



**PROPOSED RELOCATED 15 FERRY STREET TO NEW LOCATION AT THE INTERSECTION OF SALEM STREET AND HOLDEN STREET**

PROJECT NAME

**Salem Street  
Mixed Use**

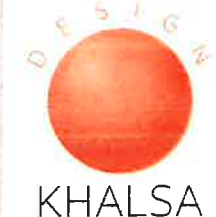
PROJECT ADDRESS

1 Salem Street Malden,  
MA

CLIENT

**Alpha Business  
Center, LLC**

ARCHITECT



17 IVALOO STREET SUITE 400  
SOMERVILLE, MA 02143  
TELEPHONE: 617-591-8682 FAX:  
617-591-2086

CONSULTANTS:

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REGISTRATION



Project number	18025
Date	06/25/21
Drawn by	Author
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Scale	

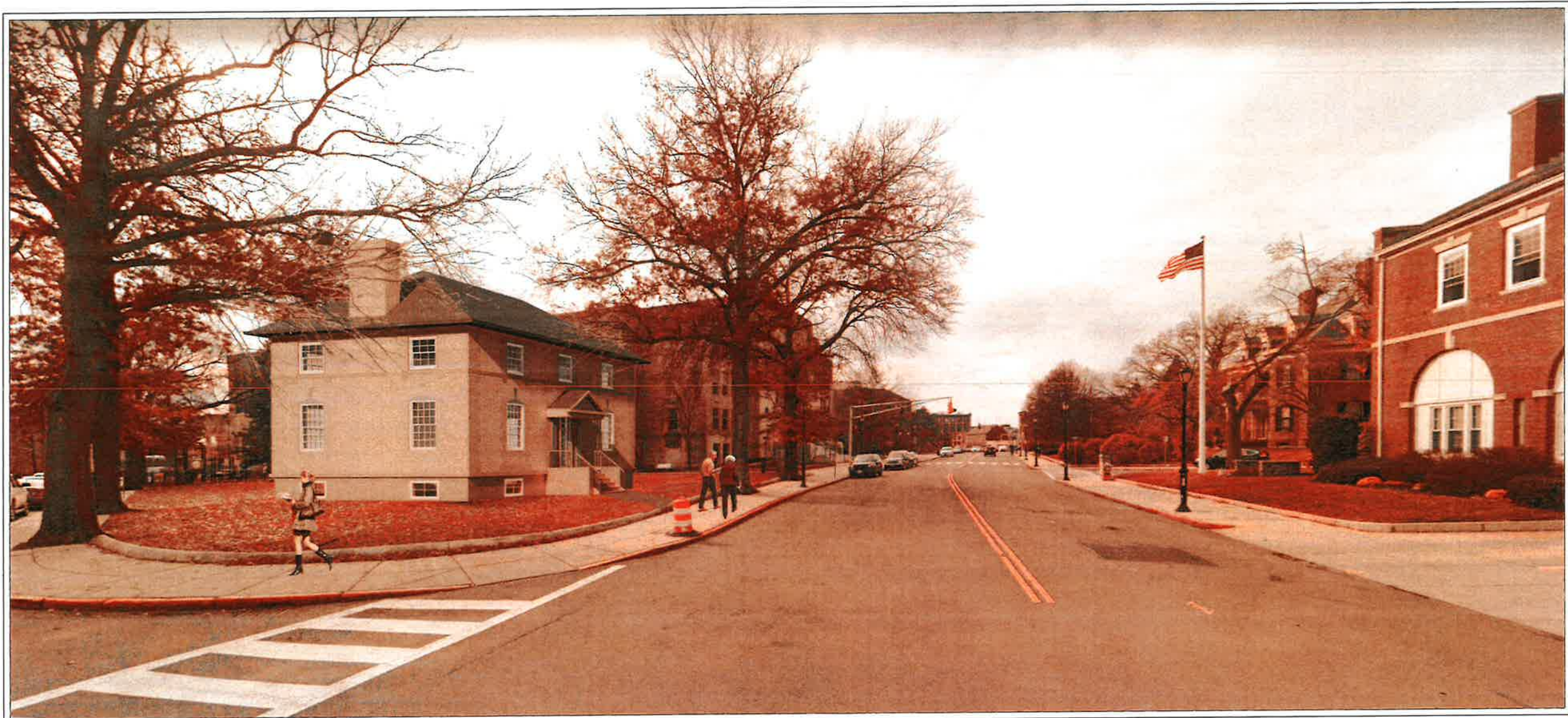
REVISIONS

No.	Description	Date

Relocated Ferry  
Street

**Ferry-1**  
Salem Street Mixed Use





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**Salem Street  
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**KHALSA**

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No.	Description	Date

Relocated Ferry  
Street

**Ferry-2**  
Salem Street Mixed Use



GENERAL:

1. THE STRUCTURAL DRAWINGS SHALL BE IN CONFORMANCE WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS, AS WELL AS THE SPECIFICATIONS AND SHOP DRAWINGS OF ALL DISCIPLINES. ANY QUESTION ABOUT THE INFORMATION SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER BEFORE PROCEEDING WITH THE AFFECTED WORK.
2. ALL WORK SHALL CONFORM TO THE PROVISIONS OF THE MASSACHUSETTS STATE BUILDING CODE, 8TH EDITION (COMMERCIAL), INCLUDING THE 2015 IRC EDITION.
3. FOR DIMENSIONS NOT INDICATED, REFER TO ARCHITECTURAL DRAWINGS.
4. ALL INDICATED DETAILS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS.
5. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE JOB SITE DURING CONSTRUCTION IN CONFORMANCE WITH THE MASSACHUSETTS STATE LAWS AND REGULATIONS, AS WELL AS THE FOLLOWING, AS ASSIGNED BY ON-SITE CONDITIONS:

- A. SHEETING OR SHORING OF TRENCHES AND EXCAVATIONS
  - B. TEMPORARY GLUING OR BRACING OF PARTIALLY COMPLETE STRUCTURES
  - C. SECURING PORTIONS OF PARTIALLY COMPLETE STRUCTURES FROM MOVEMENT
  - D. TEMPORARY SHORING OF FLOORS OR ROOFS
  - E. MEASURES TO PREVENT FALLS FROM EDGES OF OR OPENINGS THROUGH FLOORS OR ROOFS
6. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE WORK OF ALL TRADES, THE MEANS AND METHODS OF CONSTRUCTION, AND THE SAFETY OF ALL ELEVATIONS AND DIMENSIONS.
7. ELEMENTS SHALL BE IDENTIFIED, NUMBERED, COLORED, OR CUT WITHOUT THE EXPRESS APPROVAL OF THE DESIGNER.

2. ESTIMATES OF PARTIAL AND FULL DEPTH PATCHING ARE NOT BASED ON DESTRUCTIVE EXPLORATION. THEY ARE INTENDED TO ILLUSTRATE AS FULLY AS POSSIBLE WHAT IS KNOWN ABOUT EXISTING CONDITIONS. ACTUAL VOLUMES OF CUTTING, PATCHING AND NEW CONCRETE SHALL BE FIELD VERIFIED.

- |     |                             |                                   |                                |
|-----|-----------------------------|-----------------------------------|--------------------------------|
| 1.  | STRUCTURAL ACTION LOADS     | $P_d = 40 \text{ PSF}$            | MINIMUM $P_d = 30 \text{ PSF}$ |
| 2.  | GROUND SNOW LOAD            | $P_g = 127 \text{ MPN (CAT. II)}$ |                                |
| 3.  | WIND SPEED                  | $V_{ref}$                         |                                |
| 4.  | WIND EXPOSURE               | $B$                               |                                |
| 5.  | FLOOR LIVE LOAD             | $125 \text{ PSF}$                 |                                |
| 6.  | CEILING STORAGE             | $100 \text{ PSF}$                 |                                |
| 7.  | STAIRS & EGRESS             |                                   |                                |
| 8.  | EXTRINSIC LOADING CRITERIA: |                                   |                                |
| 9.  | GROUND ACCELERATION         | $S_s = 0.221g$                    | 1-SECOND PERIOD $S_1 = 0.070g$ |
| 10. | SEISMIC DESIGN CATEGORY     | $B$                               |                                |
| 11. | SITE CLASS                  | $D$                               |                                |
| 12. | ANALYSIS METHOD             | EQUILIBRIUM STATIC LOAD           |                                |
| 13. | LATERAL RESISTANCE SYSTEM   |                                   |                                |

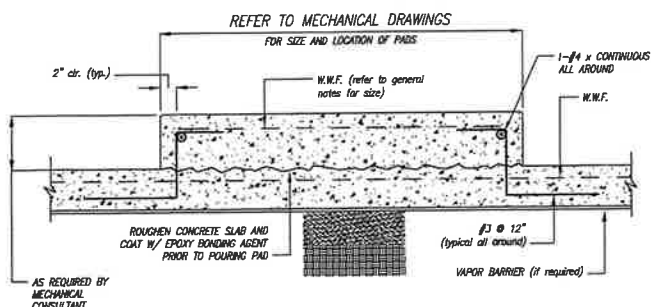
1. ALL FOUNDATIONS SHALL BE SUPPORTED ON UNDISTURBED GRANULAR SOIL OR COMPACTED FILL HAVING A CAPACITY OF 2000 PSF. SOIL BEING STRIPPED & GROUNDWATER CONDITIONS ARE SUBJECT TO FIELD VERIFICATION. REMOVE ALL LOAM AND ORGANIC MATERIAL BEFORE FOUNDATIONS.
2. THE BOTTOM OF ALL FOOTINGS SHALL BE AT LEAST 4'-0" BELOW THE LOWEST ADJACENT SURFACE SUBJECT TO FREEZING.
3. THE GENERAL CONTRACTOR SHALL MAINTAIN CONTROL OVER GROUNDWATER TO KEEP ALL EXCAVATIONS DRY DURING CONSTRUCTION.
4. CONCRETE SHALL NOT BE PLACED AGAINST MET OR FROZEN SOIL.
5. COMPACTED STRUCTURAL FILL SHALL BE GRANULAR MATERIAL COMPACTED TO 95% DENSITY IN 6" LIFTS.
6. HOW FOUNDATIONS SHALL NOT BE UNDERPAVED FOR THE PLACEMENT OF UTILITY LINES.

- CONCRETE
1. ALL CONCRETE SHALL BE NORMAL WEIGHT, 3/4" AGGREGATE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
  2. STEEL REINFORCING BARS SHALL CONFORM TO ASTM A118, GRADE 60. DEFORMED BARS SHALL BE LAPPED 40 DIAMETERS.
  3. WELDED STEELTUBES OR ANY OTHER FABRIC SHALL CONFORM TO ASTM A118.
  4. NO ALUMINUM CONCRETE SHALL BE CAST INTO CONCRETE.
  5. MINIMUM CLEAR CONCRETE COVER OVER REINFORCING STEEL (FROM TIES TO FACE OF CONCRETE):

- FORMED CONCRETE EXPOSED TO DRY, WEATHER, OR WATER 2"
- CONCRETE PLACED AGAINST EXISTING 1"
- CONCRETE SURFACES OF PAVING SLABS 1"
- NEW CONCRETE SHALL BE CURED USING PLASTIC SHEETS, FREE WATER, OR SPRAY-ON CURED MEMBRANE ON UNIFORM SURFACES 5
- INTERIOR SLABS SHALL BE SMOOTH TROWEL FINISH. FORMS SHALL REMAIN IN PLACE UNTIL THE CONCRETE IS SUFFICIENTLY STRONG TO TOLERATE REMOVAL OF FORMS WITHOUT CRACKING OR SPALLING OF CONCRETE SURFACES AND WALLS.
- USE 3/4" AT ALL NON-INTERIOR CORNERS OR FINISHES ON SLABS AND WALLS.
- ALL BASEMENT WALLS SHALL BE FULL HEIGHT CONCRETE FROM THE BASEMENT FLOOR TO THE FIRST FLOOR. WOOD CRIPPLE WALLS ARE PROHIBITED. CRIPPLE SHALL NOT BE PLACED AGAINST BASEMENT WALLS UNTIL THE BASEMENT FLOOR SLAB IS IN PLACE.
- SEE 1001 FOR CONCRETE CURING PRACTICE.

1. ALL NEW CONCRETE MASSORY UNITS SHALL CONFORM TO ASTM C476 AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI.
2. MORTAR FOR CONCRETE MASSORY SHALL CONFORM TO ASTM C770, TYPE M OR S. MORTAR MAY SHALL CONTAIN NO AIR ENTRAINING AGENTS.
3. GROUT SHALL CONFORM TO ASTM C476 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. WHERE GROUT IS SPECIFIED, THE USE OF MORTAR IS PROHIBITED.
4. STEEL REINFORCING BARS SHALL CONFORM TO ASTM A618 GRADE 60, DETERMINED AND UNDATED. VERTICAL BARS SHALL BE SET IN BLOCK CAUTES AND GROUTED SOLID AT THE INDICATED SPACING. GROUT LITES SHALL NOT EXCEED 48 INCHES. HORIZONTAL BARS SHALL BE SET IN BOND BEAMS AND GROUTED SOLID. ALL BARS SHALL BE LAPPED MINIMUM 40 DIAMETERS AND HORIZONTAL BARS SHALL BE BENT AT CORNERS.
5. STEEL WIRE REINFORCING SHALL CONFORM TO ASTM A16. GALVANIZED, STANDARD WEIGHT, LATE TYPE UNLESS OTHERWISE NOTED. JOINT REINFORCING SHALL BE SET IN FULL MORTAR BEDS BETWEEN COURSES AND SHALL SPECIALLY MANUFACTURED FOR CONNECTIONS FOR TEES AND CORNERS.
6. ALL NEW CONCRETE MASSORY SHALL BE ATTACHED TO FLOOR OR ROOF STRUCTURES AT EACH FINISHED LEVEL OF THE BUILDING. ATTACHMENT TO NEW CONCRETE MASSORY SHALL BE BY DIRECT GRADING, EMBEDDED ANCHORS, OR BY SLEEVES ANCHORS OR EPOXY SETTING ANCHORS DRILLED IN PLACE.
7. BLOCK CAUTES AT THE EDGES OF OPENINGS SHALL BE GROUTED SOLID.
8. WOODEN BEAMS ARE PERMITTED IN CONCRETE MASSORY WALLS OR FULLY GROUTED BLOCKS SHALL BE USED FOR AT LEAST 3 COURSES BELOW THE BEARING PLATE. ALL STEEL BEAMS SHALL BEAR AT LEAST 7" ON GROUT.
9. STEEL LITTLE ANGLES SHALL BE USED OVER OPENINGS IN WALLS FOR EACH 4" WYTHE FOR LITTLE SHOWING THIS DRAWING. OUTWASH ANGLES OF EXTERIOR WALLS SHALL BE NOT-UP GALVANIZED.
10. ALL CONCRETE MASSORY UNITS SHALL NOT EXCEED 8' VERTICALLY.

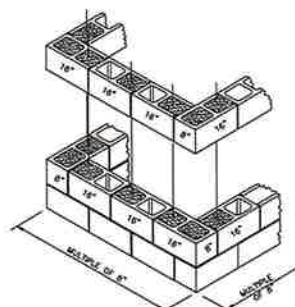
17. STRUCTURAL STEEL SHALL BE CONSTRUCTED AT APPROXIMATE WEIGHTS LISTED IN THE SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR STEEL.
- STRUCTURAL STEEL
- STEEL MATERIALS SHALL CONFORM TO THE FOLLOWING STANDARDS:
- |                                    |                    |
|------------------------------------|--------------------|
| WIDE FLANGE SHAPES                 | ASTM A588 GRADE 50 |
| WELDED STRUCTURAL SECTIONS         | ASTM A588 GRADE B  |
| STEEL PIPE                         | ASTM A53           |
| HIGH STRENGTH STRUCTURAL FASTENERS | ASTM A325N         |
| RODS AND ANCHOR BOLTS              | ASTM A307          |
| FOR SHIPWAY PLATES                 | ASTM A36           |
- ALL STRUCTURAL STEEL SHALL BE SHOP FABRICATED FROM APPROVED SHOP DRAWINGS DETAILING EXPOSED DIMENSIONS:
- FIRST PROTECTIVE COAT OF PAINT SHALL BE APPLIED WHEN WEAVING ANCHORS TO EXISTING WOOD CONSTRUCTION.
- ALL NEW STEEL COLUMNS SHALL BE ERECTED ON 1" THICK LEVELING PLATE OVER 1/4" NON-DRAINAGE COATED BED.
- ALL STEEL SHALL BE GALVANNEAL.



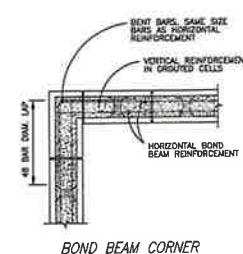
<h1 style="text-align: center;">LINTEL SCHEDULE</h1>		
OPENING SIZE	LINTEL SIZE (TYP)	AT 6" CMU
UP TO 3'-0"	L 3 1/2 X 3 1/2 X 5/16	WT 4 X 9
OVER 3'-0" TO 4'-6"	L 4 X 3 1/2 X 5/16 (4" LEG VERTICAL)	WT 4 X 10.5
OVER 4'-6" TO 6'-0"	L 5 X 3 1/2 X 5/16 (5" LEG VERTICAL)	WT 7 X 11
OVER 6'-0" TO 8'-0"	L 6 X 3 1/2 X 5/16 (6" LEG VERTICAL)	WT 8 X 13

NOTES:

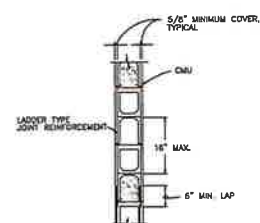
- ALL LINTEL ANGLES SHALL HAVE MIN. 8" BEARING ON MASONRY AT EACH END.
- USE ONE ANGLE FOR EACH 4" OF WALL THICKNESS.
- OUTERMOST ANGLE IN WALL SHALL BE HOT ROLLED CALVALANIZED.
- AT 6" WALLS CUT MASONRY UNIT TO FIT OVER TEE SECTION. ONE TEE PER 6" THICKNESS.



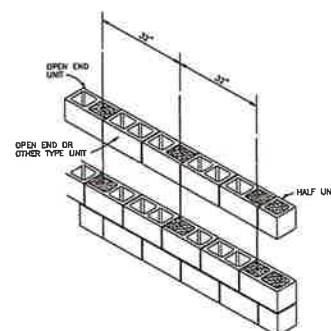
CORNER DETAIL, 8-INCH CMU WALL



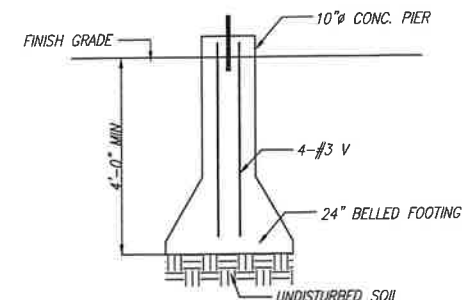
BOND BEAM CORNER



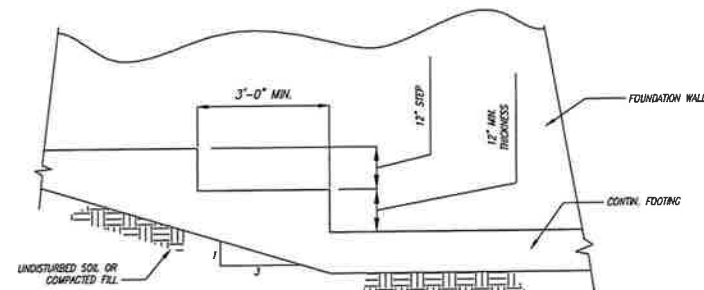
JOINT REINFORCEMENT SINGLE WYTHE WALL



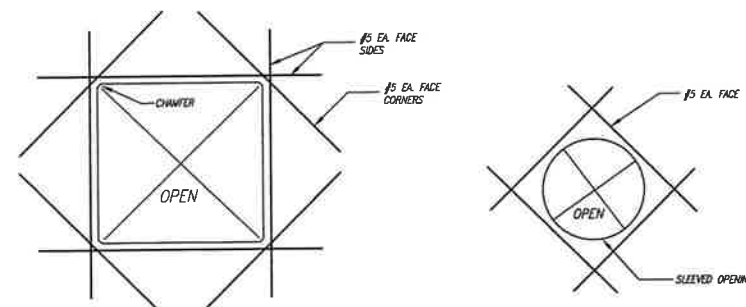
PARTIALLY GROUTED CMU  
32-INCH REINFORCEMENT SPACING



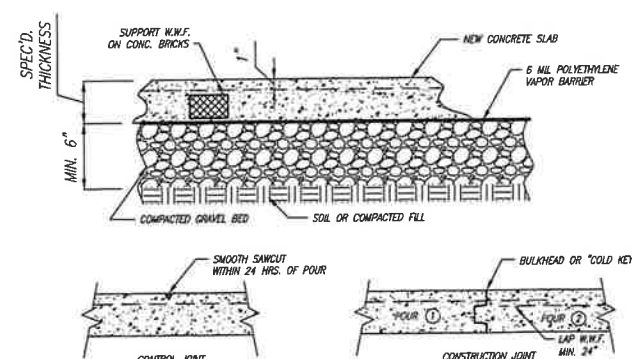
TYPICAL BELLED FOOTING



STEPPED FOOTING  
1/2" = 1'-0"



FORMED OPENINGS IN CONCRETE WALLS & SLABS  
NO SCALE

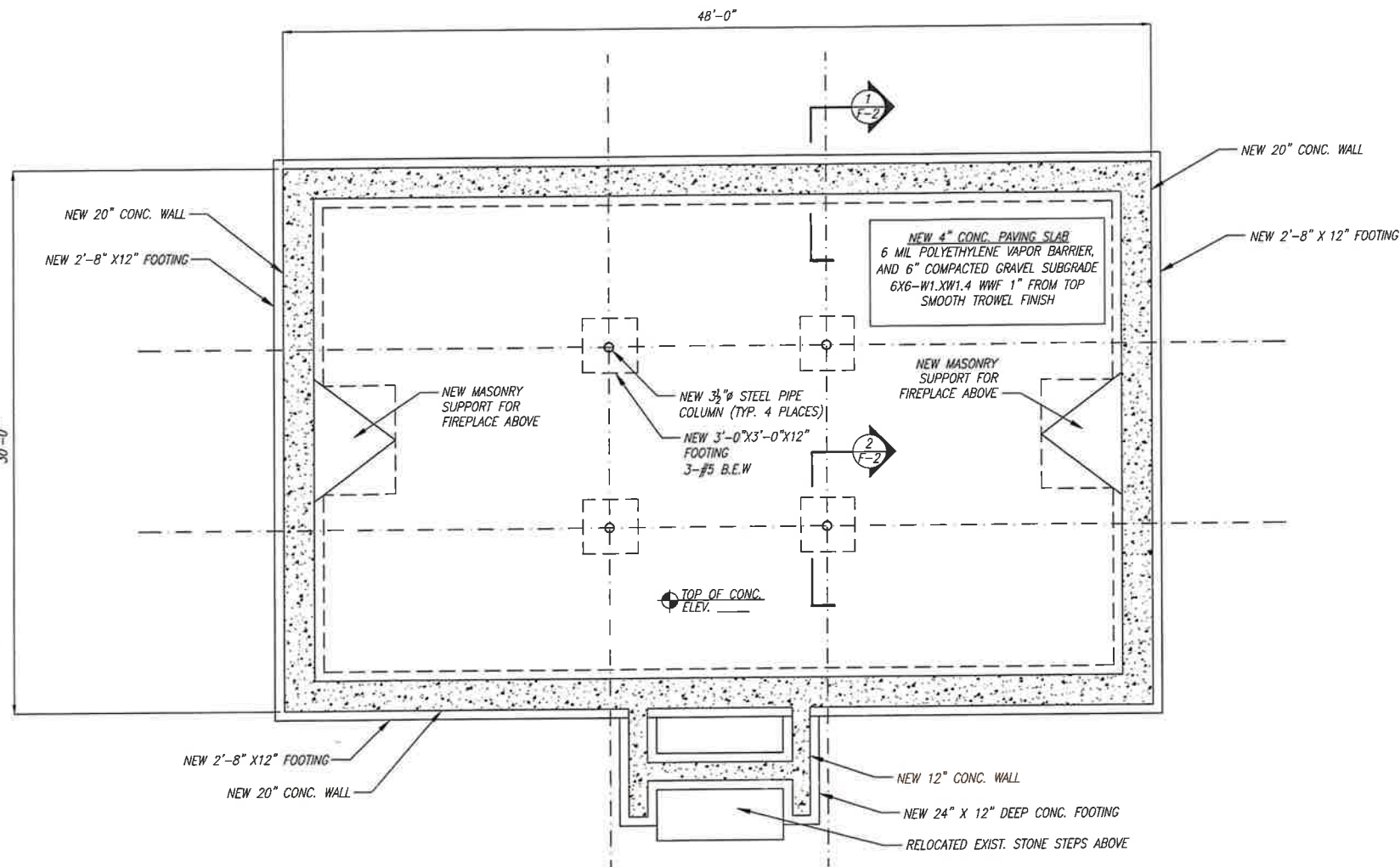


### TYPICAL CONCRETE PAVING SLAB DETAILS

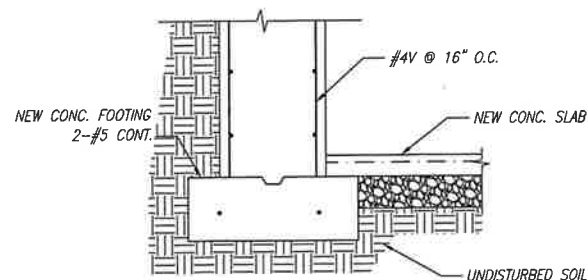
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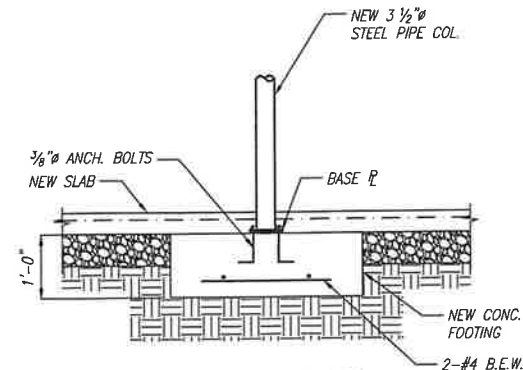
PROGRESS – NOT FOR CONSTRUCTION



**BASEMENT AND FOUNDATION PLAN**  
1/4" = 1'-0"



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



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

**PROJECT NAME**  
Historic House

**PROJECT ADDRESS**  
15 Ferry Street Malden, MA

**CLIENT**  
Alpha Business Center, LLC

**ARCHITECT**  
  
KHALSA

17 IVALOO STREET SUITE 400  
SOMERVILLE, MA 02143  
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**CONSULTANTS:**  
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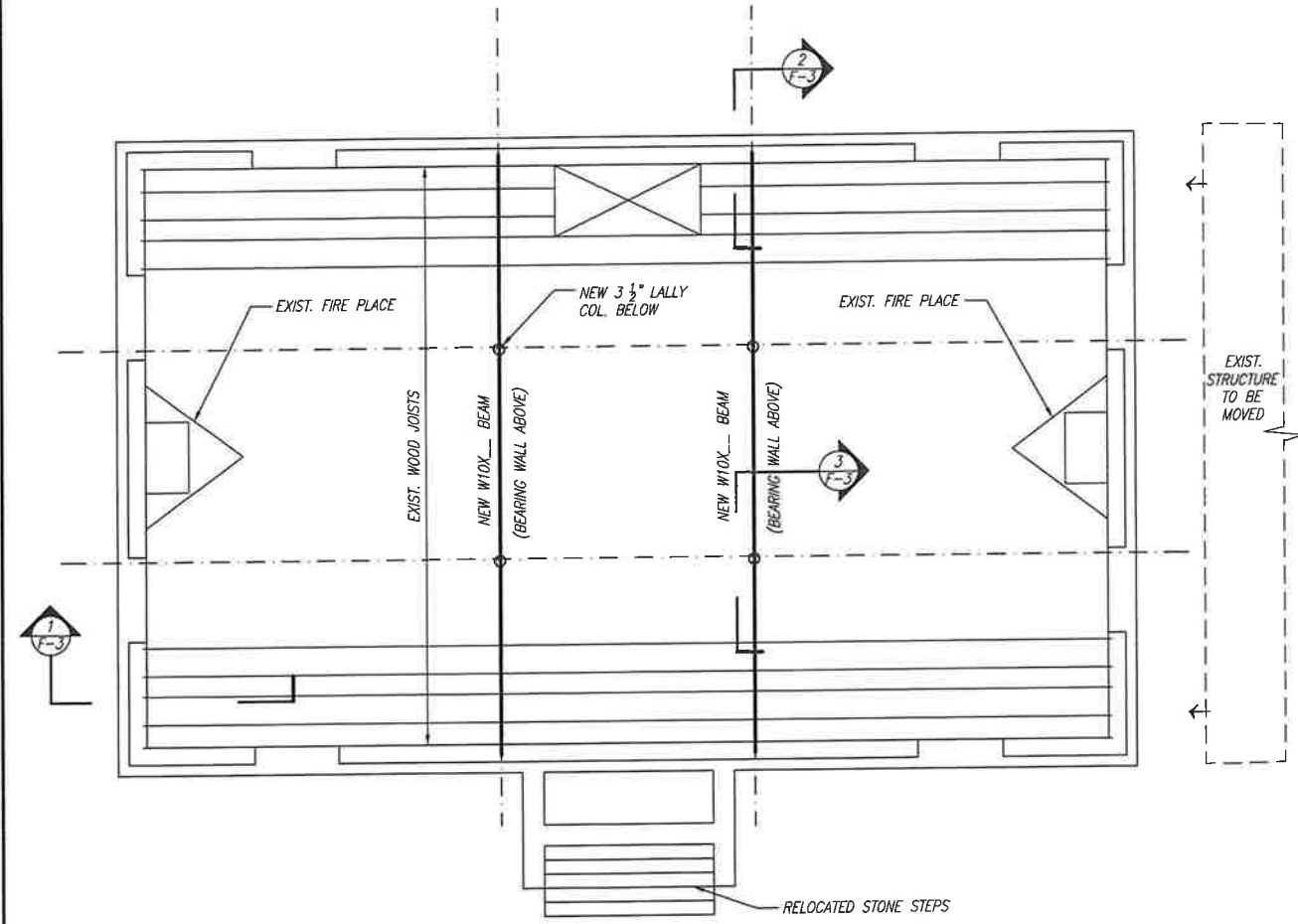
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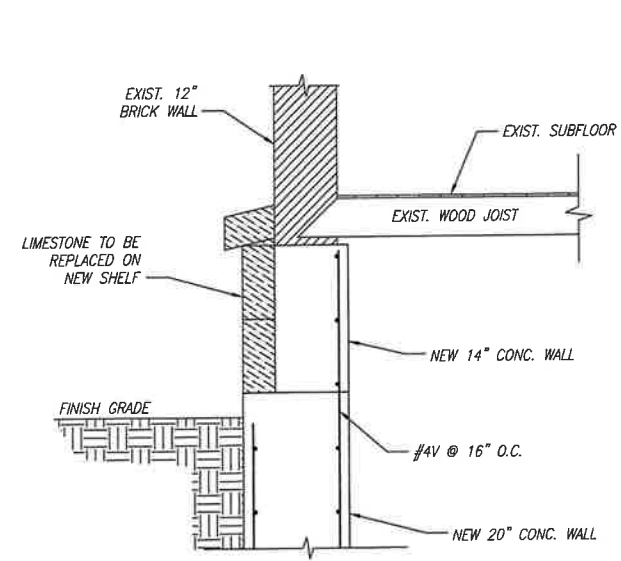
**NEW FOUNDATION & BASEMENT PLAN**  
**F-2**  
Salem Street Mixed Use

