL
NOT TO SCALE



11 ROOF CURB DETAIL
3" = 1'-0"

4/8/2024 10:52:02 AM

SAAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

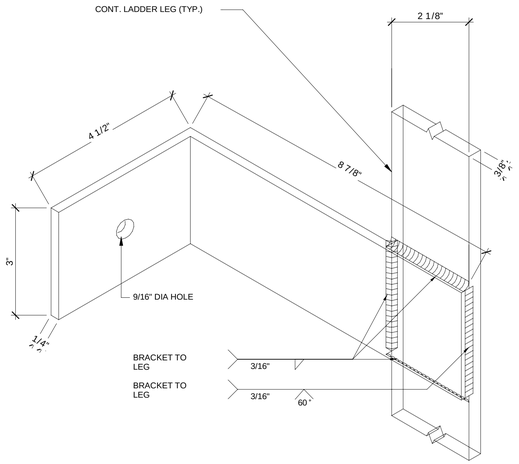
PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

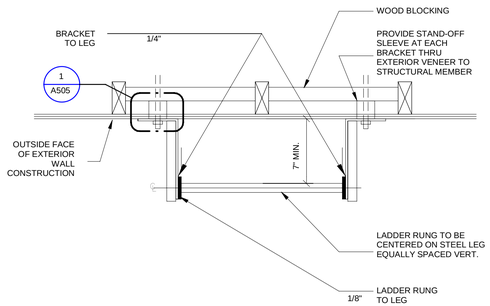
ROOF DETAILS

SHEET NUMBER

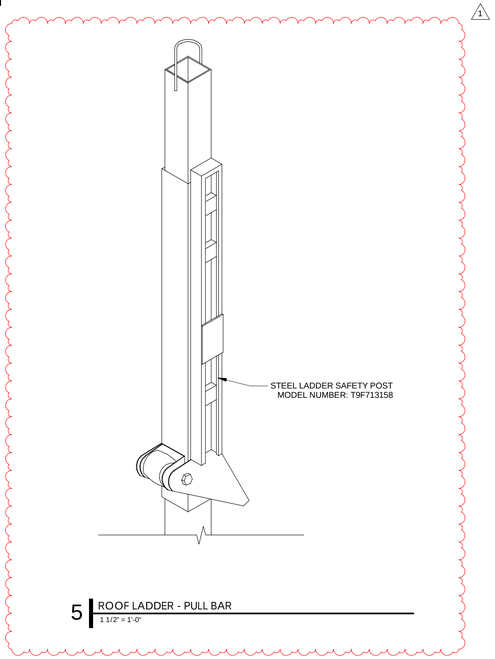
A504



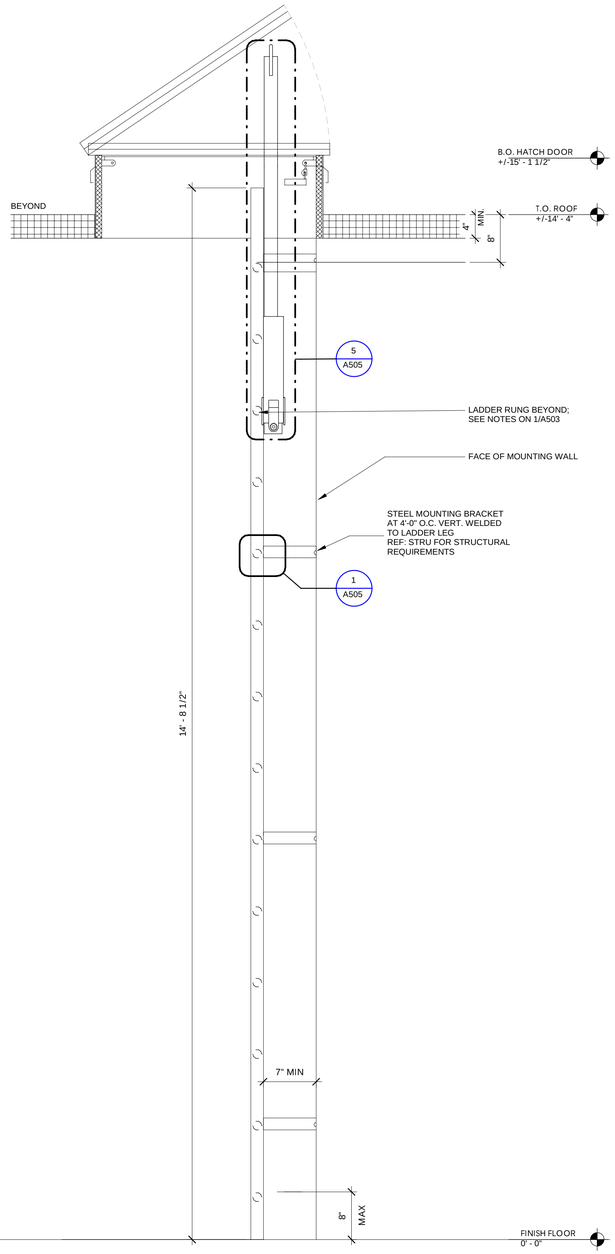
1 ROOF LADDER - "L" BRACKET DETAIL
6" = 1'-0"



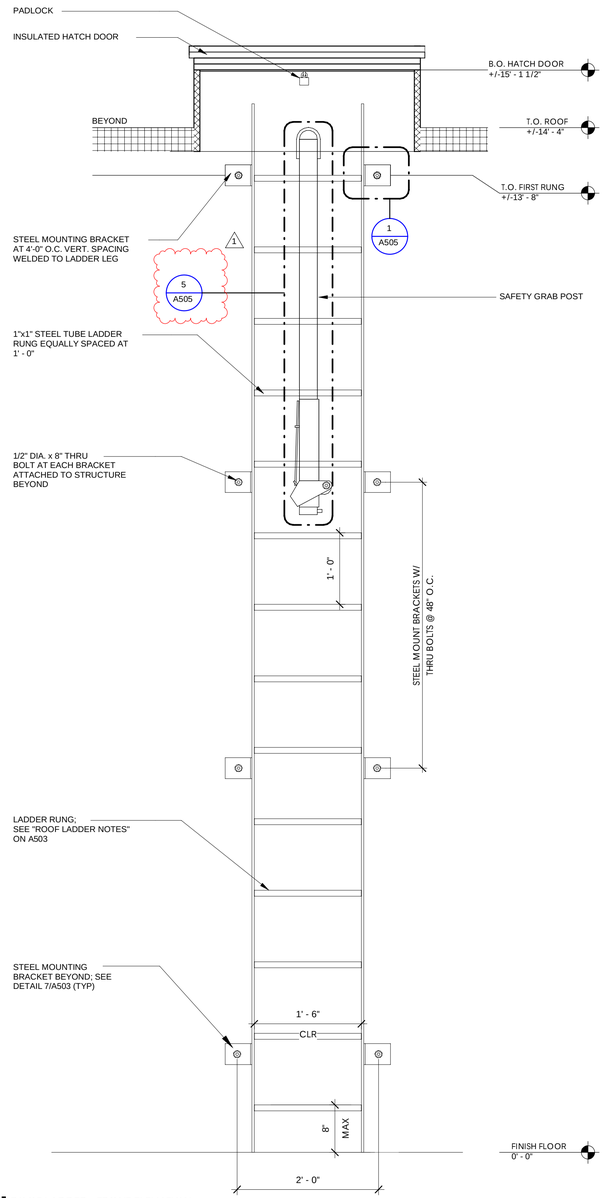
2 ROOF LADDER - SECTION
1 1/2" = 1'-0"



5 ROOF LADDER - PULL BAR
1 1/2" = 1'-0"



3 ROOF LADDER - SIDE ELEVATION
1" = 1'-0"



4 ROOF LADDER - FRONT ELEVATION
1" = 1'-0"

GENERAL NOTES

1. LADDER CONSTRUCTION IS TO MEET ALL REQUIREMENTS ACCORDING TO SECTION 1923.1053 OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION GUIDELINES
2. THE LADDER RUNGS SHALL BE CORRUGATED, KNURLED, DIMPLED, COATED WITH SKID-RESISTAND MATERIAL, OR OTHERWISE TREATED TO MINIMIZE SLIPPING.
3. ALL WELDS ARE TO BE 3/16" FILLET WELDS U.N.O.
4. ALL STEEL TO BE GALVANIZED
5. GC TO VERIFY EXISTING CONDITIONS & NOTIFY ARCHITECT IF THERE ARE ANY CONFLICTS WITH THE DRAWINGS
6. GC TO PROVIDE "SELF RETRACTING LIFELINE" FOR ALL LADDER HEIGHTS THAT EXCEED 24FT.

SALAD AND GO

#2001

610 NW CHIPMAN ROAD

LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

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FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

REVISION 1: 06/06/2024

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ISSUE	DATE	DESCRIPTION
1	06/06/2024	CITY COMMENTS

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

ROOF LADDER DETAILS

SHEET NUMBER

A505

6/6/2024 8:09:33 AM

GENERAL NOTES

A. CONSIDERATION WILL NOT BE GRANTED FOR ANY ALLEGED MISUNDERSTANDINGS OF THE AMOUNT OF WORK TO BE PERFORMED. TENDER OF PROPOSAL SHALL CONVEY FULL AGREEMENT TO THE ITEMS AND CONDITIONS INDICATED ON THE DRAWINGS. SHOULD THE CONTRACTOR FIND DISCREPANCIES OR OMISSIONS IN THE CONTRACT DOCUMENT OR BE IN DOUBT AS TO THE INTENT THEREOF, THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ARCHITECT AND/OR THE OWNER'S REPRESENTATIVE PRIOR TO SUBMITTING A PROPOSAL FOR WORK.

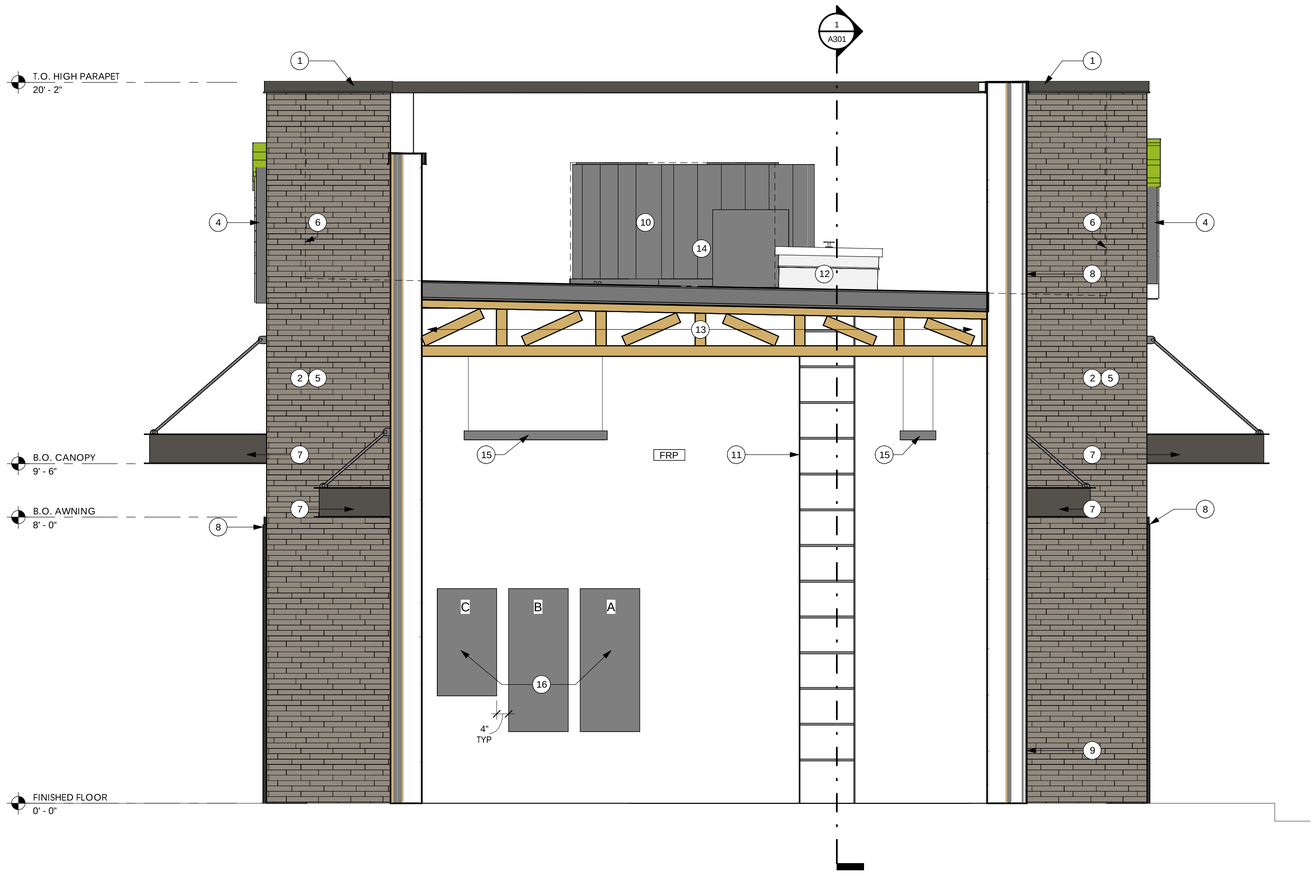
B. WATERPROOFING MEMBRANE TO BE TWO LAYERS TYVEK COMMERCIAL WRAP WITH TAPED SEAMS, INSTALLED PER MANUFACTURER SPECIFICATIONS. SPECIAL INSPECTION NEEDED FOR WRB.

C. FLASHING TO BE 24 GA GALVANIZED STEEL, UNO.

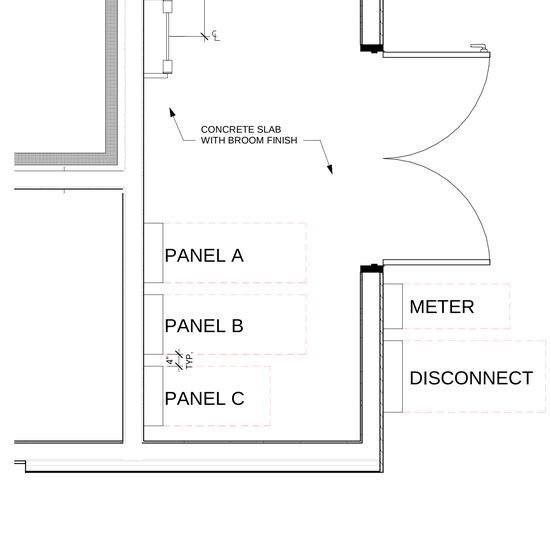
D. REFER TO A201 EXTERIOR ELEVATIONS FOR MATERIAL INFORMATION.

ELEVATION KEYNOTES

1. METAL PARAPET CAP, PAINTED. WITH TAPE LIGHT UNDER COPING. REF: ELEC.
2. THIN BRICK.
3. NOT USED.
4. BUILDING SIGNAGE SHOWN FOR PLACEMENT AND SCALE ONLY. SIGNAGE UNDER SEPARATE PERMIT. GC TO PROVIDE BLOCKING AS REQUIRED.
5. POP-OUT.
6. ROOF LINE, BEHIND.
7. PAINTED AWNING.
8. STEEL FRAME WITH TAPE LIGHTS, REF: ELEC
9. ROOF DRAIN.
10. RTU, REF: ELEC.
11. LADDER
12. ROOF HATCH
13. WOOD TRUSS
14. CONDENSING UNIT
15. UTILITY ROOM LIGHTING; REF: ELEC.
16. ELECTRICAL PANELS; REF: ELEC.



1 REAR ELEVATION INSIDE UTILITY ROOM
1/2" = 1'-0"



2 UTILITY ROOM PLAN
1/2" = 1'-0"

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DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

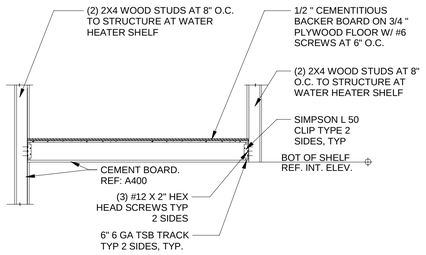
SHEET TITLE

ELECTRIC PANEL DETAILS

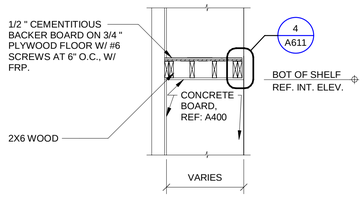
SHEET NUMBER

A506

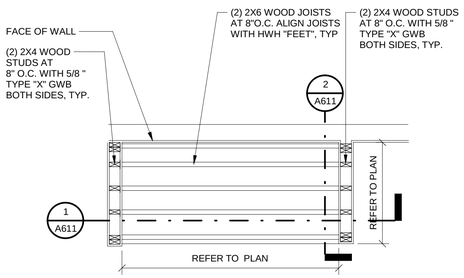
5/2/2024 2:32:27 PM



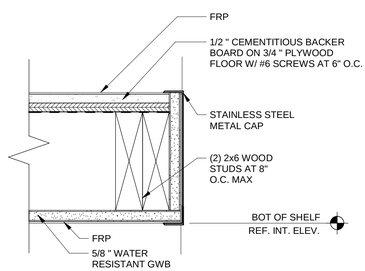
1 WATER HEATER SHELF
1/2" = 1'-0"



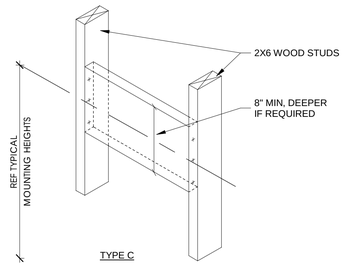
2 WATER HEATER SHELF
1/2" = 1'-0"

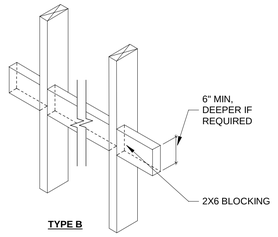


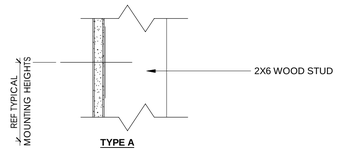
3 WATER HEATER SHELF
1/2" = 1'-0"



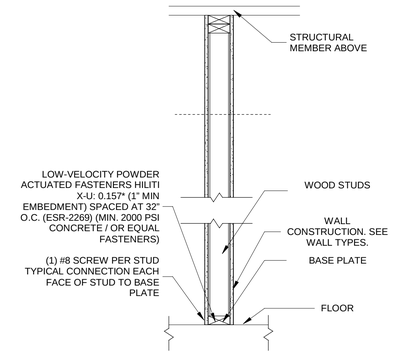
4 SHELF EDGE DETAIL
3" = 1'-0"







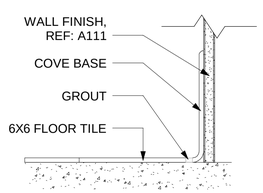
6 BLOCKING DETAILS FOR ACCESSORIES & EQUIPMENT
3" = 1'-0"



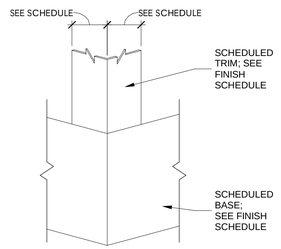
DETAIL GENERAL NOTES

1. STUDS BRACED BY GYPSUM WALLBOARD EACH SIDE. MAXIMUM SCREW SPACING SHALL NOT EXCEED 12" O.C.
2. 5LBS / SQ. FT. MAX LATERAL LOAD
3. FY (MIN) = 33KSL
4. DEFLECTION LIMIT 1/120
5. FOR H > 16'-0" AND BRACING > 8'-0" SEPARATE ENGINEERED DRAWINGS WILL BE REQUIRED
6. NOT APPLICABLE TO SHEAR WALLS

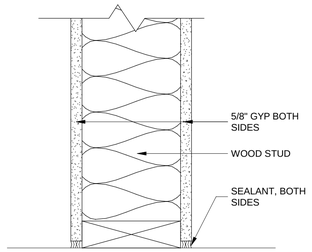
8 NON-BEARING STUD WALL PARTITION
1" = 1'-0"



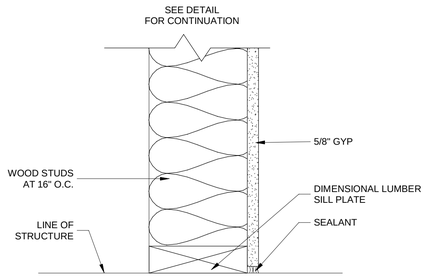
10 FLOOR TILE INSTALLATION DETAIL
3" = 1'-0"



5 CORNER GUARD DETAIL
3" = 1'-0"

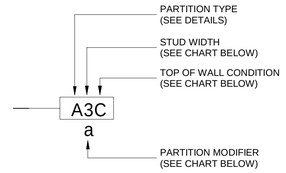


7 PARTITION TYPE A
3" = 1'-0"



9 PARTITION TYPE F
3" = 1'-0"

INTERIOR WALL TAG LEGEND



STUD WIDTH

#	WOOD STUD WIDTH	WOOD STUD WIDTH
1	1 5/8"	
2	2 1/2"	
3	3 5/8"	3 1/2"
6	6"	5 1/2"
8	8"	7 1/4"
10	10"	
12	12"	

TOP OF WALL CONDITION

ALL WALL ASSEMBLIES EXTEND TO DECK UNLESS NOTED OTHERWISE

- **B** PARTITION EXTENDS TO BOTTOM OF CEILING
- **C** PARTITION EXTENDS TO A MINIMUM OF 6" ABOVE CEILING
- **P** PARTIAL HEIGHT WALL

PARTITION MODIFIER

- **a** PROVIDE SOUND ATTENUATION BATTS TO FILL STUD CAVITY TO TOP OF ADJACENT CEILING
- **c** PROVIDE 5/8" CEMENT BOARD ON WET SIDE AND 5/8" GWB ON OTHER SIDE.
- **t** PROVIDE R-19 THERMAL BATTS TO FILL STUD CAVITY

PARTITION GENERAL NOTES

1. PARTITIONS ARE DISTINGUISHED ON FLOOR PLANS BY SYMBOL DESIGNATION, GRAPHIC DESIGNATION OR A COMBINATION OF BOTH DESIGNATIONS. SOME PARTITION TYPES SHOWN ON THIS SHEET MAY NOT BE USED ON THIS PROJECT.
2. ALL WALLS NOT DESIGNATED WITH A GRAPHIC OR TAG TO BE TYPE 'A'. IF UNCLEAR CONTACT ARCHITECT.
3. SOUND TRANSMISSION CLASS (STC) IS A RATING SYSTEM THAT DESCRIBES THE ABILITY OF AN ASSEMBLY TO REDUCE THE TRANSMISSION OF SOUND. STC RATINGS LISTED ARE BASED ON LABORATORY TESTING AND ARE NOT INDICATIVE OF RESULTS IN FIELD.
4. SEE SPECIFICATIONS FOR SOUND ATTENUATION BATTS (SAB) REQUIREMENTS. WHERE SAB ARE INDICATED, THEY SHALL EXTEND CONTINUOUSLY FROM FLOOR TO STRUCTURE ABOVE.
5. PARTITIONS ARE INDICATED WITH CONVENTIONAL GYPSUM WALLBOARD U.N.O.; UPGRADE TO PREMIUM TYPES OF WALLBOARD (I.E., MOISTURE-RESISTANT, TILE-BACKER BOARD, ACOUSTICALLY ENHANCED, ETC.) BASED ON THEIR LOCATION AND ACCORDING TO REQUIREMENTS LISTED IN THE SPECIFICATIONS.
6. SEALANTS INDICATED MAY BE FOR FIRE RATING, SMOKE RATING, AIR PRESSURE CONTAINMENT, ACOUSTIC RATING, VERMIN CONTROL, MOVEMENT (CRACK) CONTROL AND/OR BIOLOGICAL CONTAINMENT. SEALANT JOINTS ARE TO BE SIZED FOR EXPECTED MOVEMENT OF JOINT WITH EXPANSION/CONTRACTION CAPACITY OF SEALANT MATERIAL TO MAINTAIN THE INTEGRITY OF THE SEAL FOR THESE APPLICABLE PARAMETERS - SEE SPECIFICATIONS.
7. ALL DIMENSIONS ARE TO COLUMN CENTERLINES OR TO FACE OF FRAMING, U.N.O. CLEAR DIMENSIONS INDICATE DIMENSION BETWEEN FINISHES.
8. FIRE RESISTANT AND FIRE RESISTANT SMOKE BARRIER RATINGS ARE TO CONTINUE THROUGH ALL OPENINGS IN RATED PARTITIONS.
9. SMOKE RESISTANT, FIRE RESISTANT, AND FIRE RESISTANT SMOKE BARRIER PARTITIONS SHALL EXTEND AND SEAL TO INSIDE FACE OF EXTERIOR SHEATHING, INCLUDING EXTENSIONS THROUGH SOFFITS.
10. REFER TO THE TOILET ACCESSORIES SHEET AND CASEWORK SHEET FOR MOUNTING DETAIL INFORMATION.
11. PARTITIONS REQUIRED TO BE SMOKE RESISTANT, FIRE RESISTANT, OR BOTH FIRE AND SMOKE RESISTANT ARE SHOWN GRAPHICALLY ON PLANS WITH HATCH PATTERNS.
12. ALL PARTITIONS EXTEND TO DECK UNLESS NOTED OTHERWISE.

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

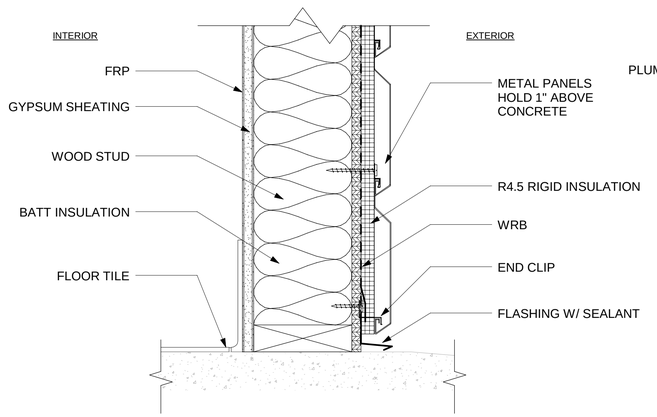
SHEET TITLE

INTERIOR PARTITION TYPES AND DETAILS

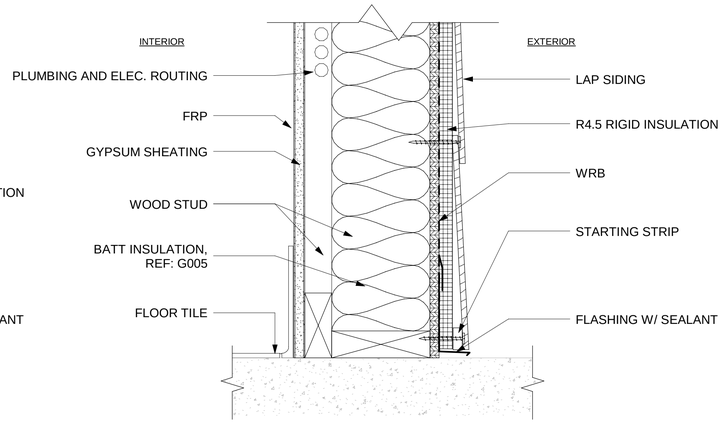
SHEET NUMBER

A611

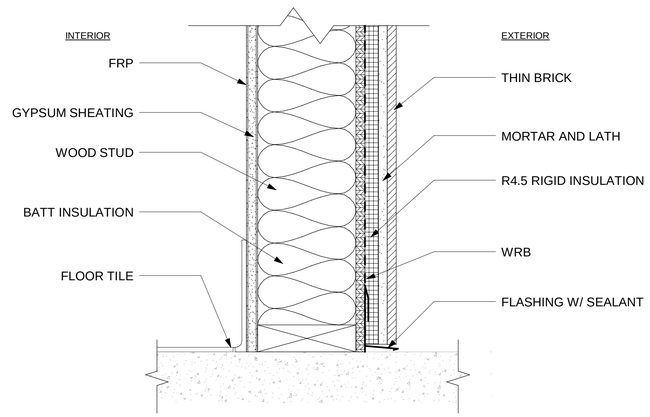
4/8/2024 10:52:05 AM



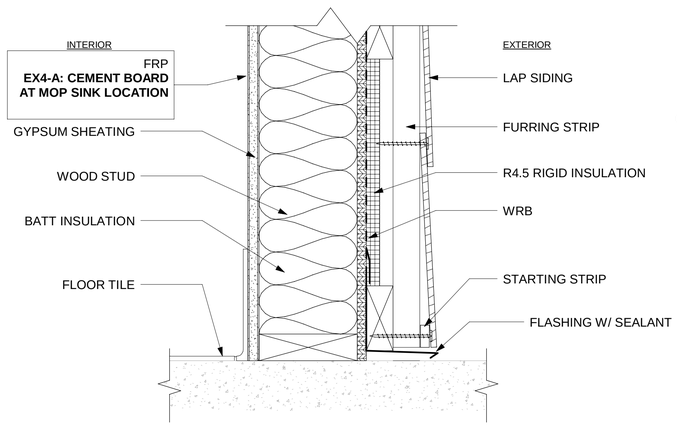
1 EXTERIOR FINISH 1 - METAL PANELS ON SHEATHING - EX1
3" = 1'-0"



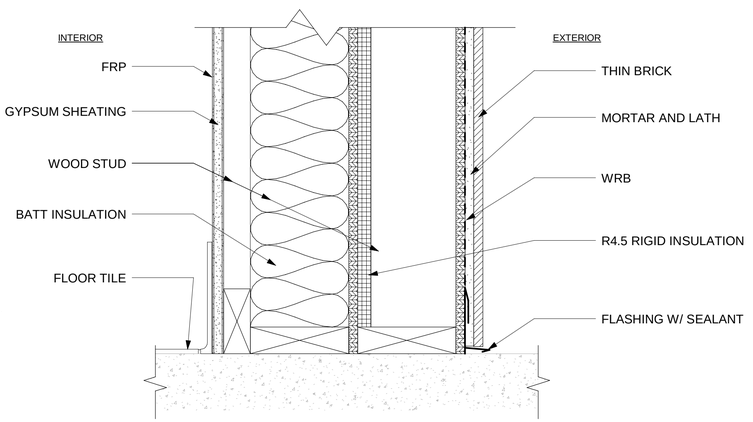
2 EXTERIOR FINISH 2 - ARCH. PANEL ON SHEATHING - EX2
3" = 1'-0"



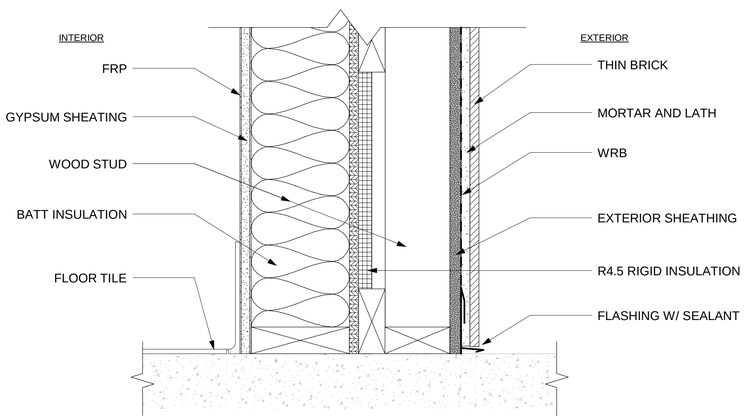
3 EXTERIOR FINISH 3 - BRICK ON SHEATHING - EX3
3" = 1'-0"



4 EXTERIOR FINISH 4 - ARCH.PANEL BUMP OUT - EX4
3" = 1'-0"



5 EXTERIOR FINISH 5 - BRICK ON DOUBLE STUD - EX5
3" = 1'-0"



6 EXTERIOR FINISH 6 - BRICK ON DOUBLE STUD AT REAR - EX6
3" = 1'-0"

4/8/2024 10:52:06 AM

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
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SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

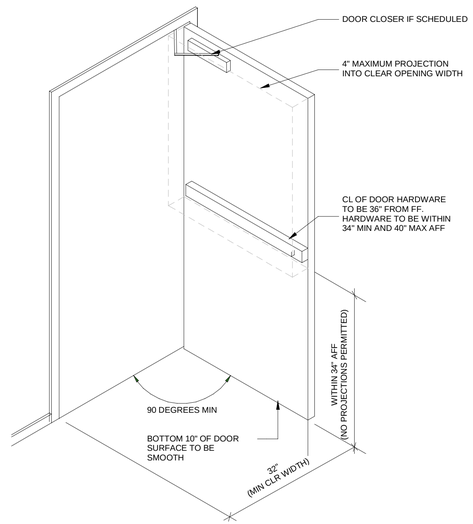
PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/20/23
SCALE:	AS NOTED
DRAWN BY:	Author
CHECKED BY:	Checker

SHEET TITLE

EXTERIOR PARTITION TYPES

SHEET NUMBER

A621



NOTE: HARDWARE TO BE OPERATED WITH ONE HAND, WITHOUT TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THRESHOLDS ARE LIMITED TO 1/2" MAXIMUM HEIGHT. INTERIOR DOORS, OTHER THAN FIRE DOORS, SHOULD BE ABLE TO BE OPERATED WITH 5 POUNDS OF FORCE. EXTERIOR DOOR AND FIRE DOORS ARE REGULATED BY THE AUTHORITY HAVING JURISDICTION. REFER TO ICC A117.1 FOR APPROACH REQUIREMENTS.

1 TYPICAL ACCESSIBLE DOOR DETAIL
1/4" = 1'-0"

DOOR GENERAL NOTES:

A. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS OF ALL OPENINGS PRIOR TO THE FABRICATION OF ALL DOORS AND FRAMES.

B. DUE TO MULTIPLE USE, SOME OF THE DETAILS REFERRED TO ON THE DOOR SCHEDULE ARE REVERSED OR TURNED FROM THE DIRECTION SHOWN ON THE FLOOR PLANS. THE INTENT OF THE DETAILS IS TO BE FOLLOWED. CONSULT THE ARCHITECT WHEN QUESTIONS ARISE.

C. ALL EXIT ACCESS DOORS AND EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT. USE OF MANUAL FLUSH BOLTS, EDGE BOLTS, TOP OR BOTTOM BOLTS, ETC., IS PROHIBITED.

D. DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES WILL BE 5 SECONDS MINIMUM.

E. FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. THE REQUIRED FORCE FOR PUSHING OPEN OR PULLING OPEN DOORS OTHER THAN FIRE DOORS SHALL BE 5 POUNDS. THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR IN A CLOSED POSITION.

F. THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC DOORS, POWER ASSISTED DOORS, AND SLIDING DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. WHEN NARROW STILE AND RAIL DOORS ARE USED, A 10" MINIMUM, SMOOTH PANEL, EXTENDING THE FULL WIDTH OF THE DOOR, SHALL BE INSTALLED ON THE PUSH SIDE(S) OF THE DOOR WHICH ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION. CAVITIES CREATED BY KICK PLATES SHALL BE CAPPED.

G. ALL DOOR LOCKSETS AND PANIC DEVICES SHALL BE ADA COMPLIANT.

H. CAULK HEAD, JAMBS, AND SILLS OF ALL DOORS AND WINDOWS WITH SEALANT CONTINUOUSLY APPLIED TO BOTH SIDES OF THE FRAMES.

I. ALL DOOR CLOSURES TO BE SET IN ACCORDANCE WITH THE ADA REDUCED OPENING FORCE REQUIREMENTS.

J. DOOR HARDWARE SUBSTITUTIONS SHALL BE PERMITTED. (MANUFACTURER ONLY) WITH OWNER'S WRITTEN APPROVAL.

K. KEYING FOR ALL SCHEDULED LOCKSETS SHALL BE PROVIDED BY OWNER.

L. PROVIDE SOLID BACK FRAMES FOR ALL STOREFRONT SYSTEMS.

M. FRAME DIMENSIONS SHOWN ARE NOMINAL. ACTUAL DIMENSIONS MAY VARY DEPENDING ON WINDOW MANUFACTURER AND SYSTEM.

N. ALL THRESHOLDS SHALL BE ACCESSIBLE.

O. ALL DOORS ON THE ACCESSIBLE ROUTE OR CIRCULATION PATH SHALL HAVE A MAX. OPENING FORCE OF 5 LBS.

P. REFER TO AS002 FOR TRASH ENCLOSURE DOOR SPECIFICATION.

DOOR SCHEDULE

DOOR NO.	ROOM NAME	WIDTH	HEIGHT	TYPE	THICKNESS	DOOR MATERIAL	FINISH	HARDWARE	FRAME MATERIAL	FRAME FINISH	COMMENTS
100	SERVICE	3' - 6"	7' - 0"	F1	0' - 1 3/4"	HOLLOW METAL	P-2	01	HOLLOW METAL - COLD ROLLED STEEL	PAINT	PROVIDE AVANTEK LD-DB-21-A, VIEWER 60" AFF MOUNTING HEIGHT, SEE DOOR NOTES
101	COOLER	3' - 0"	7' - 0"	N/A	0' - 2"	STAINLESS STEEL	BY MFG.	-	STAINLESS STEEL	-	COOLER DOOR PER MANUFACTURER
103	RESTROOM	3' - 0"	7' - 0"	F3	0' - 1 3/4"	SOLID WOOD CORE	PL-1	02	HOLLOW METAL - COLD ROLLED STEEL	PAINT	ADA SIGNAGE REQUIRED
104	UTILITY	6' - 0""	7' - 0"	F2	0' - 1 3/4"	HOLLOW METAL	P-2	03	HOLLOW METAL - COLD ROLLED STEEL	PAINT	

DOOR STOP NOTES:

A. **FLOOR STOPS AT EXTERIOR DOORS**
   a. CENTER STOP ON THE DOOR LEAF WHEN OPENED
   b. ALLOW FOR 90 DEGREE OPEN WHEN ADJACENT TO AN OBSTRUCTION
   c. ALLOW FOR 100 DEGREE OPEN WHERE NOT ADJACENT TO OBSTRUCTION

B. **FLOOR STOPS AT INTERIOR DOORS**
   a. CENTER STOP ON THE DOOR LEAF WHEN OPENED
   b. ONLY ALLOW FOR 90 DEGREE OPEN.

DOOR FINISH LEGEND

PL-1	PLASTIC LAMINATE - MATCH SHERWIN WILLIAMS SW7004 "SNOWBOUND"
P-2	PAINTED SHERWIN WILLIAMS - SW7048 "URBANE BRONZE"

DOOR TYPE LEGEND

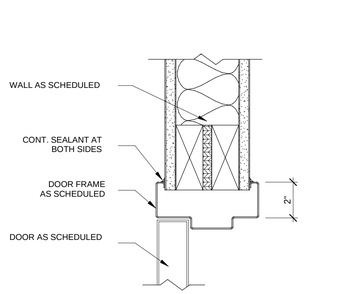
F1	HOLLOW METAL SINGLE 18 GAUGE
F2	HOLLOW METAL DOUBLE 18 GAUGE
F3	SOLID WOOD CORE WITH LAMINATE FINISH

DOOR HARDWARE

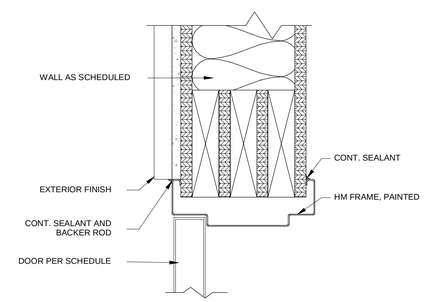
	HARDWARE GROUP - 01 SERVICE	FINISH	MANF
3 EA	CONTINUOUS HINGE - IVES 112HD	628	IVE
1 EA	ENTRANCE LOCK - ND53PD RHO	626	SCH
1 EA	PERM CORE - 23-030 "C" KEYWAY	626	SCH
1 EA	LOCK GUARD - LG12	630	IVE
1 EA	SURFACE CLOSER - LCN 4040XP	689	LCN
1 EA	KICK PLATE - 8400 12" X 2" LDW B-CS	630	IVE
1 EA	RAIN DRIP - 142AA	AA	ZER
1 EA	WEATHERSTRIP - 8303AA	AA	ZER
1 EA	DOOR SWEEP - 39A	A	ZER
1 EA	THRESHOLD - 8655A 223	A	ZER
1 EA	VIEWER - 698	626	IVE
1 EA	KICK DOWN DOOR STOP	626	
	NO PANIC ON THIS DOOR		

	HARDWARE GROUP - 02 RESTROOM	FINISH	MANF
3 EA	HW HINGES - 5BB1 4.5 X 4.5 NRP	630	IVE
1 EA	PRIVACY - ND40S RHO	626	SCH
1 EA	SURFACE CLOSER - 1461 REG	689	LCN
1 EA	8400 10" X 2" LDW B-CS	630	IVE
1 EA	WALL STOP - WS401/402CCV	626	IVE
1 EA	DOOR SEAL - 188S	BK	ZER

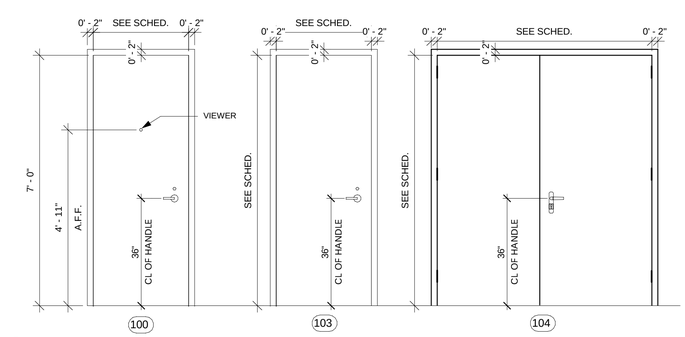
	HARDWARE GROUP - 03 UTILITY	FINISH	MANF
6 EA	HINGE - 5BB1HW 5 X 4.5 NRP	630	IVE
1 EA	ENTRANCE LOCK - ND53PD RHO	626	SCH
1 EA	PERM CORE - 23-030 "C" KEYWAY	626	SCH
1 EA	LOCK GUARD - LG12	630	IVE
1 EA	SURFACE CLOSER - 1461 SHCUSH TBWNS	689	LCN
1 EA	KICK PLATE - 8400 12" X 2" LDW B-CS	630	IVE
1 EA	RAIN DRIP - 142AA	AA	ZER
1 EA	WEATHERSTRIP - 8303AA	AA	ZER
1 EA	DOOR SWEEP - 39A	A	ZER
1 EA	THRESHOLD - 8655A 223	A	ZER
1 EA	KICK DOWN DOOR STOP	626	



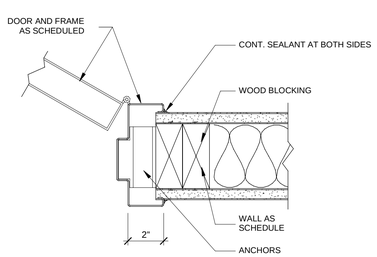
2 INTR. HOLLOW METAL HEAD @ GYP. BD.
3" = 1'-0"



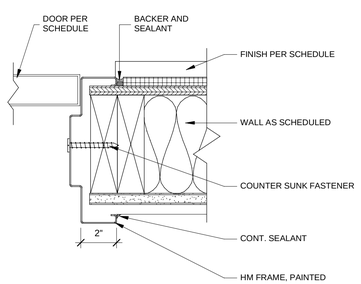
3 EXTERIOR DOOR HEAD
3" = 1'-0"



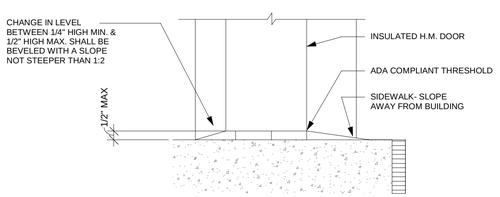
DOOR LEGEND
1/2" = 1'-0"



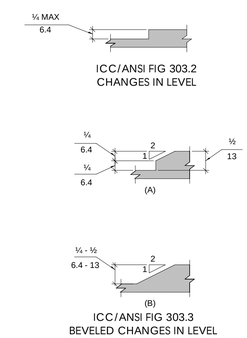
4 INTERIOR HM JAMB @ GYP.BD
3" = 1'-0"



5 EXTERIOR DOOR JAMB
3" = 1'-0"



6 EXTERIOR DOOR THRESHOLD
3" = 1'-0"



7 GROUND AND FLOOR
6" = 1'-0"

6/6/2024 8:09:35 AM

SALAD AND GO

#2001

610 NW CHIPMAN ROAD

LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

REVISION 1: 06/06/2024

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ISSUE	DATE	DESCRIPTION
1	06/06/2024	CITY COMMENTS

PROJECT INFORMATION

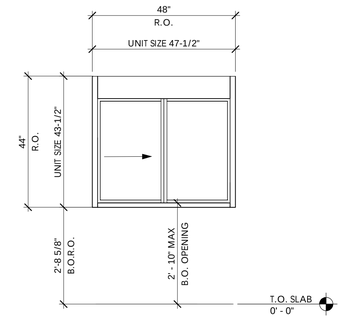
PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

DOOR SCHEDULE

SHEET NUMBER

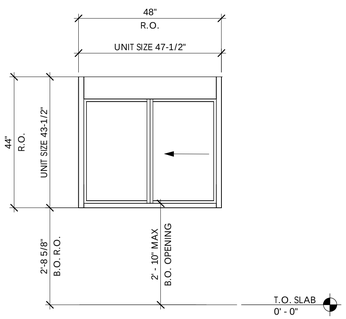
A631



WINDOW TYPE 1

1/2" = 1'-0"

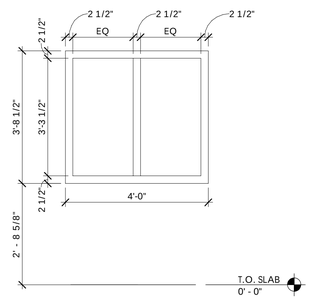
QTY: 1



WINDOW TYPE 2

1/2" = 1'-0"

QTY: 1



WINDOW TYPE 5

1/2" = 1'-0"

QTY: 1

WINDOW SCHEDULE						
WINDOW MARK	WIDTH	HEIGHT	SILL HEIGHT	FINISH	GLAZING	COMMENTS
1 & 2	4' - 0"	3' - 8"	2' - 8 5/8" MAX TO...	DARK BRONZE	G-1	PROVIDE AVANTEK LD-D8-21-A, MODEL 275 - READY ACCESS; MODEL SC4844 - QUICK SERV; DRIVE THRU WINDOW (MANUAL OPEN - SELF CLOSE)
3	8' - 0"	2' - 0"	5' - 0"	BLACK	G-1	KAWNEER 451
4	16' - 0"	4' -0"	8' - 0"	BLACK	G-1	KAWNEER 451
5	4' - 0"	3' - 8 1/2"	2' - 10"	BLACK	G-1	KAWNEER 451

GLAZING SCHEDULE	
G-1	CLEAR 1" GUARDIAN TEMPERED W/ SN68 (SUNGUARD SUPERNEUTRAL) LOW-E COATING

WINDOW GENERAL NOTES:

A. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS OF ALL OPENINGS PRIOR TO THE FABRICATION OF ALL DOORS AND FRAMES.

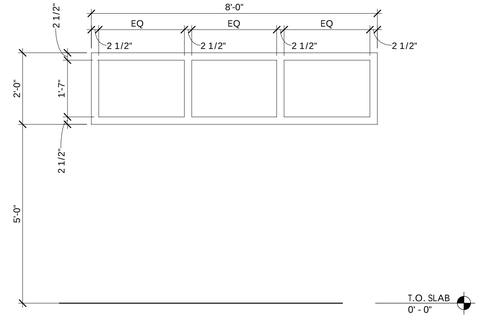
B. DUE TO MULTIPLE USE, SOME OF THE DETAILS REFERRED TO ON THE DOOR SCHEDULE ARE REVERSED OR TURNED FROM THE DIRECTION SHOWN ON THE FLOOR PLANS. THE INTENT OF THE DETAILS IS TO BE FOLLOWED. CONSULT THE ARCHITECT WHEN QUESTIONS ARISE.

C. CAULK HEAD, JAMBS, AND SILLS OF ALL DOORS AND WINDOWS WITH SEALANT CONTINUOUSLY APPLIED TO BOTH SIDES OF THE FRAMES.

D. PROVIDE END DAMS AT BOTTOM OUTSIDE CORNERS OF ALUMINUM STOREFRONT SYSTEMS. INSTALL PER MANUFACTURERS STANDARDS AND REQUIREMENTS.

E. FRAME DIMENSIONS SHOWN ARE NOMINAL. ACTUAL DIMENSIONS MAY VARY DEPENDING ON WINDOW MANUFACTURER AND SYSTEM.

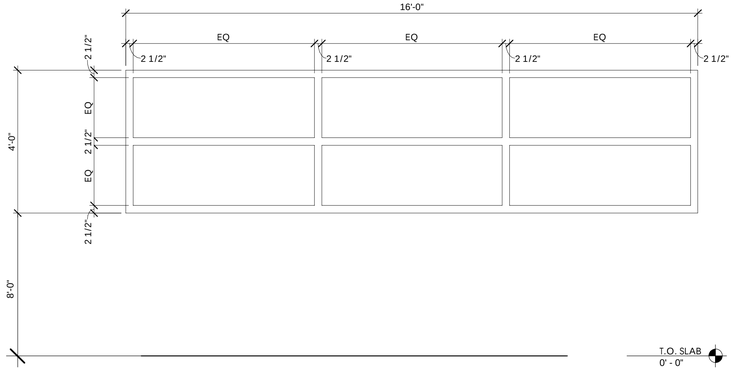
F. ALL OPERABLE SERVICE WINDOWS SHALL HAVE CORIAN SOLID SURFACE SHELF INSTALLED BY GC BELOW. REF. A302, A303, AND A503 FOR DETAILS



WINDOW TYPE 3

1/2" = 1'-0"

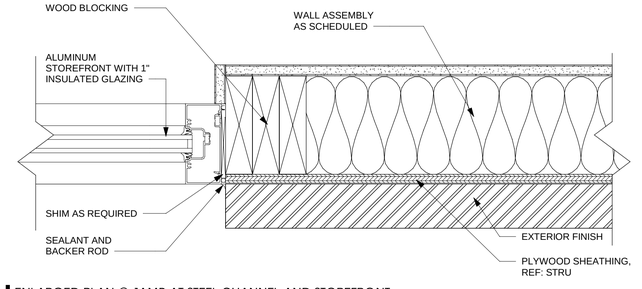
QTY: 1



WINDOW TYPE 4

1/2" = 1'-0"

QTY: 1



1 ENLARGED PLAN @ JAMB AT STEEL CHANNEL AND STOREFRONT

3" = 1'-0"

SALAD AND GO

#2001

610 NW CHIPMAN ROAD

LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS

513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER
A-2023017238
ARCHITECT

PERMIT SET: 04/12/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/28/23
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

WINDOW SCHEDULE

SHEET NUMBER

A641

5/2/2024 2:32:33 PM

SPECIFICATIONS AND GENERAL CONDITIONS
GENERAL CONDITIONS A201 – 2007 AIA GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

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01 10 00 SUMMARY
01 12 00 MULTIPLE CONTRACTS
01 32 00 SURVEY
01 33 00 SUBMITTALS
01 43 00 TESTING AND SPECIAL INSPECTIONS
01 50 00 CONSTRUCTION FACILITIES
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DIVISION 6 - WOOD, PLASTIC AND COMPOSITES
06 11 00 WOOD FRAMING
06 20 00 FINISH CARPENTRY
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07 13 00 MEMBRANE WATERPROOFING
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07 24 00 EXTERIOR INSULATION AND FINISH SYSTEM
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07 46 46 CEMENT PANELS
07 54 23 TPO ROOFING
07 65 00 FLASHING
07 72 00 ROOF ACCESSORIES
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DIVISION 8 – OPENINGS
08 11 00 METAL DOORS AND FRAMES
08 71 00 DOOR HARDWARE
08 81 00 GLASS GLAZING

DIVISION 9 – FINISHES
09 24 23 DRYVIT SYSTEMS
09 29 00 GYPSUM BOARD
09 30 00 TILE
09 51 00 ACOUSTICAL TILE CEILING
09 91 00 PAINTING
09 73 00 PRE-FINISH PANEL (FRP)

DIVISION 10 – SPECIALTIES
10 73 16 METAL CANOPIES

DIVISION 31- EARTHWORK
31 31 00 TERMITE TREATMENT

GENERAL CONDITIONS

THE FOLLOWING SUPPLEMENTS MODIFY THE AIA DOCUMENT A201 - 2007 AIA GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION WHICH IS MADE A PART OF THESE CONTRACT DOCUMENTS. WHERE AN ARTICLE, SECTION OR SUBSECTION IN THE GENERAL CONDITIONS IS AMENDED, VOIDED OR SUPERSEDED BY THE FOLLOWING PARAGRAPHS, THE PROVISIONS OF SUCH ARTICLE, SECTION OR SUBSECTION NOT SO AMENDED, VOIDED OR SUPERSEDED SHALL REMAIN IN EFFECT.

CONTRACTOR SHALL EMPLOY A COMPETENT SUPERINTENDENT AND NECESSARY ASSISTANTS WHO SHALL ATTEND AT THE PROJECT SITE ON A FULL TIME BASIS DURING THE PERFORMANCE OF THE WORK. THE SUPERINTENDENT SHALL NOT DIVIDE THEIR DUTIES OR RESPONSIBILITIES AMONG OTHER PROJECTS THAT ARE NOT A SPECIFIC PORTION OF THIS AGREEMENT.

CONTRACTOR SHALL PROVIDE FOR THE COORDINATION OF THE WORK OF OWNERS FORCES AND OF EACH SEPARATE CONTRACTOR WITH THE WORK OF CONTRACTOR.

DEFECTIVE WORK NOT REMEDIED, OR FAILURE TO BEGIN REMEDIAL ACTION WITHIN 5 DAYS FOLLOWING WRITTEN NOTIFICATION.

REFER TO SUBMITTAL SCHEDULE AND RESPONSIBILITY MATRIX ON SHEETS G001 AND G006.

SECTION 01 50 00 / SUMMARY

1.1 THE WORK INCLUDES WORK INDICATED OR SPECIFIED WITHIN THE CONTRACT LIMIT LINES UNLESS THE WORK IS INDICATED AS NIC (NOT IN CONTRACT.) ALSO INCLUDED IS WORK NECESSARY TO PROVIDE WATER, GAS, SEWER, TELEPHONE, CABLE AND ELECTRICAL SERVICE TO THE SITE, INCLUDING REPLACEMENT OF PAVING TO MEET THE REQUIREMENTS OF GOVERNING MUNICIPAL AUTHORITIES.

1.2 PROVIDE COORDINATION FOR UTILITIES INCLUDING APPLICATIONS, NOTICES, MEETINGS, SCHEDULING, FINAL CONNECTIONS, AND OTHER TASKS NECESSARY TO PROVIDE UTILITIES TO THE PROJECT.
A. INCLUDE COORDINATION BETWEEN UTILITIES AND TENANTS AS WELL AS OTHERS ON THE PROJECT SITE.
B. WORK SHALL BE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.
C. SEND PROPER NOTICES, MAKE NECESSARY ARRANGEMENTS AND PERFORM SERVICES REQUIRED IN THE CARE AND MAINTENANCE OF PUBLIC UTILITIES DURING THE CONSTRUCTION PERIOD AND UNTIL FINAL ACCEPTANCE OF THE WORK BY OWNER.

1.3 LIMIT THE STORAGE OF MATERIALS AND EQUIPMENT TO AREAS INDICATED BY OWNER. NO MATERIAL OR EQUIPMENT SHALL BE PLACED AT LOCATIONS THAT WOULD IMPEDE ACCESS TO, OR FROM, EXISTING FACILITIES FOR CUSTOMERS, EMPLOYEES, OR DELIVERIES. COOPERATE WITH OWNER IN PROVIDING TRAFFIC CONTROL DURING THE COURSE OF CONSTRUCTION TO ENSURE MINIMUM INCONVENIENCE TO OWNER'S CUSTOMERS.

1.4 IN GENERAL, THE DRAWINGS INDICATE DIMENSIONS, POSITIONS AND DETAILS OF CONSTRUCTION; THE SPECIFICATIONS DESCRIBE QUALITIES OF MATERIAL AND METHODS OF WORKMANSHIP. WORK DESCRIBED IN THE SPECIFICATIONS, SHOWN ON THE DRAWINGS, OR NECESSARY FOR PROPER COMPLETION OF THE WORK, SHALL BE EXEMUTED IN A COMPETENT MANNER AND SHALL BE OF THE MATERIALS BEST ADAPTED TO THE PURPOSE WHERE SUCH WORK OR MATERIALS ARE NOT SPECIFICALLY MENTIONED.

1.5 SHOULD CONFLICTS OCCUR IN OR BETWEEN DRAWINGS AND SPECIFICATIONS, CONTRACTOR IS DEEMED TO HAVE ESTIMATED ON THE MORE EXPENSIVE PRODUCT, METHOD, AND MATERIAL.

1.6 WORK AND MATERIALS SHALL BE THE BEST OF THE KINDS SPECIFIED AND INDICATED. SHOULD WORK OR MATERIALS BE REQUIRED WHICH ARE NOT DIRECTLY OR INDIRECTLY CALLED FOR IN THE SPECIFICATIONS OR SHOWN ON THE DRAWINGS, BUT WHICH ARE NECESSARY FOR PROPER FULFILLMENT OF THE OBVIOUS INTENT, SAID WORK OR MATERIALS SHALL BE THE SAME AS SIMILAR PARTS THAT ARE DETAILED, INDICATED OR SPECIFIED, AND CONTRACTOR SHALL UNDERSTAND THE SAME TO BE IMPLIED AND PROVIDE FOR IT IN THEIR PROPOSAL AS FULLY AS IF IT WERE PARTICULARLY DESCRIBED OR DELINEATED.

1.7 EXECUTE WORK IN ACCORDANCE WITH CONTRACT DOCUMENTS. MAKE NO CHANGES WITHOUT HAVING FIRST RECEIVED WRITTEN PERMISSION. WHERE DETAILED INFORMATION IS LACKING, BEFORE PROCEEDING WITH WORK, REFER MATTER TO ARCHITECT FOR SUPPLEMENTAL INSTRUCTIONS.

1.8 IF CONTRACTOR OBSERVES ERRORS, DISCREPANCIES OR OMISSIONS IN CONTRACT DOCUMENTS, CONTRACTOR SHALL PROMPTLY NOTIFY ARCHITECT, REQUESTING CLARIFICATION. IF CONTRACTOR PROCEEDS WITH WORK AFFECTED BY SUCH ERRORS, DISCREPANCIES OR OMISSIONS WITHOUT RECEIVING SUCH CLARIFICATION, THEY DO SO AT THEIR OWN RISK. ADJUSTMENTS INVOLVING SUCH CIRCUMSTANCES MADE BY CONTRACTOR, PRIOR TO APPROVAL BY ARCHITECT, SHALL BE AT CONTRACTOR'S RISK AND THE SETTLEMENT OF COMPLICATIONS OR DISPUTES SHALL BE AT CONTRACTOR'S SOLE EXPENSE.

1.9 NEITHER OWNER NOR ARCHITECT ASSUME RESPONSIBILITY FOR AN UNDERSTANDING OR REPRESENTATION MADE BY THEIR AGENTS OR REPRESENTATIVES PRIOR TO THE EXECUTION OF THE AGREEMENT UNLESS SUCH UNDERSTANDINGS OR REPRESENTATIONS ARE EXPRESSLY STATED IN THE AGREEMENT, AND THE AGREEMENT EXPRESSLY PROVIDES THAT RESPONSIBILITY IS ASSUMED BY OWNER.

1.10 FAILURE OF CONTRACTOR TO ACQUAINT THEMSELVES WITH AVAILABLE INFORMATION CONCERNING THE WORK SHALL NOT RELIEVE CONTRACTOR FROM THE RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY OR COST OF SUCCESSFULLY PERFORMING THE WORK.

1.11 NEITHER THE PRESENCE NOR ABSENCE OF OWNER OR ARCHITECT, NOR THEIR AUTHORIZED REPRESENTATIVES, SHALL RELIEVE CONTRACTOR FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS.

1.12 WHEN REQUESTED BY ARCHITECT, CONTRACTOR SHALL DELIVER TO ARCHITECT (PRIOR TO FINAL ACCEPTANCE OF THE WORK AS A WHOLE) SIGNED CERTIFICATES FROM SUPPLIERS OF MATERIALS AND MANUFACTURED ITEMS STATING THAT SUCH ITEMS CONFORM TO CONTRACT DOCUMENTS.

1.13 CONTRACTOR, UPON AWARD OF THE CONTRACT, OR WHERE SHOP DRAWINGS, PRODUCT DATA OR SAMPLES ARE REQUIRED, UPON RECEIPT OF THEIR APPROVAL) SHALL PLACE ORDERS FOR MATERIALS, WORK, FABRICATION AND EQUIPMENT TO BE INCORPORATED IN THE WORK. CONTRACTOR SHALL KEEP ARCHITECT INFORMED AS TO THE AVAILABILITY OF MATERIALS, WORK, FABRICATIONS AND EQUIPMENT SPEGIFIED AND TO ADVISE ARCHITECT, IN WRITING, OF ORDERS PLACED AND OF SUCH MATERIAL, WORK, FABRICATION AND EQUIPMENT, WHICH MAY NOT BE AVAILABLE FOR THE PURPOSES OF THE CONTRACT.

1.14 LABOR SHALL BE PERFORMED IN THE BEST MOST COMPETENT MANNER, BY MECHANICS SKILLED IN THEIR RESPECTIVE TRADES. STANDARDS FOR WORK REQUIRED THROUGHOUT SHALL BE OF SUCH GRADE AS WILL RESULT IN FIRST CLASS WORK.

1.15 REPLACING, PATCHING AND REPAIRING OF MATERIALS AND SURFACES CUT OR DAMAGED IN THE EXECUTION OF THE WORK SHALL BE PERFORMED BY EXPERIENCED MECHANICS. SUCH REPLACING, REPAIRING AND PATCHING SHALL BE DONE WITH THE APPLICABLE MATERIALS, IN SUCH A MANNER THAT SURFACES SO REPLACED WILL MATCH THE SURROUNDING SIMILAR SURFACES.

1.16 CONTRACTOR AGREES THAT EACH SUBCONTRACT SHALL CONTAIN AN EXPRESS PROVISION SATISFACTORY IN FORM AND CONTENT TO OWNER WHEREBY SUCH SUBCONTRACTOR OR MATERIAL SUPPLIER EXPRESSLY AGREES THAT FOR THE BENEFITS OF OWNER, IT WAIVES RIGHTS TO FILE MECHANICS LIENS WITH RESPECT TO UNPAID SERVICES OR MATERIALS PROVIDED BY IT AS SPECIFIED BY CURRENT STATE STATUTES.

1.17 IN THE EVENT THAT THE BUILDING INSPECTOR OR OTHER PUBLIC OFFICIAL REQUIRES THAT ADDITIONAL WORK BE DONE OR THAT THE WORK UNDER CONTRACT DOCUMENTS BE MODIFIED, CONTRACTOR SHALL NOTIFY ARCHITECT IN WRITING OF THE REQUESTED CHANGE. ARCHITEIT WILL REVIEW THE REQUESTED CHANGE AND ADVISE CONTRACTOR IN WRITING. THE WORK PERFORMED WITHOUT WRITTEN PERMISSION SHALL BE AT THE EXPENSE OF CONTRACTOR.

SECTION 01 12 00 / MULTIPLE CONTRACTS

1.1 CONSTRUCTION ACTIVITIES, UNDER DIRECT SUPERVISION OF OWNER, ARE CONTEMPLATED IN THE SAME AREA OF WORK DURING THE CONSTRUCTION PERIOD. OTHER CONTRACTORS BEGINNING PROGRESS DURING THE SAME PERIOD SHALL HAVE EQUAL RIGHTS TO USE THE ROADS, GROUNDS, AND AREAS.

1.2 OWNER WILL REQUIRE THE OCCUPANCY OF VARIOUS PORTIONS OF THE BUILDING IN ADVANCE OF THE DATE ESTABLISHED IN THE CONTRACT DOCUMENTS FOR THE COMPLETION OF WORK. THE SCHEDULE OF DATES REQUIRED BY OWNER FOR USES OF THE VARIOUS AREAS PRIOR TO THE COMPLETION OF THE WORK SHALL BE PROVIDED BY OWNER. OWNER SHALL HAVE THE RIGHT TO OCCUPY PORTIONS OF THE BUILDING THAT ARE COMPLETED ON OR AFTER THE SPECIFIED COMPLETION DATE. SUCH OCCUPANCY BY OWNER WILL NOT RELEASE CONTRACTOR OR THEIR BONDING AGENCY FROM WARRANTIES OR GUARANTEES AND COMPLETION OF WORK IN ACCORDANCE WITH CONTRACT DOCUMENTS AND THE CERTIFICATE OF OCCUPANCY OR EQUIVALENT HAVE BEEN ISSUED BY THE APPLICABLE GOVERNMENTAL AGENCY
A. OWNER'S FORCES MAY BE EITHER UNION OR NON-UNION

SECTION 01 32 00 / SURVEY

1.1 VERIFY LAYOUT INFORMATION SHOWN ON DRAWINGS IN RELATION TO PROPERTY SURVEY AND EXISTING BENCHMARKS BEFORE PROCEEDING WITH LAYOUT OF WORK. RECORD DEVIATIONS FROM REQUIRED LINES AND LEVELS AND ADVISE OWNER PROMPTLY UPON DETECTION OF DEVIATIONS.

1.2 IMMEDIATELY AFTER THE INSTALLATION OF THE BUILDING FOUNDATIONS, PREPARE A SURVEY SHOWING THE ACTUAL LOCATION OF PERIMETER FOUNDATIONS WITH RESPECT TO PROPERTY LINES. ALSO INCLUDE THE SQUARE FOOTAGE OF THE BUILDING BASED ON THE FOUNDATION. SUBMIT ONE COPY OF SURVEY TO OWNER.

1.3 CONTRACTOR SHALL COMPARE CONDITIONS AT THE SITE WITH CONTRACT DOCUMENTS. CONTRACTOR SHALL NOTIFY ARCHITECT OR OWNER, IN WRITING, AT OR BEFORE SUBMITTING THEIR BID, OF DISCREPANCIES BETWEEN CONTRACT DOCUMENTS AND THE EXISTING CONDITIONS AT THE SITE.

1.4 MAPS, SOIL INVESTIGATION REPORTS AND SIMILAR REFERENCE DATA MADE AVAILABLE TO CONTRACTOR ARE GIVEN FOR CONTRACTOR'S INFORMATION ONLY, AND NEITHER OWNER NOR ARCHITECT ASSUME RESPONSIBILITY FOR CONCLUSIONS CONTRACTOR MAY DRAW.

SECTION 01 33 00 / SUBMITTALS

SCHEDULES AND COST BREAKDOWN

1.1 DELIVER TO OWNER A CONSTRUCTION SCHEDULE, SHOWING THE DATES OF COMMENCEMENT AND COMPLETION OF EACH OF THE VARIOUS SUBDIVISIONS OF THE WORK REQUIRED UNDER THE CONTRACT DOCUMENTS.

1.2 SUBMIT MONTHLY: AN UPDATED PROGRESS REPORT INDICATING WORK COMPLETED DURING THE PRECEDING MONTH AND INDICATE REVISIONS TO THE CONSTRUCTION SCHEDULE.

1.3 SUBMIT A SCHEDULE OF THE ANTICIPATED MONTHLY PAYMENTS THAT WILL BECOME DUE IN ACCORDANCE WITH THE PROGRESS SCHEDULE. ALSO, SUBMIT AN ITEMIZED BREAKDOWN OF THE COSTS OF THE VARIOUS SUBDIVISIONS OF THE WORK. THE FIGURES USED IN MAKING THESE SCHEDULES WILL BE USED FOR DETERMINING THE BASIS OF PARTIAL PAYMENTS AND WILL NOT BE CONSIDERED AS FIXING A BASIS FOR ADDITIONS OR DEDUCTIONS THE CONTRACT PRICE.
A. THE PROVISIONS OF THIS SUBPARAGRAPH PROVIDING FOR ADJUSTMENT OF PRICE SHALL NOT APPLY IF CONTRACTOR HAS PROPOSED A SUBCONTRACTOR UNQUALIFIED UNDER APPLICABLE STATE LAW.

1.4 3 APPLICATION FOR PAYMENT SHALL BE MADE ON AIA FORM G-702 AND G-703, *APPLICATION AND CERTIFICATE FOR PAYMENT,* (4 COPIES) UTILIZING COMPLET E PROVISIONS PROVIDED BY THE FORM. PROVIDE SIGNATURE SPACE FOR OWNERS APPROVAL.

1.5 CONTRACTOR AGREES TO ACCOMPANY PAYMENT REQUESTS, EXCEPT THE FIRST, WITH LIEN WAIVERS PERTAINING TO THE WORK PERFORMED AND MATERIALS PROVIDED BY CONTRACTOR, SUBCONTRACTORS AND MATERIAL SUPPLIER; AND FURTHER AGREE THAT OWNER SHALL HAVE THE RIGHT TO ISSUE CHECKS MADE JOINTLY PAYABLE TO CONTRACTOR AND SUCH SUBCONTRACTOR OR MATERIAL SUPPLIER.
A. SUCH SUBCONTRACTOR OR MATERIAL SUPPLIER SHALL AGREE TO GIVE WRITTEN NOTICE TO OWNER OF NONPAYMENT FOR MATERIALS AND SERVICES, WHICH NOTIBE SHALL INCLUDE A SPECIFIC DETAIL LISTING OF THE SERVICES AND MATERIALS WITH RESPEIT TO WHICH PAYMENT HAS NOT BEEN MADE. IF LIENS ARE FILED AGAINST OWNER'S PROPERTY, OWNER MAY, AT THEIR OPTION, REQUIRE GONTRAGTOR TO PROVIDE A BOND IN ACCORDANCE WITH STATE STATUTES. FINAL LIEN WAIVERS SHALL ACCOMPANY THE FINAL PAYMENT REQUEST. LIEN WAIVERS SHALL BE ON AIA DOCUMENT G-Z06A.

1.6 CONTRACTOR SHALL REIMBURSE OWNER BY DEDUCTIVE CHANGE ORDER, FOR ARCHITECT'S ADDITIONAL SERVICES MADE NECESSARY BY CONTRACTOR'S FAILURE TO COMPLETE THE WORK WITHIN FIFTEEN DAYS FROM SUBSTANTIAL COMPLETION.

1.7 NEITHER THE FINAL PAYMENT NOR THE REMAINING RETAINED PERCENTAGE SHALL BECOME DUE UNTIL REQUIREMENTS LISTED IN SECTION 01 77 00 CONTRACT CLOSEOUT ARE COMPLETED.

1.8 BONDS SHALL BE IN ACCORDANCE WITH STATE LAWS WITH AMOUNT SHOWN EQUAL TO 100% OF THE TOTAL AMOUNT PAYABLE BY TERMS OF THE CONTRACT. SURELY SHALL BE COMPANY LICENSED TO DO BUSINESS IN THE STATE IN WHICH WORK IS LOCATED AND SHALL BE ACCEPTABLE TO OWNER. BOND AMOUNT SHALL BE INCREASED TO INCLUDE CHANGE ORDER ADDED

SHOP DRAWINGS, DATA AND SAMPLES

2.1 SUBMIT SHOP DRAWINGS, MATERIAL LISTS, MANUFACTURER'S LITERATURE, SAMPLES AND OTHER INFORMATION IN SUFFICIENT TIME TO PERMIT PROPER CONSIDERATION AND ACTION ON SAME BEFORE MATERIALS OR ITEMS ARE ORDERED.

2.2 FURNISH TO ARCHITECT FOR REVIEW, 1 DIGITAL SET OF EACH SHOP DRAWING AND SCHEDULES FOR PARTS OF THE WORK AS SPECIFIED. ARCHITECT WILL CHECK FOR CONFORMANCE WITH CONTRACT DOCUMENTS. DO NOT EXECUTE WORK UNTIL CONFIRMATION OF REVIEW IS OBTAINED. AFTER THE SUBMITTAL HAS BEEN REVIEWED IT IS CONTRACTOR'S RESPONSIBILITY TO RETRIEVE THE SHOP DRAWINGS FROM ARCHITECT.

2.3 BEFORE SUBMITTING SHOP DRAWINGS FOR REVIEW, CHECK SHOP DRAWINGS FOR ACCURACY, ASCERTAIN THAT WORK CONTIGUOUS WITH AND HAVING BEARING ON OTHER WORK SHOWN ON SHOP DRAWINGS IS ACCURATELY DRAWN, AND THAT WORK SHOWN IS IN CONFORMITY WITH CONTRACT REQUIREMENTS. SHOP DRAWINGS, WHEN SUBMITTED, MUST BEAR A STAMP OF APPROVAL FROM CONTRACTOR. DRAWINGS SUBMITTED WITHOUT SUCH EXECUTED STAMP OF APPROVAL, OR WHENEVER IT IS EVIDENT THAT THE DRAWINGS HAVE NOT BEEN CHECKED, WILL BE RETURNED FOR RESUBMISSION.

2.4 PREPARE COMPOSITE DRAWINGS AND INSTALLATION LAYOUTS, WHEN REQUIRED TO SOLVE TIGHT FIELD CONDITIONS. SUCH DRAWINGS SHALL CONSIST OF DIMENSIONED PLANS AND ELEVATIONS AND MUST GIVE INFORMATION PARTICULARLY AS TO SIZE AND LOCATION OF SLEEVES, INSERTS, ATTACHMENTS, OPENINGS, CONDUITS, DUCTS OR STRUCTURAL INTERFERENCES.

2.5 WHEN PRODUCT DATA, CONSISTING OF MANUFACTURER'S PRINTED LITERATURE IS REQUIRED TO BE SUBMITTED TO ARCHITECT, IT SHALL BE SUBMITTED IN ORIGINAL FORM. IN DIGITAL (PDF, DWF, ETC) SUBMISSION OR A MINIMUM OF 3 EACH IS REQUIRED; 2 FOR ARCHITECT AND ONE TO BE RETURNED TO CONTRACTOR.

EQUIPMENT LISTS

3.1 SUBMIT 3 COPIES OF A COMPLETE LIST OF MAJOR ITEMS OF MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND MATERIALS WITHIN 30 DAYS AFTER AWARD OF CONTRACT.

3.2 SUBMITTALS SHALL INCLUDE THE MANUFACTURER'S SPECIFICATIONS, PHYSICAL DIMENSIONS AND RATINGS OF EQUIPMENT. FURNISH PERFORMANCE CURVES FOR PUMPS AND FANS. WHERE SUBMITTAL SHEET DESCRIBES ITEMS IN ADDITION TO THAT ITEM BEING SUBMITTED, THE SUBMITTED ITEM SHALL BE CLEARLY MARKED ON THE SHEET AND SUPERFLUOUS INFORMATION SHALL BE CROSSED OUT.

3.3 EQUIPMENT SUBMITTALS SHALL BE COMPLETE INCLUDING SPACE REQUIREMENTS, WEIGHT, ELECTRICAL AND MECHANICAL REQUIREMENTS, PERFORMANCE DATA AND SUPPLEMENTAL INFORMATION REQUESTED BY ARCHITECT.

SECTION 01 43 00 / TESTING AND SPECIAL INSPECTION

1.1 THE RESPECTIVE SECTIONS OF THESE SPECIFICATIONS CONTAIN REQUIREMENTS FOR MATERIALS TESTING AND INSPECTIONS. COSTS INCURRED FOR INSPECTION, SPECIAL INSPECTION AND TESTING LABORATORY SERVICES SHALL BE PAID FOR BY CONTRACTOR. SPECIAL INSPECTION SHALL BE PERFORMED BY A LICENSED STRUCTURAL ENGINEER.

1.2 PROVIDE THE SERVICES OF A TESTING LABORATORY APPROVED BY ARCHITECT. TESTING LABORATORY SHALL REPORT THE RESULTS OF TESTS, IN WRITING, SIMULTANEOUSLY TO THE FOLLOWING: ARCHITECT 1 COPY, STRUCTURAL ENGINEER 1 COPY, CONTRACTOR 2 COPIES.

SECTION 01 50 00 / CONSTRUCTION FACILITIES

1.1 UTILITIES: PROVIDE TEMPORARY ADEQUATE LIGHT AND POWER AND WATER SUPPLY FOR CONSTRUCTION, MAKING NECESSARY ARRANGEMENTS WITH SERVING UTILITY. RECEIPTS STATING THAT CHARGES HAVE BEEN PAID SHALL ACCOMPANY APPLICATION FOR FINAL PAYMENT.

1.2 FIRE PROTECTION: PROVIDE ADEQUATE FIRE EXTINGUISHERS, OF THE TYPE AND SIZES RECOMMENDED BY THE NFPA, ON THE PREMISES DURING THE COURSE OF CONSTRUCTION. IN THE USE OF HAZARDOUS TYPES OF EQUIPMENT, NO WORK SHALL BE COMMENCED OR EQUIPMENT USED UNLESS FIRE EXTINGUISHERS OF AN APPROVED TYPE AND CAPACITY ARE PLACED IN THE WORK AREA.

1.3 TEMPORARY ENCLOSURES, BARRIERS, AND FENCES: PROVIDE AND MAINTAIN FENCES, BARRICADES, LIGHTS, SHORING AND OTHER PROTECTIVE STRUCTURES OR DEVICES NECESSARY FOR THE SAFETY OF WORKERS, EQUIPMENT, THE PUBLIC AND PROPERTY. ABIDE BY STATE OR MUNICIPAL LAWS AND REGULATIONS, AND LOCAL ORDINANCES, LAWS AND OTHER REQUIREMENTS OF THE COUNTY AND OTHER AUTHORITIES HAVING JURISDICTION WITH REGARD TO SAFETY PRECAUTIONS, OPERATION AND FIRE HAZARDS.

1.4 SECURITY: ARCHITECT AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE PROTECTION OF THE BUILDING AND PREMISES OR FOR LOSS OF MATERIALS, FROM THE TIME THAT THE CONTRACT OPERATIONS HAVE COMMENCED UNTIL THE FINAL ACCEPTANCE OF THE WORK BY OWNER. IF WATCHMAN SERVICE IS DEEMED NECESSARY BY CONTRACTOR, SUCH PROTECTION SHALL BE PROVIDED BY CONTRACTOR.

1.5 FACILITY AND EQUIPMENT: PROVIDE, INSTALL, MAINTAIN AND OPERATE A COMPLETE AND ADEQUATE FACILITY FOR THE HANDLING, EXECUTION, DISPOSAL AND DISTRIBUTION OF MATERIAL AND EQUIPMENT REQUIRED FOR THE PROPER AND TIMELY PERFORMANCE OF WORK CONNECTED WITH THE CONTRACT.

1.6 TOILET FACILITIES: PROVIDE PROPER SANITARY AND ADEQUATE TOILET FACILITIES, LOCATED WHERE DIRECTED, FOR THE USE OF WORKERS ON THE PROJECT AND ENFORCE THEIR USE BY PERSONNEL ON THE PROJECT.

1.7 HEATING: SHOULD IT BECOME NECESSARY TO DO WORK IN THE BUILDING, SUCH AS PLASTERING, CEMENT WORK OR PAINTING, AT TIMES WHEN THE TEMPERATURE IS BELOW 40 DEGREES F CONTRACTOR SHALL PROVIDE TEMPORARY HEAT FOR SUCH LENGTH OF TIME AS NECESSARY FOR THE PROTECTION OF THE WORK.

1.8 SCAFFOLD: THE WORK SHALL INCLUDE PROVIDING, INSTALLING AND MAINTAINING SCAFFOLD NECESSARY FOR THE WORK IN CONFORMITY WITH APPLICABLE LAWS AND ORDINANCES.

1.9 PROJECT IDENTIFICATION: FURNISH AND ERECT A PROJECT SIGN GIVING THE NAME OF THE PROJECT, OWNER, ARCHITECTS, ENGINEERS, AND CONTRACTOR. SIGN SHALL MEET LOCAL ORDINANCE REQUIREMENTS.

1.10 VISIT THE SITE AND REVIEW THE NATURE OF WORK UNDER THIS SECTION PRIOR TO SUBMITTING THE BID. NOTIFY ARCHITECT OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

1.11 MATERIALS LISTED FOR REUSE OR SALVAGE, WHICH IS DAMAGED TO THE EXTENT THAT THEY CANNOT BE REUSED, SHALL BE REPLACED BY CONTRACTOR WITH EQUAL QUALITY MATERIAL. COORDINATE WITH OWNER ON DISPOSITION OF SALVAGE ITEMS.

1.12 REBUILD EXISTING WORK THAT HAS TO BE REMOVED TO ALLOW FOR THE INSTALLATION OF NEW WORK. REPAIR DAMAGE TO THE ROOF, OTHER SURFACES, AND ITEMS.

1.13 THE INSURANCE REQUIRED BY SUBSECTION 11.1.1 SHALL BE WRITTEN FOR NOT LESS THAN THE FOLLOWING, OR GREATER IF REQUIRED BY LAW:
A. WORKER'S COMPENSATION INSURANCE:
i. STATE, TO BE STATUTORY, APPLICABLE FEDERAL, TO BE STATUTORY, EMPLOYER'S LIABILITY $100,000
B. COMPREHENSIVE GENERAL LIABILITY INSURANCE (INCLUDING PREMISES-OPERATION; INDEPENDENT CONTRACTOR'S PROTECTION; PRODUCTS AND COMPLETED OPERATIONS):
i. BODILY INJURY: $1,000,000 EACH OCCURRENCE, $2,000,000 ANNUAL AGGREGATE PROPERTY DAMAGE: $1,000,000 EACH OCCURRENCE, $2,000,000 ANNUAL AGGREGATE
ii. PRODUCTS AND COMPLETED OPERATIONS INSURANCE TO BE MAINTAINED INSURED FOR ONE YEAR AFTER FINAL PAYMENT. PROPERTY DAMAGE LIABILITY INSURANCE WILL PROVIDE U GOVERAGE.
C. CONTRACTUAL LIABILITY INSURANGE:
i. BODILY INJURY: $1,000,000 EACH OCCURRENCE PROPERTY DAMAGE: $1,000,000 EACH OCCURRENCE, $2,000,000 ANNUAL AGGREGATE
D. PERSONAL INJURY INSURANCE, WITH EMPLOYMENT EXCLUSION DELETED:
i. $2,000,000 ANNUAL AGGREGATE
E. COMPREHENSIVE AUTOMOBILE LIABILITY INSURANCE:
i. BODILY INJURY: $1,000,000 EACH PERSON, $2,000,000 EACH OCGURRENCE PROPERTY DAMAGE: $1,000,000 EACH OCCURRENCE
F. CONTRACTOR SHALL PROVIDE THE LIMITS OF LIABILITY BY A COMBINATION OF THE ABOVE-DESCRIBED POLICY FORMS AND AN UMBRELLA EXCESS LIABILITY POLICY.
i. CONTRACTOR'S EXCESS LIABILITY, UMBRELLA FORM, BODILY INJURY AND PROPERTY DAMAGE COMBINED:
ii. $2,000,000 EACH OCCURRENCE, $10,000,000 AGGREGATE

BUILDING DEMOLITION

2.1 CONTRACTOR SHALL, BEFORE COMMENCING WORK, VERIFY GRADES, LINES, LEVELS AND DIMENSIONS SHOWN ON THE DRAWINGS AND SHALL REPORT ERRORS OR INCONSISTENCIES TO ARCHITECT. CONTRACTOR SHALL NOT PROCEED UNTIL SUCH ERRORS OR INCONSISTENCIES ARE CORRECTED

2.2 CONTRACTOR SHALL ESTABLISH AND MAINTAIN BUILDINGS AND CONSTRUCTION GRADES, LINES, LEVELS AND BENCHMARKS AND SHALL BE RESPONSIBLE FOR THEIR ACCURACY AND PROTECTION. THIS WORK SHALL BE PERFORMED BY A LICENSED SURVEYOR.
A. CONTRACTOR SHALL PROTECT TEMPORARY BENCHMARKS AND MAINTAIN THEM IN PLACE FOR THE DURATION OF THE CONTRACT OR UNTIL SUCH TIME AS THEIR REMOVAL DOES NOT AFFECT COMPLETION OF THE PROJECT.
B. CONTRACTOR SHALL NOT REMOVE PROPERTY LINE MARKERS OR MONUMENTS OR DATA ESTABLISHED BY OWNER. IF SUCH ARE DAMAGED OR REMOVED CONTRACTOR SHALL BEAR COST OF REPLACEMENT.

