

The current proposal is:

Preservation Department – Item 1, LPC-21-03229

# 27 East 4th Street – NoHo Historic District Extension Borough of Manhattan

Note: this is a Public Meeting item. No public testimony will be received today as the hearing on this item is closed

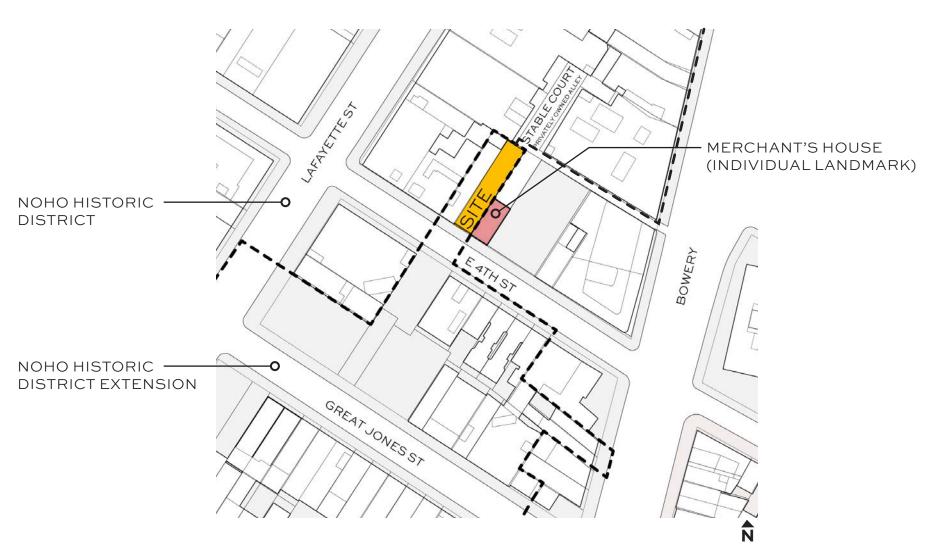
#### PROPOSED BUILDING

### 27 EAST 4TH STREET

#### NOHO HISTORIC DISTRICT EXTENSION

## LANDMARKS PRESERVATION COMMISSION

DOCKET #: LPC-21-03229
PUBLIC HEARING - JANUARY 12, 2021
PUBLIC MEETING - JANUARY 26, 2021
PUBLIC MEETING - DECEMBER 12, 2023







A - EAST STREET VIEW - FROM E 4TH ST & BOWERY



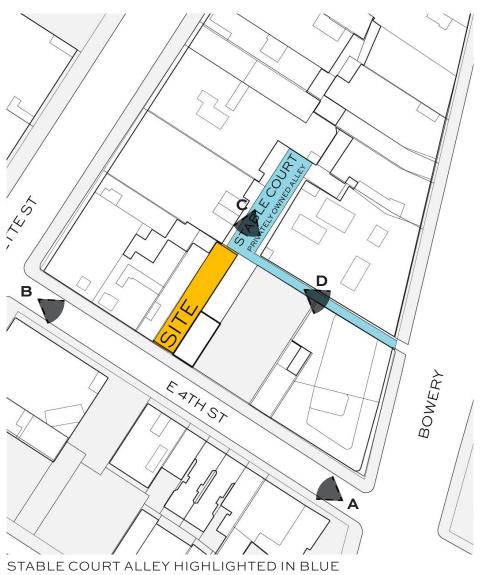
**B**-WEST STREET VIEW - FROM E 4TH ST & LAFAYETTE



C - EXISTING CONDITIONS - STABLE COURT, FACING REAR OF LOT 72



**D** - EXISTING CONDITIONS - STABLE COURT, ALLEY ACCESS TO BOWERY









DRAWING OF SEABURY TREDWELL HOUSE (NOW MERCHANT'S HOUSE MUSEUM), C. 1930.



SEABURYTREDWELL HOUSE (NOW MERCHANT'S HOUSE MUSEUM), C. 1931.



27 E 4TH ST

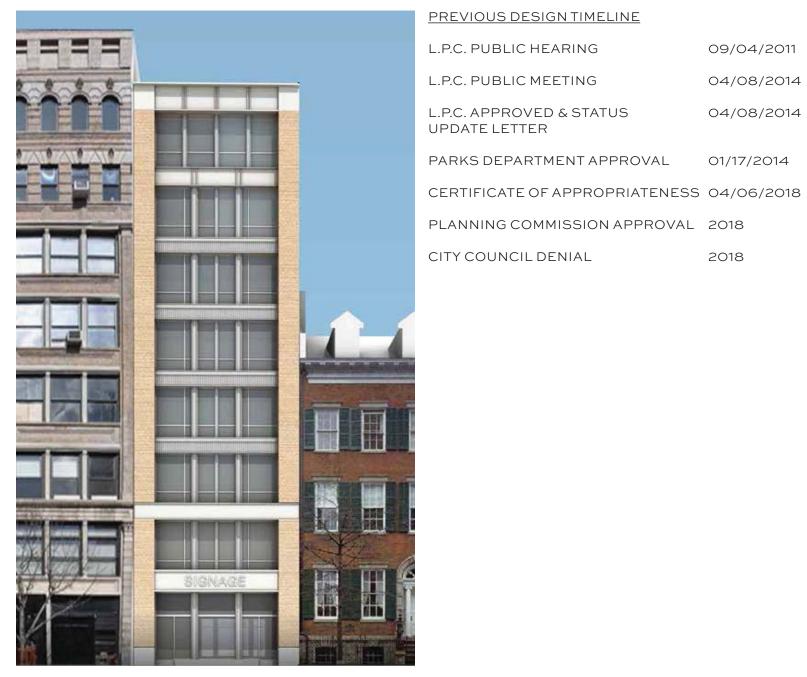
MERCHANT'S HOUSE

MUSEUM

27 E 4TH STREET IN 1940S TAX PHOTO



#### PREVIOUS PROPOSED DESIGN



PERSPECTIVE ELEVATION

#### **CURRENT** PROPOSED DESIGN

09/04/2011

04/08/2014

04/08/2014

01/17/2014

2018



PERSPECTIVE ELEVATION

CURRENT PROPOSED DESIGNTIMELINE

L.P.C. PUBLIC HEARING 01/21/2021

L.P.C. PUBLIC MEETING 01/26/2021



## CURRENT STATUS AFTER PREVIOUS LPC PUBLIC HEARING / MEETING 01/26/2021

- 1) ADDITIONALTEST PIT FOR REVIEW OF FOUNDATION AT LOT LINE WITH MERCHANT'S HOUSE MUSEUM.
- 2) CONSIDER ADDITIONAL STRUCTURAL MEASURES TO MINIMIZE ANY POTENTIAL SETTLEMENT
- 3) DESIGN WAS SUPPORTED WITH ONE EXCEPTION CONSIDER PROPOSING A DIFFERENT BRICK.
- 4) STATUS OF EXISTING SINGLE FUNCTIONING FLUE, WITH MERCHANT'S HOUSE MUSEUM.

#### TIMELINE

1)	TEST PIT DUG	11/28/2022
2)	TEST PIT REVIEWED	11/29/2022
3)	ENGINEER'S MEETING	03/28/2023
4)	REVISED STRUCTURAL DESIGN ISSUED	09/20/2023





PLS. 1 ELEV. BULKHEAD

112'-5" T.O. PARAPET 97'-11" FRONT SETBACK T.O. CORNICE 84'-10 1/2" FLOOR 6 68' - 5" P-101 FLOOR 5 55' - 5" FLOOR 4 42' - 5" 13'-0" FLOOR 1 PROPOSED SECTION

PROPOSED BUILDING

PROPOSED ELEVATION

6





12.12.2023

#### History (from Historic Designation Report)

"This one-story structure designed by architect Herman Kron was built for Paramount Filling Stations, Inc. c.1945 for use as a garage and repair shop. The building, which is currently used as storage for food carts, has a simple brick façade and large vehicle entrance."

#### LPC Certificate of Appropriateness (Issued 04/06/18)

"With regard to this proposal, the Commission found that the one-story garage building is not one of the buildings for which the historic district is designated, and therefore its demolition will not diminish the special architectural and historic character of the NoHo historic district extension"

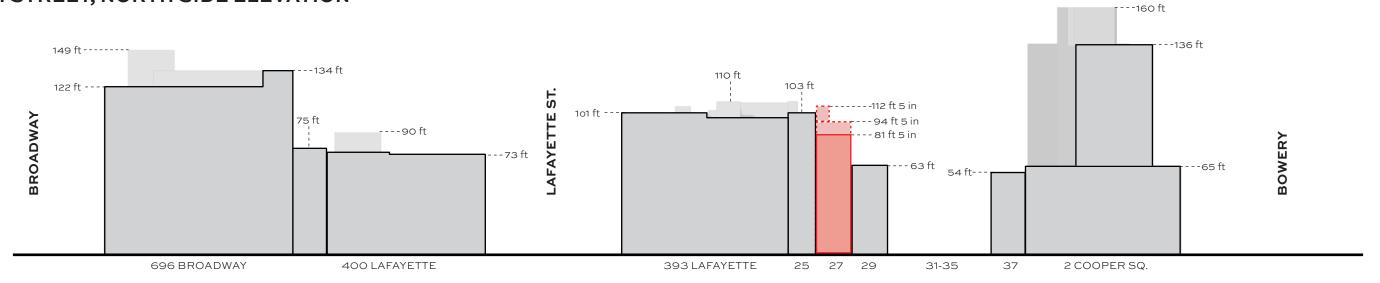


EXISTING GARAGE AND REPAIR SHOP, CONSTRUCTED 1946

DEMOLITION OF SINGLE STORY GARAGE - APPROVED



#### EAST 4TH STREET, NORTH SIDE ELEVATION





400 LAFAYETTE, 1890 COMMERCIAL



393 LAFAYETTE, 1885 COMMERCIAL



25 EAST 4TH ST., 1900 RESIDENTIAL



29 EAST 4TH ST., 1832 INSTITUTIONAL



37 EAST 4TH ST., 1900 RESIDENTIAL



2 COOPER SQ., 2009 RESIDENTIAL

SCALE OF STREET

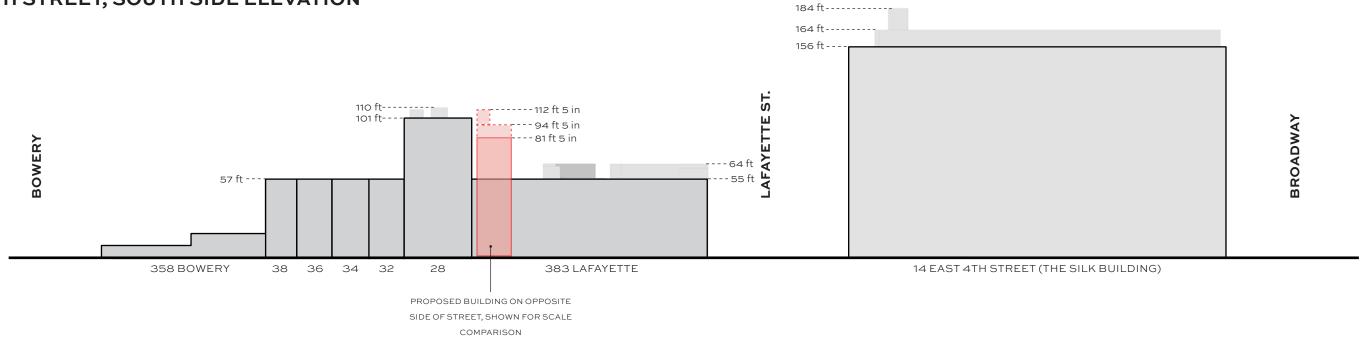
27 E 4TH STREET

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#### EAST 4TH STREET, SOUTH SIDE ELEVATION





