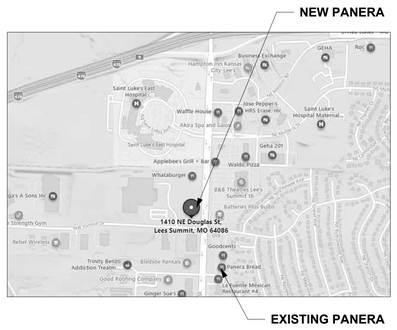
PROTOTYPE - NEW
CONSTRUCTION - SHELL

PANERA BREAD BAKERY-CAFE#2406

1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

7/8/2022 3:34:48 PM

SITE MAP:



CODE INFORMATION:

APPLICABLE CODES & REGULATIONS:

BUILDING CODE:	2018 INTERNATIONAL BUILDING CODE
FIRE CODE:	2018 INTERNATIONAL FIRE CODE
PLUMBING CODE:	2018 INTERNATIONAL PLUMBING CODE
ELECTRIC CODE:	2017 NATIONAL ELECTRIC CODE
MECHANICAL CODE:	2018 INTERNATIONAL MECHANICAL CODE
GAS CODE:	2018 INTERNATIONAL FUEL GAS CODE
ENERGY CODE:	??
ACCESSIBILITY CODE:	ICC/ANSI A117.1-2009, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
PENDING CHANGES:	NONE

CODE CLASSIFICATION:

A. OCCUPANCY GROUP:	A-2 ASSEMBLY
B. CONSTRUCTION CLASSIFICATION:	V-B
C. AUTOMATIC FIRE SUPRESSION SYSTEM INSTALLED:	NOT REQUIRED

AREA BREAKDOWN:

TOTAL GROSS PANERA SUITE:	3,482 SQFT
PATIO:	527 SQFT

TRAVEL DISTANCE:

ALLOWED TRAVEL DISTANCE:	200 FT
ACTUAL TRAVEL DISTANCE:	66'-0" FT MAX

PERMIT #: PRCOM20201329

PROTOTYPE INFORMATION:

THIS SET OF DOCUMENTS INCORPORATES ALL REVISIONS THROUGH PROTOTYPE UPDATE #2018-00.00

LANDLORD APPROVAL:

NAME

SIGNATURE DATE

CONTACT LIST

PANERA BREAD DESIGN MANAGER:
ROGER BOST
3630 S. GEYER ROAD, SUITE 100
ST. LOUIS, MO 63127
PHONE: 573.300.9693
ROGER.BOST@PANERABREAD.COM

OWNER:

SHELL:
STAR DEVELOPMENT
ROBERT DE LA FUENTE
244 W. MILL ST. STE 101
LIBERTY, MO 64068
530-520-1618

ARCHITECT:
DENNIS D. SMITH
345 RIVERVIEW, SUITE 200
WICHITA, KS 67203
PHONE: 316.268.0230 EXT: 354
CGABOIAN@LK-ARCHITECTURE.COM

PLANNING/ZONING DEPARTMENT CONTACT:
NAME: MIKE WEISENBORN
220 SE GREEN STREET
LEE'S SUMMIT, MO 64063
PHONE: 816.969.1240
MIKE.WEISENBORN@CITYOFLS.NET

MEP:
DARRELL R. CASE
796 MERUS COURT
ST. LOUIS, MO 63026
PHONE: 636.349.1600

STRUCTURE:
STEPHEN J. SACCO
796 MERUS COURT
ST. LOUIS, MO 63026
PHONE: 636.349.1600

SHEET INDEX

Sheet Count: 47

REVISION ISSUE LOG

REVISION #	ISSUE DATE	DESCRIPTION	AFFECTED SHEETS	REMARKS
A	7/5/2022	Shell - Permit Set		

DEFERRED SUBMITTALS:

ENGINEERED TRUSS PACKAGE
FIRE ALARM SYSTEM
SIGN PRICE

P8.2021 Q3.V1

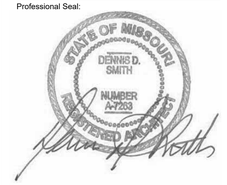
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

No.	Description	Date
A	Shell - Permit Set	7/5/2022

COVER SHEET

Project Number: 2406
Drawn By: EB
Issue Date: **07/05/2022**
DPM: DPM DM: DM CPM: CPM

Sheet Number: **G000**

7/8/2022 3:34:50 PM

ABBREVIATIONS LEGEND

A	
AFF	ABOVE FINISHED FLOOR
ACT	ACOUSTICAL CEILING TILE
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE(LY)
ARCH	ARCHITECT(URAL)
B	
BLKG	BLOCKING
BLDG	BUILDING
BD	BOARD
C	
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
C	CENTERLINE
CLG	CEILING
CT	CERAMIC TILE
CLR	CLEAR
CONC	CONCRETE
CONT	CONTINUE, CONTINUOUS
CJ	CONTROL JOINT
CORR	CORRIDOR
D	
DIA	DIAMETER
DIM	DIMENSION(S)
E	
EA	EACH
ELEC	ELECTRIC(AL)
ELEV	ELEVATION
EQ	EQUAL
EQUIP	EQUIPMENT
EXP	EXPANSION
EJ	EXPANSION JOINT
EXIST	EXISTING
EXT	EXTERIOR
F	
FIN	FINISH(ED)
FIN FLR	FINISHED FLOOR
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FLR	FLOOR
FD	FLOOR DRAIN
FLUOR	FLUORESCENT
FRT	FIRE-RETARDANT TREATED
G	
GA	GAUGE
GYP BD	GYPSUM BOARD
H	
HCP	HANDICAPPED
HDW	HARDWARE
HT	HEIGHT
HC	HOLLOW CORE
HM	HOLLOW METAL
HOR	HORIZONTAL
HR	HOUR
I	
INCL	INCLUDE(D)
INSUL	INSULATION
INT	INTERIOR
J	
JT	JOINT
L	
LAM	LAMINATE

M	
MAX	MAXIMUM
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MEPFP	MECHANICAL, ELECTRICAL, PLUMBING
AND	FIRE PROTECTION
MTL	METAL
MIN	MINIMUM
MISC	MISCELLANEOUS
N	
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O	
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OC	ON CENTER
OH	OPPOSITE HAND
OPG	OPENING
OPP	OPPOSITE
OSB	ORIENTED STRAND BOARD
P	
PLAM	PLASTIC LAMINATE
PT	PAINT(ED)
PTN	PARTITION
PWD	PLYWOOD
Q	
QTY	QUANTITY
R	
REF	REFERENCE
REINF	REINFORCE(D)
REQ	REQUIRED
REV	REVISION
RB	RESILIENT BASE
S	
SAB	SOUND ATTENUATION BATTS
SC	SOLID CORE
SF	SQUARE FOOT (FEET)
SIM	SIMILAR
SLNT	SEALANT
SPEC	SPECIFICATION
SQ	SQUARE
SQ FT	SQUARE FOOT (FEET)
STL	STEEL
SUSP	SUSPEND(ED)
SYM	SYMMETRICAL
T	
TEL	TELEPHONE
TEMP	TEMPERED
TOS	TOP OF STRUCTURE
TOW	TOP OF WALL
TYP	TYPICAL
U	
UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
V	
VERT	VERTICAL
W	
WC	WALL COVERING
W/	WITH
W/O	WITHOUT
WD	WOOD

SYMBOLS LEGEND

NORTH ARROW

1 View Name
1/8" = 1'-0"
PLAN, DETAIL OR ELEVATION TITLE

0
0
COLUMN LINE DESIGNATION

SIM 1 A101
BUILDING SECTION
DETAIL NUMBER
SHEET NUMBER

SIM 1 A101
WALL SECTION
DETAIL NUMBER
SHEET NUMBER

SIM 1 A101
DETAIL MARKS
DETAIL NUMBER
SHEET NUMBER

Room name
101
ROOM NAME / NUMBER
ROOM NAME
ROOM NUMBER

4 1 A101 3 2
EXTERIOR ELEVATION
ELEVATION NUMBER
SHEET NUMBER

4 1 A101 3 2
INTERIOR ELEVATION
ELEVATION NUMBER
SHEET NUMBER

SIM 1 A101
DETAIL REFERENCE
DETAIL NUMBER
SHEET NUMBER
AREA OF DETAIL

101
EXISTING CONSTRUCTION TO REMAIN
DOOR TO REMAIN AND TAG

EXISTING CONSTRUCTION TO BE REMOVED
EXISTING DOOR TO BE REMOVED

NEW CONSTRUCTION
101
NEW DOOR AND TAG

EXISTING PARTITIONS

EXISTING PARTITIONS TO BE REMOVED

NEW PARTITIONS (REF PARTITION SHEET)

NEW PARTITIONS W/ R-11 SOUND BATT

COOLER / FREEZER WALL

1/2 HEIGHT WALL (HEIGHT VARIES)

X
KEYED NOTE

1
REVISION CLOUD AND TAG
REVISION NUMBER
AREA OF REVISION

1t
WINDOW NUMBER SYMBOL

1i
WALL PARTITION TYPE

GENERAL CONDITIONS...

1 PERMITS: CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS.

2 QUALITY: CONTRACTOR SHALL PERFORM ALL WORK AND INSTALL ALL COMPONENTS IN A PROFESSIONAL MANNER. ALL FINISH WORK TO BE TRUE, LEVEL AND PLUMB. ALL JOINTS TO BE TIGHT AND CLEAN.

3 CODE COMPLIANCE: WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES INCLUDING NFPA; AND USE TESTED AND CERTIFIED ASSEMBLIES, AS REQUIRED BY CODE.

4 HANDICAP ACCESSIBILITY: CONTRACTOR SHALL COMPLY WITH ACCESSIBILITY GUIDELINES 36 CFR PART 1191 OF THE FEDERAL REGISTER, ITS REVISIONS TO ANSI STANDARD A117.1, AND TITLE III OF THE AMERICAN'S WITH DISABILITY ACT (ADA), AND LOCAL ORDINANCES

5 WARRANTY: ALL CONSTRUCTION, MATERIALS, PRODUCTS AND WORK TO BE WARRANTED FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE TENANT.

6 CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS. NO MEASUREMENTS SHALL BE SCALED FROM THE DRAWINGS. CONTRACTOR SHALL OBTAIN CLARIFICATION FROM ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION IF A DIMENSION(S) IS IN QUESTION.

7 CONTRACTOR IS ADVISED THAT PORTIONS OF THIS DOCUMENT MAY BE BASED ON UNFIELD VERIFIED INFORMATION PROVIDED BY OTHERS IN ACCORDANCE WITH THE OWNERS DIRECTIONS. CONTRACTOR TO ADVISE ARCHITECT OF ANY EXISTING CONDITION DIFFERENT FROM THAT NOTED WHICH MAY IMPACT CONSTRUCTION PRIOR TO EXECUTION.

8 DIMENSIONS AND NOTES ON ENLARGED PLANS AND DETAILS ARE TO OVERRULE SMALLER SCALE DRAWINGS. ALL DIMENSIONS ARE TO FACE OF DRYWALL UNLESS NOTED OTHERWISE.

9 TURN OVER TO LANDLORD OR SAVE FOR REUSE THE FOLLOWING ITEMS WHEN DISMANTLED:
A) DOORS, FRAMES, & DOOR HARDWARE AS INDICATED.
B) THERMOSTATS.
C) SUPPLY AND RETURN AIR GRILLES.
D) ADDITIONAL ITEMS INDICATED ON PLAN.
E) EXISTING LIGHT FIXTURES INDICATED ON PLAN.

10 CLEAN UP: REMOVE ALL DEBRIS, PACKING MATERIAL, DEMOLISHED MATERIAL, AND EXTRANEOUS TRASH GENERATED BY CONSTRUCTION FROM BUILDING & SITE UNLESS NOTED, TO BE TURNED OVER TO LANDLORD. ALL DEMOLISHED MATERIAL NOT TO BE TURNED OVER TO LANDLORD SHALL BECOME THE PROPERTY OF GENERAL CONTRACTOR.

11 BUILDING STANDARDS: ALL MATERIAL, HARDWARE, FIXTURES, AND FINISHES TO BE BUILDING STANDARD UNLESS NOTED OTHERWISE. BUILDING STANDARD INFORMATION IS AVAILABLE THROUGH THE TENANT'S REPRESENTATIVES, AND TYPICALLY MATCHES EXISTING INTERIOR CONSTRUCTION.

12 SITE VISIT; ALL GENERAL CONTRACTORS & SUBCONTRACTORS ARE TO VISIT SITE PRIOR TO COMPLETING BID TO VERIFY EXISTING CONDITION. GENERAL CONTRACTOR & SUBCONTRACTORS TO PROVIDE WRITTEN DOCUMENTATION OF ANY DISCREPANCY BETWEEN SITE CONDITIONS & DOCUMENTS. SUBMISSION OF BID IS CONFIRMATION THAT EXISTING CONDITIONS HAVE BEEN FULLY TAKEN INTO CONSIDERATION & ARE REFLECTED IN THE COSTS PROVIDED.

13 CONTRACTOR TO PROVIDE 2X FIRE RESISTANT BLOCKING AS NECESSARY BEHIND ALL WALL MOUNTED INSTALLATIONS.

14 CONTRACTOR TO PROVIDE BUILDING CONSTRUCTION REPRESENTATIVE WITH COPIES OF DELIVERY, AND CONSTRUCTION SCHEDULES. CONTRACTOR TO COORDINATE ALL SCHEDULES WITH BUILDINGS CONSTRUCTION REPRESENTATIVE.

15 IF EXTERIOR WINDOWS ARE BEING ENCLOSED CONTRACTOR IS TO CLEAN ALL WINDOWS, SHADES, CAVITY AREA FROM CONSTRUCTION DUST AND DEBRIS PRIOR TO ENCLOSING EXTERIOR WINDOWS.

16 CUTTING & PATCHING: CONTRACTOR TO PATCH, REPAIR, & REFINISH WORK DAMAGED AS A RESULT OF DEMOLITION OR REMOVAL OF CONSTRUCTION TO MATCH ADJACENT FINISH. PATCH THRU-WALL/ THRU-FLOOR PENETRATIONS TO MAINTAIN EXISTING BUILDING INTEGRITY.

17 USE 3M NON-INTUMESCENT FIRE STOPPING AS FOLLOWS: FIREDAM 150 CAULK FOR WALL & FLOOR PENETRATION SEALS, TO MEET OR EXCEED ASTM E 814 (UL1479) AND/OR ASTM E 119 (UL263); STRUCTURAL STEEL, AND ELECTRICAL & CONTROL SYSTEM, TO MEET OR EXCEED ASTM E 119 (UL263) AND HIGH INTENSITY FIRE TEST (UL 1709).
FIRE BARRIER 2001 SILICONE RTV FOAM FOR CABLE BUNDLES AND TRAYS, TRAYS CONDUIT BUNDLES AND MULTIPLE PIPE RUNS, AND OTHER LARGE OPENINGS TO MEET OR EXCEED ASTM E 814 AND TO COMPLY WITH CURRENTLY APPLICABLE REQUIREMENTS OF THE NEC (NFPA-70), BOCAI, ICBO, SBCCI, IBC AND NFPA CODE #101.

18 ALL NEW CONCRETE FLOORING SECTIONS TO BE DOWELED AND PINNED TO EXISTING CONCRETE SLAB

19 ALL ROOF WORK TO BE COMPLETED BY LANDLORD'S APPROVED ROOFING CONTRACTOR

20 FIRE PROTECTION: GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE, EXTEND, OR REVISE ALARM SYSTEMS AS REQUIRED TO COMPLY WITH APPLICABLE CODES. COORDINATE WORK WITH OWNER'S REPRESENTATIVES WHERE MODIFYING OR TYING INTO EXISTING SYSTEMS. GENERAL CONTRACTOR SHALL PREPARE REQUIRED DRAWINGS AND OBTAIN BUILDING PERMITS FOR ALARM SYSTEM WORK.

21 CONTRACTOR TO REQUEST FROM LANDLORD A COPY OF ALL BUILDING RULES & REGULATIONS. THESE RULES & REGULATIONS TO BE FULLY COMPLIED WITH AT ALL TIMES DURING CONSTRUCTION BY THE GENERAL CONTRACTOR & SUB-CONTRACTOR(S). CONTRACTOR TO PROVIDE STATEMENT OF QUALIFICATIONS & INSURANCE CERTIFICATES AS NECESSARY TO THE BUILDING'S REPRESENTATIVE.

22 CONTRACTOR TO MAINTAIN CLEAR ACCESS TO ALL DRIVE & ENTRANCES WHILE ON SITE.

23 CONTRACTOR TO STORE & INSTALL AS NECESSARY ANY OWNER-PROVIDED EQUIPMENT. REFER TO DOCUMENTS FOR FURTHER DETAIL.

24 NOT USED

GENERAL CONDITIONS...

25 EXISTING CONDITIONS DOCUMENTS PROVIDED FOR REFERENCE ONLY. ANY WORK INDICATED HAS ALREADY BEEN COMPLETED.

26 ALL AREAS MUST BE COMPLETELY CLEAN & CLEAR OF ANY CONSTRUCTION MATERIALS @ A MINIMUM OF (2) HOURS BEFORE THE CAFE OPENS EACH DAY.

27 WOOD DOORS: REFER TO DOCUMENTS FOR FURTHER DETAIL.

28 METAL DOORS: REFER TO DOCUMENTS FOR FURTHER DETAIL.

29 FRAMES: REFER TO DOCUMENTS FOR FURTHER DETAIL.

30 HARDWARE STANDARD: PROVIDE DOOR HARDWARE IN ACCORDANCE W/ SCHEDULE. ALL LOCKSET/LATCHSET HARDWARE COMPLY W/TITLE III OF AMERICANS WITH DISABILITIES ACT (ADA). GENERAL CONTRACTOR TO COORDINATE KEYING WITH OWNER REPRESENTATIVE.

31 DRYWALL: REFER TO PARTITION DETAILS FOR FURTHER INFORMATION.

32 RESILIENT BASE: PROVIDE 6" HIGH RUBBER COVE BASE IN 100' ROLLS. REFER TO DOCUMENTS FOR FURTHER DETAILS.

33 PAINT: PROVIDE 2 COATS OF ALKYD SEMI-GLOSS ENAMEL FINISH COLOR ON METAL DOORS & FRAMES AS INDICATED ON DRAWINGS.

34 PAINT: PROVIDE 2 COATS OF PREMIUM BENJAMIN MOORE (NO SUBSTITUTIONS ALLOWED) EGGSHELL FINISH COLOR ON ALL NEW SURFACES AS INDICATED ON DRAWINGS. PRIME NEW/EXISTING SURFACES & PATCH AS REQUIRED.

35 SOUND BATT INSULATION (WALLS ONLY): SHALL BE UNFACED GLASS FIBER ACOUSTICAL INSULATION COMPLYING WITH ASTM C665, TYPE 1, SIZED AS INDICATED IN DETAILS. MAXIMUM FLAME SPREAD: 10, STC ABOVE 55.

36 SOUND ATTENUATION (ABOVE CEILINGS) SHALL BE 3" UNFACED, LIGHT WEIGHT, RESILIENT FIBERGLASS DESIGNED TO ABSORB SOUND AND SPECIFICALLY MANUFACTURED FOR USE ABOVE CEILINGS. MAXIMUM FLAME SPREAD: 25 STC ABOVE 55. NO SOUND ATTENUATION INSULATION IS TO BE USED ABOVE FINISHED CEILING IN FOOD PREPARATION AREAS.

37 ALL FLOORING PRODUCTS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS & SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR ALL FLOOR LEVELING THAT MAY BE REQUIRED IN ORDER TO COMPLY WITH PROPER INSTALLATION PROCEDURE.

38 ACOUSTICAL CEILING: SHALL BE AS INDICATED OR AS CALLED FOR IN NOTES. INSTALLATION TO BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND SPECIFICATIONS.

39 EXTERIOR SIGNAGE, IF INDICATED, TO COMPLY WITH ALL CITY REGULATION AND BUILDING DESIGN STANDARDS. ADVISE ARCHITECT OF ANY CONFLICTS. ALL SIGNAGE PROVIDED BY OWNER, U.N.O.

40 CONTRACTOR SHALL PROVIDE MASTER KEY LOCK BOX IN ACCORDANCE TO CITY REGULATION FOR APPROVAL BY LOCAL FIRE DEPARTMENT.

41 CONTRACTOR TO PROVIDE SUITE NUMBERS AT EXTERIOR ENTRIES AS REQUIRED BY CITY REGULATIONS AND APPROVED BY LOCAL FIRE DEPARTMENT AND LANDLORD. CONTRACTOR TO COORDINATE SIGNAGE TYPE AND LOCATION WITH ARCHITECT.

42 HVAC: REFERENCE MECH. DOCUMENTS FOR INFORMATION AND LAYOUT. G.C. IS RESPONSIBLE FOR SCHEDULING AND PROVIDING A TEST AND BALANCE REPORT TO PANERA REPRESENTATIVE PRIOR TO TURNOVER. GC SHALL USE AN AABC OR NEBB INDEPENDENT THIRD PARTY AIR BALANCE COMPANY. THE REPORT SHALL BE AVAILABLE ON JOB SITE PRIOR TO FINAL INSPECTION.

43 PROVIDE MATERIAL & INSTALLATION ALLOWANCE FOR TWO (2) CLASS C FIRE EXTINGUISHERS AS REQUIRED TO MEET LOCAL FIRE OFFICIALS REQUEST AND TO MEET NFPA. CONTRACTOR TO COORDINATE WITH FIRE MARSHALL TO DETERMINE EXACT QUANTITY & LOCATION OF ALL EXTINGUISHERS. ABC, RATING: 10 BC 15 LBS.

44 PLUMBING: FIXTURES LOCATED ON ARCHITECTURAL SHEETS FOR GENERAL REFERENCE ONLY. REFER TO PLUMBING SHEETS FOR ROUGH-IN DETAILS.

45 FIRE PROTECTION: GENERAL CONTRACTOR IS RESPONSIBLE TO PROVIDE, EXTEND, OR REVISE ALARM SYSTEMS AS REQUIRED TO COMPLY WITH APPLICABLE CODES. COORDINATE WORK WITH OWNER'S REPRESENTATIVES WHERE MODIFYING OR TYING INTO EXISTING SYSTEMS. GENERAL CONTRACTOR SHALL PREPARE REQUIRED DRAWINGS AND OBTAIN BUILDING PERMITS FOR ALARM SYSTEM WORK.

46 ALL ELECTRICAL RECEPTACLES TO BE MOUNTED AT MIN. 15" A.F.F. U.N.O. TO CENTERLINE. ALL LIGHT SWITCHES AND THERMOSTATS TO BE MOUNTED AT 48" A.F.F. TO CENTERLINE.

47 ELECTRICAL, DATA, AND COMMUNICATIONS OUTLETS ARE PROVIDED FOR REFERENCE ONLY. REFERENCE ELEC. DOCUMENTS FOR ADDITIONAL ELECTRICAL INFORMATION ON SWITCHING, ADDITIONAL OUTLETS, EQUIPMENT ROOM REQUIREMENTS, ETC.

48 IF ANY DISCREPANCY EXISTS IN THE PLANS AND SPECIFICATIONS, THE CONTRACTOR IS RESPONSIBLE FOR CLARIFYING WITH THE ARCHITECT. THE ARCHITECT, ONLY, SHALL INTERPRET THE PLANS AND SPECIFICATIONS. THE GENERAL CONTRACTOR SHALL RESOLVE FIELD CONDITIONS NOT SHOWN ON THE DRAWINGS WITH THE ARCHITECT.

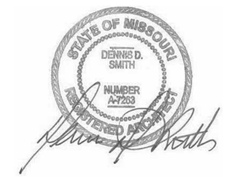
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

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1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

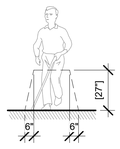
GENERAL NOTES, SYMBOLS, LEGENDS & ABBREVIATIONS

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
Sheet Number: G011

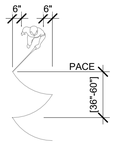
DPM:	DM:	CPM:
DPM	DM	CPM

PB 2021.03.V1

WALKING SURFACE WITH A RUNNING SLOPE NOT STEEPER THAN 1/20.



CANE TECHNIQUE

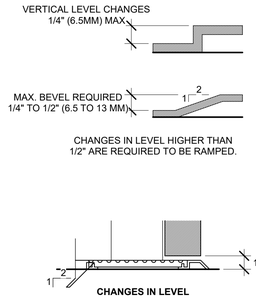


CANE TECHNIQUE

SECTION 402

21 ACCESSIBLE ROUTE

1/4" = 1'-0"

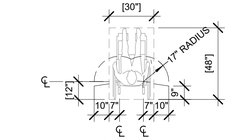


CHANGES IN LEVEL

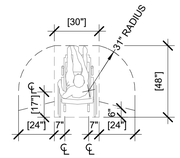
SECTION 303

17 CHANGES IN LEVEL

1/4" = 1'-0"



DIMENSIONS OF ADULT-SIZED WHEELCHAIR



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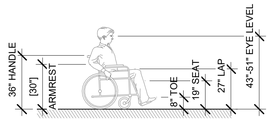

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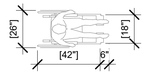

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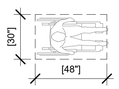
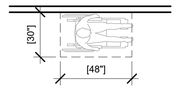
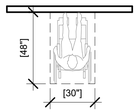


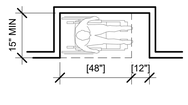
CLEAR FLOOR SPACE



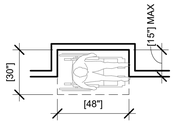
PARALLEL APPROACH



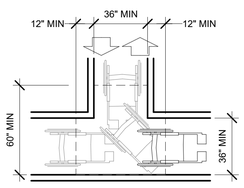
FORWARD APPROACH



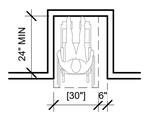
ADDITIONAL MANEUVERING CLEARANCE FOR ALCOVE



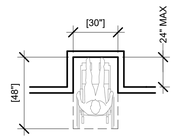
CLEAR FLOOR SPACE IN ALCOVE



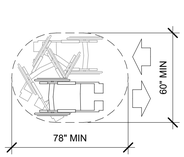
T-SHAPED SPACE FOR 180° TURNS



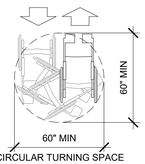
ADDITIONAL MANEUVERING CLEARANCE FOR ALCOVE



CLEAR FLOOR SPACE IN ALCOVE

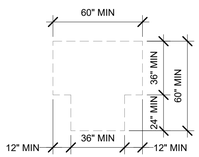


SPACE NEEDED FOR U-TURN

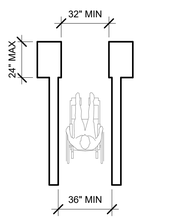


CIRCULAR TURNING SPACE

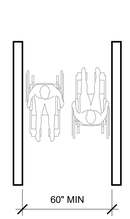
WHEELCHAIR TURNING SPACE



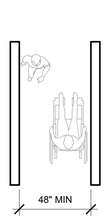
OPTIONAL "T" SHAPED TURNING SPACE



MINIMUM CLEAR WIDTH FOR SINGLE WHEELCHAIR



MINIMUM CLEAR WIDTH FOR TWO WHEELCHAIRS



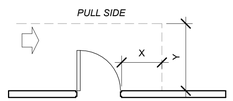
MINIMUM CLEAR WIDTH FOR ONE WHEELCHAIR

SECTIONS 304 & 305

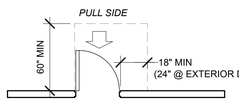
8 CLEAR FLOOR & GROUND SPACE REQ.

1/4" = 1'-0"

NOTE: X = 36" MIN. IF Y = 60"
X = 42" MIN. IF Y = 54"

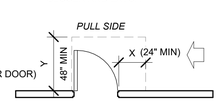


HINGE SIDE APPROACH - SWINGING DOOR



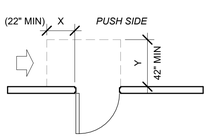
FRONT APPROACH - SWINGING DOOR

NOTE: Y = 54" MIN
IF DOOR HAS BOTH A CLOSER AND LATCH



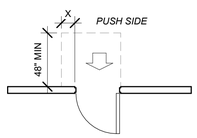
LATCH SIDE APPROACH - SWINGING DOOR

NOTE: Y = 48" MIN
IF DOOR HAS BOTH A CLOSER AND LATCH



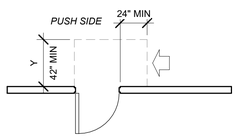
LATCH SIDE APPROACH - SWINGING DOOR

NOTE: X = 12" MIN
IF DOOR HAS BOTH A CLOSER AND LATCH

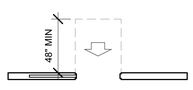


FRONT APPROACH - SWINGING DOOR

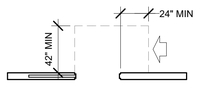
NOTE: Y = 48" MIN
IF DOOR HAS BOTH A CLOSER AND LATCH



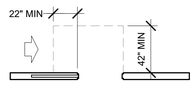
SIDE APPROACH - SWINGING DOOR



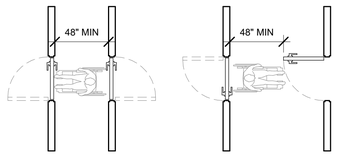
FRONT APPROACH - SLIDING OR FOLDING DOORS



LATCH SIDE APPROACH - SLIDING OR FOLDING DOORS



SLIDE SIDE APPROACH - SLIDING OR FOLDING DOORS

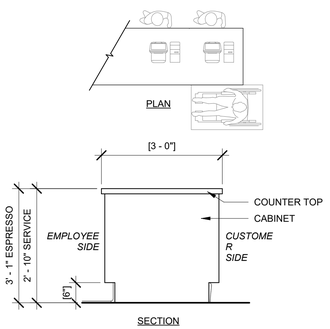


TWO HINGED DOORS IN SERIES

SECTION 404

24 DOORS

1/4" = 1'-0"

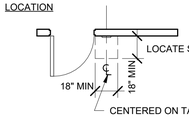


SECTION 904

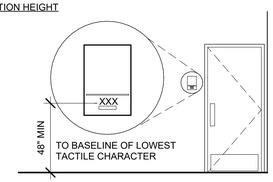
20 CHECK OUT/ SALES/ SERVICE

1/4" = 1'-0"

LOCATION



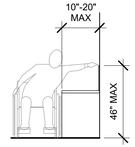
INSTALLATION HEIGHT



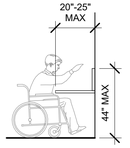
SECTION 703

9 TACTILE SIGNS

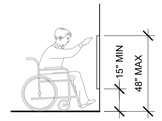
1/4" = 1'-0"



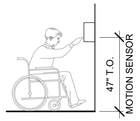
OBSTRUCTED SIDE REACH



OBSTRUCTED FORWARD REACH



UNOBSTRUCTED FORWARD REACH



AUTOMATIC PAPER TOWEL MOUNTING HEIGHT

SECTION 308

11 REACH RANGE

1/4" = 1'-0"

7/8/2022 3:34:53 PM

PB 2021.03.V1

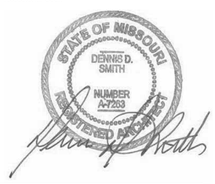
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

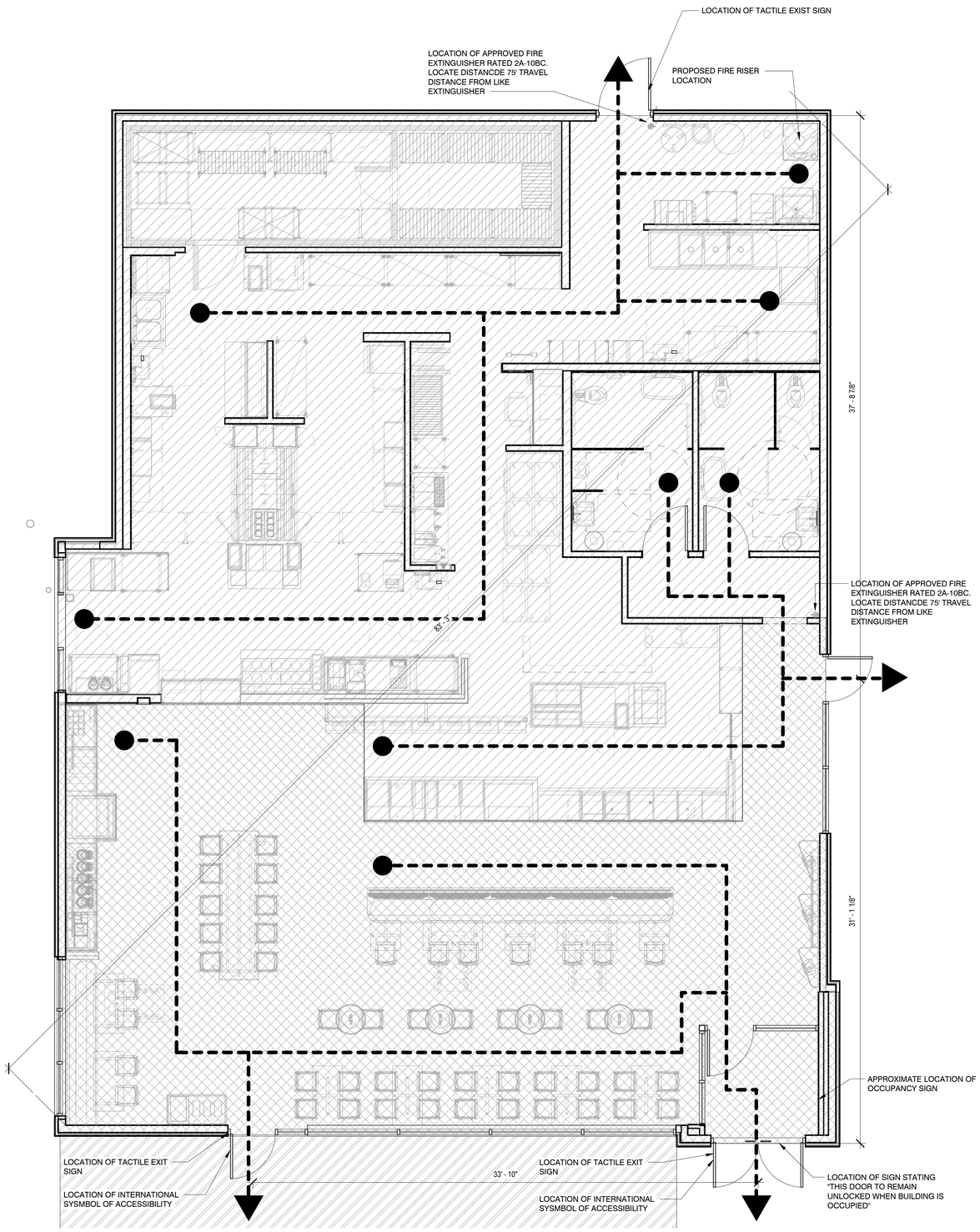
Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

ACCESSIBILITY GUIDELINES

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
DPM: DPM
DM: DM
CPM: CPM

Sheet Number: **G021**



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

GENERAL NOTES

A. TACTILE EXIT SIGNS TO BE MOUNTED BETWEEN 4'-6" AND 5'-0" AFF ON HINGE SIDE OF ALL EXTERIOR EXIT DOORS .

B. ONE 2A10BC DRY CHEMICAL FIRE EXTINGUISHER IS REQUIRED FOR EACH 3,000 SQ. FT. OF FLOOR AREA WITH THE TRAVEL DISTANCE NOT TO EXCEED 75 FEET.

C. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT USE OF KEY OR SPECIAL KNOWLEDGE OR EFFORT.

D. AT LEAST 5%, BUT NO LESS THAN ONE OF THE SEATING SPACES IN EACH FUNCTIONAL AREA SHALL BE ACCESSIBLE.
CALCULATION FOR NUMBER OF ACCESSIBLE SEATS:

(INTERIOR SEATS) 100 x 5% = 5
(EXTERIOR SEATS) 26 x 5% = 2

E. ACCESS TO ACCESSIBLE SEATING SPACES SHALL BE PROVIDED BY MAIN AISLES (ACCESSIBLE ROUTE) A MINIMUM WIDTH OF 36".

F. A MINIMUM OF 30" BY 48" CLEAR FLOOR SPACE SHALL BE PROVIDED AND SHALL NOT OVERLAP THE KNEE SPACE BY MORE THAN 14".

G. FIXED TABLES AND COUNTERS: HEIGHT OF TABLES NAD COUNTERS SHALL BE 28" MINIMUM AND 34" MAXIMUM.

H. MANEUVERING CLEARANCE: A MINIMUM OF 36" x 48" CLEAR FLOOR SPACE SHALL BE PROVIDED. KNEE CLEARANCE SHALL BE AT LEAST 27" HIGH, 30" WIDE AND 10" DEEP.

I. FINAL EXTINGUISHER LOCATIONS TO BE APPROVED BY FIRE MARSHAL.

APPLICABLE BUILDING CODES	
BUILDING CODE	2018 IBC
PLUMBING CODE	2018 IPC
ELECTRICAL CODE	2017 NATIONAL ELECTRICAL CODE
MECHANICAL CODE	2018 INTERNATIONAL MECHANICAL CODE
ENERGY CODE	
FIRE CODE	2018 INTERNATIONAL FIRE CODE
ACCESSIBILITY CODE	2009 AMERICANS WITH DISABILITIES ACT, ICC/ ANSI A117.1
BUILDING INFORMATION	
CONSTRUCTION TYPE	TYPE V - B
SPRINKLERED	BUILDING IS NON-SPRINKLERED

LEGEND

DINING AREA & CAFE AREA: 1,370 SQ. FT.
KITCHEN AREA AREA: 2,123 SQ. FT.
PATIO AREA AREA: 465 SQ.FT.

INTERIOR AREA (NET): 3,493 SQ. FT
PATIO AREA: 465 SQ FT

ALLOWABLE AREA	
PER 2018 IBC	
PRIMARY OCCUPANCY	A-2 | ASSEMBLY
MAXIMUM ALLOWABLE BUILDING AREA	6000 SF, ACTUAL 3,493
TRAVEL DISTANCE (PER 2018 IBC TABLE 1016.2)	250FT ALLOWED (SPRINKLED) | 112 FT ACTUAL

OCCUPANT LOAD

OCCUPANT LOAD COUNT TABLE PER 2018 IBC TABLE 1004.1.2

	FUNCTION OF SPACE	OCCUPANT LOAD FACTOR	AREA (SQFT)	OCCUP-ANTS
DINING AREA	UNCONCENTRATED	15	1370	91
KITCHEN	KITCHEN: COMMERCIAL	200	2123	11
FIXED SEATING				**77**
EXTERIOR SEATING				
PATIO			SEAT COUNT	16
TOTAL INTERIOR OCCUPANTS:				**60**
TOTAL OCCUPANTS (INCLUDING PATIO):				**77**

EXIT REQUIRMENTS	
PER 2018 IBC SECTION 1015.2.1	
LONGEST INTERIOR DIAGONAL DIMENSION	83'-3"
MIN. DISTANCE BETWEEN DOORWAYS (SPRINKLED)	83'-3"/3 = 27'-9"
ACTUAL DISTANCE BETWEEN CLOSEST DOORWAYS	**31'-0"**

ALLOWABLE EGRESS WIDTH

PER 2018 IBC SECTION 1005.3.2

	OCCUPANTS	FACTOR (IN.)	(IN.)
INTERIOR W/ SPRINKLER SYSTEM	179	0.15	26.85
EXTERIOR PATIO SPACE W/OUT SPRINKLER	28	0.20	5.60
MINIMUM EGRESS OPENING WIDTH REQUIRED			32.45
MINIMUM DOOR SIZE (PER 1008.1.1) [CLEAR OPENING]			32.00
	MAIN EXIT (IN.)	SECONDARY (IN.)	TOTAL (IN.)
ACTUAL EGRESS OPENING WIDTH PROVIDED	68	33.625	**101.625**

PLUMBING CALCULATIONS

PER 2018 IPC

BUILDING OCCUPANCY (TOTAL)	207				
			TOTAL MEN/WOMEN		**104.0**
	WATER CLOSETS		LAVATORIES		OTHER
BUILDING ASSEMBLY	MALE	FEMALE	MALE	FEMALE	
A-2	1:100	1:100	1:200	1:200	1 SERVICE SINK
REQUIRED	2	2	1	1	1
PROVIDED	**1+1 URNIAL**	**2**	**1**	**1**	**1**

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

STATE OF MISSOURI
DENNIS D. SMITH
NUMBER A-7203
REGISTERED ARCHITECT

Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date
A	Shell - Permit Set	7/5/2022

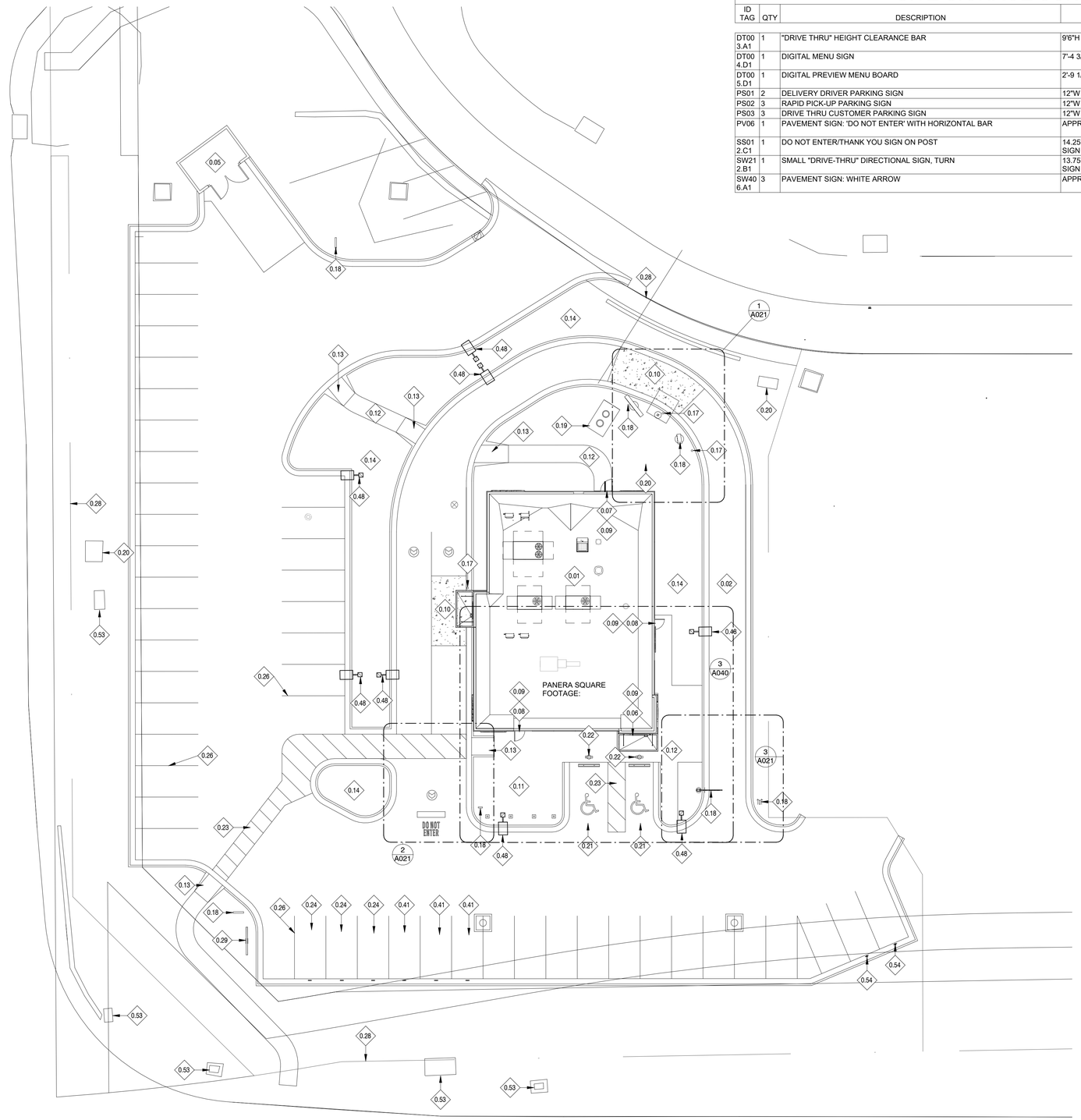
LIFE SAFETY PLAN

Project Number: 2406
Drawn By: Author
Issue Date: **07/05/2022**
DPM: DPM DM: DM CPM: CPM

Sheet Number: **G131**

7/8/2022 3:34:57 PM

P8.2021.03.V1



24 SITE PLAN
1/16" = 1'-0"

SITE SIGNAGE SCHEDULE

ID TAG	QTY	DESCRIPTION	SIZE	MOUNTING INSTRUCTIONS	DETAIL/ REF.
DT003.A1	1	"DRIVE THRU" HEIGHT CLEARANCE BAR	9'6"H x 6'9"L	REFER TO SHOP DRAWINGS	
DT004.D1	1	DIGITAL MENU SIGN	7'-4 3/8"W X 1'-1 3/8"D X 6'-2"H	REFER TO SHOP DRAWINGS	
DT005.D1	1	DIGITAL PREVIEW MENU BOARD	2'-9 1/2"W X 1'-1 3/8"D X 6'-2"H	REFER TO SHOP DRAWINGS	
PS01	2	DELIVERY DRIVER PARKING SIGN	12"W x 18"H	SEE DETAIL	N/A
PS02	3	RAPID PICK-UP PARKING SIGN	12"W x 18"H	SEE DETAIL	N/A
PS03	3	DRIVE THRU CUSTOMER PARKING SIGN	12"W x 18"H	SEE DETAIL	N/A
PV06	1	PAVEMENT SIGN: 'DO NOT ENTER' WITH HORIZONTAL BAR	APPROX. 8'0"W	REFER TO SHOP DRAWINGS	
SS012.C1	1	DO NOT ENTER/THANK YOU SIGN ON POST	14.25"W X 4" D X 36"H; 20.5"H SIGN FACE	REFER TO SHOP DRAWINGS	
SW212.B1	1	SMALL "DRIVE-THRU" DIRECTIONAL SIGN, TURN	13.75"W x 4"D x 36"H; 21.25"H SIGN FACE	REFER TO SHOP DRAWINGS	
SW406.A1	3	PAVEMENT SIGN: WHITE ARROW	APPROX. 2'10"W	REFER TO SHOP DRAWINGS	

GENERAL NOTES:

A. SITE PLAN PROVIDED FOR REFERENCE. REFER TO CIVIL DOCUMENTS FOR ADDITIONAL INFORMATION.
B. LANDSCAPE HAS BEEN INTENTIONALLY EXCLUDED FROM THIS SHEET. SEE CIVIL DRAWINGS FOR ALL LANDSCAPE INFORMATION AND REQUIREMENTS.
C. ALL WORK SHALL COMPLY WITH THE REGULATION AND ORDINANCES OF LEE SUMMIT, MO AND ANY OTHER APPLICABLE CODES.
D. THE GENERAL CONTRACTOR (G.C.) SHALL CONTACT LOCAL UTILITIES TO VERIFY ALL SIZES, LOCATIONS, AND CONNECTION POINTS FOR ALL UTILITIES AFFECTED.
E. ANY CONNECTIONS, DISCONNECTIONS, AND INSTALLATIONS TO LOCAL UTILITIES SHALL BE MADE IN ACCORDANCE WITH APPLICABLE CODES.
F. EXTERIOR BUILDING SIGN FURNISHED AND INSTALLED BY OWNER'S SIGN VENDOR, G.C. TO PROVIDE POWER.
G. G.C. TO VERIFY EXISTING SITE CONDITIONS PRIOR TO BID. ALSO PROVIDE CONTINUOUS CURB CUTS AND SMOOTH PAVEMENT & CURB TRANSITIONS BETWEEN NEW AND EXISTING CONDITIONS AS REQUIRED FOR SITE WORK AS REQUIRED.
H. G.C. SHALL PROVIDE AND INSTALL ELECTRICAL CONDUIT AND STRUCTURAL FOOTINGS FOR ALL NEW SITE DRIVE-THRU SIGNAGE (TYPICAL).
I. REFER TO CIVIL DOCUMENTS FOR GENERAL SITE LIGHTING.

KEYED NOTES

0.01 PROPOSED PANERA CAFE SPACE.
0.02 DRIVE THRU LANE, INSTALLED BY PANERA GC. REFER TO CIVIL DRAWINGS.
0.05 PROPOSED TRASH ENCLOSURE AND CONCRETE PAD BY PANERA GC; EXTERIOR MATERIALS TO MATCH MAIN BUILDING. REFER TO SHEET A020.
0.06 PRIMARY TENANT BUILDING ENTRANCE.
0.07 REAR SERVICE DOOR LOCATION; REFER TO SHEET A101 AND A601 FOR ADDITIONAL INFORMATION.
0.08 SECONDARY ENTRANCE, REFER TO SHEET A101 FOR FURTHER INFORMATION.
0.09 G C. TO PROVIDE MAXIMUM THRESHOLD HEIGHT OF 1/2"
0.10 DRIVE-THRU CONCRETE PAD, PROVIDED BY PANERA GC; REFER TO CIVIL DRAWINGS AND SHEET A021 FOR ADDITIONAL INFORMATION.
0.11 CONCRETE PATIO PROVIDED BY PANERA GC; REFER TO SHEET A040 FOR ADDITIONAL INFORMAITON. CORRDINATE WITH TENANT DRAWINGS FOR UNDERGROUND CONDUIT(S) FOR PATIO LIGHTING.
0.12 PROPOSED CONCRETE SIDEWALK BY PANERA GC, PROVIDE BROOM FINISH PERPENDICULAR TO BUILDING, TYPICAL. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
0.13 ACCESSIBLE RAMP, PROVIDED BY PANERA GC; REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND DETAILS.
0.14 PROPOSED LANDSCAPE AREA; REFER TO LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION TO UTILIZE LOCAL FLORA.
0.17 6" CONCRETE PIPE BOLLARD, REFER TO SITE DETAILS, INSTALLED BY PANERA GC.
0.18 NEW DRIVE THRU SIGNAGE; SEE SHEET A023 FOR FURTHER INFORMATION. ALSO SEE SHOP DRAWINGS.
0.19 PROPOSED GREASE INTERCEPTOR LOCATION; REFER TO CIVIL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. INSTALLED BY PANERA GC.
0.20 ELECTRICAL TRANSFORMER LOCATION ON CONCRETE PAD BY PANERA GC; REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
0.21 PROPOSED ACCESSIBLE PARKING STALL; REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
0.22 BOLLARD MOUNTED ACCESSIBLE SIGNAGE, INSTALLED BY PANERA; REFER TO SITE DETAILS FOR FURTHER REFERENCE.
0.23 PROPOSED PAINTED STRIPED CROSS WALK; REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
0.24 PROPOSED RAPID PICK-UP PARKING LOCATIONS AND BOLLARD MOUNTED SIGNAGE. REFER TO SITE DETAILS & VENDORS SHOP DRAWINGS FOR SIGNAGE INFORMATION.
0.26 PARKING STRIPING; REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
0.28 PROPERTY LINE, REFER TO CIVIL DRAWINGS FOR FURTHER INFORMATION.
0.29 PROPOSED PANERA MONUMENT SIGN-CONSTRUCTED BY PANERA; TENANT SIGN PANEL BY SIGNAGE VENDOR COMPANY.
0.41 DRIVE THRU PULL FORWARD SPACE AND SIGNAGE, REFER TO SITE DETAILS.
0.48 SITE POLE LIGHTING BY PANERA. REFER TO SITE DETAILS AND CIVIL FOR FURTHER INFORMATION.
0.53 PULL BOX.
0.54 DELIVERY DRIVER PARKING SIGN.

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

STATE OF MISSOURI
DENNIS D. SMITH
NUMBER A-7203
REGISTERED ARCHITECT

Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

ARCHITECTURAL SITE PLAN

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
Sheet Number: A001

DPM:	DM:	CPM:
DPM	DM	CPM

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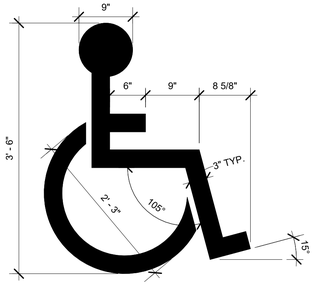
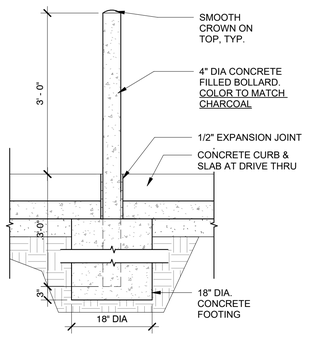
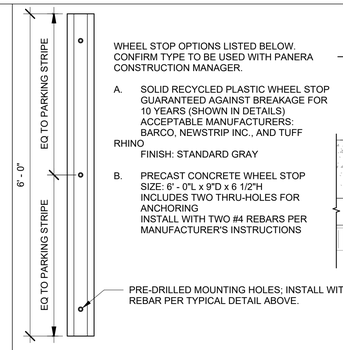


DETAIL NOTES
1. SYMBOL COLOR SHALL COMPLY WITH ALL LOCAL REGULATIONS.

21 HANDICAP SYMBOL DETAIL
1" = 1'-0"



17 BOLLARD DETAIL @ D.T. WINDOW
3/4" = 1'-0"



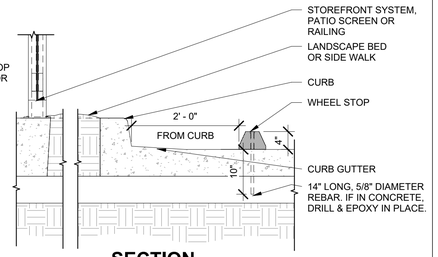
PLAN

WHEEL STOP OPTIONS LISTED BELOW. CONFIRM TYPE TO BE USED WITH PANERA CONSTRUCTION MANAGER.

A. SOLID RECYCLED PLASTIC WHEEL STOP GUARANTEED AGAINST BREAKAGE FOR 10 YEARS (SHOWN IN DETAILS)
ACCEPTABLE MANUFACTURERS: BARCO, NEWSTRIP INC., AND TUFF RHINO
FINISH: STANDARD GRAY

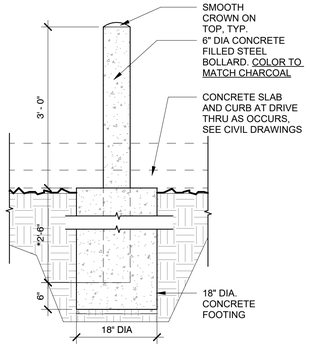
B. PRECAST CONCRETE WHEEL STOP
SIZE: 6' - 0"L x 9"D x 6 1/2"H
INCLUDES TWO THRU-HOLES FOR ANCHORING
INSTALL WITH TWO #4 REBARS PER MANUFACTURER'S INSTRUCTIONS

PRE-DRILLED MOUNTING HOLES; INSTALL WITH REBAR PER TYPICAL DETAIL ABOVE.

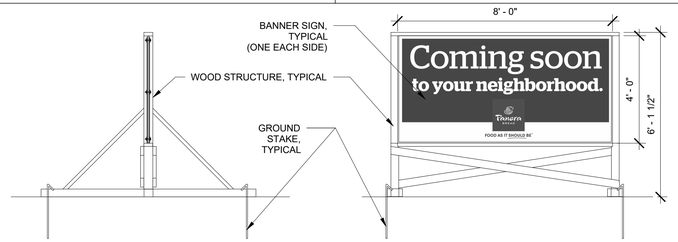


SECTION

13 DETAIL @ WHEEL STOP
3/4" = 1'-0"



18 BOLLARD DETAIL
3/4" = 1'-0"



SPECIFICATIONS:

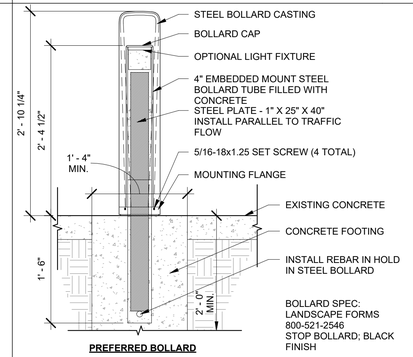
- ONE SIDED BANNER (WILL RECEIVE TWO TOTAL)
- MATERIAL: WHITE BANNER WITH GROMMETS
- GRAPHICS: DIGITALLY PRINTED
- HEIGHT: 3'-11 1/2"
- WIDTH: 7'-9 1/2"

INSTALLATION:

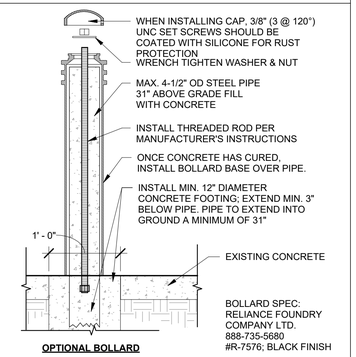
WOOD STRUCTURE FOR BARRICADE SIGN PROVIDED BY SIGN VENDOR; BANNERS PROVIDED BY PANERA

G.C. TO INSTALL BOTH STRUCTURE AND BANNERS PER PANERA PROVIDED INSTRUCTIONS AND PLACEMENT LOCATION(S).

