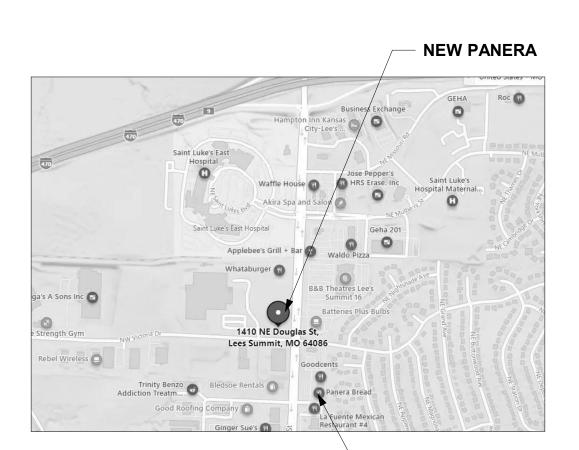


# PROTOTYPE - NEW CONSTRUCTION -TENANT IMPROVEMENT

PANERA BREAD BAKERY-CAFE#2406 1410 NE DOUGLAS ST LEES SUMMIT, MO 64086

# SITE MAP:



REVISION ISSUE LOG - TI

DESCRIPTION

PERMIT SET - T

REVISION # ISSUE DATE

7/18/2022

**EXISTING PANERA** 

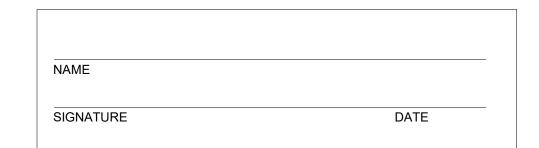
# CODE INFORMATION:

**APPLICABLE CODES & REGULATIONS:** 2018 INTERNATIONAL FIRE CODE MECHANICAL CODE: 2018 INTERNATIONAL MECHANICAL CODE B. CONSTRUCTION CLASSIFICATION: C. AUTOMATIC FIRE SUPRESSION SYSTEM INSTALLED: NOT REQUIRED AREA BREAKDOWN: TOTAL GROSS PANERA SUITE: 3,482 SQFT 527 SQFT PATIO: TRAVEL DISTANCE: ALLOWED TRAVEL DISTANCE: 200 FT 66'-0" FT MAX ACTUAL TRAVEL DISTANCE:

# PROTOTYPE INFORMATION:

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

# LANDLORD APPROVAL:



# AFFECTED SHEETS REMARKS

**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 CONSTRUCTION PROJECT MANAGER: SUSUN SABLAN 6200 OAK TREE BLVD., SUITE 250 INDEPENDENCE, OH 44131 PHONE: 530.520.1618 SSABLAN@FLYNNRG.COM PAN KANSAS, LLC INDEPENDENCE, OH 44131 CONTACT: PAT EULBERG LANDLORD: STAR AQUISITIONS & DEVELOPMENT, LLC CONTACT: TIMOTHY HARRIS

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: MIKE WEISENBORN 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 PHONE: 816.969.1240 MIKE.WEISENBORN@CITYOFLS.NET

# SHEET INDEX - TI

CASEWORK SECTIONS & DETAILS

FINISH SCHEDULES, LEGENDS, & NOTES

DOOR ELEVATIONS, SCHEDULES, & DETAILS

FURNITURE & WOOD/STEEL SCHEDULES

ARTWORK & SIGNAGE SCHEDULES, DETAIL & NOTES

FLOORING DETAILS

EQUIPMENT PLAN

FURNITURE PLAN

EQUIPMENT SCHEDULES

ARTWORK & GRAPHICS PLAN

ARCH-SCHEDULES & NOTES

ARCH-SPECIALTY

Sheet		Current
Number	Sheet Name	Revision
GENERAL		
G001.1	COVER SHEET	1
G012.1	GENERAL NOTES, SYMBOLS, LEGENDS & ABBREVIATIONS	1
G022.1	ACCESSIBILITY GUIDELINES	1
G022.2	INTERIOR ACCESSIBILITY GUIDELINES 2017 ANSI 117.1	1
G132	LIFE SAFETY PLAN	1
ARCHITEC	CTURAL PLANS	
A103	FLOOR PLAN - DIMENSIONED AND KEYED NOTES	1
A110	PARTITION TYPES	1
A120	WALL FINISH PLAN	1
A121	FLOOR FINISH PLAN	1
A130	REFLECTED CEILING PLAN	1
A134	LIGHTING SCHEDULE, DETAILS, & SECTIONS	1
A135	CEILING DETAILS	1
ARCH-LAR	RGE SCALE VIEWS	
A400	ENLARGED RESTROOM PLANS & INTERIOR ELEVATIONS	1
A410	INTERIOR ELEVATIONS FRONT OF HOUSE	1
A420	INTERIOR ELEVATIONS BACK OF HOUSE	1
ARCH-DET	ΓAILS	
	INITEDIOD DETAIL O	
A500	INTERIOR DETAILS	1
	INTERIOR DETAILS INTERIOR DETAILS	1

Sheet Count: 55

# SHEET INDEX - TI

Sheet		Current
Number	Sheet Name	Revision
MECHANIC	CAL	
M101	MECHANICAL PLAN & NOTES	1
M102	MECHANICAL SCHEDULES	1
M301	VENTILATION DETAILS & SCHEDULES	1
M302	VENTILATION DETAILS & SCHEDULES	1
M401	MECHANICAL DETAILS	1
M501	MEP ROOF PLAN	1

# SANITARY PLUMBING ROUGH-IN PLAN DOMESTIC WATER ROUGH-IN PLAN & NOTES SANITARY PLUMBING PLAN DOMESTIC WATER & GAS PLUMBING PLAI PLUMBING DWV RISER PLUMBING SUPPLY RISER GAS RISER PLUMBING DETAILS PLUMBING DETAILS PLUMBING SCHEDULES PLUMBING SPECIFICATIONS

ELECTRI	CAL	
E201	ELECTRICAL ROUGH-IN PLAN	1
E202	ELECTRICAL ROUGH-IN SCHEDULES	1
E203	ELECTRICAL POWER PLAN	1
E301	ELECTRICAL LIGHTING PLAN	1
E401	SPECIAL SYSTEMS PLAN	1
E403	POS DIAGRAM AND NOTES	1
E501	PANEL SCHEDULES AND ONE-LINE DIAGRAM	1
E502	ELECTRICAL SPECIFICATIONS	1
E601	ELEVATIONS	1
ES101	ELECTRICAL SITE PLAN	1

Bakery-Cafe:

22169

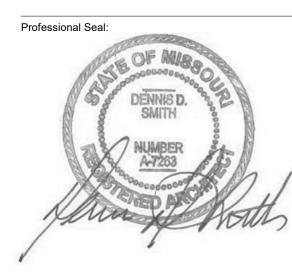
SYSTEM: G4 (ARIA)



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Description	Date
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# **COVER SHEET**

Project Numbe	r:	Sheet Number:
22169		
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Issue Date:		
07/05/2022		
DPM:	DM:	CPM:
DPM	DM	CPM

AFF

ACT

ALUM

ARCH

BLKG

BLDG BD

CFCI

CLG

CLR

CONC

CORR

DIA

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ELEV

**EQUIP** 

EXP

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HCP

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HC

HOR

INCL

INSUL

INT

HR

GYP BD

FLUOR

FIN FLF

EJ

EQ

CONT

CT

BUILDING

CENTERLINE

CERAMIC TILE

**CONTROL JOINT** 

DIAMETER

EACH

**EQUAL** 

DIMENSION(S)

ELECTRIC(AL)

**ELEVATION** 

**EXPANSION** 

**EXTERIOR** 

FINISH(ED)

FLOOR

GAUGE

FLOOR DRAIN

**HANDICAPPED** 

**HOLLOW CORE** 

**HOLLOW METAL** 

HORIZONTAL

INCLUDE(D)

INTERIOR

LAMINATE

**JOINT** 

**INSULATION** 

**HARDWARE** 

HEIGHT

HOUR

**EXPANSION JOINT** 

**EXISTING** 

FIRE EXTINGUISHER

FINISHED FLOOR

FIRE EXTINGUISHER CABINET

**FLUORESCENT** 

FIRE-RETARDANT TREATED

GYPSUM BOARD

CEILING

CLEAR

CONTRACTOR FURNISHED

CONTRACTOR INSTALLED

CONCRETE

CORRIDOR

**EQUIPMENT** 

CONTINUE, CONTINUOUS

BOARD

**NOT IN CONTRACT** NTS NOT TO SCALE

OWNER FURNISHED, OFCI CONTRACTOR INSTALLED OWNER FURNISHED. OWNER INSTALLED OC ON CENTER OPPOSITE HAND OPG OPENING **OPPOSITE** ORIENTED STRAND BOARD OSB

PLAM PLASTIC LAMINATE PT PAINT(ED) PTN **PARTITION** PLYWOOD PWD QTY

QUANTITY REFERENCE REF REINF REQ REQUIRED REV REVISION **RESILIENT BASE** 

SOUND ATTENUATION BATTS SC SOLID CORE SF SQUARE FOOT (FEET) SIM SIMILAR SLNT SEALANT SPEC SPECIFICATION SQUARE SQ FT SQUARE FOOT (FEET) STL **STEEL** SUSP SUSPEND(ED

SYM SYMMETRICAL TELEPHONE TEL **TEMP TEMPERED** TOS TOP OF STRUCTURE TOW TOP OF WALL TYP **TYPICAL** 

UNDERWRITERS LABORATORIES, INC. **UNLESS NOTED OTHERWISE** UNO VERTICAL **VERT** 

WALL COVERING

WITH

WD

WITHOUT

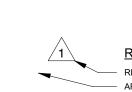
WOOD

REINFORCE(D)

— NEW DOOR AND TAG (101) -

> NEW PARTITIONS (REF PARTITION **NEW PARTITIONS W/ R-11 SOUND BATT** COOLER / FREEZER WALL

1/2 HEIGHT WALL (HEIGHT VARIES)



WINDOW NUMBER SYMBOL

# SYMBOLS LEGEND

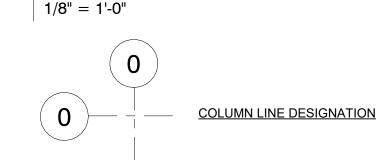


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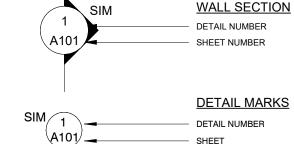
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**NORTH ARROW** 

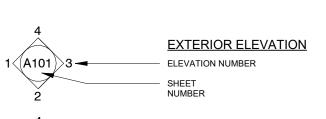
View Name PLAN, DETAIL OR ELEVATION TITLE

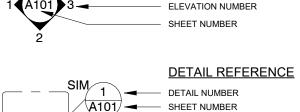


**BUILDING SECTION** DETAIL NUMBER SHEET NUMBER



**ROOM NAME / NUMBER** Room name ROOM NAME 101 ROOM







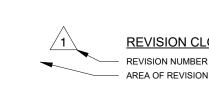


REMAIN OOR TO REMAIN AND

INTERIOR ELEVATION



EXISTING PARTITIONS **EXISTING PARTITIONS TO BE REMOVED** 



REVISION CLOUD AND TAG REVISION NUMBER

**WALL PARTITION TYPE** 

KEYED NOTE

# **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
- 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.
- 1 CLEAN UP: REMOVE ALL DEBRIS, PACKING MATERIAL, DEMOLISHED 0 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.
- 1 BUILDING STANDARDS: ALL MATERIAL, HARDWARE, FIXTURES, AND 1 FINISHES TO BE BUILDING STANDARD UNLESS NOTED OTHERWISE. BUILDING STANDARD INFORMATION IS AVAILABLE THROUGH THE TENANT'S REPRESENTATIVES, AND TYPICALLY MATCHES EXISTING INTERIOR CONSTRUCTION.
- 1 SITE VISIT; ALL GENERAL CONTRACTORS & SUBCONTRACTORS 2 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
- 1 CONTRACTOR TO PROVIDE 2X FIRE RESISTANT BLOCKING AS

3 NECESSARY BEHIND ALL WALL MOUNTED INSTALLATIONS.

- 1 CONTRACTOR TO PROVIDE BUILDING CONSTRUCTION 4 REPRESENTATIVE WITH COPIES OF DELIVERY, AND CONSTRUCTION SCHEDULES. CONTRACTOR TO COORDINATE ALL SCHEDULES WITH BUILDINGS CONSTRUCTION REPRESENTATIVE.
- 1 IF EXTERIOR WINDOWS ARE BEING ENCLOSED CONTRACTOR IS TO 5 CLEAN ALL WINDOWS, SHADES, CAVITY AREA FROM CONSTRUCTION DUST AND DEBRIS PRIOR TO ENCLOSING EXTERIOR WINDOWS.
- 1 CUTTING & PATCHING: CONTRACTOR TO PATCH, REPAIR, & 6 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.
- 1 USE 3M NON-INTUMESCENT FIRE STOPPING AS FOLLOWS: 7 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.
- 1 ALL NEW CONCRETE FLOORING SECTIONS TO BE DOWELED AND 8 PINNED TO EXISTING CONCRETE SLAB
- 1 ALL ROOF WORK TO BE COMPLETED BY LANDLORD'S APPROVED 9 ROOFING CONTRACTOR
- 2 FIRE PROTECTION: GENERAL CONTRACTOR IS RESPONSIBLE TO 0 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.
- 2 CONTRACTOR TO REQUEST FROM LANDLORD A COPY OF ALL 1 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.
- 2 CONTRACTOR TO MAINTAIN CLEAR ACCESS TO ALL DRIVE & 2 ENTRANCES WHILE ON SITE.
- 2 CONTRACTOR TO STORE & INSTALL AS NECESSARY ANY 3 OWNER-PROVIDED EQUIPMENT. REFER TO DOCUMENTS FOR FURTHER DETAIL.
- 2 NOT USED

# **GENERAL CONDITIONS...**

- 2 EXISTING CONDITIONS DOCUMENTS PROVIDED FOR REFERENCE 5 ONLY. ANY WORK INDICATED HAS ALREADY BEEN COMPLETED.
- 2 ALL AREAS MUST BE COMPLETELY CLEAN & CLEAR OF ANY
- 6 CONSTRUCTION MATERIALS @ A MINIMUM OF (2) HOURS BEFORE THE CAFE OPENS EACH DAY.

2 WOOD DOORS: REFER TO DOCUMENTS FOR FURTHER DETAIL.

- METAL DOORS: REFER TO DOCUMENTS FOR FURTHER DETAIL

2 FRAMES: REFER TO DOCUMENTS FOR FURTHER DETAIL.

- 3 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
- 3 DRYWALL: REFER TO PARTITION DETAILS FOR FURTHER 1 INFORMATION.

REPRESENTATIVE.

- 3 RESILIENT BASE: PROVIDE 6" HIGH RUBBER COVE BASE IN 100" 2 ROLLS. REFER TO DOCUMENTS FOR FURTHER DETAILS.
- 3 PAINT: PROVIDE 2 COATS OF ALKYD SEMI-GLOSS ENAMEL FINISH 3 COLOR ON METAL DOORS & FRAMES AS INDICATED ON DRAWINGS.
- 3 PAINT: PROVIDE 2 COATS OF PREMIUM BENJAMIN MOORE (NO 4 SUBSTITUTIONS ALLOWED) EGGSHELL FINISH COLOR ON ALL NEW SURFACES AS INDICATED ON DRAWINGS. PRIME NEW/EXISTING SURFACES & PATCH AS REQUIRED.
- 3 SOUND BATT INSULATION (WALLS ONLY): SHALL BE UNFACED 5 GLASS FIBER ACOUSTICAL INSULATION COMPLYING WITH ASTM C665, TYPE 1, SIZED AS INDICATED IN DETAILS. MAXIMUM FLAME SPREAD: 10, STC ABOVE 55.
- 3 SOUND ATTENUATION (ABOVE CEILINGS) SHALL BE 3" UNFACED, 6 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.
- 3 ALL FLOORING PRODUCTS TO BE INSTALLED IN ACCORDANCE WITH 7 MANUFACTURER RECOMMENDATIONS & SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR ALL FLOOR LEVELING THAT MAY BE REQUIRED IN ORDER TO COMPLY WITH PROPER INSTALLATION PROCEDURE.
- 3 ACOUSTICAL CEILING: SHALL BE AS INDICATED OR AS CALLED FOR 8 IN NOTES, INSTALLATION TO BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND SPECIFICATIONS.
- 3 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.
- 4 CONTRACTOR SHALL PROVIDE MASTER KEY LOCK BOX IN 0 ACCORDANCE TO CITY REGULATION FOR APPROVAL BY LOCAL FIRE DEPARTMENT.
- 4 CONTRACTOR TO PROVIDE SUITE NUMBERS AT EXTERIOR ENTRIES 1 AS REQUIRED BY CITY REGULATIONS AND APPROVED BY LOCAL FIRE DEPARTMENT AND LANDLORD. CONTRACTOR TO COORDINATE SIGNAGE TYPE AND LOCATION WITH ARCHITECT.
- 4 HVAC: REFERENCE MECH. DOCUMENTS FOR INFORMATION AND 2 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.
- 4 PROVIDE MATERIAL & INSTALLATION ALLOWANCE FOR TWO (2) 3 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.
- 4 PLUMBING: FIXTURES LOCATED ON ARCHITECTURAL SHEETS FOR 4 GENERAL REFERENCE ONLY. REFER TO PLUMBING SHEETS FOR ROUGH-IN DETAILS.
- 4 FIRE PROTECTION: GENERAL CONTRACTOR IS RESPONSIBLE TO 5 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.
- 4 ALL ELECTRICAL RECEPTACLES TO BE MOUNTED AT MIN. 15" A.F.F. 6 U.N.O. TO CENTERLINE. ALL LIGHT SWITCHES AND THERMOSTATS TO BE MOUNTED AT 48" A.F.F. TO CENTERLINE.
- 4 ELECTRICAL, DATA, AND COMMUNICATIONS OUTLETS ARE 7 PROVIDED FOR REFERENCE ONLY. REFERENCE ELEC. DOCUMENTS FOR ADDITIONAL ELECTRICAL INFORMATION ON SWITCHING, ADDITIONAL OUTLETS, EQUIPMENT ROOM REQUIREMENTS, ETC.
- 4 IF ANY DISCREPANCY EXISTS IN THE PLANS AND SPECIFICATIONS, 8 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:

Project Team:

SYSTEM: G4 (ARIA)

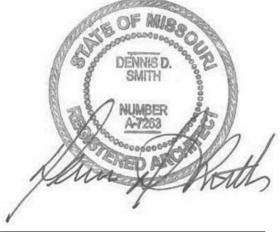


LK ARCHITECTURE, INC. **345 RIVERVIEW** WICHITA, KS 67203 T 316.268.0230

F 316.268.0205

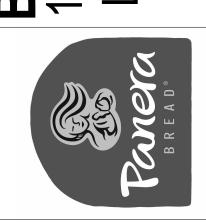
Architecture Engineering Planning Interior Design Landscape Architecture

Professional Seal:



Project Title:

# 080 900 0 <u>``</u> **~** —

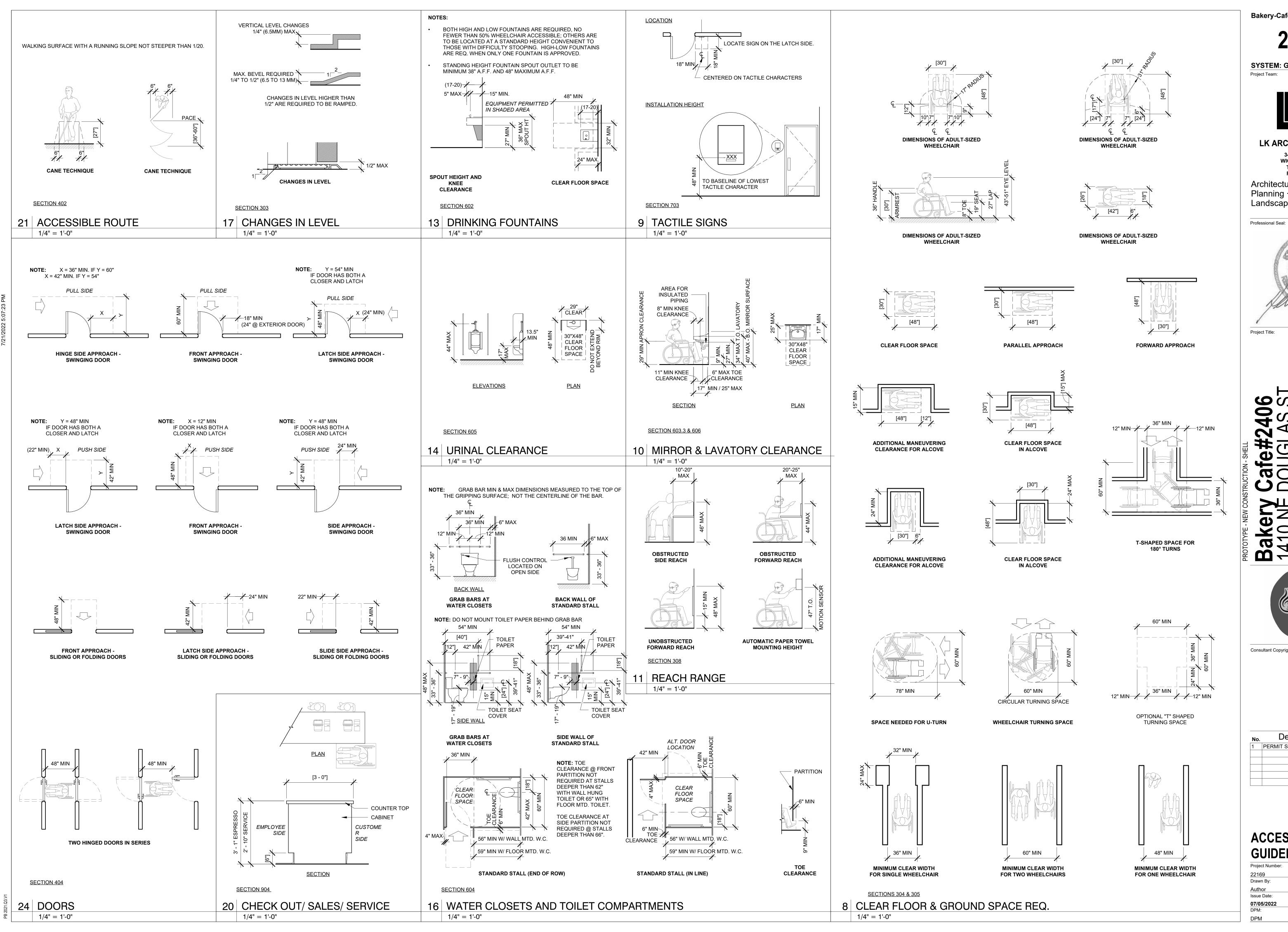


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Description Date PERMIT SET - TI 7/18/2022

**GENERAL NOTES,** SYMBOLS, LEGENDS **& ABBREVIATIONS** 

Project Number: Issue Date 07/05/2022 DPM:



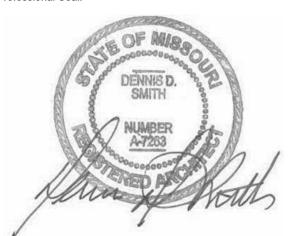
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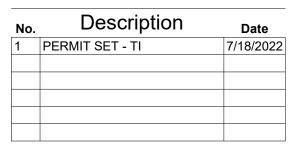
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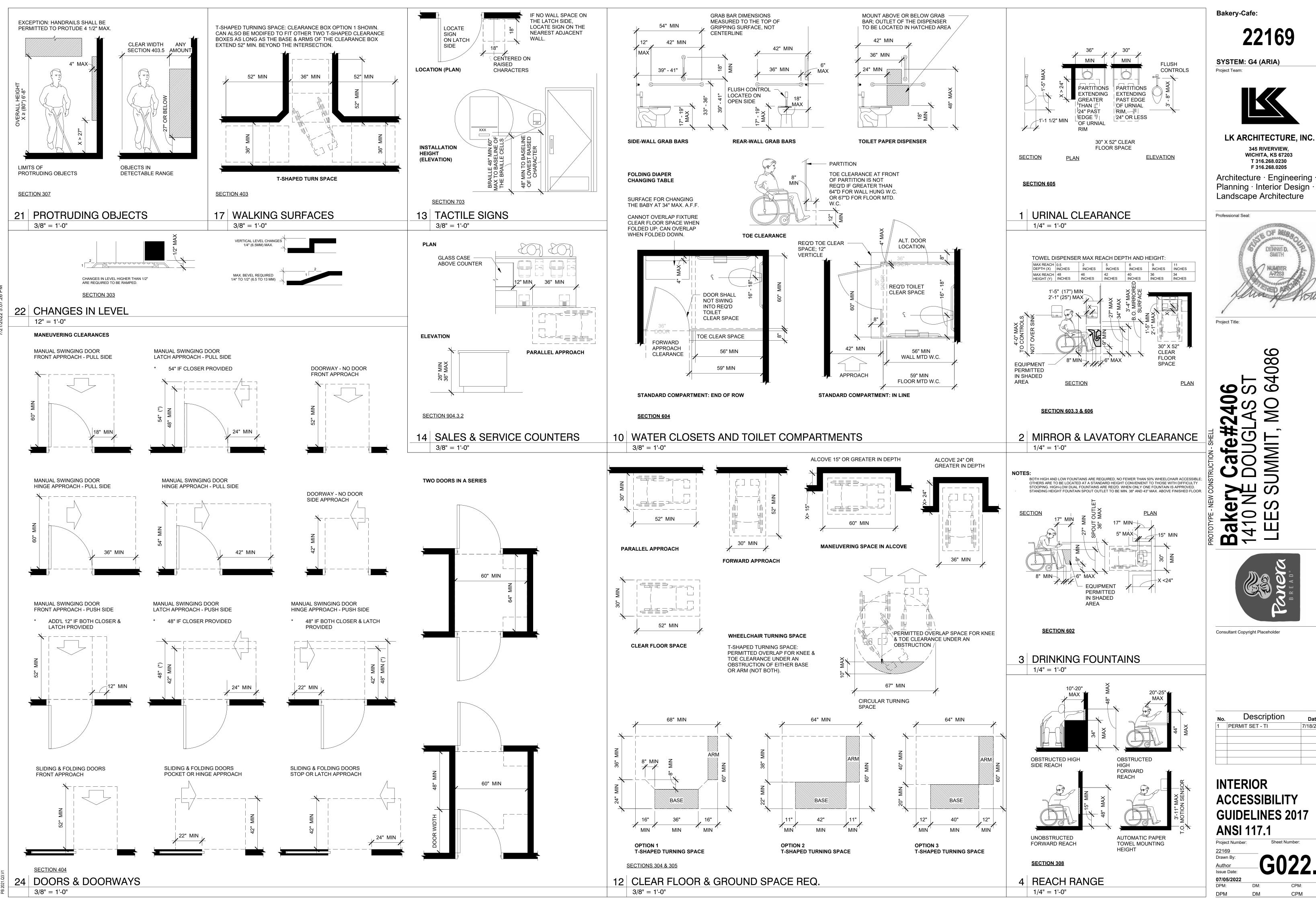


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**ACCESSIBILITY GUIDELINES** 

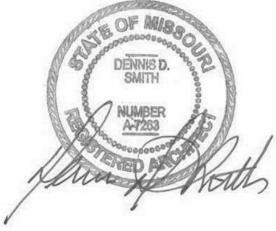
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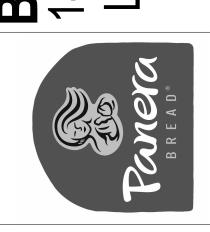




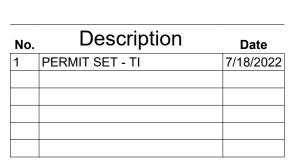
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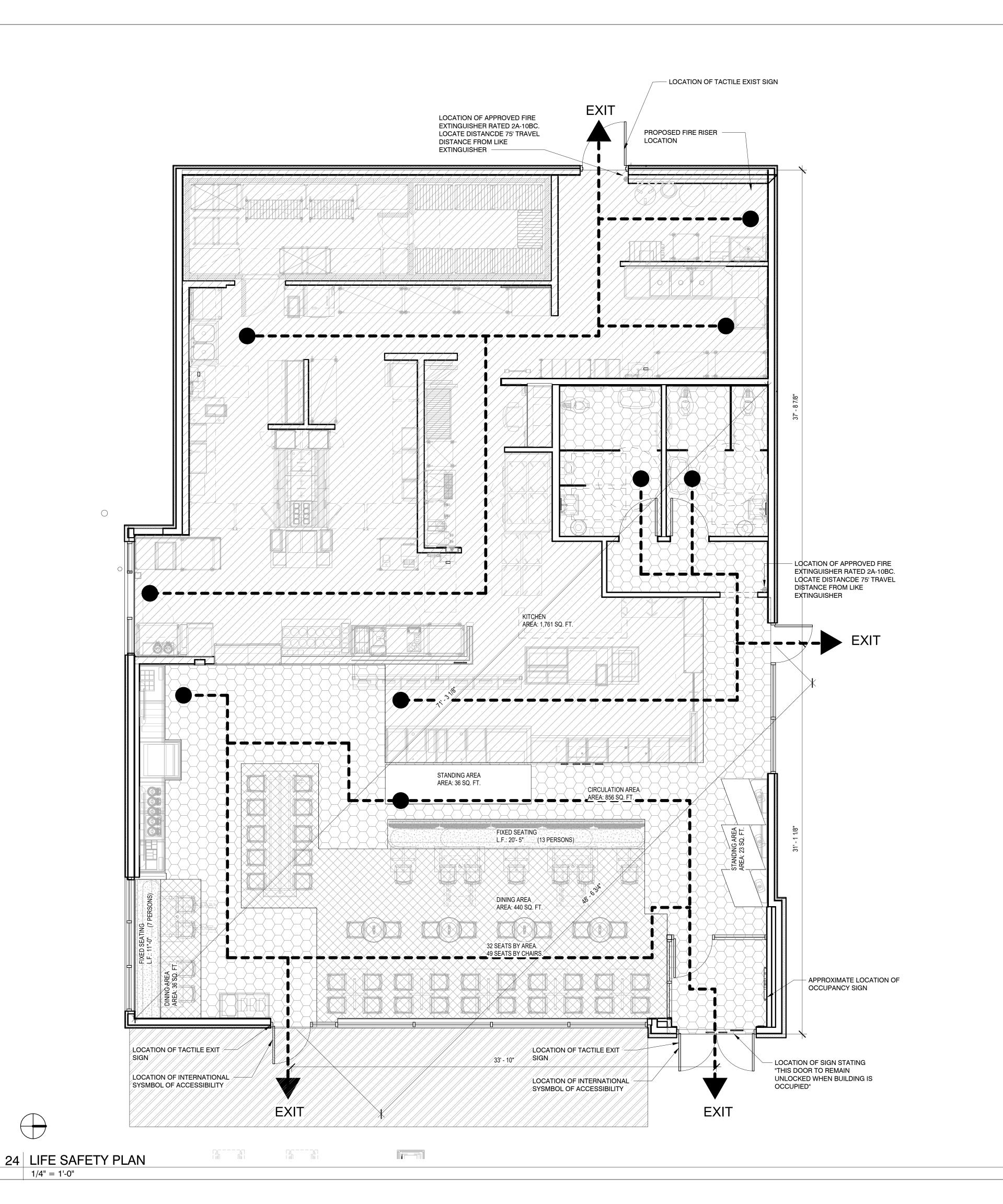




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**ACCESSIBILITY GUIDELINES 2017** 



- B. ONE 2A10BC DRY CHEMICAL FIRE EXTINGUISHER IS REQUIRED FOR EACH 3,000 SQ. FT. OF FLOOR AREA
- D. AT LEAST 5%, BUT NO LESS THAN ONE OF THE SEATING SPACES IN EACH FUNCTIONAL AREA SHALL BE

- E. ACCESS TO ACCESSIBLE SEATING SPACES SHALL BE PROVIDED BY MAIN AISLES (ACCESSIBLE ROUTE) A
- F. A MINIMUM OF 30" BY 48" CLEAR FLOOR SPACE SHALL BE PROVIDED AND SHALL NOT OVERLAP THE KNEE SPACE
- G. FIXED TABLES AND COUNTERS: HEIGHT OF TABLES NAD COUNTERS SHALL BE 28" MINIMUM AND 34" MAXIMUM.
  - CLEAR FLOOR SPACE SHALL BE PROVIDED. KNEE CLEARANCE SHALL BE AT LEAST 27" HIGH, 30" WIDE AND
- FIRE MARSHAL.

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

CALCULATION FOR NUMBER OF ACCESSIBLE SEATS:

(INTERIOR SEATS)  $100 \times 5\% = 5$ (EXTERIOR SEATS)  $26 \times 5\% = 2$ 

- MINIMUM WIDTH OF 36".
- BY MORE THAN 14".
- H. MANEUVERING CLEARANCE: A MINIMUM OF 36" x 48"
- I. FINAL EXTINGUISHER LOCATIONS TO BE APPROVED BY

BUILDING CODE 2018 IBC 2018 IPC PLUMBING CODE ELECTRICAL CODE 2017 NATIONAL ELECTRICAL CODE MECHANICAL CODE 2018 INTERNATIONAL MECHANICAL CODE ENERGY CODE 2018 INTERNATIONAL FIRE CODE FIRE CODE 2009 AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY CODE ICC/ ANSI A117.1

APPLICABLE BUILDING CODES

BUILDING INFORMATION

CONSTRUCTION TYPE TYPE V - B SPRINKLERED BUILDING IS NON-SPRINKLERED LEGEND

CIRCULATION

AREA: 475 SQ. FT. AREA: 855 SQ. FT. FIXED SEATING KITCHEN AREA AREA: 70 SQ. FT. AREA: 1,761 SQ. FT.

STANDING ROOM PATIO AREA AREA: 59 SQ. FT. AREA: 325 SQ.FT.

> INTERIOR AREA (NET): 3,220 SQ. FT PATIO AREA: 325 SQ FT

> > 112

32.00

MAIN EXIT SECONDARY TOTAL (IN.)

(IN.) (IN.)

DINING AREA & CAFE

Bakery-Cafe:

Project Team:

SYSTEM: G4 (ARIA)

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**WICHITA, KS 67203** 

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Project Title:

**Bake** 1410

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ALLOWABLE AREA

TRAVEL DISTANCE

PER 2018 IBC PRIMARY OCCUPANCY A-2 | ASSEMBLY MAXIMUM ALLOWABLE BUILDING | 6000 SF, ACTUAL 3,493

150FT ALLOWED

# OCCUPANT LOAD

(PER 2018 IBC TABLE 1016.2)

OCCUPANT LOAD COUNT TABLE PER 2018 IBC TABLE 1004.1.2

	FUNCTION OF SPACE	OCCUPANT LOAD FACTOR	AREA (SQFT)	OCCUPANTS
DINING AREA	UNCONCENTRATED	15	475	32 (49 SEATS)
CIRCULATION	UNCONCENTRATED	0	855	0
KITCHEN	KITCHEN: COMMERCIAL	200	1761	9
STANDING AREA	STANDING AREA	5	59	12
FIXED SEATING				
TOTAL LINEAL LENGTH	LINEAL IN. PER OCC		F	PERSONS

TOTAL INTERIOR OCCUPANTS: SEAT COUNT 22 PATIO:

TOTAL OCCUPANTS (INCLUDING PATIO): EXIT REQUIRMENTS

PER 2018 IBC SECTION 1015.2.1 LONGEST INTERIOR DIAGONAL DIMENSION 71'-3 1/8" MIN. DISTANCE BETWEEN DOORWAYS 71'-3 1/8" = 35'-7 1/2" (SPRINKLED) ACTUAL DISTANCE BETWEEN CLOSEST DOORWAYS 48' - 6 3/4"

ALLOWABLE EGRESS WIDTH PER 2018 IBC SECTION 1005.3.2

OCCUPANTS FACTOR (IN.) INTERIOR 0.20 EXTERIOR PATIO SPACE W/OUT 0.20 SPRINKLER MINIMUM EGRESS OPENING WIDTH 22.2 REQUIRED MINIMUM DOOR SIZE (PER 1008.1.1)

ACTUAL EGRESS OPENING WIDTH

PLUMBING CALCULATIONS PER 2018 IPC

[CLEAR OPENING]

BUILDING OCCUPANCY (TOTAL) TOTAL MEN/WOMEN OTHER WATER CLOSETS LAVATORIES **BUILDING ASSEMBLY** | MALE | FEMALE | MALE | FEMALE |

1:100 1:100 1:200 1:200 1:SER SINK REQUIRED 2 2 1 1 1 PROVIDED 2 1 1 1

Description Date PERMIT SET - TI 7/18/2022

Drawn By:

Issue Date: 07/05/2022 DPM:

PROVIDE 2" AIR SPACE AT SIDE(S) OF OVEN/PROOFER & COOLER/FREEZER (MIN. 3" AT BÀĆK OF OVEN). VERIFY ALL DIMENSIONS & SPECS WITH EQUIPMENT MANUAL. NO FINISH ON WALLS BEHIND OVEN/PROOFER & COOLER/FREEZER (TAPE & PRIME ONLY).

OFFICE AREA TO INCLUDE THE FOLLOWING (SUPPLIED AND INSTALLED BY G.C.): ROUGH-INS FOR PHONE, ALARM, SOUND, & MICROS SYSTEM. SEE ELECTRICAL SHEETS; 2'-0" x CUSTOM LENGTH PLASTIC LAMINATE ALMOND DESK TOP CLEATED TO WALL, W/ (2) 2" DIA. GROMMETS; (4) 16" DEEP PLASTIC LAMINATE WHITE SHELVES MOUNTED ON HEAVY-DUTY KV STANDARDS W/ ADJUSTABLE BRACKETS.

G.C. TO PROVIDE BLOCKING FOR SUPPORT OF RESTROOM ACCESSORIES AS RECOMMENDED BY MANUFACTURER. SEE INTERIOR

ELEVATIONS. PROVIDE 5/8" CEMENT BACKING BOARD ON ALL KITCHEN, RESTROOM, 8 OFFICE WALLS FROM FLOOR TO 2'-0" A.F.F. AT WORKROOM WALLS

WITH TILE FINISH, PROVIDE CEMENT BOARD TO 6'-0" A.F.F. PROVIDE 5/8" PLYWOOD BACKING BOARD ON KITCHEN & OFFICE WALLS (2'-0" AFF TO CEILING), SEE PARTITION SCHEDULE FOR WORKROOM WALLS W/ TILE FINISH.

OCCUPANCY LOAD SIGN SUPPLIED AND INSTALLED BY G.C. G.C. SHALL SUPPLY AND INSTALL RECESSED FIRE EXTINGUISHERS AS REQUIRED BY LOCAL CODES. LOCATION PER LOCAL CODES. REFERENCE THE FOLLOWING SHEETS: G011 GENERAL NOTES,

SYMBOLS, AND LEGENDS AND G021 ACCESSIBILITY GUIDELINES. ALL DIMENSIONS NOTED ARE FROM FACE OF DRYWALL TO FACE OF BOOTH/BANQUETTE SEATING SUPPLIED BY FURNITURE SUPLPIER,

INSTALLED BY G.C. ELECTRICAL EQUIPMENT BY G.C. SEE ELECTRICAL DRAWINGS. PLUMBING EQUIPMENT BY G.C. SEE PLUMBING DRAWINGS. G.C. TO PROVIDE & INSTALL 1/4" CLEAR SAFETY GLASS AT SNEEZE

GUARDS. VERIFY SIZE OF GLASS W/ SNEEZE GUARD POSTS. LAP TILE AT OUTSIDE CORNERS, TURN CUT TILE EDGE TOWARD GROUT, ALL EXPOSED EDGES TO BE FACTORY FINISHED.

# **WALL LEGEND:**

**KEYED NOTES** 

1.01 SOLID SURFACE SILL PROVIDED BY CASEWORK SUPPLIER,

INSTALLED BY GC; COLOR: SS28. DIMENSIONS TO BE FIELD

REFER TO FINISH PLAN, INTERIOR ELEVATIONS, AND 4/A510 FOR FURTHER INFORMATION.

1.32 INSTALL WD1 VERTICAL WOOD TRIM PIECE ALONG END OF WALL.

1.90 24" DUROCK AT TILE BASE WITH 5/8" PLYWOOD ABOVE AT BOH EXTERIOR WALLS.

NEW PARTITION, REFER TO PARTITION TYPES ON SHEET

PARTIAL HEIGHT PARTITION, HEIGHT VARIES. REFER TO ELEVATIONS ON SHEETS A511 AND A512 COOLER/FREEZER WALL

\_\_\_\_\_ SOFFIT ABOVE, REFER TO REFLECTED CEILING PLAN \_\_\_\_\_ ON SHEET A301 FOR HEIGHT

Bakery-Cafe:

SYSTEM: G4 (ARIA) Project Team:

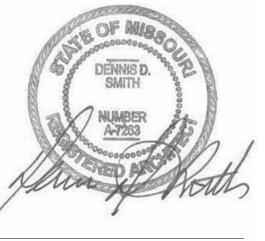


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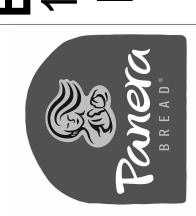
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Professional Seal:



Project Title:

# Bakery Control 1410 NE DOUR LEES SUM



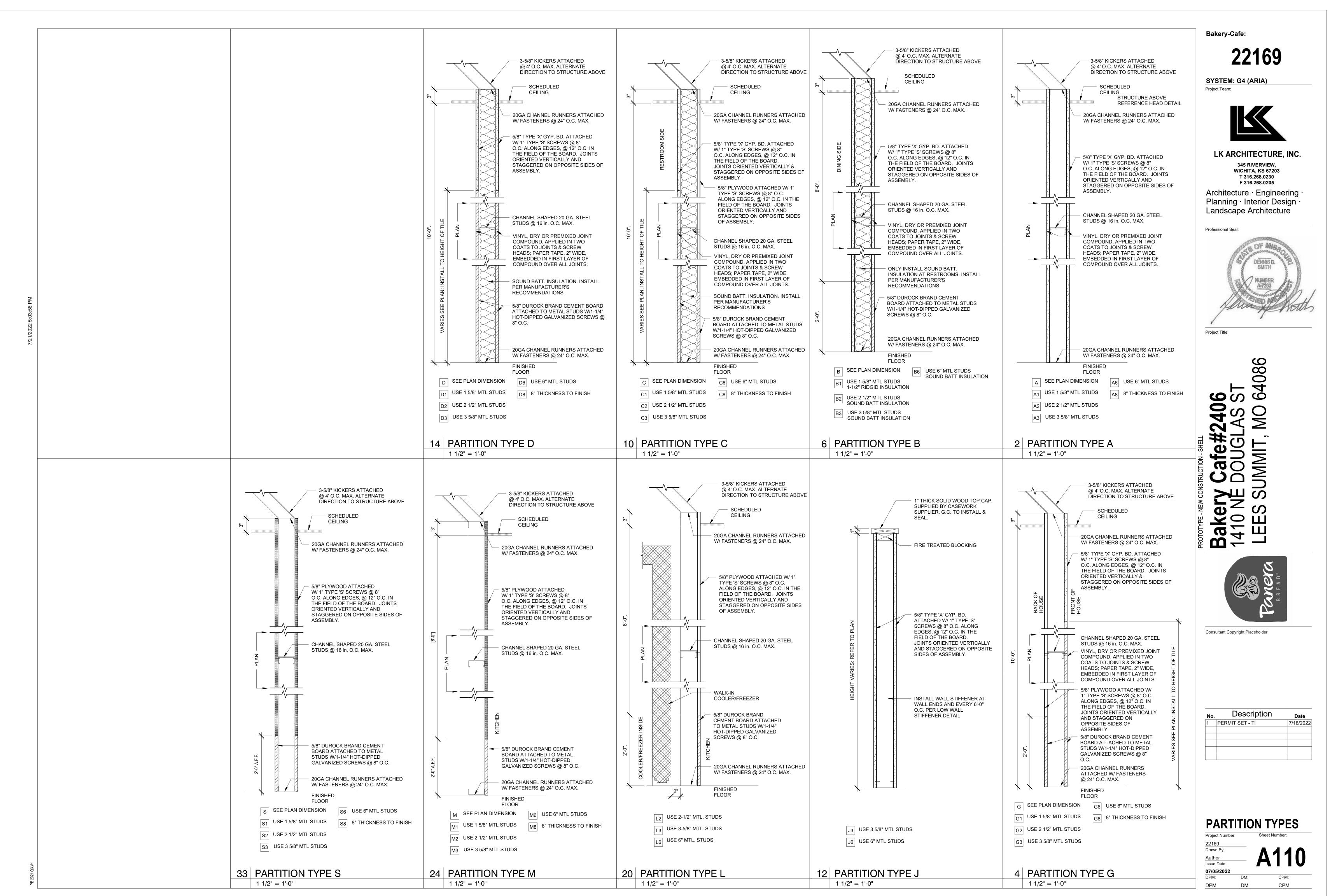
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# FLOOR PLAN -**DIMENSIONED AND KEYED NOTES**

07/05/2022

24 FLOOR PLAN - DIMENSIONED AND KEY NOTED - TI



**KEYED NOTES** 

BULKHEAD BY GC.

2.21 CASEWORK SHROUD AT OVEN HOOD, BY MILLWORK VENDOR OVER

5.08 PROVIDE SCHLUTER COVE TILE BASE AT ALL TILE LOCATIONS UNLESS NOTED OTHERWISE. REFER TO 18/A520 FOR FURTHER INFORMATION.

- A. IF THERE IS A CONFLICT BETWEEN THE WALL FINISH PLAN AND INTERIOR ELEVATIONS, PLEASE NOTIFY THE CONSTRUCTION PROJECT MANAGER FOR CLARIFICATION.
- PROJECT MANAGER FOR CLARIFICATION.