2.3 CONTRACTOR SHALL BE RESPONSIBLE FOR EXISTING STRUCTURE AND IMPROVEMENTS, BOTH ABOVEGROUND AND UNDERGROUND, INCLUDING THE FINISHES WITHIN THE ADJOINING WORKING AREAS, AND SHALL PROVIDE ADEQUATE PROTECTION, EITHER BY BARRICADES, COVERING OR TEMPORARY REMOVAL. EXISTING STRUCTURES OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND REPLACED WITH MATERIALS, WORKMANSHIP, FIXTURES OR EQUIPMENT OF THE SAME QUALITY AND SIZE AS REQUIRED BY CONTRACT DOCUMENTS.

2.4 DEBRIS FROM THE DEMOLITION SHALL NOT BE ALLOWED TO ACCUMULATE WITHIN THE BUILDING OR ON THE SITE. UNLESS LISTED FOR REUSE OR SALVAGE, DEMOLISHED MATERIALS SHALL BECOME THE PROPERTY OF CONTRACTOR, AND SHALL BE REMOVED FROM THE SITE. SPRINKLE DEBRIS, AND USE TEMPORARY ENCLOSURES, AS NECESSARY, TO LIMIT DUST. DO NOT USE WATER TO THE EXTENT OF CAUSING FLOODING, CONTAMINATION OR RUNOFF.

2.5 BREAK CONCRETE AND MASONRY INTO SECTIONS LESS THAN 3 FEET IN DIMENSION. LOWER STRUCTURAL FRAMING MEMBERS TO GROUND BY HOIST OR CRANE.

2.6 REMOVE FLOORS OVER BASEMENT CONSTRUCTION AND REMOVE ON GRADE SLABS. REMOVE EXTERIOR BASEMENT WALLS AND FOOTINGS IN TOTAL. REMOVE BELOW GRADE WOOD AND METAL FROM BUILDING DEMOLITION AREA.

2.7 PERFORM THE REMOVAL, CUTTING AND DRILLING OF EXISTING WORK WITH CARE, AND USING SMALL TOOLS IN ORDER NOT TO JEOPARDIZE THE STRUCTURAL INTEGRITY OF THE BUILDING. STORE EXISTING CONSTRUCTION WHEN EXISTING SUPPORTS ARE REMOVED, TO ALLOW FOR THE INSTALLATION OF NEW WORK. PERFORM CUTTING OF EXISTING GONCRETE AND MASONRY WITH SAWS AND CORE DRILLS; DO NOT USE JACKHAMMERS.

2.8 CONTRACTOR SHALL BE LIABLE FOR DAMAGE CAUSED BY CONTRACTOR TO OWNER'S PREMISES. CONTRACTOR SHALL HOLD AND SAVE OWNER AND THEIR AGENTS, FREE AND HARMLESS FROM LIABILITY OF ANY KIND ARISING FROM THE USE, TRESPASS OR DAMAGE OCCASIONED BY THEIR OPERATIONS ON PREMISES OR THIRD PERSONS.

PROTECTION OF EXISTING ROOFING

3.1 PROVIDE PROTECTION FROM WEATHER WHERE OPENINGS IN EXISTING ROOF ARE CUT FOR NEW WORK, OR WHERE EXISTING ROO

DETAILS AND QUALITY OF WORKMANSHIP.
D. MASONRY CONSTRUCTION MAY NOT PROCEED UNTIL THE ARCHITECT./ ENGINEER APPROVES MOCK-UP.
E. WHEN NOT ACCEPTED, CONSTRUCT ANOTHER MOCK-UP.
F. WHEN ACCEPTED, MOCK-UP WILL REMAIN INTACT DURING CONSTRUCTION, WILL BE THE STANDARD OF COMPARISON FOR THE REMAINDER OF MASONRY WORK.
G. UPON COMPLETION AND ACCEPTANCE OF PROJECT, DISPOSE OF MOCK-UPS IN LEGAL MANNER AT OFFSITE LOCATION.

1.4 CERTIFICATION: FURNISH MANUFACTURER'S CERTIFICATION THAT CLAY THIN BRICK UNITS PROVIDED MEET OR EXCEED THE REQUIREMENTS OF THIS SPECIFICATION.

DELIVERY, STORAGE, AND HANDLING

1.5 STORE MASONRY UNITS ABOVE GROUND TO PREVENT CONTAMINATION BY MUD, DUST OR OTHER MATERIALS LIKELY TO CAUSE STAINING OR OTHER DEFECTS.
1.6 COVER AND PROTECT MASONRY UNITS FROM INCLEMENT WEATHER TO MAINTAIN QUALITY CONTROL AND PHYSICAL REQUIREMENTS.
1.7 TRANSPORT AND HANDLE BRICK MASONRY UNITS AS REQUIRED TO PREVENT DISCOLORATION, CHIPPING, AND BREAKAGE.
1.8 LOCATE STORAGE PILES, STACKS, AND BINS TO PROTECT MATERIALS FROM HEAVY TRAFFIC.
1.9 REMOVE CHIPPED, CRACKED, AND OTHERWISE DEFECTIVE UNITS FROM JOBSITE UPON DISCOVERY.

PROJECT CONDITIONS

1.10 COLD WEATHER REQUIREMENTS:
A. IN ACCORDANCE IBC SECTION 2104.3.
B. PROVIDE ADEQUATE EQUIPMENT FOR HEATING MASONRY MATERIALS WHEN AIR TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT (4 DEGREES CELSIUS).

1.11 HOT WEATHER REQUIREMENTS:
A. IN ACCORDANCE WITH IBC SECTION 2104.4.
B. WHEN AMBIENT AIR TEMPERATURE EXCEEDS 100 DEGREES FAHRENHEIT (38 DEGREES CELSIUS), OR WHEN AMBIENT AIR TEMPERATURE EXCEEDS 90 DEGREES FAHRENHEIT (32 DEGREES CELSIUS)AND WIND VELOCITY IS GREATER THAN 8 MILES PER HOUR, IMPLEMENT HOT WEATHER PROTECTION PROCEDURES.
C. WET MORTAR BOARD BEFORE LOADING AND COVER MORTAR TO RETARD DRYING WHEN NOT BEING USED.
D. DO NOT SPREAD MORTAR BEDS MORE THAN 48 INCHES (1.22 M) AHEAD OF PLACING MASONRY UNITS.
E. PLACE MASONRY UNITS WITHIN ONE MINUTE OF SPREADING MORTAR.

1.12 WETTING OF BRICK: SHALL BE REQUIRED AT THE TIME OF LAYING IF THE UNIT'S INITIAL RATE OF ABSORPTION (IRA) EXCEEDS 30 GRAMS PER 30 SQUARE INCHES PER MINUTE OR 1 G/ 645MM2.

PART 2 – PRODUCTS

A. TYPE: ASTM C 1088, GRADE EXTERIOR, TYPE TBS OR TBX THIN VENEER BRICK.

B. SURFACE TEXTURE: TO BE SELECTED BY ARCHITECT/ENGINEER FROM MANUFACTURER'S FULL RANGE OF AVAILABLE TEXTURES.

C. COLORS: COLOR AS SELECTED BY ARCHITECT/ENGINEER FROM STANDARD COLORS.

D. SIZE: 9/16 IN. THICK X 2 ¼ IN. HIGH X 8 IN. LONG, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

E. SPECIAL SIZES AND SHAPES: AS REQUIRED FOR WINDOW AND DOOR LOCATIONS AND CUSTOM SILLS WHERE INDICATED, CORNERS, AND OTHER SPECIAL APPLICATIONS TO MINIMIZE CUTTING.

BOND COAT MORTAR

2.1 SITE MIXED MORTAR: MEET REQUIREMENTS OF ANSI A118.4 OR A118.15.

2.2 PREBLENDED: MEET REQUIREMENTS OF ANSI A118.4 OR A118.15.

2.3 MORTAR FOR USE WITH CEMENT BACKER BOARD SUBSTRATE: COMPLY WITH ANSI A118.4 OR A118.15

POINTING MORTAR

2.4 MORTAR USED TO GROUT OR TUCK-POINT MORTAR JOINTS (SOMETIMES CALLED GROUTING MORTARS) BETWEEN THIN BRICK UNITS AFTER THEY ARE ADHERED TO THE SUBSTRATE WALL. MIX BY PROPORTION: 1 PART PORTLAND CEMENT (ASTM C150); 1 PART HYDRATED LIME (ASTM C207); 6 PARTS SAND (ASTM C144), OR MODIFIED EPOXY EMULSION MORTAR/GROUT CONFORMING TO ANSI 118.07.
A. SITE MIXED: MEET REQUIREMENTS OF ASTM C270 TYPE N OR TYPE S.
B. PREBLENDED: MEET REQUIREMENTS OF ASTM C1714/C1714M TYPE N OR TYPE S.

WEATHER-RESISTIVE BARRIER (WRB)
SEE SECTION 071000 FOR ADDITIONAL INFORMATION

2.5 SHEET GOODS: FOR EXTERIOR WALL (NOT ROOF) APPLICATIONS. COMPATIBLE WITH CEMENTITIOUS PLASTER AND MORTAR CAPABLE OF BOND CAPACITIES OF 50 PSI (0.34 MPA) SHEAR AND TENSION BOND

2.6 ELASTOMERIC LIQUID/FLUID APPLIED: COMPATIBLE WITH CEMENTITIOUS PLASTER AND MORTAR CAPABLE OF BOND CAPACITIES OF 150 PSI (1.03 MPA) SHEAR AND TENSION BOND.

DRAINAGE LAYER

2.7 SHEET OR ROLL GOODS COMPRISED OF WOVEN PLASTIC STRANDS, PLASTIC STRAND MESH, PROFILED (RIBBED, OR DIMPLED) PLASTIC SHEETING, ALL FACED WITH FILTER FABRIC. ALTERNATIVELY, THE DRAINAGE LAYER MAY BE CREATED WITH A FILTER MEMBRANE WITH DIMPLES, OR "BUTTONS", OTHER PROTRUSIONS BONDED TO THE SURFACE WHICH CREATE A 3/16" (5 MM) (MINIMUM) AIR SPACE, OR OTHER SUITABLE MATERIAL TO PROVIDE A SEPARATION THAT ALLOWS WATER TO DRAIN OUT OF THE WALL SYSTEM.
A. HYDROGAP® BY BENJAMIN OBDYKE, OR EQUIVALENT
B. MORTAIRVENT® BY ADVANCED BUILDING PRODUCTS, OR EQUIVALENT
C. SURE CAVITY™ BY MTI, OR EQUIVALENT

RIGID EXTERIOR INSULATION
SEE SECTION 072113 FOR ADDITIONAL INFORMATION

2.8 TYPE AND THICKNESS AS DEFINED IN THE DRAWINGS

2.9 TO BE INSTALLED AS PART OF THE EXTERIOR ADHERED THIN BRICK WALL SYSTEM OUTBOARD OF THE WRB

LATH (FURRED)

A. 3/8" (9.5MM) DIMPLES OR RIBS, 3.4 LB./YD2 (1.9KG/M2) SELF-FURRING EXPANDED GALVANIZED METAL LATH – ASTM C847

B. 1/4" (6.3MM) DIMPLES OR RIBS, 2.5 LB/YD2 (1.4KG/M2) (OR HEAVIER) SELF-FURRING METAL LATH – ASTM C874

C. WELDED WIRE LATH – ASTM C933

D. PROPRIETARY INTEGRAL WOVEN FIBERGLASS LATH AND PROFILED DRAINAGE MEMBRANE – SEE 2.09-F.

FLASHING

2.10 CORROSION RESISTANT PLASTIC, COPPER, STAINLESS STEEL, PAINTED METAL, COATED METAL AS SHOWN ON THE DRAWINGS. SEE SECTION 076000 FOR ADDITIONAL INFORMATION.

ACCESSORIES

2.11 WEEP SCREEDS: CORROSION RESISTANT WITH 3.5" (89MM) (MINIMUM) VERTICAL ATTACHMENT FLANGE (THAT TERMINATES BEHIND WRB)
A. METAL WEEP SCREED: NOT LESS THAN 26 GAGE; .0179 INCHES (0.45MM)
B. PLASTIC WEEP SCREED: NOT LESS THAN 0.05 INCHES (1.3MM)

2.12 CASING BEADS: CORROSION RESISTANT
A. METAL WEEP SCREED: NOT LESS THAN 26 GAGE; .0179 INCHES (0.45MM)
B. PLASTIC WEEP SCREED: NOT LESS THAN 0.05 INCHES (1.3MM)

2.13 ELASTOMERIC SEALANTS. SIZED FOR CALCULATED MOVEMENT. SECTION 079200

2.14 FASTENERS: ASTM C1063
A. FOR STEEL STUDS: CORROSION RESISTANT SCREWS; COATED OR BI-METALLIC (MILD [DRILL] TIP WITH STAINLESS THREADED SHANK), FOR FASTENING DRAINAGE PLANE MATERIAL AND LATH MATERIAL TO SUBSTRATE WALL; RATED FOR RESISTANCE TO MOIST ENVIRONMENTS. PENETRATE STUD TO EXPOSE 3 FULL THREADS THROUGH STEEL STUDS
B. FOR WOOD STUDS: CORROSION RESISTANT STAPLES, CORROSION RESISTANT ROOFING NAILS, OR CORROSION RESISTANT SCREWS AND WASHERS, ALL OF SUFFICIENT LENGTH TO PENETRATE A MINIMUM OF ¾" INTO WALL FRAMING MEMBERS
C. FOR CONCRETE OR CMU: CORROSION RESISTANT CONCRETE SCREWS (WITH 1¼" MINIMUM PENETRATION INTO SOUND SUBSTRATE) OR CORROSION RESISTANT POWDER ACTUATED FASTENERS (WITH 1" MINIMUM PENETRATION INTO SOUND SUBSTRATE)
i. FOLLOW FASTENER MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION INTO CMU
D. FASTENERS INTENDED TO SECURE LATH SHALL HAVE SUFFICIENTLY LARGE HEADS OR ADDED CORROSION RESISTANT WASHERS LARGE ENOUGH TO NOT PULL THROUGH THE LATH.

2.15 FLUID APPLIED BOND COAT – USED ON THE FACE OF RIGID INSULATION

2.16 PROPRIETARY LATH SYSTEMS – FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION
A. PUNCHED GALVANIZED SHEET METAL: TABS II OR EQUIVALENT
B. THERMOSET REINFORCED PLASTIC: SPEEDYMASON OR EQUIVALENT
i. MORTAR SET
ii. PEEL N' STICK
C. PROFILED EXPANDED RIGID FOAM: BRICKWEBB BY OLD MILL OR EQUIVALENT.
D. FIBERGLASS WOVEN LATH BY SPIDERLATH, OR EQUIVALENT. [FOR NON-FIRE-RATED TYPE V CONSTRUCTION]
E. FIBERGLASS WOVEN LATH BONDED TO PROFILED PLASTIC DRAINAGE MEMBRANE
i. DELTA-DRY AND LATH, BY DORKEN, OR EQUIVALENT. [FOR NON-FIRE-RATED TYPE V CONSTRUCTION]

2.17 PROPRIETARY MVIS SYSTEMS: EXTERIOR WALL ASSEMBLY SYSTEM APPLIED TO CLEAN AND SOUND EXTERIOR SUBSTRATE SURFACES THAT HAS COMPATIBLE COMPONENTS COMPRISED OF: LIQUID/FLUID ELASTOMERIC WRB MEMBRANE, CEMENTITIOUS PLASTER SUBSTRATE, SETTING/BONDING MORTAR, AND POINTING MORTAR (GROUT) SYSTEMS DESIGNED SPECIFICALLY FOR ADHERED EXTERIOR MASONRY VENEERS, INCLUDING THIN BRICK. NOT APPLICABLE WHERE IT WOULD BE APPLIED DIRECTLY TO A DRAINAGE LAYER.
A. LATICRETE MVIS OR EQUIVALENT.
i. 3-PART SYSTEM: FLUID WRB + MASONRY VENEER MORTAR + POINTING MORTAR. USED FOR THIN OR THICK SET APPLICATIONS
ii. 4-PART SYSTEM: FLUID WRB + PREMIUM MORTAR BED + MASONRY VENEER MORTAR + POINTING MORTAR. USED IN LIEU OF STUCCO SUBSTRATES

CEMENT BACKER (CB) OR CEMENT BACKER BOARD (CBB)

2.18 SPECIALTY CEMENT BACKER BOARDS ARE AVAILABLE THAT COME WITH RIGID POLYSTYRENE FOAM AND/OR MINERAL WOOL OF VARIOUS THICKNESSES BONDED TO THE CEMENT BACKER BOARD AS AN OPTION TO PROVIDE EXTERIOR INSULATION.

PART 3 – EXECUTION

VENEER SUBSTRATE SURVEY

3.1 SURVEY CONDITION OF SUBSTRATE WALL OR BACKING TO RECEIVE THIN BRICK AND REPORT ALL NON-CONFORMANCE ISSUES, INCLUDING BUT NOT LIMITED TO: OUT OF TOLERANCE FLATNESS, PLUMBNESS, ALIGNMENT, AND LOCATION. REPORT ALL PERTINENT ISSUES TO THE GENERAL CONTRACTOR PRIOR TO INITIATING ANY WORK.

VENEER SUBSTRATE PREPARATION

3.1 CONCRETE, CMU, CEMENT BACKER BOARD, AND STUCCO
A. REMOVE ALL DELETERIOUS SUBSTANCES (FORM RELEASE, CURING COMPOUNDS, PAINT, GRAFFITI, ETC.)
B. WASH SURFACE TO REMOVE DUST AND LAITANCE, AND ALLOW TO DRY
C. CLEANING MAY BE WAIVED/ELIMINATED WHERE NEW CONSTRUCTION MAKES IN UNNECESSARY, AND WHEN PROPRIETARY LATH SYSTEMS ARE USED, PENDING ACCEPTANCE OF ARCHITECT AND LATH SYSTEM MANUFACTURER.

3.2 WOOD SHEATHING.
A. PREPARE TO RECEIVE VENEER ASSEMBLY BY PROPERLY SETTING ALL PROTRUDING FASTENERS AND FIXING FASTENERS THAT HAVE PUNCHED THROUGH THE EXTERIOR SURFACE OF THE SHEATHING.
B. REMOVE ALL DELETERIOUS MATERIALS FROM THE SURFACE OF THE SHEATHING.

3.3 PREPARE SUBSTRATE SURFACE TO RECEIVE ADHERED THIN BRICK AS NOTED ABOVE OR BY ANY OTHER SUITABLE AND APPROVED MEANS AND METHODS THAT WILL ENSURE ADEQUATE BOND AND DURABILITY IF THE THIN BRICK INSTALLATION. SUBMIT PROPOSED MEANS AND METHODS FOR REVIEW AND RECEIVE APPROVAL PRIOR TO INITIATING ANY WORK..

CONFIRMATION OF MASONRY LAYOUT

3.4 PRIOR TO INSTALLATION OF THIN BRICK, LAYOUT (DRY) COURSING TO FILL SURFACE AND NOTE ANY ADJUSTMENTS THAT ARE NECESSARY TO PRODUCE THE DESIRED LOOK, ELIMINATING UNITS THAT ARE LESS THAN 1/2 OF THE FULL UNIT WIDTH. THIS MAY REQUIRE ADJUSTING THE LOCATION OF HEAD JOINTS AND USING 3/4 LENGTH (APPROX.) UNITS TO MAINTAIN THE DESIRED BONDING PATTERN.

3.5 ADJUST JOINT WIDTHS WITHIN ESTABLISHED TOLERANCES TO ACCOMMODATE BRICK TOLERANCES AND LAYOUT TOLERANCES.

3.6 ADJUSTMENTS TO LAYOUT, INCLUDING BUT NOT LIMITED TO PARTIAL BRICK UNITS AND JOINT SIZES MUST BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION.

EXTERIOR THICK SET APPLICATION FOR UNEVEN SUBSTRATES

THE FOLLOWING GUIDELINES ARE INTENDED FOR EXTERIOR APPLICATION OVER SOMEWHAT UNEVEN SUBSTRATES OR WHEN USING THIN BRICK WITH UNDULATING/UNEVEN BACK SURFACES OR THIN BRICKS THAT VARY IN THICKNESS.

3.7 PROTECT ADJACENT CONSTRUCTION WITH APPROPRIATE MEANS FROM MORTAR DROPPINGS AND OTHER EFFECTS OF LAYING OF BRICK MASONRY UNITS.

3.8 INSTALL FLASHING AT THE PERIMETER OF THIN BRICK VENEER WALL ASSEMBLY, AROUND OPENINGS, AND AT BASE OF VENEER, INTEGRATED WITH THE WRB TO PREVENT THE MOISTURE FROM ENTERING THE BUILDING AND TO TRANSMIT THE MOISTURE TO THE OUTSIDE OF THE WALL. INSTALL WEEPS (WEEP SCREEDS) AT THE BOTTOM OF THE WALLS, INTEGRATED WITH THE WRB TO TRANSMIT THE MOISTURE TO THE OUTSIDE FACE OF THE WALL. SECURE FLASHINGS WITH FASTENERS.

3.9 INSTALL TWO LAYERS OF WRB SHEET OR ROLL GOODS OVER THE SUBSTRATE WALL, IN SHINGLE FASHION, STARTING AT THE BOTTOM OF THE WALL. EACH LAYER MUST PROVIDE A COMPLETE, INDEPENDENT, UNINTERRUPTED DRAINAGE PATH. THE LAPS SHOULD BE 2 IN. (51 MM) MINIMUM FOR HORIZONTAL LAPS AND 6 IN. (152 MM) MINIMUM FOR VERTICAL LAPS. STAGGER LAPS IN EACH LAYER, IN SHINGLE FASHION. SECURE IN PLACE WITH MASTIC, ADHESIVE OR FASTENERS. WRB MAY BE REDUCED TO A SINGLE LAYER WHERE DRAINAGE LAYER IS USED; INCREASE HORIZONTAL LAPS TO 3" (76 MM) FOR SINGLE LAYER WRB SHEET GOODS.
A. ALTERNATIVELY, APPLY LIQUID OR FLUID WRB TO CLEAN, SOUND SUBSTRATE MATERIALS.

3.10 INSTALL OPTIONAL (RECOMMENDED) DRAINAGE LAYER OVER WRB. AVOID CREATING DAMS OR TERMINATIONS THAT WOULD IMPEDE THE FLOW OF WATER AND MOISTURE OUT OF THE WALL, DIRECTING IT TO THE EXTERIOR SURFACE. SECURE DRAINAGE LAYER WITH FASTENERS.
A. SEE 3.04-F-1 FOR ALTERNATIVE.

3.11 WHERE EXTERIOR INSULATION IS INTENDED, RIGID INSULATION SHOULD BE CHOSEN, AND IT SHOULD BE INSTALLED OVER THE OPTIONAL BUT RECOMMENDED DRAINAGE LAYER, SECURED IN PLACE WITH APPROPRIATE FASTENERS.

3.12 INSTALL METAL LATH COMPLYING WITH ASTM C847 ON THE SUBSTRATE MATERIAL. FURRED A MINIMUM OF ¼" (6 MM) OFF THE FACE OF THE SUBSTRATE MATERIAL. SELF-FURRING LATH MAY BE USED (RECOMMENDED). REFER TO ASTM C1063 FOR INSTALLATION OF METAL LATH FOR PORTLAND CEMENT PLASTERING APPLICATIONS. SECURE LATH WITH FASTENERS. THE MAXIMUM HORIZONTAL SPACING FOR THE FASTENERS IS 16 IN. (406 MM) O.C. AND MAXIMUM VERTICAL SPACING FOR FASTENERS IS 6 IN. (152 MM) O.C.
A. ALTERNATIVE: DRAINAGE LAYER AND LATH CAN BE PROVIDED BY PROPRIETARY SYSTEM OF LATH COMBINED WITH A DRAINAGE LAYER AS NOTED IN 2.07-E.4.

3.13 APPLY ½" TO 1" (13 MM TO 25 MM) THICK CEMENTITIOUS PLASTER (STUCCO) SCRATCH COAT ON CLEAN AND DUST-FREE SUBSTRATE, USING TYPE S MORTAR, WORKING INTO LATH TO COMPLETELY EMBED LATH INTO CEMENTITIOUS PLASTER WITH AT LEAST ½" COVERAGE ON THE BACK OF THE LATH. MORTAR 2.02-D -1 ABOVE. SCARIFY SURFACE WHILE MOIST. APPLY ¾" TO 1½" (19 MM TO 32 MM) THICK CEMENTITIOUS PLASTER (STUCCO) OVER RIGID INSULATION, WHERE OCCURS.
A. CONTIGUOUS AREAS OF CEMENTITIOUS PLASTER (STUCCO) BOUNDED BY JOINTS OR EDGES OF THE PLASTER SHOULD NOT EXCEED 144 SQ FT (13.4 SQ. M), WITH JOINT SPACING NOT TO EXCEED 18 FEET (5.5 M), AND WITH THE ASPECT RATIO OF AREAS BOUNDED BY JOINTS OR EDGES OF THE PLASTER SHOULD NOT EXCEED 1.5:1.0.

3.14 CURE SCRATCH COAT AT LEAST 24 HOURS PRIOR TO THE APPLICATION OF SUBSEQUENT COATS. IF SURFACE DRY, PRE-WET SURFACE PRIOR TO APPLYING THE SETTING (BONDING) MORTAR. SEE SECTION 092400 FOR ADDITIONAL INFORMATION.

3.15 SPREAD BRICK SETTING (BONDING) MORTAR BED ONTO THE CLEAN AND DUST-FREE SUBSTRATE USING THE FLAT SIDE OF A TROWEL AND COMB USING A NOTCHED TROWEL (3/16" TO ¼" [5 MM TO 6 MM] DEEP NOTCHES) TO OBTAIN AN EVEN SETTING BED. USE TYPE S POLYMER MODIFIED MORTAR (LATEX-PORTLAND CEMENT MORTAR, PER 2.02-D-2, ABOVE).

3.16 APPLY BRICK SETTING BED MORTAR TO THE BACK OF THE VENEER UNITS, WORKING INTO THE BACK OF THE BRICK UNIT USING THE FLAT SIDE OF A TROWEL AND COMB USING A NOTCHED TROWEL (AS ABOVE) AND PLACE THE UNIT INTO THE SETTING BED ON THE SUBSTRATE WALL. WORK THE THIN BRICK UNIT INTO PLACE BY TAPPING, OR SLIDING SLIGHTLY BACK-AND-FORTH, OR UP-AND-DOWN, OR ROTATING SLIGHTLY, UNTIL EXCESS MORTAR IS SQUEEZED OUT AT THE EDGES OF THE VENEER UNIT, COMPLETELY FILLING THE SPACE BETWEEN UNIT AND BONDING MORTAR. THE THICKNESS OF THE SETTING/BONDING MORTAR BED SHALL BE BETWEEN 3/8 IN. AND ¾" IN (10 MM AND 19 MM) TO ACCOMMODATE VARIATIONS IN THE SUBSTRATE SURFACE, VARIATIONS IN THE BRICK, AND TO ADJUST FOR PLUMBNESS AND FLATNESS OF THE WALL. USE OF A 48-INCH-LONG STRAIGHT EDGE IS RECOMMENDED TO ENSURE A PLANAR INSTALLATION, SWEEPING OVER THE SURFACE AND HUMORING (ADJUSTING) THE BRICK AS NEEDED TO CORRECT FOR ANOMALIES.

3.17. LAY UNITS TO DESIRED HEIGHT WITH JOINTS OF UNIFORM THICKNESS. GROUT THE JOINTS USING TYPE N MORTAR MIX PER 2.03 ABOVE. TOOL THE JOINT WHEN THEY ARE THUMB PRINT HARD.

3.18 BOND SHALL BE PLUMB THROUGHOUT.

3.19 LAY UNITS TO AVOID FORMATION OF CRACKS WHEN UNITS ARE PLACED.

3.20 LAY MASONRY PLUMB, TRUE TO LINE, WITH COURSES LEVEL. KEEP BOND PATTERN PLUMB THROUGHOUT. CARE SHOULD BE TAKEN TO PRODUCE A FLAT FINISHED SURFACE WHERE UNEVEN SUBSTRATES EXIST OR WHERE THIN BRICK THICKNESSES VARY. LAY MASONRY WITHIN THE TOLERANCES OF ACI 530.1 SECTION 3.3 G.

3.21 WHEN POSITIONS OF UNITS SHIFT AFTER MORTAR HAS STIFFENED, BOND IS BROKEN, OR CRACKS ARE FORMED, REMOVE AND REINSTALL UNITS IN NEW MORTAR.

3.22 AVOID LAYING UNITS WHERE THEY WOULD BRIDGE ACTIVE CRACKS OR ESTABLISHED MOVEMENT JOINTS IN SUBSTRATE MATERIALS. CUT WHERE NECESSARY TO RESPECT JOINTING IN SUBSTRATE.

3.23 AVOID MORTAR STAINING ON THE UNITS DURING INSTALLATION. CLEAN ANY MORTAR SMEARING OR STAINING PROMPTLY TO REDUCE FINAL CLEANING.

3.24 ALTERNATE 1: USE A PROPRIETARY 4-PART MVIS SYSTEM (2.09-G-1-B) APPLIED TO CLEAN, SOUND CONCRETE OR CMU SUBSTRATES, WHERE NO DRAINAGE LAYER IS REQUIRED.

EXTERIOR THIN SET APPLICATION TO FLAT CEMENTITIOUS SUBSTRATE

THE FOLLOWING GUIDELINES ARE INTENDED FOR EXTERIOR APPLICATION OVER REASONABLY FLAT SUBSTRATES WHEN USING THIN BRICK WITH UNIFORM THICKNESS.

3.25 PROTECT ADJACENT CONSTRUCTION WITH APPROPRIATE MEANS FROM MORTAR DROPPINGS AND OTHER EFFECTS OF LAYING OF BRICK MASONRY UNITS.

3.26 INSTALL FLASHING AT THE PERIMETER OF THIN BRICK VENEER WALL ASSEMBLY, AROUND OPENINGS, AND AT BASE OF VENEER, INTEGRATED WITH THE WRB TO PREVENT THE MOISTURE FROM ENTERING THE BUILDING AND TO TRANSMIT THE MOISTURE TO THE OUTSIDE OF THE WALL. INSTALL WEEPS (WEEP SCREEDS) AT THE BOTTOM OF THE WALLS, INTEGRATED WITH THE WRB TO TRANSMIT THE MOISTURE TO THE OUTSIDE FACE OF THE WALL. SECURE FLASHINGS WITH FASTENERS.

3.27 APPLY LIQUID/FLUID WRB MEMBRANE TO CLEAN CONCRETE SUBSTRATE SURFACES.
A. IF DRAINAGE LAYER IS USED, WRB MAY BE SINGLE LAYER OF SHEET OR ROLL GOODS. LAP SHEET GOODS PER 3.02 C.

3.28 INSTALL OPTIONAL (RECOMMENDED) DRAINAGE LAYER OVER SHEET OR ROLL GOODS WRB OR LIQUID/FLUID ELASTOMERIC WRB. AVOID CREATING DAMS OR TERMINATIONS THAT WOULD IMPEDE THE FLOW OF WATER AND MOISTURE OUT OF THE WALL, DIRECTING IT TO THE EXTERIOR SURFACE. SECURE IN PLACE WITH FASTENERS.

3.29. WHERE EXTERIOR INSULATION IS INTENDED, RIGID INSULATION SHOULD BE CHOSEN, AND IT SHOULD BE INSTALLED OVER THE OPTIONAL BUT RECOMMENDED DRAINAGE LAYER, SECURED IN PLACE WITH APPROPRIATE FASTENERS.

3.20 APPLY CBB OVER WRB SHEET OR ROLL GOODS (OR LIQUID/FLUID WRB) AND OVER OPTIONAL (RECOMMENDED) DRAINAGE LAYER, AND OVER EXTERIOR RIGID INSULATION, WHERE USED. SECURE CEMENT BACKER BOARD IN PLACE WITH APPROPRIATE FASTENERS. TAPE JOINTS.

3.21 SPREAD BRICK SETTING (BONDING) MORTAR BED ONTO THE CLEAN AND DUST-FREE SUBSTRATE OF CONCRETE OR CMU WITH COMPATIBLE ELASTOMERIC LIQUID/FLUID WRB, OR ONTO CBB OVER WRB AND/OR OPTIONAL (RECOMMENDED) DRAINAGE LAYER, USING THE FLAT SIDE OF A TROWEL AND COMB USING A NOTCHED TROWEL (3/16" TO ¼" [5 MM TO 6 MM] DEEP NOTCHES) TO OBTAIN AN EVEN SETTING BED. USE TYPE S POLYMER MODIFIED MORTAR (LATEX-PORTLAND CEMENT MORTAR, PER 2.02-D-2, ABOVE).

3.22 APPLY BRICK SETTING BED (BONDING) MORTAR TO THE BACK OF THE VENEER UNITS, WORKING INTO THE BACK OF THE BRICK UNIT USING THE FLAT SIDE OF A TROWEL AND COMB USING A NOTCHED TROWEL (AS ABOVE) AND PLACE THE UNIT INTO THE SETTING BED ON THE SUBSTRATE WALL. WORK THE THIN BRICK UNIT INTO PLACE BY TAPPING, OR SLIDING SLIGHTLY BACK-AND-FORTH, OR UP-AND-DOWN, OR ROTATING SLIGHTLY, UNTIL EXCESS MORTAR IS SQUEEZED OUT AT THE EDGES OF THE VENEER UNIT, COMPLETELY FILLING THE SPACE BETWEEN UNIT AND BONDING MORTAR; 100% COVERAGE ON THE THIN BRICK UNITS. THE THICKNESS OF THE SETTING/BONDING MORTAR BED SHALL BE BETWEEN 3/8 IN. AND ¾" IN (10 MM AND 19 MM) TO ACCOMMODATE VARIATIONS IN THE SUBSTRATE SURFACE, VARIATIONS IN THE BRICK, AND TO ADJUST FOR PLUMBNESS AND FLATNESS OF THE WALL. USE OF A 48-INCH-LONG STRAIGHT EDGE IS RECOMMENDED TO ENSURE A PLANAR INSTALLATION, SWEEPING OVER THE SURFACE AND HUMORING (ADJUSTING) THE BRICK AS NEEDED TO CORRECT FOR ANOMALIES.

3.23 LAY UNITS TO DESIRED HEIGHT WITH JOINTS OF UNIFORM THICKNESS. GROUT THE JOINTS USING TYPE N MORTAR MIX PER 2.03 ABOVE. TOOL THE JOINT WHEN THEY ARE THUMB PRINT HARD.

3.24 BOND SHALL BE PLUMB THROUGHOUT.

3.25 LAY UNITS TO AVOID FORMATION OF CRACKS WHEN UNITS ARE PLACED.

3.26 LAY MASONRY PLUMB, TRUE TO LINE, WITH COURSES LEVEL. KEEP BOND PATTERN PLUMB THROUGHOUT. LAY MASONRY WITHIN THE TOLERANCES OF ACI 530.1 SECTION 3.3 G.

3.27 WHEN POSITIONS OF UNITS SHIFT AFTER MORTAR HAS STIFFENED, WHEN BOND IS BROKEN, OR WHEN CRACKS ARE FORMED, REMOVE AND REINSTALL UNITS IN NEW MORTAR.

3.28 AVOID LAYING UNITS WHERE THEY WOULD BRIDGE ACTIVE CRACKS OR ESTABLISHED MOVEMENT JOINTS IN SUBSTRATE MATERIALS. CUT WHERE NECESSARY TO RESPECT JOINTING IN SUBSTRATE.

3.29 AVOID MORTAR STAINING ON THE UNITS DURING INSTALLATION. CLEAN ANY MORTAR SMEARING OR STAINING PROMPTLY TO REDUCE FINAL CLEANING.

3.30 ALTERNATE 1: PROPRIETARY LATH SYSTEMS (2.09-F) ARE SUITABLE FOR THIS APPLICATION IN LIEU OF THE SETTING/BONDING MORTAR APPLICATION NOTED ABOVE. APPLY OVER WRB AND OPTIONAL (RECOMMENDED) DRAINAGE LAYER, AND OVER OPTIONAL INSULATION. WHERE PROPRIETARY LATH SYSTEM HAS AN INTEGRAL DRAINAGE LAYER, ADDITIONAL DRAINAGE LAYER IS NOT NEEDED. WHERE PROPRIETARY LATH SYSTEM HAS INTEGRAL INSULATION, ADDITIONAL INSULATION MAY NOT BE NECESSARY.

3.31 ALTERNATE 2: PROPRIETARY 3-PART MVIS SYSTEMS (2.09-G-1-A) MAY BE USED WHERE NO DRAINAGE LAYER IS REQUIRED, APPLIED OVER CONCRETE, CMU, OR OVER CBB THAT IS INSTALLED OVER (OPTIONAL) DRAINAGE AND INSULATION LAYERS.

MORTAR JOINTS

A. MAKE JOINTS STRAIGHT, CLEAN, SMOOTH, AND UNIFORM IN THICKNESS.

B. POINTING: TOOL EXPOSED JOINTS, SLIGHTLY CONCAVE. STRIKE CONCEALED JOINTS FLUSH.

C. TOOL JOINTS WHILE SLIGHTLY MOIST AND THUMBPRINT HARD.

D. JOINT THICKNESS: MAKE VERTICAL AND HORIZONTAL JOINTS AS REQUIRED TO ACHIEVE NOMINAL DIMENSIONS ON DRAWINGS AND WITHIN TOLERANCES LISTED IN ACI 530.1 SECTION 3.3 G.

E. WHERE FRESH MASONRY JOINS TOTALLY OR PARTIALLY SET MASONRY, CLEAN AND ROUGHEN SET MASONRY BEFORE LAYING NEW UNITS.

BOND PATTERN

3.32 INSTALL BRICK MASONRY UNITS IN RUNNING BOND PATTERN, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

CUTTING BRICK MASONRY UNITS

3.32 WHEN POSSIBLE, USE FULL UNITS OF THE PROPER SIZE IN LIEU OF CUT UNITS.
A. CUT UNITS AS REQUIRED TO FORM CHASES, OPENINGS, FOR ANCHORAGE, AND FOR OTHER APPURTENANCES, AND AT ALL MOVEMENT JOINTS AND TERMINATIONS, AS REQUIRED, SO AS TO ELIMINATE UNITS BRIDGING ACROSS MOVEMENT JOINTS (OR CRACKS) IN SUBSTRATE.

3.33 CUT AND FIT UNITS WITH POWER-DRIVEN CARBORUNDUM OR DIAMOND DISC BLADE SAW.

3.34 CLEAN BACK OF UNITS AFTER CUTTING TO REMOVE DUST AND OTHER DELETERIOUS MATERIAL(S).

3.35 DISCARD UNITS THAT ARE DAMAGED DURING THE CUTTING PROCESS, WHICH DO NOT MEET THE APPEARANCE STANDARD OF ASTM C1088.

CONTROL JOINTS / EXPANSION JOINTS

A. SIZE JOINTS TO ACCOMMODATE ANTICIPATED MOVEMENTS WITH RESPECT TO MOISTURE AND THERMAL GRADIENTS IN ADDITION TO BUILDING MOVEMENTS COMMENSURATE WITH THE MOVEMENT POTENTIAL OF THE JOINT MATERIAL(S).

B. PROVIDE IN MASONRY WALLS WHERE INDICATED ON THE DRAWINGS.

C. MAKE FULL HEIGHT AND CONTINUOUS IN APPEARANCE.

D. CONTROL AND EXPANSION JOINTS MUST BE CONTINUOUS THROUGH THE BACKING, UNLESS DETAILED OTHERWISE.

E. INSERT CONTROL JOINT FILLER IN JOINTS AS WALL IS CONSTRUCTED.

F. INSERT 50% COMPRESSIBLE ELASTOMERIC (NEOPRENE OR EQUIVALENT) EXPANSION JOINT MATERIAL IN PROPERLY SIZED EXPANSION JOINTS.

G. APPLY SEALANT AS SPECIFIED.

FLASHING

3.36 FLASHING MUST BE INSTALLED AT ALL THROUGH WALL PENETRATIONS AND AT LOWER BOUNDARIES OF THE ADHERED THIN BRICK VENEER INSTALLATIONS.

3.37 FLASHINGS WILL BE INTEGRATED WITH THE WRB MATERIALS TO PROVIDE EFFECTIVE CONTROL OF MOISTURE EXITING THE WALL ASSEMBLY, WITH SEALED CORNERS, END DAMS AND OTHER ACCESSORIES AS NEEDED.

PATCHING

3.38 PATCH EXPOSED BRICK MASONRY UNITS AT COMPLETION OF THE WORK AND IN SUCH MANNER THAT PATCHING WILL BE INDISTINGUISHABLE FROM SIMILAR SURROUNDINGS AND ADJOINING CONSTRUCTION.

MISCELLANEOUS

3.39 BUILD IN REQUIRED ITEMS, SUCH AS ANCHORS, FLASHINGS, WEEP SCREEDS, SLEEVES, ELECTRICAL BOXES, FRAMES, STRUCTURAL STEEL, LINTELS, ANCHOR BOLTS, AND METAL FABRICATIONS, AS REQUIRED FOR COMPLETE INSTALLATION.

WATER REPELLENT

3.40 APPLY

PIPING AND BARS FOR STRUCTURAL USE
E. WELDING PROCESSES AND WELDING OPERATORS IN ACCORDANCE WITH AWS STANDARD QUALIFICATION PROCEDURE

1.4 THE TYPES OF ITEMS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
A. CARPENTER'S IRONWORK
B. PIPE GUARDS
C. LADDERS
D. LOOSE BEARING PLATES
E. MISCELLANEOUS FRAMING AND SUPPORTS
F. MISCELLANEOUS TRIM
G. ANGLE CORNER GUARDS
H. CHANNEL DOOR FRAMES
J. ANGLE JAMBS
K. PLATES FOR DOORS
N. TRELLIS
O. FENCING AND GATES

1.5 FURNISH INSERTS AND ANCHORING DEVICES WHICH MUST BE SET IN CONCRETE OR BUILT INTO MASONRY FOR THE INSTALLATION OF THE WORK, PROVIDE SETTING DRAWINGS, TEMPLATES, INSTRUCTIONS AND DIRECTIONS FOR INSTALLATION OF AND HORAGE DEVICES.

1.6 PREASSEMBLE ITEMS IN THE SHOP TO THE GREATEST EXTENT POSSIBLE, SO AS TO MINIMIZE FIELD SPLICING AND ASSEMBLY OF UNITS AT THE PROJECT SITE. DISASSEMBLE UNITS ONLY TO THE EXTENT NECESSARY FOR SHIPPING AND HANDLING LIMITATIONS. CLEARLY MARK UNITS FOR REASSEMBLY.

MATERIALS

1. STEEL PLATES, SHAPES, BARS AND BAR-SIZE SHAPES: ASTM A_36.
2. STEEL TUBING: (HOT FORMED, WELDED OR SEAMLESS): ASTM A 501.
3. HOT ROLLED CARBON STEEL BARS: ASTM A 575, GRADE AS SELECTED BY FABRIC ATOR.
4. COLD FINISHED STEEL BARS: ASTM A 108, GRADE AS SELECTED BY FABRICATOR.
5. HOT ROLLED CARBON STEEL SHEETS AND STRIPS: ASTM A_566 AND ASTM A_569; PICKLED AND OILED.
6. COLD ROLLED CARBON STEEL SHEETS: ASTM A 336.
7. GALVANIZED CARBON STEEL SHEETS: ASTM A 526, WITH ASTM A 525, G90 ZINC COATING.
8. COLD DRAWN STEEL TUBING: ASTM A_512 SUNK DRAWN, BUTT-WELDED. COLD FINISHED AND STRESS RELIEVED.
9. STEEL PIPE: ASTM A 53, TYPE AS SELECTED; GRADE A. BLACK FINISH UNLESS GALVAN IZING IS REQUI RED. STANDARD WEIGHT, SOHEDULE 40, UNLESS OTHERWISE SHOWN OR SPEC IFIED.

ANCHORS

1.7 THREADED TYPE CONCRETE INSERTS: GALVANIZED FERROUS ‹CASTINGS, INTERNALLY THREADED TO RECEIVE 3/4" DIAMETER MACHINE BOLTS; EITHER MALLEABLE IRON ‹COMPLYING WITH ASTM A 47 OR CAST STEEL COMPLYING W

SECTION 06 42 19 / THERMALLY FUSED LAMINATE PANELS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. THERMALLY FUSED LAMINATE (TFL) PANELS.
B. DECORATIVE EDGEBANDING.

1.02 RELATED REQUIREMENTS

A. SECTION 01 3000 - SUBMITTALS.
B. SECTION 06 0620 - DECORATIVE PLASTIC LAMINATE.

PART 2 - PRODUCTS

WILSONART CONTACT INFORMATION: WILSONART, 2501 WILSON CENTER, TEMPLE, TX 76503-6110. TEL. 254.207.7000, TOLL-FREE 800.433.3222, FAX 254.207.3209. WEBSITE: WWW.WILSONART.CO

2.01 MANUFACTURER

A. BASIS OF DESIGN: WILSONART.

2.02 TFL PANEL PROPERTIES

A. LAMINATE COMPOSITION: MELAMINE SATURATED DECORATIVE LAYERS THERMALLY FUSED TO BOTH CORE FACE SURFACES WITH HEAT AND PRESSURE. STAIN RESISTANT SURFACE WITH WEAR AND SCRATCH RESISTANCE.
B. PANEL CORE MATERIAL: COMPOSITE PANEL PRODUCT COMPOSED PRIMARILY OF CELLULOSIC MATERIALS AND A BONDING SYSTEM, RESULTING IN A DURABLE AND DIMENSIONALLY STABLE SUBSTRATE SUITABLE FOR DECORATIVE LAMINATE OVERLAYS.
C. SUSTAINABLE DESIGN CONFORMANCE STANDARDS:
a. CPA: ECO-CERTIFIED COMPOSITE (ECC) SUSTAINABILITY STANDARD.
b. CPA: FORMALDEHYDE EMISSIONS GRADEMARK CERTIFICATION PROGRAM. CERTIFICATION ATTESTS COMPLIANCE WITH APPLICABLE CARB ATCM LIMITATIONS.

2.03 TFL PANELS

A. PRODUCT: WILSONART® THERMALLY FUSED LAMINATE PANELS.
B. LAMINATE COMPONENT:
a. LAMINATE CONFORMANCE STANDARD: ANSI/NEMA LD 3, GRADE VGL, AND ISO 4586.
b. COLOR, PATTERN, AND FINISH: D354 DESIGNER WHITE, 60 MATTE.
C. PANEL CORE MATERIAL: MEDIUM DENSITY FIBERBOARD.
a. CONFORMANCE STANDARD: ANSI 208.2. GRADE [130, MINIMUM 45 LB. DENSITY]. [COMPLIANT WITH CARB ATCM.]
b. PRODUCT TYPE AND THICKNESS: [TYPE 845 - 3/4 INCH]. + 0.008 INCH DIMENSIONAL TOLERANCE.
c. PANEL WIDTH: SEE DRAWINGS FOR DIMENSIONS. + 0.036 INCH DIMENSIONAL TOLERANCE.
d. PANEL LENGTH: SEE DRAWINGS FOR DIMENSIONS. + 0.080 INCH DIMENSIONAL TOLERANCE.

2.06 DECORATIVE EDGEBANDS

A. EDGEBAND PRODUCTS: "WILSONART® EDGEBAND."
B. COMPOSITION: ABS/PVC EXTRUDED FABRICATION.
C. WIDTH: EQUAL TO OR GREATER THAN PANEL THICKNESS.
D. FINISH: 60 MATTE
E. COLOR AND PATTERN: D354 DESIGNER WHITE

2.08 FABRICATION

A. FABRICATE TFL PANELS IN SHOP, TO GREATEST EXTENT PRACTICABLE, IN SIZES AND SHAPES INDICATED ACCORDING TO DRAWINGS AND MANUFACTURER'S PUBLISHED FABRICATION REQUIREMENTS.

B. COMPLETE BY SANDING ALL EDGES SMOOTH.

PART 3 - EXECUTION

3.01 **EXAMINATION**

A. EXAMINE SUBSTRATES AND CONDITIONS THAT COULD ADVERSELY AFFECT THE WORK OF THIS SECTION.
B. SUBSTRATES MUST BE SOUND, FLAT, SMOOTH, AND FREE FROM DUST OR OTHER SURFACE CONTAMINANTS.
C. COMMENCEMENT OF WORK WILL CONSTITUTE ACCEPTANCE OF EXISTING CONDITIONS AND SUBSTRATES TO RECEIVE THE WORK.

3.02 INSTALLATION

A. CONFORMANCE STANDARD: COMPLY WITH [AWI/AWMAC/WI AWS] [AND] [KCMA A161.1] AS APPLICABLE TO PROJECT.
B. INSTALL TFL PANEL COMPONENTS PLUMB, LEVEL, AND TRUE ACCORDING TO APPROVED SHOP DRAWINGS AND MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS. SHIM AS REQUIRED DURING INSTALLATION PROCESS.
C. ATTACH TFL PANEL COMPONENTS TO SUBSTRATES AS INDICATED ON DRAWINGS AND APPROVED SHOP DRAWINGS.

3.03 CLEANING AND PROTECTION

A. CLEAN TFL PANELS ACCORDING TO MANUFACTURER'S PUBLISHED CARE AND MAINTENANCE INSTRUCTIONS. COMPLETELY REMOVE DELETERIOUS SUBSTANCES FROM FINISHED SURFACES.
B. REPAIR DAMAGED AND DEFECTIVE TFL PANEL COMPONENTS, WHERE POSSIBLE, TO ELIMINATE DEFECTS, INCLUDING VISUAL. WHERE NOT POSSIBLE TO REPAIR, REPLACE AFFECT TFL PANEL COMPONENTS.
C. PROTECT COMPLETED TFL PANELS WORK FROM DAMAGE FOR REMAINDER OF CONSTRUCTION PERIOD.

SECTION 07 21 00 / THERMAL INSULATION

1.1 INSULATION MATERIALS SHALL BE REINFORCED FOIL LAMINATE FACED FLEXIBLE FIBERGLASS BATTS OR BLANKETS CONFORMING TO ASTM C665, TYPE III, CLASS A. MATERIALS SHALL HAVE A MINIMUM THERMAL RESISTANCE (R RATING) OF 30 MINIMUM FOR ROOFS AND 21 FOR WALLS, AS SHOWN ON DRAWING. INSULATION MATERIALS SHALL BE LABELED WITH R VALUE AND MANUFACTURER'S NAME.

1.2 ADHESIVES SHALL BE OF THE TYPE RECOMMENDED BY THE INSULATION MANUFACTURER AND COMPLYING WITH FIRE RESISTANCE REQUIREMENTS.

INSTALLATION

1.3 MAINTAIN VAPOR BARRIER CONTINUOUS OVER INSULATED SURFACE. PATCH TEARS IN VAPOR BARRIER IN AN APPROVED MANNER.

1.4 CUT AND FIT INSULATION MATERIALS AROUND PIPES, CONDUITS, OUTLET BOXES, ETC., AS NECESSARY TO MAINTAIN THE INTEGRITY OF THE INSULATION. WHERE PIPES ARE INSTALLED IN SPACES TO RECEIVE INSULATION, PLACE INSULATION BETWEEN EXTERIOR WALL AND THE PIPE. COMPRESSING INSULATION AS NECESSARY. FULLY INSULATE SMALL AREAS BETWEEN CLOSELY SPACED FRAMING MEMBERS.

1.5 AT ROOF AND WALL AREAS INSTALL INSULATION BETWEEN FRAMING MEMBERS WITH VAPOR BARRIER TOWARD BUILDING INTERIOR AND FLANGES CONTINUOUSLY TIGHT AGAINST INSIDE OF FRAMING MEMBERS. SECURE INSULATION FLANGE TO FRAMING MEMBERS TO RETAIN IT IN POSITION USING STAPLES OR NAILS OR OTHER APPROVED METHODS.

1.6 AT WALL AREAS INSTALL INSULATION BETWEEN FURRING STRIPS WITH FLANGES.

1.7 AT JOIST AREAS PROVIDE WIRES AT BOTTOM CHORD TO SUPPORT INSULATION. PLACE WIRES NOT TO EXCEED 16" OC. STAPLE WIRES TO WOOD CHORD.

1.8 METHODS OF SECURING INSULATION IN POSITION SHALL BE THE RESPONSIBILITY OF CONTRACTOR. INSTALLATION SHALL BE PERFORMED SO THAT INSULATION WILL NOT BE DISPLACED.

SECTION 07 24 00 / EXTERIOR INSULATION AND FINISH SYSTEMS

DELIVERY, STORAGE, AND HANDLING

1.1 STORE AND HANDLE PRODUCTS PER MANUFACTURER'S INSTRUCTIONS UNTIL READY FOR INSTALLATION.

SEQUENCING

1.2 ENSURE THAT LOCATING TEMPLATES AND OTHER INFORMATION REQUIRED FOR INSTALLATION OF PRODUCTS OF THIS SECTION ARE FURNISHED TO AFFECTED TRADES IN TIME TO PREVENT INTERRUPTION OF CONSTRUCTION PROGRESS.

1.3 ENSURE THAT PRODUCTS OF THIS SECTION ARE SUPPLIED TO AFFECTED TRADES IN TIME TO PREVENT INTERRUPTION OF CONSTRUCTION PROGRESS.

PROJECT CONDITIONS

1.4 MAINTAIN ENVIRONMENTAL CONDITIONS (TEMPERATURE, HUMIDITY, AND VENTILATION) WITHIN LIMITS RECOMMENDED BY MANUFACTURER FOR OPTIMUM RESULTS. DO NOT INSTALL PRODUCTS UNDER ENVIRONMENTAL CONDITIONS OUTSIDE MANUFACTURER'S RECOMMENDED LIMITS.

WARRANTY

1.5 INSULATION WARRANTY: AT PROJECT CLOSEOUT, PROVIDE TO OWNER AN EXECUTED COPY OF THE MANUFACTURER'S STANDARD LIMITED WARRANTY AGAINST MANUFACTURING DEFECT, OUTLINING ITS TERMS, CONDITIONS, AND EXCLUSIONS FROM COVERAGE.

ALUMINUM-FACED AND COATED GLASS MAT FACED INSULATION

1.6 ALUMINUM-FACED, POLYISOCYANURATE-FOAM INSULATING SHEATHING: ASTM C1289, TYPE I, CLASS 1 OR CLASS 2, RIGID, CELLULAR, POLYISOCYANURATE THERMAL INSULATION, BONDED TO REINFORCED ALUMINUM FACERS ON BOTH SIDES.
A. BASIS OF DESIGN: THERMASHEATH FROM RMAX.
B. FLAME SPREAD INDEX AND SMOKE CONTRIBUTION PER ASTM E84:
i. FLAME: 75 OR LESS.
ii. SMOKE: 450 OR LESS.
C. WATER VAPOR PERMEABILITY PER ASTM E96 DESICCANT METHOD: 0.03 PERM OR LESS.
D. AIR PERMEABILITY PER ASTM E2178: 0.004 CFM PER SQ FT (1.2192 L PER MIN PER SQ M) OR LESS.
E. COMPRESSIVE STRENGTH PER ASTM D1621:
i. 20 PSI (138 KPA).
ii. 25 PSI (172 KPA).
F. R-VALUE PER ASTM C518: R-6.0 MINIMUM AT THICKNESS OF 1 INCH (25 MM), R-10.0 MINIMUM A THICKNESS OF 1.55 INCHES (39 MM) AND R-13.1 MINIMUM AT THICKNESS OF 2 INCHES (51 MM).
G. REQUIRED INSULATION THICKNESS AND R-VALUE: AS INDICATED ON THE DRAWINGS.
H. INSULATION SHALL BE SUITABLE AS CONTINUOUS EXTERIOR WALL INSULATION.
I. EXTERIOR USAGE IN NFPA 285 WALL ASSEMBLIES:
i. ACCEPTABLE FOR INCLUSION IN NFPA 285 EXTERIOR WALL ASSEMBLIES THAT INCLUDE EXTERIOR GYPSUM SHEATHING.

SECTION 07 25 00 / SOUND ATTENUATION BATTS

1.1 PRODUCTS AS MANUFACTURED BY OWENS CORNING OR JOHNS MANVILLE, BUILDING INSULATION.

1.2 SOUND ATTENUATION BATTS: NOISE BARRIER BATTS, TYPE 1, UN-FACED 3-1/2" THICK, 4" THICK OR 6" THICK TO MATCH WALL STUD WIDTH.

1.3 ACOUSTICAL SEALANT: EQUAL TO USG ACOUSTICAL SEALANT INSTALLATION.

1.4 PLACE SEALANT UNDER STUD TRACKS. INSTALL ACOUSTICAL INSULATION IN BETWEEN STUDS. WHERE INDICATED ON THE DRAWINGS. PROVIDE LOOSE-LAID SOUND BATTS ABOVE CEILING TILES. LAY BATTS HORIZONTALLY WITH A SNUG FIT.

1.5 SOUND BATTS SHALL BE PRESSED FIRMLY IN PLACE AGAINST BACK OF GYPSUM BOARD AND STAPLED. STAPLES AND METHOD OF INSTALLATION SHALL BE IN ACCORDANCE

1.6 BATTS AND BACK SURFACE OF ONE PARTITION FACE. CONTINUITY OF BATTS SHALL BE MAINTAINED. USE FULL-LENGTH STRIPS WHERE POSSIBLE.

SECTION 07 46 46 / CEMENT PANELS

PART 1 – GENERAL

SECTION INCLUDES

FIBER CEMENT LAP SIDING, PANELS, SHINGLE, TRIM, FASCIA, MOULDING, AND ACCESSORIES; JAMES HARDIE HZ10 ENGINEERED FOR CLIMATE SIDING AND HARDIE ARCHITECTURAL PANELS.

FACTORY-FINISHED FIBER CEMENT LAP SIDING, PANELS, SHINGLE, TRIM, FASCIA, MOULDING, AND ACCESSORIES; JAMES HARDIE HZ10 ENGINEERED FOR CLIMATE SIDING.

RELATED SECTIONS

SECTION 05 40 00 - COLD-FORMED METAL FRAMING.
SECTION 06 10 00 - ROUGH CARPENTRY.
SECTION 06 10 00 - ROUGH CARPENTRY.
SECTION 07 21 19 - FOAMED-IN-PLACE INSULATION.

REFERENCES

ASTM D3359 - STANDARD TEST METHOD FOR MEASURING ADHESION BY TAPE TEST, TOOL AND TAPE.

ASTM E136 - STANDARD TEST METHOD FOR BEHAVIOR OF MATERIALS IN A VERTICAL TUBE FURNACE AT 750 DEGREES C.

SUBMITTALS

1.1 SUBMIT UNDER PROVISIONS OF SECTION 01 30 00 - ADMINISTRATIVE REQUIREMENTS.
PRODUCT DATA: MANUFACTURER'S DATA SHEETS ON EACH PRODUCT TO BE USED, INCLUDING:
A. PREPARATION INSTRUCTIONS AND RECOMMENDATIONS.
B. STORAGE AND HANDLING REQUIREMENTS AND RECOMMENDATIONS.
C. INSTALLATION METHODS.

1.2 SHOP DRAWINGS: PROVIDE DETAILED DRAWINGS OF ATYPICAL NON-STANDARD APPLICATIONS OF CEMENTITIOUS SIDING MATERIALS WHICH ARE OUTSIDE THE SCOPE OF THE STANDARD DETAILS AND SPECIFICATIONS PROVIDED BY THE MANUFACTURER

1.3 SELECTION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, TWO COMPLETE SETS OF COLOR CHIPS REPRESENTING MANUFACTURER'S FULL RANGE OF AVAILABLE COLORS AND PATTERNS.

1.4 VERIFICATION SAMPLES: FOR EACH FINISH PRODUCT SPECIFIED, TWO SAMPLES, MINIMUM SIZE 4 BY 6 INCHES (100 BY 150 MM), REPRESENTING ACTUAL PRODUCT, COLOR, AND PATTERNS.

QUALITY ASSURANCE

1.5 INSTALLER QUALIFICATIONS: MINIMUM OF 2 YEARS' EXPERIENCE WITH INSTALLATION OF SIMILAR PRODUCTS.

1.6 MOCK-UP: PROVIDE A MOCK-UP FOR EVALUATION OF SURFACE PREPARATION TECHNIQUES AND APPLICATION WORKMANSHIP.
FINISH AREAS DESIGNATED BY ARCHITECT.
DO NOT PROCEED WITH REMAINING WORK UNTIL WORKMANSHIP, COLOR, AND SHEEN ARE APPROVED BY ARCHITECT.
REMODEL MOCK-UP AREA AS REQUIRED TO PRODUCE ACCEPTABLE WORK.

DELIVERY, STORAGE, AND HANDLING

1.7 STORE PRODUCTS IN MANUFACTURER'S UNOPENED PACKAGING UNTIL READY FOR INSTALLATION.

1.8 STORE SIDING ON EDGE OR LAY FLAT ON A SMOOTH LEVEL SURFACE. PROTECT EDGES AND CORNERS FROM CHIPPING. STORE SHEETS UNDER COVER AND KEEP DRY PRIOR TO INSTALLING.

1.9 STORE AND DISPOSE OF SOLVENT-BASED MATERIALS, AND MATERIALS USED WITH SOLVENT-BASED MATERIALS, IN ACCORDANCE WITH REQUIREMENTS OF LOCAL AUTHORITIES HAVING JURISDICTION.

PROJECT CONDITIONS

1.10 MAINTAIN ENVIRONMENTAL CONDITIONS (TEMPERATURE, HUMIDITY, AND VENTILATION) WITHIN LIMITS RECOMMENDED BY MANUFACTURER FOR OPTIMUM RESULTS. DO NOT INSTALL PRODUCTS UNDER ENVIRONMENTAL CONDITIONS OUTSIDE MANUFACTURER'S ABSOLUTE LIMITS.

WARRANTY

1.11 PRODUCT WARRANTY: LIMITED, NON-PRO-RATED PRODUCT WARRANTY.
HARDIEPLANK HZ10 LAP SIDING FOR 30 YEARS.

1.12 FINISH WARRANTY: LIMITED PRODUCT WARRANTY AGAINST MANUFACTURING FINISH DEFECTS.
WHEN USED FOR ITS INTENDED PURPOSE, PROPERLY INSTALLED AND MAINTAINED ACCORDING TO HARDIE'S PUBLISHED INSTALLATION INSTRUCTIONS, JAMES HARDIE'S COLORPLUS FINISH WITH COLORPLUS TECHNOLOGY, FOR A PERIOD OF 15 YEARS FROM THE DATE OF PURCHASE: WILL NOT PEEL; WILL NOT CRACK; AND WILL NOT CHIP. FINISH WARRANTY INCLUDES THE COVERAGE FOR LABOR AND MATERIAL.

1.13 WORKMANSHIP WARRANTY: APPLICATION LIMITED WARRANTY FOR 2 YEARS.

PART 2 – PRODUCTS

SIDING AND TRIM

2.1 HARDIEPLANK HZ10 LAP SIDING, HARDIEPANEL HZ10 VERTICAL SIDING, HARDIESOFFIT HZ10 PANELS AND HARDIESHINGLE HZ10 SIDING REQUIREMENT FOR MATERIALS:
A. FIBER-CEMENT SIDING - COMPLIES WITH ASTM C 1186 TYPE A GRADE II.
B. FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 136 AS A NONCOMBUSTIBLE MATERIAL.
C. FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0, SMOKE DEVELOPED INDEX = 5.
D. CAL-FIRE, FIRE ENGINEERING DIVISION BUILDING MATERIALS LISTING - WILDLAND URBAN INTERFACE (WUI) LISTED PRODUCT.
E. ICC-ES EVALUATION REPORTS ESR-2290, ESR-1844, AND ESR-2273 (IBC, IRC, CBC, CRC).
F. CITY OF LOS ANGELES, RESEARCH REPORT NO. 24862.
G. MIAMI DADE COUNTY, -NOTICE OF ACCEPTANCE -20-070.06
H. US DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT MATERIALS RELEASE -1263.
I. CALIFORNIA DSA PA-019.
J. CITY OF NEW YORK M EA 223-93-M.
K. FLORIDA STATE PRODUCT APPROVAL -FL13192, FL13223, AND FL13265.
L. TEXAS DEPARTMENT OF INSURANCE PRODUCT EVALUATION EC-23.

2.2 ARTISAN HZ10 LAP SIDING REQUIREMENT FOR MATERIALS:
A. FIBER-CEMENT SIDING - COMPLIES WITH ASTM C 1186 TYPE A GRADE II.
B. FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 136 AS A NONCOMBUSTIBLE MATERIAL.
C. FIBER-CEMENT SIDING - COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0, SMOKE DEVELOPED INDEX = 5.
D. ICC-ES EVALUATION REPORT ESR-2290.
E. INTERTEK PRODUCT LISTING.
F. CAL-FIRE, FIRE ENGINEERING DIVISION BUILDING MATERIALS LISTING - WILDLAND URBAN INTERFACE (WUI) LISTED PRODUCT.
G. FLORIDA STATE PRODUCT APPROVAL FL-13192.
H. MIAMI DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE -20-0730.07
I. TEXAS DEPARTMENT OF INSURANCE PRODUCT EVALUATION EC-55.
J. MANUFACTURER'S TECHNICAL DATA SHEET.

2.3 LAP SIDING: HARDIEPLANK HZ10 LAP AS MANUFACTURED BY JAMES HARDIE BUILDING PRODUCTS, INC.
A. WIDTH: SELECT CEDARMILL 5-1/4 INCHES (133 MM) WITH 4 INCHES (102 MM) EXPOSURE.
B. TYPE: SELECT CEDARMILL 6-1/4 INCHES (159 MM) WITH 5 INCHES (127 MM) EXPOSURE.
C. TYPE: SELECT CEDARMILL 7-1/4 INCHES (184 MM) WITH 6 INCHES (152 MM) EXPOSURE.
D. TYPE: SELECT CEDARMILL 8-1/4 INCHES (210 MM) WITH 7 INCHES (178 MM) EXPOSURE.
E. TYPE: SELECT CEDARMILL 9-1/4 INCHES (235 MM) WITH 8 INCHES (203 MM) EXPOSURE.
F. TYPE: SELECT CEDARMILL 12 INCHES (305 MM) WITH 10-3/4 INCHES (273 MM) EXPOSURE.

2.4 TRIM ACCESSORIES.
A. J TRIM: ALUMINUM EXTRUSION TO BE USED AS A TRIM AT ABUTMENTS, SOFFITS, MASONRY, WINDOWS, ETC.
B. LOW-PROFILE INSIDE CORNER TRIM: ALUMINUM EXTRUSION TO BE USED FOR INSIDE CORNERS.
C. INSIDE CORNER TRIM: ALUMINUM EXTRUSION TO BE USED FOR INSIDE CORNERS.
D. LOW-PROFILE OUTSIDE CORNER TRIM: ALUMINUM EXTRUSION TO BE USED FOR OUTSIDE CORNERS.
E. LOW PROFILE 45 DEGREES INSIDE CORNER TRIM: ALUMINUM EXTRUSION TO BE USED FOR BAY WINDOWS.
F. LOW PROFILE 45 DEGREES OUTSIDE CORNER TRIM: ALUMINUM EXTRUSION TO BE USED FOR BAY WINDOWS.
G. VERTICAL T TRIM: ALUMINUM EXTRUSION TO BE USED ALONG VERTICAL BUTT JOINTS. FOR HORIZONTAL PANEL ORIENTATIONS ONLY.
H. VERTICAL H TRIM: ALUMINUM EXTRUSION TO BE USED ALONG VERTICAL BUTT JOINTS. FOR HORIZONTAL PANEL ORIENTATIONS ONLY.
I. HORIZONTAL ANGLED T FLASHING TRIM: ALUMINUM EXTRUSION TO BE USED ALONG HORIZONTAL CONTROL JOINTS.
J. HORIZONTAL Z FLASHING TRIM: ALUMINUM EXTRUSION TO BE USED ALONG HORIZONTAL CONTROL JOINTS.
K. BASE TRIM: ALUMINUM EXTRUSION TO BE USED AS A BASE EDGE SOLUTION.
L. BASE OUTSIDE CORNER TRIM: TO BE USED AS AN OUTSIDE CORNER CONNECTION FOR BASE TRIM.
M. BASE INSIDE CORNER TRIM: TO BE USED AS AN INSIDE CORNER CONNECTION FOR BASE TRIM.
N. BASE JOINTER: TO BE USED TO CONNECT BASE TRIMS.
O. HARDIETRIM BOARDS: FIBER CEMENT TRIM FOR CORNERS AND WINDOWS. CAN BE MOUNTED HORIZONTALLY OR VERTICALLY.

2.5 TRIM
A. PRODUCT: BATTEN BOARDS, 2-1/2 INCH (63 MM) WIDTH.
B. PRODUCT: 4/4 BOARDS, 3-1/2 INCH (89 MM) WIDTH.
C. PRODUCT: 4/4 BOARDS, 5-1/2 INCH (140 MM) WIDTH.
D. PRODUCT: 4/4 BOARDS, 7-1/4 INCH (184 MM) WIDTH.
E. PRODUCT: 4/4 BOARDS, 9-1/4 INCH (235 MM) WIDTH.
F. PRODUCT: 4/4 BOARDS, 11-1/4 INCH (286 MM) WIDTH.
G. PRODUCT: 4/4 NT3 BOARDS, 3-1/2 INCH (89 MM) WIDTH.
H. PRODUCT: 4/4 NT3 BOARDS, 5-1/2 INCH (140 MM) WIDTH.
I. PRODUCT: 4/4 NT3 BOARDS, 7-1/4 INCH (184 MM) WIDTH.
J. PRODUCT: 4/4 NT3 BOARDS, 9-1/4 INCH (235 MM) WIDTH.
K. PRODUCT: 4/4 NT3 BOARDS, 11-1/4 INCH (286 MM) WIDTH.
L. PRODUCT: 5/4 BOARDS, 3-1/2 INCH (89 MM) WIDTH.
M. PRODUCT: 5/4 BOARDS, 5-1/2 INCH (140 MM) WIDTH.
N. PRODUCT: 5/4 BOARDS, 7-1/4 INCH (184 MM) WIDTH.
O. PRODUCT: 5/4 BOARDS, 9-1/4 INCH (235 MM) WIDTH.
P. PRODUCT: 5/4 BOARDS, 11-1/4 INCH (286 MM) WIDTH.
Q. PRODUCT: 5/4 NT3 BOARDS, 3-1/2 INCH (89 MM) WIDTH.
R. PRODUCT: 5/4 NT3 BOARDS, 4-1/2 INCH (114 MM) WIDTH.
S. PRODUCT: 5/4 NT3 BOARDS, 5-1/2 INCH (140 MM) WIDTH.
T. PRODUCT: 5/4 NT3 BOARDS, 7-1/4 INCH (184 MM) WIDTH.
U. PRODUCT: 5/4 NT3 BOARDS, 11-1/4 INCH (286 MM) WIDTH.
V. TEXTURE: SMOOTH.
W. TEXTURE: WOOD.
X. TEXTURE: WOOD GRAINED.
Y. LENGTH: 12 FEET (3658 MM).
Z. THICKNESS: 1/4 INCH (19 MM).
AA. THICKNESS: 1 INCH (24 MM).

FIBER-CEMENT TRIM - COMPLIES WITH ASTM C 1186 TYPE A GRADE II.
FIBER-CEMENT TRIM - COMPLIES WITH ASTM E 136 AS A NONCOMBUSTIBLE MATERIAL.
FIBER-CEMENT TRIM - COMPLIES WITH ASTM E 84 FLAME SPREAD INDEX = 0, SMOKE DEVELOPED INDEX = 5.

FASTNERS

2.6 WOOD FRAMING FASTENERS:
A. WOOD FRAMING: 4D COMMON CORROSION RESISTANT NAILS.
B. WOOD FRAMING: 6D COMMON CORROSION RESISTANT NAILS.
C. WOOD FRAMING: 8D BOX RING COMMON CORROSION RESISTANT NAILS.
D. WOOD FRAMING: 0.089 INCH (2.2 MM) SHANK BY 0.221 INCH (5.6 MM) HEAD BY 2 INCHES (51 MM) CORROSION RESISTANT SIDING NAILS.
E. WOOD FRAMING: 0.093 INCH (2.4 MM) SHANK BY 0.222 INCH (5.6 MM) HEAD BY 2 INCHES (51 MM) CORROSION RESISTANT SIDING NAILS.
F. WOOD FRAMING: 0.093 INCH (2.4 MM) SHANK BY 0.222 INCH (5.6 MM) HEAD BY 2-1/2 INCHES (64 MM) CORROSION RESISTANT SIDING NAILS.
G. WOOD FRAMING: 0.091 INCH (2.3 MM) SHANK BY 0.221 INCH (5.6 MM) HEAD BY 1-1/2 INCHES (38 MM) CORROSION RESISTANT SIDING NAILS.
H. WOOD FRAMING: 0.091 INCH (2.3 MM) SHANK BY 0.225 INCH (5.7 MM) HEAD BY 1-1/2 INCHES (38 MM) CORROSION RESISTANT SIDING NAILS.
I. WOOD FRAMING: 0.121 INCH (3 MM) SHANK BY 0.371 INCH (9.4 MM) HEAD BY 1-1/4 INCHES (32 MM) CORROSION RESISTANT ROOFING NAILS.
J. WOOD FRAMING: NO. 11 GAUGE 1-1/4 INCHES (32 MM) CORROSION RESISTANT ROOFING NAILS.
K. WOOD FRAMING: NO. 11 GAUGE 1-1/2 INCHES (38 MM) CORROSION RESISTANT ROOFING NAILS.
L. WOOD FRAMING: NO. 11 GAUGE 1-3/4 INCHES (44 MM) CORROSION RESISTANT ROOFING NAILS.
M. WOOD FRAMING: 16 GAUGE 1-1/2 INCHES (38 MM) STAINLESS FINISH NAILS

2.7 METAL FRAMING.
A. METAL FRAMING: 1-1/4 INCHES (32 MM) NO. 8-18 BY 0.375 INCH (9.5 MM) HEAD SELF-DRILLING, CORROSION RESISTANT S-12 RIBBED BUGLEHEAD SCREWS.
B. METAL FRAMING: 1-5/8 INCHES (41 MM) NO. 8-18 BY 0.323 INCH (8.2 MM) HEAD SELF-DRILLING, CORROSION RESISTANT S-12 RIBBED BUGLEHEAD SCREWS.
C. METAL FRAMING: 1 INCH (25 MM) NO. 8-18 BY 0.323 INCH (8.2 MM) HEAD SELF-DRILLING, CORROSION RESISTANT RIBBED BUGLEHEAD SCREWS.
D. METAL FRAMING: 1 INCH (25 MM) NO. 8-18 BY 0.311 INCH (7.9 MM) HEAD SELF-DRILLING, CORROSION RESISTANT S-12 RIBBED BUGLEHEAD SCREWS.
E. METAL FRAMING: 1.5 INCH (38 MM) [AGS-100] -100 INCHES BY 25 INCHES (2540 MM BY 635 MM) ETANDF PIN OR EQUIVALENT PNEUMATIC FASTENER.

2.8 MASONRY WALLS:
A. MASONRY WALLS: AERICO STUD NAIL, ET&F ASM NO.-144-125, 0.14 INCH (3.6 MM) SHANK BY 0.30 INCH (7.6 MM) HEAD BY 2 INCHES (51 MM) LONG CORROSION RESISTANT NAILS.

FINISHES

2.9 FACTORY PRIMER: PROVIDE FACTORY APPLIED UNIVERSAL PRIMER.
A. PRIMER: FACTORY PRIMED BY JAMES HARDIE
B. TOPCOAT: REFER TO SECTION 09 90 00 – PAINTING AND COATING AND EXTERIOR FINISH SCHEDULE.

2.10 FACTORY FINISH: REFER TO EXTERIOR FINISH SCHEDULE.

2.11 PROCESS:
A. FACTORY APPLIED FINISH BY FIBER CEMENT MANUFACTURER IN A CONTROLLED ENVIRONMENT WITHIN THE FIBER CEMENT MANUFACTURER'S OWN FACILITY UTILIZING A MULTI-COAT, HEAT CURED FINISH WITHIN ONE MANUFACTURING PROCESS.
B. EACH FINISH COLOR MUST HAVE DOCUMENTED COLOR MATCH TO DELTA E OF 0.5 OR BETTER BETWEEN PRODUCT LINES, MANUFACTURING LOTS OR PRODUCTION RUNS AS MEASURED BY PHOTOSPECTROMETER AND VERIFIED BY THIRD PARTY.

2.12 PROTECTION: FACTORY APPLIED FINISH PROTECTION SUCH AS PLASTIC LAMINATE THAT IS REMOVED ONCE SIDING IS INSTALLED

2.13 ACCESSORIES: COMPLETE FINISHING SYSTEM INCLUDES PRE-PACKAGED TOUCH-UP KIT PROVIDED BY FIBER CEMENT MANUFACTURER. PROVIDE QUANTITIES AS RECOMMENDED BY MANUFACTURER.

2.14 FACTORY FINISH COLOR FOR TRIM, SOFFIT AND SIDING COLORS:
ALPINE FROST JH50-10.
ARCTIC WHITE JH10-20.
AUTUMN TAN JH20-20.
BOOTHBAY BLUE JH70-20.
CHESTNUT BROWN JH80-30.
COBBLE STONE JH40-10.
COUNTRYLANE RED JH90-20.
EVENING BLUE JH70-30.
FROSTED GREEN JH60-20.
HARRIS CREAM JH80-10.
HEATHERED MOSS JH50-20.
IRON GRAY JH90-30.
KHAKI BROWN JH20-30.
LIGHT MIST JH70-10.
MONTEREY TAUPE JH40-20.
MOUNTAIN SAGE JH50-30.
NAVAJO BEIGE JH30-10.
PARKSIDE PINE JH60-30.
SAIL CLOTH JH20-10.
SANDSTONE BEIGE JH30-20.
TIMBER BARK JH40-30.
TRADITIONAL RED JH90-10.
TUSCAN GOLD JH80-20.
WOODSTOCK BROWN JH30-30.
TERRA COTTA JH15-20.
CORAL COAST JH25-20.
AQUA MARINE JH35-20.
COOL BREEZE JH45-20.
PINK SAND JH55-20.

PART 3 – EXECUTION

EXAMINATION

3.1 DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED.

3.2 IF FRAMING PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING.

3.3 NOMINAL

INSTALLATION OF THE SIDING.
C. PROTECT SIDING FROM OTHER TRADES

3.4 MINIMUM 20 GAUGE (1 MM) 3-5/8 INCH (92 MM) C-STUD 16 INCHES MAXIMUM ON CENTER OR 16 GAUGE (1.6 MM) 3-5/8 INCHES (92 MM) C-STUD 24 INCHES (610 MM) MAXIMUM ON CENTER METAL FRAMING COMPLYING WITH LOCAL BUILDING CODES, INCLUDING THE USE OF WATER-RESISTIVE BARRIERS AND/OR VAPOR BARRIERS WHERE REQUIRED. MINIMUM 1-1/2 INCHES (38 MM) FACE AND STRAIGHT, TRUE, OF UNIFORM DIMENSIONS AND PROPERLY ALIGNED.
A. INSTALL WATER-RESISTIVE BARRIERS AND CLADDINGS TO DRY SURFACES.
B. REPAIR ANY PUNCTURES OR TEARS IN THE WATER-RESISTIVE BARRIER PRIOR TO THE INSTALLATION OF THE SIDING.
C. PROTECT SIDING FROM OTHER TRADES.

PREPARATION

3.5 CLEAN SURFACES THOROUGHLY PRIOR TO INSTALLATION.

3.6 PREPARE SURFACES USING THE METHODS RECOMMENDED BY THE MANUFACTURER FOR ACHIEVING THE BEST RESULT FOR THE SUBSTRATE UNDER THE PROJECT CONDITIONS.

3.7 INSTALL A WATER-RESISTIVE BARRIER IS REQUIRED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.

3.8 THE WATER-RESISTIVE BARRIER MUST BE APPROPRIATELY INSTALLED WITH PENETRATION AND JUNCTION FLASHING IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.

3.9 INSTALL ENGINEERED FOR CLIMATE HARDIEWRAP WEATHER BARRIER IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS.

3.10 USE HARDIEWRAP SEAM TAPE AND JOINT AND LAPS.

3.11 INSTALL AND HARDIEWRAP FLASHING, HARDIEWRAP FLEX FLASHING.

INSTALLATION - HARDIEPLANK HZ10 LAP SIDING, ARTISAN HZ10 LAP SIDING, AND ARTISAN HZ10 LAP SIDING WITH LOCK JOINT SYSTEM

3.12 INSTALL MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

3.13 STARTING: INSTALL A MINIMUM 1/4 INCH (6 MM) THICK LATH STARTER STRIP AT THE BOTTOM COURSE OF THE WALL. APPLY PLANKS HORIZONTALLY WITH MINIMUM 1-1/4 INCHES (32 MM) WIDE LAPS AT THE TOP. THE BOTTOM EDGE OF THE FIRST PLANK OVERLAPS THE STARTER STRIP.