24 CONSTRUCTION BARRICADE BANNER SIGN DETAIL
3/8" = 1'-0"

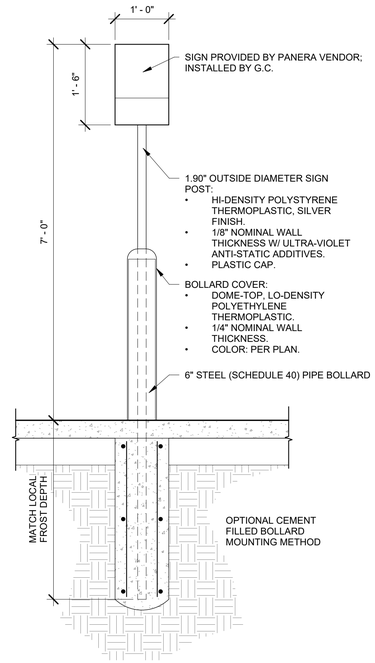


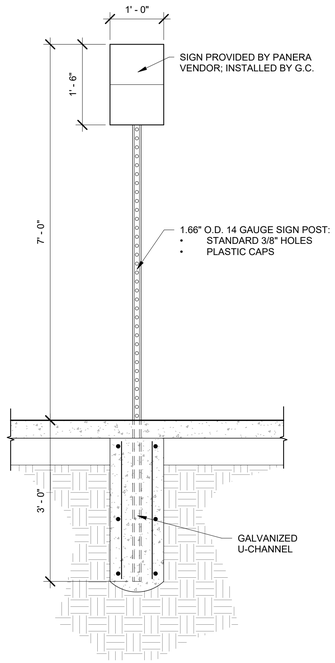
PREFERRED BOLLARD



OPTIONAL BOLLARD

16 DECORATIVE ANTI-RAM BOLLARD
1" = 1'-0"





8 DETAIL @ DELIVERY/RPU PARKING SIGN
3/4" = 1'-0"

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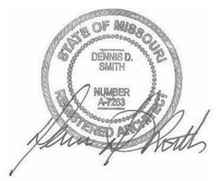
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



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PROTOTYPE - NEW CONSTRUCTION - SHELL

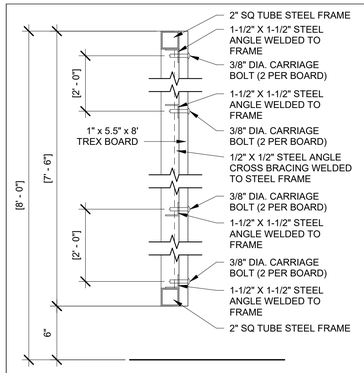
Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

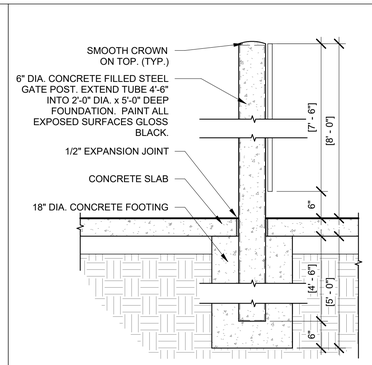
SITE DETAILS

Project Number: 2406
Sheet Number: **A002**
Drawn By: EB
Issue Date: **07/05/2022**
DPM: DPM
DM: DM
CPM: CPM



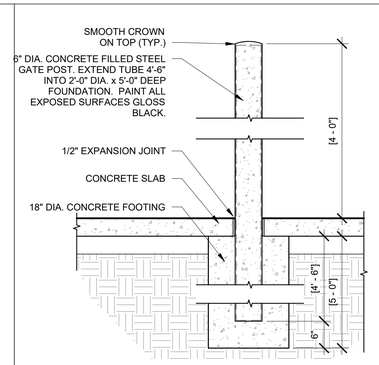
17 DETAIL @ TRASH GATE FRAMING

1 1/2" = 1'-0"



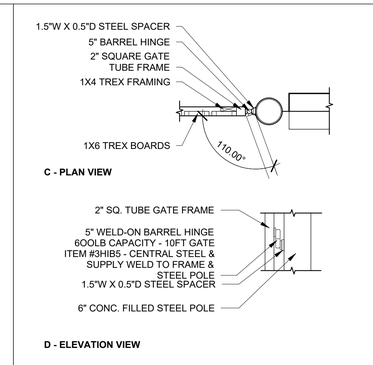
2 GATE POST DETAIL

3/4" = 1'-0"



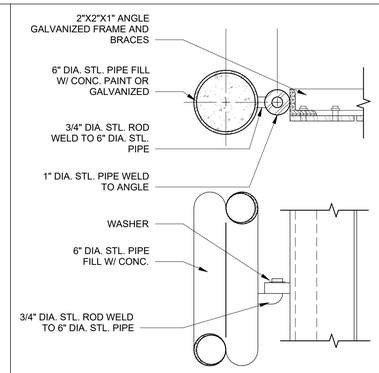
3 DUMPSTER BOLLARD DETAIL

3/4" = 1'-0"



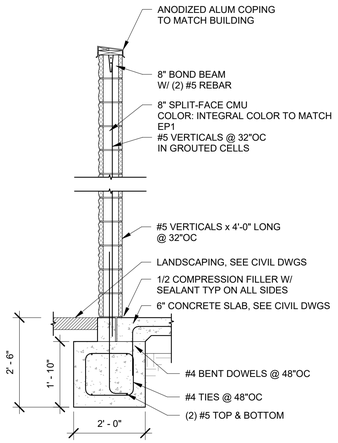
5 DTL @ TRASH ENCLOS GATE HINGE

3/4" = 1'-0"

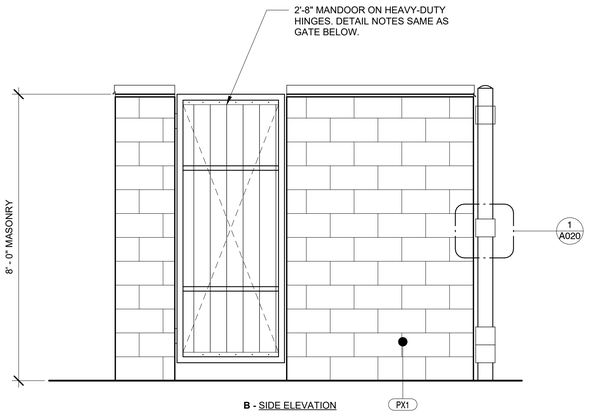


1 TRASH ENCLOSURE DETAIL

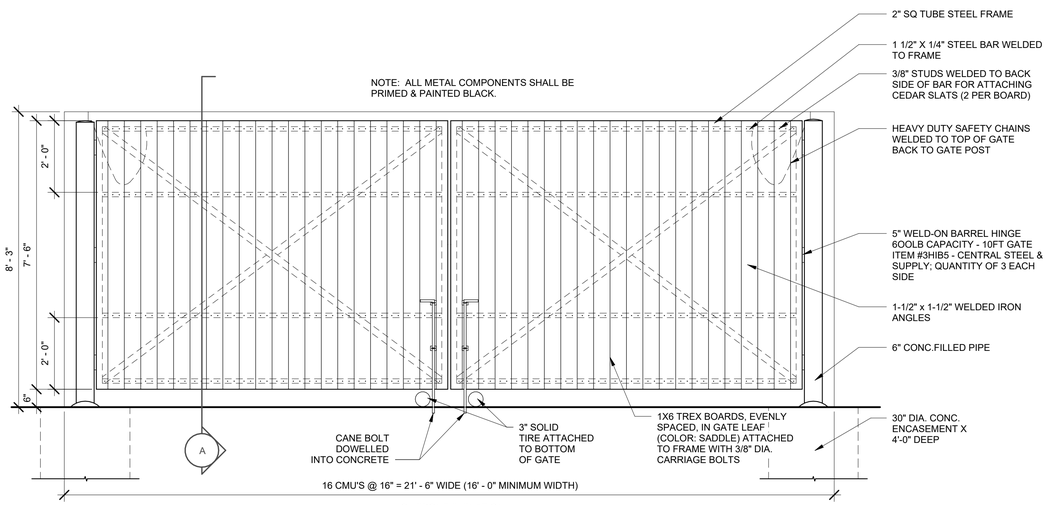
1 1/2" = 1'-0"



A - SECTION



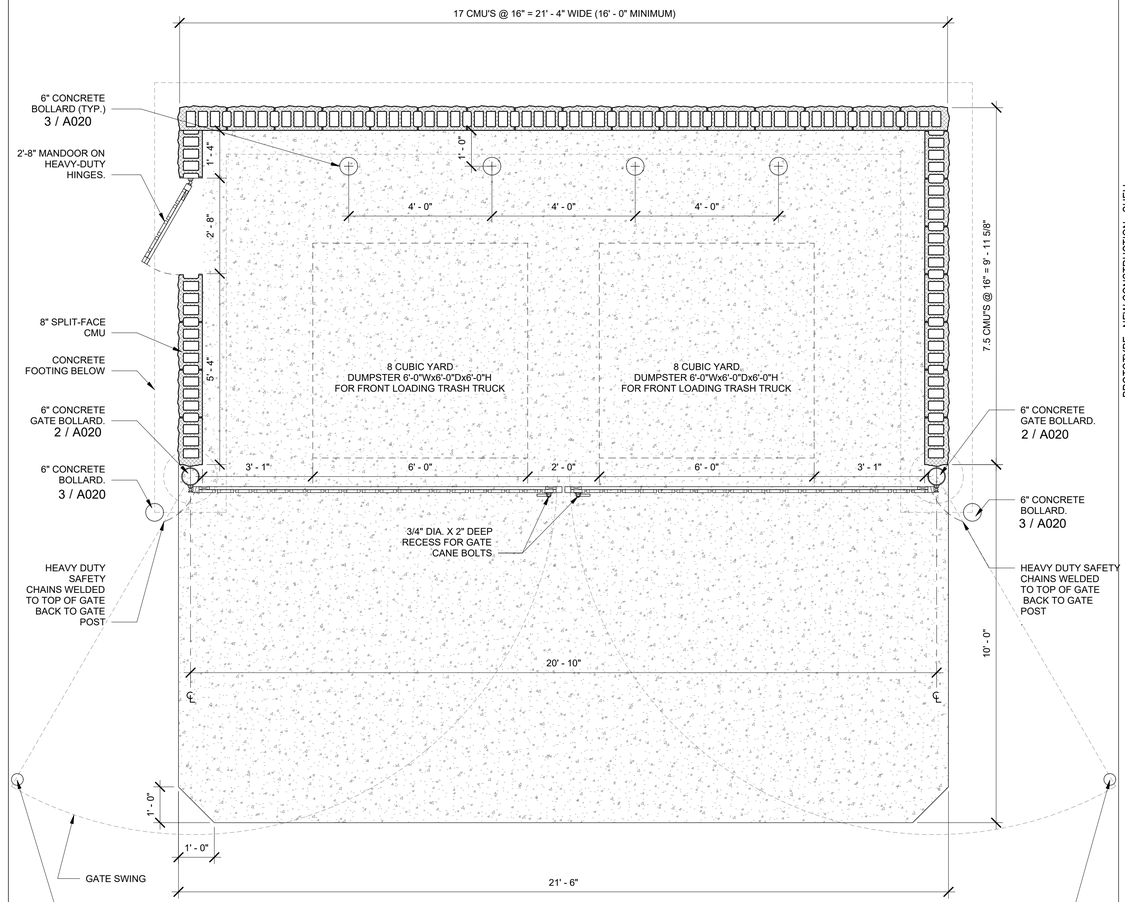
B - SIDE ELEVATION



C - FRONT ELEVATION

24 TRASH & RECYCLE ENCLOSURE DETAILS

1/2" = 1'-0"



PLAN - FRONT LOADING

COORDINATE CLEARANCES AND DUMPSTER SIZES WITH LOCAL TRASH COMPANY

12.3 PLAN @ TRASH & RECYCLE ENCLOSURE FOR FRONT LOADING TRUCK

1/2" = 1'-0"

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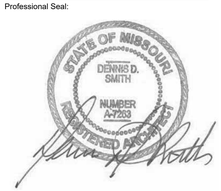
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

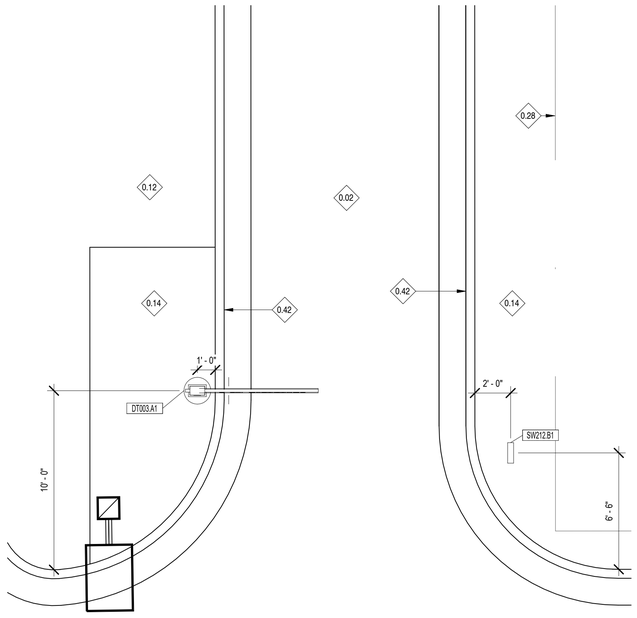
Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

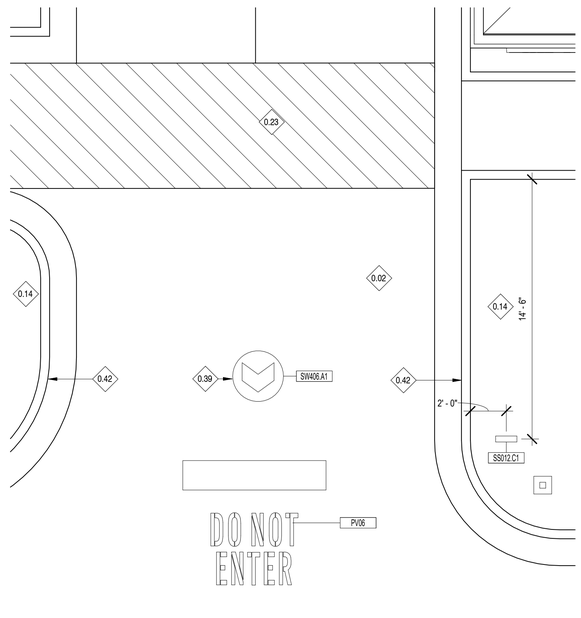
TRASH ENCLOSURE DETAILS

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
Sheet Number: A020

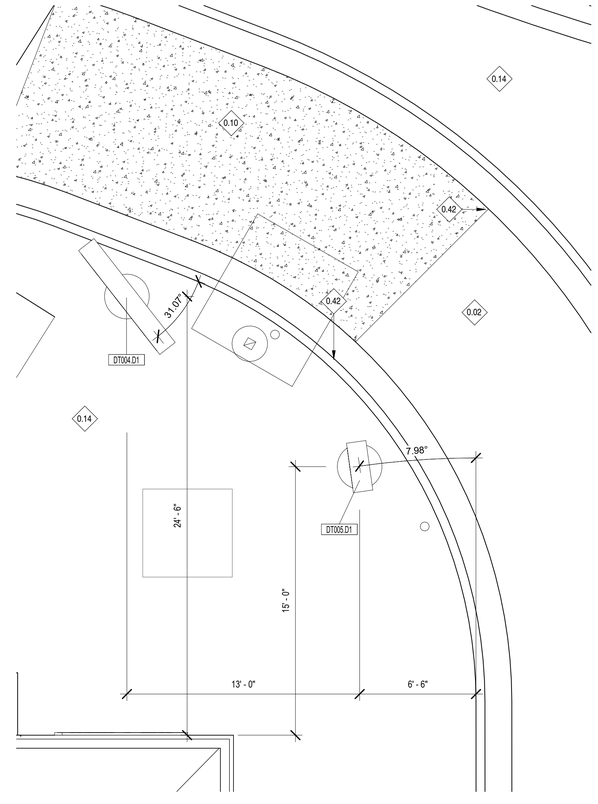
DPM:	DM:	CPM:
DPM	DM	CPM



3 SITE - ENLARGRED PLAN - DRIVE THRU ENTRY
1/4" = 1'-0"



2 SITE PLAN - ENLARGED DRIVE THRU EXIT
1/4" = 1'-0"



1 SITE PLAN - ENLARGED DRIVE THRU ORDERING PLAN
1/4" = 1'-0"

PR.2021.03.V1

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

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PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

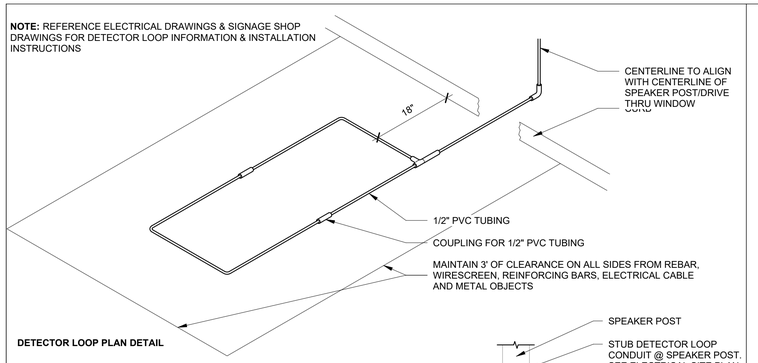
Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

SITE SIGNAGE PLAN

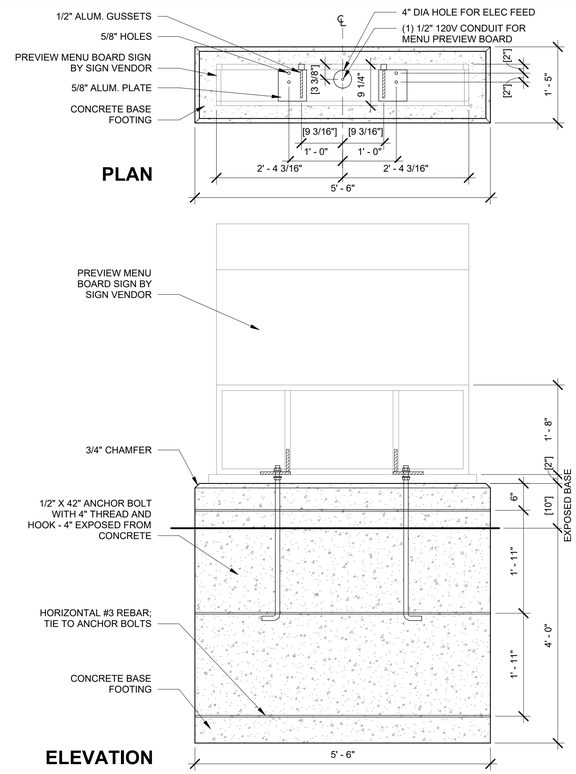
Project Number: 2406
Drawn By: EB
Issue Date: **07/05/2022**
Sheet Number: **A021**

DPM:	DM:	CPM:
DPM	DM	CPM



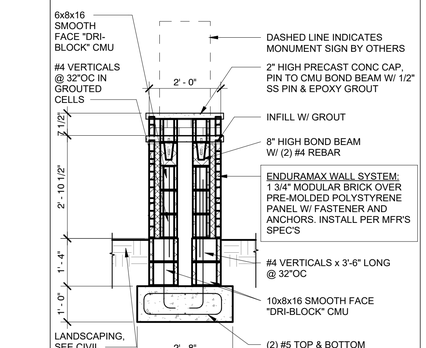
18 SECTION DETAILS @ DETECTOR LOOP IN CONCRETE PAD

3/4" = 1'-0"



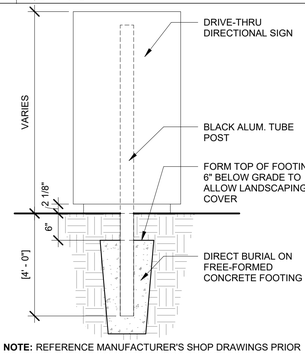
10 PREVIEW BOARD FOUNDATION ELEVATION DETAIL

3/4" = 1'-0"



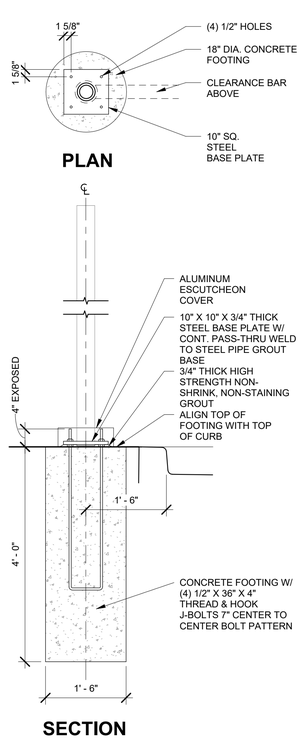
30 MONUMENT SIGN SECTION

1/2" = 1'-0"



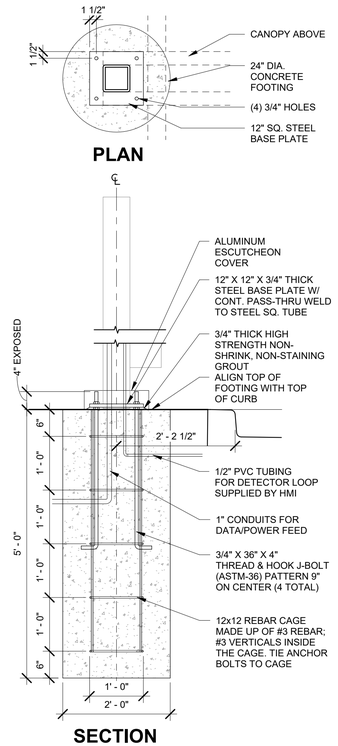
24 DIRECTIONAL SIGN FOUND. DTL

3/4" = 1'-0"



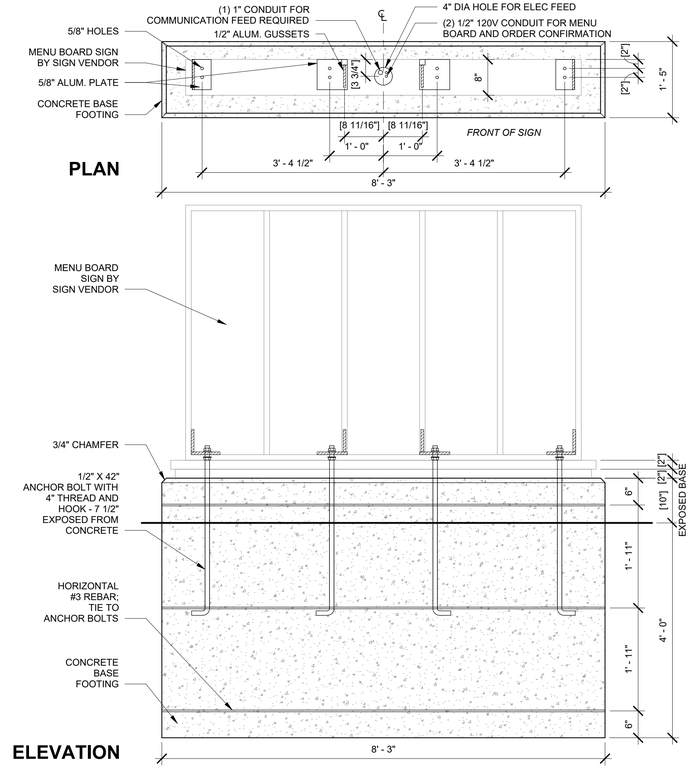
20 FOUND. DTL @ CLEARANCE BAR

3/4" = 1'-0"



16 FOUNDATION DETAIL @ CANOPY

3/4" = 1'-0"



12 MENU SIGN FOUNDATION ELEVATION DETAIL

3/4" = 1'-0"

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PROTOTYPE - NEW CONSTRUCTION - SHELL

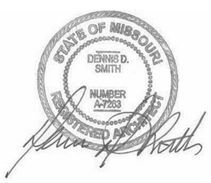
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date
A	Shell - Permit Set	7/5/2022

SITE SIGNAGE DETAILS

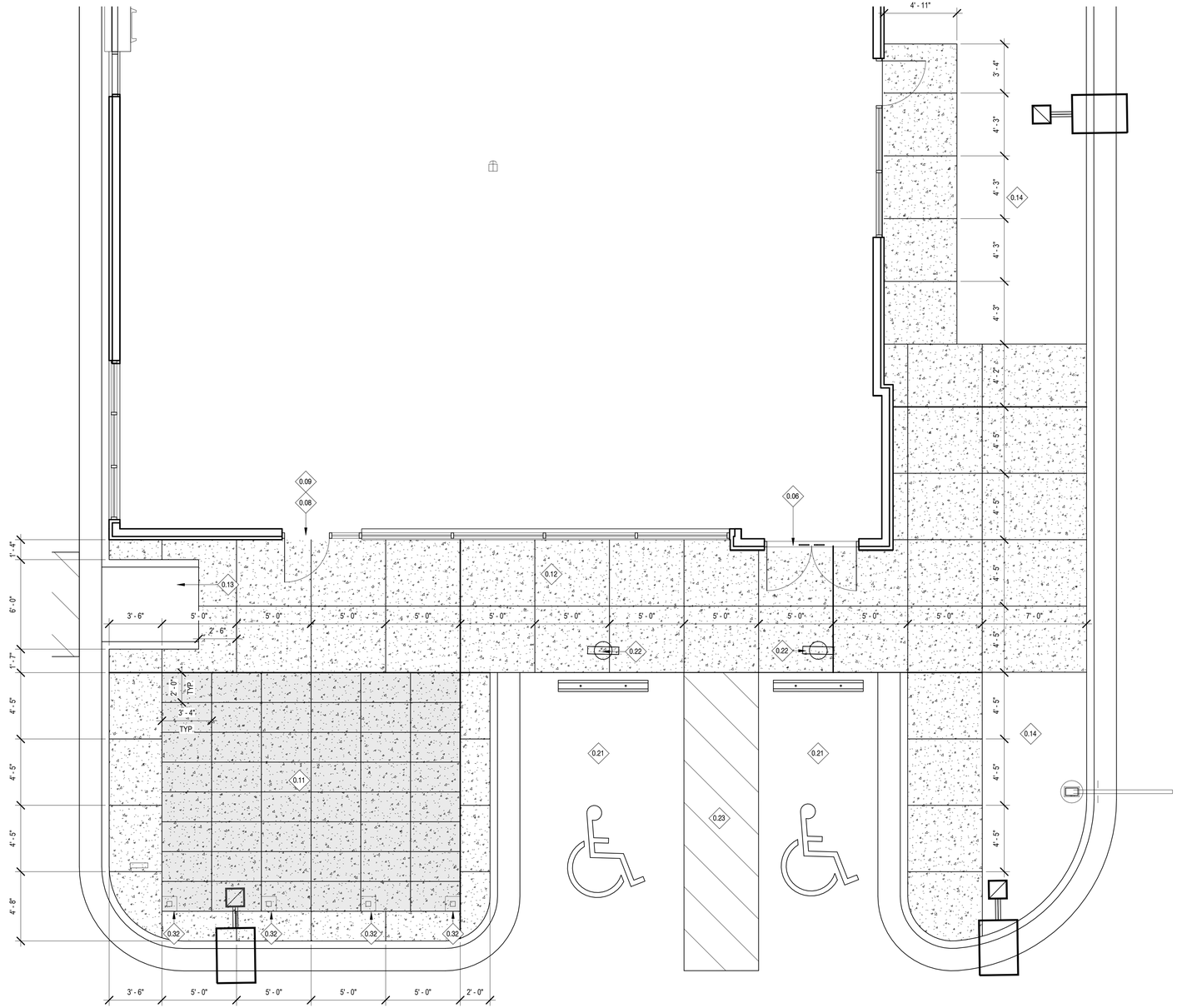
Project Number: 2406

Drawn By: EB

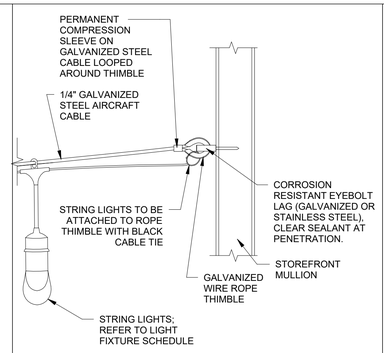
Issue Date: 07/05/2022

DPM: DPM | DM: DM | CPM: CPM

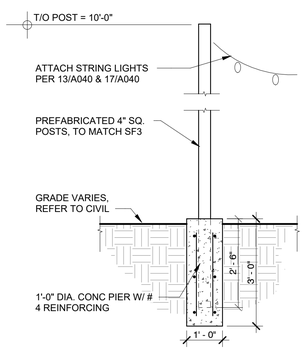
Sheet Number: **A023**



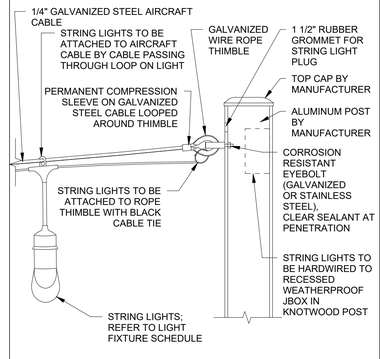
3 SITE PLAN - ENLARGED PATIO PLAN
1/4" = 1'-0"



1.1 STRING LIGHT W/ WALL OUTLET
1" = 1'-0"



2 POST BASE @ STRING LIGHTS
1/2" = 1'-0"



1 STRING LIGHT @ POLE
1" = 1'-0"

KEYED NOTES

0.06 PRIMARY TENANT BUILDING ENTRANCE.
0.08 SECONDARY ENTRANCE, REFER TO SHEET A101 FOR FURTHER INFORMATION.
0.09 G.C. TO PROVIDE MAXIMUM THRESHOLD HEIGHT OF 1/2"
0.11 CONCRETE PATIO PROVIDED BY PANERA GC; REFER TO SHEET A040 FOR ADDITIONAL INFORMAITON. CORRDINATE WITH TENANT DRAWINGS FOR UNDERGROUND CONDUIT(S) FOR PATIO LIGHTING.
0.12 PROPOSED CONCRETE SIDEWALK BY PANERA GC, PROVIDE BROOM FINISH PERPENDICULAR TO BUILDING, TYPICAL. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
0.13 ACCESSIBLE RAMP, PROVIDED BY PANERA GC; REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION AND DETAILS.
0.14 PROPOSED LANDSCAPE AREA; REFER TO LANDSCAPE DRAWINGS FOR ADDITIONAL INFORMATION TO UTILIZE LOCAL FLORA.
0.21 PROPOSED ACCESSIBLE PARKING STALL; REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
0.22 BOLLARD MOUNTED ACCESSIBLE SIGNAGE, INSTALLED BY PANERA; REFER TO SITE DETAILS FOR FURTHER REFERENCE.
0.23 PROPOSED PAINTED STRIPED CROSS WALK; REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
0.32 PATIO STRING LIGHT WITH PREFABRICATED POSTS BY PANERA GC.

LEGEND

NOTE: REFER TO SHEET A531 FOR FINISH SPECIFICATIONS

- CONCRETE - BROOM FINISH
- PROPOSED STAMPED CONCRETE PATIO, COLOR: SCOFIELD INTEGRAL COLOR SG, METALLIC GREY AND PRAIRIE BEIGE, PANERA TO SELECT COLOR FROM APPROVED MOCKUP. PROVIDE BROOM FINISH PERPENDICULAR TO BUILDING, TYP. CONCRETE TO BE SEALED WITH V-SEAL, 102 WINTERGUARD OR EQUAL AND CLEAR GUARD, CURE AND SEAL OR EQUAL. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
- EXPANSION JOINT
- CONTROL JOINT

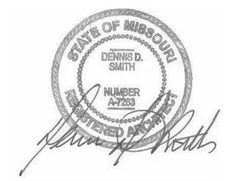
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

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1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

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No.	Description	Date
A	Shell - Permit Set	7/5/2022

ENLARGED PATIO PLAN/DETAILS

Project Number: 2406
Drawn By: EB
Issue Date: **07/05/2022**
Sheet Number: **A040**

DPM:	DM:	CPM:
DPM	DM	CPM

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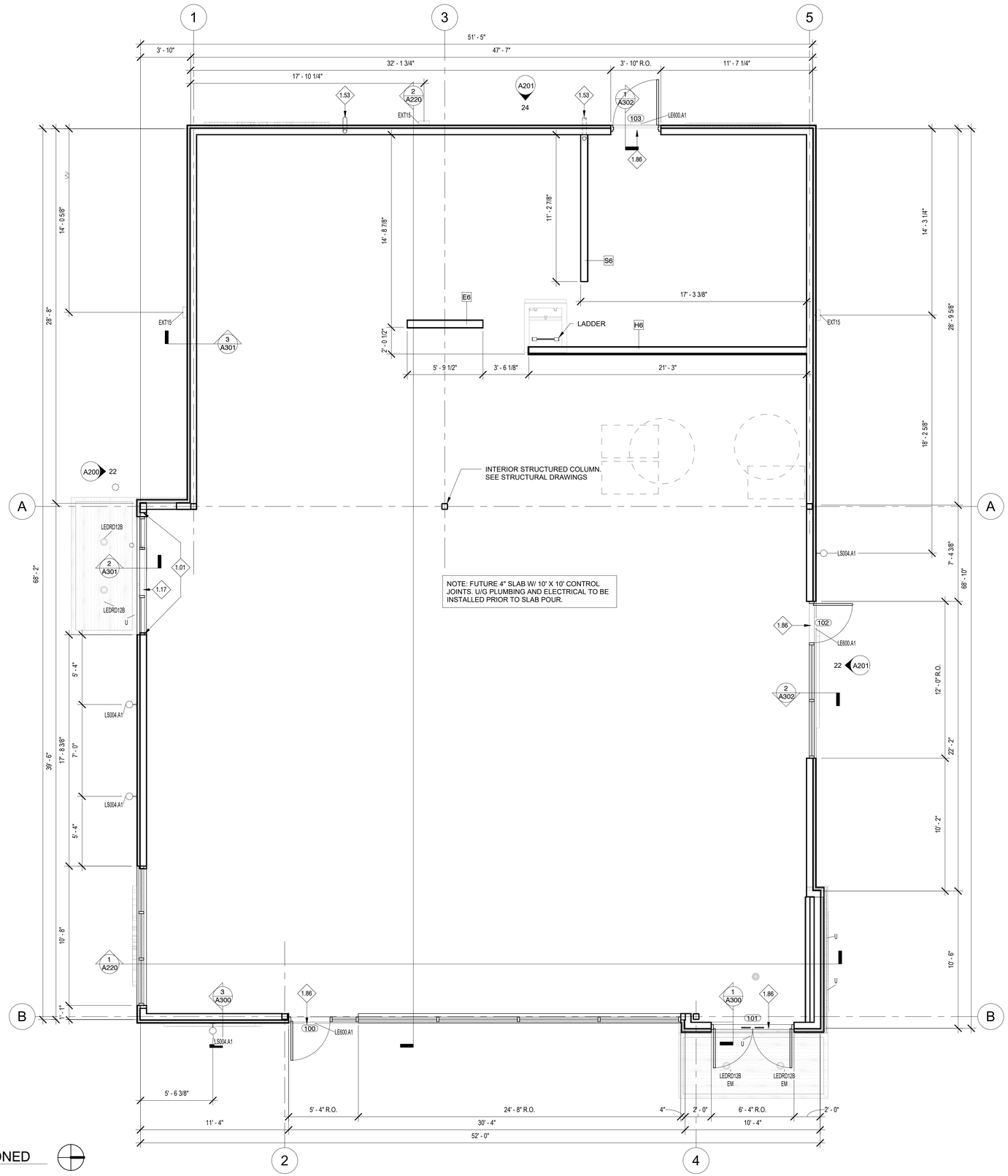

24 FLOOR PLAN - DIMENSIONED
1/4" = 1'-0"

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PB 2021.03.V1

GENERAL NOTES:

A. ALL DIMENSIONS NOTED ARE FROM FACE OF DRYWALL TO FACE OF DRYWALL.
B. ELECTRICAL EQUIPMENT BY G.C. SEE ELECTRICAL DRAWINGS.
C. PLUMBING EQUIPMENT BY G.C. SEE PLUMBING DRAWINGS.

KEYED NOTES

1.01 SOLID SURFACE SILL PROVIDED BY CASEWORK SUPPLIER, INSTALLED BY GC; COLOR: SS28. DIMENSIONS TO BE FIELD VERIFIED.
1.17 18 GA STAINLESS STEEL INFILL PANEL AT JAMB AND HEAD OF DRIVE THRU WINDOW. REFER TO SHEET 304
1.53 RUN ROOF DRAIN LEADERS DOWN EXTERIOR WALLS, RUN OVERFLOW LEADERS DOWN WALL AND CONNECT TO DOWNSPOUT NOZZLE ON EXTERIOR WALL. KEEP LEADERS AS TIGHT TO THE ROOF STRUCTURE AS POSSIBLE. SEE SHELL PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
1.86 EXTERIOR DOOR OPENING. REFER TO STRUCTURAL FOR FURTHER INFORMATION.

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

STATE OF MISSOURI
DENNIS D. SMITH
NUMBER A-7203
REGISTERED ARCHITECT

Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date
A	Shell - Permit Set	7/5/2022

FLOOR & LIGHTING PLAN - DIMENSIONED

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
DPM: DPM
DM: DM
CPM: CPM

Sheet Number: **A101**

LIGHTING SCHEDULE

ID TAG	QTY.	DESCRIPTION	MANUFACTURER	SUPPLIER	MODEL #	VOLTAGE	LAMP TYPE	FIXTURE LOCATION	MOUNTING TYPE	NOTES
EXT15	3	'SCOOP' LED WALL MOUNT	WAC LIGHTING	STANDARD ELECTRIC	WS-W20506-XX	120	LED	EXTERIOR	WALL	"XX" REFERS TO COLOR OF FIXTURE: AL-ALUM, BK-BLACK, BZ-BRONZE, GH-GRAPHITE, WH-WHITE. FIXTURE CAN BE MOUNTED AS DOWNLIGHT OR UPLIGHT
LE600.A1	3	LINEAR LED EGRESS WITH BOTH EM AND NL FUNCTION W/ BATTERY BACK-UP	MULE LIGHTING, INC	STANDARD ELECTRIC	EUE-BB-10-A-W-SD	120V	LED	EMERGENCY EGRESS	SURFACE	REQUIRES STANDARD 'MASONRY SIZED BOX' [3.75X3.5X7.375] (BY CONTRACTOR) FOR REMOTE POWER SUPPLY; REFER TO SPECIFICATION SHEET
LEDRD12B	2	6" LED ULTRA-THIN RECESSED DOWNLIGHT	LITELINE CORPORATION		SLMPRO6-27K-WH		15W LED			
LEDRD12B EM	2	6" LED ULTRA-THIN RECESSED DOWNLIGHT, EMERGENCY BACKUP	LITELINE CORPORATION		SLMPRO6-27K-WH		15W LED			
LS004.A1	4	WALL SCONCE	SCHOOLHOUSE	LIGHTING SUPPLIER	112644-BK; ISAAC SHORT SCONCE	120	(1) 5W LED G16: TCP LED5E26G1627K, CLEAR	DINING ROOM	WALL	BLACK FINISH; SEE ELEVATIONS FOR MOUNTING HEIGHT
U	4	LINEAR ACCENT	TEMPO		C4X-24DC-C CL-0-2-20-WH		5W/FT LEF			C4X 24AC 2538 0 5 30H WH NARROW BEAM

NOTES:
1. SEE PHOTOMETRIC FOR EXTERIOR SITE LIGHTING.

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLASS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

LIGHTING SCHEDULE, DETAILS, & SECTIONS

Project Number: 2406
Drawn By: EB
Issue Date: **07/05/2022**
DPM: DPM
DM: DM
CPM: CPM

Sheet Number: **A131**

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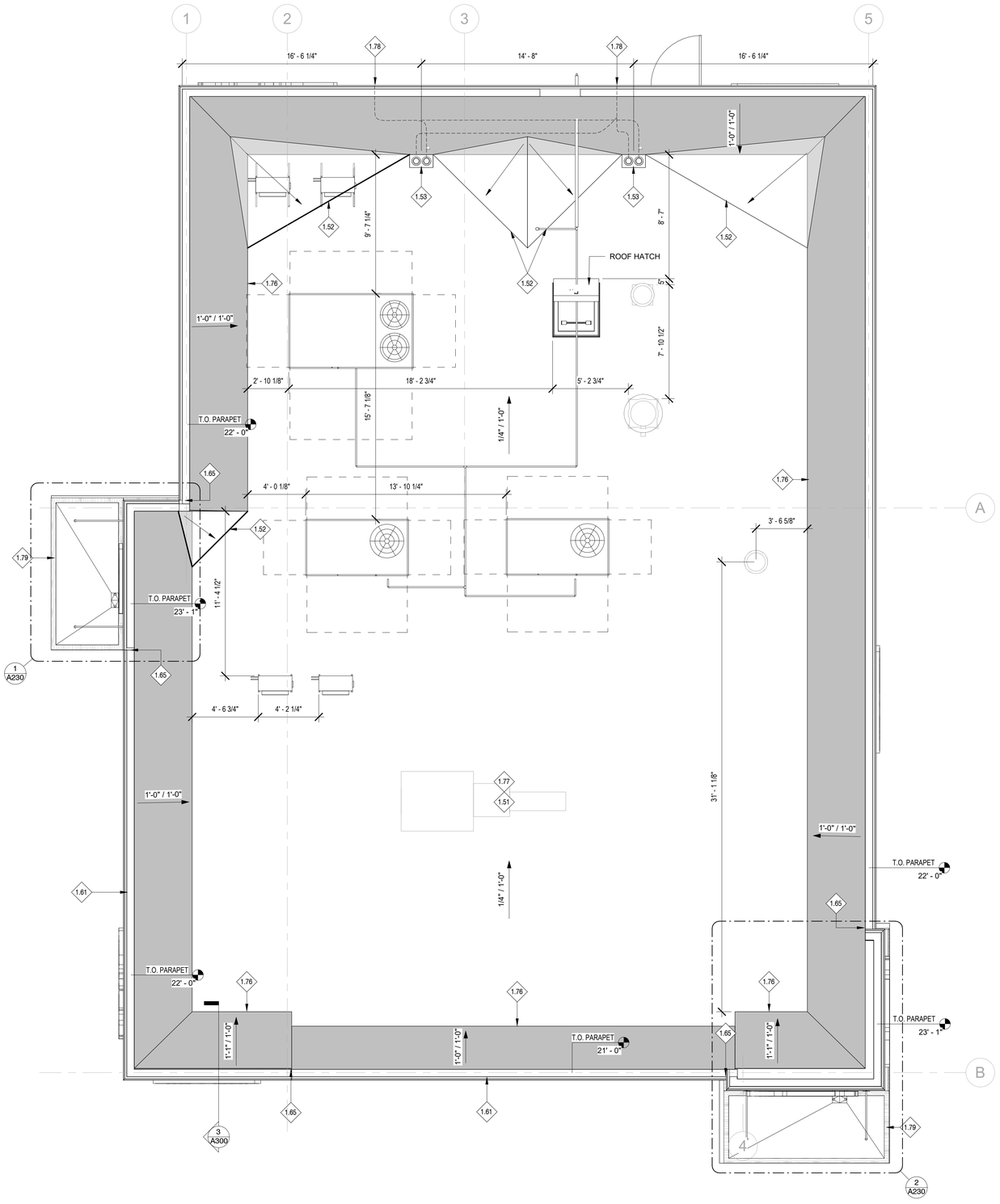
PB 2021 Q3.V1



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

GENERAL NOTES:

A. GC SHALL COORDINATE THE ANCHORING AND INSTALLATION OF THE ROOF TOP CONDENSER UNITS WITH THE FOOD SERVICE EQUIPMENT.
B. REFER TO STRUCTURAL AND MEP DRAWINGS FOR RTU/CURB ANCHORING AND INSTALLATION.

KEYED NOTES

1.51 TAPERED INSULATION TO ROOF DRAIN/OVERFLOW DRAIN; SLOPE FOR POSITIVE DRAINAGE.
1.52 ROOF CRICKET; SLOPE FOR POSITIVE DRAINAGE.
1.53 RUN ROOF DRAIN LEADERS DOWN EXTERIOR WALLS, RUN OVERFLOW LEADERS DOWN WALL AND CONNECT TO DOWNSPOUT NOZZLE ON EXTERIOR WALL. KEEP LEADERS AS TIGHT TO THE ROOF STRUCTURE AS POSSIBLE. SEE SHELL PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
1.61 PRE-FINISHED METAL COPING. SEE EXTERIOR ELEVATIONS FOR SPECIFICATION AND COLOR.
1.65 TRANSITION BETWEEN HIGH PARAPET AND LOW PARAPET, PROVIDE METAL FLASHING AS REQUIRED.
1.76 REFERENCE STRUCTURAL PLANS FOR KICKER AT PARAPET.
1.77 SINGLE PLY CLASS 'C' ROOF MEMBRANE OR EQUAL, COLOR: WHITE, OVER PROTECTION BOARD, RIGID INSULATION AND SHEATHING OVER PLYWOOD DECKING.
1.78 COMBINATION ROOF DRAIN AND OVERFLOW DRAIN; SEE P01
1.79 PREFABRICATED ALUMINUM CANOPY BELOW PROVIDED WITH SCUPPERS/DOWNSPOUTS, INSTALLED BY GC.

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

STATE OF MISSOURI
DENNIS D. SMITH
NUMBER A-7203
REGISTERED ARCHITECT

Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

ROOF PLAN

Project Number: 2406
Drawn By: EB
Issue Date: **07/05/2022**
Sheet Number: **A140**

DPM:	DM:	CPM:
DPM	DM	CPM

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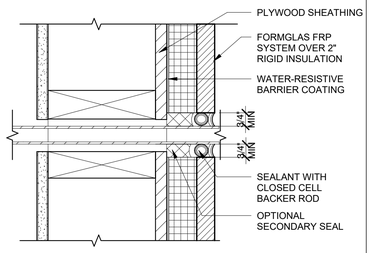
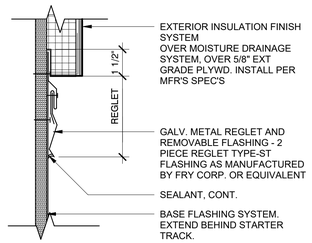
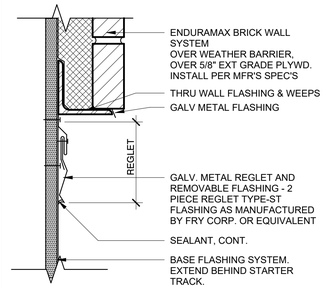
P8.2021.03.V1



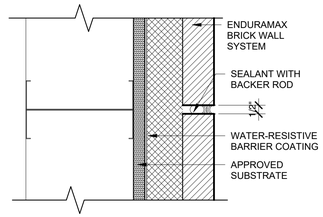
21 PENETRATION THRU EIFS
3" = 1'-0"



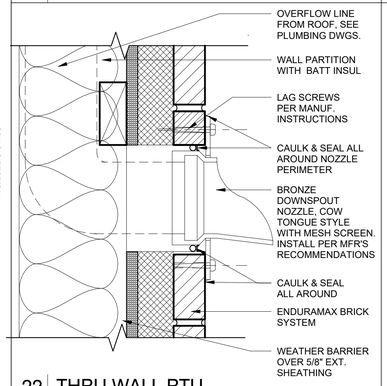
17 TYPICAL TRANSITION DETAIL
3" = 1'-0"



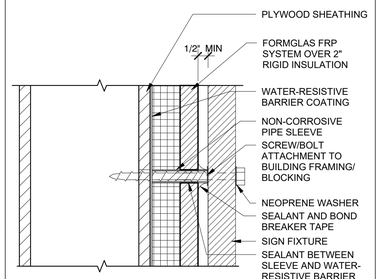
17.1 TYPICAL TRANSITION DETAIL
3" = 1'-0"



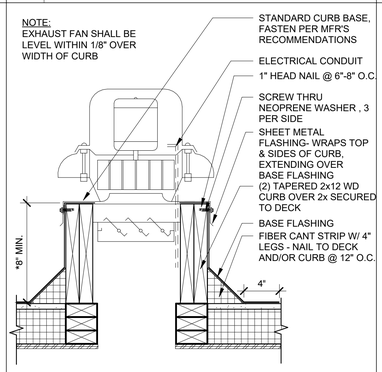
19.1 BRICK CONTROL JOINT
3" = 1'-0"



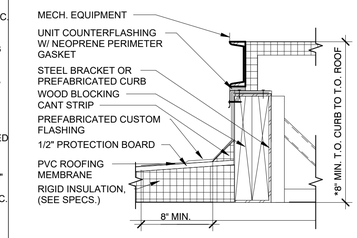
22 THRU WALL RTU
3" = 1'-0"



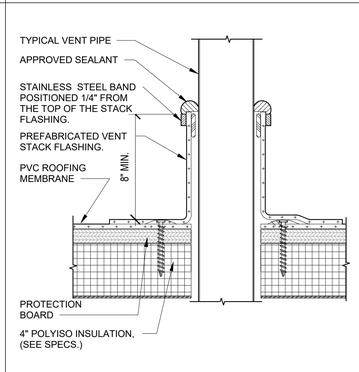
18 CONNECTION THRU EIFS
3" = 1'-0"



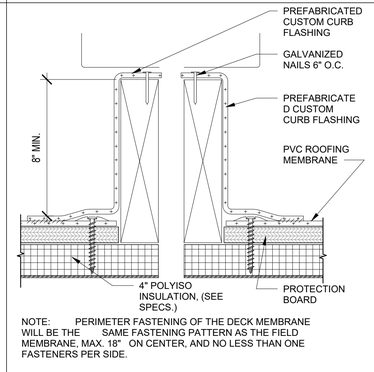
14 EXHAUST FAN CURB
1 1/2" = 1'-0"



10 DETAIL- MECHANICAL CURB
1 1/2" = 1'-0"

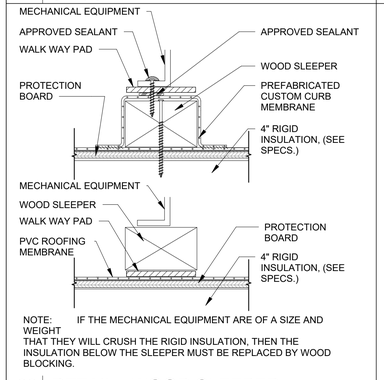


6 ROUND PENETRATION
3/4" = 1'-0"



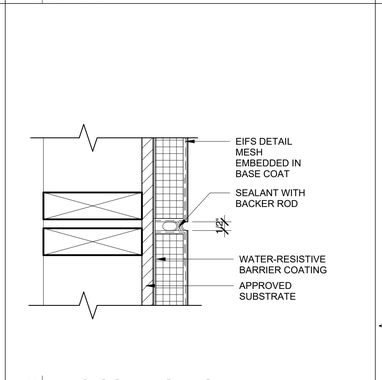
NOTE: PERIMETER FASTENING OF THE DECK MEMBRANE WILL BE THE SAME FASTENING PATTERN AS THE FIELD MEMBRANE, MAX. 18" ON CENTER, AND NO LESS THAN ONE FASTENERS PER SIDE.

2 RECTANGULAR PENETRATION
3/4" = 1'-0"

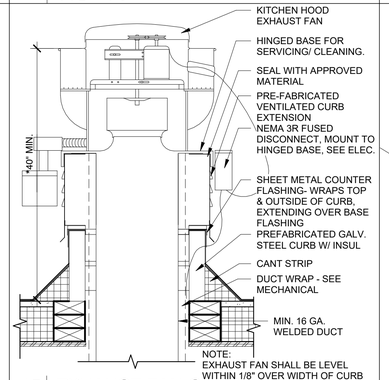


NOTE: IF THE MECHANICAL EQUIPMENT ARE OF A SIZE AND WEIGHT THAT THEY WILL CRUSH THE RIGID INSULATION, THEN THE INSULATION BELOW THE SLEEPER MUST BE REPLACED BY WOOD BLOCKING.

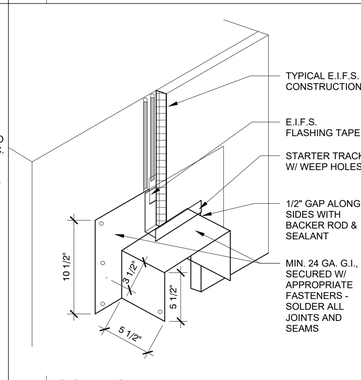
23 DETAIL - WOOD SLEEPER
1/2" = 1'-0"



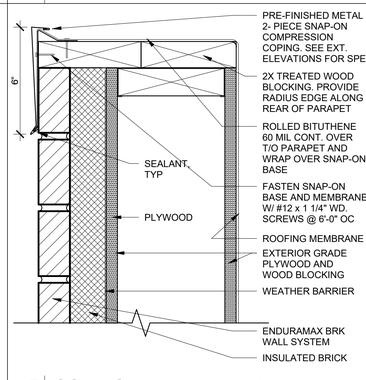
19 EIFS CONTROL JOINT
3" = 1'-0"



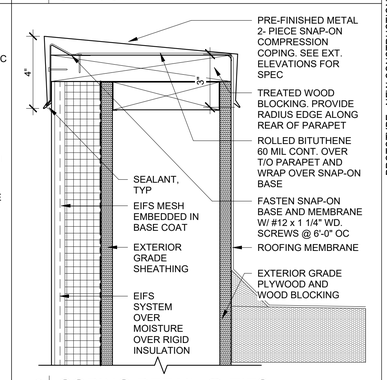
15 EXHAUST FAN CURB
1 1/2" = 1'-0"



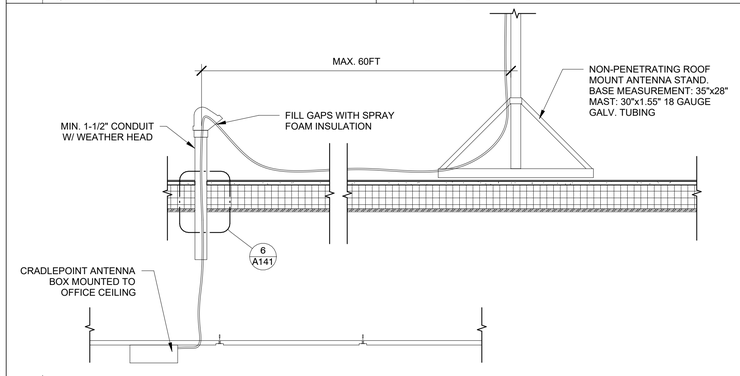
11 COPING DETAIL
1 1/2" = 1'-0"



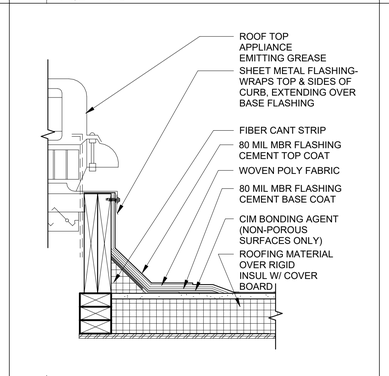
7 COPING DETAIL @ ENDURAMAX
3" = 1'-0"



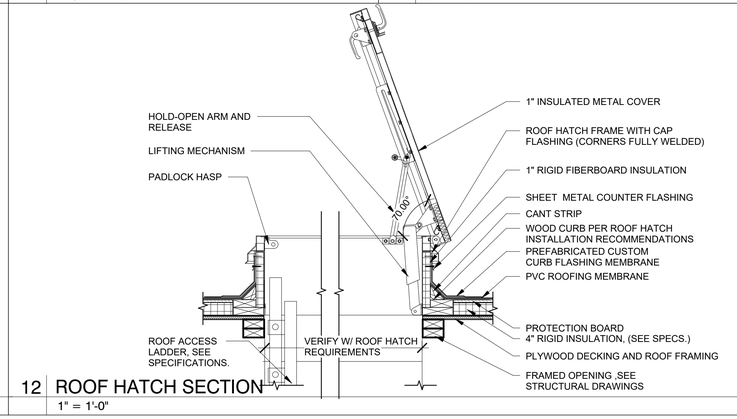
3 COPING DETAIL @ EIFS
3" = 1'-0"



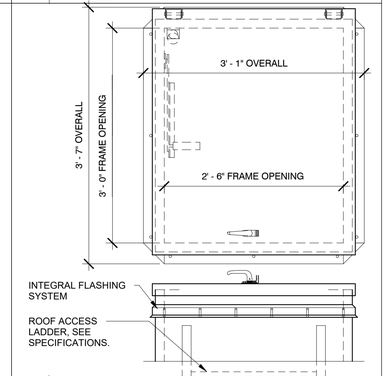
24 CRADLEPOINT DETAIL
1" = 1'-0"



16 ROOFING PENETRATION
1 1/2" = 1'-0"



12 ROOF HATCH SECTION
1" = 1'-0"



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

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PB 2021.03.V1

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

STATE OF MISSOURI
DENNIS D. SMITH
NUMBER A-7203
REGISTERED ARCHITECT

Project Title:

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

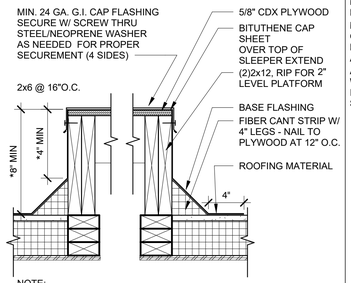
Panera BREAD

No.	Description	Date
A	Shell - Permit Set	7/5/2022

ROOF DETAILS

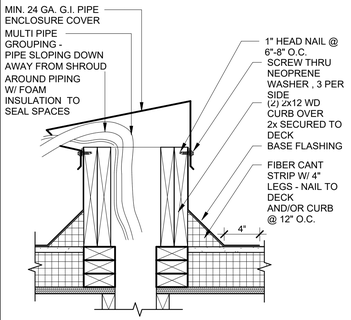
Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
DPM: DPM DM: DM CPM: CPM

Sheet Number: **A141**



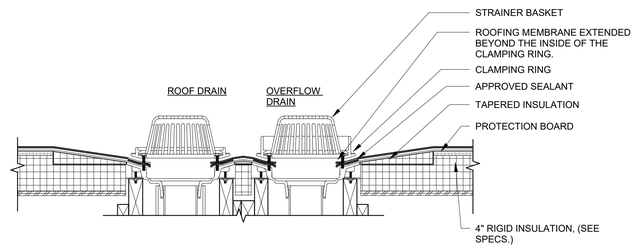
3 SLEEPER SUPPORT

1 1/2" = 1'-0"



2 MULTIPLE PIPE FLASHING

1 1/2" = 1'-0"



1 ROOF DRAIN - TYPICAL

1 1/2" = 1'-0"

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PB 2021 Q3.V1

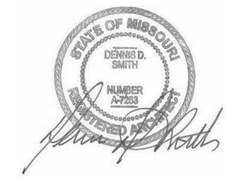
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

ROOF DETAILS

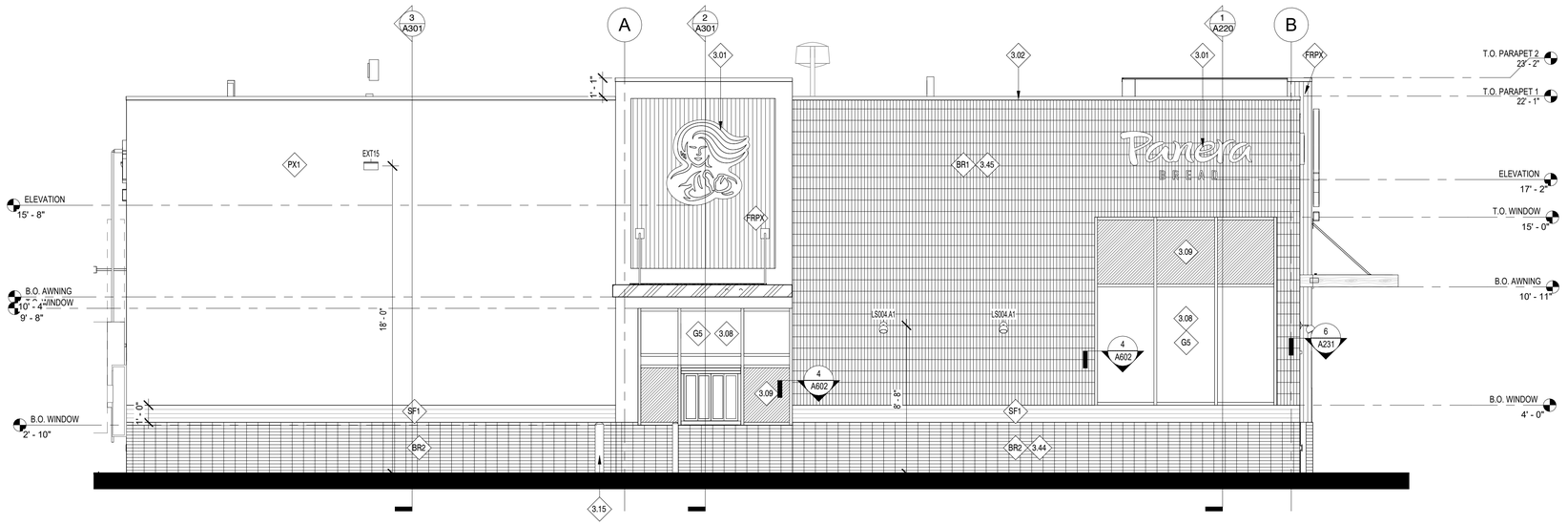
Project Number: 2406

Drawn By: EB

Issue Date: **07/05/2022**

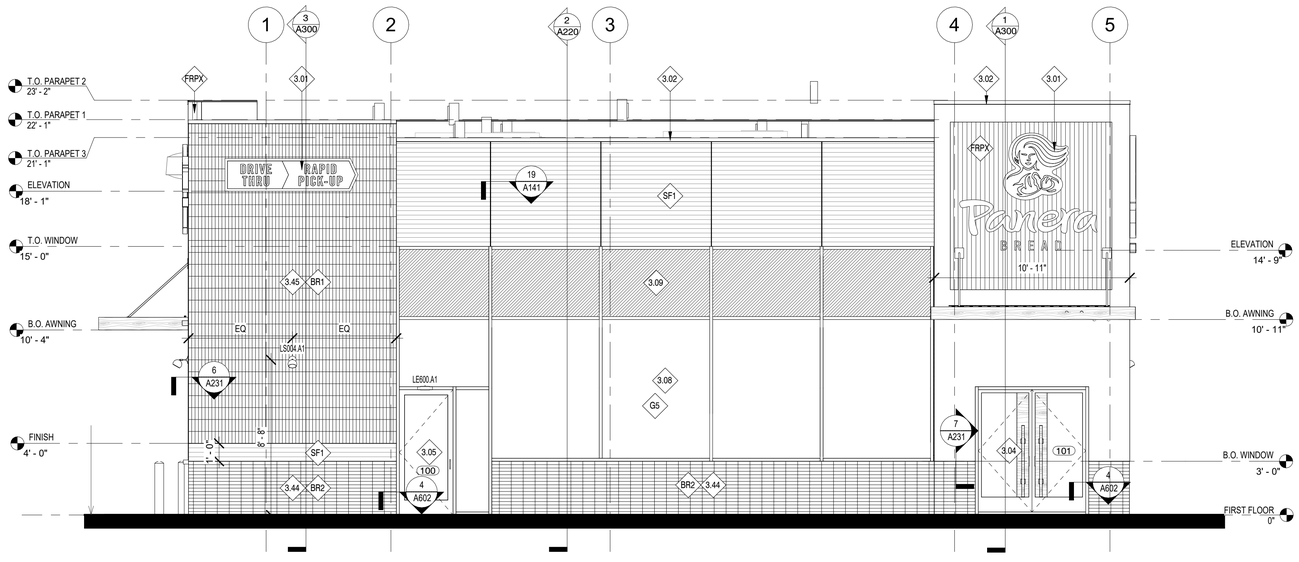
Sheet Number: **A142**

DPM:	DM:	CPM:
DPM	DM	CPM



22 ELEVATION - SOUTH

1/4" = 1'-0"



24 ELEVATION - EAST

1/4" = 1'-0"

GENERAL NOTES:

A. ALL GLAZING TO BE G1 UNLESS NOTED OTHERWISE. FOR STOREFRONT / WINDOW ELEVATIONS SEE SHEET A611.

KEYED NOTES

3.01 LOCATION OF INTERNALLY ILLUMINATED CLIP LETTERS AND/OR TRADEMARK SYMBOL; PROVIDED AND INSTALLED BY TENANT SIGN VENDOR UNDER SEPARATE PERMIT; G.C. TO PROVIDE BLOCKING IN WALL FOR SIGN AND PROVIDE ACCESS PANEL ON BACKSIDE OF PARAPET FOR ACCESS AS REQUIRED. (UNDER SEPARATE SIGNAGE PERMIT)

3.02 PRE-FINISHED METAL 2- PIECE SNAP-ON COMPRESSION COPING BY DUROLAST OR SIMILAR | COLOR: CHARCOAL TO MATCH RAL 7043

3.04 MAIN ENTRANCE/EXIT | REFER TO FLOOR A601 & A602 FOR FURTHER INFORMATION.

3.05 SECONDARY ENTRANCE/EXIT | REFER TO A601 & A602 FOR ADDITIONAL INFORMATION.

3.08 ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLAZING BY PANERA. REFER TO SHEET A602 FOR FURTHER INFORMATION.

3.09 ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED SPANDREL GLAZING BY PANERA. REFER TO SHEET A602 FOR FURTHER INFORMATION.

3.15 6" DIA. CONCRETE BOLLARD | FINISH: PAINT TO MATCH ADJACENT P165 | REFER TO SHEET A040 FOR FURTHER INFORMATION

3.44 BR-1 TO BE INSTALLED HORIZONTALLY

3.45 BR-1 TO BE INSTALLED VERTICALLY

BR1 BRICK MASONRY WALL SYSTEM | MFR: TABS WALL SYSTEM, UTILITY STACKED, VERTICAL PATTERN| COLOR: MCNEAR (THIN BRK.) + SANTIAGO CREATE MATERIALS CUSTOM BLEND (TABS WALL SYSTEM)

BR2 BRICK MASONRY WALL SYSTEM | MFR: TABS WALL SYSTEM + THIN BRICK, UTILITY STACKED, HORIZONTAL PATTERN| COLOR: MCNEAR (THIN BRK.) + SANTIAGO CREATE MATERIALS CUSTOM BLEND (TABS WALL SYSTEM)

FRPX REINFORCED FIBERGLASS PANEL MATERIAL, PATTERN: CUSTOM VERTICAL RIBBED | COLOR: TBD GREEN TO MATCH PANTONE PMS 2307 C, FINISH: BASF, PRE-FINSIHED.

G5 ALUMINUM STOREFRONT | MFR: KAWNEER RIFAB VERRSAGLAZE 451T | FINISH: POWDER COAT | COLOR: IVORY | 2" x 6" PROFILE | THERMAL BREAK| 1" CLEAR INSULATED GLAZING: PPG SOLARBAN 70 (OR APPROVED EQUAL) | REFER TO SHEET A602 FOR ADDITIONAL INFORMATION

PX1 EIFS SYSTEM | PRODUCT: DRYVIT OUTSULATION PLUS MD w/ MOISTURE DRAINAGE SYSTEM |TEXTURE: DRYVUT LIMESTONE DPR TEXTURED FINISH | PAINTED COLOR: #105 SUEDE

SF1 SPECIALTY FINISH: PREFABRICATED ALUMINUM WOOD GRAIN CLADDING SYSTEM | MFR: KNOTWOOD CLADDING | COLOR: NORDIC OAK

G.C. TO INSTALL AFTER CONSTRUCTION
BARRIER SIGN REMOVED - WITHOUT DRIVE THRU

SPECIFICATIONS:

- TWO SIDED BANNER
- MATERIAL: WHITE BANNER WITH GROMMETS
- GRAPHICS: DIGITALLY PRINTED
- HEIGHT: 4'-0"
- WIDTH: 12'-0"

INSTALLATION:

BANNERS PROVIDED BY PANERA AND TO BE INSTALLED ON EXTERIOR OF BUILDING BY G.C. PER PANERA PROVIDED HANGING INSTRUCTIONS AND PLACEMENT LOCATION(S).