  B. REFER TO INTERIOR ELEVATIONS FOR ADDITIONAL WALL FINISH INFORMATION.
- INFORMATION.

  C. REFER TO THE FLOORING DETAILS & SPECIFCIATION MANUAL FOR TILE DETAILS & CONCRETE EXPANSION/CONTROL JOINTS.

Bakery-Cafe:

2216

SYSTEM: G4 (ARIA)
Project Team:



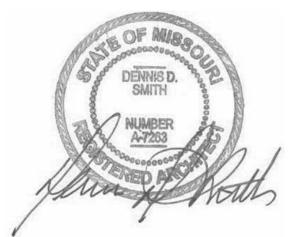
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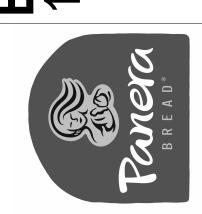
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Professional Seal:



Project Title:

Bakery Cafe#2406 1410 NE DOUGLAS ST LEES SUMMIT, MO 6408



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Project Number: Sheet Number:

22169
Drawn By:
Author

Author

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COOLER **FREEZER** BAKERY REAR BEYOND PROOFER CORRIDOR 16 (A400) 13 CONSOLIDATION 35 P278 ABOVE \_\_\_\_ T102 TO 8'-8" AFF P278 BULKHEAD ABOVE
T102 TO 3'-10" AFF P278 ABOVE T102 TO 8'-8" AFF 3 **(**A410**)** 7 HOT BEV. COLD BEV. VESTIBULE 26 24' - 8"

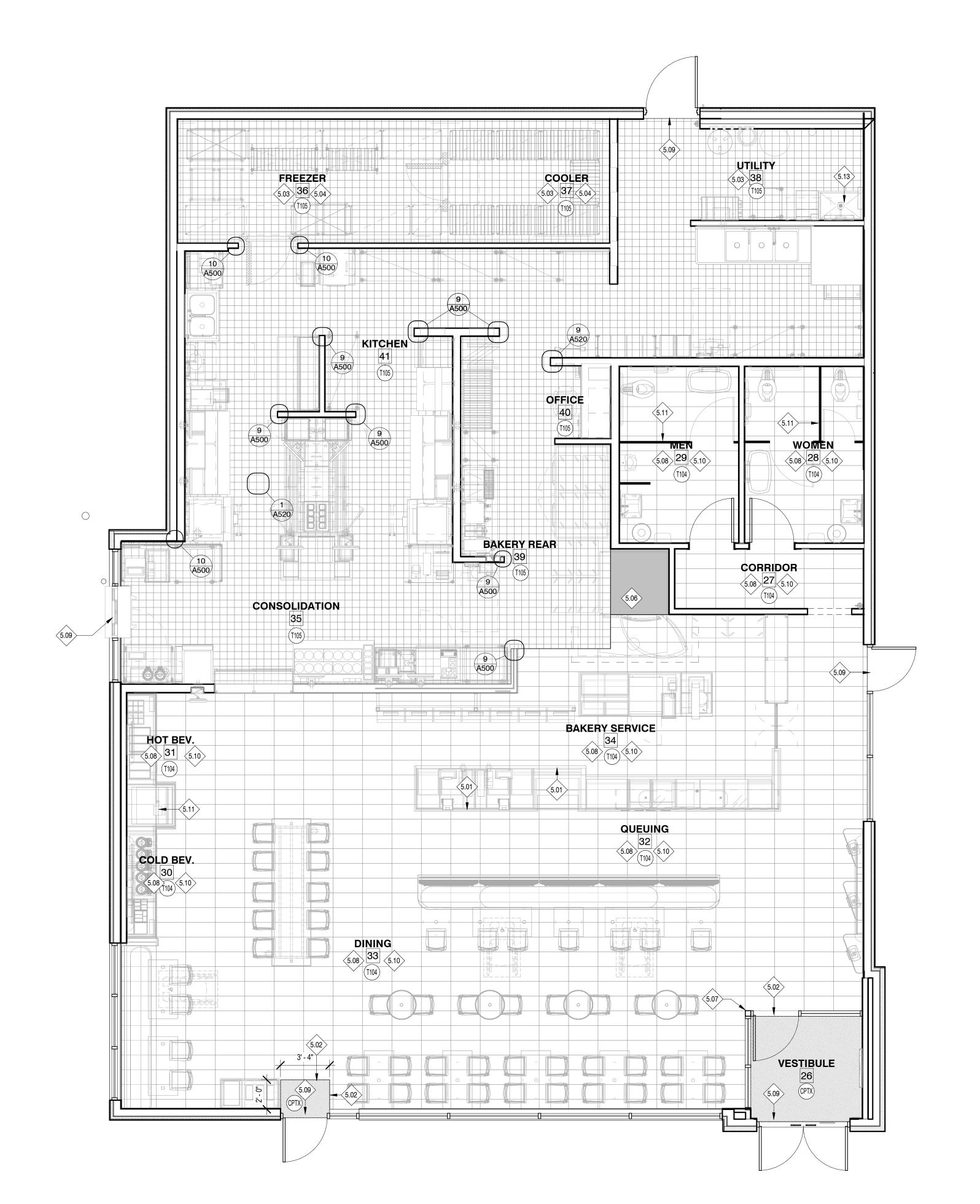
SS-2 - SILL TOP

STANDARD MFR. FINISHES

STANDARD MFR. FINISHES

24 WALL FINISH PLAN

1/4" = 1'-0"



KEYED NOTES

- NEW FLOOR TILES ARE TO BE INSTALLED AS INDICATED ON PLAN WITH FULL TILES WHEREVER POSSIBLE. SEE FINISH SCHEDULE FOR SPECIFICATIONS.
- ALL FLOOR FINISHES SHALL BE INSTALLED WITH TOP EDGES LEVEL W/ ADJACENT MATERIAL TOP EDGES. CONFIRM TILE THICKNESS AS THESE Project Team: MAY VARY. CONFIRM THAT NO OVERALL FLOATING OF FLOOR IS
- COORDINATE FLOORING TRANSITIONS & BASE TILE INSTALLATION W/ MILLWORK SHOP DRAWINGS & FIELD CONDITIONS.
- ALL THRESHOLDS SHALL HAVE A MAX HEIGHT OF 1/2" ABOVE EXISTING CONCRETE SLAB &/OR INTERIOR FINISHES. SEE FINISH SCHEDULE ON SHEET A531 FOR SPECS OF ALL FLOOR
- COVERINGS. TILE TRANSITION BETWEEN ROOMS TO BE CENTERED ON DOOR FRAME SEE PLUMBING DRAWINGS FOR DIMENSIONS & LOCATIONS OF FLOOR DRAINS & FLOOR SINKS.

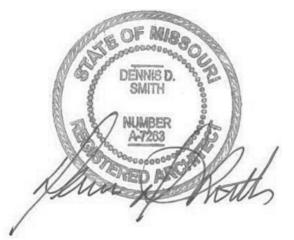
# SYSTEM: G4 (ARIA)

Bakery-Cafe:

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5.07 START FLOOR TILE PATTERN THIS LOCATION 5.08 PROVIDE SCHLUTER COVE TILE BASE AT ALL TILE LOCATIONS UNLESS NOTED OTHERWISE. REFER TO 18/A520 FOR FURTHER INFORMATION. 5.09 DOOR THRESHOLD MAX. 1/2" ABOVE EXTERIOR CONCRETE SLAB. SEE

5.01 LINE OF TOE KICK/TILE TRANSITION AT CABINET TO BE SET DIRECTLY ON CONCRETE SUBFLOOR. 6X12 TILE BASE TO BE INSTALLED ON CUSTOMER SIDE OF CABINET. COORDINATE LOCATION W/ MILLWORK

5.02 CARPET W/ SCHLUTER-SCHIENE SATIN ALUMINUM TRANSITION STRIP @ ALL TILE-CARPET. INSTALL CARPET FLUSH W/ TILE USE JOHNSONITE TILE-TO-CARPET TRANSITION TO LEVEL CARPET. 5.03 USE EPOXY W/ GROUT THROUGH OUT BOH AREA, INDICATED BY

5.04 INSTALL QUARRY TILE IN COOLER/FREEZER. FREEZER TO HAVE

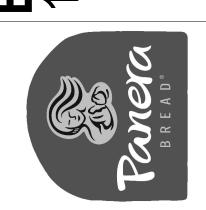
1/8" CLEARANCE AT EDGE OF TILE, SEAL GAP WITH HIGH TEMPERATURE CAULK. SEE SHEET A531 FOR VENDOR CONTACT

RECESSED, INSULATED SLAB. REFER TO DETAIL ON SHEET A520 5.06 FLOAT 1/2" MARINITE STRUCTURAL, INCOMBUSTIBLE INSULATION

UNDER RACK OVEN. INSET SHEETS 2" INSIDE OVEN FRAME, LEAVE

SHOP DRAWINGS & EQUIPMENT CUT SHEETS.

- 5.10 FLOOR TILE TO BE INSTALLED IN STACKED PLANK PATTERN W/ FULL TILES AS SHOWN, REFER TO A121 FOR MORE INFORMATION.
- 5.11 FLOOR DRAIN / FLOOR SINK. SEE DETAIL 1/A520 AND PLUMBING DRAWINGS FOR FURTHER INFORMATION.
- 5.13 NO TILE AT MOP SINK. SEE EQUIPMENT AND PLUMBING SHEETS FOR FURTHER INFORMATION.
- 5.23 ELECTRICAL PANELS. REFERENCE ELECTRICAL DRAWINGS FOR MORE DETAILS.



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FLOOR FINISH PLAN

Drawn By:

24 FLOOR FINISH PLAN

- A. G.C. SHALL CONFIRM ALL CEILING HEIGHTS. NOTIFY OWNER/ARCHITECT IF SPECIFIED HEIGHTS CANNOT BE ACHIEVED.
- SEE ELECTRICAL DRAWINGS FOR POWER & CIRCUIT. TRACK SPECIFICATION AS INDICATED ON FIXTURE SCHEDULE ONE 20 AMP CIRCUIT REQUIRED FOR EACH 20 FT. SECTION OF TRACK.
- LENGTH OF TRACK AS INDICATED BY (X') ON PLAN. ALL FIXTURES TO BE CENTERED IN 2X2 CEILING TILE (U.N.O.). ALL FIXTURES TO BE PROVIDED BY, RECEIVED, STORED & INSTALLED BY ELECTRICAL CONTRACTOR.
- (6) WEEK LEAD TIME ON THE ACOUSTICAL CEILING TILES & CEILING
- G. ALL FIXTURES TO BE OBTAINED THROUGH NATIONAL ACCOUNT FROM APPROVED PANERA, LLC VENDOR.
- SEE FINISH SCHEDULE FOR ACOUSTICAL CEILING TILE SPECIFICATIONS (ACT).
- ELECTRICAL CONTRACTOR SHALL SUPPLY 10% ADDITIONAL SPARE, OF ALL LAMP TYPES. TO BE LEFT AT JOB SITE AT END OF JOB. MECHANICAL SYSTEM DIFFUSERS NOT SHOWN THIS SHEET & SHALL BE COORDINATED BY G.C PRIOR TO CONSTRUCTION. SEE
- MECHANICAL SHEETS FOR LOCATIONS. K. G.C. TO SUPPLY (1) UNOPENED CASE OF EACH TYPE OF CEILING TILE
- WHERE APPLICABLE, PENDANTS SHALL BE CENTERED OVER TABLES. WHERE APPLICABLE, PANERA VENDOR TO EXTEND SPEAKER SYSTEM
- INTO EXPANSION AREA; CONNECT INTO EXISTING SYSTEM. MAIN DINING AREA TO BE EXPOSED STRUCTURE TO BE PAINTED P155. ALL EXPOSED DUCTWORK TO BE PAINTED TO MATCH **EXPOSED STRUCTURE.**
- ALL LIGHTING CONDUIT TO BE RIGID, PAINTED TO MATCH EXPOSED
- STRUCTURE.
  G.C. TO PLACE BOTTOM OF TRACK AT TRACK LIGHTING AT 11'-0" A.F.F. TYPICAL AT EXPOSED CEILING TO DECK.

# **KEYED NOTES**

2.02 ARCHITECTURAL BULKHEAD/SOFFIT - SEE INTERIOR ELEVATIONS AND DETAILS FOR ADDITIONAL INFORMATION. REFLECTED CEILING PLAN 2.08 G.C. SHALL SUPPLY AND INSTALL STAINLESS STEEL CLOSURE PANELS AROUND PROOFER FROM TOP OF EQUIPMENT TO 6" ABOVE

PENDANTS AT FIXED BOOTH TABLES & GATHERING TABLES: 30" ABOVE TABLE TOP TO BOTTOM OF FIXTURE.

PENDANTS AT MOVABLE TABLES & TABLES AT BANQUETTES: 6'-8"

WALL SCONCES: REFER TO PLANS/ELEVATIONS FOR FURTHER

PLANS/ ELEVATIONS FOR FURTHER INFORMATION LIGHT TRACK: 11'-0" A.F.F. TO BOTTOM OF TRACK SPEAKERS: 11'-0" A.F.F. TO BOTTOM OF SPEAKER

SPECIALTY PENDANT INSTALLATIONS AT HIGH CEILINGS: REFER TO

CEILING. PROVIDE ACCESS PANEL AS REQUIRED.

2.09 REMOVABLE STAINLESS STEEL ACCESS PANEL (16GA) FROM TOP OF EQUIPMENT TO CEILING. SEE DETAIL & ELEVATIONS.

Bakery-Cafe:

SYSTEM: G4 (ARIA) Project Team:



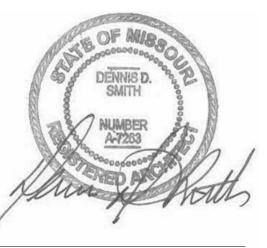
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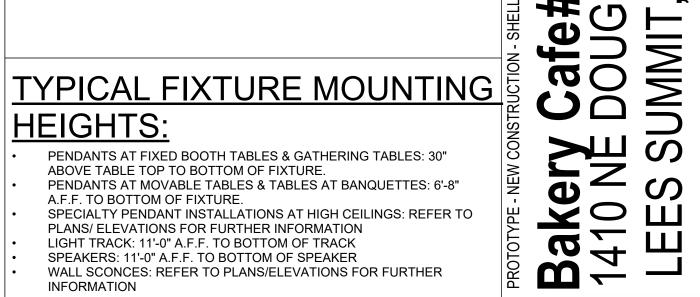
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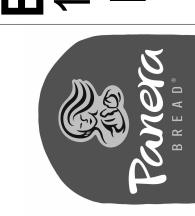
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# RCP LEGEND

**HEIGHTS:** 

A.F.F. TO BOTTOM OF FIXTURE.

ACT 3 - (BACK OF HOUSE)

ACT1, ACT2 - (FRONT OF HOUSE) → CENTER RECESSED LIGHT

FIXTURES WITHIN CEILING TILE

HATCH DENOTES DRYWALL CEILING/BULKHEAD

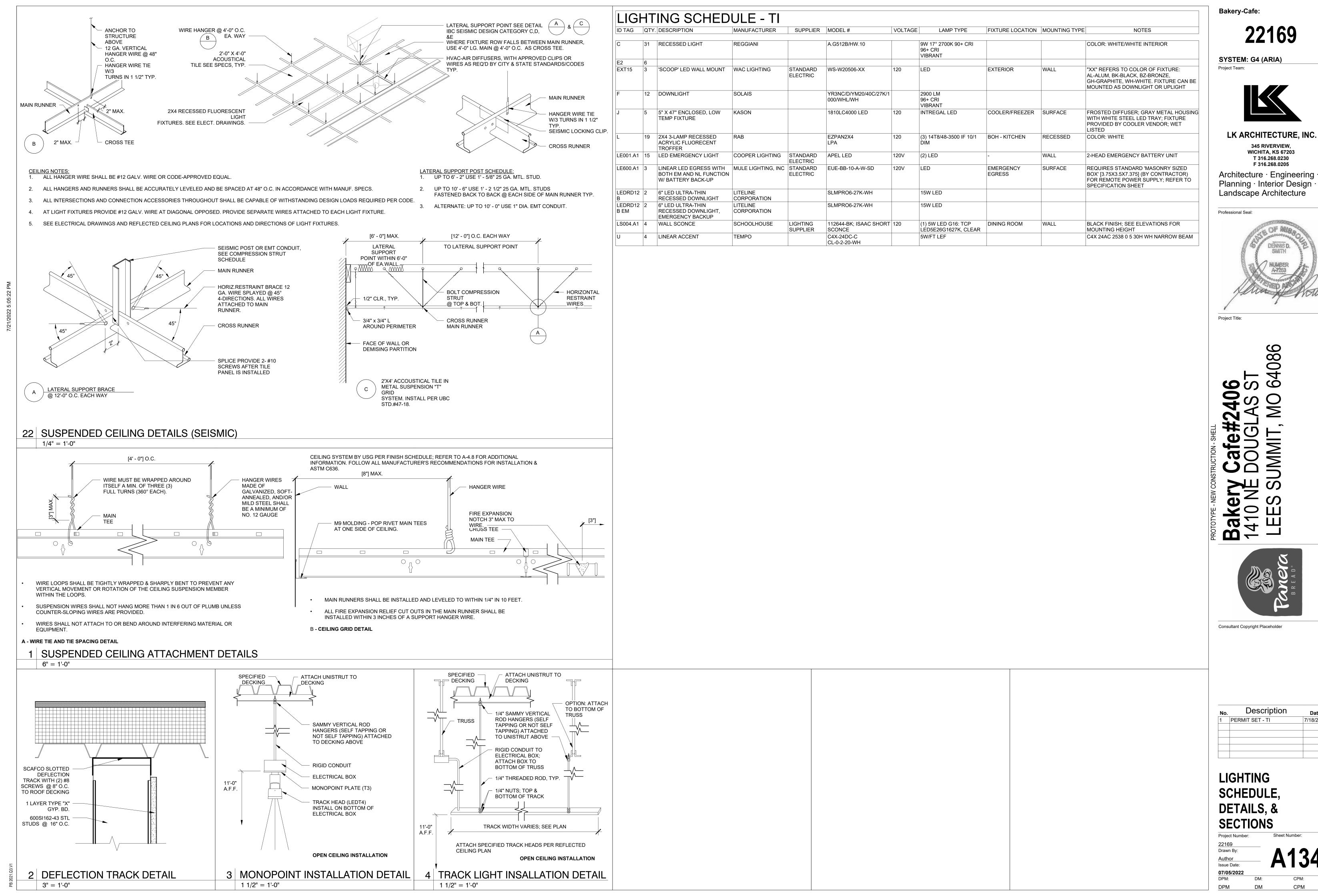
 DENOTES TRANSITION BETWEEN ACT1 & ACT2

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# REFLECTED CEILING **PLAN**

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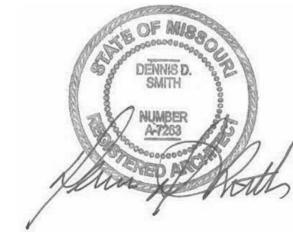
24 REFLECTED CEILING PLAN 1/4" = 1'-0"





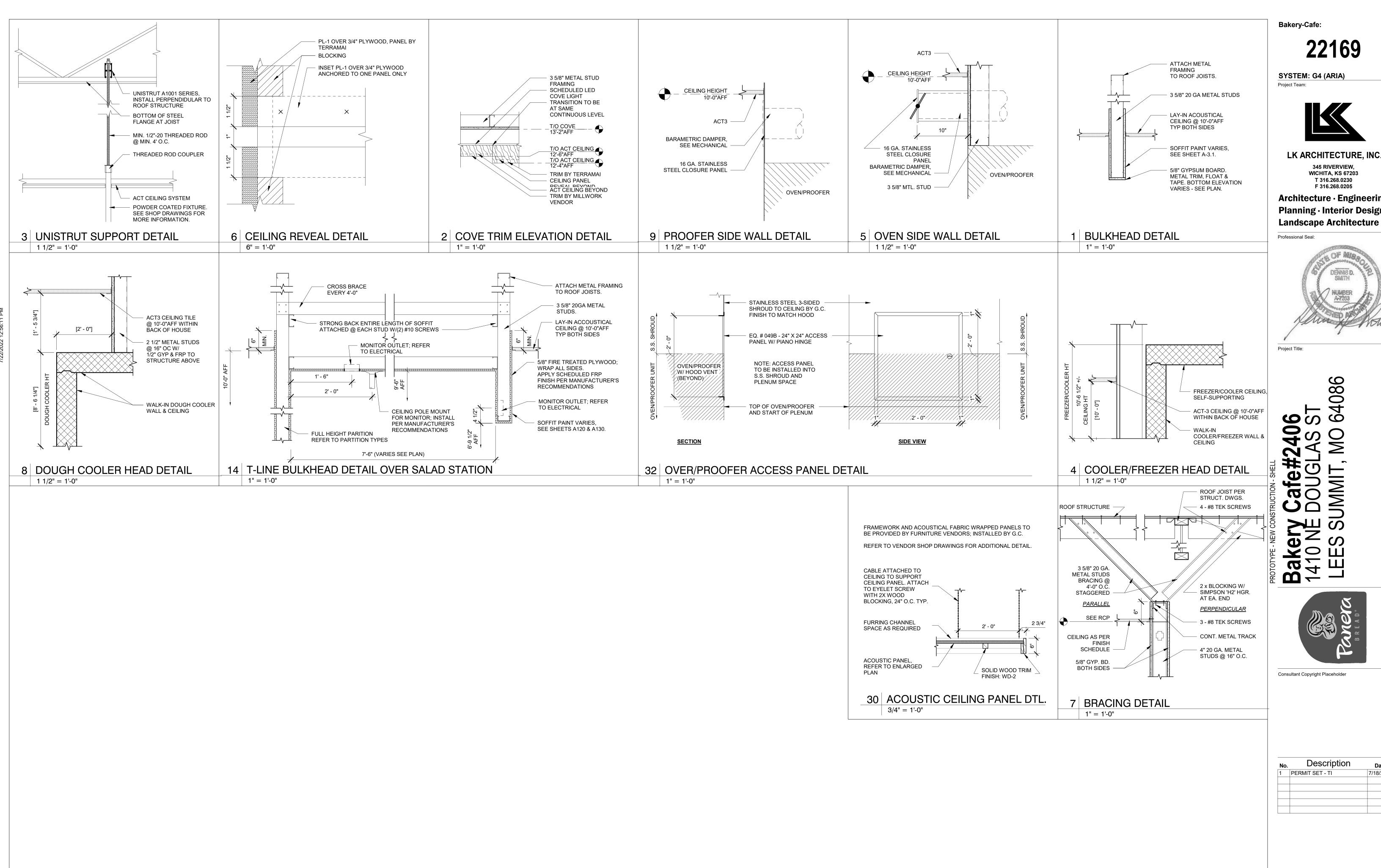
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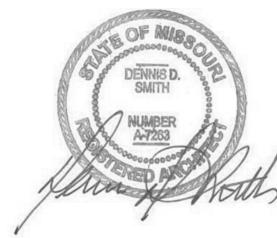


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Project Title:

086 **6** Si MMIT 

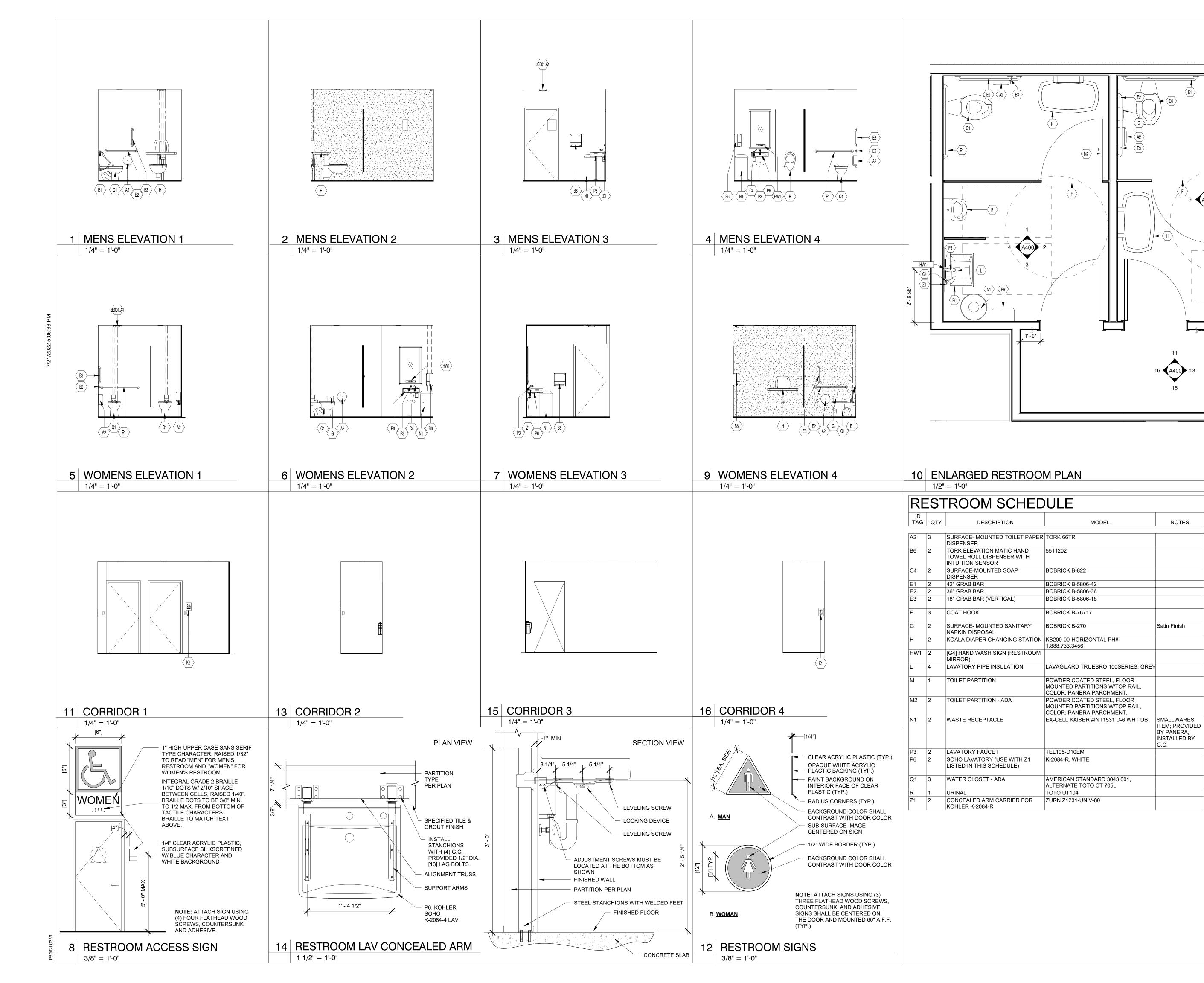


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**CEILING DETAILS** 

22169 Drawn By: Author Issue Date: 07/05/2022 DPM:



22169

SYSTEM: G4 (ARIA)

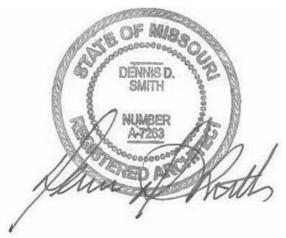


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# **6** S **6 (1) ₹**○ **3**2

MOUNTING HEIGHT

32" AFF TO TOP, C.L. 7'-9" IN FRONT OF

MOUNT IN LAVATORY; SPOUT DECK

36" TO TOP OF GRIPPING SURFACE

36" TO TOP OF GRIPPING SURFACE

BOTTOM OF BAR MTD PER ARCHITECT

72" AFF TO CENTERLINE OF STD. DOOR;

INSTALL OVER HOT/COLD WATER & DRAIN

FLOOR-MOUNTED, OVERHEAD BRACE

FLOOR-MOUNTED, OVERHEAD BRACE

34" AFF TO TOP OF SINK RIM; MIN. 27"

17" AFF MAX TO TOP OF FRONT RIM

ON OPEN (ACCESS) SIDE

TO INSTALL DETAIL

CLEAR BELOW SINK, REFER TO INSTALL

FLOOR- MOUNTED; INSTALL FLUSH VALVE

INSTALL UPRIGHTS INSIDE WALL; REFER

48" AFF TO TOP EDGE ON ADA DOOR

28.75" AFF TO BOTTOM MOST EDGE

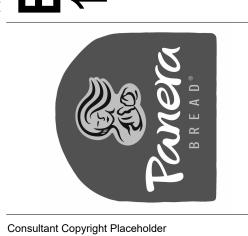
W.C.

MOUNTED

DIRECTION

30" AFF TO TOP

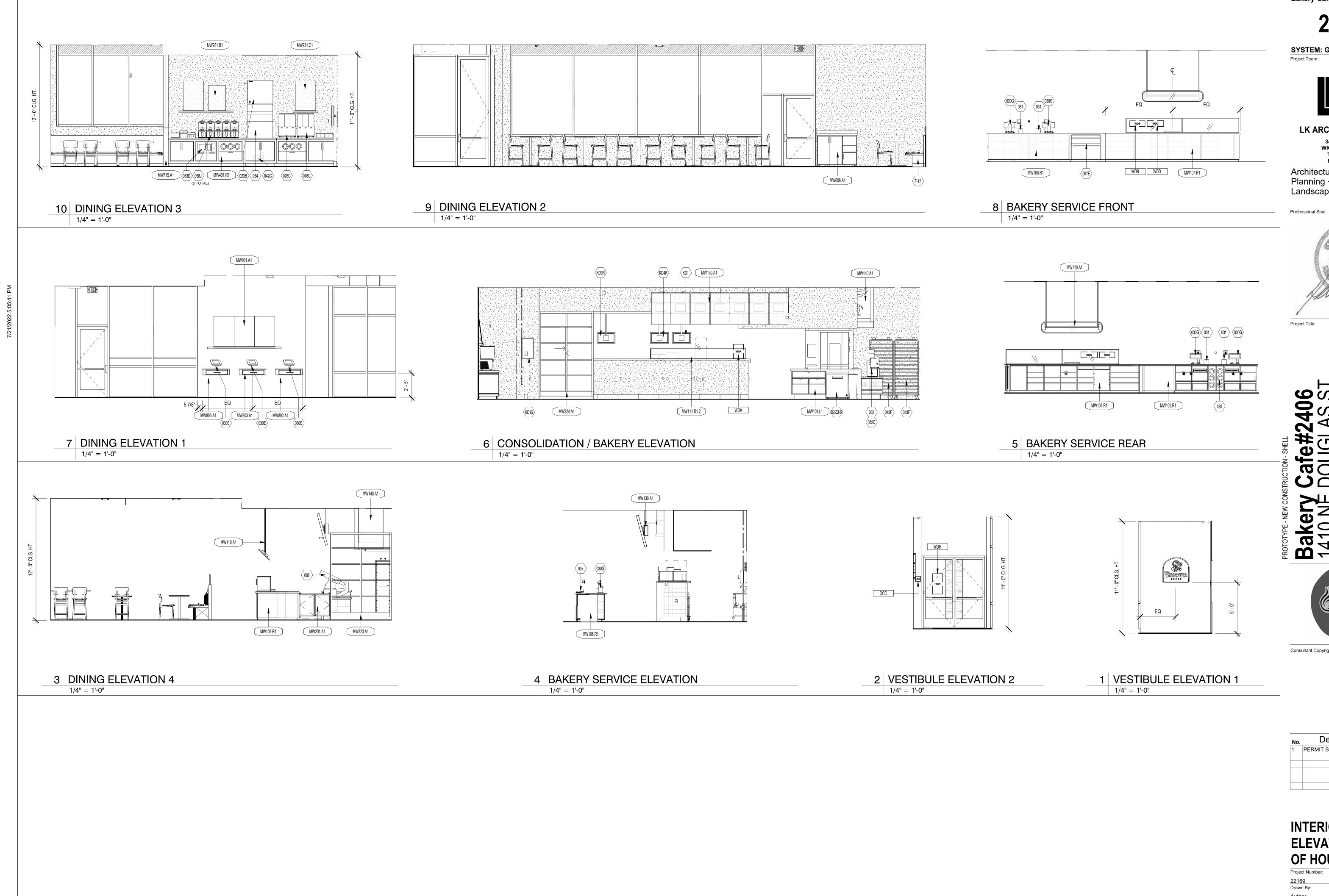
FREE STANDING



No.	Description	Date
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# **ENLARGED RESTROOM PLANS & INTERIOR ELEVATIONS**

Project Number: Drawn By: <u>Author</u> Issue Date: 07/05/2022 DPM:

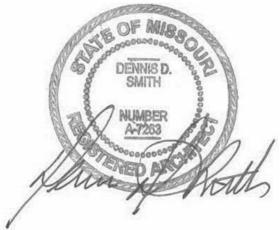


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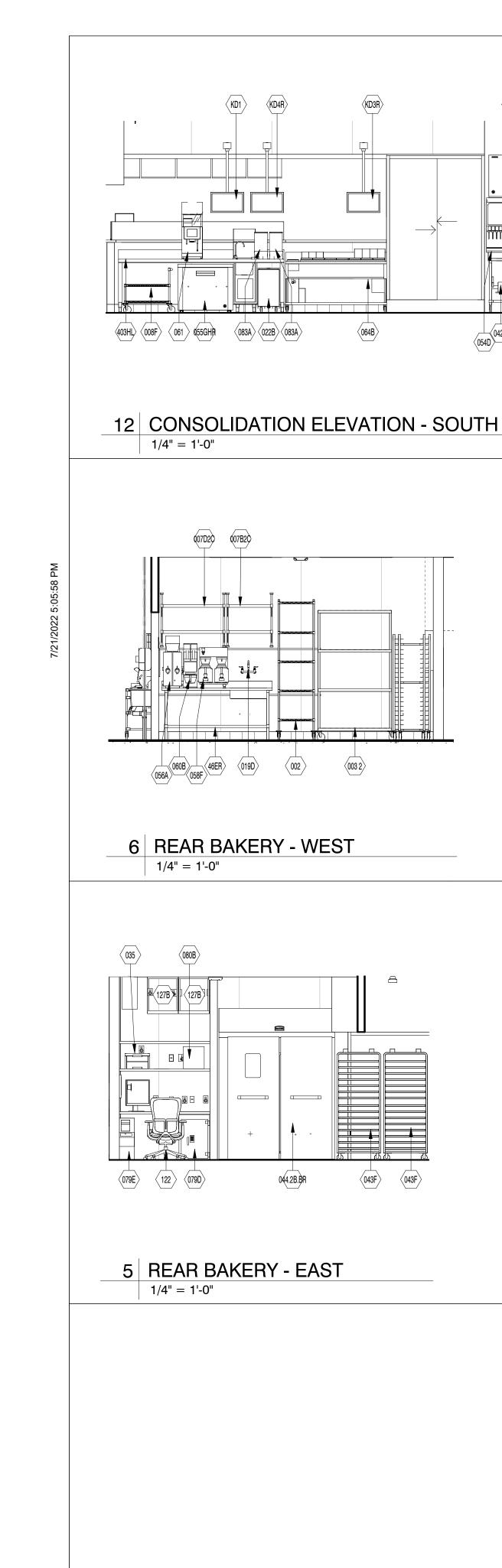


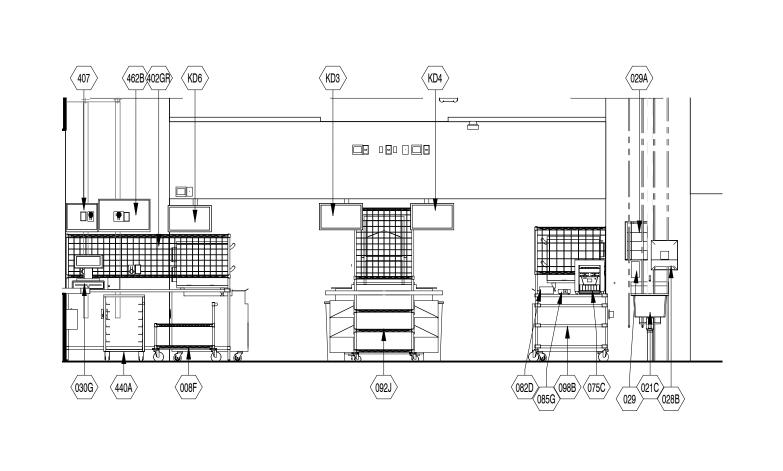
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**INTERIOR ELEVATIONS FRONT OF HOUSE** 

07/05/2022





11 CONSOLIDATION ELEVATION - NORTH

1/4" = 1'-0"

028B 021C 029 029A

(007K)

(002C)

(002D)

(002C)

(002C)

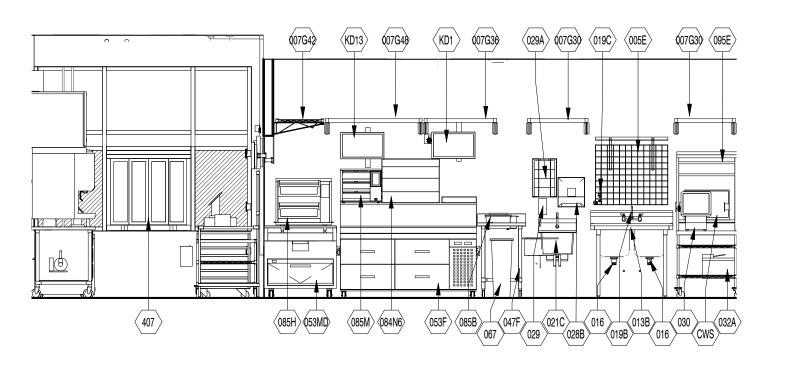
4 KITCHEN ELEVATION - SOUTH

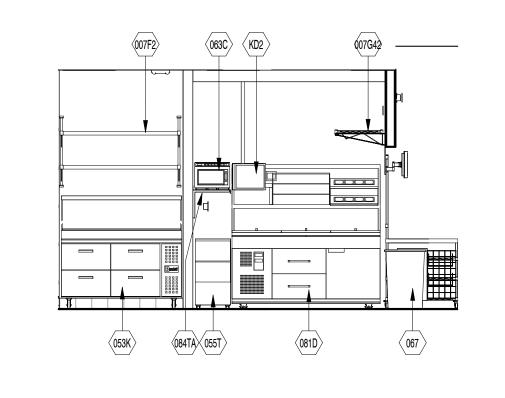
067 \( 047G \) \( 068A \)

3 KITCHEN ELEVATION - NORTH

1/4" = 1'-0"

(059A) (059A)

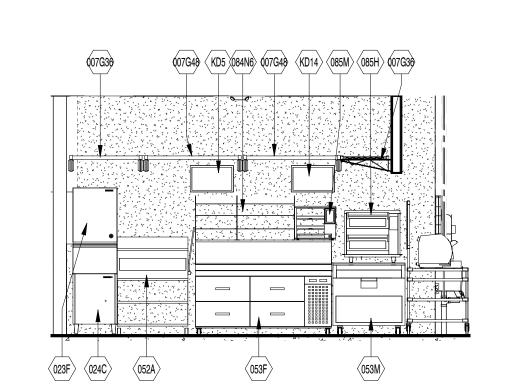




10 KITCHEN ELEVATION 2 / CONSOLIDATION - WEST 1/4" = 1'-0"

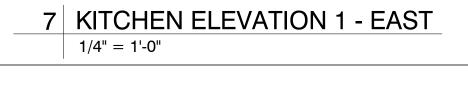
067

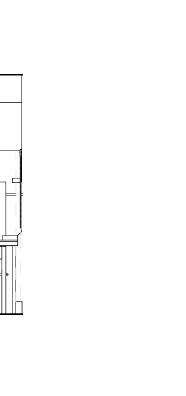
9 KITCHEN ELEVATION 2 - EAST 1/4" = 1'-0"





055T 084TA



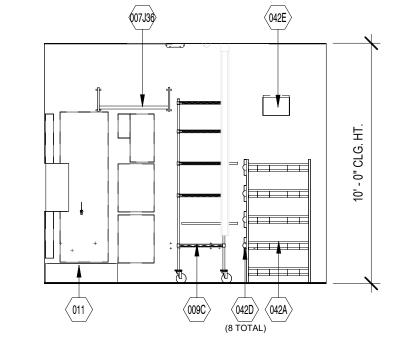


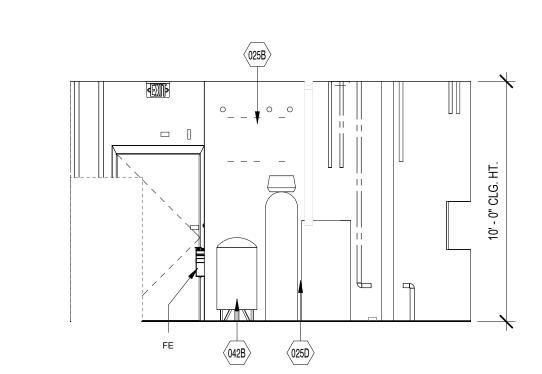
(019B) (015)

016 016 016

KTK

OPEN TO BEYOND





2 UTILITY ELEVATION - SOUTH 1/4" = 1'-0"

1 UTILITY ELEVATION - NORTH 1/4" = 1'-0"

Bakery-Cafe:

22169

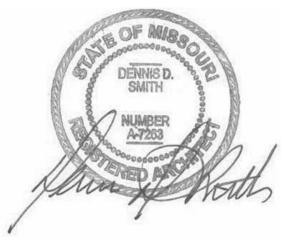
SYSTEM: G4 (ARIA) Project Team:



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Project Title:

# 406 4S S 10 64 Bakery Cafe#2 1410 NE DOUGL/ LEES SUMMIT, N

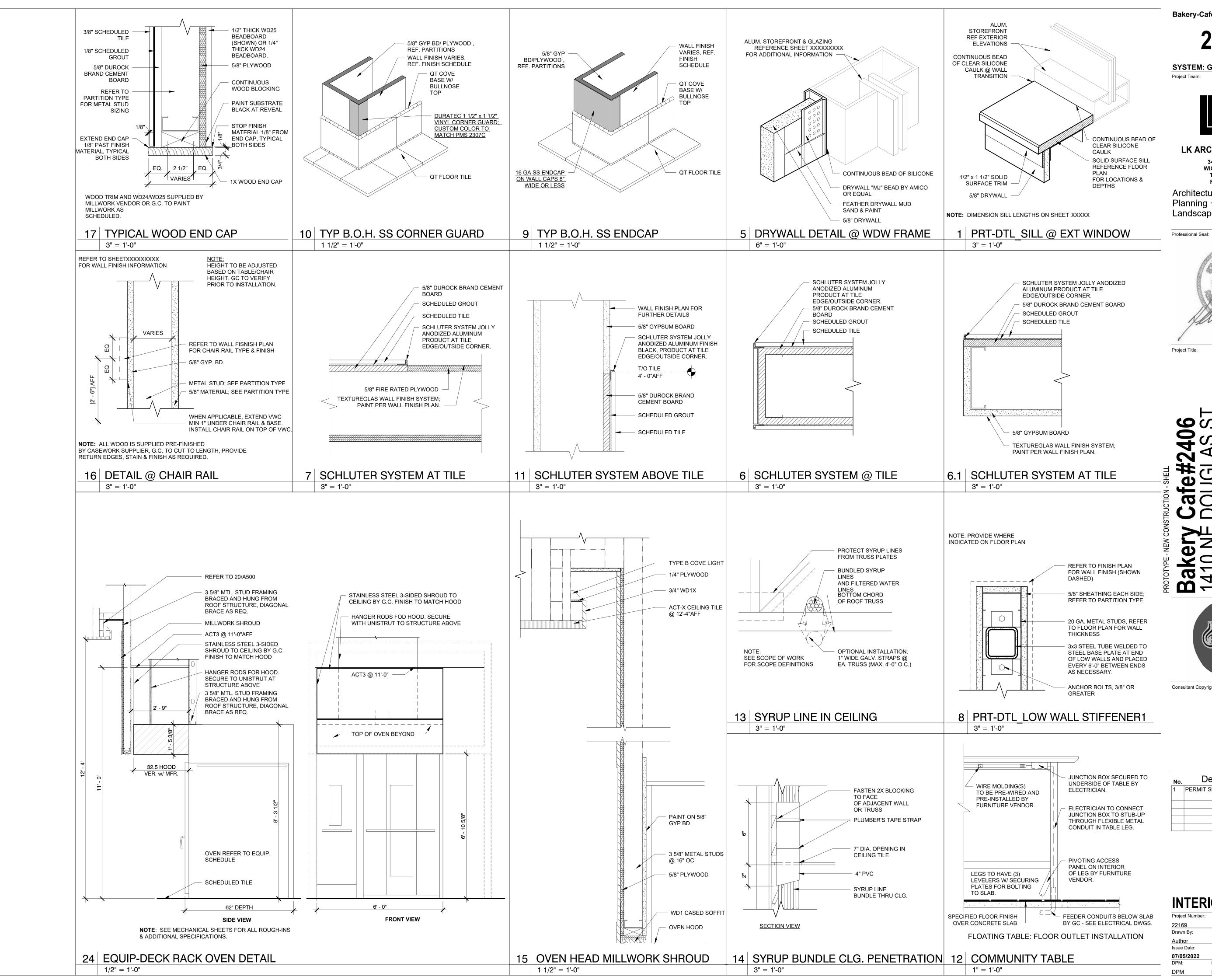


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No.	Description	Date
1	PERMIT SET - TI	7/18/2022

**INTERIOR ELEVATIONS BACK** OF HOUSE

Project Number: Drawn By: Author Issue Date: 07/05/2022 DPM:



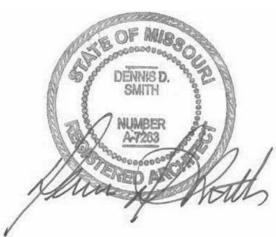
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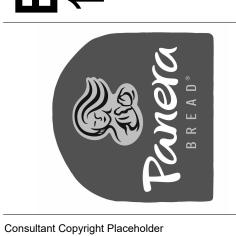
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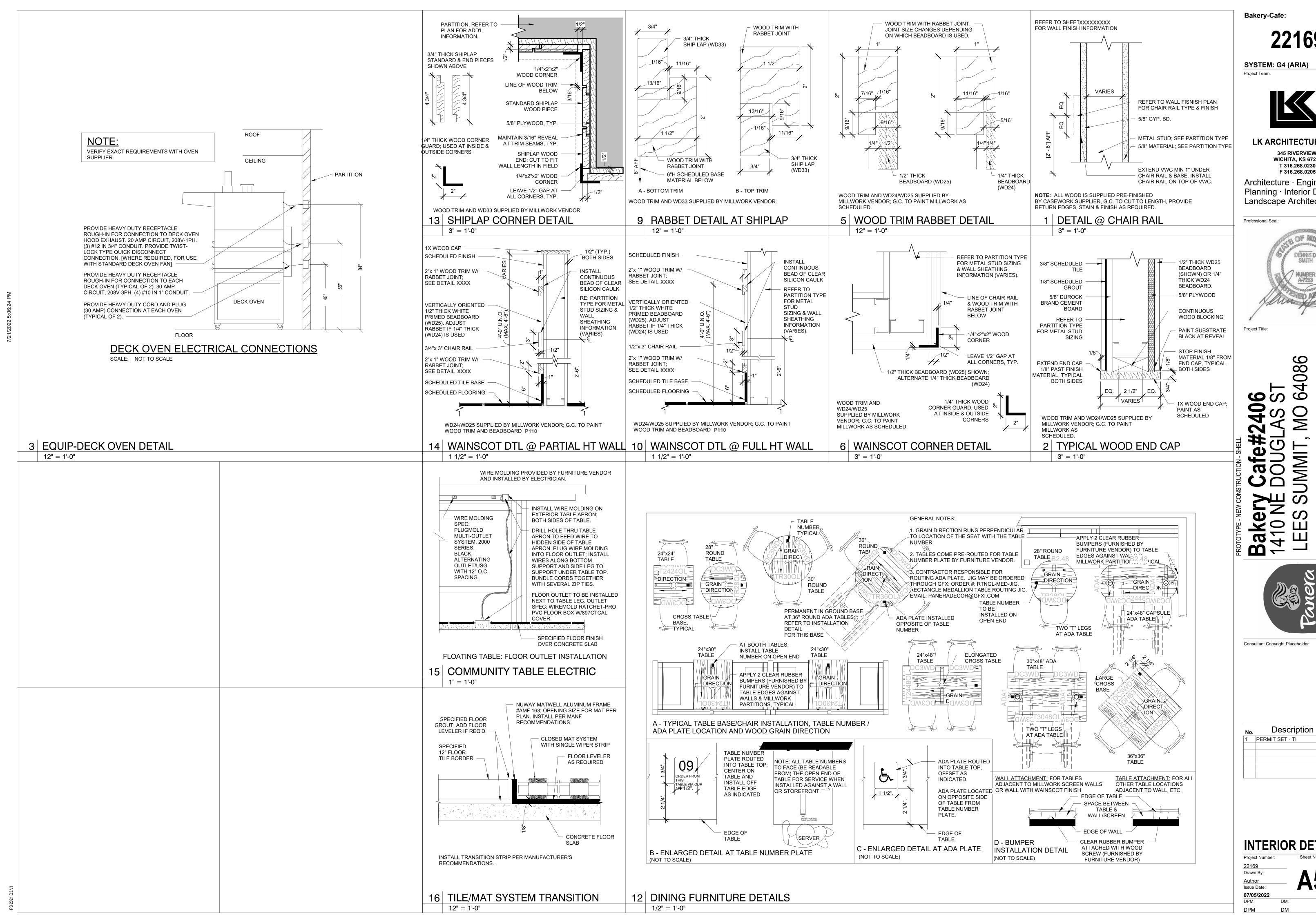


98 **@**○ **(1) 3ak** 410



Description Date PERMIT SET - TI 7/18/2022

Project Number: 07/05/2022

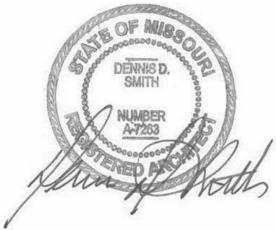


SYSTEM: G4 (ARIA)



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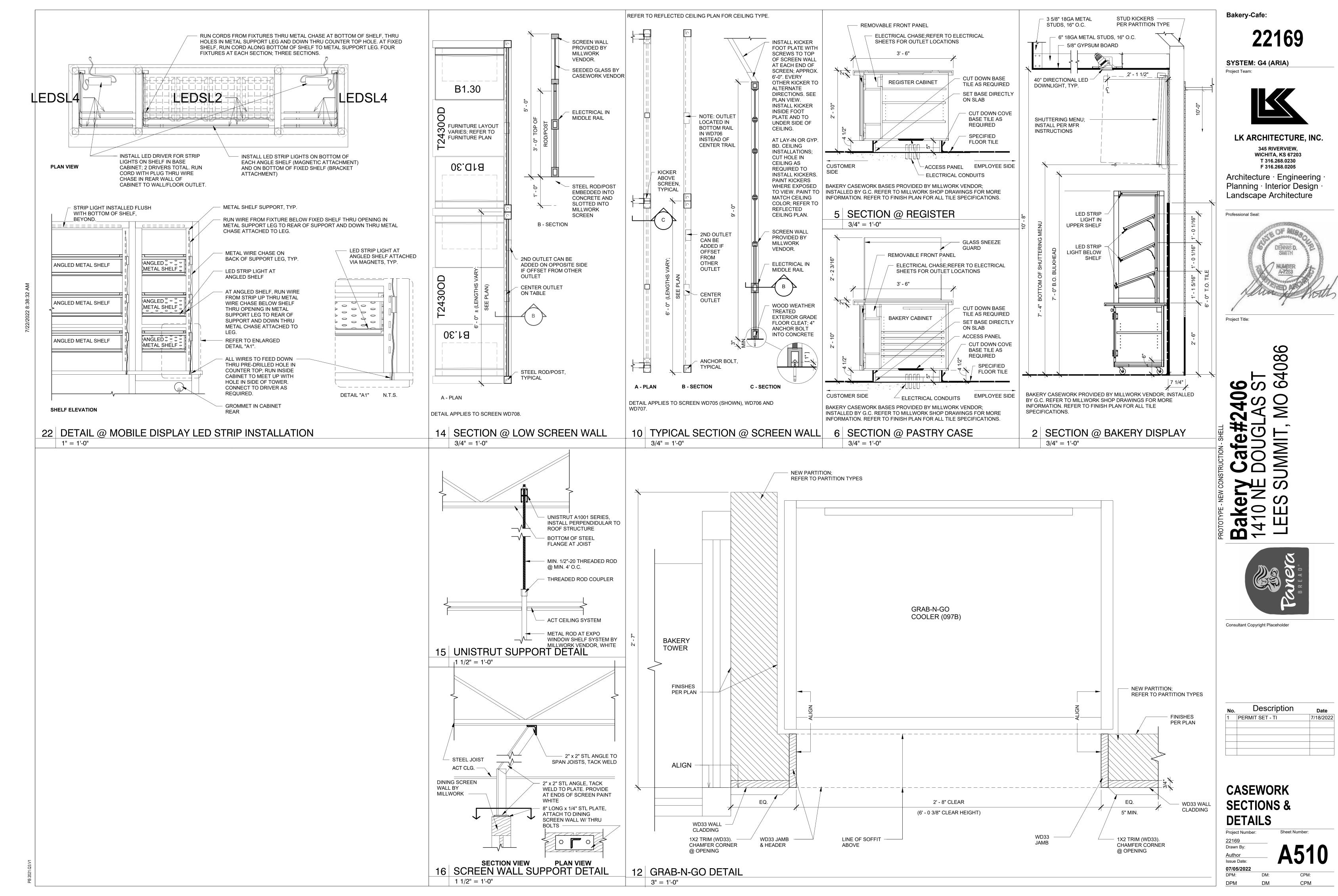
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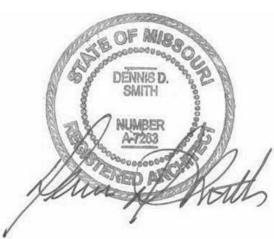


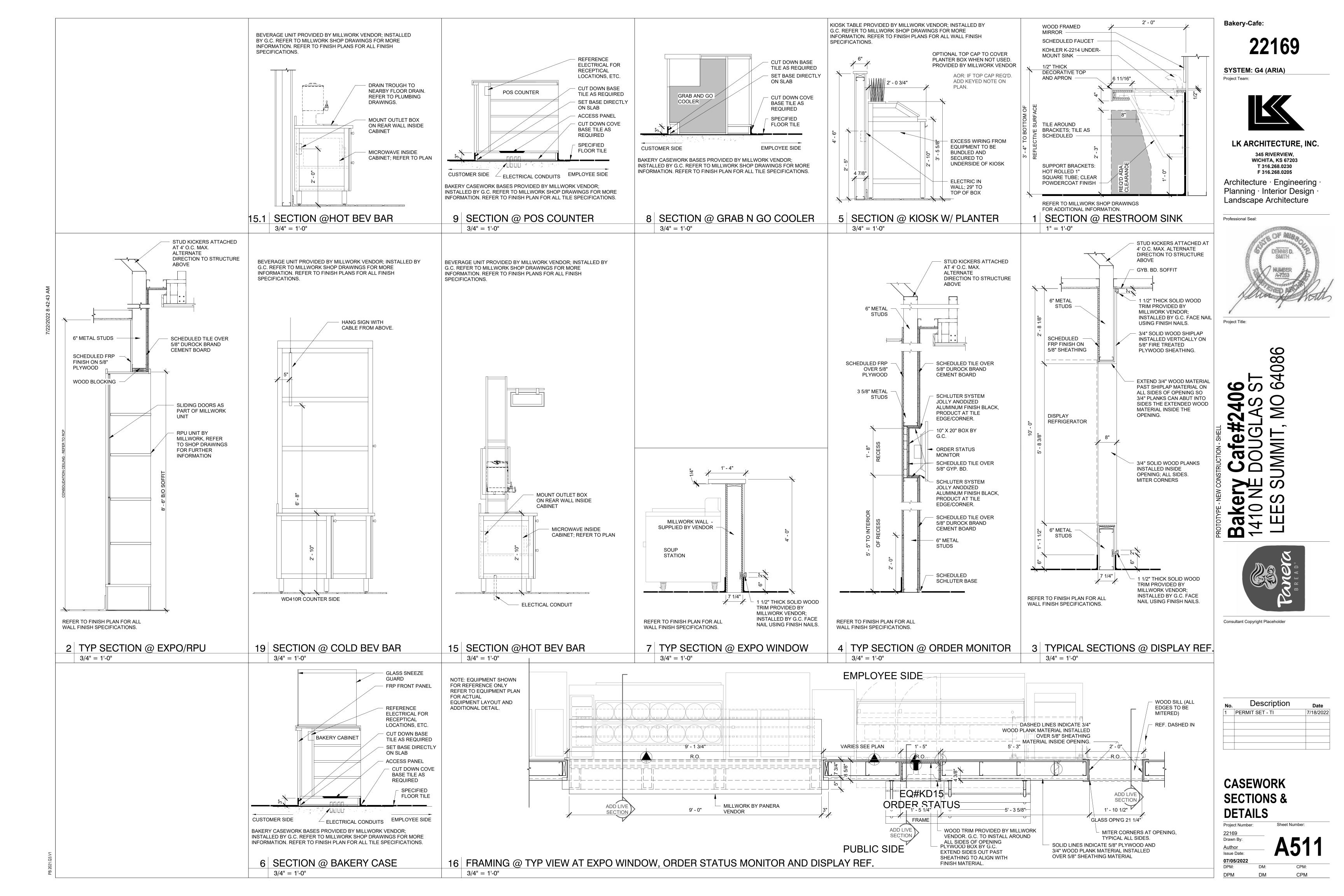
8 **\(\frac{1}{2}\)** 

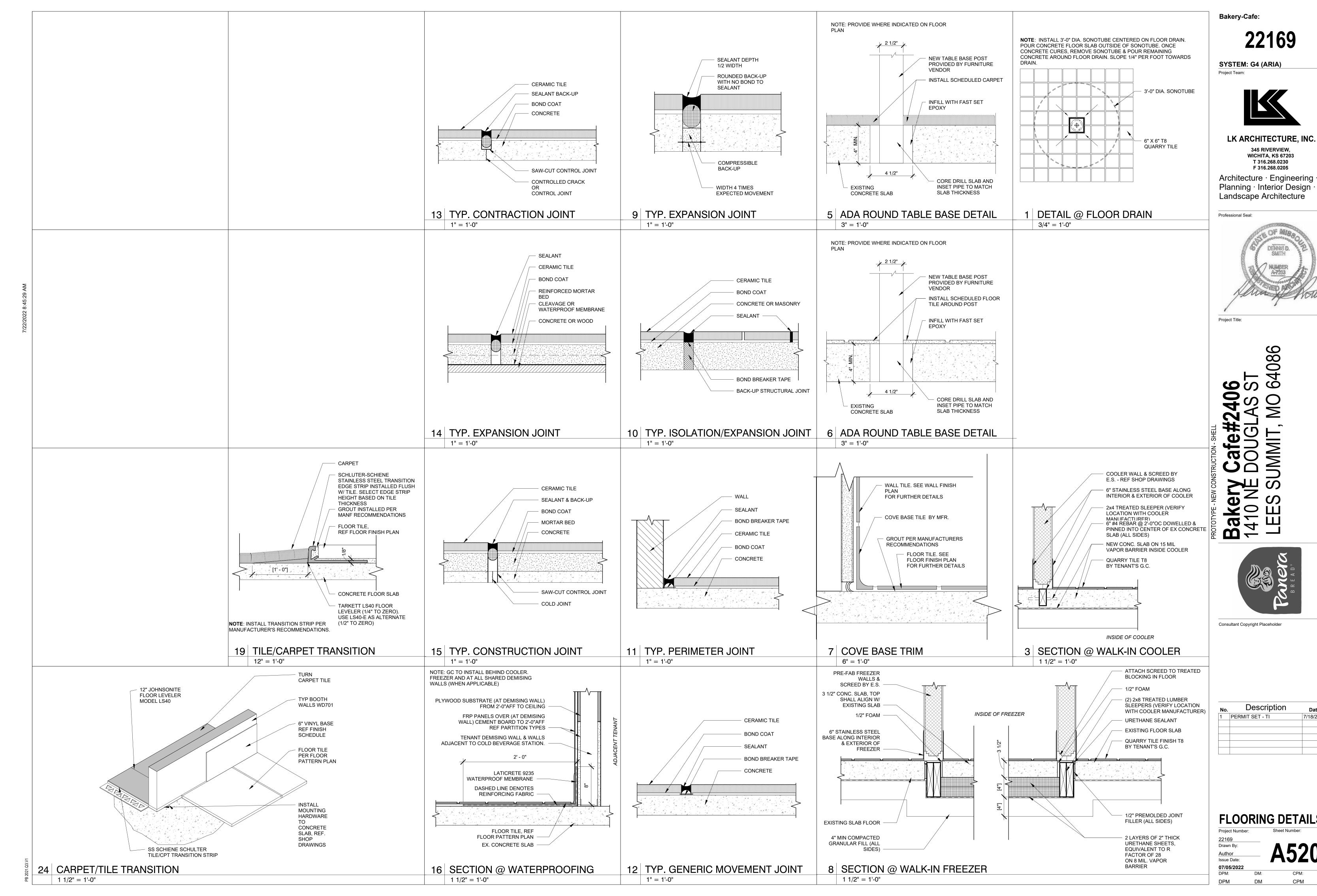


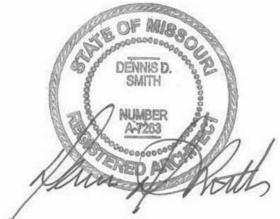
No.	Description	Date
1	PERMIT SET - TI	7/18/2022











Date 7/18/2022

NUMBER	FINISH SCHEDULE  DESCRIPTION	MANUFACTURER/DISTRIBUTO	R LOCATION	NOTES
EILINGS		I	T	
ACT10	USG SHEETROCK BRAND LAY-IN PANEL CLIMAPLUS, 2' X 4' VINYL, FINE TEXTURED, W/ ALUMINUM CAP GRID # 3270 COLOR: WHITE ACCOUSTIC CEILING TILE - CIRRUS SECOND LOOK III - 2X4X3/4 EDGE: BEVELED TEGULAR FOR 9/16" GRID -ITEM #511, COLOR; WHITE,	USG ARMSTRONG	BOH FOH	SUSPENSION SYSTEM:
	SIZE; 2'W X 4'L X 3/4"TH WOOD FINISH OVER SERVICE LINE (TBD)		SERVICE LINE	SUPRAFINE 9/16" GRID
ACTX	TEST CEILING, NOT ESTABLISHED	-	-	
	PERS, AND FRP 1" BUMPER: ECOFLEX TFC10000-012 W/ BA1000 ALUM BASE, ER1000-012 END CAPS, CN1000-012 90DEG CORNER, CX1000-12 45DEG	BOSTON RETAIL	BAKERY/KITCHEN	
B2	CORNER. FINISH COLOR: BLACK  1" BUMPER: ECOFLEX TFC10000-193 W/ BA1000 ALUM BASE, ER1000-193 END CAPS, CN1000-193 90DEG CORNER, CX1000-193 45DEG	BOSTON RETAIL	BAKERY/KITCHEN	
	CORNER. FINISH COLOR: POLAR WHITE  1" BUMPER: ECOFLEX TFC10000-018 W/ BA1000 ALUM BASE, ER1000-018 END CAPS, CN1000-018 90DEG CORNER, CX1000-018 45DEG	BOSTON RETAIL	BAKERY/KITCHEN	
	CORNER. FINISH COLOR: SILVER GRAY			
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	
	METAL COVE STRIP #DILEX-AHK, FINISH: ANODIZED ALUMINUM METAL STRIP PROFILE #JOLLY, FINISH: AGRB, BRUSHED GRAPHITE ANODIZED ALUMINUM	SCHLUTER SCHLUTER	FRONT OF HOUSE	
	RUBBER BASE: 0.80" THICK 6" BASE, COLOR: #8 BLACK	ALLSTATE	DINING & SMART ROOMS,	
VB2	THERMOPLASTIC VINYL BASE: .125" THICK, 4.5" COVE BASE, COLOR: #949 VERDE	MANNINGTON COMMERCIAL	CAFE BAKERY/POS	
WB ARPET	WOOD BASE SUPPLIED BY CASEWORK SUPPLIER, INSTALLED BY G.C.		CARPET	
C5	STYLE: MAGNITUDE, COLOR: BLACK PEARL, SIZE 4X24 TILE, INSTALLATION: BRICK ASHLAR. (REMODEL ONLY)	MANNINGTON COMMERCIAL	DINING AREAS	
	STYLE: MATRIX, COLOR: MESA, SIZE 18X36 TILE, INSTALLATION: MONOLITHIC. (REMODEL ONLY)  STYLE: NIGHT FLIGHT, COLOR: ROCKY SHORE #105698, SIZE: 19.69"x19.69" TILE, INSTALLATION: QUARTER TURNED (REMODEL ONLY)	SHAW / MATRIX MESA INTERFACE	DINING AREAS 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	
LE/GROU NOTE	「NOTES " (U)" OR "(S)" SHOWN NEXT TO GROUT NUMBER(S) BELOW INDICATES GROUT TO BE UNSANDED OR SANDED.			GROUT #;
				(S)ANDED/(U)NSANDED JOINT SPACING
CORATI				
	COLOR: FRENCH CLAY; BRONZAGE, SIZE: 4"X12", LAYOUT/PATTERN: 1/3 RUNNING BOND COLOR: FORGED; OLIVE GREEN, SIZE: 2.5" X 9.5", LAYOUT/PATTERN: STACK BOND	TRANSCERAMICA CREATIVE MATERIALS	WALL   RESTROOM WALL   FEATURE COLOR	G14; (U); 1/8" 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"
T104	COLOR: SANTIAGO BLEND, SIZE:3 5/8" X 11 5/8", LAYOUT/PATTERN: STACK BOND COLOR: OXIDIZE; BROWN, SIZE: 12" X 24", LAYOUT/PATTERN: STACKED	CREATIVE MATERIALS CREATIVE MATERIALS	WALL   FEATURE BRICK FLOOR   DINING	G25; (US); 3/8" G28; (US); 1/4"
	COLOR: ARID GRAY, SIZE: 6" X 6", LAYOUT/PATTERN: STACKED COLOR: BLAZE; DECOR YELLOW, SIZE: 4" X 12", LAYOUT/PATTERN: STACK BOND	DALTILE TRANSCERAMICA	FLOOR   KITCHEN WALL   ACCENT	G28; (US); 1/4"
UARRY TI	E		'	
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"
ROUT G1	COLOR: 39; IVORY. ALTERNATE: LATICRETE GROUT COLOR: 39 MUSHROOM	MAPEI		
	COLOR: 39; IVORY. ALTERNATE: LATICRETE GROUT COLOR: 39 MUSHROOM  COLOR: 58; TERRACOTTA	LATICRETE MVIS MORTAR		
	COLOR: 47; CHARCOAL COLOR: 00; WHITE	MAPEI MAPEI		
G28	COLOR: 35; NAVAJO BROWN	MAPEI		
	TEST GROUT, NOT ESTABLISHED ERING NOTES			
NOTE	TEXTURGLAS FINAL FINISH TO INCLUDE SCHEDULED PAINT COLOR			
ALL COVE WC1	:RING WALL TEXTURE; TEXTURGLAS, STYLE: TG4; BURLAP (CLASS A FIRE RATING)	ROOS INTERNATIONAL	FOH	SHOIW PAINT # HERE
	WALL TEXTURE; TEXTURGLAS, STYLE: TG7550; CROISINE (CLASS A FIRE RATING)	ROOS INTERNATIONAL	FOH FOH	SHOW PAINT # HERE
	WALL TEXTURE; TEXTURGLAS, STYLE: TG7710; CREPINE FLORTINES (CLASS A FIRE RATING) STYLE: BIG SUR; COLOR: COVE	ROOS INTERNATIONAL MDC	FOH   MAIN	SHOIW PAINT # HERE
WC8 SCELLAN	STYLE: WATERCOLOR CANVAS; COLOR: EVERGREEN	MDC	FOH   ACCENT	
	SPLIT FACE CMU - 4"X12"X24", CHISELED FACE WITH INTEGRAL COLOR: ARRISCRAFT RENNAISSANCE MASONRY UNIT, COLOR:		TRASH ENCLOSURE	
GL1	SANDDRIFT, FINISH: PRESS HAMMERED EUROPEAN CLEAR, TREE BARK, 5/32" THICKNESS SINGLE PANE GLASS	BENDHEIM	INTERIOR SCREEN WALLS	
GL2	SEEDED, SINGLE PANE GLASS	SEEDED	INTERIOR SCREEN WALLS	
GL5 IG	TEXTURED GLASS; REEDED. COLOR: LOW IRON  1" INSULATED CLEAR GLAZING TYPICAL	PILKINGTON	STOREFRONT	
IGS	1" INSULATED SPANDREL GLAZING TYPICAL, COLOR: BLACK	CHEMETAL	STOREFRONT	
	METAL BASE FOR MILLWORK TREX PLYWOOD, COLOR: SADDLE	TREX	MILLWORK TRASH GATE	
TREX2 OOD	TREX PLYWOOD, COLOR: WINCHESTER GREY	TREX	UTILITY SCREEN	
WD24	1/4" BEAD BOARD PANELING, 3" 'V' GROVE O.C.; PRIMED (WHITE) & PAINTED IN THE FIELD	MILLWORK VENDOR	FOH	
	1/2" BEAD BOARD PANELING, 3" 'V' GROVE O.C.; PRIMED (WHITE) & PAINTED IN THE FIELD WHITE OAK, NATURAL, WIRE BRUSHED; FINISH: DEAD FLAT	MILLWORK VENDOR MILLWORK VENDOR	FOH MILLWORK	
	WHITE OAK, NATURAL; FINISH: DEAD FLAT	MILLWORK VENDOR	MILLWORK	
	WHITE OAK, DARK STAIN; FINISH: DEAD FLAT WHITE OAK, BLACK STAIN; FINISH: SMOOTH	MILLWORK VENDOR MILLWORK VENDOR	MILLWORK MILLWORK	
	WHITE OAK; COLOR: GALLATIN WHITE OAK; COLOR: WIND RIVER	MILLWORK VENDOR MILLWORK VENDOR	MILLWORK MILLWORK	
TON TNIA	ES CONTRACTOR CONTRACT	WILLWORK VENDOR	WILLWORK	
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.			
AINT		DENIA MULTICOS = -	1	
	FAIRVIEW TAUPE; #HC-85 CHEATING HEART; #1617	BENJAMIN MOORE BENJAMIN MOORE		
P224	DRAGON'S BREATH; #1547	BENJAMIN MOORE		
	MONTEREY WHITE; #HC-27 BLACK BEAUTY; #2128-10	BENJAMIN MOORE BENJAMIN MOORE		
P290	AVOCADO; #2145-10	BENJAMIN MOORE		
P292	BAJA DUNES; #997 COLLECTOR'S ITEM; #AF-45	BENJAMIN MOORE BENJAMIN MOORE		
	FRENCH BERET; #1610 HUNTER GREEN; #2041-10	BENJAMIN MOORE BENJAMIN MOORE		
PHOLSTE	RY			
	VACATION; CANYON KIEV; CASTLE	FIL DOUX POLLACK		
F178	RE-FLE; INK WASH	POLLACK		
	FLOCK; NETTLE FLOCK; FERN	MOMENTUM MOMENTUM		
F188	FLOCK; HEARTH	MOMENTUM		
	FLOCK; FORREST REIN; SABLE	MOMENTUM DESIGNTEX		
S11	REIN; CLAY	DESIGNTEX		
	BOUNTY; COFFEE DIMA; NIGHTFALL	FIL DOUX FIL DOUX		
S71	BISTRO; CITRON	CF STINSON		
	BISTRO; GRASSHOPPER CASSIDY 2.0; PELICAN	CF STINSON CF STINSON		
S74	CASSIDY 2.0; JUNGLE	CF STINSON		
S75 DLID SUR	BOUNTY; COCAO FACING	FIL DOUX		
SS40	STYLE: DALMATA; TERRAZZO, COLOR: TERRAZZO MATRIX 412	FORMICA	COUNTER/TABLE TOPS	
SS41 MINATES	STYLE: LUNA, COLOR: SAIL WHITE	FORMICA	PICK-UP SHELVES	
L104	WILSONART 1500 - 60 GREY	WILSONART	KITCHEN DOOR	
	4155 PEWTER 0717 CASTORO OTTAWA	FORBO FENIX	TABLE TOPS CONSOLIDATION SCREENS	
L108	0724 GRIGIO BROMO	FENIX	CONSOLIDATION / BAKERY	
	0750 VERDE COMODORO	FENIX	CONSOLIDATION SCREENS	
	4132 ASH	FORBO	TABLE TOPS	

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 ST	DNE			
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	

# **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.

Bakery-Cafe:

22169

SYSTEM: G4 (ARIA)
Project Team:



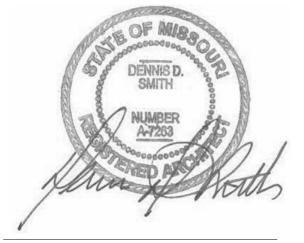
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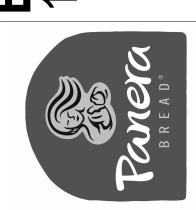
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	PERMIT SET - TI	7/18/2022

FINISH SCHEDULES, LEGENDS, & NOTES

Project Number: Sheet Number:

22169

Drawn By:

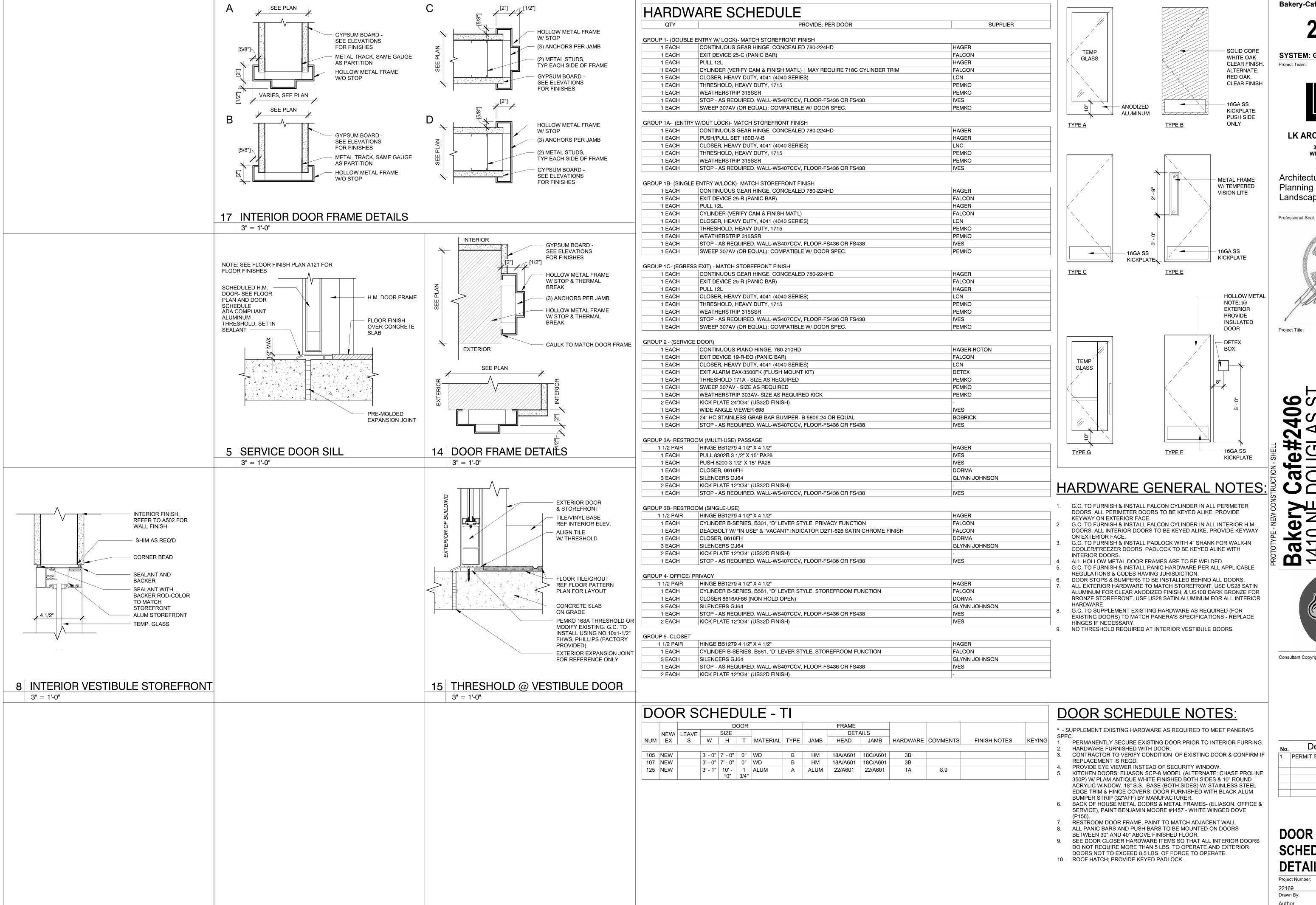
Author

Issue Date:

07/05/2022

DPM:

L112 4166 CHARCOAL



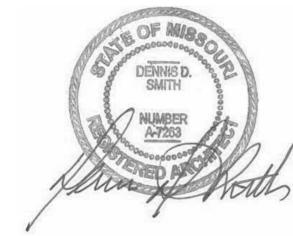
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# DOOR ELEVATIONS, SCHEDULES, & **DETAILS**

Project Number: <u>Author</u> Issue Date: 07/05/2022 DPM:



7.10 ACCESSIBLE SEATING 7.11 LOCATION OF APPROVED FIRE EXTINGUISHER RATED 2A-10BC. LOCATE WITHIN 30' TRAVEL DISTANCE FROM LIKE EXTINGUISHER.

SYSTEM: G4 (ARIA) Project Team:

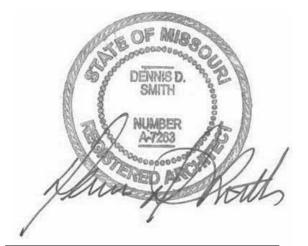
Bakery-Cafe:



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Project Title:



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# **EQUIPMENT PLAN LEGEND:**

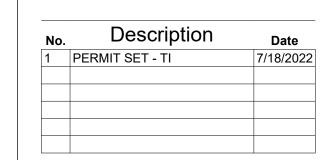
XXX ROOM NUMBER SYMBOL

- EQUIPMENT IDENTIFICATION SYMBOL

- FURNITURE IDENTIFICATION SYMBOL

DOOR NUMBER SYMBOL

? FABRIC DESIGNATION SYMBOL (SEE A-4.8 SHEET)



# **EQUIPMENT PLAN**

07/05/2022

BAKERY SERVICE

34

MW201.A1

MW803.A1 030E

MW931.A1 MW803.A1

VESTIBULE 26

ID TAG	QTY	MENT SCHEDUL  DESCRIPTION	MANF.	MODEL #	DIMENSIONS	SUPPLIED	INSTALLED	NOTE
)2	4		EAGLE	PAN 2424-C		E.S.	E.S.	
)2C	3	24IN STOR SHELVING (Z, 5 SH) 24IN STOR SHELVING (Z, 5 SH)	EAGLE	PAN 2448-C	24"W x 24"D x 91"H 48"W x 24"D x 91"H	E.S.	E.S.	В
2D 3 2	1	24IN STOR SHELVING (Z, 5 SH) BAKER STORAGE RACK	EAGLE NEW AGE INDUSTRIAL	PAN 2460-C 97191	60"W x 24"D x 91"H 48'W x 24"D x 76"H	E.S. S.W.	E.S. OWNER	B B
MD	5	WALK-IN FREEZER SHELF	CORP, INC. METRO	PAN862436-F4	36"W x 24"D x 86.625"H	E.S.	E.S.	
BM	4	WALK-IN COOLER SHELF	METRO	PAN862448-C4	48"W x 24"D x 86.625"H	E.S.	E.S.	
BMD CM	1	WALK-IN FREEZER SHELF WALK-IN COOLER SHELF	METRO METRO	PAN862448-F3 PAN862460-C3	48"W x 24"D x 86.625"H 60"W x 24"D x 86.625"H	E.S.	E.S.	
SAM KM	3	36" SINGLE BRIDGE SHELF STANDING BRIDGE SHELF	METRO METRO	PAN2436BS-PRO PAN862448-C7	36"W x 24"D x 1.5"H 48"W x 24"D x 86.625"H	E.S.	E.S.	
ИB	1	COOLER TRUNDLE	METRO	PAN2448-RIGTRUNDLE	43"W x 21.75"D x 9.75"H	E.S.	E.S.	F
//C  5E	1	COOLER TRUNDLE SMARTWALL @ PREP SINK	METRO EAGLE GROUP	PAN2460-RIGTRUNDLE PAN36-SWPREP	55"W x 21.75"D x 9.75"H 36"W x 30"H	E.S.	E.S.	F -
7B2C 7D2C	1	` '	EAGLE EAGLE	PAN 1830-WALL-2C PAN 1848-WALL-2C	30"W x 18"D 48"W x 18"D	E.S. E.S.	E.S. E.S.	
7E2	1	WALL SHELF - 48" (2 SH) - 2C WALL SHELF - 48" (2 SH)	EAGLE	PAN 1848-WALL-2C PAN 1860WALL-2	48"W x 18"D	E.S.	E.S.	
7F2 7G30	2	WALL SHELF - 60" (2 SH) WALL SHELF OVER DOOR - 30"	EAGLE EAGLE	PAN 1860-WALL-2 YPB-0047-30	60"W x 18"D 31-3/16"W x 25-9/32"D	E.S.	E.S.	
7G36	3	WALL SHELF OVER DOOR - 36"	EAGLE	YPB-0047-36	37-3/16"W x 25-9/32"D	E.S.	E.S.	
7G42 7G48	2	WALL SHELF OVER DOOR - 42" WALL SHELF OVER DOOR - 48"	EAGLE EAGLE	YPB-0047-42 YPB-0047-48	43-3/16"W x 25-9/32"D 49-3/16"W x 25-9/32"D	E.S.	E.S.	
7J36	1	WALL SHELF, SINGLE, UPTURNED BRACKETS - 18" x 48"	EAGLE	1836C SHELF; 18WB1C BRACKETS	36"W x 18"D	E.S.	E.S.	
7J48	1	WALL SHELF, SINGLE, UPTURNED	EAGLE	1848C SHELF; 18WB1C	48"W x 18"D	E.S.	E.S.	
7K	1	BRACKETS - 18" x 24" ASSOCIATE GAMENT RACK	METRO	BRACKETS INSTR-PAN1848-GRM	48"W x 18"D x 76.75"H	E.S.	E.S.	
8F M	2		EAGLE METRO	PAN 3030-DSC	30"W x 30"D x 29.75"H	E.S.	E.S. E.S.	
9C	1	MOP SINK RACK SHELV (4 SH)	EAGLE	PAN862424 YPB-0308-00	24"W x 24"D x 86.625"H 24"W x 24"D x 92"H	E.S.	E.S.	
D48 1	1	COATED CLEAN DISH RACK SHELVING MOP SINK W/ THE FOLLOWING	EAGLE FLORESTONE PROD.	PAN DISH SHELVING-C MSR3624	48"W x 24"D x 91"H 36"W x 24"D	E.S. G.C.	E.S. G.C.	_
1	I	ACCESSORIES: MR370 5/8" HOSE 5' LONG W/ CLAMP, MR371 SPEAKMAN FAUCET SC5811RCP, MR374 WEDGE-LOK SEAL FOR 3" DRAIN, MR376 DOME STRAINER, CHROME	TEORESTONE FROD.	W313024	30 W X 24 D	G.C.	G.C.	
2A 3B	1	3 COMP SINK - REDUCED SIZE (SS) 2 COMP SINK - REDUCED SIZE (SS)	EAGLE EAGLE GROUP	CUSTOM 314-16-2	103"W x 31"D x 42.5"H 41"W x 27.5"D x 44.5"H	E.S. E.S.	G.C. G.C.	_
5	1	PRE-RINSE SPRAY UNIT/DISH	FISHER	2210-WB W/ ADD ON SPOUT	37"H x 18"W	E.S.	G.C.	_
6 9A	5	( ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	FISHER ZURN	22446 Z812B1-15F	4" DIA, 4.5"H 6.5"W x 2"D x 11.9"T	E.S. C.S.	G.C.	-
9B	2	FAUCET (1, 2, 3 COMP SINK)	FISHER	13269	8" CTRS/12" SPOUT	E.S.	G.C.	
9C	1	FAUCET: POT FILLER	T&S Brass and Bronze Works, Inc.	B-0594	3.125"W x 26.5625"D x 7.6875"T	E.S.	G.C.	
9D	1	POT FILLER FAUCET FOR HOT BEV	EAGLE	301003	8" CTRS/18" DBL-JOINTED SPOUT	E.S.	G.C.	
1C	3	WALL MTD SS HANDSINK (knee cntrl)	EAGLE	HSA-10-FK-LRS	18.9"W x 14.75"D x 14.25"H	+	G.C	
2B 3B	1		EAGLE HOSHIZAKI	YPB-0093-00 KMD-901MRH w/URC-12F	14"W x 25"D x 29.6875"H 30"W x 24.625"D x 28"H	E.S. OWNER	G.C.	-
3F	1	ICE MACHINE W/ REMOTE AIR-COOLED CONDENSER	HOSHIZAKI	KM-520MRJ	22"W x 27.375"D x 28"H	OWNER	G.C.	
3H	1	ICE MACHINE W/ REMOTE AIR-COOLED	HOSHIZAKI	KM-660MRJ	22"W x 27.375"D x 28"H	OWNER	GC	
4C	1	CONDENSER ICE STORAGE BIN	HOSHIZAKI	B-300PF	22"W x 32.5"D x 46"H	OWNER	G.C.	-
5B	1	,	ELGE	SLB4PL	36"W x 27.25"H	E.S.	G.C.	
5D	<u>'</u>	WATER SOFTENER	ELGE	-	16"DIA x 72.85"H & 24.5"DIA x 50.5"H		G.C.	-
7A	1	DISHWASHER (UPRIGHT)	JACKSON	ES-2000	25.25"W x 25.25"D x 66.25"H	ECOLAB	G.C.	
7C 8B	1	DISH COUNTER (CLEAN) TORK ELEVATION MATIC HAND TOWEL	EAGLE TORK	CUSTOM 5510202; WHITE	30"W x 31"D x 42.5"H	E.S. SCA	G.C. G.C.	
		ROLL DISPENSER		, in the second	14.7"H X 13.2"W X 8.1"D			
9 9A	3	SOAP DISPENSER GLOVE BOX HOLDER	ECOLAB GLOBAL	92633825 WBB2187696	4"W x 4"D x 8"H 11.9375"W x 3.8125"D x	ECOLAB S.W.	G.C.	
0	1				19"H	NCR	NCR	
U		POS REGISTER W/ COMPACT CASH DRAWER	NCR	POS RealPOS 72XRT	REGISTER - 14.5"W x 10.5"D x 14.5"H DRAWER -	NCR	INCR	
0A	1	CASH DROP BOX	AMSEC	TB0610-1 W/ 4505095	16.2"W x 16.3"D x 4.3"H 6"W x 10"D x 6"H	E.S.	G.C.	
0E	3	KIOSK TABLET W/ SURFACE MOUNTED CASE	APPLE & LILITAB	IPAD	12.47"W x 1"D x 8.98"H	OWNER	OWNER	
0G	3	HP POS REGISTER W/ COMPACT CASH	HP	HP ENGAGE ONE	REGISTER - 13.75"W x	HP	HP	
		DRAWER			6.5"D x 11.5"H; DRAWER (IF APPLICABLE) - 16.2"W x			
0G	1	HP POS REGISTER W/ COMPACT CASH	HP	HP ENGAGE ONE	16.3"D x 4.3"H REGISTER - 13.75"W x	HP	HP	
	ľ	DRAWER			6.5"D x 11.5"H; DRAWER (IF APPLICABLE) - 16.2"W x			
	_				16.3"D x 4.3"H			
1 2A	1	PRINTER PRINTER/FAX/COPIER MACHINE	EPSON/MICROS BROTHER	TM-T88 MFC-7340	5.71"W x 7.68"D x 5.83"H 16.9"W x 15.6"D x 12"H	MICROS NCR	MICROS NCR	
5	1	MANAGER PC AND PRINTER	HP	EVO D510	-	NCR	NCR	
7 0	1	CREDIT CARD READER WALK-IN COOLER	Verifone WALK-IN VENDOR	MX925 SEE SHOP DWGS	8.6"W x 9.1"D x 2.2"H SEE SHOP DWGS	OWNER E.S.	OWNER G.C.	-
1B 2A	1	WALK-IN FREEZER WITH 30" DOOR BAG-N-BOX	WALK-IN VENDOR MBS	SEE SHOP DWGS AR-10-2W-GLIDE	SEE SHOP DWGS 32"W x 19"D x 61"H	E.S. PEPSI	G.C. PEPSI	-
2B	1	BULK Co2 TANK	NuCO2	CARBO CHARGER 300 LB.	47"H x 20" DIA	NuCO2	NuCO2	
2C 2C	1	CARBONATOR CARBONATOR	CORNELIUS CORNELIUS	1624 1624	12"W x 9"D x 10.5"H 12"W x 9"D x 10.5"H	PEPSI PEPSI	PEPSI PEPSI	
2D	8	BAG N BOX PUMP	SHURFLO	PB8-SF	5.7"W x 3.8"D x 7.9"H	PEPSI	PEPSI	
2E 3F	1 10	WATER BOOSTER PUMP SINGLE OVEN RACK (15 PAN CAPACITY)	SHURFLO MAGNA	804-023 APR1518/4RORC	10"W x 10"D x 13"H 18"W x 28.5"D x 73.125"H	PEPSI OWNER	PEPSI OWNER	-
3G	6	C-LIFT  PULL THAW RACKS (20 PAN CAPACITY)		1331	20.375"W x 69.75"H x 26"D	OWNER	OWNER	_
	1	DOUBLE DOOR PROOFER W/	BAXTER	1331 RPW2S-40.5	75.5"W x 43.3"D x 99.5"H	BAXTER	BAXTER/G.C.	-
ER	1	RETARDER; 4 RACK BOH HOT BEVERAGE STATION (72"),	EAGLE	YPB-T3072-0019-00	72"W x 30"D x 39"H; 34.5"H	E.S.	E.S.	Н
7F	1	RIGHT HAND  SS. TABLE W/OPEN BASE (24") (BETA)	EAGLE	YPB-T3324-0001-00	COUNTER 24"W x 33"D x 38"H	E.S.	E.S.	
7G	1	SS. TABLE W/OPEN BASE (18") (BETA)	EAGLE	YPB-T3318-0001-00	18"W x 33"D x 38"H	E.S.	E.S.	-
8A 9B	1	SINGLE RACK OVEN/GAS (BETA) 24X24 ACCESS PANEL	Baxter BEST ACCESS DOORS	OV500G1 BA-AHD	55"W X 83.5"D X 104"H 24"W x 24"H x 1.5"D	REVENT G.C.	BAXTER/GC G.C.	- V, W
9Б 2A	1	DUAL THICKNESS BREAD SLICER	OLIVER	758-N	38.25"W x 29.75"D x	E.S.	E.S.	v , vv
BF BK	2	68" SANDWICH PREP TABLE 60" CATERING PREP COOLER W/ OVER-SHELF	RANDELL RANDELL	8260NDWR	54.25"H 68"W x 34"D x 48"H 60"W x 34"D x 57"H	E.S.	E.S.	-
BMD	1		RANDELL RANDELL	11336PR-PANERA 11336PR-PANERA	36"W x 38"D x 36"H 36"W x 38"D x 36"H	E.S.	E.S.	
4	1	DRAWER SODA/ICE DISP. (8HD)	CORNELIUS	IDC255 #621057438	30"W x 33.125"D x 40"H	PEPSI	PEPSI	-
4D	1	SODA/ICE DISP. (8HD) W/ ED175 ICE MAKER ADAPTER KIT	CORNELIUS	RENEW 175: #621058581	25.1"W x 31.5"D x 35.6"H	PEPSI	PEPSI	
5CHR	1	U.C. 1 DR REFRIGERATOR; RIGHT HAND	HOSHIZAKI	UR27A	27"W x 31"D x 32.25"H	E.S.	E.S.	N
5GHR	2	HINGED U.C. 1 DR REFRIGERATOR; RIGHT HAND	HOSHIZAKI	UR36A	36"W x 31"D x 32.25"H	E.S.	E.S.	N
5T		HINGED						
	2	SALAD CRISPER	SILVER KING	SKDL18-RDUS4	17.62"W x 28.42"D x 36.39"H	E.S.	E.S.	A
SA SA	1	TEA BREWER COFFEE SERVER	WILBUR CURTIS BUNN	TCTS10631 42700.0251	12.75"W x 20.75"D x 34"H 9.1"W x 11.9"D x 12.6"H	E.S.	G.C. E.S.	-
	1	TWIN COFFEE BREWER	WILBUR CURTIS WILBUR CURTIS	G4TP1T19A3131	18"W x 16.625"D x 28"H	E.S.	G.C.	-
58F 58H	2	1 GAL. COFFEE URN	OLIDTIO	TXSG01	12.375"X9.125"X13.625"	E.S.	G.C.	