3.14 ALLOW MINIMUM VERTICAL CLEARANCE BETWEEN THE EDGE OF SIDING AND ANY OTHER MATERIAL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

3.15 ALIGN VERTICAL JOINTS OF THE PLANKS OVER FRAMING MEMBERS.

3.16 BUTT JOINTS MUST NOT FALL WITHIN 4 INCHES (102 MM) OF A STUD. DO NOT NAIL WITHIN 2 INCHES (51 MM) OF THE END OF PLANKS.

3.17 MAINTAIN CLEARANCE BETWEEN SIDING AND ADJACENT FINISHED GRADE.

3.18 LOCATE SPLICES AT LEAST ONE STUD CAVITY AWAY FROM WINDOW AND DOOR OPENINGS.

3.19 FOR PROPER FASTENER SELECTION AND FASTENING SCHEDULES FOR VARIOUS WIND LOAD REQUIREMENTS AND FRAMING OPTIONS, REFER TO THE TECHNICAL DATA SHEET AT WWW.ASPYREDESIGN.COM.

3.20 FACE NAIL TO SHEATHING.

3.21 LOCATE SPLICES AT LEAST 12 INCHES (305 MM) AWAY FROM WINDOW AND DOOR OPENINGS.

INSTALLATION – HARDIE ARCHITECTURAL PANELS

3.22 INSTALL MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

3.23 INSTALL OVER BRACED WOOD. SEE GENERAL FASTENING REQUIREMENTS. IRREGULARITIES IN FRAMING AND SHEATHING CAN MIRROR THROUGH THE FINISHED APPLICATION. CORRECT IRREGULARITIES BEFORE INSTALLING SIDING.

3.24 A WATER-RESISTIVE BARRIER (WRB) IS REQUIRED IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS. THE WATER-RESISTIVE BARRIER MUST BE APPROPRIATELY INSTALLED WITH PENETRATION AND JUNCTION FLASHING IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS. JAMES HARDIE WILL ASSUME NO RESPONSIBILITY FOR WATER INFILTRATION. JAMES HARDIE DOES MANUFACTURE HARDIEWRAP WEATHER BARRIER, A NON-WOVEN NON-PERFORATED HOUSEWRAP, WHICH COMPLIES WITH BUILDING CODE REQUIREMENTS.

3.25 WHEN INSTALLING HORIZONTALLY, A WRB WITH MIN. 90 PERCENT DRAINAGE EFFICIENCY SHALL BE USED.

3.26 ADJACENT FINISHED GRADE MUST SLOPE AWAY FROM THE BUILDING IN ACCORDANCE WITH LOCAL BUILDING CODES - TYPICALLY A MINIMUM OF 6 IN. IN THE FIRST 10 FT.

3.27 DO NOT USE HARDIE ARCHITECTURAL PANELS IN FASCIA OR TRIM APPLICATIONS.

3.28 DO NOT INSTALL THAT PRODUCT REMAINS IN CONTACT WITH STANDING WATER.

3.30 INSTALLED ON FLAT VERTICAL WALL APPLICATIONS ONLY.

3.31 FOR LARGER PROJECTS WHERE THE SPAN OF THE WALL IS SIGNIFICANT IN LENGTH, THE DESIGNER AND/OR ARCHITECT SHOULD TAKE INTO CONSIDERATION THE COEFFICIENT OF THERMAL EXPANSION AND MOISTURE MOVEMENT OF THE PRODUCT IN THEIR DESIGN. THESE VALUES CAN BE FOUND IN THE TECHNICAL BULLETIN "EXPANSION CHARACTERISTICS OF JAMES HARDIE SIDING PRODUCTS" AT WWW.JAMESHARDIE.COM.

3.32 JAMES HARDIE BUILDING PRODUCTS PROVIDES INSTALLATION /WIND LOAD INFORMATION FOR BUILDINGS WITH A MAXIMUM MEAN ROOF HEIGHT OF 85 FEET. FOR INFORMATION ON INSTALLATIONS ABOVE 60 FEET, PLEASE CONTACT JH TECHNICAL SUPPORT.

3.33 MINIMUM STANDARD PANEL DESIGN SIZE IS 12 X 16 INCHES (). PANELS MAY BE NOTCHED AND CUT TO SIZE TO FIT BETWEEN WINDOWS, DOORS, CORNERS, ETC.

INSTALLATION - HARDIETRIM HZ10 BOARDS

3.34 INSTALL MATERIALS IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL FLASHING AROUND ALL WALL OPENINGS.

3.35 FASTEN THROUGH TRIM INTO STRUCTURAL FRAMING OR CODE COMPLYING SHEATHING. FASTENERS MUST PENETRATE MINIMUM 3/4 INCH (19 MM) OR FULL THICKNESS OF SHEATHING. ADDITIONAL FASTENERS MAY BE REQUIRED TO ENSURE ADEQUATE SECURITY.

3.36 PLACE FASTENERS NO CLOSER THAN 3/4 INCH (19 MM) AND NO FURTHER THAN 2 INCHES (51 MM) FROM SIDE EDGE OF TRIM BOARD AND NO CLOSER THAN 1 INCH (25 MM) FROM END. FASTEN MAXIMUM 16 INCHES (406 MM) ON CENTER.

3.37 MAINTAIN CLEARANCE BETWEEN TRIM AND ADJACENT FINISHED GRADE.

3.38 TRIM INSIDE CORNER WITH A SINGLE BOARD TRIM BOTH SIDE OF CORNER.

3.39 OUTSIDE CORNER BOARD ATTACH TRIM ON BOTH SIDES OF CORNER WITH 16 GAGE CORROSION RESISTANT FINISH NAIL 1/2 INCH (13 MM) FROM EDGE SPACED 16 INCHES (406 MM) APART, WEATHER CUT EACH END SPACED MINIMUM 12 INCHES (305 MM) APART.

3.40 ALLOW 1/8 INCH GAP BETWEEN TRIM AND SIDING.

3.41 SEAL GAP WITH HIGH QUALITY, PAINT-ABLE CAULK.

3.42 SHIM FRIEZE BOARD AS REQUIRED TO ALIGN WITH CORNER TRIM.

3.43 FASTEN THROUGH OVERLAPPING BOARDS. DO NOT NAIL BETWEEN LAP JOINTS.

3.44 OVERLAY SIDING WITH SINGLE BOARD OF OUTSIDE CORNER BOARD THEN ALIGN SECOND CORNER BOARD TO OUTSIDE EDGE OF FIRST CORNER BOARD. DO NOT FASTEN HARDIETRIM BOARDS TO HARDIETRIM BOARDS.

3.45 SHIM FRIEZE BOARD AS REQUIRED TO ALIGN WITH CORNER TRIM.

3.46 INSTALL HARDIETRIM FASCIA BOARDS TO RAFTER TAILS OR TO SUB FASCIA.

FINISHING

3.47 FINISH UNPRIMED SIDING WITH A MINIMUM ONE COAT HIGH QUALITY, ALKALI RESISTANT PRIMER AND ONE COAT OF EITHER, 100 PERCENT ACRYLIC OR LATEX OR OIL BASED, EXTERIOR GRADE TOPCOATS OR TWO COATS HIGH QUALITY ALKALI RESISTANT 100 PERCENT ACRYLIC OR LATEX, EXTERIOR GRADE TOPCOAT WITHIN 90 DAYS OF INSTALLATION. FOLLOW PAINT MANUFACTURER'S WRITTEN PRODUCT RECOMMENDATION AND WRITTEN APPLICATION INSTRUCTIONS.

3.48 FINISH FACTORY PRIMED SIDING WITH A MINIMUM OF ONE COAT OF HIGH QUALITY 100 PERCENT ACRYLIC OR LATEX OR OIL BASED EXTERIOR GRADE PAINT WITHIN 180 DAYS OF INSTALLATION. FOLLOW PAINT MANUFACTURER'S WRITTEN PRODUCT RECOMMENDATION AND WRITTEN APPLICATION INSTRUCTIONS.

PROTECTION

3.49 PROTECT INSTALLED PRODUCTS UNTIL COMPLETION OF PROJECT.

3.50 TOUCH-UP, REPAIR OR REPLACE DAMAGED PRODUCTS BEFORE SUBSTANTIAL COMPLETION.

SECTION 07 54 23 / THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE ROOFING

PART 1 – GENERAL

REFERENCES

1.1 ROOFING TERMINOLOGY: REFER TO THE FOLLOWING PUBLICATIONS FOR DEFINITIONS OF ROOFING WORK RELATED TERMS IN THIS SECTION.
A ASTM D 1079 "STANDARD TERMINOLOGY RELATING TO ROOFING AND WATERPROOFING."
B GLOSSARY OF NRCA'S "THE NRCA ROOFING AND WATERPROOFING MANUAL."
C ROOF CONSULTANTS INSTITUTE "GLOSSARY OF BUILDING ENVELOPE TERMS."

1.2 SHEET METAL TERMINOLOGY AND TECHNIQUES: SMACNA "ARCHITECTURAL SHEET METAL MANUAL."

DESIGN CRITERIA

1.3 GENERAL: INSTALLED ROOFING MEMBRANE SYSTEM SHALL REMAIN WATERTIGHT; AND RESIST SPECIFIED WIND UPLIFT PRESSURES, THERMALLY INDUCED MOVEMENT, AND EXPOSURE TO WEATHER WITHOUT FAILURE.

1.4 MATERIAL COMPATIBILITY: ROOFING MATERIALS SHALL BE COMPATIBLE WITH ONE ANOTHER UNDER CONDITIONS OF SERVICE AND APPLICATION REQUIRED, AS DEMONSTRATED BY ROOFING SYSTEM MANUFACTURER BASED ON TESTING AND FIELD EXPERIENCE.

1.5 INSTALLER SHALL COMPLY WITH CURRENT CODE REQUIREMENTS BASED ON AUTHORITY HAVING JURISDICTION.

1.6 WIND UPLIFT PERFORMANCE: ROOFING SYSTEM SHALL MEET THE INTENT OF SYSTEMS THAT HAVE BEEN SUCCESSFULLY TESTED BY A QUALIFIED TESTING AND INSPECTING AGENCY TO RESIST WIND UPLIFT PRESSURE CALCULATED IN ACCORDANCE WITH ASCE 7.

1.7 FMG LISTING: ROOFING MEMBRANE, BASE FLASHINGS, AND COMPONENT MATERIALS SHALL COMPLY WITH REQUIREMENTS IN FMG 4450 AND FMG 4470 AS PART OF A ROOFING SYSTEM AND THAT ARE LISTED IN FMG'S "ROOFNAV" FOR CLASS 1 OR NONCOMBUSTIBLE CONSTRUCTION, AS APPLICABLE. IDENTIFY MATERIALS WITH FMG MARKINGS.
A. ROOFING SYSTEM SHALL COMPLY WITH ROOFNAV #:
B. FIRE/WINDSTORM CLASSIFICATION: CLASS [1][NC]A-INSERT NUMBER
C. HAIL RESISTANCE: [MH] [SH][VSH].

1.8 FIRE-TEST-RESPONSE CHARACTERISTICS: PROVIDE ROOFING MATERIALS WITH THE FIRE-TEST-RESPONSE CHARACTERISTICS INDICATED AS DETERMINED BY TESTING IDENTICAL PRODUCTS PER TEST METHOD BELOW BY UL, FMG, OR ANOTHER TESTING AND INSPECTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION. MATERIALS SHALL BE IDENTIFIED WITH APPROPRIATE MARKINGS OF APPLICABLE TESTING AND INSPECTING AGENCY.
A. EXTERIOR FIRE-TEST EXPOSURE: CLASS [A] [B] [C]; UL 790, FOR APPLICATION AND ROOF SLOPES INDICATED.

QUALITY ASSURANCE

1.9 INSTALLER QUALIFICATIONS: QUALIFIED FIRM THAT IS APPROVED, AUTHORIZED, OR LICENSED BY ROOFING SYSTEM MANUFACTURER TO INSTALL MANUFACTURER'S PRODUCT AND WHO IS ELIGIBLE TO RECEIVE THE SPECIFIED MANUFACTURER'S GUARANTEE.

1.10 MANUFACTURER QUALIFICATIONS: QUALIFIED DOMESTIC U.S. OWNED AND BASED MANUFACTURER THAT HAS [UL LISTING] OR ACCREDITED TESTING AGENCY LISTING FOR ROOFING SYSTEM IDENTICAL TO THAT USED FOR THIS PROJECT.

1.11 TESTING AGENCY QUALIFICATIONS: AN INDEPENDENT TESTING AGENCY WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT THE TESTING INDICATED, AS DOCUMENTED ACCORDING TO ASTM E 329.

1.12 TEST REPORTS:
A. ROOF DRAIN AND LEADER TEST OR SUBMIT PLUMBER'S VERIFICATION.
B. CORE CUT, IF REQUIRED.
C. ROOF DECK FASTENER PULLOUT TEST, IF REQUIRED.

1.13 MOISTURE SURVEY, IF REQUIRED:
A. SUBMIT PRIOR TO INSTALLATION, RESULTS OF A NON-DESTRUCTIVE MOISTURE TEST OF ROOF SYSTEM COMPLETED BY APPROVED THIRD PARTY. UTILIZE ONE OF THE APPROVED METHODS:
i. INFRARED THERMOGRAPHY
ii. NUCLEAR BACKSCATTER

1.14 SOURCE LIMITATIONS: OBTAIN ALL COMPONENTS FROM THE SINGLE SOURCE ROOFING MANUFACTURER GUARANTEEING THE ROOFING SYSTEM. ALL PRODUCTS USED IN THE SYSTEM SHALL BE LABELED BY THE SINGLE SOURCE ROOFING MANUFACTURER ISSUING THE GUARANTEE

DELIVERY, STORAGE, AND HANDLING

1.15 DELIVER ROOFING MATERIALS IN ORIGINAL CONTAINERS WITH SEALS UNBROKEN AND LABELED WITH MANUFACTURER'S NAME, PRODUCT BRAND NAME AND TYPE, DATE OF MANUFACTURE, AND DIRECTIONS FOR STORAGE.

1.16 STORE LIQUID MATERIALS IN THEIR ORIGINAL UNDAMAGED CONTAINERS IN A CLEAN, DRY, PROTECTED LOCATION AND WITHIN THE TEMPERATURE RANGE REQUIRED BY ROOFING SYSTEM MANUFACTURER.

1.17 PROTECT ROOF INSULATION MATERIALS FROM PHYSICAL DAMAGE AND FROM DETERIORATION BY SUNLIGHT, MOISTURE, SOILING, AND OTHER SOURCES. COMPLY WITH INSULATION MANUFACTURER'S WRITTEN INSTRUCTIONS FOR HANDLING, STORING, AND PROTECTING DURING INSTALLATION.

1.18 HANDLE AND STORE ROOFING MATERIALS AND PLACE EQUIPMENT IN A MANNER TO AVOID PERMANENT DEFLECTION OF DECK.

PROJECT CONDITIONS

1.19 WEATHER LIMITATIONS: PROCEED WITH INSTALLATION ONLY WHEN CURRENT AND FORECASTED WEATHER CONDITIONS PERMIT ROOFING SYSTEM TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND GUARANTEE REQUIREMENTS.

PART 2 – PRODUCTS

THERMOPLASTIC POLYOLEFIN ROOFING MEMBRANE – TPO

2.1 FABRIC-REINFORCED THERMOPLASTIC POLYOLEFIN SHEET: ASTM D 6878, UNIFORM, FLEXIBLE SHEET FORMED FROM A THERMOPLASTIC POLYOLEFIN, INTERNALLY FABRIC OR SCRIM REINFORCED. BASIS OF DESIGN: JM TPO
A. MEMBRANE THICKNESS: 60MILS
B. 3EXPOSED FACE COLOR: [WHITE]

2.2 SELF-ADHERED MEMBRANE THICKNESS: 60 MILS (1.52 MM), NOMINAL
A. EXPOSED FACE COLOR: WHITE
B. SERVICEABLE INSTALLATION TEMPERATURE: 20°F (-7°C) AND ABOVE.

AUXILIARY ROOFING MATERIALS – SINGLE PLY

2.3 GENERAL: AUXILIARY MATERIALS RECOMMENDED BY ROOFING SYSTEM MANUFACTURER FOR INTENDED USE AND COMPATIBLE WITH MEMBRANE ROOFING.
A. LIQUID-TYPE AUXILIARY MATERIALS SHALL MEET VOC LIMITS OF AUTHORITIES HAVING JURISDICTION.

2.4 SHEET FLASHING: MANUFACTURER'S INTERNALLY REINFORCED OR SCRIM REINFORCED. BASIS OF DESIGN: JM TPO 60 MIL

2.5 SHEET FLASHING (SELF-ADHERED): 60 MIL (1.5 MM) THICK, MANUFACTURER'S INTERNALLY REINFORCED OR SCRIM REINFORCED WITH WELDABLE SELVAGE EDGES ON EACH SIDE OF ROLL, ONE ENCAPSULATED EDGE AND SELF-ADHERING CAPABILITIES IN A WIDE INSTALLATION TEMPERATURE RANGE. BASIS OF DESIGN: JM TPO SA – FLASHING MEMBRANE
A. SERVICEABLE INSTALLATION SUBSTRATE TEMPERATURE: 20°F (-7°C) AND RISING.

2.6 BONDING ADHESIVE: MANUFACTURER'S STANDARD [SOLVENT] [WATER]-BASED BONDING ADHESIVE FOR MEMBRANE, AND [SOLVENT] [WATER]-BASED BONDING ADHESIVE FOR BASE FLASHINGS. BASIS OF DESIGN: [JM MEMBRANE BONDING ADHESIVE (TPO&EPDM)] [JM LVOC MEMBRANE ADHESIVE (TPO & EPDM)] [JM TPO WATER BASED MEMBRANE ADHESIVE] [JM TPO 1168 MEMBRANE ADHESIVE]JM ALL SEASON SPRAYABLE BONDING ADHESIVE]
1. SERVICEABLE INSTALLATION AMBIENT AIR TEMPERATURE: 25°F AND RISING.

2.7 FLASHING ADHESIVE: MANUFACTURER'S STANDARD-[SOLVENT] [WATER] - BASED BONDING ADHESIVE FOR BASE FLASHINGS. BASIS OF DESIGN: [JM MEMBRANE BONDING ADHESIVE (TPO&EPDM)] [JM LVOC MEMBRANE ADHESIVE (TPO & EPDM)] [JM TPO WATER BASED MEMBRANE ADHESIVE] [JM TPO 1168 MEMBRANE ADHESIVE] [JM ALL SEASON SPRAYABLE BONDING ADHESIVE]
1. SERVICEABLE INSTALLATION AMBIENT AIR TEMPERATURE: 25°F AND RISING.

2.8 URETHANE ADHESIVE: MANUFACTURER'S TWO COMPONENT NO VOC URETHANE ADHESIVE FORMULATED TO ADHERE FLEECE-BACKED MEMBRANE TO SUBSTRATE. BASIS OF DESIGN: ROOFING SYSTEMS URETHANE ADHESIVE (RSUA)

2.9 URETHANE ADHESIVE: MANUFACTURER'S SELF-CONTAINED TWO-PART, LOW-RISE FOAM ADHESIVE FORMULATED TO ADHERE FLEECE-BACKED MEMBRANES TO SUBSTRATE. BASIS OF DESIGN: JM TWO-PART URETHANE INSULATION ADHESIVE CANISTER

2.10 SELF-ADHERED PRIMER: ONE-PART PENETRATING PRIMER SOLUTION TO ENHANCE THE ADHESION OF SELF-ADHERING MEMBRANES. BASIS OF DESIGN: [SA PRIMER] [SA PRIMER LOW VOC]

2.11 ROOFING ASPHALT: ASTM D 312-15, TYPE IV

2.12 LIQUID APPLIED FLASHING: MANUFACTURER'S SINGLE PLY LIQUID AND FABRIC REINFORCED FLASHING SYSTEM CREATED WITH A FLEECE POLYESTER SCRIM AND A TWO-COMPONENT POLYURETHANE-BASED LIQUID APPLIED FLASHING MATERIAL, CONSISTING OF A LIQUID RESIN AND A CURING AGENT. BASIS OF DESIGN: JM SP LIQUID FLASHING RESIN AND JM SP LIQUID FLASHING SCRIM

2.13 LIQUID APPLIED FLASHING PRIMER: MANUFACTURER'S SINGLE PLY LIQUID FLASHING PRIMER. BASIS OF DESIGN: JM SP LIQUID FLASHING TPO AND PVC PRIMER, JM SP LIQUID FLASHING CONCRETE PRIMER, OR JM SP LIQUID FLASHING METAL AND WOOD PRIMER

2.14 SLIP SHEET: MANUFACTURER'S RECOMMENDED SLIP SHEET, OF TYPE REQUIRED FOR APPLICATION. BASIS OF DESIGN: [JM 3 –OZ POLYESTER SLIPSHEET] [JM POLYESTER MAT PROTECTION SLIPSHEET]

2.15 METAL TERMINATION BARS: MANUFACTURER'S STANDARD PREDRILLED STAINLESS-STEEL OR ALUMINUM BARS, WITH ANCHORS. BASIS OF DESIGN: JM TERMINATION SYSTEMS.

2.16 FASTENERS: FACTORY-COATED STEEL FASTENERS AND METAL PLATES MEETING CORROSION-RESISTANCE PROVISIONS IN FMG 4470, DESIGNED FOR FASTENING MEMBRANE TO SUBSTRATE, AND ACCEPTABLE TO MEMBRANE ROOFING SYSTEM MANUFACTURER. BASIS OF DESIGN: [HIGH LOAD FASTENERS AND PLATES] [EXTRA HIGH LOAD FASTENERS AND PLATES] [JM PURLIN FASTENERS] [ALL PURPOSE FASTENERS AND HIGH LOAD PLATES]

2.17 POLYMER FASTENERS: GLASS-REINFORCED NYLON FASTENERS WITH ¼" SQUARE DRIVE AND 1" HEAD WITH GALVALUME®-COATED 2" METAL STRESS PLATES, DESIGNED TO LOCK INTO THE FASTENER HEAD. FASTENERS DESIGNED FOR FASTENING ROOF INSULATION TO SUBSTRATE AND FURNISHED BY ROOFING SYSTEM MANUFACTURER. BASIS OF DESIGN: POLYMER AUGER FASTENERS AND PLATES

2.18 INDUCTION WELDING PLATE: A ROUND SPECIALLY COATED GALVALUME® PLATE WITH A RECESSED CENTER AND RAISED FLAT BONDING SURFACE SPECIFICALLY DESIGNED FOR INDUCTION WELDING APPLICATION . BASIS OF DESIGN: JM TPO RHINOPLATES

2.19 MISCELLANEOUS ACCESSORIES: PROVIDE ALL ACCESSORIES TO MEET THE ROOFING MANUFACTURER'S GUARANTEE REQUIREMENTS.

WALKWAYS AND SAFETY STRIPS

2.20 FLEXIBLE WALKWAYS: FACTORY-FORMED, NONPOROUS, HEAVY-DUTY, SLIP-RESISTING, SURFACE-TEXTURED WALKWAY PADS SOURCED FROM MEMBRANE ROOFING SYSTEM MANUFACTURER. BASIS OF DESIGN: [JM TPO WALKPAD] [JM TPO SAFETY WALKPAD]

2.21 SAFETY STRIPS: MANUFACTURER'S MINIMUM 65 MILS TOTAL THICKNESS, COMPRISE OF 30 MIL YELLOW NON-REINFORCED TPO MEMBRANE LAMINATED TO 35 MIL WHITE CURED SEAMING TAPE. BASIS OF DESIGN: JM SINGLE PLY SAFETY STRIP
1. EXPOSED FACE COLOR: YELLOW

COVER BOARD

2.22 POLYISOCYANURATE BOARD: ASTM C 1289, TYPE II, CLASS [1] [2], GRADE [2 (20 PSI)] [3 (25 PSI)]. POLYISOCYANURATE BONDED IN-LINE TO FIBER GLASS REINFORCED [INORGANIC COATED GLASS] FACER. BASIS OF DESIGN: [SEPARATOR] [SEPARATOR CSF]

2.23 PERLITE BOARD: ASTM C 728, TYPE 3, COMPOSED OF EXPANDED PERLITE, CELLULOSIC FIBERS, BINDERS AND WATERPROOFING AGENTS WITH TOP SURFACE SEAL COATED. BASIS OF DESIGN: RETROPLUS ROOF BOARD.

2.24 HIGH-DENSITY POLYISOCYANURATE: ASTM C 1289, TYPE II, CLASS 4, GRADE 1, HIGH-DENSITY POLYISOCYANURATE TECHNOLOGY BONDED IN-LINE TO INORGANIC COATED GLASS FACERS WITH GREATER THAN 80 LBS OF COMPRESSIVE STRENGTH. BASIS OF DESIGN: PROTECTOR HD
A. THICKNESS: 1/2 INCH (13 MM)
B. R-VALUE: 2.5

2.25 GYPSUM BOARD: ASTM C 1177, COATED GLASS-MAT FACER, WATER-RESISTANT GYPSUM SUBSTRATE FOR MECHANICALLY ATTACHED ROOF APPLICATIONS, [1/4 INCH (6 MM)] [1/2 INCH (13 MM)] [5/8 INCH (16 MM)] THICK. BASIS OF DESIGN: [SECUROCK ULTRALIGHT GLASS-MAT ROOF BOARD] [DEXCELL GLASS MAT ROOF BOARD] [DENS DECK ROOF BOARD]

2.26 GYPSUM BOARD: ASTM C 1177, HEAVY DUTY COATED GLASS-MAT FACER [WITH EONIC PRIMED FACE], WATER-RESISTANT GYPSUM SUBSTRATE FOR ADHERED ROOF APPLICATIONS, [1/4 INCH (6 MM)] [1/2 INCH (13 MM)] [5/8 INCH (16 MM)] THICK. BASIS OF DESIGN: [DEXCELL FA GLASS MAT ROOF BOARD] [DENS DECK PRIME ROOF BOARD]

2.27 GYPSUM FIBER BOARD: ASTM C 1278, NON-FACED, GYPSUM AND CELLULOSE FIBER SUBSTRATE, [1/4 INCH (6 MM)] [3/8 INCH (9.5 MM)] [1/2 INCH (13 MM)] [5/8 INCH (16 MM)] THICK. BASIS OF DESIGN: SECUROCK GYPSUM-FIBER ROOF BOARD

ROOF INSULATION – FLUTE FILLER

2.28 GENERAL: PREFORMED ROOF INSULATION BOARDS THAT COMPLY WITH REQUIREMENTS AND REFERENCED STANDARDS, SELECTED FROM MANUFACTURER'S STANDARD SIZES AND OF THICKNESSES INDICATED.

2.29 POLYISOCYANURATE BOARD INSULATION: ASTM C 1289, TYPE II, CLASS 1, GRADE 2. PRODUCT: ENRGY 3
A. PROVIDE METAL ROOF FLUTE FILLER INSULATION PACKAGE WITH THICKNESS TO FILL FLUTES THE HEIGHT OF THE STANDING SEAM.

ROOF INSULATION

2.30 GENERAL: PREFORMED ROOF INSULATION BOARDS THAT COMPLY WITH REQUIREMENTS AND REFERENCED STANDARDS, SELECTED FROM MANUFACTURER'S STANDARD SIZES AND OF THICKNESSES INDICATED.

2.31 POLYISOCYANURATE BOARD INSULATION: ASTM C 1289, TYPE II, CLASS [1] [2], GRADE [3 (25 PSI)], BASIS OF DESIGN: ENRGY 3 25 PSI CGF
A. PROVIDE INSULATION PACKAGE WITH MINIMUM R VALUE: [SEE SHEET G005] [MINIMUM REQUIRED BY APPLICABLE CODE].
B. PROVIDE INSULATION PACKAGE WITH MINIMUM THICKNESS: [60MIL].
C. PROVIDE INSULATION PACKAGE IN MULTIPLE LAYERS.
D. MINIMUM LONG-TERM THERMAL RESISTANCE (LTTR): 5.7 PER INCH.
i. DETERMINED IN ACCORDANCE WITH CAN/ULC S770 AT 75°F (24°C)

TAPERED INSULATION

2.32 TAPERED INSULATION: ASTM C 1289, TYPE II, CLASS [1] [2], GRADE [2 (20 PSI)] [3 (25 PSI)]. PROVIDE FACTORY-TAPERED INSULATION BOARDS FABRICATED TO SLOPE OF 1/4 INCH PER 12 INCHES (1:48), UNLESS OTHERWISE INDICATED. BASIS OF DESIGN: [TAPERED ENRGY 3] [TAPERED ENRGY 3 25 PSI] [TAPERED ENRGY 3 CGF] [TAPERED ENRGY 3 25 PSI CGF]

INSULATION ACCESSORIES

2.33 GENERAL: ROOF INSULATION ACCESSORIES RECOMMENDED BY INSULATION MANUFACTURER FOR INTENDED USE AND COMPATIBLE WITH MEMBRANE ROOFING.

2.34 PROVIDE SADDLES, CRICKETS, TAPERED EDGE STRIPS, AND OTHER INSULATIONS SHAPES WHERE INDICATED FOR SLOPING TO DRAIN. FABRICATE TO SLOPES INDICATED. BASIS OF DESIGN: TAPERED FESCO EDGE STRIPS.

2.35 FASTENERS: FACTORY-COATED STEEL FASTENERS AND METAL OR PLASTIC PLATES MEETING CORROSION-RESISTANCE PROVISIONS IN FMG 4470, DESIGNED FOR FASTENING ROOF INSULATION TO SUBSTRATE, AND FURNISHED BY ROOFING SYSTEM MANUFACTURER. BASIS OF DESIGN: [ULTRAFAST FASTENERS AND ULTRAFAST PLATES] [ALL PURPOSE FASTENERS AND ULTRAFAST PLATE] [LITE-DECK FASTENERS AND PLATES]

2.36 POLYMER FASTENERS: GLASS-REINFORCED NYLON FASTENERS WITH ¼" SQUARE DRIVE AND 1" HEAD WITH GALVALUME®-COATED 3" METAL STRESS PLATES, DESIGNED TO LOCK INTO THE FASTENER HEAD. FASTENERS DESIGNED FOR FASTENING ROOF INSULATION TO SUBSTRATE AND FURNISHED BY ROOFING SYSTEM MANUFACTURER. BASIS OF DESIGN: POLYMER AUGER FASTENERS AND PLATES

2.37 URETHANE ADHESIVE: MANUFACTURER'S TWO COMPONENT POLYURETHANE ADHESIVE FORMULATED TO ADHERE INSULATION TO SUBSTRATE. BASIS OF DESIGN: [JM TWO-PART URETHANE INSULATION ADHESIVE (UIA)] [JM ONE-STEP FOAMABLE ADHESIVE] [ROOFING SYSTEMS URETHANE ADHESIVE (RSUA)] [JM TWO-PART URETHANE INSULATION ADHESIVE CANISTER]

2.38 WOOD NAILER STRIPS: COMPLY WITH REQUIREMENTS IN DIVISION 06 SECTION "MISCELLANEOUS ROUGH CARPENTRY."

VAPOR RETARDER

2.39 GLASS-FIBER FELTS: ASTM D 2178, TYPE IV, ASPHALT-IMPREGNATED, GLASS-FIBER FELT. BASIS OF DESIGN: GLASPLY IV.

2.40 TORCH APPLIED SBS VAPOR RETARDER: [ASTM D 6163, GRADE S, TYPE I, GLASS-FIBER-REINFORCED] [ASTM D 6164, GRADE S, TYPE I, POLYESTER-REINFORCED], SBS-MODIFIED ASPHALT SHEET; SMOOTH SURFACED; SUITABLE FOR APPLICATION METHOD SPECIFIED. BASIS OF DESIGN: [DYNAWELD BASE] [DYNABASE HW] [DYNAWELD 180 S].

2.41 SELF-ADHERED SBS VAPOR RETARDER: [ASTM D 6163, GRADE S, TYPE I, GLASS-FIBER-REINFORCED], SBS-MODIFIED ASPHALT SHEET; SAND SURFACED; SUITABLE FOR APPLICATION METHOD SPECIFIED. BASIS OF DESIGN: DYNAGRIP BASE SD/SA.

2.42 ASPHALT PRIMER: ASTM D 41. BASIS OF DESIGN: JM ASPHALT PRIMER

2.43 SELF-ADHERED SBS VAPOR RETARDER: TRI-LAMINATE WOVEN POLYETHYLENE, NONSLIP UV PROTECTED TOP SURFACE; SUITABLE FOR APPLICATION METHOD SPECIFIED. BASIS OF DESIGN: [JM VAPOR BARRIER SAR].

2.44 SELF-ADHERED PRIMER: [ONE-PART] [LOW VOC AEROSOL] PENETRATING PRIMER SOLUTION TO ENHANCE THE ADHESION OF SELF-ADHERING MEMBRANES. BASIS OF DESIGN: [SA PRIMER] [SA PRIMER LOW VOC] [JM ALL SEASON SPRAYABLE BONDING ADHESIVE].

2.45 POLYETHYLENE VAPOR RETARDER: ASTM D 4397, [6 MILS (0.15 MM)] [10 MILS (0.25 MM)] THICK, MINIMUM, WITH MAXIMUM PERMEANCE RATING OF 0.13 PERM (7.5 NG/PA X S X SQ. M).

BASE-SHEET MATERIALS

2.46 BASE SHEET: ASTM D 4601, TYPE II NON-PERFORATED, ASPHALT-IMPREGNATED AND -COATED, GLASS-FIBER SHEET, DUSTED WITH FINE MINERAL SURFACING ON BOTH SIDES. BASIS OF DESIGN: [PERMAPLY 28] [GLASBASE PLUS]

2.47 BASE SHEET: ASTM D 4897, TYPE II, VENTING, NON-PERFORATED, HEAVYWEIGHT, ASPHALT-IMPREGNATED AND -COATED, GLASS-FIBER BASE SHEET WITH COARSE GRANULAR SURFACING OR EMBOSSED VENTING CHANNELS ON BOTTOM SURFACE. BASIS OF DESIGN: VENTSULATION FELT

2.48 BASE-SHEET FASTENERS: TWIN LEGGED FACTORY-COATED STEEL FASTENERS AND GALVALUME METAL PLATES MEETING CORROSION-RESISTANCE PROVISIONS IN FMG 4470, DESIGNED FOR FASTENING BASE-SHEET TO SUBSTRATE, TESTED BY MANUFACTURER FOR REQUIRED PULLOUT STRENGTH, AND PROVIDED BY THE ROOFING SYSTEM MANUFACTURER. PRODUCT: LIGHTWEIGHT CONCRETE (LWC) BASE SHEET FASTENERS

2.49 BASE-SHEET FASTENERS: TUBE, DISK AND LOCKING

REQUIREMENTS IN DIVISION 05 SECTION "STEEL DECKING."

3.5 VERIFY THAT DECKING IS VISIBLY DRY AND FREE OF MOISTURE.

3.6 VERIFY THAT THE DECKING IS SMOOTH AND FREE OF LARGE CRACKS, HOLES, OR SHARP CHANGES IN ELEVATION OF THE SURFACE.

3.7 WHEN APPLICABLE PERFORM PULL TEST WITH THE SPECIFIC FASTENER BEING USED ON THE PROJECT TO CONFIRM THE FASTENER RESISTANCE MEETS THE REQUIREMENTS FOR THAT PARTICULAR SYSTEM.

CONCRETE DECKS:

3.8 VERIFY THAT CONCRETE CURING COMPOUNDS THAT WILL IMPAIR ADHESION OF ROOFING COMPONENTS TO ROOF DECK HAVE BEEN REMOVED.

3.9 VERIFY THAT CONCRETE SUBSTRATE IS VISIBLY DRY AND FREE OF MOISTURE.

WOOD DECKS:

3.10 VERIFY THAT WOOD DECKING IS VISIBLY DRY AND FREE OF MOISTURE.

3.11 VERIFY THAT WOOD HAS ABILITY TO PROVIDE MINIMUM FASTENER PULL-OUT RESISTANCE.
A. PROVIDE DOCUMENTATION OF PULL-OUT RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI FX-1 2016.

CEMENTITIOUS WOOD FIBER DECKS (TECTUM):

3.12 VERIFY THAT CEMENTITIOUS WOOD FIBER SUBSTRATE IS VISIBLY DRY AND FREE OF MOISTURE.

3.13 VERIFY THAT CEMENTITIOUS WOOD FIBER HAS ABILITY TO PROVIDE MINIMUM BASE SHEET FASTENER PULL-OUT RESISTANCE.
A. PROVIDE DOCUMENTATION OF PULL-OUT RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI FX-1 2016.

3.14 PROVIDE DOCUMENTATION OF ADHESION RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI 1A-1 2015.

LIGHTWEIGHT INSULATING CONCRETE:

3.15 VERIFY THAT LIGHTWEIGHT INSULATING CONCRETE SUBSTRATE IS VISIBLY DRY AND FREE OF MOISTURE.

3.16 VERIFY THAT LIGHTWEIGHT INSULATING CONCRETE HAS ABILITY TO PROVIDE MINIMUM BASE SHEET FASTENER PULL-OUT RESISTANCE.

3.17 PROVIDE DOCUMENTATION OF ADHESION RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI 1A-1 2015.

GYPSUM DECK:

3.18 VERIFY THAT GYPSUM IS VISIBLY DRY, FREE OF MOISTURE, AND THAT THERE ARE NO SIGNS OF STAINING.

3.19 INSPECT DECK FOR CRACKING AND DEFLECTION OF BULB TEES.

3.20 VERIFY THAT GYPSUM HAS ABILITY TO PROVIDE MINIMUM FASTENER PULL-OUT RESISTANCE.
A. PROVIDE DOCUMENTATION OF PULL-OUT RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI FX-1 2016.

3.21 PROVIDE DOCUMENTATION OF ADHESION RESISTANCE VALUES IN ACCORDANCE WITH ANSI/SPRI 1A-1 2015

3.22 ENSURE GENERAL RIGIDITY AND PROPER SLOPE FOR DRAINAGE.

3.23 VERIFY THAT DECK IS SECURELY FASTENED WITH NO PROJECTING FASTENERS AND WITH NO ADJACENT UNITS MORE THAN 1/16 INCH (1.6 MM) OUT OF PLANE RELATIVE TO ADJOINING DECK.

UNACCEPTABLE PANELS SHOULD BE BROUGHT TO THE ATTENTION OF THE GENERAL CONTRACTOR AND PROJECT OWNER'S REPRESENTATIVE AND SHALL BE CORRECTED PRIOR TO INSTALLATION OF ROOFING SYSTEM.

PREPARATION

3.24 CLEAN AND REMOVE FROM SUBSTRATE SHARP PROJECTIONS, DUST, DEBRIS, MOISTURE, AND OTHER SUBSTANCES DETRIMENTAL TO ROOFING INSTALLATION IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.25 PREVENT MATERIALS FROM ENTERING AND CLOGGING ROOF DRAINS AND CONDUCTORS AND FROM SPILLING OR MIGRATING ONTO SURFACES OF OTHER CONSTRUCTION.

3.26 IF APPLICABLE, PRIME SURFACE OF DECK AT A RATE RECOMMENDED BY ROOFING MANUFACTURER AND ALLOW PRIMER TO DRY.

3.27 PROCEED WITH EACH STEP OF INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

RE-ROOF PREPARATION

3.28 REMOVE ALL ROOFING MEMBRANE, SURFACING, COVERBOARDS, INSULATION, FASTENERS, ASPHALT, PITCH, ADHESIVES, ETC.
A. REMOVE AN AREA NO LARGER THAN CAN BE RE-ROOFED IN ONE DAY.

3.29 TEAR OUT ALL BASE FLASHINGS, COUNTERFLASHINGS, PITCH PANS, PIPE FLASHINGS, VENTS, SUMPS AND LIKE COMPONENTS NECESSARY FOR APPLICATION OF NEW MEMBRANE.

3.30 REMOVE ABANDONED EQUIPMENT CURBS, SKYLIGHTS, SMOKE HATCHES, AND PENETRATIONS.
A. INSTALL DECKING TO MATCH EXISTING AS DIRECTED BY OWNER'S REPRESENTATIVE.

3.31 RAISE (DISCONNECT BY LICENSED CRAFTSMEN, IF NECESSARY) ALL HVAC UNITS AND OTHER EQUIPMENT SUPPORTED BY CURBS TO CONFORM WITH THE FOLLOWING:
A. MODIFY CURBS AS REQUIRED TO PROVIDE A MINIMUM 8" BASE FLASHING HEIGHT MEASURED FROM THE SURFACE OF THE NEW MEMBRANE TO THE TOP OF THE FLASHING MEMBRANE.
B. SECURE OF FLASHING AND INSTALL NEW METAL COUNTERFLASHING PRIOR TO RE-INSTALLATION OF UNIT.
C. PERIMETER NAILERS SHALL BE ELEVATED TO MATCH ELEVATION OF NEW ROOF INSULATION.

3.32 IMMEDIATELY REMOVE ALL DEBRIS FROM ROOF SURFACE. DEMOLISHED ROOF SYSTEM MAY NOT BE STORED ON THE ROOF SURFACE.

RE-COVER PREPARATION

3.33 PREPARE EXISTING ROOF ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE RECOMMENDATIONS OF THE ROOFING MANUFACTURER, AND REQUIREMENTS IN THIS SECTION.

3.34 TEAR OUT ALL BASE FLASHINGS, COUNTERFLASHINGS, PITCH PANS, PIPE FLASHINGS, VENTS, SUMPS AND LIKE COMPONENTS NECESSARY FOR APPLICATION OF NEW MEMBRANE.

3.35 DISABLE EXISTING ROOF MEMBRANE PER MANUFACTURER'S WRITTEN INSTRUCTION.

3.36 REMOVE EXISTING MEMBRANE PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.37 REMOVE AND REPLACE WET, DETERIORATED OR DAMAGED ROOF INSULATION AND DECKING AS IDENTIFIED IN MOISTURE SURVEY.

3.38 REMOVE ABANDONED EQUIPMENT CURBS, SKYLIGHTS, SMOKE HATCHES, AND PENETRATIONS. INSTALL DECKING TO MATCH EXISTING AS DIRECTED BY OWNER'S REPRESENTATIVE.

3.39 RAISE, (DISCONNECT BY LICENSED CRAFTSMEN, IF NECESSARY) ALL HVAC UNITS AND OTHER EQUIPMENT SUPPORTED BY CURBS TO CONFORM WITH THE FOLLOWING:
A. MODIFY CURBS AS REQUIRED TO PROVIDE A MINIMUM 8-INCH BASE FLASHING HEIGHT MEASURED FROM THE SURFACE OF THE NEW MEMBRANE TO THE TOP OF THE FLASHING MEMBRANE.
B. SECURE TOP OF FLASHING AND INSTALL NEW METAL COUNTERFLASHING PRIOR TO RE-INSTALLATION OF UNIT.
C. PERIMETER NAILERS SHALL BE ELEVATED TO MATCH ELEVATION OF NEW ROOF INSULATION.

3.40. IMMEDIATELY REMOVE ALL DEBRIS FROM ROOF SURFACE. DEMOLISHED ROOF SYSTEM MAY NOT BE STORED ON THE ROOF SURFACE.

3.41 INSTALL POLYESTER SLIP SHEET AS A LOOSELY LAID SINGLE LAYER BENEATH NEW SINGLE PLY MEMBRANE, SIDE AND END LAPPING EACH SHEET A MINIMUM OF 3 INCHES (76.2 MM) AND 6 INCHES (150 MM), RESPECTIVELY. SHEET MAY BE TACKED INTO PLACE AS DEEMED NECESSARY.

SUBSTRATE BOARD INSTALLATION

3.42 INSTALL SUBSTRATE BOARD WITH LONG JOINTS IN CONTINUOUS STRAIGHT LINES, PERPENDICULAR TO ROOF SLOPES WITH END JOINTS STAGGERED BETWEEN ROWS. TIGHTLY BUTT SUBSTRATE BOARDS TOGETHER.
1. FASTEN SUBSTRATE BOARD TO [TOP FLANGES OF STEEL DECK] [WOOD DECK] TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF PER ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.

BASE-SHEET INSTALLATION

3.43 INSTALL ONE LAPPED BASE SHEET COURSE AND MECHANICALLY FASTEN TO SUBSTRATE PER ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
A. ENHANCE FASTENING RATE IN PERIMETER AND CORNER ZONES PER CODE REQUIREMENTS, WIND UPLIFT SYSTEM APPROVALS OR MANUFACTURER'S GUARANTEE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.

3.44 COMPLY WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING ROOF INSULATION.

VAPOR-RETARDER INSTALLATION

3.45 INSTALL POLYETHYLENE-SHEET VAPOR RETARDER AS A LOOSELY LAID SINGLE LAYER OVER AREA TO RECEIVE VAPOR RETARDER, SIDE AND END LAPPING EACH SHEET A MINIMUM OF 2 INCHES (50 MM) AND 6 INCHES (150 MM), RESPECTIVELY.
A. SEAL SIDE AND END LAPS.

3.46 INSTALL 2 GLASS-FIBER FELT PLIES LAPPING EACH SHEET 19 INCHES (483 MM) OVER PRECEDING SHEET. EMBED EACH SHEET IN A SOLID MOPPING OF HOT ROOFING ASPHALT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.47 INSTALL MODIFIED BITUMINOUS VAPOR RETARDER SHEET PER ROOFING MANUFACTURER'S WRITTEN INSTRUCTIONS, STARTING AT LOW POINT OF ROOFING SYSTEM. EXTEND ROOFING MEMBRANE SHEETS OVER AND TERMINATE BEYOND CANTS, INSTALLING AS FOLLOWS:
A. UNROLL ROOFING MEMBRANE SHEETS AND ALLOW THEM TO RELAX FOR MINIMUM TIME REQUIRED BY MANUFACTURER.
B. HEAT WELD VAPOR RETARDER TO SUBSTRATE PER ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
C. ADHERE VAPOR RETARDER IN A FULL MOPPING OF HOT ASPHALT TO SUBSTRATE PER ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
D. SELF-ADHERE VAPOR RETARDER TO SUBSTRATE PER ROOFING SYSTEM MANUFACTURER'S INSTRUCTIONS.

3.48 LAPS: ACCURATELY ALIGN ROOFING MEMBRANE SHEETS, WITHOUT STRETCHING, AND MAINTAIN UNIFORM SIDE AND END LAPS. STAGGER END LAPS. COMPLETELY BOND AND SEAL LAPS, LEAVING NO VOIDS.
A. REPAIR TEARS AND VOIDS IN LAPS AND LAPPED SEAMS NOT COMPLETELY SEALED.

3.49 COMPLETELY SEAL VAPOR RETARDER AT TERMINATIONS, OBSTRUCTIONS, AND PENETRATIONS TO PREVENT AIR MOVEMENT INTO MEMBRANE ROOFING SYSTEM.

FLUTE FILLER INSULATION INSTALLATION

3.50 COORDINATE INSTALLATION OF ROOF SYSTEM COMPONENTS SO INSULATION IS NOT EXPOSED TO PRECIPITATION OR LEFT EXPOSED AT THE END OF THE WORKDAY.

3.51 COMPLY WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING ROOF INSULATION.

3.52 LOOSE LAY POLYISOCYANURATE FLUTE FILLER INSULATION BETWEEN THE METAL ROOF STANDING SEAMS. INSULATION INSTALLATION

3.53 COORDINATE INSTALLATION OF ROOF SYSTEM COMPONENTS SO INSULATION AND COVER BOARD ARE NOT EXPOSED TO PRECIPITATION OR LEFT EXPOSED AT THE END OF THE WORKDAY.

3.54 COMPLY WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLATION OF ROOF INSULATION AND COVER BOARD.

3.55 INSTALL TAPERED INSULATION UNDER AREA OF ROOFING TO CONFORM TO SLOPES INDICATED.

3.56 INSTALL INSULATION BOARDS WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE. JOINTS SHOULD BE STAGGERED BETWEEN ROWS, ABUTTING EDGES AND ENDS PER MANUFACTURER'S WRITTEN INSTRUCTIONS. FILL GAPS EXCEEDING 1/4 INCH (6 MM) WITH LIKE MATERIAL.

3.57 INSTALL 2 OR MORE LAYERS WITH JOINTS OF EACH SUCCEEDING LAYER STAGGERED FROM JOINTS OF PREVIOUS LAYER A MINIMUM OF 6 INCHES (150 MM) IN EACH DIRECTION.

3.58 TRIM SURFACE OF INSULATION BOARDS WHERE NECESSARY AT ROOF DRAINS SO COMPLETED SURFACE IS FLUSH AND DOES NOT RESTRICT FLOW OF WATER.

3.59 INSTALL TAPERED EDGE STRIPS AT PERIMETER EDGES OF ROOF THAT DO NOT TERMINATE AT VERTICAL SURFACES.

3.60 PRELIMINARILY FASTENED INSULATION [FOR MECHANICALLY FASTENED MEMBRANE SYSTEMS]: INSTALL INSULATION WITH FASTENERS AT RATE REQUIRED BY ROOFING SYSTEM MANUFACTURER.
A. FASTEN TOP LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.

3.61 ADHERED INSULATION: ADHERE INSULATION TO SUBSTRATE AS FOLLOWS:
A. INSTALL EACH LAYER IN A TWO-PART URETHANE ADHESIVE ACCORDING TO ROOFING SYSTEM MANUFACTURER'S INSTRUCTION.
B. INSTALL EACH LAYER IN A SOLID MOPPING OF HOT ROOFING ASPHALT ACCORDING TO ROOFING SYSTEM MANUFACTURER'S INSTRUCTION.
C. INSTALL EACH LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.

3.62 LOOSE LAID INSULATION WITH TOP INSULATION LAYER MECHANICALLY FASTENED: LOOSE LAY INSULATION WITH STAGGERED JOINTS AND SECURE TOP LAYER OF INSULATION TO DECK USING MECHANICAL FASTENERS DESIGNED AND SIZED FOR FASTENING SPECIFIED BOARD-TYPE TO DECK TYPE.
A. FASTEN TOP LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.

3.63 LOOSE LAID INSULATION: LOOSE LAY ALL LAYERS OF INSULATION WITH STAGGERED JOINTS.

3.64 MECHANICALLY FASTENED WITH SUBSEQUENT LAYERS ADHERED INSULATION: SECURE FIRST LAYER OF INSULATION TO DECK USING MECHANICAL FASTENERS DESIGNED AND SIZED FOR FASTENING SPECIFIED BOARD-TYPE TO DECK TYPE.
A. FASTEN FIRST LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.
B. INSTALL SUBSEQUENT LAYERS IN A TWO-PART URETHANE ADHESIVE ACCORDING TO ROOFING SYSTEM MANUFACTURER'S INSTRUCTION.
C. INSTALL SUBSEQUENT LAYERS IN A SOLID MOPPING OF HOT ROOFING ASPHALT ACCORDING TO ROOFING SYSTEM MANUFACTURER'S INSTRUCTION.
D. INSTALL EACH LAYER TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF. COVER BOARD INSTALLATION

3.65 COORDINATE INSTALLING MEMBRANE ROOFING SYSTEM COMPONENTS SO COVER BOARD IS NOT EXPOSED TO PRECIPITATION OR LEFT EXPOSED AT THE END OF THE WORKDAY.

3.66 COMPLY WITH MEMBRANE ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS FOR INSTALLING ROOF COVER BOARD.

3.67 INSTALL COVER BOARD WITH LONG JOINTS IN A CONTINUOUS STRAIGHT LINE. JOINTS SHOULD BE STAGGERED BETWEEN ROWS, ABUTTING EDGES AND ENDS PER MANUFACTURER'S WRITTEN INSTRUCTIONS. FILL GAPS EXCEEDING 1/4 INCH (6 MM) WITH COVER BOARD.
A. CUT AND FIT COVER BOARD WITHIN 1/4 INCH (6 MM) OF NAILERS, PROJECTIONS, AND PENETRATIONS.

3.68 TRIM SURFACE OF COVER BOARD WHERE NECESSARY AT ROOF DRAINS SO COMPLETED SURFACE IS FLUSH AND DOES NOT RESTRICT FLOW OF WATER.
A. INSTALL TAPERED EDGE STRIPS AT PERIMETER EDGES OF ROOF THAT DO NOT TERMINATE AT VERTICAL SURFACES.

3.69 PRELIMINARILY FASTENED COVER BOARD FOR MECHANICALLY FASTENED SYSTEMS: INSTALL COVER BOARD WITH FASTENERS AT RATE REQUIRED BY ROOFING SYSTEM MANUFACTURER OR APPLICABLE AUTHORITY, WHICHEVER IS MORE STRINGENT.

3.70 ADHERED COVER BOARD: ADHERE COVER BOARD TO SUBSTRATE AS FOLLOWS:
A. INSTALL IN A TWO-PART URETHANE ADHESIVE ACCORDING TO ROOFING SYSTEM MANUFACTURER'S INSTRUCTION.
B. INSTALL TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.

3.71 MECHANICALLY FASTENED COVER BOARD: INSTALL COVER BOARD AND SECURE TO DECK USING MECHANICAL FASTENERS DESIGNED AND SIZED FOR FASTENING SPECIFIED COVER BOARD TO DECK TYPE.
A. FASTEN TO RESIST UPLIFT PRESSURE AT CORNERS, PERIMETER, AND FIELD OF ROOF.

ROOFING MEMBRANE INSTALLATION, GENERAL

3.72 INSTALL ROOFING MEMBRANE IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE RECOMMENDATIONS OF THE ROOFING MANUFACTURER AND REQUIREMENTS IN THIS SECTION.

3.73 COOPERATE WITH TESTING AND INSPECTING AGENCIES ENGAGED OR REQUIRED TO PERFORM SERVICES FOR INSTALLING ROOFING SYSTEM.

3.74 COORDINATE INSTALLING ROOFING SYSTEM SO INSULATION AND OTHER COMPONENTS OF THE ROOFING MEMBRANE SYSTEM NOT PERMANENTLY EXPOSED ARE NOT SUBJECTED TO PRECIPITATION OR LEFT UNCOVERED AT THE END OF THE WORKDAY OR WHEN RAIN IS IMMINENT.
A. PROVIDE TIE-OFFS AT END OF EACH DAY'S WORK TO COVER EXPOSED ROOFING MEMBRANE SHEETS AND INSULATION.
B. COMPLETE TERMINATIONS AND BASE FLASHINGS AND PROVIDE TEMPORARY SEALS TO PREVENT WATER FROM ENTERING COMPLETED SECTIONS OF ROOFING SYSTEM.
C. REMOVE AND DISCARD TEMPORARY SEALS BEFORE BEGINNING WORK ON ADJOINING ROOFING.

3.75 ASPHALT HEATING: HEAT ROOFING ASPHALT TO TEMPERATURE RECOMMENDED BY ROOFING MANUFACTURER TO FLUX MODIFIED MEMBRANE. DO NOT EXCEED ROOFING ASPHALT MANUFACTURER'S RECOMMENDED TEMPERATURE LIMITS DURING ROOFING ASPHALT HEATING. DISCARD ROOFING ASPHALT MAINTAINED AT A TEMPERATURE EXCEEDING FINISHED BLOWING TEMPERATURE FOR MORE THAN 4 HOURS.

3.76 SUBSTRATE-JOINT PENETRATIONS: PREVENT ROOFING ASPHALT FROM PENETRATING SUBSTRATE JOINTS, ENTERING BUILDING, OR DAMAGING ROOFING SYSTEM COMPONENTS OR ADJACENT BUILDING CONSTRUCTION.

ADHERED ROOFING MEMBRANE INSTALLATION

3.77 INSTALL ROOFING MEMBRANE OVER AREA TO RECEIVE ROOFING IN ACCORDANCE WITH MEMBRANE ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
A. UNROLL ROOFING MEMBRANE AND ALLOW TO RELAX BEFORE INSTALLING.

3.78 ACCURATELY ALIGN ROOFING MEMBRANE AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER. STAGGER END LAPS.

3.79 SOLVENT BASED BONDING ADHESIVE FOR SMOOTH BACKED MEMBRANES: APPLY SOLVENT-BASED BONDING ADHESIVE TO SUBSTRATE AND UNDERSIDE OF ROOFING MEMBRANE AT RATE REQUIRED BY MANUFACTURER AND ALLOW TO PARTIALLY DRY BEFORE INSTALLING ROOFING MEMBRANE. DO NOT APPLY BONDING ADHESIVE TO SPLICE AREA OF ROOFING MEMBRANE.

3.80 WATER BASED BONDING ADHESIVE FOR SMOOTH BACKED MEMBRANES: APPLY WATER-BASED BONDING ADHESIVE TO SUBSTRATE AT RATE REQUIRED BY MANUFACTURER AND IMMEDIATELY INSTALL ROOFING MEMBRANE. DO NOT APPLY BONDING ADHESIVE TO SPLICE AREA OF ROOFING MEMBRANE.

3.81 WATER BASED BONDING ADHESIVE FOR FLEECE BACKED MEMBRANES: APPLY WATER-BASED BONDING ADHESIVE TO SUBSTRATE AT RATE REQUIRED BY MANUFACTURER AND IMMEDIATELY INSTALL ROOFING MEMBRANE. DO NOT APPLY BONDING ADHESIVE TO SPLICE AREA OF ROOFING MEMBRANE.

3.82 URETHANE MEMBRANE ADHESIVE FOR FLEECE BACKED MEMBRANES: APPLY URETHANE ADHESIVE TO SUBSTRATE AT RATE REQUIRED BY MANUFACTURER AND INSTALL FLEECE-BACKED ROOFING MEMBRANE. DO NOT APPLY BONDING ADHESIVE TO SPLICE AREA OF ROOFING MEMBRANE.

3.83 ASPHALT FOR FLEECE BACKED MEMBRANES: ADHERE TO SUBSTRATE IN A SOLID MOPPING OF HOT ROOFING ASPHALT APPLIED AT TEMPERATURES RECOMMENDED BY ROOFING SYSTEM MANUFACTURER.

3.84 MECHANICALLY FASTEN ROOFING MEMBRANE SECURELY AT TERMINATIONS, PENETRATIONS, AND PERIMETER OF ROOFING.

3.85 APPLY ROOFING MEMBRANE WITH SIDE LAPS SHINGLED WITH ROOF SLOPE, WHERE POSSIBLE.

3.86 SEAMS: CLEAN SEAM AREAS, OVERLAP ROOFING MEMBRANE, AND HOT-AIR WELD SIDE AND END LAPS OF ROOFING MEMBRANE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM INSTALLATION.
A. TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL CUT EDGES OF ROOFING MEMBRANE.
B. VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS.
i. REMOVE AND REPAIR ANY UNSATISFACTORY SECTIONS BEFORE PROCEEDING WITH INSTALLATION.
C. REPAIR TEARS, VOIDS, AND INCORRECTLY LAPPED SEAMS IN ROOFING MEMBRANE THAT DO NOT MEET REQUIREMENTS.

3.87 SPREAD SEALANT OR MASTIC BEAD OVER DECK DRAIN FLANGE AT DECK DRAINS AND SECURELY SEAL ROOFING MEMBRANE IN PLACE WITH CLAMPING RING.

MECHANICALLY FASTENED ROOFING MEMBRANE INSTALLATION

3.88 INSTALL ROOFING MEMBRANE OVER AREA TO RECEIVE ROOFING IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
A. UNROLL ROOFING MEMBRANE AND ALLOW IT TO RELAX BEFORE INSTALLING.
B. INSTALL SHEET IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.89 ACCURATELY ALIGN ROOFING MEMBRANES AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER. STAGGER END LAPS.

3.90 MECHANICALLY FASTEN ROOFING MEMBRANE SECURELY AT TERMINATIONS, PENETRATIONS, AND PERIMETER OF ROOFING.

3.91 ALWAYS INSTALL MEMBRANE LAPS PERPENDICULAR TO THE STEEL DECK FLUTES. "PICTURE FRAME" INSTALLATION METHOD IS NOT PERMITTED.

3.92 APPLY ROOFING MEMBRANE WITH SIDE LAPS SHINGLED WITH ROOF SLOPE, WHERE POSSIBLE.

3.93 SEAMS: CLEAN SEAM AREAS, OVERLAP ROOFING MEMBRANE, AND HOT-AIR WELD SIDE AND END LAPS OF ROOFING MEMBRANE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM INSTALLATION.
A. TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL CUT EDGES OF ROOFING MEMBRANE.
B. VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS.
i. REMOVE AND REPAIR ANY UNSATISFACTORY SECTIONS BEFORE PROCEEDING WITH WORK.
C. REPAIR TEARS, VOIDS, AND LAPPED SEAMS IN ROOFING MEMBRANE THAT DO NOT MEET REQUIREMENTS.

3.94 SPREAD SEALANT OR MASTIC BEAD OVER DECK DRAIN FLANGE AT DECK DRAINS AND SECURELY SEAL ROOFING MEMBRANE IN PLACE WITH CLAMPING RING.

3.95 IN-SPLICE ATTACHMENT: SECURE ONE EDGE OF ROOFING MEMBRANE USING FASTENING PLATES OR METAL BATTENS CENTERED WITHIN MEMBRANE SPLICE AND MECHANICALLY FASTEN ROOFING MEMBRANE TO ROOF DECK. FIELD-SPLICE SEAM.

3.96 INSTALL ROOFING MEMBRANE AND AUXILIARY MATERIALS TO TIE INTO EXISTING ROOFING.

INDUCTION WELDED ROOFING MEMBRANE INSTALLATION

3.97 INSTALL ROOFING MEMBRANE OVER AREA TO RECEIVE ROOFING ACCORDING TO ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS. UNROLL ROOFING MEMBRANE AND ALLOW TO RELAX BEFORE INSTALLING.

3.98 ACCURATELY ALIGN ROOFING MEMBRANES AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER. STAGGER END LAPS.

3.99 ALWAYS INSTALL MEMBRANE LAPS PERPENDICULAR TO THE STEEL DECK FLUTES. "PICTURE FRAME" INSTALLATION METHOD IS NOT PERMITTED.

3.100 APPLY ROOFING MEMBRANE WITH SIDE LAPS SHINGLED WITH ROOF SLOPE, WHERE POSSIBLE.

3.101 SEAMS: CLEAN SEAM AREAS, OVERLAP ROOFING MEMBRANE, AND HOT-AIR WELD SIDE AND END LAPS OF ROOFING MEMBRANE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM INSTALLATION.
A. TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL CUT EDGES OF ROOFING MEMBRANE.
B. VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS.
i. REMOVE AND REPAIR ANY UNSATISFACTORY SECTIONS BEFORE PROCEEDING WITH WORK.
C. REPAIR TEARS, VOIDS, AND LAPPED SEAMS IN ROOFING MEMBRANE THAT DO NOT MEET REQUIREMENTS.

3.102 SPREAD SEALANT OR MASTIC BEAD OVER DECK DRAIN FLANGE AT DECK DRAINS AND SECURELY SEAL ROOFING MEMBRANE IN PLACE WITH CLAMPING RING.

3.103 INDUCTION WELDING INSTALLATION:
A. PERFORM CALIBRATION AND SET-UP AS DETAILED BY THE INDUCTION WELDER OWNER'S MANUAL
B. CENTER THE INDUCTION WELDER OVER THE FIRST PLATE IN PATTERN AND ACTIVATE THE WELD.
i. INDUCTION WELDER SHALL BE CENTERED OVER THE PLATE TO CREATE A 100% BOND.
IF AN ERROR OCCURS DURING ACTIVATION, REFER TO THE INDUCTION WELDER OWNER'S MANUAL FOR CORRECTIVE ACTION.
C. PRIOR TO EVERY USE, CLEAN FACE OF HEAT SINK MAGNET.
D. PLACE HEAT SINK MAGNET OVER THE WELDED PLATE.
i. KEEP HEAT SINK MAGNET IN PLACE AT LEAST 45 SECONDS WHILE THE ASSEMBLY COOLS.
E. REPEAT PROCESS FOR EACH PLATE.

SELF-ADHERED ROOFING MEMBRANE INSTALLATION

3.104 INSTALL ROOFING MEMBRANE OVER AREA TO RECEIVE ROOFING IN ACCORDANCE WITH MEMBRANE ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
A. UNROLL ROOFING MEMBRANE AND ALLOW TO RELAX BEFORE INSTALLING (MINIMUM 15-30 MINUTES, COLDER TEMPERATURES MIGHT REQUIRE LONGER RELAXATION TIMES).
B. INSTALL SHEET IN ACCORDANCE WITH ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.105 ACCURATELY ALIGN ROOFING MEMBRANE AND MAINTAIN UNIFORM SIDE AND END LAPS OF MINIMUM DIMENSIONS REQUIRED BY MANUFACTURER.

3.106 ALIGN SHEET END LAPS OF CONSECUTIVE MEMBRANES. THE END LAPS WILL BE STRIPPED IN WITH MINIMUM 8-INCH JM TPO REINFORCED COVER STRIP PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.107 SELF-ADHERE MEMBRANE TO APPROVED SUBSTRATE PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
A. KEEP ALL FLAMMABLE MATERIALS AWAY WHILE PEELING THE RELEASE LINER.
B. ADJUST SPEED AND TENSION ON MEMBRANE TO AVOID WINKLES IN THE MATERIAL.
C. BROOM MEMBRANE IN ONCE BOTH SIDES ARE DOWN TO PROMOTE ADHESION AND ASSIST IN REMOVING AIR POCKETS.
D. ROLL-IN ADHERED MEMBRANE WITH 100LB SPLIT ROLLER COMPLETELY.

3.108 MECHANICALLY FASTEN ROOFING MEMBRANE SECURELY AT TERMINATIONS, PENETRATIONS, AND PERIMETER OF ROOFING.

3.109 APPLY ROOFING MEMBRANE WITH SIDE LAPS SHINGLED WITH ROOF SLOPE, WHERE POSSIBLE.

3.110 SEAMS: CLEAN SEAM AREAS, OVERLAP ROOFING MEMBRANE, AND HOT-AIR WELD SIDE LAPS OF ROOFING MEMBRANE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS TO ENSURE A WATERTIGHT SEAM INSTALLATION.
A. TEST LAP EDGES WITH PROBE TO VERIFY SEAM WELD CONTINUITY. APPLY LAP SEALANT TO SEAL CUT EDGES OF ROOFING MEMBRANE.
B. VERIFY FIELD STRENGTH OF SEAMS A MINIMUM OF TWICE DAILY AND REPAIR SEAM SAMPLE AREAS.
i. REMOVE AND REPAIR ANY UNSATISFACTORY SECTIONS BEFORE PROCEEDING WITH INSTALLATION.
C. END LAPS ARE SEAMED BY STRIPPING WITH 8-INCH REINFORCED COVER STRIP FOLLOWING STANDARD PRACTICES.
D. REPAIR TEARS, VOIDS, AND INCORRECTLY LAPPED SEAMS IN ROOFING MEMBRANE THAT DO NOT MEET REQUIREMENTS.

3.111 SPREAD SEALANT OR MASTIC BEAD OVER DECK DRAIN FLANGE AT DECK DRAINS AND SECURELY SEAL ROOFING MEMBRANE IN PLACE WITH CLAMPING RING.

3.112 INSTALL ROOFING MEMBRANE AND AUXILIARY MATERIALS TO TIE INTO EXISTING ROOFING.

BASE FLASHING INSTALLATION

3.113 INSTALL SHEET FLASHINGS AND PREFORMED FLASHING ACCESSORIES AND ADHERE TO SUBSTRATES PER MEMBRANE ROOFING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.

3.114 APPLY SOLVENT-BASED BONDING ADHESIVE AT REQUIRED RATE AND ALLOW TO PARTIALLY DRY. DO NOT APPLY BONDING ADHESIVE TO SEAM AREA OF FLASHING.

3.115 APPLY WATER-BASED BONDING ADHESIVE IN TWO-SIDED APPLICATION, AT REQUIRED RATE, AND ALLOW TO PARTIALLY DRY. DO NOT APPLY BONDING ADHESIVE TO SEAM AREA OF FLASHING.

3.116 SELF-ADHERE MEMBRANE TO SMOOTH APPROVED SUBSTRATES, WHEN SUBSTR

SECTION 07 65 00 / FLASHING

SUBMIT SHOP DRAWINGS COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION. DRAWINGS SHALL INDICATE TYPE OF MATERIAL, GAUGE, DIMENSIONS, FASTENING AND ANCHORING METHODS, JOINTS, AND PROVISIONS OF EXPANSION AND CONTRACTION

1.1 STANDARDS: QUALITY, PROCEDURES AND METHODS RECOMMENDED BY SMACNA ARCHITECTURAL SHEET METAL MANUAL.

1.2 COORDINATE TRADE JURISDICTION WITH RESPECT TO INSTALLING SHEET METAL ITEMS IN CONJUNCTION WITH THE ROOFING. REFER TO MEMBRANE ROOFING SECTION OR ROOFING MATERIAL SECTIONS FOR INSTALLATION PROCEDURES FOR ROOFING RELATED ITEMS.

1.3 PROVIDE THE SHEET METAL ITEMS IN SUFFICIENT TIME TO AVOID DELAYS TO THE CONSTRUCTION PROGRESS.

1.4 INVESTIGATE THE REQUIREMENTS OF THE ROOFING MANUFACTURER AS RELATED TO SHEET METAL ITEMS. QUALITY AND INSTALLATION SHALL CONFORM TO THE ROOFING MANUFACTURER'S REQUIREMENTS, TO PERMIT THE ISSUANCE OF THE REQUIRED GUARANTEES.

1.5 TO BE PAINTED IN FIELD.

MATERIALS

2.1 GALVANIZED SHEET METAL: ASTM A 525, GAUGES AS INDICATED (24-GAUGE MINIMUM). SOLDER: ASTM B 32, 50% TIN AND 50% LEAD, USED WITH ROSIN FLUX.

2.2 PLASTIC CEMENT: FS SS C 153, TYPE 1.

2.3 SEALANT: ASTM C 920 TYPE M, GRADE NS, CLASS 25, USE NT,M,A,O.

2.4 REGLETS 8 GOUNTERFLASHING: AS MANUFACTURED BY FRY REGLET CORPORATION, TYPE ST, MA, CO, SM.

2.5 SOFFIT LOUVER STRIPS: AS MANUFACTURED BY AMPCOR, ANDERSON METAL PRODUCTS, INC., TAYLORSVILLE, MISSISSIPPI, TYPE SAL 8, 2 3/4" WIDTH.

2.6 NAILS, SCREWS, RIVETS: SAME MATERIAL AS FLASHING SHEET, OR AS RECOMMENDED BY MANUFACTURER OF FLASHING SHEET.

2.7 CLEATS: METAL AND GAUGE AS SHEETS BEING ANCHORED, 2" WIDE, PUNCHED FOR 2 ANCHORS.

2.8 ROOFING FELT: ASTM D 226, 15 POUND TYPE OR 30 POUND TYPE.

2.9 BITUMINOUS COATING: FS TT C 494 OR SSPC PAINT 12, DRY FILM 15 MILS PER COAT.

EXECUTION

3.1 SURFACES TO RECEIVE SHEET METAL SHALL BE SOUND, CLEAN, DRY, AND FREE FROM PROJECTIONS OR OTHER DEFECTS THAT WOULD AFFECT THE APPLICATION. REPORT ANY UNSATISFACTORY SURFACES TO THE ARCHITECT.

3.2 WHERE DISSIMILAR MATERIALS ABUT, PROVIDE PROPER SEPARATION OR PROTECTION TO MINIMIZE THE POSSIBILITY OF GALVANIC ACTION.

3.3 PROVIDE FOR THERMAL EXPANSION OF RUNNING TRIM, FLASHING, EXPANSION JOINTS, AND OTHER ITEMS EXPOSED FOR MORE THAN 15 FEET CONTINUOUS LENGTH. MAINTAIN A WATERTIGHT INSTALLATION AT EXPANSION SEAMS. LOCATE EXPANSION SEAMS AS SHOWN, OR IF NOT SHOWN, AT THE FOLLOWING MAXIMUM SPACING FOR EACH GENERAL FLASHING USE:

3.4 FLASHING, EXPANSION JOINTS, GRAVEL STOPS, AND TRIM: AT 10 FOOT INTERVALS, AND 24" ON EACH SIDE OF GORNERS AND INTERSEGTIONS.

3.5 SEALANT TYPE EXPANSION JOINTS: WHERE SEALANT FILLED EXPANSION JOINTS ARE USED, EMBED THE HOOKED FLANGES OF THE JOINT MEMBERS NOT LESS THAN 1" INTO THE SEALANT. FORM JOINTS TO COMPLETELY CONCEAL THE SEALANT. WHEN AMBIENT TEMPERATURE IS MODERATE AT THE TIME OF INSTALLATION (400 TO TOO F.), SET JOINT MEMBERS FOR 50% MOVEMENT EITHER WAY. ADJUST SETTING PROPORTIONATELY FOR INSTALLATION AT HIGHER AMBIENT TEMPERATURES. DO NOT INSTALL SEALANT TYPE JOINTS AT TEMPERATURES BELOW 400 F. INSTALLATION OF SEALANT IS SPECIFIED IN SECTION 07900.

3.6 FABRICATE AND INSTALL SHEET METAL WITH LINES, ARISE, AND ANGLES SHARP AND TRIM, AND PLANE SURFACES FREE FROM OBJECTIONAL WAVE, WARP OR BUCKLE. HEM EXPOSED EDGES TO FORM A 1/2" WIDE HEM ON THE SIDE CONCEALED FROM VIEW.

3.7 FORMING, ANGHORING, EXPANSION AND CONTRACTION DETAILS, SHALL CONFORM TO THE GURRENT EDITION OF THE SMACNA MANUAL.

SOLDERING

4.1 EXGEPT WHERE OTHER METHODS OF JOINING ARE INDICATED OR SPECIFIED, SOLDER JOINTS, AND CONNECTIONS OF SHEET METAL WORK.

4.2 REMOVE GREASE AND DIRT FROM METAL SURFACES TO BE JOINED.

4.3 REMOVE FLUX RESIDUE BY SCRUBBING, NEUTRALIZING WITH AMMONIA OR A 5 10% SOLUTION OF WASHING SODA AND FOLLOWED BY A GLEAR WATER RINSE.

4.4 ASSEMBLE PARTS AND SOLDER USING REGULAR NON-CORROSIVE ROSIN FLUX. HEAT METAL THOROUGHLY, TO COMPLETELY SWEAT SOLDER THROUGH FULL CONTACT AREA.

REGLETS

5.1 PROVIDE WATERTIGHT REGLETS IN MASONRY, CONCRETE OR STUCCO TO REGEIVE CAP FLASHINGS.

COUNTERFLASHING

6.1 PROVIDE METAL COUNTERFLASHING AT TOP EDGES OF BUILT-UP BASE FLASHINGS AND AT OTHER LOCATIONS INDICATED.

6.2 FORM FLASHING IN 8 OR 10 FOOT LENGTHS, EXCEPT WHERE SHORTER PIECES ARE REQUIRED; LAP END JOINTS A MINIMUM OF 3". DO NOT SOLDER OR WELD JOINTS. MAKE FLASHING CONTINUOUS AT ANGLES. COUNTERFLASHING SHALL OVERLAP BASE FLASHING A MINIMUM OF 4", UNLESS OTHERWISE INDICATED.

6.3 WHERE COUNTERF LASHING TERMINATES IN REGLETS, FASTEN FLASHING WITH LEAD WEDGES EVERY 12", FILL REGL ETS CONTINUOUSLY WITH SEALING COMPOUND AS HEREINBEFORE SPECIFIED.WH ERE PREFABRICATED COUNTERF LASHING AND REGLET SYSTEM IS USED, FORM THE UPPER EDGE OF COUNTERFLASHING WITH AN APPROVED SNAP LOCK FLANGE TO ENGAGE THE REGLET RECEIVER AND TO PROVIDE A SPRING ACTION AT BOTTOM EDGE AGAINST THE BUILT-UP FLASHING.

COPINGS AND METAL CAP FLASHING

7.1 COVER TOP OF PARAPET WALLS WHERE INDICATED WITH 24 GAUGE GALVANIZED METAL COPING FORMED TO DESIGN SHOWN. BEFORE APPLYING METAL, COVER TOP OF WALL OR WOOD BLOCKING WITH ASPHALT FELT. FABRICATE THE CROSS-JOINTS BETWEEN COPING SHEETS WITH A 3/16" EXPANSION JOINT BETWEEN SHEETS AND A 6" WIDE BACK UP PLATE OR COVER PLATE FORMED TO PROFILE OF COPING. FILL SPACE BETWEEN COPING AND PLATES WITH SYNTHETIC RUBBER SEALANT. THE METHOD OF FORMING CROSS-JOINTS IN COPING SHALL BE IN ACCORDANCE WITH DETAILS ON PLATE 76, CHART 12, J2, J4, J5 OF THE SMACNA ARCHITECTURAL SHEET METAL MANUAL.

7.2 EXTEND FRONT EDGE OF COPING COVERING DOWN OVER THE LOCK INTO A PREVIOUSLY PLACED CONTINUOUS EDGE STRIP. SECURE EDGE STRIPS WITH NAILS SPACED 12" APART. JOIN REAR EDGE OF GOPING COVERING TO ADJACENT FLASHINGS AS INDICATED. MITER CORNERS OF COPING, SEAM AND SEAL WITH SOLDER.

SECTION 07 72 00 / ROOF ACCESSORIES

1.1 SPECIFICATION IS BASED ON PRODUCTS MANUFACTURED BY ROOF PRODUCTS, INC.

1.2 COMPARABLE PRODUCTS MEETING OR EXCEEDING SPECIFICATION REQUIREMENTS AS MANUFACTURED BY THYBAR CORP OR ROOF PRODUCTS AND SYSTEMS CORP, ARE ACCEPTABLE.

ROOF CURBS (STRUCTURAL)

2.1 CURBS SHALL BE MODEL RPC-1 OF BOX SE ATION DESIGN, 18-GAUGE GALVANIZED STEEL CONSTRUCTION, CONTINUOUS MITERED AND WELDED CORNER SEAMS, INTEGRAL BASE PLATE. FACTORY INSTALLED WOOD NAILER, INSULATED WITH 1 1/2" THICK RIGID FIBERGLASS BOARD INSULATION. EQUIPMENT SUPPORTS.

2.2 EQUIPMENT SUPPORTS SHALL BE MODEL RPES-1 OF MONOLITHIC CONSTRUCTION, 18-GAU E GALVANIZED STEEL, CONTINUOUS MITERED AND WELDED CORNER SEAMS, INTEGRAL BASE PLATE, AND FACTORY INSTALLED 2 X 4 WOOD NAILER, AND 18-GAUGE GALVANIZED STEEL COUNTER FLASHING.

EXPANSION JOINT CURBS (SINGLE SIDE)

3.1 CURBS SHALL BE MODEL RPEJ-1 10" HIGH, MONOLITHIC CONSTRUCTED OF 20-GAUGE GALVANIZED STEEL WITH WELDED COMPONENTS, FULL MITERED CORNERS, FACTORY INSTALLED 1/2" THICK RIGID FIBERGLASS BOARD INSULATION, ATTACH ED PRESSURE-TREATED WOOD 2X2 NAILER AND 2" MOUNTING FLANGE.

PIPE SEAL

4.1 PIPE SEALS SHALL BE 3" OR 6" CONSISTING OF A SPUN ALUMINUM BASE HAVING A MINIMUM 5" ROOF SURFAGE FLANGE, A STEPPED PVC BOOT TO BE SECURED TO THE BASE AND THE PIPE WITH ADJUSTABLE STAINLESS-STEEL CLAMPS AS FURNISHED. USE AT ROOF PIPE PENETRATIONS UP TO 8" OD, EXCEPT PLUMBING STALKS.

PIPE CURB ASSEMBLIES (VERTICAL)

5.1 PIPE CURB ASSEMBLIES SHALL BE MODEL RPVP-3 WITH CURB CONSTRUGTED OF 18-GAUGE GALVANIZED STEEL WITH CONTINUOUS WELDED CORNER SEAMS, FACTORY INSTALLED 2X2 PRESSURE-TREATED WOOD NAILER AND SHALL BE INSULATED WITH 1 1/2" THICK RIGID FIBERGLASS BOARD INSULATION. COUNTER FLASHING CAP SHALL BE 20-GAUGE GALVANIZED STEEL INCLUDING GRADUATED STEP PVC BOOTS, ADJUSTABLE STAINLESS STEEL CLAM PS AND CAP FASTENING SCREWS. EACH ASSEMBLY TO INCLUDE CURB, CAP, BOOTS AND CLAMP.

SECTION 07 92 00 / JOINT SEALANTS

GUARANTEE

1.1 CAULKING AND SEALANT SHALL RECEIVE A WRITTEN 5 YEAR GUARANTEE.

JOB CONDITIONS

2.1 DO NOT APPLY SEALANTS IN TEMPERATURES OR ON MATERIALS BELOW 40° F. DO NOT APPLY SEALANTS TO SURFACES THAT ARE WET. CAULK JOINTS BEFORE FINAL COAT OF PAINT OR BEFORE APPLICATION OF COLOR OR STAIN WATERPROOFING COMPOUNDS.

MATERIALS

3.1 SEALANT SHALL BE SILICONE BASE CONFORMING TO FS TT S 001543, TYPE II, AND CLASS A, AS MANUFACTURED BY DOW CORNING CORPORATION OR GENERAL ELECTRIC COMPANY. COLOR OF SEALANT SHALL BE AS SELECTED. SEALANTS SHALL CONFORM TO THE FOLLOWING:
A. TRAFFIC JOINTS AND HORIZONTAL JOINTS: ASTM TYPE S GRADE P, CLASS 25, USE T

3.2 OTHER JOINTS: ASTM TYPE S, GRADE NS, CLASS 25, USE NT, M, A, O

3.3 SEALANT SHALL BE ACRYLIC LATEX BASE CONFORMING TO ASTM C834. COLORS SHALL BE AS SELECTED.

3.4 SEALANTS USED ON EXTERIOR OF PROJECT ARE TO BE SINGLE COMPONENT POLYURETHANE BASE, INCLUDING INSIDE SURFACE OF EXTERIOR JOINTS.

3.5 SEALANTS USED ON INTERIOR OF PROJECT ARE TO BE ACRYLIC LATEX BASE.

3.6 SEALANTS IN FOOD SERVICE, FOOD PREPARATION AND FOOD STORAGE AREAS ARE TO BE SILICONE OR POLYURETHANE BASE.

3.7 PRIMER: OF A TYPE COMPATIBLE WITH EACH SPECIFIC SEALANT AS RECOMMENDED BY THE SEALANT MANUFACTURER. THE PRIMER SHALL HAVE BEEN TESTED FOR NON-STAINING CHARACTERISTICS.

3.8 BACK UP MATERIALS AND PREFORMED JOINT FILLERS SHALL BE NON-STAINING, COMPATIBLE WITH SEALANT AND PRIMER, AND OF A RESILIENT NATURE, SUCH AS CLOSED CELL POLYETHYLENE ROD, GLOSED CELL URETHANE OR NEOPRENE ROD, OR ELASTOMERIC TUBING OR ROD (NEOPRENE, BUTYL, OR EPDM). MATERIALS IMPREGNATED WITH OIL, BITUMEN OR SIMILAR MATERIALS SHALL NOT BE USED. SIZE AND SHAPE SHALL BE AS RECOMMENDED BY SEALANT MANUFACTURER. SEALANT SHALL NOT ADHERE TO BACK UP MATERIAL.