ARCHITECT NOTE: SHOW DASHED BOX ON EXTERIOR ELEVATIONS WITH KEYED NOTE INDICATING G.C. TO INSTALL.

4 NEW CONSTRUCTION BANNER

1/4" = 1'-0"

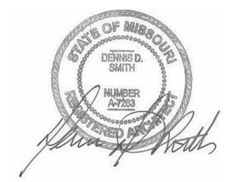
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

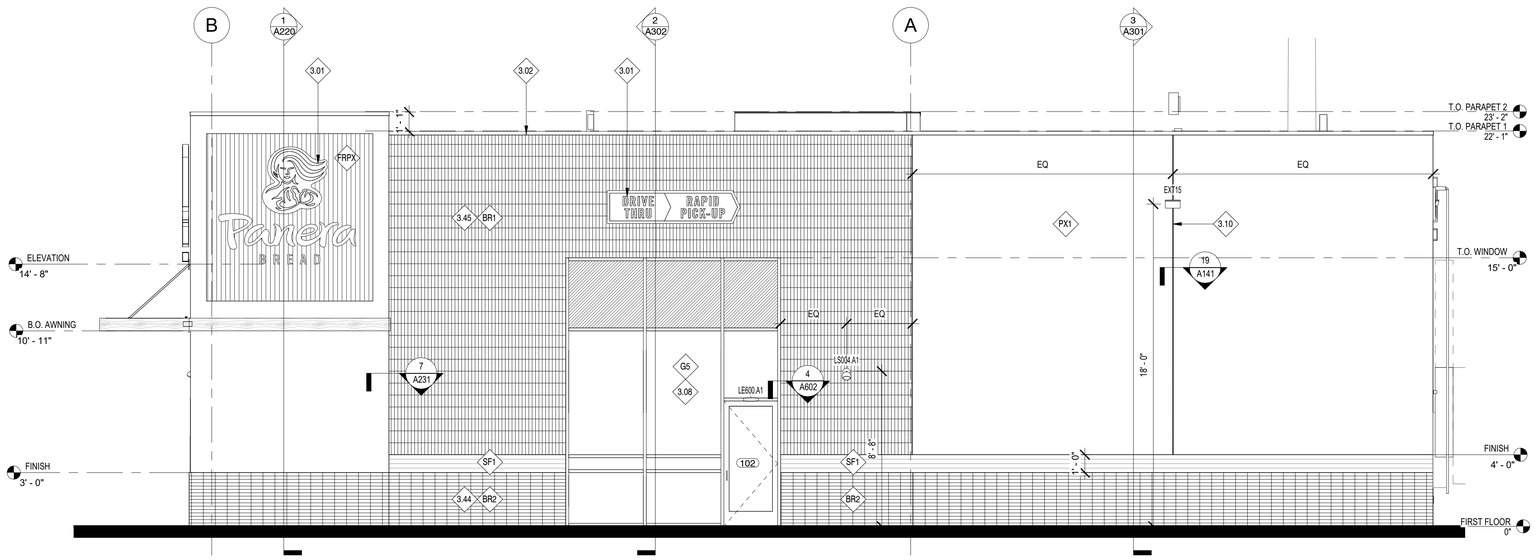
EXTERIOR ELEVATIONS

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
DPM: DPM
DM: DM
CPM: CPM

Sheet Number: **A200**

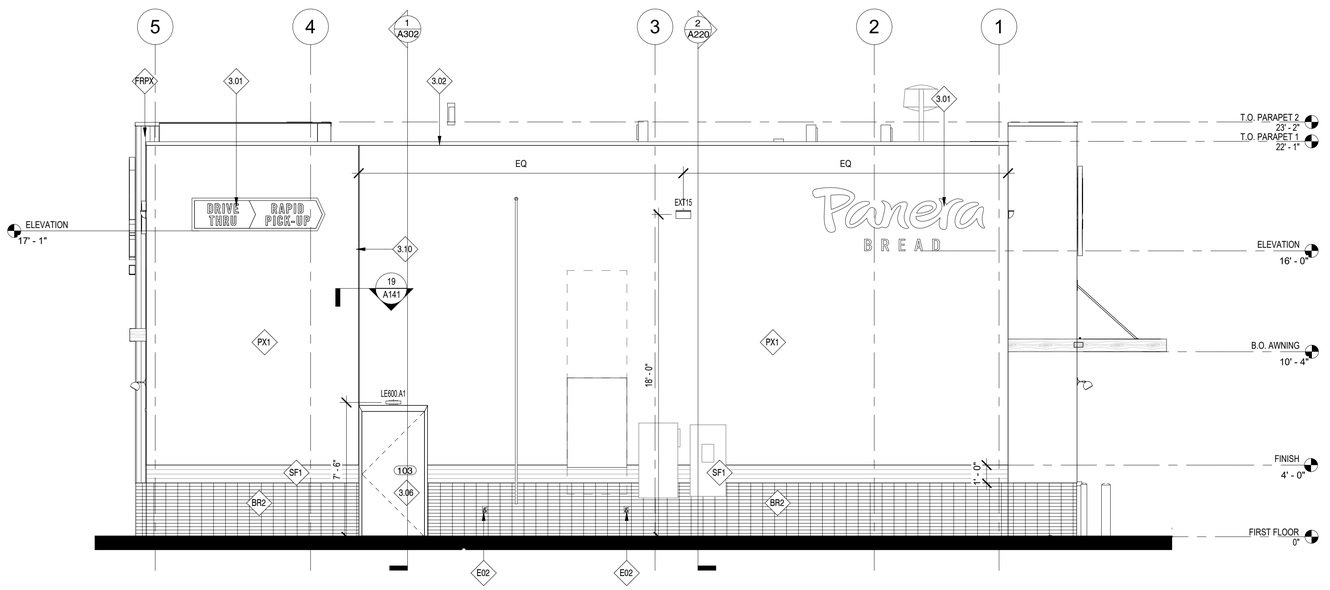
7/8/2022 3:34:20 PM

PR 2021.Q3.V1



22 ELEVATION - NORTH

1/4" = 1'-0"



24 ELEVATION - WEST

1/4" = 1'-0"

GENERAL NOTES:

A. ALL GLAZING TO BE G1 UNLESS NOTED OTHERWISE. FOR STOREFRONT / WINDOW ELEVATIONS SEE SHEET A611.

KEYED NOTES

3.01 LOCATION OF INTERNALLY ILLUMINATED CLIP LETTERS AND/OR TRADEMARK SYMBOL; PROVIDED AND INSTALLED BY TENANT SIGN VENDOR UNDER SEPARATE PERMIT; G.C. TO PROVIDE BLOCKING IN WALL FOR SIGN AND PROVIDE ACCESS PANEL ON BACKSIDE OF PARAPET FOR ACCESS AS REQUIRED. (UNDER SEPARATE SIGNAGE PERMIT)

3.02 PRE-FINISHED METAL 2- PIECE SNAP-ON COMPRESSION COPING BY DUROLAST OR SIMILAR | COLOR: CHARCOAL TO MATCH RAL 7043

3.06 HOLLOW METAL SERVICE DOOR WITH TRANSOM WINDOW ABOVE; 1" INSULATED SPANDREL GLAZING. EXTERIOR PAINT FINISH TO MATCH ADJACENT ALUMINUM STOREFRONT. REFER TO A601 FOR ADDITIONAL INFORMATION.

3.08 ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED GLAZING BY PANERA. REFER TO SHEET A602 FOR FURTHER INFORMATION.

3.10 CONTROL JOINT WHERE INDICATED. REFER TO DETAILS FOR FURTHER INFORMATION.

3.44 BR-1 TO BE INSTALLED HORIZONTALLY

3.45 BR-1 TO BE INSTALLED VERTICALLY

BR1 BRICK MASONRY WALL SYSTEM | MFR: TABS WALL SYSTEM, UTILITY STACKED, VERTICAL PATTERN| COLOR: MCNEAR (THIN BRK.) + SANTIAGO CREATE MATERIALS CUSTOM BLEND (TABS WALL SYSTEM)

BR2 BRICK MASONRY WALL SYSTEM | MFR: TABS WALL SYSTEM + THIN BRICK, UTILITY STACKED, HORIZONTAL PATTERN| COLOR: MCNEAR (THIN BRK.) + SANTIAGO CREATE MATERIALS CUSTOM BLEND (TABS WALL SYSTEM)

E02 RECEPTACLE PROVIDED IN BUILDING SHELL CONSTRUCTION, REFER TO SHELL CONSTRUCTION DOCUMENTS. VERIFY RECEPTACLE IS FULLY OPERATIONAL AND COORDINATE WITH PANERA REPRESENTATIVE. IF NECESSARY PROVIDE ALL CONDUCTORS, CONDUIT, AND CONNECTIONS REQUIRED TO COMPLETE INSTALLATION.

FRPX REINFORCED FIBERGLASS PANEL MATERIAL, PATTERN: CUSTOM VERTICAL RIBBED | COLOR: TBD GREEN TO MATCH PANTONE PMS 2307 C, FINISH: BASF, PRE-FINSIHED.

G5 ALUMINUM STOREFRONT | MFR: KAWNEER RIFAB VERRSAGLAZE 451T | FINISH: POWDER COAT | COLOR: IVORY | 2" x 6" PROFILE | THERMAL BREAK(1" CLEAR INSULATED GLAZING: PPG SOLARBAN 70 (OR APPROVED EQUAL) | REFER TO SHEET A602 FOR ADDITIONAL INFORMATION

PX1 EIFS SYSTEM | PRODUCT: DRYVIT OUTSULATION PLUS MD w/ MOISTURE DRAINAGE SYSTEM |TEXTURE: DRYVUT LIMESTONE DPR TEXTURED FINISH | PAINTED COLOR: #105 SUEDE

SF1 SPECIALTY FINISH: PREFABRICATED ALUMINUM WOOD GRAIN CLADDING SYSTEM | MFR: KNOTWOOD CLADDING | COLOR: NORDIC OAK

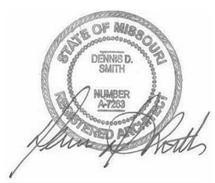
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLASS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

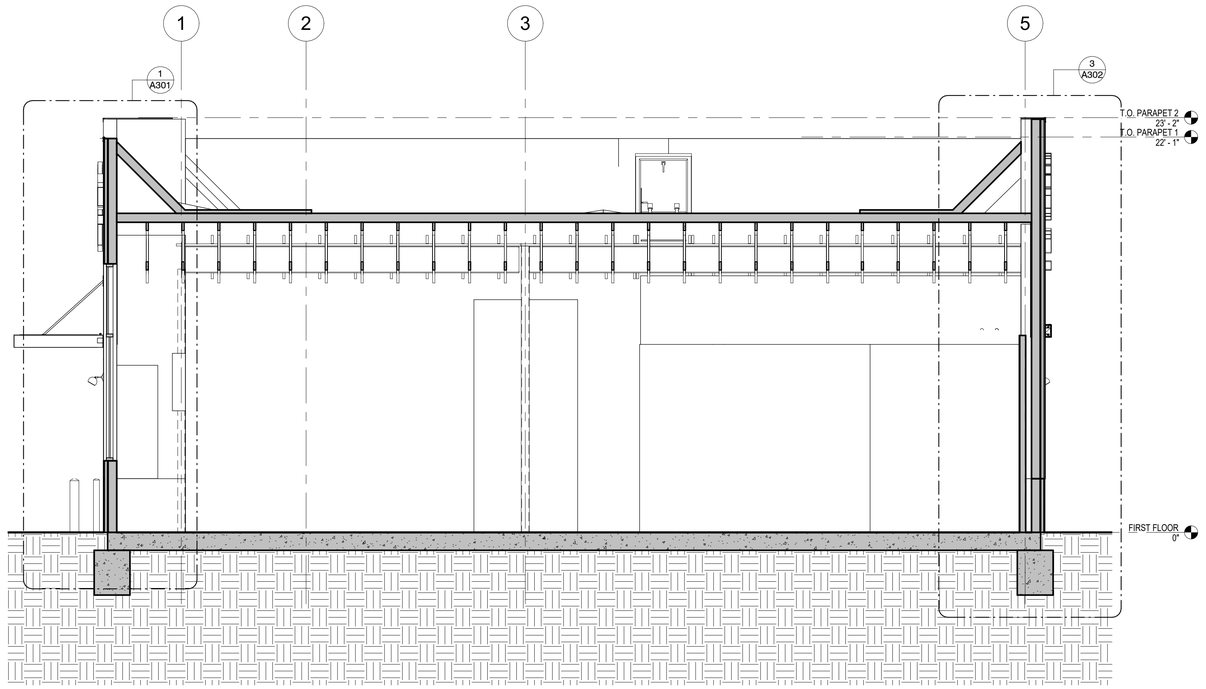
EXTERIOR ELEVATIONS

Project Number: 2406
Drawn By: EB
Issue Date: **07/05/2022**
DPM: DPM
DM: DM
CPM: CPM

Sheet Number: **A201**

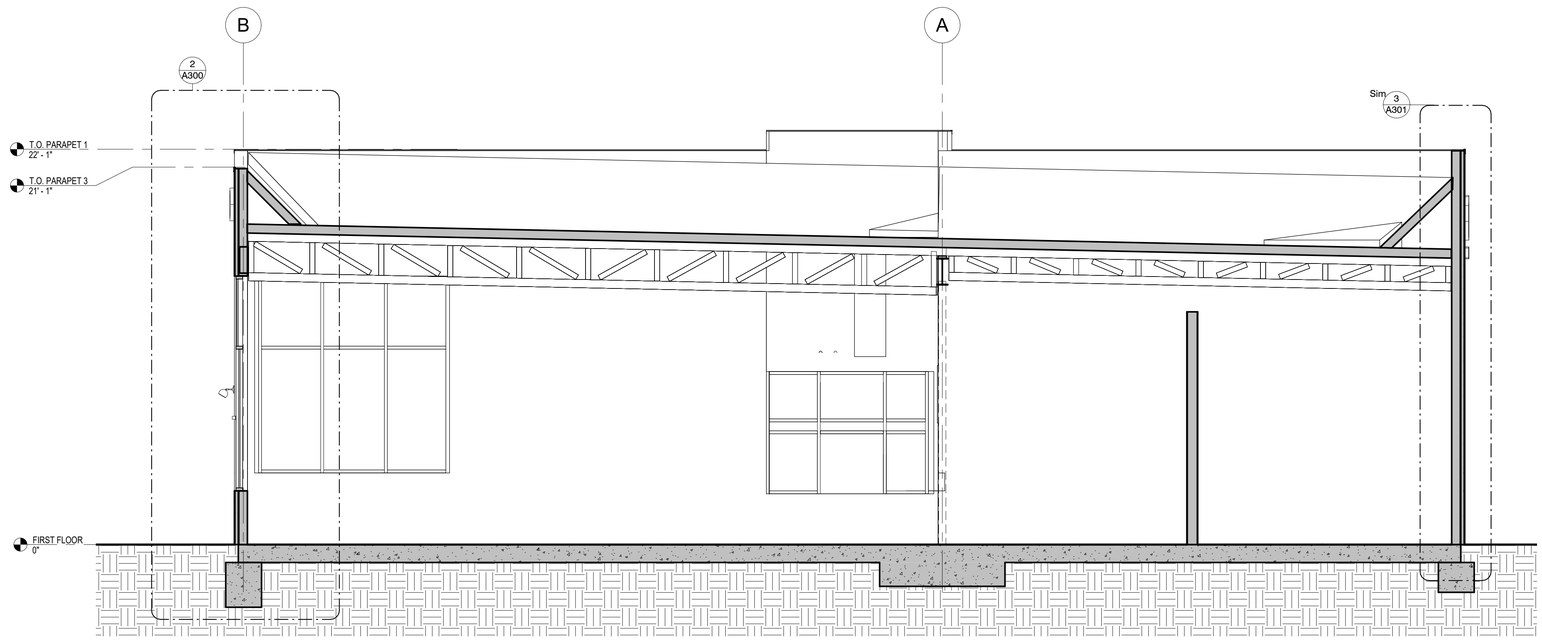
7/8/2022 3:34:25 PM

PB 2021.03.V1



1 BUILDING SECTION - WEST TO EAST

1/4" = 1'-0"



2 BUILDING SECTION - NORTH TO SOUTH

1/4" = 1'-0"

7/8/2022 3:34:28 PM

PB 2021 Q3.V1

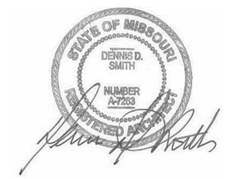
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

BUILDING SECTIONS

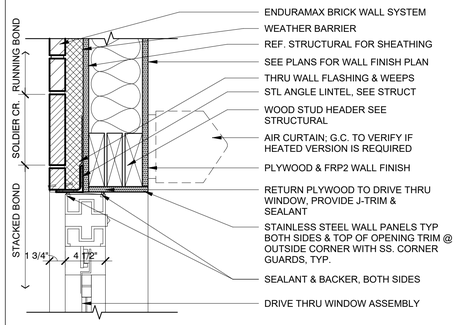
Project Number: 2406

Drawn By: EB

Issue Date: **07/05/2022**

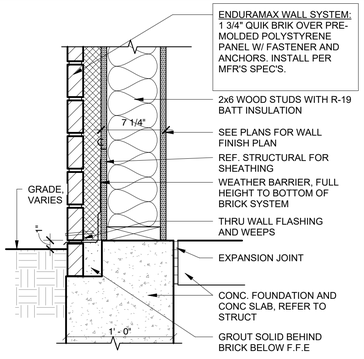
Sheet Number: **A220**

DPM:	DM:	CPM:
DPM	DM	CPM

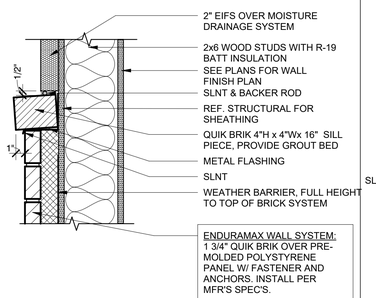


NOTE: QUICKSERV CORP. DRIVE THRU WINDOW ASSEMBLY MODEL # FM-42E WITH THRU BEAM PHOTO ELECTRIC EYE BAR AND 5/8" INSULATED TEMPERED GLAZING (BRONZE TINT) FRAME SHALL BE INSULATED AND MATCH STOREFRONT ALUM FINISH

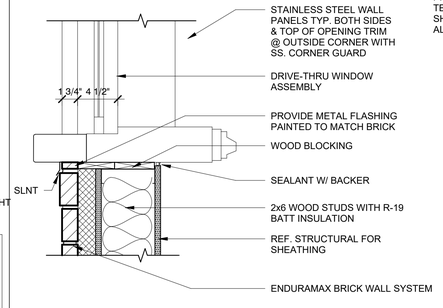
5 DRIVE THRU WDW HEAD DETAIL
1 1/2" = 1'-0"



21.1 ENDURAMAX WALL BASE DETAIL
1 1/2" = 1'-0"



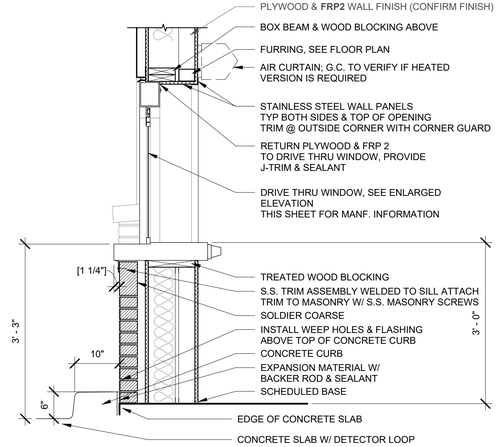
17 ENDURAMAX ROWLOCK DETAIL
1 1/2" = 1'-0"



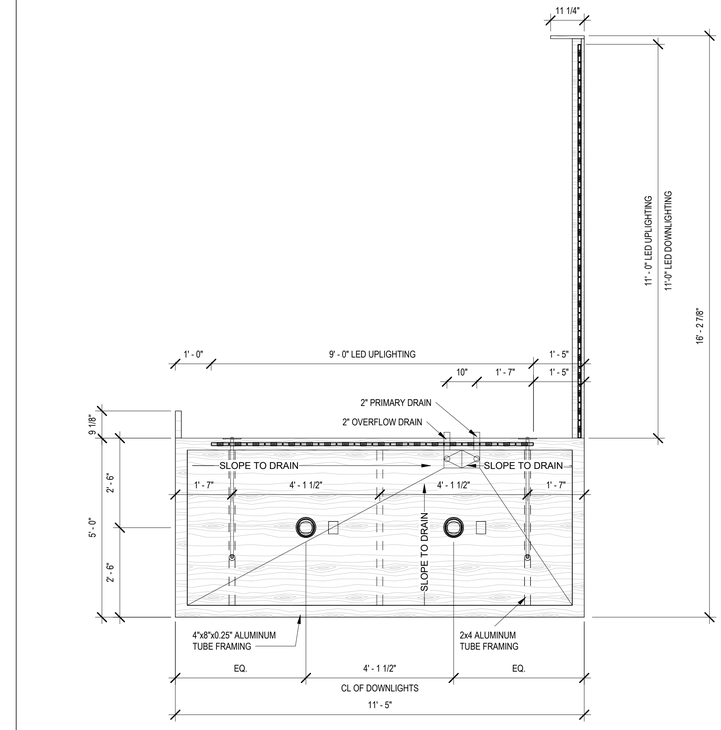
NOTE: QUICKSERV CORP. DRIVE THRU WINDOW ASSEMBLY MODEL # FM-42E WITH THRU BEAM PHOTO ELECTRIC EYE BAR AND 5/8" INSULATED TEMPERED GLAZING (BRONZE TINT) FRAME SHALL BE INSULATED AND MATCH STOREFRONT ALUM FINISH

6.3 DRIVE THRU WDW SILL DETAIL
1 1/2" = 1'-0"

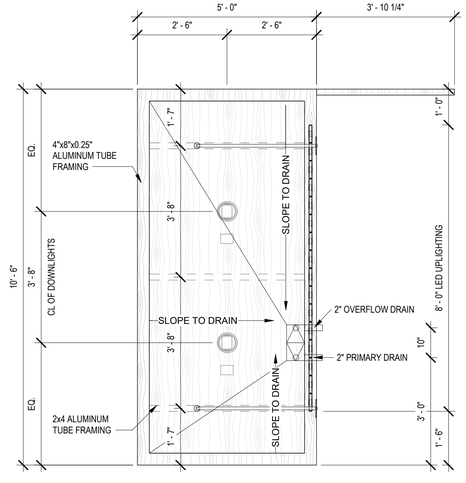
NOTE TO ARCHITECT:
WHERE EFIS & BRICK ARE COMBINED ON THIS ELEVATION, RAISE THE PRICE CONFIRMATION SCREEN UP AS REQUIRED TO CLEAR THE LOWER BRICK FACADE. THE SCREEN WILL BE MOUNTED ON THE EIFS PORTION OF THE WALL ABOVE THE BRICK. ADJUST HEIGHT OF THIS EQUIPMENT AS NECESSARY TO ALLOW 1" CLEAR FROM BOTTOM OF UNIT TO TOP OF BRICK.



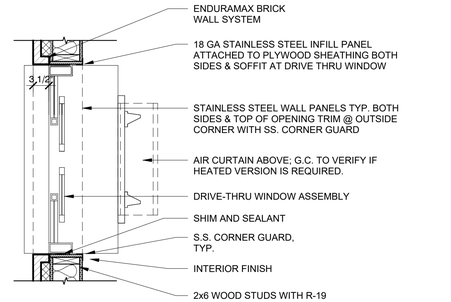
6.1 BRICK EXTERIOR MATERIAL W/ EIFS ABOVE @ DRIVE THRU WINDOW
3/4" = 1'-0"



2 AWNING AT MAIN ENTRY - PLAN
1/2" = 1'-0"



1 AWNING AT DRIVE THRU - PLAN
1/2" = 1'-0"



NOTE: QUICKSERV CORP. DRIVE THRU WINDOW ASSEMBLY
MODEL # FM-42E WITH THRU BEAM PHOTO ELECTRIC EYE BAR AND 5/8" INSULATED TEMPERED GLAZING (BRONZE TINT) FRAME SHALL BE INSULATED AND MATCH STOREFRONT ALUM FINISH

8.2 BRICK EXTERIOR MATERIAL @ DRIVE THRU WINDOW
3/4" = 1'-0"

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

STATE OF MISSOURI
DENNIS D. SMITH
NUMBER A-7203
REGISTERED ARCHITECT

Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date
A	Shell - Permit Set	7/5/2022

EXTERIOR DETAILS

Project Number: 2406
Sheet Number: **A230**
Drawn By: EB
Issue Date: **07/05/2022**
DPM: DPM | DM: DM | CPM: CPM

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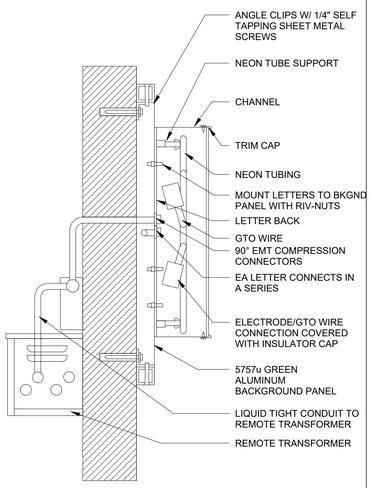
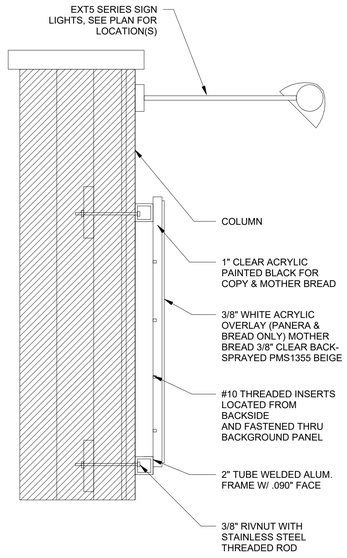
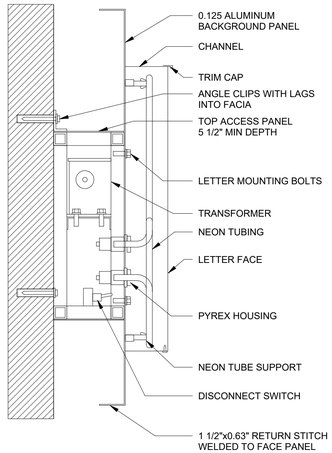
PB 2021 Q3.V1



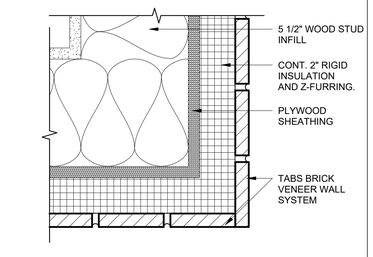
1 TYP. SIGN/BACKER PANEL SECTION
1 1/2" = 1'-0"



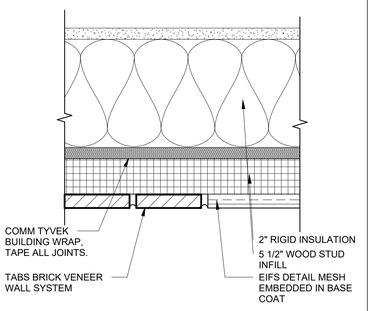
2 TYP. SECTION @ MOTHER BREAD SIGN
1 1/2" = 1'-0"



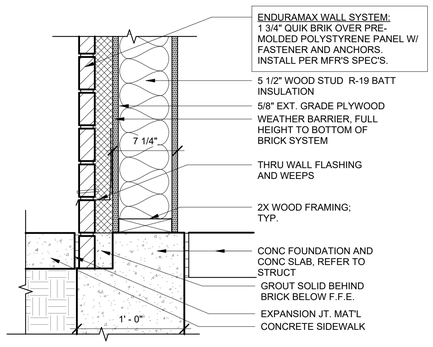
3 TYP. WALL SIGN SECTION
1 1/2" = 1'-0"



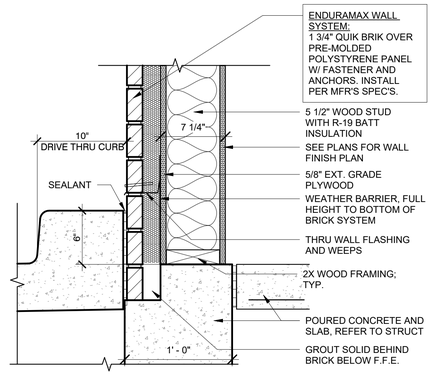
6 BRICK CORNER DETAIL
3" = 1'-0"



7 TRANSITION DETAIL - BRICK TO EIFS
3" = 1'-0"



5 BRICK BASE AT SIDEWALK DETAIL
1 1/2" = 1'-0"



4 ENDURAMAX FOUNDATION DETAIL @ DT
1 1/2" = 1'-0"

7/8/2022 3:34:32 PM

PB 2021 Q3.V1

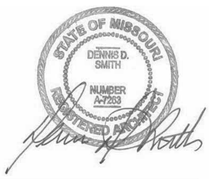
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLASS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

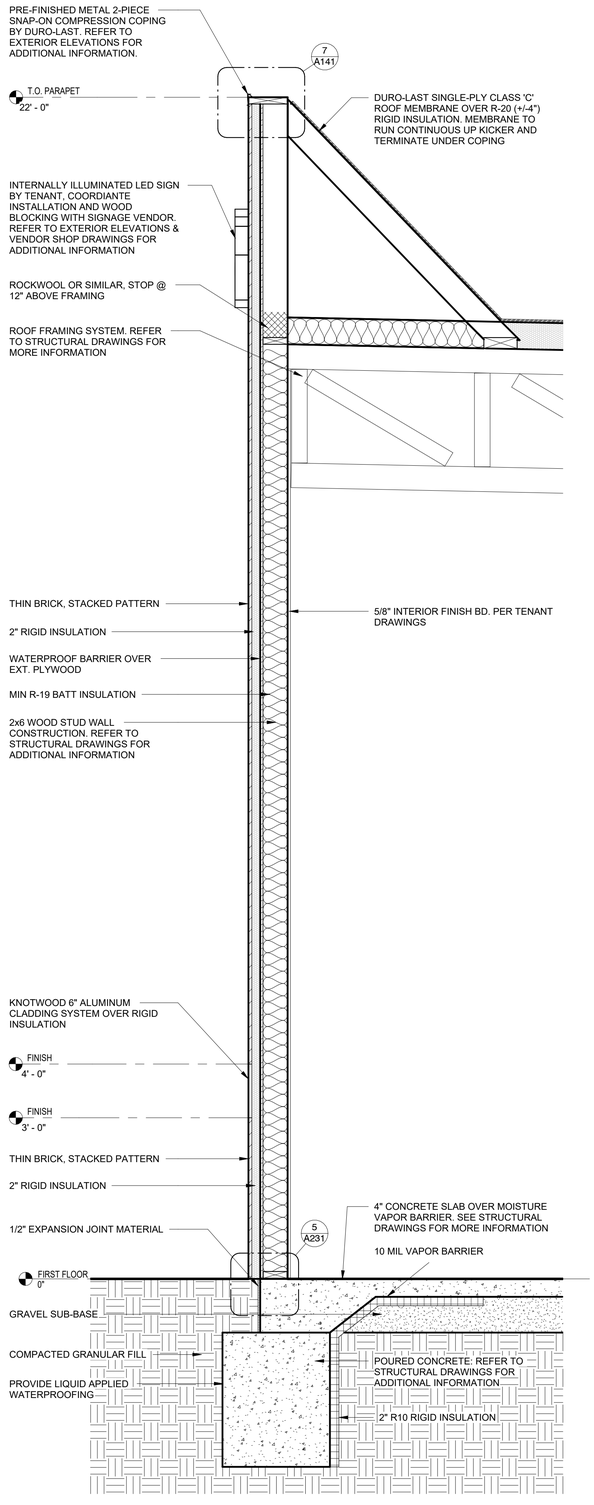
No.	Description	Date
A	Shell - Permit Set	7/5/2022

EXTERIOR DETAILS

Project Number: 2406
Drawn By: EB
Issue Date: **07/05/2022**
DPM: DPM
DM: DM
CPM: CPM

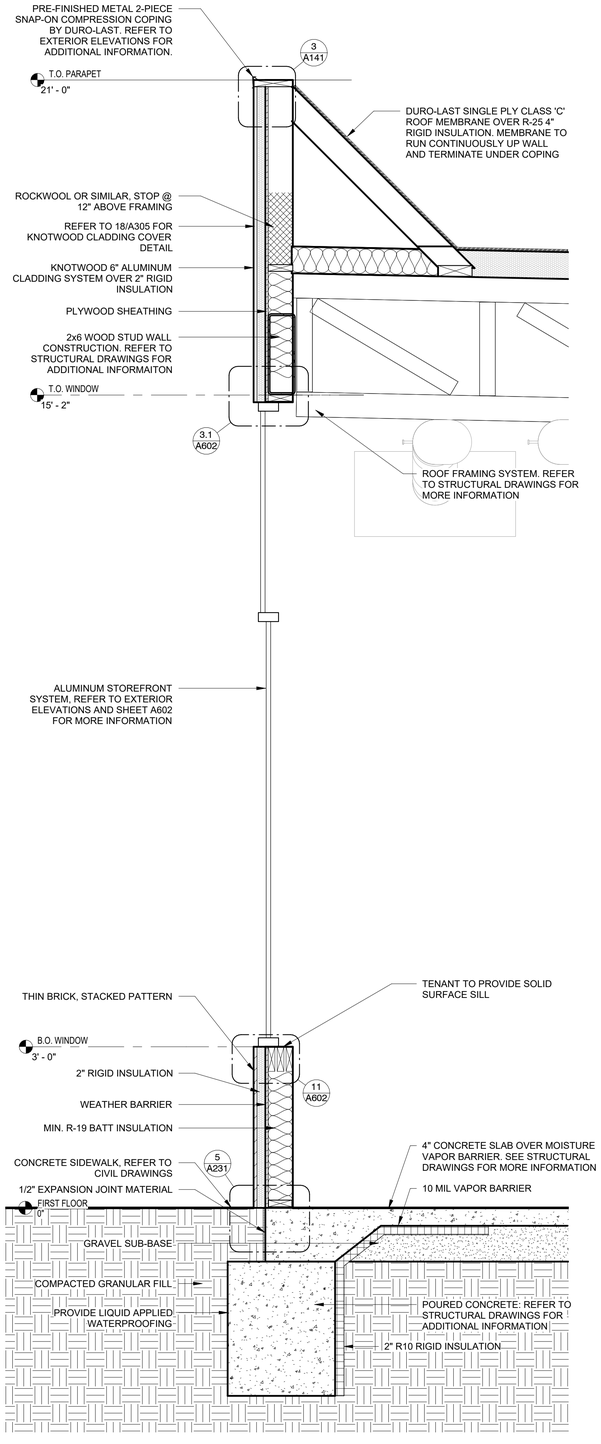
Sheet Number: **A231**

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPYS, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



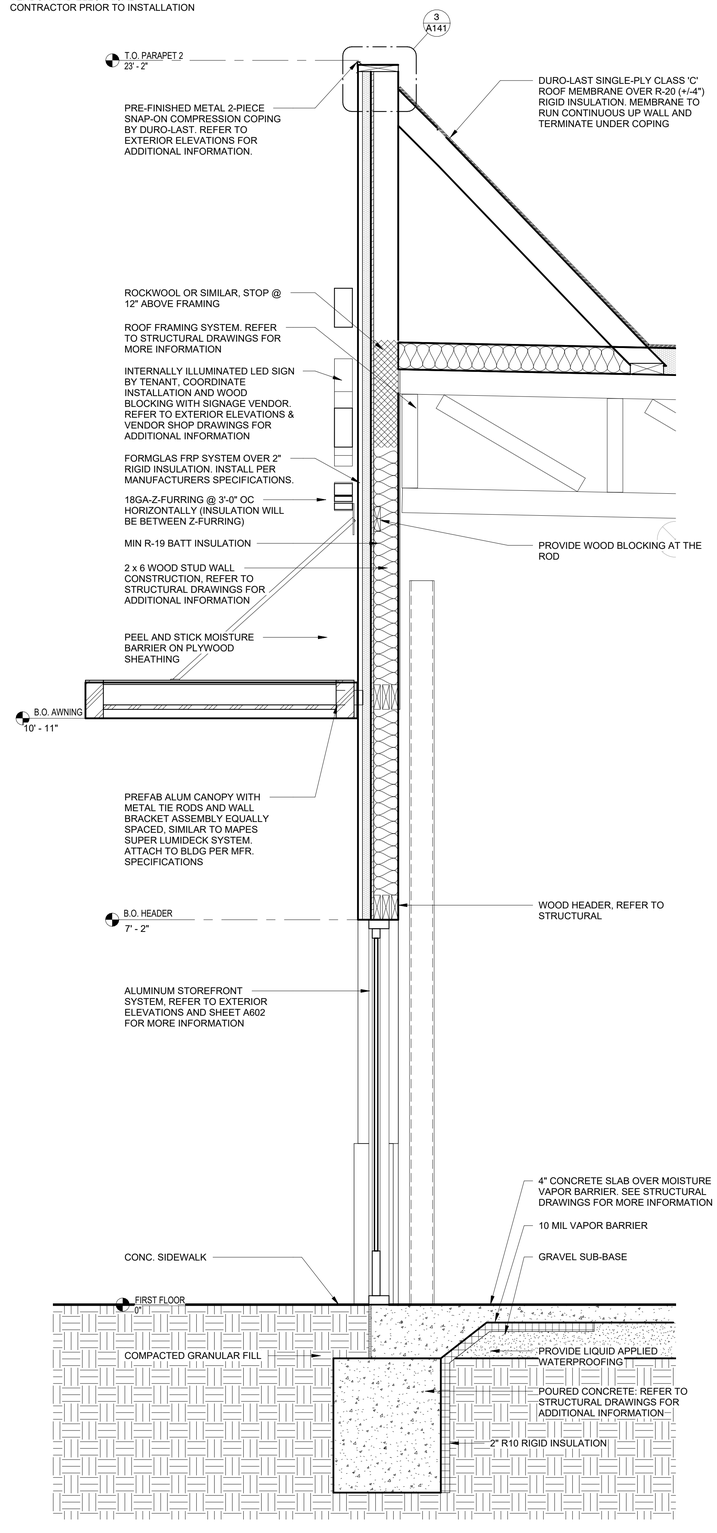
3 WALL SECTION
3/4" = 1'-0"

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPYS, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



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

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPIES, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



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

7/8/2022 3:34:34 PM

PB 2021.03.V1

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLASS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

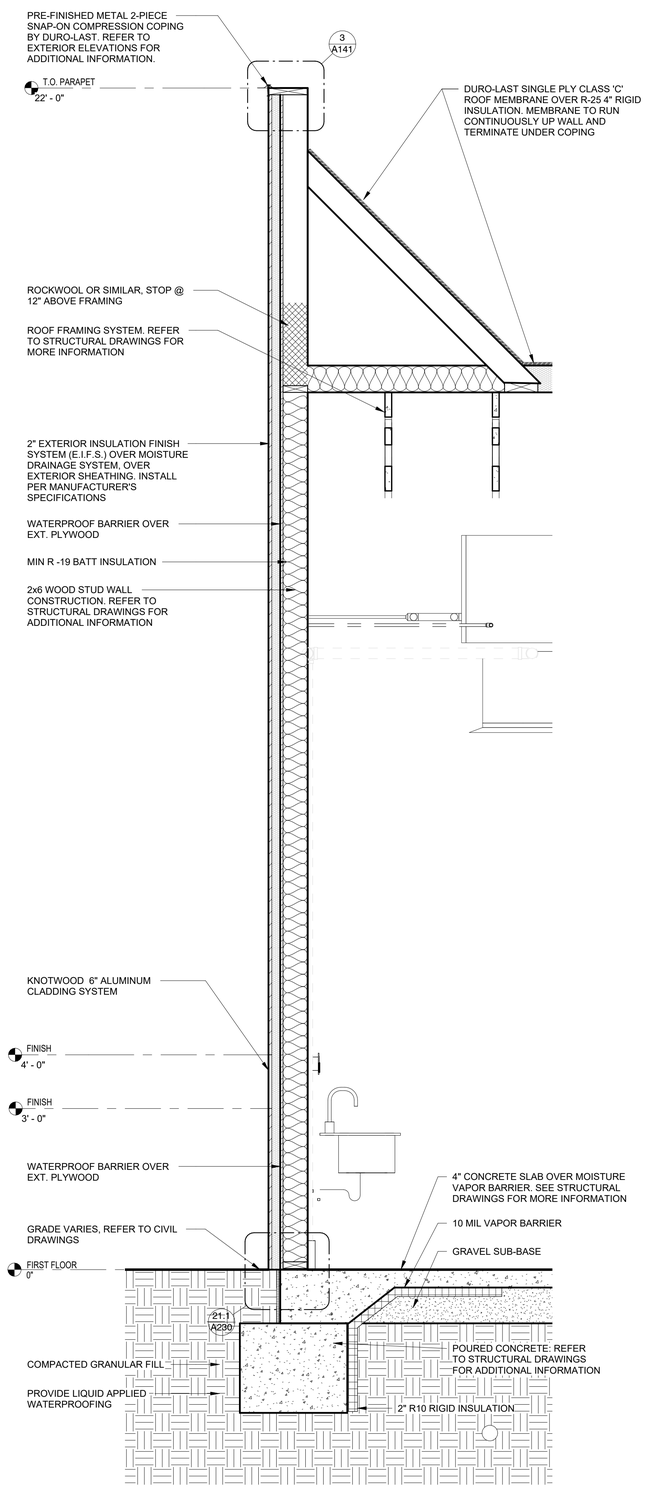
No.	Description	Date
A	Shell - Permit Set	7/5/2022

WALL SECTIONS

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
DPM: DPM | DM: DM | CPM: CPM

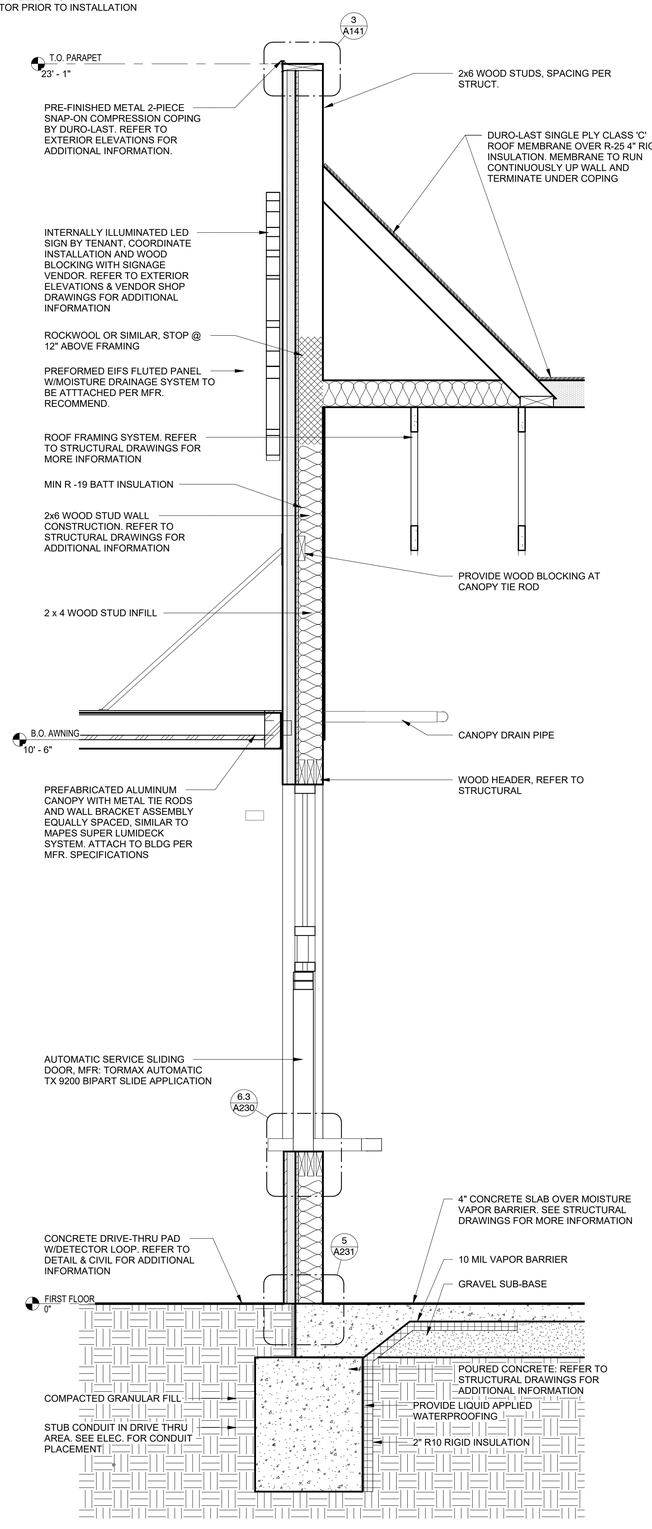
Sheet Number: **A300**

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPYS, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



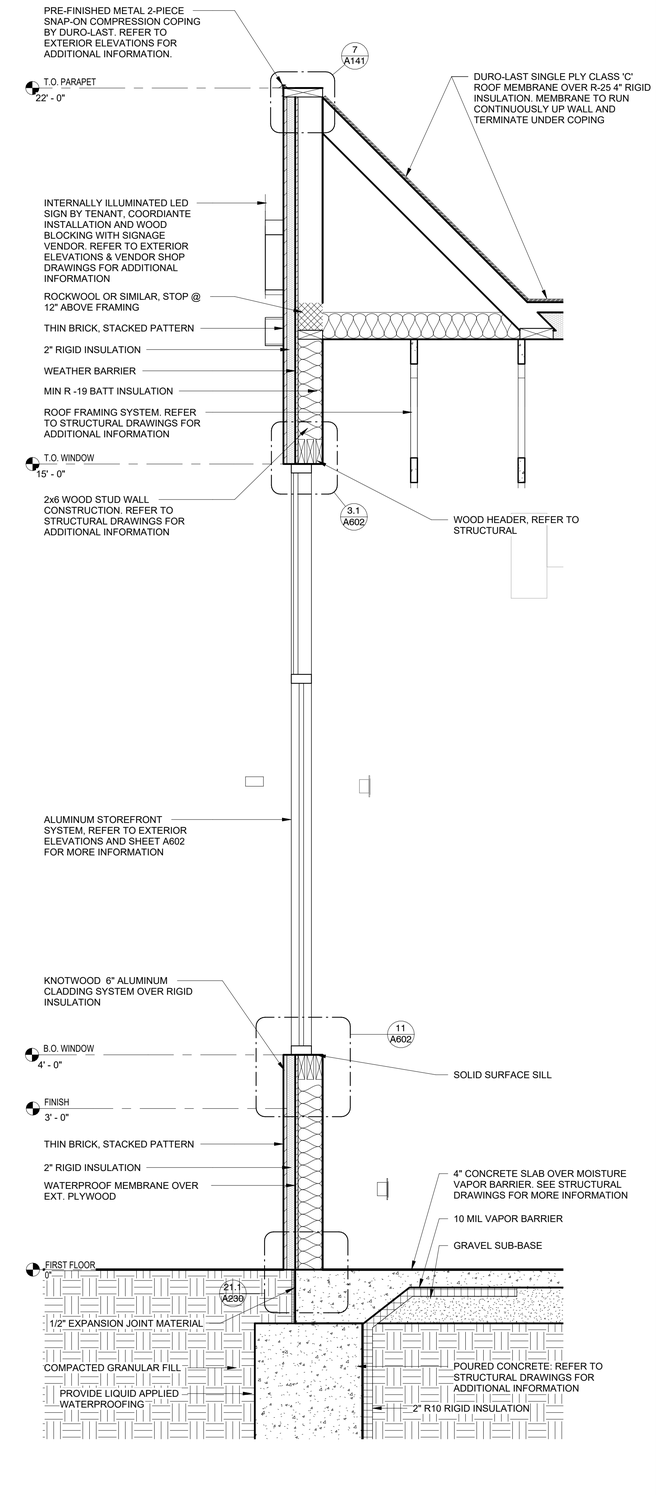
3 WALL SECTION
3/4" = 1'-0"

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPYS, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



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

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPYS, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



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

7/8/2022 3:34:36 PM

PR 2021.03.V1

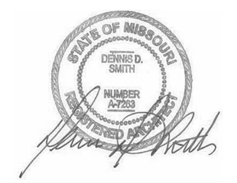
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

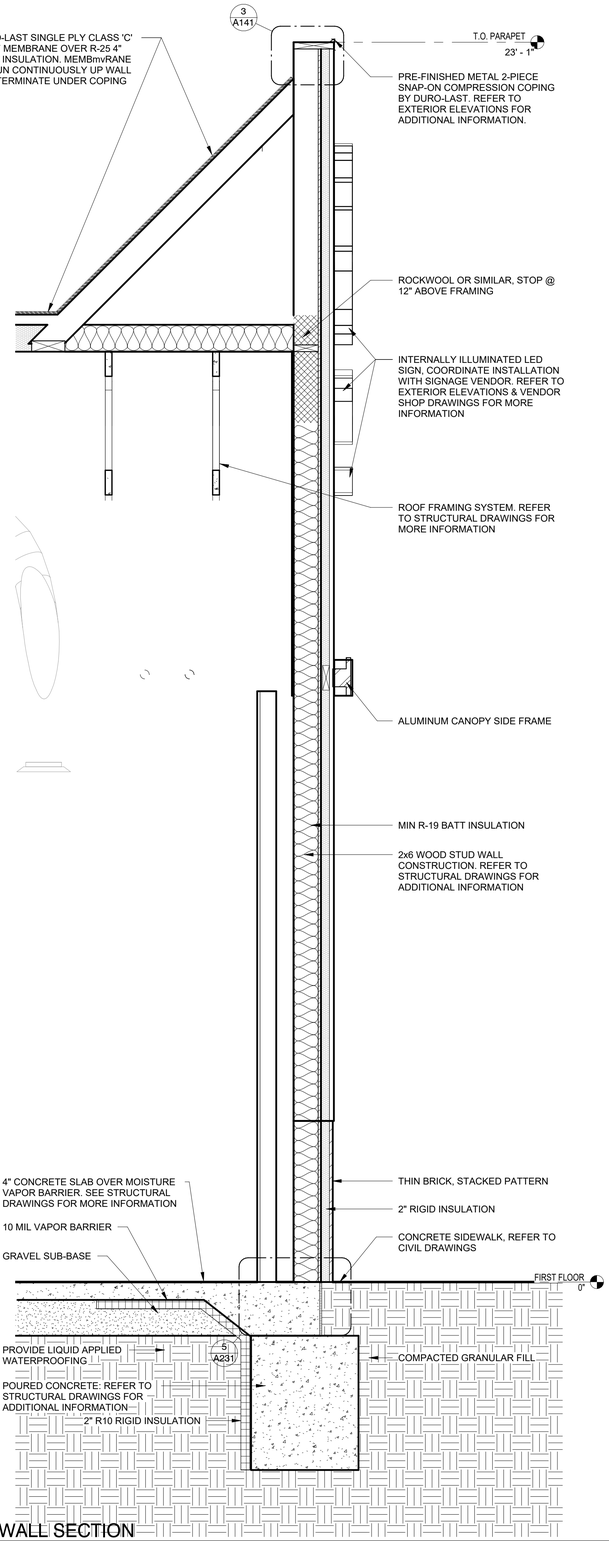
No.	Description	Date
A	Shell - Permit Set	7/5/2022

WALL SECTIONS

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
DPM: DPM DM: DM CPM: CPM

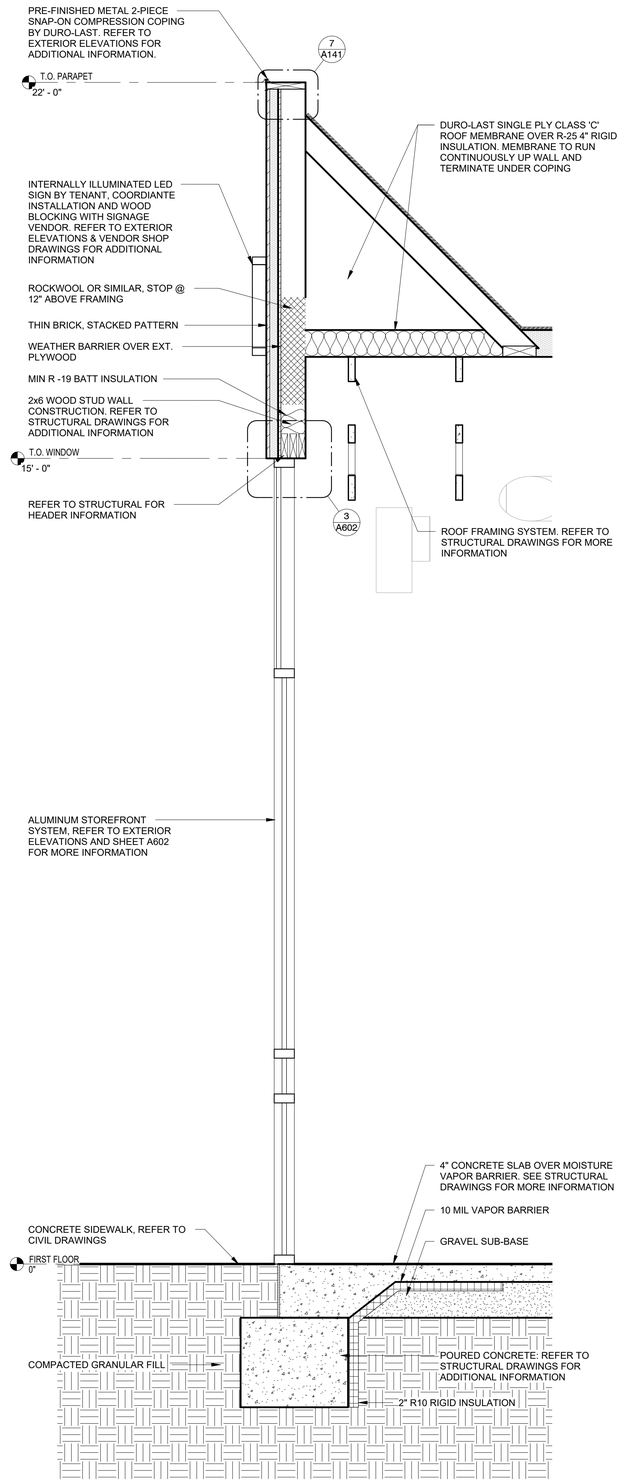
Sheet Number: **A301**

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPYS, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



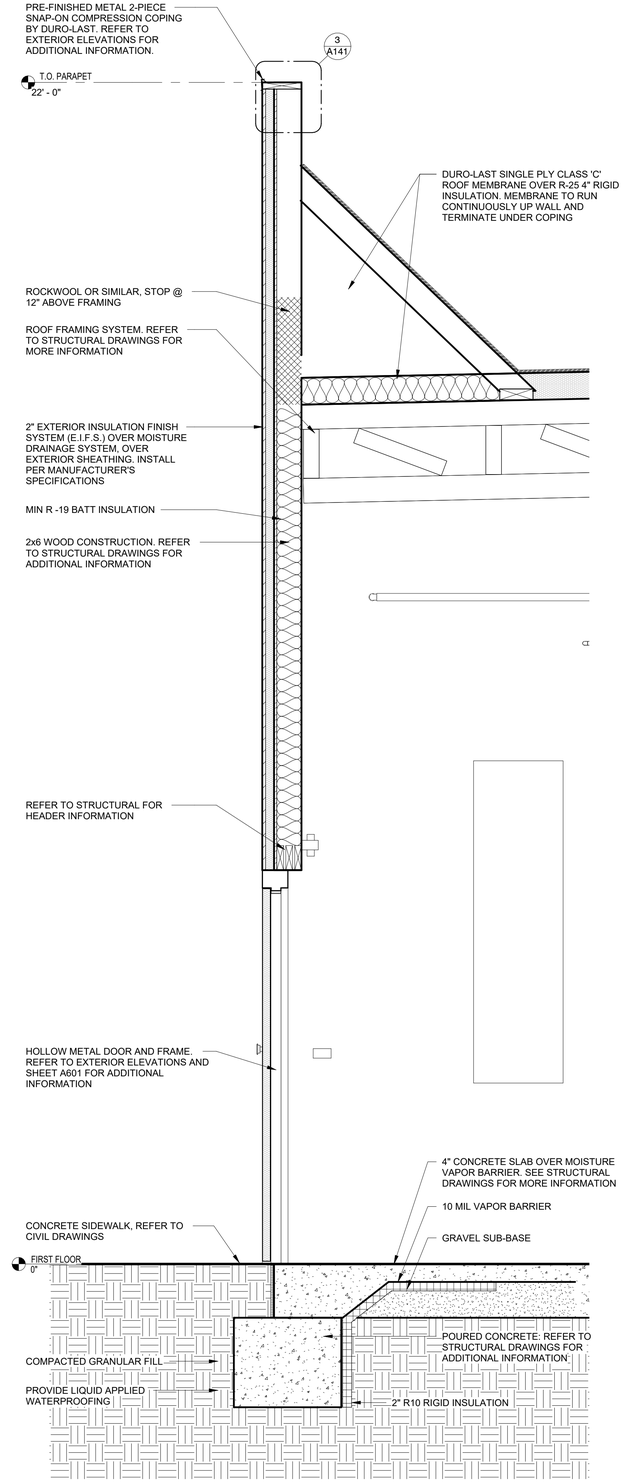
3 WALL SECTION
3/4" = 1'-0"

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPYS, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



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

NOTE: GENERAL CONTRACTOR TO COORDINATE MOUNTING HEIGHTS OF BLOCKING FOR CANOPYS, SIGNAGE, & LIGHT FIXTURES WITH SIGNAGE VENDOR AND ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION



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

7/8/2022 3:34:39 PM

P8 2021.03.V1

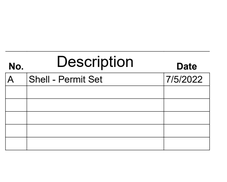
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

WALL SECTIONS

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
DPM: DPM DM: DM CPM: CPM

Sheet Number: **A302**

FINISH SCHEDULE

NUMBER	DESCRIPTION	MANUFACTURER/DISTRIBUTOR	LOCATION	NOTES
CEILINGS				
ACT3	USG SHEETROCK BRAND LAY-IN PANEL CLIMAPLUS, 2' X 4' VINYL, FINE TEXTURED, W/ ALUMINUM CAP GRID # 3270 COLOR: WHITE	USG	BOH	
ACT10	ACCOUSTIC CEILING TILE - CIRRUS SECOND LOOK III - 2X4X3/4 EDGE: BEVELED TEGULAR FOR 9/16" GRID -ITEM #511, COLOR ; WHITE, SIZE: 2'W X 4'L X 3/4"TH	ARMSTRONG	FOH	SUSPENSION SYSTEM: SUPRAFINE 9/16" GRID
ACT11X	WOOD FINISH OVER SERVICE LINE (TBD)		SERVICE LINE	
ACTX	TEST CEILING, NOT ESTABLISHED	-	-	
BASE, BUMPERS, AND FRP				
B1	1" BUMPER: ECOFLEX TFC10000-012 W/ BA1000 ALUM BASE, ER1000-012 END CAPS, CN1000-012 90DEG CORNER, CX1000-12 45DEG CORNER. FINISH COLOR: BLACK	BOSTON RETAIL	BAKERY/KITCHEN	
B2	1" BUMPER: ECOFLEX TFC10000-193 W/ BA1000 ALUM BASE, ER1000-193 END CAPS, CN1000-193 90DEG CORNER, CX1000-193 45DEG CORNER. FINISH COLOR: POLAR WHITE	BOSTON RETAIL	BAKERY/KITCHEN	
B3	1" BUMPER: ECOFLEX TFC10000-018 W/ BA1000 ALUM BASE, ER1000-018 END CAPS, CN1000-018 90DEG CORNER, CX1000-018 45DEG CORNER. FINISH COLOR: SILVER GRAY	BOSTON RETAIL	BAKERY/KITCHEN	
FRP1	FIBERGLASS REINFORCED PANELS: GLASBORD-PIF (USE PCI IN CANADA), #85 WHITE, CLASS C FIRE RATED, THICKNESS 0.09", TEXTURE: PEBBLED EMBOSSED.	CRANE COMPOSITES	BACK OF HOUSE	
MB2	METAL COVE STRIP #DILEX-AHK, FINISH: ANODIZED ALUMINUM	SCHLUTER		
MT1	METAL STRIP PROFILE #JOLLY, FINISH: AGRB, BRUSHED GRAPHITE ANODIZED ALUMINUM	SCHLUTER	FRONT OF HOUSE	
VB1	RUBBER BASE: 0.80" THICK 6" BASE, COLOR: #8 BLACK	ALLSTATE	DINING & SMART ROOMS, CAFE	
VB2	THERMOPLASTIC VINYL BASE: .125" THICK, 4.5" COVE BASE, COLOR: #949 VERDE	MANNINGTON COMMERCIAL	BAKERY/POS	
WB	WOOD BASE SUPPLIED BY CASEWORK SUPPLIER, INSTALLED BY G.C.		CARPET	
CARPET				
C5	STYLE: MAGNITUDE, COLOR: BLACK PEARL, SIZE 4X24 TILE, INSTALLATION: BRICK ASHLAR. (REMODEL ONLY)	MANNINGTON COMMERCIAL	DINING AREAS	
C6	STYLE: MATRIX, COLOR: MESA, SIZE 18X36 TILE, INSTALLATION: MONOLITHIC. (REMODEL ONLY)	SHAW / MATRIX MESA	DINING AREAS	
C9	STYLE: NIGHT FLIGHT, COLOR: ROCKY SHORE #105698, SIZE: 19.69"x19.69" TILE, INSTALLATION: QUARTER TURNED (REMODEL ONLY)	INTERFACE	DINING AREAS	
C12	CARPET - SIZE: 24"W x 24"L; ROUGH IDEA SHEAR - ENTRY WAY TILE WITH AFIRMA HARDBACK, COLOR: PLOT 800118;	BENTLEY MILLS	ENTRY	
TILE/GROUT NOTES				
NOTE	" (U)" OR "(S)" SHOWN NEXT TO GROUT NUMBER(S) BELOW INDICATES GROUT TO BE UNSANDED OR SANDED.			GROUT #; (S)ANDED/(U)NSANDED; JOINT SPACING
DECORATIVE TILE				
T49	COLOR: FRENCH CLAY; BRONZAGE, SIZE: 4"X12", LAYOUT/PATTERN: 1/3 RUNNING BOND	TRANSCERAMICA	WALL | RESTROOM	G14; (U); 1/8"
T101	COLOR: FORGED; OLIVE GREEN, SIZE: 2.5" X 9.5", LAYOUT/PATTERN: STACK BOND	CREATIVE MATERIALS	WALL | FEATURE COLOR	G26; (US); 1/4"
T102	COLOR: ZELIGE; SPECKLED TAUPE, SIZE: 5" X 5", LAYOUT/PATTERN: STACK BOND	WOW TILE	WALL | FEATURE WHITE	G27; (US); 1/8"
T103	COLOR: SANTIAGO BLEND, SIZE:3 5/8" X 11 5/8", LAYOUT/PATTERN: STACK BOND	CREATIVE MATERIALS	WALL | FEATURE BRICK	G25; (US); 3/8"
T104	COLOR: OXIDIZE; BROWN, SIZE: 12" X 24", LAYOUT/PATTERN: STACKED	CREATIVE MATERIALS	FLOOR | DINING	G28; (US); 1/4"
T105	COLOR: ARID GRAY, SIZE: 6" X 6", LAYOUT/PATTERN: STACKED	DALTILE	FLOOR | KITCHEN	G28; (US); 1/4"
T106	COLOR: BLAZE; DECOR YELLOW, SIZE: 4" X 12", LAYOUT/PATTERN: STACK BOND	TRANSCERAMICA	WALL | ACCENT	
QUARRY TILE				
QT	COLOR: CHESTNUT BROWN, #108, SIZE: 6"X6" WITH COVE BASE (ALTERNATE: DALTILE QUARRY TILE, COLOR: DIABLO RED, #0T01, OR COLOR: RED BLAZE, #0Q40, SIZE: 6"X6" SMOOTH W/ PRECISION ENDS & COVE BASE)	METROPOLITAN QUARRY BASICS	FLOOR TILE | BOH	G2, (G3); (S); 3/8"
GROUT				
G1	COLOR: 39; IVORY. ALTERNATE: LATICRETE GROUT COLOR: 39 MUSHROOM	MAPEI		
G25	COLOR: 58; TERRACOTTA	LATICRETE MVIS MORTAR		
G26	COLOR: 47; CHARCOAL	MAPEI		
G27	COLOR: 00; WHITE	MAPEI		
G28	COLOR: 35; NAVAJO BROWN	MAPEI		
GX	TEST GROUT, NOT ESTABLISHED			
WALL COVERING NOTES				
NOTE	TEXTURGLAS FINAL FINISH TO INCLUDE SCHEDULED PAINT COLOR			
WALL COVERING				
WC1	WALL TEXTURE; TEXTURGLAS, STYLE: TG4; BURLAP (CLASS A FIRE RATING)	ROOS INTERNATIONAL	FOH	SHOIW PAINT # HERE
WC2	WALL TEXTURE; TEXTURGLAS, STYLE: TG7550; CROISINE (CLASS A FIRE RATING)	ROOS INTERNATIONAL	FOH	SHOIW PAINT # HERE
WC3	WALL TEXTURE; TEXTURGLAS, STYLE: TG7710; CREPINE FLORTINES (CLASS A FIRE RATING)	ROOS INTERNATIONAL	FOH	SHOIW PAINT # HERE
WC7	STYLE: BIG SUR; COLOR: COVE	MDC	FOH | MAIN	
WC8	STYLE: WATERCOLOR CANVAS; COLOR: EVERGREEN	MDC	FOH | ACCENT	
MISCELLANEOUS				
CMU	SPLIT FACE CMU - 4"X12"X24", CHISELED FACE WITH INTEGRAL COLOR: ARRISCRAFT RENNAISSANCE MASONRY UNIT, COLOR: SANDDRIFT, FINISH: PRESS HAMMERED		TRASH ENCLOSURE	
GL1	EUROPEAN CLEAR, TREE BARK, 5/32" THICKNESS SINGLE PANE GLASS	BENDHEIM	INTERIOR SCREEN WALLS	
GL2	SEEDED, SINGLE PANE GLASS	SEEDED	INTERIOR SCREEN WALLS	
GL5	TEXTURED GLASS; REEDED. COLOR: LOW IRON	PILKINGTON		
IG	1" INSULATED CLEAR GLAZING TYPICAL		STOREFRONT	
IGS	1" INSULATED SPANDREL GLAZING TYPICAL, COLOR: BLACK		STOREFRONT	
MTL8	METAL BASE FOR MILLWORK	CHEMETAL	MILLWORK	
TREX	TREX PLYWOOD, COLOR: SADDLE	TREX	TRASH GATE	
TREX2	TREX PLYWOOD, COLOR: WINCHESTER GREY	TREX	UTILITY SCREEN	
WOOD				
WD24	1/4" BEAD BOARD PANELING, 3" "V' GROVE O.C.; PRIMED (WHITE) & PAINTED IN THE FIELD	MILLWORK VENDOR	FOH	
WD25	1/2" BEAD BOARD PANELING, 3" "V' GROVE O.C.; PRIMED (WHITE) & PAINTED IN THE FIELD	MILLWORK VENDOR	FOH	
WD30	WHITE OAK, NATURAL, WIRE BRUSHED; FINISH: DEAD FLAT	MILLWORK VENDOR	MILLWORK	
WD30A	WHITE OAK, NATURAL; FINISH: DEAD FLAT	MILLWORK VENDOR	MILLWORK	
WD32A	WHITE OAK, DARK STAIN; FINISH: DEAD FLAT	MILLWORK VENDOR	MILLWORK	
WD37A	WHITE OAK, BLACK STAIN; FINISH: SMOOTH	MILLWORK VENDOR	MILLWORK	
WDX1	WHITE OAK; COLOR: GALLATIN	MILLWORK VENDOR	MILLWORK	
WDX2	WHITE OAK; COLOR: WIND RIVER	MILLWORK VENDOR	MILLWORK	
PAINT NOTES				
NOTE	INTERIOR PAINT: USE FRESH START PRIMER 02300 (WARM). USE SEMI-GLOSS FINISH IN FOOD SERVICE AREAS. USE EGSHELL FINISH FOR ALL OTHER WALLS AND RESTROOM. USE SATIN FINISH ON INTERIOR DOORS & FRAMES. EXTERIOR EIFS: TOP COAT TO MATCH UNIDENTIFIED BENJAMIN MOORE PAINT COLOR. VERSITRIM FASCIA: MATCH BENJAMIN MOORE PAINT AT WALL BELOW, POST COATED, KYNAR 500 OR EQUAL PAINT.			
PAINT				
P99	FAIRVIEW TAUPE; #HC-85	BENJAMIN MOORE		
P166	CHEATING HEART; #1617	BENJAMIN MOORE		
P224	DRAGON'S BREATH; #1547	BENJAMIN MOORE		
P278	MONTEREY WHITE; #HC-27	BENJAMIN MOORE		
P285	BLACK BEAUTY; #2128-10	BENJAMIN MOORE		
P290	AVOCADO; #2145-10	BENJAMIN MOORE		
P291	BAJA DUNES; #997	BENJAMIN MOORE		
P292	COLLECTOR'S ITEM; #AF-45	BENJAMIN MOORE		
P293	FRENCH BERET, #1610	BENJAMIN MOORE		
P294	HUNTER GREEN; #2041-10	BENJAMIN MOORE		
UPHOLSTERY				
F133	VACATION; CANYON	FIL DOUX		
F177	KIEV; CASTLE	POLLACK		
F178	RE-FLE; INK WASH	POLLACK		
F185	FLOCK; NETTLE	MOMENTUM		
F187	FLOCK; FERN	MOMENTUM		
F188	FLOCK; HEARTH	MOMENTUM		
F189	FLOCK; FORREST	MOMENTUM		
S10	REIN; SABLE	DESIGNTEX		
S11	REIN; CLAY	DESIGNTEX		
S57	BOUNTY; COFFEE	FIL DOUX		
S69	DIMA; NIGHTFALL	FIL DOUX		
S71	BISTRO; CITRON	CF STINSON		
S72	BISTRO; GRASSHOPPER	CF STINSON		
S73	CASSIDY 2.0; PELICAN	CF STINSON		
S74	CASSIDY 2.0; JUNGLE	CF STINSON		
S75	BOUNTY; COCAO	FIL DOUX		
SOLID SURFACING				
SS40	STYLE: DALMATA; TERRAZZO, COLOR: TERRAZZO MATRIX 412	FORMICA	COUNTER/TABLE TOPS	
SS41	STYLE: LUNA, COLOR: SAIL WHITE	FORMICA	PICK-UP SHELVES	
LAMINATES				
L104	WILSONART 1500 - 6O GREY	WILSONART	KITCHEN DOOR	
L105	4155 PEWTER	FORBO	TABLE TOPS	
L107	0717 CASTORO OTTAWA	FENIX	CONSOLIDATION SCREENS	
L108	0724 GRIGIO BROMO	FENIX	CONSOLIDATION / BAKERY	
L109	0750 VERDE COMODORO	FENIX	CONSOLIDATION SCREENS	
L110	4132 ASH	FORBO	TABLE TOPS	
L111	4178 IRON	FORBO	TABLE TOPS	
L112	4166 CHARCOAL	FORBO	TABLE TOPS	

FINISH SCHEDULE

NUMBER	DESCRIPTION	MANUFACTURER/DISTRIBUTOR	LOCATION	NOTES
L113	4184 OLIVE	FORBO	TABLE TOPS	
LX	TEST LAMINATE, NOT ESTABLISHED			
BRICK				
BR-1	BRICK - THIN, SIZE: 3-5/8"W X 3/4"TH X 11-5/8"L, COLOR: SANTIAGO CREATIVE MATERIALS BLEND	MCNEAR BRICK & BLOCK	EXTERIOR	
PAVING STONE				
PV-1	HOLLAND PAVING STONE (FIELD), COLOR: RUSTIC RED, PATTERN: HERRINGBONE RECTANGULAR	UNILOCK	OUTDOOR CAFE - FIELD	
EXTERIOR FABRIC				
EF-5	GREEN .SUNBRELLA COLOR: LEAF GREEN; PMS 2411C	SUNBRELLA	AWNING	
EF-6	SLATE. SUNBRELLA COLOR: CHARCOAL; PMS 7540C	SUNBRELLA	AWNING	
EF-7	SAND. SUNBRELLA COLOR: SAND; PMS 9184C	SUNBRELLA	AWNING	

GC ORDERED/COORDINATED ITEMS:

INTERIOR FINISH
BENJAMIN MOORE - NATIONAL ACCOUNT
PANERA ACCT # - NA229
CUSTOMER CARE - 877-623-8484 OPTION 3 FOR MORE INFO

CRANE COMPOSITES (ASK FOR GLASBOARD) (FIBERGLASS REINFORCED PLASTIC)
RYAN MINATO - NATIONAL ACCT.
815.467.8951
PANERAFRP@CRANECOMPOSITES.COM
CONTACT FOR STOCKING DISTRIBUTOR
APPROVED COLORS: WHITE (85) AND BEIGE (70)

DALTILE - NATIONAL ACCOUNT
877-556-5728
NATIONAL ACCOUNTS@DALTILE.COM
JOANNA WHITTAKER (MAIN CONTACT)
314-629-0125
JOANNA.WHITTAKER@DALTILE.COM

DESIGN & DIRECT SOURCE
(TILE)
BRITTANY HAM
503-882-0687
BRITTANY@DESIGNANDDIRECTSOURCE.COM

FIRECLAY TILE
(TILE)
CAITLYN CHILD: 971-570-2330 / 800-773-2226 x1025
CAITLYN@FIRECLAYTILE.COM
ERIC EDELSON: 971-941-5493
ERIC@FIRECLAYTILE.COM

INTERFACE CARPET
(CARPET)
DENNIS UPSHAW: 314-378-3197
DENNIS.UPSHAW@INTERFACE.COM
STEVE SWEETIN: 913-707-0787
STEVE.SWEETIN@INTERFACE.COM

MANNINGTON CARPET
ERIC DEMINICO
ERIC.DEMINICO@MANNINGTON.COM
KRISTEN KOMIS
314.250.3040
KRISTEN.KOMIS@MANNINGTON.COM

MATS, INC.
(ENTRY MATS)
ROSS BECKER
508.326.3665
781.436.7525
RBECKER@MATSINC.COM

METROPOLITAN QUARRY BASICS
(QUARRY TILE)
DIANNE YOUNG
877-358-1970
DYOUNG@IRONROCK.COM
WWW.METROCERAMICS.COM

ROOS INTERNATIONAL (TEXTURGLAS)
DEBORAH & DICH ROOS
800-888-2776 / 954-429-3883
DEBORAH@ROOSINTL.COM
DICH@ROOSINTL.COM
WWW.ROOSINTL.COM

SHAW CARPET
(CARPET)
TIFFANY PURVIS
706.532.7407
TIFFANY.PURVIS@SHAWINC.COM

SMARTSTEP FLOORING
BRUCE BEANS
508.528.0886 (OFFICE)
774.571.7454 (CELL)
BBEANS@COMCAST.NET
RYAN BEANS
508.277.5487
508.528.0886
RYAN@SMARTSTEPFLOORINGINC.COM

TRANSCERAMICA TILE
JAN WERNER (MAIN CONTACT)
JWERNER@TRANSCERAMICA.COM
312-506-2856
NOREEN SCHERTLER (BACKUP)
312-342-4689

EXTERIOR PRODUCTS
AMERISTAR RAILING
JASON GOINS
800.321.8724
JASON.GOINS@ASSAABLOY.COM

API (AMERICAN PRODUCTS, INC.)
(METAL CANOPIES)
MICHAEL CALDERONE
813-925-0144
MCALDERONE@AMERICANPROD.COM

AWNING & SIGN CONTRACTORS
TOM ARMSTRONG: 888-665-1521 / 317-409-9440
TARMSTRONG@BEAGLEONEINC.COM
JOE STEMPIEN: 260-243-6751
JSTEMPIEN@BEAGLEONEINC.COM

DURO-LAST ROOFING, INC.
(ROOFING MEMEBRANE)
MOLLY GEHRIS: 989-758-6344
214-232-0079
MGEHRIS@DURO-LAST.COM

TENSHON CANOPY
CULLIN HOWARD
480-663-3166
CHOWARD@TENSHON.COM

LIGHTING
DOLAN LIGHTING
(DECORATIVE LIGHTING)
MICHELLE WEIR
888.506.7383
KNEADSUPPORT@DOLANHOSPTITALITY.COM

TAMMY MCARTHUR
206.268.3429
TMCARTHUR@DOLANHOSPITALITY.COM

STANDARD ELECTRIC SUPPLY CO.
(LIGHTING FIXTURES)
978-661-1854
PANERA@STANDARDELECTRIC.COM

UTILITY/SECURITY
AO SMITH
(HOT WATER HEATER)
JEFF GERSTAL
412-471-6984

NUCO2
HEATHER SHEPHERD
919-795-8676
HSHEPHERD@NUCO2.COM
TINA SILAS
800-472-2855 (EXT 3446)
BSILAS@NUCO2.COM

PLAYNETWORK
SOUND SYSTEM (PANERA ORDERED)
REED STRUTZENBERG
425.531.1513
RSTRUTZENBERG@PLAYNETWORK.COM
JOHANNA DELONG
425-629-2725
JDELONG@PLAYNETWORK.COM

UAS (SECURITY SYSTEM)
MARY ANN SHEILDS
(800) 421-6661 EXT 1230
MARYANN.SHIELDS@UAS.COM

RESTOOMS
ESSITY PROFESSIONAL HYGIENE (FORMERLY SCA)
(WHITE PAPER TOWEL DISPENSERS)
BRYAN YOUNG
PHONE +1 303 470 8394
MOBILE +1 720 272 8037
BRYAN.YOUNG@ESSITY.COM

GENERAL PARTITIONS
SUSAN MARCH
(573) 696-0178 (P)
(573) 696-0071 (F)
(573) 489-7495 (C)
SMARCHCOMPANY@GMAIL.COM
GENERALPARTITIONS.COM

KJA INC.
GLOBAL PARTITIONS - SALES REPRESENTATIVES ST. LOUIS
JENNIFER WELLS / PRESIDENT
CELL: 314-614-3562
JENNIFER@KJAINC.COM

TOTO USA
(RESTROOM FIXTURES)
PETER STANGEL
C:415-652-6743
PSTANGEL@TOTO.COM
WWW.TOTOUSA.COM

MISCELLANEOUS
ARMSTRONG/TECTUM CLG PANELS
LISA CAVATAIO
773.882.0299
LYCAVATAIO@ARMSTRONGCEILING.COM

BOSTON GROUP
(BOSTON BUMPER GUARDS)
DEBBIE MCNEILL: 708-639-2849
D.MCNEILL@BOSTON-GROUP.COM
MARK MUCHA: 708-306-4114
M.MUCHA@BOSTON-GROUP.COM

CARDINAL ACOUSTICS, INC.
(ACOUSTICAL PANELS)
WILLIAM KHOURIE (PRESIDENT)
614-721-3001(O)
614-496-3623(M)
CARDINALACOUSTICS.COM

HILSON INC.
(ROLLER BLINDS)
MARSHA JONES
314-773-8883

IMRIE-GIELOW
(MARINITE)
CONTACT: CYNTHIA VENT
314.772.4200
CVENT@IMRIEGIELOW.COM

MATS INC. (WALK-OFF MAT)
NATIONAL ACCOUNT
800-628-7462 / 781-344-1536
JOHN DUNBAR: 7718-964-5373
JDUNBAR@MATSINC.COM

QUIKSERV CORP.
(DRIVE-THRU WINDOWS)
BRIAN MCCLOSKEY
713-849-5882(O)
832-792-2646(M)
QUICKSERV.COM

VICTORIAN SALES
(FIREPLACE)
LAURIE COOK
636-343-4747
LAURIE@VICTORIANSALES.COM

GENERAL NOTES:

A. CORNER GUARDS TO BE INSTALLED AT ALL OUTSIDE CORNERS IN KITCHEN, BAKERY (1 1/2" X 1 1/2" STAINLESS STEEL). SUPPLIED AND INSTALLED BY G.C.
B. NOT ALL FINISHES IN SCHEDULE OF FINISHES ARE NECESSARILY INCLUDED IN THIS SCOPE OF WORK. SEE ROOM FINISH SCHEDULE & SHEETS FOR LOCATIONS.
C. G.C. TO LEAVE ON SITE, UPON COMPLETION OF JOB, (1) BOX EACH OF ALL WALL, FLOOR, CARPET TILE & CEILING TILE USED - REFER TO VENDOR LIST.
D. ALL FLOORING SHALL BE IN ACCORDANCE WITH APPLICABLE ACCESSIBILITY CODE.
E. PRIMARY SURFACES WITHIN FOOD PRODUCTION AREA SHALL MEET 70% LIGHT REFLECTIVE VALUE OR GREATER.
F. PAINT FINISHES: INTERIOR PAINT TO BE BENJAMIN MOORE, REGAL SELECT. CEILINGS AND SOFFITS ARE TO BE FLAT, WALLS IN DINING AND GENERAL AREAS TO BE LOW LUSTER (EGGSHELL), WALLS IN KITCHEN AND BATHROOM, IF PAINT FINISH, TO BE SEMI GLOSS, FRONT OF HOUSE DOOR FRAMES TO BE SEMI GLOSS AND MATCH THE ADJACENT WALL SURFACE AT FOH.
G. EXTERIOR EIFS PAINT TO BE BENJAMIN MOORE, REGAL SELECT, EXTERIOR LOW LUSTER. EXTERIOR SEALANT TO MATCH ADJACENT EIFS COLOR OR BUILDING MATERIAL, TYP.
H. ROLLER SHADES: MANUFACTURER - DRAPER, OPERATING MECHANISM - MANUAL FLEX SHADE W/ STAINLESS STEEL BEAD CHAIN CLUTCH OPERATOR & WEIGHTED BAR @ BOTTOM, FABRIC - SHEER WEAVE SERIES 4100 "GREYSTONE" BY PHIFER @ CLEAR ANODIZED ALUMINUM STOREFRONT & SHEER WEAVE SERIES 3000 "CHOCOLATE" BY PHIFER @ BRONZE ALUMINUM STOREFRONT. SET UPPER AND LOWER TRAVEL LIMITS BY INSTALLING STOP BALLS TO BEAD CHAIN (CRIMP CLOSED USING PLIERS), PER MANUFACTURER'S RECOMMENDATIONS. USE STOP BALLS PROVIDED IN HARDWARE PACKET BY DRAPER. DO NOT SUBSTITUTE HARDWARE BY OTHERS AS THIS MAY INTERFERE WITH CLUTCH MECHANISM. MOUNT HOLDER CLIP FOR CHAIN ON MULLION AT 54" AFF, TYP. NOTES CONTAINING AN "X" REFER TO TEST ITEMS AND ARE NOT STANDARD.

7/8/2022 3:34:41 PM

PB 2021.03.V1

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:

STATE OF MISSOURI
DENNIS D. SMITH
NUMBER A-7203
REGISTERED ARCHITECT

Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

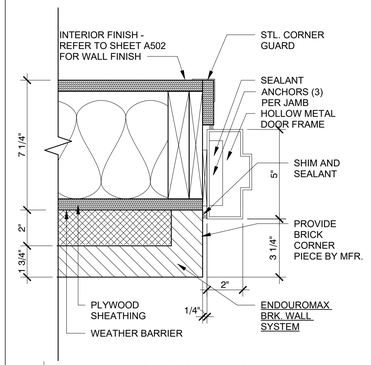
Bakery Cafe #2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date
A	Shell - Permit Set	7/5/2022

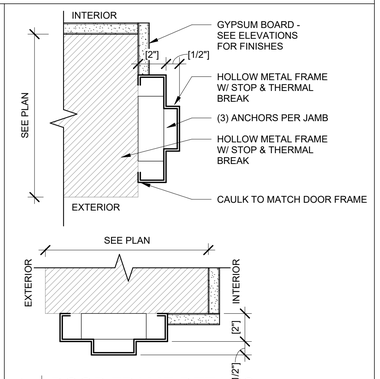
FINISH SCHEDULES, LEGENDS, & NOTES

Project Number: 2406
Sheet Number: **A600**
Drawn By: EB
Issue Date: **07/05/2022**
DPM: DPM DM: DM CPM: CPM



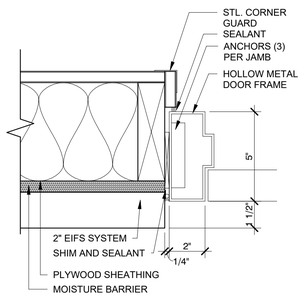
18 SERVICE DOOR JAMB

3" = 1'-0"



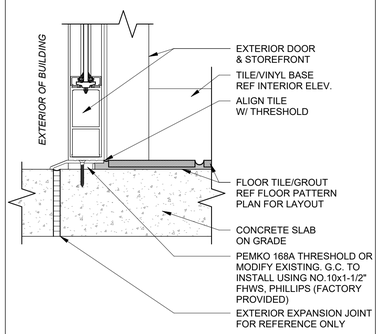
14 DOOR FRAME DETAILS

3" = 1'-0"



18.1 SERVICE DOOR JAMB

3" = 1'-0"

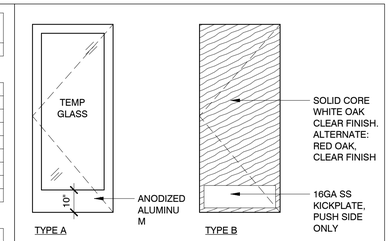


15 THRESHOLD @ VESTIBULE DOOR

3" = 1'-0"

HARDWARE SCHEDULE

QTY	PROVIDE: PER DOOR	SUPPLIER
GROUP 1- (DOUBLE ENTRY W/ LOCK)- MATCH STOREFRONT FINISH		
1 EACH	CONTINUOUS GEAR HINGE, CONCEALED 780-224HD	HAGER
1 EACH	EXIT DEVICE 25-C (PANIC BAR)	FALCON
1 EACH	PULL 12L	HAGER
1 EACH	CYLINDER (VERIFY CAM & FINISH MAT'L) | MAY REQUIRE 718C CYLINDER TRIM	FALCON
1 EACH	CLOSER, HEAVY DUTY, 4041 (4040 SERIES)	LCN
1 EACH	THRESHOLD, HEAVY DUTY, 1715	PEMKO
1 EACH	WEATHERSTRIP 315SSR	PEMKO
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
1 EACH	SWEEP 307AV (OR EQUAL): COMPATIBLE W/ DOOR SPEC.	PEMKO
GROUP 1A- (ENTRY W/OUT LOCK)- MATCH STOREFRONT FINISH		
1 EACH	CONTINUOUS GEAR HINGE, CONCEALED 780-224HD	HAGER
1 EACH	PUSH/PULL SET 160D-V-B	HAGER
1 EACH	CLOSER, HEAVY DUTY, 4041 (4040 SERIES)	LNC
1 EACH	THRESHOLD, HEAVY DUTY, 1715	PEMKO
1 EACH	WEATHERSTRIP 315SSR	PEMKO
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
GROUP 1B- (SINGLE ENTRY W/LOCK)- MATCH STOREFRONT FINISH		
1 EACH	CONTINUOUS GEAR HINGE, CONCEALED 780-224HD	HAGER
1 EACH	EXIT DEVICE 25-R (PANIC BAR)	FALCON
1 EACH	PULL 12L	HAGER
1 EACH	CYLINDER (VERIFY CAM & FINISH MAT'L)	FALCON
1 EACH	CLOSER, HEAVY DUTY, 4041 (4040 SERIES)	LCN
1 EACH	THRESHOLD, HEAVY DUTY, 1715	PEMKO
1 EACH	WEATHERSTRIP 315SSR	PEMKO
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
1 EACH	SWEEP 307AV (OR EQUAL): COMPATIBLE W/ DOOR SPEC.	PEMKO
GROUP 1C- (EGRESS EXIT) - MATCH STOREFRONT FINISH		
1 EACH	CONTINUOUS GEAR HINGE, CONCEALED 780-224HD	HAGER
1 EACH	EXIT DEVICE 25-R (PANIC BAR)	FALCON
1 EACH	PULL 12L	HAGER
1 EACH	CLOSER, HEAVY DUTY, 4041 (4040 SERIES)	LCN
1 EACH	THRESHOLD, HEAVY DUTY, 1715	PEMKO
1 EACH	WEATHERSTRIP 315SSR	PEMKO
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
1 EACH	SWEEP 307AV (OR EQUAL): COMPATIBLE W/ DOOR SPEC.	PEMKO
GROUP 2 - (SERVICE DOOR)		
1 EACH	CONTINUOUS PIANO HINGE, 780-210HD	HAGER-ROTON
1 EACH	EXIT DEVICE 19-R-EO (PANIC BAR)	FALCON
1 EACH	CLOSER, HEAVY DUTY, 4041 (4040 SERIES)	LCN
1 EACH	EXIT ALARM EAX-3500FK (FLUSH MOUNT KIT)	DETEX
1 EACH	THRESHOLD 171A - SIZE AS REQUIRED	PEMKO
1 EACH	SWEEP 307AV - SIZE AS REQUIRED	PEMKO
1 EACH	WEATHERSTRIP 303AV- SIZE AS REQUIRED KICK	PEMKO
2 EACH	KICK PLATE 24"X34" (US32D FINISH)	-
1 EACH	WIDE ANGLE VIEWER 698	IVES
1 EACH	24" HC STAINLESS GRAB BAR BUMPER- B-5806-24 OR EQUAL	BOBRICK
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
GROUP 3A- RESTROOM (MULTI-USE) PASSAGE		
1 1/2 PAIR	HINGE BB1279 4 1/2" X 4 1/2"	HAGER
1 EACH	PULL 8302B 3 1/2" X 15" PA28	IVES
1 EACH	PUSH 8200 3 1/2" X 15" PA28	IVES
1 EACH	CLOSER, 8616FH	DORMA
3 EACH	SILENCERS GJ64	GLYNN JOHNSON
2 EACH	KICK PLATE 12"X34" (US32D FINISH)	-
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
GROUP 3B- RESTROOM (SINGLE-USE)		
1 1/2 PAIR	HINGE BB1279 4 1/2" X 4 1/2"	HAGER
1 EACH	CYLINDER B-SERIES, B301, "D" LEVER STYLE, PRIVACY FUNCTION	FALCON
1 EACH	DEADBOLT W/ "IN USE" & "VACANT" INDICATOR D271-626 SATIN CHROME FINISH	FALCON
1 EACH	CLOSER, 8618FH	DORMA
3 EACH	SILENCERS GJ64	GLYNN JOHNSON
2 EACH	KICK PLATE 12"X34" (US32D FINISH)	-
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
GROUP 4- OFFICE/ PRIVACY		
1 1/2 PAIR	HINGE BB1279 4 1/2" X 4 1/2"	HAGER
1 EACH	CYLINDER B-SERIES, B581, "D" LEVER STYLE, STOREFRONT FUNCTION	FALCON
1 EACH	CLOSER 8616AF86 (NON HOLD OPEN)	DORMA
3 EACH	SILENCERS GJ64	GLYNN JOHNSON
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
2 EACH	KICK PLATE 12"X34" (US32D FINISH)	IVES
GROUP 5- CLOSET		
1 1/2 PAIR	HINGE BB1279 4 1/2" X 4 1/2"	HAGER
1 EACH	CYLINDER B-SERIES, B581, "D" LEVER STYLE, STOREFRONT FUNCTION	FALCON
3 EACH	SILENCERS GJ64	GLYNN JOHNSON
1 EACH	STOP - AS REQUIRED. WALL-WS407CCV, FLOOR-FS436 OR FS438	IVES
2 EACH	KICK PLATE 12"X34" (US32D FINISH)	-



HARDWARE GENERAL NOTES:

1. G.C. TO FURNISH & INSTALL FALCON CYLINDER IN ALL PERIMETER DOORS. ALL PERIMETER DOORS TO BE KEYED ALIKE. PROVIDE KEYWAY ON EXTERIOR FACE.
2. G.C. TO FURNISH & INSTALL FALCON CYLINDER IN ALL INTERIOR H.M. DOORS. ALL INTERIOR DOORS TO BE KEYED ALIKE. PROVIDE KEYWAY ON EXTERIOR FACE.
3. G.C. TO FURNISH & INSTALL PADLOCK WITH 4" SHANK FOR WALK-IN COOLER/FREEZER DOORS. PADLOCK TO BE KEYED ALIKE WITH INTERIOR DOORS.
4. ALL HOLLOW METAL DOOR FRAMES ARE TO BE WELDED.
5. G.C. TO FURNISH & INSTALL PANIC HARDWARE PER ALL APPLICABLE REGULATIONS & CODES HAVING JURISDICTION.
6. DOOR STOPS & BUMPERS TO BE INSTALLED BEHIND ALL DOORS.
7. ALL EXTERIOR HARDWARE TO MATCH STOREFRONT, USE US28 SATIN ALUMINUM FOR CLEAR ANODIZED FINISH, & US10B DARK BRONZE FOR BRONZE STOREFRONT. USE US28 SATIN ALUMINUM FOR ALL INTERIOR HARDWARE.
8. G.C. TO SUPPLEMENT EXISTING HARDWARE AS REQUIRED (FOR EXISTING DOORS) TO MATCH PANERA'S SPECIFICATIONS - REPLACE HINGES IF NECESSARY.
9. NO THRESHOLD REQUIRED AT INTERIOR VESTIBULE DOORS.

DOOR SCHEDULE

NUM	NEW/ EX	DOOR LEAVES	DOOR SIZE W	DOOR SIZE H	DOOR T	DOOR MATERIAL	DOOR TYPE	FRAME JAMB	FRAME DETAILS HEAD	FRAME DETAILS JAMB	HARDWARE	COMMENTS	FINISH NOTES	KEYING
100	NEW	1	3' - 0"	7' - 0"	1 3/4"	ALUM	A	ALUM				8,9		
101	NEW	2	6' - 0"	6' - 10"	1 3/4"	ALUM	A	ALUM				8,9		
102	NEW	1	3' - 0"	7' - 0"	1 3/4"	ALUM	A	ALUM				8,9		
103	NEW	1	3' - 6"	7' - 0"	1 3/4"	HM	F	HM				8,9		

DOOR SCHEDULE NOTES:

* - SUPPLEMENT EXISTING HARDWARE AS REQUIRED TO MEET PANERA'S SPEC.

1. PERMANENTLY SECURE EXISTING DOOR PRIOR TO INTERIOR FURRING.
2. HARDWARE FURNISHED WITH DOOR.
3. CONTRACTOR TO VERIFY CONDITION OF EXISTING DOOR & CONFIRM IF REPLACEMENT IS REQD.
4. PROVIDE EYE VIEWER INSTEAD OF SECURITY WINDOW.
5. KITCHEN DOORS: ELIASON SCP-8 MODEL (ALTERNATE: CHASE PROLINE 350P) W/ PLAM ANTIQUE WHITE FINISHED BOTH SIDES & 10" ROUND ACRYLIC WINDOW. 18" S.S. BASE (BOTH SIDES) W/ STAINLESS STEEL EDGE TRIM & HINGE COVERS. DOOR FURNISHED WITH BLACK ALUM BUMPER STRIP (32"AFF) BY MANUFACTURER.
6. BACK OF HOUSE METAL DOORS & METAL FRAMES- (ELIASON, OFFICE & SERVICE), PAINT BENJAMIN MOORE #1457 - WHITE WINGED DOVE (P156).
7. RESTROOM DOOR FRAME, PAINT TO MATCH ADJACENT WALL
8. ALL PANIC BARS AND PUSH BARS TO BE MOUNTED ON DOORS BETWEEN 30" AND 40" ABOVE FINISHED FLOOR.
9. SEE DOOR CLOSER HARDWARE ITEMS SO THAT ALL INTERIOR DOORS DO NOT REQUIRE MORE THAN 5 LBS. TO OPERATE AND EXTERIOR DOORS NOT TO EXCEED 8.5 LBS. OF FORCE TO OPERATE.
10. ROOF HATCH; PROVIDE KEYED PADLOCK.

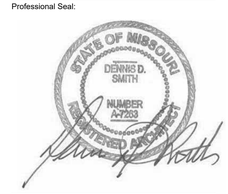
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

DOOR ELEVATIONS, SCHEDULES, & DETAILS

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
DPM: DPM DM: DM CPM: CPM

Sheet Number: **A601**

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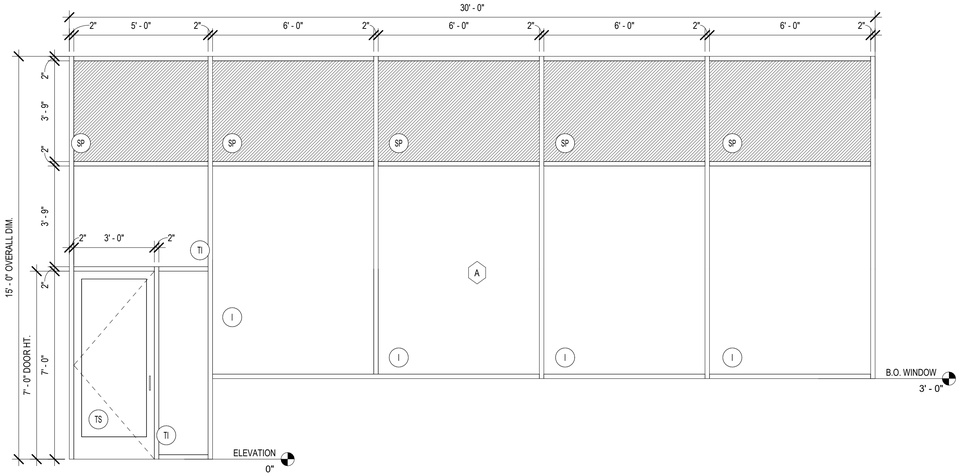
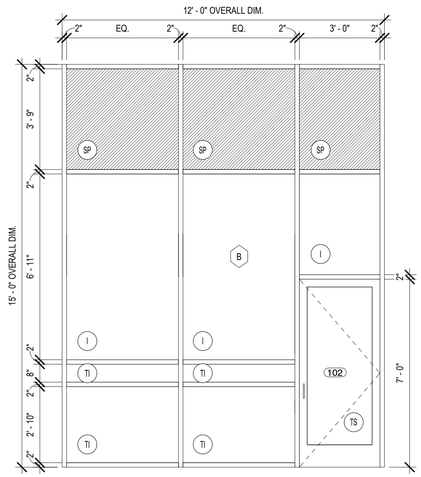
PB 2021 Q3.V1



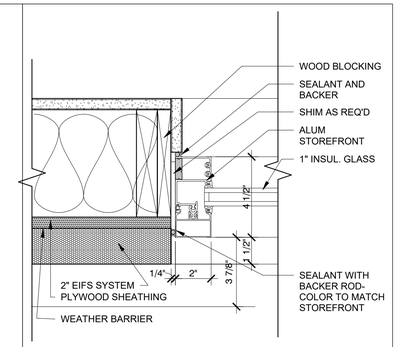
2 STOREFRONT A SOUTH ELEVATION

3/8" = 1'-0"



1 STOREFRONT B EAST ELEVATION

3/8" = 1'-0"



4.1 STOREFRONT JAMB DETAIL

3" = 1'-0"

LEGEND

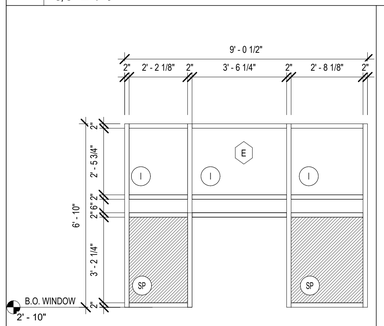
G	ALUMINUM STOREFRONT - MFR: KAWNEER, DARK BRONZE

MINUMUM GLAZING SPEC:

- PPG SOLARBAN 70XL (OR APPROVED EQUAL)
  - A. 1" DUAL-PANE , INSULATED
  - B. LOW-E GLAZING
  - C. SHGC: 0.27
  - D. U-FACTOR: 0.28

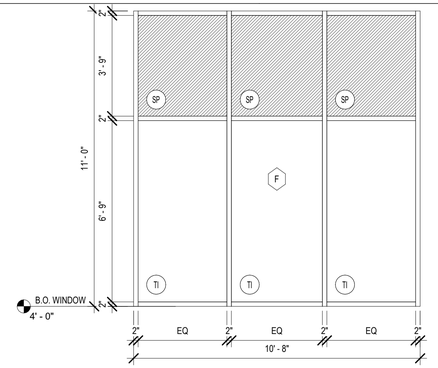
TI	1" TEMPERED AND INSULATED GLAZING
TS	TEMPERED, SINGLE-PANE GLAZING
I	1" INSULATED GLAZING
S	SINGLE-PANE GLAZING
SP	SPANDREL
BM	BREAK METAL: MATCH STOREFRONT FINISH FIELD VERIFY REQUIRED WIDTH

NOTES:
1. OVERALL DIMENSION INCLUDES SHIM AND SEALANT JOINT SPACE. SEE DETAILS FOR FURTHER INFORMATION.
2. SEE SHEET A601 FOR DOOR HARDWARE AND ADDITIONAL DETAILS.



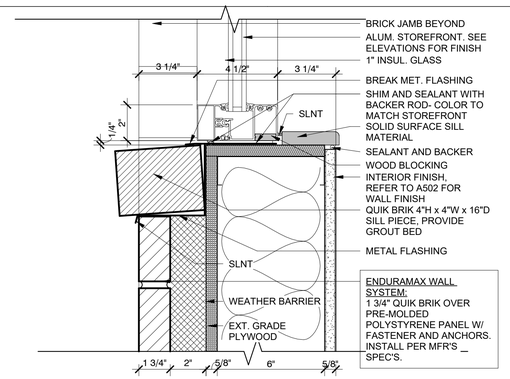
6 STOREFRONT E WEST ELEVATION

3/8" = 1'-0"



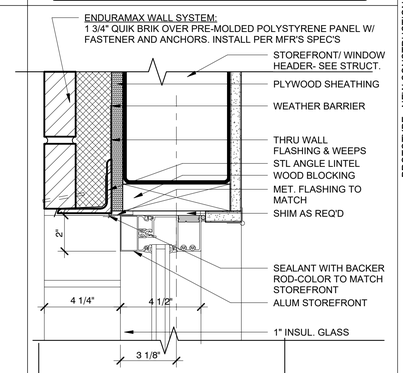
5 STOREFRONT F WEST ELEVATION

3/8" = 1'-0"



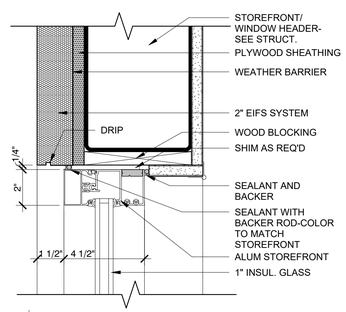
11 STOREFRONT SILL

3" = 1'-0"



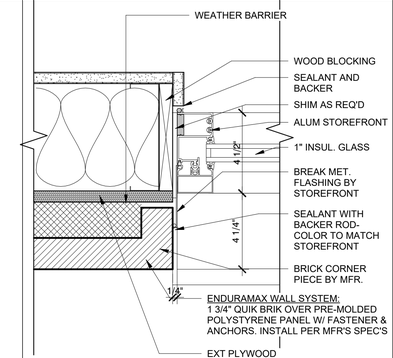
3 STOREFRONT HEAD DETAIL

3" = 1'-0"



3.1 STOREFRONT HEAD DETAIL

3" = 1'-0"



4 STOREFRONT JAMB DETAIL

3" = 1'-0"

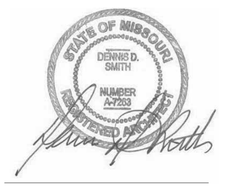
Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

Professional Seal:



Project Title:

PROTOTYPE - NEW CONSTRUCTION - SHELL

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date
A	Shell - Permit Set	7/5/2022

STOREFRONT/GLAZING ELEVATIONS, SCHEDULES, & DETAILS

Project Number: 2406
Drawn By: EB
Issue Date: 07/05/2022
Sheet Number: **A602**

DPM:	DM:	CPM:
DPM	DM	CPM

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P8.2021.03.V1

STRUCTURAL ABBREVIATIONS

#	POUND(S), NUMBER
&	AND
(E)	EXISTING
@	AT
AB	ANCHOR BOLT (S)
ADDL	ADDITIONAL
ALT	ALTERNATE
ARCH	ARCHITECT(URAL)
B/FTG	BOTTOM OF FOOTING
BLDG	BUILDING
BLKG	BLOCKING
BM	BEAM
BMD	BOTTOM OF METAL DECK
BN	BOUNDARY NAIL
BOT	BOTTOM
BP	BASE PLATE
BRG	BEARING
BS	BOUNDARY SCREW
BTWN	BETWEEN
CANT	CANTILEVER(ED)
CFS	COLD-FORMED STEEL
CIP	CAST-IN-PLACE
CJ	CONTROL OR CONST JOINT
CL	CENTER LINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CTR	CENTER
DBL	DOUBLE
DC	DEMAND CRITICAL (WELD)
deg	DEGREE
DET	DETAIL(S)
DF	DOUGLAS FIR
DFL	DOUGLAS FIR LARCH
dia	DIAMETER
DIM	DIMENSION
DWG	DRAWING
DWL	DOWEL
EA	EACH
EE	EACH END
EF	EACH FACE
EL	ELEVATION
ELEV	ELEVATOR
EMB	EMBEDMENT
EN	EDGE NAIL
EOJ	END OF JOIST
EQ	EQUAL
ETC	ET CETERA
EW	EACH WAY
EXP	EXPANSION
EXT	EXTERIOR
FDN	FOUNDATION
FF	FINISH FLOOR
FIN FLR	FINISH FLOOR
FLR	FLOOR
FRMG	FRAMING
FRT	FIRE-RETARDENT TREATED
FS	FAR SIDE
FTG	FOOTING
FV	FIELD VERIFY
ga	GAUGE
GALV	GALVANIZE(D)
GLB	GLULAM BEAM
HDR	HEADER
HGR	HANGER
HK	HOOK
HORIZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION
INT	INTERIOR
ISF	INSIDE FACE

STRUCTURAL ABBREVIATIONS

J/BRG	JOIST BEARING
JG	JOIST GIRDER
JG/BRG	JOIST GIRDER BEARING
JST	JOIST
JT	JOINT
kip	1,000 POUNDS
ksi	kips PER SQUARE INCH
LB	POUND
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
MAX	MAXIMUM
MECH	MECHANICAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
NS	NEAR SIDE
NTS	NOT TO SCALE
oc	ON CENTER
OH	OPPOSITE HAND
OPNG	OPENING
OSF	OUTSIDE FACE
PAF	POWER-ACTUATED FASTENER
PARA	PARAPET
PEMB	PRE-ENGINEERED METAL BUILDING (MANUFACTURER)
PIL	PILASTER
PL	PLATE
PLBG	PLUMBING
PLYWD	PLYWOOD
psf	POUNDS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
PTDF	PRESSURE TREATED DOUGLAS FIR
PTDFL	PRESSURE TREATED DOUGLAS FIR LARCH
PTSPF	PRESSURE TREATED SPRUCE PINE FIR
PTSYP	PRESSURE TREATED SOUTHERN YELLOW PINE
QT	QUANTITY
REINF	REINFORCED, REINFORCING
REQD	REQUIRED
RTU	ROOF TOP UNIT
SCHED	SCHEDULE
SD	SNOW DRIFT
SHTG	SHEATHING
SIM	SIMILAR
SL	SNOW LOAD
SPF	SPRUCE PINE FIR
STD	STANDARD
STL	STEEL
STRUC	STRUCTURAL
SYP	SOUTHERN YELLOW PINE
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
T/BRG	TRUSS BEARING
T/CONC	TOP OF CONCRETE
T/FTG	TOP OF FOOTING
T/PAN	TOP OF PANEL
T/PARA	TOP OF PARAPET
T/PIL	TOP OF PILASTER
T/S	TOP OF SLAB
T/STL	TOP OF STEEL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
USGS	US GEOLOGICAL SURVEY
VAR	VARIES
VERT	VERTICAL
w/	WITH
WHS	WELDED HEADED STUD(S)
WP	WORK POINT
WWR	WELDED WIRE REINFORCEMENT

SHOP DRAWING AND SUBMITTAL NOTES

1. SHOP DRAWINGS AND/OR SUBMITTALS SHALL BE FURNISHED FOR ALL STRUCTURAL COMPONENTS. UNLESS OTHERWISE NOTED, THESE SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION IN ACCORDANCE WITH THESE CONTRACT DRAWINGS AND PROJECT SPECIFICATIONS (IF APPLICABLE). CONTRACTOR SHALL ALLOW A MINIMUM OF 2 WEEKS FROM RECEIPT OF SHOP DRAWINGS FOR CASE ENGINEERING INC. TO PROVIDE RESPONSE.
2. PRIOR TO SUBMITTAL TO THE ENGINEER, THE CONTRACTOR AND ARCHITECT SHALL HAVE REVIEWED THE SHOP DRAWINGS AND MADE ANY CORRECTIONS REQUIRED. THE CONTRACTOR AND ARCHITECT SHALL STAMP THE DRAWINGS, INDICATING THE SUBMITTAL HAS BEEN REVIEWED.
3. STRUCTURAL DRAWINGS ARE THE SOLE PROPERTY OF CASE ENGINEERING. REPRODUCTION OF STRUCTURAL DRAWINGS FOR USE IN SHOP DRAWING SUBMITTALS IS NOT ACCEPTABLE WITHOUT OUR WRITTEN AGREEMENT.

BUILDING CODES AND STANDARDS USED FOR DESIGN

1. INTERNATIONAL BUILDING CODE 2018 EDITION
   ASCE 7-16
   OCCUPANCY CATEGORY: II

DESIGN LOADS

1. DESIGN LOADS

FLOOR LIVE LOAD:	100 psf
PARTITION LIVE LOAD:	15 psf
ROOF LIVE LOAD:	20 psf
ROOF DEAD LOAD:	15 psf

2. SNOW LOAD DESIGN CRITERIA

SNOW LOAD IMPORTANCE FACTOR, I:	1.0
GROUND SNOW LOAD, Pg:	20 psf
FLAT ROOF SNOW LOAD. Pf:	20 psf
THERMAL FACTOR, Ct:	1.0
EXPOSURE FACTOR, Ce:	1.0
MINIMUM FROST DEPTH:	2' - 6"

3. WIND LOAD DESIGN CRITERIA

WIND IMPORTANCE FACTOR, I:	1.0
ULTIMATE WIND SPEED:	109 MPH (3 SEC GUST)
NOMINAL WIND SPEED:	84.4 MPH (3 SEC GUST)
WIND EXPOSURE CATEGORY:	C
WIND ENCLOSURE CLASSIFICATION	ENCLOSED BUILDING
GCpi:	+/- 0.18
POSITIVE WIND ROOF PRESSURES (ASD VALUES):	
- ZONE 1	16.0 psf
- ZONE 1'	16.0 psf
- ZONE 2 & 3	21.1 psf
NET WIND UPLIFT ROOF PRESSURES (ASD VALUES):	
- ZONE 1	34.0 psf
- ZONE 1'	24.3 psf
- ZONE 2	45.1 psf
- ZONE 3	45.1 psf
- 'a' DIMENSION	5.2 ft

4. SEISMIC LOAD DESIGN CRITERIA

SEISMIC IMPORTANCE FACTOR, I:	1.0
SITE CLASS:	D
SPECTRAL RESPONSE ACCELERATIONS:	Ss=0.099g, S1=0.068g Sds=0.106g, Sd1=0.109g
SEISMIC DESIGN CATEGORY:	D
BASIC SEISMIC-FORCE RESISTING SYSTEM:	LIGHT FRAME WALLS w/WOOD PANELS
RESPONSE MODIFICATION FACTOR, R:	6.5
SYSTEM OVER-STRENGTH FACTOR, OMEGAo:	2.5
DEFLECTION AMPLIFICATION FACTOR, Cd:	4
SEISMIC RESPONSE COEFFICIENT, Cs:	0.017
ANALYSIS PROCEDURE USED:	EQUIVALENT LATERAL FORCE

GENERAL STRUCTURAL NOTES

1. THIS DRAWING SET IS TO BE VIEWED AS A WHOLE AND COORDINATED WITH ARCHITECTURAL, MECHANICAL, CIVIL, AND OTHER DISCIPLINES. ALL WORK PERTAINING TO A SPECIFIC CONTRACTOR MAY OR MAY NOT BE SHOWN ON SPECIFIC DRAWING SECTIONS. IT IS EACH SUBCONTRACTOR'S RESPONSIBILITY TO PREPARE HIS BID FROM A COMPLETE SET OF PLANS.
2. THE CONTRACTOR SHALL FOLLOW WRITTEN DIMENSIONS ONLY. DO NOT SCALE DRAWINGS. DIMENSIONS NOT SHOWN ON PLAN TO BE COORDINATED WITH ARCHITECTURAL PLANS.
3. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY AT ANY SIMILAR SITUATION ELSEWHERE ON THE JOB, EXCEPT WHERE A DIFFERENT DETAIL OR SECTION IS SHOWN.
4. THE STRUCTURE SHALL BE ADEQUATELY BRACED AND SHORED DURING ERECTION AGAINST WIND AND ERECTION LOADS. STRUCTURAL MEMBERS ARE DESIGNED FOR "IN-PLACE" LOADS ONLY.
5. THE GENERAL CONTRACTOR SHALL VERIFY ALL OPENING SIZES, PAD SIZES, AND LOCATIONS WITH THE RESPECTIVE CONTRACTORS.
6. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES BETWEEN CONSTRUCTION DOCUMENTS AND ACTUAL FIELD CONDITIONS.
7. THE VARIOUS SUBCONTRACTORS ARE RESPONSIBLE FOR PLACING SLEEVES, OUTLET BOXES, ANCHORS, VENT OPENINGS, ETC. THAT MAY BE REQUIRED IN FOUNDATION WALLS. CONSTRUCTION MANAGER SHALL COORDINATE ALL PLACEMENT OF ITEMS IN FOUNDATION WALLS.
8. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS AND INFORMATION.
9. ALL ELEVATIONS GIVEN ARE REFERENCED TO FINISHED FLOOR ELEVATIONS AT 100'-0", UNLESS SHOWN AS USGS ELEVATIONS.
10. WHERE GENERAL NOTES OR TYPICAL DETAILS CONTRADICT INFORMATION PROVIDED IN BUILDING SECTIONS, THE BUILDING SECTIONS TAKE PRECEDENCE.
11. ALL HOLES THROUGH CONSTRUCTION SHALL BE CORE DRILLED OR SAWCUT.
12. ALL STAIR STRINGERS, LANDINGS, AND HANDRAILS TO BE DESIGNED AND FABRICATED BY STAIR FABRICATOR.
13. FOR ARCHITECTURAL, MEP, & STRUCTURAL COORDINATION: MODELED ELEMENTS SHOWN ON STRUCTURAL DRAWINGS SUCH AS TRUSSES, OPEN-WEB JOISTS, AND JOIST GIRDERS, ARE NOT THE FINAL CONFIGURATION. ALL COORDINATION SHALL BE PERFORMED BETWEEN THE VARIOUS TRADES AND THE SUPPLIERS OF THESE ELEMENTS FOR THE STRUCTURE, NOT WITH THE STRUCTURAL MODEL.
14. THIS DRAWING SET IS TO BE VIEWED AS A WHOLE, ALL TYPICAL DETAILS AND GENERAL NOTES SHOWN IN THESE DRAWINGS ARE APPLICABLE TO THE PROJECT EVEN IF THEY ARE NOT SHOWN ON PLANS OR SECTIONS.

DEFERRED SUBMITTALS

THE FOLLOWING DESIGN ELEMENTS MUST BE SIGNED & SEALED BY A PROFESSIONAL ENGINEER (PE/SE) REGISTERED IN THE STATE WHERE THIS PROJECT IS LOCATED, AND SUBMITTED TO THE ARCHITECT AND ENGINEER OF RECORD. DESIGNED DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW AND RECORD.

1. STRUCTURAL STEEL CONNECTION CALCULATIONS AND SHOP FABRICATION DRAWINGS FOR CONNECTIONS.
2. PRE-FABRICATED WOOD TRUSS CALCULATIONS AND FABRICATION DRAWINGS INCLUDING:
   A. ALL TRUSS-TO-TRUSS CONNECTIONS
   B. PLAN AND DETAILS FOR THE LOCATIONS OF ALL ERECTION/TEMPORARY AND PERMANENT LATERAL AND DIAGONAL BRACING AND/OR BLOCKING.
   C. FRAMING PLAN LAYOUT (DIMENSIONED AND TO SCALE).
   D. EACH TRUSS SHALL BE LEGIBLY BRANDED, MARKED, OR OTHERWISE HAVE PERMANENTLY AFFIXED THERETO THE FOLLOWING INFORMATION LOCATED WITHIN 2 FEET OF THE CENTER OF THE SPAN ON THE FACE OF THE BOTTOM CHORD.
      a. IDENTITY OF THE COMPANY MANUFACTURING THE TRUSS
      b. DESIGN LOADS
      c. TRUSS SPACING

EXCAVATION AND EARTHWORK NOTES

1. THE BEARING VALUE AND LATERAL EARTH PRESSURES OF THE SOILS IS PER REPORT BY: ASSUMED, DATED N/A. THE FOUNDATION DESIGN IS BASED ON THE FOLLOWING NET ALLOWABLE BEARING AND LATERAL EARTH PRESSURES (ALLOWABLE BEARING PRESSURES MAY BE INCREASED BY 33 PERCENT FOR WIND AND SEISMIC LOADS):
   - SPREAD FOOTINGS 1,500 psf
2. WATER LEVELS INDICATED ON THE BORING LOGS MAY BE SUBJECT TO SEASONAL AND/OR ANNUAL VARIATIONS. A DEWATERING SYSTEM OF SUFFICIENT CAPACITY SHALL BE INSTALLED AND OPERATED TO MAINTAIN THE CONSTRUCTION AREA FREE OF WATER AT ALL TIMES.
3. ALL FOOTING EXCAVATIONS SHALL BE INSPECTED, PRIOR TO CONCRETE PLACEMENT, BY A SOILS ENGINEER TO VERIFY SUITABLE BEARING MATERIAL OF CAPACITY AS SPECIFIED.
4. NOTIFY THE OWNER'S REPRESENTATIVE WHEN ADDITIONAL EXCAVATION IS REQUIRED TO REACH SUITABLE BEARING MATERIAL.
5. THE SOILS ENGINEER SHALL CERTIFY IN WRITING THAT ALL FOUNDATIONS WERE PLACED ON SOIL WITH THE BEARING VALUE AS SPECIFIED.
6. WITHIN THE EXCAVATION AREA OF FOUNDATIONS, ALL VEGETATION, TOPSOIL, PREVIOUSLY PLACED FILL AND UNSUITABLE SOILS SHALL BE REMOVED. ALL FOOTINGS TO BEAR ON VIRGIN SOIL OR PROPERLY PLACED AND COMPACTED ENGINEERED FILL.
7. FOUNDATION DESIGN DOES NOT ACCOUNT FOR WINTER CONSTRUCTION. ANY UNENCLOSED / UNHEATED SPACES SHALL BE ADEQUATELY PROTECTED AGAINST FROST DURING WINTER CONSTRUCTION BY THE CONTRACTOR.
8. IF ANY SOFT SPOTS, OR AREAS QUESTIONABLE FOR ANY REASONS ARE ENCOUNTERED BY THE CONTRACTOR, ARCHITECT/ENGINEER SHALL BE NOTIFIED IMMEDIATELY SO THAT ANY REQUIRED ACTION MAY BE TAKEN PRIOR TO CONTINUATION OF CONSTRUCTION IN THAT AREA.

POST-INSTALLED ANCHOR NOTES

POST-INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER OF RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS TO AVOID CONFLICTS WITH EXISTING REBAR. HOLES SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE SPECIFIED ON THESE DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER OF RECORD ALONG WITH CALCULATIONS THAT ARE PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER. THE CALCULATIONS SHALL DEMONSTRATE THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING, AT A MINIMUM, THE PERTINENT EQUIVALENT PERFORMANCE VALUES OF THE SPECIFIED PRODUCT USING THE BUILDING CODE.

1. TYPICAL POST-INSTALLED ANCHORS IN CONCRETE AND CMU SHALL COMPLY WITH THE LATEST OF THEIR RESPECTIVE ICC EVALUATION REPORTS.
2. WHEN INSTALLING ANCHORS IN CONCRETE AND CMU, CONTRACTOR SHALL LOCATE EXISTING REINFORCING STEEL, CONDUITS, ETC, PRIOR TO DRILLING FOR ANCHORS. CONTRACTOR SHALL USE CARE AND CAUTION TO PREVENT DAMAGE TO EXISTING REINFORCING BARS.
3. CONTRACTOR SHALL PROVIDE 1" MINIMUM CLEARANCE BETWEEN EDGES OF ANY HOLES FOR POST-INSTALLED ANCHORS AND EXISTING REINFORCING STEEL.
4. CONTRACTOR SHALL PROVIDE INSPECTION AND TESTING AS REQUIRED PER THE "SPECIAL INSPECTIONS" SECTION OF THESE GENERAL STRUCTURAL NOTES.
5. CONTRACTOR SHALL USE A HOLLOW DRILL BIT AND VACUUM SYSTEM WHEN DRILLING INTO CEMENTITIOUS MATERIALS.

STRUCTURAL STEEL NOTES

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL MEMBERS IS TO BE IN ACCORDANCE WITH "AISC CODE OF STANDARD PRACTICE", LATEST EDITION.
2. STEEL FABRICATOR SHALL PARTICIPATE IN THE AISC QUALITY CERTIFICATION PROGRAM AND BE DESIGNATED AN AISC-CERTIFIED PLANT, CATEGORY STD.
3. IT IS THE RESPONSIBILITY OF THE STEEL FABRICATOR TO DESIGN THE CONNECTIONS. CONNECTIONS ARE TO BE IN ACCORDANCE WITH CURRENT AISC STANDARDS AND APPLICABLE GOVERNMENT CODES. ALL CONNECTIONS SHALL BE BOLTED OR WELDED AND SHALL DEVELOP 60% OF THE ALLOWABLE UNIFORM LOAD TABULATED IN THE AISC "MANUAL OF STEEL CONSTRUCTION" FOR ALLOWABLE STRESS DESIGN, 10k (ASD), OR SHEAR REACTION SHOWN ON THE DRAWINGS, WHICHEVER IS GREATER. PROVIDE MINIMUM NUMBER OF ASTM F3125 GRADE A325 OR A490 BOLTS AS SHOWN IN THE "STRUCTURAL STEEL BOLTED CONNECTIONS" TABLE.
4. ANCHOR RODS TO BE ASTM F1554, GRADE 36 FULLY-THREADED RODS WITH PLATE WASHERS AND NUTS ON THE BOTTOM UNLESS NOTED OTHERWISE-SEE "TYPICAL ANCHOR BOLT" DETAIL.
5. BOLT HOLES SHALL BE 1/16" OVERSIZE UNLESS OTHERWISE NOTED ON THE DRAWINGS. FIELD BURNING OF BOLT HOLES SHALL NOT BE PERMITTED.
6. WELDING SHALL BE PERFORMED BY AWS QUALIFIED WELDERS IN CONFORMANCE WITH AWS D1.1, USING E70 SERIES ELECTRODES, UNLESS OTHERWISE NOTED ON THE DRAWINGS. ADDITIONALLY, WELDING IN LOS ANGELES, CA SHALL BE PERFORMED BY CERTIFIED WELDERS.
7. ALL STEEL SHALL BE SHOP PAINTED WITH A STANDARD ALKYD PRIMER (GRAY). FOR HARSH ENVIRONMENTS USE A GRAY ZINC ORGANIC OR INORGANIC PRIMER.
8. FABRICATE ALL BEAMS WITH THE MILL CAMBER UP.
9. CONNECTION NOTATION IS AS FOLLOWS. SEE PLAN NOTES TO DETERMINE IF LOADS SHOWN ON PLAN/DETAILS ARE ALLOWABLE (ASD) OR ULTIMATE (LRFD):
   - AXIAL FORCE = P
   - SHEAR = V OR [ ]
   - MOMENT = M
   - TORSION = T
10. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS AND GRADES:
    - WIDE FLANGE = A992, fy = 50ksi
    - ANGLES, CHANNELS, PLATES, BARS, AND RODS = A36, fy = 36ksi
    - RECTANGULAR HSS = A500 GRADE B, fy = 46ksi OR A500 GRADE C, fy=50ksi
    - ROUND HSS = A500 GRADE B, fy = 42ksi
    - STRUCTURAL PIPE = A53 GRADE B, fy = 35ksi
11. REFER TO "DEFERRED SUBMITTALS" FOR ADDITIONAL REQUIREMENTS.