ID TAG	QTY	MENT SCHEDUL  DESCRIPTION	MANF.	MODEL#	DIMENSIONS	SUPPLIED	INSTALLED	NOTES
יט ואט	_ QIT	DESCRIPTION	IVIAINE.	IVIODEL #	DIIVILINOIUNO	JUFFLIED	INGIALLED	INOTES
59A	2	EMPLOYEE LOCKER C-THRU	NCG DENSTOR	C-THRU LOCKER	12"W x 18"D x 78"H	E.S.	E.S.	J
060B	1	WHOLE BEAN COFFEE GRINDER	BUNN	MHG SST	9.4"W x 18.6"D x 29.1"H	E.S.	E.S.	
61	1	ESPRESSO MACHINE   (SEMI-AUTOMATIC)	FRANKE	70009269-PNRA	13.4"W x 21.3"D x 29.5"H	OWNER	OWNER	
)63C	2	HYBIRD CONVECTION OVEN	SHARP	RCD1800M	17.5"W x 20.5"D x 13.675"H	E.S.	E.S.	
63D	1	MICROWAVE COMMERCIAL GRADE,	SHARP	R-21LCFS	20.5" x 16.0"D x 12.125"H	OWNER	E.S.	
		1550 WATTS, DIAL CONTROL						
)64B	1	14 WELL, LEFT HAND DRY CHANNEL HIGH CAPACITY SOUP STATION	DUKE	HCSS-LH-208V	66"W x 34.1"D x 34.1"H	E.S.	E.S.	
067	5	INDOOR TRASH CONTAINER	RUBBERMAID	1011	20"W x 11"D x 30"H	S.W.	S.W.	
068A	1	SOUP RETHERMALIZER	ELKAY FOODSERVICE	RTB-14-SL-OPB		E.S.	G.C.	
)75C	1	TOAST-QWIK ELECTRIC CONVEYOR	HATCO	TQ3-900H	14.7"W x 20.62"D x 17.13"H		G.C.	
		TOASTERS						
)76C )79D	2	SIMPLICITY BUBBLER - 3 BOWL SAFE	CRATHCO BY GMCW AMSEC	CS-3L-16 SK2014-857	20.4"W X 17.7"D X 29"H 30"H x 20"W x 20"D	E.S.	E.S.	
79D 79E	1	TIDEL "SMART SAFE"	TIDEL	SERIES 3	10.25"W x 27.25"H x 19"D	E.S.	E.S.	
77 3	'	TIBLE SWART SALE	INDEL	OLIVIES 5	(28.13"D)	L.O.	L.G.	
)80B	1	OFFICE FILE BOX				E.S.	E.S.	
)81D	1	DOUBLE SIDED SALAD PREP TOP (74")	RANDELL	51368PR-PANERA-OS	74"W x 47.875"D x 38.65"H;	E.S.	E.S.	
)82	1	WITH DOUBLE SIDED OVER SHELF BAGEL SLICER	OLIVER	702-N	77.125" WITH SHELF 30"W X 13"D X 21"H	E.S.	E.S.	
)82C	1	BAGEL SLICER CHUTE	OLIVER	702-IN	12.5"W x 33.3"D x 31.4"H	E.S.	E.S.	
)82D	1	BAGEL SABER	PRINCE CASTLE	970-A SERIES	7"W x 10.75"W x 3.5"H	E.S.	E.S.	
)83A	2	BLENDER	VITAMIX	03066	8.5"W x 10"D x 18"H (24.5"H		E.S.	
					WITH LID OPENED)			
084N6	2	MODIFIED BREAD SHELF	RANDELL	4SHEBREAD-68-PANERA-5		E.S.	G.C.	
)84TA	1	STAINLESS STEEL WALL SHELF	EAGLE	YPB-0314-00	56"W x 18.875"D x 2.25"H	E.S.	G.C.	
)85A )85B	1	HEATED SHELF EGG STATION	Hatco Corporation ROUND UP	GRS-18-I ES-600	18"W X 19.5"D X 2.25"H 16.6"W x 18.4"D x 7.25"H	E.S. ROUNDUP	E.S.	_
)85G	1	HEATED SHELF	Hatco	GRSS-1806	6"W x 18"D x 2.523"H	E.S.	E.S.	_
)85H	2	TURBOCHEF DOUBLE BATCH OVEN	TURBOCHEF	HHD-9500-21	31.7"D x 27.7"W x 23.2"H	E.S.	E.S.	
)85M	2	MERCO HOT HOLDING UNIT	MERCO	MHT32SST1W	20.5"W x 13"D x 16.9"H	E.S.	E.S.	
)89	1	SCALE	NOT PROVIDED (TAYLOR)	TE10FT/TE32FT	10.5"W x 7.5"D	NOT	NOT	NOT
		T. INF COMOCUPATION TARK	NETRO	NIGTO DANIESOS TUNE	50 5WA	PROVIDED	PROVIDED	PROVIDED
)92J	1	T-LINE CONSOLIDATOR TABLE W/SMART WALL	METRO	INSTR-PAN5836-TLINE	58.5"W x 36"D x 77.5"H	E.S.	G.C.	
)95E	1	CATERING STATION - 30"	EAGLE	YPB-0194-00	30"W x 30"D x 72"H	E.S.	E.S.	-
)97E	1	OASIS IN-COUNTER REFRIGERATED	STRUCTURAL CONCEPTS		36.25"W x 24.125"D x	E.S.	E.S.	
		GRAB AND GO			32.75"H			
)98B	1	AM PRODUCTION TABLE W/ GRID	METRO	INSTR-3036AMDTPS-WBG	36.25"W x 30.5"D x 67.75"H		E.S.	
122	2	OFFICE CHAIR	-	-	- 20 44 11 1 1 1 2 4 0 0 4 11 0 11 1	OWNER	OWNER	
127B 128	1	WALL-MOUNT OPEN FRAME RACK 13" CCTV MONITOR	TRIPP-LITE VIEWSONIC	VA503B	20.11"W x 18.24"D x 24.8"H 13.2"W x 13.7"D x 5.8"H	UAS	OWNER UAS	
401DR	1	RIGHT HAND ORDER TAKER BEVERAGE		YPB-T3272-0011-00	72"W x 32"D x 40.5"H	E.S.	E.S.	
.0.5.		TABLE; DRIVE THRU		11 5 10212 0011 00	72 W X 62 B X 16.6 T1		2.3.	
402GR	1	82" DRIVE THRU CASHIER TABLE WITH	METRO		82"W x 30.75"D x 62.5"H	E.S.	E.S.	
400111		GRID; RIGHT HAND	EAOLE	VPD 00070 0040 00	400004 0000 05 040504	F 0		
403HL 407	1	108" LH ESPRESSO BAR PASS THRU WINDOW (DRIVE THRU) W/	EAGLE	YPB-OB3072-0010-00 FM-42E	108"W x 30"D x 35.3125"H 42'W x 40"T x 25.375"D	E.S. G.C.	E.S. G.C.	
		POWER SUPPLY IN LEFT HAND HAMB, THRU BEAM PHOTO ELECTRONIC EYE BAR & 5/8" INSULATED TEMPERED GLAZING (BRONZE TINT), FRAME SHALL BE INSULATED & HAVE A CLEAR ANODIZED ALUM. FINISH						
440A	1	DRIVE THRU CONSOLIDATION SWEETS	EAGLE	YPB-RACK-0005-00	20.5"W x 26"D x 33.5"H	E.S.	E.S.	-
141A	2	RACK (7 PAN CAPACITY)  Z TYPE NESTING RACK (20 PAN	NEW AGE INDUSTRIAL	51358	21"w x 26"D x 69.625"H	OWNER	OWNER	
7717	_	CAPACITY)	CORP.	31330	21 W X 20 D X 00.020 11	OVVIVER	OWNER	
158A	3	COFFEE SHUTTLES W/O RACK	GRINDMASTER	SS-1.9LD / SS-1.9LR /	DECANTER: 6.5"R x 7.25"H	E.S.	G.C.	-
	1.			DR-2SU				
160	1	DRIVE THRU TIMER/PC	HYPERACTIVE	CUSTOM	21"W x 6"D x 18"H	E.S.	E.S.	-
161	1	WIRELESS DRIVE THRU AUDIO COMMUNICATION SYSTEM	HM ELECTRONICS, INC	WIRELESS 6000	12.8"W x 3.8"D x 7.8"H	E.S.	E.S.	-
162B	1	ORDER READY MONITOR	NEC	EA273WMBK	14.6"W x 24.9"H x 2.5"D	OWNER	OWNER	C - PORTRAI
								ORIENTATION
463	1	SECURITY FLAT SCREEN MONITOR 17"		V1768U	14.88"W x 1.91"D x 12.50"H		E.S.	-
166A	2	WALL BRACKET FOR DOME CAMERA	UAS	VX-WB / VX-WBB	4.33"W x 7.41"D x 4.33"H	NOT PROVIDED	NOT PROVIDED	
166A	2	WALL BRACKET FOR DOME CAMERA	UAS	VX-WB / VX-WBB	4.33"W x 7.41"D x 4.33"H	NOT	NOT	_
10071	-	While Bruterier Fort Bowle of William	0710	VX WB7 VX WBB	1.00 W X 7.11 B X 1.00 11	PROVIDED	PROVIDED	
CWS	1	ROPE MONITOR	LG	23MB35PM-B	21.6"W x 2.4"D x 13.2"H	OWNER	OWNER	
<del>-</del> -11	1	1	CUSTOM BY MW VENDOR.	CUSTOM BY MW VENDOR.		C.S	C.S.	
<del>-</del> -12	5	BASE: PC-3, SEAT: FB-1, GL-1 CENTRAL BANQUETTE - BACK CUSHION; FINISH: FB-1 & FB-2, SCREWS TO MATCH PMS 9184C		CUSTOM BY MW VENDOR.		C.S	C.S.	
-17	1	CORNER BANQUETTE; FINISH: WD-1, BASE: PC-3, SEAT: FB-1		CUSTOM BY MW VENDOR.	24 6 1 1 2 4 1 5 4 4 2 6 1 1	C.S	C.S.	C
(D1 (D2	2	SANDWICH 1 MONITOR SALAD 1 MONITOR	LG LG	23MB35PM-B 23MB35PM-B	21.6"W x 2.4"D x 13.2"H 21.6"W x 2.4"D x 13.2"H	OWNER OWNER	OWNER OWNER	C
(D3	1	MAIN CONSOLIDATOR MONITOR	LG	23MB35PM-B	21.6 W X 2.4 D X 13.2 H	OWNER	OWNER	С
KD3R	1	MAIN CONSOLIDATOR MONITOR (REPEATER)	LG	23MB35PM-B	21.6"W x 2.4"D x 13.2"H	OWNER	OWNER	С
KD4	1	CONSOLIDATOR MONITOR	LG	23MB35PM-B	21.6"W x 2.4"D x 13.2"H	OWNER	OWNER	С
(D4R	1	CONSOLIDATOR MONITOR (REPEATER)		23MB35PM-B	21.6"W x 2.4"D x 13.2"H	OWNER	OWNER	С
(D5	1	SANDWICH 2 MONITOR	LG	23MB35PM-B	21.6"W x 2.4"D x 13.2"H	OWNER	OWNER	C
(D6 (D11	1	DRIVE THRU CONSOLIDATOR MONITOR SALAD 2 MONITOR	LG	23MB35PM-B 23MB35PM-B	21.6"W x 2.4"D x 13.2"H 21.6"W x 2.4"D x 13.2"H	OWNER OWNER	OWNER OWNER	C
(D13	1	TURBOCHEF 1 MONITOR	LG	23MB35PM-B	21.6 W X 2.4 D X 13.2 H	OWNER	OWNER	С
KD13 KD14	1	TURBOCHEF 2 MONITOR	LG	23MB35PM-B	21.6"W x 2.4"D x 13.2"H	OWNER	OWNER	С
KD15	1	ORDER STATUS MONITOR (RPU)	LG	27BK550Y-B	14.6"W x 2.3"D x 24.5"H	OWNER	OWNER	С
	1	MOP BUCKET				C.S.	C.S.	
MB PAN-UP	<u> </u>	PAN-UP CART	SHURFLO		36"W x 26"D x 34"H	PEPSI	PEPSI	

- A. ONLY ITEMS WITH QUANTITY NUMBERS LISTED ARE INCLUDED
- IN THIS SCOPE OF WORK.

  B. STAINLESS STEEL WORK TABLES WITH DROP-IN SINKS ARE TO BE INSTALLED BY THE GC. ESPRESSO SINK INSTALLED BY
- CASEWORK VENDOR.

  C. G.C. TO COORDINATE THE DELIVERY & INSTALLATION OF ALL EQUIPMENT TO BE SUPPLIED AND/OR INSTALLED BY OTHERS. REFER TO SPEC SECTION 01010 & 01640 FOR NOTES ON SCOPE OF WORK & ITEMS NOT IN CONTRACT.

KEYED NOTES-EQUIP.SCHED.

PLASTIC LAMINATE DESK TOP CLEATED TO WALLS.INSTALL (2) 2"

EQUIPMENT TO HAVE 4" CASTERS W/ 2 LOCKING EQUIPMENT TO HAVE (2) 5M & (2) 5MB CASTERS

EQUIPMENT TO HAVE 6" CASTERS W/ 2 LOCKING

DIAMETER GROMMET HOLES FOR ELEC WIRES.

EQUIPMENT TO HAVE 2.25" CASTERS W/ 2 LOCKING

SINGLE SHELF SUPPORTS W/ SINGLE DIRECT WALL MTS

SCREW INTO SHROUD WITH STAINLESS STEEL SCREWS

USE "BEST ACCESS DOORS" BUT WILL ACCEPT "APPROVED EQUALS"
INSTALL NOTE: SILICONE INSIDE FLANGE ALL-SIDES (100% SILICONE) AND

WALL MOUNTED

NOT USED

FURNISH W/ RAILS (4) SIDES

CUT OUT FOR DROP-IN SINK FURNISHED W/ STAND

EQUIPMENT TO HAVE 3" CASTERS
FURNISH W/ RICHLITE CUTTING BOARD
EQUIPMENT TO BE SECURED TO WALL

25' DRAFT INDUCER W/ MOTOR

100' DRAFT INDUCER W/ MOTOR

EQUIPMENT TO BE BOLTED TO FLOOR.

**ABBREVIATIONS** 

DEPTH

S.W.

EPOXY FINISH

STAINLESS STEEL

SMALL WARES

SHELF WIDTH ZINC COATED

CASEWORK SUPPLIER

EQUIPMENT SUPPLIER

FURNITURE SUPPLIER
GENERAL CONTRACTOR

EQUIPMENT TO HAVE 5" CASTERS
FURNISH W/ SIDE SPLASHES
FURNISHED W/ SINK AND FAUCET

Bakery-Cafe:

22169

SYSTEM: G4 (ARIA)
Project Team:



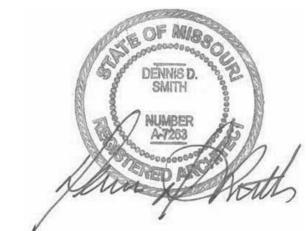
LK ARCHITECTURE, INC.

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WICHITA, KS 67203
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Architecture · Engineering · Planning · Interior Design · Landscape Architecture

Professional Seal:



Project Title:

Bakery Cafe#2406 1410 NE DOUGLAS ST LEES SUMMIT, MO 640

Fanera L

Consultant Copyright Placeholder

No.	Description	Date
1	PERMIT SET - TI	7/18/2022

# EQUIPMENT SCHEDULES

Project Number:

22169
Drawn By:
Author
Issue Date:

07/05/2022

DPM: DM: CPM:

3 2021.Q3.V1

- A. G.C. TO PROVIDE MANAGER OFFICE LAMINATE TOP. ALMOND COLOR PREFERRED; WHITE ALLOWED IF ALMOND IS NOT AVAILABLE. REFER
- TO ELEVATIONS FOR ADDITIONAL INFORMATION.

  B. FIELD CONFIRM LENGTH OF BANQUETTE(S) PRIOR TO PRODUCTION AND INSTALLATION

Bakery-Cafe:

2216

SYSTEM: G4 (ARIA)
Project Team:

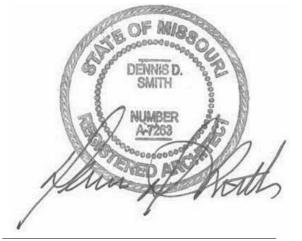


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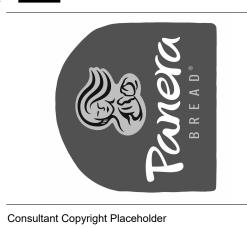
Architecture · Engineering · Planning · Interior Design · Landscape Architecture

Professional Seal:



ect Title:

# Bakery Cafe#2406 1410 NE DOUGLAS ST LEES SUMMIT, MO 640



# FUNITURE PLAN LEGEND:

>	xxx	ROOM NUMBER SYMBOL
1	REL —	RELOCATION INDICATION, ADDED TO SYMBOL
FU	RN-ID	FURNITURE IDENTIFICATION SYMBOL
	xxx)	- DOOR NUMBER SYMBOL

**SERVICE REQUIREMENTS:** 

TABLE SERVICE:
APPLICABLE TO THIS
MARKET?

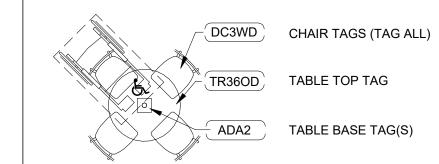
CO2 MONITORING: IS THIS REQUIRED?

**DESIGN NOTES:** 

CAL133: IS THIS REQUIRED? NO

- FABRIC DESIGNATION SYMBOL (SEE SHEET A600)

TYPICAL TABLE TAGGING EXAMPLE:



No.	Description	Date
1	PERMIT SET - TI	7/18/2022

FURNITURE PLAN

Sheet Number: Sheet Number:

Project Number:

22169
Drawn By:
Author
Issue Date:

07/05/2022

DPM: DM: CPM:

24 FURNITURE PLAN

1/4" = 1'-0"

FINISH MILLWORK SCHEDULE

ID TAG DESCRIPTION FINISH LOCATION

	WOOD/STEEL SCHEDULE						
ID TAG	QTY	DESCRIPTION	LOCATION				
MW102.A1	1	HERITAGE BAKERY BASE UNIT	POS				
MW106.R1	1	POS GNG COUNTER; (2) REGISTER, 139.5"W; RIGHT HAND	POS				
MW107.R1	1	BAKERY BASE UNIT, 151"W; RIGHT HAND	POS				
MW109.L1	1	BAKERY TABLE, 36"D x 109"W; LEFT HAND	BAKERY				
MW110.A1	1	BAKERY MIRROR; 18x72	POS/BAKERY				
MW111.R1 2	1	G4 BAKERY SNEEZE GUARD; RIGHT HAND, 113"W x 32"D	POS/BAKERY				
MW130.A1	1	MENU BOARD HOLDER	POS/BAKERY				
MW140.A1	1	OVEN SHROUD W/ ENGRAVED MB LOGO	BAKERY				
MW201.A1	1	BAKERY SERVICE DOUBLE-ACTING GATE	BAKERY				
MW323.A1	1	RPU SHELVING; 18.5x72	POS				
MW324.A1	1	RPU SHELVING; 20x64	EXPO				
MW401.R1	1	200" COMBINED BEVERAGE STATION; RIGHT HAND	BEVERAGE AREA				
MW606.A1	1	(3) BIN TRASH STATION	DINING				
MW715.A1	1	DIVIDER PANEL	FOH				
MW803.A1	3	SINGLE KIOSK DRAWER	FOH				
MW807	1	PHONE BOX-RECESSED	AS NEEDED				
MW931.A1	1	DISCOVERY SHELF; 87"W	FOH				
MW931.B1	1	DISCOVERY SHELF; 78"W	FOH				
MW931.C1	1	DISCOVERY SHELF; 43"W	FOH				
MW935	2	46H X 26W RESTROOM MIRROR FRAME	RESTROOM				

ID TAG	QTY	DESCRIPTION	MANUF.	SUPPLIED BY	FINISH	METAL	LAMINATE	ELECT D
ID TAG	QII	DESCRIPTION	WANUE.	SUPPLIED BY	FINISH	IVIETAL	LAWINATE	ELECT. N
ADA1	8	ADA "T" LEG BASE	FDS	FDS		BLACK POWDER COAT	N/A	
CHB2	5	COUNTER HEIGHT 22" X 30" METAL CROSS BASE	FDS	FDS		BLACK POWDER COAT	N/A	
DHB1	3	DINING HEIGHT 22" X 22" METAL CROSS BASE	FDS	FDS		BLACK POWDER COAT	N/A	
FN-10	4		GRAND RAPIDS CHAIR COMPANY		FORMICA SOLID SURFACE DALMATA TERRAZZO MATRIX	N/A	N/A	
FS001.B1	10	BAR HEIGHT STOOL: LOFT; DUSTY GREEN	MUUTO/ CI SELECT	GROUP O	CLEAR OAK	DUSTY GREEN	N/A	
FS001.C1	8	COUNTER HEIGHT STOOL: LOFT; DUSTY GREEN	MUUTO/ CI SELECT	GROUP O	CLEAR OAK	DUSTY GREEN	N/A	
FS001.C1	20	COUNTER HEIGHT STOOL: LOFT; DUSTY GREEN / OAK	MUUTO/ CI SELECT	GROUP O	CLEAR OAK	DUSTY GREEN	N/A	
FS001.D1	11	DINING CHAIR: LOFT; DUSTY GREEN	MUUTO/ CI SELECT	GROUP O	CLEAR OAK	DUSTY GREEN	N/A	
FT001.A1	3	24" SQUARE WHITE OAK TABLE	VIRIDIAN	GROUP O	OAK - LIGHT	PER PLAN	N/A	
FT001.E1	9	24" X 48" WHITE OAK BOOTH TABLE	VIRIDIAN	GROUP O	OAK - LIGHT	PER PLAN	N/A	
FT404.B1	1	120 X 32 GATHERING TABLE - BAR	CHARLES TON FORGE	GROUP O	OAK - LIGHT	METAL LEGS	N/A	Yes
FU001.A1	2	HEXAGONAL EXTERIOR PATIO UMBRELLA W/ 24" ROUND BASE - 7'x7'	TRESCO	TRESCO	GRASS GREEN	N/A	N/A	
ODC2MAI	16	G4 OUTDOOR DINING CHAIR DARWIN #521	EMU	FDS	ANTIQUE IRON	-	N/A	
OT2424AI	2	EXTERIOR TABLE CAMBI #800: 24" x 24"	EMU	FDS	ANTIQUE IRON	MESH TOP	N/A	
OT3248AI	3	EXTERIOR TABLE CAMBI ADA #836: 32" x 48"	EMU	FDS	ANTIQUE IRON	STEEL MESH TOP	N/A	
ОТВ	1	OUTDOOR TRASH & BUSSING	FDS	FDS	WOOD SLAT	-	-	

Bakery-Cafe:

22169

SYSTEM: G4 (ARIA)

Project Team:

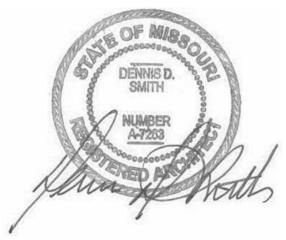


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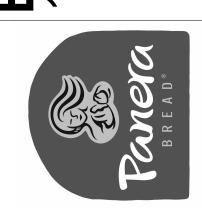
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Project Title:

# Sakery Cafe#2406 410 NE DOUGLAS ST LEES SUMMIT, MO 6408



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No.	Description	Date
1	PERMIT SET - TI	7/18/2022

# FURNITURE & WOOD/STEEL

Project Number:

22169
Drawn By:
Author
Issue Date:

07/05/2022

DPM: DM: CPM:

DPM DM CPM

B 2021.Q3.V1

- A. ALL SIGNS WILL BE PROVIDED BY OWNER TO G.C. FOR INSTALLATION.
   B. VENDOR WILL VERIFY ALL QUANTITIES AND CURRENT GRAPHIC DESIGNS WITH OWNER PRIOR TO FABRICATING.
   C. REFERENCE INTERIOR ELEVATIONS FOR SIGNAGE PLACEMENT.

Bakery-Cafe:

SYSTEM: G4 (ARIA) Project Team:

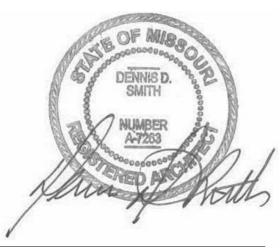


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No.	Description	Date
1	PERMIT SET - TI	7/18/2022

# **ARTWORK & GRAPHICS PLAN**

Project Number:		Sheet Number:
22169		
Drawn By:		<b>A 700</b>
Author		$\Delta I I$
Issue Date:		TI LV
07/05/2022		
DPM:	DM:	CPM:

			SIGNAGE	SCHEDULE	
		ID TAG		SIZE	MOUNTING INSTRUCTIONS REI
		DOW 1 HW1 2 HW2 3	DAYS OF THE WEEK [G4] [G4] HAND WASH SIGN (RESTROOM MIRROR) HAND WASH	23"W x 7.67"H 11"W x 1.75"H 4"W x 4"H	MOUNT TO WALL  MOUNT ON MIRROR IN RESTROOM -  MOUNT ON TILE NEXT TO MIRROR
		K1 1	MEN'S ACCESSIBLE TOILET SIGN	6"W x 9"H	IN RESTROOM  60" AFF TO CENTER OF SIGN; 48"  MIN. & 60" MAX. TO BASE LINE OF
		K2 1	WOMEN'S ACCESSIBLE TOILET SIGN	6"W x 9"H	LOWEST TACTILE CHARACTER  60" AFF TO CENTER OF SIGN; 48"  MIN. & 60" MAX. TO BASE LINE OF  LOWEST TACTILE CHARACTER
		KTK 1 LLREXT 1	KNEAD TO KNOW COMMUNICATION BOARD  LANDFILL, LANDFILL & RECYCLE TAGS FOR EXTERIOR TRASH/BUSSING UNIT	48"W x 36"H 8"W x 1"H; 3 TOTAL	5'-0" CENTERLINE OF BOARD, PROVIDED & INSTALLED BY OWNER MOUNT ON TRASH/BUSSING STATION TRASH HOOD
		OCC 1 WDA 1	OCCUPANCY SIGN [G4] [G4] WINDOW DECAL - ALLERGY	6"W x 6"H 12"W x 17.25"H	MOUNT ON WALL NEAR MAIN - ENTRANCE MOUNT ON BAKERY CASE GLASS -
		WDB 1 WDD 1 WDH 1	[G4] WINDOW DECAL - BAKERY [G4] WINDOW DECAL - DONATION [G4] WINDOW DETAL - HOURS	18"W x 6.75"H 19.5"W x 6.85"H 12"W x 24"H	MOUNT TO BAKERY CASE GLASS - MOUNT ON BAKERY CASE GLASS - MOUNT OUTSIDE ON RIGHT - SIDELIGTH, IF NO SIDELIGHT, MOUNT ON RIGHT DOOR BELOW
					DOOR HANDLE
[6"]  ADHESIVE DECAL WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY (I.S.A.) COMPLY	A. EACH GRADE LEVEL EXTERIOR EXIT DOOR SHALL BE IDENTIFIED BY A TACTILE EXIT WITH THE WORD "EXIT".		ARTWORK	SCHEDULE	
WITH CBC 11B-1103.7.2.1  BACKGROUND TO BE BLUE (COLOR NO. 15090 IN FEDERAL	B. EACH EXIT DOOR THAT LEADS DIRECTLY TO A GRADE-LEVEL EXTERIOR EXIT BY MEANS OF A STAIRWAY OR RAMP SHALL BE IDENTIFIED BY A TACTILE EXIT SIGN WITH THE FOLLOWING:		AG QTY DESCRIPTION	SUBSTRATE & MOUNTING	G MATTE Y/N
STANDARD 595B), FIGURE TO BE WHITE.	C. WORDS AS APPROPRIATE:  CORRESPONDII  G  1. "EXIT STAIRS DOWN"  TYPE II BRAILLE  2. "EXIT RAMP DOWN"		ARTWORK TO B	E DETERMINED	
SINGLE DOOR OR RIGHT LEAF OF OPERABLE DOUBLE DOORS	1. "EXIT STAIRS DOWN" 2. "EXIT RAMP DOWN" 3. "EXIT STAIR UP" 4. "EXIT RAMP UP"				
MOUNT I.S.A. ADHESIVE DECAL DIRECTLY TO GLASS AS INDICATED	TO EXIT EXIT ROUTE				
	D. EACH EXIT DOOR THAT LEADS DIRECTLY TO A GRADE-LEVEL EXTERIOR EXIT BY MEANS OF AN EXIT ENCLOSURE OR AN EXIT				
MAX MAX	PASSAGEWAY SHALL BE IDENTIFIED BY A TACTILE EXIT SIGN WITH THE WORDS "EXIT ROUTE".  E. EACH EXIT ACCESS DOOR FROM AN INTERIOR ROOM OR AREA TO A				
25 0	CORRIDOR OR HALLWAY THAT IS REQUIRED TO HAVE A VISUAL EXIT SIGN, SHALL BE IDENTIFIED BY A TACTILE EXIT SIGN WITH THE WORDS "EXIT ROUTE".				
	F. EACH EXIT DOOR THROUGH A HORIZONTAL EXIT SHALL BE IDENTIFIED BY A SIGN WITH THE WORDS "TO EXIT".				
14 BUILDING ENTRANCE SIGN 3/8" = 1'-0"	10 EXIT SIGNAGE  1/4" = 1'-0"				
	4"				
	4" 4"				
	4" 4" 4"				
				<b>^-</b>	
		l.	[12"]	GENERA	L NOTES:
				INSTALLATION.	SE PROVIDED BY OWNER TO G.C. FOR  FY ALL QUANTITIES AND CURRENT GRAPHIC
			MAXIMUM	DESIGNS WITH O	WNER PRIOR TO FABRICATING. ET A511 FOR SIGNAGE ELEVATIONS.
			OCCUPANCY		
	4"		XXX		

12 PEEL SPACING DETAIL

1" = 1'-0"

-Cafe:

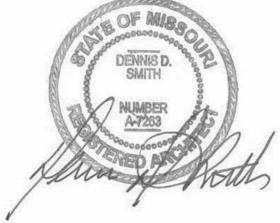
22169

M: G4 (ARIA)



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1/4" = 1'-0"

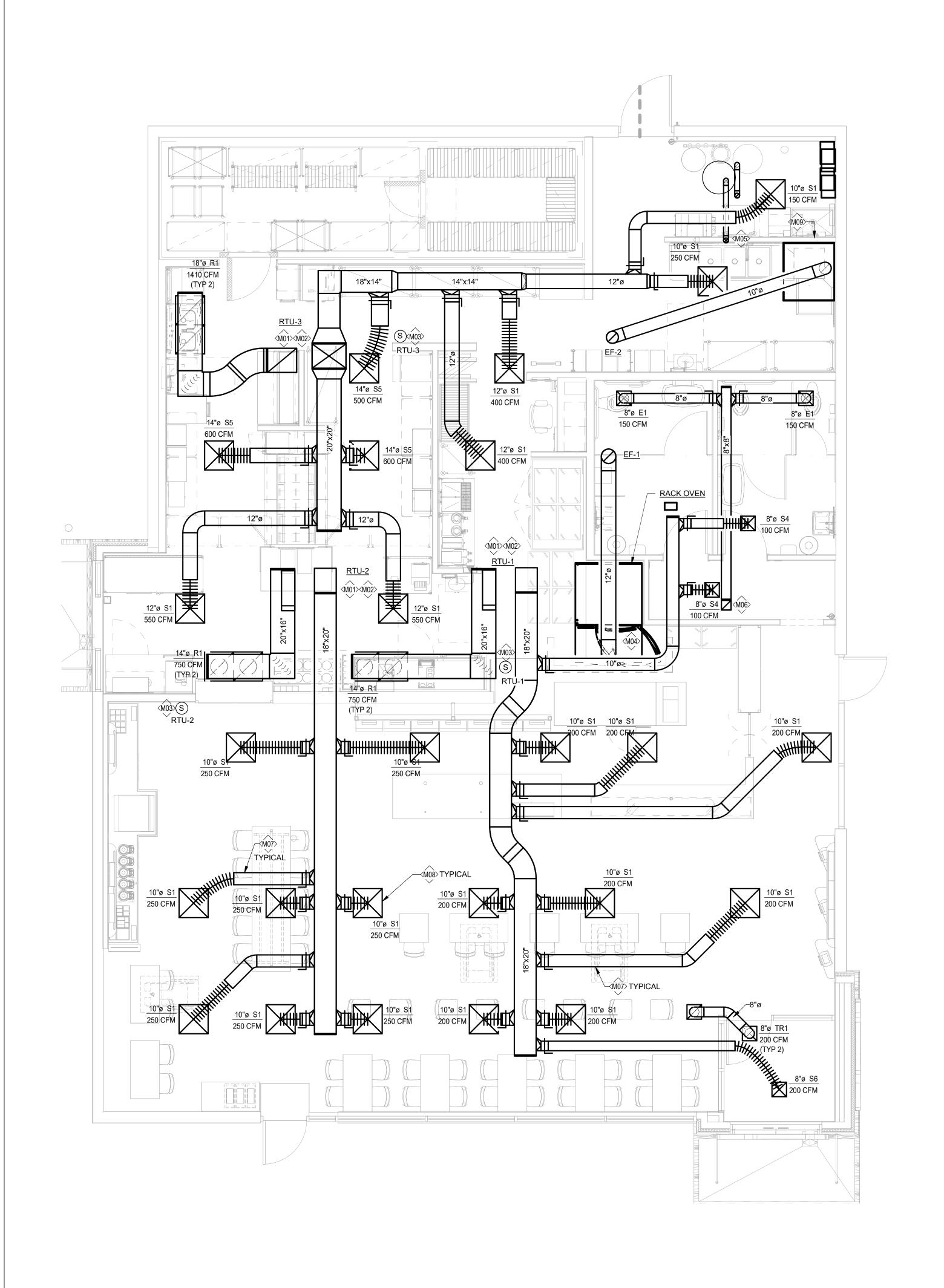
12" x 7" ACRYLIC PANEL OCCUPANCY SIGN WHITE GRAPHICS ON BLUE BACKGROUND. INSTALL AT 60" A.F.F. ADJACENT TO ENTRANCE DOORS

8 OCCUPANCY SIGN

Description **Date** 7/18/2022

WORK & NAGE HEDULES, DETAIL

& NOTES **07/05/2022**DPM:



- THE CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES IN LOCATING DUCTWORK, PIPING AND EQUIPMENT TO AVOID ANY INTERFERENCE.
- COORDINATE INSTALLATION OF NEW DUCT W/ STRUCTURE.
- CONTRACTOR TO INSTALL ALL WORK IN STRICT COMPLIANCE WITH LOCAL CODES AND ORDINANCES.
- MECHANICAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND EQUIPMENT SUBMITTAL PRIOR TO INSTALLING OR FABRICATING ANY DUCTWORK.
- PAINT INSIDE OF DIFFUSERS BLACK TO MINIMIZE VIEWING OF DUST AND DIRT.
- PROVIDE FIBERGLASS INSULATION BLANKET ABOVE TOPS OF ALL SUPPLY AIR DIFFUSERS.
- PROVIDE ADJUSTABLE VOLUME DAMPER AT ALL BRANCH DUCTWORK.
- PROVIDE TURNING VANES AT ALL RECTANGULAR ELBOWS (TYPICAL).
- MECHANICAL CONTRACTOR TO REPLACE FILTER AFTER CONSTRUCTION IS COMPLETED.
- CONTRACTOR TO PAINT ANY EXPOSED DUCT/DIFFUSERS WITHIN F.O.H. REFER TO ARCHITECTURAL RCP FOR

# **KEYED NOTES:**

- (MO1)> SHELL CONTRACTOR PROVIDED ROOF TOP UNIT AS SHOWN IN SCHEDULE ON SHEET M201.
- M02> SHELL CONTRACTOR PROVIDED U.L. LISTED IONIZATION TYPE SMOKE DETECTORS INTERLOCKED W/ RTU CONTROLS TO SHUT RTU DOWN UPON ACTIVATION OF DETECTOR.
- <M03> CONTRACTOR TO PROVIDE AND INSTALL ONE PIECE THERMOSTAT (C0STAT06FF1L COMML TOUCHSCREEN TSTAT) WITH WALL MOUNTED SENSOR AND CONTROLLER MOUNTED IN OFFICE, COORDINATE LOCATIONS WITH OTHER ELEMENTS OF WALL/COLUMN. VERIFY EXACT LOCATION IN FIELD, COORDINATE WITH OWNER REPRESENTATIVE. MOUNT SENSOR AS SHOWN ON PLAN (54" A.F.F.). ON PROJECTS USING ONE-PIECE THERMOSTATS, THE MOUNTING HEIGHT IS 48" PER ADA. DO NOT LOCATE SENSOR/T-STAT ON WALL TILE. T-STAT WIRING SHALL ROUTE THRU CPI PANEL. COORDINATE EXACT REQUIREMENTS WITH CPI REPRESENTATIVE.
- <MO4> TYPE-II HOOD FOR RACK OVEN, PROVIDE 10" DIA. TO 12" DIA. DOUBLE WALL GALVANIZED STEEL EXHAUST DUCT PER MANUFACTURER'S RECOMMENDATIONS EXTEND AND CONNECT TO VENT STUBBED THROUGH ROOF BY SHELL CONTRACTOR. FAN SHALL BE INTERLOCKED WITH OVEN SUCH THAT FAN ONLY RUNS WHEN OVEN IS ON.
- CONNECT OT PIPES STUBBED THROUGH ROOF BY SHELL CONTRACTOR. SEE DETAIL SHEET M401.
- (M06) EXTEND AND CONNECT EXHAUST DUCT SIZED AS SHOWN TO EXHAUST DUCT STUBBED THROUGH ROOF BY SHELL CONTRACTOR. SEE FAN DETAIL SHEET M401 AND FAN SCHEDULE ON SHEET M201. PROVIDE CONTROL RELAY AND INTERLOCK WITH KITCHEN LIGHTING CIRCUIT. SEE WIRING DIAGRAM ON SHEET M301. FIELD VERIFY.
- KM07> ROUTE DUCTWORK THROUGH JOIST WEBBING. COORDINATE EXACT LOCATIONS IN FIELD.
- (MOB) PAINT DIFFUSERS IN DINING AREA TO MATCH CEILING. SEE ARCHITECTURAL DRAWING FOR COLOR.
- (MO9) INSTALL DISHWASHER TYPE II HOOD. SEE FAN SCHEDULE SHEET AND DETAIL SHEET M301 AND M302. INSTALL 10" DIA. (22 Ga. STAINLESS STEEL OR ALUMINUM) EXHAUST DUCT TO EXHAUST DUCT STUBBED THROUGH ROOF BY SHELL CONTRACTOR. DISHWASHER HOOD IS FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR. SEE SHEETS M102, M302 FOR DISHWASHER VENTILATION INFORMATION.
- (M10) 16" B-TYPE VENT PIPE FOR GAS FIREPLACE (STELLAR MODEL #6-RD-OH-R) TO BE SIZED AND INSTALLED PER MANUFACTURERS RECOMMENTATION. EXTÈND FLUE UP THRU ROOF TO MINIMUM OF 2'-0" FROM HIGH POINT OF ROOF TO LOW POINT OF DISCHARGE. TERMINATE PER MANUFACTURERS RECOMMENDATION. KEEP OUTLET 10'-0" MINIMUM FROM ANY AIR INTAKE. VERIFY LOCATION. TOTAL NATURAL GAS INPUT FOR THIS FIREPLACE SHALL BE 100,000 BTUH. FIREPLACE OPERATION TO BE INTERLOCKED WITH HVAC.

**Bakery-Cafe:** 

Project Team:

0620

**SYSTEM: NEXT GEN** 



St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

796 Merus Court

Professional Seal:



Project Title:

# 64086 40



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No.	Description	Date
1	PERMIT SET - TI	7/18/2022

# **MECHANICAL PLAN** & NOTES

07/05/2022

- MEET THE REQUIREMENTS OF THE OWNER AND GOVERNING CODES. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH ALL APPLICABLE CODES AND THE OWNER'S MINIMUM REQUIREMENTS
- SEE ARCHITECTURAL GENERAL AND SPECIAL CONDITIONS. ALL CONDITION REQUIREMENTS SHALL APPLY UNLESS OTHERWISE NOTED.

AS STATED HEREIN OR OTHERWISE INDICATED BY THE OWNER.

- 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 WITHIN 90 DAYS. 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.
- EQUIPMENT, FIXTURES, AND ACCESSORIES SHALL NOT BE SUP-PORTED FROM CEILING, SOFFIT, NEUTRAL PIERS, PIPING, DUCT-WORK, METAL ROOF DECK, LATERAL BRACING, BRIDGING OR CONDUIT. ITEMS SHALL ONLY BE SUPPORTED FROM STRUCTURE WHICH HAS BEEN APPROVED BY THE ARCHITECT FOR SUPPORT
- ALL ROOF WORK PENETRATIONS AND REPAIRS SHALL BE TOTALLY PERFORMED BY ONLY THOSE ROOFING CONTRACTORS APPROVED BY THE GENERAL CONTRACTOR.
- 8. INSTALLATION OF ROOF MOUNTED EQUIPMENT SHALL BE COOR-DINATED WITH THE GENERAL CONTRACTOR AND OTHER TRADES.
- 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.
- THE SCOPE OF WORK OF THIS CONTRACT INCLUDES, BUT SHALL NOT BE LIMITED TO:

PROVIDE AND INSTALL ALL FOLIPMENT, APPLIANCES, CON-TROL DEVICES, ACCESSORIES, MATERIAL AND LABOR.

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

PROVIDE AND INSTALL ALL PIPING, FITTINGS, VALVES, IN-SULATION, ACCESSORIES, MATERIAL AND LABOR.

WATERPROOFING OF ROOF.

PROVIDE AND INSTALL EXHAUST SYSTEM(S) INDICATED. PROVIDE AND INSTALL ALL ROOF WORK, INCLUDING EQUIP-MENT SUPPORTS, ROOF PENETRATIONS, PATCHING AND

PROVIDE ALL FOLIPMENT SUPPORTS AND HANGERS INCLUD-ING ANY AUXILIARY STEEL REQUIRED. ANY STRUCTURAL MOD-IFICATION 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. PROVIDE CERTIFIED BALANCE REPORT TO BUILDING OFFICIAL

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

12.1 ALL MATERIALS SHALL BE NEW AND OF RECOGNIZED COM-MERCIAL QUALITY. USED MATERIALS WILL NOT BE PERMITTED. 12.2 DUCTWORK

EXPOSED ROUND/SPIRAL DUCTWORK SHALL BE CONSTRUCTED OF NEW DOUBLE WALL INSULATED GALVANIZED PRIME GRADE SHEET STEEL.

ALL DUCTWORK SHALL BE DESIGNED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN THE LATEST EDITION OF THE AMERICAN SOCIETY OF HEATING REFRIGERATION AND AIR CONDITIONING ENGINEERS GUIDE (ASHRAE) FABRICATED AND INSTALLED IN ACCORDANCE WITH THE METHODS RECOMMENDED IN THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA) LOW VELOCITY DUCT MANUAL, LATEST EDITION. DUCT WORK SHALL BE SHEETMETAL EXTERNALLY WRAPPED WITH 2-1/2" THICK FIBERGLASS (.75 LB. DENSITY) INSULATION HAVING A MIN. R VALUE OF 8.0; FOIL FACED, INSULATION HAVING A MIN. R VALUE OF 6.0.

NEW 2-1/2" THICK EXTERNALLY (.75 "LB. DENSITY) WITH MIN. VALUE OF R-6.0 INSULATED "LOW PRESSURE" SUPPLY AIR DUCT INSTALLED BY HVAC CONTRACTOR. PROVIDE TRANSITIONS AS REQUIRED, DUCT DIMENSIONS ARE CLEAR INTERNAL AIR PATH DIMENSIONS.

FLEXIBLE AIR DUCT FOR CONNECTIONS BETWEEN S.M. DUCT AND DIFFUSER SHALL BE AIR DUCT LISTED BY UNDERWRITERS LABORATORIES UNDER UIL STANDARD 181 AS A CLASS 1 FLEXIBLE AIR DUCT AND COMPLYING WITH NFPA STANDARDS 90A AND 90B. DUCT SHALL BE FACTORY MADE AND COMPOSED OF A CPE LINER DUCT PERMANENTLY BOUNDED TO A COATED SPRING STEEL WIRE HELIX AND SUPPORTING A FIBER GLASS INSULATING BLANKET. R.-6.0. LOW PERMEABILITY OUTER VAPOR BARRIER OF FIBER GLASS REINFORCED FILM LAMINATE SHALL COMPLETE THE

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.

ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK MUST BE SECURELY SEALED USING WELDMENTS: MECHANICAL FASTENERS WITH SEALS, GASKETS, OR TAPES. TAPES MUST BE LISTED AND LABELED IN ACCORDANCE WITH UL 181A OR UL 181B. ALL LONGITUDINAL AND TRANSVERSE JOINTS, SEAMS AND CONNECTIONS OF SUPPLY AND RETURN DUCTS OPERATING AT STATIC PRESSURES LESS THAN OR FOUAL TO 2" W.G. SHALL BE SECURELY FASTENED AND SEALED WITH WELDS GASKETS OR TAPES MECHANICAL FASTENERS AND SEALS OR GASKETS MUST BE USED WHEN CONNECTING DUCTS TO FANS AND OTHER AIR DISTRIBUTION

INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION AND ANSI/SMACNA 006-2006 HVAC DUCT CONSTRUCTION STANDARDS. 12.3 FLEXIBLE DUCTWORK:

SHALL HAVE AN IMPERVIOUS INNER CORE WITH WIRE REIN-FORCEMENT. THE INNER DUCT SHALL BE COVERED WITH 1.5" THICK FIBERGLASS DUCT INSULATION WITH A POLY-ETHYLENE VAPOR-PROOF JACKET, FLEXIBLE DUCT SHALL BE UL-181 LISTED. CLASS 1, AND SHALL MEET ALL APPLICABLE CODES AND THE REQUIREMENTS OF THE LANDLORD.

FITTINGS TO CONNECT THE FLEX DUCT TO THE TRUNK DUCT SHALL BE OF THE 45° LEAD-IN TYPE PER THE LATEST OF SMACNA STANDARDS AND SHALL HAVE AN OPPOSED BLADE VOLUME DAMPER, SQUARE-TO-ROUND TRANSITION AND SHALL HAVE THE SAME FREE AREA AS THE SPECIFIED FLEX DUCT.

FLEX DUCT SHALL BE THE PRODUCT OF AN ESTABLISHED MANUFACTURER OF SUCH PRODUCTS AND EQUIVALENT TO CERTAINTEED MODEL G-25, WIREMOLD WGC, OR PPG GOSSFLEX.

# 12.4 DUCT INSULATION

ALL SUPPLY AND RETURN AIR DUCTWORK (EXCEPT FLEXIBLE DUCTS) SHALL BE INSULATED EXTERNALLY UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. EXTER-NAL DUCT INSULATION (DUCT WRAP) SHALL BE 1-1/2" THICK FIBERGLASS DUCT WRAP WITH VINYL OR FSK FACING. DUCT WRAP SHALL HAVE A K-FACTOR OF .28 AT 75°F MEAN AND A DENSITY OF .75 LB./C.F.

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

DUCT INSULATION SHALL BE EQUAL TO PRODUCTS MANUFAC-TURED 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.

12.5 PIPING AND FITTINGS

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

# EQUIPMENT

HVAC EQUIPMENT SHALL BE AS SCHEDULED ON THE DRAWINGS AND/OR SPECIFIED HEREIN. EQUIVALENT EQUIPMENT AND/OR COMPONENTS THEREOF 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 ACC-ESS ARE LOCATED AND INSTALLED THAT THEY MAY BE SER-VICED RESET REPLACED OR RECALIBRATED ETC. BY SER-VICE 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

FURNISH THE STARTING EQUIPMENT TO THE ELECTRICAL CONTRACTOR FOR INSTALLATION CONTROL WIRING INCLUDE ING 115V FROM POWER SOURCE. CONDUIT AND SWITCHES SHALL BE FURNISHED BY THE MECHNICAL 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 EQUIP-MENT 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 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 MAINTEN-ANCE 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

I OW 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.

SERVING MORE THAN ONE DIFFUSER.

PROVIDE VOLUME CONTROL DAMPERS AND BALANCING DE-VICES AS REQUIRED TO DISTRIBUTE THE AIR AND AS INDI-CATED ON THE DRAWINGS.

PROVIDE VANED TEES AT BRANCH CONNECTIONS SERVING

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 DUCTWORK OR WHEN FABRICATING DUCTS IN THE FIELD.

# 14.4 FLEXIBLE DUCTWORK

DUCTWORK SHALL BE LIMITED IN LENGTH TO THAT NECESS-ARY TO MAKE CONNECTIONS BETWEEN TRUNK OR BRANCH DUCTS AND AIR DEVICES. FLEX DUCT LENGTH SHALL NOT EXCEED 5'-0".

ALL FLEX DUCT SHALL BE FULLY STRETCHED OUT TO RE-DUCE AIR RESISTANCE.

CONNECTIONS TO FITTINGS OR AIR DEVICES SHALL BE MADE WITH TWO (2) STAINLESS STEEL BANDS. THE INNER LINER SHALL BE CLAMPED TIGHT WITH THE FIRST BAND. THEN THE INSULATION AND VAPOR-PROOF JACKET PULLED TO BE TIGHT AGAINST THE DUCT FITTING OR AIR DEVICE AND SECURED WITH THE SECOND BAND INSTALL ATION SHALL BE AS RE-COMMENDED BY THE DUCT MANUFACTURER AND SMACNA.

SUPPORT THE FLEXIBLE DUCT WITH ADEQUATE HANGERS TO RELIEVE STRAIN ON ANY FITTING. UNNECESSARY BENDS, SAGS, TWISTS, ETC., WILL NOT BE ALLOWED.

# 14.5 DUCT LINER & WRAP

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

DUCT LINER SHALL BE CUT AS REQUIRED TO ENSURE OVER-LAPPED AND COMPRESSED LONGITUDINAL CORNER JOINTS.

FASTENERS SHALL START WITHIN 3" OF THE UPSTREAM TRAVERSE EDGES OF THE LINER AND 3" FROM THE LONG-ITUDINAL JOINTS AND SHALL BE SPACED AT A MAXIMUM OF 12" o.c. AROUND THE PERIMETER OF THE DUCT, ELSE-WHERE 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

DUCT WRAP SHALL BE INSTALLED IN A NEAT AND COMPE-TENT 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

DUCT WRAP SHALL BE INSTALLED IN A NEAT AND COMPE-TENT 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

# 14.6 AIR DEVICES

INSTALL ALL GRILLES AND DIFFUSERS TO BE FLUSH WITH THE PENETRATED SURFACE AND LEVEL OR STRAIGHT WITH WITH SURROUNDING FEATURES. ALL CEILING MOUNTED AIR DEVICES BE LOCATED IN THE CEILING TILE INDICATED ON THE DRAWINGS. SUPPORT CEILING MOUNTED GRILLES AND DIFFUSERS AT THE PROPER HEIGHT TO HOLD IT SNUG AGAINST THE CEILING.

# 14.7 DUCT SEALANT

PROVIDE DUCT SEALANT OF 2" WIDE, WOVEN-FIBER TAPE IMPREGNATED WITH GYPSUM MINERAL COMPOUND AND MODIFIED ACRYLIC/SILICONE ACTIVATOR TO REACT EXOTHERMICALLY WITH TAPE TO FORM HARD, DURABLE, AIRTIGHT SEAL.

SEAL DUCT TRAVERSE JOINTS FOR PRESSURE CLASS LESS THAN 2" AND PERFORM LEAKAGE TEST PRIOR TO INSTALLATION OF INSULATION.

INSTALL ROOF MOUNTED FOUIPMENT SUPPORT RAILS OR ROOF CURB AS REQUIRED FOR THE JOB CONDITIONS AND AS RECOM-MENDED 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. ELECTRICAL CONTRACTOR FOR INSTALLATION. CONTROL WIRING, INCLUDING CONTRACTOR SHALL PROVIDE A TEMPORARY PLYWOOD WORK PLATFORM THAT COMPLETELY SURROUNDS THE AREA WHERE NEW ROOF MOUNTED EQUIPMENT AND/OR DUCTS ARE TO BE INSTALLED. THE ENTIRE WORK AREA SHALL REMAIN ON THE 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 CON-DUITS 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 BAI ANCE CONTRACTOR TO ADJUST AND COMPLETELY BALANCE THE INSTALLED SYSTEM(S) TO THE DESIGN AIR QUANTITIES. CONTRACTOR SHALL PROVIDE THE OWNER, THE ARCHITECT AND AHJ A COPY OF THE CERTIFIED 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 RESPON-SIBLE FOR ANY DAMAGE CAUSED TO THE PREMISES BY DEFECTS IN HIS WORKMANSHIP OR WORK AND/OR EQUIPMENT INSTALLED BY OTHERS UNDER HIS CONTRACT.

# **TESTING AND ADJUSTING**

CONTRACTOR SHALL DEMONSTRATE OPERATION OF SYSTEM TO FULL SATISFACTION OF TENANT, SHALL BALANCE AIR FLOW IN ACCORDANCE WITH AIR QUANTITIES ON DRAWINGS AND SHALL RECORD VOLUME READINGS IN ACCORDANCE WITH ASHRAE AND PROVIDE SAME TO TENANT. OPERATION AND MAINTENANCE DOCUMENTATION MUST BE PROVIDED TO THE OWNER THAT INCLUDES AT LEAST THE FOLLOWING INFORMATION:

A. EQUIPMENT CAPACITY (INPUT AND OUTPUT) AND REQUIRED MAINTENANCE ACTIONS. B. EQUIPMENT OPERATION AND MAINTENANCE MANUALS WITHIN 90 DAYS. C. HVAC SYSTEM CONTROL MAINTENANCE AND CALIBRATION INFORMATION,

WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCE DESCRIPTIONS; OR FIELD-DETERMINED SET POINTS MUST BE PERMANENTLY RECORDED ON DRAWINGS, AT CONTROL DEVICES, OR, FOR DIGITAL CONTROL SYSTEMS, IN PROGRAMMING COMMENTS.

D. COMPLETE NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE. ALL PIPING SHALL WITHSTAND AIR PRESSURE TESTING PER GOVERNING PLUMBING CODE.

FOR COMPANY BAKERY CAFES, THE GC IS RESPONSIBLE FOR

SCHEDULING AND PROVIDING A TEST AND BALANCE REPORT TO

PANERA REPRESENTATIVE PRIOR TO TURNOVER. G.C. SHALL USE

AN AABC OR NEBB INDEPENDANT THIRD PARTY AIR BALANCE COMPANY.

**HVAC LEGEND** 

DESCRIPTION

SYMBOL

# SUPPLY AIR DIFFUSER RETURN AIR GRILLE

	TOILET ROOM EXHAUST GRILL
- 0 -	SPRINKLER HEAD
(SD)	DUCT MOUNTED SMOKE DETECTOR
	DIRECTION OF AIR FLOW
	VOLUME DAMPER
<u> </u>	THERMOSTAT (CONTOLLER)
<u>(S)</u>	TEMPERATURE SENSOR
F.O.I.C	FURNISH BY OWNER INSTALL BY CONTRACTOR
	FURNISH BY CONTRACTOR

FURNISH BY CONTRACTOR

**INSTALL BY CONTRACTOR** 

NTILATION REQ								PER IMC 2015 TAB		
ROOM NAME	Area (SF)	People/1000 SF	People	CFM/Person	CFM/SF	Ez	People X CFM/Person	SF X CFM/SF	REQUIRED O.A. CFM	PROVIDED O.A. CFM
-1 & RTU-2										
NG	996	70	70	7.5	0.18	0.8	522.9	179.3	877.7	900.00
UING	100	15	2	7.5	0.06	0.8	11.3	6.0	21.6	25.00
ERY SERVICE	293	15	4	7.5	0.12	0.8	33.0	35.2	85.2	90.00
D BEV	51	15	1	7.5	0.06	0.8	5.7	3.1	11.0	12.00
BEV	51	15	1	7.5	0.06	0.8	5.7	3.1	11.0	12.00
RR, M, W TLT	244	15	4	7.5	0.12	0.8	27.5	29.3	70.9	75.00
-3										
ISOLIDATION	264	15	4	7.5	0.12	0.8	29.7	31.7	76.7	8.00
CHEN	590	15	9	7.5	0.12	0.8	66.4	70.8	171.5	9.00
ERY REAR	73	15	1	7.5	0.12	0.8	8.2	8.8	21.2	10.00
ICE	29	15	0	7.5	0.06	0.8	3.3	1.7	6.3	11.00
.ITY	113	15	2	7.5	0.12	0.8	12.7	13.6	32.8	13.00

AIR BALANCE SCHEDULE							
TAG	SUPPLY AIR (CFM)	OA AIR (CFM)	EXHAUST AIR (CFM)	RESULTING PRESSURE			
EF-1	(OI IVI)	(OI IVI)	900	TREGOGRE			
EF-2			400				
EF-3			225				
RTU-1	2000	500					
RTU-2	2000	500					
RTU-3	4000	1000					

2000

1525

TOTAL OF ALL FRESH AIR INTRODUCED INTO SPACE

8000

EXHA	UST FAN SC	HEDULE	E (EXI	STIN	IG INS	TALLED BY SH	ELL CONTRA	CTOR)
PLAN MARK	MANUFACTURER	MODEL	TYPE	SP	CFM	ELECTRICAL	OPTIONS	REMARKS
EF-1	CAPTIVEAIRE	DU50 FLA	UPBLAST	0.5	900	120/1/60 1/2 HP	ROOF CURB	F.O.I.C.
EF-2	CAPTIVEAIRE	DU50 HFA	UPBLAST	0.5	400	120/1/60 1/3 HP	ROOF CURB	F.O.I.C.
EF-3	GREENHECK	G-070-VG	ROOF MTD	0.5	225	120/1/60 1/6 HP	ROOF CURB	F.C.I.C.

# AIR DEVICE **SCHEDULE**

PLAN MARK	MANUFACTURER\ MODEL NUMBER	MODULE	AIR FLOW DIRECTION	FRAME
S1	MILL HARDWARE 3T16(X)	24"x24"	4-WAY	LAY-IN
S2	1 PRICE SDS 150	48"x6"	2-WAY	LAY-IN
S3	PRICE SDS 150	36"x6"	2-WAY	LAY-IN
S4	MILL HARDWARE 3T46(D)2WC	12"x12"	2-WAY	LAY-IN
S5	MILL HARDWARE 3T18(Y)	24"x24"	PERFORATED	LAY-IN
S6	MILL HARDWARE 3T46(X)	12"x12"	4-WAY	LAY-IN DRYWALL
R1	* MILL HARDWARE 3T16(Z)	48"x24"	-	LAY-IN DRYWALL
R1a	* MILL HARDWARE 3T17(A)	24"x24"	-	LAY-IN DRYWALL
R2	** MILL HARDWARE 3T46(B)	12"x12"	-	LAY-IN DRYWALL
E1	** MILL HARDWARE 3T46(C)	12"x12"	-	DRYWALL
TR1	** MILL HARDWARE 3T46(B)	12"x12"	-	LAY-IN DRYWALL
TR2	PRICE SDR 150	36"x6"	-	DRYWALL
	IONAL ORDERING IN		N	

3T157 - UNIVERSAL ADAPTER

3T176 - 3T164 + 3T157 MUST ORDER FRAME ADDITIONALLY

\*\* THE FRAME IS INCLUDED W/ PART CAN BE USED WITH (DRYWALL) OR WITHOUT (LAY-IN) FRAME

PROVIDE WITH SDB PLENUM - 1-1/2" SLOT WIDTH, 2-SLOTS. PROVIDE WITH SDB PLENUM - 1-1/2" SLOT WIDTH, 3-SLOTS 3. PROVIDE WITH NECK MOUNTED VOLUME DAMPER

ACCESSIBLE.

PROVIDE ALL AIR DEVICES WITH CEILING TILE PROTECTOR, AIRTECH MODEL CTP OR EQUIVALENT.

# PACKAGED ROOF TOP UNIT SCHEDULE - DX / GAS (EXISTING INSTALLED I

								COOLI	NG (DX) -	95° F												
						EVAP F	AN		OAT			HEATIN	IG - GAS			El	_ECTRIC	CAL DATA				
			NOM		MIN	E.S.P.					INPUT	OUTPUT								APPROX.		
TAG	LOCATION	SERVICE	TONS	CFM	OA	(in. wg)	HP	TMBH	SMBH	EER	MBH	MBH	EAT	LAT	VOLT	PH	MCA	MOCP	STARTER	WEIGHT (LBS)	DESIGN EQUIPMENT	REMARKS
RTU-1	ROOF	CAFE	5	2000	500	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	500	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	1000	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

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.

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.

BY	SH	ELL C	CONTF	RACTOR	)	
El	ECTRI	CAL DATA				
				APPROX.		
PH	MCA	MOCP	STARTER	WEIGHT (LBS)	DESIGN EQUIPMENT	REMARKS
3	35.0	50	PKGD.	1172	LENNOX LGH060S4B	1, 2, 3, 4, 5

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 &

**SYSTEM: NEXT GEN** 

CERTIFICATE OF AUTHORITY NO. 001498

F 636.349.1730

St. Louis, MO 63026

Professional Seal

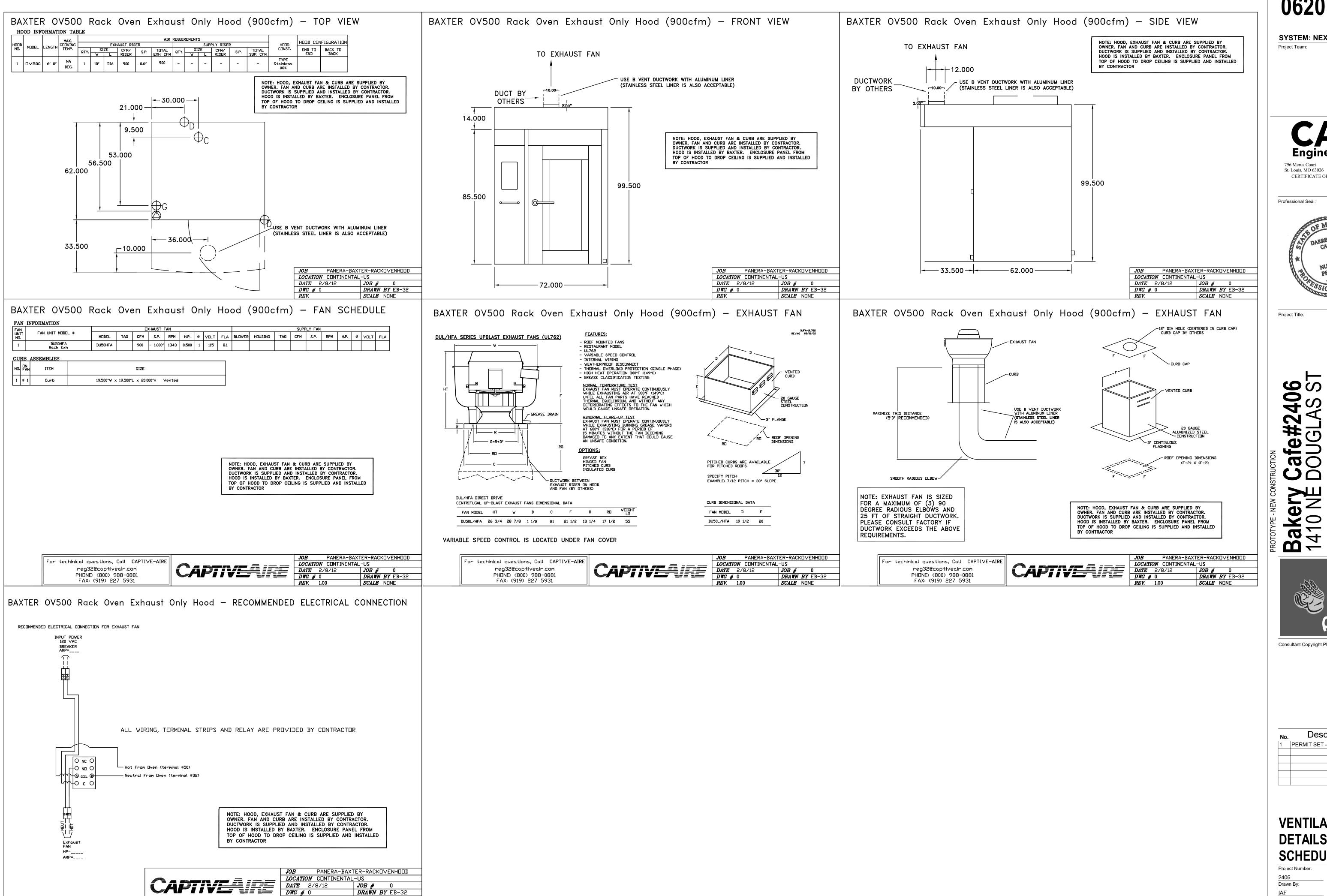


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# **MECHANICAL SCHEDULES**

Project Number: Drawn By: 07/05/2022



*SCALE* N□NE

**Bakery-Cafe:** 

**SYSTEM: NEXT GEN** 

F 636.349.1730

CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:



64086 98 **40 3akery** 1410 NE EES SU

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Date
7/18/2022

**VENTILATION DETAILS & SCHEDULES** 

Project Number: Drawn By: 07/05/2022 DPM:

END TO ROW LENGTH COOKING TOTAL CONSTRUCTION TEMP. EXH. CFM WIDTH LENG. DIA. CFM S.P. 4224 4' 0.00" 10" | 400 | -0.040" | 304 SS ALONE ALONE 100% VHB-G

SIZE

19.500'W x 19.500'L x 22.000'H Vented

HOOD INFORMATION

		FILTER	(2				LIGHT(S)			UTILITY CABI	NET(S)		FIRE	ноор
HOOD	TAG							WIRE	FI	RE SYSTEM	ELECTRICAL	SWITCHES	CACLEM	HANGIN
NO.	ING	TYPE	QTY.	.HEIGHT	LENGTH	QTY.	TYPE	GUARD	TYPE	SIZE	MODEL #	QUANTITY	PIPING WGH	WGHT
,						_							ND	169
1						l۳							l NO	LBS

HOOD OPTIONS

1 # 1 30 LBS

FAN #1 DU30HFA - EXHAUST FAN

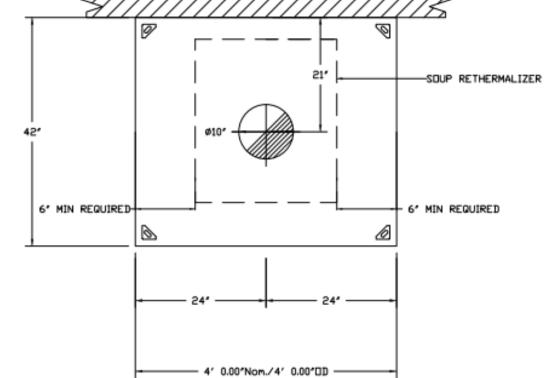
25 1/4

OPTION FIELD WRAPPER 16.00" High Front, Left, Right

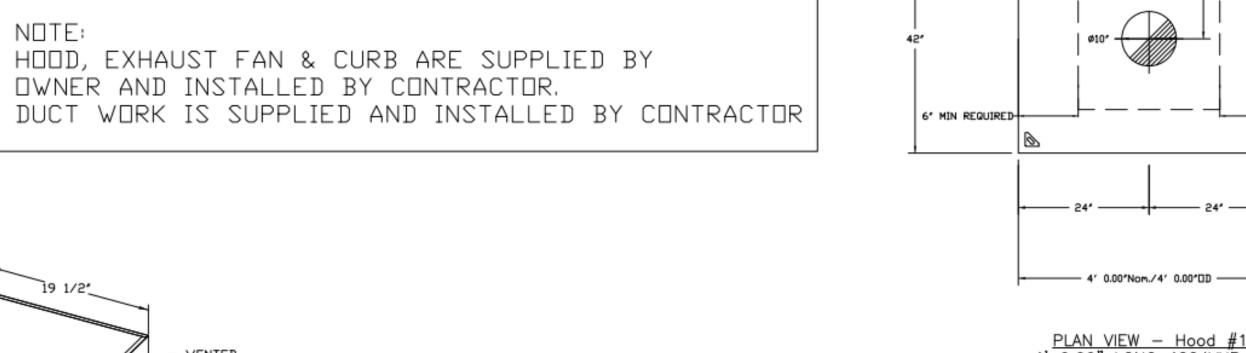
EVHALIST FAM IMPODMATION - IAB#1955097

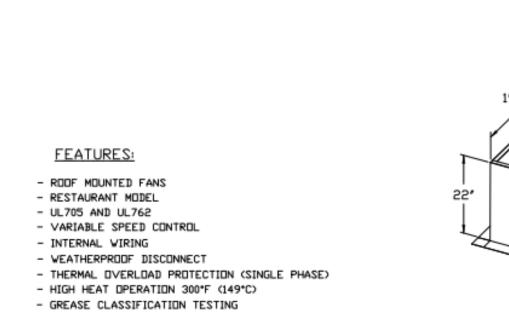
EXHA	AUST	FAN INFORMATION - Job	)#1 <i>8</i> 55	987							
FAN UNIT ND.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1		DU30HFA	400	0.500	1124	0.250	1	115	4.0	59	6.8
CURE	ASS	EMBLIES									

NOTE: HOOD, EXHAUST FAN & CURB ARE SUPPLIED BY



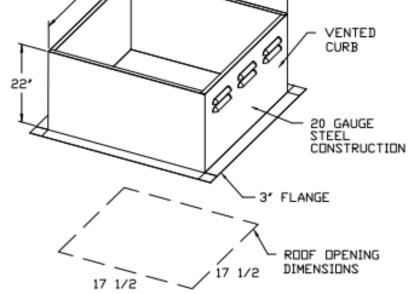
PLAN VIEW - Hood #1 4' 0.00" LONG 4224VHB-G

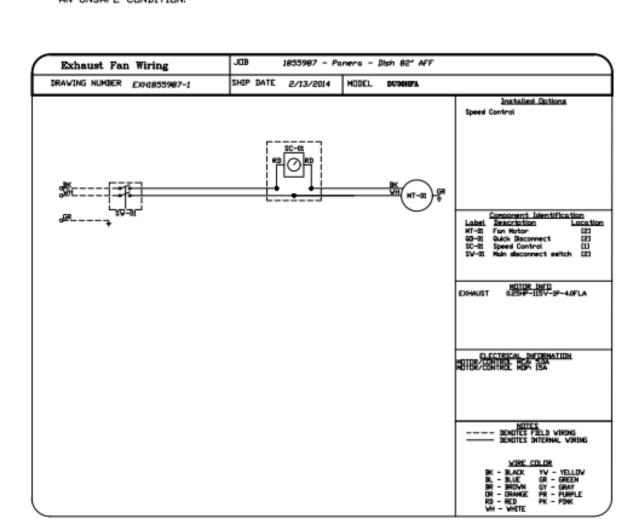




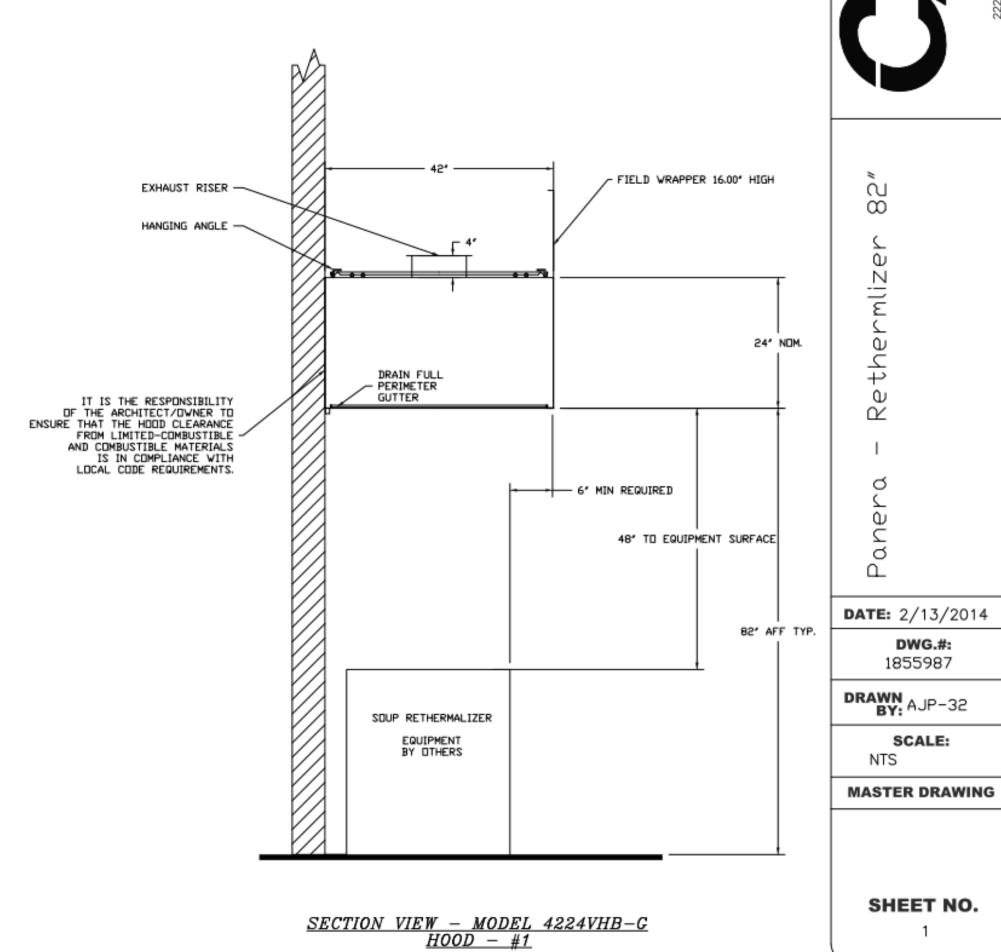
NORMAL TEMPERATURE TEST EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND VITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

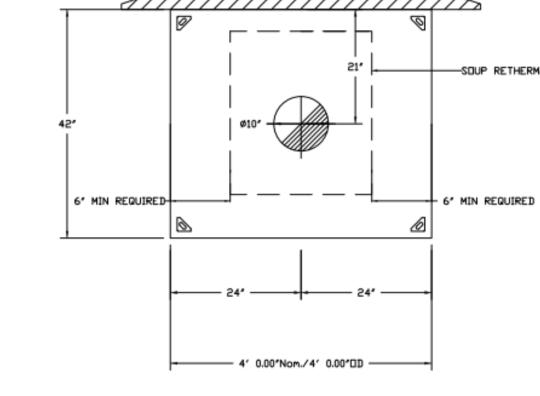
ABNORMAL FLARE-UP TEST EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.





FOR QUESTIONS, CALL CAPTIVE-AIRE 2221 KANSAS AVENUE SILVER SPRING, MD 20910 PHDNE: (800) 988-0881 FAX: (919) 227-5931







Bakery-Cafe:

Project Team:

796 Merus Court St. Louis, MO 63026

Professional Seal:

CERTIFICATE OF AUTHORITY NO. 001498

F 636.349.1730

REVISIONS

DESCRIPTION DATE:

**SYSTEM: NEXT GEN** 

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**VENTILATION DETAILS & SCHEDULES** 

Project Number: Drawn By: Issue Date: 07/05/2022 DPM:

DUCTWORK BETWEEN

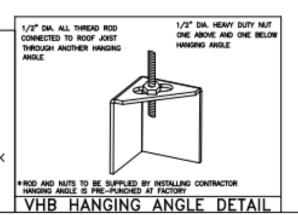
EXHAUST RISER ON HOOD
AND FAN (BY OTHERS)

ETL LISTING DESCRIPTION BLOCK THE CAPTIVE-AIRE MODEL VHB HAS BEEN TESTED, LISTED AND APPROVED TO EXHAUST A MINIMUM OF 100 CFM PER LINEAR FOOT OVER 700

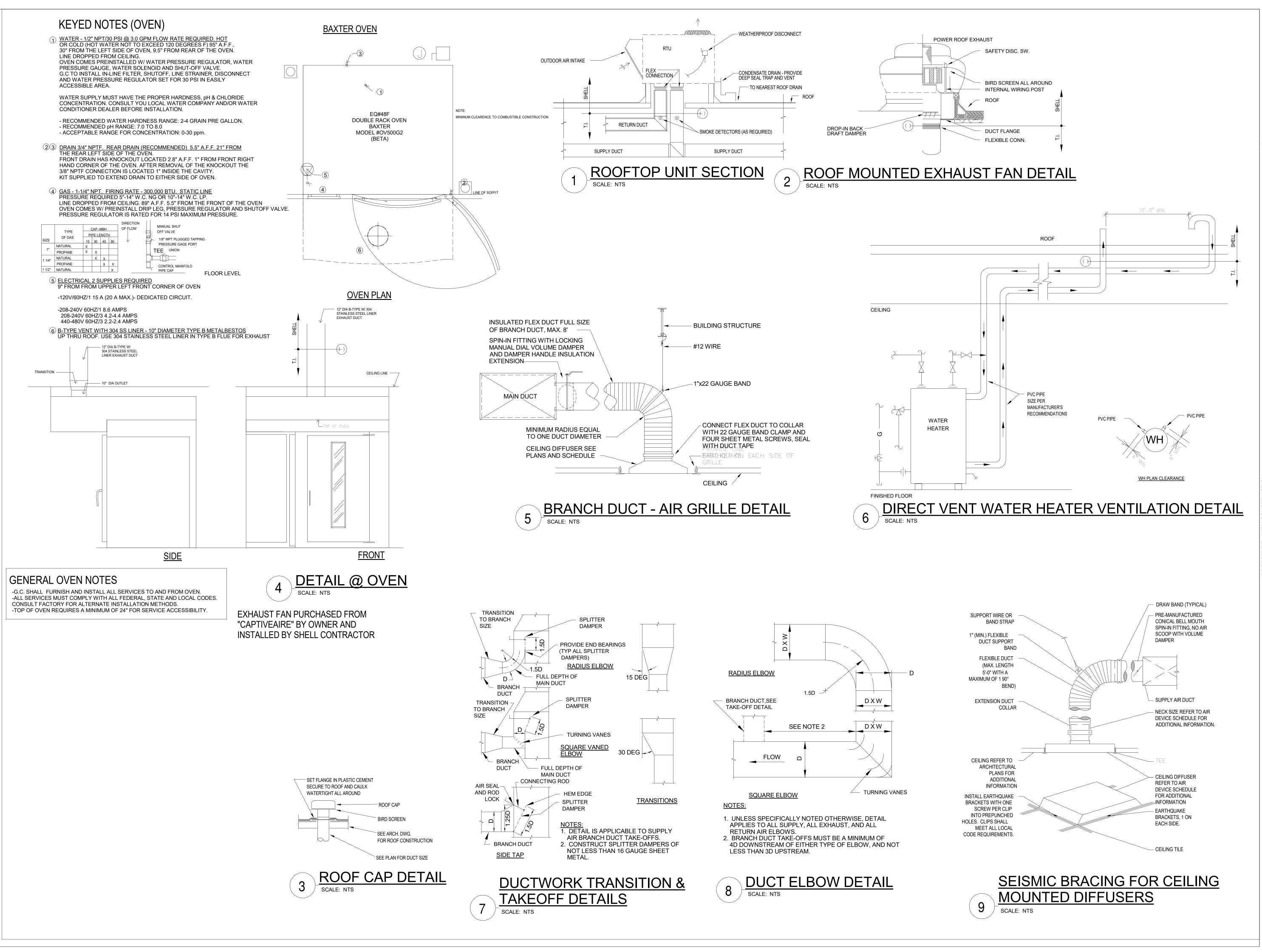
DEGREE EQUIPMENT FOR

NON-GREASE APPLICATIONS

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH NFPA #96 ETL SANITATION LISTED ETL LISTED #3054804-001



Intertek



Project Team:

SYSTEM: NEXT GEN

F 636.349.1730

St. Louis, MO 63026 CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:

796 Merus Court



Project Title:

980 **Bake** 1410 I LEES



Description Date 1 PERMIT SET - TI 7/18/2022

**MECHANICAL DETAILS** 

Project Number: Drawn By: Issue Date: 07/05/2022

RTU-2 7 8

(105 MBH)

DT ICE MACHINE **■** CONDENSOR

13 | 23B

FREEZER

CONDENSER

COOLER

CONDENSER

4" ROOF/OVERFLOW DRAIN

1" NG----

3/4" NG (150MBH)

(1129 MBH)

3/4" NG-/

(574MBH)

-2"NG DOWN TO GAS METER

−3/4" NG

(555MBH)

→ M -21,23,25

-4" ROOF/OVERFLOW DRAIN

TYPICAL \

<u>EF-3</u>

——4" VTR

# **KEYED NOTES**

- PROVIDE ROUGH-IN AND FINAL CONNECTION TO ROOFTOP UNIT. ROOFTOP UNIT-MOUNTED DISCONNECTING MEANS SUPPLIED BY EQUIPMENT MANUFACTURER. ELECTRICAL CONTRACTOR TO PROVIDE AND MAKE FINAL CONNECTION TO UNIT-MOUNTED WEATHERPROOF GFI SERVICE RECEPTACLE. COORDINATE WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER. COORDINATE ALL
- 2 PROVIDE ROUGH-IN AND FINAL CONNECTION TO RACK OVEN HOOD EXHAUST FAN, DRAFT INDUCER MOTOR, AND PRESSURE SWITCH. DISCONNECTING MEANS SUPPLIED BY EQUIPMENT MANUFACTURER. FAN SHALL BE INTERLOCKED WITH OVEN TO RUN WHEN OVEN IS ON. SEE WIRING DETAILS ON MECHANICAL SHEETS. COORDINATE WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER.
- $\langle 3 \rangle$  PROVIDE ROUGH-IN AND FINAL CONNECTION TO RESTROOM EXHAUST FAN. DISCONNECTING MEANS SUPPLIED BY EQUIPMENT MANUFACTURER. VERIFY AND COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR AND MECHANICAL
- AND COOLER/FREEZER MANUFACTURER.
- \( 6 \) ELECTRICAL CONTRACTOR TO MAKE ELECTRICAL CONNECTION BETWEEN ICE MAKER AND REMOTE CONDENSER. COORDINATE WITH G.C. AND EQUIPMENT
- (7) CONTRACTOR PROVIDED ROOF TOP UNIT AS SHOWN IN SCHEDULE ON SHEET M201. UNIT SHALL BE LOCATED SUCH THAT SUPPLY AND RETURN DUCTWORK
- $\langle 8 
  angle$  Contractor to provide and install U.L. Listed ionization type smoke DETECTOR INTERLOCKED W/ RTU CONTROLS TO SHUT RTU DOWN UPON ACTIVATION OF DETECTOR. LOCATE IN RETURN AIR DUCTWORK. DETECTORS
- $ig\langle$   $ar{9}ig
  angle$  RACK OVEN EXHAUST FAN-1 F.O.I.C. INSTALLED BY SHELL CONTRACTOR. (SEE SCHEDULE AND DETAIL ON SHEET M01, M301, M302, M401) RUN EXHAUST DUCT DOWN TO RACK OVEN EXHAUST HOOD SEE SHEET M101 FOR CONTINUATION. LOCATE FAN OUTLET 10' MIN. FROM ANY AIR INTAKE. (DUCT SHALL BE "B-VENT" WITH ALUMINUM OR STAINLESS STEEL LINER).
- OR STAINLESS STEEL).
- <11> PVC LINES (FLUE OUTLET AND COMBUSTION INLET) FROM WH BELOW (SEE SHEET) M101 FOR CONTINUATION) UP THRU ROOF BY SHELL CONTRACTOR. TERMINATE PER ,MANUFACTURER'S RECOMMENDATION W/ 4 FEET MIN. CLEARANCE BETWEEN FLUE OUTLET AND ANY AIR INTAKE. SEE DETAIL ON SHEET M401.
- (12) RESTROOM EXHAUST FAN-3 BY CONTRACTOR (SEE SCHEDULE ON SHEET M201 AND DETAIL ON SHEET M301). LOCATE 10 FEET MIN. FROM ANY AIR INTAKE. VERIFY
- $\langle 13 \rangle$  REMOTE CONDENSERS ON ROOF FOR FREEZER, COOLERS AND ICE MACHINES. TAKE OFF FOR PIPING RUNS TO BE COORDINATED WITH GENERAL CONTRACTOR. G.C. TO RUN WIRING FOR COOLERS AND FREEZER AND FOR REMOTE COMPRESSORS. MECHANICAL/ELECTRICAL SUBCONTRACTOR TO PERFORM FINAL CONNECTION FOR THESE UNITS. COORDINATE LOCATION W/ OWNER. FOR BIDDING PURPOSES REFRIGERANT PIPING COMES IN PRE CHARGED LENGTHS OF 25 ft AND

- WORK WITH MECHANICAL CONTRACTOR IN FIELD.

- 4 PROVIDE ROUGH-IN AND FINAL CONNECTION TO COOLER/FREEZER COMPRESSOR. EXTEND POWER FROM COMPRESSOR TO EVAPORATOR. COORDINATE WITH G.C.
- (5) PROVIDE ROUGH-IN AND FINAL CONNECTION TO HOOD FAN. DISCONNECTING MEANS SUPPLIED BY EQUIPMENT MANUFACTURER. FAN TO BE CONTROLLED VIA "ECOLAB" SYSTEM. COORDINATE LOCATION OF SYSTEM WITH G.C. IN FIELD. COORDINATE HOOD CONNECTION WITH MECHANICAL CONTRACTOR.
- DROP BETWEEN JOISTS. SEE SHEET M101 FOR CONTINUATION. RUN CONDENSATE LINE TO NEAREST DRAIN. REFER TO PLUMBING DRAWINGS.
- SHALL BE ACCESSORIZED WITH VISIBLE AND AUDIBLE SIGNALS IN AN APPROVED
- (10) DISHWASHER EXHAUST FAN-2 F.O.I.C. INSTALLED BY SHELL CONTRACTOR. (SEE SCHEDULE AND DETAIL ON SHEET M01, M301, M302, M401). RUN EXHAUST DUCT DOWN TO DISHWASHER EXHAUST HOOD. SEE SHEET M101 FOR CONTINUATION. LOCATE FAN OUTLET 10' MIN. FROM ANY AIR INTAKE. (DUCT SHALL BE ALUMINUM

- 50 ft. (COOLER AND FREEZER ONLY).

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Project Team:

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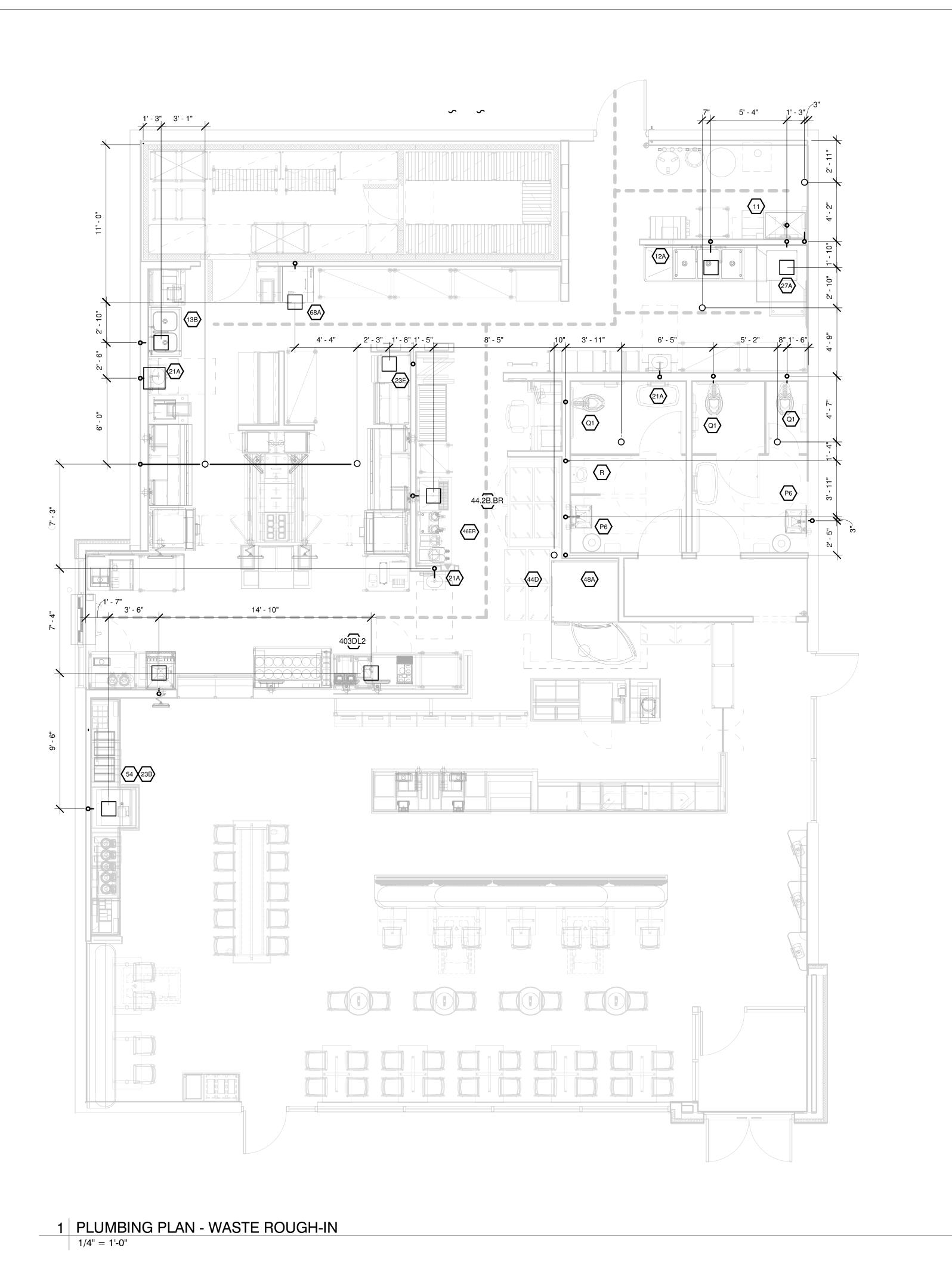
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**MEP ROOF PLAN** 

07/05/2022

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



SCHEDULE: ROUGH-IN SYMBOLS

- # NUMERICAL SYMBOL CORRESPONDS TO EQUIPMENT IDENTIFICATION NUMBER. SEE SHEET P303 FOR REFERENCE.
- WATER CLOSET (ADA):
  1" CW SUPPLY AT 28 3/4" A.F.F. AND OFFSET 4 3/4" FROM <sup>©</sup> OF FIXTURE
- P6 1/2" CW & HW SUPPLY AT 22 3/4" A.F.F. AND EACH ONE OFFSET 4" FROM © OF FIXTURE
- URINAL (ADA):

  (R) 1" SUPPLY AT 40 7/8" A.F.F. AND OFFSET 4 3/4" FROM OF FIXTURE
- SUPPLY ROUGH-IN SEE DOMESTIC WATER ROUGH-IN SCHEDULE FOR SIZE & HEIGHT
- EQUIPMENT CONNECTION SEE DOMESTIC WATER ROUGH-IN SCHEDULE FOR SIZE SEE EQUIPMENT MANUAL FOR FITTING REQUIREMENTS

NOTE: REFER TO ARCHITECTURAL FLOOR PLAN FOR ALL INTERIOR PARTITION LOCATIONS \* ROUGH-INS ARE BASED ON FIXTURES SHOWN IN SCHEDULE ON SHEET P-303. CONTRACTOR TO VERIFY REQUIREMENTS FOR ANY SUBSTITUTION PRIOR TO INSTALLATION. Bakery-Cafe:

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SANITARY **PLUMBING ROUGH-IN PLAN** 

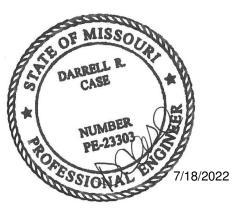
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Professional Seal:



Project Title:

SCHEDULE: ROUGH-IN SYMBOLS

NUMERICAL SYMBOL CORRESPONDS TO EQUIPMENT IDENTIFICATION NUMBER. SEE SHEET P303 FOR REFERENCE.