3.9 BOND BREAKERS (WHERE REQUIRED:) SHALL BE POLYETHYLENE TAPE AS RECOMMENDED BY MANUFACTURER OF SEALANT.

3.10 SOLVENTS, CLEANING AGENTS AND ACCESSORY MATERIALS SHALL BE AS RECOMMENDED BY SEALANT MANUFACTURER.

EXECUTION

4.1 APPLY SEALANT UNDER PRESSURE WITH HAND OR POWER ACTUATED GUN. GUN SHALL HAVE NOZZLE OF PROPER SIZE AND PROVIDE SUFFICIENT PRESSURE TO COMPLETELY FILL JOINTS AS DESIGNED. JOINT SURFACES SHALL BE TOOLED TO PROVIDE THE CONTOUR AS INDICATED.

PREPARATION:

5.1 THOROUGHLY CLEAN JOINTS, REMOVING FOREIGN MATTER SUCH AS DUST, OIL, GREASE, WATER, SURFACE DIRT AND FROST. SEALANT MUST BE APPLIED TO THE BASE SURFACE. PREVIOUSLY APPLIED PAINT OR PRIMER MUST BE ENTIRELY REMOVED.

5.2 POROUS MATERIALS SUCH AS CONCRETE OR MASONRY SHALL BE CLEANED WHERE NECESSARY BY GRINDING, BLAST CLEANING, MECHANICAL ABRADING, ACID WASHING OR COMBINATION OF THESE METHODS TO PROVIDE A CLEAN, SOUND BASE SURFACE FOR SEALANT ADHESION. LAITANCE SHALL BE REMOVED BY ACID WASHING, GRINDING OR MECHANICAL ABRADING. FORM OILS SHALL BE REMOVED BY BLAST GLEANING.

5.3 LOOSE PARTICLES PRESENT OR RESULTING FROM GRINDING, ABRADING OR BLAST CLEANING SHALL BE REMOVED BY BLOWING OUT JOINTS WITH OIL FREE COMPRESSED AIR OR VACUUMING PRIOR TO APPLICATION OF PRIMER OR SEALANT.

5.4 NON-POROUS SURFAGES, SUCH AS METAL AND GLASS, SHALL BE CLEANED EITHER MECHANICALLY OR CHEMICALLY. PROTECTIVE COATINGS ON METALLIC SURFACES SHALL BE REMOVED BY A SOLVENT THAT LEAVES NO RESIDUE. SOLVENT SHALL BE USED WITH CLEAN CLOTHS. DO NOT ALLOW SOLVENT TO AIR DRY WITHOUT WIPING.

5.5 FOR JOINTS IN CONCRETE OR MASONRY: DEPTH OF THE SEALANT MAY BE EOUAL TO THE WIDTH IN JOINTS UP TO 1/4" WIDE. FOR JOINTS 1/2" TO 1" WIDE: DEPTH SHALL BE 1/2". FOR EXPANSION AND OTHER JOINTS 1" TO 2" WIDE, DEPTH SHALL NOT BE GREATER THAN 1/2 THE APPLIED SEALANT WIDTH. FOR JOINTS EXCEEDING 2" IN WIDTH, DEPTH SHALL BE AS DIRECTED BY SEALANT MANUFACTURER.

5.6 FOR JOINTS IN METAL, GLASS, AND OTHER NON-POROUS SURFACES: SEALANT DEPTH SHALL BE A MINIMUM OF 1/2 THE APPLIED SEALANT WIDTH AND SHALL NOT EXCEED THE SEALANT WIDTH.

5.7 JOINTS TO RECEIVE SEALANT, BACK UP MATERIAL OR PRE-FORMED JOINT FILLER SHALL BE CLEANED, RAKED TO FULL WIDTH AND DEPTH AS REQUIRED. JOINTS SHALL BE OF SUFFICIENT WIDTH AND DEPTH TO ACCOMMODATE SPECIFIED BACK UP MATERIAL OR PREFORMED JOINT FILLER AND SEALANT.

5.8 APPLICATION: INSTALL BACK UP MATERIAL OR JOINT FILLER, OF TYPE AND SIZE SPECIFIED, AT PROPER DEPTH TO PROVIDE SEALANT DIMENSIONS. BACK UP MATERIAL SHALL BE OF SUITABLE SIZE AND SHAPE; AND COMPRESSED 25% TO 50% TO FIT JOINTS AS REQUIRED. SEALANT SHALL NOT BE APPLIED WITHOUT BACK UP MATERIAL OR BOND BREAKER STRIP. WHEN USING BACK UP TUBE AVOID LENGTHWISE STRETCHING.

5.9 APPLY MASKING TAPE, WHERE REQUIRED, IN CONTINUOUS STRIPS IN ALIGNMENT WITH JOINT EDGE.

5.10 PRIME SURFACES WITH PRIMER WHERE RECOMMENDED BY MANUFACTURER. FOLLOW MANUFACTURER'S INSTRUCTIONS REGARDING MIXING, SURFACE PREPARATION, PRIMING, APPLICATION LIFE, AND APPLICATION PROCEDURE.

5.11 CLEAN ADJACENT SURFACES OF SEALANT AS WORK PROGRESSES. USE SOLVENT OR CLEANING AGENT AS RECOMMENDED BY MANUFACTURER.

SCHEDULE

6.1 PROVIDE CAULKING AT FOLLOWING LOCATIONS INTERIOR AND EXTERIOR: (THIS SGHEDULE IS NOT TO BE CONSTRUED TO BE COMPLETE. PROVIDE CAULKING AT OTHER AREAS AS REQUIRED.)
A. CONTROL JOINTS IN MASONRY AND CONCRETE SURFACES.
B. PERIMETER OF WINDOW AND DOOR FRAMES.
C. PERIMETER OF LOUVERS AND GRILLES.
D. PERIMETER OF ALUMINUM SECTIONS AND BELOW SILL MEMBERS.
E. TOP EDGE OF REGLET AND COUNTER FLASHING ASSEMBLIES.
F. TOP OF EDGE OF ELASTOMERIC FLOOR FINISH AND CONCRETE CURBS.
G. AT INTERIOR PARTITIONS BAULKING IS REQUIRED AT JOINTS BETWEEN DISSIMILAR MATERIALS WHERE THE JOINT WIDTH EXCEEDS 1/16".

SANITARY CAULKING

7.1 TYPICAL JOINTS TO BE CAULKED ARE AS FOLLOWS: JUNCTURE OF WALL PANELS WITH FLOOR OR BASE; JUNCTURE OF EXHAUST HOODS WITH WALLS; JUNCTURE OF DOOR JAMBS OR JAMB COVERS WITH WALLS; JUNCTURE OF FIXTURE AND EQUIPMENT BASES AND LEGS WITH FLOOR AND WALL; JUNCTURE OF CONCRETE CURBS TO WALLS, AROUND PLUMBING FIXTURES.

7.2 CONTRACTOR SHALL BE RESPONSIBLE FOR ACCEPTANCE OF CAULKING UNDER THIS DIVISION BY THE HEALTH DEPARTMENT.

SECTION 08 71 00 / DOOR HARDWARE

PART 1 GENERAL

1.1 SUMMARY
A. SECTION INCLUDES: HARDWARE AND RELATED ITEMS FOR INTERIOR AND EXTERIOR DOORS, OTHER THAN SPECIFIED IN SPECIFIC DOOR SECTIONS.

SYSTEM DESCRIPTION

1.2 PERFORMANCE REQUIREMENTS: THE MANUFACTURER OR AUTHORIZED DISTRIBUTOR SHALL CONFIRM THAT THERE IS AN ESTABLISHED LOCAL AGENCY WHICH STOCKS A FULL COMPLEMENT OF PARTS AND OFFERS SERVICE DURING NORMAL WORKING HOURS FOR THE FINISH HARDWARE TO BE FURNISHED AND THAT THE AGENCY WILL SUPPLY PARTS WITHOUT DELAY AND AT REASONABLE COST.

1.3 FURNISH HARDWARE ITEMS OF PROPER DESIGN FOR USE IN DOORS AND FRAMES OF THE THICKNESSES, PROFILE, SECURITY AND SIMILAR REQUIREMENTS INDICATED, AS NECESSARY FOR PROPER INSTALLATION AND FUNCTION, REGARDLESS OF OMISSIONS OR CONFLICTS IN THE INFORMATION IN THE CONTRACT DOCUMENTS.

SUBMITTALS

1.4 SUBMIT SHOP DRAWINGS AND PRODUCT DATA OF EACH TYPE OF HARDWARE REQUIRED FOR PROJECT, IN ACCORDANCE WITH SECTION 01 33 00. INDICATE THE FOLLOWING:
A. STYLE AND FINISH.
B. LOCATIONS AND MOUNTING HEIGHTS OF EACH ITEM OF HARDWARE. USE ESTABLISHED NUMBERING SYSTEM.
C. INCLUDE A COMPLETE LISTING OF EQUIPMENT AND MATERIALS INCLUDING MANUFACTURER, CATALOG NUMBER, FINISH, DIAGRAMS, (INCLUDING CUT-SHEETS), SCHEMATICS AND ALL OTHER PERTINENT DATA.

1.5 TEMPLATES: SUPPLY TO DOOR AND FRAME MANUFACTURER(S) TO ENABLE PROPER AND ACCURATE SIZING AND LOCATIONS OF CUTOUTS FOR HARDWARE.

1.6 CERTIFICATION:
A. AT THE COMPLETION OF INSTALLATION, CERTIFY THAT MATERIAL IS PROPERLY INSTALLED ACCORDING TO MANUFACTURERS PRINTED INSTRUCTIONS.
B. SUBMIT CERTIFICATION THAT HARDWARE FOR FIRE RATED DOORS (INCLUDING DOORS AND FRAMES AS A UNIT) WILL COMPLY WITH UL 10C (POSITIVE PRESSURE TESTING.

1.7 OPERATING AND MAINTENANCE DATA: SUBMIT IN ACCORDANCE WITH SECTION 01 77 00. PROVIDE OWNER WITH MANUFACTURER'S PARTS LIST AND MAINTENANCE INSTRUCTIONS FOR EACH TYPE OF HARDWARE SUPPLIED AND NECESSARY WRENCHES AND TOOLS REQUIRED FOR PROPER MAINTENANCE OF HARDWARE.

QUALITY ASSURANCE

1.8 STANDARDS: COMPLY WITH THE FOLLOWING:
A. ANSI/NFPA 80 - FIRE DOORS AND WINDOWS.
B. UL STANDARD 305 - PANIC HARDWARE.

1.9 REGULATORY REQUIREMENTS:
A. COMPLY WITH THE FOLLOWING:
i. ANSI A117.1, 2003 "ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES."
ii. PUBLIC LAW 101-336 "THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA).
iii. ADA ACCESSIBILITY GUIDELINES (ADAAG).
iv. THE ARIZONANS WITH DISABILITIES ACT OF 1992 ADMINISTRATIVE RULES (AZDAAG)

1.10 HARDWARE LISTED OR FURNISHED SHALL MEET REQUIREMENTS OF FEDERAL, STATE AND LOCAL CODES HAVING JURISDICTION.

1.11 ANY ITEM FURNISHED OR INSTALLED THAT DOES NOT MEET CODE REQUIREMENTS SHALL BE REMOVED AND PROPER ITEMS SUBSTITUTED AT NO ADDITIONAL COST OR EXPENSE TO THE OWNER.

1.12 PROVIDE HARDWARE FOR FIRE-RATED OPENINGS IN COMPLIANCE WITH A.I.A. (NBFU) PAMPHLET NO .80 AND NFPA STANDARDS NO. 80 AND NO. 101 AND UL 10(C) (POSITIVE PRESSURE TESTING). THIS REQUIREMENT SHALL TAKE PRECEDENCE OVER OTHER REQUIREMENTS FOR SUCH HARDWARE.

1.13 PROVIDE HARDWARE WHICH HAS BEEN TESTED AND LISTED BY U.L. FOR THE TYPES AND SIZES OF DOORS REQUIRED, AND WHICH COMPLIES WITH THE REQUIREMENTS OF THE DOORS AND DOOR FRAME LABELS.

1.14 PROVIDE 3-POINT LATCHES AT ALUMINUM DOUBLE DOORS USED AS ENTRANCE, NOT EGRESS EXIT.

1.15 HARDWARE ON ALL DOORS LEADING TO OR FROM ELECTRICAL ROOMS, MECHANICAL ROOMS, SERVICE STAIRS, DOCK AREAS AND THE LIKE WHICH REPRESENT A HAZARD TO THE BLIND, SHALL HAVE KNURLING OR ABRASIVE COATING ON THE DOOR LEVER, HANDLE, OR BAR WHICH WILL ALERT THE USER TO POTENTIAL PERILS PRESENT. THE HARDWARE PRODUCT AND INSTALLATION SHALL SATISFY ALL GOVERNING HANDICAPPED CODES.

1.16 SUPPLIER QUALIFICATIONS:
A. EMPLOY AN AHC MEMBER OF THE DHI.
B. FACTORY AUTHORIZED STOCKING DISTRIBUTOR OF THE APPROVED ITEMS.
C. HOLDER OF LEGALLY REQUIRED LICENSES.

1.17 MANUFACTURER QUALIFICATIONS: 5 YEARS' EXPERIENCE IN MANUFACTURE OF COMPARABLE SYSTEMS.

DELIVERY, STORAGE AND HANDLING

1.18 PACKING AND SHIPPING: PACKAGE EACH ITEM OF HARDWARE IN ORIGINAL AND INDIVIDUAL CONTAINERS, COMPLETE WITH ALL NECESSARY FASTENINGS, KEYS, INSTRUCTIONS, AND TEMPLATES FOR SPOTTING MORTISING TOOLS.
A. MARK EACH CONTAINER WITH ITS ITEM NUMBER CORRESPONDING TO THE ITEM NUMBER ON THE FINISH HARDWARE SCHEDULE.
B. CONTAINERS HOLDING LOCKS SHALL SHOW THE FOLLOWING CORRESPONDING TO THAT SHOWN ON THE FINISH HARDWARE SCHEDULE:
i. HEADING NUMBER
ii. DOOR NUMBER
iii. HAND OF DOOR (WHEN REQUIRED)
iv. KEYING SYMBOL (DEVELOPED BY OWNER)
v. A TYPEWRITTEN SCHEDULE IN DHI FORMAT CONFORMING WITH THE APPROVED SCHEDULE SHALL ACCOMPANY EACH SHIPMENT.

1.19 WHEN HARDWARE MUST BE INSTALLED AT THE FACTORY, THE HARDWARE SUPPLIER SHALL SEND ALL SUCH NEEDED ITEMS TO THE RESPECTIVE SUPPLIER FOR THEIR USE IN INSTALLATION. THE COST OF THIS SHIPPING REQUIREMENT SHALL BE BORNE BY THE HARDWARE SUPPLIER.

1.20 ACCEPTANCE AT SITE: UPON DELIVERY OF THE FINISH HARDWARE TO THE JOB SITE, CHECK IN AND SIGN FOR ALL MATERIAL DELIVERED AND THEREAFTER BE RESPONSIBLE FOR SAME.

1.21 STORAGE AND PROTECTION: PROVIDE A SECURED AREA WITH SUFFICIENT SPACE AND SHELVING IN WHICH TO STORE AND INVENTORY ALL MATERIALS UNDER LOCK AND KEY. PROTECT HARDWARE FROM DAMAGE AT ALL TIMES.

WARRANTY

1.22 WARRANTY HARDWARE AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP.REPAIR, REPLACE OR OTHERWISE CORRECT DEFICIENT MATERIALS AT NO ADDITIONAL COST TO OWNER.
A. LOCKSETS: TEN-YEAR WARRANTY.
B. CLOSERS: THIRTY-YEAR WARRANTY.
C. EXIT DEVICE THREE-YEAR WARRANTY

PART 2 PRODUCTS

MANUFACTURERS

2.1 PRODUCT REQUIREMENTS OF THE SPECIFIED PRODUCT AS MANUFACTURED BY THE FOLLOWING.
A. BUTT HINGES: IVES (IVE) NO SUBSTITUTION.
B. EXIT DEVICES: VON DUPRIN (VON) NO SUBSTITUTION.
C. LOCKSETS: SCHLAGE (SCH) NO SUBSTITUTION.
D. CORE/CYLINDER: SCHLAGE (SCH) NO SUBSTITUTION.
E. DOOR CLOSERS: LCN (LCN) NO SUBSTITUTION.
F. THRESHOLDS, DOOR BOTTOMS, WEATHERSTRIPPING: ZERO (ZER) NO SUBSTITUTION.
G. STOPS, KICKPLATES, PULLS, PUSH PLATES: IVES (IVE) NO SUBSTITUTION.
H. OVERHEAD STOPS: GLYNN JOHNSON (GJ) NO SUBSTITUTION.
I. POCKET DOOR SYSTEM: CAVITY SLIDERS (CS) NO SUBSTITUTION.

2.2 OBTAIN ALL SWINGING DOOR FINISHED HARDWARE FROM ALLEGION MANUFACTURES LISTED ABOVE.

HARDWARE

2.3 GENERAL:
A. PROVIDE ITEMS AS LISTED IN SCHEDULE COMPLETE TO FUNCTION AS INTENDED.
B. MANUFACTURE HARDWARE SUPPLIED FOR METAL DOORS OR JAMBS TO TEMPLATE AND SECURE WITH MACHINE SCREWS.
C. WHERE CYLINDRICAL LOCKS ARE USED IN HOLLOW METAL DOORS, FURNISH LOCK REINFORCING IN THE DOOR AT THE TIME OF MANUFACTURE.
D. FURNISH FINISH HARDWARE WITH ALL NECESSARY SCREWS, BOLTS, OR OTHER FASTENINGS OF SUITABLE; SIZE AND TYPE TO ANCHOR THE HARDWARE IN POSITION FOR HEAVY USE AND LONG LIFE, AND OF COMPATIBLE MATERIAL AND FINISH.
E. FURNISH FASTENINGS WITH ANCHORS ACCORDING TO THE MATERIAL TO WHICH IT IS APPLIED, AND AS RECOMMENDED BY THE MANUFACTURER.
F. FURNISH HARDWARE FASTENED TO CONCRETE WITH MACHINE SCREWS AND TAMPINS.
G. FASTEN CLOSERS ON WOOD OR MINERAL CORE DOORS WITH FASTENERS RECOMMENDED BY THE CLOSER MANUFACTURER FOR THE APPARENT INTENDED USE OF THE DEVICE, UNLESS THE INSTALLATION IS IN AN OPENING REQUIRING UL-RATED HARDWARE IN WHICH CASE SEX NUTS AND BOLTS (APPROVED BY UL) ARE REQUIRED BY UL.

2.4 BUTT HINGES:
A. DETERMINE CORRECT CLEARANCE FROM THE DRAWINGS.
B. PROVIDE NON-REMOVABLE PINS AT OUT SWINGING DOORS.
C. DOORS WITH CLOSERS SHALL HAVE BALL BEARING BUTTS.
D. FLAT BUTTON, TOP AND BOTTOM TIPS REQUIRED.
E. BUTT HINGE LENGTH: AS RECOMMENDED BY MANUFACTURER.
F. NUMBER OF BUTT HINGES REQUIRED: AS RECOMMENDED BY MANUFACTURER.

2.5 DOOR LOCKS: LEVER AS LISTED IN HARDWARE SETS.
A. DESIGN SHALL PERMIT REMOVAL OF CYLINDER WITHOUT REMOVING LOCK FROM DOOR.
B. PROVIDE LOCKS AND LATCHES WITH 2-3/4 INCH (70MM) BACKSET UNLESS OTHERWISE NOTED.
C. PROVIDE STRIKES WITH EXTENDED LIP WHERE REQUIRED TO PROTECT TRIM FROM BEING MARRED BY LATCH BOLT.
D. ANSI 156.2 SERIES 4000 & 1000 GRADE 1.

2.6 DOOR CLOSERS: SERIES
A. SURFACE MOUNTED WITHOUT COVERS, FINISH SPRAYED TO MATCH OTHER HARDWARE.
B. BODIES TO BE CLOSE GRAINED MALLEABLE IRON, WITH 3 SEPARATE CONTROL VALVES (INCLUDING BACKCHECK) ANSI GRADE 1.
C. CLOSER TO BE EQUIPPED WITH SIZE ADJUSTMENT (1 THROUGH 6) IN THE FIELD BY THE INSTALLER.
D. EQUIP CLOSERS MOUNTED ON WOOD OR MINERAL CORE DOORS WITH CONVENTIONAL FASTENERS UNLESS THE MANUFACTURER OF THE CLOSER RECOMMENDS SEX NUTS AND BOLT BECAUSE OF THE APPARENT FREQUENCY USE OF THE CLOSER. IN THE EVENT THE DOOR IS INDICATED TO BE UL-RATED, THE SEX NUTS AND BOLTS SHALL BE UL APPROVED.
E. PROVIDE TYPE AS LISTED IN HARDWARE SETS.

2.7 EXIT DEVICES: SERIES
A. U.L. APPROVED FOR CASUALTY.
B. PROVIDE CYLINDERS AS REQUIRED FOR EXIT DEVICE AND PROPER OPERATION
C. LEVER DESIGN TO MATCH LOCKSETS, TYPES FUNCTIONS AS LISTED IN HARDWARE SETS

2.8 KICK PLATES: SIZE AS LISTED IN HARDWARE STES..050 (3MM) STAINLESS STEEL WITH NO. 4 FINISH, B4E, CS

2.9 OVERHEAD HOLDERS OR STOPS: AS LISTED IN HARDWARE SETS.

2.10 STOPS: WALL STOPS SHALL BE USED WHEREVER POSSIBLE. USE OVERHEAD STOPS WHERE WALL STOPS CANNOT BE USED OR AS LISTED IN HARDWARE SETS. WALLS TO RECEIVE PROPER BACKING FOR WALL BUMPERS AS SPECIFIED IN SECTION 06100 - ROUGH CARPENTRY.

2.11 SILENCERS: AT METAL FRAMES; 3 AT EACH JAMB OF SINGLE DOORS, 2 AT EACH JAMB OF DOUBLE DOORS. NOT REQUIRED ON DOORS HAVING WEATHERSTRIP OR SEALS.

2.12 WEATHERPROOFING, SMOKE SEALS AND DOOR BOTTOMS:
A. CONTINUOUS AT HEAD AND JAMB OF EXTERIOR DOORS; CONTINUOUS SMOKE SEALS AT HEAD AND JAMB OF CORRIDOR DOORS.

2.13 THRESHOLDS: SIZED FOR OPENING; TO MEET HANDICAPPED CONDITIONS. AS LISTED IN HARDWARE SETS.

KEYING

2.14 DOOR LOCKS: KEY ALL LOCKS INTO NEW KEY SYSTEM IN ACCORDANCE WITH OWNER'S INSTRUCTIONS

2.15 SUPPLY 2 KEYS FOR EACH LOCK.

2.16 SUPPLY ADDITIONAL KEYS IN FOLLOWING QUANTITIES:
A. 5 - MAST

PRODUCTS ARE SUBMITTED ON, MATERIAL SUPPLIER TO PROVIDE NEW ELEVATION RISER DIAGRAMS AS PART OF THEIR SUBMITTAL PACKAGE.

SECTION 08 11 00 / METAL DOORS AND FRAMES

1.1 SUBMIT SHOP DRAWINGS COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.

1.2 EXERCISE CARE IN CUTTING OPERATIONS AND PERFORM SUCH OPERATIONS UNDER ADEQUATE SUPERVISION BY COMPETENT MECHANICS SKILLED IN THE APPLICABLE TRADE. OPENINGS SHALL BE NEATLY CUT AND SHALL BE KEPT AS SMALL AS POSSIBLE TO AVOID UNNECESSARY DAMAGE.

HOLLOW METAL FRAMES

2.1 FRAMES SHALL MEET SPECIFIED REQUIREMENTS AND SDI 100 FOR UNIT WELDED FRAMES, AND THE NAMM HOLLOW METAL TECHNICAL AND DESIGN MANUAL.

2.2 FRAMES TO BE PRESSED STEEL TO PROFILE INDICATED, 16-GAUGE (UNLESS OTHERWISE NOTED) COLD ROLLED, PICKLED, ANNEALED STEEL, UNIT TYPE WELDED CONSTRUCTION, WITH ANGLES, MOLDS, RETURNS AND MITERS NEATLY WELDED AND WELD BEADS GROUND SMOOTH. PREPARE FRAMES TO RECEIVE MORTISED TYPE HARDWARE. SPOT WELD REINFORCING PLATES TO INNER SURFACE OF JAMBS AT HINGE, LOCK, LATCH, AND OTHER HARDWARE LOCATIONS.

2.3 HINGE REINFORCEMENTS SHALL BE 10-GAUGE STEEL FOR LIGHTWEIGHT CORE DOORS, 7-GAUGE STEEL FOR OTHERS. OTHER HARDWARE REINFORCEMENTS SHALL CONFORM TO TABLE IV, SDI 100. SPOT WELD 24-GAUGE GALVANIZED STEEL PLASTER GUARDS OVER HARDWARE FROM TEMPLATES FURNISHED TO FRAME MANUFACTURER BY HARDWARE SUPPLIER. PROVIDE REINFORCEMENTS FOR SURFACE APPLIED HARDWARE. PUNCH DOORSTOPS TO RECEIVE RUBBER SILENCERS.

2.4 PROVIDE FRAMES WITH FIXED INSERT ANCHORS WELDED TO FACE AND FLANGE RETURNS 12" DOWN FROM TOP, THEN 24" ON CENTER. PROVIDE FRAMES WITH MINIMUM 18-GAUGE FLOOR CLIPS WELDED TO EACH JAMB, FACE AND FLANGES PUNCHED FOR ANCHORING TO FLOOR. AT DOOR OPENINGS WIDER THAN 42" AND AT MULTIPLE OPENINGS, REINFORCE HEAD MEMBERS FULL LENGTH WITH 12-GAUGE STEEL CHAN NEL. BRACE DOORFRAMES WITH TEMPORARY WOOD OR METAL SPREADERS TO INSURE MAINTAINING SQUARE AND TRUE SHAPES IN SHIPPING.

2.5 PROVIDE FRAMES WITH UL LABELS AS REQUIRED OR AS INDICATED.

2.6 PROVIDE FRAMES WITH LOOSE GLAZING BEADS WITH SCREWS FOR FLUSH COUNTERSUNK INSTALLATION TO RECEIVE GLASS PER SDI 100.

2.7 PRIMING: FRAMES SHALL RECEIVE ONE SHOP COAT OF RUST INHIBITIVE PRIMER. PRIMER SHALL BE SMOOTH SURFACE, READY TO RECEIVE FINISH COATS WHEN INSTALLED. NO RUNS, OVERSPRAY, DUST OR OTHER DEFECTS WILL BE ALLOWED. PRIMER SHALL BE BONDED TO THE METAL SUFFICIENTLY THAT UPON AGING IT WILL NOT CHIP OR FLAKE WHEN SCRAPED THROUGH. WIPE COAT GALVANIZED STEEL IS AN ACCEPTABLE SUBSTITUTION FOR THE SHOP COAT OF PRIMER.

INTERIOR PRE-FINISHED STEEL DOOR FRAMES

3.1 FRAMES SHALL BE OF 18-GAUGE STEEL AS MANUFACTURED BY TIMELY INDUSTRIES, (818-492-3500) WITH ALUMINUM CASINGS #TA-23. PROVIDE FRAMES AND CASINGS WITH FACTORY-FINISHED COLOR AS SELECTED BY ARCHITECT.

3.2 PRE-FINISHED STEEL DOOR FRAMES SHALL BE FORMED FROM COLD ROLLED SHEET STEEL CONFORMING TO ASTM A 336. PREPARE FRAMES FOR HEAT-TREATED ZINC-PLATED CASING RETAINER CLIPS MECHANICALLY FASTENED FOR SECURE, PROPERLY ALIGNED INSTALLATION OF CASINGS.

3.3 FRAMES SHALL HAVE 14-GAUGE HINGE-REIN FORCEMENT PLATES WITH EXTRUDED TAPPED HOLES, FOR A MINIMUM OF 3/16" THREAD PENETRATION DEPTH.

3.4 STRIKES: PROVIDE FOR 2-3/4" ADJUSTABLE T. PROVIDE STANDARD FIELD-APPLIED REINFORCEMENT FOR SURFACE MOUNTED HARDWARE. PROVIDE UL FIRE RATED FRAMES WHERE SHOWN ON THE DRAWINGS.

3.5 FACTORY FINISH: STEEL SHALL BE CHEMICALLY CLEANED, BONDERIZED, PRIMED AND PAINTED WITH IMPACT-RESISTANT, POLYESTER BAKED ENAMEL. PROVIDE AEROSOL TOUGH-UP PAINT FOR AFTER INSTALLATION, ON-SITE REPAIR AS RECOMMENDED BY MANUFACTURER.

HOLLOW METAL DOORS

4.1 DOORS SHALL MEET SPECIFIED REQUIREMENTS AND SDI 100, AND THE NAAMM HOLLOW METAL TECHNICAL AND DESIGN MANUAL.

4.2 CONSTRUCT DOORS, FLUSH TYPE, 1 3/4" THICK, WITH A FINEST GRADE 18-GAUGE COLD ROLLED STEEL SHEET ON THE INTERIOR FACE AND A 16-GAUGE COLD ROLLED STEEL SHEET ON THE EXTERIOR FACE OF THE DOOR. VERTICAL STIFFENERS SHALL BE 22-GAUGE STEEL "U" FORMS, SPOT-WELDED TO EACH INSIDE FACE OF THE DOOR FULL HEIGHT AND NOT MORE THAN 6" APART.

4.3 REINFORCE TOP AND BOTTOM OF DOORS HORIZONTALLY BY STEEL CHANNELS, FULL WIDTH, SPOT-WELDED TO EACH FACE AT LEAST 6" ON CENTER. JOINTS AT THE EDGES OF DOORS SHALL BE CONTINUOUSLY WELDED, AUTOMATICALLY BY THE GAS SHIELDED METHOD ARC PROCESS.

4.4 DOORS SHALL HAVE SOUND DEADENING MATERIAL OF AN APPROVED TYPE APPLIED TO THE INTERIOR SURFACE OF PANELS. SOUND DEADENER SHALL ELIMINATE METALLIC REVERBERATIONS INCIDENTAL TO NORMAL DOOR OPERATION.

4.5 PROVIDE DOUBLE DOORS WITH ONE-PIECE ASTRAGALS OF 12-GAUGE STEEL.

4.6 MORTISE DOORS FOR LOCKS AND HINGES. PROVIDE REINFORCEMENT IN ACCORDANCE WITH TABLE IV SDI 100, AND NAAMM CHM 1. PROVIDE DOORS WITH UL LABELS AS REQUIRED OR INDICATED.

4.7 PROVIDE LOUVER DOORS AS SCHEDULED. PROVIDE SIGHT-PROOF LOUVERS EITHER PIERCED INTO THE PANELS OF THE DOOR OR INSERTED INTO THE PANELS. FORM LOUVER FRAMES OF MINIMUM 20-GAUGE STEEL. WELD MINIMUM 24-GAUGE BLADES TO FRAME AND FASTEN THE ENTIRE ASSEMBLY TO THE DOOR WITH MOLDINGS. THE MOLDINGS, WHEN USED, SHALL BE AN INTEGRAL PART OF THE LOUVER.

4.8 PROVIDE FOR GLAZING IN DOORS AS SCHEDULED. NON-REMOVABLE MINIMUM 20-GAUGE GLAZING STOPS SHALL OCCUR ON THE OUTSIDE OF EXTERIOR DOORS AND ON THE REVERSE SIDE OF INTERIOR DOORS. GLAZING BEADS ON THE INSIDE OF GLASS PANELS SHALL BE REMOVABLE.

PRIMING

5.1 DOORS AND FRAMES TO BE CLEANED, BONDERIZED AND PRIMED WITH SHOP COAT OF LIGHT GRAY ZINC CHROMATE RUST INHIBITIVE PRIMER.

5.2 PRIMER SHALL BE SMOOTH SURFACE, READY TO RECEIVE FINISH COATS WHEN INSTALLED. NO RUNS, OVERSPRAY, DUST OR OTHER DEFECTS WILL BE ALLOWED. PRIMER SHALL BE BONDED TO THE METAL SUFFICIENTLY THAT UPON AGING IT WILL NOT CHIP OR FLAKE WHEN SCRAPED THROUGH. WIPE COAT GALVANIZED STEEL IS AN ACCEPTABLE SUBSTITUTION FOR THE SHOP COAT OF PRIMER.

INSTALLATION

6.1 INSTALL DOORS COMPLETELY AND ACCURATELY, COMPL ETE WITH FINISH HARDWARE. INSTALL FINISH HARDWARE IN A NEAT WORKMAN LIKE MANNER IN ACCORDANCE WITH THE HARDWARE SCHEDULE USING ONLY MECHANICS SKILLED IN THIS TYPE OF WORK.

SECTION 08 41 13 / ALUMINUM-FRAMED STOREFRONTS

PART 1 – GENERAL

A. INSTALLER QUALIFICATIONS: AN ENTITY THAT EMPLOYS INSTALLERS AND SUPERVISORS WHO ARE TRAINED AND APPROVED BY MANUFACTURER.

B. TESTING AGENCY QUALIFICATIONS: QUALIFIED ACCORDING TO ASTM E 699 FOR TESTING INDICATED AND ACCREDITED BY IAS OR ILAC MUTUAL RECOGNITION ARRANGEMENT AS COMPLYING WITH ISO/IEC 17025.

C. PRODUCT OPTIONS: INFORMATION ON DRAWINGS AND IN SPECIFICATIONS ESTABLISHES REQUIREMENTS FOR AESTHETIC EFFECTS AND PERFORMANCE CHARACTERISTICS OF ASSEMBLIES. AESTHETIC EFFECTS ARE INDICATED BY DIMENSIONS, ARRANGEMENTS, ALIGNMENT, AND PROFILES OF COMPONENTS AND ASSEMBLIES AS THEY RELATE TO SIGHTLINES, TO ONE ANOTHER, AND TO ADJOINING CONSTRUCTION.

D. DO NOT CHANGE INTENDED AESTHETIC EFFECTS, AS JUDGED SOLELY BY ARCHITECT, EXCEPT WITH ARCHITECT'S REVIEW.

DELIVERY, STORAGE, AND HANDLING

1.1 DELIVER ALUMINUM WORK PALLETIZED, PACKAGED, OR CRATED TO PROVIDE PROTECTION DURING TRANSIT AND PROJECT-SITE STORAGE. DO NOT USE NON-VENTED PLASTIC. PROVIDE ADDITIONAL PROTECTION TO PREVENT DAMAGE TO FACTORY-FINISHED UNITS.

A. STORE ALUMINUM WORK VERTICALLY UNDER COVER AT PROJECT SITE WITH HEAD UP. PLACE ON MINIMUM 4- INCH- (102-MM-) HIGH WOOD BLOCKING. PROVIDE MINIMUM 1/4-INCH (6-MM) SPACE BETWEEN EACH STACK TO PERMIT AIR CIRCULATION.

WARRANTY

1.2 SPECIAL WARRANTY: MANUFACTURER AGREES TO REPAIR OR REPLACE COMPONENTS OF ALUMINUM-FRAMED STOREFRONTS THAT DO NOT COMPLY WITH REQUIREMENTS OR THAT FAIL IN MATERIALS OR WORKMANSHIP WITHIN SPECIFIED WARRANTY PERIOD.

A. WARRANTY PERIOD: FIVE YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

B. SPECIAL FINISH WARRANTY: STANDARD FORM IN WHICH MANUFACTURER AGREES TO REPAIR FINISHES OR REPLACE ALUMINUM THAT SHOWS EVIDENCE OF DETERIORATION OF FACTORY-APPLIED FINISHES WITHIN SPECIFIED WARRANTY PERIOD.

i. WARRANTY PERIOD: 10 YEARS FROM DATE OF SUBSTANTIAL COMPLETION.

PART 2 – PRODUCTS

PERFORMANCE REQUIREMENTS

2.1 GENERAL PERFORMANCE: COMPLY WITH PERFORMANCE REQUIREMENTS SPECIFIED, AS DETERMINED BY TESTING OF ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS REPRESENTING THOSE INDICATED FOR THIS PROJECT WITHOUT FAILURE DUE TO DEFECTIVE MANUFACTURE, FABRICATION, INSTALLATION, OR OTHER DEFECTS IN CONSTRUCTION.

A. ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS SHALL WITHSTAND MOVEMENTS OF SUPPORTING STRUCTURE INCLUDING, BUT NOT LIMITED TO, STORY DRIFT, TWIST, COLUMN SHORTENING, LONG-TERM CREEP, AND DEFLECTION FROM UNIFORMLY DISTRIBUTED AND CONCENTRATED LIVE LOADS.

B. FAILURE ALSO INCLUDES THE FOLLOWING:

i. THERMAL STRESSES TRANSFERRING TO BUILDING STRUCTURE.

ii. GLASS BREAKAGE.

iii. LOOSENING OR WEAKENING OF FASTENERS, ATTACHMENTS, AND OTHER COMPONENTS.

2.2 FAILURE OF OPERATING UNITS.

A. STRUCTURAL LOADS:

B. WIND LOADS: AS INDICATED ON DRAWINGS.

C. OTHER DESIGN LOADS: AS INDICATED ON DRAWINGS.

2.3 DEFLECTION OF FRAMING MEMBERS: AT DESIGN WIND PRESSURE, AS FOLLOWS:
DEFLECTION NORMAL TO WALL PLANE: LIMITED TO EDGE OF GLASS IN A DIRECTION PERPENDICULAR TO GLASS PLANE NOT EXCEEDING 1/175 OF THE GLASS EDGE LENGTH FOR EACH INDIVIDUAL GLAZING LITE OR AN AMOUNT THAT RESTRICTS EDGE DEFLECTION OF INDIVIDUAL GLAZING LITES TO 3/4 INCH (19.1 MM), WHICHEVER IS LESS.

A. DEFLECTION PARALLEL TO GLAZING PLANE: LIMITED TO AMOUNT NOT EXCEEDING THAT WHICH REDUCES GLAZING BITE TO LESS THAN 75 PERCENT OF DESIGN DIMENSION AND THAT WHICH REDUCES EDGE CLEARANCE BETWEEN FRAMING MEMBERS AND GLAZING OR OTHER FIXED COMPONENTS TO LESS THAN 1/8 INCH (3.2 MM).

2.4 STRUCTURAL: TEST ACCORDING TO ASTM E 330 AS FOLLOWS:

A. WHEN TESTED AT POSITIVE AND NEGATIVE WIND-LOAD DESIGN PRESSURES, ASSEMBLIES DO NOT EVIDENCE DEFLECTION EXCEEDING SPECIFIED LIMITS.

B. WHEN TESTED AT 150 PERCENT OF POSITIVE AND NEGATIVE WIND-LOAD DESIGN PRESSURES, ASSEMBLIES, INCLUDING ANCHORAGE, DO NOT EVIDENCE MATERIAL FAILURES, STRUCTURAL DISTRESS, OR PERMANENT DEFORMATION OF MAIN FRAMING MEMBERS EXCEEDING 0.2 PERCENT OF SPAN.

C. TEST DURATIONS: AS REQUIRED BY DESIGN WIND VELOCITY, BUT NOT LESS THAN 10 SECONDS.

2.5 AIR INFILTRATION: TEST ACCORDING TO ASTM E 283 FOR INFILTRATION AS FOLLOWS:

A. FIXED FRAMING AND GLASS AREA: MAXIMUM AIR LEAKAGE OF 0.06 CFM/SQ. FT. (0.30 L/S PER SQ. M) AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 6.24 LBF/SQ. FT. (300 PA).

2.6 WATER PENETRATION UNDER STATIC PRESSURE: TEST ACCORDING TO ASTM E 331 AS FOLLOWS:

A. NO EVIDENCE OF WATER PENETRATION THROUGH FIXED GLAZING AND FRAMING AREAS WHEN TESTED ACCORDING TO A MINIMUM STATIC-AIR-PRESSURE DIFFERENTIAL OF 20 PERCENT OF POSITIVE WIND-LOAD DESIGN PRESSURE, BUT NOT LESS THAN 10 LBF/SQ. FT. (500 PA).

2.7 ENERGY PERFORMANCE: CERTIFIED AND LABELED BY MANUFACTURER FOR ENERGY PERFORMANCE AS FOLLOWS:

A. THERMAL TRANSMITTANCE (U-FACTOR): FIXED GLAZING AND FRAMING AREAS: U-FACTOR FOR THE SYSTEM OF NOT MORE THAN 0.41 BTU/SQ. FT. X H X DEG F (2.33 W/SQ. M X K) AS DETERMINED ACCORDING TO NFRC 100.

2.8 SOLAR HEAT-GAIN COEFFICIENT (SHGC): FIXED GLAZING AND FRAMING AREAS: SHGC FOR THE SYSTEM OF NOT MORE THAN 0.40 AS DETERMINED ACCORDING TO NFRC 200.

2.9 AIR LEAKAGE:

A. FIXED GLAZING AND FRAMING AREAS: AIR LEAKAGE FOR THE SYSTEM OF NOT MORE THAN 0.06 CFM/SQ. FT. (0.30 L/S PER SQ. M) AT A STATIC-AIR-PRESSURE DIFFERENTIAL OF 6.24 LBF/SQ. FT. (300 PA) WHEN TESTED ACCORDING TO ASTM E283.

2.10 CONDENSATION RESISTANCE FACTOR (CRF): FIXED GLAZING AND FRAMING AREAS: CRF FOR THE SYSTEM OF NOT LESS THAN 25 AS DETERMINED ACCORDING TO AAMA 1503.

2.11 THERMAL MOVEMENTS: ALLOW FOR THERMAL MOVEMENTS RESULTING FROM AMBIENT AND SURFACE TEMPERATURE CHANGES

A. TEMPERATURE CHANGE: 120 DEG F (67 DEG C), AMBIENT; 180 DEG F (100 DEG C), MATERIAL SURFACES.

MANUFACTURERS

BASIS OF DESIGN: MANUFACTURER: KAWNEER, AN ARCONIC COMPANY; HYPERLINK "http://www.kawneer.com"WWW.KAWNEER.COM.
PRODUCTS: EXTERIOR: TRIFAB 451T FRAMING SYSTEM (THERMAL)

FRAMING

2.12 FRAMING MEMBERS: MANUFACTURER'S EXTRUDED- OR FORMED-ALUMINUM FRAMING MEMBERS OF THICKNESS REQUIRED AND REINFORCED AS REQUIRED TO SUPPORT IMPOSED LOADS.

A. CONSTRUCTION: THERMALLY BROKEN FOR ALL EXTERIOR FRAMING AND NONTHERMAL FOR INTERIOR FRAMING. SILL AND HEAD MEMBERS ARE CONTINUOUS.

B. SYSTEM DIMENSIONS: 2 BY 4.5 INCHES (50.8 BY 114.3 MM) NOMINAL.

C. GLAZING SYSTEM: RETAINED MECHANICALLY WITH GASKETS ON FOUR SIDES.

D. GLAZING PLANE: FRONT SET OF FRAME.

E. FINISH: ANODIZED ALUMINUM

2.13 FABRICATION METHOD: SHOP-FABRICATED CREW SPLINE OR SHEAR BLOCK.

A. BACKER PLATES: MANUFACTURER'S STANDARD, CONTINUOUS BACKER PLATES FOR FRAMING MEMBERS, IF NOT INTEGRAL, WHERE FRAMING ABUTS ADJACENT CONSTRUCTION.

B. BRACKETS AND REINFORCEMENTS: MANUFACTURER'S STANDARD HIGH-STRENGTH ALUMINUM WITH NONSTAINING, NONFERROUS SHIMS FOR ALIGNING SYSTEM COMPONENTS.

C. FASTENERS AND ACCESSORIES: MANUFACTURER'S STANDARD CORROSION-RESISTANT, NONSTAINING, NONBLEEDING FASTENERS AND ACCESSORIES COMPATIBLE WITH ADJACENT MATERIALS. WHERE EXPOSES SHALL BE STAINLESS STEEL.

D. PERIMETER ANCHORS: WHEN STEEL ANCHORS ARE USED, PROVIDE INSULATION BETWEEN STEEL MATERIAL AND ALUMINUM MATERIAL TO PREVENT GALVANIC ACTION.

2.14 MATERIALS:

A. ALUMINUM: ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR TYPE OF USE AND FINISH INDICATED.

B. SHEET AND PLATE: ASTM B 209 (ASTM B 209M).

C. EXTRUDED BARS, RODS, PROFILES, AND TUBES: ASTM B 221 (ASTM B 221M).

2.15 EXTRUDED STRUCTURAL PIPE AND TUBES: ASTM B 429/B 429M.

GLAZING

2.16 GLAZING: COMPLY WITH SECTION 088000 "GLAZING."

2.17 GLAZING GASKETS: MANUFACTURER'S STANDARD COMPRESSION TYPES; REPLACEABLE, EXTRUDED EPDM RUBBER.

2.18 SPACERS AND SETTING BLOCKS: MANUFACTURER'S STANDARD ELASTOMERIC TYPE.

2.19 GLAZING SEALANTS: AS RECOMMENDED BY MANUFACTURER.

2.20 WEATHERSEAL SEALANT: ASTM C 920 FOR TYPE S, GRADE NS, CLASS 25, USES NT, G, A, AND O; SINGLE-COMPONENT NEUTRAL-CURING FORMULATION THAT IS COMPATIBLE WITH STRUCTURAL SEALANT AND OTHER SYSTEM COMPONENTS WITH WHICH IT COMES IN CONTACT; RECOMMENDED BY STRUCTURAL-SEALANT, WEATHERSEAL-SEALANT, AND ALUMINUM-FRAMED-SYSTEM MANUFACTURERS FOR THIS USE.

2.21 VOC CONTENT: GLAZING SEALANTS APPLIED INSIDE THE WEATHERPROOFING SYSTEM OF THE BUILDING SHALL HAVE A VOC CONTENT OF 250 G/L OR LESS WHEN CALCULATED ACCORDING TO 40 CFR 59, SUBPART D (EPA METHOD 24).

ACCESSORY MATERIALS

2.22 JOINT SEALANTS: FOR INSTALLATION AT PERIMETER OF ALUMINUM-FRAMED SYSTEMS, AS SPECIFIED IN DIVISION 07 SECTION "JOINT SEALANTS".

2.23 BITUMINOUS PAINT: COLD-APPLIED, ASPHALT-MASTIC PAINT COMPLYING WITH SSPC-PAINT 12 REQUIREMENTS EXCEPT CONTAINING NO ASBESTOS; FORMULATED FOR 30 MIL (0.762 MM) THICKNESS PER COAT.

FABRICATION

2.24 FORM OR EXTRUDE ALUMINUM SHAPES BEFORE FINISHING.

2.25 WELD IN CONCEALED LOCATIONS TO GREATEST EXTENT POSSIBLE TO MINIMIZE DISTORTION OR DISCOLORATION OF FINISH. REMOVE WELD SPATTER AND WELDING OXIDES FROM EXPOSED SURFACES BY DESCALING OR GRINDING.

2.26 FABRICATE COMPONENTS THAT, WHEN ASSEMBLED, HAVE THE FOLLOWING CHARACTERISTICS:

A. PROFILES THAT ARE SHARP, STRAIGHT, AND FREE OF DEFECTS OR DEFORMATIONS.

B. ACCURATELY FITTED JOINTS WITH ENDS COPED OR MITERED.

C. PHYSICAL AND THERMAL ISOLATION OF GLAZING FROM FRAMING MEMBERS.

D. ACCOMMODATIONS FOR THERMAL AND MECHANICAL MOVEMENTS OF GLAZING AND FRAMING TO MAINTAIN REQUIRED GLAZING EDGE CLEARANCES.

E. PROVISIONS FOR FIELD REPLACEMENT OF GLAZING FROM INTERIOR.

F. FASTENERS, ANCHORS, AND CONNECTION DEVICES THAT ARE CONCEALED FROM VIEW TO GREATEST EXTENT POSSIBLE.

2.27 MECHANICALLY GLAZED FRAMING MEMBERS: FABRICATE FOR FLUSH GLAZING WITHOUT PROJECTING STOPS.

2.28 STOREFRONT FRAMING: FABRICATE COMPONENTS FOR ASSEMBLY USING MANUFACTURER'S STANDARD INSTALLATION INSTRUCTIONS.

2.29 AFTER FABRICATION, CLEARLY MARK COMPONENTS TO IDENTIFY THEIR LOCATIONS IN PROJECT ACCORDING TO SHOP DRAWINGS.

PART 3 – EXECUTION

EXAMINATION

3.1 EXAMINE OPENINGS, SUBSTRATES, STRUCTURAL SUPPORT, ANCHORAGE, AND CONDITIONS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF WORK. VERIFY ROUGH OPENING DIMENSIONS, LEVELNESS OF SILL PLATE AND OPERATIONAL CLEARANCES. EXAMINE WALL FLASHINGS, VAPOR RETARDERS, WATER AND WEATHER BARRIERS, AND OTHER BUILT-IN COMPONENTS TO ENSURE A COORDINATED, WEATHER TIGHT FRAMED ALUMINUM- STOREFRONT SYSTEM INSTALLATION.

A. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

INSTALLATION

3.2 GENERAL:

A. COMPLY WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.

B. DO NOT INSTALL DAMAGED COMPONENTS.

C. FIT JOINTS TO PRODUCE HAIRLINE JOINTS FREE OF BURRS AND DISTORTION.

D. RIGIDLY SECURE NONMOVEMENT JOINTS.

E. INSTALL ANCHORS WITH SEPARATORS AND ISOLATORS TO PREVENT METAL CORROSION AND ELECTROLYTIC DETERIORATION AND TO PREVENT IMPEDING MOVEMENT OF MOVING JOINTS.

F. SEAL PERIMETER AND OTHER JOINTS WATERTIGHT UNLESS OTHERWISE INDICATED.

3.3 METAL PROTECTION:

A. WHERE ALUMINUM IS IN CONTACT WITH DISSIMILAR METALS, PROTECT AGAINST GALVANIC ACTION BY PAINTING CONTACT SURFACES WITH MATERIALS RECOMMENDED BY MANUFACTURER FOR THIS PURPOSE OR BY INSTALLING NONCONDUCTIVE SPACERS.

B. WHERE ALUMINUM IS IN CONTACT WITH CONCRETE OR MASONRY, PROTECT AGAINST CORROSION BY PAINTING CONTACT SURFACES WITH BITUMINOUS PAINT.

3.4 SET CONTINUOUS SILL MEMBERS AND FLASHING IN FULL SEALANT BED AS SPECIFIED IN SECTION 079200 "JOINT SEALANTS" TO PRODUCE WEATHERTIGHT INSTALLATION.

3.5 INSTALL ALUMINUM-FRAMED STOREFRONT SYSTEM LEVEL, PLUMB, SQUARE, TRUE TO LINE, WITHOUT DISTORTION OR IMPEDING THERMAL MOVEMENT, ANCHORED SECURELY IN PLACE TO STRUCTURAL SUPPORT, AND IN PROPER RELATION TO WALL FLASHING AND OTHER ADJACENT CONSTRUCTION.

3.6 INSTALL ALUMINUM-FRAMED STOREFRONT SYSTEM AND COMPONENTS TO DRAIN CONDENSATION, WATER PENETRATING JOINTS, AND MOISTURE MIGRATING WITHIN ALUMINUM-FRAMED STOREFRONT SYSTEM TO THE EXTERIOR.

3.7 INSTALL GLAZING AS SPECIFIED IN SECTION 088000 "GLAZING."

ADJUSTING, CLEANING AND PROTECTION

3.8 CLEAN ALUMINUM SURFACES IMMEDIATELY AFTER INSTALLING ALUMINUM-FRAMED STOREFRONTS. AVOID DAMAGING PROTECTIVE COATINGS AND FINISHES. REMOVE EXCESS SEALANTS, GLAZING MATERIALS, DIRT, AND OTHER SUBSTANCES.

3.9 CLEAN GLASS IMMEDIATELY AFTER INSTALLATION. COMPLY WITH GLASS MANUFACTURER'S WRITTEN RECOMMENDATIONS FOR FINAL CLEANING AND MAINTENANCE. REMOVE NONPERMANENT LABELS, AND CLEAN SURFACES.

3.10 REMOVE AND REPLACE GLASS THAT HAS BEEN BROKEN, CHIPPED, CRACKED, ABRADED, OR DAMAGED DURING CONSTRUCTION PERIOD.

SECTION 08 81 00 / GLAZING

1.1 SUBMIT SAMPLES COMPLYING WITH SECTION 01 SB 00 FOR WORK IN THIS SECTION.
A. REVIEW OF SAMPLES WILL BE FOR COLOR ONLY.

1.2 PROVIDE MATERIAL AND INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS, RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS FOR MATERIALS SPECIFIED.

1.3 WATERTIGHT AND AIRTIGHT INSTALLATION OF EACH PIECE OF GLASS IS REQUIRED. EACH INSTALLATION MUST WITHSTAND NORMAL TEMPERATURE CHANGES, WIND LOADING, IMPACT LOADING (FOR OPERATING DOORS) WITHOUT FAILURE INCLUDING LOSS OR BREAKAGE OF GLASS, FAILURE OF SEALANTS OR GASKETS TO REMAIN WATERTIGHT AND AIRTIGHT, DETERIORATION OF GLAZING MATERIALS AND OTHER DEFECTS IN THE WORK.

1.4 PROTECT GLASS FROM EDGE DAMAGE DURING HANDLING, INSTALLATION AND OPERATION OF THE BUILDING. GLASS BREAKAGE DURING THE GUARANTEE PERIOD WILL BE GONSIDERED A FORM OF FAULTY INSTALLATION (RESULTING FROM EDGE DAMAGE) UNLESS KNOWN TO RESULT FROM VANDALISM OR OTHER CAUSES NOT RELATED TO MATERIALS AND INSTALLATION.

1.5 GLAZING CHAN NEL DIMENSIONS AS SHOWN ARE INTENDED TO PROVIDE FOR NECESSARY MINIMUM BITE ON THE GLASS, MINIMUM EDGE GLEARANGE AND ADEQUATE SEALANT THICKNESSES, WITH REASONABLE TOLERANCES.

PRODUCTS

2.1 GLASS AND GLAZING PRODUCTS SHALL BE AS MANUFACTURED BY:
A. GUARDIAN SUNGUARD ADVANCED ARCHITECTURAL GLASS.
B. FLEETWOOD AND WESTERN INSULATED GLASS

MATERIALS

3.1 REGULAR GLASS: 1/4" THINK COMPLYING WITH FS DD G 451, TYPE I, CLASS I, QUALITY Q 3 PLATE OR FLOAT GLASS, CLEAR.

3.2 SHEET GLASS: 1/8" THICK COMPLYING WITH FS DD G 451, TYPE II, CLASS 1, QUALITY Q 5, GLEAR.

3.3 TEMPERED GLASS: 1/4" THICK FULLY TEMPERED PLATE GLASS. PERMANENTLY ETCH EACH LIGHT WITH MANUFACTURER'S NAME AND COMPLIANCE WITH ANSI Z 97.1, CLEAR OR TINTED AS INDICATED ON THE DRAWINGS.

3.4 CLEAR WIRE GLASS: 1/4" THICK POLISHED WIRE GLASS; SUPERLITE I-W AS MANUFAGTURED BY SAFTI OF O'KEEFFE'S, INC.. DIAMOND PATTEN WITH 20 / 45 / 60 OR 90 MINUTE RATING AS INDICATED ON THE DRAWINGS.

3.5 INSULATING GLASS: " THICK SOLARBAN 6 OR GUARDIAN SUNGUARD.

3.6 INTERIOR GLAZING COMPOUND: POLYMERIZE D BUTYL RUBBER AND INERT FILLERS (PIGMENTS), SOLVENT BASED WITH MINIMUM 75% SOLIDS, NON-SAG CONSISTENCY, TACK FREE TIME OF 24 HOURS OR LESS, PAINTABLE AND NON_STAINING.

3.7 SETTING BLOCKS: NEOPRE NE, EPDM, MIN. LENGTH 4".

3.8 EXTERIOR GLAZING COMPOUND: CONFORMING TO ASTM 0920, TYPE S, GRADE NS USE G.

INSTALLATION

4.1 COMPLY WITH COMBINED RECOMMENDATIONS OF GLASS MANUFACTURER AND MANUFACTURER OF SEALANTS AND OTHER MATERIALS USED IN GLAZING, EXCEPT WHERE MANUFACTURER'S TECHNICAL REPRESENTATIVES DIRECT OTHERWISE. COMPLY WITH GLAZING MANUAL BY FLAT GLASS MANUFACTURER'S ASSOC IATION. AND EXCEPT AS SPECIFINALLY RECOMMENDED OTHERWISE BY THE MANUFACTURERS OF THE GLASS AND GLAZING MATERIALS.

4.2 CLEAN THE GLAZING, CHANNEL OR OTHER FRAMING MEMBERS TO RECEIVE GLASS, IMMEDIATELY BEFORE GLAZING. REMOVE COATINGS THAT ARE NOT FIRMLY BONDED TO THE SUBSTRATE. DO NOT ATTEM PT TO CUT, SEAM, NIP OR ABRADE GLASS THAT IS TEMPERED OR HEAT STRENGTHENED.

4.3 INSPECT EACH PIECE OF GLASS IMMEDIATELY BEFORE INSTALLATION AND ELIMINATE ANY THAT HAVE OBSERVABLE EDGE DAMAGE OR FACE IMPERFECTIONS. INSTALL SETTING BLOCKS OF PROPER SIZE AT QUARTER POINTS OF MILL RABBET. SET BLOCKS IN THIS COURSE OF THE HEEL_HEAD COMPOUND.

4.4 PROVIDE SPACERS INSIDE AND OUT. AND OF PROPER SIZE AND SPACING. FOR GLASS SIZES LARGER THAN 50 UNITED INCHES. PROVIDE 1/8" MINIMUM BITE OF SPACERS ON GLASS, AND USE THICKNESS EQUAL TO SEALANT WIDTH. UNIFY APPEARANCE OF EACH SERIES OF LIGHTS BY SETTING EACH PIECE TO MATCH OTHERS AS NEARLY AS POSSIBLE. INSPECT EACH PIECE AND SET WITH PATTERN, DRAW AND BOW ORIENTED IN THE NAME DIRECTION AS OTHER PIECES.

4.5 MITER CUT AND BOND ENDS TOGETHER AT CORNERS WHERE GASKETS ARE USED FOR CHANNEL GLAZING, SO THAT GASKETS WILL NOT PULL AWAY FROM CORNERS AND RESULT IN VOIDS OR LEAKS.

SECTION 09 24 23 / DRYVIT SYSTEMS

PART I - GENERAL

SUMMARY:

THIS DOCUMENT IS INTENDED TO BE USED IN PREPARING SPECIFICATIONS FOR PROJECTS UTILIZING COMMERCIAL CEMENT PLASTER 2 BY DRYVIT APPLIED TO PROPERLY FRAMED AND SHEATHED EXTERIOR WALL ASSEMBLIES. FOR COMPLETE PRODUCT DESCRIPTION AND USAGE REFER TO:

A. DRYVIT COMMERCIAL CEMENT PLASTER 2 DATA SHEET DS813.
B. DRYVIT COMMERCIAL CEMENT PLASTER 2 INSTALLATION DETAILS DS825
C. DRYVIT COMMERCIAL CEMENT PLASTER BASE™ – SANDED DS817
D. DRYVIT COMMERCIAL CEMENT PLASTER BAS™ – CONCENTRATE DS818

SUBMITTALS

1.1 SUBMITTAL REQUIREMENTS BY THE CONTRACTOR ARE TO BE INDICATED IN THE CONSTRUCTION DOCUMENTS AS REQUIRED, INCLUDING:
A. PRODUCT LITERATURE, SAMPLES OR MOCK UP.

DESCRIPTION

COMMERCIAL CEMENT PLASTER 2 CONSISTS OF DRYVIT CCP BASE - SANDED OR CONCENTRATE*, DRYVIT ACRYLIC PRIMER AND DRYVIT ACRYLIC COATING OR FINISH. CCP BASE IS APPLIED DIRECTLY TO THE PROPERLY INSTALLED METAL LATH (AS SPECIFIED). *OTHER APPROVED SCRATCH AND BROWN COATS MAY BE ACCEPTABLE. CONSULT DRYVIT SYST

3.16 THE LATH AND WATER-RESISTIVE BARRIER INSTALLATION SHALL BE INSPECTED AS REQUIRED BY THE LOCAL BUILDING DEPARTMENT PRIOR TO PLASTER MATERIALS BEING APPLIED.

3.17 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER APPLICATION OF THE COMMERCIAL CEMENT PLASTER 2 MATERIALS.

3.18 DRYVIT ASSUMES NO RESPONSIBILITY FOR ON-SITE INSPECTIONS OR APPLICATION OF ITS PRODUCTS.

CLEANING

3.19 ALL EXCESS COMMERCIAL CEMENT PLASTER 2 MATERIALS SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR IN ACCORDANCE WITH CONTRACT PROVISIONS.

3.20 ALL SURROUNDING AREAS, WHERE THE DRYVIT COMMERCIAL CEMENT PLASTER 2 HAS BEEN APPLIED, SHALL BE LEFT FREE OF DEBRIS AND FOREIGN SUBSTANCES RESULTING FROM THE CONTRACTOR'S WORK.

PROTECTION

3.21 THE COMMERCIAL CEMENT PLASTER 2 MATERIALS SHALL BE PROTECTED FROM WEATHER AND OTHER DAMAGE UNTIL PERMANENT PROTECTION IN THE FORM OF FLASHINGS, SEALANTS, ETC. ARE INSTALLED.

SECTION 09 29 00 / GYPSUM BOARD

1.1 ASTM C-840 AND C-754, AND GA-216, ARE HEREBY MADE A DIRECT PART OF THIS SPECIFICATION.

1.2 SUBMIT INFORMATION COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.
A. FURNISH MANUFACTURER'S CERTIFICATION THAT MATERIAL MEET SPECIFICATION REQUIREMENT.
B. FURNISH MANUFACTURER'S PRINTED INSTRUCTIONS FOR INSTALLATION OF ASSEMBLIES.

JOB CONDITIONS

2.1 TEMPERATURE AND HUMIDITY CONDITIONS: DO NOT INSTALL WALLBOARDUNLESS INSTALLATION AREAS COMPLY WITH THE MINIMUM TEMPERATURE AND VENTILATION REQUIREMENTS RECOMMENDED BY THE MANUFACTURER.

2.2 PROTECTION: PROVIDE CLOSURES FOR EXTERIOR OPENINGS, WHERE REQUIRED. ROOM TEMPERATURE DURING INSTALLATION OF WALLBOARD SHALL NOT BE LESS THAN 50° F, WITH ADEQUATE VENTILATION MAINTAINED TO ELIMINATE EXCESSIVE MOISTURE UNTIL JOINT COMPOUND IS DRY.

2.3 PROVIDE VENTILATION DURING AND FOLLOWING ADHESIVES AND JOINT TREATMENT APPLICATIONS. USE TEMPORARY AIR CIRCULATORY IN ENCLOSED AREAS LACKING NATURAL VENTILATION. UNDER SLOW DRYING CONDITIONS, ALLOW ADDITIONAL DRYING TIME BETWEEN COATS OF JOINT TREATMENT. PROTECT INSTALLED MATERIALS FROM DRAFTS DURING HOT, DRY WEATH ER.

MANUFACTURERS

3.1 GYPSUM WALLBOARD COMPONENTS SHALL BE AS MANUFACTURED BY NATIONAL GYPSUM COMPANY. PRODUCTS FROM US GYPSUM COMPANY, GEORGIA_PACIFIC, OR FLINTKOTE BLUE DIAMON D ARE ACCEPTABLE. IT IS INTENDED THAT MATERIALS FURNISHED BE A PART OF A SINGLE SYSTEM, WHETHER IT BE SUPPLIED BY ONE OR SEVERAL MANUFACTURES.

PRODUCTS

4.1 GYPSUM WALLBOARD
A. REGULAR WALLBOARD: ASTM C 36; OR FS SS L 30, TYPE III, GRADE R, CLASS I; 5/8" THICKNESS, TAPERED EDGE.
B. FIRE RATED WALLB OARD: ASTM C 36, TYPE X: OR FS SS L 30, TYPE III, GRADE X, CLASS I, 5/8" THICK NESS, TAPERED EDGE.
C. WATER—RESISTANT WALLBOARD: ASTM C 630, 5/8" THICKNESS, TAPERED EDGE, AS INDICATED ON PLAN.
D. EXTERIOR WALLBOARD: NATIONAL GYPSUM COMPANY EXTERIOR SOFFIT BOARD, 5/8" THICKNESS, OR CONFORMING TO ASTM C 931.

4.2 WALLBOARD ACCESSORIES:
A. CORNER BEAD REINFORCEMENT: KAL-KORNER BEAD
B. METAL EDGE REINFORCEMENT: J-TRIM CASING BEAD
C. CONTROL JOINTS: E-Z STRIP OR .093 ZINC CONTROL JOINT

4.3 SCREWS: PROVIDE SELF-DRILLING, SELF-TAPPING, BUGLE HEAD, FOR USE WITH POWER DRIVEN TOOL. TYPE S FOR APPLICATION TO LIGHT-GAUGE METAL FRAMING, MINIMUM 1", TYPE S 12 FOR APPLICATION TO HEAVY-GAUGE METAL FRAMING (ASTM C 646); TYPE W FOR APPLICATION TO WOOD FRAMING, MINIMUM 1/2" (SINGLE LAYER) 1 5/8" (DOUBLE LATER) (ASTM C 894); TYPE G FOR WALLBOARD-TO-WALLBOARD APPLICATION, MINIMUM 1 1/2", (ASTM C 893).

4.4 LAMINATIN ADHESIVES:
A. WALLBOARD TO WOOD OR METAL FRAMING: US GYPSUM DURABOND 200 OR 300; OR CONFORMING TO ASTM C_ 557 FOR WOOD FRAMING.
B. WALLBOARD TO WALLBOARD: US GYPSUM DURABOND 600.
C. WALLBOARD TO CORE BOARD OR SOUND DEADENING BOARD: US GYPSUM DURABOND 500.
D. WALLBOARD TO CONCRETE OR MASONRY: US GYPSUM DURABOND 500.

4.5 FINISHING MATERIALS: JOINT TREATMENT SYSTEM SHALL BE PROFORM JOINT SYSTEM CONSISTING OF:
A. PROFORM PAPER JOINT REINFORCING TAPE CONFORM ING TO ASTM C-475.
B. PROFORM PURPOSE JOINT COMPOUND FOR EMBEDDING, FILL AND FINISHING CONFORMING TO A STM C-475.

4.6 TEXTURE FINISH:
A. WALL TEXTU RE MATERIAL SHALL BE REGULAR WALL TEXTURE AS MANUFACTURED BY HAMILTON MATERIALS.
B. CEILING TEXTU RE MATERIAL SHALL BE PAS TEX PREMIUM CEILING TEXTU RE, MANUFACTURED BY HAMILTON MATERIALS.
C. WALL TEXTURE MATERIAL SHALL BE V 1200 WALL TEXTURE AS MANUFACTURED BY LAHABRA PRODUCTS.

4.7 SEALANTS: ACOUSTICAL SEALANT FOR SOUND CONTROL WALLS SHALL BE PRESSTITE NO 579.64 AS MANUFACTURED BY PRESSTITE PRODUCTS. TREMCO ACOUSTICAL SEALANT BY TREMCO, OR USG ACOUSTICAL SEALANT.

INSTALLATION – WALLS

5.1 APPLY WALLBOARD WITH LONG DIMENSION AT RIGHT ANGLES TO FRAMING OR FURRING MEMBERS WITH ABUTTING ENDS AND EDGES OCCURRING OVER STUD FLANGES. USE WALLBOARD OF THE MAXIMUM PRACTICAL LENGTH TO MINIMIZE END JOINTS. NEATLY FIT AND STAGGER END JOINTS. ARRANGE JOINTS ON OPPOSITE SIDES OF THE PARTITION AS TO OCCU R ON DIFFERENT STUDS. CUT WALLB OARD NEATLY TO FIT AROU ND OPENINGS. WALLBOARD SHALL EXTEND TO WITHIN 1/2" OF THE FLOOR.

5.2 WHEREVER WALLBOARD TERMINATES AGAINST DISSIM ILAR MATERIALS OR WHERE EDGES OF WALLBOARD ARE EXPOSED, INSTALL METAL EDGE REINFORCEMENT AS SPECIFIED. AT OUTSIDE CORNERS INSTALL METAL CORNER BEAD REINFORCEMENT AS SPECIFIED.

5.3 AT LOCATIONS INDICAT ED INSTALL CONTROL JOINT OVER FACE OF WALLBOARD PANELS. CUT END JOINTS SQUARE, BUTT TOGETHER AND ALIGN TO PROVIDE NEAT FIT. ATTACH CONTROL JOINT TO WALLBOARD WITH BOSTITCH 1/2" TYPE G STAPLES SPACED NOT OVER 6" ON CENTER IN EACH FLANGE.

5.4 AT METAL STUDS APPLY WALLB OARD USING SCREWS SPACED A MAXIMUM OF 12" OC IN THE FIELD OF THE BOARD AND 12" OC ALONG THE ABUTTING END JOINTS; 8" OC AT RATED WALLS.

5.5 AT WOOD FRAMING APPLY WALLBOARD WITH DOUBLE NAILING METHOD.APPLY FIRST NAILS SPACED 12" OC WITH THE SECON D NAIL IN CLOSE PROXIMITY, INSTALLED AFTER FIRST NAILS ARE IN PLACE. NAILS SHALL NOT BE STAGGERED ON ADJOIN ING EDGES OR ENDS. NAILS SHALL BE DRIVEN WITH THE HEADS SLIGHTLY BELOW THE SURFACE OF THE WALLBOARD, IN A DIMPLE FORMED BY THE DRIVING TOOL. A NAIL SET SHALL NOT BE USED AND CARE SHALL BE TAKEN TO AVOID BREAKING THE PAPER FACE.

5.6 WHERE WR OR WX WALLBOARD IS USED, COAT CUT EDGES AND FASTENER HEADS WITH USG SHEETROCK WR SEALANT. TREAT CUT EDGES, UTILITY HOLES, AND JOINTS, INCLUDING THOSE AT ANGLE INTERSECTIONS PRIOR TO INSTALLATION. TREAT FASTENER HEADS AFTER INSTALLATION.

5.7 AT SOUND CONTROL PARTITIONS INSTALL WALLBOARD OVER SOUND DEADENING BOARD. INSTALL HORIZONTALLY STAGGERING JOINTS BETWEEN LAYERS AND ON OPPOSITE SIDES AS FAR AS IS PRACTICAL. PROVIDE FULL RUNNING BEADS OF ACOUSTICAL SEALANT AT PERIMETER OF SUCH WALLS, BOTH SIDES. ALSO, PROVIDE AT SOUND CONTROL WALLS CONTINUOUS CAULKING BEAD WHERE WALLB OARD FORMS A JUNCTURE WITH OTHER WALLS OR SURFACES.

5.8 APPLY ACOUSTICAL SEALANT USING AIR OPERATED EQUIPMENT. INSPECT JOINTS TO RECEIVE SEALANT TO BE SURE THEY ARE CLEAN, DRY AND FREE OF DUST AND DIRT. SEAL AROU ND LIGHT BOXES, OUTLETS AND SWITCHES, WITH A CONTINUOUS BEAD OF SEALANT. REMOVE EXCESS OF SEALANT OR SMEARS AS WORK PROGRESSES.

5.9 AT DOUBLE-STU D PARTITIONS, SUCH AS CHASES, INSTALL STRIPS OF WALLB OARD 12" WIDE AND OF LENGTHS TO SPAN THE PARTITION DEPTH BY STREWING TO THE WEBS OF OPPOSING STUDS. SPAOE STRIPS APPROXIMATELY 42" OF.

5.10 AT DOUBLE LAYER WALLS INSTALL BASE LAYER AS SPECIFIED ABOVE EXCEPT INSTALL VERTICALLY OVER FRAMING MEMBERS. INSTALL FACE LAYER WITH ADHESIVE VERTICALLY AND PROVIDE FASTENERS UNTIL ADHESIVE SETS. STAGGER JOINTS IN FACE LAYER AT LEAST 10" FROM JOINTS IN BASE LAYER. AT VERTICAL CORNERS PROVIDE "FLOATING" CORNER INSTALLATION PER THE USG DRYWALL CONSTRUCTION HANDBOOK.

5.11 PROVIDE PERIMETER RELIEF WHERE NONLOAD BEARING WALLBOARD PARTITIONS ABUT STRUCTURAL DECKS OR CEILINGS OR VERTICAL STRUCTURAL ELEMENTS. ALLOW NOT LESS THAN 1/4", OR MORE THAN 1/2" GAP BETWEEN WALLBOARD AND STRUCTURE. FINISH EDGES OF WALLBOARD FACE LATER WITH SQUARE NOSE METAL CASING HEAD AND CAULK SPACE BETWEEN CASING BEAD AND STRUCTURE WITH CONTINUOUS SEALANT BEAD. ATTACH WALLBOARD TO STUDS NOT LESS THAN 1/2" BELOW BOTTOM EDGE OF CEILING TRACK FLANGES AND TO FIRST STUD ADJACENT TO VERTICAL TRACKS. DO NOT ATTACH WALLBOARD DIRECTLY TO TRACKS.

5.12 WHERE WALLBOARD PARTITIONS INTERSECT MASONRY WALLS, PROVIDE CONTROL JOINT NO LESS THAN 1/4"; OR MORE THAN 3/8" WIDE BETWEEN WALLB OARD AND MASONRY. FINISH EXPOSED EDGES OF WALLBOARD WITH SQUARE NOSE METAL CASING BEAD AND CAULK SPACE BETWEEN CASING BEAD AND MASONRR WITH CONTINUOUS SEALANT BEAD.

FINISHING

6.1 REINFORCE WALL AND CEILING ANGLES AND INSIDE VERTICAL CORNER ANGLES WITH TAPE FOLDED TO CONFORM TO THE ADJOINING SURFACE AND TO FORM A STRAIGHT, TRUE ANGLE. APPLY A THIN LAYER OF COMPOUND, APPROXIMATELY 3" WIDE, UNDER AND OVER THE TAPE IN THE ANGLE JOINT TO BE REINFORCED. CENTER TAPE OVER JOINTS TO BE REINFORCED AND SEAL INTO THE COMPOU ND, LEAVING SUFFICIENT COMPOU ND UNDER THE TAPE TO PROVIDE PROPER BOND. APPLY A SKIM COAT OF COMPOUND IMMEDIATELY AFTER EMBEDDING TAPE AND AN EXTRA EXPOSURE TO THE WALLBOARD SURFACE. AFTER DRYING, COVER EMBEDDING COMPOUNDS WITH AN ADDITIONAL COAT OF COMPOUND.
A. ALLOW JOINTS TO DRY THOROUGHLY (MINIMUM OF 24 HOURS) BETWEEN EACH APPLICATION OF COMPOUND.

6.2 COVER FILL COAT WITH COMPOUND SPREAD EVENLY OVER AND SLIGHTLY BEYOND THE TAPERED EDGE OF THE BOARD, FEATH ERED AT THE EDGES, WITH A SMOOTH UNIFORM SLIGHT CROWN OVER THE JOINT. DIMPLES AT FASTENER HEADS SHALL RECEIVE 3 COATS OF COMPOUND IN SUCCESSION AS USED IN JOINTS.

6.3 CONCEAL FLANGES OF METAL OORNER AND EDGE REINFORCING BE AT LEAST 2 COATS OF COMPOUND. WHEN COMPLETED, THE COMPOUND SHALL EXTEND APPROXIMATELY 8" TO 10" ON EITHER SIDE OF THE EXPOSED METAL NOSING.

6.4 SAND COATS AS NECESSARY AFTER EACH APPLICATION OF COMPOUND HAS DRIED. THE FINAL COAT AND SUBSEQUENT SANDING SHALL LEAVE WALLB OARD AND TREATED AREAS UNIFORMLY SMOOTH AND READY TO RECEIVE DECORATION, TO THE EXTENT THAT AFTER PAINTING OF WALLB OARD THERE SHALL BE NO DISTINGUISHABLE DIFFERENCE IN APPEARANCE BETWEEN TAPED AND UN-TAPED SURFACES.

6.5 APPLY WALL TEXTURE TO EXPOSED WALLS (EXCEPT TOILETS) (AND WALLS TO RECEIVE WALL «COVERING) UPON COMPLETION OF FINISHING SPEC IFIED ABOVE. SURFACES SHALL BE FREE OF DUST, DIRT AND OIL BEFORE APPLICATION. USE AS HEAVY A MIXTURE AS PRACTICAL AND AVOID OVER THINNING OF THE MATERIAL. APPLY MATERIAL USING SPRAY EQUIPMENT CAPABLE OF DEVELOPING SUFFICIENT PRESSURE TO PRODUCE A LIGHT ORANGE PEEL TEXTURE FINISH.

CEMENT BOARD

7.1 BASIS OF DESIGN: SUBJECT TO COMPLIANCE WITH PROJECT REQUIREMENTS, THE DESIGN IS BASED ON THE FOLLOWING: USG CORPORATION, LLC, " USG DUROCK CEMENT BOARD"

7.2 CLASSIFICATION: CEMENTITIOUS BACKER UNITS: ANSI A118.9, ASTM A108.11 AND ASTM C 1325 PROVIDE WITH MANUFACTURER'S STANDARD EDGES.
A. THICKNESS: [1/4 INCH (6.4 MM)] [1/2 INCH (12.7 MM)] [5/8 INCH (15.9 MM)] [AS INDICATED].
B. BOARD LENGTH: [5 FEET (1524 MM)] [8 FEET (2438 MM)] [AS INDICATED].
C. BOARD WIDTH: [32 INCHES (813 MM)] [36 INCHES (914 MM)] [48 INCHES (1219 MM)] [AS INDICATED].
D. MOLD RESISTANCE: ASTM D 3273, SCORE OF 10 AS RATED ACCORDING TO ASTM D 3274.

7.3 MINIMUM BENDING RADIUS: 6 FEET (1830 MM).

7.4 FASTENER REQUIREMENTS: PROVIDE FASTENERS OF SIZE AND TYPE INDICATED THAT COMPLY WITH REQUIREMENTS SPECIFIED IN THIS ARTICLE FOR MATERIAL AND APPLICATION.
A. SCREWS FOR FASTENING GYPSUM SHEATHING TO COLD-FORMED METAL FRAMING: DUROCK BRAND STEEL DRIL LSG SHEATHING SF STEEL DRILL SCREWS [1-1/4 INCH] [1-5/8 INCH] [2-1/4 INCH] WITH CORROSION-RESISTANT COATING.
B. WOOD SCREWS: DUROCK BRAND WOOD OR USG SHEATHING WF SCREWS [1-1/4 INCH] [1-5/8 INCH] [2-1/4 INCH] WITH CORROSION-RESISTANT COATING.
C. NAILS: 11-GAUGE HOT-DIPPED GALVANIZED ROOFING NAILS [1-1/2 INCH (38 MM)] [1-3/4 INCH (44 MM)], 7/16 11 MM INCH DIAMETER HEAD.

7.5 INSTALLATION REQUIREMENTS:
A. FOR STEEL FRAMING LESS THAN 0.0329 INCH THICK, ATTACH SHEATHING TO COMPLY WITH ASTM C 1002.
B. FOR STEEL FRAMING FROM 0.033 TO 0.112 INCH THICK, ATTACH SHEATHING TO COMPLY WITH ASTM C 954.

SECTION 09 30 00 / TILE

QUARRY TILE

1.1 SUBMIT SAMPLES COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.

1.2 FURNISH MASTER GRADE CERTIFICATE FOR TILES, BEFORE INSTALLATION, BEARING THE CERTIFICATION MARK OF THE TCA, SIGNED BY THE MANUFACTURER STATING THE TYPE AND QUANTITY OF THE MATERIAL.

1.3 FURNISH MANUFACTURER'S PRINTED INSTRUCTIONS FOR USE OF LATEX PORTLAND CEMENT AND MORTAR.

1.4 PROVI DE CARTON OF EACH OOLOR AND PATTERN OF QUARRY TILE FOR OWNERS' FUTURE USE.

1.5 MATERIALS, PREPARATION, AND INSTALLATION SHALL CONFORM TO ANSI STANDARDS AS LISTED AND THE DETAILED INSTALLATION INSTRUCTIONS OF THE MATERIAL MANUFACTURER INSOFAR AS APPLICABLE.

1.6 INSTALLATION OF QUARRY TILE WITH WATER RESISTANT ORGANIC ADHESIVE: ANSI A_108.4.

1.7 REFERENCED SPECIFIXATIONS, INSOFAR AS ANY PORTIONS ARE APPLICABLE, ARE HEREBY MADE A DIRECT PART OF THIS SPECIFICATION AS THOUGH REPEATED HEREIN.

JOB CONDITIONS

2.1 SET AND GROUT TILE IN EPOXY OR CEMENT MORTAR WHEN SURFACE TEMPERATURE IS AT LEAST 50 DEGREES F AND RISING. COMPLY WITH MINIMUM TEMPERATURE RECOMMENDATIONS OF MANUFACTURER'S FOR BONDING AND GROUTING MATERIALS IN OTHER THAN PORTLAND CEMENT MORTAR. PROTECT ADJOINING WORK SURFACES BEFORE TILE WORK BEGINS.

PRODUCTS

3.1 QUARRY TILE PRODUCTS AS MANUFACTURED BY DALTILE.

MATERIALS

4.1 TILES SHALL BE OF DOMESTIC MANUFACTURE, STANDARD GRADE. MEETING THE REQUIREMENTS OF SPR_R_61 OF THE U.S. DEPARTMENT OF COMMERCE AND SHALL COMPLY WITH ANS A_137.1. TCA CERTIFICATION MARK SHALL APPEAR ON EACH CARTON LABEL.

4.2 FLOOR QUARRY TILE SHALL BE STANDARD GRADE, UNGLAZE CERAMIC TYPE, NOT LESS THAN 3/8" .

4.3 WALL QUARRY BASE TILE SHALL BE STANDARD GRADE UNGLAZED TILE NOT LESS THAN 5/16" THICK, IN NOMINAL FACE SIZES OF 5" X 6". PROVIDE SPACER LUGS OR OTHER SIMILAR FEATURES ON EDGES OF TILE. TILE SHALL COMPLY WITH SECTION 6.1 OF ANSI A 137.1. PROVIDE A 3401 BASE MEMBER AT JUNCTION OF FLOOR AND AT INTERNAL CORNERS: ABJR 3401 AND ACL/4 3401 AS APPLICABLE.

4.4 QUARRY TILE COLORS SHALL BE AS INDICATED ON THE DRAWINGS.

4.5 PORTLAND CEMENT SHALL CONFORM TO ASTM C 150, TYPE I.

4.6 SAND SHALL CONFORM TO ASTM C_144.

4.7 MORTAR SHALL BE ONE PART PORTLAND CEMENT, 6 PARTS DAMP SAND BY VOLUME.

4.8 BOND COAT SHALL BE PORTLAND CEMENT PASTE ON A PLASTIC BED, OR DRY—SET MORTAR ON A CURED BED OR LATEX PORTLAN D CEMENT MORTAR ON A CURED BED.