STRUCTURAL STEEL BOLTED CONNECTIONS TABLE

NOMINAL MEMBER DEPTH	MINIMUM NUMBER OF BOLTS
8" - 10"	2
12" - 14"	3
16" - 18"	4
21" - 24"	5
27" OR DEEPER	6

CONCRETE NOTES

1. ALL CONCRETE WORK INCLUDING FORMING, REINFORCING, MIXING, PLACING, FINISHING AND CURING SHALL BE DONE IN ACCORDANCE WITH THE ACI MANUAL OF CONCRETE PRACTICE INCLUDING "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE", ACI 318, AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE", ACI 301 LATEST EDITIONS.
2. IT SHALL BE THE RESPONSIBILITY OF THE MIX DESIGN SUPPLIER TO PROPORTION MIXES APPROPRIATELY TO REACH THE REQUIRED PROPERTIES NOTED, AND SHALL BE APPROPRIATE FOR THEIR INTENDED USE. ADMIXTURES MEETING ASTM C494 ARE OPTIONAL. HOWEVER, AIR-ENTRAINING ADMIXTURES MEETING ASTM C260 SHALL BE USED FOR CONCRETE EXPOSED TO THE EXTERIOR OR FREEZE-THAW CYCLES.
3. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR EACH INTENDED USE ON THE PROJECT FOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD. CONTENTS OF THE MIX DESIGN SHALL COMPLY WITH, AND INCLUDE ALL INFORMATION REQUIRED BY, ACI 318, CHAPTER 5 (FOR 2011 AND EARLIER CODE EDITIONS), & CHAPTER 26 (FOR 2014 CODE EDITION). THIS INCLUDES, BUT IS NOT LIMITED TO NUMBER OF TESTS AND AGE OF TESTS INCLUDED IN THE MIX DESIGN REPORT.
4. ALL CONCRETE DENSITY SHALL BE NORMAL WEIGHT (145 pcf +/- 5) UNLESS OTHERWISE INDICATED. LIGHT WEIGHT CONCRETE SHALL BE 110 pcf +/- 5, UNO.
5. FLY ASH ALLOWANCES:
   - 20% MAXIMUM BY WEIGHT OF CEMENTITIOUS IN FOOTINGS
   - 15% MAXIMUM BY WEIGHT OF CEMENTITIOUS MATERIAL IN SLABS
6. COORDINATE CONCRETE WORK WITH THAT OF OTHER TRADES TO ALLOW FOR SETTING OF SLEEVES, ACCESSORIES, ETC.
7. ALL REINFORCING STEEL, ANCHOR RODS, DOWELS, AND INSERTS SHALL BE WELL-SECURED IN POSITION PRIOR TO PLACING CONCRETE. DO NOT "WET SET" OR "FLOAT" INTO CONCRETE.
8. TEST CYLINDERS WILL BE REQUIRED, AND RECORDS OF RESULTS SHALL BE SUBMITTED TO ENGINEER OF RECORD. PROVIDE A MINIMUM OF (4) 6"x12" CYLINDERS FOR TESTING (1 AT 7 DAYS, 2 AT 28 DAYS, ONE SPARE). ALTERNATIVELY, PROVIDE A MINIMUM (5) 4"x8" CYLINDERS FOR TESTING (1 AT 7 DAYS, 3 AT 28 DAYS, ONE SPARE). SLUMP TESTS ARE RECOMMENDED.
9. CONSTRUCTION JOINTS IN CONCRETE INDICATED WITH A ROUGH, CLEAN SURFACE SHALL HAVE A 1/4" AVERAGE AMPLITUDE.
10. ALL COLD JOINTS SHALL BE ROUGHENED AND CLEANED PRIOR TO PLACING CONCRETE.
11. SLUMP: CONCRETE MIXES SHALL BE PROPORTIONED TO ACHIEVE A MAXIMUM SLUMP OF 8" FOR CONCRETE CONTAINING HIGH RANGE WATER REDUCING ADMIXTURE. 6" FOR CONCRETE CONTAINING A MID-RANGE WATER REDUCING ADMIXTURE. MIXES SHALL HAVE A WATER SLUMP OF 2"-3" (3" TO 4" FOR CONCRETE RECEIVING A "DRY-SHAKE" HARDENER). MAXIMUM 4" WATER SLUMP FOR ALL OTHER CONCRETE.
12. AIR CONTENT: ALL CONCRETE EXPOSED TO FREEZING AND THAWING AND/OR REQUIRED TO BE WATER TIGHT SHALL HAVE AN AIR CONTENT OF 4.5% TO 7.5%. ALL INTERIOR SLABS AND ALL SLABS TO RECEIVE DRY-SHAKE SHALL HAVE A MAXIMUM AIR CONTENT OF 3%.
13. DEPOSIT AND CONSOLIDATE CONCRETE FOR FLOORS AND SLABS IN A CONTINUOUS OPERATION, WITHIN LIMITS OF CONSTRUCTION JOINTS, UNTIL PLACEMENT OF A PANEL OR SECTION IS COMPLETE.
   A. CONSOLIDATE CONCRETE DURING PLACEMENT OPERATIONS, SO CONCRETE IS THOROUGHLY WORKED AROUND REINFORCEMENT AND OTHER EMBEDDED ITEMS AND INTO CORNERS.
   B. MAINTAIN REINFORCEMENT IN POSITION ON CHAIRS DURING CONCRETE PLACEMENT.
   C. SCREED SLAB SURFACES WITH A STRAIGHT EDGE AND STRIKE OFF TO CORRECT ELEVATIONS.
   D. UTILIZE A VIBRATORY SCREED FOR CONCRETE THAT WILL RECEIVE DIAMOND POLISH FINISH. KEEP VIBRATING SCREED MOVING CONTINUOUSLY ACROSS SURFACE. DO NOT STOP SCREED IN ANY ONE PLACE WHILE VIBRATING.
   E. SLOPE SURFACES UNIFORMLY TO DRAINS WHERE REQUIRED.
   F. BEGIN INITIAL FLOATING USING BULL FLOATS OR DARBIES TO FORM A UNIFORM AND OPEN-TEXTURED SURFACE PLANE BEFORE EXCESS BLEED WATER APPEARS ON THE SURFACE. DO NOT FURTHER DISTURB SLAB SURFACES BEFORE STARTING FINISHING OPERATIONS.
   G. THE USE OF HIGHWAY STRAIGHT EDGES OR "BUMP CUTTERS" ON CONCRETE SLABS TO BE POLISHED IS PROHIBITED.
14. ALL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH IN ACCORDANCE WITH THE FOLLOWING:
   A. "N" IN COLUMN INDICATES THE ADDITION OF ENTRAINED AIR IS NOT REQUIRED, BUT IS PERMITTED. AIR ENTRAINMENT IS NOT RECOMMENDED FOR SURFACES TO BE GIVEN A SMOOTH, DENSE, HARD-TROWELED FINISH. COORDINATE FINISH REQUIREMENTS WITH ARCHITECTURAL DRAWINGS AND/ OR SPECIFICATIONS.

CONCRETE TABLE

INTENDED USE	MIN 28 DAY STRENGTH (psi)	MAX WATER-CEMENT RATIO	% TOTAL AIR LIMITS	MACRO SYNTHETIC FIBER (1)	% MAX SHRINKAGE @ 28 DAYS
INTERIOR SLAB ON GRADE	4,000	0.50	3	YES	0.04
FOOTING & FOUNDATION WALLS	4,000	0.48	4.5 TO 7.5 (WHERE EXPOSED TO EXT)	-	0.05
ALL CONCRETE NOT OTHERWISE SPECIFIED	4,000	0.40	4.5 TO 7.5	-	0.05

TABLE NOTES

1. SYNTHETIC MACRO FIBER REINFORCEMENT MAY BE USED TO REPLACE REINFORCING STEEL IN CONCRETE SLABS ON GRADE AND TOPPING SLABS WHERE INDICATED ON DRAWINGS. SUBMIT FIBER MANUFACTURER'S DOCUMENTATION INDICATING THAT PROPOSED FIBER DOSAGE WILL PROVIDE A MINIMUM Fe3 VALUE AS FOLLOWS IN ACCORDANCE WITH ASTM C 1609. UNDER NO CIRCUMSTANCES SHALL DOSAGE RATE BE LESS THAN 3.0lbs PER CUBIC YARD OF CONCRETE IN SLABS ON GRADE AND TOPPING SLABS (4lbs PER CUBIC YARD FOR SLABS ON METAL DECK). SYNTHETIC MACRO FIBER REINFORCEMENT IS PROHIBITED IN CONCRETE TO RECEIVE POLISHED CONCRETE FINISHES.
   A. SLABS ON GRADE AND TOPPING SLABS
      1. 4" DEEP SLAB: Fe3 = 94psi
      2. 6" DEEP SLAB: Fe3 = 128psi
      3. 8" DEEP SLAB: Fe3 = 180 psi

Bakery-Cafe:

#2406

SYSTEM: G4 (ARIA)

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07/05/2022

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No.	Description	Date

ISSUED FOR PERMIT

GENERAL NOTES

Project Number: LKA-MO-01-22
Drawn: KG
Chkd: AC/SJS
Issue Date: 07.05.2022
DPM:
DM:
CPM:
Sheet Number: S101

REINFORCING STEEL NOTES

1. NON-WELDED STEEL BAR REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60. WELDED STEEL BAR REINFORCING SHALL CONFORM TO ASTM A706.
2. WELDING OF REINFORCING STEEL SHALL BE PERFORMED BY AWS QUALIFIED WELDERS IN CONFORMANCE WITH AWS D1.1 USING E90 ELECTRODES FOR ASTM A615 REBAR, AND E80 ELECTRODES FOR ASTM A706 REBAR UNLESS OTHERWISE NOTED ON THE DRAWINGS.
3. WELDED WIRE REINFORCEMENT (WWR) SHALL BE SMOOTH WIRE PER ASTM A185 WITH MINIMUM YIELD STRENGTH, fy = 65 ksi, OR DEFORMED WIRE PER ASTM A497 WITH MINIMUM YIELD STRENGTH, fy = 70 ksi, UNLESS NOTED OTHERWISE.
4. MINIMUM CONCRETE COVER FOR REINFORCING STEEL IN CAST-IN-PLACE (NON-PRESTRESSED) CONCRETE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE DRAWINGS:
   A. CONCRETE CAST AGAINST EARTH = 3"
   B. CONCRETE EXPOSED TO WEATHER:
      - #6 BAR AND LARGER = 2"
      - #5 BAR AND SMALLER = 1 1/2"
   C. CONCRETE NOT EXPOSED TO EARTH OR WEATHER (SLABS, WALLS, & JOISTS):
      - #14 BARS AND LARGER = 1 1/2"
      - #11 BARS AND SMALLER = 3/4"
   D. CONCRETE NOT EXPOSED TO EARTH OR WEATHER (BEAMS & COLUMNS):
      - PRIMARY REINFORCEMENT, TIES, STIRRUPS, & SPIRALS = 1 1/2"
5. ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE LATEST EDITION OF ACI 315 (SP-66), DETAILS AND DETAILING OF CONCRETE REINFORCEMENT.
6. LAP SPLICE LENGTHS FOR BARS INSTALLED IN CONCRETE AND CMU SHALL BE IN ACCORDANCE WITH THE TABLE.

DEVELOPMENT LENGTH OF STANDARD HOOKS IN CONCRETE NOTES

1. VALUES IN TABLE ARE BASED ON 60ksi REBAR. FOR OTHER REBAR YIELD STRENGTHS, MULTIPLY VALUES IN THE TABLE BY THE SPECIFIED YIELD STRENGTH DIVIDED BY 60.
2. SEE ACI 318 SECTION 12.5 FOR ALLOWABLE REDUCTIONS IN DEVELOPMENT LENGTH. IT SHALL NOT BE LESS THAN 8 BAR DIAMETERS OR 6 INCHES.
3. HOOKED BARS ARE NOT CONSIDERED EFFECTIVE IN DEVELOPING BARS IN COMPRESSION.

DEVELOPMENT LENGTH OF STANDARD HOOKS IN CONCRETE - 60 ksi REBAR TABLE (INCHES)

BAR SIZE	f'c = 3,000 psi	f'c = 3,500 psi	f'c = 4,000 psi	f'c = 5,000 psi
#3	9	8	8	7
#4	11	11	10	9
#5	14	13	12	11
#6	17	16	15	13

TENSION LAP SPLICE LENGTH IN CONCRETE NOTES

1. FOR HORIZONTAL BARS, VALUES IN THE TABLE SHALL BE MULTIPLIED BY 1.3 WHERE MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST BELOW THE BAR.
2. **VALUES IN THE TABLE SHALL BE MULTIPLIED BY 1.5 FOR EPOXY COATED BARS WITH CLEAR COVER LESS THAN 3 BAR DIAMETERS OR CLEAR SPACING LESS THAN 6 BAR DIAMETERS. MULTIPLY VALUES IN TABLE BY 1.2 FOR ALL OTHER EPOXY COATED BARS.**
3. **VALUES IN TABLE NEED NOT TO BE MULTIPLIED BY MORE THAN 1.7 DUE TO THE INCREASE FROM NOTES 1 AND 2.**
4. **VALUES IN THE TABLE SHALL BE MULTIPLIED BY 1.33 WHERE LIGHT WEIGHT CONCRETE IS USED.**
5. LAP SPLICES IN TENSION ARE NOT PERMITTED FOR BAR LARGER THAN #11. A FULL MECHANICAL OR FULL WELDED SPLICE SHALL DEVELOP AT LEAST 1.25fy OF THE BAR.
6. WHERE CLEAR SPACING OF BARS BEING SPLICED IS AT LEAST 2 BAR DIAMETERS AND CLEAR COVER AT LEAST 1 BAR DIAMETER, USE CASE 1. FOR ALL OTHER BAR ARRANGEMENTS, USE CASE 2.
7. VALUES IN THE TABLE ARE BASED ON 60ksi REBAR. FOR OTHER REBAR YIELD STRENGTHS, MULTIPLY VALUES IN THE TABLE BY THE SPECIFIED YIELD STRENGTH DIVIDED BY 60.
8. WHERE BARS OF DIFFERENT SIZES ARE SPLICED, PROVIDE THE LAP LENGTH OF THE LARGER BAR.
9. WELDED WIRE REINFORCEMENT (DEFORMED OR PLAIN WIRE) SHALL BE LAPPED ONE FULL MESH SQUARE PLUS 2 INCHES MINIMUM, BUT NOT LESS THAN 12 INCHES.
10. REBAR IN ALL CONCRETE MEMBERS SHALL BE SPLICED IN ACCORDANCE WITH "TENSION LAP SPLICE LENGTH" TABLE, UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.

TENSION LAP SPLICE LENGTH IN CONCRETE - 60 KSI REBAR TABLE (INCHES)

f'c =	3,000psi	3,000psi	3,500psi	3,500psi	4,000psi	4,000psi	5,000psi	5,000psi
BAR SIZE	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
#3	22	33	20	30	19	28	17	25
#4	29	43	27	40	25	37	23	34
#5	36	54	33	50	31	47	28	42
#6	43	65	40	60	37	56	34	50

WOOD FRAMING NOTES

1. WOOD FRAMING SHALL CONFORM TO THE "LUMBER TABLE" UNLESS NOTED OTHERWISE.
2. FOR WOOD FASTENING REQUIREMENTS, REFER TO TABLE 2304.9.1 FOR IBC 2012 AND OLDER, OR TABLE 2304.10.1 FOR IBC 2015 AND NEWER.
3. ALL NAILS SHALL BE GALVANIZED COMMON WIRE NAILS UNLESS OTHERWISE NOTED. SEE "WOOD FASTENER TYPES SCHEDULE" FOR MINIMUM FASTENER DIMENSIONS. NAILS IN CONTACT WITH FIRE RETARDANT TREATED OR PRESSURE TREATED WOOD SHALL BE HOT-DIP GALVANIZED (ASTM A153) OR STAINLESS STEEL (TYPE 304 OR 316). WHEN REQUIRED TO PREVENT SPLITTING, PRE-DRILL FOR NAILS WITH 1/8" DIAMETER DRILL BIT.
4. BOLTS AND LAG SCREWS SHALL CONFORM TO ASTM A307 AND ANSI/ASME STANDARD B18.2.1-1981, AND SHALL BE GALVANIZED. BOLTS AND LAG SCREWS IN CONTACT WITH FIRE RETARDANT TREATED OR PRESSURE TREATED WOOD SHALL BE HOT-DIP GALVANIZED (ASTM A153) OR STAINLESS STEEL (TYPE 304 OR 316). STANDARD WASHERS SHALL BE PROVIDED UNDER HEAD AND NUT OF ALL BOLTS IN WOOD FRAMING. BOLT THREADS SHALL NOT BEAR ON WOOD. DRILLED HOLES FOR BOLTS SHALL BE 1/16" LARGER IN DIAMETER THAN BOLT.
5. ALL BOLTS SHALL BE RETIGHTENED IMMEDIATELY PRIOR TO CLOSING IN FRAMING.
6. METAL FRAMING CONNECTORS SHALL BE "SIMPSON" BRAND OR ENGINEERED APPROVED EQUIVALENT AND SHALL BE GALVANIZED. METAL FRAMING CONNECTORS IN CONTACT WITH FIRE RETARDANT TREATED OR PRESSURE TREATED WOOD SHALL BE HOT-DIP GALVANIZED (ASTM A123) OR STAINLESS STEEL (TYPE 316L). METAL FRAMING CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST PUBLISHED INSTALLATION INSTRUCTIONS USING THE LARGER SIZE AND QUANTITY OF FASTENERS INDICATED, UNLESS OTHERWISE NOTED.
7. WASHERS USED IN SHEAR WALLS AND ANCHOR HOLD DOWNS SHALL BE SQUARE WASHERS OF SIZE AND THICKNESS INDICATED IN "SHEAR WALL SHEATHING AND FASTENER SCHEDULE". ROUND WASHERS ARE NOT ACCEPTABLE FOR SHEAR WALL APPLICATIONS.
8. ALL BOLTS, WASHERS, NAILS, METAL FRAMING CONNECTORS AND OTHER FASTENERS IN CONTACT WITH PRESERVATIVE OR FIRE RETARDANT TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED (ASTM A153) OR STAINLESS STEEL (TYPE 304 OR 316).
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT WOOD USED FOR STRUCTURAL PURPOSES IS KEPT AS DRY AS POSSIBLE BEFORE AND DURING CONSTRUCTION. A MAXIMUM MOISTURE CONTENT SHALL BE MAINTAINED UNTIL THE BUILDING ENVELOPE IS CLOSED IN AND WATER-PROOFED AS FOLLOWS:
   A. KILN-DRIED LUMBER: 19%
   B. TIMBERS: 19%
   C. GLULAM BEAMS: 16%
   D. LVL & PSL: 12%
   E. PLYWOOD: 8%
   F. OSB: 4%
10. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED. ALL WOOD EXPOSED TO WEATHER SHALL BE PRESSURE-TREATED. PRESSURE TREATMENT OF WOOD THAT IS CUT SHALL BE REINSTATED ON CUT EDGES.

LUMBER TABLE

MEMBER	SPECIES	GRADE
GLULAM BEAMS (GLB)	PER PLAN	PER PLAN
2x PLATES, STRIPPING, MISC CONCEALED FRAMING, BLKG, & FIRE STOPPING	SOUTHERN PINE	NO 2
SILLS ON CONCRETE OR MASONRY	PRESSURE TREATED SOUTHERN PINE	NO 2
2x LUMBER	SOUTHERN PINE	NO 2
ALL 4x DIMENSIONED LUMBER	SOUTHERN PINE	NO 2
TIMBER 5x5 AND LARGER	SOUTHERN PINE	NO 1
PARALLEL STRAND LUMBER (PSL)	PER MANUFACTURER	2.0E
ENGINEERED WOOD RIM BOARD	PER MANUFACTURER	APA RATED RIM BOARD PLUS
LAMINATED VENEER LUMBER (LVL) HEADERS, BEAMS, STRINGERS AND POSTS	PER MANUFACTURER	ICC ESR-2403. GRADE 1.9E; OR ICC ESR-1387, GRADE 1.9E; OR ICC ESR-2993, GRADE 1.9E; OR ICC ESR-1994, GRADE 2.0E
SHEAR WALL SHEATHING	PER MANUFACTURER	APA RATED SHEATHING, EXPOSURE 1 (PS 1 OR PS 2)
ROOF SHEATHING	PER MANUFACTURER	APA RATED SHEATHING, EXPOSURE 1 (PS 1 OR PS 2)

WOOD FASTENER TYPES SCHEDULE

NOTE: 1.-"SD" AND "SDS" SCREWS ARE MANUFACTURED BY SIMPSON STRONG-TIE. 2.-ALL SCREWS SHALL BE INSTALLED SO THAT HEADS ARE FLUSH WITH OUTSIDE MATERIAL. DO NOT OVERDRIVE SCREWS. SCREWS WITH WING-TIPS ARE NOT PERMITTED IN SHEAR WALLS OR DIAPHRAGMS.

TYPE	DIAMETER	LENGTH
16d COMMON	0.162"	3 1/2"
10d COMMON	0.148"	3"
8d COMMON	0.131"	2 1/2"
#9 SD SCREW	0.131"	1 1/2" OR 2 1/2"
#10 SD SCREW	0.161"	1 1/2" OR 2 1/2"
SDS SCREW	0.25"	VARIES 1 1/2"-8"

PRE-FABRICATED WOOD TRUSS NOTES

1. DESIGN AND FABRICATION SHALL BE IN ACCORDANCE WITH THE TRUSS PLATE INSTITUTE PUBLICATION "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES", LATEST EDITION.
2. PROVIDE ALL PERMANENT TRUSS BRACING INDICATED ON DRAWINGS OR SPECIFIED BY TRUSS MANUFACTURER. IN ADDITION, PROVIDE TEMPORARY BRACING AS INDICATED IN THE TRUSS PLATE INSTITUTE BOOKLET "BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS BWT-76".
3. NO FIELD MODIFICATIONS OF TRUSSES ARE PERMITTED UNLESS FABRICATOR PROVIDES CALCULATIONS AND DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED ENGINEER (REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED).
4. REFER TO "DEFERRED SUBMITTALS" FOR ADDITIONAL REQUIREMENTS.

PRE-FABRICATED WOOD ROOF TRUSSES - DESIGN CRITERIA TABLE

TOP CHORD	20 psf LIVE LOAD 10 psf DEAD LOAD SNOW LOAD AND WIND LOAD PER ROOF PLAN AND NOTES
BOTTOM CHORD	10 psf LIVE LOAD (NOT CONCURRENT WITH TOP CHORD LIVE LOAD) 5 psf DEAD LOAD
WIND UPLIFT	PER "DESIGN LOADS" ON THESE GENERAL NOTES
LOAD DURATION FACTOR	AS REQUIRED
TRUSS SPACING	PER PLAN
DEFLECTION LIMITS	L/240 MAXIMUM LIVE LOAD
CAMBER	75 PERCENT OF DEAD LOAD

SPECIAL INSPECTIONS

1. REFER TO THE SPECIAL INSPECTION TABLES FOR THE LIST OF ELEMENTS OF CONSTRUCTION THAT SHALL REQUIRE SPECIAL INSPECTION. THIS SHALL BE CONSIDERED A GUIDE, AND THE CONTRACTOR AND INSPECTOR SHALL REFER TO THE IBC FOR COMPLETE REQUIREMENTS, QUALIFICATIONS, EXCEPTIONS, AND SUBMITTALS. REFER TO IBC CHAPTER 17. THE OWNER SHALL BE RESPONSIBLE FOR EMPLOYING THE SPECIAL INSPECTION AGENCY. ANY "OBSERVATIONS" BY THE EOR WILL NOT BE TO PERFORM SPECIAL INSPECTIONS AND SHALL NOT BE INTERPRETED AS SUCH.
2. COPIES OF ALL INSPECTION REPORTS THAT REPORT COMPLIANCE SHALL BE SUBMITTED TO THE ARCHITECT OF RECORD, STRUCTURAL ENGINEER OF RECORD, AND BUILDING INSPECTOR WITHIN 7 CALENDAR DAYS OF COMPLETION OF THAT PORTION OF WORK. A MINIMUM OF ONE (1) PROGRESS REPORT PER MONTH FOR EACH TYPE OF CONSTRUCTION REQUIRING SPECIAL INSPECTION SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD.
3. SPECIAL INSPECTOR SHALL INFORM ENGINEER OF RECORD IMMEDIATELY OF NON-COMPLIANCE WITH CONSTRUCTION DOCUMENTS OR APPROVED SUBMITTALS. CONTACT ENGINEER OF RECORD THE SAME DAY NON-COMPLIANCE IS DISCOVERED AND FOLLOW UP WITH AN OFFICIAL REPORT WITHIN 2 BUSINESS DAYS.
4. THE SPECIAL INSPECTIONS IDENTIFIED ON THE PLANS ARE IN ADDITION TO, AND NOT A SUBSTITUTE FOR THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY A BUILDING INSPECTOR.
5. SPECIAL INSPECTIONS ARE NOTED AS EITHER "CONTINUOUS" OR "PERIODIC". A "CONTINUOUS" INSPECTION REQUIRES THE PRESENCE OF A QUALIFIED INSPECTOR IN THE VICINITY OF THE WORK BEING PERFORMED FOR 100% OF THAT WORK. A "PERIODIC" INSPECTION REQUIRES PART-TIME OBSERVATION OF THE WORK BEING PERFORMED. THE INSPECTOR SHALL ALSO OBSERVE THE FINAL CONDITION OF THE WORK BEFORE IT IS CLOSED FROM VIEW.
6. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED, IT SHALL BE THE RESPONSIBILITY OF THE AGENT TO EMPLOY A SUFFICIENT NUMBER OF SPECIAL INSPECTORS TO ASSURE THAT ALL WORK IS CONTINUOUSLY INSPECTED IN ACCORDANCE WITH THOSE PROVISIONS.

SPECIAL INSPECTIONS - WOOD TABLE

ITEM	INSPECTION FREQUENCY	SCOPE
PREMANUFACTURED WOOD STRUCTURAL ELEMENTS AND ASSEMBLIES	-	SEE "OFF-SITE FABRICATION" SPECIAL INSPECTION TABLE
DIAPHRAGM AND SHEAR WALL	PERIODIC	WOOD SHEAR WALLS, SHEAR PANELS, AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING, AND OTHER FASTENING TO COMPONENTS OF THE MAIN LATERAL SYSTEM WHEN THE FASTENER SPACING IS LESS THAN OR EQUAL TO 4 INCHES ON CENTER

SPECIAL INSPECTIONS - CONCRETE TABLE

ITEM	INSPECTION FREQUENCY	SCOPE
REINFORCEMENT	PERIODIC	INSPECT REINFORCEMENT (INCLUDING PRESTRESSING TENDONS) AND PLACEMENT; VERIFY CONFORMANCE WITH CONSTRUCTION DOCUMENTS, AND THAT BARS ARE FREE FROM MATERIALS THAT COULD PREVENT BOND, ARE ADEQUATELY LAPPED, SPLICED, TIED, AND SUPPORTED
ANCHOR INSTALLATION	PERIODIC	INSPECT CAST-IN-PLACE ANCHORS AND BOLTS
ANCHOR INSTALLATION	PERIODIC	INSPECT POST-INSTALLED MECHANICAL AND ADHESIVE ANCHORS NOT OTHERWISE SPECIFIED
ANCHOR INSTALLATION	CONTINUOUS	INSPECT POST-INSTALLED MECHANICAL AND ADHESIVE ANCHORS PER THE REQUIREMENTS IN THEIR RESPECTIVE ICC-ES REPORTS
MIX DESIGN	PERIODIC	VERIFY USE OF APPROVED MIX DESIGN
SAMPLING AND TESTING	CONTINUOUS	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTING; PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE OF THE CONCRETE
CONCRETE PLACEMENT	PERIODIC	VERIFY MAINTENANCE OF CURING TEMPERATURE AND TECHNIQUES

SPECIAL INSPECTIONS - SOILS AND FOUNDATIONS TABLE

ITEM	INSPECTION FREQUENCY	SCOPE
SOILS	PERIODIC	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY; VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL; PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS; PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY
SOILS	CONTINUOUS	VERIFY USE OF PROPER MATERIALS, DENSITIES, LIFT THICKNESSES, AND COMPACTION OF FILL; VERIFY MATERIALS AND PROCEDURES COMPLY WITH THE GEOTECHNICAL REPORT

SPECIAL INSPECTIONS - STEEL TABLE

ITEM	INSPECTION FREQUENCY	SCOPE
MATERIAL VERIFICATION	PERIODIC	HIGH STRENGTH BOLTS, NUTS, AND WASHERS: REVIEW MANUFACTURER'S CERTIFICATE OF COMPLIANCE; IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE CONSTRUCTION DOCUMENTS
MATERIAL VERIFICATION	PERIODIC	STRUCTURAL STEEL: REVIEW MANUFACTURER'S CERTIFIED MILL TEST REPORTS; IDENTIFICATION MARKINGS ON STEEL SHAPES TO CONFORM TO AISC STANDARDS SPECIFIED IN THE CONSTRUCTION DOCUMENTS
HIGH-STRENGTH BOLTING	PERIODIC	BEARING-TYPE CONNECTIONS: VERIFY BOLTS, NUTS, WASHERS, PAINT, INSTALLATION, AND TIGHTENING CONFORM TO THEIR RESPECTIVE STANDARDS
WELDING	PERIODIC	SINGLE PASS FILLET WELDS NOT GREATER THAN 5/16"
WELDING	PERIODIC	VERIFY WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706; ALL REINFORCING STEEL NOT REQUIRING CONTINUOUS INSPECTION

SPECIAL INSPECTIONS - OFF-SITE FABRICATION (INCLUDING PRE-MANUFACTURED WOOD STRUCTURAL ELEMENTS AND ASSEMBLIES, AND STEEL FABRICATING)

ITEM	INSPECTION FREQUENCY	SCOPE
FABRICATION AND IMPLEMENTATION PROCEDURES	PERIODIC	VERIFY THAT FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS; REVIEW PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK
NOTE	-	SPECIAL INSPECTION FOR OFF-SITE FABRICATION IS NOT REQUIRED FOR FABRICATORS APPROVED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH THE CODE

Bakery-Cafe:

#2406

SYSTEM: G4 (ARIA)

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CERTIFICATE OF AUTHORITY NO. 001498

Case Engineering Project Number: LKA-MO-01-22

Professional Seal:

STATE OF MISSOURI
STEPHEN J. SACCO
NUMBER PE-21871
PROFESSIONAL ENGINEER

07/05/2022

Project Title:

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Panera BREAD

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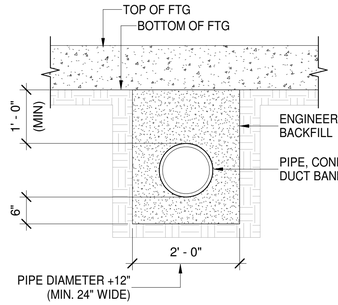
ISSUED FOR PERMIT

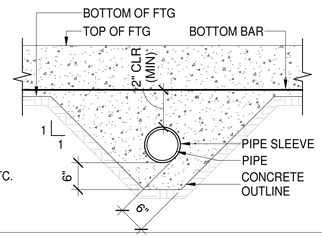
GENERAL NOTES

Project Number: LKA-MO-01-22
Drawn: KG
Chkd: AC/SJS
Issue Date: 07.05.2022
DPM:
DM:
CPM:

Sheet Number: **S102**

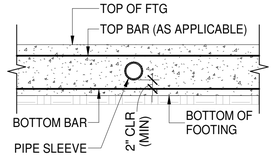


BELOW BOTTOM OF FOUNDATION



NOTE:
PIPE SLEEVE I.D. 2" LARGER THAN O.D. OF PIPE TYPICAL UNLESS NOTED OTHERWISE. CAULK OR PROVIDE FLOWABLE GROUT w/COMPRESSIBLE WRAP AROUND PIPE.

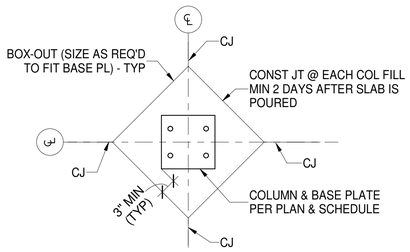
CLOSE TO BOTTOM OF FOUNDATION



CLEAR OF TOP & BOTTOM BAR IN FOOTING OR FOUNDATION WALL (OR TRENCH FOOTING/GRADE BM.)

A S103 TYP FOUNDATION PIPE PENETRATION DETAILS

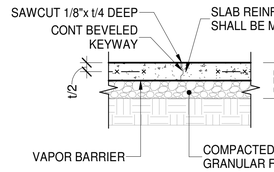
N.T.S.



B S103 TYP SLAB BOX-OUT @ COL

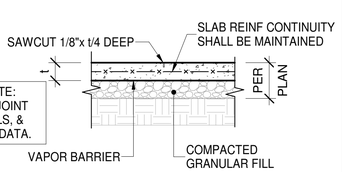
N.T.S.

NOTES:
1. SAW-CUT CONTROL JOINTS TO BE CUT AS SOON AS SURFACE WILL NOT BE TORN, ABRADED, OR OTHERWISE DAMAGED BY CUTTING ACTION. (WITHIN 8 TO 10 HR. OF BURNISHING)
2. SPACE CONTROL JOINTS AT 15'-0" MAX. FOR INTERIOR SLABS UNO ON PLANS.
3. CONSTRUCTION JOINTS TO BE USED AT END OF EACH POUR.



CONSTRUCTION JOINT

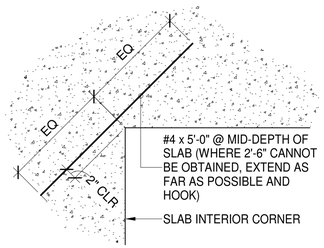
KEYWAY ALTERNATE: PROVIDE CAST IN JOINT PLATES OR DOWELS, & SUBMIT PRODUCT DATA.



CONTROL JOINT

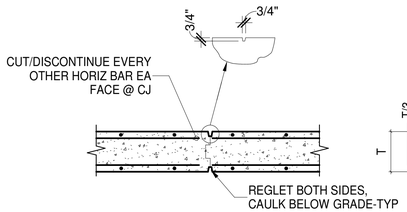
C S103 TYP SLAB-ON-GRADE CONSTRUCTION JOINT DETAILS

N.T.S.



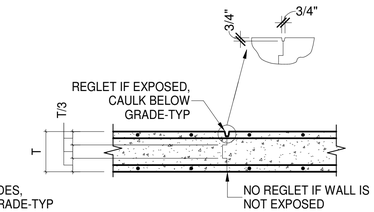
D S103 TYP REINF @ INTERIOR CORNERS

N.T.S.



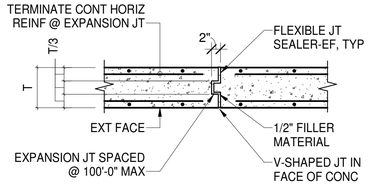
NOTE:
(25'-0"oc MAX. SPACING) APPROVED BY OWNER/ARCHITECT/ENGINEER

WALL CONTROL JOINT



NOTE:
LOCATION TO BE BY CONTRACTOR

WALL CONSTRUCTION JOINT

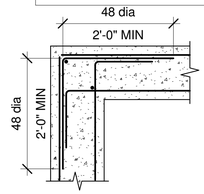


TYPICAL CONCRETE WALL EXPANSION JOINT DETAIL

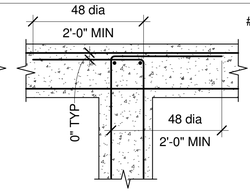
E S103 TYP CONCRETE WALL CONTROL, CONSTRUCTION, AND EXPANSION JOINT DETAIL

N.T.S.

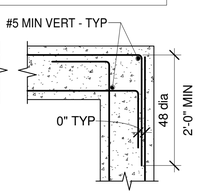
NOTES:
1. WHERE SINGLE CURTAIN OF REINFORCING OCCURS, BEND BARS AS SHOWN FOR OUTSIDE BARS.
2. FOR MORE THAN 2 BARS PER LAYER, EXTEND INNER BARS 12" INTO PERPENDICULAR FOOTING. OUTER BARS SHALL BE PLACED AS INDICATED.
3. CORNER BARS TO MATCH WALL REINFORCEMENT.



PLAN OF ALT CORNER



PLAN OF INTERSECTION



PLAN OF TYPICAL CORNER

F S103 TYP CONCRETE WALL REINFORCEMENT

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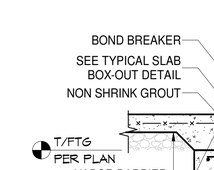
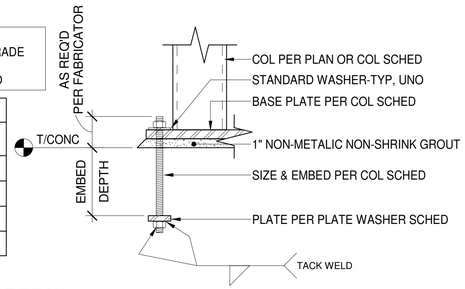


G S103 TYP DEPRESSED SLAB SECTION

N.T.S.

NOTE:
ANCHOR RODS TO BE ASTM F1554, GRADE 36, FULLY-THREADED RODS w/ PLATE WASHER & NUT ON BOTTOM-TYP, UNO

PLATE WASHER SCHED	
ANCHOR ROD DIAMETER	**PLATE WASHER SIZE**
LESS THAN 1"	2 1/2" x 2 1/2" x 5/8"
1"	3" x 3" x 5/8"
1 1/4"	3 1/2" x 3 1/2" x 5/8"
1 1/2"	4" x 4" x 5/8"



H S103 TYP ANCHOR BOLT DETAIL

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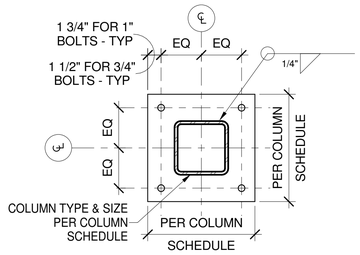
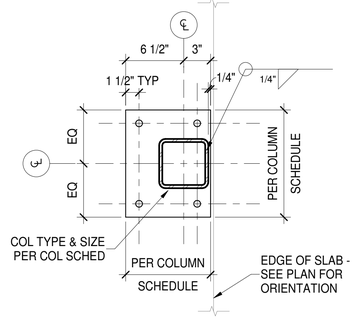


J S103 TYP BASE PLATE DETAIL

N.T.S.



K S103 BASE PLATE DETAIL - TYPE-A

N.T.S.

L S103 TYP INTERIOR COLUMN

N.T.S.

Bakery-Cafe:

#2406

SYSTEM: G4 (ARIA)

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Case Engineering Project Number: LKA-MO-01-22

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PROFESSIONAL ENGINEER

07/05/2022

Project Title:

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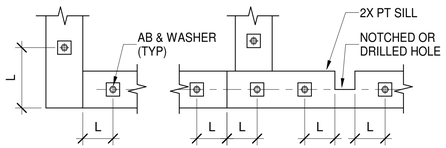
No.	Description	Date

ISSUED FOR PERMIT

TYPICAL DETAILS

Project Number: LKA-MO-01-22
Sheet Number: **S103**
Drawn: KG
Chkd: AC/SJS
Issue Date: 07.05.2022
DPM:
DM:
CPM:



NOTES:

1. TYPICAL ANCHOR BOLT END DISTANCE L = 4 1/2" MIN, 12" MAX.
2. ANCHOR BOLTS SHALL BE INSTALLED AT 12" MAXIMUM FROM EACH END OF EACH SILL PLATE PIECE, AND SHALL BE SPACED AT 48" ON CENTER MAXIMUM. SEE TYPICAL SHEAR WALL DETAIL FOR ANCHOR BOLT SPACING AT SHEAR WALLS.
3. WHERE SILL PLATE IS NOTCHED, DRILLED OR CUT MORE THAN ONE THIRD OF ITS WIDTH, INSTALL ANCHOR BOLT EACH SIDE AS SHOWN. NOTCHES, CUTS AND HOLES SHALL BE TREATED WITH A PRESERVATIVE SOLUTION CONFORMING TO AWPA STANDARD M4.
4. ANCHOR BOLTS SHALL BE 5/8" DIAMETER FULLY THREADED WITH 3"x3" x 0.229" PLATE WASHERS, UNLESS OTHERWISE NOTED.
5. MINIMUM ANCHOR BOLT EMBEDMENT SHALL BE 7", MEASURED FROM TOP OF THE CONCRETE SLAB. FOR ANCHOR BOLTS EMBEDED IN CONCRETE CURBS **NOT** POURED MONOLITHICALLY WITH THE FOUNDATION (NON-INTEGRAL CURBS), THE LENGTH OF ANCHOR BOLT IN CONCRETE CURBS SHALL NOT APPLY TO THIS MINIMUM EMBEDMENT.
6. ANCHOR BOLTS WITH DAMAGED THREADS SHALL NOT BE USED.
7. WHERE SILL PLATE ANCHORS MUST BE POST-INSTALLED, PROVIDE 3/4"dia x 8 1/2" SIMPSON TITEN HD STAINLESS STEEL SCREW ANCHORS (INTEGRAL CURBS ONLY, OR NO CURB), OR 5/8"dia x (8 1/2" + CURB HEIGHT) STAINLESS STEEL THREADED ROD ANCHORS INSTALL w/ HILTI HIT-HY 200 ADHESIVE OR EQUIVALENT. POST-INSTALLED ANCHORS SHALL NOT REPLACE HOLDOWN ANCHOR BOLTS UNLESS ALLOWED IN THE HOLDOWN SCHEDULE.

A S104 TYP SILL PLATE ANCHOR BOLT DETAIL

N.T.S.

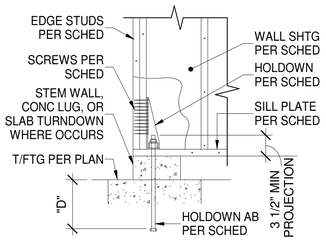
SILL PL BOLTS & SOLE PL SCREWS SCHEDULE			
MARK	WALL SIDES SHEATHED	FASTENER SPACING "B" (NOTES #5-6)	
		BOLT	SCREW
⑥	1	34"	5"
	2	16"	2"
④	1	22"	3"
	2	10"	1.5"
③	1	16"	2"
	2	8"	1"

WALL SHEATHING AND NAILING SCHEDULE			
MARK	SHTG SPEC	NAIL SIZE	EN SPCG "E"
⑥	15/32" *	10d	6"
④	15/32" *	10d	4"
③	15/32" *	10d	3"

* PANELS SHALL BE (**STRUCTURAL 1 / SHEATHING**) GRADE, SEE LUMBER SCHEDULE FOR REQUIREMENTS.

NOTES:

1. FIELD NAILING (FN): 10d @ 12"oc.
2. ALL NAILS SHALL BE COMMON OR BOX WIRE NAILS.
3. MINIMUM DIMENSION OF ANY SHEATHING SHEET EQUALS 16" OR STUD SPACING, WHICHEVER IS GREATER.
4. ALL SHEAR WALL SHEATHING PANEL EDGES SHALL BE FULLY BLOCKED WITH FULL DEPTH 2x STUD BLOCKING-TYP-UNO.
5. SILL PLATES SHALL BE FASTENED WITH 5/8"dia x 7"LG EMBED ANCHOR BOLTS PER FASTENER SPACING "B" IN SCHEDULE ABOVE. ALTERNATIVELY, USE 5/8" x 8"LG SIMPSON TITEN HD SCREW ANCHORS. BOTH OPTIONS REQUIRE 3"x3"x0.229" PLATE WASHERS AT EACH AB.
6. SOLE PLATES SHALL BE FASTENED WITH 1/4"dia (#14) x 4 1/2"LG WOOD SCREWS PER SCREW FASTENERS SPACING "B" IN SCHEDULE ABOVE. PRE-DRILL HOLES FOR #14 WOOD SCREWS PER NDS 12.1.5.3 ALTERNATIVELY, CONTRACTOR MAY USE SIMPSON STRONG-TIE SDS25412 STRONG-DRIVE SCREWS AND DOUBLE THE SCREW SPACING PER THE SCHEDULE ABOVE. NO PRE-DRILLING REQUIRED FOR SDS SCREWS.



HOLDOWN AT FOUNDATION

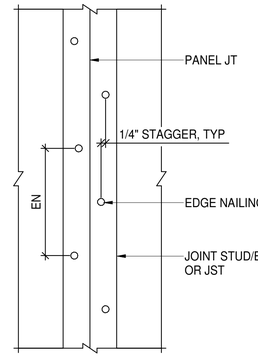
B S104 TYP HOLDOWN SCHEDULE & DETAILS

N.T.S.

HOLDOWN SCHEDULE								
MARK	EDGE STUDS	SIMPSON HOLDOWN	FASTENERS	SDS 1/4"x2.5" STUD SCWS	SIMPSON AB (CIP)	"D" (CIP)	HILTI AB (POST-INSTALLED)	"D" (POST-INSTALLED)
Ⓐ	2 - 2x	HDU2-SDS2.5	N/A	6	SSTB16	12 5/8"	5/8" GR.36	8"
Ⓑ	3 - 2x	HDU8-SDS2.5	N/A	20	SSTB28	24 7/8"	7/8" GR.36	14"
Ⓒ	6x	HHDU14-SDS2.5	N/A	36	SSTB36	28 7/8"	1" GR.36	16"
Ⓓ	6x6	HD19	(5) 1" dia THRU BOLTS	N/A	N/A	N/A	1 1/4" GR.36	16"

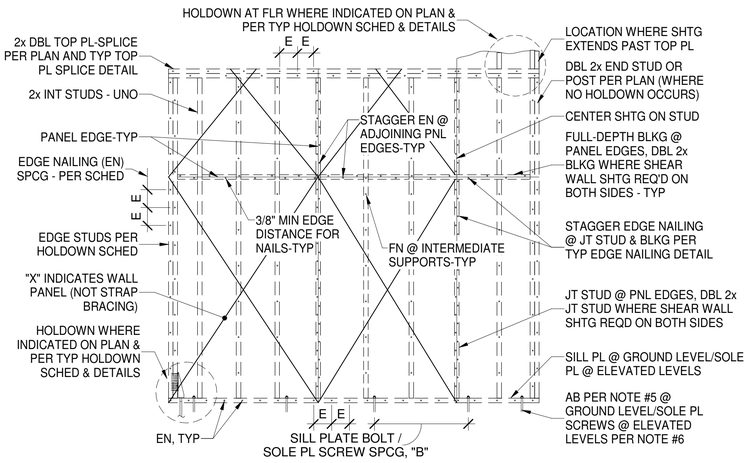
NOTES:

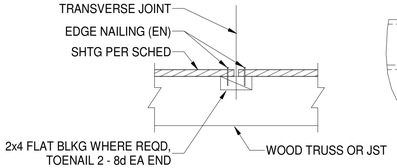
1. HOLDOWN ANCHOR BOLTS SHALL BE HOT-DIPPED GALVANIZED (ASTM A153). CONTRACTOR MAY CHOOSE CAST-IN-PLACE OR POST-INSTALLED OPTION. ADHERE WITH HILTI HIT-HY 200 SAFE SET SYSTEM ADHESIVE FOR POST-INSTALLED OPTION. IF "N/A" IS SHOWN, POST-INSTALLED OPTION IS NOT ALLOWED.
2. THICKENED FOOTING WHERE REQUIRED TO ACHIEVE MINIMUM ANCHOR BOLT EMBEDMENT.
3. WHERE HOLDOWN OCCURS ADJACENT TO A POST ON THE PLAN, USE THE LARGER OF THE INDICATED POST OR THE SCHEDULE EDGE STUDS.
4. "THRU BOLTS" TO BE STRUCTURAL QUALITY EQUAL TO OR BETTER THAN ASTM A307, GRADE A.
5. HD19 w/1 1/4" ANCHOR ROD REQUIRES NO. 1 OR BETTER EDGE STUDS.



C S104 TYP STAGGERED EDGE NAILING DETAIL

N.T.S.





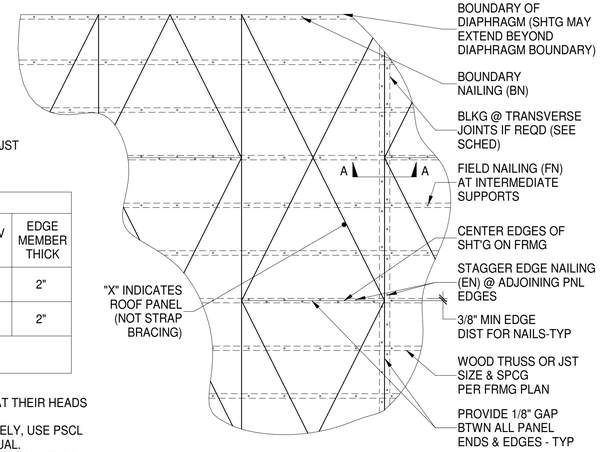
SECTION A-A

DIAPHRAGM SHEATHING & NAILING SCHEDULE							
MARK	SHTG SPEC	NAILS IZE	BN SPCG	EN SPCG	FN SPCG	TRANSV BLKG	EDGE MEMBER THICK
R1	19/32" *	10d	6"	6"	12"	NO	2"
F2	19/32" *	10d	6"	6"	12"	YES	2"

* PANELS SHALL BE (**STRUCTURAL 1/SHEATHING**) GRADE, SEE LUMBER SCHEDULE FOR REQUIREMENTS.

NOTE:

1. DIAPHRAGM SHEATHING NAILS SHALL BE DRIVEN SO THAT THEIR HEADS ARE FLUSH WITH THE SURFACE OF THE SHEATHING.
2. PROVIDE T & G SHEATHING AT ALL FLOORS. ALTERNATIVELY, USE PSCL 19/32 CLIPS BY SIMPSON STRONG-TIE OR APPROVED EQUAL.
3. 10d COMMON NAILS CAN BE SUBSTITUTED WITH #9 x 2" SCREW WSV2 BY SIMPSON STRONG-TIE.

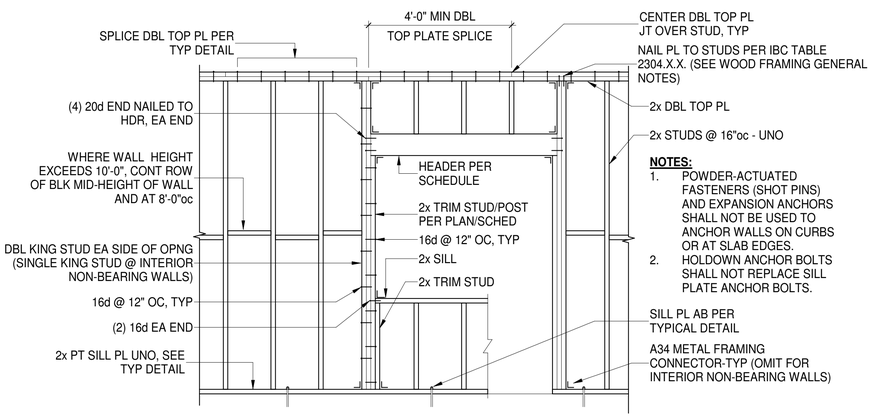


E S104 TYP ROOF SHEATHING DETAIL

N.T.S.

D S104 TYP SHEAR WALL SHEATHING AND FASTENER SCHEDULE

N.T.S.

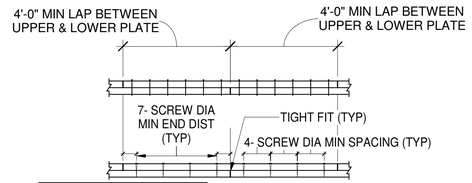


NOTES:

1. POWDER-ACTUATED FASTENERS (SHOT PINS) AND EXPANSION ANCHORS SHALL NOT BE USED TO ANCHOR WALLS ON CURBS OR AT SLAB EDGES.
2. HOLDOWN ANCHOR BOLTS SHALL NOT REPLACE SILL PLATE ANCHOR BOLTS.

F S104 TYP STRUCTURAL WALL PANEL FRAMING ELEVATION

N.T.S.



NAILED SPLICE SCHEDULE	
MARK	NAILS
A	8 - 16d
B	10 - 16d
C	12 - 16d

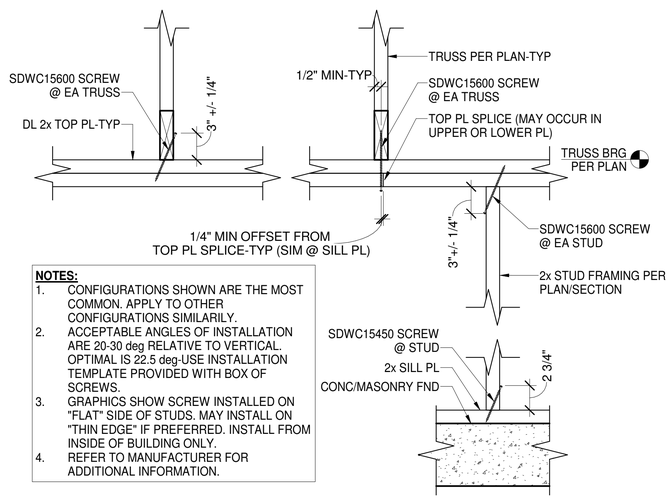
SCREWED SPLICE SCHEDULE	
MARK	SDS 1/4 SCREWS
D	8 - 1/4" SCREWS
E	12 - 1/4" SCREWS
F	24 - 1/4" SCREWS

NOTES:

1. SPLICE 2x DOUBLE TOP PLATES PER MARK "A" AND 3x DOUBLE TOP PLATES PER MARK "D" OF THE ABOVE SCHEDULE, UNLESS OTHERWISE INDICATED.
2. SCREWS SHALL BE 3" LONG FOR 2x PLATES AND 5" LONG FOR 3x PLATES.
3. JOINTS IN UPPER AND LOWER PLATE SHALL BE CENTERED OVER STUD OR MULLION.
4. ALL NAILS SHALL BE COMMON WIRE NAILS.
5. SCHEDULE INDICATES NUMBER OF NAILS OR SCREWS ON EACH SIDE OF EACH JOINT.

G S104 TYP TOP PLATE SPLICE DETAIL

N.T.S.



NOTES:

1. CONFIGURATIONS SHOWN ARE THE MOST COMMON. APPLY TO OTHER CONFIGURATIONS SIMILARILY.
2. ACCEPTABLE ANGLES OF INSTALLATION ARE 20-30 deg RELATIVE TO VERTICAL. OPTIMAL IS 22.5 deg-USE INSTALLATION TEMPLATE PROVIDED WITH BOX OF SCREWS.
3. GRAPHICS SHOW SCREW INSTALLED ON "FLAT" SIDE OF STUDS. MAY INSTALL ON "THIN EDGE" IF PREFERRED. INSTALL FROM INSIDE OF BUILDING ONLY.
4. REFER TO MANUFACTURER FOR ADDITIONAL INFORMATION.

H S104 TYP SIMPSON SDWC TRUSS SCREW DETAIL

N.T.S.

Bakery-Cafe:

#2406

SYSTEM: G4 (ARIA)

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Case Engineering Project Number: LKA-MO-01-22

Professional Seal:

STATE OF MISSOURI
STEPHEN J SACCO
NUMBER PE-21871
PROFESSIONAL ENGINEER

07/05/2022

Project Title:

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1410 NE DOUGLAS ST
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TYPICAL DETAILS

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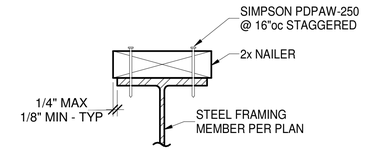
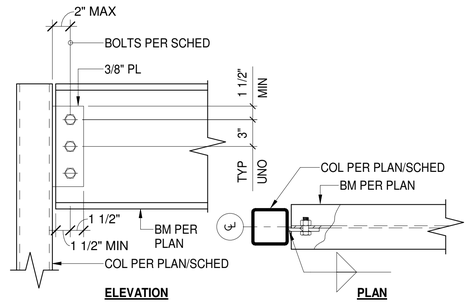
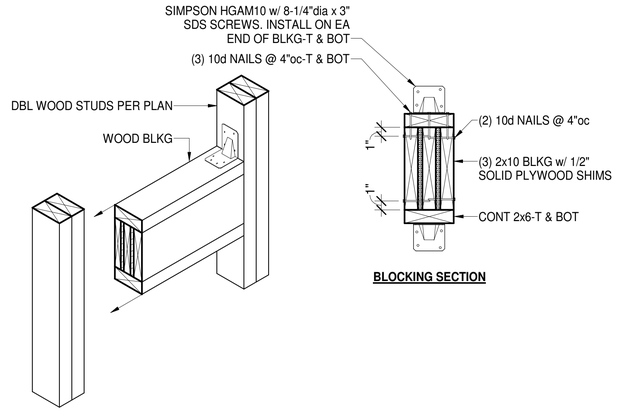


A S105 **TYP NAILER ON BEAM-NAILED**
N.T.S.



B S105 **TYP BM TO COL CONNECTION DETAILS**
N.T.S.



C S105 **TYP CANOPY ATTACHMENT BLOCKING @ WOOD STUDS**
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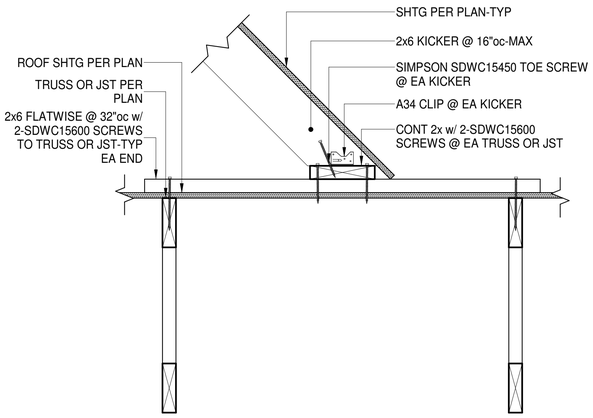
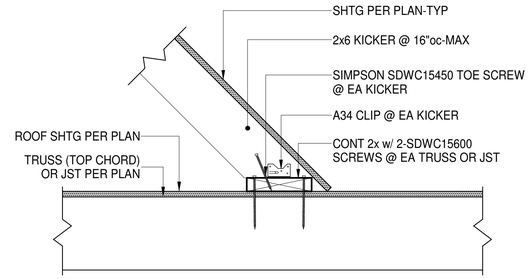
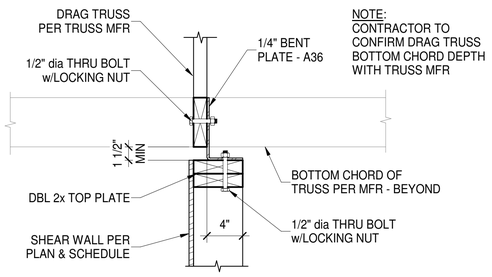


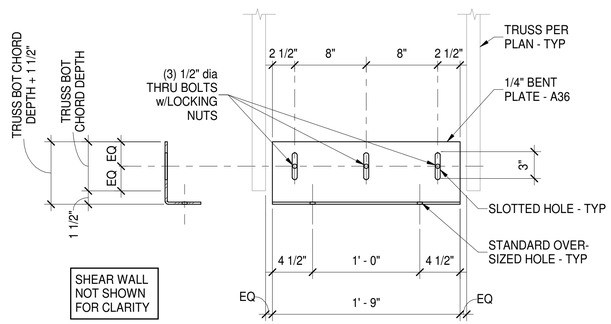
D S105 **TYP KICKER CONNX. TO TRUSS/JST (PARALLEL)**
N.T.S.



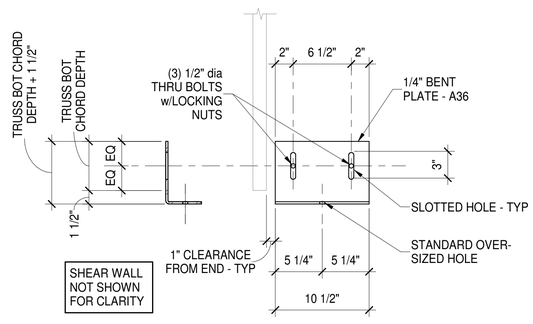
E S105 **TYP KICKER CONNX. TO TRUSS/JST (PERPENDICULAR)**
N.T.S.



F S105 **SECTION - DRAG TRUSS TO SHEAR WALL CONNECTION**
1 1/2" = 1'-0"



G S105 **BENT PLATE AT INTERMEDIATE DRAG TRUSS**
1 1/2" = 1'-0"



H S105 **BENT PLATE AT END DRAG TRUSS**
N.T.S.

Bakery-Cafe:

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PROFESSIONAL ENGINEER

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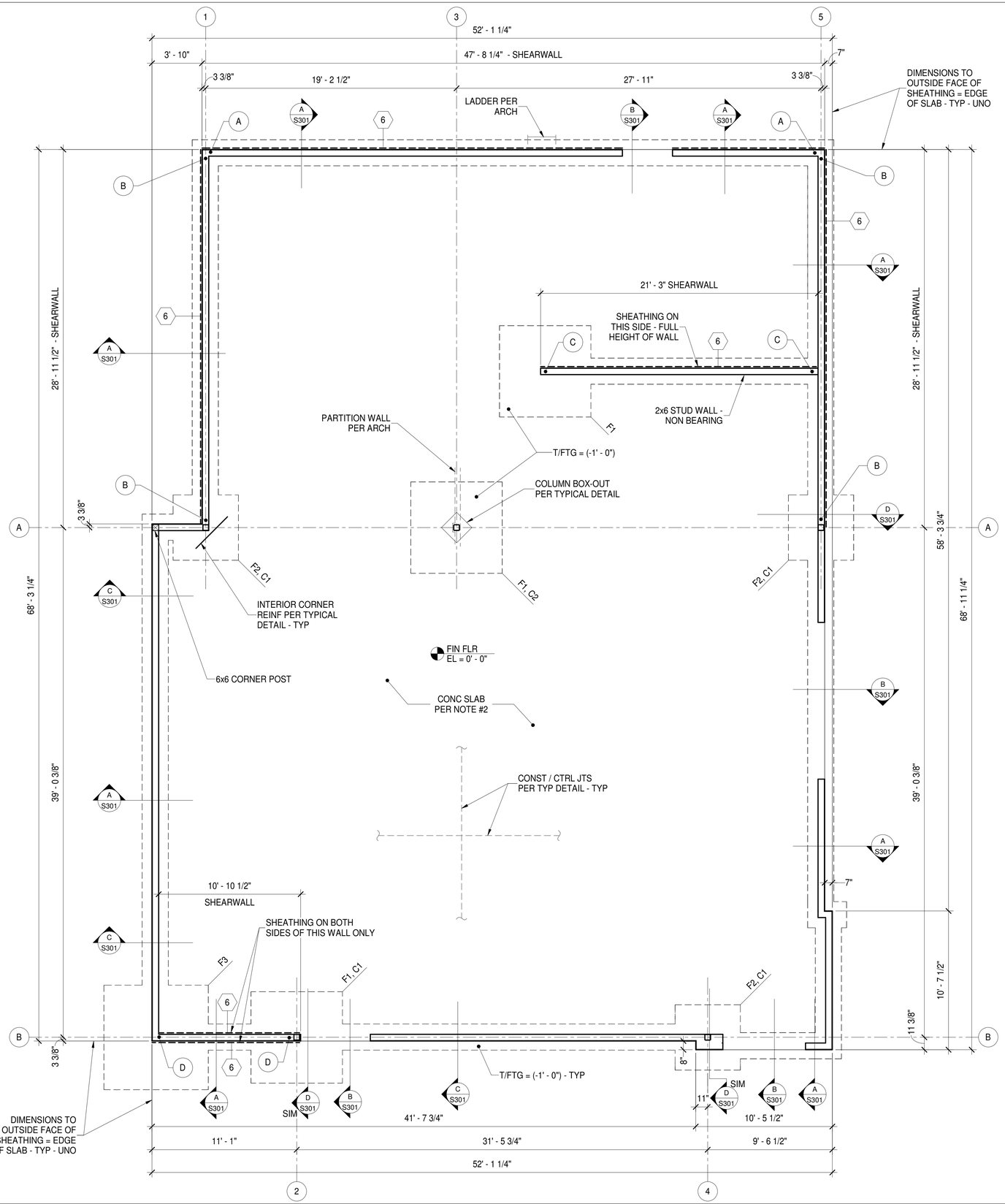
Sheet Number: **S105**



LEGEND - FOUNDATION PLAN

- (X) INDICATES HOLDOWN PER TYPICAL DETAIL
- (X) INDICATES WOOD SHEAR WALL SHEATHING PER TYPICAL DETAIL
- INDICATES POST OR COLUMN PER SCHEDULE (NOTE THAT SOME POSTS REQUIRE HOLDOWNS)
- C1
- INDICATES EDGE OF FOOTING
- INDICATES EDGE OF SLAB AT DOOR OPENING
- INDICATES STRUCTURAL WALL FRAMED WITH 2x6 STUDS @ 16"oc

COLUMN SCHEDULE

MARK	SIZE	BASE PLATE	ANCHOR BOLTS
C1	HSS 5 1/2" x 5 1/2" x 3/8"	12" x 9 1/2" x 3/4" SEE DETAIL K / S103	4 - 3/4"dia w/16" EMBED
C2	HSS 6" x 6" x 1/4"	16" x 16" x 3/4" SEE DETAIL J / S103	4 - 3/4"dia w/9" EMBED

FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F1	7'-0" x 7'-0" x 1'-6"	8 - #5 EW TOP & BOT
F2	5'-0" x5'-0" x 1'-6"	6 - #5 EW TOP & BOT
F3	8'-0" x 8'-0" x 1'-6"	10 - #5 EW TOP & BOT

FOUNDATION PLAN

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

PLAN NOTES

1. SEE SHEETS S101 - S105 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. 4" CONCRETE SLAB REINFORCED WITH ONE LAYER OF 6x6 - W1.4xW1.4 WWR ON 10 MIL. POLY VAPOR BARRIER OVER 4" MINIMUM COMPACTED SUB-BASE AS RECOMMENDED BY THE SOILS REPORT). REINFORCEMENT TO BE LOCATED IN THE MIDDLE OF THE SLAB.
3. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, SECTIONS, AND ELEVATIONS NOT SHOWN HEREON.
4. COORDINATE SIZE AND LOCATION OF ROUGH OPENINGS IN FLOOR OR WALLS WITH ARCHITECTURAL DRAWINGS.
5. ALL ELEVATIONS ARE REFERENCED FROM FINISHED MAIN FLOOR = 0' - 0"
   - T/FTG = TOP OF FOOTING = PER PLAN
6. ALL EXTERIOR WALL SHEATHING NOT SPECIFIED AS "SHEAR WALL SHEATHING" IS TO BE 1/2" OSB SHEATHING AND ATTACHED PER IBC TABLE 2304.9.1 UNLESS OTHERWISE INDICATED BY ARCHITECT.

Bakery-Cafe:

#2406

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FOUNDATION PLAN

Project Number: LKA-MO-01-22
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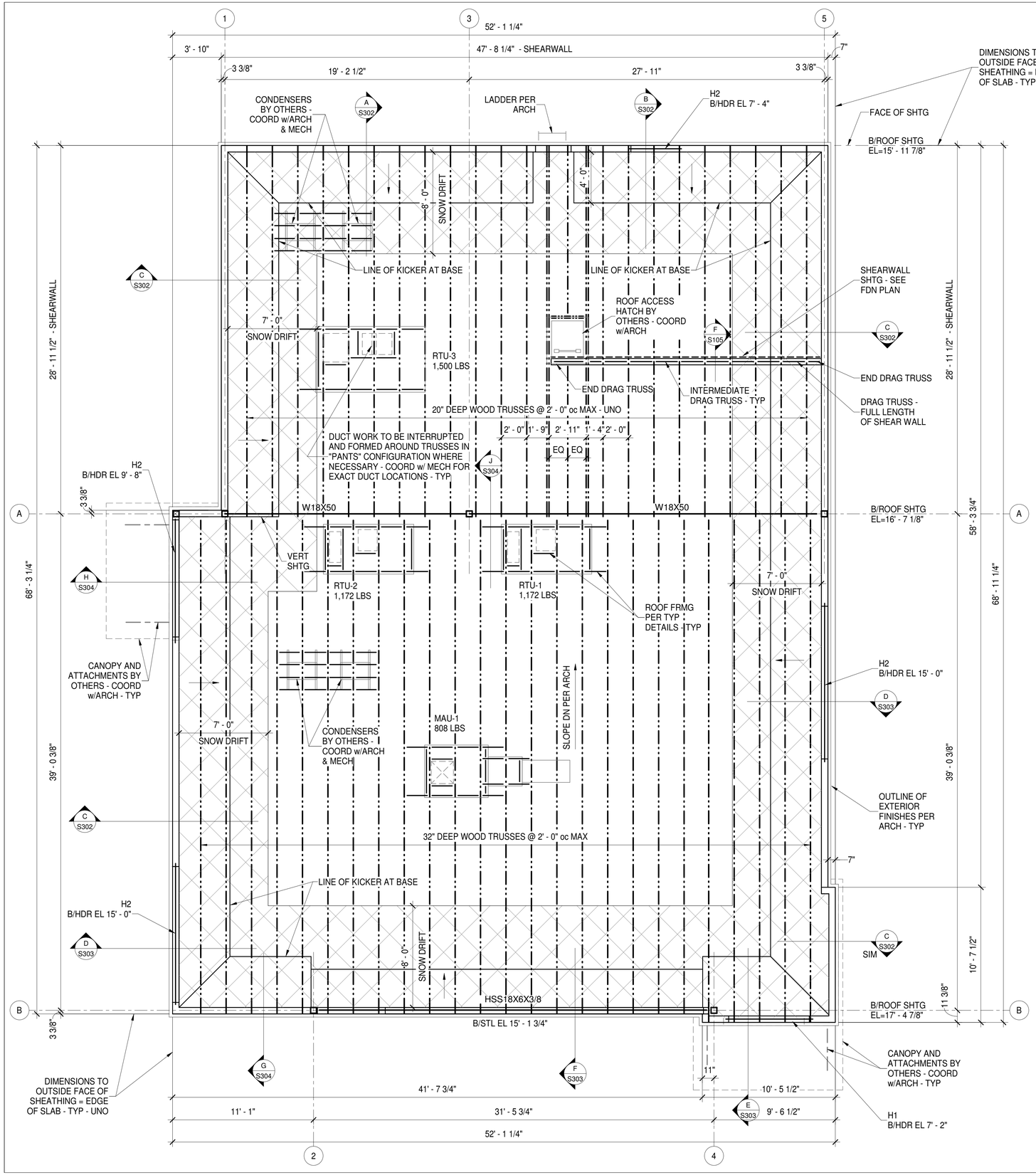
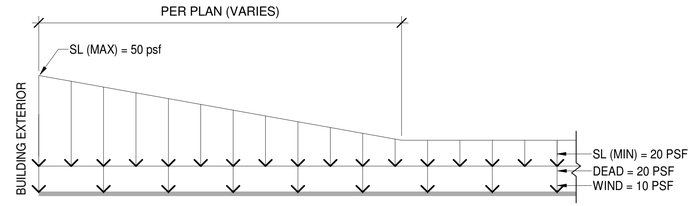




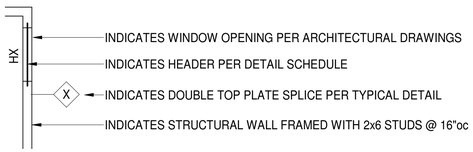
A S202 **TYPICAL SNOW DRIFT LOAD DIAGRAM**

N.T.S.

HEADER SCHEDULE

MARK	SIZE	TRIM STUDS	KING STUDS
H1	(3) 1.75 x 14" 1.9E LVL	(2) 2x6	(2) 2x6
H2	(3) 2x12	(2) 2x6	(3) 2x6

LEGEND - FRAMING PLAN



ROOF FRAMING PLAN

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

PLAN NOTES

1. SEE SHEETS S101 - S105 FOR GENERAL NOTES AND TYPICAL DETAILS.
2. ROOF CONSTRUCTION: 5/8" PLYWOOD ROOF SHEATHING, ATTACHED TO SUPPORTS PER MARK R1.
3. PROVIDE TRUSS BRIDGING AND SPACING PER TRUSS SUPPLIER.
4. TRUSS MANUFACTURER TO COORDINATE WITH CONTRACTORS TO DETERMINE RTU AND TRANSFORMER LAYOUTS, WEIGHTS, AND FOOTPRINTS. MANUFACTURER TO COORDINATE WITH ROOF HATCH SUPPLIER FOR SIZE AND LOCATION. RTU AND EXHAUST HOOD LOADS ARE TO BE IN ADDITION TO OTHER DESIGN LOADS.
5. MAXIMUM TRUSS SPACING = 2' - 0" UNO
6. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, SECTIONS, AND ELEVATIONS NOT SHOWN HEREON.
7. ALL ELEVATIONS ARE REFERENCED FROM FINISHED MAIN FLOOR = 0' - 0"
   - T/STL = TOP OF STEEL ELEVATION = PER PLAN
   - TRUSS/BRG OR T/BRG = TRUSS BEARING = PER PLAN

Bakery-Cafe:

#2406

SYSTEM: G4 (ARIA)

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ROOF FRAMING PLAN

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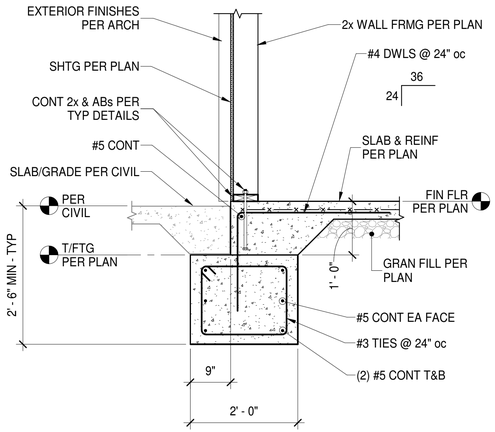
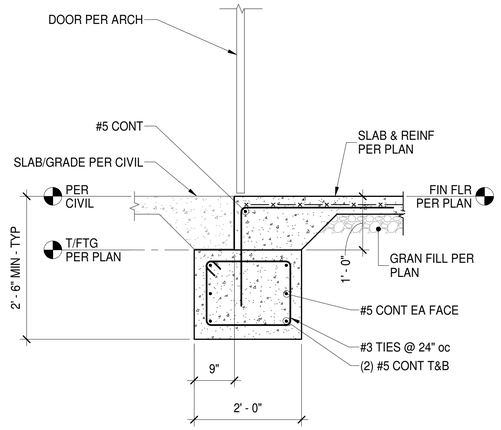
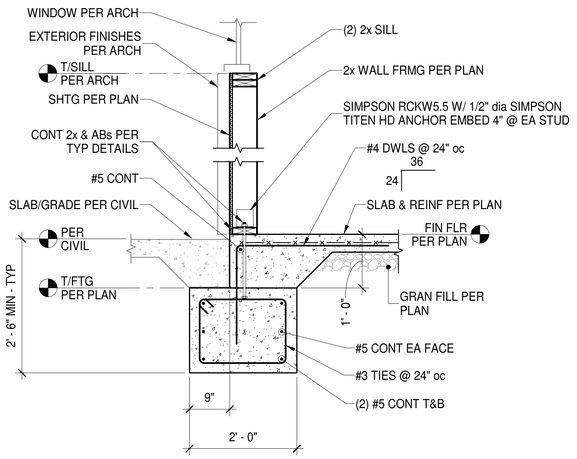


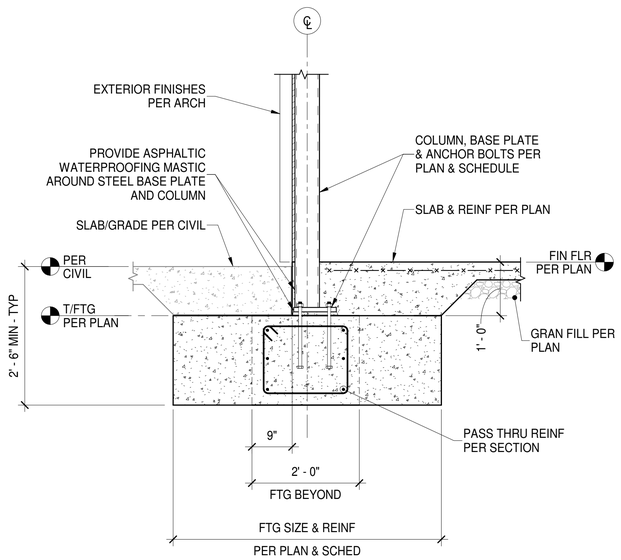
A S301 **FOUNDATION SECTION**
3/4" = 1'-0"



B S301 **FOUNDATION SECTION**
3/4" = 1'-0"



C S301 **FOUNDATION SECTION**
3/4" = 1'-0"



D S301 **FOUNDATION SECTION**
3/4" = 1'-0"

Bakery-Cafe:

#2406

SYSTEM: G4 (ARIA)

Project Team:

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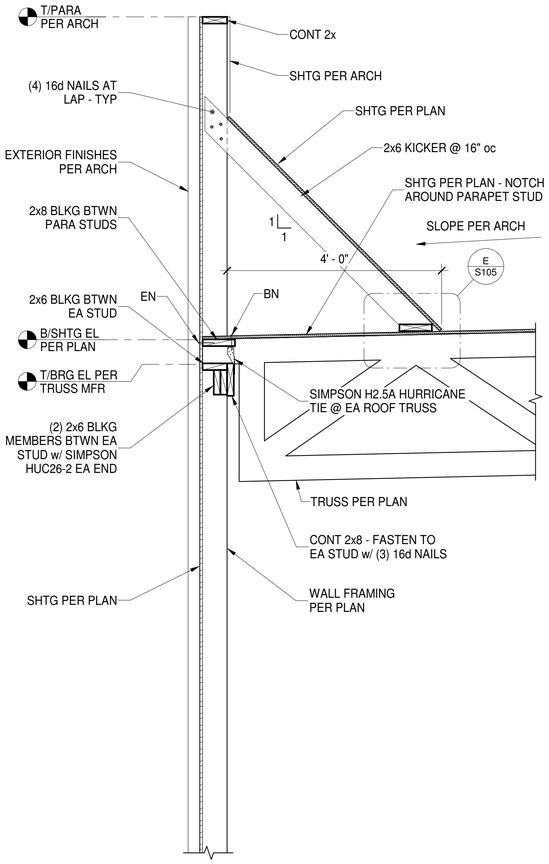
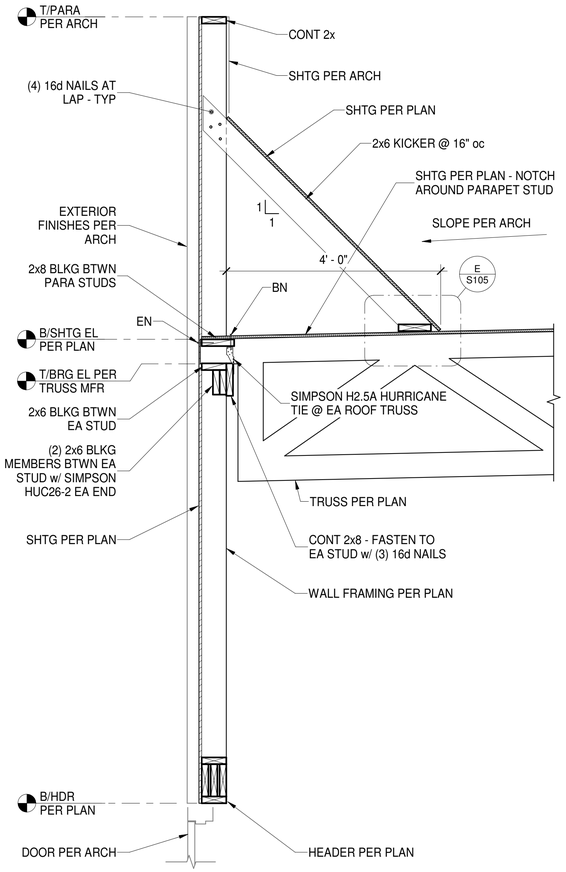
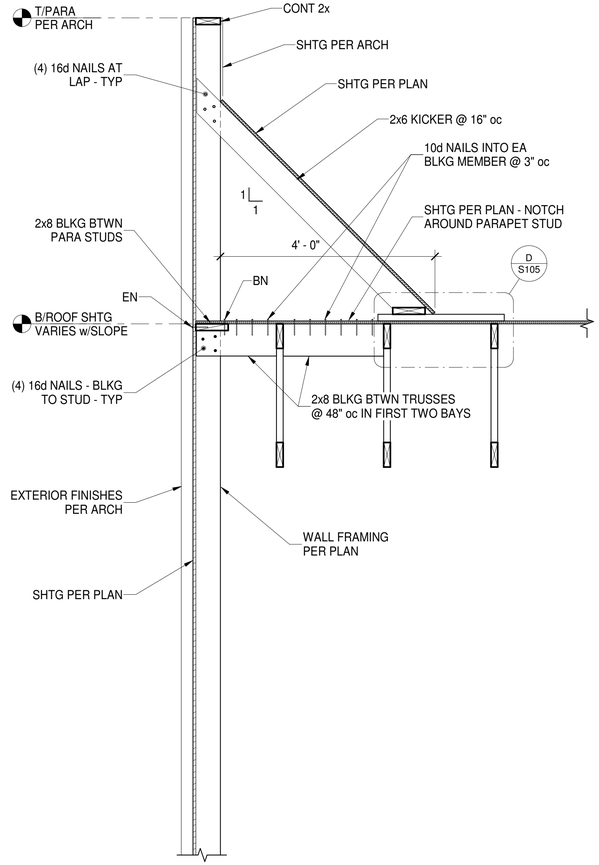


A S302 **FRAMING SECTION**
3/4" = 1'-0"



B S302 **FRAMING SECTION**
3/4" = 1'-0"



C S302 **FRAMING SECTION**
3/4" = 1'-0"

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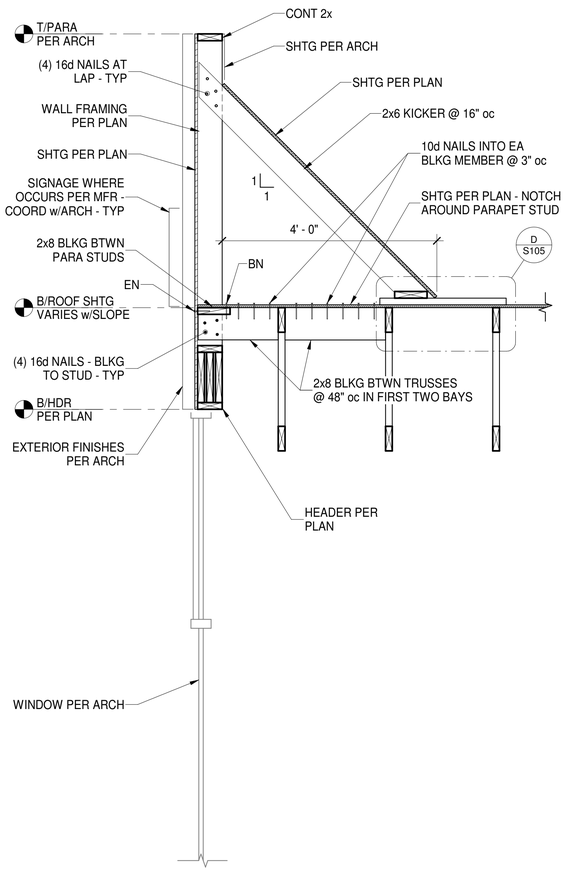
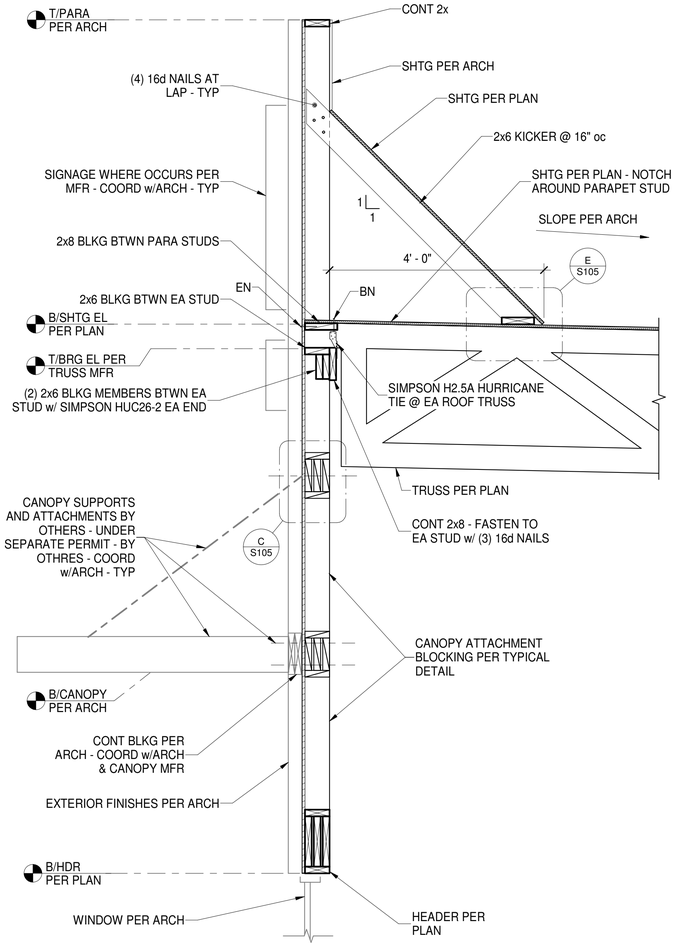
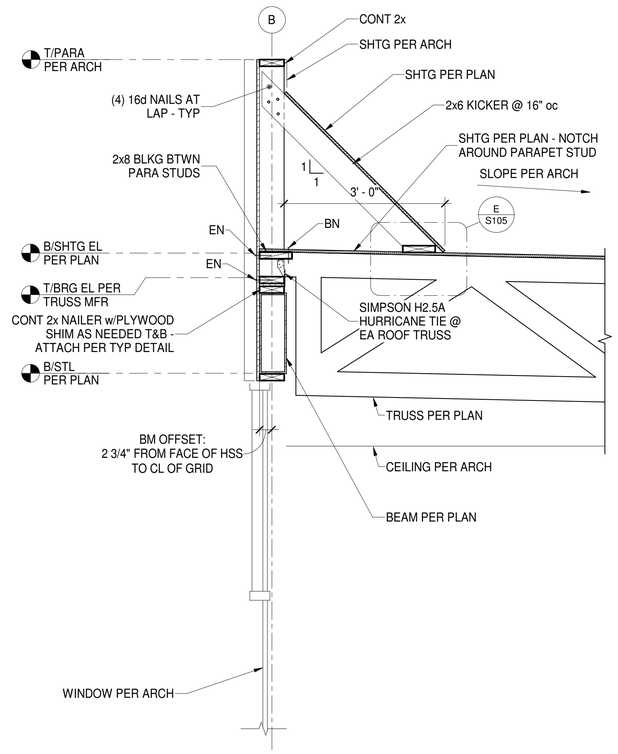


D S303 **FRAMING SECTION**
3/4" = 1'-0"



E S303 **FRAMING SECTION**
3/4" = 1'-0"



F S303 **FRAMING SECTION**
3/4" = 1'-0"

Bakery-Cafe:

#2406

SYSTEM: G4 (ARIA)

Project Team:

CASE Engineering Inc.
796 Menas Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1730
CERTIFICATE OF AUTHORITY NO. 001498

Case Engineering Project Number: LKA-MO-01-22

Professional Seal:

STATE OF MISSOURI
STEPHEN J. SACCO
NUMBER PE-21871
PROFESSIONAL ENGINEER

07/05/2022

Project Title:

Bakery Cafe #2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD®

Dennis D. Smith
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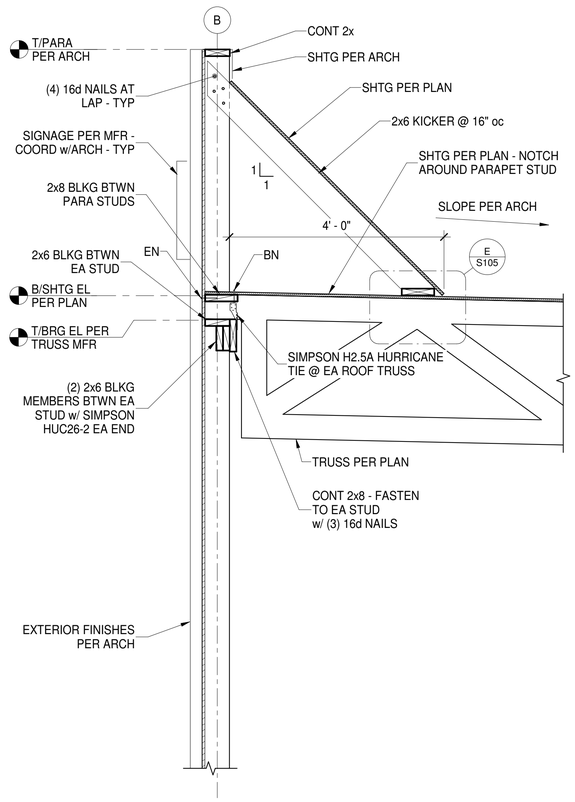
No.	Description	Date

ISSUED FOR
PERMIT

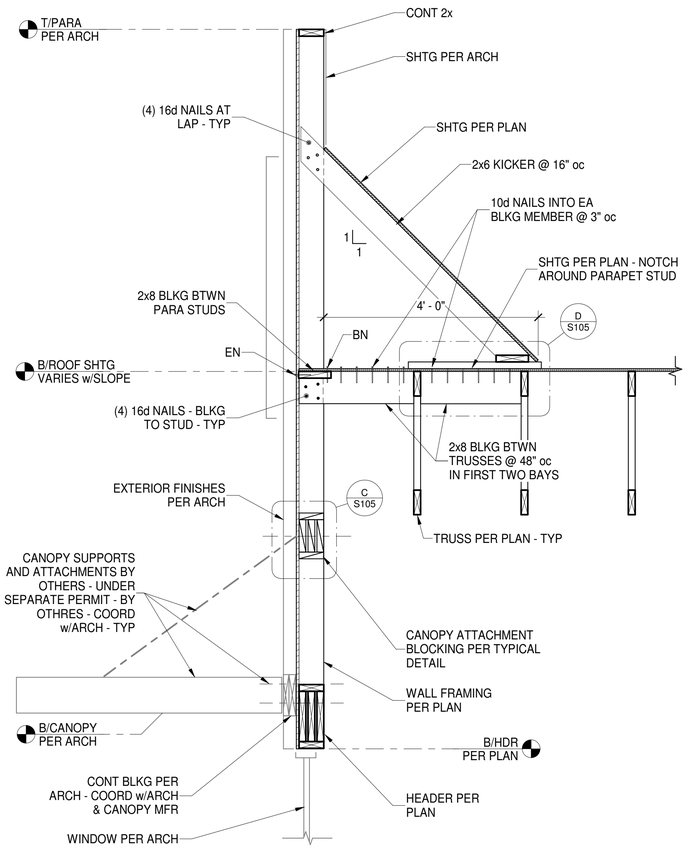
FRAMING SECTIONS

Project Number: LKA-MO-01-22
Drawn: KG
Chkd: AC/SJS
Issue Date: 07.05.2022
DPM:
DM:
CPM:

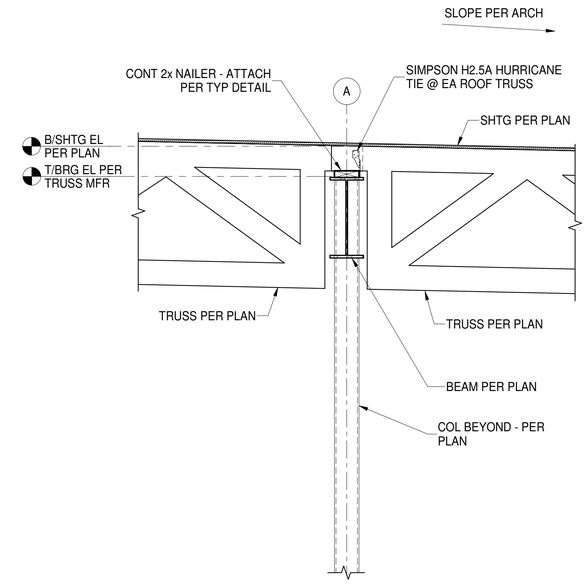
Sheet Number: **S303**



G S304 FRAMING SECTION
3/4" = 1'-0"



H S304 FRAMING SECTION
3/4" = 1'-0"



J S304 FRAMING SECTION
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Bakery-Cafe:

#2406

SYSTEM: G4 (ARIA)

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Professional Seal:

STATE OF MISSOURI
STEPHEN J. SACCO
NUMBER PE-21871
PROFESSIONAL ENGINEER
07/05/2022

Project Title:

Bakery Cafe #2406
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Project Number: LKA-MO-01-22
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7/5/2022 13:41:10

SHELL HVAC SPECIFICATIONS

NOTE: MANUFACTURERS' NAMES ON WHICH THIS SPECIFICATION IS BASED INDICATE THE MINIMUM QUALITY OF PRODUCT REQUIRED. SUBSTITUTION MAY BE MADE TO THOSE SPECIFIED IF DEEMED EQUIVALENT BY THE OWNER'S REPRESENTATIVE. ALL WORK AND PRODUCTS SHALL MEET THE REQUIREMENTS OF THE OWNER AND GOVERNING CODES.

1. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH ALL APPLICABLE CODES AND THE OWNER'S MINIMUM REQUIREMENTS AS STATED HEREIN OR OTHERWISE INDICATED BY THE OWNER.
2. SEE ARCHITECTURAL GENERAL AND SPECIAL CONDITIONS. ALL CONDITION REQUIREMENTS SHALL APPLY UNLESS OTHERWISE NOTED.
3. ALL WORK SHALL BE PERFORMED AS INDICATED ON DRAWINGS UNLESS FIELD CONDITIONS REQUIRE MINOR CHANGES BE MADE. MINOR CHANGES SHALL BE MADE WITH NO ADDITIONAL COST.
4. ALL WORK SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE WORK BY THE OWNER.
5. CONTRACTOR SHALL PREPARE AND SUBMIT AS-BUILT DRAWINGS TO THE OWNER IF REQUESTED. AS-BUILT DRAWINGS SHALL INDICATE THE ACTUAL MANUFACTURER OF THE EQUIPMENT THAT WAS INSTALLED, THE EXACT LOCATION OF THE EQUIPMENT AND PERTINENT CAPACITIES FOR HEATING, COOLING, ETC.
6. EQUIPMENT, FIXTURES, AND ACCESSORIES SHALL NOT BE SUPPORTED FROM CEILING SOFFIT, NEUTRAL PIERS, PIPING, DUCTWORK, METAL ROOF DECK, LATERAL BRACING, BRIDGING OR CONDUIT. ITEMS SHALL ONLY BE SUPPORTED FROM STRUCTURE WHICH HAS BEEN APPROVED BY THE ARCHITECT FOR SUPPORT.
7. ALL ROOF WORK PENETRATIONS AND REPAIRS SHALL BE TOTALLY PERFORMED BY ONLY THOSE ROOFING CONTRACTORS APPROVED BY THE OWNER/LANDLORD.
8. INSTALLATION OF ROOF MOUNTED EQUIPMENT SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND OTHER TRADES.
9. DEFICIENCIES AND NON-CONFORMING ITEMS SHALL BE CORRECTED BY THE CONTRACTOR. FAILURE TO CORRECT SUCH ITEMS SHALL PERMIT THE LANDLORD TO CORRECT SAME AT A COST TO THE CONTRACTOR.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL PERMITS AND PAYING FOR SAME. HE SHALL INCLUDE IN HIS BID CHARGES FOR ALL FEES ASSOCIATED WITH THE CONSTRUCTION OF THE SPACE INCLUDING BUT NOT LIMITED TO LOCAL, COUNTY, OR STATE SERVICE CHARGES AND PERMIT FEES, AND UTILITY AND/OR EQUIPMENT CHARGES.
11. THE SCOPE OF WORK OF THIS CONTRACT INCLUDES, BUT SHALL NOT BE LIMITED TO:

    THIS CONTRACTOR SHALL PROVIDE DUCTWORK FULL SIZE FROM RTU AND EF
    CONNECTIONS TO DUCT SIZES NOTED. STUB S.A., R.A., AND E.F. DUCTS TO 12TH BELOW ROOF DUCT - FOR EXTENSION AND CONNECTION BY TENANT INTERIOR CONTRACTOR.
    PROVIDE AND INSTALL ALL EQUIPMENT, APPLIANCES, CONTROL DEVICES,
    ACCESSORIES, MATERIAL AND LABOR.

    PROVIDE AND INSTALL ALL DUCTWORK, INSULATION, AIR DEVICES, DUCT DEVICES, DUCT ACCESSORIES, MATERIAL AND LABOR.

    PROVIDE AND INSTALL ALL PIPING, FITTINGS, VALVES, INSULATION, ACCESSORIES, MATERIAL AND LABOR.

    PROVIDE AND INSTALL EXHAUST SYSTEMS(S) INDICATED.

    PROVIDE AND INSTALL ALL ROOF WORK, INCLUDING EQUIPMENT SUPPORTS, ROOF PENETRATIONS, PATCHING AND WATERPROOFING OF ROOF.

    PROVIDE ALL EQUIPMENT SUPPORTS AND HANGERS INCLUDING ANY AUXILIARY STEEL REQUIRED. ANY STRUCTURAL MODIFICATION TO THE BUILDING STRUCTURE SHALL BE MADE ONLY WITH THE WRITTEN APPROVAL OF THE LANDLORD.

    CLEAN, TEST AND PUT INTO SERVICE ALL SYSTEMS SPECIFIED.

    PROVIDE A BALANCE REPORT PREPARED BY AN INDEPENDENT AABC OR NEBB CERTIFIED AIR BALANCE CONTRACTOR.

    WARRANTY ALL WORK AND MATERIALS HEREIN SPECIFIED FOR A PERIOD OF NOT LESS THAN ONE YEAR.

12. MATERIALS

    12.1 ALL MATERIALS SHALL BE NEW AND OF RECOGNIZED COMMERCIAL QUALITY. USED MATERIALS WILL NOTE BE PERMITTED.

    12.2 DUCTWORK

    SHALL BE GALVANIZED SHEET METAL, FABRICATED AND INSTALLED IN STRICT ACCORDANCE WITH THE LATEST EDITIONS OF SMACNA - "HVAC DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE."

    DUCTWORK 18" WIDTH AND LARGER SHALL BE CROSS-BROKEN OR RIBBED AND STIFFENED SO THAT IT WILL NOT "BREATHE", RATTLE, VIBRATE OR SAG.

    FIBERGLASS DUCTWORK WILL ONLY BE PERMITTED WITH THE APPROVAL OF THE OWNER, ARCHITECT, AND ENGINEER.

    12.3 DUCT INSULATION

    ALL SUPPLY AND RETURN AIR DUCTWORK (EXCEPT FLEXIBLE DUCTS) SHALL BE INSULATED EXTERNALLY UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. EXTERNAL DUCT INSULATION (DUCT WRAP) SHALL BE MINIMUM OF R-5 FIBERGALSS DUCT WRAP WITH VINYL OR FSK FACING.

    ALL DUCT INSULATION SHALL BE UL LABELED FOR FIRE AND SMOKE RATINGS.

    DUCT INSULATION SHALL BE EQUAL TO PRODUCTS MANUFACTURED BY CERTAINTEED AND SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS

    NOTE: ALL RESTAURANT DUCTWORK SHALL BE EXTERNALLY INSULATED - NO INTERNAL INSULATION ALLOWED.

    12.4 PIPING AND FITTINGS

    CONDENSATE DRAIN PIPING SHALL BE TYPE L COPPER WITH SOLDERED JOINTS AND WROUGHT COPPER FITTINGS.

13. EQUIPMENT

    HVAC EQUIPMENT SHALL BE AS SCHEDULED ON THE DRAWINGS AND/OR SPECIFIED HEREIN. EQUIVALENT EQUIPMENT AND/OR COMPONENTS THERE OF MAY BE SUBSTITUTED FOR SPECIFIED EQUIPMENT ONLY AS APPROVED BY THE OWNER AND/OR THE PROJECT ENGINEER.

14. EXECUTION

    14.1 GENERAL

    ACCESSIBILITY - ALL EQUIPMENT SHALL BE INSTALLED IN SUCH A MANNER THAT ALL COMPONENTS REQUIRING ACCESS ARE LOCATED AND INSTALLED THAT THEY MAY BE SERVICED, RESET, REPLACED, OR RECALIBRATED, ETC., BY SERVICE PEOPLE WITH NORMAL SERVICE TOOLS AND EQUIPMENT.

    WORK BY OTHER TRADES - FOR THE WORK REQUIRED BY OTHER TRADES FOR CHANGES MADE BY THIS CONTRACTOR IN TYPE OR SIZE OF EQUIPMENT PURCHASED, ANY CUTTING, PATCHING, FURRING, PAINTING, ELECTRICAL OR PLUMBING WORK SHALL BE DONE BY THE AFFECTED TRADE AT THIS CONTRACTOR'S EXPENSE.

    WORK NOT INCLUDED - POWER WIRING, INCLUDING FINAL CONNECTIONS, IS BY THE ELECTRICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL INSTALL ALL MOTORS AND FURNISH THE STARTING EQUIPMENT TO THE ELECTRICAL CONTRACTOR FOR INSTALLATION. CONTROL WIRING, INCLUDING 115V FROM POWER SOURCE, CONDUIT AND SWITCHES SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR. CONTROL DEVICES, THERMOSTATS, INTERLOCKS, ETC. SHALL BE FURNISHED BY THE MECHANICAL CONTRACTOR. WIRING DIAGRAMS AND INSTALLATION INSTRUCTIONS SHALL BE FURNISHED TO THE OWNER UPON PROJECT COMPLETION.

    EARLY START-UP - THIS CONTRACTOR SHALL ENSURE THAT ALL MECHANICAL EQUIPMENT IS CONNECTED WITH ELECTRICAL POWER AS EARLY AS POSSIBLE SO THAT BALANCING AND TESTING CAN BEGIN AT THE EARLIEST DATE AVAILABLE.

    CLEANING AND PAINTING - THOROUGHLY CLEAN ALL EQUIPMENT AND REMOVE ALL TRASH, CARTONS, ETC., FROM THE WORK AREA. MAKE ANY NECESSARY CORRECTIONS OR REPAIR/REPLACE ANY DAMAGED MATERIALS OR EQUIPMENT. LEAVE THE ENTIRE LEASE SPACE IN A THOROUGHLY CLEAN AND ORDERLY MANNER. ANY FINISHED SURFACES THAT HAVE BEEN SCRATCHED OR DISCOLORED SHALL BE TOUCHED UP OR REPAINTED TO MATCH THE ORIGINAL COLOR. IF ANY PART HAS BEEN BENT, BROKEN OR OTHERWISE DAMAGED, IT SHALL BE REPLACED PRIOR TO PROJECT CLOSEOUT. ALL METAL ITEMS INSIDE THE BUILDING SUBJECT TO RUSTING, AND ALL FERROUS METAL EXPOSED TO THE WEATHER SHALL BE GIVEN ONE COAT OF RUST PREVENTIVE PRIMER AS SOON AS INSTALLED.

    14.2 EQUIPMENT INSTALLATION

    ALL EQUIPMENT AND RELATED PIPING, DUCTWORK, CONTROL WIRING AND ACCESSORIES SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BUILDING LINES AND, IF INSTALLED WITHIN THE BUILDING ENVELOPE SHALL BE INSTALLED AS HIGH AS POSSIBLE TO ALLOW THE MAXIMUM AMOUNT OF HEADROOM. EQUIPMENT THAT REQUIRES ROUTINE MAINTENANCE SUCH AS FILTER REPLACEMENT SHALL BE INSTALLED AND ARRANGED TO BE ACCESSIBLE. PROVIDE ACCESS PANEL(S) AS REQUIRED AND/OR AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER. ALL EQUIPMENT SHALL BE INSTALLED WITH THE REQUIRED CLEARANCES AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER OR AS REQUIRED BY GOVERNING CODES, WHICHEVER IS GREATER.

    14.3 DUCTWORK

    LOW PRESSURE DUCTWORK AND FITTINGS SHALL BE MADE TIGHT FOR MINIMUM AIR LEAKAGE. DUCT TAPE SHALL NOT BE USED TO SEAL JOINTS, TO MAKE TRANSITIONS OR FOR ANY OTHER REASON ON THE OUTSIDE OF WRAPPED INSULATION.

    INSTALL DUCTWORK AS HIGH AS POSSIBLE.

    PROVIDE TURNING VANES AT ALL CHANGES IN DIRECTION.

    PROVIDE VANED TEES AT BRANCH CONNECTIONS SERVING MORE THAN ONE DIFFUSER.

    PROVIDE VOLUME CONTROL DAMPERS AND BALANCING DEVICES AS REQUIRED TO DISTRIBUTE THE AIR AND AS INDICATED ON THE DRAWINGS.

    NOTE: DUCT DIMENSIONS INDICATED ON THE DRAWINGS ARE INSIDE CLEAR, OR "FREE AREA" DIMENSIONS. CONTRACTOR SHALL MAKE ALLOWANCE FOR INTERNAL DUCT LINER (WHERE SPECIFIED) WHEN ORDERING PRE-FABRICATED DUCT WORK OR WHEN FABRICATING DUCTS IN THE FIELD.

    14.4 DUCT INSULATION

    ALL DUCTWORK DESIGNATED TO RECEIVE DUCT LINER SHALL BE COMPLETELY COVERED WITH LINER. TRAVERSE JOINTS SHALL BE NEATLY BUTTED AND THERE SHALL BE NO INTERRUPTIONS OR GAPS.

    DUCT LINER SHALL BE CUT AS REQUIRED TO ENSURE OVERLAPPED AND COMPRESSED LONGITUDINAL CORNER JOINTS.

    FASTENERS SHALL START WITHIN 3" OF THE UPSTREAM TRAVERSE EDGES OF THE LINER AND 3" FROM THE LONGITUDINAL JOINTS AND SHALL BE SPACED AT A MAXIMUM OF 12" O.C. AROUND THE PERIMETER OF THE DUCT. ELSEWHERE THEY SHALL BE SPACED AT A MAXIMUM OF 18" O.C., EXCEPT THAT THEY SHALL BE PLACED NOT MORE THAN 6" FROM A LONGITUDINAL JOINT OF THE LINER OR 12" FROM A CORNER BREAK.

    DUCT WRAP SHALL BE INSTALLED IN A NEAT AND COMPETENT MANNER WITH ALL EDGES NEATLY COVERED WITH AN APPROVED METALLIC DUCT TAPE TO VAPOR-PROOF THE ENTIRE DUCT. LAPS AND JOINTS SHALL BE SECURED WITH INSULATION STAPLES AND THEN COVERED WITH APPROVED TAPE.

15. INSTALL ROOF MOUNTED EQUIPMENT SUPPORT RAILS OR ROOF CURB AS REQUIRED FOR THE JOB CONDITIONS AND AS RECOMMENDED BY THE MANUFACTURER FOR THE INSTALLATION OF ROOF MOUNTED EQUIPMENT. THE EXACT LOCATION OF ALL ROOF MOUNTED EQUIPMENT IS SUBJECT TO SITE CONDITIONS AND THE APPROVAL OF THE GENERAL CONTRACTOR. COORDINATE THE ENTIRE INSTALLATION WITH THE GENERAL CONTRACTOR AND OTHER TRADES.

    CONTRACTOR SHALL PROVIDE A TEMPORARY PLYWOOD WORK PLATFORM THAT COMPLETELY SURROUND THE AREA WERE NEW ROOF MOUNTED EQUIPMENT AND/OR DUCTS ARE TO BE INSTALLED. THE ENTIRE WORK AREA SHALL REMAIN ONT HE ROOF DURING THE ENTIRE PERIOD OF INSTALLATION AND SHALL BE REMOVED FROM THE ROOF AND THE SITE BY THIS CONTRACTOR UPON COMPLETION OF THE INSTALLATION.

    ALL ROOF PENETRATIONS FOR POWER AND CONTROL WIRING CONDUITS AND GAS, CONDENSATE, OR REFRIGERANT PIPING SHALL BE MADE WITH WATERPROOF PIPE SLEEVES.

16. THIS CONTRACTOR SHALL ENGAGE THE SERVICES OF AN AABC OR NEBB CERTIFIED AIR BALANCE CONTRACTOR TO ADJUST AND COMPLETELY BALANCE THE INSTALLED SYSTEM(S) TO THE DESIGN AIR QUAUITIES. CONTRACTOR SHALL PROVIDE THE OWNER AND THE ARCHITECT A COPY OF THE CERTIFIFIED AIR BALANCE REPORT SHOWING DESIGN AND MEASURED AIR QUANTITIES, STATIC PRESSURES, FAN MOTOR RPM AND MOTOR CURRENT. DEVIATION BETWEEN DESIGN AND MEASURED QUANTITIES SHALL NOT BE GREATER THAN 10%.
17. ALL MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF ONE (1) YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S EXPENSE.

    FOR THE SAME PERIOD, THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED TO THE PREMISES BY DEFECTS IN HIS WORKMANSHIP OR WORK AND/OR EQUIPMENT INSTALLED BY OTHERS UNDER HIS CONTRACT.

MINIMUM REQUIRED CONTROLS:

A. UNLESS OTHERWISE SPECIFIED IN THESE DOCUMENTS, ALL EXHAUST AND RELIEF FANS SHALL BE CONTROLLED BY TIME CLOCK, TIME CLOCK PROVIDED BY HVAC CONTRACTOR, CONNECTED TO HAND-OFF-AUTO RELAYS OF FAN MOTOR STARTERS, OR START-STOP OF VFD'S. ALL POWER WIRING OF TIME CLOCK BY HVAC CONTRACT.

B. ALL EXHAUST AND RELIEF FANS SHALL HAVE POSITIVE CLOSURE DAMPERS INTERLOCKED TO OPEN WHEN FAN IS ENERGIZED, EXCEPTING SMOKE MANAGEMENT SYSTEMS, DRYER VENTS AND COOKING EQUIPMENT.

C. ALL DIRECT DRIVE FANS SHALL BE PROVIDED WITH SOLID STATE MOTOR CONTROLLERS OR ELECTRONICALLY COMMUTATED MOTORS (ECM) WITH ALL REQUIRED CONTROL DEVICES FOR SPEED ADJUSTMENT OF THE FAN MOTOR.

D. FOR ALL HVAC EQUIPMENT (EXCLUDING SMOKE MANAGEMENT SYSTEMS AND COOKING APPLICATIONS) PROVIDE AN INTERLOCK TO THE MOTORIZED DAMPER SUCH THAT THE DAMPERS WILL CLOSE UPON UNOCCUPIED CONDITION. HVAC CONTRACT TO PROVIDE TIME CLOCK OR DDC CONTROL.

E. EACH ZONE SHALL HAVE A 7 DAY-4 FUNCTION PER DAY PROGRAMMABLE CONTROLLER WITH A 5°F DEADBAND AND SETPOINT OVERLAP RESTRICTIONS.

F. MINIMUM AUTOMATIC CONTROLS SHALL SETBACK TO 55°F (HEAT) AND 85°F (COOL); 7-DAY CLOCK, 2-HOUR OCCUPANT OVERRIDE, 10-HOUR BACKUP.

G. PROVIDE ECONOMIZER AND SUPPLY SIDE DUCT SMOKE DETECTORS ON ALL HVAC EQUIPMENT OVER 2000 CFM.

H. PROVIDE EXHAUST AIR ENERGY RECOVERY ON ALL HVAC EQUIPMENT OVER 5000 CFM SUPPY.

I. SEE SCHEDULES, SPECIFICATIONS, DETAILS AND NOTES WHICH MAY SUPERCEDE THESE MINIMUM PERFORMANCE REQUIREMENTS.

MAKE-UP AIR UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	SERVES	CFM	E.S.P. (" WC)	MOTOR RPM	ELECTRICAL TYPE	ELECTRICAL HP	ELECTRICAL VOLT/PH	ELECTRICAL FLA	ELECTRICAL MCA	ELECTRICAL MOCP	WEIGHT	NOTES
MAU-1	CAPTIVE AIRE	A1-IBT-150-15D	FIREPLACE	950	1.0	1319	ROOF	1.0	208/3	3.1	3.9	15	808	1,2,3,4

NOTES:
1. CAPTIVE AIRE SHALL PROVIDE MOTOR STARTER IN CAPTIVE AIRE WALL MOUNTED ELECTRICAL PACKAGE.
2. VERIFY ELECTRICAL VOLTAGE WITH ELECTRICAL CONTRACTOR PRIOR TO ORDERING.
3. SEE CAPTIVE AIRE DRAWINGS FOR MORE INFORMATION/REQUIREMENTS.
4. INTERLOCK OPERATION WITH FIREPLACE. FIREPLACE SHALL NOT BE IN OPERATION DURING MONTHS REQUIRING COOLING.

HVAC NATIONAL ACCOUNT CONTACT INFORMATION.

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HVAC LEGEND

SYMBOL	DESCRIPTION
SD	DUCT MOUNTED SMOKE DETECTOR
T	THERMOSTAT (CONTOLLER)
S	TEMPERATURE SENSOR
F.O.I.C	FURNISH BY OWNER INSTALL BY CONTRACTOR
F.C.I.C	FURNISH BY CONTRACTOR INSTALL BY CONTRACTOR

DUCTWORK MATERIAL CONSTRUCTION & INSULATION SCHEDULE

SYSTEM EQUIPMENT	DUCTWORK PRESSURE CLASS "WC	DUCTWORK SERVICE	SMACNA SEAL CLASS	DUCTWORK CONSTRUCTION	INSULATION	REMARKS
ROOF TOP UNITS	+2.0	SUPPLY AIR	A	RECTANGULAR DUCT: GALVANIZED SHEET METAL RIGID ROUND BRANCHES (CONCEALED): LONGITUDINAL OR SPIRAL SEAMS FLEXIBLE BRANCHES: INSULATED WITH NON-METALLIC LINER & SPRING HELIX	INTERIOR "CONCEALED" APPLICATIONS, INCLUDING ATTIC & PLENUM SPACES: USE 1-1/2" FLEXIBLE FIBERGLASS WRAP INSULATION	1, 2 & 3
	+/- 1.0	RETURN AIR	C	RECTANGULAR DUCTWORK: GALVANIZED SHEET METAL RIGID ROUND BRANCHES (CONCEALED): LONGITUDINAL OR SPIRAL SEAMS. FLEXIBLE BRANCHES: NOT PERMITTED	INTERIOR "CONCEALED" APPLICATIONS, INCLUDING ATTIC & PLENUM SPACES: USE 1-1/2" FLEXIBLE FIBERGLASS WRAP INSULATION	1, 2 & 3
TOILET EXHAUST	+/- 1.0	TOILET EXHAUST AIR	C	RECTANGULAR DUCT: GALVANIZED SHEET METAL RIGID. ROUND BRANCHES: LONGITUDINAL OR SPIRAL SEAMS. FLEXIBLE BRANCHES: NOT PERMITTED.	NOT REQUIRED	2 & 3

REMARKS:
1. ALL DUCT SIZES INDICATED ON DRAWINGS REPRESENT INTERNAL NET DIMENSIONS.
2. DUCTWORK CONSTRUCTION, INCLUDING SHEET METAL GAUGES AND SEAM CONSTRUCTION METHODS, SHALL BE IN ACCORDANCE WITH SMACNA STANDARDS.
3. DUCTWORK ELBOWS, TRANSITIONS, ETC. SHALL BE FABRICATED IN ACCORDANCE WITH DETAIL "A" ON DRAWING M-4.1.

FAN SCHEDULE

TAG	LOCATION	SERVICE	CFM	E.S.P. (in. wg)	DRIVE TYPE	DISC'T BY FAN MANF'T	BIRD SCREEN BY FAN MANF'T	BACK DRAFT DAMPER BY MANF'T	ELECTRICAL DATA HP	VOLT	PH	STARTER	WEIGHT	DESIGN EQUIPMENT	REMARKS
EF-1	ROOF	RACK OVEN HOOD	900	1.00	DIRECT	YES	YES	NO	1/2	120	1	BY E.C.	60	CAPTIVE AIRE DU50HFA	1, 3, 4, 5, 6
EF-2	ROOF	DISH EXHAUST	400	0.5	DIRECT	YES	YES	NO	1/3	120	1	BY E.C.	60	CAPTIVE AIRE DU50HFA	1, 3, 4, 5, 6
EF-3	ROOF	TOILET EXHAUST	225	0.35	DIRECT	YES	YES	NO	1/6	120	1	BY E.C.	60	GREENHECK G-070-VG	1, 2, 5

REMARKS:
1. FURNISH FAN WITH MANUFACTURER'S ROOF CURB.
2. FURNISH DUCTWORK CONNECTING TO FAN IN ACCORDANCE WITH THE "DUCTWORK MATERIAL CONSTRUCTION SCHEDULE" FOUND ON THIS DRAWING.
3. THE UNIT IS FURNISHED BY CAPTIVE AIRE AS PART OF HOOD PACKAGE PURCHASED BY OWNER. MECHANICAL CONTRACTOR SHALL INSTALL UNIT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REFER TO DETAILED SHOP DRAWINGS BY CAPTIVE AIRE FOR MORE INFORMATION.
4. FURNISH DUCTWORK CONNECTING TO FAN IN ACCORDANCE WITH HOOD MANUFACTURER'S REQUIREMENTS. REFER TO DETAILS ON DRAWINGS M301, M302 AND M303.
5. UNIT FURNISHED AND INSTALLED BY LANDLORD MC.
6. M.C. SHALL PROVIDE GRAVITY DAMPERS INSIDE THE EXHAUST DUCT SERVING EF-1,2. DAMPER SHALL BE GREENHECK MODEL WDR-53, SIZE DAMPER PER DUCT SIZE.

PACKAGED ROOF TOP UNIT SCHEDULE - DX / GAS

TAG	LOCATION	SERVICE	NOM TONS	CFM	MIN OA	EVAP FAN E.S.P. (in. wg)	EVAP FAN HP	COOLING (DX) - 95° F OAT TMBH	OAT SMBH	OAT EER	HEATING - GAS INPUT MBH	HEATING - GAS OUTPUT MBH	HEATING - GAS EAT	HEATING - GAS LAT	ELECTRICAL DATA VOLT	PH	MCA	MOCP	STARTER	APPROX. WEIGHT (LBS)	DESIGN EQUIPMENT	REMARKS
RTU-1	ROOF	CAFE	5	2000	400	1.00	1	60.1	42.2	12	150.0	120.0	55.4 °F	88.6 °F	208	3	35.0	50	PKGD.	1172	LENNOX LGH060S4B	1, 2, 3, 4, 5
RTU-2	ROOF	DINING	5	2000	400	1.00	1	60.1	42.2	12	150.0	120.0	55.4 °F	88.6 °F	208	3	35.0	50	PKGD.	1172	LENNOX LGH060S4B	1, 2, 3, 4, 5
RTU-3	ROOF	KITCHEN	10	4000	500	1.00	3.0	99.0	72.0	11.2	240.0	180.0	55.4 °F	88.6 °F	208	3	46.0	50	PKGD.	1500	LENNOX LGH120S4B	1, 2, 3, 4, 5

REMARKS:
1. UNIT SHALL BE CLASSIFIED IN ACCORDANCE WITH ANSI-Z21.47, ARI 210 & 270.
2. UNIT SHALL HAVE MANUFACTURER'S 14" HIGH ROOF CURB, RETURN AIR SMOKE DETECTOR, UNIT MOUNTED DISCONNECT, THRU BASE ELECTRICAL SERVICE AND HINGED ACCESS DOORS.
3. MANUFACTURER SHALL FURNISH UNIT WITH DIFFERENTIAL ENTHALPY CONTROL ECONOMIZER WITH BAROMETRIC RELIEF DAMPER, 0 TO 100% FULLY MODULATING MOTORIZED OUTSIDE AIR DAMPERS, OUTSIDE AIR HOOD & ADJUSTABLE POSITION POTENTIOMETER. DAMPER ACTUATOR SHALL BE SPRING RETURN TYPE TO FULLY CLOSE OUTSIDE AIR DAMPER WHEN UNIT IS SHUT DOWN.
4. COOLING CAPACITY IS BASED UPON 95°F AMBIENT AND 80/67 COIL ENTERING CONDITIONS, PROVIDE HIGH EFFICIENCY UNIT IF STANDARD EFFICIENCY UNIT DOES NOT MEET SCHEDULED VALUES.
5. LANDLORD CONTRACTOR SHALL PURCHASE FROM NATIONAL ACCOUNT. SEE CONTACTS ON THIS SHEET.

PB2020-Q2 V1

Bakery-Cafe:

0620

SYSTEM: NEXT GEN

Project Team:

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CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:

STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-23305
PROFESSIONAL ENGINEER
7/5/2022

Project Title:

PROTOTYPE - NEW CONSTRUCTION

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

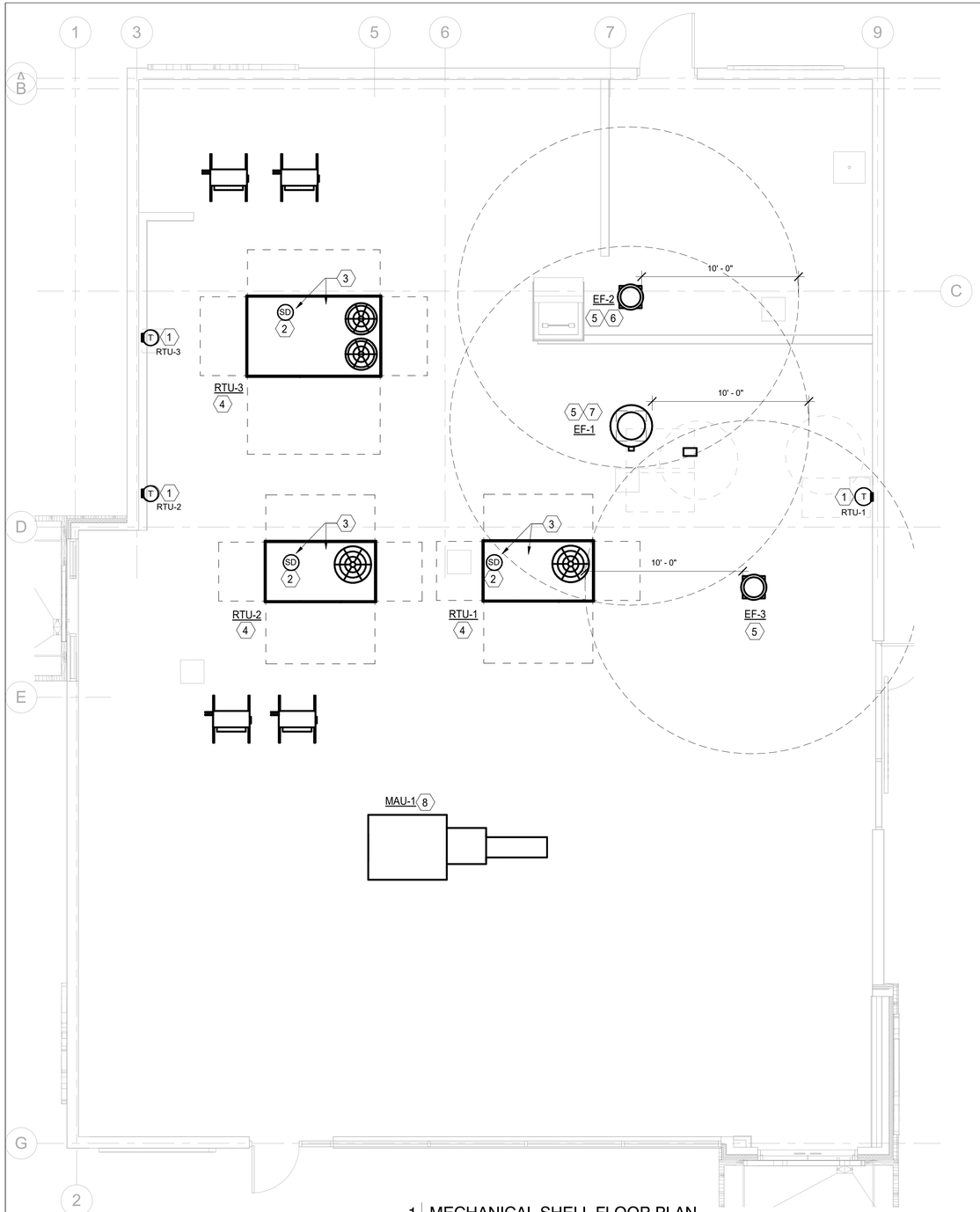
Panera BREAD

No.	Description	Date

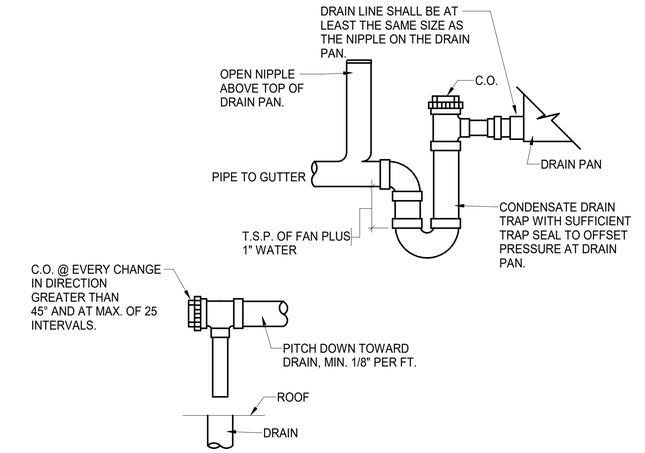
SHELL MECHANICAL SPECIFICATIONS AND SCHEDULES

Project Number: 2406
Drawn By: IAF
Issue Date: **07/05/2022**
Sheet Number: **M01**

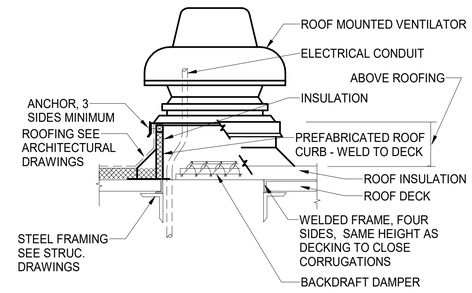
DPM:	DM:	CPM:
DC	CH	JP



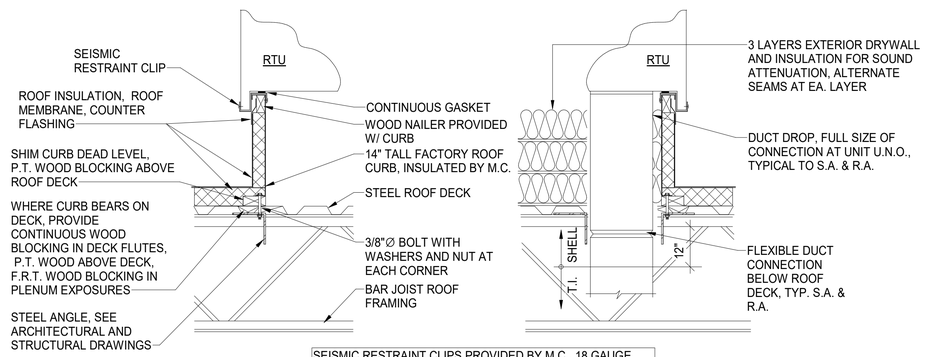
1 MECHANICAL SHELL FLOOR PLAN
1/4" = 1'-0"



3 RTU CONDENSATE DRAIN TRAP DETAIL
NO SCALE



5 ROOF MOUNTED VENTILATOR DETAIL
NO SCALE



SEISMIC RESTRAINT CLIPS PROVIDED BY M.C., 18 GAUGE GALVANIZED STEEL, ATTACH TO RTU AND CURB WITH FOUR (4) # 10 x 1/2" TEK SCREWS, MIN. TWO (2) CLIPS ON LONG SIDE OF RTU AND ONE (1) ON SHORT SIDE.

6 RTU CURB DETAIL
NO SCALE

MECHANICAL SHELL KEYED NOTES

1. PROVIDE AN EQUIPMENT COMPATIBLE PROGRAMMABLE THERMOSTAT WITH NIGHT SETBACK FEATURE AND LOCKING COVER. PROVIDE FIFTY (50) LINEAR FEET OF WIRE, COILED FOR FINAL MOUNTING BY T.I. CONTRACTOR. HANG THERMOSTATS AT RTU.
2. PROVIDE DUCT SMOKE DETECTOR IN RETURN AIR DUCT TO SHUT DOWN UNIT UPON ACTIVATION. PROVIDE TEST/RESET SWITCH, PIEZO ALERT SOUNDER AND REMOTE ANNUNCIATOR ALARM LED MOUNTED AS DIRECTED BY LOCATION AHJ. PROVIDE ALL INTERLOCK WIRING. COORDINATE WITH ELECTRICAL CONTRACTOR FOR FINAL CONNECTIONS.
3. STUB SUPPLY AND RETURN DUCTWORK DOWN THROUGH ROOF AND INTO SPACE OPEN ENDED, FOR FUTURE CONNECTION.
4. FURNISH AND INSTALL ROOFTOP UNIT. VERIFY EXACT LOCATION WITH STRUCTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR SCREENING REQUIREMENTS.
5. PROVIDE EF AND CURB AS SCHEDULED AND SPECIFIED. STUB E.A. DUCT FULL SIZE FROM FAN CONNECTION TO 12" BELOW ROOF DECK, FOR EXTENSION AND CONNECTION BY TENANT INTERIOR CONTRACTOR.
6. DUCT SHALL BE ALUMINUM OR STAINLESS STEEL.
7. DUCT SHALL BE "B-VENT" WITH ALUMINUM OR STAINLESS STEEL LINER.
8. PROVIDE MAU AND CURB AS SCHEDULED AND SPECIFIED. STUB SUPPLY AIR DUCT FULL SIZE FROM FAN CONNECTION TO 12" BELOW ROOF DECK, FOR EXTENSION AND CONNECTION BY TENANT INTERIOR CONTRACTOR.

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

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Professional Seal:

STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-23305
PROFESSIONAL ENGINEER

Project Title:

PROTOTYPE - NEW CONSTRUCTION

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Consultant Copyright Placeholder

No.	Description	Date

MECHANICAL SHELL PLAN

Project Number: 2406
Drawn By: IAF
Issue Date: 07/05/2022
Sheet Number: **M02**

DPM:	DM:	CPM:
DPM	DM	CPM

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PB 2021.Q3.V1

PLUMBING SYMBOLS

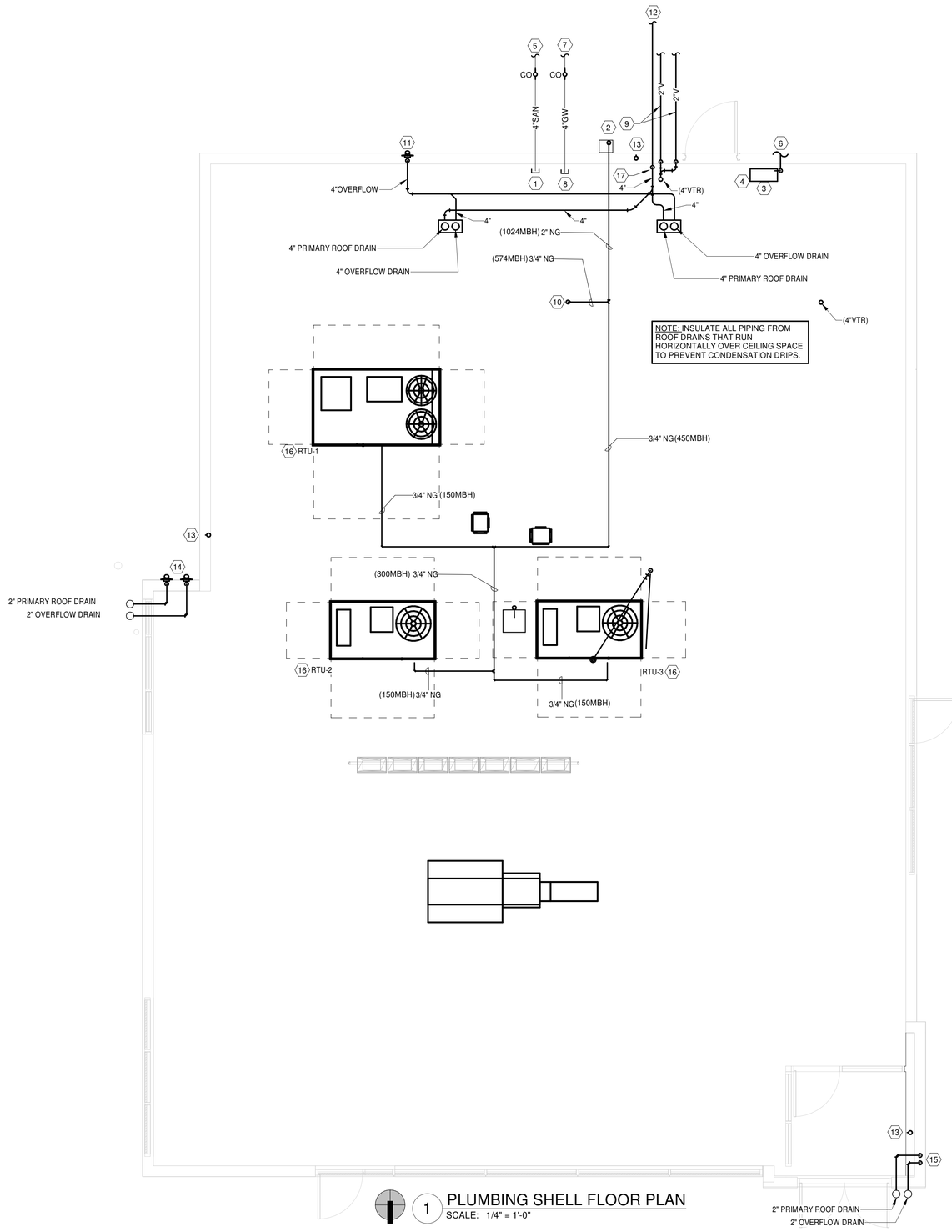
- ELBOW UP
- ELBOW DOWN
- DOMESTIC COLD WATER
- DOMESTIC FILTERED COLD WATER
- DOMESTIC HOT WATER (110 DEGREES)
- DOMESTIC HOT WATER RECIRC.
- GAS
- GAS (ON ROOF)
- SANITARY WASTE
- GREASE WASTE
- SANITARY VENT
- CONDENSATE DRAIN
- PLAN NOTE: SEE PLAN NOTES LISTED ON THE SAME SHEET FOR NOTE MEANING
- CONNECT TO EXISTING
- REDUCED PRESSURE ZONE BACKFLOW PREVENTER
- WATER METER
- GAS METER
- EQUIPMENT TAG: SEE EQUIPMENT SCHEDULE ON SHEET P200 FOR EQUIPMENT INFORMATION
- VALVE
- SOLENOID-OPERATED VALVE
- WALL HYDRANT/ROOF HYDRANT
- CHECK VALVE
- CIRCUIT-SETTER BALANCE VALVE RATED FOR POTABLE WATER
- FLOOR DRAIN
- FLOOR SINK
- CLEANOUT

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
EX	EXISTING
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FS	FLOOR SINK
GCO	GRADE CLEANOUT
CO2AS	TENANT'S CO2 ALARM SUPPLIER
GC	GENERAL CONTRACTOR
HES	TENANT'S HVAC EQUIPMENT SUPPLIER
HS	TENANT'S HOOD SUPPLIER
KES	TENANT'S KITCHEN EQUIPMENT SUPPLIER
TAB	TENANT'S TEST AND BALANCE VENDOR
TCC	TENANT'S CABLING CONTRACTOR
TDC	TENANT'S DUCT CLEANER
TEMS	TENANT'S ENERGY MANAGEMENT SYSTEM SUPPLIER
TLS	TENANT'S LIGHT/LAMP SUPPLIER
TMB	TENANT'S MENU BOARD SUPPLIER
TMS	TENANT'S MILLWORK SUPPLIER
TP	TENANT'S PHONE SUPPLIER
TRS	TENANT'S RAILING SUPPLIER
TSV	TENANT'S SIGN VENDOR
TUV	TENANT'S UV SANITIZER SUPPLIER
WCS	TENANT'S WALK-IN COOOLER SUPPLIER
WHS	TENANT'S WATER HEATER SUPPLIER

PLUMBING KEYED NOTES

1. PROVIDE A MINIMUM 4" SANITARY SEWER WASTE LINE TO THE PREMISES FOR TENANT'S USE.
2. PROVIDE NEW GAS METER SIZED FOR 2PSI AT A TOTAL LOAD OF 1024MBH AND BASED ON A TOTAL DEVELOPED LENGTH OF 80FT. VERIFY EXACT LOCATION AND CONNECTION REQUIREMENTS WITH LOCAL GAS COMPANY PRIOR TO ANY WORK. PROVIDE SEISMIC SHUT-OFF VALVE ON METER. ALL GAS PIPING SHALL BE PROTECTED/PAINTED WHEN EXPOSED TO EXTERIOR ENVIRONMENT.
3. PROVIDE NEW 2" WATER METER. VERIFY EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH LOCAL UTILITY COMPANY. FURNISH AND INSTALL ONE COPPER-PIPED DOMESTIC WATER (DW) SERVICE SIZED PER LOCAL CODE MINIMUM 2" AFTER METER, MODIFY TO LARGER SERVICE PER TENANT'S DOCUMENTS AS NEEDED. COORDINATE WITH FUTURE INTERIOR WORK.
4. 2" WATER STUB TO SPACE.
5. SEE CIVIL PLANS FOR SANITARY SEWER LINE CONTINUATION.
6. ROUTE TO CONNECT TO SITE WATER MAIN. SEE CIVIL DRAWINGS FOR CONTINUATION.
7. PROVIDE NEW SCHIER GB-250 GREASE INTERCEPTOR BELOW GRADE. INSTALL SAMPLE PORT AS REQUIRED. VERIFY EXACT LOCATION AND INSTALLATION REQUIREMENTS IN FIELD.
8. PROVIDE A MINIMUM 4" GREASE WASTE LINE TO THE PREMISES FOR TENANT'S USE.
9. VENT PIPING BELOW GRADE FROM GREASE INTERCEPTOR.
10. 2PSI GAS PIPING ON ROOF ROUTED TO 2" GAS PIPING DOWN THROUGH ROOF AND CAPPED FOR TENANT EQUIPMENT. PROVIDE PRESSURE REGULATOR PRIOR TO PENETRATION THROUGH ROOF.
11. ROUTE OVER FLOW DRAINS TO LAMBS TONGUE SCUPPER ON BUILDING EXTERIOR.
12. DOWNSPOUT TO UNDERGROUND STORM. COORDINATE LOCATION IN FIELD WITH CIVIL DRAWINGS.
13. PROVIDE 1/2" COLD WATER TO NEW FROST PROOF HOSE BIBB (WOODFORD MODEL 65).
14. ROUTE DISCHARGE FROM CANOPY ROOF/OVERFLOW DRAIN TO WALL SCUPPERS.
15. ROUTE DISCHARGE FROM CANOPY ROOF/OVERFLOW TO DRAIN TO PARKING LOT. COORDINATE LOCATION IN FIELD.
16. PROVIDE GAS COCK, DIRT LEG AND LBS TO INCHES PRESSURE REGULATOR AT EACH PIECE OF ROOFTOP EQUIPMENT TO BE CONNECTED.
17. ROUTE PRIMARY ROOF DRAIN DRAINAGE DOWN INTERIOR WALL.



1 PLUMBING SHELL FLOOR PLAN
SCALE: 1/4" = 1'-0"

Bakery-Cafe:
0620

SYSTEM: NEXT GEN
Project Team:

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7/5/2022

Project Title:

PROTOTYPE - NEW CONSTRUCTION
Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date

PLUMBING SHELL FLOOR PLAN

Project Number: 2406
Sheet Number: P01
Drawn By: JSP
Issue Date: 07/05/2022
DPM: DC
DM: CH
CPM: JP

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P8200-02.1Y

PLUMBING SPECIFICATIONS

1. GENERAL
THE "ARCHITECTURAL GENERAL CONDITIONS" GOVERN WORK UNDER THIS SECTION.

BEFORE SUBMITTING A PROPOSAL, THIS CONTRACTOR SHALL VISIT THE SITE OF THE WORK AND SHALL CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS. IT IS EXPRESSLY UNDERSTOOD THAT THIS PROPOSAL IS BASED ON THE ABOVE REQUIREMENTS AND THAT IT COVERS EVERYTHING NECESSARY TO DO AND COMPLETE THE WORK.

2. INSPECTION AND COOPERATION
NO DEVIATION FROM THE DRAWINGS AND /OR SPECIFICATIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF ARCHITECT OR ENGINEER. THIS CONTRACTOR SHALL COOPERATE WITH THE OTHER CONTRACTORS TO ALLOW FOR THE INSTALLATION OF THEIR WORK AS WELL AS HIS OWN.

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR HIS WORK FITTING IN PLACE WITHOUT CONFLICT WITH THE OTHER TRADES, WHERE PROPER PLANNING COULD AVOID INTERFERENCE.

3. CODES AND PERMITS
NOTHING IN THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE INTERPRETED TO CONFLICT WITH ANY CITY OR PROVINCIAL LAW, REGULATION, CODE, ORDINANCE, RULING, OR FIRE UNDERWRITER'S REQUIREMENT APPLICABLE TO THIS CLASS OF WORK.

SHOULD THE DRAWINGS AND/OR SPECIFICATIONS CONFLICT WITH SUCH LAWS OR ORDINANCES, THE CONFLICTING PORTION OF THE WORK SHALL BE INSTALLED STRICTLY IN ACCORDANCE WITH SUCH LAWS AND ORDINANCES WITHOUT EXTRA COST.

THIS CONTRACTOR SHALL SECURE AND PAY FOR ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED FOR THIS INSTALLATION OF HIS WORK.

4. ACCURACY OF DATA
THE INFORMATION GIVEN HEREIN AND ON THE DRAWINGS IS AS EXACT AS COULD BE SECURED, BUT ITS EXTREME ACCURACY IS NOT GUARANTEED. THIS CONTRACTOR SHALL EXAMINE THE LOCATIONS AND VERIFY ALL MEASUREMENTS, DISTANCES, ELEVATIONS AND EXISTING PIPE SIZES BEFORE STARTING THE WORK.

THIS CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS, RAISED AND DROPS IN PIPING AND DUCTWORK AS REQUIRED BY BUILDING CONDITIONS AT NO ADDITIONAL COST.

MECHANICAL DRAWINGS SHALL NOT BE USED FOR GENERAL CONSTRUCTION DIMENSIONS OR FOR TYPE OF MATERIAL USED. FOR EXACT BUILDING LAYOUT, DIMENSIONS AND BUILDING MATERIAL USED, THIS CONTRACTOR SHALL REFER TO THE ARCHITECTURAL DRAWINGS.

5. SHOP DRAWINGS
FIVE (5) COPIES OF ALL SHOP OR INSTALLATION DRAWINGS, FOUNDATION PLANS, EQUIPMENT OR APPARATUS DRAWINGS SHALL BE FURNISHED BY THIS CONTRACTOR. THESE DRAWINGS SHALL BE CLEARLY MARKED INDICATING WHICH ITEMS ARE TO BE SUPPLIED AND SHALL STATE CAPACITIES, SIZES AND GENERAL DESCRIPTION OF ALL EQUIPMENT. ANY CHANGES FROM THE SPECIFIED ITEMS SHALL BE NOTED ON THE SUBMITTALS.

SHOP DRAWINGS OF SPECIAL APPARATUS OR EQUIPMENT WHICH IS TO BE FABRICATED INDIVIDUALLY FOR THIS PROJECT AND IS NOT DESCRIBED BY STANDARD MANUFACTURERS DRAWINGS OR BULLETINS SHALL BE SUBMITTED FOR PROCESSING BEFORE FABRICATION.

THESE DRAWINGS SHALL BE SUBMITTED IN A TIMELY MANNER.

IT SHALL BE THIS CONTRACTORS RESPONSIBILITY TO MAINTAIN LIAISON WITH ALL PARTIES CONCERNED WITH THE MATERIAL SUBMITTED. THIS CONTRACTOR SHALL NOT PURCHASE ANY EQUIPMENT UNTIL SHOP DRAWINGS HAVE BEEN PROCESSED.

THIS CONTRACTOR SHALL SUBMIT NO DRAWINGS WITHOUT NOTATION OF EACH COPY INDICATING DATE OF CONTRACTOR'S REVIEW AND SIGNATURE OF CHECK FOR CONTRACTOR TOGETHER WITH CONTRACTOR'S NAME AND PROJECT IDENTIFICATION.

ARCHITECT'S PROCESSING WILL NOT CONSTITUTE A COMPLETE CHECK BUT WILL INDICATE ONLY THAT GENERAL METHOD OF CONSTRUCTION AND DETAILING IS SATISFACTORY.

ARCHITECT'S PROCESSING WILL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR ERRORS SINCE THIS CONTRACTOR IS SOLELY RESPONSIBLE FOR DIMENSIONS AND DESIGNS OF ADEQUATE CONNECTIONS, DETAILS AND SATISFACTORY CONSTRUCTION OF ALL WORK, AS WELL AS FURNISHING MATERIALS AND WORKMANSHIP REQUIRED BY DRAWINGS AND SPECIFICATIONS WHICH MAY NOT BE INDICATED ON THE SUBMITTALS WHEN APPROVED.

6. SUBSTITUTIONS OF EQUIPMENT OR MATERIAL

THE BRAND NAMES OF EQUIPMENT OR MATERIALS SPECIFIED HEREIN SHALL ESTABLISH QUALITY, CAPACITY, TYPE AND DIMENSIONS TO BE INCLUDED IN THE BASE BID.

APPROVAL OF SUBSTITUTED ITEMS WILL BE BASED ON ABILITY AND CAPACITY TO PERFORM FUNCTION SERVED, QUALITY AND AVAILABILITY OF PARTS AND SERVICE, QUALITY OF EQUIPMENT, DELIVERY SCHEDULE, ETC. THE ARCHITECT SHALL REVIEW ALL SUCH REQUESTS BUT RESERVES THE SOLE RIGHT OF JUDGEMENT TO APPROVE OR REJECT THE PROPOSED SUBSTITUTIONS.

ACCEPTANCE OR REJECTION OF PROPOSED SUBSTITUTIONS SHALL NOT CAUSE ADDITIONAL COST. ANY CHANGES OF PIPING, DUCTWORK, ELECTRICAL CONTROLS OR INSTALLATION REQUIRED BECAUSE OF THE SUBSTITUTION OR EQUIPMENT SHALL BE PAID FOR BY THIS CONTRACTOR PROPOSING THE SUBSTITUTION.

7. ERECTION OF APPARATUS

ALL WORK SHALL BE DONE UNDER THE PERSONAL SUPERVISION OF THIS CONTRACTOR WHO SHALL PROVIDE A COMPETENT FOREMAN TO LAY OUT ALL WORK. ALL WORK SHALL BE LAID OUT WITH DUE REGARD FOR THE SPACE REQUIREMENTS OF THE OTHER CONTRACTORS. THIS CONTRACTOR SHALL REPORT ANY CONFLICTS OR DIFFICULTIES IN REGARD TO THE INSTALLATION IMMEDIATELY.

WHERE CROWDED LOCATIONS EXIST OR WHERE THERE IS A POSSIBILITY OF CONFLICT BETWEEN TRADES, THIS CONTRACTOR SHALL MAKE COMPOSITE DRAWINGS SHOWING THE EXACT LOCATIONS OF PIPES, DUCT, CONDUIT AND EQUIPMENT. DRAWINGS SHALL BE BASED ON FIELD MEASUREMENTS AND AFTER CONSULTATION AND AGREEMENT BETWEEN THE TRADES.

EQUIPMENT OF A TYPE TO REQUIRE REPLACEMENT, SERVICING, ADJUSTING OR MAINTENANCE SHALL BE LOCATED TO ALLOW EASY ACCESS AND SPACE FOR REMOVAL OF INTERNAL ASSEMBLIES, IT REQUIRED.

8. EXCAVATION AND BACKFILL

THIS CONTRACTOR SHALL DO ALL EXCAVATION REQUIRED TO INSTALL PIPES AND EQUIPMENT SHOWN ON THE PLANS OR REQUIRED FOR PROPER OPERATION. EXCESS EXCAVATION BELOW THE REQUIRED LEVEL SHALL BE BACKFILLED WITH EARTH AND THOROUGHLY TAMPED. UTILITIES SERVICES LINES SHALL BE INSPECTED AND APPROVED BY THE PROPER INSPECTION AUTHORITY BEFORE BACKFILLING.

THE BOTTOM OF TRENCHES SHALL BE TAMPED HARD AN GRADED TO SECURE THE REQUIRED FALL. ROCK, WHERE ENCOUNTERED SHALL BE EXCAVATED TO A DEPTH OF SIX INCHES (6") BELOW THE BOTTOM OF THE PIPE, AND BEFORE THE PIPE IS LAID, THE SPACE BETWEEN BOTTOM PIPE AND ROCK SURFACE SHALL BE FILLED WITH GRAVEL. IF TRENCHES ARE DEEPER THAN BOTTOM OF FLOORING OR CLOSER THAN THREE FEET (3'0") TO FOOTING THEY MUST BE FILLED WITH COHESIVE SOIL AND COMPACTED TO 95% OF MAXIMUM DENSITY, STANDARD PROCTOR, ASTM D- 698. ALL OTHER EXCAVATIONS UNDER FLOOR SLABS COMPACTED TO 95% STANDARD PROCTOR.

WHEN EXCESS DIRT HAS BEEN REMOVED, THE TRENCH SHALL BE BROUGHT TO THE REQUIRED LEVEL WITH SAND AND GRAVEL FIRMLY COMPACTED.

TRENCHES AND EXCAVATION SHALL BE BACKFILLED IN 6" LAYERS OF EARTH, FREE FROM CLODS, AND STONES THOROUGHLY TAMPED TO A DEPTH OF 12" ABOVE THE PIPE. AFTER THAT DEPTH HAS BEEN REACHED, BACKFILLING SHALL BE DONE IN 12" LAYERS, THOROUGHLY TAMPED.

9. EQUIPMENT SUPPORTS

ANY STRUCTURAL STEEL MEMBERS REQUIRED TO ADAPT THE EQUIPMENT AND PIPING AS FURNISHED BY THIS CONTRACTOR, TO THE BUILDING STEEL OR STRUCTURE, SHALL BE INCLUDED IN THE BID OF THE CONTRACTOR FURNISHING THE EQUIPMENT OR PIPING. HANGING OF ALL EQUIPMENT AND REQUIRED SUPPORTING STEEL AND BRACING SHALL BE FURNISHED BY THE CONTRACTOR WHO SUPPLIES THE EQUIPMENT.

10. CUTTING AND PATCHING

THIS CONTRACTOR SHALL INCLUDE ALL CUTTING, PATCHING AND PAINTING OF PATCHED AREAS REQUIRED FOR AND RESULTING FROM THE INSTALLATION OF ALL OF THIS CONTRACTOR'S WORK, EXCEPT WHERE NOTED OTHERWISE.

ALL OPENINGS AROUND PIPE PENETRATIONS THROUGH SMOKE OR FIRE-RATED FLOORS, CEILINGS OR WALLS SHALL BE SEALED AIRTIGHT WITH MATERIAL HAVING A RATING EQUAL TO THE MATERIAL OF THE WALL, CEILING AND/OR FLOOR PENETRATED.

ALL PATCHING SHALL BE NEATLY FINISHED TO THE SATISFACTION OF THE ARCHITECT.

11. ACCESS PANELS

THIS CONTRACTOR SHALL LOCATE AND FURNISH FOR INSTALLATION BY THE GENERAL CONTRACTOR, ALL ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVES, AND THE PROPER SERVICING OF EQUIPMENT AND LINES INSTALLED UNDER THE CONTRACT.

ALL PANELS SHALL BE MILCOR, STYLE "M" FOR MASONRY, "A" FOR ACOUSTICAL TILE AND "K" FOR PLASTER; EXCEPT FOR FIRE-RATED UL 1-1/2 HOUR AND "B" LABEL ACCESS PANELS SHALL BE FURNISHED IN FIRE-RATED WALLS AND CEILINGS AS INDICATED ON THE DRAWINGS. ACCESS DOORS SHALL BE 12" X 12" MINIMUM SIZE FOR VALVES.

12. DIELECTRIC UNIONS

FOR THE PREVENTION OF ELECTROLYTIC CORROSION AT CONNECTIONS BETWEEN PIPE OF DISSIMILAR METALS OR BETWEEN PIPE AND EQUIPMENT CONNECTIONS OF DISSIMILAR METALS, PROVIDE DIELECTRIC UNIONS OR FLANGES.

13. MOTORS, STARTERS AND DISCONNECTS

UNLESS SPECIFIED TO BE FURNISHED WITH EQUIPMENT, ALL MOTOR STARTERS AND DISCONNECT SWITCHES SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.

14. JOINTS AND FITTINGS

THREADS ON SCREWED PIPE SHALL BE STANDARD. CLEAN BUTT AND TAPERED. PIPE SHALL BE REAMED OF BURRS AND KEPT CLEAN OF SCALE, DIRT AND SHAVINGS. TREADS SHALL BE MADE WITH FLAKED GRAPHITE AND LUBRICATING OIL OR APPROVED PIPE COMPOUND ON THE MALE THREAD ONLY.

COPPER-TO-STEEL AND COPPER-TO-BRASS JOINTS SHALL BE MADE WITH SILVER SOLDER. ALL OTHER COPPER-TO-COPPER JOINTS ABOVE GROUND SHALL BE MADE WITH LEAD FREE SOLDER. COPPER PIPE SHALL BE CUT SQUARE, BURRS REMOVED AND CARE SHALL BE GIVEN TO KEEP THE LINES FREE OF DIRT AND MOISTURE. ALL TUBING AND FITTINGS SHALL BE THOROUGHLY CLEANED.

WELDED PIPE SHALL HAVE BUTT WELDED SINGLE "V" TYPE JOINTS FOR WHICH PIPE HAS BEEN BEVELED TO 45 DEGREES. WELD SHALL BE ONE-FOURTH GREATER THICKNESS THAN THE PIPE. CONNECTIONS TO EQUIPMENT, ACCESSORIES, ETC. SHALL BE MADE BY MEANS OF FLANGES AND/OR ADAPTERS.

UNIONS SHALL BE PROVIDED AT EACH SCREWED VALVE AND UNIONS OR FLANGES AT EACH EQUIPMENT CONNECTION.

15. EXPANSION JOINTS

FURNISH AND INSTALL FLEXONICS EXPANSION JOINTS IN PIPING SYSTEM WHERE SHOWN OR NECESSARY FOR EXPANSION AND CONTRACTION.

EXPANSION JOINTS IN PIPE 4" AND GREATER SHALL BE THE PACKLESS TYPE WITH STAINLESS STEEL BELLOWS AND HAVE WELDED OR FLANGED END. JOINTS SHALL HAVE TRAVERSE AS INDICATED ON THE PLANS. EXPANSION JOINTS SHALL BE OF THE CONTROLLED FLEXING TYPE.

EXPANSION JOINTS IN COPPER PIPE UNDER 4" IN SIZE SHALL BE OF THE COMPENSATOR TYPE CONSTRUCTED OF TWO-PLY STAINLESS STEEL BELLOWS AND CARBON STEEL SHROUDS AND END FITTINGS, INTERNAL GUIDES AND ANTI-TORQUE DEVICES.

EXPANSION JOINTS IN STEEL PIPE UNDER 4" IN SIZE SHALL BE OF THE COMPENSATOR TYPE CONSTRUCTED OF TWO-PLY STAINLESS STEEL ELBOWS AND CARBON STEEL SHROUDS AND END FITTINGS, INTERNAL GUIDES AND ANTI-TORQUE DEVICES.

PROVIDE GUIDES ON EACH SIDE OF EXPANSION JOINT, AT 4 PIPE DIAMETERS, 14 PIPE DIAMETERS, AND A THIRD GUIDE AS RECOMMENDED BY THE MANUFACTURER.

16. PIPE FLEXIBLE CONNECTIONS

FLEXIBLE PIPE CONNECTIONS SHALL BE RESISTOFLEX #R6904 OR APPROVED EQUAL FLEXIBLE CONNECTIONS MADE FROM TEFLON.

PROVIDE FOR MOVEMENT IN PIPING BY USE OF SWING JOINTS AT CONNECTION OF ALL BRANCHES TO MAINS AND RISERS. ALL BRANCHES FROM MAINS AND RISERS SHALL HAVE 1/4" CLEARANCE BETWEEN PIPE INSULATION AND SLEEVE TO PERMIT PIPE MOVEMENT.

17. VALVES

THIS CONTRACTOR SHALL FURNISH AND INSTALL ALL VALVES OF ONE MANUFACTURER, FIGURE NUMBER AND TYPE THROUGHOUT THE ENTIRE INSTALLATION OF THE WORK, UNLESS OTHERWISE SPECIFIED. THE FOLLOWING NUMBERS ARE FROM THE CRANE CATALOG. EQUAL VALVES OF REPUTABLE MANUFACTURERS, SUCH AS HAMMOND, NIBCO-SCOTT AND/OR JENKINS WILL BE CONSIDERED EQUIVALENT.

ALL VALVES SHALL BE BUILT FOR A MINIMUM OF 125 PSIG WORKING PRESSURE. GATE VALVES 2-1/2" AND SMALLER SHALL BE #438 (SCREWED ENDS) OR #1320 (SOLDER-JOINT ENDS) WITH BRONZE BODY, BRONZE TRIM AND RISING STEM.

CHECK VALVES 2-1/2" AND SMALLER SHALL BE #36 (SCREWED ENDS) OR #1342 (SOLDER-JOINT ENDS) SWING-TYPE WITH BRONZE BODY AND BRONZE TRIM.

BUTTERFLY VALVES 2" AND LARGER SHALL BE #12F, IRON BODY, CAST-IRON WAFER W/LOCK LEVER.

BALL VALVE UP TO 3" IN SIZE SHALL BE APOLLO SERIES #70 BRONZE VALVE WITH CHROME-PLATED BALL AND TEFLON SEAT.

GAS LINE COCKS UP TO 4" SHALL BE #320.

HOSE END VALVES SHALL BE #438 GATE VALVES WITH HOSE END NIPPLES.

18. PIPE SLEEVES AND COLLARS

THIS CONTRACTOR SHALL LAY OUT ALL HIS WORK AND SET SLEEVES IN NEW CONSTRUCTION AS CONCRETE FORMS AND WALL ARE ERECTED SO AS TO BE ABLE TO INSTALL HIS WORK WITHOUT CUTTING OR BREAKING OF FLOORS OR WALLS. ALL SLEEVES FOR INSULATED PIPING SHALL BE LARGE ENOUGH TO ALLOW INSULATION TO PASS THROUGH SLEEVE.

ALL SLEEVES PASSING THROUGH FLOORS WHICH ARE WATERPROOFED SHALL BE COPPER TUBING SLEEVES EXTENDING 1" ABOVE FINISHED FLOOR. ALL OTHER SLEEVES SHALL BE 24 GAUGE GALVANIZED PIPES AND SLEEVES TO BE THOROUGHLY PACKED WITH OAKUM AND THE REMAINING SPACE FILLED WITH MASTIC AND MUST BE WATERTIGHT.

ALL SLEEVES PASSING THROUGH INNER WALLS SHALL BE STANDARD PIPE THIMBLES EQUAL TO THE THICKNESS OF THE WALL.

SPACES BETWEEN PIPES AND SLEEVES THROUGH OUTSIDE WALLS, ABOVE GRADE, SHALL BE CAULKED WITH CAULKING COMPOUND; THOSE BELOW GRADE SHALL BE MADE WATERTIGHT.

SPACE AROUND ALL PIPING THROUGH FIRE OR SMOKE RATED PARTITIONS OR FLOORS SHALL BE SEALED AIRTIGHT WITH MATERIAL AS SPECIFIED UNDER FIRESTOPPING.

ALL PIPE PENETRATIONS OF SLABS ON GRADE SHALL BE WRAPPED WITH #15 BUILDING FELTS OR FOAM WRAP.

19. HANGERS

A. PIPE HANGER AND SUPPORT PRODUCTS INSTALLATION
   a. VERTICAL PIPING: MSS TYPE 8 OR 42 CLAMPS.
   b. INDIVIDUAL, STRAIGHT, HORIZONTAL PIPING RUNS: 100 FEET AND LESS: MSS TYPE 1, ADJUSTABLE, STEEL CLEVIS HANGERS. LONGER THAN 100 FEET: MSS TYPE 43, ADJUSTABLE ROLLER HANGERS. LONGER THAN 100 FEET IF INDICATED: MSS TYPE 49, SPRING CUSHION ROLLS.
   c. MULTIPLE, STRAIGHT, HORIZONTAL PIPING RUNS 100 FEET OR LONGER:MSS TYPE 44, PIPE ROLLS. SUPPORT PIPE ROLLS ON TRAPEZE.
   d. BASE OF VERTICAL PIPING: MSS TYPE 52, SPRING HANGERS.

B. SUPPORT VERTICAL PIPING AND TUBING AT BASE AND AT EACH FLOOR.
C. ROD DIAMETER MAY BE REDUCED ONE SIZE FOR DOUBLE-ROD HANGERS, TO A MINIMUM OF 3/8 INCH
D. INSTALL HANGERS FOR COPPER TUBING WITH THE FOLLOWING MAXIMUM HORIZONTAL SPACING AND MINIMUM ROD DIAMETERS:
   a. NPS 3/4 AND SMALLER: 60 INCHES WITH 3/8-INCH ROD.
   b. NPS 1 AND NPS 1-1/4: 72 INCHES WITH 3/8-INCH ROD.
   c. NPS 1-1/2 AND NPS 2: 96 INCHES WITH 3/8-INCH ROD.
   d. NPS 2-1/2: 108 INCHES WITH 1/2-INCH ROD.
   e. NPS 3 TO NPS 5: 10 FEET WITH 1/2-INCH ROD.
E. INSTALL SUPPORTS FOR VERTICAL COPPER TUBING EVERY 10 FEET.
F. INSTALL HANGERS FOR STEEL PIPING WITH THE FOLLOWING MAXIMUM HORIZONTAL SPACING AND MINIMUM ROD DIAMETERS:
   a. NPS 1-1/4 AND SMALLER: 84 INCHES WITH 3/8-INCH ROD.
   b. NPS 1-1/2: 108 INCHES WITH 3/8-INCH ROD.
   c. NPS 2: 10 FEET WITH 3/8-INCH ROD.
   d. NPS 2-1/2: 11 FEET WITH 1/2-INCH ROD.
   e. NPS 3 AND NPS 3-1/2: 12 FEET WITH 1/2-INCH ROD.
   f. NPS 4 AND NPS 5: 12 FEET WITH 5/8-INCH ROD.
G. INSTALL SUPPORTS FOR VERTICAL STEEL PIPING EVERY 15 FEET.
H. SUPPORT PIPING AND TUBING NOT LISTED IN THIS ARTICLE ACCORDING TO MSS SP-69 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

20. DAMAGE BY LEAKS

THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO THE GROUNDS, WALKS, ROADS, ALL BUILDING COMPONENTS AND FINISHES, PIPING SYSTEMS, ELECTRICAL SYSTEMS AND THEIR EQUIPMENT AND CONTENT, CAUSED BY LEAKS IN THE PIPING SYSTEMS BEING INSTALLED OR HAVING BEEN INSTALLED HEREIN. ALL REPAIRS WILL BE MADE AT THIS CONTRACTOR'S EXPENSE.

21. PIPE MARKERS

FURNISH AND INSTALL BRADY #B-350 THIN FILM OR APPROVED EQUAL PIPE MARKERS. MARKERS SHALL BE 1-1/8" HIGH FOR PIPES 3" AND UNDER AND 2-1/4" HIGH FOR PIPES OVER 3". MARKERS SHALL INDICATE TYPE OF SERVICE AND DIRECTION OF FLOW.

PIPE MARKERS SHALL BE LOCATED:
- AT EQUIPMENT CONNECTIONS
- AT ACCESS DOORS
- AT BRANCH MAINS
- ON ALL ACCESSIBLE PIPE A MAXIMUM OF 75' BETWEEN MARKERS.

22. FLOOR, WALL AND CEILING PLATES

PIPES PASSING THROUGH FLOORS AND FINISHED CEILINGS, FITTED WITH CHROME-PLATED PLATES OR ESCUTCHEONS LARGE ENOUGH TO COMPLETELY CLOSE OPENING AROUND PIPE OR PIPE COVERING AND FLOOR SUPPORT IN THE CASE OF VERTICAL PIPING, SECURELY HELD IN PLACE; CAULK WATERTIGHT AROUND PIPE IN UNFINISHED ROOMS.

23. FIRE STOPPING

THE PENETRATIONS OF FIRE AND/OR SMOKE RATED WALLS OR FLOORS SHALL BE PROTECTED BY A UL APPROVED MATERIAL TO RETAIN THE INTEGRITY OF THE TIME-RATED CONSTRUCTION BY MAINTAINING AS EFFECTIVE BARRIER AGAINST THE SPREAD OF FLAME, SMOKE AND GASES. IT SHALL BE USED IN ALL DUCT CABLE, CONDUIT AND PIPING PENETRATIONS THROUGH FLOOR SLABS AND TIME-RATED WALLS, AND/OR FLOORS. THE RATING OF THE FIRESTOPPING SHALL EQUAL THE RATING OF THE TIME-RATED ASSEMBLY.

FIRESTOPPING MATERIAL SHALL BE 3M FIRE BARRIER SEALING SYSTEM OF APPROVED EQUAL. FIRESTOPPING MATERIAL SHALL CONSTITUTE ONE OR MORE OF THE FOLLOWING PRODUCTS:

- CAULK: CP-25
- PUTTY: #303
- WRAP/STRIP: FS195
- COMPOSITE SHEET: CS195
- PENETRATING SEALING SYSTEMS: 7900 SERIES

INSTALLATION OF FIRESTOPPING SHALL BE INSTALLED IN ACCORDANCE WITH AND IN STRICT CONFORMITY WITH MANUFACTURER'S PRINTED INSTRUCTIONS AS TO SURFACE PREPARATION, INSTALLATION AND QUALITY CONTROL. AREAS OF WORK SHALL REMAIN ACCESSIBLE UNTIL INSPECTION AND APPROVAL BY THE APPLICABLE CODE AUTHORITIES.

ON INSULATED PIPES, THE FIRE-RATING CLASSIFICATION SHALL NOT REQUIRE REMOVAL OF THE INSULATION.

QUALITY ASSURANCE:
SUBMIT MANUFACTURER'S PRODUCT DATA, LETTER OF CERTIFICATION OR CERTIFIED LABORATORY TEST REPORT THAT THE MATERIAL OR COMBINATION OF MATERIALS MEET THE REQUIREMENTS SPECIFIED IN ASTM E814 AND ARE SO CLASSIFIED IN UL'S BUILDING MATERIALS DIRECTORY. MATERIALS SHALL MEET AND BE ACCEPTABLE FOR USE BY ALL MODEL BUILDING CODES. MATERIALS SHALL MEET THE REQUIREMENTS OF NFPM61- LIFE SAFETY CODE

SUBMITTALS:
SUBMIT SHOP DRAWINGS, PRODUCT DATA, CERTIFICATES AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. SUBMIT MANUFACTURER'S PRODUCT DATA FOR ALL MATERIALS AND PREFABRICATED DEVICES, PROVIDING DESCRIPTIONS SUFFICIENT FOR IDENTIFICATION AT THE JOB SITE. INCLUDE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.

SUBMIT SHOP DRAWINGS SHOWING PROPOSED MATERIAL, REINFORCEMENT, ANCHORAGE, FASTENINGS, AND METHOD OF INSTALLATION. CONSTRUCTION DETAILS SHALL ACCURATELY REFLECT ACTUAL JOB CONDITIONS.

24. CLEANUP AND ADJUSTMENT

ALL PARTS WORK LEFT CLEAN: EQUIPMENT, FIXTURES, VALVES, PIPES AND FITTINGS CLEANED OF GREASE AND METAL CUTTINGS. ANY DISCOLORATION OR OTHER DAMAGE TO PORTIONS OF BUILDING, ITS FINISH OR FURNISHING DUE TO THIS CONTRACTORS FAILURE TO PROPERLY CLEAN INTERIOR OF PIPING, REPAIRED AT THIS CONTRACTOR'S EXPENSE. ALL AUTOMATIC CONTROL DEVICES ADJUSTED FOR PROPER OPERATION. ALL SURPLUS MATERIALS AND ANY RUBBISH REMOVED AS IT ACCUMULATES. ALL EQUIPMENT LEFT IN SAFE, PROPER OPERATING CONDITION.

DAMAGE TO ANY PORTIONS MUST BE REPAIRED OF THE PART REPLACED BY THIS CONTRACTOR AND ALL PARTS LEFT WITHOUT DENTS, SCRATCHES, THROUGH THE FINISH PAINT, LOOSE PLASTER, STAINS OR OTHER BLEMISHES.

25. PIPE TESTING AND START-UP

ALL PIPING TO BE TESTED IN ACCORDANCE WITH THE FOLLOWING:
- WATER - 100 PSI WATER PRESSURE

ALL TESTING MUST HOLD FOR AT LEAST 24 HOURS WITHOUT LOSS OF PRESSURE OR VACUUM. ALL CONCEALED PIPING SHALL BE TESTED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE PRIOR TO COVERING. BEFORE STARTING ANY SYSTEM, ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE LUBRICATED BY THIS CONTRACTOR. TEST ENTIRE PLANT FOR HEATING, VENTILATING, AND AIR CONDITIONING UNDER FULL LOAD CONDITIONS FOR A PERIOD OF NOT LESS THAT ONE (1) WEEK DURING WHICH TIME THE AARON BROTHERS OPERATING PERSONNEL SHALL BE FULLY INSTRUCTED IN THE OPERATION AND MAINTENANCE OF THE PLANT. AFTER THE PLANT IS IN FULL OPERATION, THIS CONTRACTOR IS TO FURNISH WHATEVER ADDITIONAL SERVICE IS REQUIRED TO RECALIBRATE AND RESET CONTROLS, VALVES, BALANCING COCKS, ETC. TO ENSURE PROPER OPERATION OF THIS SYSTEM.

26. TESTING AND BALANCING

THIS CONTRACTOR SHALL AT THE TIME OF INSTALLATION ENSURE THAT ALL DEVICES TO COMPLETE TESTING AND BALANCING AS DIRECTED HEREIN ARE FURNISHED AND INSTALLED DURING FABRICATION AND INSTALLATION OF WORK.

27. SEISMIC RESTRAINTS ON MECHANICAL EQUIPMENT

ALL PLUMBING EQUIPMENT SHALL BE PROVIDED WITH SEISMIC RESTRAINING SERVICES AS REQUIRED BY LOCAL BUILDING CODES. CONTRACTOR SHALL HAVE LOCAL BUILDING OFFICE REVIEW EACH PIECE OF EQUIPMENT WHEN INSTALLED AND THE CONTRACTOR SHALL INSTALL ALL REQUIRED TIE DOWN, ANCHORS, STRAPS OR OTHER DEVICES REQUIRED.

28. GUARANTEE

THIS CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, MATERIALS, AND LABOR FURNISHED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AND SHALL REPAIR OR REPLACE ANY EQUIPMENT OR MATERIAL WHICH IS DEFECTIVE OR IMPROPERLY INSTALLED. IN ADDITION, THIS CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO THE BUILDINGS AND ITS CONTENTS OR OTHER EQUIPMENT, CAUSED BY DEFECTS OR IMPROPER INSTALLATION OF EQUIPMENT OR MATERIALS INSTALLED UNDER THIS SECTION OF THE SPECIFICATIONS.

29. TEMPORARY WATER

TEMPORARY WATER SERVICE TO THE BUILDING SHALL BE PROVIDED BY THIS CONTRACTOR TO THE BUILDING FOR CONSTRUCTION PURPOSES. THIS CONTRACTOR TO MAINTAIN WATER SERVICE AS REQUIRED DURING CONSTRUCTION.

30. DOMESTIC WATER SERVICE

PROVIDE PRESSURE REDUCING VALVE WITH STRAINER IN SERVICE LINE IF REQUIRED BY LOCAL CODES OR PRESSURE IS ABOVE 80 PSI.

JOINTS SHALL BE CLEANED AND DEBURRED AS RECOMMENDED BY THE MANUFACTURER AND FEDERAL, STATE, AND LOCAL CODES AND SOLDERED AS LISTED BELOW. FLUX SHALL BE NON-CORROSIVE.

ABOVE GRADE - WHERE FITTINGS ARE SOLDERED BOTH FITTINGS AND TUBING SHALL BE CLEANED AS DESCRIBED ABOVE. UNDER NO CIRCUMSTANCES SHALL DISSIMILAR METALS COME INTO DIRECT CONTACT WITH COPPER TUBING; E.G., GALVANIZED STRAPPING, HANGERS, OR CLAMPS TO SECURE THE TUBING.

BELOW GRADE, OR FLOOR SLAB ON EARTH OR STONE FILL - HIGH TEMPERATURE, SOLDER, 1200 DEG. F OR GREATER MELTING POINT.

NOTE: WATER PIPE TO BE PROPERLY SECURED AND ALIGNED SO AS NOT TO EXERT VERTICAL OR HORIZONTAL STRESSES ON THE SEATING OF THE MATING (MALE AND FEMALE) SURFACES OF THE UNIONS.
MATERIALS - UNDERGROUND: TYPE "K" COPPER TUBE, SOFT TEMPE
MATERIALS - ABOVEGROUND: TYPE "L" COPPER TUBE, HARD DRAWN.
ALTERNATE MATERIALS - CPVC AND OR PEX PIPING IS AN ACCEPTABLE ALTERNATE IF NOT INSTALLED IN A PLENUM AND APPROVED BY LOCAL CODE OFFICIALS. VIEGA, PROPRESS COPPER ½-INCH THROUGH 4-INCH WITH EPDM SEALING ELEMENT AND/OR VIEGA, PROPRESS 304 OR 316 STAINLESS ½-INCH THROUGH 4-INCH WITH EPDM OR FKM SEALING ELEMENT IS ACCEPTABLE IF ALLOWED BY LOCAL CODE

31. STERILIZATION OF DOMESTIC WATER SYSTEM

THE ENTIRE DOMESTIC WATER DISTRIBUTION SYSTEM SHALL BE THOROUGHLY STERILIZED WITH A SOLUTION CONTAINING NOT LESS THAN 100 PARTS PER MILLION OF AVAILABLE CHLORINE. THE SOLUTION SHALL REMAIN IN THE SYSTEM FOR TWO (2) HOURS DURING WHICH TIME ALL VALVES AND FAUCETS SHALL BE OPENED AND CLOSED SEVERAL TIMES. AFTER STERILIZATION, THE SOLUTION SHALL BE FLUSHED FROM THE SYSTEM WITH CLEAN WATER UNTIL THE RESIDUE CHLORINE CONTENT IS NOT GREATER THAN THE CHLORINE LEVEL OF THE AVAILABLE WATER SUPPLY.

THIS CONTRACTOR SHALL HAVE THE WATER TESTED AND APPROVED BY THE HEALTH DEPARTMENT.

32. SANITARY SEWERS

THIS CONTRACTOR SHALL CONNECT SANITARY SEWER AS INDICATED ON THE DRAWINGS. VERIFY DIRECTION OF FLOW PRIOR TO ANY ROUGH-IN WORK.

EACH PIPE SHALL BE LAID TO THE LINE AND GRADE INDICATED ON THE PLANS AND SUCH A MANNER AS TO FORM A CLOSE CONCENTRIC JOINT WITH THE ADJOINING PIPE AND TO PRESENT OFFSETS IN FLOW LINE. ALL PIPE SHALL BE LAID WITH THE BELLS UPHILL.

THE SUB-GRADES SHALL BE KEPT FREE FROM WATER WHILE PIPES ARE BEING LAID. ALL PIPE SHALL BE LAID WITH ENDS ABUTTING AND TRUE TO LINE AND GRADE. THEY SHALL BE FITTED AND MATCHED SO THAT THEY WILL FORM A SEWER WITH A SMOOTH AND UNIFORM INVERT.

EACH JOINT SHALL BE CLEANED AS IT IS LAID AND ALL BELLS SHALL BE CLEANED BEFORE PIPES ARE JOINED.

PVC SEWER PIPE MAY BE USED IN LIEU OF THAT SPECIFIED ABOVE IF ALLOWED BY LOCAL CODES.

33. WASTE, SOIL, DRAIN AND VENT PIPING

THE DRAINS, SOIL WASTE AND VENT PIPE AND FITTINGS INCLUDING EXTENSIONS TO SEWERS SHALL BE OF SAND SPUN SERVICE WEIGHT CAST IRON PIPE OF THE SIZES INDICATED ON THE DRAWINGS. PIPE AND FITTINGS TO BE COATED ON THE INSIDE AND OUTSIDE WITH COAL TAR PITCH, CYLINDRICAL AND FRE

ELECTRICAL SPECIFICATIONS

1. THE GENERAL CONDITIONS AND SUPPLEMENTARY GENERAL CONDITIONS SHALL BE CONSIDERED AS PART OF THIS SPECIFICATION.

2. ALL WORK TO BE IN ACCORDANCE WITH THE RULES AND REGULATION OF THE LOCAL AUTHORITIES HAVING JURISDICTION AND THE MOST RECENT EDITION OF NATIONAL ELECTRIC CODE.

3. FURNISH ALL MATERIALS, EQUIPMENT, LABOR, & SERVICES REQUIRED FOR THE INSTALLATION OF ALL ELECTRICAL WORK & AS REQUIRED TO PROVIDE A COMPLETE & OPERABLE ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS.

   MATERIALS SHALL BE NEW W/ MANUFACTURERS NAME PRINTED THEREON & UNDERWRITERS LABORATORY LISTED. THE SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE W/ THE DRAWINGS AND/OR SPECIFICATIONS. SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE W/ THE DRAWINGS AND/OR SPECIFICATIONS.

4. SUBMIT MATERIAL LISTS AND SHOP DRAWINGS FOR MAJOR EQUIPMENT TO THE OWNER'S REPRESENTATIVE FOR REVIEW. SUBMITTALS SHALL BE IN ACCORDANCE WITH GENERAL CONDITIONS AND SHALL BEAR THE STAMP OF THE ELECTRICAL CONTRACTOR SHOWING THAT HE HAS REVIEWED AND APPROVED THEM. LACK OF SUCH CONTRACTOR'S APPROVAL WILL BE CAUSE FOR REJECTION WITHOUT REVIEW BY THE OWNER.

5. CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP & MATERIALS, USUAL WEAR EXCEPTED, & SHOULD ANY SUCH DEFECTS DEVELOP WITH A PERIOD OF ONE YEAR ACCEPTANCE OF THE BLDG. BY THE YEAR, THIS CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE ITEMS & DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE TO THE OWNER.

6. INCIDENTAL ITEMS NOT INDICATED ON THE DRAWINGS, NOR MENTIONED IN THE SPECIFICATIONS, THAT CAN BE LEGITIMATELY & REASONABLE BE INFERRED TO BELONG TO THE WORK DESCRIBED OR BE NECESSARY IN GOOD PRACTICE TO PROVIDE A COMPLETE SYSTEM, SHALL BE FURNISHED & INSTALLED AS THOUGH ITEMIZED HERE IN EVERY DETAIL.

7. NOTIFY ARCHITECT IMMEDIATELY OF POSSIBLE CONFLICTS WITH STRUCTURE, MECHANICAL, OR OTHER FEATURES. WHERE JOB CONDITIONS REQUIRE REASONABLE CHANGES IN LOCATIONS & ARRANGEMENT OF INDICATED EQUIP., CONDUIT, OUTLETS, OR WIRING, CONTRACTOR SHALL MAKE SUCH CHANGES WITHOUT COST TO OWNER.

8. CONTRACTOR SHALL FILE PLANS WITH AND OBTAIN APPROVALS FROM MUNICIPAL AGENCIES. ALL PERMITS AND CERTIFICATES OF INSPECTION SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.

   PERTINENT CERTIFICATES SHALL BE DELIVERED TO THE OWNER'S REPRESENTATIVE, PRIOR TO FINAL BILLING.

   ANY FEES ASSOCIATED WITH CONSTRUCTION AND INSPECTION SHALL BE BORNE BY THE CONTRACTOR IN ORDER TO DELIVER TO THE OWNER A FINISHED BUILDING, READY FOR OCCUPANCY AND 100% OPERATION.

9. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING. BIDDS SHALL SERVE AS EVIDENCE OF KNOWLEDGE OF EXISTING CONDITIONS.

   HE SHALL CAREFULLY EXAMINE THE EXISTING CONDITIONS AND LIMITATIONS THEREOF. HE SHALL ASCERTAIN CONDITIONS UNDER WHICH THE WORK MUST BE PERFORMED, INCLUDING THE HANDLING OF MATERIALS, SECURITY AND LIMITING FIELD DIMENSIONS. FURTHER, THIS CONTRACTOR SHALL PROVIDE FIELD VERIFICATION OF LOCATION OF POINTS OF CONNECTION TO LANDLORD'S ELECTRICAL AND TELEPHONE EQUIPMENT AND DISTANCE FROM LEASED SPACE.

   ANY DISCREPANCIES WITH THE CONSTRUCTION DOCUMENTS DISCOVERED AS A RESULT OF THE AFOREMENTIONED FIELD SURVEY, SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE, PRIOR TO COMMENCING ANY WORK. ANY ADDITIONAL COSTS RESULTING FROM CONTRACTOR'S FAILURE TO DO SO SHALL BE HIS RESPONSIBILITY AND SHALL BE BORNE BY HIM.

10. ANY DEVIATION FROM PLANS WITHOUT PRIOR APPROVAL OF THE ARCHITECT SHALL BE CAUSE FOR THE REJECTION OF MATERIALS AND/OR METHODS, AND ANY COST INCURRED TO CORRECT SUCH DEVIATION TO THE SATISFACTION OF THE A/E SHALL BE BORNE BY THE CONTRACTOR.

11. THE SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT THE CONTRACTOR HAS FAMILIARIZED HIMSELF WITH THE PLANS AND BUILDING SITE. CLAIMS MADE SUBSEQUENT TO THE PROPOSAL FOR MATERIALS AND LABOR, BECAUSE OF DIFFICULTIES ENCOUNTERED, WILL NOT BE RECOGNIZED IF THEY COULD HAVE BEEN FORSEEN HAD PROPER EXAMINATION BEEN MADE.

12. ANY COSTS INCURRED DUE TO LACK OF COOPERATION AMONG THE TRADES SHALL BE BORNE BY THE CONTRACTOR.

13. CONTRACTOR SHALL SUBMIT 6 COPIES OF SHOP DRAWINGS TO THE ARCHITECT/ENGINEER FOR APPROVAL FOR ALL EQUIPMENT AND DEVICES INSTALLED THERE WILL BE NO DRAW UNTIL SHOP DRWGS. HAVE BEEN SUBMITTED & REVIEWED BY ARCH./ENGR..

14. THE EQUIPMENT ROUGH-INS AS SHOWN ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE. HOWEVER, IN SOME INSTANCES, THE OWNER OR SUPPLIER MAY SUBSTITUTE OR THE EQUIPMENT MAY VARY FROM WHAT IS SHOWN. THEREFORE, THE CONTRACTOR SHALL VERIFY ALL CRITICAL DIMENSIONS WITH THE OWNER PRIOR TO CONSTRUCTION. FAILURE OF THE CONTRACTOR TO VERIFY THESE DIMENSIONS SHALL PLACE THE RESPONSIBILITY FOR ANY SUB-SEQUENT RELOCATION DIRECTLY UPON THE CONTRACTOR.

15. PLAN & INSTALL WORK IN SUCH A MANNER AS TO CONFORM TO THE STRUCTURE. AVOID OBSTRUCTIONS, PRESERVE HEADROOM, & KEEP OPENINGS & PASSAGEWAYS CLEAR.

16. ELECTRICAL CONTRACTOR SHALL RECORD ALL FIELD CHANGES IN HIS WORK AS THE JOB PROGRESSES; AN ACCURATE RECORD OF ALL WORK AS ACTUALLY INSTALLED.

    UPON COMPLETION OF THE WORK AND BEFORE FINAL PAYMENT IS AUTHORIZED, SHALL TURN OVER TO THE OWNER'S REPRESENTATIVE A RECORD SET OF PRINTS SHOWING THESE CHANGES.

17. THIS CONTRACTOR SHALL DO ALL CUTTING, CHASING, OR CHANNELING AND PATCHING REQUIRED FOR ANY WORK HEREIN SPECIFIED.

    ALL OPENINGS THROUGH STRUCTURALLY SUPPORTED SLABS MUST BE COREBORED, SLEEVED, GROUTED, SEALED AND MADE WATERPROOF. SLEEVES MUST EXTEND AT LEAST 2" AFF.

    ALL SLEEVES, OPENINGS, ETC. THROUGH FIRE RATED WALLS AND FLOORS SHALL BE SEALED AFTER CONDUIT INSTALLATION TO RETAIN FIRE RATING.

18. ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATING, SERVICING, MAINTAINING AND REPAIR.

    HANGERS SHALL INCLUDE ALL MISCELLANEOUS STEEL, SUCH AS CHANNELS, RODS, ETC., NECESSARY FOR THE INSTALLATION OF WORK AND SHALL BE SECURED TO THE BUILDING STRUCTURE, NOT TO PIPING OR DUCTWORK.

    ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. EXPOSED CONDUIT SHALL BE RUN IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO COLUMN LINES AND SEPARATED AT LEAST 3" FROM WATER LINES WHEREVER THEY RUN ALONG SIDE OR ACROSS SUCH LINES.

19. EVERY PART OF THE INSTALLATION SHALL BE TESTED, OPERATED AND LEFT IN PERFECT WORKING ORDER.

    TEST ALL WIRES AND CABLES INSTALLED UNDER THIS CONTRACT WITH A 1,000 VOLT MEGOHM METER. ANY READINGS THAT ARE LOWER THAN REQUIRED BY GOOD PRACTICE OR APPLICABLE CODES, PROMPTLY REPLACE THE MATERIALS OR EQUIPMENT INVOLVED.

    SHOULD TESTING REVEAL ANY OTHER DEFECTS, PROMPTLY CORRECT SUCH DEFECTS AND RERUN TESTS UNTIL THE ENTIRE INSTALLATION IS SATISFACTORY IN ALL RESPECTS.

20. ALL ITEMS IN THE NOTES, SCHEDULES AND LEGEND MAY NOT NECESSARILY APPEAR ON THESE DRAWINGS.

21. TWO COPIES OF OPERATION AND MAINTENANCE MANUALS FOR THE EQUIPMENT HEREIN INSTALLED SHALL BE GIVEN TO THE OWNER PRIOR TO ACCEPTANCE OF THE BUILDING FOR OCCUPANCY.

22. GUARANTEE:

    CONTRACTOR IS TO GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR AFTER THE DATE OF ACCEPTANCE OF THE PROJECT BY THE OWNER. IT IS UNDERSTOOD BY HIS ACCEPTANCE OF THE CONTRACT THAT THIS CONTRACTOR WILL MAKE GOOD ANY AND ALL WORK WHICH IN ANY WAY HAS BECOME DEFECTIVE AS TO THE QUALITY OF MATERIALS AND WORKMANSHIP FOR ANY CAUSE OTHER THAN ORDINARY WEAR AND TEAR.

    FOR THE SAME PERIOD, ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

23. THE CONTRACTOR, BEFORE FINAL ACCEPTANCE BY THE OWNER WILL BE GRANTED, SHALL CLEAN ALL LIGHTING FIXTURES, DEVICE PLATES, SERVICE FITTINGS AND OTHER ITEMS FURNISHED UNDER THIS CONTRACT. HE SHALL INSURE THAT ALL DIRECTORIES ARE IN PLACE WITH COMPLETED OR REVISED SCHEDULES AND ALL IDENTIFICATIONS AND MARKINGS OF EQUIPMENT, CABLES AND OTHER ITEMS ARE COMPLETED.

24. THIS CONTRACTOR SHALL COORDINATE SEQUENCE OF WORK WITH ALL OTHER TRADES. CONTRACTOR SHALL VERIFY VOLTAGE OF MECHANICAL EQUIPMENT AND FLUORESCENT FIXTURE BALLASTS, PRIOR COMMENCING ANY WORK.

    NO REMOVALS SHALL BE MADE WITHOUT OWNER'S APPROVAL. ALL EXISTING EQUIPMENT, MATERIALS, ETC. THAT ARE NOT TO BE REUSED SHALL BE REMOVED COMPLETELY AND DISPOSED OF BY THIS CONTRACTOR.

25. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY, PRIOR TO ANY INDIVIDUAL CIRCUIT'S INSTALLATION, TO VERIFY WITH ALL OTHER TRADES CONCERNED THAT THE CIRCUIT WITH DEVICES AS DRAWN IS ADEQUATE IN SIZE AND MAKE-UP FOR THE MECHANICAL AND/OR KITCHEN EQUIPMENT TO BE INSTALLED. IF ANY CONFLICT IN VOLTAGE, PHASE OR LOAD IS ENCOUNTERED WHICH WOULD ALTER THE CIRCUIT SIZE, THIS CONTRACTOR SHALL NOTIFY THE ENGINEER OR OWNER IMMEDIATELY. FAILURE TO DO SO SHALL PLACE THE RESPONSIBILITY FOR ANY SUBSEQUENT CIRCUIT CHANGE DIRECTLY UPON THE CONTRACTOR.

26. REFER TO THE MECHANICAL DRAWINGS FOR THE LOCATION OF THER-MOSTATS, UNITS AND OTHER SPECIAL EQUIPMENT. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL CONDUITS, JUNCTION BOXES AND DISCONNECT SWITCHES, THERMOSTAT AND CONTROL WIRING.

27. THIS CONTRACTOR SHALL MAKE ARRANGEMENTS FOR TEMPORARY POWER AND SHALL PAY THE COST FOR THE UTILITY CONNECTION AND SHALL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF THE TEMPORARY WORK AND FOR THE REMOVAL OF SAME.

    CONTRACTOR SHALL PAY ALL UTILITY CHARGES IN CONNECTION WITH THE TEMPORARY POWER.

    CONTRACTOR SHALL PROVIDE GROUND FAULT PROTECTION FOR ALL POWER EQUIPMENT USED ON THE PREMISES DURING CONSTRUCTION.

28. GENERAL SCOPE OF WORK

    CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, SUPPLIES, EQUIPMENT AND FEES REQUIRED TO COMPLETELY INSTALL, TEST AND PLACE THE HEREIN SPECIFIED EQUIPMENT, COMPONENTS, CONTROLS, AND SYSTEMS IN SERVICE.

    COMPLETE POWER AND LIGHTING DISTRIBUTION SYSTEMS INCLUDING ALL PANELS AND COMPLETE BRANCH CIRCUIT WIRING SYSTEM

    TEMPORARY ELECTRICAL SERVICE AS REQUIRED FOR CONSTRUCTION. TEMPORARY SERVICE SHALL INCLUDE, TEMPORARY INTERIOR AND EXTERIOR LIGHTING, TEMPORARY POWER OUTLETS AND RECEPTACLES.

    COMPLETE LIGHTING FIXTURE INSTALLATION

    COMPLETE UTILITY MOTOR WIRING SYSTEM (EXCEPT AS NOTED)

    COMPLETE TELEPHONE CONDUIT SYSTEM INCLUDING CONDUIT FROM POINT OF CONNECTION TO UTILITY COMPANY SERVICE AND ALL TERMINAL DEVICES, BOXES, CONDUIT, PLATES, ETC.

    PROVISIONS FOR FIRE ALARM SYSTEM AS REQUIRED BY CODE

    WIRING AND FINAL CONNECTION TO ALL SIGNS AND GRAPHICS

    TESTING OF ALL CABLES AND CIRCUIT WIRING AFTER INSTALLATION

    TESTING OF ALL ELECTRICAL EQUIPMENT

    WARRANTY OF ALL WORK FOR A PERIOD OF ONE YEAR FROM DATE OF PROJECT CLOSE-OUT

29. ELECTRICAL SERVICE

    PROVIDE ELECTRICAL AS INDICATED ON THE DRAWING.

    ALL WORK NOT SPECIFICALLY NOTED AS BEING BY THE LANDLORD OR THE POWER COMPANY SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR

    CLOSELY COORDINATE ENTIRE INSTALLATION WITH THE POWER COMPANY.

    CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE LOCAL UTILITY FOR INSTALLATION OF METERING.

    THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE AVAILABLE SHORT CIRCUIT CURRENT AT THE SUPPLY TERMINALS FROM THE POWER COMPANY &/OR MALL/SHOPPING CENTER POWER SOURCE. THE SERVICE EQUIPMENT SHALL MEET OR EXCEED THIS RATING PER N.E.C.

30. THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE LOCAL TELEPHONE UTILITY COMPANY FOR TELEPHONE SERVICE TO THE SPACE. CONDUIT SYSTEM FOR TELEPHONE DISTRIBUTION TO THE LEASED PREMISES SHALL BE PROVIDED WHERE REQUIRED FOR UTILITY COMPANY WIRES.

    COORDINATE INSTALLATION OF TELEPHONE WORK AND INSTALL ALL CONDUIT FOR TELEPHONE SYSTEM.

    OUTLET BOXES SHALL BE 4" SQUARE MINIMUM WITH SINGLE DEVICE COVER AND TELEPHONE PLATE.

    PROVIDE INTERIOR TYPE 4-D PLYWOOD 24" X 24" TO SERVE AS TELEPHONE TERMINAL BOARD.

31. THIS CONTRACTOR SHALL PROVIDE, INSTALL AND CONNECT A COMPLETE SYSTEM OF GROUNDING FOR ALL EQUIPMENT AND STRUCTURES. A GOOD MECHANICAL AND ELECTRICAL CONNECTION SHALL BE MADE WITH APPROVED GROUNDING CONNECTORS.

    ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS SHALL COMPLY WITH ALL LOCAL, STATE AND NEC CODES AND REGULATIONS.

    PANELS, CONDUIT SYSTEMS, MOTOR FRAMES, LIGHTING FIXTURES AND OTHER EQUIPMENT THAT ARE A PART OF THIS INSTALLATION SHALL BE SECURELY GROUNDED BOTH MECHANICALLY AND ELECTRICALLY IN ACCORDANCE WITH ALL CODES.

    MAIN GROUNDING SYSTEM SHALL BE SIZED TO CONFORM WITH SECTION 250, TABLE 250-94 OF THE NATIONAL ELECTRICAL CODE. PROVIDE CONDUIT TO PROTECT GROUND WIRE FROM DAMAGE TO AN AREA 6 FT. ABOVE FLOOR.

    MAKE ALL JOINTS AND CONNECTIONS OF THE CONDUIT SYSTEM TIGHT TO MAINTAIN CONTINUITY OF MECHANICAL AND ELECTRICAL GROUND THROUGHOUT ENTIRE SYSTEM.

    GROUND ALL 3 WIRE RECEPTACLES TO THE OUTLET BOXES.

    GROUND NEUTRAL FROM THE TRANSFORMER CONNECTED TO WATER LINE.

    GROUND CONDUCTOR SHALL BE SUPPLIED IN ALL NON-METALLIC CONDUIT.

32. IF REQUIRED: PROVIDE DRY-TYPE TRANSFORMER WHICH SHALL BE ENCLOSED, VENTILATED TYPE WITH KVA AND VOLTAGE RATINGS AS CALLED FOR ON THE DRAWING AS MANUFACTURED BY SQUARE-D OR EQUAL.

    TRANSFORMER SHALL HAVE A MINIMUM OF 150 DEGREE, CLASS H INSULATION AND A MINIMUM OF (4) 2-1/2% TAPS BELOW AND (2) 2-1/2% TAPS ABOVE RATED PRIMARY VOLTAGE.

    SOUND LEVEL SHALL BE LOW AND INSTALLATION SHALL INCLUDE VIBRATION DAMPENING MOUNTS AND FLEXIBLE STEEL CONDUIT FOR PRIMARY AND SECONDARY

33. LIGHTING FIXTURES:

    THE CONTRACTOR SHALL PROVIDE A NEW LIGHTING FIXTURE OF THE TYPE SPECIFIED FOR EACH LIGHTING OUTLET SHOWN WITH COMPLETE LAMPS OR TUBES. ALL FIXTURES SHALL BE HUNG AND MOUNTED IN PLACE, PROPERLY WIRED, TESTED AND LEFT READY FOR OPERATION.

    CONTRACTOR SHALL VERIFY LOCATION OF ALL PARKING LOT LIGHTS, MONUMENT SIGNS, AND PYLON SIGNS ON INDIVIDUAL SITE PLAN.

34. PANELBOARDS AND BREAKERS SHALL BE BY SQUARE-D OR EQUAL

    PANEL SHALL BE CIRCUITED SP THAT THE LOAD IS DISTRIBUTED EVENLY ACROSS ALL THREE PHASES.

    ALL PANELBOARDS AND EMERGENCY LIGHTING DISCONNECT SWITCHES SHALL BE LABELED WITH RESPECT TO THEIR TITLE, VOLTAGE AND PHASE; I.E. PANEL "A" 120/208/3Ø. LABEL SHALL BE PHENOLIC SHALL BE PERMANENTLY FIXED TO THE EQUIPMENT.

35. LIGHTING PANELBOARD SHALL BE 3-PHASE, 4-WIRE DISTRIBUTED PHASE TYPE W/SOLID NEUTRAL GROUND LUG, GROUND BUS AND ALL BREAKERS SHALL BE BOLTED TYPE, THERMAL MAGNETIC WITH ALL TWO OR THREE POLE BREAKERS HAVING COMMON TRIP.

    CIRCUIT BREAKERS SHALL BE RATED FOR MINIMUM 10,000 AMP SYMMETRICAL SHORT CIRCUIT AT 120/208V.

    CIRCUIT BREAKERS SERVING LIGHTING CIRCUITS SHALL BE RATED FOR SWITCH SERVICE.

36. WIRING DEVICES:

    WALL SWITCHES, SINGLE POLE, DOUBLE POLE, AND THREE WAY SHALL BE GENERAL DUTY, FLUSH, TOGGLE SWITCHES; SPECIFICATION GRADE, 20A, 120/277V, WITH SCREW TERMINALS: MANUFACTURERS SHALL BE HUBBELL, BRYANT, PASS & SEYMORE, OR LEVITRON.

    GENERAL DUTY DUPLEX RECEPTACLES SHALL BE 2-POLE, 3-WIRE GROUNDING TYPE, SPECIFICATION GRADE, 20A, 125V, NEMA 5-20R UNLESS OTHERWISE INDICATED. MANUFACTURERS SHALL BE HUBBELL, BRYANT, PASS & SEYMORE, OR LEVITRON.

    GROUND FAULT INTERRUPTER RECEPTACLE SHALL BE GENERAL DUTY, DUPLEX RECEPTACLES, GROUND FAULT CIRCUIT INTERRUPTER, DOWNSTREAM RECEPTACLES ON A SINGLE CIRCUIT, GROUNDING TYPE UL-RATED CLASS A, GROUP 1, 20A, 120V, 60 HZ, WITH SOLID-STATE GROUND FAULT SENDING AND SIGNALING; WITH 5 MILLIAMPERES GROUND-FAULT TRIP LEVEL; IN NEMA 5-15R CONFIGURATION. MANUFACTURERS SHALL BE HUBBELL, BRYANT, PASS & SEYMORE, OR LEVITRON.

    DUPLEX ISOLATED GROUND TYPE RECEPTACLE SHALL BE 2-POLE, 4-WIRE, 15A STRAIGHT BLADE DEVICE WITH SEPARATE ISOLATED GROUND AND BUILDING GROUND CONNECTIONS, IN NEMA 5-15R CONFIGURATION, AS MANUFACTURED BY HUBBELL IG-5362.

    WIRING DEVICE ACCESSORIES INCLUDING ALL WALL PLATES SHALL BE PROVIDED AT EACH DEVICE. WALL PLATES SHALL BE SAME COLOR AS DEVICE AND MANUFACTURED AS A COMPANION TO THE DEVICE.

    ANY ELECTRICAL OUTLETS WITHIN 6 FEET OF A SINK SHALL BE GFI PROTECTED. PROVIDE EITHER INDIVIDUAL GFI DEVICES OR GFI CIRCUIT BREAKERS, UNLESS SPECIFICALLY NOTED ON THE DRAWINGS OR SCHEDULES.

    PROVIDE A 120 VOLT RECEPTACLE WITHIN 25 FEET OF ALL HVAC EQUIPMENT ON THE ROOF.

    ALL EXTERIOR RECEPTACLES AND DEVICES SHALL BE WEATHERPROOF

    ELECTRICAL DEVICES, DISCONNECT SWITCHES, ETC. SHALL BE SUPPORTED INDEPENDENT OF & ISOLATED FROM EQUIP. VIBRATIONS.

37. PROVIDE SAFETY AND DISCONNECT SWITCHES, FUSED OR NON-FUSED AS REQUIRED BY CODE OR SHOWN ON DRAWINGS. SWITCHES SHALL BE SQUARE-D, GENERAL ELECTRICAL, OR EQUAL.

    FURNISH AND INSTALL DUAL ELEMENT CURRENT LIMITING FUSES OF TYPE AND AMPICITY DESIGNED TO PROTECT SYSTEMS AGAINST AVAILABLE SHORT CIRCUIT FAULT CURRENT.

38. COORDINATE ALL EQUIP. CONNECTIONS W/EQUIP. SUPPLIER PRIOR TO ROUGH-IN. PROVIDE ADDITION FUSED DISCONNECT SWITCHES & CONTROLS, IF OVERCURRENT PROTECTION OR CONTROLS ARE NOT INTEGRAL W/UNITS.

    ALL ELECTRICAL EQUIP. ON ROOF OR OUTSIDE THE BLDG. SHALL BE IN NEMA-3R OR NEMA-4 ENCLOSURES.

    ALL EQUIP. SHALL BE FUSE SIZED PER MANUF. RECOMMENDATIONS & U.L. APPROVAL.

    ALL VIBRATING EQUIP. CONN. SHALL BE SEAL TYPE FLEX, 30" MAX.

    STARTERS AND RELATED WIRING SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR. OVERLOAD UNITS SHALL BE INSTALLED AS PER NAME PLATE DATA ON EQUIPMENT, EXCEPT FOR SUCH ITEMS AS ARE NORMALLY SUPPLIES WITH STARTERS INSTALLED (HVAC UNITS, DISHWASHERS ETC.). AT THEIR POINT OF MANUFACTURE. ALL STARTERS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR WILL MOUNT ALL SUCH STARTERS, AS DIRECTED, FURNISHING SUPPORTING STRUCTURES WHERE NECESSARY.

    ALL REMOTE EQUIPMENT ON ROOF OR GROUNDS SHALL HAVE A DISCONNECT SWITCH AT EACH PIECE OF EQUIPMENT. FURNISH FUSED DISCONNECTS AS REQUIRED BY N.E.C.

    FULL LOAD AMPS (FLA) SIZES ARE BASED ON SPECIFIED EQUIP. DATA. CONTRACTOR SHALL VERIFY NAMEPLATE FLA OF EQUIP. SUPPLIED & COORDINATE ACCORDINGLY PER EQUIP. SUPPLIERS RECOMMENDATIONS.

39. CONDUIT SHALL BE STANDARD STEEL, RIGID, IMC OR EMT (THIN WALL) ACCORDING TO LOCAL CODE.

    ALL CONDUIT & J-BOXES SHOWN SHALL BE CONCEALED WHEN POSSIBLE. WHEN NOT POSSIBLE, CONDUIT & J-BOXES MAY BE SURFACE MOUNTED W/PERMISSION OF THE ARCHITECT.

    INSULATE ALL CONDUIT PASSING THROUGH WALK-IN COOLER, FILL AROUND CONDUIT WITH DUCT-IN SEAL WHERE IT PASSES THROUGH COOLER WALL OR CEILING.

    ALL EXTERIOR CONDUIT FOR WIRING SHOULD BE MINIMIZED BY ROUTING IN CEILING SPACE. NO EXTERIOR CONDUIT WILL BE ACCEPTED, UNLESS OTHERWISE NOTED.

    PAINTING OR ELECTRICAL CONDUITS, ETC., IF REQUIRED, WILL BE BY THE GENERAL CONTRACTOR.

40. RACEWAYS SHALL BE SURFACE METAL TYPE OF THE SIZE AND CHANNEL REQUIRED FOR SERVICE, CONSTRUCTED OF GALVANIZED STEEL WITH SNAP-ON COVERS, WITH 1/8" MOUNTING SCREW KNOCKOUTS IN BASE APPROXIMATELY 8" O.C. PROVIDE FITTINGS INDICATED WHICH MATCH AND MATE WITH RACEWAY. FINISH WITH MANUFACTURER'S STANDARD PRIME COATING SUITABLE FOR PAINTING.

41. OUTLET BOXES AND COVERS SHALL BE ONE PIECE, GALVANIZED STEEL JUNCTION BOXES, PULL BOXES AND COVERS SHALL BE GALVANIZED STEEL, CODE GAUGE AND SIZE.

42. ALL FEEDERS & BRANCH CIRCUITS SHALL BE THHN/TWHN (90° C). DESIGN IS BASED ON COPPER CONDUCTORS & ALL BRANCH CIRCUIT WIRING SHALL BE COPPER. ALL WIRING SHALL BE IN CONDUIT OR MC TYPE.

    ALL WIRE AND CABLE SHALL BE NEW AND SHALL BE BROUGHT TO THE SITE IN UNBROKEN PACKAGES.

    ADDITIONAL CONDUCTOR SPECIFICATIONS:

    #10 AND SMALLER - SOLID WITH SINGLE BRAID.

    #8 AND LARGER - STRANDED WITH AT LEAST DOUBLE BRAID.

    MINIMUM WIRE SIZE SHALL BE #12 (#14 MAY BE USED FOR CONTROLS)

    WIRES SHALL BE COLOR CODED IN KEEPING WITH NEC STANDARDS

    PROVIDE IMC FOR FEEDER CONDUIT WHERE INSTALLED ABOVE GRADE. FITTINGS SHALL BE STEEL, THREADED, SET SCREW TYPE W/INSULATED THROATS. FURNISH EMT CONDUIT OP BX OR MC FOR INTERIOR WIRING NOT SUBJECT TO PHYSICAL DAMAGE, MIN. CONDUIT SIZE SHALL BE 1/2 UNLESS SPECIFICALLY NOTED OTHERWISE. CONDUIT SHALL BE CONCEALED WHEREVER POSSIBLE & SHALL RUN PARALLEL OR PERPENDICULAR TO BLDG. WALLS OR CEILING. PCV SCHEDULE 40 CONDUIT MAY BE USED FOR UTILITY FEEDERS WHERE BURIED UNDERGROUND. SEE ADDITIONAL RATES ON ELECTRICAL SERVICE SCHEMATIC.

    A SEPARATE GREEN INSULATED EQUIP. GROUNDED CONDUCTOR (BOND) SHALL BE INSTALLED W/IN EVERY RACEWAY.

    WIRING SHOWN IN THE PANEL SCHEDULE IS THE MINIMUM REQUIRED. RUNS IN EXCESS OF 90'-0" (ONE-WAY) SHALL BE SIZED PER THE N.E.C. MAXIMUM 2% V.D.

43. TEST ELECTRICAL SYSTEM FOR SHORT CIRCUITS & MEGGAR TEST FEEDERS & BRANCH CIRCUIT WIRING. INSURE LOW IMPEDANCE GROUND PATH SYSTEM.

44. FINALLY: IT IS THE INTENT THAT THE FOREGOING WORK SHALL BE COMPLETE IN EVERY RESPECT AND THAT ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK SHALL BE FURNISHED.

    THE LOCATION OF THE RECEPTACLES AND FIXTURES SHOWN ON THE DRAWING IS APPROXIMATE AND THE OWNER SHALL HAVE THE RIGHT TO RELOCATE ANY DEVICES BEFORE THEY ARE INSTALLED WITHOUT ANY ADDITIONAL COSTS.

ELECTRICAL LEGEND

POWER

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE
	QUAD PLEX RECEPTACLE MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE
	DUPLEX ISOLATED GROUND TYPE RECEPTACLE (IG5392CN ORANGE) MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE
	QUAD PLEX ISOLATED GROUND TYPE RECEPTACLE MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE
	DUPLEX GROUND FAULT INTERRUPTING TYPE RECEPTACLE
J	JUNCTION BOX
M	MOTOR CONNECTION
	DISCONNECT SWITCH
	SINGLE SECTION PANELBOARD
	BRANCH CIRCUIT WIRING CONCEALED ABOVE CEILING OR IN PARTITION
	CIRCUIT HOME RUN
	VERIFY NEMA CONFIGURATION REQUIRED WITH EQUIPMENT SUPPLIER

COMMUNICATIONS

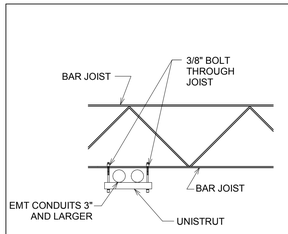
▶	ROUGH-IN FOR TELEPHONE VOICE LINE MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE
▷	ROUGH-IN FOR TELEPHONE DATA LINE OR DATACOM MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE
—T—	EMPTY CONDUIT FOR TELEPHONE CABLES TO BE INSTALLED BY COMMUNICATINS SUB CONTRACTOR
—D—	EMPTY CONDUIT FOR DATA CABLES TO BE INSTALLED BY DATA COM SUB CONTRACTOR

LIGHTING CONTROL

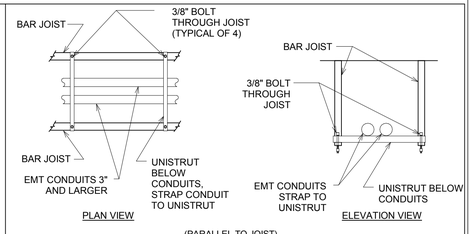
$	WALL MOUNTED TOGGLE SWITCH
$3	3-WAY WALL MOUNTED TOGGLE SWITCH
$D	SLIDING DIMMER SWITCH (LEVITON OR EQUAL)
	PROGRAMMABLE TIME SWITCH (TO CONTROL STOREFRONT LIGHTING CIRCUITS)
O	OCCUPANCY SENSING CONTROL, VERIFY EQUIPMENT SPEC WITH ROOM LAYOUT AND OWNER IN FIELD (LEVITON OR EQUAL)
O	CEILING MOUNTED MOTION SENSING CONTROL. VERIFY LOCATION WITH ROOM LAYOUT AND OWNER IN FIELD LUTRON LOS-CDT-2000-WH
P	PHOTO SENSING CONTROL, VERIFY EQUIPMENT SPEC WITH SPACE LAYOUT AND OWNER IN FIELD

ABBREVIATIONS

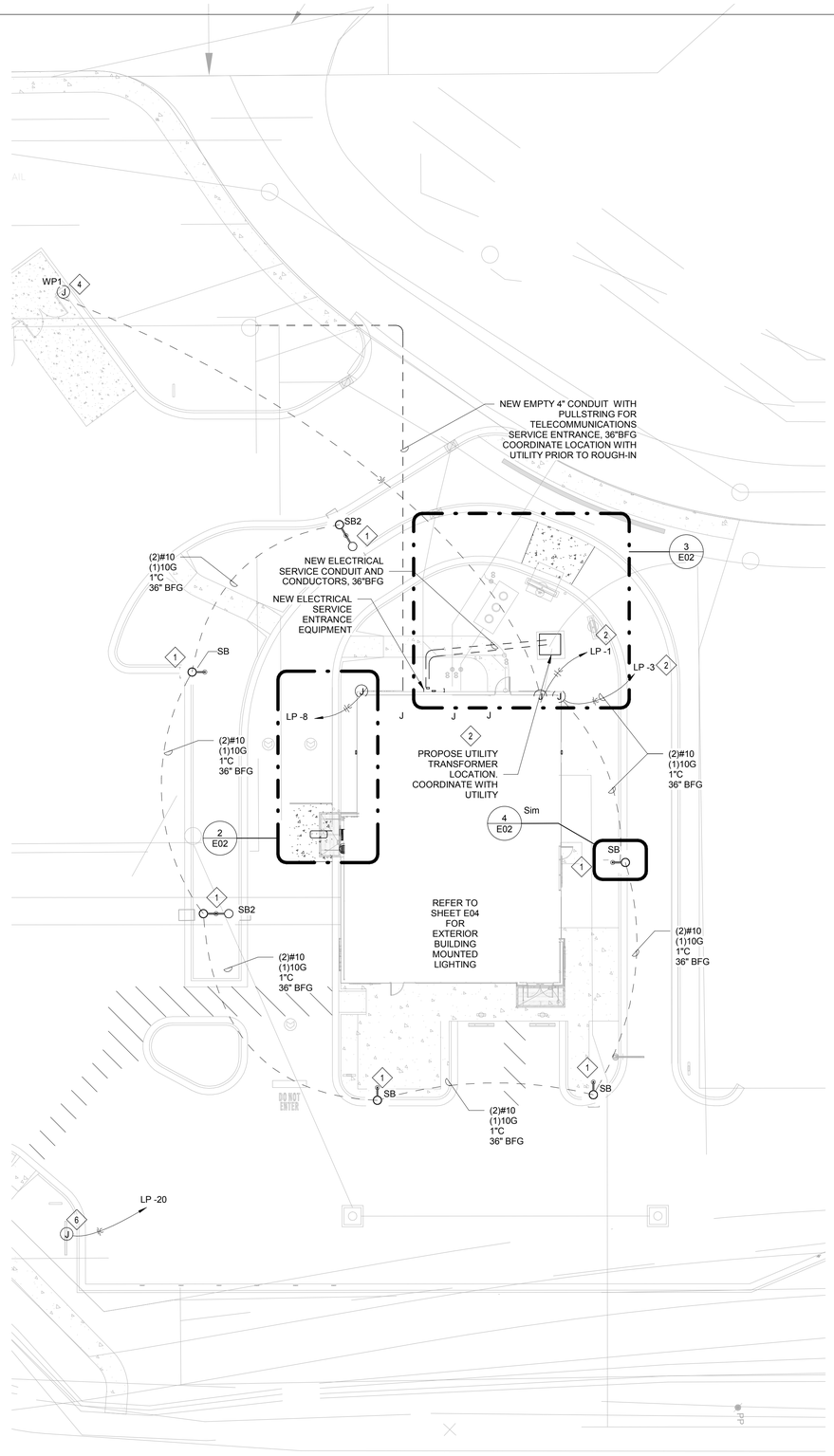
AFF	ABOVE FINISHED FLOOR	J-BOX	JUNCTION BOX
A	AMPERE	KW	KILOWATT
AWG	AMERICAN WIRE GAUGE	NIC	NOT IN CONTRACT
CB	CIRCUIT BREAKER	PNL	PANEL
ELEC	ELECTRICAL	SPECS	SPECIFICATIONS
EXIST	EXISTING	SW	SWITCH
EQUIP	EQUIPMENT	TEL	TELEPHONE
FA	FIRE ALARM	TYP	TYPICAL
FOIC	FURNISHED BY OWNER, INSTALLED BY ELEC. CONTR.	V	VOLT
G.GND	GROUND	W	WIRE
GFI	GROUND FAULT INTERUPTER	WP	WEATHERPROOF
HP	HORSEPOWER	PH	PHASE
IG	ISOLATED GROUND	XFMR	TRANSFORMER
VIF	VERIFY IN FIELD	OC	ON CENTER
DIA	DIAMETER	AFG	ABOVE FINISH GRADE
EC	ELECTRICAL CONTRACTOR	BFG	BELOW FINISH GRADE



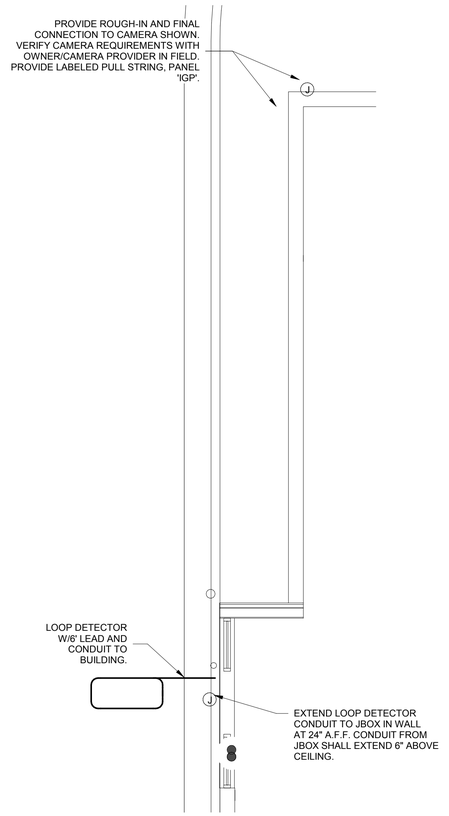
ELEVATION VIEW



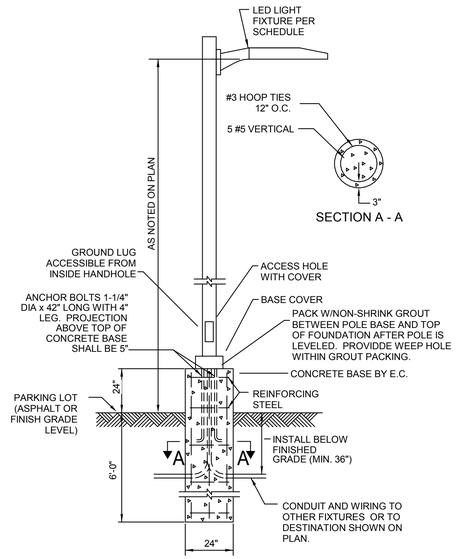
PLAN VIE



1 SHELL ELECTRICAL SITE PLAN
SCALE: 1/16" = 1'-0"

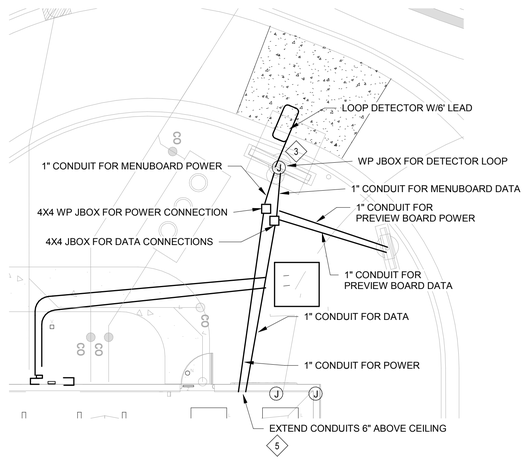


2 ENLARGED SITE PLAN 'A'
SCALE: 1/4" = 1'-0"



LIGHT POLE - BASE DETAIL
(FOR REFERENCE ONLY)

4 LIGHT POLE DETAIL
NOT TO SCALE



3 ENLARGED SITE PLAN 'A'
SCALE: 1/8" = 1'-0"

KEYED NOTES:

1. PROVIDE NEW LIGHT POLE AND NEW LIGHT FIXTURE, SEE SHEET E05 FOR MOUNTING HEIGHT AND LIGHTING FIXTURE TYPES. PROVIDE ROUGH-IN AND ALL CONDUCTORS, CONDUIT, APPURTENANCES, AND CONNECTIONS (SIZED PER N.E.C. REGULATIONS) TO COMPLETE INSTALLATION.
2. CIRCUIT VIA LIGHTING CONTACTOR AND TIME CLOCK/PHOTOCELL FURNISHED WITH CPI PANEL. COORDINATE WITH CPI REPRESENTATIVE.
3. EXTEND LOOP DETECTOR TO 4x4 WP J-BOX AT SPEAKER POST.
4. PROVIDE NEW LIGHT FIXTURE IN TRASH ENCLOSURE, SEE SHEET E05 FOR MOUNTING HEIGHT AND LIGHTING FIXTURE TYPE. COORDINATE INSTALLATION WITH PANERA CM. PROVIDE ROUGH-IN AND ALL CONDUCTORS, CONDUIT, APPURTENANCES, AND CONNECTIONS (SIZED PER N.E.C. REGULATIONS) TO COMPLETE INSTALLATION.
5. TWO (2) INDIVIDUAL 1" CONDUITS WITH PULL STRING. COORDINATE ROUTING OF CONDUITS TO DRIVE THRU BUMP OUT AREA AS REQUIRED. LABEL PULL STRING WITH PANEL AND CIRCUIT NUMBER WHERE REQUIRED.
6. PROVIDE ROUGH-IN AND FINAL CONNECTION TO MONUMENT SIGN. COORDINATE AND VERIFY ALL REQUIREMENTS WITH CIV IL AND SIGN PROVIDER PRIOR TO START OF WORK.

GENERAL NOTES:

1. REFER TO SHEET E03 FOR ADDITIONAL INFORMATION ON NEW ELECTRICAL SERVICE.
2. PROVIDE LABELED PULL STRING FOR ALL EMPTY CONDUITS.

DRIVE-THRU CONDUIT NOTE

FROM JUNCTION BOX INSIDE CAFE (TYPICALLY ABOVE COOLER/FREEZER), (2)-1" CONDUITS TO BE RUN DIRECTLY TO PRIMARY DRIVE-THRU MENU BOARD. FROM THERE, (2)-1" CIRCUITS (POWER & TELECOM) ARE BRANCHED TO (4) LOCATIONS: 1) SPEAKER POST, 2) PREVIEW BOARD, 3) FUTURE MENU @ 2ND DRIVE THRU LANE (IF APPLICABLE) & 4) SPARE (ROUGHED IN TO NEARBY GREEN SPACE W/WATER-PROOF SEAL)

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

CASE Engineering Inc.
796 Menas Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1730
CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:

STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-23305
PROFESSIONAL ENGINEER

Project Title:

PROTOTYPE - NEW CONSTRUCTION

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date

ELECTRICAL SITE PLAN

Project Number: 2406
Drawn By: Author
Issue Date: 07/05/2022
Sheet Number: **E02**

DPM:	DM:	CPM:
DPM	DM	CPM

7/5/2022 3:09:48 PM

PR 2021 03.V1

Branch Panel: MDP

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:** 65K AIC CALCULATED
Supply From: | **Phases:** 3 | **Mains Type:**
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 800 A
Enclosure: NEMA 3R | **MCB Rating:** 800 A

Notes:

CLASS	CKT		CB	TYPE	POLE	A	B	C	POLE	TYPE	CB		CKT	CLASS
Light...	1	PANEL LP	125 A		3	3500	500 VA		3		225 A	PANEL K2	2	Other
--	3	--	--	--	--		3781	0 VA	--	--	--	--	4	--
--	5	--	--	--	--			1040	0 VA	--	--	--	--	6	--
-KIT;...	7	PANEL K1	150 A		3	0 VA	13600		3		400 A	PANEL M	8	-HV...
--	9	--	--	--	--			0 VA	12600	--	--	--	10	--
--	11	--	--	--	--				0 VA	12600	--	--	12	--
-KIT;...	13	PANEL IGP	60 A		3	0 VA	0 VA		3		100 A	PANEL S	14	Other
--	15	--	--	--	--			2000 VA	0 VA	--	--	--	16	--
--	17	--	--	--	--				500 VA	0 VA	--	--	18	--
	19												20	
	21												22	
	23												24	

Total Load: 17600 | 18381 | 14140

Legend:
G = GFCI (5mA), GE = GF Equipment Protection (30mA), ST = Shunt Trip, A = AFCI Breaker, AG = AFCI / GFCI Combo Breaker, L = Lock On Device, R = Red Mark On Breaker, SW = SWD Rated

		DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
LIGHTS	8321 VA	125%	10401 VA		
RECEPTACLE	500 VA	FIRST 10K 100% REMAINING @50%	500 VA	**Total Conn. Load:**	47621
GENERAL POWER	0 VA	100%	0 VA	**Total Est. Demand:**	49951
WATER HEATER	0 VA	100%	0 VA		
MOTOR	1000 VA	100% PLUS 25% OF LARGEST...	1250 VA	**Total Conn. Current:**	132 A
HEATING	0 VA	125%	0 VA	**Total Est. Demand...**	139 A
HVAC	37800 VA	100%	37800 VA		
KITCHEN	0 VA	NEC	0 VA		

Branch Panel: M

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC CALCULATED
Supply From: MDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 400 A
Enclosure: NEMA 1

Notes:

DEMAND	CKT		CB	TYPE	POLE	A	B	C	POLE	TYPE	CB		CKT	DEMAND
-H...	1	RTU-1	50 A		3	4200 VA	4200 VA		3		50 A	RTU-2	2	-H...
--	3	--	--	--	--		4200 VA	4200 VA	--	--	--	--	4	--
--	5	--	--	--	--			4200 VA	4200 VA	--	--	--	6	--
-H...	7	RTU-3	50 A		3	4200 VA			1		20 A	SPARE	8	
--	9	--	--	--	--		4200 VA			1		20 A	SPARE	10	
--	11	--	--	--	--			4200 VA		1		20 A	SPARE	12	
-M...	13	EF-2	20 A		1	500 VA	500 VA		1		20 A	EF-1	14	-M...
	15	SPARE	20 A		1				1		20 A	SPARE	16	
	17	SPARE	20 A		1				1		20 A	SPARE	18	
	19	SPARE	20 A		1				1		20 A	SPARE	20	
	21	SPARE	20 A		1				1		20 A	SPARE	22	
	23	SPARE	20 A		1				1		20 A	SPARE	24	
	25	SPARE	20 A		1				1		20 A	SPARE	26	
	27	SPARE	20 A		1				1		20 A	SPARE	28	
	29	SPARE	20 A		1				1		20 A	SPARE	30	
	31	SPARE	20 A		1				1		20 A	SPARE	32	
	33	SPARE	20 A		1				1		20 A	SPARE	34	
	35	SPARE	20 A		1				1		20 A	SPARE	36	
	37	SPARE	20 A		1				1		20 A	SPARE	38	
	39	SPARE	20 A		1				1		20 A	SPARE	40	
	41	SPARE	20 A		1				1		20 A	SPARE	42	

Total Load: 13600 | 12600 | 12600

Legend:
G = GFCI (5mA), GE = GF Equipment Protection (30mA), ST = Shunt Trip, A = AFCI Breaker, AG = AFCI / GFCI Combo Breaker, L = Lock On Device, R = Red Mark On Breaker, SW = SWD Rated

Branch Panel: IGP

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC CALCULATED
Supply From: MDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 100 A
Enclosure: NEMA 1

Notes:

DEMAND	CKT		CB	TYPE	POLE	A	B	C	POLE	TYPE	CB		CKT	DEMAND
	1	SPARE	20 A		1				1		20 A	SPARE	2	
	3	SPARE	20 A		1				1		20 A	SPARE	4	
	5	SPARE	20 A		1				1		20 A	SPARE	6	
	7	SPARE	20 A		1				1		20 A	SPARE	8	
	9	SPARE	20 A		1				1		20 A	SPARE	10	
	11	SPARE	20 A		1				1		20 A	SPARE	12	
	13	SPARE	20 A		1				1		20 A	SPARE	14	
	15	SPARE	20 A		1				1		20 A	SPARE	16	
	17	SPARE	20 A		1				1		20 A	SPARE	18	
	19	SPARE	20 A		1				1		20 A	SPARE	20	
	21	SPARE	20 A		1	0 VA	1000 VA		1		20 A	DRIVE THRU	22	-P...
	23	SPARE	20 A		1				1		20 A	SPARE	24	
	25	SPARE	20 A		1				1		20 A	SPARE	26	
	27	SPARE	20 A		1		1000 VA		1		20 A	MENU BOARD	28	-P...
	29	SPARE	20 A		1			500 VA	1		20 A	SPARE	30	

Total Load: 0 VA | 2000 | 500

Legend:
G = GFCI (5mA), GE = GF Equipment Protection (30mA), ST = Shunt Trip, A = AFCI Breaker, AG = AFCI / GFCI Combo Breaker, L = Lock On Device, R = Red Mark On Breaker, SW = SWD Rated

Branch Panel: K1

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC CALCULATED
Supply From: MDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1

Notes:

DEMAND	CKT		CB	TYPE	POLE	A	B	C	POLE	TYPE	CB		CKT	DEMAND
	1	DUCT SMOKE DETECTOR	20 A		1	500			1		20 A	SPARE	2	
	3	SPARE	20 A		1				1		20 A	SPARE	4	
	5	SPARE	20 A		1				1		20 A	SPARE	6	
	7	SPARE	20 A		1				1		20 A	SPARE	8	
	9	SPARE	20 A		1				1		20 A	SPARE	10	
	11	SPARE	20 A		1				1		20 A	SPARE	12	
	13	SPARE	20 A		1				1		20 A	SPARE	14	
	15	SPARE	20 A		1				1		20 A	SPARE	16	
	17	SPARE	20 A		1				1		20 A	SPARE	18	
	19	SPARE	20 A		1				1		20 A	SPARE	20	
	21	SPARE	20 A		1				1		20 A	SPARE	22	
	23	SPARE	20 A		1				1		20 A	SPARE	24	
	25	SPARE	20 A		1				1		20 A	SPARE	26	
	27	SPARE	20 A		1				1		20 A	SPARE	28	
	29	SPARE	20 A		1				1		20 A	SPARE	30	
	31	SPARE	20 A		1				1		20 A	SPARE	32	
	33	SPARE	20 A		1				1		20 A	SPARE	34	
	35	SPARE	20 A		1				1		20 A	SPARE	36	
	37	SPARE	20 A		1				1		20 A	SPARE	38	
	39	SPARE	20 A		1				1		20 A	SPARE	40	
	41	SPARE	20 A		1				1		20 A	SPARE	42	

Total Load: 500 VA | 0 VA | 0 VA

Legend:
G = GFCI (5mA), GE = GF Equipment Protection (30mA), ST = Shunt Trip, A = AFCI Breaker, AG = AFCI / GFCI Combo Breaker, L = Lock On Device, R = Red Mark On Breaker, SW = SWD Rated

Branch Panel: K2

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC CALCULATED
Supply From: MDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1

Notes:

DEMAND	CKT		CB	TYPE	POLE	A	B	C	POLE	TYPE	CB		CKT	DEMAND
	1	SPARE	20 A		1				1		20 A	SPARE	2	
	3	SPARE	20 A		1				1		20 A	SPARE	4	
	5	SPARE	20 A		1				1		20 A	SPARE	6	
	7	SPARE	20 A		1				1		20 A	SPARE	8	
	9	SPARE	20 A		1				1		20 A	SPARE	10	
	11	SPARE	20 A		1				1		20 A	SPARE	12	
	13	SPARE	20 A		1				1		20 A	SPARE	14	
	15	SPARE	20 A		1				1		20 A	SPARE	16	
	17	SPARE	20 A		1				1		20 A	SPARE	18	
	19	SPARE	20 A		1				1		20 A	SPARE	20	
	21	SPARE	20 A		1				1		20 A	SPARE	22	
	23	SPARE	20 A		1				1		20 A	SPARE	24	
	25	SPARE	20 A		1				1		20 A	SPARE	26	
	27	SPARE	20 A		1				1		20 A	SPARE	28	
	29	SPARE	20 A		1				1		20 A	SPARE	30	
	31	SPARE	20 A		1				1		20 A	SPARE	32	
	33	SPARE	20 A		1				1		20 A	SPARE	34	
	35	SPARE	20 A		1				1		20 A	SPARE	36	
	37	SPARE	20 A		1				1		20 A	SPARE	38	
	39	SPARE	20 A		1				1		20 A	SPARE	40	
	41	SPARE	20 A		1				1		20 A	SPARE	42	

Total Load: 0 VA | 0 VA | 0 VA

Legend:
G = GFCI (5mA), GE = GF Equipment Protection (30mA), ST = Shunt Trip, A = AFCI Breaker, AG = AFCI / GFCI Combo Breaker, L = Lock On Device, R = Red Mark On Breaker, SW = SWD Rated

Branch Panel: LP

Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC CALCULATED
Supply From: MDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 225 A
Enclosure: NEMA 1

Notes:

DEMAND	CKT		CB	TYPE	POLE	A	B	C	POLE	TYPE	CB		CKT	DEMAND
	1	SPARE	20 A		1				1		20 A	SPARE	2	
	3	SPARE	20 A		1				1		20 A	SPARE	4	
	5	SPARE	20 A		1				1		20 A	SPARE	6	
LTG	7	LTG. SIGNAGE	20 A		1	500 VA	500 VA		1		20 A	DT SIGNAGE	8	-L...
-L...	9	SITE LTG	20 A		2			1281 VA				SPARE	10	
--	11	--	--	--	--					0 VA	40 VA	SITE LTG	12	-L...
	13	BUILDING MTD SIGNAGE	20 A		1	1000 VA						SPARE	14	
	15	BUILDING MTD SIGNAGE	20 A		1			1000 VA	0 VA			SPARE	16	
	17	SPARE	20 A		1							SPARE	18	
	19	SPARE	20 A		1							SPARE	20	
	21	SPARE	20 A		1							SPARE	22	
	23	SPARE	20 A		1							SPARE	24	
	25	SPARE	20 A		1							SPARE	26	
-P...	27	CPI TIME CLOCK	20 A		1			500 VA				SPARE	28	
	29	SPARE	20 A		1							SPARE	30	
	31	SPARE	20 A		1							SPARE	32	
	33	SPARE	20 A		1							SPARE	34	
-P...	35	LTG. SIGNAGE	20 A		1					1000 VA		SPARE	36	
LTG	37	LTG. SIGNAGE	20 A		1	1500 VA						SPARE	38	
LTG	39	LTG. SIGNAGE	20 A		1			1000 VA				SPARE	40	
	41											SPARE	42	

Total Load: 3500 | 3781 | 1040

Legend:
G = GFCI (5mA), GE = GF Equipment Protection (30mA), ST = Shunt Trip, A = AFCI Breaker, AG = AFCI / GFCI Combo Breaker, L = Lock On Device, R = Red Mark On Breaker, SW = SWD Rated

Branch Panel: S

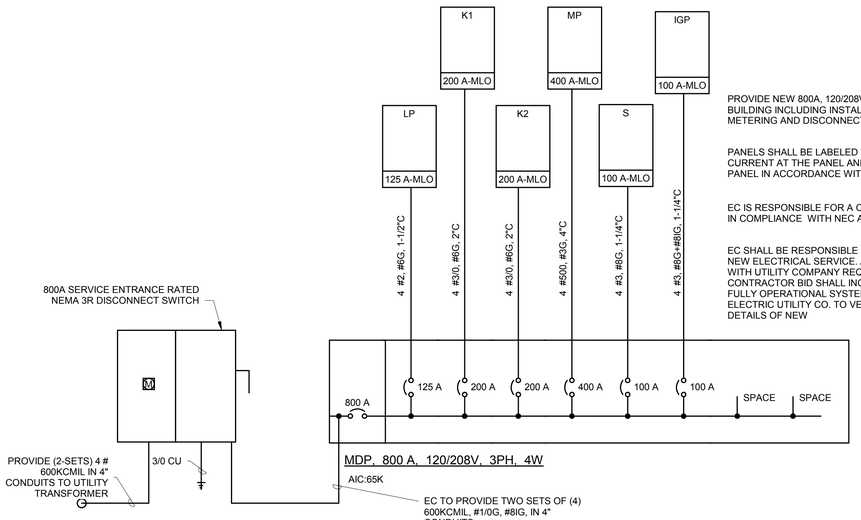
Location: | **Volts:** 120/208 Wye | **A.I.C. Rating:** 22K AIC CALCULATED
Supply From: MDP | **Phases:** 3 | **Mains Type:** MLO
Mounting: SURFACE | **Wires:** 4 | **Mains Rating:** 100 A
Enclosure: NEMA 1

Notes:

DEMAND	CKT		CB	TYPE	POLE	A	B	C	POLE	TYPE	CB		CKT	DEMAND
	1	SPARE	20 A		1				1		20 A	SPARE	2	
	3	SPARE	20 A		1				1		20 A	SPARE	4	
	5	SPARE	20 A		1				1		20 A	SPARE	6	
	7	SPARE	20 A		1				1		20 A	SPARE	8	
	9	SPARE	20 A		1				1		20 A	SPARE	10	
	11	SPARE	20 A		1				1		20 A	SPARE	12	
	13	SPARE	20 A		1				1		20 A	SPARE	14	
	15	SPARE	20 A		1				1		20 A	SPARE	16	
	17	SPARE	20 A		1				1		20 A	SPARE	18	
	19	SPARE	20 A		1				1		20 A	SPARE	20	
	21	SPARE	20 A		1				1		20 A	SPARE	22	
	23	SPARE	20 A		1				1		20 A	SPARE	24	
	25	SPARE	20 A		1				1		20 A	SPARE	26	
	27	SPARE	20 A		1				1		20 A	SPARE	28	
	29	SPARE	20 A		1				1		20 A	SPARE	30	

Total Load: 0 VA | 0 VA | 0 VA

Legend:
G = GFCI (5mA), GE = GF Equipment Protection (30mA), ST = Shunt Trip, A = AFCI Breaker, AG = AFCI / GFCI Combo Breaker, L = Lock On Device, R = Red Mark On Breaker, SW = SWD Rated



3 ONE-LINE DIAGRAM
NTS

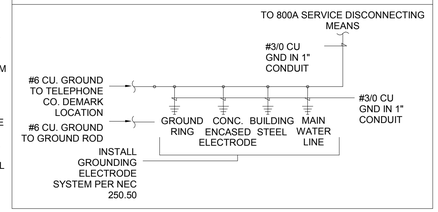
PROVIDE NEW 800A, 120/208V-3PH ELECTRICAL SERVICE TO BUILDING INCLUDING INSTALLATION OF ANY REQUIRED CT'S AND METERING AND DISCONNECT AT REAR OF SPACE.

PANELS SHALL BE LABELED TO IDENTIFY THE AVAILABLE FAULT CURRENT AT THE PANEL AND THE ARC FLASH HAZARD AT THE PANEL IN ACCORDANCE WITH APPLICABLE NEC REQUIREMENTS.

EC IS RESPONSIBLE FOR A COMPLETE AND OPERATIONAL SYSTEM IN COMPLIANCE WITH NEC AND ALL STATE AND LOCAL CODES

EC SHALL BE RESPONSIBLE FOR ALL WORK RELATED TO THE NEW ELECTRICAL SERVICE. ALL WORK SHALL BE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS AND LOCAL CODE. CONTRACTOR BID SHALL INCLUDE ALL WORK NECESSARY FOR A FULLY OPERATIONAL SYSTEM. EC SHALL CONTACT THE ELECTRIC UTILITY CO. TO VERIFY AVAILABLE FAULT CURRENT, ALL DETAILS OF NEW

GROUNDING DETAIL



GENERAL NOTES

1. EC TO PROVIDE HANDLE TIE ON ALL MULTIWIRE BRANCH CIRCUITS PER NEC 210.4(B).
2. ALL SPARE CIRCUIT BREAKERS AND DISCONNECT SWITCHES SHALL BE LEFT IN THE OFF POSITION.
3. EC SHALL VERIFY THE VOLTAGE AND AMPERAGE REQUIREMENTS OFALL EQUIPMENT DELIVERED TO THE SITE PRIOR TO CONNECTION. EC SHALL NOTIFY OWNER OF ANY DIFFERENCE.

Bakery-Cafe:
0620

SYSTEM: NEXT GEN
Project Team:

CASE Engineering Inc.
796 Merus Court
St. Louis, MO 63026
T 636.349.1600
F 636.349.1730
CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:

7/5/2022

Project Title:

PROTOTYPE - NEW CONSTRUCTION

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

No.	Description	Date

ELECTRICAL DETAILS AND SCHEDULES

Project Number: 2406
Drawn By: Author
Issue Date: **07/05/2022**
Sheet Number: **E03**

DPM:	DM:	CPM:
DC	CH	JP

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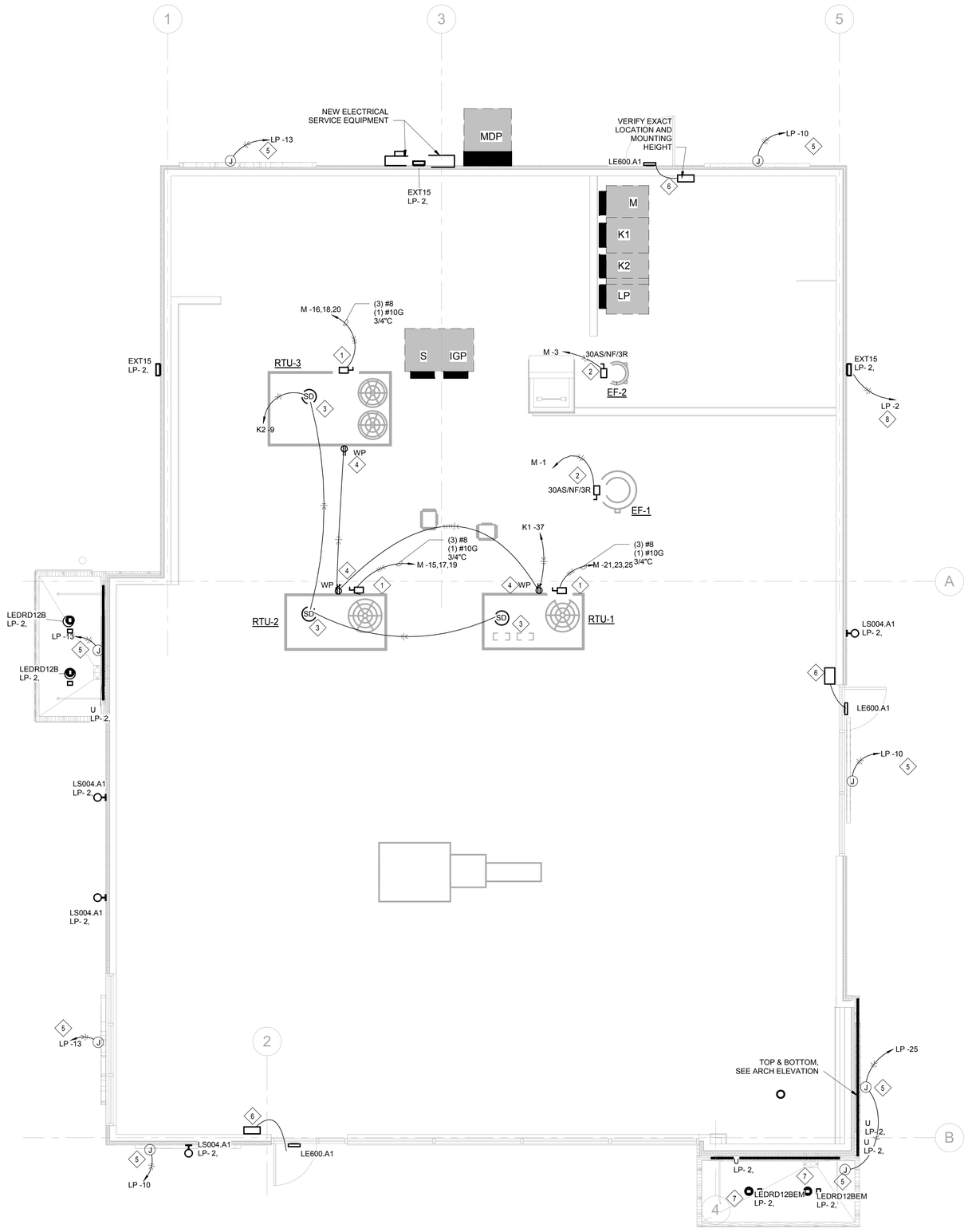
PR2020-Q2 V1



1 ELECTRICAL SHELL FLOOR PLAN
SCALE: 1/4" = 1'-0"

KEYED NOTES:

1. DISCONNECT AND CONVENIENCE RECEPTACLE PROVIDED WITH UNIT. PROVIDE INUSE COVER FOR CONVENIENCE RECEPTACLE AND CIRCUIT AS INDICATED.
2. PROVIDE DISCONNECT AND CIRCUIT AS INDICATED. REFER TO 5/M02 FOR CONDUIT ROUTING.
3. DUCT SMOKE DETECTOR FURNISHED AND INSTALLED BY MC, CONNECTED BY EC.
4. PROVIDE GFIC PROTECTED RECEPTACLE AND INUSE COVER FOR CONVENIENCE RECEPTACLE AND CIRCUIT AS INDICATED.
5. PROVIDE 120V, 20A OUTLET WITH DISCONNECTING MEANS WITHIN SIGHT OF SIGN FOR BUILDING MOUNTED SIGNAGE. COORDINATE OUTLET ROUGHIN LOCATION WITH ARCHITECTURAL ELEVATIONS. CIRCUIT VIA LIGHTING CONTACTOR AND TIME CLOCK/PHOTOCELL PROVIDED BY EC.
6. PROVIDE EXTERIOR EMERGENCY EGRESS LIGHT WITH EMERGENCY BATTERY BACK UP UNIT TO INSURE CONTINUED ILLUMINATION FOR AT LEAST 90 MINUTES IN CASE OF PRIMARY POWER LOSS. EXTEND UNSWITCHED CIRCUIT LEG TO BATTERY. VERIFY EXACT MOUNTING LOCATION OF EXTERIOR EGRESS LIGHT AND REMOTE BATTERY PRIOR TO START OF WORK.
7. PROVIDE UNSWITCHED CIRCUIT TO EMERGENCY BATTERY AND PROVIDE SWITCHED CIRCUIT TO FIXTURE.
8. CIRCUIT VIA LIGHTING CONTACTOR AND TIME CLOCK/PHOTOCELL PROVIDED BY EC.

Bakery-Cafe:

2406

SYSTEM: G4 (ARIA)

Project Team:

CASE Engineering Inc.
796 Menas Court
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T 636.349.1600
F 636.349.1730
CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:

STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-23303
PROFESSIONAL ENGINEER

Project Title:

PROTOTYPE - NEW CONSTRUCTION

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date

ELECTRICAL SHELL PLAN

Project Number: 2406
Drawn By: Author
Issue Date: 07/05/2022
Sheet Number: **E04**

DPM:	DM:	CPM:
DPM	DM	CPM

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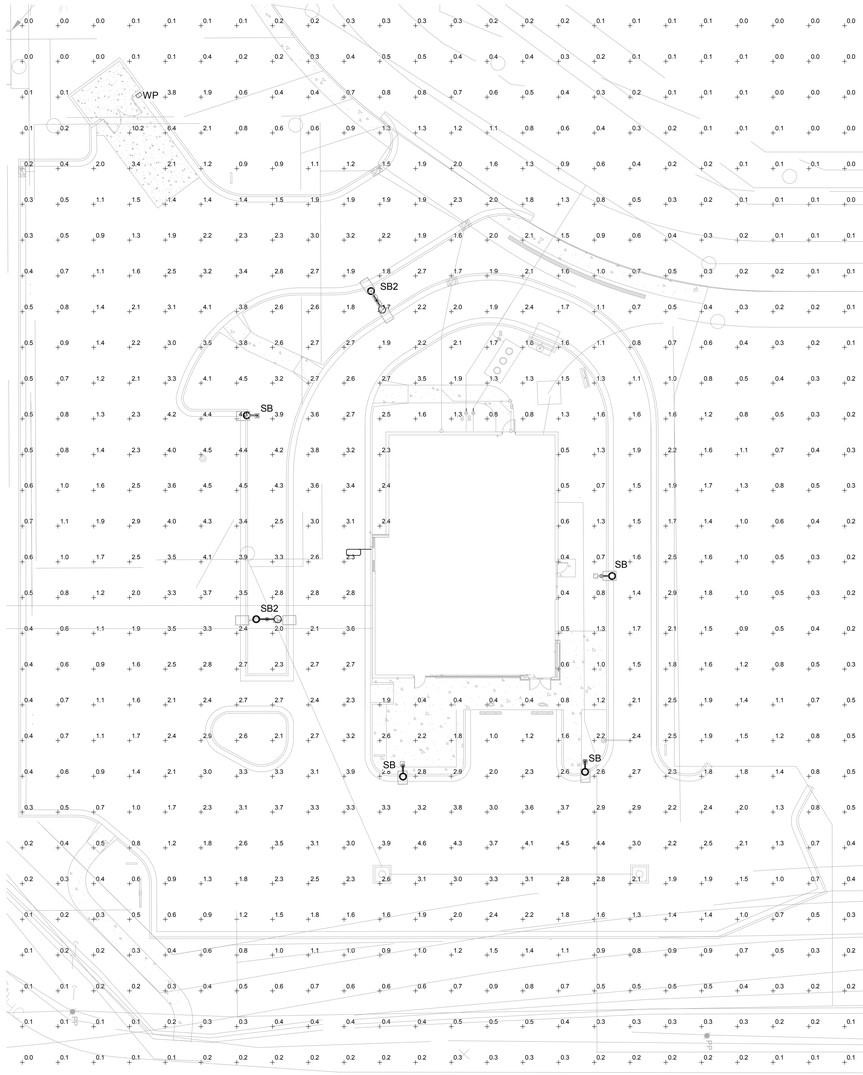
PR 2021 Q3.V1

Schedule

Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Plot
	SB2		2	KIM LIGHTING	2SB-ALT3-P35-120L-4K-120-DB-FGL-4-RFD-ON-KRS20-4120-DB-BC4	TWIN HEAD (180°) POLE MOUNTED LED AREA LIGHT WITH FLAT GLASS AND TYPE III DISTRIBUTION MOUNTED ON 20'X4" ROUND STEEL POLE WITH 2' HIGH CONCRETE BASE.	2	12586	1	286	Max: 10639cd
	SB		4	KIM LIGHTING	ALT3P35-120L4K-FGL	POLE MOUNTED LED AREA LIGHT WITH FLAT GLASS AND TYPE III DISTRIBUTION MOUNTED ON 20'X4" ROUND STEEL POLE WITH 2' HIGH CONCRETE BASE.	1	12586	1	143	Max: 10639cd
	WP		1	Solais Lighting Inc dba EnergyLite	GL1-4-4S-740-STD	GL1-4-4S-740-STD	1	4243	1	35.85	Max: 2819cd

FIXTURES MOUNTED AT 22' AFG



1 SHELL ELECTRICAL SITE PHOTOMETRIC PLAN
SCALE: 1" = 20'-0"

7/5/2022 3:09:50 PM

PR2020-Q2 V1

Bakery-Cafe:

0620

SYSTEM: NEXT GEN

Project Team:

CASE
Engineering Inc.
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Professional Seal:

STATE OF MISSOURI
DARRELL R. CASE
NUMBER PE-22303
PROFESSIONAL ENGINEER
7/5/2022

Project Title:

PROTOTYPE - NEW CONSTRUCTION

Bakery Cafe#2406
1410 NE DOUGLAS ST
LEES SUMMIT, MO 64086

Panera BREAD

No.	Description	Date

SITE PHOTOMETRIC PLAN

Project Number: 2406
Drawn By: Author
Issue Date: **07/05/2022**
Sheet Number: **E05**

DPM:	DM:	CPM:
DC	CH	JP