358 BOWERY, 1915 COMMERCIAL



38 E 14TH ST., 1910 RESIDENTIAL



34-36 EAST 4TH ST., 1910 RESIDENTIAL



32 EAST 4TH ST., 1900 RESIDENTIAL



28 EAST 4TH ST., 1902 RESIDENTIAL



383 LAFAYETTE, 1900 COMMERCIAL + OFFICE

SCALE OF STREET

27 E 4TH STREET

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#### **MATERIALITY**

TERRA COTTA + METAL + BRICK



65 BLEECKER ST. BAYARD-CONDICT BUILDING

• TERRA COTTA TRADITION AND PROMINENT DECORATIVE UNDERSIDE OF CORNICE



561 BROADWAY LITTLE SINGER BUILDING

• TERRA COTTA IN METAL ARMATURE AND DECORATIVE METAL SCREEN



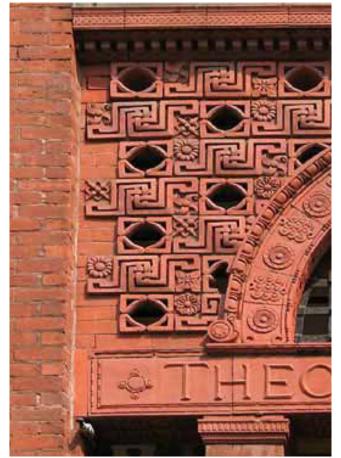
529 BROADWAY\* NIKE SOHO

\*LPC APPROVAL

• CONTEMPORARY ADAPTATION OFTERRA COTTA SCREEN AND **DECORATIVE ELEMENTS** 

#### **COLORATION**

TERRA COTTA + MOTTLED FACEBRICK



LAFAYETTE & E 4TH **DEVINNE PRESS BUILDING** 

• DECORATIVE TERRA COTTA SCREEN AND MOLDED BRICK



DETAIL OF BRICKWORKTONES AT THE MERCHANT'S HOUSE MUSEUM

MOTTLED, MOLDED BRICK

PRECEDENT BUILDINGS: COLORATION AND MATERIALITY

27 E 4TH STREET

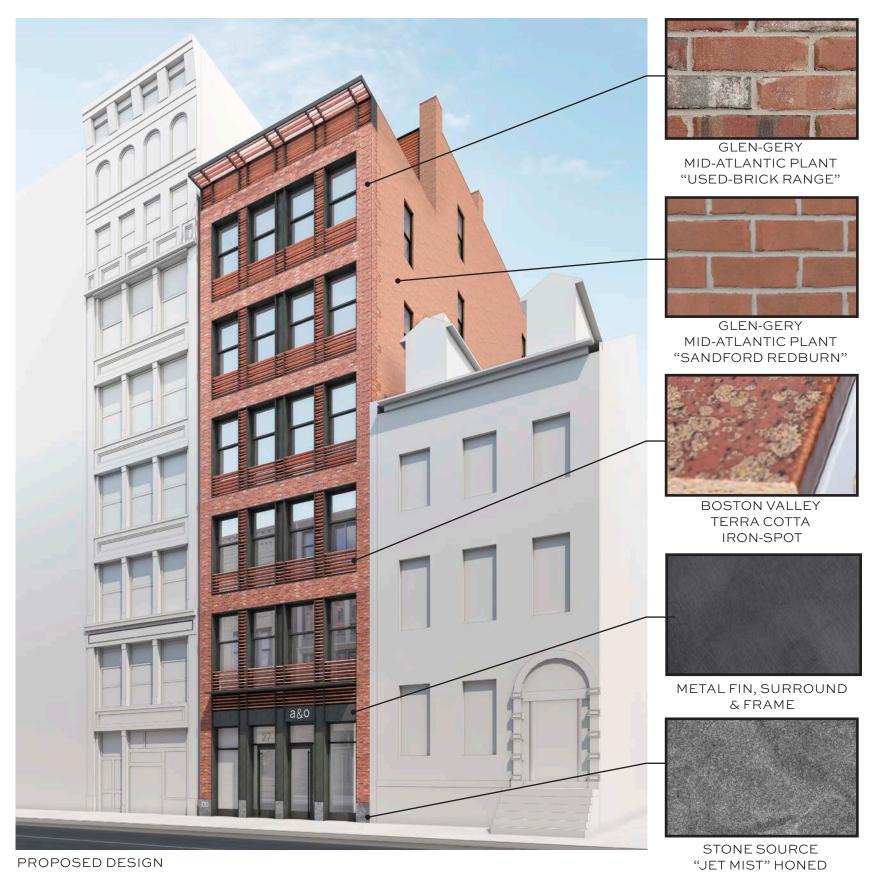


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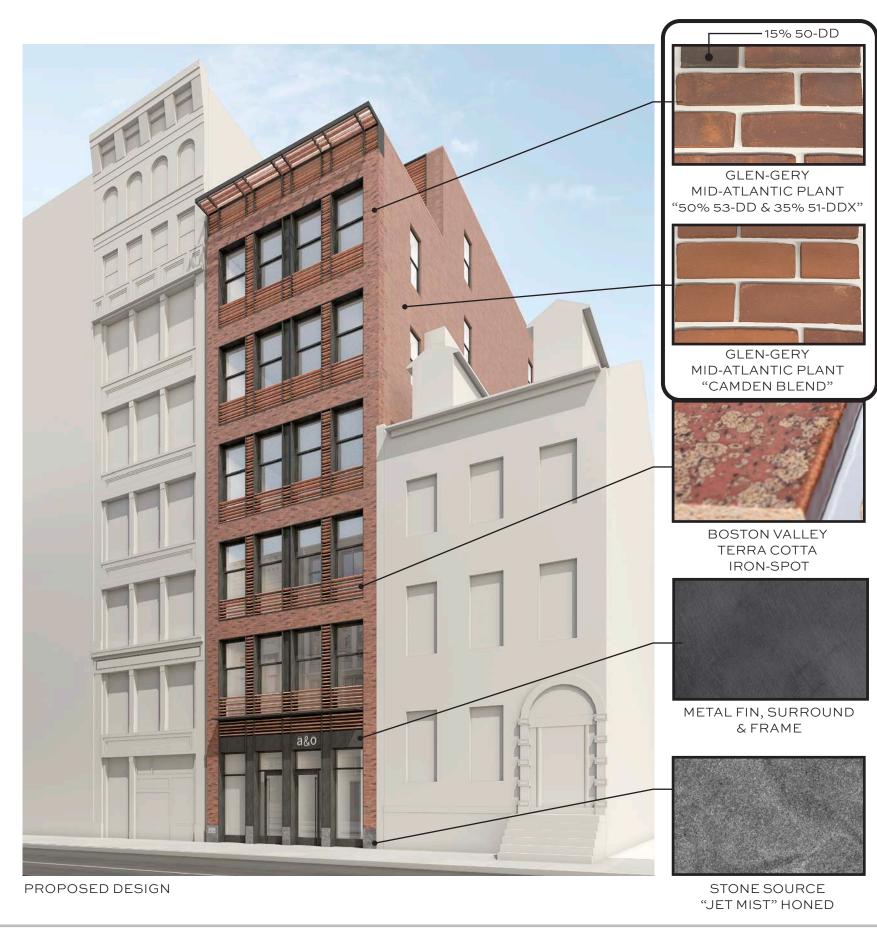




PROPOSED DESIGN IN CONTEXT









PROPOSED DESIGN IN CONTEXT

**CURRENT PROPOSED DESIGN - REVISED BRICK CHOICE** 

GILSANZ MURRAY STEFICEK
ENGINEERS AND ARCHITECTS

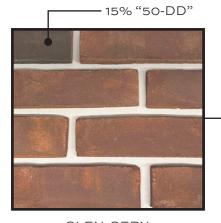








BOSTON VALLEY TERRA COTTA IRON-SPOT



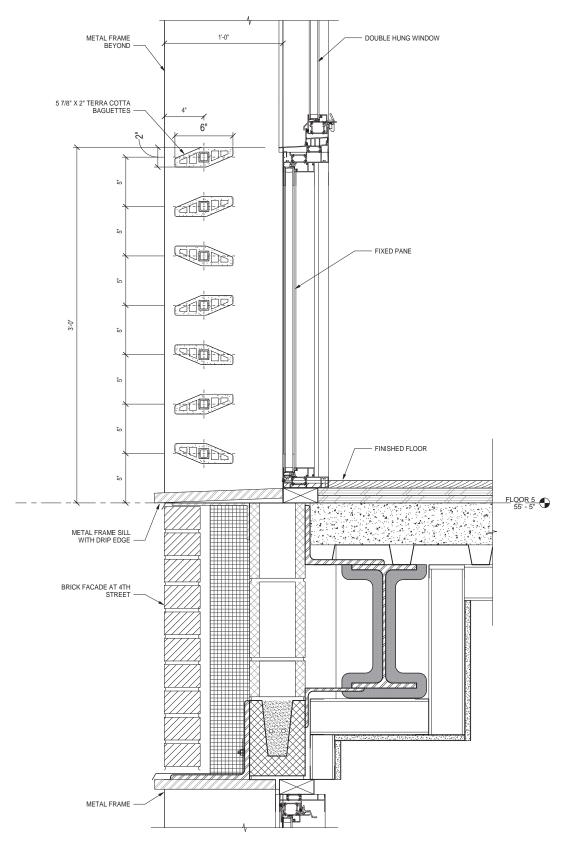
GLEN-GERY
MID-ATLANTIC PLANT
50% "53-DD" & 35% "51-DDX"



METAL SURROUND & FRAME



CLOSE UP OF TERRA COTTA SCREENS IN METAL FRAMES OVER CONTINUOUS WINDOWS

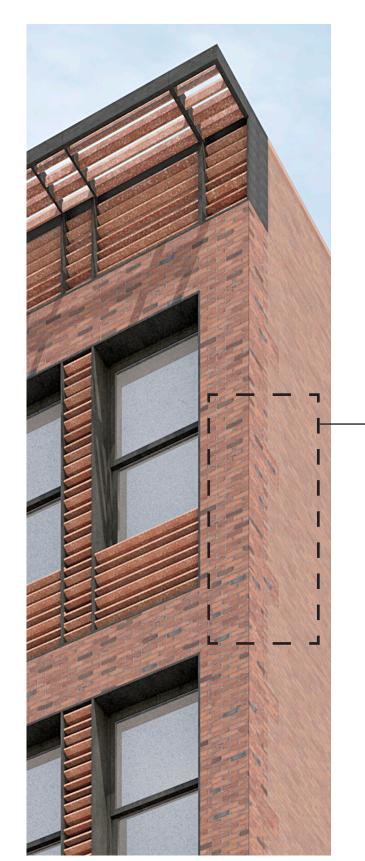


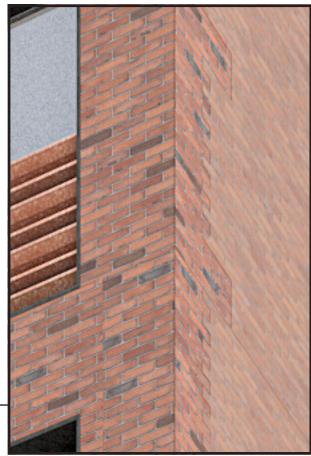
TERRA COTTA BAGUETTE SECTION DETAIL











ZIPPER BRICK PATTERN WHERE MOTTLED WEATHERED BRICK MEETS UNIFORMLY TONED BRICK



ZIPPER BRICK AT 310 ELIZABETH STREET



TERRACE RENDERING

SETBACK
PENTHOUSE
FLOOR WITH
TERRA COTTA
FIN AND METAL
FACADE

CORNICE: TERRA COTTA SCREEN IN METAL FRAME



GILSANZ MURRAY STEFICEK
ENGINEERS AND ARCHITECTS





PROPOSED PERSPECTIVE OF BUILDING REAR



BULKHEAD -METAL PANEL WITH VERTICAL REVEAL 15" O.C. IN CHARCOAL



HORIZONTAL LOUVERED METAL MECHANICAL SCREEN IN CHARCOAL



PROPOSED PERSPECTIVE OF BUILDING ROOF







 $\boldsymbol{\mathsf{A}}$  - EAST STREET VIEW - FROM E 4TH ST & BOWERY



**B** - WEST STREET VIEW - FROM E 4TH ST & LAFAYETTE



WEST STREET VIEW - FROM E 4TH ST & LAFAYETTE



27 E 4TH STREET

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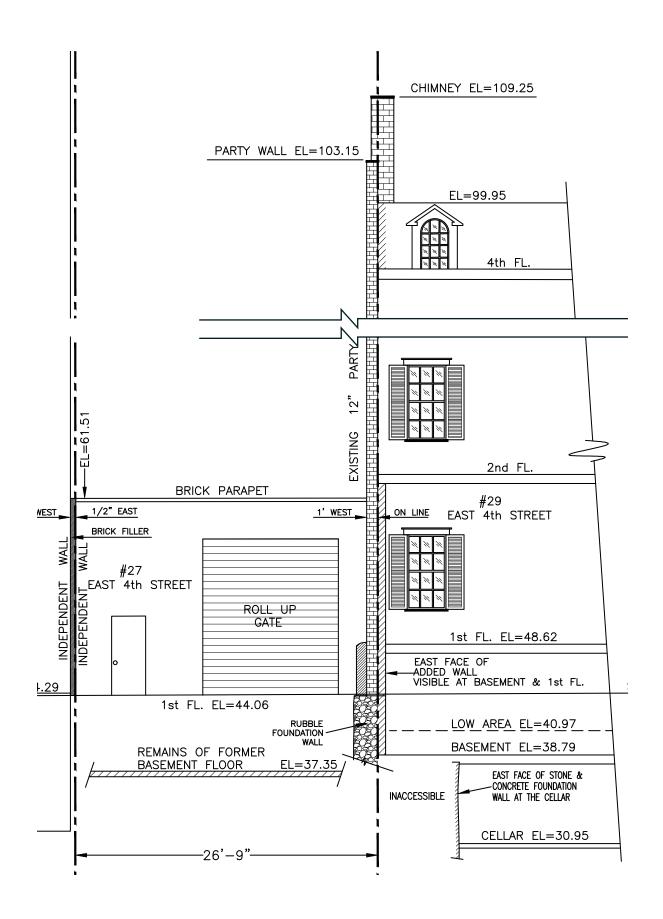


1960'S LOT LINE WALL CONDITION



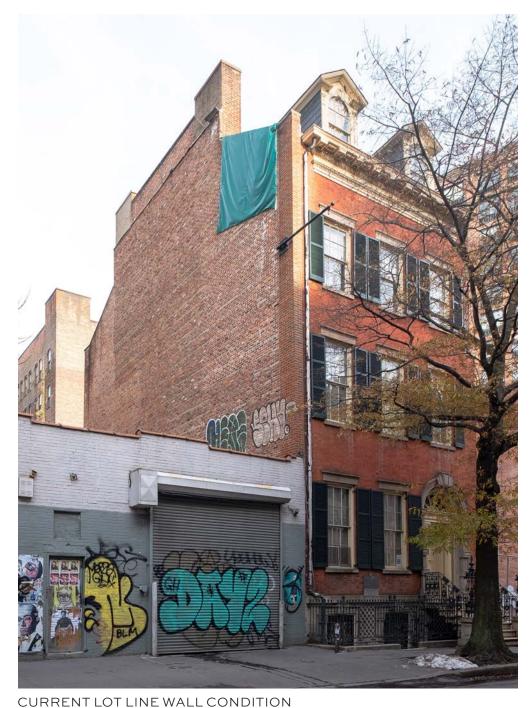
CURRENT LOT LINE WALL CONDITION

**REVISED NEW NAVD 88 DATUM** 



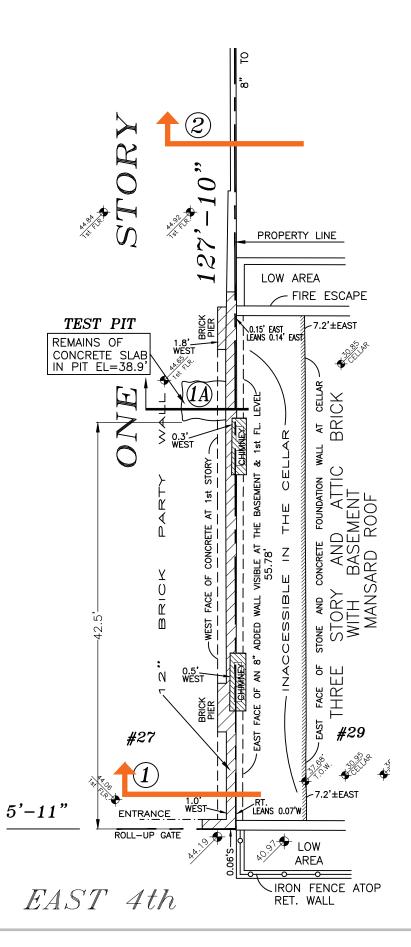


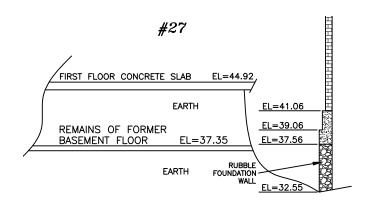
GILSANZ MURRAY STEFICEK



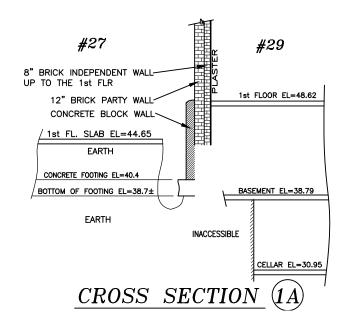
WEITH EST EINE WITEE SONDITION

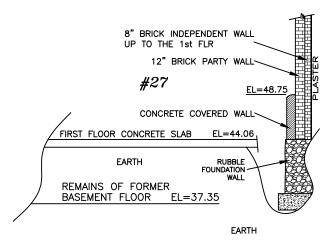
REVISED TO INCLUDE TEST PIT 1A





#### CROSS SECTION 2





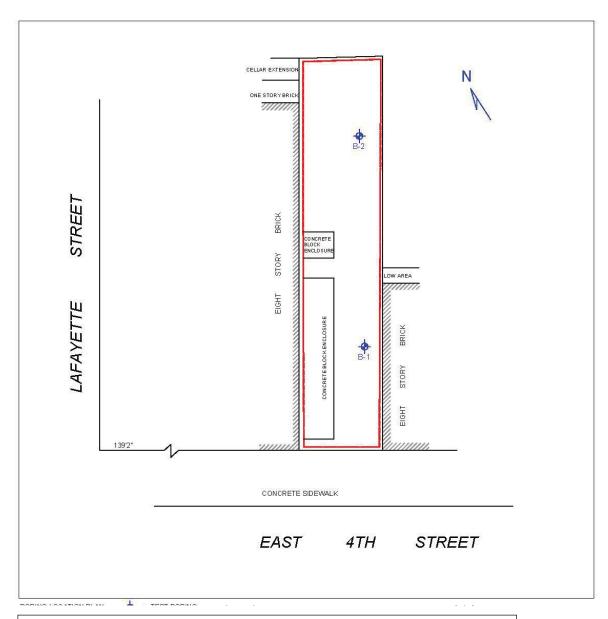
CROSS SECTION ①

GILSANZ MURRAY STEFICEK



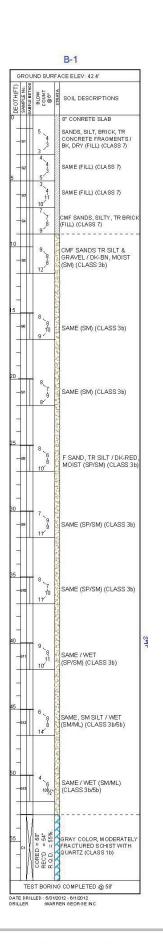
**CURRENT STRUCTURAL DESIGN: LOT LINE WALL TEST PITS & SURVEY** 

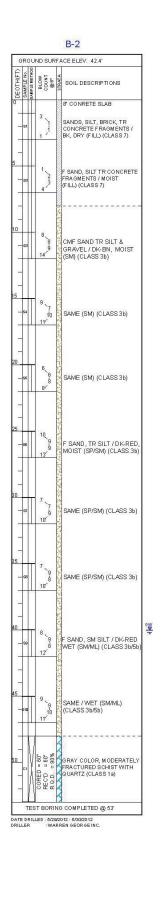
## **Geotechnical Investigation**



-GEOTECHNICAL INVESTIGATION PERFORMED.

