



65 SADLER ROAD (PART OF THE PILOT TRAVEL C-STORE) DUNN, NC 28334

ARCHITECT

JON W. SAMMER, AIA

PROJECT MANAGER

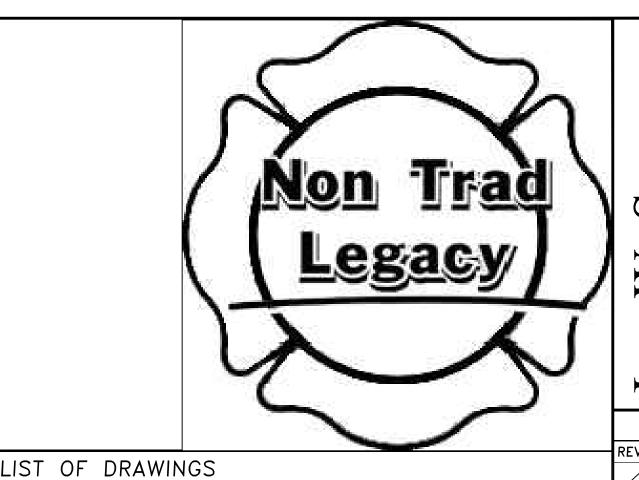
FAIRFAX, VA 22030

CONTACT: JOHN A. HARROP,

DIRECT: (703) 216-7897

4101 CHAIN BRIDGE ROAD., SUITE 102

REMARKS



DATE

2/14/2025

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2/14/2025

PLAN DATES REV. SUBMISSION

10/01/2025

PROGRESS SUBMISSION 10/10/2025 BID & PERMIT SUBMISSION

THE USE OF SEALANTS ON FOOD SERVICE **EQUIPMENT**

- ALL SEALANTS MUST BE LISTED AS APPROVED BY THE NATIONAL SANITATION FOUNDATION (NSF) UNDER STANDARD 51
- SEALANTS SHALL BE USED ONLY IN STRUCTURALLY SOUND JOINTS AND SEAMS. SEALANTS MAY BE USED TO FILL SPACES AND OPENINGS SUCH AS, BUT NOT LIMITED
- TO BLIND RIVET HEADS AND SLOT AND PHILLIPS HEAD SCREWS. OPENINGS AROUND SERVICE AND UTILITY LINES SHOULD BE CLOSED INSOFAR AS PRACTICAL BY COLLARS OR GROMMETS OR FLEXIBLE FORM GASKETS. SEALANTS MAY BE
- USED TO SEAL SERVICE AND UTILITY LINES TO WALLS OR ADJACENT PIECES OF EQUIPMENT WHERE THE SPACING IS CLOSED TO LESS THAN 1/8 INCH. SEALANTS MAY NOT BE UTILIZED IN FOOD AND SPLASH CONTACT SURFACES. TO FILL OPEN SPACES OR VOIDS WHICH RESULT DUE TO IMPROPER DESIGN OR FABRICATION. ANY OPENING IN EXCESS OF 1/8 INCH SHALL BE CONSIDERED EXCESSIVE AND MUST

ABBREVIATIONS

BE CLOSED USING PROPER FIELD JOINTS.

ABBREV	DEFINITION	ABBREV		ABBREV	DEFINITION
+/- ABV	FIELD VERIFY ASSOC DIM	FLUOR FO	FLUORESCENT	PTN	PARTITION
ABV	ABOVE	FO	FINISHED OPENING	QT	QUARRY TILE
ADJ	AD IACENT	FRT FT	FIRE RETARDANT TREATED	R	RISER
AFF	ABOVE FINISHED FLOOR	FT	FIRE RETARDANT TREATED	RA	RETURN AIR
AHJ	AUTHORITY HAVING JURISDICTION	FV	FIELD VERIFY	RD	ROOF DRAIN
ALUM	ALUMINUM	GA	FIELD VERIFY GAUGE GALVANIZED	REF:	REFER TO
AOR	ARCHITECT OF RECORD	GALV.	GALVANIZED	REQ'D	REQUIRED
BRL			GENERAL CONTRACTOR	RO	ROUGH OPENING
B.0	BUILDING RESTRICTION LINE BOTTOM OF	GC GWB	GENERAL CONTRACTOR GYPSUM WALL BOARD	RR	RESTROOM
CJ	CONTROL JOINT	H.C.	HANDICAPPED ACCESSIBLE	RTU	ROOF TOP UNIT
CKT	ELECTRICAL CIRCUIT	H.C. HC	HOLLOW CORE	SC	SOLID CORE
CL	CENTER LINE	HDR	HEADER	SF	SQUARE FEET
CLG	CEILING	HDW	HARDWARE	SI	SINGLE
CLR	BUILDING RESTRICTION LINE BOTTOM OF CONTROL JOINT ELECTRICAL CIRCUIT CENTER LINE CEILING CEILING CLEAR	НМ	HOLLOW METAL	REF: REQ'D RO RR RTU SC SF SIM	SIMILAR TO
CMU	CONCRETE MASONRY UNIT	HT	HEIGHT	SO	SQUARE
CO	CONCRETE MASONRY UNIT COMPANY COLUMN COMPRESSIBLE CONCRETE CONTINUOUS	HT KD	HANDICAPPED ACCESSIBLE HOLLOW CORE HEADER HARDWARE HOLLOW METAL HEIGHT KNOCK DOWN LINEAR FOOT MASONRY MAXIMUM	SQ SMP	SOLID MASONRY PIER
COL	COLUMN	LF	LINEAR FOOT	SS STD	STAINLESS STEEL
COMP	COMPRESSIBLE	MAS	MASONRY	STD	STANDARD
CONC	CONCRETE	MAX	MAXIMUM	STL	STEEL
CONT	CONTINUOUS	MC	MILLWORK CONTRACTOR	Ť	TREAD
CPM/PCM	CONST. PROJECT MANAGER	MEF	MILLWORK CONTRACTOR MATCH EXISTING FINISH	TBD	TO BE DETERMINED
CRS	COURSE	MDF	MED DENSITY FIBERBOARD	THK	
CS	CARPET STRIP	MDO	MED DENSITY OVERLAID	THLD	THICK(NESS) THRESHOLD
CT	CFRAMIC TILE	MFR	MANUFACTURE(D) MINIMUM	TMP	TEMPERED
DBL	DOUBLE	MIN	MINIMIM		
DF	DRINKING FOLINTAIN	MO	MINIMUM MASONRY OPENING MOISTURE RESISTANT	T.O. TOB TOM TOS	TOP OF BEAM
DIM	DIMENSION	MR	MASONICI OF LINING	TOM	TOP OF MASONRY
DS	DOWNSPOLIT	MTD	MOUNTED	TOS	TOP OF SLAB
DW	DRYWALL	MTG	MOUNTING	TVD	TYPICAL
EA	FACH	NIC	NOT IN CONTRACT	TYP UNO VCT	UNLESS NOTED OTHER
EC	ELECTRICAL CONTRACTOR	NR	NOT PEOLIPED	VCT	VINYL COMPOSITION T
EJ	EXPANSION JOINT	NTS	NOT TO SCALE	VWC	VINYL WALL COVERING
ELEV	FI FVATION	OC	NOT IN CONTRACT NOT REQUIRED NOT TO SCALE ON CENTER	VIF	VERIFY IN FIELD
ETR	EXISTING TO REMAIN	ŎĎ	OUTSIDE DIMENSION		WITH
EWC	ELECTRIC WATER COOLER	PAF	DOWNER ACTUATED FACTENER	W/	WITH OUT
EWH	ELECTRIC WATER COOLER	PCC	POWDER ACTUATED FASTENER PRECAST CONCRETE	W/0	WATER CLOSET
EXIST	CONTINUOUS CONST. PROJECT MANAGER COURSE CARPET STIP CERAMIC TILE DOUBLE DRINKING FOUNTAIN DIMENSION DOWNSPOUT DRYWALL EACH ELECTRICAL CONTRACTOR EXPANSION JOINT ELECTRIC WATER COOLER ELECTRIC WATER COLER ELECTRIC WATER HEATER EXISTING EXISTING	PL	PLATE	WC	WOOD
EXIST	EXTERIOR	PLAM	PLATE PLASTIC LAMINATE	WD	WIDE FLANGE
	FIDE ALADM CONTROL DANIEL		PLASTIC LAMINATE PAIR	WF	WATER HEATER
FACP FD	FIRE ALARM CONTROL PANEL FIRE DAMPER	PT	PAIR	WH_	WATER HEATER
FDC	FIRE DEPARTMENT CONNECTION		PRESSURE TREATED	WWF	WOVEN WIRE FABRIC
			PAINT(ED)		

FINAL CHECKLIST ITEMS

LOCATION MAP

PLAN NORTH

TRUE NORTH

GENERAL CONTRACTOR SHALL HIRE A PROFESSIONAL CLEANING COMPANY FOR FINAL CLEAN UP BEFORE TURNING COMPLETED STORE OVER TO FRANCHISEE.

GENERAL CONTRACTOR AND HIS JOB SUPERVISOR SHALL TEST ALL EQUIPMENT FOR PROPER OPERATION IN THE PRESENCE OF THE FRANCHISEE BEFORE TURNING COMPLETED STORE OVER TO FRANCHISEE GENERAL CONTRACTOR SHALL PROVIDE THE FRANCHISEE WITH TWO (2) COPIES OF A MAINTENANCE MANUAL(S) UPON COMPLETION OF THE STORE.

SCOPE OF WORK IS A GENERAL DESCRIPTION AND DOES NOT TAKE PRECEDENCE OVER INFORMATION ON THIS

FIREHOUSE

• SUBS •

CONSTRUCTION FOR SERVICE LINE EQUIPMENT CONVERSION FROMAN EXISTING QUZINOS SUBS TO A

EXISTING TO REMAIN ELECTRICAL, SEWER, WATER UTILITY CONNECTIONS FOR INTERIOR RENOVATION. REFER TO PLUMBING & ELECTRICAL DRAWINGS

PROPOSED

RENOVATION

EXISTING

TENANT SPACE

CODE ANALYSIS

LIFE SAFETY SYSTEMS

ELEMENT

PROJECT CONTACTS

TREHOUSE SUBS FRANCHISEE

SCOPE OF WORK

RESTAURANT OWNER

ΓELE: (434) 594-7193

IERMIE SADLER

BUILDING USE GROUP/MIXED USE:		B-BUSINESS	B-BUSINESS	ACCESSORY USE TO MERCANTILE BUILDING. FEWER THAN 50 OCCUPANTS PER CODE SECTION 303.1.1.
	TYPE OF CONSTRUCTION:	VB	VB	COMBUSTIBLE - UNPROTECTED
	TENANT AREA:	425 SF	425 SF	AREA OF SERVICE LINE CONVERSION.
	TENANT OCCUPANT LOAD:	NANT OCCUPANT LOAD: VACANT 7		SEE SHEET CS3 FOR TENANT OCCUPANT LOAD CLACULATIONS
	AVERAGE HEIGHT/ NUMBER OF STORIES:	22'-0" / 1	22'-0" / 1	NO INCREASE
	COVERED MALL:	N	N	
	HIGH RISE:	N	N	
	BUILDING FULLY SUPPRESSED (SPRINKLERED) (Y/N):	N	N	
	FIRE-RESISTANT TREATED LUMBER, PLYWOOD, AND BLOCKING REQUIRED(Y/N)	N	N	
	EXITS REQ'D/PROV'D	1 / 1	1 / 1	SEE SHEET CS3 FOR FIRE EXIT PLAN. NO CHANGE TO MEANS OF EGRESS. LESS THAN 50 OCCUPANTS. 1 ADDITIONAL EXIT FROM KITCHEN AREA.
	ALL NEW INTERIOR FRAMING	N/A	COLD FORM STEEL STUDS	
				1

Type of Construction: NOTE: FRT Construction wood NOTE: FRT Construction wood framing & plywood sheathing framing & plywood sheathing is not required. is required.

ELEMENT	REQUIRED	PROVIDED	REMARKS
EMERGENCY LIGHTING	YES	YES	
EXIT SIGNS	YES	YES	
MANUAL PULL STATIONS @ EXIT DOORS	NO	NO	
NOTIFICATION APPLIANCES (HORNS & STROBES)	NO	NO	
PANIC HARDWARE	YES	YES	EXISTING TO REMAIN
FIRE SPRINKLER SYSTEM	NO	NO	

CONVERGE ENGINEERING, LLC CONTACT: JUSTIN HARDY. PE 54 SOUTH AVE, SE, MARIETTA, GA 30060 TELE: (404) 800-7988

ELECTRICAL, MECHANICAL, PLUMBING

CONSULTANTS

APPLICABLE CODES ALL WORK SHALL COMPLY WITH THE FOLLOWING CODES: AS ADOPTED BY THE STATE OF NORTH CAROLINA: 2018 NORTH CAROLINA EXISTING BUILDING CODE, 2018 IBC WITH NC

MODIFICATIONS; ALTERATION LEVEL I 2018 NORTH CAROLINA FIRE PREVENTION CODE NFPA 101 LIFE SAFETY CODE 2018 EDITION INTERNATIONAL FIRE CODE, 2018 EDITION ICC/ANSI A117.1-2009 ACCESSIBILITY CODE

SEE ENGINEERING PLANS FOR APPLICABLE CODES

NOTE: ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE 2010 ADA

110121 /122 1101111 011112			0 20.	0 / 10/ 1		
STANDARDS FOR ACCES	SIBLE DESIGN	- 28 CFR 3	6		E2.0	ELECTRICAL LIGHTING PLAN
FIRE RESISTAN	CE OE B	IIII DING	FLEMENTS (T	ADI E (04)	E3.0	MECHANICAL POWER PLAN
TINE RESISTAN	CL OI D	OILDING	LLLIVILINIS (IA	ABLE 601)	E4.0	ELECTRICAL RISER DIAGRAM
ELEMENT	REQUIRED	PROVIDED	REMARKS		PLUMBING	
OTPUGTURAL FRANCE					MP1.0	PLUMBING SPECIFICATIONS
STRUCTURAL FRAME (INCLUDING COLUMNS,	0	0			P0.1	PLUMBING REFERENCE
GIRDERS, TRUSSES)					P1.0	PLUMBING PLANS
INTERIOR WALLS & PARTITIONS	0	0				
FLOOR CONSTRUCTION	0	0			VENDO	R CONTACT LIST

COMBINED PUBLIC & EMPLOYEE PLUMBING FIXTURE REQUIREMENTS

INTERNATIONAL PLUMBING CODE

ROOF CONSTRUCTION

EXTERIOR WALLS

EXTERIOR BEARING WALLS

TENANT SEPARATION WALL

RESTROOMS PROVIDED IN CONVENIENCE STORE FOR CUSTOMER AND EMPLOYEE USE. RESTROOMS ARE EXISTING TO REMAIN.

SHEET # | SHEET TITLE

APPENDIX B

ARCHITECTURAL

ECTRICAL

E1.0

THE USE OF ANY VENDOR THAT IS NOT LISTED ABOVE IS PROHIBITED UNLESS PRE-AUTHORIZED BY FIREHOUSE SUBS

DALTILE: TERRIE MILLER FLOOR / WALL TILE EMAIL: terrie.miller@daltile.com Office: (216) 409-3153 SHERWIN-WILLIAMS: JOY BABUR

BUILDING CODE SUMMARY, COVER SHEET & KEY PLAN

ACCESSIBILITY STANDARDS & DETAILS

LIFE SAFETY & OCCUPANT LOAD PLAN

EQUIPMENT PLAN & EQUIPMENT SCHEDULE

FINISH PLAN & FINISH SCHEDULE

INTERIOR DETAILS: CUSTOMER AREA

ELECTRICAL LEGEND & SPECS

ELECTRICAL POWER PLAN

EQUIPMENT SCHEDULE

EXISTING CONDITIONS PLAN

REFLECTED CEILING PLAN

INTERIOR ELEVATIONS

CONSTRUCTION PLAN

OFFICE: (407) 694-7994 ADDRESS: 2191 MORTHLAKE PKWY, SUITE 107 ELIASON CORPORATION: OFFICE: (800) 828-3655 SWING GATE FAX: (800) 828-3577

JACKSON LIGHTING: EMAIL: firehousesubs@jlesco.com PHONE: (866) 526-8956 TARRANT LIGHTING (ALTERNATE): LIGHTING FIXTURES

BILL McCOY

OFFICE: (636) 736-0251 DIRECT: (636) 736-0253 LOCAL DISTRIBUTION PERSONNEL WILL CONTACT THE CRANE COMPOSITES CUSTOMER SERVICE DEDICATED TO THE FIREHOUSE SUBS ACCOUNT JOHN S BECK, CSI, CCPR CRANE COMPOSITES (FRP BOARD) OFFICE: (704) 830-8653 RYAN MINATO

WEBSITE: https://tarrantlighting.com

OFFICE: (815) 467-8951

EMAIL: www.firehousefrp@cranecomposites.com

DUNN, NORTH CAROLINA

INSTRUCTIONS TO G.C.

Department and Board of Health.

- The term "work" as used in these notes shall include all provisions as drawn or specified in these documents as well as all other provisions specifically included by the owner in the form of drawings, specifications, and written instructions. Bidding requirement: before submitting a bid, the contractor & all sub-contractors shall adhere to the following: a. Related to existing construction, visit the premises to become familiar with the existing
- onditions and the extent of work required to complete the project. b. Contractors shall not submit a bid for this work unless they are fully qualified and state in which the work is to be performed. censed by the If the contract drawings appear to be unclear, ambiguous, or contradictory the contractor must request clarification from the architect in writing before submitting a bid for that part of the work. All work shall be performed in strict accordance with the Building Code And the local and federal governing codes. General contractor will be responsible for
- a professionally complete tenant improvement within the space defined in the plans. All work shall be performed by workers thoroughly experienced in their respective trades. All manufactured items shall be installed in strict accordance with the manufacturers recommendations and/or with the standards of the industrial or trade association governing . All electrical work will comply with the requirements of Chapter 27 of the building code And
- the National Electrical Code (NEC) NFPA 70, building code Approved edition and all local codes, and is subject to the approval of the state electrical inspector assigned by the Division of Factory and Building Inspection. All H.V.A.C. work shall conform to the requirements of the Mechanical Code and shall be installed in accordance with it's Underwriter Approval, the manufacturers recommendations and specifications and good engineering practice All phases of the plumbing work will comply with the Plumbing Code and the County Health
- The Contractor shall be responsible for obtaining all necessary permits and inspections.). The Contractor shall be responsible for field verifications of all existing conditions during the bidding process. Any variation between actual conditions and the contract documents shall be brought immediately to the attention of the Architect and resolved at that time prior to submitting a bid. This also includes specific requirements as to procedures the owner or the landlord expects the contractor(s) to follow during construction, parking of the construction vehicles, deliveries, storage, staging areas, and any other items necessary to comply with all aspects of the lease and tenant obligations. No monetary consideration will be made for discrepancies brought forth once bids are submitted. . During the bidding period, conflict of detail or noting between specifications, written notes,
- bid forms and/or drawings, shall be brought to the attention of the Architect and the conflict resolved. Should the conflict be discovered after the start of construction, the contractor shall be responsible for providing the highest quality largest quantity called for. 2. The Contractor shall furnish all work and materials necessary to complete the work even though they may not be specifically shown on the drawings.
- 3. The contractor shall be responsible for coordinating the work of all trades and shall check all dimensions. Any discrepancies shall be called to the attention of the designer and owner and shall be resolved before proceeding with construction. 4. All information contained in these construction drawings are the sole property of the architect / design. Copies are to be used for the exclusive purpose of constructing this
- 5. The designer and architect assume no responsibility or liability for the use of these documents for any purpose other than specifically authorized by the afore mentioned and signed for the specific location in the state shown on the drawings and seal. 5. Special attention shall be given to existing areas surrounding the exterior of the project space. All construction and installed equipment, walks, and landscaped areas shall be

space. Any use may violate the copyright laws of the United States.

- protected and guarded by barriers or other means necessary to protect areas from damaged during construction. All areas damaged will be restored to their original condition prior to INTERIOR WALL & CEILING FINISHES (PER BUILDING CODE TABLE 803.5) protected and quarded by barriers or other means necessarv to protect areas from damaa final payment at the sole expense of the general contractor. 17. Install safety barriers during construction as necessary to protect the public from injury a access to the site. Review specific requirements with the landlord's tenant coordinator prior to beginning construction. 18. The general contractor shall be solely responsible to secure and protect from damage, a
- items on the premises. Including, but not limited to; construction materials, light fixtures, equipment, all furniture, etc. After receipt on job site, any lost, stolen or items damaged later by subcontractors or others in the building, shall be replaced or repaired at the general contractor's sole expense. The general contractor should notify and relate this information and requirements to all trades and subcontractors on site. 19. It is the responsibility of the general contractor to receive and unload product and materials supplied by others at the job site. Immediately inspect delivered products and equipment for shipping damage, including concealed damage prior to shipper leaving premises. Any product or materials found to be damaged after the shipper has left will
- or defective materials. Save all packing of damaged products until claims are finalized. Immediately notify project manager and owner of any damaged materials received and immediately file a damage claim with the shipping company. 20. The general contractor shall maintain a current and complete set of construction documents on the job site during all phases of construction for use by the trades and shall provide subcontractors with the current construction documents as required. . Drawings may not always be to scale. Noted dimensions shall take precedence.
- All changes to these documents must be approved by owner. 3. No material substitutions will be permitted unless authorization has been granted by owne Any material substitutions without authorization will subject the general contractor to replacement of such materials with approved materials at the sole expense of the general 24. All materials and workmanship shall be guaranteed for a period of one (1) year. Owner
- may withhold final payment until general contractor supplies franchisee with a warranty 25. Ten days before construction commencement, the general contractor shall provide the owner with a detailed and complete construction schedule. The schedule showing all trades with starting and completion dates. A complete list of all subcontractors must also be included with the schedule. The general contractor is to notify all parties in receipt of project schedule if any changes occur which affect the completion date. Failure to complete the project as scheduled may result in penalties incurred by the general contractor regarding
- 26. The architect shall be available to visit the site when requested by the owner. If a condition exists that requires observation or action by the architect or engineer, the contractor shall notify the owner and architect. These documents do not include the necessary components for construction safety. safety care of adjacent properties during construction, compliance with state and federal regulation regarding safety and compliance with requirements specified in the owner/contractor contract is, and shall be, the contractor's responsibility
- 28. The general contractor shall be solely responsible for all construction means, methods, techniques, and safety procedures and for coordinating all portions of the work. 29. Cleaning up: the contractor shall at all times keep the premises from accumulation of waste materials and rubbish and at completion of the work the contractor shall remove a rubbish, implements, and surplus materials and leave the building clean, with painted and wood surfaces clean, floors waxed and/or polished as specified, and all glass and mirrors cleaned and polished.
- 30. The contractor shall provide and install fire extinguishers as required and located by the fire marshal and in accordance w/ NFPA no. 10 standards. 31. General contractor shall provide and pay for trash dumpster service and/or refuse remove for all restaurant sub-contractors which include millwork, food service, and flooring

sub-contractors.

32. General contractor shall be responsible to review building permit approved plans for all permit revisions and changes, no work shall begin prior to receipt of the building permit and review of permit plans by the general contractor.

FIRE RESISTANCE OF FINISH MATERIALS

and			
	ELEMENT	REQUIRED	PROVIDED * AS STATED BY MFR.
ш			2007 20 4 470 2 4 2 270

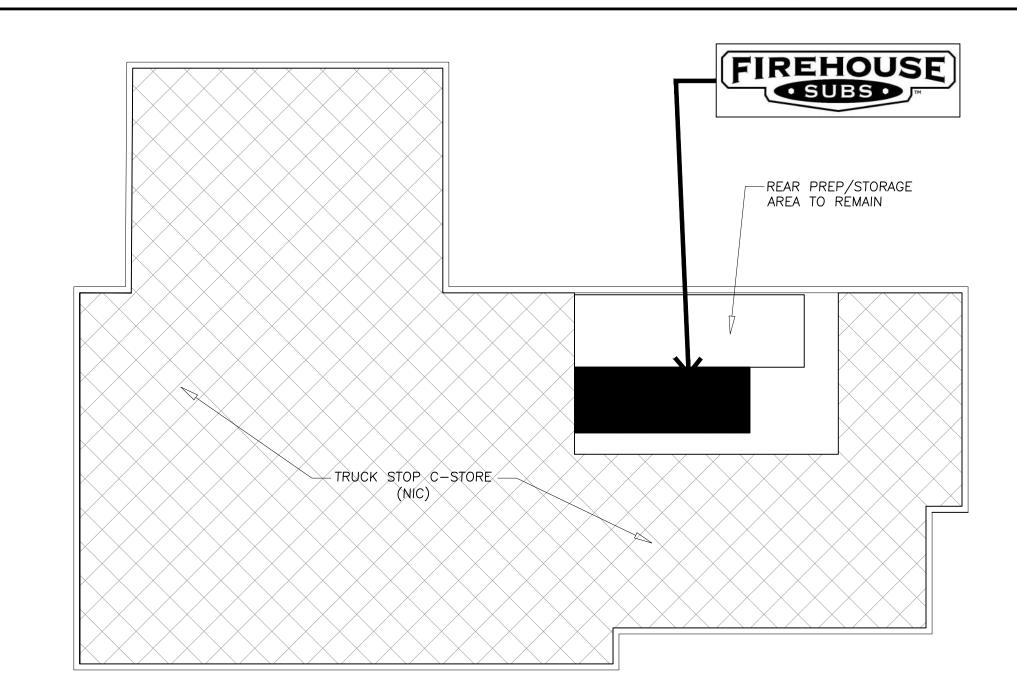
to beginning construction.			
3. The general contractor shall be solely responsible to secure and protect from damage, all items on the premises. Including, but not limited to; construction materials, light fixtures, equipment, all furniture, etc. After receipt on job site, any lost, stolen or items damaged later by subcontractors or others in the building, shall be replaced or repaired at the general contractor's sole expense. The general contractor should notify and relate this information and requirements to all trades and subcontractors on site. 3. It is the responsibility of the general contractor to receive and unload product and materials supplied by others at the job site. Immediately inspect delivered products and equipment for shipping damage, including concealed damage prior to shipper leaving premises. Any product or materials found to be damaged after the shipper has left will be the sole responsibility of the general contractor to replace. Record any shortages, damaged or defective materials. Save all packing of damaged products until claims are finalized. Immediately notify project manager and owner of any damaged materials received and		CLASS C (LESS THAN 300 OCCUPANTS)	. GWB: Class A (Flame Spread: 0-25) . Acoustic Ceiling Tiles: See Finish Schedule for Ceiling Types . FRP: Class C (Flame Spread: 76-200) . Thin Brick . Ceramic Wall Tile . Metal Diamond-tread paneling . Pine Trim (70): Class B: (Flame Spread: 26-75) * * American Wood Council — G.C. to apply Sherwin-Williams (or equivalent) Intumescent wiping stain to all wood paneling, planking, & trim as require for min. Class-C Flame Spread Rating.
immediately file a damage claim with the shipping company.	EXIT ACCESS CORRIDORS	N/A	
O. The general contractor shall maintain a current and complete set of construction documents on the job site during all phases of construction for use by the trades and shall provide subcontractors with the current construction documents as required. 1. Drawings may not always be to scale. Noted dimensions shall take precedence.	VERTICAL EXITS, LOBBIES, & PASSAGEWAYS	N/A	
 All changes to these documents must be approved by owner. No material substitutions will be permitted unless authorization has been granted by owner. 	INTERIOR FLOO	OR FINISHES	S (PER BUILDING CODE SECTION 804 IN ACCORDANCE

INTERIOR	FLOOR	FINISHES	(PER	BUILDING	CODE	SECTION	804	IN	ACCORDA
W/ NFPA 253	5)								

PROVIDED * AS STATED BY MFR.

ROOMS & ENCLOSED SPACES	CLASS II or DOC FF-1 "pill test" (CPSC 16 CFR, Part 1630)	. Ceramic Tile (** Per Building Code Section 804.1 Exception 1, Vinyl & Ceramic Tile Flooring are exempt from floor finish rating requirements.)
EXIT ACCESS CORRIDORS	N/A	
VERTICAL EXITS, LOBBIES, & PASSAGEWAYS	N/A	

AREA OF WORK PLAN SCALE: N.T.S.



CERTIFY THAT THESE DRAWINGS WERE PREPARED (APPROVED BY ME, AND THAT AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF NORTH CAROLINA, LICENSE NUMBER 7676, EXPIRATION DATE 06/30/2026.

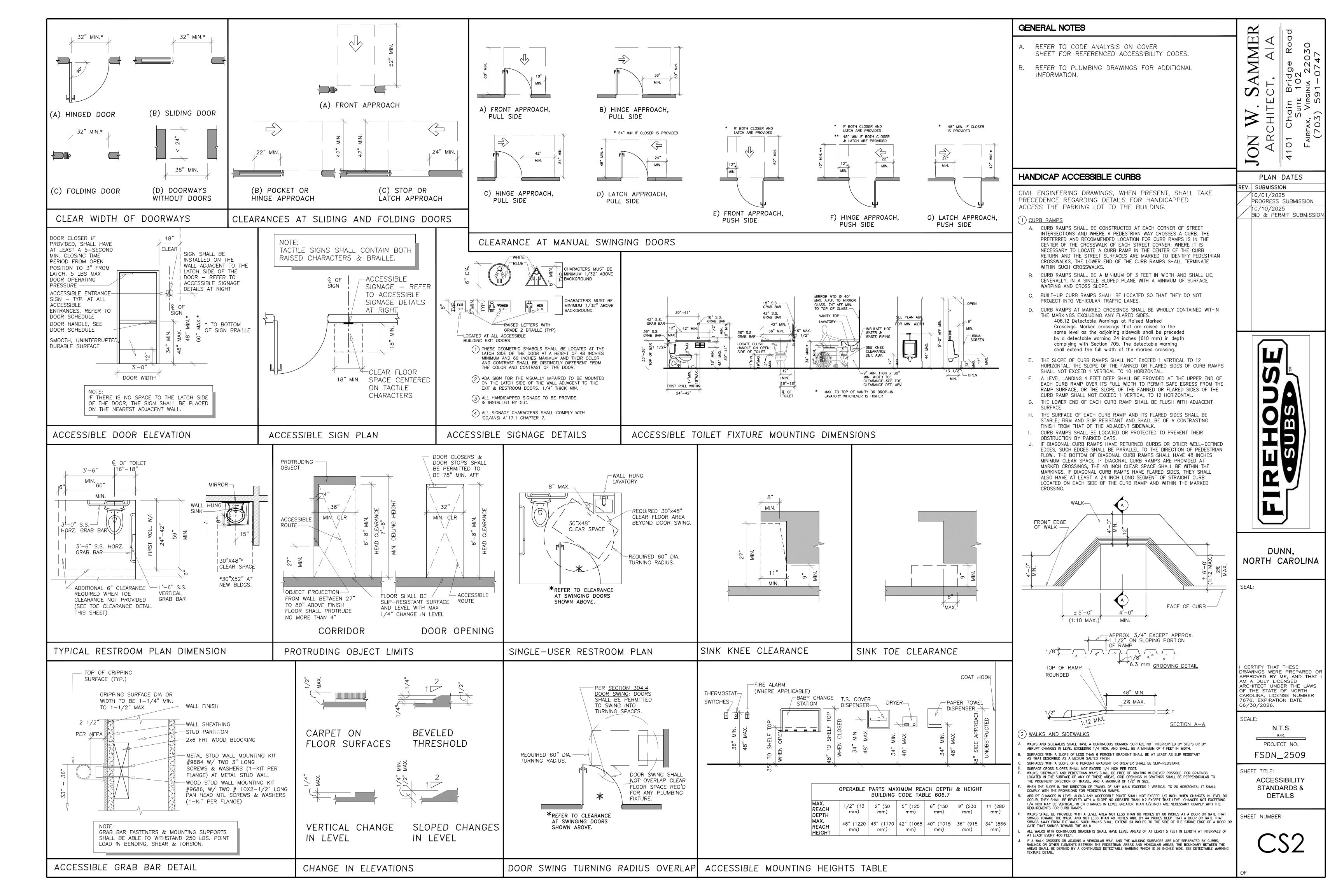
SCALE:

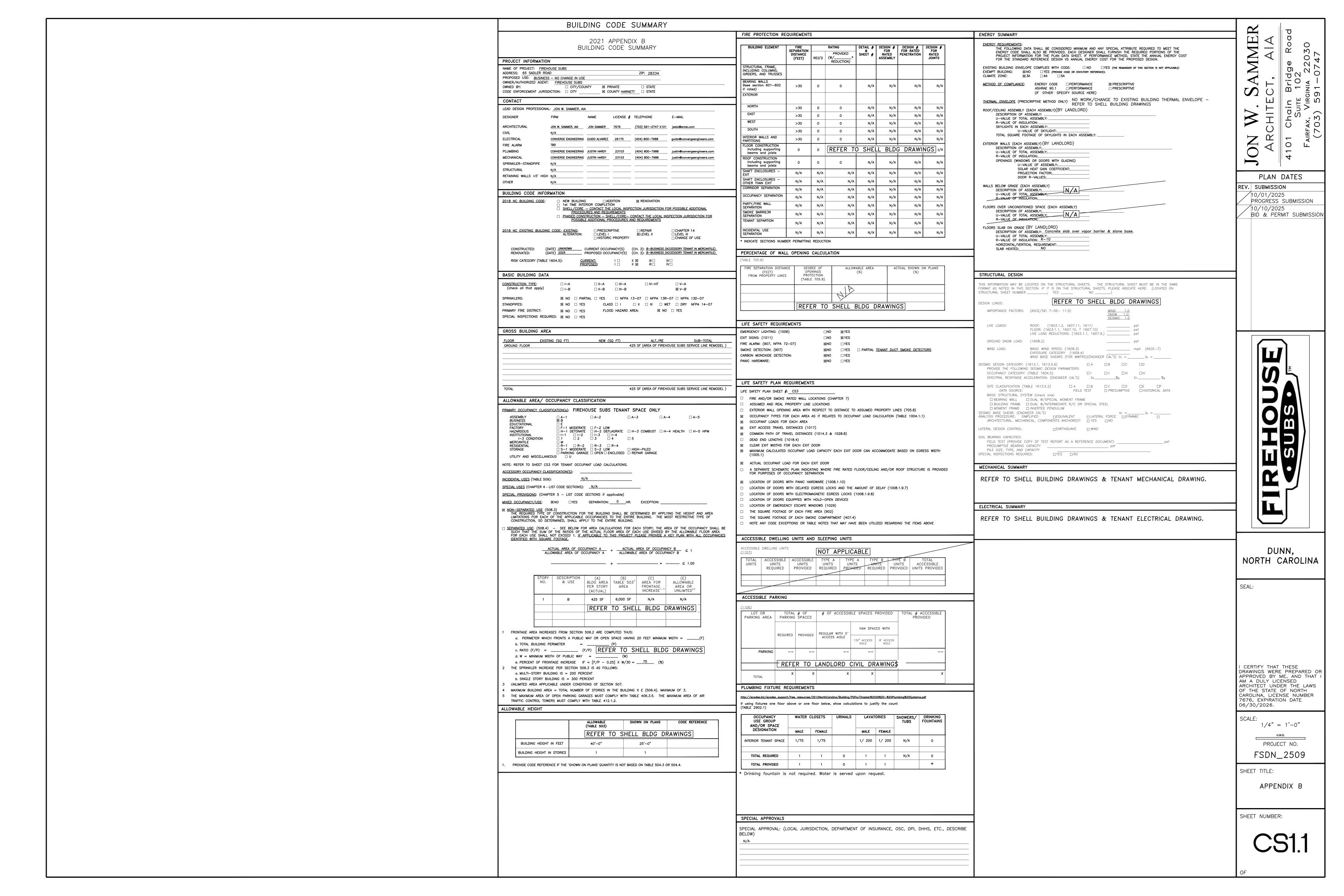
AS SHOWN PROJECT NO.