PROGRESS - NOT FOR CONSTRUCTION

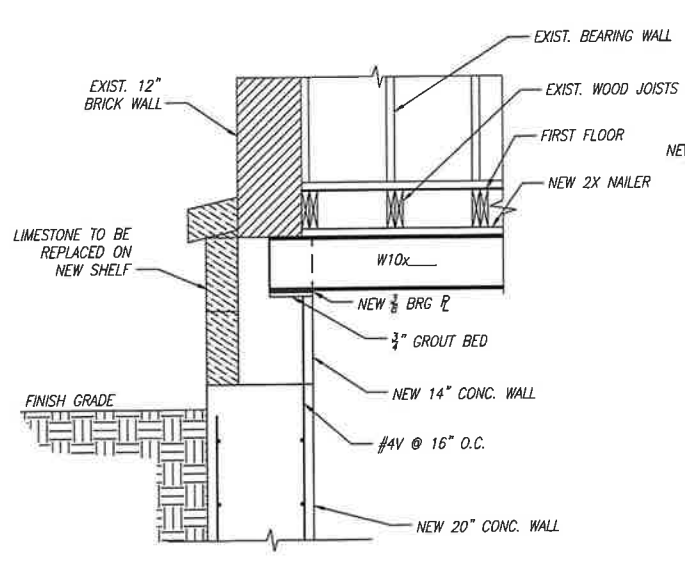




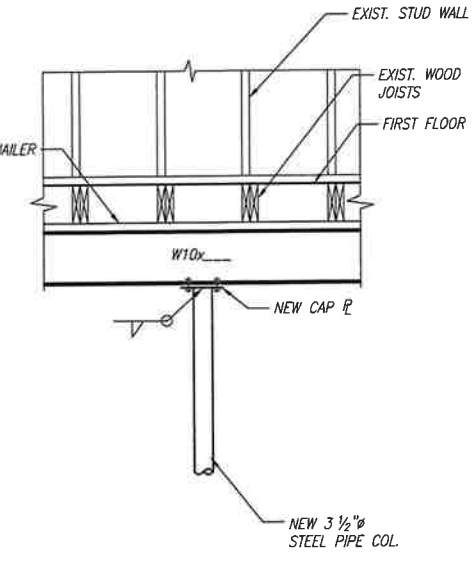
**FIRST FLOOR FRAMING PLAN**  
 $\frac{1}{4}'' = 1'-0''$



**SECTION 1**  
 $\frac{3}{4}'' = 1'-0''$



**SECTION 2**  
 $\frac{3}{4}'' = 1'-0''$



**SECTION 3**  
 $\frac{3}{4}'' = 1'-0''$

PROGRESS – NOT FOR CONSTRUCTION

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**FIRST FLOOR SUPPORT PLAN**  
**F-3**  
Salem Street Mixed Use