- VOLUNTARY GEOTECHNICAL PEER REVIEW PERFORMED
- SUBGRADE IS "GLACIATED SANDS CONSISTING OF MOSTLY COARSE-MEDIUM-FINE SANDS WITH TRACE TO SOME AMOUNT OF SILT AND/OR GRAVEL"
- USCS SP/SM, NYC CLASS 3B, "STIFF SOIL PROFILE"
- GROUNDWATER APPROX 40' BELOW GRADE
- SUBGRADE MODULUS 120 TCF FOR MAT DESIGN











#### Geo Tech Consultants, LLC

52 E 2<sup>nd</sup> Street, Mineola, NY 11501 Tel: 516 355 0168 Fax: 516 355 0271

January 18, 2023

Ariston Development 78 Horatio St. New York, N 10014

Mr. Constantine Fotos

Test pit observation report Re:

> **Proposed Building** 27 east 4<sup>th</sup> Street New York, NY

GTC Job No.: ARTD322

Dear Mr. Fotos:

On November 29, 2022, our engineer visited the project site as per your request and inspected a recently excavated test pit.

The new test pit labeled as TP-4 was excavated along the east wall of the subject building at a location about 42.5' from the front wall of the same.

Our observation of the test pit was illustrated in sketches and presented on drawing G-001.01, which is attached at the end of this report. A brief description of the same is presented below.

In a cross section across the east wall, we observed a brick wall resting on a concrete wall that extended 9" below the top of the first-floor slab to rest on a concrete-rubble footing. The rubble footing was observed to extend to a depth around 6' below the top of the first floor to bear on natural sand soils. The natural sand soils were observed to consist of a mixture of coarse medium fine sands with trace to some silt consistent with the composition of the SM Group of the Unified Soil Classification System (USCS).

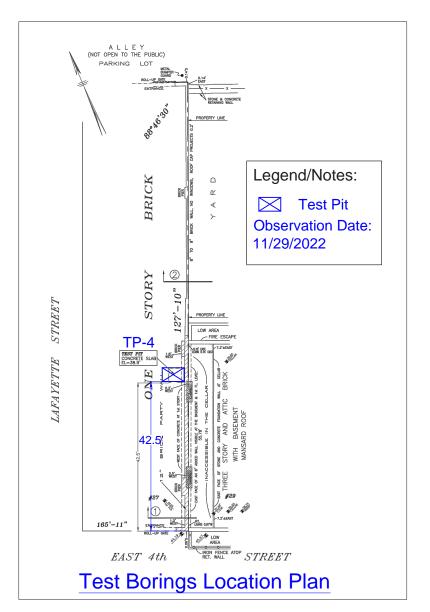
A horizontal probe was conducted along the underside of the rubble footing to detect adjacent wall or footings. Within the reach of 4' of the horizontal probing, no obstructions or concrete footings were detected or encountered (see test pit profile illustration).

As you are aware that the site was investigated in 2012 with three test pits (TP-1 thru TP-3). For your convenience I have attached the previous test pit finding drawing G-001.00 for your reference.

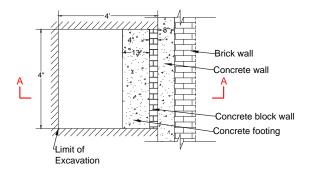
Review of drawings G-001.00 and G-001.01 suggests that TP-1 and TP-4 revealed similar findings in that the east wall footings at those two test pit locations bear on natural sand soils.

We trust the above information is sufficient for you review and use. Should you have any questions regarding this report, or if we can be of further assistance, please do not hesitate to contact us.

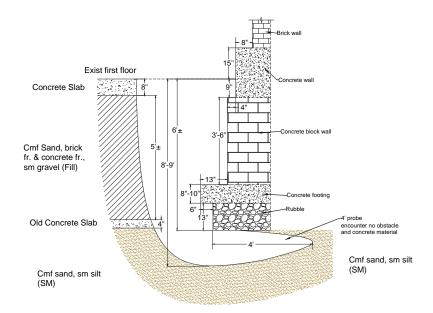
Respectfully Submitted Geo Tech Consultants LLC Steve J. J. Lin, P.E.