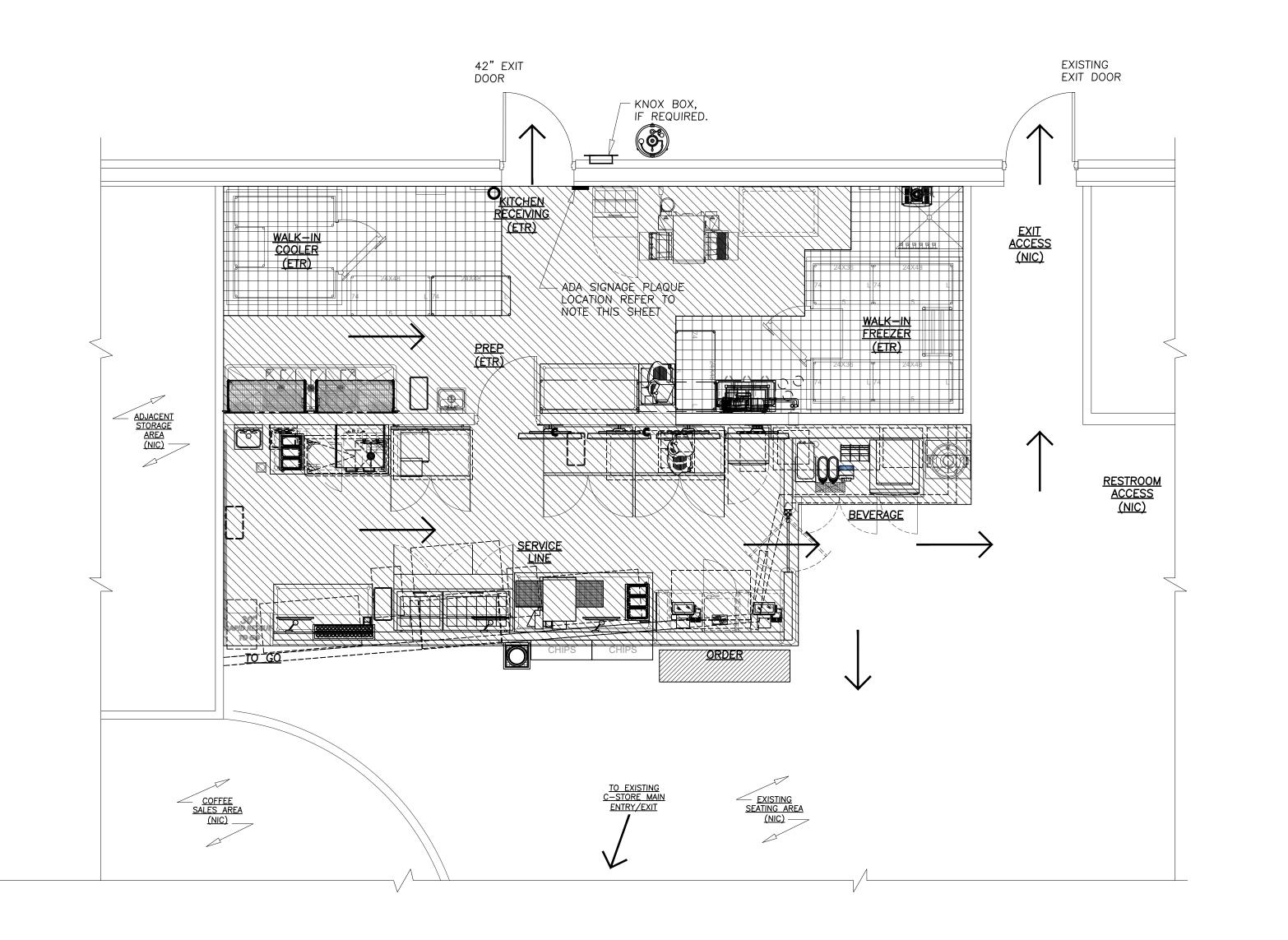
FSDN_2509 SHEET TITLE:

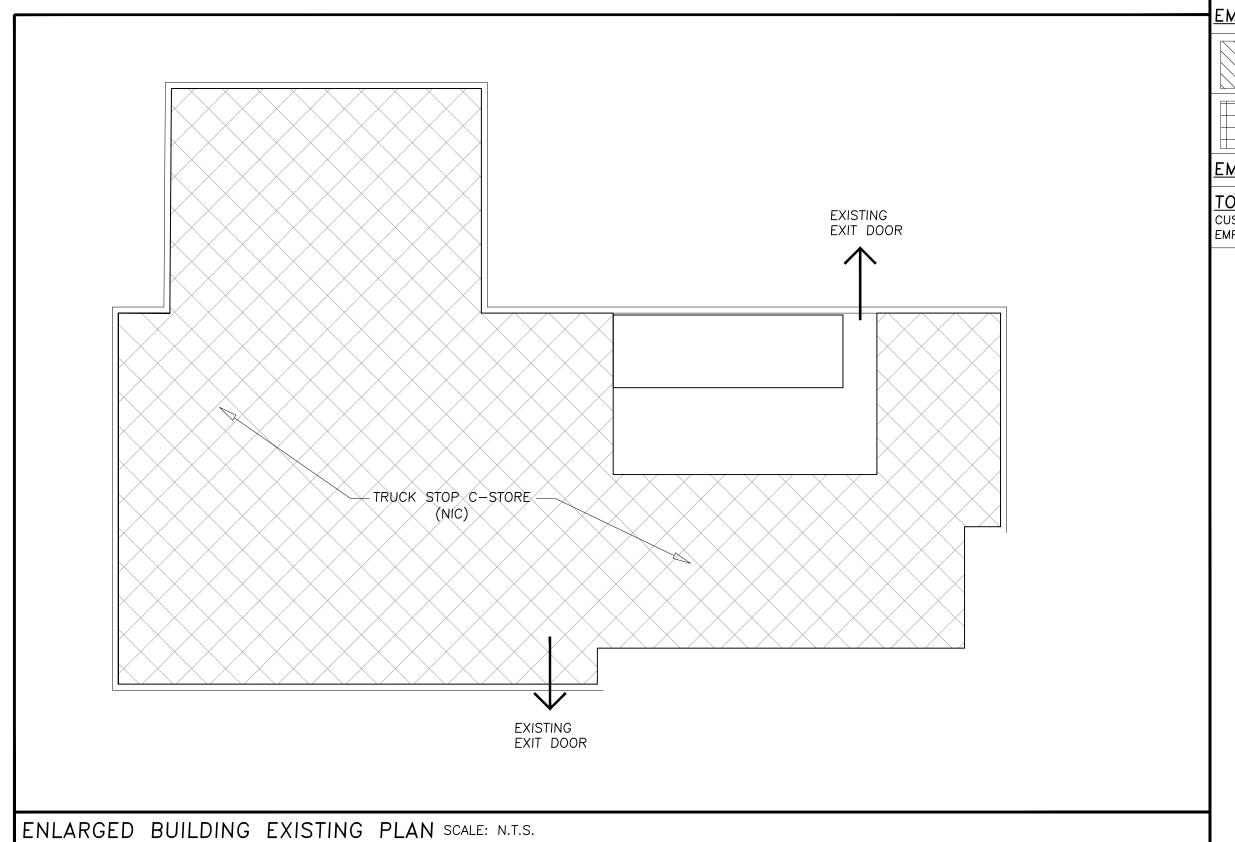
BUILDING CODE SUMMARY, COVER SHEET & KEY PLAN











MEANS OFF EGRESS CALCULATIONS MIN. NUMBER OF REQUIRED EXITS

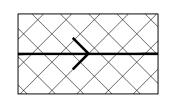
REQUIRED PROVIDED LESS THAN 50 OCCUPANTS (ADDITIONAL EXIT DOOR PROVIDED IN KITCHEN SERVICE AREA)

MIN. EXIT DOOR CLEAR WIDTH

REQUIRED PROVIDED REMARKS PER SECTION 1028.2 LESS THAN 300 OCCUPANTS 32" MIN.* MAIN EXIT *(1) 36" DOOR

MAXIMUM TRAVEL DISTANCE BASED ON BUILDING CODE SECTION 1017 AND TABLE 1017.2 MAX. ALLOWABLE PROVIDED (SINGLE EXIT)

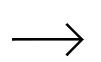
EXIT AISLE CLEAR WIDTH



EXIT AISLEWAY EXIT AISLEWAY WIDTH 36" (LESS THAN 50 OCCUPANTS) PER BLDG. CODE SECTION 1028.9.1.1

56'-10"

#4 EXCEPTION #1.



KITCHEN/SERVICE AREA AISLEWAY WIDTH 36" (LESS THAN 50 OCCUPANTS) PER BLDG. CODE SECTION 1028.9.1.1 #4 EXCEPTION #1.

ADA TACTILE SIGNAGE PLAQUE



INSTALL ADA TACTILE SIGNAGE PLAQUE ADJACENT TO EACH DOOR PER ICC A117.1. REFER TO SHEET CS2 FOR SIGNAGE REQUIREMENT.

LIFE SAFETY ACCESSORY KEY PLAN



FIRE EXTINGUISHER MIN. RATING 3A:40BC PER



FIRE DEPARTMENT KNOX BOX - VERIFY LOCATION WITH LOCAL FIRE MARSHAL PRIOR TO INSTALLATION. G.C. TO SUPPLY AND INSTALL.

NOTE: FIRE EXTINGUISHERS ARE SHOWN FOR REFERENCE ONLY. GENERAL CONTRACTOR TO VERIFY WITH LOCAL FIRE MARSHAL QUANTITY, LOCATIONS, AND TYPES OF FIRE EXTINGUISHERS PRIOR TO ORDERING AND INSTALLATION. NOTE: REFER TO ELECTRICAL DRAWINGS FOR EMERGENCY AND EXIT LIGHT & SIGNAGE LOCATIONS AND SPECIFICATIONS.

DESIGNED OCCUPANCY LOAD

PER: BUILDING CODE TABLE 1004.1.1 & SECTION 1004.1

ORDER AREA:

WAITING CUSTOMERS:	3
ORDER LINE (STANDING): 11 SF/ 5 SF = 2.2	3

TOTAL CUSTOMERS: WAITING = 3

TADLOVEE ADEAC.

<u> EMPLOYEE</u>	AREAS:	
	KITCHEN/SERVICE AREAS: 596 S.F / 200 S.F. = 2.98	3
	STORAGE AREAS: 210 S.F / 300 S.F. = .39	1
EMPLOYEES	<u>5:</u>	4
TOTAL OCC CUSTOMERS = EMPLOYEES =		7

DUNN, NORTH CAROLINA

0.4

JON

REV. SUBMISSION

10/01/2025

10/10/2025

PLAN DATES

PROGRESS SUBMISSION

BID & PERMIT SUBMISSION

SEAL:

CERTIFY THAT THESE DRAWINGS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF NORTH CAROLINA, LICENSE NUMBER 7676, EXPIRATION DATE 06/30/2026.

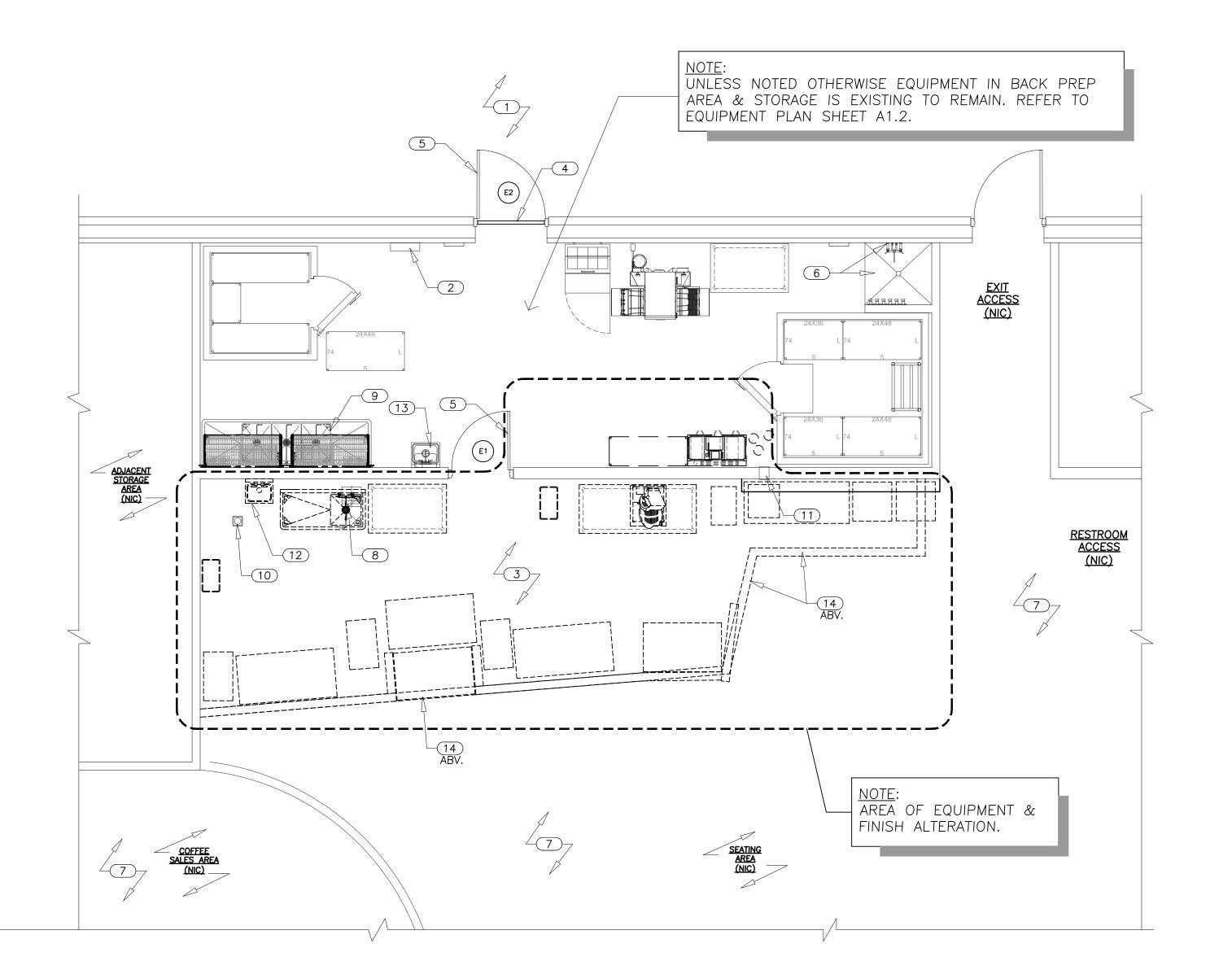
SCALE: 1/4" = 1'-0"

> PROJECT NO. FSDN_2509

SHEET TITLE:

LIFE SAFETY & OCCUPANT LOAD PLAN





GENERAL NOTES

UNLESS NOTED OTHERWISE REMOVE ALL:

- A. FLOORING TO EXPOSED CONCRETE SLAB (FLASH PATCH & GRIND CONCRETE SLAB FOR SMOOTH LEVEL SURFACE FOR NEW FLOOR FINISHES.
- B. ABANDONED WASTE LINES BELOW CONCRETE SLAB SHALL BE CAPPED OFF WITHIN 24" OF VENTED SEWER LINE. REFER TO PLUMBING
- C. INTERIOR NON LOAD BEARING PARTITIONS AS SHOWN ON THIS PLAN.
- D. DEMO EXISTING CONC. SLAB ON GRADE AS REQUIRED FOR ALL NEW PLUMBING. REFER TO DETAIL 1 SHEET A1.0.
- E. REFER TO ELECTRICAL DRAWINGS FOR EXTENT OF ELECTRICAL SERVICE RE-USE.
- F. ALL DECORATIVE TRIM, PANELING, WALL PAPER, ETC. & PATCH/REPAIR SUBSTRATE AS REQUIRED FOR INSTALLATION OF NEW INTERIOR FINISHES.
- G. REMOVE SERVICE LINE EQUIPMENT AS SHOWN ON THIS PLAN G.C. TO COORDINATE DISPOSAL W/ OWNER.

EXISTING CONDITIONS LEGEND

EXISTING INTERIOR PARTITION TO REMAIN



EXISTING DOOR TO REMAIN

_____ EXISTING INTERIOR PARTITION TO BE REMOVED

KEY NOTES # NOTE: NOT ALL KEY NOTES MAY BE USED.

- 1 EXISTING EXTERIOR ASPHALT AREA TO REMAIN.
- 2 EXISTING ELECTRIC PANEL REFER TO ELECTRICAL DRAWINGS.
- GC TO DEMO EXISTING FLOOR FINISH TO SLAB. EXISTING CONCRETE SLAB TO REMAIN —
 REFER TO DEMOLITION NOTE A ABOVE & UNDERSLAB PLUMBING PIPES ADD/ALTERNATE NOTE
- 4 EXISTING HC ALUMINUM THRESHOLD TO REMAIN.
- 5 EXISTING DOOR TO REMAIN.
- 6 EXISTING MOP SINK & FAUCET TO REMAIN.
- 7 EXISTING OPEN SALES AREA/ SEATING AREA TO REMAIN NO MODIFICATIONS UNDER THIS PERMIT
- EXISTING FLOOR SINK TO BE REPLACED WITH NEW CAST FLOOR SINK. REMOVE & REPLACE 10' OF UNDERGROUND WASTER PIPING WITH NEW CAST IRON PIPE REFER TO PLUMBING DRAWINGS.
- 9 EXISTING FLOOR SINK TO REMAIN.
- 10 EXISTING FLOOR DRAIN TO REMAIN.
- 11 EXISTING THRU-WALL CHASE TO REMAIN.
- 12 EXISTING HANDSINK TO BE REPLACED.
- 13 EXISTING HANDSINK TO REMAIN.
- 14 EXISTING BULKEHAD TO BE REMOVED REFER TO RCP.

JON W. SAMME
ARCHITECT, AIA
4101 Chain Bridge Roa
Suite 102
FAIRFAX, VIRGINIA 22030
(703) 591-0747

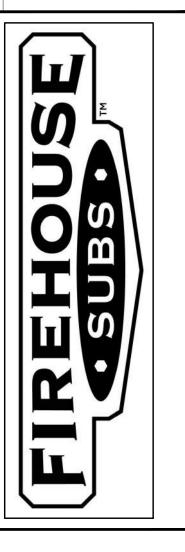
PLAN DATES

REV. SUBMISSION

10/01/2025

10/01/2025 PROGRESS SUBMISSION 10/10/2025

BID & PERMIT SUBMISSION



DUNN, NORTH CAROLINA

SEAL:

I CERTIFY THAT THESE
DRAWINGS WERE PREPARED OR
APPROVED BY ME, AND THAT I
AM A DULY LICENSED
ARCHITECT UNDER THE LAWS
OF THE STATE OF NORTH
CAROLINA, LICENSE NUMBER
7676, EXPIRATION DATE
06/30/2026.

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

PROJECT NO.
FSDN_2509

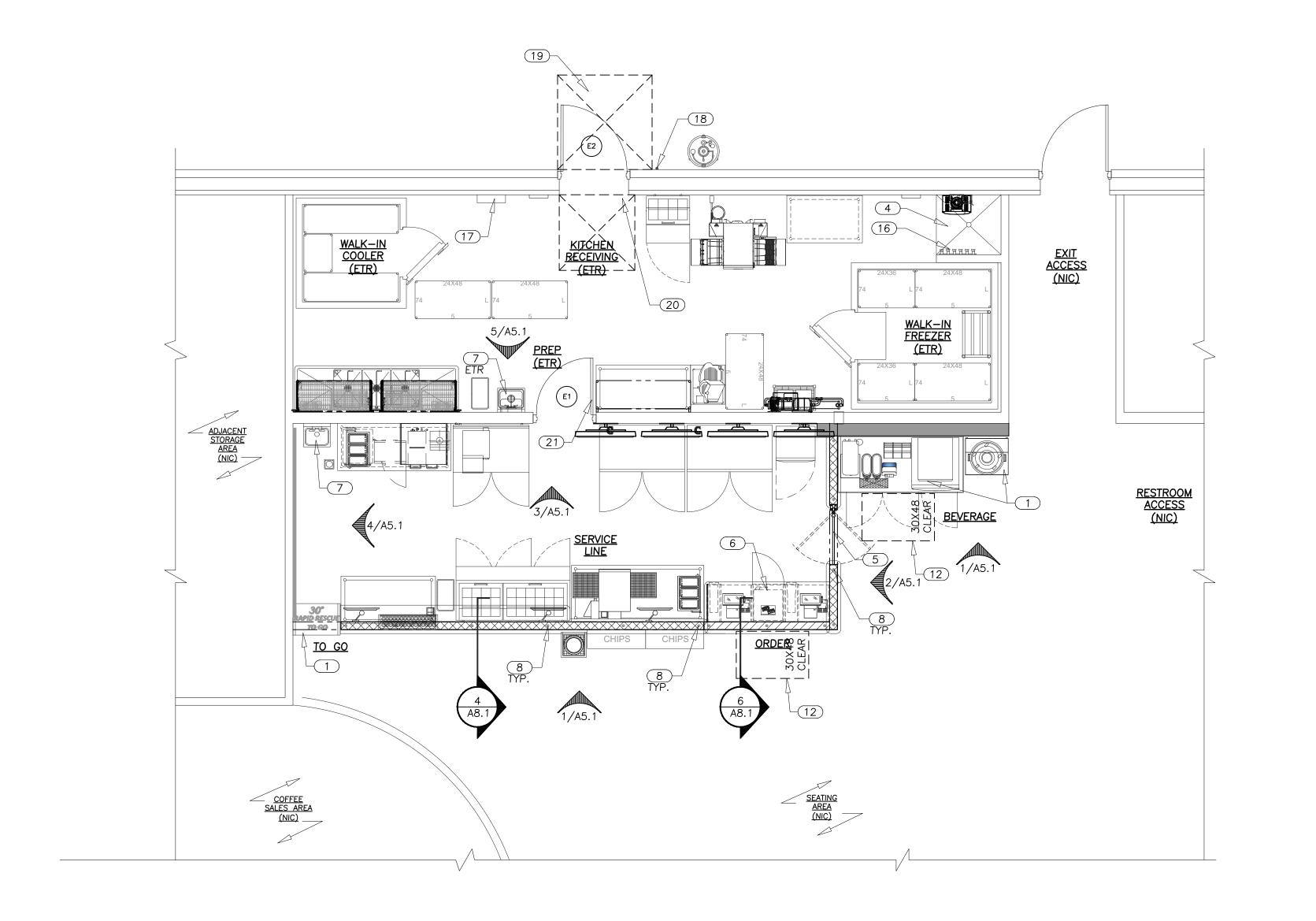
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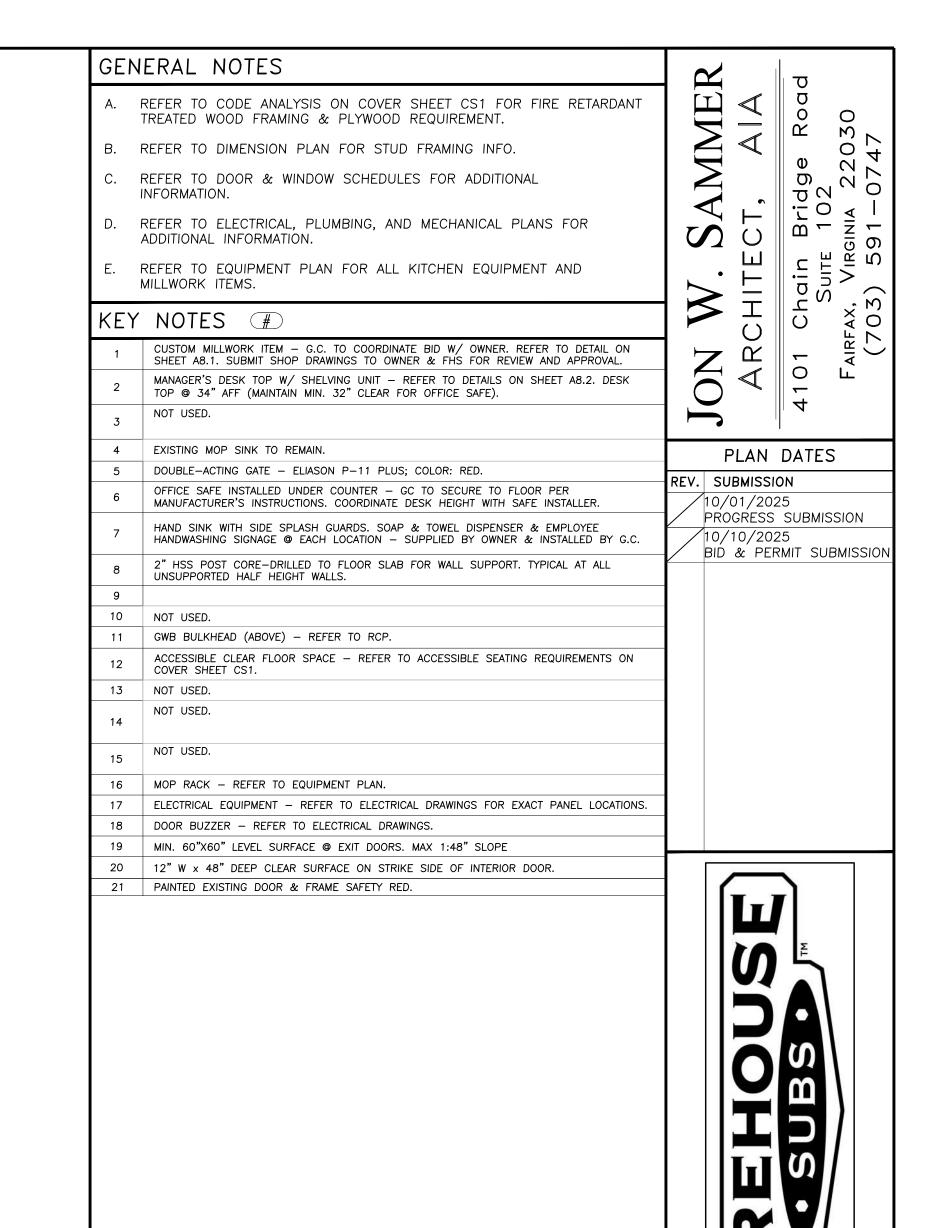
EXISTING CONDITIONS PLAN

SHEET NUMBER:

D1.0







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06/30/2026.

INTERIOR PARTITION TYPES

NOTE:
• REFER TO FINISH PLAN FOR WALL WATERPROOFING SYMBOLS.

REFER TO INTERIOR PARTITION SHEATHING NOTES ON DIMENSION PLAN.

REFER TO DIMENSION PLAN FOR INTERIOR PARTITION TYPE SCHEDULE.

SYMBOL DESCRIPTION

INTERIOR PARTITION/FURRING, REFER TO DIMENSION PLAN FOR PARTITION TYPES.

INTERIOR METAL STUD & SHEATHING PARTITION W/
SOUND ATTENUATION BATT INSULATION FULL HEIGHT AND

THICKNESS OF PARTITION.

KITCHEN COUNTER LOW WALL BY G.C.

KITCHEN COUNTER LOW WALL BY G.C. @ 4'-4 1/2"

ORDER COUNTER LOW WALL BY G.C. @ 2'-10" AFF MAX.

SCALE: 1/4" = 1'-0" U.N.O. PROJECT NO.

FSDN_2509

SHEET TITLE:

CONSTRUCTION
PLAN

LAN

SHEET NUMBER:

A1.0

DRILL 8" IN FOR 16" LONG #4
BARS © 32" O.C. & FILL W/
NON-SHRINKING EPOXY GROUT.

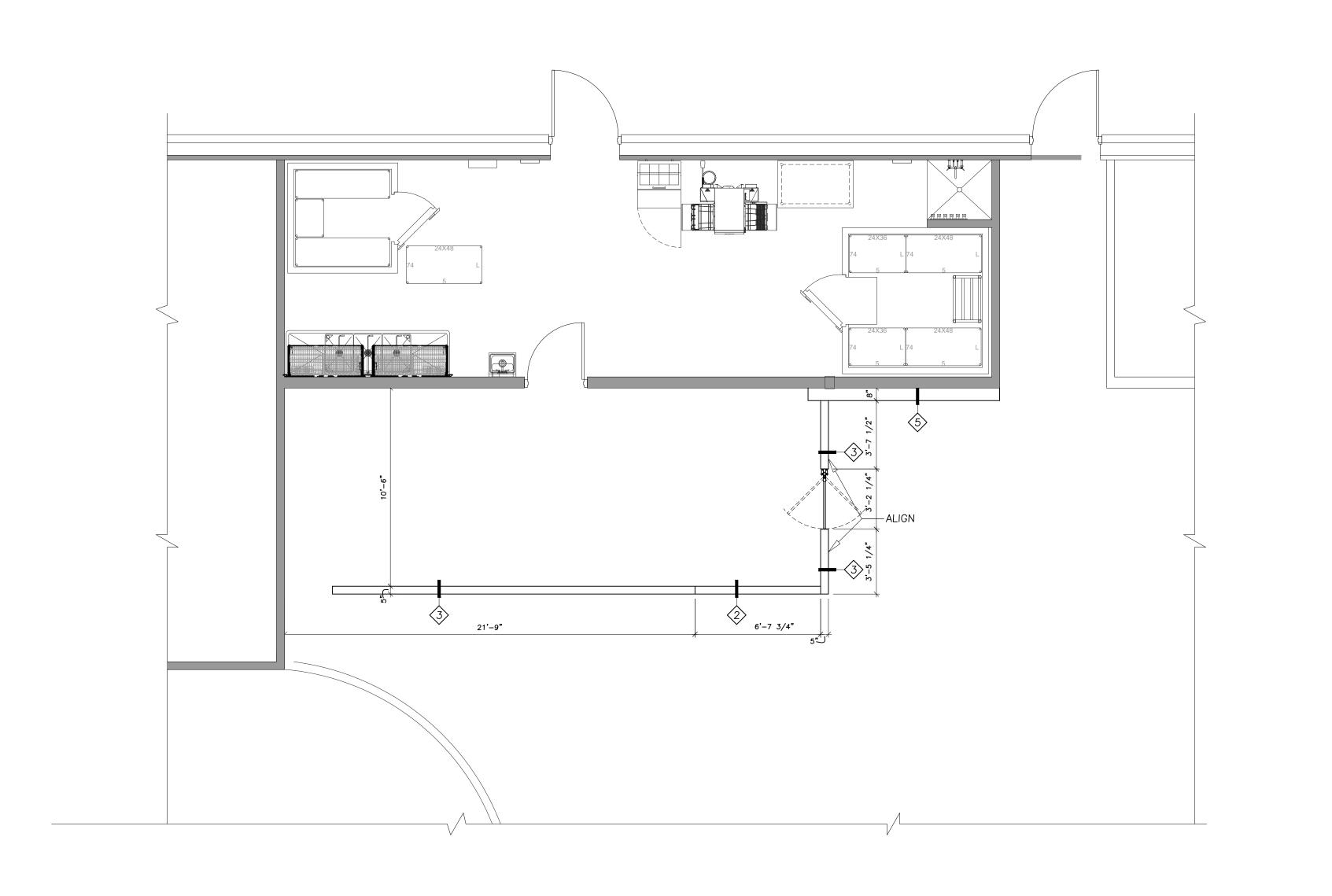
EXISTING CONCRETE SLAB TO
REMAIN — REFER TO
DEMOLITION NOTE A ON D1.0.

EXIST. NEW

WITHOUT KEYWAY

TYP. EXISTING/ NEW CONC. SLAB DETAIL SCALE: N.T.S. WHERE EXIST. CONC. SLAB IS REMOVED FOR NEW PLUMBING.

F



GENERAL NOTE

A. REFER TO CODE ANALYSIS ON COVER SHEET CS1 FOR FIRE RETARDANT TREATED WOOD FRAMING & PLYWOOD REQUIREMENT.

INTERIOR FRAMING NOTES

- A. ALL INTERIOR PARTITION AND DINING ROOM HALF—HEIGHT WALL DIMENSIONS ARE TO FACE OF SHEATHING. U.N.O.
- B. 5" NOMINAL PARTITION THICKNESS = 3 5/8" MET. STUD OR 2×4 FRT WOOD STUD.
- C. 7" NOMINAL PARTITION THICKNESS = 6" METAL STUD OR 2x6 FRT WOOD

INTERIOR SHEATHING NOTES

- A. UNLESS NOTED OTHERWISE ALL INTERIOR PARTITIONS:
 - 1.) 5/8" GWB ON EACH SIDE OF WALL
 - 2.) 5/8" MR-GWB IN PUBLIC RESTROOMS
 - 3.) 5/8" FRT PLYWOOD SHEATHING IN KITCHEN AREAS
 4.) 5/8" DUROCK TO 54" AFF @ MOP SINK WALLS
 5.) 5/8" DUROCK TO 56" AFF @ RESTROOM WALL TILE WAINSCOT
- B. 5/8" GWB SHEATHING TAPED & SPACKLED TO UNDERSIDE OF ROOF DECK AT PERIMETER WALLS (U.N.O.).
- KITCHEN PERIMETER WALLS TO HAVE DUROCK SHEATHING TO 12" AFF, FRT PLYWOOD SHEATHING TO 6" ABOVE CEILING, & GWB TAPED & SPACKLED ABOVE TO UNDERSIDE OF ROOF. CUT & SEAL AROUND ALL PENETRATIONS.

INTERIOR PARTITION LEGEND

INTERIOR STUD PARTITION TYPE (REFER TO INTERIOR PARTITIONS TYPE ON SHEET A1.0).

- METAL STUD GAUGE: 20 (U.N.O.)
- STUD SPACING: 16" O.C.

REFER TO PARTITION SYMBOLS BELOW FOR ADDITIONAL INFORMATION.

METAL STUDS OR FURRING TO 6" ABOVE FINISHED CEILING.

METAL STUDS COUNTER DYE WALL TO 32 1/2" AFF

(34" AFF MAXIMUM COUNTER HEIGHT.)

METAL STUDS COUNTER DYE WALL TO 51" AFF (52 1/2" AFF COUNTER HEIGHT.)

TYP. INTERIOR PARTITION DETAIL

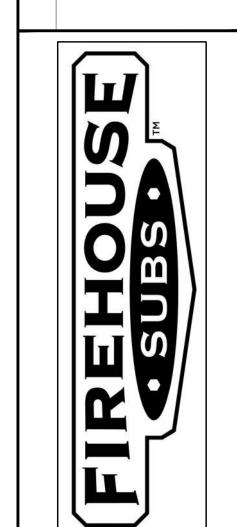
SCALE: N.T.S.

METAL STUDS W/ SHEATHING TO UNDERSIDE OF ROOF STRUCTURE W/ FIRE SAFING BETWEEN STUDS @ TOP OF LOW CEILING HEIGHT.

METAL STUDS OR HAT CHANNEL FURRING @ 24" O.C. TO 6" ABOVE FINISHED CEILING.

NOTES: PROVIDE SLIP-TRACK @ ALL PARTITIONS EXTENDING TO ROOF DECK OR ROOF FRAMING.

WHERE APPLICABLE EXTEND METAL STUD FRAMING & SHEATHING TO UNDERSIDE OF METAL ROOF DECK & CUT SHEATHING AROUND DECK FLUTES, JOISTS, BEAMS, ETC. CAULK W/ PAINT ACCEPTABLE SEALANT.



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PLAN DATES

PROGRESS SUBMISSION

BID & PERMIT SUBMISSION

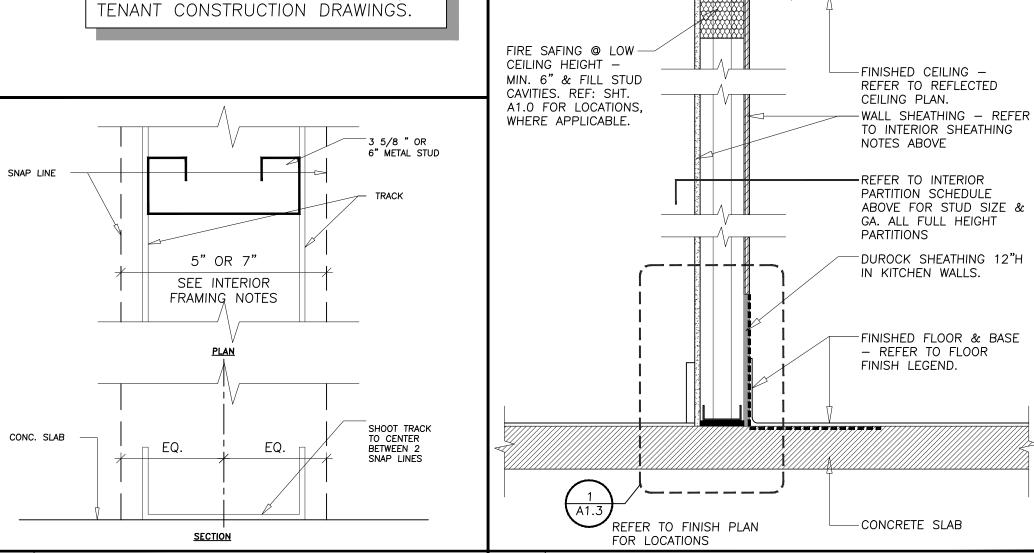
REV. SUBMISSION 10/01/2025

10/10/2025

NOTE: INDICATES EXISTING INTERIOR PARTITIONS TO REMAIN.

NOTE:
TENANT G.C. TO FIELD VERIFY
EXISTING SHELL BUILDING
DIMENSIONS. NOTIFY CPM &
ARCHITECT OF DISCREPANCIES W/

FRAMING METHOD DETAIL



REFER TO INTERIOR-

FULL HT WALL WHERE — INDICATED ON PLAN

PARTITION LEGEND

NOTES ABOVE

DUNN, NORTH CAROLINA

SEAL:

-DIAGONAL BRACING —

DEFLECTION.

REFER TO DETAIL 3/A8.2.

NOTCH FOR SNOW LOAD

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CAROLINA, LICENSE NUMBER

ARCHITECT UNDER THE LAWS
OF THE STATE OF NORTH
CAROLINA, LICENSE NUMBER
7676, EXPIRATION DATE
06/30/2026.

SCALE:

1/4" = 1'-0"

U.N.O.

PROJECT NO.

