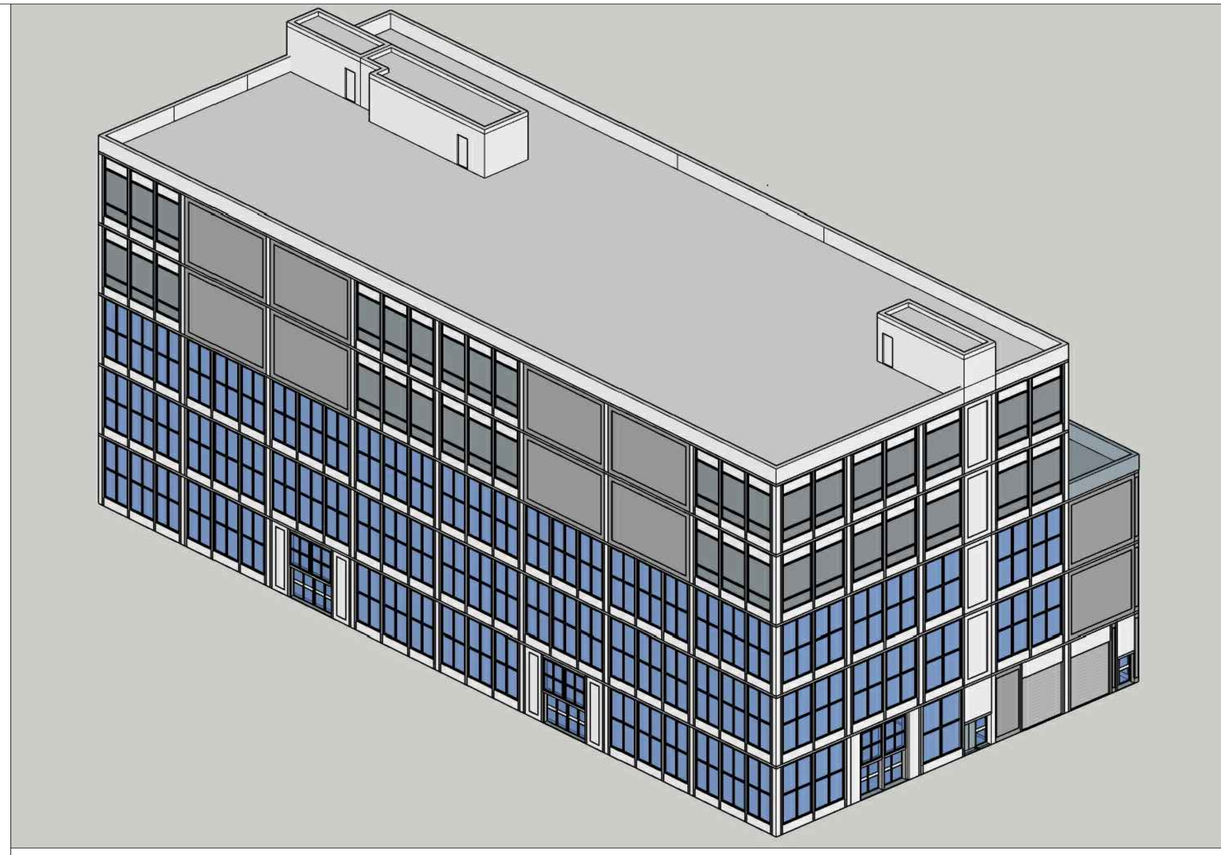
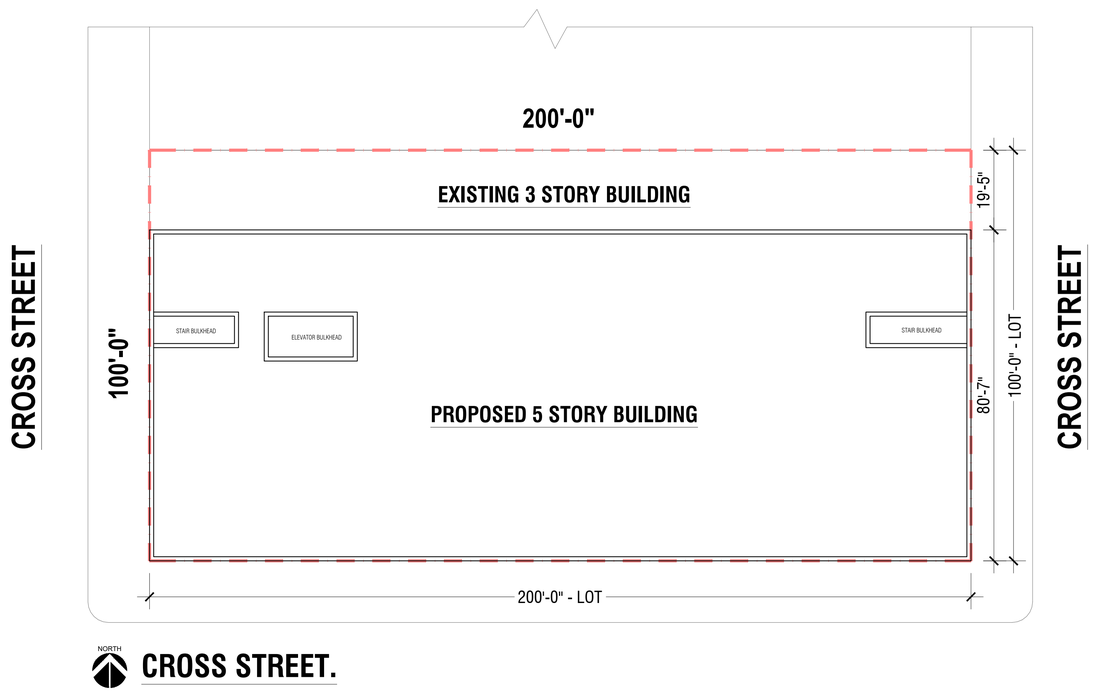
EBC CASE STUDY 02

BLOCK : # LOT : #

[ZONING COMPLIANCE IS NOT DEMONSTRATED IN THIS CASE STUDY]



PLOT PLAN



SCOPE OF WORK

2-STORY VERTICAL ENLARGEMENT FOR OFFICE USE (GROUP B - BUSINESS) TO A 3-STORY + CELLAR PRIOR CODE DEPARTMENT STORE.

LIST OF RELATED APPLICATIONS

ARCHITECTURAL APPLICATIONS		
01	GENERAL CONSTRUCTION APPLICATION	
OTHER APPLICATIONS		
02	PLUMBING APPLICATION	
03	MECHANICAL APPLICATION	
04	SPRINKLER APPLICATION	
05	STRUCTURAL APPLICATION	
06	FIRE ALARM APPLICATION	

#	SHEET	SHEET TITLE	ISSUANCE 2026.06.16	2026.08.03	2026.08.14
	ARCHITECTURAL DRAWINGS				
01	G-001.00	PROJECT INFORMATION AND PLOT PLAN	●	●	●
02	G-002.00	GENERAL NOTES AND SPECIAL INSPECTION	●	●	●
03	G-003.00	ACCESSIBILITY DIAGRAMS AND NOTES	●	●	●
04	G-004.00	ARCHITECTURAL CODE ANALYSIS - PART 1	●	●	●
05	G-005.00	ARCHITECTURAL CODE ANALYSIS - PART 2	●	●	●
06	G-006.00	ARCHITECTURAL CODE ANALYSIS - PART 3	●	●	●
07	G-007.00	ARCHITECTURAL CODE ANALYSIS - PART 4	●	●	●
08	G-008.00	ARCHITECTURAL CONDITION ASSESSMENT REPORT	●	●	●
09	G-009.00	CODE ANALYSIS DIAGRAM	●	●	●
10	G-010.00	WORK AREA DIAGRAM	●	●	●
11	G-100.00	EGRESS ANALYSIS - CELLAR - 4TH FLOOR	●	●	●
12	G-101.00	EGRESS ANALYSIS - 5TH FLOOR & ANALYSIS	●	●	●
13	DM-100.00	DEMOLITION PLAN - CELLAR	●	●	●
14	DM-101.00	DEMOLITION PLAN - GROUND FLOOR	●	●	●
15	DM-102.00	DEMOLITION PLAN - 2ND & 3RD FLOOR	●	●	●
16	DM-103.00	DEMOLITION PLAN - ROOF	●	●	●
17	A-100.00	PROPOSED PLAN - CELLAR	●	●	●
18	A-101.00	PROPOSED PLAN - GROUND FLOOR	●	●	●
19	A-102.00	PROPOSED PLAN - 2ND & 3RD FLOOR	●	●	●
20	A-103.00	PROPOSED PLAN - 4TH FLOOR	●	●	●
21	A-104.00	PROPOSED PLAN - 5TH FLOOR	●	●	●
22	A-105.00	PROPOSED PLAN - ROOF	●	●	●
23	A-200.00	REFLECTED CEILING PLAN - GROUND FLOOR	●		●
24	A-201.00	REFLECTED CEILING PLAN - 3RD FLOOR	●		●
25	A-202.00	REFLECTED CEILING PLAN - 4TH FLOOR	●	●	●
26	A-203.00	REFLECTED CEILING PLAN - 5TH FLOOR			●
27	A-204.00	REFLECTED CEILING PLAN - NEW ROOF			●
28	A-300.00	BUILDING SECTION	●	●	●
29	A-310.00	BUILDING ELEVATION		●	●
30	A-400.00	EXTERIOR WALL DETAIL		●	●
31	A-500.00	PARTITION SCHEDULE	●	●	●
32	A-501.00	DOOR SCHEDULE	●	●	●
33	A-510.00	TYPICAL DETAILS: CEILING	●	●	●
34	A-511.00	TYPICAL DETAILS: FLOORING	●	●	●
35	EN-100.00	ENERGY ANALYSIS		●	●
36	EN-101.00	ENERGY ANALYSIS - WALL SECTION		●	●
37	EN-102.00	ENERGY ANALYSIS - ENVELOPE ANALYSIS		●	●
38	EN-103.00	ENERGY ANALYSIS - LIGHTING ANALYSIS		●	●

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

PROJECT INFORMATION AND PLOT PLAN

PROJECT #: DRAWN BY:

SHEET TITLE :

G-001.00

ABBREVIATIONS

ADJ.	ADJACENT
A.F.F.	ABOVE FINISHED FLOOR
A.C.T	ACOUSTICAL CEILING TILE
ADA	AMERICANS WITH DISABILITIES ACT
ADAAG	ADA ACCESSIBILITY GUIDELINES
BLK.	BLOCKING
CL	CENTERLINE
CLR.	CLEAR
CLG.	CEILING
CNTR.	COUNTER
CNT.	CENTER
CONC.	CONCRETE
COL.	COLUMN
C.O.W.	CENTER OF WALL
CPT.	CARPET
CONT.	CONTINUOUS
CONST.	CONSTRUCTION
C.G.	CORNER GUARD
CMU	CONCRETE MASONRY UNIT
DEMO	DEMOLITION
DIM.	DIMENSION
DTL.	DETAIL
DWG.	DRAWING
DIA.	DIAMETER
DN.	DOWN
DR.	DOOR
ELEC.	ELECTRICAL
E.P.	ELECTRICAL PANELBOARD
EMER.	EMERGENCY
EQ.	EQUAL
(E)	EXISTING
EA.	EACH
EXT.	EXTERIOR
FBO.	FURNISHED BY OWNER
F.C.	FIXTURE CONTRACTOR
F.F.	FINISH FLOOR
F.D.	FLOOR DRAIN
FR	FRAME
F.R.T.	FIRE RETARDANT TREATED
F.S.	FIRE EXTINGUISHER
FURN.	FURNISH
F.O.W.	FACE OF WALL
GA.	GAUGE
G.B.	GRAB BAR
G.C.	GENERAL CONTRACTOR
GWB.	GYPSUM WALL BOARD
HC	HOLLOW CORE
H.M.	HOLLOW METAL
HGT.	HEIGHT
HORIZ.	HORIZONTAL
IN.	INCH
INST.	INSTALL
INSUL.	INSULATION
KE	KITCHEN EQUIPMENT
L.O.D.	LEASE OUTLINE DRAWING
L.L.	LANDLORD
MAX	MAXIMUM
MAT'L.	MATERIAL
M.D.F.	MAIN DISTRIBUTION FACILITY
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIR.	MIRROR
MIN.	MINIMUM
M.A.	MOISTURE RESISTANT
M.O.	MASONRY OPENING
N/A	NOT APPLICABLE
(N)	NEW
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
N.P.	NEUTRAL PIER
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPG.	OPENING
OPP.	OPPOSITE
PT.	PAINT
PLYWD.	PLYWOOD
P-LAM.	PLASTIC LAMINATE
PNL	PANEL
QTY.	QUANTITY
RCP	REFLECTED CEILING PLAN
R.B.	RUBBER BASE
REINF.	REINFORCING
REQ'D.	REQUIRED
REV.	REVISED/REVISION
SC	SOLID CORE
SCHED.	SCHEDULE
SIM.	SIMILAR
SPEC.	SPECIFICATION
SQ.	SQUARE
SUSP.	SUSPENDED
TEMP.	TEMPERED
TYP.	TYPICAL
UON	UNLESS OTHERWISE NOTED
V.C.A.	VINYL COMPOSITION TILE
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL
WD	WOOD

GENERAL NOTES

GENERAL NOTES:

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK CITY CONSTRUCTION CODES.
2. CONTRACTOR TO CHECK AND VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE BEFORE COMMENCING THE WORK. THE ARCHITECT SHALL BE NOTIFIED OF ANY UNUSUAL CONDITIONS.
3. CONTRACTOR IS TO FILE WORKMAN'S COMPENSATION AND TO SECURE ALL PERMITS BEFORE THE START OF WORK.
4. THE CONTRACTOR SHALL NOT SCALE DRAWING TO OBTAIN DIMENSIONS. IF THERE IS A DISCREPANCY ON OR LACK OF DIMENSION, THE ARCHITECT SHALL BE NOTIFIED AND THE INFORMATION WILL BE PROVIDED.
5. THE ENGINEER / ARCHITECT HAS NOT BEEN RETAINED FOR FIELD SUPERVISION OR INSPECTION.
6. THE CONTRACTOR IS TO RETAIN A LICENSED PROFESSIONAL ENGINEER AS PART OF HAS CONTRACT, ON BEHALF OF THE OWNER TO PERFORM ALL REQUIRED SPECIAL INSPECTION WORK AS MAY BE REQUIRED.
7. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO INSURE THE SAFETY AFFECTED BY THIS WORK.
8. FIVE DAYS PRIOR NOTICE SHALL BE GIVEN TO THE ADJOINING PROPERTY OWNERS AFFECTED BY THIS WORK.
9. ALL MATERIALS, ASSEMBLIES, FORMS AND METHODS OF CONSTRUCTION AND SERVICE EQUIPMENT SHALL MEET THE FOLLOWING REQUIREMENT:
   - 9.1. IT SHALL HAVE BEEN ACCEPTED PRIOR TO THE EFFECTIVE DATE OF CODE.
   - 9.2. IT SHALL HAVE BEEN ACCEPTED FOR USE UNDER THE PRESCRIBED CODE TEST METHOD BY THE COMMISSIONER.

PARTITION FRAMING NOTES

1. ALL FIRE RATED LIGHT GAUGE METAL STUD WALLS AND PARTITIONS REQUIRE GYPSUM BOARD ON BOTH SIDES FOR THE FULL HEIGHT OF THE STUDS (UNLESS SPECIFICALLY DETAILED OTHERWISE).
2. ALL STUD WALLS AND PARTITIONS SHALL HAVE CONTINUOUS LINES OF BRIDGING SPACED AT 4'-0" ON-CENTER. THE BRIDGING SHALL BE SECURELY FASTENED TO THE STUDS WITH EITHER WELDS OR SCREWS.
3. ALL STUDS SHALL BE 'C'-TYPE WITH FLANGE STIFFENERS.
4. THE MATERIALS AND DETAILS SHOWN ARE FOR TYPICAL INSTALLATIONS. WHERE THE STUD MANUFACTURER RECOMMENDS OR LOCAL ORDINANCES AND/OR CODES ARE MORE RESTRICTIVE OR OF HIGHER STANDARDS, THESE SHALL PREVAIL AND APPLY.

TYPICAL FASTENERS:

A. STEEL STUDS TO STEEL STUDS OR TRACKS:
#8-18 X 1/2" TEKS-2 WITH PHIL PAN-HEAD FOR 25 GA. OR 20 GA.
#10-16 X 9/16" TEK-3 WITH PHIL PAN-HEAD FOR INTERCONNECTION OF 18 GA. 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 (WIDE FLANGE BEAMS, COLUMNS, GIRDERS, STEEL TUBE SHAPES, 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. GYPSUM BOARD TO STEEL STUDS:
#7 X 1/4" TYPE 'S' BUGLE HEAD SCREWS FOR 3/8" TO 5/8" GYPSUM BOARD TO 25 GA. OR 20 GA. METAL STUDS.
#6 X 1/4" TYPE 'S-12' BUGLE HEAD SCREWS FOR 3/8" TO 5/8" GYPSUM BOARD TO 18 GA. OR 16 GA. METAL STUDS OR TRACKS.

CONSTRUCTION NOTES

1. WATER PROOF IN ALL WET AREAS.
2. CONTIUOUS MEMBRANE WATER-PROOFING INSTALLED UNDER FLOOR FINISH AND UP PERIMETER WALLS 6" ABOVE FLOOR LINE OR PER LOCAL CODE; WHICH IS MORE RESTRICTIVE SHALL PREVAIL AND APPLY.
3. GC IS RESPONSIBLE FOR VERIFYING SITE DIMENSIONS AND CONDITIONS.
4. EMERGENCY LIGHTING CIRCUITS MUST BE ON A DEDICATED BREAKER. BREAKER LOCKS SHALL INSTALLED ON THE EMERGENCY LIGHTING BREAKER AND THE FIRE ALARM BREAKER.
5. SITE SUPER TO VERIFY SPACE DIMENSIONS AFTER DEMOLITION.
6. GC MUST COORDINATE ALL WALL OPENINGS' OVERALL DIMENSION DIRECTLY WITH MILLWORK SHOP DRAWINGS.
7. STRUCTURAL COLUMNS SHALL BE COVERED BY 5/8" FIRE-RATED DRYWALL AS PART OF THE DEMISING WALL, AND SHALL BE SEALED TO THE UNDERSIDE OF THE STRUCTURE ABOVE IN THE SAME MANNER AS DEMISING WALLS.
8. FIRESTOP ALL EXISTING AND NEW PENETRATIONS.
9. ALL FLOOR PENETRATIONS SHALL BE FIRESTOPPED AND SEALED LIQUID TIGHT.
10. FLOOR TRANSITIONS SHALL BE FLUSH. AT STOREFRONT, ALIGN FINISHED FLOOR WITH BORDER PAVER ELEVATION OF THE WALKWAY WITH A THRESHOLD OF MINIMAL THICKNESS (NOT TO EXCEED 1/2") PROVIDED AT THE DOORS. VINYL, RUBBER, OR METAL REDUCER STRIPS ARE NOT PERMITTED.
11. CEILING SUPPORT SYSTEMS SHALL ATTACH TO STRUCTURAL MEMBERS ONLY; NOT PERMITTED TO BE ATTACHED TO THE LANDLORD'S ROOF OR FLOOR DECKING, BRIDGING OR WIND BRACING, AND SHALL COMPLY WITH SEISMIC SPECIFICATIONS.
12. GC TO PROVIDE ACCESS TO ALL TENANT AND LANDLORD SYSTEMS AND CONTROLS WITHIN THE PREMISES, INCLUDING DIRECT ACCESS TO ANY FIRE SPRINKLER VALVE, BY MEANS OF FLUSH ACCESS PANELS.

CONSTRUCTION SYMBOLS

Symbol	Description
	EXISTING WALL TO REMAIN
	EXISTING WALL TO DEMOLISH
	PROPERTY LINE
	BUILDING SEPARATION LINE
N.I.C.	NOT IN CONTRACT
#	PARTITION TYPE
#	DOOR TAG
#	WINDOW TAG
# / #	SECTION CUT SYMBOL
# / #	ELEVATION SYMBOL
# / #	DETAIL SYMBOL WITH BUBBLE
CL	CENTER LINE
#	REVISION DELTA
	SMOKE DETECTOR / CARBON MONOXIDE DETECTOR, HARD-WIRED
EXIT	EXIT SIGN
EXIT+LIT	EXIT SIGN W/ INTEGRAL EMERGENCY LIGHT

GENERAL NOTES

Form—246-1924 Certificate of Occupancy. 5A-0007-24-B

BUREAU OF BUILDINGS

BOROUGH OF MANHATTAN, CITY OF NEW YORK

HVO CERTIFICATE OF OCCUPANCY No. XXXXX 192 5

Supersedes Certificate of Occupancy No. XXXXX

To the owner or owners of the building: New York Sept.10 19 25

THIS CERTIFIES that the building located on Block xxx Lot xx

known as 100-10 Commercial Avenue

under a permit, Application No. xxx-25 conforms to the approved plans and specifications accompanying said permit and any approved amendments thereto, and to the requirements of the building code and all other laws and ordinances and to the rules and regulations of the board of standards and appeals, applicable to a building of its class and kind, except that in the case of a building heretofore existing and for which no previous certificate of occupancy has been issued and which has not been altered or converted since March 14, 1916, to a use that changed its classification as defined in the building code, this certificate confirms and continues the existing uses to which the building has been put; and

CERTIFIES FURTHER that the building is of fireproof construction within the meaning of the building code and may be used and occupied as a business building as hereinafter qualified, in a business district under the building zone resolution, subject to all the privileges, requirements, limitations, and conditions prescribed by law or as hereinafter specified.

Story	Live Loads Lbs. per sq. ft.	Persons Accommodated Male	Female	Total	Use
Cellar				230	Boiler, Mechanical Rooms, Storage
1st story	120	150	80	230	Department Store (Retail), (2) Accessory Loading Berths
2nd story	120	150	80	230	Department Store (Retail)
3rd story	120	150	80	230	Department Store (Retail)
Roof	100				Roof, Elevator Machine Room

This certificate is issued to XYZ Department Store 100-10 Commercial Ave New York, NY 10000 , for the owner or owners.

TR1 & TR8 TABLE

ENERGY CONSERVATION STATEMENT AND NOTES:

"TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, ALL WORK UNDER THIS APPLICATION **COMPLIES** WITH THE NYCECC 2022."

TR1: SPECIAL INSPECTION CATEGORIES

Y	N	INSPECTION CATEGORY		CODE SECTION
		STRUCTURAL STEEL - WELDING		BC 1704.3.1
		STRUCTURAL STEEL - DETAILS		BC 1704.3.2
		STRUCTURAL STEEL- HIGH STRENGTH BOLTING		BC 1704.3.3
		STRUCTURAL COLD-FRAMED STEEL		BC 1704.3.4
		CONCRETE - CAST-IN-PLACE		BC 1704.4
		CONCRETE - PRECAST		BC 1704.4
		CONCRETE - PRESTRESSED		BC 1704.4
		MASONRY		BC 1704.5
		WOOD - INSTALLTION OF HIGH-LOAD DIAPHRAMS		BC 1704.6.1
		WOOD - INSTALLATION OF METALOPLATE-CONNECTED TRUSSES		BC 1704.6.2
		WOOD - INSTALLATION OF PREFABRICATED I-JOISTS		BC 1704.6.3
		SUBGRADE INSPECTION		BC 1704.7.1
		SUBSURFACE CONDITIONS - FILL PLACEMENT & IN-PLACE DENSITY		BC 1704.7.2 & BC 1704.7.3
		SUBSURFACE INVESTIGATIONS (BORINGS/TEST PITS)	TR4	BC 1704.7.4
		DEEP FOUNDATION ELEMETS	TR5	BC 1704.8
		HELICAL PILES (BB #2014-020)	TR5H	BC 1704.8.5
		WALL PANELS, CURATIN WALLS, AND VENEERS		BC 1704.9
		SPRAYED FIRE-RESISTANT MATERIALS		BC 1704.10
		MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS		BC 1704.11
		EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)		BC 1704.12
		ALTERNATIVE MATERIALS - OTCR BUILDING BUILLETINS#		BC 1704.13
		SMOKE CONTRL SYSTEMS		BC 1704.14
		MECHANICAL SYSTEMS		BC 1704.15
		FUEL-OIL STORAGE AND FUEL-OIL PIPING SYSTEMS		BC 1704.16
		HIGH-PRESSURE STEAM PIPING (WELDING)		BC 1704.17
		HIGH TEMPATURE HOT WATER PIPING (WELDING)		BC 1704.18
		HIGH-PRESSURE FUEL-GAS PIPING (WELDING)		BC 1704.19
		STRUCTURAL STABILITY - EXISTING BUILDINGS		BC 1704.20.1
		EXCAVATIONS - SHEETING, SHORING AND BRACING		BC 1704.20.2
		UNDERPINNING		BC 1704.20.3 & BC 1814
		MECHANICAL DEMOLITION		BC 1740.20.4
		RAISING AND MOMVING OF A BUILDING		BC 1704.20.5
		SOIL PERDCOLATION TEST - PRIVAE ON SITE STORM WATER DRAINAGE DISPOSAL SYSTEMS, AND DETAITION FACILITIES		BC 1704.21.1.2
		PRIVATE ON-SITE STORM WATER DRAINAGE DISPOSAL SYSTEMS, AND DETENTION FACILITIES INSTALLATION		BC 1704.21.2
		INDIVIDUAL ON-SITE PRIVATE SEWAGE DISPOSAL SYSTEMS INSTALLATION		BC 1704.22
		SOIL PERCOLATION TEST - INDIVIDUAL ON-SITE PRIVATE SEWAGE DISPOSAL SYSTEMS		BC 1704.22
		SPRINKLER SYSTEMS		BC 1704.23
		STAND PIPESYSTEMS		BC 1704.24
		HEATING SYSTEMS		BC 1704.25
		CHIMNEYS		BC 1704.26
Y		FIRE-RESISTANT PENETRATIONS AND JOINTS		BC 1704.27
		ALUMINUM WELDING		BC 1704.28
		FLOOD ZONE COMPLIANCE		BC 1704.29 & BC G105
		LUMINOUS EGRESS PATH MARKINGS	TR7	BC 1704.30 & BC 1024.8
		EMERGENCY AND STANDBY POWER SYSTEMS (GENERATORS)		BC 1704.31
		POST-INSTALLED ANCHORS (BB #2014-018, 2014-019)		BC 1704.32
		SEISMIC ISOLATION SYSTEMS		BC 1701.8
		CONCRETE DESIGN MIX	TR3	BC 1905.3 & BC 1913.5
		CONCRETE DAMPLING AND TESTING	TR2	BC 1905.6 & BC 1913.10

TR8: PROGRESS INSPECTION CATEGORIES

Y	N	INSPECTION CATEGORY		CODE SECTION
		PRELIMINARY		28-116.2.1 & BC 110.2
		FOOTING AND FOUNDATION		BC 110.3.1
		LOWEST FLOOR ELEVATION		BC 110.3.2
		STRUCTRAL WOOD FRAME		BC 110.3.3
Y		ENERGY CODE COMPLIANCE INSPECTIONS	TR8	BC 110.3.5
Y		FIRE-RESISTANCE RELATED CONSTRUCTION		BC 110.3.4
		PUBLIC ASSEMBLY EMERGENCY LIGHTING		28-116.2.2
		FINAL		28-116.2.4.2, BC 110.5, DIRECTIVE 14 OF 1975, AND 1RCNY §101-10

TR8: ENERGY CODE PROGRESS INSPECTION

Y	N	INSPECTION CATEGORY	CODE SECTION
		PROTECTION OF EXPOSED FOUNDATION INSULATION	(IA1),(IIA1)
Y		INSULATION PLACEMENT AND R-VALUES	(IA2),(IIA2)
Y		FENESTRATION AND DOOR U-FACTOR AND PRODUCT RATINGS	(IA3),(IIA3)
Y		FENESTRATION AIR LEAKAGE	(IA4),(IIA4)
Y		FENESTRATION AREAS	(IA5),(IIA5)
Y		AIR BARRIER - VISUAL INSPECTION	(IA6),(IIA6)
		AIR BARRIER - TESTING	(IA7),(IIA7)
		AIR BARRIER CONTINUITY PLAN TESTING/INSPECTION	(IIA8)
		VESTIBULES	(IIA9)
		FIREPLACES	(IB1),(IIB1)
		VENTILATION AND AIR DISTRIBUTION SYSTEM	(IB2)
		SHUTOFF DAMPERS	(IIB2)
		HVAC-R AND SERVICE WATER HEATING EQUIPMENT	(IB3),(IIB3)
		HVAC-R AND SERVICE WATER HEATING SYSTEM CONTROLS	(IB4),(IIB4)
		HVAC-R AND SERVICE WATER PIPING DESIGN AND INSULATION	(IB5),(IIB5)
		DUCT LEAKAGE TESTING, INSULATION AND DESIGN	(IB6),(IIB6)
		METERING	(IC1),(IIC1)
		LIGHTING IN DWELLING UNITS	(IIC2)
Y		INTERIOR LIGHTING POWER	(IC2),(IIC3)
Y		EXTERIOR LIGHTING POWER	(IIC4)
Y		LIGHTING CONTROLS	(IIC5)
		ELECTRICAL MOTORS AND ELEVATORS	(IIC6)
		MAINTENANCE INFORMATION	(ID1),(IID1)
		PERMANENT CERTIFICATE	(ID2)
		ELECTRIC VEHICLE SERVICE EQUIPMENT REQUIREMENTS	(ID3)

OWNER:

NYC Buildings

INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

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2026.08.14	SUBMIT FOR DOB REVIEW
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2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

GENERAL INFORMATION AND CODE ANALYSIS

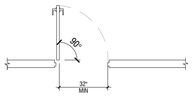
PROJECT #: DRAWN BY:

SHEET TITLE :

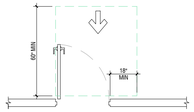
G-002.00

404 DOORS, DOORWAYS, AND GATES

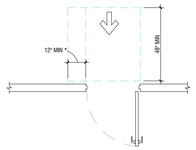
404.2.4.2 DOORWAYS WITHOUT DOORS OR GATES, SLIDING DOORS, AND FOLDING DOORS. DOORWAYS LESS THAN 36 INCHES WIDE WITHOUT DOORS OR GATES, SLIDING DOORS, OR FOLDING DOORS SHALL HAVE MANEUVERING CLEARANCES COMPLYING WITH TABLE 404.2.4.2. APPROACH FROM FRONT, PERPENDICULAR TO DOORWAY MINIMUM MANEUVERING CLEARANCE IS TO BE 48", PARALLEL TO DOORWAY TO BE 0". SEE FIGURE (a) FRONT APPROACH.



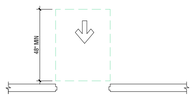
HINGED DOOR CLEAR WIDTH



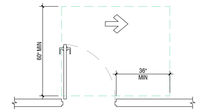
FRONT APPROACH, PULL SIDE



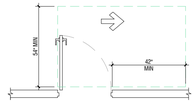
FRONT APPROACH, PUSH SIDE
*IF BOTH CLOSER AND LATCH ARE PROVIDED



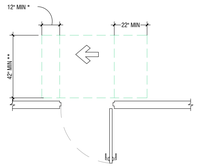
FRONT APPROACH
AT DOORWAYS WITHOUT DOORS



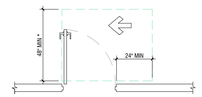
HINGE APPROACH, PULL SIDE



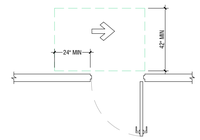
HINGE APPROACH, PULL SIDE



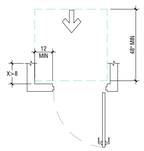
HINGE APPROACH, PUSH SIDE
*IF BOTH CLOSER AND LATCH ARE PROVIDED
** 48 MIN IF BOTH CLOSER AND LATCH PROVIDED



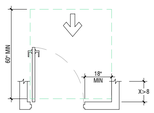
LATCH APPROACH, PULL SIDE
*54 MIN IF CLOSER IS PROVIDED



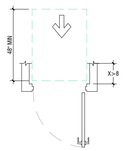
LATCH APPROACH, PUSH SIDE
*48 MIN IF CLOSER IS PROVIDED



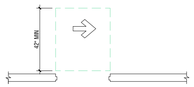
PUSH SIDE, DOOR PROVIDED WITH BOTH
CLOSER AND LATCH AT RECESSED DOOR



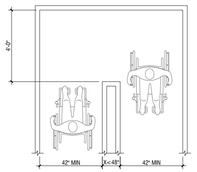
PULL SIDE
AT RECESSED DOOR



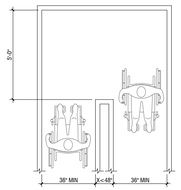
PUSH SIDE
AT RECESSED DOOR



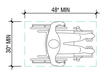
SIDE APPROACH
AT DOORWAYS WITHOUT DOORS



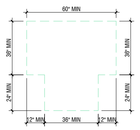
CLEAR WIDTH AT 180° TURN



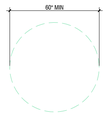
CLEAR WIDTH AT 180° TURN (EXCEPTION)



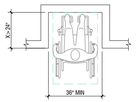
CLEAR FLOOR SPACE



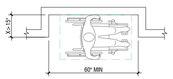
T-SHAPE



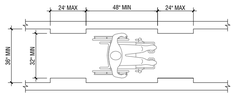
CIRCULAR



FORWARD APPROACH



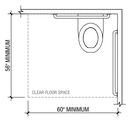
PARALLEL APPROACH



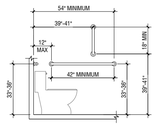
CLEAR WIDTH OF AN ACCESSIBLE ROUTE

BATHROOMS

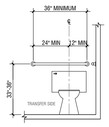
604.2
WATER CLOSET LOCATION



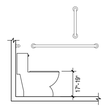
604.3.1
SIZE OF CLEARANCE AT WATER CLOSETS



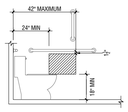
604.5.1
SIDE WALL GRAB BAR AT WATER CLOSETS



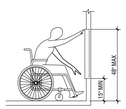
604.5.2
REAR WALL GRAB BAR AT WATER CLOSETS



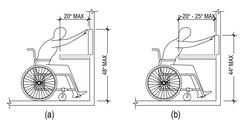
604.4
WATER CLOSET SEAT HEIGHT



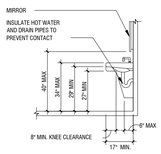
604.7
PROTRUDING DISPENSER OUTLET LOCATION



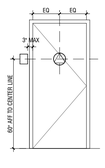
UNOBSTRUCTED FORWARD REACH



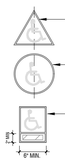
OBSTRUCTED HIGH FORWARD REACH



CLEARANCE AND HEIGHT REQUIREMENTS AT LAVATORY



BATHROOM SIGNAGE

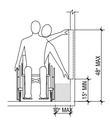


9" EA. SIDE TRIANGLE,1/4" THK; REQUIRED FOR MEN'S A.D.A. RESTROOM DOOR SIGNAGE

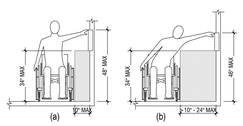
9" DIA. CIRCLE, 1/4" THK; REQUIRED FOR WOMEN'S A.D.A. RESTROOM DOOR SIGNAGE

5/8" HIGH (MINIMUM) HELVETICA FACE UPPER-CASE TYPE, RAISED 1/32" FROM SURFACE, GRADE 2 BRAILLE OF TEXT ABOVE

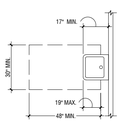
505.10.1
TOP AND BOTTOM HANDRAIL EXTENSIONS AT RAMPS
RAMP HANDRAILS SHALL EXTEND HORIZONTALLY ABOVE THE LANDING 12 INCHES (305 MM) MINIMUM BEYOND THE TOP AND BOTTOM OF RAMP RUNS. EXTENSIONS SHALL RETURN TO A WALL, GUARD, OR FLOOR, OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT RAMP RUN.



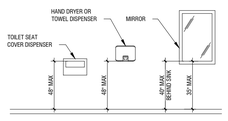
UNOBSTRUCTED SIDE REACH



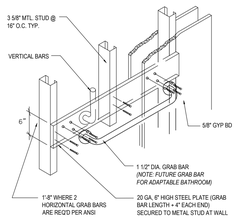
OBSTRUCTED HIGH SIDE REACH



FORWARD APPROACH



OTHER FIXTURE AND ACCESSORY MOUNTING HEIGHTS



METAL PLATE DETAIL FOR GRAB BAR

GRAB BAR NOTE
(2014 NYC BC APPENDIX P, P102.8.3 EXCEPTION):
GRAB BARS ARE **NOT REQUIRED** TO BE INSTALLED WHERE REINFORCEMENT FOR SUCH GRAB BARS IS INSTALLED AND LOCATED TO PERMIT FUTURE INSTALLATION OF GRAB BARS COMPLYING WITH SECTION P102.8.3.
PROPOSED:
1. GRAB BAR REINFORCEMENT TO BE INSTALLED PER METAL PLATE DETAIL.
2. NO GRAB BARS WILL BE INSTALLED UNLESS FUTURE TENANT WITH DISABILITIES REQUEST PRIOR TO MOVE IN.

ACCESSIBILITY NOTES

ACCESSIBILITY NOTES

ACCESSIBILITY & USABILITY FOR THE PHYSICALLY HANDICAPPED SHALL BE PROVIDED IN PUBLIC AREAS. THE PROVISIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE AMERICAN NATIONAL INSTITUTE, INC. (ANSI A 117.1) AS REQUIRED BY THE NYC BUILDING CODE, SHOWN GRAPHICALLY ON THIS SHEET AND IN NOTES BELOW.

305 CLEAR FLOOR OR GROUND SPACE

305.1 GENERAL. CLEAR FLOOR OR GROUND SPACE SHALL COMPLY WITH 305.

305.2 FLOOR SURFACE. FLOOR SURFACES OF A CLEAR FLOOR SPACE SHALL COMPLY WITH SECTION 302. CHANGES IN LEVEL ARE NOT PERMITTED WITHIN THE CLEAR FLOOR SPACE. (EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED

305.3 SIZE. THE CLEAR FLOOR SPACE SHALL BE 48 INCHES MINIMUM IN LENGTH AND 30 INCHES MINIMUM IN WIDTH.

305.4 KNEE AND TOE CLEARANCE. UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR OR GROUND SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH SECTION 306.

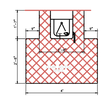
404 DOORS AND DOORWAYS

404.1 GENERAL. DOORS AND DOORWAYS THAT ARE PART OF AN ACCESSIBLE ROUTE SHALL COMPLY WITH SECTION 404

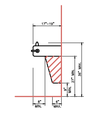
404.2.1 DOUBLE-LEAF DOORS AND GATES. AT LEAST ON OF THE ACTIVE LEAVES OF DOORWAYS WITH TWO LEAVES SHALL COMPLY WITH SECTION 404.2.2 AND 4.4.2.3

404.2.2 CLEAR WIDTH. DOORWAYS SHALL HAVE A CLEAR OPENING WIDTH OF 32 INCHES MINIMUM. CLEAR OPENING WIDTH OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF DOOR AND STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAT 24 INCHES IN DEPTH AT DOORS AND DOORWAYS WITHOUT DOORS SHALL PROVIDE A CLEAR OPENING WIDTH OF 36 INCHES MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE CLEAR OPENING WIDTH LOWER THAN 34 INCHES ABOVE THE FLOOR. PROJECTIONS INTO THE CLEAR OPENING WIDTH BETWEEN 34 INCHES AND 80 INCHES ABOVE THE FLOOR SHALL NOT EXCEED 4 INCHES.

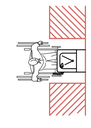
DRINKING FOUNDATON REQUIREMENT



DRINKING FOUNTAIN PLAN



DRINKING FOUNTAIN SECTION
(a)
SPOUT HEIGHT AND KNEE CLEARANCE



(b)
CLEAR FLOOR SPACE

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

ACCESSIBILITY DIAGRAMS AND RELATED NOTES

PROJECT #:

DRAWN BY:

SHEET TITLE :

G-003.00

ARCHITECTURAL CODE ANALYSIS - *NYC Existing Building Code - Case Study 2 - Addition & Alteration Level 1*

PART 01

SUMMARY	
Project Type	Change of Occupancy and Interior Alteration
Job Description / Scope of Work	The project is a 2-story vertical addition for office use (Occupancy Group B – Business) to a 3-story + cellar prior code department store (Occupancy Group M – Mercantile) constructed in 1925. The project includes an Alteration Level 1 in the existing building to accommodate the addition. Two existing stairs are extended to provide means of egress for the addition. A 1st floor entry lobby and two new elevators are provided to serve the addition. An Alteration Level 1 to the existing building includes the new office entrance and lobby, new elevators serving the addition, column reinforcement, partial floor slab repairs, and MEP/FP alterations. The roof slab above the existing 3rd floor is removed, but the steel framing is maintained. A new 4th floor slab is provided as part of the addition. Existing bulkheads are modified to match the new 4th floor level. The existing building is Construction Class 1 Fireproof (1938 Code), equivalent to 2022 BC Construction Type IB. The addition is Construction Type IB. The existing building cellar is sprinklered and the addition 4th and 5th floors will be sprinklered. The building is considered "unsprinklered" because the entire building is not sprinklered.
Stories	Existing: 3 stories + cellar,
	Proposed vertical addition: 2 stories
	Total: 5 stories + cellar
Height	Existing height: 44 ft.
	Addition height: 30 ft.
	Total height: 74 ft. (< 75 ft., not a high rise)
Occupancy	Existing: Occupancy Group M, Mercantile
	Addition: Occupancy Group B, Business (Offices)
Construction Class	Existing: Class 1 Fireproof (1938 Code) equivalent to 2022 BC Constuction Type IB
	Addition: 2022 BC Class IB
Existing Building Floor Area (SF) including cellar level	80,634 SF
Addition Floor Area (SF)	33,038 SF
Proposed Total Building Area (SF)	113,672 SF
Prior Code Building (Y/N)?	Y, Building constructed in 1925, prior to July 1, 2008.
EBC CONSIDERATIONS	
Work Area (SF)	25,496 SF (see Work Area analysis on Dwg. G-010)
Work Area / Exist. Building Area %	31.62%
Work Area relative to Building Area	<50%
EBC Alteration Level (Level 1 or Level 2)	Level 1
Change of Occupancy (Y/N)?	N
Addition (Y/N)?	Y
Addition Floor Area (SF)	33,038 SF
Floor Surface Area	Increase in Floor Surface Area is < 110% (see Floor Surface Area analysis on Dwg. G-009)
Floor surface area to remain (FSAR)	80,634 SF
Floor surface area of addition	53,038 SF
Floor surface area proposed (FSAP)	133,672 SF
% increase in floor surface area	65.78% < 110%
Tenant/Occupant Protection Plan required?	No. Building will be vacant during construction.
Will the "Building safety performance and scoring method" be used? (Y/N)	N
Applicable EBC Chapters (in addition to Chapter 1 – Administration and Chapter 2 – Definitions)	Chapter 3 – General Applicable Provisions
	Chapter 7 - Structural
	Chapter 8 – Alteration Level 1
	Chapter 11 – Additions
	Chapter 15 – Additional Safeguards During Construction or Demolition…
Certificate of Occupancy required (AC 28-118)? (Y/N)	Y

ARCHITECTURAL CODE ANALYSIS

ADDITION

GENERAL PROVISIONS

Section	Subject	Requirements	Applies?	Compliance
1101.1	Scope	An addition to an existing building or structure shall comply with the NYC BC as required for new construction without requiring the existing building to be altered to meet such new construction requirements, except as required by this chapter. Where an addition impacts the existing building, that portion shall comply with this code.	Y	Complies. The addition is designed to comply with the NYC BC.
1101.2	Creation or extension of noncompliance.	An addition shall not create or extend any noncompliance in the existing building to which the addition is being made.	Y	Complies. The addition does not create or extend any noncompliance in the existing building.
1101.3	Other work.	Any alteration work within an existing building to which an addition is being made shall comply with the applicable requirements for the work as classified in Chapter 6.	Y	Complies. Work within the existing building is an Alteration Level 1. See analysis below.
1101.4	Work that increases floor surface area of an existing building by more than 110%.	Where an addition including alteration made to an existing building causes the existing floor surface area to be increased by more than 110% per Section 302.7, the entire building shall be made to comply with the provisions of the NYC BC as if it were a new construction hereafter erected.	N	Not applicable. The addition does not increase the existing floor surface area by more than 110%. See compliance analysis under Section 302.7.2 below.
302.7.2	Calculation of increase in floor surface area.	To determine the percentage by which the floor surface area is increased, the following formula shall be used:	Y	I = (FSAP – FSAR) / FSAR x 100
		I = (FSAP – FSAR) / FSAR x 100		(133,672 - 80,634) / 80,634 x 100 = 65.78% < 110%
				See Dwg. G-009 for Floor Surface Area Analysis.
303.6	Interior environment.	Alterations, additions, conversions and changes of use or occupancy shall comply with BC Chapter 12 and this code.	Y	Complies. The addition complies with BC Chapter 12.

HEIGHTS AND AREAS

Section	Subject	Requirements	Applies?	Compliance
1102.1	Height limitations.	No addition shall increase the height of an existing building beyond that permitted under the applicable provisions of BC Chapter 5 for new construction.	Y	Complies.
				Per BC Table 504.3 allowable height for Groups B & M with Type IB construction is 160 ft. (non-sprinklered).
				Per BC Table 504.4 allowable number of stories for Groups B & M with Type IB construction is unlimited.
				Proposed building height is 74 ft. & 5 stories.
1102.2	Area limitations.	No addition shall increase the area of an existing building beyond that permitted under the applicable provisions of BC Chapter 5 for new construction unless fire separation, as required by the BC, is provided.	Y	Complies.
				Per BC Table 504.4 allowable area for Groups B & M with Type IB construction is unlimited.
				Proposed building area is 113,672 SF.
1102.5	Existing buildings within the fire district.	In accordance with Section 302.6 and BC Appendix D, an existing building shall not be increased in height or area unless it is of a type of construction permitted for new buildings within the fire district. Nor shall any existing building be hereafter extended on any side, nor square footage or floors added within the existing building, unless such modifications are of a type of construction permitted for new buildings within the fire district.	Y	Complies. Existing and proposed Construction Type IB complies. See Section 302.6.
302.6	Existing buildings in fire districts.	Alterations, additions, changes of use or occupancy and relocations of existing buildings inside the fire district, as described in BC Appendix D, shall be subject to BC Chapter 6 and Sections 302.6.1 and 302.6.2	Y	Complies. Existing and proposed Construction Type IB complies.
302.6.1	Group H-1 prohibited.	New Group H-1 occupancies shall be prohibited within the fire district.	N	No Group H-1 occupancy is proposed.
302.6.2	Changes to buildings.	An existing building shall not be hereafter altered, increased in height or area, changed to a new use or occupancy, relocated or moved into the fire district unless such building is of a type of construction permitted for new buildings within the fire district in accordance with the BC.	Y	Complies. Existing building (Group M occupancy) of Construction Type IA and proposed addition (Group B occupancy) of Construction Type IB complies with BC Chapters 5 & 6.

STRUCTURAL

Section	Subject	Requirements	Applies?	Compliance
	See structural analysis and drawings.		Y	

FIRE PROTECTION

Section	Subject	Requirements	Applies?	Compliance
	See fire protection code analysis and plans.		Y	

MEANS OF EGRESS

Section	Subject	Requirements	Applies?	Compliance

OWNER:

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PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

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ARCHITECTURAL CODE ANALYSIS - *NYC Existing Building Code - Case Study 2 - Addition & Alteration Level 1*

PART 02

1105.1	General.	Means of egress from an addition to an existing building or structure shall comply with BC Chapter 10 and with this section. Means of egress from additions shall be permitted to utilize existing exit facilities of the building or structure in accordance with Sections 1105.2 through 1105.3.	Y	Complies. The addition extends existing Stairs A & B as means of egress. Stairs A & B shall be in full compliance with BC Chapter 10 from highest level of addition to level of exit discharge and from the cellar level to the level of exit discharge.
1105.2	The addition does not increase the existing floor surface area by more than 110%.	Where the addition including alteration made to the building does not exceed the existing floor surface area by more than 110% per Section 302.7, the existing exit facilities shall be permitted to be utilized by the new addition to discharge onto the outside, subject to Sections 1105.2.1 and 1105.2.2. Such existing exit facilities shall be in compliance with the terms of their approval prior to the proposed addition.	Y	Complies. Addition does not increase existing floor surface area by more than 110%. See Section 302.7.2 analysis.
1105.2.1	Prior code buildings.	Means of egress components serving the addition shall comply with BC Chapter 10 or as permitted by Section 305.5.	Y	Complies. Means of egress serving the addition complies with BC Chapter 10 and EBC Section 305.5. See Dwg. G-100 and G-101 for Occupancy & Egress Analysis for Addition.
1105.2.1.1	Vertical exits.	In prior code buildings, existing vertical exits may be extended to serve the addition, maintaining its width, in compliance with Section 305.5 provided the occupant load of the new addition shall not exceed the capacity of the existing stairs.	Y	Complies. Stairs A & B are extended to serve the addition and comply with Section 305.5. See Dwg. G-100 and G-101 for Occupancy & Egress Analysis for Addition.
305.5	Special provisions for prior code buildings.	Alterations, additions, changes of occupancy or relocations of prior code buildings that require changes to means of egress shall be permitted to comply with Sections 305.5.1 through 305.5.19 of this code. Other means of egress components shall comply with BC Chapter 10.	Y	Complies. See Section 305.5 analysis below. See Dwg. G-100 and G-101 for Occupancy & Egress Analysis for Addition.
305.5.1	Occupant load and exit capacity.	The occupant load and exit capacity of prior code buildings or spaces shall be determined in accordance with BC Chapter 10.	Y	Complies. Occupant load and exit capacity shall comply with BC Chapter 10. See Dwg. G-100 and G-101 for Occupancy & Egress Analysis for Addition.
305.5.2	Accessible means of egress.	Accessible means of egress are not required in prior code buildings where the level of alterations does not trigger full building compliance with the accessibility provisions of the BC.	Y	Complies. Proposed addition does not trigger full building compliance with accessibility, as the increase in floor surface area does not exceed 110%, in accordance with Section 1106.2. Therefore, accessible means of egress are not required.
305.5.3	Remoteness.	Alterations that result in the same or a lesser hazard occupancy category as described in EBC Section 1005 may maintain the existing remoteness of exits.	Y	Complies. Occupancy Groups M & B are both classified as hazard category 3 per EBC Table 1005.2. Stairs A & B serving occupancy Group B are separated by more than 50% of the length of the maximum overall diagonal dimension of the area served, per BC 1007.1.1.
305.5.4	Travel distance.	The maximum travel distance measured from the most remote point within a story along the natural and unobstructed path of egress travel to an exterior exit door at the level of exit discharge, an entrance to an interior exit stairway, interior exit ramp, exit passageway, horizontal exit, exterior exit stairway, or exterior exit ramp shall not exceed the limits specified in BC Chapter 10.	Y	Complies. Travel distance in the addition complies with BC Chapter 10. Group B max. travel distance: 200 ft. in unsprinklered buildings per BC Table 1017.2. Although the cellar is sprinklered and the addition's 4th & 5th floors are sprinklered, the entire building is considered "unsprinklered" because the 1st, 2nd and 3rd floors are not sprinklered. Proposed max. travel distance on 4th & 5th floors: 179 ft. See Dwg. G-100 and G-101 for travel distance diagrams.
305.5.11	Stairs.	New or relocated stairs shall comply with BC Chapter 10 unless otherwise provided for in this code. Alteration or vertical extension of existing stairs shall comply with Section 305.5.11.1.	Y	Applies to the extension of Stairs A & B to the addition floors.
305.5.11.1	Stair width.	The width of existing stairs shall be measured as the clear width between walls, grilles, guards, or newel posts. Stair stringers may project into the required width not more than 2 inches on each side of the stair. Alterations to existing stairs shall maintain a minimum width of 44 inches.	Y	Complies. Existing Stairs A & B are 44 inches wide and extensions of the stairs to the 4th & 5th floors and addition roof maintain a width of 44 inches.
305.5.11.2	Riser height and tread depth.	Riser height and tread depth for new stairs and vertical extension of existing stairs shall comply with BC Chapter 10. Alteration or replacement within the same shaft made to existing stairs where the existing space and construction does not allow a reduction in pitch or slope shall be permitted to maintain the existing riser height and tread depth and shall comply with Table 305.5.11.2. Riser height and tread depth shall be constant from story to story.	Y	Due to the size of the existing stair shafts, treads (11") and risers (7") in accordance with BC Chapter 10 cannot be achieved. Riser height of 7.5" and tread depth of 10" are provided at Stair A & B extensions to the 4th & 5th floors to match the riser and tread dimensions of the existing stair runs. Riser height and tread depth are constant from story to story between the existing building and the addition to maintain safe exit travel for occupants. See Dwg. A-300. *Note: DOB interpretation of Section 305.5.11.2 is required to confirm that max. riser height and min, tread depth for prior code buildings is permitted for Stairs A & B extensions.*
Table 305.5.11.2	Max. Riser Height and Min. Tread Depth in Prior Code Buildings.	Max. riser height: 7-3/4" Min. tread depth: 9-1/2" + nosing 2R + 1T > 24" and < 25-1/2"	Y	Complies. Riser height: 7.5". Tread depth: 10". Calculation: 2 x 7.5" + 1 x 10" = 25"
305.5.13	Handrails.	Where handrails are altered or added, they shall comply with BC Chapter 10.	Y	Complies. Handrails at Stair A & B extensions and within existing Stair A & B stair runs comply with BC Chapters 10 & 16.
305.5.14	Guards.	Where the alteration or repair of a building involves the addition or replacement of guards, such guards shall comply with BC Chapters 10 and 16.	Y	Complies. Guards at Stair A & B extensions and within existing Stair A & B stair runs comply with BC Chapters 10 & 16.
BC 1010.1.9.11	Stairway doors.	Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.	Y	Stairway doors at Stairs A & B are proposed to be locked on stair side to separate the Group M and B occupancies, subject to approval of a CCD1 to permit such locking with safety measures.
	Exception 2.	This section shall not apply to doors arranged in accordance with Section 403.5.3.		The Owner requests approval for the separation of the Group M and B occupancies for security reasons. A CCD1 will be submitted to permit the locking of stairway doors on the stair side in Stairs A & B with safety measures guided by the provisions of BC 403.5.3, as detailed below.
BC 403.5.3	Stairway door operation.	A door locked from the stair side may be permitted provided that such door is equipped with an automatic fail-safe system for opening in the event of the activation of any automatic fire detection system, or when any elevator recall is activated, or when any signal is received from the fire command center. Such door shall be deemed as openable from the stair side. Stair reentry signs shall be posted throughout the stairway indicating that reentry is provided only during fire emergencies.		Stair A & B doors are equipped with an automatic fail-safe system for opening in the event of the activation of any automatic fire detection system, or when any elevator recall is activated, or when any signal is received from the fire command center. Stair reentry signs shall be posted throughout the stairway indicating that reentry is provided only during fire emergencies.
BC 403.5.3.1	Stairway communication system.	A two-way voice communications system connected to an approved constantly attended station shall be provided at not less than every fifth floor in each stairway where the doors to the stairway are locked in accordance with Section 403.5.3.		A two-way voice communications system system connected to an approved constantly attended station is provided at the 1st, 3rd and 5th floor stair landings in Stairs A and B.

ACCESSIBILITY

Section	Subject	Requirements	Applies?	Compliance
306.1	Compliance.	Alterations, including minor alterations, repairs excluding ordinary repairs, and alterations affecting an area containing a primary function, changes of use or occupancy, additions and relocation of existing buildings, shall comply with BC Chapter 11 and this code.	Y	Complies. Addition is designed to be accessible in accordance with BC Chapter 11.
1106.1	Minimum requirements.	Accessibility provisions of BC Chapter 11 for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, primary function shall also comply with the requirements of Sections 806 and 906, as applicable.	Y	Complies. Addition is designed to be accessible in accordance with BC Chapter 11. Portions of the existing building being altered, including the new 1st floor office lobby, are addressed under the Alteration, Level 1 section of this analysis.
1106.2	Additions requiring accessibility throughout a building.	Where an addition, including any alteration made to the building, increases the existing floor surface area of the existing building by more than 110%, the entire building shall be made to comply with BC Chapter 11 as if it were new construction hereafter erected.	N	Not applicable, work does not increase the floor surface area by more than 110%. See Section 302.7.2 analysis above and Dwg. G-009.

OWNER:

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ARCHITECTURAL CODE ANALYSIS - *NYC Existing Building Code - Case Study 2 - Addition & Alteration Level 1*

PART 03

ENERGY CONSERVATION

Section	Subject	Requirements	Applies?	Compliance
1107.1	Minimum requirements.	Additions to existing buildings shall conform to the energy requirements of the NYC Energy Conservation Code as they relate to new construction.	Y	Complies. See Energy Code analysis.

OTHER BUILDING SYSTEMS

Section	Subject	Requirements	Applies?	Compliance
	See MEP code analysis and drawings.			
1108.6	Elevators	Where additions are made to existing buildings, the alterations and additions to existing elevators shall be in accordance with BC Chapter 30 and BC Appendix K.	Y	Complies. Modifications to existing elevators at existing roof / new 4th floor level are in accordance with Chapter 30 and BC Appendix K. New elevators comply with the Building Code. Elevator work is filed under a separate application.

EXISTING BUILDING – ALTERATION LEVEL 1

GENERAL PROVISIONS

Section	Subject	Requirements	Applies?	Compliance
General	Supplemental requirements.	Where the work area on any floor exceeds 50% of that floor area, the supplemental requirements of Chapter 8 apply.	Y	The work area does not exceed 50% of the area of the cellar, 1st and 2nd floors. The work area does exceed 50% of the 3rd floor area, so that supplemental requirements apply to the 3rd floor. See work area analysis and diagrams on Dwg. G-010.
302.4	New and replacement materials, assemblies and details.	Except as otherwise required or permitted by this code, materials, assemblies, and details permitted by the NYC Construction Codes shall be used. Exception: For partial and restorative repairs, where such repairs are necessitated by deteriorating façade or roof conditions and are required by the NYC Construction Codes, like materials, assemblies and details are permitted if no unsafe condition is created...	Y	Complies. Partial existing building façade repairs incorporate like materials, assemblies and details as permitted by the Exception to Section 302.4.
302.6	Existing buildings in fire districts.	Alterations, additions, changes of use or occupancy and relocations of existing buildings inside the fire district, as described in BC Appendix D, shall be subject to BC Chapter 6 and Sections 302.6.1 and 302.6.2	Y	Complies. Existing Construction Type IB complies. See Addition analysis above.
302.7.2	Calculation of increase in floor surface area.	To determine the percentage by which the floor surface area is increased, the following formula shall be used: I = (FSAP – FSAR) / FSAR x 100	Y	Complies. Increase in floor surface area does not exceed 100%. See calculation under Addition analysis above.

BUILDING ELEMENTS AND MATERIALS

Section	Subject	Requirements	Applies?	Compliance
303.2	Fire resistive elements.	The fire-resistance ratings of existing building elements and materials shall not be reduced.	Y	Complies. The fire-resistance rating of existing building elements is maintained.
303.5	Mold resistance.	Alterations, repairs, additions and relocations of buildings shall comply with BC Sections 2506 and 2509 relating to areas subject to moisture or water damage.	Y	Complies. Mold resistant finishes (tile and mold resistant gyspum board) are used in 3rd floor bathrooms.
303.6	Interior environment.	Alterations, additions, conversions and changes of use or occupancy shall comply with BC Chapter 12 and this code.	Y	Complies. The alteration complies with BC Chapter 12.
801.3	New and replacement materials, assemblies and details.	Materials, assemblies and details for all new work shall comply with Section 302.4.	Y	Complies. Materials, assemblies and details used within the work area comply with the NYC Construction Codes.
803.2	Shafts and vertical openings.	Existing shafts and vertical openings shall comply with the provisions of BC Chapter 7 except as stated in Sections 803.2.1 through 803.2.3 for prior code buildings.	Y	Provisions for prior code buildings apply. Existing shafts within the work area are limited to plumbing risers and the boiler flue and are enclosed in 2-hr fire rated construction.
803.2.1	Existing shafts and vertical openings in prior code buildings.	Existing shafts and vertical openings that are lawfully enclosed in accordance with a prior code shall not be reduced in fire-resistance rating.	Y	Complies. Existing and new shafts and vertical openings within the work area are enclosed with 2 hr. fire-rated construction and rating is not reduced.
803.2.2	Supplemental shaft and floor opening enclosure requirements.	Where the work area on any floor exceeds 50% of that floor area, the enclosure requirements of Section 803.2 shall apply to vertical openings other than stairways throughout the floor.	Y	Complies. Supplemental requirements apply to 3rd floor. All vertical openings comply with the enclosure requirements of Section 803.2.
803.2.3	Supplemental stairway enclosure requirements in prior code buildings.	Where the work area on any floor exceeds 50% of that floor area, stairways that are part of the means of egress serving the work area shall, at a minimum, be enclosed with 1-hour fire rated construction on the highest work area floor and all floors below.	Y	Complies. Supplemental requirements apply to 3rd floor. Stairs A, B & C have 2 hour rated enclosures at the 3rd floor and all floors below.
803.4	Interior finish.	The interior finish of walls and ceilings in exits and corridors in the work area shall comply with the NYC BC Chapter 8.	Y	Complies. Interior finishes in Stairs A & B and new elevator lobby on 1st floor are in accordance with BC Table 803.11 Class "A" finishes for unsprinklered buildings.
803.4.1	Supplemental interior finish requirements.	Where the work area on any floor exceeds 50% of the floor area, Section 803.4 shall also apply to the interior finish in exits and corridors serving the work area throughout the floor.	Y	Complies. Supplemental requirements apply to 3rd floor. Interior finishes in Stairs A, B & C serving the work area throughout the floor are in accordance with BC Table 803.11 Class "A" finishes .
803.9	Existing buildings in fire districts.	Alterations made to existing buildings shall comply with Section 302.6 and Sections 803.9.1 through 803.9.3.	Y	Complies. See Addition portion of this analysis for compliance with Section 302.6 and below for compliance with Section 803.9.1 and 803.9.2. Section 803.9.3 is not applicable.
803.9.1	Construction type.	Every existing building, room, or space hereafter altered shall be of a construction type as indicated in BC Chapter 6 including the required fire resistance rating of bearing walls, floors, roofs and their supporting structural members.	Y	Complies. Existing and proposed Construction Type IB complies.
803.9.2	Roof covering.	Roof covering in the fire district shall conform to the requirements of Class A or B roof coverings as defined in BC Section 1505.	Y	Complies. Roof coverings at the addition (4th floor setback roof and main roof) are Class A.
803.10	Architectural condition assessment.	Where a building is being altered and the work area exceeds 50% of the floor area, the registered design professional of record shall visually assess the condition of fire-resistant building elements and assemblies within the work area, and egress elements serving the work area on that same story.	Y	Complies. Supplemental requirements apply to 3rd floor. See Architectural condition assessment report.

FIRE PROTECTION

Section	Subject	Requirements	Applies?	Compliance
	See fire protection code analysis and drawings.		Y	

EGRESS

Section				
805.1	Means of Egress – Scope.	The requirements of this section shall be limited to work areas that include exits or corridors shared by more than 1 tenant within the work area in which Level 1 alterations are being performed, except that, where specified for supplemental requirements, they shall apply throughout the floor on which the work areas are located or otherwise beyond the work area.	N	Work area does not include exits or corridors shared by more than one tenant.

ACCESSIBILITY

Section	Subject	Requirements	Applies?	Compliance

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

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ARCHITECTURAL CODE ANALYSIS - *NYC Existing Building Code - Case Study 2 - Addition & Alteration Level 1*

PART 04

306.1	Compliance.	Alterations, including minor alterations, repairs excluding ordinary repairs, and alterations affecting an area containing a primary function, changes of use or occupancy, additions and relocation of existing buildings, shall comply with BC Chapter 11 and this code.	Y	General. See Section 806.
306.1.2	Alterations affecting an area containing a primary function.	Alterations affecting an area containing a primary function shall comply with Section 806.3.	Y	Complies. See Section 806.3.
806.2	Compliance.	A facility that is altered shall comply with the applicable provisions in Sections 806.2.1 through 806.2.14 of this code and Chapter 11 of the NYC BC to the extent of the alteration.	Y	See compliance with the applicable sections and Dwg. G-003 and A-100 through A-105.
806.2.1	Entrances and accessible routes.	Where an alteration includes alterations to an entrance or a route that would be required to be accessible by this code, such entrance and route shall be made accessible in accordance with BC Chapter 11.	Y	Complies. New office lobby on 1st floor is accessible and new accessible elevators provide an accessible route to the office floors of the addition. See Dwg. G-003 and A-101.
806.2.9	Toilet and bathing rooms.	Where it is technically infeasible to alter existing toilet and bathing rooms to be accessible, an accessible family or assisted-use toilet or bathing room constructed in accordance with the requirements of BC Sections 1109.2.1 through 1109.2.1.6 is permitted...	Y	Complies.3rd floor bathrooms comply with BC Chapter 11 requirements.
806.2.12	Thresholds.	The maximum height of thresholds at doorways shall be in accordance with ICC A117.1.	Y	Complies. Thresholds at new office lobby entrance doors are in accordance with ICC A117.1. See Dwg. G-003 and A-101.
806.3	Alterations affecting an area containing a primary function.	Where an alteration affects the accessibility to or contains an area of primary function, the route to the primary function area, including entrances, shall be accessible in accordance with this section and Section 806.3.1.	Y	Complies. The route to the area of primary function from the office entrance and lobby via the new elevators to the office floors is accessible.
STRUCTURAL				
Section	**Subject**	**Requirements**	**Applies?**	**Compliance**
	See Structural code analysis and drawings.		Y	
ELECTRICAL				
Section	**Subject**	**Requirements**	**Applies?**	**Compliance**
	See MEP code analysis and drawings.		Y	
MECHANICAL				
Section	**Subject**	**Requirements**	**Applies?**	**Compliance**
	See MEP code analysis and drawings.		Y	
PLUMBING				
Section	**Subject**	**Requirements**	**Applies?**	**Compliance**
	See MEP code analysis and drawings.		Y	
FUEL GAS				
Section	**Subject**	**Requirements**	**Applies?**	**Compliance**
	See MEP code analysis and drawings.		Y	
ELEVATORS & CONVEYING SYSTEMS				
Section	**Subject**	**Requirements**	**Applies?**	**Compliance**
812.1	General	Alterations made to existing elevators and conveying systems shall comply with Chapter 30 and ASME A17.1 as modified by Appendix K of the NYC BC, as applicable, and this section.	N	New elevators within work area comply with BC Chapter 30 & ASME 17.1 as modified by BC Appendix K. Work related to existing elevators for this application is limited to elevator overruns and machine room modifications due to rebuilding the existing bulkheads and complies BC Chapter 30 & ASME 17.1 as modified by BC Appendix K.
ENERGY CONSERVATION				
Section	**Subject**	**Requirements**	**Applies?**	**Compliance**
	Minimum requirements.	Level 1 alterations are permitted without requiring the entire building to comply with the energy requirements of the NYC Energy Conservation Code. Level 1 alterations shall conform to the energy requirements of ECC Chapters R5 or C5, Existing Buildings.	Y	Complies. See energy code analysis.

CHAPTER 15 - ADDITIONAL SAFEGUARDS DURING CONSTRUCTION OR DEMOLITION				
FOR EXISTING BUILDINGS AND OCCUPIED BUILDINGS				
Subject	**Requirements**		**Applies?**	**Compliance**
Section 1502 – Safeguards for Occupants				
Occupant protection required.	When construction or demolition activity occurs in an occupied building... protective means shall be installed and maintained as necessary to provide reasonable protection for the occupants against hazard and nuisance.		N	Not applicable. Building will be vacant during demolition and construction.
Section 1504 – Occupant Protection Plan				
Occupant protection plan - Where required.	Alteration, construction, or partial demolition work performed in a building that will be occupied during the work... shall be conducted in accordance with an occupant protection plan.		N	Not applicable. Building will be vacant during demolition and construction.
Section 1505 – Maintaining Means of Egress				
Maintenance of means of egress.	Means of egress shall be maintained at all times during construction or demolition operations in occupied buildings.		N	Not applicable. Building will be vacant during demolition and construction. Means of egress are maintained for workers.
SECTION 1506 – AUTOMATIC SPRINKLER SYSTEM				
Sprinkler systems during alteration or demolition.	Existing sprinkler systems in buildings undergoing an alteration or demolition shall comply with the requirements of BC Section 3303.7.4 and EBC Section 1506.2.		Y	Complies. See Fire Protection code analysis.

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CASE STUDY 02
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ARCHITECTURAL CONDITION ASSESSMENT REPORT - NYC Existing Building Code -*Case Study 2 - Addition & Alteration Level 1*

- Section 803.10 – Architectural condition assessment. Where a building is being altered and the work area exceeds 50% of the floor area, the registered design professional of record shall visually assess the condition of fire-resistant building elements and assemblies within the work area, and egress elements serving the work area on that same story. The results and findings of the assessment shall be incorporated in the scope of work as needed. Where the assessment reveals unsafe conditions or deteriorated building elements, such elements shall be remediated, and the unsafe conditions corrected. See Assessment Table below.
- Section 803.10.1 Hazardous conditions. All conditions noted as hazardous to life, safety or health that are not immediately corrected shall be brought to the immediate attention of the commissioner.
- Indicate locations of conditions identified by assessment on drawings and provide photographs.

Project Information				
Application No.:	**XXXXXXXXXXX**			
Address:	**XXXXXXXXXXX**			
Borough:	**XXXXXXXXXXX**			
Block:	**XXXX**			
Lot(s):	**XX**			
Assessment of Floor #s:	**3**			

Assessment Table

Element	**Floor #**	**Condition Assessment**	**Corrective Action**	
			Corrected	Included in Scope
			(Describe correction)	(indicate drawing #s)
1. Shafts and vertical openings enclosures.	3	Existing shafts and vertical openings are in code compliant condition and enclosed in 2 hr. rated walls as required by the 1968 code and comply.	NA	Removal of roof slab above 3rd floor will require partial rebuilding of shaft and vertical opening enclosures.
2. Stair A, B and C enclosures and material combustibility.	3	Stair A, B and C are in code-compliant condition including enclosure and interior finish as required by the 1968 code.	NA	Removal of roof slab above 3rd floor will require partial rebuilding of stair enclosures.
3. Fire walls and fire-rated partitions, including penetrations and protection of windows and doors.	3	Fire-rated partitions to be in code compliant condition. New pipe penetrations to be fire-stopped.	NA	New fire-rated patitions to comply with BC requirements. New duct/pipe penetrations shall be fire-stopped and provided with fire/smoke dampers per BC Chapter 7.
4. Protection of lot line windows.	3	Not applicable. No lot line windows.	NA	NA
5. Fire escape and access thereto, including attachment to exterior wall, stairs, balconies, fire protection of windows and railings.	3	Not applicable. No fire escape.	NA	NA
Section 803.10 Hazardous conditions.	3	None observed.	NA	NA
ASSESSED CONDITIONS BEYOND THE WORK AREA TO MEET SUPPLEMENTAL REQUIREMENTS				
803.2.2 Supplemental shaft & floor opening requirements.	3	Entire 3rd floor is included in the work area. Existing shafts and vertical openings are in code compliant condition. See Item 1 above.	NA	Removal of roof slab above 3rd floor will require partial rebuilding of shaft and vertical opening enclosures.
803.2.3 Supplemental stairway enclosure requirements.	3	Stair A, B and C are in code-compliant condition including enclosure and interior finish as required by the 1968 code, as noted in Item 2 above.	NA	Removal of roof slab above 3rd floor will require partial rebuilding of stair enclosures.
803.4.1 Supplemental interior finish requirements.	3	Interior finishes in Stairs B, and C are observed to be compliant.	NA	Removal of roof slab above 3rd floor will require partial rebuilding of stair enclosures with code compliant finishes.
805.4.2.1 Supplemental requirements for door swing.	3	Exit access doors at the 3rd floor swing in the direction of egress.	NA	Complies, no action needed.
805.4.3.1 Supplemental requirements for door closing.	3	Fire doors throughout the exit stairways from the level of the work area to the exit discharge are provided with self-closing mechanisms.	NA	Complies, no action needed.
805.7.1 Supplemental requirements for means of egress lighting.	3	Means of egress lighting is provided throughout the 3rd floor and complies.	NA	Removal of roof slab above 3rd floor will require reinstallation of means of egress lighting.
805.8.2 Supplemental requirements for exit signs.	3	Exit signs are provided throughout the 3rd floor.	No	Removal of roof slab above 3rd floor will require reinstallation of exit signs.
Signature and Attestation				
Applicant of Record: _____ ___				
I state that the above assessment is accurate to the best of my knowledge, based on visual observations.				
Seal and Signature				

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

ARCHITECTURAL ASSESSMENT REPORT

PROJECT #: DRAWN BY:

SHEET TITLE :

G-008.00

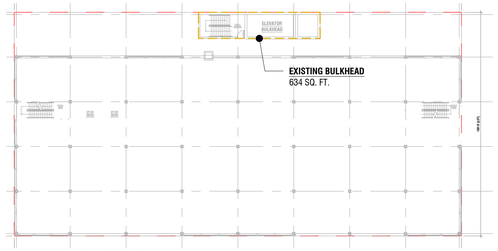
FLOOR AREA AND FLOOR SURFACE AREA

FLOOR SURFACE AREA			
EXISTING BUILDING	**EXISTING FSA [SF]**	**DEMOLISHED / REMOVED [SF]**	**EXISTING FSA TO REMAIN [SF]**
CELLAR	20,000		20,000
1ST FLOOR	20,000		20,000
2ND FLOOR	20,000		20,000
3RD FLOOR	20,000		20,000
EXIST. ROOF	20,000	-20,000	0
EXIST. BULKHEADS	634		634
FSAR			**80,634**
ADDITION			
4TH FLOOR			20,000
5TH FLOOR			16,117
ADDITION ROOF			16,117
ADDITION BULKHEAD ROOFS			804
Addtion FSAP			**53,038**
Exist. FSAR			**80,634**
Total FSAP			**133,672**
Floor Surface Area Calculation (EBC Section 302.7.2)			
I =	(FSAP – FSAR) / FSAR x 100		
65.78%	(133,672 - 80,634) / 80,634 x 100		**< 110% increase in FSA**

EXISTING FLOOR SURFACE AREA

ADDITION FLOOR SURFACE AREA

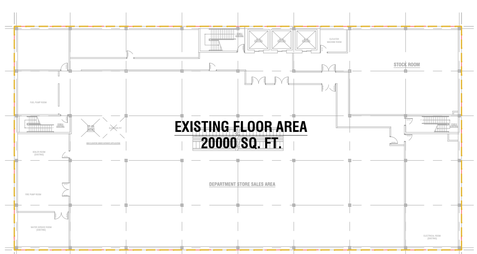
EXISTING



EXISTING - BULKHEAD

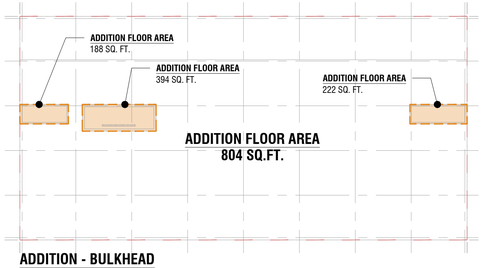
EXISTING - 2ND & 3RD FLOOR

EXISTING - GROUND FLOOR

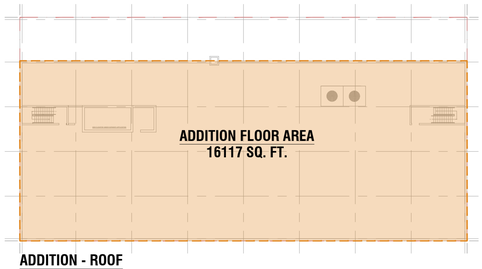


EXISTING - CELLAR

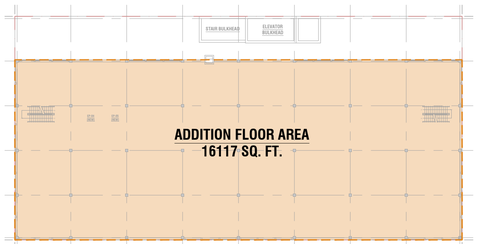
ADDITION



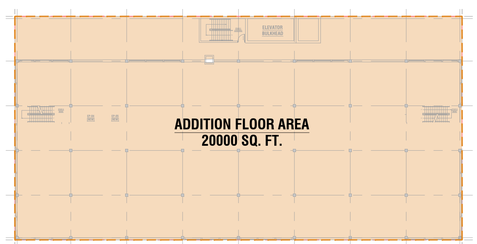
ADDITION - BULKHEAD



ADDITION - ROOF



ADDITION - 5TH FLOOR



ADDITION - 4TH FLOOR

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

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2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

FLOOR AREA AND FLOOR SURFACE AREA

PROJECT #:

DRAWN BY:

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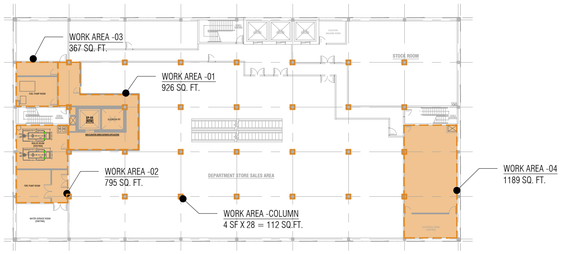
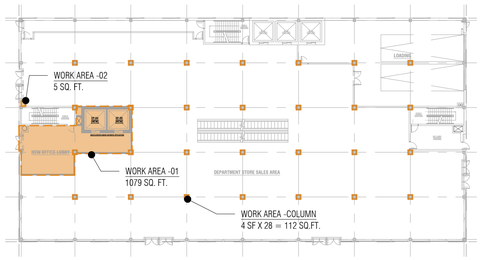
G-009.00

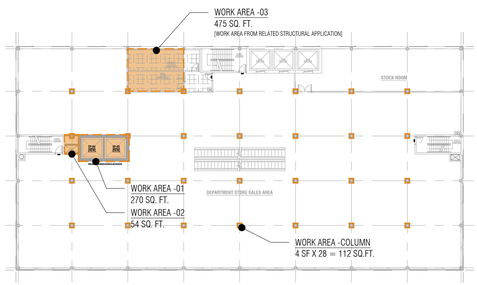
EXISTING BUILDING AREA & WORK AREA CALCULATION



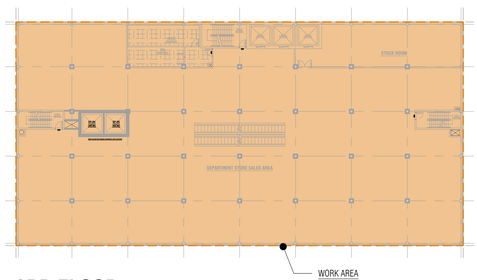
CELLAR



GROUND FL.



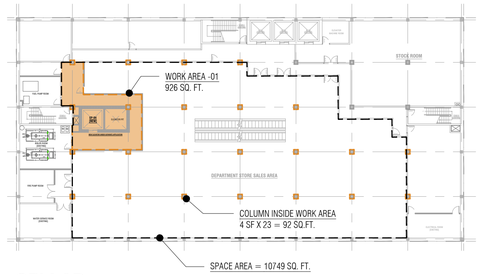
2ND FLOOR



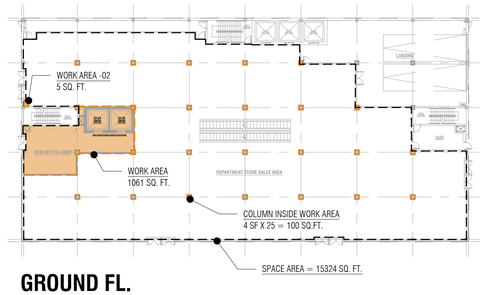
WORK AREA
20000 SQ. FT.

3RD FLOOR

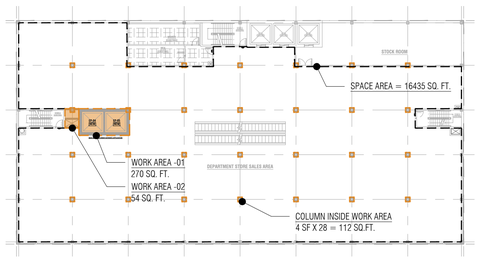
EXISTING BUILDING AREA PER SPACE/AREA PER FLOOR CALCULATION



CELLAR



GROUND FL.



2ND FLOOR

WORK AREA - EXISTING BUILDING

SPACE AREA

CALCULATION

EXISTING BUILDING AREA CALCULATION

EXISTING BUILDING FLOOR AREA (SF)	CELLAR						**20,000**
	1ST - 3RD FLOORS	20,000 SF EA					**60,000**
	BULKHDS. TO REMAIN						**634**
	TOTAL EXISTING						**80,634**

WORK AREA CALCULATION

		AREA -01 (SF)	AREA -02 (SF)	AREA -03 (SF)	AREA -04 (SF)	COLUMN (SF)	TOTAL
WORK AREA IN EXISTING BUILDING (SF)	CELLAR	926	795	367	1,189	112	**3,389**
	GROUND FLOOR	1,079	5			112	**1,196**
	2ND FLOOR	270	54	475		112	**911**
	3RD FLOOR	20,000					**20,000**
	ROOF (4TH FLOOR)						**0**
	TOTAL WORK AREA						**25,496**
WORK AREA / EXISTING FLOOR AREA (%)			25,496	/		80,634	**31.62%**
WORK AREA RELATIVE TO BUILDING AREA			**< 50% = ALTERATION LEVEL 1**				

WORK AREA PER SPACE CALCULATION

		AREA -01 (SF)	AREA -02 (SF)	COLUMN (SF)	TOTAL(SF)	SPACE AREA (SF)	% (TOTAL/SPACE AREA)
AREA PER SPACE (per EBC 601.2.3.1, Exception 2)	CELLAR	926		92	1,018	10,749	**9%**
	GROUND FLOOR	1,061	5	100	1,166	15,324	**8%**
	2ND FLOOR	270	54	112	436	16,435	**3%**
	3RD FLOOR	20,000			20,000	20,000	**100%**
	THRESHOLD FOR RECONFIGURATION = 10%						

WORK AREA PER FLOOR CALCULATION

					TOTAL WORK (SF)	FLOOR AREA (SF)	% (TOTAL/FLOOR AREA)
AREA PER FLOOR (per EBC Chapter 8 - Supplemental Req's)	CELLAR				3,389	20,000	**17%**
	GROUND FLOOR				1,196	20,000	**6%**
	2ND FLOOR				911	20,000	**5%**
	3RD FLOOR				20,000	20,000	**100%**
	THRESHOLD FOR SUPPLEMENTAL REQUIREMENTS = 50%						

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

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2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

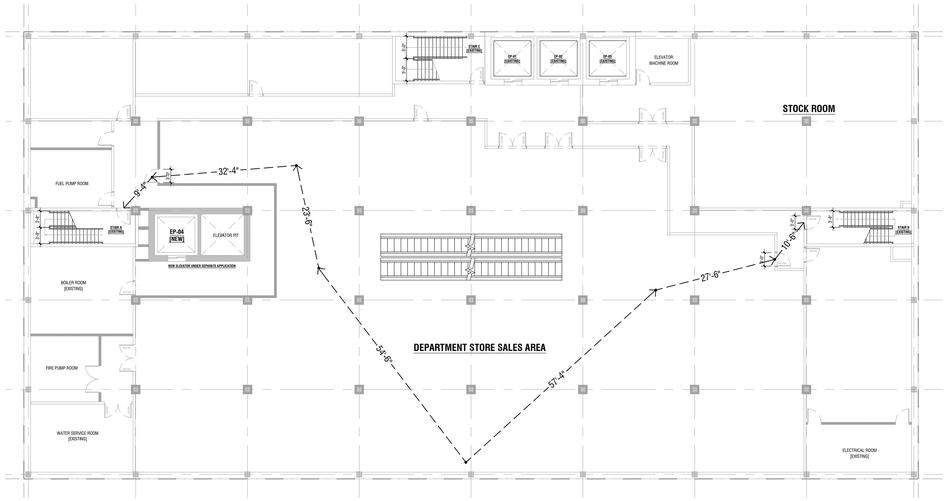
DRAWING TITLE:

WORK AREA DIAGRAM

PROJECT #: | DRAWN BY:

SHEET TITLE :

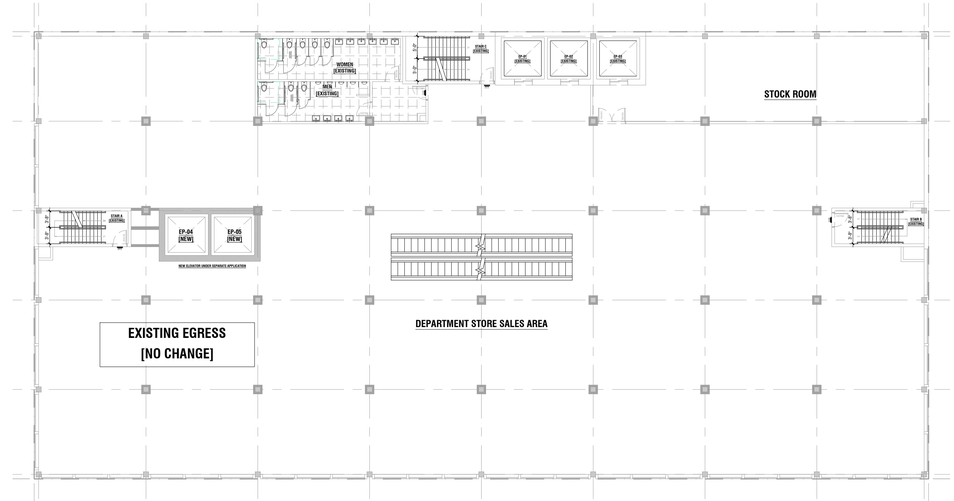
G-010.00



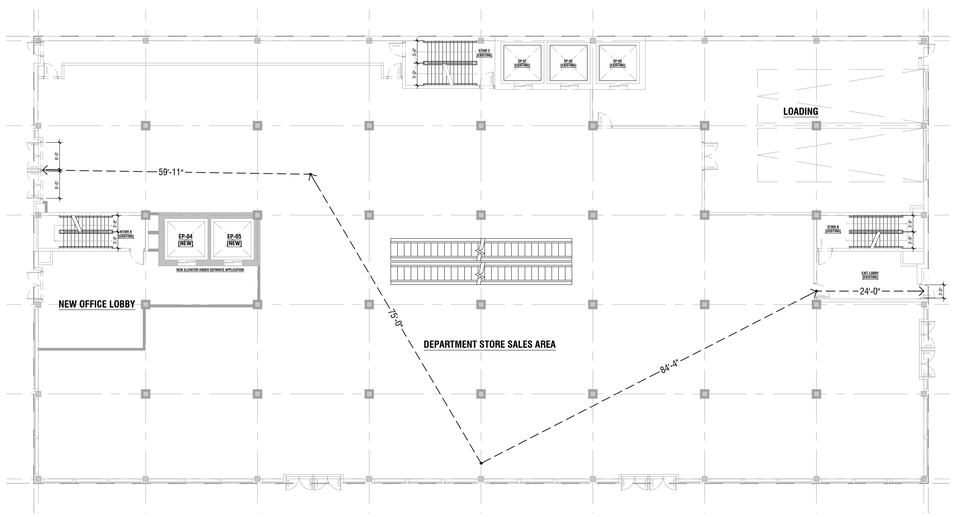
TRAVEL PATH - STAIR A = 54'-6"+23'-6"+32'-4"+9'-4" =119'-9"

TRAVEL PATH - STAIR B = 57'-4"+27'-6"+10'-6" =87'-10"

1 EGRESS PLAN - CELLAR
SCALE: 1/16" = 1'-0"



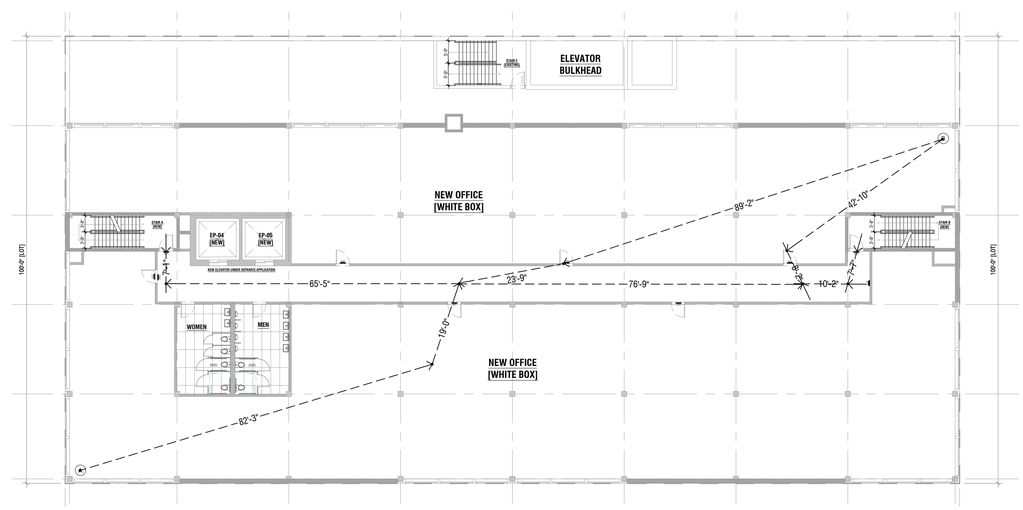
3 EGRESS PLAN - 2ND & 3RD FLOOR
SCALE: 1/16" = 1'-0"



TRAVEL PATH - STAIR A = 75'-0"+59'-11"=134'-11"

TRAVEL PATH - STAIR B = 84'-4"+24'-0" =108'-4"

2 EGRESS PLAN - GROUND FLOOR
SCALE: 1/16" = 1'-0"



TRAVEL PATH - A TO STAIR A= 82'-3"+19'-0"+65'-5"+7'-1"=173'-10"

TRAVEL PATH - A TO STAIR B= 82'-3"+19'-0"+76'-9"+10'-2"+7'-7"=195'-9"

TRAVEL PATH - B TO STAIR A= 89'-2"+23'-9"+65'-5"+7'-1"=185'-6"

TRAVEL PATH - B TO STAIR B= 42'-10"+8'-2"+10'-2"+7'-7"=68'-8"

4 EGRESS PLAN - 4TH FLOOR
SCALE: 1/16" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

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2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

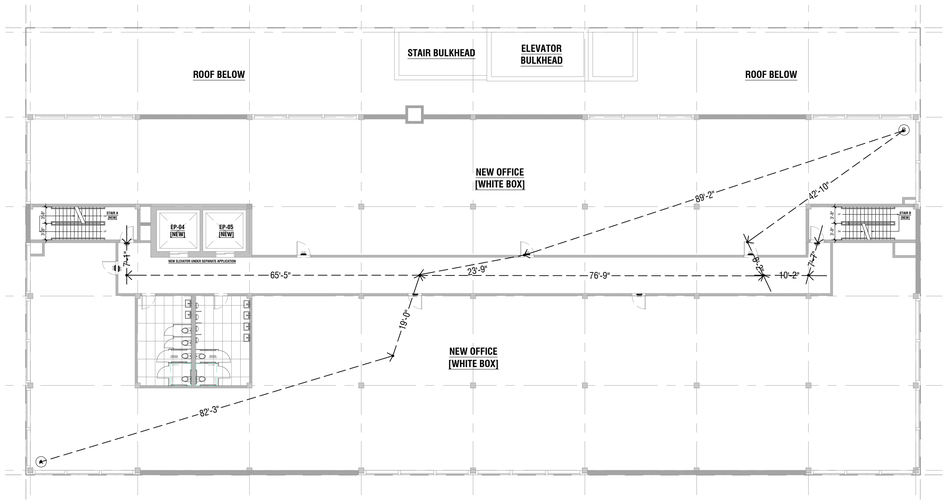
DRAWING TITLE:

EGRESS PLAN
[CELLAR - 4TH FLOOR]

PROJECT #: | DRAWN BY:

SHEET TITLE :

G-100.00



TRAVEL PATH - A TO STAIR A= 82'-3"+19'-0"+65'-5"+7'-1"=173'-10"
TRAVEL PATH - A TO STAIR B= 82'-3"+19'-0"+76'-9"+10'-2"+7'-7"=195'-9"
TRAVEL PATH - B TO STAIR A= 89'-2"+23'-9"+65'-5"+7'-1"=185'-6"
TRAVEL PATH - B TO STAIR B= 42'-10"+8'-2"+10'-2"+7'-7"=68'-8"

1 EGRESS PLAN - 5TH FLOOR
SCALE: 1/16" = 1'-0"

NEW PARTITION FIRE RATING LEGEND

1 HOUR FIRE RATED WALL

2 HOUR FIRE RATED WALL

3 HOUR FIRE RATED WALL

NOTE: REFER A-500 FOR PARTITION TYPES.

2 RESERVED
SCALE: 1/16" = 1'-0"

OCCUPANCY AND EGRESS ANALYSIS

NYC BUILDING CODE REFERENCES

TABLE 1004.1.3	OCCUPANCY FACTOR					
	GROUP B		100	GSF/OCCUPANT		
	GROUP M - CELLAR & 1ST FL RETAIL		30	GSF/OCCUPANT		
	GROUP M - 2ND & 3RD FLS		60	GSF/OCCUPANT		
	GROUP M - STORAGE & MECH		300	GSF/OCCUPANT		
1005.3.1	STAIR WIDTH FACTOR		0.3	INCH PER OCCUPANT		
1005.3.2	OTHER EGRESS FACTOR		0.2	INCH PER OCCUPANT		
TABLE 1017.2	MAX. TRAVEL DISTANCE (GROUP B)		200	FT. (UNSPRINKLERED)		
	MAX. TRAVEL DISTANCE (GROUP M)		150	FT. (UNSPRINKLERED)		

ADDITION

GROSS AREA OF 4TH FL & 5TH FL EACH		16,117	SF	
OCCUPANCY OF 4TH FL & 5TH FL EACH	16,117/100	161	OCCUPANTS	
STAIR WIDTH REQUIRED AT EACH FL	161 x 0.3	48	INCHES	
STAIR WIDTH PROVIDED AT EACH FL		88	INCHES (STAIR A & B, EACH 44" WIDE)	COMPLIES
EXIT DOOR WIDTH REQUIRED AT EACH FL	161 x 0.2	32	INCHES	
EXIT DOOR WIDTH PROVIDED AT EACH FL		72	INCHES (STAIR A & B EXIT DOOR EA 36" W)	COMPLIES
MAX.TRAVEL DISTANCE PROVIDED		176	FT. < 200 FT.	COMPLIES

EXISTING BUILDING

OCCUPANCY PER 1925 C OF O						
CELLAR			230	OCCUPANTS		
1ST FLOOR			230	OCCUPANTS		
2ND FLOOR			230	OCCUPANTS		
3RD FLOOR			230	OCCUPANTS		

NO CHANGE TO OCCUPANCY OR EGRESS

- EGRESS ANALYSIS
SCALE: N.T.C

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

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DRAWING TITLE:

5TH FLOOR EGRESS PLAN &ANALYSIS

PROJECT #: | DRAWN BY:

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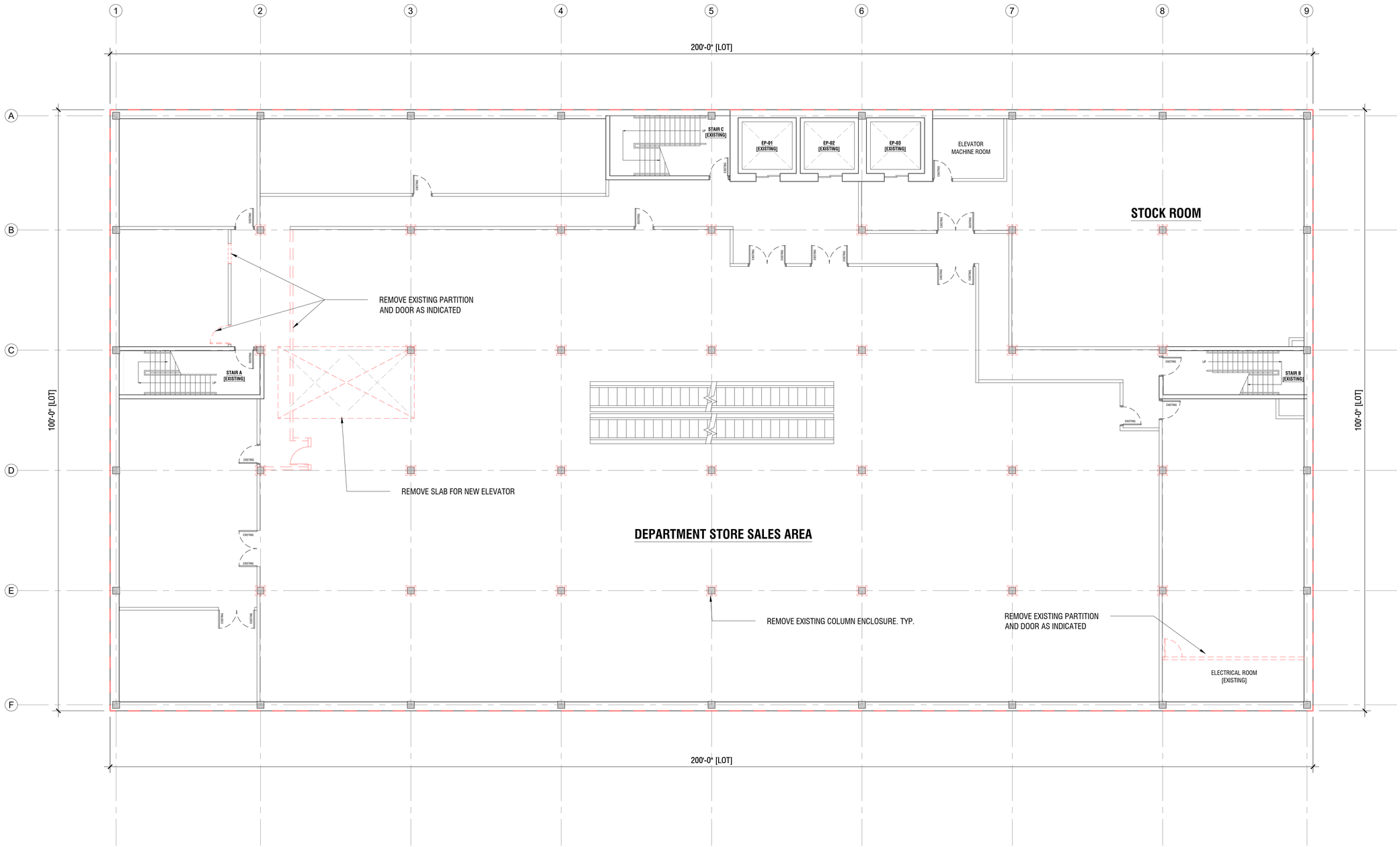
G-101.00



1 DEMOLITION PLAN - CELLAR
SCALE: 1/8" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL
ENLARGEMENT

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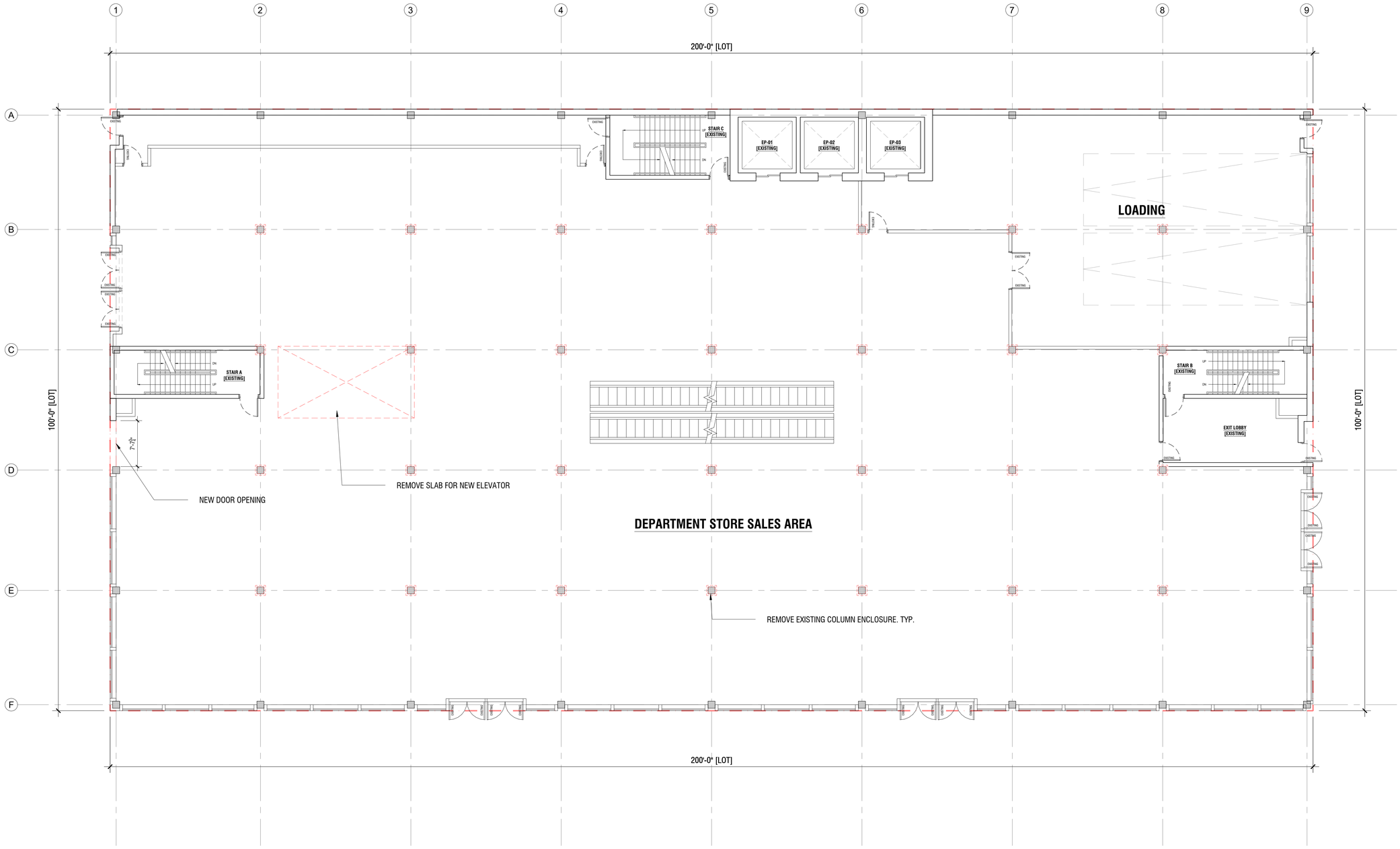
DRAWING TITLE:

DEMOLITION PLAN
CELLAR

PROJECT #: | DRAWN BY:

SHEET TITLE :

DM-100.00



1 DEMOLITION PLAN - GROUND FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

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VERTICAL ENLARGEMENT

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DRAWING TITLE:

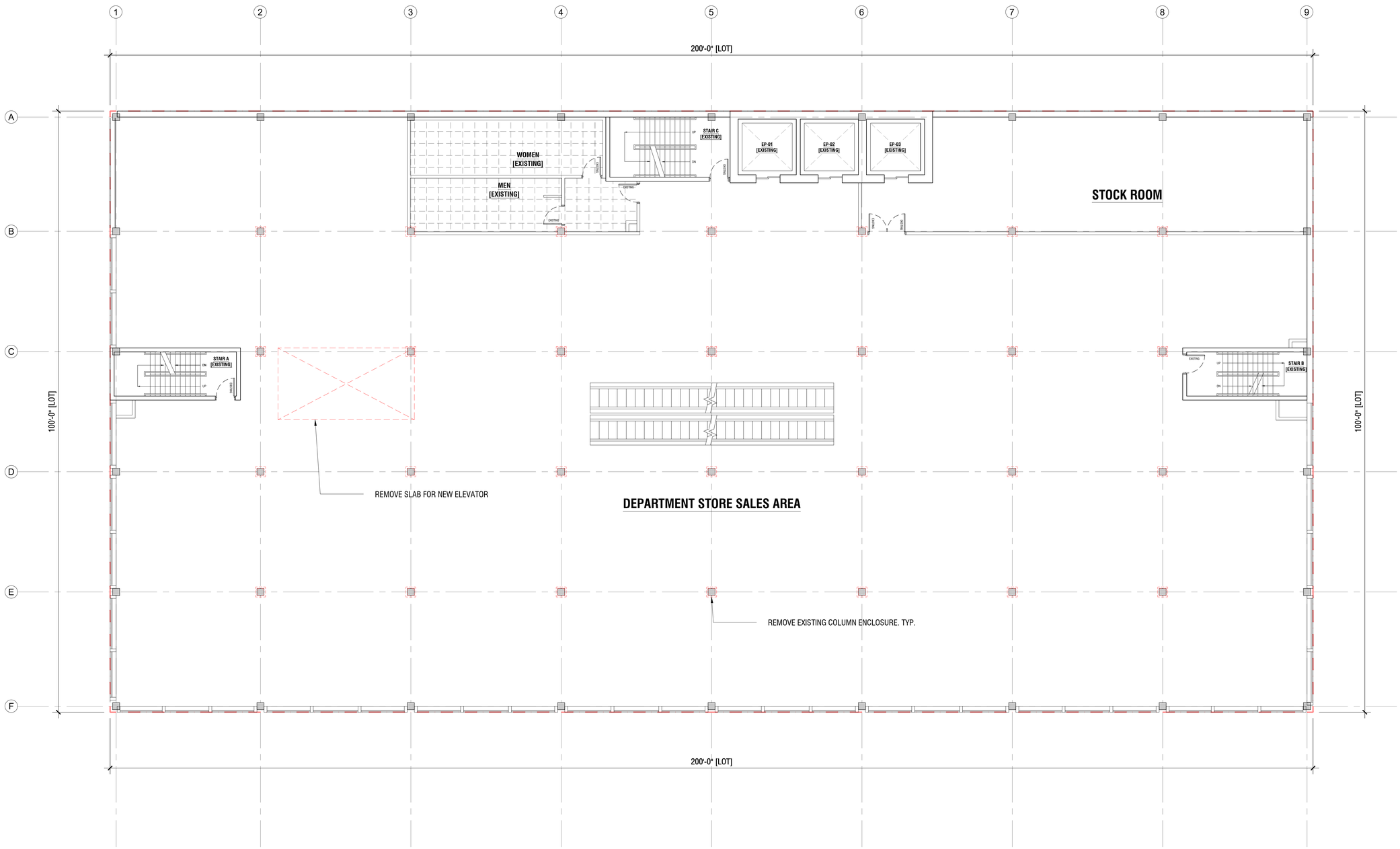
DEMOLITION PLAN
GROUND FLOOR

PROJECT #:

DRAWN BY:

SHEET TITLE :

DM-101.00



1 DEMOLITION PLAN - 2ND & 3RD FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

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DRAWING TITLE:

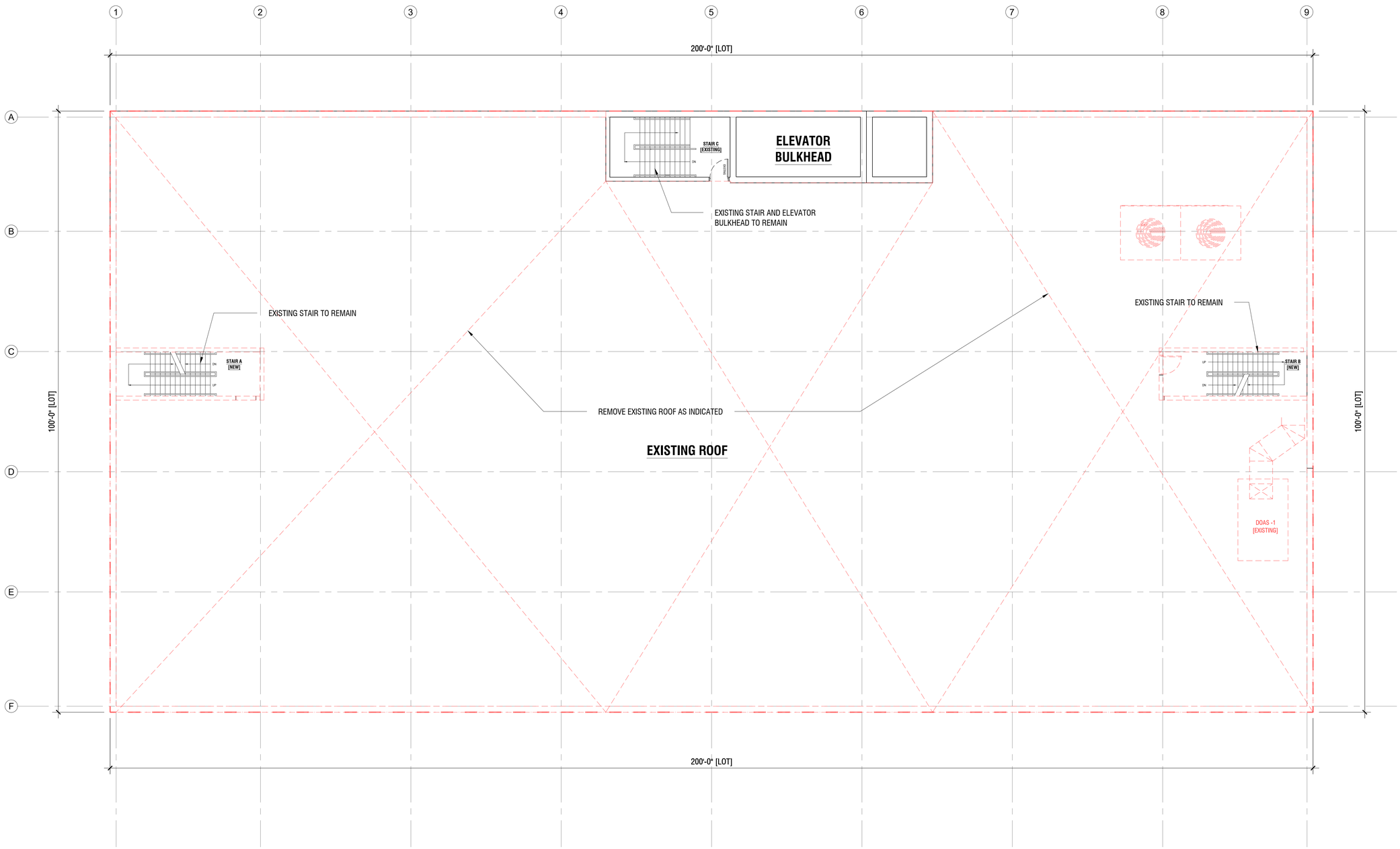
DEMOLITION PLAN
2ND & 3RD FLOOR

PROJECT #:

DRAWN BY:

SHEET TITLE :

DM-102.00



1 DEMOLITION PLAN - EXISTING ROOF
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL
ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

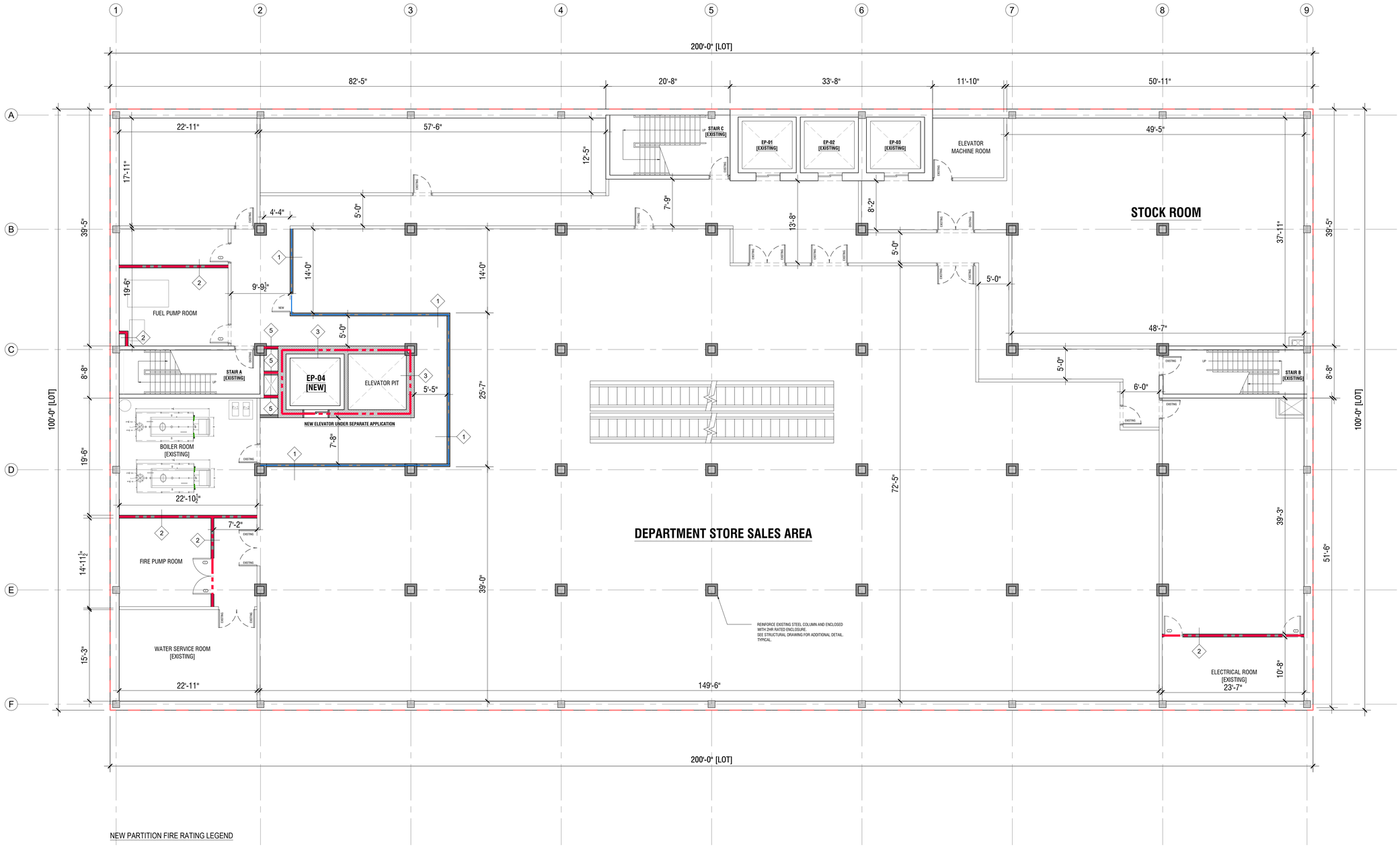
DEMOLITION PLAN
ROOF

PROJECT #:

DRAWN BY:

SHEET TITLE :

DM-103.00



NEW PARTITION FIRE RATING LEGEND

1 HOUR FIRE RATED WALL

2 HOUR FIRE RATED WALL

NOTE: REFER A-500 FOR PARTITION TYPES.

1 PROPOSED PLAN - CELLAR
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
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2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

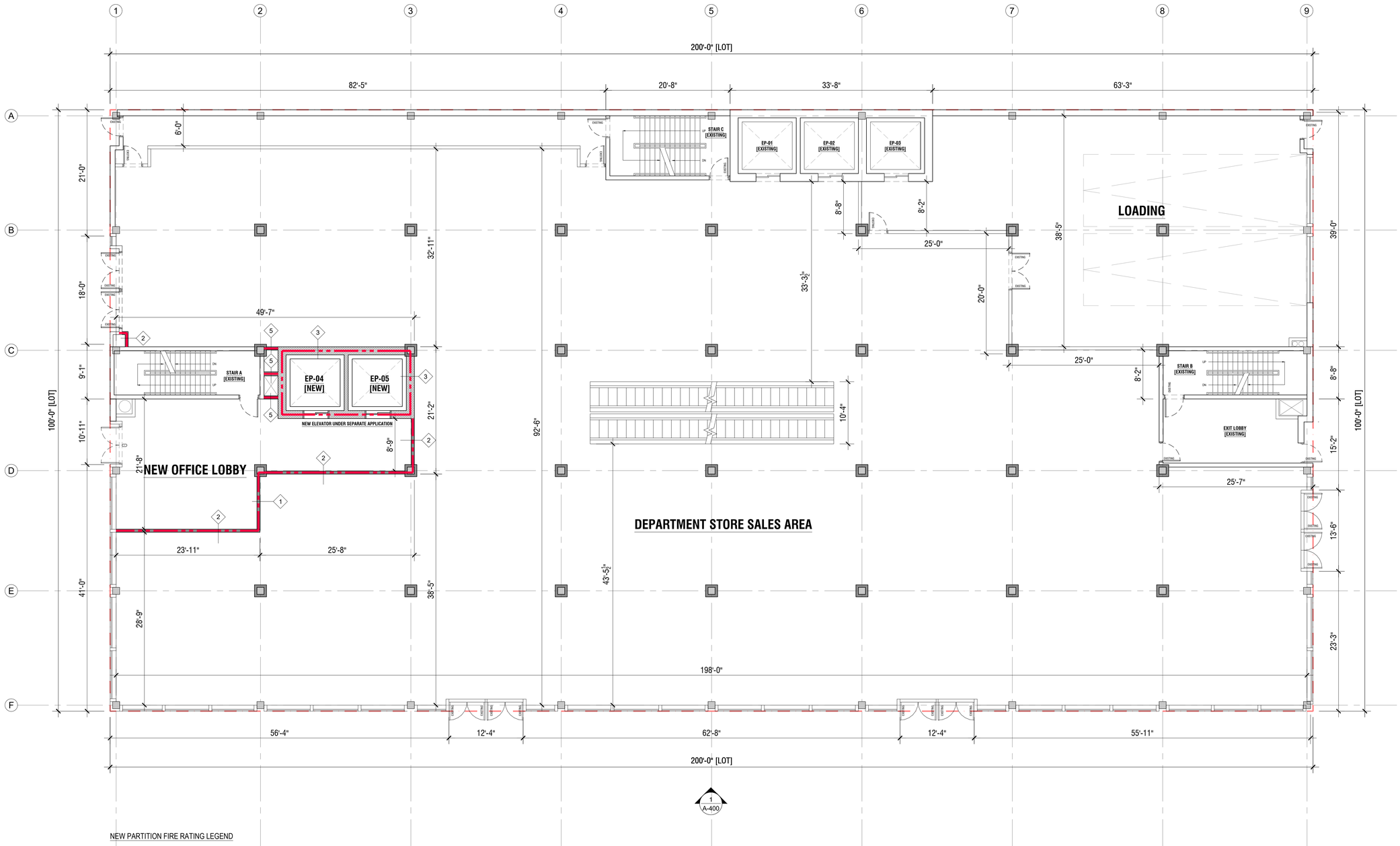
DRAWING TITLE:

PROPOSED PLAN
CELLAR

PROJECT #: | DRAWN BY:

SHEET TITLE :

A-100.00



NEW PARTITION FIRE RATING LEGEND

1 HOUR FIRE RATED WALL

2 HOUR FIRE RATED WALL

NOTE: REFER A-500 FOR PARTITION TYPES.

1 PROPOSED PLAN - GROUND FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

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2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

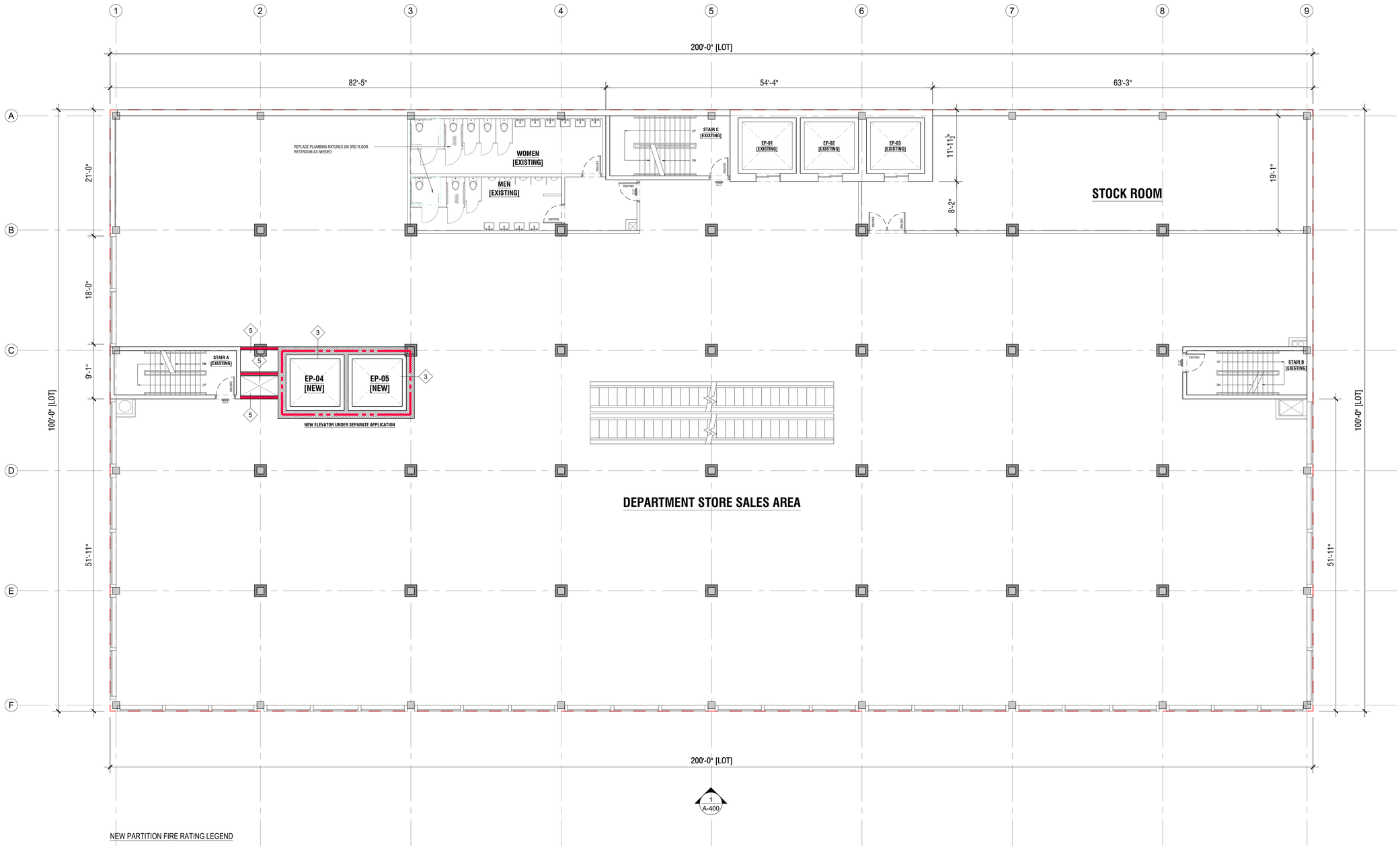
DRAWING TITLE:

PROPOSED PLAN
GROUND FLOOR

PROJECT #: DRAWN BY:

SHEET TITLE :

A-101.00



NEW PARTITION FIRE RATING LEGEND

1 HOUR FIRE RATED WALL

2 HOUR FIRE RATED WALL

NOTE: REFER A-500 FOR PARTITION TYPES.

1 PROPOSED PLAN - 2ND & 3RD FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

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2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

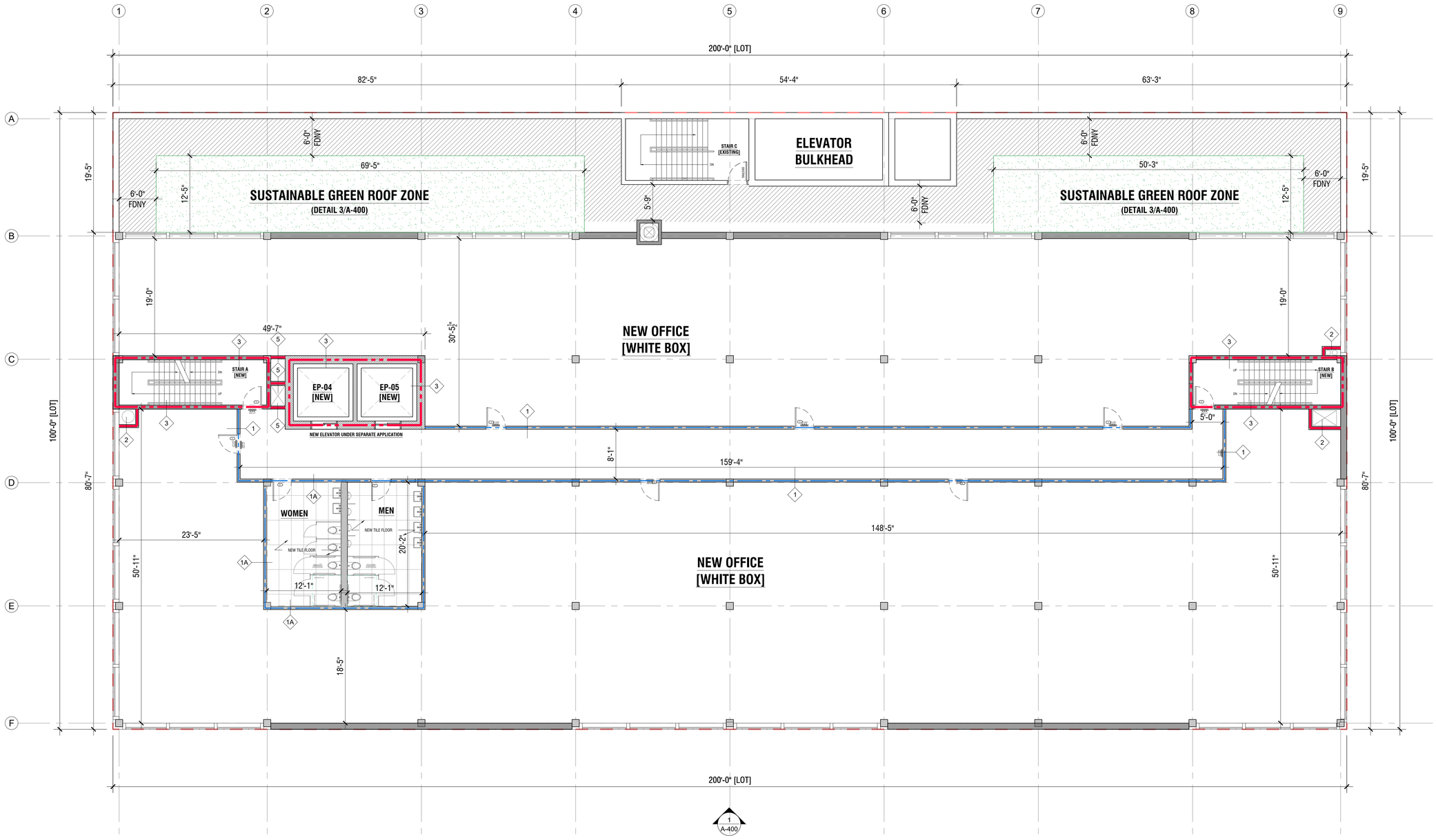
PROPOSED PLAN
2ND & 3RD FLOOR

PROJECT #:

DRAWN BY:

SHEET TITLE :

A-102.00



NEW PARTITION FIRE RATING LEGEND

1 HOUR FIRE RATED WALL

2 HOUR FIRE RATED WALL

NOTE: REFER A-500 FOR PARTITION TYPES.

1 PROPOSED PLAN - 4TH FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

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2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

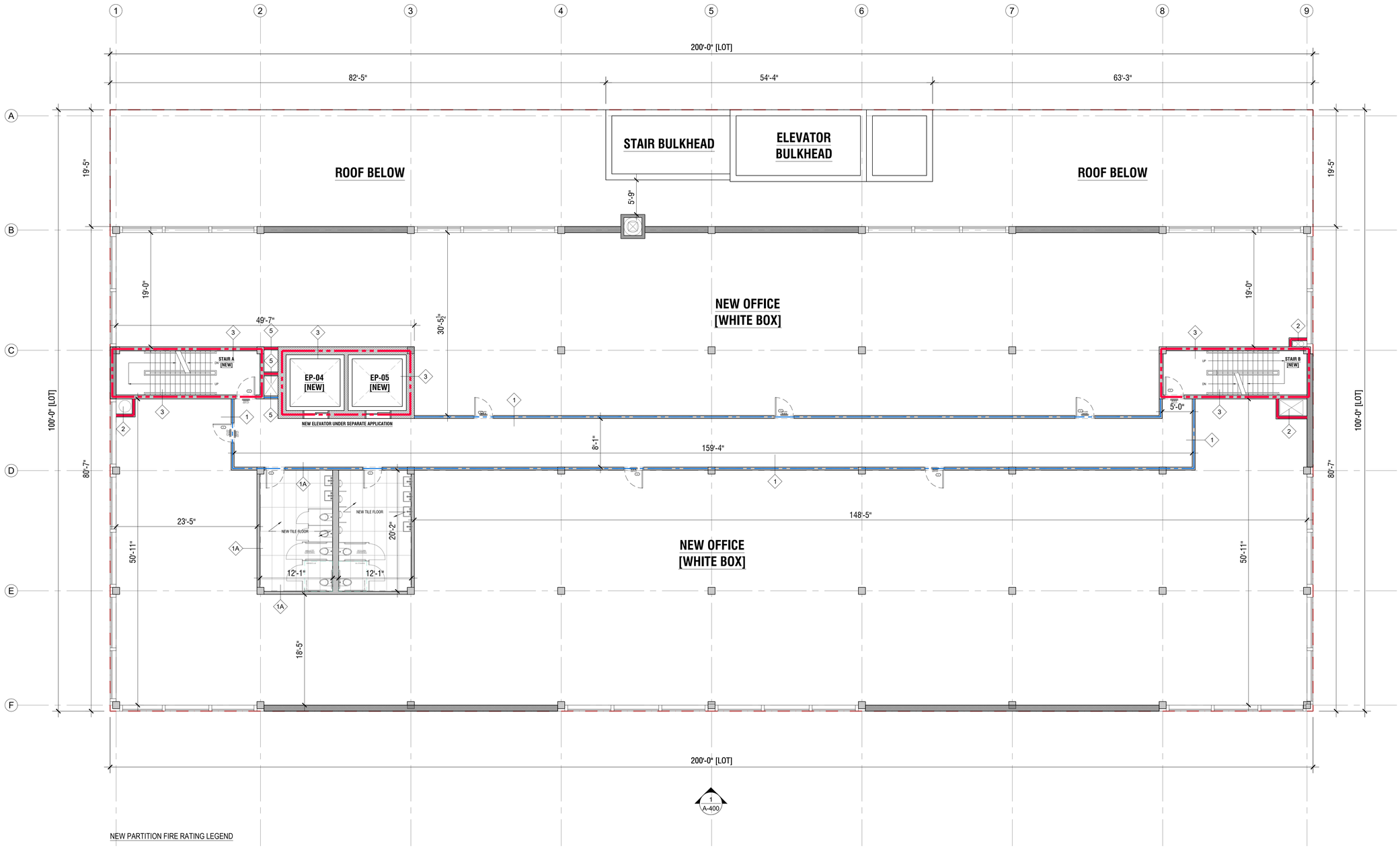
DRAWING TITLE:

PROPOSED PLAN
4TH FLOOR

PROJECT #: | DRAWN BY:

SHEET TITLE :

A-103.00



NEW PARTITION FIRE RATING LEGEND

1 HOUR FIRE RATED WALL

2 HOUR FIRE RATED WALL

NOTE: REFER A-500 FOR PARTITION TYPES.

1 PROPOSED PLAN - 5TH FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

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2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

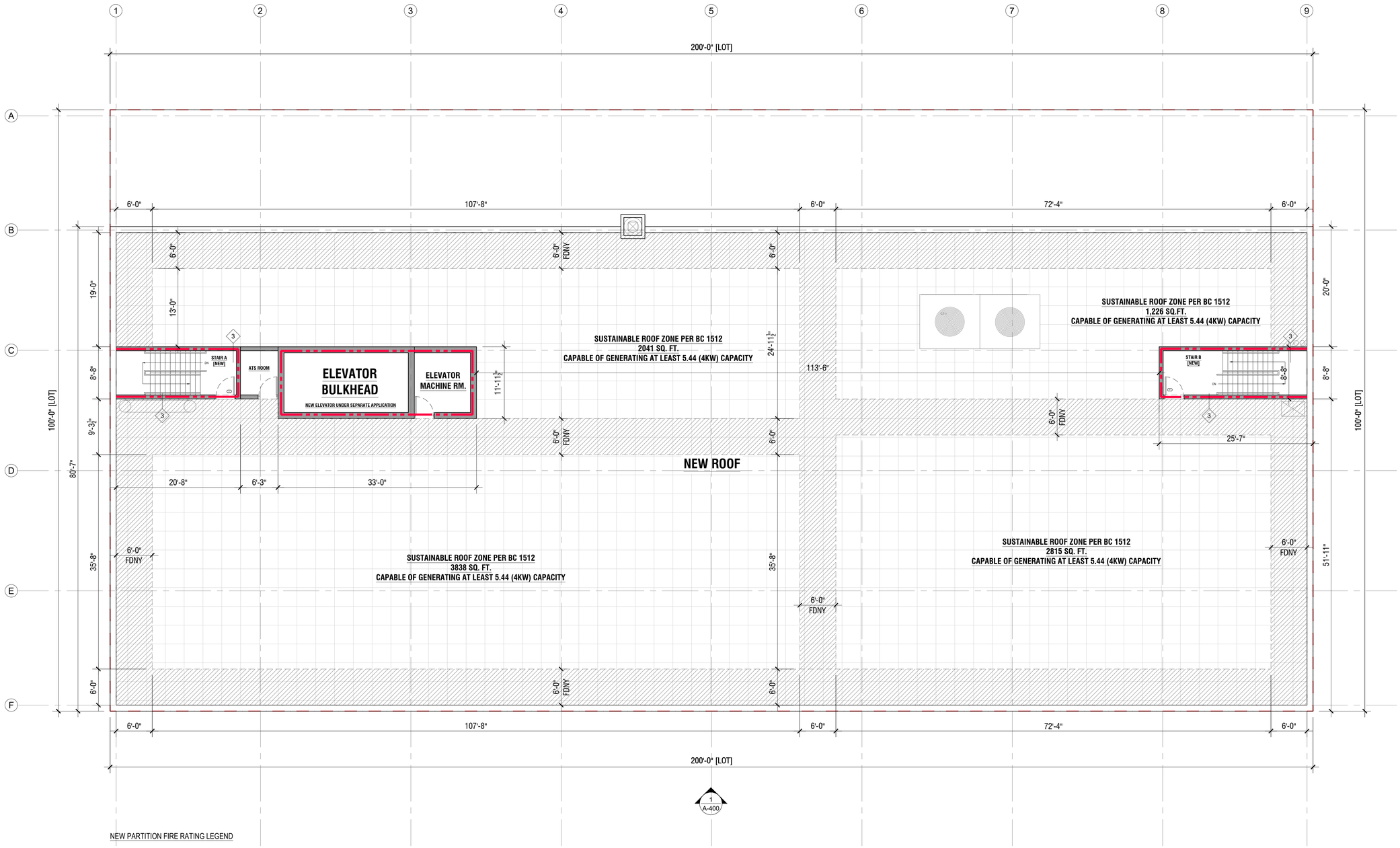
PROPOSED PLAN
5TH FLOOR

PROJECT #:

DRAWN BY:

SHEET TITLE :

A-104.00



NEW PARTITION FIRE RATING LEGEND

1 HOUR FIRE RATED WALL

2 HOUR FIRE RATED WALL

NOTE: REFER A-500 FOR PARTITION TYPES.

1 PROPOSED PLAN - ROOF
SCALE: 1/8" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

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2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

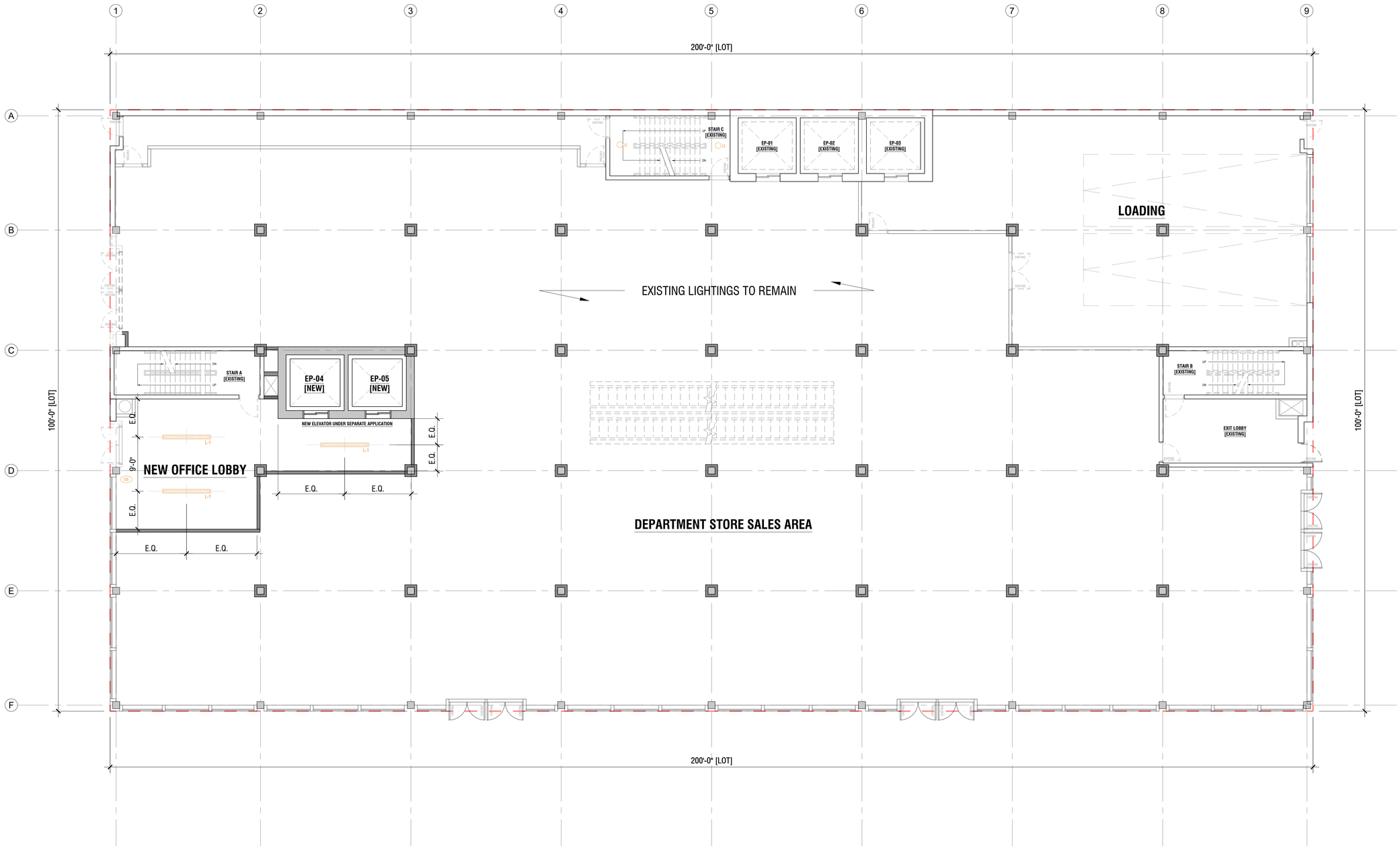
DRAWING TITLE:

PROPOSED PLAN
ROOF

PROJECT #: | DRAWN BY:

SHEET TITLE :

A-105.00



1 REFLECTED CEILING PLAN - GROUND FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

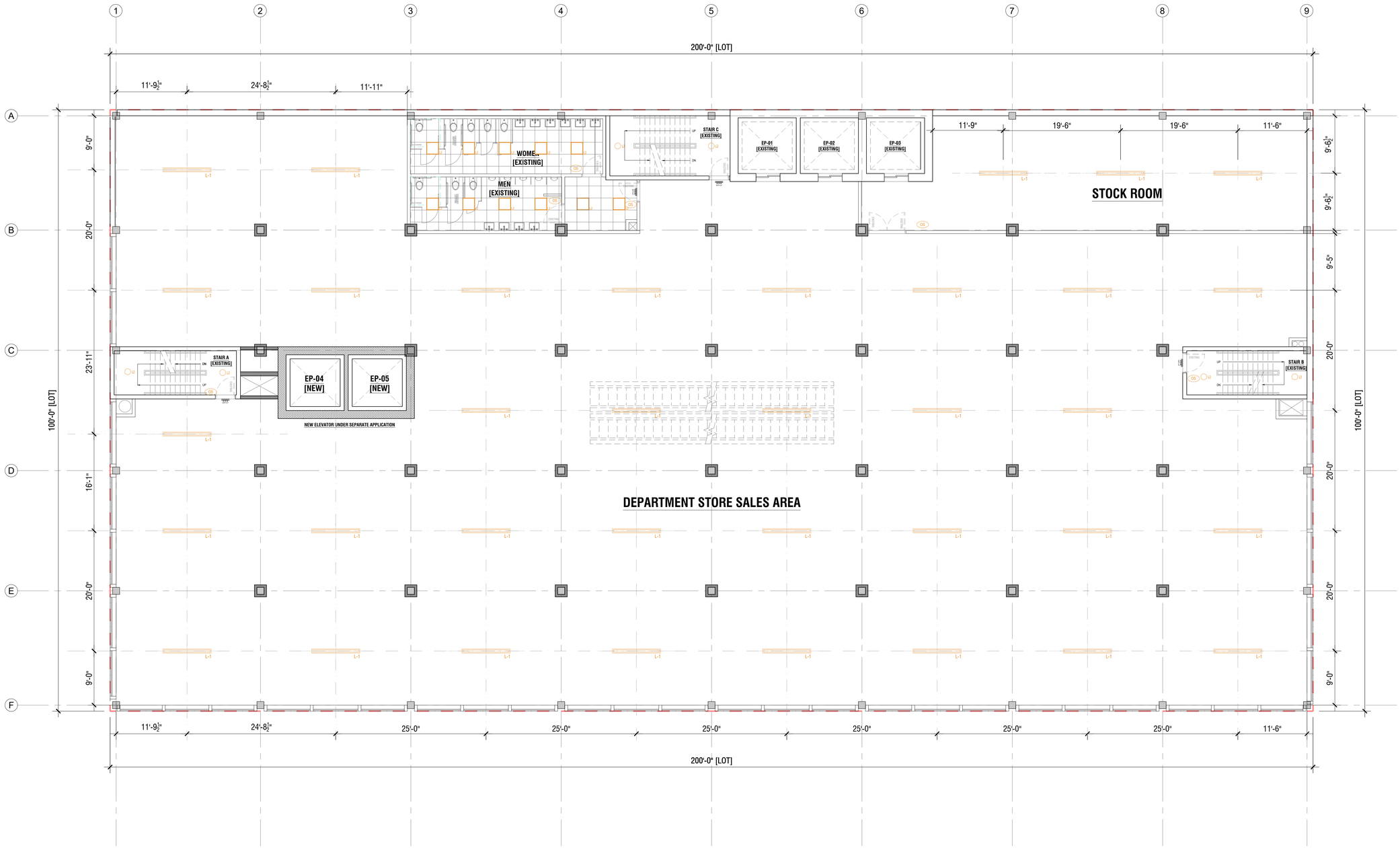
REFLECTED CEILING PLAN
GROUND FLOOR

PROJECT #:

DRAWN BY:

SHEET TITLE :

A-200.00



1 REFLECTED CEILING PLAN - 3RD FLOOR

SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02

VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

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2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

REFLECTED CEILING PLAN

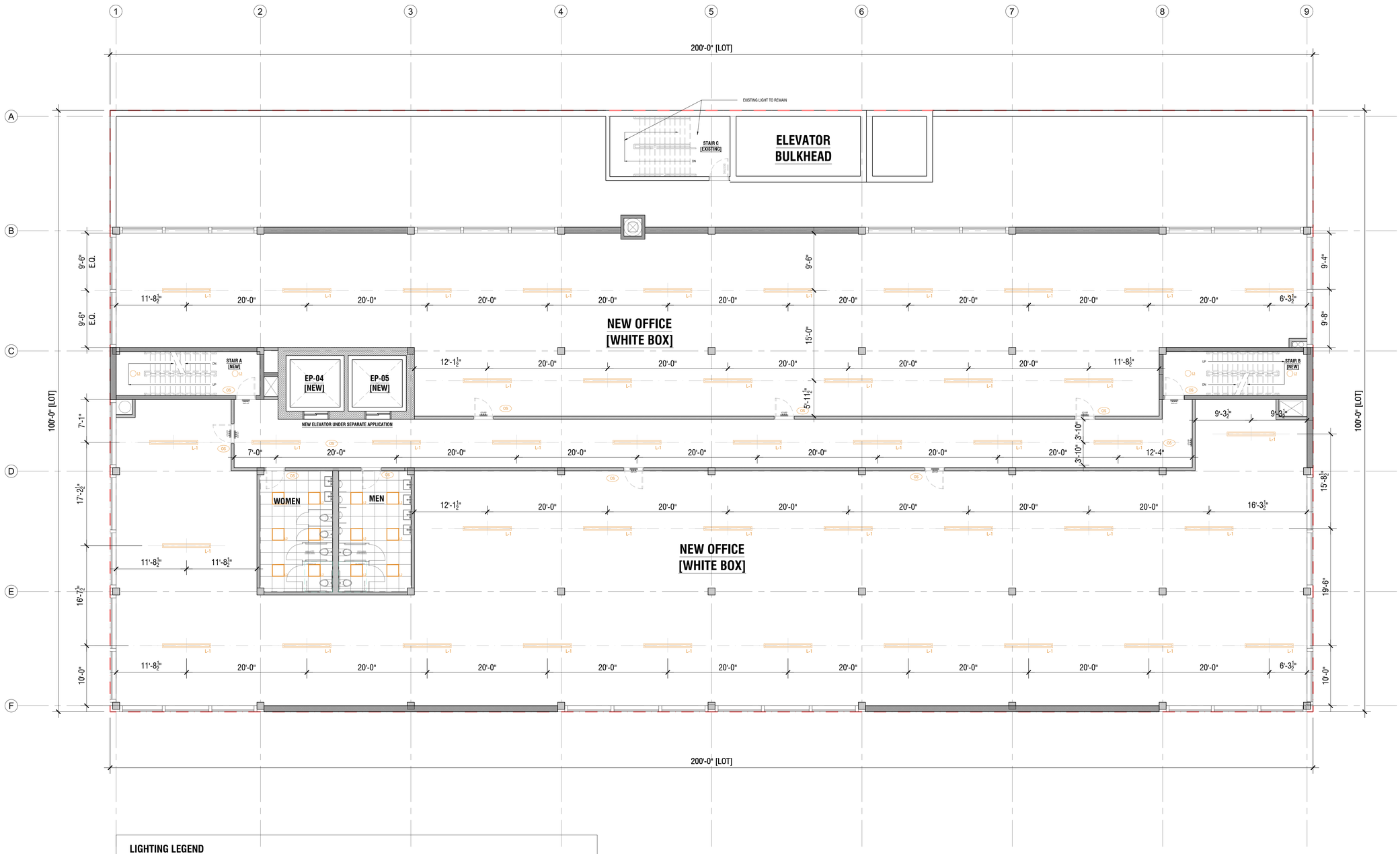
3RD FLOOR

PROJECT #:

DRAWN BY:

SHEET TITLE :

A-201.00



LIGHTING LEGEND

L1	L1: LINEAR PENDANT LIGHT		2X2 ACT CEILING TILE
	L2: 2X2 CEILING LIGHT		
u	L3: SURFACE MOUNT BOH LIGHT	OS	OCCUPANT SENSOR

1 REFLECTED CEILING PLAN - 4TH FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

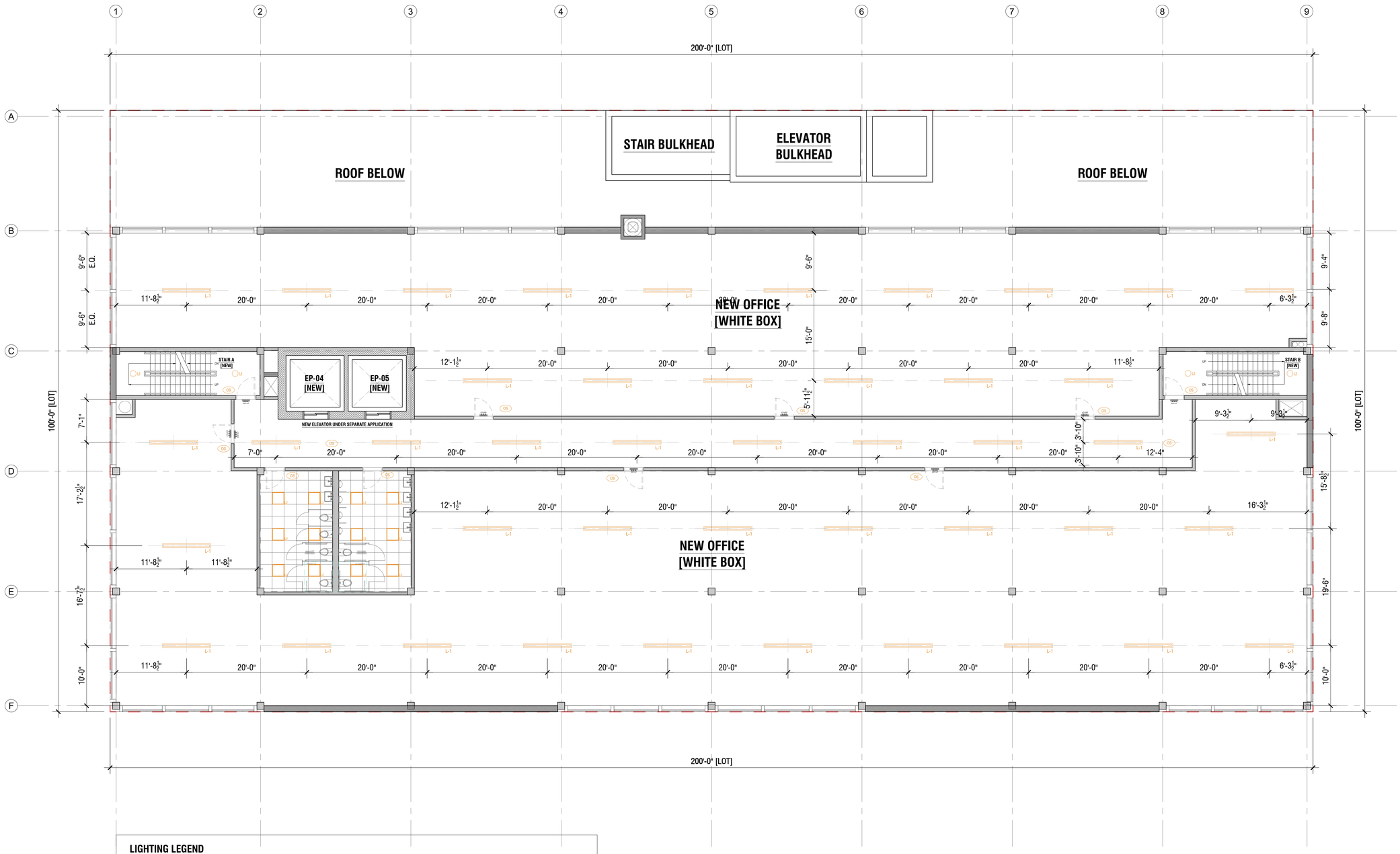
DRAWING TITLE:

REFLECTED CEILING PLAN
4TH FLOOR

PROJECT #: | DRAWN BY:

SHEET TITLE :

A-202.00



LIGHTING LEGEND

L1	L1: LINEAR PENDANT LIGHT		2X2 ACT CEILING TILE
	L2: 2X2 CEILING LIGHT		
u	L3: SURFACE MOUNT BOH LIGHT	OS	OCCUPANT SENSOR

1 REFLECTED CEILING PLAN - 5TH FLOOR
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL
ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

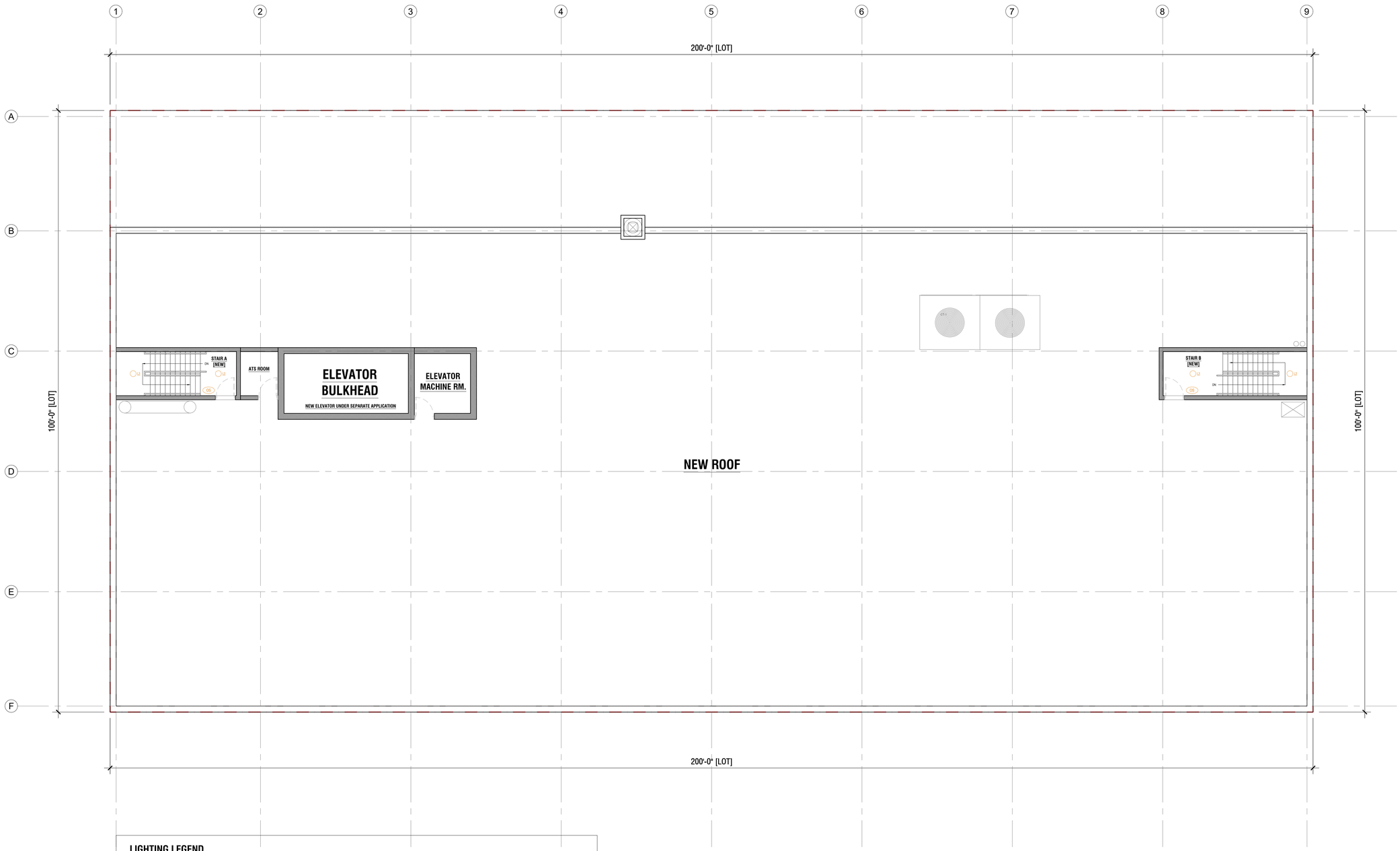
REFLECTED CEILING PLAN
5TH FLOOR

PROJECT #:

DRAWN BY:

SHEET TITLE :

A-203.00



LIGHTING LEGEND

- L1: LINEAR PENDANT LIGHT
- L2: 2X2 CEILING LIGHT
- L3: SURFACE MOUNT BOH LIGHT
- 2X2 ACT CEILING TILE
- OCCUPANT SENSOR

1 PROPOSED PLAN - ROOF
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL
ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

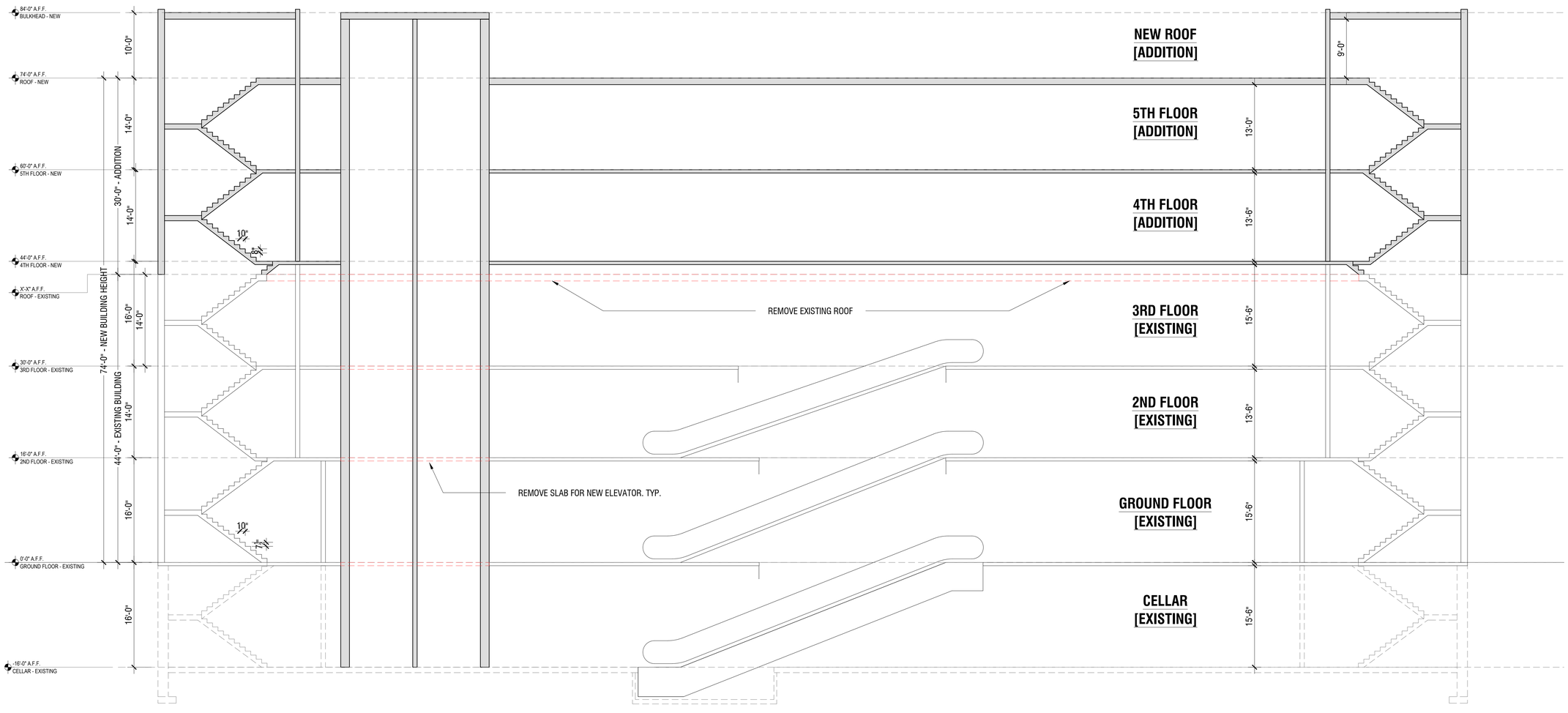
DRAWING TITLE:

REFLECTED CEILING PLAN
NEW ROOF

PROJECT #: | DRAWN BY:

SHEET TITLE :

A-204.00



BUILDING ELEMENT TO BE DEMOLISHED

EXISTING BUILDING ELEMENT TO BE REMAINED

NEW BUILDING ELEMENT

1 PROPOSED BUILDING SECTION
SCALE: 1/8" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

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2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

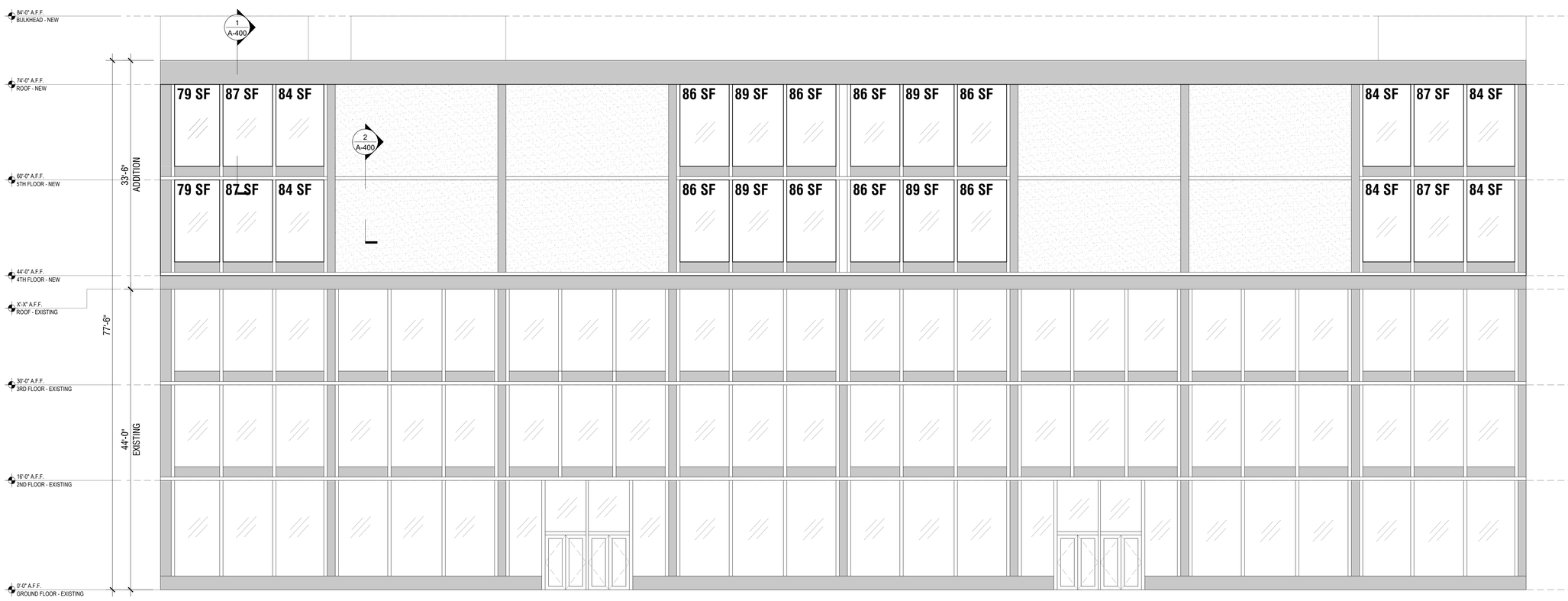
BUILDING SECTION

PROJECT #: | DRAWN BY:

SHEET TITLE :

A-300.00

FACADE AREA: 5,600 SF
FENESTRATION AREA: 2,054 SF



1 PROPOSED BUILDING ELEVATION
SCALE: 1/8" = 1'-0"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

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2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

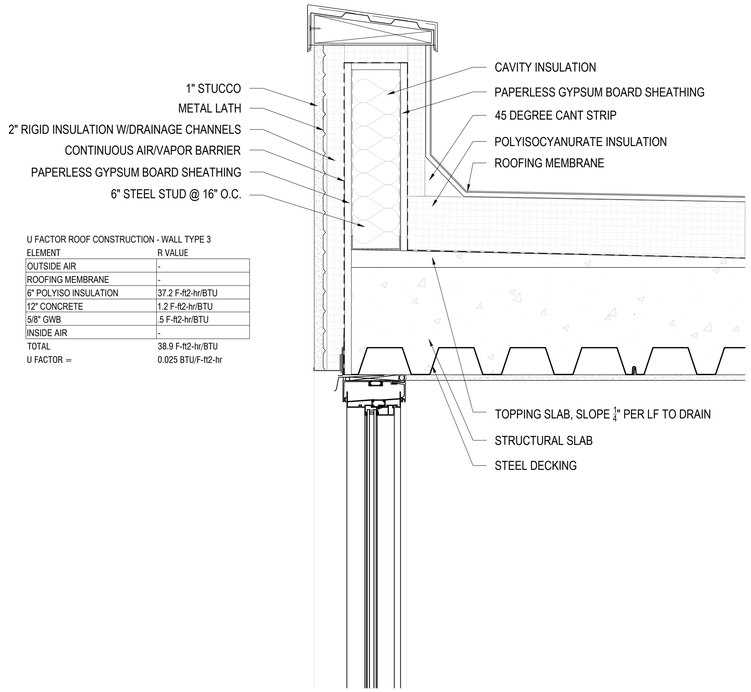
DRAWING TITLE:

BUILDING ELEVATION

PROJECT #: | DRAWN BY:

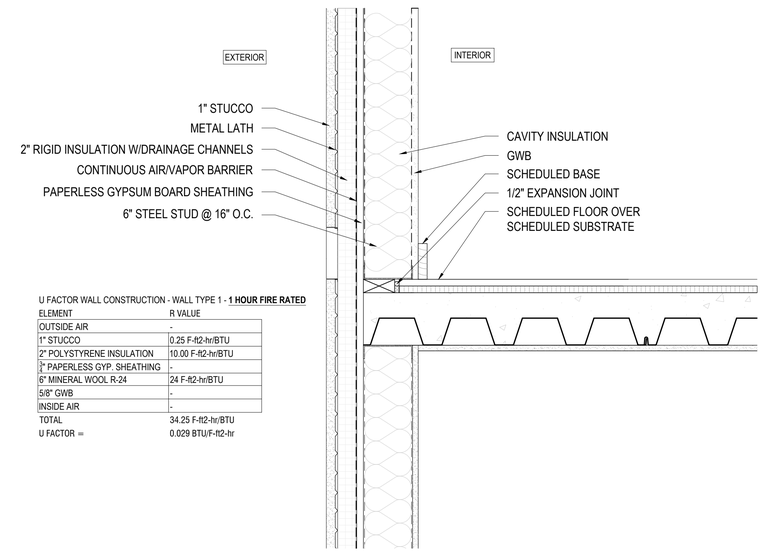
SHEET TITLE :

A-400.00



U FACTOR ROOF CONSTRUCTION - WALL TYPE 3

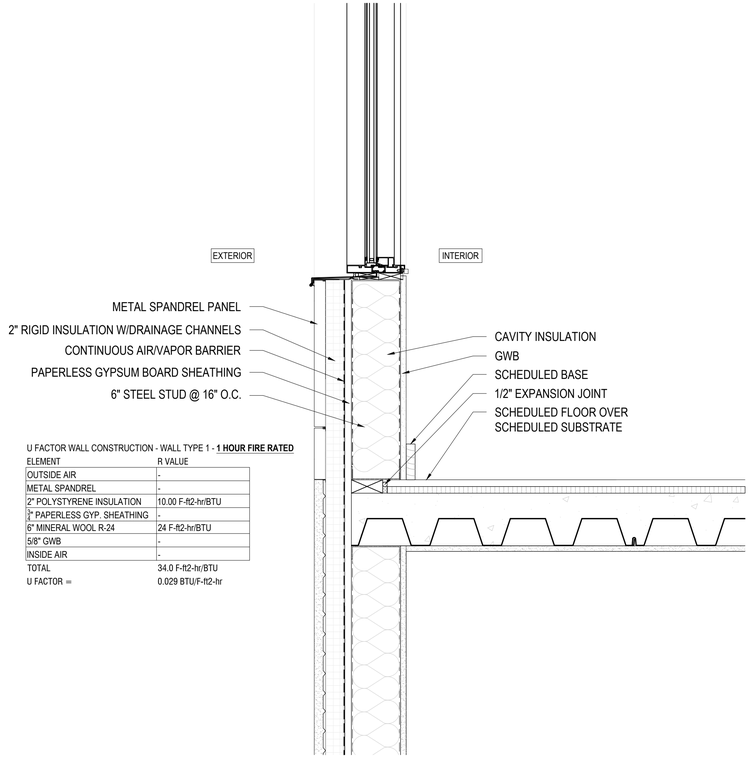
ELEMENT	R VALUE
OUTSIDE AIR	-
ROOFING MEMBRANE	-
6" POLYISO INSULATION	37.2 F-ft2-hr/BTU
12" CONCRETE	1.2 F-ft2-hr/BTU
5/8" GWB	.5 F-ft2-hr/BTU
INSIDE AIR	-
TOTAL	38.9 F-ft2-hr/BTU
U FACTOR =	0.025 BTU/F-ft2-hr



U FACTOR WALL CONSTRUCTION - WALL TYPE 1 - **1 HOUR FIRE RATED**

ELEMENT	R VALUE
OUTSIDE AIR	-
1" STUCCO	0.25 F-ft2-hr/BTU
2" POLYSTYRENE INSULATION	10.00 F-ft2-hr/BTU
1/2" PAPERLESS GYP. SHEATHING	-
6" MINERAL WOOL R-24	24 F-ft2-hr/BTU
5/8" GWB	-
INSIDE AIR	-
TOTAL	34.25 F-ft2-hr/BTU
U FACTOR =	0.029 BTU/F-ft2-hr

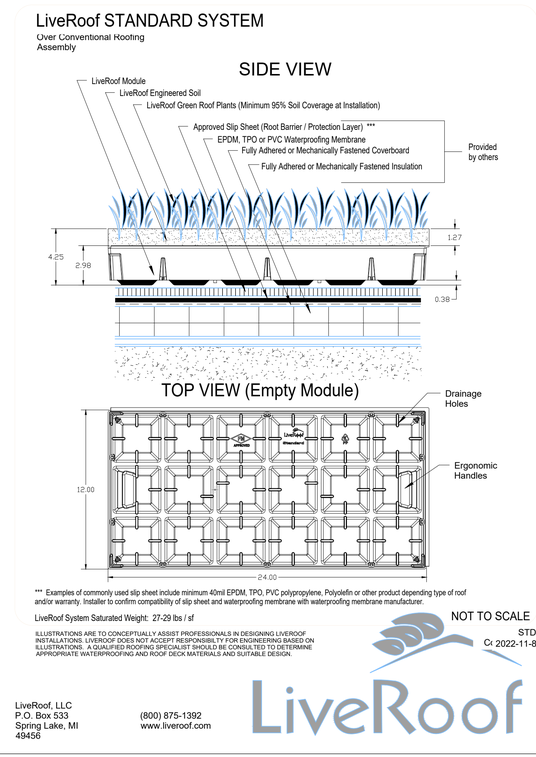
2 EXTERIOR SECTION DETAIL - 1 HR FIRE RATED
SCALE: 1-1/2" = 1'-0"



U FACTOR WALL CONSTRUCTION - WALL TYPE 1 - **1 HOUR FIRE RATED**

ELEMENT	R VALUE
OUTSIDE AIR	-
METAL SPANDREL	-
2" POLYSTYRENE INSULATION	10.00 F-ft2-hr/BTU
1/2" PAPERLESS GYP. SHEATHING	-
6" MINERAL WOOL R-24	24 F-ft2-hr/BTU
5/8" GWB	-
INSIDE AIR	-
TOTAL	34.0 F-ft2-hr/BTU
U FACTOR =	0.029 BTU/F-ft2-hr

1 EXTERIOR SECTION DETAIL - 1 HR FIRE RATED
SCALE: 1-1/2" = 1'-0"



*** Examples of commonly used slip sheet include minimum 40mil EPDM, TPO, PVC polypropylene, Polyolefin or other product depending type of roof and/or warranty. Installer to confirm compatibility of slip sheet and waterproofing membrane with waterproofing membrane manufacturer.

LiveRoof System Saturated Weight: 27-29 lbs / sf

NOT TO SCALE

STD
Ce 2022-11-8

ILLUSTRATIONS ARE TO CONCEPTUALLY ASSIST PROFESSIONALS IN DESIGNING LIVEROOF INSTALLATIONS. LIVEROOF DOES NOT ACCEPT RESPONSIBILTY FOR ENGINEERING BASED ON ILLUSTRATIONS. A QUALIFIED ROOFING SPECIALIST SHOULD BE CONSULTED TO DETERMINE APPROPRIATE WATERPROOFING AND ROOF DECK MATERIALS AND SUITABLE DESIGN.

LiveRoof, LLC
P.O. Box 533
Spring Lake, MI
49456

(800) 875-1392
www.liveroof.com

LiveRoof

3 GREEN ROOF DETAIL
SCALE: NTS

OWNER:

NYC Buildings
ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

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2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

EXTERIOR DETAIL

PROJECT #: | DRAWN BY:

SHEET TITLE :

A-400.00

PARTITION NOTES

TYPICAL GYPSUM BOARD PARTITION NOTES:

1. GYP BOARD SHALL BE 5/8" THICK U.N.O
2. TYPE "X" GYP BOARD AT ALL FIRE-RATED ASSEMBLES UNLESS ASSEMBLY DESIGN REQUIRES OTHERWISE
3. STUD SPACING 16" O.C. U.N.O. REFER TO LIMITING HEIGHT SCHEDULE ON THIS SHEET FOR MAXIMUM SPANS & MINIMUM FRAMING METAL THICKNESS
4. PARTITIONS (STUDS & ALL LAYERS OF GYP BOARD) TO EXTEND FULL HEIGHT TO UNDERSIDE OF FLOOR OR ROOF ABOVE U.N.O.
5. PROVIDE U.L FIRE RATED DYNAMIC HEAD-OF-WALL ASSEMBLY TO ACCOMMODATE REQUIRED STRUCTURAL DEFLECTION AT ALL FULL HEIGHT FIRE RATED PARTITIONS.
6. PROVIDE U.L. FIRE RATED BOTTOM OF WALL ASSEMBLE AT ALL FIRE RATED WALLS & SHAFT WALLS
7. PROVIDE FIRE-RATED CONTROL JOINTS WHEN REQUIRED AT FIRE RATED PARTITIONS.
8. PROVIDE DYNAMIC HEAD-OF-WALL DEFLECTION ASSEMBLY TO ACCOMMODATE REQUIRED STRUCTURAL DEFLECTION AT ALL FULL HEIGHT NON-RATED PARTITION. PROVIDE ACOUSTICAL SEALANT AT BOTH SIDES OF WALL.
9. PROVIDE MOISTURE AND MOLD RESISTANT GYP BOARD (GREEN BOARD) BEHIND ALL CERAMIC-TILED AND NON-TILED PARTITIONS AT NON-WET(MOISTURE ONLY) AREAS (RESTROOMS, JANITOR CLOSET, ETC.) WHETHER OR NOT INDICATED.
10. PROVIDE 3/4" FIRE RATED PLYWOOD OR CONTINUOUS 10" WIDE 14 GA. STEEL BACKER PLATE AS REQUIRED AT TOILET ACCESSORIES.

TYPICAL CMU PARTITION NOTES:

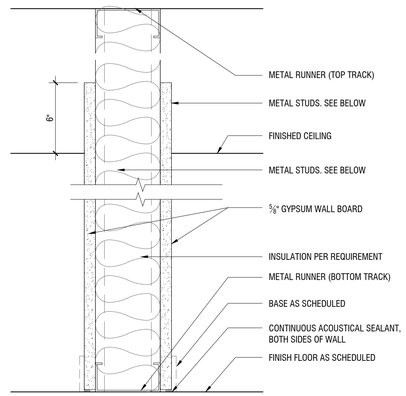
1. PARTITIONS TO EXTEND FULL HEIGHT TO UNDERSIDE OF FLOOR OR ROOF ABOVE U.N.O
2. PROVIDE ACOUSTICAL SEALANT & BACKER ROD AT HEAD & CONTROL JOINTS IN NON-RATED PARTITIONS. HEAD JOINT DESIGN TO ACCOMMODATE REQUIRED STRUCTURAL DEFLECTION.
3. PROVIDE U.L. FIRE-RATED DYNAMIC HEAD-OF-WALL & CONTROL JOINTS ASSEMBLIES AT ALL FIRE-RATED PARTITIONS.
4. ALL CMU TO BE LIGHTWEIGHT U.N.O
5. FIRE RATING TO BE BASED UPON EQUIVALENT THICKNESS METHOD PER THE BUILDING CODE.
6. PROVIDE HEAD-OF-WALL SEISMIC RESTRAINT AT ALL FULL HEIGHT PARTITIONS.

PARTITION NOTES

INTERIOR FRAMING LIMITING HEIGHT

SIZE	STUD SPACING	DESIGN LIMIT	GAUGE (THICKNESS)	LIMITING HEIGHT	
				L/240	L/360
2-1/2" (250S125-18/33)	16"	5 PSF	25 GAUGE (18 MIL)	11'-3"	9'-10"
		5 PSF	20 GAUGE (33 MIL)	12'-10"	11'-2"
	24"	5 PSF	25 GAUGE (18 MIL)	10'-7"	9'-3"
		5 PSF	20 GAUGE (33 MIL)	11'-7"	10'-0"
3-5/8" (362S125-18/33)	16"	5 PSF	25 GAUGE (18 MIL)	14'-4"	12'-4"
		5 PSF	20 GAUGE (33 MIL)	16'-5"	14'-3"
	24"	5 PSF	25 GAUGE (18 MIL)	13'-5"	11'-7"
		5 PSF	20 GAUGE (33 MIL)	14'-9"	12'-9"
6" (600S125-18/33)	16"	5 PSF	25 GAUGE (18 MIL)	19'-9"	17'-11"
		5 PSF	20 GAUGE (33 MIL)	24'-6"	21'-4"
	24"	5 PSF	25 GAUGE (18 MIL)	16'-9"	16'-9"
		5 PSF	20 GAUGE (33 MIL)	21'-7"	18'-10"

NOTE: GC TO VERIFY ALL EXISTING INTERIOR CEILING HEIGHT



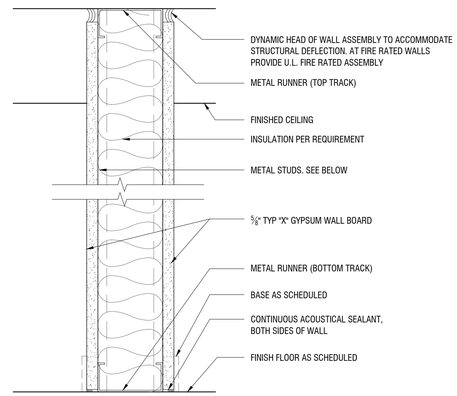
TYPE 0

INTERIOR PARTITION - NON-LOAD BEARING

WALL TYPE	STUD	SYSTEM THICKNESS	FIRE RATING	STC	INSULATION	LOCATION	REMARKS
0	3 5/8"	4 5/8"	NONE	48	3 1/2" FIBERGLASS INSULATION	SEE PLAN	SEE PLAN FOR LOCATION

NOTE:
1. WET AREA TO HAVE GREEN BOARD. G.C TO INSTALL WATER PROOFING MEMBRANE TO 6" HEIGHT ON WALL
2. GC TO INSTALL 3/4" FIRE RETARDANT PLY WD. BLOCKING BETWEEN STUDS AS REQ'D FOR GRAB BAR MOUNTING WHERE NECESSARY
3. ACOUSTIC INSULATION WHERE NEEDED
*NOT ALL THE PARTITIONS ARE SELECTED TO BE USED. REFER TO FLOOR PLANS FOR EXACT PARTITION TYPE.

0 PARTITION TYPE 0
SCALE: 3" = 1'-0"



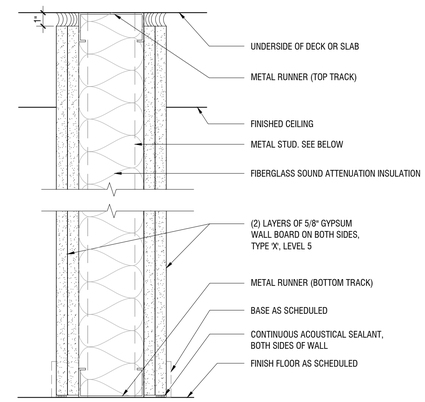
TYPE 1

INTERIOR PARTITION - NON-LOAD BEARING (UL U419)

WALL TYPE	STUD	SYSTEM THICKNESS	FIRE RATING	STC	INSULATION	LOCATION	REMARKS
1	3 5/8"	4 5/8"	1 HR	48	3 1/2" FIBERGLASS INSULATION	SEE PLAN	SEE PLAN FOR LOCATION
1A	3 5/8"	4 5/8"	1 HR	48	3 1/2" FIBERGLASS INSULATION	SEE PLAN	GREEN BOARD @ WET AREA

NOTE:
1. WET AREA TO HAVE GREEN BOARD. G.C TO INSTALL WATER PROOFING MEMBRANE TO 6" HEIGHT ON WALL
2. GC TO INSTALL 3/4" FIRE RETARDANT PLY WD. BLOCKING BETWEEN STUDS AS REQ'D FOR GRAB BAR MOUNTING WHERE NECESSARY
3. ACOUSTIC INSULATION WHERE NEEDED
*NOT ALL THE PARTITIONS ARE SELECTED TO BE USED. REFER TO FLOOR PLANS FOR EXACT PARTITION TYPE.

1 PARTITION TYPE 1
SCALE: 3" = 1'-0"



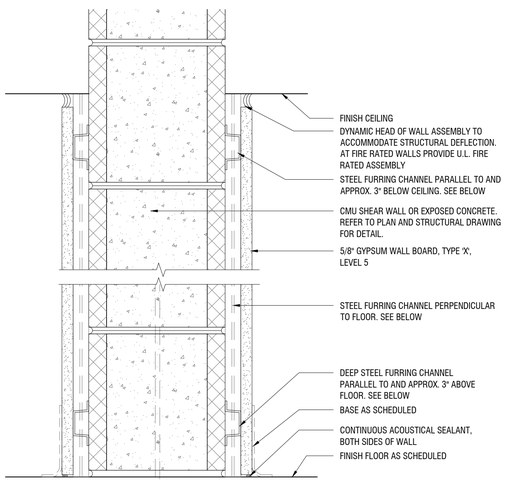
TYPE 2

INTERIOR PARTITION - NON-LOAD BEARING (UL U419 | STC 51)

WALL TYPE	STUD	SYSTEM THICKNESS	FIRE RATING	STC	INSULATION	LOCATION	REMARKS
2	3 5/8"	6 5/8"	2 HR	51	3 1/2" FIBERGLASS INSULATION	SEE PLAN	SEE PLAN FOR LOCATION
2A	3 5/8"	6 5/8"	2 HR	51	3 1/2" FIBERGLASS INSULATION	SEE PLAN	GREEN BOARD @ WET AREA

NOTE:
1. WET AREA TO HAVE GREEN BOARD. G.C TO INSTALL WATER PROOFING MEMBRANE TO 6" HEIGHT ON WALL.
2. GC TO INSTALL 3/4" FIRE RETARDANT PLY WD. BLOCKING BETWEEN STUDS AS REQ'D FOR GRAB BAR MOUNTING WHERE NECESSARY
3. ACOUSTIC INSULATION WHERE NEEDED
*NOT ALL THE PARTITIONS ARE SELECTED TO BE USED. REFER TO FLOOR PLANS FOR EXACT PARTITION TYPE.

2 PARTITION TYPE 2
SCALE: 3" = 1'-0"



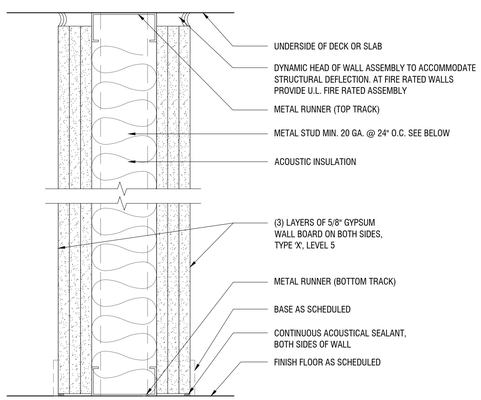
TYPE 3

FULL HEIGHT FURRING WALL (CMU / EXPOSED CONCRETE)

WALL TYPE	CHANNEL DEPTH	SYSTEM THICKNESS	FIRE RATING	STC	INSULATION	LOCATION	REMARKS
3	7/8"		2 HR			ELEVATOR & STAIR	SEE PLAN FOR LOCATION

NOTE:
1. WET AREA TO HAVE GREEN BOARD. G.C TO INSTALL WATER PROOFING MEMBRANE TO 6" HEIGHT ON WALL
2. GC TO INSTALL 3/4" FIRE RETARDANT PLY WD. BLOCKING BETWEEN STUDS AS REQ'D FOR GRAB BAR MOUNTING WHERE NECESSARY
3. ACOUSTIC INSULATION WHERE NEEDED
*NOT ALL THE PARTITIONS ARE SELECTED TO BE USED. REFER TO FLOOR PLANS FOR EXACT PARTITION TYPE.

3 PARTITION TYPE 3
SCALE: 3" = 1'-0"



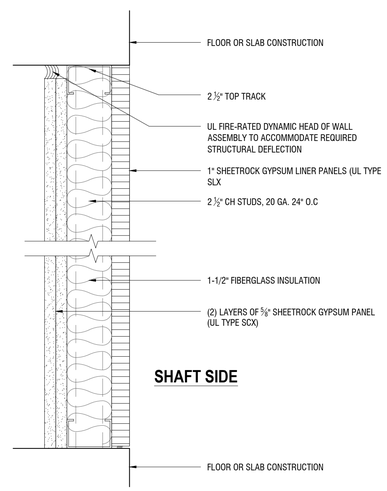
TYPE 4

FURRING WALL - NON LOAD BEARING - UL U419

WALL TYPE	STUD	SYSTEM THICKNESS	FIRE RATING	STC	INSULATION	LOCATION	REMARKS
3	3 1/2"	7 1/4"	3 HR	N/A		TRASH ROOM	SEE PLAN FOR LOCATION

NOTE:
1. WHERE REQUIRED FOR LATERAL SUPPORT OF STUDS, SUPPORT MAY BE PROVIDED BY MEANS OF STEEL STRAPS, CHANNELS OR OTHER SIMILAR MEANS AS SPECIFIED IN THE DESIGN OF A PARTICULAR STEEL STUD WALL SYSTEM

4 PARTITION TYPE 4
SCALE: 3" = 1'-0"



TYPE 6

SHAFT WALL - NON-LOAD BEARING (UL U415 UL SYSTEM B)

WALL TYPE	STUD	STUD SPACING	SYSTEM THICKNESS	FIRE RATING	STC	INSULATION	LOCATION	REMARKS
5	2 1/2" C-H	24 O.C.	3 3/4 "	2 HR	48	1 1/2" FIBERGLASS	MECH. SHAFT	SEE PLAN FOR LOCATION
5A	2 1/2" C-H	24 O.C.	3 3/4"	2 HR	48	1 1/2" FIBERGLASS	MECH. SHAFT	WET AREA. 5/8" GREEN BOARD

NOTE:
1. WET AREA TO HAVE GREEN BOARD. G.C TO INSTALL WATER PROOFING MEMBRANE TO 6" HEIGHT ON WALL
2. GC TO INSTALL 3/4" FIRE RETARDANT PLY WD. BLOCKING BETWEEN STUDS AS REQ'D FOR GRAB BAR MOUNTING WHERE NECESSARY
3. ACOUSTIC INSULATION WHERE NEEDED
4. SEE PARTITION NOTE FOR HEIGHT LIMIT

5 PARTITION TYPE 5
SCALE: 3" = 1'-0"

6 RESERVED
SCALE: 3" = 1'-0"

OWNER:

NYC Buildings | ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

PARTITION SCHEDULE

PROJECT #: | DRAWN BY:

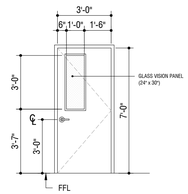
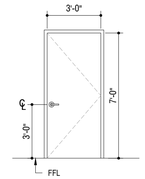
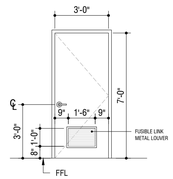
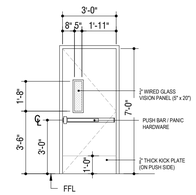
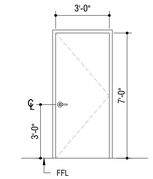
SHEET TITLE :

A-500.00

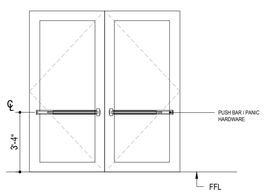
DOOR NOTES

1. FOR WINDOWS AND GLAZED DOORS PROVIDED BY OWNER, GENERAL CONTRACTOR TO CONFIRM U-VALUE, SHGC-VALUE AND AIR LEAKAGE WITH MINIMUM REQUIREMENT SET FORTH IN THIS SCHEDULE.
2. THE MAX. AIR LEAKAGE RATE FOR WINDOWS, SLIDING AND SWINGING DOORS, AND SKYLIGHTS IS PERMITTED TO BE 0.3 CFM/SF OF FENESTRATION OR DOOR AREA WHEN TESTED IN ACCORDANCE WITH AAMA / WDMA / CAS101 / I.S.2 / A440 AT 6.24 PSF (300PA). STUD SPACING 16" O.C. U.N.O. REFER TO LIMITING HEIGHT SCHEDULE ON THIS SHEET FOR MAXIMUM SPANS & MINIMUM FRAMING METAL THICKNESS
3. ALL NEW DOORS TO HAVE CLOSERS PROVIDED

DOOR SCHEDULE

TYPE	A	B	C	D	E
ELEVATION					
QUANTITY	SEE PLAN	SEE PLAN	SEE PLAN	STAIR ENCLOSURE	SEE PLAN
DOOR SIZE	SEE ELEVATION FOR DETAIL	SEE ELEVATION FOR DETAIL	SEE ELEVATION FOR DETAIL	SEE ELEVATION FOR DETAIL	SEE ELEVATION FOR DETAIL
PANEL THICKNESS	1 3/4"	1 3/4"	1 3/4"	1 3/4"	1 3/4"
LOCATION	SEE PLAN	SEE PLAN	MECHANICAL	NEW STAIR	SEE PLAN
FIRE RATING	45 MIN.	NONE	90 MIN.	90 MIN.	45 MIN.
MATERIAL	HOLLOW METAL	HOLLOW METAL OR SOLID WOOD (PER CLIENT)	HOLLOW METAL	HOLLOW METAL *(PER CLIENT)*	HOLLOW METAL
FRAME MATERIAL	PAINTED	PAINTED	METAL	PAINTED	PAINTED
FINISH	*PER CLIENT*	*PER CLIENT*	PAINTED	*PER CLIENT*	*PER CLIENT*
SWING	SINGLE SWING, SINGLE DOOR	SINGLE SWING, SINGLE DOOR	SINGLE	SINGLE SWING, SINGLE DOOR	SINGLE SWING, SINGLE DOOR
HARDWARE	3 HINGES, PASSAGE SET (ALWAYS UNLOCKED)	3 HINGES, STORAGE SET (LOCKED, OPEN WITH KEY)	SELF-CLOSER: FALCON SC80, OR EQUIV.	3 HINGES, PASSAGE SET (ALWAYS UNLOCKED)	3 HINGES, PASSAGE SET (ALWAYS UNLOCKED)
	DOOR HOLDER	DOOR HOLDER		DOOR HOLDER	DOOR HOLDER
	SELF-CLOSING			SELF-CLOSING	SELF-CLOSING
MANUFACTURER	GENERIC	GENERIC	GENERIC	GENERIC	GENERIC
MODEL	GENERIC	GENERIC	GENERIC	FLUSH HM FIRE RATED DOORS - FNV	GENERIC
REMARKS	W/ 12"x36" GLASS VISION PANEL	W/ FUSIBLE LINK FIRE RATED LOUVER	W/ FUSIBLE LINK FIRE RATED LOUVER	W/ PUSH (PANIC) BAR HARDWARE AND FIRE-RATED WIRED GLASS VISION PANEL	

DOOR SCHEDULE

TYPE	F
ELEVATION	
QUANTITY	SEE PLAN
DOOR SIZE	SEE ELEVATION FOR DETAIL
PANEL THICKNESS	1 3/4"
LOCATION	SEE PLAN
FIRE RATING	N/A
MATERIAL	METAL / GLASS
FRAME MATERIAL	PAINTED
FINISH	*PER CLIENT*
SWING	SINGLE SWING, DOUBLE DOOR
HARDWARE	3 HINGES
	PUSH BAR
	SELF-CLOSER: FALCON SC80, OR EQUIV.
MANUFACTURER	GENERIC
MODEL	GENERIC
REMARKS	SEE ENERGY ANALYSIS FOR ENERGY REQUIREMENT

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

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2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

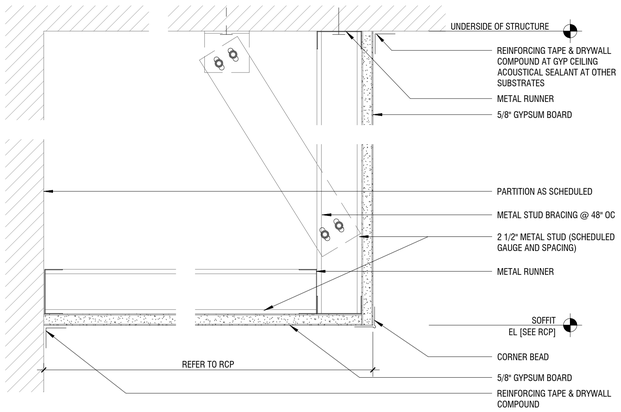
DOOR SCHEDULE

PROJECT #:

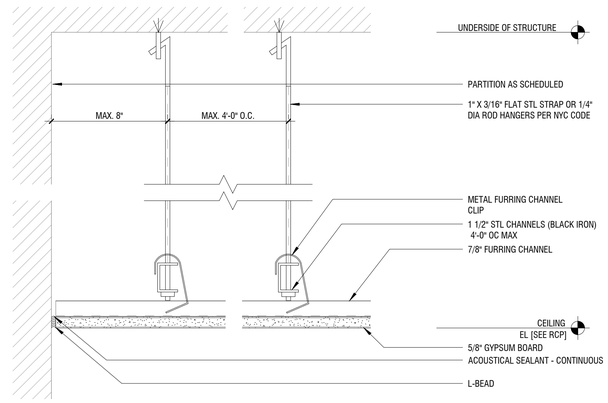
DRAWN BY:

SHEET TITLE :

A-501.00



1 CEILING DETAILS - GYPSUM SOFFIT
SCALE: 3" = 1'-0"



2 CEILING DETAILS - TYPICAL SUSPENDED GYPSUM CEILING
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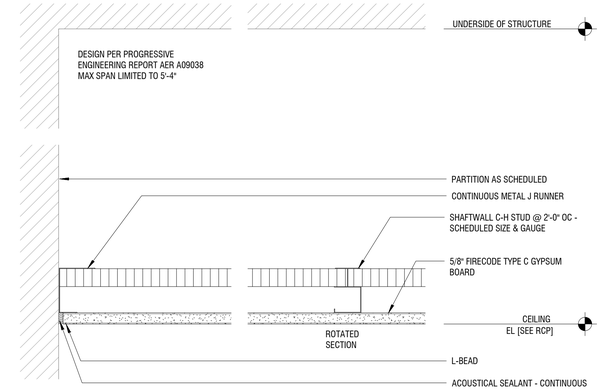
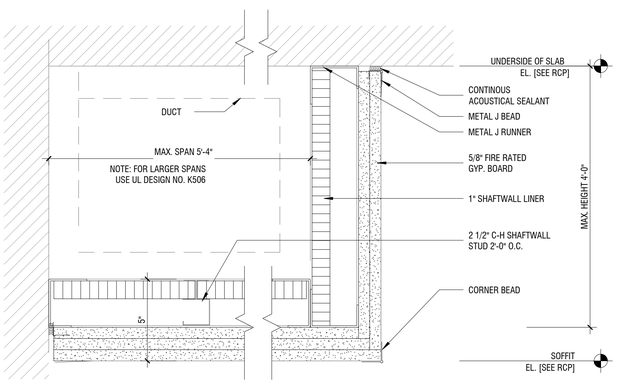
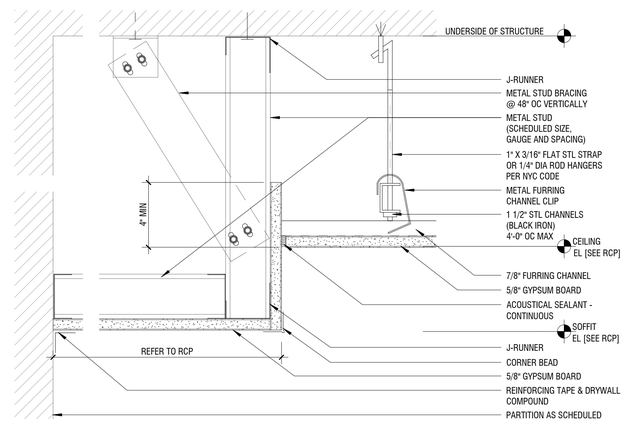


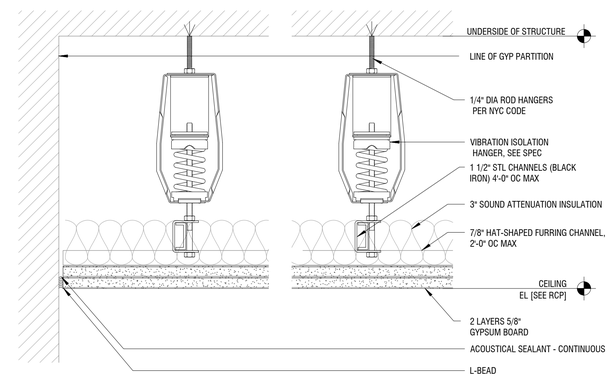
3 CEILING DETAILS - TYPICAL 1HR CEILING MEMBRANE
SCALE: 3" = 1'-0"



4 CEILING DETAILS - TYPICAL 2HR SOFFIT
SCALE: 3" = 1'-0"



5 CEILING DETAILS - TYPICAL SOFFIT LOWERED CEILING
SCALE: 3" = 1'-0"



6 CEILING DETAILS - TYPICAL SUSPENDED ACOUSTIC GYPSUM CEILING
SCALE: 3" = 1'-0"

NOTE:
NOT ALL CEILING TYPES ARE SELECTED TO BE USED, DETAILS ARE FOR WHERE APPLICABLE

- CEILING DETAILS - RESERVED
SCALE: 3" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

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2026.05.26	SUBMIT FOR DOB REVIEW

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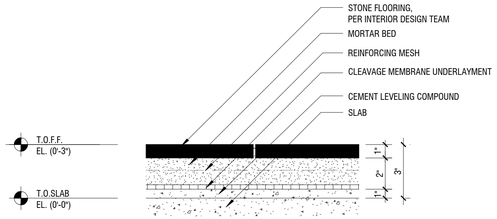
TYPICAL DETAILS: CEILING

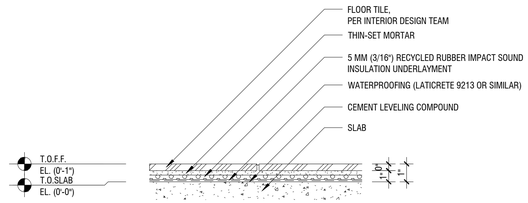
PROJECT #: | DRAWN BY:

SHEET TITLE :

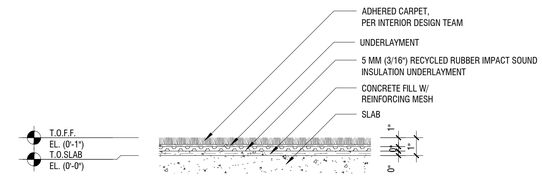
A-510.00



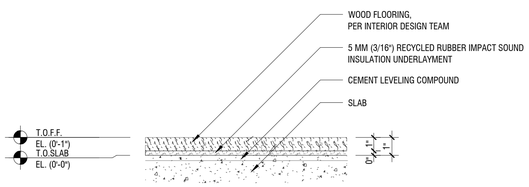
1 FLOOR DETAILS - STONE FLOOR (WHERE APPLICABLE)
SCALE: 3" = 1'-0"



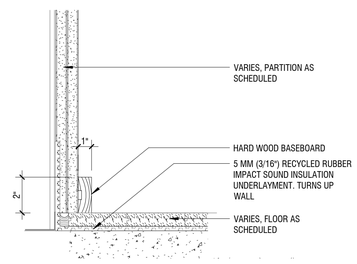
2 FLOOR DETAILS - TILE FLOOR (WHERE APPLICABLE)
SCALE: 3" = 1'-0"



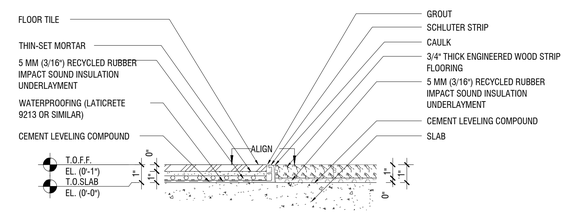
3 FLOOR DETAILS - CARPET FLOOR (WHERE APPLICABLE)
SCALE: 3" = 1'-0"



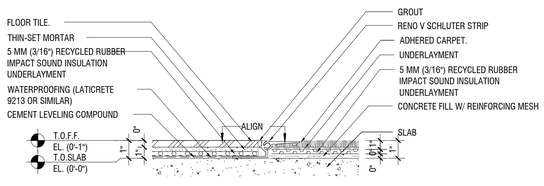
4 FLOOR DETAILS - WOOD FLOOR (WHERE APPLICABLE)
SCALE: 3" = 1'-0"



5 TYPICAL WOOD BASE DETAILS (WHERE APPLICABLE)
SCALE: 3" = 1'-0"



6 TRANSITION DETAILS - TILE TO WOOD (WHERE APPLICABLE)
SCALE: 3" = 1'-0"



7 FLOOR TRANSITION DETAILS - TILE TO CARPET (WHERE APPLICABLE)
SCALE: 3" = 1'-0"

NOTE:
NOT ALL FLOORING TYPES ARE SELECTED TO BE USED, DETAILS ARE FOR WHERE APPLICABLE

- FLOOR DETAILS - RESERVED
SCALE: 3" = 1'-0"

- FLOOR DETAILS - RESERVED
SCALE: 3" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

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2026.06.16	SUBMIT FOR DOB REVIEW
2026.06.02	SUBMIT FOR DOB REVIEW
2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

TYPICAL DETAILS: FLOORING

PROJECT #: | DRAWN BY:

SHEET TITLE :

A-511.00

ENERGY ANALYSIS

THIS APPLICATION WILL COMPLY WITH 2025 NYC ENERGY CODE 101.5

NYC ENERGY CONSERVATION STATEMENT AND NOTES:
"TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE NEW YORK CITY ENERGY CONSERVATION CONSTRUCTION CODE, USING CHAPTER C4, NYCECC 2025"

2025 NYCECC ENERGY CODE ANALYSIS (CLIMATE ZONE 4A) COMMERCIAL CHAPTERS: C4 COMMERCIAL ENERGY EFFICIENCY

TABLE II – PROGRESS INSPECTIONS FOR ENERGY CODE COMPLIANCE – COMMERCIAL BUILDINGS

	INSPECTION/TEST	PERIODIC (MINIMUM)	REFERENCE STANDARD (SEE ECC CHAPTER C6) OR OTHER CRITERIA	ECC OR OTHER CITATION
IIA	**ENVELOPE INSPECTIONS**			
IIA2	INSULATION PLACEMENT AND R- VALUES: INSTALLED INSULATION FOR EACH COMPONENT OF THE CONDITIONED SPACE ENVELOPE AND AT JUNCTIONS BETWEEN COMPONENTS, INCLUDING THERMAL BRIDGES AND HEATED SLAB INSULATION, MUST BE VISUALLY INSPECTED TO ENSURE THAT THE R- VALUES ARE MARKED, THAT SUCH R- VALUES CONFORM TO THE R-VALUES IDENTIFIED IN THE CONSTRUCTION DOCUMENTS AND THAT THE INSULATION IS PROPERLY INSTALLED. CERTIFICATIONS FOR UNMARKED INSULATION ALSO BE VISUALLY INSPECTED.	AS REQUIRED TO VERIFY CONTINUOUS ENCLOSURE WHILE WALLS, CEILINGS AND FLOORS ARE OPEN	APPROVED CONSTRUCTION DOCUMENTS	"C303.1, C303.2, C402.1, C402.2, C402.6, C406; ASHRAE 90.1 –5.5, 5.6, 5.8, 5.9, 11 OR APPENDIX G, APPENDIX I"
IIA3	FENESTRATION AND DOOR U- FACTOR AND PRODUCT RATINGS: U-FACTORS, SHGC AND VT VALUES OF INSTALLED FENESTRATION MUST BE VISUALLY INSPECTED FOR CONFORMANCE WITH THE U- FACTORS, SHGC AND VT VALUES IDENTIFIED IN THE CONSTRUCTION	AS REQUIRED DURING INSTALLATION	"APPROVED CONSTRUCTION DOCUMENTS; NFRC 100, NFRC 200, NFRC 300, ANSI/DASMA 105, ASTM E972"	"C303.1, C303.1.3, C402.1.4, C402.4, C406; ASHRAE 90.1 –5.4.2, 5.5, 5.6, 5.8.2, 5.9, 11 OR APPENDIX G, APPENDIX I"
	DRAWINGS BY VERIFYING THE MANUFACTURER'S NFRC LABELS OR, WHERE NOT LABELED, USING THE RATINGS IN ECC TABLES C303.1.3(1), (2) AND (3).			
IIA4	"FENESTRATION AIR LEAKAGE: WINDOWS AND DOOR ASSEMBLIES, EXCEPT SITE-BUILT WINDOWS AND/OR DOORS, MUST BE VISUALLY INSPECTED TO VERIFY THAT INSTALLED ASSEMBLIES ARE LISTED AND LABELED BY THE MANUFACTURER TO THE REFERENCED STANDARD. FOR CURTAIN WALL, STOREFRONT GLAZING, COMMERCIAL ENTRANCE DOORS AND REVOLVING DOORS, THE TESTING REPORTS MUST BE REVIEWED TO VERIFY THAT THE INSTALLED ASSEMBLY COMPLIES WITH THE STANDARD CITED IN THE APPROVED PLANS. WEATHERSEALS AT LOADING DOCKS MUST BE VISUALLY VERIFIED."	AS REQUIRED DURING INSTALLATION; PRIOR TO FINAL CONSTRUCTION INSPECTION	NFRC 400, AAMA/WDMA/CSA 101/I.S.2/A440; ASTM E283; ANSI/DASMA 105	"C402.5.2, C402.5.6; ASHRAE 90.1 – 5.4.3.2, 5.4.3.3, 5.8.2, 5.9"
IIA5	FENESTRATION AREAS: DIMENSIONS OF WINDOWS, DOORS AND SKYLIGHTS MUST BE VERIFIED BY VISUAL INSPECTION.	PRIOR TO FINAL CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	"C402.4; ASHRAE 90.1 – 5.4, 5.5.4, 5.6, 5.9, 11 OR APPENDIX G"
IIA6	"AIR BARRIER VISUAL INSPECTION: OPENINGS AND PENETRATIONS IN THE BUILDING ENVELOPE, INCLUDING SITE-BUILT FENESTRATION AND DOORS, MUST BE VISUALLY INSPECTED TO VERIFY THAT A CONTINUOUS AIR BARRIER AROUND THE ENVELOPE FORMS AN AIR-TIGHT ENCLOSURE. THE PROGRESS INSPECTOR MUST VISUALLY INSPECT TO VERIFY THAT MATERIALS AND/OR ASSEMBLIES HAVE BEEN TESTED AND MEET THE REQUIREMENTS OF THE RESPECTIVE STANDARDS, OR MUST OBSERVE THE TESTING OF THE BUILDING AND/OR ASSEMBLIES AND VERIFY THAT THE BUILDING AND/OR ASSEMBLIES MEET THE REQUIREMENTS OF THE STANDARD, IN ACCORDANCE WITH THE STANDARD(S) CITED IN THE APPROVED PLANS."	AS REQUIRED DURING CONSTRUCTION	APPROVED CONSTRUCTION DOCUMENTS; ASTM E2178, ASTM E2357, ASTM E1677, ASTM E779, ASTM E283.	"C402.5; ASHRAE 90.1 – 5.4.3.1, 5.4.3.5, 5.9"
IIA7	AIR BARRIER TESTING: TESTING MUST BE PERFORMED IN	AS REQUIRED DURING	APPROVED CONSTRUCTION DOCUMENTS; ASTM E 779,	C402.5, C402.5.1.3, C406; ASHRAE 90.1
	"ACCORDANCE WITH SECTION ECC C402.5.1.3.1 OR ASHRAE 90.1 SECTION 5.4.3.1.3, AND SHALL BE ACCEPTED IF THE BUILDING MEETS THE REQUIREMENTS DETAILED IN SUCH SECTION. TEST RESULTS SHALL BE RETAINED IN ACCORDANCE WITH THE PROVISIONS OF TITLE 28 OF THE ADMINISTRATIVE CODE. TESTING MUST BE PERFORMED BY A THIRD- PARTY INDEPENDENT OF THE CONTRACTOR AND ACCEPTABLE TO THE DEPARTMENT."	CONSTRUCTION, OR PRIOR TO FINAL CONSTRUCTION INSPECTION	ANSI/BOMA Z65.1, ASTM E3158, RESNET/ICC 380	"– 5.4.3.1.3, 5.9, APPENDIX I"
IIA8	"AIR BARRIER CONTINUITY PLAN TESTING: EACH UNIQUE AIR BARRIER JOINT OR SEAM MUST BE TESTED OR INSPECTED FOR COMPLIANCE. DOCUMENTATION INCLUDES THE METHOD OF TEST PERFORMED ON EACH UNIQUE AIR BARRIER JOINT OR SEAM AND THE RESULTS OF THE TEST. IF AN AIR BARRIER JOINT OR SEAM HAS A DEFICIENCY, THE DEFICIENCY MUST BE NOTED, AND RETESTED UNTIL IT COMPLIES WITH THE TESTING REQUIREMENTS. TEST RESULTS MUST BE RETAINED IN ACCORDANCE WITH THE PROVISIONS OF TITLE 28 OF THE ADMINISTRATIVE CODE. TESTING MUST BE PERFORMED BY A THIRD-PARTY INDEPENDENT OF THE CONTRACTOR AND ACCEPTABLE TO THE DEPARTMENT."	AS REQUIRED DURING CONSTRUCTION	APPROVED CONSTRUCTION DOCUMENTS; ASTM E779, ASTM E1186, ASTM E2813, ASTM E3158	"C402.5.1.3; ASHRAE 90.1 – 5.4.3.1.3, 5.9"
IIB	**MECHANICAL AND SERVICE WATER HEATING INSPECTIONS**			
IIB2	SHUTOFF DAMPERS: DAMPERS FOR STAIR AND ELEVATOR SHAFT VENTS AND OTHER OUTDOOR AIR INTAKES AND EXHAUST OPENINGS INTEGRAL TO THE BUILDING ENVELOPE MUST BE VISUALLY INSPECTED TO VERIFY THAT SUCH DAMPERS, EXCEPT WHERE PERMITTED TO BE GRAVITY DAMPERS, COMPLY WITH APPROVED CONSTRUCTION DRAWINGS.	AS REQUIRED DURING INSTALLATION	APPROVED CONSTRUCTION DOCUMENTS; AMCA 500D	"C402.5.5, C403.7.7; ASHRAE 90.1 – 6.4.3.4"
	MANUFACTURER'S LITERATURE MUST BE REVIEWED TO VERIFY THAT THE PRODUCT HAS BEEN TESTED AND FOUND TO MEET THE STANDARD.			
IIB3	HVAC-R, COMMERCIAL KITCHEN EQUIPMENT, AND SERVICE WATER HEATING EQUIPMENT: EQUIPMENT SIZING, EFFICIENCIES, PIPE SIZING AND OTHER PERFORMANCE FACTORS OF ALL MAJOR EQUIPMENT UNITS, AS DETERMINED BY THE APPLICANT OF RECORD, AND NO LESS THAN 15% OF MINOR EQUIPMENT UNITS, MUST BE VERIFIED BY VISUAL INSPECTION AND, WHERE NECESSARY, REVIEW OF MANUFACTURER'S DATA. POOL HEATERS AND COVERS MUST BE VERIFIED BY VISUAL INSPECTION.	PRIOR TO FINAL PLUMBING AND CONSTRUCTION INSPECTION	"APPROVED CONSTRUCTION DOCUMENTS, ASHRAE 183, ASHRAE HVAC SYSTEMS AND EQUIPMENT HANDBOOK"	"C403.1, C403.2, C403.3, C403.7.5, C404.2, C404.5, C404.9, C404.10, C406; ASHRAE 90.1 – 6.3, 6.4, 6.5, 6.7, 7.4, 7.5, 7.8, 10.4.6, APPENDIX I"
IIB4	HVAC-R AND SERVICE WATER HEATING SYSTEM CONTROLS: NO LESS THAN 20% OF EACH TYPE OF REQUIRED CONTROLS MUST BE VERIFIED BY VISUAL INSPECTION AND TESTED FOR FUNCTIONALITY AND PROPER OPERATION. SUCH CONTROLS MUST INCLUDE, BUT ARE NOT LIMITED TO: THERMOSTATIC OFF-HOUR ZONES FREEZE PROTECTION/SNOW- AND ICE-MELT SYSTEM VENTILATION SYSTEM AND FAN CONTROLS ENERGY RECOVERY SYSTEMS KITCHEN/LAB EXHAUST SYSTEMS FAN SYSTEMS SERVING SINGLE AND MULTIPLE ZONES OUTDOOR HEATING SYSTEMS HVAC CONTROL IN HOTEL/MOTEL GUEST ROOMS AIR/WATER ECONOMIZERS & CONTROLS HYDRONIC SYSTEMS HEAT REJECTION SYSTEMS HOT GAS BYPASS LIMITATION REFRIGERATION SYSTEMS DOOR SWITCHES COMPUTER ROOM SYSTEMS SERVICE WATER HEATING SYSTEMS POOL HEATER AND TIME SWITCHES CONTROLS WITH SEASONALLY DEPENDENT FUNCTIONALITY: CONTROLS WHOSE COMPLETE OPERATION CANNOT BE DEMONSTRATED DUE TO PREVAILING WEATHER CONDITIONS TYPICAL OF THE SEASON DURING WHICH PROGRESS INSPECTIONS WILL BE PERFORMED SHALL BE PERMITTED TO BE SIGNED OFF FOR THE PURPOSE OF A TEMPORARY CERTIFICATE OF OCCUPANCY WITH ONLY A VISUAL INSPECTION, PROVIDED, HOWEVER, THAT THE PROGRESS INSPECTOR MUST PERFORM A SUPPLEMENTAL INSPECTION WHERE THE CONTROLS ARE VISUALLY INSPECTED AND TESTED FOR FUNCTIONALITY AND PROPER OPERATION DURING THE NEXT IMMEDIATE SEASON THEREAFTER. THE OWNER MUST PROVIDE FULL ACCESS TO THE PROGRESS INSPECTOR WITHIN TWO WEEKS OF THE PROGRESS INSPECTOR'S REQUEST FOR SUCH ACCESS TO PERFORM THE PROGRESS INSPECTION. FOR SUCH SUPPLEMENTAL INSPECTIONS, THE DEPARTMENT MUST BE NOTIFIED BY THE APPROVED PROGRESS INSPECTION AGENCY OF ANY UNRESOLVED DEFICIENCIES IN THE INSTALLED WORK WITHIN 180 DAYS OF SUCH SUPPLEMENTAL INSPECTION.	AFTER INSTALLATION AND PRIOR TO FINAL ELECTRICAL AND CONSTRUCTION INSPECTION, EXCEPT THAT FOR CONTROLS WITH SEASONALLY DEPENDENT FUNCTIONALITY, SUCH TESTING MUST BE PERFORMED BEFORE SIGN-OFF FOR ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY	"APPROVED CONSTRUCTION DOCUMENTS, INCLUDING CONTROL SYSTEM NARRATIVES; ASHRAE GUIDELINE 1: THE HVAC COMMISSIONING PROCESS WHERE APPLICABLE"	"C403, C404, C406, ASHRAE 90.1 – 6.3, 6.4, 6.5, 6.6, 7.4, 7.5, APPENDIX I"
IIB5	HVAC-R AND SERVICE WATER PIPING DESIGN AND INSULATION: INSTALLED PIPING INSULATION MUST BE VISUALLY INSPECTED TO VERIFY PROPER INSULATION PLACEMENT AND VALUES. SERVICE HOT WATER DISTRIBUTION SYSTEMS MUST BE INSPECTED TO VERIFY THE SUPPLY OF HEATED WATER.	AFTER INSTALLATION AND PRIOR TO CLOSING SHAFTS, CEILINGS AND WALLS	APPROVED CONSTRUCTION DOCUMENTS;	"C403.11, C404.4, C404.5; MC 603.9; ASHRAE 90.1 – 6.3, 6.4.4, 6.8.2, 6.8.3; 7.4.3"
IIB6	"DUCT LEAKAGE TESTING, INSULATION AND DESIGN: FOR DUCT SYSTEMS DESIGNED TO OPERATE AT STATIC PRESSURES IN EXCESS OF 3 INCHES W.G. (747 PA), REPRESENTATIVE SECTIONS, AS DETERMINED BY THE PROGRESS INSPECTOR, TOTALING AT LEAST 25% OF THE DUCT AREA, MUST BE TESTED TO VERIFY THAT ACTUAL AIR LEAKAGE IS BELOW ALLOWABLE AMOUNTS. INSTALLED DUCT INSULATION MUST BE VISUALLY INSPECTED TO VERIFY PROPER INSULATION PLACEMENT AND VALUES. JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK MUST BE VISUALLY INSPECTED FOR PROPER SEALING."	AFTER INSTALLATION AND SEALING AND PRIOR TO CLOSING SHAFTS, CEILINGS AND WALLS	APPROVED CONSTRUCTION DOCUMENTS; SMACNA HVAC AIR DUCT LEAKAGE TEST MANUAL; SMACNA DUCT CONSTRUCTION STANDARDS, METAL AND FLEXIBLE	C403.11; ASHRAE 90.1 – 6.4.4.2.2
IIC	**ELECTRICAL POWER AND LIGHTING SYSTEMS**			
IIC1	METERING: THE PRESENCE AND OPERATION OF ALL REQUIRED METERS FOR MONITORING TOTAL ELECTRICAL ENERGY USAGE AND/OR TOTAL FUEL USE, SYSTEM ENERGY USAGE, TENANT ENERGY USAGE, OR ELECTRICAL ENERGY USAGE IN THE BUILDING, IN INDIVIDUAL DWELLING UNITS, OR IN TENANT SPACES MUST BE VERIFIED BY VISUAL INSPECTION.	PRIOR TO FINAL ELECTRICAL AND CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	"C405.5, C405.11, C405.12; ASHRAE 90.1 – 8.4.3, 8.4.5, 8.4.6, 10.4.5"
IIC2	LIGHTING IN DWELLING UNITS: LAMPS IN PERMANENTLY INSTALLED LIGHTING FIXTURES MUST BE VISUALLY INSPECTED TO VERIFY COMPLIANCE WITH HIGH-EFFICACY REQUIREMENTS.	PRIOR TO FINAL ELECTRICAL AND CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	C405.1; ASHRAE 90.1 – 9.1.1
IIC3	INTERIOR LIGHTING POWER: INSTALLED LIGHTING MUST BE VERIFIED FOR COMPLIANCE WITH THE LIGHTING POWER ALLOWANCE BY VISUAL INSPECTION OF FIXTURES, LAMPS, BALLASTS AND TRANSFORMERS.	PRIOR TO FINAL ELECTRICAL AND CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	"C405.3, C406; ASHRAE 90.1 –9.1, 9.2, 9.5, 9.6, 9.7; 1RCNY §101-07(C)(3)(V)(C)4, APPENDIX I"
IIC4	EXTERIOR LIGHTING POWER: INSTALLED LIGHTING MUST BE VERIFIED FOR COMPLIANCE WITH SOURCE EFFICACY AND/OR THE LIGHTING POWER ALLOWANCE BY VISUAL INSPECTION OF FIXTURES, LAMPS, BALLASTS AND RELEVANT TRANSFORMERS.	PRIOR TO FINAL ELECTRICAL AND CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	"C405.4; ASHRAE 90.1 –9.4.2; 1RCNY §101-07(C)(3)(V)(C)4"
IIC5	LIGHTING CONTROLS: EACH TYPE OF REQUIRED LIGHTING CONTROLS, INCLUDING: OCCUPANT SENSORS MANUAL INTERIOR LIGHTING CONTROLS LIGHT-REDUCTION CONTROLS AUTOMATIC LIGHTING SHUT- OFF DAYLIGHT ZONE CONTROLS SLEEPING UNIT CONTROLS EXTERIOR LIGHTING CONTROLS EGRESS ILLUMINATION CONTROLS MUST BE VERIFIED BY VISUAL INSPECTION AND TESTED FOR FUNCTIONALITY AND PROPER OPERATION.	PRIOR TO FINAL ELECTRICAL AND CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS, INCLUDING CONTROL SYSTEM NARRATIVES	"C405.2, C406; ASHRAE 90.1 – 9.4.1, 9.4.3, 9.7, APPENDIX I"
IIC6	ELECTRIC MOTORS AND ELEVATORS: WHERE REQUIRED BY THE CONSTRUCTION DOCUMENTS FOR ENERGY CODE COMPLIANCE, MOTOR LISTING OR LABELS BE VISUALLY INSPECTED TO VERIFY THAT THEY COMPLY WITH THE RESPECTIVE ENERGY REQUIREMENTS IN THE CONSTRUCTION DOCUMENTS. ELEVATORS AND ESCALATORS MUST BE INSPECTED FOR COMPLIANCE WITH REGENERATIVE DRIVE REQUIREMENTS.	PRIOR TO FINAL ELECTRICAL AND CONSTRUCTION INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	"C403.8, C405.6, C405.7, C405.8, C405.9; ASHRAE 90.1 – 8.4.4, 10.4, 10.8"
IID	**OTHER**			
IID1	MAINTENANCE INFORMATION: MAINTENANCE MANUALS FOR MECHANICAL, SERVICE HOT WATER AND ELECTRICAL EQUIPMENT AND SYSTEMS REQUIRING PREVENTIVE MAINTENANCE MUST BE REVIEWED FOR APPLICABILITY TO INSTALLED EQUIPMENT AND SYSTEMS BEFORE SUCH MANUALS ARE PROVIDED TO THE OWNER. LABELS REQUIRED FOR SUCH EQUIPMENT OR SYSTEMS MUSTL BE INSPECTED FOR ACCURACY AND COMPLETENESS.	PRIOR TO SIGN- OFF OR ISSUANCE OF FINAL CERTIFICATE OF OCCUPANCY	APPROVED CONSTRUCTION DOCUMENTS, INCLUDING ELECTRICAL DRAWINGS WHERE APPLICABLE; ASHRAE GUIDELINE 4: PREPARATION OF OPERATING AND MAINTENANCE DOCUMENTATION FOR BUILDING SYSTEMS	"C408.11, C408.2.5.2, C408.3.2; ASHRAE 90.1 – 4.2.2.3, 6.7.2.2, 6.7.2.3.5.2, 8.7.2, 9.4.3.2.2, 9.7.2.2"

OWNER:

NYC Buildings

ICC INTERNATIONAL CODE COUNCIL

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

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CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

2026.08.14	SUBMIT FOR DOB REVIEW
2026.07.21	SUBMIT FOR DOB REVIEW
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2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

ENERGY ANALYSIS

PROJECT #: | DRAWN BY:

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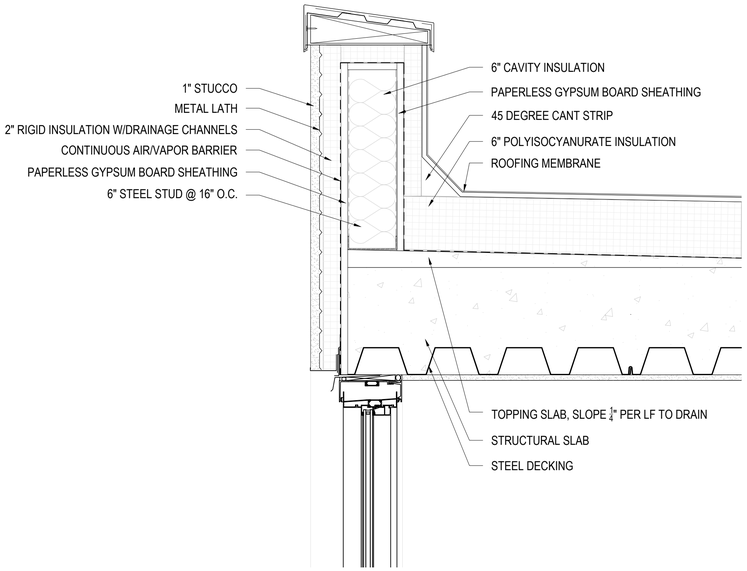
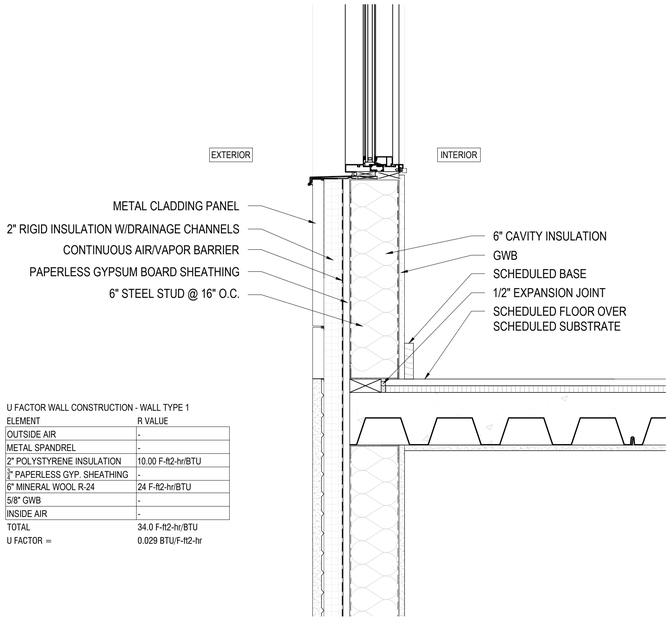


U FACTOR ROOF CONSTRUCTION - WALL TYPE 3

ELEMENT	R VALUE
OUTSIDE AIR	-
ROOFING MEMBRANE	-
6" POLYISO INSULATION	37.2 F-ft2-hr/BTU
12" CONCRETE	1.2 F-ft2-hr/BTU
5/8" GWB	.5 F-ft2-hr/BTU
INSIDE AIR	-
TOTAL	38.9 F-ft2-hr/BTU
U FACTOR =	0.025 BTU/F-ft2-hr

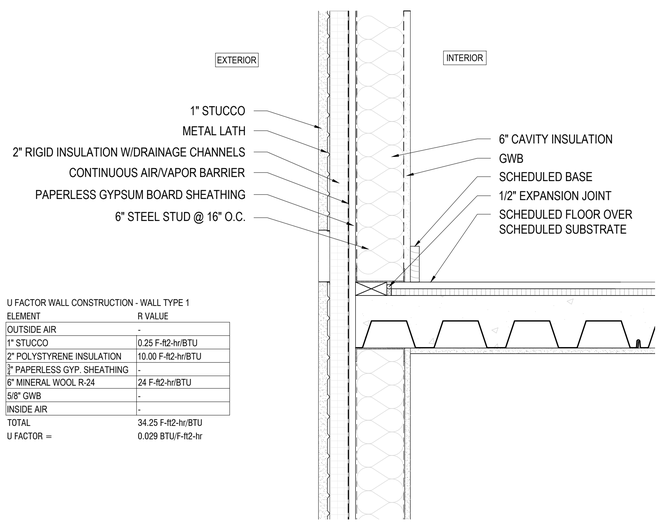
1 ROOF SECTION
SCALE: 1 1/2" = 1'-0"



U FACTOR WALL CONSTRUCTION - WALL TYPE 1

ELEMENT	R VALUE
OUTSIDE AIR	-
METAL SPANDREL	-
2" POLYSTYRENE INSULATION	10.00 F-ft2-hr/BTU
¾" PAPERLESS GYP. SHEATHING	-
6" MINERAL WOOL R-24	24 F-ft2-hr/BTU
5/8" GWB	-
INSIDE AIR	-
TOTAL	34.0 F-ft2-hr/BTU
U FACTOR =	0.029 BTU/F-ft2-hr

2 EXTERIOR WALL @ FENESTRATION
SCALE: 1 1/2" = 1'-0"



U FACTOR WALL CONSTRUCTION - WALL TYPE 1

ELEMENT	R VALUE
OUTSIDE AIR	-
1" STUCCO	0.25 F-ft2-hr/BTU
2" POLYSTYRENE INSULATION	10.00 F-ft2-hr/BTU
¾" PAPERLESS GYP. SHEATHING	-
6" MINERAL WOOL R-24	24 F-ft2-hr/BTU
5/8" GWB	-
INSIDE AIR	-
TOTAL	34.25 F-ft2-hr/BTU
U FACTOR =	0.029 BTU/F-ft2-hr

3 OPAQUE EXTERIOR WALL
SCALE: 1 1/2" = 1'-0"

ENERGY ANALYSIS FOR HEATING AND HOT WATER UNDER SEPARATE MECHANICAL APPLICATIONS

TABULAR ANALYSIS 2025 NYC ECC					
MEASURE	CODE SECTION	REQUIREMENT	PROPOSED VALUE	STATUS	NOTES
CLIMATE ZONE 4					
BUILDING ENVELOPE - INSULATION					
Roof insulation	C402.1.2	R-33 min ci	R-38.9	complies	Meets minimum
Above-grade metal-frame wall	C402.1.3	R-13 + R-8.5 ci	R-34.25	complies	Meets minimum: R-24 + R-10 ci
BUILDING ENVELOPE - FIXED VERTICAL FENESTRATION					
Window U-factor	C402.5	U-0.30 max	U-0.25	complies	
SHGC (PF < 0.2)	C402.5	0.33 max	0.31	complies	
Fenestration area	C402.5.1.1	40% max. of gross above-grade wall area (16.274 SF X .40 = 6,509.6 SF) if 25% net floor area in daylight zone	6,377.6 SF	complies	6,377.6 SF < 6,509.6 SF
Visible transmittance	C402.5.1.1	≥ .363 (1.1 SHGC)	≥ .363	complies	304 SF < 339 SF
Daylight-responsive lighting controls	C402.5.1.1	Required	lighting controls provided	complies	
THERMAL BRIDGING					
Parapets	C402.7.2.5	continuous insulation both sides, roof insulation entirely above deck		complies	
LIGHTING & ELECTRICAL					
High-efficiency lighting	R404.1	> 90% of permanently installed fixtures HE	100% LED per fixture schedule	complies	

THESE DRAWINGS FOR EBC TRAINING PURPOSES ONLY

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NYC Buildings

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CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

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DRAWING TITLE:

ENERGY ANALYSIS
WALL SECTIONS

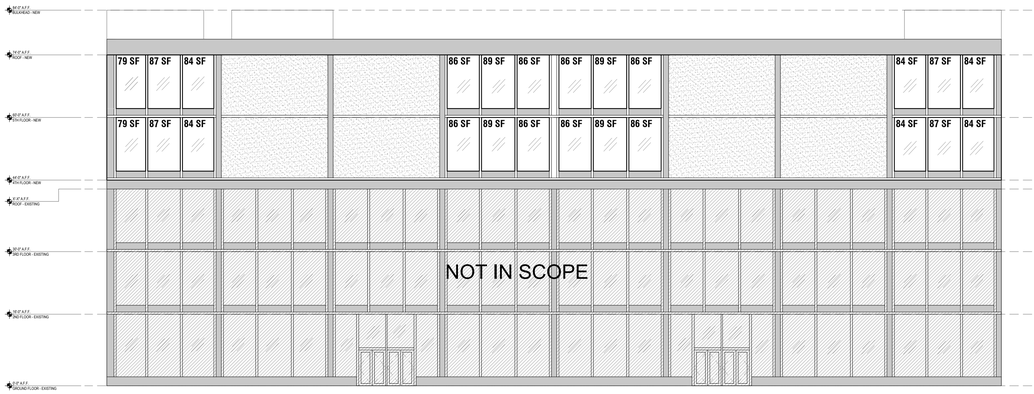
PROJECT #:

DRAWN BY:

SHEET TITLE :

EN-101.00

FACADE AREA: 5,600 SF
FENESTRATION AREA: 2,054 SF

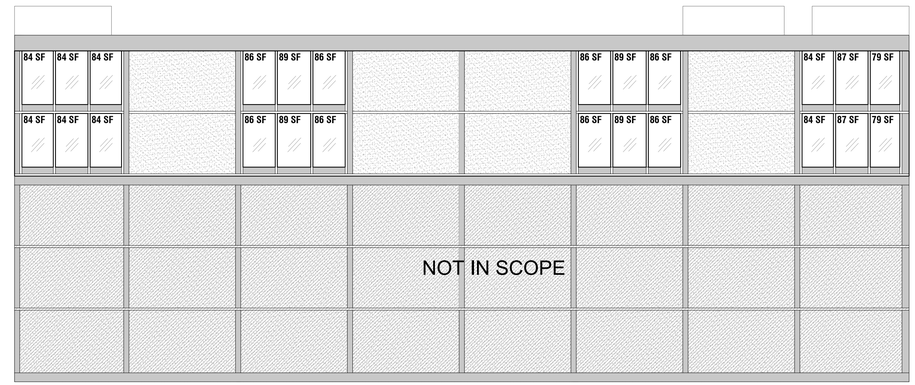


1 FRONT ELEVATION
SCALE: 1/16" = 1'-0"

FENESTRATION AREA ANALYSIS

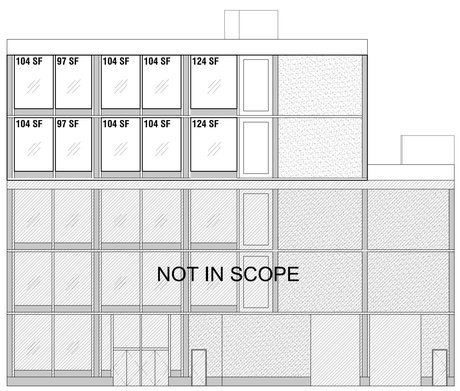
FACADE AREA: 15,712 SF X .40 = 6,248 SF
FENESTRATION AREA: 6,234 SF
6,234 / 15,712 = .39
.39 < .40 COMPLIES

FACADE AREA: 5,600 SF
FENESTRATION AREA: 2,048 SF



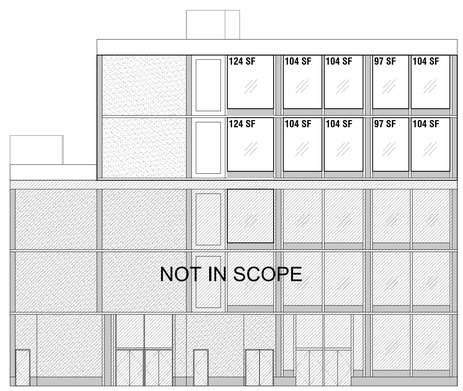
2 REAR ELEVATION
SCALE: 1/16" = 1'-0"

FACADE AREA: 2,256 SF
FENESTRATION AREA: 1,066 SF



3 EAST ELEVATION
SCALE: 1/16" = 1'-0"

FACADE AREA: 2,256 SF
FENESTRATION AREA: 1,066 SF



4 WEST ELEVATION
SCALE: 1/16" = 1'-0"

OPAQUE WALL CALCULATIONS		
ELEVATION	WALL AREA	FENESTRATION
FRONT	5,600 SF	2,054 SF
BACK	5,600 SF	2,048 SF
EAST	2,256 SF	1,066 SF
WEST	2,256 SF	1,066 SF
TOTAL	15,712 SF	6,234 SF
6,234 / 15,712 = .39 .39 < .40 COMPLIES		

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2026.06.16	SUBMIT FOR DOB REVIEW
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2026.05.26	SUBMIT FOR DOB REVIEW

DRAWING TITLE:

OPAQUE WALL CALCULATIONS

PROJECT #: DRAWN BY:

SHEET TITLE :

EN-102.00

ENERGY ANALYSIS

THIS APPLICATION WILL COMPLY WITH 2025 NYC ENERGY CODE

NYC ENERGY CONSERVATION STATEMENT AND NOTES:
"TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE NEW YORK CITY ENERGY CONSERVATION CONSTRUCTION CODE, USING CHAPTER C4, NYCECC 2025"

2025 NYCECC ENERGY CODE ANALYSIS (CLIMATE ZONE 4A) COMMERCIAL CHAPTERS: C4 COMMERCIAL ENERGY EFFICIENCY

NYCECC CITATION	ITEM DESCRIPTION	PROPOSED DESIGN VALUE	CODE PRESCRIPTIVE VALUE	SUPPORTING DOCUMENT
C405.1.1	EXIT SIGNS	PROPOSED EXIT SIGN = **3.5 W/EACH**	INTERNALLY ILLUMINATED EXIT SIGNS SHALL NOT EXCEED 5 W PER FACE	**A-121, A-122**
C405.2.1	OCCUPANT SENSOR CONTROLS	**AS REQUIRED BY C405.2.1.1:** OCCUPANT SENSOR CONTROLS ARE PROVIDED FOR: 1. OPEN PLAN OFFICE AREA 2. RESTROOMS 3. CORRIDORS/TRANSITION AREAS/STAIRWAYS 4. STORAGE ROOM ADDITIONALLY, OCCUPANT SENSOR CONTROLS ARE **VOLUNTARILY** PROPOSED FOR TREATMENT ROOMS.	OCCUPANT SENSOR CONTROLS SHALL BE INSTALLED TO CONTROL LIGHTS IN THE FOLLOWING SPACE TYPE: 1. OPEN PLAN OFFICE AREA 2. RESTROOMS 3. CORRIDORS/STAIRWAYS/OFFICE LOBBY 4. STORAGE ROOMS **C405.2.1.1 OCCUPANT SENSOR CONTROL FUNCTION.** 1.THEY SHALL AUTOMATICALLY TURN OFF LIGHTS WITHIN 15 MINUTES AFTER ALL OCCUPANTS HAVE LEFT THE SPACE. 2.THEY SHALL BE MANUAL-ON OR CONTROLLED TO AUTOMATICALLY TURN ON THE LIGHTING TO NOT MORE THAN 50-PERCENT POWER. 3.THEY SHALL INCORPORATE A MANUAL CONTROL TO ALLOW OCCUPANTS TO TURN OFF LIGHTS	**A-200, A-201, A-202, A-203, A-204**
C405.2.4	DAYLIGHT-RESPONSIVE CONTROLS	**DAYLIGHT-RESPONSIVE CONTROLS ARE PROVIDED FOR REQUIRED SIDELIT ZONES** SEE EN-103 DIAGRAM FOR DETAILS.	**DAYLIGHT RESPONSIVE CONTROLS COMPLYING WITH SECTION C405.2.4.1 SHALL BE PROVIDED TO CONTROL THE GENERAL LIGHTING WITHIN DAYLIGHT ZONES IN THE FOLLOWING SPACE S:** 1.SPACES WITH A TOTAL OF MORE THAN 75 WATTS OF GENERAL LIGHTING WITHIN PRIMARY SIDELIT DAYLIGHT ZONES COMPLYING WITH SECTION C405.2.4.2. 2.SPACES WITH A TOTAL OF MORE THAN 150 WATTS OF GENERAL LIGHTING WITHIN SIDELIT DAYLIGHT ZONES COMPLYING WITH SECTION C405.2.4.2. 3.SPACES WITH A TOTAL OF MORE THAN 75 WATTS OF GENERAL LIGHTING WITHIN TOPLIT DAYLIGHT ZONES COMPLYING WITH SECTION C405.2.4.3.	**EN-103**
C405.3	INTERIOR LIGHTING POWER REQUIREMENTS	PER TALBE C405.3.2(1) INTERIOR LIGHTING POWER ALLOWANCES: BUILDING AREA METHOD **GROUND FLOOR LOBBY (OFFICE) = 0.62 (WATTS/FT^2)** **3RD FLOOR (RETAIL) = 0.78 (WATTS/FT^2)** **4TH & 5TH (OFFICE) = 0.62 (WATTS/FT^2)**	**OFFICE LOBBY (PARTIAL GROUND FLOOR)** FLOOR AREA =719.33 SF TOTAL PROPOSED WATTAGE = 270 WATT LPD = 270 WATT / 719.33 SF = 0.38 < 0.62 **3RD FLOOR** FLOOR AREA = 19,365 SF TOTAL PROPOSED WATTAGE = 3,520 WATT LPD = 3,520 WATT / 19,398 SF = 0.18 < 0.75 **4TH & 5TH FLOOR** FLOOR AREA = 15,559 SF TOTAL PROPOSED WATTAGE = 4,300 WATT LPD = 4,300 WATT / 15,559 SF = 0.28 < 0.62	**EN-103**
C402.4.4	DAYLIGHT ZONES	DAYLIGHT RESPONSIVE CONTROL IS PROVIDED	DAYLIGHT ZONES REFERENCED IN SECTIONS C402.4.1.1 THROUGH C402.4.3.2 SHALL COMPLY WITH SECTIONS C405.2.3.2 AND C405.2.3.3, AS APPLICABLE. DAYLIGHT ZONES SHALL INCLUDE TOPLIT ZONES AND SIDELIT ZONES.	**EN-103**

C405.2.1.1 OCCUPANT SENSOR CONTROL FUNCTION

OCCUPANCY SENSOR TO BE PROVIDED IN ALL OCCUPANT SENSOR CONTROL ZONES.

1. THE CONTROLS SHALL BE CONFIGURED SO THAT GENERAL LIGHTING CAN BE CONTROLLED SEPARATELY IN CONTROL ZONES WITH FLOOR AREAS NOT GREATER THAN 600 SQUARE FEET.
2. THE CONTROLS SHALL AUTOMATICALLY TURN OFF GENERAL LIGHTING IN ALL CONTROL ZONES WITHIN 15 MINUTES AFTER ALL OCCUPANTS HAVE LEFT.
3. THE CONTROLS SHALL BE CONFIGURED SO THAT GENERAL LIGHTING POWER IN EACH CONTROL ZONE IS REDUCED BY NOT LESS THAN 80 PERCENT OF THE FULL ZONE GENERAL LIGHTING POWER IN A REASONABLY UNIFORM ILLUMINATION PATTERN WITHIN 15 MINUTES OF ALL OCCUPANTS LEAVING THAT CONTROL ZONE. CONTROL FUNCTIONS THAT SWITCH CONTROL ZONE LIGHTS COMPLETELY OFF WHEN THE ZONE IS VACANT MEET THIS REQUIREMENT.
4. THE CONTROLS SHALL BE CONFIGURED SUCH THAT ANY DAYLIGHT RESPONSIVE CONTROL WILL ACTIVATE OPEN PLAN OFFICE SPACE GENERAL LIGHTING OR CONTROL ZONE GENERAL LIGHTING ONLY WHEN OCCUPANCY FOR THE SAME AREA IS DETECTED.

C405.2.4.1: DAYLIGHT-RESPONSIVE CONTROLS

DAYLIGHT-RESPONSIVE CONTROLS SHALL BE PROVIDED WITHIN EACH SPACE FOR CONTROL OF LIGHTS IN THAT SPACE AND SHALL COMPLY WITH ALL OF THE FOLLOWING:

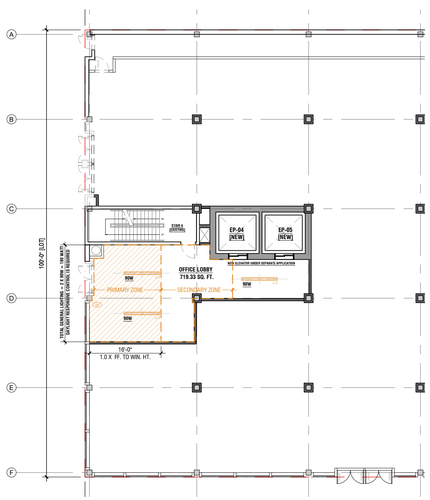
1. LIGHTS IN TOPLIT ZONES IN ACCORDANCE WITH SECTION C405.2.3.3 SHALL BE CONTROLLED INDEPENDENTLY OF LIGHTS IN SIDELIT ZONES IN ACCORDANCE WITH SECTION C405.2.3.2.
2. DAYLIGHT RESPONSIVE CONTROLS WITHIN EACH SPACE SHALL BE CONFIGURED SO THEY CAN BE CALIBRATED FROM WITHIN THAT SPACE BY AUTHORIZED PERSONNEL.
3. CALIBRATION MECHANISMS SHALL BE IN A LOCATION WITH READY ACCESS.
4. DAYLIGHT RESPONSIVE CONTROLS SHALL DIM LIGHTS CONTINUOUSLY FROM FULL DESIGN LIGHT POWER TO 40 PERCENT OF FULL DESIGN LIGHT POWER OR LOWER
5. DAYLIGHT RESPONSIVE CONTROLS SHALL BE CONFIGURED TO COMPLETELY SHUT OFF ALL CONTROLLED LIGHTS
6. LIGHTS IN SIDELIT ZONES IN ACCORDANCE WITH SECTION C405.2.3.2 FACING DIFFERENT CARDINAL ORIENTATIONS (WITHIN 45 DEGREES OF DUE NORTH, EAST, SOUTH, WEST) SHALL BE CONTROLLED INDEPENDENTLY OF EACH OTHER.

EXCEPTION: UP TO 100 WATTS OF LIGHTING IN EACH SPACE IS PERMITTED TO BE CONTROLLED TOGETHER WITH LIGHTING IN A DAYLIGHT ZONE FACING A DIFFERENT CARDINAL ORIENTATION.

C405.2.4.2 SIDELIT DAYLIGHT ZONE

THE SIDELIT ZONE IS THE FLOOR AREA ADJACENT TO VERTICAL FENESTRATION THAT COMPLIES WITH ALL OF THE FOLLOWING:

1.WHERE THE FENESTRATION IS LOCATED IN A WALL, THE PRIMARY SIDELIT DAYLIGHT ZONE SHALL EXTEND LATERALLY TO THE NEAREST FULL-HEIGHT WALL, OR UP TO 1.0 TIMES THE HEIGHT FROM THE FLOOR TO THE TOP OF THE FENESTRATION, AND LONGITUDINALLY FROM THE EDGE OF THE FENESTRATION TO THE NEAREST FULL-HEIGHT WALL, OR UP TO 0.5 TIMES THE HEIGHT FROM THE FLOOR TO THE TOP OF THE FENESTRATION, WHICHEVER IS LESS, AS INDICATED IN FIGURE C405.2.4.2(1).
2.WHERE THE FENESTRATION IS LOCATED IN A ROOFTOP MONITOR, THE PRIMARY SIDELIT DAYLIGHT ZONE SHALL EXTEND LATERALLY TO THE NEAREST OBSTRUCTION THAT IS TALLER THAN 0.7 TIMES THE CEILING HEIGHT, OR UP TO 1.0 TIMES THE HEIGHT FROM THE FLOOR TO THE BOTTOM OF THEFENESTRATION, WHICHEVER IS LESS, AND LONGITUDINALLY FROM THE EDGE OF THE FENESTRATION TO THE NEAREST OBSTRUCTION THAT IS TALLER THAN 0.7 TIMES THE CEILING HEIGHT, OR UP TO 0.25 TIMES THE HEIGHT FROM THE FLOOR TO THE BOTTOM OF THE FENESTRATION, WHICHEVERIS LESS, AS INDICATED IN FIGURES C405.2.4.2(2) AND C405.2.4.2(3).
3.WHERE THE FENESTRATION IS LOCATED IN A WALL, THE SECONDARY SIDELIT DAYLIGHT ZONE IS DIRECTLY ADJACENT TO THE PRIMARY SIDELIT DAYLIGHT ZONE AND SHALL EXTEND LATERALLY TO 2.0 TIMES THE HEIGHT FROM THE FLOOR TO THE TOP OF THE FENESTRATION OR TO THE NEAREST FULL HEIGHT WALL, WHICHEVER IS LESS, AND LONGITUDINALLY FROM THE EDGE OF THE FENESTRATION TO THE NEAREST FULL HEIGHT WALL, OR UP TO 0.5 TIMES THE HEIGHT FROM THE FLOOR TO THE TOP OF THE FENESTRATION, WHICHEVER IS LESS, AS INDICATED IN FIGURE C405.2.4.2(1).
4.THE AREA OF THE FENESTRATION IS NOT LESS THAN 24 SQUARE FEET (2.23 M2).
5.THE DISTANCE FROM THE FENESTRATION TO ANY BUILDING OR GEOLOGICAL FORMATION THAT WOULD BLOCK ACCESS TO DAYLIGHT IS GREATER THAN ONE-HALF OF THE HEIGHT FROM THE BOTTOM OF THE FENESTRATION TO THE TOP OF THE BUILDING OR GEOLOGIC FORMATION.
6.THE VISIBLE TRANSMITTANCE OF THE FENESTRATION IS NOT LESS THAN 0.20.
7.THE PROJECTION FACTOR (DETERMINED IN ACCORDANCE WITH EQUATION 4-4) FOR ANY OVERHANGING PROJECTION THAT IS SHADING THE FENESTRATION IS NOT GREATER THAN 1.0 FOR FENESTRATION ORIENTED 45 DEGREES OR LESS FROM TRUE NORTH AND NOT GREATER THAN 1.5 FOR ALL OTHER ORIENTATIONS.

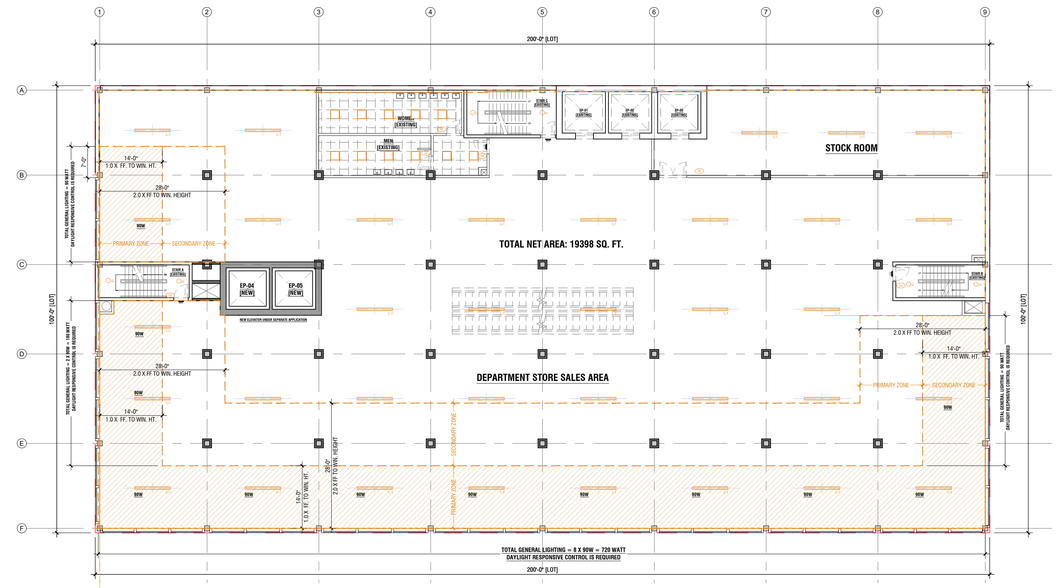


PRIMARY AND SECONDARY SIDELIT DAYLIGHT ZONE DIAGRAM
AS PER ECC FIGURE C405.2.4.2

LIGHTING SCHEDULE - GROUND FLOOR - PARTIAL

TAG	SYMBOL	LOCATION	WATTS	COUNT	TOTAL WATTAGE
L1		SEE PLAN, OPEN CEILING	90	3	270
				TOTAL:	270

1 LIGHTING ENERGY ANALYSIS - GROUND FL - PARTIAL
SCALE: 1/16" = 1'-0"

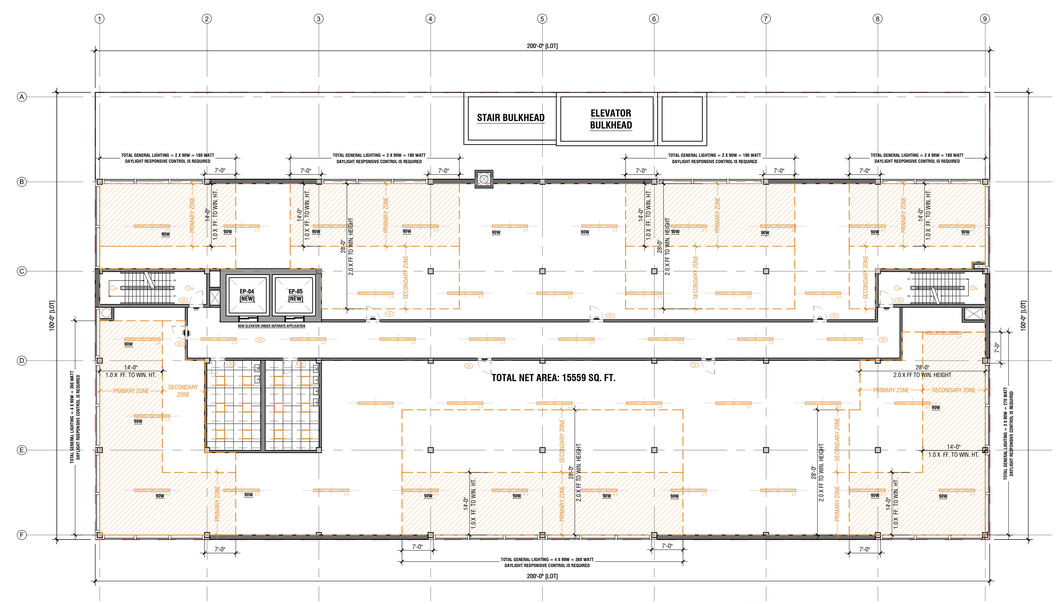


PRIMARY AND SECONDARY SIDELIT DAYLIGHT ZONE DIAGRAM
AS PER ECC FIGURE C405.2.4.2

LIGHTING SCHEDULE - 3RD FLOOR

TAG	SYMBOL	LOCATION	WATTS	COUNT	TOTAL WATTAGE
L1		SEE PLAN, OPEN CEILING	90	35	3150
L2		RESTROOMS	20	11	220
L3		STAIRWAY	25	6	150
				TOTAL:	3520

2 LIGHTING ENERGY ANALYSIS - 3RD FLOOR
SCALE: 1/16" = 1'-0"



PRIMARY AND SECONDARY SIDELIT DAYLIGHT ZONE DIAGRAM
AS PER ECC FIGURE C405.2.4.2

LIGHTING SCHEDULE - 4TH & 5TH FLOOR

TAG	SYMBOL	LOCATION	WATTS	COUNT	TOTAL WATTAGE
L1		SEE PLAN, OPEN CEILING	90	44	3960
L2		RESTROOMS	20	12	240
L3		STAIRWAY	25	4	100
				TOTAL:	4300

3 LIGHTING ENERGY ANALYSIS - 4TH & 5TH FLOOR
SCALE: 1/16" = 1'-0"

OWNER:

ARCHITECT :

MEP ENGINEER :

STRUCTURAL ENGINEER :

PROJECT:

CASE STUDY 02
VERTICAL ENLARGEMENT

DOB NOW JOB NUMBER:

DOB APPROVAL STAMP:

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