LAVATORY:
1/2" CW & HW SUPPLY AT 22 3/4" A.F.F. AND EACH ONE OFFSET 4" FROM © OF FIXTURE

WATER CLOSET (ADA):
1" CW SUPPLY AT 28 3/4" A.F.F. AND OFFSET
4 3/4" FROM <sup>©</sup> OF FIXTURE

URINAL (ADA):
1" SUPPLY AT 40 7/8" A.F.F. AND OFFSET 4 3/4"
FROM LOF FIXTURE

SUPPLY ROUGH-IN - SEE DOMESTIC WATER ROUGH-IN SCHEDULE FOR SIZE & HEIGHT

NOTE: REFER TO ARCHITECTURAL FLOOR PLAN FOR ALL INTERIOR PARTITION LOCATIONS

EQUIPMENT CONNECTION - SEE DOMESTIC WATER ROUGH-IN SCHEDULE FOR SIZE - SEE EQUIPMENT MANUAL FOR FITTING REQUIREMENTS

\* ROUGH-INS ARE BASED ON FIXTURES SHOWN IN SCHEDULE ON SHEET P-303. CONTRACTOR TO VERIFY REQUIREMENTS FOR ANY SUBSTITUTION PRIOR TO INSTALLATION.

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# **DOMESTIC WATER ROUGH-IN PLAN & NOTES**

Project Number: Sheet Number: Drawn By:

07/05/2022

### PLUMBING KEYED NOTES

- 1 POINT OF CONNECTION TO SITE 4" GREASE WASTE STUB TO SPACE ROUTED TO GB-250 GREASE INTERCEPTOR PROVIDED IN SHELL PACKAGE. FIELD VERIFY EXACT LOCATION, SIZE AND INVERT ELEVATION PRIOR TO WORK.
- 2 EXTEND INDIRECT WASTE TO RECEPTACLE. FIELD VERIFY EXACT ROUTING OF PIPING.
- (3) EXTEND DRAIN LINES FROM FREEZER, COOLER, OVEN AND PROOFER TO FLOOR/HUB DRAIN LOCATED NEARBY. FIELD VERIFY EXACT ROUTING OF PIPING.
- 4 PROVIDE 6" CONDUIT RUN OVERHEAD FROM SODA DISPENSER TO BAG-N-BOX FOR SODA LINES. CONDUIT TO BE OF MATERIALS APPROVED BY LOCAL CODE. NO PVC ALLOWED IN PLENUM
- (5) SECURE DRAIN LINES FOR ICE MACHINE AND SODA DISPENSER TO THE SIDE OF THE CABINET WITH BRACKETS.
- 6 CAST IRON PIPE SHALL BE USED FOR THE FIRST 8' OF DISCHARGE PIPING FOR SOUP RETHERMALIZER AND
- $\left<7\right>$  1 1/2" CONDENSATE DRAIN DOWN WALL AND TERMINATE THRU WALL INTO HUB DRAIN WITH A CODE APPROVED AIR GAP.
- 8 POINT OF CONNECTION TO EXISTING 4" SANITARY STUB PROVIDED IN SHELL PACKAGE. FIELD VERIFY EXACT LOCATION, SIZE AND INVERT ELEVATION PRIOR TO WORK.
- (9) 1/2"CW FROM TRAP PRIMER. PRECISION PLUMBING PRODUCTS MODEL PP500 OR APPROVED EQUAL.
- POINT OF CONNECTION TO EXSITING 4" VENT THROUGH ROOF. FIELD VERIFY EXACT LOCATION AND SIZE PRIOR TO WORK.

### NOTES:

-HOLD CONDENSATE WASTE PIPES 1" AWAY FROM THE WALLS AND GRAVITY DRAIN TO HUB DRAINS WITH THE DRAIN LINE HELD

-LOCATED FLOOR SINKS WITHIN 1FT OF BOTTOM DRAINED

6" OFF THE FLOOR.

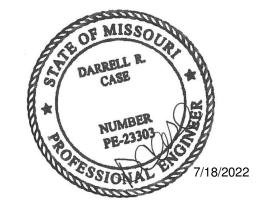
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SANITARY **PLUMBING PLAN** 

### PLUMBING KEYED NOTES

- 1 CONTRACTOR SHALL PERFORM A WATER TEST TO DETERMINE WATER HARDNESS. IF RESULT IS BELOW THE MAXIMUM REQUIREMENTS FOR THE KITCHEN EQUIPMENT, CONTRACTOR IS TO FURNISH AND INSTALL WATER SOFTENER AS INDICATED AND SPECIFIED. SEE DETAIL P301. IF RESULT IS ABOVE THE MAXIMUM REQUIREMENTS FOR THE KITCHEN EQUIPMENT, CONTRACTOR IS TO FURNISH AND INSTALL ALTERNATE WATER SOFTENER AND MODIFY PIPING AS INDICATED ON DETAIL 10/P301.
- 2 1-1/2"NG CONNECTION TO OVEN (180 MBH). SEE OVEN DETAIL ON SHEET M402.
- 3 3/4"NG CONNECTION TO WATER HEATER (199 MBH). SEE DETAIL 11 ON SHEET P301.
- 4 NEW 2" DOMESTIC WATER SERVICE. SEE PROJECT CIVIL DRAWINGS FOR CONTINUATION. VERIFY THAT SERVICE IS ADEQUATE TO SUPPPLY 45 PSI AFTER METER AND BACKFLOW PREVENTER. ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL CODES. CONTRACTOR SHALL FIELD VERIFY REQUIREMENTS PRIOR TO BID. BID TO INCLUDE ALL WORK NECESSARY FOR A FULLY OPERATIONAL SYSTEM.
- (5) PROVIDE AND INSTALL TANKLESS WATER HEATERS AS SHOWN.
- 6 NSTALL COLD WATER FILTRATION SYSTEM SEE DETAIL ON SHEET P301. SEE EQUIPMENT PLAN AND SCHEDULE FOR MORE INFORMATION.
- ⟨7⟩ 2" PRESSURE REDUCING BACKFLOW PREVENTER (ZURN/WILKINS MODEL 950XLT2, OR APPROVED EQUAL) INSTALLED IN THE VERTICAL POSITION.
- (8) POINT OF CONNECTION TO 2" GAS STUB TO SPACE. VERIFY EXACT SIZE, LOCATION, AND DELIVERY PRESSURE IN FIELD PRIOR TO WORK.
- (9) PROVIDE GRUNDFOS 59896877 ALPHA 15-55F RECIRCULATION
- (10) 1/2" SUPPLY PIPING DOWN WALL TO BE ROUTED BELOW GRADE TO SERVE SODA DISPENSER. PROVIDE SHUT-OFF VALVE PRIOR TO ROUTING BELOW GRADE.
- (11) PROVIDE SEPERATE WATER CONNECTION FOR CHEMICAL DISPENSER INSTALLATION. SEE SHEET P304 FOR BACKFLOW INFORMATION.
- (12) SUPPLY PIPING ROUTED BELOW GRADE TO SERVE SINK. PROVIDE SHUTOFF VALVE PRIOR TO ROUTING BELOW GRADE.

### **GENERAL NOTES**

1. PLUMBING CONTRACTOR SHALL VERIFY WITH THE LOCAL HEALTH DEPARTMENT AND/OR WATER COMPANY AS TO THE METER AND VALVING ARRANGEMENTS OF THE DOMESTIC WATER SERVICE WHICH ENTERS THE BUILDING. IF A BACKFLOW PREVENTER AND/OR PRESSURE REDUCING VALVE IS REQUIRED, THE PLUMBER SHALL FURNISH AND INSTALL SAME PER LOCAL AND STATE REQUIREMENTS. CONTRACTOR SHALL VERIFY WATER SERVICE (NEW OR EXISTING) IS CAPABLE OF PROVIDING A MAXIMUM OF 75 G.P.M. AT A MINIMUM OF 45 P.S.I. DOWNSTREAM OF METERING AND VALVING. IN THE EVENT THAT THE SERVICE CANNOT PROVIDE ADEQUATE VOLUME/PRESSURE THE CONTRACTOR SHALL CONTACT THE OWNERS REPRESENTATIVE PRIOR TO COMMENCING ANY WORK.

2. PLUMBING CONTRACTOR SHALL PROVIDE AND INSTALL STOP VALVES AT FINISHED WALL SURFACE.

3. ALL PIPING SHOWN ON THIS PLAN IS CONCEALED ABOVE THE LAY-IN CEILING, BELOW THE FLOOR AND IN WALLS. EXPOSE PIPING IN SPACE ONLY AT EQUIPMENT AND FIXTURES.

4. PROVIDE WATER CONNECTIONS AS REQUIRED, ANGLE STOP AND ESCUTCHEON PLATE FOR ALL FINAL WATER CONNECTIONS.

5. PROVIDE AIR CHAMBER TYPE WATER HAMMER ARRESTORS OR ACCEPTABLE FACTORY MANUFACTURED SUBSTITUTES AT

6. ALL PLUMBING WORK SHALL BE PERFORMED IN FULL COMPLIANCE WITH LOCAL PLUMBING CODE, HEALTH

7. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL PERMIT FEES, UTILITY TAP FEES AND INSPECTION FEES AS

8. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF HIS DRAINS, HUB DRAINS AND CONNECTION POINTS WITH THE GENERAL CONTRACTOR. THE PLUMBING CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTING HIS

9. ALL PLUMBING PIPING SHALL BE ROUTED UNDER THE FLOOR, ABOVE THE CEILING OR LOCATED WITHIN WALLS OR PLUMBING CHASES. EXPOSED PIPING ONLY WHERE NECESSARY TO CONNECT TO EQUIPMENT.

ALL WATER ROUGH-IN LOCATIONS.

REGULATIONS AND LOCAL ORDINANCES.

**Bakery-Cafe:** 

Project Team:

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# 93

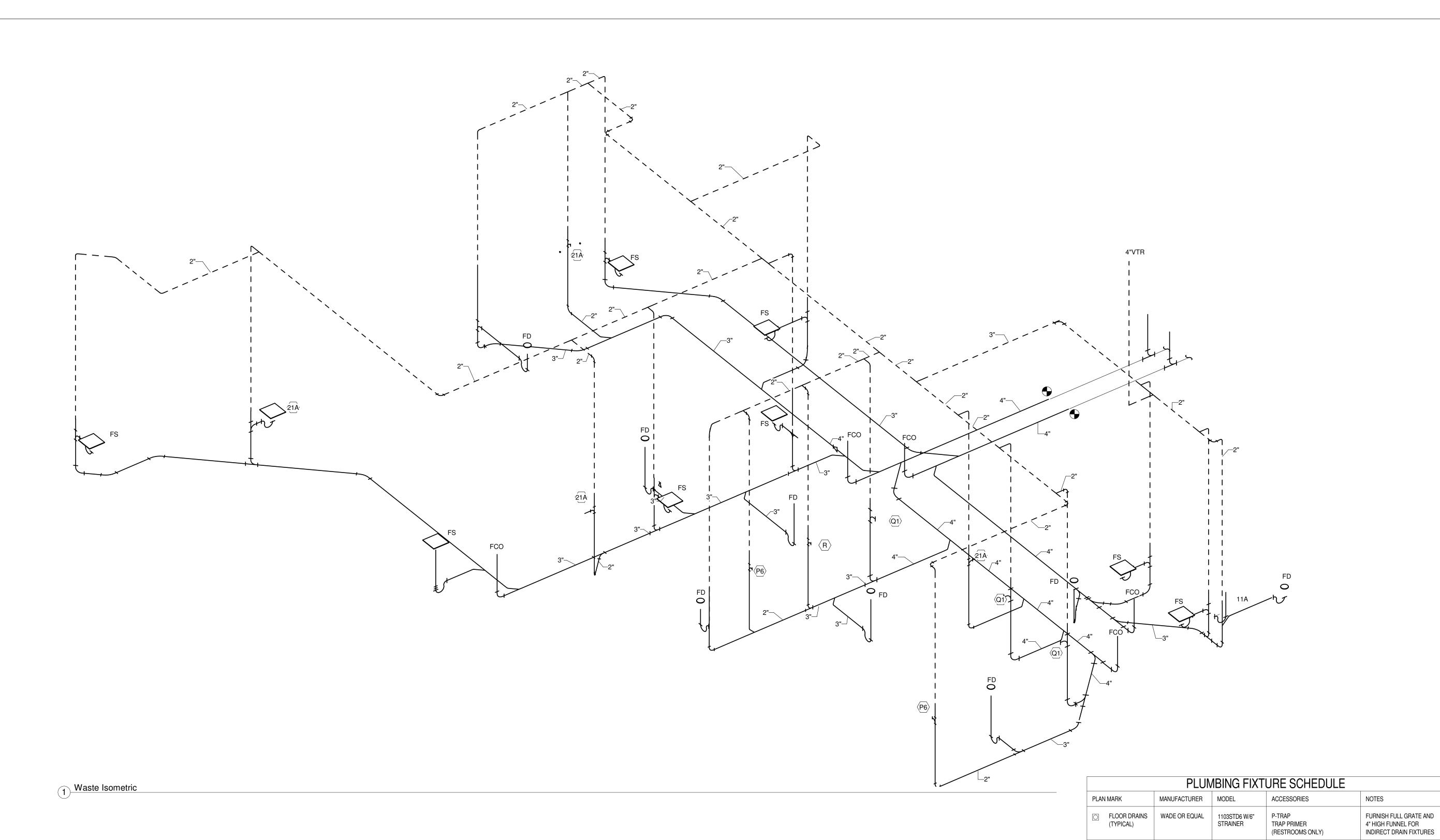


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### **DOMESTIC WATER & GAS PLUMBING PLAN**

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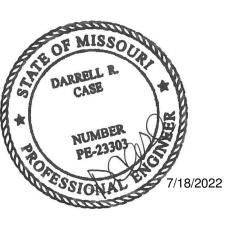
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**CASE Engineering Inc.**796 Merus Court
St. Louis, MO 63026

T 636.349.160
F 636.349.173

CERTIFICATE OF AUTHORITY NO. 001498



oject Title:

Professional Seal:

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

Panera L

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NICKEL BRONZE SECURED TOP

12"x12"x8" W/PORCELAIN GRATE

MOUNTING HGT PER ADA, SEE ARCH SHEET A112

MOUNTING HGT PER ADA, SEE ARCH SHEET A112

24" X 24"

SEE ARCH PLANS TERRAZZO FINISH

W/ AM. STD. MANUAL FLUSH VALVE 6047.161.02

W/ TOTO TET1LA32#CP FLUSH VALVE

100 G.P.M., 1,076 LB.

100 GAL. 199,900 BTU, 230 GPH RECOVERY

1/2" FEMALE INLET

3/4" HOSE CONNECTION

VENT PER LOCAL CODE

⊕ FLOOR CLEANOUT | WADE OR EQUAL | 6000

TOTO

KOHLER

TOTO

TOTO

TOTO

SCHIER

A.O. SMITH

JAY R. SMITH

**FLORESTONE** 

FS-740

LT307

5-2084-R

LET105-D10EM

MSR-2424

CT 705ELN

CT 705ELN

GB-250

BTH-199

OR EQUAL

1/2 GRATE

1-1/4x1-1/2 P-TRAP STOP VALVES

1-1/4x1-1/2 P-TRAP STOP VALVES

BLADE TYPE HANDLES AM. STD. 0000.172V

W/ MOEN FAUCET 8230

WHITE-OPEN FRONT SEAT. NO COVER

WHITE-OPEN FRONT SEAT. NO COVER

DIRECT VENT

KEY OPERATED

SEALED COMBUSTION

EQUIP WITH TELE GLIDE AJDUSTABLE RISERS AND HEAVY DUTY TRAFFIC RATED LID

INTEGRAL VACUUM BREAKER

MR 372 MOP HANGER, STRAINER, TILE FLANGES

FLOOR SINK WATTS

LAV P

LAV P6

FAUCET

MSB

(FOR LAV)

WC (ADA)

WC (ADA) Q1

GREASE

INTERCEPTOR

(GAS WATER HEATER)

(FREEZEPROOF

WALL HYDRANT)

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PLUMBING DWV RISER

Project Number:

2406

Drawn By:

JSP
Issue Date:

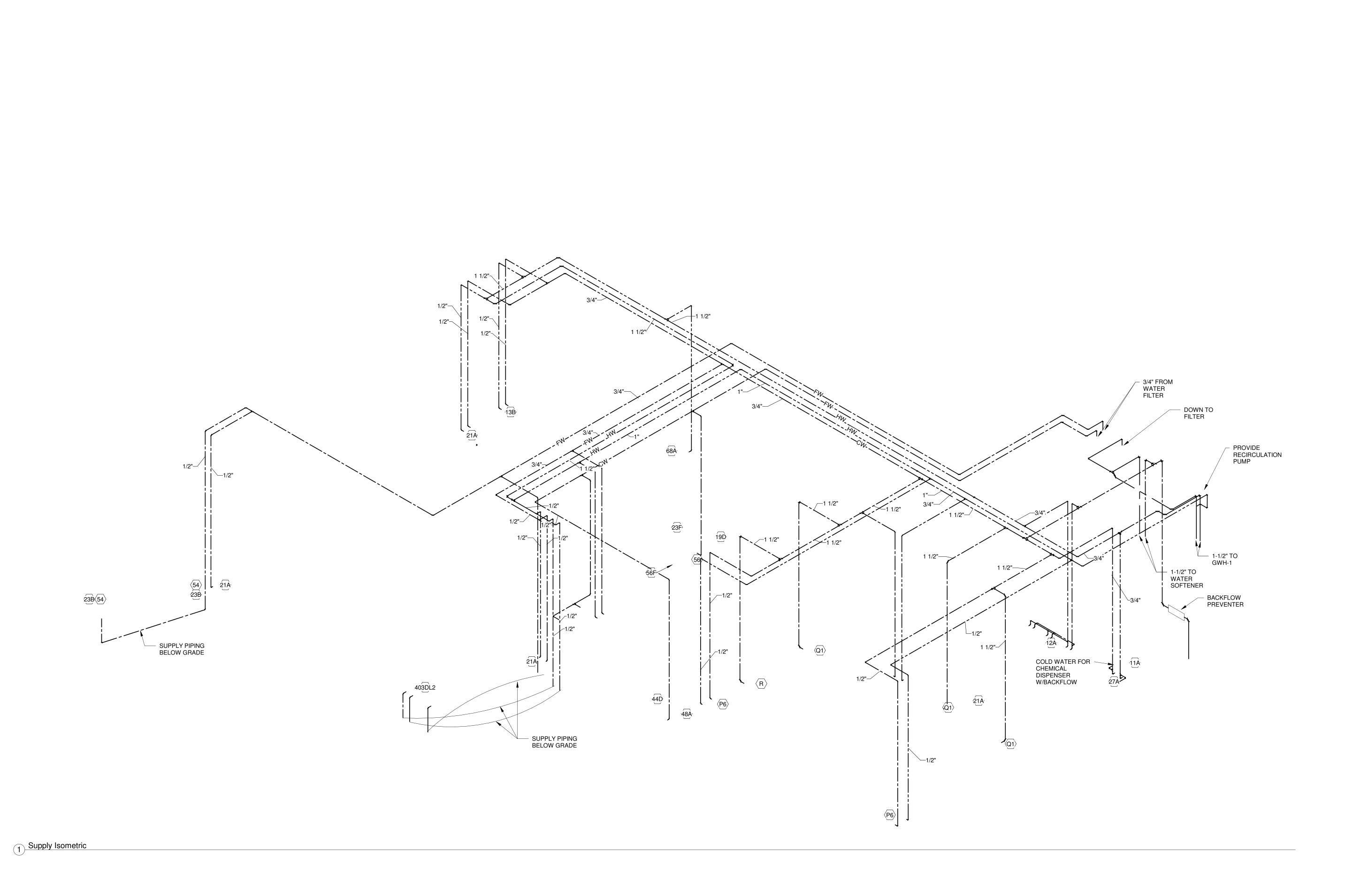
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DPM:

DM:

Sheet Number:

P201



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PLUMBING SUPPLY

**RISER** Project Number: 2406 Drawn By:

Sheet Number: **07/05/2022**DPM:
DC

GAS METER, ROOFTOP UNITS AND ASSOCIATED GAS PIPING FURNISHED UNDER SHELL PACKAGE. PROVIDE GAS COCK, DIRT LEG AND LBS TO INCHES PRESSURE REGULATOR AT EACH PIECE OF ROOFTOP EQUIPMENT TO BE CONNECTED. POINT OF
CONNECTION TO 2"
GAS STUB TO SPACE
FURNISHED UNDER
SHELL PACKAGE.
PROVIDE LBS TO
INCHES REGULATOR
PRIOR TO ENTRY INTO
SPACE. - 3/4" (150MBH) (1223MBH) – 2" (673MBH) — 3/4" (150MBH) (550MBH) - 3/4" (400MBH) (150MBH) TO GAS METER TOTAL CONNECTED LOAD: 1223MBH @ 2 PSI 1-1/4" (398MBH) GWH-1 (398MBH) 1-1/2" (275MBH) 48A (275MBH)

1 Gas Isometric

	GAS LOAD SUMMAR	RY					
SYSTEM	DESIGNATION	EQUIPMENT	МВН				
PLUMBING	GWH-1	398					
HVAC	RTU-1	ROOFTOP UNIT	120				
	RTU-2	ROOFTOP UNIT	120				
	RTU-3	ROOFTOP UNIT	180				
KITCHEN	48A	OVEN	180				
TOTAL NATU	998						
	MBH CAPACITY						
GAS METER REQUIREMENTS	TOTAL DEVELOPED LE EQUIVALENT PIPE LEN AND VALVE FRICTION METER.	75 FT X 1.2 = 90FT					
	CONSULT GAS UTILITY COMPANY FOR REGULATOR						

Bakery-Cafe:

0620

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Project Team:

CASE Engineering Inc.

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Bakery Cafe#2406 1410 NE DOUGLAS ST LEES SUMMIT, MO 6408(



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**GAS RISER** 

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Issue Date:

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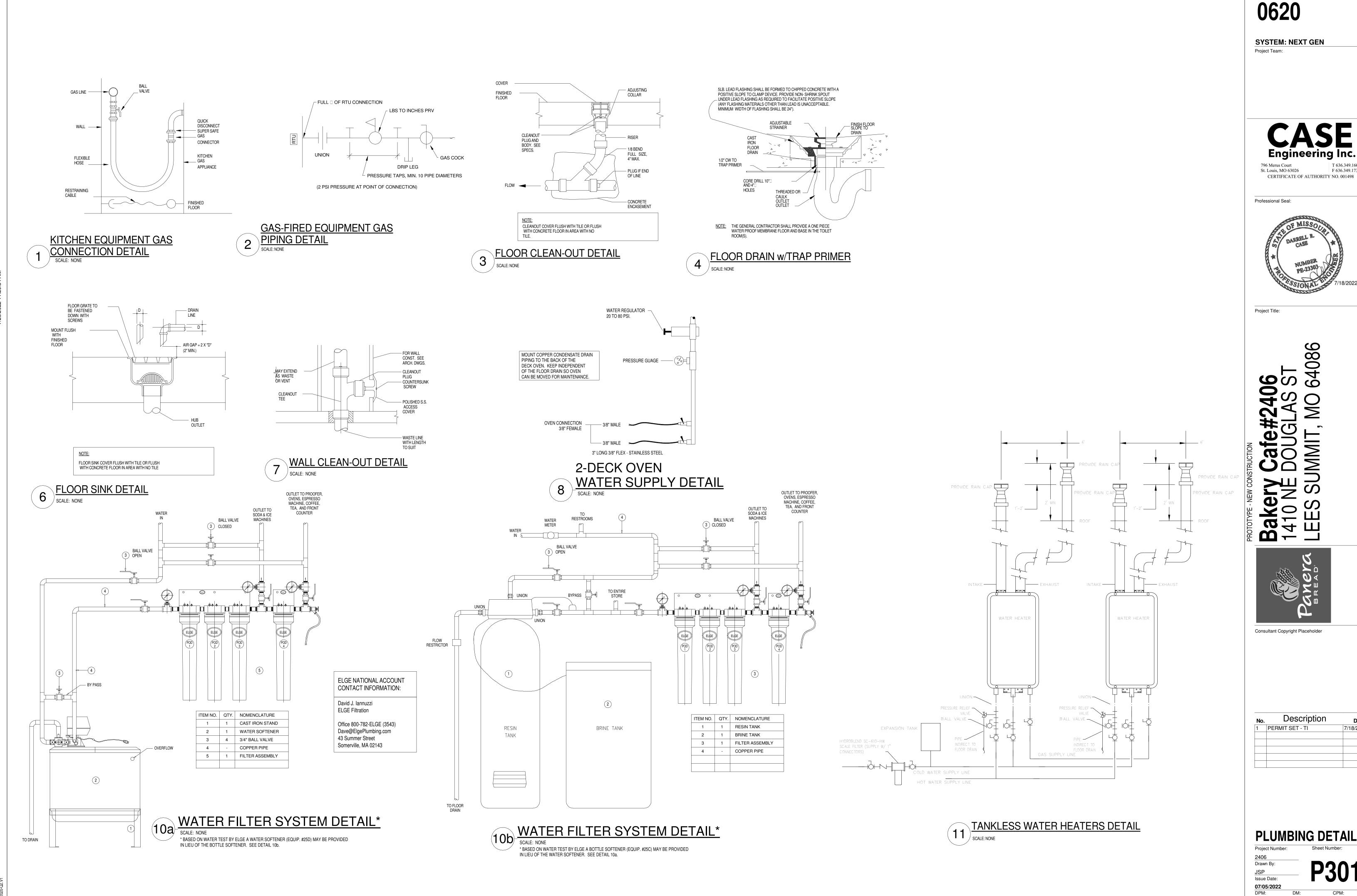
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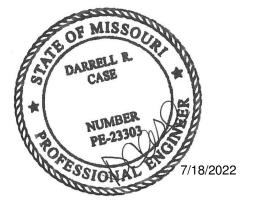
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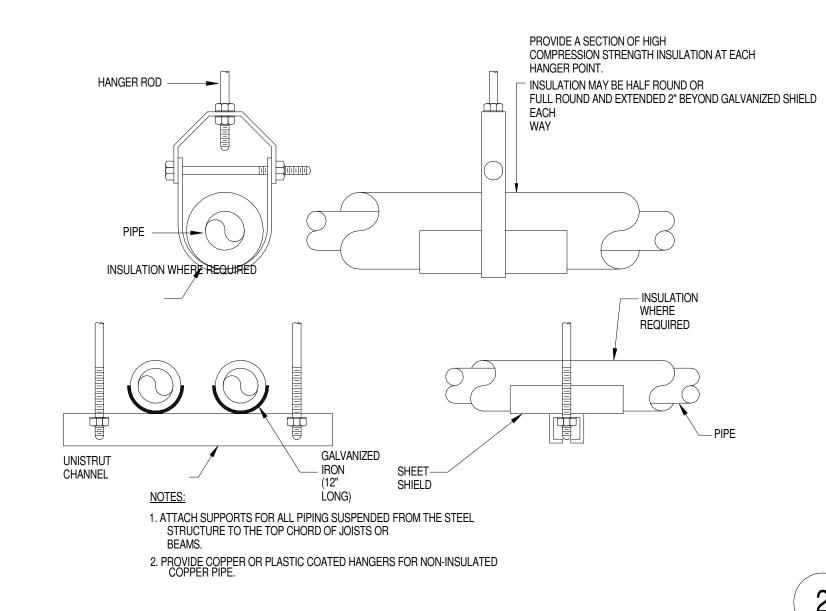
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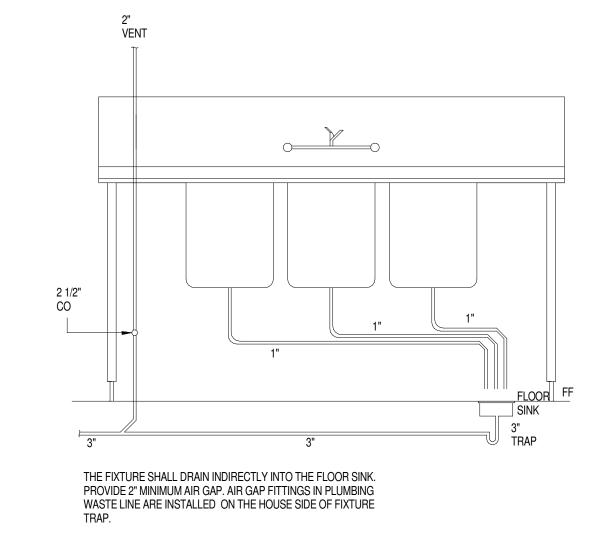


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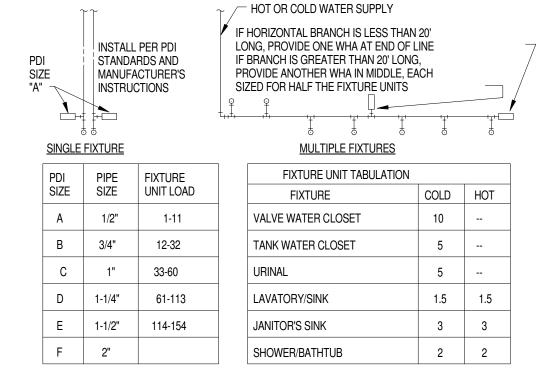
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PLUMBING DETAILS Drawn By:



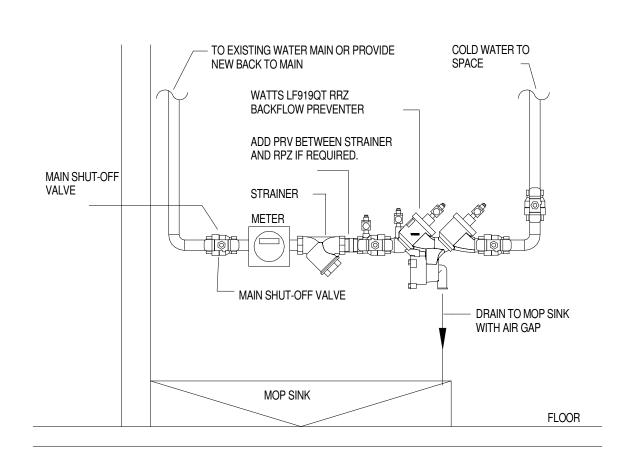


2 3 COMPARTMENT SINK DETAIL
SCALE: NONE



PC TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND 0-RING CONSTRUCTION, HAVING PDI #WH- 201, ASSE #1010 AND ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE TABLES SHOWN ABOVE. PROVIDE ACCESS PANEL FOR SERVICING OR REPLACEMENT, WHERE REQUIRED.







Project Title:

Bakery-Cafe:

Project Team:

796 Merus Court

Professional Seal:

St. Louis, MO 63026

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PLUMBING DETAILS Drawn By:

PIPE HANGER DETAIL

BALL VALVE

OR EQUIVALENT. A. CIRCUIT SOLVER SHALL REGULATE THE FLOW OF RECIRCULATED DOMESTIC HOT WATER BASED ON WATER TEMPERATURE ENTERING CIRCUIT SOLVER REGARDLESS OF SYSTEM OPERATING PRESSURE. I. WHEN FULLY CLOSED CIRCUIT SOLVER SHALL BYPASS A MINIMUM FLOW TO MAINTAIN DYNAMIC CONTROL OF THE RECIRCULATING LOOP AND PROVIDE A MEANS CIRCUIT SOLVER SHALL BE FACTORY ADJUSTABLE FROM 105 F (40.5C) TO 140F (60C) AS REQUIRED BY PROJECT CONDITIONS. (OTHER SETPOINTS AVAILABLE, CONSULT FACTORY) A. CIRCUIT SOLVER SHALL MODULATE BETWEEN OPEN AND CLOSED POSITION WITHIN A 10F (5.5C) RANGE. iii. CIRCUIT SOLVER SHALL BE AVAILABLE IN SIZES RANGING FROM ½ INCH NPT TO 2 "NPT. CIRCUIT SOLVER BODY AND ALL INTERNAL COMPONENTS SHALL BE CONSTRUCTED OF STAINLESS STEEL WITH MAJOR COMPONENTS CONSTRUCTED OF TYPE 303 STAINLESS STEEL A. CIRCUIT SOLVER SIZES ½ INCH THROUGH 2 INCH SHALL BE RATED TO 200 PSIG THERMOMEGATECH MAXIMUM WORKING PRESSURE. I. ALL CIRCUIT SOLVERS SHALL BE STANDARD TAPERED FEMALE PIPE THREAD, NPT. B. ALL CIRCUIT SOLVERS SHALL BE RATED TO 300F (148.9C) MAXIMUM WORKING TEMPERATURE. SEE PLANS CIRCUIT SOLVER SHALL BE ANSI/AWWA C800 COMPLIANT. ALL CIRCUIT SOLVERS SHALL BE NSF-61 COMPLIANT WITH ZERO LEAD CONTENT FOR USE IN ALL DOMESTIC WATER SYSTEMS. THERMAL ACTUATOR SHALL BE SPRING OPERATED AND SELF CLEANING, DELIVERING CLOSING THRUST SUFFICIENT TO KEEP ORIFICE OPENING FREE OF SCALE DEPOSITS. I. THERMAL ACTUATOR SHALL BE RATED FOR A MINIMUM OF 200,000 3. INSTALLATION OF CIRCUIT SOLVER SHALL BE MADE BY QUALIFIED TRADESMEN. INSTALL CIRCUIT SOLVER IN EACH DOMESTIC HOT WATER RETURN PIPING BRANCH

BEYOND LAST HOT WATER DEVICE IN THAT BRANCH. A. PROVIDE SUITABLE LINE SIZE ISOLATION VALVES, UNIONS, AND STRAINER AS INDICATED IN PIPING DETAIL

B. PROVIDE SUITABLE ACCESS PANEL AS REQUIRED IN NON-ACCESSIBLE CEILINGS

SHOWN ON THE DRAWINGS.

1. FURNISH AND INSTALL AS INDICATED ON THE PLANS, CIRCUIT SOLVER IN THE DOMESTIC HOT WATER PIPING. CIRCUIT SOLVER SHALL BE SELF CONTAINED AND FULLY AUTOMATIC WITHOUT ADDITIONAL PIPING OR CONTROL MECHANISMS. VALVE SHALL BE A CIRCUIT SOLVER AS MANUFACTURED BY THERM-OMEGA-TECH, INC.,

BALANCING VALVE DETAIL
SCALE: NONE

CIRCUIT SOLVER

PLUMBING FIXTURE CONNECTION SCHEDULE

FWH-1 WALL HYDRANT FREEZE PROOF

ITEM	DESCRIPTION	WASTE	VENT	CW	FCW	HW	GAS	FURN.I BY	NST. BY	SPECIFICATIONS & REMARKS
<b>(21)</b>	FRONT OF HOUSE WATER CLOSET FLOOR SET-FLUSH VALVE ADA	4"	2"	1-1/2"				P.C.	P.C.	AMERICAN STANDARD 3043.001 WHITE-OPEN FRONT SEAT. NO COVER W/SLOAN ROAL #111-1.28GPF FLUSH VALVE PER ADA
<b>®</b>	FRONT OF HOUSE LAVATORY-WALL HUNG ADA	1-1/2"	1-1/2"	1/2"		1/2"		P.C.	P.C.	KOHLER #K-2084-R, SOHO, 20"X18" WALL HUNG LAVATORY WITH SINGLE HOLE FAUCET CENTER. DRILLED FOR CONCEALED ARM CARRIER. CARRIER; ZURN #Z-1231. SUPPLIES; BRASS CRAFT #SCR-1912-A. TRAP; SPEEDWAY #CR-1915-A. FAUCET; TOTO MODEL TEL105-D10EM. INSULATE ALL PIPING BELOW SINK WITH PLUMBEREX TRAP-GEAR. MOUNTED AT ADA HEIGHT. INSTALL SHUT-OFF VALVES SO THE HANDLES ARE FACING IN TOWARDS THE CENTER OF THE SINK TO MAKE ROOM FOR SOAP DISPENSER CANISTER.
FD-1	FLOOR DRAIN	4"	2"					P.C.	P.C.	WADE #1103STD6 (OR EQUAL), CAST IRON BODY w/FLANGE, INTEGRAL CLAMPING COLLAR, SEEPAGE OPENINGS, AND ADJUSTABLE 6"x6" SQUARE NICKEL BRONZE STRAINER WITH VANDAL PROOF SCREWS. AND ADJUSTABLE 6"x6" SQUARE NICKEL BRONZE STRAINER WITH VANDAL PROOF SCREWS. PROVIDE PREASSEMBLED INLINE FLOOR DRAIN TRAP SEALER, EQUAL TO SURE SEAL, ON ALL FLOOR DRAINS.
FD-2	FLOOR DRAIN w/FUNNEL	4"	2"					P.C.	P.C.	WADE #1103G6-EF4 (OR EQUAL), CAST IRON BODY w/FLANGE, INTEGRAL CLAMPING COLLAR, SEEPAGI OPENINGS, ADJUSTABLE 6"x6" SQUARE NICKEL BRONZE STRAINER WITH VANDAL PROOF SCREWS AND 4" FUNNEL. PROVIDE PREASSEMBLED INLINE FLOOR DRAIN TRAP SEALER, EQUAL TO SURE SEAL, OF ALL FLOOR DRAINS.
FS-1	FLOOR SINK	4"	2"					P.C.	P.C.	WATTS #FS-740, 12"x12" SQUARE FLOOR SINK WITH 8" DEEP SUMP, WHITE PORCELAIN ENAMEL COATED INTERIOR, LOOSE SET PORCELAIN ENAMEL COATED CAST IRON GRATE, ALUMINUM DOME BOTTOM STRAINER,NO HUB (STANDARD) OUTLET.
GWH-1 (2)	(2) GAS FIRED TANKLESS WATER HEATERS		(2) 3"	1-1/2"		1-1/2"	1"	P.C.	P.C.	(2) RU199I TANKLESS WATER HEATERS, 199 BTUH INPUT, SEALED COMBUSTION DIRECT VENT, 4 GPM @ 90 °F RISE, 96% EFFICIENCY.
FCO	FLOOR CLEANOUT	REFER TO DWGS						P.C.	P.C.	ZURN #ZN1400 TUF-TOP ADJUSTABLE FLOOR CLEANOUT WITH DURA-COATED CAST IRON BODY, WITH GAS & WATERTIGHT ABS TAPERED THREAD PLUG, AND SCORIATED NICKEL BRONZE COVER AND PLATE.
GCO	CLEANOUT TO GRADE	REFER TO DWGS						P.C.	P.C.	ZURN #Z1406-HD-VP, EXTERIOR CLEANOUT, HEAVY DUTY WITH VANDAL PROOF SCREWED TOP.
FWH-1	WALL HYDRANT			3/4"				P.C.	P.C.	WOODFORD #67 "ANTI-SIPHON" AUTOMATIC DRAINING WALL HYDRANT FOR FLUSH INSTALLATION.FURNISH COMPLETE WITH INTEGRAL BACKFLOW PREVENTER, LOOSE KEY, NON-

CROSS CONNECTION CONTROL SCHEDULE									
FIXTURE	MAKE	MODEL	ASSE, ASME OR ANSI STANDARD						
MOP SINK (FAUCET CONTAINS INTERGRAL BACKFLOW DEVICE)	INTEGRAL	-	ASME A112.18.1 ANSI/NSF 61/9						
DISHWASHER	WATTS	LF008PCQT	ASSE 1056						
ICE MAKER (ABOVE SODA)	AIR GAP	INTERNAL	ASME A112.1.2						
ICE MACHINE	AIR GAP	INTERNAL	ASME A112.1.2						
CARBONATOR	WATTS	9D	ASSE 1022						
COFFEE BREWER	WATTS	SD-3	ASSE 1022						
TEA BREWER	WATTS	SD-3	ASSE 1022						
SOUP RETHERMALIZER	AIR GAP	-	ASME A112.1.2						
ESPRESSO	WATTS	SD-3	ASSE 1022						
BOTTLE SOFTENER	WATTS	LF009QT	ASSE 1013						
WATER FILTER SYSTEM	WATTS	LF009QT	ASSE 1013						
RACK OVEN	WATTS	LF007QT	ASSE 1015						
DECK OVEN	WATTS	LF007QT	ASSE 1015						
PROOFER	WATTS	LF007QT	ASSE 1015						
CHEMICAL DISPENSER	WATTS	LF009 W/ AIR GAP FITTING LF909AGA	-						
FREEZEPROOF HOSEBIBB	WATTS	-	ASSE 1011						
3-COMPARTMENT SINK	AIR GAP	-	ASME A112.1.2						
VEGETABLE PREP SINK	AIR GAP	-	ASME A112.1.2						
HAND SINKS	AIR GAP	-	ASME A112.1.2						
DROP-IN SINKS	AIR GAP	-	ASME A112.1.2						
LAVATORIES	AIR GAP	-	ASME A112.1.2						
WATER CLOSETS (FLUSH VALVE)	INTEGRAL	-	ASSE 1001						
URINAL (FLUSH VALVE)	INTEGRAL	-	ASSE 1001						
WATER HEATER	WATTS	LFN360	ANSI Z21.22						

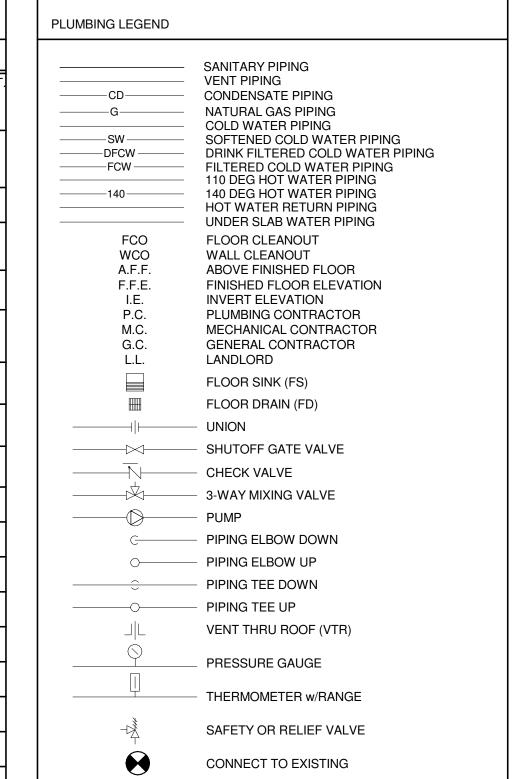
PROVIDE APPROPRIATE BACK FLOW PREVENTER AT OTHER EQUIPMENT AS REQUIRED BY CODE.

TOTAL HOT WATER GPM	NO. OF FIXTURES	WATER GALLONS PER HOUR	PLUMBING FIXTURE						
45	1	45	3-COMP SINK 45						
20	1	20	2-COMP SINK						
35	1	35	DISWASHER						
10	1	10	MOP SINK / LAUNDRY TUB 10						
30	6	5	SINKS / LAVATORIES						
140 GPH	HOUR FOR ALL FIXTURES:	HOT WATER GALLONS PER	TOTA						
- 75 GALLONS	100 GALLONS USABLE STORAGE (75% TOTAL STORAGE)								
65.0 GPH	NEEDED FOR RECOVERY:	WATER GALLONS PER HOUR	TOTAL HOT						
100 ℉	TEMPERATURE RISE (°F)								
TOTAL BTU NEEDED FOR RECOVERY	X (DEMAND FACTOR %)	THERMAL EFFICIENCY	GPH RECOVERY x 8.33 x TEMP. RISE THERM.						
42,301 BTU	0.75	56,401 BTU 0.							
	3.413 BTU / KW	BTU -> KW CONVERSION							

TURNING OPERATING ROD WITH COMPRESSION CLOSURE VALVE. BRONZE SEAT AND SEAT WASHER, 3/4" INLET & HOSE CONNECTION.