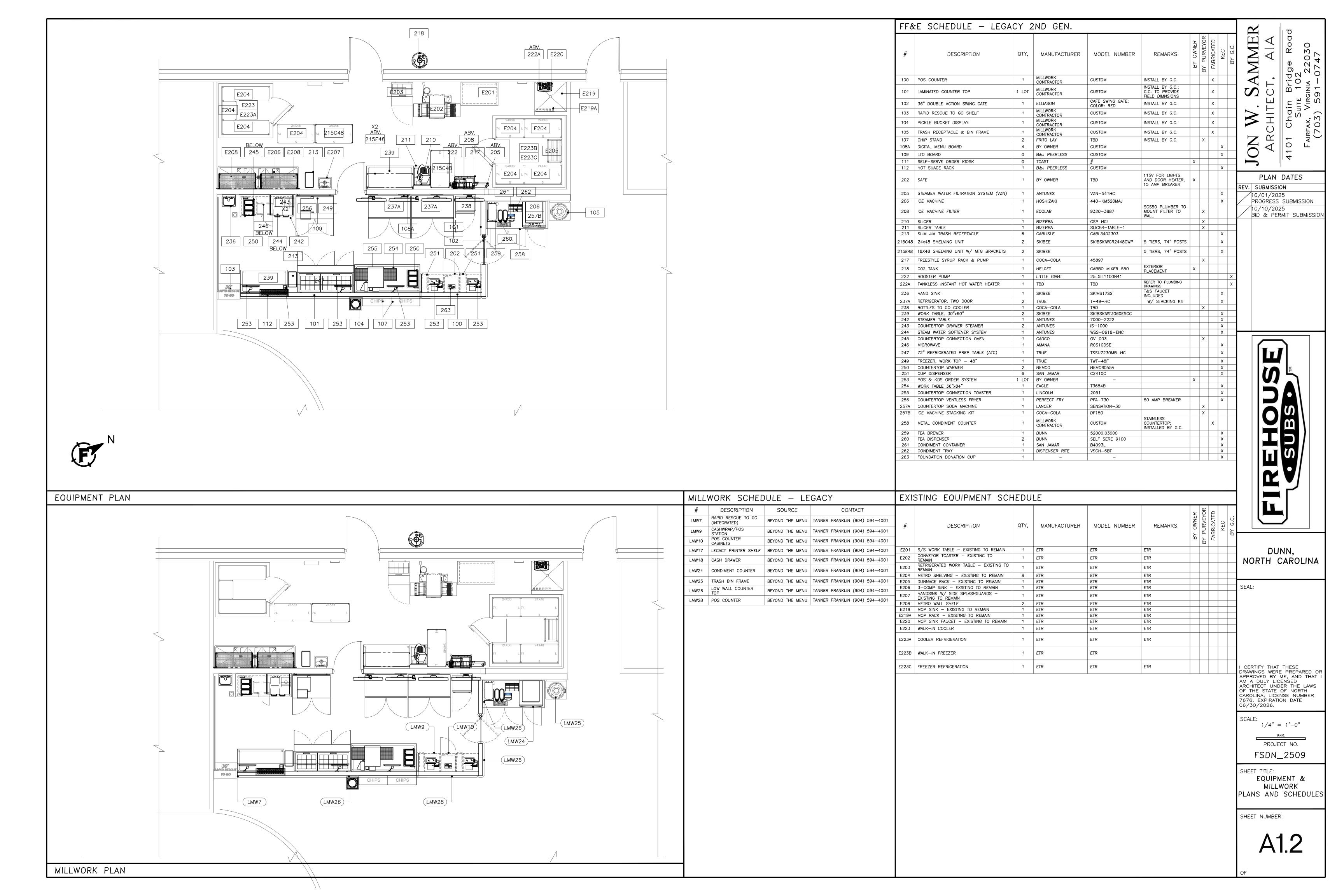
FSDN_2509
SHEET TITLE:

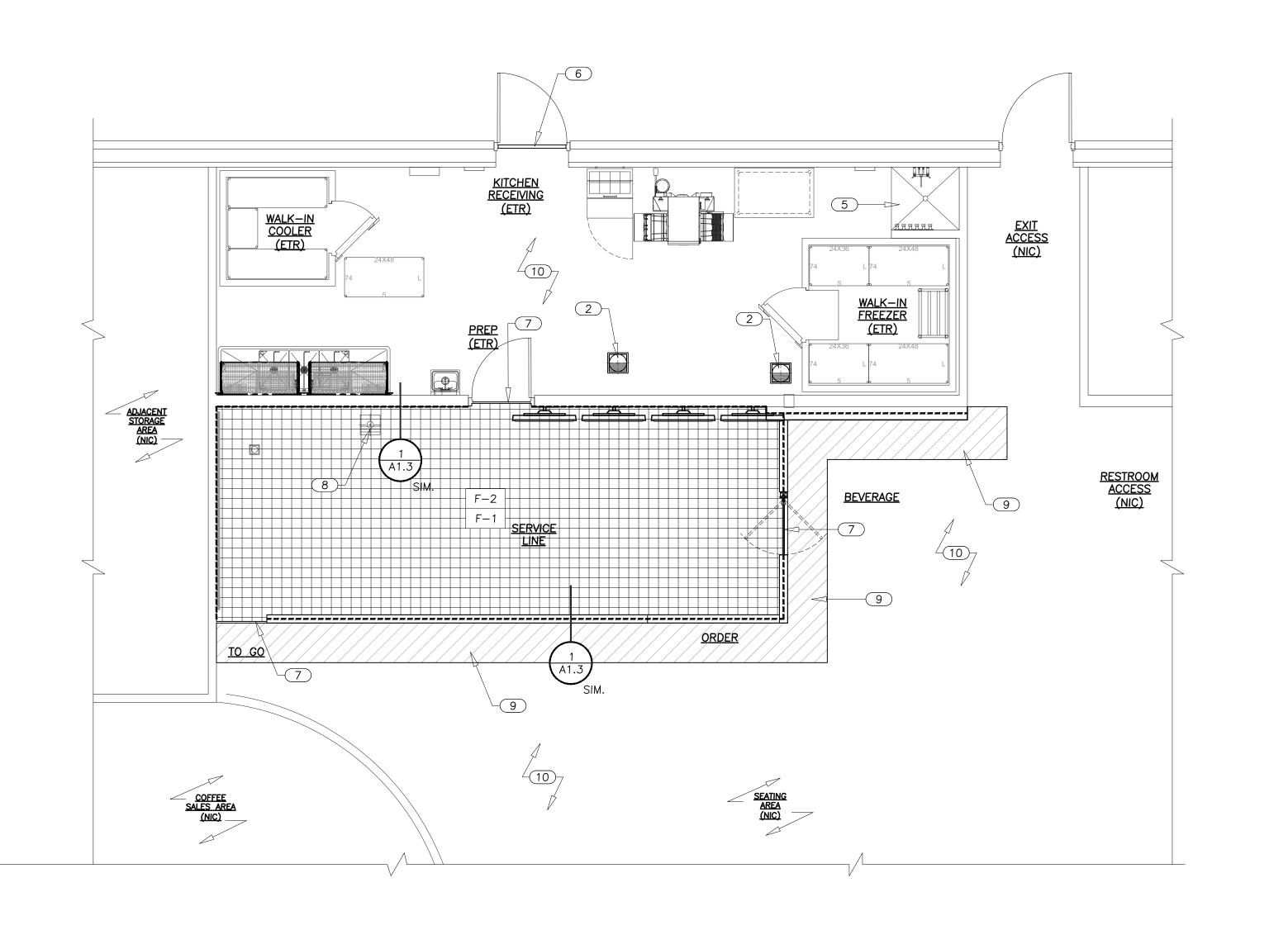
DIMENSION PLAN

SHEET NUMBER:

A1.1

F





NOTE: G.C. TO USE INDUSTRIAL GROUT @ ALL TILE FLOORING AREAS.

NOTE: NO PONDING WATER ALLOWED IN KITCHEN FLOORING AREAS.

TO 60" A.F.F. AT MOP SINK WALLS.

NOTE: INSTALL DUROCK SHEATHING

GENERAL NOTES

- A. REFER TO ROOM FINISH LEGEND BELOW FOR FINISH DESIGNATIONS. REFER TO MATERIAL SCHEDULE BELOW FOR ADDITIONAL INFORMATION.
- ALL EXPOSED CONCRETE SHALL BE SEALED W/ SHERWIN-WILLIAMS CONCRETE SEALER - 2 COATS PER MANUFACTURER'S SPECIFICATIONS. REFER TO MATERIAL SCHEDULE BELOW.
- G.C SHALL SUBMIT PAINT/STAIN SAMPLE FOR OWNERS APPROVAL PRIOR TO APPLICATION.
- KITCHEN QUARRY TILE FLOORING SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.

KEY NOTES

NOT USED. 2 | FLOOR SINK - REFER TO PLUMBING DRAWINGS. NOT USED. 4 NOT USED. EXISTING MOP SINK TO REMAIN.

7 SCHLUTER TRANSITION STRIP. 8 CAST IRON HUB DRAIN @ STEAMERS — REFER TO PLUMBING DRAWINGS.

6 H.C. ACCESSIBLE ALUMINUM THRESHOLD.

10 EXISTING FLOORING TO REMAIN.

REPLACE PORTION OF EXISTING C.T. @ ATREA OF DEMO/NEW CONSTRUCTION. PATCH & REPAIR EXIST. C.T. FLOORING TO MATCH ADJACENT.

NOTE: E.C. TO INSTALL BLACK OUTLETS & BLACK COVER PLATES @ ALL OUTLETS IN THE SEATING AREA WAINSCOT LOCATIONS.



LATICRETE EPOXY WALL WATERPROOFING. RUN UP WALL AND OUT FROM WALL 12". REFER TO DETAIL 1 ON THIS SHEET. PARTITION —

FLOOR FINISH SYMBOLS F-#

F-1 QUARRY TILE FLOORING W/ QT COVE BASE

F-6 SEALED CONCRETE W/ VINYL COVE BASE

DUNN,

MMER

JON

REV. SUBMISSION

10/01/2025

10/10/2025

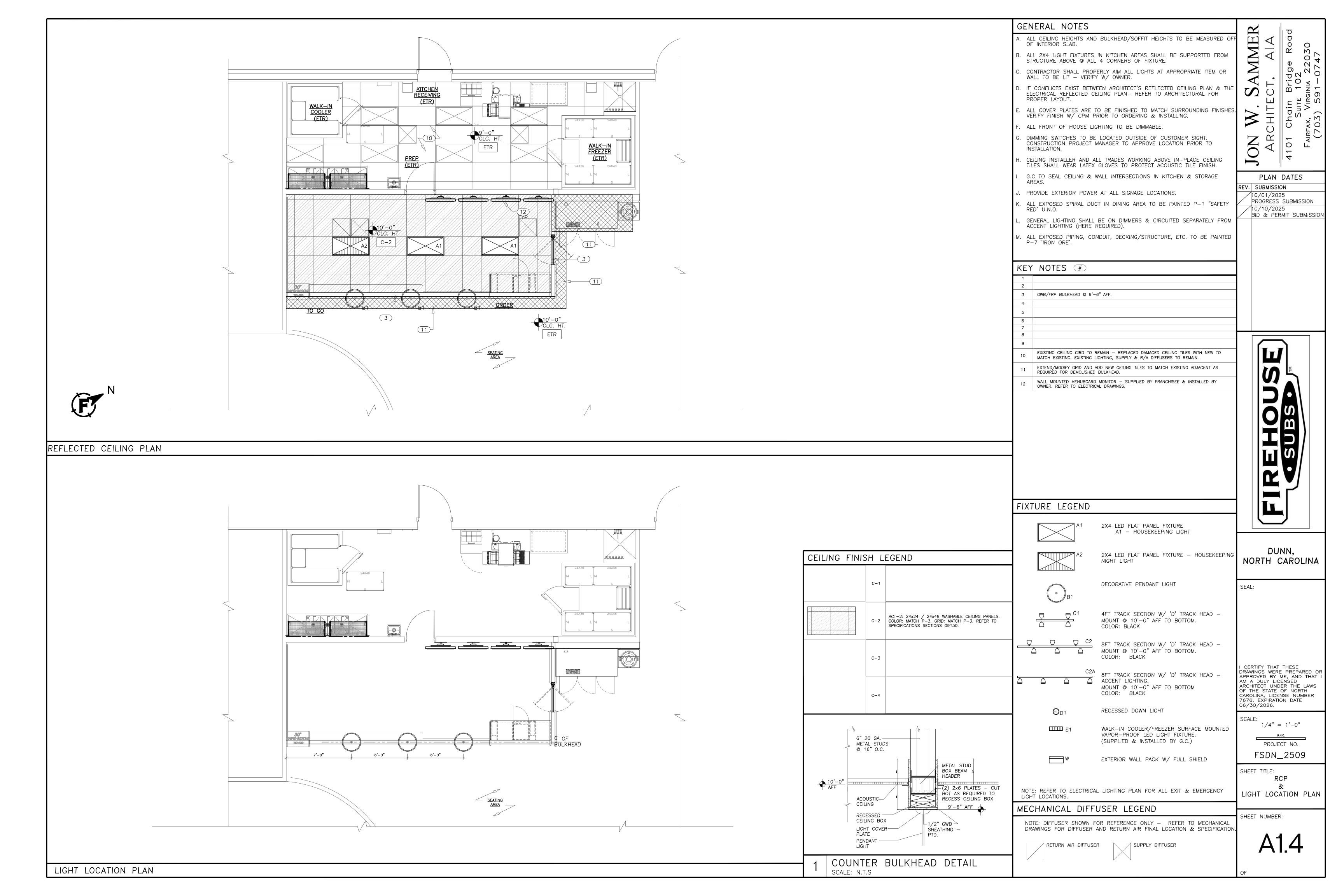
PLAN DATES

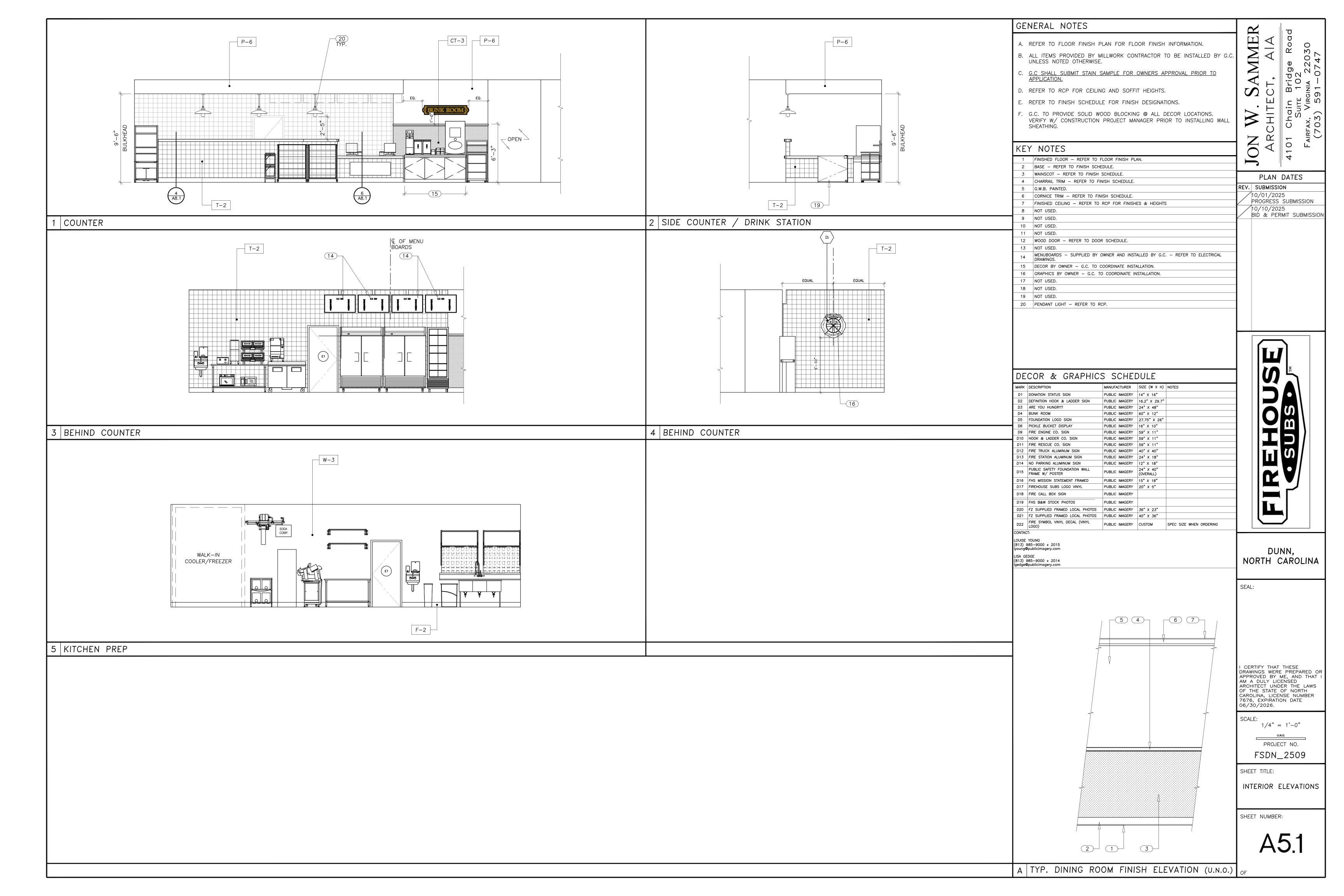
PROGRESS SUBMISSION

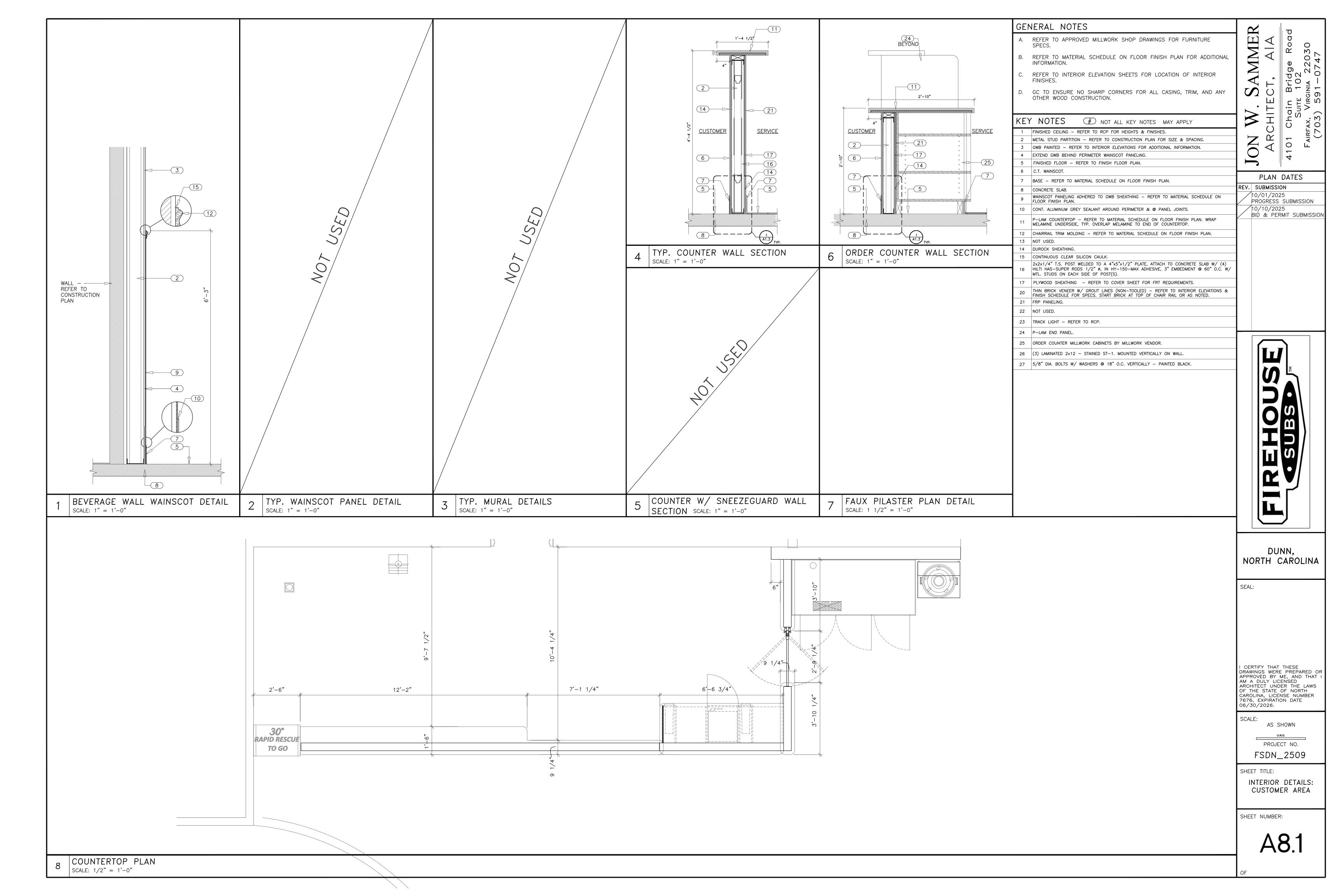
BID & PERMIT SUBMISSION

Bridge Roc 102 RGINIA 22030

																		DUNN,
MAT	ERIAL SCHE	DULE								ROOM FINISH	LEGEN	D						NORTH CAROLINA
FLO					TA-2	CERAMIC WALL TILE	DAL TILE	BLACK, 2"x6" BULLNOSE CORNER; #SN4269	DRY WHITE GROUT - UNSANDED #381.	ROOM NAME	FLOOR	BASE	WAINSCO	T WALL	CEILING	REM	ARKS	
F-1	QUARRY TILE	DALTILE	#0Q70661A; 6"x6" HARVEST RED	3/8" JOINTS, SANDED GROUT "CUSTM BUILDING PRODUCTS" SURECOLOR #60 CHARCOAL. SEE FINISH PLAN FOR PATTERN	TA-3	CERAMIC WALL TILE	DAL TILE	BLACK, 6"x6" SQUARE TOP COVE; #A3601	DRY WHITE GROUT - UNSANDED #381.									SEAL:
F-2	QUARRY TILE COVE BASE FLOOR TRIM	DAL-TILE	#Q3665; 6"x6" HARVEST RED	3/8" JOINTS, SANDED GROUT "CUSTM BUILDING PRODUCTS" SURECOLOR #60 CHARCOAL. SEE FINISH PLAN FOR PATTERN	TA-4	CERAMIC WALL TILE	DAL TILE	ARCTIC WHITE, 2"x6" BULLNOSE;	DRY WHITE GROUT - UNSANDED #381.									
F-3	QUARRY TILE COVE BASE OUTSIDE CORNER	DAL-TILE	#QC3665; 1"x6" HARVEST RED	3/8" JOINTS, SANDED GROUT "CUSTM BUILDING PRODUCTS" SURECOLOR #60 CHARCOAL. SEE FINISH PLAN FOR PATTERN	TA-5	CERAMIC WALL TILE	DAL TILE	#S4269 ARCTIC WHITE, SINKRAIL TILE; WA8262	DRY WHITE GROUT — UNSANDED #381.									
F-4	QUARRY TILE COVE BASE INSIDE CORNE	DAL-TILE	#QC3665; 1"x6" HARVEST RED	3/8" JOINTS, SANDED GROUT "CUSTM BUILDING PRODUCTS" SURECOLOR #60 CHARCOAL. SEE FINISH PLAN FOR PATTERN	TA-6	CERAMIC WALL TILE	DAL TILE	BLACK, SCR TILE; #WA8262	DRY WHITE GROUT — UNSANDED #381.	FRONT SERVICE LINE	F-1	F-2	N/A	W-3	C-2			
					TA-7	CERAMIC WALL TILE	DAL TILE	BLACK, SCR TILE; #LA3602 R/L/ET					<u> </u>					
					CT-1	PLASTIC LAMINATE	WILSONART	D307-60; HOLLYBERRY RED, MATTE	<u> </u>									I CERTIFY THAT THESE
					CT-2	STAINLESS STELL		#4 FINISH; 18 GA.										DRAWINGS WERE PREPARED C APPROVED BY ME, AND THAT AM A DULY LICENSED
BAS B-1	VINYL BASE	HOME DEPOT; ROPPE	C" DIACK COVE DACE		CT-3	ALUMINUM DIAMOND PLATE	CUTSMETAL	1/16 TREAD BITE; COLOR: GUNMETAL GREY	SECURE TO WALL W/ LOCTITE 375 ADHESIVE, PROVIDE ALUMINUM GREY SEALANT AROUND PERIMETER & JOINTS.									ARCHITECT UNDER THE LAWS OF THE STATE OF NORTH CAROLINA, LICENSE NUMBER
		HOME DEPOT, ROPPE	6" BLACK COVE BASE.		P-1	PAINT	SHER-CRYL	B66R00300, GLOSS SAFETY RED.										7676, EXPIRATION DATE 06/30/2026.
WAL	-				P-2	PAINT	SHER-CRYL	B66R00300, GLOSS BLACK	PAINT								4	00, 00, 2020.
W-1	PAINTED GWB W/ SMOOTH FINISH			REFER TO INTERIOR ELEVATIONS.	P-3	PAINT	PROMAR 200	B21W251, SEMI GLOSS WHITE	PAINT								INTERIOR PARTITION. REFER	SCALE: $1/4" = 1'-0"$
W-2	PAINTED GWB W/			REFER TO INTERIOR ELEVATIONS.	P-4	PAINT	PAINT	B70W200, WATER-BASED CATALYZED; WHITE	PAINT							WALL SHEATHING - REFER	SIZE AND SPACING.	U.N.O.
W-3	SMOOTH FINISH FRP PANELING	CRANE COMPOSITES	WHITE: EMBOSSED W/ SUFASEAL	EXTEND ABOVE CEILING. DO NOT EXTEND BEHIND TILE WALL BASE.	P-5	PAINT	PAINT	PROFESSIONAL DRYFALL EGGSHELL; BLACK	PAINT			,				FOR TYPES & LOCATIONS.	WALL SHEATHING — REFERTORY TO CONSTRUCTION PLAN	PROJECT NO.
			FINISH; #.90 WHITE (85)	("OR EQUAL" MANUFACTURER & LOOK WILL ALSO BE ACCEPTED).	P-6	PAINT	ULTRA SPEC 500	#1473 GRAY HUSKIE, SATIN	ALL WALLS WITH PAINT			15/				LATICRETE 9235 MOISTURE	FOR TYPES & LOCATIONS.	FSDN_2509
W-4	PAINTED GWB		SEE PAINT COLOR; LEVEL 4 FINISH	. SMOOTH FINISH. REFER TO INTERIOR ELEVATIONS.	P-7	PAINT	SHERWIN-WILLIAMS	SW7069 IRON ORE, FLAT	CEILING & RESTROOM HALL							BARRIER – LAP 12" UP	DUROCK 12" HIGH (TYPICA	SHEET TITLE:
M-2	CHAIRRAIL	LOWES / HOME DEPOT	BLACK (PAINT P-2)	#27215 / #369-594.	ST-1	WOOD STAIN	RUSTOLEUM, KONA				MC					WALL & 12" OVER FLOOR. (RESTROOM WALLS ONLY)	FRP/S.S. J-MOLD	FLOOR FINISH PLAN & FINISH
M-3	CROWN MOLDING	LOWES / HOME DEPOT	BLACK (PAINT P-2)	#82051 / #734-072.	CEIL	ING										SEALED CONC. FLOORING & RUBBER COVE BASE.	KITCHEN FLOOR & 6" COVE BASE SYSTEM —	SCHEDULE
																	REFER TO FLOOR FINISH VEGEND.	SHEET NUMBER:
T-2	CERAMIC WALL TILE	DAL TILE	WHITE, 6"x6"; #D190	DRY WHITE GROUT - UNSANDED #381.	C-2	ACOUSTIC CEILING TILE	USG	COLOR: WHIITE, CLEAN ROOM; 3260 SQ EDGE. CLIMA—PLUS PANELS DXLA GRID										
T-3	CERAMIC WALL TILE	SPARE					I	I								CONCRETE SLAB	-TREMCO VULKEM 116 CAULK UNDER BOTTOM	A1.3
TA-1	CERAMIC WALL TILE	DAL TILE	BLACK, 2"x6" BULLNOSE; #S4269	DRY WHITE GROUT - UNSANDED #381.													TRACK/PLATE.	
										2 WATERP SCALE: N.T.S		DETAIL	@ DEN	MISING W	'ALL	1 TYPICAL WATERPRO	OFING DETAIL	OF







	ELECTRIC		
	LED TROFFER, TYPE AS NOTED	=	DUPLEX RECEPTACLE 18" AFF OR AS NOTED, NEMA 5-20R
	LED TROFFER, TYPE AS NOTED PROVIDE WITH EMERGENCY BALLAST	WP C	WEATHER PROOF DUPLEX RECEPTACLE 18" AFF OR AS NOTED, NEMA 5-20R
	LED TROFFER, TYPE AS NOTED	USB	WEATHER PROOF DUPLEX RECEPTACLE AFF AS NOTED, NEMA 5-20R W/ USB CHARGER
	LED TROFFER, TYPE AS NOTED	=	DUPLEX RECEPTACLE
	PROVIDE WITH EMERGENCY BALLAST	-	ABOVE COUNTER OR AS NOTED, NEMA 5-20R QUAD RECEPTACLE
0	RECESSED CAN FIXTURE, TYPE AS NOTED RECESSED CAN FIXTURE, TYPE AS NOTED	IG IG	18" AFF OR AS NOTED, NEMA 5-20R DUPLEX RECEPTACLE
•	PROVIDE WITH EMERGENCY BALLAST	lG H	18" AFF OR AS NOTED, NEMA 5-20R
-	LED STRIP FIXTURE	9	SPECIAL PURPOSE RECEPTACLE 18" AFF OR AS NOTED, SEE SCHEDULE
Q.	WALL MOUNTED FIXTURE, TYPE AS NOTED	ю/0	WALL / CEILING MOUNTED JUNCTION BOX
\$	PENDANT FIXTURE, TYPE AS NOTED	60/3/1	UNFUSED DISCONNECT SWITCH RATING/POLES/NEMA RATING
•	PENDANT FIXTURE, TYPE AS NOTED	60/3/3R/40	FUSED DISCONNECT SWITCH
***	PROVIDE WITH EMERGENCY BALLAST TRACK LIGHT FIXTURE, TYPE AS NOTED	\ \frac{1}{\dots}	RATING/POLES/NEMA RATING/FUSE SIZE MOTOR
	EMERGENCY LIGHT	 	GROUND
· 4	EXIT/EMERGENCY LIGHT COMBINATION	§ §	TRANSFORMER
9 <u>8</u> <u>8</u>	CEILING MOUNTED EXIT SIGN	M	UTILITY GRADE METER
⊗ • ⊗ • • <u>▼</u>	WALL MOUNTED EXIT SIGN	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
\$	SINGLE POLE SWITCH, 44" AFF	▼	TELEPHONE OUTLET, PROVIDE 4" BOX SINGLE GANG PLASTER RING, 3/4" C ABOVE CEILING
\$ \$	TWO SINGLE POLE SWITCHES GANGED TOGETHER FOR INNER/OUTER CONTROL OF LAMPS, 44" AFF	▽	DATA OUTLET, PROVIDE 4" BOX SINGLE GANG PLASTER RING, 3/4" C ABOVE CEILING
\$\$\$	THREE SINGLE POLE SWITCHES GANGED TOGETHER		TELEVISION/CABLE OUTLET
\$ ₃	44" AFF THREE WAY SWITCH, 44" AFF	•	TELEPHONE OUTLET, PROVIDE 4" BOX
	TWO THREE WAY SWITCHES GANGED TOGETHER	 	FLUSH IN FLOOR, 3/4" C ABOVE CEILING DATA OUTLET, PROVIDE 4" BOX
\$ ₃ \$ ₃	FOR INNER/OUTER CONTROL OF LAMPS, 44" AFF		FLUSH IN FLOOR, 3/4" C ABOVE CEILING
\$ 4	FOUR WAY SWITCH, 44" AFF	•	DOOR HOLD-OPEN DEVICE
\$ D	WALL BOX DIMMER 1000W UNLESS NOTED DIFFERENTLY 44" AFF	T	TRANSFORMER, SEE ONE LINE
\$ _{WP}	WEATHER PROOF SWITCH, 44" AFF	S	SPEAKER STROBE
\$ M	MOTOR RATED SWITCH, 44" AFF OR AS NOTED		HORN
\$os	COMBINATION SWITCH AND OCCUPANCY SENSOR, 44" AFF TYPE WSD OR EQUAL	Ø	PULL STATION
\$ ⊤	DIGITAL TIMER SWITCH, 44" AFF	9 9	FIRE ALARM STROBE, MIN 75 CANDELA CEILING / WALL MOUNT
© _x	CEILING MOUNTED OCCUPANCY SENSOR	-	DUCT MOUNTED SMOKE DETECTOR
••••••••••••••••••••••••••••••••••••••	WALL MOUNTED OCCUPANCY SENSOR, 44" AFF	S	SMOKE DETECTOR
TC	TIME CLOCK	Н	HEAT DETECTOR
LC	LIGHTING CONTACTOR	TS	TAMPER SWITCH
<u> </u>	PHOTO CELL		FLOW SWITCH
	8" CONE SPEAKER IN CEILING		RACEWAY CONCEALED IN WALL OR ABOVE CEILING
	EC TO PROVIDE BLACK SPEAKER 8" CONE SPEAKER IN WALL		
<u>\$</u>	EC TO PROVIDE BLACK SPEAKER		RACEWAY EXPOSED RACEWAY CONCEALED IN FLOOR SLAB, BELOW SLAB OR GRADE
<u> </u>	VOLUME CONTROL		BELOW SLAB OR GRADE, OR UNDER RAISED ACCESS FLOOR
	PLYWOOD EQUIPMENT BACKBOARD 4'X8' UNLESS NOTED OTHERWISE		DENOTES CONDUIT TURNING UP IN PLAN VIEW
CCTV 4	CLOSED CIRCUIT TELEVISION CAMERA		DENOTES CONDUIT TURNING DOWN IN PLAN VIEW
XXXX	SHORT CIRCUIT AVAILABLE CURRENT	٦ -	STUB UP

(NOTE: ALL SYMBOLS SHOWN MAY NOT APPEAR ON DRAWINGS AND ARE USED AS APPLICABLE TO THIS PROJECT)

ABBREVIATIONS

A, AMPS	AMPERES	FLA	FULL LOAD AMPERES	NO	NORMALLY OPEN,
A/C	AIR CONDITIONER	GND	GROUND	NTO	NUMBER
AC	ALTERNATING CURRENT	GALV	GALVANIZED	NTS	NOT TO SCALE
AF	AMPERE FRAME	GRS	GALVANIZED RIGID STEEL	PNL	PANELBOARD
AFF	ABOVE FINISHED FLOOR	GFCI	GROUND FAULT	PVC	POLYVINYL CHLORIDE
AFG	ABOVE FINISHED GRADE		CIRCUIT INTERRUPTER	RGS	RIGID GALVANIZED
AIC	AMPERE	GFI	GROUND FAULT INTERRUPTER	RMC	STEEL CONDUIT
	INTERRUPTING CURRENT	HD	HEAT DETECTOR	RIVIC	RIGID METALLIC
AL	ALUMINUM	HP	HORSEPOWER	RMS	CONDUIT (GALVANIZED)
ANSI	AMERICAN NATIONAL			RNC	ROOT-MEAN-SQUARE
	STANDARDS INSTITUTE	IMC	INTERMEDIATE METAL CONDUIT	KNC	RIGID NON-METALLIC
AWG	AMERICAN WIRE GAUGE	ISC	INTERRUPTING SHORT CIRCUIT	SCA	CONDUIT SHORT CIRCUIT
BC	BARE COPPER	IG	ISOLATED GROUND	SCA	AVAILABLE
BKBD	BACKBOARD	INST	INSTANTANEOUS	OWIDD	
С	CONDUIT	JB	JUNCTION BOX	SWBD	SWITCHBOARD
СВ	CIRCUIT BREAKER	KAIC	KILO (THOUSAND) AMPERES INTERRUPTING CAPACITY	SWGR	SWITCHGEAR
CKT	CIRCUIT	KCMIL		TBD	TO BE DETERMINED
CU	COPPER	KCIVIIL	KILO (THOUSAND) CIRCULAR MILS	TCP	TEMPERATURE CONTROL
DIST	DISTRIBUTION	KV	KILO (THOUSAND) VOLTS	TD	PANEL
DN	DOWN	KVA	KILO (THOUSAND)	TD	TIME DELAY
DP	DISTRIBUTION PANEL	KVA	VOLT-AMPERES	TEL	TELEPHONE
DWG	DRAWING	KW	KILO (THOUSAND) WATTS	TVSS	TRANSIENT VOLTAGE
EB	ENCASED BURIAL	KWH	KILO (THOUSAND) WATTS KILO (THOUSAND) WATT-HOURS		SURGE SUPPRESSION
EC	EMPTY CONDUIT	LFMC	LIQUID-TIGHT FLEXIBLE	TYP	TYPICAL
EEW	ENERGIZED ELECTRICAL WORK	LFIVIC	METAL CONDUIT	UG	UNDERGROUND
EGC	EQUIPMENT GROUNDING	MCB	MAIN CIRCUIT BREAKER	UON	UNLESS OTHERWISE
	CONDUCTOR	MCM	THOUSAND CIRCULAR MILS		UNDERGROUND PULLBOX
ELR	END-OF-LINE RESISTOR	MCCB	MOLDED CASE	V	VOLTS
EWC	ELECTRIC WATER COOLER	MLO	MAIN LUGS ONLY	VA	VOLT-AMPERES
<e></e>	EXISTING	N	NEUTRAL	VFD	VARIABLE
_ <er></er>	EXISTING TO REMAIN	NEC	NATIONAL ELECTRICAL		FREQUENCY DRIVE
<ex></ex>	EXISTING		CODE	WH	WATER HEATER
FA	FIRE ALARM	NESC	NATIONAL ELECTRICAL	WP	WEATHERPROOF
FAA	FIRE ALARM ANNUNCIATOR		SAFETY CODE	WT	WATERTIGHT
FACP	FIRE ALARM CONTROL PANEL	NIC	NOT IN CONTRACT	XFMR	TRANSFORMER
		NL	NIGHT LIGHT	7 (WII)	dator or will

ELECTRICAL SPECIFICATIONS

A. DEFINITIONS:

- . "PROVIDE": FURNISH AND INSTALL, COMPLETE AND READY FOR OPERATION.
- 2. "INSTALL": RECEIVE, MOUNT, AND CONNECT, COMPLETE AND READY FOR OPERATION.
- 3. "FURNISH": SUPPLY, DELIVER TO JOB SITE, PROTECT AND STORE.
- B. WORK INCLUDED: PROVIDE ALL LABOR, TOOLS, MATERIAL, EXCAVATION, BACKFILL, CUTTING, PATCHING, TESTING, ADJUSTING, AND TRADE COORDINATION REQUIRED FOR A COMPLETE AND FULLY OPERATIONAL INSTALLATION, AS DESCRIBED ON THE DRAWINGS OR IN THE SPECIFICATIONS.
- C. CODES, RULES, AND REGULATIONS: COMPLY WITH ALL CODES ENFORCED BY THE LOCAL INSPECTION AUTHORITY, THE EDITION OF THE NATIONAL ELECTRICAL CODE BEING ENFORCED FOR THIS PROJECT BY THE LOCAL INSPECTION AUTHORITY, ALL APPLICABLE LAWS AND ORDINANCE, NFPA FIRE CODES, STANDARD BUILDING CODE. GIVE ALL NECESSARY NOTICES, OBTAIN ALL REQUIRED PERMITS, AND PAY ALL INSPECTION AND OTHER FEES REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER THE WORK.
- D. MATERIALS: ALL MATERIAL SHALL BE NEW, AND SHALL COMPLY WITH THE INDICATED STANDARDS. ALL MATERIAL SHALL BE U/L LABELED OR U/L LISTED. ALL MATERIAL SHALL BE OF A SUITABLE TYPE AND RATING FOR THE INTENDED USE, AND SHALL BE INSTALLED IN CONFORMANCE WITH THE INSTRUCTIONS AND RECOMMENDATIONS OF THE MANUFACTURER.