#### TP-4



#### Plan View



#### **Cross Section A-A**



**Photo** 

**NEW TEST PIT: UNDISTURBED** SOILS OF SIMILAR COMPOSITION TO EARLIER TEST PIT



**CURRENT STRUCTURAL DESIGN: GEOTECHNICAL INVESTIGATION** 

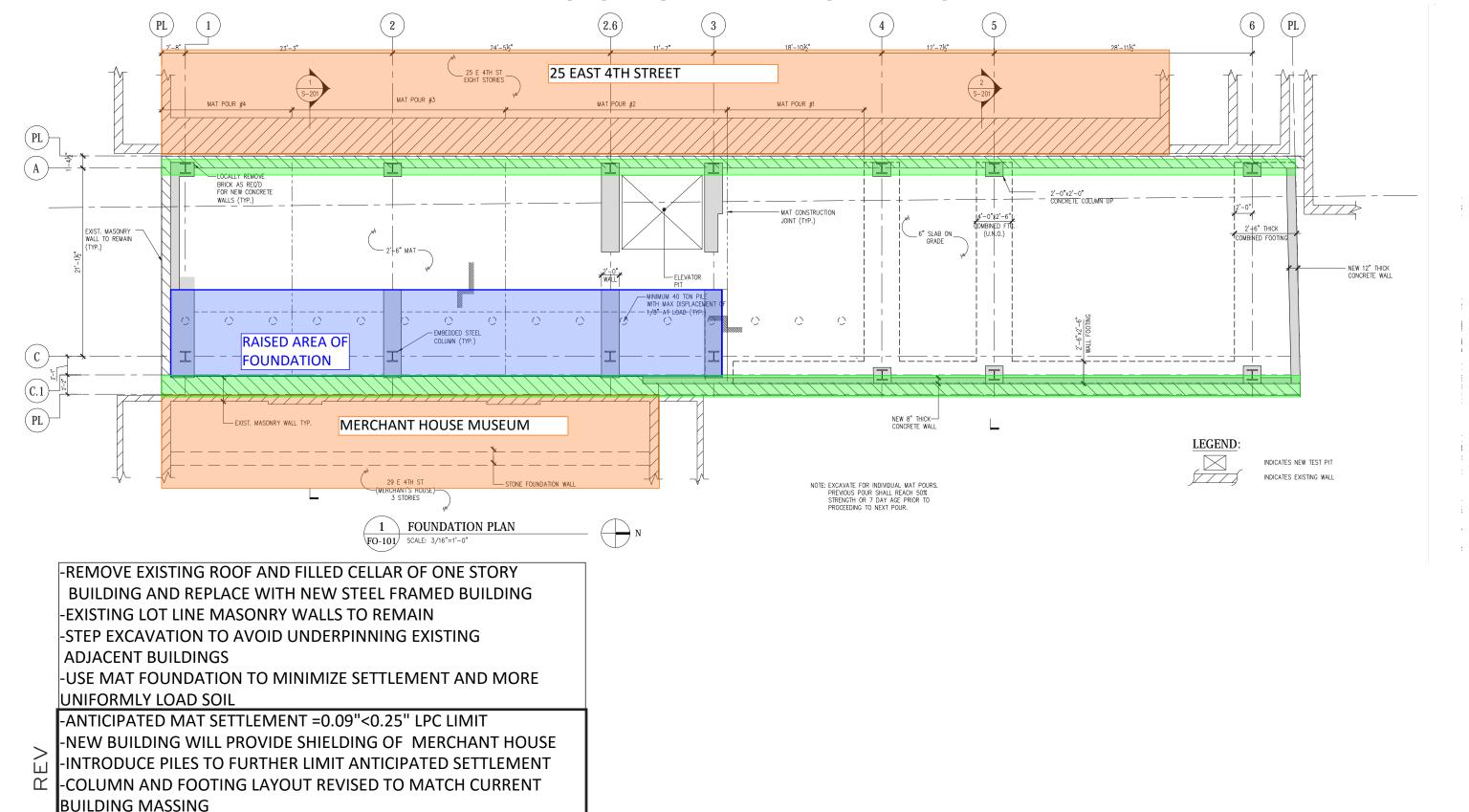
SILSANZ MURRAY STEFICEK



27 E 4TH STREET

12.12.2023

### **DESIGN OF NEW BUILDING**



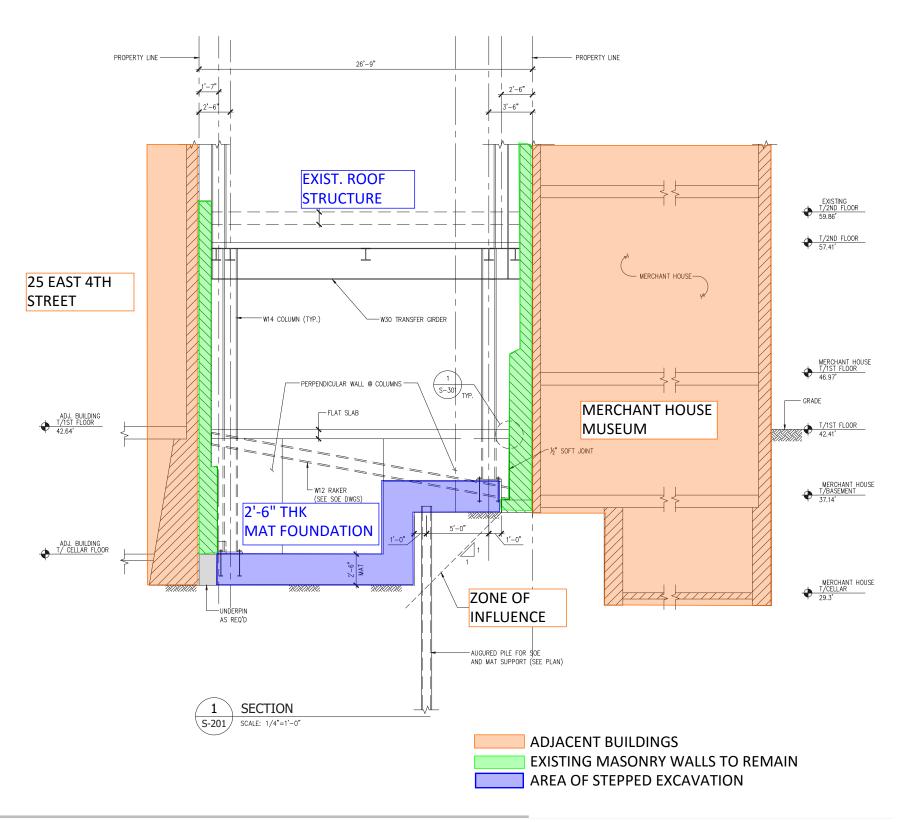


### **DESIGN OF NEW BUILDING**

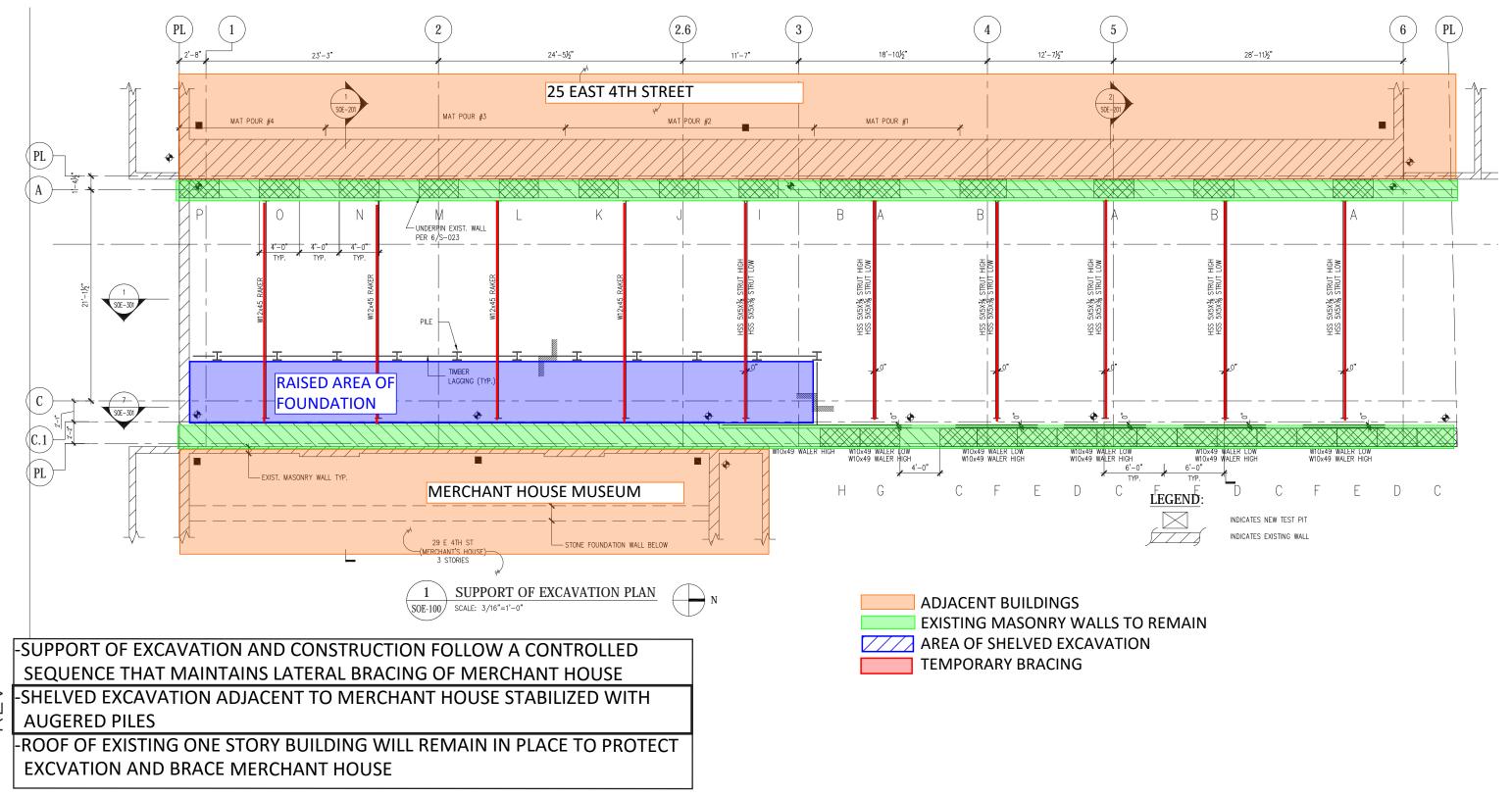
- STEEL COLUMNS SUPPORTING NEW BUILDING PULLED BACK FROM EXIST MASONRY LOT LINE WALL AT MH.

- STEPPED MAT FOUNDATION USED TO MINIMIZE EXCAVATION AND SETTLEMENT.

-PILES TO PROVIDE SUPPORT OF EXCAVATION AND SUPPORT MAT ADJACENT TO MH MUSEUM

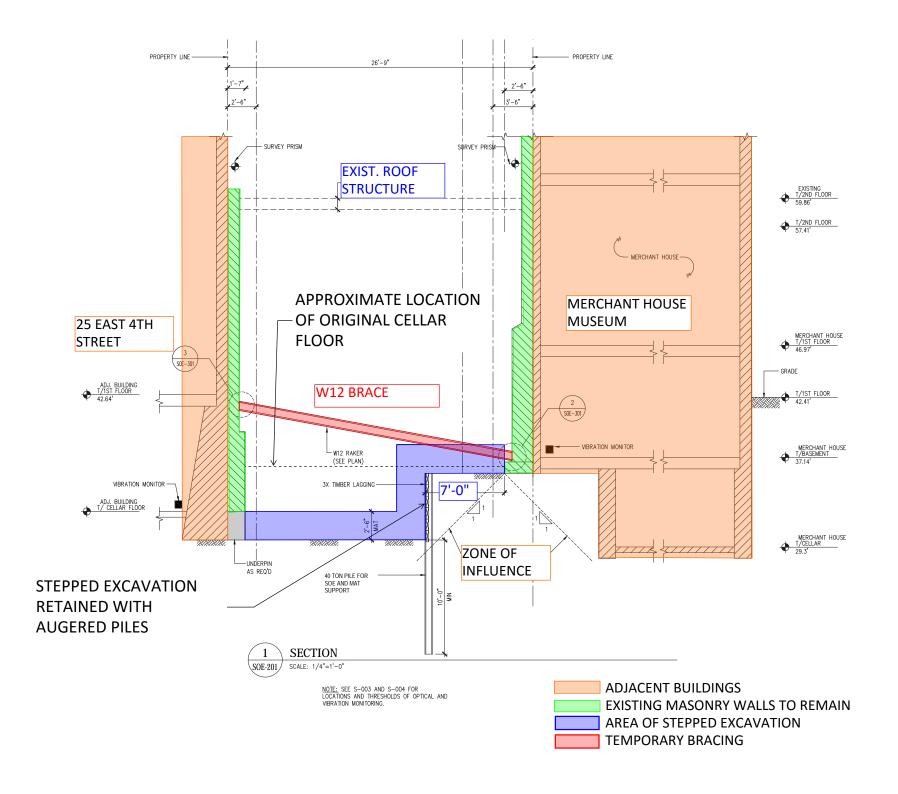


## SUPPORT OF EXCAVATION& CONSTRUCTION SEQUENCE



SILSANZ MURRAY STEFICEK

## SUPPORT OF EXCAVATION & CONSTRUCTION SEQUENCE



#### -GENERAL SEQUENCE ADJACENT MERCHANT'S HOUSE:

- 1. REMOVE EXIST PARTITIONS AND SLAB ON GRADE.
- 2. INSTALL AUGERED PILES APPROX 7' FROM EXIST FOUNDATION
- 3. REMOVE EXIST FILL/DEBRIS DOWN TO APPROX ORIGINAL CELLAR FLOOR.
- 4. INSTALL BRACES
- 5. EXCAVATE TO SUBGRADE LEVEL FOR MAT, INSTALLING LAGGING AS EXCAVATION PROGRESSES.
- 6. INSTALL UNDERPINNING AT 27 E 4TH WESTERN LOT LINE WALL.
- 7. INSTALL MAT FOUNDATION.
- 8. INSTALL NEW BUILDING UP TO 2ND FLOOR
- 9. REMOVE EXIST ROOF AND THEN INSTALL REMAINDER OF NEW BUILDING.



## **MONITORING & PROTECTION PROGRAM**

MONITORING TASK	MINIMUM REQUIRED BY TPPN 10/88	PROPOSED FOR MERCHANT HOUSE MUSEUM	PROPOSED FOR ALL OTHER ADJACENT LANDMARK BUILDINGS (25 E. 4th Street, 403 Lafayette Street, 16 Cooper Square)
DISPLACEMENT MONITORING	SURVEY MEASUREMENTS 2X WEEK. MAX ALLOWED VERTICAL AND HORIZONTAL DISPLACEMENT 1/4"	CONTINOUS AUTOMATIC SURVEY DURING DEMOLITION AND EXCAVATION. MAX ALLOWED VERTICAL AND HORIZONTAL DISPLACEMENT 1/4" REVIEW THRESHOLD =1/8"	SURVEY MEASUREMENTS 2X WEEK. MAX ALLOWED VERTICAL AND HORIZONTAL DISPLACEMENT 1/4"
CRACK MONITORING	TELLTALES ACROSS EXISTING CRACKS IN MASONRY MEASURED DAILY.	TELLTALES ACROSS EXISTING CRACKS IN MASONRY MEASURED DAILY.	TELLTALES ACROSS EXISTING CRACKS MASONRY MEASURED DAILY.
TILT MONITORING	NONE REQUIRED	CONTINOUS AUTOMATIC TILT METER DURING DEMOLITION AND EXCAVATION	NONE REQUIRED
VIBRATION MONITORING	MAXIMUM PEAK PARTICLE VELOCITY=0.5 IN/S	MAXIMUM PEAK PARTICLE VELOCITY=0.5 IN/S. REVIEW THRESHOLD =0.2 IN/S	MAXIMUM PEAK PARTICLE VELOCITY=0.5 IN/S
PRE-CONSTRUCTION SURVEY	PHOTOGRAPH TELLTALES	PHOTOGRAPH AND VIDEO SURVEY OF EXTERIOR AND INTERIOR ACCESSIBLE SPACES	PHOTOGRAPHIC SURVEY OF EXTERIOR AND INTERIOR ACCESSIBLE SPACES

-MONITORING PROGRAM MEETS OR EXCEEDS TPPN 10-88

-SETTLEMENT MONITORING COMPLETED BY AUTOMATIC TOTAL STATION WITH REALTIME REPORTING IN LIEU OF BI-WEEKLY

-ADDITIONAL VIBRATION REVIEW THRESHOLD OF 0.2 IN/S HELPS ANTICIPATE HIGHER VIBRATION

-BASELINE MONITORING COMPLETE JUNE-OCTOBER 2012 HAD 5 VIBRATION EVENTS ABOVE 0.5 IN/S. HIGHEST OF 0.622 IN/S.

-ADDITIONAL MOVEMENT REVIEW THRESHOLD OF 1/8"

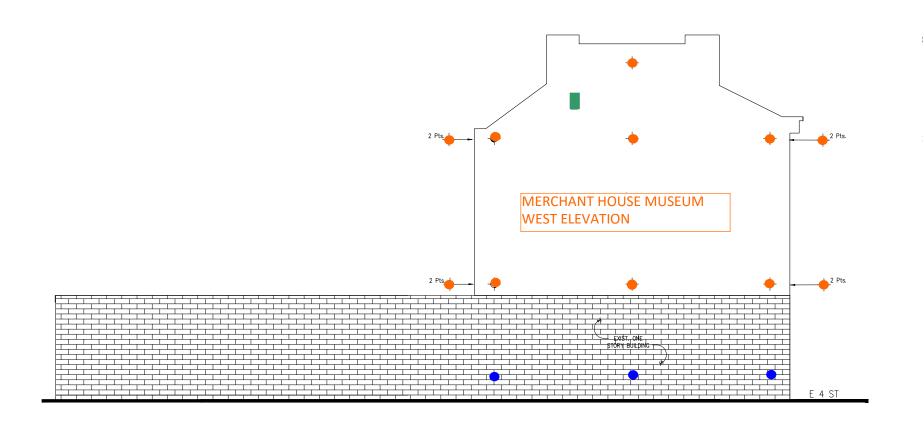
#### REVISED

#### MERCHANT HOUSE ACTION PLAN DURING CONSTRUCTION

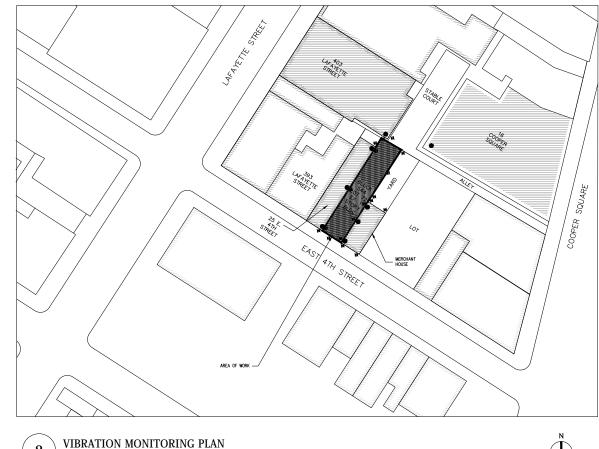
- 1. DISPLACEMENT, CRACK, TILT AND VIBRATION MONITORING IN ACCORDANCE WITH ADJACENT CRITERIA
- 2. IN THE EVENT THAT NOTIFICATION AND REVIEW THRESHOLDS ARE REACHED:
  - A. THE CLIENT-DESIGNATED PARTIES, IE CONTRACTOR, OWNER, ENGINEER, AND ADJACENT PROPERTY OWNER, SHALL BE NOTIFIED VIA EMAIL IMMEDIATELY.
  - B. THE CONTRACTOR SHALL PROVIDE A WRITTEN EXPLANATION OF THE ACTIONS WHICH CAUSED THE VIBRATION OR MOVEMENT, AND IDENTIFY STEPS BEING TAKEN TO MINIMIZE FUTURE VIBRATION OR MOVEMENT.
  - C. THE ENGINEER SHALL REVIEW THE DATA AND MAKE RECOMMENDATIONS AS RELEVANT.
- 3. IN THE EVENT THAT MAXIMUM VIBRATION OR DISPLACEMENT CRITERIA ARE EXCEEDED:
  - A. CONTRACTOR SHALL CEASE CONSTRUCTION ACTIVITIES AND CONSULT WITH ENGINEER OF RECORD. ADJACENT PROPERTY OWNER AND DEPARTMENT OF BUILDINGS SHALL BE NOTIFIED IMMEDIATELY.
  - B. ENGINEER OF RECORD TO REVIEW DATA AND OBSERVE/DOCUMENT ADJACENT STRUCTURES FOR SIGNS OF DISTRESS. ANY SIGNS OF DISTRESS TO BE BROUGHT TO THE ATTENTION OF THE ADJACENT STRUCTURES OWNER.
  - C. IF SIGNIFICANT SIGNS OF DISTRESS ARE FOUND AND/OR MOVEMENT BEYOND 1/4" NOTED WORK SHALL NOT PROCEED UNTIL THE CAUSE OF THE DISTRESS/MOVEMENT IS IDENTIFIED AND STEPS ARE TAKEN TO PREVENT ADDITIONAL DISTRESS OR MOVEMENT. ANY STRUCTURAL DAMAGE SHALL BE REPAIRED PRIOR TO WORK PROCEEDING.
  - D. IF NO SIGNS OF DISTRESS ARE FOUND AND/OR MOVEMENT DOES NOT EXCEED 1/4" WORK MAY PROCEED, BUT EQUIPMENT OR METHOD BEING USED SHALL BE ALTERED OR TERMINATED TO PREVENT VIBRATION AND/OR DISPLACEMENT CRITERIA FROM BEING EXCEEDED.

**CURRENT STRUCTURAL DESIGN: MONITORING AND PROTECTION** 

## **MONITORING & PROTECTION PROGRAM**











CONSTRUCTION AREA

BUILDING TO BE MONITORED FOR VIBRATION

•

PLANNED LOCATION OF VIBRATION MONITORS LOCATED IN BUILDING CELLARS OR MOUNTED TO EXTERIOR FACE OF MASONRY WALL AT GROUND FLOOR

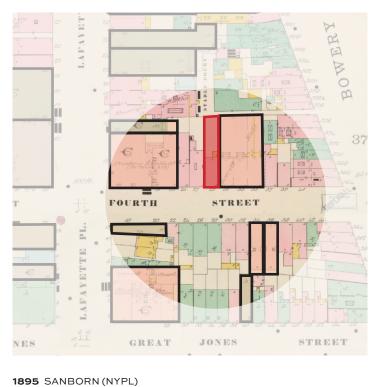
**\rightarrow** 

LOCATION OF SURVEY PRISM AT 2ND FLOOR AND TOP OF BUILDING (NATURAL TARGETS PERMITTED-EXCLUDING MERCHANT HOUSE)

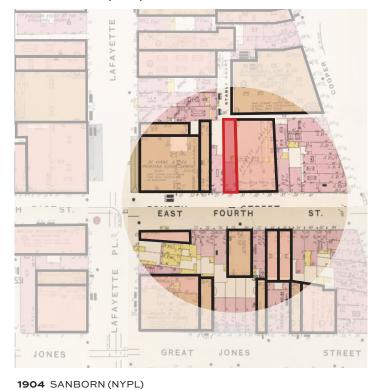




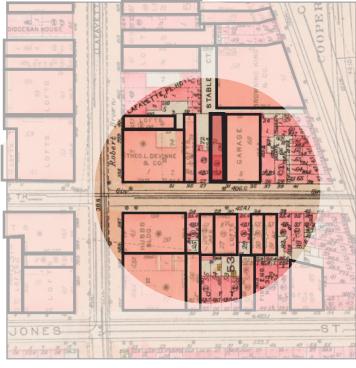


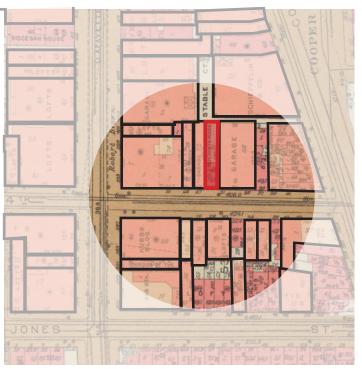


1857-62 PERRIS (NYPL)



1879 BROMLEY (NYPL)





1956 TO PRESENT SANBORN (NYPL)

**BASELINE VIBRATION MONITORING:** JANUARY - OCTOBER 2012

REPEAT VIBRATION MONITORING: 2 MONTHS PRIOR TO CONSTRUCTION

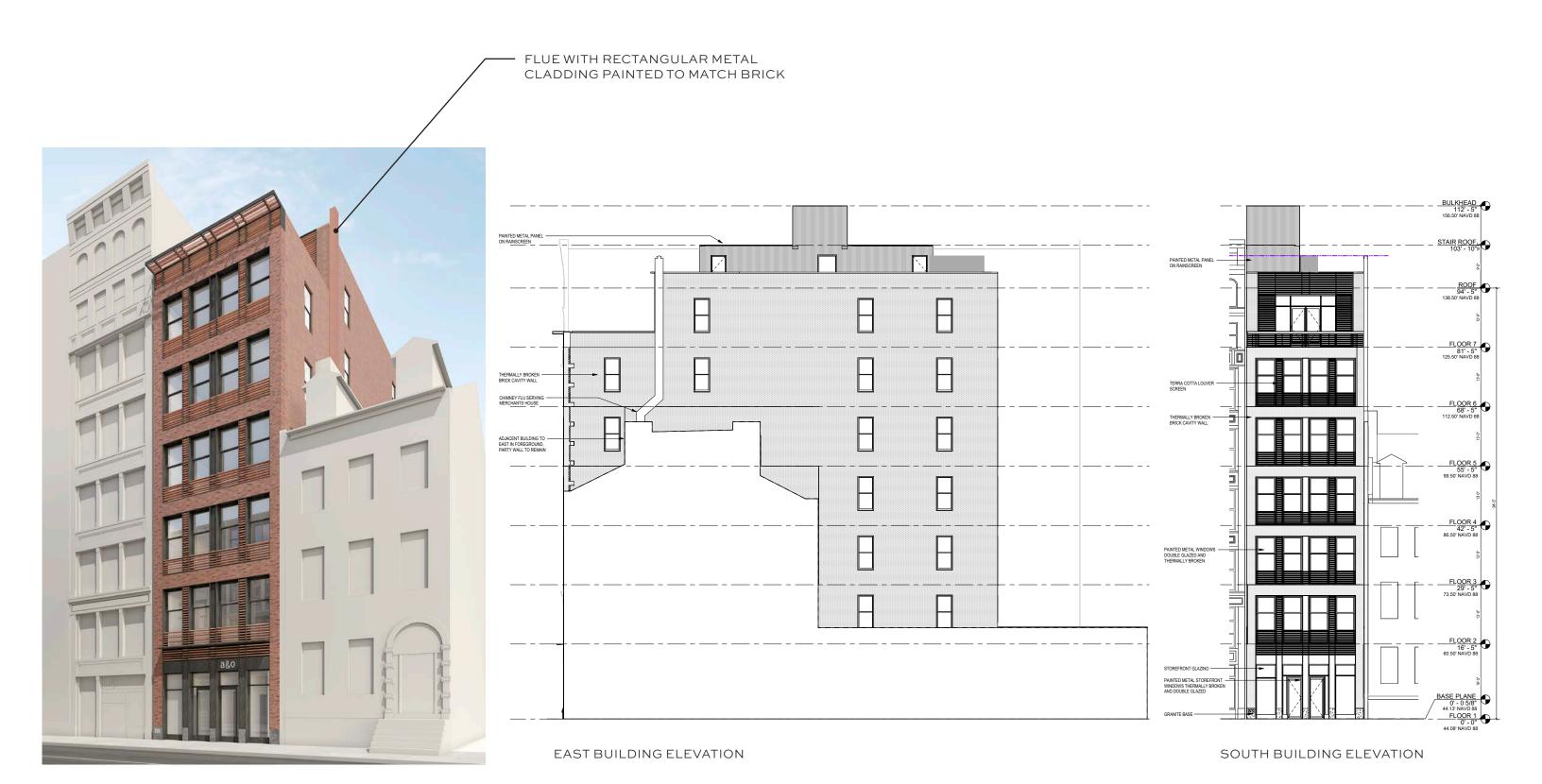
**EXISTING CONDITIONS SURVEY:** SPECIAL ATTENTION PAID TO AREAS IDENTIFIED BY MERCHANT'S HOUSE CONSULTANT

PROTECTION MEASURES FOR MERCHANT'S HOUSE MUSEUM INTERIORS

1923 SANBORN (NYPL)

GILSANZ MURRAY STEFICEK









## THANKYOU







The current proposal is:

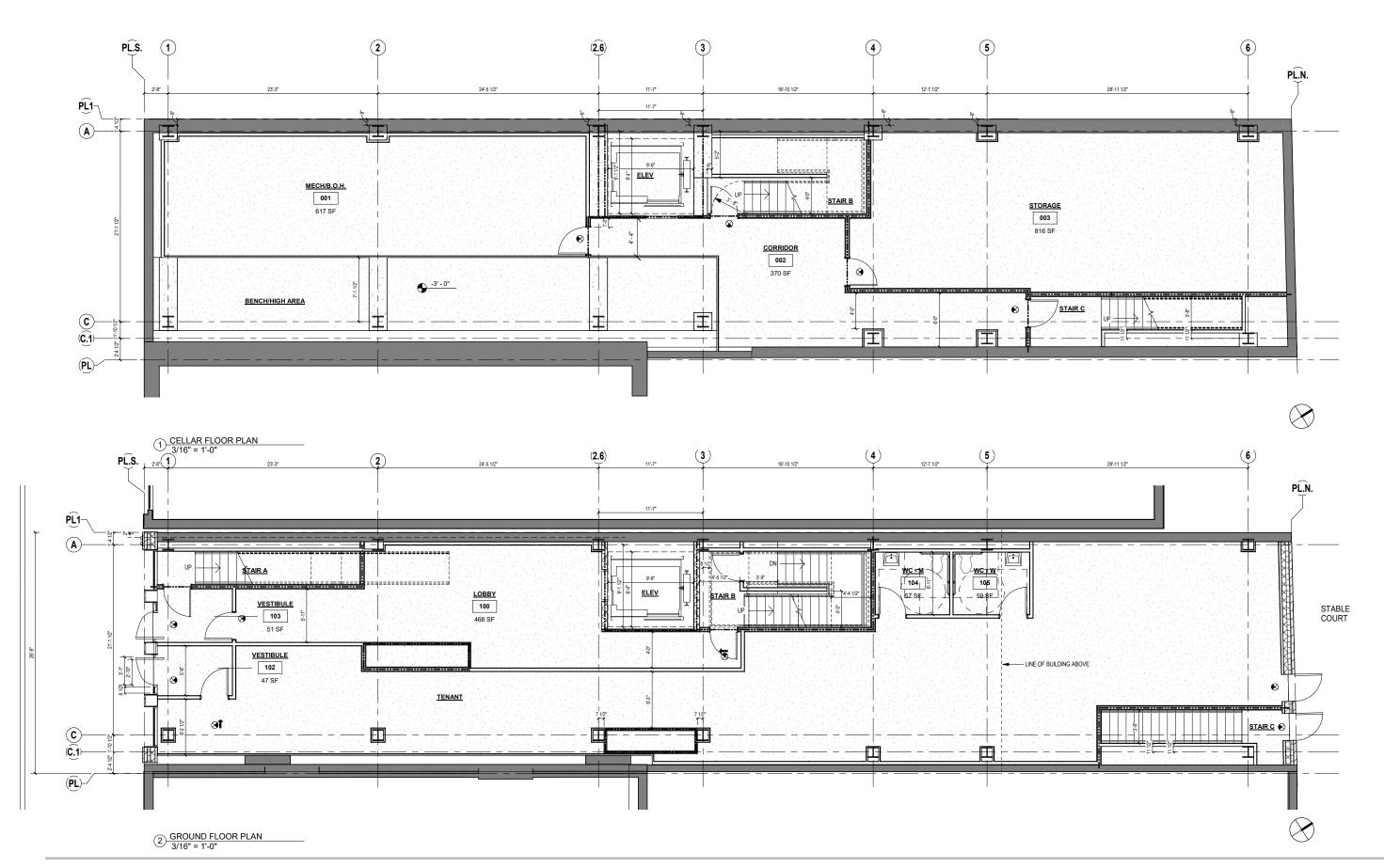
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## **APPENDIX**

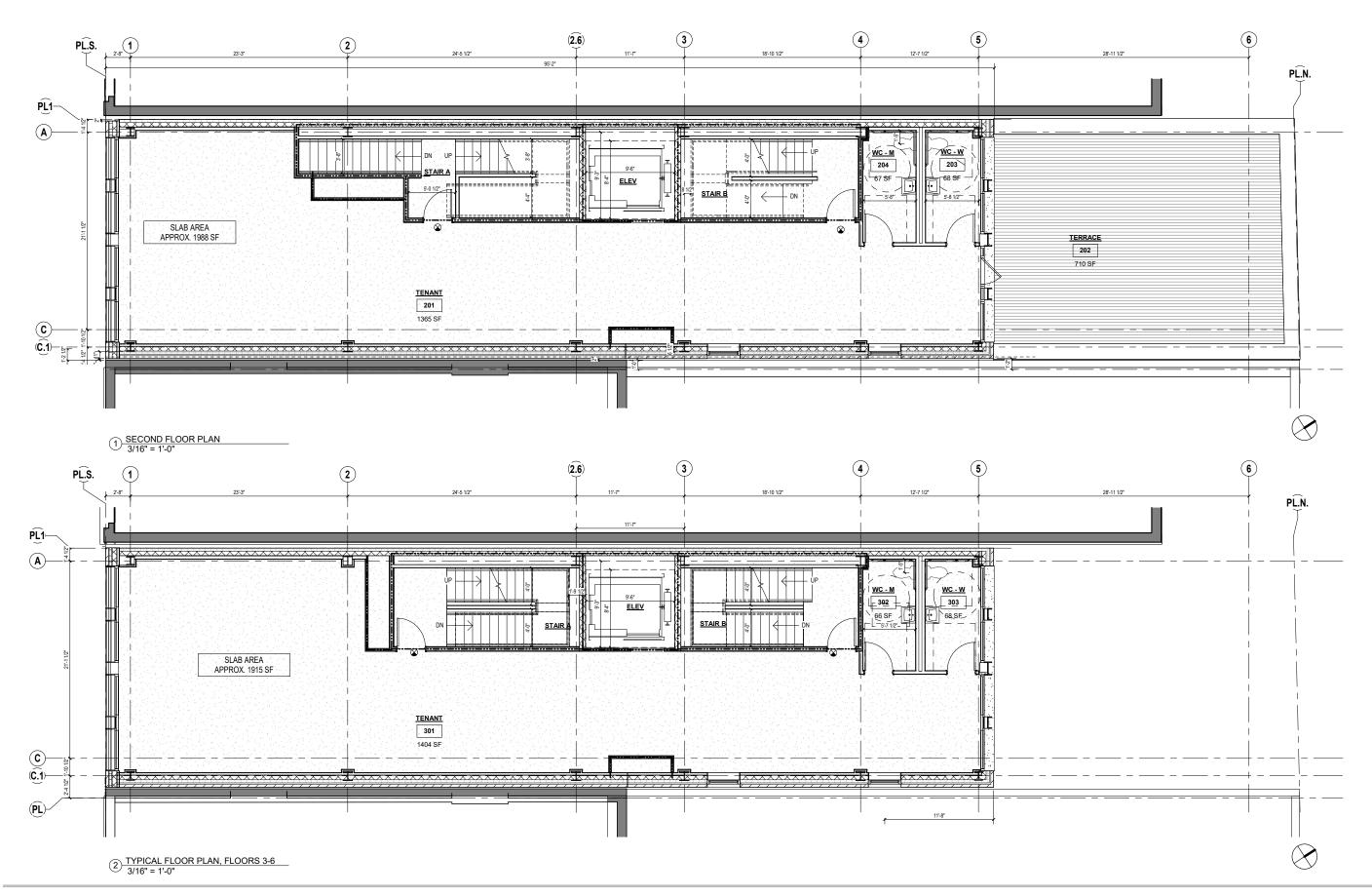
- 1. PLANS
- 2. ELEVATIONS
- 3. SECTIONS







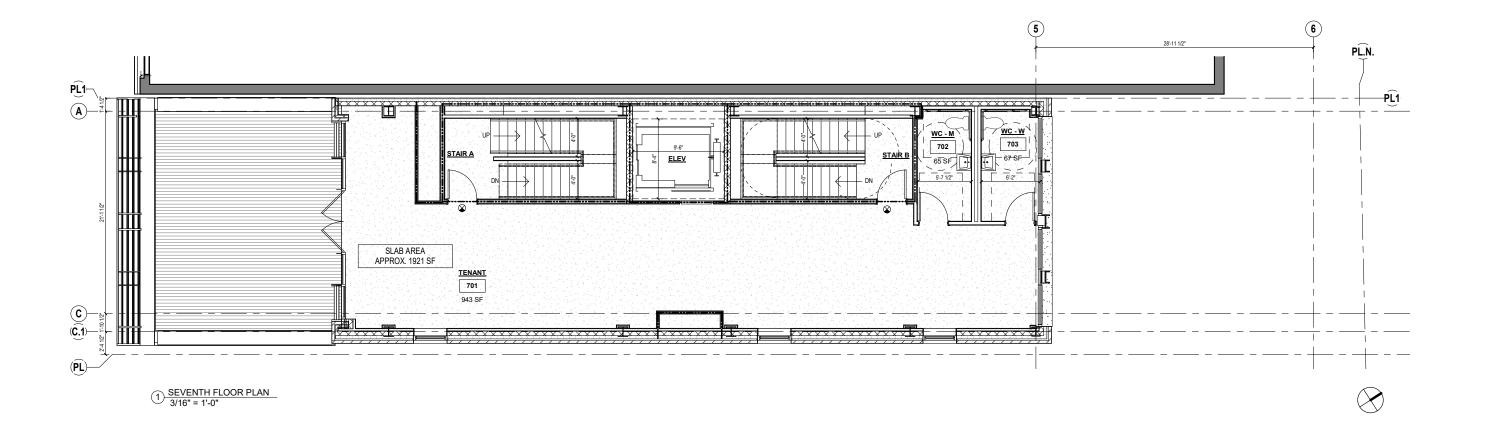


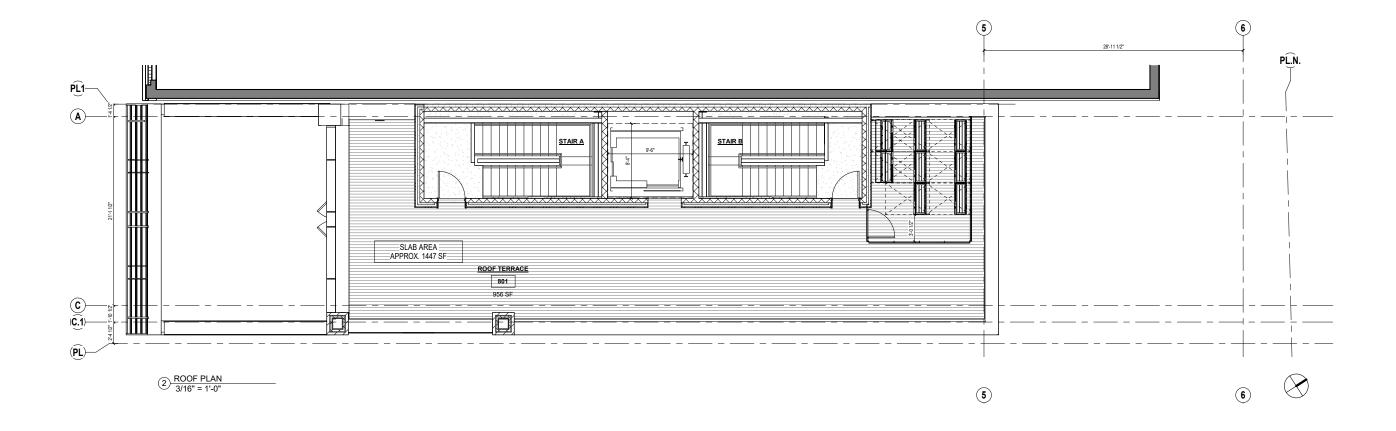


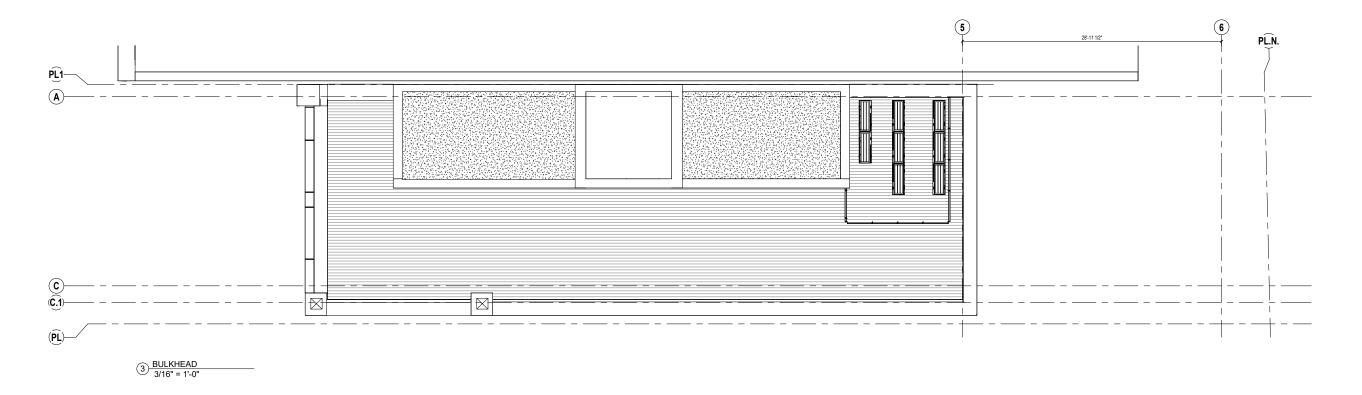






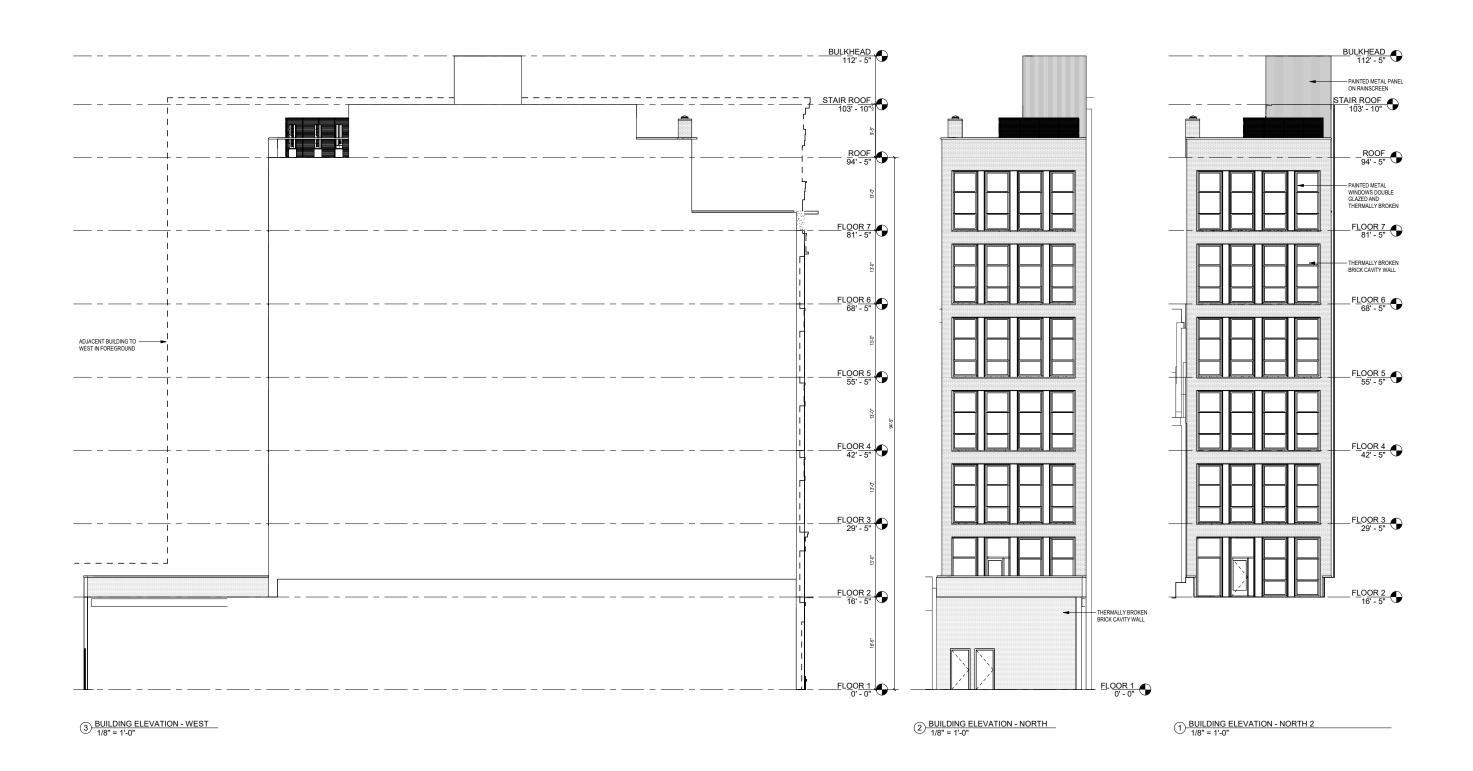


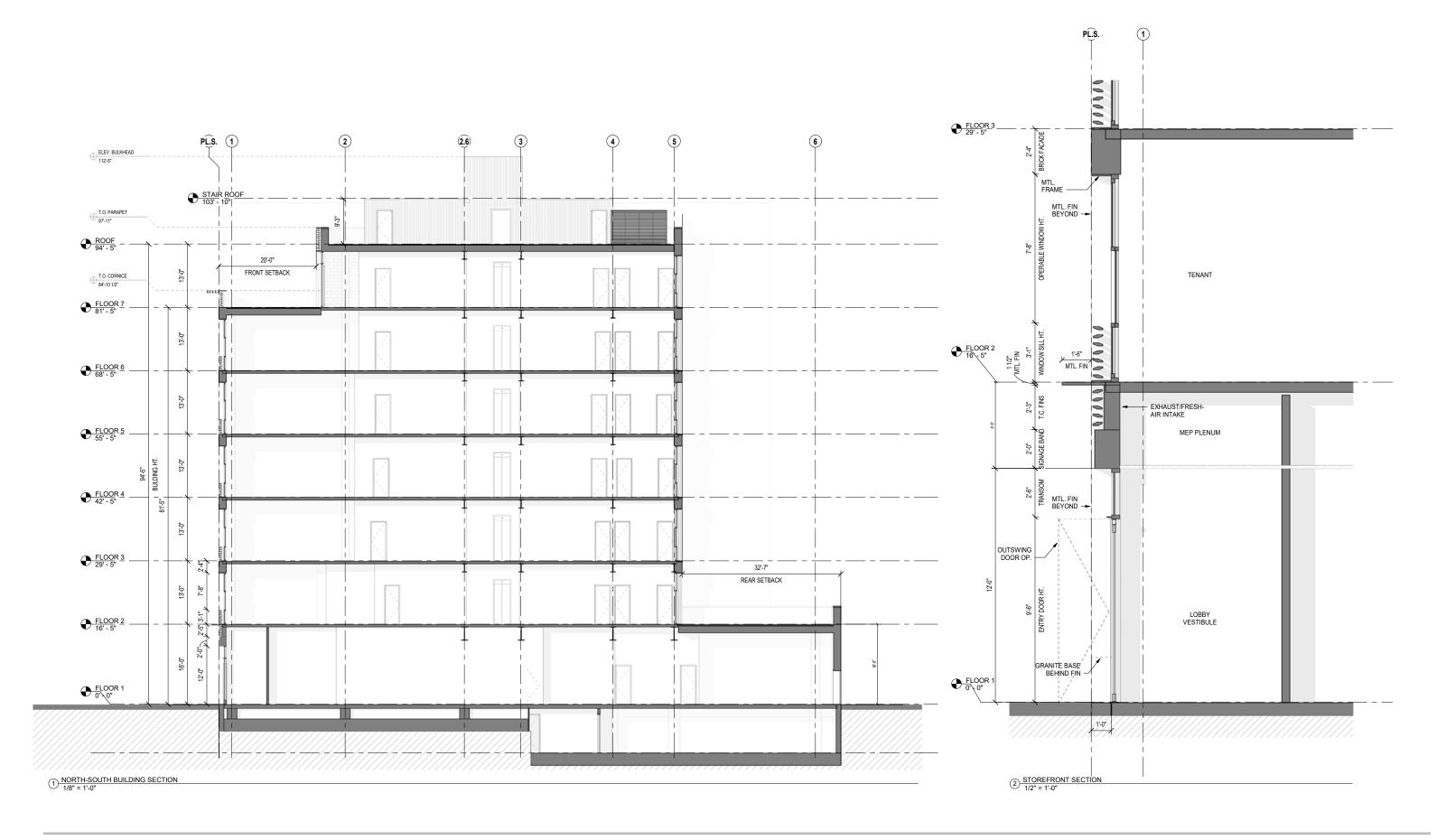






GILSANZ MURRAY STEFICEK





GILSANZ MURRAY STEFICEK
ENGINEERS AND ARCHITECTS



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