TEM	DESCRIPTION	IW	WASTE	VENT	CW	FCW	HW	GAS	FURN BY	INSTALL BY	SPECIFICATIONS & REMARKS
(1A)	MOP SINK		3"	1-1/2"	1/2"		1/2" (110°)		G.C.	G.C.	FLORESTONE #MSR-2424. HOSE #MR370, LONG w/o CLAMP. DOME STRAINER #MR37 FAUCET #MR-371. MOP HANGER #MR-372. WEDGE-LOK SEAL FOR 3" DRAIN #MR374.
	3-COMPARTMENT SINK (REDUCED SIZE)	2"							E.S.	G.C.	EAGLE; CUSTOM WASTE VALVE; FISHER #22446 WASTE THRU GREASE TRAP
(2A)	#15 PRE-RINSE SPRAY UNIT AT 3-COMPARTMENT SINK					1/2"	1/2" (140°)	-	E.S.	G.C.	FISHER #2210-WB w/ADD-ON SPOUT
(2A)	#16 ROTARY WASTE VALVE AT 3-COMPARTMENT SINK	2"		-			-	1	E.S.	G.C.	FISHER #22446
	#19B FAUCET AT 3-COMPARTMENT SINK					1/2"	1/2"		E.S.	G.C.	FISHER #13269
	1-COMPARTMENT SINK (REDUCED SIZE)	2"							E.S.	G.C.	EAGLE GROUP #314-17.5-1-18L WASTE VALVE; FISHER #22446 WASTE THRU GREASE TRAP
<b>(3B)</b>	#16 ROTARY WASTE VALVE AT 2-COMPARTMENT SINK	2"							E.S.	G.C.	FISHER #22446
	#19B FAUCET AT 2-COMPARTMENT SINK					1/2"	1/2"		E.S.	G.C.	FISHER #13269
<b>(1C)</b>	HAND SINK (WALL MOUNTED S.S.)		2"	1-1/2"	1/2"		1/2" (110°)		E.S.	G.C.	EAGLE #HSA-10-F-LRS
<b>(</b> 3B)	ICE MACHINE w/REMOTE CONDENSER	3/8" & 3/4"				1/2" DFCW		1	E.S.	G.C.	HOSHIZAKI #KMD-901MRH w/URC-12F
<b>(3F)</b>	ICE MACHINE (AIR COOLED)	3/8" & 3/4"				1/2" DFCW			OWNER	G.C.	HOSHIZAKI #KM-515MAH
<b>(</b> 3H)	ICE MACHINE (AIR COOLED)	3/8" & 3/4"				1/2" DFCW			OWNER	G.C.	HOSHIZAKI #KM-660MRJ
<b>€</b> 5B	4-POD COLD WATER FILTER				3/4"				E.S.	G.C.	ELGE #SLB4PL, 4-POD, WALL MOUNTED
(25D)	WATER SOFTENER				3/4"				E.S.	G.C.	HOSHIZAKI #KMD-901MRH w/URC-12F
<b>€</b> 7A	DISHWASHER (UPRIGHT)	1-1/2"	-	-			(140°)	-	ECOLAB	G.C.	JACKSON #ES-2000
<b>(</b> 2A <b>)</b>	BAG-N-BOX							1	PEPSI	PEPSI	MBS #AR-10-2W-GLIDE
(.2A.B)R	DOUBLE WIDE 6 RACK PROOFER	1/2"				1/2"			BAXTER	BAXTER G.C.	BAXTER RPW2E-40.5
€EP)	HOT BEV TABLE W/URN TROUGH	1/2"				1/2"			EAGLE	EAGLE G.C.	EAGLE YPBT3072-0019-00
	#19D POT FILLER FAUCET AT HOT BEV TABLE					1/2"	1/2"		KROWNE	G.C.	KROWNE #16-252L
48A	SINGLE RACK OVEN/GAS (BETA)	3/4"		-1		1/2"		1 1/2"	BAXTER	BAXTER G.C.	BAXTER #OV500G1
<b>(54)</b>	SODA/ICE DISPENSER (DINING ROOM)	3/4"		-		1/2" DFCW FROM #42C	-	1	PEPSI	PEPSI	CORNELIUS #1DC255 #621057438
<b>€</b> 4D	SODA/ICE DISPENSER (DRIVE THRU)	3/4"				1/2" DFCW FROM #42C			PEPSI	PEPSI	CORNELIUS #1DC255 621053801
<b>€</b> 6A <b>&gt;</b>	TEA BREWER					1/2"			E.S.	G.C.	WILBUR CURTIS #TCTS10631
(8F)	TWIN COFFEE BREWER					1/2"			E.S.	G.C.	WILBUR CURTIS #G4TP1T19A3131
<b>61</b>	ESPRESSO MACHINE (AUTO)	3/8"				1/2"			OWNER	OWNER	FRANKE EVOLUTION 2-STEP
(8A)	SOUP RETHERMALIZER	1-1/2"	-			1/2"			E.S.	G.C.	SSP (FAUSSEETT INTERNATIONAL) #RTB-14-SL
	ESPRESSO BAR LH	1-1/2"			1/2"		1/2"		E.S.	E.S.	EAGLE; YPB-OB3072-0010-00
403GL	# 19A FAUCET AT ESPRESSO BAR				1/2"		1/2" (110°)		E.S.	G.C.	ZURN #Z812B1-15F

BE SERVED BY POWERS HYDROGUARD SERIES LFe480 THERMOSTATIC TEMPERING VALVE, SET TO 110 °F.



MAX	MUM SPACING FOR GA	S PIPE SUPPORTS
STEEL PIPE		
(HORIZONTAL)	SPACING IN FEET	MIN. ROD SIZE - INCHES
1/2	53/8	
3/4 TO 1-1/4	8	3/8
1-1/2 TO 3	10	1/2
(VERTICAL)		
3-1/2 TO 5	EVERY FLOOR	

Bakery-Cafe:

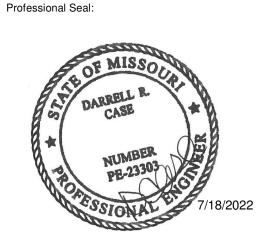
Project Team:

**SYSTEM: NEXT GEN** 

CERTIFICATE OF AUTHORITY NO. 001498

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Project Title:

Consultant Copyright Placeholder

No.	Description	Date
1	PERMIT SET - TI	7/18/2022
		1770,202

**PLUMBING** 

PLUMBING SPECIFICATIONS

### 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

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

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.

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

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.

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 MANUFACTURER'S 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

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

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.

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.

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.

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

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.

A. PIPE HANGER AND SUPPORT PRODUCTS INSTALLATION

- a. VERTICAL PIPING: MSS TYPE 8 OR 42 CLAMPS. 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.

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.

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

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 NFPME61- 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

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.

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.

### 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.

VIEGA. PROPRESS COPPER 1/2-INCH THROUGH 4-INCH WITH EPDM SEALING ELEMENT

AND/OR VIEGA, PROPRESS 304 OR 316 STAINLESS ½-INCH THROUGH 4-INCH WITH

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

AND UNIFORM INVERT.

AN APPROVED MANNER.

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

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

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.

THOROUGHLY CAULKED WITH CAULKING IRONS.

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 FREE FROM CRACKS OR OTHER

DEFECTS. ALL TRENCHES TO BE DUG WITH GRADUAL FALL, THE PIPING TO BE STRAIGHT AND THOROUGHLY YARNED WITH OAKUM AND POURED WITH MOLTEN LEAD AND

THE ARRANGEMENT OF THE SYSTEM SHALL BE AS SHOWN ON THE DRAWINGS AND AS DIRECT AS POSSIBLE, AVOIDING ALL UNNECESSARY OFFSETS. THE STACKS SHALL BE FIRMLY SECURED IN POSITION WITH WROUGHT IRON CLAMPS AT EACH FLOOR.

ALL CHANGES IN DIRECTION OF SOIL OR WASTE PIPE SHALL BE MADE BY MEANS OF "Y" BRANCHES AND 1/8 BENDS. NINETY DEGREE SHORT TURN FITTINGS WILL NOT BE PERMITTED EXCEPT TO INDIVIDUAL FIXTURE CONNECTIONS OR WHERE THE FLOW IS FROM THE HORIZONTAL TO THE VERTICAL.

HANDHOLES WITH CAST IRON FERRULES AND HEAVY BRASS SCREWS FOR CLEANOUTS SHALL BE PLACED AT ENDS AND ALL CHANGES IN DIRECTION OF SOIL AND WASTE PIPE WHERE NOT OTHERWISE SHOWN OR WHERE REQUIRED AND BROUGHT UP TO THE FLOOR LINE WHERE PIPING IS CONCEALED BY MEANS OF "Y"S OR SUITABLE BENDS.

ALL TRAP SCREWS MUST BE OF FULL SIZE OF PIPE UP TO 4" AND 4" FOR ALL OVER THIS

SIZE. CONNECTIONS BETWEEN OUTLETS OF FIXTURES AND SOIL OR WASTE PIPE

SHALL BE MADE WITH "Y" BRANCHES TO "TY" BRANCHES WHEREVER POSSIBLE. ALL

HORIZONTAL SOIL WASTE AND VENT PIPE SHALL BE GRADED TOWARD OUTLETS AND PIPE NOT BURIED SHALL BE INSTALLED ABOVE THE CEILING OR CLOSE AS POSSIBLE TO THE CONSTRUCTION ABOVE WHERE THERE IS NO CEILING. THE STACKS SHALL BE EXTENDED THROUGH ROOF OF BUILDING TO POINTS NOT LESS THAT 12" ABOVE ROOF. EXTENSIONS THROUGH ROOF SHALL BE MADE WATER- TIGHT BY MEANS OF A LEAD FLASHING OF FOUR POINTS SHEET LEAD SPREAD OVER A

DISTANCE OF NOT LESS THAN TWELVE INCHES (12") AROUND PIPE. THIMBLE TO BE

SOLDERED TO BASE AND EXTENDED OVER AND TURNED DOWN INTO END OF PIPE IN

ALL CLEANOUTS IN FLOORS TO BE JOSAM #8360 OR AMERICAN FOUNDRY #427 ADJUSTABLE CLEANOUT WITH CAST IRON BODY, CAST BRASS SCORIATED COVER WITH LETTERS C.O. CAST IN TOP AND CONCEALED BRASS PLUG.

CLEANOUTS SHALL BE INSTALLED IN BASE OF EACH STACK. CONCEALED CLEANOUTS SHALL HAVE JOSAM #8600 OR AMERICAN FOUNDRY #71-F CAST BRASS CHROMIUM PLATED FLAT ACCESS COVER PLATES.

FERRULES SHALL BE EXTRA HEAVY RED BRASS, EXTRA LONG AND SMOOTH ON THE INSIDE. FOR WASTE, SOIL AND VENT CONNECTION THE LEAD SHALL EXTEND THROUGH

THE FERRULES. BE TURNED BACK. WIPED WITH SOLDER AND CAULKED INTO THE HUB.

ALL JOINTS OF CAST IRON PIPE SHALL BE MADE WITH JUTE AND PURE SOFT LEAD BEDDED IN WITH HAMMER AND CAULKING IRON, USING FOR EACH JOINT TWELVE OUNCES OF LEAD TO EACH INCH OF DIAMETER OF PIPE ON WHICH THE JOINT IS MADE. ALL JOINTS SHALL BE FILLED AT ONE POURING, IF IT FAILS TO RUN FULL IT SHALL BE DUG OUT AND RE-POURED AND CAULKED WITH PROPER TOOLS. JOINTS BETWEEN LEAD AND CAST IRON SHALL BE MADE WITH BRASS FERRULES, WIPED TO THE LEAD PIPE AND CAULKED INTO THE HUB OF THE CAST IRON FITTINGS. AT THE CONTRACTOR'S OPTION HE MAY USE NO-HUB PIPE, FITTINGS, COUPLING AND GASKETS

AT THE CONTRACTOR'S OPTION, DWV COPPER PIPING AND FITTINGS MAY BE USED IF APPROVED BY LOCAL CODES AND ORDINANCES.

IN LIEU OF LEAD JOINTS IF APPROVED BY THE LOCAL CODES AND ORDINANCES.

IF APPROVED BY THE LOCAL CODES, SCHEDULE 40 PVC PIPE WITH DWV FITTINGS MAY BE USED FOR THE WASTE AND VENT SYSTEM. PVC PIPE AND FITTINGS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL CODES. ENCASEMENT OF PVC PIPES WITHIN RATED SHAFTS SHALL BE THE COST OF THIS CONTRACTOR.

EACH VENT FLASHING SHALL BE MADE WATER-TIGHT WITH THE ROOF BY PROPER LEAD FLASHING. FLASHING SHALL BE LEAD FOUR (4) POUNDS PER SQUARE FOOT.

### 35. WASTE, VENT AND WATER CONNECTIONS

THE MINIMUM SIZE OF WASTE, VENT, AND WATER CONNECTION TO THE INDIVIDUAL FIXTURES SHALL BE AS FOLLOWS:

WATER CLOSETS LAVATORIES 1-1/2" 1-1/2" 1/2" 1/2" 1-1/2" 1-1/2" 1/2" 1/2" WALL HYDRANTS

WHERE FIXTURES ARE GROUPED PIPES SHALL BE INCREASED IN PROPORTION: IN ALL CASES THE SIZE ARRANGEMENTS AND CONNECTIONS OF WATER AND VENT PIPING SHALL NOT BE LESS THAN SIZE OF OPENINGS SPECIFIED FOR FIXTURES AND APPEARING IN FIXTURE LIST. NO WATER PIPE LESS THAN 1/2" SHALL BE INSTALLED IN CONCEALED PLACES SUCH AS IN PARTITIONS OR WALLS ETC.

### 36. PLUMBING FIXTURES AND TRIM

PLUMBING FIXTURES SHALL BE FURNISHED AND INSTALLED IN A NEAT AND WORKMANLIKE MANNER WITH PROPER CONNECTIONS TO SUPPLY AND DRAINAGE PIPING. ALL FIXTURES SHALL BE FREE OF FLAWS AND DEFECTS OF ANY SORT IN MATERIAL AND WORKMANSHIP AND SHALL OPERATE PERFECTLY WHEN INSTALLED IN ACCORDANCE WITH MANUFACTURER'S DIRECTION.

MATERIALS: FIXTURES SHALL BE THE STANDARD PRODUCT OF ONE OF THE MANUFACTURER'S LISTED BELOW, OR ANY EQUAL UNIT APPROVED BY THE ENGINEER.

ZURN, KOHLER, CRANE, AMERICAN STANDARD, ELJER, GROHE, DELTA, ELKAY

INSTALLATION: THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE PLUMBING FIXTURES AND ACCESSORIES DURING CONSTRUCTION. HE SHALL REPLACE AT HIS EXPENSE ANY MATERIAL THAT IS MARRED, SCRATCHED, DEFACED AND/OR BROKEN. FIXTURES SHALL BE COVERED WITH BUILDING PAPER AND WOODEN CRATES DURING CONSTRUCTION.

PLUMBING SYSTEM. ALL FIXTURES TO BE INSTALLED TO DIMENSIONS WITH CHROME-PLATED SUPPLIES WITH STOPS.

ALL FIXTURES INSTALLED TO DIMENSIONS SHOWN ON THE DRAWINGS. ALL WATER

CLOSETS SHALL HAVE CAULKING BETWEEN THE FLOOR AND UNDERSIDE OF THE

CONTRACTOR SHALL PROVIDE ROUGH-IN AND SHALL CONNECT ALL FIXTURES TO THE

WATER CLOSET.

PLUMBING EQUIPMENT: (REFER TO SCHEDULE ON THE DRAWINGS)

ALL INSULATION SHALL HAVE COMPOSITE (INSULATION, JACKET OR FACINGS AND ADHESIVE USED TO ADHERE THE FACING OR JACKET TO THE INSULATION) FIRE AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURE ASTM E-84, NFPA 225 UL 723 NOT

### FLAME SPREAD 25

AND REGULATIONS.

SMOKE DEVELOPED 50 ALL ACCESSORIES SUCH AS ADHESIVES, MASTICS, CEMENTS, TAPES AND CLOTH FOR

FITTINGS SHALL HAVE THE SAME COMPONENTS RATINGS AS LISTED ABOVE. INSULATION SHALL BE APPLIED ON CLEAN, DRY SURFACES AND AFTER INSPECTION AND RELEASE FOR INSULATION APPLICATION. ALL INSULATION SHALL BE CONTINUOUS THROUGH WALL AND CEILING OPENINGS AND SLEEVES. INSULATION ON ALL COLD SURFACES WHERE VAPOR BARRIER JACKETS ARE USED, WILL BE APPLIED WITH A CONTINUOUS, UNBROKEN VAPOR SEAL, INCLUDING ALL FITTINGS AND VALVES. ALL INSULATION TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S. FITTINGS

DOMESTIC COLD WATER - 1" THICK ARMAFLEX (FLAME SPREAD 25/ SMOKE DEVELOPED DOMESTIC HOT WATER - 1" THICK ARMAFLEX (FLAME SPREAD 25/ SMOKE DEVELOPED

SHALL BE FINISHED WITH 1/4" COAT OF INSULATING CEMENT AND CANVAS.

### ALL MATERIALS USED SHALL COMPLY WITH SECTIONS 1712 AND 1713 OF THE UBC. 38. NATURAL GAS PIPING SYSTEM

INSTALLED BY THIS CONTRACTOR. ALL GAS PIPING TO BE IN ACCORDANCE WITH LOCAL CODES, NFPA-54, IFGC AND UPC ALL GAS PIPING SHALL BE INSTALLED IN ACCORDANCE WITH NFPA-54, LOCAL CODES,

THREADED JOINTS. FITTINGS LARGER THAN TWO INCHES (2") SHALL BE WELDED.

PROVIDE UNIONS AND GAS SHUT-OFF VALVES AT EACH PIECE OF GAS FIRED EQUIPMENT OR APPLIANCE. ANY GAS PIPING CONCEALED IN CHASES AND/OR

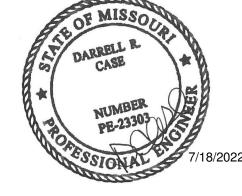
INACCESSIBLE CEILING IS TO BE WELDED WITH WELDED FITTINGS.

ALL PIPING FROM GAS METER TO GAS-FIRED EQUIPMENT SHALL BE FURNISHED AND

ALL GAS PIPING SHALL BE SCHEDULE 40 BLACK OR GALVANIZED STEEL WITH BLACK OR GALVANIZED WITH MALLEABLE SCREWED FITTINGS. USE TEFLON TAPE ON ALL

St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:



Consultant Copyright Placeholder

Description 1 PERMIT SET - TI 7/18/2022

Project Number: Drawn By: 07/05/2022

SYSTEM: NEXT GEN

Bakery-Cafe:

0620

SYSTEM: NEXT GEN
Project Team:

**CASE Engineering Inc.**796 Merus Court
St. Louis, MO 63026

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CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:



Project Title:

**akery Cafe#2406** 410 NE DOUGLAS ST EES SUMMIT, MO 6408

Panera BREAD

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No.	Description	Date
1	PERMIT SET - TI	7/18/2022

ELECTRICAL ROUGH-IN PLAN

Project Number: Sheet Number:

2406
Drawn By:
MBN
Issue Date:
07/05/2022
DPM: DM: CPM:

SEE SHEET E202 FOR ROUGH-IN EQUIPMENT SCHEDULE

SCHEDULE: ROUGH-IN SYMBOLS

ISOLATED GROUND DUPLEX RECEPTACLE (HUBBELL IG5392CN ORANGE OR EQUAL)

HEAVY DUTY RECEPTACLE - VERIFY NEMA CONFIGURATION

ROUGH-IN FOR TELEPHONE VOICE LINE UNLESS NOTED OTHERWISE

ROUGH-IN FOR TELEPHONE DATA LINE OR DATACOM UNLESS NOTED OTHERWISE

DUPLEX RECEPTACLE

G.F.I. DUPLEX RECEPTACLE

J JUNCTION BOX

☐☐☐ DISCONNECT SWITCH

ALL EQUIPMENT MUST BE LISTED AND LABELED FOR ITS USE. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE ON-SITE AT TIME OF INSPECTION. TYPICAL PER NEC SECTION 110.3 & 2012 ICC CODES.

SEE SHEET E403 FOR ROUGH-IN REQUIREMENTS AT

SEE SHEET E601 FOR DRIVE THRU KITCHEN EQUIPMENT DIMENSIONS.

2 ELECTRICAL ROUGH-IN PLAN

1/4" = 1'-0"

	CTRICAL ROUGH-IN MASTER S	,			,	DE: /			CTRICAL ROUGH-IN MASTER S		`		,	DEV.
MARK	ITEM NAME KDS ORDER READY	V	PH	Α	ROUGH-IN @ 70" AFF	DEV.		ARK	ITEM NAME KDS SANDWICH	V	PH	A	ROUGH-IN	DEV.
(KD15)	MONITOR	120	1	4	VERIFY  @ 46" AFF	Φ	KI	=	MONITOR	120	1	4	@ 80" AFF	#
(cws)	ROPE MONITOR	120	1	4	VERIFY	Φ	(KI	$\Rightarrow +$	KDS SALAD STN MONITOR	120	1	4	@ 90" AFF	-
(023B) <sub>N</sub>	ICE MACHINE	208**	1	10.0	96"	J	(KI	D3	KDS MAIN CONSOLIDATOR MONITOR	120	1	4	@ 68"/ 90" AFF VERIFY	<b>*</b>
023B W	ICE MACHINE - REMOTE CONDENSER	W	W	W	ON ROOF		KI	D4 <b>&gt;</b>	KDS TO GO CONSOLIDATOR MONITOR	120	1	4	@ 68"/ 90" AFF VERIFY	<b>*</b>
(023F)	ICE MACHINE	120	1	11.7	@ 72" AFF	J	KI	D5	KDS TO GO SANDWICH STN MONITOR	120	1	4	@ 80" AFF	<b>+</b>
(025D)	WATER SOFTNER	120	1	4.3	@ 24" AFF	φ	KI	D6	KDS DT MASTER CONSOLIDATOR MONITOR	120	1	4	@ 68" AFF	<b></b>
(027A)	DISHWASHER	120	1	12	@ 66" AFF	J	KE	01)	KDS MAIN CONSOLIDATOR MONITOR	120	1	4	@ 90" AFF	<b>+</b>
(027D) H	EXHAUST HOOD	120	1	Н	VERIFY	J	KE	012	KDS DT ESPRESSO STN MONITOR	120	1	4	@ 68" AFF	<b></b>
(030)	CASH REGISTER	120	1	5	IN CASEWORK VIF/ @46" AFF @ WALL	$  \Phi  $	(KE	013	KDS PANINI MONITOR	120	1	4	@ 80" AFF	<b>\Pi</b>
(030E)	KIOSK TABLET, TABLE TRACKER CHARGER	120	1	1.5	IN CASEWORK @24" AFF - VERIFY	$  \Phi  $	(KE	014	KDS DT PANINI MONITOR	120	1	4	@ 80" AFF	<b>#</b>
030F	CASH REGISTER	120	1	5	IN CASEWORK VIF/ @46" AFF @ WALL	$  \Phi  $	(KE	015	KDS MONITOR	120	1	4	SEE PLAN	<b>+</b>
(031)	PRINTER	120	1	2	IN CASEWORK VIF/ @46" AFF @ WALL	Φ	(02	3B <sub>N</sub>	ICE MACHINE	120/208	1	10	@ 72" AFF	J
(032A)	FAX MACHINE	120	1	2.16	@ 46" AFF	Φ	(02	3B <sub>W</sub>	ICE MACHINE - REMOTE CONDENSER	W	W	W	ON ROOF	
035	MGR PC & PRINTER	120	1	5	SEE MGR OFFICE DETAIL	Φ	(03	$\neg$	CASH REGISTER	120	1	5	@ 46" AFF	Φ
(035A)	E-LEARNING PC (FUTURE)	120	1	5	SEE MGR OFFICE DETAIL	Φ	(03	31	PRINTER	120	1	2	46"/68"/90" AFF VERIFY	SEE PLAN
(037)	CREDIT CARD READER	120	1	1	IN CASEWORK VIF/ @46" AFF @ WALL	-	(04	2C <sub>X</sub>	CARBONATOR	120	1	3.5	@ 24" AFF	Φ
042C X	CARBONATOR	120	1	10.0		$\Box$	(05	_	SANDWICH PREP 72"	120	1	9	@ 24" AFF	Φ
044Q	PROOFER	208	3	36	@ 96" AFF		(05)	=-+	TOPPING STATION	120	1	5	@ 24" AFF	Φ
(048A) +	RACK OVEN	208	3	4.4	@ 96" AFF		(05	- 54 X	SODA/ICE DISPENSER	120	1	9.3	@ 24" AFF	Φ
(048F) +	OVEN CONTROLS	120	1	7.4	@ 96" AFF	J	(05	$\neg$	UNDER-COUNTER	120	1	3.9	@ 24" AFF	Φ
		-					<u> </u>	CHR	REFRIGERATOR UNDER-COUNTER	120	1	4.7	@ 24" AFF	Φ
(052A)	BREAD SLICER	120	1	7	@ 24" AFF	Φ	(05	$\exists$	REFRIGERATOR SALAD CRISPER	120	1	1.7	@ 24" AFF	SEE
(053K)	CATERING PREP COOLER	120	1	9	@ 24" AFF			=		208		21.15	@ 24" AFF	PLAN
054)X	SODA/ICE DISPENSER	120	1	9.3	@ 24 Al I	Ψ		61 Z	ESPRESSO MACHINE	208	1	13.5	VERIFY	•
(056)	TEA BREWER	120	1	14.2	@ 24" AFF	Φ	(06	=	MICROWAVE	208	1	11	@ 24" AFF	<b>b</b>
(058F)	COFFEE MAKER	120/220	3	20	@ 46" AFF	(J)		$\dashv$	Z3 SOUP STATION	208	1	14.5	@ 24" AFF	1
060B	COFFEE GRINDER	120/220	1	11	@ 46" AFF		07	=	Z4 CONVEYOR TOASTER SIMPLICITY		1			Φ Φ
					IN CACEWORK	Φ	(07		BUBBLER	120		8.5	@ 46" AFF @ 15" AFF	***
(063D)	MICROWAVE	120	1	13.0	VIF	Φ	(08	$\equiv$	DUAL-SIDED SALAD PREP	120	1	9	VERIFY	Φ
(068A)	SOUP RETHERMALIZER	208	3	25	@ 24" AFF		(08		BLENDER	120	1	15	@ 24" AFF	Φ
(071)	COOLER COMPRESSOR	120/208	3	14.2	* ON ROOF			5B Z1	EGG STATION	208	1	12.6	@ 24" AFF	Φ
(071A)	COOLER EVAPORATOR	120	1	М	@ C00LER CLG	J	08	56	HEATED SHELF	120	1	8.0	@ 46" AFF	Φ
							08	5H Z2	DOUBLE BATCH OVEN	208	1	40	@ 24" AFF VERIFY	$\Phi$
072	FREEZER COMPRESSOR	208	3	19.5	* ON ROOF		08	5K	HOLDING UNIT	120	1	10	@ 46" AFF	Φ
(072A)	FREEZER EVAPORATOR	208	1	М	@ FREEZER CLG	J	40	07	DRIVE THRU WINDOW	120	1	1	VERIFY	J
(076C)	SIMPLICITY BUBBLER	120	1	8.5	18"AFF	Φ	40	8B	AIR CURTAIN- HEATED	208	1	30	VERIFY	J
(082)	BAGEL SLICER	120	1	6.8	@ 24" AFF	Φ	46	50	DRIVE-THRU TIMER	120	1	1	12" BELOW CEILING	<b>+</b>
							46	61	HME DIGITAL COMMUNICATION SYSTEM	120	1	3	@ 24" BELOW CEILING	φ
(085D)	HEATED SHELF	120	1	5.3	IN CASEWORK VIF	Φ	46	2B	TIMER FLAT SCREEN	120	1	3	VERIFY HEIGHT	<b>+</b>
(089)	SCALE	120	1	1	@ 46"AFF	Φ		63	SECURITY FLAT SCREEN	120	1	1.5	@ 68" AFF	Φ
(097C)	REFRIG. SELF-SERVE COOLER CASE	120	1	14.58	IN CASEWORK VIF	Φ	46	6A	SECURITY CAMERA	120	1	*	ROUGH-IN BY BLDG CONTRACTOR, INSTALLED BY VENDOR	J
(102)	AIR CURTAIN - DELIVERY DOOR	120	1	5.1	VERIFY	J			TRAL REQUIRED FOR EQUIPMI	ENT	I	ı		ш
109	DIGITAL INTERNET RECEIVER/AMP (DMX)	120	1	2	SEE MGR OFFICE DETAIL	Φ			VIDE WITH PLASTIC COVER CTRICAL SUPPLY FOR REMOT	E CONDFNS	SER S	UPPI II	ED FROM ICF MAI	KER
128	CCTV MONITOR	120	1	1	SEE MGR OFFICE DETAIL	Φ	X - C	CARI	BONATOR PUMP & SODA DISPI	ENSER SHA	RE SA	AME R	ECEPTACLE	
(128A)	CCTV CONTROLLER	120	1	6	SEE MGR OFFICE DETAIL	Ψ.	Z - N	NEM.	TRACTOR VERIFY CONNECTION A L6-30R RECEPTACLE (TWIST	-LOCK)	vii II E	_QUIPI	WENT WANUFACT	UKEK
208	DOUGH SHEETER	120	1	5.8	@ 24" AFF				//A L6-20R RECEPTACLE (TWIS //A 6-50R RECEPTACLE	T-LOCK)				

Z2 - NEMA 6-50R RECEPTACLE Z3 - NEMA 6-20R RECEPTACLE Z4 - NEMA 6-30R RECEPTACLE

\* - VERIFY POWER REQUIREMENTS WITH EQUIPMENT SUPPLIER

H - ELECTRICAL POWER FOR HOOD SUPPLIED WITH DISHWASHER EXHAUST FAN -
REFER TO E203, E502, AND MECHANICAL DRAWINGS.

120 | 1 | 5.8 | @ 24" AFF

208 DOUGH SHEETER

MARK	ITEM NAME	V	PH	Α	ROUGH-IN DEV.		REMARKS
A	RECEPTACLES	120	1	20	@ 15" AFF	Φ	TAMPER RESISTANT DUPLEX RECEPTACLE W/ USB - HUBBELL CATALOG NO. USB15X2W - COLOR WHITE
В	RECEPTACLES	120	1	20	@ 42" AFF	\$	GFI RECEPTACLES
D	RECEPTACLES	120	1	20	VERIFY, BASE OF BOOTH, HORIZONTALLY	Φ	ROUTE WIRE INSIDE BOOTH TO HALF-WALL, THEN RUN CONDUIT BELOW FLOOR TO NEAREST WALL EXTENDING TO CEILING. TAMPER RESISTANT DUPLEX RECEPTACLE W/ USB - HUBBELL CATALOG NO. USB15X2BK - COLOR BLACK
E	RECEPTACLES	120	1	20	VERIFY, @ SCREEN WALL, HORIZONTALLY	Φ	ROUTE CONDUIT BELOW FLOOR TO NEAREST WALL WHICH ENGAGES CEILING. TAMPER RESISTANT DUPLEX RECEPTACLE W/ USB -HUBBELL CATALOG NO. USB15X2BK -COLOR BLACK
F	RECEPTACLES	120	1	20	@ 48" AFF (UNO)	\$	GFI RECEPTACLES
BTL	BAKERY TOWER LIGHTING	120	1	1.5	IN CASEWORK VIF	Φ	RECEPTACLE MOUNTED IN CASEWORK TO POWER PLUG-IN BAKERY TOWER LIGHTS. PROVIDE ROUGH-IN AND FINAL CONNECTION
(CBD)	CAFE BASE DELIVERY SYSTEM	120	1	1.5	@ 15" AFF	#	PROVIDE ROUGH-IN AND FINAL CONNECTION
cws	ROPE MONITOR	120	1	4	@ 46" AFF	Φ	GFI RECEPTACLES
FP	FIREPLACE	120	1	4	VERIFY	J	PROVIDE ROUGH-IN AND FINAL CONNECTION
$\langle H \rangle$	HEAT TAPE	120	1	4	VERIFY	φ	FOR FREEZER CONDENSATE LINE OR WATER LINE. PROVIDE GROUND FAULT CIRCUIT BREAKER.
(HT)	HAND TOWEL	120	1	1	VERIFY	φ	VERIFY HEIGHT WITH ADA REQUIREMENTS. SEE ARCHITECTURAL PLANS FOR MORE INFORMATION.
MBD	MOBILE BAGEL DISPLAY	120	1	1	VERIFY	\$	PROVIDE RECEPTACLE, VERIFY EXACT ROUGH-IN LOCATION AND PLUG/RECEPTACLE REQUIREMENTS WITH MANUFACTURER AND PANERA REPRESENTATIVE.
PB	PAGE BUMP	120	1	2	@ 24" AFF	Φ	IG RECEPTACLE MOUNTED IN CASEWORK.
(PM1)	MULTI-OUTLET PLUGMOLD	120	1	15	VERIFY	J	PROVIDE ROUGH-IN AND FINAL CONNECTION TO FACTORY INSTALLED PLUGMOLD AT TABLE ROUTE CONDUIT BELOW FLOOR TO NEAREST WALL WHICH ENGAGES CEILING. COORDINATE LOCATION WITH PANERA CM AND TABLE VENDOR PRIOR TO ROUGH-IN.
(RP)	RECIRCULATING PUMP	120	1	2.4	VERIFY	J	PROVIDE ROUGH-IN AND FINAL CONNECTION.
SYP	SYRUP PUMP	120	1	2.4	@ 24" AFF	φ	PROVIDE ROUGH-IN AND FINAL CONNECTION
TDM	TABLE DELIVERY MONITOR	120	1	20	@ 24" AFF	Φ	VERIFY EXACT LOCATION AND HEIGHT OF RECEPTACLES LOCATED IN CASEWORK FOR TABLE SERVICE WITH PANERA CM PRIOR TO ROUGH-IN.
TSC	TABLE LOCATOR TRANSMITTER	120	1	20	@ 90" AFF	Φ	VERIFY EXACT LOCATION AND HEIGHT OF RECEPTACLES LOCATED IN CASEWORK FOR TABLE SERVICE WITH PANERA CM PRIOR TO ROUGH-IN.
TSA	TABLE SERVICE	120	1	20	ABOVE CEILING	Φ	VERIFY EXACT LOCATION FOR RECEPTACLE LOCATED ABOVE CEILING FOR TABLE SERVICE WITH PANERA CM PRIOR TO ROUGH-IN. RECEPTACLE TO BE LOCATED AS CLOSE AS POSSIBLE TO WINDOW AT PATIO DINING.
⟨wH⟩	WATER HEATER CONTROLS	120	1	5	VERIFY	J	PROVIDE ROUGH-IN AND FINAL CONNECTION.

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CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:

Bakery-Cafe:

0620

Project Team:

**SYSTEM: NEXT GEN** 



Project Title:

## 64086 406 \S S

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1	PERMIT SET - TI	7/18/2022

### **ELECTRICAL ROUGH-IN SCHEDULES**

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

M - ELECTRICAL POWER SUPPLY FOR EVAPORATOR SUPPLIED FROM REMOTE CONDENSER. CONTRACTOR TO PROVIDE ALL REQ'D INTER-CONNECT WIRING.

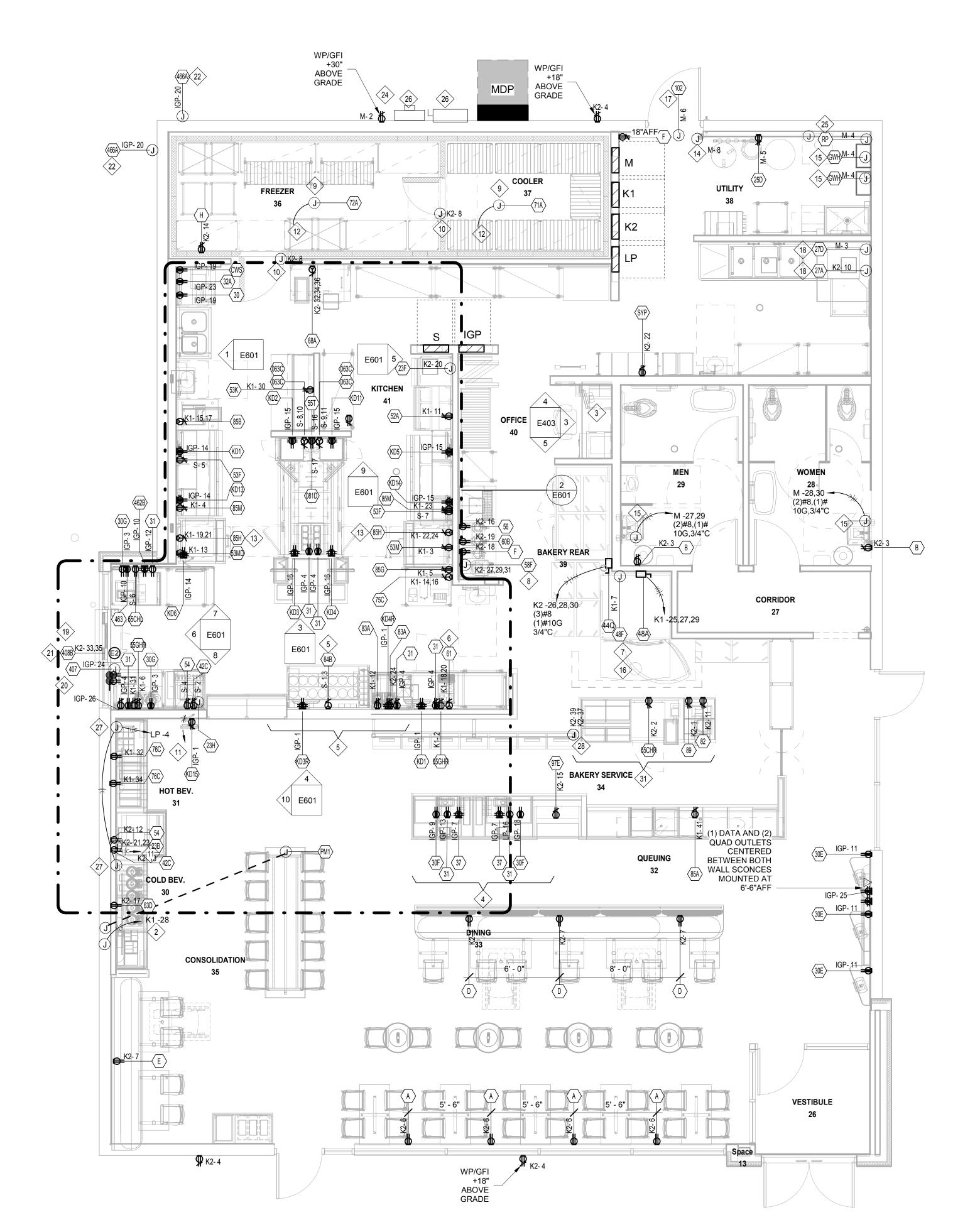
N - NEUTRAL REQUIRED FOR EQUIPMENT T - ELECTRICAL CONTRACTOR TO SUPPLY LOW VOLTAGE TRANS. AS REQUIRED W - ELECTRICAL SUPPLY FOR REMOTE CONDENSER SUPPLIED FROM ICE MAKER

X - CARBONATOR PUMP & SODA DISPENSER SHARE SAME RECEPTACLE Y - CONTRACTOR VERIFY CONNECTION DEVICE WITH EQUIPMENT MANUFACTURER

<sup>+ -</sup> VERIFY WIRE SIZE WITH MANUFACTURER

<sup>++ -</sup> PROVIDE 30A BREAKER PER MANUFACTURER

<sup>\*</sup> VERIFY \*\* - F.O.H.



### **GENERAL NOTES:**

- E.C. SHALL RUN NEUTRAL AND GROUNDING WIRES TO ALL KITCHEN EQUIPMENT. NO SHARED NEUTRALS SHALL BE USED.
- ALL KITCHEN EQUIPMENT SHALL BE FURNISHED BY OTHERS. ELECTRICAL CONTRACTOR SHALL SET IN PLACE AND MAKE FINAL CONNECTIONS.
- ALL CONDUIT PASSING THROUGH WALL OF COOLER/FREEZER SHALL BE SEALED WITH SILICONE.
- ALL RECEPTACLES SHALL BE NEMA GROUNDING TYPE. RECEPTACLES IN DINING AREA SHALL HAVE BLACK WIRING DEVICES AND BLACK COVERS. RECEPTACLES IN KITCHEN AREA SHALL HAVE BLACK WIRING DEVICES AND BRUSHED STAINLESS STEEL COVERS.
- ALL KITCHEN EQUIPMENT JUNCTION BOXES SHOWN SHALL INCLUDE FINAL CONNECTION TO THEIR RESPECTIVE KITCHEN EQUIPMENT.
- VERIFY ELECTRICAL REQUIREMENTS, CONNECTIONS, AND EXACT LOCATION OF CONNECTIONS. COORDINATE WITH EQUIPMENT SUPPLIER/CONTRACTOR.
- ALL 120V OUTLETS IN KITCHEN AREA ARE TO BE GFCI PROTECTED, EITHER BY RATED BREAKERS OR DEVICES.
- REFER TO THE GENERAL CONDITIONS ON SHEET G011 FOR FIRE STOPPING REQUIREMENTS.

CONDUITS INSTALLED EXPOSED AND NOT CONCEALED IN WALLS OR MOUNTED ABOVE FINISHED CEILINGS SHALL BE INSTALLED A MINIMUM OF 1" CLEAR SPACING FROM WALL AND 6" ABOVE FINISHED FLOOR FOR CLEANING PURPOSES. INSALLATION OF EXPOSED FLEXIBLE CONDUIT IS NOT ACCEPTABLE.

- SEE ONE-LINE DIAGRAM AND PANEL SCHEDULES ON SHEET E501.
- PROVIDE ROUGH-IN AND FINAL CONNECTION TO FIREPLACE IGNITION CONTROL SWITCH AND POWER VENT LOCATED ON ROOF. CONDUIT SHALL BE ROUTED WITHIN WALL AND ROUTED UNDER SLAB TO UNIT. ROOF VENT POWER SUPPLY DERIVES FROM THE CONRTOL PANEL TERMINAL #7 AND SHALL BE ROUTED BACK TO WALL AND UP TO ROOF VENT. LOCATE LOCAL DISCONNECTING MEANS IN UNIT BASE HOUSING. COORDINATE POWER STUB UP WITH OWNER AND FIREPLACE MANUFACTURER.
- SEE DETAILS ON SHEET E403 FOR LOCATION AND CIRCUIT OF RECEPTACLES IN
- ALL WIRING DEVICES IN FRONT COUNTER/CONSOLIDATION WALL SHALL BE INSTALLED IN CABINETRY OR IN CASING AND ACCESSED FROM THE FRONT REMOVABLE PANELS. INSTALL GROMMETS IN WALL TO CONNECT EQUIPMENT TO DEVICES. RUN CONDUIT BELOW SLAB TO NEAREST WALL WHICH ENGAGES CEILING FOR CIRCUITING "HOME RUNS". EACH ISOLATED GROUND CIRCUIT SHALL BE RUN IN SEPARATE CONDUIT. ROUTING OF CONDUIT BELOW FLOOR SHALL BE IN SUCH A WAY AS TO MINIMIZE CHANNELING OF SLAB AND AMOUNT
- RECEPTACLES FOR EQUIPMENT (IN THE FRONT LINE) SHALL BE FLUSH-MOUNTED AND RECESSED INTO CASEWORK.
- RECEPTACLE FOR ESPRESSO MACHINE PROVIDED BY MANUFACTURER. MOUNT ESPRESSO RECEPTACLE SIDEWAYS IN CASEWORK CHASE SO CORD AND PLUG DOES NOT INTERFERE WITH REFRIGERATOR LOCATION.
- PROVIDE ROUGH-IN AND FINAL CONNECTION TO COFFEE MACHINE, PROVIDE "LOCK-OUT" TYPE CIRCUIT BREAKER IN PANEL K2. CONTRACTOR TO PROVIDE 8/4 BLACK SEOOW FLEXIBLE CORD AND MAKE FINAL CONNECTION TO EQUIPMENT. CORD TO ALLOW 2'-6" MOVEMENT OF EQUIPMENT MINIMUM.
- PROVIDE ROUGH-IN AND FINAL CONNECTION TO COOLER/FREEZER COMPRESSOR. COORDINATE WITH G.C. AND COOLER/FREEZER MANUFACTURER. SEE SHEET M501 FOR LOCATION.
- \$\langle 10 \rangle PROVIDE ROUGH-IN AND FINAL CONNECTION TO COOLER/FREEZER DOOR. FIELD VERIFY LOCATION. COORDINATE WITH G.C. AND COOLER/FREEZER
- PROVIDE ROUGH-IN AND FINAL CONNECTION TO EVAPORATOR. EXTEND CIRCUIT FROM COMPRESSOR ON ROOF. COORDINATE WITH G.C. AND COOLER/FREEZER MANUFACTURER.
- 213 PROVIDE ROUGH-IN AND FINAL CONNECTION TO DOUBLE BATCH OVEN. VERIFY RECEPTACLE ORIENTATION AND CORD AND PLUG REQUIREMENTS WITH MANUFACTURER AND PANERA REPRESENTATIVE.
- VERIFY REQUIREMENTS OF DETEX DOOR ALARM WITH EQUIPMENT SUPPLIER.
- PROVIDE ROUGH-IN AND FINAL CONNECTION TO WATER HEATER. COMPLETE INSTALLATION SHALL BE IN COMPLIANCE WITH MANUFACTURER RECOMMENDATIONS. COORDINATE REQUIREMENTS WITH PLUMBING CONTRACTOR.
- (18) INSTALL ENTIRE DISHWASHER HOOD CONTROL SYSTEM. COMPONENTS PROVIDED BY ECOLAB, WIRING PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR, SEE SHEET E502 THIS SET FOR CONTROL WIRING DIAGRAM COORDINATE CONNECTION OF HOOD CONTROLS TO EXHAUST FAN WITH MECHANICAL CONTRACTOR IN FIELD.
- (19) HME WIRELESS TRANSMITTER LOCATED @ 24" BELOW CEILING. VERIFY
- 20 PROVIDE JBOX TO FEED POWER TO DRIVE THRU WINDOW. COORDINATE
- PROVIDE ROUGH-IN FOR AIR CURTAIN. (WHERE REQUIRED) AIR CURTAIN TO BE
- (23) NOT USED.
- 25 PROVIDE ROUGH-IN AND FINAL CONNECTION TO TIME CLOCK FOR WATER RECIRCULATING PUMP. COORDINATE LOCATION WITH G.C. IN FIELD AND TIME PROGRAMMING WITH PANERA REPRESENTATIVE
- HEIGHT WITH CONSTRUCTION MANAGER PRIOR TO ROUGHIN.
- PROVIDE (2) CIRCUIT FOR DIGITAL MENU BOARDS. PROVIDE WIRING TO CEILING, DOWN HOLLOW METAL POLE AND CONNECT MENU BOARDS COMPLETE AND READY FOR

### **KEYED NOTES**

- OFFICE AREA.
- OF CONDUIT.
- VERIFY WIRE SIZE WITH OVEN SUPPLIER.
- ELECTRICAL CONTRACTOR TO MAKE ELECTRICAL CONNECTION BETWEEN ICE MAKER AND REMOTE CONDENSER ON ROOF. COORDINATE WITH G.C. AND EQUIPMENT MANUFACTURER. ROUGH-IN FOR FUTURE ROOF PENETRATION AT

- PROVIDE ROUGH-IN AND FINAL CONNECTION TO RACK OVEN HOOD EXHAUST FAN, DRAFT INDUCER MOTOR, AND PRESSURE SWITCH. FAN SHALL BE INTERLOCKED WITH OVEN TO RUN WHEN OVEN IS ON. SEE WIRING DETAILS ON MECHANICAL SHEETS. COORDINATE WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER.
- (17) PROVIDE DOOR SWITCH/SENSOR TO ACTIVATE DELIVERY DOOR AIR CURTAIN WHEN DOOR IS OPENED.
- LOCATION AND REQUIREMENTS WITH GENERAL CONTRACTOR IN FIELD.
- LOCATION WITH WINDOW SUPPLIER AND INSTALLATION MANUAL.
- ACTIVATED WHEN DRIVE-THRU WINDOW IS OPENED.
- PROVIDE ROUGH-IN AND FINAL CONNECTION TO NEW SECURITY CAMERA SHOWN. VERIFY CONNECTION REQUIREMENTS IN FIELD WITH EQUIPMENT SUPPLIER. WHERE 120V CIRCUIT IS REQUIRED USE 20 AMP CIRCUIT LOCATED IN "IGP" PANEL AS INDICATED ON PLANS.
- 24> PROVIDE ROUGH-IN AND FINAL CONNECTION FOR IRRIGATION CONTROLLER. COORDINATE LOCATION WITH PANERA REPRESENTATIVE.
- 26 EXISTING SERVICE ENTRANCE EQUIPMENT (CT CABINET, MAIN DISCONNECT SWITCH AND ELECTRIC METER) LOCATIONS. 800 AMP, 3 PHASE, 4 WIRE ELECTRICAL SERVICE, REFER TO ONE-LINE DIAGRAM ON SHEET E501.
- 27 PROVIDE 120V, 20A POWER OUTLET FOR FUTURE DISPLAY. COORDINATE MOUNTING

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CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:

**Bakery-Cafe:** 

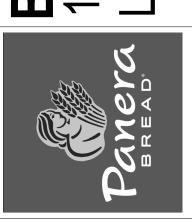
Project Team:

**SYSTEM: NEXT GEN** 



Project Title:

## 980 3ake, 410 № 1-S



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No.	Description	Date
1	PERMIT SET - TI	7/18/2022

### **ELECTRICAL POWER PLAN** Project Number: Sheet Number: Drawn By:

07/05/2022 DPM:

ELECTRICAL POWER PLAN

1/4" = 1'-0"

ELECTRICAL LIGHTING PLAN

1/4" = 1'-0"

### **CONTRACTOR NOTE**

FIXTURE EM-EUE IS EQUIPPED WITH REMOTE BATTERY -COORDINATE ACTUAL BATTERY LOCATION WITH ARCHITECTURAL DRAWINGS. BATTERY MAY BE LOCATED AS MUCH AS 100 TO 430 FEET FROM LAMP HEAD (SEE MANUFACTURER'S LITERATURE FOR LOW VOLTAGE WIRE SIZE DEPENDING ON DISTANCE BETWEEN BATTERY AND LAMPS. 120 VOLT POWER SOURCE AND CONDUIT TERMINATES AT BATTERY AND LOW VOLTAGE WIRES ARE EXTENDED FROM BATTERY TO LAMPS. ALSO BE AWARE THAT LOW VOLTAGE WIRES DO NOT REQUIRE J-BOX BEHIND LAMP BASE.