E. DRAWINGS

- 1. THE DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT SHOW ALL OF THE REQUIRED DETAILS OF THE WORK. ALL MATERIALS CUSTOMARILY CONSIDERED TO BE A PART OF THE ELECTRICAL WORK AND REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION SHALL BE PROVIDED WITHOUT ADDITIONAL COST TO THE OWNER
- 2. THE CONTRACTOR SHALL REFER ALSO TO THE ARCHITECTURAL DRAWINGS AND TO THE DRAWINGS OF ALL OTHER TRADES TO COORDINATE THE ELECTRICAL INSTALLATION. WHERE ELECTRICAL EQUIPMENT IS SHOWN ON ARCHITECTURAL DRAWINGS OR DETAILS, THE EQUIPMENT SHALL BE INSTALLED AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- 3. EQUIPMENT OF OTHER TRADES IS SHOWN SCHEMATICALLY ON THE ELECTRICAL DRAWINGS. THE CONTRACTOR SHALL EXAMINE THE DRAWINGS OF THE TRADE PROVIDING THE EQUIPMENT BEFORE ROUGHING IN THE CONNECTIONS FOR IT. THE CONTRACTOR SHALL CONNECT THE EQUIPMENT WHERE ACTUALLY INSTALLED, INCLUDING WIRING THROUGH ANY LINE VOLTAGE CONTROLLERS, WITHOUT ANY ADDITIONAL COST TO THE OWNER.
- 4. PRIOR TO ROUGHING IN CIRCUITS FOR EQUIPMENT FURNISHED BY OTHER TRADES, AND PRIOR TO RELEASING FOR MANUFACTURE PANELBOARDS, STARTERS OR MOTOR CONTROL CENTERS FEEDING SUCH EQUIPMENT, THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL PROVISIONS BEING PLANNED WITH THE TRADE PROVIDING THE EQUIPMENT AND SUBMIT ANY CONFLICTS IN WRITING TO THE ARCHITECT.
- 5. THE ARCHITECT MAY DIRECT THE RELOCATION OF ANY ELECTRICAL OUTLET, FIXTURE, OR OTHER EQUIPMENT TO A LOCATION WITHIN 10 FEET OF THE LOCATION SHOWN ON THE DRAWINGS AT NO ADDITIONAL COST TO THE OWNER PROVIDED SUCH RELOCATION IS DIRECTED PRIOR TO THE INSTALLATION OF THE OUTLET, FIXTURE OR EQUIPMENT BEING RELOCATED.
- F. SUBMITTAL DOCUMENTS: PRODUCT DATA AND SHOP DRAWINGS SHALL BE SUBMITTED IN SIX COPIES TO THE ARCHITECT FOR REVIEW PRIOR TO THE RELEASE OF THE MATERIAL FOR MANUFACTURE. REVIEW OF SUBMITTALS BY THE ARCHITECT WILL BE ONLY FOR GENERAL CONFORMANCE WITH THE DRAWINGS AND SPECIFICATIONS. REVIEW WILL BE MADE ONLY OF INFORMATION CLEARLY AND SPECIFICALLY INDICATED IN THE SUBMITTAL, AND DOES NOT IMPLY THE ACCEPTABILITY OF DETAILS WHICH ARE NOT SO DESCRIBED IN THE SUBMITTAL. REVIEW OF THE SUBMITTAL DOCUMENTS BY THE ARCHITECT DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO COMPLY WITH ALL REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. SUBMITTAL IS REQUIRED FOR PANELBOARDS AND LOADCENTERS, LIGHT FIXTURES, WIRING DEVICES, FIRE ALARM DEVICES, AND SURFACE ALUMINUM RACEWAY.
- G. AS-BUILT DRAWINGS: AS-BUILT DRAWINGS SHALL BE MAINTAINED AT THE JOBSITE, AND SHALL BE AVAILABLE FOR REVIEW DURING CONSTRUCTION. AS-BUILT DRAWINGS SHALL BE KEPT CURRENT DURING THE COURSE OF CONSTRUCTION OF THE WORK. SUBMIT AS-BUILT DRAWINGS TO THE ARCHITECT AT THE COMPLETION OF THE PROJECT.
- H. TESTING: TEST ALL PARTS OF THE WORK TO VERIFY COMPLIANCE WITH THE DRAWINGS AND SPECIFICATIONS. VERIFY TIGHTNESS OF ALL MECHANICAL AND ELECTRICAL CONNECTIONS. VERIFY INTEGRITY OF ALL WIRING SYSTEMS TO ASSURE CONTINUITY, ABSENCE OF UNINTENTIONAL GROUNDS, AND INTEGRITY OF REQUIRED GROUNDS.
- . CHANGE REQUEST (CHANGE ORDER) APPROVAL: CHANGE REQUESTS WILL NOT BE CONSIDERED UNLESS THE CONTRACTOR'S DETAILED LABOR AND MATERIAL ESTIMATE DESCRIBING THE CHANGE IS SUBMITTED TO THE ARCHITECT ALONG WITH THE CHANGE REQUEST, WITH MATERIAL PRICES AND LABOR UNITS ASSIGNED TO EACH LINE ITEM OF THE ESTIMATE. MATERIAL PRICES SHALL BE THE ACTUAL PRICE PAID BY THE CONTRACTOR FOR MATERIAL PURCHASED OR THE ACTUAL PRICE QUOTED TO THE CONTRACTOR BY THE MATERIAL VENDOR PROPOSED BY THE CONTRACTOR.
- J. COORDINATION WITH THE WORK OF OTHERS: COORDINATE WITH EACH TRADE FURNISHING EQUIPMENT REQUIRING ELECTRICAL SERVICE TO INSURE THAT THE CHARACTERISTICS SHOWN ON THE DRAWINGS FOR THE CIRCUIT SERVING THE EQUIPMENT ARE COMPATIBLE WITH THE REQUIREMENTS OF THE EQUIPMENT BEING FURNISHED. CIRCUIT BREAKERS, FUSES, DISCONNECT SWITCHES AND ASSOCIATED BRANCH CIRCUITS SHOWN ON THE DRAWINGS TO FEED HVAC EQUIPMENT, KITCHEN EQUIPMENT, ELEVATOR MOTORS, AND OTHER EQUIPMENT HAVE BEEN SELECTED BASED UPON THE CHARACTERISTICS OF EQUIPMENT BY ONE MANUFACTURER AND MAY NOT BE CORRECT FOR THE EQUIPMENT BEING PROVIDED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE THE OPERATING CHARACTERISTICS OF THE EQUIPMENT ACTUALLY BEING PROVIDED AND SHALL PROVIDE AT NO ADDITIONAL COST TO THE OWNER CIRCUIT BREAKERS, FUSES, DISCONNECT SWITCHES AND BRANCH CIRCUITS AS REQUIRED BY THAT EQUIPMENT.
- K. EXISTING WORK: THE EXISTING ELECTRICAL INSTALLATION SHALL REMAIN AS-IS AND IN OPERATION EXCEPT WHERE OTHERWISE REQUIRED. GIVE WRITTEN NOTICE OF ANY UNFORESEEN EXISTING CONDITIONS WHICH MAY AFFECT THE WORK. WORK INVOLVING EXISTING SYSTEMS OR EXISTING SPACES SHALL BE ACCOMPLISHED WITH MINIMUM INCONVENIENCE TO THE OWNER, AND SHALL BE DONE IN A MANNER AND TIME APPROVED BY THE OWNER. ANY INTERRUPTIONS SHALL BE DURING TIMES DESIGNATED BY THE OWNER.
- L. DEMOLITION: IN THE AREA SHOWN ON THE ARCHITECTURAL DRAWINGS TO BE DEMOLISHED REMOVE ALL EXISTING CONDUITS, CONDUCTORS, BOXES, FIXTURES, SERVICE ENTRANCE CONDUCTORS, DISTRIBUTION EQUIPMENT, AND ALL OTHER ELECTRICAL EQUIPMENT NOT SHOWN TO REMAIN. UNLESS OTHERWISE INDICATED, MATERIAL BEING REMOVED INCLUDING WIRE, CONDUIT, AND HANGING MATERIALS BEING REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PREMISES. EQUIPMENT NOTED TO REMAIN THE PROPERTY OF THE OWNER SHALL BE STORED ON SITE AS DIRECTED BY THE ARCHITECT. COORDINATE WITH OTHER TRADES AND DISCONNECT MOTORS, HEATERS, OR OTHER EQUIPMENT AS REQUIRED FOR THE DEMOLITION OF OTHER TRADES WORK. CUT OFF ALL IN FLOOR CONDUITS, GRIND SMOOTH WITH FLOOR AND PREPARE FOR PATCHING BY OTHERS. REMOVE CONDUCTORS AND DEVICES FROM WALL AND CEILING OUTLETS AND PREPARE OUTLET FOR PATCHING BY OTHERS. CONTRACTOR SHALL DENOTE ALL DEMOLISHED CIRCUITS ON EXISTING PANEL DIRECTORIES AND NOTE ALL SPARE BREAKERS.

M. BASIC MATERIALS AND METHODS:

- 1. ALL WORK SHALL BE SUPPORTED FROM STRUCTURAL ELEMENTS OF THE BUILDING, EXCEPT CEILING MOUNTED EQUIPMENT SUCH AS LIGHT FIXTURES, DETECTORS, REMOTE LAMPS, ETC. CEILING MOUNTED EQUIPMENT SHALL BE SUPPORTED FROM CEILING STRUCTURAL MEMBERS, INDEPENDENT OF CEILING TILES. SIZE AND SPACING OF SUPPORTS SHALL BE DETERMINED BY THE LOAD TO BE SUPPORTED SUCH THAT THE WORKING LOAD OF SUPPORTS WILL NOT EXCEED A SAFETY FACTOR OF 4:1. PLASTIC ANCHORS ARE NOT ACCEPTABLE. ELECTRICAL WORK SHALL NOT BE SUPPORTED FROM PIPING, DUCTS, OR WORK OF OTHER TRADES.
- 2. PROVIDE ENGRAVED PLASTIC NAMEPLATES FOR ALL SWITCHBOARDS, PANELBOARDS, MOTOR CONTROL CENTERS, STARTERS, DISCONNECTS, PRIMARY SELECTOR SWITCHES, AND TRANSFORMERS. INDICATE EQUIPMENT NAME, CIRCUIT SOURCE AND NUMBER, CIRCUIT SIZE, AMPERE RATING, VOLTAGE AND PHASE. NAMEPLATES SHALL BE BLACK BACKGROUND LAMACOID PLASTIC WITH 0.25" WHITE LETTERS.

- 3. ALL PENETRATIONS OF FIRE RATED WALLS, SLABS, PARTITIONS, AND CEILINGS SHALL BE FIREPROOFED WITH A U.L. LISTED SYSTEM THAT WILL MAINTAIN THE ORIGINAL FIRE RATING OF THE PENETRATED STRUCTURE. ALL FIREPROOFING MATERIALS APPLIED AT ANY ONE PENETRATION SHALL BE THE PRODUCT OF ONE MANUFACTURER AND SHALL BE APPLIED AS DESCRIBED BY THE U.L. FIREPROOFING SYSTEM BEING CONSTRUCTED. FIREPROOFING OF SLEEVES, CABLE TRAYS, TROUGHS, AND NIPPLES TO BE USED FOR LOW VOLTAGE CABLES SHALL BE INDEFINITELY NON-HARDENING AND REMOVABLE WITH COMMON HAND TOOLS.
- 4. BACKBOARDS SHALL BE 8 FT. HIGH BY LENGTH SHOWN ON THE DRAWINGS AND SHALL BE U/L LABELED FIRE TREATED PLYWOOD.
- 5. PROVIDE ALL POWER WIRING AND CONNECTIONS FOR ALL ELECTRICALLY OPERATED EQUIPMENT. POWER WIRING INCLUDES WIRING THROUGH ANY LINE VOLTAGE CONTROL DEVICES, SUCH AS THERMOSTATS AND MANUAL STARTERS. INSTALL ALL STARTERS AND CONTACTORS EXCEPT THOSE FURNISHED AS AN INTEGRAL PART OF THE EQUIPMENT.
- 6. CONNECTIONS TO MOTORS, TRANSFORMERS, AND OTHER VIBRATING EQUIPMENT NOT INSTALLED IN A PLENUM SPACE SHALL BE MADE WITH A SHORT LENGTH OF LIQUIDTIGHT FLEXIBLE CONDUIT, MINIMUM 18", INSTALLED IN A MANNER TO PERMIT MOVEMENT OF EQUIPMENT.
- 7. PERFORM ALL EXCAVATING, BACKFILLING, CUTTING AND REPAIRING REQUIRED FOR INSTALLATION OF ELECTRICAL WORK.
- 8. CONTRACTOR SHALL X-RAY FLOOR SLABS PRIOR TO ALL CORE DRILLINGS.
- 9. 406.12 TAMPER-RESISTANT RECEPTACLES. ALL 15- AND 20-AMPERE, 125- AND 250-VOLT NONLOCKING-TYPE T-ECEPTACLES IN THE AREAS SPECIFIED IN 406.12(L) THROUGH (8) SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES.
- (1) DWELLING UNITS, INCLUD ING ATTACHED AND DETACHED GARAGES AND ACCESSORY BUILDINGS TO DWELLING
- UNITS, AND COMMON AREAS OF MULTIFAMILY DWELLINGS SPECIFIED IN 210.52 AND 550.1 3
 (2) GUEST ROOMS AND GUEST SUITES OF HOTELS, MOTELS, AND THEIR COMMON AREAS
- (3) CHILD CARE FACILITIES
 (4) PRESCHOOLS AND EDUCATION FACILITIES
- (4) PRESCHOOLS AND EDUCATION FACILITIES
- (5) BUSINESS OFFICES, CORRIDORS, WAITING ROOMS AND THE LIKE IN CLINICS, MEDICAL AND DENTAL OFFICES, AND OUTPATIENT FACILI-TIES
 (6) SUBSET OF ASSEMBLY OCCUPANCIES DESCRIBED IN 518.2 TO INCLUDE PLACES OF AWAITING TRANSPORTATION,
- GYMNASIUMS, SKATING RINKS, AND AUDITORIUMS
 (7) DORMITORY UNITS
- (8) ASSISTED LIVING FACILITIES
- 518.2 General Classification.
 (A) EXAMPLES. ASSEMBLY OCCUPANCIES SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:
- ASSEMBLY HALLS, AUDITORIUMS, BOWLING LANES, CLUB ROOMS, CONFERENCE ROOMS, COURTROOMS, DANCE HALLS, DINING AND DRINKING FACILITIES, EXHIBITION HALLS, GYMNASIUMS, MORTUARY CHAPELS, MULTIPURPOSE ROOMS, MUSEUMS, PLACES OF AWAITING, TRANSPORTATION, PLACES OF RELIGIOUS WORSHIP, POOL ROOMS, RESTAURANTS, SKATING RINKS.
- N. CONDUIT: FEEDERS AND BRANCH CIRCUIT HOME RUNS SHALL BE CONSTRUCTED OF EMT WITH ALL STEEL SET-SCREW FITTINGS. CONNECTORS SHALL BE INSULATED THROAT TYPE. PROVIDE METALLIC BUSHINGS WITH PLASTIC INSERTS FOR 3" OR LARGER. CONDUITS FEEDING OR CONNECTING TO EQUIPMENT PROVIDED BY OTHER TRADES SHALL NOT BE INSTALLED UNTIL SUCH EQUIPMENT IS INSTALLED OR UNTIL SPECIFIC ROUGH-IN INSTRUCTIONS ARE PROVIDED BY THE TRADE PROVIDING THE EQUIPMENT. UNLESS OTHERWISE INDICATED, CONDUITS SHALL BE CONCEALED. RACEWAYS INSTALLED IN OR UNDER SLABS, ON GRADE, OR AS EXTERIOR DUCT BANKS SHALL BE PVC COATED RMC. RUN EXPOSED CONDUITS PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. TWO OR MORE RACEWAYS RUN TOGETHER SHALL BE INSTALLED ON GANG TRAPEZE TYPE HANGERS. SUCH RACEWAYS ASSEMBLIES SHALL BE RUN PARALLEL OR PERPENDICULAR TO STRUCTURAL ELEMENTS. CONDUITS EMBEDDED IN SLABS SHALL HAVE A MINIMUM OF 1" COVER OF CONCRETE ON ALL SIDES. OUTSIDE DIAMETER OF CONDUIT SHALL NOT EXCEED 1/3 OF THE SLAB THICKNESS, AND SHALL NOT BE LARGER THAN 1 1/4". PROVIDE 0.25" NYLON PULL TAPE IN ALL EMPTY CONDUITS. BRANCH CIRCUITS MAY UTILIZE TYPE MC ARMORED CABLE ASSEMBLY WITH COPPER CONDUCTORS AND FULL SIZE EQUIPMENT GROUNDING CONDUCTORS FOR INDIVIDUAL DROPS TO DEVICES. TYPE MC CABLE SHALL BE SUPPORTED A 48" INTERVALS AND SHALL NOT LAY ON THE CEILING GRID OR INTERFERE WITH THE REMOVAL OF CEILING SIZE EQUIPMENT GROUNDING CONDUCTORS.
- O. CONDUCTORS: ALL BUILDING WIRE SHALL BE 600 VOLT RATED THHN OR THWN COPPER, STRANDED FOR SIZES \$8AWG AND LARGER, SOLID FOR SIZES 10 AND SMALLER UNLESS APPLIED FOR CONTROL. ALL BUILDING WIRE AND SPECIAL CABLES FOR SYSTEMS SHALL BE INSTALLED IN A RACEWAY. ALL WIRE AND CABLE SHALL BE DELIVERED TO THE JOBSITE IN ORIGINAL UNBROKEN PACKAGES, CARTONS OR REELS, WITH THE MANUFACTURERS NAME, UL LABEL, AND CHARACTERISTICS OF THE PRODUCT PLAINLY VISIBLE. ALL WIRE AND CABLE SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA. WIRES SHALL BE COLOR CODED AS FOLLOWS (A,B,C,N,G): 120/208-BLACK, RED, BLUE, WHITE, GREEN; 480/277 BROWN, ORANGE, YELLOW, GRAY, GREEN. SPLICES SHALL BE COMPRESSION TYPE. CONTROL CONDUCTORS SHALL BE TERMINATED WITH INSULATED CONNECTORS, T&B STAKON. 120 VOLT CIRCUITS WITH HOMERUN LENGTH OVER 100 FEET AND 277 VOLT CIRCUITS WITH A HOMERUN LENGTH OVER 200 FEET SHALL HAVE #10 MINIMUM HOMERUN CONDUCTORS. ALL THREE PHASE BRANCH CIRCUITS WITH A COMMON NEUTRAL SHALL HAVE #10 MINIMUM NEUTRAL.
- P. BOXES: OUTLET BOXES SHALL BE SHEET STEEL, MINIMUM 4" SQUARE, MINIMUM 1.5" DEEP, WITH PLASTER RING IN PLASTER OR BRICK CONSTRUCTION. OUTLETS BOXES IN POURED CONCRETE SHALL BE CONCRETE RINGS. MASONRY BOXES SHALL BE USED IN MASONRY OR TILE CONSTRUCTION. OUTLET BOXES FOR SURFACE ALUMINUM RACEWAY SHALL BE 4-11/16 WITH PLASTER RINGS ORIENTED HORIZONTALLY. BOXES SHALL BE SECURELY ANCHORED IN PLACE, AND SHALL BE SUPPORTED INDEPENDENT OF THE RACEWAY SYSTEM. PULL BOXES SHALL BE GALVANIZED SHEET STEEL, MINIMUM 12 GAUGE, WITH SCREW COVERS, AND WELDED CONSTRUCTION. WELDS SHALL BE COLD GALVANIZED. USING PERMANENT WATER PROOF WIDE BLACK MARKER, CLEARLY LABEL COVER OF ALL BRANCH CIRCUIT JUNCTION AND PULL BOXES WITH PANEL AND CIRCUIT NUMBER OF CIRCUITS CONTAINED IN OR PASSING THROUGH THE BOX. BRANCH CIRCUIT AND FEEDER JUNCTION AND PULL BOXES USED WITH EMERGENCY FEEDERS AND CIRCUITS SHALL BE PAINTED RED. PROVIDE ENGRAVED LAMINATED PLASTIC LABEL ON COVER OF EACH FEEDER PULL OR JUNCTION BOX INDICATING FEEDER DESIGNATION, SOURCE, LOAD, AND VOLTAGE.
- Q. WIRING DEVICES: SWITCHES FOR LIGHTING CIRCUITS SHALL BE 120/277 VOLT, 20 AMP, A.C. ONLY, QUIET TYPE, WITH GROUND BONDING SCREW, SPECIFICATION GRADE. MOMENTARY CONTACT SWITCHES SHALL BE SINGLE POLL DOUBLE THROW, CENTER OFF GE #5935 OR EQUAL. DUPLEX RECEPTACLES SHALL BE 15 AMP HUBBELL 5262 OR EQUAL. DEDICATED DUPLEX RECEPTACLES SHALL BE 20AMP HUBBELL IG5362 OR EQUAL. SPECIAL RECEPTACLES SHALL BE OF SIMILAR CONSTRUCTION. FACE PLATES SHALL BE SMOOTH NYLON OR THERMOSET PLASTIC. ADJACENT OUTLETS SHALL BE INSTALLED IN MULTI-GANG BOXES WITH A SINGLE MULTI-GANG FACE PLATE. RECEPTACLES CONNECTED TO AN EMERGENCY CIRCUIT SHALL BE RED. COORDINATE COLOR OF DEVICES AND FACEPLATE WITH ARCHITECT.
- R. GROUNDING: ALL FEEDERS AND BRANCH CIRCUITS SHALL BE PROVIDED WITH INSULATED GREEN EQUIPMENT GROUNDING CONDUCTOR.
- S. LIGHTING: SPARE FLUORESCENT LAMPS SHALL MATCH BUILDING STANDARD UNLESS NOTED OTHERWISE. INCANDESCENT LAMPS SHALL BE 130VOLT. NEW BALLASTS SHALL BE SOILD STATE ELECTRONIC. EXIT FIXTURES SHALL MATCH BUILDING STANDARD. FIXTURE LOCATIONS SHALL BE AS SHOWN ON THE REFLECTED CEILING PLAN. PROVIDE LAY-IN FIXTURES WITH TWO REMOVABLE CLIPS ATTACHING FIXTURE TO CEILING GRID. FLANGED FIXTURES SHOWN TO BE INSTALLED IN CONTINUOUS ROWS SHALL NOT HAVE INTERMEDIATE FLANGES. ALL PENDANT FIXTURES SHALL BE MOUNTED TO STRUCTURE. SEISMIC SUPPORT WIRES AND/OR COMPRESSION STRUTS FOR LAY-IN FIXTURES SHALL BE SUBJECT TO LOCAL AHJ LATEST REQUIREMENTS.
- T. PANELBOARDS: DEAD FRONT PANEL CONSTRUCTION WITH SEPARATELY MOUNTED INTERIOR TRIM. MAIN AND BRANCH DEVICES SHALL BE BOLT-ON. MULTI-POLE BREAKERS SHALL BE COMMON TRIP. WIDTH SHALL NOT EXCEED 22" FOR PANELBOARD AND ENCLOSURE SHALL MATCH BUILDING STANDARD. PROVIDE GROUND BUS IN PANELBOARD AND PROVIDE DEVICE MOUNTING HARDWARE WHERE A SPACE IS SCHEDULED. PANEL AND OCPD SHORT CIRCUIT RATINGS SHALL BE AT LEAST 10% GREATER THAN AVAILABLE SHORT CIRCUIT CURRENT AT PANELBOARD.
- U. DRY-TYPE TRANSFORMERS: TRANSFORMERS SHALL BE DRY-TYPE, ENCLOSED, SELF-COOLED, VENTILATED TYPE, DEAD-FRONT DRIP PROOF. PRIMARY AND SECONDARY TAPS SHALL BE ACCESSIBLE FROM THE FRONT. TRANSFORMERS SHALL MEET OR EXCEED BUILDING STANDARD TRANSFORMERS SPECIFICATIONS. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN THE PRIMARY FEED TO THE TRANSFORMER, SUPPLEMENTAL GROUND TO NEAREST ACCESSIBLE PRIMARY STRUCTURAL MEMBER OR EQUIPMENT ROOM GROUND BUS BAR. SIZE PER NEC AND RUN IN CONDUIT WITH BOND BUSHING AT EACH END. NEUTRAL AND GROUNDING CONDUCTOR SHALL BE BONDED TO ENCLOSURE.



Engineering

54 South Ave. SE

Marietta, GA 30060

404-800-7988

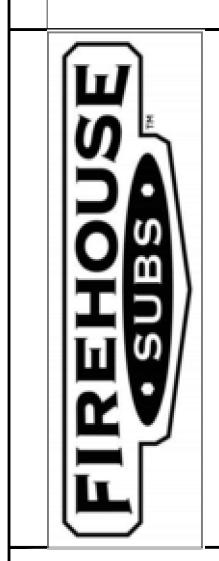
info@convergeengineers.com

PLAN DATES

REV. SUBMISSION

10/01/2025 PROGRESS SUBMISSION

10/10/2025 BID & PERMIT SUBMISSION



65 SADLER ROAD DUNN, NORTH CAROLINA

SEAL:



SCALE:

PROJECT NO.
FSDN_2509

SHEET TITLE:
ELECTRICAL
LEGEND
& SPECS

SHEET NUMBER:

E0.0

ELE	ECTRICAL LEGEND
=	DUPLEX RECEPTACLE 18" AFF OR AS NOTED, NEMA 5-20R
WP	WEATHER PROOF DUPLEX RECEPTACLE 18" AFF OR AS NOTED, NEMA 5-20R
USB	WEATHER PROOF DUPLEX RECEPTACLE AFF AS NOTED, NEMA 5-20R W/ USB CHARGER
-	DUPLEX RECEPTACLE ABOVE COUNTER OR AS NOTED, NEMA 5-20R
+	QUAD RECEPTACLE 18" AFF OR AS NOTED, NEMA 5-20R
lG H	DUPLEX RECEPTACLE 18" AFF OR AS NOTED, NEMA 5-20R
P	SPECIAL PURPOSE RECEPTACLE 18" AFF OR AS NOTED, SEE SCHEDULE
Ю/Ф	WALL / CEILING MOUNTED JUNCTION BOX
60/3/1	UNFUSED DISCONNECT SWITCH RATING/POLES/NEMA RATING
60/3/3R/40 F	FUSED DISCONNECT SWITCH RATING/POLES/NEMA RATING/FUSE SIZE
•	TELEPHONE OUTLET, PROVIDE 4" BOX SINGLE GANG PLASTER RING, 3/4" C ABOVE CEILING
∇	DATA OUTLET, PROVIDE 4" BOX SINGLE GANG PLASTER RING, 3/4" C ABOVE CEILING
₩	TELEVISION/CABLE OUTLET
	TELEPHONE OUTLET, PROVIDE 4" BOX FLUSH IN FLOOR, 3/4" C ABOVE CEILING
	DATA OUTLET, PROVIDE 4" BOX FLUSH IN FLOOR, 3/4" C ABOVE CEILING
TC	TIME CLOCK
LC	LIGHTING CONTACTOR
©	PHOTO CELL

GFCI NOTE:

ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS IN KITCHENS AND FOOD PREP AREAS SHALL USE GFCI BREAKER TYPE. GFCI BREAKERS SHALL BE INSTALLED IN ACCORDANCE WITH 2020 NEC ARTICLE 210.8.

ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE-PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS IN RESTROOMS, WITHIN 6 FEET FROM A SINK, OR ON EXTERIOR SHALL BE INSTALLED IN ACCORDANCE WITH 2020 NEC ARTICLE 210.8 AND BE READY ACCESSIBLE. FOR EQUIPMENT THAT WOULD HAVE TO BE MOVED TO RESET THE RECEPTACLE PER THE NEC DEFINITION. A GFCI BREAKER SHALL BE UTILIZED IN LIEU OF A RECEPTACLE.

POWER AND SYSTEMS NOTES:

- CONFIRM ALL RECEPTACLES AND DATA MOUNTING HEIGHTS WITH OWNER PRIOR TO ROUGH-IN. ALL CONDUCTORS ARE COPPER AND #12AWG OR LARGER UNLESS NOTED OTHERWISE.
- 2. RECEPTACLES AT P.O.S. SHALL BE SURGE PROTECTED. PROVIDE SURGE PROTECTION. SURGE PROTECTOR SHALL BE EATON, 120/208V, 100KA NOM, DISCHARGE AMPS 20KA, 200KA AMPS SC RATED OR APPROVED EQUAL.
- 3. PROVIDE WORKING CLEARANCE IN FRONT OF PANELS PER N.E.C. COORDINATE FINAL LOCATION WITH OWNER.
- 4. DIGITAL MENU BOARD RECEPTACLES INSTALLED AT 90" AFF. VERIFY FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- 5. G.C TO FIELD VERIFY EXISTING BREAKER POSITIONS IN EXISTING PANEL "A" FOR ALL EXISTING EQUIPMENT CONNECTIONS.
- 6. NOT USED
- 7. G.C RESPONSIBLE FOR ALL DATA RUNS AND TERMINATIONS FOR THIS LOCATION FOR POS VENDOR.
- 8. G.C. SHALL VERIFY AND COORDINATE ALL ELECTRICAL REQUIREMENTS FOR WALK-IN FREEZER AND COOLER WITH OWNER AND VENDOR PRIOR ROUGH-IN
- 9. G.C SHALL VERIFY ALL ELECTRICAL REQUIREMENTS PRIOR ROUGH-IN.

POS DATA AND POWER NOTES:

P.O.S. STATION:

- CONTRACTOR TO PROVIDE (1) DEDICATED, ISOLATED GROUND RECEPTACLE (ORANGE) FOR EACH P.O.S. STATION.
- CONTRACTOR TO PROVIDE (1) J-BOX AT EACH P.O.S. STATION W/ (3) TERMINATED CAT-5 CABLES IN EACH (1 POS, 1 VERIFONE, 1-EXTRA)
- CONTRACTOR TO PROVIDE (1) J-BOX IN P.O.S. CABINET W/ (1) CAT-5
 CABLE, TERMINATED FOR VOICE.
- CONTRACTOR TO PROVIDE (1) DUPLEX RECEPTACLE IN P.O.S. CABINET FOR PHONE BASE, ETC.

LINE PRINTER:

• CONTRACTOR TO PROVIDE (1) DEDICATED, ISOLATED GROUND RECEPTACLE AND (1) J-BOX W/ ONE TERMINATED CAT-5 CABLE AT LINE PRINTER.

BUMP SECTION:

• CONTRACTOR TO PROVIDE (1) DEDICATED, ISOLATED GROUND RECEPTACLE AND (1) J-BOX W/ (1) TERMINATED CAT-5 CABLE AT END OF LINE FOR BUMP SCREEN.



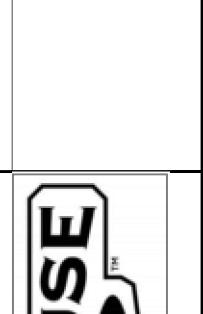
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Marietta, GA 30060
404-800-7988
info@convergeengineers.com

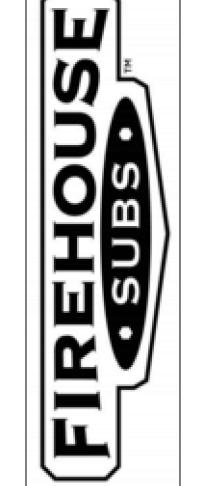
PLAN DATES

REV. SUBMISSION 10/01/2025

PROGRESS SUBMISSION

10/10/2025
BID & PERMIT SUBMISSION





65 SADLER ROAD DUNN, NORTH CAROLINA

SEAL:



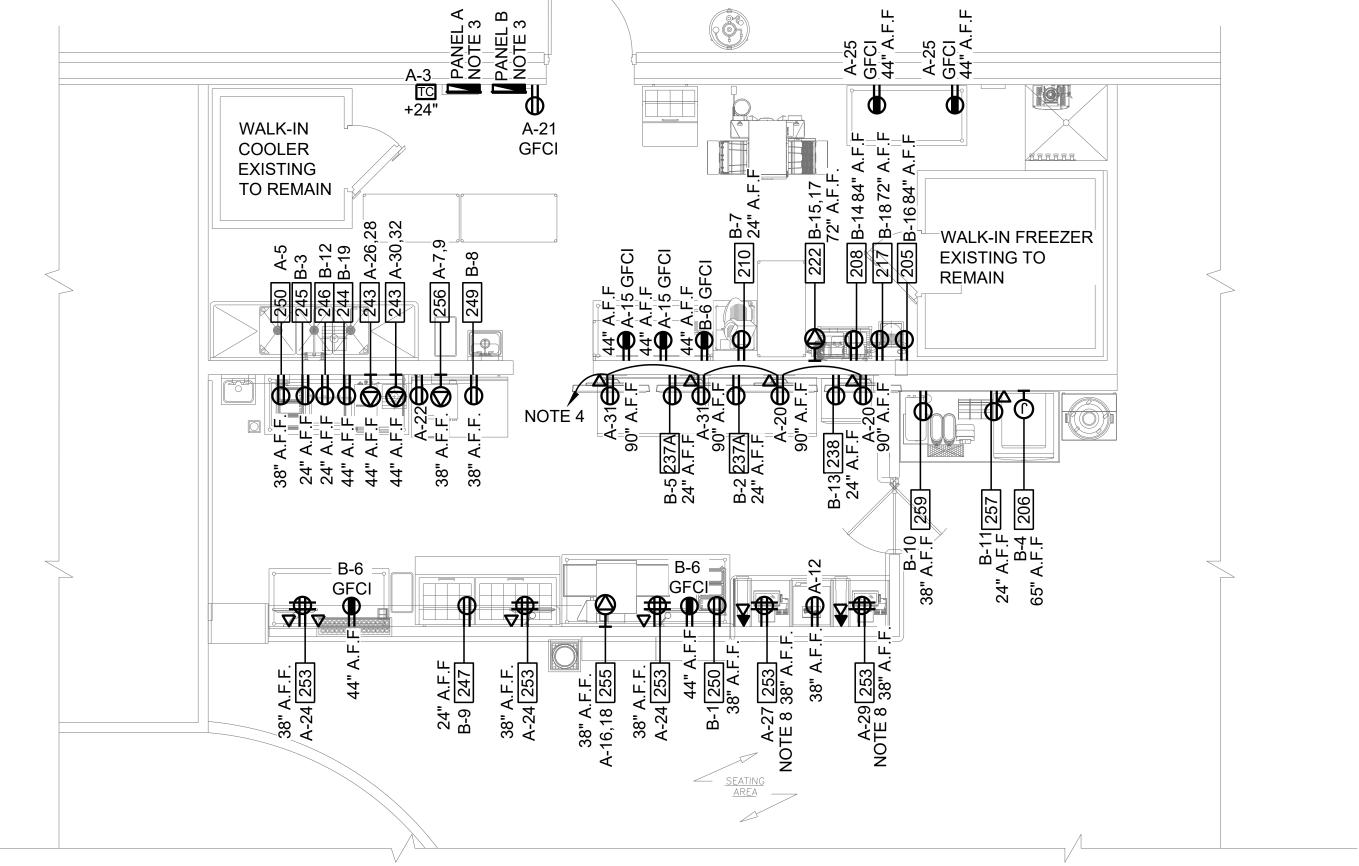
SCALE:

PROJECT NO.
FSDN_2509

SHEET TITLE:
ELECTRICAL
POWER PLAN

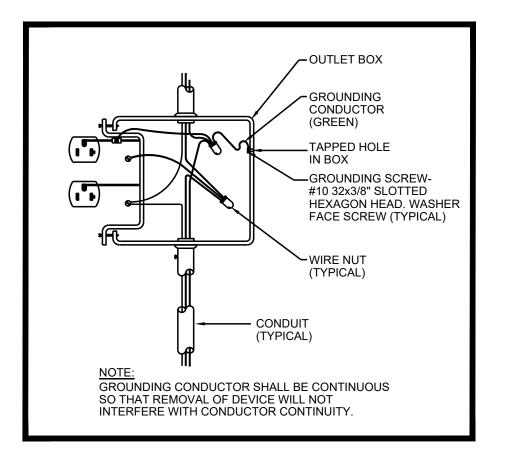
SHEET NUMBER:

E1.0



ELECTRICAL POWER PLAN

1/4" = 1'-0"



GROUNDING RECEPTACLE DETAIL N.T.S

#	DESCRIPTION	QTY,	MANUFACTURER	MODEL NUMBER	REMARKS	BY OWNER	BY PURVEYOR	FABRICATED	KEC	BY G.C.
100	POS COUNTER	1	MILLWORK CONTRACTOR	CUSTOM	INSTALL BY G.C.			x		П
101	LAMINATED COUNTER TOP	1 LOT	MILLWORK CONTRACTOR	CUSTOM	INSTALL BY G.C.; G.C. TO PROVIDE FIELD DIMNSIONS			х		
102	36" DOUBLE ACTION SWING GATE	1	ELLIASON	CAFE SWING GATE; COLOR: RED	INSTALL BY G.C.			x		
103	RAPID RESCUE TO GO SHELF	1	MILLWORK CONTRACTOR	CUSTOM	INSTALL BY G.C.			х		
104	PICKLE BUCKET DISPLAY	1	MILLWORK CONTRACTOR	CUSTOM	INSTALL BY G.C.			х		
105	TRASH RECEPTACLE & BIN FRAME	1	MILLWORK CONTRACTOR	CUSTOM	INSTALL BY G.C.			х		П
107	CHIP STAND	2	FRITO LAY	TBD	INSTALL BY G.C.		x		\vdash	Н
108	MENU BOARD	1	B&J PEERLESS	CUSTOM					х	П
109	LTO BOARD	4	B&J PEERLESS	CUSTOM					х	П
111	SELF-SERVE ORDER KIOSK	0	TOAST	#		x			Н	Н
112	HOT SUACE RACK	1	B&J PEERLESS	CUSTOM					Х	
202	SAFE	1	BY OWNER	TBD	115V FOR LIGHTS AND DOOR HEATER, 15 AMP BREAKER	x				
205	STEAMER WATER FILTRATION SYSTEM (VZN)	1	ANTUNES	VZN-541HC					х	
206	ICE MACHINE	1	HOSHIZAKI	440-KM520MAJ					х	口
208	ICE MACHINE FILTER	1	ECOLAB	9320-3887	SCS50 PLUMBER TO MOUNT FILTER TO WALL		x			
210	SLICER	1	BIZERBA	GSP HGi			X			Ш
211	SLICER TABLE	1	BIZERBA	SLICER-TABLE-1			X	\vdash	<u> </u>	Н
213	SLIM JIM TRASH RECEPTACLE	6	CARLISLE	CARL3402303				\vdash	Х	Н
215C48	24×48 SHELVING UNIT	2	SKIBEE	SKIBSKIWGR2448CWP	5 TIERS, 74" POSTS	$ldsymbol{ld}}}}}}$		Ш	X	Ш
215E48	18X48 SHELVING UNIT W/ MTG BRACKETS	2	SKIBEE		5 TIERS, 74" POSTS				x	Ш
217	FREESTYLE SYRUP RACK & PUMP	1	COCA-COLA	45897	EXTERIOR		x			Ш
218	CO2 TANK	1	HELGET	CARBO MIXER 550	PLACEMENT	×				Ш
222	BOOSTER PUMP	1	LITTLE GIANT	25LGIL1100N41	REFER TO PLUMBING					×
222A	TANKLESS INSTANT HOT WATER HEATER	1	TBD	TBD	DRAWINGS					×
236	HAND SINK	1	SKIBEE	SKIHS17SS	T&S FAUCET INCLUDED				x	
237A	REFRIGERATOR, TWO DOOR	2	TRUE	T-49-HC	W/ STACKING KIT				х	П
238	BOTTLES TO GO COOLER	1	COCA-COLA	TBD			х			Ш
239	WORK TABLE, 30"x60"	2	SKIBEE	SKIBSKIWT3060ESCC		\vdash	\vdash	Ш	X	Н
242	STEAMER TABLE COUNTERTOP DRAWER STEAMER	2	ANTUNES ANTUNES	7000-2222 IS-1000		\vdash	\vdash	\vdash	x	Н
244	STEAM WATER SOFTENER SYSTEM	1	ANTUNES	WSS-0618-ENC		\vdash			X	H
245	COUNTERTOP CONVECTION OVEN	1	CADCO	OV-003			х			П
246	MICROWAVE	1	AMANA	RCS10DSE					х	\Box
247	72" REFRIGERATED PREP TABLE (ATC)	1	TRUE	TSSU7230MB-HC				L	x	$\lfloor \rfloor$
249	FREEZER, WORK TOP - 48"	1	TRUE	TWT-48F					х	
250	COUNTERTOP WARMER	2	NEMCO	NEMC6055A					X	\Box
251	CUP DISPENSER	6	SAN JAMAR	C2410C		H	\vdash	$\vdash \vdash$	Х	$\vdash \vdash$
253 254	POS & KDS ORDER SYSTEM WORK TABLE 36"x84"	1 LOT	BY OWNER EAGLE	 T3684B		×		\vdash	х	\vdash
255	COUNTERTOP CONVECTION TOASTER	1	LINCOLN	2051		\vdash		П	x	М
256	COUNTERTOP VENTLESS FRYER	1	PERFECT FRY	PFA-730	50 AMP BREAKER	Н		П	х	Н
257A	COUNTERTOP SODA MACHINE	1	LANCER	SENSATION-30			х			
257B	ICE MACHINE STACKING KIT	1	COCA-COLA	DF150			х			
258	METAL CONDIMENT COUNTER	1	MILLWORK CONTRACTOR	CUSTOM	STAINLESS COUNTERTOP; INSTALLED BY G.C.			x		
259	TEA BREWER	1	BUNN	52000.03000		oxdot		\Box	X	Ш
260 261	TEA DISPENSER CONDIMENT CONTAINER	1	BUNN SAN JAMAR	SELF SERE 9100 B4093L		\vdash	\vdash	$\vdash \vdash$	X	$\vdash \vdash$
1 201					i e		4 '	لــــــا		السا
262	CONDIMENT TRAY	1	DISPENSER RITE	VSCH-6BT					l x l	

EXISTING EQUIPMENT SCHEDULE

#	DESCRIPTION	QTY,	MANUFACTURER	MODEL NUMBER	REMARKS	BY OWNER	BY PURVEYOR	FABRICATED	KEC	BY G.C.
E201	S/S WORK TABLE - EXISTING TO REMAIN	1	ETR	ETR	ETR					
E202	CONVEYOR TOASTER — EXISTING TO REMAIN	1	ETR	ETR	ETR					
E203	REFRIGERATED WORK TABLE – EXISTING TO REMAIN	1	ETR	ETR	ETR					
E204	METRO SHELVING - EXISTING TO REMAIN	8	ETR	ETR	ETR					
E205	DUNNAGE RACK - EXISTING TO REMAIN	1	ETR	ETR	ETR					
E206	3-COMP SINK - EXISTING TO REMAIN	1	ETR	ETR	ETR					
E207	HANDSINK W/ SIDE SPLASHGUARDS – EXISTING TO REMAIN	1	ETR	ETR	ETR					
E208	METRO WALL SHELF	2	ETR	ETR	ETR					
E219	MOP SINK - EXISTING TO REMAIN	1	ETR	ETR	ETR					
E219A	MOP RACK - EXISTING TO REMAIN	1	ETR	ETR	ETR					
E220	MOP SINK FAUCET - EXISTING TO REMAIN	1	ETR	ETR	ETR					
E223	WALK-IN COOLER	1	ETR	ETR	ETR					
E223A	COOLER REFRIGERATION	1	ETR	ETR	ETR					
E223B	WALK-IN FREEZER	1	ETR	ETR						
E223C	FREEZER REFRIGERATION	1	ETR	ETR	ETR					



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Marietta, GA 30060
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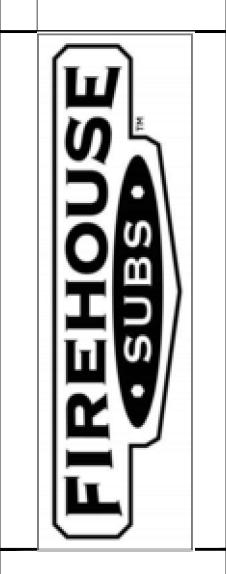
PLAN DATES

REV. SUBMISSION

10/01/2025

PROGRESS SUBMISSION

10/10/2025 BID & PERMIT SUBMISSION



65 SADLER ROAD DUNN, NORTH CAROLINA

SEAL:



SCALE:

PROJECT NO.
FSDN_2509

SHEET TITLE:
EQUIPMENT
SCHEDULE AND
DETAILS

SHEET NUMBER:

E1.1

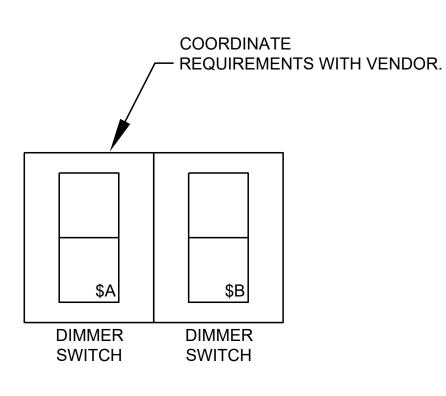
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		LIGHTING	SCHEDULE	
MARK	SYMBOLS	MFR	MFR PART #	DESCRIPTION
A1		ABL-LITHONIA LIGHTING	EPANL 24 40L 40K	LITHONIA 4350 LUMENS 2X4 FLAT PANEL LED 40K
A2		ABL-LITHONIA LIGHTING	EPANL 24 40L 40K E10WCP	LITHONIA 4350 LUMENS 2X4 FLAT PANEL LED 40K NITE LIGHT
B1	\odot	SATCO / NUVO	SF76-663	RED PENDANT LIGHT LED
D1	RC	LITHONIA LIGHTING	LDN6-35-15-L06-AR-LSS-MVOLT DRIVER-GZ10	RECESSED DOWN LIGHT FINISH CLEAR
C1 C2 C2A		JUNO	R4BL/48BL	BLACK 4FT/8FT ALPHA TRACK SECTION JUNO
EX	₹	PROGRESS LIGHTING	PECUE-UR-30RC	90 MINUTE BATT. BACKUP POWER
EM	¥	PROGRESS LIGHTING	PE2EU-30	90 MINUTE BATT. BACKUP POWER
EX2	◆	PROGRESS LIGHTING	PERHC-DB-OD-30	90 MINUTE BATT. BACKUP POWER

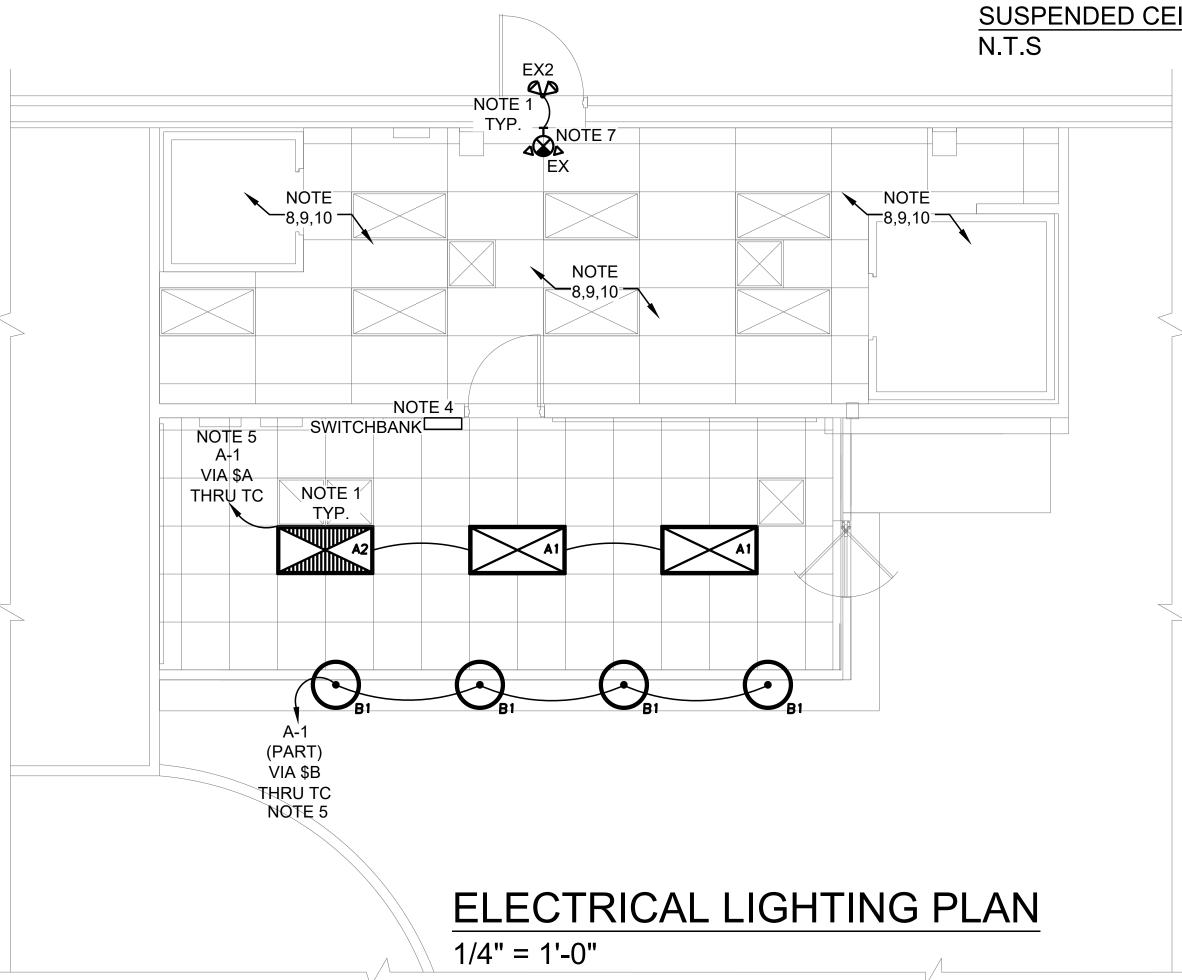


NOTE 3

TIME CLOCK DETAIL N.T.S



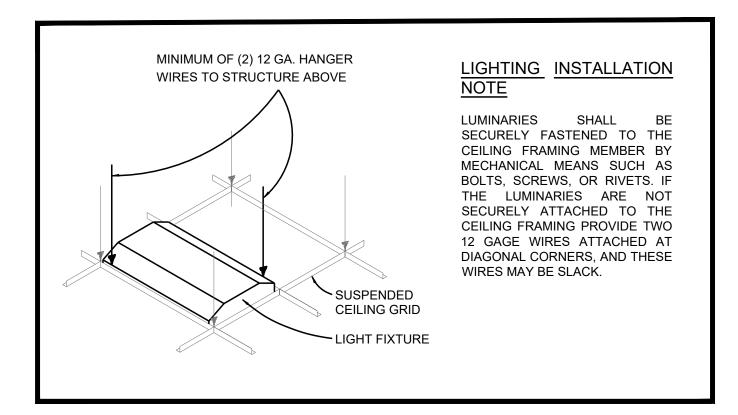
SWITCHBANK DETAIL N.T.S



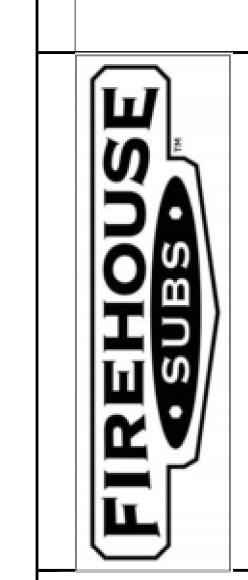
LIGHTING NOTES:

- 1. PROVIDE NON-CONTACTORED, NON-SWITCHED HOT CONDUCTOR OF SAME CIRCUIT TO EACH EMERGENCY LIGHTING FIXTURE, EXIT SIGN AND NIGHT LIGHT.
- 2. PROVIDE DISCONNET SWITCH UP HIGH AT SIGN FOR SIGNAGE CIRCUITS AS REQUIRED BY NEC 600. SIGNS SHALL BE RUN THROUGH A PHOTOCELL. SEE DETAIL. COORDINATE REQUIREMENTS AND MOUNTING LOCATION WITH OWNER AND LANDLORD. (NOT USED)
- 3. PROVIDE NEW TIME CLOCK. COORDINATE WITH OWNER PRIOR TO INSTALLATION.
- 4. PROVIDE SWITCHBANK FOR LIGHTING. PROVIDE DIMMERS FOR DINING FIXTURES, TOGGLES FOR NOT DIMMER FIXTURES, AND A MOTOR RATED SWITCH FOR THE FANS. GC TO PROVIDE KEY BOX FOR SWITCHBANK. COORDINATE FINAL LOCATION WITH OWNER PRIOR INSTALLATION.
- 5. TO SWITCHBANK. SEE DETAIL IN THIS SHEET.
- 6. FIXTURE PROVIDED WITH WALK-IN COOLER/FREEZER. CONTRACTOR TO PROVIDE POWER TO COOLER AS SPECIFIED IN KITCHEN EQUIPMENT SCHEDULE (WHEN APPLICABLE).
- 7. CONNECT EMERGENCY LIGHTING TO EXISTING LIGHTING CIRCUIT FEEDING AREA WHEN APPLICABLE.
- 8. ALL LIGHTING IS EXISTING TO REMAIN.
- 9. LIGHTING FIXTURES IN THIS AREA ARE TO BE RE-USED AND FITTED WITH LED LAMPS AND BALLASTS. GC TO COORDINATE WITH OWNER AND LIGHTING VENDOR PRIOR TO BIDDING. GC TO ENSURE FIXTURES ARE IN CLEAN WORKING CONDITION PRIOR TO BIDDING.

10. PROVIDE EMERGENCY LIGHTING IN EXISTING AREAS IN COMPLIANCE WITH CODE WHERE REQUIRED.



SUSPENDED CEILING LIGHTING SUPPORT DETAILS



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54 South Ave. SE Marietta, GA 30060

404-800-7988 info@convergeengineers.com

PLAN DATES

PROGRESS SUBMISSION

10/10/2025 BID & PERMIT SUBMISSION

REV. SUBMISSION

10/01/2025

65 SADLER ROAD DUNN, NORTH CAROLINA

SEAL:



SCALE:

PROJECT NO.
FSDN_2509

SHEET TITLE:
ELECTRICAL
LIGHTING PLAN

SHEET NUMBER:

E2.0

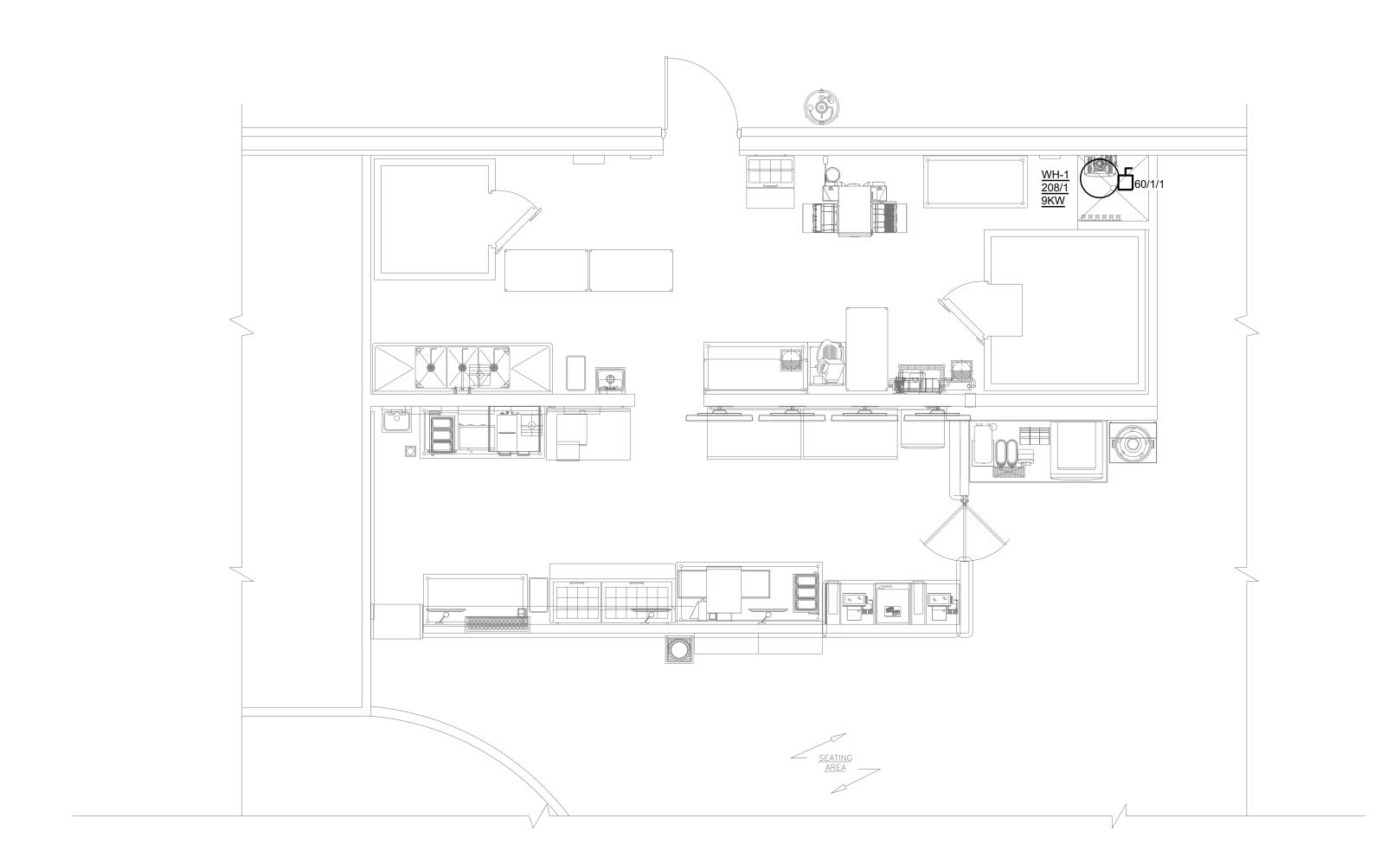
MECHANICAL NOTES:

 COORDINATE WITH MECHANICAL CONTRACTOR ON ALL MECHANICAL EQUIPMENT PURCHASED PRIOR TO INSTALLATION OF ELECTRICAL DISTRIBUTION. IF EQUIPMENT PURCHASED DIFFERS FROM WHAT IS SHOWN ON THESE PLANS, PROVIDE MANUFACTURER RECOMMNEDED FEEDER, CONDUIT, DISCONNECT, AND OVERCURRENT PROTECTION.

MECHANICAL EQUIPMENT SCHEDULE															
												DISC	CONNECT	(NOTE 1)	
EQUIPMENT NAME	VOLTAGE	PHASE	НР	KW	KW / POLE	FLA MCA	МОСР	BREAKER AMPACITY	PANEL	FEEDER	SIZE	POLES	FUSE SIZE	ENCLOSURE	CONTROL
WH-1	208	1			4.50		60	60	A-11,13	2 # 4 ,1# 10 G- 1 "C.	60	2	NF	NEMA 3R	BY DIVISION 26

NOTES:

1. DISCONNECT SWITCH IS NOT REQUIRED IF UNIT IS PROVIDED WITH DISCONNECT OR IF UNIT HAS CORD/PLUG AND RECEPTACLE.



MECHANICAL POWER PLAN

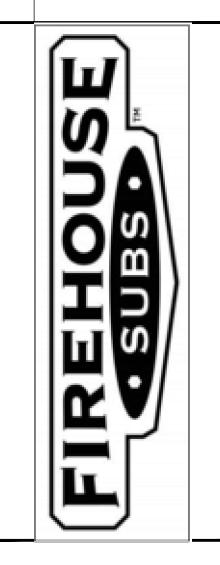
1/4" = 1'-0"



PLAN DATES

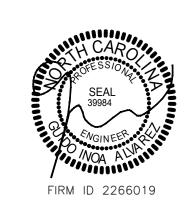
REV. SUBMISSION
10/01/2025
PROGRESS SUBMISSION

10/10/2025 BID & PERMIT SUBMISSION



65 SADLER ROAD DUNN, NORTH CAROLINA

SEAL:



SCALE:

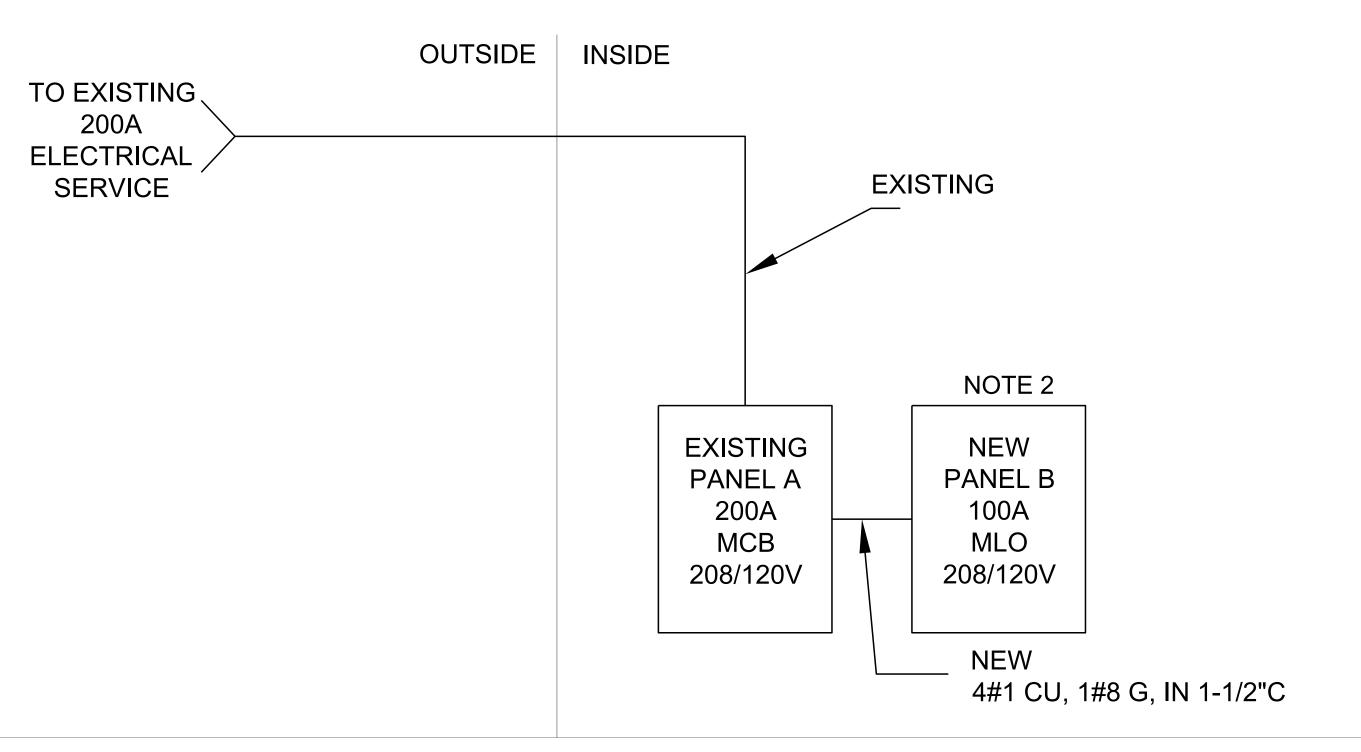
PROJECT NO.

FSDN_2509

SHEET TITLE:
MECHANICAL
POWER PLAN

SHEET NUMBER:

E3.0



RISER DIAGRAM N.T.S.

LOAD SUM	MARY			
		VOLTAGE: 20	8 Y/ 120V	
CIRCUIT DESCRIPTION	PANEL A	PANEL B	CONNECTED	DEMAND
LIGHTING	0.7	0.0	0.67	0.84
RECEPTACLE	1.2	0.8	2.00	2.00
MOTOR	0.0	1.0	1.00	2.40
HEATING	0.0	0.0	0.00	0.00
COOLING	0.0	0.0	0.00	
KITCHEN	55.7	15.2	70.90	46.09
MISC	12.7	0.0	12.70	12.70
_			AL DIVERSIFIED KVA	64
		NEW TOTAL	. DIVERSIFIED A MPS	178

P.	ANEL NAM	1E	LOCATION:			VOLTAGE:	20	08 Y/ 120V	3 PHAS	SE	MOUNTING / ENCLOSURE:	EXISTING	/	NEMA
	A		ВОН				200A	МСВ			EXISTIN	IG		
AMPS	POLES	TYPE	CIRCUIT DESCRIPTION	KVA	CKT	A	В	С	CKT	KVA	CIRCUIT DESCRIPTION	TYPE	POLES	AMPS
20	1	L	FOH LIGHTS	0.47	1	5.94			2	5.47		Т		
20	1	L	TIME CLOCK	0.20	3		6.09		4	5.89	PANEL B	Т	3	100
20***	1	K	FOOD WARMER (250)	1.20	5			6.87	6	5.67	1	T		
50***	2	K	- VENTLESS FRYER (256)	3.65	7	5.57			8	1.92	FREEZER HEATER (EXISTING)	K	1	20***
30		K	VENTLESS FRIER (230)	3.65	9		3.65		10	0.00	SPARE		1	20
60*	2		WH-1	4.50	11			4.80	12	0.30	SAFE (202)		1	20
00.	2		W H-1	4.50	13	4.50			14	0.00	SPARE		1	20
20	1	R	GENERAL RECEPT. (KITCHEN)	0.40	15		3.40		16	3.00	-CONVEYOR TOASTER (255)	K	2	50***
20	1		SPARE	0.00	17			3.00	18	3.00	CONVETOR TOASTER (255)	K		30
20	1		SPARE	0.00	19	0.60			20	0.60	DIGITAL MENU BOARD		1	20
20	1	R	PANEL RECEPT.	0.30	21		0.90		22	0.60	PERFECT FRY FILTER	K	1	20***
20***	1	K	REFRIG. WORK TABLE (EXISTING)	0.86	23			1.86	24	1.00	KDS ORDER MONITORS (253)		1	20***
20	1	R	CONVENIENCE RECEPT. (KITCHEN)	0.50	25	4.70			26	4.20	COUNTERTOP STEAMER (243)	K	2	50***
20	1		POS (253)	0.60	27		4.80		28	4.20	-COUNTERTOF STEAMER (243)	K	2	30
20	1		POS (253)	0.60	29			4.80	30	4.20	COUNTERTOP STEAMER (243)	K	2	50***
20	1		DIGITAL MENU BOARD	0.60	31	4.80			32	4.20	-COUNTERTOF STEAMER (243)	K	2	30
20***	1	K	COOLER CONDENSER (EXISTING)	1.92	33		3.84		34	1.92	FREEZER LIGHTS/RECEPT.(EXISTING)	K	1	20***
20	1		SPARE	0.00	35			2.50	36	2.50	CONVEYOR TOASTER (EXISTING)	K	2	30***
20***	1	K	COOLER LIGHTS (EXISTING)	1.92	37	4.42			38	2.50	CONVETOR TOASTER (EXISTING)	K		30
20***	1	K	COOLER FAN (EXISTING)	1.92	39		6.08		40	4.16	-WALK-IN FREEZER COND. (EXISTING)	K	2	50***
20	1		SPARE	0.00	41			4.16	42	4.16	WALK-IN TREEZER COND. (LAISTING)	K		30
***PROVII	DE GFCI BRI	EAKER	·		TOTAL	30.5	28.8	28.0	KVA					
** PROVID	E LOCK ON	I BREAKEF	RS IN THE OPEN POSITION		_			•			TOTAL CONNECTED LOAD	87	7 KVA	242 A
*PROVIDE	HACR TYP	E CIRCUIT	BREAKER								TOTAL DEMAND LOAD	68	8 KVA	189 A

L	LIGHTING	0.7		0.8
R	RECEPTACLE	1.2		1.2
M	MOTOR	0.0	2.4	0.0
Н	HEATING	0.0		0.0
AC	AC	0.0		
K	KITCHEN	55.7	65%	36.2
	MISCELLANEOUS	12.7		12.7
T	TRANSFORMED FROM SUB PANEL	17.0		17.0

FILL IN KVA OF LARGEST MOTOR AND DIVERSITY FACTOR FOR KITCHEN

P	ANEL NAM	Œ	LOCATION:			VOLTAGE:	20	08 Y/ 120V	3 PHAS	SE	MOUNTING/ENCLOSURE:	RECESSED	/	NEMA 1
	В		ВОН				100A	MLO			NE	W		
AMPS	POLES	TYPE	CIRCUIT DESCRIPTION	KVA	CKT	A	В	С	CKT	KVA	CIRCUIT DESCRIPTION	TYPE	POLES	AMPS
20***	1	K	FOOD WARMER (250)	1.20	1	1.82			2	0.62	REFRIGERATOR TWO DOOR (237A)	K	1	20***
20***	1	K	CONVECTION OVEN (245)	1.45	3		2.75		4	1.30	ICE MACHINE (206)	K	1	20***
20***	1	K	REFRIGERATOR TWO DOOR (237A)	0.62	5			1.42	6	0.80	CONVENIENCE RECEPT. (KITCHEN)	R	1	20
20***	1	K	SLICER (210)	1.20	7	1.75			8	0.55	WORKTOP FREEZER (249)	K	1	20***
20***	1	K	72" REFRIG. PREP (247)	0.86	9		2.54		10	1.68	TEA BREWER (259)	K	1	20***
20***	1	K	SODA MACHINE (257)	1.20	11			2.75	12	1.55	MICROW A VE (246)	K	1	20***
20***	1	K	BOTTLES TO GO COOLER (238)	1.20	13	1.30			14	0.10	ICE MA CHINE FILTER (208)	K	1	20***
20	2	M	BOOSTER PUMP (222)	0.50	15		0.60		16	0.10	WATER FILTRATION SYSTEM (205)	K	1	20***
20	2	M	BOOSTERT OWN (222)	0.50	17			1.50	18	1.00	CARBORATOR (217)	K	1	20***
20***	1	K	STEAM WATER SYSTEM (244)	0.60	19	0.60			20	0.00	SPARE		1	20
20	1		SPARE	0.00	21				22	0.00	SPARE		1	20
20	1		SPARE	0.00	23				24	0.00	SPARE		1	20
20	1		SPARE	0.00	25				26	0.00	SPACE		1	20
20	1		SPACE	0.00	27				28	0.00	SPACE		1	20
20	1		SPACE	0.00	29				30	0.00	SPACE		1	20
**PROVII	DE GFCI BRI	EAKER			TOTAL	5.5	5.9	5.7	KVA				•	
* PROVID	E LOCK ON	BREAKER	RS IN THE OPEN POSITION		•	·					TOTAL CONNECTED LOAD	17	7 KVA	47 A
PROVIDE	HACR TYP	E CIRCUIT	BREAKER								TOTAL DEMAND LOAD	12	2 KVA	34 A

L	LIGHTING	0.0		0.
R	RECEPTACLE	0.8		0.
M	MOTOR	1.0	2.4	1.
Н	HEATING	0.0		0.
AC	AC	0.0		
K	KITCHEN	15.2	65%	9.
	MISCELLANEOUS	0.0		0.
T	TRANSFORMED FROM SUB PANEL	0.0		0.

FILL IN KVA OF LARGEST MOTOR AND DIVERSITY FACTOR FOR KITCHEN

RISER DIAGRAM NOTES:

- 1. ALL EQUIPMENT AND OTHER ELECTRICAL MATERIALS/WORK SHOWN AS EXISTING IN THE RISER DIAGRAM SHALL BE VERIFIED BY CONTRACTOR TO BE EXISTING. WHERE THE METER, DISCONNECT, FEEDER OR OTHER COMPONENTS OF THE TENANT FEEDER DO NOT EXIST AS SHOWN, THE CONTRACTOR SHALL PROVIDE.
- 2. PROVIDE NEW PANEL "B" AS SUB-PANEL FEED FROM PANEL "A".

GENERAL NOTES:

- A. PROVIDE PULL STRINGS IN ALL EMPTY CONDUITS.
- B. ALL JUNCTION BOXES, CONDUITS, AND WIRES SHALL BE SIZED PER NEC.
- C. PROVIDE A CONSTANT HOT FROM PANEL BOARD DIRECTLY TO ALL EMERGENCY BATTERY PACKS/BALLASTS IN ALL EMERGENCY LIGHTING FIXTURES.
- D. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION & MOUNTING HEIGHTS OF ALL LIGHTING FIXTURES SHOWN ON THIS DRAWING.
- E. REFER TO DETAIL SHEET FOR SYMBOLS, SPECIFICATIONS AND ABBREVIATIONS.
- F. ALL DEVICES AND EQUIPMENT OUTSIDE THE SCOPE OF WORK ARE EXISTING TO REMAIN U.O.N.
- G. ELECTRICAL CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY PROBLEMS PERTAINING TO CIRCUIT AVAILABILITY, EXISTING CONDITIONS OR LOAD CAPACITY PRIOR TO COMMENCEMENT OF WORK.

Engineering

54 South Ave. SE

Marietta, GA 30060

404-800-7988

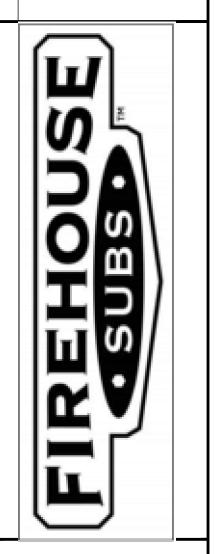
info@convergeengineers.com

PLAN DATES

REV. SUBMISSION

10/01/2025
PROGRESS SUBMISSION

10/10/2025
BID & PERMIT SUBMISSION



65 SADLER ROAD DUNN, NORTH CAROLINA

SEAL:



SCALE:

PROJECT NO.
FSDN_2509

SHEET TITLE:
ELECTRICAL
RISER AND
PANELS

SHEET NUMBER:

E4.0

I. GENERAL PROVISIONS

A. OVERVIEW

- 1. ALL WORK DONE UNDER THIS CONTRACT SHALL COMPLY WITH ALL STATE AND LOCAL CODES HAVING JURISDICTION AND WITH THE REQUIREMENTS OF THE UTILITY COMPANIES WHOSE SERVICES MAY BE USED. ALL MODIFICATIONS REQUIRED BY THESE CODES SHALL BE MADE BY THE CONTRACTOR WITHOUT ADDITIONAL CHARGES. WHERE CODE REQUIREMENTS ARE LESS THAN THOSE SHOWN ON THE PLANS OR IN THE SPECIFICATIONS, THE PLANS AND SPECIFICATIONS SHALL BE FOLLOWED. WHERE APPLICABLE, NFPA REQUIREMENTS SHALL BE MET.
- 2. IN CASE OF ANY CONFLICTS BETWEEN CONTRACT DOCUMENTS, THE STRICTER/MORE STRINGENT SHALL GOVERN.
- 3. THE CONTRACTOR SHALL OBTAIN ALL PERMITS, INSPECTIONS, AND APPROVALS AS REQUIRED BY ALL AUTHORITIES HAVING JURISDICTION AND DELIVER CERTIFICATES OF APPROVAL TO THE ENGINEER. ALL FEES AND COSTS OF ANY NATURE WHATSOEVER INCIDENTAL TO THESE PERMITS, INSPECTIONS AND APPROVALS MUST BE ASSUMED AND PAID BY THE CONTRACTOR.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF O.S.H.A.
 THE WORKMANSHIP AND MATERIALS COVERED BY THESE SPECIFICATIONS SHALL CONFORM TO ALL ORDINANCES AND REGULATIONS OF THE CITY, COUNTY AND/OR
- OTHER AUTHORITIES HAVING JURISDICTION.

 6. CONTRACTOR SHALL VISIT THE SITE AND EXAMINE EXISTING CONDITIONS BEFORE SUBMITTING BID. NO ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS WHEN SUCH CONDITIONS CAN BE DETERMINED BY
- 7. PRIOR TO SUBMITTING DATA FOR OR PURCHASING EQUIPMENT REQUIRING ELECTRICAL SERVICE, THE CONTRACTOR SHALL VERIFY THAT ELECTRICAL CHARACTERISTICS OF EQUIPMENT SUBMITTALS COMPLY WITH ELECTRICAL SERVICE PROVIDED FOR THE SPECIFIED ITEMS OF EQUIPMENT.
- 8. UPON RECEIPT OF THE CONTRACTOR OF REVIEWED SUBMITTALS FOR EQUIPMENT PROVIDED UNDER THIS DIVISION, THE CONTRACTOR SHALL COORDINATE THE ELECTRICAL SERVICE REQUIREMENTS, I.E., MOTOR HORSEPOWER AND FULL LOAD AMPS, ELECTRICAL SERVICE CHARACTERISTICS (VOLTAGE AND PHASE), AND NUMBER OF SERVICES FOR EACH ITEM OF EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS WITH THE ELECTRICAL DRAWINGS AND SPECIFICATIONS.
- 9. ITEMS ON OR PROJECTING THROUGH THE CEILING SHALL BE COORDINATED WITH OTHER TRADES.

B. OPERATION AND MAINTENANCE INSTRUCTIONS

- 1. THE CONTRACTOR SHALL PROVIDE TWO OPERATION AND MAINTENANCE MANUALS. THE MANUALS SHALL BE COMPILED IN HARD BACK, THREE RING NOTEBOOKS. O&M MANUALS SHALL HAVE PERMANENT LABELS ON FRONT AND SIDE. THE FOLLOWING INFORMATION SHALL APPEAR IN EACH MANUAL:
- 2. PROVIDE MANUFACTURER'S PRINTED OPERATING PROCEDURES TO INCLUDE START-UP, BREAK-IN, ROUTINE AND NORMAL OPERATING INSTRUCTIONS; REGULATION, CONTROL, STOPPING, SHUTDOWN AND EMERGENCY INSTRUCTIONS; AND SUMMER AND WINTER OPERATING INSTRUCTIONS. PROVIDE MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING; DISASSEMBLY, REPAIR AND REASSEMBLY; ALIGNING AND ADJUSTING INSTRUCTIONS. SERVICING INSTRUCTIONS AND LUBRICATION CHARTS AND SCHEDULES.

C. INSTRUCTIONS OF OWNER PERSONNEL

I. BEFORE FINAL INSPECTION, AT A TIME DESIGNATED BY THE DESIGNER, PROVIDE A COMPETENT REPRESENTATIVE TO INSTRUCT OWNER'S DESIGNATED PERSONNEL IN OPERATION, ADJUSTMENT AND MAINTENANCE OF PRODUCTS, EQUIPMENT AND SYSTEMS UNDER THIS DIVISION OF THE SPECIFICATIONS. FOR EQUIPMENT REQUIRING SEASONAL OPERATIONS, PERFORM INSTRUCTIONS FOR OTHER SEASONS WITHIN SIX MONTHS UNLESS REQUESTED OTHERWISE.

D. COORDINATIO

- 1. THE PRODUCTS OF PARTICULAR MANUFACTURERS HAVE BEEN USED AS THE BASIS OF DESIGN IN PREPARATION OF THESE DOCUMENTS. ANY MODIFICATIONS TO THE MECHANICAL SYSTEMS AND THEIR COMPONENTS, THE ELECTRICAL SYSTEMS, THE BUILDING STRUCTURE AND ARCHITECTURE, OR ANY OTHER PORTION OF THE BUILDING THAT RESULT FROM THE USE OF ANY OTHER THAN THAT BASIS OF DESIGN EQUIPMENT SHALL BE COORDINATED WITH ALL OTHER TRADES. SUCH COORDINATION SHALL OCCUR BEFORE PURCHASE OR DELIVERY OF PRODUCTS FROM THE MANUFACTURER DRAWINGS OR INSTALLED ACCORDINGLY. ANY RELATED MODIFICATIONS SHALL BE PERFORMED WITHOUT ANY ADDITIONAL COST TO THE CONTRACT.
- 2. RESIDENTIAL GRADE HVAC COMPONENTS SHALL NOT BE PERMITTED WITHOUT SPECIFIC OWNER INSTRUCTION AND ENGINEER APPROVAL.

E. EXECUTION

- 1. THE PLANS DO NOT GIVE EXACT ELEVATIONS OR LOCATIONS OF LINES, NOR DO THEY SHOW ALL THE OFFSETS, CONTROL LINES, OR OTHER INSTALLATION DETAILS. THE CONTRACTOR SHALL CAREFULLY LAY OUT HIS WORK AT THE SITE TO CONFORM TO THE STRUCTURAL CONDITIONS, TO PROVIDE PROPER GRADING OF LINES, TO AVOID ALL OBSTRUCTIONS, TO CONFORM TO DETAILS OF INSTALLATION SUPPLIED BY THE MANUFACTURERS OF THE EQUIPMENT TO BE INSTALLED, AND TO THEREBY PROVIDE AN INTEGRATED, COORDINATED AND SATISFACTORY OPERATING INSTALLATION. DO NOT SCALE DRAWINGS.

 2. IF THE CONTRACTOR PROPOSES TO INSTALL FOLLIPMENT, INCLUDING PIPING AND
- 2. IF THE CONTRACTOR PROPOSES TO INSTALL EQUIPMENT, INCLUDING PIPING AND DUCTWORK, REQUIRING SPACE CONDITIONS OTHER THAN THOSE SHOWN, OR TO REARRANGE THE EQUIPMENT, HE SHALL ASSUME FULL RESPONSIBILITY FOR THE REARRANGEMENT OF THE SPACE AND CONNECT ARRANGEMENT AT NO ADDITIONAL COST TO THE OWNER, AND SHALL HAVE THE ENGINEER REVIEW THE CHANGE BEFORE PROCEEDING WITH THE WORK. THE REQUEST FOR SUCH CHANGES SHALL BE ACCOMPLISHED BY SHOP DRAWINGS OF THE SPACE IN QUESTION.
- 3. TEMPORARY FILTERS SHALL BE PROVIDED FOR FANS THAT ARE USED DURING CONSTRUCTION. AT THE TIME OF STARTING THE BALANCING OF THE AIR DISTRIBUTION SYSTEM, NEW FILTERS SHALL BE INSTALLED.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER LOCATION AND SIZE OF ALL SLOT,
 HOLES OR OPENINGS IN THE BUILDING STRUCTURE PERTAINING TO HIS WORK, AND FOR
 THE CORRECT LOCATION OF SLEEVES, INSERTS, CORES, ETC.
 5. THE CONTRACTOR SHALL SO COORDINATE THE WORK OF THE SEVERAL VARIOUS
- TRADES THAT IT MAY BE INSTALLED IN THE MOST DIRECT AND WORKMANLIKE MANNER WITHOUT HINDERING OR HANDICAPPING THE OTHER TRADES. PIPING INTERFERENCES SHALL BE HANDLED BY GIVING PRECEDENCE TO PIPE LINES WHICH REQUIRE A STATED GRADE FOR PROPER OPERATION. FOR EXAMPLE SEWER LINES AND CONDENSATE PIPING SHALL TAKE PRECEDENCE OVER WATER LINES IN DETERMINATION OF ELEVATIONS. WHERE THERE IS INTERFERENCE BETWEEN SEWER LINES AND CONDENSATE LINES, THE SEWER LINES SHALL HAVE PRECEDENCE AND PROVISIONS SHALL BE MADE IN THE CONDENSATE LINES FOR LOOPING THEM AROUND THE SEWER LINES. IN ALL CASES, LINES REQUIRING A STATED GRADE FOR THEIR PROPER OPERATION SHALL HAVE PRECEDENCE OVER ELECTRICAL CONDUIT AND DUCTWORK.
- 6. ALL PIPING AND DUCTWORK IN FINISHED AREAS- EXCEPT WHERE NOTED TO THE CONTRARY- SHALL BE INSTALLED IN A CHASE, FURRED SPACE, OR ABOVE CEILINGS, ETC. IN ALL CASES, PIPES AND DUCTS SHALL BE INSTALLED AS HIGH AS POSSIBLE. RUNS OF PIPING SHALL BE GROUPED WHENEVER IT IS FEASIBLE TO DO SO.
- 7. PIPING SHALL BE INSTALLED TO PASS INSPECTIONS BY LOCAL PLUMBING INSPECTION DEPARTMENT, STATE AND FEDERAL AUTHORITIES AND INSURANCE COMPANY HAVING JURISDICTION. ANY CHANGES OR ADDITIONS WHICH MAY BE NECESSARY TO OBTAIN SUCH INSPECTIONS AND APPROVAL SHALL BE MADE BY THE CONTRACTOR AS PART OF THIS CONTRACT AND WITHOUT ADDITIONAL COST TO THE OWNER.
- 8. PIPING, DUCTWORK OR EQUIPMENT SHALL NOT BE INSTALLED IN ELECTRICAL EQUIPMENT ROOMS OR ELEVATOR MACHINE ROOMS EXCEPT AS SERVING ONLY THOSE ROOMS. OUTSIDE OF ELECTRICAL EQUIPMENT ROOMS, DO NOT RUN PIPING OR DUCTWORK OR LOCATE EQUIPMENT, WITH RESPECT TO SWITCHBOARDS, PANEL BOARDS, POWER PANELS, MOTOR CONTROL CENTERS, DRY TYPE TRANSFORMERS OR ROOF TOP AIR CONDITIONING UNIT ELECTRICAL PANELS.
- 9. PROVIDE ACCESS TO EQUIPMENT AND APPARATUS REQUIRING OPERATION, SERVICE OR MAINTENANCE WITHIN THE LIFE OF THE SYSTEM. INCLUDING, BUT NOT LIMITED TO, MOTORS, VALVES, FILTERS, DAMPERS, SHOCK ABSORBERS, ETC. EQUIPMENT LOCATED ABOVE LAY-IN TYPE CEILINGS IS CONSIDERED ACCESSIBLE.
- 10.DAMAGED EQUIPMENT SHALL BE REPAIRED OR REPLACED AT THE OPTION OF THE ARCHITECT.

F. ELECTRICAL WORK

- ALL ELECTRICAL EQUIPMENT PROVIDED UNDER THIS DIVISION SHALL COMPLY WITH THE ELECTRICAL SYSTEM CHARACTERISTICS INDICATED ON THE ELECTRICAL DRAWINGS AND SPECIFIED IN DIVISION 16.
- 2. EQUIPMENT UNIT MOTOR SPEED CONTROLS, STARTERS, SYSTEM CONTROLS, PILOT LIGHTS, PUSH-BUTTONS, ETC., SHALL BE FURNISHED COMPLETE AS A PART OF THE MOTOR APPARATUS WHICH IT OPERATES. ALL COMPONENTS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND DIVISION 16. ALL MOTOR STARTERS SHALL BE PROVIDED WITH AN H-O-A SWITCH AND CONTROL TRANSFORMER. ALL STARTERS AND DISCONNECT SWITCHES SHALL BE FURNISHED UNDER DIVISION 15. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR PRIOR TO HIS WIRING OF EQUIPMENT.
- 3. CONTROL WIRING (120V AND LESS) SHALL BE PROVIDED UNDER DIVISION 15 AND EXTENDED FROM THE STARTERS, CONTROL TRANSFORMERS OR 120V POWER CIRCUITS INDICATED ON THE ELECTRICAL DRAWINGS. ALL WIRING FOR 120 VOLTS SHALL BE DONE BY A LICENSED ELECTRICIAN.

 ALL ELECTRICAL CHARACTERISTICS SHALL BE TAKEN FROM THE ELECTRICAL DRAWINGS AND SPECIFICATIONS AND COORDINATED BEFORE EQUIPMENT IS ORDERED OR PURCHASED.

G. CUTTING AND PATCHING

- 1. THE CONTRACTOR SHALL ASSUME ALL COST OF, AND BE RESPONSIBLE FOR, ARRANGING FOR ALL CUTTING AND PATCHING REQUIRED TO COMPLETE THE INSTALLATION OF HIS PORTION OF THE WORK. ALL CUTTING SHALL BE CAREFULLY AND NEATLY DONE SO AS NOT TO DAMAGE OR CUT AWAY MORE THAN IS NECESSARY OF ANY EXISTING PORTIONS OF THE STRUCTURE.
- 2. ALL SURFACES SHALL BE PATCHED TO THE CONDITION OF THE ADJACENT SURFACES.

 3. THE CONTRACTOR SHALL MAKE SUITABLE PROVISIONS FOR ADEQUATELY
- 3. THE CONTRACTOR SHALL MAKE SUITABLE PROVISIONS FOR ADEQUATELY WATERPROOFING AT HIS FLOOR PENETRATIONS OF WATER PROOF MEMBRANE FLOORS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO FLOOR DRAINS, OPEN SIGHT DRAINS, HUB DRAINS, CLEANOUTS, AND SLEEVES FOR THE VARIOUS PIPING. THIS ALSO APPLIES TO MEMBRANE ROOFING SYSTEMS.
- 4. ALL PENETRATIONS AND WATER PROOFING OF PENETRATIONS IN MEMBRANE ROOFING SYSTEMS SHALL BE COORDINATED WITH AND PERFORMED BY THE MANUFACTURER/INSTALLER.
- 5. THE CONTRACTOR SHALL INSTALL, AS REQUIRED, IN CONCRETE, CARPENTRY OR MASONRY CONSTRUCTION, ALL NECESSARY HANGERS, SLEEVES, EXPANSION BOLTS, INSERTS AND OTHER FIXTURES AND APPURTENANCES NECESSARY FOR THE SUPPORT OF PIPE, DUCT, EQUIPMENT AND DEVICES FURNISHED UNDER EACH SECTION OF THE SPECIFICATION.
- 6. FOR WALLS BETWEEN INTERIOR AND BELOW GRADE AREA, THE LINK-SEAL SYSTEM AS MANUFACTURED BY THUNDERLINE CORPORATION SHALL BE USED TO SEAL PIPE TO WALL PENETRATIONS. INSTALL SYSTEM IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- ESCUTCHEONS SHALL BE INSTALLED ON ALL PIPES WHERE THEY PASS THROUGH FLOORS, CEILINGS, WALLS OR PARTITIONS IN FINISHED AREAS WHERE EXPOSED TO VIEW.
 WHERE AND HVAC OR PLUMBING REPLACEMENT SCOPE IS INDICATED, MECHANICAL

CONTRACTOR SHALL PROVIDE FOR THE DEMOLITION OF EXISTING SYSTEMS THAT ARE

BEING REPLACED OR ABANDONED H. ACCESS DOORS

- CESS DOORS

 1. FURNISH AND INSTALL ACCESS DOORS AT EACH POINT REQUIRED TO PROVIDE ACCESS TO CONCEALED VALVES, CLEANOUTS AND OTHER DEVICES REQUIRING OPERATION, ADJUSTMENT OR MAINTENANCE. ACCESS DOORS SHALL BE 16 GAUGE STEEL, PRIME COAT FINISH, WITH MOUNTING STRAPS, CONCEALED HINGES AND SCREWDRIVER LOCKS, DESIGNED FOR THE DOORS TO OPEN 180 DEGREES.
- ACCESS DOORS INSTALLED IN FIRE WALLS OR PARTITIONS SHALL BE UL LABELED TO MAINTAIN THE FIRE RATING OF THE WALL OR PARTITION.
- I. FLAME SPREAD AND SMOKE DEVELOPED PROPERTIES OF MATERIALS

 1. MATERIALS AND ADHESIVES USED THROUGHOUT THE MECHANICAL AND ELECTRICAL SYSTEMS FOR INSULATION, AND JACKETS OR COVERINGS OF ANY KIND, OR FOR PIPING OR CONDUIT SYSTEM COMPONENTS, SHALL HAVE A FLAME SPREAD RATING NOT OVER 25 WITHOUT EVIDENCE OF CONTINUED COMBUSTION AND WITH A SMOKE DEVELOPED RATING NOT HIGHER THAN 50. IF SUCH MATERIALS ARE TO BE APPLIED WITH ADHESIVES, THEY SHALL BE TESTED AS APPLIED WITH SUCH ADHESIVES, OR THE ADHESIVES USED SHALL HAVE A FLAME SPREAD RATING NOT OVER 25 AND A SMOKE DEVELOPED RATING NOT HIGHER THAN 50.

II. INSULATION

A. GENERAL PIPE INSULATION

- 1. FIBERGLASS SHALL BE ACCEPTABLE FOR INDOOR HOT & COLD DOMESTIC; HYDRONIC PIPING; AND INSULATED DRAINAGE PIPING. PROVIDE PREFABRICATED FITTINGS FOR ELBOWS AND TEE'S. PROVIDE PREFAB PVC FITTINGS OR WHITE ALL SERVICE (INTEGRAL TO PREFAB PIPING ELBOW) PIPING ELBOW JACKETING. PROVIDE PIPE LABELING FOR ALL INSULATED, JACKETED INDOOR PIPING. PVC JACKETING SHALL NOT BE PERMITTED IN RETURN PLENUM AREAS. ALL JACKEING SEAMS SHALL BE SEALED AIR-TIGHT FOR CONTINUOUS VAPOR BARRIER.
- 2. FITTINGS AND VALVES SHALL BE INSULATED WITH PRE-FORMED FITTINGS, FABRICATED SECTIONS OF PIPE
- INSULATION, TANK INSULATION, BLANKET INSULATION, OR INSULATING CEMENT. THICKNESS SHALL BE EQUAL TO ADJACENT PIPE INSULATION. FINISH SHALL BE WITH PRE-FORMED PVC FITTING COVERS OR AS

OTHERWISE SPECIFIED ON CONTRACT DRAWINGS.

3. FLANGES, COUPLINGS AND VALVE BONNETS SHALL BE COVERED WITH AN OVERSIZED PIPE INSULATION SECTION SIZED TO PROVIDE THE SAME INSULATION THICKNESS AS ON THE MAIN PIPE SECTION. AN OVERSIZED INSULATION SECTION SHALL BE USED TO FORM A COLLAR BETWEEN THE TWO INSULATION SECTIONS WITH LOW-DENSITY BLANKET INSULATION BEING USED TO FILL GAPS. JACKETING SHALL MATCH THAT USED ON STRAIGHT PIPE SECTIONS. ROUGH CUT ENDS SHALL BE COATED WITH SUITABLE WEATHER OR VAPOR RESISTANT MASTIC AS DICTATED BY THE SYSTEM LOCATION AND SERVICE. ON HOT SYSTEMS WHERE FITTINGS ARE TO BE LEFT EXPOSED, INSULATION ENDS SHOULD BE BEVELED AWAY FROM BOLTS FOR EASY ACCESS.

B. INSULATION THICKNESS

- 1. DOMESTIC COLD WATER INSULATION SHALL BE 1" MINIMUM OR AS REQUIRED BY
- LOCAL ENERGY CODES.

 2. FOR MEDIA BELOW 60 DEGREES INSULATION SHALL BE 1" UP TO 1-¼" PIPE SIZE; 1.5" THICK UP TO 3" PIPE SIZE; AND 2" THICK BEYOND 3" PIPE SIZE.
- 3. CHILLED WATER PIPING INSULATION SHALL BE 1" UP TO 1-1/4" PIPE SIZE, 1.5" UP TO 3".

 C. FIBERGLASS PIPE INSULATION

 1. ONE PIECE FIBROUS GLASS PIPE INSULATION WITH FACTORY APPLIED ALUMINUM FOIL
 - AND WHITE KRAFT PAPER FLAME RETARDANT VAPOR BARRIER JACKET.

 2. PROVIDE SELF_SEALING LONGITUDINAL JACKET LAPS AND BUTT STRIPS. AVERAGE THERMAL CONDUCTIVITY: 0.23 BTU/IN. PER SQUARE FOOT PER DEGREES F PER HOUR
 - AT 75 DEGREES F MEAN TEMPERATURE.

 3. PROVIDE INSULATION CEMENT, FIBERGLASS REINFORCEMENT FABRIC, VAPOR BARRIER COATING, FOR CONTINUOUS, AIR-TIGHT INSULATION WITH VAPOR BARRIER.

D. FOAMGLASS PIPE INSULATION

- 1. FOAM GLASS TYPE PIPE INSULATION SHALL HAVE MAXIMUM K_FACTOR OF 0.38 AT 50 DEGREES F MEAN TEMPERATURE. MINIMUM DENSITY SHALL BE 8 LB/CU. FT., 1 1/2" THICK MINIMUM. PROVIDE MASTIC, FIBERGLASS REINFORCED STRAPPING TAPE TO ASSURE AIR-TIGHT MOISTURE-PROOF INSULATION. PROVIDE WITH ALUMINUM JACKETING THAT SHALL BE 0.016" THICK WITH FITTING COVERS 0.024" THICK. PROVIDE WITH 5 WATT/FT HEAT TRACING BELOW INSULATION FOR OUTDOOR, ABOVE-GROUND INSTALLATION.
- 2. PROVIDE FOAM GLASS INSERTS AT PIPE HANGERS, CLAMPS, OR OTHER SUPPORTS IN FIBERGLASS OR ELASTOMERIC PIPE INSULATION INSTALLATIONS INSERTS SHALL BE SAME THICKNESS AS ADJOINING PIPE INSULATION. VAPOR SEAL SHALL BE AS HEREINBEFORE SPECIFIED. ALUMINUM JACKETING SHALL NOT BE REQUIRED FOR INDOOR INSERTS (PVC OR WHITE ALL-SERVICE FOIL/KRAFTJACKETING MEDIA SHALL BE USED).

E. ELASTOMERIC (CLOSED CELL FOAM) PIPE INSULATION

1. ELASTOMERIC SHALL BE PROVIDED FOR ALL REFRIGERANT PIPING AND OUTDOOR INSULATED PIPING AND MAY BE USED FOR INDOOR DOMESTIC OR CONDENSATE PIPING. PIPING WILL REQUIRE JACKETING- ALUMINUM FOR OUTDOOR PIPING OR FOIL/WHITE KRAFT MEDIA OR PVC FOR INDOOR PIPING. PROVIDE WITH FULL ADHESIVE ADHERING SEAMS AND JOINTS FOR CONTINUOUS VAPOR BARRIER. ELBOWS SHALL BE FORMED BY CUTTING SEGMENTS AT 30 DEGREE ANGLES (3 SEGMENTS AT EACH 90 DEGREE BEND) WITH MASTIC AT ALL SEAMS. PROVIDE PREFORMED JACKETING ELBOWS AT ALL PIPING ELBOWS.

F. FIBERGLASS BLANKET INSULATION FOR DUCTWORK (INDOOR DUCT ONLY)

- 1. INSULATION SHALL BE BLANKET TYPE FIBERGLASS INSULATION WITH AVERAGE THERMAL CONDUCTIVITY NOT EXCEEDING 0.29 BTU_IN. PER SQUARE FEET PER DEGREES F PER HOUR AT MEAN TEMPERATURE OF 75 DEGREES F. WITH A MINIMUM DENSITY OF 1 LB/CU. FT., 2" THICK MINIMUM AND FOIL INSULATION FACE. PROVIDE FIRE RETARDANT ADHESIVE OR FOIL REINFORCED KRAFT TAPE, 3" WIDE AT ALL SEAMS. SECURE INSULATION TO DUCT WITH 18 GAUGE TIE-WIRE OR 1/2" X 0.015" GALVANIZED STEEL STRAPS. PROVIDE COMPLETE AIR-TIGHT VAPOR BARRIER FOR ALL DUCTWORK. STAPLES SHALL NOT BE PERMITTED FOR ANY INSULATION ATTACHMENT. PROVIDE GRAY SEALER FOR SEALING JOINTS, PENETRATION AND PUNCTURES.
- 2. CONTINUE INSULATION THROUGH WALL AND CEILING OPENINGS AND SLEEVES, EXCEPT TERMINATE DUCT INSULATION AT FIRE DAMPERS AND AT FLEXIBLE DUCT CONNECTIONS AT AIR HANDLING UNITS.
- 3. PROTECT INSULATION FROM PHYSICAL DAMAGE AT POINTS OF SUPPORT WHERE INSULATION MUST CARRY LOAD IMPOSED BY SUPPORT. COORDINATE THIS REQUIREMENT WITH TYPES OF HANGER AND SUPPORT USED. HANGERS THAT PENETRATE INSULATION SHALL BE SEALED WITH MASTIC TO PRESERVE CONTINUOUS VAPOR BARRIER.

G. ELASTOMERIC (CLOSED CELL FOAM) DUCT LINER

1. INSTALL INSIDE OF DUCT WITH FULL ADHESIVE COVERAGE ATTACHMENT TO THE SURFACE TO WHICH IT IS APPLIED; 1" FOR INDOOR AND 2" FOR OUTDOOR. R VALUES SHALL BE R-6 FOR 1" AND R-12 FOR 2". FIBERGLASS DUCT LINER SHALL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES. PROVIDE WITH ANTIMICROBIAL PROTECTION. PROVIDE MASTIC AT ALL INTERIOR SEEMS FOR CONTINUOUS VAPOR

BARRIER. PROVIDE DUCT LINER AT FIRST FIVE FEET OF SUPPLY DUCT FOR REFRIGERATION/COOLING AIR HANDLING EQUIPMENT, UPSIZING INDICATED DUCT SIZE TO ACCOUNT FOR INSULATION THICKNESS. FIBERGLASS DUCT LINER OR DUCT BOARD SHALL NOT BE PERMITTED.

III. VIBRATION ISOLATION

A. ALL MOTORIZED AIR MOVING AND FLUID MOVING EQUIPMENT PIECE SHALL BE PROVIDED WITH VIBRATION ISOLATION MOUNTING OR SUPPORTS.

B. PAD-TYPE ISOLATORS SHALL BE NEOPRENE IN-SHEAR ISOLATION PADS WITH CROSSED DOUBLE

RIBS. A STEEL SHIM PLATE SHALL BE PROVIDED BETWEEN THE TWO LAYERS. PADS SHALL BE

- MOLDED USING OIL RESISTANT 25,000 PSI TENSILE STRENGTH NEOPRENE.

 C. HANGING ISOLATORS FOR ITEMS 300 LBS OR LESS SHALL BE BRIDGE-BEARING NEOPRENE MOUNTINGS AND SHALL HAVE A MINIMUM STATIC DEFLECTION OF 0.2" AND ALL DIRECTIONAL SEISMIC CAPABILITY. THE ELEMENTS SHALL PREVENT THE CENTRAL THREADED SLEEVE AND ATTACHMENT BOLT FROM CONTACTING THE CASTING DURING NORMAL OPERATION. THE SHOCK ABSORBING NEOPRENE MATERIALS SHALL BE COMPOUNDED TO BRIDGE-BEARING SPECIFICATIONS. MASON HD, KINETICS
- D. HANGING ISOLATORS FOR EQUIPMENT ABOVE 300 LBS SHALL BE STEEL SPRING-TYPE INCORPORATING STEEL HOUSING, NEOPRENE OR LDS RUBBER SPRING CUP SIZED FOR 1" DEFLECTION. INSTALL SPRING IN PLUMB CONFIGURATION WITH MAXIMUM 1" DEFLECTION FROM ANY HORIZONTAL DISTORTION. THE ELEMENTS SHALL PREVENT THE CENTRAL THREADED SLEEVE AND ATTACHMENT BOLT FROM CONTACTING THE CASTING DURING NORMAL OPERATION. CONTRACTOR SHALL SELECT SPRING COLOR/RATING BASED ON EQUIPMENT WEIGHT. AMBER BOOTH SH, KINETICS SH, MASON 30 OR EQUIVALENT.

IV. DUCTWORK AND FITTINGS A. MATERIAL AND TYPE

- 1. DUCT CONSTRUCTION SHALL CONFORM TO THE RECOMMENDATIONS OF THE SMACNA
- HVAC DUCT CONSTRUCTION MANUAL. DUCTBOARD SHALL NOT BE PERMITTED.

 2. RIGID, SQUARE DUCTWORK SHALL BE CONSTRUCTED OF LOCK FORMING QUALITY GALVANIZED STEEL SHEETS PER ASTM A527. GALVANIZED COATING SHALL BE NOT LESS THAN 1.25 OUNCES (TOTAL FOR BOTH SIDES) PER SQUARE FOOT OF SHEET. DUCTWORK SHALL BE CLASSIFIED AND CONSTRUCTED SMACNA PRESSURE CLASSES: +2 FOR SUPPLY AND -2 FOR RETURN AND EXHAUST. DUCTWORK GAUGE SHALL BE 26 GAUGE UP TO 30" AND 22 GAUGE ABOVE 30" IN CROSS SECTIONAL HEIGHT, WIDTH, OR DIAMETER.
- 3. CONCEALED ROUND DUCTS UP TO 12" IN DIAMETER IN PRESSURE CLASSES 2" AND LOWER SHALL BE LONGITUDINAL SEAM CONSTRUCTION.
- 4. EXPOSED ROUND DUCTWORK OR ROUND ABOVE 12" SHALL BE SPIRAL LOCK_SEAM CONSTRUCTION. ROUND FITTINGS SHALL BE FUSION WELDED BUT SEAM TYPE WITH ALL WELDS CONTINUOUS ALONG SEAMS. ALL DIVIDED FLOW FITTINGS SHALL BE MANUFACTURED AS SEPARATE FITTINGS _ TAP COLLARS WELDED INTO SPIRAL DUCT SECTIONS WILL NOT BE PERMITTED. ALL DIVIDED FLOW FITTINGS 12" IN DIAMETER AND SMALLER SHALL HAVE RADIUSED ENTRANCE PRODUCED BY MACHINE OR PRESS FORMING; ALL DIVIDED FLOW FITTINGS 14" AND LARGER SHALL HAVE CONICAL ENTRANCE PRODUCED BY MACHINE OR PRESS FORMING. ALL DIVIDED FLOW ENTRANCES SHALL BE FREE OF WELD BUILD_UP, BURRS AND IRREGULARITIES. FITTINGS SHALL BE OF THE SAME MANUFACTURER AS THE DUCTWORK.
- 5. DUCT SEALANT SHALL BE POLYMERIC RUBBER BASE MASTIC, MINERAL IMPREGNATED WOVEN FIBER TAPE WITH ADHESIVE, OR HEAT_SHRINK WITH ADHESIVE. TAPE THICKNESS UP TO 10" = 2"; UP TO 20" = 3"; OVER 20" = 4"
- 6. INSULATED FLEXIBLE DUCT SHALL BE CLASS 1 AIR DUCT IN ACCORDANCE WITH UL 181 AND SHALL COMPLY WITH NFPA 90A AND 90B. INSULATED FLEXIBLE DUCT SHALL CONSIST OF AN INNER FILM LAYER FOR MINIMUM WORKING PRESSURE OF 6" WATER GAUGE BONDED TO A STEEL OR ALUMINUM SPRING WIRE HELIX, FIBERGLASS INSULATION, AND A VAPOR BARRIER JACKET. INSULATION SHALL HAVE A MAXIMUM U_VALVE OF .23 BTU/HR/SQFT/DEG F AT 75 DEGREES F MEAN TEMPERATURE. VAPOR BARRIER JACKET SHALL HAVE A MAXIMUM VAPOR TRANSMISSION RATE OF 0.1 GRAINS/SQ. FT./HR/INCH HG (PERM). THE ASSEMBLY SHALL HAVE A MAXIMUM FLAME AND SMOKE RATING OF 25/50 PER ASTM E84 AND NFPA 255. FLEXIBLE DUCTS SHALL BE INSTALLED IN AN EXTENDED CONDITION FREE OF SAGS AND KINKS, USING ONLY THE MINIMUM LENGTH REQUIRED TO MAKE THE CONNECTION. ABRUPT BENDS AND TURNS THAT CRIMP THE DUCT AND RESTRICT AIR FLOW SHALL NOT BE PERMITTED. HORIZONTAL SUPPORTS SHALL BE 3/4" WIDE, 22 GAUGE FLAT GALVANIZED STEEL SHEET BANDING MATERIAL. FLEXIBLE DUCTS SHALL BE SUPPORTED ON 36" CENTERS. MAXIMUM LENGTH OF FLEXIBLE DUCT IN PRESSURE CLASS 2" AND BELOW SHALL BE 12 FEET. FLEXIBLE DUCT SHALL NOT BE USED ABOVE INACCESSIBLE CEILINGS.
- 7. GREASE DUCT SERVING TYPE I HOODS SHALL BE 16 GAUGE BLACK IRON OR 18 GAUGE STAINLESS STEEL WELDED WITH AIR TIGHT SEAM. PROVIDE DUCT CLEANOUTS AT ALL CHANGES OF DIRECTION. FOR INSTALLATIONS THAT WILL RESULT IN A DUCT OR SECTION OF DUCT WITHIN 18" OF COMBUSTIBLE MATERIAL, PROVIDE FIRE-RATED INSULATION AS REQUIRED FOR A ZERO INCH CLEARANCE TO COMBUSTIBLE INSTALLED PER MANUFACTURER'S AND/OR RATING AGENCY REQUIREMENTS COMPLETE WITH ALL REQUIRED PENETRATION TREATMENTS, NUMBER IF INSULATING LAYERS AND APPROVED PREFABRICATED, RATED ACCESS PANELS. DO NOT PROVIDE VENTED ROOF CURBS FOR FIRE WRAPPED GREASE EXHAUST DUCTS.
- 8. DISHWASHER EXHAUST DUCT SHALL BE STAINLESS STEEL.

B. <u>PIPING</u> A. <u>USE DIELECTRIC UNIONS WHERE DISSIMILAR METALS ARE JOINED TOGETHER.</u>

- B. DOMESTIC WATER & PUMPED CONDENSATE

 1. UNDERGROUND WATER SERVICE PIPING 3" IN SIZE AND LARGER SHALL BE CLASS 50
 DUCTILE IRON PIPE, AWWA C151, WITH HUB AND SPIGOT, PUSH_ON JOINTS, AND CLASS
 50 OR GREATER MECHANICAL JOINT DUCTILE IRON FITTINGS ALL CEMENT LINED PER
 AWWA C104. MECHANICAL JOINTS FOR DUCTILE IRON PIPE SHALL BE MADE WITH A
 FOLLOWER GLAND, GASKET, BOLTS AND NUTS. PUSH-ON JOINTS FOR DUCTILE PIPE
 - SHALL BE MADE WITH A ONE PIECE LUBRICATED COMPRESSION RUBBER GASKET AS PER AWWA C111.
 UNDERGROUND STEEL PIPE AND FITTINGS INCLUDING THE PORTION THROUGH THE FLOOR SHALL BE PROTECTED AGAINST CORROSION BY APPLICATION OF PROTECTIVE COATINGS. PRIOR TO COATING, PIPE AND FITTINGS SHALL BE CLEANED OF ALL RUST, SCALE, DIRT AND OIL. PIPES AND FITTINGS SHALL BE GIVEN TWO COATS OF A COAL-TAR BASE BITUMINOUS PROTECTIVE COATING, EACH HAVING A DRY FILM THICKNESS OF 7-9
 - MILS. THE COMBINED THICKNESS OF BOTH COATS COMBINED SHALL BE 15-18 MILS.

 3. UNDERGROUND WATER SERVICE PIPING 2 1/2" IN SIZE AND SMALLER (TO A POINT 1'-0" ABOVE THE FINISHED FLOOR) SHALL BE. TYPE "K" HARD DRAWN COPPER TUBING, ASTM B88, WITH BRAZED JOINTS AND WROUGHT COPPER, ANSI B16.22, OR CAST BRONZE, ANSI B16.18, SOCKET FITTINGS. . BRAZED JOINTS SHALL BE MADE USING BCUP-5 BRAZING ALLOY WITH A COMPATIBLE FLUX.
 - 4. ABOVE-GROUND WATER PIPING 4" AND SMALLER SHALL BE. TYPE "L" HARD DRAWN COPPER TUBING, ASTM B88, WITH SOLDERED JOINTS AND WROUGHT COPPER, ANSI B16.22, OR CAST BRONZE, ANSI B16.18, SOCKET FITTINGS. SOLDER JOINTS SHALL BE MADE USING A 95-5 TIN-ANTIMONY SOLDER (NO-LEAD SOLDER) WITH A COMPATIBLE
 - 5. UNDERGROUND WATER PIPING TO TRAP PRIMERS OR HVAC CONDENSATE PUMP DISCHARGE SHALL BE. TYPE "L" SOFT DRAWN COPPER TUBING, ASTM B88, WITHOUT FITTINGS.6. FLANGED JOINT SHALL BE MADE WITH RING TYPE NON-METALLIC GASKETS, BOLTS AND
 - NUTS.
 7. THREADED JOINTS AT EQUIPMENT CONNECTIONS SHALL BE MADE UP WITH TEFLON TAPE. AFTER CUTTING BUT PRIOR TO THREADING, PIPE SHALL BE REAMED AND SHALL
 - HAVE BURRS REMOVED.

 8. GROOVED MECHANICAL JOINTS: GROOVED JOINTS FOR COPPER AND GALVANIZED STEEL PIPES SHALL BE INSTALLED USING BOLTED MECHANICAL COUPLING, PRESSURE-RESPONSIVE GASKET ALONG WITH GROOVED AND FITTINGS. LAYOUT BASIS SHALL BE ANVIL GRUV-LOCK,
 - DIELECTRIC ADAPTERS SHALL BE PROVIDED BETWEEN COPPER AND IRON PIPE CONNECTIONS AND BETWEEN FERROUS AND NONFERROUS PIPING OR EQUIPMENT.
 UNDERGROUND WATER PIPING SHALL HAVE A MINIMUM COVER OF 3'- 0" TO THE TOP
 - OF THE PIPE.

 11.INSTALL WATER HAMMER ARRESTORS ABOVE CEILING ON THE HOT AND COLD WATER BRANCH LINES SERVING A BATTERY OF FIXTURES; ON THE COLD WATER BRANCH LINES SERVING INDIVIDUAL FLUSH VALVE WATER CLOSETS AND URINALS; AND ELSEWHERE AS INDICATED ON THE DRAWINGS. PROVIDE ACCESS PANEL FOR WHA LOCATED ABOVE HARD CEILINGS.
 - 12. VACUUM BREAKERS SHALL BE PROVIDED ON ALL HOSE OUTLETS, HOSE BIBS AND HYDRANTS UNLESS THE DRAWINGS INDICATE THAT A BACKFLOW PREVENTER IS TO BE PROVIDED ON THE PIPING SERVING THE OUTLET.
 - 13.INSTALL 1/2" CW LINE FROM NEAREST CW MAIN OR BRANCH LINE TO ALL FLOOR DRAINS WITH TRAP PRIMER FOR TRAP PRIMING. UNDERGROUND PIPING FROM TRAP PRIMER TO FLOOR DRAINS SHALL BE INSTALLED WITHOUT FITTINGS. TRAP PRIMERS SHALL BE PROVIDED FOR ALL FLOOR DRAINS AND HUB DRAINS.
 - 14.CONNECT HOT AND COLD WATER PIPING SYSTEM TO EQUIPMENT AS INDICATED, AND COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE SHUT-OFF BALL VALVE AND UNION FOR EACH CONNECTION, PROVIDE DRAIN VALVE ON DRAIN CONNECTIONS. PROVIDE SINGLE SHUTOFF BALL VALVE FOR HEADERS SERVING HOT OR COLD WATER TO MULTIPLE FIXTURES WITHIN A SINGLE WALL OR CHASE. PROVIDE ACCESS PANEL FOR VALVES INSTALLED ABOVE HARD CEILINGS.
 - 15. ALL DOMESTIC WATER SERVICE AND SUPPLY PIPING INSTALLED UNDER THIS DIVISION SHALL BE DISINFECTED WITH CHLORINE BEFORE IT IS PLACED INTO OPERATION. THE CHLORINATING MATERIAL SHALL BE LIQUID CHLORINE CONFORMING TO FED. SPEC. BB-C-120 AND SHALL BE INTRODUCED TO THE SYSTEM BY EXPERIENCED OPERATORS ONLY. THE CHLORINE SOLUTION APPLIED TO THE PIPING SECTIONS OR SYSTEM SHALL

CONTAIN AT LEAST FIFTY PARTS PER MILLION OF AVAILABLE CHLORINE AND SHALL REMAIN IN THE SECTIONS OR SYSTEM FOR A PERIOD OF NOT LESS THAN SIXTEEN (16) HOURS. DURING THE DISINFECTION PERIOD ALL VALVES SHALL BE OPENED AND CLOSED AT LEAST FOUR TIMES. AT THE END OF THE RETENTION PERIOD, NO LESS THAN 50 PPM OF CHLORINE SHALL BE PRESENT IN THE EXTREME END OF THIS SYSTEM. AFTER THE DISINFECTION PERIOD THE CHLORINATED WATER SHALL BE FLUSHED FROM THE SYSTEM WITH CLEAR WATER UNTIL THE RESIDUAL CHLORINE CONTENT IS NOT GREATER THAN TWO-TENTHS - (0.2) - PARTS PER MILLION. THE CONSTRUCTION MANAGER SHALL SUBMIT TO THE ARCHITECT WRITTEN CERTIFICATION THAT THE SYSTEM WAS DISINFECTED. CERTIFICATION SHALL INCLUDE NAME OF PROJECT, NAME OF OWNER, NAME OF OPERATORS, DATE OF DISINFECTION, TIMES OF DISINFECTION PERIOD, MAXIMUM CHLORINE LEVEL AND RESIDUAL CHLORINE LEVEL.

D. SANITARY WASTE &VENT, STORM, GREASE WASTE

- 3. UNDERGROUND SANITARY, WASTE AND VENT PIPING, AND STORM DRAINAGE PIPING, AND INDOOR PIPING ABOVE 8" IN SIZE SHALL BE SERVICE WEIGHT (COATED) CAST IRON SOIL PIPE AND FITTINGS, ASTM A74, WITH GASKET HUB AND SPIGOT JOINTS, ASTM C564. GASKET JOINTS FOR CAST IRON PIPE SHALL BE MADE WITH LUBRICATED NEOPRENE COMPRESSION GASKETS. PVC SHALL BE PERMITTED IF ALLOWED BY LOCAL CODE. UNDERGROUND PVC PIPING SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELD JOINTS MEETING ASTM D-1785 AND ASTM D-2665.
- 4. ABOVE-GROUND SANITARY, WASTE AND VENT AND STORM DRAINAGE PIPING 8" AND SMALLER SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE AND FITTINGS, ASTM A888 AND CISPI 301, WITH STANDARD NO-HUB COUPLINGS. PVC SHALL BE PERMITTED OUTSIDE OF RETURN AIR PLENUMS WITH OWNER APPROVAL. NEOPRENE RUBBER GASKET AND MINIMUM 24 GAUGE TYPE 304 STAINLESS STEEL SHIELD AND FOUR STAINLESS STEEL BANDS FOR SIZES 1 1/2" THROUGH 4", SIX BANDS MINIMUM FOR SIZED 5" AND LARGER. 6" PIPE AND UP: NEOPRENE ELASTOMERIC GASKET AND SERIES 300 STAINLESS STEEL SHIELD AND MULTIPLE DRAW BANDS AND SCREW CLAMPS CONFORMING TO ASTM C-564 AND CISPI STANDARD 310-90. ABOVE-GROUND SANITARY PIPING, LOCATED OUTSIDE OF RETURN AIR PLENUMS MAY ALSO BE SCHEDULE 40 PVC WITH SOLVENT WELD JOINTS MEETING ASTM D-1785 AND ASTM D-2665 PER OWNER APPROVAL.
- 5. ALL WASTE PIPING 1" IN SIZE AND SMALLER SHALL BE TYPE "L" HARD DRAWN COPPER TUBING, ASTM B88, WITH SOLDERED JOINTS AND WROUGHT COPPER, ANSI B16.22, OR CAST BRONZE, ANSI B16.18, SOCKET FITTINGS. SOLDERED JOINTS FOR TYPE 'L' COPPER TUBING AND CAST DMV BRONZE PIPE SHALL BE MADE WITH 95-5 TIN-ANTIMONY (NO LEAD) SOLDER AND COMPATIBLE FLUX.

E. PIPING HANGE

- 1. PROVIDE CLEVIS SUPPORTS WITH BEAM CLAMP, CONCRETE ANCHORS (CONCRETE STRUCTURE), SCREWED BRACKET (WOOD STRUCTURE). PROVIDE HANGER OUTSIDE OF INSULATION WITH RIGID FOAM GLASS INSULATION SECTION AT HANGERS. PROVIDE 16 GAUGE PIPING SADDLE AT EACH HANGER. NO WELDING OR CUTTING OF STEEL STRUCTURAL MEMBERS SHALL BE PERMITTED. LAYOUT BASIS SHALL BE ANVIL 260.

 2. PROVIDE SEISMIC HANGERS PER DRAWING REQUIREMENTS.
- 3. HANGER INSTALLATION FOR HOT WATER PIPING SHALL NOT PREVENT MOVEMENT FOR PIPING EXPANSION.
 4. SPACING AS FOLLOWS:
- STEEL PIPE: 1/2" TO 1-1/4" 7'; 1-1/2" TO 2-1/2" 9'; 3"&4" 12'; 6"&8" 17'; 10" AND UP-

COPPER PIPE: 1/2" TO 1" - 5'; 1-1/4" TO 2" - 7'; 2-1/2" AND UP - 9'

CAST IRON: 10' WITH SUPPORT AT EACH JOINT, TAKEOFF, AND FITTING.

PVC DRAINAGE (140 DEG F SERVICE UP TO 6"- 80 DEG F ABOVE 6"): UP TO 3" - 3 $^{\circ}$; 4" TO 6" - ; ABOVE 6" - 8 $^{\circ}$

PVC VENT (80 DEG F SERVICE): UP TO 1-1/2" - 5'; 2"-3" - 6'; ABOVE 3" 7'

VII. VALVES/PUMPS

VALVES SHALL HAVE THE NAME OR TRADEMARK OF THE MANUFACTURER AND THE

- WORKING PRESSURE STAMPED OR CAST ON THE VALVE BODY.

 2. ALL VALVES IN EACH SYSTEM, EXCEPT FOR SPECIAL TYPES SHALL BE THE PRODUCT OF A
- SINGLE MANUFACTURER.

 3. ALL VALVES REQUIRING PACKING SHALL BE DESIGNED AND CONSTRUCTED SUCH THAT THEY CAN BE REPACKED UNDER PRESSURE.
- VALVE HAND WHEELS/ ACTUATOR SHALL BE MALLEABLE IRON EXCEPT WHERE SPECIFIED OTHERWISE.
- 5. ALL VALVES INSTALLED IN HORIZONTAL LINES SHALL BE INSTALLED WITH THE STEMS HORIZONTAL OR ABOVE. VALVE ACTUATOR SHALL BE ORIENTED, WHEN INSTALLED, TO PROVIDE MAXIMUM ACCESSIBILITY FOR OPERATION.

6. PROVIDE ACCESS PANELS FOR VALVES LOCATED IN WALLS OR ABOVE HARD CEILINGS. B. VALVES FOR HYDRONIC / DOMESTIC WATER SYSTEM

- 1. BALL VALVES (FOR PIPING 3" AND SMALLER) SHALL HAVE BRONZE BODY, STAINLESS
 STEEL BALL, LEVER HANDLE, FOR SYSTEMS UP TO 125 PSIG. GATE VALVES SHALL NOT BE
 PERMITTED FOR PIPES 3" AND SMALLER. VALVE LAYOUT BASIS SHALL BE WATTS
- B6000-SS

 2. GATE VALVES (FOR DOMESTIC PIPING 4" IN SIZE AND LARGER): VALVE SHALL HAVE IRON BODY, BRONZE TRIM, NON-RISING STEM, SOLID WEDGE AND FLANGED ENDS FOR 200
- POUND W.O.G. LAYOUT BASIS FOR VALVE SHALL BE NIBCO F-619.

 3. BUTTERFLY VALVES (FOR HYDRONIC PIPING 4" AND LARGER): VALVE SHALL HAVE DUCTILE IRON BODY, EXTENDED NECK, GEOMETRIC DRIVE MOLDED-IN SEAT LINER, EPDM LINER AND ALUMINUM BRONZE DISC INSTALL BETWEEN STD. ANSI CLASS
- 125/150 FLANGES CONFORMING TO MSS-SP67/MSS-SP25/API-609. LAYOUT BASIS SHALL BE NIBCO WD 2000.
 4. CHECK VALVES (4" IN SIZE AND LARGER): VALVE SHALL BE HORIZONTAL SWING TYPE WITH IRON BODY, BRONZE TRIM AND FLANGED ENDS FOR 200 POUND W.O.G. VALVE
- LAYOUT BASIS SHALL BE NIBCO F-918-B.

 5. CHECK VALVES (3" IN SIZE AND SMALLER): VALVE SHALL BE HORIZONTAL SWING TYPE WITH BRONZE BODY, COMPOSITION DISC AND SOLDER ENDS FOR 200 POUND W.O.G.
- LAYOUT BASIS SHALL BE NIBCO S/T-413.

 6. HOSE END DRAIN VALVES: VALVE SHALL BE 3/4" IN SIZE WITH BRONZE BODY,
 NON-RISING STEM, SOLID WEDGE, THREADED INLET AND HOSE OUTLET WITH CAP AND
- CHAIN FOR 200 POUND W.O.G.

 7. UNDERGROUND GATE VALVES AND VALVE BOXES: GATE VALVES (4" IN SIZE AND LARGER) SHALL BE AWWA APPROVED WITH IRON BODY, BRONZE TRIM, NON-RISING STEM, PARALLEL SEAT DOUBLE DISC, SQUARE OPERATING NUT AND MECHANICAL JOINT ENDS FOR 200 POUND W.W.P. VALVE BOXES SHALL BE PROVIDED OVER EACH UNDERGROUND GATE VALVE. VALVE BOXES SHALL BE ADJUSTABLE CAST IRON ROADWAY TYPE WITH BELLED LOWER SECTION AND REMOVABLE LID AT GRADE. LID SHALL BE LABELED "WATER" AND BOXES NOT IN PAVED AREAS SHALL BE SET IN A 12" X 12" X 6" CONCRETE PAD. VALVE BOXES LAYOUT BASIS SHALL BE MUELLER H-10360 PROVIDE ONE T-WRENCH FOR EACH SIZE OPERATING NUT.

PVC NOT TO BE USED WITHIN 10' OF FLOOR SINKS AT STEAMERS.

54 South Ave. SE
Marietta, GA 30060
404-800-7988
info@convergeengineers.com

PLAN DATES

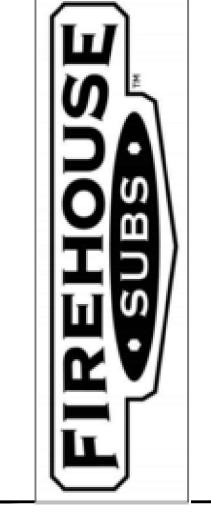
REV. SUBMISSION

10/01/2025

PROGRESS SUBMISSION

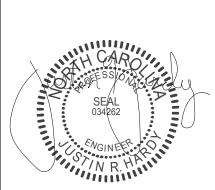
10/10/2025

BID & PERMIT SUBMISSION



65 SADLER ROAD DUNN, NORTH CAROLINA

SEAL



SCALE

PROJECT NO.
FSDN_2509

SHEET TITLE:

MECHANICAL/PLUMBING SPECIFICATION

GENERAL PLUMBING NOTES

- . THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE PLUMBING AND FIRE PROTECTION SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT APPURTENANCES AND CONTROLS COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED TO. ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE PLUMBING AND FIRE PROTECTION SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS, LOCAL AUTHORITIES AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE OWNER. CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
- 2. COORDINATE ALL WORK WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL TRADES. PIPE ROUTING SHOWN IS DIAGRAMMATIC. PROVIDE ALL OFFSETS, ETC. TO AVOID INTERFERENCES WITH EQUIPMENT, PIPING, DUCT WORK, LIGHTS, CONDUITS, AND STRUCTURAL ITEMS, ETC...
- 3. ALL DRAINAGE PIPING AND POTABLE WATER PIPING SHALL BE CONCEALED INSIDE WALLS AND PIPE CHASES OR ABOVE CEILINGS AS HIGH AS POSSIBLE.
- 4. EXPOSED PIPING AT FIXTURES SHALL BE SECURED TO WALLS CONSTRAINED AGAINST ANY FREE-MOVEMENT OF PIPING.
- 5. CONTRACTOR SHALL MAKE FINAL CONNECTION TO ALL DOMESTIC WATER, SANITARY SEWERS, STORM DRAINS, FIRE SUPPLY AND GAS SERVICES AT APPROXIMATELY 5'-0" FROM BUILDING STRUCTURE UNLESS OTHERWISE NOTED.
- 6. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR LOCATION OF ALL PLUMBING FIXTURES. EXACT LOCATION OF ALL PLUMBING FIXTURES MUST BE VERIFIED IN FIELD PRIOR TO INSTALLATION. FINAL LOCATIONS AND HEIGHTS SHALL BE AS DIRECTED BY ARCHITECT
- 7. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO ALL EQUIPMENT INDICATED ON DRAWINGS INCLUDING KITCHEN AND LAUNDRY EQUIPMENT PER MANUFACTURER'S SPECIFIC INSTALLATION INSTRUCTIONS. FINAL CONNECTION SHALL INCLUDE ANY ADAPTERS, NIPPLES SHUTOFF VALVES, PRESSURE REGULATING VALVES. SHOCK ABSORBERS, BACKFLOW PREVENTION DEVICES, ETC. CONTRACTOR SHALL COMPLETELY REVIEW EACH EQUIPMENT ITEM'S INSTALLATION INSTRUCTIONS PRIOR TO COMMENCEMENT OF WORK. ALL ITEMS REQUIRED FOR INSTALLATION ARE INCLUDED IN THE PLUMBING CONTRACTOR'S SCOPE.
- 8. DO NOT RUN PLUMBING OR FIRE PROTECTION PIPING THROUGH TRANSFORMER VAULTS, ELECTRICAL CLOSETS, ELECTRICAL SWITCHGEAR ROOMS, ELEVATOR EQUIPMENT ROOMS, COMPUTER ROOMS OR TELEPHONE ROOMS, DO NOT RUN ANY PIPING ABOVE ELECTRICAL PANELS OR OTHER ELECTRICAL/CONTROLS COMPONENTS.
- 9. ALL COMMERCIAL FIXTURES SPECIFIED BY AN EQUIPMENT PROVIDER SHALL OVERRIDE ANY SPECIFIED PLUMBING FIXTURES ON THIS PLAN. THE PLUMBER SHALL COORDINATE FINAL REQUIRED FIXTURES WITH OWNER/EQUIPMENT SUPPLIER. VERIFY CONNECTION SIZE AND LOCATION OF ALL ITEMS WITH KITCHEN EQUIPMENT DRAWINGS.
- 10. PROVIDE AN EXPANSION JOINT ON ALL PIPING SYSTEMS THAT CROSS BUILDING EXPANSION JOINTS.
- 11. PROVIDE CONNECTION TO EXISTING WATER SERVICE WHERE AVAILABLE. PROVIDE WATER METER, PRV STATION WITH FULL SIZE BYPASS, AND RPZ VALVE, COORDINATE METER AND BACKFLOW REQUIREMENTS WITH LOCAL AUTHORITY AND UTILITY COMPANIES. CONNECT TO EXISTING SANITARY AND KITCHEN WASTE STUB WHERE AVAIALBLE. CONNECTIONS TO EXISTING UTILITIES SHALL BE COORDINATED IN THE FIELD FOR EXACT LOCATION AND INVERT AVAILABILITY.
- 12. PROVIDE GAS CONNECTION TO EXISTING METER WHERE POSSIBLE. PROVIDE CONNECTION TO ROOF MOUNTED EQUIPMENT AND TO KITCHEN EQUIPMENT AS INDICATED ON KITCHEN EQUIPMENT DRAWING, PROVIDE SHUT-OFF VALVES AT ALL POINTS OF CONNECTION. PROVIDE SOLENOID SHUT-OFF VALVE FOR GAS ITEMS UNDEF KITCHEN HOODS. INTERLOCK SOLENOID WITH HOOD FIRE PROTECTION SYSTEM. GAS PIPING SHALL NOT BE ROUTED BELOW FLOORS. PIPING INDICATED AS BELOW SLAB SHALL BE PROVIDED IN A PREFABRICATED MODULAR STAINLESS STEEL UTILITY
- 13. ALL PLUMBING FIXTURES, PIPING, AND MATERIALS SHALL BE LISTED OR LABELED AND INSTALLED AS PER A RECOGNIZED APPROVAL AGENCY.
- 14. ALL WORK WITHIN THIS SCOPE OF WORK SHALL COMPLY WITH ALL CITY, STATE AND NATIONAL PLUMBING CODES. ALL WORK SHALL CONFORM TO BUILDING STANDARDS.
- 15. PLUMBING CONTRACTOR SHALL VERIFY VOLTAGE, PHASE AND WIRE SIZE OF PLUMBING EQUIPMENT REQUIRING ELECTRICAL CONNECTION WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASE OF EQUIPMENT
- 16. COORDINATE ALL FLOOR PENETRATIONS WITH STRUCTURAL DRAWINGS. THE PLUMBER SHALL SET SLEEVES IN FLOORS AND WALLS AND ATTACHMENTS FOR HANGERS AS CONSTRUCTION PROGRESSES. COORDINATE THE EXACT SIZE AND LOCATION OF ALL SLEEVES WITH STRUCTURAL ENGINEER. ALL PENETRATIONS MUST BE SEALED AND HELD AS TIGHT TO COLUMNS OR WALLS AS POSSIBLE.
- 17. COORDINATE ALL UNDERGROUND PIPING WITH GRADE BEAMS, WALL FOOTINGS, COLUMN FOUNDATIONS AND OTHER STRUCTURAL CONDITIONS.
- 18. ALL DRAINAGE PIPING AND VENT PIPING SHALL SLOPE AT 1/8 INCH PER FOOT UNLESS
- 19. EXACT LOCATION OF ALL CLEANOUTS MUST BE COORDINATED AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION.
- 20. SANITARY VENTS MUST TERMINATE A MINIMUM OF 10 FT. FROM OR 2 FT. ABOVE AIR INTAKES, WINDOWS OR VENT SHAFTS.
- 21. ALL HOSE BIBBS AND WASHDOWN FAUCETS ARE REQUIRED TO HAVE PROPER BACKFLOW PREVENTERS WHERE HOSES ARE ATTACHED AND LEFT UNATTENDED. CHEMICAL FEED SYSTEMS AT COMMERCIAL KITCHENS SHALL HAVE DEDICATED BACKFLOW PREVENTERS SEPARATE FROM WASHO-DOWN OR HOSE BIB FIXTURES.
- 22. PROVIDE 12" x 12" ACCESS PANELS FOR SHOCK ABSORBERS, TRAP PRIMERS AND ALL VALVES LOCATED ABOVE NON-ACCESSIBLE CEILINGS AND INSIDE PIPE CHASES. EXACT LOCATION MUST BE COORDINATED WITH ARCHITECTURAL DRAWINGS AND APPROVED BY ARCHITECT PRIOR TO INSTALLATION. ALL ACCESS PANELS SHALL BE LOCATED SO THAT THEY ARE NOT VISIBLE TO PUBLIC VIEW.
- 23. WALL HYDRANTS AND HOSE BIBBS SHALL BE MOUNTED 1' 6" ABOVE GRADE OR FLOOR
- 24. PIPING INSULATION SHALL BE PROVIDED WITH CONTINUOUS AIR-TIGHT VAPOR BARRIER WITH NO LOOSE TAPE OR EXPOSED INSULATION MATERIAL. CONDENSATE PIPING SHALL BE PROVIDED WITH ELECTROMETRIC INSULATION. ALL INSULATION AND WRAPPING JOINTS AND SEEMS SHALL BE PROVIDED WITH 1" OVERLAP AND MANUFACTURER RECOMMENDED, AIR-TIGH MASTIC AT ANY INSULATION OR VAPOR BARRIER JOINTS. INSULATION SHALL BE INSTALLED WITH FULL THICKNESS, FREE OF ANY INSULATION COMPRESSION. PROVIDE RIGID INSULATION SECTION AT ALL PIPING HANGERS
- 25. PROVIDE A VALVE BYPASS AT ALL EQUIPMENT INCLUDING WATER HEATERS, STORAGE TANKS WATER SOFTENERS, BOOSTER PUMPS, FIRE PUMPS, ETC. FOR MAINTENANCE
- 26. PROVIDE BALL VALVES AT ALL BRANCH LINES SERVING MULTIPLE FIXTURES. PROVIDE ACCESSIBLE BALL VALVE AT EACH FIXTURE CONNECTION (IN ADDITION TO ANY EXPOSED STOPS) OR FIXTURE HEADER BRANCH CONNECTION.
- 27. ALL HAND-WASHING BASINS AND LAVATORIES INSTALLED SHALL BE EQUIPPED WITH HOT AND COLD WATER THROUGH A MIXING VALVE UNLESS A TEMPERED WATER SUPPLY IS INDICATED
- 28. INSTALL VACUUM BREAKERS A MINIMUM OF 6" ABOVE THE FLOOD LEVEL RIM OF A FIXTURE SERVED WITH NO SHUT-OFF DEVICES BEYOND THE DISCHARGE OF THE 29. THE USE OF RISER CLAMPS TO SUPPORT VERTICAL PIPE ALONG WALLS, OR COLUMNS IS
- PROHIBITED. PROVIDE B-LINE 22 STRUT & B-2000 PIPE CLAMPS 30. CONTRACTOR SHALL HANG ALL PIPING FROM THE STRUCTURAL MEMBERS (W-SHAPES, BAR JOISTS) WITH CLAMP-TYPE CONNECTIONS. PIPING SHALL NOT BE SUPPORTED
- FROM THE METAL DECK. STRUCTURAL MEMBERS SHALL NOT BE CUT OR DRILLED. 31. ALL JOINTS, ANNULAR SPACES, OR OPENINGS INTO HOLLOW OR INACCESSIBLE AREAS ARE TO BE CLOSED TO 1/32" OR LESS FOR FOOD SERVICE AREAS.
- 32. ALL ANNULAR SPACES ARE TO BE CLOSED AND ESCUTCHEON PLATES AT HAND WASHING AREAS MUST BE SECURED.
- 33. INSTALL VACUUM BREAKERS A MINIMUM OF 6" ABOVE THE FLOOD LEVEL RIM OF THE FIXTURE SERVED WITH NO SHUT-OFF DEVICES BEYOND THE DISCHARGE OF THE
- 34. ALL JOINTS, ANNULAR SPACES, OR OPENINGS INTO HOLLOW OR INACCESSIBLE AREAS ARE TO BE CLOSED TO 1/32" OR LESS FOR FOOD SERVICE AREAS.

						PLUMBING FIXTURE SCHEDULE
FIXTURE TAG	DRAIN	VENT	CW	HW	FIXTURE DESCRIPTION	FIXTURE SPECIFICATION
FS - 1	3	1.5			JAY R. SMITH	PVC FLOOR SINK WITH 1/2 PVC GRATE - MAX 200 DEG DISCHARGE ACCETPANCE
PVC ECONOMY FLOOR SINK					305-12	
FS-2	3	1.5			JAY R. SMITH	CAST IRON FLANGED RECEPTOR WITH SEEPAGE HOLES; ACID RESISTANT COATED INTERIOR; 12-1/2" SQUARE NICKEL BRONZE RIM AND
12X12 FLOOR SINK					3110	SECURED GRATE; SEDIMENT BUCKET; 1/2" COVER AND GRATE; P050 TRAP PRIMER OPTION. CAST IRON GRATES NOT PERMITTED. CAST IRON
FCO	4				JAY R. SMITH	CAST IRON CLEANOUT; NICKEL BRONZE 6" ROUND ADJUSTABLE SCORIATED VANDAL PROOF TOP; GASKET SEAL ABS THREADED PLUG WITH
FLOOR CLEAN OUT					4020S	SLOT TO RECEIVE 1/2" BAR STOCK. ARFCO- ACID RESITANT OPTION.
WHA					JAY R. SMITH 5000 SERIES	STAINLESS STEEL PRESSURIZED COMPRESSION CHAMBER; THREADED NIPPLE CONNECTION; SIZE AS INDICATED ON DRAWINGS
WATER HAMMER ARRESTOR						
MXV-1				.75(X2)	POWERS	MULTI-FIXTURE MIXING VALVE, SOLID BRASS WITH INTEGRAL CHECK. THREADED UNION CONNECTIONS. ASSE 1017
MIXING VALVE					LM490	
VZN			0.75		ATUNES	COORIDNATE WITH EQ. PROVIDER
WATER FILTER SYSTEM			(X2)		AZN FILTER SYSTEM	
OOMESTIC WATER BOOSTER PUMP			1.25		60"	SERVES WATER PIPING TO FILTERS/SOFTENERS/FOOD SERVICE EQUIPMENT
	,					

4. THE ABSENCE OF AN ALTERNATE BID SHALL BE CONSTRUED TO MEAN THAT THE CONTRACTORS BASE BID INCLUDES ALL COSTS NECCESSARY TO MEET ALL REGULATIONS AND CODES.

ALL FIXTURES, EQUIPMENT, TRIM, FITTINGS, ETC. SHALL COMPLY WITH LOCAL, STATE AND/OR FEDERAL REGULATIONS AND CODES, INCLUDING BUT NOT LIMITED TO WATER AND ENERGY CONSERVATION CODES, AND THE AMERICANS WITH DISABILITIES ACT (ADA). 2. PROVIDE ALL MOUNTING HARDWARE, ESCUTCHEONS AT PIPE PENETRATIONS AND FITTINGS FOR COMPLETE INSTALLATION. FOR SINK AND TANK TOILET FIXTURES CHROME FINISH BRASS 1/4-TURN ANGLE STOPS AND CHROME SUPPLIES TO FIXTURE. WHERE CONCEALED, STEEL BRAIDED HOSES SHALL BE ACCE 2. THE SCHEDULE REFLECTS FIXTURES AND EQUIPMENT WHICH ARE MINIMUM CRITERIA AND SHALL BE THE BASIS FOR CONTRACTORS BASE BID. WALL PLUGS OR EXPOSED TRANFORMERS NOT PERMITTED

3. WHERE SPECIFIED FIXTURES AND/OR EQUIPMENT ARE NOT IN COMPLIANCE WITH GOVERNING CODES AND REGULATIONS, THE CONTRACTOR SHALL PROVIDE AN ALTERNATE BID FOR THE SUBSTITUTIONS OF COMPLYING FIXTURES, EQUIPMENT, FITTINGS, ETC.

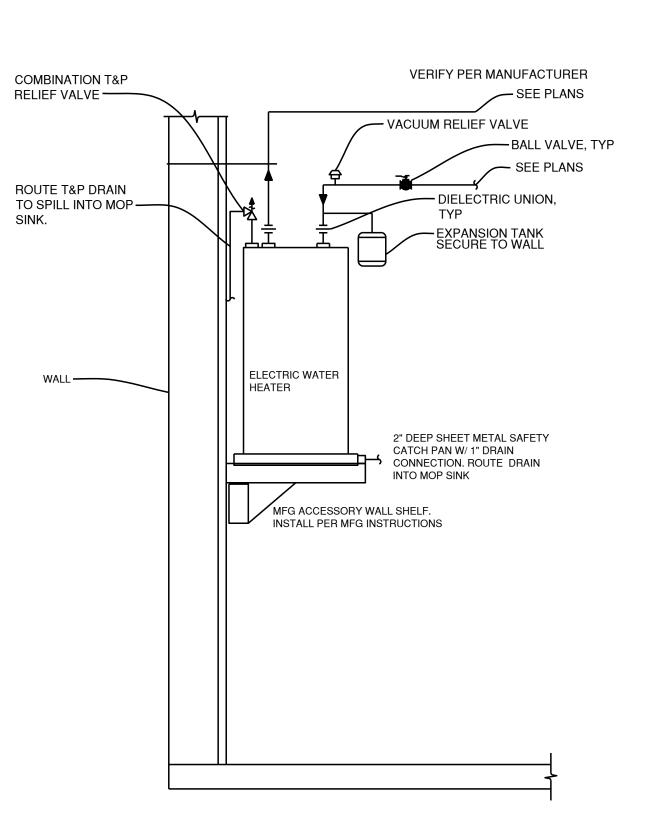
BACKFLOW PREVENTER MATRIX						
MARK	MODEL	SERVES	TYPE	IPC LISTING		
BFP-1	WATTS 009	WATER SERVICE	RPZ	ASSE 1013		
BFP-2	WATTS SD-3	CARBONATOR	CO2 CHECK	ASSE 1022		
BFP-3	WATTS 7	FOOD SERVICE WATER FILTER	DOUBLE CHECK	ASSE 1024		
BFP-4	WATTS 7	RINSE FAUCETS (MULTI COMP SINK)	DOUBLE CHECK	ASSE 1024		
BFP-5	INTEGRAL TO FIXTURE	HOSE BIB	DOUBLE CHECK	ASSE 1052		
BFP-6	WATTS 7	CHEMICALS DISP.	DOUBLE CHECK	ASSE 1024		
BFP-7	WATTS SD-3	CARBONATED DRINK DISPENSER	CO2 CHECK	ASSE 1022		
BFP-8	WATTS 7	ICE MAKER	DOUBLE CHECK	ASSE 1024		
BFP-9	WATTS 7	NON-CARB DRINK DISPENSER	DOUBLE CHECK	ASSE 1024		
BFP-10	WATTS 288A	WATER HEATER VACUUM BREAKER	VACUUM BREAKER	ASSE 1001		
BFP-11	INTEGRAL TO FIXTURE	MOP SINK FAUCET	VACUUM BREAKER	ASSE 1001		

1. PROVIDE HANGING ALUMINUM TAG FOR EACH BFP WITH THE BFP DESIGNATOR AND LISTING ETCHED IN A	AS INDICATED ABOVE.	I
2. TENANT SHALL PROVIDE TESTING FOR EACH BFP AT THE TIME OF ISNTALLATION/RELOCATION AND ANNU	ALLY THEREAFTER	
3. TESTING PROCEDURES TO BE PERFOMED PER LOCAL CODE		<u> </u>
4. MOUNT WITH BFP ACCESSIBLE FOR TESTING/REPAIR AT A MINIMUM 1" ABOVE FLLOR AND MAXIMUM 5' ABO	OVE FLOOR	
5. PROVIDE ACCESS PANELS FOR BFP THAT ARE INSTALLED WITHIN WALLS WHERE SURFACE MOUNTING IS	NOT POSSIBLE.	1

PROVIDE IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL CODE.

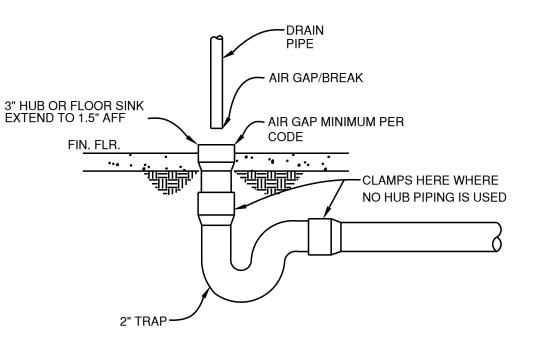
7. ALL BFP MUST BE LEAD FREE ASSEMBLY

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SUSPENDED ELECTRIC WATER HEATER DETAIL

			WA	ΓER HE	ATER	SCHEDU	LE			
		LAYOUT	STORAGE	GAS INPUT	OUTPUT	ELECTRICAL	GPH RECOVERY	TEMP	ELEC	EXPANSION TANK
MARK	TYPE	BASIS	GALLONS	MBH	MBH	CAPACITY (KW)	@80 DEG RISE	SETTING	VOLT/PHASE	ACCPETANCE (GAL)
WH-1	ELECTRIC STORAGE	AO SMITH DEL-50	50			9.0	46.00	140	208/1	5
			<u> </u>							
1. PROVIDE A	1. PROVIDE ARMSTRONG LST EXP TANK AND T&P SET AT 150 PSI DISCHARGE PER PLANS. DO NOT ROUTE INTO DRAIN PAN.									
2. PROVIDE C	CONDENSATE NUETRALIZE	R AND CONDENSATE	TRAP FOR W/	ATER HEATER	. ROUTE CO	NDENSATE TO FLO	OOR SINK. SEAL PEN	ETRATION	AT PAN WITH C/	AULKING.
3. PROVIDE II	INDIVIDUAL FIXTURE MIXING	G VALVES SET TO 110	DEGREES FC	R HAND WASI	HING FIXTUF	₹ES.		<u> </u>		
		,					ſ	'		



HUB /FLOOR SINK DRAIN DETAIL

IF BRANCH IS GREATER THAN 20' LONG. PROVIDE A WHA PROVIDE ANOTHER WHA IN MIDDLE, EACH AT ALL QUICK-SIZED FOR HALF THE FIXTURE UNITS. CLOSING VALVES. SINGLE FIXTURE **MULTIPLE FIXTURES** FIXTURE UNIT TABULATION PDI PIPE FIXTURE SIZE | SIZE | UNIT LOAD FIXTURE COLD HOT 1-11 VALVE WATER CLOSET 12-32 TANK WATER CLOSET 33-60 LAVATORY/SINK D 1-1/4" 61-113 I SHOWER/BATHTUB E 1-1/2" 114-154 2" 154-330

INSTALL PER PDI - / HOT OR COLD WATER SUPPLY

IF HORIZONTAL BRANCH IS LESS THAN 20'

LONG, PROVIDE ONE WHA AT END OF LINE.

STANDARDS AND

INSTRUCTIONS

MANUFACTURER'S

VALVE/FACUET SPECIFICATION

Engineering

54 South Ave. SE

Marietta, GA 30060

404-800-7988

info@convergeengineers.com

PLAN DATES

PROGRESS SUBMISSION

BID & PERMIT SUBMISSION

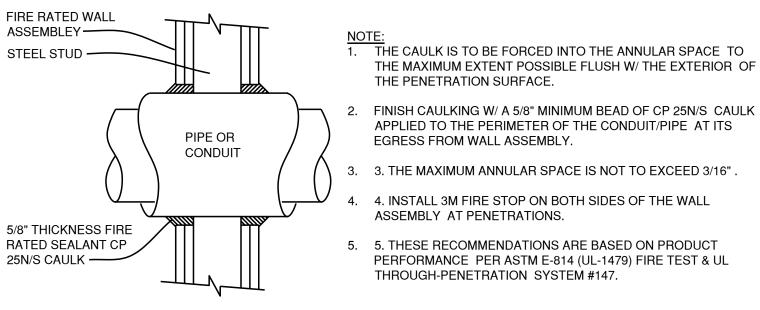
EV. SUBMISSION

/10/01/2025

/10/10/2025

DO NOT PROVIDE AIR CHAMBERS. 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 IF POSSIBLE, SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE TABLES SHOWN ABOVE. SIOUX CHIEF "MINI-RESTER" MAY BE USED AT EACH FIXTURE. PROVIDE ACCESSIBILITY TO "WHA" WHERE REQUIRED BY LOCAL CODE.

WATER HAMMER ARRESTOR DETAIL

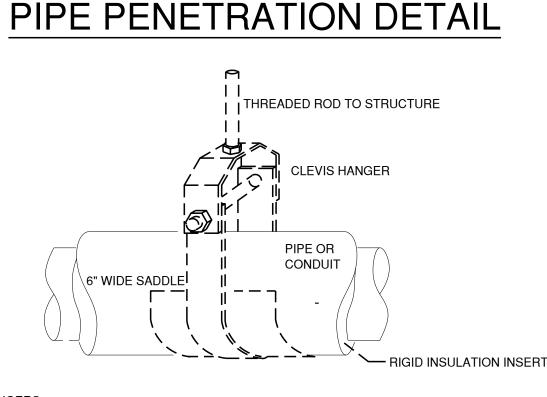


1. THE CAULK IS TO BE FORCED INTO THE ANNULAR SPACE TO THE MAXIMUM EXTENT POSSIBLE FLUSH W/ THE EXTERIOR OF THE PENETRATION SURFACE.

APPLIED TO THE PERIMETER OF THE CONDUIT/PIPE AT ITS EGRESS FROM WALL ASSEMBLY. 3. 3. THE MAXIMUM ANNULAR SPACE IS NOT TO EXCEED 3/16". 4. INSTALL 3M FIRE STOP ON BOTH SIDES OF THE WALL

ASSEMBLY AT PENETRATIONS. 5. 5. THESE RECOMMENDATIONS ARE BASED ON PRODUCT PERFORMANCE PER ASTM E-814 (UL-1479) FIRE TEST & UL

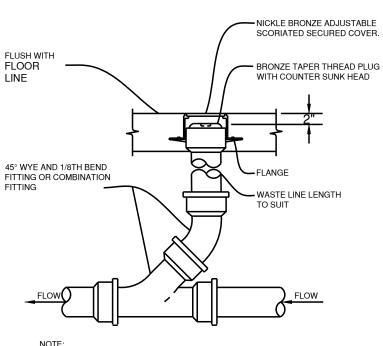
THROUGH-PENETRATION SYSTEM #147.



1. PROVIDE CLEVIS SUPPORTS WITH BEAM CLAMP, CONCRETE ANCHORS (CONCRETE STRUCTURE), SCREWED BRACKET (WOOD STRUCTURE). PROVIDE HANGER OUTSIDE OF INSULATION WITH RIGID FOAM GLASS INSULATION SECTION AT HANGERS. PROVIDE 16 GAUGE PIPING SADDLE AT EACH HANGER. NO WELDING OR CUTTING OF STEEL STRUCTURAL MEMBERS SHALL BE PERMITTED. LAYOUT BASIS SHALL BE ANVIL 260. ROD SIZE PER CLEVIS HANGER DIMENSIONS FOR EACH PIPE SIZE: 3/8" FOR 2" PIPE OR LESS,1/2" UP TO 3" PIPE AND 5/8" FOR 4" PIPE 2. HANGER INSTALLATION FOR HOT WATER PIPING SHALL NOT PREVENT MOVEMENT FOR PIPING EXPANSION. SPACING AS FOLLOWS: STEEL PIPE: 1/2" TO 1-1/4" - 7'; 1-1/2" TO 2-1/2" - 9'; 3" &4" - 12'; 6" &8" - 17'; 10" AND UP- 22'

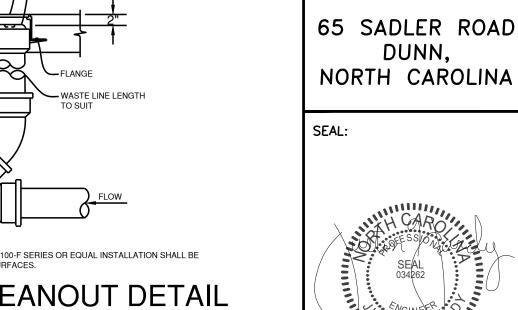
COPPER PIPE: 1/2" TO 1" - 5'; 1-1/4" TO 2" - 7'; 2-1/2" AND UP - 9' CAST IRON: 10' WITH SUPPORT AT EACH JOINT, TAKEOFF, AND FITTING. PVC DRAINAGE (140 DEG F SERVICE UP TO 6" - 80 DEG F ABOVE 6"): UP TO 3" - 3' ; 4" TO 6" - 4' ; ABOVE 6" - 8' PVC VENT (80 DEG F SERVICE): UP TO 1-1/2" - 5'; 2"-3" - 6'; ABOVE 3" 7'

PIPE HANGER DETAIL



CLEAN-OUT TO BE J.R. SMITH MODEL 4100-F SERIES OR EQUAL INSTALLATION SHALL BE

FLOOR CLEANOUT DETAIL



SCALE:

PROJECT NO. FSDN_2509

SHEET TITLE:

PLUMBING DETAILS

GENERAL SCHEDULE NOTES

- 1. REFER TO ARCHITECTURAL DRAWINGS AND ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT ELEVATIONS OF ALL PLUMBING FIXTURES PRIOR TO INSTALLATION
- 2. PROVIDE ALL FIXTURES WITH CHROME PLATED CAST BRASS, ADJUSTABLE 'P' TRAPS WITH CLEANOUT PLUGS, TUBING OUTLETS AND WALL FLANGES UNLESS FIXTURE IS FURNISHED WITH AN INTEGRAL TRAP OR IS PROVIDED
- 3. PROVIDE ALL FIXTURES WITH CHROME PLATED SUPPLIES WITH ANGLE OR STRAIGHT PATTERN LOOSE KEY STOPS UNLESS FIXTURE IS FURNISHED WITH INTEGRAL STOPS OR STOPS ARE PROVIDED AS STANDARD ACCESSORIES
- 4. ALL FLUSH VALVES SHALL HAVE A.D.A COMPLIANT HANDLES ALL EXPOSED PIPING SHALL BE POLISHED CHROME 5. COORDINATE ALL CASEWORK MOUNTED FIXTURES WITH BASE CABINET DIMENSIONS PRIOR TO ORDERING
- FIXTURES. NOTIFY ARCHITECT/ENGINEER IMMEDIATELY IF A CONFLICT EXISTS 6. ACCESSIBLE WATER CLOSETS SHALL BE OPERABLE FROM THE WIDE SIDE OF THE STALL

SCHEDULE REMARKS: (NOT ALL REMARKS MAY BE APPLICABLE TO THIS PROJECT)

FIXTURE DESIGNATED TO BE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (A.D.A)

REFRIGERATION SYSTEM CHARGED WITH R-134A REFRIGERANT

FAUCET COMPLETE WITH RIGID GOOSENECK SPOUT, E3-VP AERATOR AND 317 WRIST BLADE HANDLES. INSULATE TRAP AND WATER SUPPLIES

MOUNTED 3'-6" A.F.F. PROVIDE SHORT SPOUT W/VACUUM BREAKER AND RPZA ASSEMBLY

FAUCET TO HAVE ROUGH CHROME FINISH AND SHALL BE MOUNTED 3'-6" A.F.F. PROVIDE SHORT SPOUT W/VACUUM BREAKER AND RPZA ASSEMBLY

FAUCET LEDGE SHALL BE PUNCHED FOR SINGLE HOLE FAUCET SPECIFIED

PROVIDE CHROME PLATED TAILPIECE EXTENSION AND TURN DOWN TO ALLOW FOR KNEE-SPACE CLEARANCE.

WC-1:TOILET SHALL BE 1.28 GALLONS PER FLUSH 0.5 GALLONS PER FLUSH

WC-1: COORDINATE FLUSH VALVE ROUGH-IN ELEVATION WITH GRAB BAR MOUNTING HEIGHT PRIOR TO INSTALLATION

L-1: PROVIDE WATTS SERIES LFMMV THERMOSTATIC MIXING VALVE SET AT 105°F - ASSE 1070 LISTED

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GC SHALL VERIFY ALL EQUIPMENTS MARKED AS "EXISTING" ARE IN GOOD WORKING CONDITION. GC SHALL PROVIDED AN ALTERNATIVE BID.

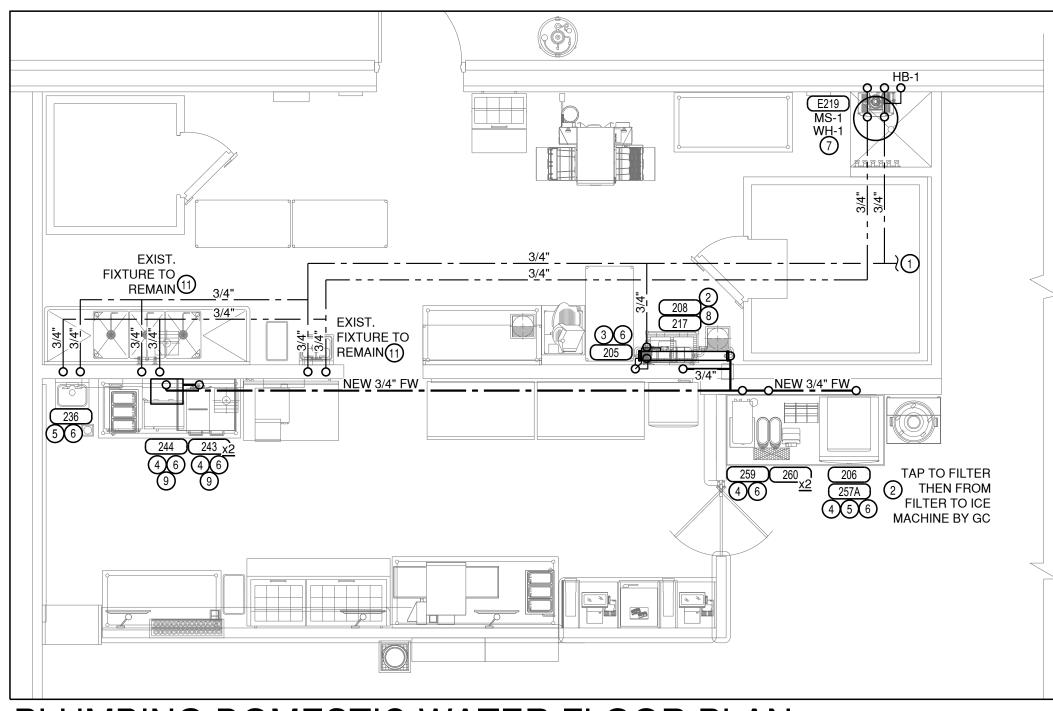
DEMOLISH ALL UNUSED PLUMBING ITEMS AND CAP EXISTING UTILITIES BELOW FLOOR AND ABOVE CEILING. FINISH FLOORS, WALL, AND ROOF DECKING TO MATCH SURROUNDING AREAS.

PLUMBER SHALL VERIFY FREE FLOW OF DRAINAGE AT EACH REUSED DRAIN LINE AND PROVIDE SERVICES TO CLEAN OUT OR CLEAR ANY BLOCKED OR OBSTRUCTED SANITARY LINES.

CONTRACTOR TO PROCURE ACCESS TO SPACE AND COORDINATE BELOW-FLOOR PIPING LAYOUT WITH EXISTING CONDITIONS AND BID ACCORDINGLY FOR ANY ADDITIONAL OFFSETS OR FITTINGS REQUIRED FOR COMPLETE LAYOUT. ALL EXISTING PIPING

LOCATIONS- SANITARY AND DOMESTIC ARE

ESTIMATED AND MUST BE VERIFIED IN FIELD FOR EXACT LOCATIONS.



PLUMBING DOMESTIC WATER FLOOR PLAN

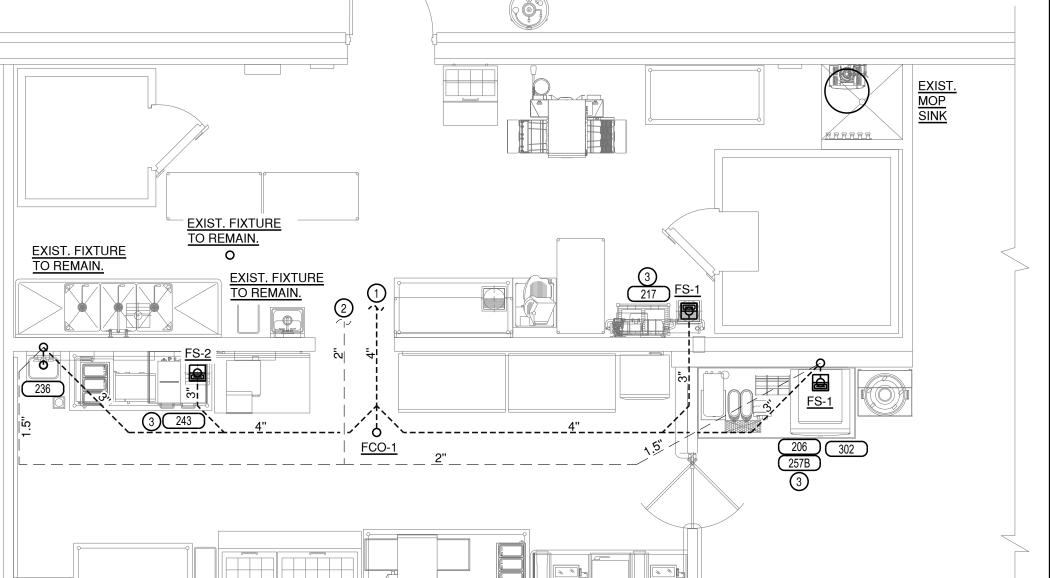
1/4" = 1'-0"

DOMESTIC KEY NOTES:

- 1. EXTEND AND CONNECT TO EXISTING WATER LINE. GC SHALL VERIFY EXACT LOCATION ON FIELD.
- 2. NEW 3/4" FW TO BEVERAGE/ICE MACHINE WITH BACKFLOW. REUSE EXISTING BACK-FLOWS WHERE AVAILABLE.
- 3. NEW 3/4" MAIN TO FEED STEAMER BOOSTER/FILTER WITH BACKFLOW PREVENTER. 4. 3/4" FILTERED WATER DROP TO SOFTENER MODULE THEN 1/2" FROM MODULE TO
- EACH STEAMER- REFER TO KITCHEN PLANS FOR CONT. PROVIDE BACK-FLOW AT CONNECTION TO SOFTENER AND TO EACH STEAMER. 5. 3/4" DOMESTIC HW/CW TO EACH FAUCET AT KITCHEN FIXTURE. PROVIDE DROP TO BELOW SINK IN WALL WITH CHROME 1/4 TURN BALL VALVE STOPS AND STEEL HOSES
- TO FAUCET CONNECTIONS- ALL MOUNTING HARDWARE BY PLUMBER. PROVIDE CODE APPROVED BACKFLOW OR VACUUM BREAKER FOR WATER SUPPLIES. 6. PROVIDE MIXING VALVE AT HAND WASH SINK. TEMPERATURE SETTING TO BE AT
- 7. NEW ELECTRIC WATER HEATER. 8. PROVIDE CODE-APPROVED BACK-FLOW PREVENTER.
- 9. 1/2" TO SOFTENER THEN FROM SOFTENER TO STEAMERS. REFER TO FILTRATION DETAILS ON DRAWING P1.1.
- 10. WATER FEED TO BEVERAGE/FOOD SERV. EQUIPMENT. VERIFY FILTRATION REQUIREMENTS WITH BEVERAGE VENDOR. FILTERS WITH BACKFLOW BY PLUMBER. 11. RECONNECT EXISTING FIXTURE TO NEW WATER LINE.

LEGEND

——— GAS ———• GAS PIPING —— - — - — CW PIPING —— - - —— • HW PIPING **GAS METER**



SANITARY WASTE AND VENT FLOOR PLAN

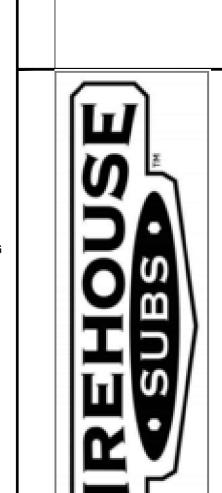
1/4" = 1'-0"

SANTIARY KEY NOTES:

- 1. CONNECT TO EXISTING GREASE LINE IN THIS AREA. VERIFY EXACT LOCATION IN
- 2. CONNECT TO EXISTING VENT TO ROOF IN THIS AREA. VERIFY EXACT LOCATION
- 3. EXTEND FULL SIZE DRAIN FROM EQUIPMENT/APPLIANCE TO FLOOR SINK WITH AIR GAP.R.

---- VENT PIPING

LEGEND ----- GREASE PIPING — — — SANITARY PIPING



Enĝineerinĝ '

54 South Ave. SE Marietta, GA 30060

info@convergeengineers.com

PLAN DATES

PROGRESS SUBMISSION

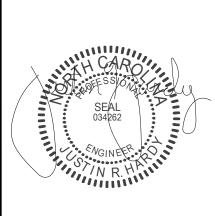
BID & PERMIT SUBMISSION

REV. SUBMISSION

/10/01/2025

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65 SADLER ROAD DUNN, NORTH CAROLINA



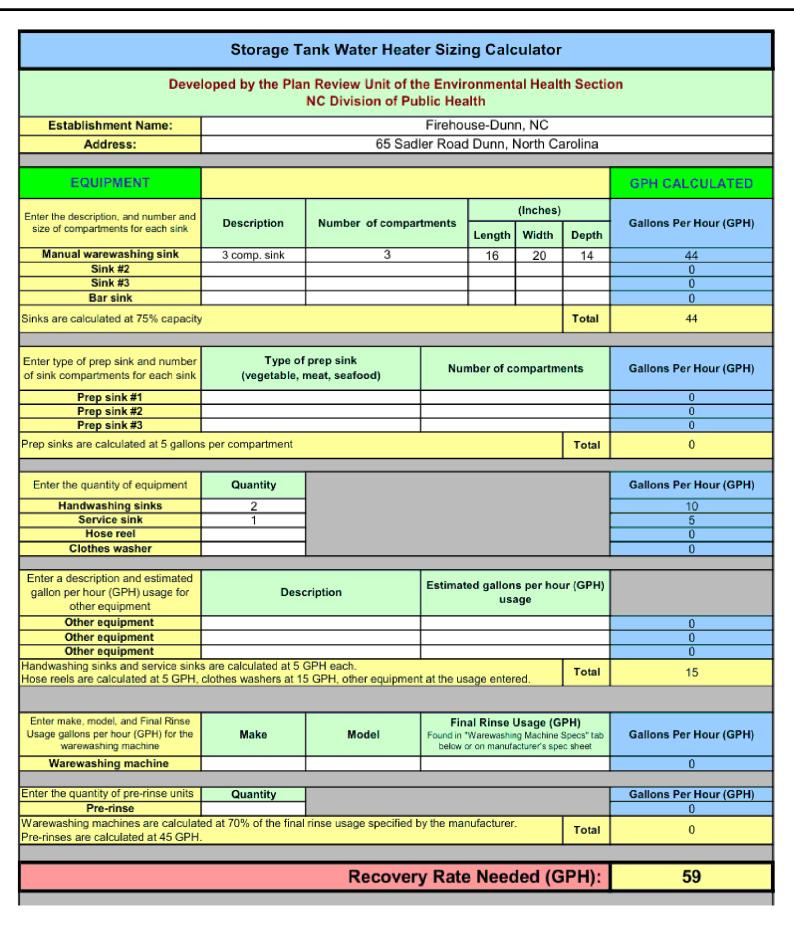
SCALE:

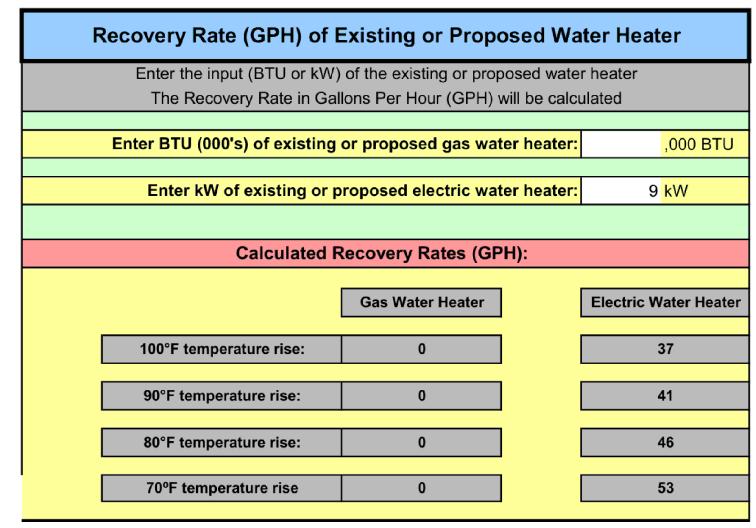
PROJECT NO. FSDN_2509

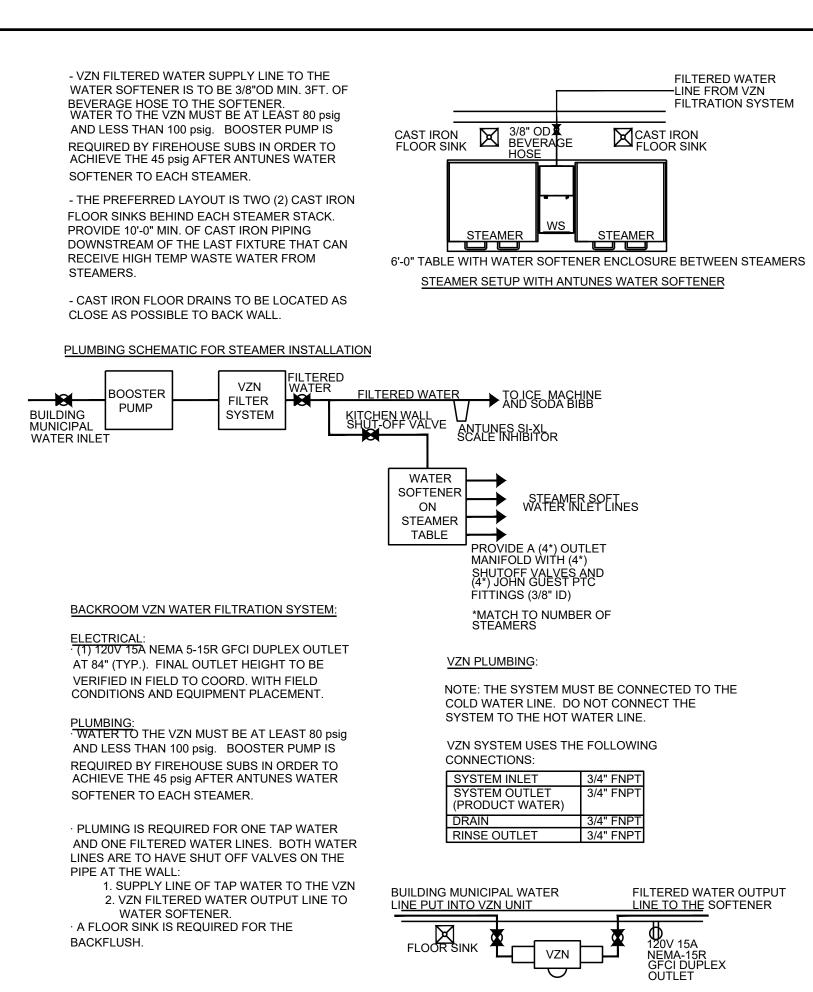
SHEET TITLE: PLUMBING PLAN

SHEET NUMBER:

P1.0







STEAMER WATER LINE INSTALLATION DIAGRAM

WATER SYSTEM FLOW DIAGRAM

COLD WATER LINE

FILTERED WATER LINE

BEVERAGE STATION

(CREW-SERVE)

BEVERAG

DISPENSE

1.0 gpm DISPENSER HEAD

→ WATER ENTERING VZN MUST BE @ 80.0 psi

REQUIRED: 20" CLEARANCE ON ONE SIDE AND

WATER

SOFTENER

3/8" PUSH-2-CONNECT INLET/OUTLET

CANNOT BE SWITCHED OFF AND SHOULD

REQUIRED: FLOOR DRAIN, OUTLET NEEDS

BE DENOTED ON ELECTRICAL PANEL

MAX. FLOW RATE: 4.5 gpm

MIN. PRESSURE: 25.0 psi

MAX. PRESSURE: 125.0 psi

120V-10A CIRCUIT - A DRAW -

TO BE AT 48" A.F.F.

OUTLET NEEDS TO BE AT LEAST 96"±A.F.F.

3/4" FEMALE INLET/OUTLET

MAX. FLOW RATE: 8.0 gpm

MIN. PRESSURE: 50.0 psi

MAX. PRESSURE: 100.0 psi

BEVERAGE STATION

(SELF-SERVE)

TEA MAKE

BEVERAGI

DISPENSER

FLOOR DRAIN

120V-10A DEDICATED CIRCUIT

RECIRCULATION

PUMP (IF REQUIRI BY CODE / CITY

KITCHEN SINK(S),

HAND SINK(S)

AFTER THE ATTUNES FILTERED WATER.

(DRIVE-THRU SIDE) IF APPLICABLE

STEAMER

(DINE-IN SIDE)

STEAMER

—— EACH INDIVIDUAL STEAMER MUST BE DIALED IN @45.0 psi

4 - 6 STEAMER UNITS PER VZN

1/4" QUICK DISCONNECT INLET

REFILL RATE: 1.0 gpm @ 50 psi

MIN. PRESSURE: 40.0-45.0 psi

REQUIRED: CAST IRON HUB DRAIN

OUTLET NEEDS TO BE AT 48" A.F.F.

INITIAL FILL RATE: 3.5 g/hr

MAX. PRESSURE: 70.0 psi

208V - 50A CIRCUIT

3/8" PUSH-2-CONNECT INLET/OUTLET

CANNOT BE SWITCHED OFF AND SHOULD

REQUIRED: FLOOR DRAIN, OUTLET NEEDS

DISPENSER AND 84" A.F.F. FOR ICE MAKERS

MOUNTED ABOVE BEVERAGE DISPENSER

BE DENOTED ON ELECTRICAL PANEL

TO BE AT 48" A.F.F. FOR BEVERAGE

MAX. FLOW RATE: 4.5 gpm

MIN. PRESSURE: 25.0 psi

MAX. PRESSURE: 125.0 psi

120V-10A CIRCUIT - A DRAW -

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FIXTURE TAG	DESCRIPTION	DRAIN	VENT	CW	HW	SUPPLY ROUGH-IN HT	NOTES
203	UNDER COUNTER DW	5/8"	I.W.	3/4"		APPX 18"	3/4" CW WITH CODE-APPROVED CHECK VALVE- DROP TO 3/4" GHT MALE TERMINATION-MFG INCLUDED HOSE. PROVIDE 5/8" RUBBER DISCHARGE HOSE TO FS WITH AIR GAP.
205	STEAMER WATER FILTRATION (VZN)	3/4"	I.W.	3/4"(X 2)		96"	3/4" WATER IN AND FILTERED WATER OUT WITH BACKFLOW ON SUPPLY BRANCH. PROVIDE HOSE DISCAHRGE FROM FILTER FLUSH VALVE TO FLOOR RECEPTOR WITH AIR GAP.
206	ICE MAKER (NO BIN)	1/2"	I.W.	0.5	0.5	78"	ROUTE DRAINAGE TO RECEPTRO WITH AIR GAP
207	ICE MAKER BIN	1"	I.W.				1" I.W.
212	3-COMP SINK	2"	I.W.	1/2"	1/2"	12"	1/2" HW/CW WITH CHECK VALVE BACK FLOW PREVENTERS WITH DROPS TO 1/4-TURN STOPS-SUPPLIES. 1-1'2" DRAIN TO EACH BASIN TO 2" HEADER ROUTED TO RECEPTOR WITH AIR GAP
217	FREESTYLE RACK/PUMP (SODA)			1/2" FW		84"	EQUIPMENT PIECES PROVIDED BY BEVERAGE VENDOR. COORDINATE TERMINATIONS AN CONNECTION DETAILS WITH VENDOR. CO2 BACKFLOW PREVENTER
217 A	SODA BAG IN BOX FILTER			1/2"		78"	PRIVIDE WITH CODE-APPROVED BACKFLOW PREVENTER
220	MOP SINK FAUCET			1/2"	1/2"	36"	140 DEG. F WATER SUPPLY
220 A	HOSE BIB			1/2"	1/2"	15"	INTEGRAL VACUUM BREAKER
222	DOMESTIC WATER BOOSTER PUMP			1-1/4"		60"	SERVES WATRE PIPING TO FILTERS/SOFTENERS/FOOD SERVICE EQUIPMENT
236	HAND SINK	1-1/2"	1-1/4"	1/2"	1/2"	12"	PROVIDE WITH SINGLE FIXTUE MIXING VALVE SET TO 110 DEG. F
243	STEAMER	1/2"		1/2" (SOFTENED)		24"	1/2" WATER FEED TO WATER SOFTENER- 1/2" CONNECTION TO EACH STEAMER AFTER SOFTENER. STEMER DRAIN TO CAST IRON RECEPTRO WITH AIR GAP. PROVDE WITH CODE APPROVED BACKFLOW VALVE
244	STEAMER WATER SOFTENER	1/2"		1/2" FW		40"	VZN FILTERED WATER TO SOFTENER WITH COEDE APPROVED BACKFLOW PREVENTER
257	FREE-STYLE SODA DISPENSER			1/2" FW		84"	FOR FUTURE ICE MAKER
259	TEA BREWER			1/2" FW		36"	PROVIDE WITH CODE APPROVED BACKFLOW PREVENTER.

1. ALL FIXTURES, EQUIPMENT, TRIM, FITTINGS, ETC. SHALL COMPLY WITH LOCAL, STATE AND/OR FEDERAL REGULATIONS AND CODES.

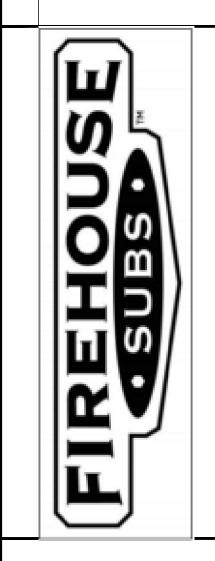
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3. THE SCHEDULE REFLECTS FIXTURES AND EQUIPMENT WHICH ARE MINIMUM CRITERIA AND SHALL BE THE BASIS FOR CONTRACTORS BASE BID.

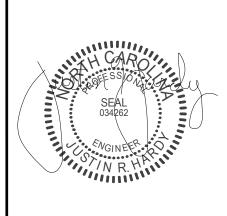
Enĝineerinĝ ^U 54 South Ave. SE Marietta, GA 30060 404-800-7988 info@convergeengineers.com

PLAN DATES REV. SUBMISSION /10/01/2025

PROGRESS SUBMISSION /10/10/2025 BID & PERMIT SUBMISSION



65 SADLER ROAD DUNN, NORTH CAROLINA



SCALE:

PROJECT NO. FSDN_2509

SHEET TITLE:

PLUMBING DETAILS