4.9 LATEX PORTLAND CEMENT MORTAR SHALL CONFORM TO ANSI A 118.4.

4.10 DRY SET MORTAR SHALL CONFORM TO ANSI A 118.1.

4.11 ORGANIC ADHESIVE SHALL BE FLOOR TYPE CONFORMING TO ANSI A 136.1.

4.12 SEALANT: TWO COMPONENTS COMPLYING WITH ASTM C 920, TYPE M, CLASS 25, GRADE NS FOR JOINTS IN VERTICAL SURFACES; GRADE P, USE T FOR JOINTS IN HORIZONTAL SURFACES. BACK UP: FLEXIBLE AND COMPRESS IBLE TYPE OF CLOSED CELL FOAM POLYETHYLENE OR BUTYL RUBBER, ROUNDED AT SURFACE TO CONTACT SEALANT, AS SHOWN IN TCA DETAILS, AND AS RECOMMENDED BY SEALANT MANUFACTURER. IT SHALL FIT NEATLY INTO THE JOINT WITH 1/8" COMPACTION AND TO SUCH A HEIGHT TO ALLOW A SEALANT DEPTH OF 1/2 THE WIDTH OF THE JOINT. SEALANT SHALL NOT BOND TO THE BACK UP MATERIAL.

EXECUTION

5.1 INSTALL OUARRY TILE USING WATER RESISTANT ORGANIC ADHESIVES IN ACCORDANCE WITH ANS A-108.4 AND TCA METHOD

5.2 LAY OUT FLOORS SO THAT NO TILE LESS THAN ONE—HALF SIZE OCCURS. ALIGN JOINTS IN BOTH DIRECTIONS.

5.3 GROUT TILE JOINTS FLUSH WITH FACE OF TILES MAKING A NEATLY FINISHED SMOOTH SURFACE.

5.4 INSTALL SPECIFIED GROUT IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS.

EXPANSION JOINTS

6.1 PROVIDE EXPANSION JOINTS IN QUARRY TILE SURFACES IN ACOORDANCE WITH TCA METHOD EJ-411-84. EXPANSION JOINT WIDTH SHALL BE 1/4" MINIMUM. JOINTS THROUGH TILE AND MORTAR DIRECTLY OVER STRUCTURAL JOINTS IN THE BACKING MUST BE AT LEAST THE WIDTH OF THE STRUCTURAL JOINT.

6.2 INSTALLATION: SET BACK UP WHEN MORTAR IS PLACED OR UTILIZE REMOVABLE WOOD STRIP TO PROVIDE SPACE FOR BACK UP AFTER MORTAR HAS CURED. INSTALL SEALANT AFTER TILE WORK AND GROUT ARE DRY. FOLLOW SEALANT MANUFACTURER'S RECOMMENDATION.

CLEANING AND PROTECTION

7.1 CLEAN TILE AFTER GROUTING AND PROTECT FROM OTHER TRADES. CURE QUARRY TILE FLOORS FOR A MINIMU M OF 72 HOURS.

SECTION 09 51 00 / ACOUSTICAL TILE CEILING

1.1 SUBMIT SAMPLES COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION.
A. SUBMIT SHOP DRAWINGS IN FORM OF REFLECTED CEILING PLAN SHOWING AREAS TO RECEIVE ACOUSTICAL TILE AND DETAILS OF INSTALLATION.
B. SUBMIT SAMPLES OF EACH TYPE OF PANEL AND SUSPENSION SYSTEMS SPECIFIED.

1.2 PROVIDE OWNER WITH EXTRA STOCK EQUAL TO A MINIMUM OF ONE FULL, UNOPENED CARTON OF EACH TYPE.

MANUFACTURERS

2.1 PRODUCTS SHALL BE AS MANUFACTURED BY ARMSTRONG OR VSG.

2.2 ACOUSTICAL PANELS (ACT-1)
A. ACOUSTICAL PANELS SHALL CONFORM TO ASTM E 1477-98 AND ASTM D 3273.
B. PATTERN: "DUNE" BEV ELED TEGULAR
C. FINISH: WHITE FINE TEXTURE.
D. SIZE: 24" X 48" X 5/8" AND 24" X 24" X 5/8"
E. LIGHT REFLECTANCE: LR 0.83 OR GREATER

2.3 WASHABLE ACOUSTICAL PANELS (ACT-2)

SECTION 09 73 00 / PREFINISHED PANELS (FRP)

1.1 SUBMIT SAMPLES COMPLYING WITH SECTION 01 33 00 FOR WORK IN THIS SECTION

1.2 PRE-FIN ISHED PANEL PRODUCTS SHALL BE AS MANUFACTURED BY MARLITE. MATERIALS

1.3 FIBER REINFORCED POLYESTER (FRP) PANELS: MARLITE FRP PANELS, FACTORY PRE-FINISH ED. SIZE: 4' X 10' X 3/32" THICK.

1.4 COLOR: SMOOTH BRIGHT WHITE

1.5 FURNISH PANELS COMPLETE WITH MANUFACTURERS PVC MOLDING SYSTEM CONSISTING OF ONE_PIECE TOP AND EDGE CAPS, DIVISION BARS, INSIDE AND OUTSIDE CORN ER MOLDINGS. AND BASE MOLDINGS. COLOR SHALL MATCH PANEL COLOR.

1.6 SEALANT SHALL BE SILICONE BASED CONSTRUCTION GRADE GENERAL ELECTRIC 1200 SEALANT. COLOR TO MATCH PANELS.

1.7 ADHESIVE SHALL BE AS RECOMMENDED BY THE MANU FACTURER FOR FIRE_RESISTANT CONSTRUCTION.

INSTALLATION

2.1 APPLY PANELS WITH THE LONG DIMENSION VERTICALLY. CUT AND FIT NEATLY AROUND OUTLETS AND SWITCHEX. CAULK SEAMS, CURB JUNCTURES AND CORNERS. INSTALLATION TECHNIQUES SHALL RESULT IN PLUMB AND STRAIGHT SURFACES WITHOUT WAVES OR BUCKLES, FREE OF UNEVENNESS AT JOINTS.

SECTION 09 91 00 / PAINTING

ENVIRONMENTAL CONDITIONS

1.1 DO NOT APPLY EXTERIOR PAINT IN DAMP, RAINY WEATH ER OR UNTIL THE SURFACE HAS DRIED THOROUGHLY FROM THE EFFECTS OF SUCH WEATHER. DO NOT APPLY VARNISH OR PAINT WHEN TEMPERATURE IS BELOW TOO F. AVOID PAINTING SURFACES WHEN EXPOSED TO HOT SUNLIGHT.

PROTECTION

2.1 BEFORE PAINTING, REMOVE HARDWARE, ACCESSORIES, PLATES, LIGHTING FIXTURES AND SIMILAR ITEMS OR PROVIDE AMPLE PROTECTION OF SUCH ITEMS. ON COMPLETION OF EACH SPACE, REPLACE ABOVE ITEMS. PROTECT ADJACENT SURFACES AS REQUIRED. A SUFFICIENT SUPPLY OF CLEAN DROP CLOTHS AND OTHER PROTECTIVE COVERING SHALL BE MAINTAINED.

2.2 FINISHING OF THE FOLLOWING LISTED ITEMS AND MATERIALS WILL NOT BE REQUIRED AND THEY SHALL BE PROTECTED: STAINLESS STEEL, BRASS, BRONZE, COPPER, MONEL, CHROMIUM, ANODIZED ALUMINUM; SPECIALLY FINISHED ARTICLES SUCH AS PORCELAIN ENAMEL, PLASTIC COATED FABRICS, AND BAKED ENAMEL.

PREPARATION OF SURFACES

3.1 INSPECTION OF SURFACES: DO NOT BEGIN PAINTING ON SURFACES UNTIL IT HAS BEEN INSPECTED AND IS IN PROPER CONDITION TO RECEIVE THE PAINT AS SPECIFIED. APPLY NO MATERIAL UNTIL THE UNSUITABLE SURFACES HAVE BEEN MADE SATISFACTORY. AFTER ACCEPTANCES OF SURFACE, BY APPLICATION OF FIRST COAT OF PAINT, ASSUME RESPONSIBILITY FOR UNSATISFACTORY FINISH RESULTING.

3.2 IF, AFTER TREATMENT, THE COMPLETED FINISH (OR PORTION THEREOF) BLISTERS, CHECKS, PEELS, OR OTHERWISE SHOWS INDICATION OF DAMPNESS OR OTHER IRREGULAR CONDITION OF SURFACE, REMOVE THE APPLIED TREATMENT AND REFINISH THE PART AFFECTED TO THE SATISFACTION OF ARCHITECT. DETERMINE DRYNESS OF MOISTU RE_HOLDING MATERIALS BY USE OF A RELIABLE ELECTRONIC MOISTURE METER.

3.3 WOOD: SANDPAPER TO SMOOTH AND EVEN SURFACE. AFTER PRIMING OR STAIN COAT HAS BEEN APPLIED, FILL NAIL HOLES AND OTHER SURFACE IMPERFECTIONS WITH PUTTY TINTED WITH PRIMER OR STAIN TO MATCH WOOD COLOR. SAND WOODWORK BETWEEN COATS TO A SMOOTH SURFACE. COVER KNOTS AND SAP STREAKS WITH A THIN COAT OF SHELLAC.

3.4 STEEL AND IRON: REMOVE GREASE, RUST AND RUST SCALE AND TOUCH_UP ANY CHIPPED OR ABRADE D PLACES ON ITEMS THAT HAVE BEEN SHOP COATED. WHERE STEEL OR IRON HAVE A HEAVY COATING OF SCALE, REMOVE BY DESCALING. OR WIRE BRUSH ING, AS NECESSARY. WHEN AREA WILL BE EXPOSED TO VIEW, SANDPAPER THE AREA SMOOTH, FEATHER THE EDGE OF SURROUNDING UNDAMAGED PRIME COAT AND SPOT PRIME IN A MANNER TO ELIMINATE EVIDENCE OF REPAI R.

3.5 GALVANIZED METAL: CLEAN BY WIPING SURFACES WITH SURFACE CONDITION ER AND PRIME WITH GALVANIZED IRON PRIM MER AS RECOMMENDED BY PAINT MANUFACTU RER.

3.6 CONCRETE AND CONCRETE MASONRY: PREPARE SURFACES TO BE PAINTED BY REMOVING DIRT, DUST, OIL AND GREASE STAINS AND EFFLORESCENC E. THE METHOD OF SURFACE PREPARATION SHALL BE LEFT TO THE DISCRETION OF CONTRACTOR. BEFORE FIRST PAINT COAT IS APPLIED, SPOT PRIME NAILS AND OTHER EXPOSED METAL OCCURRING IN THE SURFACES WITH AN OIL BASE MASONRR PRIMER AS RECOMMENDED BY PAINT MANUFACTURER.

3.7 PLASTER SURFACES: FILL CRACKS, HOLES, OR IMPERFECTIONS IN PLASTER WITH PATCHING PLASTER AND SMOOTH OFF TO MATCH ADJOINING SURFACES. BEFORE PAINTING PLASTER, SURFACES SHALL BE FIRST TESTED FOR DRYNESS WITH MOISTURE TESTING DEVICE. APPLY NO PAINT OR SEALER ON PLASTER WHEN THE MOISTURE CONTENT EXCEEDS 12% AS DETERMINED BY THE TESTING DEVICE. TEST SUFFICIENT AREAS IN EACH SPACE AND AS OFTEN AS NECESSARY TO DETERMINE THE PROPER MOISTURE CONTENT FOR PAINTING. IF THE MOISTURE CONTENT IS BETWEEN 8% AND 12%, PRIME WITH ALKALI RESISTANT PRIMER. IF 6% OR LESS, PRIME WITH SPECIFIED PRIMER. REMOVE THE DRY SALT DEPOSITS FROM PLASTER SURFACES BY BRUSH ING WITH STIFF BRUSH.

WORKMANSHIP

4.1 PERFORM WORK USING ONLY EXPERIENCED, PAINTERS IN ACCORDANCE WITH THE STANDARDS OF PRACTICE IN THE TRADE. HAND BRUSH OR ROLL WORK EXCEPT WHERE OTHERWISE PERM ITTED. OLYMPIC PRODUCTS ARE TO BE BRUSH APPLIED. WHEN COMPLETED, THE PAINTING SHALL REPRESENT A FIRST-CLASS APPEARANCE. APPLY PAINT MATERIALS UNDER ADEQUATE ILLUMINATION.

4.2 TINT PRIMERS AND UNDERCOATS TO APPROXIMATELY THE COLOR OF THE FINISH COAT. EACH COAT SHELL BE SUFFICIENTLY DIFFERENT FROM THE WORK IN PLACE TO PERM IT EAST IDENTIFICATION.

4.3 FINISH EDGES, TOPS AND BOTTOMS OF DOORS THE SAME AS DOOR FACES.

4.4 EXPOSED WATER, GAS, WASTE PIPING, EXPOSED CONDUIT, LIGHTING PANELS, TELEPHONE TERMINAL BOXES AND GALVANIZED OR INSULATED DUCTS, SHALL BE PAINTED IN AREAS OTHER THAN MECHANICAL ROOMS. PAINT PORTIONS OF EQUIPMENT EXPOSED TO VIEW FROM GROUND LEVEL AT ANY POINT ON THE SITE.

4.5 GRILLES AND REGISTERS SHALL BE SPRAY PAINTED WITH ENAMEL OR LACQUER TO MATCH WALLS AND CEILINGS. PAINT MATERIALS SHALL NOT SAG, RUN OR BIND MOVABLE PARTS OF GRILLES OR REGISTERS.

4.6 DUCT THROATS BEHIND GRILLES, REGISTERS, LOUVERS, BAFFLES, ETC. SHALL BE GIVEN ONE COAT OF FLAT BLACK OIL PAINT, WHEREVER VISIBILITY OF THE INTERIOR OF THE DUCT IS ALLOWED.

4.7 EXAMINE THE MECHANICAL AND ELECTRICAL DRAWINGS TO DETERMINE THE AMOUNT OF EXPOSED WORK TO BE PAINTED.

4.8 REFER TO THE EXTERIOR ELEVATIONS, ROOM FINISH AND DOOR SCHEDULES ON THE DRAWINGS.

4.9 REFER TO THE "FINISH SCHEDULE" ON THE DRAWING FOR DESIGNATED FINISHES OF AREAS, WHICH ARE LISTED IN ACCORDANCE WITH FOLLOWING SCHEDULE.

4.10 ITEMS LISTED ARE ACCEPTABLE PRODUCTS OF DUNN EDWARDS PAINTS, FRAZEE PAINTS, AND ICI PAINTS. RESPONSIBILITY FOR RECOMMENDING, SCHEDULING AND USING THE PROPER PAINT FOR THE JOB CONDITIONS RESTS WITH THE MANUFACTURER AND CONTRACTOR.

SECTION 09 90 00 / INTERIOR, EXTERIOR AND HIGH-PERFORMANCE PAINTS AND COATINGS

RELATED SECTIONS

SECTION 04 20 00 - UNIT MASONRY: CONCRETE MASONRY UNITS (CMU) AND BRICK.
SECTION 05 50 00 - METAL FAB

DELIVERY, STORAGE, AND HANDLING

3.1 DELIVERY: DELIVER MANUFACTURER'S UNOPENED CONTAINERS TO THE WORK SITE. PACKAGING SHALL BEAR THE MANUFACTURER'S NAME, LABEL, AND THE FOLLOWING LIST OF INFORMATION.
- A. PRODUCT NAME, AND TYPE (DESCRIPTION).
- B. APPLICATION AND USE INSTRUCTIONS.
- C. SURFACE PREPARATION.
- D. VOC CONTENT.
- E. ENVIRONMENTAL HANDLING.
- F. BATCH DATE.
- G. COLOR NUMBER.

3.2 STORAGE: STORE AND DISPOSE OF SOLVENT-BASED MATERIALS, AND MATERIALS USED WITH SOLVENT-BASED MATERIALS, IN ACCORDANCE WITH REQUIREMENTS OF LOCAL AUTHORITIES HAVING JURISDICTION.

3.3 STORE MATERIALS IN AN AREA THAT IS WITHIN THE ACCEPTABLE TEMPERATURE RANGE, PER MANUFACTURER'S INSTRUCTIONS. PROTECT FROM FREEZING.

3.4 HANDLING: MAINTAIN A CLEAN, DRY STORAGE AREA, TO PREVENT CONTAMINATION OR DAMAGE TO THE COATINGS.

PROJECT CONDITIONS

4.1 MAINTAIN ENVIRONMENTAL CONDITIONS (TEMPERATURE, HUMIDITY, AND VENTILATION) WITHIN LIMITS RECOMMENDED BY MANUFACTURER FOR OPTIMUM RESULTS. DO NOT INSTALL PRODUCTS UNDER ENVIRONMENTAL CONDITIONS OUTSIDE MANUFACTURER'S RECOMMENDED LIMITS.

EXTRA MATERIALS

5.1 FURNISH EXTRA PAINT MATERIALS FROM THE SAME PRODUCTION RUN AS THE MATERIALS APPLIED AND, IN THE QUANTITIES, DESCRIBED BELOW. PACKAGE WITH PROTECTIVE COVERING FOR STORAGE AND IDENTIFY WITH LABELS DESCRIBING CONTENTS. DELIVER EXTRA MATERIALS TO OWNER.

5.2 FURNISH OWNER WITH AN ADDITIONAL ONE PERCENT OF EACH MATERIAL AND COLOR, BUT NOT LESS THAN 1 GAL (3.8 L) OR 1 CASE, AS APPROPRIATE.

MANUFACTURERS

6.1 ACCEPTABLE MANUFACTURER: SHERWIN-WILLIAMS, WHICH IS LOCATED AT: 101 PROSPECT AVE.; CLEVELAND, OH 44115; ASD TOLL FREE TEL: 800-524-5979; TEL: 216-566-2000; FAX: 440-826-1989; EMAIL: REQUEST INFOSPECIFICATIONS@SHERWIN.COM; WEB:WWW.SWSPECS.COM.

6.2 REQUESTS FOR SUBSTITUTIONS WILL BE CONSIDERED IN ACCORDANCE WITH PROVISIONS OF SECTION 01 60 00 - PRODUCT REQUIREMENTS.

APPLICATIONS/SCOPE

7.1 EXTERIOR PAINT AND COATING SYSTEMS:

7.2 CONCRETE: NON-VEHICULAR CONCRETE FLOORS, PATIOS, PORCHES, STEPS, AND PLATFORMS.

PAINT MATERIALS – GENERAL

8.1 PAINTS AND COATINGS:
- A. UNLESS OTHERWISE INDICATED, PROVIDE FACTORY-MIXED COATINGS. WHEN REQUIRED, MIX COATINGS TO CORRECT CONSISTENCY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS BEFORE APPLICATION. DO NOT REDUCE, THIN, OR DILUTE COATINGS OR ADD MATERIALS TO COATINGS UNLESS SUCH PROCEDURE IS SPECIFICALLY DESCRIBED IN MANUFACTURER'S PRODUCT INSTRUCTIONS.
- B. FOR OPAQUE FINISHES, TINT EACH COAT INCLUDING PRIMER COAT AND INTERMEDIATE COATS, ONE-HALF SHADE LIGHTER THAN SUCCEEDING COAT, WITH FINAL FINISH COAT AS BASE COLOR. OR FOLLOW MANUFACTURES PRODUCT INSTRUCTIONS FOR OPTIMAL COLOR CONFORMANCE.

8.2 PRIMERS: WHERE THE MANUFACTURER OFFERS OPTIONS ON PRIMERS FOR A PARTICULAR SUBSTRATE, USE PRIMER CATEGORIZED AS "BEST" BY THE MANUFACTURER.

8.3 COATING APPLICATION ACCESSORIES: PROVIDE ALL PRIMERS, SEALERS, CLEANING AGENTS, CLEANING CLOTHS, SANDING MATERIALS, AND CLEAN-UP MATERIALS REQUIRED, PER MANUFACTURER'S SPECIFICATIONS.

8.4 COLOR: REFER TO FINISH SCHEDULE FOR PAINT COLORS, AND AS SELECTED.

8.5 V4 and V4.1 EQ CREDIT: INDOOR ENVIRONMENTAL QUALITY-LOW EMITTING MATERIALS.

EXTERIOR PAINT AND COATING SYSTEMS

9.1 CONCRETE: CEMENTITIOUS SIDING, FLEXBOARD, TRANSITE BOARD, NON-ROOF SHINGLES, COMMON BRICK, STUCCO, EIFS, TILT-UP, PRECAST, AND POURED-IN-PLACE CEMENT.

LATEX SYSTEMS:

10.1 FLAT FINISH:
- A. 1ST COAT: S-W LOXON CONCRETE AND MASONRY PRIMER SEALER, LX02W50 (5.3-8.0 MILS WET, 2.1-3.2 MILS DRY).
- B. 2ND COAT: S-W SUPERPAINT EXTERIOR LATEX FLAT, A80 SERIES.
- C. 3RD COAT: S-W SUPERPAINT EXTERIOR LATEX FLAT, A80 SERIES (4.0 MILS WET, 1.4 MILS DRY PER COAT).

10.2 METAL: MISCELLANEOUS. IRON, ORNAMENTAL IRON, STRUCTURAL IRON AND STEEL, FERROUS METAL, HOLLOW METAL DOORS AND FRAMES, PARAPET COPINGS, CANOPIES/AWNINGS.

10.3 ALKYD SYSTEMS; WATERBASED:
- A. SEMI-GLOSS FINISH:
  - i. 1ST COAT: S-W PRO INDUSTRIAL PRO-CRYL UNIVERSAL PRIMER, B66-1310 SERIES (5.0 MILS WET, 2.0 MILS DRY).
  - ii. 2ND COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150 SERIES.
  - iii. 3RD COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150 SERIES (4.0-5.0 MILS WET, 1.4 - 1.7 MILS DRY PER COAT).

CURED ASPHALT, CONCRETE, AND BRICK: NON-VEHICULAR FLOORS, PATIOS, PORCHES, STEPS AND PLATFORMS.

11.1 ACRYLIC SYSTEM WATER-BASED: CURED ASPHALT:
- A. ACRYLIC SYSTEM WATER-BASED: FLOOR FINISH:
  - i. 1ST COAT: S-W PROPARK WATERBORNE TRAFFIC MARKING PAINT, B97 SERIES (330 LINEAL FEET OF STANDARD 4-INCH STRIPE PER GALLON).
  - ii. 2ND COAT: S-W SHER-CRYL HPA, B66-350 SERIES (6.0 M-10.0 MILS WET, 2.0-3.3 MILS DRY PER COAT). *WITH SILICA SAND BROADCAST FOR SLIP RESISTANCE.

#PLEASE NOTE, A MOCK-UP FOR COLOR RETENTION, ADHESION AND HOT TIRE PICK-UP TESTING IS REQUIRED PRIOR TO FULL APPLICATION.

INTERIOR PAINT AND COATING COMMERCIAL SYSTEMS:

ALKYD SYSTEMS; WATERBASED:

12.1 SEMI-GLOSS FINISH:
- A. 1ST COAT: S-W EXTREME BOND PRIMER, B51W01150 (3.1 MILS WET, 1.0 MILS DRY).
- B. 2ND COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150 SERIES.
- C. 3RD COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150 SERIES (4.0-5.0 MILS WET, 1.4 - 1.7 MILS DRY PER COAT).

METAL: HOLLOW METAL DOORS AND FRAMES.

ALKYD SYSTEMS; WATERBASED:

13.1 SEMI-GLOSS FINISH:
- A. 1ST COAT: S-W PRO INDUSTRIAL PRO-CRYL UNIVERSAL PRIMER, B66-1310 SERIES (5.0 MILS WET, 2.0 MILS DRY).
- B. 2ND COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150 SERIES.
- C. 3RD COAT: S-W PRO INDUSTRIAL WATERBASED ALKYD URETHANE ENAMEL SEMI-GLOSS, B53-1150 SERIES (4.0-5.0 MILS WET, 1.4 - 1.7 MILS DRY PER COAT).

EXAMINATION

14.1 DO NOT BEGIN INSTALLATION UNTIL SUBSTRATES HAVE BEEN PROPERLY PREPARED; NOTIFY ARCHITECT OF UNSATISFACTORY CONDITIONS BEFORE PROCEEDING. IF SUBSTRATE PREPARATION IS THE RESPONSIBILITY OF ANOTHER INSTALLER, NOTIFY ARCHITECT OF UNSATISFACTORY PREPARATION BEFORE PROCEEDING.

14.2 PROCEED WITH WORK ONLY AFTER CONDITIONS HAVE BEEN CORRECTED AND APPROVED BY ALL PARTIES, OTHERWISE APPLICATION OF COATINGS WILL BE CONSIDERED AS AN ACCEPTANCE OF SURFACE CONDITIONS.

14.3 PREVIOUSLY PAINTED SURFACES: VERIFY THAT EXISTING PAINTED SURFACES DO NOT CONTAIN LEAD-BASED PAINTS, NOTIFY ARCHITECT IMMEDIATELY IF LEAD-BASED PAINTS ARE ENCOUNTERED.

SURFACE PREPARATION

15.1 GENERAL: SURFACES SHALL BE DRY AND IN SOUND CONDITION. REMOVE OIL, DUST, DIRT, LOOSE RUST, PEELING PAINT OR OTHER CONTAMINATION TO ENSURE GOOD ADHESION.

15.2 PRIOR TO ATTEMPTING TO REMOVE MILDEW, IT IS RECOMMENDED TO TEST ANY CLEANER ON A SMALL, INCONSPICUOUS AREA PRIOR TO USE. BLEACH AND BLEACHING TYPE CLEANERS MAY DAMAGE OR DISCOLOR EXISTING PAINT FILMS. BLEACH ALTERNATIVE CLEANING SOLUTIONS ARE ADVISED.

15.3 REMOVE MILDEW BEFORE PAINTING BY WASHING WITH A SOLUTION OF 1 PART LIQUID HOUSEHOLD BLEACH AND 3 PARTS OF WARM WATER. APPLY SOLUTION AND SCRUB THE MILDEWED AREA. ALLOW SOLUTION TO REMAIN ON THE SURFACE FOR 10 MINUTES. RINSE THOROUGHLY WITH CLEAN WATER AND ALLOW SURFACE TO DRY BEFORE PAINTING. WEAR PROTECTIVE GLASSES OR GOGGLES, WATERPROOF GLOVES, AND PROTECTIVE CLOTHING. QUICKLY WASH OFF ANY OF THE MIXTURE THAT COMES IN CONTACT WITH YOUR SKIN. DO NOT ADD DETERGENTS OR AMMONIA TO THE BLEACH/WATER SOLUTION.

15.4 REMOVE ITEMS INCLUDING BUT NOT LIMITED TO THERMOSTATS, ELECTRICAL OUTLETS, SWITCH COVERS AND SIMILAR ITEMS PRIOR TO PAINTING. AFTER COMPLETING PAINTING OPERATIONS IN EACH SPACE OR AREA, REINSTALL ITEMS REMOVED USING WORKERS SKILLED IN THE TRADES INVOLVED.

15.5 NO EXTERIOR PAINTING SHOULD BE DONE IMMEDIATELY AFTER A RAIN, DURING FOGGY WEATHER, WHEN RAIN IS PREDICTED, OR WHEN THE TEMPERATURE IS BELOW 50 DEGREES F (10 DEGREES C). UNLESS PRODUCTS ARE DESIGNED SPECIFICALLY FOR THESE CONDITIONS. ON LARGE EXPANSES OF METAL SIDING, THE AIR, SURFACE AND MATERIAL TEMPERATURES MUST BE 50 DEGREES F (10 DEGREES F) OR HIGHER TO USE LOW TEMPERATURE PRODUCTS.

15.6 ALUMINUM: REMOVE ALL OIL, GREASE, DIRT, OXIDE, AND OTHER FOREIGN MATERIAL BY CLEANING PER SSPC-SP1, SOLVENT CLEANING.

15.7 BLOCK (CINDER AND CONCRETE): REMOVE ALL LOOSE MORTAR AND FOREIGN MATERIAL. SURFACE MUST BE FREE OF LAITANCE, CONCRETE DUST, DIRT, FORM RELEASE AGENTS, MOISTURE CURING MEMBRANES, LOOSE CEMENT, AND HARDENERS. CONCRETE AND MORTAR MUST BE CURED AT LEAST 30 DAYS AT 75 DEGREES F (24 DEGREES C). THE PH OF THE SURFACE SHOULD BE BETWEEN 6 AND 9 UNLESS THE PRODUCTS ARE DESIGNED TO BE USED IN HIGH PH ENVIRONMENTS. ON TILT-UP AND POURED-IN-PLACE CONCRETE, COMMERCIAL DETERGENTS AND ABRASIVE BLASTING MAY BE NECESSARY TO PREPARE THE SURFACE. FILL BUG HOLES, AIR POCKETS, AND OTHER VOIDS WITH A CEMENT PATCHING COMPOUND.

15.8 CONCRETE, SSPC-SP13 OR NACE 6: THIS STANDARD GIVES REQUIREMENTS FOR SURFACE PREPARATION OF CONCRETE BY MECHANICAL, CHEMICAL, OR THERMAL METHODS PRIOR TO THE APPLICATION OF BONDED PROTECTIVE COATING OR LINING SYSTEMS. THE REQUIREMENTS OF THIS STANDARD ARE APPLICABLE TO ALL TYPES OF CEMENTITIOUS SURFACES INCLUDING CAST-IN-PLACE CONCRETE FLOORS AND WALLS, PRECAST SLABS, MASONRY WALLS, AND SHOTCRETE SURFACES. AN ACCEPTABLE PREPARED CONCRETE SURFACE SHOULD BE FREE OF CONTAMINANTS, LAITANCE, LOOSELY ADHERING CONCRETE, AND DUST, AND SHOULD PROVIDE A SOUND, UNIFORM SUBSTRATE SUITABLE FOR THE APPLICATION OF PROTECTIVE COATING OR LINING SYSTEMS.

15.9 CEMENT COMPOSITION SIDING/PANELS: REMOVE ALL SURFACE CONTAMINATION BY WASHING WITH AN APPROPRIATE CLEANER, RINSE THOROUGHLY AND ALLOW TO DRY. EXISTING PEELED OR CHECKED PAINT SHOULD BE SCRAPED AND SANDED TO A SOUND SURFACE. PRESSURE CLEAN, IF NEEDED, WITH A MINIMUM OF 2100 PSI PRESSURE TO REMOVE ALL DIRT, DUST, GREASE, OIL, LOOSE PARTICLES, LAITANCE, FOREIGN MATERIAL, AND PEELING OR DEFECTIVE COATINGS. ALLOW THE SURFACE TO DRY THOROUGHLY. THE PH OF THE SURFACE SHOULD BE BETWEEN 6 AND 9 UNLESS THE PRODUCTS ARE DESIGNED TO BE USED IN HIGH PH ENVIRONMENTS.

15.10 COPPER AND STAINLESS STEEL: REMOVE ALL OIL, GREASE, DIRT, OXIDE, AND OTHER FOREIGN MATERIAL BY CLEANING PER SSPC-SP 2, HAND TOOL CLEANING.

15.11 EXTERIOR COMPOSITION BOARD (HARDBOARD): SOME COMPOSITION BOARDS MAY EXUDE A WAXY MATERIAL THAT MUST BE REMOVED WITH A SOLVENT PRIOR TO COATING. WHETHER FACTORY PRIMED OR UNPRIMED, EXTERIOR COMPOSITION BOARD SIDING (HARDBOARD) MUST BE CLEANED THOROUGHLY AND PRIMED WITH AN ALKYD PRIMER.

15.12 DRYWALL - EXTERIOR: MUST BE CLEAN AND DRY. ALL NAIL HEADS MUST BE SET AND SPACKLED. JOINTS MUST BE TAPED AND COVERED WITH A JOINT COMPOUND. SPACKLED NAIL HEADS AND TAPE JOINTS MUST BE SANDED SMOOTH, AND ALL DUST REMOVED PRIOR TO PAINTING. EXTERIOR SURFACES MUST BE SPACKLED WITH EXTERIOR GRADE COMPOUNDS.

15.13 DRYWALL - INTERIOR: MUST BE CLEAN AND DRY. ALL NAIL HEADS MUST BE SET AND SPACKLED. JOINTS MUST BE TAPED AND COVERED WITH A JOINT COMPOUND. SPACKLED NAIL HEADS AND TAPE JOINTS MUST BE SANDED SMOOTH, AND ALL DUST REMOVED PRIOR TO PAINTING.

15.14 GALVANIZED METAL: CLEAN PER SSPC-SP1 USING DETERGENT AND WATER OR A DEGREASING CLEANER TO REMOVE GREASES AND OILS. APPLY A TEST AREA PRIMING AS REQUIRED. ALLOW THE COATING TO DRY AT LEAST ONE WEEK BEFORE TESTING. IF ADHESION IS POOR, BRUSH BLAST PER SSPC-SP16 IS NECESSARY TO REMOVE THESE TREATMENTS.

15.15 PLASTER: MUST BE ALLOWED TO DRY THOROUGHLY FOR AT LEAST 30 DAYS BEFORE PAINTING UNLESS THE PRODUCTS ARE DESIGNED TO BE USED IN HIGH PH ENVIRONMENTS. ROOM MUST BE VENTILATED WHILE DRYING; IN COLD, DAMP WEATHER, ROOMS MUST BE HEATED. DAMAGED AREAS MUST BE REPAIRED WITH AN APPROPRIATE PATCHING MATERIAL. BARE PLASTER MUST BE CURED AND HARD. TEXTURED, SOFT, POROUS, OR POWDERY PLASTER SHOULD BE TREATED WITH A SOLUTION OF 1 PINT HOUSEHOLD VINEGAR TO 1 GALLON OF WATER. REPEAT UNTIL THE SURFACE IS HARD, RINSE WITH CLEAR WATER AND ALLOW TO DRY.

15.16 STEEL: STRUCTURAL, PLATE, AND SIMILAR ITEMS: SHOULD BE CLEANED BY ONE OR MORE OF THE SURFACE PREPARATIONS DESCRIBED BELOW. THESE METHODS ARE USED THROUGHOUT THE WORLD FOR DESCRIBING METHODS FOR CLEANING STRUCTURAL STEEL. VISUAL STANDARDS ARE AVAILABLE THROUGH THE SOCIETY OF PROTECTIVE COATINGS. A BRIEF DESCRIPTION OF THESE STANDARDS TOGETHER WITH NUMBERS BY WHICH THEY CAN BE SPECIFIED FOLLOW.

15.17 SOLVENT CLEANING, SSPC-SP1: SOLVENT CLEANING IS A METHOD FOR REMOVING ALL VISIBLE OIL, GREASE, SOIL, DRAWING AND CUTTING COMPOUNDS, AND OTHER SOLUBLE CONTAMINANTS. SOLVENT CLEANING DOES NOT REMOVE RUST OR MILL SCALE. CHANGE RAGS AND CLEANING SOLUTION FREQUENTLY SO THAT DEPOSITS OF OIL AND GREASE ARE NOT SPREAD OVER ADDITIONAL AREAS IN THE CLEANING PROCESS. BE SURE TO ALLOW ADEQUATE VENTILATION.

15.18 HAND TOOL CLEANING, SSPC-SP2: HAND TOOL CLEANING REMOVES ALL LOOSE MILL SCALE, LOOSE RUST, AND OTHER DETRIMENTAL FOREIGN MATTER. IT IS NOT INTENDED THAT ADHERENT MILL SCALE, RUST, AND PAINT BE REMOVED BY THIS PROCESS. BEFOREHAND TOOL CLEANING, REMOVE VISIBLE OIL, GREASE, SOLUBLE WELDING RESIDUES, AND SALTS BY THE METHODS OUTLINED IN SSPC-SP1.

15.19 POWER TOOL CLEANING, SSPC-SP3: POWER TOOL CLEANING REMOVES ALL LOOSE MILL SCALE, LOOSE RUST, AND OTHER DETRIMENTAL FOREIGN MATTER. IT IS NOT INTENDED THAT ADHERENT MILL SCALE, RUST, AND PAINT BE REMOVED BY THIS PROCESS. BEFORE POWER TOOL CLEANING, REMOVE VISIBLE OIL, GREASE, SOLUBLE WELDING RESIDUES, AND SALTS BY THE METHODS OUTLINED IN SSPC-SP1.

15.20 WHITE METAL BLAST CLEANING, SSPC-SP5 OR NACE 1: A WHITE METAL BLAST CLEANED SURFACE, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, MILL SCALE, RUST, PAINT, OXIDES, CORROSION PRODUCTS, AND OTHER FOREIGN MATTER. BEFORE BLAST CLEANING, VISIBLE DEPOSITS OF OIL OR GREASE SHALL BE REMOVED BY ANY OF THE METHODS SPECIFIED IN SSPC-SP1 OR OTHER AGREED UPON METHODS.

15.21 COMMERCIAL BLAST CLEANING, SSPC-SP6 OR NACE 3: A COMMERCIAL BLAST CLEANED SURFACE, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, MILL SCALE, RUST, PAINT, OXIDES, CORROSION PRODUCTS, AND OTHER FOREIGN MATTER, EXCEPT FOR STAINING. STAINING SHALL BE LIMITED TO NO MORE THAN 33 PERCENT OF EACH SQUARE INCH OF SURFACE AREA AND MAY CONSIST OF LIGHT SHADOWS, SLIGHT STREAKS, OR MINOR DISCOLORATION CAUSED BY STAINS OF RUST, STAINS OF MILL SCALE, OR STAINS OF PREVIOUSLY APPLIED PAINT. BEFORE BLAST CLEANING, VISIBLE DEPOSITS OF OIL OR GREASE SHALL BE REMOVED BY ANY OF THE METHODS SPECIFIED IN SSPC-SP1 OR OTHER AGREED UPON METHODS.

15.22 BRUSH-OFF BLAST CLEANING, SSPC-SP7 OR NACE 4: A BRUSH-OFF BLAST CLEANED SURFACE, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, LOOSE MILL SCALE, LOOSE RUST, AND LOOSE PAINT. TIGHTLY ADHERENT MILL SCALE, RUST, AND PAINT MAY REMAIN ON THE SURFACE. BEFORE BLAST CLEANING, VISIBLE DEPOSITS OF OIL OR GREASE SHALL BE REMOVED BY ANY OF THE METHODS SPECIFIED IN SSPC-SP 1 OR OTHER AGREED UPON METHODS.

15.23 POWER TOOL CLEANING TO BARE METAL, SSPC-SP11: METALLIC SURFACES THAT ARE PREPARED ACCORDING TO THIS SPECIFICATION, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, MILL SCALE, RUST, PAINT, OXIDE CORROSION PRODUCTS, AND OTHER FOREIGN MATTER. SLIGHT RESIDUES OF RUST AND PAINT MAY BE LEFT IN THE LOWER PORTIONS OF PITS IF THE ORIGINAL SURFACE IS PITTED. PRIOR TO POWER TOOL SURFACE PREPARATION, REMOVE VISIBLE DEPOSITS OF OIL OR GREASE BY ANY OF THE METHODS SPECIFIED IN SSPC-SP1, SOLVENT CLEANING, OR OTHER AGREED UPON METHODS.

15.24 NEAR-WHITE BLAST CLEANING, SSPC-SP10 OR NACE 2: A NEAR WHITE BLAST CLEANED SURFACE, WHEN VIEWED WITHOUT MAGNIFICATION, SHALL BE FREE OF ALL VISIBLE OIL, GREASE, DIRT, DUST, MILL SCALE, RUST, PAINT, OXIDES, CORROSION PRODUCTS, AND OTHER FOREIGN MATTER, EXCEPT FOR STAINING. STAINING SHALL BE LIMITED TO NO MORE THAN 5 PERCENT OF EACH SQUARE INCH OF SURFACE AREA AND MAY CONSIST OF LIGHT SHADOWS, SLIGHT STREAKS, OR MINOR DISCOLORATION CAUSED BY STAINS OF RUST, STAINS OF MILL SCALE, OR STAINS OF PREVIOUSLY APPLIED PAINT. BEFORE BLAST CLEANING, VISIBLE DEPOSITS OF OIL OR GREASE SHALL BE REMOVED BY ANY OF THE METHODS SPECIFIED IN SSPC-SP1 OR OTHER AGREED UPON METHODS.

15.25 HIGH- AND ULTRA-HIGH PRESSURE WATER JETTING FOR STEEL AND OTHER HARD MATERIALS: SSPC-SP12 OR NACE 5: THIS STANDARD PROVIDES REQUIREMENTS FOR THE USE OF HIGH- AND ULTRA-HIGH PRESSURE WATER JETTING TO ACHIEVE VARIOUS DEGREES OF SURFACE CLEANLINESS. THIS STANDARD IS LIMITED IN SCOPE TO THE USE OF WATER ONLY WITHOUT THE ADDITION OF SOLID PARTICLES IN THE STREAM.

15.26 WATER BLASTING, SSPC-SP12/NACE NO. 5: REMOVAL OF OIL GREASE DIRT, LOOSE RUST, LOOSE MILL SCALE, AND LOOSE PAINT BY WATER AT PRESSURES OF 2,000 TO 2,500 PSI AT A FLOW OF 4 TO 14 GALLONS PER MINUTE.

15.27 VINYL SIDING, ARCHITECTURAL PLASTICS, EIFS AND FIBERGLASS: CLEAN VINYL SIDING THOROUGHLY BY SCRUBBING WITH A WARM, SOAPY WATER SOLUTION. RINSE THOROUGHLY. DO NOT PAINT VINYL SIDING WITH ANY COLOR DARKER THAN THE ORIGINAL COLOR UNLESS THE PAINT SYSTEM FEATURES SHERWIN-WILLIAMS VINYLSAFE TECHNOLOGY. PAINTING WITH DARKER COLORS THAT ARE NOT SHERWIN-WILLIAMS VINYLSAFE MAY CAUSE SIDING TO WARP. FOLLOW ALL PAINTING GUIDELINES OF THE VINYL MANUFACTURER WHEN PAINTING. ONLY PAINT PROPERLY INSTALLED VINYL SIDING. DEVIATING FROM THE MANUFACTURER'S PAINTING GUIDELINES MAY CAUSE THE WARRANTY TO BE VOIDED.

15.28 STUCCO: MUST BE CLEAN AND FREE OF ANY LOOSE STUCCO. IF RECOMMENDED PROCEDURES FOR APPLYING STUCCO ARE FOLLOWED, AND NORMAL DRYING CONDITIONS PREVAIL, THE SURFACE MAY BE PAINTED IN 30 DAYS. THE PH OF THE SURFACE SHOULD BE BETWEEN 6 AND 9 UNLESS THE PRODUCTS ARE DESIGNED TO BE USED IN HIGH PH ENVIRONMENTS SUCH AS LOXON.

15.29 WOOD: MUST BE CLEAN AND DRY. PRIME AND PAINT AS SOON AS POSSIBLE. KNOTS AND PITCH STREAKS MUST BE SCRAPED, SANDED, AND SPOT PRIMED BEFORE A FULL PRIMING COAT IS APPLIED. PATCH ALL NAIL HOLES AND IMPERFECTIONS WITH A WOOD FILLER OR PUTTY AND SAND SMOOTH.

INSTALLATION

16.1 APPLY ALL COATINGS AND MATERIALS WITH THE MANUFACTURER'S SPECIFICATIONS IN MIND. MIX AND THIN COATINGS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

16.2 DO NOT APPLY TO WET OR DAMP SURFACES. WAIT AT LEAST 30 DAYS BEFORE APPLYING TO NEW CONCRETE OR MASONRY. OR FOLLOW MANUFACTURER'S PROCEDURES TO APPLY APPROPRIATE COATINGS PRIOR TO 30 DAYS. TEST NEW CONCRETE FOR MOISTURE CONTENT. WAIT UNTIL WOOD IS FULLY DRY AFTER RAIN OR MORNING FOG OR DEW.

16.3 APPLY COATINGS USING METHODS RECOMMENDED BY MANUFACTURER.

16.4 UNIFORMLY APPLY COATINGS WITHOUT RUNS, DRIPS, OR SAGS, WITHOUT BRUSH MARKS, AND WITH CONSISTENT SHEEN.

16.5 APPLY COATINGS AT SPREADING RATE REQUIRED TO ACHIEVE THE MANUFACTURERS RECOMMENDED DRY FILM THICKNESS.

16.6 REGARDLESS OF NUMBER OF COATS SPECIFIED, APPLY AS MANY COATS AS NECESSARY FOR COMPLETE HIDE, AND UNIFORM APPEARANCE.

16.7 INSPECTION: THE COATED SURFACE MUST BE INSPECTED AND APPROVED BY THE ARCHITECT JUST PRIOR TO THE APPLICATION OF EACH COAT.

PROTECTION

17.1 PROTECT FINISHED COATINGS FROM DAMAGE UNTIL COMPLETION OF PROJECT.

17.2 TOUCH-UP DAMAGED COATINGS AFTER SUBSTANTIAL COMPLETION, FOLLOWING MANUFACTURER'S RECOMMENDATION FOR TOUCH UP OR REPAIR OF DAMAGED COATINGS. REPAIR ANY DEFECTS THAT WILL HINDER THE PERFORMANCE OF THE COATINGS.

SECTION 10 73 16 / METAL CANOPIES

PART 1 GENERAL

DESCRIPTION OF WORK

1.1 WORK IN THIS SECTION INCLUDES FURNISHING AND INSTALLATION OF EXTRUDED ALUMINUM OVERHEAD HANGER ROD STYLE CANOPIES, WITH A GUTTER, AS FURNISHED BY GC.

1.2 RELATED ITEMS AND CONSIDERATIONS
- A. FLASHING OF VARIOUS DESIGNS AS REQUIRED.
- B. DETERMINE WALL CONSTRUCTION, MAKE-UP, AND THICKNESS.
- C. ENSURE ADEQUATE WALL CONSTRUCTION TO CARRY CANOPY LOADS AS REQUIRED.
- D. CONSIDER WATER DRAINAGE OUT OF AND AWAY FROM CANOPY.
- E. ANY NECESSARY REMOVAL OR RELOCATION OF EXISTING STRUCTURES, OBSTRUCTIONS OR MATERIALS.
- F. LIGHTING, WIRING, AND ELECTRICAL DIAGRAMS, AS REQUIRED.
- G. CANOPY ATTACHMENT HARDWARE TO MATCH BUILDING AND APPLICATION.

1.3 QUALITY ASSURANCE
- A. PRODUCTS SPECIFIED HEREIN MEET THE ESTABLISHED STANDARD OF QUALITY REQUIRED, AS MANUFACTURED BY AWNEX INC., BALL GROUND, GA, 770-704-7140.

1.4 FIELD MEASUREMENT
- A. CONFIRM DIMENSION PRIOR TO SHOP DRAWINGS WHEN POSSIBLE OR NECESSARY.
- B. IF REQUESTED, SUPPLY MANUFACTURER'S STANDARD LITERATURE AND SPECIFICATIONS FOR CANOPIES.

1.5 SUBMIT SHOP DRAWINGS SHOWING STRUCTURAL COMPONENT LOCATIONS/POSITIONS, MATERIAL DIMENSIONS, AND DETAILS OF CONSTRUCTION AND ASSEMBLY.

PERFORMANCE REQUIREMENTS

1.6 CANOPY MUST CONFORM TO LOCAL BUILDING CODES.

1.7 DETERMINE IF SPECIFIC LOAD REQUIREMENTS HAVE BEEN ESTABLISHED FOR CANOPIES AND IF STAMPED CALCULATIONS AND DRAWINGS ARE REQUIRED FOR LOCATION IN WHICH CANOPY IS TO BE INSTALLED.

DELIVERY, STORAGE, AND HANDLING

1.8 DELIVER AND STORE ALL CANOPY COMPONENTS IN PROTECTED AREAS UNTIL READY FOR INSTALLATION.

REFERENCES

1.9 AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA) 2603 VOLUNTARY SPECIFICATION, PERFORMANCE REQUIREMENTS AND TEST PROCEDURES FOR PIGMENTED ORGANIC COATINGS ON ARCHITECTURAL EXTRUSIONS AND PANELS.
- A. AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) 7 – MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- B. ASTM INTERNATIONAL (ASTM) B-221 STANDARD SPECIFICATION FOR ALUMINUM AND ALUMINUM-ALLOY EXTRUDED BARS, RODS, WIRE, PROFILES AND TUBES B429 – STANDARD SPECIFICATION FOR ALUMINUM-ALLOY EXTRUDED PIPE AND TUBE

PART 2 PRODUCTS

MATERIALS

2.1 DECKING SHALL CONSIST OF BRAKE-FORMED CHANNEL STYLE PANS AT 1/16" THICKNESS (WIDTH VARIES), SEALED WITH EXTRUDED ALUMINUM BATTEN CAPS.

2.2 DRY-PITCH MEMBERS SHALL BE EXTRUDED ALUMINUM, ALLOY 6061-T6 AT A NOMINAL THICKNESS OF 1/8".

2.3 GUTTER MEMBERS SHALL BE EXTRUDED ALUMINUM, ALLOY 6063-T5 AT A NOMINAL THICKNESS OF 1/8".

2.4 INTERMEDIATE FRAMING MEMBERS (COMPRESSION BARS) SHALL BE EXTRUDED ALUMINUM, ALLOY 6005A-T5 AT A NOMINAL THICKNESS OF 1/8"

2.5 TIE-BACK RODS AND EXPOSED ATTACHMENT BRACKETS AND HARDWARE SHALL BE POWDER COATED.

2.6 END MEMBERS (SNAP CHANNEL) SHALL BE EXTRUDED ALUMINUM, ALLOY 6083-T5 AT A NOMINAL THICKNESS OF 1/8".

2.7 FASCIA SHALL BE STANDARD 8" FLAT FACE, 8" OPEN CHANNEL FACE, OR 10" OPEN CHANNEL FACE, EXTRUDED ALUMINUM, ALLOY 6063-T5 AT A NOMINAL THICKNESS OF 1/8". DEVIATION FROM THESE FACES WILL REQUIRE BRAKE-FORMED OR EXTRUDED ALUMINUM PIECES TO BE ATTACHED MECHANICALLY TO THE 8" SNAP CHANNEL.

FINISHES

2.8 STANDARD POWDER-COAT FINISH SHALL CONFORM WITH AAMA 2603 SPECIFICATIONS. COLOR CHARTS AND SAMPLES ARE AVAILABLE UPON REQUEST.

2.9 OPTIONAL FINISHES INCLUDE STANDARD AND CUSTOM TWO-COAT KYNAR COLORS, AND WOOD-LOOK "SUBLIMATED" FINISH

FABRICATION

2.10 ALL SEATTLE CANOPIES ARE SHIPPED IN PRE-ASSEMBLED SECTIONS FOR EASE OF INSTALLATION.

2.11 ALL CONNECTIONS SHALL BE MECHANICALLY ASSEMBLED, UTILIZING 410 STAINLESS STEEL #10 AND #14 SIZE FASTENERS WITH A MINIMUM SHEAR STRESS OF 350 LB.

2.12 CONCEALED DRAINAGE: WATER SHALL DRAIN FROM COVERED SURFACES INTO GUTTER EXTRUSION LOCATED AT THE FRONT FOR FRONT DRAINAGE VIA SCUPPERS.

PART 3: EXECUTION

INSPECTION

3.1 CONFIRM THAT SURROUNDING AREA IS READY FOR THE CANOPY INSTALLATION.

3.2 INSTALLER SHALL CONFIRM DIMENSIONS AND ELEVATIONS TO BE AS SHOWN ON DRAWINGS PROVIDED BY AWNEX INC.

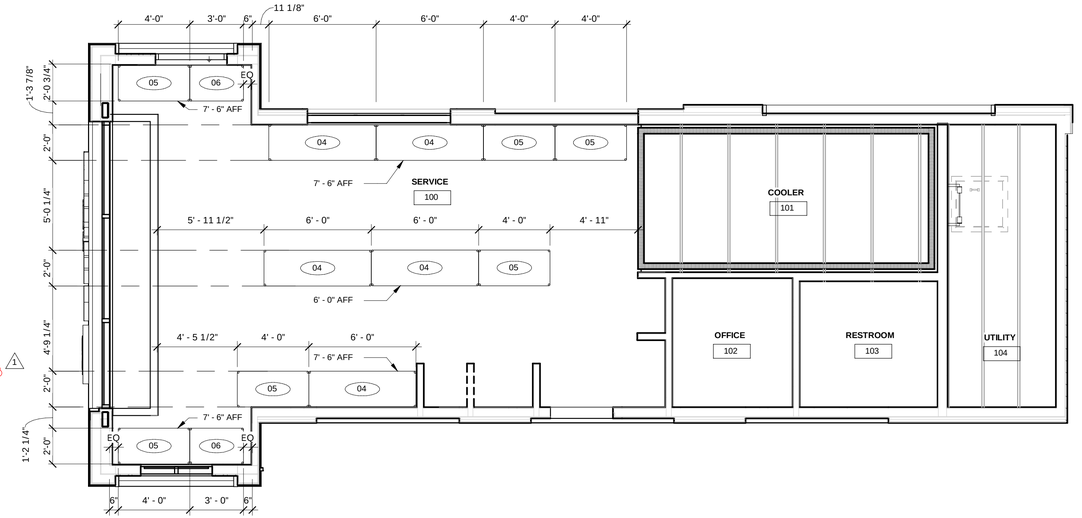
3.3 ERECTION SHALL BE PERFORMED BY AN QUALIFIED INSTALLER OF SIMILAR PRODUCTS AND SCHEDULED AFTER ALL CONCRETE, MASONRY, AND ROOFING IN THE AREA IS COMPLETED.

INSTALLATION

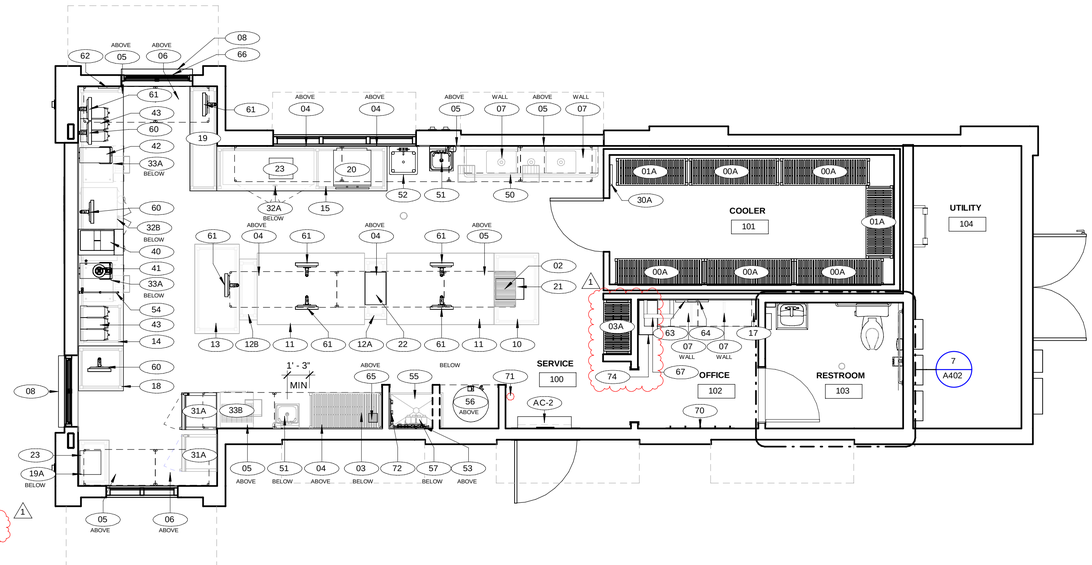
3.4 INSTALLATION SHALL BE PER

FIXTURE & EQUIPMENT SCHEDULE

ITEM NO.	DESCRIPTION	MODEL	QTY	FURNISHED BY OWNER	FURNISHED BY GC	INSTALLED BY OWNER	INSTALLED BY GC	PLUMBING WATER	PLUMBING WASTE	ELECTRICAL VOLT	ELECTRICAL AMP	ELECTRICAL RECEP	REMARK
0 SHELVES, RACKS													
00A	WALK IN COOLER RACK W/ (4) SHELVES	60" L X 18"D X 72"H	5	X		X							
01A	WALK IN COOLER RACK W/ (4) SHELVES	48"L X 18"D X 72"H	2	X		X							
02	TORTILLA RACK W/ (2) SHELVES	24"L X 14"D	1	X		X							
03	KITCHEN RACK W/ (5) SHELVES	48"L X 24"D X 72"H	1	X		X							OFCI. DO NOT PLACE BOTTOM 2 SHELVES OVER FLOOR SINK.
03A	KITCHEN RACK W/ (5) SHELVES	36"L X 18"D X 72"H	1	X		X							OFCI. DO NOT PLACE BOTTOM 2 SHELVES OVER FLOOR SINK.
04	KITCHEN SHELF - HUNG FROM STRUCTURE	72"L X 24"D	5	X			X						OWNER FURNISHED CONTRACTOR INSTALLED
05	KITCHEN SHELF - HUNG FROM STRUCTURE	48"L X 24"D	6	X			X						OWNER FURNISHED CONTRACTOR INSTALLED
06	KITCHEN SHELF - HUNG FROM STRUCTURE	36"L X 24"D	2	X			X						OWNER FURNISHED CONTRACTOR INSTALLED
07	S.S SHELF - HUNG FROM WALL	36"L X 18"D	4	X			X						
08	SOLID SURFACE SHELF	ASH AGGREGATE CORIAN SHELF	2		X		X						REFER TO DETAIL 11/A503.
1 TABLES													
10	WORK TABLE - STAINLESS STEEL	GSW USA WT-E3048	1	X		X							
11	FOOD PREP TABLE - STAINLESS STEEL	TRUE - TSSU-72-30M-B-DS-ST-ADA-HC	2	X		X				115	7.2	5-15R	POWERED BY OVERHEAD ISO CORD
12A	INTERMEDIATE TABLE - STAINLESS STEEL	15"W X 41 13/16"L X 27"H	1	X		X							
12B	INTERMEDIATE TABLE - STAINLESS STEEL	15"W X 41 13/16"L X 35"H	1	X		X							W/ CUTOUTS FOR PANS
13	EXPO TABLE - STAINLESS STEEL	GSW - USA - WT-E3060	1	X		X							
14	DRINK TABLE - STAINLESS STEEL	14'-6"L X 30"D	1	X		X							USED W/ DOUBLE D/T UNITS
15	PREP TABLE - STAINLESS STEEL	9'-6"L X 30"D	1	X		X							RIGHT DRIVE THRU SIDE PREP TABLE
17	DESK - MANAGERS WORKSTATION	66"L X 18"D X 30"H	1		X		X						WALL MOUNTED - GC TO VERIFY IN FIELD
18	P.O.S TABLE - STAINLESS STEEL	30"L X 30"D	1	X		X							
19	DRIVE THRU TABLE - STAINLESS STEEL	70"L X 18"D	1	X		X							
19A	MOBILE EXPRESS TABLE - STAINLESS STEEL	30"L X 20"D	1	X		X							
2 WARMERS													
20	HIGH SPEED COMBINATION MICROWAVE OVEN	AMANA COMMERCIAL XPRESS IQ MXP221LT	1	X		X				208-240	40	6-30R	
21	PANINI PRESS	WARING WFG275	1	X		X				120	15	5-15R	POWERED BY OVERHEAD ISO CORD
22	CAYENNE NITRO POWER RETHERMALIZER	VOLLRATH PC-21 72090-SW	1	X		X				120	12	5-15R	
23	COUNTER TOP (SOUP) WARMER	NEMCO 6055A	2	X		X				120	10	5-15R	
3 COOLERS													
30A	WALK IN COOLER 16'-7"L X 7'-11"W X 10"H EXT DIM	KOLPAK 15'-11" X 7'-3" CLEAR INTERIOR SPACE	1	X			X			208-230	20		2" AIRGAP REQUIRED. ELECTRICAL TO MAKE FINAL CONNECTIONS
31A	BEVERAGE COOLER - SINGLE	TRUE GDM-23-HC~TSL01	2	X		X				120	5.4	5-15R	EC F&I CORD AND PLUG SET, DOOR HINGES TO LEFT
32A	REFRIGERATED REACH IN COOLER	TRUE TBR60-RISZ1-L-B-GG1	1	X		X				120	2.7	5-15R	D/T UNDER COUNTER REFRIGERATOR
32B	REFRIGERATED REACH IN COOLER	TRUETBR48-RISZ1-L-B-GG-1	1	X		X				120	2.1	5-15R	FRONTLINE UNDER COUNTER REFRIGERATOR
33A	UNDER COUNTER ICE MAKER	ICE-O-MATIC ICEU220HA3	2	X		X		5/8" DIA	3/4" DIA	120	11.9	5-15R	ICE-O-MATIC IFQ1 WATER FILTER SYSTEM INCLUDED
33B	ELEVATION SERIES ICE CUBE MAKER	ICE-O-MATIC CIM0520A - B42PS ICE BIN	1	X		X		3/8" DIAM	3/4" DIA	120	17.8		EC TO F&I CORD AND PLUG;ICE-O-MATIC STORAGE BIN B42PS; ICE-O-MATIC IFQ1 WATER FILTER SYSTEM INCLUDED.
4 BEVERAGE													
40	FROZEN BEVERAGE DISPENSER	STOELTING F112-38	1	X		X				208-240	20	6-20P	NEMA 6 - 15 RECEPTACLE. CARB ASSEMBLY F112 INCLUDED
41	HOT COFFEE BREWER	CURTIS - CBHS	1	X		X							
42	ICE TEA BREWER	BUNN ITB DUAL DILUTION 36700.0301 TB6	1	X		X		1/4" DIA		120	14	5-15R	PC F&I BACKFLOW DOUBLE CHECK VENTED ASSE 1022
43	LEMONADE BUBBLER	CRATHCO CLASSIC BUBBLERS D35-3	2	X		X				115	8.5	6-15R	NEMA 6 - 15 RECEPTACLE, INCLUDES CRATHCO 2266 PUSH HANDLES (X3)
5 WATER													
50	(3) COMPARTMENT SINK	GSW USASE18183D	1	X			X	1/2" DIA	2" DIA				T&S BRASS FAUCET B-0133 - 12CRB8TP; GSW USA DRAIN AA-303
51	S.S. WALL HUNG HAND SINK W/ FAUCET	GSW USA HS-1615S	2	X			X						GSW USA FAUCET AA-410G W/ SPLASH GUARDS; STRAINER INCLUDED
52	PREP SINK	GSW USA SE18181P	1	X			X						
53	WATER FILTER		1		X		X	1" DIA		120	16		PC TO PROVIDE TO WATER SUPPLY LOOP WITH SHUTOFF VALVES; SEE P SHEETS FOR DETAILS
54	POT FILLER	B-0594	1	X			X	1/2" DIA					SUPPLY FW, SEE PLUMBING SHEETS; DOUBLE JOINTED
55	SINK - MOP - 36" X 24" X 10"	MUSTEE MOP BASIN MODEL 65M	1		X		X						SEE SHEETS FOR DETAILS - GC TO FURNISH
55A	FAUCET - MOP SINK WALL MOUNTED	MUSTEE SERVICE FAUCET MODEL 63.006A	1		X								
56	WATER HEATER OVER MOP SINK	AO SMITH DEL-50	1		X		X						COORDINATE WITH PLUMBING
57	CLICK AND GO CHEMICAL DISPENSER	ECOLAB LIQUID DILUTION SYSTEM	4	X		X							
6 TECH													
60	KIOSK	NCR P1535 AND P1235	5	X		X	X						EC TO PROVIDE DATA AND POWER CONNECTIVITY BOX
61	POS MONITOR		7	X		X							EC TO PROVIDE DATA AND POWER CONNECTIVITY BOX
62	3M HEADSET CHARGER CONTROL STATION		1	X		X				115		5-15R	WALL MOUNTED ABOVE COUNTER
63	OFFICE MONITOR, PRINTER		2	X		X				115		5-15R	EC TO PROVIDE DATA AND POWER CONNECTIVITY BOX
64	SECURITY DVR		1	X		X				120	3	5-15R	COORDINATE WITH OWNER FOR LOCATION
65	MUSIC SYSTEM		1	X		X				120	3		
66	DRIVE THRU DETECTOR		1	X			X			120	2	5-15R	MOUNT AT 72" A.F.F.
67	NETWORK RACK	24 PORT PATCH PANEL	1	X			X						
7 OTHER													
70	COAT HOOK STRIP - 46IN 1170MM		2	X			X						
71	FIRE EXTINGUISHER	2A10BC	1		X		X						LOCATE AS DIRECTED BY FIRE MARSHAL; DO NOT MOUNT TO WIC
72	MOP RACK		1	X			X						
74	SAFE	TIDEL SERIES 4 WITH STORAGE VAULT.	1	X		X							GC TO PROVIDE POWER AND DATA. OWNER TO INSTALL.



1 EQUIPMENT REFLECTED CEILING PLAN
1/4" = 1'-0"



2 EQUIPMENT FLOOR PLAN
1/4" = 1'-0"

REFRIGERATION

THE ICE MACHINE MUST BE INSTALLED BY A CERTIFIED REFRIGERATION TECHNICIAN. THE GENERAL CONTRACTOR MUST ACCOUNT FOR THIS IN ITS PROPOSAL AND SUBMIT THE TECHNICIAN'S QUALIFICATIONS TO THE OWNER FOR APPROVAL PRIOR TO COMMENCEMENT OF THE WORK. THE GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR THE EXTENT OF THIS SCOPE OF WORK, AND SHALL COMPLETE IT IN ACCORDANCE WITH THE "RESPONSIBILITY SCHEDULE".

EQUIPMENT GENERAL NOTES:

A. SEE ELECTRICAL FOR ADDITIONAL EQUIPMENT REQUIREMENTS AND ADDITIONAL INFORMATION.

B. SEE MECHANICAL AND PLUMBING FOR ADDITIONAL GAS, WATER, AND DRAIN REQUIREMENTS AND INFORMATION.

C. ELECTRICAL, MECHANICAL, AND PLUMBING INFORMATION SHOWN WITHIN THE EQUIPMENT SCHEDULE IS FOR REFERENCE ONLY. FOR ELECTRICAL, MECHANICAL, AND PLUMBING INFORMATION SEE CONSULTANT SHEETS AND EQUIPMENT SPECIFICATION SHEETS.

D. FOR WALL MOUNTED SHELVING LOCATIONS SEE INTERIOR ELEVATIONS

E. PROVIDE AND INSTALL CASEWORK AND SHELVING AS INDICATED ON FLOOR PLANS AND INTERIOR ELEVATIONS. ALL CASEWORK TO BE SOLID CLEAR STAIN GRADE WOOD EXTERIOR SURFACE WITH MELAMINE INTERIOR SURFACES AND SHELVES. ALL DOORS AND DRAWER FRONTS SHALL BE RAISED PANEL.

F. CONTRACTOR SHALL FIELD MEASURE AND VERIFY DIMENSIONS AT LOCATIONS THAT ARE TO RECEIVE CUSTOM CASEWORK AND PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

SALAD AND GO

#2001
610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION 2.00

ROGUE ARCHITECTS
513 MAIN STREET #300
FORT WORTH TX 76102

SEAL

STATE OF MISSOURI
STEVEN COX
NUMBER A-2023017238
ARCHITECT

REVISION 1: 06/06/2024

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION
1	06/06/2024	CITY COMMENTS

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	06/01/2023
SCALE:	AS NOTED
DRAWN BY:	P. C
CHECKED BY:	J. JEFFERY

SHEET TITLE

EQUIPMENT PLAN

SHEET NUMBER

Q101

6/6/2024 8:09:36 AM

PLUMBING SYMBOLS AND ABBREVIATIONS

NOTE: ALL SYMBOLS AND ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS

GENERAL NOTES

1. PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALL PERMITS, INSPECTIONS, LICENSES AND FEES. FURNISH ALL LABOR, EQUIPMENT, SUPPLIES AND MATERIALS NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS.

2. THE DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF PIPES, FIXTURES, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DO NOT SCALE THE DRAWINGS FOR DIMENSIONS. TAKE ALL DIMENSIONS, MEASUREMENTS, EQUIPMENT LOCATIONS, LEVELS, ETC FROM THE ARCHITECTURAL DRAWINGS AND FROM THE EQUIPMENT TO BE FURNISHED. PIPING MAY BE RELOCATED OR OFFSET FOR PROPER CLEARANCES OR TO AVOID CONFLICTS WITH OTHER TRADES. THE DESIGN INTENT (I.E. PITCHES, VELOCITIES, PRESSURE DROPS, VOLTAGE DROPS, ETC) CANNOT BE GREATLY ALTERED WITHOUT THE APPROVAL OF THE ARCHITECT. THE COST OF THESE DEVIATIONS TO AVOID INTERFERENCE'S SHALL BE PART OF THE ORIGINAL CONTRACT BID.

3. EACH SUBCONTRACTOR SHALL CONFER AND COOPERATE WITH ALL OTHER TRADES TO COORDINATE THEIR WORK. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO MATERIALS AND EQUIPMENT ROUTED IN CEILING AND WALL CAVITIES, EQUIPMENT ARRANGEMENT IN MECHANICAL SPACES, INCLUDING EQUIPMENT CLEARANCE REQUIREMENTS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS, ETC. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS.

4. BASE FINAL INSTALLATION OF MATERIALS AND EQUIPMENT ON ACTUAL DIMENSIONS AND CONDITIONS AT THE PROJECT SITE. FIELD MEASURE FOR MATERIALS AND EQUIPMENT REQUIRING EXACT FIT. NO EXTRAS WILL BE GIVEN FOR THE CONTRACTORS FAILURE TO FIELD COORDINATE.

5. THE OWNER OR ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK.

6. THE CONTRACTOR SHALL LOCATE ALL EQUIPMENT THAT MUST BE SERVICED, OPERATED, OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE (BUT NOT LIMITED TO) VALVES, SHOCK ABSORBERS, TRAPS, CLEANOUTS, MOTORS, CONTROLLERS, SWITCHGEAR, AND DRAIN POINTS IF REQUIRED FOR BETTER ACCESSIBILITY. FURNISH ACCESS DOORS FOR THIS PURPOSE. MINOR DEVIATIONS FROM THE DRAWINGS MAY BE ALLOWED TO PROVIDE FOR BETTER ACCESSIBILITY. ANY CHANGES SHALL BE APPROVED BY THE ARCHITECT AND CONSTRUCTION MANAGER/GENERAL CONTRACTOR PRIOR TO MAKING THE CHANGE.

7. THE CONTRACTOR SHALL PROVIDE ACCESS DOORS, WALL OPENINGS, ROOF OPENINGS OR ANY OTHER CONSTRUCTION REQUIREMENT NEEDED TO ACCOMMODATE THE PLUMBING EQUIPMENT. LOCATIONS OF THESE OPENINGS SHALL BE SUBMITTED IN SUFFICIENT TIME TO BE INSTALLED IN THE NORMAL COURSE OF WORK.

8. THE CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF PLUMBING EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO THE PURCHASE AND INSTALLATION OF ANY ELECTRICAL GEAR OR CONDUIT.

9. PROVIDE VIBRATION ISOLATORS FOR MOTOR DRIVEN PLUMBING EQUIPMENT UNLESS NOTED OTHERWISE. PROVIDE ISOLATION AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

10. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WALL CLEANOUTS, ACCESS DOORS, ETC WITH THE ARCHITECT AND ALL OTHER TRADES PRIOR TO INSTALLATION. IF A CONFLICT WITH MILLWORK, LIGHT SWITCHES, WINDOWS, ETC EXISTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF THE POTENTIAL INTERFERENCE PRIOR TO INSTALLATION.

11. PLUMBING VENTS THROUGH THE ROOF SHALL BE A MINIMUM OF 10 FEET FROM ALL OUTSIDE AIR INTAKES AND A MINIMUM OF 5 FEET FROM EXTERIOR PERIMETER WALLS.

12. SOME PIPES SHOWN ON EACH FLOOR PLAN MAY BE SHOWN WITH AN OFFSET FOR CLARITY.

13. PLUMBING FIXTURES AND TRIM OF LIKE KIND SHALL BE OF THE SAME MANUFACTURER THROUGHOUT THE PROJECT. TYPICAL CATEGORIES INCLUDE THE FOLLOWING:

    A. WATER CLOSETS, LAVATORIES, URINALS
    B. ELECTRIC WATER COOLERS, DRINKING FOUNTAINS
    C. FAUCETS, MIXING VALVES
    D. TAIL PIECE, FIXTURE TRAPS, ESCUTCHEONS, ARM EXTENSIONS, STRAINERS
    E. FIXTURE CARRIERS, FLOOR DRAINS, FLOOR SINKS, ROOF DRAINS, OVERFLOW DRAINS
    F. COUNTER TOP SINKS

14. PROVIDE WATER HAMMER ARRESTERS BETWEEN THE NEXT TO LAST AND LAST FIXTURE AT EACH BATTERY OF PLUMBING FIXTURES IN ACCORDANCE WITH THE WATER HAMMER ARRESTER SCHEDULE AND THE PLUMBING AND DRAINAGE INSTITUTE STANDARD PDI-WH-201.

15. ALL SANITARY WASTE PIPING WITHIN THE BUILDING ENVELOPE SHALL HAVE MINIMUM SLOPES AS REQUIRED BY THE LOCAL CODE AUTHORITY. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS INDICATED ON FLOOR PLANS PRIOR TO INSTALLATION OF ANY SITE UTILITIES AND CONNECTION INTO EXISTING SERVICES.

16. COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY'S STANDARD (TAS). PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING FIXTURES WITH FLUSH VALVE HANDLES LOCATED ON THE WIDE SIDE OF EACH STALL.

17. SEAL ALL PIPE PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS WITH AN APPROVED FIRE PROOFING MATERIAL.

18. ALL FLOOR DRAIN AND FLOOR SINK TRAPS SHALL USE TRAP PRIMERS.

19. THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL NATURAL GAS UTILITY COMPANY TO EXTEND NATURAL GAS SERVICE TO LOCATION INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL PAY ALL FEES AND COSTS ASSOCIATED/REQUIRED BY THE LOCAL GAS UTILITY COMPANY FOR THE EXTENSION OF THE GAS SERVICE. THE CONTRACTOR SHALL PROVIDE ALL PIPING, VALVES, ETC THAT ARE NOT PROVIDED BY THE LOCAL GAS UTILITY COMPANY AND THAT ARE REQUIRED FOR CONNECTION OF THE GAS METER AND REGULATOR(S) FOR A COMPLETE OPERATIONAL SYSTEM. THE CONTRACTOR SHALL VERIFY THE NATURAL GAS PRESSURE PROVIDED BY THE NATURAL GAS UTILITY COMPANY AND PROVIDE ADDITIONAL REGULATORS AS REQUIRED BY THE GAS FIRED EQUIPMENT INSTALLED.

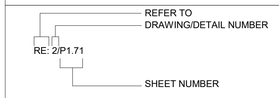
20. WELDED ALL GAS PIPING. THREADED JOINTS SHALL BE USED ONLY ON VALVES AND REGULATORS.

21. CONTRACTOR SHALL INSTALL NEW ISOLATION VALVES AT BRANCH CONNECTION TO EACH RESTROOM ON DOMESTIC HOT AND COLD WATER SUPPLY LINES. ACCESS PANELS TO BALL VALVE SHUT OFF SHALL BE INSTALLED AS REQUIRED BY GENERAL NOTE 7.

ABBREVIATIONS

A/E	ARCHITECT/ENGINEER	L	LENGTH
AFF	ABOVE FINISHED FLOOR	LB	POUNDS
AHU	AIR HANDLING UNIT	LRA	LOCKED ROTOR AMPS
AV	ACID VENT	MAX	MAXIMUM
AW	ACID WASTE	MCA	MINIMUM CIRCUIT AMPACITY
BD	BUILDING DRAIN (BELOW FLOOR)	MIN	MINIMUM
		MSB	MOP SINK BASIN
B.F.G.	BELOW FINISHED GRADE	N/A	NOT APPLICABLE
BS	BUILDING SEWER (OUTSIDE OF BLDG)	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
DCW	DOMESTIC COLD WATER	NFWH	NON-FREEZE WALL HYDRANT
DHW	DOMESTIC HOT WATER	N/O.N/C	NORMALLY OPEN, NORMALLY CLOSED
DHWR	DOMESTIC HOT WATER CIRCULATION LOOP	O/C	ON CENTER
		OFD	ROOF OVERFLOW DRAIN
D	EQUIPMENT DRAIN	PCO	PLUG CLEANOUT
DI	DEIONIZED WATER	PH	PHASE
DCO	TWO-WAY GRADE CLEANOUT	PROVIDE	FURNISH AND INSTALL
DSN	DOWNSPOUT NOZZLE	PSI	POUNDS PER SQUARE INCH
(E)	EXISTING	RD	ROOF DRAIN
EQUIP	EQUIPMENT	RE:	REFERENCE, REFER
EWC	ELECTRIC WATER COOLER	RLA	RUNNING LOAD AMPS
°F	DEGREES FAHRENHEIT	RM	ROOM
FCO	FLOOR CLEANOUT	RPBFP	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER
FCU	FAN COIL UNIT		
FD	FLOOR DRAIN	RPZ	REDUCED PRESSURE ZONE
FS	FLOOR SINK	S	SINK
FT.	FOOT, FEET	SD	STORM DRAIN (BELOW FLOOR)
FVC	FIRE VALVE CABINET	ST	STORM WATER (ABOVE CEILING)
G	NATURAL GAS	SSD	SUBSURFACE DRAIN
GCO	GRADE CLEANOUT	THRU	THROUGH
GWH	NATURAL GAS WATER HEATER	TP	TRAP PRIMER
H	HEIGHT	TYP	TYPICAL
HB	HOSE BIBB	U	URINAL
HP	HORSEPOWER	UL	UNDERWRITERS LABORATORIES, INC.
HWTM	HOT WATER TEMPERATURE MAINTENANCE CABLE	V	SANITARY VENT
		VTR	SANITARY VENT THRU ROOF
HZ	HERTZ	W	SANITARY WASTE (ABOVE FLOOR)
IE	INVERT ELEVATION	WC	WATER CLOSET
IN.	INCH, INCHES	WCO	WALL CLEANOUT
J-BOX	JUNCTION BOX	W/	WITH
kW	KILOWATT	W/O	WITHOUT

DRAWING/DETAIL REFERENCE



WATER HAMMER ARRESTER SCHEDULE

P.D.I. SIZE	A	B	C	D	E	F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-330

NOTES:
1. ALL WHA'S SHALL HAVE AN ACCESS PANEL.
2. SIZE AND LOCATE WATER HAMMER ARRESTERS IN ACCORDANCE WITH PDI PAMPHLET PDI-WH-201

BASIS OF PLUMBING DESIGN

PRIMARY CODES:
PLUMBING: 2018 INTERNATIONAL PLUMBING CODE.

Storm Drain Calculation		Storm Drain Calculation (Per Drain)
Rainfall (in/hr)	6	
Area of Roof (Sqft)	860 Area of Roof (Sqft)	430.00
Gal/min	53.61 Gal/min	26.80
Pipe Size	**8" Pipe Size**	4"
	Number of Drains	2

VALVES AND FITTINGS

SYMBOL	DESCRIPTION
	SHUT-OFF / ISOLATION VALVE
	BALL VALVE
	BUTTERFLY VALVE
	GLOBE VALVE
	PLUG VALVE / GAS COCK
	CHECK VALVE
	STRAINER
	CALIBRATED BALANCING VALVE
R	GAS PRESSURE REGULATOR
	FLOW SWITCH
	UNION (DIELECTRIC)
	VALVE IN RISER
	END RISE (90° ELL)
	END DROP (90° ELL)
	RISE OR DROP
	TEE OUT OF TOP OF PIPE
	TEE OUT OF BOTTOM OF PIPE
	CAP ON END OF PIPE
WCO	WALL CLEANOUT
PCO	PLUG CLEANOUT
DCO	TWO WAY CLEANOUT
GCO	GRADE CLEANOUT
	NON-FREEZE WALL HYDRANT OR HOSE BIBB
FD	FLOOR DRAIN
FCO	FLOOR CLEANOUT
	SHUT-OFF / ISOLATION VALVE

LINE TYPES

SYMBOL	DESCRIPTION
SW	SANITARY SEWER (BELOW FLOOR, BUILDING DRAIN)
GW	GREASY WASTE (ABOVE CEILING)
D	EQUIPMENT DRAIN (ABOVE CEILING)
	SANITARY VENT
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER CIRCULATION

WATER CALCULATIONS

SANITARY SEWER AND WATER SERVICE PLUMBING CALCULATIONS

FIXTURE TYPE	QUANTITY	WASTE FIXTURE UNITS PER FIXTURE	TOTAL WASTE FIXTURE UNITS FOR FIXTURE TYPE	WATER FIXTURE UNITS PER FIXTURE	TOTAL WATER FIXTURE UNITS FOR FIXTURE TYPE
WATER CLOSET < 1.6 GPF	1	4	4	5	5
LAVATORY	1	1	1	2	2
HAND SINK	2	2	4	3	6
SINK (SERVICE/MOP)	1	2	2	3	3
SINK (THREE COMP.)	1	0	0	3	3
PREP SINK	1	0.5	0.5	3	3
HOSE BIBB	2	0	0	2	4
EMERGENCY FLOOR DRAIN	1	0	0	0	0
FLOOR DRAIN	2	2	6	0	0
FLOOR SINK	5	5	20	0	0
		TOTAL FIXTURE UNITS:	**37.5**		**26**
		SERVICE PIPE SIZE:	**4"**		**1"**
			DISTANCE FROM METER TO MOST REMOTE FIXTURE (FEET):		**50**
			EQUIVALENT LENGTH OF PIPING = DISTANCE x 1.5 (FEET):		**75**

WATER PIPE CALCULATION: IPC APPENDIX E		
TOTAL WATER SERVICE DEMAND (FLOW):	18	GPM
EQUIVALENT LENGTH OF PIPE:	75	FEET
MINIMUM PRESSURE AT METER:	60.0	PSI
PRESSURE LOSS THROUGH METER:	3.0	PSI
PRESSURE LOSS THROUGH BACKFLOW PREVENTION DEVICE:	10.0	PSI
HEAD LOSS (HEAD IN FEET x 0.433 PSI/FT):	4.3	PSI
PRESSURE LOSS THROUGH WATER HEATER:	0.0	PSI
PRESSURE LOSS THROUGH SPECIAL EQUIPMENT:	0.0	PSI
GREATEST PRESSURE REQUIRED FOR FIXTURE:	20.0	PSI
TOTAL PRESSURE LOSS:	37.3	PSI
TOTAL PRESSURE AVAILABLE FOR FRICTION LOSS:	22.7	PSI
ALLOWABLE FRICTION LOSS PER 100 FEET OF PIPE:	30.2	PSI

GREASE INTERCEPTOR CALCULATION

PROJECT: SALAD AND GO

FIXTURE	GPM	LBS OF GREASE
THREE COMPARTMENT SINK COMPARTMENT=18"X18"X12" = 3888 CU. IN. X 3 COMPARTMENTS = 11664 CU. IN. TOTAL CU IN = 11664/231X.75= 38 GALLONS. 38 GALLONS AT 2 MINUTE DRAIN DOWN PERIOD = 38/2 = 19 GPM.	19	38
HAND SINK=.5 GALLONS	0.5	1
PREP SINK=1 GALLON	1	2
HAND SINK=.5 GALLONS	0.5	1
MOP SINK=1 GALLON	1	2
TOTAL POUNDS OF GREASE	**21**	**44**
GREASE INTERCEPTOR (GB-75)	**75**	**861**

PER PDI-G101, SECTION 8.0: IT IS RECOMMENDED THAT THE TOTAL CAPACITY IN GALLONS OF FIXTURES BEING SERVED BY AN INTERCEPTOR CONFORMING TO THE ABOVE STANDARD RATINGS, SHALL NOT EXCEED TWO AND ONE-HALF (2-1/2) TIMES THE CERTIFIED GALLONS PER MINUTE FLOW RATING OF THE SUBJECT INTERCEPTOR.