### DINING **BAKERY GENERAL** SERVICE LTG LTG UTILITY/BAKERY CONSOLIDATION/ KITCHEN REAR GENERAL LTG GENERAL LTG

CONTRACTOR TO VERIFY EXACT CONFIGURATION REQUIRED WITH SPACE AVAILABLE. PROVIDE LABELS AS DIRECTED BY OWNER. SWITCHES SHALL NOT BE MOUNTED HIGHER THAN 48". ALL SWITCH SHALL BE DIMMABLE AND COMPATIBLE WITH FIXTURE TYPE.

2 SWITCH BANK NOT TO SCALE

### LIGHTING GENERAL NOTES

- INSTALL LIGHT FIXTURES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LATEST EDITION OF THE NEC.
- ALL WIRING SHALL BE COPPER, #12 THHN IN 3/4" CONDUIT UNLESS OTHERWISE NOTED.
- WHERE CONDUCTORS ARE NOT INDICATED (FOR CLARITY) INSTALL
- CONDUCTORS AS INDICATED BY THE CORRESPONDING HOMERUN. ALL FIXTURES TO BE PROVIDED BY, RECEIVED, STORED, AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL FIXTURE LAMPS

SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL

- ELECTRICAL CONTRACTOR SHALL SUPPLY 10% ADDITIONAL SPARE LAMPS FOR ALL LAMP TYPES.
- F. 'NL' REFERS TO NIGHT LIGHT FIXTURE.
- 'EM' REFERS TO LIGHT FIXTURE WITH EMERGENCY BALLAST.

### **KEYED NOTES**

- 1 COORDINATE CONNECTION OF COOLER/FREEZER LIGHTING WITH COOLER/FREEZER EQUIPMENT SUPPLIER AND CONTRACTOR, MANUFACTURER PROVIDES FIXTURE, AND CONTRACTOR PROVIDES LOW TEMP BALLAST.
- 2 PROVIDE RECEPTACLE ABOVE STOREFRONT WINDOW (TYPICAL MOUNT AT 6" ABOVE WINDOW ) FOR WINDOW DISPLAY. CIRCUIT VIA LIGHTING CONTACTOR AND TIME CLOCK FURNISHED WITH CPI PANEL. COORDINATE WITH CPI REPRESENTATIVE.
- INSTALL PHOTOCELL (INCLUDED W/CPI PACKAGE) IN UNOBSTRUCTED LOCATION ON ROOF. LOCATE W/SENSOR POINTING NORTH. CONNECT TO CPI LIGHTING CONTROL EQUIPMENT.
- 4 JUNCTION BOX AND CIRCUIT FOR SIGNAGE PROVIDED IN SHELL PACKAGE. CONNECT SIGN COMPLETE AND READY FOR OPERATION..
- (5) EXTERIOR LIGHTING FURNISHED AS PART OF SHELL PACKAGE.
- 6 NOT USED.
- 7 NOT USED.
- 8 NOT USED.
- PROVIDE HUBBELL WSP-SM-UNV-LTWT OCCUPANCY SENSOR
- 9 W/WSPLENS-360-LTWT LENS.
- (10) NOT USED
- (11) EXTERIOR EGRESS FIXTURE FURNISHED AS PART OF SHELL PACKAGE.
- APPROXIMATE LOCATION OF SWITCHBANK. SEE DETAIL THIS SHEET. COORDINATE EXACT LOCATION AND SWITCH CONFIGURATION WITH OWNER.
- EMERGENCY EGRESS FIXTURE, CONNECT TO UNSWITCH LEG OF CIRCUIT NOTED
- $\stackrel{\frown}{}_{15}>$  connect night light to unswitched leg of circuit noted.
- 16 EMERGENCY EXIT SIGN, CONNECT TO UNSWITCH LEG OF CIRCUIT NOTED.
- RECEPTACLE FOR PLUG-IN LED STRIP LIGHTS INSIDE OF BAKERY TOWERS, CONNECT TO BAKERY SERVICE LIGHT CIRCUIT AND SWITCH ON/OFF WITH TOGGLE SWITCH INDICATED. VERIFY AND COORDINATE ALL BAKERY TOWER LIGHT FIXTURE LOCATIONS AND REQUIREMENTS WITH CASEWORK AND PANERA REPRESENTATIVES.
- PROVIDE CEILING MOUNTED RECEPTACLE FOR WINDOW DISPLAY. CIRCUIT VIA LIGHTING CONTACTOR AND TIME CLOCK FURNISHED BY EC.

**Bakery-Cafe:** 

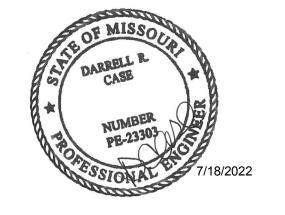
Project Team:

**SYSTEM: NEXT GEN** 



796 Merus Court St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:



Project Title:

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### **ELECTRICAL** LIGHTING PLAN

Project Number: Drawn By: 07/05/2022 DPM:

NOTE

SEE SHEET A131 FOR LIGHT FIXTURE SCHEDULE AND SHEET A130 FOR ADDITIONAL INFORMATION ON FIXTURE LOCATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REVIEWING ARCHITECTURAL ELEVATIONS FOR ANY ADDITIONAL POWER REQUIREMENTS INCLUDING SIGNS AND BUILDING LIGHTING BEING PROVIDED AS A PART OF THE PANERA BUILD OUT.

ALL LIGHTING FIXTURE BULBS SHALL HAVE PROTECTIVE COVERS. BE COATED OR SHATTER-RESISTANT IN AREAS WHERE THERE IS NON-PREPACKAGED READY TO EAT FOOD, CLEAN EQUIPMENT, UTENSILS. LINENS OR UNWRAPPED SINGLE USE ARTICLES. FOOD PREPARATION AREAS, OPENED FOOD STORAGE ROOMS, AND DISHWASHING AREAS.

### NOTE

ALL FIXTURES (NO EXCEPTIONS) TO BE OBTAINED THROUGH NATIONAL ACCOUNT AT: STANDARD ELECTRICAL SUPPLY COMPANY #14 JEWEL DRIVE WILMINGTON, MA 01887 CONTACT: PANERA ACCOUNT REPRESENTATIVE

800-370-5050 x3176 CITY LIGHTING 4307 WEST PAPIN ST. ST. LOUIS. MO 63110 CONTACT: DON SCHWEITZER 314-566-5312

### **KEYED NOTES**

- S1 SEE "POS SYSTEM DIAGRAM" ON SHEET E403 FOR ALL WIRING AND CONNECTION INFORMATION.
- AT FREEZER AND COOLER PROVIDE TWO SINGLE GANG JUNCTION BOXES ADJACENT TO STRIKE SIDE OF DOOR WITH 1/2" CONDUIT W/PULLWIRE STUBBED OUT ABOVE ACCESSIBLE CEILING. ONE BOX FOR ALARM SYSTEM HOLD-UP PUSHBUTTON AND ONE FOR TEMPERATURE SENSOR. FIELD VERIFY EXACT LOCATIONS W/OWNERS REPRESENTATIVE. COORDINATE WORK WITH SECURITY SYSTEM CONTRACTOR AND FREEZER/COOLER EQUIPMENT MANUFACTURER.
- PROVIDE ALL NECESSARY CONTROL WIRING FOR FREEZER AND COOLER PER MANUFACTURERS REQUIREMENTS.
  PROVIDE 1/2" CONDUIT W/PULLWIRE CONCEALED IN PARTITON RUN UP FROM TOP EDGE OF DOOR FRAME AND STUBBED OUT ABOVE ACCESSIBLE CEILING FOR DOOR CONTACT. CONDUIT SHALL BE AT STRIKE SIDE OF DOOR, NOT HINGED SIDE. COORDINATE WORK WITH SECURITY SYSTEM CONTRACTOR.
- COORDINATE INSTALLATION OF ROPE TERMINAL AND PRINTER.
  CONTRACTOR TO PROVIDE PATCH CABLES FROM OFFICE (MINIMUM 3 PLUS EXTRAS AS BACKUP).
- PROVIDE CONDUIT FROM ALL PHONE OUTLETS AT HEIGHT INDICATED TO THE TELEPHONE SYSTEM IN THE OFFICE. TELEPHONE CONDUITS SHALL HAVE A PULL WIRE INSTALLED. STUB 3/4" CONDUIT FROM TELEPHONE OUTLET TO ABOVE FINISHED CEILING. PROVIDE INSULATED BUSHING ON CONDUIT END. CURVE CONDUIT TOWARDS DIRECTION OF TELEPHONE SERVICE. COORDINATE WITH TELEPHONE COMPANY PRIOR TO INSTALLATION.
- HME WIRELESS TRANSMITTER LOCATED @ 24" BELOW CEILING. VERIFY LOCATION AND REQUIREMENTS WITH GENERAL CONTRACTOR IN FIELD.
- ROUTE POS SYSTEM CONDUIT(S) UNDER FLOOR OR THROUGH
  CASEWORK TO NEAREST FULL HEIGHT PARTITION THEN UP ABOVE
  ACCESSIBLE CEILING. PROVIDE W/ PULL WIRE. SEE POS SYSTEM NOTES
  ON SHEET E403 FOR QUANTITY, SIZES, AND REQUIREMENTS.
- PROVIDE PUSH BUTTON AT MAIN BAKERY REGISTER WITH CHIME IN REAR AREA. CHIME TONE SHALL BE DIFFERENT FROM THAT OF THE DOOR CHIME. RUN WIRING IN CABINETRY AND/OR IN CONDUIT BELOW FLOOR (IF REQUIRED) TO STUB OUT ABOVE ACCESSIBLE CEILING. VERIFY REQUIREMENTS IN FIELD.
- PROVIDE ROUGH-IN AND FINAL CONNECTION TO SMOKE DETECTOR MOUNTED IN RETURN AIR DUCT. DETECTOR SHOULD SHUT DOWN RTU UPON ACTIVATION. (WHEN FIRE ALARM IS PROVIDED SMOKE DETECTOR SHALL NOTIFY CONTROL PANEL AND SHUT DOWN RTU).
- VIDEO MONITOR, COMPLETE WITH VDU CONTROLLER BOX, IS SUPPLIED AND INSTALLED BY VENDOR.
- PROVIDE RECESSED SINGLE GANG JUNCTION BOX AT 60" AFF WITH 1/2" CONDUIT W/ PULLWIRE UP IN PARTITION STUBBED OUT ABOVE ACCESSIBLE CEILING FOR ALARM SYSTEM CONTROL KEYPAD. LOCATE THE KEYPAD ON THE CUSTOMER SIDE OF THE WALL NEAR THE DOORWAY INTO THE KITCHEN CLOSEST TO THE CAFE'S FRONT ENTRY. COORDINATE WORK WITH SECURITY SYSTEM CONTRACTOR.
- PROVIDE DOOR BUZZER SYSTEM AT REAR ENTRY DOOR. PROVIDE PUSHBUTTON AT 48" AFF ADJACENT TO STRIKE SIDE OF ENTRY DOOR. PROVIDE BUZZER MOUNTED JUST BELOW CEILING IN KITCHEN AREA. FIELD VERIFY EXACT LOCATION. PUSHBUTTON SHALL BE EDWARDS 632 OR EQUAL BUZZER SHALL BE EDWARDS 725 OR EQUAL.
- PROVIDE SEPARATE CONDUIT RUN BELOW FLOOR OR IN CASEWORK FOR SOUND SYSTEM WIRING TO MICROPHONES VERIFY REQUIREMENTS IN FIELD. (WHERE REQUIRED)
- PROVIDE ROUGH-IN AND FINAL CONNECTION TO SECURITY SYSTEM MONITOR. VERIFY CONNECTION REQUIREMENTS WITH SECURITY SYSTEM PROVIDER. (WHERE REQUIRED)
- JBOX/CONDUIT FOR DRIVE THRU WINDOW SECURITY WIRING. VERIFY LOCATION AND REQUIREMENTS WITH EQUIPMENT PROVIDER PRIOR TO INSTALLATION OF CONDUIT.
- JBOX/CONDUIT FOR DRIVE THRU SECURITY CAMERAS. VERIFY LOCATION AND REQUIREMENTS WITH EQUIPMENT PROVIDER PRIOR TO INSTALLATION OF CONDUIT.
- ⟨\$17⟩ NOT USED.
- SEE DETAILS ON SHEET E403 FOR INFORMATION AND LOCATION OF SPECIAL SYSTEMS' EQUIPMENT/ DEVICES IN OFFICE AREA.
- PROVIDE 1" CONDUIT TO SPEAKER POST AT PATIO. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
- PROVIDE 1" CONDUIT TO LANSCAPING AREA FOR IRRIGATION SYSTEM BOX. VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.

### **KEYED NOTES**

SPEAKER SYSTEM TO BE INSTALLED ON A DESIGN BUILD BASIS BY PANERA'S VENDOR AND SHALL INCLUDE INTERIOR AND EXTERIOR APPLICATIONS.

Bakery-Cafe:

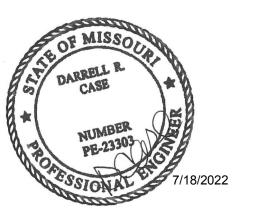
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SYSTEM: NEXT GEN
Project Team:



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

Professional Seal:



Project Title:

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ry Cafe#2406 JE DOUGLAS ST SUMMIT, MO 64086

**3akery Ca** 1410 NE DO EES SUMM



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No.	Description	Date
1	PERMIT SET - TI	7/18/2022

PLAN

Project Number: Sheet Number:

2406
Drawn By:
MBN
Issue Date:

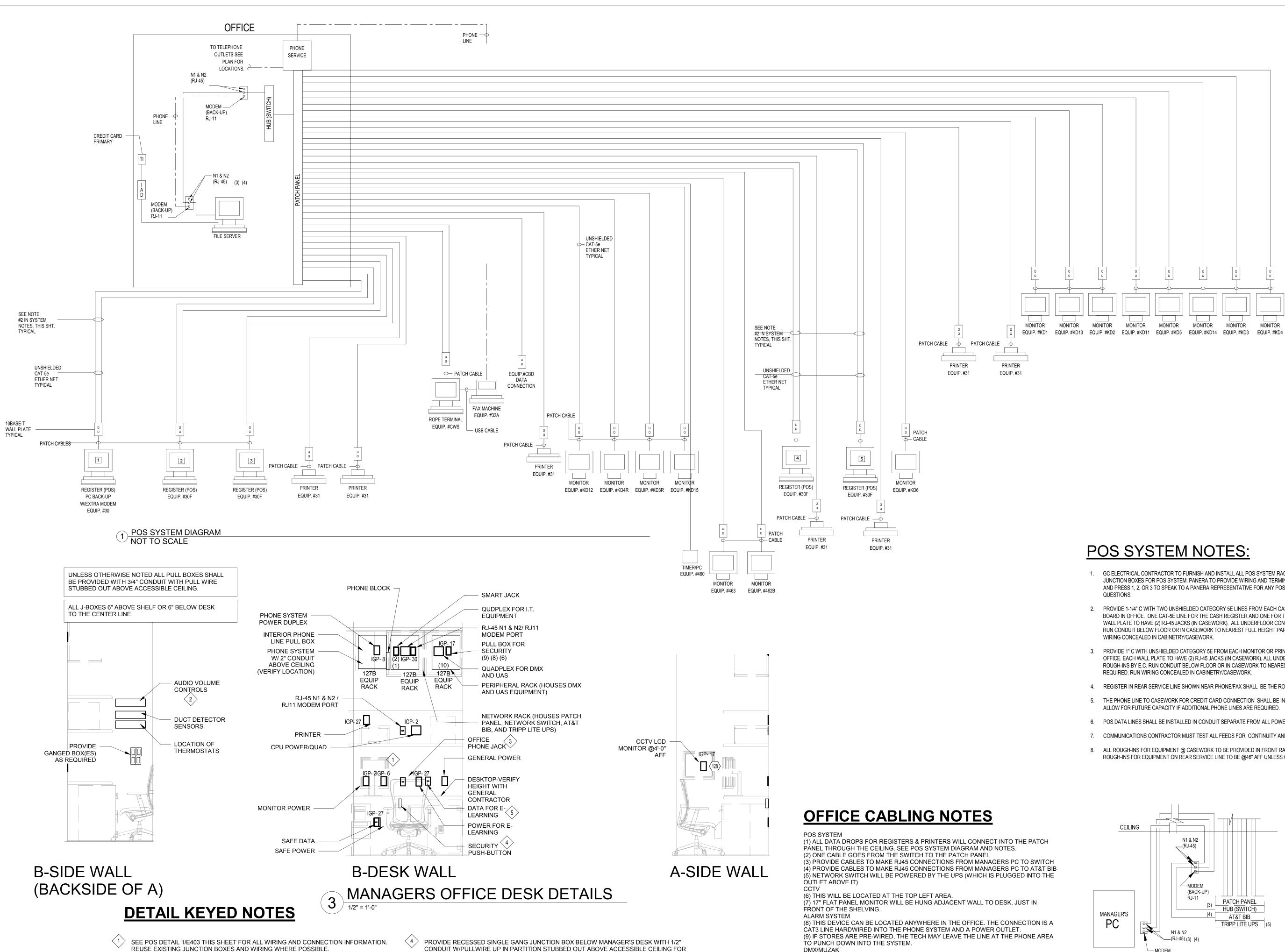
Sheet Number:

E401

**07/05/2022** DPM:

SPECIAL SYSTEMS PLAN

1/4" = 1'-0"



ALARM SYSTEM HOLD-UP PUSHBUTTON. FIELD VERIFY EXACT LOCATION W/OWNER'S

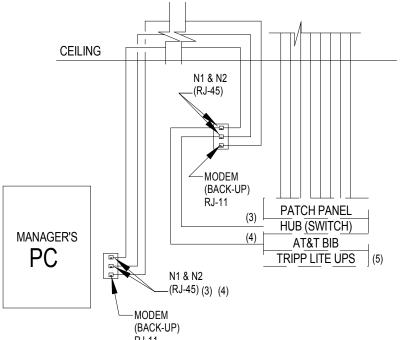
PROVIDE 3/4" CONDUIT WITH PULLSTRING UP TO ABOVE CEILING. FIELD VERIFY EXACT TERMINATION POINT AND FINAL CONNECTION REQUIREMENTS.

REPRESENTATIVE. COORDINATE WORK WITH SECURITY SYSTEM CONTRACTOR.

DMX/MUZAK

(10) LOCATED ON THE TOP SHELF OF THE RACK ON LEFT HAND SIDE

- 1. GC ELECTRICAL CONTRACTOR TO FURNISH AND INSTALL ALL POS SYSTEM RACEWAYS, CONDUITS, AND JUNCTION BOXES FOR POS SYSTEM. PANERA TO PROVIDE WIRING AND TERMINATIONS. CONTACT: 314-984-2450 AND PRESS 1, 2, OR 3 TO SPEAK TO A PANERA REPRESENTATIVE FOR ANY POS SPECIFIC OUTLET OR WIRING
- 2. PROVIDE 1-1/4" C WITH TWO UNSHIELDED CATEGORY 5E LINES FROM EACH CASH REGISTER TO EQUIPMENT BOARD IN OFFICE. ONE CAT-5E LINE FOR THE CASH REGISTER AND ONE FOR THE ATTACHED PRINTER. EACH WALL PLATE TO HAVE (2) RJ-45 JACKS (IN CASEWORK). ALL UNDERFLOOR CONDUIT AND ROUGH-INS BY E.C. RUN CONDUIT BELOW FLOOR OR IN CASEWORK TO NEAREST FULL HEIGHT PARTITION AS REQUIRED. RUN
- PROVIDE 1" C WITH UNSHIELDED CATEGORY 5E FROM EACH MONITOR OR PRINTER TO EQUIPMENT BOARD IN OFFICE. EACH WALL PLATE TO HAVE (2) RJ-45 JACKS (IN CASEWORK). ALL UNDERFLOOR CONDUIT AND ROUGH-INS BY E.C. RUN CONDUIT BELOW FLOOR OR IN CASEWORK TO NEAREST FULL HEIGHT PARTITION AS REQUIRED. RUN WIRING CONCEALED IN CABINETRY/CASEWORK.
- REGISTER IN REAR SERVICE LINE SHOWN NEAR PHONE/FAX SHALL BE THE ROPE TERMINAL.
- THE PHONE LINE TO CASEWORK FOR CREDIT CARD CONNECTION SHALL BE INSTALLED IN 1" CONDUIT TO
- 6. POS DATA LINES SHALL BE INSTALLED IN CONDUIT SEPARATE FROM ALL POWER CONDUCTORS.
- 7. COMMUNICATIONS CONTRACTOR MUST TEST ALL FEEDS FOR CONTINUITY AND LABEL ALL FEEDS.
- 8. ALL ROUGH-INS FOR EQUIPMENT @ CASEWORK TO BE PROVIDED IN FRONT RACEWAY OF CASEWORK. ALL ROUGH-INS FOR EQUIPMENT ON REAR SERVICE LINE TO BE @46" AFF UNLESS OTHERWISE NOTED



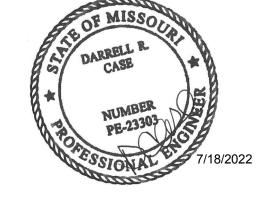
CABLE SCHEMATIC NOT TO SCALE

**Bakery-Cafe:** 

**SYSTEM: NEXT GEN** 

CERTIFICATE OF AUTHORITY NO. 001498

St. Louis, MO 63026



PATCH

**Jake**, 410 №



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No.	Description	Date
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**POS DIAGRAM AND NOTES** 

Project Number: Sheet Number: Drawn By: 07/05/2022

PROVIDE 3-SINGLE GANG BOX ROUGH-IN AT 4'-0" AFF WITH 1/2" CONDUIT W/ PULLWIRE UP

IN PARTITION STUBBED OUT ABOVE ACCESSIBLE CEILING FOR SEPARATE SPEAKER

VOLUME CONTROLS (DINING, RESTROOMS, OUTDOORS). COORDINATE WORK WITH

PROVIDE CONDUIT FROM ALL PHONE OUTLETS AT HEIGHT INDICATED TO THE TELEPHONE SYSTEM IN THE OFFICE. TELEPHONE CONDUITS SHALL HAVE A PULL WIRE INSTALLED. STUB 3/4" CONDUIT FROM TELEPHONE OUTLET TO ABOVE FINISHED CEILING.

OF TELEPHONE SERVICE. COORDINATE WITH TELEPHONE COMPANY PRIOR TO

PROVIDE INSULATED BUSHING ON CONDUIT END. CURVE CONDUIT TOWARDS DIRECTION

SOUND SYSTEM SUB-CONTRACTOR.

**Branch Panel: M** 

Location: UTILITY 38

Mounting: SURFACE

Supply From: MDP

**Volts:** 120/208 Wye

Phases: 3

Wires: 4

A.I.C. Rating: 65/22K SERIES RATED

Mains Type: MLO

Mains Rating: 400 A

**Branch Panel: MDP** 

Location:

Mounting: SURFACE

**Supply From:** 

Volts: 120/208 Wye

Phases: 3

Wires: 4

A.I.C. Rating: 10,000 AMPS SYMMETRICAL

Mains Type: MLO

Mains Rating: 800 A

**Branch Panel: K1** 

-KIT 11 EQ 52A

-KIT 19 EQ 85H

-KIT 23 EQ 85K

-R... 37 CONV. REC

-KIT 1 KD12

-KIT 7 CREDIT CARD READER 37

Mark On Breaker, SW = SWD Rated

**Branch Panel: S** 

Location: KITCHEN 41

Mounting: SURFACE

Enclosure: NEMA 1

Supply From: MDP

-KIT 9 CASH REGISTER #030,

-KIT 13 CASH REGISTER #030

-KIT 11 TABLET KIOSK

-- 29 SPARE

-KIT | 1 | EQ 64C

-KIT 5 EQ 53F

-KIT 13 EQ 63C

-KIT 17 EQ 81D

-KIT 9 EQ 63C FUTURE

Mark On Breaker, SW = SWD Rated

-KIT 41 BAKERY HEAT SHELF #085D 20 A G

Mark On Breaker, SW = SWD Rated

**Branch Panel: IGP** 

Location: KITCHEN 41

Mounting: SURFACE

**Enclosure: NEMA 1** 

Supply From: MDP

Location: UTILITY 38 Supply From: MDP Mounting: SURFACE Enclosure: NEMA 1

Phases: 3 Wires: 4

**∢** 468 VA

20 A G 1 888 VA 1800 VA

20 A G 1 1200 VA 1508 VA

50 A G 2 4160 VA 2200 VA

1 180 VA 960 VA

1 720 VA

Total Load: 14260 VA

20 A G 1 1260 VA 540 VA

20 A G 1 360 VA 180 VA

20 A G 1 1080 VA 1000 VA

Total Amps:

Total Amps:

20 A 3 176 VA

600 VA 1200 VA

1310 VA 1508 VA

4160 VA 4160 VA

176 VA 0 VA

14074 VA

117 A

Volts: 120/208 Wye

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

Phases: 3

Wires: 4

600 VA 900 VA

600 VA 360 VA

-- 1000 VA 1

59 A

**Volts:** 120/208 Wye

1404 VA 300 VA

-- 0 VA

6772 VA

59 A

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

1404 VA 1404 VA 2 20 A EQ 63C

1080 VA 0 VA 1 -- 20 A SPARE

5148 VA

43 A

1 -- 20 A SPARE

Phases: 3

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

**Total Load:** 6640 VA 6440 VA 2540 VA

20 A G 1 540 VA 1000 VA

60 A

2 1144 VA 420 VA

20 A 2 1404 VA 1404 VA

-- | -- | 1 | -- | 0 VA

Total Load: 6856 VA

59 A

Total Amps:

0 VA 180 VA 1 20 A IT REC

21 A

Volts: 120/208 Wye

A.I.C. Rating: 65/22K SERIES RATED Mains Type: MLO Mains Rating: 225 A MCB Rating: 0 A

20 A F-15 FIRE PLACE

A.I.C. Rating: 65/22K SERIES RATED

Mains Type: MLO

Mains Rating: 100 A

MCB Rating: 0 A

1 G 20 A OFFICE REC

20 A TTB REC

20 A DRIVE THRU

20 A MENU BOARD

20 A HEADSET CHARGER

A.I.C. Rating: 65/22K SERIES RATED

Mains Type: MLO

Mains Rating: 100 A

MCB Rating: 0 A

1 G 20 A EQ 42C

1 G 20 A EQ 55T

1 -- 20 A SPARE

20 A DT EQ

1 G 20 A EQ 31

540 VA 240 VA 1 G 20 A EQ 31

360 VA 180 VA 1 G 20 A CASH REGISTER #030F

1 20 A DT CAMERAS

20 A #76C

20 A #76C

1 G 20 A EQ 85K

200 VA 500 VA 1 G 20 A #55GHR

840 VA 1800 VA 1 G 20 A EQ 83A

2 G 50 A EQ 85H

2 G 20 A EF-2

1200 VA 4160 VA -- -- -- --

176 VA 1080 VA 1 G 20 A #53K

1310 VA 2200 VA 2 G 30 A EQ 61

636 VA

14102 VA

118 A

**SYSTEM: NEXT GEN** Project Team:

2 -KIT

4 -KIT

6 -KIT

8 -R... 10 --12 -KIT 14 -KIT

16 --18 -KIT

26 28 -P...

30 -KIT

32 -KIT

34 -KIT

DE MA ND 2 -R... 4 -KIT 6 -R... 8 -R... 10 -KIT

12 -KIT

14 -KIT

16 -KIT

18 -KIT

26 -KIT

CKT | ON |

2 -KIT

4 -KIT

6 -KIT

8 -KIT

12 -KIT

16 -KIT

### **Engineering Inc.**

796 Merus Court St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

Professional Seal:

**Bakery-Cafe:** 



Project Title:

### 64086 8 **40** #27 GLA 3akery 410 NE EES SU

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### PANEL SCHEDULES **AND ONE-LINE DIAGRAM**

Project Number: Sheet Number: Drawn By: 07/05/2022 DPM:

POWER					
SYMBOL		DESCRIPTION	ı		
Ф	DUPLEX RECEPTACLE MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE				
<del></del>	QUAD PLEX RECEPTACLE MOUNTED AT 15"AFF				
<u></u>	UNLESS NOTED OTHERWISE  DUPLEX ISOLATED GROUND TYPE RECEPTACLE (IG5392CN ORANGE)  MOUNTED AT 45 AFE UNITED ATTERMISE				
<b>+</b>	MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE  QUAD PLEX ISOLATED GROUND TYPE RECEPTACLE MOUNTED				
Ö	AT 15"AFF UNLESS NOTED OTHERWISE  DUPLEX GROUND FAULT INTERRUPTING TYPE RECEPTACLE				
<u> </u>	JUNCTION BOX				
~ ~	MOTOR CONNECTION				
——————————————————————————————————————	DISCONNECT SWITCH				
	SINGLE SECTION PANELBOARD				
<del> </del>	BRANCH CIRCUIT WIRING CONCEALED ABOVE CEILING OR IN PARTITION				
	CIRCUIT HOME RUN				
<b>•</b>	VERIFY NEMA CONFIGURATION I				
	COMMUNI	CATION	IS		
<b>•</b>	ROUGH-IN FOR TELEPHONE VOICE LINE MOUNTED AT 15"AFF UNLESS NOTED OTHERWISE				
<b>&gt;</b>	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	CONTR	OL		
\$ <sub>oc</sub>	WALL MOUNTED TOGGLE SWITC TECHNOLOGY	H, OC=OCCUP	ANCY SENSING DUAL		
\$3	3-WAY WALL MOUNTED TOGGLE	SWITCH			
ф	SLIDING DIMMER SWITCH (LEVIT	ON OR EQUAL)			
	PROGRAMMABLE TIME SWITCH (	TO CONTROL S	STOREFRONT		
0	OCCUPANCY SENSING CONTROL				
 	LAYOUT AND OWNER IN FIELD (LEVITON OR EQUAL)  CEILING MOUNTED MOTION SENSING CONTROL, VERIFY LOCATION WITH				
	ROOM LAYOUT AND OWNER IN F PHOTO SENSING CONTROL, VER	IELD LUTRON I	OS-CDT-2000-WH		
Р	LAYOUT AND OWNER IN FIELD  ABBREV				
AFF	ABOVE FINISHED FLOOR	J-BOX	JUNCTION BOX		
AFF	AMPERE AMPERE	KW	KILOWATT		
AWG	AMERICAN WIRE GAUGE	NIC	NOT IN CONTRACT		
СВ	CIRCUIT BREAKER	PNL	PANEL		
ELEC	ELECTRICAL	SPECS	SPECIFICATIONS		
EXIST	EXISTING	SW	SWITCH		
EQUIP	EQUIPMENT	TEL	TELEPHONE		
FA	FIRE ALARM FURNISHED BY OWNER,	TYP	TYPICAL		
FOIC G,GND	INSTALLED BY ELEC. CONTR.  GROUND	v w	VOLT		
G,GND GFI	GROUND FAULT INTERUPTER	WP	WEATHERPROOF		
HP	HORSEPOWER	PH	PHASE		
IG	ISOLATED GROUND	XFMR	TRANSFORMER		
VIF	VERIFY IN FIELD	-			

### **ELECTRICAL SPECIFICATIONS**

- 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
- 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
- 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.
- 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 W/IN 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.
- 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
- 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.

CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING. BIDS 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 FOUIPMENT 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
- 16. ELECTRICAL CONTRACTOR SHALL RECORD ALL FIELD CHANGES IN HIS WORK AS THE JOB PROGRESSES; AN ACCURATE RECORD OF ALL WORK AS ACTUALLY

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

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

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
- 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

CONTRACTOR SHALL PAY ALL UTILITY CHARGES IN CONNECTION WITH THE TEMPORARY

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

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

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

GROUNDING FOR ALL EQUIPMENT AND STRUCTURES. A GOOD MECHANICAL AND ELECTRICAL CONNECTION SHALL BE MADE WITH APPROVED GROUNDING

31. THIS CONTRACTOR SHALL PROVIDE, INSTALL AND CONNECT A COMPLETE SYSTEM OF

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

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

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

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" 120/208/3 ... 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,

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 &

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

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

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

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.

AMPICITY DESIGNED TO PROTECT SYSTEMS AGAINST AVAILABLE SHORT

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

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

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

- 41. OUTLET BOXES AND COVERS SHALL BE ONE PIECE, GALVANIZED STEEL JUNCTION BOXES, PULL BOXES AND COVERS SHALL BE GALVANIZED STEEL,
- 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.

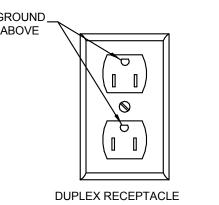
#8 AND LARGER - STRANDED WITH AT LEAST DOUBLE BRAID.

MINIMUM WIRE SIZE SHALL BE #12 (#14 MAY BE USED FOR CONTROLS) WIRES SHALL BE COLOR CODED IN KEEPING WITH NEC STANDARDS

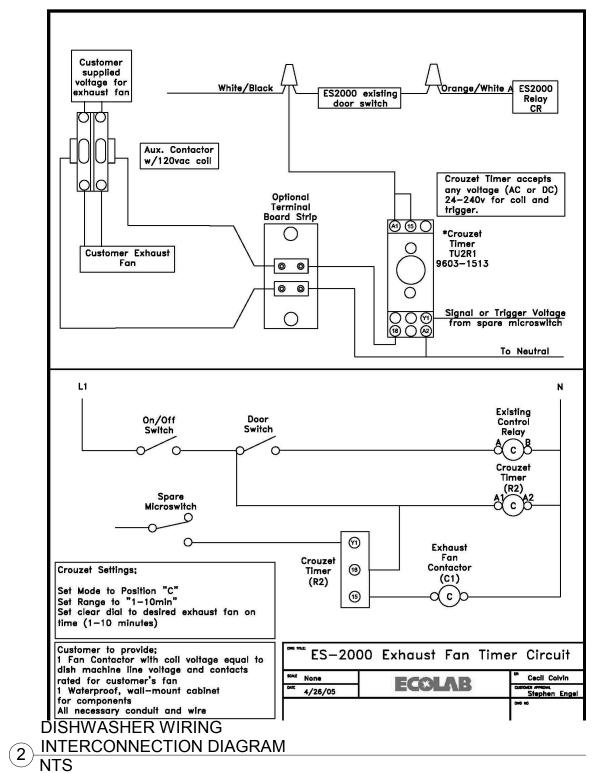
PROVIDE IMC FOR FEEDER CONDUIT WHERE INSTALLED ABOVE GRADE, FITTINGS SHALL BE STEEL. THREADED. SET SCREW TYPE W/INSULATED THROATS. FURNISH EMT CONDUIT OP BX OR MC FOR INTERIOR WIRING NOT SUBJECT TO PHYSICAL DAMAGE, MIN. CONDUIT SIZE SHALL BE 1/2 UNLESS SPECIFICALLY NOTED OTHERWISE. CONDUIT SHALL BE CONCEALED 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.



DUPLEX RECEPTACLE @ 37" AND BELOW @ 38" AND ABOVE RECEPTACLE GROUND LOCATION



**SYSTEM: NEXT GEN** 

St. Louis, MO 63026 F 636.349.1730 CERTIFICATE OF AUTHORITY NO. 001498

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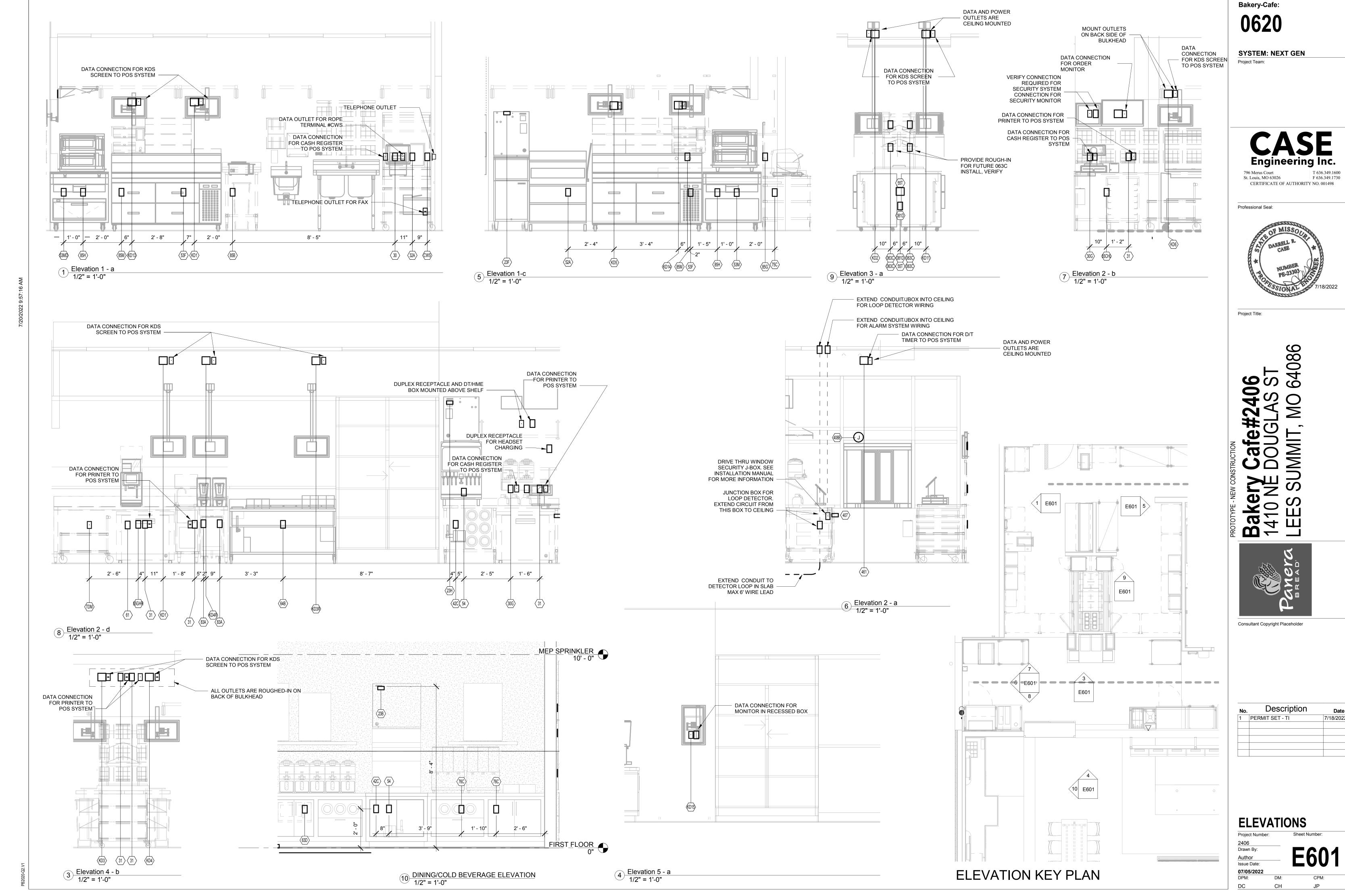


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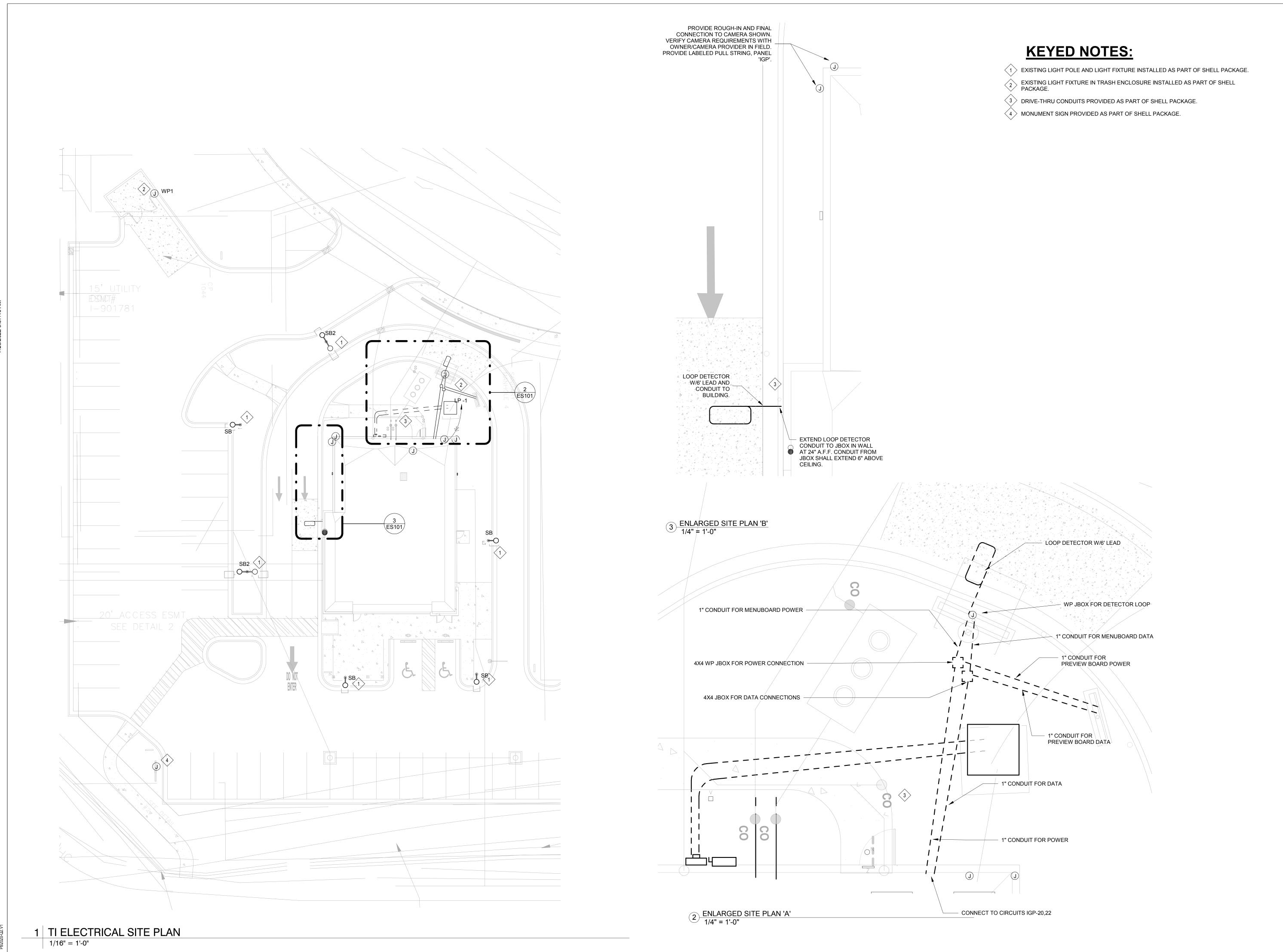
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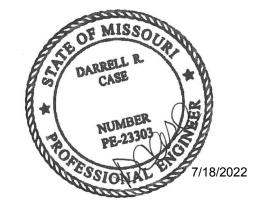
Project Team:

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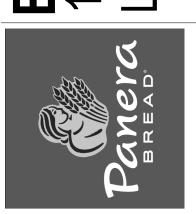


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**ELECTRICAL SITE PLAN** 

Project Number: **07/05/2022** DPM: