



# CITY OF CAMBRIDGE

BOARD OF ZONING APPEAL

831 Massachusetts Avenue, Cambridge MA 02139

617-349-6100

2024 FEB -1 AM 11:49

OFFICE OF THE CITY CLERK  
CAMBRIDGE, MASSACHUSETTS

## BZA Application Form

**BZA Number: 255955**

### General Information

The undersigned hereby petitions the Board of Zoning Appeal for the following:

Special Permit:   X  

Variance:       

Appeal:       

**PETITIONER:** BCSP 9 OBS Property LLC

**PETITIONER'S ADDRESS:** 200 State Street, Boston, MA 02109

**LOCATION OF PROPERTY:** 1 Brattle Sq., Cambridge, MA

**TYPE OF OCCUPANCY:** vacant

**ZONING DISTRICT:** Business B Zone

**REASON FOR PETITION:**

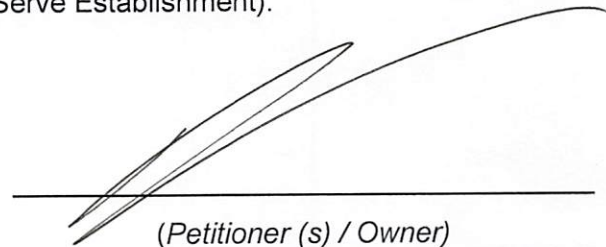
### **DESCRIPTION OF PETITIONER'S PROPOSAL:**

Special permit for Van Leeuwen Ice Cream which is considered a Formula Business

### **SECTIONS OF ZONING ORDINANCE CITED:**

- Article: 4.000      Section: 4.35.0 (Fast Order Food Establishment).
- Article: 11.000    Section: 11.30 (Fast Order Food or Quick Serve Establishment).
- Article: 10.000    Section: 10.40 (Special Permit).

Original  
Signature(s):



\_\_\_\_\_  
(Petitioner (s) / Owner)

\_\_\_\_\_  
(Print Name)

Address: \_\_\_\_\_  
 Tel. No. \_\_\_\_\_  
 E-Mail Address: DTinory@beaconcapital.com

**Date:** \_\_\_\_\_

## BZA Application Form

**BZA APPLICATION FORM - OWNERSHIP INFORMATION**

To be completed by OWNER, signed before a notary and returned to The Secretary of the Board of Zoning Appeals.

I/We BCSP 9 OBS Property LLC  
(OWNER)

Address: 40 Beacon Capital Partners, LLC

State that I/We own the property located at One Brattle Square, which is the subject of this zoning application.

The record title of this property is in the name of BCSP 9 OBS Property LLC

\*Pursuant to a deed of duly recorded in the date Two's December 14, 2022, Middlesex South County Registry of Deeds at Book 81056, Page 381; or ~~and Middlesex Registry District of Land Court, Certificate No. \_\_\_\_\_~~  
Book 81056 Page 390.

BCSP 9 OBS Property LLC  
By [Signature] Matthew Stegall  
SIGNATURE BY LAND OWNER OR AUTHORIZED TRUSTEE, OFFICER OR AGENT\* Managing Director

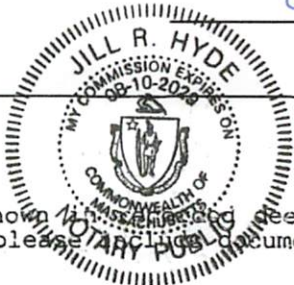
\*Written evidence of Agent's standing to represent petitioner may be requested.

Commonwealth of Massachusetts, County of Suffolk

The above-name Matthew Stegall, Managing Director personally appeared before me, this 26 of January, 2024, and made oath that the above statement is true.

[Signature] Notary

My commission expires August 10, 2029 (Notary Seal).



• If ownership is not shown in public records, e.g. if by court order, recent deed, or inheritance, please provide supporting documentation.

## **BZA Application Form**

### **SUPPORTING STATEMENT FOR A SPECIAL PERMIT**

**Please describe in complete detail how you meet each of the following criteria referring to the property and proposed changes or uses which are requested in your application. Attach sheets with additional information for special permits which have additional criteria, e.g.; fast food permits, comprehensive permits, etc., which must be met.**

**Granting the Special Permit requested for 1 Brattle Sq., Cambridge, MA (location) would not be a detriment to the public interest because:**

**A) Requirements of the Ordinance can or will be met for the following reasons:**

Van Leeuwen Ice Cream is a high-end retail ice cream scoop shop with 50+ nationwide, originating in Brooklyn, NY. Ice Cream use is currently permitted in Harvard Square overlay district.

**B) Traffic generated or patterns of access or egress would not cause congestion hazard, or substantial change in established neighborhood character for the following reasons:**

Space is currently vacant, we do not anticipate additional congestion hazards in the area.

**C) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would not be adversely affected by the nature of the proposed use for the following reasons:**

We do not anticipate and adverse effects from the proposed ice cream shop use.

**D) Nuisance or hazard would not be created to the detriment of the health, safety, and/or welfare of the occupant of the proposed use or the citizens of the City for the following reasons:**

We do not anticipate any hazards from the proposed ice cream shop use.

**E) For other reasons, the proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this ordinance for the following reasons:**

Van Leeuwen Ice Cream is a brand with multiple locations however each store is unique in design.

**\*If you have any questions as to whether you can establish all of the applicable legal requirements, you should consult with an attorney.**

**DIMENSIONAL INFORMATION**

**Applicant:** BCSP 9 OBS Property LLC  
**Location:** 1 Brattle Sq., Cambridge, MA  
**Phone:**

**Present Use/Occupancy:** vacant  
**Zone:** Business B Zone  
**Requested Use/Occupancy:** Ice Cream Shop

		<u>Existing Conditions</u>	<u>Requested Conditions</u>	<u>Ordinance Requirements</u>	
<u>TOTAL GROSS FLOOR AREA:</u>		1375	1375	1375	(max.)
<u>LOT AREA:</u>		29630	29630	29630	(min.)
<u>RATIO OF GROSS FLOOR AREA TO LOT AREA: <sup>2</sup></u>		0	0	0	
<u>LOT AREA OF EACH DWELLING UNIT</u>		0	0	0	
<u>SIZE OF LOT:</u>	WIDTH	271.86	271.86	0	
	DEPTH	82.31	82.31	0	
<u>SETBACKS IN FEET:</u>	FRONT	0	0	0	
	REAR	0	0	0	
	LEFT SIDE	0	0	0	
	RIGHT SIDE	0	0	0	
<u>SIZE OF BUILDING:</u>	HEIGHT	60	60	0	
	WIDTH	140	140	0	
	LENGTH	220	220	0	
<u>RATIO OF USABLE OPEN SPACE TO LOT AREA:</u>		unknown	unknown	unknown	
<u>NO. OF DWELLING UNITS:</u>		0	0	0	
<u>NO. OF PARKING SPACES:</u>		0	0	0	
<u>NO. OF LOADING AREAS:</u>		0	0	0	
<u>DISTANCE TO NEAREST BLDG. ON SAME LOT</u>		0	0	0	

Describe where applicable, other occupancies on the same lot, the size of adjacent buildings on same lot, and type of construction proposed, e.g; wood frame, concrete, brick, steel, etc.:

n/a

1. SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).
2. TOTAL GROSS FLOOR AREA (INCLUDING BASEMENT 7'-0" IN HEIGHT AND ATTIC AREAS GREATER THAN 5') DIVIDED BY LOT AREA.
3. OPEN SPACE SHALL NOT INCLUDE PARKING AREAS, WALKWAYS OR DRIVEWAYS AND SHALL HAVE A MINIMUM DIMENSION OF 15'.

# VanLeeuwen

ONE BRATTLE SQUARE  
SPACE C2  
CAMBRIDGE, MA 02138

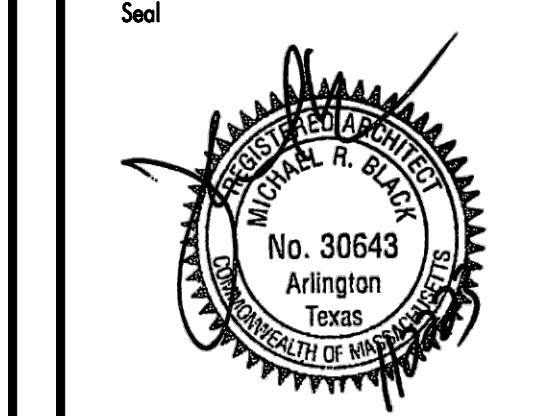
Project Address  
**Van Leeuwen Ice Cream**  
**One Brattle Square**  
**Space #C2**  
**Cambridge, MA 02138**

Issue Date **11/22/23**

Revisions	Date	Description	By
△			
△			
△			
△			
△			

*VanLeeuwen*  
ONE BRATTLE SQUARE  
CAMBRIDGE, MA

Consultant  
**mb**  
MICHAEL R. BLACK, AIA  
2225 E. RANDOL MILL  
ARLINGTON, TEXAS 76011  
817.701.4819  
MASSACHUSETTS LICENSE NO.: 30643



Seal

Job Number **230174**

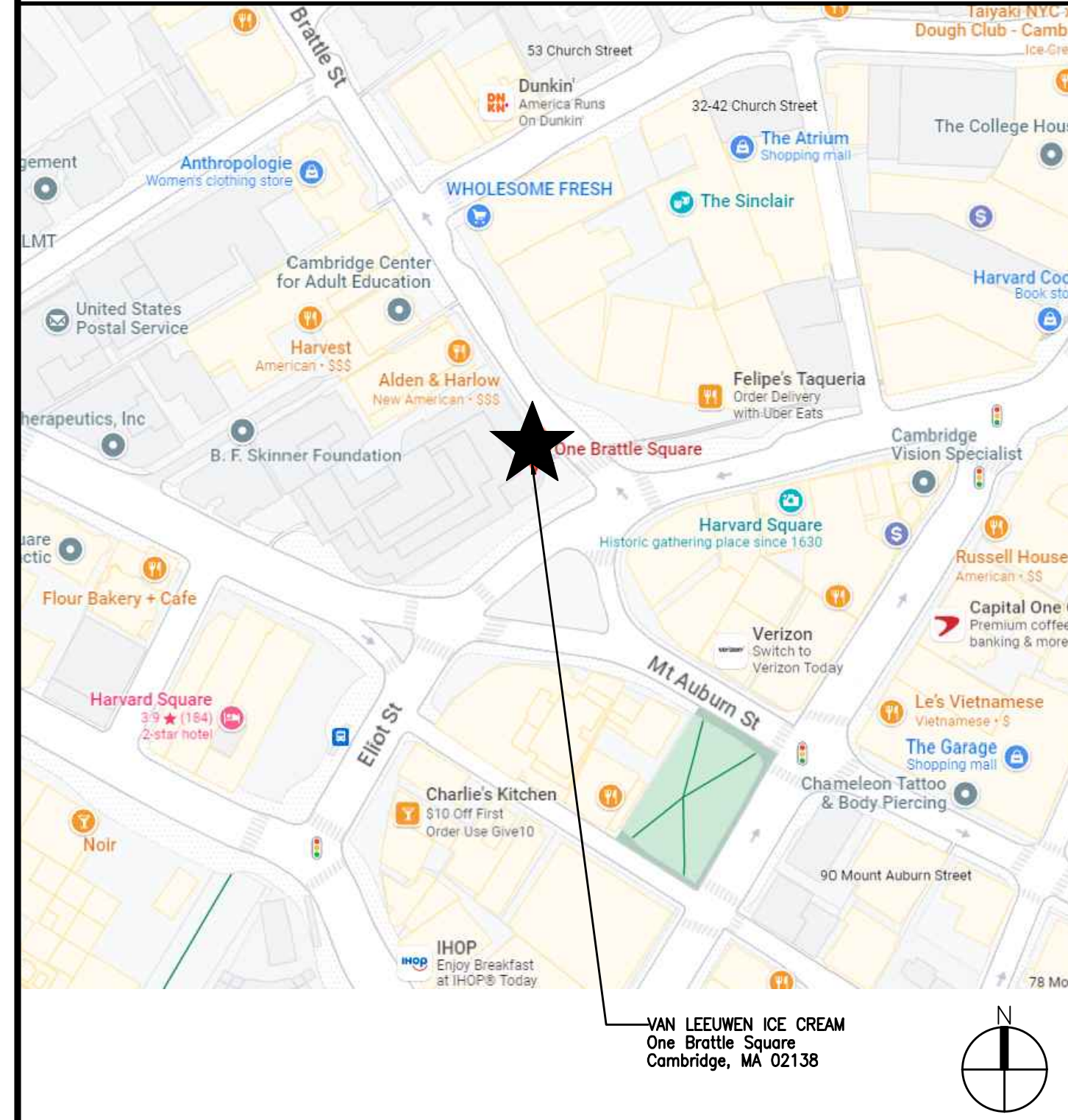
Drawn By **CMS**

App'd By **SS**

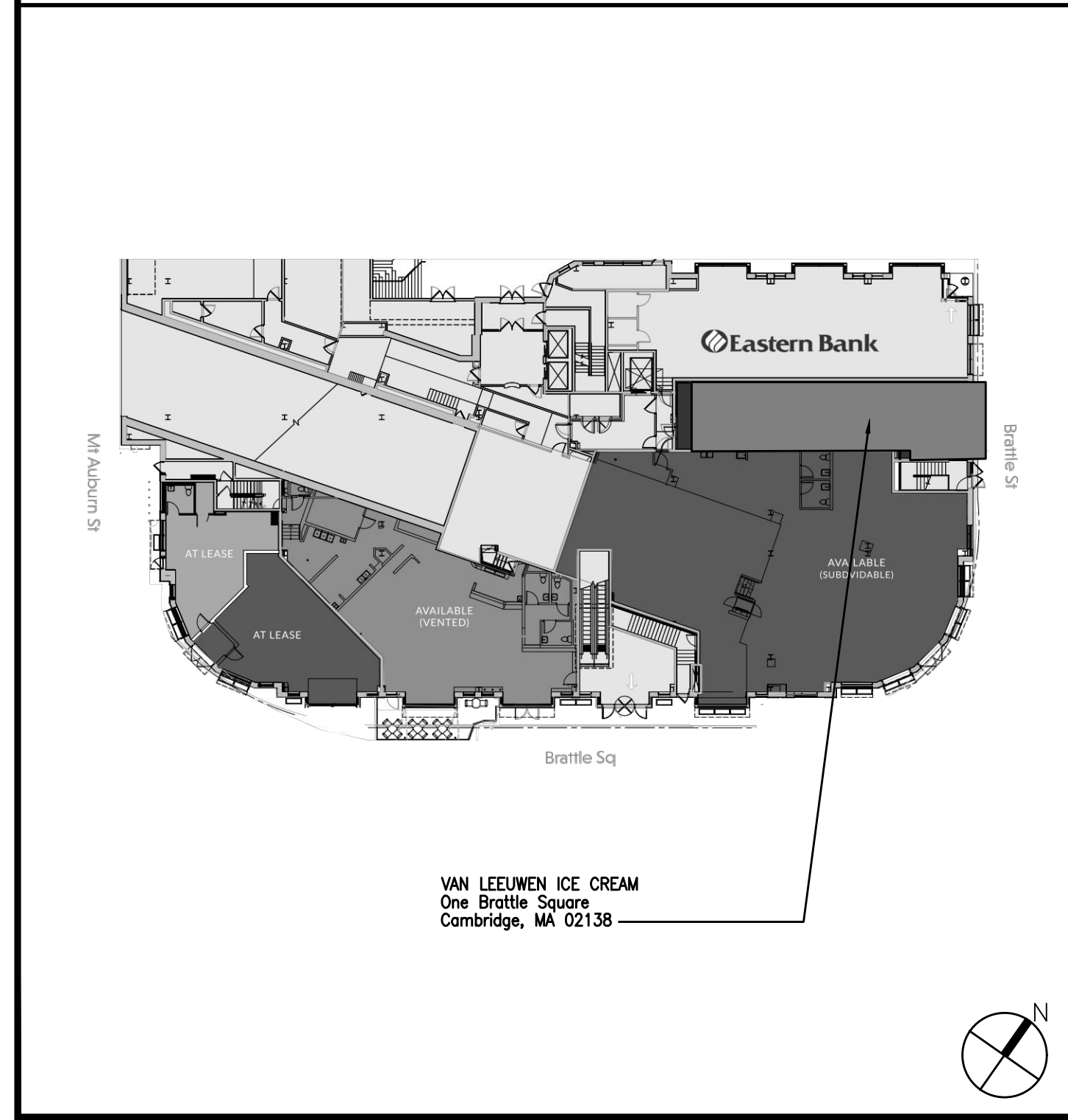
Sheet Title  
**Cover Sheet**

Sheet Number  
**A000**

## VICINITY MAP



## KEY PLAN



## PROJECT DIRECTORY

**OWNER**  
Corey Segal  
Chief Operating Officer  
corey@vanleeuwenicecream.com  
973.493.0951

**LANDLORD**  
BCSP 9 OBS Property LLC  
a Delaware limited liability company  
c/o Beacon Capital Partners, LLC  
200 State Street, 5th Floor  
Boston, Massachusetts 02109

**ARCHITECT**  
Michael R. Black, AIA, NCARB  
2225 E. Randol Mill Road, Suite 300  
Arlington, TX 76011  
TEL (817) 701-4819  
FAX (817) 633-4153  
mblack@pdmsdesign.com

**MEP ENGINEER**  
Daniel A. Reeves, PE  
2225 E. Randol Mill Road, Suite 300  
Arlington, TX 76011  
TEL (817) 701-4808  
FAX (817) 633-4153  
dreeves@pdmsdesign.com

## SYMBOLS

- XX'-X" DATUM A.F.F.
- 1 A2 DETAIL BUBBLE
- 1 A2 ELEVATION SYMBOL
- 1 A2 SECTION CUT
- 1 GRID LINE
- 1 REVISION SYMBOL

## SEPARATE PERMIT SIGNAGE

## PROJECT INFORMATION

**BUILDING DEPARTMENT**  
Cambridge Inspectional Services  
Department  
831 Massachusetts Avenue  
Cambridge, MA 02139  
TEL (617) 349-6100  
FAX (617) 349-6132

**CODES**  
BUILDING & STRUCTURAL: 2015 INTERNATIONAL BUILDING CODE, WITH MA 9th EDITION AMENDMENTS  
MECHANICAL: 2015 INTERNATIONAL MECHANICAL CODE, WITH MA AMENDMENTS  
ELECTRICAL: 2023 NATIONAL ELECTRICAL CODE, WITH MA AMENDMENTS  
PLUMBING: MA UNIFORM STATE PLUMBING CODE (248 CMR 10.00)  
FIRE PROTECTION: 2021 INTERNATIONAL FIRE CODE & NFPA 1 W/ MA AMENDMENTS  
ENERGY: 2018 INTERNATIONAL ENERGY CONSERVATION CODE W/ MA AMENDMENTS  
HANDICAPPED ACCESS: 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN, W/ MA AMENDMENTS

**BUILDING DATA**  
OCCUPANCY CLASSIFICATION (CHAPTER 3):  
SECTION 903.1.2 - GROUP B (EXISTING & PROPOSED)  
TYPE OF CONSTRUCTION (CHAPTER 6):  
SECTION 602 - I-B EXISTING  
FIRE PROTECTION SYSTEMS (CHAPTER 9):  
SECTION 903 - SPRINKLED: YES  
SECTION 907 - FIRE ALARMS:  
OCCUPANT LOAD (CHAPTER 10)  
SECTION 1004 - OCCUPANT LOAD

PUBLIC (B)	= 470
EMPLOYEES SERVICE AREA	= 156
SUPPORT ROOM AREA	= 221
AUXILIARY	= 528
UNOCCUPIED AREA, CIRCULATION	= 1375 SF
GROSS LEASED AREA	
PUBLIC (B)	= 471/100 = 5
FIXED SEATINGS	= 6+(1)WC = 7
EMPLOYEES SERVICE AREA	= 156/100 = 2
SUPPORT ROOM AREA	= 221/300 = 1
AUXILIARY	= 527/0 = 0
UNOCCUPIED AREA, CIRCULATION	
GROSS OCCUPANT LOAD	= 15

SECTION 1005.3.2 - EGRESS WIDTH  
REQUIRED: INCHES PER PERSON= 0.15 (SPRINKLED)  
0.20 X 15 OCCUPANTS = 3" INCHES  
PROVIDED: INCHES = 34" CLEAR  
EXITS PROVIDED: 1

SECTION 1006 - EXIT AND EXIT ACCESS DOORWAYS  
MAX TRAVEL = 100 FEET (SPRINKLED)  
OCCUPANCY= A (ASSEMBLY)/ B (BUSINESS - UNDER EXCEPTION A303.1.2)  
MAX OCCUP. = 49 OCCUPANTS

SECTION 1017 - EXIT ACCESS TRAVEL DISTANCE  
MAX TRAVEL = 300 FEET (SPRINKLED SYSTEM)

SECTION 2902.2 EXCEPTION 3 - SEPARATE FACILITIES SHALL NOT BE REQUIRED IN BUSINESS OCCUPANCIES IN WHICH THE MAXIMUM OCCUPANT LOAD IS 15 OR FEWER.

## SCOPE OF WORK

TENANT IMPROVEMENT OF EXISTING RETAIL STORE WITH A CHANGE OF USE TO BUSINESS FOR A NEW ICE CREAM SHOP. WORK WILL INCLUDE DEMOLITION OF INTERIOR PARTITIONS, NEW FINISHES, LIGHT FIXTURES, HVAC DUCTS, AND PLUMBING PER NEW EQUIPMENT AND FIXTURE LAYOUTS. NEW WORK WILL INCLUDE NEW INTERIOR PARTITIONS AND DOORS, PATCH, REPAIR, REPLACE, CLEAR EXISTING FLOOR, WALL, AND CEILING FINISHES AS REQUIRED, NEW LIGHTING, NEW MILLWORK, AND INSTALLATION OF NEW EQUIPMENT, INCLUDING A 3-COMPARTMENT SINK, GREASE TRAP, REFRIGERATORS AND FREEZERS. NO ICE CREAM WILL BE MADE ON SITE.

## DRAWING INDEX

NO.	DRAWING NAME	REVIEW SET-85%	REVIEW SET-95%	ISSUE DATE	REV 1	REV 2	REV 3	REV 4	REV 5	REV 6	REV 7
		10/2/23	10/13/23	11/22/23							
<b>ARCHITECTURAL</b>											
A000	COVER SHEET	●	●	●							
A001	ARCHITECTURAL SPECIFICATIONS	●	●	●							
A002	ARCHITECTURAL SPECIFICATIONS	●	●	●							
A003	RESPONSIBILITIES & SCHEDULES	●	●	●							
A004	OCCUPANCY AND EGRESS PLAN	●	●	●							
A005	DEMOLITION PLAN	●	●	●							
A100	FLOOR PLAN & DETAILS	●	●	●							
A101	EQUIPMENT PLAN & SCHEDULE	●	●	●							
A102	FLOOR FINISH PLAN & DETAILS	●	●	●							
A200	REFLECTED CEILING PLAN	●	●	●							
A300	EXTERIOR ELEVATION	●	●	●							
A400	INTERIOR ELEVATIONS - FOH	●	●	●							
A401	INTERIOR ELEVATIONS - FOH	●	●	●							
A402	INTERIOR ELEVATIONS - BOH	●	●	●							
A500	ENLARGED COUNTER PLAN & DETAILS	●	●	●							
A501	COUNTER ELEVATIONS	●	●	●							
A502	ENLARGED COUNTER SECTIONS	●	●	●							
A600	ENLARGED TOILET ROOM PLAN & ELEVATIONS	●	●	●							
<b>MECHANICAL</b>											
M001	MECHANICAL SPECIFICATIONS	●	●	●							
M100	MECHANICAL PLAN	●	●	●							
M200	REFRIGERATION SHOP DRAWING	●	●	●							
<b>ELECTRICAL</b>											
E001	ELECTRICAL SPECIFICATIONS	●	●	●							
E100	POWER PLANS, SCHEDULES & DETAILS	●	●	●							
E200	LIGHTING PLANS	●	●	●							
<b>PLUMBING</b>											
P001	PLUMBING SPECIFICATIONS	●	●	●							
P100	PLUMBING PLANS & RISER DIAGRAMS	●	●	●							
P200	PLUMBING DETAILS, SCHEDULES & CALCULATIONS	●	●	●							

## ABBREVIATIONS

- A.C.T. ACOUSTIC CEILING TILE
- A.D.A. AMERICANS W/ DISABILITIES ACT
- A.F.F. ABOVE FINISH FLOOR
- B.D. BOARD
- B.M. BEAM
- CL.G. CEILING
- CONC. CONCRETE
- CL.R. CLEAR
- EQ. EQUAL
- FIN. FINISH
- F.L. FLOOR
- F.F. FACE OF FINISH
- G.A. GAUGE
- GYP.BD. GYPSUM WALL BOARD
- H.M. HOLLOW METAL
- L.L. LANDLORD
- MIN. MINIMUM
- MTL. METAL
- O.C. ON CENTER
- P.L. PLASTIC LAMINATE
- REFL. REFLECTED
- SS. STAINLESS STEEL
- STL. STEEL
- STRUCT. STRUCTURE
- SIM. SIMILAR
- SUSP. SUSPENDED
- T.B.D. TO BE DETERMINED
- TEMP. TEMPORARY
- T.G.C. TENANT'S GENERAL CONTRACTOR
- TYP. TYPICAL
- U.N.O. UNLESS NOTED OTHERWISE
- V.I.F. VERIFY IN FIELD
- V.C.T. VINYL COMPOSITION TILE
- W/ WITH
- WD. WOOD

## GENERAL NOTES

1. THE WORK DELINEATED IN THESE DRAWINGS AND DESCRIBED IN THE SPECIFICATION SHALL CONFORM TO ALL CODES AND STANDARDS THAT HAVE JURISDICTION OVER THE PROJECT
2. ALL REQUIREMENTS AND REGULATIONS PERTAINING TO THE HANDICAPPED AND OSHA MUST BE INCORPORATED IN THE WORK EVEN THOUGH THEY MAY NOT BE LISTED INDIVIDUALLY AND SEPARATELY IN EITHER THE DRAWINGS OR SPECIFICATIONS.
3. THESE GENERAL NOTES SHALL APPLY TO ALL DRAWINGS AND GOVERN UNLESS OTHERWISE NOTED OR SPECIFIED.
4. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AT THE JOB SITE PRIOR TO SUBMISSION OF BIDS. COMPARE ARCHITECTURAL DRAWINGS WITH MECHANICAL AND ELECTRICAL DRAWINGS, AND REPORT ANY DISCREPANCIES TO THE ARCHITECT. NO INFORMATION OR DETAILS ON THE DRAWINGS OF THIS PROJECT MAY BE USED WITHOUT THE WRITTEN PERMISSION OF THE ARCHITECT.
5. DO NOT SCALE DRAWINGS.
6. UNLESS OTHERWISE SHOWN OR NOTED, ALL TYPICAL DETAILS SHALL BE USED WHERE APPLICABLE.
7. ALL DETAILS SHALL BE CONSIDERED TYPICAL AT SIMILAR CONDITIONS.
8. SAFETY MEASURES: AT ALL TIMES THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF THE PERSONS & PROPERTY AND FOR ALL INDEPENDENT ENGINEERING REVIEWS OF THESE CONDITIONS. THE ARCHITECT'S OR ENGINEER'S JOB SITE REVIEW (IF OCCURS) IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES.
9. CONSTRUCTION WORK WILL NOT BLOCK HALLWAYS OR MEANS OF EGRESS.
10. CONTRACTOR SHALL REFER TO GENERAL NOTES AS DESCRIBED ON EACH DRAWING SHEET AND INCORPORATE AS A PART OF THIS SCOPE OF WORK.
11. ABSOLUTELY NO SUBSTITUTIONS WILL BE ALLOWED, UNLESS APPROVED BY THE ARCHITECT IN WRITING.
12. T.G.C. SHALL FURNISH ONE EMPTY DUMPSTER AT STORE TURNOVER TO OWNER FOR STORE'S DISPOSAL OF CARDBOARD, TRASH, ETC.
13. TENANT WILL BE REQUIRED TO TRANSFER ALL UTILITIES INTO THEIR NAME PRIOR TO STARTING CONSTRUCTION, WITH THE EXCEPTION OF WATER

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07270	Fire Stop Insulation And Sealing
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<b>PART 4 - EXECUTION</b>	
Installation General	Demolition
Cast-in-place Concrete	Concrete Repair
Millwork/Casework	Hollow Metal Frames
Finish Hardware	Glass and Glazing
Drywall Work	Tile and Marble
Resilient Flooring and Base	Painting and Finishing
Equipment	

**PART 1 - GENERAL**

**QUALITY ASSURANCE:**

Obtain materials from reputable manufacturers regularly engaged in the production of products and materials for the intended use.

Quality Standards: Except as otherwise shown or specified, comply with specified provisions of the following:

Structural Steel:  
AISC "Specifications for the Design, Fabrication and Erection of Structural Steel For Buildings, latest edition, including supplements there as issued".

AWS D1.1 "Structural Steel Welding Code".

Qualifications for Welding Work:  
Qualify welding processes and welding operators in accordance with AWS "Standard Qualification Procedures".

Millwork/Casework:  
Architectural Woodwork Institute (AWI) "Quality Standards".

Wood Doors: NWMA Industry Standard I.S.I. – Wood Flush Doors.

Fire Rated Hollow Metal Frames: Provide fire-rated hollow metal frames investigated and tested as a fire rated assembly. Identify fire-rated frames with recognized testing laboratory labels, indicating applicable fire-rating of frame.

Fire Resistant Drywall Assemblies: Comply with fire resistant ratings as indicated and as required by governing authorities and codes. Provide materials, accessories and application procedures which have been listed by UL or tested in accordance with ASTM E 119 for the type of construction indicated.

UL Fire Hazard Classification: Acoustical ceilings to comply with a fire hazard classification for flame spread, including fuel contribution and smoke development classifications specified, provide tile which has been tested, rated and labeled by UL.

Ceramic Tile Work: TCA "Handbook for Ceramic Tile Installation".

**SUBMITTALS:**

Manufacturers Data: Before starting any work, submit list of materials and accessories to be incorporated in the work. List shall include descriptive data, catalog cuts, and other such information to identify the materials as to the location or locations of their use in the work, and the methods of installation. No consideration will be given to partial lists submitted from time to time.

Samples: When requested, submit samples of materials to Architect for review.

Hardware Schedule: Submit final hardware schedule organized by "sets", to indicate specifically the product to be furnished for each item required on each door. Horizontal hardware schedule are not acceptable.

Templates: Furnish templates to each fabricator of doors and frames, as required for preparation to receive hardware.

Shop Drawings: Submit shop drawings for the following items showing dimensioned plans, elevations, large scale details of constructions, and methods of installation. Show details and locations of anchorage and fittings.

Mechanical & sprinkler installation, millwork, and signage.

**JOB CONDITIONS:**

All work must be performed in cooperation with the Landlords requirements for schedule and access to areas of work.

Contractor must examine the spaces in which, and the substrates to which the work required by this Contract is to be installed. Notify the Owner's Representative in writing of any conditions detrimental to the proper and timely completion of the work. Starting installation of work required by this Contract indicates acceptance of the spaces and substrate conditions and full responsibility for completed work.

**PROJECT HANDLING AND STORAGE:**

Deliver all finished materials in manufacturer's unopened containers, bundles or packages, fully identified with manufacturer's name, brand, type and grade. Protect from soiling and damage using handling equipment and storage techniques recommended by the manufacturer.

All prefinished items shall be shipped, delivered and stored in protective wrapping. Cut openings in wrappings as necessary to avoid condensation.

Protect lumber and finish carpentry and millwork against dampness and injury during and after delivery, and store under cover in well ventilated portions of the building not exposed to humid conditions and maintain temperature of at least 70 degrees F.

Store hollow metal work under cover on the building site on wood sills or on floors in a manner that will prevent rust and damage. Care shall be taken to avoid creating a humidity chamber by using a plastic or canvas shelter and not venting the area covered.

**PART 2 - SITE WORK**

**02060 - BUILDING DEMOLITION**

Selective Demolition: This section is included for general reference of work to be removed by the General Contractor.

Consult demolition plans included with project documents for additional notes and site specific items.

Demolition includes removal of the existing interiors, if required, but not limited to interior partitions, cabinets, suspended ceiling tile, storefront, electrical, mechanical, etc, as required, as shown or as directed.

All items indicated or required to be demolished or removed to be legally disposed of in coordination and compliance with all landlord procedures and regulations. All items indicated to be relocated or reinstalled to be cleaned, serviced and prepared for proper re-use. Any items stored during construction are to be protected to avoid damage or theft.

All items indicated as existing to remain shall be cleaned, serviced and prepared for proper continued re-use. Protect all items sufficiently during construction to avoid damage or theft.

Cooperate and coordinate with landlord, the tenants of the adjacent spaces and the tenant in scheduling work in order to cause the least inconvenience to personal and property. See mechanical and electrical plans for specific demolition items under those trades.

**PART 3 - PRODUCTS**

**03300 - CAST-IN-PLACE CONCRETE**

Provide and install concrete as indicated in the drawings.

Concrete work shall conform to the latest edition of "American Concrete Institute" codes and standards including ACI 301, ACI 315 and ACI 318.

Concrete strengths are as follows: Class I 3000psi interior slab (or min. required per landlord specifications).

Reinforcement: Per landlord requirements.

Bonding agent (if required):  
"Sonobond" epoxy concrete bonding agent or equal.

Manufacturer:  
Chemtrec, Inc.  
889 Valley Park Drive  
Shakopee, MN 55379-1854

Consult manufacturer for application procedure.

ASTM C881

Vapor barrier:  
Slab on grades to receive 6 mil. clear or black polyethylene film with minimum of 12" overlap. Tape all seams.

**03732 - CONCRETE REPAIR**

The extent of concrete repair work includes remaining floor areas after demolition providing a level floor throughout to receive future finishes.

Types of finish millwork/casework include, but is not limited to the following:  
Clear maple lacquered plywood veneer for cabinet and drawer interiors.  
Premium grade cherry for millwork.  
Solid Stock: Plain sawn, select white maple complying with "Premium Grade requirements established by AWI".

Painted Plywood: Birch faced plywood, thickness as indicated.

Fabrication:  
General: Comply with the most stringent "Premium Grade" requirements of the Architectural Woodwork Institute (AWI) "Quality Standards" as a minimum level of quality standard for the fabrication of all work.

Steel Shapes, Plates, and Bars: Comply with ASTM A 36, except where other type of steel is indicated.

Steel Tubing: ASTM A 500, Grade B.

Steel Pipe: ASTM A53, Type E or S, Grade B.

Anchor Bolts: ASTM A 307, nonheaded type unless otherwise indicated.

Threaded Fasteners: ASTM A 307, Grade A, regular low carbon steel bolts and nuts. Provide hexagonal heads and nuts on all connections.

Welding Electrodes: Provide electrodes, welding rods and filler metals equal in strength and compatible in appearance with parent metal joined.

Primer: Fabricator's standard, fast-curing, lead-free, universal primer.

Fabrication:  
Fabricate and Assemble structural assemblies in shop to greatest extent possible. Fabricate items of structural steel in accordance with AISC Specifications as indicated on shop drawings. Properly mark and match-mark materials for field assembly.

Connections: Weld or bolt shop connections as indicated. Bolt field connections, except where welded connections or other connections are indicated.

Holes for Other Work: Provide holes required for securing other work to structural steel members, and for passage of other work through steel members. Cut, drill, or punch holes perpendicular to metal surfaces. Do not flame cut holes or enlarge holes by burning.

Shop Primer: Remove scale, rust, and other deleterious materials from metal surface before applying shop primer. Immediately after surface preparation, brush or spray on primer at a rate to provide a uniform dry film thickness of 2.0 mils.

**05500 - MISCELLANEOUS METALS**

Definition: Miscellaneous metals include items made from iron and steel shapes, plates and bars, which are not a part of structural steel or other metal systems specified elsewhere.

Metals: Provide steel plates, shapes and bars complying with ASTM A 36.

Fasteners: Provide type, sizes, materials and finish as required for the application indicated.

Primer: Fabricator's standard, fast-curing, lead-free, universal primer.

Fabrication:  
Workmanship: Use material of size and thickness indicated or, if not indicated provide as required to produce strength and durability in finished product for use intended. Work to dimensions shown, using proven details of fabrication and support.

Form exposed work true to line and level with accurate angles and surfaces and straight sharp edges. Ease exposed edges to a radius of approximately 1/32" unless otherwise shown. Form bent metal corner to smallest radius possible without causing grain separation or otherwise impairing work.

Weld corners and seams continuously, complying with AWS recommendations. At exposed locations, and polish exposed welds smooth and flush to match and blend with adjoining surfaces.

Provide for anchorage of type required for a secure and complete installation, coordinated with the supporting structure. Fabricate and space anchoring devices to provide adequate support for intended use.

Shop Primer: Remove scale, rust, and other deleterious materials from metal surface before applying shop primer. Immediately after surface preparation, brush or spray on primer at a rate to provide a uniform dry film thickness of 2.0 mils. Provide UL label on each piece of fire-retardant treated lumber.

Weld corners and seams continuously, complying with AWS recommendations. At exposed locations, and polish exposed welds smooth and flush to match and blend with adjoining surfaces.

Provide for anchorage of type required for a secure and complete installation, coordinated with the supporting structure. Fabricate and space anchoring devices to provide adequate support for intended use.

Shop Primer: Remove scale, rust, and other deleterious materials from metal surface before applying shop primer. Immediately after surface preparation, brush or spray on primer at a rate to provide a uniform dry film thickness of 2.0 mils. Provide UL label on each piece of fire-retardant treated lumber.

Face Sheets: 18 gauge, cold rolled steel.

Internal Reinforcing: Channel shaped sections or continuous truss form liner core reinforcement welded to both face sheets.

**06100 - CARPENTRY, GENERAL**

Miscellaneous Lumber: Wood and plywood for support or attachment of other work including nailers, blocking, furring, and similar members. S4S, 19% moisture at time of dressing.

Grade: "Standard" grade, any species, free from knots, or other defects that might impair the strength or finished appearance.

Structural Lumber: For members 2" to 4" thick and more than 4" in width, provide the following grade and species:  
Grade: No.2 Grade or better, S4S and kiln dried.  
Species: Douglas Fir or Yellow Pine.  
Strength: Fiber stress rating of not less than 1350 psi.

Plywood Panels: Provide fire-retardant treated plywood with grade designation, APA A-D INT with exterior glue, in thickness indicated, or if not indicated, not less than 3/4".

Rough Hardware (Nails, screws, bolts, etc.): Provide type, size, material and finish as required for the applications indicated. Screws for the attachment of plywood panels shall be self-drilling, self-taping screws with countersunk type heads.

Pressure Treatment:  
All wood and plywood permanently installed within the interior of the building shall be fire retardant treated with Hoover "Pyro-Guard", or approved equal system containing no ammonium phosphates.

Provide UL label on each piece of fire-retardant treated lumber.

**06400 - MILLWORK/CASEWORK**

Types of finish millwork/casework include, but is not limited to the following:  
Clear maple lacquered plywood veneer for cabinet and drawer interiors.  
Premium grade cherry for millwork.  
Solid Stock: Plain sawn, select white maple complying with "Premium Grade requirements established by AWI".

Painted Plywood: Birch faced plywood, thickness as indicated.

Fabrication:  
General: Comply with the most stringent "Premium Grade" requirements of the Architectural Woodwork Institute (AWI) "Quality Standards" as a minimum level of quality standard for the fabrication of all work.

Steel Shapes, Plates, and Bars: Comply with ASTM A 36, except where other type of steel is indicated.

Steel Tubing: ASTM A 500, Grade B.

Steel Pipe: ASTM A53, Type E or S, Grade B.

Anchor Bolts: ASTM A 307, nonheaded type unless otherwise indicated.

Threaded Fasteners: ASTM A 307, Grade A, regular low carbon steel bolts and nuts. Provide hexagonal heads and nuts on all connections.

Welding Electrodes: Provide electrodes, welding rods and filler metals equal in strength and compatible in appearance with parent metal joined.

Primer: Fabricator's standard, fast-curing, lead-free, universal primer.

Fabrication:  
Fabricate and Assemble structural assemblies in shop to greatest extent possible. Fabricate items of structural steel in accordance with AISC Specifications as indicated on shop drawings. Properly mark and match-mark materials for field assembly.

Connections: Weld or bolt shop connections as indicated. Bolt field connections, except where welded connections or other connections are indicated.

Holes for Other Work: Provide holes required for securing other work to structural steel members, and for passage of other work through steel members. Cut, drill, or punch holes perpendicular to metal surfaces. Do not flame cut holes or enlarge holes by burning.

Shop Primer: Remove scale, rust, and other deleterious materials from metal surface before applying shop primer. Immediately after surface preparation, brush or spray on primer at a rate to provide a uniform dry film thickness of 2.0 mils.

**07250 - FIREPROOFING**

Application of fireproofing shall include the following:  
Fireproofing of new structural steel framing members, and patching and repairing of existing fireproofing system which is removed to accommodate the installation of new work, or damaged as a result of work under this Contract.

Fireproofing System: Provide fireproofing of same material and manufacturer as used on the existing steel, or as approved by the Landlord and the Building Department.

**07270 - FIRE STOP INSULATION AND SEALING**

Applications for fire stop insulation and sealing include, but are not necessarily limited to the following:  
Sealing pipe, duct, conduit and similar penetrations through fire rated walls and partitions and floors.

Sealing rated partitions at tops where partitions join structure or other rated construction.

Sealing expansion and control joints in rated partitions.

One-Part Fire-Stopping Sealant: To be used for sealing openings around cables, conduit, pipes and similar penetrations through walls and partitions.

Biotherm Firestop Sealant: Bio Fireshield, Inc.

Dow Corning Fire Stop Sealant; Dow Corning Corp. 3M Fire Barrier Caul CP-25; Electrical Products Div/3M SpecSeal Sealant; STI, Inc. "Thermafiber Fire Safing

Mineral Wool Sealing Insulation: "Insulation" by USG, or approved equal.

**07900 - CAULKING AND SEALANT**

Applications of caulking and sealant include, but are not necessarily limited to the following:  
All caulking and sealant work not specifically mentioned in other sections, but required to provide a neat appearing construction.

Single-Component Polyurethane Sealant (General Interior Sealant and Caulking): Provide one of the following:  
Dynatrol; Pecora Corp.  
Dymonic; Tremco, Inc.  
921; Mameco International, Inc.

Miscellaneous Materials: Provide primer/sealers, bond breaker tape and spacer anchoring devices as recommended by the respective caulking and sealant manufacturer's for use with their product and substrates to which they are applied.

**08100 - HOLLOW METAL DOORS AND FRAMES**

Doors: Flush design doors, 1 3/4" thick, seamless hollow metal construction, with smooth surfaces without visible joints or seams on exposed surfaces or stile edges, except around glazed inserts.

Face Sheets: 18 gauge, cold rolled steel.

Internal Reinforcing: Channel shaped sections or continuous truss form liner core reinforcement welded to both face sheets.

Reinforce tops, sides and bottoms of doors with 1/8" channels. Sound Deadener: Non-combustible on all surfaces.

Frames: Full-welded unit construction, with corners mitered, reinforced, and continuously welded full depth and width of frame. All welds shall ground smooth and flush. Knock down type frames are not acceptable. All cut-outs shall be protected with metal dust covers, welded to frame, at back of finish hardware cutouts.

Gauge: 16

Floor Anchors: Securely welded inside each jamb. Anchors shall be properly punched for anchoring to floor.

Jamb Anchors: Provide minimum of 4 double stud anchors per jamb for use with steel stud walls and partitions. Anchors shall be standard type used by frame manufacturer for the particular type of wall and partition construction. Where fire rated assemblies are indicated, provide anchors required to meet UL rating.

Mortise, reinforce, drill, and tap as required to accommodate all mortised template hardware.

Hardware Reinforcement: Not less than 1/8" thick at hinges and strike plate clips.

Spreader Bars: Provide removable spreader bars across bottom of frames, tack welded to jambs.

Stops and Moldings: Form fixed stops integral with frames. Provide removable stops around glazed panels; secure with machine screws spaced uniformly not more than 12" O.C.

Finishes: Manufacturer's standard rust inhibitive primer.

**08210 - WOOD DOORS**

Manufacturers: Provide products of one of the following:  
Algoma Hardwoods, Inc.  
Eggers Industries, Architectural Door Division  
Weyerhaeuser Company  
VT Industries  
Fenestra

Flush Wood Doors: All interior flush wood doors shall be "Premium Grade" as defined in the AWI Quality Standards, Section 1300. All interior flush doors shall have rotary cut birch veneers suitable for painted finish, 1 3/4" thick, AWI type PC-5 or PC-7 (particleboard core, 5-ply or 7-ply) construction.

Fire Rated Doors: Provide faces and grade to match non-rated flush wood doors. Materials and construction of labeled doors shall meet the requirements of UL for class of opening. Provide additional hardware blocking in doors containing mineral type cores for the attachment of surface mounted hardware without the use of thru-bolts. Affix UL labels to doors.

Edge Construction: Provide manufacturer's standard laminated edge construction for improved screw-holding power capability and split resistance.

**08710 - FINISH HARDWARE**

General: Furnish and install finish hardware for interior and exterior doors.

Follow DHI (Door and Hardware Institute) standards and guidelines and AWI (American Woodworking Institute) standards for hardware installed on wood doors.

Fire rated hardware shall follow guidelines as established by:  
NFPA 80 – Fire doors and windows  
NFPA 101 – Life Safety Code  
NFPA 252 – Fire tests of door assemblies  
UL 10B – Safety fire tests of door assemblies  
UL 305 – Safety Panic Hardware

Furnish owner with maintenance data, maintenance procedures, manufacturer warranties and special tools.

Finishes: As noted on plans and schedules.

Keying: General Contractor to coordinate keying and master keying with construction manager. General contractor to install construction cores during construction and replace with permanent at end of job prior to turn-over.

Manufacturers: See door schedule for specific items, manufacturers & model numbers.

**08800 - GLASS AND GLAZING**

Clear Tempered Glass: ASTM C 1048, Condition A (uncoated surfaces), Type I (transparent glass, flat), Class 1 (clear), Quality q3 (glazing select), kind and thickness indicated below:

Kind: FT (fully tempered).  
Thickness: As indicated.

Glass Edges: Edges not concealed by stops or moldings shall be ground and polished flat, with edges slightly eased.

Glazing Sealants: Provide glazing sealants and pre-formed glazing tapes selected for compatibility with surfaces contacted in the installation.

Setting Blocks: Neoprene or EPDM, 70-90 durometer hardness, with proven compatibility with glazing sealants used.

Spacers: Neoprene or EPDM, 40-50 durometer hardness, with proven compatibility with glazing sealants used.

Framing System for 1/2" Glass: Fabricate from 16 gauge 302/304 stainless steel to profile indicated, with No. 8 mirror finish. Size shall be 3-5/8" high x 1-3/4" wide. Form frames in maximum lengths and keep joints to a minimum. To the greatest possible, complete fabrication, assembly, and other work before shipment to project site. Disassemble components only as necessary for shipment and installation.

**09250 - GYPSUM DRYWALL SYSTEMS**

Gypsum Board: Provide gypsum board of types indicated in maximum lengths available to minimize end-to-end joints. Comply with ASTM C 36. Thickness: 5/8", except where indicated as 1/4". Edges shall be tapered. Gypsum board used in conjunction with fire rated walls and partitions shall be type "X". Provide 5/8" thick water resistant gypsum complying with ASTM C 630 at locations indicated.

Studs and Runners: Screw type, roll formed, channel shaped sections, ASTM C 645, with flange edges of studs bent back 90 degrees and doubled over to form 3/16" minimum lip (return), 20 gauge galvanized steel with cutouts for utility runs. Include 25 gauge top and bottom runners and all accessories required for a complete installation as recommended by the manufacturer. All accessories shall have a galvanized coating. Top runner track for partitions extending to structure above shall be a deep leg type.

Furring Channels: 7/8" deep, 25 gauge roll formed galvanized hat shaped sections.

Carrying Channels (Main Runners): Cold rolled, 1 1/2" steel channels weighing 475 lbs. per M lin.ft., and coated with rust inhibitive primer.

Cold Rolled Furring Channels: 3/4" steel channels weighing 300 lbs. per M lin.ft., and coated with rust inhibitive primer.

Direct Hung Suspension Systems (Contractor's Option): Manufacturer's standard zinc coated or painted system of furring runners, furring tees, and accessories designed for concealed support of gypsum drywall ceiling system; provide proper type used or intended.

Fasteners: Self-drilling, self-tapping screws.

Hanger Wires: 9 gauge galvanized annealed wire.

Tie Wires: 16 gauge galvanized annealed wire.

Furring Channel Clips: Heavy gauge galvanized wire clips by the manufacturer of the furring channels used.

Metal Trim and Reinforcement:  
Corner Beads: U.S. Gypsum "Dur-A-Bead", or an approved equal.  
Casing Beads: U.S. gypsum "#200A", or approved equal.

Reveal Trim: Extruded aluminum trim of sizes and shapes indicated.

Water: Potable.

Insulation: Semi-rigid mineral fiber without membrane, unless otherwise indicated; USG "Thermafiber Sound Attenuation Blankets", friction fit (self-supporting).

Joint Treatment: U.S. Gypsum "Perf-a-Tape" joint system, or approved equal.

Joint Compound: Ready-mixed vinyl type for interior work or approved equal.

Acoustical Sealant (for use with sound rated walls partitions): Provide non-drying, non-shrinking sealant recommended by the drywall manufacturer. Provide sealant which is paintable wherever exposed to view.

**09300 - TILE AND MARBLE**

Marble/ceramic/quarry tile, refer to finish and responsibility schedule for sizes, colors, and manufacturers.

Install grout as recommended by the tile manufacturer.

Refer to finish schedule for specifications.

**09660 - RESILIENT FLOORING**

Resilient Tile: Refer to "Finish Legend" for type, pattern, color and manufacturer.

Adhesive: As recommended by tile manufacturer for use with his product and substrate to which it is applied.

Edge Strips: 1/8" thick vinyl with tapered or bullnose edge. Provide where tile edges are exposed in the finished work.

Leveling And Patching Compounds: Latex type as recommended by flooring manufacturer.

**09675 - RESILIENT BASE**

Base: Vinyl base, 0.125" gauge by high as scheduled. Style shall be coved.

Colors: As scheduled.

Adhesive: As recommended by the resilient base manufacturer.

**09900 - PAINTING AND FINISHING**

Colors: As scheduled, where not scheduled, provide colors as selected by the Architect. Colors shall not be limited to manufacturer's standard colors. All paints, varnishes, stains, paste fillers, thinners, colors and similar materials shall be delivered in original containers with seals unbroken and labels intact.

Paints, Enamels and Stains: Provide the best quality grade products of following manufacturer:  
Pratt and Lambert  
Sherwin-Williams

All materials such as thinners, dryers, etc., shall be of some brand as that of painting materials or of brand recommended by the manufacturer of the brand of painting materials used.

All materials shall be used as delivered, from the cans, without thinning or adulteration, whenever possible to do so.

All primers and undercoats of paint shall be tinted slightly lighter than shade of finish coat.

Interior Painting:  
Ferrous Metal Surfaces (Including existing exposed structure): One (1) coat Benjamin Moore "Interior Trim Primer" and two (2) coats Benjamin Moore "Pro-Hide Plus Alkyd Satin".

Existing Painted Metal Surfaces: Two (2) coats Benjamin Moore "Pro-Hide Plus Alkyd Satin". Spot prime damaged areas of existing ferrous metal surfaces with Benjamin Moore "Interior Trim Primer".

Interior of ducts connecting to exhaust or return grilles, registers, or diffusers shall be given two (2) coats of flat black enamel to a distance of 2 feet from outlet.

Wood (Painted): One (1) Benjamin Moore "Interior Trim Primer" and two (2) coats Benjamin Moore "Pro-Hide Plus Alkyd Satin".

Drywall surfaces not receiving other applied finishes shall be painted. Provide the following system at locations scheduled:  
Eggshell Finish: One (1) coat Benjamin Moore "Pro-Hide Plus PVA Primer/Sealer", and two (2) coats Benjamin Moore "Pro-Hide Plus Latex Eggshell".

Flat Finish: One (1) coat Benjamin Moore "Pro-Hide Plus PVA Primer/Sealer", two (2) coats Benjamin Moore "Pro-Hide Plus Latex Flat".

Existing Painted Walls And Ceilings: Spot prime repaired areas, and apply finish systems of the types and number of coats specified for Drywall Surfaces.

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Project Address  
**Van Leeuwen Ice Cream**  
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**Space #C2**  
**Cambridge, MA 02138**

Issue Date **11/22/23**

Revisions	Date	Description	By
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Seal

Job Number **230174**

Drawn By **CMS**

App'd By **SS**

Sheet Title  
**Architectural Specifications**

Sheet Number  
**A001**

**10520 - FIRE EXTINGUISHERS**

Fire Extinguishers: Multi-purpose dry chemical type, UL rated 2-A-10BC, in enameled steel container, for Class A, B, and C fires.

Wall Mounting Brackets: Fire extinguishers manufacturer's standard.

**10800 - TOILET ROOM ACCESSORIES**

Accessory Items: Items of work covered herein shall be models as listed in the Plumbing Fixture Schedule and manufactured by Bobrick Washroom Equipment, Inc., or approved equal units by ASI or Bradley.

**11001 - EQUIPMENT**

Contractor shall coordinate all equipment work and placement with the work of all other trades and make adjustments as required to accommodate locations of equipment.

All equipment shall comply with all governing building codes and local codes.

Equipment shall be furnished, unloaded, unpacked or uncrated and placed according to the construction documents.

**PART 4 - EXECUTION**

**INSTALLATION GENERAL:**

Comply with each manufacturer's specifications and recommendations for the installation of the various work under this section.

Set all work plumb, level, true to line, and in correct relationship to adjacent work.

Securely anchor all work in place.

Ensure that operating parts work freely and fit neatly. Adjust hardware and catches as required.

Repair or replace damaged materials, as acceptable to the Architect.

Coordinate and cooperate with other trades for proper location of roughing-in services and service connections required for equipment and fixtures.

Subfloors: Prior to start of laying the finish flooring, broom clean and vacuum all surfaces to be covered and inspect the subfloor.

Use latex type leveling compound for filling cracks, depressions and surface irregularities in subfloors to receive resilient flooring, sheet flooring, and carpeting.

Remove coatings and adhesives from subfloors that would prevent adhesive bond, or telegraph through the new finished floor systems.

Repair damaged areas in new and existing drywall surfaces prior to application of finishes. Apply texture on repaired areas as required to match existing adjacent surfaces.

**DEMOLITION:**

Arrange with the landlord a convenient time to perform demolition work and install temporary protected means of egress from required exits. Include temporary lighting and safety devices, all in accordance with governing state and local codes and landlord requirements.

The contractor shall remove, repair, restore, and replace where any such work is necessary or as indicated on the drawings. Cut all necessary openings, and patch/repair/seal same to degree necessary to satisfy all requirements. Insofar as possible, all protrusions, marks, cracks or other evidence of a deficient or damaged condition shall be eliminated, unless specifically noted otherwise. Any parts which are split, cracked, chipped, spalled, broken, missing, or out of line or adjustment, mechanically or structurally unsafe or unsound, bent, torn or otherwise deficient or injured in any manner, shall be removed, replaced, restored or repaired. Landlord's representative, architect, and tenant's construction manager must be notified immediately of any structural or safety defects, and only the tenant's construction manager if the defect(s) are limited to cosmetic finishes.

Exercise extreme care during demolition so as not to damage or disrupt any utility or sprinkler lines which might pass through this space to service other mall spaces or tenants. G.C. will bear sole responsibility of any such disruption or damage.

All abandoned electrical and telephone conduit, plumbing lines, drain lines, and all mechanical items shall be capped at source and removed in a manner to meet all landlord and code requirements, unless directed otherwise.

G.C. responsibilities:

- 1.- G.C. is to notify tenant immediately of any severe discrepancies or irregularities discovered during demolition which might affect the current store design. General Contractor is to pay special attention to available height for intended ceiling elevation, mechanical ductwork and recessed lighting.
- 2.- G.C. is to erect construction barricades and debris/duct screens per landlord's specifications. Contact landlord's representative prior to the commencement of all demolition work.
- 3.- G.C. is responsible for patching, repairing and leveling of the existing floor slab, repair of demising walls and roof deck after completion of all demolition and prior to the commencement of new construction. Coordinate with landlord responsibility in performing any and all roof work.

**CAST-IN-PLACE CONCRETE**

Concrete contractor shall assume full responsibility for strength, consistency proportions and handling of concrete.

Verify that compacted granular base is in place and ready to support paving and imposed loads.

Verify gradient and elevations of base are correct. Thickness and reinforcing as shown on drawings.

Immediately after placement, protect pavement from mechanical injury.

Deposit concrete within any one section continuously so that no concrete will be placed on older concrete which has set sufficiently to result in seams and planes of weakness within section.

Place slabs for full thickness in one operation, without changes in properties (screed to proper elevation) float and lightly trowel. Unless otherwise specified, when concrete has set sufficiently to ring under trowel, give slab second troweling to produce smooth, dense surface. Dusting of surfaces with cement is prohibited.

Compact sub grade for slabs on grade to optimum density. Provide min. 6" compacted crushed gravel sub-base at all areas to receive new concrete.

Finishes:

Give typical interior floor slabs a steel trowel finish with Class A tolerance (true planes within 1/8 in 10 ft. as determined by a 10 foot straightedge placed anywhere on slab in any direction).

Provide saw cut control joints 1/8" width x 1" deep at maximum 400 square foot area.

Apply bonding agent (as specified) to adjacent concrete surfaces immediately prior to placement of concrete.

Expansion joint material: 1/2" pre molded asphalt impregnated fiberboard, same depth as concrete.

**CONCRETE REPAIR**

Do not proceed with work until visiting the site and determining conditions to decide methods of repair. Coordinate with tenant's construction manager.

Remove and dispose of existing floor finishes where indicated on demolition plan.

Thoroughly clean floor slab removing conditions that will affect bond including residue from removal of adhesives, underlayments, stains, oils, etc.

Remove high floor levels and loose concrete.

Rough in concrete in areas where patching is required, such as cracked, spalled, or holes due to removal of existing work.

Grind high spots.

At locations of construction joints in existing slab, continue joints through new floor in leveling area. Saw cut joint or place 1/16" wide metal bar in the joint location coincident with existing.

Trench only at slab on grade. Verify and get approval of trench or core locations with the landlord's representative and mall structure prior to completing any work. Cores to be sealed waterproof. See sect. 07200 "Insulation and Waterproofing" for additional waterproofing information.

Clean areas removing all waste material, broom clean.

**MILLWORK/CASEWORK:**

General: Comply with the most stringent "Premium" requirements of AWI "1700 - Installation of Architectural Woodwork Interior" as a minimum level of quality for the installation of millwork and casework.

Condition finish carpentry and millwork to average prevailing humidity conditions in installation areas prior to installing.

Install the work plumb, level, true and straight with no distortions.

Scribe and cut work to fit adjoining work, and refinish cut surfaces or repair damage to finish at cuts.

Cleaning and Protection: Repair damaged and defective items to eliminate defects functionally and visually; where not possible to repair properly, replace items. Adjust joinery for uniform appearance.

Clean finish millwork on exposed surfaces.

**HOLLOW METAL FRAMES:**

Placing Frames: Set frame accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces and spreaders leaving surfaces smooth and undamaged.

**FINISH HARDWARE:**

Install each hardware item in strict compliance with the manufacturer's instructions and recommendations. Whenever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in any other way, install each item completely and then remove and store in a secure place during the finish application. After completion of the finishes, re-install each item. Do not install surface mounted items until finishes have been completed on the substrate.

Set units level, plumb and true to line and location. All mortises shall be smooth and tight.

Adjust and check each operating item of hardware and each door, prior to acceptance or occupancy of area, to insure proper operation or function of every unit. Lubricate moving parts with type lubrication recommended by the hardware manufacturers (graphite-type) if not other recommended.

**GLASS AND GLAZING:**

General: Comply with combined recommendations and technical reports by manufacturers of glass and glazing products as used in each glazing application, and with recommendations of Flat Glass Marketing Association "Glazing Manual".

Set glass plumb, level, true to line and in correct relationship to adjacent work.

Unify appearance of each series of glass lites by setting each piece to match others as nearly as possible.

Install setting blocks of proper size in glazing rabbets, located 1/4th of glass width from each corner.

In addition to top and bottom "J" moldings, glass shall be set in adhesive in accordance with manufacturer's instructions.

Remove and replace glass which is broken, chipped, cracked, abraded or damaged in other ways during construction period.

Wash and polish glass upon completion of installation.

**DRYWALL WORK:**

General: The installation required for the various drywall systems shall be in accordance with USG "Systems Folder SA/923-1990", ASTM C754 for metal support installation, and ASTM C 840 for gypsum board application and finishing.

Partition Framing: Erect framing plumb and true within 1/8" in 12'-0".

All partitions shall be aligned accurately according to partition layout. Floor and ceiling runners shall be attached 16" O.C.

Studs shall be positioned vertically in the runners, spaced no greater than 16" o.c. or as otherwise noted. Anchor all studs located adjacent to door frames, partition intersections and corners to runner flanges with screws or other positive engagement through each stud flange and runner flange. Use full length studs between floor and ceiling runners, splicing of studs shall not be permitted.

Isolate stud system from transfer of structural loading to system by use of deep leg top runners.

All door openings shall be double studded to comply with "Gypsum Construction Handbook" published by USG. Double studs shall be securely anchored to the jamb and head anchor clips of each door frame by screw attachment.

Install supplementary framing, blocking and bracing for support and attachment of wall mounted cabinets, fixtures, equipment, and similar work. Coordinate the location of framing, blocking and bracing in wall and partitions for wall mounted equipment and furniture furnished by Tenant.

Gypsum Board Application and Finishing: Comply with USG "Systems Folder SA/923" and ASTM C840.

Install exposed gypsum board with face side out. Do not install imperfect, damaged or damp boards.

Locate either edge or end joints on supports. Position boards so that like edges abut, tapered edges against tapered edges and mill-cut or field cut ends against mill-cut or field cut ends. Do not place tapered edges against cut edges or ends. Stagger vertical joints over different studs on opposite sides of partitions.

Screw attach gypsum board to supporting members. Space fasteners in gypsum boards in accordance with referenced standards and manufacturer's recommendations.

Finishing: All joints to be taped and spackled. All fasteners and metal trim shall be spackled. Apply joint compound in 3 coats (not including prefill of openings in base), and sand between last two coats and after last coat.

Casing Beads: Provided on all exposed edges of drywall, and where drywall meets dissimilar material.

Corner Beads: Provided at all exposed corners.

Sound Insulation: Fill all voids in partitions and walls indicated using batt or blankets in as long a lengths as possible. All insulation shall be securely held in place by friction, or by tying to prevent sagging and eventual gaps. Cut and pack insulation carefully around all obstructions to provide complete and continuous seal.

**TILE AND MARBLE**

Refer to section 03732 "Concrete Repair" and to section 07200 "Insulation and Waterproofing"

Before setting any tile, the contractor shall assure himself that no tiles will have to be removed after installation to accommodate the work of other trades. All cutting, fitting, drilling and grinding of the work, where necessary in relation to the work of other trades, shall be performed so that the work will be neatly and accurately done and cut edges shall be uniform.

Conform to requirements under American National Standards Institute ANSI A-137.1 for ceramic tile material and ANSI A-108 for installation.

Install per landlord's specifications, where applicable.

Lay out tile pattern symmetrically with even joint on all floor and wall surfaces. Align joints with mall pattern, where applicable.

Cut and drill tile as required without marring tile, grind and fit around fixtures, etc.. leave completed work free from cracked, broken, or damaged tile.

All transitions between new and existing or unlike finishes shall be flush and smooth. No reducer strips permitted in storefront area.

Protect heavily traveled, newly tiled areas as required.

Install tiles using thinset method with 1/16" joints at walls and floors.

Seal/wax all tile per manufacturer's specifications.

**RESILIENT FLOORING AND BASE:**

Match tile for color and pattern by using tile from cartons in the same sequence as manufactured and packaged. Cut tile neatly to and around all fixtures. Broken, cracked, chipped or deformed tile are not acceptable.

Tightly adhere tile to subfloor without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks through tile, or other surface imperfections.

Lay tile in grid pattern with grain in all tile running in the same direction. Avoid use of cut widths less than 1/2 tile at room perimeter.

Place resilient edge strips tightly butted to tile and secure with adhesive. Provide edging strips at all unprotected edges of tile.

Base: Install in as long lengths as practicable. Tightly bond base to backing throughout the length of each piece with continuous contact at horizontal and vertical surfaces.

Remove any excess adhesive or other surface blemishes from tile and base, using neutral type cleaners as recommended by the manufacturer. Protect installed work from damage until final acceptance by the Owner/Tenant.

**PAINTING AND FINISHING:**

Storage of Materials:

All materials used on the job shall be stored in a single place designated by the Owner. Such storage places shall be kept neat and clean, and any damage there to or to its surroundings shall be repaired to original condition at no additional cost. Any oily rags, waste, etc., shall be removed from the building every night, and every precaution taken to avoid danger of fire. Empty paint cans shall be placed in the dumpster dry and with the lids off.

Condition of Surfaces:

Remove all loose dirt, oil, grease, rust, dust, paint and other foreign material before beginning painting and finishing.

Remove hardware, hardware accessories, machined surfaces, plates, lighting fixtures, and similar items in place and not to be painted, or provide surface protection prior to surface preparation and painting operations. Following completion of painting of each space or area, reinstall removed items.

Repair defects to new and existing surfaces to avoid finish failures or the recurrences of previous failures.

Cut out scratches, cracks and abrasions in new and existing surfaces, fill with approved material, bring flush with adjoining surface and finish to match adjacent surface texture. Patched areas shall not be visible in the finished work. Seal before application of prime coat.

Existing Painted Surfaces: Remove all loose and scaling paint. Make certain that all paint remaining is adhered well to the surface. Remove all grease, oil, and other surface contaminants which would affect adhesion of the new paint finish. Sand surfaces for proper paint adhesion, and to remove glossy areas in the existing paint finish. Sand rough edges of bare areas to feather edge or adjacent surface.

Painting and finishing of patched or damaged surfaces occurring outside the contract limit area, shall be contained to the nearest change in plane or interruption of surface.

Materials Preparation:

Mix and prepare painting materials in accordance with manufacturer's directions.

Stir materials before and during application to produce a mixture of uniform density. Do not stir surface film into material.

Application: Paint.

General: Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied.

Apply additional coats when undercoats, stains or other conditions show through final coat of paint, until paint film is a uniform finish, color and appearance.

Paint surfaces behind movable equipment and furniture same as similar exposed surface.

Sand lightly between each succeeding enamel coat.

Allow sufficient time between successive coatings to permit proper drying.

Recoat primed and sealed surfaces where there is evidence of suction spots or unsealed areas in first coat, to assure a finish coat with no burn-through or other surface defects due to insufficient priming or sealing.

Completed Work: Match approved samples for color, texture and coverage. Cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness or other surface imperfections will not be acceptable. Remove, refinish, or repaint work not in compliance with specified requirements.

Clean-up and Protection:

During progress of work, remove from site discarded paint materials, rubbish, cans and rags at end of each work day.

Upon completion of painting work, clean window glass and other paint-spattered surfaces.

Protect work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct any damage as acceptable to Owner.

Provide "Wet Paint" signs as required to protect newly-painted finishes. At completion of work of other trades, touch-up and restore all damaged or defaced painted surfaces.

**EQUIPMENT**

General Contractor's installation of tenant supplied equipment is to be included in general bid.

G.C. shall notify the construction manager immediately of any damage to the equipment prior to installation.

G.C. shall be responsible for final hookup of all equipment, including all mechanical, plumbing and electrical work.

All equipment manuals, instruction booklets and warranty information shall be neatly bound and turned over to the construction manager prior to the turnover.

**END OF MATERIALS GENERAL**



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Project Address

**Van Leeuwen Ice Cream**

**One Brattle Square  
Space #C2  
Cambridge, MA 02138**

Issue Date **11/22/23**

Revisions	Date	Description	By
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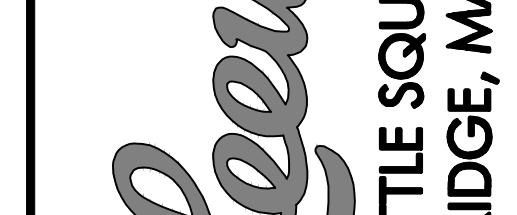
Consultant

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Seal



Job Number **230174**

Drawn By **CMS**

App'd By **SS**

Sheet Title

**Architectural Specifications**

Sheet Number

**A002**

Vertical text: Van Leeuwen

Vertical text: ONE BRATTLE SQUARE CAMBRIDGE, MA

### DOOR SCHEDULE

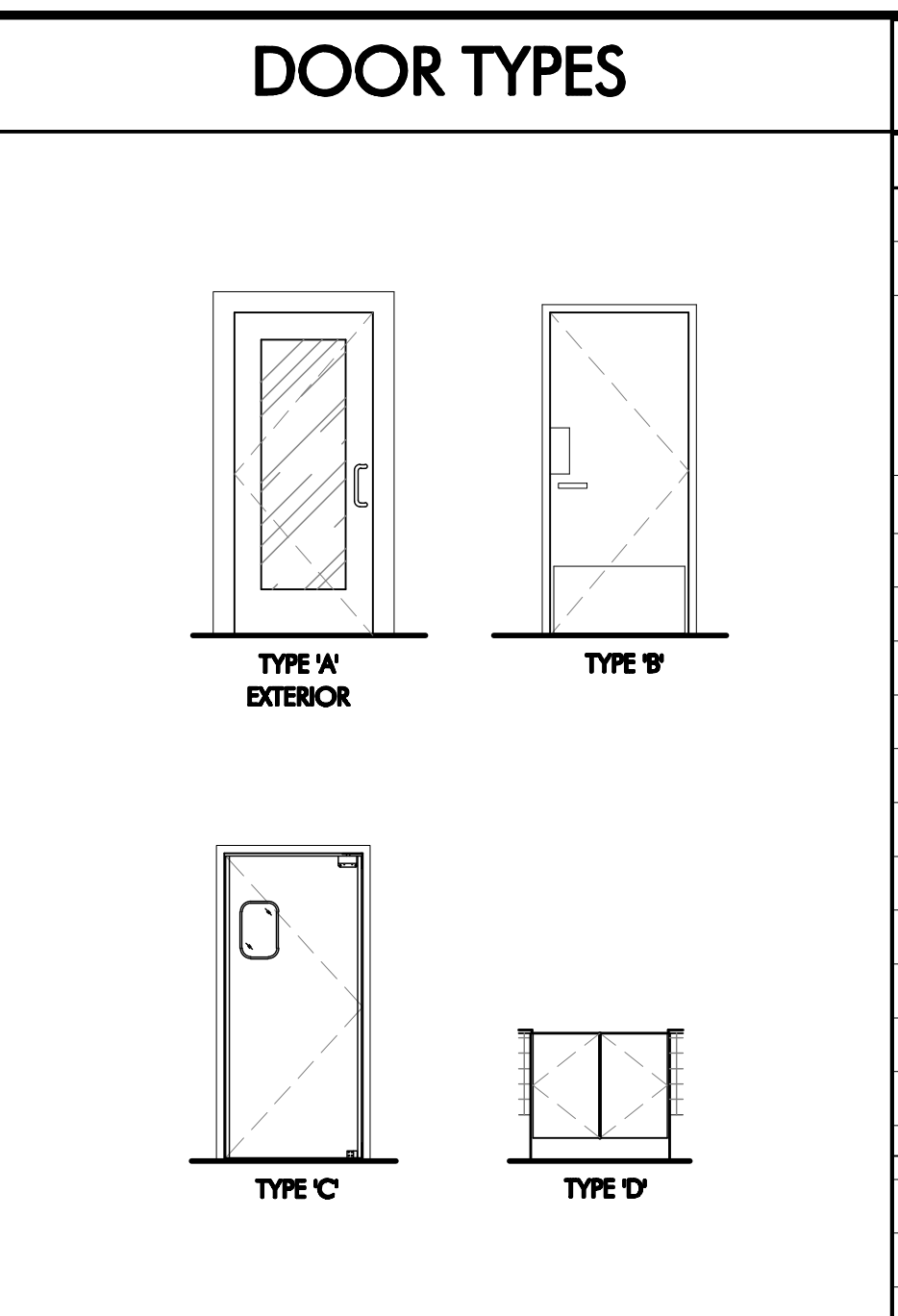
SYMBOL	SIZE / LOCATION	DOOR TYPE	MATERIAL	FRAME	HARDWARE	RATING	NOTES
①	3'-0" x 7'-0" - ENTRY	A	ALUM/GLASS	ALUM	1	N/A	EXISTING TO REMAIN, RE KEY
②	(PR)1'-8" x 2'-3" DOUBLE SWING GATE	D	[WD-01]	-	2	N/A	DOUBLE SWING GATE (1" THICK SOLID WHITE OAK)
③	3'-0" x 6'-8" - EMPLOYEE SERVICE AREA	C	SS	HM	-	N/A	ELIASON DOUBLE SWING, SCP-3
④	3'-0" x 7'-0" - TOILET ROOM	B	[PY-02]	ALUM	3	N/A	TGC TO PAINT [PT-02] BOTH SIDES + FRAME
⑤	3'-0" x 7'-0" - BOH SERVICE DOOR	EXISTING/B	EXISTING	EXISTING	EXISTING/4	N/A	TGC TO PAINT PUBLIC SIDE TO MATCH EXISTING AND [PT-09] ON BOH SIDE

### DOOR HARDWARE SCHEDULE

HARDWARE GROUP #1 (STOREFRONT ENTRY)	HARDWARE GROUP #2 (DOUBLE SWING GATE)	HARDWARE GROUP #3 (TOILET ROOM)
<b>LATCH SET:</b> EXISTING TO REMAIN, RE-KEY (REPLACE) LOCK CYLINDER <b>CLOSER:</b> EXISTING TO REMAIN <b>PULLS:</b> TGC TO REPLACE EXISTING PULL SET	<b>HINGES:</b> BOMMER NON-TEMPLATE - 3029-7 (2 PER GATE) OR EQUAL	<b>LATCH SET:</b> SARGENT 10 LINE 65 F76 L LEVER 26D FINISH <b>CLOSER:</b> LCN #4040XP - SURFACE MOUNTED, ALUMINUM FINISH 626 <b>SILENCERS:</b> IVES #SR64 (5 PER JAMB) <b>WALL BUMPS:</b> WS406/407COV, SATIN STAINLESS STEEL <b>COAT HOOK:</b> BOBRICK B-211 <b>KICK PLATE:</b> ROCKWOOD #K1050F - .050" THICK, 18" x 34" x US260/626, B4E (BOTH SIDES) <b>PUSH PLATE:</b> DON-JO WRAP PLATE #90 - BLANK - 1 3/4" DOORS - SILVER (90-5-CW) 5"x12"

### HARDWARE GROUP #4 (SERVICE DOOR)

<b>HINGES:</b> TA2714-NRP 4 1/2" x 4 1/2" (MCKINNEY) <b>LATCH SET:</b> SARGENT 10 LINE 54 F90 L LEVER 26D FINISH <b>CLOSER:</b> LCN #41071 - HINGE FACE MOUNTED, ALUM FINISH (MOUNTED ON PULL SIDE IF NOT EXISTING) <b>SILENCERS:</b> IVES #SR64 (5 PER JAMB) <b>KICK PLATE:</b> ROCKWOOD #K1050F - .050" THICK, 18" x 34" x US260/626, B4E (INTERIOR SIDE ONLY) <b>PEEP HOLE:</b> IVES U698 WIDE ANGLE INSTALL AT 4'-0" AND 5'-0" AFF
---



**NOTES:**

- ALL DOORS MUST BE OPERABLE WITHOUT SPECIAL KNOWLEDGE OR EFFECT W/ LEVER TYPE HARDWARE IN COMPLIANCE WITH STATE & LOCAL CODES.
- HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS OF DOORS OR GATES SHALL BE 34 INCHES (864MM) MINIMUM AND 44 INCHES (1118MM) MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
- OPENING FORCE REQUIRED AT ALL INTERIOR DOORS SHALL BE 5LBS MAX.

### FINISH SCHEDULE-STRAWBERRY

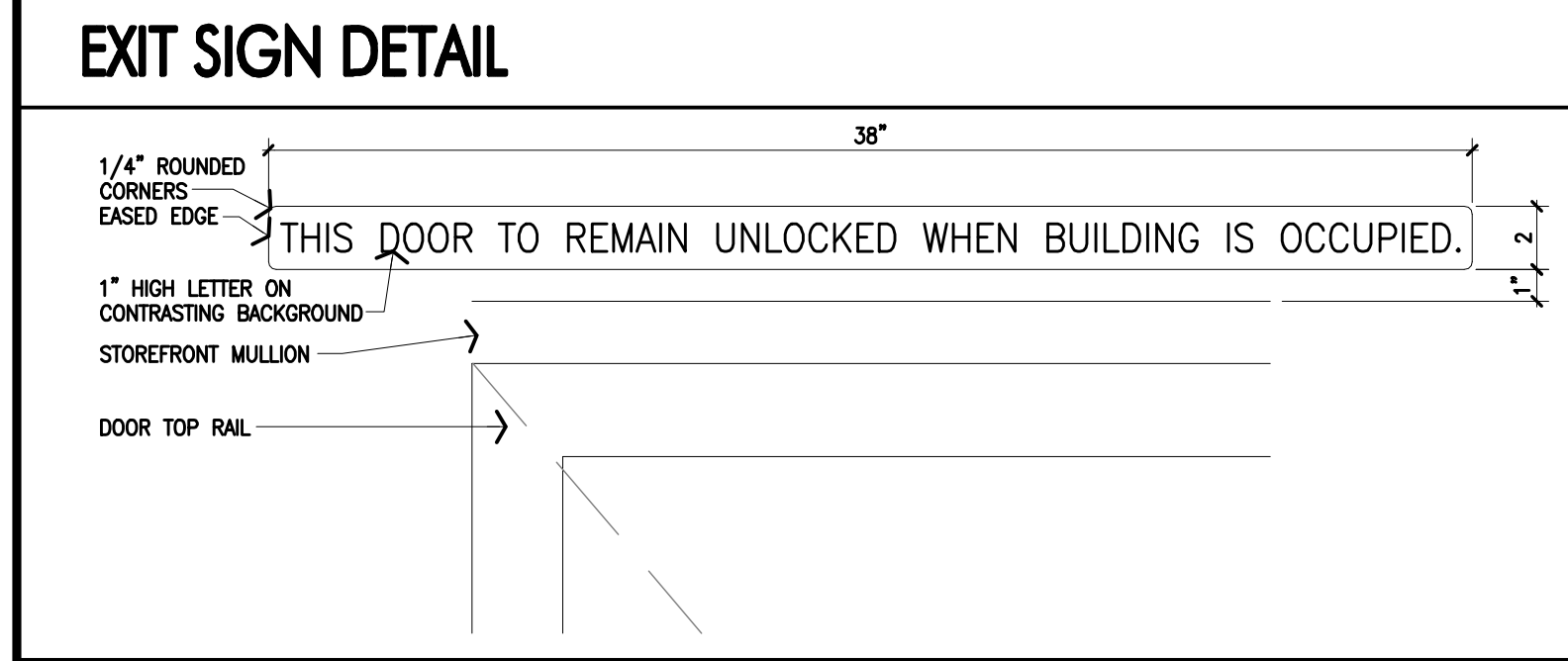
SYMBOL	MATERIAL	DESCRIPTION	NOTES
[GL-01]	GLASS	CLEAR GLASS	CLEAR GLASS, TEMPERED SUPPLIER BY GC.
[WD-01]	WOOD	SOLID WHITE OAK	1" THICK TO BE SEALED WITH A CLEAR POLYURETHANE, SATIN FINISH
[TL-01]	FLOOR TILE	PORCELAIN TILE	"CASALGRANDE PADANA" CEMENTO RASATO GRIGIO 24"x48" NATURAL GROUT: LACTICRETE PERMACOLOR RAVEN, 1/8" GROUT JOINT (USE MIRACLE 511 IMPREGNATOR SEALER PRIOR TO GROUTING, FOLLOW APPLICATION AND DRYING INSTRUCTIONS EXACTLY ON SEALER CONTAINER. DO NOT ALLOW ANY SEALER INTO JOINTS. USE SPONGE, TIGHT ROLLER OR SEALER APPLICATOR - REFER TO BACK OF CONTAINER AND FOLLOW DRY TIME BEFORE GROUTING)
[TL-02]	WALL TILE	GLOSSY WALL TILE	"CASALGRANDE PADANA" CEMENTO RASATO GRIGIO, BASE TILE 24 x 6 (CUT TILE) GROUT: LACTICRETE PERMACOLOR RAVEN, 1/8" GROUT JOINT
[TL-03]	COVE BASE TILE	QUARRY TILE	2.5"x6" EQUIPE VILLAGE ROSE GOLD GROUT: LACTICRETE PERMACOLOR 42 PLATINUM, 1/16" TO 1/8" GROUT JOINT, VERTICAL STACK (NO STAGGER)
[ST-01]	CORIAN QUARTZ	CORIAN QUARTZ SOLID SURFACE	DAL TILE ARID GREY 6" W/ COVE BASE GROUT: LACTICRETE PERMACOLOR 45 RAVEN, 3/16" GROUT JOINT
[PT-01]	PAINT	FRONT OVERHEAD CEILING PAINT	COLOR: BIANCO DOLOMITE 3 CENTIMETER THICK
[PT-02]	PAINT	PRIMARY PAINT	BENJAMIN MOORE MAYONNAISE OC-85 EGGSHELL, LRV: 90.49
[PT-03]	PAINT	ACCENT PAINT	BENJAMIN MOORE PINK PUNCH, ULTRA SPEC SCUFF-X EGGSHELL, LRV: 47.05, LEVEL 5 FINISH, CURED 5 DAYS PRIOR TO GRAPHICS INSTALL
[PT-09]	PAINT	BACK OF HOUSE PAINT	BENJAMIN MOORE AUTHENTIC PINK, ULTRA SPEC SCUFF-X EGGSHELL, LRV: 47.05, LEVEL 5 FINISH, CURED 5 DAYS PRIOR TO GRAPHICS INSTALL
[MT-01]	S.S. WALL BASE	6" H STAINLESS STEEL WITH 3/8" COVED BASE	EPOXY PAINT FINISH DUNN EDWARDS, PRO INDUSTRIAL PRE-CATALYZED DEW 385/SEM-GLASS BY CONTRACTOR
[MT-02]	FULL-HEIGHT WALL/WAINSCOT	1/2" PAINTED CORRUGATED PANEL WITH EDGE TRIM PIECES	PAINTED [PT-02] SEMIGLOSS
[WC-01]	WALL COVERING	CUSTOM PRINT WALL COVERING/MURAL	BY OTHERS
[FRP]	FRP	FRP	WHITE PEBBLED W/ OUTSIDE CORNER TRIM
[AT-01]	ACOUSTIC LAY-IN CEILING TILE	2x2 LAY-IN	USG FELICE ACOUSTICAL PANELS 576975, WHITE
[AT-02]	ACOUSTIC LAY-IN CEILING TILE	2x2 LAY-IN	USG MARS HEALTHCARE HIGH-CAC 60/40 PANELS #86270, NON ABSORBENT, EASILY CLEANABLE AND ARE VINYL FACED, WHITE-CLASS A FLAME SPREAD RATING.

### RESPONSIBILITIES

TENANT - T	LANDLORD - L	EXISTING - E	TENANT GENERAL CONTRACTOR - TGC	FURNISHED BY	INSTALLED BY
NUMBER	ITEM				
1	CONCRETE SLAB / TRENCH INFILL		E/TGC	E/TGC	
2	DEMISING PARTITION STUDS		E	E	
3	DEMISING PARTITION GYPBD.		E	E	
4	DEMOLITION		TGC	TGC	
5	INSULATION (CEILING AND/OR STOREFRONT WALLS)		-	-	
6	BARRICADE		-	-	
7	BARRICADE GRAPHICS		T	T	
8	STOREFRONT SIGN(S)		T	T	
9	STOREFRONT BLADE SIGN(S)		T	T	
10	STOREFRONT GLAZING SYSTEM		E	E	
11	ENTRY DOOR(S), FRAME(S) AND HARDWARE		E/TGC	E/TGC	
12	SERVICE DOOR(S), FRAME(S) AND HARDWARE		E/TGC	E/TGC	
13	INTERIOR DOOR(S), FRAME(S) AND HARDWARE		TGC	TGC	
14	INTERIOR PARTITIONS		TGC	TGC	
15	CEILINGS		TGC	TGC	
16	PORCELAIN FLOOR TILE AND BASE		T	TGC	
17	QUARRY FLOOR TILE AND BASE		TGC	TGC	
18	FLOORING TRANSITIONS / THRESHOLDS		TGC	TGC	
19	CERAMIC WALL TILE		T	TGC	
20	FRP		TGC	TGC	
21	PAINT		TGC	TGC	
22	QUARTZ COUNTERTOPS & TABLE TOPS		TGC	TGC	
23	TOILET ROOM SIGNAGE		TGC	TGC	
24	TOILET ROOM GRAB BARS AND MIRROR		TGC	TGC	
25	SOAP DISPENSER, PAPER TOWEL DISPENSER, CHEMICAL STATION, AND TOILET PAPER DISPENSER		T	T	
26	MENU MONITORS		T	TGC	
27	INTERIOR GRAPHICS (PAINTED CIRCLES)		TGC	TGC	
28	INTERIOR GRAPHICS (DECALS)		T	T	
29	FIRE EXTINGUISHERS		TGC	TGC	
30	AUDIO SYSTEM AND SPEAKERS		T	T	
31	SECURITY SYSTEM AND CAMERAS		T	T	
32	MILLWORK		TGC	TGC	
33	STAINLESS STEEL TABLES		T	TGC	
34	FOOD SERVICE EQUIPMENT / RACKS (SEE A101 FOR MORE INFO)		T	TGC	
35	EMPLOYEE LOCKERS		T	TGC	
36	MECHANICAL EQUIPMENT - SEE MECHANICAL DRAWINGS		E/TGC	E/TGC	
37	ELECTRICAL EQUIPMENT - SEE ELECTRICAL DRAWINGS		E/TGC	E/TGC	
38	PLUMBING EQUIPMENT - SEE PLUMBING DRAWINGS		E/TGC	E/TGC	
39	LIGHT FIXTURES		T	T	
40	FINAL CONNECTION FOR ALL EQUIPMENT		-	TGC	
41	24"x36" FRAMED PHOTOS		T	TGC	

### VENDOR LIST

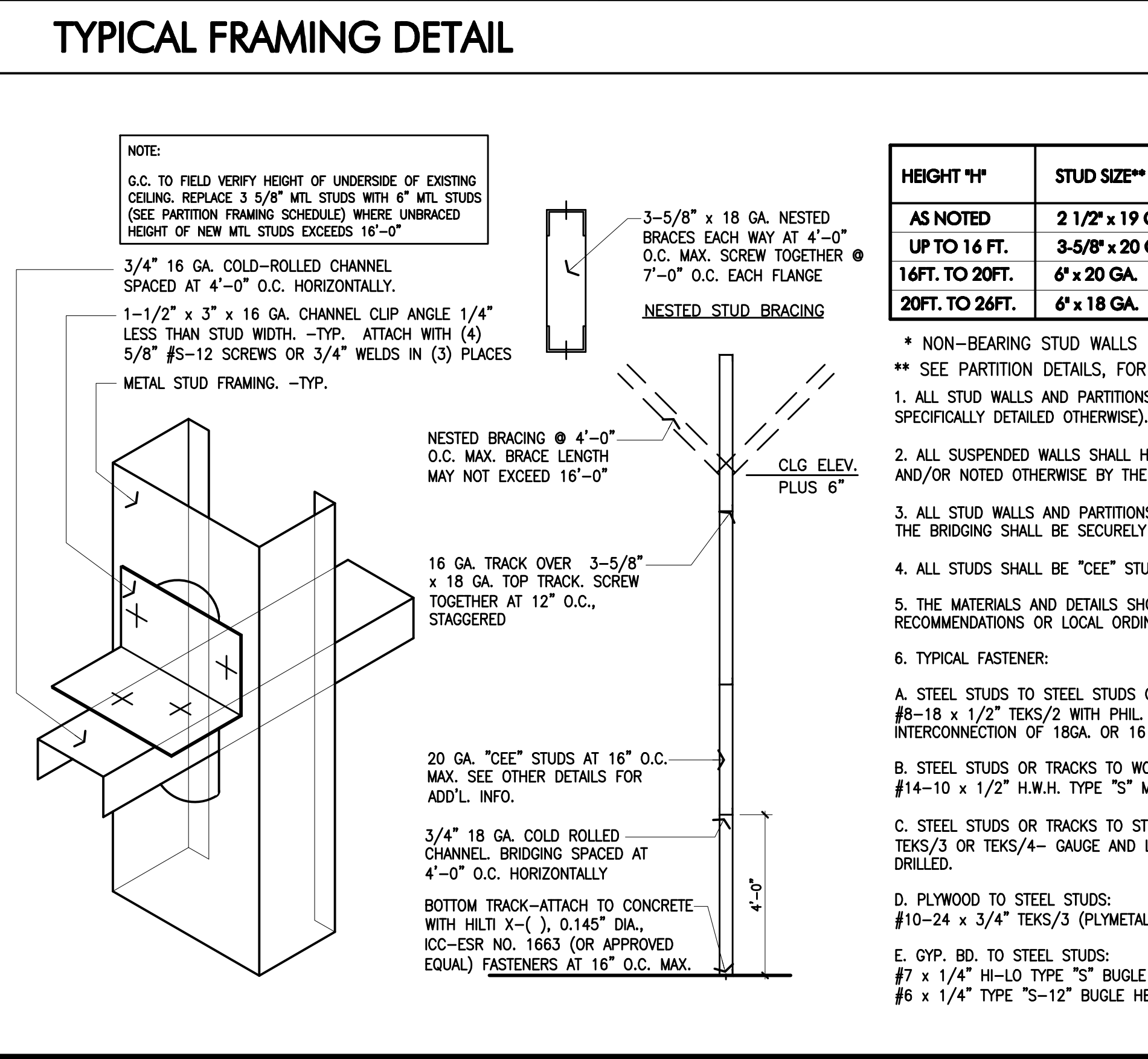
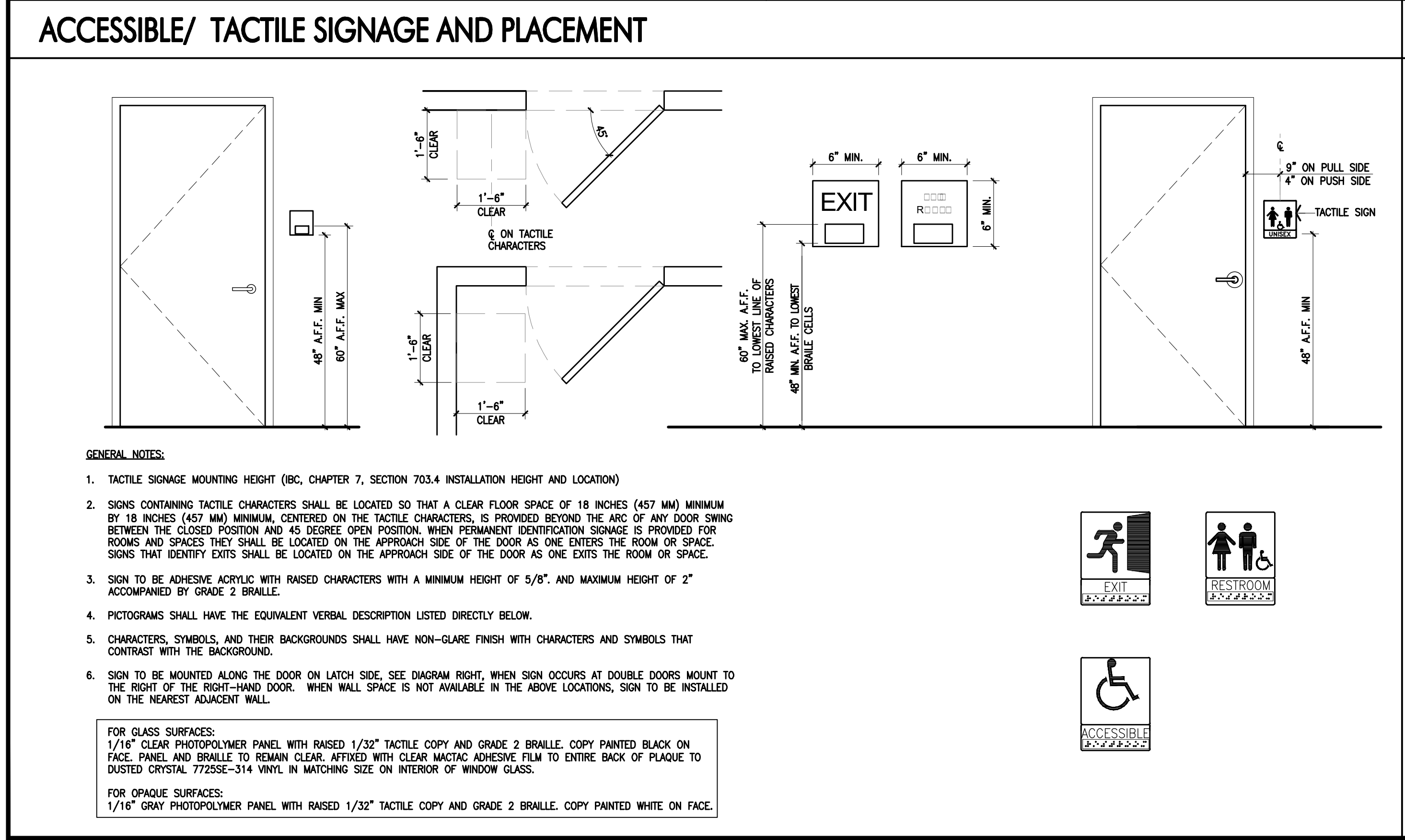
DESCRIPTION	SUPPLIER	CONTACT	PHONE	EMAIL
LOW VOLTAGE WIRING		DANIEL VALLEJO		dvallejo258@gmail.com
LOW VOLTAGE TERMINATIONS		DANIEL VALLEJO		dvallejo258@gmail.com
SECURITY SYSTEM	N/A	N/A	N/A	N/A
SECURITY CAMERAS	FUTRONICS	JOEL DONDERS	347-987-0388	JOEL@FUTRONICSAV.COM
COMPUTER INSTALL		DANIEL VALLEJO		dvallejo258@gmail.com
PHONE SYSTEM		DANIEL VALLEJO		dvallejo258@gmail.com
INTERNET		DANIEL VALLEJO		dvallejo258@gmail.com
AUDIO/VISUAL		DANIEL VALLEJO		dvallejo258@gmail.com
POS TERMINALS	BY OWNER			
EQUIPMENT SUPPLIER	BFA FOODSERVICE	BOB FINKELSTEIN	973-885-2475	BOB@BFAFOODSERVICE.COM
MENU MONITOR SUPPLIER	VSG, INC.	FRANK ALVY	-	FALVY@VSG-INC.COM
INTERIOR SIGNS AND GRAPHICS	TRIANGLE SIGNS	DAVID DELELLIS	443-833-9518 727-947-2353	david.delellis@trianglesign.com
EXTERIOR SIGNS AND GRAPHICS		SUZANNE SIDLER	443-833-9502 727-735-9269	suzanne.sidler@trianglesign.com
TILE SUPPLIER	DALTILE	JOSEPH ROACH	516.322.2639	joseph.roach@daltile.com
SOAP, TOILET PAPER & PAPER TOWEL DISPENSERS	CINTAS	SCOTT KELLY	609-832-2214	kellys3@cintas.com



### INTERIOR MATERIALS FIRE RATINGS

MATERIAL	FLAME SPREAD	SMOKE DENSITY	CLASSIFICATION
PLASTIC LAMINATE	80 (BONDED)	95 (BONDED)	C
TILE	0.45	450 OR LESS	A
FRP	150	245	C

PER 803.1 OF THE 2012 INTERNATIONAL BUILDING CODE, INTERIOR FINISHES SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE DEVELOPMENT INDEXES  
 CLASS A: FLAME SPREAD 0-25; SMOKE DEVELOPMENT 0-450  
 CLASS B: FLAME SPREAD 26-75; SMOKE DEVELOPMENT 0-450  
 CLASS C: FLAME SPREAD 76-200; SMOKE DEVELOPMENT 0-450



HEIGHT 'H'	STUD SIZE**	BOTTOM TRACK	TOP TRACK	
			8'-0" SPAN	11'-6" SPAN
AS NOTED	2 1/2" x 19 GA. **	2 1/2" x 18 GA.	2 1/2" x 16 GA.	N.A.
UP TO 16 FT.	3-5/8" x 20 GA. **	3-5/8" x 18 GA.	3-5/8" x 18 GA.	3-5/8" x 16 GA. DL.
16 FT. TO 20 FT.	6" x 20 GA.	6" x 18 GA.	6" x 18 GA.	6" x 18 GA.
20 FT. TO 26 FT.	6" x 18 GA.	6" x 18 GA.	6" x 18 GA.	6" x 18 GA. DL.

- \* NON-BEARING STUD WALLS ONLY.  
 \*\* SEE PARTITION DETAILS, FOR EXACT MTL. GA NUMBERS
- ALL STUD WALLS AND PARTITIONS REQUIRE GYP. BD. BOTH SIDES FOR THE FULL HEIGHT OF THE STUDS (UNLESS SPECIFICALLY DETAILED OTHERWISE).
  - ALL SUSPENDED WALLS SHALL HAVE GYP. BD. WHICH EXTENDS 6" ABOVE THE SUSPENDED CEILING (UNLESS SHOWN AND/OR NOTED OTHERWISE BY THE ARCHITECT).
  - ALL STUD WALLS AND PARTITIONS SHALL HAVE CONTINUOUS LINES OF BRIDGING SPACED AT 4'-0" MAX. ON CENTER. THE BRIDGING SHALL BE SECURELY FASTENED TO THE STUDS WITH EITHER SCREWS OR WELDS.
  - ALL STUDS SHALL BE "CEE" STUDS WITH FLANGE STIFFENERS.
  - THE MATERIALS AND DETAILS SHOWN ARE FOR TYPICAL INSTALLATIONS. WHERE THE STUD MANUFACTURERS RECOMMENDATIONS OR LOCAL ORDINANCES ARE MORE RESTRICTIVE, THEY SHALL APPLY.
  - TYPICAL FASTENER:
    - A. STEEL STUDS TO STEEL STUDS OR TRACKS: #8-18 x 1/2" TEKS/2 WITH PHIL. PAN HEAD FOR 20GA. #10-16 x 9/16" TEKS/3 WITH PHIL. PAN HEAD FOR INTERCONNECTION OF 18GA. OR 16 GA.
    - B. STEEL STUDS OR TRACKS TO WOOD PURLINS, GIRDERS AND BEAMS: #14-10 x 1/2" H.W.H. TYPE "S" METAL-TO-WOOD TEKS.
    - C. STEEL STUDS OR TRACKS TO STRUCTURAL STEEL (TUBE STEEL, WIDE FLANGE BEAMS, COLUMNS, GIRDERS, ETC.): TEKS/3 OR TEKS/4- GAUGE AND LENGTH AS REQUIRED FOR THE COMBINED THICKNESS OF THE MATERIAL TO BE DRILLED.
    - D. PLYWOOD TO STEEL STUDS: #10-24 x 3/4" TEKS/3 (PLYMETAL TEKS) WITH THIN WAFER HEAD.
    - E. GYP. BD. TO STEEL STUDS: #7 x 1/4" HI-LO TYPE "S" BUGLE HEAD SCREWS FOR 3/8" TO 5/8" GYP. BD. TO 20GA. STUDS. #6 x 1/4" TYPE "S-12" BUGLE HEAD SCREWS FOR 3/8" TO 5/8" GYP. BD. TO 18GA. OR 16GA. STUDS OR TRACKS.

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Project Address  
**Van Leeuwen Ice Cream**  
 One Brattle Square  
 Space #C2  
 Cambridge, MA 02138

Issue Date **11/22/23**

Revisions	Date	Description	By
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**Van Leeuwen**  
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Job Number **230174**  
 Drawn By **CMS**  
 App'd By **SS**  
 Sheet Title  
**Responsibilities and Schedules**  
 Sheet Number  
**A003**



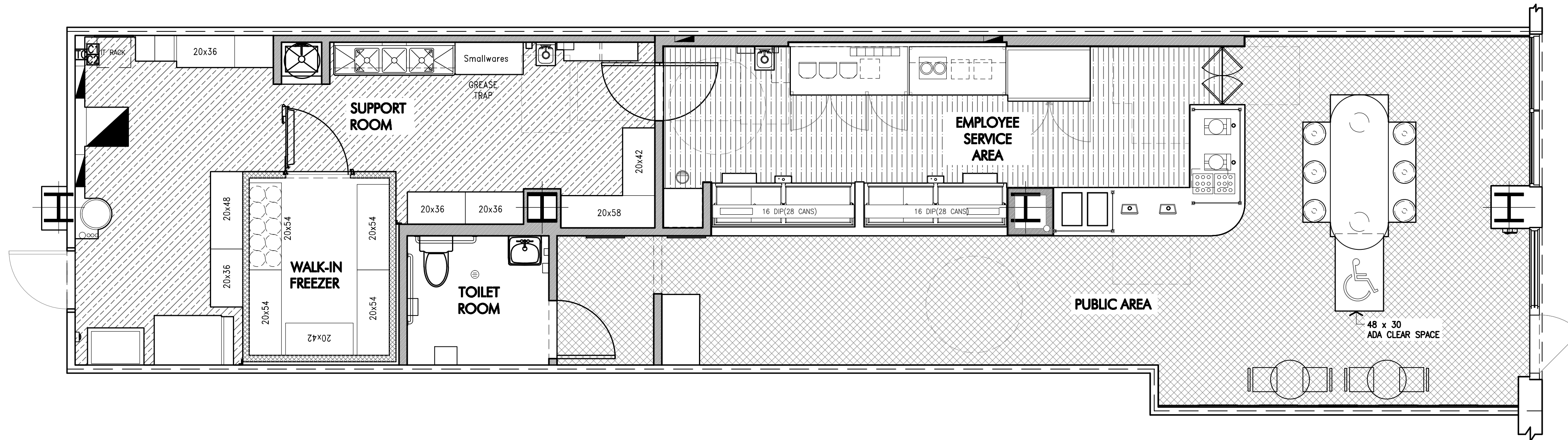
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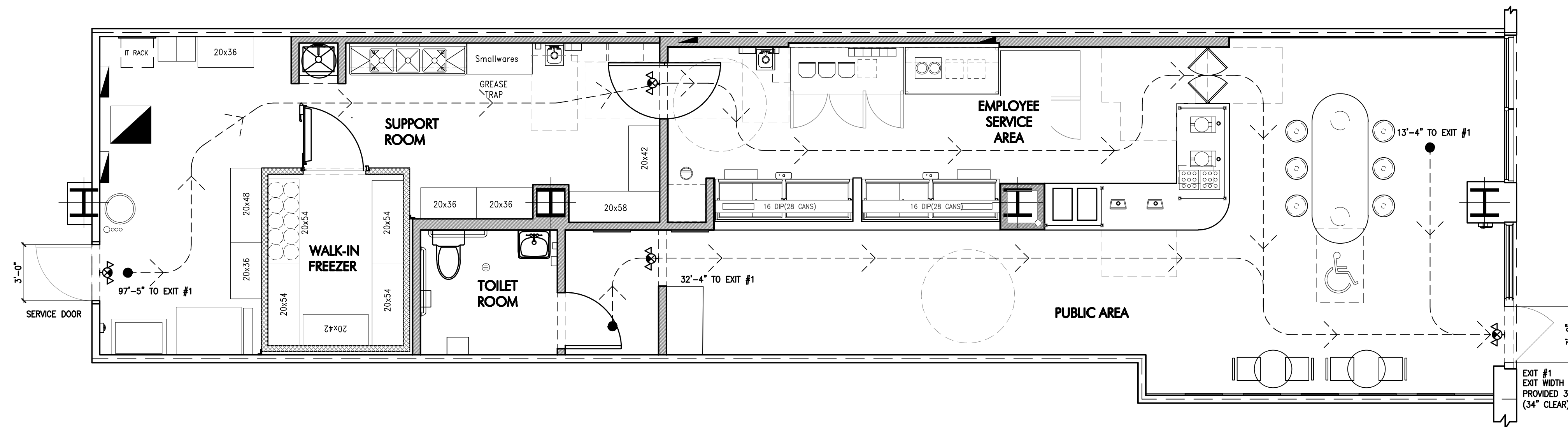
**Van Leeuwen Ice Cream**  
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**1** **Occupancy Plan**  
Scale 1/4" = 1'-0"



**2** **Egress Plan**  
Scale 1/4" = 1'-0"

**EGRESS AND OCCUPANCY**

OCCUPANCY CLASSIFICATION (CHAPTER 3):  
SECTION 303.1.2 - GROUP B

FIRE PROTECTION SYSTEMS (CHAPTER 9):  
SECTION 903 - SPRINKLED: YES  
SECTION 907 - FIRE ALARMS: YES

OCCUPANT LOAD (CHAPTER 10)  
SECTION 1004 - OCCUPANT LOAD

	PUBLIC (B)	= 471/100	= 5
	FIXED SEATING	= # OF STOOLS	= 6 + 1HC = 7
	EMPLOYEES SERVICE AREA	= 156/100	= 2
	SUPPORT ROOM AREA	= 221/300	= 1
	AUXILIARY (UNOCCUPIED AREA, CIRCULATION)	= 527/0	= 0
	<b>GROSS LEASED AREA/OCC</b>	<b>= 1375 SF</b>	<b>= 15</b>

SECTION 1005.3.2 - EGRESS WIDTH  
REQUIRED: INCHES PER PERSON= 0.20 (SPRINKLED)  
0.20 X 15 OCCUPANTS = 3" INCHES  
PROVIDED: INCHES = 36" (34" CLEAR)  
EXITS PROVIDED: 1  
MINIMUM WIDTH: 34" (< 50 OCCUPANTS)

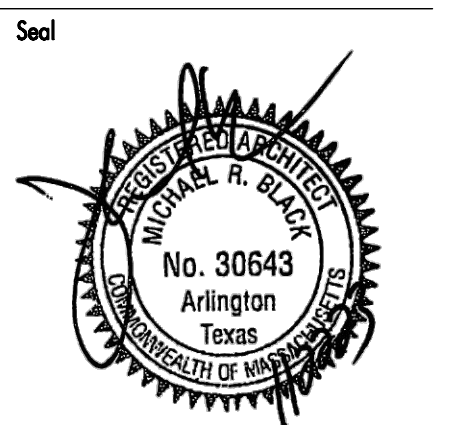
SECTION 1006 - EXIT AND EXIT ACCESS DOORWAYS  
MAX TRAVEL = 100 FEET (SPRINKLED)  
OCCUPANCY= A (ASSEMBLY)/ B (BUSINESS - UNDER EXCEPTION A303.1.2)  
MAX OCCUP. = 49 OCCUPANTS

SECTION 1017 - EXIT ACCESS TRAVEL DISTANCE  
MAX TRAVEL = 300 FEET (SPRINKLER SYSTEM)

SECTION 2902.2  
EXCEPTION 3 - SEPARATE FACILITIES SHALL NOT BE REQUIRED IN BUSINESS OCCUPANCIES IN WHICH THE MAXIMUM OCCUPANT LOAD IS 15 OR FEWER.

Consultant

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Job Number **230174**  
Drawn By **CMS**  
App'd By **SS**  
Sheet Title

**Occupancy and Egress Plan**

Sheet Number

**A004**

Revisions	Date	Description	By
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Job Number 230174

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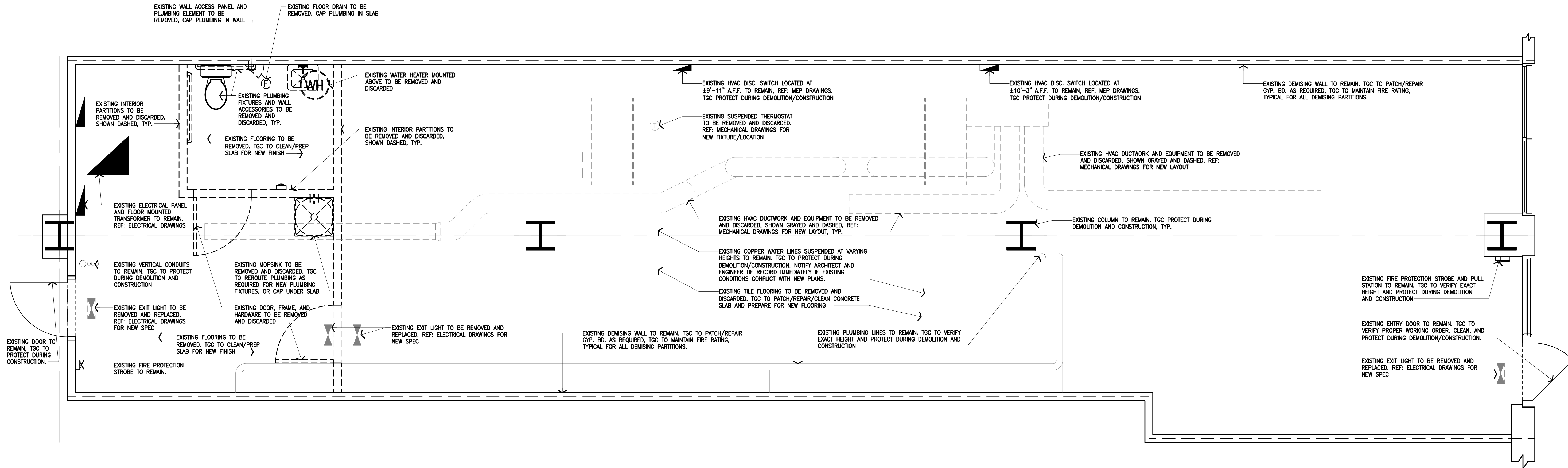
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Sheet Title

Demolition Plans

Sheet Number

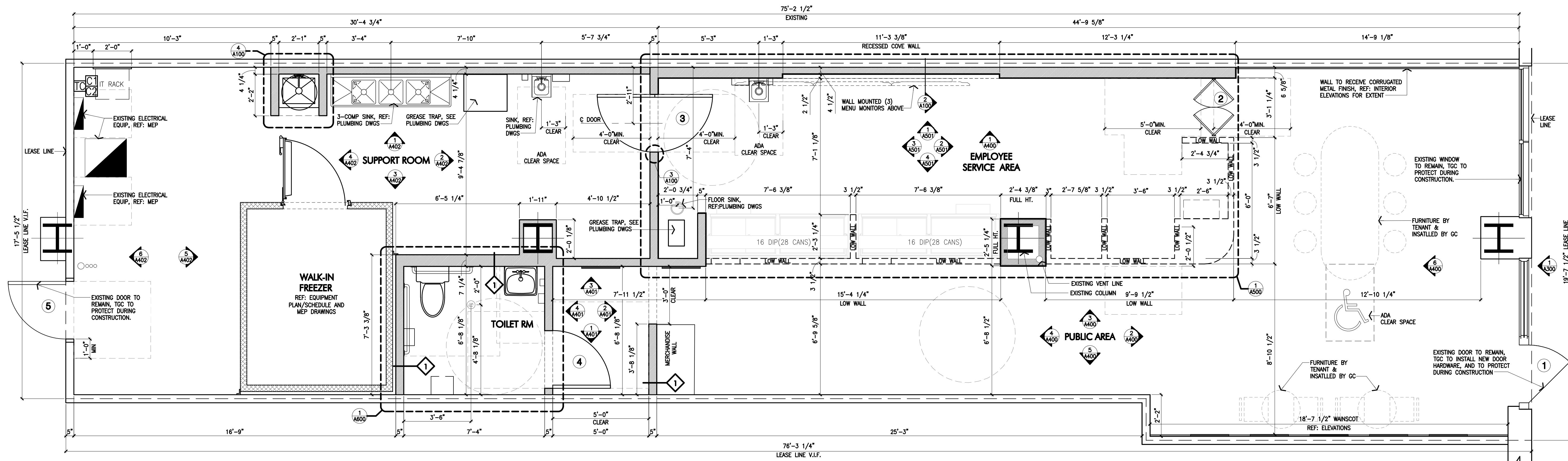
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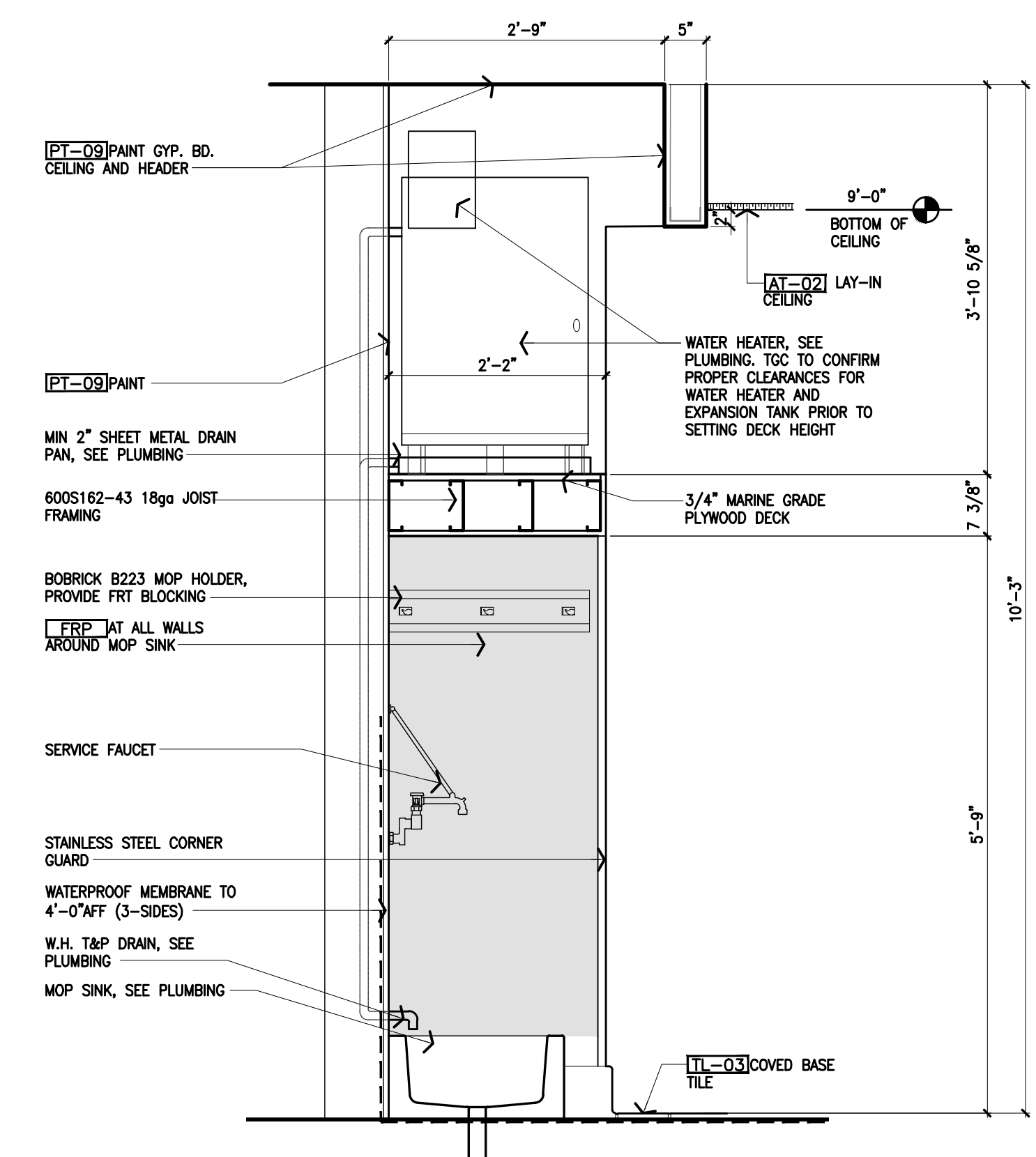
**1 Demolition Floor Plan**  
Scale 3/8" = 1'-0"

**DEMOLITION NOTES**

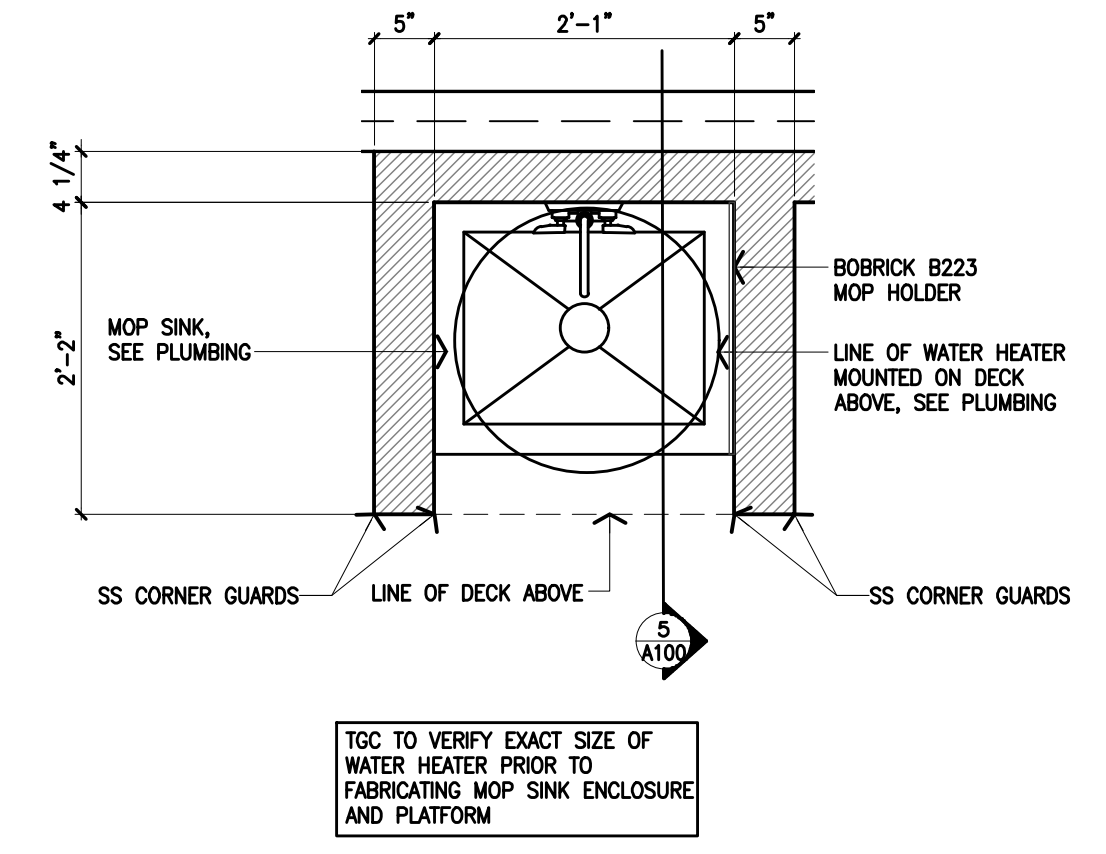
1. DRAWINGS OF EXISTING CONDITIONS HAVE BEEN COMPILED FROM EXISTING DATA SUPPLIED BY THE OWNER TO THE ARCHITECT. THE ARCHITECT MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, FOR THE ACCURACY OF THE COMPLETENESS OF THE EXISTING INFORMATION RECORDED. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES OR CONFLICTS THAT MIGHT ARISE IN THE COURSE OF THE DEMOLITION WORK.
2. VERIFY LOCATIONS OF EXISTING MECHANICAL, PLUMBING AND ELECTRICAL UTILITIES. LOCATE AND PROTECT UTILITIES TO REMAIN. DISCONNECT, REMOVE BACK TO NEAREST JUNCTION BOX OR PANEL, AS REQUIRED, AND CAP DESIGNATED UTILITIES WITHIN THE DEMOLITION AREA. REFER TO THE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFO.
3. EXISTING ELECTRICAL AND TELEPHONE OUTLETS LOCATED ON DEMOLISHED WALLS ARE TO BE REMOVED INCLUDING CONDUIT AND BRING BACK TO JUNCTION BOX. LOCATIONS ARE TO BE PATCHED AND REPAIRED TO BE FLUSH WITH ADJACENT WALL SURFACE.
4. WHERE PLUMBING FIXTURES ARE BEING REMOVED OR WHERE EXPOSED PLUMBING PIPES OCCUR, CAP LINES BEHIND FINISHED SURFACES. PATCH AND REPAIR AS REQUIRED.
5. ALL EXISTING CONSTRUCTION WHERE INDICATED INCLUDING ELECTRICAL, TELEPHONE, PLUMBING AND MECHANICAL DEVICES NOT OTHERWISE INDICATED ON THESE CONSTRUCTION DRAWINGS SHALL BE REMOVED IN A CAREFUL MANNER SO AS NOT TO DAMAGE ADJOINING CONSTRUCTION.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSE OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.
7. ALL EXISTING BUILDING UTILITIES SHALL REMAIN IN OPERATION DURING CONSTRUCTION. PROVIDE REROUTING OF UTILITIES SERVING ADJACENT AREAS THAT ARE TO MAINTAIN UNINTERRUPTED SERVICE. ANY TEMPORARY SUSPENSION OF SERVICE SHALL BE COORDINATED AND APPROVED BY THE FACILITY MANAGER, NOT LESS THAN 24-HOURS IN ADVANCE.
8. THE CONTRACTOR WILL VERIFY AND CONFORM TO ALL REQUIREMENTS OF ALL UTILITY COMPANIES UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS.
9. THE DEMOLITION PLAN NOTES ARE DIAGRAMMATIC AND GENERAL IN NATURE. THE INTENT IS TO ILLUSTRATE THE COMPLETE DEMOLITION OF THE SPACES INDICATED UNLESS NOTED OTHERWISE. FIELD VERIFICATION OF THE EXISTING CONDITIONS AND SPECIFIC QUANTITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. REMOVAL AND DISPOSAL OF DEMOLITION DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR. VERIFY THE HAULING ROUTE THROUGH THE BUILDING, THE DEMOLITION STAGING AREA, AND THE LOCATION OF THE QUANTITIES TO THE OWNER PRIOR TO THE START OF DEMOLITION. DISPOSAL OF RUBBISH SHALL BE DONE IN A LEGAL MANNER.
11. THE OWNER RESERVES THE RIGHT TO SALVAGE ANY DEMOLISHED ITEM. VERIFY ITEMS TO BE SALVAGED WITH THE OWNER PRIOR TO THE START OF DEMOLITION. REMOVE, PROTECT, CLEAN, REPAIR FOR THE REUSE AND TURN OVER SUCH ITEMS AS DIRECTED BY THE OWNER.
12. IN ORDER TO INSTALL SOME OF THE NEW WORK (INCLUDING, BUT NOT LIMITED TO MECHANICAL, PLUMBING OR ELECTRICAL) IT WILL BE NECESSARY FOR THE CONTRACTOR AND HIS SUBCONTRACTORS TO REMOVE AND REPLACE (OR REFINISH) EXISTING WALLS, FLOORS, OR CEILING IN THE AREAS OF THE BUILDING NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL INCLUDE ALL RELATED COSTS IN HIS BASE BID, WHETHER SHOWN ON THESE PLANS OR NOT.
13. PROTECT ADJACENT SPACES NOT SCHEDULED FOR DEMOLITION. PATCH AND REPAIR DAMAGED FINISHES, ITEMS AND FIXTURES TO REPAIR AND/OR REPLACE IN KIND TO MATCH EXISTING FROM DAMAGE DURING THE COURSE OF THE WORK. PROVIDE TEMPORARY SAFETY BARRIERS REQUIRED BY CODE AND AS NECESSARY TO INSURE PUBLIC SAFETY AND TO ALLOW BUILDING OCCUPANCY. CONTRACTOR TO SUBMIT FOR APPROVAL, BARRIER LOCATIONS, AND METHOD OF CONSTRUCTION TO THE ARCHITECT PRIOR TO INSTALLATION.
14. NO STRUCTURAL ELEMENTS ARE INCLUDED IN THIS SCOPE OF WORK.
15. PROVIDE DUST BARRIERS AROUND OPENINGS, TO AND FROM THE CONSTRUCTION AREA. PROVIDE ALL MEANS NECESSARY TO INHIBIT DUST FROM ENTERING OTHER PORTIONS OF THE FACILITY.
16. PROVIDE ADEQUATE SHORING, BRACINGS, BARRIAGES AND PROTECTIVE MEASURES AS REQUIRED TO SAFELY EXECUTE THE WORK IN THE CONSTRUCTION AREA AND THE AREAS ADJACENT TO THE CONSTRUCTION AREA. CEASE OPERATIONS AND NOTIFY THE ARCHITECT IMMEDIATELY IF THE STRUCTURE APPEARS TO BE ENDANGERED. DO NOT RESUME OPERATIONS UNTIL CORRECTIVE MEASURES HAVE BEEN TAKEN.
17. CONTRACTOR SHALL MAINTAIN MEANS OF EGRESS AND ENSURE THAT EXIT ROUTES ARE SIGNED, LIGHTED AND PROTECTED IN ACCORDANCE WITH CODE REQUIREMENTS. RELOCATE EXISTING AND/OR PROVIDE SMOKE PROTECTORS AND LIFE SAFETY EQUIPMENT FOR ADEQUATE COVERAGE.
18. PROVIDE TEMPORARY NON-COMBUSTIBLE CONSTRUCTION BARRIERS WHERE REQUIRED BY CODE AND THE GOVERNING FIRE AUTHORITY. MINIMUM REQUIREMENTS:  
A. FULL HEIGHT WALL FROM FLOOR TO CEILING.  
B. STUDS AT 24" O.C., WITH 5/8" TYPE "X" Gypsum BOARD.  
C. NON-COMBUSTIBLE ACCESS DOOR WITH (2) HINGES AND SPRING CLOSER.
19. SURVEY EXISTING FLOORS AND CLEARLY MARK ON FLOOR SURFACES THE LOCATIONS OF ALL BEAMS AND JOISTS. MARK ALL CORE DRILL PENETRATIONS OR SAW CUT PENETRATIONS AND RECEIVE STRUCTURAL ENGINEER'S APPROVAL PRIOR TO DRILLING CONCRETE.
20. CUT ROOF MATERIALS USING MASONRY SAW OR CORE DRILL. PNEUMATIC TOOLS ARE NOT ALLOWED WITHOUT PRIOR APPROVAL.
21. ALL CORE DRILLING, SAW CUTTING OR OTHER NOISY WORK SHALL BE SCHEDULED 48-HOURS IN ADVANCE WITH THE OWNER.
22. APPLY CEMENT BASE FLOOR PATCH AS REQUIRED TO FILL DINGS, NAIL HOLES, CHIPS AND CRACKS.
23. AT FLOOR AREAS SCHEDULED TO RECEIVE NEW FLOOR COVERING, REMOVE EXISTING FLOOR COVERING AND PREPARE SUBSTRATE FOR NEW FLOOR COVERING PER SPECIFICATIONS AND MANUFACTURER'S REQUIREMENTS.
24. AT ABANDONED PENETRATIONS OF FIRE RATED WALLS, CEILING OR FLOOR CONSTRUCTION, COMPLETELY SEAL VOIDS WITH FIRE RATED MATERIAL TO FULL THICKNESS OF THE PENETRATED ELEMENT. ALL PATCHING OF EXISTING WORK TO REMAIN SHALL MATCH FINISH PER SCHEDULE OR WHERE UNSCHEDULED TO MATCH EXISTING FINISHES TO REMAIN, AND SHALL MEET OR EXCEED FIRE RATING INDICATED ON FLOOR PLAN AND AS REQUIRED BY THE FIRE/LIFE SAFETY INSPECTOR.
25. COORDINATE EXISTING SPRINKLER LINE AND HEAD LOCATION WITH NEW PLAN. SUBMIT SPRINKLER SHOP DRAWINGS TO ARCHITECT FOR REVIEW WITH THE CITY FIRE DEPARTMENT.
26. CONTRACTOR IS RESPONSIBLE FOR BUILDING SECURITY DURING DEMOLITION PHASE. PROTECT ALL OPENINGS FROM WEATHER CONDITIONS AND SECURE THEM TO PREVENT VANDALISM.
27. DO NOT PERFORM ANY WORK THAT WILL VOID WARRANTIES OF EXISTING WEATHER EXPOSED OR MOISTURE RESISTANT ELEMENTS WITHOUT PRIOR APPROVAL FROM THE OWNER.
28. ARCHITECT ASSUMES NO RESPONSIBILITY RELATING TO ANY TOXIC MATERIALS, INCLUDING ASBESTOS, AND ASSUMES NO RESPONSIBILITY TO ITS EXISTENCE OR REMOVAL. THE OWNER WILL TAKE ACTION FOR DIRECTLY CONTRACTING WITH A CONSULTANT OR SPECIALIST LICENSED BY THE STATE, FOR SUCH SERVICES SHOULD THOSE SERVICES BE REQUIRED ON THE PROJECT.
29. IF THE EXISTING BUILDING CONSTRUCTION IS CLASSIFIED SUCH THAT FIREPROOFING INSULATION IS PRESENT, THEN THE CONTRACTOR, PRIOR TO STARTING ANY WORK, SHALL VERIFY THE CURRENT FIRE-RESISTANCE RATING(S) OF THE EXISTING BUILDING ELEMENT(S). IF THE EXISTING FIREPROOFING INSULATION IS DAMAGED/AFFECTED DURING THE COURSE OF THE WORK, AS DEFINED BY THIS PROJECT SCOPE, THEN THE CONTRACTOR SHALL PATCH/REPAIR THE FIREPROOFING INSULATION TO A CONDITION THAT SHALL MATCH OR EXCEED THE ORIGINAL FIRE-RESISTANCE RATING(S) OF THE EXISTING BUILDING ELEMENT(S).
30. CONTRACTOR TO RELOCATE AND REUSE EXISTING DOORS AND HARDWARE WHERE POSSIBLE.
31. EXISTING DOORS TO REMAIN U.L.O.



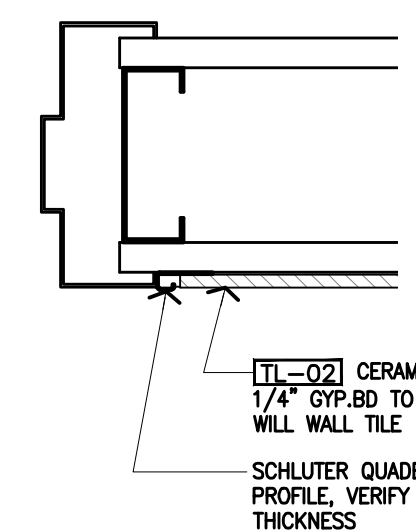
**1 Floor Plan**  
Scale 3/8" = 1'-0"



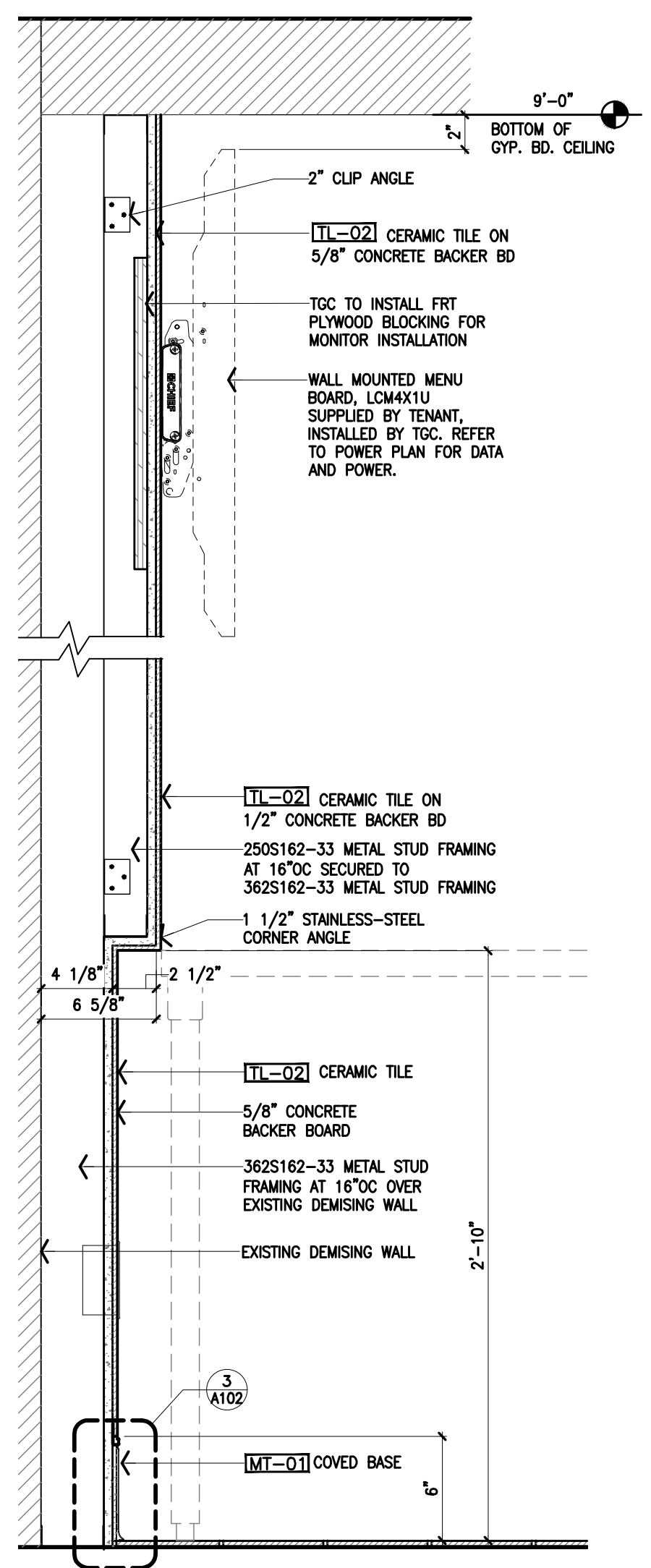
**5 Mop Sink Section**  
Scale 3/4" = 1'-0"



**4 Mop Sink Detail**  
Scale 3/4" = 1'-0"



**3 Door Jamb Tile Detail**  
Scale 3" = 1'-0"

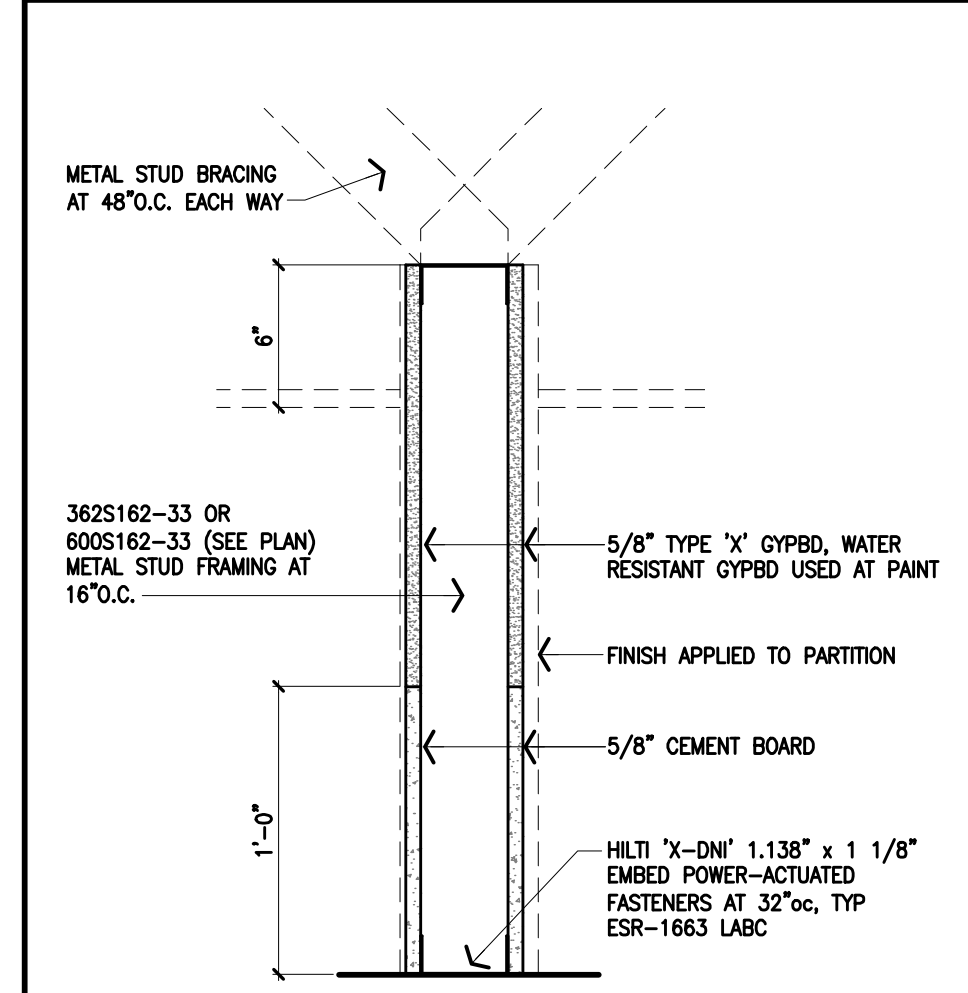


**2 Section at Cove Wall**  
Scale 1 1/2" = 1'-0"

**WALL LEGEND**

SYMBOL	DESCRIPTION
	EXISTING WALL
	NEW PARTITION
	NEW LOW WALL

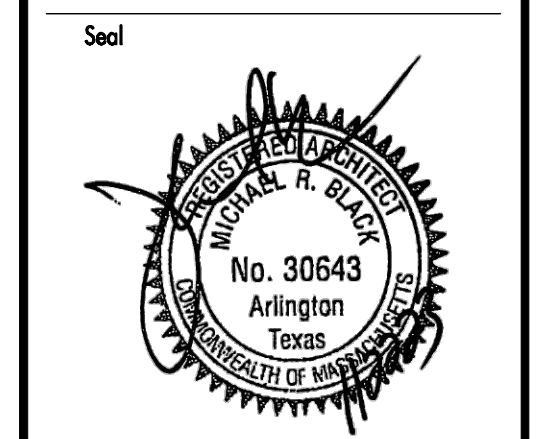
**PARTITION TYPES**

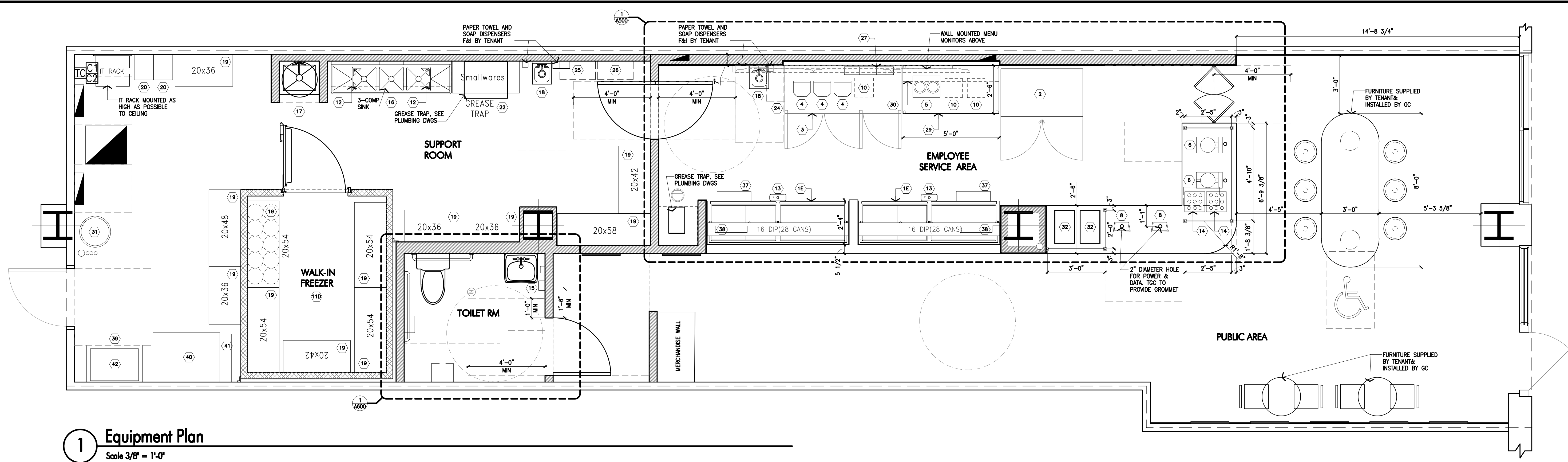


**1 NON-RATED PARTITION**  
5/8" TYPE "X" GYP. BD. ON BOTH SIDES OF METAL STUDS

Revisions

Date	Description	By





**1 Equipment Plan**  
Scale 3/8" = 1'-0"

MK.	DESCRIPTION	SUPPLIER	QTY.	BASE	MANUFACTURER/ MODEL NUMBER	ELECTRICAL REQUIREMENTS										PLUMBING REQUIREMENTS			REMARKS
						VOLTS	H.P.	AMPS	PHASE	CONN	MOUNT HEIGHT	CW	HW	FW	DIRECT WASTE	INDIRECT WASTE	MOUNT HEIGHT		
1A	ICE CREAM FREEZER	T	1		C. NELSON, BDB	115V	NA	8	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 7" SERVICE CORD, 2" CASTERS
1E	ICE CREAM FREEZER	T	2		C. NELSON, 16DIP	115V	NA	10	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 7" SERVICE CORD, 2" CASTERS	
2	2-DOOR DISPLAY FREEZER	T	1		TGM-72RS-N	115V	3/4	10.4	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 8" SERVICE CORD	
3	3-DOOR WORKTOP REFRIGERATOR	T	1		TURBO AIR, TUR-725D-N	115V	1/5	2.5	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 9" SERVICE CORD, 5 5/8" CASTERS	
4	MILKSHAKE MACHINE	T	3		WARING, SINGLE SPINDLE DRINK MIXER WDM120TX	120V	NA	3.3	1P	5-15P	30"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 5" SERVICE CORD	
5	SUNDAE STATION	T	1		SERVER TWIN, FS/FSP 81220	120V	NA	8.3	1P	5-15P	30"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 6" SERVICE CORD	
6	WAFFLE MAKER	T	2		COBARCO ME-10SSE	120V	NA	8.3	1P	5-15P	30"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 6" SERVICE CORD	
8	P.O.S.	T	2		SQUARE UP	115V	NA	3	1P	5-15P	27"	NA	NA	NA	NA	NA	NA		
9	TOPPINGS CASE	T	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
10	12x12 MATT	T	3			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
11B	BOH WALK-IN FREEZER	T	1		ARCTIC INDUSTRIES, BLB10-F-R	-	-	-	-	-	-	-	-	-	-	-	-	7'-11"W x 9'-10"D x 7'-8 1/2"H	
12	WALL MOUNTED TUBULAR SHELF	T	2		JOHN BOOS BHS1624-T-X TUBULAR WALL MOUNT SHELF	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NSF LISTED. G.C. TO PROVIDE IN WALL FOR SHELF BACKING (FIELD VERIFY SIZE)	
13	DIPPER WELL	T	2		ECO RINSE SCOOP SHOWER D10NSF1	NA	NA	NA	NA	NA	1/2"	NA	NA	NA	1"	34"	NA	NSF LISTED. BACKPLATE INCLUDED. G.C. TO INSTALL TO STAINLESS STEEL TABLE	
14	WAFFLE CONE CASE	T	2		GOLD MEDAL PRODUCTS #8211	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
15	EXCEL THIN AIR HAND DRYER	T	1		TA-ABS	120V	NA	7.7	1P	JBox	52"	NA	NA	NA	NA	NA	NA		
16	3-COMPARTMENT SINK	T	1		75" LONG, 15 1/2" X 15" BOWL SIZE	NA	NA	NA	NA	NA	1/2"	1/2"	NA	NA	3"	NA	NA	EQUIPPED WITH T&S BRASS B-0133-ADF12-B AND B-3850	
17	MOP SINK	T	1		TABCO, 9-0P-20	NA	NA	NA	NA	NA	1/2"	1/2"	NA	NA	3"	NA	NA	EQUIPPED WITH T&S BRASS B-0665-BSTR	
18	WALL MOUNTED HAND SINK	T	2		JOHN BOOS PBRS-W-9909-SSLR-X	NA	NA	NA	NA	NA	1/2"	1/2"	NA	NA	3"	NA	NA	EQUIPPED WITH JOHN BOOS PBF-4-S-LF-X	
19	METRO RACK (REF: PLAN FOR SIZE)	T	12		JOHN BOOS CS-XXXX-X SEE PLAN FOR SIZE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20"D x (SEE PLAN)	
20	EMPLOYEE LOCKERS	T	2		GSW USE ELS-5DR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
21	24" DEEP WALL MOUNTED WIRE SHELVES	T	1		JOHN BOOS X-XXXX-X SEE PLAN FOR SIZE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MOUNTED AT 8'-0" AFF	
22	42"x20" RACK FOR SMALLWARES	T	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
23	BOH 1-DOOR REACH-IN REFRIGERATOR	T	1		TURBO AIR, TSR-235D-N6	115V	1/8	1.6	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 7" SERVICE CORD	
24	FOH TRASH RECEPTACLE	T	2		X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
25	BOH TRASH RECEPTACLE	T	1		X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
26	BOH RECYCLE	T	1		X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
27	LID ORGANIZER	T	1		DISPENSE-RITE CTLD-22A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
28	WHIPPED CREAM MACHINE	T	1		STOELTING, CWS-37B	115V	NA	8	1P	5-15P	NA	NA	NA	NA	NA	NA	NA	AIR-COOLED COUNTERTOP WHIPPED CREAM DISPENSER	
29	STAINLESS-STEEL BACK TABLE	T	1		JOHN BOOS - 30" X 60"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	EQUIP TABLE WITH 2 UNDER SHELVES	
30	STAINLESS-STEEL WALL MOUNTED SHELF	T	1		ADVANCE TABCO WS-12-72-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
31	LINEN BIN	T	1		LAVEX JANITORIAL 20 GALLON GRAY CAN WITH LID	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
32	TOPPINGS PAN	T	2		20 7/8" X 12 13/16" PANS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	PAN TO BE RECESSED INTO COUNTER	
37	SPEED RAIL	T	2		SAN JAMAR SPEED RAIL MODEL #B5522	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	G.C. TO MODIFY AND INSTALL. CUT NEW HOLES TO MATCH EXISTING CABINET ATTACHMENT SPACING, ON SITE.	
38	CONE HOLDER WITH SNEEZE GUARD	T	2		CAI-MIL-394 FIVE CONE HOLDER	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	G.C. TO AFFIX TO TOP OF DIPPING CABINETS WITH STRONG CLEAR ADHESIVE (CRAZY GLUE)	
39	HANDI-MOVER	T	1		U-LINE, MODEL#H-2176	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23"W x 35"L BIG WHEEL HANDI-MOVER WITH PNEUMATIC WHEELS	
40	C. NELSON CART	T	1		C. NELSON MODEL#BDC8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30 3/4"W x 41 3/4"L, ICE CREAM CART	
41	FOLD-IN-HALF TABLE	T	1		U-LINE, MODEL#H-2751FH, WHITE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30"W x 96"L, ECONOMY FOLDING TABLE	
42	STACKABLE CONTAINERS	T	2		U-LINE, MODEL#S-19894GR, SILVER	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20"W x 30"L x 15"H, STACK AND NEST CONTAINERS	

NOTE: CASTERS WILL BE SUPPLIED WITH SOME EQUIPMENT, TGC SHALL INSTALL CASTERS ON ALL EQUIPMENT THAT ARRIVE WITH CASTERS

Issue Date **11/22/23**

Revisions	Date	Description	By

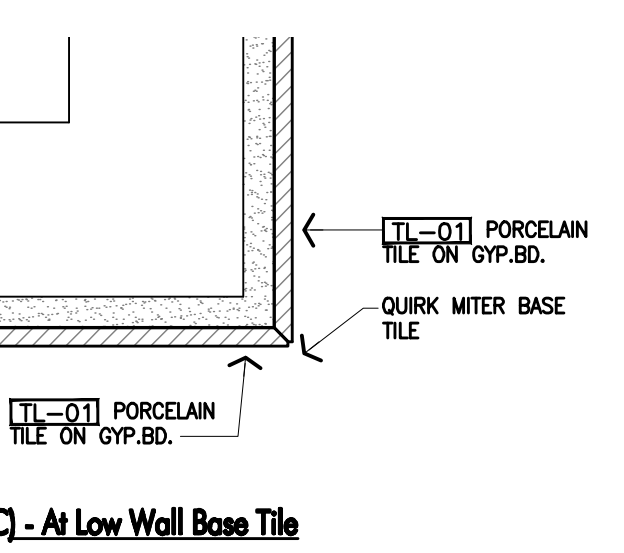
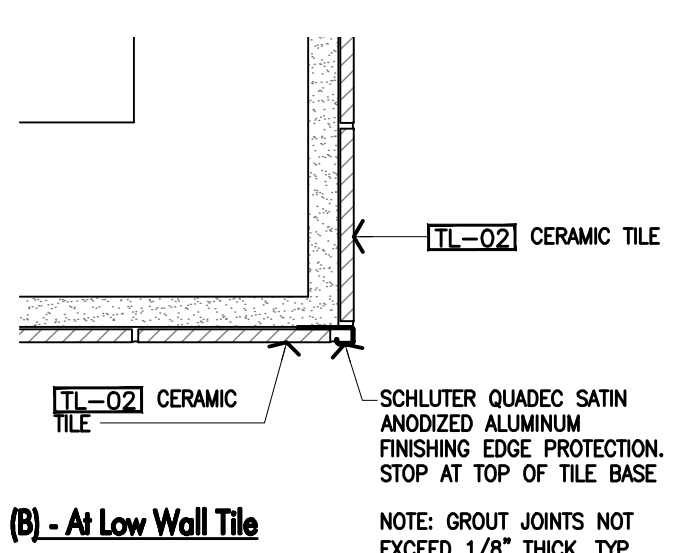
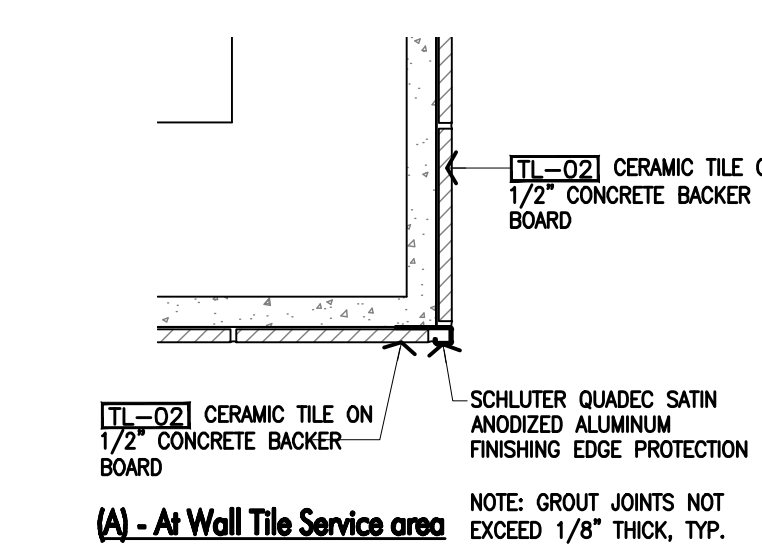
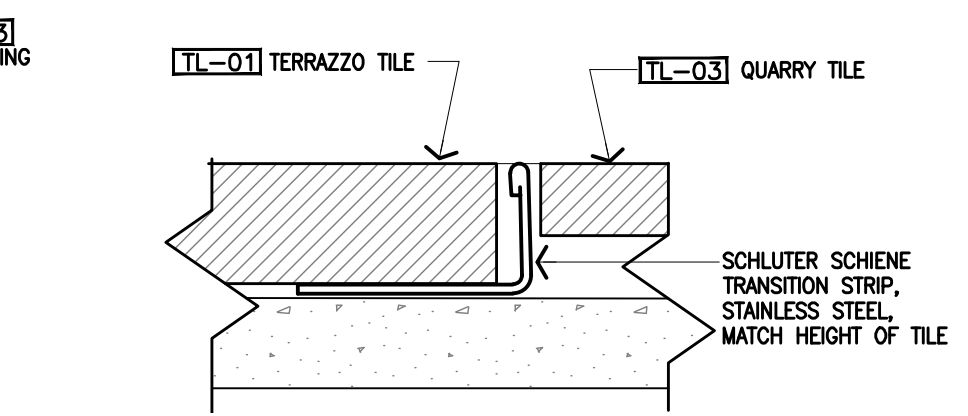
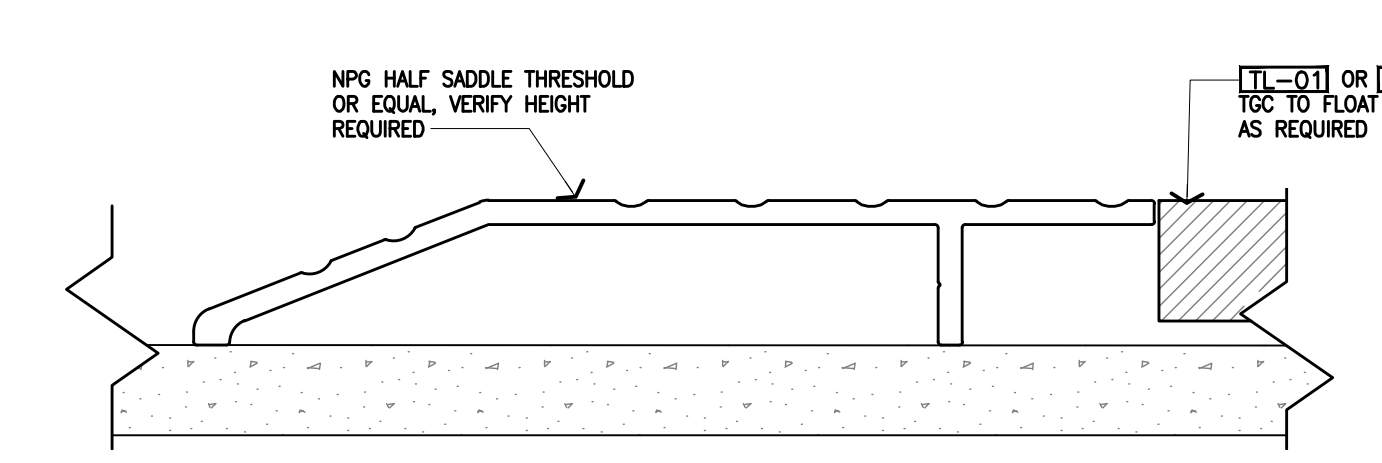
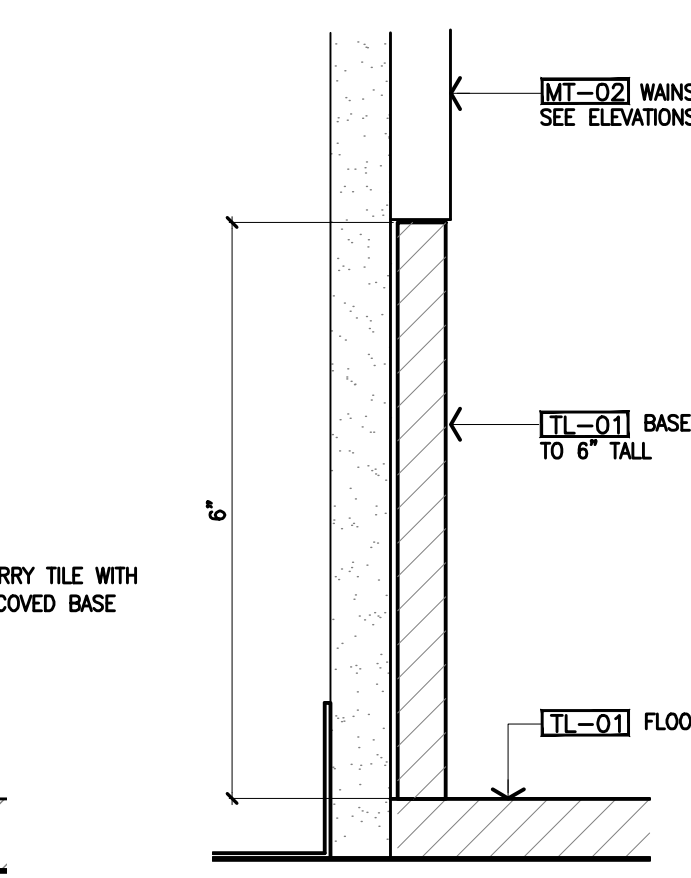
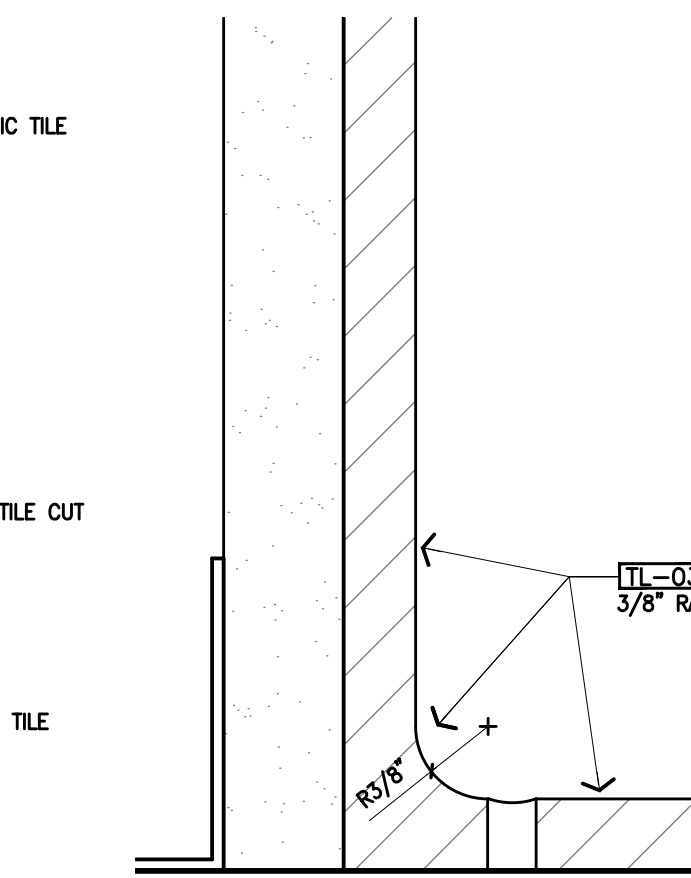
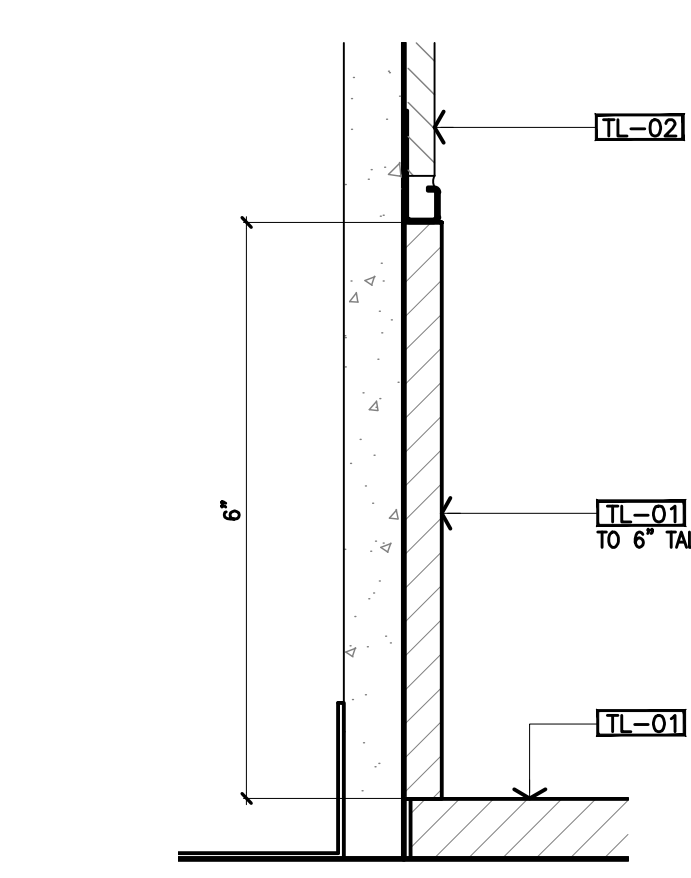
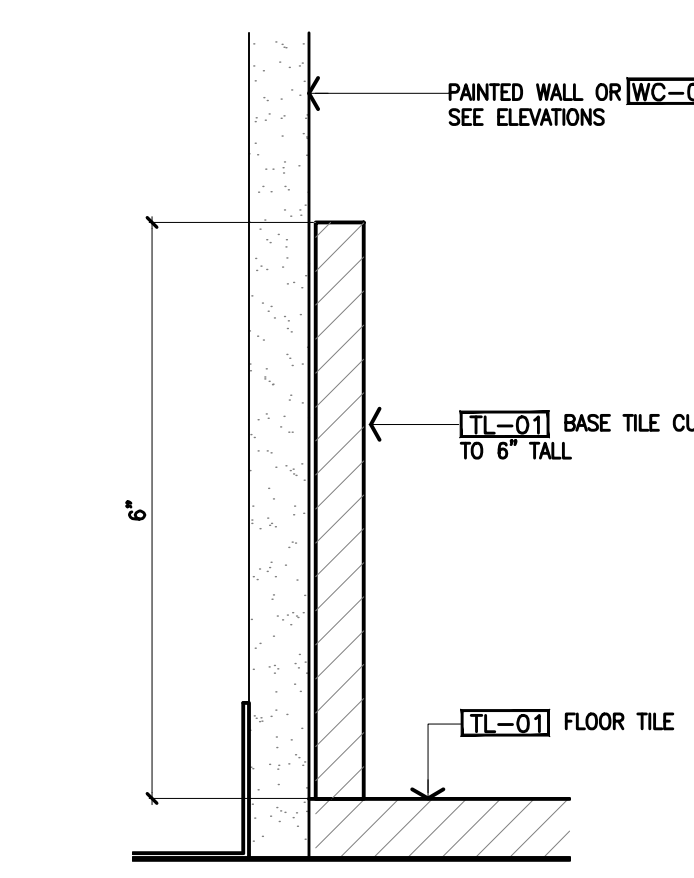
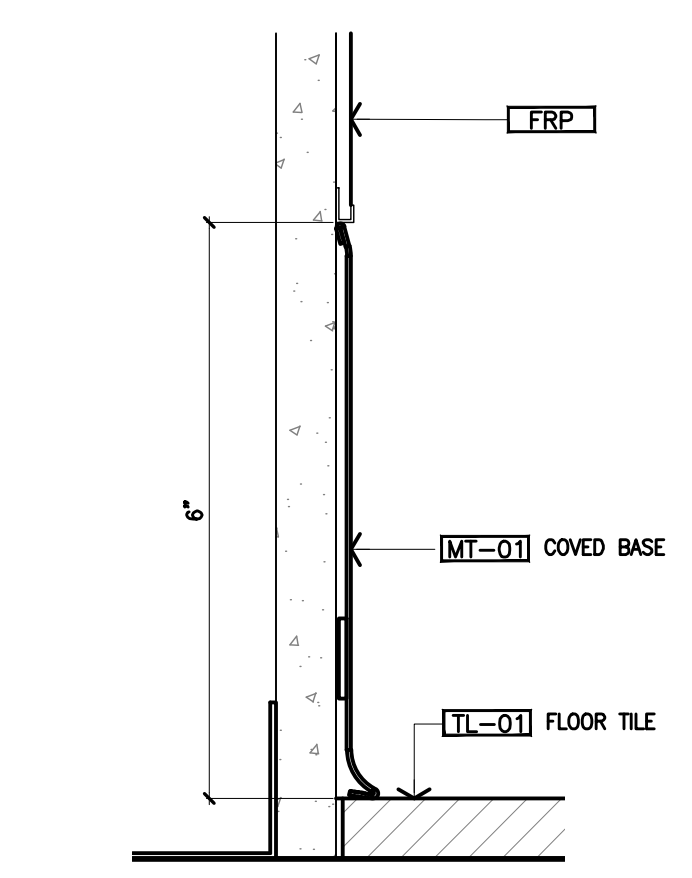
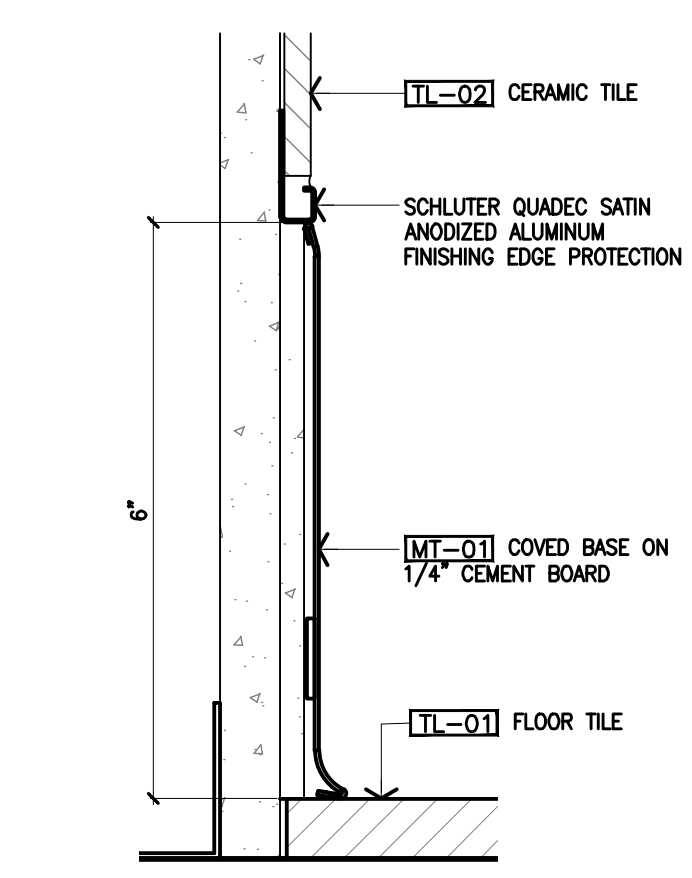
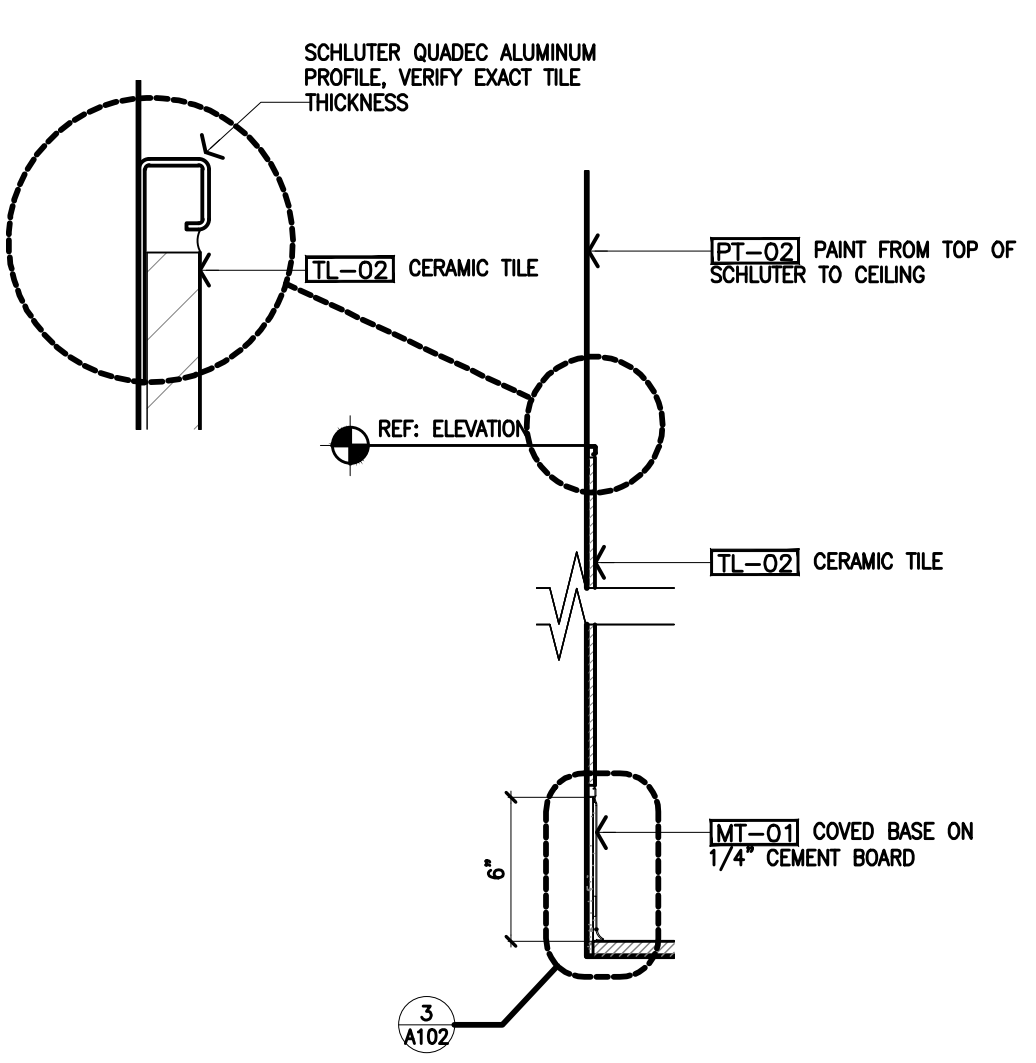
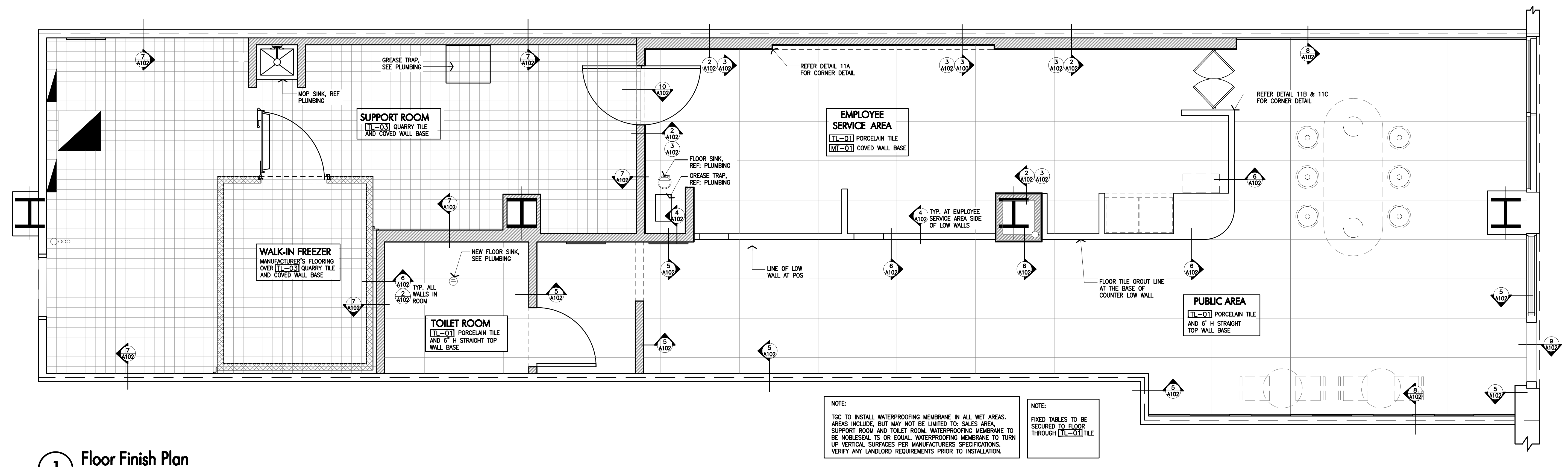


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Job Number **230174**  
Drawn By **NN**  
App'd By **SS**  
Sheet Title  
**Equipment Plan and Schedule**  
Sheet Number

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*Van Leeuwen*  
ONE BRATTLE SQUARE  
CAMBRIDGE, MA

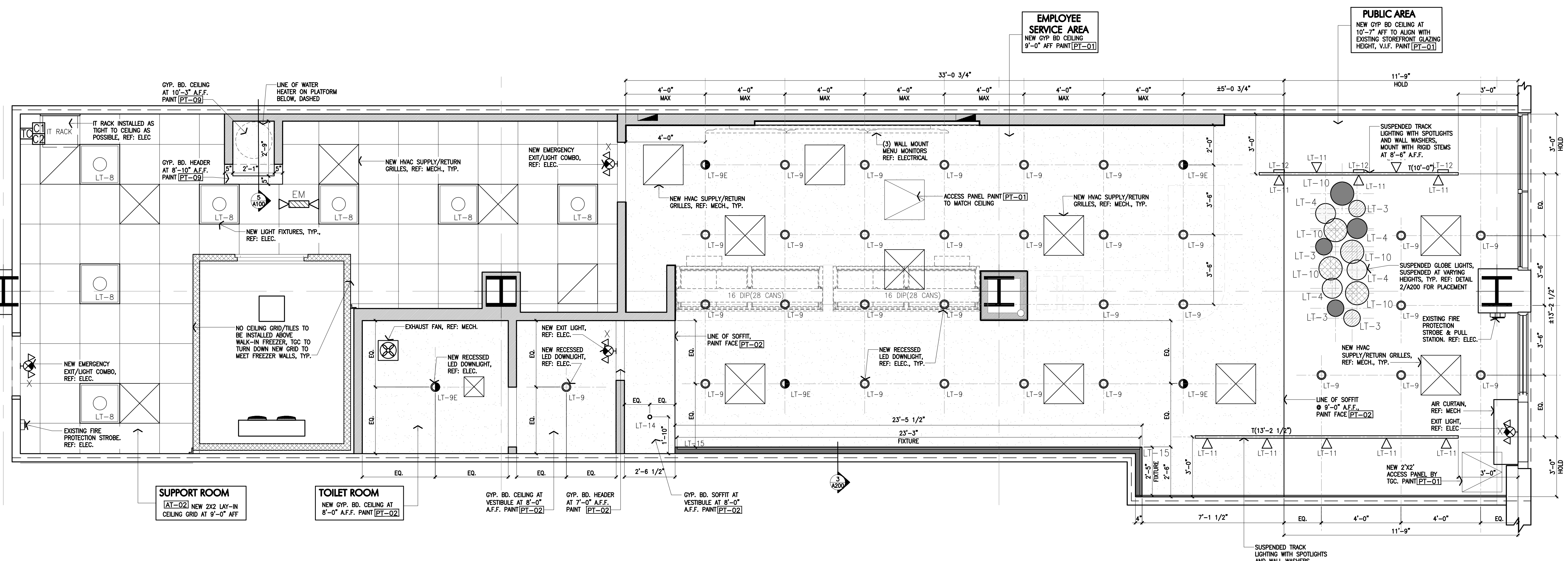
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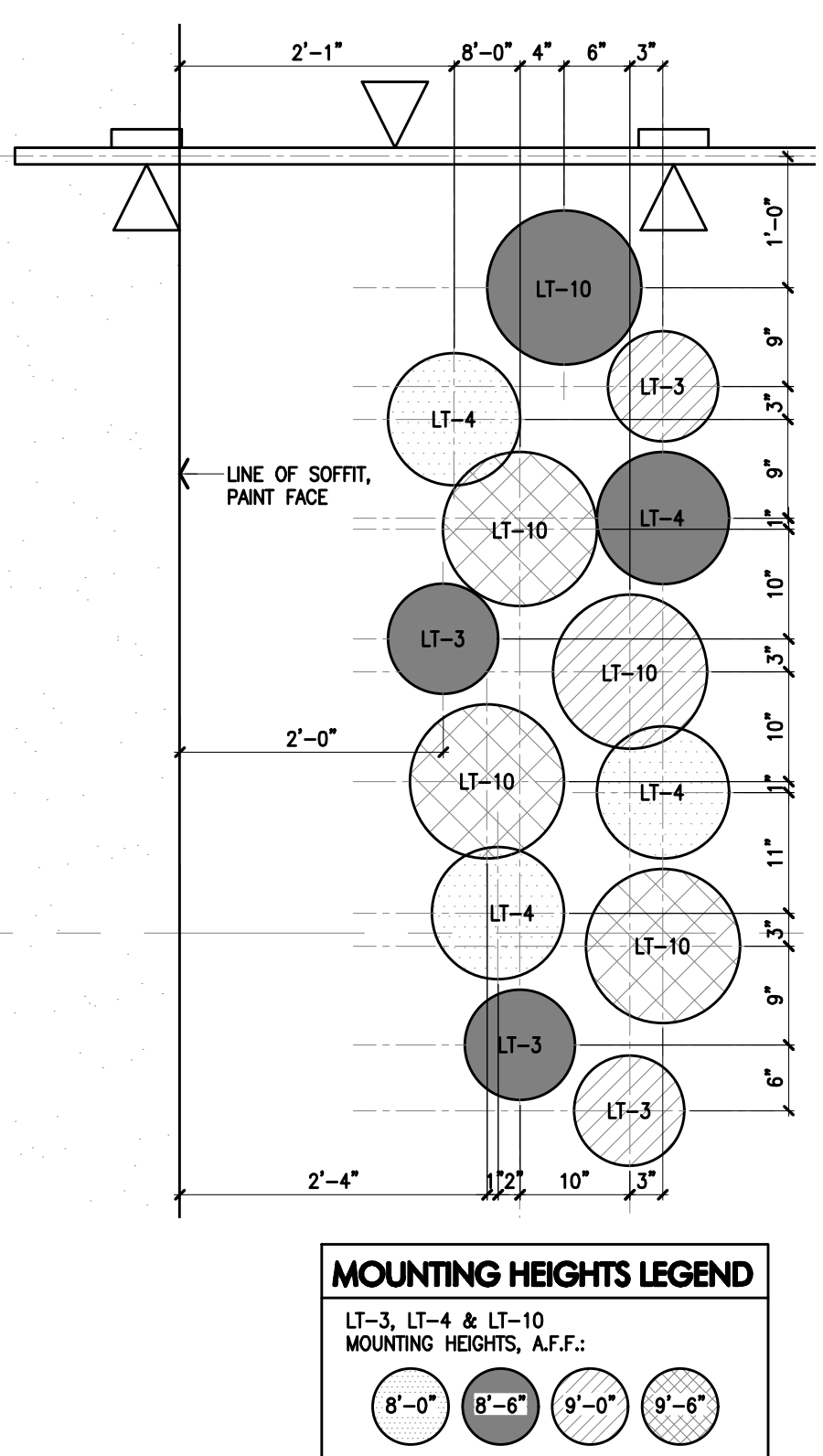
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App'd By **SS**  
Sheet Title

**Reflected Ceiling Plan**

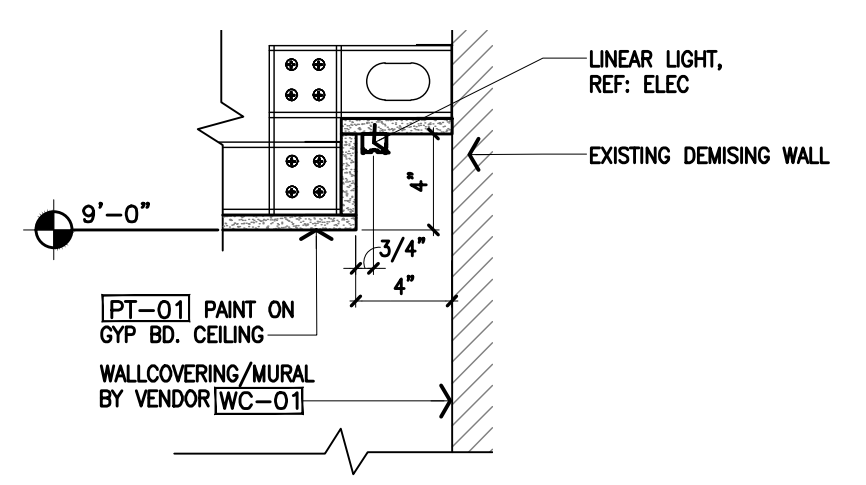
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**A200**



**1** Reflected Ceiling Plan  
Scale 3/8" = 1'-0"



**2** Globe Lights Detail  
Scale 3/4" = 1'-0"



**3** Enlarged Light Cove Section  
Scale 1 1/2" = 1'-0"

DESCRIPTION	QUAN.	TYPE	MANUFACTURER	VOLT.	CATALOGUE NO.	REF NOTE	MOUNTING				QUAN.	LAMPS/FIXT.	TOTAL WATTS	LAMP SIZE
							REC	SURF	PEND	WALL				
GLOBE PENDANT LIGHT	4	LT-3	PROGRESS LIGHTING	120	P4402-29 - 10" DIA SHADE WHITE FINISH/CHORD	3,5		*			1	1	5	PROVIDE 5W TCP GLOBE OR EQ
GLOBE PENDANT LIGHT	4	LT-4	PROGRESS LIGHTING	120	P4403-29 - 12" DIA SHADE WHITE FINISH/CHORD	3,5			*		1	1	5	PROVIDE 5W TCP GLOBE OR EQ
2X2 RECESSED MTD	7	LT-8	GREENCREATIVE	120-277	30PAN22DIM/830 WITH 2X2 RECESSED MTD KITS	5		*			1	1	30	INCLUDED
4" DOWNLIGHT	30	LT-9	CONTECH	120	R4NC2-30K-12-D-C4321-CLR-P	4,5	*				1	1	16	INCLUDED
EMERGENCY 4" DOWNLIGHT	5	LT-9E	CONTECH	120	R4NC2-30K-12-D-EM-C4321-CLR-P	4,5,7	*				1	1	16	INCLUDED
GLOBE PENDANT LIGHT	5	LT-10	PROGRESS LIGHTING	120	P4406-29 - 14" DIA SHADE WHITE FINISH/CHORD	3,5			*		1	1	5	PROVIDE 5W TCP GLOBE OR EQ
TRACK LIGHT	10	LT-11	LUMENTURE	120	T65-30H-1500-40-W-L	2,5		*			1	1	18	INTEGRAL 18W LED, 3000K, 90+ CRI, 1500 LUMEN
TRACK LIGHT - WALLWASHER	3	LT-12	LUMENTURE	120	TW160-30H-1600-W-L	2,5		*			1	1	17	INTEGRAL 17W LED, 3000K, 90+ CRI, 1600 LUMEN
ENTRA 2" NICHE LED DOWNLIGHT	1	LT-14	VISUAL COMFORT & CO	120	ENN2R-LO-9-30-A-D-I-12-W	4,5	*				1	1	7.5	INCLUDED
LINEAR IN ARCH COVE - SURFACE FIXTURE	2	LT-15	SCOUT LIGHTING	120	SS-S-FM-SH-30-W-EF-0-I-N-CUSTOM	2,4,5,8		*			1	1	9.8/FT	INCLUDED
TRACK	24	T	LIGHTOLIER	120	600#NWH	5,6		*						N/A
EMERGENCY/EXIT LIGHT COMBO	4	X	COOPER LIGHTING	120	AP70-RWH	5,7		*						--- INCLUDED ---
EMERGENCY LIGHT	1	EM	COOPER LIGHTING	120	SEL17	5,7		*						--- INCLUDED ---

- NOTES:
1. FIXTURE IS EXISTING, CLEAN AND TEST FOR PROPER OPERATION. REPLACE/REPAIR AS REQUIRED.
  2. ALL LIGHTING IN SERVICE AREAS AND FOOD STORAGE AREAS MUST BE SHIELDED. EXPOSED BULBS ARE NOT ACCEPTABLE, UNLESS LABELED "SHATTERPROOF".
  3. VERIFY CHORD LENGTH REQUIRED PRIOR TO ORDERING.
  4. FIXTURE SHALL BE CONTROLLED VIA DIMMER SWITCH.
  5. IF ALTERNATIVE FIXTURES PROVIDED, FIXTURES SHALL BE REQUIRED SIMILAR AND VAN LEEUWEN'S APPROVAL PRIOR TO ORDERING.
  6. REFERENCE PLAN FOR LENGTH & QUANTITY OF TRACK. PROVIDE WITH ALL REQUIRED CONNECTORS, LIVE ENDS & DEADENDS.
  7. PROVIDE LIGHT FIXTURES WITH BATTERY BACKUP.
  8. REFERENCE PLAN FOR LENGTH OF LIGHT. PROVIDE WITH ALL REQUIRED CONNECTORS AND ILLUMINATED CORNER AS REQUIRED.

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Project Address  
**Van Leeuwen Ice Cream**  
**One Brattle Square**  
**Space #C2**  
**Cambridge, MA 02138**

Issue Date **11/22/23**

Revisions		
Date	Description	By
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*Van Leeuwen*  
ONE BRATTLE SQUARE  
CAMBRIDGE, MA

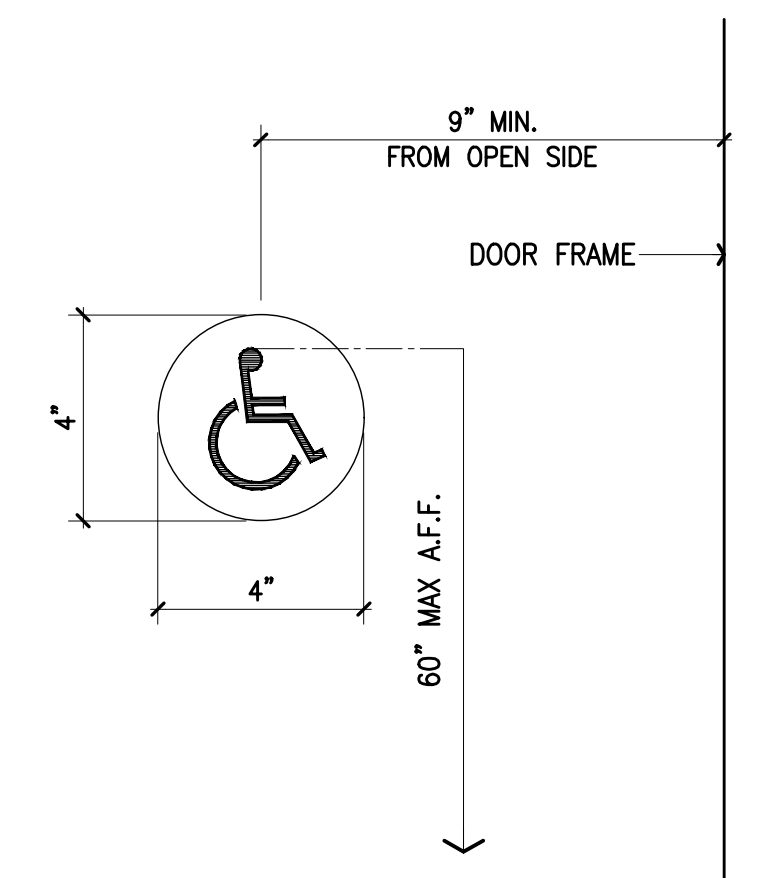
Consultant  
**mb**  
MICHAEL R. BLACK, AIA  
2225 E. RANDOL MILL  
ARLINGTON, TEXAS 76011  
817.701.4819  
MASSACHUSETTS LICENSE NO.: 30643



Job Number **230174**  
Drawn By **NN**  
App'd By **SS**  
Sheet Title

**Exterior Elevation and Section**

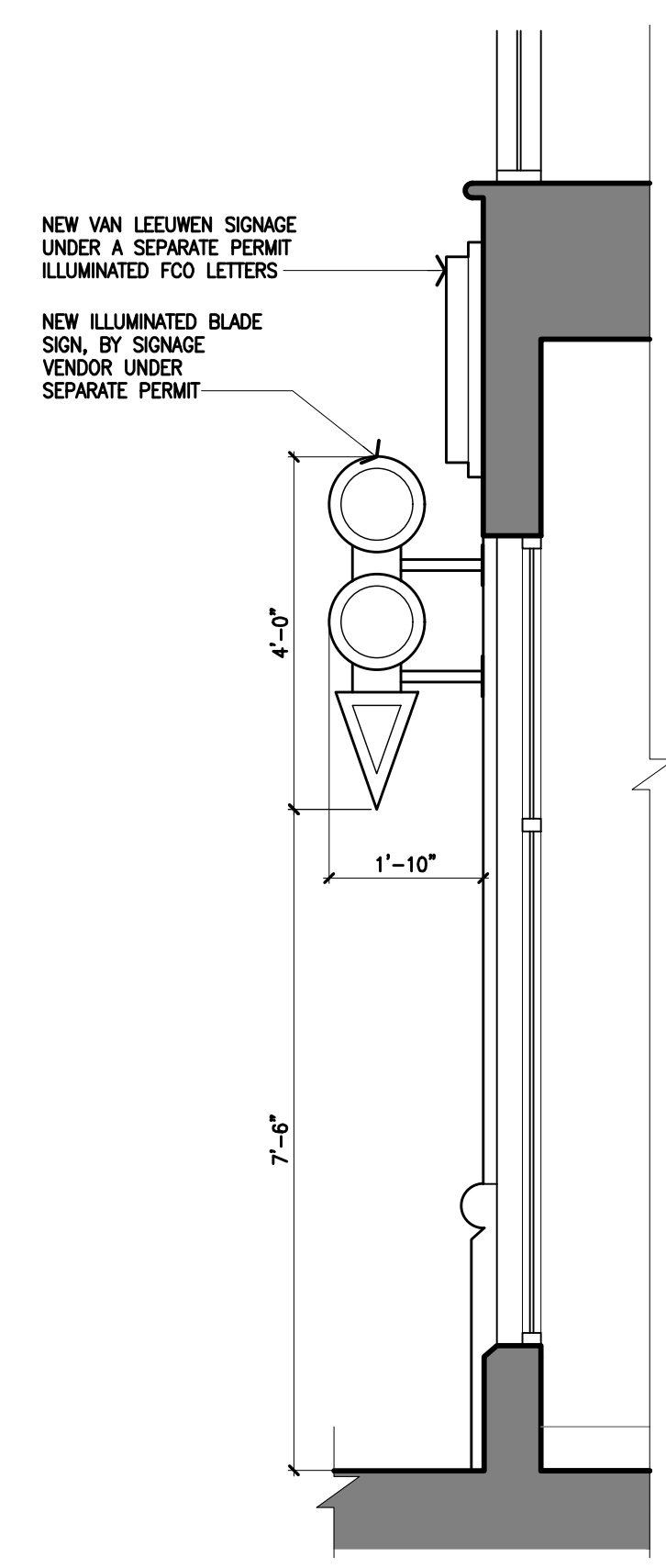
Sheet Number  
**A300**



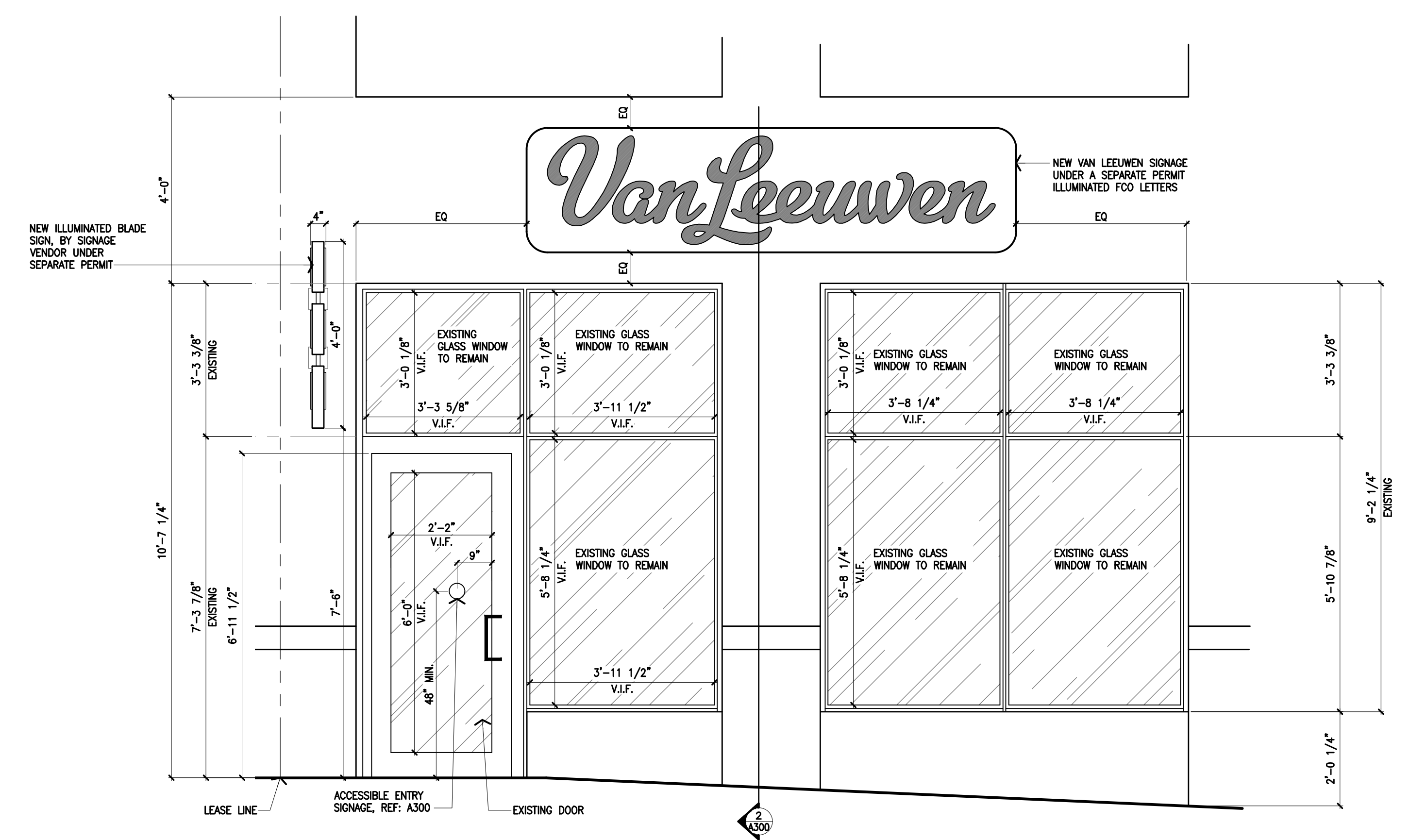
WALL MOUNTED INTERNATIONAL SYMBOL OF ACCESSIBILITY SIGNAGE

WALL MOUNTED SIGNAGE REQUIREMENTS:  
THE SYMBOL SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE COLOR BLUE SHALL APPROXIMATE FS 15090 IN FEDERAL STANDARD 595C. A BORDER MAY BE PROVIDED INSIDE OR OUTSIDE OF THE MINIMUM REQUIRED INTERNATIONAL SYMBOL OF ACCESSIBILITY DIMENSION.

**3 Accessible Entry Signage**  
Scale = N.T.S.

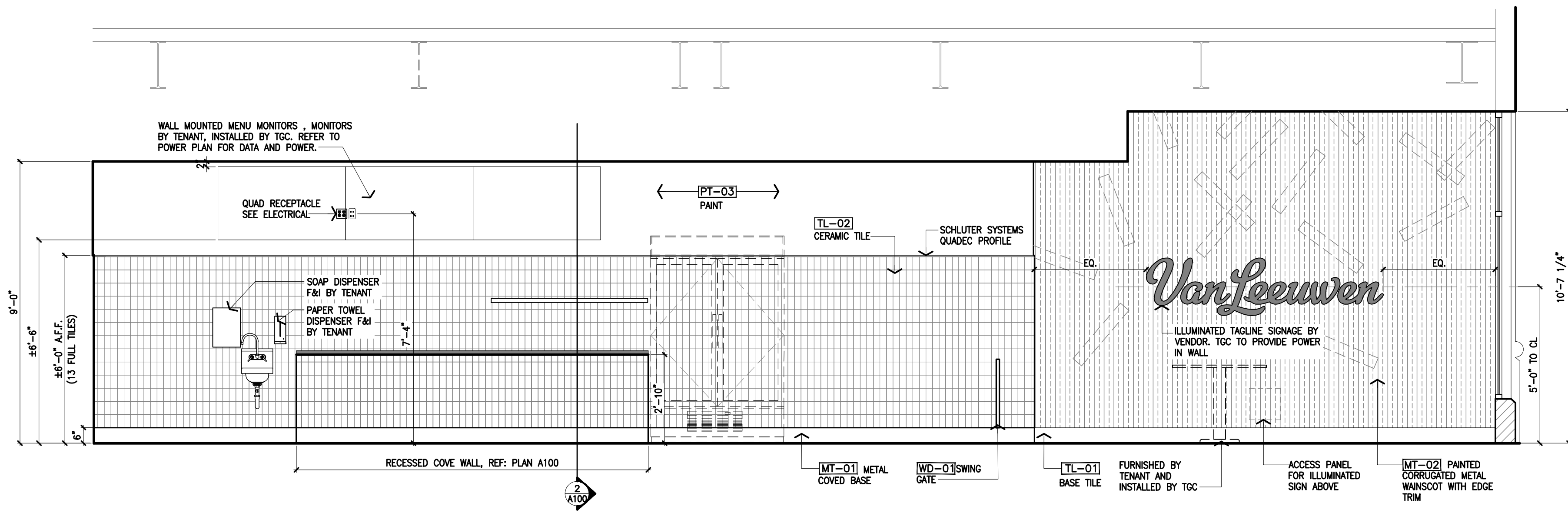


**2 Storefront Section**  
Scale 1/2" = 1'-0"

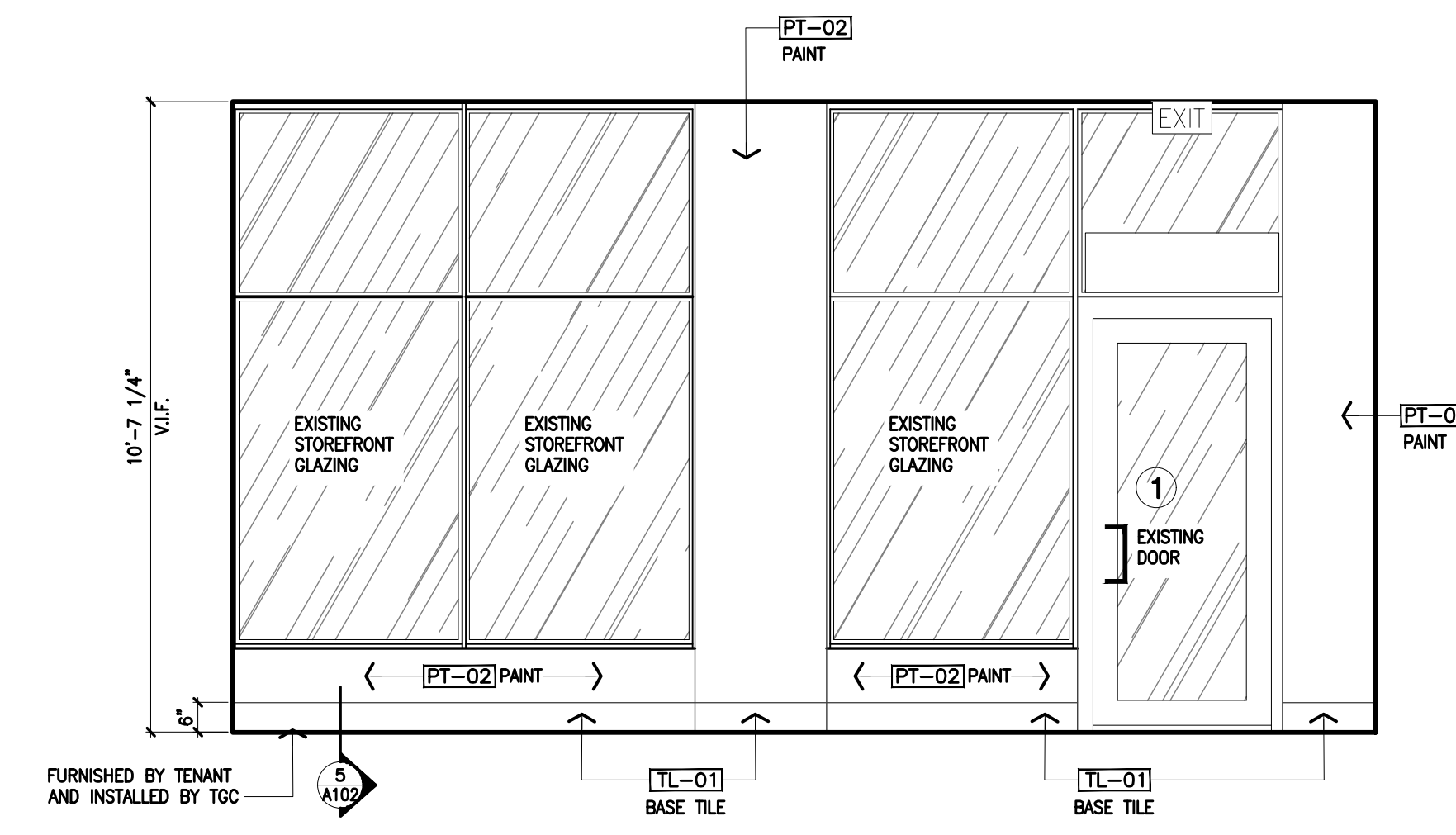


**1 Existing Storefront Elevation**  
Scale 1/2" = 1'-0"

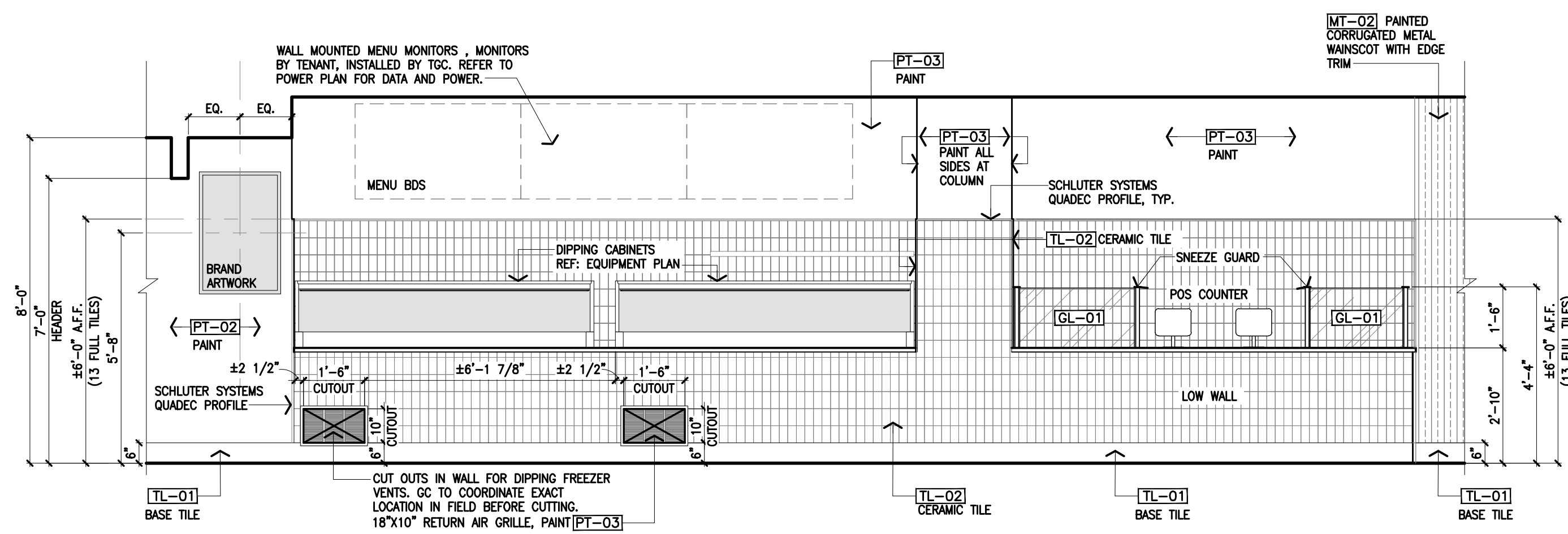
NOTE: SIGNAGE NOT SHOWN. SIGNS UNDER SEPARATE PERMIT. TOC TO VERIFY ALL ELECTRICAL REQUIREMENTS FOR ALL TENANT SIGNAGE.



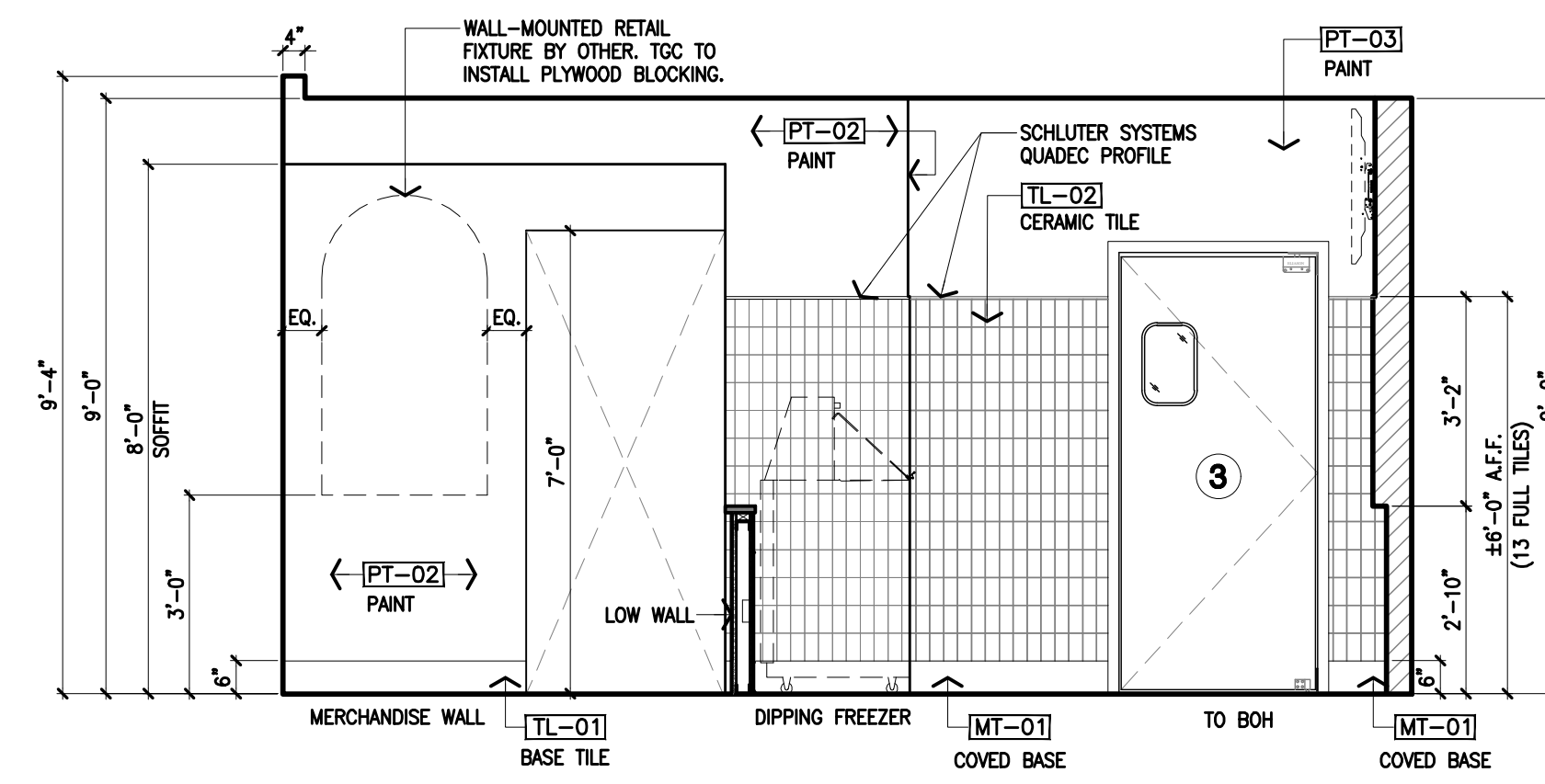
**1 Interior Elevation**  
Scale 3/8" = 1'-0"



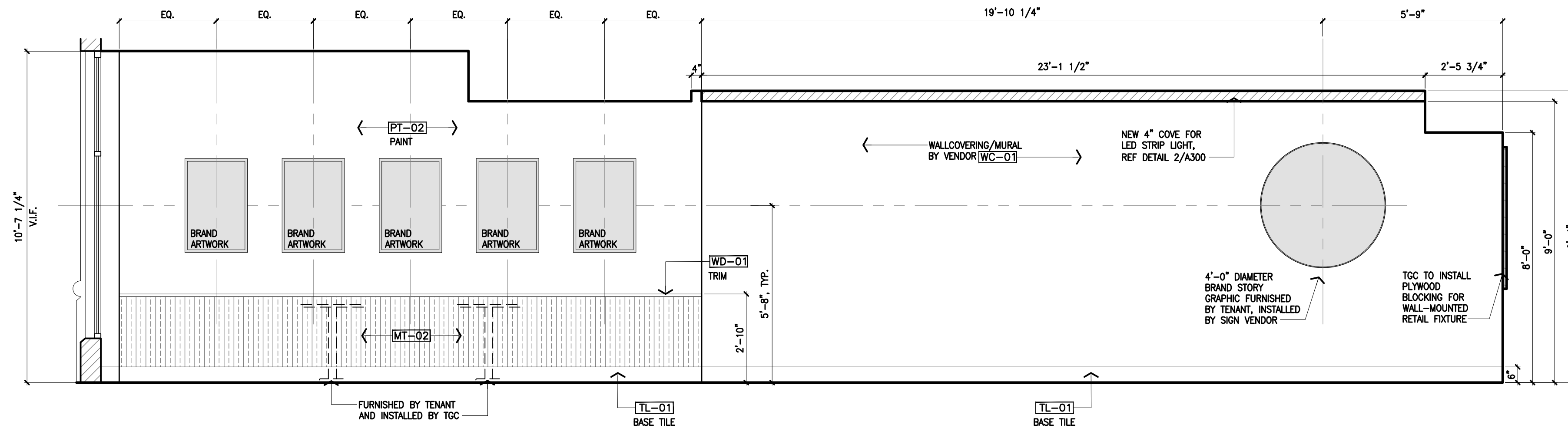
**2 Interior Elevation**  
Scale 3/8" = 1'-0"



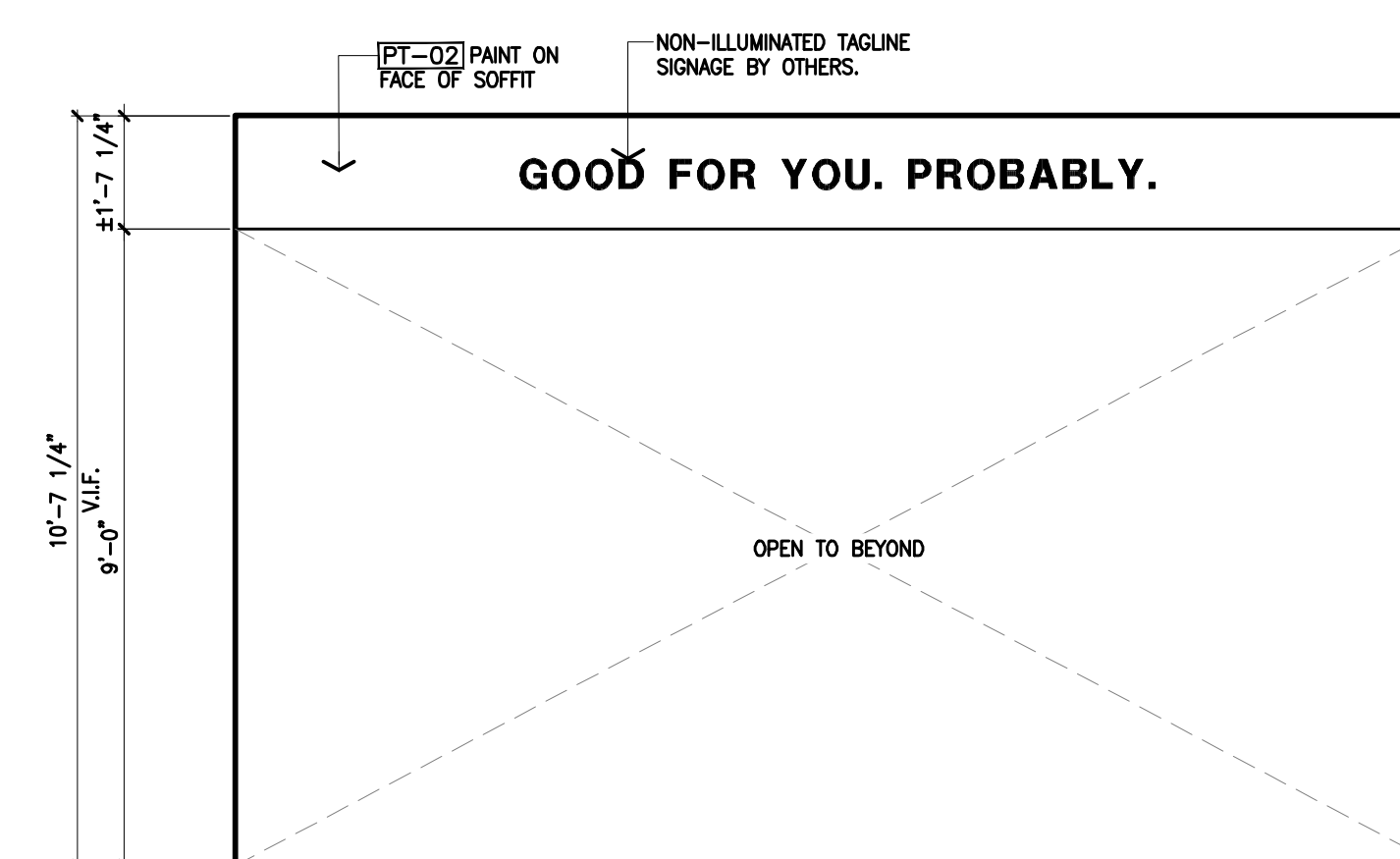
**3 Interior Elevation**  
Scale 3/8" = 1'-0"



**4 Interior Elevation**  
Scale 3/8" = 1'-0"



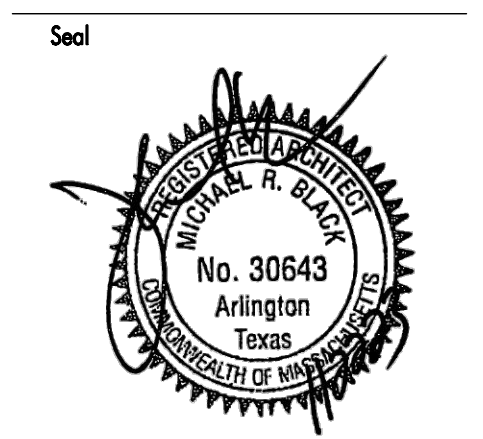
**5 Interior Elevation**  
Scale 3/8" = 1'-0"



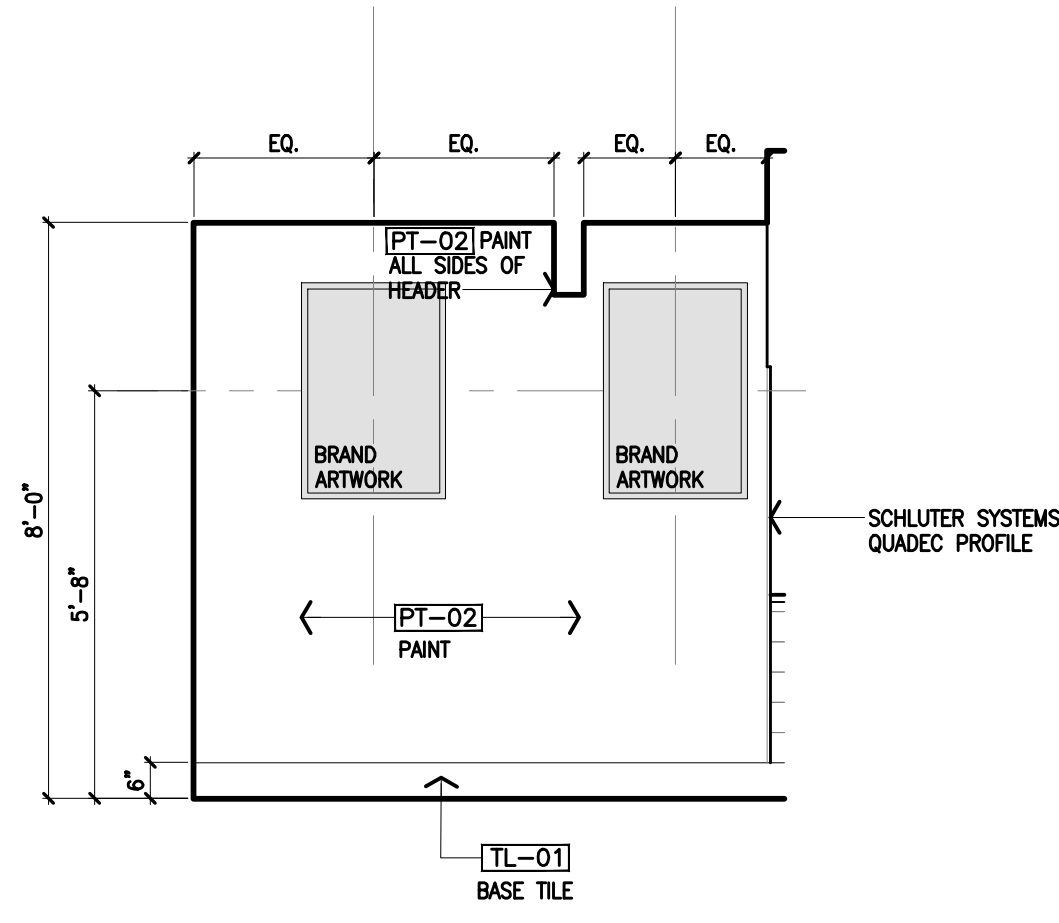
**6 Interior Elevation**  
Scale 3/8" = 1'-0"

Issue Date **11/22/23**

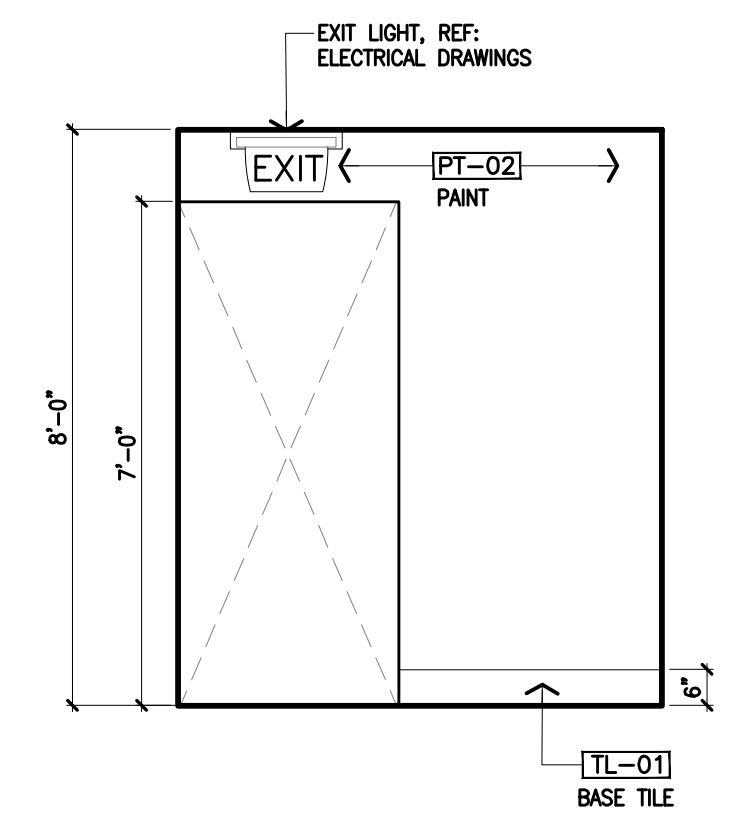
Revisions	Date	Description	By



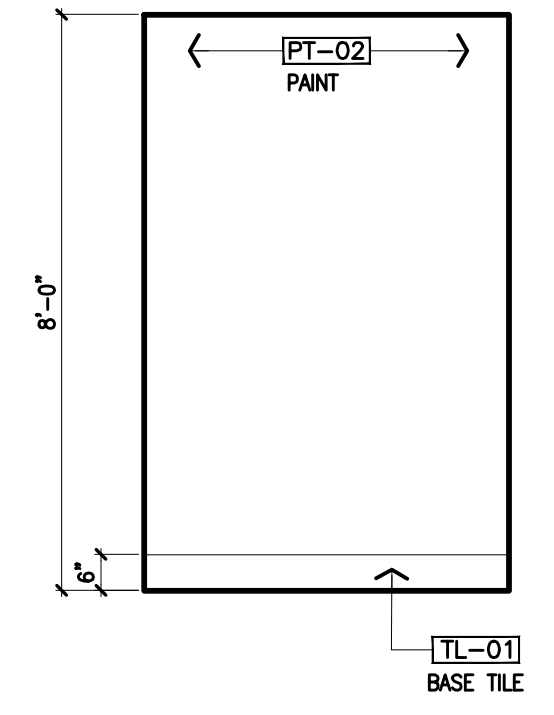




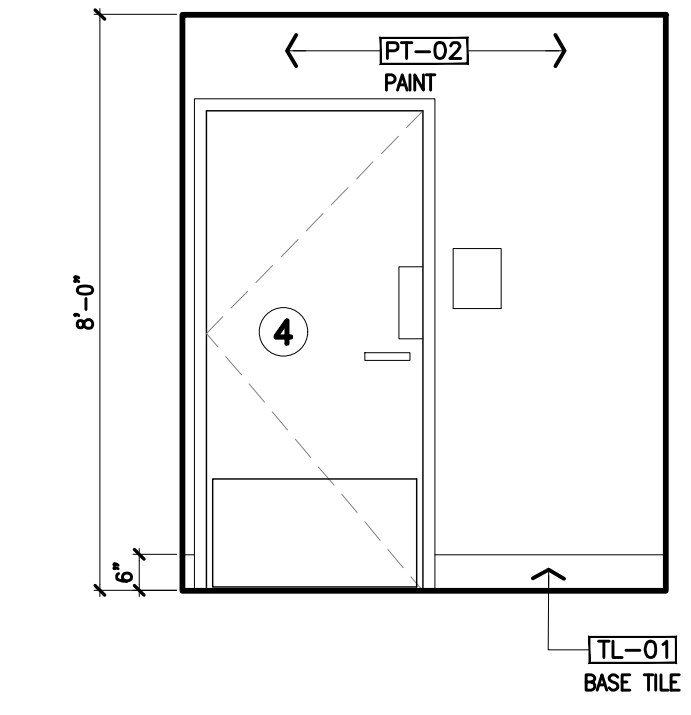
1 Interior Elevation  
Scale 3/8" = 1'-0"



2 Interior Elevation  
Scale 3/8" = 1'-0"



3 Interior Elevation  
Scale 3/8" = 1'-0"



4 Interior Elevation  
Scale 3/8" = 1'-0"

Project Address  
**Van Leeuwen Ice Cream**  
**One Brattle Square**  
**Space #C2**  
**Cambridge, MA 02138**

Issue Date **11/22/23**

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*Van Leeuwen*  
ONE BRATTLE SQUARE  
CAMBRIDGE, MA

Consultant  
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MASSACHUSETTS LICENSE NO.: 30643



Job Number **230174**  
Drawn By **NN**  
App'd By **M RB**  
Sheet Title  
**Interior Elevations**

Sheet Number  
**A401**

Project Address  
**Van Leeuwen Ice Cream**  
**One Brattle Square**  
**Space #C2**  
**Cambridge, MA 02138**

Issue Date **11/22/23**

Revisions	Date	Description	By
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*Van Leeuwen*  
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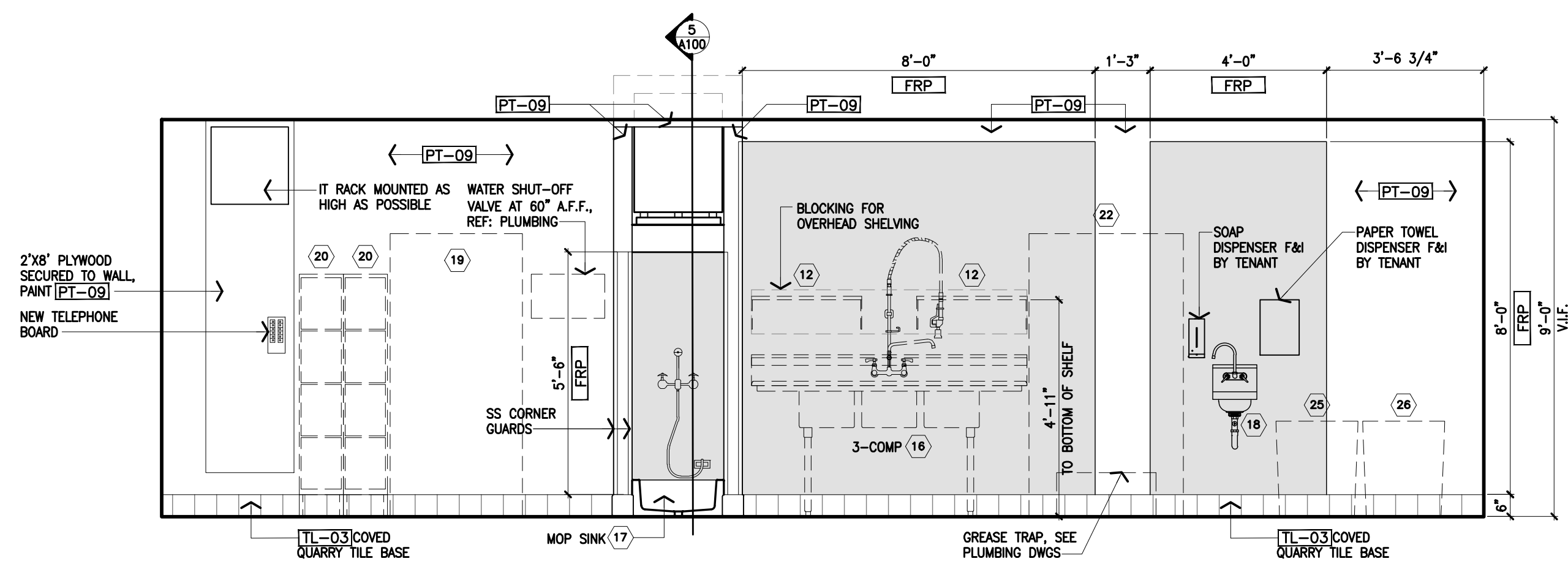


Job Number **230174**  
Drawn By **NN**  
App'd By **M RB**  
Sheet Title

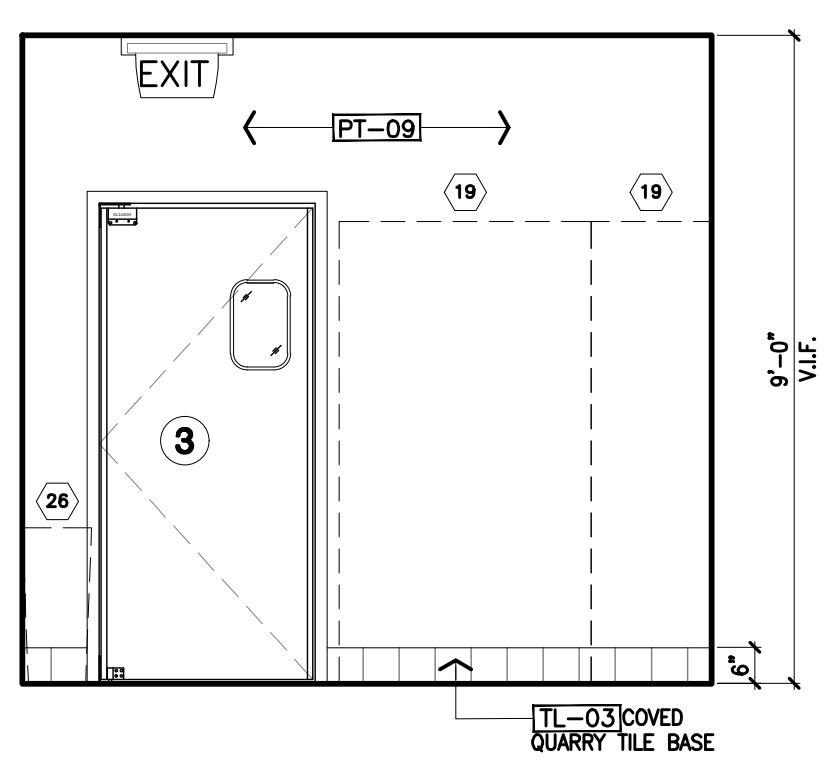
**Interior Elevations**  
**BOH**

Sheet Number

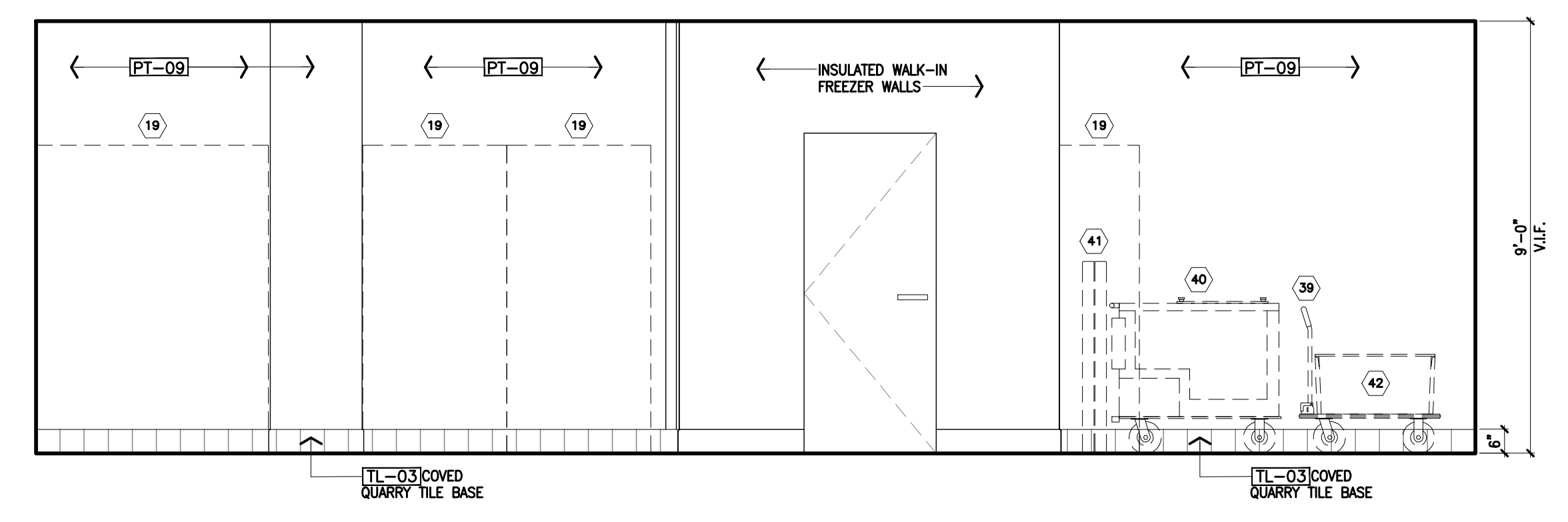
**A402**



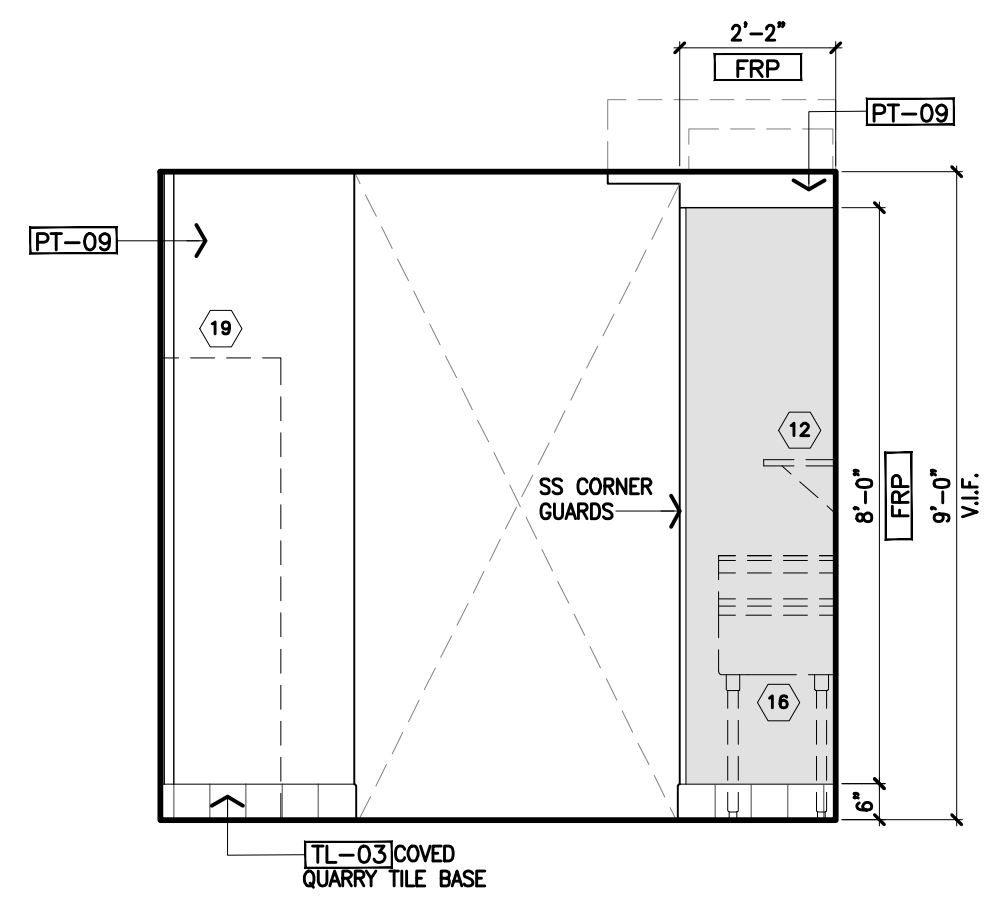
**1 Interior Elevation**  
Scale 3/8" = 1'-0"  
REFER TO EQUIPMENT PLAN AND SCHEDULE, SHEET A101, FOR KEYED ITEMS (xx), TYP.



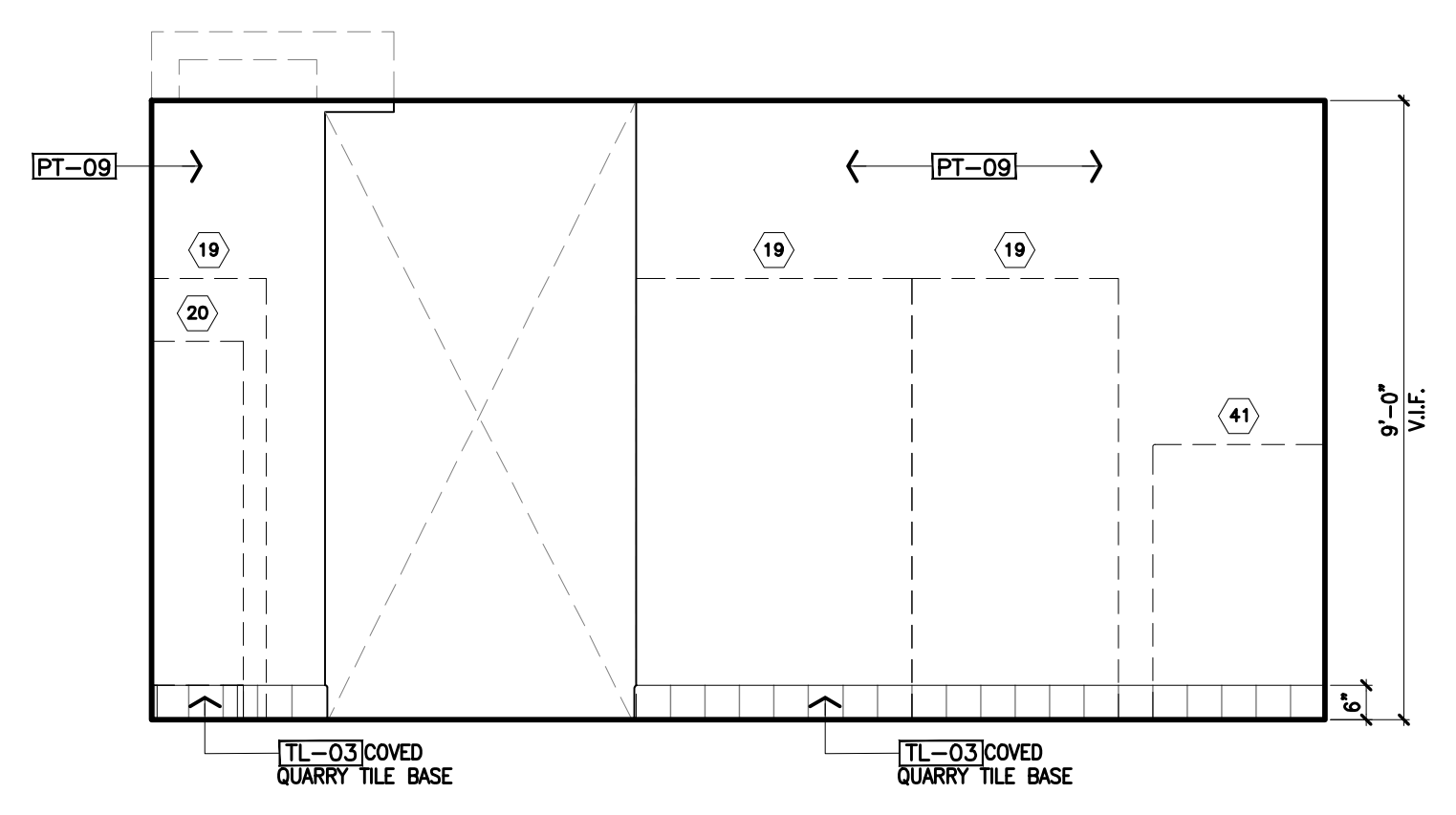
**2 Interior Elevation**  
Scale 3/8" = 1'-0"  
REFER TO EQUIPMENT PLAN AND SCHEDULE, SHEET A101, FOR KEYED ITEMS (xx), TYP.



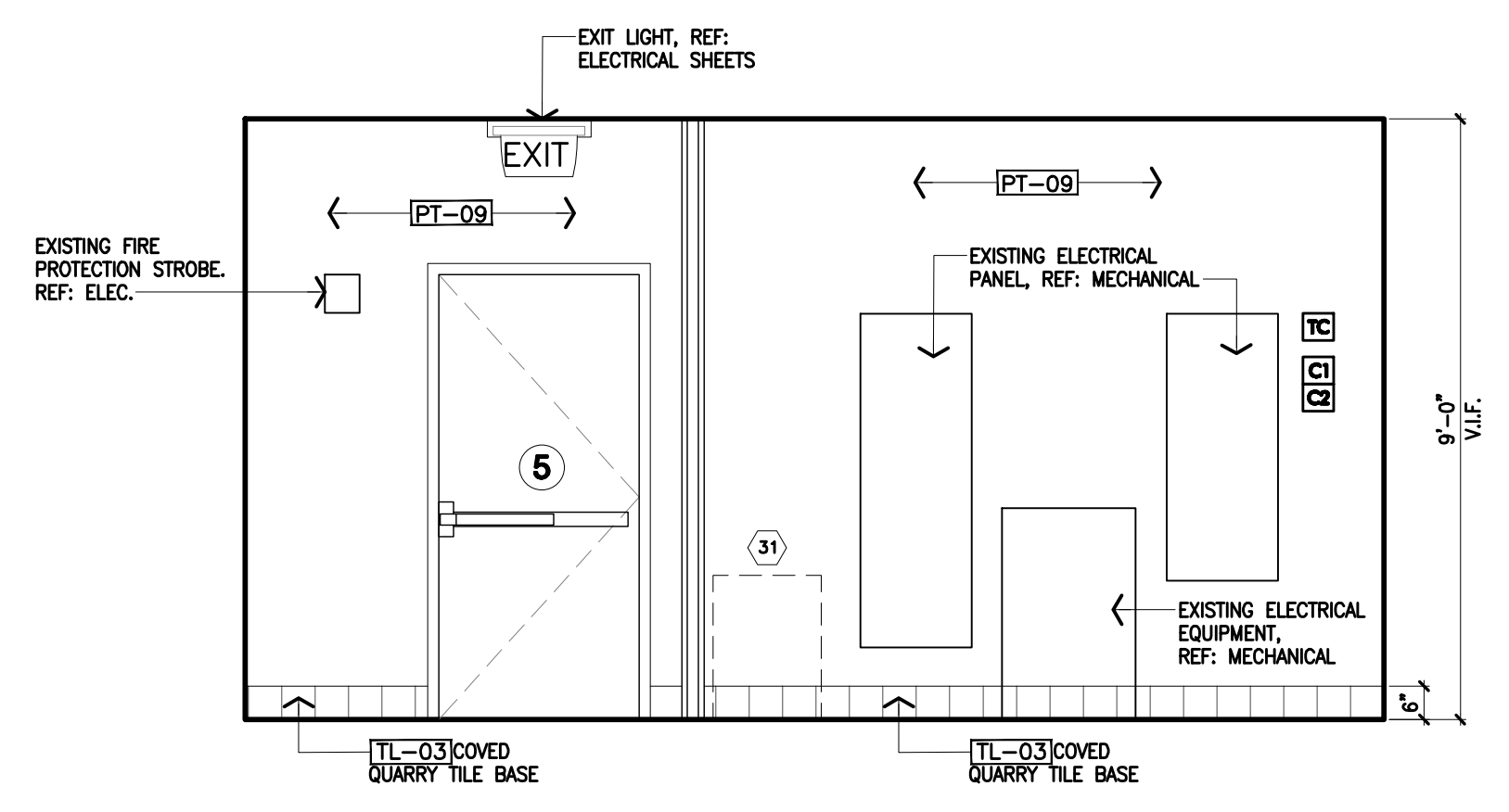
**3 Interior Elevation**  
Scale 3/8" = 1'-0"  
REFER TO EQUIPMENT PLAN AND SCHEDULE, SHEET A101, FOR KEYED ITEMS (xx), TYP.



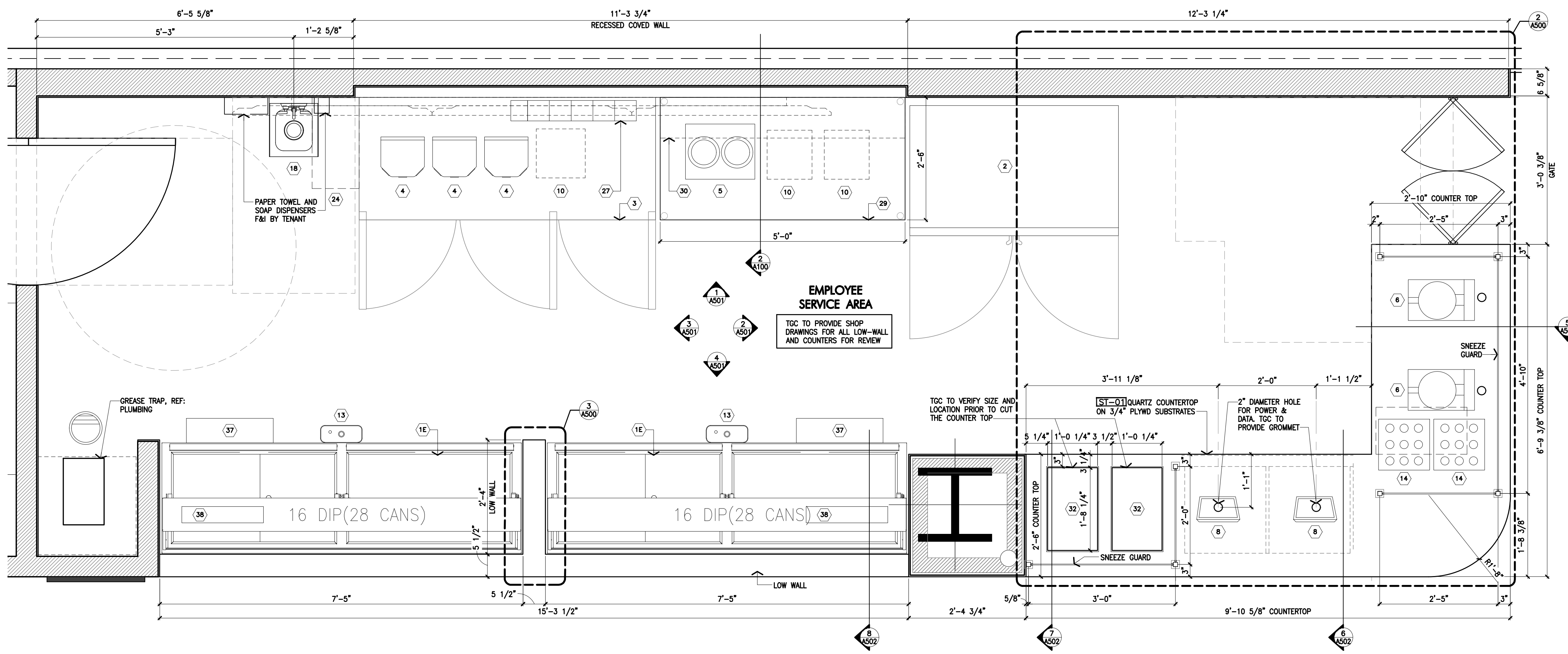
**4 Interior Elevation**  
Scale 3/8" = 1'-0"  
REFER TO EQUIPMENT PLAN AND SCHEDULE, SHEET A101, FOR KEYED ITEMS (xx), TYP.



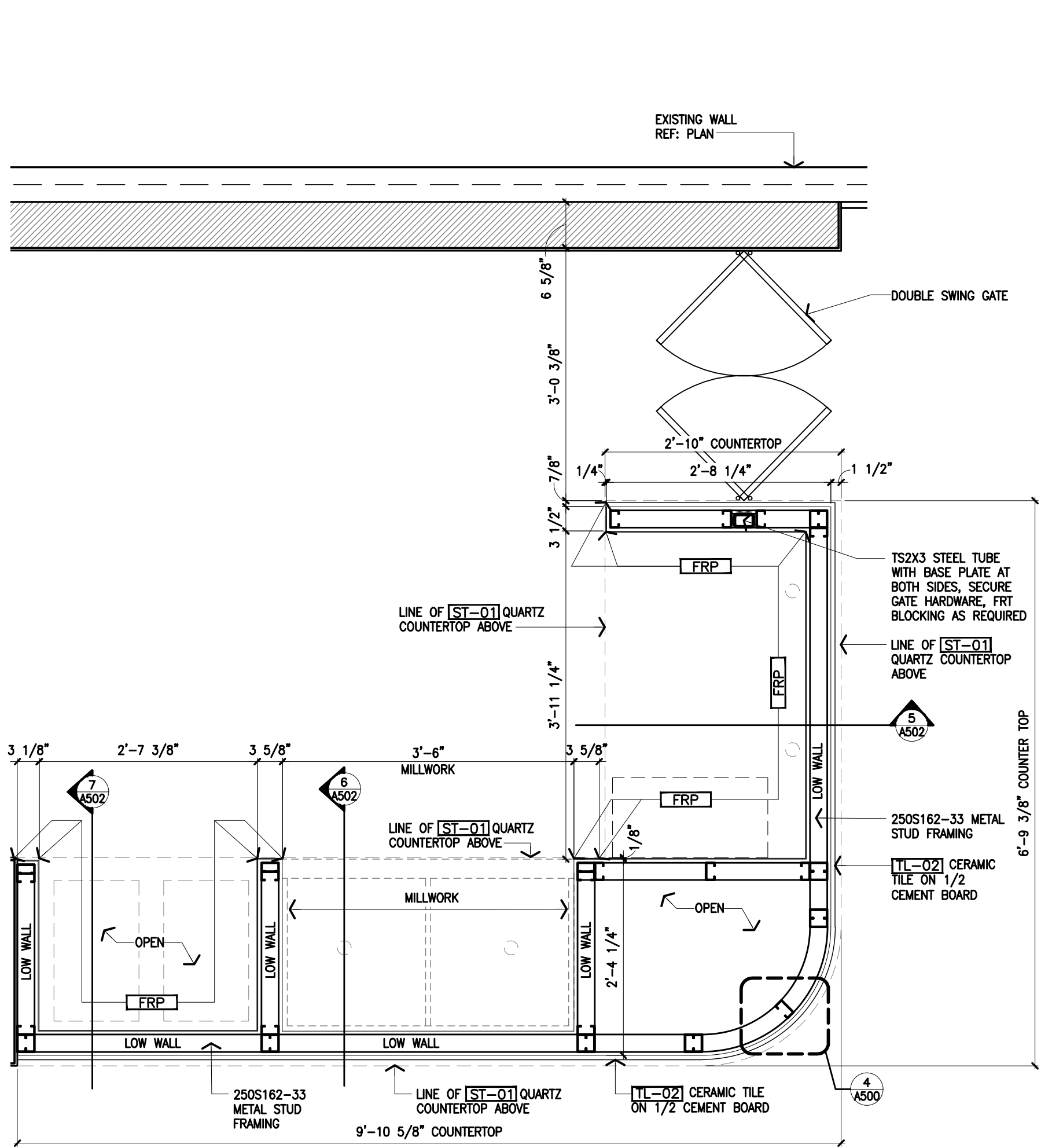
**5 Interior Elevation**  
Scale 3/8" = 1'-0"  
REFER TO EQUIPMENT PLAN AND SCHEDULE, SHEET A101, FOR KEYED ITEMS (xx), TYP.



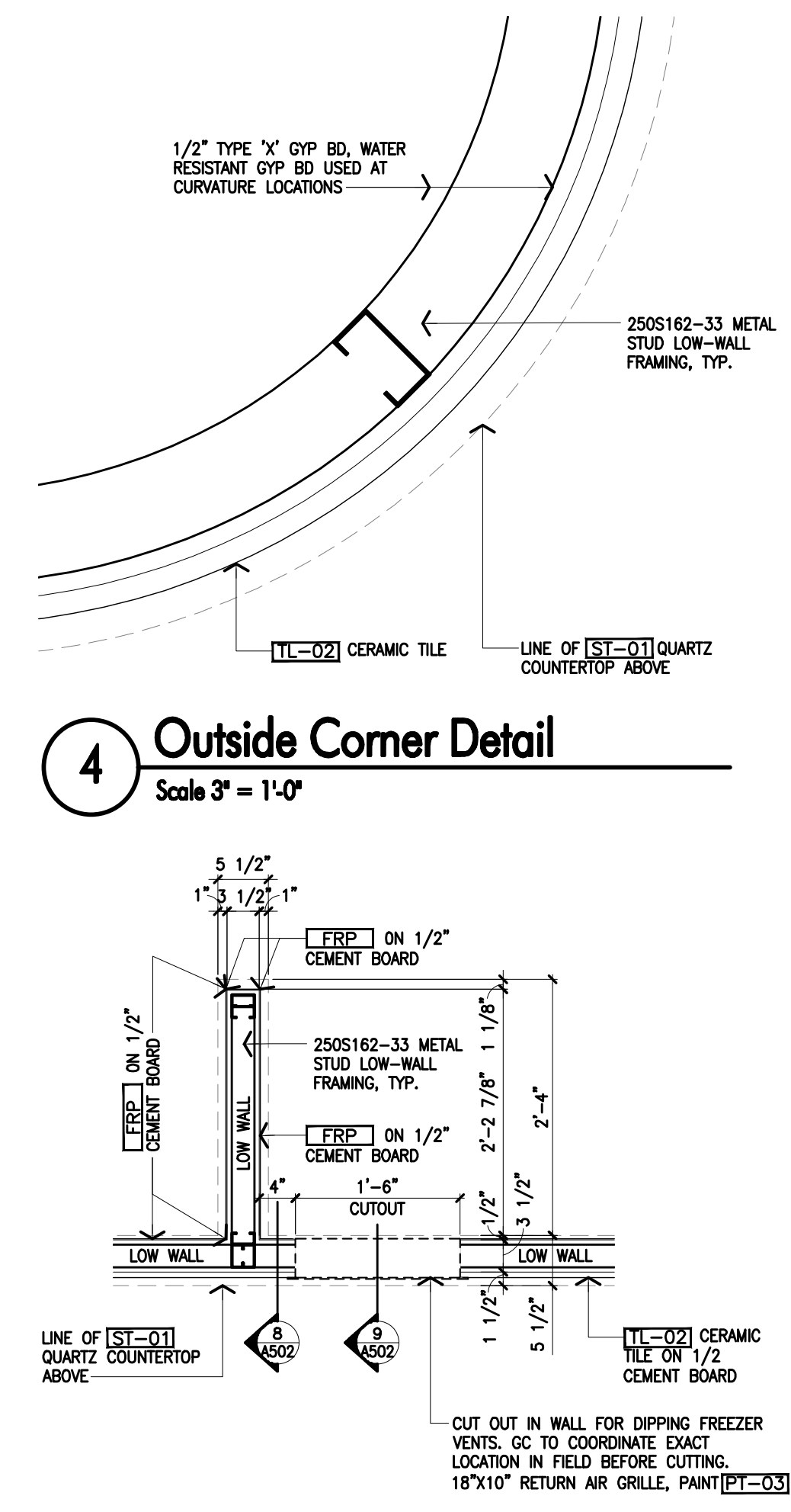
**6 Interior Elevation**  
Scale 3/8" = 1'-0"  
REFER TO EQUIPMENT PLAN AND SCHEDULE, SHEET A101, FOR KEYED ITEMS (xx), TYP.



**1 Enlarged Above Counter Plan**  
Scale 3/4" = 1'-0"



**2 Below Counter Plan & Gate Detail**  
Scale 3/4" = 1'-0"



**4 Outside Corner Detail**  
Scale 3" = 1'-0"

**3 Low Wall Plan**  
Scale 3/4" = 1'-0"

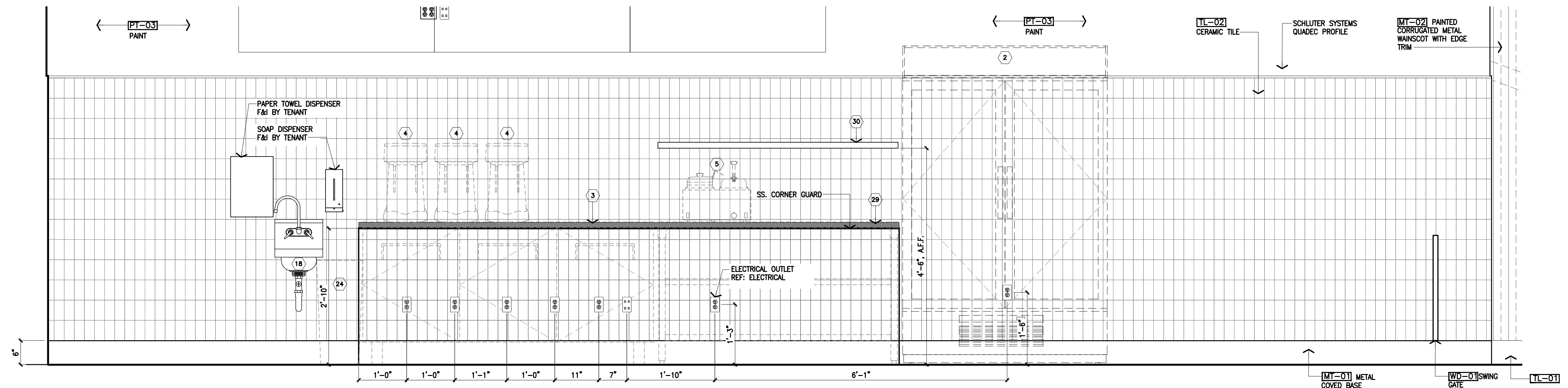
MK.	DESCRIPTION	SUPPLIER	QTY.	BASE	MANUFACTURER/ MODEL NUMBER	ELECTRICAL REQUIREMENTS										PLUMBING REQUIREMENTS			REMARKS
						VOLTS	H.P.	AMPS	PHASE	CONN	MOUNT HEIGHT	CW	HW	FW	DIRECT WASTE	INDIRECT WASTE	MOUNT HEIGHT		
1A	ICE CREAM FREEZER	T	1		C. NELSON, BDB	115V	NA	0	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 7' SERVICE CORD, 2" CASTERS
1E	ICE CREAM FREEZER	T	2		C. NELSON, 16DIP	115V	NA	10	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 7' SERVICE CORD, 2" CASTERS	
2	2-DOOR DISPLAY FREEZER	T	1		TGM-72RS-N	115V	3/4	10.4	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 8' SERVICE CORD	
3	3-DOOR WORKTOP REFRIGERATOR	T	1		TURBO AIR, TUR-72SD-N	115V	1/5	2.5	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 9' SERVICE CORD, 5 5/8" CASTERS	
4	MILKSHAKE MACHINE	T	3		WARNING, SINGLE SPINDLE DRINK MIXER WDM120TX	120V	NA	3.3	1P	5-15P	30"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 5' SERVICE CORD	
5	SUNDAE STATION	T	1		SERVER TWIN, FS/FSP 81220	120V	NA	8.3	1P	5-15P	30"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 6' SERVICE CORD	
6	WAFFLE MAKER	T	2		COBARCO ME-10SSE	120V	NA	8.3	1P	5-15P	30"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 6' SERVICE CORD	
8	P.O.S.	T	2		SQUARE UP	115V	NA	3	1P	5-15P	27"	NA	NA	NA	NA	NA	NA		
9	TOPPING-GASE	T	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
10	12x12 MATT	T	3			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
11D	BOH WALK-IN FREEZER	T	1		ARCTIC INDUSTRIES, BL810-F-R	-	-	-	-	-	-	-	-	-	-	-	-	7'-11"W x 9'-10"D x 7'-8 1/2"H	
12	WALL MOUNTED TUBULAR SHELF	T	2		JOHN BOOS BHS1624-T-X TUBULAR WALL MOUNT SHELF	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NSF LISTED. G.C. TO PROVIDE IN WALL FOR SHELF BACKING (FIELD VERIFY SIZE)	
13	DIPPER WELL	T	2		ECO RINSE SCOOP SHOWER D10NSF1	NA	NA	NA	NA	NA	1/2"	NA	NA	NA	NA	1"	34"	NSF LISTED. BACKPLATE INCLUDED. G.C. TO INSTALL TO STAINLESS STEEL TABLE	
14	WAFFLE CONE CASE	T	2		GOLD MEDAL PRODUCTS #8211	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
15	EXCEL THIN AIR HAND DRYER	T	1		TA-ABS	120V	NA	7.7	1P	JBox	52"	NA	NA	NA	NA	NA	NA		
16	3-COMPARTMENT SINK	T	1		JOHN BOOS, E3S8-14T15, 75" LONG, 15 1/2" X 15 1/2" BOWL SIZE	NA	NA	NA	NA	NA	1/2"	1/2"	NA	NA	NA	3"		EQUIPPED WITH T&S BRASS B-0133-ADF12-8 AND B-3950	
17	MOP SINK	T	1		TABCO, 9-0P-20	NA	NA	NA	NA	NA	1/2"	1/2"	NA	NA	NA	3"		EQUIPPED WITH T&S BRASS B-0665-BSTR	
18	WALL MOUNTED HAND SINK	T	2		JOHN BOOS PBRS-W-0909-SSLR-X	NA	NA	NA	NA	NA	1/2"	1/2"	NA	NA	NA	3"		EQUIPPED WITH JOHN BOOS PBF-4-S-LF-X	
19	METRO RACK (REF: PLAN FOR SIZE)	T	12		JOHN BOOS CS-XXXX-X SEE PLAN FOR SIZE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20"D x (SEE PLAN)	
20	EMPLOYEE LOCKERS	T	2		GSW USE ELS-5DR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
21	24" DEEP WALL MOUNTED WIRE SHELVES	T	1		JOHN BOOS X-XXXX-X SEE PLAN FOR SIZE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	MOUNTED AT 8'-0" AFF	
22	42"x20" RACK FOR SMALLWARES	T	1			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
23	BOH 1-DOOR-REACH-IN-REFRIGERATOR	T	1		TURBO AIR, TSR-23SD-N6	115V	1/70	1.5	1P	5-15P	15"	NA	NA	NA	NA	NA	NA	FROM FACTORY WITH 7' SERVICE CORD	
24	FOH TRASH RECEPTACLE	T	2		X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
25	BOH TRASH RECEPTACLE	T	1		X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
26	BOH RECYCLE	T	1		X	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
27	LID ORGANIZER	T	1		DISPENSE-RITE CTLD-22A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
28	WHIPPED CREAM MACHINE	T	1		STOELTING, CWS-37B	115V	NA	8	1P	5-15P	NA	NA	NA	NA	NA	NA	NA	AIR-COOLED COUNTERTOP WHIPPED CREAM DISPENSER	
29	STAINLESS-STEEL BACK TABLE	T	1		JOHN BOOS - 30" X 60"	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	EQUIP TABLE WITH 2 UNDER SHELVES	
30	STAINLESS-STEEL WALL MOUNTED SHELF	T	1		ADVANCE TABCO WS-12-72-16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
31	LINEN BIN	T	1		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
32	TOPPING PAN	T	2		20 7/8" X 12 13/16" PANS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	PAN TO BE RECESSED INTO COUNTER	
37	SPEED RAIL	T	2		SAN JAMAR SPEED RAIL MODEL#B5522	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	G.C. TO MODIFY AND INSTALL. CUT NEW HOLES TO MATCH EXISTING CABINET ATTACHMENT SPACING, ON SITE.	
38	CONE HOLDER WITH SNEEZE GUARD	T	2		CALL-MIL 394 FIVE CONE HOLDER	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	G.C. TO AFFIX TO TOP OF DIPPING CABINETS WITH STRONG CLEAR ADHESIVE (CRAZY GLUE)	
39	HANDI-MOVER	T	1		U-LINE, MODEL#H-2176	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23"W x 35"L BIG WHEEL HANDI-MOVER WITH PNEUMATIC WHEELS	
40	C. NELSON CART	T	1		C. NELSON MODEL#BDC8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30 3/4"W x 41 3/4"L, ICE CREAM CART	
41	FOLD-IN-HALF TABLE	T	1		U-LINE, MODEL#H-2751FH, WHITE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30"W x 96"L, ECONOMY FOLDING TABLE	
42	STACKABLE CONTAINERS	T	2		U-LINE, MODEL#S-19694GR, SILVER	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20"W x 30"L x 15"H, STACK AND NEST CONTAINERS	

NOTE: CASTERS WILL BE SUPPLIED WITH SOME EQUIPMENT, TGC SHALL INSTALL CASTERS ON ALL EQUIPMENT THAT ARRIVE WITH CASTERS

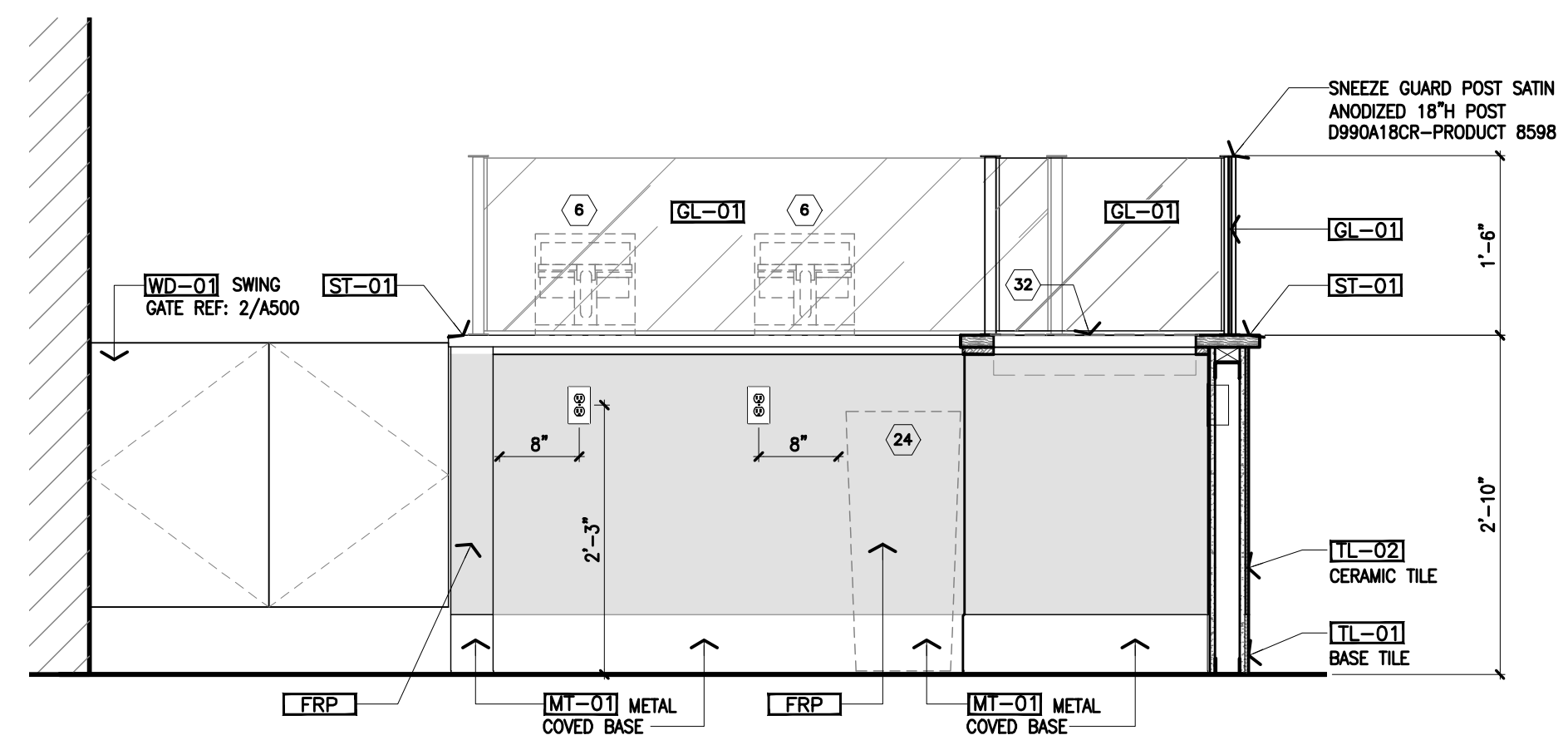
Issue Date 11/22/23

Revisions	Date	Description	By
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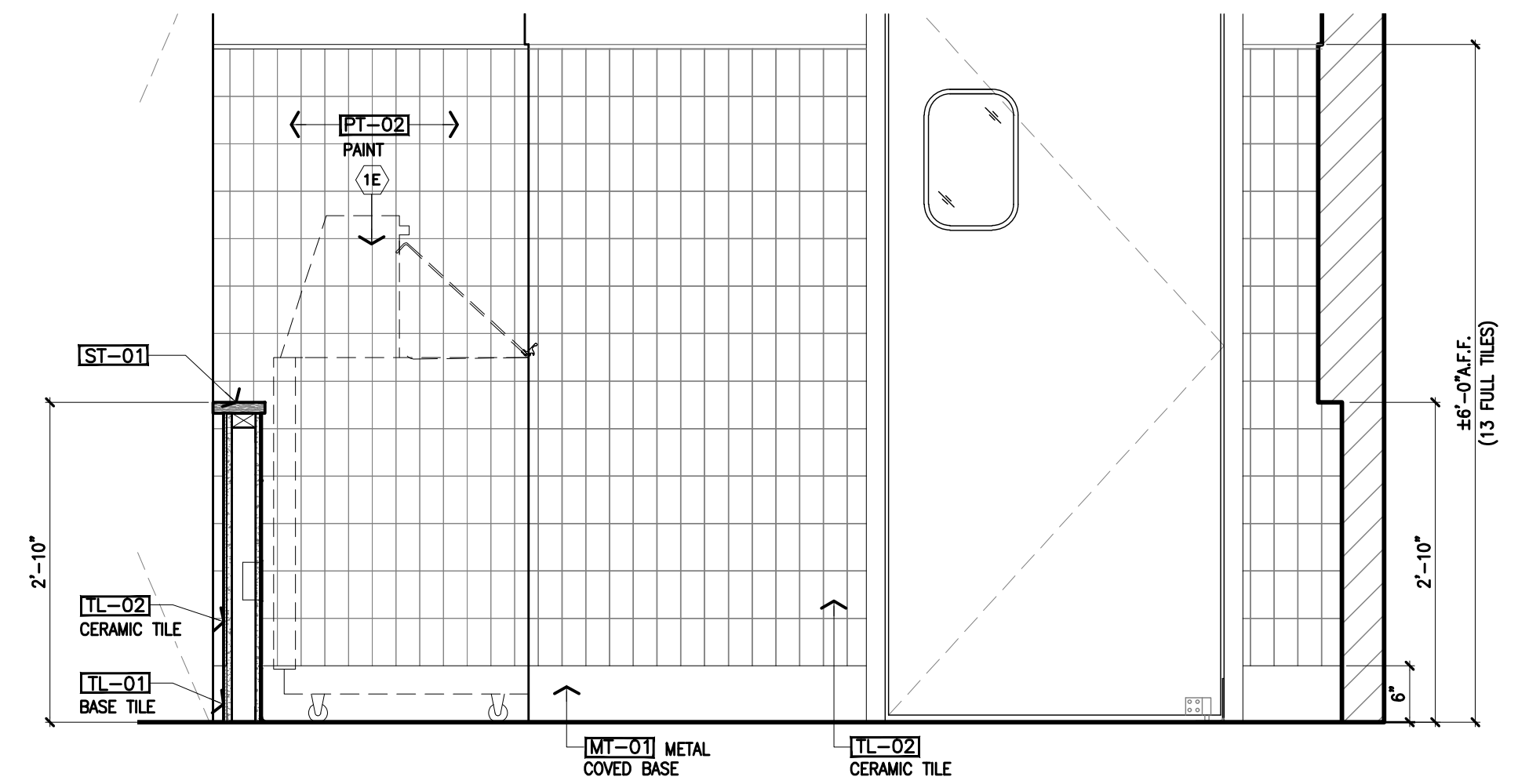




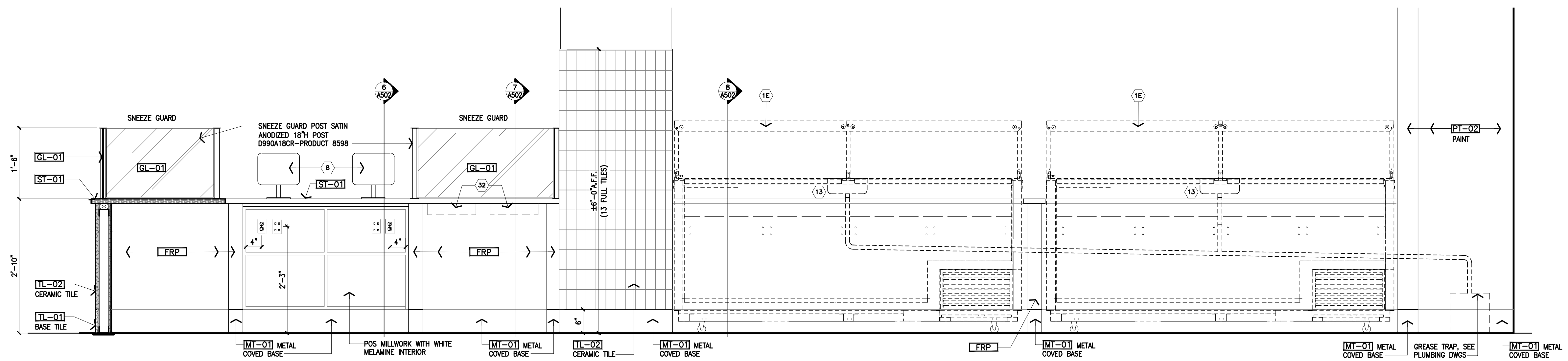
**1 Service Area Elevation**  
Scale 3/4" = 1'-0"



**2 Service Area Elevation**  
Scale 3/4" = 1'-0"

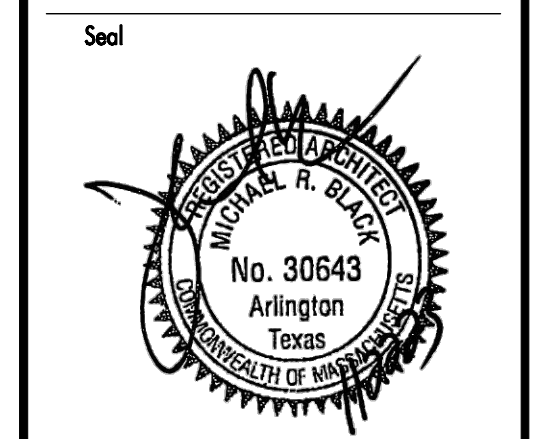


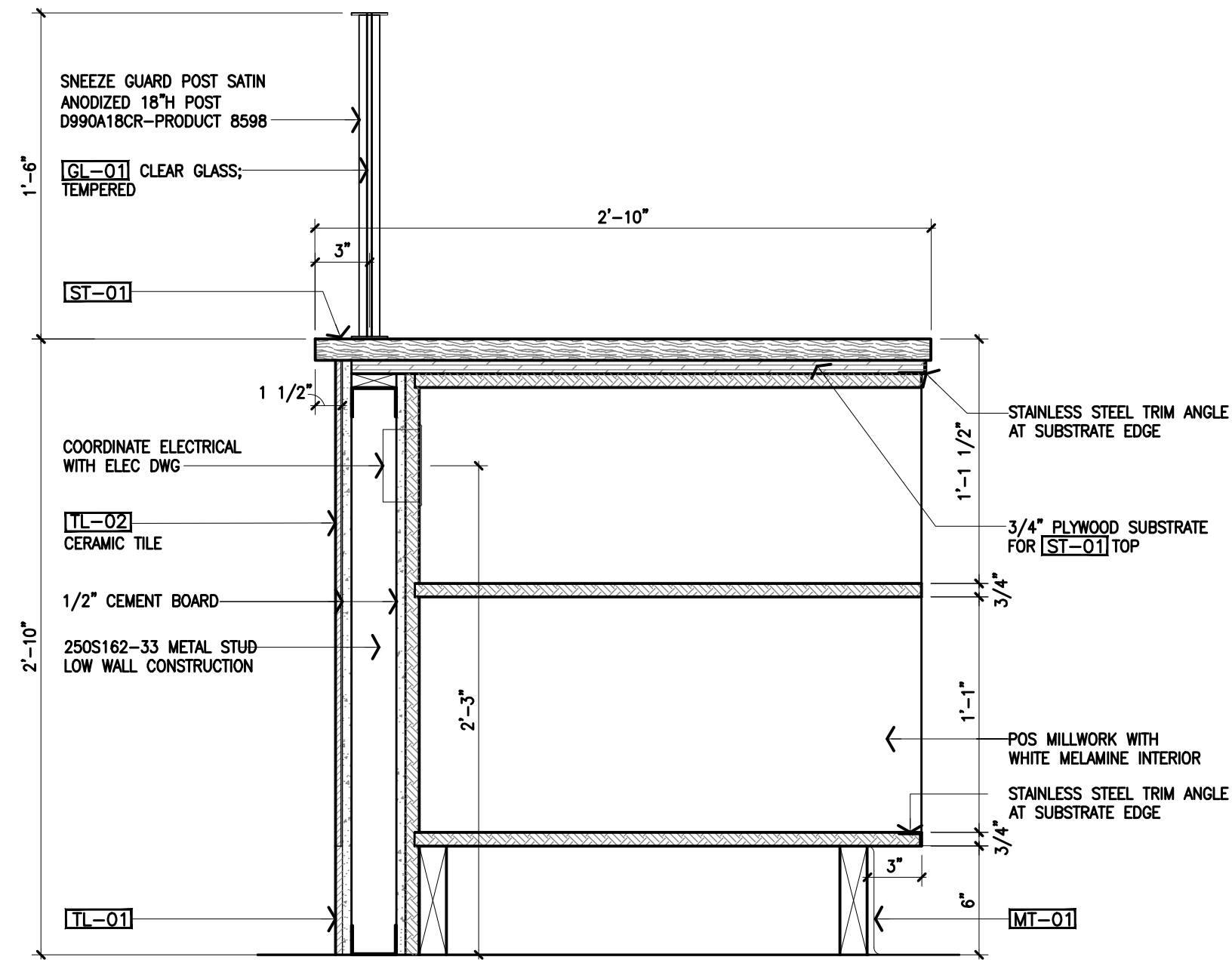
**3 Service Area Elevation**  
Scale 3/4" = 1'-0"



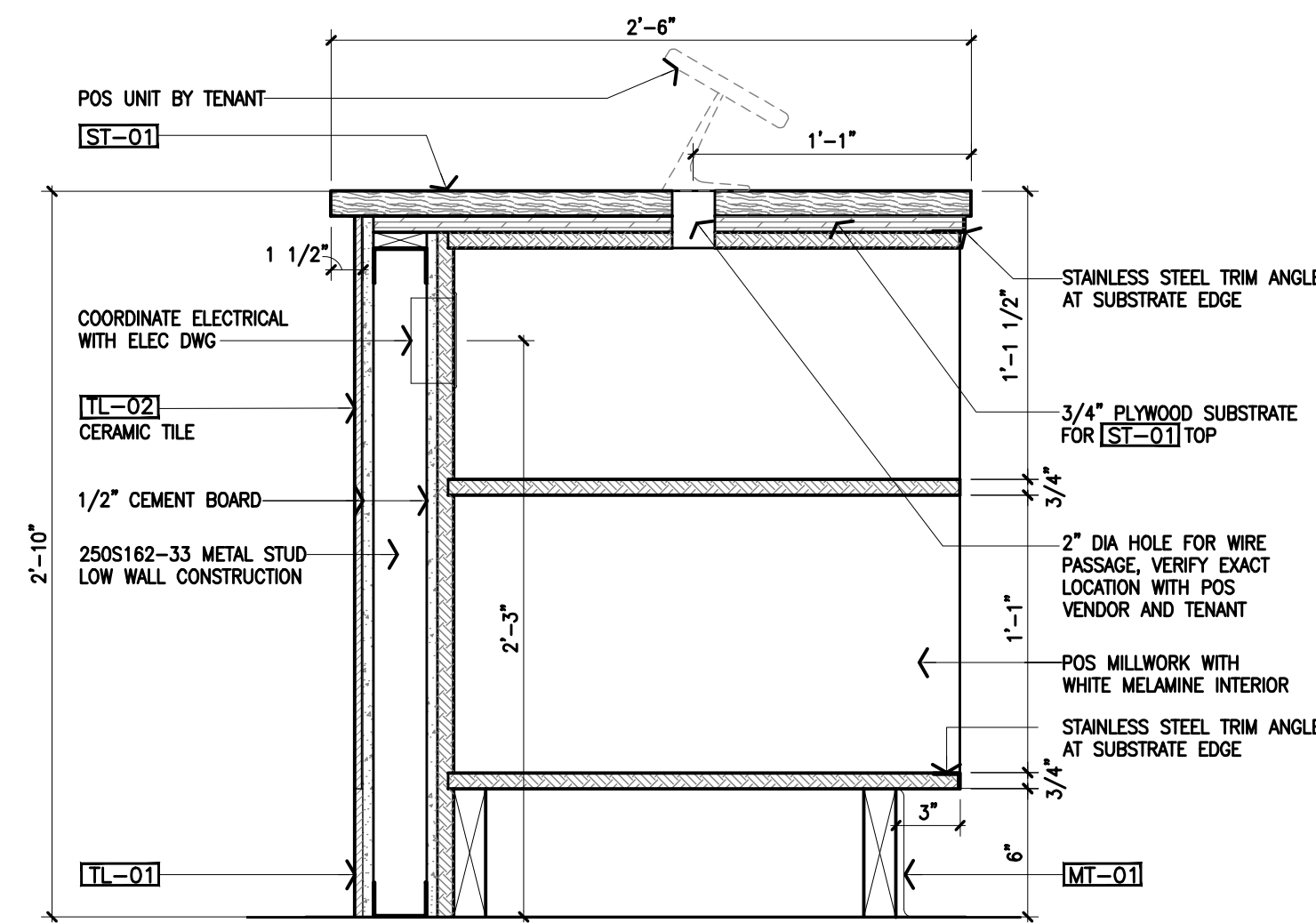
**4 Service Area Elevation**  
Scale 3/4" = 1'-0"

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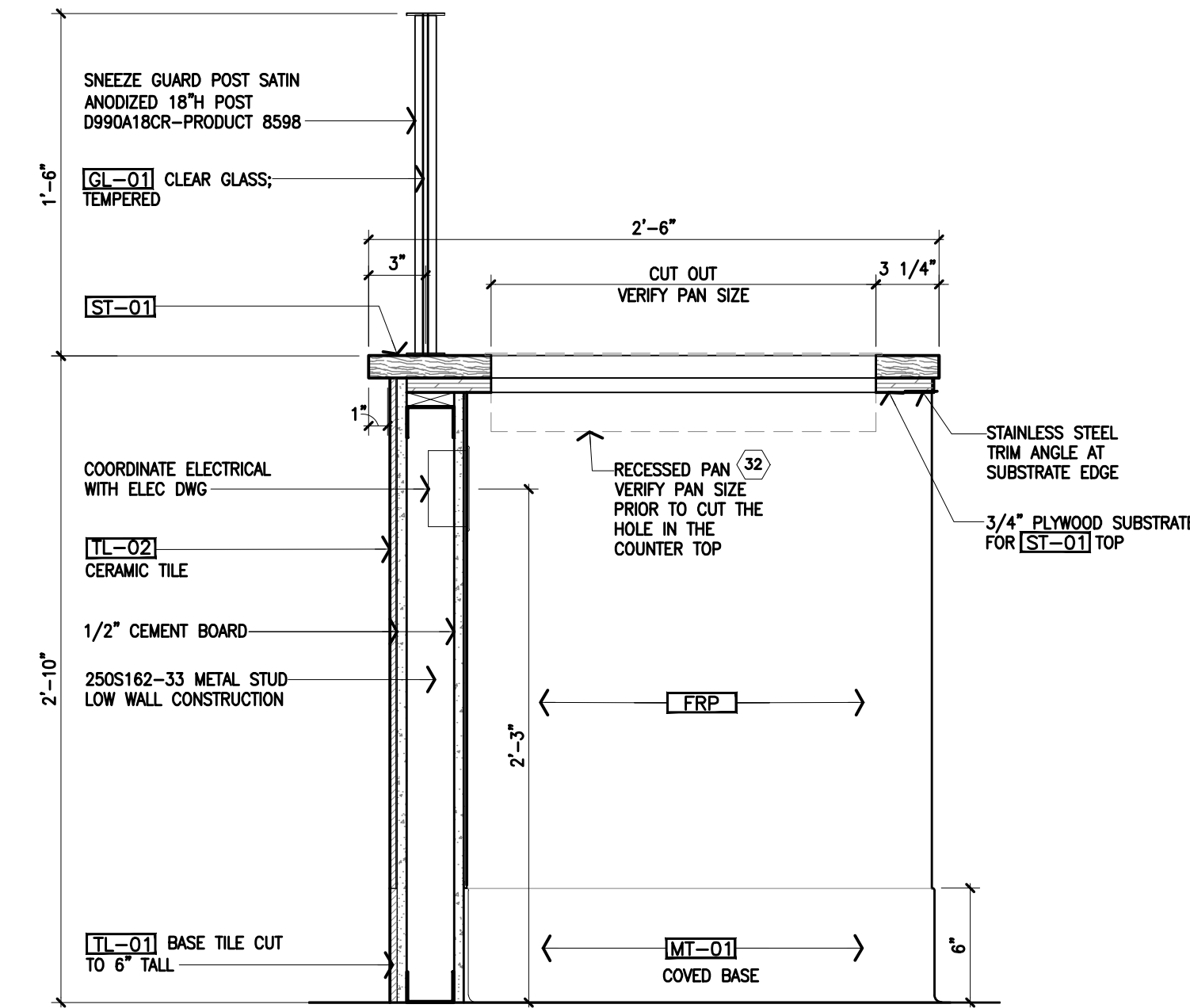




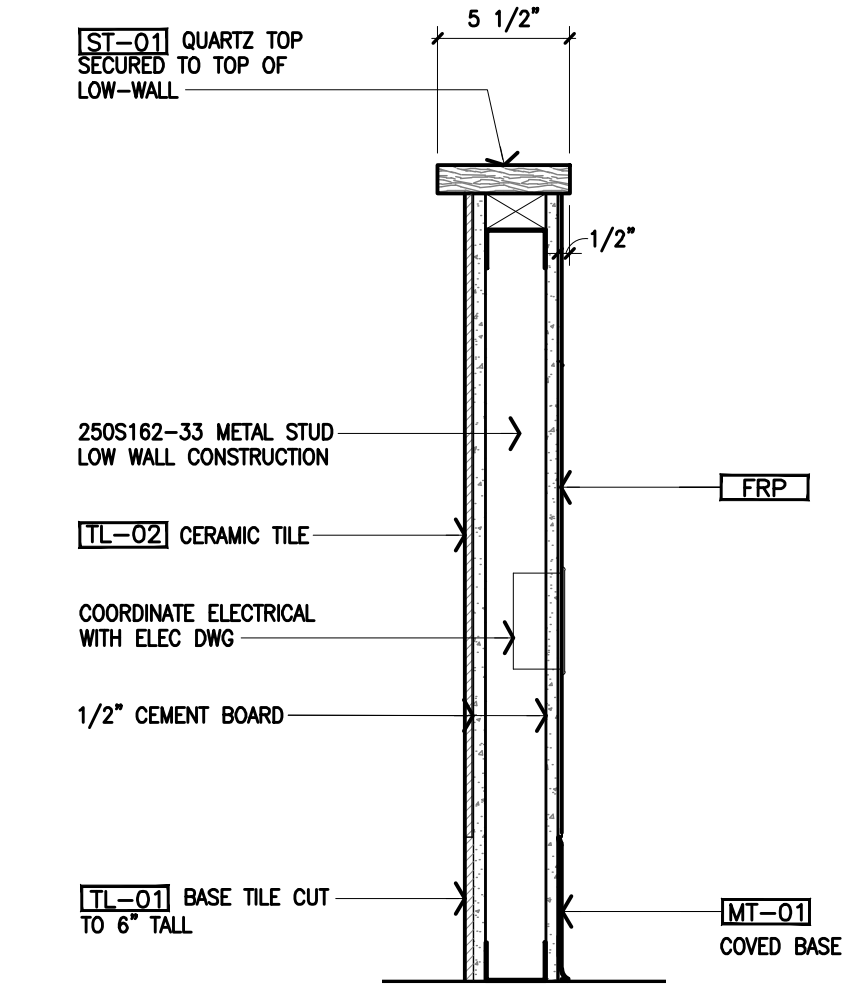
**5 Enlarged Counter Section**  
Scale 1 1/2" = 1'-0"



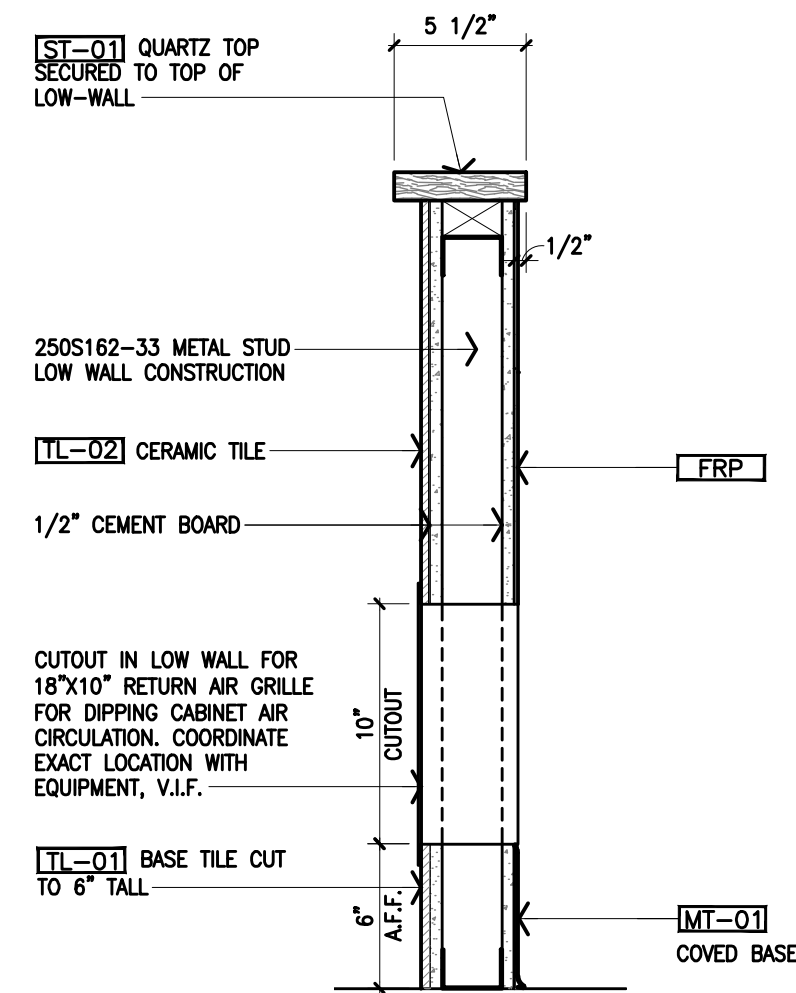
**6 Enlarged Counter Section - POS**  
Scale 1 1/2" = 1'-0"



**7 Enlarged Counter Section**  
Scale 1 1/2" = 1'-0"



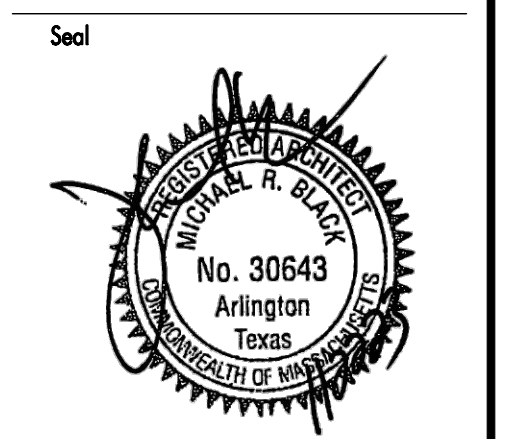
**8 Low Wall Section**  
Scale 1 1/2" = 1'-0"



**9 Low Wall Section-Vent**  
Scale 1 1/2" = 1'-0"

Issue Date **11/22/23**

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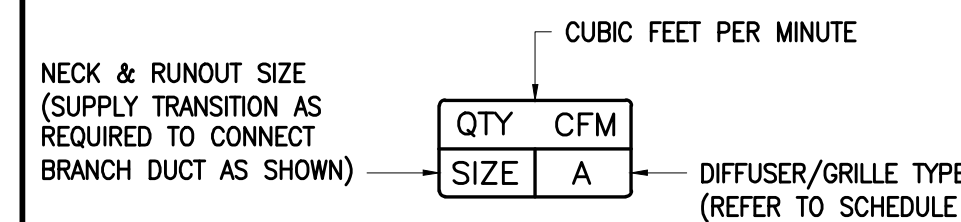


Job Number	230174
Drawn By	NN
Appvd By	MRB
Sheet Title	<b>Enlarged Counter Sections</b>
Sheet Number	<b>A502</b>



**LEGEND**

**DIFFUSER/GRILLE TAG**



**LINE-TYPE & SYMBOLS**

- BRANCH DUCT WORK (EXISTING)
- BRANCH DUCT WORK (NEW)
- FLEXIBLE DUCT, 5'-0" MAX LENGTH, FINAL CONNECTION ONLY.
- POINT OF CONNECTION
- DUCT WORK (EXISTING)
- DUCT WORK (NEW)
- DUCT WORK MOUNTED BALANCING DAMPER (PROVIDE ACCESS IF ABOVE GWB CEILING).
- DIFFUSER MOUNTED BALANCING DAMPER (ACCESSIBLE FROM BELOW)
- SUPPLY AIR DIFFUSER (NEW)
- SUPPLY AIR DIFFUSER (EXISTING)
- SUPPLY AIR DUCT UP (RECTANGULAR)
- RETURN AIR DUCT UP (RECTANGULAR)
- RETURN AIR DIFFUSER (NEW)
- RETURN AIR DIFFUSER (EXISTING)
- DUCT MOUNTED SMOKE DETECTOR
- REMOTE TEST SWITCH FOR SMOKE DETECTOR
- REMOTE TEMPERATURE SENSOR
- 7-DAY PROGRAMMABLE THERMOSTAT
- RESTROOM EXHAUST FAN W/ GRILL
- KITCHEN EXHAUST FAN (UPBLAST, ROOF MOUNTED)
- HVAC EQUIPMENT (ROOF MOUNTED)

**GENERAL**

- A. THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS SHALL FORM A PART OF THIS SECTION OF THE SPECIFICATIONS.
- B. REQUIREMENTS FOR BIDDERS AND CONTRACTORS WHICH ARE CONTAINED IN OTHER SECTIONS OF THESE SPECIFICATIONS SHALL BE CONSIDERED BINDING UNDER THIS SECTION, UNLESS OTHERWISE NOTED HEREIN.
- C. ALL WORK TO BE ACCOMPLISHED IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS. ALL CHANGES MUST BE APPROVED IN WRITING BY PDMS. ALL COSTS INCURRED BY PDMS AS A RESULT OF UNAUTHORIZED CHANGES ARE THE RESPONSIBILITY OF THE INDIVIDUAL(S) MAKING THE CHANGE.

**SCOPE**  
EACH CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH THE CONSTRUCTION DETAILS BEFORE SUBMITTING BID. NO ALLOWANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION.

**INSPECTION OF SITE**  
PROPOSALS ARE ACCEPTED WITH THE ASSUMPTION THAT CONTRACTOR IS FAMILIAR WITH JOBSITE CONDITIONS AND UTILITY LOCATIONS. THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.

**PERMITS**  
ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE SUBCONTRACTOR INVOLVED.

**CODE REQUIREMENTS**  
ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS AND OWNER'S INSTRUCTIONS, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, WHETHER SO SHOWN OR NOT. ALL MODIFICATIONS REQUIRED BY SUCH AUTHORITIES SHALL BE MADE BY THE CONTRACTOR WITHOUT ANY ADDITIONAL COST TO THE OWNER.

**MATERIALS AND WORKMANSHIP**  
A. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURERS AND, UNLESS OTHERWISE SPECIFIED, SHALL BE NEW AND FREE FROM ANY DEFECTS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY UNLESS OTHERWISE SPECIFIED.  
B. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION AND, UPON COMPLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED AND ALL DEBRIS REMOVED FROM THE SITE.

**CODES AND REGULATIONS**  
EACH SUBCONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN OR SPECIFIED. IF A SUBCONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT A VARIANCE WITH SUCH CODES, HE/SHE SHALL PROMPTLY NOTIFY THE GENERAL CONTRACTOR AND THE TENANT IN WRITING. IF ANY SUBCONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO LAWS, ORDINANCES, RULES AND REGULATIONS AND WITHOUT GIVING SUCH NOTICE, THE SUBCONTRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

**PROTECTION OF WORK AND PROPERTY**  
A. EACH SUBCONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL HIS/HER WORK FROM DAMAGE AND SHALL PROTECT THE OWNER'S PROPERTY FROM INJURY OR LOSS ARISING FROM HIS/HER WORK. HE/SHE SHALL MAKE GOOD ANY SUCH DAMAGE, INJURY, OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO CAUSES BEYOND HIS/HER CONTROL AND NOT TO HIS/HER FAULT OR NEGLIGENCE. HE/SHE SHALL ADEQUATELY PROTECT ADJACENT PROPERTY AS WELL.

B. EACH SUBCONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THEIR EMPLOYEES ON THE JOB AND SHALL COMPLY WITH ALL PROVISIONS OF FEDERAL, STATE AND LOCAL BUILDING CODES AND SAFETY LAWS TO PREVENT ACCIDENTS OR INJURY TO PERSONS ON OR ADJACENT TO THE PREMISES WHERE THE WORK IS BEING PERFORMED. EACH SUBCONTRACTOR SHALL MAINTAIN ALL INSURANCE REQUIRED TO PROTECT HIMSELF/HERSELF, OWNER AND TENANT FOR THE DURATION OF THE WORK AGAINST PROPERTY DAMAGE AND PUBLIC LIABILITY.

**CHANGES IN THE WORK**  
THE TENANT, WITHOUT INVALIDATING THE CONTRACT, MAY ORDER EXTRA WORK OR MAKE CHANGES BY ALTERING, ADDING TO OR DEDUCTING FROM THE WORK, THE CONTRACT SUM BEING ADJUSTED ACCORDINGLY.

**COOPERATION**  
ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CONJUNCTION WITH OTHER CONTRACTORS AND TRADES OF THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH CONTRACTOR AND TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS/HER CONTRACTS. THE OWNER SHALL BE CONSULTED TO RESOLVE ANY QUESTIONS WHICH MIGHT ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS, FIXTURES, OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OF STRENGTH OF THE STRUCTURE.

**SUBSTITUTION OF MATERIALS**  
MANUFACTURER'S NAMES ARE LISTED HEREIN TO ESTABLISH A STANDARD. THE PRODUCTS OF OTHER MANUFACTURERS WILL BE ACCEPTABLE, IF IN THE OPINION OF THE TENANT, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DURABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED.

**SHOP DRAWINGS**  
SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND SYSTEMS, AND SUCH OTHER ILLUSTRATIVE MATERIAL AS MAY BE CONSIDERED NECESSARY BY THE TENANT, SHALL BE SUBMITTED BY THE CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION.

**DRAWINGS AND SPECIFICATIONS**  
A. THE DRAWINGS SHOW DIAGRAMMATICALLY THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUITS, FIXTURES, AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL OF ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM.  
B. SHOULD THE CONTRACTOR DEEM IT NECESSARY TO MAKE CHANGES TO ITEMS SHOWN ON CONTRACT DRAWINGS, THE SHOP DRAWINGS, DESCRIPTIONS, AND THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

**RESPONSIBILITY**  
THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED IN HIS CONTRACT. HE/SHE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PROVIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS/HER WORK, REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED.

**H.V.A.C.**

**GENERAL**  
A. THE WORK COVERED BY THIS SECTION OF THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE RESPECTIVE DRAWINGS, INFORMATION, INSTRUCTIONS TO BIDDERS, AND THE GENERAL CONDITIONS, ADDENDA, OR DIRECTIVES WHICH MAY BE ISSUED BY THE OWNER, HEREWITH, OR ELSEWHERE.  
B. THE LISTING HEREIN OF AN ARTICLE OR MATERIAL, OPERATION OR METHOD, REQUIRES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL EACH ITEM LISTED, UNLESS SPECIFICALLY NOTED TO THE CONTRARY. THE CONTRACTOR SHALL PERFORM EACH OPERATION PRESCRIBED OR LISTED ACCORDING TO THE CONDITIONS STATED.

**EXAMINATION OF SITE**  
ALL CONTRACTORS SUBMITTING PROPOSALS FOR THIS WORK SHALL FIRST EXAMINE THE SITE AND ALL EXISTING CONDITIONS. ALL PROPOSALS SHALL TAKE INTO CONSIDERATION ALL SUCH CONDITIONS AS MAY AFFECT THE WORK UNDER THIS CONTRACT.

**SCOPE**  
FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR A COMPLETE AND OPERATING HEATING, VENTILATING, AND AIR CONDITIONING SYSTEM, EXCEPT AS SPECIFICALLY EXCLUDED BY THE DRAWINGS, AND/OR TENANT'S DIRECTIONS.

**EQUIPMENT**  
1. EXHAUST FANS: AS SPECIFIED AT EQUIPMENT SCHEDULE. NO PLASTIC PARTS WILL BE ACCEPTABLE.

**DUCTWORK**  
1. SQUARE AND RECTANGULAR DUCTWORK SHALL BE CONSTRUCTED OF NEW GALVANIZED PRIME GRADE SHEET STEEL OF THE FOLLOWING GAUGES:

DUCT SIZE	GAUGE
12" AND LESS	NO. 26 U.S. GAUGE
13" TO 30"	NO. 24 U.S. GAUGE
31" TO 54"	NO. 22 U.S. GAUGE
55" TO 84"	NO. 20 U.S. GAUGE
85" AND OVER	NO. 18 U.S. GAUGE

SIZE	METHOD
17" AND LESS	"S" AND DRIVE CLEATS
18" TO 30"	1" STANDING SEAMS ON 3'-0" CENTERS
31" TO 54"	1-1/4" STANDING SEAMS ON 3'-0" CENTERS

DUCT SIZE (DIAMETER)	DUCTS	FITTINGS
8" AND LESS	24	22
9" TO 18"	22	20
19" TO 30"	20	18

ALL 90 DEGREE ELBOWS FOR ROUND DUCTWORK SHALL BE FIVE (5) PIECE. ALL LONGITUDINAL SEAMS SHALL BE FORMED BY PITTSBURGH LOOKS. JOINTS SHALL BE SWAGGED WITH ONE-HALF INCH (1/2") OVERLAP.

3. ALL DUCTWORK SHALL BE MADE AIR TIGHT WITH MASTIC AND PRESSURE SENSITIVE TAPE.  
4. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK LOCATED WITHIN THE BUILDING SHALL BE INSULATED WITH GLASS FIBER INSULATION WITH FOIL VAPOR BARRIER WITH A MINIMUM OF R-6.

5. ALL SUPPLY AND RETURN AIR DUCTS LOCATED OUTSIDE OF THE BUILDING OR EXPOSED TO THE WEATHER SHALL HAVE RIGID INSULATION ON THE INTERIOR OF THE DUCT WITH A MINIMUM OF R-8.  
6. CONTRACTOR WILL INSTALL INSECT SCREENS ON ALL DUCT OPENINGS WHICH LEAD TO OR ARE OUTDOORS. INSECT SCREENS SHALL BE 10 GAUGE, ONE-EIGHTH INCH (1/8") MESH IN REMOVABLE GALVANIZED STEEL FRAMES.

**TESTING AND ADJUSTING**  
CONTRACTOR WILL DEMONSTRATE OPERATION OF SYSTEM TO FULL SATISFACTION OF TENANT, WILL BALANCE AIR FLOW IN ACCORDANCE WITH AIR QUANTITIES ON DRAWINGS AND WILL RECORD VOLUME READINGS IN ACCORDANCE WITH ASHRAE AND PROVIDE SAME TO TENANT. WHERE REQUIRED BY LANDLORD, A CERTIFIED AIR BALANCE REPORT SHALL BE SUBMITTED TO OWNER AND LANDLORD. GAS PIPING SHALL MEET TEST REQUIREMENTS OF UPC.

**HANGERS AND SUPPORTS**  
1. ALL HORIZONTAL DUCTS HAVING A HALF-PERIMETER OF 40 INCHES OR LESS SHALL BE SUPPORTED BY MEANS OF BAND IRON HANGERS OF NO. 18 U.S. GAUGE ATTACHED TO THE DUCT BY MEANS OF RIVETS, SCREWS, OR CLAMPS, AND FASTENED TO STRUCTURE ABOVE BY TOGGLE BOLTS OR OTHER MEANS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS. VERTICAL DUCTS SHALL BE SUPPORTED WITH 1-1/4" x 1-1/4" x 1-1/4" ANGLES WHERE THEY PASS THROUGH THE FLOOR LINES.  
2. ALL HORIZONTAL DUCTS HAVING A HALF-PERIMETER OF 40 INCHES OR MORE SHALL BE SUPPORTED BY MEANS OF ANGLE IRON TRAPEZE HANGERS. EACH SECTION OF DUCTWORK SHALL HAVE AT LEAST ONE PAIR OF SUPPORTS.

**PIPING**  
SEE SHEET P-001 FOR PIPING SPECIFICATIONS.

**DAMPERS**  
1. SPLITTER DAMPERS SHALL BE FABRICATED OF SHEET STEEL NOT LESS THAN NO. 18 U.S. GAUGE WITH THE LEADING EDGE HEIMED. EACH DAMPER SHALL BE LARGE ENOUGH TO COVER THE SMALLER OF THE TWO OPENINGS IT CONTROLS. DAMPERS SHALL BE CONTROLLED AS FOLLOWS:

EXPOSED OR ACCESSIBLE DUCTWORK - LOCKING QUADRANTS EQUAL TO YOUNG REGULATOR NO. 1 WITH DAMPER ROD END BEARINGS ON OPPOSITE END.

CONCEALED DUCTWORK - LOCKING QUADRANT EQUAL TO YOUNG REGULATOR NO. 315 (CHROMIUM PLATED WITH DAMPER ROD END BEARINGS ON BOTH ENDS).

2. VOLUME DAMPERS SHALL BE OF THE OPPOSED INTERLOCKING TYPE AS MANUFACTURED BY AMERICAN FOUNDRY AND FURNACES CO. (AFFCO) OR EQUAL. BLADES SHALL BE OF NO. 16 GAUGE SHEET METAL AND SHALL NOT EXCEED 48" IN LENGTH OR 12" IN WIDTH. BLADES SHALL BE ON ONE-HALF INCH (1/2") DIAMETER RUSTPROOF AXLE. BEARINGS SHALL BE OF THE SELF-LUBRICATING FERRULE TYPE.

**H.V.A.C. (Continued)**

**DAMPERS (CONT'D)**  
3. DOUBLE-THICKNESS TURNING VANES ARE REQUIRED IN SQUARE ELBOWS. PROVIDE AND INSTALL BARBER-COLMAN AIRTURNS OR EQUAL. TURNING VANES SHALL BE OF THE SAME GAUGE METAL AS THE DUCT IN WHICH THEY ARE INSTALLED. RADIUS ELBOWS SHALL HAVE A CENTERLINE RADIUS OF ONE AND ONE-HALF (1-1/2) TIMES THE DUCT WIDTH.

**SUPPORT OF DUCT SYSTEM**  
DUCTWORK SHALL BE SUPPORTED AT ALL TURNS AND TRANSITIONS. SUPPORT STRAIGHT DUCT EVERY 8'-0" UP TO 35', EVERY 6'-0" FOR DUCT FROM 36" TO 59", AND EVERY 4'-0" FOR DUCT 60" AND ABOVE.

HANGER DESIGN SHALL BE AS DESCRIBED IN THE LATEST EDITION OF THE "SMACNA" MANUAL. REINFORCEMENT MEMBERS MAY BE USED TO SUPPORT THE DUCT SYSTEM PROVIDED DETAILS OUTLINED IN THE AFOREMENTIONED DOCUMENTS ARE ADHERED TO.

**REINFORCEMENT**  
ALL DUCTS REQUIRING REINFORCEMENT SHALL BE REINFORCED ACCORDING TO THE LATEST EDITION OF "SMACNA" MANUAL.

**MATERIALS FOR REINFORCEMENT MEMBERS SHALL BE GALVANIZED STEEL. ALL SCREWS AND WASHERS SHALL BE PLATED OR GALVANIZED.**

**ACCESSORY ITEMS**  
ALL MANUAL DAMPERS, FIRE DAMPERS, TURNING VANES, REGISTER CONNECTIONS, ACCESS DOORS OR OTHER ASSOCIATED ACCESSORIES SHALL BE INSTALLED ACCORDING TO THE LATEST PUBLICATION OF "SMACNA" MANUAL.

**RESPONSIBILITIES**

- E - EXISTING
- L - LANDLORD
- C - TENANT'S GENERAL CONTRACTOR
- T - TENANT

**A - MECHANICAL**

A-1 HVAC SYSTEM	F	I	N	S	T	N	O	T	E
A WATER SOURCE HEAT PUMP				C	C	2			
B DUCTWORK & INSULATION				C	C				
C GRILLES & REGISTERS				C	C				
D CONTROLS				C	C	1			
E CONDENSATION DRAINAGE				C	C				
F OUTSIDE AIR DUCTWORK				C	C				

A-2 TOILET EXHAUST SYSTEM	F	I	N	S	T	N	O	T	E
A EXHAUST FAN				C	C				
B DUCTWORK & INSULATION				C	C				
C EXTEND TO LANDLORD EXHAUST DUCT				C	C				

A-3 AIR CURTAIN	F	I	N	S	T	N	O	T	E
A AIR CURTAIN				C	C				
B CONTROLS & CONTROL WIRING				C	C				

**RESPONSIBILITY NOTES**

1. ALL WIRING, CONDUITS, ETC., REQUIRED FOR H.V.A.C. CONTROLS SYSTEMS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUBCONTRACTOR. H.V.A.C. SUBCONTRACTOR SHALL SUPPLY THE CONTROLS AND WIRING DIAGRAMS.
2. THE H.V.A.C. SUBCONTRACTOR SHALL IDENTIFY ALL ROOF MOUNTED H.V.A.C. EQUIPMENT AND APPARUSES WITH 2" HIGH PAINTED STENCILED STORE NAME ON ALL SIDES OF THIS EQUIPMENT.



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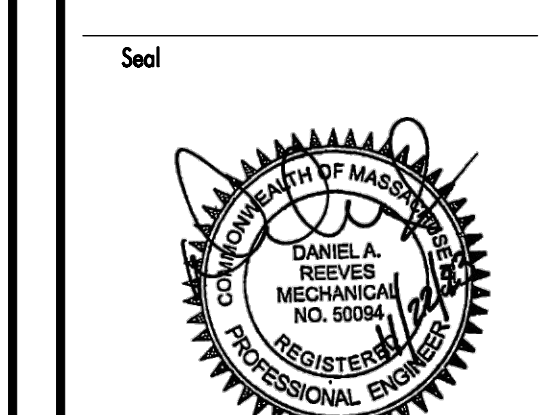
**Project Address**  
**Van Leeuwen Ice Cream**  
**One Brattle Square**  
**Space #C2**  
**Cambridge, MA 02138**

**Issue Date** 11/22/23

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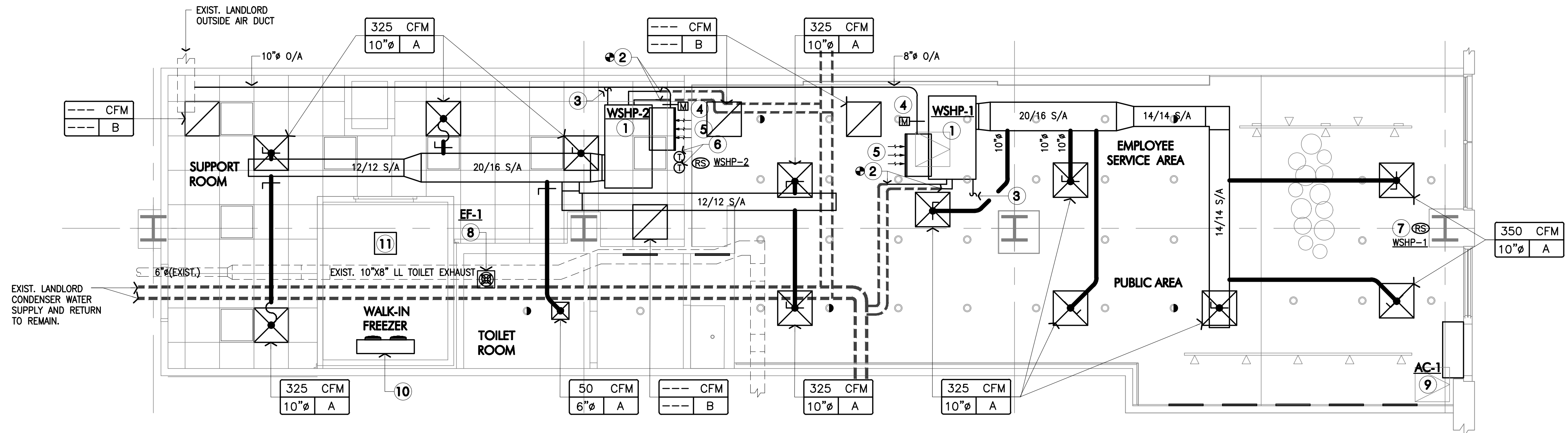


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**Job Number** 230174  
**Drawn By** TQ  
**App'd By** AQ  
**Sheet Title**  
**Mechanical Specifications**

**Sheet Number**  
**M001**



**1 Mechanical Plan**  
SCALE: 1/4" = 1'-0"

**WATER SOURCE HEAT PUMP UNIT**

MARK.	MANUFACTURER MODEL NUMBER	NOMINAL TONNAGE	OSA (CFM)	SUPPLY FAN			COOLING CAP.			CONDENSER WATER (COOLING)			HEATING CAP. (MBH)			CONDENSER WATER (HEATING)			ELECTRICAL			EST. WEIGHT (LBS)
				CFM	E.S.P.	H.P.	SENS. (MBH)	TOTAL (MBH)	EWT	EWT	LWT	GPM	EWT	LWT	EBR	VOLTS /PH	MCA	MAX FUSE				
WSHP-1	TRANE GEHE0604	5	200	2,000	0.5	1.0	46.3	59.6	79.0	79.0	93.4	70.9	11.5	73	60.0	13.0	460/3	12.45	20	398		
WSHP-2	TRANE GEHE0604	5	200	2,000	0.5	1.0	46.3	59.6	79.0	79.0	93.4	70.9	11.5	73	60.0	13.0	460/3	12.45	20	398		

NOTES:  
 1. PROVIDE UNIT WITH INTERNAL CONDENSATE SWITCH, HORIZONTAL HANGER KIT, AND SINGLE POINT POWER ENTRY.  
 2. PROVIDE TWO WAY CONTROL VALVE, A BALANCING VALVE SET FOR MAXIMUM WATER FLOW.  
 3. PROVIDE WITH FUNCTIONING REVERSING VALVE, HEAT IS ALLOWED TO BE EXTRACTED OUT OF THE CONDENSER LOOP.

**AIR CURTAIN**

MARK.	MANUFACTURER MODEL NUMBER	PERFORMANCE					ELECTRICAL					EST. WEIGHT (LBS)
		NOZZLE WIDTH (IN)	MAX VELOCITY AT NOZZLE (FFM)	AVG. OUTLET VELOCITY (FFM)	AIR VOLUME (CFM)	MOTORS @ HP	POWER RATING (KW)	VOLTS	PHASE	MCA	MOC <sup>2</sup>	
AC-1	BERNER A110-1036A	36.0	3,440	2,071	1,424	1 @ 1/2	0.51	120	1	8.5	15	85

NOTES:  
 1. PROVIDE WITH DISCONNECT SWITCH AND MOUNTING ACCESSORIES TO COMPLETE INSTALLATION.  
 2. PROVIDE WITH DOOR LIMIT SWITCH

**OUTSIDE AIR SCHEDULE**

SPACE DESIGNATION	FLOOR AREA (SF)	SPACE OUTSIDE AIR REQUIREMENTS (2018 INTERNATIONAL MECHANICAL CODE)				SERVICE	OUTSIDE AIR (CFM)
		OCCUPANCY	CFM PER PERSON	CFM PER SF	MINIMUM CFM		
SALES/PUBLIC AREA	840	13	15	0.12	296	WSHP-1 WSHP-2	200 200
TOILET ROOM	60	-	-	-	-		
SUPPORT AREA	475	1	5	0.12	62		

MINIMUM OUTSIDE AIR REQUIRED = 358 CFM  
 MINIMUM OUTSIDE AIR DELIVERED = 400 CFM

**EXHAUST FAN**

MARK	MANUFACTURER	MODEL	SERVICE	CFM	S.P. (IN WG)	FAN MOTOR (80W)	FAN RPM	ELECTRICAL		EST. WEIGHT (LBS)	REMARKS
								VOLTS	PHASE		
EF-1	GREENHECK	SP-B110	TOILET EXHAUST	100	0.25	<0.25HP (80W)	950	120	1	-	1

NOTES:  
 1. TOILET EXHAUST FAN SHALL BE PROVIDED WITH CEILING GRILLE, PLUG STYLE DISCONNECT, FAN SPEED CONTROLLER, AND INTEGRAL BACKDRAFT DAMPER. FAN SHALL BE CONTROLLED BY TOILET ROOM LIGHT SWITCH.

**GRILLES & REGISTER**

MANUFACTURER & MODEL NUMBER	MARK	SERVICE	MODULE SIZE	FRAME TYPE	VOLUME DAMPERS	FINISH	REMARKS
TITUS - TMS	A	SUPPLY	24X24 / 12X12	T-BAR	YES	FACTORY WHITE	1,2,3,4
TITUS - PAR	B	RETURN	24X24	T-BAR	NO	FINISH	1,2,3,4

NOTES:  
 1. USE TITUS RAPID-MOUNT FRAME FOR ALL DRYWALL INSTALLATIONS. WHITE CAULK AROUND EDGE OF FRAME KIT.  
 2. COORDINATE DIFFUSER PLACEMENT AND QUANTITY WITH LIGHTING PLAN.  
 3. REFERENCE MECHANICAL FLOOR PLAN FOR DIFFUSER NECK SIZE AND PROVIDE ROUND NECK REDUCER AS REQUIRED.  
 4. GRILLES AND TRIM ON WHITE TILE TO BE WHITE. GRILLES AND TRIM ON BLACK TILE TO BE BLACK.

**HEAT LOAD CALCULATIONS**

**System Checksums**  
By PDMS DESIGN GROUP

WSHP 1 & 2

COOLING COIL PEAK				CLG SPACE PEAK				HEATING COIL PEAK				TEMPERATURES			
Space Sens + Lat. Btu/h	Plenum Sens + Lat. Btu/h	Net Total Btu/h	Percent Of Total (%)	Space Sens Btu/h	Percent Sensible (%)	Space Peak Space Sens Btu/h	Coil Peak Tot Sens Btu/h	Percent Of Total (%)	Space Peak Space Sens Btu/h	Coil Peak Tot Sens Btu/h	Percent Of Total (%)	SADB	Cooling Capacity	Heating Capacity	Return
0	0	0	0	0	0	0	0	0	0	0	0	70.2	68.1	68.1	70.2
0	0	0	0	0	0	0	0	0	0	0	0	72.0	62.2	62.2	72.0
0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
1,383	0	1,383	1	7,678	9	7,678	16,011	17.1	0	0	0	4,000	4,000	4,000	4,000
1,921	0	1,921	2	796	1	796	16,011	1.7	-1,127	-5,127	16,011	0	0	0	0
61	297	358	0	25	0	25	16,011	0.0	-36	-549	16,011	0	0	0	0
0	0	0	0	0	0	0	16,011	0.0	0	0	0	4,000	4,000	4,000	4,000
0	0	0	0	0	0	0	16,011	0.0	0	0	0	4,000	4,000	4,000	4,000
0.00	0.00	0.00	0.00	0.00	0.00	0.00	16,011	0.00	0.00	0.00	0.00	400	400	400	400
0	0	0	0	0	0	0	16,011	0.00	0	0	0	400	400	400	400
3,365	297	3,662	3	8,500	10	8,500	16,011	17.73	-5,212	-5,675	17,73	0	0	0	0

Internal Loads  
 Lights 3,901 225 4,126 4 3,901 5 Lights 0 0 0.00 0.00  
 People 7,500 0 7,500 7 3,750 5 People 0 0 0.00 0.00  
 Misc 67,144 0 67,144 63 67,144 81 Misc 0 0 0.00 0.00  
 Sub Total => 78,545 225 78,770 74 74,795 90 Sub Total => 0 0 0.00 0.00

CEILING LOAD  
 Ceiling Load 46 -46 0 0 36 0 Ceiling Load -41 0 0.00 0.00  
 Ventilation Load 0 0 23,542 22 0 0 Ventilation Load 0 -26,297 82.14 0 0  
 Adj Air Trans Heat 0 0 0 0 0 0 Adj Air Trans Heat 0 0 0.00 0.00  
 Dehumid. Or Sizing 0 0 0 0 0 0 Dehumid. Or Sizing 0 0 0.00 0.00  
 Ov/Undr Sizing 0 0 0 0 0 0 Ov/Undr Sizing 0 0 0.00 0.00  
 Exhaust Heat 0 -276 0 0 0 0 Exhaust Heat -44 0.14 0.00 0.00  
 Sub. Fan Heat 0 0 0 0 0 0 Sub. Fan Heat 0 0 0.00 0.00  
 Duct Heat PkUp 0 0 0 0 0 0 Duct Heat PkUp 0 0 0.00 0.00  
 Underfr Sup Ht PkUp 0 0 0 0 0 0 Underfr Sup Ht PkUp 0 0 0.00 0.00  
 Supply Air Leakage 0 0 0 0 0 0 Supply Air Leakage 0 0 0.00 0.00  
 Grand Total => 81,956 200 106,884 100.00 83,331 100.00 Grand Total => -5,253 -32,015 100.00

COOLING COIL SELECTION  
 Main Clg 8.9 106.9 87.7 4,000 72.0 59.4 55.5 50.7 49.6 51.1  
 Aux Clg 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0  
 Opt Vent 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0  
 Total 8.9 106.9

AREAS  
 Floor 1,375  
 Part 1  
 Int Door 0  
 ExFr 0  
 Roof 0  
 Wall 228  
 Ext Door 0

HEATING COIL SELECTION  
 Main Htg -31.2 4,000 62.2 69.2  
 Aux Htg 0.0 0.0 0.0 0.0  
 Preheat 0.0 0.0 0.0 0.0  
 Humidif 0.0 0.0 0.0 0.0  
 Opt Vent 154.37  
 Blower Fr 77.73  
 No. People 15

Project Name: Van Leeuwen  
 Dataset Name: 230174.TRC  
 TRACER 700 v6.3.5 calculated at 07:59 AM on 09/18/2023  
 Alternative - 1 System Checksums Report Page 1 of 1

**KEYED NOTES**

- EXISTING WATER SOURCE HEAT PUMP SHALL BE REPLACED WITH NEW WATER SOURCE HEAT PUMP. VERIFY LOCATION AND ORIENTATION IN FIELD WITH PROJECT MANAGER PRIOR TO ORDERING. PROVIDE AUXILIARY DRAIN PAN WITH FLOAT SWITCH WIRED TO SHUT OFF WATER CONTROL VALVE. CONTRACTOR TO BALANCE AIRFLOW TO QUANTITY SPECIFIED. ADJUST DUCTWORK AS REQUIRED.
- CONNECT TO EXISTING 1" CONDENSER WATER SUPPLY AND 1" RETURN STUB-INS. TOP SHALL PROVIDE SHUT-OFF VALVES IF NOT EXISTING AND ALL PIPING SPECIALTIES REQUIRED TO COMPLETE BUILDING STANDARD INSTALLATION. VERIFY LOCATION IN FIELD. PROVIDE WITH STRAINER ON SUPPLY SIDE AND BALANCING VALVE ON RETURN.
- PROVIDE 3/4" CONDENSATION DRAIN TO UTILITY/MOP SINK. PIPING SHALL BE RUN CONCEALED DOWN WALL AND PENETRATE WALL 2" ABOVE RIM OF SINK.
- FURNISH & INSTALL MOTORIZED DAMPER FOR OUTSIDE AIR DUCTWORK. MOTORIZED DAMPER SHALL BE CLOSED DURING UNOCCUPIED HOURS. CONNECT TO EXISTING LANDLORD OUTSIDE AIR DUCT. ADJUST TO PROVIDE 200 CFM OF OUTSIDE AIR. VERIFY IN FIELD.
- PROVIDE FULL SIZE OF RETURN MIXING BOX WITH VOLUME DAMPER FOR CONTROL OF RETURN AIR FLOW.
- PROVIDE NEW PROGRAMMABLE THERMOSTAT FOR WSHP UNIT. MOUNT THERMOSTAT AT 48" AFF. PROVIDE WITH LOCKABLE PLASTIC COVER.
- FURNISH AND INSTALL REMOTE SENSOR AT 60" AFF AND CONNECT TO MAIN THERMOSTAT (WSHP-1).
- NEW CEILING MOUNTED EXHAUST FAN. EXTEND 6" TOILET EXHAUST DUCT TO EXISTING LANDLORD'S TOILET EXHAUST STACK. VERIFY IN FIELD.
- PROVIDE AND INSTALL NEW AIR CURTAIN (AC-1). MOUNT AIR CURTAIN DIRECTLY TO THE STOREFRONT GLAZING SYSTEM. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED TO COMPLETE THE INSTALLATIONS. FIELD VERIFY EXISTING STOREFRONT GLAZING SYSTEM PRIOR BIDDING / INSTALLATION.
- FREZZER EVAPORATOR SHOWN FOR REFERENCE ONLY.
- CONDENSER ABOVE WALK-IN FREEZER SHOWN FOR REFERENCE ONLY. COORDINATE WITH WALK-IN FREEZER VENDOR PRIOR BIDDING/INSTALLATION. REFRIGERANT LINES TO BE INSTALLED AND INSULATED PER MANUFACTURER REQUIREMENTS.

**GENERAL NOTES**

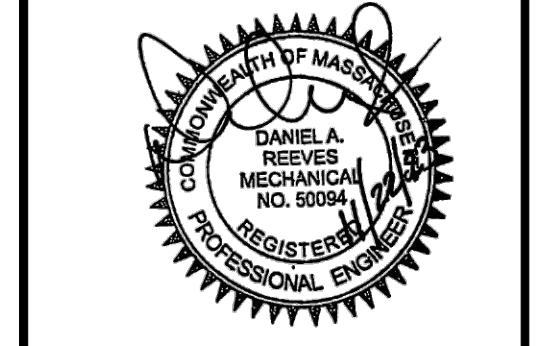
- "VERIFY IN FIELD" OR "EXISTING" MEANS THE CONTRACTOR IS TO CONFIRM THE ITEM SHOWN ON THE DRAWING (E.E. EQUIPMENT, DUCT, WIRE, ETC.) EXISTS AT THE SITE AND IS IN GOOD WORKING CONDITION. SHOULD THE CONTRACTOR FIND THAT THE EQUIPMENT, DUCT, WIRE, ETC. IS NOT THE EQUAL TO THAT SHOWN ON THE DRAWING, IT IS TO BE REPLACED, IF THE CONTRACTOR HAS ANY QUESTION ABOUT WHETHER IT IS EQUAL TO WHAT IS SHOWN ON THE DRAWING, THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER AND TENANT'S PROJECT MANAGER FOR APPROVAL. CONTRACTOR IS TO NOTIFY TENANT'S PROJECT MANAGER AND DESIGN ENGINEER IN WRITING OF ALL REPLACEMENT ITEMS PRIOR TO CONSTRUCTION.
- WHERE EXISTING EQUIPMENT (LIGHTS, DIFFUSERS, TOILETS, ETC.) ARE TO BE REUSED, WHETHER IT IS RELOCATED OR REUSED IN THE EXISTING LOCATION, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE RENOVATION OF THE STORE. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER. ALL ITEMS TO BE THOROUGHLY CLEANED, IF REQUIRED, PAINTED, AND ANY OTHER MAINTENANCE NEEDED TO BRING EQUIPMENT UP TO LIKE NEW CONDITION. THIS INCLUDED RELAMPING ALL LIGHTS REUSED.
- REFER TO SHEET M001 FOR MECHANICAL SPECIFICATIONS.
- TEST & BALANCE AIR REPORT SHALL BE BY AN INDEPENDENT AABC OR NEBB CONTRACTOR.
- THE GENERAL CONTRACTOR SHALL REFER TO REFLECTED CEILING PLAN FOR LOCATION OF CEILING RELATED EQUIPMENT.
- ALL DUCTWORK DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS. THIS SHALL BE CLEAR WHETHER DUCT IS INTERNALLY LINED OR EXTERNALLY WRAPPED.
- MECHANICAL CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING TO FULLY UNDERSTAND THE EXISTING CONDITIONS

Issue Date **11/22/23**

Revisions	Date	Description	By

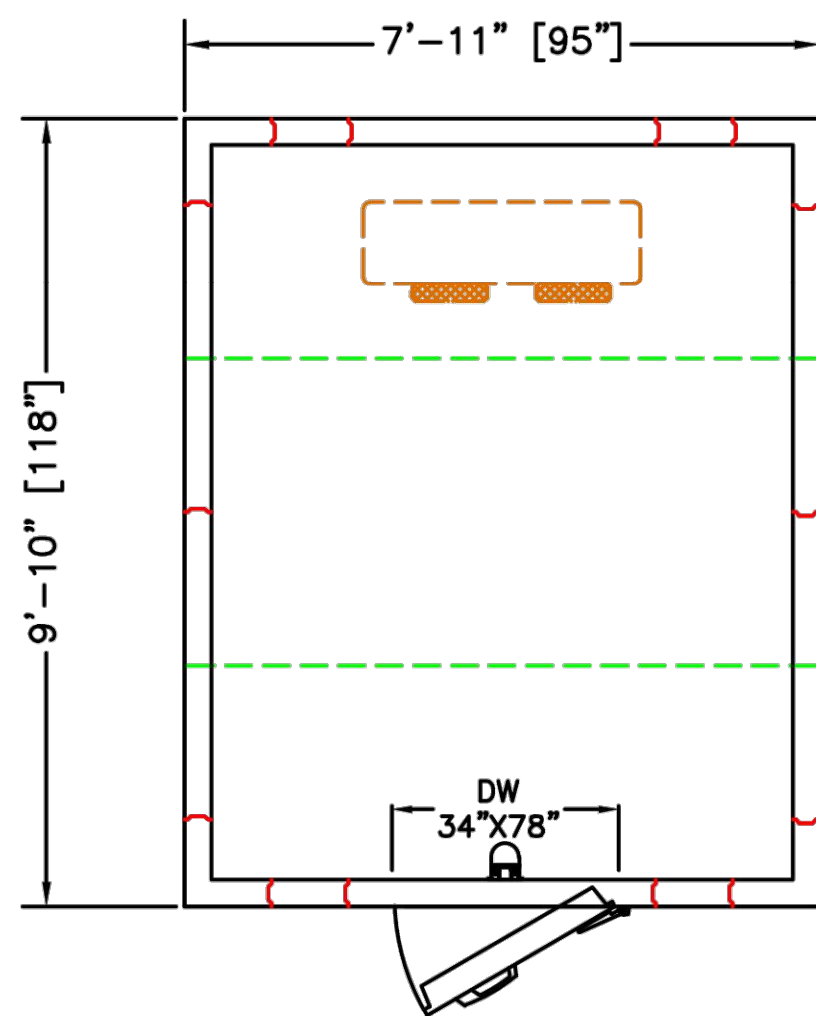
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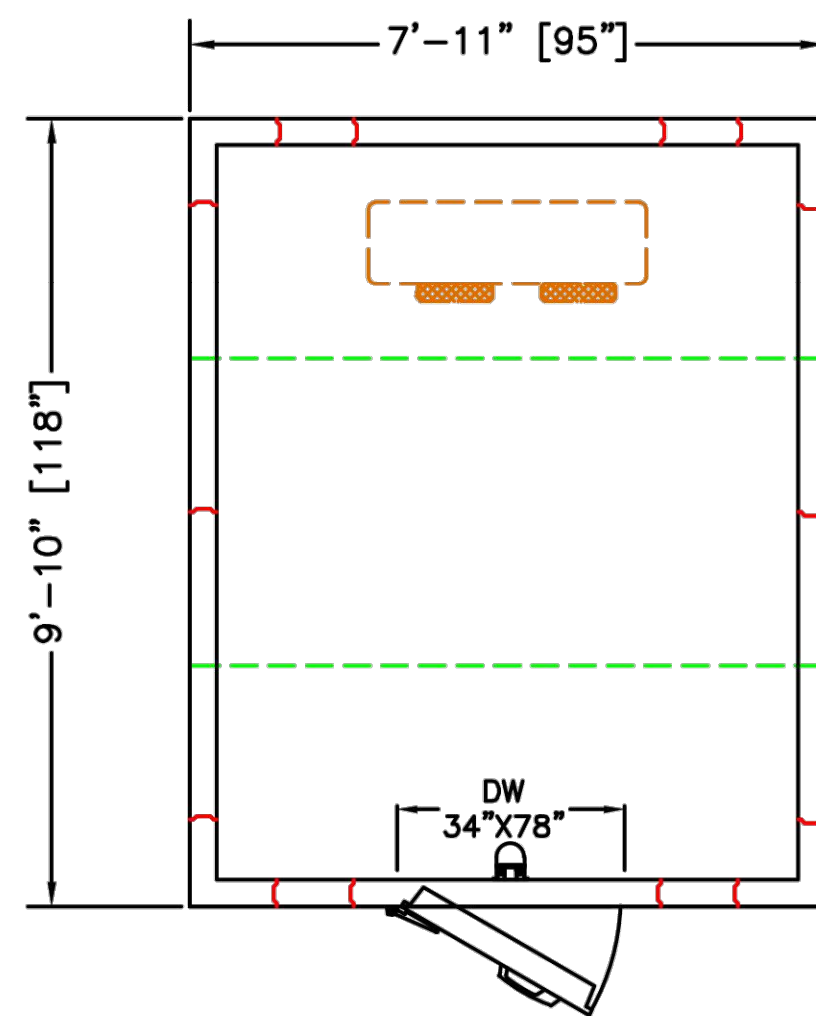


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 Drawn By **TQ**  
 App'd By **AG**  
 Sheet Title

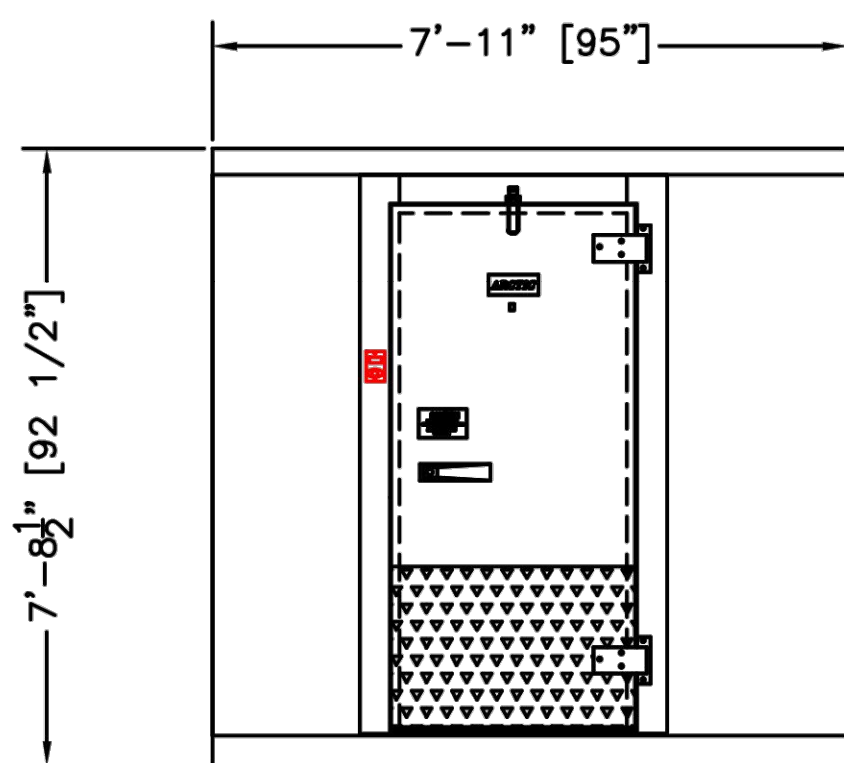




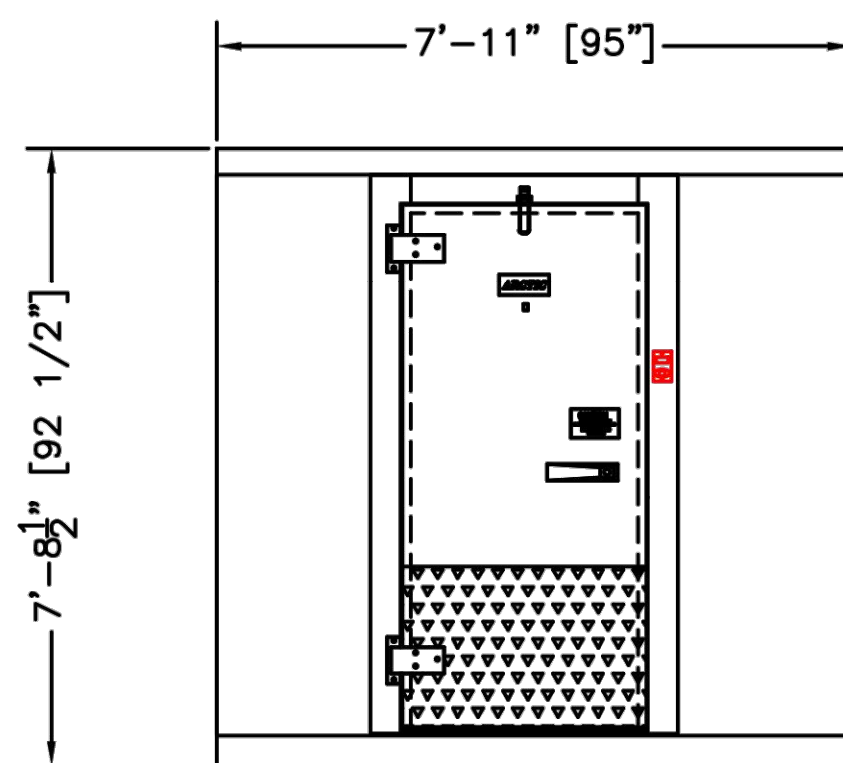
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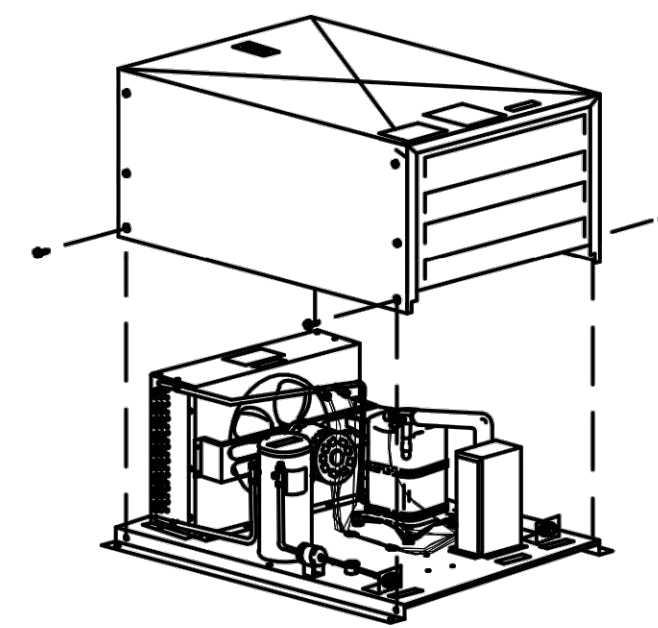
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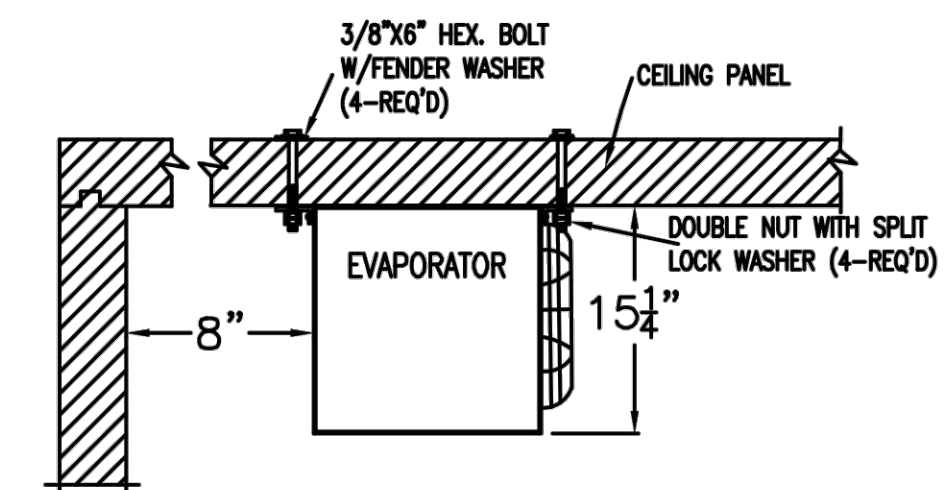
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ELEVATION  
LEFT HINGE



CONDENSING UNIT  
DETAIL



EVAPORATOR MOUNTING DETAIL  
(MOUNTING HARDWARE  
BY OTHERS)

PRODUCT SPECIFICATIONS	
MODEL:	BL810-F-R
WALK-IN SPECIFICATION	
INTERIOR/EXTERIOR FINISH	26 GAUGE MILL EMBOSSED ACRYLUME OR 26 GAUGE STUCCO EMBOSSED GALVANIZED STEEL
ELECTRICAL (VOLTS/Hz/PH)	115/60/1
MAX AMP.	0.8
EVAPORATOR SPECIFICATION	
ELECTRICAL (VOLTS/Hz/PH)	230/60/1
AMPS	10.8
WEIGHT (LBS)	58
CONDENSOR SPECIFICATION	
ELECTRICAL (VOLTS/Hz/PH)	208-230/60/1
AMPS	32.2
WEIGHT (LBS)	219
WALK-IN AND REFRIGERATION FREIGHT	
TOTAL SHIPPING WEIGHT (LBS)	1453
MAXIMUM PALLET SIZE	48" X 96" X 102" HIGH
NUMBERS OF PALLETS	2

MODEL: BL810-F-R
INDOOR-WITH FLOOR
FREEZER -10°F
REMOTE PRE-ASSEMBLED REFRIGERATION

CUSTOMER APPROVAL

DATE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

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E-3000-01

Intertek  
CONFORMS TO  
S-3000-01

EISA

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Issue Date **11/22/23**

Revisions	Date	Description	By
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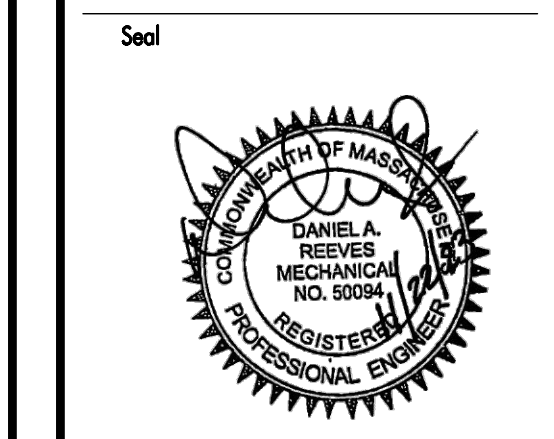
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Job Number	230174
Drawn By	TQ
App'd By	AG
Sheet Title	<b>Refrigeration Shop Drawing</b>
Sheet Number	<b>M200</b>

**GENERAL**

THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS, SHALL FORM A PART OF THIS SECTION OF THE SPECIFICATIONS. REFERENCE IS MADE TO REQUISITES FOR BIDDERS AND CONTRACTORS UNDER OTHER SECTIONS OF THESE SPECIFICATIONS, WHICH SHALL BE CONSIDERED BINDING, UNLESS OTHERWISE NOTED, UNDER THIS SECTION. ALL WORK TO BE ACCOMPLISHED IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS. ALL CHANGES MUST BE APPROVED IN WRITING BY PDMS. ALL COSTS INCURRED BY PDMS AS A RESULT OF UNAUTHORIZED CHANGES ARE THE RESPONSIBILITY OF THE INDIVIDUAL(S) MAKING THE CHANGE.

**SCOPE**

EACH CONTRACTOR SHALL THOROUGHLY ACQUAINT HIMSELF WITH THE CONSTRUCTION DETAILS BEFORE SUBMITTING HIS BID AS NO ALLOWANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE PACE OF THE GENERAL CONSTRUCTION.

**INSPECTION OF SITE**

ALL PROPOSALS SHALL ASSUME THAT CONTRACTOR IS FAMILIAR WITH JOB-SITE CONDITIONS AND UTILITY LOCATIONS AND THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.

**PERMITS**

ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE SUBCONTRACTOR INVOLVED, WHERE APPLICABLE.

**CODE REQUIREMENTS**

ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS OR AS DIRECTED BY THE OWNER, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, WHETHER SO SHOWN OR NOT, AND ALL MODIFICATIONS REQUIRED BY SUCH AUTHORITIES SHALL BE MADE BY THE CONTRACTOR WITHOUT ANY ADDITIONAL COST TO THE OWNER.

**MATERIALS AND WORKMANSHIP**

- 1. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURERS, AND UNLESS OTHERWISE SPECIFIED SHALL BE NEW, AND FREE FROM ANY DEFECTS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY UNLESS OTHERWISE SPECIFIED.
2. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. AND ON COMPLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED AND ALL DEBRIS PRESENT AS A RESULT OF THIS CONTRACT SHALL BE REMOVED FROM THE PREMISES.
3. ALL MATERIALS USED IN A PLENUM RETURN MUST BE PLENUM RATED (CABLES, CONDUIT, WIRE, ETC)
4. IF DRAWINGS CALL FOR THE REUSE OF EXISTING EQUIPMENT, THE T.G.C. SHALL VERIFY THAT ALL SUCH EQUIPMENT IS IN PROPER WORKING ORDER, OR TAKE THE NECESSARY STEPS TO ACCOMPLISH SUCH. IF REPLACEMENT IS REQUIRED, USE THE EQUIPMENT AND HARDWARE AS SPECIFIED ON THESE SCHEDULES OR AS CALLED OUT IN THE SPECIFICATIONS ON THIS SHEET. ALL SUCH ITEMS MUST MEET ALL GOVERNING CODES AND STANDARDS OF PRACTICE.

**CODES AND REGULATIONS**

EACH SUBCONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN OR SPECIFIED. IF A SUBCONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT A VARIANCE, HE SHALL PROMPTLY NOTIFY THE GENERAL CONTRACTOR AND THE TENANT IN WRITING. IF ANY SUBCONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO LAWS, ORDINANCES, RULES AND REGULATIONS AND WITHOUT GIVING SUCH NOTICE, THE SUBCONTRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

**PROTECTION OF WORK AND PROPERTY**

- 1. EACH SUBCONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL HIS WORK FROM DAMAGE AND SHALL PROTECT THE OWNER'S PROPERTY FROM INJURY OR LOSS ARISING FROM HIS WORK. HE SHALL MAKE GOOD ANY SUCH DAMAGE, INJURY, OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO CAUSES BEYOND HIS CONTROL AND NOT TO HIS FAULT OR NEGLIGENCE. HE SHALL ADEQUATELY PROTECT ADJACENT PROPERTY AS WELL.
2. EACH SUBCONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THE EMPLOYEES ON THE JOB AND SHALL COMPLY WITH ALL PROVISIONS OF FEDERAL, STATE AND LOCAL BUILDING CODES AND SAFETY LAWS TO PREVENT ACCIDENTS OR INJURY TO PERSONS ON OR ADJACENT TO THE PREMISES WHERE THE WORK IS BEING PERFORMED. EACH SUBCONTRACTOR SHALL MAINTAIN ALL INSURANCE REQUIRED TO PROTECT HIMSELF, OWNER AND TENANT FOR THE DURATION OF THE WORK AGAINST PROPERTY DAMAGE AND PUBLIC LIABILITY.

**CHANGES IN THE WORK**

THE TENANT, WITHOUT INVALIDATING THE CONTRACT, MAY ORDER EXTRA WORK OR MAKE CHANGES BY ALTERING, ADDING TO OR DEDUCTING FROM THE WORK, THE CONTRACT SUM BEING ADJUSTED ACCORDINGLY.

**COOPERATION**

ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CONJUNCTION WITH OTHER CONTRACTORS AND TRADES ON THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH CONTRACTOR AND TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS CONTRACTS. REFERENCE SHALL BE MADE TO THE OWNER FOR INSTRUCTIONS SHOULD ANY QUESTIONS ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS, FIXTURES, OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OF STRENGTH OF THE STRUCTURE.

**SUBSTITUTION OF MATERIALS**

MANUFACTURER'S NAMES ARE LISTED HEREIN TO ESTABLISH A STANDARD. THE PRODUCTS OF OTHER MANUFACTURERS WILL BE ACCEPTABLE, IF, IN THE OPINION OF THE TENANT, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED.

**SHOP DRAWINGS**

SHOP DRAWINGS AND CATALOGUE DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND SYSTEMS, AND SUCH OTHER ILLUSTRATIVE MATERIAL AS MAY BE CONSIDERED NECESSARY BY THE TENANT, SHALL BE SUBMITTED BY THIS CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION.

**DRAWINGS AND SPECIFICATIONS**

THE DRAWINGS SHOW DIAGRAMMATICALLY THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUIT FIXTURES, AND EQUIPMENT, AND THE CONTRACTOR SHALL VERIFY AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL AND ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM. SHOULD ANY CHANGES BE DEEMED NECESSARY BY THE CONTRACTOR IN ITEMS SHOWN ON CONTRACT DRAWINGS, THE SHOP DRAWINGS, DESCRIPTIONS, AND THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

**RESPONSIBILITY**

THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED IN HIS CONTRACT. HE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PROVIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS WORK, REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED.

**ELECTRICAL**

**ELECTRICAL - GENERAL**

- 1. FOR ADDITIONAL ELECTRICAL INFORMATION SEE ELECTRICAL DRAWINGS AND SPECIFICATIONS.
2. ALL BREAKERS TO BE BOLT DOWN TYPE.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT WITH PULL WIRE FOR TELEPHONE OR AS REQUIRED BY LOCAL PHONE CO.
4. THE ELECTRICAL CONTRACTOR SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE PLANS (ARCHITECTURAL, MEP, LANDLORD DRAWINGS AND DETAILS, ETC.) AND SHALL VERIFY EXISTING CONDITIONS AT THE JOB SITE.
5. ENTIRE INSTALLATION SHALL BE PREPARED IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEMS SHALL BE FULLY OPERATIONAL. ACCEPTANCE BY OWNER SHALL BE A CONDITION OF THE CONTRACT. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCES OR DISPUTES AMONG RESPECTIVE TRADES.
6. ALL NEW MATERIALS, WORKMANSHIP AND EQUIPMENT SHALL BE GUARANTEED FOR ONE YEAR AFTER SYSTEM ACCEPTANCE.
7. ALL WIRING SHALL BE IN CONDUIT AS REQUIRED BY LOCAL CODE AND SHALL BE CONCEALED WHERE POSSIBLE, WHERE EXPOSED, RUN IN STRAIGHT LINES PARALLEL AND/OR PERPENDICULAR TO BUILDING LINES.
8. ELECTRICAL CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED TO COMPLETE THE WORK.
9. ELECTRICAL CONTRACTOR SHALL NOT SCALE DRAWINGS FOR DIMENSIONS BUT SHALL CONTACT THE OWNERS REPRESENTATIVE REGARDING ANY DIMENSIONAL DATA REQUIRED AND SHALL VERIFY EXACT LOCATION AND MOUNTING HEIGHTS OF ALL FIXTURES NOT SPECIFIED ON DRAWINGS OR DETAILS WITH TENANT'S REPRESENTATIVE PRIOR TO INSTALLATION.
10. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES, LAMPS OR REPLACEMENTS THAT ARE NOT INDICATED ON DRAWINGS AS FURNISHED BY TENANT. REFER TO ELECTRICAL DRAWINGS AND SCHEDULES. ALL SUCH INSTALLATIONS AND HOOK-UPS ARE BY ELECTRICAL CONTRACTOR.
11. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL OR REMOVE AND REPLACE AS NECESSARY ALL DAMAGED LIGHT FIXTURES, LENSES, LOUVERS, BUFFERS, HOUSING, ETC., RECEIVED ON JOB IN DAMAGED OR DEFECTIVE CONDITION, WITH REPLACEMENT UNITS.
12. THE ELECTRICAL CONTRACTOR'S CONTRACT, ALONG WITH THE PREVIOUS LISTED ITEMS, SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: WIRING, PANEL BOXES, TRANSFORMERS, SWITCHES, DUPLEX RECEPTACLES, SIGN TIME CLOCK, JUNCTION BOXES AND LABOR.
13. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ANY AND ALL ITEMS NECESSARY TO COMPLETE THIS PROJECT AS DRAWN.
14. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ELECTRICAL EQUIPMENT AND WIRING IN ACCORDANCE WITH LANDLORD'S DESIGN CRITERIA.
15. IDENTIFY ALL EQUIPMENT AND APPARATUS WITH ENGRAVED BAKELITE NAMEPLATE OR IMPRESSED PLASTIC STRIP.
16. ELECTRICAL CONTRACTOR SHALL BALANCE THE LOADS ACROSS ALL PHASES AND SHALL PROVIDE A CIRCUIT DIRECTORY WITH TYPED CIRCUIT DESIGNATION CARD UNDER PLASTIC COVER ON THE INSIDE OF EACH PANEL DOOR. ELECTRICAL CONTRACTOR SHALL ALSO FURNISH AND INSTALL NAMEPLATE ON ALL DISCONNECT SWITCHES AND PANELS. ALL NEW ELECTRICAL MATERIALS, PRODUCTS AND EQUIPMENT (INCLUDING ALL COMPONENTS THEREOF) SHALL BEAR THE UNDERWRITER'S LABORATORIES LABEL AND MEET THE APPROPRIATE ASTM, NEC AND NEMA STANDARDS.
17. ONLY U.L. APPROVED CUT-OUTS WILL BE PERMITTED IN DEMISING AND OTHER FIRE RATED PARTITIONS FOR ELECTRICAL CIRCUITS/SWITCHES, AND FOR ALL UTILITY PENETRATIONS.
18. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE A TEMPORARY LIGHTING AND POWER SYSTEM FOR THE WORK OF ALL TRADES DURING CONSTRUCTION, AND SHALL REMOVE THE SAME PRIOR TO COMPLETION OF THE PROJECT.
19. TENANT'S ELECTRICAL CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY POWER WITH GROUND FAULT PROTECTION FOR ALL POWER EQUIPMENT USED IN THE PREMISES. ALL TEMPORARY SERVICES ARE TO BE REMOVED UPON COMPLETION OF THE WORK AND PRIOR TO OPENING.
20. ELECTRICAL WORK (RECESSED DUPLEX OUTLETS, ETC.) IS ALLOWED IN THE DIVIDING PARTITIONS BETWEEN TENANTS WHERE (1) NO WORK CONFLICTS WITH OR DAMAGES WORK PREVIOUSLY INSTALLED BY AN ADJACENT TENANT, AND (2) CODES AND BUILDING DEPARTMENT DO NOT RESTRICT PROPOSED WORK.
21. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE ANY AND ALL BLOCKING, CHAINS, HANGERS, ETC., AS NECESSARY TO SUPPORT LIGHTING SYSTEMS.
22. DOOR CHIME SYSTEM SHALL INCLUDE ALL WIRING, PUSHBUTTON AND 120/24V TRANSFORMER. VERIFY TONE REQUIRED WITH OWNER PRIOR TO INSTALLATION OF SYSTEM. TRANSFORMER IS TO BE LOCATED IN ACCESSIBLE CEILING SPACE.
23. ALL WIRING SHALL CONFORM TO THE STANDARDS OF THE NATIONAL ELECTRICAL CODE AND MEET ALL LOCAL REGULATIONS.
24. RECEPTACLES
24.A. CONVENIENCE OUTLETS/RECEPTACLES SHALL BE NEMA 5-15R RATED AT 125VAC/15A AS MANUFACTURED BY LEVITON, PASS AND SEYMOUR OR EQUAL. RECEPTACLE FACE SHALL BE WHITE WITH A WHITE COVER PLATE.
24.B. RECEPTACLES DEDICATED FOR EQUIPMENT SHALL BE NEMA 5-20R RATED AT 125VAC/20A AS MANUFACTURED BY LEVITON, PASS AND SEYMOUR OR EQUAL. RECEPTACLE FACE SHALL BE WHITE WITH A WHITE COVER PLATE.
24.C. OUTLETS/RECEPTACLES FOR DEDICATED CIRCUITS WITH ISOLATED GROUNDS SHALL BE 20A/125VAC, NEMA 5-20R AS MANUFACTURED BY PASS AND SEYMOUR (OR EQUAL) WITH ORANGE NYLON RECEPTACLE FACE AND MATCHING ORANGE THERMO PLASTIC WALL PLATE WITH THE WORDS "ISOLATED GROUND" ENGRAVED THEREON.
24.D. ALL CONVENIENCE DUPLEX RECEPTACLES AND OVERHEAD GRILLE SWITCH PLATES SHALL BE LOCATED 15" A.F.F. UNLESS OTHERWISE NOTED ON PLANS. (NOTE: MANAGERS DESK IS A PARTICULAR EXCEPTION)
24.E. GROUND FAULT INTERRUPTER RECEPTACLES SHALL BE AS FOLLOWS:
24.E.1. FOR INTERIOR APPLICATIONS: INSTALL GFI RECEPTACLE DESIGNATED TO TRIP AT 5 MA IN 1/30th OF A SECOND RATED AT 115VAC/20A WITH WHITE FACE AND WHITE COVER PLATE AS MANUFACTURED BY PASS AND SEYMOUR OR EQUAL.
24.E.2. FOR EXTERIOR APPLICATIONS, INSTALL GFI RECEPTACLE AS DESIGNED FOR TRIP AND RATING ABOVE. RECEPTACLE SHALL BE MOUNTED IN A BOX RATED NEMA 3R AND SHALL HAVE COVER PLATE AS MANUFACTURED BY PASS AND SEYMOUR OR EQUAL.
24.F. NO CONVENIENCE DUPLEX RECEPTACLES SHALL BE LOCATED ON CERAMIC TILE OR A MIRRORRED SURFACE UNLESS SPECIFICALLY REQUIRED BY CITY CODE.
25. LIGHT SWITCH BOXES - ENCLOSURE BOXES TO SERVE AS RECEIVER FOR VARIOUS LIGHT CONTROL SWITCHES (PER PLANS) MEET SAME CRITERIA AS FOR OUTLET/BOXES (ABOVE). ALL BOXES SHALL (AS A MINIMUM STANDARD) BE RATED FOR THE VOLTAGE AND AMPERAGE OF THE CIRCUIT BEING SWITCHED AND/OR MEET LOCAL CODES AND ORDINANCES.
26. LIGHT SWITCHES
26.A. GENERAL-USE SNAP SWITCHES AS INDICATED ON PLANS ARE AS MANUFACTURED BY LEVITON, PASS AND SEYMOUR OR EQUAL AND SHALL BE RATED AT 20A/125VAC OR 20A/277VAC AS REQUIRED. THE SWITCH FACE SHALL BE WHITE AND THE COVER PLATE SHALL BE WHITE UNLESS NOTED OTHERWISE.
26.B. SNAP-SWITCHES USED TO CONTROL OUTLETS/RECEPTACLES SHALL BE OF THE HEAVY-DUTY TYPE RATED AT THE VOLTAGE/AMPERAGE INDICATED ON PLANS AND DIAGRAMS AND SHALL BE FURTHER QUALIFIED TO CONTROL MOTOR LOADS UP TO 2 H.P., UNLESS NOTED OTHERWISE, AS MANUFACTURED BY PASS AND SEYMOUR OR EQUAL (WHITE BODY AND WHITE COVER PLATE)

**LIGHTING & POWER PANELS**

ALL LIGHT AND POWER PANELS SHALL BE GENERAL ELECTRIC, SQUARE 'D', SIEMENS OR EATON/CUTLER HAMMER UTILIZING BOLTED BREAKERS WITH INTEGRAL MAIN BREAKER.

**ELECTRICAL (Continued)**

**STEP DOWN TRANSFORMERS**

STEP DOWN TRANSFORMERS SHALL BE 600V CLASS DRY TYPE SINGLE OR THREE PHASE PER PLANS, GLASS "M" INSULATION WITH MULTIPLE TAPS ABOVE AND BELOW RATED VOLTAGE. (GENERAL ELECTRIC, SQUARE D, CUTLER HAMMER, ACME, OR EQUAL)

**CONDUIT**

- 1. ALL CONDUIT SHALL BE RUN CONCEALED IN FINISHED AREAS. ALL CONDUIT GROUND OR IN CONCRETE SLAB SHALL BE RIGID CONDUIT. ALL OTHER CONDUIT MAY BE "THIN WALL". ALL OUTLETS SHALL BE FLUSH MOUNTED. ALL CONDUITS SHALL BE RUN PARALLEL WITH AND AT RIGHT ANGLES TO THE BUILDING CONSTRUCTION AND SHALL BE LEVEL.
2. CONTRACTOR WILL PROVIDE NECESSARY CABLES, JUMPERS, ETC. TO INSURE CONTINUOUS GROUND IN CONDUIT SYSTEM.
3. TYPE BX CABLE AND NON-METALLIC CABLES ARE NOT PERMITTED. MC CABLE IS PERMITTED WHERE ALLOWED BY CODE AND LANDLORD REGULATIONS. ONLY EMT OR RIGID CONDUIT SHALL BE INSTALLED IN EXPOSED LOCATIONS.
4. P.O.S. STATIONS REQUIRE TRUE THREE WIRE DEDICATED AC LINES. THIS IS A TRUE GROUND NOT A NEUTRAL. CONDUIT MUST NOT BE USED AS THE ONLY GROUNDING MEANS.
5. ALL WIRING CONDUITS, ETC. REQUIRED FOR THE PROPER CONTROL OF THE HVAC SYSTEMS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUB-CONTRACTOR. THE MECHANICAL SUB-CONTRACTOR SHALL SUPPLY THE CONTROLS AND WIRING DIAGRAMS TO THE ELECTRICAL SUB-CONTRACTOR. ALL UNITS SHALL BE PROVIDED WITH INDIVIDUAL DISCONNECTS AT EACH UNIT IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE. ALL LINE VOLTAGE AND LOW VOLTAGE CONTROL WIRING SHALL BE IN CONDUIT PROVIDED AND INSTALLED BY THE E.C.
6. WHERE STORE IS ON ANY LEVEL BUT GROUND LEVEL, THE TENANT'S GENERAL CONTRACTOR SHALL RUN ALL CONDUIT FOR ELECTRICAL FLOOR OUTLETS, TELEPHONE FLOOR OUTLETS TIGHT AGAINST THE UNDERSIDE OF THE FLOOR. THE FLOOR STRUCTURAL SLAB SHALL BE COVERED AS REQUIRED TO INSTALL THESE ITEMS AT THE LOCATIONS SHOWN ON THE PLANS.
7. ALL DATA AND TELEPHONE WIRE SHALL BE INSTALLED IN CONDUIT. ALL WIRE SHALL BE COPPER.
8. CATEGORY 5 TELEPHONE WIRE SHALL BE LUCENT #BC-24AWG-4PR- CAT5 PLENUM RATED OR EQUAL.

**CONDUCTORS**

- 1. NO ALUMINUM WIRING IS ACCEPTABLE.
2. NO. 10 AND SMALLER, SOLID CONDUCTOR, COPPER TYPES, THW, THWN, R, RH, RHW, WITH IDEAL WING NUTS, SCOTCHLOCK CONNECTORS.
3. NO. 8 AND LARGER, STRANDED CONDUCTOR, COPPER TYPES, THW, THWN, RHW, WITH SOLDER LESS BOLTED PRESSURE CONNECTORS.
4. FIXTURE WIRING, WIRING IN CHANNELS OF FLUORESCENT FIXTURES SHALL BE EITHER RHH OR THERMOPLASTIC "APPLIANCE WIRE" - 105°C COPPER (CSA TYPE THW).
5. MINIMUM SIZE, SHALL BE NO. 12 AWG, TYPE THWN, EXCEPT FOR CONTROL CIRCUITS.
6. ALL LOW VOLTAGE WIRING MUST BE RUN IN CONDUIT.

**OUTLET BOXES**

OUTLET BOXES SHALL BE PRESSED STEEL KNOCKOUT TYPE CAST IRON WITH DRILLED, TAPPED, AND PLUGGED HOLES OR PVC. CAST IRON BOXES SHALL BE HOT DIPPED GALVANIZED OR SHERARIZED. ALL BOXES SHALL BE OF PROPER CODE SIZE FOR THE NUMBER OF WIRES OR CONDUITS PASSING THROUGH OR TERMINATING THEREIN. STANDARD SIZE SHALL BE 4" SQUARE.

BRASS GFI COVER PLATE SHALL BE LEGRAND #828GFCIC OR EQUAL.

TWO GANG BRASS COMBINATION SHALL BE LEGRAND #827B FLANGE OR EQUAL.

**EQUIPMENT IDENTIFICATION**

- 1. IDENTIFY ALL TRANSFORMERS, DISCONNECTS, PANELBOARDS, AND EQUIPMENT WITH PERMANENT ENGRAVED PHEVIC LABELS.
2. FURNISH A TYPED CIRCUIT DIRECTORY CARD IN ALL LIGHTING AND POWER PANELS.
3. RECEPTACLES SHALL BE PROVIDED WITH PERMANENT LABELS ON FACEPLATE INDICATING PANEL AND CIRCUIT.
4. LIGHT SWITCHES SHALL BE PROVIDED WITH PERMANENT LABELS ON FACEPLATE INDICATING PANEL, CIRCUIT, AREA SERVED AND TYPE OF LIGHT (CAN LIGHTS, TRACK, ETC.)
5. ALL JUNCTION BOXES SHALL BE PROVIDED WITH PERMANENT LABELS FOR CIRCUIT NUMBERS CONTAINED IN JUNCTION BOX.
6. WHERE AN ITEM IS TO BE PAINTED AND LABELED, THE LABEL SHALL BE APPLIED AFTER PAINTING.
7. LABELS THAT ARE VISIBLE IN CUSTOMER AREA SHALL BE 1/4" HEIGHT FONT IN A CONTRASTING COLOR ON A CLEAR BACKGROUND.

**GUARANTEE**

ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY TENANT SHALL BE A CONDITION OF THIS CONTRACT. ALL WORK FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED BY THIS SUBCONTRACTOR WITHOUT ADDITIONAL CHARGE TO THE TENANT.

**TEMPORARY SERVICES**

THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SPECIFIC ITEMS OF TEMPORARY SERVICES(AS REQUIRED):

- 1. TELEPHONE - THE TENANT'S GENERAL CONTRACTOR SHALL INSTALL A JOB SITE TELEPHONE AND NOTIFY TENANT AS LISTED ON COVER SHEET OF THE TELEPHONE NUMBER AND THE NAME OF THE SUPERINTENDENT.
2. TEMPORARY ELECTRICITY - TEMPORARY ELECTRIC SERVICE REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE FURNISHED AND PAID FOR BY THE CONTRACTOR WHO SHALL FURNISH, INSTALL, AND MAINTAIN ALL TEMPORARY OVERHEAD CONSTRUCTION, METERS, DROPS, AND OTHER WIRING AND FITTINGS FOR BOTH LIGHT AND POWER AT LOCATIONS REQUIRED IN THE WORK AND SHALL BEAR THE COST OF MAKING THE SERVICE CONNECTIONS. BEFORE FINAL ACCEPTANCE, TEMPORARY ELECTRICAL SERVICE FACILITIES INSTALLED BY THE CONTRACTOR SHALL BE REMOVED, AND THE SERVICE CONNECTIONS SEVERED IN ACCEPTABLE MANNER.
3. COST OF LANDLORD PROVIDED UTILITY SERVICES - IF THE LANDLORD ELECTS TO PROVIDE TEMPORARY UTILITY SERVICES, THE CONTRACTOR WILL BE SO INFORMED BY THE TENANT. THE CONTRACTOR SHALL MAKE PROVISIONS OR COORDINATE WITH LANDLORD'S GENERAL CONTRACTOR TO PAY THE COST OF SAID TEMPORARY CONSTRUCTION AND UTILITY SERVICES.

NOTE FOR TENANT GENERAL CONTRACTOR: IT IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES & SPECIFICATIONS LISTED ON THIS SHEET AS THEY MAY PERTAIN TO THE SPECIFIC JOB. REFERENCE SHEET M100 FOR AND/OR OVERRIDING SPECIFICATIONS.

**ELECTRICAL RESPONSIBILITIES**

Table with columns: E - EXISTING, L - LANDLORD, C - TENANT'S GENERAL CONTRACTOR, T - TENANT. Rows include MAIN ELECTRICAL SERVICE, ELECTRICAL EQUIPMENT, LIGHT FIXTURES & LAMPS, WIRING & CONNECTIONS, and TELEPHONE SYSTEM.

**ELECTRICAL LEGEND**

Legend table mapping symbols to electrical components: HOMERUN TO PANEL, TELEPHONE SIGNAL CONDUCTORS, 12"x12" PULL BOX, MOTOR RATED SWITCH, WALL SWITCH, OCCUPANCY SENSING SWITCH, DIMMER SWITCH, 2-POLE, 3-WIRE, 20 AMP SIMPLEX RECEPTACLE, QUADRAPLEX RECEPTACLE OUTLET, RECESSED FLOOR SIMPLEX, GROUND FAULT INTERRUPTER, WEATHER-PROOF, TELEPHONE OUTLET, DATA OUTLET, MOTOR, SMOKE DETECTOR, NIGHT LIGHT, EMERGENCY LIGHT, SIMPLEX RECEPTACLE, DUPLEX RECEPTACLE, USB, CTR, SW, HEAVY DUTY OUTLET, PANEL BOARD, JUNCTION BOX, NON-FUSED DISCONNECT SWITCH, FUSED DISCONNECT SWITCH, EQUIPMENT CONNECTION.

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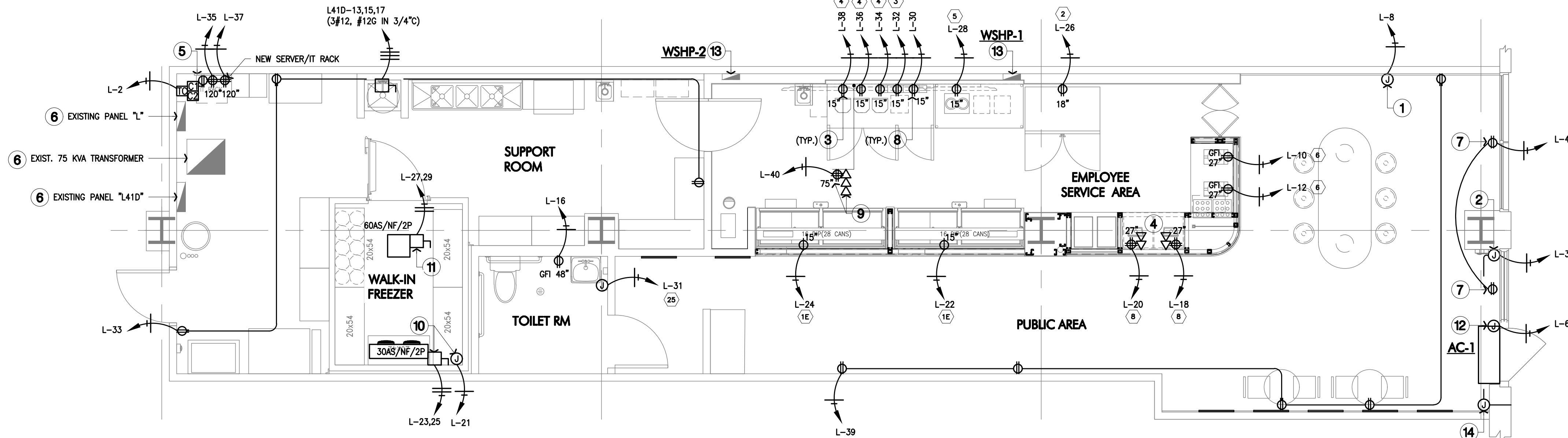
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MOUNTING HEIGHT OF ALL APPLIANCE RECEPTACLES AND DATA JACKS SHALL BE 30" A.F.F. TO CENTERLINE OF RECEPTACLE/JACK UNLESS NOTED OTHERWISE. RECEPTACLE PLACEMENT SHALL BE COORDINATED WITH EQUIPMENT POWER CORD LENGTH AND TABLE GROMMET LOCATIONS.

ALL DATA/POWER RECEPTACLES AND COVER PLATES SHALL BE WHITE IN COLOR.

PER NEC 210.8(B), ALL SINGLE PHASE 15A & 20A RECEPTACLES IN SERVICE AREAS SHALL BE GFI.

SHADED CIRCUIT BREAKERS INDICATE CIRCUIT THAT ARE EXISTING TO REMAIN.



**1 Power Plan**  
SCALE: 1/4" = 1'-0"

**PANEL "L41D" (EXISTING)**

REMARKS	ITEM	CONT.	APPL.	N.C.	A	B	C	N.C.	APPL.	CONT.	ITEM	REMARKS
	1										SPARE	2
	3	WSHP-1									SPARE	4
	5										SPARE	6
	7										SPARE	8
	9	WSHP-2									SPARE	10
	11										SPARE	12
	13										SPARE	14
	15	WH-1									SPARE	16
	17										SPARE	18
	19	SPARE									SPARE	20
	21	SPARE									SPARE	22
	23	SPARE									SPARE	24
	25	SPARE									SPARE	26
	27	SPARE									SPARE	28
	29	SPARE									SPARE	30
	31	SPARE									SPARE	32
	33	SPARE									SPARE	34
	35	SPARE									SPARE	36
	37	SPARE									SPARE	38
	39	SPARE									SPARE	40
	41	SPARE									SPARE	42
											75 KVA TRANSFORMER	EX 3P/125A
TOTALS		0	0	28634				6970	1907	2909		TOTALS
PHASE A		15715	830	3917								2392
PHASE B		22652	1200	7874								15715
PHASE C		19813	879	8116								
TOTALS		58480										
CONTINUOUS LOADS		2999		1.25							3536	
APPLIANCE LOADS		19907		0.85							12940	
NONCONTINUOUS LOADS		35664		1							35664	
CONNECTED LOAD		58480									58480	
											WATT S AT 480 VOLTS / 3 PHASE	
											(6) AMPERES	

PHASE A	PHASE B	PHASE C	TOTALS
15715	22652	19813	58480
830	1200	879	
3917	7874	8116	
10988	15878	10816	
HIGHEST PHASE			2392
LOWEST PHASE			15715

SERVICE IS 277/480 VOLT; 3 PHASE; 4 WIRE  
PANEL IS RATED AT 225 AMPS WITH 225 AMP MAIN CIRCUIT BREAKER

L = BREAKER WITH LOCK ON DEVICE  
T = CIRCUIT CONTROLLED BY A THERM CONTACTOR  
+ = DEDICATED CIRCUIT WITH AN ISOLATED GROUND  
CIRCUIT BREAKER RATINGS: 65,000 A.C. (EXISTING)  
ALL CIRCUIT BREAKERS ARE 1P/20A SWITCHING DUTY BOLT-ON, UNLESS NOTED OTHERWISE.  
ALL CIRCUIT BREAKERS FOR HVAC EQUIPMENT SHALL BE "WC" TYPE.

**PANEL "L" (EXISTING)**

REMARKS	ITEM	CONT.	APPL.	N.C.	A	B	C	N.C.	APPL.	CONT.	ITEM	REMARKS
	1	SPARE									TIMECLOCK/PHONE BOARD	2 L
	3	STOREFRONT SIGN									SHOW WINDOW RECEPTS	4 T
	5	SALE LIGHTING									AIR CURTAIN	5
	7	SUPPORT & BOYLIGHTING									INTERIOR SIGN	8 T
	9	SPARE									#6 - WAFFLE MAKER	10 GFI
	11	SPARE									#6 - WAFFLE MAKER	12 GFI
	13	SPARE									SPARE	14
	15	SPARE									TOILET RECEPT	16
	17	SPARE									#6 - POS	18 *
	19	SPARE									#6 - POS	20 *
	21	WALK-IN CONTROL									#1E - ICE CREAM FREEZER	22 GFI
	23	EVAPORATOR									#1E - ICE CREAM FREEZER	24 GFI
	25	EVAPORATOR									#2 - REACH-IN FREEZE	26 GFI
	27	CONDENSOR									#5 - SUNDGE STATION	28 GFI
	29	RECEPT									RECEPT	30 GFI
	31	#25 - HAND DRYER									#3 - DOOR UC FRIIDGE	32 GFI
	33	SUPPORT RECEPTS									#4 - MILKSHAKE MACHINE	34 GFI
	35	IF RACK									#4 - MILKSHAKE MACHINE	36 GFI
	37	IF RACK									#4 - MILKSHAKE MACHINE	38 GFI
	39	PUBLIC RECEPTS									DIGITAL MENU	40
	41	SPARE									SPARE	42 EX IP/15A
TOTALS		2509	9182	3510				3460	10725	400		TOTALS
PHASE A		8817	830	3917								12054
PHASE B		12654	1200	7874								6987
PHASE C		10813	879	8116								
TOTALS		29286										
CONTINUOUS LOADS		2999		1.25							3536	
APPLIANCE LOADS		19907		0.85							12940	
NONCONTINUOUS LOADS		35664		1							35664	
CONNECTED LOAD		29786									23546	
											WATT S AT 208 VOLTS / 3 PHASE	
											(6) AMPERES	

SERVICE IS 120/208 VOLT; 3 PHASE; 4 WIRE  
PANEL IS RATED AT 225 AMPS WITH 225 AMP MAIN CIRCUIT BREAKER

L = BREAKER WITH LOCK ON DEVICE  
T = CIRCUIT CONTROLLED BY A THERM CONTACTOR  
+ = DEDICATED CIRCUIT WITH AN ISOLATED GROUND  
CIRCUIT BREAKER RATINGS: 22,000 A.C. (EXISTING)  
ALL CIRCUIT BREAKERS ARE 1P/20A SWITCHING DUTY BOLT-ON, UNLESS NOTED OTHERWISE.  
ALL CIRCUIT BREAKERS FOR HVAC EQUIPMENT SHALL BE "WC" TYPE.

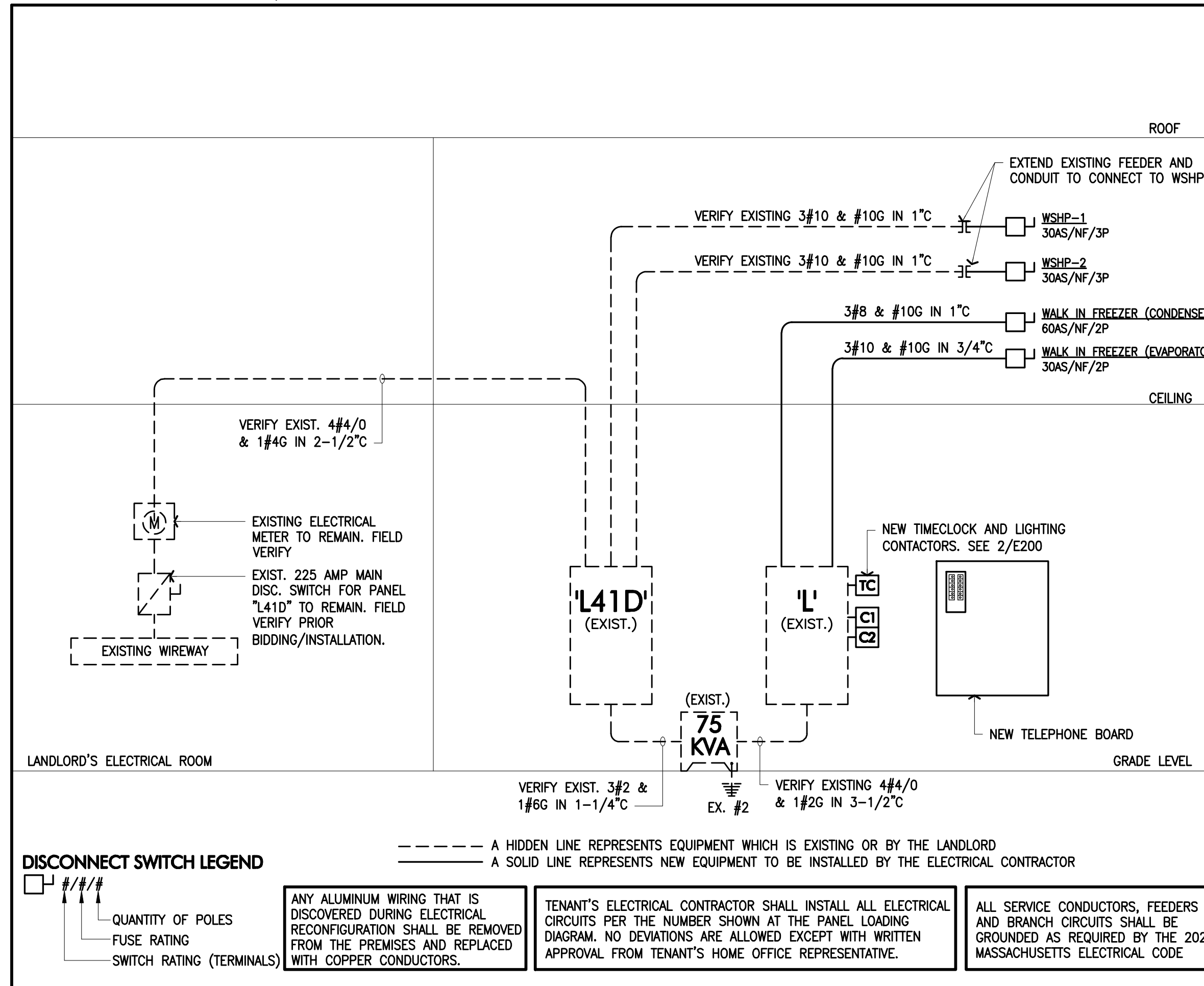
**ELECTRICAL LOAD SUMMARY**

LOAD DESCRIPTION	CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
LIGHTING	1.4	1.25	1.8
SIGNAGE	1.6	1.25	2.0
SHOW WINDOW RECEPTS	0.4	1.0	0.4
APPLIANCES	19.9	0.65	12.9
RECEPTACLES	6.4	1.0	6.4
HVAC	20.7	1.0	20.7
WATER HEATER	8.0	1.0	8.0
MISCELLANEOUS	0	1.0	0.0
TOTAL (KVA)			52.2
SERVICE SIZE @ 277/480V, 3-PHASE, 4-WIRE (AMPS)			63

**SERVICE VOLTAGE DROP @ PANEL "L41D":**

225 AMPS, LENGTH = 30 FT, #4/0 CU WIRE, 3-PHASE  
VOLTAGE DROP = 2 X LENGTH X RESISTANCE PER 1000 FT X CURRENT X 0.866  
1000  
VOLTAGE DROP = 2 X 30 FT X 0.0628 OHM/1000 FT X 225 AMPS X 0.866  
1000  
VOLTAGE DROP = .73 VOLTS LINE TO LINE = .15% @ 480V 3-PHASE

**ELECTRICAL RISER DIAGRAM**



**DISCONNECT SWITCH LEGEND**

--- A DOTTED LINE REPRESENTS EQUIPMENT WHICH IS EXISTING OR BY THE LANDLORD  
— A SOLID LINE REPRESENTS NEW EQUIPMENT TO BE INSTALLED BY THE ELECTRICAL CONTRACTOR

□ QUANTITY OF POLES  
/ FUSE RATING  
/ SWITCH RATING (TERMINALS)

ANY ALUMINUM WIRING THAT IS DISCOVERED DURING ELECTRICAL RECONFIGURATION SHALL BE REMOVED FROM THE PREMISES AND REPLACED WITH COPPER CONDUCTORS.

TENANT'S ELECTRICAL CONTRACTOR SHALL INSTALL ALL ELECTRICAL CIRCUITS PER THE NUMBER SHOWN AT THE PANEL LOADING DIAGRAM. NO DEVIATIONS ARE ALLOWED EXCEPT WITH WRITTEN APPROVAL FROM TENANT'S HOME OFFICE REPRESENTATIVE.

ALL SERVICE CONDUCTORS, FEEDERS AND BRANCH CIRCUITS SHALL BE GROUNDED AS REQUIRED BY THE 2023 MASSACHUSETTS ELECTRICAL CODE

**KEYED NOTES**

- PROVIDE ROUGH-IN FOR FINAL CONNECTION TO ILLUMINATED SIGN. PROVIDE DISCONNECT SWITCH AS REQUIRED BY N.E.C. 600. COORDINATE LOCATION WITH SIGN CONTRACTOR AND ARCHITECT.
- NEW ROUGH-IN FOR ILLUMINATED STOREFRONT SIGN. PROVIDE FINAL CONNECTION TO NEW SIGN. CIRCUIT CONTROLLED BY NEW TIME CLOCK CONTROLLED CIRCUIT.
- ALL RECEPTACLES ALONG SALES AREA WALL ARE TO BE GFI AND MOUNTED UNDER COUNTER WITHIN 24" OF APPLIANCE SERVED.
- NEW 4 (2 FOR POS, 1 FOR PHONE AND 1 FOR AUDIO CONTROLS) CAT-6 DATA JACK AT POINT OF SALE STATION FOR CONNECTION TO HUB AND TELEPHONE BOARD AT IT RACK.
- NEW TELEPHONE BOARD. PROVIDE CONNECTIONS FOR AND SUPPORTING COMPONENTS FOR NEW POINT OF SALE SYSTEM.
- EXISTING ELECTRICAL EQUIPMENT TO REMAIN. REFER TO RISER DIAGRAM AND PANEL SCHEDULES ON THIS SHEET FOR ADDITIONAL INFORMATION.
- PROVIDE CEILING MOUNTED RECEPTACLES IN SHOW WINDOW AREA. RECEPTACLE SHALL BE ROUTED THROUGH NEW TIME CLOCK TO NEW CIRCUIT AS INDICATED.
- ALL OUTLET ELEVATION HEIGHT SHALL BE CONFIRMED WITH THE EQUIPMENT SCHEDULE.
- QUAD RECEPTACLE, DUPLEX AND DATA JACKS FOR POWER TO DIGITAL MENU BOARD. CONTRACTOR SHALL VERIFY LOCATION AND REQUIREMENTS IN FIELD WITH VENDOR PRIOR TO INSTALLATION. COORDINATE RECEPTACLE LOCATION WITH MOUNTING BRACKET.
- GC SHALL SUPPLY POWER, INTERCONNECTING SERVICES AND ALL FINAL CONNECTIONS TO WALK-IN FREEZER, COMPRESSORS, CONDENSERS, EVAPORATORS SOLENOID VALVES & SWITCHES REQUIRED FOR A COMPLETE OPERATING SYSTEM. FURNISH AND INSTALL A DISCONNECT SWITCH FOR COMPRESSOR. WALK-IN FREEZER LIGHTS SHALL BE FURNISHED WITH WALK-IN AND INSTALLED & FULLY CONNECTED BY THE ELECTRICAL CONTRACTOR. VERIFY ELECTRICAL REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
- DISC. SWITCH FOR WALK-IN FREEZER CONDENSING UNIT MOUNTED ABOVE UNIT. VERIFY ELECTRICAL REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
- PROVIDE POWER AND DOOR JAMB SWITCH TO AIR CURTAIN (AC-1). SEE SHEET M100 FOR AIR CURTAIN SCHEDULE.
- EXISTING WATER SOURCE HEAT PUMP SHALL BE REPLACED WITH NEW WATER SOURCE HEAT PUMP. VERIFY EXISTING DISCONNECT, FEEDER AND CONDUIT ARE IN GOOD CONDITION AND MEET NEW REQUIREMENTS. VERIFY IN FIELD PRIOR TO WORK.
- BLADE SIGN TO BE CONNECTED TO STOREFRONT SIGN CIRCUIT.

**GENERAL NOTES**

- "VERIFY IN FIELD" OR "EXISTING" MEANS THE CONTRACTOR IS TO CONFIRM THE ITEM SHOWN ON THE DRAWING (L.E.EQUIPMENT, DUCT, WIRE, ETC.) EXISTS AT THE SITE AND IS IN GOOD WORKING CONDITION. SHOULD THE CONTRACTOR FIND THAT THE EQUIPMENT, DUCT, WIRE, ETC. IS NOT THE EQUAL TO THAT SHOWN ON THE DRAWING, IT IS TO BE REPLACED. IF THE CONTRACTOR HAS ANY QUESTION ABOUT WHETHER IT IS EQUAL TO WHAT IS SHOWN ON THE DRAWING, THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER AND TENANT'S PROJECT MANAGER FOR APPROVAL. CONTRACTOR IS TO NOTIFY TENANT'S PROJECT MANAGER AND DESIGN ENGINEER IN WRITING OF ALL REPLACEMENT ITEMS PRIOR TO CONSTRUCTION.
- WHERE EXISTING EQUIPMENT (LIGHTS, DIFFUSERS, TOILETS, ETC.) ARE TO BE REUSED, WHETHER IT IS RELOCATED OR REUSED IN THE EXISTING LOCATION, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE RENOVATION OF THE STORE. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER. ALL ITEMS TO BE THOROUGHLY CLEANED, IF REQUIRED, PAINTED, AND ANY OTHER MAINTENANCE NEEDED TO BRING EQUIPMENT UP TO LIKE NEW CONDITION. THIS INCLUDES RELAMPING ALL LIGHTS REUSED.
- THE GENERAL CONTRACTOR AND MECHANICAL SUB-CONTRACTOR SHALL VERIFY AND INCLUDE IN THEIR FINAL BID ALL LIFE SAFETY, SMOKE/FIRE ALARM SYSTEMS NEEDED TO BRING TENANT'S SPACE COMPATIBLE WITH THE LANDLORD'S SYSTEM, AND CURRENT WITH LOCAL AND STATE CODES. FAILURE TO DO SO SHALL RESULT IN NO EXPENSE TO THE TENANT.
- MOUNT ALL RECEPTACLES AT 18" A.F.F. TO CENTERLINE OF RECEPTACLE UNLESS OTHERWISE NOTED.
- UNGROUNDING CONDUCTORS IN THE PREMISE WIRING SUPPLIED FROM MORE THAN ONE NOMINAL VOLTAGE SYSTEM SHALL BE IDENTIFIED BY SIGN PERMANENTLY POSTED AT EACH BRANCH CIRCUIT PANEL BOARD OR SIMILAR DISTRIBUTION EQUIPMENT AS DESCRIBED IN THE NATIONAL ELECTRIC CODE, §210.5(C).

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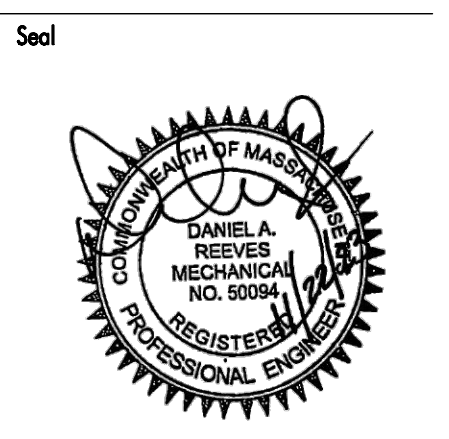
Issue Date **11/22/23**

Revisions	Date	Description	By
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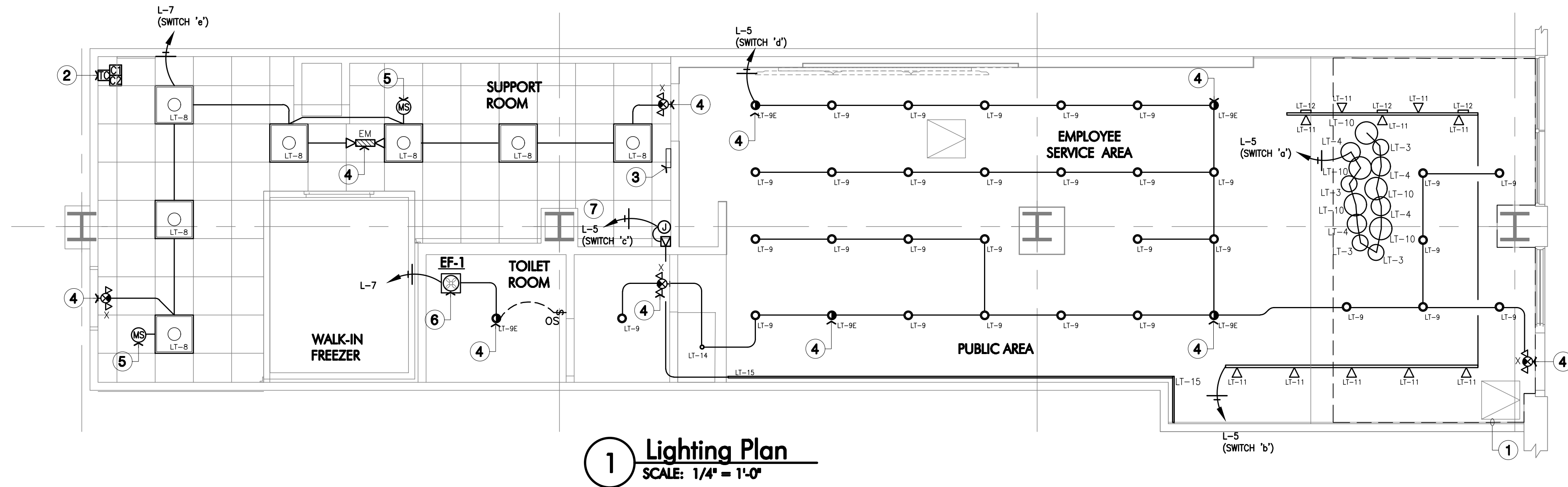
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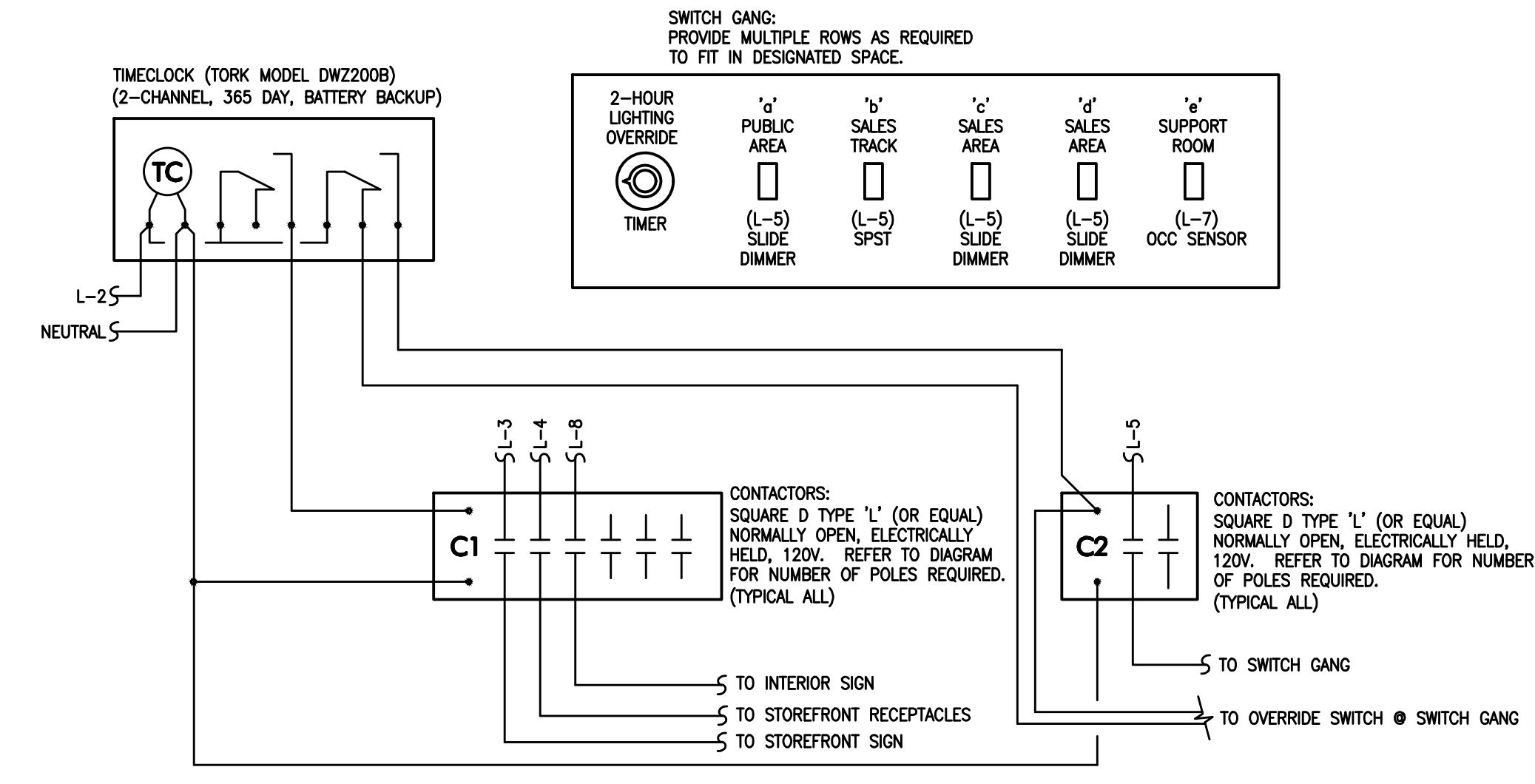


Job Number **230174**  
Drawn By **TQ**  
App'd By **DAR**  
Sheet Title

**Lighting Plan**  
Sheet Number  
**E200**



**1 Lighting Plan**  
SCALE: 1/4" = 1'-0"



- NOTES:
- CONTRACTOR SHALL PROGRAM ON/OFF TIMES AS DECIDED BY TENANT OR REQUIRED BY LANDLORD.
  - SEE PLAN VIEW FOR LOCATIONS OF TIMECLOCK, CONTACTORS, AND SWITCH GANG.
  - PROVIDE LABEL OVER OVERRIDE SWITCH STATING "2-HOUR LIGHTING OVERRIDE". LABEL SHALL BE BAKELITE PLASTIC WITH 1/4" LETTERS.

**2 Lighting Control Diagram**  
SCALE: NTS

LIGHTING FIXTURE SCHEDULE							LAMP SCHEDULE							
DESCRIPTION	QUAN.	TYPE	MANUFACTURER	VOLT.	CATALOGUE NO.	REF NOTE	MOUNTING				QUAN.	LAMPS /FIXT.	TOTAL WATTS	LAMP SIZE
							REC	SURF	PEND	WALL				
GLOBE PENDANT LIGHT	4	LT-3	PROGRESS LIGHTING	120	P4402-29 - 10" DIA SHADE WHITE FINISH/CHORD	3,5			*		1	1	5	PROVIDE 5W TCP GLOBE OR EQ
GLOBE PENDANT LIGHT	4	LT-4	PROGRESS LIGHTING	120	P4403-29 - 12" DIA SHADE WHITE FINISH/CHORD	3,5			*		1	1	5	PROVIDE 5W TCP GLOBE OR EQ
2X2 RECESSED MTD	7	LT-8	GREENCREATIVE	120-277	30PAN22DIM/830 WITH 2X2 RECESSED MTD KITS	5		*			1	1	30	INCLUDED
4" DOWNLIGHT	30	LT-9	CONTECH	120	R4NC2-30K-12-D-C4321-CLR-P	4,5	*				1	1	16	INCLUDED
EMERGENCY 4" DOWNLIGHT	5	LT-9E	CONTECH	120	R4NC2-30K-12-D-EM-C4321-CLR-P	4,5,7	*				1	1	16	INCLUDED
GLOBE PENDANT LIGHT	5	LT-10	PROGRESS LIGHTING	120	P4406-29 - 14" DIA SHADE WHITE FINISH/CHORD	3,5			*		1	1	5	PROVIDE 5W TCP GLOBE OR EQ
TRACK LIGHT	10	LT-11	LUMENTURE	120	T65-30H-1500-40-W-L	2,5		*			1	1	18	INTEGRAL 18W LED, 3000K, 90+ CRI, 1500 LUMEN
TRACK LIGHT - WALLWASHER	3	LT-12	LUMENTURE	120	TWW160-30H-1600-W-L	2,5		*			1	1	17	INTEGRAL 17W LED, 3000K, 90+ CRI, 1600 LUMEN
ENTRA 2" NICHE LED DOWNLIGHT	1	LT-14	VISUAL COMFORT & CO	120	ENN2R-LO-9-30-A-D-I-12-W	4,5	*				1	1	7.5	INCLUDED
LINEAR IN ARCH COVE - SURFACE FIXTURE	2	LT-15	SCOUT LIGHTING	120	SS-S-FM-SH-30-W-EF-0-I-N-CUSTOM	2,4,5,8		*			1	1	9.8/FT	INCLUDED
TRACK	24	T	LIGHTOLIER	120	600#NWH	5,6		*						N/A
EMERGENCY/EXIT LIGHT COMBO	4	X	COOPER LIGHTING	120	AP70-RWH	5,7		*						--- INCLUDED ---
EMERGENCY LIGHT	1	EM	COOPER LIGHTING	120	SEL17	5,7	*							--- INCLUDED ---

- NOTES:
- FIXTURE IS EXISTING, CLEAN AND TEST FOR PROPER OPERATION. REPLACE/REPAIR AS REQUIRED.
  - ALL LIGHTING IN SERVICE AREAS AND FOOD STORAGE AREAS MUST BE SHIELDED. EXPOSED BULBS ARE NOT ACCEPTABLE, UNLESS LABELED "SHATTERPROOF".
  - VERIFY CHORD LENGTH REQUIRED PRIOR TO ORDERING.
  - FIXTURE SHALL BE CONTROLLED VIA DIMMER SWITCH.
  - IF ALTERNATIVE FIXTURES PROVIDED, FIXTURES SHALL BE REQUIRED SIMILAR AND VAN LEEUWEN'S APPROVAL PRIOR TO ORDERING.
  - REFERENCE PLAN FOR LENGTH & QUANTITY OF TRACK. PROVIDE WITH ALL REQUIRED CONNECTORS, LIVE ENDS & DEADENDS.
  - PROVIDE LIGHT FIXTURES WITH BATTERY BACKUP.
  - REFERENCE PLAN FOR LENGTH OF LIGHT. PROVIDE WITH ALL REQUIRED CONNECTORS AND ILLUMINATED CORNER AS REQUIRED.

**KEYED NOTES**

- PRIMARY DAYLIGHT ZONE: NO DAYLIGHT CONTROLS REQUIRED FOR THIS AREA PER 2020 MASSACHUSETTS CEC C405.2.3 EXCEPTION #2 SIDELIT DAYLIGHT ZONES ON FIRST FLOOR ABOVE GRADE IN GROUP M OCCUPANCY.
- PROVIDE NEW LIGHTING CONTACTORS AND TIME CLOCK FOR CONTROL OF ALL LIGHTING WITHIN TENANT SPACE EXCEPT EMERGENCY FIXTURES.
- PROVIDE NEW SWITCH BANK. EXTEND CONTROL CIRCUITS FOR LIGHTING TO NEW SWITCH LOCATION. SEE DETAIL 2/E200.
- PROVIDE NEW EMERGENCY LIGHTING AS SCHEDULED. ALL EMERGENCY LIGHTING SHALL BE ENERGIZED AHEAD OF ANY SWITCHING. ALL EMERGENCY FIXTURES SHALL BE EQUIPPED WITH BATTERY FOR 90 MINUTES MINIMUM OPERATION DURING POWER FAILURE.
- PROVIDE NEW DUAL TECHNOLOGY SOUND/MOTION SENSOR WITH BUILT-IN OVER RIDE FOR CONTROL OF FIXTURES WITHIN SUPPORT ROOM.
- EXTEND POWER AND CONTROL CIRCUIT TO TOILET ROOM EXHAUST FAN. REFER TO MECHANICAL SHEET FOR FAN SPECIFICATIONS.
- PROVIDE JUNCTION BOX AND TRANSFORMER MOUNTED HIGH IN STRUCTURE FOR POWER AND CONTROL OF SURFACE FIXTURE LT-15. COORDINATE ELECTRICAL REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUGH-IN.

**GENERAL NOTES**

- "VERIFY IN FIELD" OR "EXISTING" MEANS THE CONTRACTOR IS TO CONFIRM THE ITEM SHOWN ON THE DRAWING (EQUIPMENT, DUCT, WIRE, ETC.) EXISTS AT THE SITE AND IS IN GOOD WORKING CONDITION. SHOULD THE CONTRACTOR FIND THAT THE EQUIPMENT, DUCT, WIRE, ETC. IS NOT THE EQUAL TO THAT SHOWN ON THE DRAWING, IT IS TO BE REPLACED. IF THE CONTRACTOR HAS ANY QUESTION ABOUT WHETHER IT IS EQUAL TO WHAT IS SHOWN ON THE DRAWING, THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER AND TENANT'S PROJECT MANAGER FOR APPROVAL. CONTRACTOR IS TO NOTIFY TENANT'S PROJECT MANAGER AND DESIGN ENGINEER IN WRITING OF ALL REPLACEMENT ITEMS PRIOR TO CONSTRUCTION.
- WHERE EXISTING EQUIPMENT (LIGHTS, DIFFUSER, TOILETS, ETC) ARE TO BE REUSED, WHETHER IT IS RELOCATED OR REUSED IN THE EXISTING LOCATION, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE RENOVATION OF THE STORE. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER. ALL ITEMS TO BE THOROUGHLY CLEANED, IF REQUIRED, PAINTED, AND ANY OTHER MAINTENANCE NEEDED TO BRING EQUIPMENT UP TO LIKE NEW CONDITION. THIS INCLUDES RELAMPING ALL LIGHTS REUSED.
- THE GENERAL CONTRACTOR AND MECHANICAL SUB-CONTRACTOR SHALL VERIFY AND INCLUDE IN THEIR FINAL BID ALL LIFE SAFETY, SMOKE/FIRE ALARM SYSTEMS NEEDED TO BRING TENANT'S SPACE COMPATIBLE WITH THE LANDLORD'S SYSTEM, AND CURRENT WITH LOCAL AND STATE CODES. FAILURE TO DO SO SHALL RESULT IN NO EXPENSE TO THE TENANT.
- MOUNT ALL RECEPTACLES AT 18" A.F.F. TO CENTERLINE OF RECEPTACLE UNLESS OTHERWISE NOTED.
- UNGROUNDING CONDUCTORS IN THE PREMISE WIRING SUPPLIED FROM MORE THAN ONE NOMINAL VOLTAGE SYSTEM SHALL BE IDENTIFIED BY SYSTEM PERMANENTLY POSTED AT EACH BRANCH CIRCUIT PANEL BOARD OR SIMILAR DISTRIBUTION EQUIPMENT AS DESCRIBED IN THE NATIONAL ELECTRIC CODE, §210.5(C).

## SPRINKLER SYSTEM

### SPRINKLER REQUIREMENTS AND PLAN REVIEW SUBMITTAL REQUIREMENTS

#### SPRINKLER REQUIREMENTS

- FM APPROVED SPRINKLER HEADS SHOULD BE USED IN THE INSTALLATION.
- SPRINKLER IDENTIFICATION NUMBERS (SIN) SHOULD BE PROVIDED FOR THE TYPE(S) OF SPRINKLERS TO BE USED IN THE INSTALLATION.
- FM GLOBAL RESEARCH APPROVED EQUIPMENT SHOULD BE PROVIDED WHERE APPLICABLE AND DETAILS OF THE INSTALLATION SHOULD CONFORM TO FM GLOBALS RECOMMENDED GOOD PRACTICES.
- A PERMANENT METAL PLACARD SHOULD BE PROVIDED AT THE BASE OF THE RISER FEEDING THESE SYSTEMS, INDICATING THE DESIGN, AREA, FLOW AND PRESSURES REQUIRED.
- ALL PIPING SHOULD BE HYDROSTATICALLY TESTED FOR A PERIOD OF TWO (2) HOURS AT 200 PSI, OR 50 PSI ABOVE MAXIMUM SYSTEM PRESSURE, WHICHEVER IS GREATER.
- IF ANY CUTTING OR WELDING IS TO BE DONE ON ANY OF THE SPRINKLER PIPING IN THE FIELD, ALL CUT COUPONS FROM MODIFIED PIPES SHOULD BE RETAINED FOR EXAMINATION BY GLOBAL RISK CONSULTANTS.
- WELD FABRICATED FITTINGS USED FOR JOINING SPRINKLER PIPING SHOULD BE FM APPROVED.
- AUTOMATIC SPRINKLERS MUST BE HANDLED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS TO ENSURE RELIABLE OPERATION AND TO PREVENT PREMATURE OPERATION. THIS TYPICALLY INCLUDES USE OF A DESIGNATED SPRINKLER WRENCH SPECIFIED FOR INSTALLATION OF THE SPECIFIC AUTOMATIC SPRINKLER, PROPER TORQUING OR SEATING OF THE SPRINKLER INTO THE FITTING AND INSPECTION OF THE ACTUATING MECHANISM. AUTOMATIC SPRINKLERS THAT ARE DAMAGED OR HAVE THEIR FUSIBLE ELEMENT ASSEMBLY MODIFIED DUE TO ROUGH HANDLING SHOULD BE REPLACED WITH NEW, UNDAMAGED SPRINKLERS OF THE SAME TYPE/DESIGN/TEMPERATURE SETTING. FIELD ADJUSTMENT OF DAMAGED SPRINKLER HEAD FUSIBLE ELEMENT ASSEMBLIES IS NOT ACCEPTABLE.
- THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FORM NO. 85 SHOULD BE COMPLETED BY THE INSTALLING CONTRACTOR FOR ALL INSTALLATIONS AND SUBMITTED TO GLOBAL RISK CONSULTANTS.
- FOLLOW THE GCP FIRE PROTECTION SYSTEM IMPAIRMENT MONITORING PROCEDURES - SEE MALL OPERATIONS MANAGER FOR REQUIREMENTS.

#### SUBMITTAL REQUIREMENTS:

- BELOW IS A LIST OF GENERAL REQUIREMENTS FROM GRC. THIS LIST IS NOT INTENDED TO BE A COMPLETE LISTING; IT IS THE TENANT'S RESPONSIBILITY TO CONTACT THE APPROPRIATE GRC OFFICE WITH QUESTIONS AND CONCERNS RELATING TO THEIR PLAN REVIEW. FOR THE CORRECT GRC CONTACT, PLEASE SEE ATTACHED GRC PLAN REVIEW/IMPACT HANDLING PACKET.
- SUBMIT THREE (3) SETS OF SPRINKLER PROTECTION PLANS AND SUPPORTING HYDRO-CALCULATIONS TO GRC.
  - PLANS SHALL INCLUDE A SCHEDULE AND KEY OF ALL SPRINKLER HEADS; TYPE AND SIZE OF ALL PIPING AND FITTINGS USED; LOCATION OF INSPECTORS TEST AND FLUSHING CONNECTIONS; HANGER LOCATION AND DETAILS; PROPER HYDRAULIC NOTES AND REMOTE AREA OUTLINED; AND THE LOCATION OF ANY STRUCTURAL COMPONENTS, MECHANICAL EQUIPMENT, SERVICE LINES OR FIXTURES THAT MAY SHIELD WATER SPRAY.
  - REFERENCE DRAWINGS OF UNDERGROUND MAINS AND/OR ADJACENT SYSTEMS OR RISERS FEEDING THE SYSTEM BEING SUBMITTED.
  - HYDRAULIC CALCULATIONS USING FM GLOBAL RECOMMENDED EQUIVALENT LENGTHS FOR FITTINGS AND APPROVED K FACTORS FOR SPRINKLERS AND INCLUDING ANY BALANCING OF THE OVERHEAD FOR RACK SYSTEMS.
  - SPECIFICATIONS/CUT SHEETS FOR MATERIALS BEING USED, SUCH AS SPRINKLER HEADS, SPRINKLER PIPE, VALVES AND FITTINGS, AND PERIPHERAL EQUIPMENT (INCLUDING TAMPER ALARMS, WATERFLOW ALARMS, ETC.).
  - OCCUPANCY DETAILS IN ORDER TO REVIEW SUBMITTED PLANS TO ENSURE ADEQUATE PROTECTION, ADEQUATE OCCUPANCY DETAILS MUST BE PROVIDED. THESE INCLUDE, BUT ARE NOT LIMITED TO, MATERIALS BEING STORED, STORAGE HEIGHT, STORAGE ARRANGEMENT, PROCESSES PRESENT, ETC.
  - FOR DRY SYSTEMS, THE VALVE HOUSE HEATING ARRANGEMENTS, PIPING SLOPE AND AIR SUPPLY DETAILS SHOULD BE INCLUDED.
  - FOR EARTHQUAKE ZONES, BRACING LOCATION AND SECUREMENT DETAILS, INCLUDING INFLUENCE ZONE CALCULATIONS, SHOULD BE INCLUDED.

## GENERAL

- A. THE GENERAL CONDITIONS OF THE GENERAL SPECIFICATIONS, ALONG WITH ALL APPLICABLE INSTRUCTIONS TO BIDDERS SHALL FORM A PART OF THIS SECTION OF THE SPECIFICATIONS.
- B. REQUIREMENTS FOR BIDDERS AND CONTRACTORS WHICH ARE CONTAINED IN OTHER SECTIONS OF THESE SPECIFICATIONS SHALL BE CONSIDERED BINDING UNDER THIS SECTION, UNLESS OTHERWISE NOTED HEREIN.
- C. ALL WORK TO BE ACCOMPLISHED IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS. ALL CHANGES MUST BE APPROVED IN WRITING BY POMS. ALL COSTS INCURRED BY POMS AS A RESULT OF UNAUTHORIZED CHANGES ARE THE RESPONSIBILITY OF THE INDIVIDUAL(S) MAKING THE CHANGE.

#### SCOPE

EACH CONTRACTOR SHALL BECOME THOROUGHLY ACQUAINTED WITH THE CONSTRUCTION DETAILS BEFORE SUBMITTING BID. NO ALLOWANCES WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS. ALL PERFORMANCE OF CONSTRUCTION SHALL BE AS REQUIRED BY THE PAGE OF THE GENERAL CONSTRUCTION.

#### INSPECTION OF SITE

PROPOSALS ARE ACCEPTED WITH THE ASSUMPTION THAT CONTRACTOR IS FAMILIAR WITH JOBSITE CONDITIONS AND UTILITY LOCATIONS. THE LACK OF SPECIFIC INFORMATION ON THE DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY.

#### PERMITS

ALL PERMITS AND LICENSES NECESSARY FOR THE PROPER EXECUTION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE SUBCONTRACTOR INVOLVED.

#### CODE REQUIREMENTS

ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS, DRAWINGS AND OWNER'S INSTRUCTIONS, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES, OR REGULATIONS OF THE GOVERNING BODIES, WHETHER SO SHOWN OR NOT. ALL MODIFICATIONS REQUIRED BY SUCH AUTHORITIES SHALL BE MADE BY THE CONTRACTOR WITHOUT ANY ADDITIONAL COST TO THE OWNER.

#### MATERIALS AND WORKMANSHIP

- A. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURERS AND, UNLESS OTHERWISE SPECIFIED, SHALL BE NEW AND FREE FROM ANY DEFECTS. ALL LIKE MATERIALS USED SHALL BE OF THE SAME MANUFACTURE AND QUALITY UNLESS OTHERWISE SPECIFIED.
- B. ALL WORK UNDER THIS CONTRACT SHALL BE PERFORMED BY COMPETENT WORKMEN AND EXECUTED IN A NEAT AND WORKMANLIKE MANNER. WORK SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION AND, UPON COMPLETION, THE INSTALLATION SHALL BE THOROUGHLY CLEANED AND ALL DEBRIS REMOVED FROM THE SITE.

#### CODES AND REGULATIONS

EACH SUBCONTRACTOR SHALL COMPLY WITH ALL LAWS, ORDINANCES, RULES AND REGULATIONS BEARING ON THE CONDUCT OF THE WORK AS DRAWN OR SPECIFIED. IF A SUBCONTRACTOR OBSERVES THAT THE DRAWINGS AND SPECIFICATIONS ARE AT A VARIANCE WITH SUCH CODES, HE/SHE SHALL PROMPTLY NOTIFY THE GENERAL CONTRACTOR AND THE TENANT IN WRITING. IF ANY SUBCONTRACTOR PERFORMS ANY WORK KNOWING IT TO BE CONTRARY TO LAWS, ORDINANCES, RULES AND REGULATIONS AND WITHOUT GIVING SUCH NOTICE, THE SUBCONTRACTOR SHALL BEAR ALL COSTS ARISING THEREFROM.

#### PROTECTION OF WORK AND PROPERTY

- A. EACH SUBCONTRACTOR SHALL CONTINUOUSLY MAINTAIN ADEQUATE PROTECTION OF ALL HIS/HER WORK FROM DAMAGE AND SHALL PROTECT THE OWNER'S PROPERTY FROM INJURY OR LOSS ARISING FROM HIS/HER WORK. HE/SHE SHALL MAKE GOOD ANY SUCH DAMAGE, INJURY, OR LOSS, EXCEPT SUCH AS MAY BE DIRECTLY DUE TO CAUSES BEYOND HIS/HER CONTROL AND NOT TO HIS/HER FAULT OR NEGLIGENCE. HE/SHE SHALL ADEQUATELY PROTECT ADJACENT PROPERTY AS WELL.
- B. EACH SUBCONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THEIR EMPLOYEES ON THE JOB AND SHALL COMPLY WITH ALL PROVISIONS OF FEDERAL, STATE AND LOCAL BUILDING CODES AND SAFETY LAWS TO PREVENT ACCIDENTS OR INJURY TO PERSONS ON OR ADJACENT TO THE PREMISES WHERE THE WORK IS BEING PERFORMED. EACH SUBCONTRACTOR SHALL MAINTAIN ALL INSURANCE REQUIRED TO PROTECT HIMSELF/HERSELF, OWNER AND TENANT FOR THE DURATION OF THE WORK AGAINST PROPERTY DAMAGE AND PUBLIC LIABILITY.

#### CHANGES IN THE WORK

THE TENANT, WITHOUT INVALIDATING THE CONTRACT, MAY ORDER EXTRA WORK OR MAKE CHANGES BY ALTERING, ADDING TO OR DEDUCTING FROM THE WORK, THE CONTRACT SUM BEING ADJUSTED ACCORDINGLY.

#### COOPERATION

ALL WORK UNDER THESE SPECIFICATIONS SHALL BE ACCOMPLISHED IN CONJUNCTION WITH OTHER CONTRACTORS AND TRADES OF THIS PROJECT IN A MANNER WHICH WILL ALLOW EACH CONTRACTOR AND TRADE ADEQUATE TIME AT THE PROPER STAGE OF CONSTRUCTION TO FULFILL HIS/HER CONTRACTS. THE OWNER SHALL BE CONSULTED TO RESOLVE ANY QUESTIONS WHICH MIGHT ARISE BETWEEN TRADES AS TO THE PLACING OF LINES, DUCTS, CONDUITS, FIXTURES, OR EQUIPMENT, OR SHOULD IT APPEAR DESIRABLE TO REMOVE ANY GENERAL CONSTRUCTION WHICH WOULD AFFECT THE APPEARANCE OF STRENGTH OF THE STRUCTURE.

#### SUBSTITUTION OF MATERIALS

MANUFACTURER'S NAMES ARE LISTED HEREIN TO ESTABLISH A STANDARD. THE PRODUCTS OF OTHER MANUFACTURERS WILL BE ACCEPTABLE, IF IN THE OPINION OF THE TENANT, THE SUBSTITUTE MATERIAL IS OF A QUALITY AS GOOD OR BETTER THAN THE MATERIAL SPECIFIED, AND WILL SERVE WITH EQUAL EFFICIENCY AND DEPENDABILITY, THE PURPOSE FOR WHICH THE ITEMS SPECIFIED WERE INTENDED.

#### SHOP DRAWINGS

SHOP DRAWINGS AND CATALOG DATA ON ALL MAJOR ITEMS OF EQUIPMENT AND SYSTEMS, AND SUCH OTHER ILLUSTRATIVE MATERIAL AS MAY BE CONSIDERED NECESSARY BY THE TENANT, SHALL BE SUBMITTED BY THE CONTRACTOR IN ADEQUATE TIME TO PREVENT DELAY AND CHANGES DURING CONSTRUCTION.

#### DRAWINGS AND SPECIFICATIONS

- A. THE DRAWINGS SHOW DIAGRAMMATICALLY THE LOCATIONS OF THE VARIOUS LINES, DUCTS, CONDUITS, FIXTURES, AND EQUIPMENT AND THE METHOD OF CONNECTING AND CONTROLLING THEM. IT IS NOT INTENDED TO SHOW EVERY CONNECTION IN DETAIL OF ALL FITTINGS REQUIRED FOR A COMPLETE SYSTEM.
- B. SHOULD THE CONTRACTOR DEEM IT NECESSARY TO MAKE CHANGES TO ITEMS SHOWN ON CONTRACT DRAWINGS, THE SHOP DRAWINGS, DESCRIPTIONS, AND THE REASON FOR THE PROPOSED CHANGES SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

#### RESPONSIBILITY

THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE SATISFACTORY AND COMPLETE EXECUTION OF ALL WORK INCLUDED IN HIS CONTRACT. HE/SHE SHALL PRODUCE COMPLETE FINISHED OPERATING SYSTEMS AND PROVIDE ALL INCIDENTAL ITEMS REQUIRED AS PART OF HIS/HER WORK, REGARDLESS OF WHETHER SUCH ITEM IS PARTICULARLY SPECIFIED OR INDICATED.

## PLUMBING

#### MATERIALS

- SANITARY SEWER - CAST IRON TO BE USED. ALL PIPING SHALL CONFORM TO REQUIREMENTS OF LANDLORD AND LOCAL JURISDICTION.
- DOMESTIC WATER AND HOT WATER PIPING SHALL BE TYPE "L" COPPER, INSULATED WITH 1" ARAFLEX OR EQUIVALENT.
- DOMESTIC WATER PIPING UNDER FLOOR SHALL BE TYPE "K" COPPER.
- GAS PIPING - GAS PIPING SHALL BE BLACK IRON PIPE. PIPING EXPOSED ON EXTERIOR OF BUILDING AND ROOF SHALL BE PAINTED WITH EPOXY PAINT TO MATCH ADJACENT SURROUNDINGS.
- VENT PIPING - VENT PIPING MAY BE CAST IRON. ALL PIPING SHALL CONFORM TO REQUIREMENTS OF LANDLORD AND LOCAL JURISDICTION. EXPOSED VENT PIPING SHALL BE SERVICE WEIGHT CAST IRON. ALL VENT PIPING INSTALLED ABOVE CEILING IN RETURN AIR PLENUM SHALL BE CAST IRON.
- INDIRECT WASTE PIPING SHALL BE DWV COPPER. PROVIDE CLEAN-OUT FITTINGS AT ALL CHANGES IN DIRECTION.
- THE VISIBLE PIPING FOR UNDER HAND SINK CONNECTIONS SHALL BE STAINLESS STEEL OR CHROME.

#### MAKING UP PIPE

- SCREWED PIPE SHALL BE MADE UP WITH PIPE COMPOUND APPLIED TO THE MALE THREAD WITH NOT MORE THAN TWO THREADS LEFT EXPOSED. PIPE SHALL BE REMOVED AFTER THREADING.
- CAST IRON PIPE AND SHALL BE OF THE HUB AND SPOOT OR NO-HUB TYPE. INSTALLATION MUST MEET ALL PROVISIONS OF APPLICABLE CODE.
- COPPER JOINTS SHALL BE MADE UP WITH 95-5 SOLDER. (LEAD FREE)

#### HANGERS AND SUPPORTS

HORIZONTAL PIPING SHALL BE SUPPORTED AT INTERVALS NOT TO EXCEED 10'-0" WITH SWIVEL SPLIT PIPE HANGERS EQUAL TO CRANE NO. 199F OR GRINNELL NO. 104. VERTICAL PIPING SHALL BE SUPPORTED BY MEANS OF WROUGHT IRON CLAMPS SUSPENDED FROM THE UNDERSIDE OF STRUCTURE WITH HANGER RODS.

#### CLEANOUTS

CLEANOUTS SHALL BE AS SPECIFIED IN THE PLUMBING FIXTURE SCHEDULE AND SHALL BE INSTALLED AT ALL BENDS, ANGLES, AND ENDS OF ALL WASTE AND SEWER LINES, AS CALLED FOR ON THE DRAWINGS, AND AS REQUIRED BY LOCAL CODES. ALL CLEANOUTS SHALL BE BROUGHT TO GRADE, AND IN ALL CASES, SHALL BE PROVIDED WITH SUFFICIENT SPACE FOR RODDING.

#### VALVES

ALL VALVES SHALL BE BRASS AND MANUFACTURED BY CRANE, NIBCO, STOCKHAM, LUNKENHEIMER, NORDSTROM, GRINNELL OR EQUAL.

#### ROUGH-INS

FOR SECOND LEVEL STORES, THE TENANT'S GENERAL CONTRACTOR SHALL RUN ALL LINES REQUIRED FOR PLUMBING ROUGH-INS TIGHT AGAINST THE UNDERSIDE OF THE SECOND FLOOR LEVEL. THE SECOND FLOOR STRUCTURAL SLAB SHALL BE CORED AS REQUIRED TO INSTALL THESE ITEMS AT THE LOCATIONS SHOWN ON THE PLANS.

#### INSULATION

- ALL DOMESTIC COLD, HOT WATER, AND CONDENSATE DRAINAGE PIPING ABOVE FINISHED FLOOR SHALL BE INSULATED TO CONFORM TO ASHRAE STANDARDS.
- INSULATION SHALL BE FIBERGLASS AS/SSL INSULATION WITH VAPOR RETARDER JACKET.
  - PIPING 3/4" AND LESS - 1/2" THICK INSULATION
  - PIPING 1"-2" - 1" THICK INSULATION
  - PIPING OVER 2" - 1-1/2" THICK INSULATION
- VALVES AND FITTINGS SHALL BE INSULATED TO SAME THICKNESS AS PIPE INSULATION WITH ONLY WHEEL AND ADJUSTING NUT VISIBLE. PROVIDE PRE-MOLDED PLASTIC FITTINGS AT ALL VALVES AND FITTINGS (FIBERGLASS)
- INSULATION SHALL RUN CONTINUOUSLY THRU HANGERS, PROVIDE SADDLES AS REQUIRED.
- PIPING RUNNING THROUGH EXTERIOR WALLS OR OUTSIDE OF CONDITIONED SPACE SHALL ALSO BE PROVIDED WITH HEAT TAPE.

## TEMPORARY SERVICES

### THE CONTRACTOR SHALL PROVIDE THE FOLLOWING SPECIFIC ITEMS OF TEMPORARY SERVICES:

- TEMPORARY WATER - WATER REQUIRED IN THE PERFORMANCE OF THE CONTRACT SHALL BE PROVIDED AND PAID FOR BY THE CONTRACTOR. WATER USED FOR HUMAN CONSUMPTION SHALL CONFORM TO REQUIREMENTS OF STATE AND LOCAL AUTHORITIES FOR POTABLE WATER.
- TEMPORARY HEAT - WHEN REQUIRED FOR PROPER INSTALLATION OR PROTECTION OF ANY PORTION OF THE WORK, THE CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY HEATING UNITS AS APPROVED BY THE LANDLORD OR LOCAL AUTHORITY.
- COST OF LANDLORD PROVIDED UTILITY SERVICES - IF THE LANDLORD ELECTS TO PROVIDE TEMPORARY UTILITY SERVICES, THE CONTRACTOR WILL BE SO INFORMED BY THE TENANT. THE CONTRACTOR SHALL MAKE PROVISIONS OR COORDINATE WITH LANDLORD'S GENERAL CONTRACTOR TO PAY THE COST OF SAID TEMPORARY CONSTRUCTION AND UTILITY SERVICES.

#### NOTE FOR TENANT GENERAL CONTRACTOR:

IT IS THE RESPONSIBILITY OF THE TENANT'S GENERAL CONTRACTOR TO MAKE USE OF APPLICABLE NOTES & SPECIFICATIONS LISTED ON THIS SHEET AS THEY PERTAIN TO THE SPECIFIC JOB. REFERENCE SHEET EST FOR ANY OVERRIDING SPECIFICATIONS.

#### GUARANTEE

ALL MATERIALS, EQUIPMENT, AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF ACCEPTANCE. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL AND ACCEPTANCE BY TENANT SHALL BE A CONDITION OF THIS CONTRACT. ALL WORK FOUND TO BE DEFECTIVE SHALL BE REPAIRED OR REPLACED BY THE SUB-CONTRACTOR WITHOUT ADDITIONAL CHARGE TO THE TENANT.

## RESPONSIBILITIES

E - EXISTING L - LANDLORD C - TENANT'S GENERAL CONTRACTOR T - TENANT V- OWNER VENDOR	P U N D E R S L A B	I N S T A L L	N O T E S
<b>A PLUMBING</b>	1,2,3,4,5,6		
<b>A-1 WATER CLOSET</b>			
A WATER CLOSET	C	C	
B UNDERSLAB ROUGH-IN	C	C	5
C FINAL CONN. & VENTS	C	C	1
<b>A-2 LAVATORIES</b>			
A LAVATORIES	C	C	
B UNDERSLAB ROUGH-IN	C	C	5
C FINAL CONN. & VENTS	C	C	1
<b>A-3 MOP SINK</b>			
A MOP SINK	C	C	
B UNDERSLAB ROUGH-IN	C	C	5
C FINAL CONN. & VENTS	C	C	1
<b>A-4 FLOOR DRAINS &amp; FLOOR SINKS</b>			
A FLOOR DRAINS & FLOOR SINKS	C	C	
B UNDERSLAB ROUGH-IN	C	C	5
C FINAL CONN. & VENTS	C	C	1
<b>A-5 CLEANOUTS</b>			
A CLEANOUTS	C	C	
B UNDERSLAB ROUGH-IN	C	C	5
C FINAL CONN. & VENTS	C	C	
<b>A-6 THREE COMPARTMENT SINK</b>			
A THREE COMPARTMENT SINK	C	C	
B UNDERSLAB ROUGH-IN	C	C	
C FINAL CONN. & VENTS	C	C	1
<b>A-7 HAND SINKS</b>			
A HAND SINKS	C	C	
B UNDERSLAB ROUGH-IN	C	C	5
C FINAL CONN. & VENTS	C	C	1
<b>A-8 DIPPER WELLS</b>			
A DIPPER WELLS	C	C	
B UNDERSLAB ROUGH-IN	C	C	5
C FINAL CONN. & VENTS	C	C	1
<b>A-9 WATER HEATER</b>			
A WATER HEATER	C	C	
B FINAL CONN.	C	C	
C INSULATION - HOT WATER LINE	C	C	1
<b>A-10 SPRINKLER SYSTEM</b>			
A ENGINEERING	C	C	
B EQUIPMENT	E/C	E/C	
<b>A-11 MISCELLANEOUS</b>			
A WATER METER	E/C	E/C	6
B PIPING INSULATION	C	C	
C ALL TAP FEES (IF REQ'D.)	C	C	
D GREASE INTERCEPTORS	C	C	

## RESPONSIBILITY NOTES

- ROOF OPENINGS FOR PLUMBING AND RELATED WORK SHALL BE THE RESPONSIBILITY OF THE PLUMBING SUBCONTRACTOR. HE SHALL EMPLOY THE LANDLORD'S ROOFER FOR THIS WORK TO MAINTAIN THE ROOF BOND.
- SANITARY SEWER AND DOMESTIC WATER, STUBBED INTO THE PREMISES BY THE LANDLORD. REFER TO SHEET P100 FOR LOCATIONS. FIELD VERIFY LOCATIONS.
- THE FOLLOWING ITEMS ARE THE TENANT'S RESPONSIBILITY, HOWEVER, THE LANDLORD MAY, AT HIS OPTION, SUBMIT TO THE TENANT, FOR APPROVAL, A PRICE FOR THE LANDLORD TO PROVIDE THE FOLLOWING UNDER FLOOR UTILITIES ROUGH-IN AND SLAB DEPRESSIONS:
  - UNDERFLOOR PLUMBING ROUGH-IN.
  - SLAB DEPRESSIONS FOR LOBBY FLOOR FINISHES.
- THE SPRINKLER CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE TENANT'S LANDLORD AND TO THE APPROPRIATE RATING BUREAU FOR APPROVAL. A COPY OF THE APPROVAL LETTER FROM THE RATING BUREAU SHALL BE FORWARDED TO THE TENANT AND LANDLORD AS LISTED ON SHEET A000. ANY MODIFICATIONS TO SYSTEM TO BE BY LL CONTRACTOR AT TENANT'S EXPENSE.
- THE TENANT'S GENERAL CONTRACTOR (T.G.C.) SHALL RUN PLUMBING LINES TIGHT TO THE SECOND FLOOR STRUCTURE. THE FLOOR SLAB SHALL BE CORED AS REQUIRED TO INSTALL SERVICE STUBS, FLOOR BOXES, ETC...
- IF DRAWINGS CALL FOR THE REUSE OF EXISTING EQUIPMENT, THE TENANT'S GENERAL CONTRACTOR SHALL VERIFY THAT ALL SUCH EQUIPMENT IS IN PROPER WORKING ORDER, OR TAKE THE NECESSARY STEPS TO ACCOMPLISH SUCH. IF REPLACEMENT IS REQUIRED, USE THE EQUIPMENT AND HARDWARE AS SPECIFIED ON THESE SCHEDULES OR AS CALLED OUT IN THE SPECIFICATIONS ON THIS SHEET. ALL SUCH ITEMS MUST MEET ALL GOVERNING CODES AND STANDARDS OF PRACTICE.



2225 East Randol Mill Road, Suite #300  
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**Project Address**  
**Van Leeuwen Ice Cream**  
**One Brattle Square**  
**Space #C2**  
**Cambridge, MA 02138**

**Issue Date** 11/22/23

Revisions			
Date	Description	By	
△			
△			
△			
△			
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**Job Number** 230174

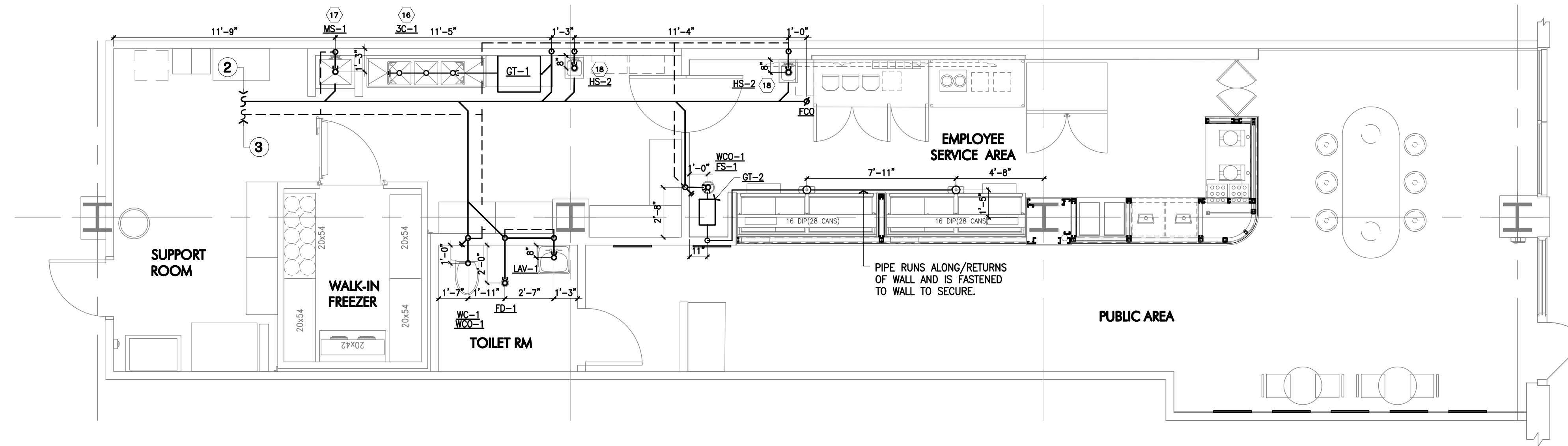
**Drawn By** TQ

**App'd By** AG

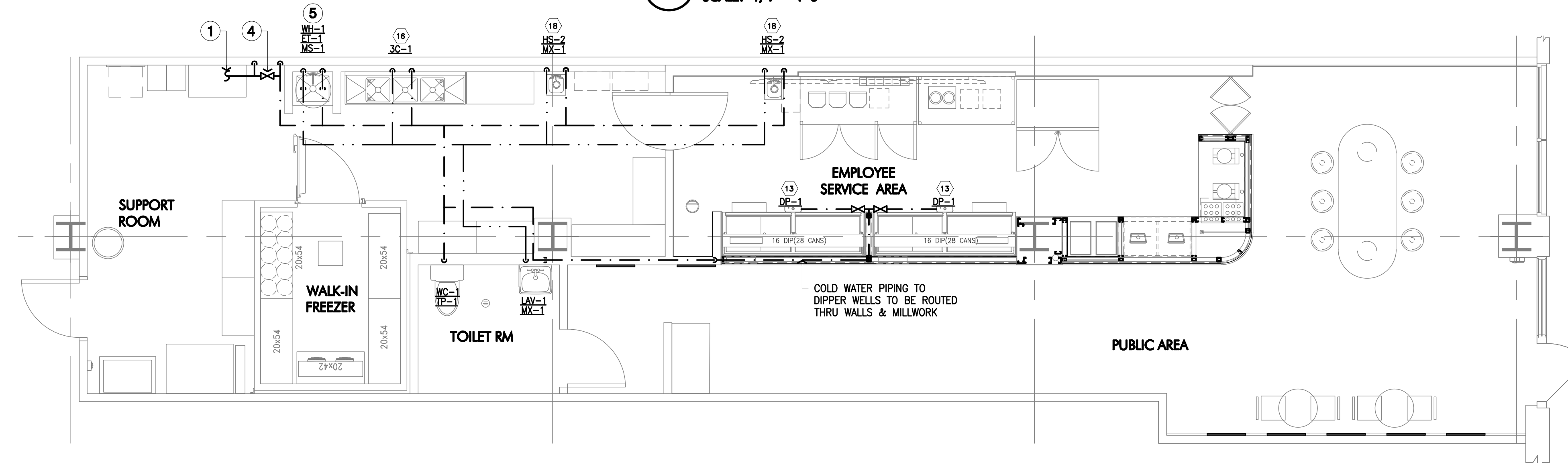
**Sheet Title**  
**Plumbing Specifications**

**Sheet Number**

**P001**



**1 Plumbing Plan - Sanitary Waste**  
SCALE: 1/4" = 1'-0"



**2 Plumbing Plan - Domestic Water**  
SCALE: 1/4" = 1'-0"

**Pipe Legend**

---	COLD WATER (CW)
---	HOT WATER (HW)
---	FILTERED WATER (FW)
---	VENT (V)
---	SANITARY SEWER (W)
---	GAS PIPE (G)
⊕	CONNECTION TO EXISTING

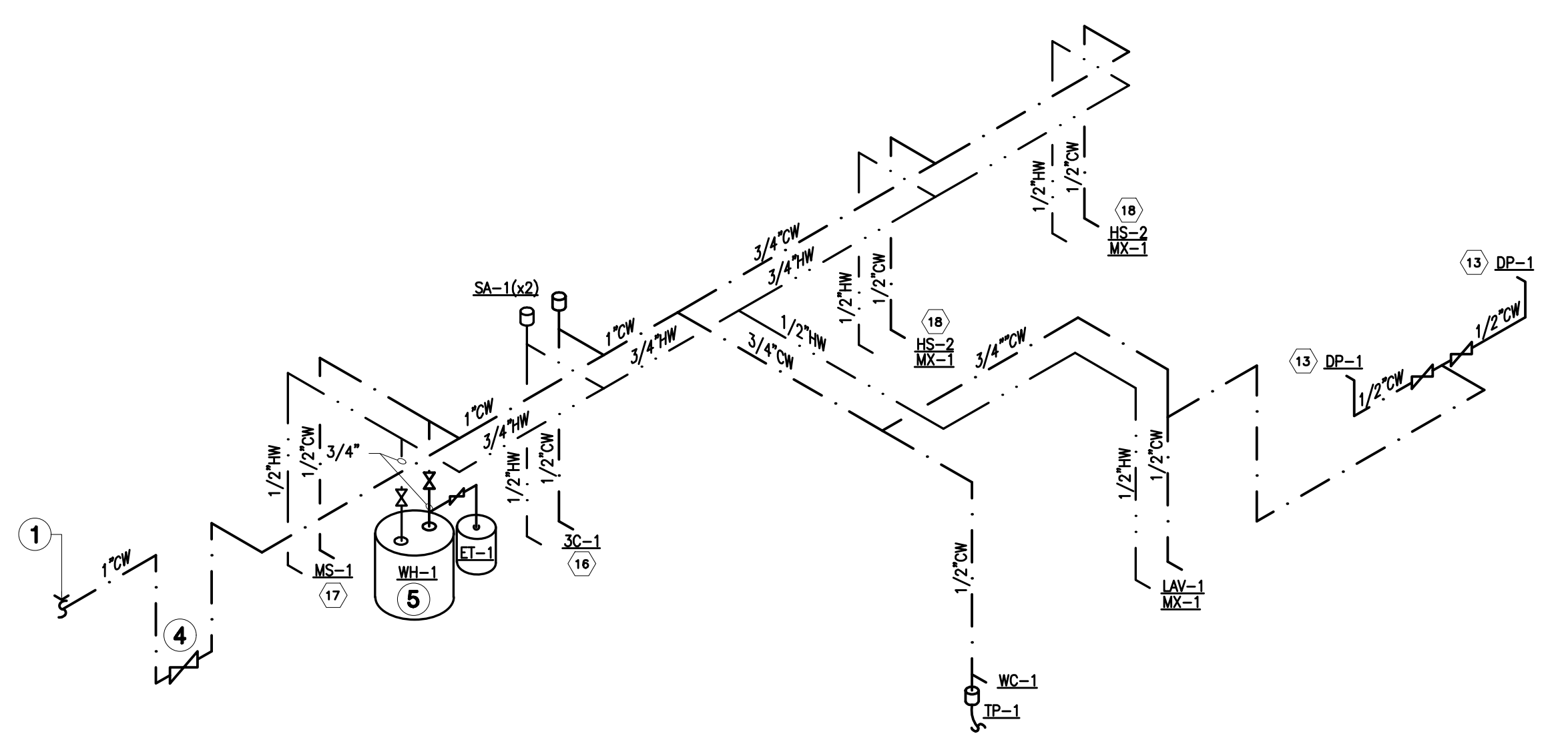
AS BUILT PLUMBING DRAWINGS WERE NOT AVAILABLE FOR THIS PROJECT. LOCATION FOR ALL POINT OF CONNECTION SHALL BE FIELD VERIFIED PRIOR TO BID. INVERT ELEVATION OF SANITARY PIPING SHALL BE VERIFIED PRIOR TO ANY INSTALLATION OF PIPE.

**KEYED NOTES**

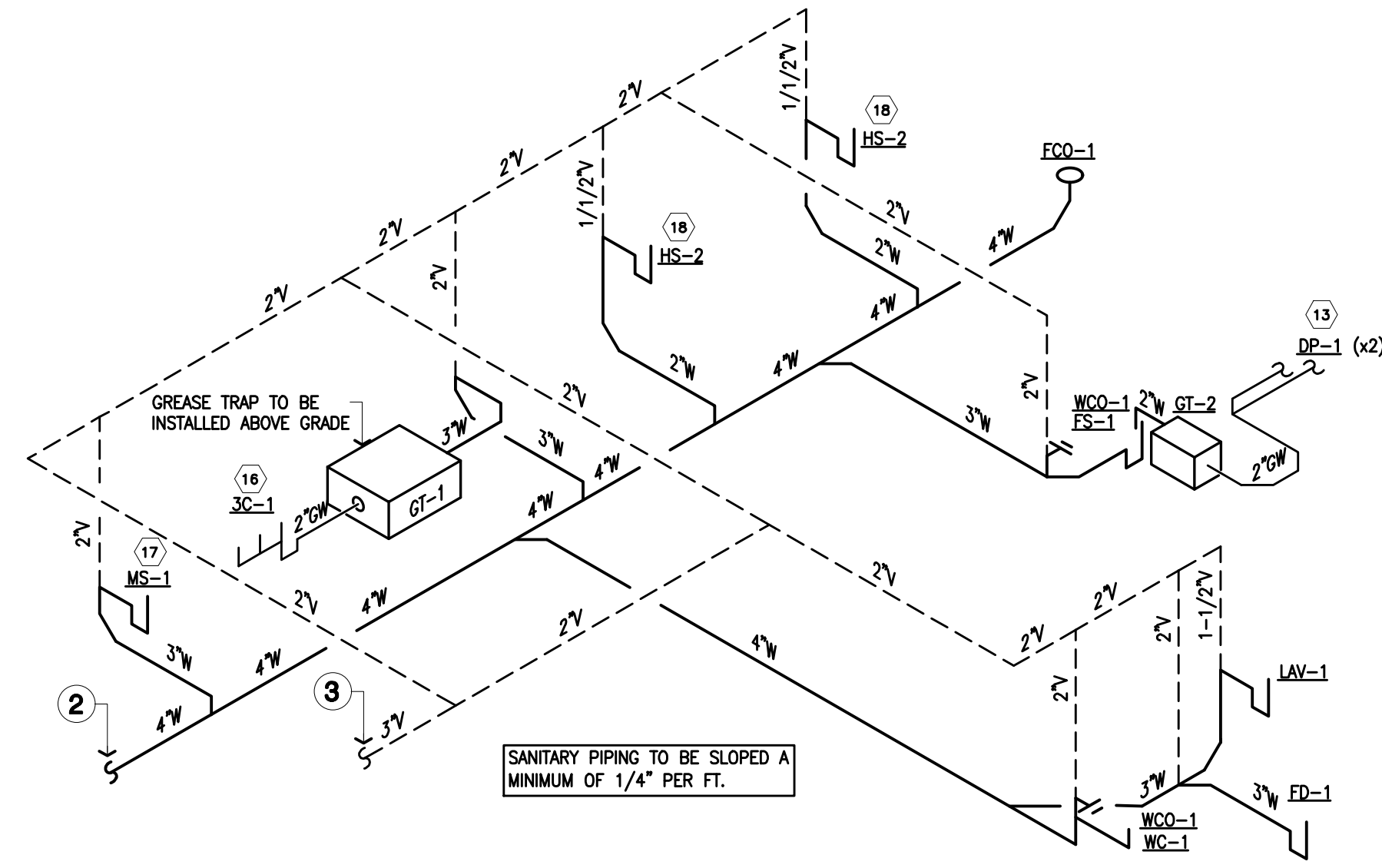
- CONNECT NEW COLD WATER INTO EXISTING COLD WATER WITHIN SPACE. T.G.C. SHALL VERIFY EXISTING COLD WATER LINE IS SAME SIZE OR LARGER THAN NEW LINE SPECIFIED. IF EXISTING STUB-IN IS UNDERSIZED, T.G.C. SHALL EXTEND COLD WATER LINE TO EXISTING LINE OF EQUAL OR GREATER SIZE.
- CONNECT NEW SANITARY SEWER INTO EXISTING SANITARY SEWER UNDER SLAB. COORDINATE WITH ROUTING AND FLOW OF EXISTING SANITARY MAIN. PLUMBING CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION PRIOR TO BEGINNING OF WORK AND ADJUST PIPING AS REQUIRED.
- CONNECT NEW VENT LINE TO EXISTING VENT LINE AS REQUIRED. FIELD VERIFY.
- PROVIDE SHUT-OFF BALL VALVE AT 60" AFF. PROVIDE WITH 2.5"x5" PERMANENT LABEL READING "WATER SHUT-OFF" (SMARTSIGN LB-1511, OR EQUAL).
- NEW 40 GALLON ELECTRIC WATER HEATER MOUNTED ON PLATFORM ABOVE MOP SINK. REFER TO FIXTURE SCHEDULE AND DETAIL 4/P200 FOR ADDITIONAL INFORMATION.

**GENERAL NOTES**

- "VERIFY IN FIELD" OR "EXISTING" MEANS THE CONTRACTOR IS TO CONFIRM THE ITEM SHOWN ON THE DRAWING (I.E. EQUIPMENT, DUCT, WIRE, ETC.) EXISTS AT THE SITE AND IS IN GOOD WORKING CONDITION. SHOULD THE CONTRACTOR FIND THAT THE EQUIPMENT, DUCT, WIRE, ETC. IS NOT THE EQUAL TO THAT SHOWN ON THE DRAWING, IT IS TO BE REPLACED, IF THE CONTRACTOR HAS ANY QUESTION ABOUT WHETHER IT IS EQUAL TO WHAT IS SHOWN ON THE DRAWING, THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER AND TENANT'S PROJECT MANAGER FOR APPROVAL. CONTRACTOR IS TO NOTIFY TENANT'S PROJECT MANAGER AND DESIGN ENGINEER IN WRITING OF ALL REPLACEMENT ITEMS PRIOR TO CONSTRUCTION.
- WHERE EXISTING EQUIPMENT (LIGHTS, DIFFUSERS, TOILETS, ETC.) ARE TO BE REUSED, WHETHER IT IS RELOCATED OR REUSED IN THE EXISTING LOCATION, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE RENOVATION OF THE STORE. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER. ALL ITEMS TO BE THOROUGHLY CLEANED, IF REQUIRED, PAINTED, AND ANY OTHER MAINTENANCE NEEDED TO BRING EQUIPMENT UP TO LIKE NEW CONDITION. THIS INCLUDED RELAMPING ALL LIGHTS REUSED.
- IT IS REQUIRED THAT THE PLUMBING CONTRACTOR MUST VISIT THE JOBSITE TO FAMILIARIZE HIMSELF WITH MAJOR ITEMS SUCH AS STRUCTURAL ELEMENTS AND OTHER EXISTING JOB CONDITIONS THAT MAY AFFECT HIS WORK. ADDITIONALLY, PLUMBING CONTRACTOR SHALL VERIFY EXACT LOCATIONS AND DIMENSIONS OF SUCH ITEMS AS WASTE, VENTS, WATER LINES, ETC.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO THE BUILDING STRUCTURE, GRADE BEAMS, OR BUILDING UTILITIES CAUSED BY ANY SLAB PENETRATIONS. IT IS RECOMMENDED THE FLOOR BE X-RAYED PRIOR TO ANY SLAB PENETRATIONS.
- PIPE AND DRAIN LOCATIONS ARE FOR REFERENCE ONLY. ACTUAL LOCATIONS SHALL BE COORDINATED IN THE FIELD WITH CABINET LOCATIONS BY THE TENANT'S GENERAL CONTRACTOR.
- CONTRACTOR SHALL SCHEDULE PLUMBING CONNECTIONS TO THE BUILDING MAINS WITH THE LANDLORD REPRESENTATIVE PRIOR TO CONNECTION.
- SANITARY PIPING TO BE SLOPED A MINIMUM OF 1/4" PER FOOT.
- ALL FLOOR SINKS AND FLOOR DRAINS SHALL BE INSTALLED FLUSH WITH FLOOR.
- PROVIDE CLEAN-OUTS AT THE ENDS OF RUNS.



**4 Domestic Water Riser Diagram**  
SCALE: NTS



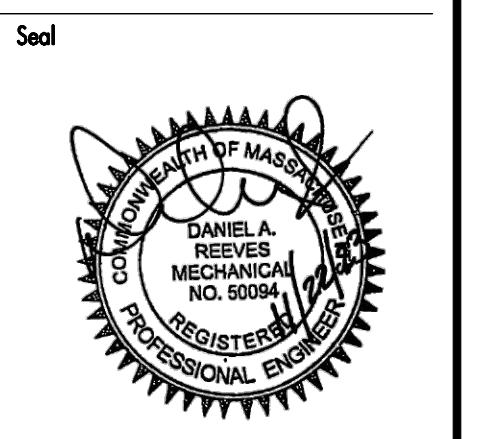
**3 Sanitary Waste Riser Diagram**  
SCALE: NTS

Issue Date **11/22/23**

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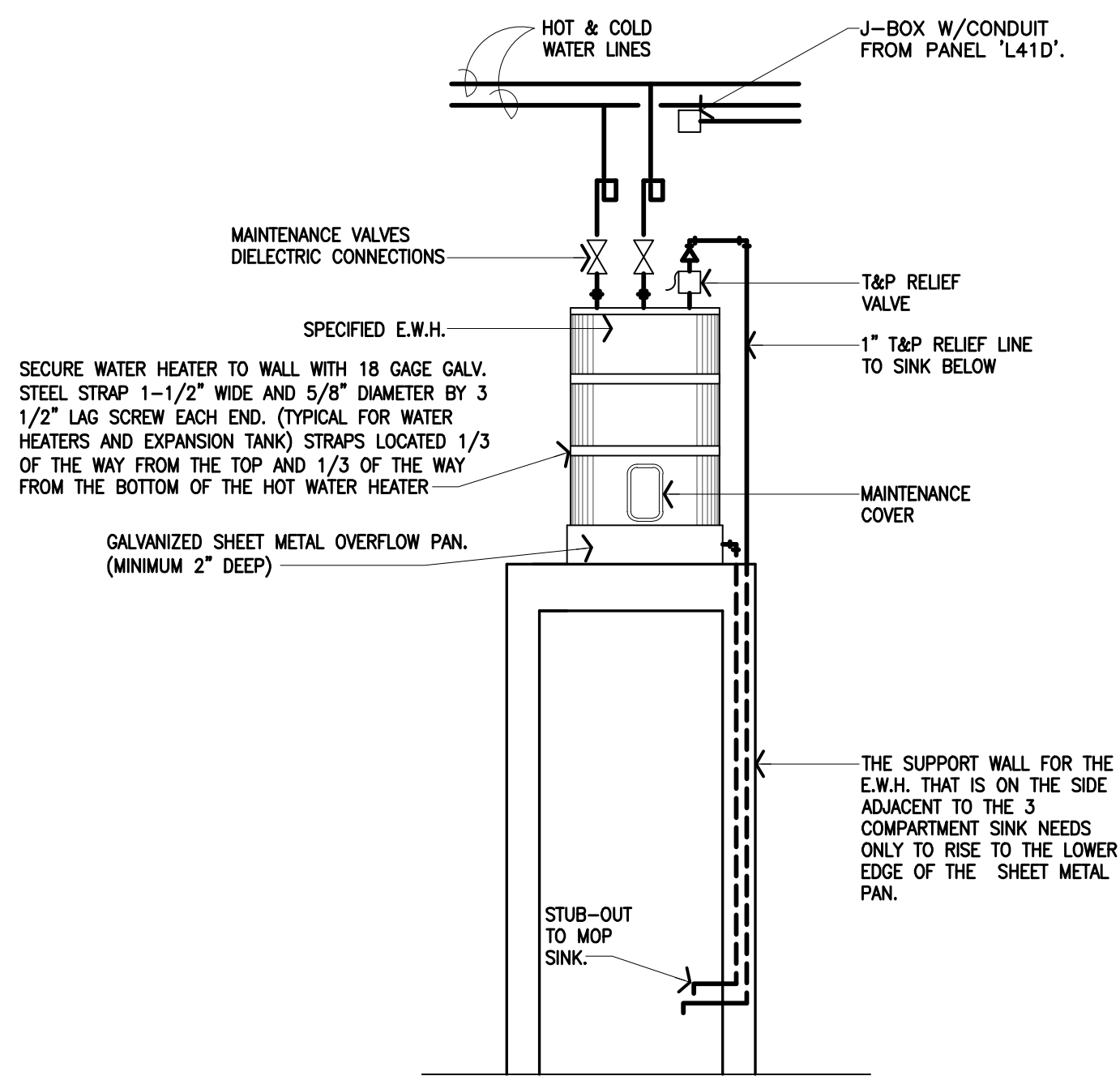
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**ONE BRATTLE SQUARE**  
**CAMBRIDGE, MA**

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Job Number **230174**  
Drawn By **TQ**  
App'd By **AG**  
Sheet Title  
**Plumbing Plans & Riser Diagrams**  
Sheet Number

Revisions	Date	Description	By
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**4 Water Heater Detail**  
SCALE: NONE

**GREASE INTERCEPTOR CALCULATION (GT-2)**

V (DIPPER WELL) = 4 * 4.25 * 10.25 = 175 CUBIC INCHES
V (TOTAL) = 175 CUBIC INCHES
A (GALLON) = $\frac{175 \text{ CI}}{231 \text{ CI/GALLON}} = .75 \text{ GALLON}$
V (GPM) = $\frac{.75 \text{ GALLON} \times 0.75}{2 \text{ MINUTES}} = .28 \text{ GPM}$

GREASE INTERCEPTOR REQUIRED .28 GPM  
GREASE INTERCEPTOR PROVIDED 4 GPM / 8 LB GREASE CAPACITY

**GREASE INTERCEPTOR CALCULATION (GT-1)**

V (3 COMP. SINK) = (15 x 15 x 14) x 3 = 9,450 CUBIC INCHES
A (GALLON) = $\frac{9,450 \text{ CI}}{231 \text{ CI/GALLON}} = 41 \text{ GALLON}$
V (GPM) = $\frac{41.0 \text{ GALLON}}{2 \text{ MINUTES}} = 20.5 \text{ GPM}$

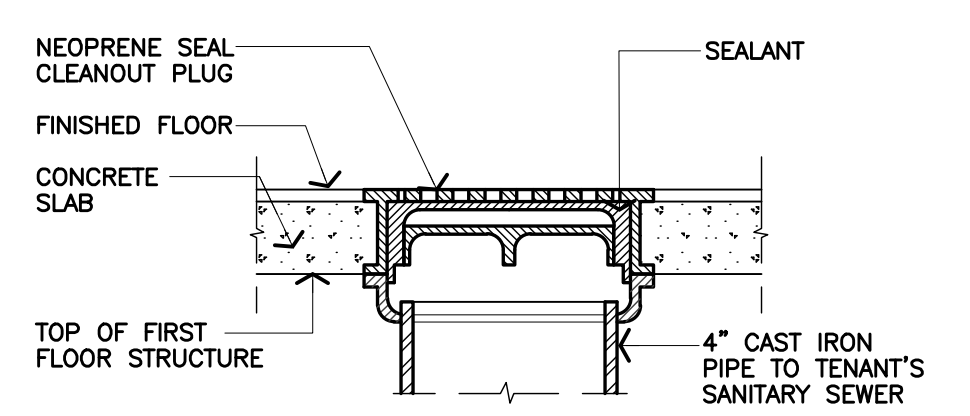
GREASE INTERCEPTOR REQUIRED 20.5 GPM  
GREASE INTERCEPTOR PROVIDED 25 GPM / 64.9 LB GREASE CAPACITY

**WATER HEATER DEMAND CALCULATION**

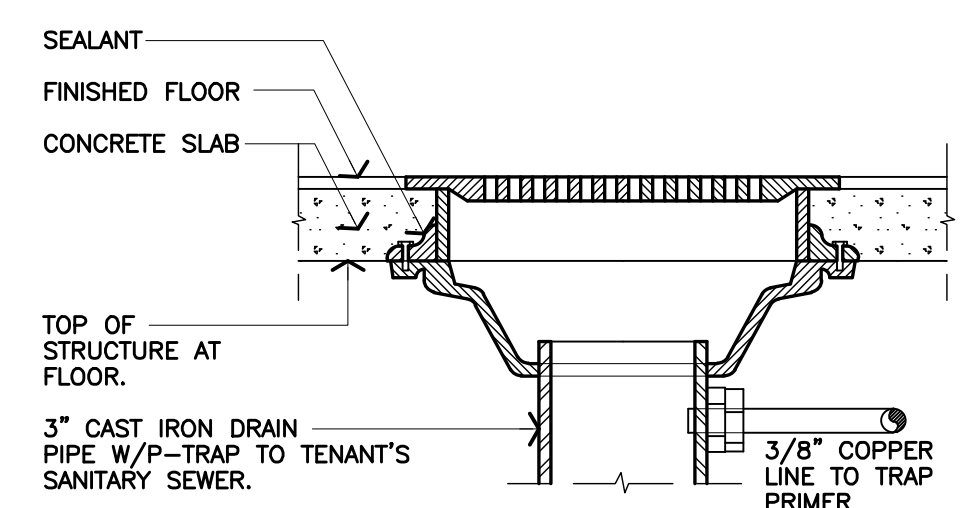
NAME	# FIXTURE	GPH	TOTAL GPH
HAND SINK	2	5	10
MOP SINK	1	7	7
3-COMPARTMENT SINKS	1	19	19
LAVATORY	1	5	5
GALLONS PER HOUR DEMAND			41
ALLOWANCE FOR SINGLE SERVICE UTENSILS			0.8
TOTAL GALLONS PER HOUR DEMAND			33

**PLUMBING CALCULATIONS**

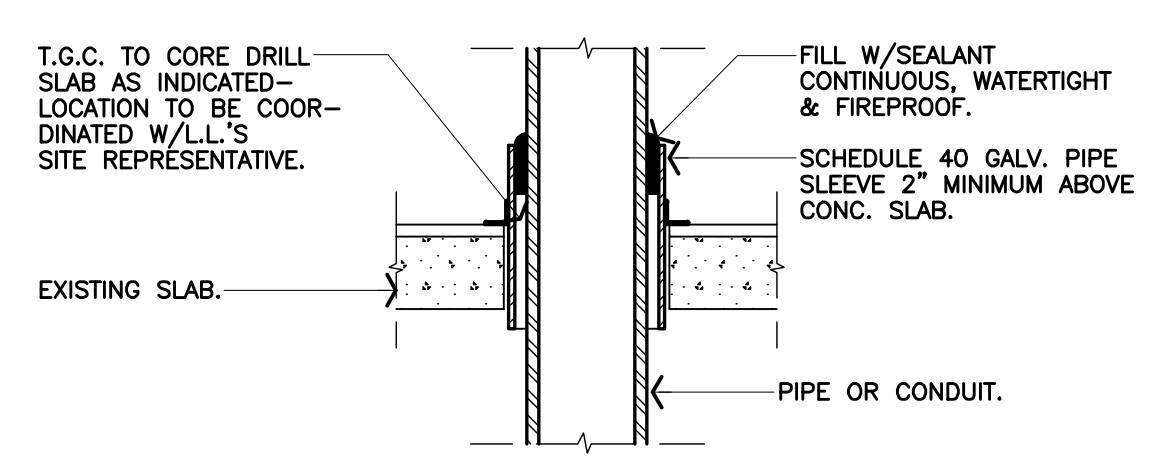
MARK	QUANTITY	SAN. F.U. EACH	SAN. F.U. TOTAL	C.W. F.U. EACH	WTR. DMD TOTAL
3-COMPARTMENT SINKS	1 (3 SINKS)	2 x 3(SINKS)	6	3	3
MOP SINK	1	2	2	3	3
HAND SINK	2	2	4	2	4
FLOOR SINK	1	2	2	0	0
FLOOR DRAIN	1	2	2	0	0
DIPPER WELL	2	-	0	0.5	1
LAVATORY	1	2	2	2	2
WATER CLOSET	1	4	4	2	2
TOTAL			22		15
SERVICE CONNECTION SIZE			SANITARY 4"		WATER 1"



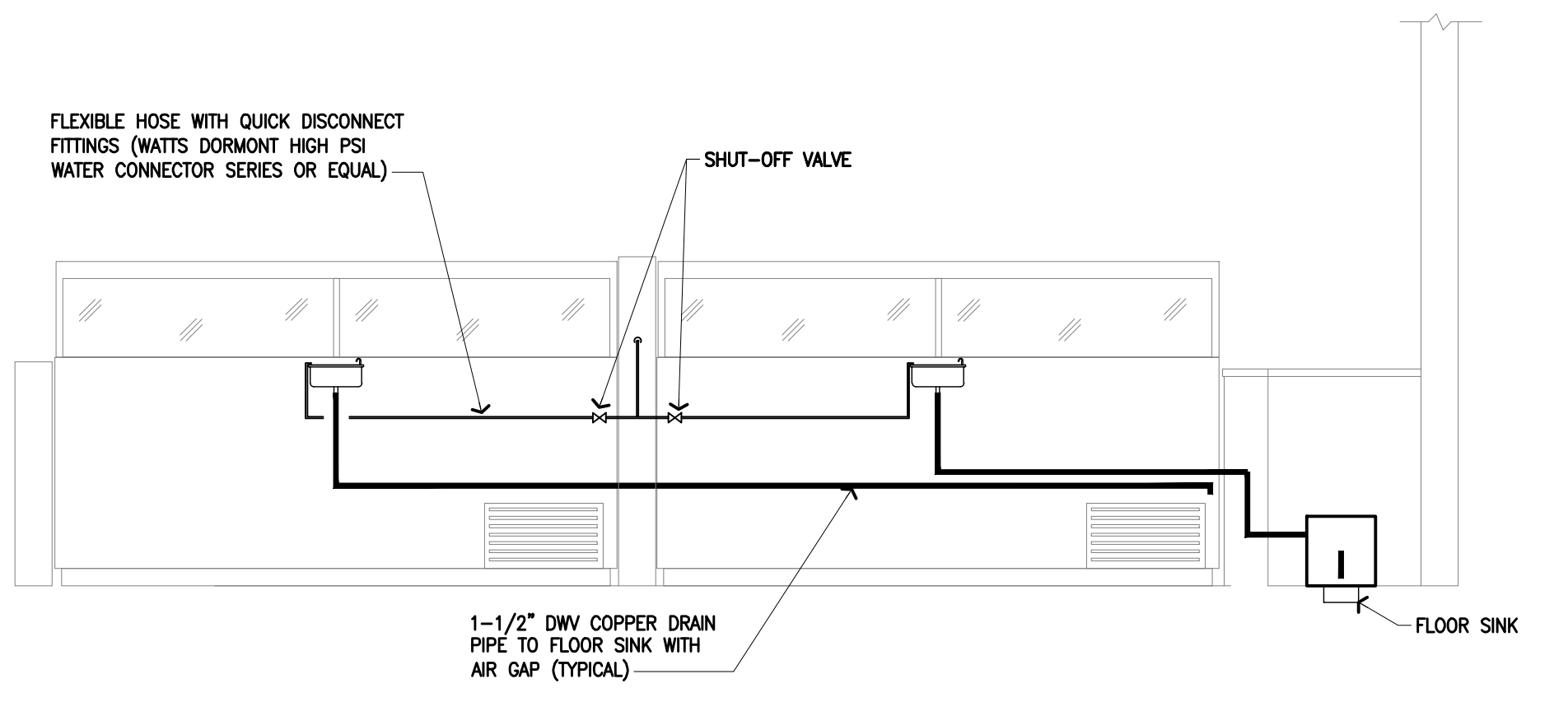
**3 Clean Out Detail**  
SCALE: NONE



**2 Floor Drain Detail**  
SCALE: NONE



**1 Penetration Detail**  
SCALE: NONE



**5 Dipper Well Detail**  
SCALE: NTS

**PLUMBING FIXTURE SCHEDULE**

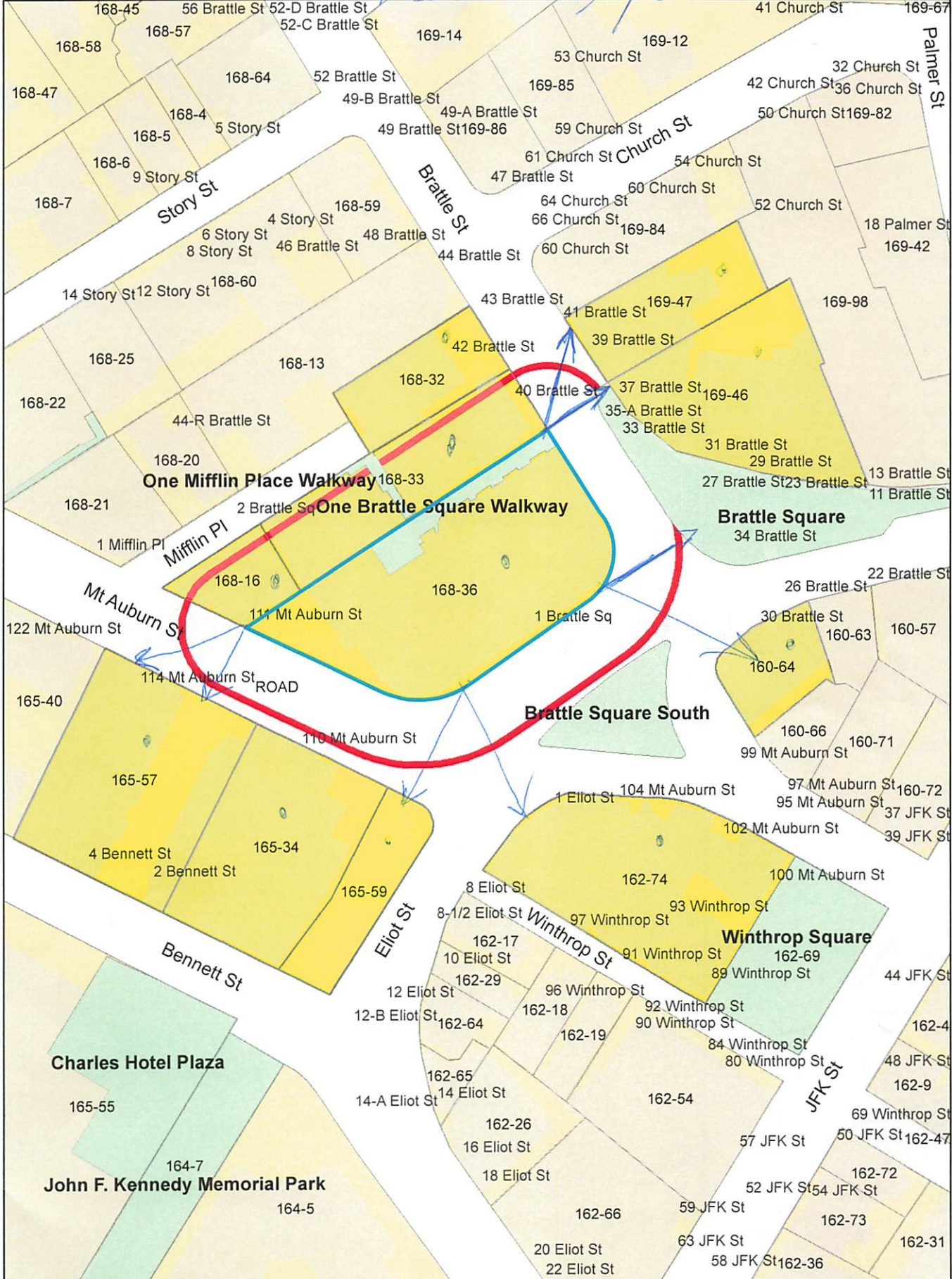
MARK	MANUFACTURER	MODEL	PROVIDED BY	PLUMBING CONNECTIONS						ACCESSORIES	DESCRIPTION
				W	HW	V	CW	FW	FW		
DP-1	REFERENCE EQUIPMENT SCHEDULE		OWNER	-	1-1/2"	-	1/2"	-	-	-	DIPPER WELLS
ET-1	AMTROL	ST-5	GC	-	-	-	3/4"	-	-	-	EXPANSION TANK (2.0 GAL)
FCO-1	ZURN	C02449	GC	4"	-	-	-	-	-	-	PVC FLOOR CLEANOUT
FD-1	ZURN	Z415B	GC	SEE PLAN	-	SEE PLAN	-	-	-	PROVIDE WITH TRAP PRIMER CONNECTION	FLOOR DRAIN WITH 6" DIAMETER STRAINER
FS-1	ZURN	FSB-5-PV3-SH-YS	GC	3"	-	2"	-	-	-	DOMESTIC STRAINER, HALF GRATE, & STAINLESS STEEL MESH SEDIMENT BUCKET	8" ROUND PVC FLOOR SINK
GT-1	SCHIER	GB-1 4060-001-04	GC	3"	-	2"	-	-	-	PROVIDE WITH EXTENSION RINGS AS REQUIRED	GREASE TRAP (ABOVE GROUND) 25 GPM, 64.9 LB GREASE CAPACITY
GT-2	ASHLAND POLYTRAP	ASHLAND 4804	GC	2"	-	2"	-	-	-	-	GREASE TRAP WITH THREADED CONNECTIONS (ABOVE GRADE) 4GPM, 8 LB GREASE CAPACITY
HS-2	REFERENCE EQUIPMENT SCHEDULE		OWNER	2"	-	-	1/2"	1/2"	-	MIXING VALVE (MX-1) (BY TGC)	WALL MOUNTED HAND SINK INCLUDED 8" GOOSENECK FAUCET.
LAV-1	AMERICAN STANDARD	355.012 LUCERNE	GC	2"	-	1-1/2"	1/2"	1/2"	-	WALL HUNG, WHITE VITREOUS CHINA LAVATORY, 4" O.C., CENTER SET FAUCET, HANDS FREE OPERATION, DELTA 591LFRONHD; 0.5 GPM, CONCEALED ARM CARRIER (ZURN Z1231 OR EQUAL) GRID DRAIN, P-TRAP, QUARTER TURN BALL STOPS, MESH STAINLESS UPPLIES, AND PIPING COVERS (TRUBRO LAV GUARD 2, OR EQUAL)	WALL HUNG ADA LAVATORY W/ ELECTRONIC FAUCET
MS-1	REFERENCE EQUIPMENT SCHEDULE		OWNER	3"	-	2"	1/2"	1/2"	-	T&S BRASS B-0665-BSTR (W/ INTEGRAL VACUUM BREAKER)	FLOOR MOUNTED MOP SINK
MX-1	WATTS	LFUSG-B	GC	-	-	-	1/2"	1/2"	-	-	THERMOSTATIC MIXING VALVE: SET DELIVERY TEMPERATURE TO 110°F. INSTALL IN ACCESSIBLE LOCATION.
SA-1	WATTS	LF15M2-A	GC	-	-	-	1/2"	-	-	-	SHOCK ABSORBER - 1/2" NPT
TP-1	PRECISION PLUMBING PRODUCTS	PR500	GC	-	-	-	1/2"	-	-	PROVIDE WITH DISTRIBUTION UNIT WHERE USED TO FEED MULTIPLE DRAINS AND ACCESS PANEL AS REQUIRED	TRAP PRIMER
3C-1	REFERENCE EQUIPMENT SCHEDULE		OWNER	-	2"(x3)	2"	1/2"	1/2"	-	-	-
WC-1	AMERICAN STANDARD	2467.100 - CADET FLOWISE CHAIR HEIGHT ELONGATED PRESSURE-ASSISTED TOILET	GC	4"	-	2"	1/2"	-	-	FURNISH WITH ALL FITTINGS, VALVES & SUPPLIES TO COMPLETE INSTALLATION.	1.1 GPF WATER CLOSET, PROVIDE TRIP LEVER ON SIDE OPPOSITE WALL.
WCO-1	ZURN	C02530	GC	SEE PLAN	-	-	-	-	-	PROVIDE WITH BRONZE CLEANOUT PLUG (ZURN Z1470, OR EQUAL)	WALL CLEANOUT
WH-1	A.O. SMITH	DEL-40	GC	-	-	-	3/4"	3/4"	-	PROVIDE WITH ALL NECESSARY PIPING AND EXPANSION TANK(ET-1) TO MEET PLUMBING CODE. UNIT SHALL SIT ON SHELF ABOVE MOP SINK WITH DRIP PAN AND DRAIN PIPING TO MOP SINK BELOW.	40 GALLON WATER HEATER, 460V/3Ø, 8 KW (4.0KW/4.0KW SIMULTANEOUS), RECOVERY AT 90°F - 36 GAL/HR







# 1 Brattle Square



168-45 56 Brattle St 52-D Brattle St 41 Church St 169-67  
168-58 168-57 52-C Brattle St 169-14 53 Church St 169-12  
168-47 168-64 52 Brattle St 169-85 42 Church St 32 Church St  
168-4 49-B Brattle St 49-A Brattle St 42 Church St 36 Church St  
168-5 5 Story St 49 Brattle St 169-86 59 Church St 50 Church St 169-82  
168-6 9 Story St 61 Church St Church St  
168-7 47 Brattle St 54 Church St  
168-59 64 Church St 60 Church St 52 Church St  
168-59 48 Brattle St 66 Church St 169-84 18 Palmer St  
168-60 44 Brattle St 60 Church St 169-42  
14 Story St 12 Story St 43 Brattle St 41 Brattle St 169-47 169-98  
168-25 168-13 42 Brattle St 39 Brattle St  
168-22 44-R Brattle St 40 Brattle St 37 Brattle St 169-46  
168-20 168-32 35-A Brattle St 33 Brattle St  
168-21 2 Brattle Sq One Brattle Square Walkway 31 Brattle St  
1 Mifflin Pl Mifflin Pl 27 Brattle St 23 Brattle St 13 Brattle St  
168-16 114 Mt Auburn St 168-36 1 Brattle Sq 34 Brattle St  
122 Mt Auburn St 114 Mt Auburn St ROAD 26 Brattle St 22 Brattle St  
165-40 110 Mt Auburn St 160-63 160-57  
165-57 160-64 30 Brattle St  
4 Bennett St 165-34 99 Mt Auburn St 160-66 160-71  
2 Bennett St 165-59 104 Mt Auburn St 97 Mt Auburn St 160-72  
110 Mt Auburn St 95 Mt Auburn St 37 JFK St  
165-59 102 Mt Auburn St 39 JFK St  
8 Eliot St 162-74 100 Mt Auburn St  
8-1/2 Eliot St 97 Winthrop St 93 Winthrop St  
162-17 10 Eliot St 91 Winthrop St 162-69  
162-29 96 Winthrop St 89 Winthrop St  
12 Eliot St 162-18 92 Winthrop St  
12-B Eliot St 162-64 162-19 90 Winthrop St  
14-A Eliot St 162-65 14 Eliot St 84 Winthrop St  
162-26 16 Eliot St 162-54 80 Winthrop St  
18 Eliot St 162-66 57 JFK St 44 JFK St  
20 Eliot St 63 JFK St 50 JFK St 162-47  
22 Eliot St 58 JFK St 52 JFK St 54 JFK St  
162-72  
162-73  
162-31

One Mifflin Place Walkway  
One Brattle Square Walkway

Brattle Square

Brattle Square South

Winthrop Square

Charles Hotel Plaza

John F. Kennedy Memorial Park

*1 Brattle Square*  
*Petitioner*

168-33  
BRATTLE SQUARE ASSOCIATES  
C/O BRATTLE SQUARE MANAGEMENT CORP  
P.O. BOX 380828  
CAMBRIDGE, MA 02238

168-33  
COHEN, SAUL B. & MARC E. GOLDBERG  
TRS. OF HARVARD YEARBOOK REALTY TRUST  
2 BRATTLE SQUARE  
CAMBRIDGE, MA 02138

DANA JALBUENA  
119 N 11th St 1A,  
BROOKLINE, NY 11249

168-16  
TARRAGON, LLC  
1188 CENTRE STREET  
NEWTON, MA 02459

168-33  
B & J BRATTLE REALTY, LLC.  
2 BRATTLE SQ  
CAMBRIDGE, MA 02138

168-36  
BCSP 9 OBS PROPERTY LLC  
200 STATE ST  
BOSTON, MA 02109

168-33  
UNION OF CONCERNED SCIENTISTS, INC.  
2 BRATTLE SQUARE  
CAMBRIDGE, MA 02138

168-33  
CRESS, WILLIAM E.,  
TR OF TWO BRATTLE SQUARE TR. C/O BRATTLE  
WALK INC HAMMOND PRP MGMT INC  
TWO BRATTLE SQUARE  
CAMBRIDGE, MA 02138

169-46-47  
AP BRATTLE SQUARE, LP  
C/O ASANA PARTNERS, LP  
1616 CAMDEN RD SUITE 210  
CHARLOTTE, NC 28203

168-33  
UNION OF CONCERNED SCIENTISTS, INC.  
40C BRATTLE STREET UNIT 1/4  
CAMBRIDGE, MA 02138

168-32  
CAMBRIDGE CENTER FOR ADULT  
EDUCATION  
P.O. BOX 9113  
CAMBRIDGE, MA 02238-9113

162-74  
ELIOT SQUARE ENTERPRISES INC.,  
TR. ELIOT SQUARE ENTERPRISES TRUST  
1270 SOLDIERS FIELD RD  
BRIGHTON, MA 02135

162-74  
JUNIPER ENTERPRISES LIMITED  
PARTNERSHIP  
1270 SOLDIERS FIELD RD  
BRIGHTON, MA 02135

162-74  
LAURELWOOD, LLC  
1188 CENTRE ST.  
NEWTON, MA 02458

165-57  
CONDUCTOR'S BUILDING LLC  
20 UNIVERSITY RD.  
CAMBRIDGE, MA 02138

162-74  
KOAWOOD LLC  
PO BOX 590179  
NEWTON, MA 02459

162-74  
BORDEN, PHILIP A. & CATHERINE J. TURCO  
95 WINTHROP ST UNIT WSR7  
CAMBRIDGE, MA 02138

165-34  
PRESIDENT & FELLOWS OF HARVARD COLLEGE  
C/O HARVARD REAL ESTATE INC.  
HOLYOKE CENTER ROOM 1017  
1350 MASSACHUSETTS AVE  
CAMBRIDGE, MA 02138-3895

162-74  
DF CAMBRIDGE HOLDINGS, LLC  
55 HUDSON YARDS FL 29  
NEW YORK, NY 10001

162-74  
BALL, VALERIE & ROBERT BRAUNS  
93 WINTHROP ST - UNIT WSR 5B  
CAMBRIDGE, MA 02138

162-74  
HUEBNER, ALEXANDRA  
93 WINTHROP ST UNIT 5A  
CAMBRIDGE, MA 02138

160-64  
HADLEY, LILLIAN H.,  
HARRY LEBARON SAMPSON, TR.  
C/O THOMAS HADLEY TRUST  
411 WALNUT ST PMB 17806  
GREEN COVE SPRINGS, FL 32043

162-74  
BORDEN, PHILIP A. CATHERINE J. TURCO  
93 WINTHROP STREET, UNIT WSR 5C  
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165-59  
COMMONWEALTH OF MASSACHUSETTS  
20 SOMERSET STREET  
BOSTON, MA 02108