HOT WATER CALCULATIONS

FIXTURE TYPE	QUANTITY	HOT WATER FIXTURE UNITS PER FIXTURE	TOTAL HOT WATER FIXTURE UNITS	GALLONS PER HOUR PER FIXTURE	TOTAL GALLONS PER HOUR
LAVATORY	1	1.5	1.5	5	5
HAND SINK	2	2.25	4.5	5	10
SINK (SERVICE/MOP)	1	2.25	2.25	10	10
SINK (THREE COMP.)	1	2.25	2.25	25	25
PREP SINK	1	2.25	2.25	5	5
		TOTAL HFU:	**12.75**	**TOTAL GPH:**	**55**

TOTAL HOT WATER DEMAND (FLOW):	55	GPH
DEMAND FACTOR:	0.8	
ACTUAL HOT WATER DEMAND (FLOW):	44.0	GPH
WATER HEATER RECOVERY RATE:	46.0	GPH

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

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SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

PLUMBING LEGENDS AND NOTES

SHEET NUMBER

P101

8/12/2024 11:24:01 AM

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	ROUGH IN (MINIMUM) W	V	CW	HW	E	MANUFACTURER AND MODEL NUMBER	ADA
WC-1	WATERCLOSET, 1.1 GPF, HIGH PERFORMANCE FLUSHOMETER TANK, ELONGATED BOWL, 3" FLUSH VALVE WITHIN TANK, CLOSE-COUPLED TANK, VITREOUS CHINA, WHITE, 2 1/8" FULLY GLAZED TRAPWAY, 12" ROUGH-IN, ASME A112.19.2M (& 19.6M).	4"	2"	-	-	-	AMERICAN STANDARD, 2467.100	♿
	SUPPLY AND STOP, LOOSE KEY, CHROME PLATED BRASS VALVE AND CHROME PLATED COPPER RISER	-	-	1/2"	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	SEAT, EXTRA HEAVY WEIGHT, POSTURE MOLDED SOLID PLASTIC, ELONGATED, OPEN FRONT, LESS COVER, EXTERNAL CHECK HINGES, STAINLESS STEEL HINGE POSTS, WHITE	-	-	-	-	-	CHURCH; BEMIS	
LAV-1	LAVATORY, 20"X18" VITREOUS CHINA WALL MOUNT, SINGLE CENTER FAUCET HOLE, FRONT OVERFLOW, CONCEALED ARM CARRIER SYSTEM, DECK MOUNTED FAUCET, INTEGRAL 4" BACKSPLASH, ANSI A112.19.2	2"	1 1/2"	-	-	-	AMERICAN STANDARD, 0356.041	♿
	TOUCHLESS METERING FAUCET, DECK MOUNT, SINGLE CENTER HOLE, POLISHED CHROME FINISH, BATTERY-POWERED, 0.35 GPM MAX	-	-	1/2"	1/2"	-	AMERICAN STANDARD; SELECTRONIC	
	SUPPLY AND STOPS, LOOSE KEY, CHROME PLATED BRASS VALVES, BRAIDED HOSE CONNECTIONS	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA.	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	OFFSET TAILPIECE AND STRAINER, CHROME PLATED CAST BRASS	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	FIXTURE CARRIER, CONCEALED ARMS, LEVELING AND SECURING SCREWS, UPRIGHTS, WELDED FEET	-	-	-	-	-	JOSAM; WATTS; ZURN; OR JR SMITH	
	THERMOSTATIC MIXING VALVE, 0.25 GPM MINIMUM FLOW, INTEGRAL INLET CHECK VALVES AND STRAINER, SET TEMPERATURE TO 105°, ASSE 1070.	-	-	1/2"	1/2"	-	WATTS; LEONARD	
HB-1	NARROW WALL HYDRANT, ENCASED, ANTI-SIPHON WITH EXTERNAL VACUUM BREAKER, 3/4" MALE N.H.T OUTLET, CHROME PLATED CAST BRONZE WALL BOX WITH HINGED COVER.	-	-	3/4"	-	-	ZURN Z1350	
FD-1	FLOOR DRAIN, CAST IRON BODY, ANCHOR FLANGE, WEEPHOLES FOR DOUBLE DRAINAGE, 6" SQUARE STAINLESS STEEL FLAT STRAINER. ADJUSTABLE DRAIN HEAD W/ MACHINED INTEGRAL BODY THREADS, ASME A112.21.1	-	-	1/2"	-	-	ZURN Z-415-S6	
FS-1	FLOOR SINK, 12"x12"x8", CI BODY, DBL DRAINAGE FLANGE, STAINLESS STEEL DOME STRAINER, 1/2 GRATE, NON-PUNCTURING FLASHING COLLAR, PORCELAIN ENAMEL OR EPOXY COATED INTERIOR	-	-	1/2"	-	-	ZURN Z-1901	
MS-1	MOP SINK BASIN, ONE PIECE-MOLDED STONE 36"x24"x10", COLORFAST MARBLEIZED WHITE FINISH, SELF-DRAINING SHELF WITH REMOVABLE STRAINER, MOLDED-IN DRAIN, STAINLESS STEEL WALL GUARDS, STAINLESS STEEL BUMPER GUARDS, HOSE AND HOSE HOLDER, MOP HANGER, DRAIN SEAL	3"	2"	-	-	-	MUSTEE - 65M	
	FAUCET, HEAVY-DUTY, CHROME PLATED BRASS, DUAL HANDLE, TOP REINFORCING BAR, PAIL HOOK	-	-	3/4"	3/4"	-	MUSTEE - 63.600A	
WCO	WALL CLEANOUT, CI BODY, RECESSED, THREADED BRASS PLUG, STAINLESS STEEL ACCESS COVER	-	-	-	-	-	ZURN Z-1441	
FCO	FLOOR CLEANOUT, COATED CAST IRON BODY, COMBINATION ADJUSTABLE ROUND STAINLESS STEEL COVER AND PLUG TOP ASSEMBLY, GASKET SEAL, ASME 112.36.2	-	-	-	-	-	ZURN Z-1400	
GCO	GRADE CLEANOUT, HEAVY DUTY COATED CAST IRON ACCESS BODY WITH ANCHOR FLANGES, HEAVY DUTY DUCTILE IRON ACCESS COVER WITH VANDAL RESISTANT STAINLESS STEEL SCREWS	-	-	-	-	-	ZURN Z-1474-SG-VP	
DCO	2-WAY GRADE CLEANOUT, TWO-RISER CLEANOUT BODY WITH HEAVY DUTY COATED CAST IRON ACCESS BODY WITH ANCHOR FLANGES, HEAVY DUTY DUCTILE IRON ACCESS COVER WITH VANDAL RESISTANT STAINLESS STEEL SCREWS	-	-	-	-	-	ZURN Z-1474-SG-VP	
TP	TRAP PRIMER, DIAPHRAGM OPERATED BASED ON PRESSURE SPIKES OR PRESSURE DROPS, OPERATING RANGE BETWEEN 30 TO 70 PSIG. PROVIDE WITH DISTRIBUTION UNIT SERVING MULTIPLE DRAINS (UP TO 4). PROVIDE ACCESS PANEL FOR TRAP PRIMER MAINTENANCE.	-	-	1/2"	-	-	MIFAB, MI-500; PPP CPO-500 OR EQUAL	
BFP-1	1" DUAL CHECK VALVE ASSEMBLY, BRONZE VALVE BODY, STAINLESS STEEL SPRINGS, LED FREE, NSF COMPLIANT, ASME B1.20.1	-	-	1"	-	-	WATTS - LF850	
WH-1	ELECTRIC, TANK TYPE WATER HEATER, 50-GALLON, 208V, 1-PH, (2) 4500W SIMULTANEOUS HEATING ELEMENTS, 46-GPH RECOVERY RATE AT 80-DEG F TEMPERATURE RISE, SET TO 140-DEG F	-	-	3/4"	3/4"	YES	A.O. SMITH DEL-50	
CP-1	VARIABLE SPEED DOMESTIC HOT WATER RE-CIRCULATION PUMP, 120V/1-PH, 5-GPM AT 8-FEET OF HEAD, AQUA-STAT, TIME CLOCK SET TO BUSINESS HOURS	-	-	-	3/4"	YES	GRUNDFOS - UP	
GT-1	HYDROMECHANICAL GREASE TRAP, MOLDED POLYETHYLENE, 861 LB GREASE CAPACITY AT 75-GPM FLOW RATE, INTEGRAL AIR RELIEF AND ANTI-SIPHON, H-20 RATED CAST IRON COVER, ASME A112.14.3 (TYPE D), ACCESS RESISTOR	4"	-	-	-	-	SCHIER - GB-75	
SW-1	SAMPLING PORT, MOLDED POLYETHYLENE, H-20 CAST IRON COVER, WATER/GAS TIGHT SEAL, ACCESS RESTRICTOR	4"	-	-	-	-	SCHEIR - SV24	
PS-1	ONE COMPARTMENT SINK, 18"x18"x13" BOWL, STAINLESS STEEL LEGS WITH CROSS BRACING, EXTRA WELDS UNDER TUBS, STAINLESS STEEL STRAINER	2"	1 1/2"	-	-	-	GSW - SE18181P	
	DECK MOUNT FAUCET, 8" COMMERCIAL DUTY,10-INCH SWING SPOUT, CHROME PLATED BRASS,	-	-	1/2"	1/2	-	GSW - AA-710G	
	SUPPLY AND STOPS, LOOSE KEY, CHROME PLATED BRASS VALVES, BRAIDED HOSE CONNECTIONS	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	1-1/2" COPPER TUBE TO INDIRECTLY DISCHARGE INTO FLOOR SINK BELOW	1-1/2"	-	-	-	-	-	
HS-1	HAND SINK, WALL MOUNTED, STAINLESS STEEL, 12-1/2" x 9-3/4"x 5-5/8" BOWL, WELDED SPLASH GUARDS	2"	1 1/2"	-	-	-	GSW - HS-1615SSG	
	FAUCET, 4" WRISTBLADE HANDLES, GOOSE NECK SPOUT, CHROME PLATED BRASS, BACKSPLASH MOUNTED	-	-	1/2"	1/2	-		
	SUPPLY AND STOPS, LOOSE KEY, CHROME PLATED BRASS VALVES, BRAIDED HOSE CONNECTIONS	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA.	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	OFFSET TAILPIECE AND STRAINER, CHROME PLATED CAST BRASS	-	-	-	-	-	MCGUIRE; T&S BRASS; OR BRASSCRAFT	
	FIXTURE CARRIER, CONCEALED ARMS, LEVELING AND SECURING SCREWS, UPRIGHTS, WELDED FEET	-	-	-	-	-	JOSAM; WATTS; ZURN; OR JR SMITH	
	THERMOSTATIC MIXING VALVE, 0.25 GPM MINIMUM FLOW, INTEGRAL INLET CHECK VALVES AND STRAINER, SET TEMPERATURE TO 105°, ASSE 1070.	-	-	1/2"	1/2"	-	WATTS; LEONARD	
3COMP-1	3-COMPARTMENT SCULLERY SINK WITH TWO DRAINBOARDS, THREE-18"x18"x12" BOWLS, 24" DRAINBOARDS, ONE-PIECE DIE FORMED, INTEGRAL 9" HIGH REAR BACK SPLASH, 2"-180° ROLLED EDGES AT FRONT AND ENDS, WELDED CORNERS/EXPOSED CORNERS GROUND AND POLISHED TO BLEND WITH ADJACENT SURFACES, STAINLESS STEEL LEGS WITH ADJUSTABLE BULLET FEET.	2"	-	-	-	-	GSW - SE18183D	
	PULL-DOWN PRE-RINSE UNIT: 8" WALL MOUNT MIXING FAUCET, QUARTER-TURN CERAMA CARTRIDGES W/ CHECK VALVES, LEVER HANDLES, ADD-ON FAUCET W/ 12-INCH SWING NOZZLE, ACCESSORY TEE, 12"	-	-	1/2"	1/2"	-	T&S BRASS - B-0133-12CRB8TP	
	RISER, 30" FLEXIBLE STAINLESS STEEL HOSE, 1.07 GPM SPRAYER, 6-INCH WALL BRACKET	-	-	1/2"	1/2	-	UNIVERSAL STAINLESS, MODEL USF-10-S; T&S BRASS, B-2481-WH4	
	SUPPLY AND STOP, LOOSE KEY, CHROME PLATED BRASS VALVES AND BRAIDED HOSE CONNECTIONS	-	-	1/2"	1/2	-	MCGUIRE, H2167CCLK; OR EQUAL IN T&S BRASS OR BRASSCRAFT	
	TWIST HANDLE LEVER DRAINS	-	-	-	-	-	GSW - AA-303	
	MANIFOLD FOR INDIRECT DRAIN, CHROME PLATED CAST BRASS, OUTLET TEE TAILPIECE	-	-	-	-	-	MCGUIRE; OR EQUAL IN T&S BRASS OR BRASSCRAFT	
	2" COPPER TUBE TO INDIRECTLY DISCHARGE INTO FLOOR SINK BELOW	2"	-	-	-	-	-	
PF-1	WALL MOUNTED POT FILLER FAUCET, 24" DOUBLE JOINT SWING NOZZLE, CHROME PLATED BRASS, ASME A112.18.1, NSF 61	-	-	1/2"	1/2	-	T&S BRASS - B-0594	
RD	ROOF DRAIN, LARGE SUMP, CAST IRON BODY, 12"DIA. CAST IRON OR DUCTILE IRON DOME STRAINER, ANCHOR FLANGE AND CLAMP, ADJUSTABLE/INTEGRAL GRAVEL STOP, ASME A112.21.2	-	-	-	-	-	ZURN, ZC-100-G	
OFD	OVERFLOW ROOF DRAIN, LARGE SUMP, ADJUSTABLE INTERNAL STANDPIPE DAM, CAST IRON BODY, 12" DIA. CAST IRON OR DUCTILE IRON DOME STRAINER, ANCHOR FLANGE AND CLAMP, ADJUSTABLE/INTEGRAL GRAVEL STOP, ASME A112.21.2	-	-	-	-	-	ZURN ZC-100-G-W2	
DSN-1	DOWNSPOUT NOZZLE, 2-PIECE, BRONZE, WALL FLANGE AND THREADED INLET. PROVIDE SAMPLES OF MATERIAL AND FINISHES FOR EXTERIOR DOWNSPOUT NOZZLE FOR ARCHITECTURAL SELECTION OF FINISH.	-	-	-	-	-	ZURN Z-199	

NOTES:

1. CONTRACTOR SHALL FURNISH AND INSTALL SUPPLIES, STOPS, TRAPS, TAILPIECES AND ALL APPURTENANCES NECESSARY FOR A COMPLETE INSTALLATION OF ALL FIXTURES.
2. ALL ADA ACCESSIBLE SINKS AND LAVATORIES SHALL BE EQUIPPED WITH TRUEBRO #103 UNDER SINK PROTECTIVE PIPE COVERS WHERE NOT CONCEALED BY MILLWORK.
3. COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY'S STANDARD (TAS). PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING FIXTURES WITH FLUSH VALVE HANDLES LOCATED ON THE WIDE SIDE OF EACH STALL OR ROOM.
4. FLOOR CLEANOUT ACCESS COVERS IN ALL FINISHED AREAS SHALL BE OF THE RECESSED TYPE TO ALLOW FOR INSERTION OF FINISHED FLOOR TREATMENT. TILE OR CARPET MARKER AS NECESSARY.
5. ABOVE THE FLOOR P-TRAPS ON LAVATORIES AND SINKS SHALL BE 17 GAUGE, CHROME PLATED BRASS. ACCEPTABLE MANUFACTURERS: MCGUIRE, T&S BRASS, OR BRASSCRAFT.
6. CONTRACTOR SHALL VERIFY FIXTURE SUPPLIES AND APPURTENANCES FOR EACH FIXTURE PRIOR TO BIDDING AND PURCHASING.
7. ALL FLOOR MOUNTED WATER CLOSETS SHALL HAVE 10" ROUGH-IN UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL VERIFY PLUMBING FIXTURES PROVIDED COMPLY WITH HANDICAPPED ACCESSIBILITY STANDARDS INCLUDING HEIGHT AND CLEARANCE REQUIREMENTS.
9. ALL WATER CLOSET AND URINAL FLUSH VALVES SHALL INCLUDE CHROME PLATED CAST WALL FLANGE WITH SETSCREW AND COVER TUBE.
10. LAVATORIES INDICATED WITH SENSOR OPERATED FAUCETS SHALL BE BATTERY OPERATED AND PROVIDED WITH A OF TEMPERING VALVE SET FOR 85°F.

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

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SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

PLUMBING SCHEDULES

SHEET NUMBER

P102

8/12/2024 11:24:01 AM

NOTES BY SYMBOL

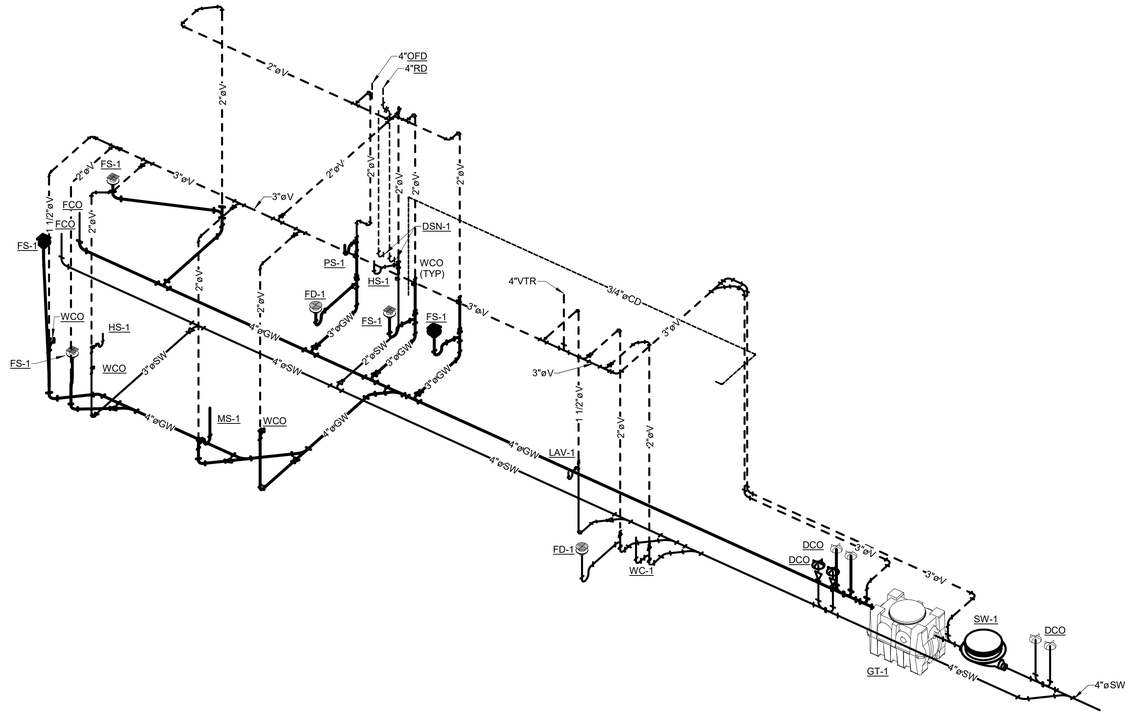
1 PROPOSED LOCATION FOR INSTALLATION OF GREASE TRAP AND SAMPLE WELL. COORDINATE EXACT INSTALLATION LOCATION WITH ARCHITECT AND CIVIL PRIOR TO INSTALLATION. INSTALL GREASE TRAP AND SAMPLE WELL PER MANUFACTURER'S PUBLISHED IOM.

2 4-INCH VENT THRU ROOF. MAINTAIN 10-FEET OF CLEARANCE BETWEEN VENT AND ALL OUTDOOR AIR INTAKES ON ROOF.

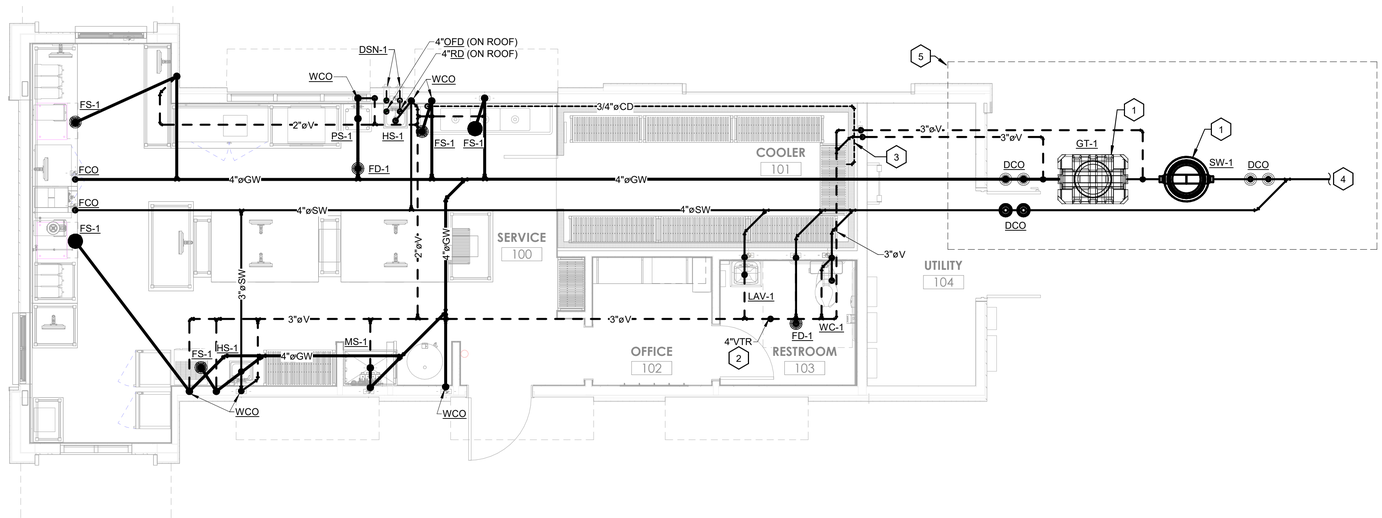
3 ROUTE CONDENSATE PIPING FROM WALK-IN COOLER TO FLOOR SINK AS SHOWN. CONDENSATE PIPING IS TO BE 82" AFF BEHIND WALL. PROVIDE 12" STUB-OUT FOR VENDOR TO CONNECT CONDENSATE FROM WALK-IN COOLER.

4 REFER TO CIVIL PLANS FOR CONTINUATION OF SANITARY WASTE PIPING.

5 CONTRACTOR SHALL COORDINATE EXACT OREINTATION OF GREASE INTERCEPTOR AND SAMPLE WELL WITH CIVIL DRAWINGS. OREINTATION SHOWN IS FOR LAYOUT OF EQUIPMENT AND CLEAN OUTS ONLY. CONTRACTOR SHALL CONFIRM ALL REQUIRED SANITARY DROPS WITH CIVIL PRIOR TO INSTALLATION.



2 GREASE/SANITARY WASTE AND VENT RISER DIAGRAM
P103



1 GREASE/SANITARY WASTE AND VENT PLAN
P103 1/4" = 1'-0"

8/12/2024 11:24:02 AM

SALAD AND GO

610 NW CHIPMAN ROAD

LEE'S SUMMIT, MO 64086 PROPOSED LOT 3

PROTOTYPE VERSION V2-B

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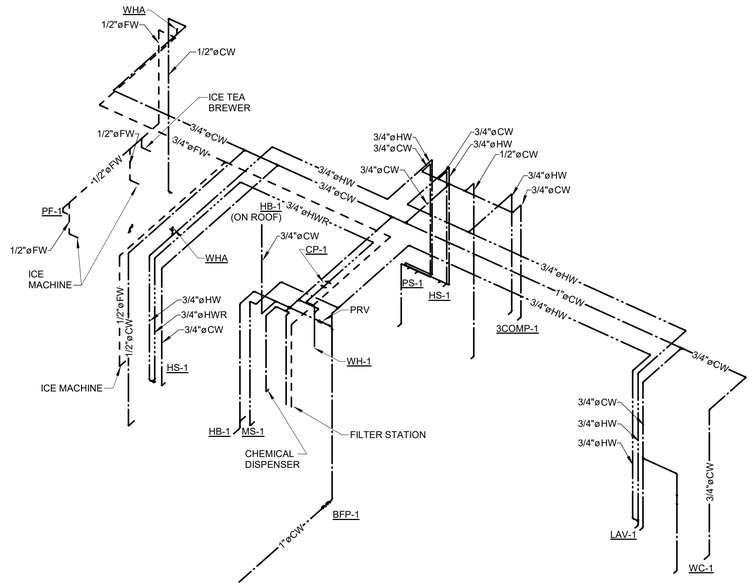
GREASE/SANITARY WASTE PLAN

SHEET NUMBER

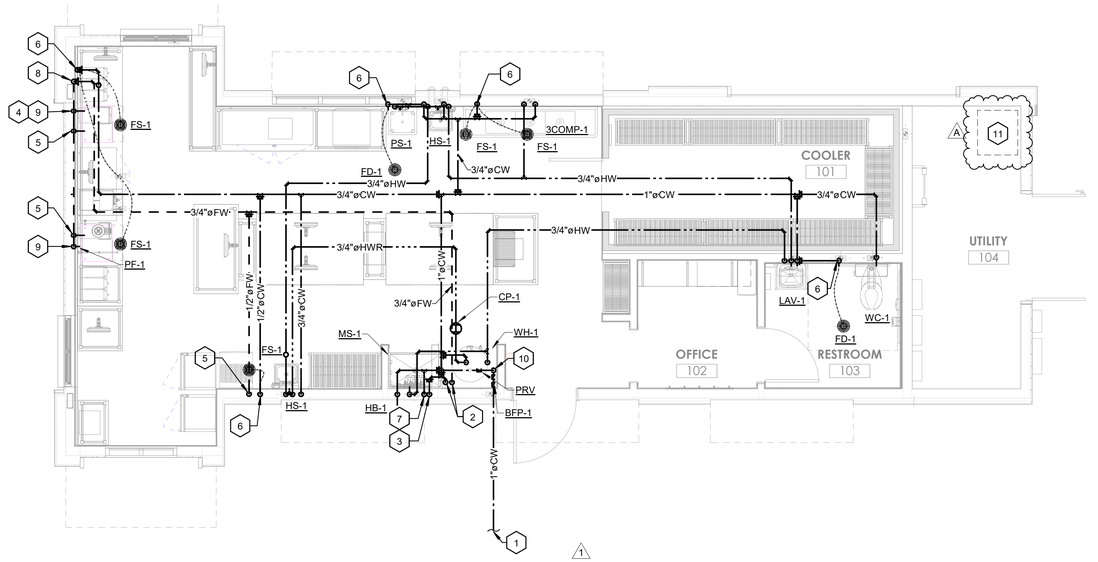
P103



2 P104 DOMESTIC WATER RISER DIAGRAM

NOTES BY SYMBOL

1. REFER TO CIVIL PLANS FOR CONTINUATION OF DOMESTIC WATER SERVICE AND METER TO BUILDING.
2. 3/4-INCH DOMESTIC/FILTERED WATER CONNECTIONS TO FILTERED WATER STATION (BY OTHERS). REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. PROVIDE AND INSTALL AN IN-LINE RPZ (WATTS LF009-QT) ON SUPPLY SIDE OF FILTERED WATER STATION. RPZ DRAIN LINE SHALL DISHCARGE INTO MOP SINK.
3. 1/2-INCH DOMESTIC WATER PIPING DOWN TO CHEMICAL DISPENSER (BY OTHERS). PROVIDE AND INSTALL T&S BRASS; B-0205LN FAUCET FOR CONNECTION TO CHEMICAL DISPENSER. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. PROVIDE AND INSTALL AN IN-LINE BACKFLOW PREVENTION DEVICE (WATTS LF009-QT-FS OR EQUAL) .
4. CONNECT 1/2-INCH FILTERED WATER PIPING INTO ICE TEA BREWER (PROVIDED BY OTHERS). PROVIDE WITH ISOLATION VALVE AND IN-LINE BACKFLOW PREVENTION DEVICE (WATTS SD-3 OR APPROVED EQUAL). REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
5. CONNECT 1/2-INCH FILTERED WATER PIPING INTO ICE MACHINE (PROVIDED BY OTHERS). PROVIDE WITH ISOLATION VALVE AND IN-LINE BACKFLOW PREVENTION DEVICE (WATTS SD-3 OR APPROVED EQUAL). REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
6. 1/2-INCH DOMESTIC WATER PIPING SERVING FLOOR DRAIN/FLOOR SINK TRAP PRIMER. INSTALL TRAP PRIMER IN ACCESSIBLE LOCATION OR PROVIDE WALL MOUNTED ACCESS PANEL. COORDINATE LOCATION OF ACCESS PANEL WITH ARCHITECT PRIOR TO INSTALLATION.
7. 3/4-INCH DOMESTIC WATER UP TO HOSE BIBB (HB-1) ON ROOF PARAPET. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
8. PROTECT IN-WALL PIPING WITH NAIL PLATES
9. FILTERED WATER LINE CONNECTING TO POTFILLER AND TEA BREWER TO BE MADE OF FLEX LINE. 4'-11" MOUNTING HEIGHT.
10. PROVIDE DOMESTIC WATER SHUT OFF VALUE.
11. PROVIDE AND INSTALL IRRIGATION METER AND BACKFLOW PREVENTION DEVICE IN AREA SHOWN. BACKFLOW PREVENTION DEVICE TO BE "WATTS - 007" OR APPROVED EQUAL. VERIFY LOCATION AND ROUTING IN FIELD. VERIFY METERING AND BACKFLOW REQUIREMENTS WITH UTILITY COMPANY PRIOR TO BID.



1 P104 DOMESTIC WATER SUPPLY PLAN
1/4" = 1'-0"

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI · PROFESSIONAL ENGINEER · CLAYTON LUCAS NUMBER PE-2024000504
10/23/2024

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION
1	7/18/24	REVISION 1
A	8/12/24	CB-A

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	4/1/2024
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

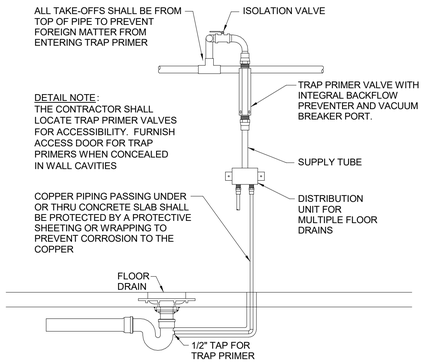
SHEET TITLE

DOMESTIC WATER PLAN

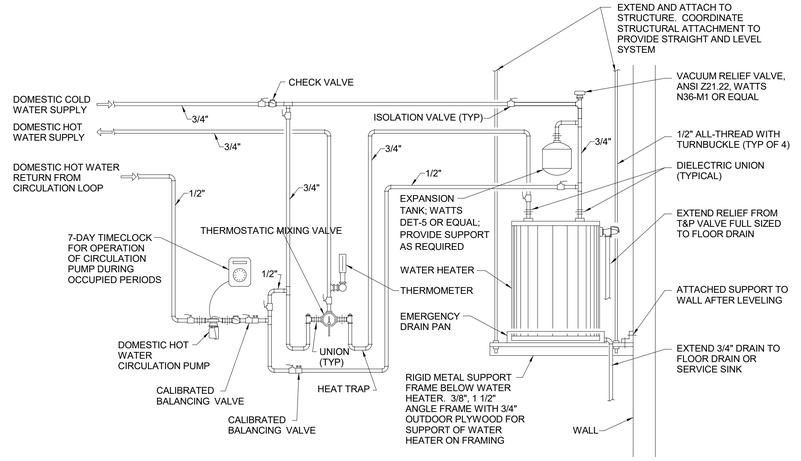
SHEET NUMBER

P104

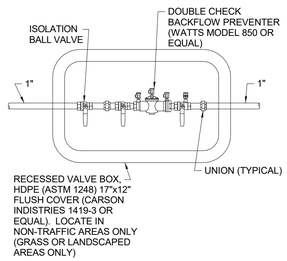
10/23/2024 9:33:31 AM



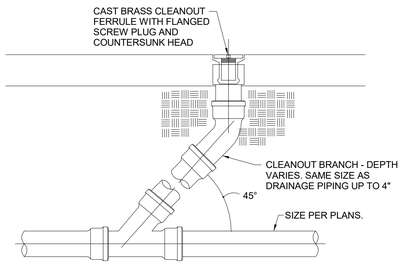
1 TRAP PRIMER
SCALE: NO SCALE



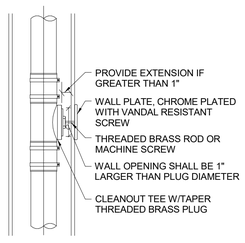
2 SUSPENDED WATER HEATER
SCALE: NO SCALE

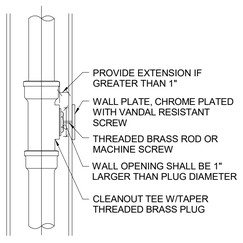


3 DOMESTIC WATER SERVICE ENTRANCE
SCALE: NO SCALE

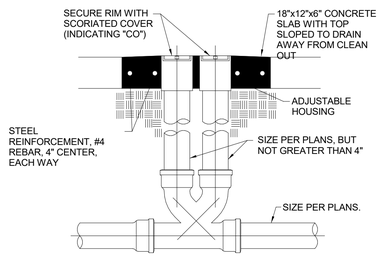


4 FLOOR CLEANOUT
SCALE: NO SCALE

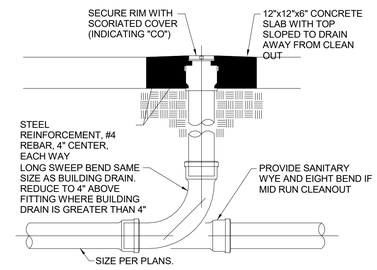




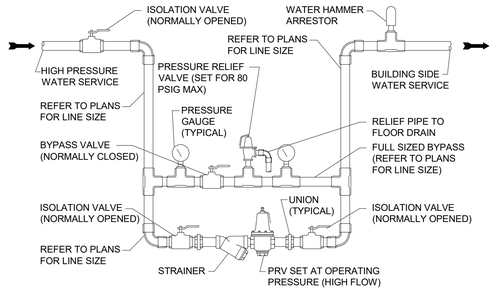
5 WALL CLEANOUT
SCALE: NO SCALE



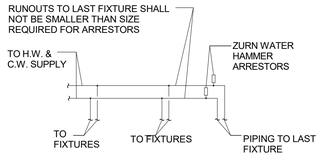
6 DOUBLE CLEANOUT
SCALE: NO SCALE



7 GRADE CLEANOUT
SCALE: NO SCALE



8 PRESSURE REDUCING VALVE PIPING DIAGRAM
SCALE: NO SCALE



NOTE: USE TABLE 10-1 UNIFORM PLUMBING CODE FOR FIXTURE UNITS, FOR SIZING WATER HAMMER ARRESTORS. TABLE APPLIES TO BOTH UPC & IPC.

WATER HAMMER ARRESTOR SIZING CHART	
FIXTURE UNIT RATING	CONNECTION TO SUPPLY LINE
1-11	3/4"
12-32	1"
33-60	1"
61-113	1"
114-154	1"
155-330	1"

9 WATER HAMMER ARRESTOR DETAIL
SCALE: NO SCALE

SALAD AND GO

610 NW CHIPMAN ROAD
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PROTOTYPE VERSION V2-B

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PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

PLUMBING DETAILS

SHEET NUMBER

P105

8/12/2024 11:24:03 AM

PLUMBING SPECIFICATIONS

PART I - GENERAL

1.01 DESCRIPTION

A. THE PLUMBING CONTRACTOR SHALL BE A LICENSED INSTALLER OF PLUMBING SYSTEMS IN THE CITY WHERE WORK IS PERFORMED.

B. THE CONTRACTOR SHALL BE QUALIFIED WITH AT LEAST 5 YEARS OF SUCCESSFUL INSTALLATION EXPERIENCE ON PROJECTS WITH WORK SIMILAR TO THAT REQUIRED FOR THIS PROJECT.

C. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF APPLICABLE BUILDING CODE OF THE LATEST EDITION.

1.02 VERIFYING CONDITIONS

A. EXAMINE ALL DRAWINGS COVERING THE WORK OF THIS SECTION AND REFER TO OTHER DRAWINGS, INCLUDING ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS, WHICH MAY AFFECT THE WORK OF THIS SECTION OR REQUIRE COORDINATION BY SAME.

B. BEFORE STARTING ANY WORK, EXAMINE AND THOROUGHLY CHECK DRAWINGS, DIMENSIONS, SPECIFICATIONS, AND ADJOINING OR UNDERLYING CONDITIONS IN WHICH THE WORK OF THIS SECTION IS TO BE PERFORMED.

C. REPORT, IN WRITING, TO THE ARCHITECT ANY AND ALL CONDITIONS WHICH MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION AND COMPLETION OF THE WORK OF THIS SECTION. DO NOT COMMENCE WORK UNTIL ANY AND ALL SUCH CONDITIONS HAVE BEEN CORRECTED BY THE TRADE OR TRADES RESPONSIBLE.

D. FAILURE TO NOTIFY THE ARCHITECT OF UNSATISFACTORY CONDITIONS WILL BE CONSTRUED AS AN ACCEPTANCE OF ALL CONDITIONS.

E. THE EXECUTION OF THE WORK OF THIS SECTION CONSTITUTES ACCEPTANCE OF THE BASE OR ADJOINING WORK AND OTHER CONDITIONS AS BEING SATISFACTORY IN EVERY RESPECT AND LATER CLAIMS OF DEFECTS IN SUCH CASES WILL NOT BE ALLOWED.

F. THE DRAWINGS INDICATE AND THE SPECIFICATIONS DESCRIBE THE GENERAL ARRANGEMENT AND THE APPROXIMATE LOCATION OF EQUIPMENT, FIXTURES, PIPING, ETC. EXACT LOCATIONS MAY BE ADJUSTED IN THE FIELD TO SUIT EXISTING CONDITIONS.

G. THE CONTRACTOR SHALL, WITHOUT EXTRA COST TO THE OWNER, MAKE ALL REASONABLE MODIFICATIONS IN THE WORK AS MAY BE REQUIRED TO PREVENT CONFLICT WITH THE WORK OF OTHER TRADES, OR FOR THE PROPER INSTALLATION OF THE WORK.

1.04 AS-BUILT DRAWINGS

A. THE CONTRACTOR SHALL KEEP A SET OF PLANS ON THE JOB, NOTING DAILY ALL CHANGES MADE IN CONNECTION WITH THE FINAL INSTALLATION INCLUDING EXACT DIMENSIONED LOCATIONS OF ALL NEW AND UNCOVERED EXISTING UTILITY PIPING OUTSIDE THE BUILDING.

B. PREPARE AND SUBMIT "AS-BUILT" DRAWINGS AT THE COMPLETION OF THE PROJECT.

1.05 TESTS

A. ALL PLUMBING SYSTEMS SHALL BE SUBJECT TO AN OPERATING TEST UNDER DESIGN CONDITIONS TO ENSURE PROPER SEQUENCE AND OPERATION THROUGHOUT THE RANGE OF OPERATION REGARDLESS OF THE SEASON.

B. ALL NEW PLUMBING SYSTEMS SHALL BE OPERATED SEPARATELY AND COINCIDENT WITH OTHER SYSTEMS FOR A PERIOD OF TIME TO DEMONSTRATE TO THE SATISFACTION OF THE OWNER, ENGINEER AND ARCHITECT THE ABILITY OF THE EQUIPMENT TO MEET CAPACITY AND PERFORMANCE REQUIREMENTS WHILE MAINTAINING DESIGN CONDITIONS IN ACCORDANCE WITH THE TRUE INTENT AND PURPOSE OF THESE SPECIFICATIONS

C. MAKE ADJUSTMENTS AS REQUIRED TO ENSURE PROPER FUNCTIONING OF ALL SYSTEMS.

1.06 CLEANING

A. ALL PIPING, FIXTURES, EQUIPMENT, ETC., INSTALLED UNDER THIS CONTRACT SHALL BE THOROUGHLY CLEANED AND PROTECTED DURING CONSTRUCTION AND PUT INTO FIRST-CLASS OPERATING CONDITION BEFORE BEING OFFERED FOR ACCEPTANCE.

B. UPON COMPLETION OF ALL WORK, THE PLUMBING CONTRACTOR SHALL THOROUGHLY CLEAN ALL PLUMBING FIXTURES AND LEAVE ALL ITEMS READY FOR USE BY THE OWNER. ALL FLOOR DRAINS SHALL BE CLEANED AND MANUFACTURERS PROTECTIVE COVERINGS SHALL BE REMOVED.

1.07 LAWS, ORDINANCES, ETC.

A. THE WORK OF THIS CONTRACTOR MUST COMPLY WITH ALL LOCAL LAWS, ORDINANCES AND RULES. THIS CONTRACTOR MUST HAVE THE NECESSARY INSPECTIONS MADE BY THESE AUTHORITIES, PAY ALL THE REQUIRED FEES, AND FURNISH THE OWNER WITH CERTIFICATES OF APPROVAL BEFORE FINAL PAYMENT ON THIS CONTRACT IS MADE. HE SHALL APPLY, PAY FOR, AND OBTAIN ALL PERMITS.

1.08 SUPERVISION

A. THIS CONTRACTOR SHALL HAVE A COMPETENT FOREMAN IN CHARGE OF THE WORK WHO SHALL BE ON THE SITE DURING THE INSTALLATION OF THE MATERIAL FURNISHED UNDER THIS SPECIFICATION UNTIL SAME HAS BEEN PUT IN COMPLETE OPERATIVE CONDITION AND ACCEPTED BY THE OWNER.

1.09 CUTTING AND PATCHING

A. THIS CONTRACTOR SHALL DO ALL CUTTING AND PATCHING FOR PLUMBING WORK AND SHALL COORDINATE SAME WITH ALL OTHER TRADES. ALL CUTTING SHALL BE SUBJECT TO TRADE REGULATIONS. NO CUTTING OF STRUCTURAL MEMBERS SHALL BE DONE WITHOUT THE APPROVAL OF THE ARCHITECT.

PART 2 - MATERIAL

2.01 GENERAL

A. THE PLUMBING SYSTEMS SHALL BE COMPLETE WITH ALL PIPES, FITTINGS, TRAPS, VALVES, HANGERS AND SUPPORTS, INSULATION, ETC. AND ALL OTHER ITEMS NECESSARY FOR COMPLETE AND OPERATING APPROVED TYPE SYSTEM.

B. MANUFACTURERS: FIRMS REGULARLY ENGAGED IN MANUFACTURE OF PRODUCTS OF THIS TYPE WHOSE PRODUCTS HAVE BEEN IN SATISFACTORY USE IN SIMILAR SERVICE FOR NOT LESS THAN 5 YEARS.

C. UL COMPLIANCE: PROVIDE COMPONENTS WITH UL LISTING AND LABELING WHEN THERE IS AN APPLICABLE UL CATEGORY.

D. PROVIDE MATERIALS, PRODUCTS, AND FABRICATIONS THAT COMPLY WITH ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS AND RECOMMENDATIONS REGARDING LEAD CONTENT AND CONTRIBUTION OF LEAD TO POTABLE WATER, THAT HAVE NO LEAD OR LEAD ALLOYS IN CONTACT WITH POTABLE WATER, AND THAT DO NOT CONTRIBUTE TO OR CAUSE LEAD IN POTABLE WATER.

E. PROVIDE MATERIALS, PRODUCTS, AND FABRICATIONS THAT COMPLY WITH ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS AND RECOMMENDATIONS REGARDING LEAD CONTENT AND CONTRIBUTION OF LEAD TO POTABLE WATER, THAT HAVE NO LEAD OR LEAD ALLOYS IN CONTACT WITH POTABLE WATER, AND THAT DO NOT CONTRIBUTE TO OR CAUSE LEAD IN POTABLE WATER.

2.02 SANITARY WASTE AND VENT PIPE AND FITTINGS

A. SANITARY SEWER - CAST IRON, DWV COPPER, OR PVC PIPING MAY BE USED EXCEPT THAT ALL PIPING BELOW GRADE SHALL BE PVC OR CAST IRON. RETURN AIR PLENUM RATED PIPING SHALL BE CAST IRON OR DWV COPPER. VENTS TWO (2") INCHES IN SIZE AND SMALLER MAY BE DWV COPPER PIPING.

2.03 COLD WATER AND HOT WATER PIPE AND FITTINGS

A. DOMESTIC COLD AND HOT WATER PIPING SHALL BE COPPER TYPE "L" WITH WROUGHT COPPER FITTINGS OR PVC/CPVC AS REQUIRED BY CODE. PVC AND CPVC SHALL BE SCHEDULE 40 ALL FITTINGS ARE TO MATCH PIPING TYPES. PIPE SHALL BE MANUFACTURED RIGID CPVC COMPOUNDS WITH A CELL CLASS OF 24448 AS IDENTIFIED IN ASTM D 1784. FITTINGS SHALL BE MANUFACTURED FROM RIGID CPVC WITH A CELL CLASS OF 23447 AS IDENTIFIED IN ASTM D 1784.

B. PEX PIPING IS ALLOWED AS AN ALTERNATE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING PIPE SIZES IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND AHJ.

2.06 EXPANSION JOINTS AND ANCHORS

A. PROPER PROVISIONS SHALL BE MADE FOR EXPANSION AND CONTRACTION OF ALL PIPES AND THE PIPING SHALL BE ARRANGED WITH ALL NECESSARY PIPE EXPANSION LOOPS AND SWING JOINTS.

B. MAINS AND BRANCHES MUST BE SO INSTALLED WITH SWING CONNECTIONS SO AS TO PERMIT FREE EXPANSION OF PIPING.

2.07 HANGERS AND SUPPORTS

A. FURNISH ALL NECESSARY HANGERS, SUPPORTS, INSERTS, CLAMPS, ETC. AS REQUIRED. ALL HANGERS AND SUPPORTS SHALL BE OF HEAVY CONSTRUCTION AND SUITABLE FOR THE SIZE OF PIPE TO BE SUPPORTED. ALL INSERTS AND HANGERS SHALL BE INSTALLED TO CLEAR WORK OF OTHER TRADES.

B. ALL HORIZONTAL CAST IRON PIPING SHALL BE SUPPORTED ON FIVE (5) FOOT CENTERS AND AT ALL JOINTS. ALL HORIZONTAL SCREWED PIPING SHALL BE SUPPORTED BY HANGERS SPACED NOT OVER TEN (10) FEET APART. ALL BRANCHES SHALL HAVE SEPARATE HANGERS. HANGERS SHALL BE CLEVIS TYPE, CONSTRUCTED OF HEAVY BAR STEEL STOCK, WITH PROPER SIZE SUSPENSION ROD AND LOCKNUTS. WHERE PIPING IS SUPPORTED FROM THE FLOOR, PROVIDE ADJUSTABLE PIPE SADDLE SUPPORT WITH U-BOLT.

C. WHERE PIPES ARE TO BE INSULATED, THE HANGERS SHALL BE OF AMPLE SIZE TO PROVIDE FOR THE COVERING SPECIFIED AND BE PROVIDED WITH GALVANIZED STEEL INSULATION SHIELDS.

D. ALL HANGERS, RODS, BEAM CLAMPS, ETC. SHALL BE SHOP ZINC COATED.

E. ALL HORIZONTAL COPPER TUBING SHALL BE SUPPORTED BY HANGERS NOT OVER SIX (6) FEET APART FOR PIPING 1-1/4 INCH AND SMALLER AND NOT OVER TEN (10) FEET APART FOR PIPING 1-1/2 INCH AND LARGER. ALL0W BRANCHES SHALL HAVE SEPARATE HANGERS. HANGERS SHALL BE CLEVIS TYPE WITH COPPER BOTTOM SUPPORT. IF CHANNEL OR ANGLE IRON TRAPEZE HANGERS ARE USED, THE SPACE ON HANGERS FOR THE COPPER TUBING SHALL BE WRAPPED WITH LEAD SHIELDS TO ISOLATE TUBING.

F. IN AREAS OF STEEL CONSTRUCTION, PIPE HANGERS SHALL BE SUPPORTED BY BEAM CLAMPS. COORDINATE WITH ENGINEER FOR MAXIMUM LOADING. BEAM CLAMPS SHALL BE STEEL WITH BOLT, NUT AND SOCKET THREADED FOR ROD CONNECTION AND SHALL BE F & S MANUFACTURING COMPANY FIG. #45, CENTRAL IRON, GRINNELL COMPANY, OR APPROVED EQUAL.

2.08 INSULATION

A. COVER ALL HOT WATER PIPE WITH 1 INCH THICK AND ALL COLD WATER PIPE WITH 1/2 INCH THICK MANVILLE MICRO-LOK AP-T PLUS FIBERGLASS INSULATION. FITTINGS AND VALVES SHALL BE INSULATED WITH MANVILLE ZESTON 2000 PVC INSULATED FITTING COVERS. INSTALL ALL INSULATION AS PER MANUFACTURERS RECOMMENDATIONS. ALL INSULATION MATERIAL SHALL COMPLY WITH THE LOCAL CODE REQUIREMENTS FOR OF A FLAME SPREAD RATING NOT TO EXCEED 25 AND A SMOKE DEVELOPED RATING NOT TO EXCEED 50.

2.09 VALVES

A. STOP VALVES, EXCEPT FIXTURE STOPS, ON HOT AND COLD WATER LINES 2 IN. AND SMALLER SHALL BE FULL PORT 400 LB. NON-SHOCK BRONZE BALL VALVES, NIBCO T-595-Y FOR THREADED CONNECTIONS, AND NIBCO S-595-Y FOR COPPER TO COPPER, OR APPROVED OTHER.

B. GLOBE VALVES UP TO AND INCLUDING 3 IN. SHALL BE SCREW-OVER BONNET, COMPOSITION DISC, BRASS, NIBCO T-211 FOR THREADED CONNECTIONS AND S-211 FO SOLDER CONNECTIONS, OR APPROVED OTHER.

C. CHECK VALVES SHALL BE OF THE SWING-TYPE, SIZES UP TO AND INCLUDING 3 IN. SHALL BE ALL BRASS, 125 LB. S.W.P., NIBCO T-413 FOR THREADED CONNECTIONS & NIBCO S-413 FOR SOLDER CONNECTIONS OR APPROVED OTHER.

2.10 VALVE TAGS AND CHART

A. EACH VALVE, EXCEPT VALVES AT FIXTURES, SHALL HAVE A 2 INCH DIAMETER BRASS TAG WITH 1 INCH HIGH NUMERAL STAMPED THEREON, SECURED TO THE VALVE BY MEANS OF BRASS'S HOOK OR BRASS CHAIN. EACH SYSTEM TO HAVE A LETTER DESIGNATION IDENTIFYING SOURCE AS WELL.

B. THE CONTRACTOR SHALL FURNISH AN APPROVED, NEATLY DRAWN VALVE CHART, PROPERLY FRAMED, SHOWING THE USE AND LOCATION OF EACH VALVE THAT IS TAGGED.

2.11 SHOCK ARRESTORS

A. SHOCK ARRESTORS SHALL BE JONESPEC MODEL #55000 SERIES OR APPROVED EQUAL.

2.12 CONNECTION TO MISC. EQUIPMENT

A. PROVIDE ALL NECESSARY PIPE, FITTINGS, VALVES, ETC. EXCEPT AS OTHERWISE SPECIFIED AND MAKE ALL FINAL PLUMBING PIPING CONNECTIONS, INCLUDING WASTE, VENT, HOT AND COLD WATER, ETC., TO ALL EQUIPMENT REQUIRING SAME, FURNISHED "UNDER ANOTHER SECTION OF THE SPECIFICATIONS"

2.13 CONDENSATE DRAIN PIPING

A. CONDENSATE DRAIN PIPING SHALL BE TYPE "M" COPPER OR SCHEDULE 40 PVC, WHERE PERMITTED BY LOCAL CODE.

2.14 GUARANTEE

A. THIS CONTRACTOR SHALL GUARANTEE FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE BY THE OWNERS, ALL MATERIALS, APPARATUS AND WORKMANSHIP WHETHER FURNISHED BY HIMSELF OR BY HIS SUBCONTRACTORS AND HE SHALL REPLACE OR REPAIR IN A MANNER APPROVED BY THE ARCHITECTS, WITHOUT COST TO THE OWNER, ANY PARTS OR PARTS OF THE WORK WHICH MAY PROVE DEFECTIVE OR UNSATISFACTORY WITHIN THE PERIOD OF THE GUARANTEE.

B. WHERE SPECIAL GUARANTEES COVERING INSTALLATION, OPERATION OR PERFORMANCE OF ANY SYSTEMS OR APPLIANCES FURNISHED UNDER THIS CONTRACTOR ARE REQUIRED, THE FULL RESPONSIBILITY FOR THE FULFILLMENT OF SUCH GUARANTEES MUST BE ASSUMED BY THE CONTRACTOR, WHO SHALL OBTAIN WRITTEN GUARANTEES, IN TRIPLICATE, WHICH SHALL BE FILED WITH THE ARCHITECT BEFORE FINAL ACCEPTANCE.

C. CONTRACTOR WILL BE RESPONSIBLE FOR ALL LEAKS IN ALL PIPES FOR A PERIOD OF ONE YEAR FROM THE DATE OF COMPLETION OF WORK UNDER THIS CONTRACT. CONTRACTOR SHALL REPAIR AT NO COST TO THE OWNER, ALL SUCH LEAKS WHICH OCCUR AFTER COMPLETION OF THIS CONTRACT UPON 24 HOURS NOTICE THEREOF BY THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR. LEAKS WHICH OCCUR PRIOR TO THE COMPLETION OF THIS CONTRACT SHALL BE REPAIRED AT ONCE. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED BY SUCH LEAKS AND THE REPAIR THEREOF AND WILL REIMBURSE THE CONSTRUCTION MANAGER/GENERAL CONTRACTOR FOR ALL EXPENSE INCURRED THEREBY.

D. DISINFECTION THE POTABLE WATER SYSTEM SHALL BE DISINFECTED PRIOR TO USE BY A METHOD OF DISINFECTION IN ACCORDANCE WITH THE NATIONAL PLUMBING CODE CHAPTER 10 PARAGRAPH-10.9. THE POTABLE WATER PURITY TEST RESULT FROM A NEW JERSEY CERTIFIED TESTER SHALL BE SUBMITTED FOR ENGINEER'S REVIEW AND APPROVAL.

2.15 PRESSURE REDUCING VALVE (DOMESTIC WATER)

A. SIZE 1/2" - 2-1/2" THREADED BRONZE BODY CONSTRUCTION RENEWABLE STAINLESS STEEL SEAT. HIGH TEMPERATURE RESISTING DIAPHRAGM, SPRING CAGE CONSTRUCTION AND STRAINER. WATTS NO. 223S OR APPROVED EQUAL. SEE DRAWINGS FOR PSI SETTINGS.

2.16 PLUMBING FIXTURES AND EQUIPMENT

A. PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING FIXTURES AND APPLIANCES, UNLESS OTHERWISE NOTED, AND MAKE ALL FINAL CONNECTIONS AS REQUIRED.

B. REFER TO ARCHITECTURAL PLANS AND/OR SPECIFICATIONS FOR EXACT PLUMBING FIXTURE TYPE, MAKE AND MOUNTING HEIGHTS.

2.17 COMMISSIONING

A. WHEN REQUIRED, IT IS THE OWNER'S RESPONSIBILITY TO CONTRACT WITH A COMMISSIONING AUTHORITY TO COMPLY WITH LOCAL CODES.

SALAD AND GO

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ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

PLUMBING SPECIFICATIONS

SHEET NUMBER

P106

8/12/2024 11:24:03 AM

MECHANICAL SYMBOLS AND ABBREVIATIONS

GENERAL NOTES

1. PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALL PERMITS, INSPECTIONS, LICENSES AND FEES. FURNISH ALL LABOR, EQUIPMENT, SUPPLIES AND MATERIALS NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS.

2. THE DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF PIPES, FIXTURES, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DO NOT SCALE THE DRAWINGS FOR DIMENSIONS. TAKE ALL DIMENSIONS, MEASUREMENTS, EQUIPMENT LOCATIONS, LEVELS, ETC FROM THE ARCHITECTURAL DRAWINGS AND FROM THE EQUIPMENT TO BE FURNISHED. PIPING MAY BE RELOCATED OR OFFSET FOR PROPER CLEARANCES OR TO AVOID CONFLICTS WITH OTHER TRADES. THE DESIGN INTENT (I.E. PITCHES, VELOCITIES, PRESSURE DROPS, VOLTAGE DROPS, ETC) CANNOT BE GREATLY ALTERED WITHOUT THE APPROVAL OF THE ARCHITECT. THE COST OF THESE DEVIATIONS TO AVOID INTERFERENCE'S SHALL BE PART OF THE ORIGINAL CONTRACT BID.

3. CONFER AND COOPERATE WITH ALL OTHER TRADES TO COORDINATE THEIR WORK. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO MATERIALS AND EQUIPMENT ROUTED IN CEILING AND WALL CAVITIES, EQUIPMENT ARRANGEMENT IN MECHANICAL SPACES, INCLUDING EQUIPMENT CLEARANCE REQUIREMENTS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS, ETC. NOTIFY THE ARCHITECT OF ANY CONFLICTS.

4. BASE FINAL INSTALLATION OF MATERIALS AND EQUIPMENT ON ACTUAL DIMENSIONS AND CONDITIONS AT THE PROJECT SITE. FIELD MEASURE FOR MATERIALS AND EQUIPMENT REQUIRING EXACT FIT. NO EXTRAS WILL BE GIVEN FOR THE CONTRACTOR'S FAILURE TO FIELD COORDINATE.

5. THE OWNER OR ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK.

6. LOCATE ALL EQUIPMENT THAT MUST BE SERVICED, OPERATED, OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE (BUT NOT LIMITED TO) VALVES, MOTORS, CONTROLLERS, SWITCHGEAR, AND DRAIN POINTS IF REQUIRED FOR BETTER ACCESSIBILITY. FURNISH ACCESS DOORS FOR THIS PURPOSE. MINOR DEVIATIONS FROM THE DRAWINGS MAY BE ALLOWED TO PROVIDE FOR BETTER ACCESSIBILITY. ANY CHANGES SHALL BE APPROVED BY THE ARCHITECT AND CONSTRUCTION MANAGER/GENERAL CONTRACTOR PRIOR TO MAKING THE CHANGE.

7. PROVIDE ACCESS DOORS, WALL OPENINGS, ROOF OPENINGS OR ANY OTHER CONSTRUCTION REQUIREMENT NEEDED TO ACCOMMODATE THE MECHANICAL EQUIPMENT. LOCATIONS OF THESE OPENINGS SHALL BE SUBMITTED IN SUFFICIENT TIME TO BE INSTALLED IN THE NORMAL COURSE OF WORK.

8. COORDINATE ELECTRICAL REQUIREMENTS OF APPROVED MECHANICAL EQUIPMENT WITH THE ELECTRICAL SUB-CONTRACTOR PRIOR TO THE PURCHASE AND INSTALLATION OF ANY ELECTRICAL EQUIPMENT, DEVICES, WIRING, OR CONDUIT.

9. PROVIDE GENERAL CONTROL WIRING, THERMOSTATS, MOTORIZED DAMPERS AND CONDUIT ASSOCIATED WITH HVAC EQUIPMENT. COORDINATE THE LOCATION OF ALL THERMOSTATS, ROOM SENSORS, ETC WITH THE ARCHITECT AND ALL OTHER TRADES PRIOR TO INSTALLATION. IF A CONFLICT WITH MILLWORK, LIGHT SWITCHES, WINDOWS, ETC EXISTS, NOTIFY THE ARCHITECT OF THE POTENTIAL INTERFERENCE PRIOR TO INSTALLATION. INSTALL THERMOSTATS WITH PROTECTIVE LOCKING COVER, CENTERED AT 4'-0" ABOVE FINISHED FLOOR, UNLESS OTHERWISE INDICATED. COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA).

10. ALL DIMENSIONS SHOWN ON THE DRAWINGS FOR DUCTWORK ARE NET INSIDE CLEAR DIMENSIONS. FOR RECTANGULAR DUCT, THE FIRST FIGURE OF THE DUCT SIZE INDICATES THE DIMENSION OF THE FACE SHOWN. VERIFY THAT THE DUCTWORK SPECIFIED WILL FIT IN THE SPACE AVAILABLE USING THE ARCHITECTURAL, STRUCTURAL AND ELECTRICAL DRAWINGS AS REFERENCE PRIOR TO FABRICATION AND INSTALLATION. ROUND DUCT OF EQUAL NET INSIDE CLEAR AREA MAY BE USED IN LIEU OF RECTANGULAR DUCT.

11. PROVIDE TURNING VANES ON ALL RECTANGULAR SUPPLY, OUTDOOR AIR, EXHAUST AND RETURN DUCTWORK INCLUDING THE TOP AND BOTTOM OF VERTICAL DUCTS.

12. PROVIDE A LOCKING QUADRANT VOLUME DAMPER AT THE TAP OF EACH RUN-OUT TO DIFFUSERS FOR BALANCING PURPOSES, UNLESS OTHERWISE INDICATED. THE RUN-OUT DUCT SIZE IS THE SAME SIZE AS THE DIFFUSER OR GRILLE NECK SIZE UNLESS OTHERWISE INDICATED.

13. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF ALL FIRE RATED WALLS AND CEILINGS. PROVIDE FIRE DAMPERS AND/OR COMBINATION FIRE/SMOKE DAMPERS IN DUCTWORK AT ALL LOCATIONS WHERE DUCTS PASS THROUGH FIRE RATED ASSEMBLY. MECHANICAL SUB-CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING FIRE AND FIRE/SMOKE DAMPERS. COORDINATE CONSTRUCTION REQUIREMENTS AND PROVISIONS FOR CONNECTIONS TO FIRE ALARM SYSTEM.

14. ALL DUCTWORK SHALL BE SHEET METAL FABRICATED IN ACCORDANCE WITH SMACNA STANDARDS. ALL DUCT WORK ASSOCIATED WITH CONSTANT VOLUME SYSTEMS SHALL BE CONSTRUCTED TO 2" W.G. AND SEALED TO SMACNA CLASS B. SEAL ALL SEAMS WITH MASTIC SEALANT UL 181 LISTED FOR THE APPLICATION USED. SEALANT SHALL BE DESIGNED FOR USE ON METAL DUCT AND FLEXIBLE DUCT.

15. ALL RECTANGULAR AND ROUND SUPPLY AND RETURN DUCTWORK LOCATED IN EXPOSED INTERIOR AREAS SHALL BE INTERNALLY LINED WITH DUCT LINER AND EXTERNALLY PAINTED. REFER TO ARCHITECT FOR COLOR SELECTION.

16. PROVIDE VIBRATION ISOLATORS FOR MOTOR DRIVEN EQUIPMENT UNLESS NOTED OTHERWISE. PROVIDE ISOLATION AS INDICATED OR AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

17. SOME DUCTS SHOWN ON EACH FLOOR PLAN MAY BE SHOWN WITH AN OFFSET FOR CLARITY.

18. SEAL ALL DUCT PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS WITH AN APPROVED FIRE PROOFING MATERIAL.

19. ALL EQUIPMENT SHALL HAVE IDENTIFICATION TAGS. TAGS SHALL BE PLASTIC LAMINATE, WHITE FACE WITH 1/2" TALL BLACK LETTERS. THE TAG SHALL MATCH THE UNIT DESIGNATIONS SHOWN ON THE SCHEDULES.

20. EXPAND OR REDUCE DUCTS AT EQUIPMENT CONNECTIONS BASED ON THE EQUIPMENT PURCHASED, WITH TRANSITIONS NOT TO EXCEED 30 DEGREES. SIZES SHOWN ON SCHEDULES, ETC. ARE FOR GUIDANCE ONLY. ASPECT RATIO SHALL BE NO GREATER THAN 4:1, PER SMACNA'S GUIDELINES.

21. ALL DUCTS WITH A DIMENSION GREATER THAN 12" PASSING THRU A NON-RATED WALL SHALL HAVE THE OPENING FRAMED IN WITH METAL STUDS. COORDINATE OPENING SIZE AND LOCATION WITH OTHER TRADES.

22. WHERE DAMPERS ARE LOCATED ABOVE HARD CEILINGS PROVIDE CONCEALED YOUNG REGULATORS. REGULATORS SHALL NOT BE LOCATED IN CORRIDORS, PATEINT CARE, OR TREATMENT AREAS. EACH REGULATOR SHALL BE LABLE PER THE SPECIFICATIONS.

23. TEST AND BALANCE SHALL BE PERFORMED BY AN AABC LICENSED FIRM IN THE TESTING, ADJUSTING, AND BALANCING (TAB) BUSINESS FOR A MINIMUM OF 10 YEARS. AABC FIRM SHALL SUBMIT A REPORT TO THE ENGINEER OF RECORD INDICATING EQUIPMENT NAMEPLATE DATA, DESIGN PERFORMANCE, INITIAL TESTED PERFORMANCE, AND FINAL ADJUSTED PERFORMANCE. REPORT SHALL BE SUBMITTED IN A TIMELY FASHION PRIOR TO JOB CLOSE-OUT. TAB SHALL BE PERFORMED ON ALL NEW SYSTEMS SPECIFIED AS PART OF THIS CONTRACT. TAB FIRM SHALL PERFORM A FUNCTIONAL PERFORMANCE TEST OF THE SYSTEM BASED ON THE CONTRACT DOCUMENTS HEREIN SHALL AND RELAY ALL DISCREPANCIES AND OUTSTANDING CONSTRUCTION ITEMS RELATING TO THE MECHANICAL EQUIPMENT AND PERFORMANCE TO THE ENGINEER OF RECORD.

SYMBOLS

SYMBOL	DESCRIPTION
20/20	ACOUSTICAL DUCT LINING (FIGURES SHOWN ARE INSIDE DUCT DIMENSIONS
20/20	SUPPLY AIR DUCT UP
20/20	RETURN DUCT UP
20/20	EXHAUST DUCT UP
20/20	SUPPLY AIR DUCT DOWN
20/20	RETURN DUCT DOWN
20/20	EXHAUST DUCT DOWN
18"⌀	ROUND/SPIRAL DUCT UP
18"⌀	ROUND/SPIRAL DUCT DOWN
	ARROW INDICATES DIRECTION OF AIR FLOW
UP/DN	CHANGE OF ELEVATION, RISE(UP) OR DROP (DN) IN DIRECTION OF ARROW
AD ☐	BOTTOM ACCESS DOOR (UNLESS OTHERWISE NOTED). SIZE AS NOTED OR SPECIFIED.
AD	SIDE ACCESS DOOR. SIZE AS NOTED OR SPECIFIED.
	RECTANGULAR DUCT SQUARE ELBOW WITH TURNING VANES
W, R=3W/2	RECTANGULAR DUCT RADIUS ELBOW
D, R=3D/2	ROUND DUCT RADIUS ELBOW, 5 SEAM UNLESS OTHERWISE NOTED
16/20, 20/20	TRANSITION CONCENTRIC UNLESS TOP LEVEL OR BOTTOM LEVEL IS NOTED
20/20, 16"⌀	TRANSITION, RECTANGULAR TO ROUND CONCENTRIC UNLESS TOP LEVEL OR BOTTOM LEVEL IS NOTED
	DUCT FLEXIBLE CONNECTION
	SOUND ATTENUATOR
	SQUARE SUPPLY CEILING DIFFUSER
	SQUARE RETURN CEILING GRILLE
	SQUARE EXHAUST CEILING GRILLE
T S D	THERMOSTAT / TEMP SENSOR / DUCT SMOKE DETECTOR
	SIDEWALL SUPPLY GRILLE W/ FLOW ARROW
	EXHAUST FAN
	MANUAL VOLUME DAMPER
FD	FIRE DAMPER

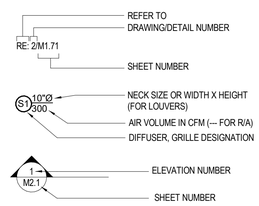
MISCELLANEOUS

1	DRAWING NOTE REFERENCE (I.E., NOTES BY SYMBOL)
	CONNECTION INTO EXISTING

ABBREVIATIONS

AD	ACCESS DOOR	kW	KILOWATT
A/C	AIR CONDITIONING UNIT	L	LENGTH
A/E	ARCHITECT/ENGINEER	LAT	LEAVING AIR TEMPERATURE
AFF	ABOVE FINISHED FLOOR	LPC	LOW PRESSURE CONDENSATE
AFS	AIR FLOW SWITCH	LPS	LOW PRESSURE STEAM
AHU	AIR HANDLING UNIT	LB	POUNDS
APPROX	APPROXIMATE	LRA	LOCKED ROTOR AMPS
BAS	BUILDING AUTOMATION SYSTEM	LWT	LEAVING WATER TEMPERATURE
BHP	BRAKE HORSE POWER	MAX	MAXIMUM
BTU	BRITISH THERMAL UNIT PER HOUR	MBH	1000 BRITISH THERMAL UNITS / HOUR
C/A	COMBUSTION AIR	MCA	MINIMUM CIRCUIT AMPACITY
CC	COOLING COIL	MFR	MANUFACTURER
CFH	CUBIC FEET PER HOUR	MIN	MINIMUM
CFM	CUBIC FEET PER MINUTE	N/A	NOT APPLICABLE
CLG	CEILING	N/O,N/C	NORMALLY OPEN, NORMALLY CLOSED
CU	CONDENSING UNIT	O/A	OUTSIDE AIR/FRESH AIR
D	EQUIPMENT DRAIN	OBD	OPPOSED BLADE DAMPER
DEG	DEGREES	O/C	ON CENTER
DB	DRY BULB	PEF	PURGE EXHAUST FAN
DN	DOWN	PH	PHASE
(E)	EXISTING	PROVIDE	FURNISH AND INSTALL
EAT	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE
E/A	EXHAUST AIR	PSI	POUNDS PER SQUARE INCH
EDH	ELECTRIC DUCT HEATER	R/A	RETURN AIR
EF	EXHAUST FAN	RE:	REFERENCE, REFER
EQUIP	EQUIPMENT	RL	REFRIGERANT LIQUID
EWT	ENTERING WATER TEMPERATURE	RLA	RUNNING LOAD AMPS
°F	DEGREES FAHRENHEIT	RM	ROOM
FCU	FAN COIL UNIT	RPM	REVOLUTIONS PER MINUTE
FD	FIRE DAMPER	RS	REFRIGERANT SUCTION
FLA	FULL LOAD AMPS	S/A	SUPPLY AIR
FLR	FLOOR	SD	SMOKE DETECTOR
FPVAV	FAN POWERED VAV	SF	SQUARE FOOT, SUPPLY FAN
FSD	FIRE SMOKE DAMPER	SPECS	SPECIFICATIONS
FT.	FOOT, FEET	T, TSTAT	THERMOSTAT, ROOM SENSOR
FT. WG	FEET WATER GAUGE	T/A	TRANSFER AIR
GA	U.S. GAUGE	THRU	THROUGH
GPM	GALLONS PER MINUTE	TSP	TOTAL STATIC PRESSURE
H	HEIGHT	TSTAT	THERMOSTAT OR ROOM SENSOR
HP	HORSEPOWER	TYP	TYPICAL
HPC	HIGH PRESSURE CONDENSATE	UL	UNDERWRITERS LABORATORIES, INC.
HPS	HIGH PRESSURE STEAM	UH	UNIT HEATER
HWR	HEATING WATER RETURN	V	VOLTS
HWS	HEATING WATER SUPPLY	VAV	VARIABLE AIR VOLUME
HZ	HERTZ	VEL	VELOCITY
IN.	INCH, INCHES	VFD	VARIABLE FREQUENCY DRIVE
IN.WG	INCHES WATER GAUGE	W/	WITH
IOM	INSTALLATION/OPERATION MANUAL	WB	WET BULB
J-BOX	JUNCTION BOX	W/O	WITHOUT

DRAWING/DETAIL REFERENCE



BASIS OF MECHANICAL DESIGN

PRIMARY MECHANICAL CODES

MECHANICAL:	2018 INTERNATIONAL MECHANICAL CODE
ENERGY:	2018 INTERNATIONAL ENERGY CONSERVATION CODE

PROJECT DESIGN VALUES:

OUTDOOR DESIGN TEMPERATURE (SUMMER):	95.5°F (DRYBULB), 75.3°F (WETBULB)
AMBIENT TEMPERATURE AT ROOFTOP UNITS:	102.35F (DRYBULB, SUMMER)
OUTDOOR DESIGN TEMPERATURE (WINTER):	-5.5°F (DRYBULB)
INDOOR DESIGN TEMPERATURE (SUMMER):	75°F (DRYBULB), 50% (RELATIVE HUMIDITY)
INDOOR DESIGN TEMPERATURE (WINTER):	70°F (DRYBULB)
OUTSIDE AIR REQUIREMENTS:	PER 2018 IMC TABLE 403.3.1.1

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

MECHANICAL LEGEND AND NOTES

SHEET NUMBER

M101

8/12/2024 11:23:59 AM

PACKAGED DX ROOFTOP UNIT WITH ELECTRIC HEAT SCHEDULE

MARK RTU-	ARRANGEMENT	NOM. TONS	SUPPLY FAN				COMPRESSOR			CONDENSER			COOLING PERFORMANCE DATA								HEATING PERFORMANCE DATA					ELECTRICAL DATA				MANUFACTURER MAKE AND MODEL	UNIT WEIGHT (LBS)	NOTES
			S/A CFM	O/A CFM	EXT. S.P.	MOTOR H.P.	NO.	R.L.A. (EACH)	REF. TYPE	NO. FANS	AMBIENT TEMP		ENTERING AIR		NET CAPACITY (MBH)			LEAVING AIR		MIN. SEER / EER	KW	NO. STAGES	AMBIENT TEMP	EAT D.B.	LAT D.B.	V.	Ph.	MCA	MOCP			
											D.B.	W.B.	D.B.	W.B.	SENS	LATENT	TOTAL	D.B.	W.B.												
1	DOWNFLOW	5	1750	180	0.8	1.0	2	15.9	R-410A	1	101	75	77	64	43.8	11.1	54.9	55	55	14.2	13.1	2	32	64	90	208	3	51	60	TRANE THJ	1,200	1-21

1. TRANE IS THE BASIS FOR DESIGN. ACCEPTABLE MANUFACTURER'S ARE: AAON, YORK, LENNOX, AND CARRIER. NO EXCEPTIONS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING VARIATIONS IN FIT, WEIGHT, AND ELECTRICAL SERVICE.
2. PROVIDE WITH THE FOLLOWING WARRANTIES: 5-YEAR COMPRESSOR, 10-YEAR HEAT EXHANGER, 1-YEAR ALL PARTS.
3. CONTRACTOR SHALL PROVIDE UNIT START-UP SERVICES.
4. PROVIDE WITH 2-IN. PLEATED MERV 8 FILTER.
5. EQUIPMENT SHALL BE IDENTIFIED BY MEANS OF ENGRAVED LAMINATED PLASTIC OR ETCHED METAL NAMEPLATES PERMANENTLY ATTACHED TO EQUIPMENT.
6. PROVIDE WITH 7-DAY, 24-HR, FULLY PROGRAMMABLE THERMOSTAT LOCATED PER CONSTRUCTION DOCUMENTS.
7. EQUIPMENT SHALL BE SET PLUMB AND LEVEL. PROVIDE WITH 14-IN. TALL GALVANIZED INSULATED FACTORY ROOF CURB TO MATCH ROOF SLOPE.
8. EQUIPMENT SHALL BE INSTALLED BY AUTHORIZED REPRESENTATIVE OF MANUFACTURER OR VERIFIED BY MANUFACTURER'S REPRESENTATIVE.
9. EXTERNAL STATIC PRESSURE (IN. W.G.) INCLUDES DUCTWORK, BALANCING DAMPERS AND AIR DEVICES ONLY.
10. CAPACITIES SHOWN ARE NET FROM UNIT DISCHARGE. UNITS MUST PERFORM TO LISTED CAPACITIES AND SATISFY BOTH SENSIBLE AND LATENT REQUIREMENTS.
11. PROVIDE UNIT WITH SINGLE POINT ELECTRICAL CONNECTION. ELECTRICAL DATA PROVIDED INCLUDES ELECTRIC HEAT.
12. PROVIDE FACTORY COIL PROTECTION PACKAGE INCLUDING CONDENSER HAIL GUARDS.
13. PROVIDE UNIT WITH INTEGRAL DISCONNECT.
14. PROVIDE WITH CORROSION RESISTANT CONDENSATE DRAIN PAIN.
15. PROVIDE WITH DRY BULB ECONOMIZER WITH BAROMETRIC RELIEF WITH FAULT DETECTION DIAGNOSTICS PER IECC.
16. PROVIDE WITH LOW-LEAK ECONOMIZER DAMPERS.
17. PROVIDE UNIT WITH HOT-GAS REHEAT.
18. PROVIDE WITH SPACE MOUNTED RELATIVE HUMIDITY SENSOR LOCATED PER CONSTRUCTION DOCUMENTS.
19. PROVIDE UNIT WITH LOW-AMBIENT KIT SUITABLE DOWN TO 0-DEG. F. AND CRANKCASE HEATER.
20. PROVIDE WITH SMOKE DETECTOR LOCATED IN RETURN DUCT INTERLOCKED TO SUPPLY FAN AS REQUIRED BY CODE.
21. PROVIDE MINIMUM 2-STAGES OF COOLING. SUPPLY FAN SHALL MODULATE TO MATCH COMPRESSOR STAGING. PROVIDE WITH VFD AS REQUIRED.

VENTILATION REQUIREMENT CALCULATION — PER UMC TABLE 402.1

ROOM NAME	UNIT SERVICING	PEOPLE	CFM/PERSON	CFM/SF	AREA (SF)	PEOPLE X CFM/PERSON	SF X CFM/SF	REQUIRED O.A. CFM	PROVIDED O.A. CFM
OFFICE	RTU-1	1	5	0.06	61	5	3.66	8.66	10
KITCHEN	RTU-1	10	7.5	0.12	495	75	59.4	134.4	140
FIRE RISER ROOM	-	-	-	-	50	-	-	0	0
RESTROOM	-	-	-	-	50	-	-	0	0
MINIMUM FRESH AIR CFM REQUIRED PER CODE									143.06
ZONE AIR DISTRIBUTION EFFECTIVENESS (TABLE 403.3.1.2) = 0.8					=				178.825
TOTAL O.A. PROVIDED									180
RESTROOMS	70 CFM / FIXTURE			# FIXTURES=	1	70	CFM EXHAUST REQ'D	75	CFM EXHAUST PROVIDED

NOTES: REPRESENTS CONDITIONS DURING NORMAL OPERATIONS AND NOT CONSIDERING ECONOMIZER OPERATION.

FAN SCHEDULE

MARK EF-	LOCATION	CFM	EXT. SP IN. W.G.	MOTOR DATA				DRIVE	MAX. SONES	MANUFACTURER AND MODEL NUMBER	WEIGHT (LBS.)	REMARKS
				H.P. (WATTS)	RPM	VOLTS	PH					
1	RESTROOM	75	0.25	(8)	950	120	1	DIRECT	4.5	GREENHECK SP-B110	11	1-5
2	ELECTRIC ROOM	50	0.25	(15.6)	790	120	1	DIRECT	0.4	GREENHECK SP-A70	12	1-5

1. OR APPROVED EQUAL.
2. PROVIDE A GRAVITY BACKDRAFT DAMPER.
3. VIBRATION ISOLATION SUPPORT HANGERS.
4. PROVIDE WEATHERPROOF CAP WITH BIRD SCREEN AT DISCHARGE.
5. INTERLOCK FAN WITH LIGHT SWITCH.

AIR DEVICE SCHEDULE

MARK	SERVES	FACE SIZE	MOUNTING	TYPE	MATERIAL	MANUFACTURER MAKE AND MODEL	MAX NC	REMARKS
S1	SUPPLY	24" X 24"	LAY-IN	PERFORATED	STEEL	TITUS PAR	30	1,2,3
S2	SUPPLY	12" X 12"	LAY-IN	PERFORATED	STEEL	TITUS PAR	30	1,2,3
S3	SUPPLY	6" X 6"	SURFACE	PERFORATED	STEEL	TITUS PAR	30	1,2
R1	RETURN	24" X 24"	LAY-IN	PERFORATED	STEEL	TITUS PAR	30	1,2

1. UNITS SHALL BE FURNISHED WITH APPROPRIATE FRAMES, ETC. FOR MOUNTING IN RESPECTIVE CEILING/WALL TYPES AND CONDITIONS OR APPROVED EQUAL.
2. FINISH SHALL BE WHITE.
3. TRANSITION FROM BACK OF AIR DEVICE TO DUCT SIZE SHOWN ON PLANS.

AIR CURTAIN SCHEDULE

MARK	CFM	VOLTAGE/PHASE	FLA	AMPERAGE	MANUFACTURER MAKE AND MODEL	WEIGHT	REMARKS
AC-2	900	120/1	2.4	5	MARS AIR LPV242-1U-OB	35	1-6

1. INSTALL WITH AUTOMATIC ON/OFF SWITCH WITH DOOR OR WINDOW OPERATION.
2. PROVIDE FAN WITH BACKDRAFT DAMPER AND FAN SPEED CONTROLLER.
3. NO ELECTRIC HEAT.
4. PROVIDE WITH LOUVER AND FILTER.
5. PROVIDE WALL MOUNTING BRACKETS.
6. PAINT COLOR PER ARCHITECTURAL SPECIFICATIONS.

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER PE-2024000504
REGISTERED PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

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PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

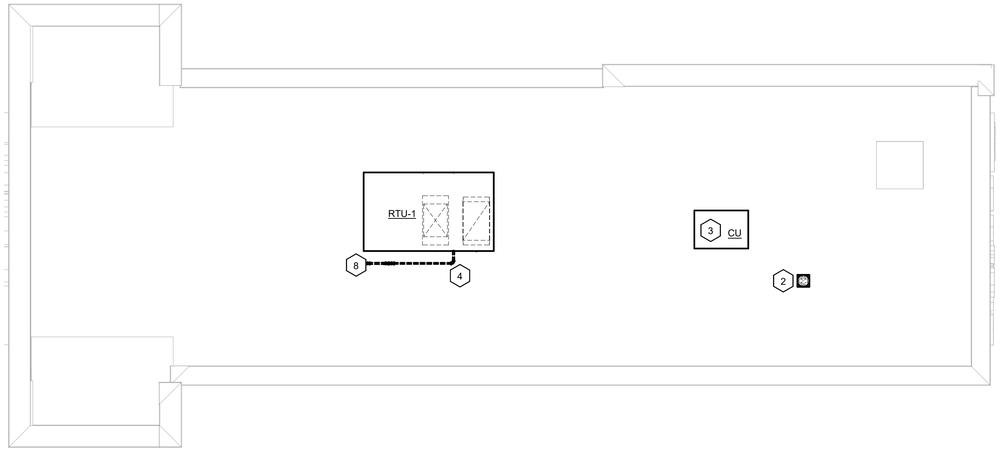
SHEET TITLE

MECHANICAL SCHEDULES

SHEET NUMBER

M102

8/12/2024 11:23:59 AM



2 MECHANICAL ROOF PLAN
M103 1/4" = 1'-0"

NOTES BY SYMBOL

1 PROVIDE NEW EXHAUST FAN PER SCHEDULE ON SHEET M102. SUSPEND FROM STRUCTURE. EXTEND EXHAUST DUCT UP THROUGH ROOF AND TERMINATE WITH GRAVITY VENT WITH BIRD SCREEN. ENSURE MINIMUM 10'-0" FROM ALL FRESH AIR INTAKES.

2 EXHAUST DUCT THROUGH ROOF. PROVIDE WEATHERPROOF CAP AND BIRD SCREEN. MAINTAIN MINIMUM 10'-0" FROM FRESH AIR INTAKES.

3 CONDENSING UNIT FOR WALK-IN COOLER SHOWN FOR REFERENCE ONLY. COMPLETE SYSTEM TO BE PROVIDED AND INSTALLED BY OWNER'S DESIGNATED CONTRACTOR. CONTRACTOR SHALL PROVIDE CONDENSING UNIT CURB MODEL B-LINE SINGLE TIER, PART # 18334.

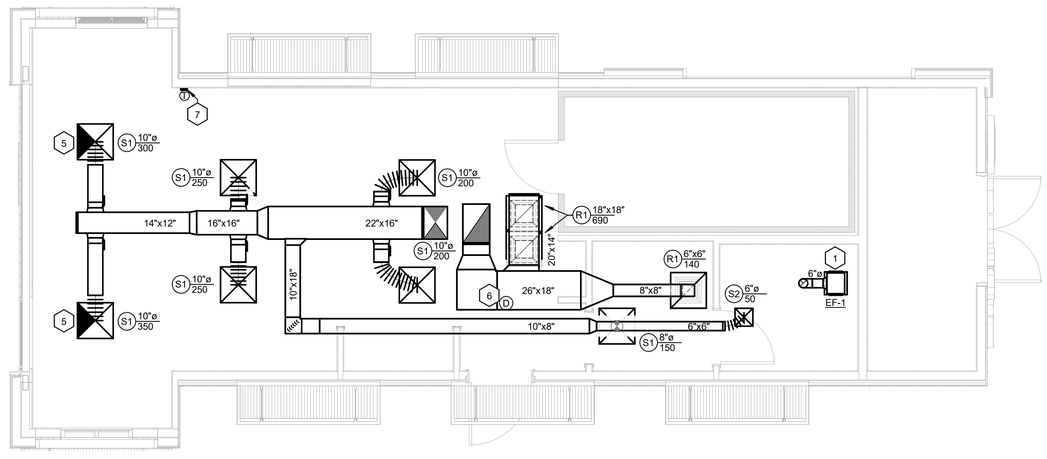
4 3/4-INCH CONDENSATE CONNECTION TO RTU. REFER TO DETAIL 1/M104 FOR ADDITIONAL INFORMATION.

5 PROVIDE 3-WAY DIFFUSER THROW AS INDICATED.

6 PROVIDE 120V SMOKE DETECTOR IN RETURN AIR DUCT FOR AUTOMATIC SHUTDOWN OF UNIT. KIDDLE SUPERDUCT MODEL# K-70-160. INSTALL HVAC DUCT DETECTOR AUDIBLE/VISUAL ALARMS AND TROUBLE LIGHTS PER IMC 606.4.

7 PROVIDE NEW THERMOSTAT AS INDICATED ON PLAN. MOUNT THERMOSTAT AT 48" AFF VERIFY LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN. NOTIFY EOR IF LOCATION IS CHANGED PRIOR TO INSTALL.

8 CONDENSATE PIPE DOWN THROUGH ROOF TO MOP SINK. DISCHARGE CONDENSATE AT MOP SINK VIA AIR GAP. SEE MECHANICAL FLOOR PLAN FOR ROUTING.



1 MECHANICAL FLOOR PLAN
M103 1/4" = 1'-0"

8/12/2024 11:24:00 AM

SAD AND GO

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GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

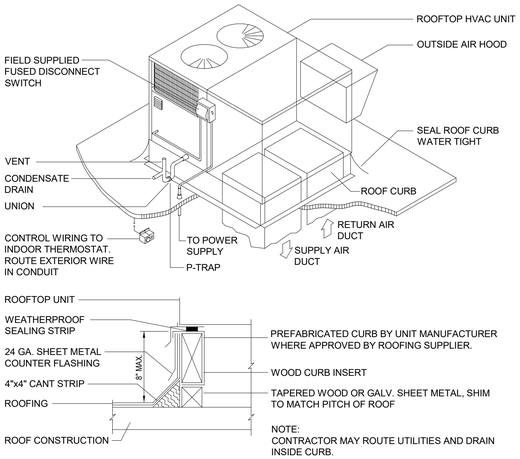
PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

MECHANICAL FLOOR PLANS

SHEET NUMBER

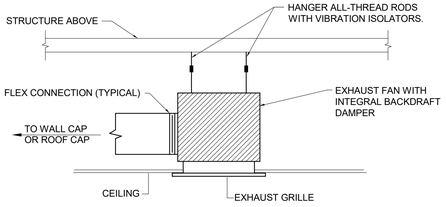
M103



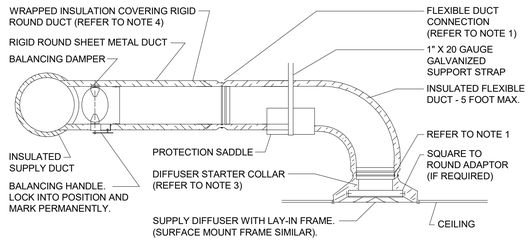
NOTES:

1. TOP OF CURB TO BE LEVEL ALL FOUR SIDES. ALL CURBS FURNISHED BY GENERAL CONTRACTOR. CURB SHALL BEAR DIRECTLY ON STRUCTURAL STEEL, NOT ON METAL DECK. MECHANICAL UNIT MUST SIT LEVEL.
2. CONTRACTOR MAY ROUTE UTILITIES AND DRAIN INSIDE CURB.
3. ALL ROOF CURBS/ PENETRATIONS ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S DETAILS. ALL REQUIRED ROOFING SHALL BE BY THE LANDLORD'S DESIGNATED ROOFING CONTRACTOR AS REQUIRED TO MAINTAIN THE WARRANTY AND INTEGRITY OF THE ROOF.

1 RTU DETAIL
SCALE: NO SCALE



2 CEILING EXHAUST FAN DETAIL
SCALE: NO SCALE



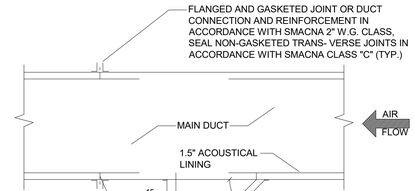
NOTES:
PROVIDE AT FLEXIBLE DUCT CONNECTION METAL OR "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX. SECURE THE INSULATION OVER THE DRAWBAND WITH AN ADDITIONAL DRAWBAND.

PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER.

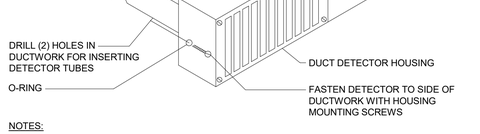
PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS.

BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

3 DIFFUSER CONNECTION DETAIL
SCALE: NO SCALE



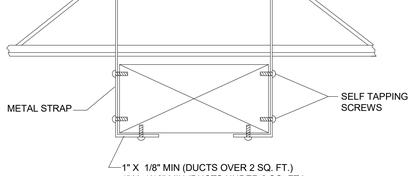
4 RECTANGULAR TAKE-OFF DETAIL
SCALE: NO SCALE



NOTES:

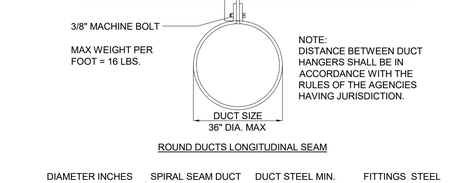
1. KIDDLE SUPERDUCT MODEL #K-70-160
   UL 268A LISTED OR EQUIVALENT.
2. RUGGED NORYL HOUSING WITH STRONG CLEAR POLYCARBONATE INSPECTION COVER.
3. ACCOMMODATES ION (IONIZATION) OR PHOTO HEADS (PHOTOELECTRIC).
4. SUITABLE FOR 4 WIRE 14-18 AWG WIRE, 24VAC/DC OR 120/220 VAC OPERATION.
5. REMOTE TEST STATION OPTION.
6. POWERED OUTPUTS FOR REMOTE LED AND AUDIBLE ALARM.
7. AIR VELOCITY RATING FROM 300 TO 4000 FPM.
8. EQUIPPED WITH A DPDT AUXILIARY RELAY.

5 DUCT DETECTOR DETAIL
SCALE: NO SCALE



1" X 1/8" MIN (DUCTS OVER 2 SQ. FT.)
1" X 1/16" MIN (DUCTS UNDER 2 SQ. FT.)
FOR DUCTS OVER 49" WIDE, TURN METAL STRAP UNDER BOTTOM OF DUCT AND FASTEN

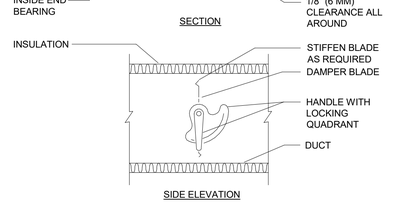
6 DUCT SUPPORT DETAIL
SCALE: NO SCALE



ROUND DUCTS LONGITUDINAL SEAM

DIAMETER INCHES	SPIRAL SEAM DUCT STEEL MIN. GALV.	DUCT STEEL MIN. GALV. SHT. GAUGE	FITTINGS STEEL MIN.
THROUGH 12	SHT. GAUGE	26 (0.022 IN.)	GALV. SHT. GAUGE
13 THROUGH 18	28 (0.019 IN.)	24 (0.028 IN.)	26 (0.022 IN.)
19 THROUGH 28	26 (0.022 IN.)	22 (0.034 IN.)	24 (0.028 IN.)
29 THROUGH 36	24 (0.028 IN.)	20 (0.040 IN.)	22 (0.034 IN.)
37 THROUGH 52	22 (0.034 IN.)	18 (0.052 IN.)	20 (0.040 IN.)
	20 (0.040 IN.)		18 (0.052 IN.)

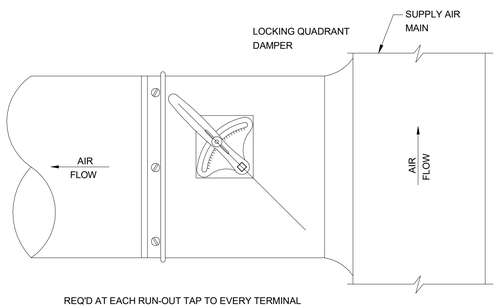
7 ROUND DUCT HANGING DETAIL
SCALE: NO SCALE



NOTES:

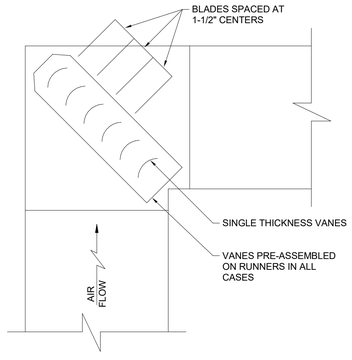
1. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

8 MANUAL DAMPER DETAIL
SCALE: NO SCALE



REQ'D AT EACH RUN-OUT TAP TO EVERY TERMINAL SUPPLY AIR DEVICE, AND OTHERWISE AS INDICATED.

9 TYPICAL CONICAL TAP
SCALE: NO SCALE



10 TYPICAL SQUARE ELBOW
SCALE: NO SCALE

8/12/2024 11:24:00 AM

SAAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS
NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

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MECHANICAL DETAILS

SHEET NUMBER

M104

DIVISION 15010 - BASIC MECHANICAL REQUIREMENTS

SECTION 1 - SUPPLEMENTARY CONDITIONS FOR MECHANICAL WORK

1.1.1 GENERAL CONDITIONS

A. ALL WORK COVERED BY THIS SECTION OF THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RESPECTIVE DRAWINGS, INFORMATION OF INSTRUCTIONS TO BIDDERS, GENERAL REQUIREMENTS AND THE SUPPLEMENTARY GENERAL CONDITIONS OF THESE SPECIFICATIONS.

B. BIDDERS SHALL DETERMINE THE CONTENTS OF A COMPLETE SET OF DRAWINGS AND SPECIFICATIONS AND BE AWARE THAT THEY MAY BE BIDDING FROM A PARTIAL SET OF DRAWINGS, APPLICABLE ONLY TO THE VARIOUS SEPARATE CONTRACT, SUBCONTRACTS OR TRADES AS MAY BE ISSUED FOR BIDDING PURPOSES ONLY. THE CONTRACT DOCUMENTS ARE THE COMBINED ARCHITECTURAL, STRUCTURAL, PLUMBING, HEATING, VENTILATING AND AIR CONDITIONING AND ELECTRICAL DRAWINGS AND SPECIFICATIONS. ALL DRAWINGS AND SPECIFICATIONS ARE ON FILE IN THE ARCHITECT'S OFFICE, AND EACH BIDDER SHALL THOROUGHLY ACQUAINT HIMSELF WITH ALL OF THE DETAILS OF THE COMPLETE SET OF DRAWINGS AND SPECIFICATIONS BEFORE SUBMITTING HIS BID. ALL DRAWINGS AND SPECIFICATIONS FORM A PART OF THE CONTRACT DOCUMENTS FOR EACH SEPARATE CONTRACT. THEY SHALL BE CONSIDERED AS BOUND THEREWITH IN THE EVENT PARTIAL SETS OF PLANS AND SPECIFICATIONS SHALL BE DEEMED EVIDENCE OF THE REVIEW AND EXAMINATION OF ALL DRAWINGS, SPECIFICATIONS AND ADDENDA ISSUED FOR THIS PROJECT. NO ALLOWANCES SHALL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH ANY PORTION OF THE COMPLETE SET OF DOCUMENTS.

C. ALL EQUIPMENT AND MATERIALS SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA.

1.1.2 SCOPE

A. THE WORK INCLUDED UNDER THIS SPECIFICATION CONSISTS OF THE FURNISHING OF ALL LABOR, MATERIALS, TOOLS, TRANSPORTATION, SERVICES, ETC. WHICH ARE APPLICABLE AND NECESSARY TO COMPLETE THE INSTALLATION OF THE SYSTEMS SPECIFIED HEREIN; ALL AS DESCRIBED IN THESE SPECIFICATIONS, AS ILLUSTRATED ON THE ACCOMPANYING DRAWINGS, OR AS DIRECTED BY THE ARCHITECT.

B. IN GENERAL, THE VARIOUS LINES AND DUCTS TO BE INSTALLED BY THE VARIOUS TRADES UNDER THIS SPECIFICATION SHALL BE RUN AS INDICATED, AS SPECIFIED HEREIN, AS REQUIRED BY PARTICULAR CONDITIONS AT THE SITE AND AS REQUIRED TO CONFORM TO THE GENERALLY ACCEPTED STANDARDS SO AS TO COMPLETE THE WORK IN A NEAT AND SATISFACTORILY WORKABLE MANNER. RUN WORK PARALLEL OR PERPENDICULAR TO THE LINES OF THE BUILDING UNLESS OTHERWISE NOTED.

C. THE CONSTRUCTION DETAILS FOR THE BUILDING ARE ILLUSTRATED ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS. EACH CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE DETAILS BEFORE SUBMITTING HIS BID, AS NO ALLOWANCE WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. PLACE ALL INSERTS TO ACCOMMODATE THE ULTIMATE INSTALLATION OF PIPE HANGERS IN THE FORMS BEFORE CONCRETE IS POURED. SET SLEEVES IN PLACE IN FORMS BEFORE CONCRETE IS POURED, AND IN MASONRY WALLS WHILE THEY ARE UNDER CONSTRUCTION. ALL CONCEALED LINES SHALL BE INSTALLED AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION TO PRECEDE THAT GENERAL CONSTRUCTION.

1.1.3 INSPECTION OF SITE

A. THE CONTRACTORS SHALL VISIT THE SITE, VERIFY ALL EXISTING ITEMS SHOWN ON PLANS OR SPECIFIED HEREIN, AND FAMILIARIZE HIMSELF WITH THE WORKING CONDITIONS, HAZARDS, EXISTING GRADES, ACTUAL FORMATIONS, SOIL CONDITIONS, AND LOCAL REQUIREMENTS INVOLVED, AND SUBMISSION OF BIDS SHALL BE DEEMED EVIDENCE OF SUCH VISIT. ALL PROPOSALS SHALL TAKE THE EXISTING CONDITIONS INTO CONSIDERATION, AND THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.

1.1.4 UTILITIES, LOCATIONS AND ELEVATIONS

A. LOCATIONS AND ELEVATIONS OF THE VARIOUS UTILITIES INCLUDED WITHIN THE SCOPE OF THIS WORK HAVE BEEN OBTAINED FROM CITY AND/OR OTHER SUBSTANTIALLY RELIABLE SOURCES AND ARE OFFERED SEPARATELY FROM THE CONTRACT DOCUMENTS, AS A GENERAL GUIDE ONLY, WITHOUT GUARANTEE AS TO ACCURACY. THE CONTRACTOR SHALL EXAMINE THE SITE, SHALL VERIFY TO THEIR OWN SATISFACTION THE LOCATIONS, ELEVATIONS AND AVAILABILITY OF ALL UTILITIES AND SERVICES REQUIRED AND SHALL ADEQUATELY INFORM THEMSELVES AS TO THEIR RELATION TO THE WORK; THE SUBMISSION OF BIDS SHALL BE DEEMED EVIDENCE THEREOF.

1.1.5 CODE REQUIREMENTS

A. ALL WORK SHALL COMPLY WITH THE PROVISIONS OF THESE SPECIFICATIONS, AS ILLUSTRATED ON THE ACCOMPANYING DRAWINGS, OR AS DIRECTED BY THE ARCHITECT, AND SHALL SATISFY ALL APPLICABLE LOCAL CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, AND ALL AUTHORITIES HAVING JURISDICTION OVER THE WORK, OR SERVICES THERETO. IN ALL CASES WHERE ALTERATIONS TO, OR DEVIATIONS FROM THE DRAWINGS AND SPECIFICATIONS ARE REQUIRED BY THE AUTHORITY HAVING JURISDICTION, THE CONTRACTOR SHALL REPORT SAME IN WRITING TO THE OWNER AND SECURE HIS APPROVAL BEFORE PROCEEDING. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PROVIDE COMPLETE UTILITY SERVICE CONNECTIONS, AS DIRECTED, AND SUBMIT, AS REQUIRED, ALL NECESSARY DRAWINGS; HE SHALL SECURE ALL PERMITS AND INSPECTIONS NECESSARY IN CONNECTION WITH HIS WORK AND PAY ALL LEGAL FEES ON ACCOUNT THEREOF. IN THE ABSENCE OF OTHER APPLICABLE LOCAL CODES ACCEPTABLE TO THE ARCHITECT, THE NATIONAL ELECTRICAL CODE AND INTERNATIONAL PLUMBING CODE SHALL APPLY TO THIS WORK.

1.1.6 RECORDS FOR THE OWNER

A. THE CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE A COMPLETE, FULL-SIZE SET OF PRINTS ON WHICH HE SHALL KEEP AN ACCURATE RECORD OF THE INSTALLATION OF ALL MATERIALS AND SYSTEMS COVERED BY HIS CONTRACTUAL AGREEMENT. THE RECORD SHALL INDICATE THE LOCATION OF ALL EQUIPMENT AND THE ROUTING OF ALL SYSTEMS. ALL CONDUIT BURIED IN CONCRETE SLABS, WALLS, AND BELOW GRADE SHALL BE LOCATED BY DIMENSION UNLESS A SURFACE MOUNTED DEVICE IN EACH SPACE INDICATES THE EXACT LOCATION. HE SHALL THEN OBTAIN AT HIS EXPENSE ONE COMPLETE REPRODUCIBLE SET OF THE ORIGINAL DRAWINGS ON WHICH HE SHALL NEATLY TRANSFER HIS NOTATIONS AND DELIVER THESE DRAWINGS TO THE ENGINEER AT JOB COMPLETION BEFORE THE FINAL PAYMENT FOR DELIVERY TO THE OWNER.

B. IN ADDITION TO THE ABOVE, THE CONTRACTOR SHALL ACCUMULATE DURING THE JOB PROGRESS THE FOLLOWING DATA IN DUPLICATE PREPARED IN A NEAT BROCHURE OR PACKET FOLDER BONDING FOR SUBSEQUENT DELIVERY TO THE OWNER. THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF BINDING INTO A BOOK:

1. ALL WARRANTIES, GUARANTEE, AND MANUFACTURER'S DIRECTIONS ON EQUIPMENT AND MATERIAL COVERED BY THE CONTRACT.
2. COPIES OF APPROVED SHOP DRAWINGS AND SUBMITTALS.
3. COPIES OF SEQUENCE OF OPERATIONS FOR ALL EQUIPMENT COVERED BY CONTRACT.

1.1.7 MATERIALS AND WORKMANSHIP

A. ALL MATERIALS, UNLESS OTHERWISE SPECIFIED, SHALL BE NEW, FREE FROM ANY DEFECTS AND OF THE BEST QUALITY OF THEIR RESPECTIVE KINDS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURER, MODEL AND QUALITY, UNLESS OTHERWISE SPECIFIED.

B. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, USED, CLEANED, ADJUSTED AND CONDITIONED AS RECOMMENDED BY THE MANUFACTURERS, OR ALL INDICATED IN THEIR PUBLISHED LITERATURE, UNLESS SPECIFICALLY HEREIN SPECIFIED TO THE CONTRARY. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER PROVIDING A THOROUGH AND COMPLETE INSTALLATION. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION, INCLUDING THE SHIELDING OF SOFT OR FRAGILE MATERIALS AND THE TEMPORARY PLUGGING OF OPEN LINES DURING CONSTRUCTION. AT COMPLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED, AND ALL TOOLS, EQUIPMENT, OBSTRUCTION OR DEBRIS PRESENT AS A RESULT OF THIS CONTRACT SHALL BE REMOVED FROM THE PREMISES.

1.1.8 STORAGE AND PROTECTION

A. PROVIDE ADEQUATE FACILITIES FOR ITEMS FURNISHED UNDER THESE SPECIFICATIONS WHICH ARE SUBJECT TO DAMAGE IF EXPOSED TO ELEMENTS. TAKE SUCH PRECAUTIONS AS NECESSARY TO PROPERLY PROTECT APPARATUS FROM DAMAGE. FAILURE TO COMPLY WITH THIS PROVISION WILL BE SUFFICIENT CAUSE FOR REJECTION OF THE PARTICULAR APPARATUS INVOLVED.

1.1.9 COOPERATION

A. ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CONJUNCTION WITH OTHER TRADES ON THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS WORK.

B. MAINTAINING CONTACT AND BEING FAMILIAR WITH THE PROGRESS OF THE GENERAL CONSTRUCTION AND THE TIMELY INSTALLATION OF SLEEVES AND INSERTS, ETC., BEFORE CONCRETE IS PLACED SHALL BE THE RESPONSIBILITY OF THIS TRADE, AS WILL THE INSTALLATION OF THE REQUIRED SYSTEMS IN THEIR SEVERAL STAGES, AT THE PROPER TIME TO EXPEDITE THIS CONTRACT AND AVOID UNNECESSARY DELAYS IN THE PROGRESS OF OTHER CONTRACTS, AND MEET ALL REQUIREMENTS OF PROGRESS SCHEDULES SET UP BY THE ARCHITECT.

C. SHOULD ANY QUESTION ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS, FIXTURES OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OR STRENGTH OF THE STRUCTURE, REFERENCE SHALL BE MADE TO THE ARCHITECT FOR INSTRUCTION.

1.1.10 SCHEDULE OF MATERIAL AND EQUIPMENT

A. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A COMPLETE SCHEDULE OF MATERIAL AND EQUIPMENT WHICH IS TO BE INSTALLED UNDER THE CONTRACT. THE SCHEDULE SHALL BE SUBMITTED WITHIN 30 DAYS AFTER THE AWARD OF THIS CONTRACT AND PRIOR TO THE INSTALLATION OR FABRICATION OF ANY OF THE MATERIAL INVOLVED. THE SCHEDULE SHALL INCLUDE FOR MATERIALS THE MANUFACTURER'S NAME, CATALOG NUMBER, TYPE AND TRADE NAME; IN ADDITION, FOR EQUIPMENT, ATTACH MANUFACTURER'S ENGINEERING DATA AND SPECIFICATION SHEET.

1.1.11 SHOP DRAWINGS AND SUBMITTALS:

A. PROVIDE SUBMITTALS AND SHOP DRAWINGS (3 COPIES MINIMUM) FOR THE FOLLOWING EQUIPMENT AND LAYOUT:

1. DUCTWORK FABRICATION DETAILS AND LAYOUT AT 1/8" = 1'-0" SCALE.
2. MECHANICAL EQUIPMENT CUT SHEETS INCLUDING ALL PERFORMANCE CHARACTERISTICS, ACCESSORIES, DRAWINGS, WIRING DIAGRAMS, ETC. ACCESSORIES SHALL BE CLEARLY LABELED TO SHOW WHAT IS AND IS NOT PROVIDED.
3. PIPING DETAILS SHOWING MATERIALS USED AND JOINING/SEALING METHODS.
4. PIPING LAYOUT AT 1/8" = 1'-0" SCALE.

B. EQUIPMENT SHALL NOT BE ORDERED UNTIL APPROVED BY THE ARCHITECT AND ENGINEER OF RECORD. THE CONTRACTOR SHALL ALLOW TWO (2) WEEKS FOR DESIGN TEAM REVIEW OF SUBMITTALS.

1.1.12 DRAWINGS AND SPECIFICATIONS

A. THE DRAWINGS SHOW, DIAGRAMMATICALLY, THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUITS, FIXTURES AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL AND ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM. THE SYSTEMS SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE ITEMS SHOWN ON THE DRAWINGS. EXACT LOCATIONS OF THESE ITEMS SHALL BE DETERMINED BY REFERENCE TO THE GENERAL PLANS AND MEASUREMENTS AT THE BUILDING AND IN COOPERATION WITH OTHER SUB-CONTRACTORS AND, IN ALL CASES, SHALL BE SUBJECT TO THE APPROVAL OF THE CONTRACTOR. THE CONTRACTOR RESERVES THE RIGHT TO MAKE ANY REASONABLE CHANGE IN THE LOCATION OF ANY PART OF THIS WORK WITHOUT ADDITIONAL COST TO THE OWNER.

B. SHOULD ANY CHANGES BE DEEMED NECESSARY BY THE CONTRACTOR IN ITEMS SHOWN ON THE CONTRACT DRAWINGS, SHOP DRAWINGS AND DESCRIPTIONS, THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

C. EXCEPTIONS AND INCONSISTENCIES IN PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE CONTRACTOR'S ATTENTION BEFORE BIDS ARE SUBMITTED; OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ANY AND ALL CHANGES AND ADDITIONS THAT MAY BE NECESSARY TO ACCOMMODATE HIS PARTICULAR APPARATUS.

D. THE CONTRACTORS SHALL LAY OUT HIS WORK AND RUNNING ALL LINES, GRADES AND DIMENSIONS ACCORDING TO THESE DRAWINGS WITH DUE CONSIDERATION FOR OTHER TRADES AND VERIFY ALL DIMENSIONS AT THE SITE PRIOR TO ANY FABRICATION OR INSTALLATION. SHOULD THE LAYOUT BE IMPRACTICAL, THE CONTRACTOR SHALL BE NOTIFIED BEFORE ANY INSTALLATION OR FABRICATION, AND THE EXISTING CONDITIONS SHALL BE INVESTIGATED AND PROPER CHANGES EFFECTED WITHOUT ANY ADDITIONAL COST.

E. TITLES OF SECTIONS AND PARAGRAPHS IN THESE SPECIFICATIONS ARE INTRODUCED MERELY FOR CONVENIENCE AND ARE NOT TO BE CONSTRUED AS A CORRECT OR COMPLETE SEGREGATION TO INSULATION OF THE VARIOUS UNITS OF MATERIAL AND/OR WORK. THE ARCHITECT DOES NOT ASSUME ANY RESPONSIBILITY, EITHER DIRECT OR IMPLIED, FOR OMISSIONS OR DUPLICATIONS BY THE CONTRACTOR OR ANY SUB-CONTRACTOR DUE TO REAL OR ALLEGED ERROR IN THE ARRANGEMENT OF MATTER IN THE CONTRACT DOCUMENTS.

1.1.13 ARCHITECT'S APPROVAL

A. IN ANY SECTION OF THIS CONTRACT WHERE "APPROVAL" IS REQUIRED OR REQUESTED, IT IS UNDERSTOOD THAT SUCH APPROVAL MUST BE OBTAINED FROM THE ARCHITECT IN WRITING BEFORE PROCEEDING WITH THE PROPOSAL, AND AN ADEQUATE NUMBER OF COPIES OF ANY SUCH PROPOSAL SHALL BE SUBMITTED TO THE ARCHITECT.

B. THE APPROVAL BY THE ARCHITECT OF ANY MATERIALS, CHANGED DRAWINGS, ETC., SUBMITTED BY THE CONTRACTOR WILL BE CONSIDERED AS GENERAL ONLY AND TO AID THE CONTRACTOR IN EXPEDITING HIS WORK. SUCH APPROVAL AS MAY BE GIVEN DOES NOT IN ANY WAY RELIEVE THE CONTRACTOR FROM THE NECESSITY OF FURNISHING THE MATERIALS AND PERFORMING ALL WORK AS REQUIRED BY THE DRAWINGS AND SPECIFICATIONS.

1.1.14 LOCAL RESTRICTIONS

A. THE CONTRACTOR SHALL BECOME FAMILIAR WITH ALL RULES AND REGULATIONS OF THE CITY, COUNTY AND STATE, OR ANY OTHER AUTHORITY HAVING JURISDICTION OVER THIS PROJECT. IF IT IS THE CONTRACTOR'S OPINION THAT ANY WORK OR MATERIALS SHOWN ON THE DRAWINGS OR SPECIFICATIONS DO NOT COMPLY WITH THESE RULES AND REGULATIONS AS TO SIZE, TYPE, CAPACITY AND QUALITY, HE MUST MAKE IT KNOWN PRIOR TO THE SUBMISSION OF HIS BID, WHICH SHALL BE DEEMED EVIDENCE OF COMPLIANCE; OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE APPROVAL OF ALL WORK OR MATERIAL AND, IN THE EVENT THAT SUCH AUTHORITY SHOULD INDICATE DISAPPROVAL, HE SHALL CORRECT SAME WITH MATERIALS APPROVED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.

1.1.15 ELECTRICAL WIRING

A. EXCEPT FOR SUCH ITEMS AS ARE NORMALLY WIRED UP AT THEIR POINT OF MANUFACTURE AND SO DELIVERED, AND UNLESS SPECIFICALLY NOTED TO THE CONTRARY HEREIN, THE ELECTRICAL SUBCONTRACTOR WILL DO ALL ELECTRIC WIRING OF EVERY CHARACTER FOR POWER SUPPLY. THE MECHANICAL SUBCONTRACTOR SHALL ERECT ALL MOTORS IN PLACE READY FOR CONNECTIONS AND SHALL FURNISH WITH EACH SUCH MOTOR A STARTER OF THE TYPE SPECIFIED AND DELIVER IT IN GOOD CONDITION TO THE ELECTRICAL SUBCONTRACTOR AT THE JOB. THE ELECTRICAL SUBCONTRACTOR WILL MOUNT ALL SUCH STARTERS, AS DIRECTED, FURNISHING SUPPORTING STRUCTURES WHERE NECESSARY. THE OWNER AND OTHER SUBCONTRACTORS SHALL FURNISH WITH EACH ITEM REQUIRING ELECTRICAL CONNECTIONS, THE NECESSARY INSTRUCTIONS AND WIRING DIAGRAMS TO THE ELECTRICAL SUBCONTRACTOR. THE ELECTRICAL SUBCONTRACTOR SHALL REFER TO THE SPECIFICATIONS TO DETERMINE THE SCOPE OF THE WORK.

1.1.16 LARGE APPARATUS AND EQUIPMENT

A. ALL LARGE APPARATUS AND EQUIPMENT WHICH IS SPECIFIED OR SHOWN TO BE FURNISHED OR INSTALLED UNDER THIS CONTRACT, AND WHICH MAY BE TOO LARGE TO BE MOVED INTO ITS FINAL POSITION THROUGH THE NORMAL BUILDING OPENINGS PLANNED, SHALL BE PLACED BY THIS SUBCONTRACTOR IN ITS APPROXIMATE FINAL POSITION. THIS SHALL BE ACCOMPLISHED THROUGH COOPERATION AND COORDINATION WITH OTHER SUBCONTRACTORS BEFORE ANY OBSTRUCTING STRUCTURE IS INSTALLED. ALL APPARATUS SHALL BE CRIBBED UP FROM THE FLOOR BY THIS SUBCONTRACTOR AND CARED FOR AS SPECIFIED UNDER "STORAGE AND PROTECTION" OR AS DIRECTED BY THE ARCHITECT.

1.1.17 RESPONSIBILITY

A. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED. HE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PROVIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS WORK, REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED.

1.1.18 CLEAN UP

A. CLEAN UP TRASH AND DEBRIS CAUSED BY THE WORK OF THIS SECTION, KEEPING PREMISES, STREETS, SIDEWALKS AND ADJACENT AREAS CLEAN AND NEAT AT ALL TIMES. B. DISPOSE OF SUCH MATERIALS OUTSIDE THE LIMITS OF THE PROJECT SITE TO APPROVED LOCATIONS.

1.1.19 PAINTING

A. UPON COMPLETION, CLEAN ALL PIPES AND EQUIPMENT BEFORE PAINTING. PAINTING OF MECHANICAL EQUIPMENT AND PIPING IS SPECIFIED IN ARCHITECTURAL PAINTING SECTION.

1.1.20 ACCESS DOORS

A. ACCESS DOORS ARE TO BE PROVIDED BY THE CONTRACTOR. CONTRACTOR WILL CLOSELY COORDINATE LOCATIONS OF VALVES, ETC. IN ORDER TO HAVE ACCESS TO ALL CONCEALED PORTIONS OF THE SYSTEM REQUIRING PERIODIC SERVICE. PREPARE SHOP DRAWINGS FOR COORDINATION OF ALL ACCESS DOORS, LOCATING SAME FOR INSTALLATION BY GENERAL CONTRACTOR. ACCESS DOOR LOCATIONS SHALL BE APPROVED BY ARCHITECT OR OWNER BEFORE INSTALLATION.

1.1.21 EXCAVATION AND BACKFILLING

a. PROVIDE NECESSARY EXCAVATING AND BACKFILLING FOR THE INSTALLATION OF WORK SPECIFIED IN THIS DIVISION. TRENCHES FOR UNDERGROUND PIPING AND CONDUIT SHALL BE EXCAVATED TO REQUIRED DEPTHS WITH BELL HOLES PROVIDED AS NECESSARY TO INSURE UNIFORM BEARING. ARE SHOULD BE TAKEN NOT TO EXCAVATE BELOW DEPTH, AND ANY EXCAVATION BELOW DEPTH SHALL BE REFILLED WITH SAND OR GRAVEL FIRMLY COMPACTED. WHERE ROCK OR HARD OBJECTS ARE ENCOUNTERED, THEY SHALL BE EXCAVATED TO A GRADE SIX INCHES (6") BELOW THE LOWERMOST PART OF THE PIPE AND REFILLED TO THE PIPE GRADE AS SPECIFIED. AFTER THE PIPE HAS BEEN INSTALLED, TESTED AND APPROVED, THE TRENCHES SHALL BE BACKFILLED IN GRADE WITH APPROVED MATERIAL, WELL TAMPED OR PUDDLED COMPACTLY IN PLACE. DO NOT PROCEED WITH BACKFILL OPERATIONS UNTIL THE ARCHITECT OR CONTRACTOR HAS INSPECTED PIPING. ALL PIPING OUTSIDE THE BUILDING SHALL BE INSTALLED BELOW THE FROST LINE. WHERE STREETS, SIDEWALKS, ETC. ARE DISTURBED, CUT OR DAMAGED BY THIS WORK, THE EXPENSE OF REPAIRING SAME IN A MANNER APPROVED BY THE ARCHITECT SHALL BE A PART OF THIS CONTRACT.

1.1.22 SLEEVES AND ESCUTCHEONS

a. ALL PIPING OTHER THAN SANITARY SEWER LINES AND PVC OR POLYBUTAL PASSING THROUGH CONCRETE FLOOR SLABS SHALL BE COMPLETELY ISOLATED IN 1/2" THICK FLEXIBLE FOAM PLASTIC INSULATION FROM 6" BELOW THE SLAB TO 2" ABOVE THE SLAB. IF PIPES PASS THROUGH GRADE BEAMS, THE INSULATION THICKNESS SHALL BE 3/8". SANITARY SEWER LINES PASSING GRADE BEAMS SHALL BE WRAPPED WITH TWO (2) PLY OF 15#Q FELT TO ISOLATE THE PIPE FROM THE CONCRETE.

b. ESCUTCHEONS EXCEPT AS SPECIFICALLY NOTED OR SPECIFIED SHALL BE INSTALLED ON ALL PIPES PASSING EXPOSED THROUGH THE FLOORS, WALLS OR CEILINGS. ESCUTCHEONS SHALL BE CHROME PLATED SECTIONAL FLOOR AND CEILING PLATES AND SHALL FIT SNUGLY AND NEATLY AROUND PIPE OR PIPE INSULATION OR INSULATED LINES. SOLID CHROME PLATES WITH SETSCREWS SHALL BE USED IF SECTIONAL PLATES DO NOT FIT PROPERLY OR STAY IN PLACE.

1.1.23 FLASHINGS

a. FLASH AROUND ALL PIPES PASSING THROUGH THE ROOF IN CONNECTION WITH THIS CONTRACT WITH STANDARD MANUFACTURED FLASHINGS. FLASHINGS SHALL BE SHEET METAL WITH RUBBER GASKETS. FLASHINGS SHALL EXTEND INTO ROOFING AND UP PIPE DISTANCES IN ACCORDANCE WITH THE LOCAL CODE.

1.1.24 EXPANSION OF PIPING

a. THIS SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL DEVICES REQUIRED TO PERMIT THE EXPANSION AND CONTRACTION OF ALL PIPE WORK INSTALLED PARTICULARLY IN WATER SUPPLY AND CIRCULATING SYSTEMS. IN THE MAIN WATER AND CIRCULATING LINES, HE SHALL EMPLOY EXPANSION JOINTS AS REQUIRED OR WHERE DIRECTED.

b. SHOULD THE INSTALLATION OF MECHANICAL EXPANSION JOINTS BECOME NECESSARY IN THE OPINION OF THE ARCHITECT, JOINTS 1-1/2" AND SMALLER SHALL BE FULTON SYLPHON NO. 111 PACKLESS EXPANSION JOINTS. JOINTS ON 2" AND LARGER LINES SHALL BE ADSCO, FLEXONES OR TUBE TURN, BELLOWS TYPE EXPANSION JOINTS WITH THE PROPER NUMBER OF BELLOWS SECTIONS OF STAINLESS STEEL.

c. ANCHOR ALL LINES HAVING EXPANSION JOINTS SO THAT EXPANSION AND CONTRACTION EFFECT IS EQUALLY DISTRIBUTED. VERIFY EXACT LOCATIONS OF ANCHORS WITH THE ARCHITECT PRIOR TO MAKING INSTALLATION. THE LINES HAVING EXPANSION JOINTS SHALL BE ACCURATELY GUIDED ON BOTH SIDES OF EACH JOINT. THESE GUIDES SHALL CONSIST OF SADDLES AND "E" CLAMPS PROPERLY ARRANGED AND SUPPORTED. SUBMIT COMPLETE DETAILS FOR APPROVAL.

1.1.25 FLAME SPREAD PROPERTIES OF MATERIALS

A. ALL MATERIALS AND ADHESIVES USED FOR ACOUSTICAL LININGS AND INSULATION, JACKETS, TAPES, ETC. SHALL CONFORM TO INTERIM FEDERAL STANDARD FLAME-SPREAD PROPERTIES OF MATERIALS, INC. FED. STD. NO. 00336A (COMM. NBS). THE CLASSIFICATION SHALL NOT EXCEED NO. 2, WITH THE RANGE OF INDICES BETWEEN 0 AND 25 FOR THESE CLASSIFICATIONS AS LISTED IN THE FEDERAL SPECIFICATIONS FOR THE BASIC MATERIALS, THE FINISHES, ADHESIVES ETC. SPECIFIED FOR EACH SYSTEM, AND SHALL BE SUCH THAT WHEN COMPLETELY ASSEMBLED THE TOTAL WILL NOT EXCEED AN INDEX OF 50 IN CLASSIFICATION 111 AS LISTED IN THE FEDERAL SPECIFICATIONS. MODIFICATIONS SHALL BE MADE TO INSULATING MATERIALS, ETC. AS REQUIRED TO COMPLY WITH THE FEDERAL SPECIFICATIONS.

1.1.26 GUARANTEE

A. THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE IN TRIPLICATE, WARRANTING ALL MATERIALS, EQUIPMENT AND LABOR FURNISHED BY HIM TO BE FREE OF ALL DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE BY THE OWNER. HE SHALL FURTHER GUARANTEE THAT ALL EQUIPMENT SHALL MEET THE CHARACTERISTICS, CAPACITIES AND WORKMANSHIP SPECIFIED AND WITHIN THE WARRANTY PERIOD, THE DEFECTS AND/OR EQUIPMENT WILL BE REPAIRED OR MADE GOOD WITHOUT COST TO THE OWNER. THE CONTRACTOR FURTHER AGREES TO CORRECT WARRANTY DEFICIENCIES WITHIN 48 HOURS OF NOTIFICATION BY MANAGEMENT.

B. REFERENCE DOCUMENTS: CONDITIONS OF THE CONTRACT AND DIVISION 01 "GENERAL REQUIREMENTS" ARE MADE A PART OF THIS SECTION WHETHER ATTACHED HERETO OR NOT.

SECTION 4 - HEATING, VENTILATION AND AIR-CONDITIONING SYSTEMS

4.1.1 SCOPE

A. PROVIDE COMPLETE AIR SUPPLY, RETURN, OUTSIDE AIR AND EXHAUST SYSTEMS INCLUDING FANS, TERMINAL DEVICES AND OTHER COMPONENTS SPECIFIED HEREIN.

4.1.2 SUBMITTALS

A. SHOP DRAWINGS: SUBMIT COMPLETE SHOP DRAWINGS, IN ACCORDANCE WITH SECTION 1, INDICATING MATERIALS, QUANTITIES, SIZES AND INSTALLATION DETAILS.

4.1.3 COORDINATION

A. INSTALL MATERIALS AND EQUIPMENT AT PROPER TIME TO KEEP PACE WITH THE GENERAL CONSTRUCTION AND THE WORK OF THE OTHER TRADES INVOLVED.

4.1.4 WARRANTY

A. THE MECHANICAL SUB-CONTRACTOR SHALL WARRANTY ALL MATERIAL, WORKMANSHIP AND EQUIPMENT FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE BY THE OWNER. THE WARRANTY SHALL ALSO COVER ANY DAMAGE RESULTING APPARENT DURING THIS PERIOD WILL BE REPAIRED, REPLACED OR OTHERWISE MADE GOOD AT NO ADDITIONAL COST TO THE OWNER. IT SHALL FURTHER INCLUDE REPLACEMENT OR REFRIGERANT LOSS NOT DUE TO OWNER NEGLIGENCE. COMPRESSORS SHALL CONTAIN AN ADDITIONAL FOUR-YEAR WARRANTY.

4.2.1 DUCTWORK

A. RIGID DUCTWORK: ALL AIR CONDITIONING AND EXHAUST DUCTWORK, PLENUM, CASINGS AND SHEET METAL, CONNECTIONS SHALL BE FABRICATED OF NEW JOINT-FORMING QUALITY GALVANIZED PRIME GRADE SHEETS.

B. RECTANGULAR LOW PRESSURE DUCTS: CONSTRUCTED OF THE FOLLOWING MINIMUM GAUGES:

LARGEST DIMENSION OF DUCT	GAUGE OF METAL
UP TO 12"	NO. 26 U.S. GAUGE
13" TO 30"	NO. 24 U.S. GAUGE
31" TO 54"	NO. 22 U.S. GAUGE

C. C. ROUND LOW PRESSURE DUCTS: "SNAP-LOK" AS MANUFACTURED BY UNITED SHEET METAL COMPANY.

D. RECTANGULAR DUCTWORK FITTINGS: FABRICATED PER SMACNA STANDARDS FOR LOW-PRESSURE DUCTWORK(2-INCH PRESSURE CLASS).

E. ROUND DUCTWORK FITTINGS: AS MANUFACTURED BY UNITED SHEET METAL CO., AND/OR AS DETAILED ON THE DRAWINGS.

F. FLEXIBLE CONNECTIONS: CONNECTIONS TO AIR CONDITIONING UNITS AND FANS SHALL BE FLEXIBLE CONNECTIONS WHICH SHALL BE NEOPRENE COATED GLASS FABRIC WEIGHING NOT LESS THAN 30 OUNCES PER SQUARE YARD AND AT LEAST 1/16" THICK.

G. AT THE CONTRACTOR'S OPTION, 2" INSULATED FLEXIBLE DUCT MAY BE USED FOR FINAL RUN OUT TO AIR DEVICES WHEN INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. FLEXIBLE RUN OUTS SHALL NOT EXCEED 5-FEET EXTENDED LENGTH.

H. SURFACE-BURNING CHARACTERISTICS FOR SEALANTS AND GASKETS SHALL BE A MAXIMUM FLAME-SPREAD INDEX OF 25 AND A MAXIMUM SMOKE-DEVELOPED INDEX OF 50 WHEN TESTED ACCORDING TO UL 723; CERTIFIED BY AN NRTL

I. ACCESS DOORS SHALL BE PROVIDED FOR ACCESS TO ALL DAMPERS, FUSIBLE LINKS, AND WHERE REQUIRED FOR MAINTENANCE AND CLEANING OPERATIONS. ACCESS DOORS SERVING INSULATED DUCTS SHALL BE DOUBLE-SKIN DOORS WITH ONE INCH OF INSULATION ON THE DOOR

COM*check* Software Version 4.1.5.5

Mechanical Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Salad & Go
Location: Lees Summit, Missouri
Climate Zone: 4a
Project Type: New Construction

Construction Site:
610 NW Chipman Road
Lee's Summit, MO

Owner/Agent:

Designer/Contractor:
Gemini Engineering Group
101 Nightlinger Ln
Milsap, TX 76066
(817) 901-5191

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Mechanical Systems List

Quantity **System Type & Description**

1 HVAC System 1 (Single Zone):
Single Package Heat Pump
Heating Mode: Capacity = 34 kBtu/h,
Proposed Efficiency = 8.30 HSPF, Required Efficiency = 8.00 HSPF
Cooling Mode: Capacity = 52 kBtu/h,
Proposed Efficiency = 16.20 SEER, Required Efficiency: 14.00 SEER
Fan System: FAN SYSTEM 1 -- Compliance (Motor nameplate HP method) : Passes

Fans:
FAN 1 Supply, Constant Volume, 1750 CFM, 1.4 motor nameplate hp, 0.0 fan efficiency grade

1 Water Heater 1:
Electric Storage Water Heater, Capacity: 50 gallons w/ Circulation Pump
Proposed Efficiency: 0.84 SL, %/h (if > 12 kW), Required Efficiency: 0.84 SL, %/h (if > 12 kW)

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

CLAYTON LUCAS, P.E. — Name - Title
Signature
10/23/2024 — Date

COM*check* Software Version 4.1.5.5

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR3][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the service water heating systems and equipment and document where exceptions to the standard are claimed. Hot water system sized per manufacturer's sizing guide.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C403.12.2 , C403.12.3 [FO9][1]	Snow/ice melting system and freeze protection systems have sensors and controls configured to limit service for pavement temperature and outdoor temperature. future connection to controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Plumbing Rough-In Inspection	Complies?	Comments/Assumptions
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.5, C404.5.1, C404.5.2 [PL6][3]	Heated water supply piping conforms to pipe length and volume requirements. Refer to section details.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.1, C404.6.2 [PL3][3]	Automatic time switches installed to automatically switch off the recirculating hot-water system or heat trace.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.3 [PL7][3]	Pumps that circulate water between a heater and storage tank have controls that limit operation from startup to <= 5 minutes after end of heating cycle.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.7 [PL8][3]	Demand recirculation water systems have controls that start the pump upon receiving a signal from the action of a user of a fixture or appliance and limits the temperature of the water entering the cold-water piping to 104°F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.2.6 [ME41][3]	Thermally ineffective panel surfaces of sensible heating panels have insulation >= R-3.5.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.8.4 [ME142][2]	Motors for fans that are not less than 1/12 hp and less than 1 hp are electronically commutated motors or have a minimum motor efficiency of 70 percent. These motors have the means to adjust motor speed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.8.5 [ME143][2]	Each DX cooling system > 65 kBtu and chiller water/evaporative cooling system with fans > 1/4 hp are designed to vary the indoor fan airflow as a function of load and comply with detailed requirements of this section.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.12.1 [ME71][3]	Systems that heat outside the building envelope are radiant heat systems controlled by an occupancy sensing device or timer switch.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.2.3 [ME55][2]	HVAC equipment efficiency verified.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Mechanical Systems list for values.*
C403.2.2 [ME59][3]	Natural or mechanical ventilation is provided in accordance with International Mechanical Code Chapter 4. Mechanical ventilation has capability to reduce outdoor air supply to minimum per IMC Chapter 4.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.7.1 [ME59][3]	Demand control ventilation provided for spaces >500 ft2 and >25 people/1000 ft2 occupant density and served by systems with air side economizer, auto modulating outside air damper control, or design airflow >3,000 cfm.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.7.2 [ME115][3]	Enclosed parking garage ventilation has automatic contaminant detection and capacity to stage or modulate fans to 50% or less of design capacity.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.7.6 [ME141][3]	HVAC systems serving guestrooms in Group R-1 buildings with > 50 guestrooms: Each guestroom is provided with controls that automatically manage temperature setpoint and ventilation (see sections C403.7.6.1 and C403.7.6.2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.4 [ME57][3]	Exhaust air energy recovery on systems meeting Table C403.7.4(1) and C403.7.4(2).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C403.7.5 [ME116][3]	Kitchen exhaust systems comply with replacement air and conditioned supply air limitations, and satisfy hood rating requirements and maximum exhaust rate criteria.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C403.11.1 , C403.11.2 [ME60][3]	HVAC ducts and plenums insulated in accordance with C403.11.1 and constructed in accordance with C403.11.2, verification may need to occur during Foundation Inspection.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.3.2 [ME121][3]	Closed-circuit cooling tower within heat pump loop have either automatic bypass valve or lower leakage positive closure dampers. Open-circuit tower within heat pump loop have automatic valve to bypass all heat pump water flow around the tower. Open- or closed-circuit cooling towers used in conjunction with a separate heat exchanger have heat loss by shutting down the circulation pump on the cooling tower loop. Open- or closed circuit cooling towers have a separate heat exchanger to isolate the cooling tower from the heat pump loop, and heat loss is controlled by shutting down the circulation pump on the cooling tower loop.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.1.4 [ME63][2]	Heating for vestibules and air curtains with integral heating include automatic controls that shut off the heating system when outdoor air temperatures > 45F. Vestibule heating and cooling systems controlled by a thermostat in the vestibule with heating setpoint <= 60F and cooling setpoint >= 80F.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.2.1 [ME53][3]	Air outlets and zone terminal devices have means for air balancing.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.5, C403.5.1, C403.5.2 [ME123][3]	Refrigerated display cases, walk-in coolers or walk-in freezers served by remote compressors and remote condensers not located in a condensing unit, have fan-powered condensers that comply with Sections C403.5.1 and refrigeration compressor systems that comply with C403.5.2..	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

8/12/2024 11:24:01 AM

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

MECHANICAL ENERGY FORMS

SHEET NUMBER

M106

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26]³	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.7 [EL27]³	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28]³	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.9 [EL29]³	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI83]³	Furnished O&M manuals for HVAC systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.2 [FI27]³	HVAC systems and equipment capacity does not exceed calculated loads.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1 [FI47]³	Heating and cooling to each zone is controlled by a thermostat control. Minimum one humidity control device per installed humidification/dehumidification system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1.1 [FI42]³	Heat pump controls prevent supplemental electric resistance heat from coming on when not needed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.4.1.2 [FI38]³	Thermostatic controls have a 5 °F deadband.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.1.3 [FI20]³	Temperature controls have setpoint overlap restrictions.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.2 [FI39]³	Each zone equipped with setback controls using automatic time clock or programmable control system.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.2.1, C403.2.4.2.2 [FI40]³	Automatic Controls: Setback to 55°F (heat) and 85°F (cool); 7-day clock, 2-hour occupant override, 10-hour backup	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C403.2.4.2.3 [FI41]³	Systems include optimum start controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.3 [FI11]³	Heat traps installed on supply and discharge piping of non-circulating systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.4 [FI25]³	All piping insulated in accordance with section details and Table C403.11.3.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C404.6.1 [FI12]³	Controls are installed that limit the operation of a recirculation pump installed to maintain temperature of a storage tank. System return pipe is a dedicated return pipe or a cold water supply pipe.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C408.1.1 [FI57]³	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.1 [FI28]³	Commissioning plan developed by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.1 [FI31]³	HVAC equipment has been tested to ensure proper operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.3.2 [FI10]³	HVAC control systems have been tested to ensure proper operation, calibration and adjustment of controls.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.4 [FI29]³	Preliminary commissioning report completed and certified by registered design professional or approved agency.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI7]³	Furnished HVAC as-built drawings submitted within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.3 [FI43]³	An air and/or hydronic system balancing report is provided for HVAC systems.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.4 [FI30]³	Final commissioning report due to building owner within 90 days of receipt of certificate of occupancy.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

MECHANICAL ENERGY FORMS

SHEET NUMBER

M107

8/12/2024 11:24:01 AM

NON-STRUCTURAL ELECTRICAL COMPONENT NOTES

A. THE FOLLOWING ITEMS ARE TAKEN DIRECTLY FROM THE 2018 INTERNATIONAL BUILDING CODE AND FROM THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD 7. THE CONTRACTOR SHALL REFER TO THE ABOVE FOR ADDITIONAL INFORMATION, EXCEPTIONS, AND FURTHER DESCRIPTIONS. THE CONTRACTOR SHALL ADHERE TO REQUIREMENTS AND AS SUCH, SHALL BE INCLUDED WITHIN BID. ALSO REFER TO SPECIFICATIONS.

B. 2018 IBC, 1613.1, SCOPE: ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND NON-STRUCTURAL COMPONENTS THAT ARE PERMANENTLY ATTACHED TO STRUCTURES AND THEIR SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED AND CONSTRUCTED TO RESIST THE EFFECTS OF EARTHQUAKE MOTIONS IN ACCORDANCE WITH ASCE 7, EXCLUDING CHAPTER 14 AND APPENDIX 11A.

C. ASCE 7-02, 11A.1.2.2CONTRACTOR RESPONSIBILITY: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONSTRUCTION OF A SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM, OR COMPONENT LISTED IN THE QUALITY ASSURANCE PLAN SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE AUTHORITY HAVING JURISDICTION AND TO THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE
   a. CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL INCLUDE THE FOLLOWING:
   b. ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE QUALITY ASSURANCE PLAN;
   c. ACKNOWLEDGMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE AUTHORITY HAVING JURISDICTION;
   d. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND THE DISTRIBUTION OF THE REPORTS; AND
   e. IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

D. DIVISION 16 RESPONSIBILITIES:
   a. HANGERS AND SEISMIC BRACING FOR ELECTRICAL SYSTEMS SHALL BE DESIGNED AND SPECIFIED BY DIVISION 16. DIVISION 16 SHALL REFER TO THE ELECTRICAL DRAWINGS FOR LOCATIONS OF EQUIPMENT AND ELECTRICAL SYSTEMS.AS STRUCTURAL DRAWINGS DO NOT SHOW THE LOCATIONS OF ELECTRICAL EQUIPMENT, RACEWAYS, AND OTHER COMPONENTS.
   b. DIVISION 16 SHALL COORDINATE THE SUPPORT SYSTEMS AND DESIGN LOADS FOR HUNG RACEWAYS AND OTHER ELECTRICAL SYSTEMS (INCLUDING COMBINED MULTIPLE RACEWAY RUNS) WITH THE GENERAL CONTRACTOR AND THE STEEL AND WOOD JOIST MANUFACTURERS IN ADDITION TO OTHER TRADES THAT MAY BE IMPACTED.

ENERGY CODE NOTES

A. RECORD DRAWINGS: SUBMIT TO THE BUILDING OWNER PER ENERGY CODE ENFORCED BY THE LOCAL AHJ.

B. OPERATION AND MAINTENANCE MANUALS: SUBMIT TO THE BUILDING OWNER PER ENERGY CODE ENFORCED BY THE LOCAL AHJ.

C. THIS BUILDING AND ITS ENERGY SYSTEMS HAVE BEEN DESIGNED TO COMPLY WITH ENERGY CODE ENFORCED BY THE LOCAL AHJ. CONTRACTOR IS RESPONSIBLE FOR CORRECT INSTALLATION OF ENERGY CONSERVATION MEASURES.

D. LIGHTING CONTROL SYSTEMS COMMISSIONING AND COMPLETION REQUIREMENTS: TEST SYSTEMS TO ENSURE THAT BUILDING SYSTEMS HAVE BEEN INSTALLED AND FUNCTION PROPERLY AND EFFICIENTLY, AND CAN BE MAINTAINED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND OPERATIONAL REQUIREMENTS PER ENERGY CODE ENFORCED BY THE AHJ. REFER TO SPECIFICATIONS FOR ADDITIONAL COMMISSIONING REQUIREMENTS.

GENERAL NOTES

A. PERFORM WORK IN ACCORDANCE WITH APPLICABLE NATIONAL AND STATE CODES AS AMENDED LOCALLY AND ENFORCED BY THE AHJ.

B. OBTAIN AND PAY FOR PERMITS REQUIRED FOR INSTALLATION OF WORK. ARRANGE AND SCHEDULE REQUIRED INSPECTIONS.

C. DRAWINGS ARE DIAGRAMMATIC IN NATURE. PROVIDE COMPONENTS AS REQUIRED FOR A COMPLETE OPERATIONAL SYSTEM WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS.

D. DEVICE LOCATIONS ARE APPROXIMATE. COORDINATE DEVICE LOCATIONS AND ELEVATIONS WITH APPROPRIATE DOCUMENTS INCLUDING CASEWORK SHOP DRAWINGS AND ARCHITECT'S INTERIOR ELEVATIONS PRIOR TO ROUGH-IN.

E. COORDINATE ELECTRICAL WORK WITH THAT OF OTHER TRADES. REFER TO MECHANICAL, ARCHITECTURAL, STRUCTURAL, CIVIL, AND LANDSCAPE DRAWINGS AND SPECIFICATIONS. COORDINATION SHALL OCCUR PRIOR TO FABRICATION, PURCHASE, AND INSTALLATION OF WORK.

F. COORDINATE LOCATION OF LIGHT FIXTURES AND CEILING-MOUNTED DEVICES WITH ARCHITECTURALREFLECTED CEILING PLANS AND ELEVATIONS.

G. PROVIDE RATED ENCLOSURES AROUND ALL LIGHT FIXTURES PENETRATING RATED CEILINGS. COORDINATE WITH ARCHITECTURAL.

H. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS OF EXPANSION/SEISMIC JOINTS. PROVIDE RACEWAY EXPANSION/SEISMIC JOINTS FOR RACEWAYS CROSSING BUILDING EXPANSION/SEISMIC JOINTS.

I. DEMOLISH EXISTING SYSTEMS AS INDICATED ON PLANS OR AS REQUIRED FOR INSTALLATION OF NEWWORK. MATERIAL SHALL BE REMOVED FROM SITE ANDLEGALLY DISPOSED OF OFF SITE UNLESS OTHERWISE DIRECTED. RETURN ITEMS TO OWNER IN EXISTING CONDITION WHEN DIRECTED BY OWNER.

J. COMPLETION OF WORK SHALL BE EXECUTED INACCORDANCE WITH THE PROJECT SCHEDULE. SCHEDULE INSTALLATION WITH OTHER TRADES TO ENSURE PROJECT MILESTONES ARE MET.

K. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY SHOW EVERY RACEWAY, BOX, CONDUCTOR, OR SIMILAR ITEMS FOR A COMPLETE INSTALLATION. PROVIDE ITEMS NECESSARY FOR COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM.

L. BRANCH CIRCUIT HOMERUNS ARE SHOWN TO INDICATE CIRCUIT PROPERTIES AND CONFIGURATION. SINGLE-CIRCUIT HOMERUNS SERVED FROM THE SAME PANELBOARD MAY BE COMBINED IN ACCORDANCE WITH THE DIVISION SPECIFICATIONS, UNLESSINDICATEDOTHERWISE. EXTEND AND CONNECT BRANCH CIRCUIT RACEWAY AND WIRING FROM HOMERUN TO DEVICES AND EQUIPMENT WITH CIRCUIT NUMBERS INDICATED. CONDUCTOR QUANTITIES AND SIZES ARE INDICATED AT HOMERUNS ONLY. SHOW ACTUAL RACEWAY ROUTING AND CIRCUITING ON RECORD DRAWINGS. MINIMUM CONDUCTOR SIZE #12 AWG.

M. LIGHT FIXTURES MOUNTED IN CONTINUOUS ROWS SHALL BE THROUGH-WIRED VIA FIXTURE INTERNAL WIREWAYS. CIRCUITS AS INDICATED ON DRAWINGS. FIXTURES NOT LISTED FOR THROUGH WIRING SHALL BE WIRED VIA SEPARATE RACEWAY AND WIRING SYSTEM EXTERNAL TO THE FIXTURES. PROVIDE RACEWAYS, WIRING AND CONNECTIONS FOR A COMPLETE AND OPERATIONAL SYSTEM.

N. PROVIDE BIDDER DESIGN FIRE ALARM SYSTEM MODIFICATIONS AS REQUIRED BY CODES ASSOCIATED WITH THE TENANT IMPROVEMENTS. REFER TO DIVISION 28 SPECIFICATIONS. DEVICES SHOWN ON DRAWINGS ARE FOR COORDINATION PURPOSES ONLY. PROVIDE ADDITIONAL DETECTION, NOTIFICATION AND SUPERVISORY DEVICES AS REQUIRED BY CODES.

LIGHTING CONTROLS SYMBOL LEGEND

SYMBOL*	DESCRIPTION
$	SINGLE POLE SWITCH
X $	SWITCH - 'X' INDICATES TYPE: 3 3-WAY 4 4-WAY D DIMMER T TIMER M MOTOR RATED MC MOMENTARY CONTACT OC OCCUPANCY SENSOR G GAS SHUT-OFF P PILOT-LIGHTED EPO EMERGENCY POWER OFF
a $	SWITCHING CIRCUIT 'a', 'b', etc. REFER TO LIGHTING FIXTURES ON PLANS.
⊗	OCCUPANCY SENSOR, CEILING MOUNTED
⊗	VACANCY SENSOR, CEILING MOUNTED
⊗→	OCCUPANCY SENSOR, WALL MOUNTED
⊕	DAYLIGHT SENSOR, CEILING MOUNTED

* NOTES:
1. NOT ALL SYMBOLS MAY BE USED.
2. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT AND LOCATION.
3. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

ELECTRICAL SYMBOLS

SYMBOL*	DESCRIPTION
1	REFER TO 'ELECTRICAL NOTES BY SYMBOL'
1 / E201	REFER TO DETAIL/VIEW '1' ON SHEET 'E201'
⊗	CONNECT TO EXISTING
1-P1 1,3	HOMERUN TO PANELBOARD '1-P1' CIRCUITS 1 & 3
	RECEPTACLE/DUPLEX, +18"AFF (OR AS INDICATED)
	RECEPTACLE, QUAD, +18"AFF (OR AS INDICATED)
	220V RECEPTACLE +18"AFF (OR AS INDICATED)
	RECEPTACLE FOR SPECIAL EQUIPMENT
GFI	GROUND FAULT INTERRUPT PROTECTED DEVICE
WP	WEATHERPROOF DEVICE
	FLOOR MOUNTED RECEPTACLE
	LOCATION OF FLOOR MOUNTED RECEPTACLE, COORDINATE DATA REQUIREMENTS WITH TECHNOLOGY DRAWINGS. REFER TO SPECIFICATIONS.
J	JUNCTION BOX, 4" X 4" MINIMUM, WITH SINGLE GANG PLASTER RING & 1" CONDUIT(S) TURNED HORIZ. TO ABOVE CLG. WITH PROTECTIVE BUSHING AND PULL TAPE
M	MICROPHONE OUTLET @ 18" AFF.
TV	DEVICE CLUSTER, FLAT SCREEN
	DEVICE CLUSTER, MEDIA CENTER
S	AIR SENSOR REFER TO MECHANICAL PLANS AND/OR ARCHITECTURAL PLANS FOR TYPE, MOUNTING LOCATION AND ANY ADDITIONAL REQUIREMENTS.
DB	DOORBELL PUSH BUTTON REFER TO CONSULTANT PLANS AND/OR ARCHITECTURAL PLANS FOR TYPE, MOUNTING LOCATION AND ANY ADDITIONAL REQUIREMENTS.
DC	DOORBELL CONTACT/TRANSFORMER REFER TO CONSULTANT PLANS AND/OR ARCHITECTURAL PLANS FOR TYPE, MOUNTING LOCATION AND ANY ADDITIONAL REQUIREMENTS.
	EXHAUST FAN, CEILING MOUNTED
	EXHAUST FAN, INLINE / ABOVE CEILING
	EXHAUST FAN, ROOFTOP
	MECHANICAL EQUIPMENT (REFER TO MECHANICAL SCHEDULE FOR MORE INFORMATION.
	NON-FUSED DISCONNECT NEMA 1 (UNO). FOR AMP RATING, VOLTAGE AND PHASE REFER TO PLANS.

* NOT ALL SYMBOLS MAY BE USED.

AUXILIARY SYSTEM SYMBOLS

FACP	FIRE ALARM CONTROL PANEL, COORDINATE EXACT LOCATION WITH LOCAL FIRE AUTHORITY.
FARA	FIRE ALARM REMOTE ANNUNCIATOR, COORDINATE EXACT LOCATION WITH LOCAL FIRE AUTHORITY.

FIRE ALARM SYSTEM NOTES

A. COORDINATE FINAL LOCATION OF ALL DEVICES WITH LIGHT AND HVAC SYSTEM DEVICES.

B. MAINTAIN CLEARANCES FROM ALL AIR MOVING DEVICES PER NFPA AND MANUFACTURER REQUIREMENTS.

C. CENTER DEVICES BETWEEN CEILING ELEMENTS AND CEILING AREAS.

D. EXACT LOCATION OF FIRE ALARM REMOTE ANNUNCIATOR TO BE APPROVED BY THE LOCAL FIRE MARSHALL.

E. ALL DEVICES TO BE INSTALLED PER ALL APPLICABLE CODES.

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PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	10/06/2023
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

ELECTRICAL LEGEND AND NOTES

SHEET NUMBER

E101

8/12/2024 11:23:51 AM

KITCHEN GENERAL NOTES

A. FINAL CONNECTION TO ALL HARD-WIRED EQUIPMENT SHALL BE MADE WITH "SEAL-TITE" FLEXIBLE CONDUIT.

B. THE ELECTRICAL CONTRACTOR SHALL MAKE FINAL ELECTRICAL CONNECTIONS TO ALL RELATED EQUIPMENT.

C. "CALL OUT" -INDICATES EQUIPMENT IDENTIFICATION NUMBER. REFER TO EQUIPMENT SCHEDULE. COORDINATE WITH EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.

D. THE ELECTRICAL CONTRACTOR SHALL VERIFY ROUGH-IN REQUIREMENTS, LOCATIONS, MOUNTING HEIGHTS, VOLTAGE, PHASE, AMPS, HP, KW, ETC. FOR ALL EQUIPMENT PRIOR TO ROUGH-IN.

E. PROVIDE SEAL-OFFS FOR ALL CONDUITS ENTERING OR LEAVING WALK-IN BOXES.

F. ALL CIRCUIT BREAKERS PROVIDED WITH SHUNT TRIPPING DEVICES SHALL HAVE THE CONTROL CIRCUIT ROUTED THROUGH DRY CONTACTS PROVIDED IN THE FIRE PROTECTION SYSTEM. UPON ACTIVATION OF FIRE PROTECTION SYSTEM THOSE CIRCUIT BREAKERS SHALL BE AUTOMATICALLY TRIPPED.

G. ALL CIRCUITS SHALL HAVE AN INSULATED GROUND WIRE (BOND) SIZED PER 2020 NEC 250.122, #12 MINIMUM GROUND, WIRE NOT SHOWN ON DRAWINGS.

H. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL DISCONNECT SWITCHES, CONDUIT, WIRE AND INSTALL UNDER SUPERVISION OF THE EQUIPMENT SUPPLIER.

I. THE ELECTRICAL CONTRACTOR SHALL VERIFY PLUG CONFIGURATIONS FOR APPLICABLE EQUIPMENT WITH SUPPLIER PRIOR TO ROUGH-IN.

J. PROVIDE GFCI PROTECTION FOR ALL EQUIPMENT/KITCHEN RECEPTACLES PER 2017 NEC 210.8 (B)(2).

MECHANICAL GENERAL NOTES

A. VERIFY ALL MECHANICAL UNIT LOCATIONS WITH MECHANICAL PLANS.

B. THE ELECTRICAL CONTRACTOR SHALL NOT MOUNT DISCONNECT EQUIPMENT DIRECTLY TO MECHANICAL UNITS FOR DISCONNECTS 200A AND LARGER. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A SELF-SUPPORTING SYSTEM FOR DISCONNECT EQUIPMENT.

C. PROVIDE WEATHERPROOF, HEAVY DUTY, NEMA 3R FUSIBLE DISCONNECT SWITCHES FOR ALL MECHANICAL UNITS LOCATED OUTSIDE.

D. ALL EXTERIOR RECEPTACLES SHALL BE WEATHER RESISTANT GFCI (PASS & SEYMOUR 2095DSWRBK OR EQUAL), INTALLED IN A WEATHERPROOF ENCLOSURE WITH A WHILE IN USE COVERPLATE (PASS & SEYMOUR #WIUC10DCL OR EQUAL).

E. EXHAUST FANS MOUNTED OUTSIDE SHALL HAVE A WEATHERPROOF DISCONNECT MOUNTED EXTERIOR TO THE UNIT. INTERNAL DISCONNECT SWITCHES SHALL NOT BE ALLOWED.

KITCHEN EQUIPMENT SCHEDULE

TAG #	DESCRIPTION	VOLTAGE	LOAD	BREAKER SIZE	WIRE SIZE	MOUNTING HEIGHT	NOTES
K7	NITRO WARMER	120 V	12 A	20	3/4"C, 2#12,#12G	42"	
K8	SOUP WARMER	120 V	10 A	20	3/4"C, 2#12,#12G	42"	
K9	UNDER COUNTER ICE MAKER	120 V	12 A	20	3/4"C, 2#12,#12G	18"	
K10	ICE MAKER	120 V	11 A	20	3/4"C, 2#12,#12G	18"	
K11	PANINI PRESS	120 V	15 A	20	3/4"C, 2#12,#12G	REFER TO PLANS	
K12	LEMONADE DISPENSER	120 V	9 A	20	3/4"C, 2#12,#12G	42"	
K13	DAIRY DISPENSER	120 V	1 A	20	3/4"C, 2#12,#12G	42"	
K14	BEVERAGE COOLER	120 V	5 A	20	3/4"C, 2#12,#12G	18"	
K17	FOOD PREP TABLE	120 V	7 A	20	3/4"C, 2#12,#12G	REFER TO PLANS	
K19	MICROWAVE	208 V	27 A	30	3/4"C, 3#10,#10G	42"	
K21	WALK-IN COOLER	208 V	11 A	20	3/4"C, 2#12,#12G	REFER TO PLANS	PROVIDE 30A/2P NEMA-3R DISCONNECT
K26	42" MARS AIR CURTAIN	120 V	2 A	20	3/4"C, 2#12,#12G	96"	
K29	ICE TEA BREWER	120 V	14 A	20	3/4"C, 2#12,#12G	42"	
K30	FROZEN BEV DISPENSER	208 V	29 A	30	3/4"C, 3#10,#10G	42"	
K31	REACH-IN COOLER	120 V	3 A	20	3/4"C, 2#12,#12G	18"	SIMPLEX RECEPTACLE
K35	WALL FAN	120 V	2 A	20	3/4"C, 2#12,#12G	92"	
K36	WATER FILTER	120 V	16 A	20	3/4"C, 2#12,#12G	84"	PROVIDE 2 WATER LOOPS FOR FILTERED WATER AND SOFTWATER
K39	SECURITY VCR	120 V	3 A	20	3/4"C, 2#12,#12G	18"	
K40	MUSIC SYSTEM	120 V	3 A	20	3/4"C, 2#12,#12G	18"	
K41	DRIVE THRU DETECTOR	120 V	2 A	20	3/4"C, 2#12,#12G	18"	
K44	DRIVE THRU WINDOW AND SERVING SHELF	120 V	5 A	20	3/4"C, 2#12,#12G	42"	
K45	BREWER SERVER SOFT HEAT	120 V	3 A	20	3/4"C, 2#12,#12G	42"	
K47	WATER SOFTNER	120 V	16 A	20	3/4"C, 2#12,#12G	18"	PROVIDE POWER FOR FUTURE WATER SOFTNER COORDINATE EXACT LOCATION WITH OWNER, ARCHITECT PRIOR TO INSTALLATION

ELECTRICAL DISCONNECT SCHEDULE

Mark	Count	Panel	DISC	W. P.	WALL	ABV. CEILING	ROOF
CU-1	1	C	2P/30/20AF	•			•
RTU-1	1	A	3P/60A	•			•

POWER GENERAL NOTES

A. ALL EXTERIOR DISCONNECTS SHALL BE WP TYPE.

B. ALL RECEPTACLES WITHIN 6'-0" OF A SINK TO BE GFCI RATED.

C. REFER TO MECHANICAL AND PLUMBING PLANS FOR EXACT SIZE, LOCATION, AND ELECTRICAL REQUIREMENTS FOR ALL MECHANICAL AND PLUMBING EQUIPMENT.

D. ELECTRICAL CONTRACOTR SHALL FIELD VERIFY ALL CONNECTION REQUIREMENTS (HP, AMPS, VOLTAGE, PHASE, MOUNTING HEIGHT, AND DISCONNECTING MEANS) FOR ALL EQUIPMENT SUPPLIED BY OTHERS BEFORE ROUGH-IN. DISCONNECT SWITCHES SHALL BE LOCATED WITH NEC CODE CLEARANCE OR PROVIDE LOCKOUT TYPE C/B.

E. ELECTRICAL CONTRACTOR RESPONSIBLE FOR COORDINATING EXACT LOCATION, QUANTITIES, AND INSTALLATION REQUIREMENTS OF ELECTRICAL EQUIPMENT IN MILL WORK.

F. ALL EXTERIOR RECEPTACLES SHALL BE WP/GFCI TYPE.

G. ALL ELECTRICAL PANEL BOARDS SHALL MAINTAIN 3'-0" INFRONT WORKING CLEARANCE. REFER TO ONE-LINE FOR DETAILS.

H. ELECTRICAL CONTRACTOR SHALL PROVIDE #6 COPPER GROUND TO ANY NEW METAL GAS PIPE SYSTEMS PER NEC 250.

I. CONDUIT AND WIRING SHOWN FOR REFERECE ONLY. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE THE NUMBER OF CONDUCTORS REQUIRED FOR HOT-LEGS, NEUTRAL, AND GROUNDING AT EACH DEVICE FOR PROPER BRANCH CIRCUITING SHOWN FOR EACH AREA OR ROOM.

NOTES BY SYMBOL

1 PROVIDE DOORBELL SYSTEM (AVANTEK LD-DB-21-A) WITH LOW VOLTAGE TRANSFORMER AND INTERIOR BELL.

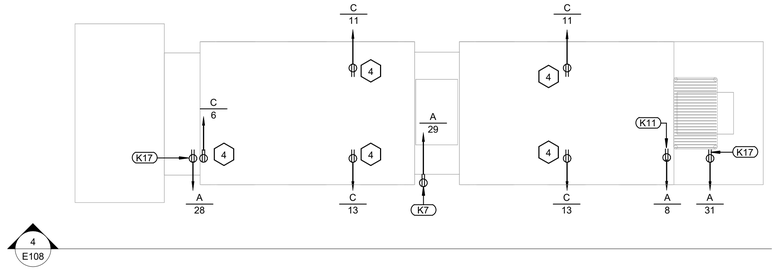
2 2 WALL FANS TO BE CONTROLLED BY A SINGLE SWITCH AT THE ENTRY DOOR.

3 PROVIDE GFCI POWER FOR FIRE BELL. COORDINATE EXACT LOCATION WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.

4 PROVIDE POWER DROP FOR POS STATION AND MONITORS COORDINATE OUTLET LOCATIONS & CONDUIT ROUTING WITH SHELFING PRIOR TO INSTALLATION.

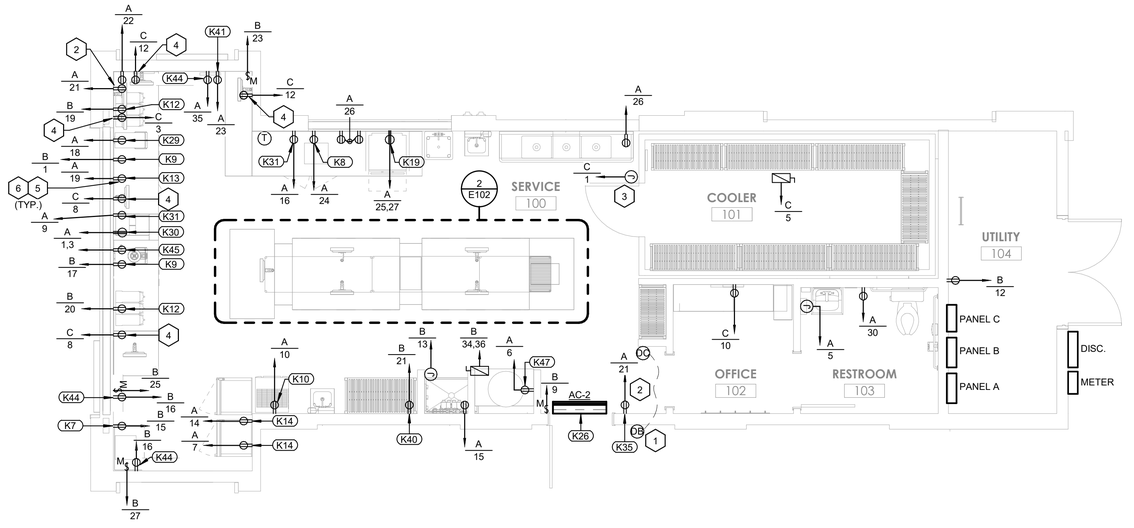
5 RUN MC CABLE THROUGH CHASE AND UNDER WINDOW FOR RECEPTACLES BETWEEEN COLUMNS.

6 WEATHER RATED WATERPROOF RECEPTACLES ALONG DRINK LINE. PROVIDE BUBBLE COVERS FOR ALL RECEPTACLES.



4 / E108

2 POWER FLOOR PLAN - ISLAND DETAIL
E102 1/2" = 1'-0"



1 POWER FLOOR PLAN
E102 1/4" = 1'-0"

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

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PROJECT INFORMATION

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ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

POWER FLOOR PLAN

SHEET NUMBER

E102

8/12/2024 11:23:53 AM

LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL	VOLTAGE	REF. NOTE	MOUNTING	TOTAL WATTS	LAMP TYPE	REMARKS
D	HALO	SMD6RTRMWH	UNV	1,3,4	SURFACE	13	LED	6" ROUND LED DOWNLIGHT, SURFACE MOUNT, 120V DRIVER, WHITE FINISH - INSTALLED ONTO JUNCTION BOX
DE	HALO	SMD6RTRMWH W/90 MINUTE BODINE BATTERY BACKUP	UNV	1,3,4	SURFACE	13	LED	6" ROUND LED DOWNLIGHT, SURFACE MOUNT, 120V DRIVER, WHITE FINISH - INSTALLED ONTO JUNCTION BOX
EX	EXITRONIX	QCRS U WH	UNV	2	SURFACE	1	LED	COMBO LED EXIT SIGN, WET LOCATION, FIELD SELECTABLE RED/GREEN LEDS, TWO (2) 0.5W FULLY ADJUSTABLE ROUND HEADS WITH HIGH-INTENSITY LED LAMPS, WHITE FINISH
G4	SATCO	NUVO 65-572	UNV	3	RECESSED	50	LED	2X4 LED BACKLIT FLAT PANEL, SELECTABLE COLOR TEMP, IP20 DAMP LISTED, DIMMABLE, WHITE FINISH
G4E	SATCO	NUVO 65-572 LUMEN BATTERY	UNV	3	RECESSED	50	LED	2X4 LED BACKLIT FLAT PANEL, SELECTABLE COLOR TEMP, IP20 DAMP LISTED, DIMMABLE, WHITE FINISH
S4	SATCO	NUVO 65-573 + 65-592	UNV	3	PENDENT/SURFACE	40	LED	1X4 LED BACKLIT FLAT PANEL, SELECTABLE COLOR TEMP, IP20 DAMP LISTED, DIMMABLE, WHITE FINISH + SUSPENSION KIT
S4E	SATCO	NUVO 65-573 + 65-592 LUMEN BATTERY	UNV	3	PENDENT/SURFACE	40	LED	1X4 LED BACKLIT FLAT PANEL, SELECTABLE COLOR TEMP, IP20 DAMP LISTED, DIMMABLE, WHITE FINISH + SUSPENSION KIT, WITH 90 MINUTE BATTERY BACK-UP
T1	NOVA FLEX	NF-PRO-O-60-24V-4100K	UNV	1	SURFACE	135	LED	LED TAPE LIGHT, 4100K, NO DOTTING CHANNEL, WET LOCATION RATED
W	RAB	SLIM 18 N	UNV	1,3	SURFACE	18	LED	WALL PACK, FULL CUTOFF, 4000K (NEUTRAL) COLOR TEMP, 2547LM, BRONZE FINISH W/ 90 MINUTE BATTERY BACK-UP
WS	CAMMAN LIGHTING	W425-24-40K-1-WM-PBR	UNV	1,3	WALL	20	WALL SCONCE	WALL SCONCE, WHITE ACRYLIC FRONT, SHALLOW PROFILE 24", 4000K, 120V, MATTE WHITE ACRYLIC, BRONZE FIXTURE

LIGHT FIXTURE SCHEDULE NOTES

Key Name	LIGHT FIXTURE NOTES
*	NOTE: SALAD AND GO HAS A NATIONAL ELECTRICAL AGREEMENT WITH CONSOLIDATED ELECTRICAL DISTRIBUTORS, INC. (CED). THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING THE LED LIGHTING EQUIPMENT, AND SHOULD PURCHASE FROM CED ACCORDINGLY. QUESTIONS CONCERNING QUOTES, PRICING, AND TECHNICAL SPECIFICATIONS SHALL BE DIRECTED TO DAVID RASH, CED NATIONAL ACCOUNTS, VIA EMAIL david.rash@ced.com OR BY TELEPHONE (817) 480-1171
1	VERIFY MOUNTING HEIGHT WITH ARCHITECT AND COORDINATE CORRESPONDING PENDANT MOUNTING HARDWARE LENGTH WITH FIXTURE MANUFACTURER.
2	EXIT SIGNS. PROVIDE ALL DIRECTIONAL ARROWS. DOUBLE FACEPLATES. OR BLANK FACEPLATES AS REQUIRED TO CLEARLY IDENTIFY PATH OF EGRESS. COORDINATE MOUNTING TYPE WITH REFLECTED.
3	FIXTURE TO HAVE FINISH AS SPECIFIED BY ARCHITECT.
4	PROVIDE ALL MOUNTIING CLIPS, JOINTS, AND ANY OTHER NESSARY APPURTENANCES FOR ROW MOUNTING.
5	COORDINATE MOUNTING LOCATION OF REMOTE POWER SUPPLY WITH ARCHITECT. LOCATE IN ACCESSIBLE SPACE ABOVE 12"AFF.
6	COORDINATE MOUNTING LOCATION OF REMOTE POWER SUPPLY WITH ARCHITECT. LOCATE ON TOP OF REFRIGERATION CASE, NOT VISIBLE FROM BELOW.
7	LOCATE FIXTURE WITHIN MOUNTING CHANNEL LOCATED ABOVE REFRIGERATION CASE. CHANNEL FURNISHED BY OTHERS.
8	LIGHT FIXTURE FURNISHED WITH COOLER AND INSTALLED BY CONTRACTOR. COORDINATE INSTALLATION WITH COOLER MANUFACTURER PRIOR TO ROUGH-IN.

LIGHTING GENERAL NOTES

A. PRIOR TO ROUGH-IN, THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATIONOF ALL LIGHT FIXTURES / EXIT SIGN LOCATION / PLACEMENT WITH LOCAL JURISDICTION PRIOR TO ROUGH INSPECTION APPROVAL: ALL CONFLICTS SHALL BE REPORTED TO THE ENGINEER/ARCHITECT.

B. ALL FIXTURES INSTALLED OUTDOORS SHALL BE RATED FOR DAMP/WET LOCATIONS AS REQUIRED. THE CONTRACTOR SHALL COORDINATE DAMP/WET LOCATION RATING PER NEC ARTICLE 410.10(A). ALL INSTALLATIONS SHALL CONFORM TO NEC ARTICLE 410, ALL SUB ARTICLES.

C. ALL FLUORESCENT FIXTURES THAT UTILIZE DOUBLE ENDED LAMPS AND CONTAIN BALLST(S) THAT CAN BE SERVICED IN PLACE SHALL BE CODE COMPLAINT WITH NEC 40.130(G).

D. COORDINATE ALL EXTERIOR BUILDING MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL BUILDING ELEVATIONS FOR HEIGHTS AND LOCATIONS. PROVIDE EXIT SIGNS FOR ALL EXITS DESIGNATED BY THE CODE STUDY PLAN. REFER TO ARCHITECTURAL CODE PLANS FOR LOCATIONS AND REQUIREMENTS.

E. ALL EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO UNSWITCHED CIRCUIT LEG.

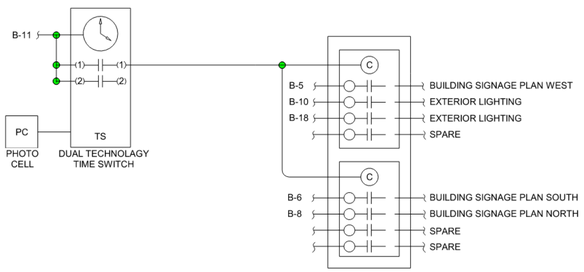
F. CONDUIT AND WIRING SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE THE NUMBER OF CONDUCTORS REQUIRED FOR HOT-LEGS, NEUTRAL, AND GROUNDING AT EACH DEVICE FOR PROPER BRANCH CIRCUITING SHOWN FOR EACH AREA OR ROOM.

NOTES BY SYMBOL

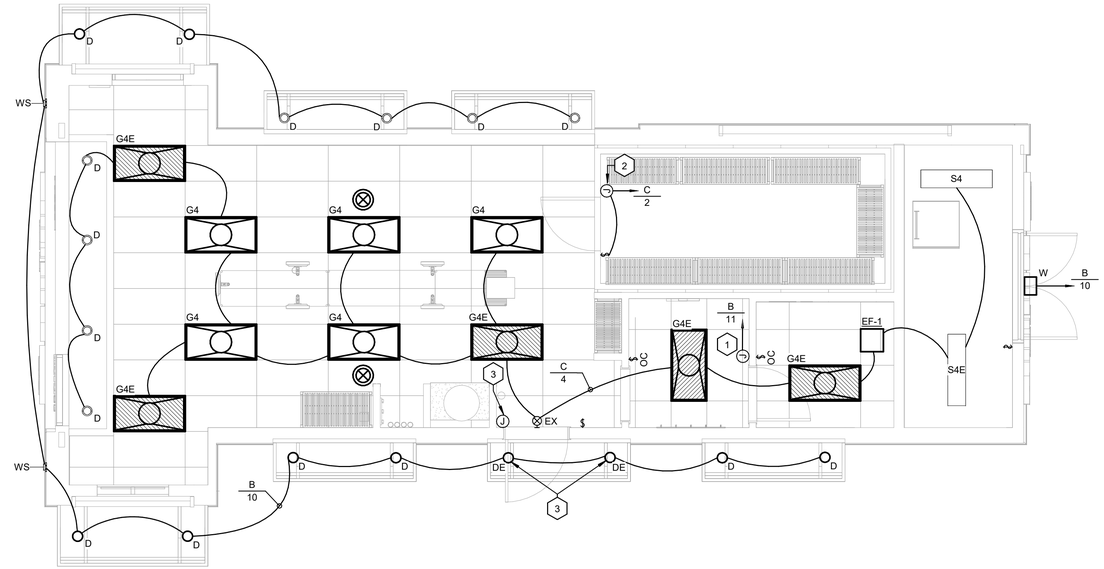
1 REFER TO 2/E103 FOR TIMECLOCK AND LIGHTING CONTRACTOR CIRCUITING INFORMATION.

2 REFER TO WALK-IN COOLER MANUFACTURER SPECIFICATIONS FOR LIGHTING POWER AND CONTROLS.

3 PROVIDE BODINE BATTERY BACK UP MODEL #BSL20HV ABOVE CEILING FOR EXTERIOR CANOPY LIGHTS. INSTALL PER MANUFACTURERS IOM.



2 LIGHTING CONTROLS
E103 N.T.S.



1 LIGHTING FLOOR PLAN
E103 1/4" = 1'-0"

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS
NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

LIGHTING FLOOR PLAN

SHEET NUMBER

E103

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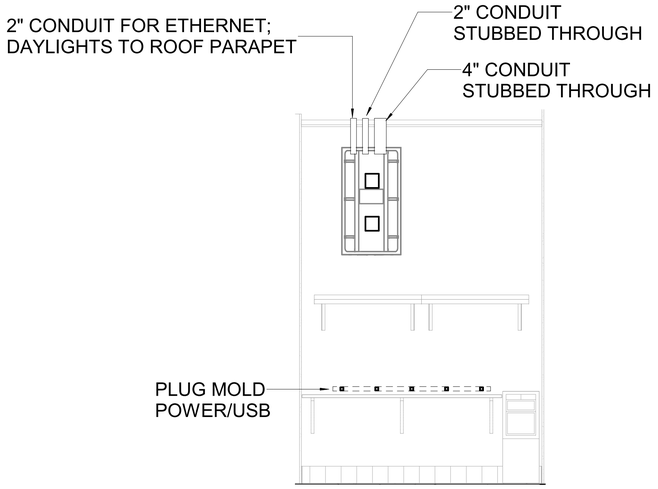
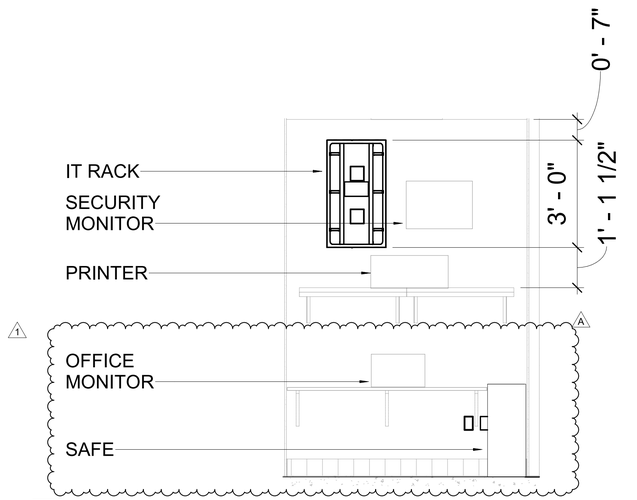
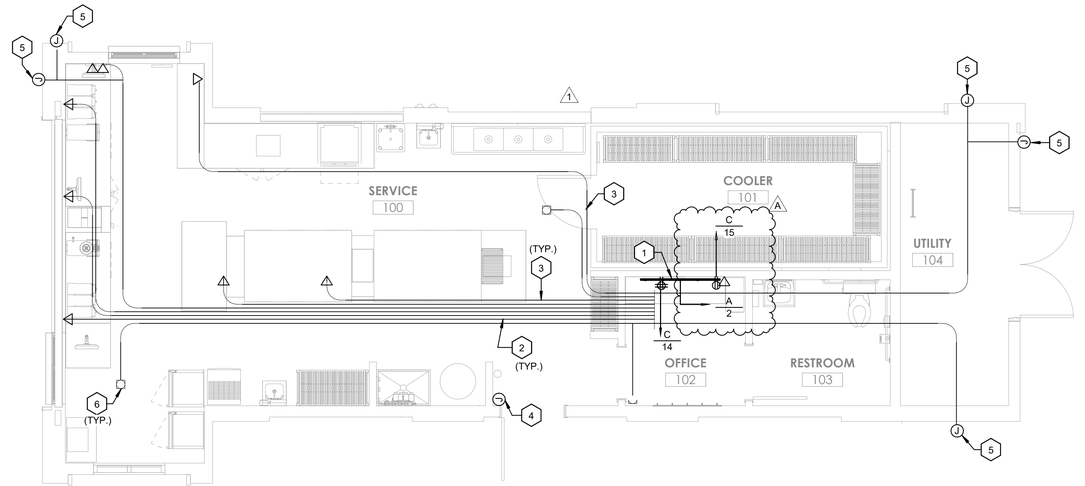


3 INTERIOR ELEVATION - OFFICE STUB
E104 1/2" = 1'-0"



2 INTERIOR ELEVATION - OFFICE
E104 1/2" = 1'-0"



1 LOW VOLTAGE PLAN
E104 1/4" = 1'-0"

GENERAL NOTES

A. ALL LOW VOLTAGE CABILING TO BE SUSPENDED SECURLY TO STRUCTURE; DO NOT SUSPEND OR ATTACH TO GRID.

B. ALL RUNS SHOWN AS CAT 5E.

C. ALL CABLE: EXTRA LENGTH OF CABLE COIL 5' ABOVE CEILING PRIOR TO CONNECTION POINT, BEFORE TURNING DOWN WALL TO MAKE CONNECTION.

D. ALL DRINK LINE RECEPTACLES TO HAVE WATERPROOF COVERS. GC TO VERIFY AFTER INSTALLATION.

NOTES BY SYMBOL

1 PLUGMOLD 2000 SERIES STEEL MULTIOUTLET SYSTEM (OR SIMILAIR). STANDARD RECEPTACLES AND USB; LAYOUT TO BE DETERMINED BY GC.

2 1-1/2" CONDUIT FOR DATA CABLING.

3 1" CONDUIT FOR DATA CABLING.

4 PROVIDE J-BOX WITH CONDUIT STUBBED ABOVE WALL FOR FUTURE ALARM KEYPAD.

5 PROVIDE J-BOX @ 9'-0" AFF FOR EXTERIOR WALL MOUNTED SECURITY CAMERA. ROUTE CONDUIT TO SERVER RACK. COORDINATE LOCATIONS AND HEIGHTS WITH EXTERIOR AWNINGS. GC TO VERIFY.

6 SECURITY CAMERA MOUNTED FLUSH TO CEILING. ROUTE CONDUIT TO SERVER RACK. GC TO VERIFY.

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
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A	8/12/24	CB-A

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ORIGINAL ISSUE:	12/06/22
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

LOW VOLTAGE PLAN

SHEET NUMBER

E104

8/12/2024 11:23:54 AM

NOTES BY SYMBOL

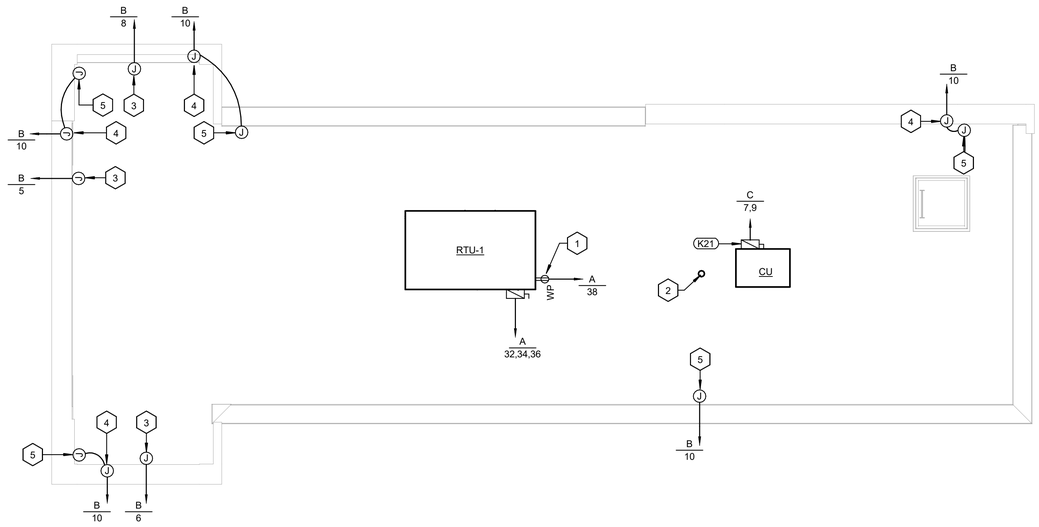
1 PROVIDE GFCI MAINTENANCE RECEPTACLE WITHIN 25' OF ALL MECHANICAL EQUIPMENT PER NEC 210.63.

2 APPROXIMATE LOCATION OF IT STUB OUT. TO BE CAPPED UNTIL EQUIPMENT INSTALLATION. GC TO PROVIDE PULL STRING IN CONDUIT FOR EASE OF INSTALLATION.

3 PROVIDE WP J-BOX AND TOGGLE SWITCH LOCATED ON SIGN IN CONCEALED LOCATION FOR EXTERIOR SIGNAGE PER NEC. COORDINATE EXACT LOCATIONS PRIOR TO INSTALLATION, EXTEND CIRCUIT THROUGH PHOTOCELL TIME CLOCK. VERIFY EXACT REQUIREMENTS WITH OWNER.

4 (DI-24-VLX5-40-XX-16-BL-MC-O/O) (DRIVER: VLM200W-24-LPL). NO MORE THAN 40 FEET BETWEEN DRIVERS. TAPE TO BE PLACE ON INSIDE PERIMETER OF ALL 3 SIDES OF BOXOUT. REFER TO ARCHITECTURAL SHEET A131. CLASS 3 TAPE LIGHT TO BE ON BETWEEN THE HOURS OF 6 A.M-9 P.M. ONLY.

5 PROVIDE JBOX FOR EXTERIOR PERIMETER COPE TAPE LIGHT (DI-24-VLX5-40-XX-16-BL-MC-O/O) (DRIVER: VLM200W-24-LPL). NO MORE THAN 40 FEET BETWEEN DRIVERS. TAPE TO BE PLACE ON INSIDE PERIMETER OF ALL 3 SIDES OF BOXOUT. REFER TO ARCHITECTURAL SHEET A201. CLASS 3 TAPE LIGHT TO BE ON BETWEEN THE HOURS OF 6 A.M-9 P.M. ONLY.



1 MECHANICAL POWER ROOF PLAN
E105 1/4" = 1'-0"

8/12/2024 11:23:54 AM

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

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MECHANICAL POWER ROOF PLAN

SHEET NUMBER

E105

GENERAL NOTES

a. CONTRACTOR TO INSTALL (3) 1" ELECTRICAL CONDUITS TO EACH MENU BOARD J-BOX.
   a. (1) VOICE (LOW VOLTAGE)
   b. (1) DATA (LOW VOLTAGE)
   c. (1) POWER (120V)

NOTES BY SYMBOL

1 APPROXIMATE LOCATION OF MARQUEE SIGN. CONTRACTOR TO COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO BID. PROVIDE (1) 1" CONDUIT FROM MARQUEE SIGN BACK TO ELECTRICAL ROOM. VERIFY ROUTING WITH CIVIL PRIOR TO INSTALLATION.

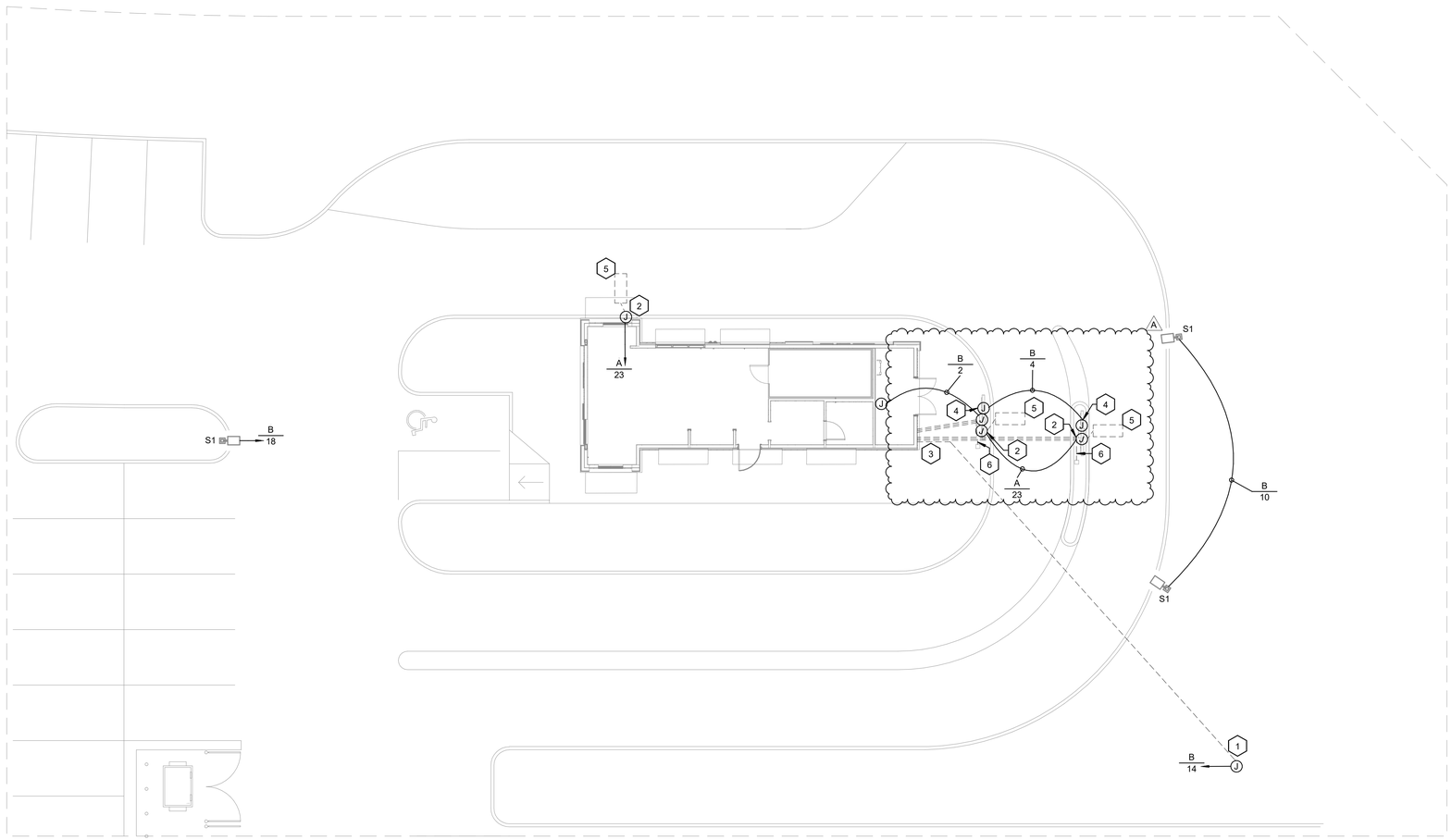
2 PROVIDE JBOX FOR DRIVE-THRU DETECTOR. INSTALL PER MANUFACTURER'S SPECIFICATIONS. PROVIDE 1" PVC CONDUIT FOR LOW VOLTAGE RUN TO MANAGER'S OFFICE.

3 LOCATION OF MAIN SERVICE DISCONNECT AND PANELS. REFER TO RISER DIAGRAM ON E110 FOR MORE INFORMATION.

4 PROVIDE JBOX FOR MENU BOARD. INSTALL PER MANUFACTURER'S SPECIFICATIONS. PROVIDE 1" PVC CONDUIT FOR 120V POWER SUPPLY FROM BUILDING.

5 WIRE MAGNETIC LOOP UNDER DRIVE-THRU.

6 PROVIDE 1" PVC CONDUIT FOR LOW VOLTAGE RUN BETWEEN SPEAKER POST AND MENU BOARD.



1 ELECTRICAL SITE PLAN
E106 3/32" = 1'-0"

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

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DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

ELECTRICAL SITE PLAN

SHEET NUMBER

E106

8/12/2024 11:23:55 AM

SITE LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL	VOLTAGE	REF. NOTE	MOUNTING	TOTAL WATTS	LAMP SIZE	REMARKS
S1	LITHONIA LIGHTING	DSX1 LED P8 40K T5M MVOLT SPA HS DDBXD	UNV	1	POLE	207	LED	NO EXCEPTIONS ALLOWED. PROVIDE LITHONIA POLE: SSS 15 4G DM19AS VD DDBXD

LIGHT FIXTURE SCHEDULE NOTES

Key Name	LIGHT FIXTURE NOTES
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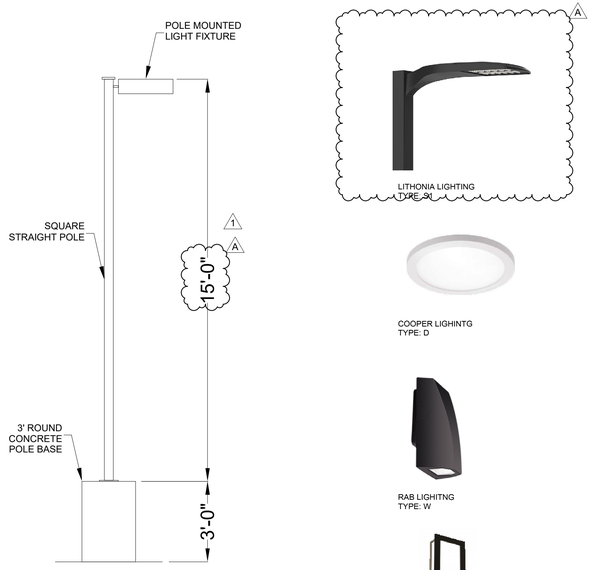
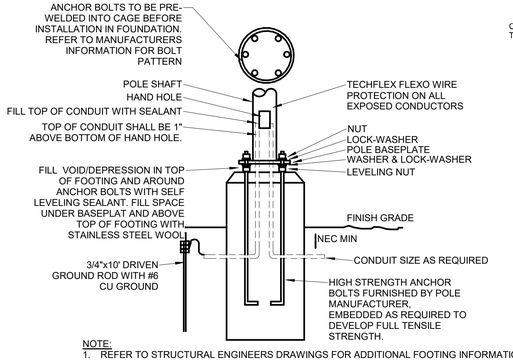
1	VERIFY MOUNTING HEIGHT WITH ARCHITECT AND COORDINATE CORRESPONDING PENDANT MOUNTING HARDWARE LENGTH WITH FIXTURE MANUFACTURER.
2	EXIT SIGNS. PROVIDE ALL DIRECTIONAL ARROWS. DOUBLE FACEPLATES. OR BLANK FACEPLATES AS REQUIRED TO CLEARLY IDENTIFY PATH OF EGRESS. COORDINATE MOUNTING TYPE WITH REFLECTED.
3	FIXTURE TO HAVE FINISH AS SPECIFIED BY ARCHITECT.
4	PROVIDE ALL MOUNTIING CLIPS, JOINTS, AND ANY OTHER NESSARY APPURTENANCES FOR ROW MOUNTING.
5	COORDINATE MOUNTING LOCATION OF REMOTE POWER SUPPLY WITH ARCHITECT. LOCATE IN ACCESSIBLE SPACE ABOVE 12"AFF.
6	COORDINATE MOUNTING LOCATION OF REMOTE POWER SUPPLY WITH ARCHITECT. LOCATE ON TOP OF REFRIGERATION CASE, NOT VISIBLE FROM BELOW.
7	LOCATE FIXTURE WITHIN MOUNTING CHANNEL LOCATED ABOVE REFRIGERATION CASE. CHANNEL FURNISHED BY OTHERS.
8	LIGHT FIXTURE FURNISHED WITH COOLER AND INSTALLED BY CONTRACTOR. COORDINATE INSTALLATION WITH COOLER MANUFACTURER PRIOR TO ROUGH-IN.



3 TYPICAL AREA SITE LIGHTING POLE DETAIL
E107 N.T.S.



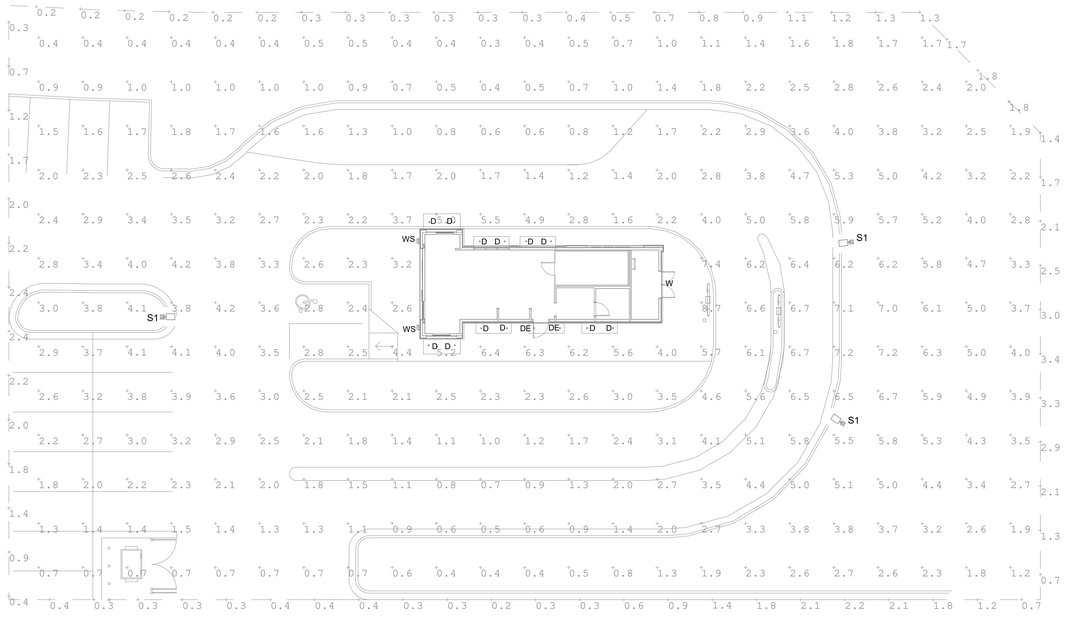
NOTE:
1. REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR ADDITIONAL FOOTING INFORMATION.

2 TYPICAL AREA SITE LIGHTING POLE FOOTING DETAIL
E107 N.T.S.

Label	Units	Avg	Max	Min	Max/Min
PERIMETER	Fc	1.13	3.4	0.2	17.00
SITE	Fc	2.80	8.7	0.3	29.00

Luminaire Schedule

Symbol	Qty	Label	Description	Tag	Total Watts	Mounting Height	BUG Rating
	3	LITHONIA LIGHTING	DSX1 LED P8 40K 70CRI T5M	S1	647.31	20	B5-U0-G4
	1	RAB LIGHTINGS	SLIM18N	W	20.8	12	B1-U0-G0
	14	COOPER LIGHTING	RECESSED CANOPY LIGHTS	D	173.869	12	B1-U1-G0
	2	CAMMAN LIGHTING	WALL MOUNTED SCONCE	WS	36.28	5	B0-U4-G2



1 PHOTOMETRIC PLAN
E107 1/16" = 1'-0"

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
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CHECKED BY:	CL

SHEET TITLE

PHOTOMETRIC PLAN

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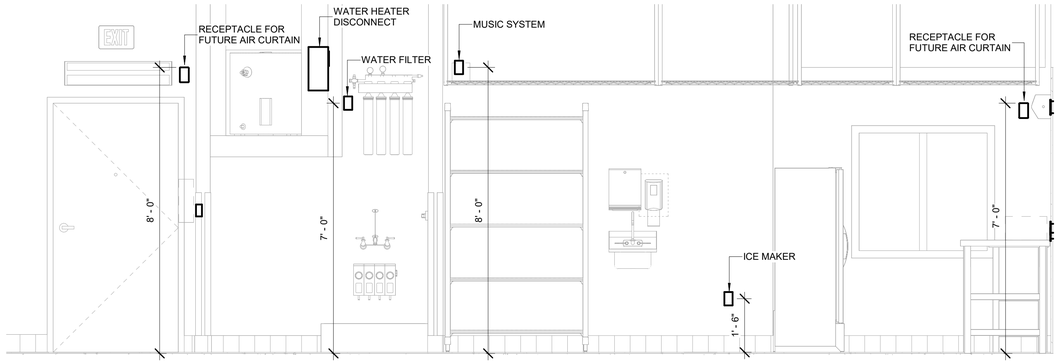
E107

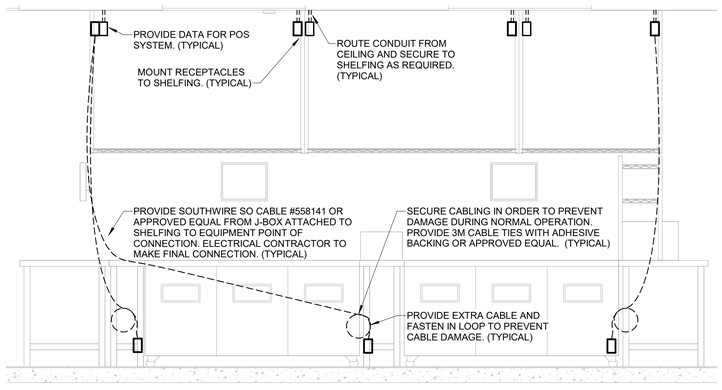
8/12/2024 11:23:55 AM

NOTES BY SYMBOL

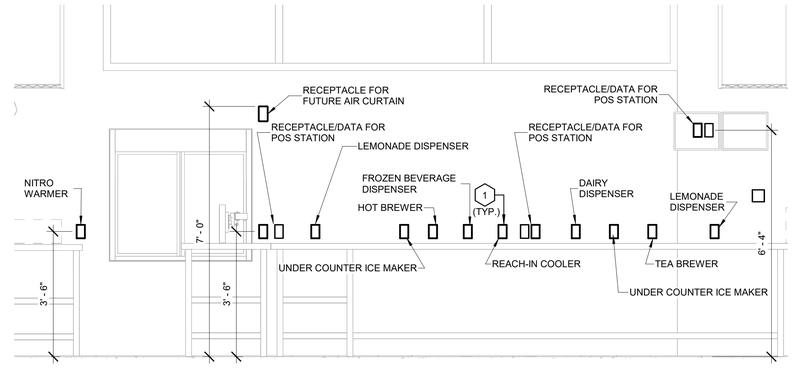
1 WEATHER RATED WATERPROOF RECEPTACLES ALONG DRINK LINE. PROVIDE BUBBLE COVERS FOR ALL RECEPTACLES.



5 E108 ELEVATION AT MOP SINK
1/2" = 1'-0"

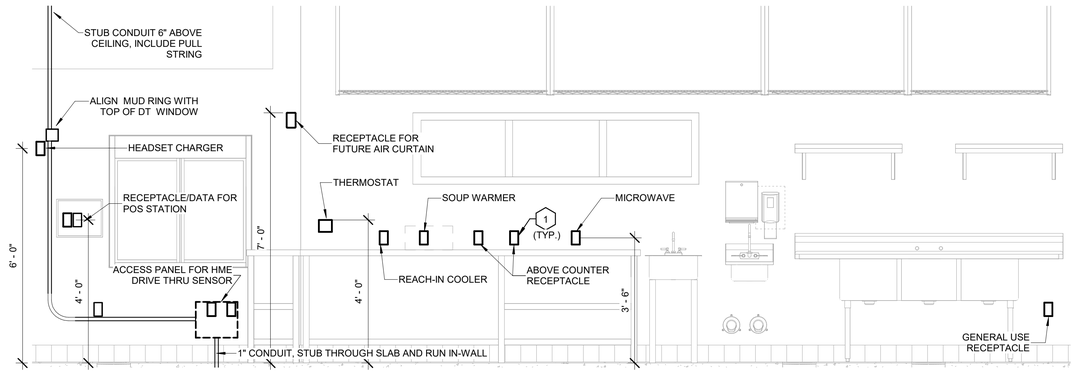


4 E108 KITCHEN ELEVATION PLAN SOUTH
1/2" = 1'-0"



3 E108 ELEVATION AT PREP AREA
1/2" = 1'-0"

2 E108 ELEVATION AT COMMAND CENTER
1/2" = 1'-0"



1 E108 ELEVATION AT DT WINDOW
1/2" = 1'-0"

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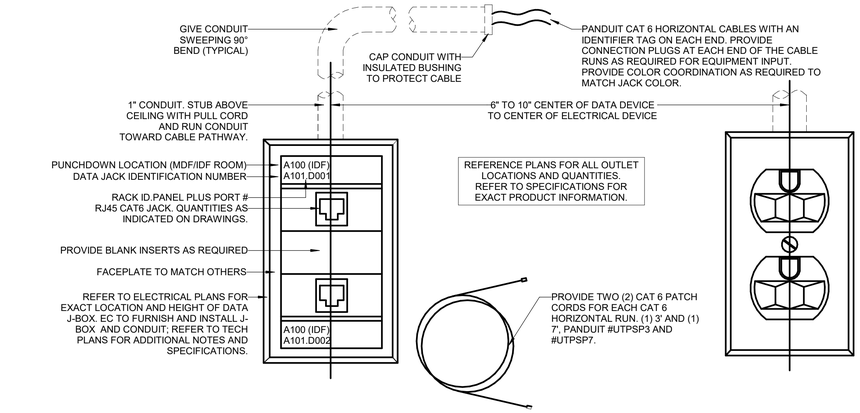
SHEET TITLE

ELECTRICAL ELEVATIONS

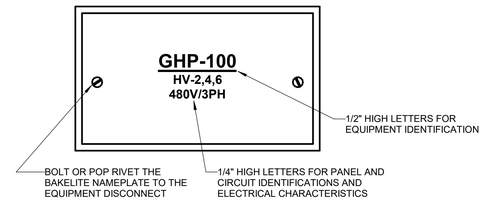
SHEET NUMBER

E108

8/12/2024 11:23:57 AM

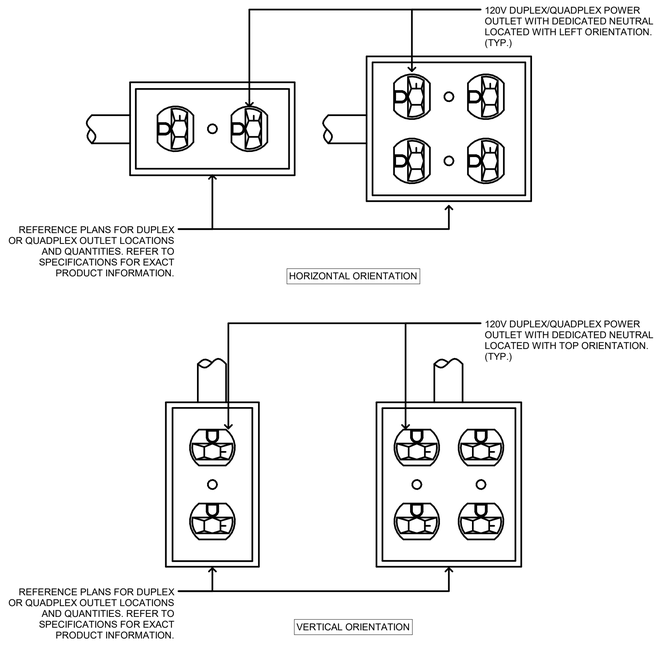


1 E109 TYPICAL DATA JACK DETAIL
N.T.S.



NOTE:
1. ALL NAMEPLATES SHALL BE CUSTOM ENGRAVED WHITE LETTERING ON BLACK PHENOLIC PLASTIC (BAKELITE).

2 E109 TYPICAL EQUIPMENT DISCONNECT NAMEPLATE DETAIL
N.T.S.

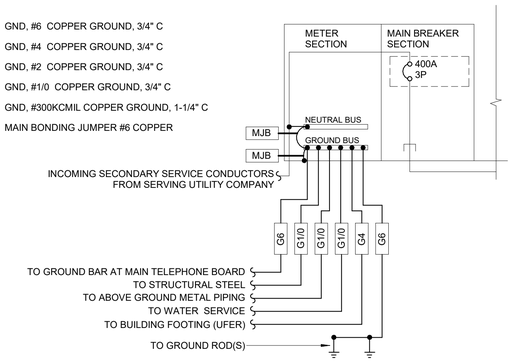


3 E109 TYPICAL RECEPTACLE ORIENTATION DETAIL
N.T.S.

GROUNDING ELECTRODE FEEDER SCHEDULE:

SIZES ARE BASED ON COPPER (CU) THHN/THWN-2 INSULATION, UNO. ALL CONDUCTOR SIZES ARE BASED ON 75 DEG C RATED TERMINATIONS, UNO. CONDUIT SIZES SHOWN ARE APPROPRIATE FOR SCHEDULE 40 PVC, EMT, GRS, IMC AND RMC; ADJUST SIZE AS NEEDED FOR OTHER RACEWAY TYPES. FOR ANY OTHER CONDITIONS MODIFY SIZES PER CODE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

G6	GND, #6 COPPER GROUND, 3/4" C
G4	GND, #4 COPPER GROUND, 3/4" C
G2	GND, #2 COPPER GROUND, 3/4" C
G1/0	GND, #1/0 COPPER GROUND, 3/4" C
G300	GND, #300KCMIL COPPER GROUND, 1-1/4" C
MJB	MAIN BONDING JUMPER #6 COPPER



4 E109 GROUNDING ELECTRODE SYSTEM DETAIL
N.T.S.

SAVE AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER
PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

E109

8/12/2024 11:23:57 AM

Panel: A

PROVIDE 200% NEUTRAL

Location: UTILITY 104 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22,000
Supply From: WIREWAY | **Phas...** 3 | **Mains Rating:** 200
Mounting: SURFACE | **Wires:** 4 | **Mains Type:** MCB

NO...	C...	CIRCUIT DESCRIPTION	WIRE	BRKR	#	A	B	C	A	B	C	#	BRKR	WIRE	CIRCUIT DESCRIPTION	C...	NO...
	1	FROZEN BEVERAGE DISPENSER	10	30	2	3000			540			1	20	12	OFFICE DESK RECEPTACLES	2	
	3						3000			0		1	20	--	SPARE	4	
	5	HAND DRYER	12	20	1			180			1920	1	20	12	WATER SOFTNER	6	
	7	BEVERAGE COOLER	12	20	1	600			1800			1	20	12	PANINI PRESS	8	
6	9	REACH-IN COOLER	12	20	1		360			1320		1	20	12	ICE MAKER	10	
	11	SPARE	--	20	1			0			0	1	20	--	SPARE	12	
	13	SPARE	--	20	1	0			600			1	20	12	BEVERAGE COOLER	14	
6	15	WATER FILTRATION SYSTEM	12	20	1		1920			360		1	20	12	REACH-IN COOLER	16	
	17	SPARE	--	20	1			0			1680	1	20	12	ICE TEA BREWER	18	
	19	DAIRY DISPENSER	12	20	1	120			0			1	20	--	SPARE	20	
	21	WALL FAN	12	20	1		360			180		1	20	12	3M HEADSET CHARGER	22	
	23	DRIVE THRU DETECTOR	12	20	1			840			1200	1	20	12	SOUP WARMER	24	
6	25	MICROWAVE	10	30	2	2850			540			1	20	12	GENERAL RECEPTACLE	26	6
	27						2850			864		1	20	12	FOOD PREP TABLE	28	
	29	NITRO WARMER	12	20	1			1440			180	1	20	12	RESTROOM RECEPTACLE	30	
	31	FOOD PREP TABLE	12	20	1	864			4896							32	
	33	SPARE	--	20	1		0			4896		3	60	4	RTU-1	34	4,5
	35	READY ACCESS 600-DT	12	20	1			600			4896					36	
	37	SPARE	--	20	1	0			180			1	20	12	HVAC SERVICE RECEPTACLE	38	
	39	SPARE	--	20	1		0			0		1	20	--	SPARE	40	
	41	SPARE	--	20	1			0			0	1	20	--	SPARE	42	
			Total Load:			15990 W		16110 W			12936 W						
			Total Amps:			137		138			108						

NOTES:
1. Provide GFCI Breaker
2. Circuit Via Energy Management System
3. Circuit Via Photo Cell Operation / DDC Controller
4. Provide Breaker and Fuses Per Manufacturers Recommendation
5. Provide H.A.C.R. Breaker
6. Provide a Lock on Breaker

PANEL TOTALS

Total Conn. Load: 45035
Total Est. Demand: 40990
Total Conn.: 125
Total Est. Demand: 114

Panel: B

PROVIDE 200% NEUTRAL

Location: UTILITY 104 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22,000
Supply From: WIREWAY | **Phas...** 3 | **Mains Rating:** 200
Mounting: SURFACE | **Wires:** 4 | **Mains Type:** MCB

NO...	C...	CIRCUIT DESCRIPTION	WIRE	BRKR	#	A	B	C	A	B	C	#	BRKR	WIRE	CIRCUIT DESCRIPTION	C...	NO...
	1	UNDERCOUNTER ICE MAKER	12	20	1	1425			1600			1	20	12	MENUBOARD	2	
	3	SPARE	--	20	1		0			400		1	20	12	SPEAKER BOX	4	
	5	SIGNAGE	12	20	1			1200			1200	1	20	12	SIGNAGE	6	
	7	SPARE	--	20	1	0			1200			1	20	12	SIGNAGE	8	
4	9	AC-2	12	20	1		240			1548		1	20	12	EXTERIOR LIGHTING	10	3
	11	TIMECLOCK	12	20	1			180			180	1	20	12	PANEL RECEPTACLE	12	
	13	CP-1	12	20	1	400			800			1	20	12	MARQUEE SIGNS	14	3
	15	NITRO WARMER	12	20	1		1440			1200		1	20	12	DRIVE THRU WINDW & SERVING...	16	
	17	UNDERCOUNTER ICE MAKER	12	20	1			1425			207	1	20	12	EXTERIOR LIGHTING	18	
	19	LEMONADE DISPENSER	12	20	1	1080			1080			1	20	12	LEMONADE DISPENSER	20	
	21	MUSIC SYSTEM	12	20	1		360			0		1	20	--	SPARE	22	
4	23	AC-1	12	20	1			240			0	1	20	--	SPARE	24	
4	25	AC-1	12	20	1	480			0			1	20	--	SPARE	26	
4	27	AC-1	12	20	1		240			0		1	20	--	SPARE	28	
	29	SPARE	--	20	1			0			0	1	20	--	SPARE	30	
	31	SPARE	--	20	1	0			0			1	20	--	SPARE	32	
	33	SPARE	--	20	1		0			4493		2	55	6	WATER HEATER	34	4
	35	SPARE	--	20	1			0			4493					36	
	37	SPARE	--	20	1	0			3106							38	
	39	SPARE	--	20	1		0			2546		3	60	4	PANEL C	40	
	41	SPARE	--	20	1			0			3012					42	
			Total Load:			11171 W		12467 W			12137 W						
			Total Amps:			93		105			102						

NOTES:
1. Provide GFCI Breaker
2. Circuit Via Energy Management System
3. Circuit Via Photo Cell Operation / DDC Controller
4. Provide Breaker and Fuses Per Manufacturers Recommendation
5. Provide H.A.C.R. Breaker
6. Provide a Lock on Breaker

PANEL TOTALS

Total Conn. Load: 35775
Total Est. Demand: 35668
Total Conn.: 99
Total Est. Demand: 99

Panel: C

PROVIDE 200% NEUTRAL

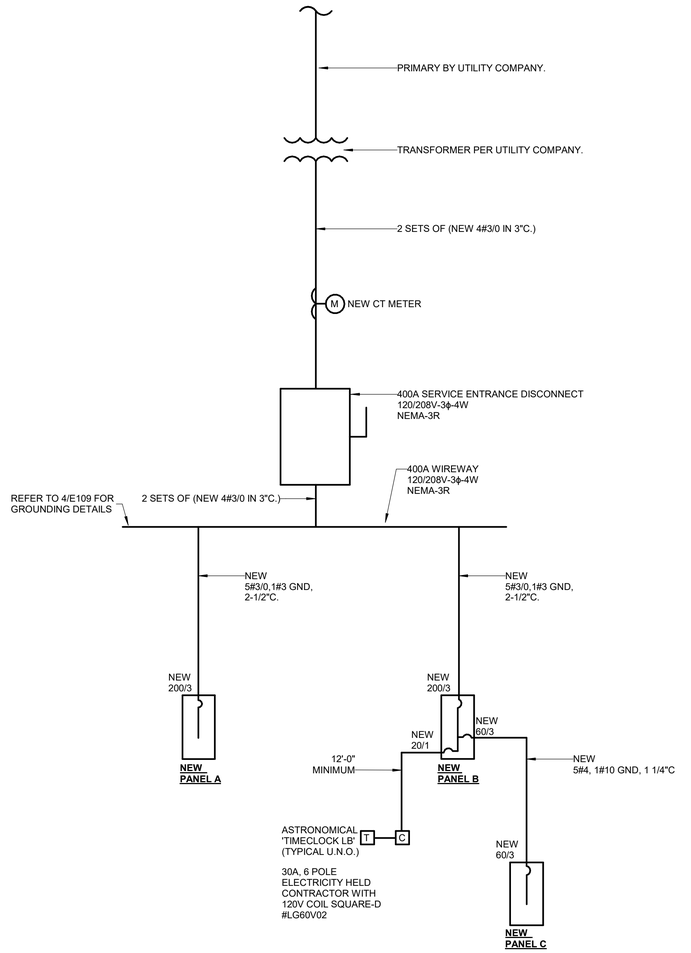
Location: UTILITY 104 | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22,000
Supply From: B | **Phas...** 3 | **Mains Rating:** 60
Mounting: SURFACE | **Wires:** 4 | **Mains Type:** MCB

NO...	C...	CIRCUIT DESCRIPTION	WIRE	BRKR	#	A	B	C	A	B	C	#	BRKR	WIRE	CIRCUIT DESCRIPTION	C...	NO...
	1	FIRE BELL	12	20	1	100				300		1	20	12	WALK IN COOLER LIGHT	2	
6	3	POS RECEPTACLE	12	20	1		180			720		1	20	12	INTERIOR LIGHTING	4	
	5	WALK IN COOLER EVAP COIL	12	20	1			1932			180	1	20	12	POS RECEPTACLE	6	6
4,5	7	WALK IN CONDENSING UNIT	12	20	2	1186				360		1	20	12	POS RECEPTACLE	8	6
	9						1186				360	1	20	12	SECURITY VCR	10	
6	11	POS RECEPTACLE	12	20	1			360			540	1	20	12	POS RECEPTACLE	12	6
6	13	POS RECEPTACLE	12	20	1	360			800			1	20	12	IT RECEPTS	14	
	15	SAFE	12	20	1		100			--		1	--	--	SPACE	16	
	17	SPACE	--	--	1			--			--	1	--	--	SPACE	18	
			Total Load:			3106 W		2546 W			3012 W						
			Total Amps:			26		21			26						

NOTES:
1. Provide GFCI Breaker
2. Circuit Via Energy Management System
3. Circuit Via Photo Cell Operation / DDC Controller
4. Provide Breaker and Fuses Per Manufacturers Recommendation
5. Provide H.A.C.R. Breaker
6. Provide a Lock on Breaker

PANEL TOTALS

Total Conn. Load: 8664
Total Est. Demand: 8576
Total Conn.: 24
Total Est. Demand: 24



1 E110 ELECTRICAL ONE-LINE DIAGRAM
N.T.S.

ONE-LINE GENERAL NOTES

A. SWITCHBOARD COMPONENTS, INCLUDING OVER CURRENT PROTECTIVE DEVICES SHALL BE FULLY RATED TO THE AVAILABLE FAULT CURRENT SHOW.

B. PROVIDE ARC FLASH AND SHOCK HAZARD WARNING IDENTIFICATION PER NEC ARTICLE 110.16.

C. "NO DESIGN CHANGES MAY BE MADE TO THE SYSTEM WITHOUT THE PRIOR APPROVAL OF THE DESIGN ENGINEER AND THE ELECTRICAL INSPECTOR"

D. THE FEEDER LENGTHS SHOWN IN THE INPUT DATA IS FOR CALCULATIONS ONLY. IT IS NOT THE INTENT TO USE THESE ENTERED LENGTHS FOR USAGE OF ACTUAL FIELD FEEDER LENGTH MEASUREMENTS.

PANEL SCHEDULE GENERAL NOTES

A. A.I.C. RATING SHOWN ON PANEL SCHEDULES ARE THE MINIMUM RATING FOR NEW OVERCURRENT PROTECTIVE DEVICES.

B. ALL PANEL BOARDS SHALL HAVE A TYPE WRITTEN DIRECTORY IDENTIFYING EACH NUMBERED CIRCUIT PLACED IN A DIRECTORY HOLDER INSIDE THE DOOR.

C. THE CONTRACTOR SHALL PERMANENTLY MARK WITH PERMANENT MARKER THE CIRCUIT IDENTIFICATIONS ON THE COVERPLATES OF RECEPTACLE, EQUIPMENT, AND LIGHTING JUNCTION BOXES. (STICK LABELS NOT ACCEPTABLE)

D. PER NEC 210.4(B) ALL MULTIWIRE BRANCH CIRCUITS ARE TO BE PROVIDED WITH A DEVICE THAT WILL DISCONNECT POWER TO ALL UNDERGROUND CONDUCTORS SIMULTANEOUSLY AT THE POINT OF ORIGIN.

SALAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS. OMISSIONS OR DISCREPANCIES BEFORE BEGINNING OR FABRICATING ANY WORK. DO NOT SCALE DRAWINGS.

ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

ELECTRICAL ONE-LINE DIAGRAM

SHEET NUMBER

E110

8/12/2024 11:23:58 AM

DIVISION 16010 - BASIC ELECTRICAL REQUIREMENTS

A. THE WORK OF EACH OF THE ELECTRICAL SECTIONS INCLUDES FURNISHING AND INSTALLING THE MATERIAL, EQUIPMENT, AND SYSTEMS COMPLETE AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS. THE ELECTRICAL INSTALLATIONS, WHEN FINISHED, SHALL BE COMPLETE AND COORDINATED, READY FOR SATISFACTORY SERVICE.

B. THE WORK UNDER THIS CONTRACT SHALL BE DONE IN STRICT ACCORDANCE WITH ALL FEDERAL (OSHA), STATE, APPLICABLE LOCAL STANDARDS, ALL SPECIFIC SAFETY REQUIREMENTS, THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), AND THE LATEST ENFORCED EDITION OF THE AMERICANS WITH DISABILITIES ACT.

C. THE CONTRACTOR SHALL MAKE APPLICATION AND PAY FOR ALL PERMITS, LICENSES AND INSPECTIONS AS REQUIRED UNDER THE ABOVE CODES.

D. THE GENERAL ARRANGEMENT OF CONDUIT, WIRING AND EQUIPMENT SHALL BE AS IDENTIFIED ON THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE SITE, STRUCTURAL, AND FINISH CONDITIONS AFFECTING HIS WORK AND SHALL ARRANGE SUCH WORK ACCORDINGLY, PROVIDING SUCH FITTINGS AND ACCESSORIES AS MAY BE REQUIRED TO MEET SUCH CONDITIONS.

E. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO THE COMPLETE INSTALLATION OF THE ELECTRICAL WORK AND RELATED SYSTEMS AS INDICATED ON THE DRAWINGS OR AS NECESSARY TO PROVIDE A COMPLETE SYSTEM.

F. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY WIRING, LIGHTING AND CONSTRUCTION POWER FOR ALL TRADES AS REQUIRED TO COMPLETE THE PROJECT.

G. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AND COMPLETED IN A FIRST CLASS WORKMANLIKE MANNER. ALL MATERIALS SHALL BE NEW AND THE BEST OF THEIR RESPECTIVE KINDS. ALL EQUIPMENT AND SYSTEMS SHALL BE APPROVED BY UL OR SIMILAR NATIONALLY ACCEPTED TESTING AGENCY SUCH AS ETL TESTING LABORATORIES.

H. THE CONTRACTOR SHALL VISIT THE SITE AND OBSERVE THE CONDITIONS UNDER WHICH THE WORK SHALL BE COMPLETED. NO ALLOWANCE WILL BE MADE SUBSEQUENTLY IN THIS CONTRACT FOR ANY ERROR OR NEGLIGENCE ON THE CONTRACTOR'S PART.

I. THE CONTRACTOR SHALL SUBMIT DETAILED DIMENSIONED SHOP DRAWINGS, TOGETHER WITH WIRING DIAGRAMS, SPECIFICATIONS, OPERATING DATA, AND/OR CATALOG CUTSHEETS FOR ALL EQUIPMENT.

J. A THOROUGH TEST SHALL BE MADE PRIOR TO ENERGIZING THE SYSTEM TO DEMONSTRATE THAT THE SYSTEM IS ENTIRELY FREE FROM GROUND FAULTS, SHORT CIRCUITS, AND OPEN CIRCUITS; THAT THE RESISTANCE TO GROUND ALL NON-GROUNDED CIRCUITS, BEFORE AND AFTER CONNECTION OF EQUIPMENT MEETS THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND IEEE STANDARDS/RECOMMENDATIONS.

K. IDENTIFY ALL MOTOR STARTERS, SWITCHES, CONTROLS, PANELBOARDS, SWITCHBOARDS, TERMINAL BOARDS, CONTROL CENTERS AND OTHER EQUIPMENT. PROVIDE BLACK AND WHITE NAMEPLATES CONSTRUCTED FROM LAMINATED PHENOLIC WITH A WHITE CENTER CORE. LETTERS SHALL BE ENGRAVED IN THE PHENOLIC TO FORM WHITE LETTERS 3/8" HIGH. FASTEN THE NAMEPLATES WITH SCREWS AND ADHESIVE FASTENER.

L. UPON COMPLETION OF THE ELECTRICAL INSTALLATION, THE CONTRACTOR SHALL DELIVER TO THE OWNER ONE (1) SET OF PRINTS OF ELECTRICAL CONTRACT DRAWINGS WHICH SHALL BE LEGIBLY MARKED IN RED PENCIL TO SHOW ALL ADDITIONS, CHANGES AND DEPARTURES OF THE INSTALLATION AS COMPARED WITH THE ORIGINAL DESIGN. THEY SHALL BE SUITABLE FOR USE IN PREPARATION OF RECORD DRAWINGS.

M. THE CONTRACTOR SHALL GUARANTEE THEIR WORKMANSHIP AND MATERIAL (LAMPS EXCEPTED) FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF BUILDING ACCEPTANCE AND LEAVE HIS WORK IN PERFECT ORDER AT THE COMPLETION. SHOULD DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD, THE CONTRACTOR SHALL, UPON NOTICE OF THE SAME, REMEDY THE DEFECTS AND HAVE ALL DAMAGES TO OTHER WORK OR FURNISHINGS CAUSED BY THE REPAIRS CORRECTED AT HIS EXPENSE TO THE CONDITION BEFORE SUCH DAMAGE.

N. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF A RECORD AND INFORMATION MANUAL. THE MANUAL SHALL BE BOUND IN A THREE-RING LOOSE-LEAF BINDER. PROVIDE THE FOLLOWING DATE IN THE BOOKLET:

1) CUTSHEETS OF ALL EQUIPMENT WITH TECHNICAL SPECIFICATIONS.
2) OPERATION AND MAINTENANCE PROCEDURES.
3) SERVICING INSTRUCTIONS.
4) COPIES OF PANELBOARD DIRECTORIES.
5) COPIES OF WARRANTIES.
6) LIST OF LAMPS SHOWING QUANTITY, TYPE, WATTAGE, MANUFACTURER, CATALOG NUMBER, ETC., FOR EACH FIXTURE TYPE.
7) COPIES OF TEST REPORTS.

O. EXACT LOCATIONS OF OUTLETS SHALL BE COORDINATED WITH DOOR SWINGS AND VARIOUS PROTRUSIONS. MOUNTING HEIGHTS OF THE VARIOUS ELECTRICAL DEVICES SHALL BE AS FOLLOWS:

SWITCHES	48" AFF TO CENTER OF BOX
RECEPTACLES	18" AFF TO CENTER OF BOX
TELEPHONE OUTLETS	18" AFF TO CENTER OF BOX
EXIT LIGHTS	CENTERED BETWEEN CEILING AND TOP OF DOOR (UP TO 1'-0" ABOVE DOOR), SURFACE OR CEILING MOUNTED AS SHOWN.
DISCONNECTING SWITCHES	52" AFF TO CENTER OF SWITCH

P. PROVIDE A DISCONNECT SWITCH FOR EACH MOTOR AS SHOWN ON THE DRAWINGS SIZED AS REQUIRED TO MEET THE NATIONAL ELECTRICAL CODE AND PROVIDE ALL WIRING CONNECTIONS FROM SOURCE. PROVIDE REQUIRED VOLTAGE.

Q. SEAL ALL CONDUIT PENETRATIONS THRU FIRE RATED WALLS AND FLOORS TO MAINTAIN FIRE INTEGRITY. REFER TO ARCHITECTURAL DRAWING FOR FIRE WALL LOCATIONS.

R. ELECTRICAL CONTRACTOR SHALL VERIFY ALL VOLTAGES OF MECHANICAL AND PLUMBING EQUIPMENT WITH THE RESPECTIVE CONTRACTOR PRIOR TO ROUGH-IN.

S. ALL SURFACE-MOUNTED EQUIPMENT ON BLOCK WALLS SHALL BE MOUNTED ON 3/4" PLYWOOD BACKBOARD. ALL FLOOR-MOUNTED EQUIPMENT SHALL BE INSTALLED ON A 4" HIGH CONCRETE PAD.

DIVISION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

A. INSTALL ALL WIRING IN CONDUIT MINIMUM, U.N.O. MINIMUM CONDUIT SIZE SHALL BE 3/4". ALL CONDUIT EMBEDDED IN CONCRETE SHALL BE 3/4" MINIMUM. INSTALL ALL CONDUIT CONCEALED UNLESS ON UNFINISHED WALLS, ON UNFURRED CEILINGS OR MECHANICAL EQUIPMENT SPACES. PROVIDE CONDUIT AS FOLLOWS:

1) RIGID STEEL CONDUIT FOR WORK EXPOSED TO WEATHER OR EMBEDDED IN CONCRETE OR MASONRY.
2) GALVANIZED ELECTRICAL METALLIC TUBING (EMT) FOR INTERIOR EXPOSED WORK, CONCEALED WORK ABOVE SUSPENDED CEILINGS, AND WITHIN INTERIOR PARTITIONS OR NON-MASONRY WALLS.
3) FLEXIBLE METAL CONDUIT IN SHORT LENGTHS (6' MAXIMUM) FOR THE CONNECTION OF RECESSED LIGHTING FIXTURES AND MOTORS.
4) LIQUID TIGHT FLEXIBLE METAL CONDUIT WHEREVER MOISTURE MAY BE PRESENT AND MOTORS IN MECHANICAL EQUIPMENT SPACES.
5) POLYVINYLCHLORIDE (PVC) SCHEDULE 40 AND 80 CONDUIT WITH GROUND CONDUCTOR FOR UNDERGROUND OUTSIDE OF BUILDING (SITE) INSTALLATION AS PERMITTED BY NATIONAL ELECTRICAL CODE (NEC) ARTICLE 352.

B. INSTALL CONDUITS PARALLEL AND PERPENDICULAR TO WALLS AND INTERIOR SURFACES. CLEAN AND PLUG AND PROVIDE A PULL LINE IN EACH CONDUIT LEFT EMPTY. USE MANUFACTURED ELBOWS AND SCREW JOINTED CONDUIT FITTINGS. USED CAPPED BUSHINGS OR "PUSH PENNY" PLUGS. ALL FITTINGS SHALL BE STEEL OR MALLEABLE IRON. ALL EMT FITTINGS SHALL BE COMPRESSION TYPE.

C. ALL OUTLET, SWITCH AND JUNCTION BOXES, SHALL BE SHERARDIZED OR GALVANIZED STAMPED STEEL BY STEEL CITY, RACO, APPLETON, VALEN, OR EQUIVALENT. OUTLET BOXES IN CONCRETE CONSTRUCTION SHALL BE OCTAGONAL. NO "THRU-WALL" BOXES SHALL BE USED IN PARTITIONS. ALL BOXES SHALL BE FURNISHED WITH APPROPRIATE COVERS.

D. JUNCTION AND PULL BOXES SHALL BE FURNISHED AND INSTALLED AS INDICATED OR WHERE REQUIRED TO FACILITATE PULLING OF WIRES OR CABLES. BOXES FOR EXTERIOR WORK SHALL BE CAST ALUMINUM OR GALVANIZED CAST IRON TYPE WITH THREADED HUBS, U.N.O. GASKETED COVER PLATES SHALL BE FURNISHED FOR OUTDOOR INSTALLATIONS.

DIVISION 16060 - GROUNDING AND BONDING

A. GROUND ALL EQUIPMENT PER NATIONAL ELECTRICAL CODE (NEC).

B. GROUND ALL DRY TYPE TRANSFORMERS AS PER DRAWINGS AND NATIONAL ELECTRICAL CODE (NEC).

C. ALL CONDUITS SHALL CONTAIN A CODE-SIZED GROUND WIRE SIZE PER NATIONAL ELECTRICAL CODE (NEC) IN ADDITION TO THE CONDUCTORS SHOWN ON THE PLANS. WHERE CIRCUIT CONDUCTORS ARE INCREASED IN SIZE FOR VOLTAGE DROP, THE GROUND WIRE SIZE SHALL BE INCREASE PROPORTIONATELY.

D. WHERE AN ISOLATED, INSULATED GROUND IS REQUIRED A SEPARATE GREEN GROUND SHALL BE RUN FROM THE PANEL GROUND BUS TO THE ISOLATED GROUND CONNECTION OF THE DEVICE SERVED. IN NO CASE SHALL THE SYSTEM GROUND (WIRE AND ASSOCIATED OUTLET BOXES, CONDUIT AND BUILDING STEEL) BE ALLOWED TO CONTACT THE ISOLATED GROUND (GREEN WIRE AND DEVICE GROUND).

DIVISION 16120 - WIRE AND CABLE

A. THE COLOR CODING SYSTEM LISTED BELOW SHALL BE USED THROUGHOUT THE BUILDING:

SYSTEM	PHASE A	PHASE B	PHASE C	NEUTRAL/GROUND
208/120V	BLACK	RED	BLUE	WHITE GREEN
240/120V	BLACK	RED	BLUE	WHITE GREEN
480/277V	BROWN	ORANGE	YELLOW	GRAY GREEN

B. THE WIRE SIZE INDICATED IN THE HOMERUN SHALL BE USED THROUGH THE CIRCUIT.

C. BUILDING WIRE, U.N.O., SHALL BE COPPER, 600 VOLT, TYPE THWN/THHN INSULATION, #12 AWG MINIMUM, FOR INTERIOR AND EXTERIOR APPLICATIONS. TYPE THHN SHALL NOT BE USED IN WET OR DAMP LOCATIONS.

D. INSTALL ALL WIRING IN CONDUIT.

E. CONTROL CONDUCTORS SHALL BE #14 MINIMUM FOR NATIONAL ELECTRICAL CODE (NEC) CLASS 1 AND #16 FOR NATIONAL ELECTRICAL CODE (NEC) CLASS 2.

F. CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED.

G. CONDUCTORS #10 AWG AND SMALLER SHALL BE SOLID.

H. NO SPLICES SHALL BE MADE EXCEPT WITHIN OUTLET OR JUNCTION BOXES. WIRES AND CABLES SHALL BE MANUFACTURED BY PIRELLI, ROYAL, TRIANGLE OR APPROVED EQUAL.

I. PULL CONDUCTORS USING RECOGNIZED METHODS AND EQUIPMENT LEAVING AS LEAST 6" WIRE AT ALL JUNCTION BOXES FOR CONNECTIONS.

J. CLEAN OUT EACH CONDUIT SYSTEM BEFORE PULLING WIRE.

K. FORM AND TIE ALL WIRING IN PANEL BOARDS.

L. THERE SHALL BE NO WIRE NUT JOINTS OR SPLICES MADE INSIDE SWITCHBOARDS/PANEL BOARDS.

M. BRANCH CIRCUIT WIRE SIZES (AND CONDUITS) SHALL BE INCREASED FROM THOSE INDICATED ON THE PLANS TO PREVENT EXCESSIVE VOLTAGE DROP. BRANCH CIRCUITS SHALL BE INSTALLED WITH WIRES OF SUFFICIENT SIZE SO THAT VOLTAGE DROP BETWEEN THE PANEL AND THE LOADS DOES NOT EXCEED LIMIT OF 3 PERCENT.

N. WIRE SIZES SHALL BE BASED ON THE 60°C. AMPACITIES FOR WIRE SIZES NO. 14-1 AWG, AND 75°C. AMPACITIES FOR WIRE SIZES #1/0 AWG AND LARGER.

O. CIRCUITS MAY BE MULTI-PLEXED IN CONDUIT PROVIDED WIRE IS PROPERLY DERATED AND CONDUIT SIZED PER NATIONAL ELECTRICAL CODE. UNDER NO CIRCUMSTANCES SHALL MORE THAN (9) CURRENT CARRYING CONDUCTORS BE RUN IN A SINGLE CONDUIT.

P. PROVIDE WIRE AND RACEWAY SYSTEMS AS DESCRIBED HEREIN AND INDICATED ON DRAWINGS. METAL-CLAD (MC), ARMORED CABLE (AC), AND NON-METALLIC SHEATED CABLE (NMC) SHALL NOT BE PERMITTED, U.N.O, AND APPROVED PRIOR TO BIDDING.

Q. PROVIDE DISCONNECT SWITCHES WHERE INDICATED AND AS REQUIRED. SWITCHES SHALL BE OF SIZE, NUMBER OF POLES AND FUSED OR NONFUSED, AS REQUIRED FOR JOB CONDITIONS AND THE NATIONAL ELECTRICAL CODE. ALL SAFETY SWITCHES SHALL BE NEMA I ENCLOSURE "HD" WITH INTERLOCKING COVER AND HANDLE, MANUFACTURED BY SQUARE D OR APPROVED EQUAL. PROVIDE NEMA 3R ENCLOSURES WHERE REQUIRED.

R. MOUNT WEATHERPROOF DEVICES IN CAST METAL BOXES WITH GASKETED, SPRING-HINGED LID-TYPE LOCKING COVERS HAVING CORROSION-RESISTANT FINISH.

S. THE ENTIRE ELECTRICAL SYSTEM SHALL BE SOLIDLY GROUNDED INCLUDING MAIN SERVICE EQUIPMENT, DISCONNECT SWITCHES, WIRING TROUGHS AND PULL BOXES, CONDUIT SYSTEM, OUTLET BOXES, MOTORS, ELECTRIC HEATING EQUIPMENT, LIGHTING FIXTURES, TRANSFORMERS, EMERGENCY SYSTEMS, UPS SYSTEMS, AND FIRE ALARM SYSTEMS.

T. PROVIDE EQUIPMENT GROUNDING CONDUCTORS IN ALL BRANCH CIRCUITS AND FEEDERS SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE TABLE 250.112.

U. ALL BRANCH CIRCUITS SHALL BE RUN CONCEALED IN EXISTING AND NEW WALLS. CUT AND PATCH EXISTING WALLS AND SURFACES AS REQUIRED.

V. ALL D.C. WIRING SHALL BE #10 AWG MINIMUM.

W. GROUND, PHASE AND NEUTRAL CONDUCTORS SHALL BE PIG-TAILED IN OUTLET BOXES OR MULTI-OUTLET ASSEMBLY FOR RECEPTACLES SO THAT GROUND AND ELECTRICAL SERVICE WILL NOT BE DISTURBED TO OTHER RECEPTACLES ON THE SAME MULTI-WIRE CIRCUIT IF RECEPTACLE IS REMOVED.

DIVISION 16140 - WIRING DEVICES

A. WIRING DEVICES SHALL BE ARROW HART, GENERAL ELECTRIC, P & S, LEVITON, HUBBELL, OR APPROVED EQUAL (COORDINATE COLOR SELECTION WITH ARCHITECT):

1) WALL SWITCHES: THREE AND FOUR-WAY SWITCHES SHALL BE OF THE SAME MANUFACTURER AND GRADE.
2) RECEPTACLES: GFCI SHALL BE #GFCS20 RATED 20 AMPERE, 120 VOLT.
3) DIMMERS: 600/1000/1500/2000 WATTS AS REQUIRED BY JOB ONDITIONS. LUTRON 'NOVA' SERIES OR EQUAL.
4) DEVICE PLATES: ARROW HART SWITCH PLATES SI-S6 SERIES. ARROW HART RECEPTACLE PLATES S8. ARROW HART TELEPHONE BLANK PLATES S14.

B. WIRING DEVICE COLOR SHALL BE WHITE, UNLESS OTHERWISE NOTED.

C. PROVIDE TOTALLY ENCLOSED, 20 AMPERE, 120/277 VOLT, QUIET A/C GENERAL USE SNAP SWITCHES.

D. SWITCHES SHALL BE SPECIFICATION GRADE AS MANUFACTURED BY HUBBELL, P&S, LEVITON, OR APPROVED EQUAL.

E. PROVIDE NEMA CONFIGURATION 5-20R DUPLEX 125 VOLT GROUNDING TYPE RECEPTACLES RATED FOR 20 AMPERES U.N.O. ON THE DRAWINGS.

F. RECEPTACLES SHALL BE SPECIFICATION GRADE AS MANUFACTURED BY HUBBELL, P&S, LEVITON, OR APPROVED EQUAL.

1.6 RECEPTACLES REQUIRING AMPERAGES, VOLTAGES OR CONFIGURATIONS DIFFERENT FROM THE DUPLEX CONVENIENCE RECEPTACLES ABOVE SHALL BE AS INDICATED ON THE DRAWINGS.

1.7 PROVIDE OTHER RECEPTACLES OF A QUALITY, MATERIAL AND WORKMANSHIP EQUAL TO THAT SPECIFIED FOR DUPLEX CONVENIENCE RECEPTACLES.

1.8 PROVIDE COVER OR DEVICE PLATES FOR OUTLET BOXES AS FOLLOWS UNLESS OTHERWISE NOTED:

1.8a FINISHED AREAS: THERMOPLASTIC-COLOR TO MATCH DEVICE.

G. UNFINISHED AREAS: ZINC COATED SHEET METAL, ALUMINUM, OR CAST METAL AS APPROPRIATE FOR THE TYPE OF BOX.

H. EXTERIOR AREAS: COPPER FREE ALUMINUM WITH GRAY, POWDER EPOXY FINISH, GASKET, WEATHERPROOF, CROUSE-HINDS "WLRD" FOR DUPLEX RECEPTACLES AND "WLRS" FOR SINGLE RECEPTACLES OR APPROVED EQUAL.

I. TELEPHONE COMMUNICATIONS, AND SIGNAL OUTLET PLATES, SHALL MATCH THOSE USED FOR RECEPTACLES AND SWITCHES. ALL OUTLET AND/OR JUNCTION BOXES SHALL BE COMPLETE WITH A COVER PLATE BY THIS CONTRACTOR.

J. WHERE DEVICES ARE GANGED, THEY SHALL BE INSTALLED UNDER A COMMON COVER PLATE.

K. LOCATE THE SWITCHES APPROXIMATELY 4'-0" ABOVE THE FINISHED FLOOR ELEVATION OR NEAREST BLOCK COURSE (WITHIN A.D.A. REQUIREMENTS), U.N.O. THE LONG DIMENSION OF THE SWITCHES SHALL BE VERTICAL.

L. LOCATE RECEPTACLES APPROXIMATELY 1'-6" ABOVE THE FINISHED FLOOR ELEVATION OR NEAREST BLOCK COURSE (WITHIN A.D.A. REQUIREMENTS), U.N.O. THE LONG DIMENSION OF RECEPTACLES SHALL BE VERTICAL.

SECTION 16500 - LIGHTING

A. ALL LIGHTING SHALL BE LED TYPE, U.N.O.

B. PROVIDE A COMPLETE LIGHTING FIXTURE AT EACH LOCATION INDICATED ON THE DRAWINGS. FIXTURES SHALL BE SPECIFIED ON THE LIGHTING FIXTURE SCHEDULE ON THE DRAWINGS.

C. EACH FIXTURE SHALL BE COMPLETELY EQUIPPED WITH LAMPS OF THE SIZE, TYPE, WATTAGE AND SHAPE INDICATED AND SPECIFIED. ALL LAMPS SHALL BE MANUFACTURED BY THE GENERAL ELECTRIC CO., PHILIPS LIGHTING CO., VENTURE LIGHTING INTERNATIONAL, SYLVANIA/OSRAM CORPORATION OR APPROVED EQUAL. LUMEN OUTPUT AND LIFE OF LAMPS SHALL BE EQUIVALENT TO THE GENERAL ELECTRIC LAMP OF THAT TYPE AND WATTAGE. EXACT VOLTAGE SHALL BE CHECKED BEFORE ORDERING LAMPS.

D. THE CONTRACTOR SHALL CONSULT THE CEILING CONTRACTOR AND ARCHITECT'S DRAWINGS FOR APPROVED REFLECTED CEILING PLANS BEFORE ORDERING FIXTURES TO INSURE THAT ALL ARE COMPATIBLE WITH THE CEILING SYSTEM AND PROPERLY LOCATED. VERIFY THAT ADEQUATE CLEARANCE FOR INSTALLATION, MAINTENANCE, AND HEAT DISSIPATION IS AVAILABLE.

E. PROVIDE A MINIMUM OF TWO (2) GALVANIZED STEEL #12 GAUGE HANGER WIRES (ALTERNATE CORNERS) ON ALL RECESSED FIXTURES.

F. CONTRACTOR SHALL PROVIDE ADDITIONAL EXIT LIGHTS AND EMERGENCY BATTERY PACK WITH DUAL HEADS AS NEEDED TO MEET FIRE MARSHAL'S WALK-THROUGH AND ACCEPTANCE.

G. CONNECT EXIT LIGHTS, EMERGENCY BATTERY UNITS AND NIGHT LIGHTS (NL) TO UNSWITCHED PORTION OF LIGHTING CIRCUIT SERVING RESPECTIVE AREA.

SAAD AND GO

610 NW CHIPMAN ROAD
LEE'S SUMMIT, MO 64086 PROPOSED LOT 3
PROTOTYPE VERSION V2-B

GEMINI ENGINEERING GROUP

SEAL

STATE OF MISSOURI
CLAYTON LUCAS NUMBER PE-2024000504
PROFESSIONAL ENGINEER
10/23/2024

CONSTRUCTION BULLETIN-A

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ISSUE	DATE	DESCRIPTION

PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

ELECTRICAL SPECIFICATIONS

SHEET NUMBER

E111

8/12/2024 11:23:58 AM

COMcheck Software Version 4.1.5.5

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Salad & Go
Project Type: New Construction

Construction Site:
610 NW Chipman Road
Lee's Summit, MO

Owner/Agent:

Designer/Contractor:
Gemini Engineering Group
101 Nightlinger Ln
Milsap, TX 76066
(817) 901-5191

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-RESTROOM (Common Space Types:Restrooms)	50	0.77	38
2-OFFICE (Common Space Types:Office - Enclosed)	61	0.84	51
3-SERVICE (Common Space Types:Food Preparation)	486	0.95	462
4-SES (Common Space Types:Electrical/Mechanical)	99	0.39	39
		Total Allowed Watts =	590

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-RESTROOM (Common Space Types:Restrooms)				
G4/G4E: G4/G4E: 2X4 LED TROFFER: LED Panel 36W:	1	1	36	36
2-OFFICE (Common Space Types:Office - Enclosed)				
G4/G4E: G4/G4E: 2X4 LED TROFFER: LED Panel 36W:	1	1	36	36
3-SERVICE (Common Space Types:Food Preparation)				
G4/G4E: G4/G4E: 2X4 LED TROFFER: LED Panel 36W:	1	8	36	288
D: D: RECESSED: Other:	1	4	16	64
4-SES (Common Space Types:Electrical/Mechanical)				
S4/S4E: S4/S4E: PENDANT: Other:	1	2	40	80
			Total Proposed Watts =	504

Interior Lighting PASSES: Design 15% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

CLAYTON LUCAS, P.E. Signature 10/23/2024
Name - Title Date

COMcheck Software Version 4.1.5.5

Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Salad & Go
Project Type: New Construction
Exterior Lighting Zone 3 (Other (LZ3))

Construction Site:
610 NW Chipman Road
Lee's Summit, MO

Owner/Agent:

Designer/Contractor:
Gemini Engineering Group
101 Nightlinger Ln
Milsap, TX 76066
(817) 901-5191

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
DRIVE THRU (Free standing/attached sales canopy)	145 ft2	0.6	Yes	87
WALK-UP WINDOW (Entry canopy)	174 ft2	0.4	Yes	70
Parking area (Parking area)	30000 ft2	0.06	Yes	1800
			Total Tradable Watts (a) =	1957
			Total Allowed Watts =	1957
			Total Allowed Supplemental Watts (b) =	500

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
DRIVE THRU (Free standing/attached sales canopy 145 ft2): Tradable Wattage				
D: D: RECESSED LED: Other:	1	6	16	96
WALK-UP WINDOW (Entry canopy 174 ft2): Tradable Wattage				
D: D: RECESSED LED: Other:	1	8	16	128
WS: WS: SCONCE: Other:	1	2	20	40
Parking area (Parking area 30000 ft2): Tradable Wattage				
S1: S1: LED POLE LIGHTS: Other:	1	3	70	210
			Total Tradable Proposed Watts =	474

Exterior Lighting PASSES: Design 81% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COM*check* Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

CLAYTON LUCAS, P.E. Signature 10/23/2024
Name - Title Date

COMcheck Software Version 4.1.5.5

Inspection Checklist

Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COM*check* software
Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C103.2 [PR8][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [EL22][1]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1, C405.2.1.1 [EL18][1]	Occupancy sensors installed in classrooms/lecture/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1.2 [EL19][1]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.1.3 [EL20][1]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.
C405.2.2, C405.2.2.1, C405.2.2.2 [EL21][2]	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

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SALAD AND GO

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PROJECT INFORMATION

PROJECT NO:	24-0087
ORIGINAL ISSUE:	09/06/2022
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

LIGHTING ENERGY FORMS

SHEET NUMBER

E112

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23][3]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces. C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception** Sidelit zones on first floor in Group A-2 and M occupancies.
C405.2.4 [EL26][3]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.4 [EL27][3]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.5 [EL28]mst	Manual controls required by the energy code are in a location with ready access to occupants and located where the controlled lights are visible, or identify the area served and their status.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.2.6 [EL30]mst	Automatic lighting controls for exterior lighting installed. Controls will be daylight controlled, set based on business operation time-of-day, or reduce connected lighting > 30%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.3 [EL6][3]	Exit signs do not exceed 5 watts per face.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.6 [EL26][3]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.7 [EL27][3]	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.8.2, C405.8.2.1 [EL28][3]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.9 [EL29][3]	Total voltage drop across the combination of feeders and branch circuits <= 5%.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

1 High Impact (Tier 1) | 2 Medium Impact (Tier 2) | 3 Low Impact (Tier 3)

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [FI17][3]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C405.4.1 [FI18][3]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Interior Lighting fixture schedule for values.*
C405.5.1 [FI19][3]	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	*See the Exterior Lighting fixture schedule for values.*
C408.1.1 [FI57][3]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.2.5.1 [FI16][3]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C408.3 [FI33][3]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

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ORIGINAL ISSUE:	12/13/23
SCALE:	AS NOTED
DRAWN BY:	JB
CHECKED BY:	CL

SHEET TITLE

LIGHTING ENERGY FORMS

SHEET NUMBER

E113

8/12/2024 11:23:59 AM