PROPOSED MIXED USE

30 THORN STREET,



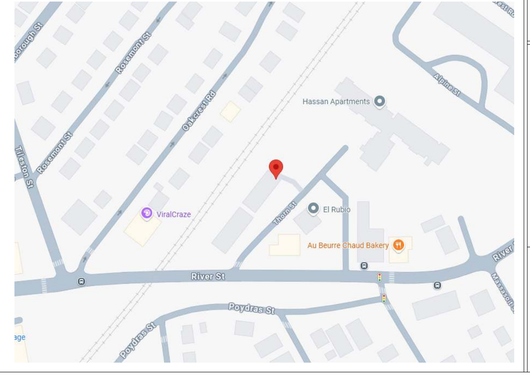
GROSS AREA (FAR)	
Level	Area
GROUND FLOOR	1426 SF
SECOND FLOOR	7435 SF
THIRD FLOOR	7435 SF
FOURTH FLOOR	7435 SF
FIFTH FLOOR	7435 SF
SIXTH FLOOR	7435 SF
Total	38601 SF

Unit Area Schedule				
Name	Comments	Area	Count	Level
SECOND FLOOR				
UNIT 201	3 BED 1 BA GROUP 2	834 SF	1	SECOND FLOOR
UNIT 202	3 BED 1 BA	867 SF	1	SECOND FLOOR
UNIT 203	3 BED 1 BA	903 SF	1	SECOND FLOOR
UNIT 204	1 BED 1 BA HEARING/IMPAIRED	636 SF	1	SECOND FLOOR
UNIT 205	3 BED 1 BA	861 SF	1	SECOND FLOOR
UNIT 206	STUDIO	415 SF	1	SECOND FLOOR
UNIT 207	1 BED 1 BA	537 SF	1	SECOND FLOOR
UNIT 208	3 BED 1 BA	829 SF	1	SECOND FLOOR
THIRD FLOOR				
UNIT 301	3 BED 1 BA	834 SF	1	THIRD FLOOR
UNIT 302	3 BED 1 BA	867 SF	1	THIRD FLOOR
UNIT 303	3 BED 1 BA GROUP 2	903 SF	1	THIRD FLOOR
UNIT 304	1 BED 1 BA	636 SF	1	THIRD FLOOR
UNIT 305	3 BED 1 BA	861 SF	1	THIRD FLOOR
UNIT 306	STUDIO	415 SF	1	THIRD FLOOR
UNIT 307	1 BED 1 BA	537 SF	1	THIRD FLOOR
UNIT 308	3 BED 1 BA	829 SF	1	THIRD FLOOR
FOURTH FLOOR				
UNIT 401	3 BED 1 BA	834 SF	1	FOURTH FLOOR
UNIT 402	3 BED 1 BA	867 SF	1	FOURTH FLOOR
UNIT 403	3 BED 1 BA	903 SF	1	FOURTH FLOOR
UNIT 404	1 BED 1 BA	636 SF	1	FOURTH FLOOR
UNIT 405	3 BED 1 BA	861 SF	1	FOURTH FLOOR
UNIT 406	STUDIO	415 SF	1	FOURTH FLOOR
UNIT 407	1 BED 1 BA	537 SF	1	FOURTH FLOOR
UNIT 408	3 BED 1 BA	829 SF	1	FOURTH FLOOR
FIFTH FLOOR				
UNIT 501	3 BED 1 BA	834 SF	1	FIFTH FLOOR
UNIT 502	3 BED 1 BA	867 SF	1	FIFTH FLOOR
UNIT 503	3 BED 1 BA	903 SF	1	FIFTH FLOOR
UNIT 504	1 BED 1 BA	636 SF	1	FIFTH FLOOR
UNIT 505	3 BED 1 BA	861 SF	1	FIFTH FLOOR
UNIT 506	STUDIO	415 SF	1	FIFTH FLOOR
UNIT 507	1 BED 1 BA	537 SF	1	FIFTH FLOOR
UNIT 508	3 BED 1 BA	829 SF	1	FIFTH FLOOR
SIXTH FLOOR				
UNIT 601	3 BED 1 BA	834 SF	1	SIXTH FLOOR
UNIT 602	3 BED 1 BA	867 SF	1	SIXTH FLOOR
UNIT 603	3 BED 1 BA	903 SF	1	SIXTH FLOOR
UNIT 604	1 BED 1 BA	636 SF	1	SIXTH FLOOR
UNIT 605	3 BED 1 BA	861 SF	1	SIXTH FLOOR
UNIT 606	STUDIO	415 SF	1	SIXTH FLOOR
UNIT 607	1 BED 1 BA	537 SF	1	SIXTH FLOOR
UNIT 608	3 BED 1 BA	829 SF	1	SIXTH FLOOR
Grand total: 40				

SOIL TESTING

NOTE: REFER TO THE GEOTECHNICAL REPORT DATED JULY 24, 2018 BY McPHAIL ASSOCIATES, LLC AT 2269 MASSACHUSETTS AVENUE, CAMBRIDGE, MA 02140.
(617) 868-1420

LOCUS MAP



Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

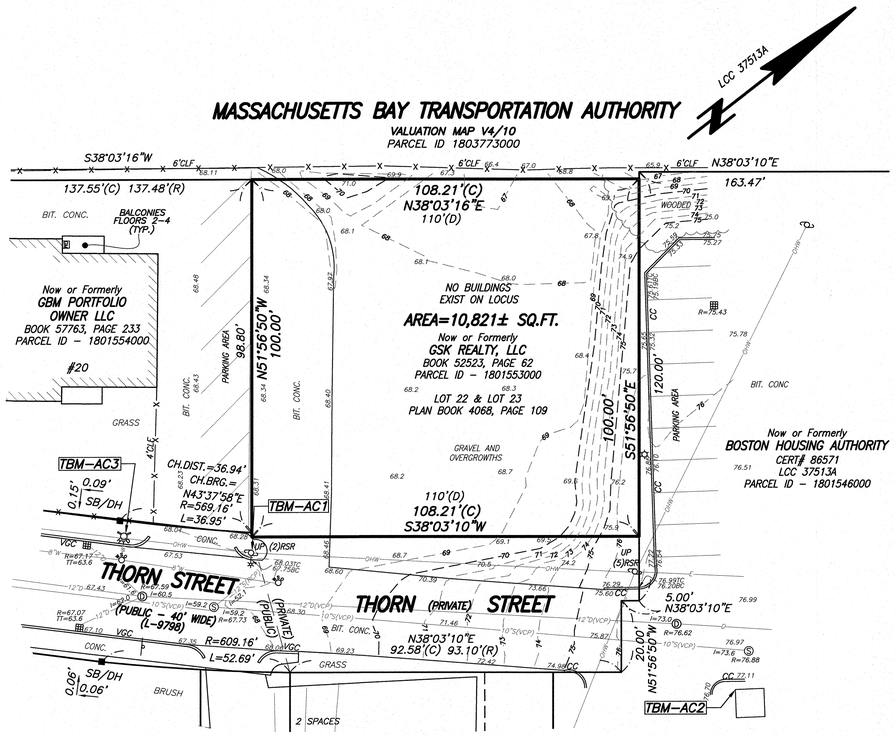
Project No: 2025014
Scale:
Date: 01-07-2026
Drawn By: PM

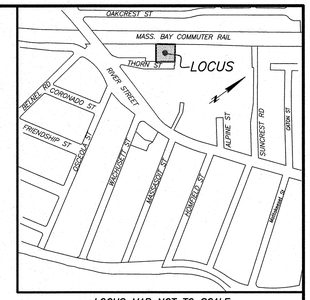
Drawing Name

COVER SHEET

Sheet No.

A-0.00





LOCUS MAP NOT TO SCALE

REFERENCES

SUFFOLK COUNTY REGISTRY OF DEEDS
BOOK 7874 PAGE 364
BOOK 4068 PAGE 108

CITY OF BOSTON ENGINEERING DEPARTMENT
L-9798 (THORN STREET)

FIELD BOOK 1121 PAGES 102-109
FIELD BOOK 1124 PAGES 74-97

COMMONWEALTH OF MASSACHUSETTS LAND COURT
LCC 37513A
LCC 23178A

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY LAYOUT NO. 8165

NOTES:

1) BENCH MARK INFORMATION: CITY BENCH MARK

BENCH MARK USED: #10 THORN STREET LEFT OUTER CORNER OF STONE STEP.
ELEVATION = 71.57

TEMPORARY BENCH MARKS SET: TBM-AC1: NAIL SET IN UTILITY POLE ON THE NORTHWESTERLY SIDELINE OF THORN STREET AT #20 THORN STREET.
ELEVATION = 69.21

TBM-AC2: MAG NAIL SET ON THE NORTHWEST CORNER OF CONCRETE TRANSFORMER PAD AT THE NORTHEAST END OF THORN STREET.
ELEVATION = 78.31

TBM-AC3: RIGHT FRONT HYDRANT BOLT OVER MAIN OUTLET AT #20 THORN STREET.
ELEVATION = 69.85

2) ELEVATIONS REFER TO BOSTON CITY BASE

3) CONTOUR INTERVAL EQUALS ONE (1) FOOT.

4) BY GRAPHIC PLOTTING ONLY, THE PARCEL SHOWN HEREON LIES WITHIN A ZONE "X" (UNSHADED), AN AREA OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD, AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A) FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR SUFFOLK COUNTY, MASSACHUSETTS, MAP NUMBER 25025C0088G, CITY OF BOSTON COMMUNITY NUMBER 250286, PANEL NUMBER 0088G, HAVING AN EFFECTIVE DATE OF SEPTEMBER 25, 2009.

5) THERE WAS NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.

6) TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES.

7) NO PARKING SPACES WERE OBTAINED WHILE PERFORMING THIS SURVEY.

LEGEND

(S)	SEWER MANHOLE
(D)	DRAIN MANHOLE
▦	CATCH BASIN
	WATER SHUT OFF
	HYDRANT
⊠	BOSTON WATER VALVE
	GAS SHUT OFF
▣	GAS METER
	UTILITY POLE W/LIGHT
	LIGHT POLE
	GUY POLE
•	BOLLARD
	FLOODLIGHT
•GP	GATE POST
■	BOUND FOUND
	HANDICAP RAMP
ENT.	ENTRANCE
TYP.	TYPICAL
VGC	VERTICAL GRANITE CURB
(C)	CALCULATED
(R)	RECORD
CLF	CHAIN LINK FENCE
BIT.	BITUMINOUS
CONC.	CONCRETE
SB	STONE BOUND
DH	DRILL HOLE
TC	TOP OF CURB
BC	BOTTOM OF CURB
R=	RIM ELEVATION
I=	INVERT ELEVATION
TT=	TOP OF TRAP ELEVATION
X X	CHAIN LINK FENCE
OHW	OVERHEAD WIRE
D	DRAIN
E	ELECTRIC
G	GAS
S	SEWER
W	WATER
12"D(CI)	PIPE SIZE AND MATERIAL
VCP	VITRIFIED CLAY PIPE

I CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY AND THE LATEST PLANS AND DEEDS OF RECORD.

COMMONWEALTH OF MASSACHUSETTS
DAMIEN J. RAFFLE No.49629 REGISTERED PROFESSIONAL LAND SURVEYOR

FOR FELDMAN LAND SURVEYORS

DAMIEN J. RAFFLE, PLS (MA# 49629)
draffle@feldmansurveyors.com

11/20/2018
DATE

EXISTING CONDITIONS SURVEY
30 THORN STREET
BOSTON, MASS.

FELDMAN LAND SURVEYORS
152 HAMPDEN STREET
BOSTON, MASS. 02119
PHONE: (617)357-9740
www.feldmansurveyors.com

MAY 15, 2017

FELDMAN LAND SURVEYORS

20 0 10 20 40 80

SCALE: 1"=20'

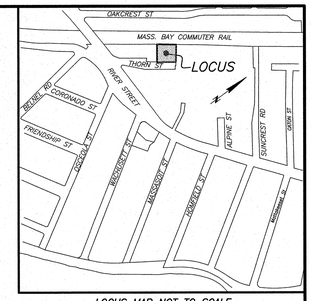
RESEARCH JBD	FIELD CHIEF DS	PROJ MGR DJR	APPROVED DJR	SHEET NO. 1 OF 1
CALC JBD	CADD JBD	FIELD CHECKED	CRD FILE 15601	JOB NO. 15601

FILENAME: S:\PROJECTS\15600's\15601\DWG\SUBMITTED\15601-EX(2017-06-05).dwg

NOTES:

1) BY GRAPHIC PLOTTING ONLY, THE PARCEL SHOWN HEREON LIES WITHIN A ZONE "X" (UNSHADED), AN AREA OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD, AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A) FLOOD INSURANCE RATE MAP (F.I.R.M.) FOR SUFFOLK COUNTY, MASSACHUSETTS, MAP NUMBER 25025C0088G, CITY OF BOSTON COMMUNITY NUMBER 250286, PANEL NUMBER 0088G, HAVING AN EFFECTIVE DATE OF SEPTEMBER 25, 2009.

2) PROPOSED BUILDING UNIT FROM PLAN ENTITLED "GROUND FLOOR PLAN – 30 THORN STREET, HYDE PARK, MA 02136," DATED APRIL 24, 2018 AND PREPARED BY EMBARC STUDIO, LLC.

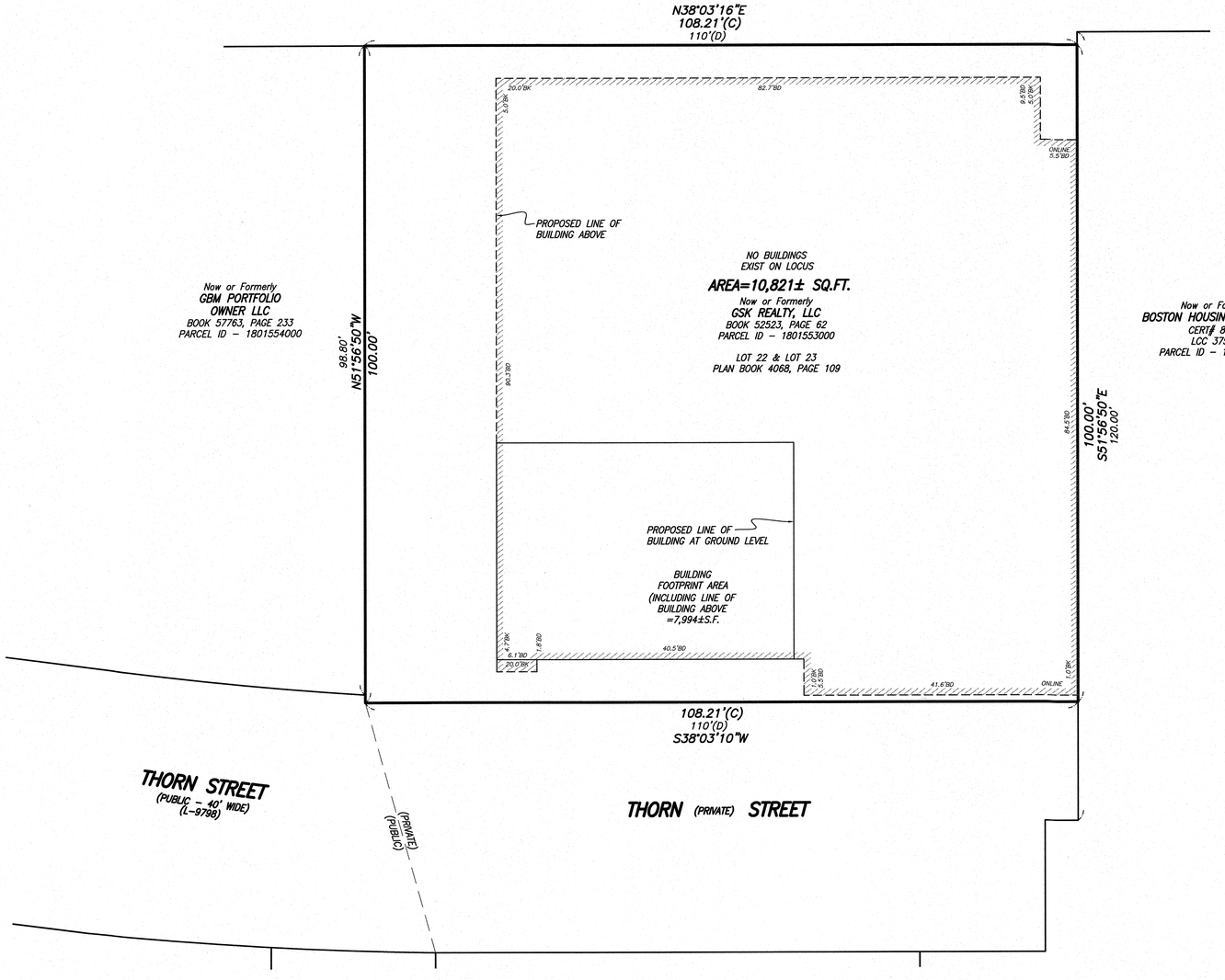


LOCUS MAP NOT TO SCALE

LCC 37513A

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

VALUATION MAP V4/10
PARCEL ID 1803773000



I CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY AND THE LATEST PLANS AND DEEDS OF RECORD.

COMMONWEALTH OF MASSACHUSETTS
DAMIEN J. RAFFLE No.49629 REGISTERED PROFESSIONAL LAND SURVEYOR

FOR FELDMAN LAND SURVEYORS

DAMIEN J. RAFFLE, PLS (MA# 49629) — DATE 4/30/2018
draffle@feldmansurveyors.com

PLOT PLAN
30 THORN STREET
BOSTON, MASS.

FELDMAN LAND SURVEYORS
152 HAMPDEN STREET
BOSTON, MASS. 02119

APRIL 30, 2018
PHONE: (617)357-9740
www.feldmansurveyors.com

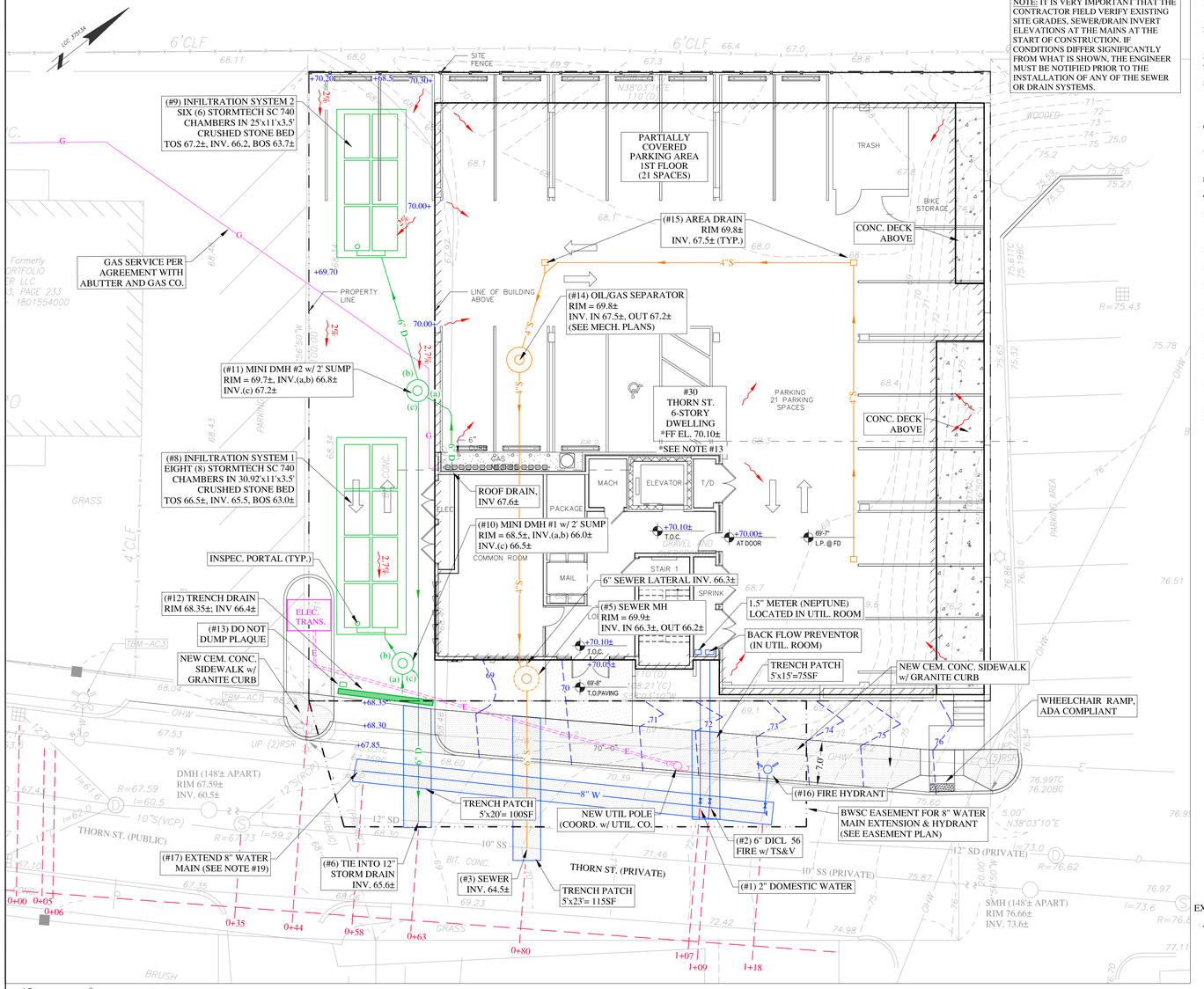
FELDMAN LAND SURVEYORS

10 0 5 10 20 40

SCALE: 1"=10'

RESEARCH JBD	FIELD CHIEF DS	PROJ MGR DJR	APPROVED DJR	SHEET NO. 1 OF 1
CALC JBD	CADD JBD	FIELD CHECKED	CRD FILE 16149	JOB NO. 16149

FILENAME: S:\PROJECTS\16100s\16149\DWG\SUBMITTED\16149-PP(2018-04-30).dwg



NOTE: IT IS VERY IMPORTANT THAT THE CONTRACTOR FIELD VERIFY EXISTING SITE GRADES, SEWER/DRAIN INVERT ELEVATIONS AT THE MAINS AT THE START OF CONSTRUCTION. IF CONDITIONS DIFFER SIGNIFICANTLY FROM WHAT IS SHOWN, THE ENGINEER MUST BE NOTIFIED PRIOR TO THE INSTALLATION OF ANY OF THE SEWER OR DRAIN SYSTEMS.

GENERAL NOTES

1. THIS PLAN HAS BEEN PREPARED FOR APPROVAL BY THE BWSC FOR THE PROPOSED WATER, FIRE SERVICE, SEWER SERVICE AND DRAIN SERVICES. FOR ADDITIONAL INFORMATION ABOUT THE PROPOSED BUILDING PLEASE SEE THE ARCHITECTURAL DRAWINGS.
2. THE APPLICANT FOR THIS PROPERTY IS:
   OLEG URITSKY, 617.968.6810
   ONE BEACON ST., 15th FLOOR, BOSTON, MA 02108
3. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF BWSC, DPW AND BTD
4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS PRIOR TO CONSTRUCTION.
5. THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES TO EXISTING UTILITIES. ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON RECORD INFORMATION.
6. BOSTON WATER AND SEWER IS NOT PART OF DIG-SAFE. MARKING OF BWSC FACILITIES SHALL BE PERFORMED BY BWSC STAFF. REQUEST FOR MARKINGS CAN BE MADE BY CALLING THE BWSC FIELD SERVICES DEPARTMENT AT 617-989-7248. CONTACT DIG-SAFE AT 1-888-344-7233 AT LEAST 72 HRS PRIOR TO EXCAVATION.
7. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CUT AND CAPPED AT THE MAIN. THE CONTRACTOR IS RESPONSIBLE FOR INVESTIGATING AND VERIFYING THE LOCATION OF EACH EXISTING SERVICE CONNECTION, EVEN IF SAID LOCATION IS NOT SHOWN ON THIS PLAN.
8. THE CONTRACTOR SHALL SUPPLY ALL PIPING AND FITTINGS NECESSARY FOR THE UTILITY SERVICE CONNECTIONS, AND SHALL PERFORM ALL WET AND DRY TAPS AS PART OF THE CONTRACT.
9. NEW WATER SERVICES SHALL BE LEFT SHUT OFF AT THE MAIN ON THE STREET UNTIL ACTIVATED BY THE BOSTON WATER AND SEWER COMMISSION.
10. UTILITIES SHOWN ON THIS PLAN ARE TO THE EXTERIOR OF THE BUILDING FOUNDATION ONLY. UTILITIES THROUGH THE FOUNDATION AND INSIDE THE BUILDING ARE THE RESPONSIBILITY OF THE LICENSED PLUMBER OR MECHANICAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND RECORDING THE EXACT LOCATION OF EACH UTILITY CONNECTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY BRACING ALL TRENCH AND FOUNDATION EXCAVATIONS TO PROTECT AGAINST CAVE-IN, DURING THE CONSTRUCTION.
12. THE RESPONSIBILITY OF MAINTENANCE OF THE SEWER, DRAIN AND WATER CONNECTION ON PRIVATE PROPERTY AND/OR PRIVATE WAYS SHALL REMAIN THAT OF THE OWNER.
13. FLOOR ELEVATIONS SHOWN ON THIS PLAN ARE APPROXIMATE AND MUST BE CONFIRMED BASED ON FIELD CONDITIONS AND THE ARCHITECTURAL PLANS. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OR ENGINEER.
14. CONTRACTOR SHALL FILE THE ROUGH CONSTRUCTION SIGN-OFF DOCUMENT FROM THE CITY OF BOSTON'S INSPECTIONAL SERVICES DEPARTMENT, AS A PREREQUISITE FOR FILING A GENERAL SERVICE APPLICATION WITH THE BOSTON WATER & SEWER COMMISSION FOR NEW CONSTRUCTION.
15. THE CONTRACTOR SHALL COORDINATE FIELD INSPECTIONS WITH THE ENGINEER AND PROVIDE AS-BUILT DRAWINGS TO BWSC.
16. THE CONTRACTOR SHALL VERIFY RIM/INV AND EXIST. IT IS THE CONTRACTORS RESPONSIBILITY TO VALIDATE THE GRADES SHOWN. IF EXIST. CONDITIONS ARE SIGNIFICANTLY DIFFERENT FROM WHAT IS SHOWN THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO INSTALLING SYSTEMS.
17. THE CONTRACTOR SHALL COORDINATE ELECTRICAL, GAS AND COMMUNICATION SERVICES WITH PRIVATE UTILITY COMPANIES FOR FINAL DEMARCATIONS AND DETAILS. PRIVATE UTILITIES SHOWN HERE ARE FOR DESIGN INTENT ONLY.
18. THE FINISHED FLOOR ELEVATIONS (FFE) IS TO BE HIGHER THAN ANY ADJACENT PUBLIC SIDEWALK.
19. THE CONTRACTOR SHALL PERFORM TEST PITS TO DETERMINE EXACT LOCATION OF EXISTING WATER MAIN. THE 8" MAIN SHALL BE EXTENDED APPROX. 65' WITH NEW FIRE HYDRANT. ANY CHANGES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO COMMENCING WITH THE WORK.

DRAINAGE CALCULATIONS & LAYOUT NOTES:
IMPERVIOUS SURFACES:
7,400(Roof area) + 3,421(paved) = 10,821 SF

DESIGN STORMS: 1" – OVER IMPERVIOUS AREA
STORAGE REQUIRED: (10,821x1"/12) = 902 CF

PROP. STORAGE:
INFILTRATION SYSTEM #1
4 Chambers= 30.92' Base Length
2 Rows = 11.00' Base Width, 3.50' Field Height
8 Chambers 30.0% Voids = 245.2 cf Stone Storage
Chamber Storage + Stone Storage = 618.3 CF

INFILTRATION SYSTEM #2
3 Chambers = Base Length
2 Rows = 11.00' Base Width, 4.00' Field Height
6 Chambers 30.0% Voids
Chamber Storage + Stone Storage = 526.4 CF

TOTAL STORAGE 902+526=1428 CF
NOTE: PROPOSED STORM DRAINAGE SYSTEM COMPLETELY STORES THE 1" (24hr) STORM EVENT.

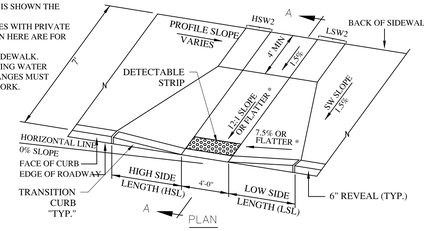
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WATER ACCOUNT: NEW Meter: NEW

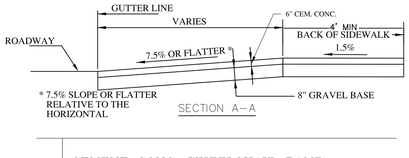
BOSTON WATER AND SEWER COMMISSION
Reviewed and approved as to proposed connections(s) to existing Water and Sewer facilities as shown, for Issue of Building Permit Only. Additional Permits must be obtained from BWSC prior to Connection to BWSC facilities. Site Plans are valid for a period of one (1) year from date of approval.

JOHN P. SULLIVAN, JR. P.E.
Chief Engineer

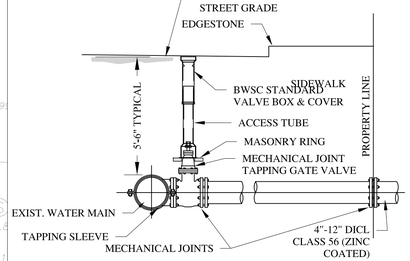
BOSTON WATER AND SEWER COMMISSION
Cross Connection
Approval: _____ Date: _____
Discharge Enforcement
Approval: _____ Date: _____

RESERVED FOR BWSC USE ONLY
PEAK WATER DEMAND = 81 GPM
SEWER: 7,150 GPD (65 BED x 110 GPD)



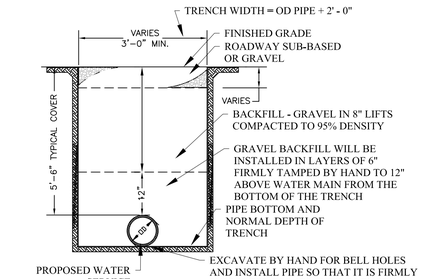


CEMENT CONC. WHEELCHAIR RAMP
NOT TO SCALE



NOTES:
- CONCRETE THRUST BLOCK TO BE USED ONLY WHERE IT WILL BEAR ON UNDISTURBED EARTH.
- USE RESTRAINED JOINT FITTINGS OR TIE RODS WHERE CONCRETE THRUST BLOCK IS UNACCEPTABLE.
- SIZE OF BLOCK OR MEGALUG TO BE DESIGNED FOR SPECIFIC CONDITIONS.

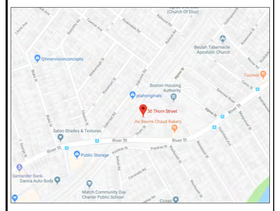
TYPICAL WATER PIPE CONNECTION w/ TAPPING SLEEVE & GATE VALVE
NOT TO SCALE



WATER PIPE EXCAVATION IN SOIL
NOT TO SCALE

Civil Site Plan

30 Thorn St.
Hyde Park, MA



ALL WATER, SEWER AND DRAIN SERVICE CONNECTIONS TO BOSTON WATER AND SEWER COMMISSION FACILITIES MUST BE PERFORMED BY A BONDED DRAIN LAYER LICENSED BY THE BOSTON WATER AND SEWER COMMISSION.

MATERIALS:
DRAIN LINES SHALL BE 6" SDR35 w/ 2' MIN. COVER OVER PIPE. 1% SLOPE MIN.
SEWER SERVICE: 6" (SDR 35) 2% SLOPE MIN.
WATER MAIN: 8" DICL (MINIMUM OF 5.5 FEET BELOW GRADE) ZINC COATED
WATER DOMESTIC: 2" COPPER (TYPE K) (MINIMUM OF 5.5 FEET BELOW GRADE)
FIRE: 6" DICL (MINIMUM OF 5.5 FEET BELOW GRADE) ZINC COATED

INSPECTION CHECK LIST

1. 2" DOMESTIC WATER
   INSPECTOR: _____ DATE: _____
2. 6" FIRE SERVICE
   INSPECTOR: _____ DATE: _____
3. 6" SEWER LATERAL
   INSPECTOR: _____ DATE: _____
4. SEWER DYE TEST
   INSPECTOR: _____ DATE: _____
5. SEWER MH
   INSPECTOR: _____ DATE: _____
6. 6" DRAIN LATERAL
   INSPECTOR: _____ DATE: _____
7. DRAIN DYE TEST
   INSPECTOR: _____ DATE: _____
8. INFILTRATION SYSTEM #1
   INSPECTOR: _____ DATE: _____
9. INFILTRATION SYSTEM #2
   INSPECTOR: _____ DATE: _____
10. MINI DMH #1
    INSPECTOR: _____ DATE: _____
11. MINI DMH #2
    INSPECTOR: _____ DATE: _____
12. TRENCH DRAIN
    INSPECTOR: _____ DATE: _____
13. DO NOT DUMP PLAQUE
    INSPECTOR: _____ DATE: _____
14. OIL/GAS SEPARATOR
    INSPECTOR: _____ DATE: _____
15. FLOOR DRAINS
    INSPECTOR: _____ DATE: _____
16. FIRE HYDRANT
    INSPECTOR: _____ DATE: _____
17. 8" W WATER MAIN
    INSPECTOR: _____ DATE: _____

AS-BUILT PREPARATION FEE IS REQUIRED

REFERENCES:
SURVEY: Feldman Land Surveyors
ARCHITECT: Embare Studio
APPLICANT: OLEG URITSKY, 617.968.6810
ONE BEACON ST., 15th FLOOR, BOSTON, MA 02108

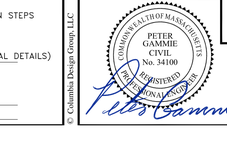
No.	Date	Comment
#1	7-19-19	BWSC Comments
#2	8-07-19	BWSC Comments
#3	5-20-25	BWSC Easement

Columbia Design Group, LLC
Consulting Engineers
14 Upham Avenue
Boston, MA 02125
(T) 617.506.1474 (F) 617.507.7740

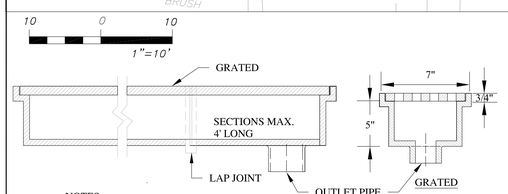
BWSC SITE PLAN
#19216

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May 08, 2019	1" = 10'
Project No.:	Drawing by:
2019-113	PG

C-1
Sheet 1 of 2

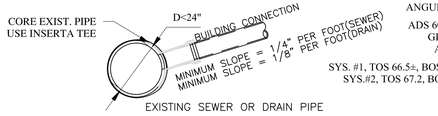


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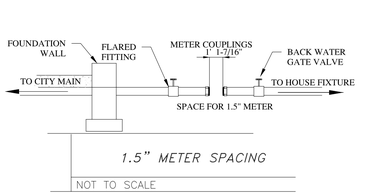


NOTES:
1. HEAVY DUTY
2. CLOSED ENDS
STANDARD 4" PVC SDR OUTLET AT END OF DRAIN
NEENAH R-499-A2 SERIES OR APPROVED EQUIVALENT

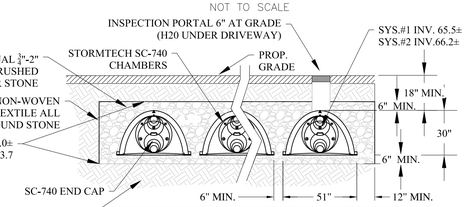
TRENCH DRAIN w/ GRATED FRAME
NOT TO SCALE



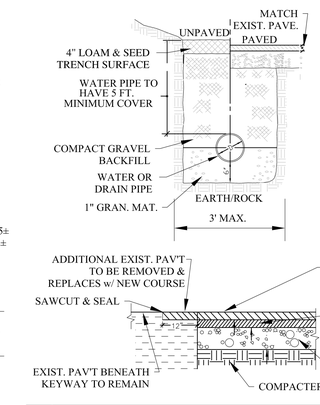
SEWER OR DRAIN SERVICE TO EXISTING MAIN – INSERTA TEE
NOT TO SCALE



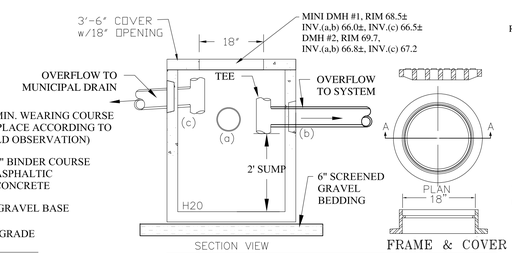
1.5" METER SPACING
NOT TO SCALE



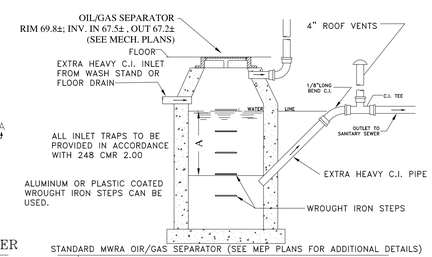
STORMTECH SC 740 SECTION (H–20 LOADING)
NOT TO SCALE



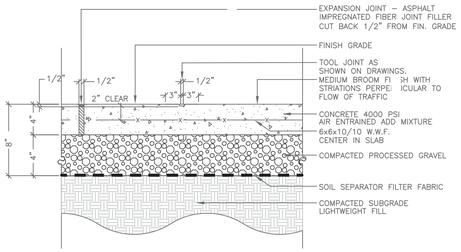
PIPE EXCAVATION & TRENCH PATCH
NOT TO SCALE



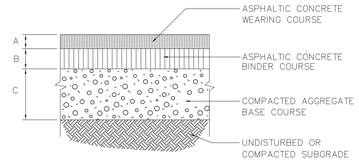
PRECAST CONCRETE MINI CB
NOT TO SCALE



APPROVED OIL & GREASE SEPARATOR DETAIL
NOT TO SCALE

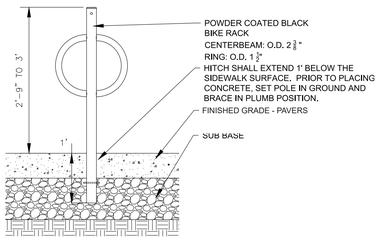


1 Scored Concrete Walk Section

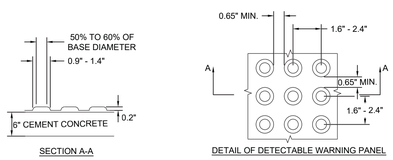


	THICKNESS (INCHES)	
	WALKS	ROADS & DRIVES
A	N/A	1 1/2"
B	N/A	2 1/2"
C	N/A	8"

2 Asphalt Drive Section

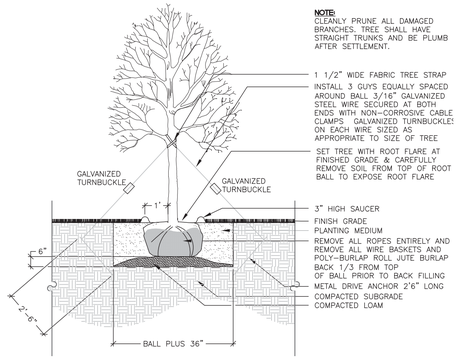


3 Bike Rack



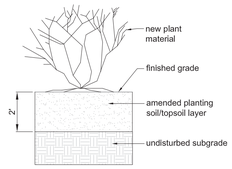
NOTES:
1. DETECTABLE WARNING PANELS SHALL BE PERMANENTLY APPLIED TO THE PEDESTRIAN RAMP.
2. DETECTABLE WARNING PANELS SHALL MATCH THE WIDTH OF THE PEDESTRIAN RAMP.
3. DETECTABLE WARNING PANELS SHALL BE CAST IRON.
4. DETECTABLE WARNING PANELS SHALL BE FEDERAL YELLOW, CONFORMING TO THE REQUIREMENTS OF FEDERAL NO. 33538, UNLESS OTHERWISE SPECIFIED BY PWD. IF BRICK RED COLOR IS REQUESTED BY PWD, IT SHALL CONFORM WITH RAL 2001.
5. DETECTABLE WARNING PANELS SHALL BE INSTALLED PER THE MANUFACTURERER'S RECOMMENDATIONS.

4 Detectable Warning Panels



NOTE:
1. TREE PIT TO BE A MINIMUM OF 24 SQUARE FEET.
2. PROVIDE 10' LONG X 3" SQ WOODEN STAKES EQUALLY SPACED, 3 PER TREE, 7' EXPOSED. DRIVE STAKES AT AN ANGLE AND DRAW VERTICAL WITH NYLON TREE TIE.
3. CONTRACTOR SHALL PERFORM PERCOLATION TEST ON SUB-GRADE PRIOR TO PLANTING. IF TEST IS NOT PASSING, CONTRACTOR SHALL ADJUST SUB-GRADE ACCORDINGLY.

5 Tree Planting Section



6 Plant Bed Section

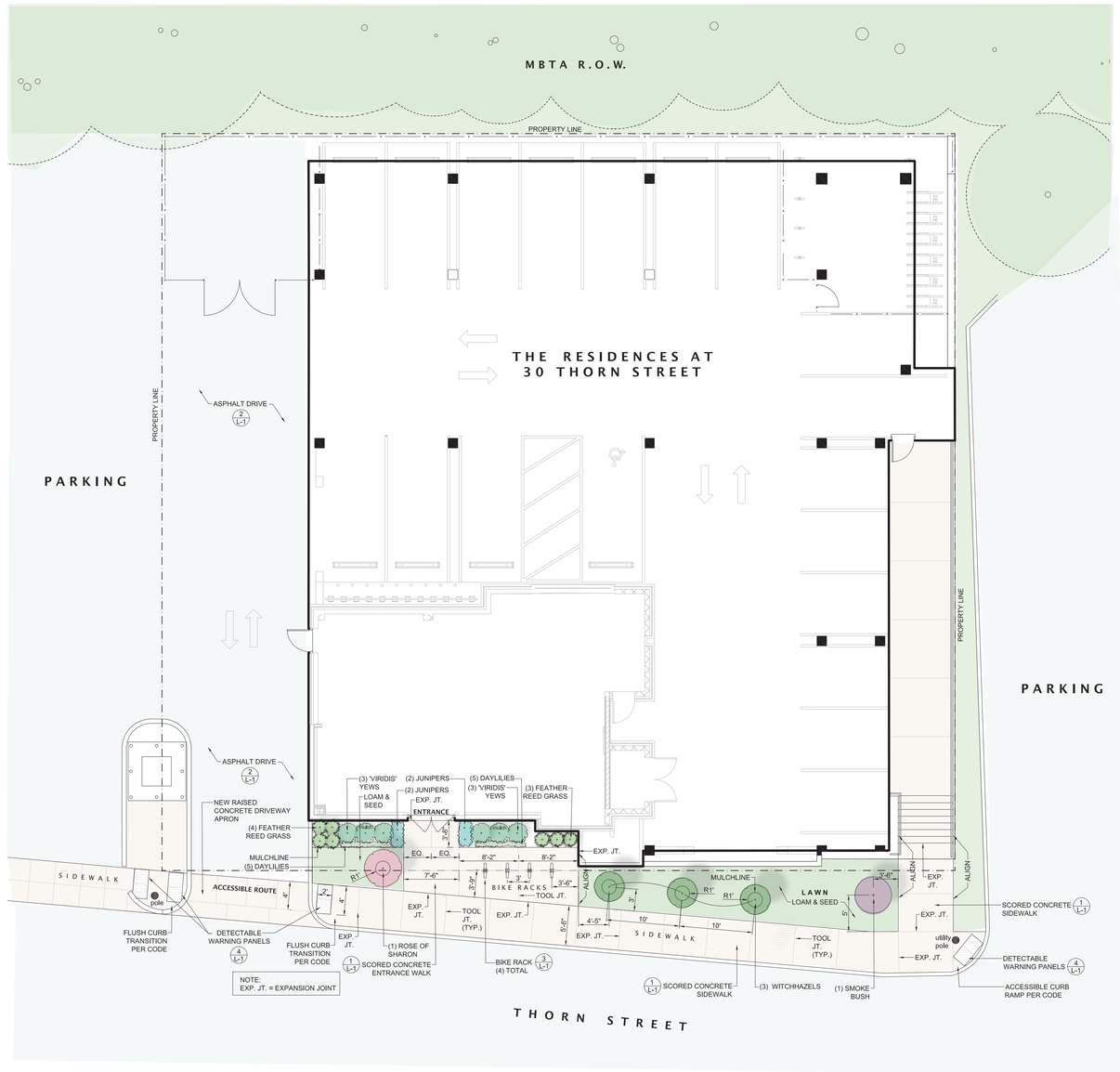
Plant List

NEW PLANTS

Quantity	Botanical Name	Common Name	Size	Notes
1	Cotinus coggygria 'Royal Purple'	Purple Smoke Bush	4'-5' HT.	B&B
7	Calamagrostis x 'Karl Foerster'	Feather Reed Grass	2"-2 1/2" Caliper	B&B
3	Hamamellis x 'Arnold's Promise'	Arnold's Promise Witchhazel	4'-5' HT.	B&B
10	Hemerocallis x 'Fulva'	Tall Daylily	1 Gallon	
1	Hibiscus syriascus 'Pink'	Pink Rose of Sharon	4'-5' HT.	B&B
4	Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper	3 Gallon	
6	Taxus x 'Viridis'	Viridis Yew	4'-5' HT.	B&B - 'Flushing' variety is an acceptable sub.

Note: Use matched specimens for yews

1/8"=1'-0"
0' 24'



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Landscape Architecture + Planning
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Cambridge, MA 02138 USA
617-460-7913
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30 Thorn Street | Hyde Park, Massachusetts

SITE LANDSCAPE PLAN L-1

July 31, 2025

LIST OF DRAWINGS

SHEET NO.	SHEET TITLE	BID SET 06-09-2025	PERMIT SET XX-XX-XXXX	CONST. SET XX-XX-XXXX
COVER SHEET AND DRAWING LIST				
A-0.00	COVER SHEET	X		
A-0.01	DRAWING LIST	X		
CIVIL				
	EXISTING CONDITIONS SURVEY	X		
	EXISTING CONDITIONS SURVEY	X		
	PLOT PLAN	X		
C-1	CIVIL SITE PLAN	X		
L-1	SITE LANDSCAPE PLAN	X		
	DETAILS	X		
ARCHITECTURAL				
A-0.XX	**GENERAL: NOTES, CODE SUMMARY, PROGRAMMING, MOCK-UP**			
A-0.02	GENERAL NOTES	X		
A-0.03	ABBREVIATIONS AND LEGENDS	X		
A-0.04	AXONOMETRIC VIEWS	X		
A-0.10	CODE SUMMARY	X		
A-0.11	LIFE SAFETY PLANS	X		
A-0.20	GROUND FLOOR EOS PLAN	X		
A-0.21	SECOND FLOOR EOS PLAN	X		
A-0.40	MOCK-UP	X		
A-0.41	MOCK-UP 3D VIEWS	X		
A-1.XX	**PLANS: SITE PLAN, FLOOR PLANS, RCP, EDGE OF SLAB PLANS**			
A-1.10	PROPOSED GROUND FLOOR PLAN	X		
A-1.10A	ENLARGED GROUND FLOOR PLAN	X		
A-1.11	PROPOSED SECOND FLOOR PLAN	X		
A-1.11A	ENLARGED SECOND FLOOR PLAN	X		
A-1.11B	ENLARGED SECOND FLOOR PLAN	X		
A-1.12	PROPOSED THIRD FLOOR PLAN	X		
A-1.12A	ENLARGED THIRD FLOOR PLAN	X		
A-1.12B	ENLARGED THIRD FLOOR PLAN	X		
A-1.13	PROPOSED FOURTH FLOOR PLAN	X		
A-1.13A	ENLARGED FOURTH FLOOR PLAN	X		
A-1.13B	ENLARGED FOURTH FLOOR PLAN	X		
A-1.14	PROPOSED FIFTH FLOOR PLAN	X		
A-1.14A	ENLARGED FIFTH FLOOR PLAN	X		
A-1.14B	ENLARGED FIFTH FLOOR PLAN	X		
A-1.15	PROPOSED SIXTH FLOOR PLAN	X		
A-1.15A	ENLARGED SIXTH FLOOR PLAN	X		
A-1.15B	ENLARGED SIXTH FLOOR PLAN	X		
A-1.16	PROPOSED ROOF PLAN	X		
A-1.20	RCP GROUND & SECOND FLOOR PLAN	X		
A-1.21	RCP THIRD & FOURTH FLOOR PLAN	X		
A-1.22	RCP FIFTH & SIXTH FLOOR PLAN	X		
A-2.XX	**ELEVATIONS: EXTERIOR ELEVATIONS**			
A-2.10	PROPOSED NORTH & SOUTH ELEVATIONS	X		
A-2.11	PROPOSED EAST & WEST ELEVATIONS	X		
A-3.XX	**SECTIONS: BUILDING SECTIONS, EXTERIOR WALL SECTIONS**			
A-3.00	BUILDING SECTIONS	X		
A-3.01	EXTERIOR WALL SECTIONS	X		
A-3.02	EXTERIOR WALL SECTIONS	X		
A-3.03	EXTERIOR WALL SECTIONS	X		
A-3.04	EXTERIOR WALL SECTIONS	X		
A-3.05	EXTERIOR WALL SECTIONS	X		

SHEET NO.	SHEET TITLE	BID SET 06-09-2025	PERMIT SET XX-XX-XXXX	CONST. SET XX-XX-XXXX
ARCHITECTURAL CONTINUED				
A-4.XX	**ENLARGED DRAWINGS: PLANS, STAIR/ELEVATOR SECTIONS, INTERIOR ELEVATIONS**			
A-4.00	ELEVATOR SECTION AND PLANS	X		
A-4.01	ELEVATOR SECTION AND DETAILS	X		
A-4.10	STAIR #1 SECTION AND PLANS	X		
A-4.11	STAIR #2 SECTION AND PLANS	X		
A-4.12	STAIR DETAILS	X		
A-4.13	STAIR DETAILS	X		
A-4.30	ENLAGED KITCHEN PLANS & ELEVATIONS	X		
A-4.40	GROUP 2 BATHROOM NOTES	X		
A-4.41	ENLARGED BATH PLANS & ELEVATIONS	X		
A-4.42	ENLARGED BATH PLANS & ELEVATIONS	X		
A-5.XX	**DETAILS: ASSEMBLY TYPES, EXTERIOR DETAILS, INTERIOR DETAILS**			
A-5.00	INTERIOR PARTITION TYPES	X		
A-5.01	INTERIOR PARTITION TYPES	X		
A-5.02	INTERIOR / EXTERIOR PARTITION TYPES	X		
A-5.03	FLOOR SLAB, FLOOR/CEILING, & ROOF/CEILING TYPES	X		
A-5.10	ENLARGED SECTION DETAILS	X		
A-5.11	ENLARGED SECTION DETAILS	X		
A-5.12	ENLARGED SECTION DETAILS	X		
A-5.13	ENLARGED SECTION AND DETAILS	X		
A-5.14	EXTERIOR PLAN DETAILS	X		
A-5.15	EXTERIOR AND INTERIOR PLAN DETAILS	X		
A-5.16	ROOF DETAILS	X		
A-5.17	ROOF DETAILS	X		
A-5.19	STOREFRONT DETAILS	X		
A-5.20	WINDOW DETAILS	X		
A-5.21	WINDOW FLASHING DETAILS	X		
A-5.22	EXTERIOR DOOR DETAILS	X		
A-5.23	INTERIOR DOOR DETAILS	X		
A-5.24	INTERIOR SECTION DETAILS	X		
A-5.25	INTERIOR PLAN DETAILS	X		
A-5.26	MEP SHAFT DETAILS	X		
A-5.27	FIRESTOPPING DETAILS	X		
A-5.28	SMOKE CURTAIN	X		
A-5.29	SMOKE CURTAIN	X		
A-5.30	KITCHEN BATH MILLWORK DETAILS	X		
A-5.31	KITCHEN CABINET DETAILS	X		
A-6.XX	**SCHEDULES AND DIAGRAMS: STOREFRONT, WINDOWS, DOORS, INTERIOR FINISHES**			
A-6.02	DOOR SCHEDULE AND ELEVATIONS	X		
A-6.03	WINDOW SCHEDULE AND ELEVATIONS	X		
A-6.04	FINISH SCHEDULE AND INTERIOR DETAILS	X		
A-7.XX	**3D VISUALS: RENDERINGS**			
A-7.00				
A-7.01				
STRUCTURAL				
S-0	STRUCTURAL NOTES	X		
S-0.1	GENERAL NOTES II	X		
S-1.1	FOUNDATION PLAN	X		
S-1.2	SECOND FLOOR FRAMING PLAN	X		
S-1.3	THIRD FLOOR FRAMING PLAN	X		
S-1.4	FOURTH FLOOR FRAMING PLAN	X		
S-1.5	FIFTH LEVEL FRAMING PLAN	X		
S-1.6	SIXTH LEVEL FRAMING PLAN	X		
S-1.7	ROOF FRAMING PLAN	X		
S-2.1	CONCRETE DETAILS I	X		
S-2.2	CONCRETE DETAILS II	X		
S-2.3	CONCRETE DETAILS III	X		
S-2.4	MISC. DETAILS	X		

SHEET NO.	SHEET TITLE	BID SET 06-09-2025	PERMIT SET XX-XX-XXXX	CONST. SET XX-XX-XXXX
STRUCTURAL CONTINUED				
S-3.1	TYPICAL STEEL DETAILS I	X		
S-3.2	TYPICAL STEEL DETAILS II	X		
S-3.3	TYPICAL STEEL DETAILS III	X		
S-3.4	TYPICAL STEEL DETAILS IV	X		
S-4.1	WOOD DETAILS I	X		
S-4.2	WOOD DETAILS II	X		
S-4.3	WOOD DETAILS III	X		
S-4.4	WOOD DETAILS III	X		
S-4.5	WOOD DETAILS V	X		
S-4.6	TYPICAL WOOD DETAILS VI	X		
S-4.7	WOOD DETAILS VII	X		
FIRE PROTECTION				
FP-1	GROUND FIRE PROTECTION PLAN	X		
FP-2	FIRE PROTECTION FLOOR PLAN	X		
FP-3	FIRE PROTECTION FLOOR PLAN	X		
FP-4	FIRE PROTECTION FLOOR PLAN	X		
FP-5	FIRE PROTECTION NOTES	X		
FP-6	FIRE PROTECTION DETAILS	X		
FP-7	FIRE PROTECTION DETAILS	X		
FP-8	FIRE PROTECTION DETAILS	X		
PLUMBING				
P-0	UNDERGROUND PLUMBING PLAN	X		
P-1	GROUND FLOOR PLUMBING PLAN	X		
P-2	PLUMBING FLOOR PLAN	X		
P-3	PLUMBING FLOOR PLAN	X		
P-4	PLUMBING FLOOR PLAN	X		
P-5	PLUMBING NOTES	X		
P-6	PLUMBING SCHEDULES	X		
P-7	PLUMBING DETAILS	X		
P-8	PLUMBING DETAILS	X		
P-9	PLUMBING DETAILS	X		
P-10	PLUMBING DETAILS	X		
HVAC				
H-1	GROUND FLOOR HVAC PLAN	X		
H-2	HVAC FLOOR PLAN	X		
H-3	HVAC FLOOR PLAN	X		
H-4	HVAC FLOOR PLAN	X		
ELECTRICAL				
E0.0	ELECTRICAL LEGEND	X		
E1.1	GROUND FLOOR POWER PLAN	X		
E1.2	POWER FLOOR PLAN, SECOND AND THIRD FLOOR	X		
E1.3	POWER FLOOR PLAN, FOURTH AND FIFTH FLOOR	X		
E1.4	POWER FLOOR PLAN, SIXTH FLOOR AND ROOF	X		
E2.1	GROUND FLOOR LIGHTING PLAN	X		
E2.2	LIGHTING FLOOR PLAN, SECOND AND THIRD FLOOR	X		
E2.3	LIGHTING FLOOR PLAN, FOURTH AND FIFTH FLOOR	X		
E2.4	LIGHTING FLOOR PLAN, SIXTH AND ROOF	X		
E3.0	POWER DETAILS	X		
E3.1	ELECTRICAL SCHEDULES	X		
E3.2	POWER RISER	X		
FIRE ALARM				
FA0.0	FIRE ALARM DETAILS	X		
FA1.1	GROUND FLOOR FIRE ALARM PLAN	X		
FA1.2	FIRE ALARM FLOOR PLAN	X		
FA1.3	FIRE ALARM FLOOR PLAN	X		
FA1.4	FIRE ALARM FLOOR PLAN, SIXTH FLOOR AND ROOF	X		

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

DRAWING LIST

Sheet No.

A-0.01

GENERAL NOTES:

CONTRACTOR RESPONSIBILITY-
CONTRACTOR IS SOLELY RESPONSIBLE FOR:

1. VIEWING SITE AND INCLUDING ANY SPECIAL CONDITIONS NECESSARY TO PERFORM THE WORK AS DESCRIBED IN THE DRAWINGS.
2. ESTABLISHING CONTROL OF THE SITE VIA SURVEY, AND LAYOUT.
3. OBTAINING AND PAYING FOR ALL PERMITS.
4. PAYING FOR ALL TEMPORARY UTILITIES AND FACILITIES.
5. CHECKING AND CONFIRMING ALL DIMENSIONS, AND LAYOUTS.
6. SCHEDULING AND SEQUENCING.
7. CONSTRUCTION MEANS, METHODS AND TECHNIQUES
8. MAINTAINING DRAWINGS AND PERMITS ON SITE.
9. JOB SITE SAFETY
10. COORDINATION BETWEEN TRADES, AND SUPPLIERS.
11. PROVIDE SCHEDULE TO OWNER AND ARCHITECT,
12. PROVIDE A SCHEDULE OF VALUES TO THE OWNER AND ARCHITECT.
13. TEMPORARY HEAT, ICE AND SNOWPLOWING IS THE RESPONSIBILITY OF THE CONTRACTOR.
14. SITE CLEANLINESS AND CONFORMANCE TO NFPA 241 REQUIREMENTS.
15. REPAIRING ANY WORK DAMAGED BY HIS FORCES WHILE PERFORMING THIS CONTRACT.
16. GIVING WARRANTY FOR HIS WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL COMPLETION.

REVIEW OF WORK BY DESIGNERS-

CONTRACTOR SHALL NOTIFY ARCHITECT BEFORE PROJECT STARTS.

CONTRACTOR SHALL NOTIFY ARCHITECT, ONE WEEK PRIOR TO:

17. POURING CONCRETE
18. INSULATING
19. INSTALLING DRYWALL
20. FINAL INSPECTION

SHOP DRAWINGS-

ALL SHOP DRAWINGS SHALL BE SUBMITTED 30 DAYS AFTER CONTRACT AWARD.

GENERAL CONTRACTOR SHALL APPROVE SHOP DRAWINGS, PRIOR TO SUBMITTING TO ARCHITECT OR ENGINEER.

NON SUBMISSION DOES NOT CONSTITUTE APPROVAL OF ANY WORK.

NO EXCEPTIONS TAKEN DOES NOT RELIEVE THE CONTRACTOR OF PERFORMING ANY OTHER WORK ON THE DRAWINGS.

CONTRACTOR SHALL EXPECT A MINIMUM OF 2 WEEKS FOR DESIGNERS' REVIEW TIME.

ANY VARIANCE FROM THE ORIGINAL DESIGN SHALL BE NOTED.

ANY SUBSTITUTION NOT INDICATED SHALL NOT CONSTITUTE APPROVAL OF A CHANGE.

SHOP DRAWINGS ARE NOT COORDINATION DRAWINGS.

DESIGNERS ARE NOT RESPONSIBLE FOR DIMENSIONS.

CHANGE ORDERS-

CONTRACTOR SHALL VISIT THE SITE AND BE THOROUGHLY ACQUAINTED WITH THE PROJECT PRIOR TO SUBMITTING A PRICE. ADDITIONAL MONEY WILL NOT BE GRANTED FOR WORK NOT CLARIFIED PRIOR TO BIDDING.

DESIGNER SHALL BE NOTIFIED OF ANY CHANGE TO THE DRAWINGS, UNFORESEEN FIELD CONDITIONS OR DISCREPANCIES PRIOR TO PERFORMING WORK.

ANY PROPOSED CHANGES SHALL BE ACCOMPANIED WITH A WRITTEN DESCRIPTION OR A SKETCH FOR CLARIFICATION.

ALL CHANGE ORDERS SHALL BE APPROVED PRIOR TO PERFORMING WORK.

CHANGE ORDERS SHALL BE PRICED EITHER LUMP SUM OR UNIT PRICE OR TIME AND MATERIALS.

ANY SUBSTITUTION REQUEST SHALL BE MADE VIA CHANGE ORDER, AND NOT VIA SHOP DRAWINGS UNLESS AGREED TO.

ANY CHANGE SHALL STATE THE CREDIT OR COST ADD AND/OR ANY CHANGE TO THE SCHEDULE.

REQUISITIONS-

ANY REQUISITION REQUIRED TO BE SIGNED BY THE ARCHITECTED SHALL BE SUBMITTED A MINIMUM OF ONE WEEK PRIOR TO BEING SUBMITTED TO THE BANK FOR REVIEW.

CONTRACTOR SHALL PROVIDE RECEIPTS AND INSURANCE CERTIFICATES FOR ANY MATERIALS FOR PAYMENT FOR ANY UNINSTALLED MATERIALS.

NOTE:ENERGY CODE COMPLIANCE

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING STRETCH/ ENERGY CODE COMPLIANCE PRIOR TO CLOSING OF WALLS. THE PROPER ENERGY CONSULTANT, HERs RATER, OR OTHER ALLOWED PROFESSIONAL SHALL PERFORM THE FINAL INSPECTIONS ASSOCIATED WITH THE CONSTRUCTION REQUIREMENTS AT THE DIRECTION OF THE CONTRACTOR.

WOOD NOTES:

1. ALL LUMBER SHALL HAVE A MOISTURE CONTENT OF NOT MORE THAN 19%.
2. ALL FRAMING LUMBER SHALL BE #2 SPF, OR BETTER, HAVING A MINIMUM: FB=875 PSI, FV=135 PSI, E=1,400,000 PSI.
3. ALL L.V.L. LUMBER DENOTED ON PLANS SHALL HAVE A MINIMUM:
   - FB=2,650 PSI, FV=285 PSI, E=1,900,000 PSI - FOR STUDS COLUMNS
   - FB-3100 PSI, FV=285 PSI, E=2,000,000 PSI - FOR BEAMS
4. ALL JOIST SPANS SHALL HAVE ONE ROW OF 1" X 3: CROSS BRIDGING AT MID SPAN AND NOT MORE THAN 8'-0" O.C.
5. ALL STUD BEARING WALLS SHALL HAVE ONE ROW OF 2X HORIZONTAL BLOCKING AT 1/2 STUD HEIGHT, AND NOT MORE THAN 6'-0" O.C. MAXIMUM.
6. PROVIDE AND INSTALL ALL NECESSARY TIMBER CONNECTORS WITH ADEQUATE STRENGTH.
7. PROVIDE DOUBLE JOIST BELOW PARTITIONS PARALLEL TO JOIST FRAMING.
8. PROVIDE SOLID BRIDGING BELOW PARTITIONS PERPENDICULAR TO JOIST FRAMING.
9. PROVIDE SOLID BRIDGING BETWEEN JOIST FRAMING MEMBERS WHEN BEARING ON STUD PARTITIONS OR BEAMS.
10. PROVIDE A CONTINUOUS BAND JOIST AT EXTERIOR STUD WALLS.
11. PROVIDE DIAGONAL METAL STRAP BRACING AT ALL CORNERS AND WALL INTERSECTIONS, AT THE INSIDE FACE OF STUDS, FROM TOP PLATE TO FLOOR PLATE AT A 45 DEGREE ANGLE WITH A SIMPSON TYPE "RCWB" STRAP, OR EQUAL.
12. ALL BUILT-UP BEAMS SHALL BE BOLTED WITH ½" Ø THRU BOLTS, MEETING A307 STANDARDS, OR, AS NOTED ON DRAWINGS.

WOOD LINTEL SCHEDULE:

Lintels over openings in bearing walls shall be as follows;or as noted on drawings.

Span of opening:	Size: 2x6 studs	Size: 2x4 studs
less than 4'-0"	3 - 2x4	2 - 2x4
up to 6'-0"	3 - 2x6	2 - 2x6
up to 8'-0"	3 - 2x8	2 - 2x8
up to 10'-0"	3 - 2x10	2 - 2x10

DESIGN CRITERIA:

ALL WORK PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE **NINTH EDITION** OF THE MASSACHUSETTS BUILDING CODE.

DESIGN LIVE LOAD =40 POUNDS PER SQUARE FOOT FLOORS
= 100 POUNDS PER SQUARE FOOT - DECK AND STAIRS
DESIGN SNOW LOAD = 45 POUNDS PER SQUARE FOOT WITH SNOW DRIFT WHERE APPLICABLE.
WIND LOAD = 128 MILES PER HOUR
SEISMIC:
Ss = 0.217
S1 = 0.069

REBAR SPLICE SCHEDULE

REINFORCING BAR DEVELOPMENT AND LAP SPLICE LENGTHS FOR f'c = 4500 PSI AND Fy = 60 KSI

BAR SIZE	TENSION DEVELOPMENT		TENSION SPLICE (CLASS B)		STANDARD 90° HOOK	COMPRESION BARS	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	EMBEDMENT Ldh	DEVELOPMENT Ldb	SPLICE LENGTH
#3	18"	14"	23"	18"	7"	8"	12"
#4	24"	18"	31"	24"	9"	10"	15"
#5	30"	23"	38"	30"	12"	12"	19"
#6	35"	27"	46"	35"	14"	14"	24"
#7	41"	32"	54"	41"	16"	16"	27"
#8	47"	36"	61"	47"	18"	18"	30"

STEEL NOTES:

1. ALL COLUMNS: A36, STEEL PIPE, A46 STEEL TUBE.
2. BOLTS: A325, ANCHOR BOLTS: A307.

STRUCTURAL STEEL NOTES:

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A50 SPECIFICATIONS, EXCEPT SQUARE STEEL TUBE COLUMNS.
2. ALL SQUARE STEEL TUBE COLUMNS SHALL CONFORM TO ASTM A500, WITH A MINIMUM YIELD STRESS OF 46,000 PSI.
3. ALL SHOP CONNECTIONS SHALL BE WELDED.
4. FIELD CONNECTION SHALL BE MADE WITH HIGH STRENGTH FRICTION BOLTS MEETING A325-X SPECIFICATIONS.
5. ALL BOLTS SHALL BE 3/4" IN DIAMETER, OR AS NOTED ON DRAWINGS. HOLES SHALL BE 1/16" LARGER.
6. ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RUST INHIBITIVE PAINT; SUCH AS TNEMEC-99, OR RUST INHIBITOR BY "MAINLINE". OR, PAINT, AS NOTED IN THE SPECIFICATIONS.
7. AFTER STRUCTURAL STEEL ERECTION IS IN PLACE, ALL EXPOSED AREAS SHALL BE TOUCHED UP. SEE SPECIFICATIONS ON PAINTING FOR ADDITIONAL REQUIREMENTS.
8. PROVIDE 3/4: GROUT, 3,000 PSI, AND 1/4" THICK LEVELING PLATES UNDER ALL COLUMN BASE PLATES, WITH FOUR (4) 3/4" DIAMETER x 16" LONG ANCHOR BOLTS; OR AS NOTED.
9. PROVIDE A MINIMUM OF 8" BEARING ON EACH SIDE OF LINTELS AND HEADERS OVER DOORS, WINDOWS, LOUVERS, AND OPENINGS, ETC.
10. THE CONTRACTOR SHALL SUBMIT A REPRODUCIBLE SEPIA AND FOUR PRINTS OF SHOP DRAWINGS; SHOWING ALL STRUCTURAL STEEL SIZES, CONNECTIONS AND DETAILS, TO THE ARCHITECT FOR HIS APPROVAL. FABRICATION OF STRUCTURAL STEEL MEMBERS SHALL NOT BEGIN WITHOUT PRIOR WRITTEN APPROVAL BY THE ARCHITECT OR HIS ENGINEER.
11. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE LATEST COMMONWEALTH OF MASSACHUSETTS BUILDING CODE AND THE STRUCTURAL STEEL INSTITUTE SPECIFICATIONS FOR BUILDINGS AND BRIDGES.

FOUNDATION NOTES:

1. THE FOUNDATION HAS BEEN DESIGNED FOR 4000 PSF ALLOWABLE SOIL BEARING CAPACITY.
2. ALL BACKFILL UNDER STRUCTURAL SLABS, MATS, AND FOOTINGS WILL BE ENGINEERED BACKFILL COMPACTED IN SPECIFIC LIFTS TO 95 PERCENT OF MAXIMUM DRY DENSITY, UNLESS OTHERWISE INDICATED OR SPECIFIED.
3. ALL EMBANKMENTS AND BACKFILL COMPACTED IN SPECIFIED LIFTS TO 90 PERCENT OF MAXIMUM DRY DENSITY, UNLESS OTHERWISE INDICATED OR SPECIFIED.
4. PROVIDE SHEETING, BRACING, AND UNDERPINNING AS REQUIRED TO PRESERVE ADJACENT STRUCTURES.
5. FOUNDATIONS SHALL NOT BE POURED IN WATER OR ON FROZEN GROUND.
6. VERIFY LOCATIONS AND REQUIREMENTS FOR INSERTS, SLEEVES, CONDUITS, EMBEDMENT AND PENETRATIONS WITH RESPECTIVE TRADES BEFORE PLACING CONCRETE.
7. DOWELS FROM FOUNDATIONS INTO PIERS, COLUMNS, BUTTRESSES OR WALLS SHALL BE THE SAME SIZE AND NUMBER AS REINFORCEMENT IN PIERS, COLUMNS, BUTTRESSES OR WALLS ABOVE, EXCEPT AS OTHERWISE SHOWN.
8. CONTRACTOR SHALL PROVIDE CONTINUOUS DRAINAGE BY MECHANICAL METHODS TO CONTROL SURFACE AND UNDERGROUND WATER, AS REQUIRED DURING CONSTRUCTION.
9. CONTRACTOR SHALL ENSURE THAT GROUND WATER LEVELS UNDER ADJACENT STRUCTURES AND PROPERTIES ARE NOT ALTERED.
10. ALL FOUNDATION UNITS (PIERS) SHALL BE CENTERED SUPPORT MEMBERS, UNLESS OTHERWISE NOTED ON PLANS.
11. COORDINATE UNDER FLOOR AND PERIMETER DRAIN REQUIREMENTS WITH ARCHITECTURAL, CIVIL AND PLUMBING DRAWINGS AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
12. ALL BEARING MATERIALS SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT TESTING AGENCY SHALL DETERMINE THE SUITABILITY OF THE BEARING MATERIAL. FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED.
13. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 4'-0" BELOW FINAL FINISHED GRADE FOR FROST PROTECTION.
14. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR & SLAB AT TOP AND BOTTOM ARE IN PLACE.
15. WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.
16. ALL FOOTING EXCAVATIONS ARE TO BE FINISHED BY HAND.
17. SEE THE REQUIREMENTS OF THE SPECIFICATIONS FOR BACKFILLING UNDER OR ADJACENT TO ANY PORTION OF THE BUILDING.
18. PROTECT IN-PLACE FOUNDATIONS, SLABS AND ADJACENT STRUCTURES, NEW CONSTRUCTION, STREET UTILITIES FROM FROST PENETRATION OR DAMAGE FROM CONSTRUCTION ACTIVITIES UNTIL THE PROJECT IS COMPLETED.
19. SLAB ON GRADE SHALL BEAR DIRECTLY ON A MIN. 12" THICK LAYER OF COMPACTED STRUCTURAL FILL, OR MIN. 6" THICK LAYER OF CRUSHED STONE, PLACED ABOVE PROOFROLLED AND COMPACTED EXISTING FILL, OR ABOVE UNDISTURBED NATURAL TILL. SHOULD BEDROCK BE ENCOUNTED AT OR WITHIN 12" OF BOTTOM OF SLAB, BEDROCK SHALL BE OVER EXCAVATED A MIN. OF 12" BELOW BOTTOM OF SLAB.
20. WHERE BEDROCK IS ENCOUNTED AT OR WITHIN 12" OF DESIGN FOOTING GRADE, IT SHOULD BE OVER EXCAVATED A MIN. OF 12" BELOW THE BOTTOM OF PROPOSED FOOTING. BEDROCK EXCAVATIONS SHOULD EXTEND A MIN. OF 12" BEYOND FOOTING EDGE. LOOSE ROCK PIECES SHOULD BE REMOVED WITHIN THE FOOTING BEARING ZONE, AND OPEN BEDROCK JOINTS SHOULD BE CHOKED WITH CRUSHED STONE OR FILLED WITH CONCRETE PRIOR TO PLACING THE SOIL CUSHION.

CONCRETE NOTES:

1. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF:
   - **3000 PSI** FOR BASEMENT SLABS, FOUNDATION WALL, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE SURFACES EXPOSED TO THE WEATHER
   - **3500 PSI** FOR DRIVEWAYS, CURBS, WALKS, PATIOS, PORCHES, CARPORT SLAB, STEPS AND OTHER FLATWORK EXPOSED TO WEATHER AND GARAGE FLOOR SLABS
2. MAXIMUM SLUMP SHALL NOT EXCEED 4"; AND MAXIMUM; COARSE AGGREGATE SIZE SHALL NOT EXCEED 3/4" IN DIAMETER.
3. ALL CONCRETE SLABS ON GRADE SHALL BE POURED IN 900 SQUARE FOOT PANELS, MAXIMUM; OR, PROVIDE CONTROL JOINTS BY SAW CUTTING THE SLAB WHILE THE CONCRETE IS STILL GREEN.

REINFORCING NOTES:

1. ALL REINFORCEMENT, EXCEPT FOR TIES AND STIRRUPS, SHALL CONFORM TO ASTM 615-60.
2. ALL REINFORCEMENT FOR TIES AND STIRRUPS SHALL CONFORM TO ASTM 615-40.
3. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185-70 SPECIFICATIONS.
4. ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ARCHITECT OR HIS ENGINEER PRIOR TO THE PLACEMENT OF ANY CONCRETE.
5. THE CONTRACTOR SHALL SUBMIT FOUR PRINTS OF SHOP DRAWINGS: SHOWING ALL REINFORCING DETAILS, CHAIR BARS, HIGH CHAIRS, SLAB BOLSTERS, ETC. TO THE ARCHITECT FOR HIS APPROVAL. THE CONTRACTOR SHALL RECEIVE WRITTEN APPROVED SHOP DRAWINGS FROM THE ARCHITECT OR HIS ENGINEER PRIOR TO THE FABRICATION OF REINFORCEMENT.
6. CLEARANCES OF MAIN REINFORCING FROM ADJACENT CONCRETE SURFACES SHALL BE AS FOLLOWS:
   A. FOOTINGS 3 INCHES
   B. SIDES OF FOUNDATIONS WALLS. EXPOSED FACES OF FOUNDATIONS. SIDES OF COLUMNS/PIERS, SLABS ON GRADE FROM TOP SURFACE 2 INCHES
   C. INTERIOR FACES OF FOUNDATIONS, TOP REINFORCING IN SLABS EXPOSED TO THE WEATHER 1-1/2 INCHES
   D. TOP STEEL OF INTERIOR SLABS 1 INCHES
7. MAXIMUM DEVIATION FROM THESE REQUIREMENTS SHALL BE 1/4" OF SECTIONS 10" OR LESS, 1/2" FOR SECTIONS GREATER THAN 10".

CONTRACTOR NOTE:
PRIOR TO COMMENCEMENT OF WORK OR FABRICATION OF COMPONENTS, CONTRACTOR SHALL INVESTIGATE AND VERIFY IN THE FIELD ALL CONDITIONS, DIMENSIONS, AND ELEVATIONS OF THE EXISTING CONSTRUCTION. ALL DISCREPANCIES BETWEEN FIELD-VERIFIED CONDITIONS, DIMENSIONS AND ELEVATIONS AND THOSE INDICATED ON THE DRAWINGS SHALL BE IMMEDIATELY MADE KNOWN TO THE ENGINEER IN WRITING. THE USE OF (V.I.F.) OR (+/-) OR OTHER SIMILAR NOTES AT CERTAIN LOCATIONS ON THE DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR VERIFYING ALL CONDITIONS DESCRIBED ABOVE.

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

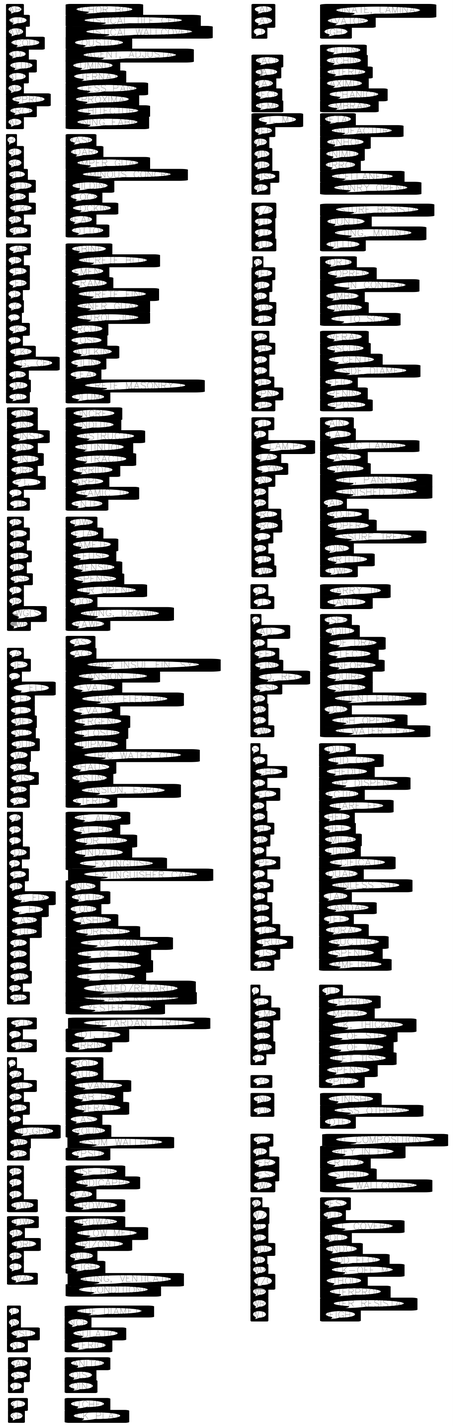
Drawing Name

GENERAL NOTES

Sheet No.

A-0.02

ABBREVIATIONS



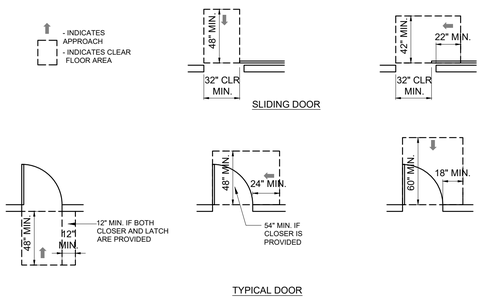
KEY SYMBOLS

# # # #	EGRESS INDICATORS	2	2 HOUR CEILING TAG ABOVE (SEE C.T.1/G-01c)
1	WALL TAG (SEE G-01a-G-01.b)		BREAK LINE
	FIRE EXIT SIGN		FAN
FE	FIRE EXTINGUISHER	88	REVISION TAG
SD	SMOKE DETECTOR	CLNG. HT. CLNG-HT	CEILING HEIGHT
HD	HEAT DETECTOR		DOOR (POCKET)
CO	CARBON MONOXIDE DETECTOR		DOOR (SWING)
A	WINDOW TYPE		WINDOW
C	45MIN. DOOR TAG		NEW WALL
220-3	DOOR NUMBER	FLOOR LEVEL 0'-0"	ELEVATION GRADE LINE
B	1 1/2 HOUR DOOR TAG	1 A-?	SECTION MARKER
P	HORN/STROBE/PULL STATION	1 A-?	EXTERIOR ELEVATION MARKERS
	HORN/STROBE	1 A-1	DETAIL SYMBOL
	EMERGENCY LIGHT (FLOOD LIGHT)	1 A-?	INTERIOR ELEVATION MARKER
FACP	FIRE ALARM CONTROL PANEL	RECEPTION ???	ROOM NAME ROOM NUMBER
1	1 HOUR CEILING TAG ABOVE (SEE C.T.1/G-01c)		

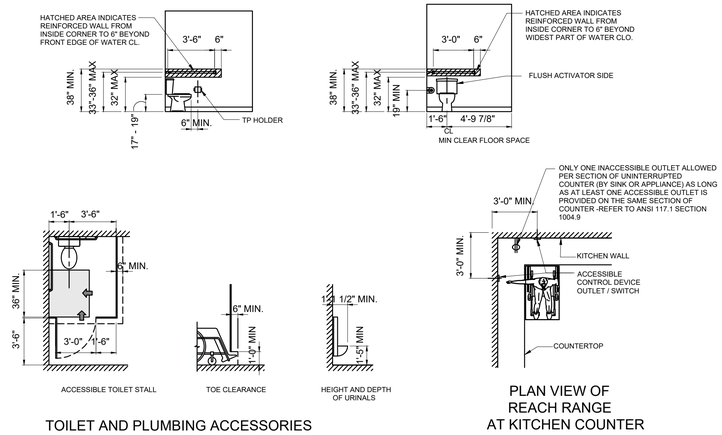
DOOR PUSH/PULL CLEARANCE LEGEND

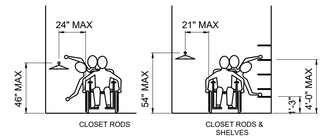
NOTE: UNIT INTERIOR CLEAR FLOOR AREA IS ONLY REQUIRED AT UNIT ENTRY DOORS AND GROUP 2A BATHROOMS

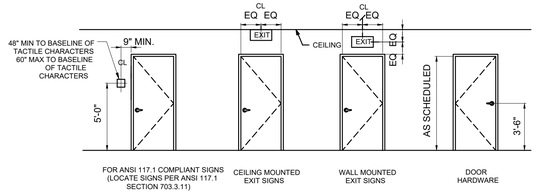
NOTE: ENSURE HARDWARE IS EXPOSED AND USABLE FROM BOTH SIDES WHEN DOORS ARE IN FULLY OPEN POSITION

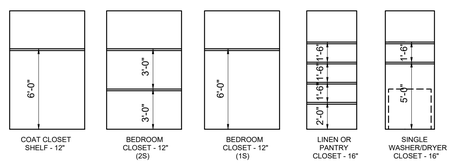


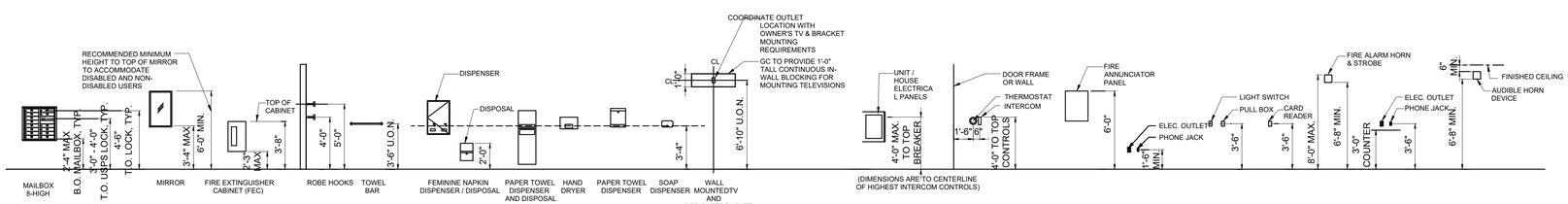
MOUNTING HEIGHT LEGEND











EQUIPMENT, CONTROLS & DISPENSERS

ELECTRICAL & FIRE PROTECTION DEVICES TYPICAL UNLESS NOTED OTHERWISE (ALL LOCATIONS TO BE COORDINATED WITH AND APPROVED BY THE ARCHITECT)

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

ABBREVIATIONS AND LEGENDS

Sheet No.

A-0.03



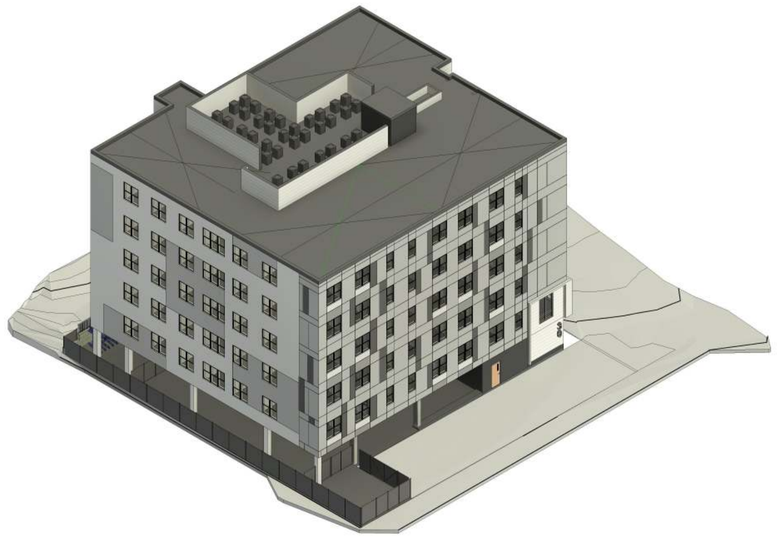
AXO FROM NORTH
1/8" = 1'-0"



AXO FROM SOUTH
1/4" = 1'-0"



AXO FROM EAST
1/4" = 1'-0"



AXO FROM WEST
1/4" = 1'-0"

Location

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30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
24610
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: As indicated
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

AXONOMETRIC VIEWS

Sheet No.

A-0.04

BUILDING CODE SUMMARY

Project Description:

The proposed project is for a 6 story, 38,641 sf residential use building in Hyde Park, Mass. The first floor has a lobby, common room, laundry room and utility spaces. The upper floors consist of 40 units, 8 units per floor compromised of (1) studio, (1) one bedroom, (1) two bedroom and (5) three bedroom units.

Applicable Codes:

IBC 2015 w/ MA Amend (780 CMR)
City of Boston Zoning Code
527 CMR MA Fire Prevention Regulations NFPA 1 2015
521 CMR MA Architectural Access Board
248 CMR MA Gas & Plumbing Code
524 CMR MA Elevator Code (2013 ASME A17.1)
IEEC 2018 & MA 780 CMR 115.AA Stretch Energy Code

Occupancy Classification:

Proposed	
R-2 Multifamily	

Construction Type:

Building Level		Proposed	Notes
1st Fl		1A	
2nd-6th fl		3B	
	510.2 Building Separation Allowance		

Construction type note:
This building is designed as a podium style construction per 510.2 where a 3 hour floor assembly separates the lower floor of type 1 construction and the upper floors of type 3 construction.

Building Height & Area Limitations (780 CMR Chapter 5)

Code Citation	Construction Type 1A/ 5B sprinkled NFPA 13		
	Height	Area SF	Notes
510.2 increase	1 story		
Section 504.3 and 504.4	5 stories / 75' total height		510.2 allows 5 stories above a 3 hr floor assembly
Section 506. Area per floor		48,000	
Section 506.2 Frontage Area Increase			
Total Area Allowance per floor		48,000	
Total Allowed	5 stories / 75'	48,000/240,000	
Actual Proposed	5 stories/52'-4"	7,435 / 37,175	

Building Height note:
Because of the podium construction proposed, the height in stories for the 3B construction type is allowed to be measured from the 3 hour floor separation at the 2nd floor slab

Building Areas:

Building Level	FAR GSF	Total GSF	Notes
1st Floor	1426	1426	
2nd Floor	7,435	7,435	
3rd Floor	7,435	7,435	
4th Floor	7,435	7,435	
5th Floor	7,435	7,435	
6th Floor	7,435	7,435	

Sprinkler Requirements: (780 CMR Chapter 9)

System Type & Use		Proposed	Notes
NFPA 13		NFPA 13	
Standpipe		Standpipe	

Occupant Load: (780 CMR 1004.)

Floor	Occupant Type	Floor Area	Floor Area Per Occupant	Total Occupant Load
1st Floor	residential	1,426	200	8 occupants
2nd Floor	residential	7,435	200	38 occupants
3rd Floor	residential	7,435	200	38 occupants
4th Floor	residential	7,435	200	38 occupants
5th Floor	residential	7,435	200	38 occupants
6th Floor	residential	7,435	200	38 occupants

Means of Egress: Number of Exits (1006.3.1)

Building Level	Occupant Load	Required Exits	Proposed Exits	Notes
1st Floor	8	2	2	
2nd Floor	38	2	2	
3rd Floor	38	2	2	
4th Floor	38	2	2	
5th Floor	38	2	2	
6th Floor	38	2	2	

Means of Egress: Width (Section 1005)

Building Level	Occupant Load	Limiting Width Factor	Egress Element Width	Egress Element Capacity
1st Floor	8	Door (.2" per person)	(3) x 36" = 108"	540
2nd Floor	38	Door (.2" per person)	36" door + 36" stair	300
3rd Floor	38	Stair (.3" per person)	2 x 36" = 72"	240
4th Floor	38		2 x 36" = 72"	240
5th Floor	38		2 x 36" = 72"	240
6th Floor	38		2 x 36" = 72"	240

Means of Egress: Exit Travel Distance (Table 1017.2)

Occupancy	w/o Sprinkler	W/ Sprinkler	Notes
R-2		250	

Means of Egress: Exit Width

Occupancy	Corridors/ Stairs	Doors	Notes
Required	36"	32" clear	
Proposed	44"	36" (34" clear)	

Means of Egress: General Notes

Exit Doors Serving 50+ occupants Must Swing in the Direction of Travel
Required multiple means of egress must be separated by 1/3 of the buildings diagonal dimension minimally
Doors shall not swing in to a egress path more than 1/2 that paths required width or project more than 7" when fully open
Dead end corridor max distance 50'
Exit signs and emergency lighting to be equipped with emergency power supply
Elevator to be sized for stretcher requirements
Exit Doors to be provided with panic hardware
Accessible means of egress to be provided. In lieu of providing generator powered back up, the building is provided with a horizontal exit complying with 1009.2.1 and 1026.

Means of Egress: Stair Notes (Section 1011)

Width 44" (36" less than 50 occupants)
Headroom (80")
Min Tread Depth 11" (10" inside residential unit)
Max Riser Height 7" (7 3/4" inside residential unit)
units)
Handrail Height 34-38" Max 4.5" projection into width
bottom
Guardrails 42" min high/ Max 4" opening limitation

Egress Convergence 1005.3.1 Stairways
The capacity, in inches, of means of egress stairways shall be calculated by multiplying the occupant load served by such stairways by a means of egress capacity factor of 0.3 inch per occupant. Where stairways serve more than one story, only the occupant load of each story considered individually shall be used in calculating the required capacity of the stairways serving that story.

Means of Egress: Ramp Notes (780 CMR 1012/ 521 CMR)

Slope greater than 1/20 Requires Railings
Min 48" clear between railings
1/12 Max slope
Max slope run 30'
Continuous Handrails Both Sides
Upper Handrail Height 34-38" Lower Rail Height 18-20"
Handrail Extension 12" at Top & Bottom
Max Cross Slope to be 1/50 (2%)
Guardrails 42" min high/ Max 4" opening limitation
Clearance Between Wall and Railing 1.5"
Edge Curbs (2" min) to be provided at all drop offs
direction
Handrail Cross section to be round or oval and be 1-1/4 to 2" max
Circular Ramps Are not Allowed

Structural Fire Resistant Ratings (780 CMR Chapter 6)

Building Element	Construction Type 1A / 3B		
	1A	3B	Notes
Structural Frame	3	0	
Bearing Walls Exterior	3	2	
Bearing Walls Interior	3	0	
Non Bearing Walls Exterior	See Exterior Wall Fire Resistant Ratings below		
Non Bearing Walls Interior	0	0	
Floor Construction	2	0	
Roof Construction	na	0	

Interior Fire Resistant Ratings

Building Element	Construction Type 1A / 3B		
	Wall Type	Fire Resistant Rating	Opening Ratings
Fire Wall	Fire Wall		
Stair Shaft 4 Stories Plus 713.4	Fire Barrier	2	1.5
Horizontal Exit 1026.2	Fire Barrier	2	1.5
Other Shafts 4 Stories Plus 708.4	Fire Barrier	2	1.5
Other Shafts Less Than 4 Stories 713.4	Fire Barrier	1	1.5
Dwelling Unit Separation Walls 708.3	Fire Partition	0.5hr req 1 hr prop	NA
Dwelling Unit Separation Floors 712.3		1	NA
Tenant Separations 508.4	Fire Partition	1	45 min
Common Area Dwelling Corridors 708.3	Fire Partition	0.5hr req 1 hr prop	20 min req 45 min prop
Separation of Incidental Accessory uses 508.2.5	Fire Barrier	2	1.5

Exterior Wall Fire Resistant Ratings (780 CMR 602)

Fire Separation Distance	Construction Type	Fire Resistant Wall Rating	
		Use F-1, M, S-1	Use A, B, E, F-2, I, R, S-2, U
< 5 feet	All	2	1
>=5' to < 10'	1A 3B	2 1	1
>=10' to < 30'	1A 3B	1	1
>=30'	All	0	0

Exterior Wall Notes:
Bearing walls within 10' of the interior property lines require rating from both sides. All others only require protection from the inside.

Exterior Wall Max Opening Area (780 CMR 705.8)

Fire Separation Distance	Allowable Area		
	Degree of Opening Protection	Unprotected Non-sprinkled	Sprinkled or Protected
0 to less than 3'		0%	0%
3 to less than 5'		0%	15%
5 to less than 10'		10%	25%
10 to less than 15'		15%	45%

Exterior Wall Openings Notes:
See accompanying request for Code Compliance Alternative as it pertains to opening percentages.

Accessibility Notes:

All Areas open to the public are required to comply with 521 CMR.
route.
standards
5% of units shall be designed as Group 2A units (2 provided)
Future public bathrooms shall be fully accessible.
Accessible means of egress to be provided by horizontal exit

Fire Protection Notes:

NFPA 13 System required
Standpipe System Required
Fire Extinguishers Required
Fire Alarm System Required (manual and Automatic)
Smoke and CO2 Detectors Required

Energy Notes:

Per IECC 2018 and Mass stretch code requirements, conformance is proposed through HERs and the prescriptive path as outlined per the on board energy professional.

Fall Protection:

All Guardrails shall be 42" from the adjacent walking path
ANY WINDOWS WITH SILLS LESS THAN 3' ABOVE THE FLOOR & MORE THAN 6' UP FROM THE ADJACENT GRADE SHALL HAVE OPENING CONTROL DEVISES THAT COMPLY WITH ASTM F2090

Location

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REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

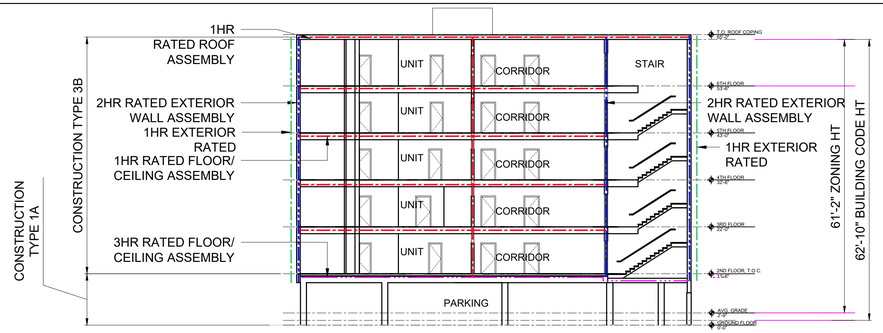
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

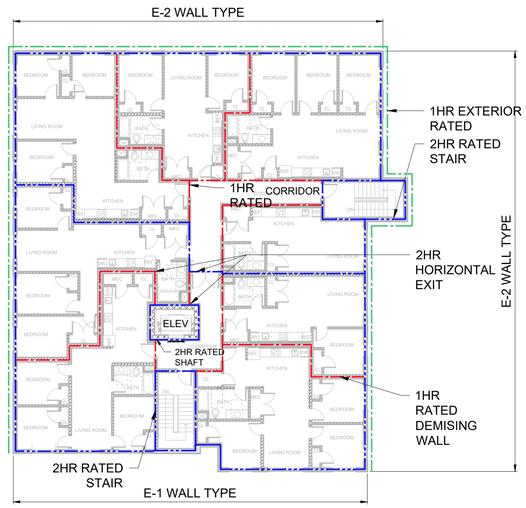
CODE SUMMARY

Sheet No.

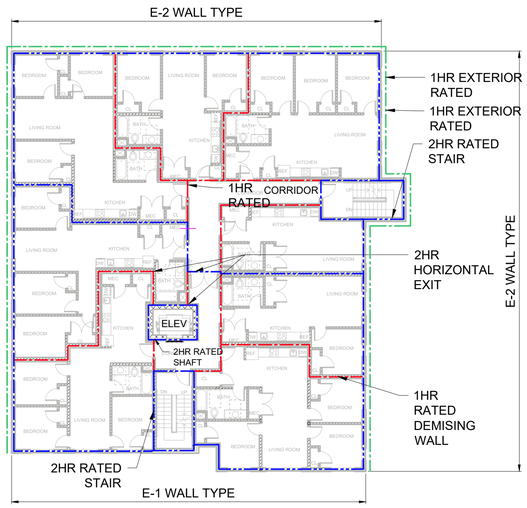
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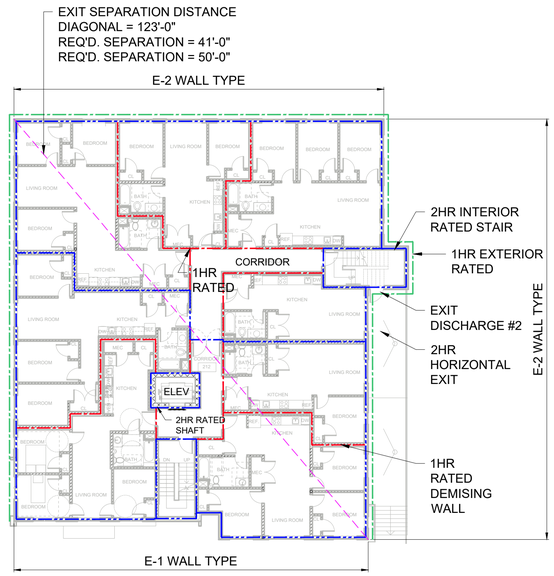
7 BUILDING SECTION CODE DIAGRAM
1/16" = 1'-0"



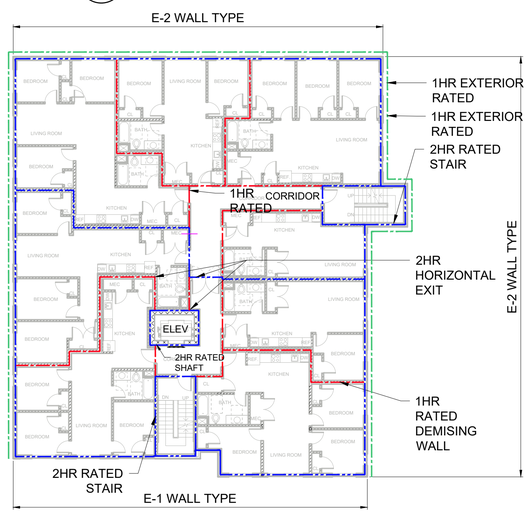
6 SIXTH FLOOR EGRESS PLAN
1/16" = 1'-0"



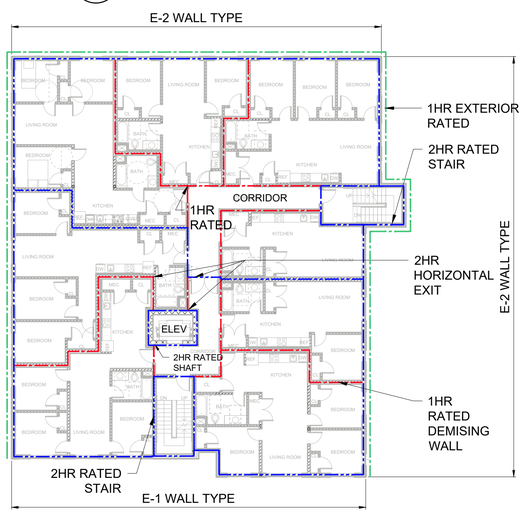
4 FOURTH FLOOR EGRESS PLAN
1/16" = 1'-0"



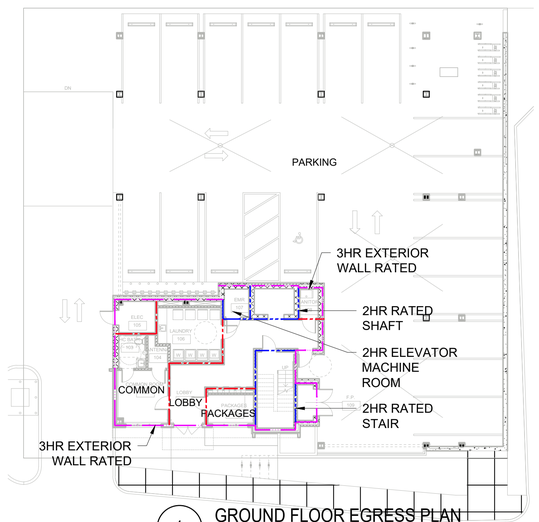
2 SECOND FLOOR EGRESS PLAN
1/16" = 1'-0"



5 THIRD FLOOR EGRESS PLAN
1/16" = 1'-0"



3 THIRD FLOOR EGRESS PLAN
1/16" = 1'-0"



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

CONSTRUCTION ASSEMBLY RATINGS

1HR SEPARATION	
2HR SEPARATION (EXTERIOR WALL RATED FROM INTERIOR SIDE ONLY)	
1HR EXTERIOR WALL RATED	
3HR SEPARATION AND EXTERIOR WALL	
TD = XX FT.	TRAVEL DISTANCE
TD = XX FT.	COMMON PATH OF TRAVEL

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

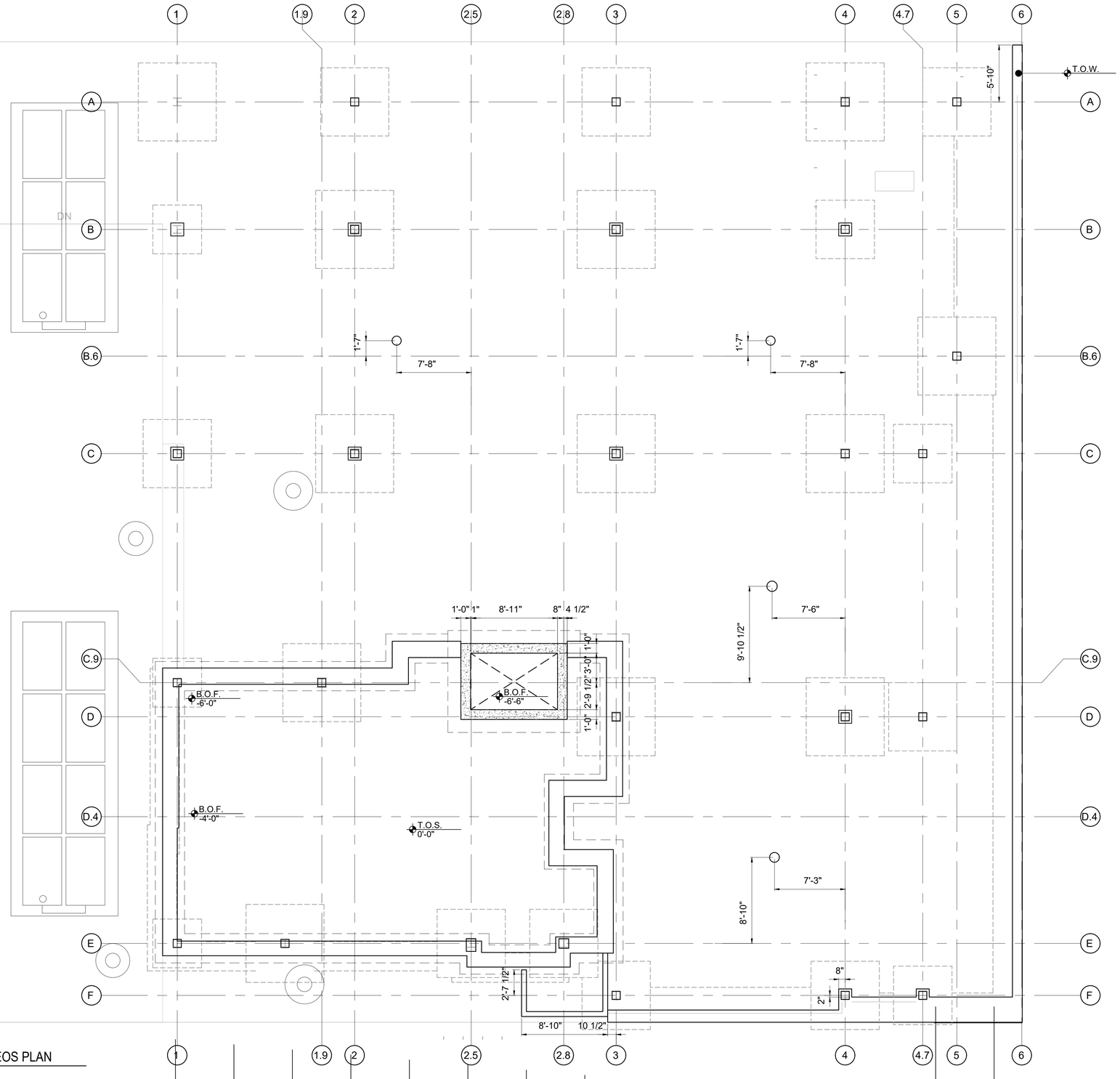
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

LIFE SAFETY PLANS

Sheet No.

A-0.11



1 GROUND FLOOR EOS PLAN
3/16" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 6319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

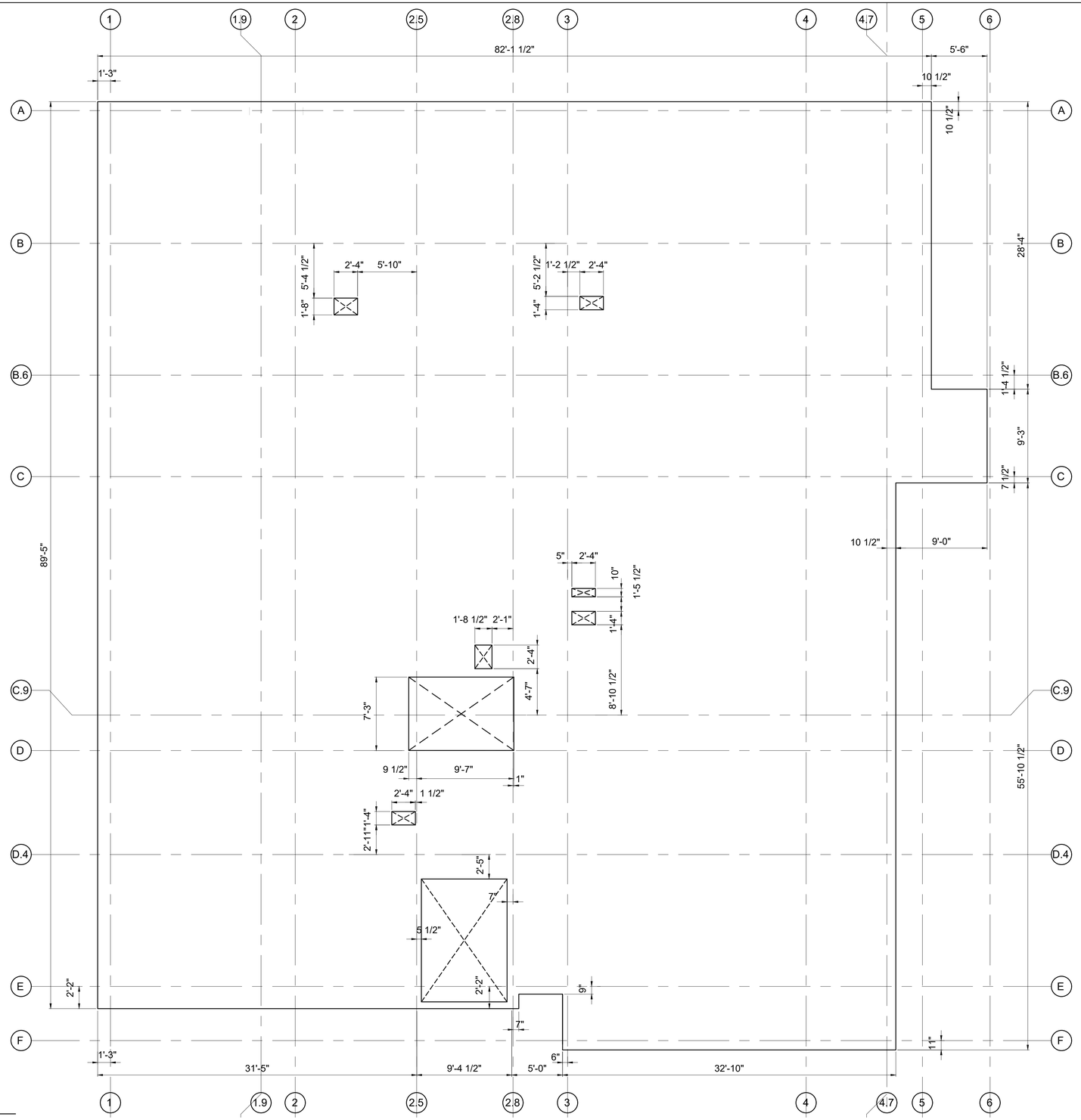
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

GROUND FLOOR EOS PLAN

Sheet No.

A-0.20



1 SECOND FLOOR EOS PLAN
3/16" = 1'-0"

Location

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30 THORN STREET
HYDE PARK, MA 02136

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617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

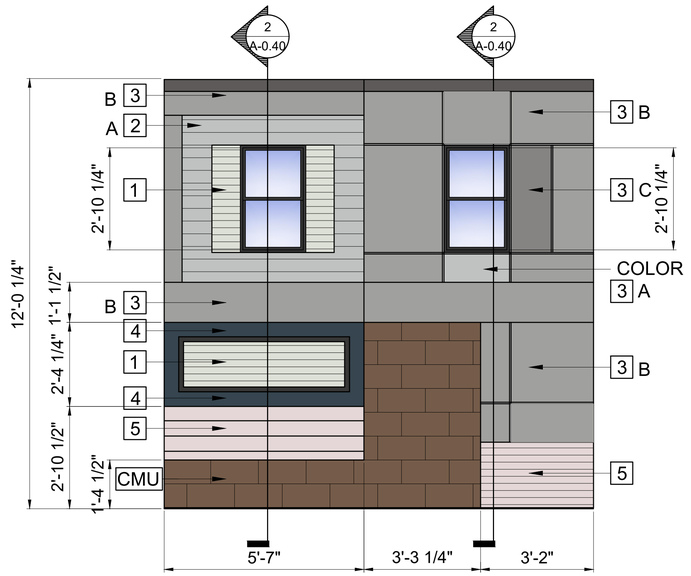
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Date: 01-07-2026
Drawn By: DF

Drawing Name

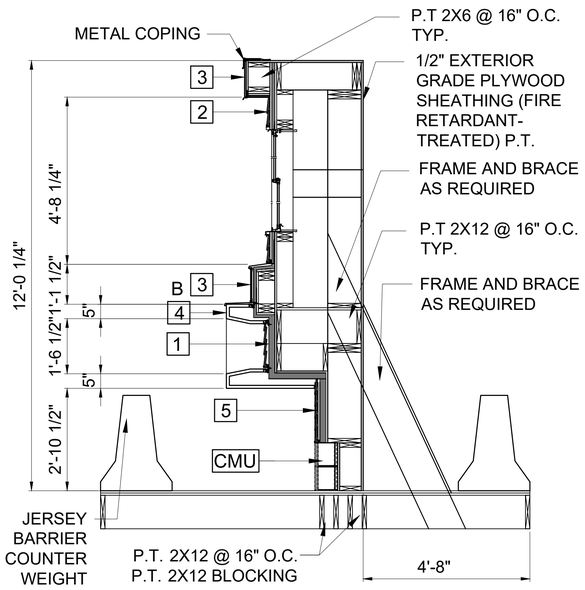
SECOND FLOOR EOS PLAN

Sheet No.

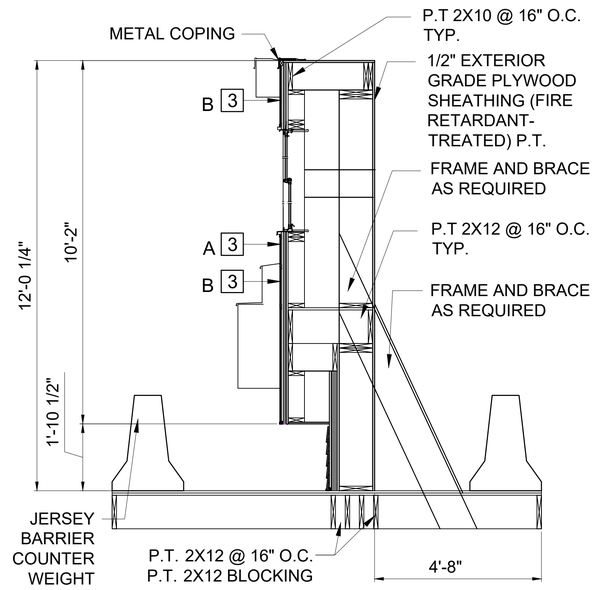
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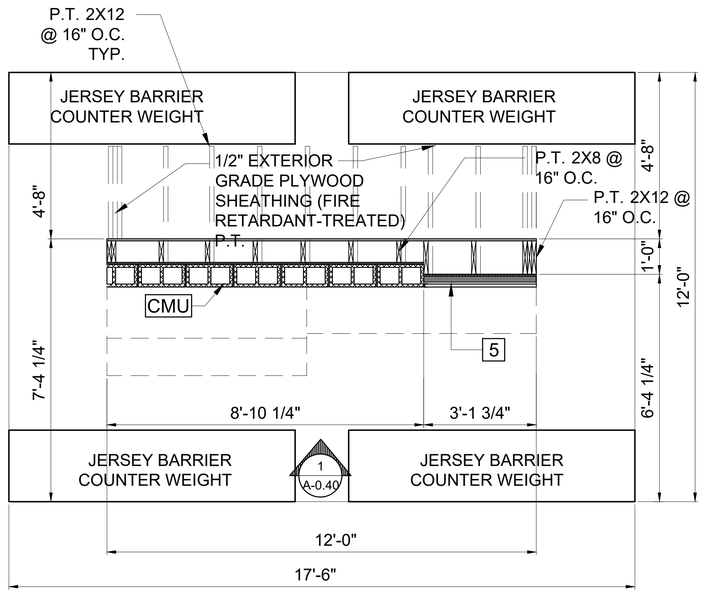
1 ELEVATION
1/2" = 1'-0"



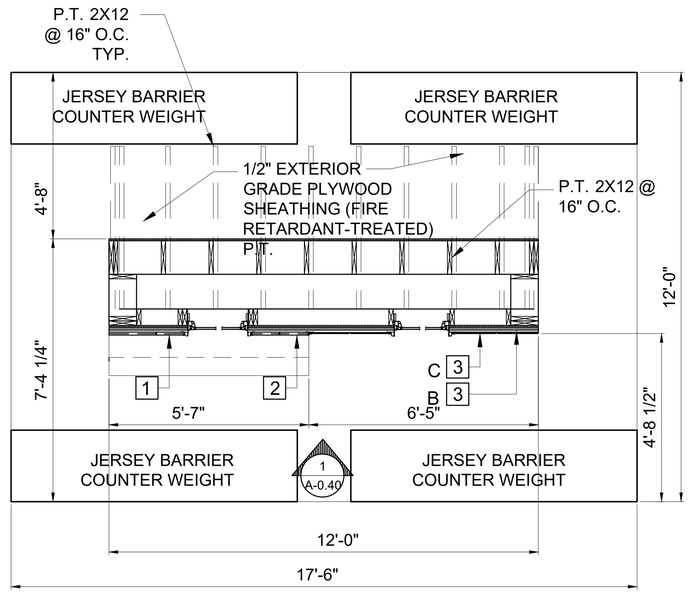
2 WALL SECTION AT CMU/FIBER CEMENT SIDING
1/2" = 1'-0"



3 WALL SECTION AT FIBER CEMENT SIDING/ F.C. PANEL
1/2" = 1'-0"



4 WALL PLAN AT CMU / CEDAR SIDING
1/2" = 1'-0"



5 WALL PLAN AT FIBER CEMENT
1/2" = 1'-0"

EXTERIOR MATERIALS LEGEND

CMU MASONRY VENEER: CONCRETE MASONRY UNITS
PRODUCT: A. JANDRIS & SONS ARCHITECTURAL CMU
SIZE: 4"x8"x16" NOMINAL REGULAR 3 CORE
TEXTURE: GROUND FACE
COLOR: 2503-2
MIX: MEDIUM WEIGHT

1 SIDING TYPE 1: FIBER CEMENT CLAPBOARD SIDING
PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING
THICKNESS: 5/16"
SIZE: 5 1/ 4" WITH 4" EXPOSURE TO THE WEATHER
TEXTURE: SMOOTH
FACTORY FINISH PEARL GRAY

2 SIDING TYPE 2: FIBER CEMENT CLAPBOARD SIDING
PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING
THICKNESS: 5/16"
SIZE: 9 1/ 4" WITH 8" EXPOSURE TO THE WEATHER
TEXTURE: SMOOTH
FACTORY PRIMED; FIELD PAINTED BENJAMIN MOORE
COLOR A = AF-695 ETERNITY
COLOR C = AF-705 CINDER

3 SIDING TYPE 3: FIBER CEMENT PANEL SYSTEM
PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING
THICKNESS: 7/16"
SIZE: 4'x8' NOMINAL WITH 1/ 2" JOINT
TEXTURE: SMOOTH
FULL RANGE OF FIBER CEMENT PANEL TRIM
FACTORY PRIMED; FIELD PAINTED BENJAMIN MOORE
COLOR A = AF-695 ETERNITY
COLOR B = AF-700 STORM
COLOR C = AF-705 CINDER

4 COMPOSITE METAL PANEL
PRODUCT: ALUCOBOND
COLOR: DUSTY/CHARCOAL
PVDF 3 / GLOSS 30

5 CEDAR SIDING
NATURAL FINISH

GENERAL NOTES

1. ALL MEP ITEMS (EXHAUST/ CONCENTRIC VENTS,MECHANICAL INTAKE/EXHAUST LOUVERS, ETC.) AND THEIR RELATING TRIM TO BE PAINTED TO MATCH ADJACENT SIDING/TRIM COLOR.
2. REFER TO ELEVATIONS FOR TRIM BOARD.

Location

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30 THORN STREET
HYDE PARK, MA 02136

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One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

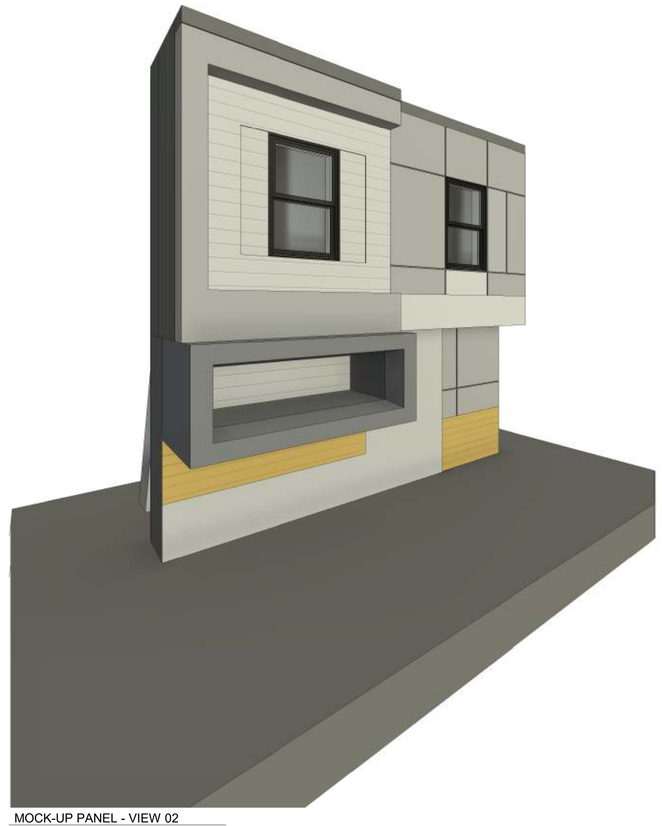
MOCK-UP

Sheet No.

A-0.40



MOCK-UP PANEL - VIEW 01



MOCK-UP PANEL - VIEW 02

Location

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30 THORN STREET, HYDE PARK, MA 02136

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One Billings Road Quincy, MA 02171 fax 617 786 7215

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 8319 BOSTON

No.	Description	Date

Project No: 2025014

Scale:

Date: 01-07-2026

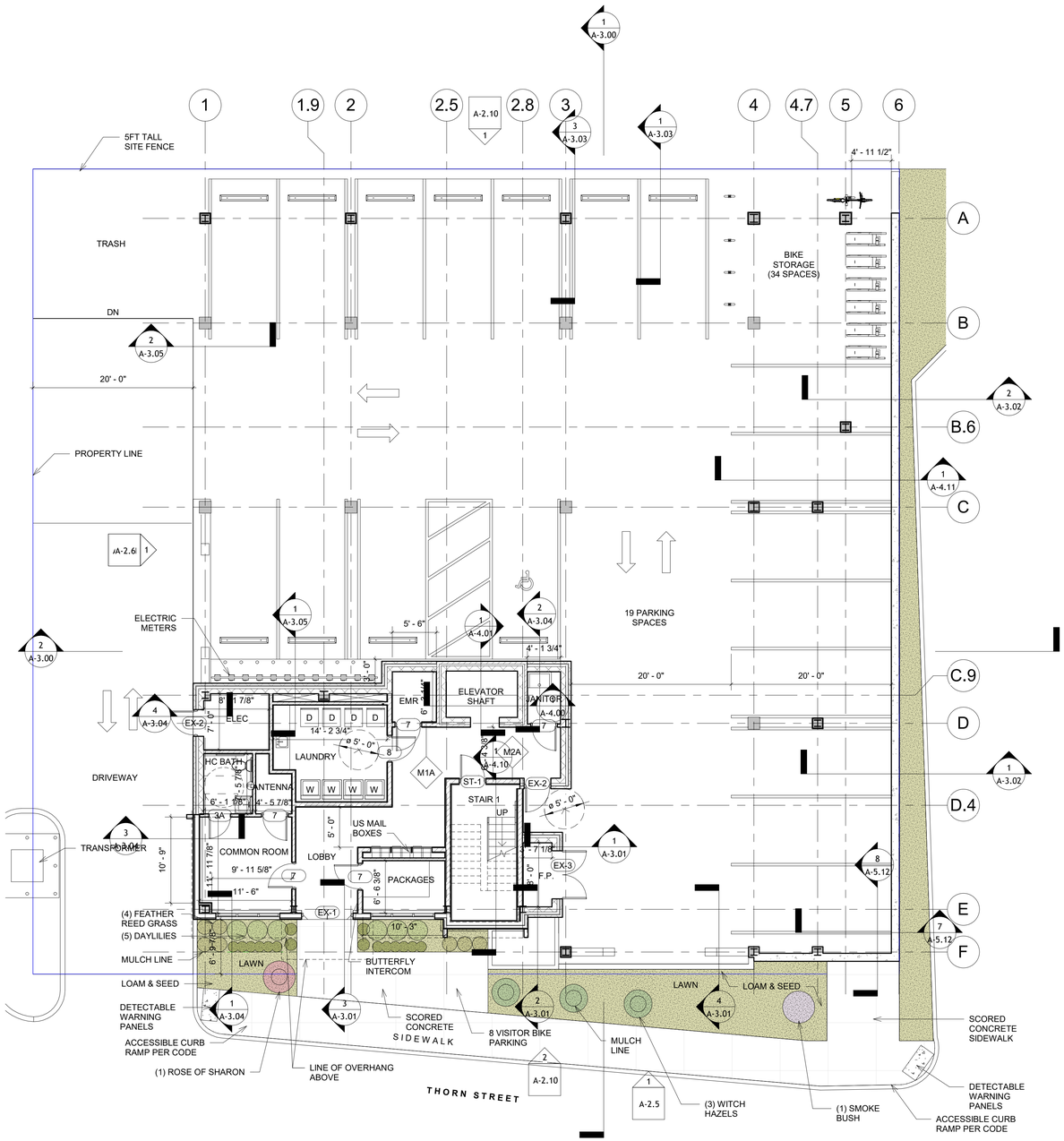
Drawn By: PM DF

Drawing Name

MOCK-UP PANEL 3D VIEW

Sheet No.

A-0.41



PROPOSED LANDSCAPE PLAN
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7700 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: 1/8" = 1'-0"
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

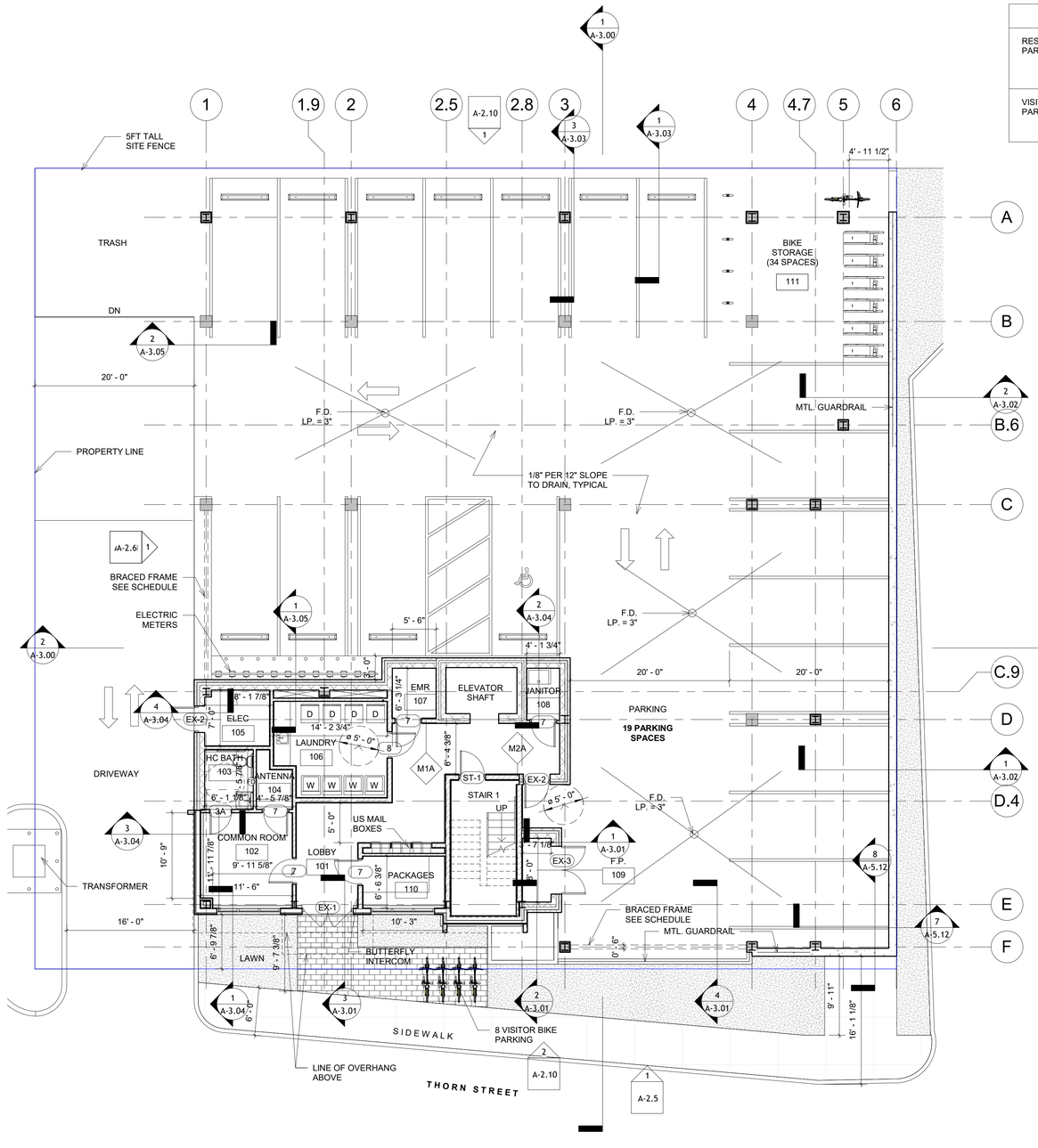
PROPOSED LANDSCAPE PLAN

Sheet No.

G-1.10

BIKE PARKING COMPLIANCE

	REQUIRED	PROPOSED
RESIDENT BIKE PARKING	1 SPACE PER UNIT (40 SPACES) - 25% MIN. ON-GROUND SPACES (10 SPACES) - 5% EXTRA-WIDE SPACES (2 SPACES)	34 SPACES - 10 ON-GROUND (25%) - 2 EXTRA-WIDE (5%) - 24 TWO-TIER SPACES
VISITOR BIKE PARKING	1 SPACE PER 5 UNITS (8 SPACES)	8 SPACES (LOCATED AT THE EXTERIOR OF THE BUILDING)



PROPOSED GROUND FLOOR
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7715 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
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COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

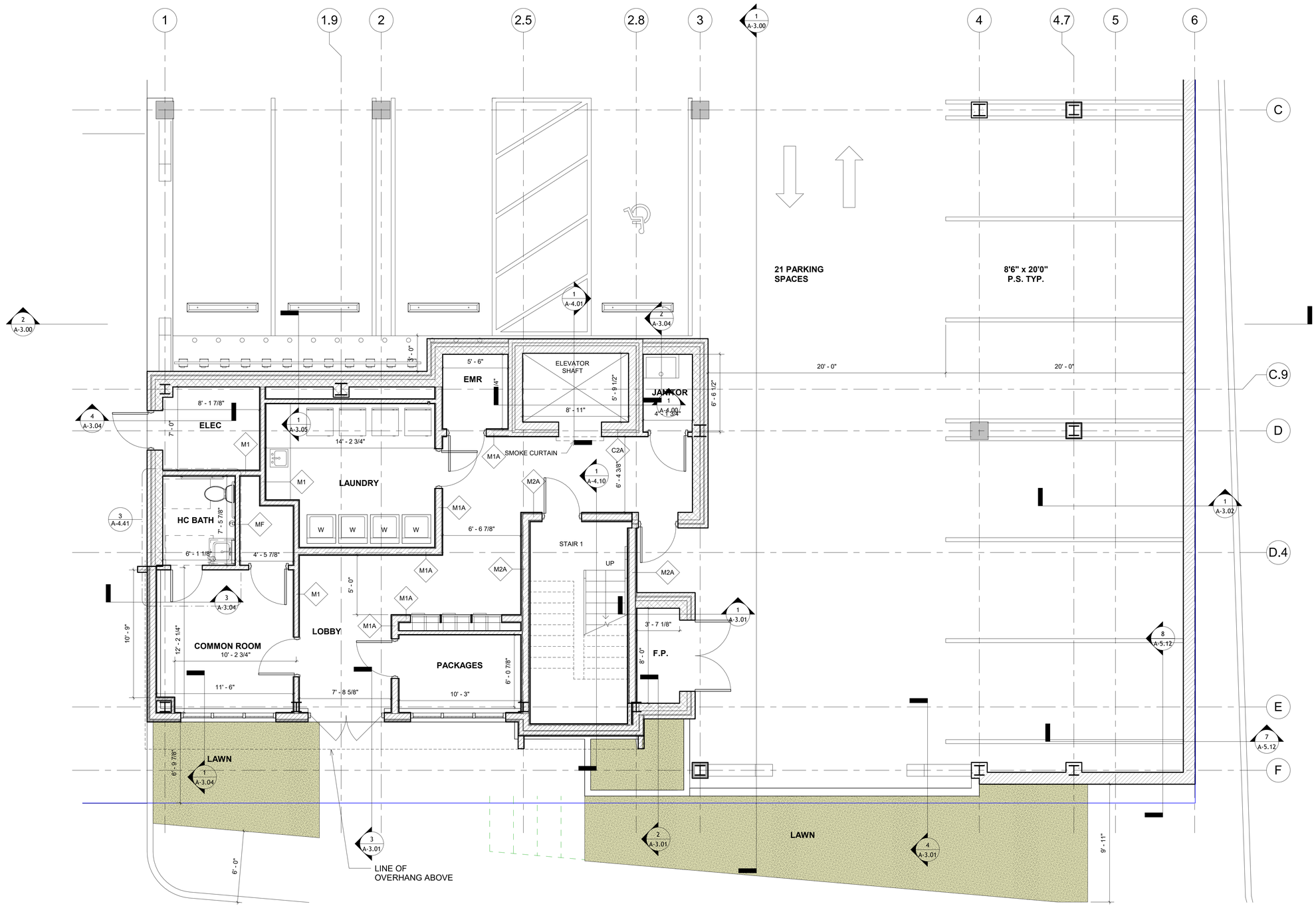
Project No: 2025014
Scale: As indicated
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

PROPOSED GROUND FLOOR PLAN

Sheet No.

A-1.10



ENLARGED GROUND FLOOR - 02
1/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

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617-786-7700 fax 617-786-7715

REGISTERED ARCHITECT
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No.	Description	Date

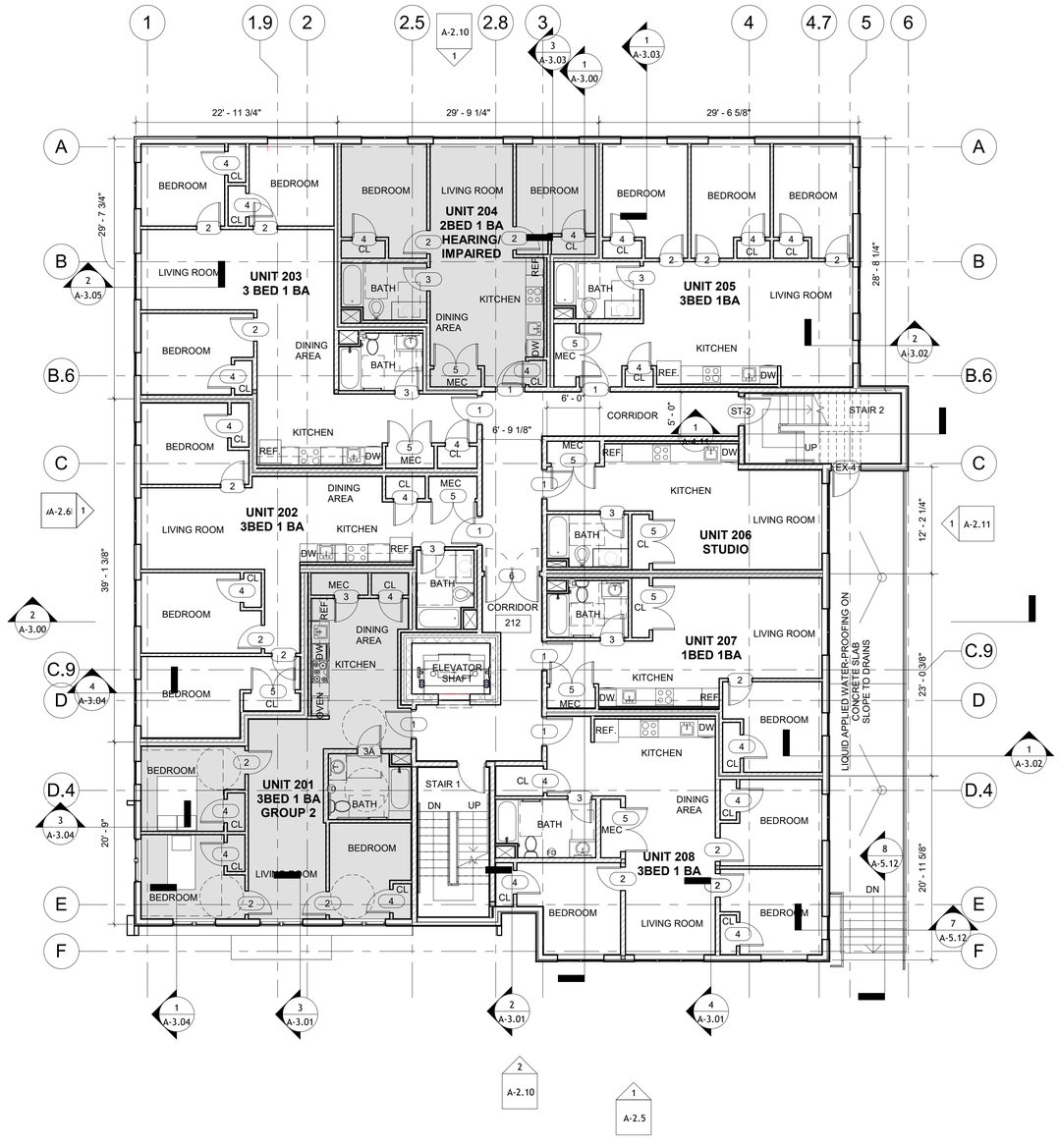
Project No: 2025014
Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED GROUND FLOOR PLAN - 01

Sheet No.

A-1.10A



PROPOSED SECOND FLOOR
1/8" = 1'-0"

Location

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30 THORN STREET
HYDE PARK, MA 02136

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617-786-7715 fax

COMMONWEALTH OF MASSACHUSETTS
REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA

No.	Description	Date

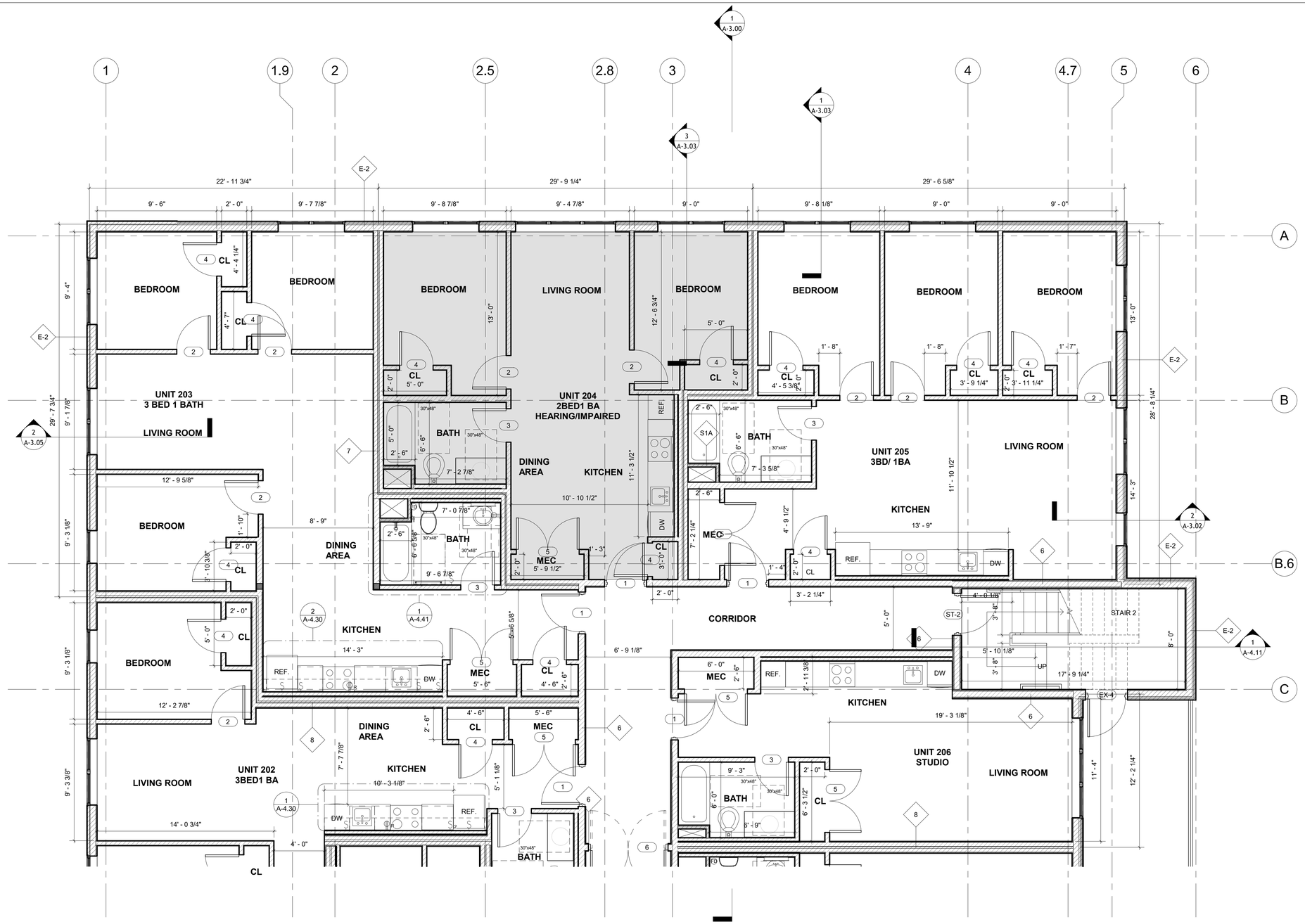
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Scale: 1/8" = 1'-0"
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

PROPOSED SECOND FLOOR PLAN

Sheet No.

A-1.11



ENLARGED SECOND FLOOR - 01
1/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
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617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

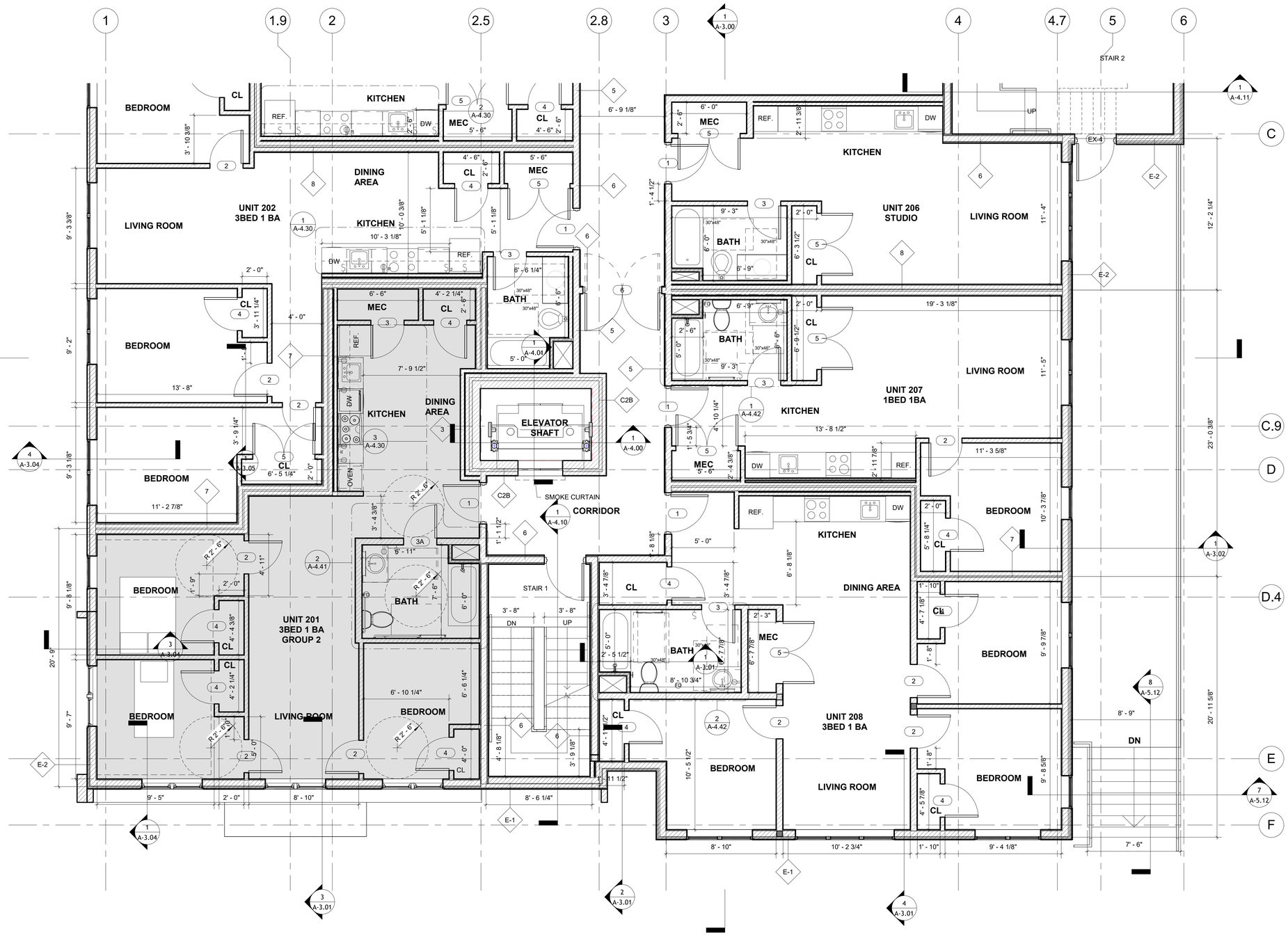
Project No: 2025014
Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED SECOND FLOOR PLAN - 01

Sheet No.

A-1.11A



ENLARGED SECOND FLOOR - 02
1/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
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tel 617-786-7715 fax 617-786-7715

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No.	Description	Date

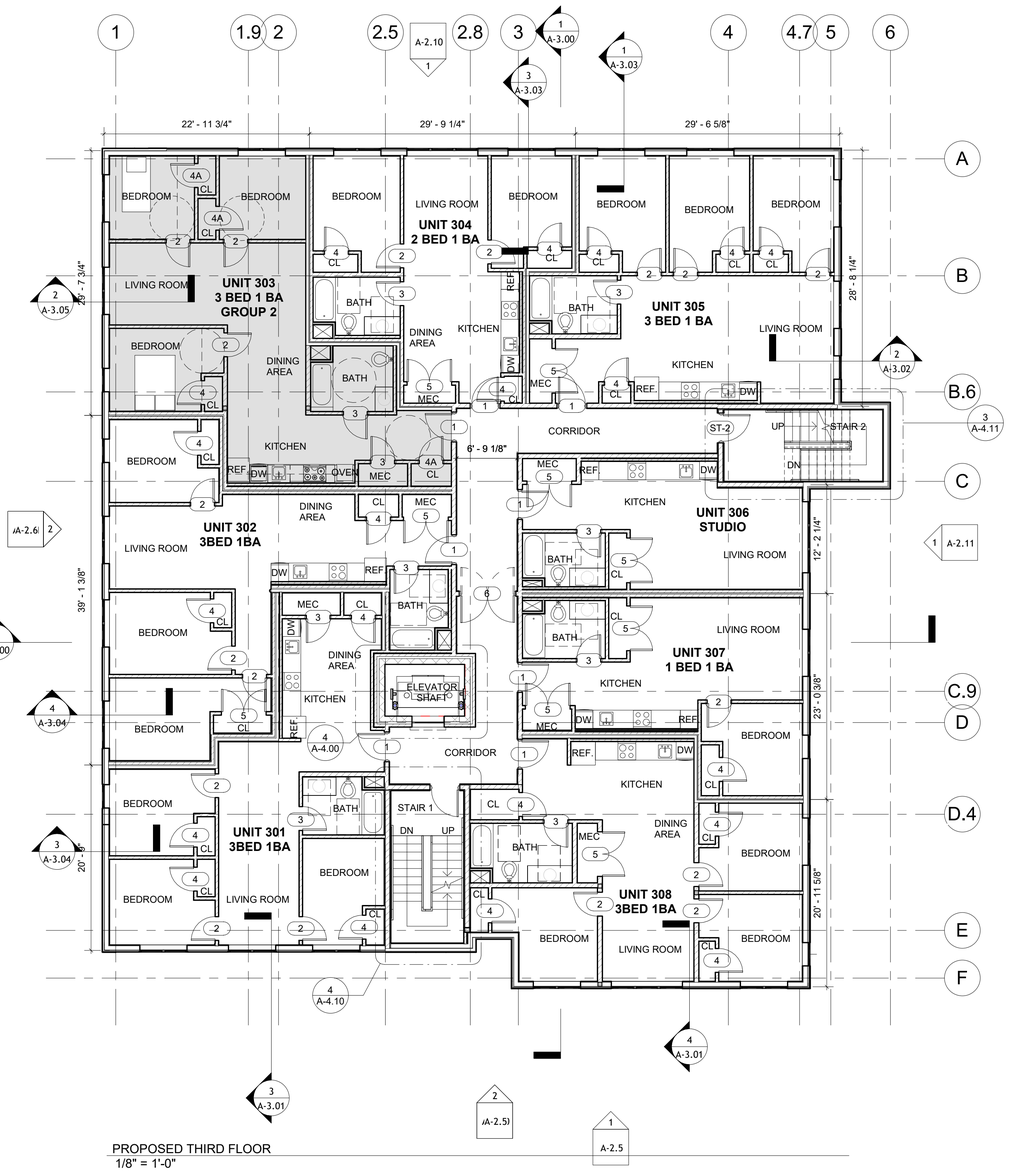
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Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED SECOND FLOOR PLAN - 02

Sheet No.

A-1.11B



PROPOSED THIRD FLOOR
1/8" = 1'-0"

Location

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REGISTERED ARCHITECT
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No.	Description	Date

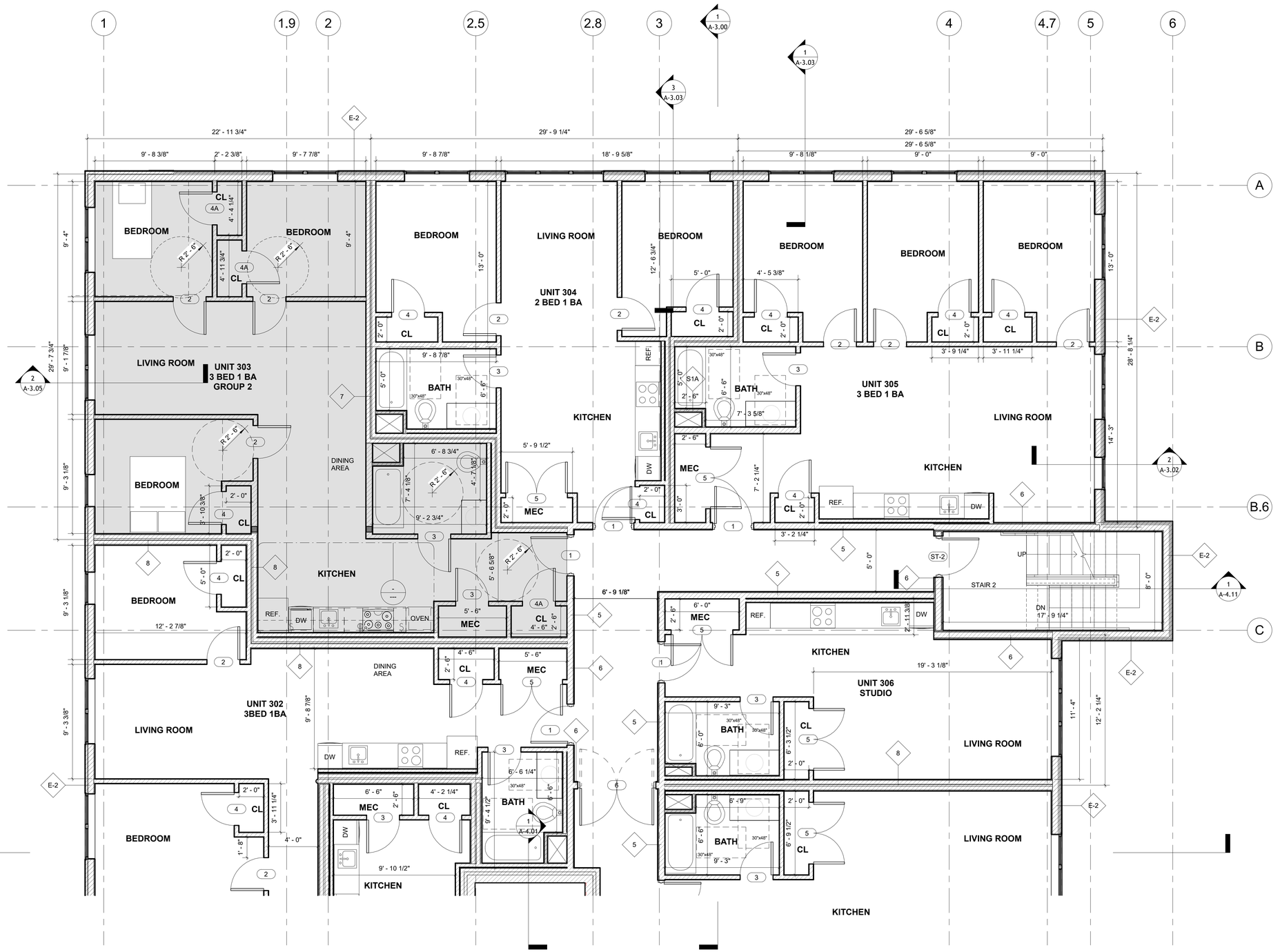
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Scale: 1/8" = 1'-0"
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

PROPOSED THIRD FLOOR PLAN

Sheet No.

A-1.12



ENLARGED THIRD FLOOR - 01
1/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7700 x 27
fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

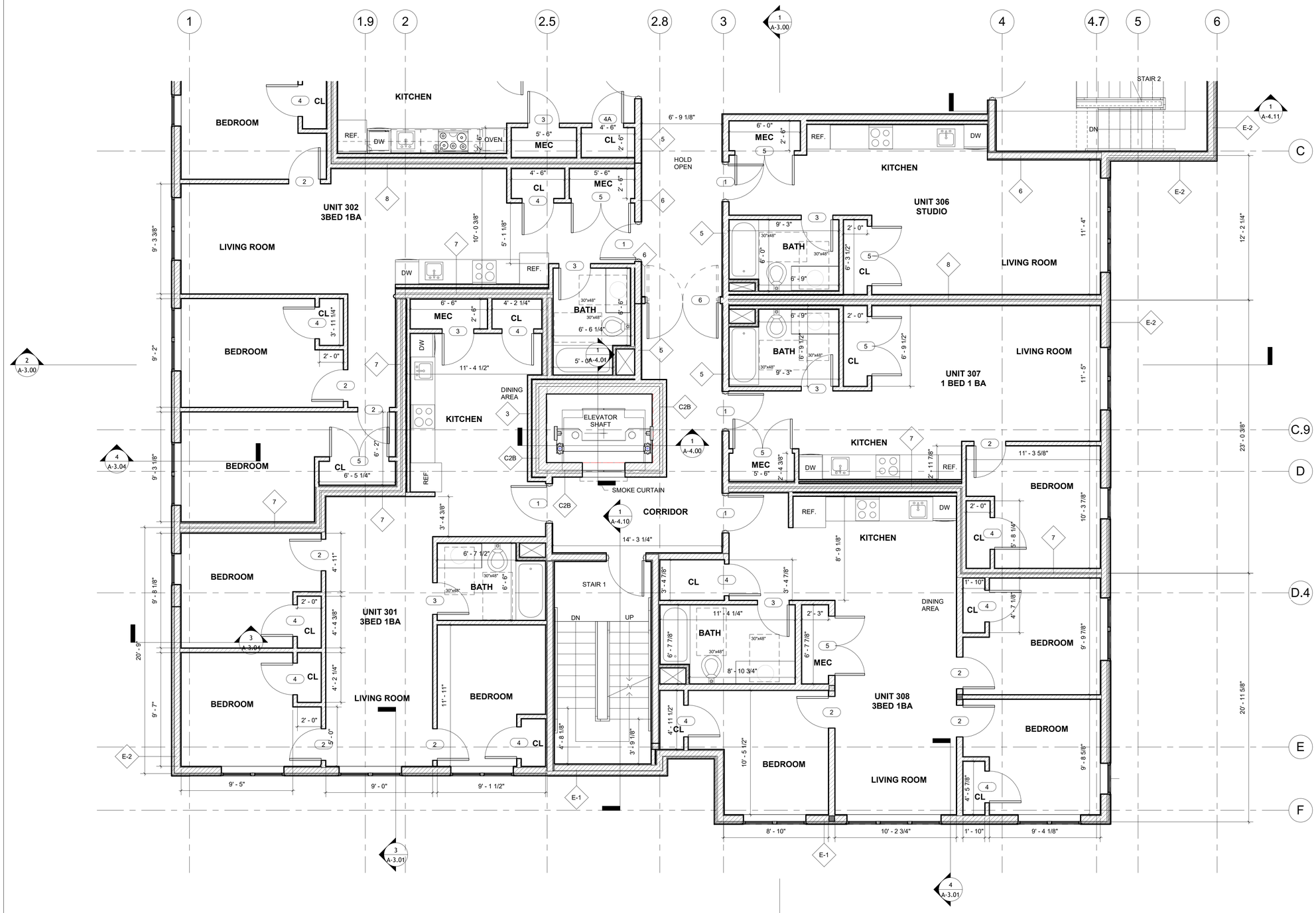
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Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED THIRD FLOOR PLAN - 01

Sheet No.

A-1.12A



ENLARGED THIRD FLOOR - 02
1/4" = 1'-0"

Location

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30 THORN STREET
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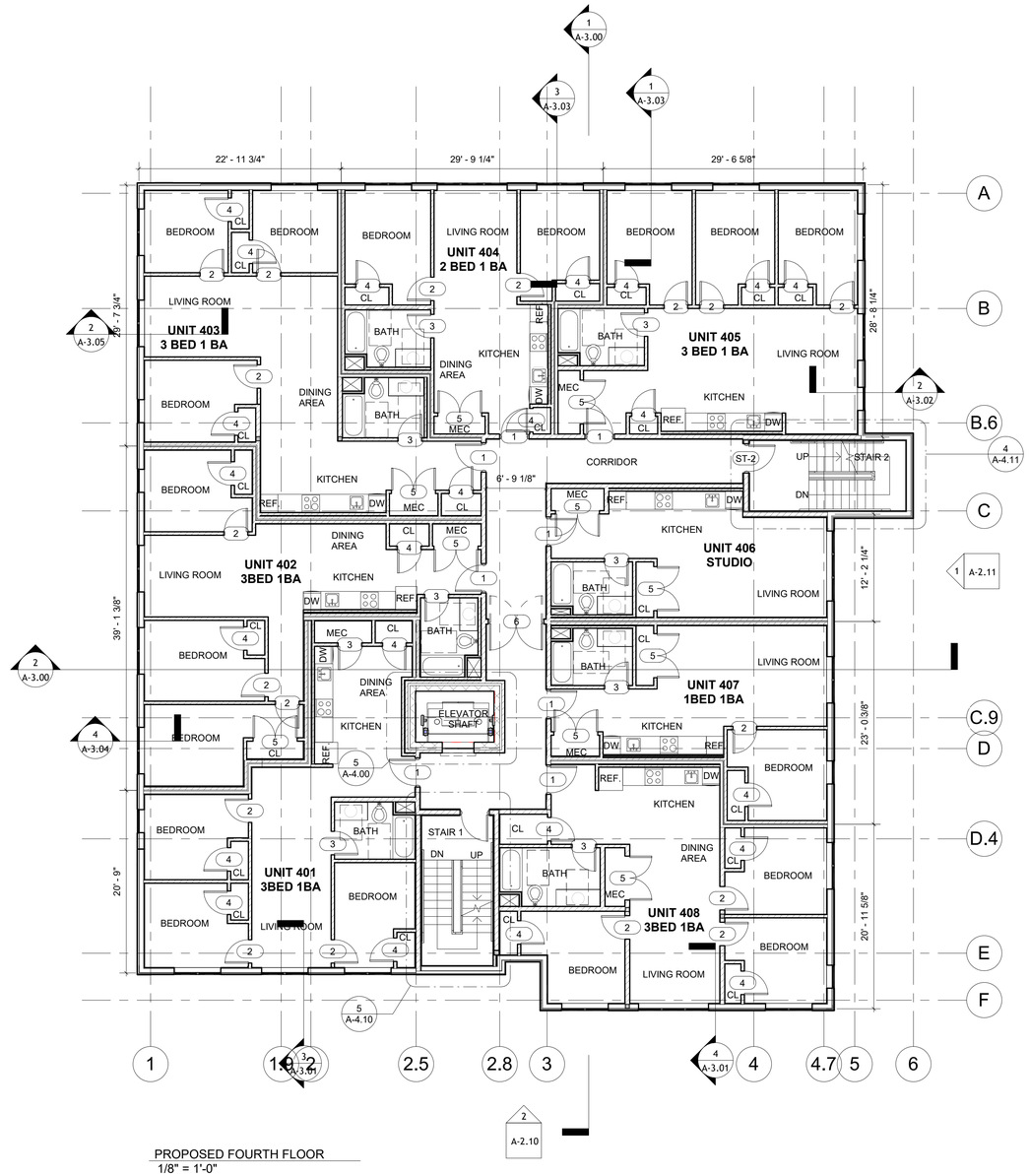
Project No: 2025014
Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED THIRD FLOOR PLAN - 02

Sheet No.

A-1.12B



PROPOSED FOURTH FLOOR
1/8" = 1'-0"

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Location

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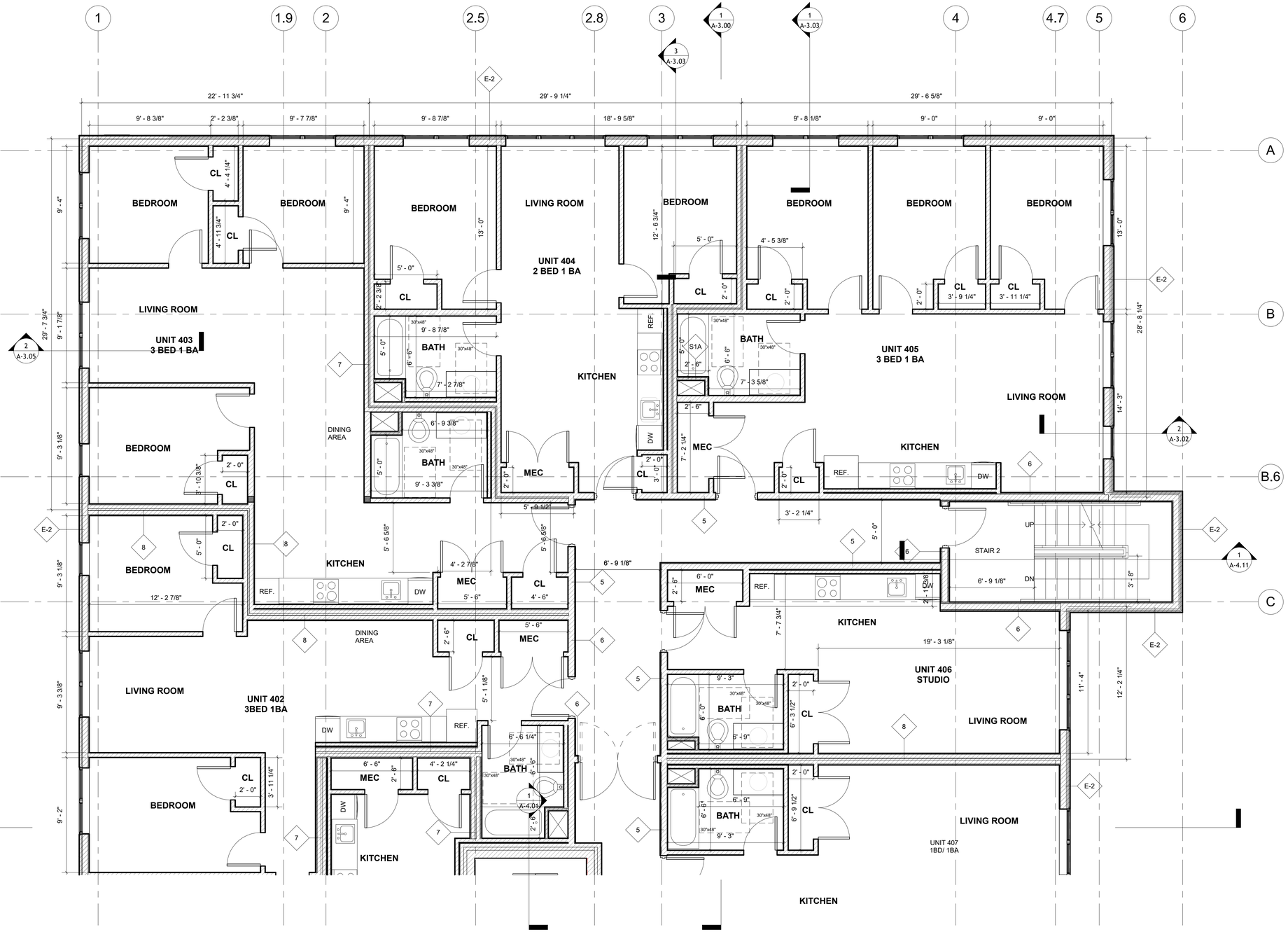
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Scale: 1/8" = 1'-0"
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

PROPOSED FOURTH FLOOR PLAN

Sheet No.

A-1.13



ENLARGED FOURTH FLOOR - 01
1/4" = 1'-0"

Location

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No.	Description	Date

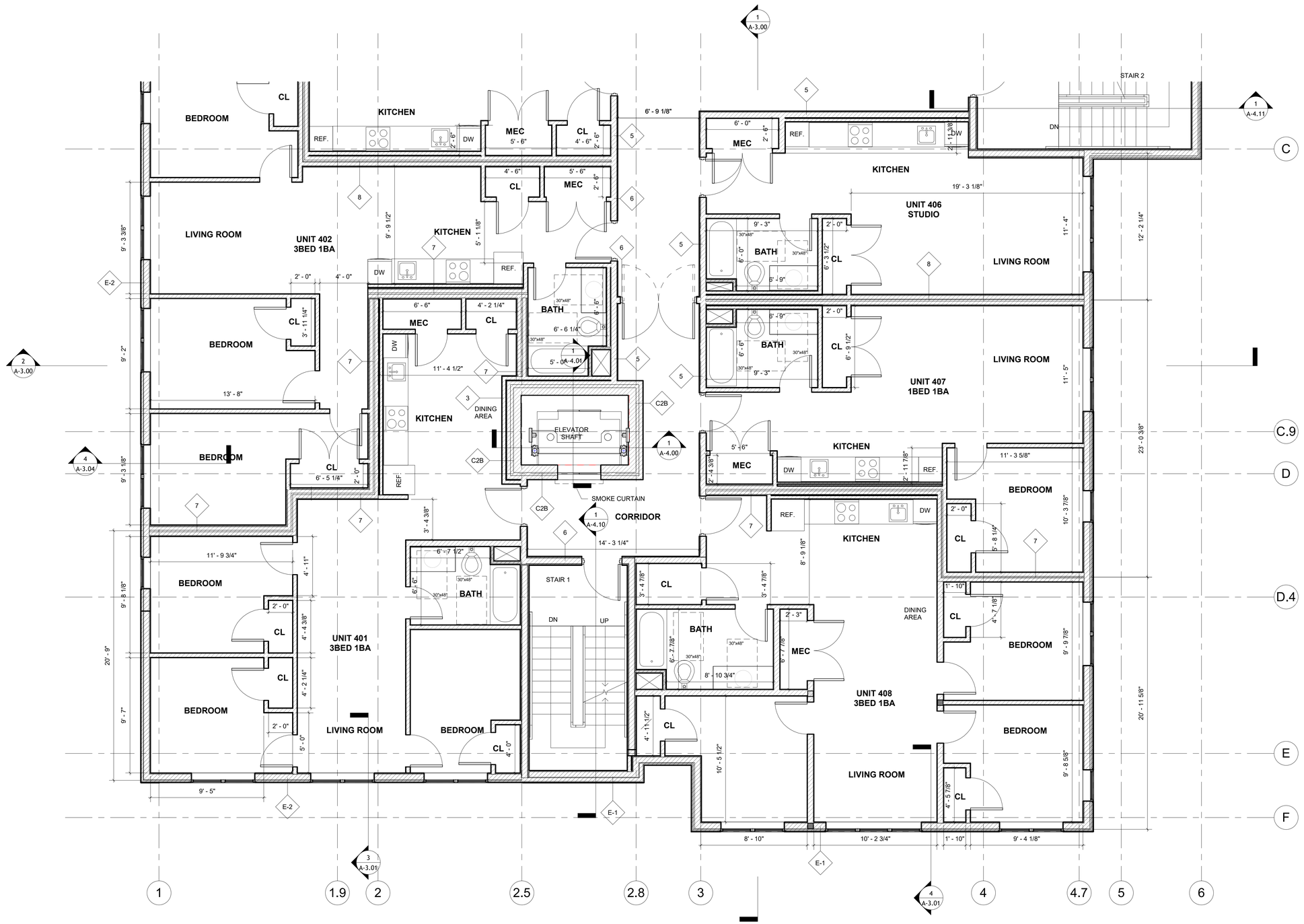
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Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED FOURTH FLOOR PLAN - 01

Sheet No.

A-1.13A



ENLARGED FOURTH FLOOR - 02
1/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

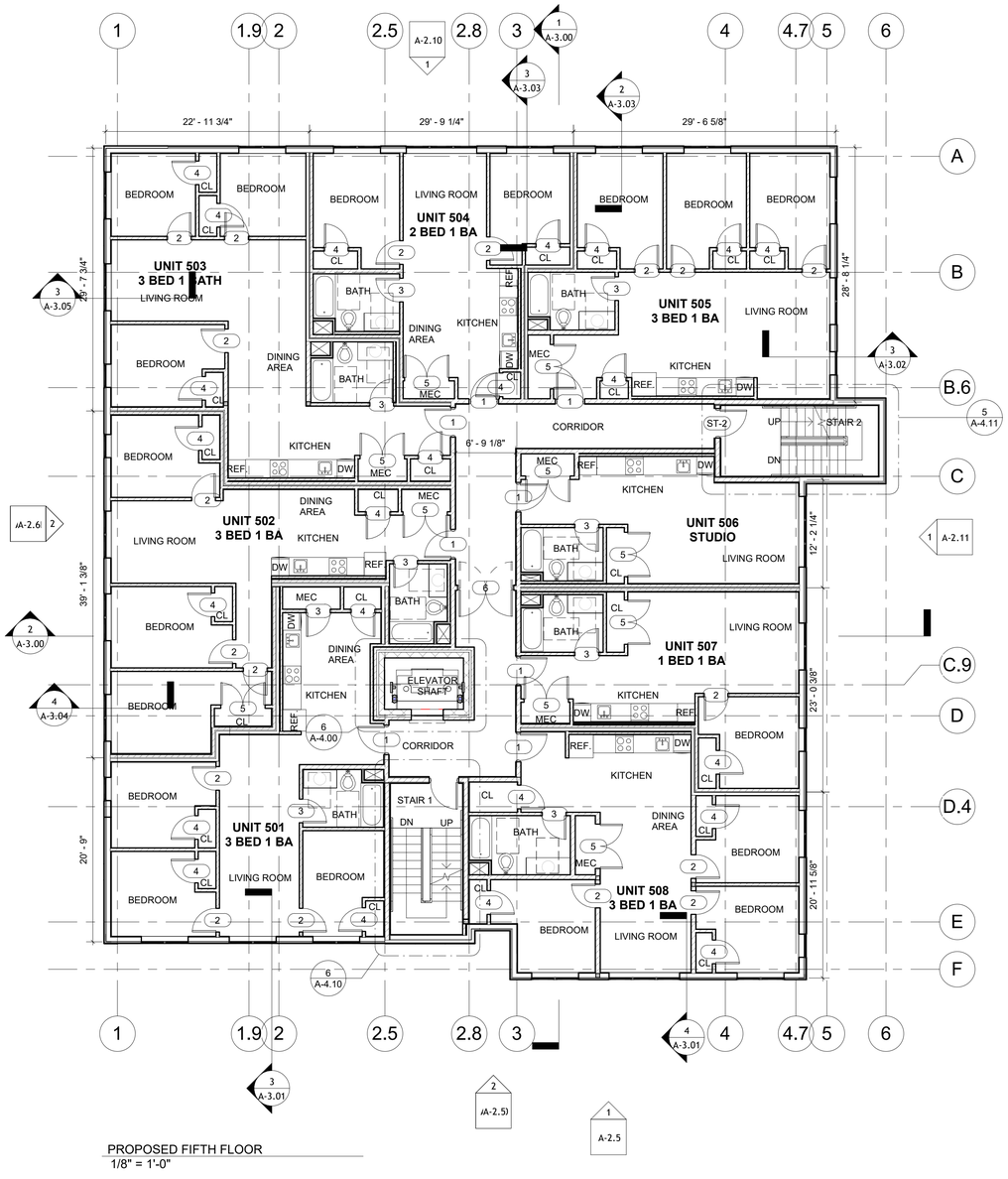
Project No: 2025014
Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED FOURTH FLOOR PLAN - 02

Sheet No.

A-1.13B



PROPOSED FIFTH FLOOR
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-472-0427
fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
24610
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

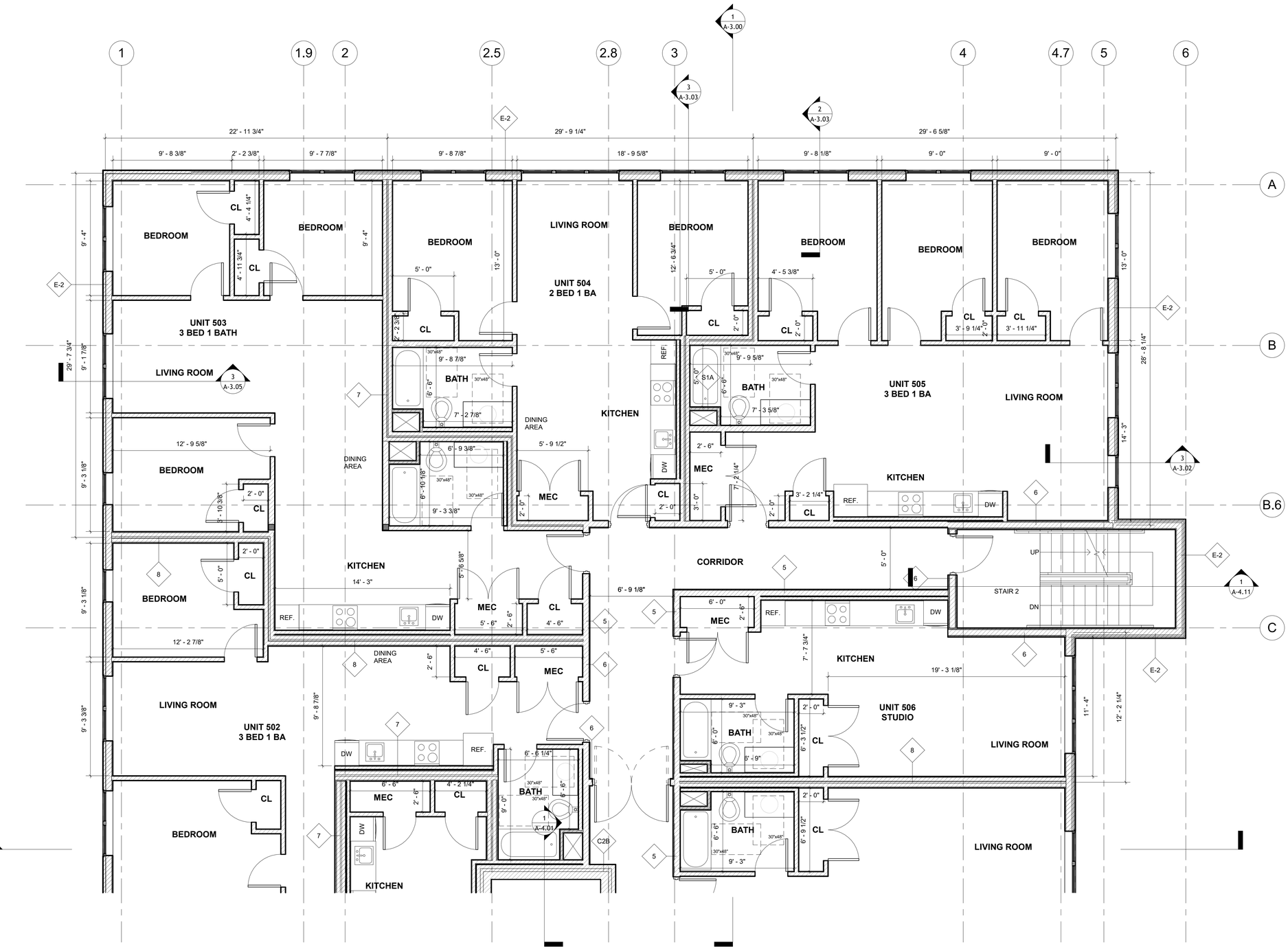
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Date: 01-07-2026
Drawn By: PM

Drawing Name

PROPOSED FIFTH FLOOR PLAN

Sheet No.

A-1.14



ENLARGED FIFTH FLOOR - 01
1/4" = 1'-0"

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Location

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7700 x 27
fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

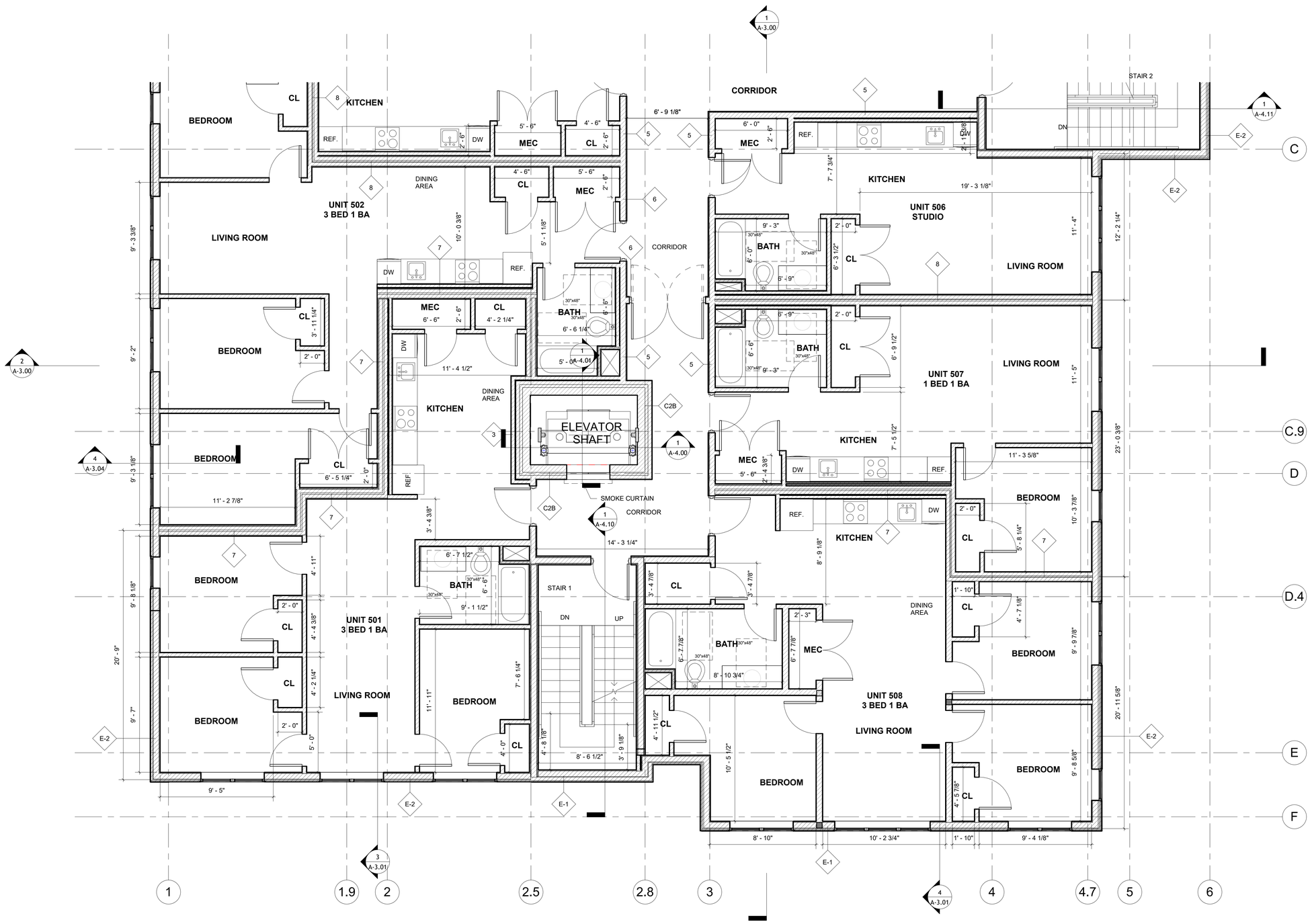
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Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED FIFTH FLOOR PLAN - 01

Sheet No.

A-1.14A



ENLARGED FIFTH FLOOR - 02
1/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7715 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

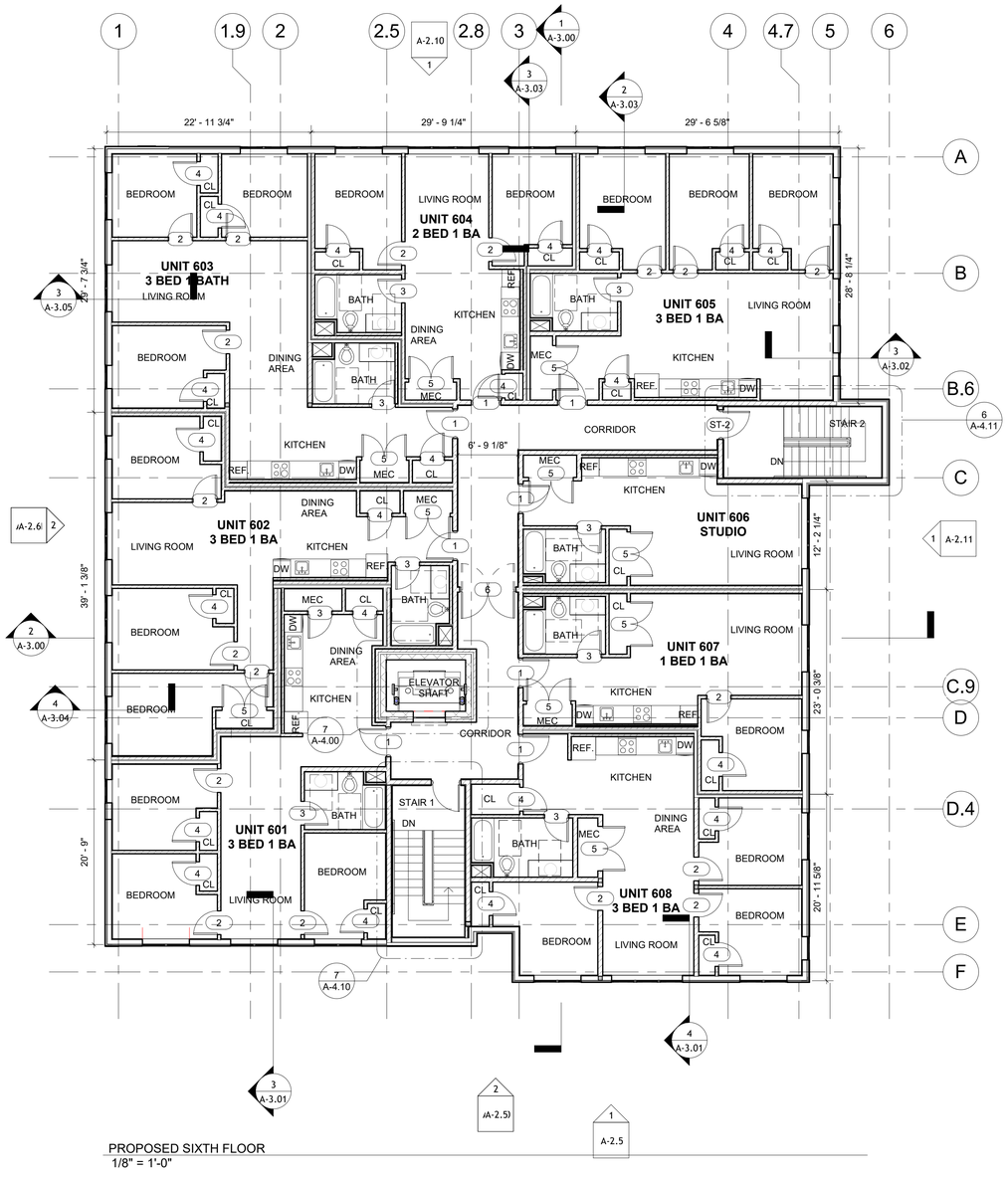
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Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED FIFTH FLOOR PLAN - 02

Sheet No.

A-1.14B



PROPOSED SIXTH FLOOR
1/8" = 1'-0"

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Location

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7700 x 27
fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

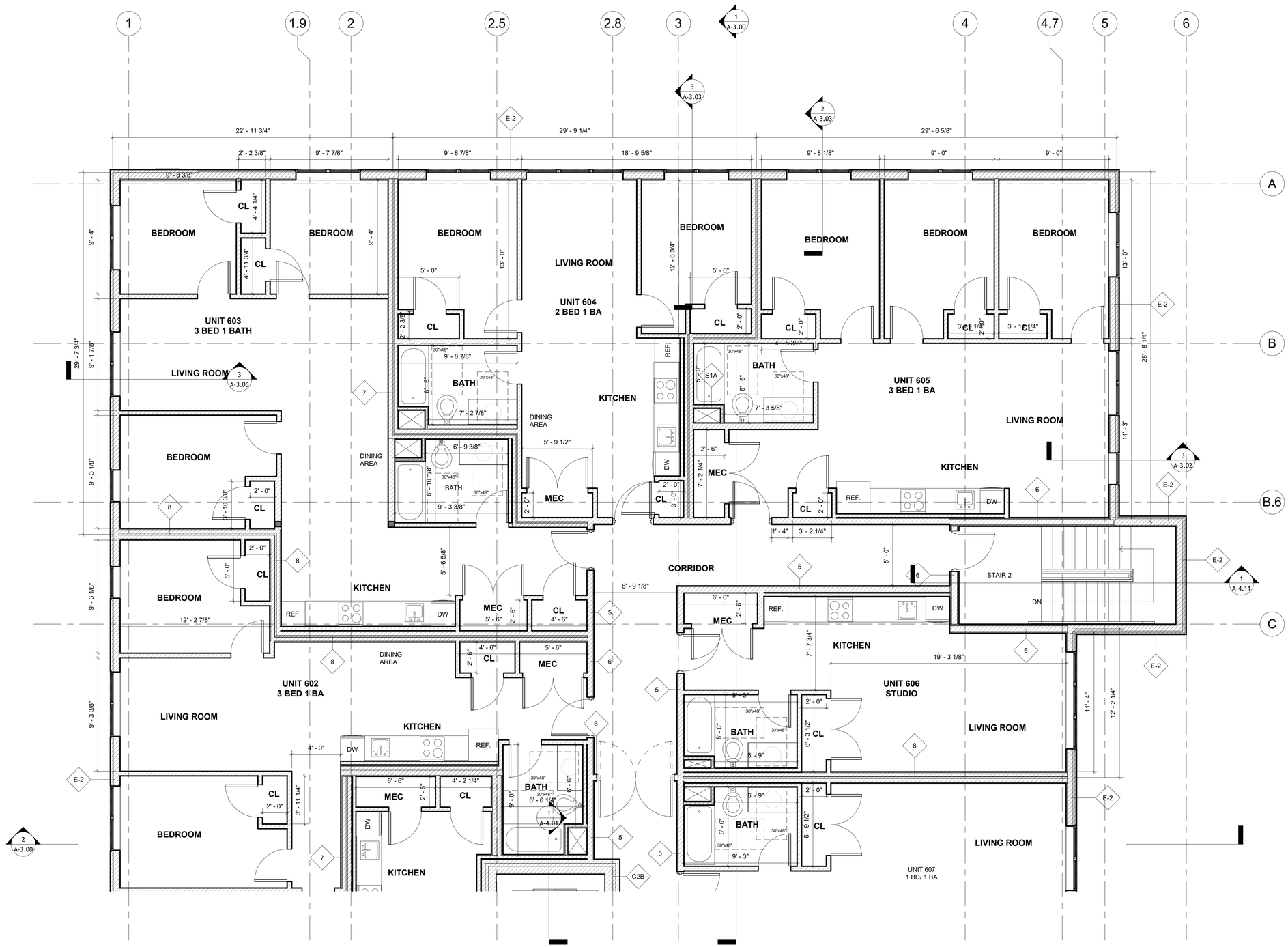
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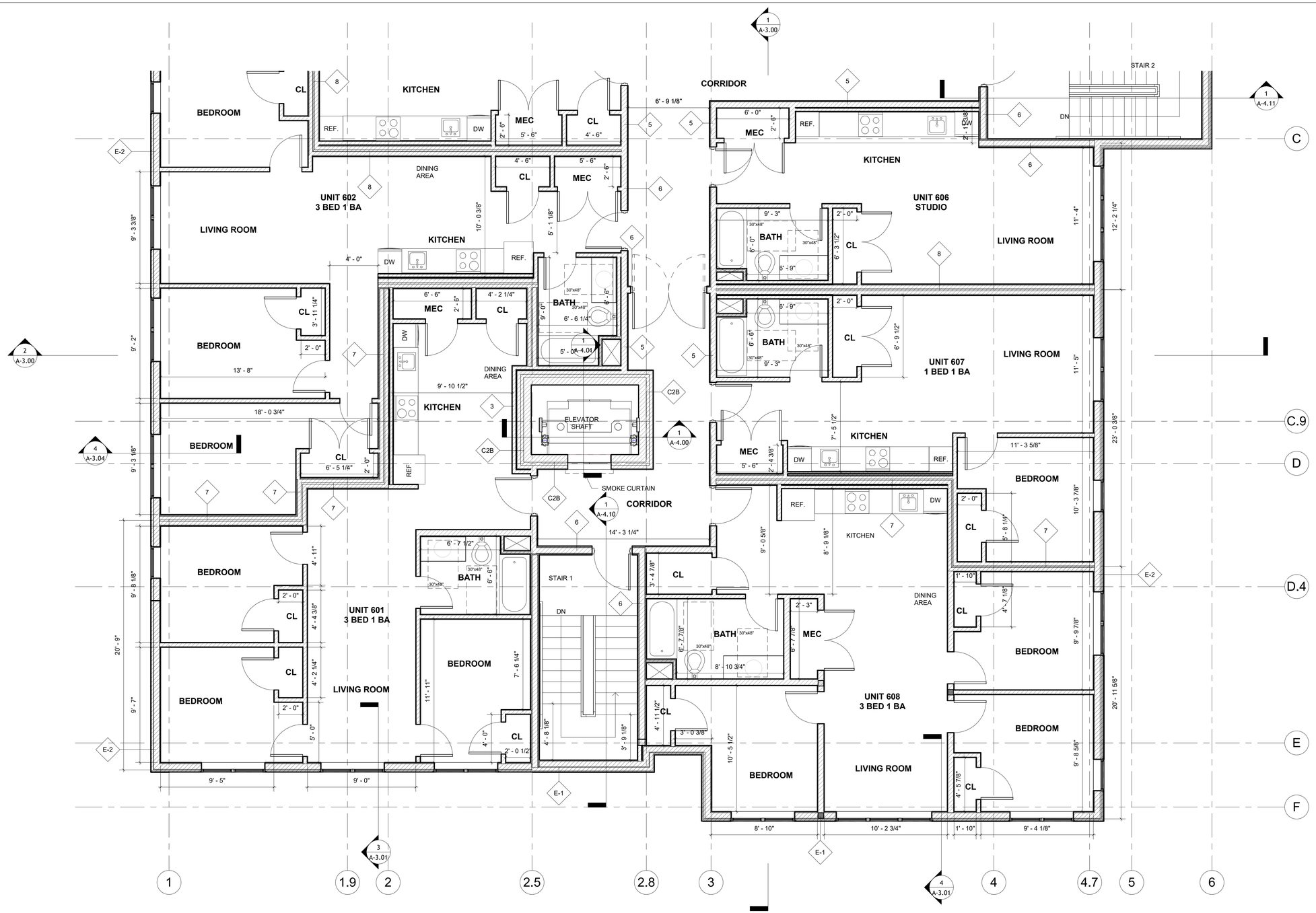
Drawing Name

PROPOSED SIXTH FLOOR PLAN

Sheet No.

A-1.15


1
1.9
2
2.5
2.8
3
4
4.7
5
6
A
B
B.6
C
22' - 11 3/4"
29' - 9 1/4"
29' - 6 5/8"
2' - 2 3/8"
9' - 7 7/8"
9' - 8 7/8"
18' - 9 5/8"
9' - 8 1/8"
9' - 0"
9' - 0"
9' - 8 3/8"
29' - 7 3/4"
9' - 1 7/8"
9' - 3 1/8"
9' - 3 3/8"
9' - 4"
9' - 4"
28' - 8 1/4"
13' - 0"
13' - 0"
14' - 3"
11' - 4"
12' - 2 1/4"
BEDROOM
CL
4' - 4 1/4"
4' - 11 3/4"
UNIT 603
3 BED 1 BATH
LIVING ROOM
BEDROOM
BEDROOM
BEDROOM
LIVING ROOM
UNIT 604
2 BED 1 BA
BEDROOM
BEDROOM
BEDROOM
BEDROOM
BEDROOM
UNIT 605
3 BED 1 BA
LIVING ROOM
KITCHEN
BEDROOM
2' - 0"
5' - 10 3/8"
CL
BEDROOM
12' - 2 7/8"
KITCHEN
REF.
DW
MEC
5' - 6"
CL
4' - 6"
DINING
AREA
UNIT 602
3 BED 1 BA
LIVING ROOM
KITCHEN
REF.
DW
4' - 0"
BEDROOM
CL
2' - 0"
3' - 11 1/4"
MEC
6' - 6"
CL
4' - 2 1/4"
DW
KITCHEN
CORRIDOR
6' - 9 1/8"
MEC
6' - 0"
REF.
DW
KITCHEN
19' - 3 1/8"
STAIR 2
DN
UNIT 606
STUDIO
LIVING ROOM
BATH
9' - 3"
6' - 3 1/2"
CL
5' - 9"
BATH
6' - 9 1/2"
CL
9' - 3"
LIVING ROOM
UNIT 607
1 BD/ 1 BA
BATH
6' - 6"
6' - 6 1/4"
9' - 0"
1
A-4.01
BATH
6' - 6"
7' - 2 7/8"
BATH
6' - 6"
7' - 3 5/8"
BATH
6' - 10 7/8"
9' - 3 3/8"
BATH
6' - 6"
9' - 8 7/8"
5' - 0"
5' - 0"
5' - 0"
5' - 0"
5' - 9 1/2"
6' - 9 3/8"
2' - 6"
7' - 2 1/4"
MEC
2' - 0"
3' - 0"
MEC
2' - 0"
CL
4' - 5 3/8"
3' - 1 1/4"
3' - 1 1/4"
1' - 4"
3' - 2 1/4"
E-2
E-2
E-2



ENLARGED SIXTH FLOOR - 02
1/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

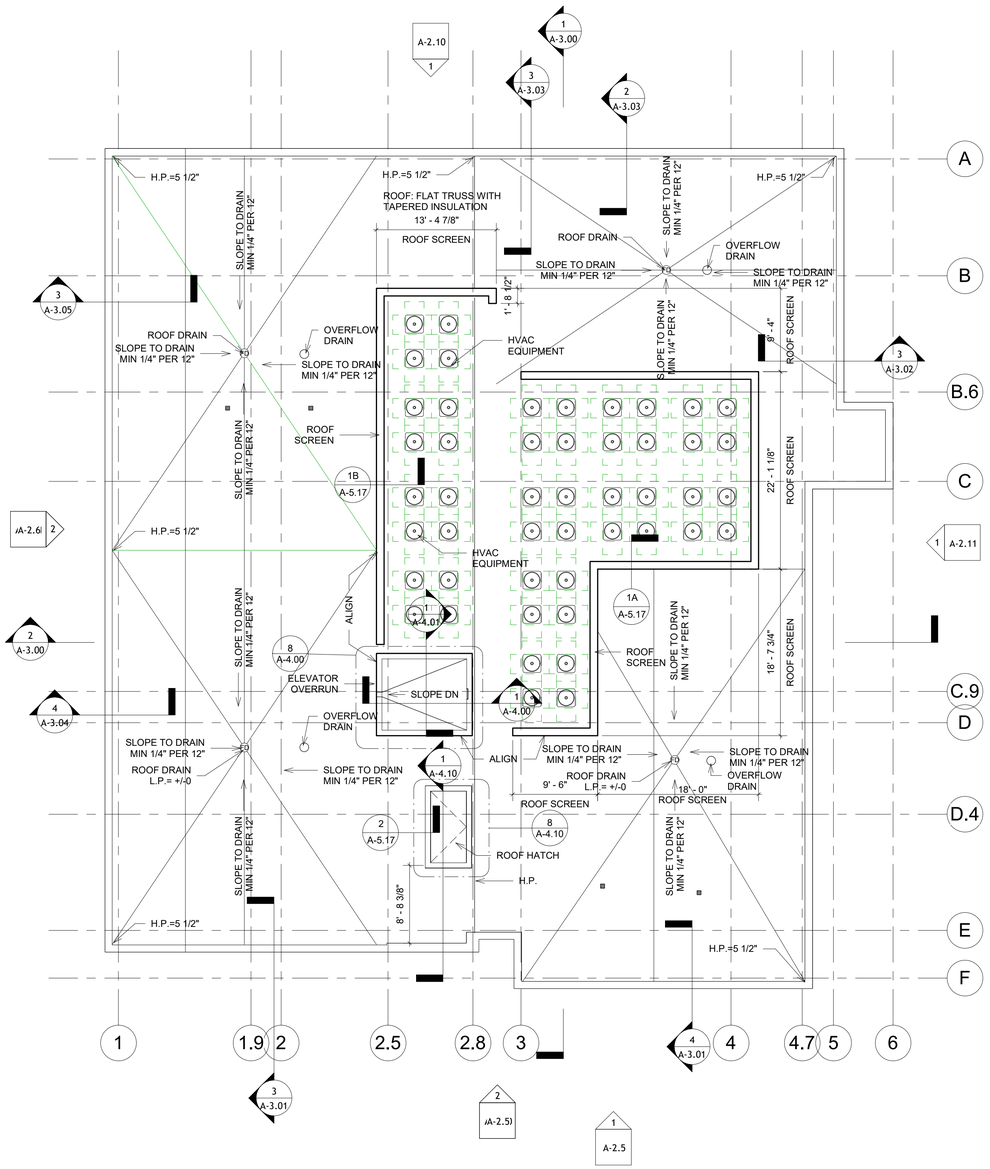
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Scale: 1/4" = 1'-0"
Date: 01-07-2026
Drawn By: PM

Drawing Name

ENLARGED SIXTH FLOOR PLAN - 02

Sheet No.

A-1.15B



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

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Location

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: 1/8" = 1'-0"
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

PROPOSED ROOF PLAN

Sheet No.

A-1.16

LIGHTING LEGEND

	EXW-1	WATERPROOF IP65 LED MODERN OUTDOOR WALL LIGHTS SPOTLIGHT
	EXW-2	ULINE LED WALL PACK (MODEL - H-9996)
	EXS -1	FLUSH MOUNT (FLUSH MOUNTED - TBD)
	F-1	BATHROOM FAN/LIGHT
	P-1	PENDANT (KITCHEN ISLAND)
	S-1	DRUM LIGHTING (MODEL: P350135-009-30)
	S-2	SURFACE MOUNT 14" DIAMETER ROUND LED LIGHT (BACK OF HOUSE)
	S-3	ULTRA-LOW PROFILE INTEGRATED LED FLUSH MOUNT 5CCT (MODEL: LC0000155-01/BN)
	S-4	ELITE SERIES 4 IN. LED DUOBRIGHT (MODEL: 92348)
	S-5	1'X4' LED PANEL (SKU: PL-14405W5Cbt-4C-16)
	UC-1	UNDER CABINET LIGHT - 24"
	W-1	UNIT ENTRY WALL SCONCE
	W-2	HAMPTON BAY WOODBURY 24.6 IN. 1-LIGHT BRUSHED NICKEL INTEGRATED LED BATHROOM VANITY LIGHT BAR WITH FROSTED ACRYLIC SHADE (MODEL: IQP1301LX-07/BN)

CEILING LEGEND

GWB DROPPED GWB CEILING OR SOFFIT BELOW RATED FLOOR-CEILING ASSEMBLY, +/- 8'-0" AFF UNLESS OTHERWISE NOTED.

REFLECTED CEILING PLAN GENERAL NOTES

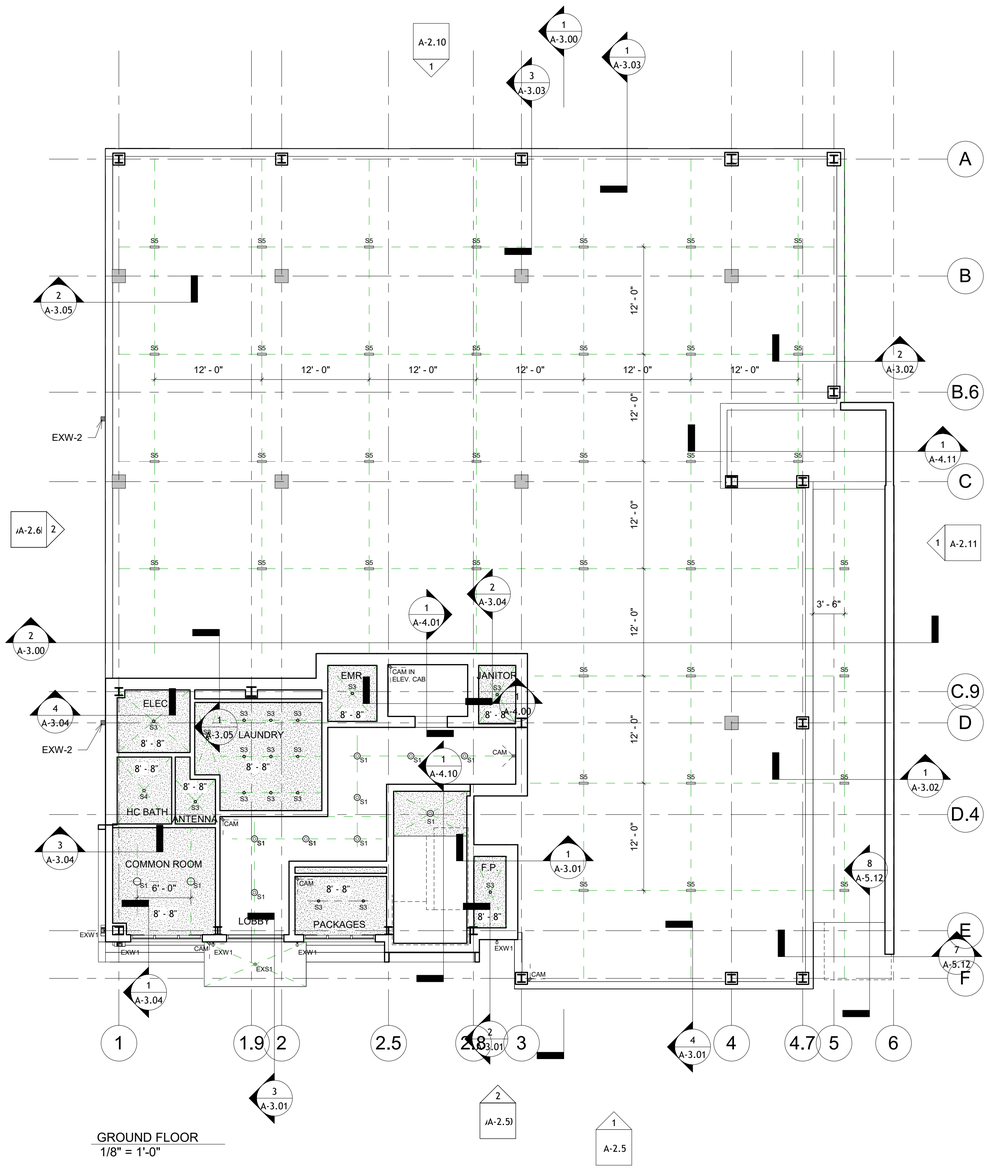
1. ALL CEILINGS ARE TO BE PTD GWB UNLESS OTHERWISE NOTED.

2. FINISHED CEILINGS IN DWELLING UNITS TO BE +/- 8'-10" AFF UNLESS OTHERWISE NOTED.

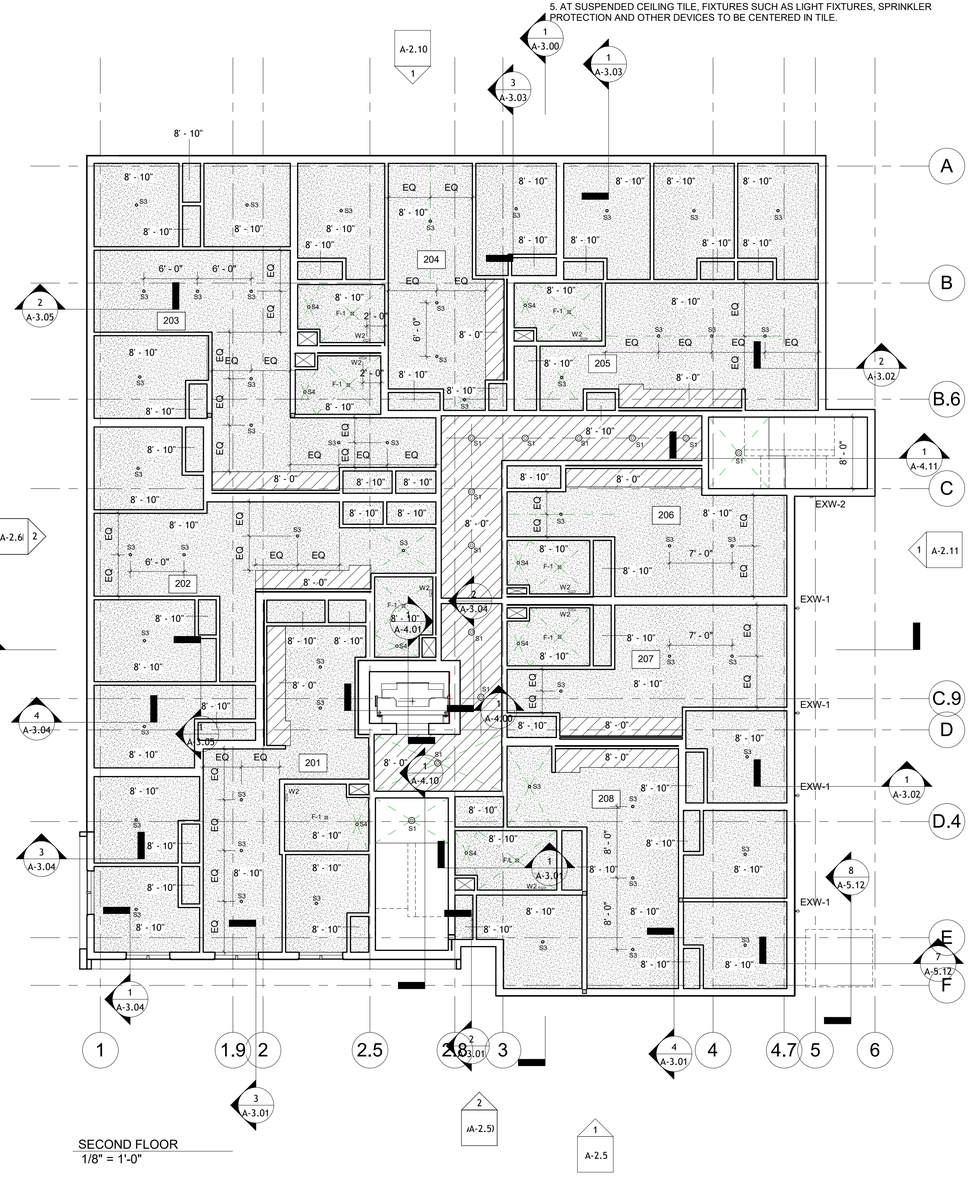
3. RECESSED DOWNLIGHT IN RATED FLOOR-CEILING ASSEMBLY MUST BE PROVIDED WITH FIRE RATED DOWNLIGHT ENCLOSURE OR FIRE RATED ELECTRICAL BOX WITH ALL GAPS SEALED WITH FIRE RATED CAULKING.

4. AT ALL SPACE NOTED TO BE EXPOSED OR OPEN TO STRUCTURE, ALL ELEMENT EXPOSED TO VIEW SHALL BE PAINTED.

5. AT SUSPENDED CEILING TILE, FIXTURES SUCH AS LIGHT FIXTURES, SPRINKLER PROTECTION AND OTHER DEVICES TO BE CENTERED IN TILE.



GROUND FLOOR
1/8" = 1'-0"



SECOND FLOOR
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT
ARTHUR K.P. CHOO
No. 9319
BOSTON MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: As indicated
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

RCP - GROUND & SECOND FLOOR PLAN

Sheet No.

A-1.20

LIGHTING LEGEND

EXW-1	WATERPROOF IP65 LED MODERN OUTDOOR WALL LIGHTS SPOTLIGHT
EXW-2	ULINE LED WALL PACK (MODEL - H-9996)
EXS -1	FLUSH MOUNT (FLUSH MOUNTED - TBD)
F-1	BATHROOM FAN/LIGHT
P-1	PENDANT (KITCHEN ISLAND)
S-1	DRUM LIGHTING (MODEL: P350135-009-30)
S-2	SURFACE MOUNT 14" DIAMETER ROUND LED LIGHT (BACK OF HOUSE)
S-3	ULTRA-LOW PROFILE INTEGRATED LED FLUSH MOUNT 5CCT (MODEL: LC0000155-01/BN)
S-4	ELITE SERIES 4 IN. LED DUOBRIGHT (MODEL: 92348)
S-5	1'X4' LED PANEL (SKU: PL-14405W5Cbt-4C-16)
UC-1	UNDER CABINET LIGHT - 24"
W-1	UNIT ENTRY WALL SCONCE
W-2	HAMPTON BAY WOODBURY 24.6 IN. 1-LIGHT BRUSHED NICKEL INTEGRATED LED BATHROOM VANITY LIGHT BAR WITH FROSTED ACRYLIC SHADE (MODEL: IQP1301LX-07/BN)

CEILING LEGEND

GWB DROPPED GWB CEILING OR SOFFIT BELOW RATED FLOOR-CEILING ASSEMBLY, +/- 8'-0" AFF UNLESS OTHERWISE NOTED.

REFLECTED CEILING PLAN GENERAL NOTES

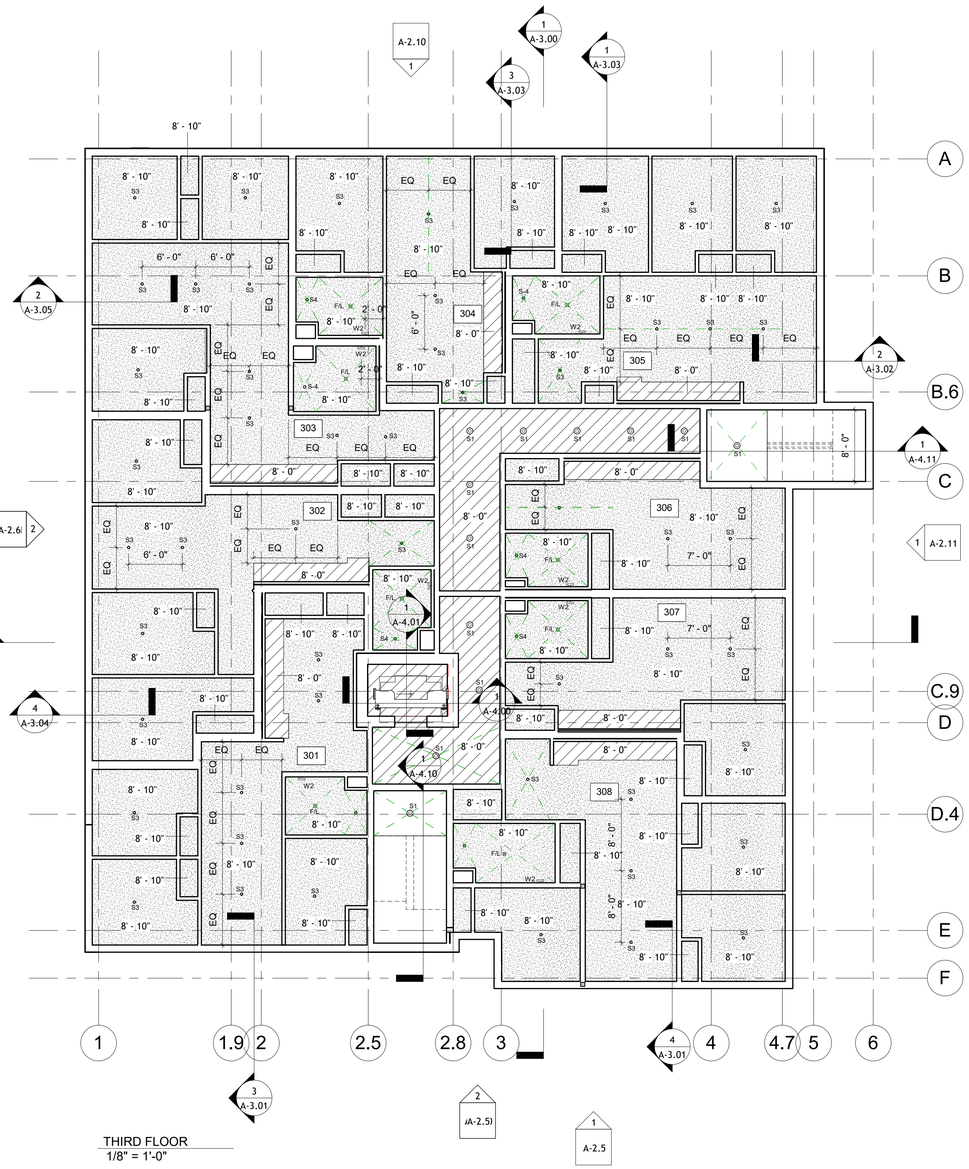
1. ALL CEILINGS ARE TO BE PTD GWB UNLESS OTHERWISE NOTED.

2. FINISHED CEILINGS IN DWELLING UNITS TO BE +/- 8'-10" AFF UNLESS OTHERWISE NOTED.

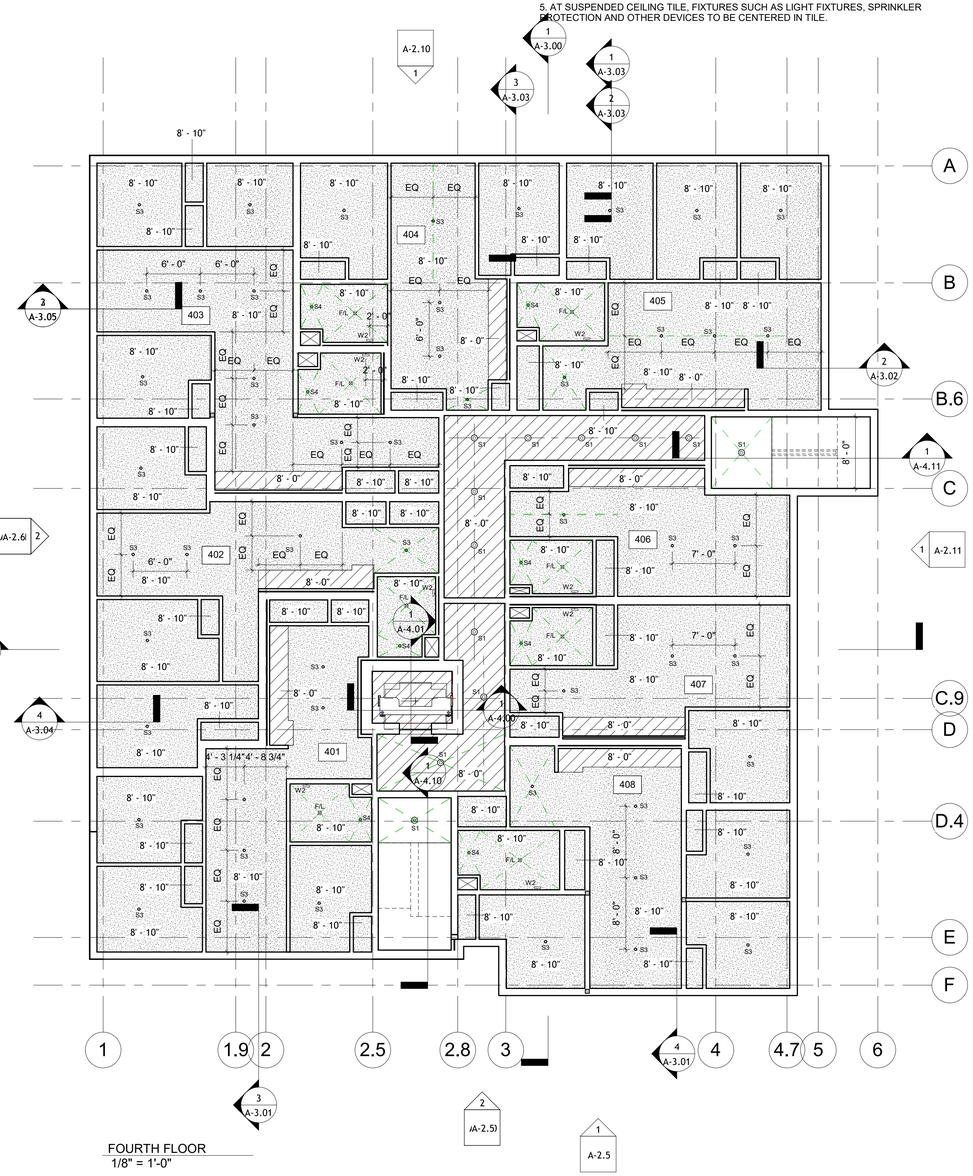
3. RECESSED DOWNLIGHT IN RATED FLOOR-CEILING ASSEMBLY MUST BE PROVIDED WITH FIRE RATED DOWNLIGHT ENCLOSURE OR FIRE RATED ELECTRICAL BOX WITH ALL GAPS SEALED WITH FIRE RATED CAULKING.

4. AT ALL SPACE NOTED TO BE EXPOSED OR OPEN TO STRUCTURE, ALL ELEMENT EXPOSED TO VIEW SHALL BE PAINTED.

5. AT SUSPENDED CEILING TILE, FIXTURES SUCH AS LIGHT FIXTURES, SPRINKLER PROTECTION AND OTHER DEVICES TO BE CENTERED IN TILE.



THIRD FLOOR
1/8" = 1'-0"



FOURTH FLOOR
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7700
fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 8319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: As indicated
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

RCP - THIRD & FOURTH FLOOR PLAN

Sheet No.

A-1.21

LIGHTING LEGEND

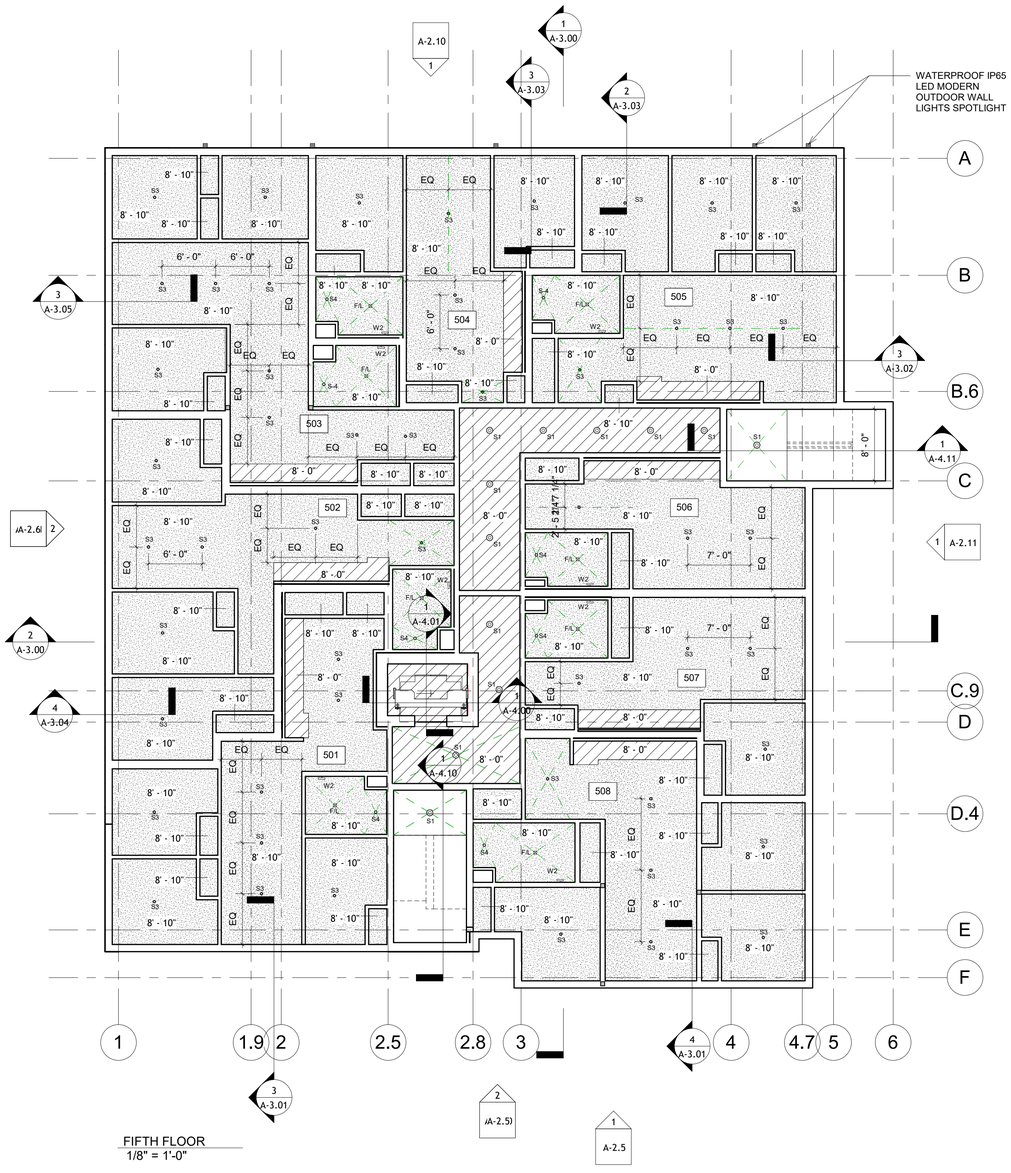
EXW-1	WATERPROOF IP65 LED MODERN OUTDOOR WALL LIGHTS SPOTLIGHT
EXW-2	ULINE LED WALL PACK (MODEL - H-9996)
EXS -1	FLUSH MOUNT (FLUSH MOUNTED - TBD)
F-1	BATHROOM FAN/LIGHT
P-1	PENDANT (KITCHEN ISLAND)
S-1	DRUM LIGHTING (MODEL: P350135-009-30)
S-2	SURFACE MOUNT 14" DIAMETER ROUND LED LIGHT (BACK OF HOUSE)
S-3	ULTRA-LOW PROFILE INTEGRATED LED FLUSH MOUNT 5CCT (MODEL: LC0000155-01/BN)
S-4	ELITE SERIES 4 IN. LED DUOBRIGHT (MODEL: 92348)
S-5	1'X4' LED PANEL (SKU: PL-14405W5Cbt-4C-16)
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W-1	UNIT ENTRY WALL SCONCE
W-2	HAMPTON BAY WOODBURY 24.6 IN. 1-LIGHT BRUSHED NICKEL INTEGRATED LED BATHROOM VANITY LIGHT BAR WITH FROSTED ACRYLIC SHADE (MODEL: IQP1301LX-07/BN)

CEILING LEGEND

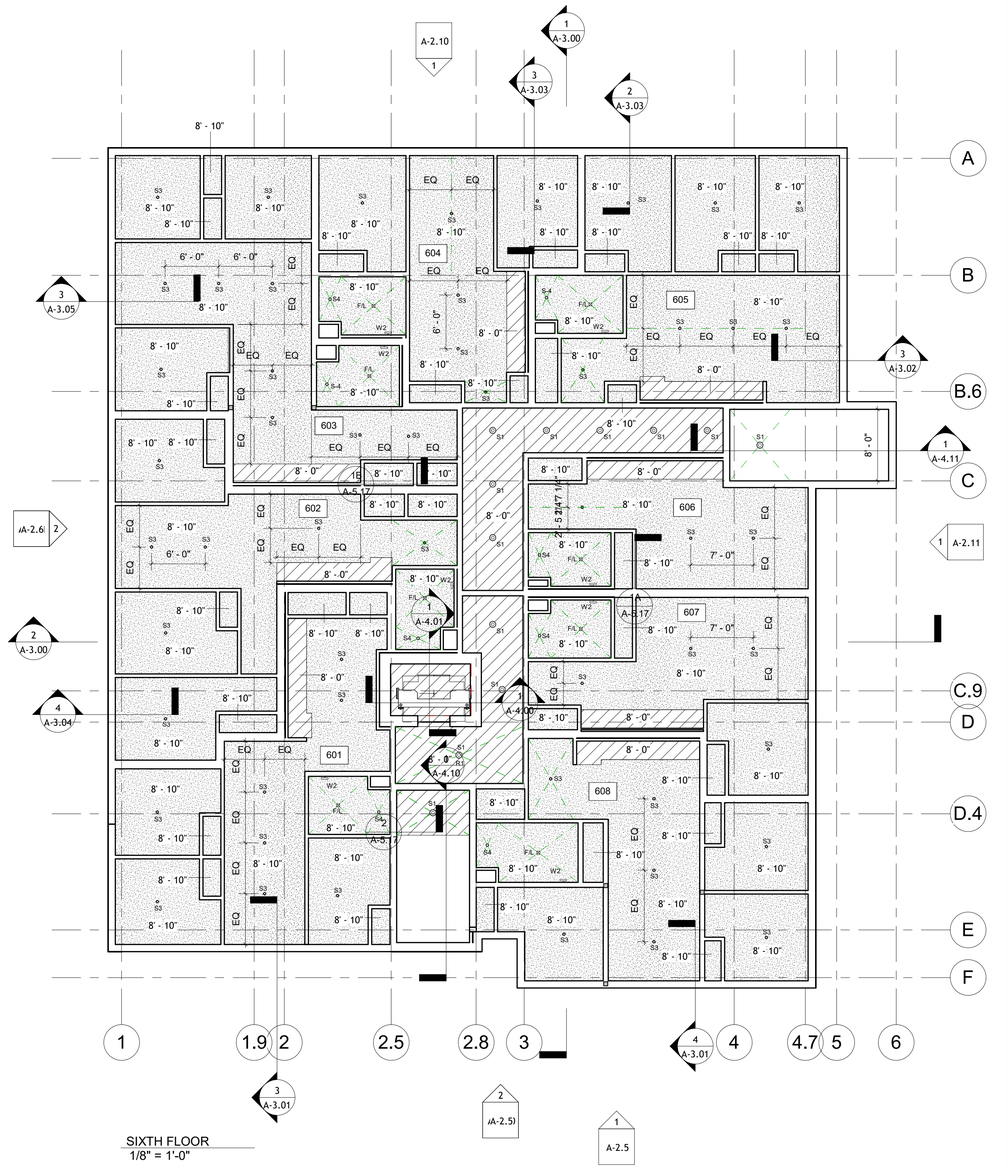
GWB DROPPED GWB CEILING OR SOFFIT BELOW RATED FLOOR-CEILING ASSEMBLY, +/- 8'-0" AFF UNLESS OTHERWISE NOTED.

REFLECTED CEILING PLAN GENERAL NOTES

1. ALL CEILINGS ARE TO BE PTD GWB UNLESS OTHERWISE NOTED.
2. FINISHED CEILINGS IN DWELLING UNITS TO BE +/- 8'-10" AFF UNLESS OTHERWISE NOTED.
3. RECESSED DOWNLIGHT IN RATED FLOOR-CEILING ASSEMBLY MUST BE PROVIDED WITH FIRE RATED DOWNLIGHT ENCLOSURE OR FIRE RATED ELECTRICAL BOX WITH ALL GAPS SEALED WITH FIRE RATED CAULKING.
4. AT ALL SPACE NOTED TO BE EXPOSED OR OPEN TO STRUCTURE, ALL ELEMENT EXPOSED TO VIEW SHALL BE PAINTED.
5. AT SUSPENDED CEILING TILE, FIXTURES SUCH AS LIGHT FIXTURES, SPRINKLER PROTECTION AND OTHER DEVICES TO BE CENTERED IN TILE.



FIFTH FLOOR
1/8" = 1'-0"



SIXTH FLOOR
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
Tel 617-479-9227 Fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: As indicated
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

RCP - FIFTH & SIXTH FLOOR PLAN

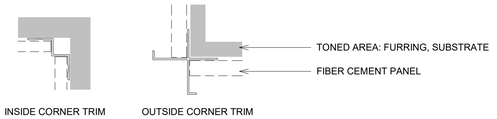
Sheet No.

A-1.22



PROPOSED NORTH ELEVATION
1/8" = 1'-0"

METAL TRIM FOR FIBER CEMENT PANEL SYSTEM



INSIDE CORNER TRIM | OUTSIDE CORNER TRIM



RECESS HORIZONTAL TRIM | RECESS HORIZONTAL EDGE TRIM | RECESS DRAINAGE FLASHING



RECESS VERTICAL TRIM | RECESS VERTICAL F TRIM | J TRIM AT FIBER CEMENT CLAPBOARD WINDOW

METAL TRIM FOR FIBER CEMENT CLAPBOARD



INSIDE CORNER TRIM | OUTSIDE CORNER TRIM



VERTICAL TRIM | J TRIM AT WINDOW

EXTERIOR WALL MATERIALS LEGEND

MASONRY VENEER	CONCRETE MASONRY UNITS PRODUCT: A. JANDRIS & SONS ARCHITECTURAL CMU SIZE: 4" x 8" x 16" NOMINAL REGULAR 3 CORE TEXTURE: GROUND FACE COLOR: 2503-2 MIX: MEDIUM WEIGHT	
SIDING TYPE 1	FIBER CEMENT CLAPBOARD SIDING PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING THICKNESS: 5/16" SIZE: 5 1/4" WITH 4" EXPOSURE TO THE WEATHER TEXTURE: SMOOTH FACTORY FINISH: PEARL GRAY	
SIDING TYPE 2	FIBER CEMENT CLAPBOARD SIDING PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING THICKNESS: 5/16" SIZE: 9 1/4" WITH 8" EXPOSURE TO THE WEATHER TEXTURE: SMOOTH FACTORY PRIMED; FIELD PAINTED	BENJAMIN MOORE COLOR A = AF-695 ETERNITY COLOR C = AF-705 CINDER
SIDING TYPE 3	FIBER CEMENT PANEL SYSTEM PRODUCT: JAMES HARDIE REVEAL PANEL SYSTEM THICKNESS: 7/16" SIZE: 4' x 8' NOMINAL WITH 1/2" JOINT TEXTURE: SMOOTH FULL RANGE OF FIBER CEMENT PANEL TRIM FACTORY PRIMED; FIELD PAINTED	BENJAMIN MOORE COLOR A = AF-695 ETERNITY COLOR B = AF-700 STORM COLOR C = AF-705 CINDER
SIDING TYPE 4	COMPOSITE METAL PANEL PRODUCT: ALUCOBOND COLOR DUSTY CHARCOAL PVDF 3 / GLOSS 30	
SIDING TYPE 5	CEDAR SIDING NATURAL FINISH	

EXTERIOR ELEVATIONS NOTES:

1. PROVIDE (1) 8FT X 12FT TALL FULL SCALE MOCK-UP PANEL FOR OWNER AND ARCHITECT'S REVIEW AND APPROVAL.

2. ALL GRILLE, LOUVERS, VENTS MOUNTED ON THE FACADE SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR.

3. THERE SHOULD NOT BE ANY VENTS INSTALLED ON FACADE FACING THORN STREET.



PROPOSED SOUTH ELEVATION
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: As indicated
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

PROPOSED NORTH & SOUTH ELEVATIONS

Sheet No.

A-2.10



PROPOSED EAST ELEVATION
1/8" = 1'-0"

EXTERIOR WALL MATERIALS LEGEND

MASONRY VENEER	CONCRETE MASONRY UNITS PRODUCT: A. JANDRIS & SONS ARCHITECTURAL CMU SIZE: 4" x 8" x 16" NOMINAL REGULAR 3 CORE TEXTURE: GROUND FACE COLOR: 2503-2 MIX: MEDIUM WEIGHT	
SIDING TYPE 1	FIBER CEMENT CLAPBOARD SIDING PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING THICKNESS: 5/16" SIZE: 5 1/4" WITH 4" EXPOSURE TO THE WEATHER TEXTURE: SMOOTH FACTORY FINISH: PEARL GRAY	
SIDING TYPE 2	FIBER CEMENT CLAPBOARD SIDING PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING THICKNESS: 5/16" SIZE: 9 1/4" WITH 8" EXPOSURE TO THE WEATHER TEXTURE: SMOOTH FACTORY PRIMED; FIELD PAINTED	BENJAMIN MOORE COLOR A = AF-695 ETERNITY COLOR C = AF-705 CINDER
SIDING TYPE 3	FIBER CEMENT PANEL SYSTEM PRODUCT: JAMES HARDIE REVEAL PANEL SYSTEM THICKNESS: 7/16" SIZE: 4' x 8' NOMINAL WITH 1/2" JOINT TEXTURE: SMOOTH FULL RANGE OF FIBER CEMENT PANEL TRIM FACTORY PRIMED; FIELD PAINTED	BENJAMIN MOORE COLOR A = AF-695 ETERNITY COLOR B = AF-700 STORM COLOR C = AF-705 CINDER
SIDING TYPE 4	COMPOSITE METAL PANEL PRODUCT: ALUCOBOND COLOR DUSTY CHARCOAL PVDF 3 / GLOSS 30	
SIDING TYPE 5	CEDAR SIDING NATURAL FINISH	

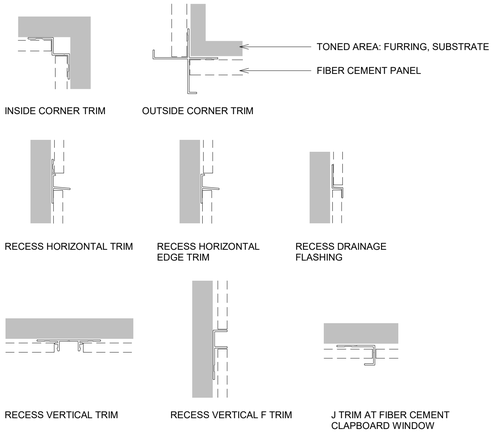
EXTERIOR ELEVATIONS NOTES:

1. PROVIDE (1) 8FT X 12FT TALL FULL SCALE MOCK-UP PANEL FOR OWNER AND ARCHITECT'S REVIEW AND APPROVAL.

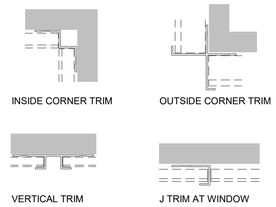
2. ALL GRILLE, LOUVERS, VENTS MOUNTED ON THE FACADE SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR.

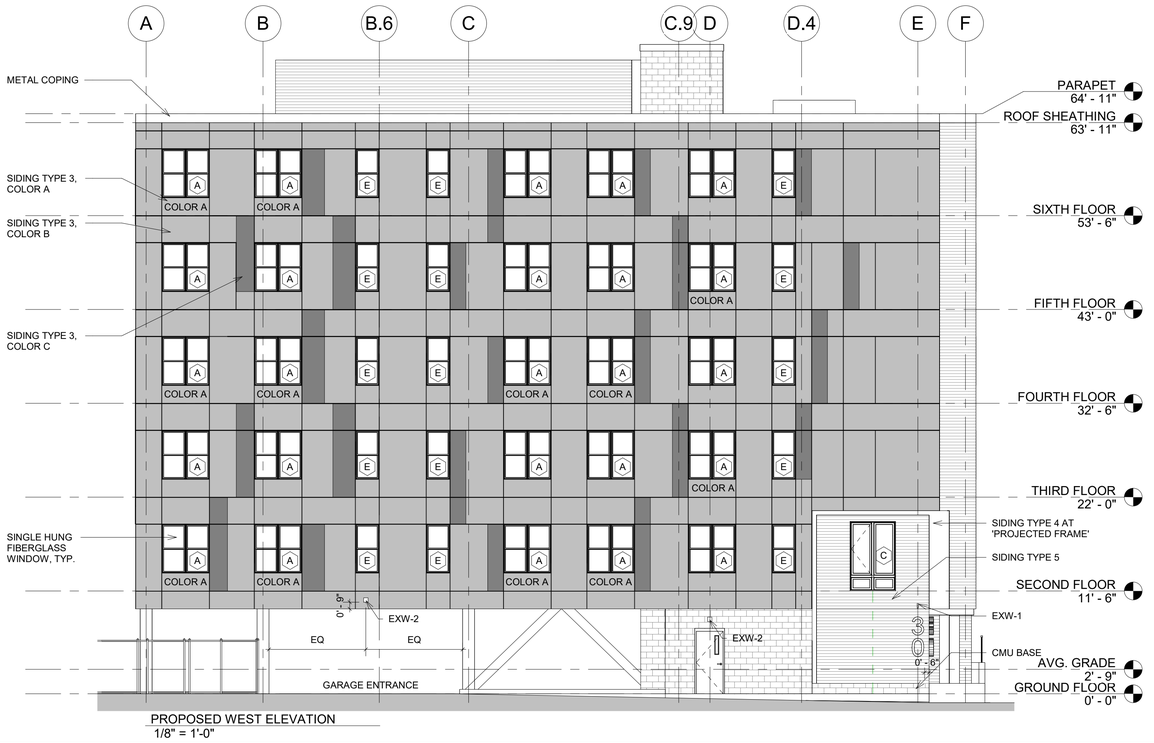
3. THERE SHOULD NOT BE ANY VENTS INSTALLED ON FACADE FACING THORN STREET.

METAL TRIM FOR FIBER CEMENT PANEL SYSTEM



METAL TRIM FOR FIBER CEMENT CLAPBOARD





PROPOSED WEST ELEVATION
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: As indicated
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

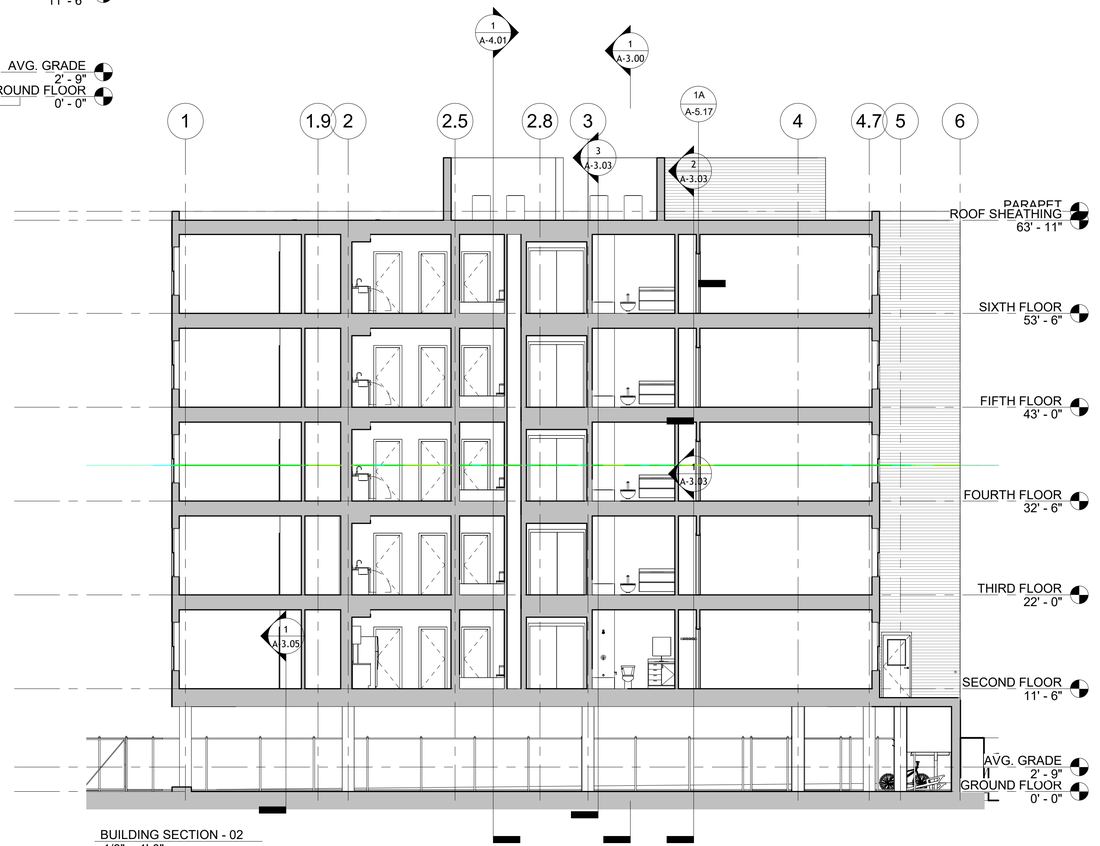
PROPOSED EAST & WEST ELEVATIONS

Sheet No.

A-2.11



BUILDING SECTION -01
1/8" = 1'-0"



BUILDING SECTION - 02
1/8" = 1'-0"

Location

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617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
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COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

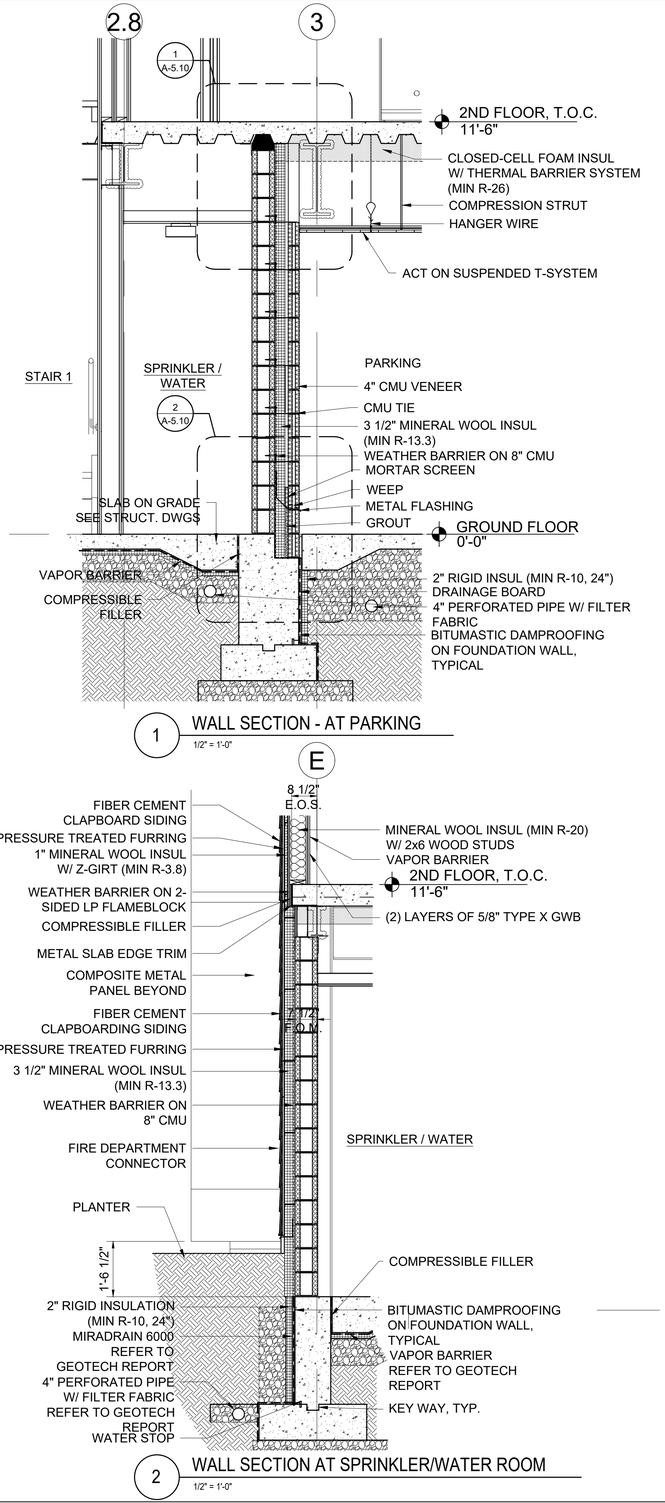
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Scale: 1/8" = 1'-0"
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

BUILDING SECTIONS

Sheet No.

A-3.00



NOTE:
ALL EXTERIOR STUDS, POSTS, HEADERS, BLOCKING, AND SHEATHING TO BE FRTW.

Location

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30 THORN STREET
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REGISTERED ARCHITECT
ARTHUR K.F. CHOO
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No.	Description	Date

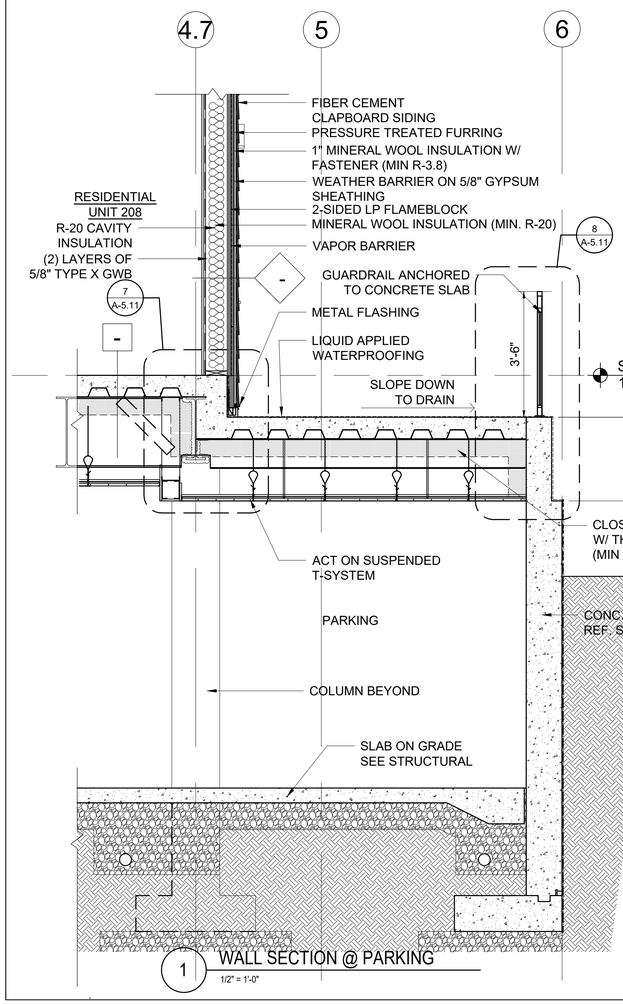
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Date: 01-07-2026
Drawn By: DF

Drawing Name

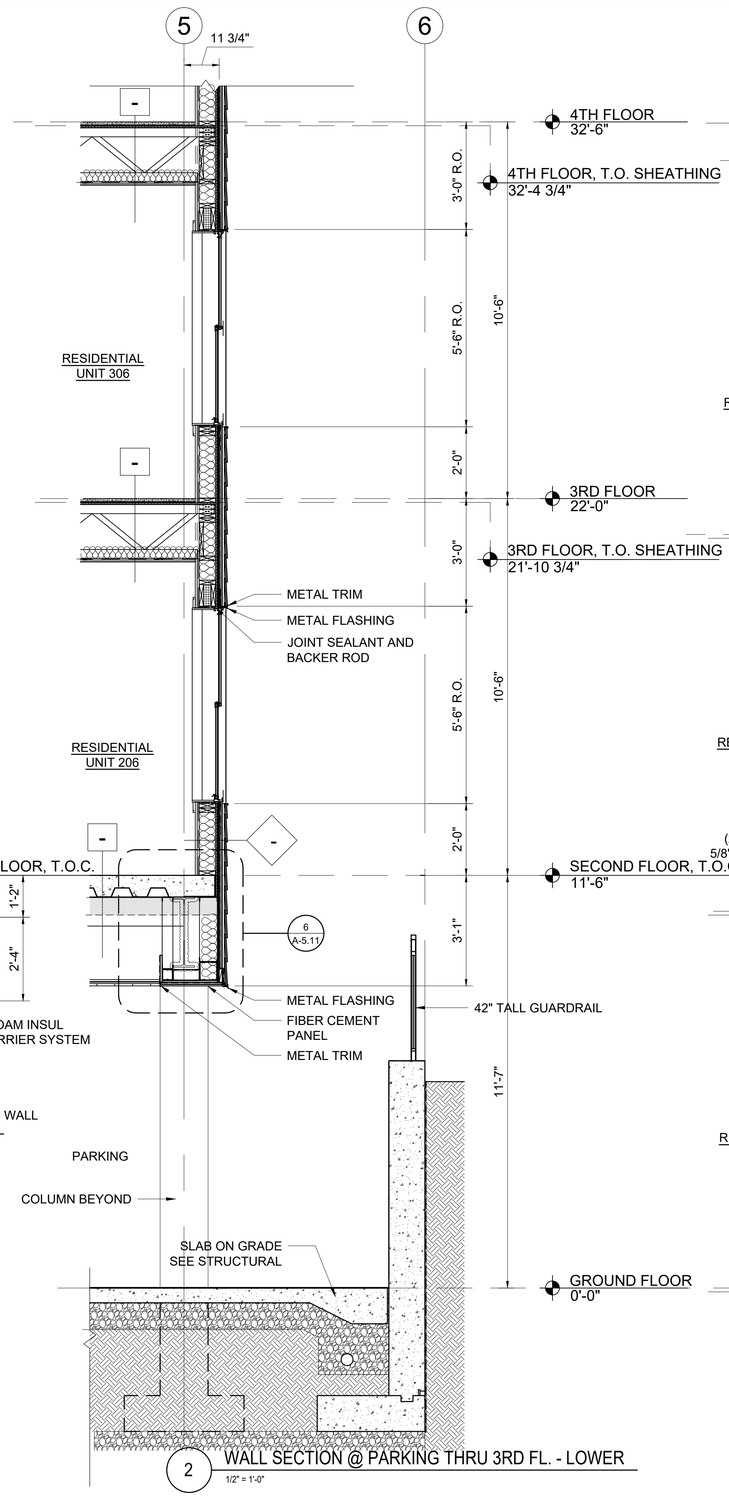
EXTERIOR
WALL
SECTIONS

Sheet No.

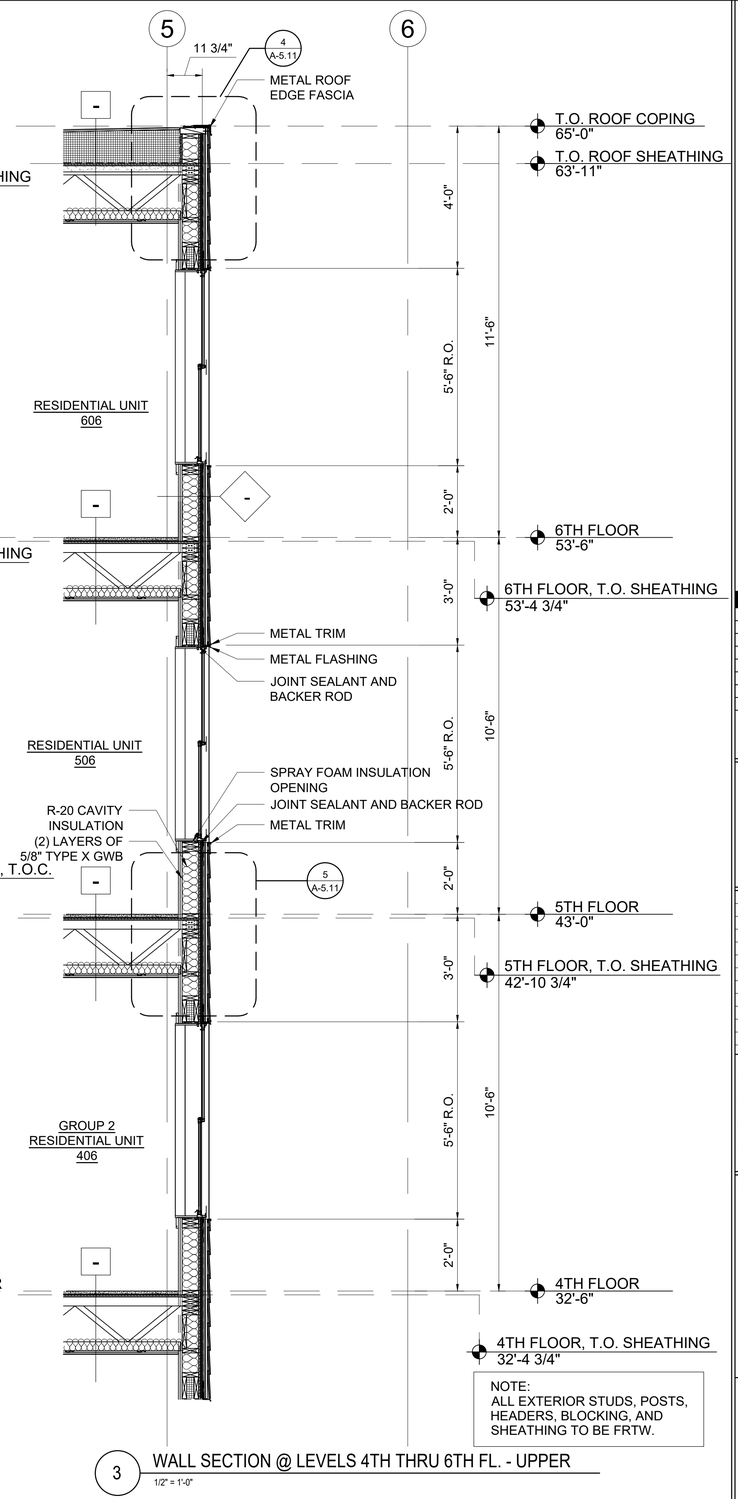
A-3.01



1 WALL SECTION @ PARKING
1/2" = 1'-0"



2 WALL SECTION @ PARKING THRU 3RD FL. - LOWER
1/2" = 1'-0"



NOTE:
ALL EXTERIOR STUDS, POSTS, HEADERS, BLOCKING, AND SHEATHING TO BE FRTW.

3 WALL SECTION @ LEVELS 4TH THRU 6TH FL. - UPPER
1/2" = 1'-0"

Location

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No.	Description	Date

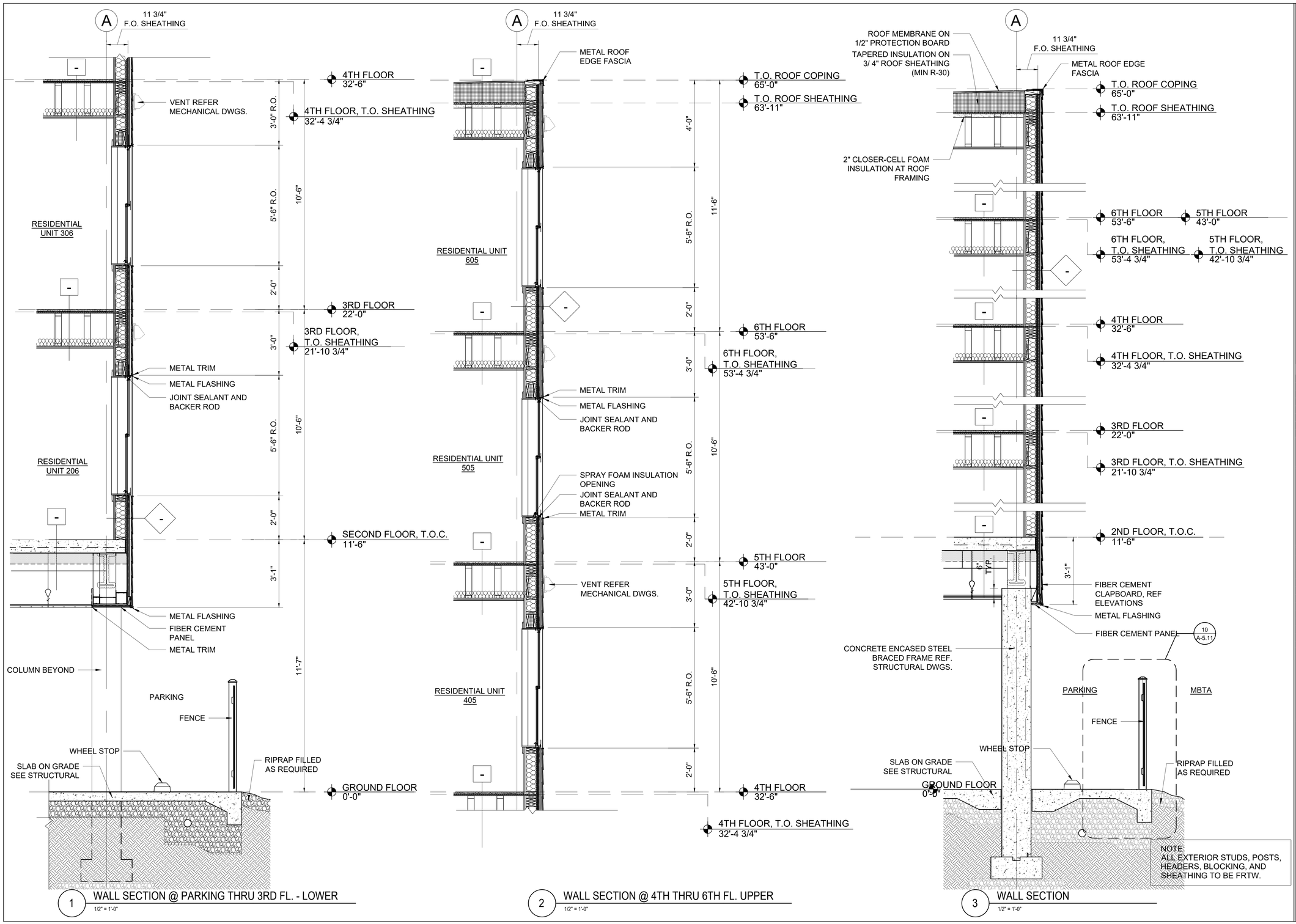
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Date: 01-07-2026
Drawn By: DF

Drawing Name

EXTERIOR WALL SECTIONS

Sheet No.

A-3.02



Location

PROPOSED MULTI-FAMILY BUILDING
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REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
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COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

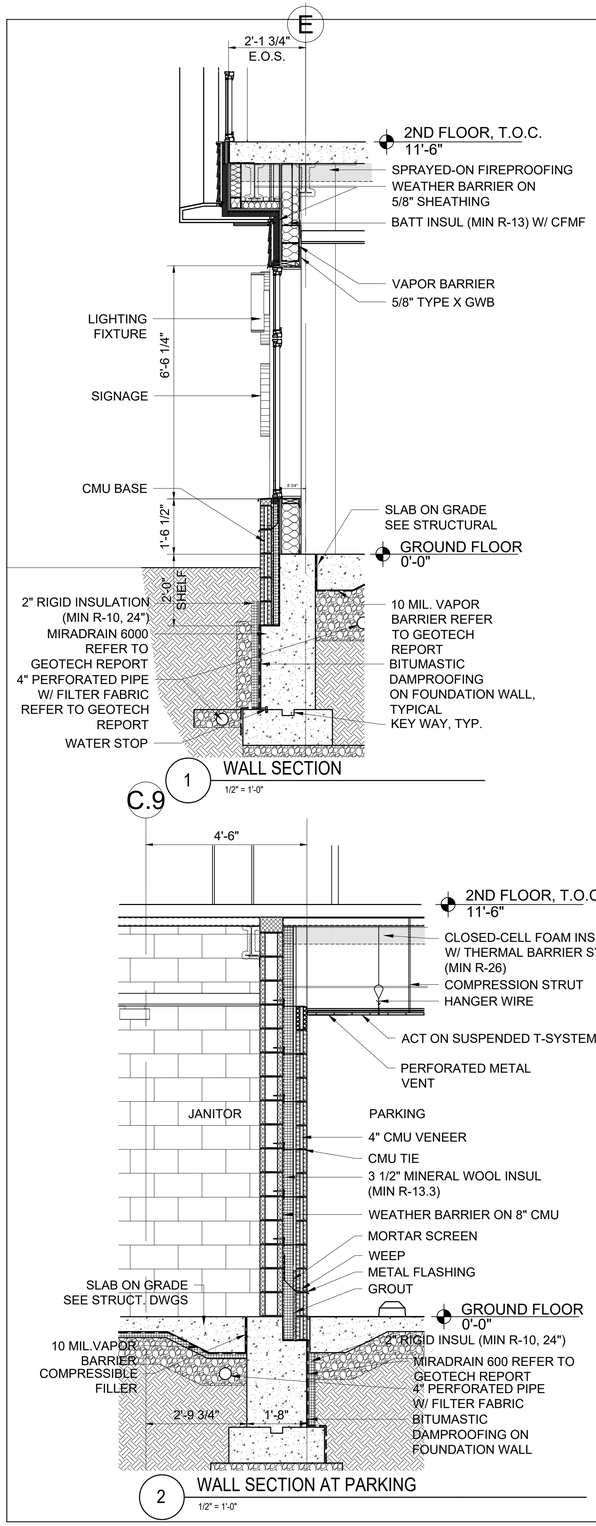
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Drawn By: DF

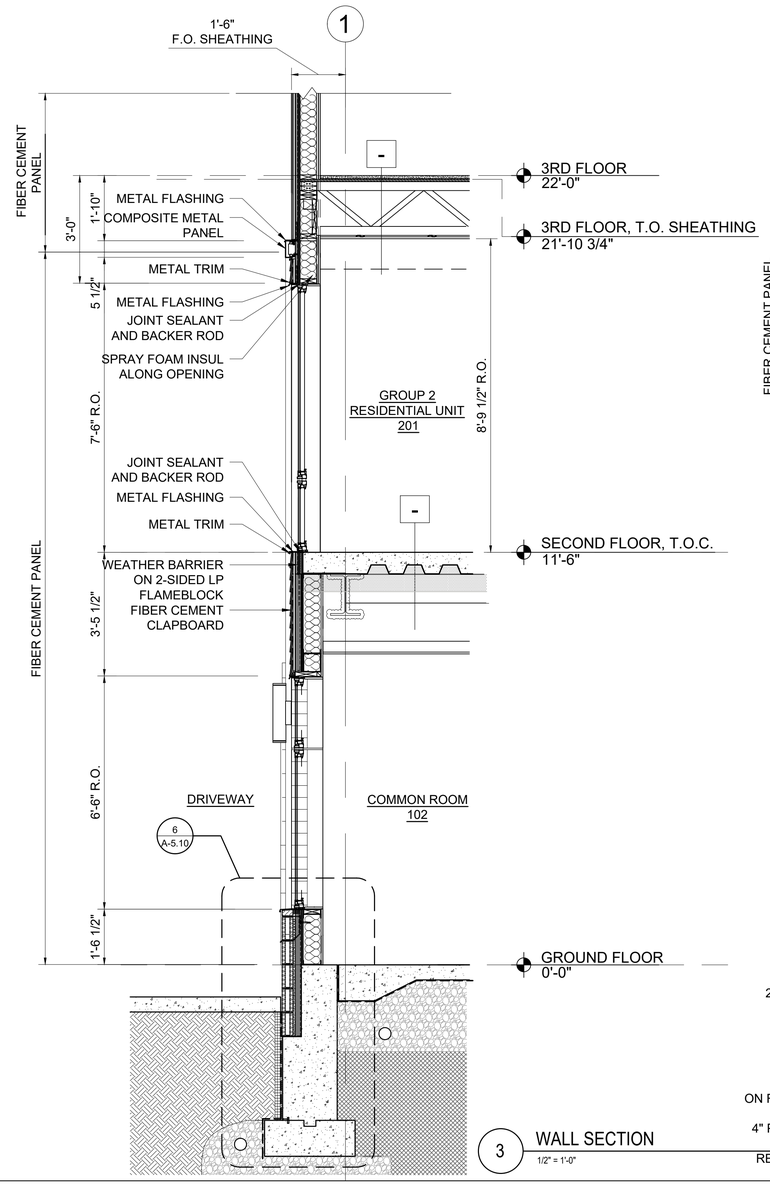
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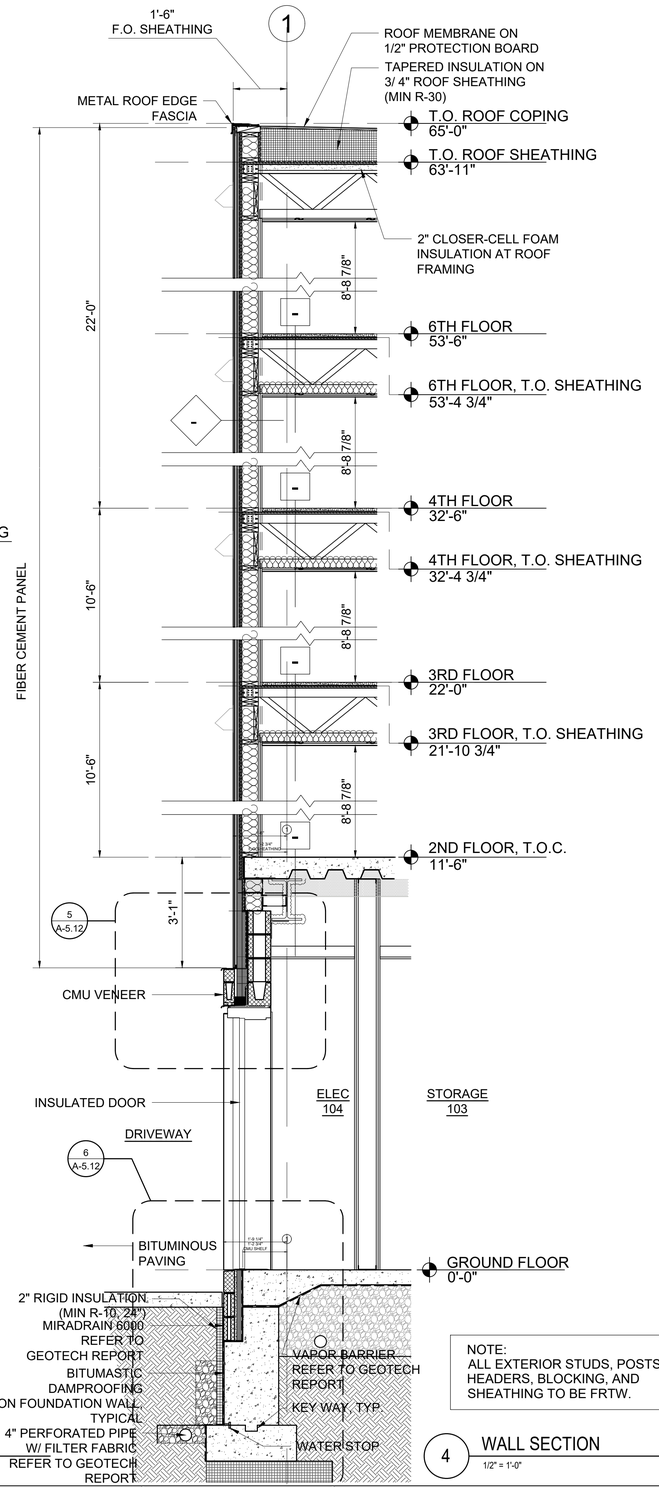
EXTERIOR WALL SECTIONS

Sheet No.

A-3.03







NOTE:
ALL EXTERIOR STUDS, POSTS, HEADERS, BLOCKING, AND SHEATHING TO BE FRTW.

Location

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REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

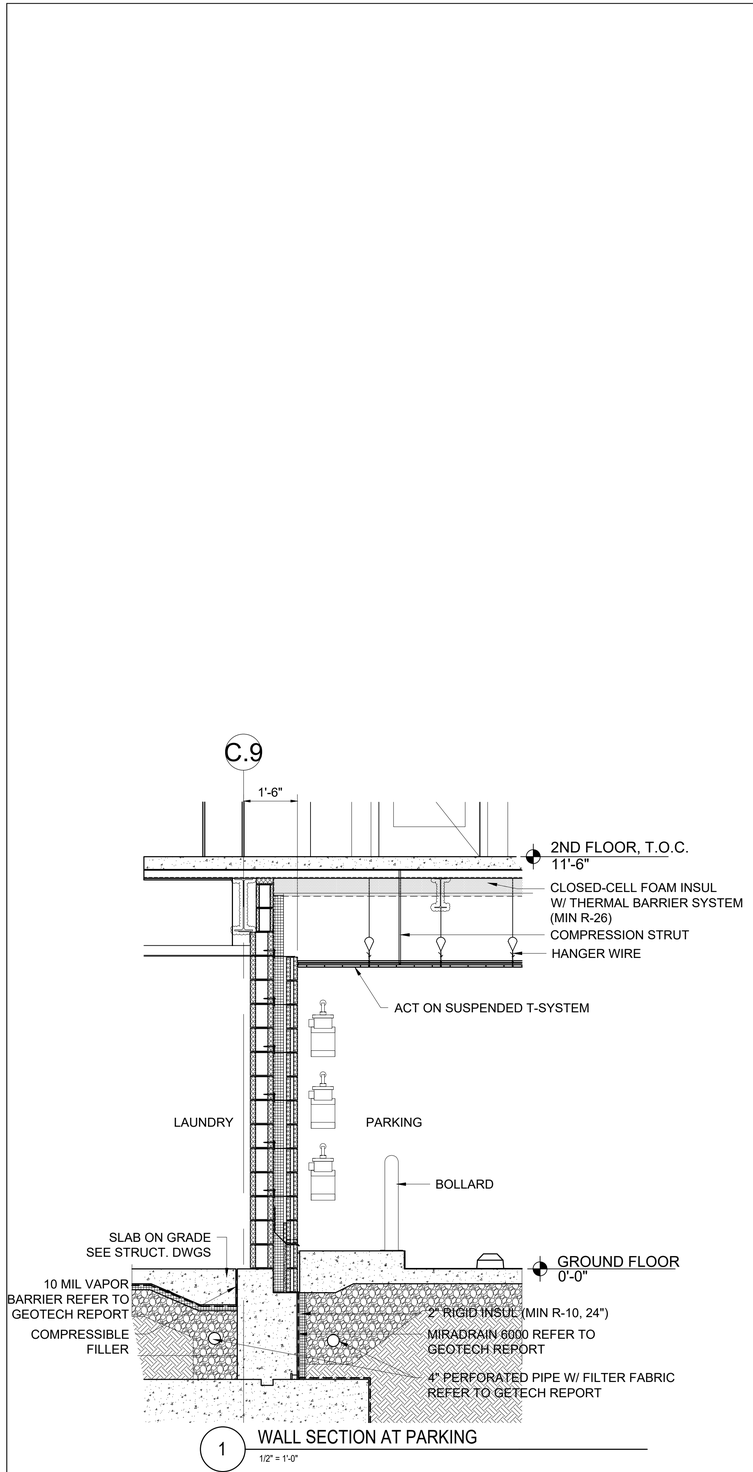
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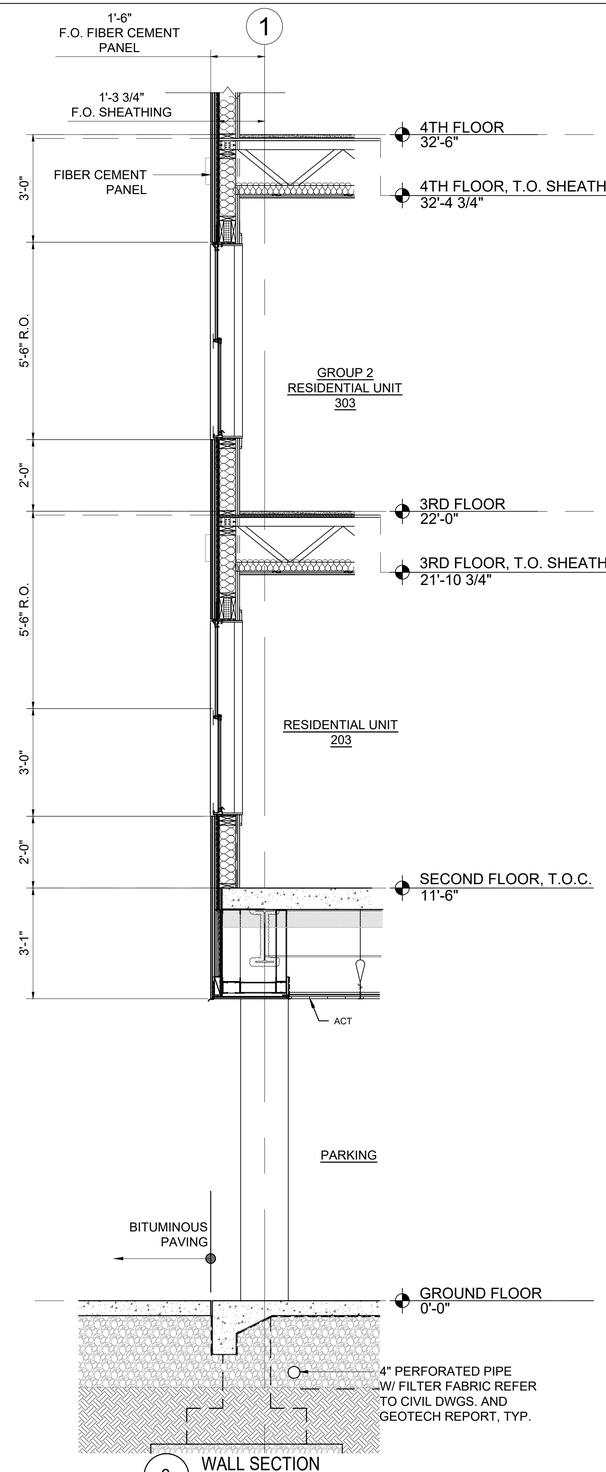
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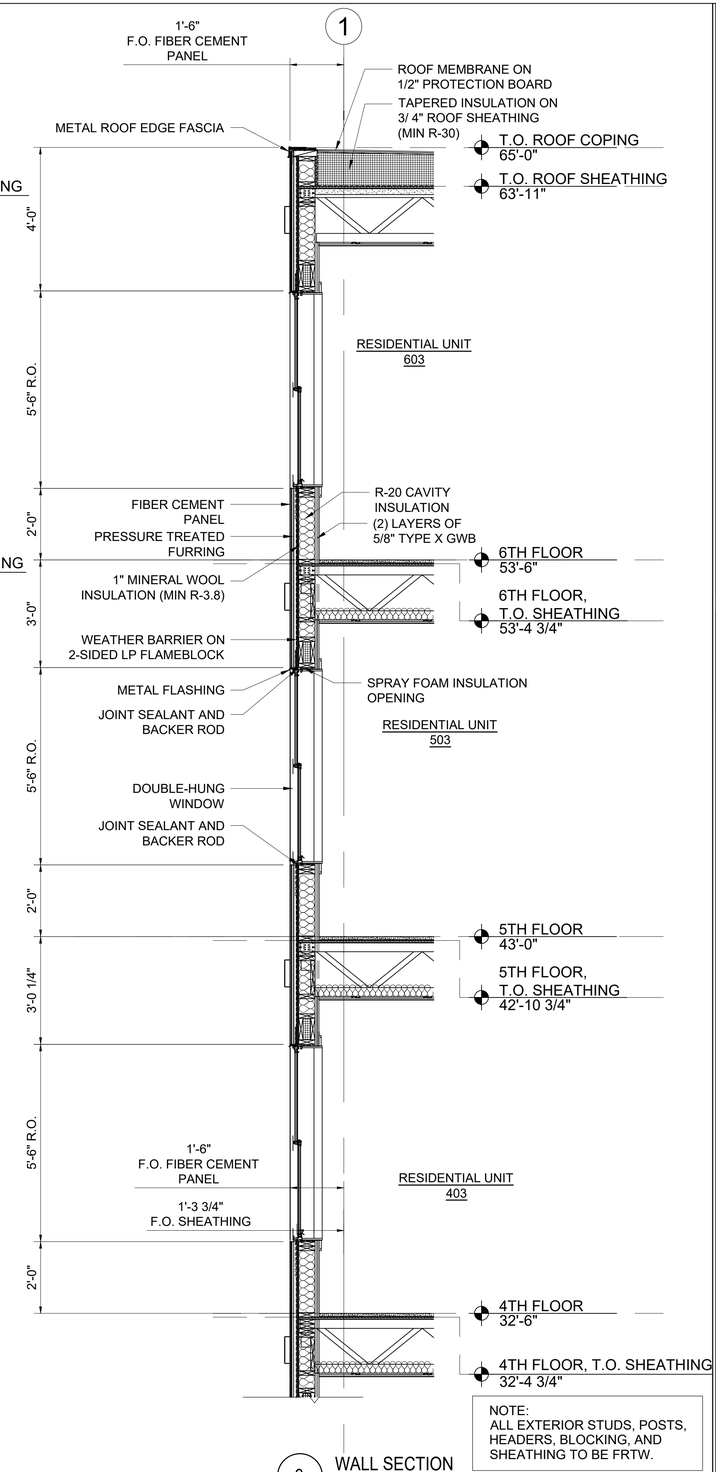
EXTERIOR WALL SECTIONS

Sheet No.

A-3.04







Location

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30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 7919
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

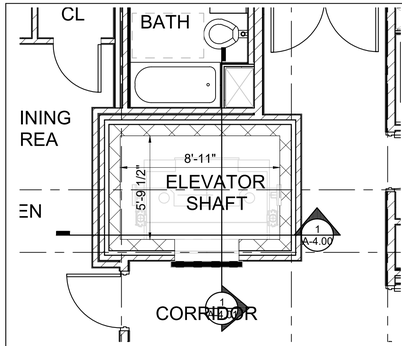
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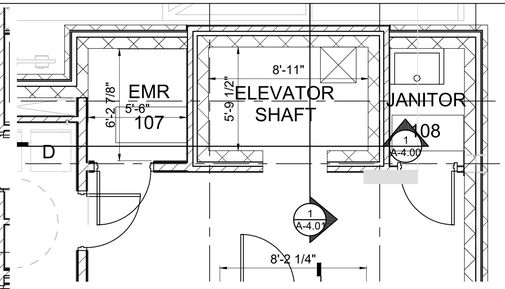
Drawing Name

EXTERIOR
WALL
SECTIONS

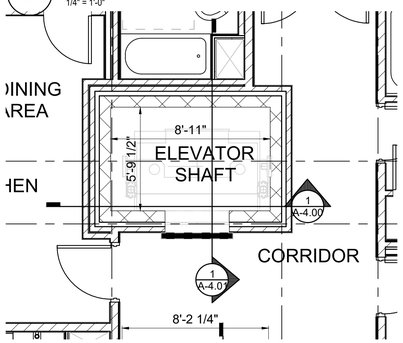
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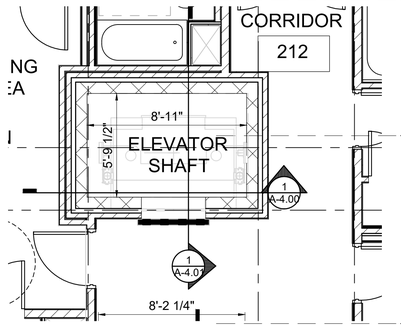




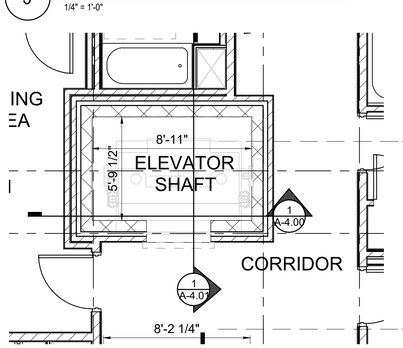
6 PARTIAL FIFTH FLOOR PLAN
1/4" = 1'-0"



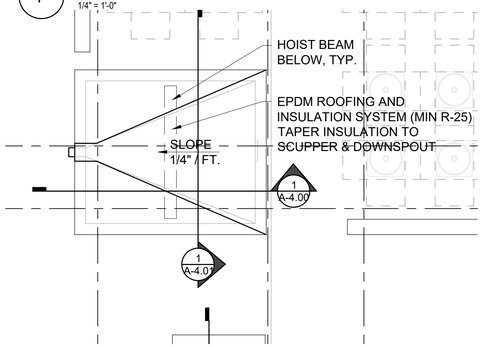
2 PARTIAL GROUND FLOOR PLAN
1/4" = 1'-0"



3 PARTIAL SECOND FLOOR PLAN
1/4" = 1'-0"

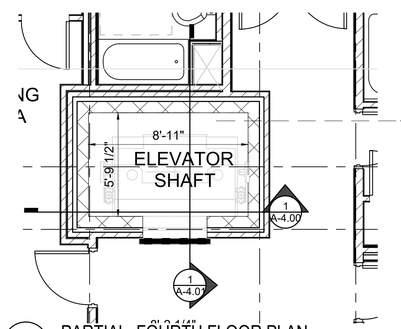


7 PARTIAL SIXTH FLOOR PLAN
1/4" = 1'-0"

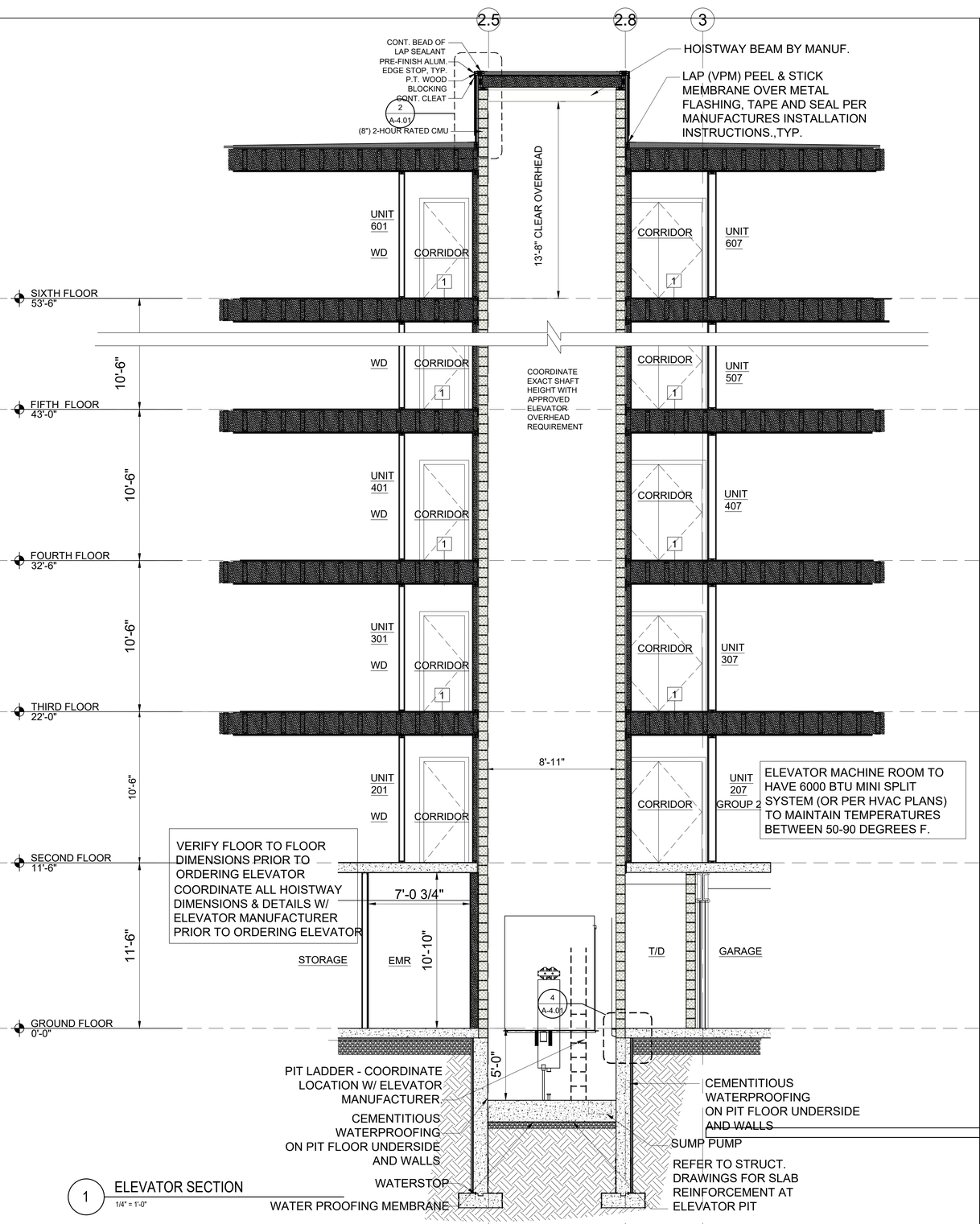


8 PARTIAL ROOF FLOOR PLAN
1/4" = 1'-0"

4 PARTIAL THIRD FLOOR PLAN
1/4" = 1'-0"



5 PARTIAL FOURTH FLOOR PLAN
1/4" = 1'-0"



1 ELEVATOR SECTION
1/4" = 1'-0"

Location

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30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

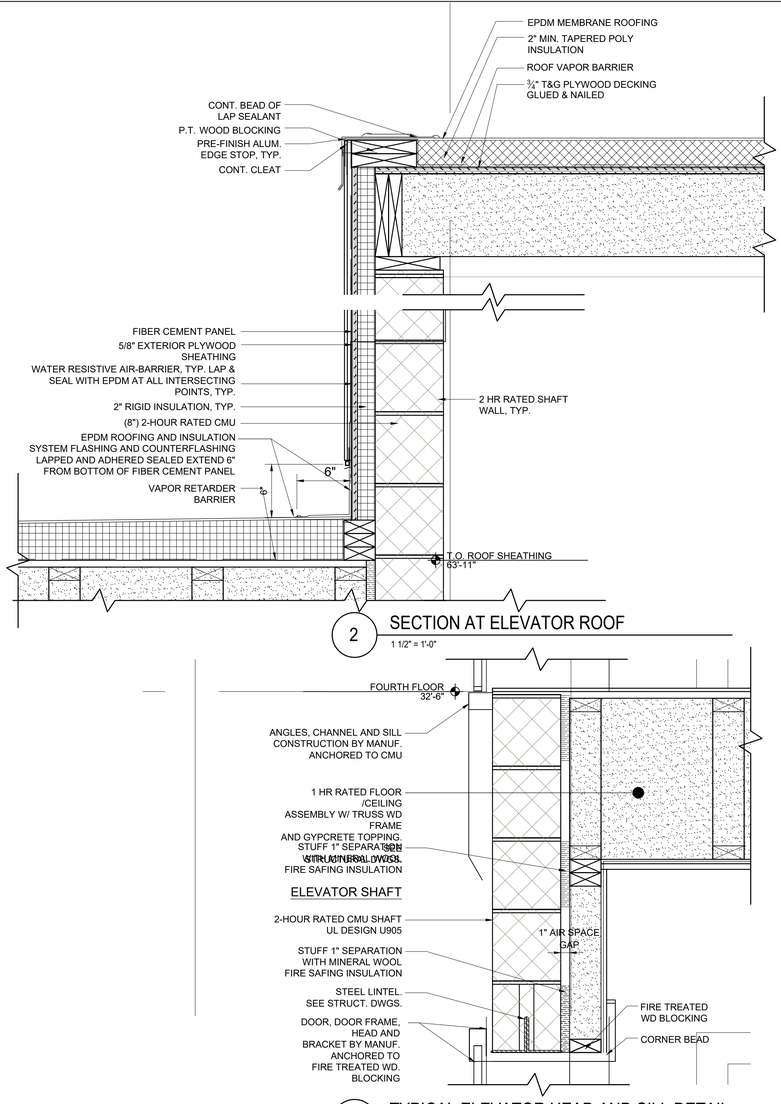
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: EP/DF

Drawing Name

ELEVATOR
SECTION
AND PLANS

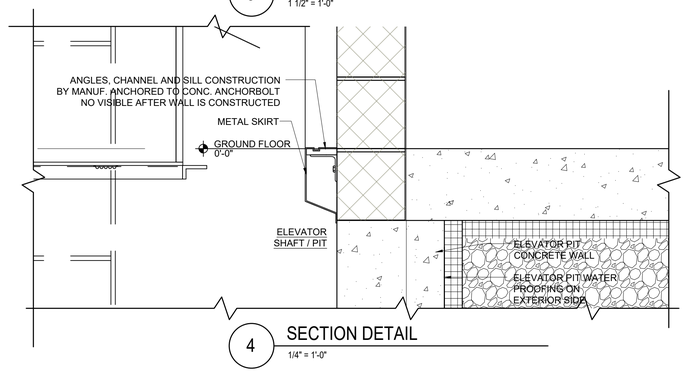
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A-4.00

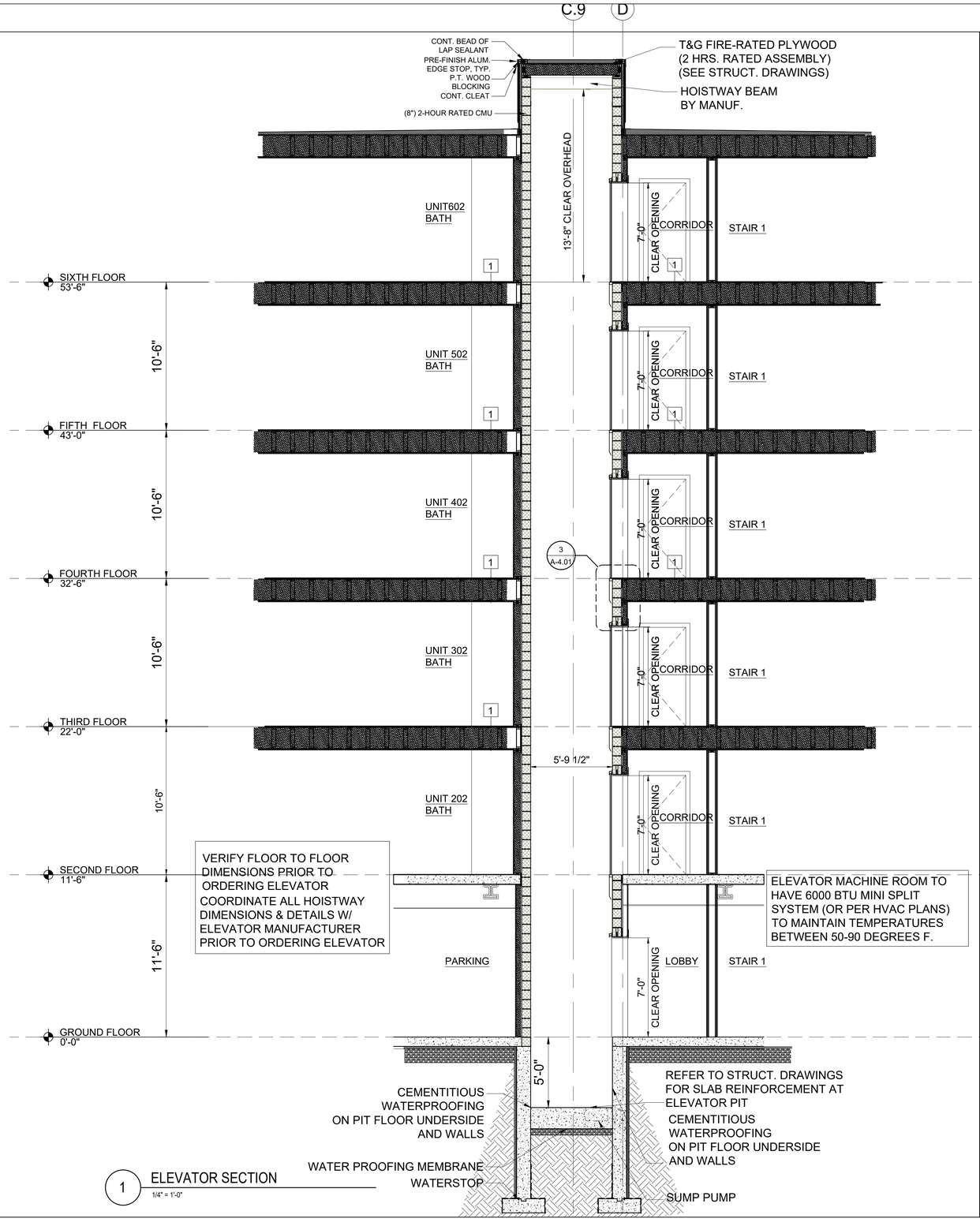


2 SECTION AT ELEVATOR ROOF
1 1/2" = 1'-0"

3 TYPICAL ELEVATOR HEAD AND SILL DETAIL
1 1/2" = 1'-0"



4 SECTION DETAIL
1/4" = 1'-0"



1 ELEVATOR SECTION
1/4" = 1'-0"

Location

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617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO 19819 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

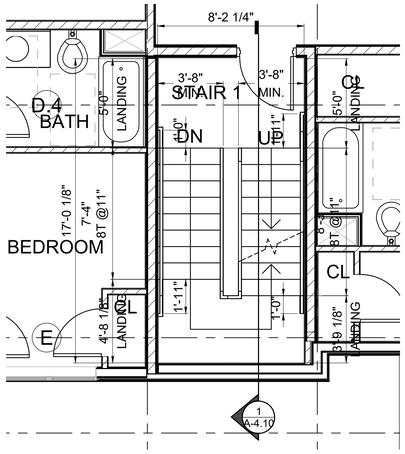
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Drawn By: EP/DF

Drawing Name

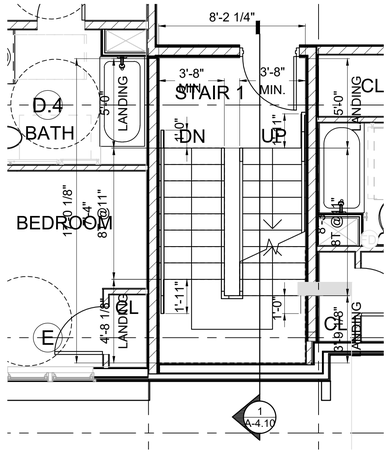
ELEVATOR SECTION AND DETAILS

Sheet No.

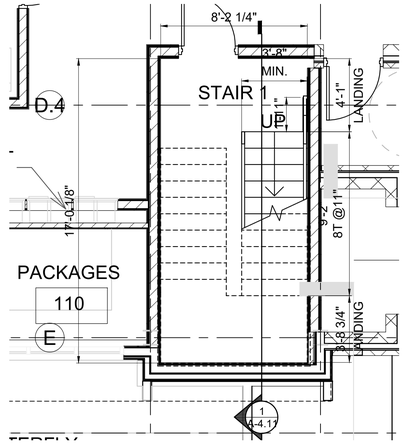
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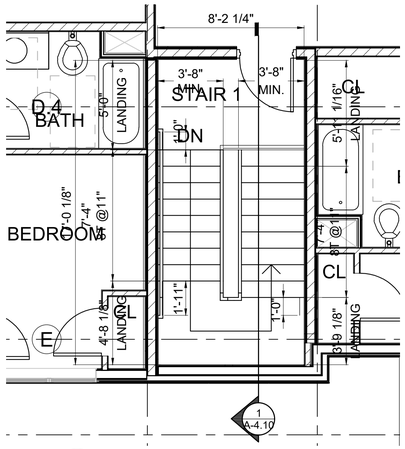
6 STAIR 1 FLOOR PLAN - FIFTH
1/4" = 1'-0"



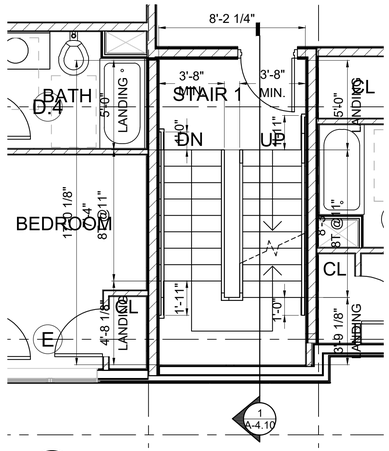
3 STAIR 1 FLOOR PLAN - SECOND
1/4" = 1'-0"



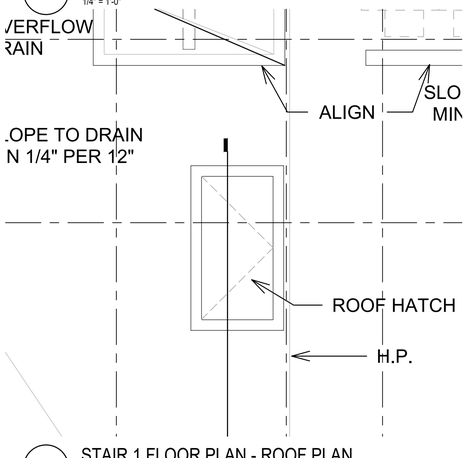
2 STAIR 1 FLOOR PLAN - GROUND FLOOR
1/4" = 1'-0"



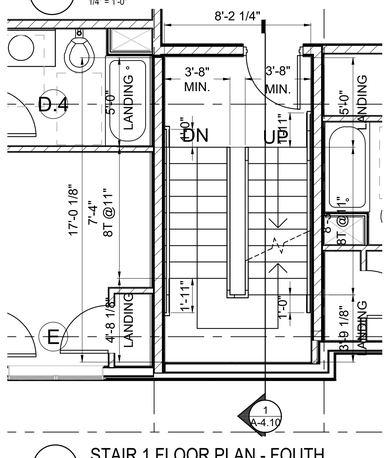
7 STAIR 1 FLOOR PLAN - SIXTH
1/4" = 1'-0"



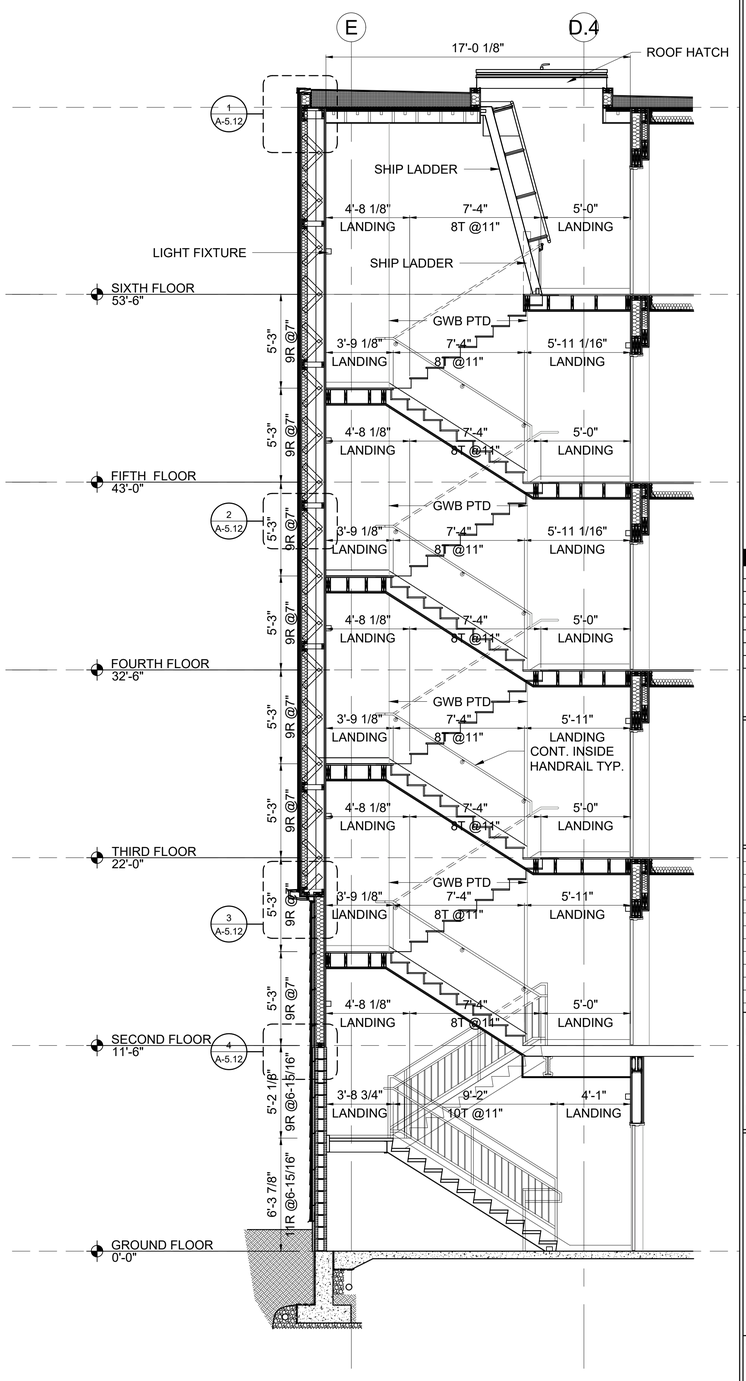
4 STAIR 1 FLOOR PLAN - THIRD
1/4" = 1'-0"



8 STAIR 1 FLOOR PLAN - ROOF PLAN
1/4" = 1'-0"



5 STAIR 1 FLOOR PLAN - FOUTH
1/4" = 1'-0"



1 STAIR 1 SECTION
1/4" = 1'-0"

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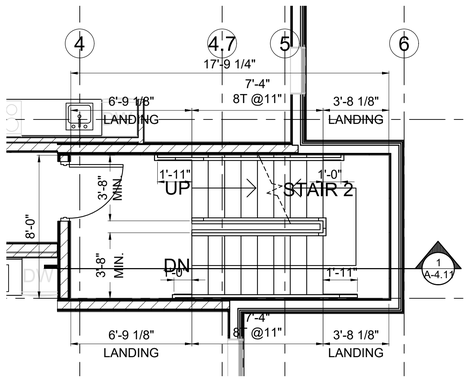
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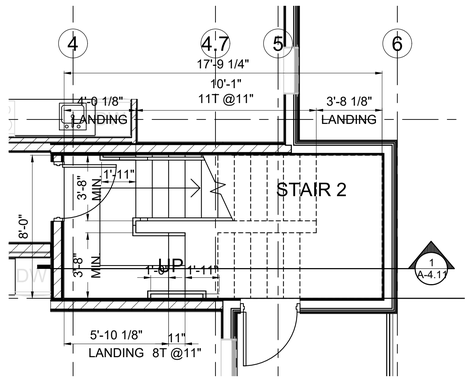
STAIR 1
SECTION
AND PLANS

Sheet No.

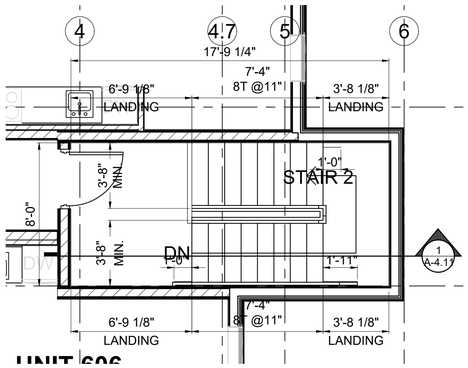
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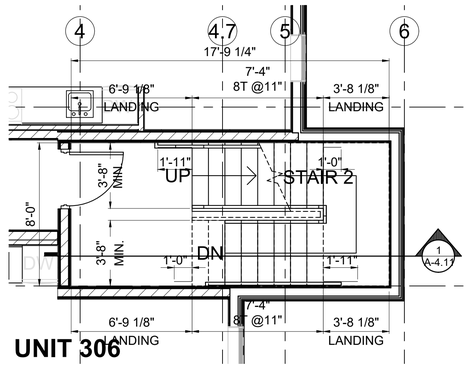
5 STAIR 2 FLOOR PLAN - FIFTH
1/4" = 1'-0"



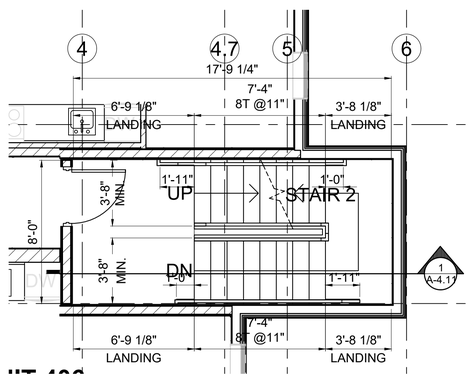
2 STAIR 2 FLOOR PLAN - SECOND
1/4" = 1'-0"



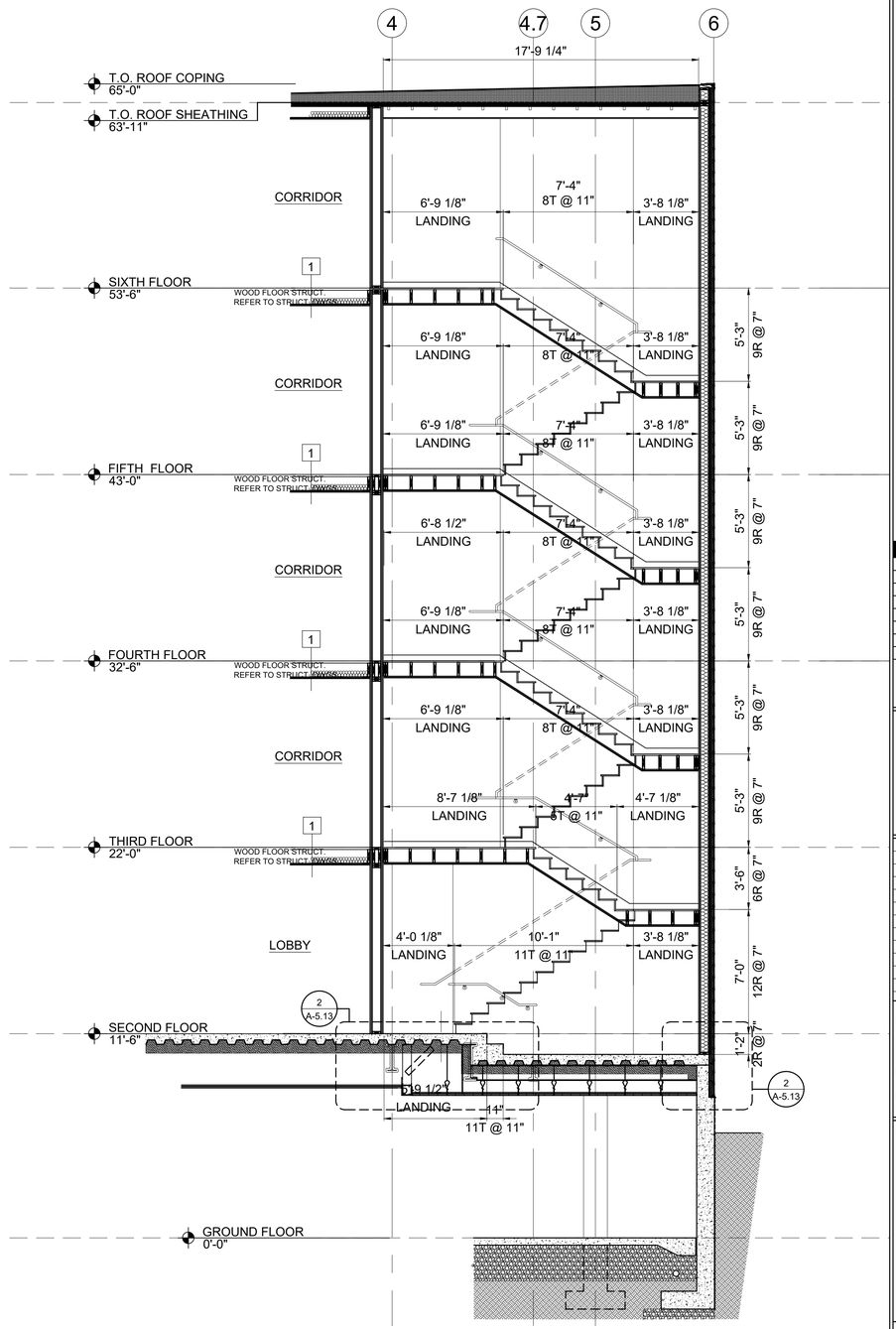
6 STAIR 2 FLOOR PLAN - SIXTH
1/4" = 1'-0"



3 STAIR 2 FLOOR PLAN - THIRD
1/4" = 1'-0"



4 STAIR 2 FLOOR PLAN - FOUTH
1/4" = 1'-0"



1 STAIR 2 SECTION
1/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
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Drawn By: EP/DF

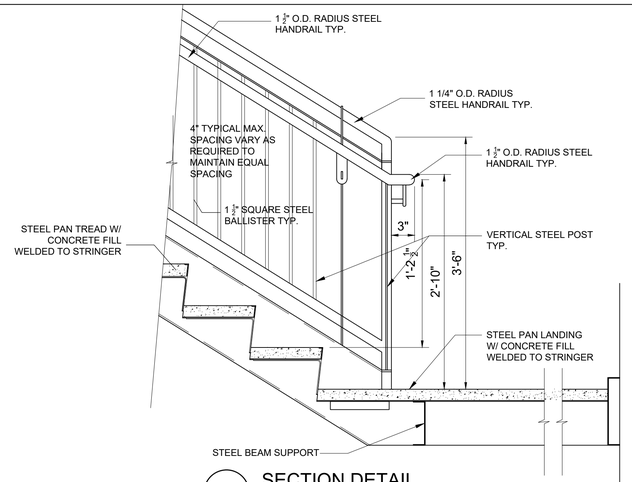
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STAIR 2
SECTION
AND PLANS

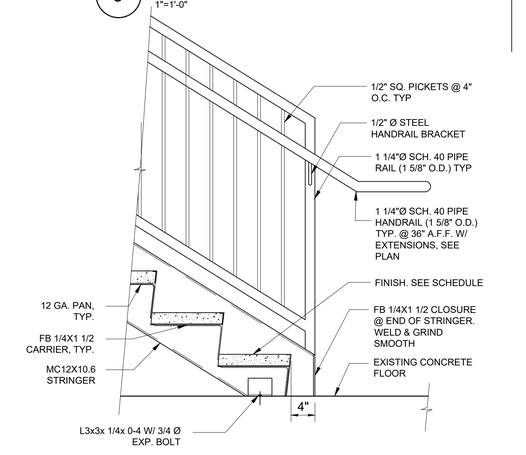
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A-4.11

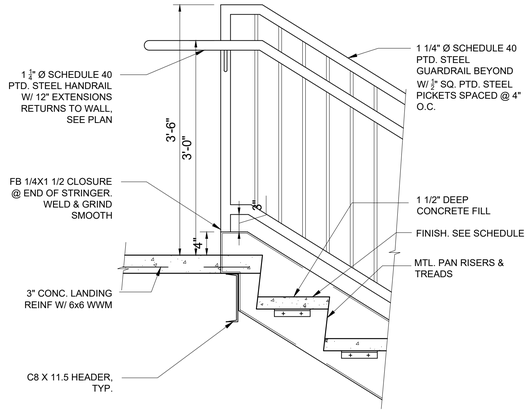
METAL STAIR



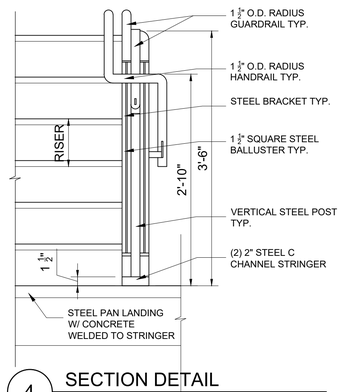
3 SECTION DETAIL
1"=1'-0"



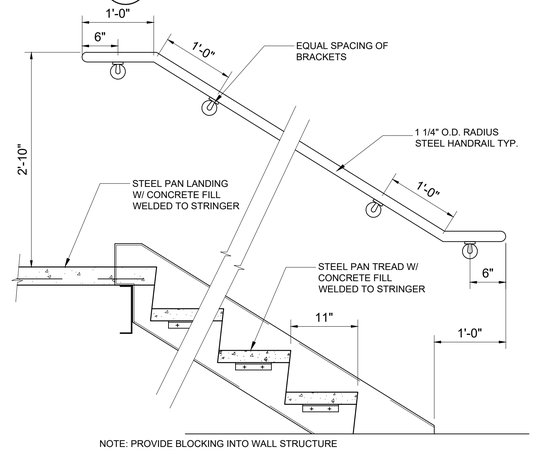
2 SECTION DETAIL
1"=1'-0"



5 SECTION DETAIL
1"=1'-0"



4 SECTION DETAIL
1"=1'-0"



NOTE: PROVIDE BLOCKING INTO WALL STRUCTURE @ ALL BRACKET LOCATIONS

1 SECTION DETAIL
1"=1'-0"

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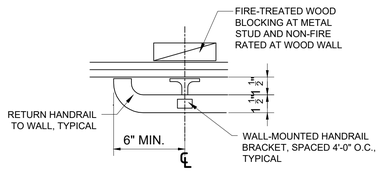
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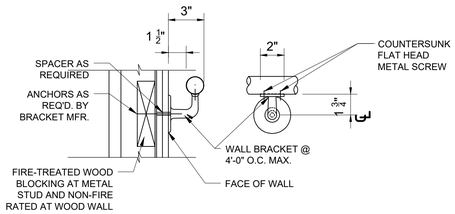
STAIR DETAILS

Sheet No.

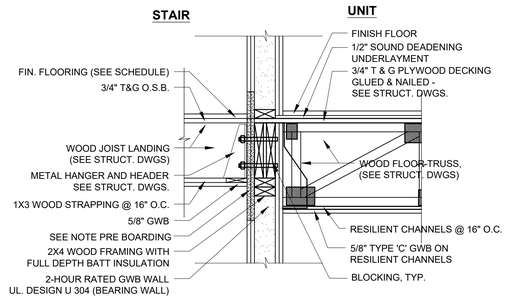
A-4.12

WOOD STAIR

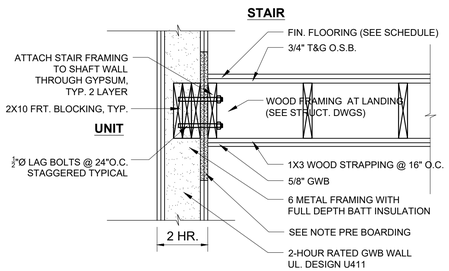




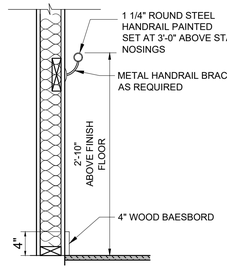
9 HANDRAIL ATTACHMENT AT GYSUM WALL
NOT TO SCALE



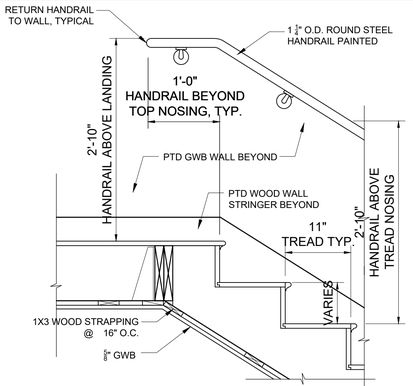
6 SECTION DETAIL AT LANDING
1"=1'-0"



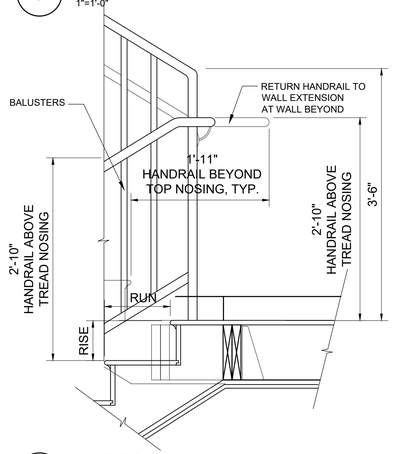
8 SECTION DETAIL AT LANDING
1"=1'-0"



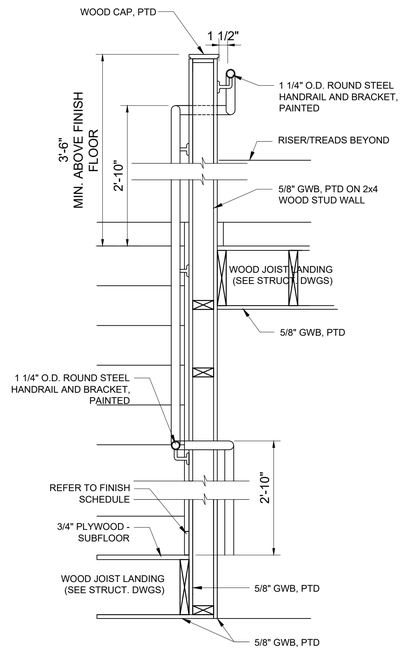
5 HANDRAIL DETAIL
1"=1'-0"



3 SECTION DETAIL
1"=1'-0"

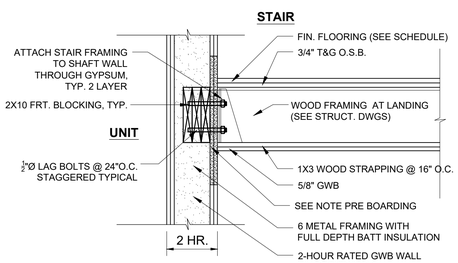


2 SECTION DETAIL
1"=1'-0"

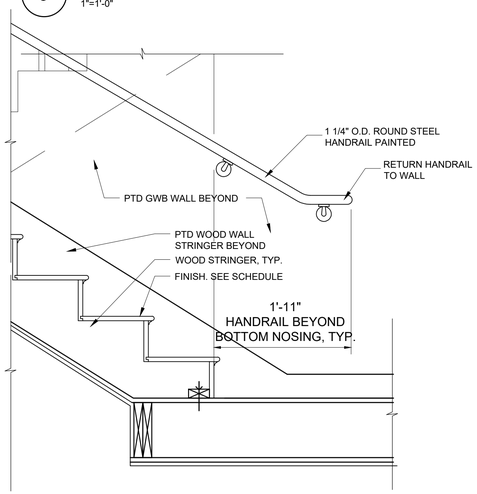


10 GUARDWALL AT STAIR
1"=1'-0"

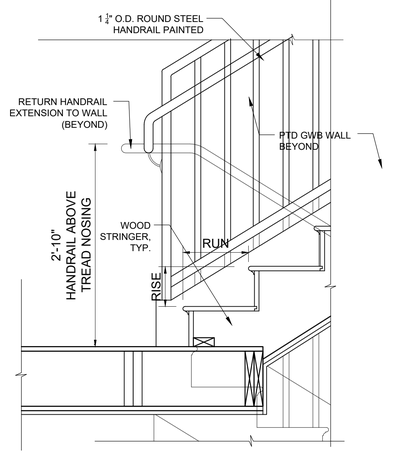
REQUIRED
NOTE: FIRE BARRIER WALL PRE BOARDING AT STAIR LANDING/ STRINGERS SHAFT WALL PARALLEL WITH FLOOR JOISTS (NOTE ONLY 2 LAYER OF PREBOARD REQUIRED FOR 2 HOUR SHAFT WALL ASSEMBLIES)



7 SECTION DETAIL AT LANDING
1"=1'-0"



4 SECTION DETAIL
1"=1'-0"



1 SECTION DETAIL
1"=1'-0"

Location

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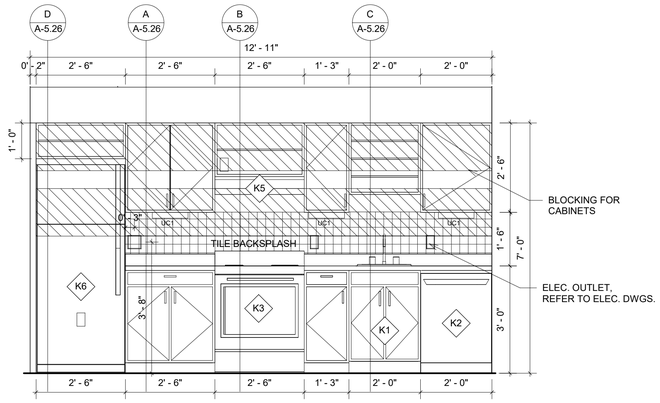
Project No: 2025014
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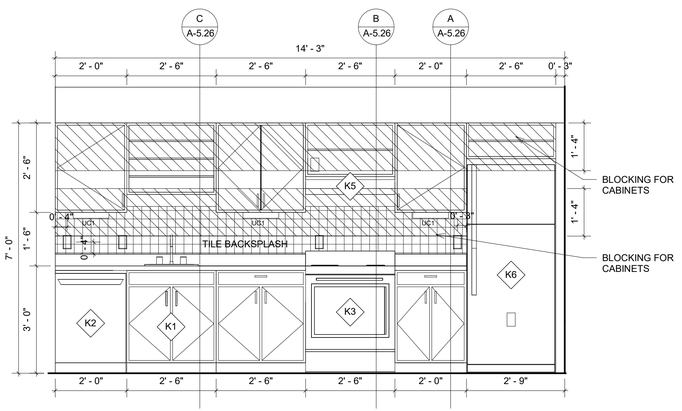
STAIR DETAILS

Sheet No.

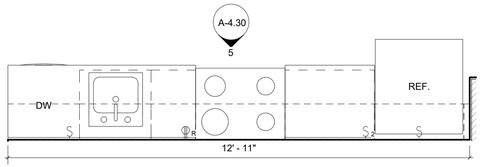
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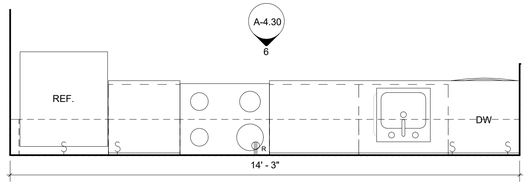
KITCHEN ELEVATION - TYPE 1
1/2" = 1'-0"



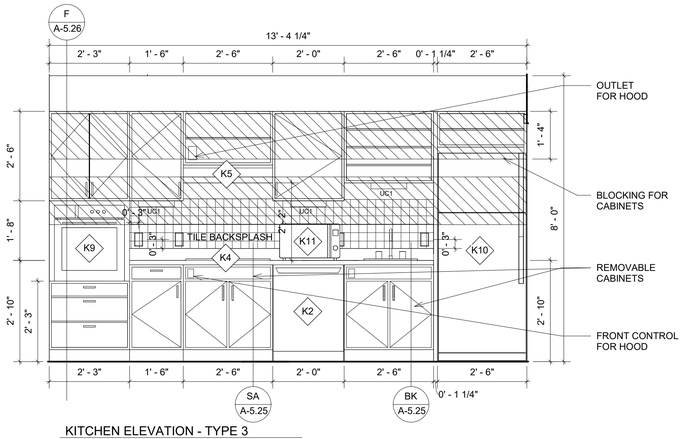
KITCHEN ELEVATION - TYPE 2
1/2" = 1'-0"



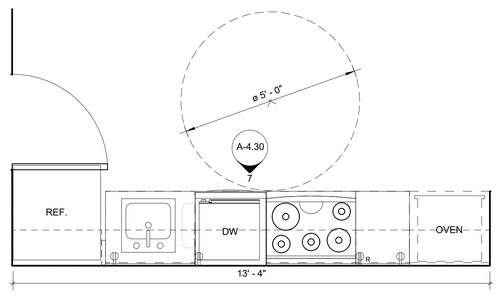
KITCHEN PLAN - TYPE 1
1/2" = 1'-0"



KITCHEN PLAN - TYPE 2
1/2" = 1'-0"



KITCHEN ELEVATION - TYPE 3
1/2" = 1'-0"



KITCHEN PLAN - TYPE 3 - GROUP 2
1/2" = 1'-0"

KITCHENS TO BE DESIGNED BY KITCHEN DESIGNER

GROUP 2A GENERAL NOTES:

GROUP 2A DWELLING UNIT KITCHENS
(FROM CMR 521- MASSACHUSETTS ARCHITECTURAL ACCESS BOARD)

6. SINKS:
SINK CABINET: THE BASE CABINET PROVIDED UNDER THE SINK SHALL BE REMOVABLE TO PROVIDE A KNEESPACE THAT COMPLIES WITH (45.4.2) & (45.4.3), NOTED BELOW. KNEESPACE: A CLEAR KNEESPACE SHALL BE PROVIDED OR CAPABLE OF BEING PROVIDED UNDER THE SINK, 19" DEEP AND AT LEAST 30" WIDE. PER FHA: KNEE SPACES SHALL HAVE WALLS AND FLOOR SURFACES FINISHED AT THE TIME OF FIRST OCCUPANCY, EVEN IF COVERED BY A REMOVABLE BASE CABINET.
HEIGHT: THE SINK SHALL BE CAPABLE OF BEING RELOCATED VERTICALLY IN THE FUTURE, WITHOUT STRUCTURAL CHANGE TO THE WALLS OF THE KITCHEN.

7. COOKTOPS:
BASE CABINET : THE BASE CABINET PROVIDED UNDER THE COOKTOP SHALL BE REMOVABLE TO PROVIDE KNEESPACE THAT COMPLIES WITH KNEESPACE, BELOW. KNEESPACE: A CLEAR KNEESPACE SHALL BE PROVIDED OR BE CAPABLE OF BEING PROVIDED UNDER THE COOKTOP, 19" DEEP AND AT LEAST 30" WIDE. PER FHA: KNEE SPACES SHALL HAVE WALLS AND FLOOR SURFACES FINISHED AT THE TIME OF FIRST OCCUPANCY, EVEN IF COVERED BY A REMOVABLE BASE CABINET.
HEIGHT: THE COOKTOP SHALL BE CAPABLE OF BEING RELOCATED VERTICALLY IN THE FUTURE, WITHOUT STRUCTURAL CHANGE TO THE WALLS OF THE KITCHEN.
CONTROLS: COOKTOP CONTROLS SHALL BE LOCATED AT THE FRONT OR SIDE OF THE APPLIANCE.

8. OVENS:
A RETRACTABLE "BREAD BOARD" TYPE SHELF SHALL BE PROVIDED IN THE COUNTER IMMEDIATELY ADJACENT TO THE OVEN DOOR (AS SHOWN ON THE DRAWINGS). THE FLOOR OF THE OVEN SHALL BE SET 30" ABOVE THE FLOOR.

9. WALL CABINETS:
WALLS SHALL BE CAPABLE OF STRUCTURALLY SUPPORTING WALL CABINETS SO THAT THE INSIDE BOTTOM SURFACE OF THE CABINET IS CAPABLE OF BEING LOCATED BETWEEN 42" AND 54" ABOVE THE FLOOR.

10. BASE CABINETS:
EACH CABINET SHALL BE CAPABLE OF BEING REMOVED TO PROVIDE CLEAR KNEESPACE FOR PERSONS USING WHEELCHAIRS.
CORNERS: CABINETS LOCATED AT THE INSIDE CORNER OF AN L-SHAPED COUNTER SHALL HAVE A BUILT-IN LAZY SUSAN.

11. REFRIGERATORS:
THE REFRIGERATOR SHALL BE LOCATED SO THAT ITS DOORS ARE CAPABLE OF BEING OPENED 180 DEGREES AND SO THAT IT MEETS MINIMUM CLEAR FLOOR SPACE AND ZONE OF REACH REQUIREMENTS (AS SHOWN ON THE DRAWINGS).

GENERAL NOTES:

1. REFER TO 1/8" SCALE PLANS FOR LOCATION & ORIENTATION OF EACH KITCHEN TYPE.

2. REFER TO 1/8" SCALE PLANS FOR DEMISING AND CORRIDOR WALL PARTITION TYPES.

3. ALL PARTITIONS SHALL BE TYPE 'A1' UNLESS NOTED OTHERWISE. (REFER TO SHEET A8.1)

4. ALL DIMENSIONS ARE TO THE FACE OF G.W.B. UNLESS NOTED OTHERWISE. (F.O.S. DENOTES FACE OF STUD)

5. DIMENSIONS NOTED AS "CLEAR" OR "CLR" DENOTE THE MINIMUM REQUIRED DISTANCE TO THE FACE OF WALL FINISHES, (I.E. CERAMIC TILE, ETC..)

6. ALL DOORS SHALL BE POSITIONED BASED ON M.A.A.B. DOOR CLEARANCE REQUIREMENTS.

7. REFER TO ELECTRICAL DRAWINGS FOR COMPLETE POWER AND LIGHTING REQUIREMENTS. COUNTERTOP SWITCHES AND ELECTRICAL OUTLETS MUST BE POSITIONED SO THAT HIGHEST OPERABLE PART OF CONTROLS, DISPENSERS, RECEPTACLES, ETC., ARE LOCATED NOT HIGHER THAN 46" A.F.F. ALL CONTROLS SHALL BE LOCATED AT LEAST 36" FROM AN INTERIOR CORNER.

8. REFER TO 1A AND 1B / A5.20 FOR PLANS AND ELEVATIONS OF REQUIRED MOUNTING HEIGHTS.

9. REFER TO I.D. DRAWINGS FOR ADDITIONAL FINISH INFORMATION.

10. ALTERNATE KITCHEN PLANS AND ELEVATIONS (DRAWINGS 9-18 ON A5.17) SHALL BE USED FOR ALL PREMIUM UNIT LOCATIONS. REFER TO ARCHITECTURAL SITE PLAN FOR PREMIUM UNIT LOCATIONS.

WALL BLOCKING

KEY TO KITCHEN APPLIANCES & FIXTURES

- K1 — KITCHEN SINK W/ DISPOSAL & BASE CABINET: REFER TO NOTE 1&2 (GROUP) & NOTE 6 (GROUP 2A)
- K2 — DISHWASHER (GROUP 1 & GROUP 2A) (MODEL: FDPC4221AS)
- K3 — ELECTRIC RANGE (GROUP 1); REFER TO MECHANICAL DRAWINGS FOR EXHAUST REQUIREMENTS (MODEL: GRF40HSVSS)
- K4 — COOKTOP (GROUP 2A)
- K5 — UNDER CABINET RANGE HOOD (GROUP 1 & 2A) (MODEL: RL6230BL)
- K6 — REFRIGERATOR (MODEL: GIE17GSNRSS)
- K7 — BASE & WALL CABINETS: REFER TO NOTES 4, 9, & 10
- K8 — UNDER CABINET MICROWAVE OVEN WITH EXHAUST (GROUP 1) (MODEL: AMV2307PFS)
- K9 — BUILT-IN WALL OVEN (GROUP 2A)
- K10 — REFRIGERATOR (GROUP 2A) SHALL BE MAX. SIZE 32" DEEP x 35 3/4" WIDE
- K11 — ON-COUNTER MICROWAVE (GROUP 2A)

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Drawn By: PM DF

Drawing Name

ENLARGED KITCHEN PLANS & ELEVATIONS

Sheet No.

A-4.30

521 CMR 44.00: GROUP 2 BATHROOMS

44.1 GENERAL
In all dwelling units required to be Group 2A units, (see 521 CMR 9.4 Group 2A Dwelling Units) all bathrooms and half bathrooms shall comply with 521 CMR 44, exclusive of the bold and italicized text which refer to Group 2B units. In facilities required to have Group 2B bathrooms, such as hotels, motels, inns and health facilities, the bathroom shall comply with 521 CMR including the bold and italicized text which refer to Group 2B units.

44.2 WHEELCHAIR TURNING SPACE
Bathrooms shall have or be capable of having wheelchair turning space which complies with 521 CMR 6.3, Wheelchair Turning Space without coming into contact with any fixtures. See Fig. 44a.

44.3 DOORS
Shall comply with 521 CMR 26.5, Width through 521 CMR 26.11, Door Hardware. Doors shall swing out, fold or slide. Doors may swing into the bathroom only if the door does not impede the wheelchair turning space.

44.4 WATER CLOSETS
Shall comply with the following:

44.4.1 Location: The centerline of the water closet shall be located 18 inches (18" = 457mm) from the nearest side wall and at least 42 inches (42" = 1067mm) from the farthest side wall or the closest edge of an adjacent fixture. There shall be 42 inches (42" = 1067mm) clear from the front edge of the water closet to the nearest wall or fixture.

44.1: GROUP 2 BATHROOMS

44.4.2 Height: The top of the water closet seat shall be 15 inches to 19 inches (15" to 19" = 381mm to 483mm) above the floor.

In Group 2B bathrooms, the water closet seat shall be 17 inches to 19 inches (17"_19" = 470mm to 483mm) above the floor.

44.4.3 Operation: The flush activator shall be operable with a closed fist and shall not require grasping, pinching, or twisting of the wrist. Water closet flush control shall be located on the accessible side of the water closet.

44.4.4 Wall Reinforcement: Walls adjacent to and behind the water closet shall be capable of structurally supporting the future installation of grab bars from 32 to 38 inches (32" to 38" = 813mm to 965mm) above the floor. The back wall shall have reinforcement from the interior corner to a distance of six inches (6" = 152mm) beyond the widest part of the water closet. The side wall shall have reinforcement from the interior corner to a distance of six inches (6"= 152mm) beyond the front edge of the water closet, unless interrupted by a door or other fixture, then the reinforcement shall be installed as far as possible.

In Group 2B bathrooms, two grab bars , one 42 inches (42" = 1067mm) long and one 36 inches (36" = 914mm) long shall be installed at the water closet between 33 inches (33" = 838mm) and 36 inches (36" = 914mm) above and parallel to the floor. The 42 inch (42" = 1067mm) grab bar shall be mounted on the side wall closest to the water closet, no more than 12 inches (12" = 305mm) from the back wall. The 36 inch (36" = 914mm) grab bar shall be mounted on the back wall six inches (6" = 152mm) from the interior corner and may be located up to three inches (3" = 76mm) above the top of the water closet tank.

44.4.5 Toilet Paper Dispensers: The toilet paper dispensers shall be located on the side wall closest to the water closet. The centerline of the roll shall be set at a minimum height of 19 inches (19" = 483mm) above the floor. Dispensers that control delivery or that do not permit continuous paper flow are not allowed.

44.5 SINKS
Shall comply with the following:

44.5.1 Adaptability: The sink, its plumbing, and the walls adjacent to the sink shall be designed so that the sink can be relocated vertically and so that the sink installation meets the definition of structural strength.

44.5.2 Vanity Cabinets: Where a cabinet or vanity is provided under a sink, it shall be removable or replaceable to provide a knee space that complies with 521 CMR 44.5.4 and 44.5.5.

In Group 2B bathrooms, base cabinets can be used only if kneespace is also provided.

44.0: GROUP 2 BATHROOMS

44.5.3 Height: The sink shall be capable of being relocated vertically, in the future, without requiring structural change to the walls of the bathroom. A sink with kneespace shall be installed or be capable of being installed, with at least 27 inches (27" = 686mm) of clearance from the floor to the bottom of the sink or counter apron.

In Group 2B bathrooms, the sink rim or counter surface shall be installed at a height of 34 inches (34" = 864mm) from the floor and there shall be at least 29 inches (29" = 737mm) of clearance from the floor to the bottom of the sink or counter apron.

44.5.6 Piping: All piping under the sink shall be offset to the back wall so that persons in wheelchairs have maximum possible kneespace.

In Group 2B bathrooms, the hot water and waste pipes under the sink shall be offset to the back wall and insulated.

44.5.7 Hardware: Faucets shall be operable with a closed fist and shall not require grasping, pinching, or twisting of the wrist.

44.6 BATHING FIXTURES
If more than one bathing fixture is provided in a dwelling unit, one shall be a shower unit complying with 521 CMR 44.6.2. If a jacuzzi or whirlpool tub is the only bathing facility, it must meet the requirements of 521 CMR 44.6.1. Where one bathing fixture is provided, it may be either a shower unit or a bathtub.

44.6.1 Bathtubs shall comply with the following:

a. Fixtures: Bathtubs shall be a minimum, nominal dimension of 60 inches (60" = 1524mm) long. The rim shall be between 16 and 18 inches (16" and 18" = 406mm and 457mm) above the floor.
44.1: GROUP 2 BATHROOMS

b. Minimum floor area: A clear floor area 30 inches (30" = 762mm) wide and at least 72 inches (72" = 1829mm) long shall be provided adjacent to the tub. At least 12 inches (12" = 305mm) of the clear floor area length shall extend beyond the drain end of the tub if the tub is 60 inches (60" = 1524mm) long.
c. Wall reinforcement: All walls of the tub shall have structural reinforcement to allow the future installation of grab bars at any location from the rim of the tub to a height of 60 inches (60" = 1524m) above the tub bottom.

In Group 2B bathrooms, two grab bars, 48 inches (48" = 1219mm) long, shall be installed centered on the long wall and parallel to the floor. One shall be mounted at a height of 21 inches (21" = 533mm) and one at a height of 36 inches (36" = 914mm) above the floor.

d. Tub material: Plastic or fiberglass tubs shall be structurally capable of accepting the installation of a lift that clamps onto the rim.
e. Hardware: Faucets shall be operable with a closed fist and shall not require grasping, pinching, or twisting of the wrist.
f. Hardware location: Faucets and mixing valves shall be centered horizontally on the long wall of the tub, 28 inches (28" = 711mm) above the floor. The tub spout shall be located on the end wall above the drain and a shower head may be located on either the end wall or long wall. If hardware is installed in locations other than those specified, piping shall also be provided and capped in the wall.
g. Hand_held showers: A hand_held shower head with a flow regulator, attached to a 60 inch (60" = 1524mm) long flexible hose and an adjustable mounting bar, shall be provided or be capable of being installed on the long wall of the tub.

In Group 2B bathrooms, a tub seat which is portable or permanent shall be provided.

In Group 2B bathrooms, a hand held shower head attached to a 60 inch (60" = 1524mm) long flexible hose and an adjustable mounting bar , 36 inches (36" = 914mm) long, shall be installed on the long wall of the tub. The bottom of the mounting bar shall be located at 40 inches (40" = 1016mm) above the tub bottom.

h. Door enclosures: Tracks for sliding doors or enclosures shall not be mounted on the rim of the bathtub unless they can be removed.

In Group 2B bathrooms, sliding doors shall not be used.

i. Soap Trays: Soap trays shall not have a hand_hold feature and shall be installed or be capable of being relocated with a centerline no higher than 48 inches (48" = 1219mm) above the floor.

In Group 2B bathrooms, soap trays shall be installed no higher than 48 inches (48" = 1219mm) above the floor to the centerline of the soap tray.

44.0: GROUP 2 BATHROOMS

44.6.2 Showers shall comply with the following:

a. Fixture size: The shower shall be the wheel_in type with a minimum, nominal size of 30 inches by 60 inches (30" x 60" = 762mm x 1524mm). The long side shall be fully open. In the alternative, the stall may be 36 by 60 inches (36" x 60" = 914mm x 1524mm) with a 24 inch (24" = 610mm) wing wall on the 60 inch (60" = 1524mm) side. The slope of the shower floor shall not exceed 2%. The curb shall have no more than a ½ inch (½" = 13mm) maximum lip, beveled at a slope no steeper than 1:2. See Fig. 44b and 44c.

44.1: GROUP 2 BATHROOMS

a. Wall reinforcement: All walls of the shower shall have structural reinforcement to allow the future installation of a seat and grab bars, at any location from the floor to a height of 60 inches (60" = 1524mm) above the floor.

In Group 2B bathrooms, one grab bar 48 inches (48" = 1219mm) long shall be installed on the long wall, at a height of 36 inches (36" = 914mm) above the floor.

b. Seat: A hinged, padded shower seat shall be installed or be capable of being installed on a wall adjacent to the opening. The seat shall be mounted with the edge as close as possible to the opening to provide a safe transfer. The top of the seat shall be 17 to 19 inches (17" to 19" = 432mm to 483mm) above the shower floor.

In Group 2B bathrooms, a hinged, padded shower seat shall be installed and mounted as specified above. The seat shall be a minimum of 16 inches (16" = 406mm) deep by 24 inches (24" = 610mm) long. Grab bars shall not be located behind the seat.

d. Hardware: Faucets shall be operable with a closed fist and shall not require grasping, pinching, or twisting of the wrist.
e. Hardware location: Mixing valves shall be centered horizontally on the long wall. The centerline of the control shall be mounted 38 inches to 48 inches (38" to 48" = 965mm to 1219mm) above the shower floor.
f. Hand held shower: A hand held shower head attached to a 60 inch (60" = 1524mm) long flexible hose and an adjustable mounting bar shall be provided or be capable of being installed in the shower.

In Group 2B bathrooms, a hand held shower head attached to a 60 inch (60" = 1524mm) long flexible hose and an adjustable mounting bar , 36 inches (36" = 914mm) long shall be installed in the shower on the long wall adjacent to the seat. The bottom of the mounting bar shall be located at 40 inches (40" = 1016mm) above the shower floor.

g. Soap tray: Shall not have a hand_hold feature unless it can support 250 lbs for five minutes. If provided, it shall be installed or be capable of being relocated with a centerline no higher than 48 inches (48" = 1219mm) above the shower floor.

In Group 2B bathrooms, soap trays shall be installed no higher than 48 inches (48" = 1219mm) above the floor to the centerline of the soap tray.

44.7 GRAB BARS
Grab bars shall be non_rusting and slip resistant, shall be between 1¼ inches and 1½ inches (1¼" to 1½" = 32mm to 38mm) in outside diameter, and shall be located 1½ inches (1½" = 38mm) clear from the wall. Grab bars shall also meet the definition of structural strength.
44.0: GROUP 2 BATHROOMS

44.8 MIRRORS
Shall comply with the following:

44.8.1 A mirror over a sink shall be installed at or be capable of being relocated to a height of 40 inches (40" = 1016mm) from the floor to the bottom edge of the mirror's reflecting surface.

44.8.2 The top of the mirror shall be at least 72 inches (72" = 1829mm) above the floor.

In Group 2B bathrooms, a mirror shall be installed with the bottom no more than 40 inches (40" = 1016mm) above the floor and the top no less than 72 inches (72" = 1829mm) above the floor.

44.9 MEDICINE CABINETS
If medicine cabinets are provided, one medicine cabinet shall be installed or be capable of being relocated so that the inside bottom surface is at a height of 40 inches (40" = 1016mm) above the floor. If the medicine cabinet is also the only mirror, the bottom of the mirror shall be no higher than 40 inches (40" = 1016mm) above the floor.

In Group 2B bathrooms, the medicine cabinet shall be installed with its inside bottom surface at a height of 40 inches (40" = 1016mm) above the floor.

44.10 OUTLETS AND CONTROLS
Shall comply with 521 CMR 39.00: CONTROLS.

44.11 ALARMS
Shall comply with 521 CMR 41.00: ALARMS.

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

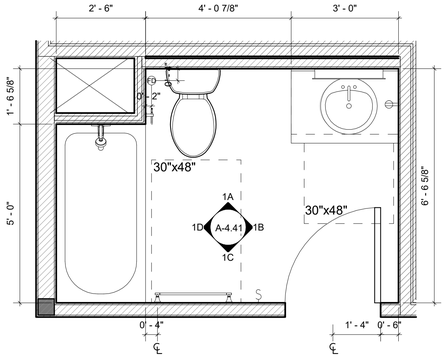
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Drawn By: PM DF

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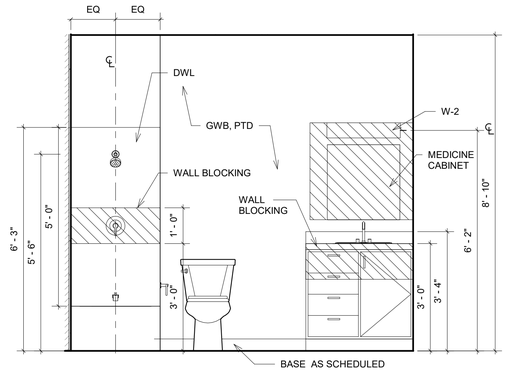
GROUP 2 BATHROOM NOTES

Sheet No.

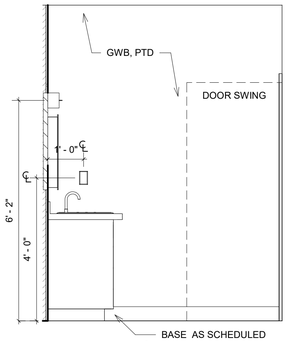
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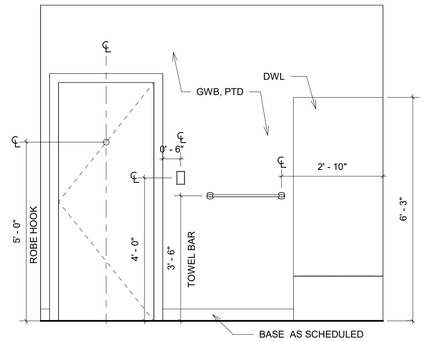
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1/2" = 1'-0"



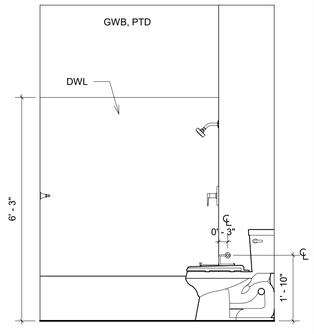
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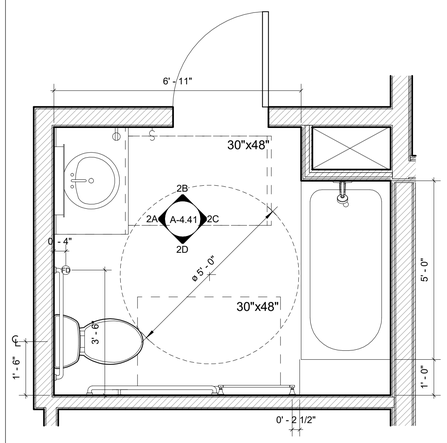
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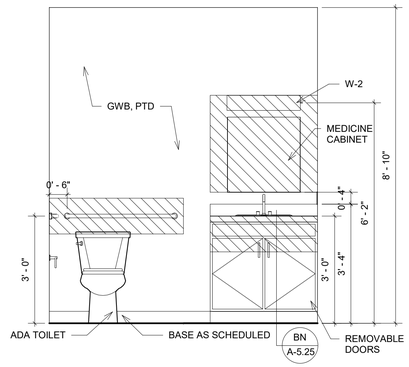
BATH ELEVATION 03 - TYPE 1
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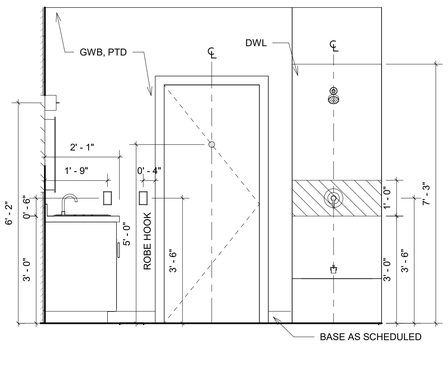
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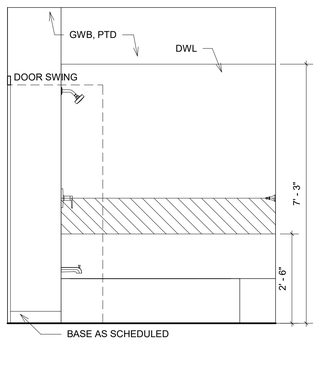
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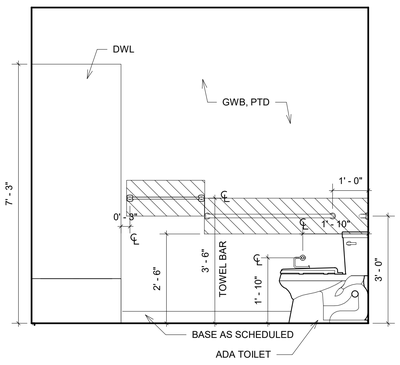
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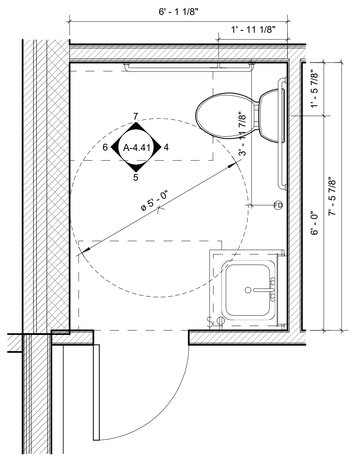
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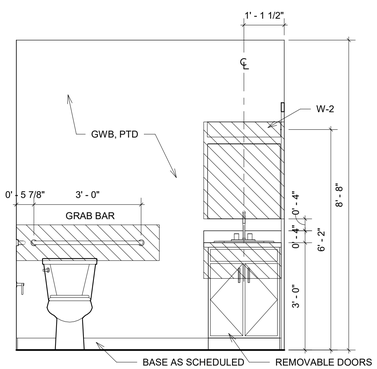
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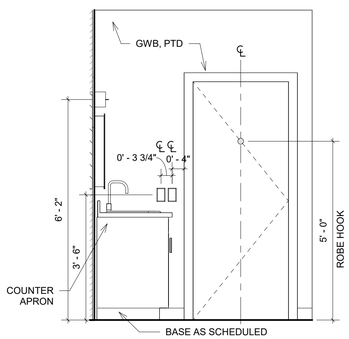
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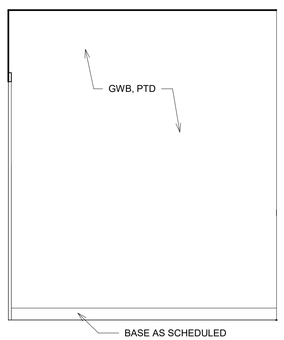
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1/2" = 1'-0"



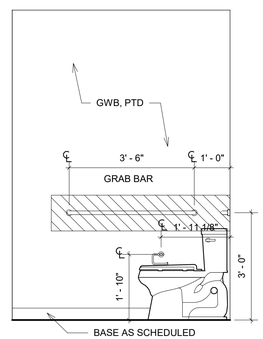
BATH ELEVATION 01 - TYPE 3
1/2" = 1'-0"



BATH ELEVATION 02 - TYPE 3
1/2" = 1'-0"



BATH ELEVATION 03 - TYPE 3
1/2" = 1'-0"



BATH ELEVATION 04 - TYPE 3
1/2" = 1'-0"

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Location

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 fax

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
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COMMONWEALTH OF MASSACHUSETTS

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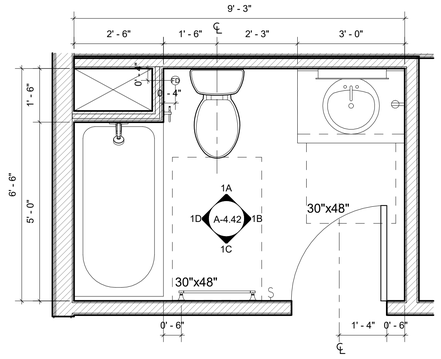
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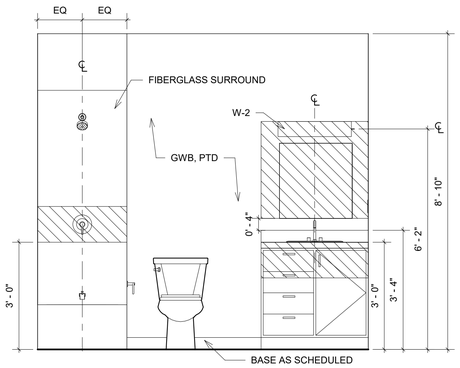
ENLARGED BATH PLANS & ELEVATIONS

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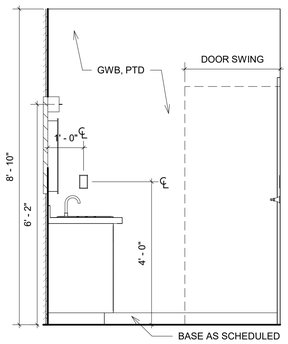
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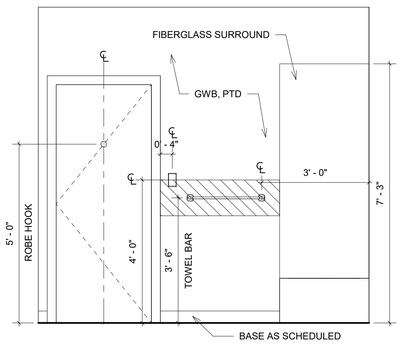
BATHROOM PLAN - TYPE 4
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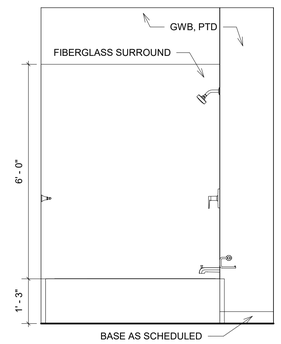
BATH ELEVATION 01 - TYPE 4
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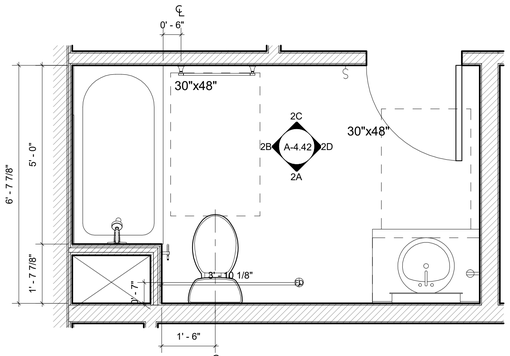
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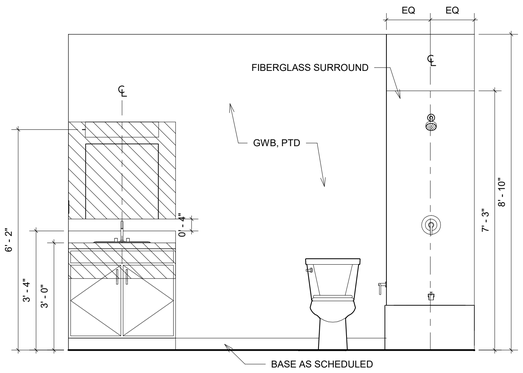
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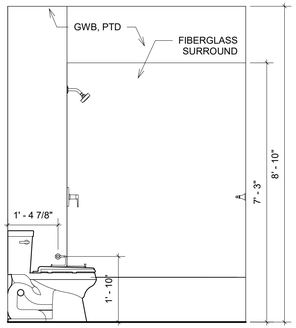
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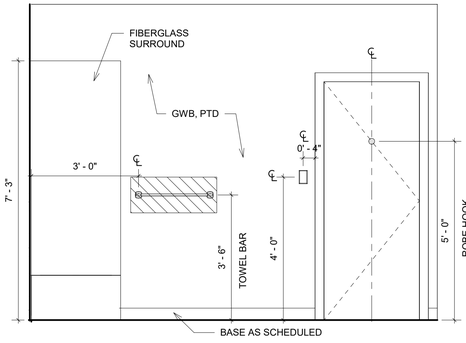
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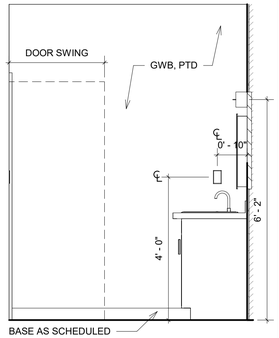
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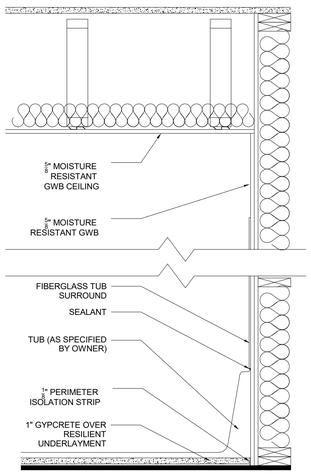
BATH ELEVATION 02 - TYPE 5
1/2" = 1'-0"



BATH ELEVATION 03 - TYPE 5
1/2" = 1'-0"



BATH ELEVATION 04 - TYPE 5
1/2" = 1'-0"



DETAIL AT BATH TUB
1" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
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tel 617-786-7715 x 27
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REGISTERED ARCHITECT
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No. 9319
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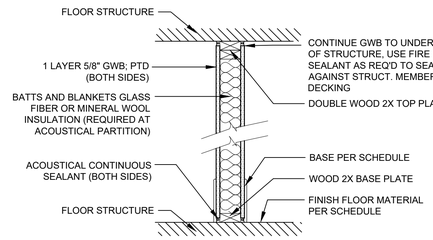
ENLARGED BATH PLANS & ELEVATIONS

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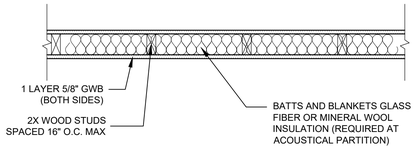
A-4.42

PARTITION NOTES

1. ALL NON-BEARING WALLS TO BE PARTITION TYPE 0 UNLESS OTHERWISE NOTED.
2. AT THE INTERSECTION OF PARTITIONS AND ASSEMBLIES, ALL PORTIONS OF THE HIGHER RATED PARTITION OR ASSEMBLY SHALL BE CONTINUOUS PAST THE LOWER OR NON-RATED ASSEMBLY/PARTITION.
3. ALL PENETRATIONS AND OPENINGS IN PARTITIONS/ASSEMBLIES (INCLUDING ABOVE THE CEILING) ARE TO BE FILLED WITH INSULATION AND/OR SEALANT AS REQUIRED AT FIRE AND ACOUSTICAL RATED PARTITIONS TO MAINTAIN RATING. GC TO SUBMIT A PENETRATION FIRESTOPPING PACKAGE FOR APPROVAL.
4. ALL PENETRATIONS THROUGH NON-RATED ASSEMBLIES ARE TO BE PROVIDED WITH ACOUSTICAL SEALANT.
5. CONTRACTOR SHALL INSTALL PUTTY PACKS ON ALL BACK-TO-BACK OUTLETS, WALL BOXES, OR OTHER INSTALLATIONS THAT MAY COMPROMISE FIRE RATING, THERMAL, AND/OR ACOUSTICAL PERFORMANCE. OUTLETS TO BE STAGGERED AS TO NOT BE BACK TO BACK, WHERE POSSIBLE.
6. INSTALL PERIMETER ACOUSTICAL SEALANT AT ALL INTERIOR ASSEMBLIES AND EXTERIOR WALLS.
7. ALL UNIT DEMISING WALLS AND UNIT CORRIDOR WALLS TO ACHIEVE AND STC-50 RATING MINIMUM.
8. AT ALL FIRE-RATED ASSEMBLIES, STUD SPACING SHALL COMPLY WITH THE UL REQUIREMENTS PER THE UL APPROVED LISTING. STUD SPACING IN UL ASSEMBLIES IS A MAX U.O.N., SEE STRUCTURAL DRAWINGS FOR THE ACTUAL STUD SPACING. GC SHALL REVIEW FRAMING SUBMITTALS AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION OR INSTALLATION OF FRAMING.
9. ARCHITECT TO BE NOTIFIED OF ANY CHANGES TO THE UL LISTED ASSEMBLIES MADE BY THE OWNER/CONTRACTOR PRIOR TO CONSTRUCTION.
10. ALL GYPSUM WALL BOARD (GWB) IS 5/8" TYPE "X" U.O.N.
11. SEAL ALL VAPOR BARRIER TERMINATIONS AND SEAMS PER MANUFACTURER'S REQUIREMENTS.
12. ALL SEAMS BETWEEN DIFFERENTIAL EXTERIOR MATERIALS AND CONTROL JOINTS TO BE CAULKED ACCORDINGLY.



SECTION



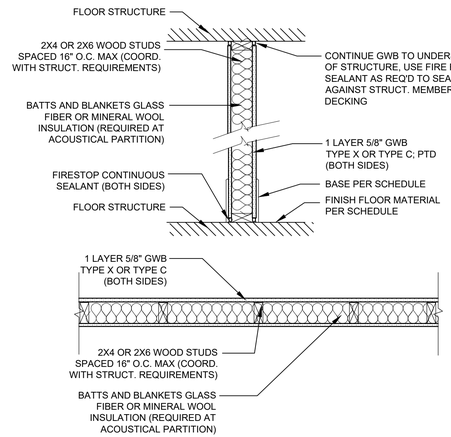
PLAN

0 HR	INTERIOR NON LOAD BEARING	N/A

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

0 — 2X4 WOOD STUDS W/ SOUND BATTS (UNIT INTERIOR WALL)

0A — 2X6 WOOD STUDS W/ SOUND BATTS (UNIT INTERIOR WALL)

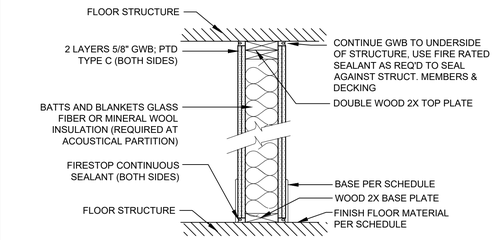


1 HR	INTERIOR LOAD BEARING	UL #: U305

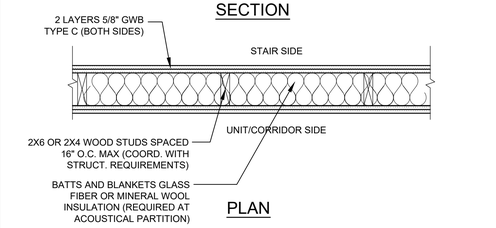
SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

1 — 2X4 WOOD STUDS W/ SOUND BATTS (STC 53)
1 HR. FIRE RATED

1A — 2X6 WOOD STUDS W/ SOUND BATTS (STC 53)
1 HR. FIRE RATED



SECTION



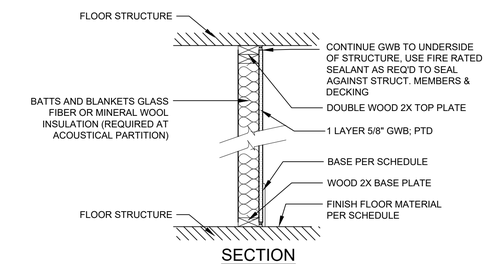
PLAN

2 HR	INTERIOR LOAD BEARING/ NON LOAD BEARING	UL #: U301

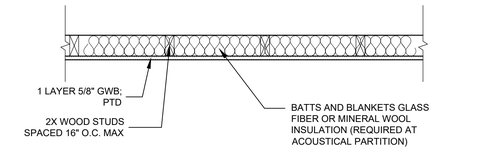
SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

2 — 2X4 WOOD STUDS W/ SOUND BATTS (STAIR SHAFT WALL)
2HR. FIRE RATED (STC 56)

2A — 2X6 WOOD STUDS W/ SOUND BATTS (STAIR SHAFT WALL)
2HR. FIRE RATED (STC 56)



SECTION

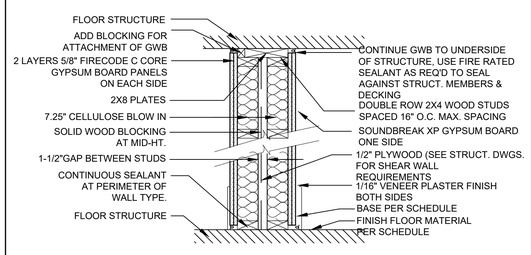


PLAN

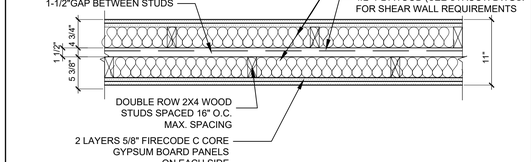
0 HR	INTERIOR NON LOAD BEARING	N/A

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

3 — 2X4 WOOD STUDS W/ SOUND BATTS (UNIT INTERIOR WALL)



SECTION



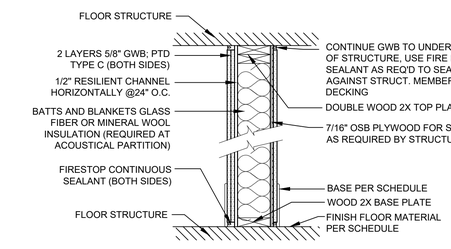
PLAN

2 HR	INTERIOR HORIZONTAL DEMISING/LOAD BEARING WALL	GA FILE: WP 3820

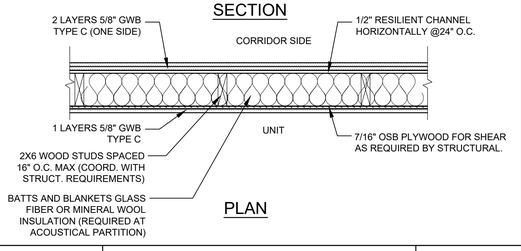
GA FILE: WP 3820 - 2 HOUR INTERIOR HORIZONTAL DEMISING/LOAD BEARING WALL

4 — 2X4 WOOD STUDS W/ SOUND BATTS (STC 60)
2 HR. FIRE RATED

4A — 2X6 WOOD STUDS W/ SOUND BATTS (STC 60)
2 HR. FIRE RATED



SECTION

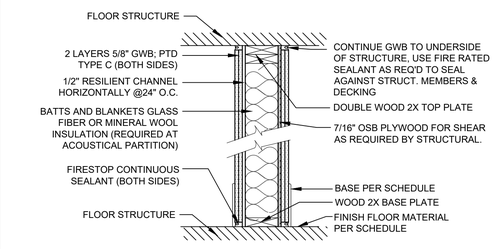


PLAN

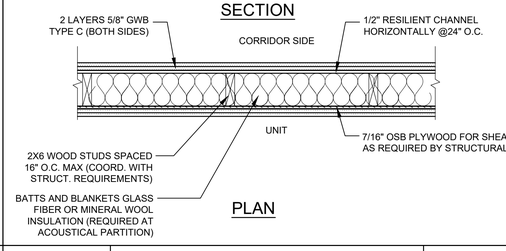
1 HR	INTERIOR LOAD BEARING/ NON LOAD BEARING	UL #: U311

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

5 — 2X6 WOOD STUDS W/ SOUND BATTS (CORRIDOR)
1HR. FIRE RATED



SECTION



PLAN

2 HR	INTERIOR LOAD BEARING/ NON LOAD BEARING	UL #: U334

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

6 — 2X6 WOOD STUDS W/ SOUND BATTS (CORRIDOR)
2HR. FIRE RATED (STC 56)

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT — ARTHUR K.F. CHOO — No. 9319 — BOSTON MA — COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

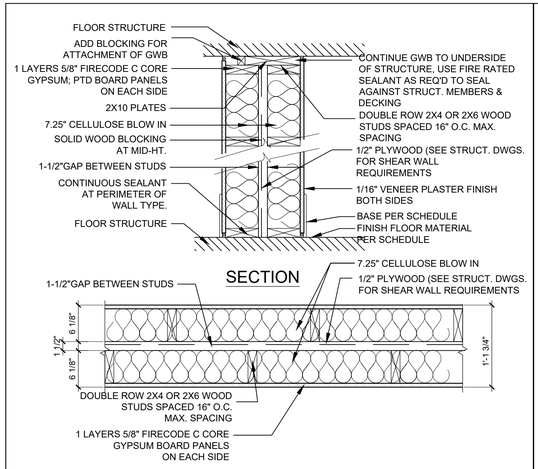
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

INTERIOR PARTITION TYPES

Sheet No.

A-5.00

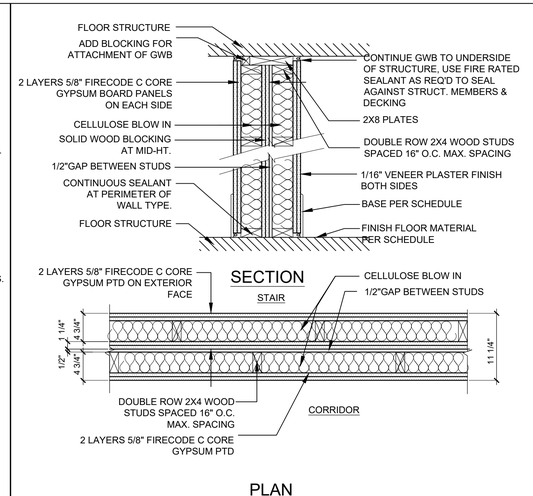


1 HR	INTERIOR HORIZONTAL DEMISING/LOAD BEARING WALL	UL #: U341

GA FILE: WP 3820 - 2 HOUR INTERIOR HORIZONTAL DEMISING/LOAD BEARING WALL

7 2X4 WOOD STUDS W/ SOUND BATTS (STC 60)
2 HR. FIRE RATED

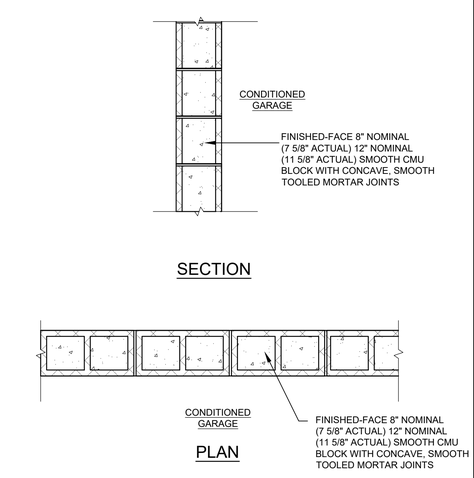
7A 2X6 WOOD STUDS W/ SOUND BATTS (STC 60)
2 HR. FIRE RATED



2 HR	INTERIOR HORIZONTAL EXIT & UNIT SEPARATION WALL	UL #: U301

GA FILE: WP 3725-2 HOUR INTERIOR HORIZONTAL EXIT & UNIT SEPARATION WALL

8 2X4 WOOD STUDS W/ SOUND BATTS (STC 60)
2 HR. FIRE RATED

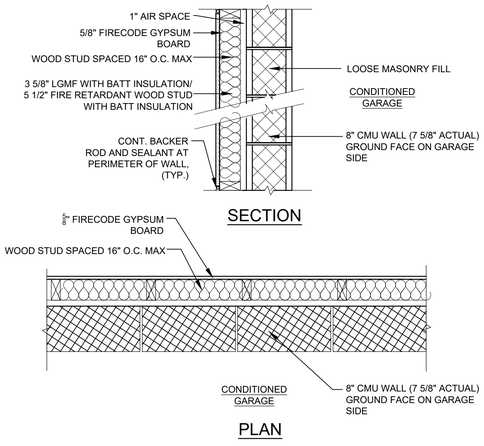


2 HR	EXTERIOR NON LOAD BEARING	UL #: U905

SEE STRUCTURAL DRAWINGS FOR ALL CMU DETAILS FOR ADDITIONAL REQUIREMENTS

C1 8" CMU PARTITION
2 HR. FIRE RATED

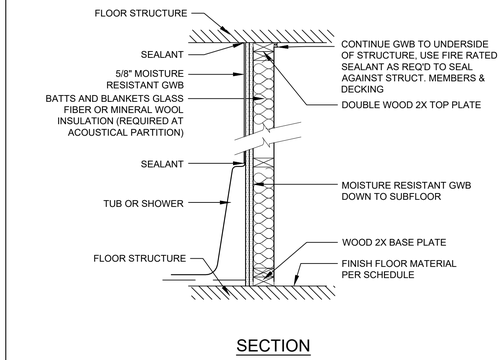
C1A 12" CMU PARTITION
2 HR. FIRE RATED



2 HR	INTERIOR LOAD BEARING/ NON LOAD BEARING	UL #: U914

C2A 8" CMU PARTITION (3 5/8" - METAL STUD)
2HR. FIRE RATED

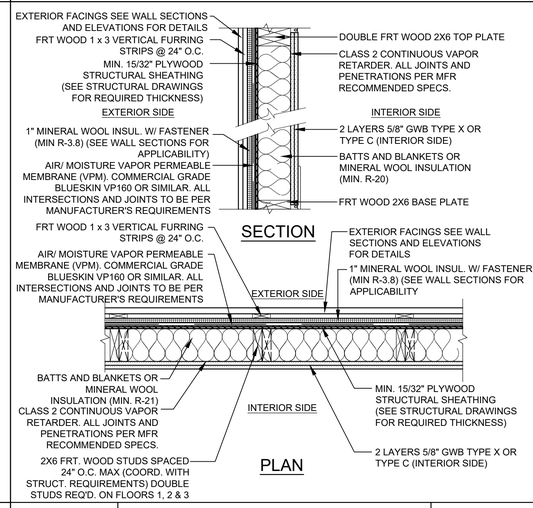
C2B 8" CMU PARTITION WALL (3 1/2" - WOOD STUD)
2HR. FIRE RATED



0 HR	INTERIOR NON LOAD BEARING	N/A

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

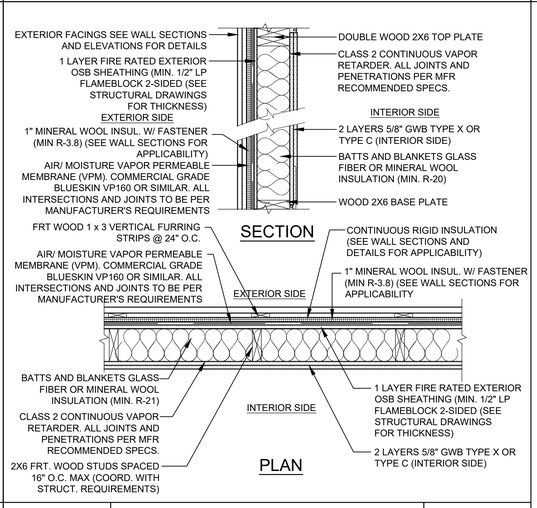
9 2X4 WOOD STUDS W/ SOUND BATTS (UNIT INTERIOR WALL)



2 HR	EXTERIOR LOAD BEARING/ NON LOAD BEARING	UL #: V337

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

E-1 EXTERIOR BEARING WALL
2 HR. FIRE RATED FROM INTERIOR SIDE ONLY (FSD > 10'-0")



2 HR	EXTERIOR LOAD BEARING/ NON LOAD BEARING	UL #: V337

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

E-2 EXTERIOR BEARING WALL
2 HR. FIRE RATED FROM INTERIOR SIDE AND 1 HR. FIRE RATED FROM EXTERIOR SIDE RATED FROM BOTH SIDES (FSD < 10'-0")

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

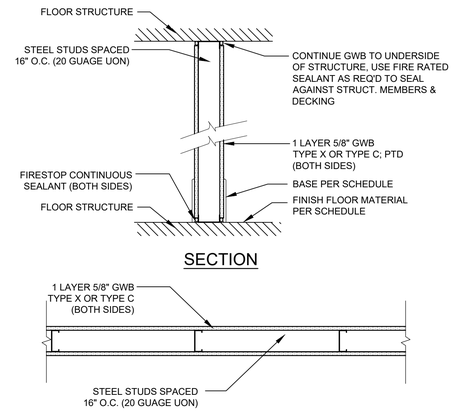
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

INTERIOR PARTITION TYPES

Sheet No.

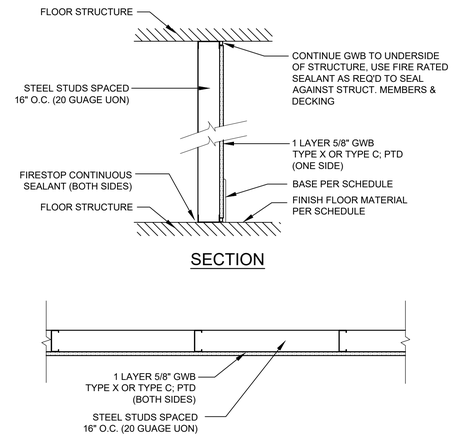
A-5.01



	INTERIOR NON LOAD BEARING	

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

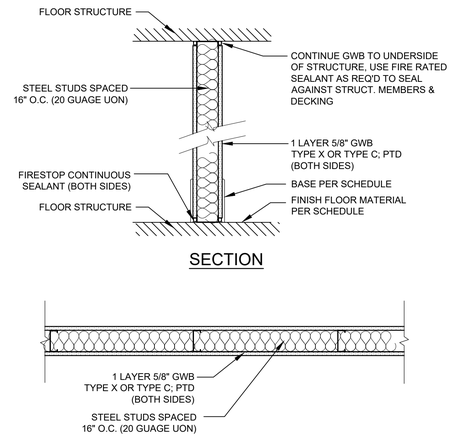
- M0 — 3 5/8" METAL STUDS W/ SOUND BATTS
- M0A — 6" METAL STUDS W/ SOUND BATTS



	INTERIOR NON LOAD BEARING	

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

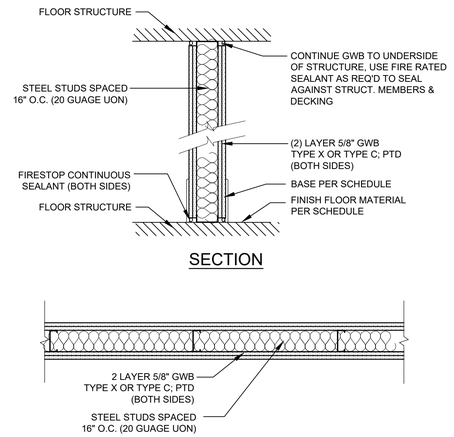
- MF — 3 5/8" METAL STUDS



1 HR	INTERIOR NON LOAD BEARING	UL #: U419	

SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

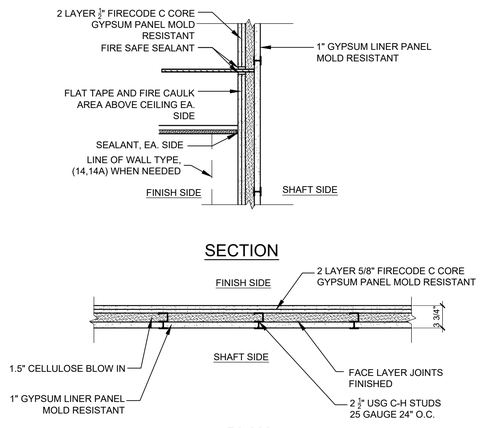
- M1 — 3 5/8" METAL STUDS W/ SOUND BATTS, 1HR. FIRE RATED
- M1A — 6" METAL STUDS W/ SOUND BATTS, 1HR. FIRE RATED



2 HR	INTERIOR NON LOAD BEARING	UL #: U411	

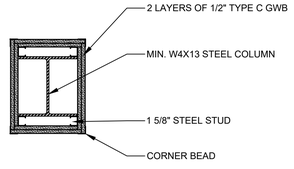
SEE STRUCTURAL DRAWINGS FOR ALL SHEATHING AND STUD SIZES/SPACING

- M2 — 3 5/8" LGMF METAL STUDS W/ SOUND BATTS, 2HR. FIRE RATED
- M2A — 6" LGMF METAL STUDS W/ SOUND BATTS, 2HR. FIRE RATED



2 HR	INTERIOR LOAD BEARING/ NON LOAD BEARING	UL #: W415	

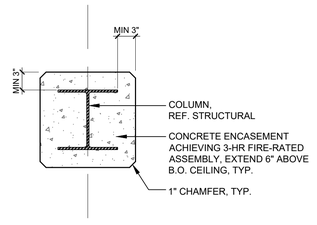
- S1 — SHAFT WALL / MECHANICAL SHAFT WALL (2 1/2"), 2HR. FIRE RATED (STC 46)
- S1A — SHAFT WALL / MECHANICAL SHAFT WALL (4"), 2HR. FIRE RATED (STC 46)
- S1B — SHAFT WALL / MECHANICAL SHAFT WALL (6"), 2HR. FIRE RATED (STC 46)



1 HR	STEEL COLUMN ASSEMBLY (WIDE FLANGE)	UL #: X528	

SEE STRUCTURAL DRAWINGS FOR FRAMING DETAILS AND SIZING. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING.

- C-1 — STEEL COLUMN WRAP ASSEMBLY (TYPICAL COLUMN ASSEMBLY), 1HR. FIRE RATED



3 HR	TYPICAL COLUMN ENCASEMENT		

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT — ARTHUR K.F. CHOO — No. 9319 — BOSTON MA — COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

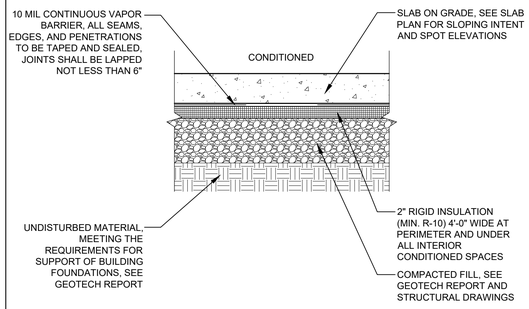
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

INTERIOR / EXTERIOR PARTITION TYPES

Sheet No.

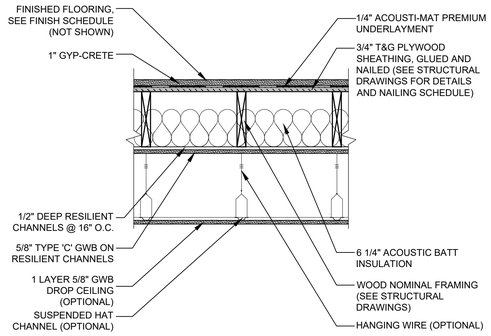
A-5.02



N/A	SLAB ON GRADE ASSEMBLY	UL #: N/A

SEE STRUCTURAL DRAWINGS FOR CONCRETE SLAB DETAILS AND SIZING. ALL PENETRATIONS TO BE SEALED.

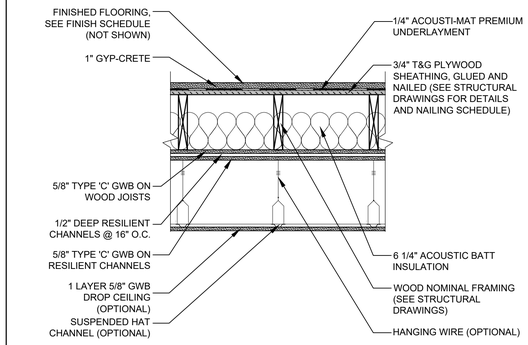
SG-1 SLAB ON GRADE ASSEMBLY (CONDITIONED SPACE)



1 HR	WOOD FRAMING FLOOR/CEILING ASSEMBLY	UL #: L525

SEE STRUCTURAL DRAWINGS FOR FRAMING DETAILS AND SIZING. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING.

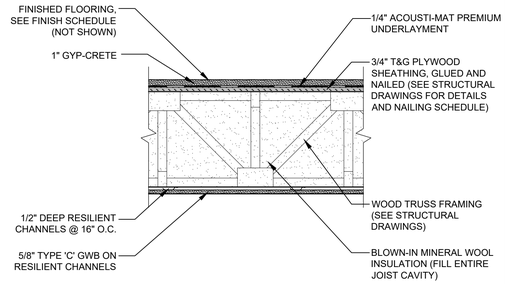
FC-1 WOOD FRAMING FLOOR/CEILING ASSEMBLY (FLOOR ABOVE GARAGE)
1HR. FIRE RATED (STC 56)



2 HR	WOOD FRAMING FLOOR/CEILING ASSEMBLY	UL #: L505

SEE STRUCTURAL DRAWINGS FOR FRAMING DETAILS AND SIZING. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING.

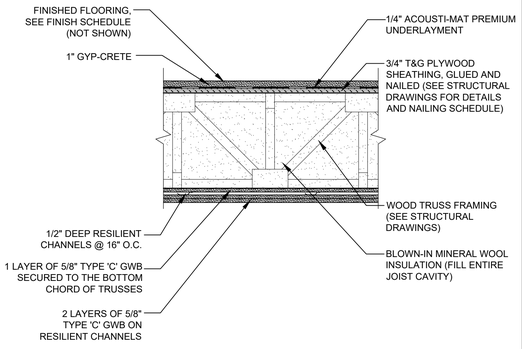
FC-2 WOOD FRAMING FLOOR/CEILING ASSEMBLY (FLOOR ABOVE GARAGE)
1HR. FIRE RATED (STC 56)



1 HR	WOOD TRUSS FLOOR/CEILING ASSEMBLY	UL #: L521

SEE STRUCTURAL DRAWINGS FOR FRAMING DETAILS AND SIZING. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING.

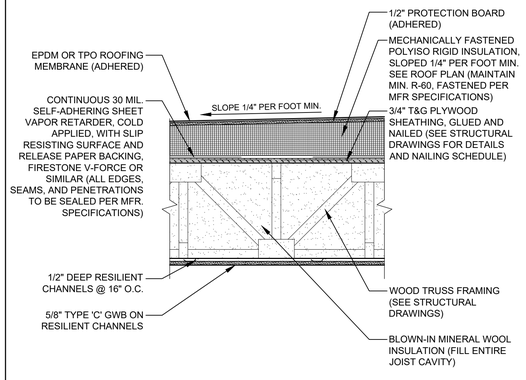
FC-3 WOOD TRUSS FLOOR/CEILING ASSEMBLY (TYPICAL FLOOR)
1HR. FIRE RATED (STC 56)



2 HR	WOOD TRUSS FLOOR/CEILING ASSEMBLY	UL #: L577

SEE STRUCTURAL DRAWINGS FOR FRAMING DETAILS AND SIZING. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING.

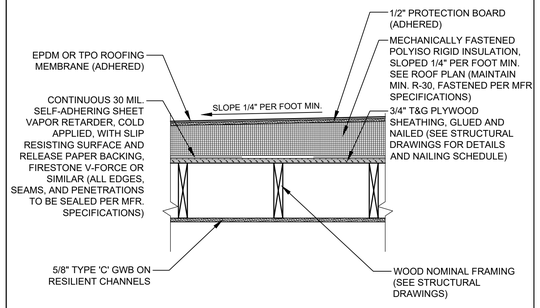
FC-4 WOOD TRUSS FLOOR/CEILING ASSEMBLY (FLOOR OVER LOBBY)
2HR. FIRE RATED (STC 56)



1 HR	WOOD TRUSS ROOF/CEILING ASSEMBLY	UL #: P522

SEE STRUCTURAL DRAWINGS FOR FRAMING DETAILS AND SIZING. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING.

RC-1 WOOD TRUSS ROOF/CEILING ASSEMBLY (TYPICAL ROOF)
1HR. FIRE RATED (STC 56)



1 HR	WOOD FRAMING ROOF/CEILING ASSEMBLY	UL #: L525

SEE STRUCTURAL DRAWINGS FOR FRAMING DETAILS AND SIZING. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING.

RC-3 WOOD FRAMING ROOF/CEILING ASSEMBLY (ELEVATOR/STAIR ROOF)
1HR. FIRE RATED (STC 56)

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

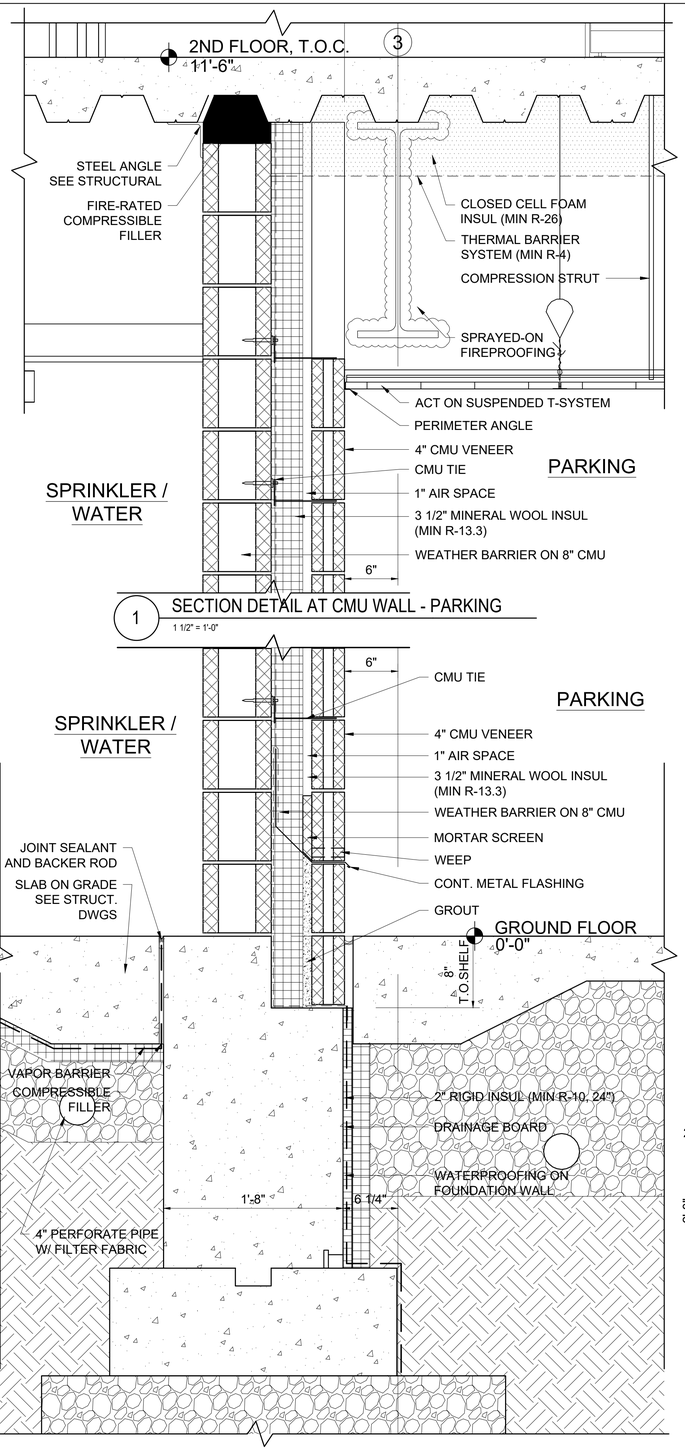
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Date: 01-07-2026
Drawn By: DF

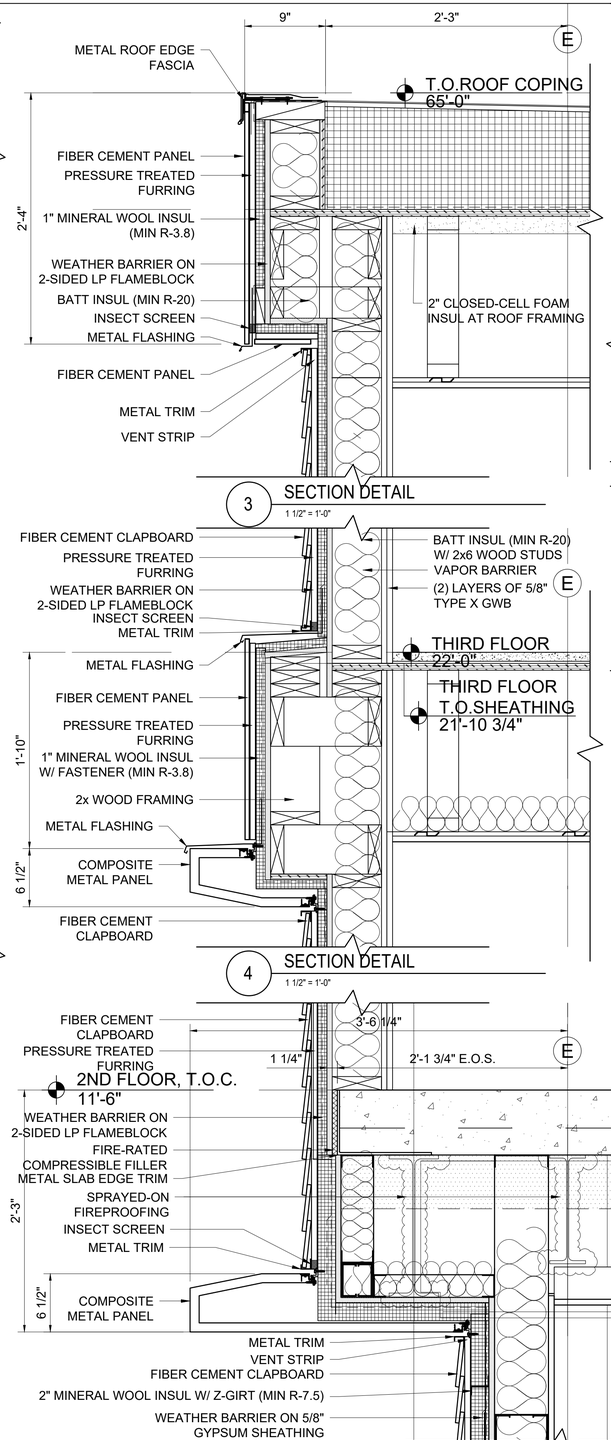
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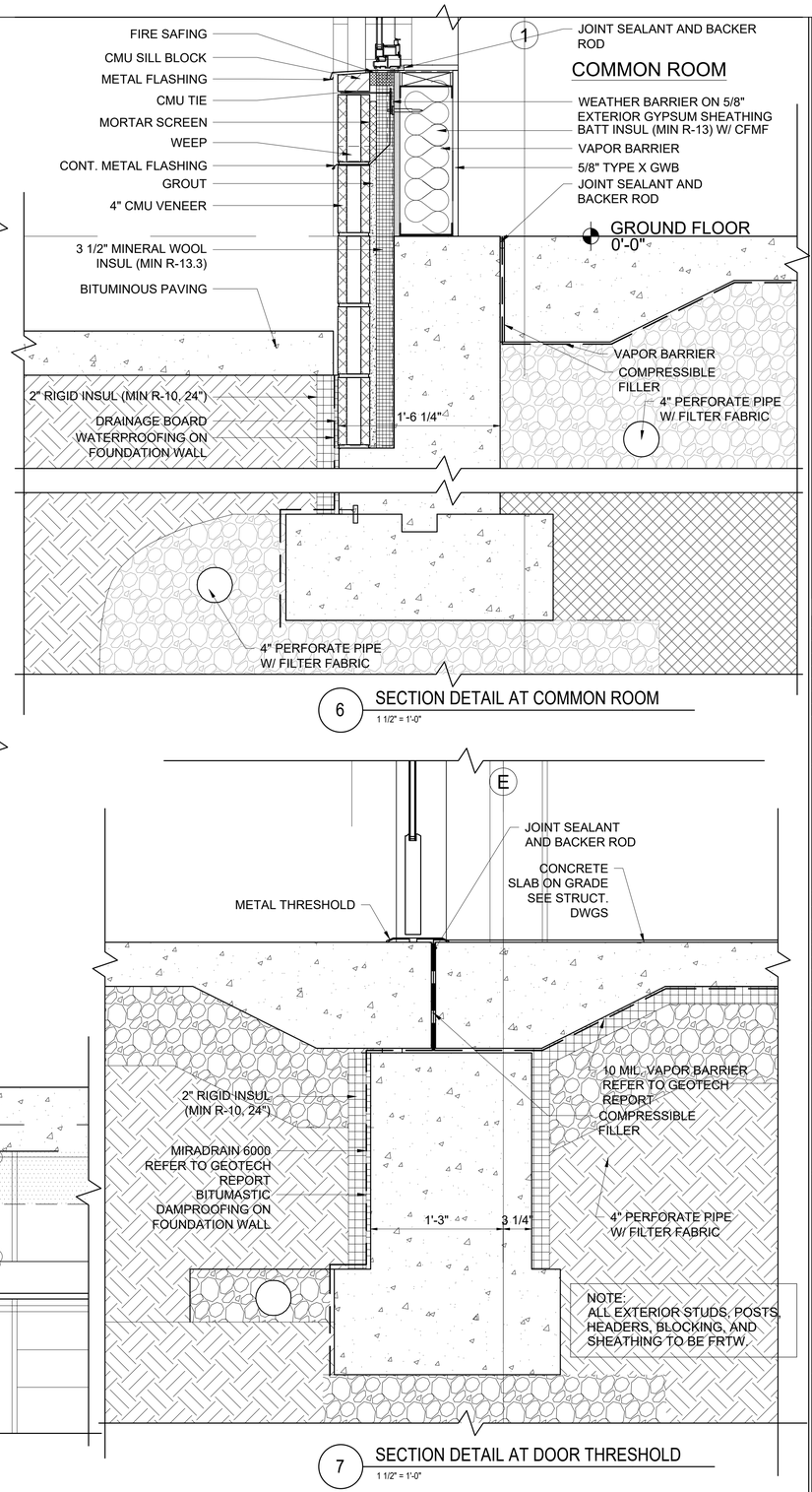
FLOOR SLAB
FLOOR CEILING
ROOF/CEILING &
COLUMN TYPES

Sheet No.

A-5.03







Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

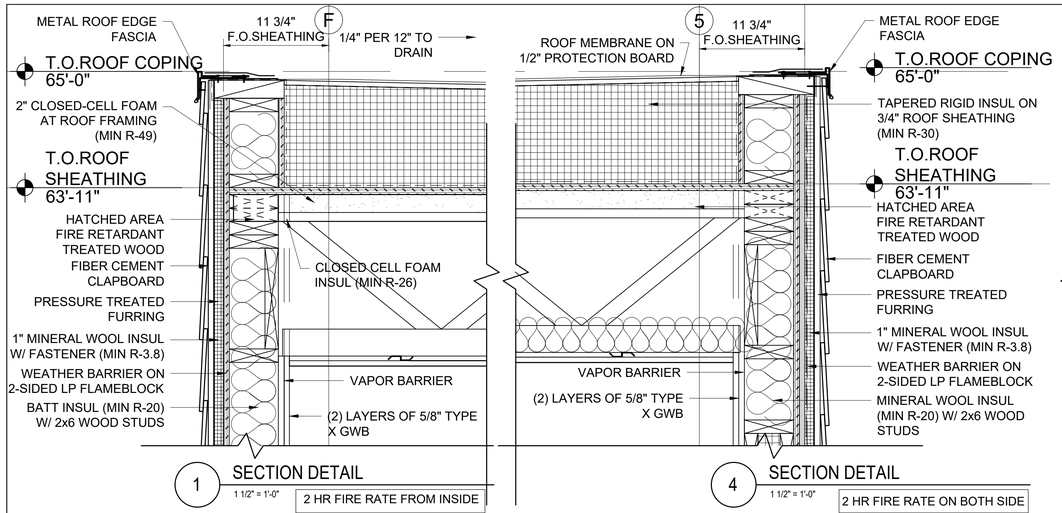
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

ENLARGED
SECTION
DETAILS

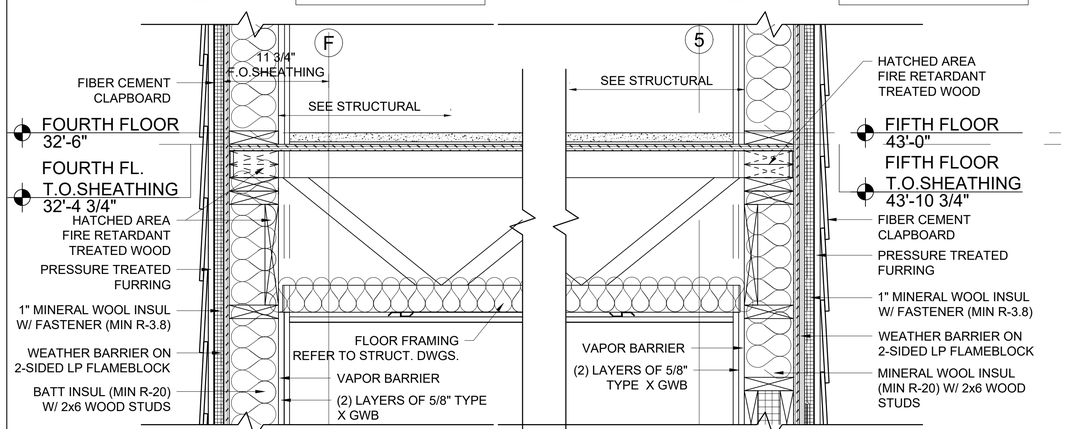
Sheet No.

A-5.10



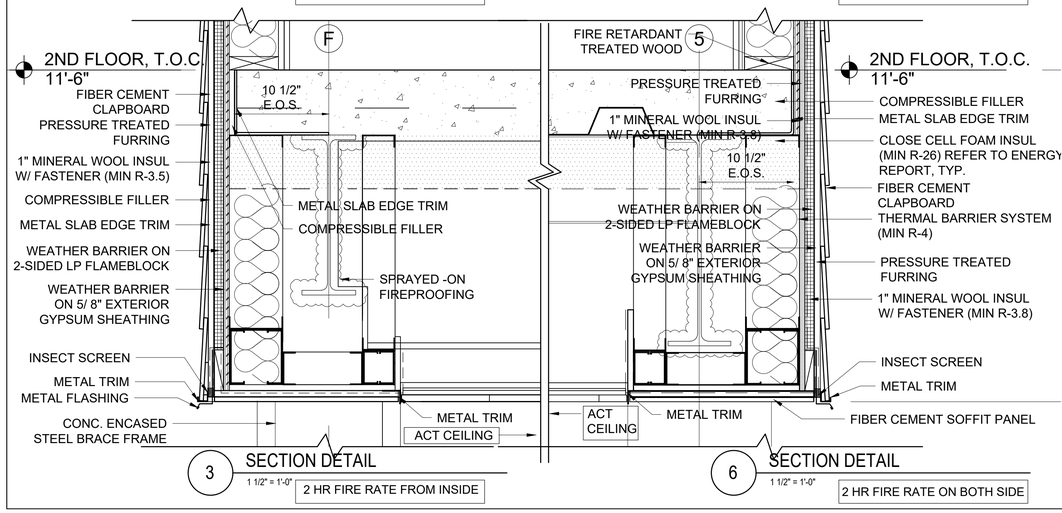
1 SECTION DETAIL
1 1/2" = 1'-0"
2 HR FIRE RATE FROM INSIDE

4 SECTION DETAIL
1 1/2" = 1'-0"
2 HR FIRE RATE ON BOTH SIDE



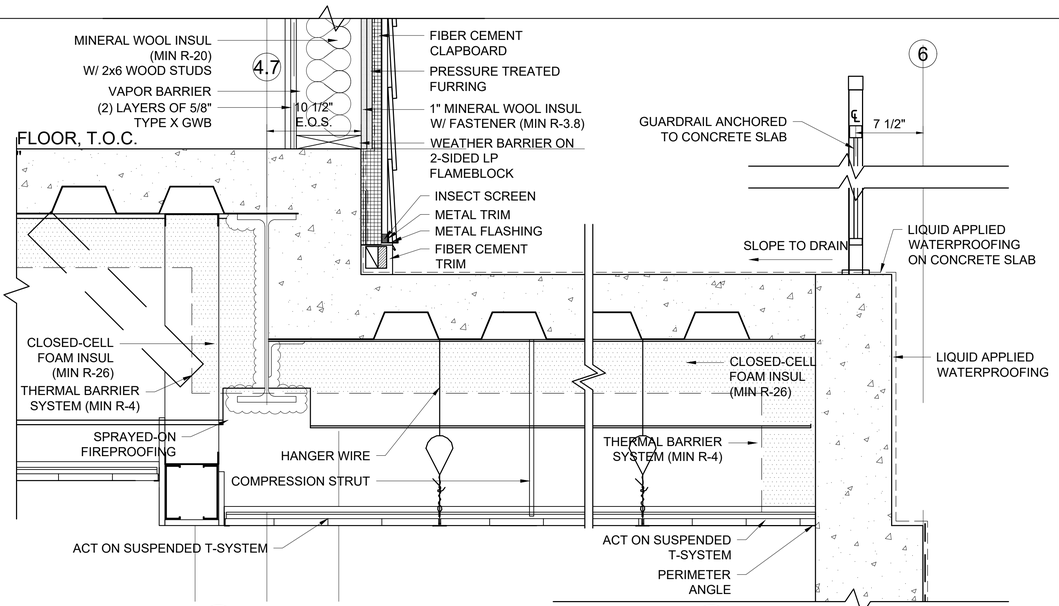
2 SECTION DETAIL
1 1/2" = 1'-0"
2 HR FIRE RATE FROM INSIDE

5 SECTION DETAIL
1 1/2" = 1'-0"
2 HR FIRE RATE ON BOTH SIDE



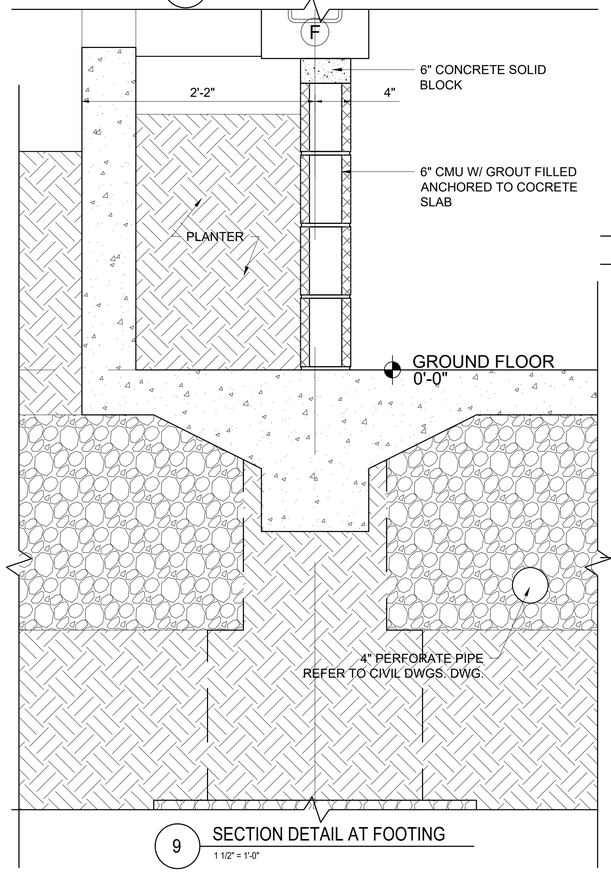
3 SECTION DETAIL
1 1/2" = 1'-0"
2 HR FIRE RATE FROM INSIDE

6 SECTION DETAIL
1 1/2" = 1'-0"
2 HR FIRE RATE ON BOTH SIDE

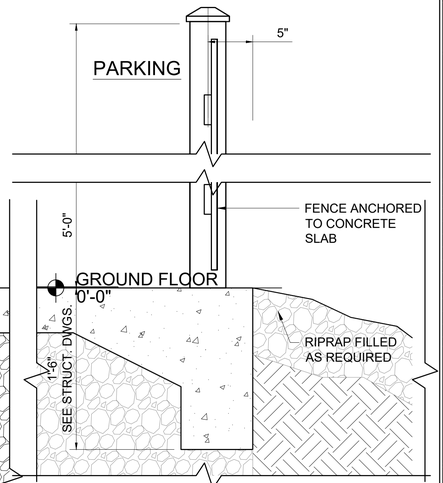


7 SECTION DETAIL
1 1/2" = 1'-0"

8 SECTION DETAIL AT GUARDRAIL
1 1/2" = 1'-0"



9 SECTION DETAIL AT FOOTING
1 1/2" = 1'-0"



10 SECTION DETAIL AT FENCE
1 1/2" = 1'-0"

NOTE:
ALL EXTERIOR STUDS, POSTS, HEADERS, BLOCKING, AND SHEATHING TO BE FRTW.

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 8319 BOSTON MA. COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

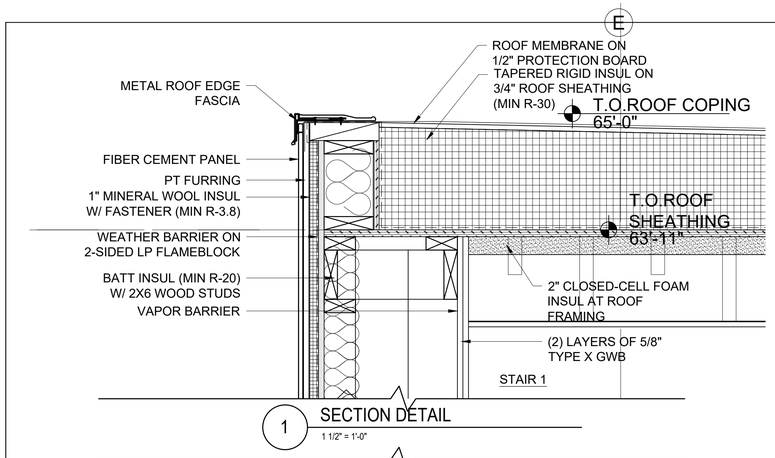
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

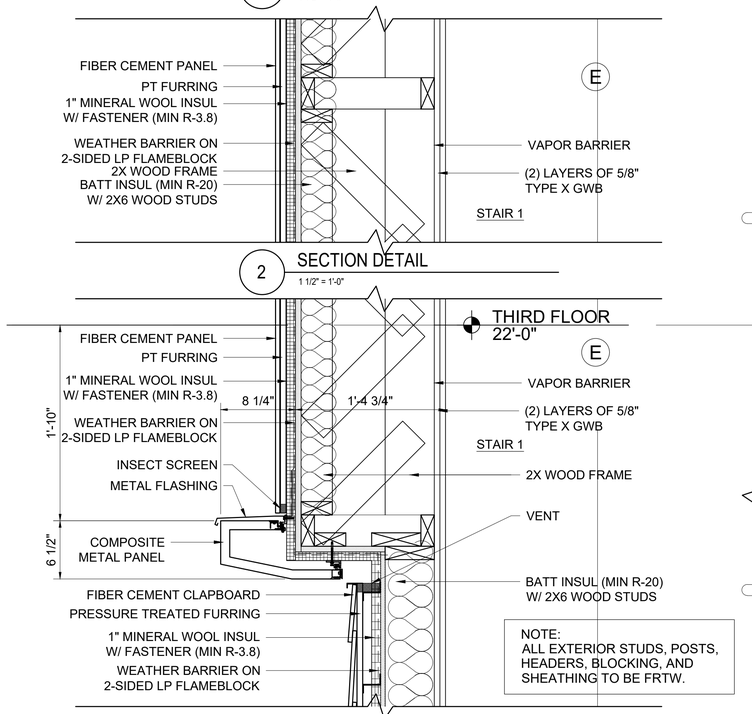
ENLARGED SECTION DETAILS

Sheet No.

A-5.11

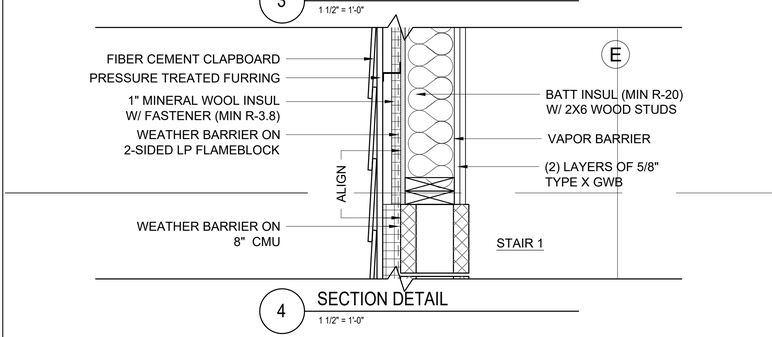


1 SECTION DETAIL
1 1/2" = 1'-0"

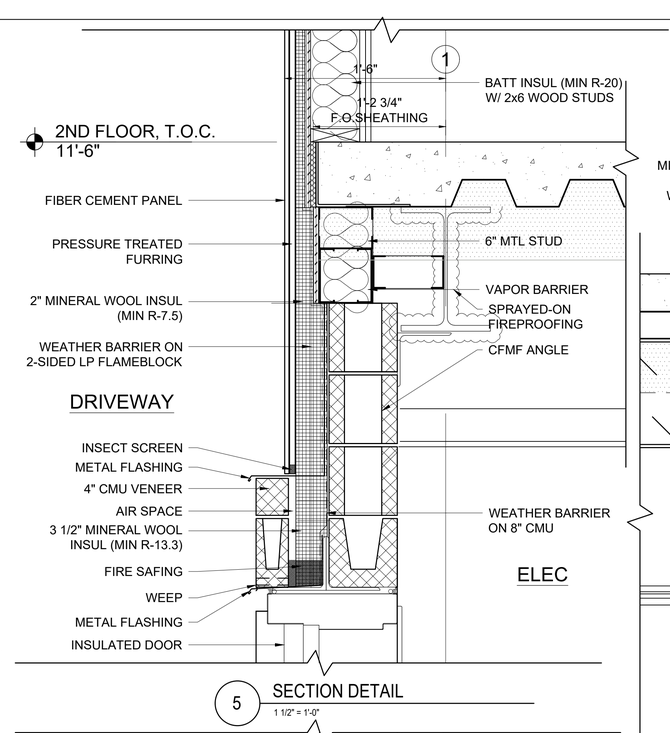


2 SECTION DETAIL
1 1/2" = 1'-0"

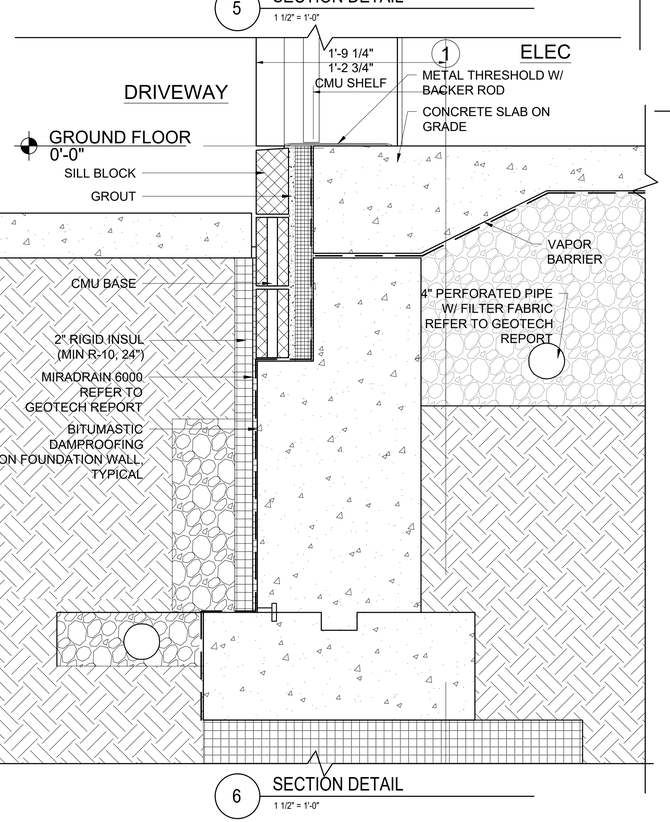
3 SECTION DETAIL
1 1/2" = 1'-0"



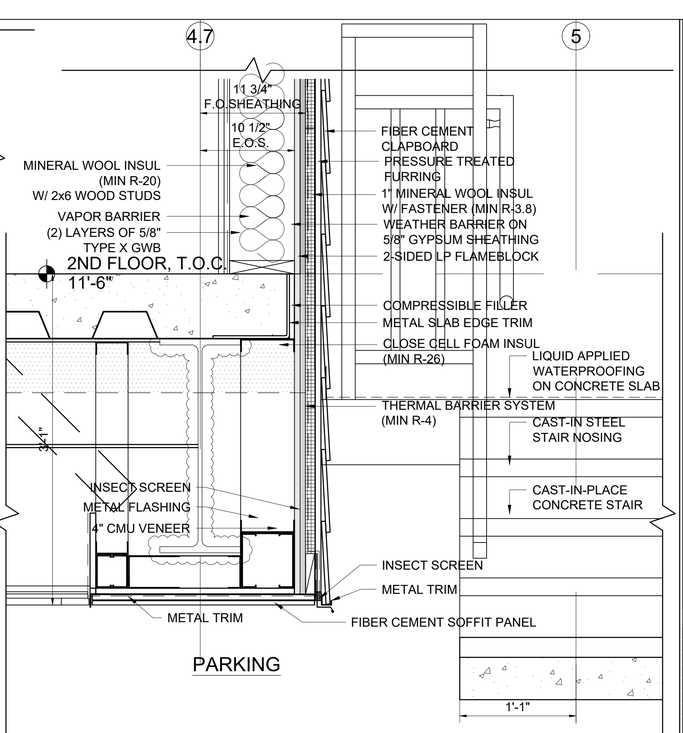
4 SECTION DETAIL
1 1/2" = 1'-0"



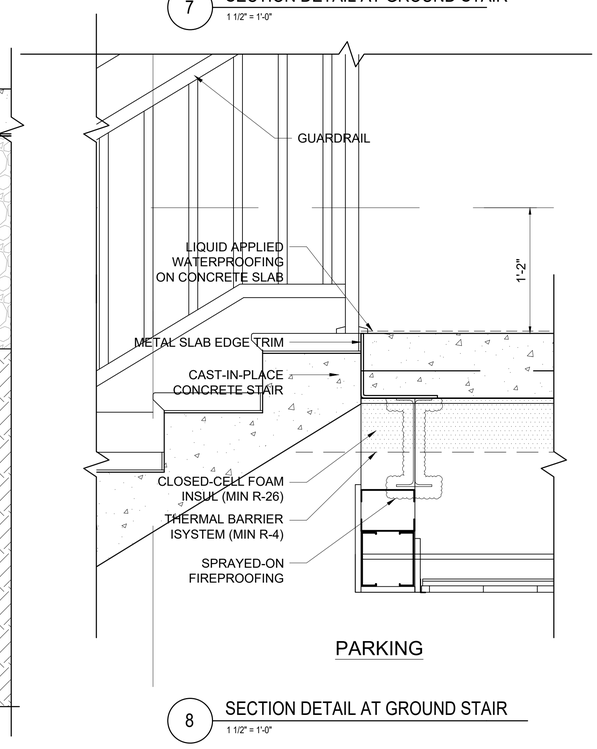
5 SECTION DETAIL
1 1/2" = 1'-0"



6 SECTION DETAIL
1 1/2" = 1'-0"



7 SECTION DETAIL AT GROUND STAIR
1 1/2" = 1'-0"



8 SECTION DETAIL AT GROUND STAIR
1 1/2" = 1'-0"

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REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

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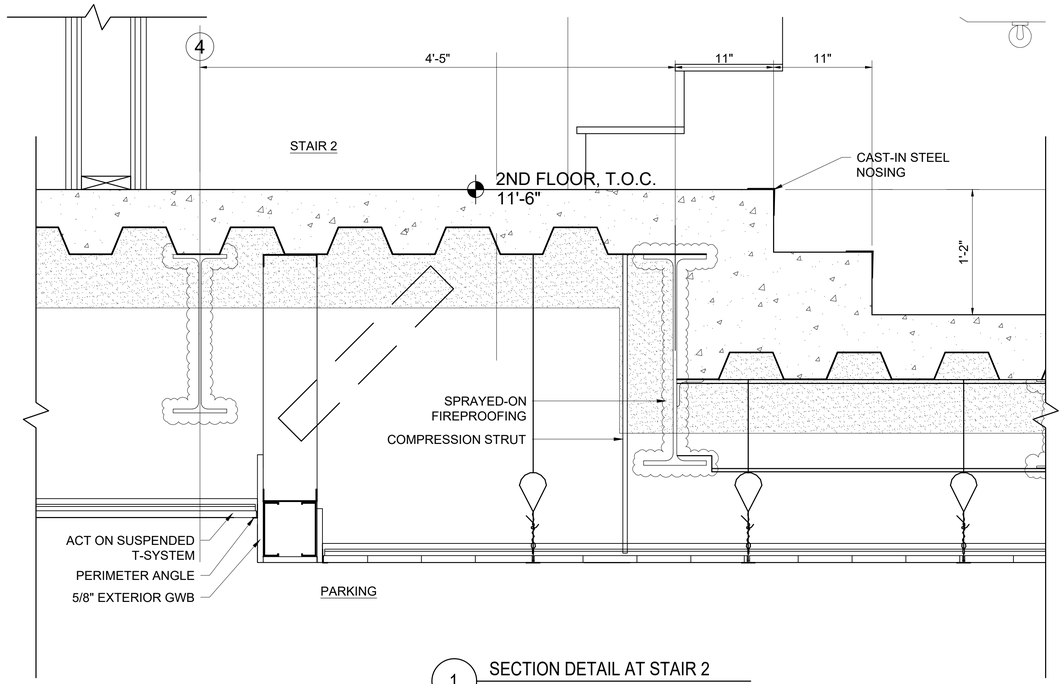
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Drawn By: DF

Drawing Name

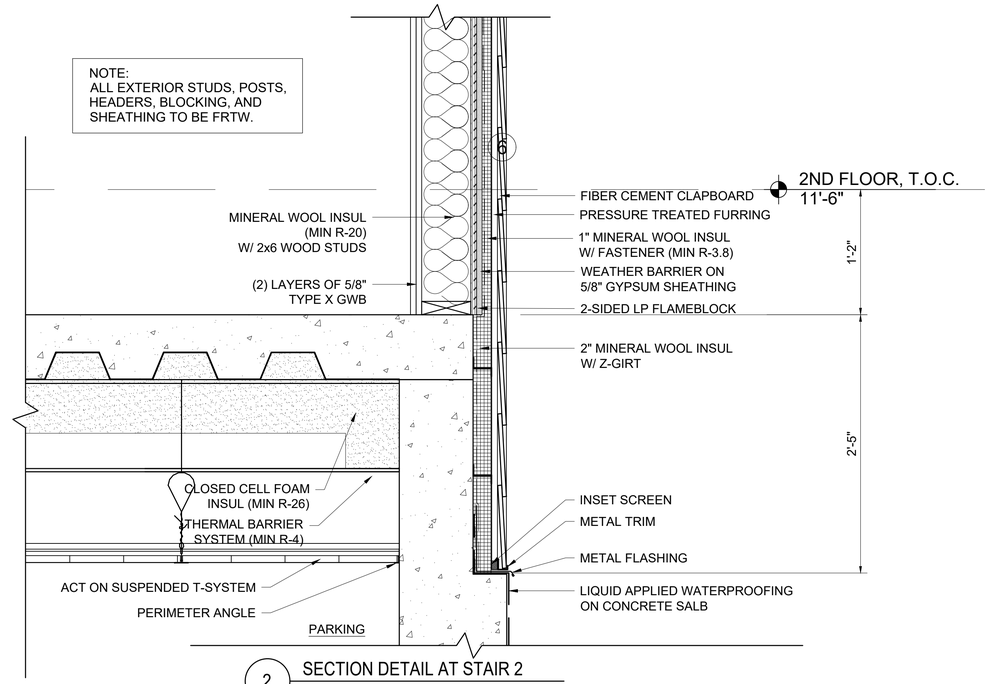
ENLARGED SECTION DETAILS

Sheet No.

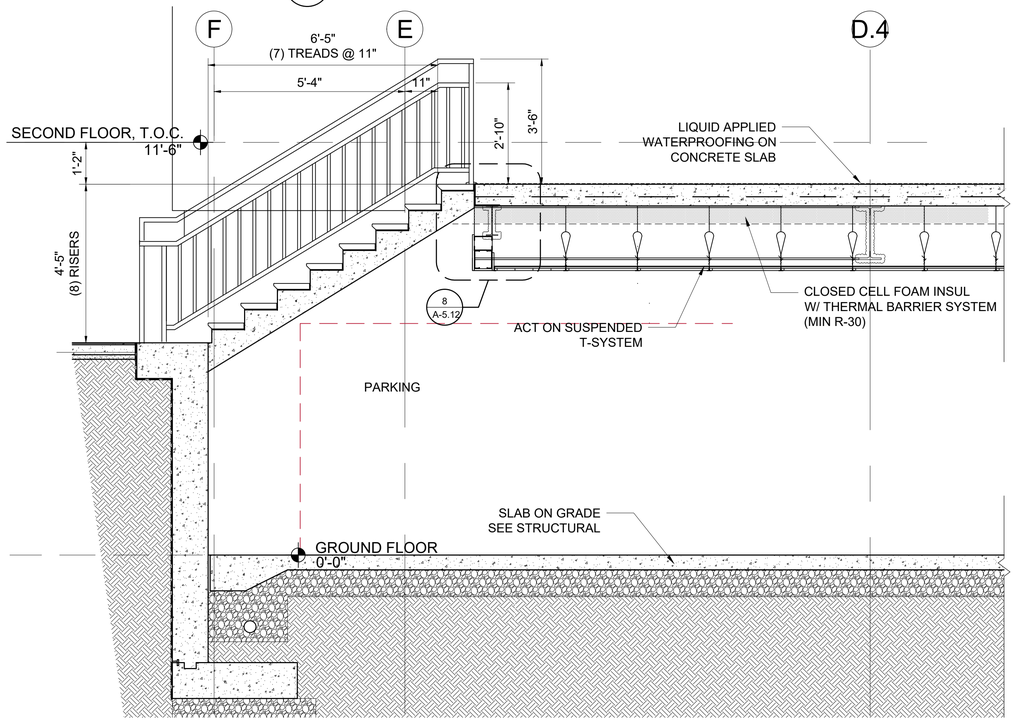
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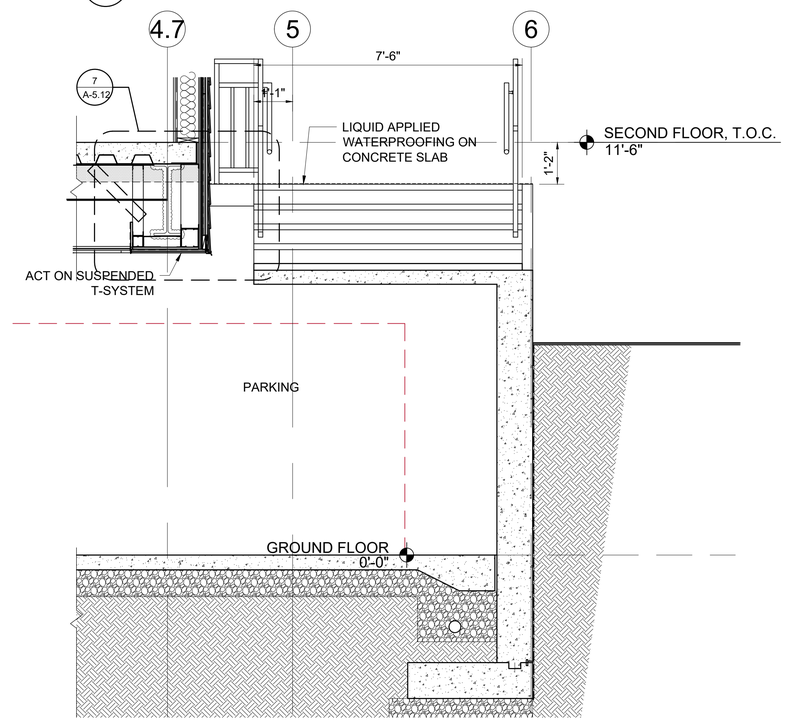
1 SECTION DETAIL AT STAIR 2
1 1/2" = 1'-0"



2 SECTION DETAIL AT STAIR 2
1 1/2" = 1'-0"



3 STAIR TO GROUND FROM STAIR 2 SECTION
1 1/2" = 1'-0"



4 STAIR TO GROUND FROM STAIR 2 SECTION
1 1/2" = 1'-0"

Location

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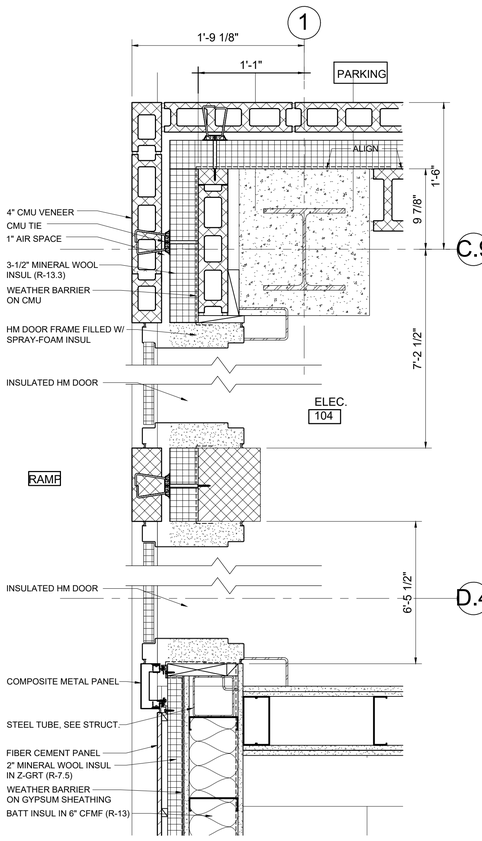
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

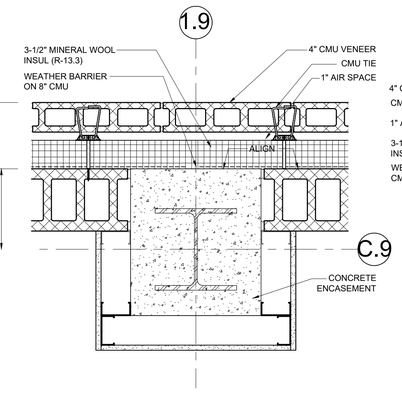
ENLARGED SECTIONS AND DETAILS

Sheet No.

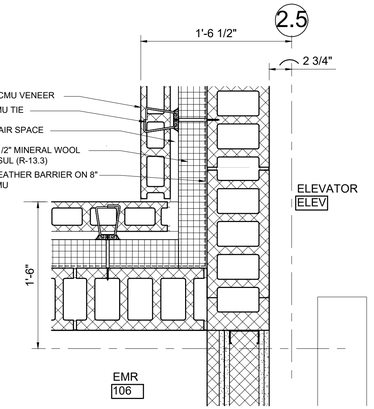
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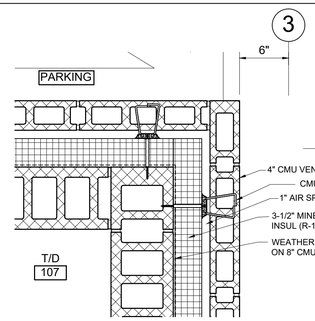
1 PLAN DETAIL AT C.9/1
1 1/2" = 1'-0"



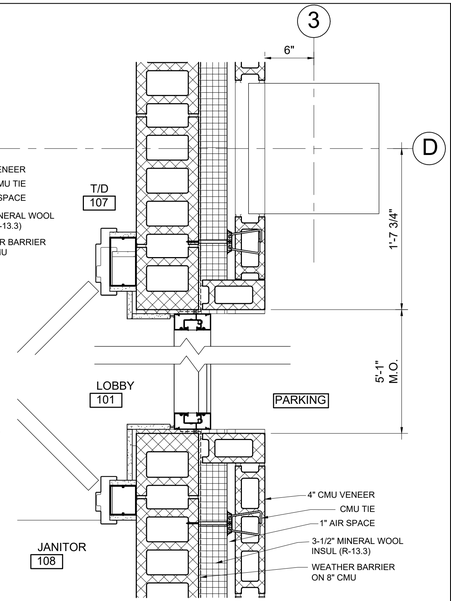
2 PLAN DETAIL AT C.9/1.9
1 1/2" = 1'-0"



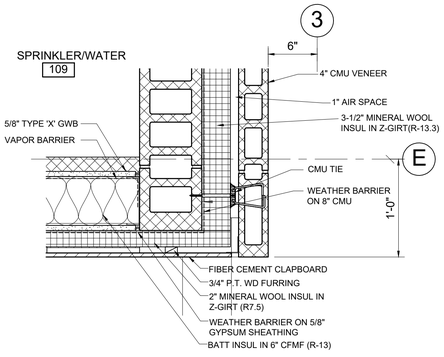
3 PLAN DETAIL AT C.9/2.5
1 1/2" = 1'-0"



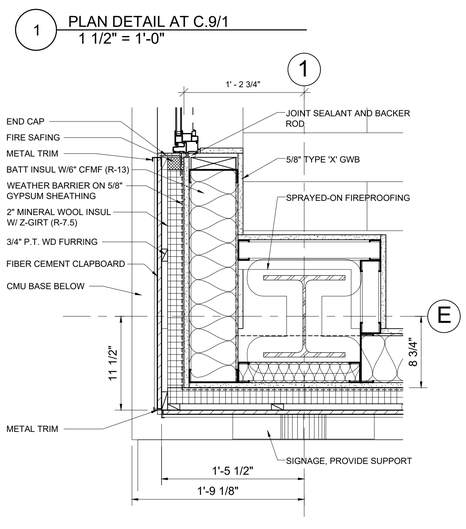
4 PLAN DETAIL AT E.7/2.9
1 1/2" = 1'-0"



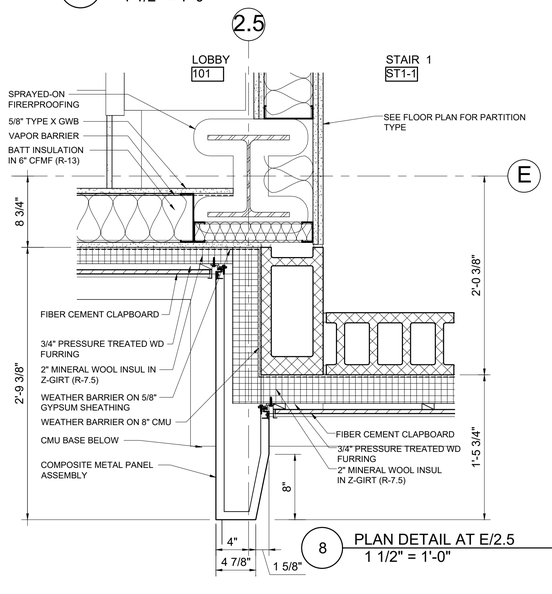
5 PLAN DETAIL AT D/2.9
1 1/2" = 1'-0"



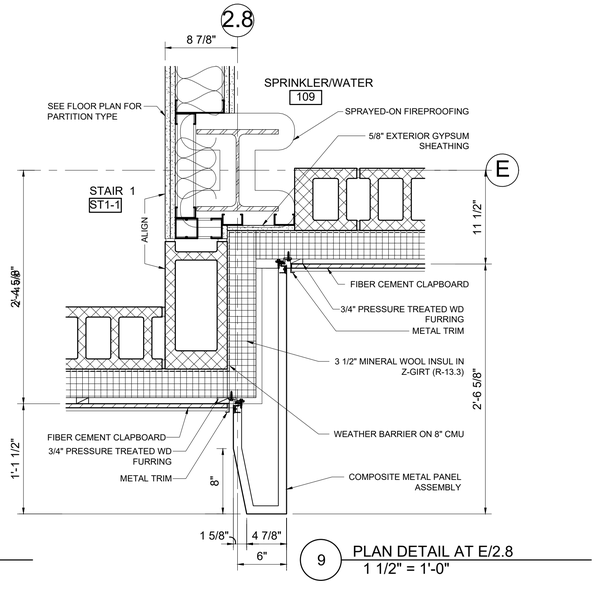
6 PLAN DETAIL AT E/2.9
1 1/2" = 1'-0"



7 PLAN DETAIL AT E/1
1 1/2" = 1'-0"



8 PLAN DETAIL AT E/2.5
1 1/2" = 1'-0"



9 PLAN DETAIL AT E/2.8
1 1/2" = 1'-0"

Location

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REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
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COMMONWEALTH OF MASSACHUSETTS

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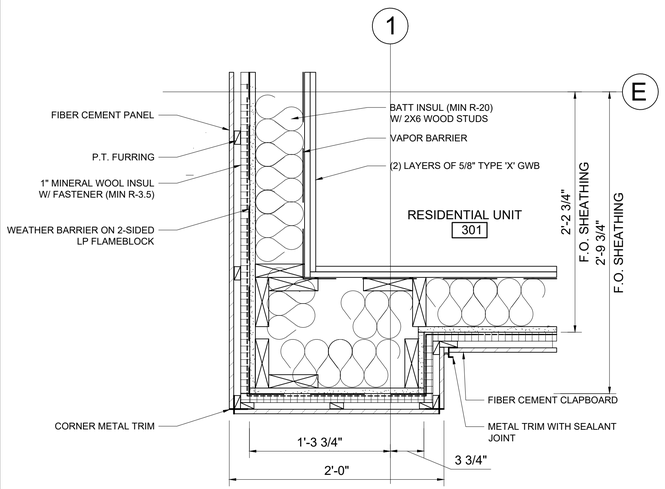
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

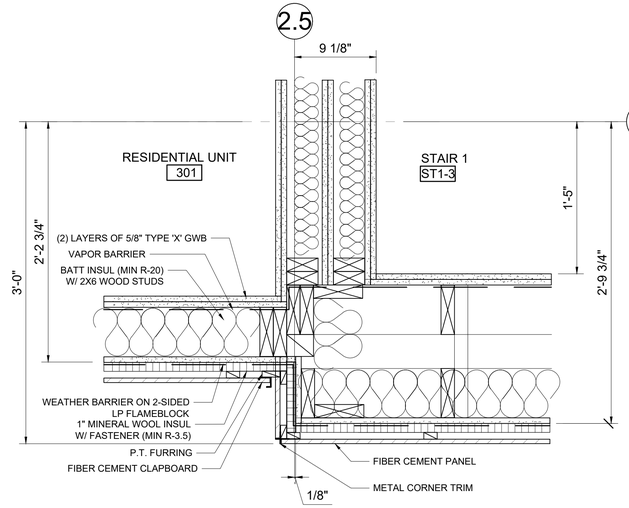
EXTERIOR PLAN DETAILS

Sheet No.

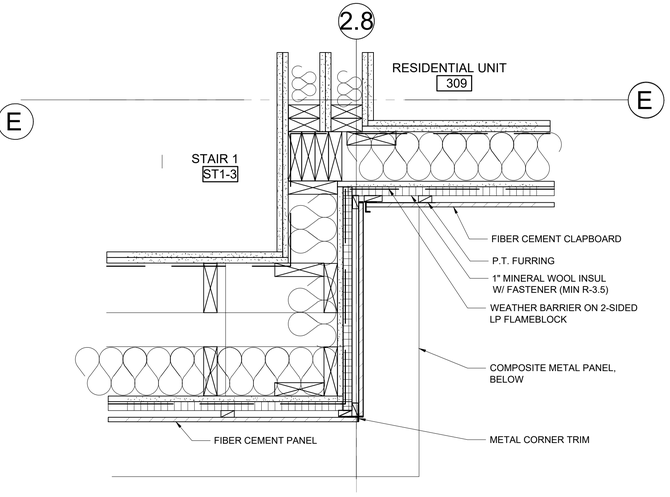
A-5.14



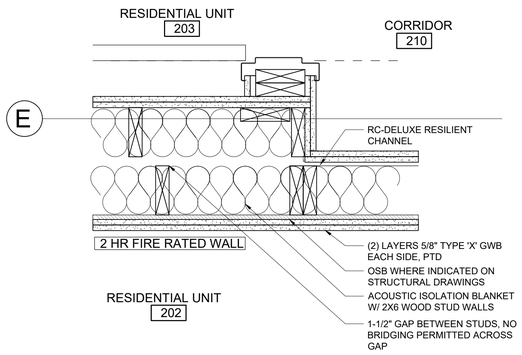
1 PLAN DETAIL AT E.4/1, 3 FL
1 1/2" = 1'-0"



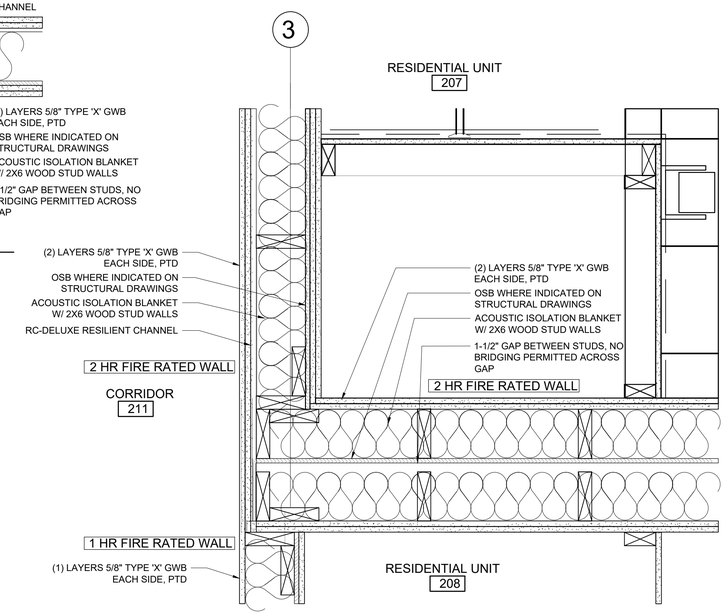
2 PLAN DETAIL AT E.4/2.5, 3 FL
1 1/2" = 1'-0"



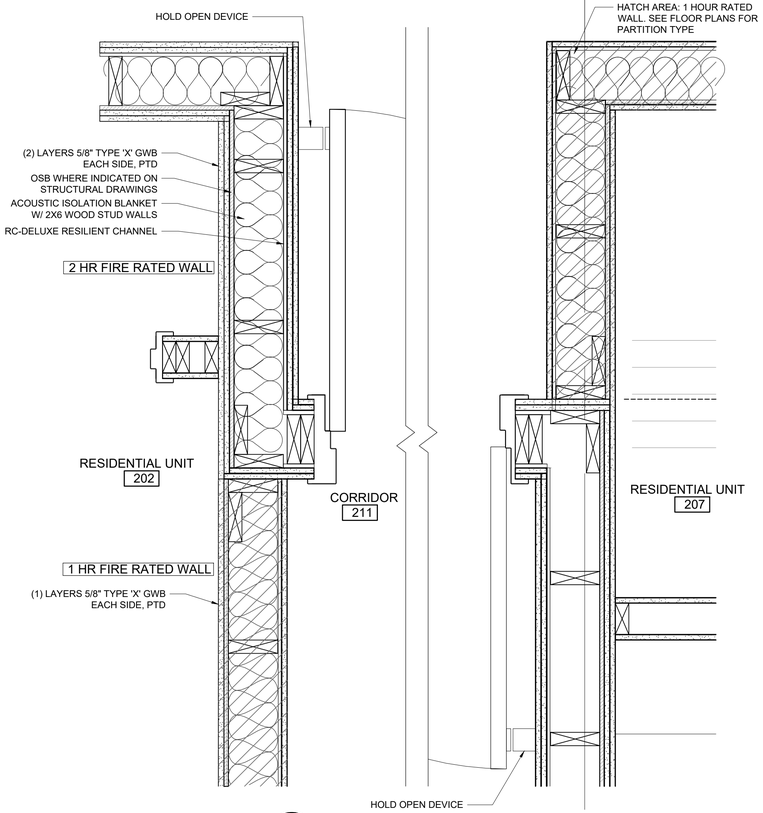
3 PLAN DETAIL AT E/2.8, 3 FL
1 1/2" = 1'-0"



4 PLAN DETAIL AT C/2.2
1 1/2" = 1'-0"



5 PLAN DETAIL AT C.6/3
1 1/2" = 1'-0"



6 PLAN DETAIL AT C.2/2.4, EGRESS DOOR
1 1/2" = 1'-0"

Location

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ARTHUR K.F. CHOO
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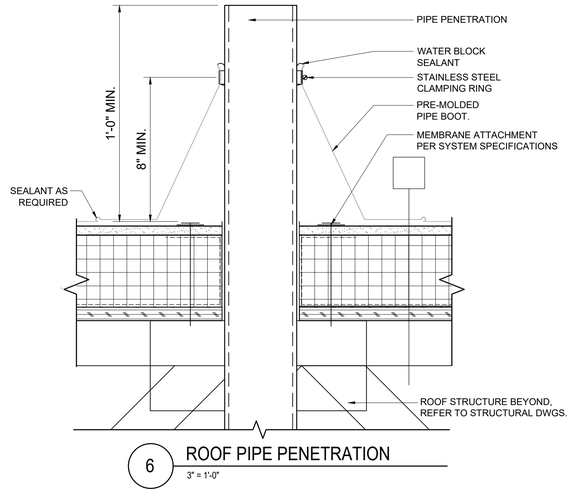
Project No: 2025014
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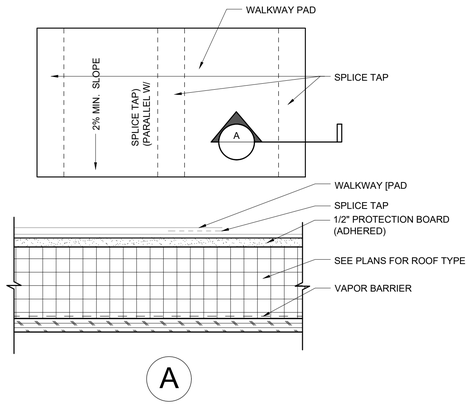
EXTERIOR AND INTERIOR PLAN DETAILS

Sheet No.

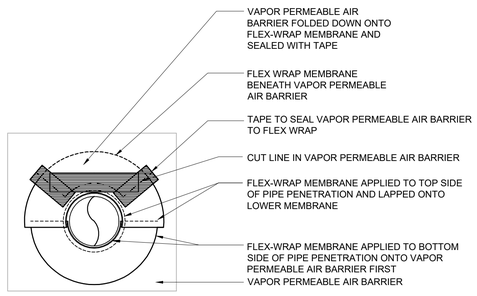
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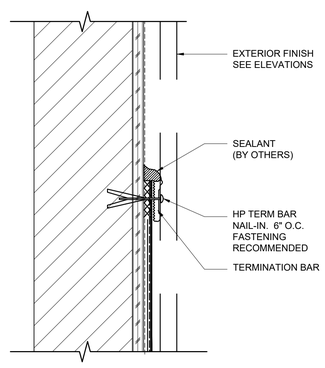
6 ROOF PIPE PENETRATION
3" = 1'-0"

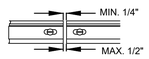


3 WALKWAY PAD DETAIL
3" = 1'-0"



8 TYPICAL VENT PENETRATION FOR DRYER, TOILET EXHAUST, AND HW HEATER VENT
3" = 1'-0"





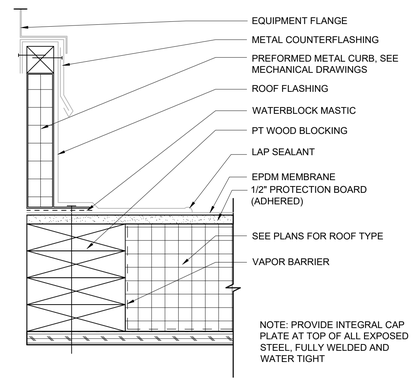
NOTES:

1. APPLY ON HARD SMOOTH SURFACE ONLY; NOT FOR USE ON EXPOSED WOOD.
2. DO NOT WRAP COMPRESSION TERMINATION BAR AROUND CORNERS.
3. DETAIL NOT FOR USE ON WARRANTY PROJECTS EXCEEDING 20 - YEARS.
4. DETAIL 9E MUST BE USED AT VERTICAL JOINTS IN PANEL WALLS.

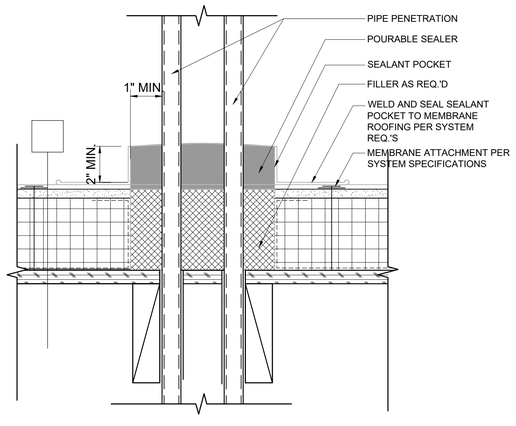
---- APPLICABLE BONDING ADHESIVE.

XXX WATER CUT-OFF MASTIC - MUST BE HELD UNDER CONSTANT COMPRESSION.

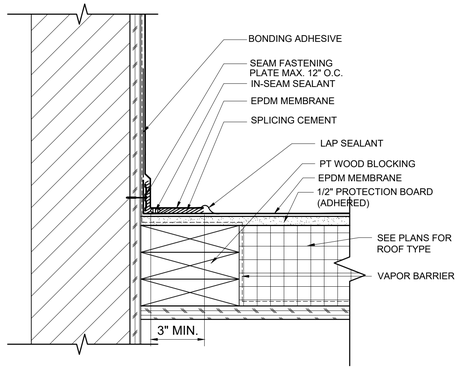
5 MECHANICAL TERMINATION
3" = 1'-0"



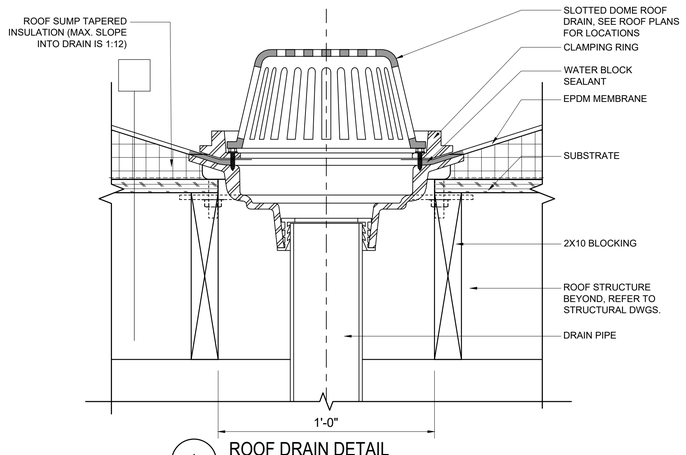
2 MECHANICAL CURB DETAIL
3" = 1'-0"



7 PITCH POCKET DETAIL FOR MULTIPLE PIPES
3" = 1'-0"



4 PARAPET/CURB CURED EPDM
3" = 1'-0"



1 ROOF DRAIN DETAIL
3" = 1'-0"

Location

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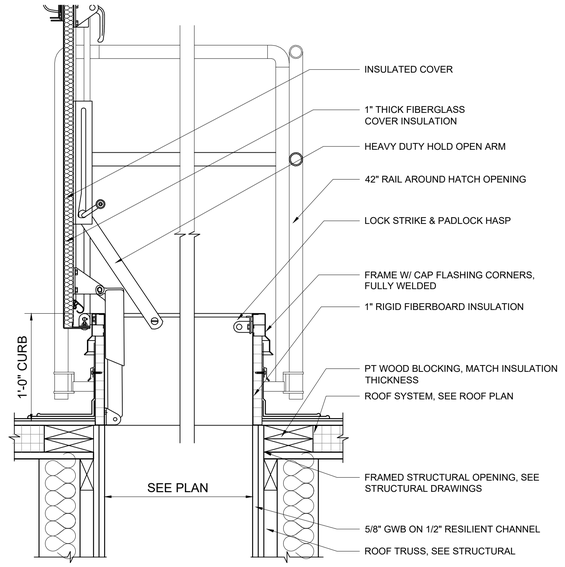
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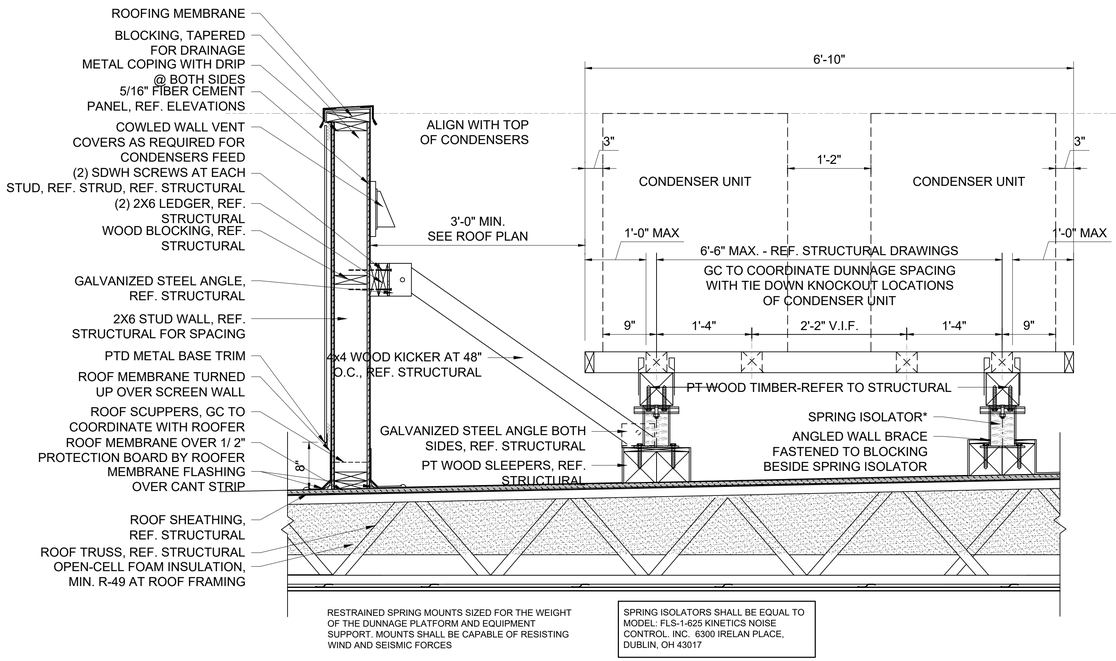
ROOF DETAILS

Sheet No.

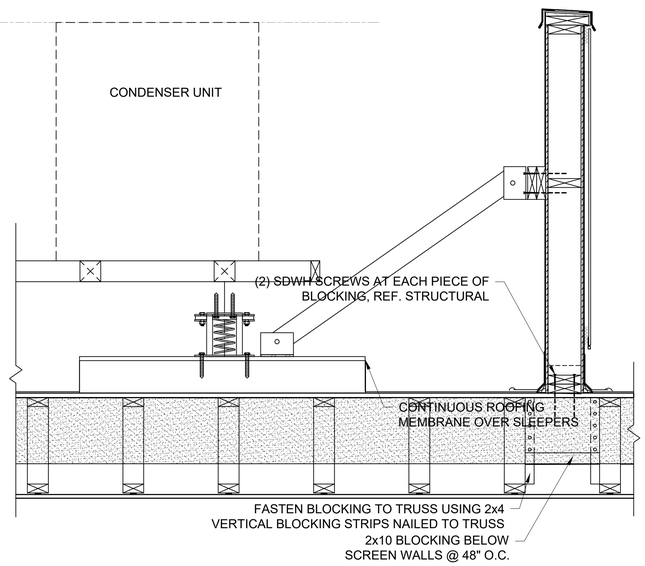
A-5.16



2 ROOF HATCH DETAIL
1 1/2" = 1'-0"



1A SECTION AT ROOF CONDENSER SUPPORT
1" = 1'-0"



1B SECTION AT ROOF CONDENSER SUPPORT
1" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 6319
BOSTON MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

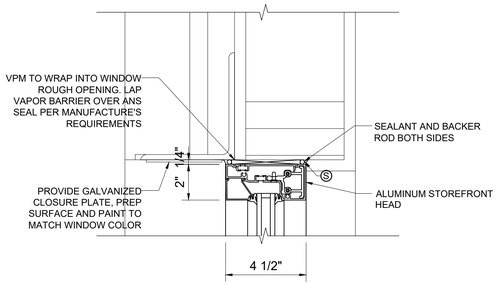
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

ROOF DETAILS

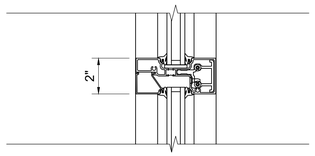
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A-5.17



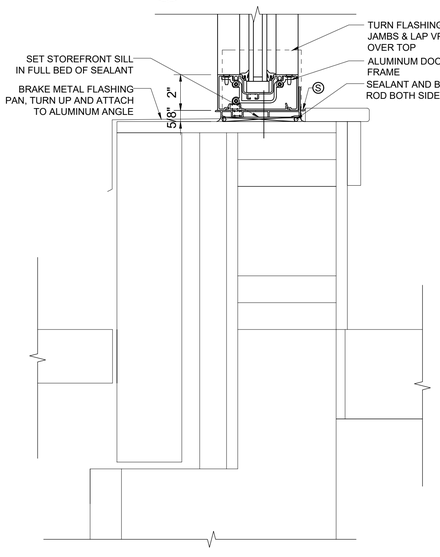
TYPICAL HEAD DETAIL

A9 SCALE: 3"=1'-0"



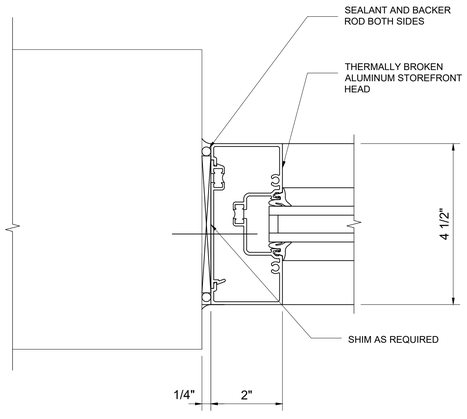
TYPICAL HORIZ. MULLION DETAIL

A10 SCALE: 3"=1'-0"



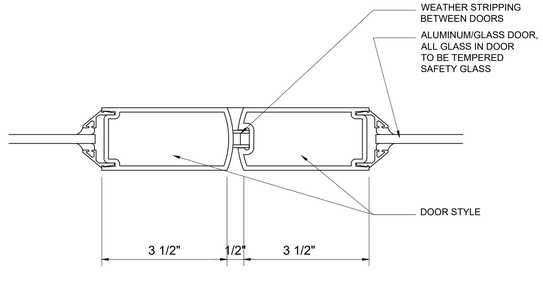
TYPICAL SILL DETAIL

A11 SCALE: 3"=1'-0"



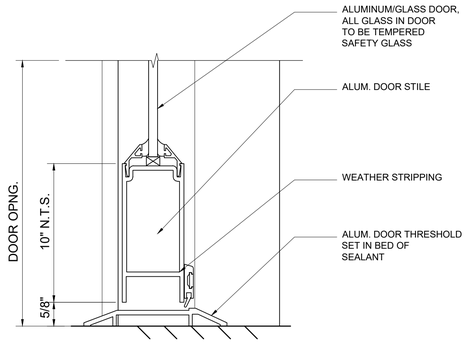
TYPICAL JAMB DETAIL

A9 SCALE: 6"=1'-0"



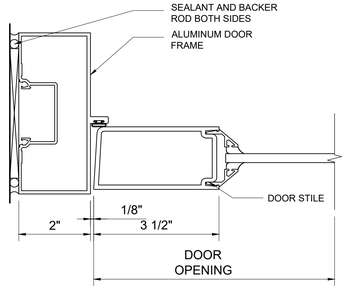
TYPICAL ALUM. DOUBLE DOOR CONNECTION

A8 SCALE: 6"=1'-0"



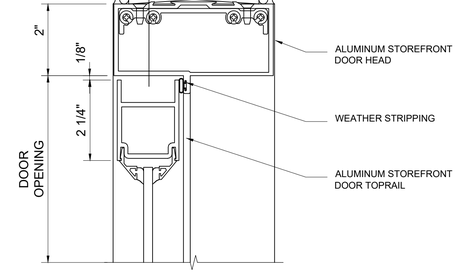
ALUM. DOOR BOTTOM RAIL W/ THRESHOLD

A6 SCALE: 6"=1'-0"



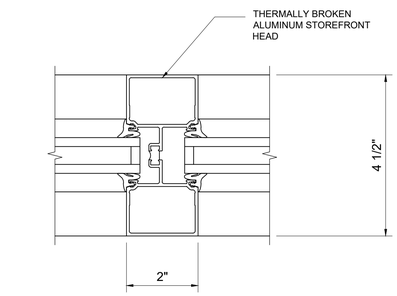
TYPICAL ALUM. DOOR JAMB

A5 SCALE: 6"=1'-0"



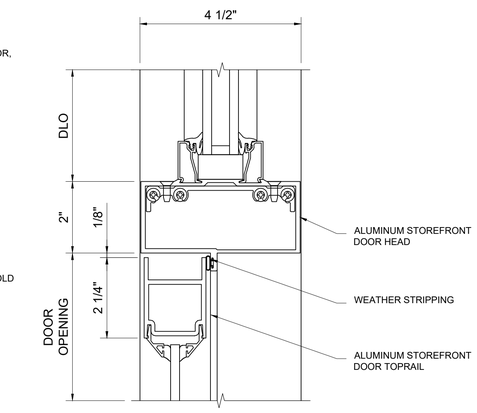
ALUM. DOOR HEADER DETAIL

A7 SCALE: 6"=1'-0"



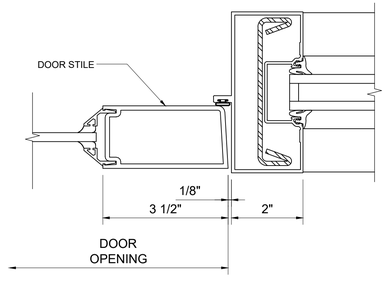
TYPICAL VERTICAL MULLION DETAIL

A1 SCALE: 6"=1'-0"



ALUM. DOOR TRANSOM DETAIL

A2 SCALE: 6"=1'-0"



ALUM. DOOR JAMB W/ SIDELITE

A3 SCALE: 6"=1'-0"

Location

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617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

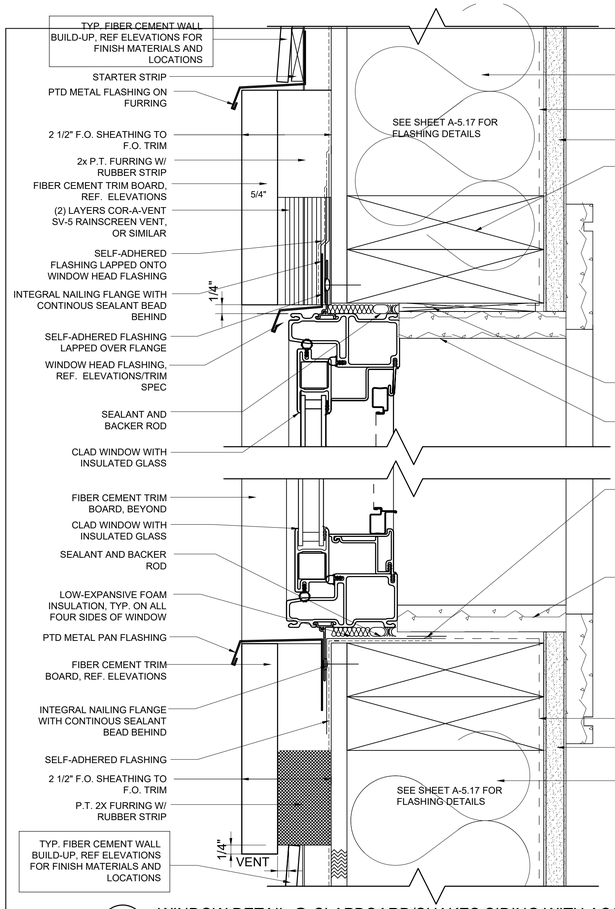
Project No: 2025014
Scale: AS NOTED
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Drawn By: DF

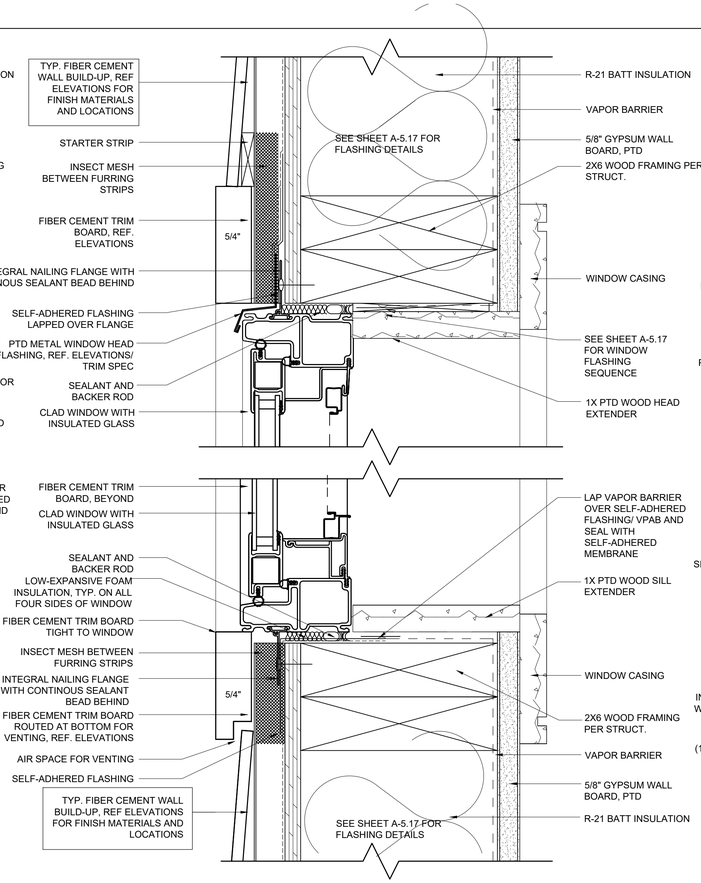
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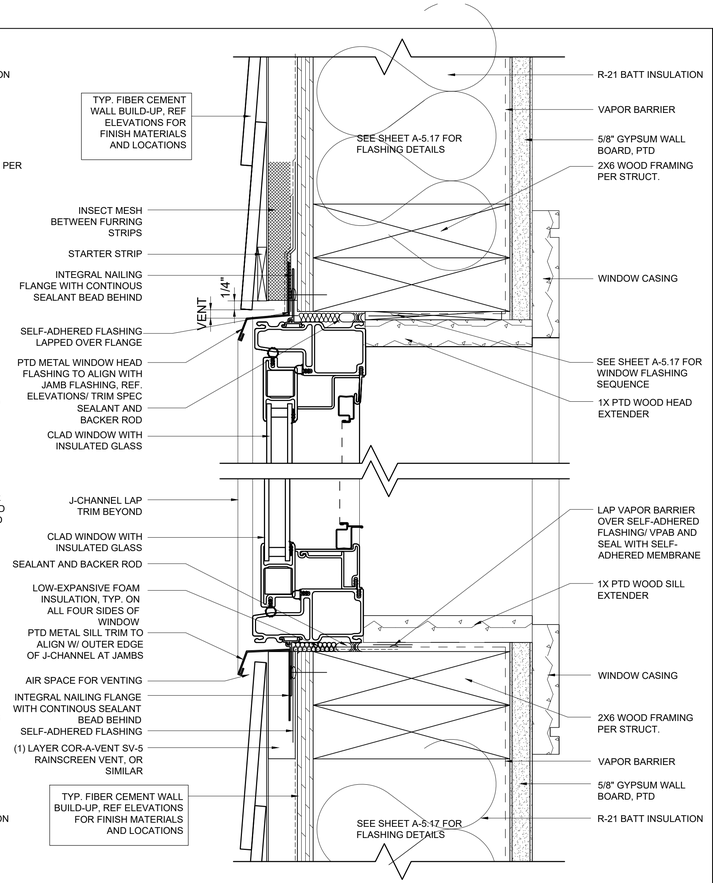
STOREFRONT DETAILS

Sheet No.

A-5.19

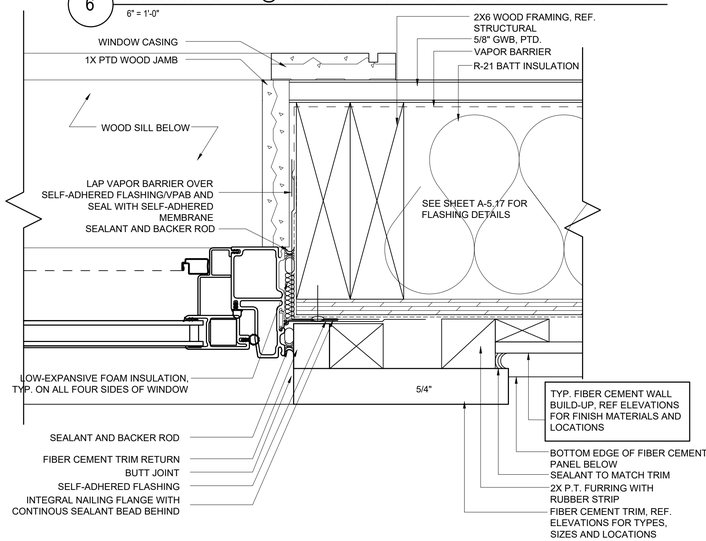






6 WINDOW DETAIL @ CLAPBOARD/SHAKES SIDING WITH ACCENT TRIM

6" = 1'-0"

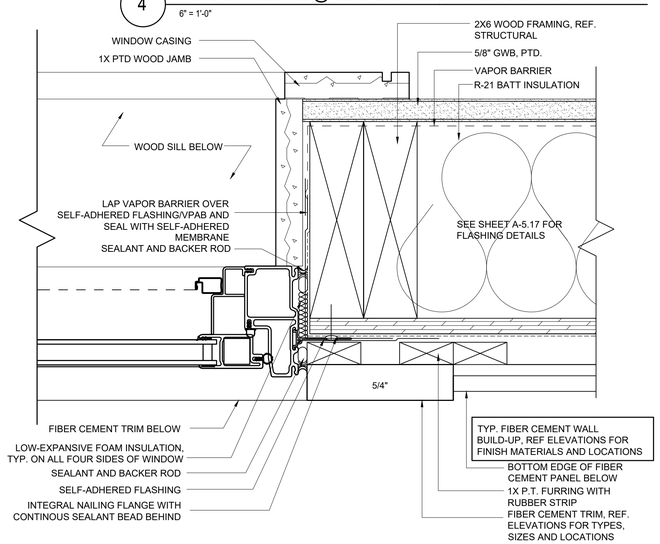


5 WINDOW JAMB DETAIL @ CLAPBOARD/SHAKES SIDING WITH ACCENT TRIM

6" = 1'-0"

4 WINDOW DETAIL @ CLAPBOARD/SHAKES SIDING WITH TRIM

6" = 1'-0"

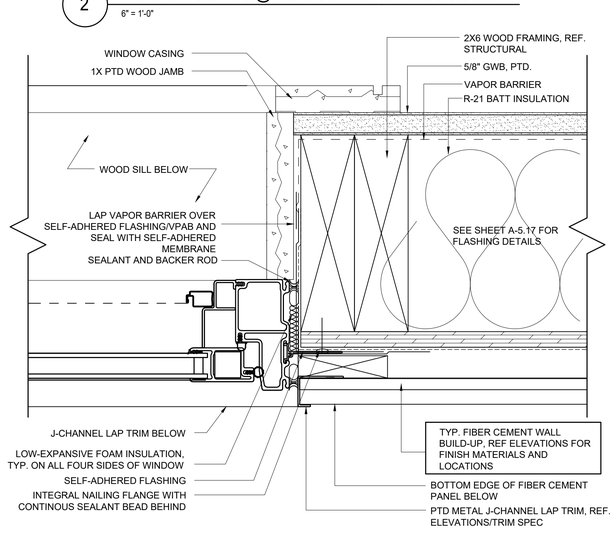


3 WINDOW JAMB DETAIL @ CLAPBOARD/SHAKES SIDING WITH TRIM

6" = 1'-0"

2 WINDOW DETAIL @ CLAPBOARD/SHAKES SIDING

6" = 1'-0"



1 WINDOW JAMB DETAIL @ CLAPBOARD/SHAKES SIDING

6" = 1'-0"

Location

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REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 8319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

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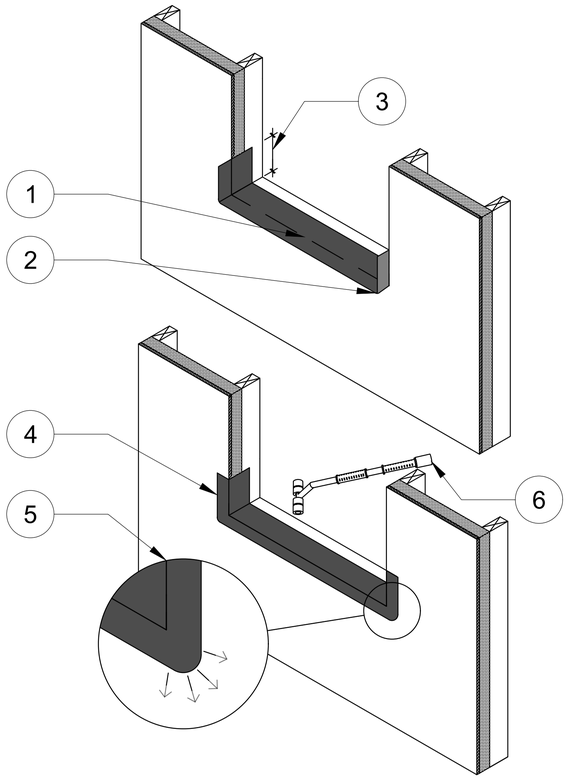
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Date: 01-07-2026
Drawn By: DF

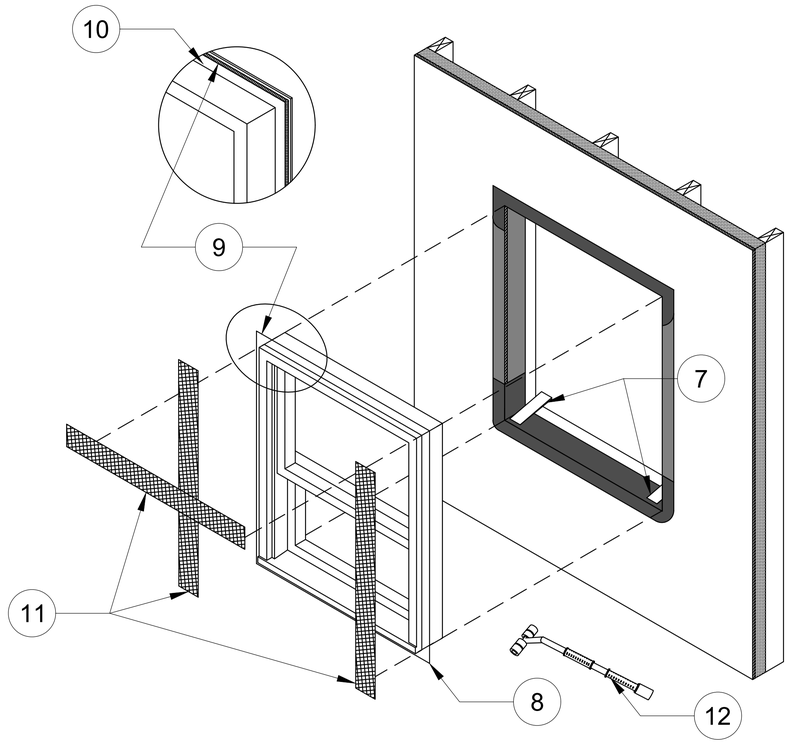
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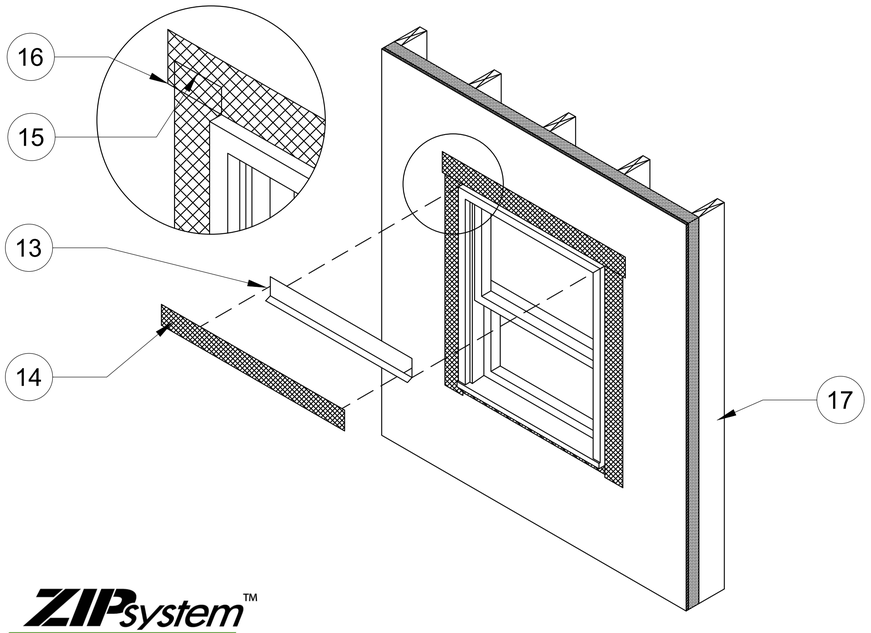
WINDOW DETAILS

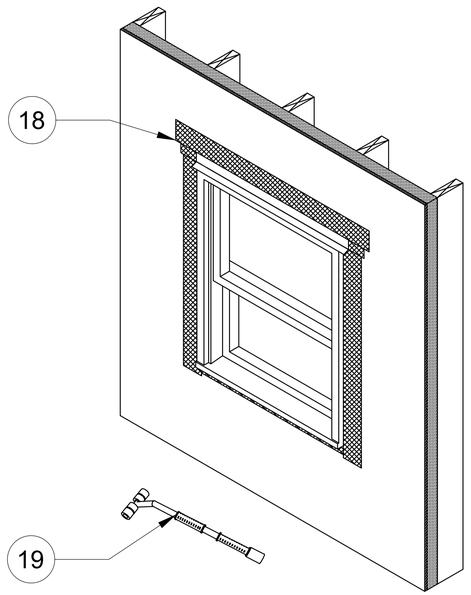
Sheet No.

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ZIPsystem™
SHEATHING & TAPE

HUBER ENGINEERED WOODS

1. CENTER ZIP SYSTEM™ STRETCH TAPE ON WINDOW SILL AND PRESS FIRMLY FROM THE CENTER, TO THE CORNERS AND THEN UP THE JAMBS.
2. ENSURE ZIP SYSTEM™ STRETCH TAPE FITS TIGHTLY INTO THE CORNERS.
3. EXTEND ZIP SYSTEM™ STRETCH TAPE UP THE JAMBS A MINIMUM OF 6-INCHES.
4. EXTEND ZIP SYSTEM™ STRETCH TAPE ON THE FACE OF THE ZIP SYSTEM™ PANEL A MINIMUM OF 2-INCHES.
5. WHEN ROLLING THE TAPE ONTO THE PANEL'S SURFACE, START WITH THE CORNERS.
6. ZIP SYSTEM™ ROLLER. ROLL ALL TAPE.
7. SHIMS AS REQUIRED BY THE WINDOW MANUFACTURER.
8. INSTALL GAPS IN THE SEALANT PER WINDOW MANUFACTURER.
9. APPLY A CONTINUOUS BEAD OF SEALANT* AROUND THE BACK SIDE (INTERIOR SURFACE) OF THE WINDOW MOUNTING FLANGE.
10. INSIDE SURFACE OF WINDOW FLANGE.
11. ZIP SYSTEM™ TAPE OR ADHESIVE BACKED FLASHING (MEETING AAMA 711 OR AC148).
12. ZIP SYSTEM™ ROLLER. ROLL ALL TAPE.
13. CODE APPROVED FLASHING (ONLY REQUIRED WHEN BUILT-IN DRAINAGE CHANNELS ARE NOT APART OF THE WINDOW'S DESIGN).
14. ZIP SYSTEM TAPE™ OR ADHESIVE BACKED FLASHING (MEETING AAMA 711 OR AC148).
15. ENSURE JAMB FLASHING DOES NOT EXTEND MORE THAN HALF WAY THROUGH THE HEAD FLASHING.
16. EXTEND THE HEAD FLASHING BEYOND THE JAMB FLASHING A MINIMUM OF 1-INCH.
17. FROM THE INTERIOR, INSTALL LOW PRESSURE POLYURETHANE FOAM BETWEEN WINDOW AND ROUGH OPENING TO MAINTAIN CONTINUITY OF THE AIR BARRIER. IF GAP IS TOO NARROW USE A COMPATIBLE CAULK SEALANT*.
18. EXTEND THE HEAD FLASHING BEYOND THE JAMB FLASHING A MINIMUM OF 1-INCH.
19. ZIP SYSTEM™ ROLLER. ROLL ALL TAPE.

*FOR SEALANT COMPATIBILITY WITH ZIP SYSTEM™ PRODUCTS REFER TO TECH TIP "WINDOW AND DOOR SEALANT COMPATIBILITY WITH ZIP SYSTEM SHEATHING AND ACCESSORIES" AT HUBERWOOD.COM.

NOTES:

- GENERAL CONTRACTOR TO CONFIRM AND COORDINATE THE FLASHING TECHNIQUE/INSTALLATION WITH THE WINDOW MANUFACTURER AND A HUBER ENGINEERED WOOD REPRESENTATIVE FOR PROJECT SPECIFIC APPLICATION.

- ARCHITECT OF RECORD ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR THE USE OF THESE DETAILS, OTHER CONSTRUCTION DETAILS, OR THE CONTRACTOR'S INABILITY TO INSTALL THE WINDOW FLASHING PER THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS.

- SPECIFIC WINDOW FLASHING APPLICATION AND INSTALLATION TO BE AGREED UPON BY BOTH THE WINDOW MANUFACTURER AND A HUBER ENGINEERED WOOD REPRESENTATIVE. SHOP DRAWINGS REFLECTING THIS AGREED UPON APPLICATION TO BE PROVIDED TO THIS OFFICE FOR APPROVAL.

- INSTALLATION SEQUENCE AND WINDOW MOCK-UP SHALL BE REVIEWED ON SITE WITH THE ARCHITECT, OWNER AND APPLICABLE MANUFACTURER'S REPRESENTATIVE PRIOR TO WINDOW INSTALLATION ON THE PROJECT.

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

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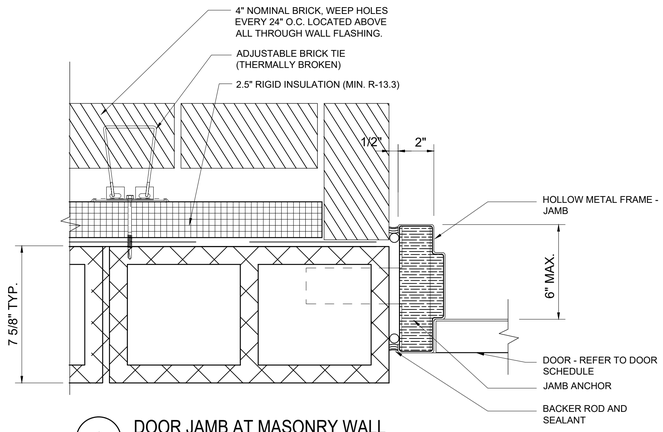
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

WINDOW FLASHING DETAILS

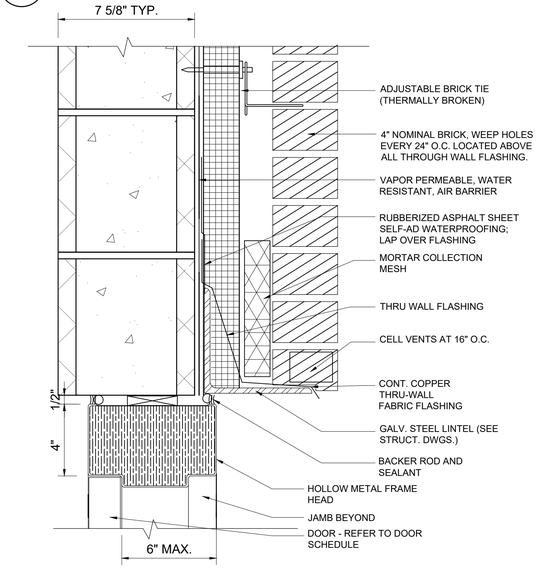
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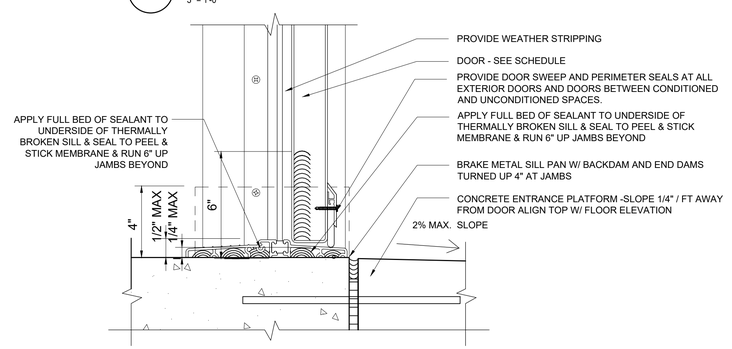
1 DOOR JAMB AT MASONRY WALL

3" = 1'-0"



2 DOOR HEAD AT MASONRY WALL

3" = 1'-0"



3 TYPICAL DOOR THRESHOLD DETAIL AT GARAGE

3" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING 30 THORN STREET HYDE PARK, MA 02136

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One Billings Road Quincy, MA 02171
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REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

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Date: 01-07-2026

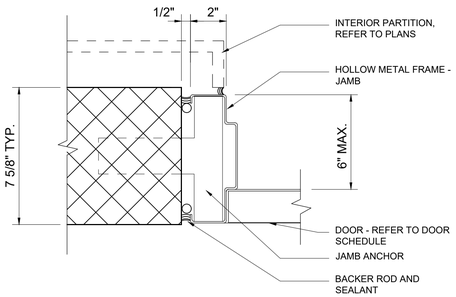
Drawn By: DF

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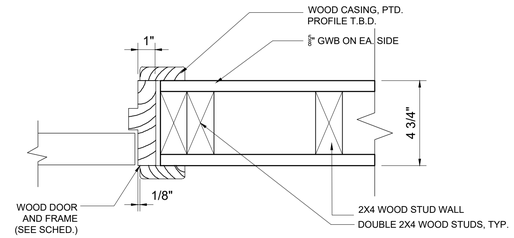
EXTERIOR DOOR DETAILS

Sheet No.

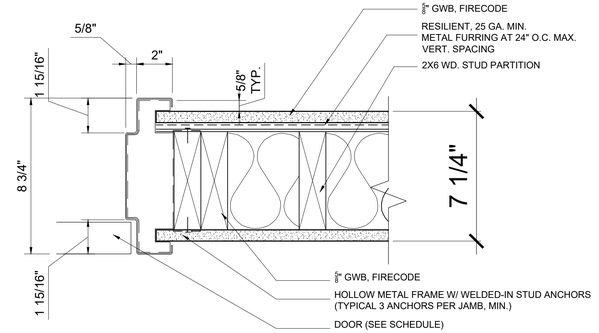
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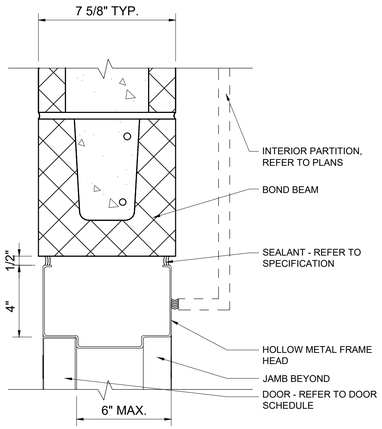
6 DOOR JAMB AT MASONRY WALL
3" = 1'-0"



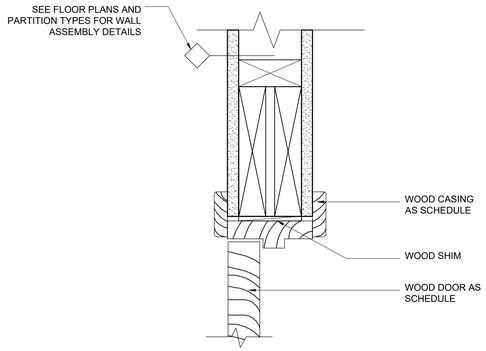
4 DOOR JAMB DETAIL
3" = 1'-0"



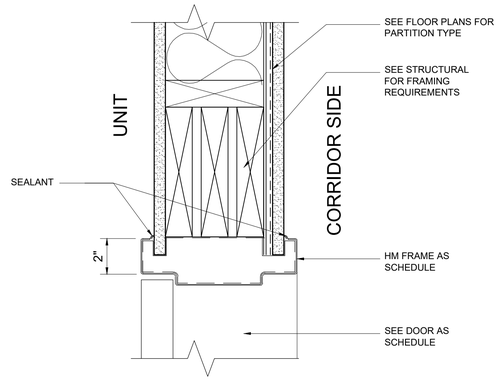
1 DOOR JAMB DETAIL
3" = 1'-0"



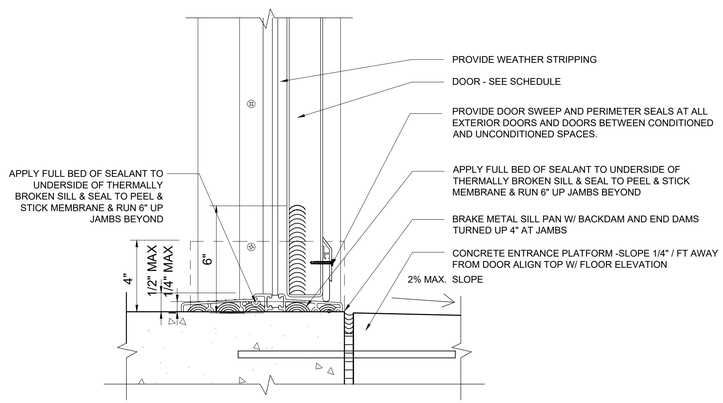
7 DOOR HEAD AT MASONRY WALL
3" = 1'-0"



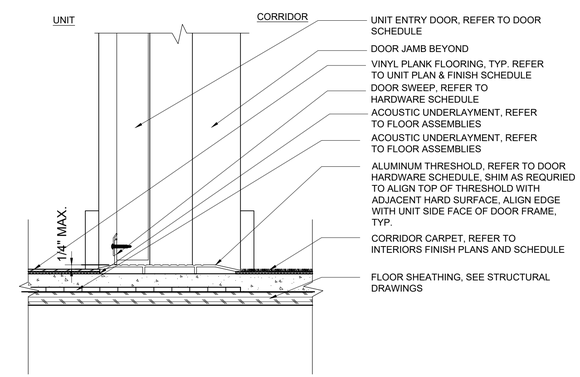
5 WD FRAME DOOR HEAD DETAIL - WOOD STUD
3" = 1'-0"



2 HM DOOR AT CORRIDOR-HEAD DETAIL
3" = 1'-0"



8 TYPICAL DOOR THRESHOLD DETAIL AT GARAGE
3" = 1'-0"



3 TYPICAL THRESHOLD AT UNIT ENTRY
3" = 1'-0"

Location

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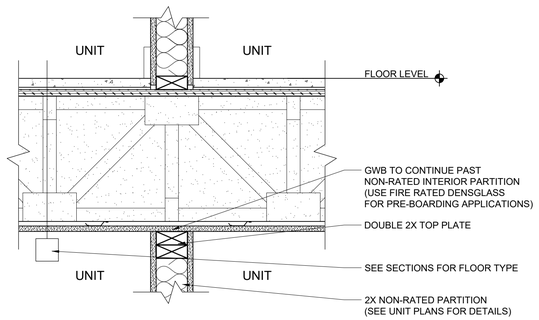
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

INTERIOR DOOR DETAILS

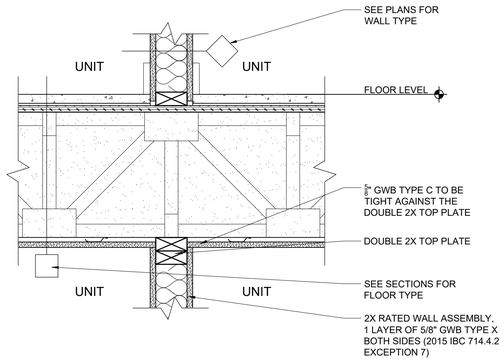
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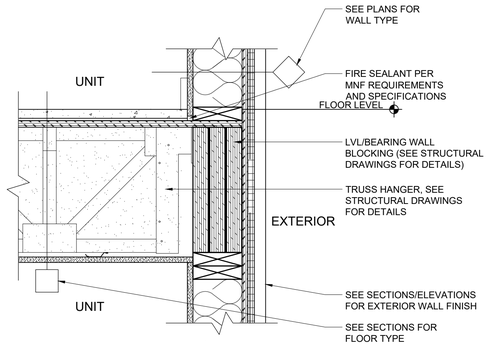
1 CEILING/FLOOR INTERSECTION NON-RATED PARTITION DETAIL

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



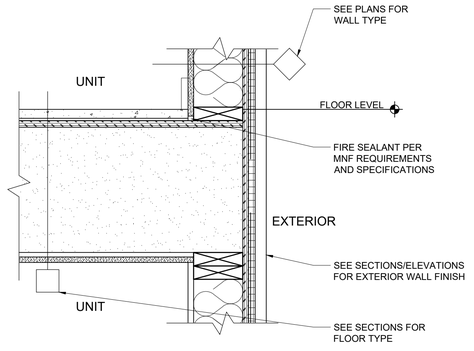
2 CEILING/FLOOR INTERSECTION RATED PARTITION DETAIL

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



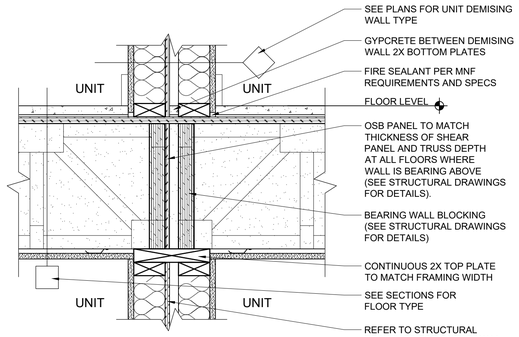
3 TYPICAL EXTERIOR WALL DETAIL PERPENDICULAR TRUSS

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



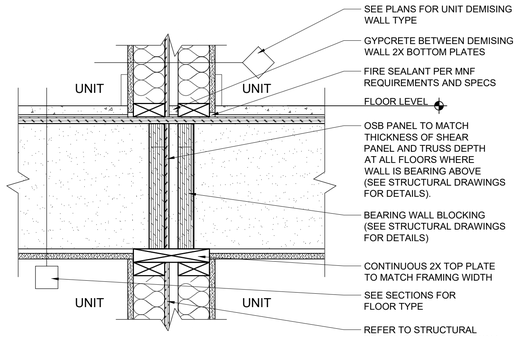
4 TYPICAL EXTERIOR WALL DETAIL PARALLEL TRUSS

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



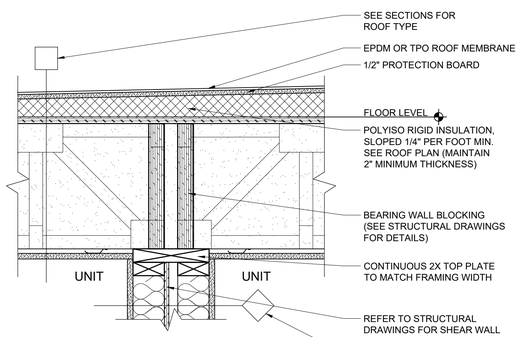
5 TYPICAL UNIT DEMISING WALL DETAIL PERPENDICULAR TRUSS

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



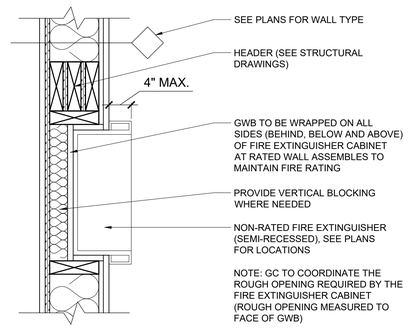
6 TYPICAL UNIT DEMISING WALL DETAIL PARALLEL TRUSS

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



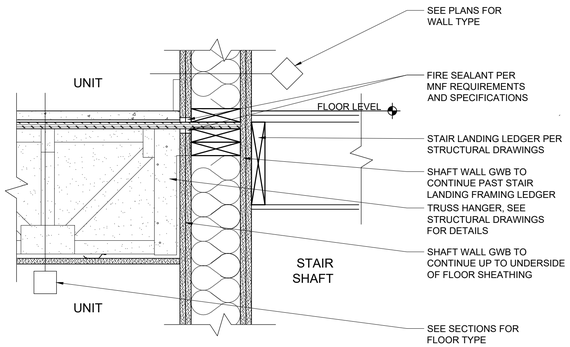
7 TYPICAL UNIT DEMISING WALL DETAIL AT ROOF

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



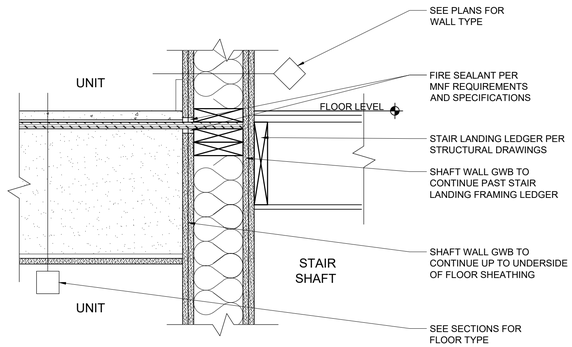
8 TYPICAL FIRE EXTINGUISHER CABINET DETAIL

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



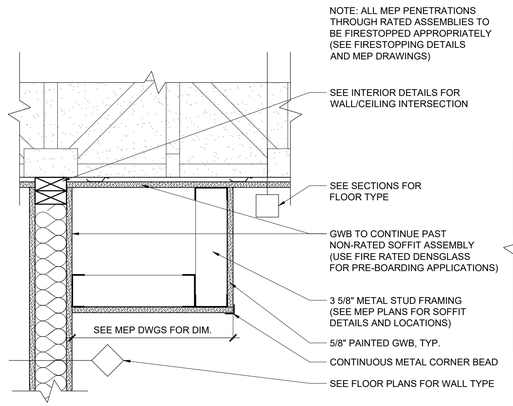
9 TYPICAL STAIR SHAFT DETAIL PERPENDICULAR TRUSS

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



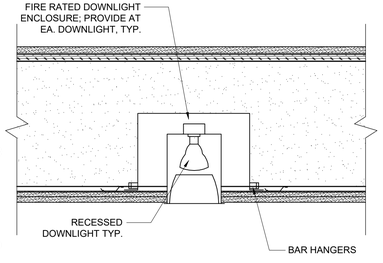
10 TYPICAL STAIR SHAFT DETAIL PARALLEL TRUSS

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



11 TYPICAL GWB SOFFIT DETAIL

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



12 RECESSED DOWNLIGHT ENCLOSURE

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

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

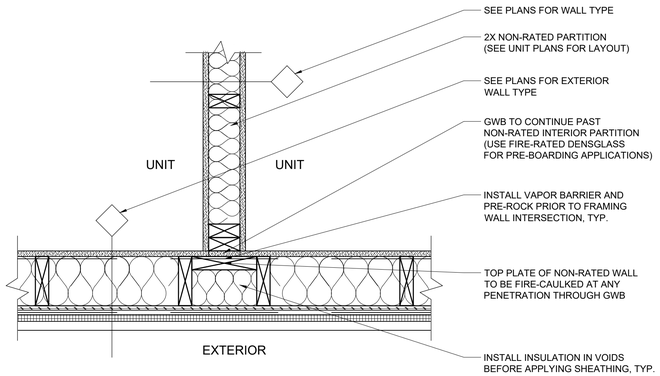
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

INTERIOR SECTION DETAILS

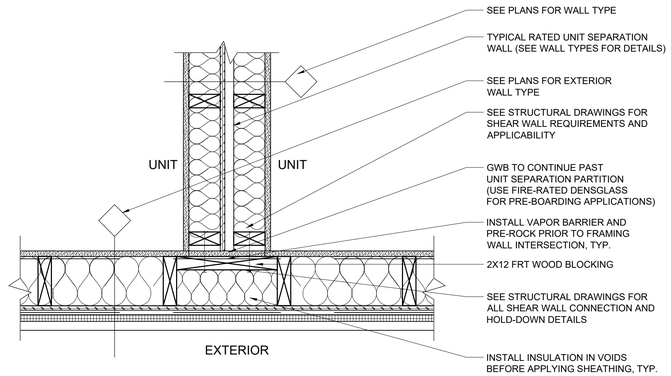
Sheet No.

A-5.24



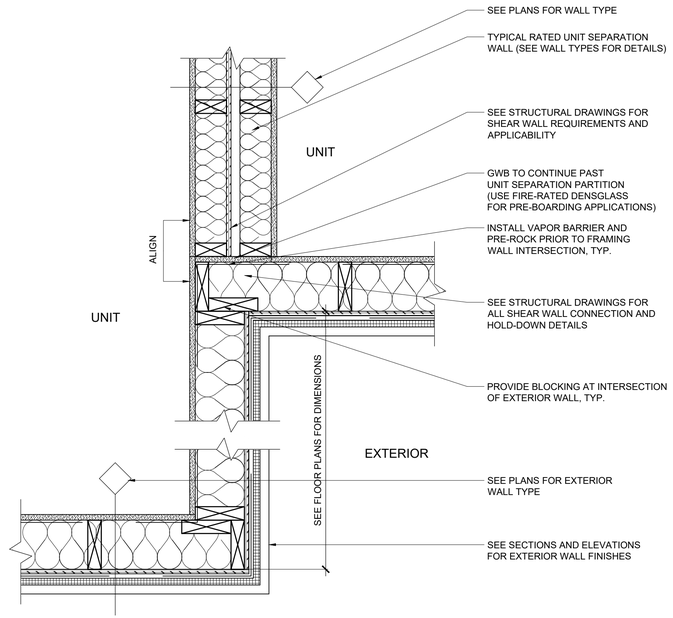
1 PLAN DETAIL AT TYPICAL NON-RATED WALL AND EXTERIOR WALL INTERSECTION

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



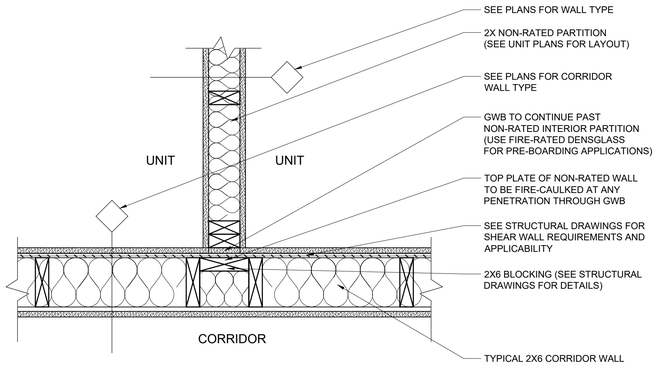
2 PLAN DETAIL AT TYPICAL UNIT SEPARATION WALL AND EXTERIOR WALL INTERSECTION

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



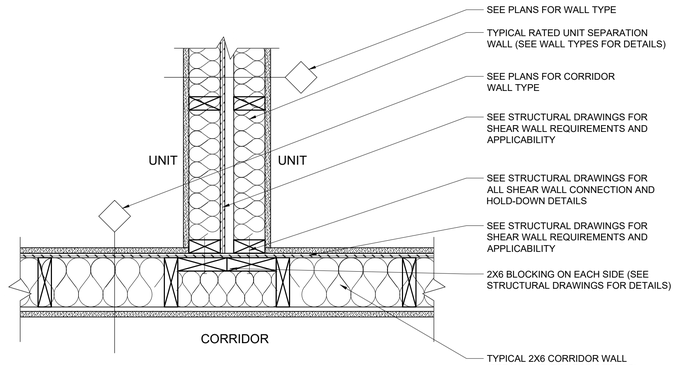
3 PLAN DETAIL AT TYPICAL UNIT SEPARATION WALL AND EXTERIOR CORNER WALL INTERSECTION

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



4 PLAN DETAIL AT TYPICAL NON-RATED WALL AND CORRIDOR WALL INTERSECTION

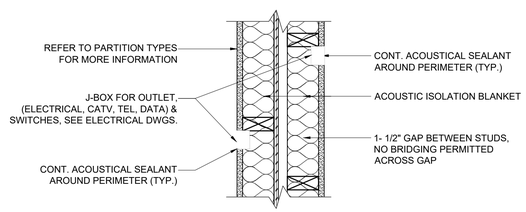
SCALE: 1 1/2"=1'-0"



5 PLAN DETAIL AT TYPICAL UNIT SEPARATION WALL AND CORRIDOR WALL INTERSECTION

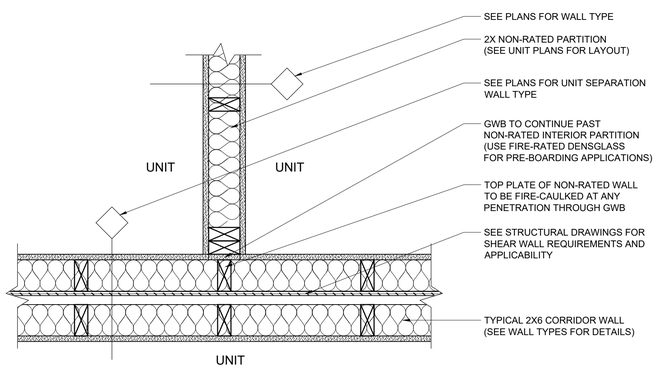
SCALE: 1 1/2"=1'-0"

NOTE:
1. ALL OUTLETS & SWITCH BOXES ARE TO BE OFFSET HORIZONTALLY, MINIMUM OF ONE 24".
2. OUTLET AND SWITCH BOXES SHALL NOT EXCEED 100 SQ. IN PER 100 SQ. FT. OF WALL SURFACE FOR RATED WALLS.
3. WHERE BACK OR MIN SEPARATION IS UNAVOIDABLE, PROVIDE CONTINUOUS 1" GYPSUM SHAFT LINER BETWEEN OUTLETS FROM FLOOR TO UNDERSIDE OF STRUCTURE ABOVE



8 OUTLET & SWITCH BOX PLAN DETAIL

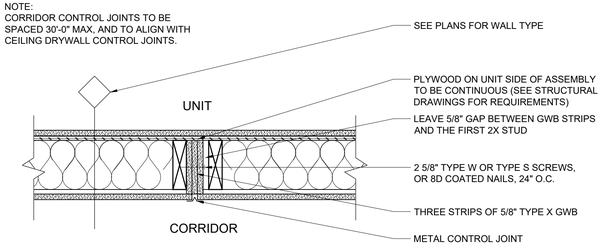
SCALE: 1 1/2"=1'-0"



6 PLAN DETAIL AT TYPICAL NON-RATED WALL AND UNIT SEPARATION WALL INTERSECTION

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

NOTE:
CORRIDOR CONTROL JOINTS TO BE SPACED 30'-0" MAX, AND TO ALIGN WITH CEILING DRYWALL CONTROL JOINTS.



7 PLAN DETAIL AT TYPICAL CORRIDOR WALL CONTROL JOINT

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

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

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REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

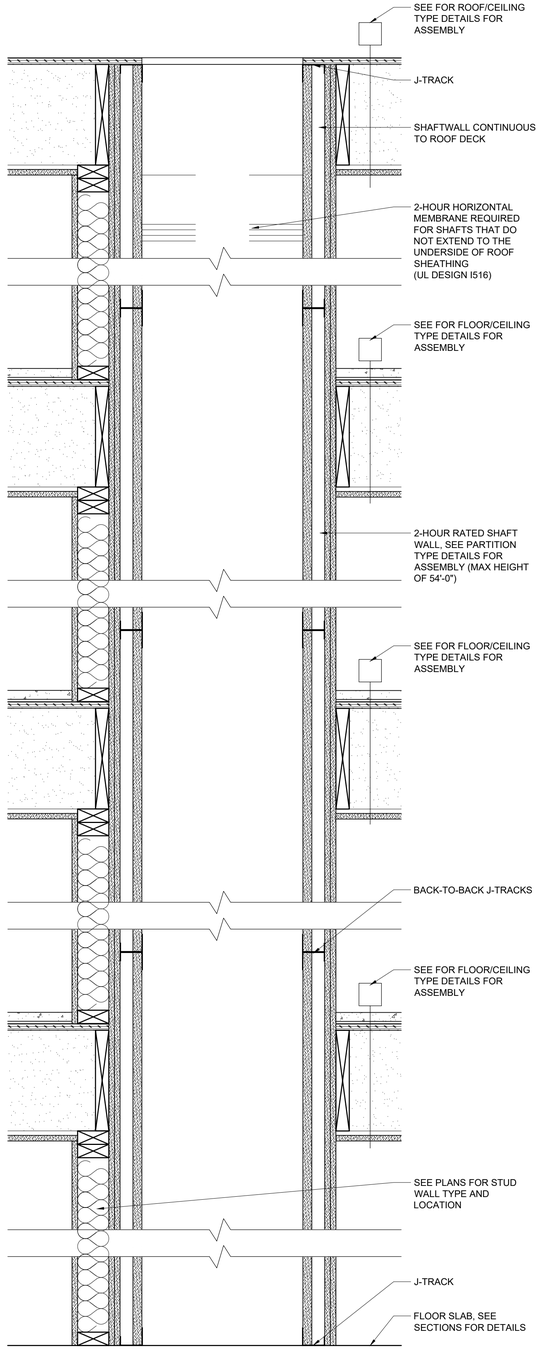
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

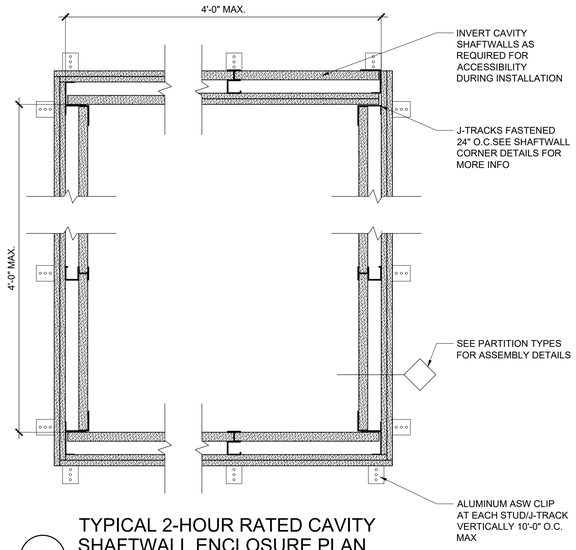
INTERIOR PLAN DETAILS

Sheet No.

A-5.25

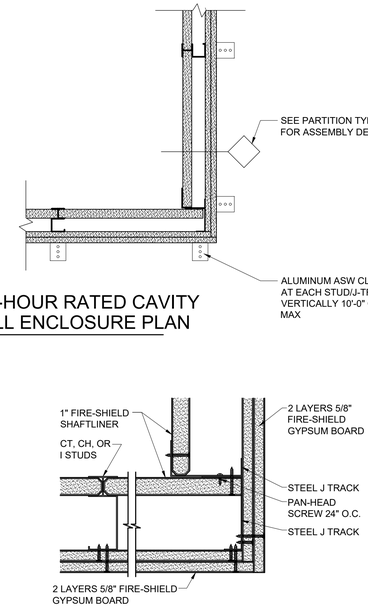


1 TYPICAL 2-HOUR RATED CAVITY SHAFTWALL ENCLOSURE SECTION
SCALE: 1 1/2"=1'-0"



2 TYPICAL 2-HOUR RATED CAVITY SHAFTWALL ENCLOSURE PLAN
SCALE: 1 1/2"=1'-0"

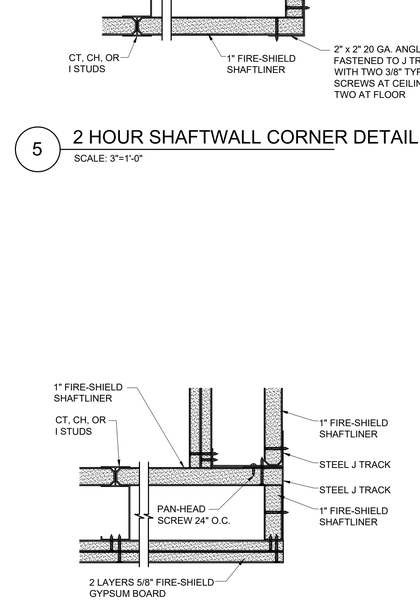
3 2 HOUR SHAFTWALL CORNER DETAIL
SCALE: 3"=1'-0"



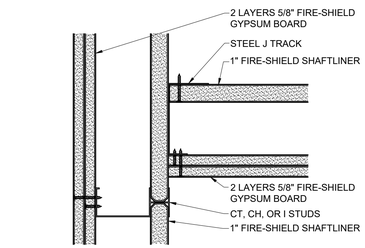
5 2 HOUR SHAFTWALL CORNER DETAIL
SCALE: 3"=1'-0"

6 2 HOUR SHAFTWALL CORNER DETAIL
SCALE: 3"=1'-0"

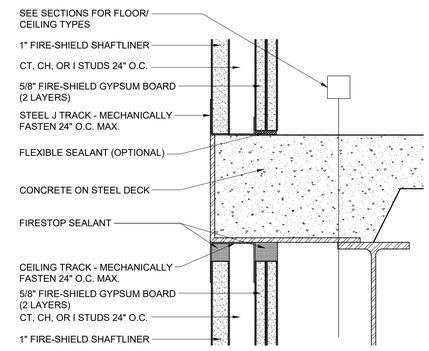
4 2 HOUR SHAFTWALL CORNER DETAIL
SCALE: 3"=1'-0"



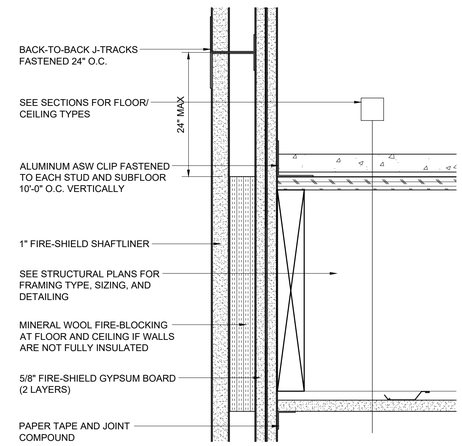
7 2 HOUR SHAFTWALL CORNER DETAIL
SCALE: 3"=1'-0"



8 2 HOUR SHAFTWALL CORNER DETAIL
SCALE: 3"=1'-0"



9 SHAFTWALL OVERHANG AT SLAB EDGE
SCALE: 3"=1'-0"



10 TYPICAL SHAFTWALL AT FLOOR ASSEMBLY
SCALE: 3"=1'-0"

Location

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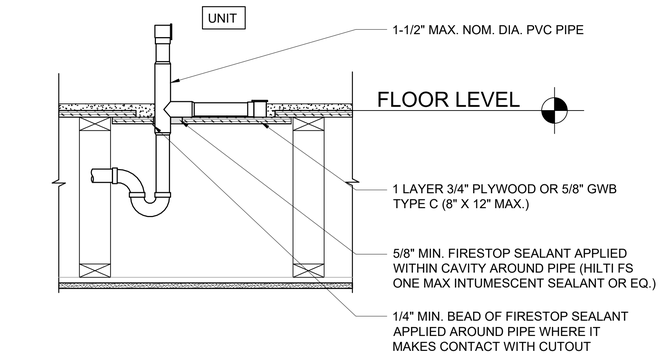
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

MEP SHAFT DETAILS

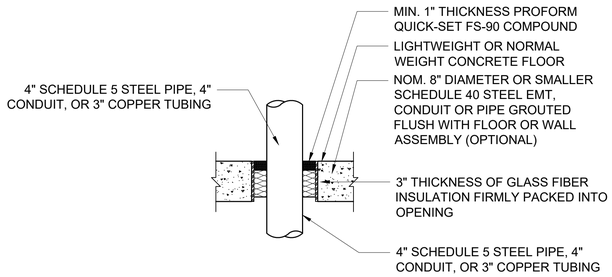
Sheet No.

A-5.26



5 BATHTUB DRAIN AT 1-HR FLOOR CEILING ASSEMBLY

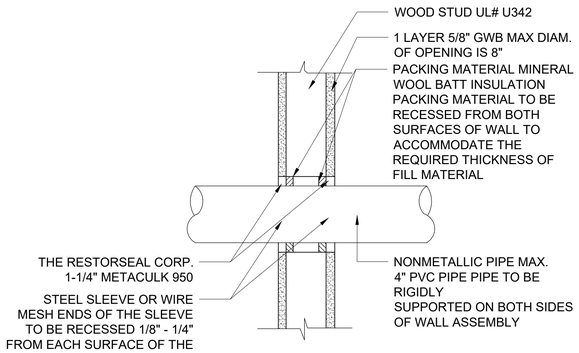
SCALE: 1 1/2"=1'-0"



F RATING - 1 HR
UL DESIGN: C-AJ-3073

4 FLOOR PENETRATION (CONC.)

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

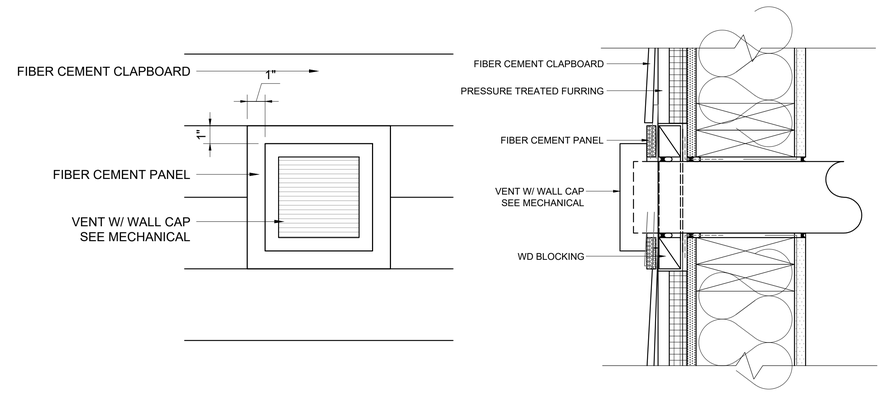


1 HOUR THROUGH PENETRATION FIRESTOP SYSTEM WALL ASSEMBLY #W-L-2014

NOTES:
1. ALL PENETRATIONS TO BE SEALED WITH FIRE STOP SYSTEM SEALANTS, TAPES AND COMPONENTS AS REQUIRED TO MAINTAIN HOURLY RATING. PROVIDE US FIRE STOP SYSTEM OR EQUAL

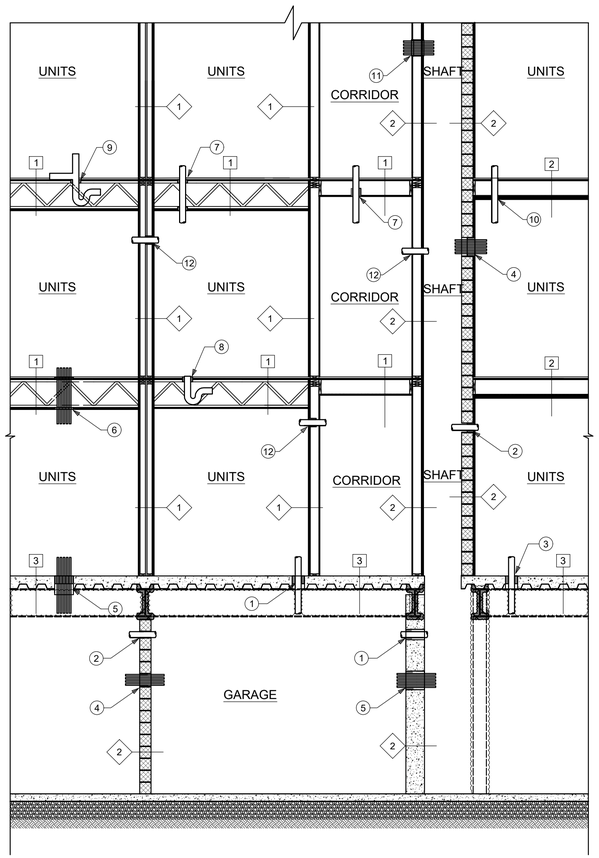
3 PENETRATION AT WALL

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



2 VENT DETAIL AT CLAPBOARD

3" = 1'-0"



1 CODE DIAGRAMS - UL SCHEMATIC SECTION

1/4" = 1'-0"

PENETRATION FIRESTOPPING SCHEDULE

1) UL C-AJ-1226
2) UL C-AJ-2167
3) UL C-AJ-2643
4) UL C-AJ-1513
5) UL C-AJ-8041
6) UL F-C-8026
7) UL F-C-2160
8) UL F-C-2203
9) UL F-C-2204
10) UL F-C-5037
11) UL W-L-3065
12) UL W-L-1054

NOTES:
- NOT ALL POSSIBLE PENETRATIONS TYPES OR CONDITIONS ARE SHOWN ON THIS DIAGRAM. THE GENERAL CONTRACTOR TO COORDINATE ALL FIELD INSTALLATIONS AND PROVIDE ALL FIRE STOPPING REQUIRED PENETRATIONS WITH A UL LISTED FIRESTOPPING DETAIL MEETING OR EXCEEDING THE FIRE RATING OF THE PENETRATED ASSEMBLY.

- GC TO SUBMIT A FIRESTOPPING PACKAGE WITH ALL PRODUCT DATA AND DETAILS TO BE USED ON THE PROJECT FOR APPROVAL. SPECIAL INSPECTIONS OF PENETRATION FIRSTOPPING DETAILS SHALL BE PERFORMED BY AN OWNER CONTRACTED THIRD-PARTY SPECIAL INSPECTOR.

- ALL PENETRATIONS THROUGH NON-RATED ASSEMBLIES TO BE PROVIDED WITH ACOUSTIC SEALANT.

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

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No.	Description	Date

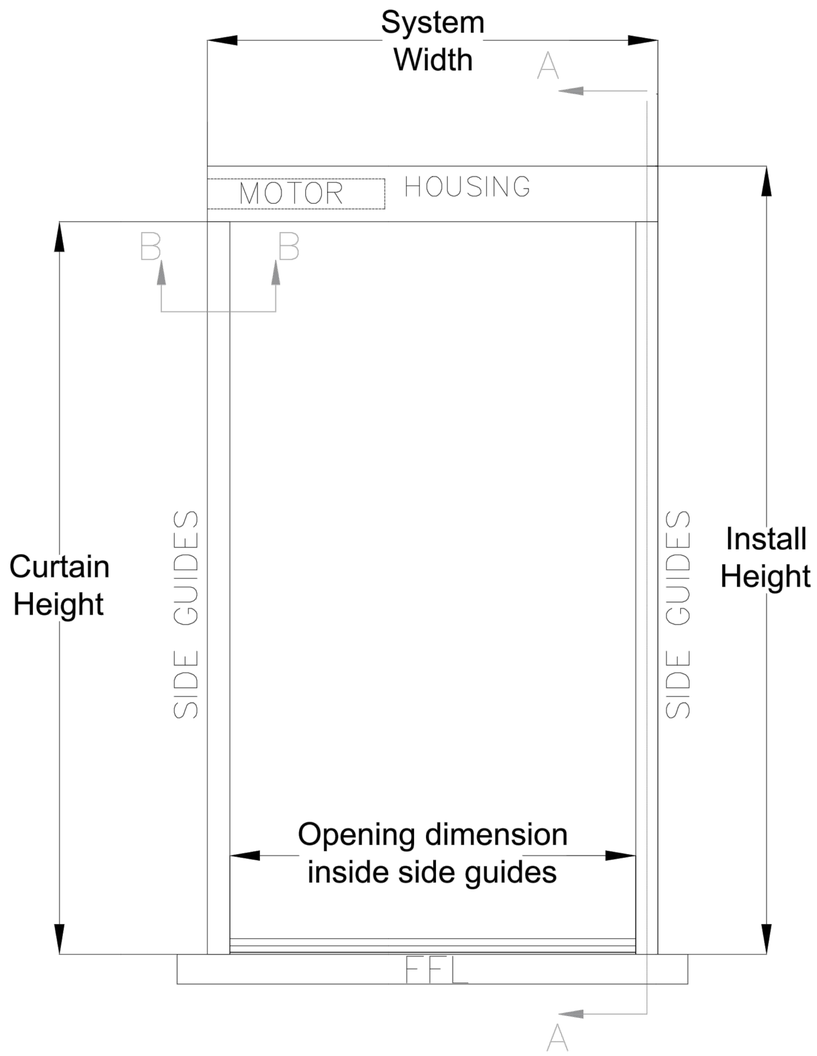
Project No: 2025014
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Date: 01-07-2026
Drawn By: DF

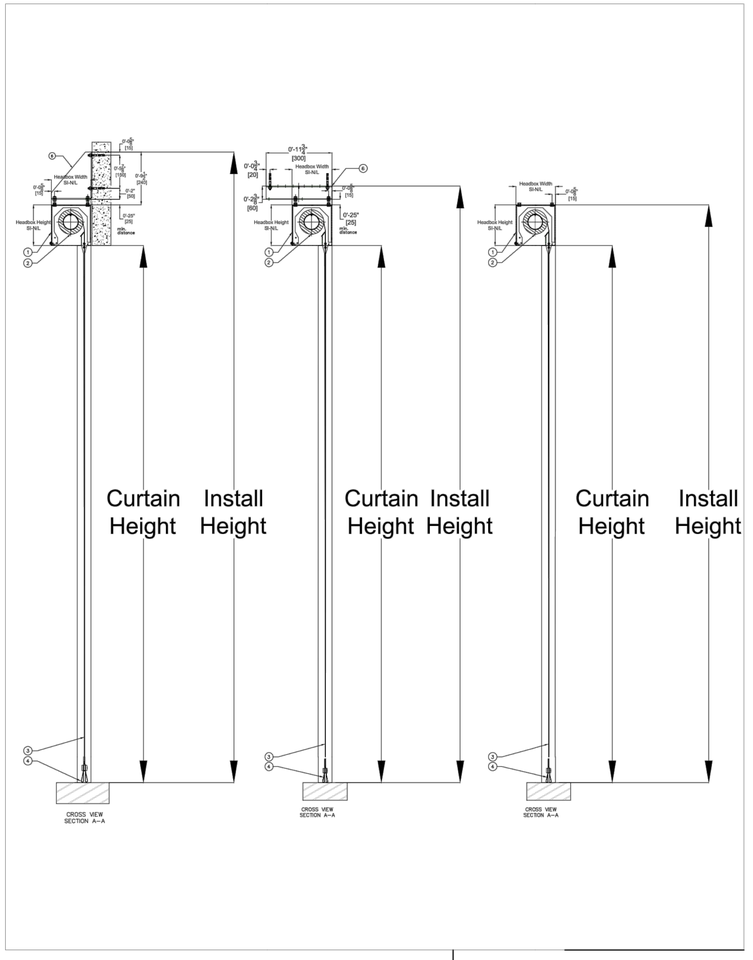
Drawing Name

FIRESTOPPING DETAILS

Sheet No.

A-5.27





SINGLE LARGE-SIZE HEADBOX, TYPE SI-L
ROLLER BAR WITH GRAVITY DOWN AND 48 VDC DRIVE UP
SMOKE-SEALED CURTAIN UL10D+UL1784 (60-180 MINUTES)
SMOKE-SEALED BOTTOM BAR "DP"
SIDE GUIDES, TYPE "FD"
OPTIONAL WALL OR cEILING MOUNTING BRACKETS

COMPLETE HEADBOX , SIDE GUIDES & BOTTOM BAR
POLYESTER POWDER COATING SEMI-GLOSS - 70% GLOSS
RAL9010 - PURE WHITE

SD/1/SI/X/G/WIDTH/HEIGHT/1/0/X/DP/FD/X/Z/X

GENERIC DRAWINGS

WIDTH x HEIGHT
[WIDTHmm x HEIGHTmm] TBD

2021-04-29

DAVID GUEVARA

XX M-XXXX DO NOT SCALE

FIRE CURTAIN TECHNOLOGIES

SMOKE CURTAIN
SD/60-180

1/2

Location

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BUILDING
30 THORN STREET
HYDE PARK, MA 02136

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Project No: 2025014
Scale: NOT TO SCALE
Date: 01-07-2026
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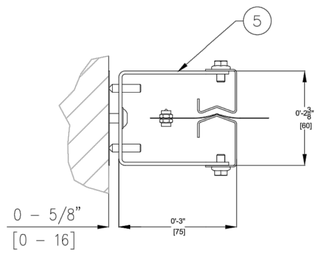
Drawing Name

SMOKE
CURTAIN

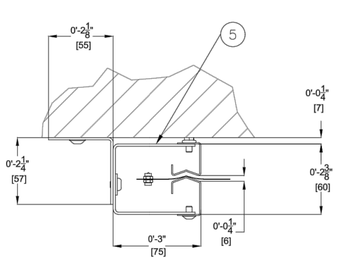
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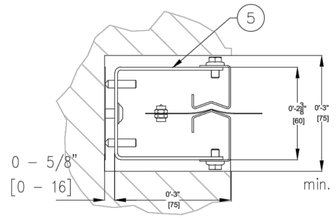
RevNo	Revision note	Date	Signature	Checked



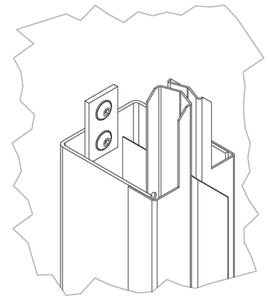
CROSS SECTION FD–1
VIEW B–B



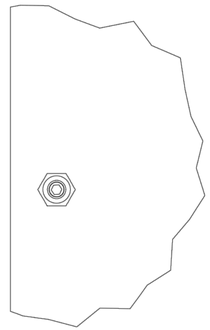
CROSS SECTION FD–2
SECTION B–B



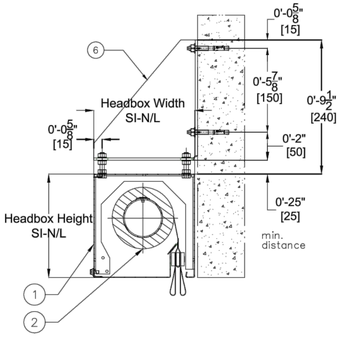
CROSS SECTION FD–3
VIEW B–B

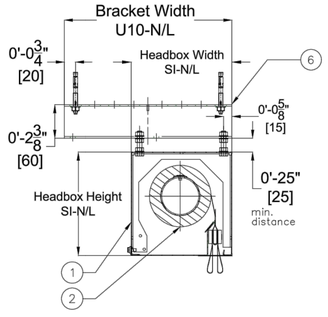


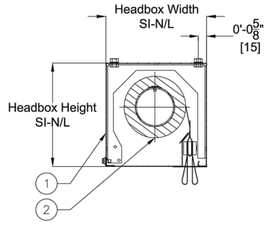
OVERVIEW
SIDE GUIDES

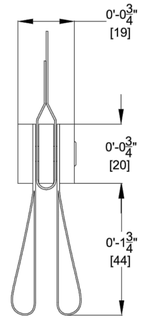


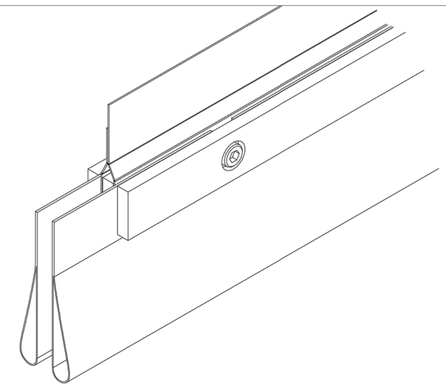
PIN ON CURTAIN











BOTTOM BAR "DP"

1. SINGLE LARGE-SIZE HEADBOX, TYPE SI-L	SHOP FINISH:
2. ROLLER BAR WITH GRAVITY DOWN AND 48 VDC DRIVE UP	COMPLETE HEADBOX , SIDE GUIDES & BOTTOM BAR
3. SMOKE-SEALED CURTAIN UL10D+UL1784 (60-180 MINUTES)	POLYESTER POWDER COATING SEMI-GLOSS - 70% GLOSS
4. SMOKE-SEALED BOTTOM BAR "DP"	RAL9010 - PURE WHITE
5. SIDE GUIDES, TYPE "FD"	
6. OPTIONAL WALL OR CEILING MOUNTING BRACKETS	

NOMENCLATURE
SD/1/SI/X/G/WIDTH/HEIGHT/1/0/X/DP/FD/X/Z/X

JOB: GENERIC DRAWINGS

CUSTOMER:

SIZE: WIDTH x HEIGHT
[WIDTHmm x HEIGHTmm]

WEIGHT: TBD

DATE: 2021-11-12

DRAWN BY: DAVID GUEVARA

QTY: XX UNITS

QUOTE NUMBER: M-XXXX

SCALE: DO NOT SCALE

FIRE CURTAIN TECHNOLOGIES
Smoke and Fire Curtains

5711 THOMAS ROAD
CANANDAIGUA, NY 14424
(585) 412-2179
www.firecurtaintechnologies.com

SMOKE CURTAIN
SD/60-180

DRAWING NO.
2/2

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8319
BOSTON MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

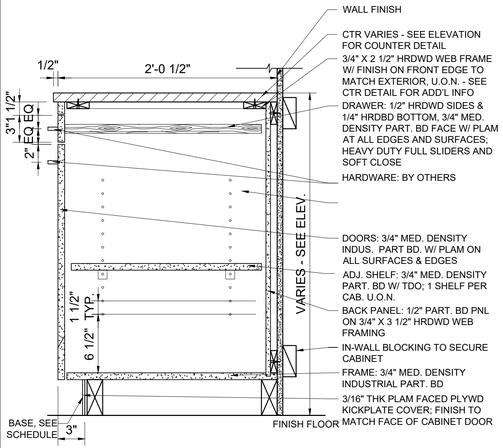
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Date: 01-07-2026
Drawn By: DF

Drawing Name

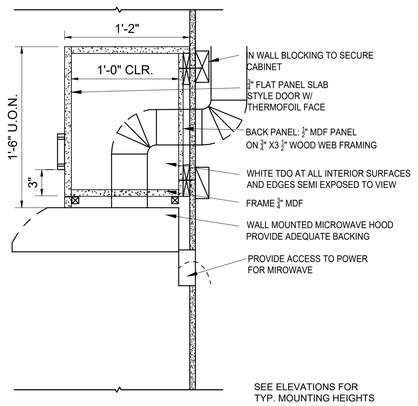
SMOKE CURTAIN

Sheet No.

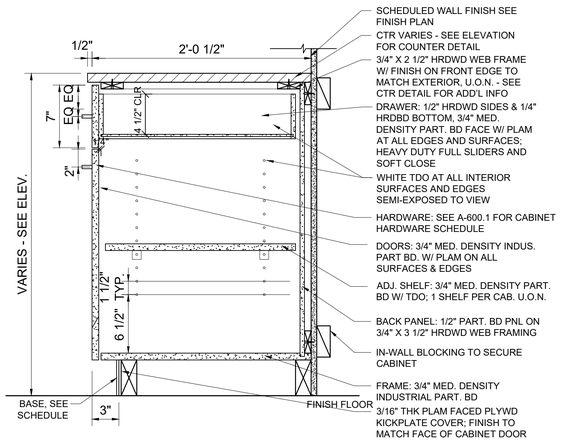
A-5.29



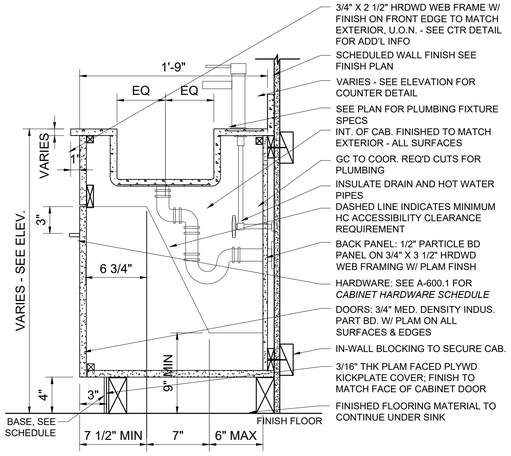
BH BASE CABINET W/ DOOR & CUTTING BOARD
1 1/2" = 1'-0"

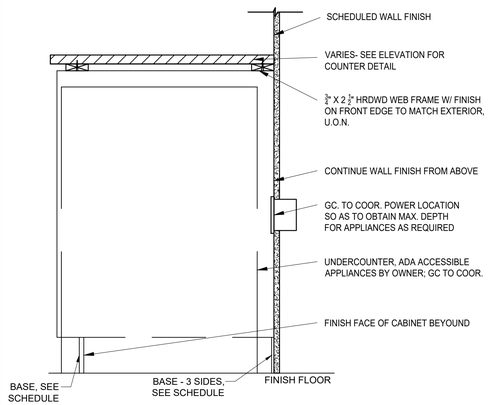


WD WALL HUNG CABINET ABOVE RANGE HOOD
1 1/2" = 1'-0"

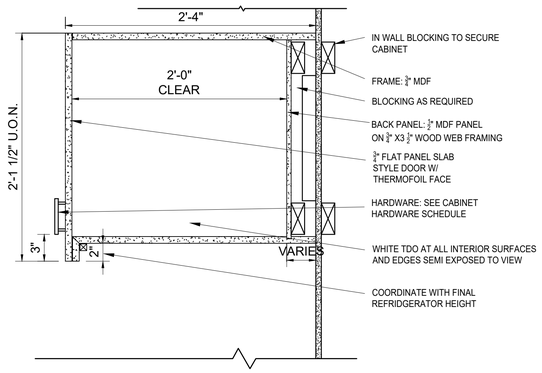


BC/BD BASE CABINET W/ DOOR & DRAWER
1 1/2" = 1'-0"



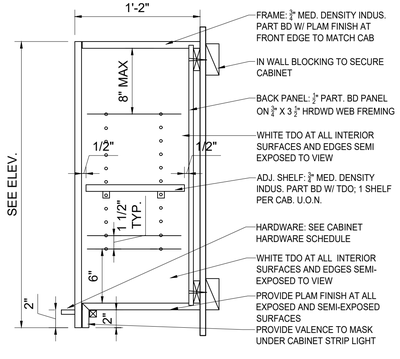


SA OPEN COUNTER AT APPLIANCE
1 1/2" = 1'-0"

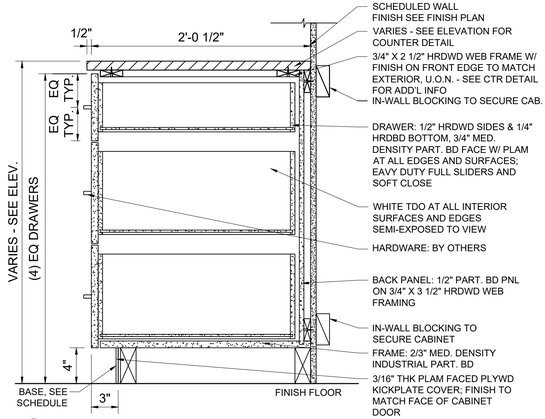


WC WALL HUNG CABINET ABOVE REFRIGERATOR
1 1/2" = 1'-0"

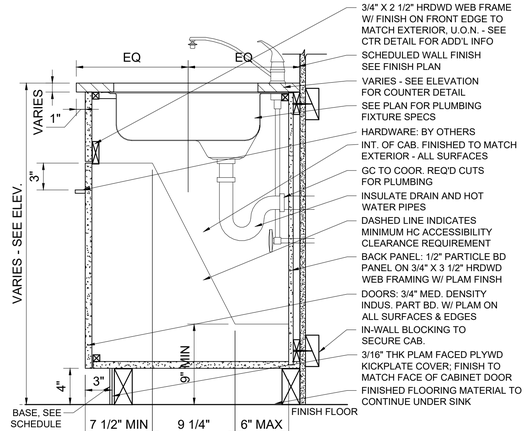
BE VANITY CABINET NON-REMOVABLE
1 1/2" = 1'-0"



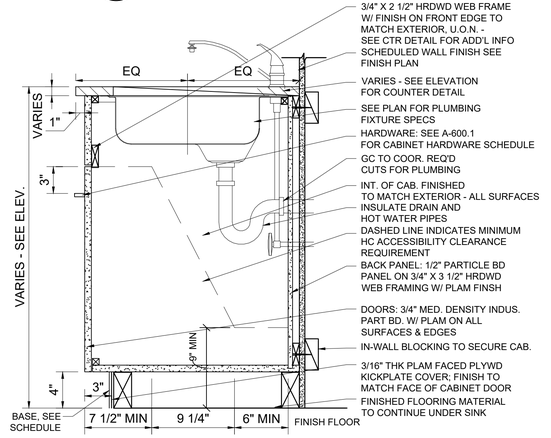
WA/WB WALL HUNG CABINET
1 1/2" = 1'-0"



BM BASE CABINET W/ 3 DRAWERS
1 1/2" = 1'-0"



BK SINK BASE CABINET REMOVABLE
1 1/2" = 1'-0"



BF SINK BASE CABINET NON-REMOVABLE
1 1/2" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT ARTHUR K.F. CHOO No. 9319 BOSTON MA COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

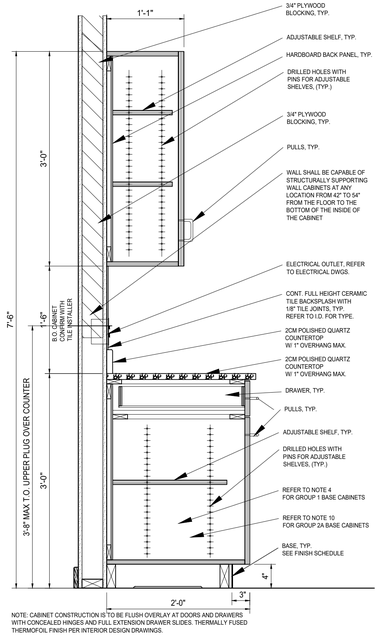
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Scale: NOT TO SCALE
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

KITCHEN & BATH MILLWORK DETAILS

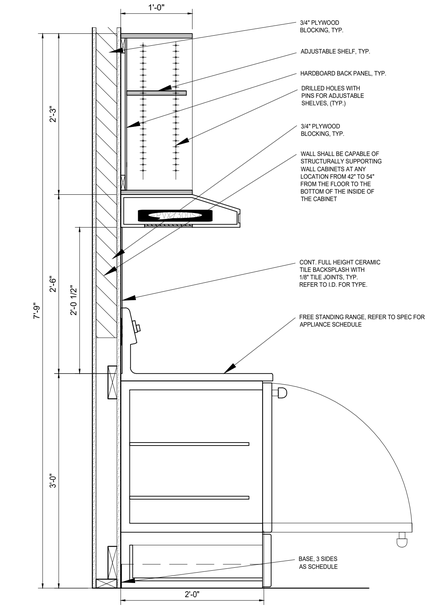
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A-5.30



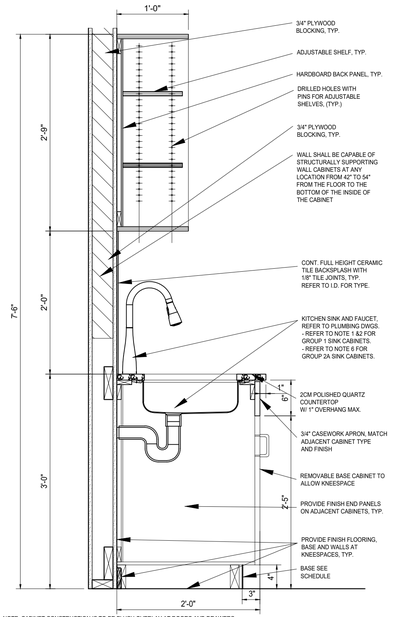
NOTE: CABINET CONSTRUCTION IS TO BE FLUSH OVERLAY AT DOORS AND DRAWERS WITH CONCEALED HINGES AND FULL EXTENSION DRAWER SLIDES. THERMALLY FUSED THERMOFOIL FINISH PER INTERIOR DESIGN DRAWINGS.

A SECTION AT KITCHEN CABINET
1" = 1'-0" GROUP 1 AND 2A



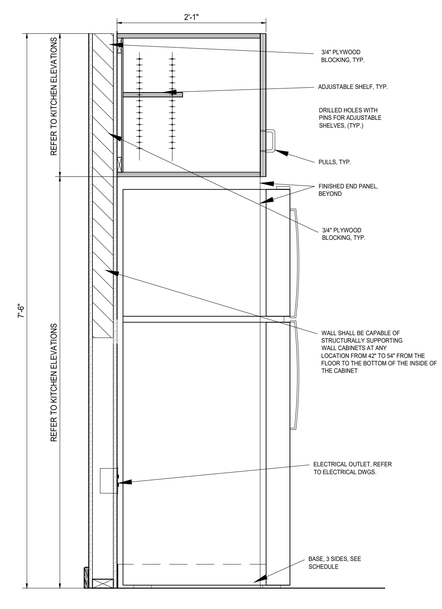
NOTE: CABINET CONSTRUCTION IS TO BE FLUSH OVERLAY AT DOORS AND DRAWERS WITH CONCEALED HINGES AND FULL EXTENSION DRAWER SLIDES. THERMALLY FUSED THERMOFOIL FINISH PER INTERIOR DESIGN DRAWINGS.

B SECTION AT RANGE
1" = 1'-0" GROUP 1



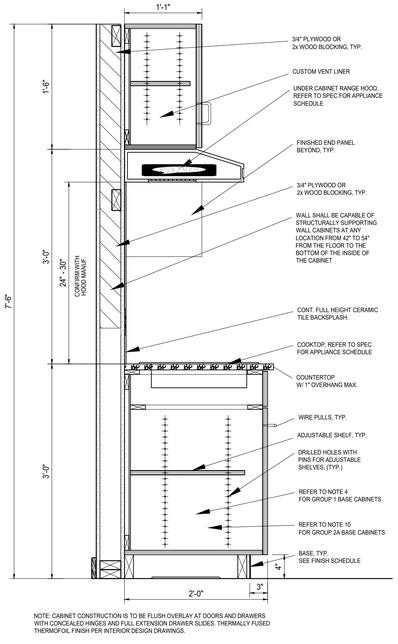
NOTE: CABINET CONSTRUCTION IS TO BE FLUSH OVERLAY AT DOORS AND DRAWERS WITH CONCEALED HINGES AND FULL EXTENSION DRAWER SLIDES. THERMALLY FUSED THERMOFOIL FINISH PER INTERIOR DESIGN DRAWINGS.

C SECTION AT KITCHEN SINK
1" = 1'-0" GROUP 1 AND 2A



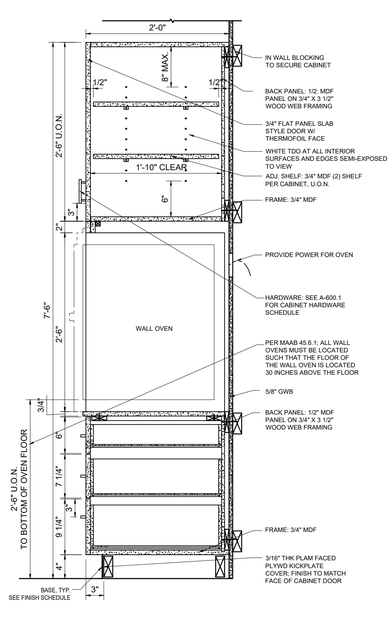
NOTE: CABINET CONSTRUCTION IS TO BE FLUSH OVERLAY AT DOORS AND DRAWERS WITH CONCEALED HINGES AND FULL EXTENSION DRAWER SLIDES. THERMALLY FUSED THERMOFOIL FINISH PER INTERIOR DESIGN DRAWINGS.

D SECTION AT REFRIGERATOR
1" = 1'-0" GROUP 1 AND 2A



NOTE: CABINET CONSTRUCTION IS TO BE FLUSH OVERLAY AT DOORS AND DRAWERS WITH CONCEALED HINGES AND FULL EXTENSION DRAWER SLIDES. THERMALLY FUSED THERMOFOIL FINISH PER INTERIOR DESIGN DRAWINGS.

E SECTION AT COOKTOP
1" = 1'-0" GROUP 2A



F WALL OVEN CABINET - GROUP 2
1" = 1'-0" GROUP 2A

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 9319
BOSTON
MA
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

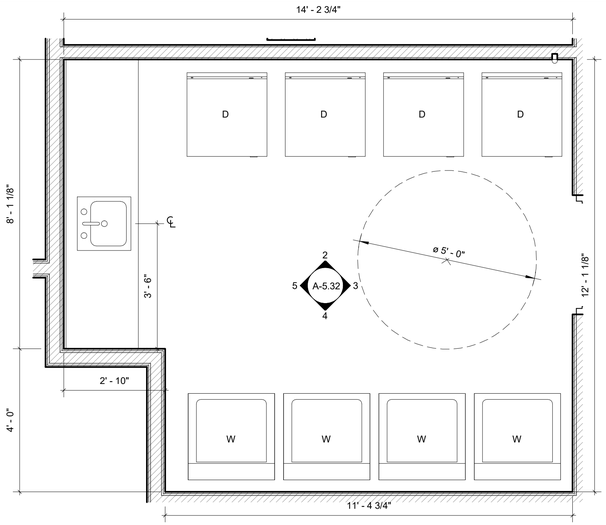
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Scale: NOT TO SCALE
Date: 01-07-2026
Drawn By: PM DF

Drawing Name

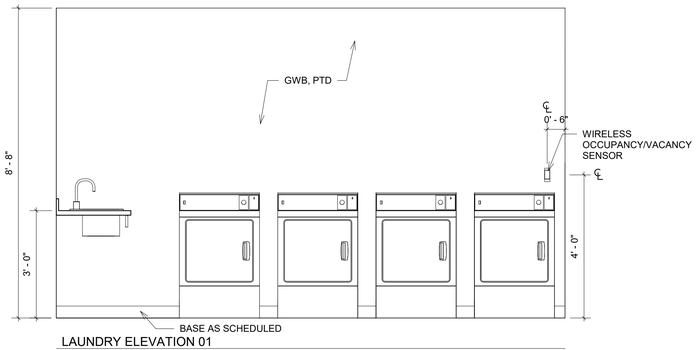
KITCHEN & CABINET DETAILS

Sheet No.

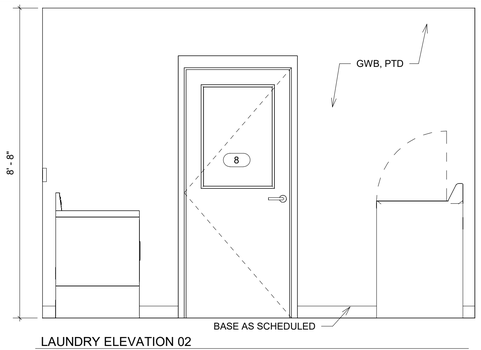
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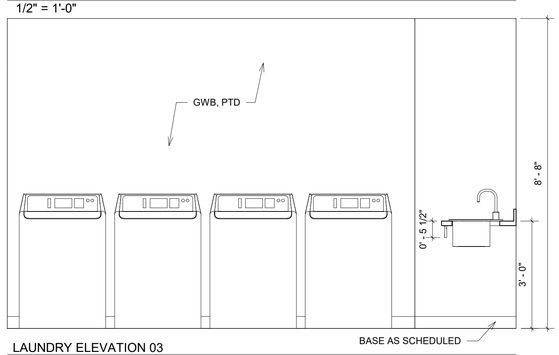
LAUNDRY ROOM - PLAN
1/2" = 1'-0"



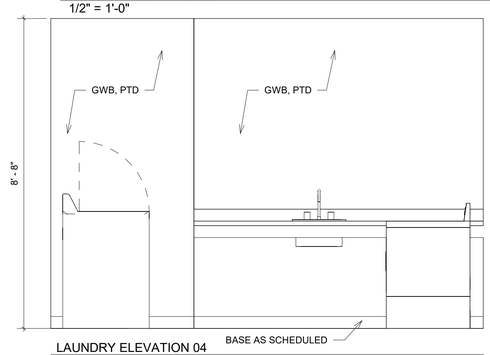
LAUNDRY ELEVATION 01
1/2" = 1'-0"



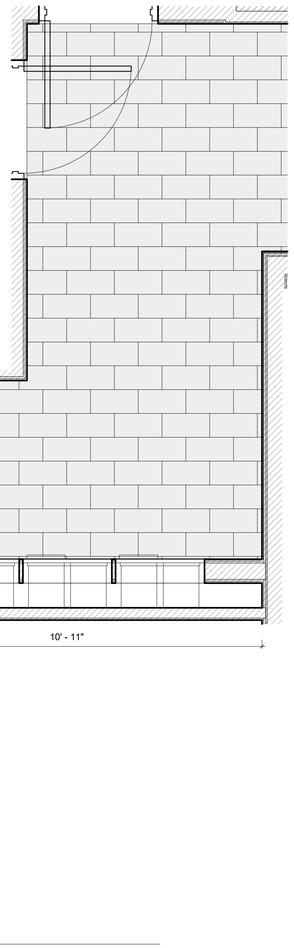
LAUNDRY ELEVATION 02
1/2" = 1'-0"



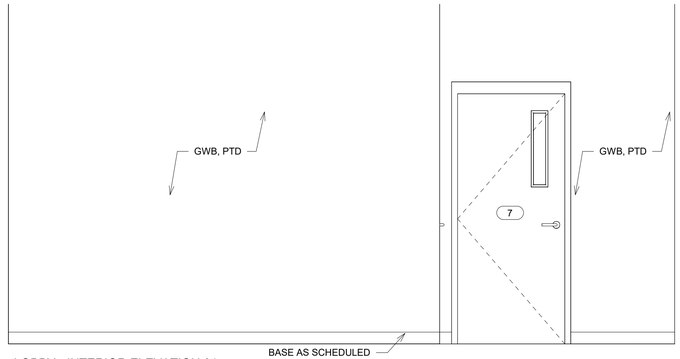
LAUNDRY ELEVATION 03
1/2" = 1'-0"



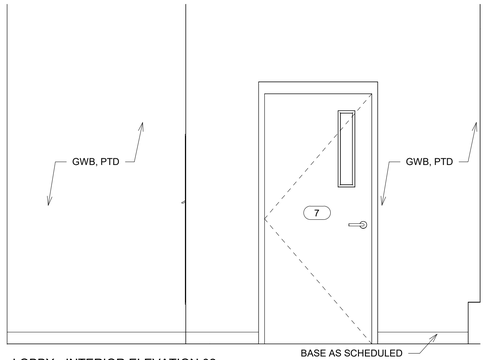
LAUNDRY ELEVATION 04
1/2" = 1'-0"



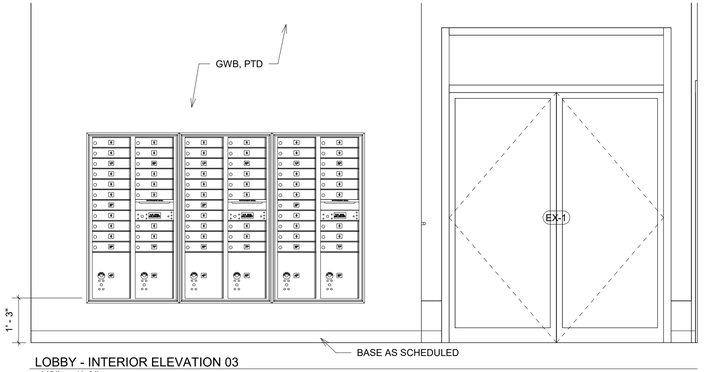
LOBBY - PLAN
1/2" = 1'-0"



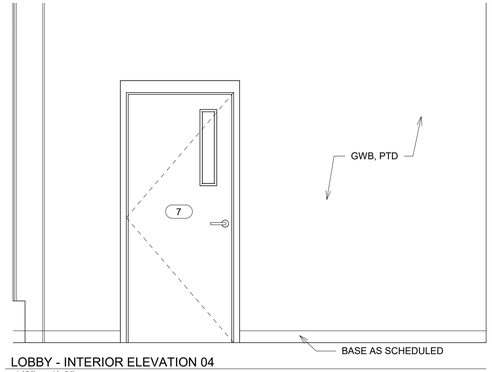
LOBBY - INTERIOR ELEVATION 01
1/2" = 1'-0"



LOBBY - INTERIOR ELEVATION 02
1/2" = 1'-0"



LOBBY - INTERIOR ELEVATION 03
1/2" = 1'-0"



LOBBY - INTERIOR ELEVATION 04
1/2" = 1'-0"

Location

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Project No: 2025014
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Drawn By: PM DF

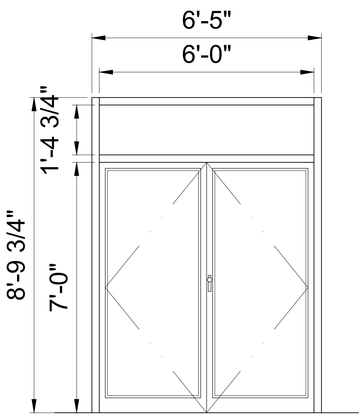
Drawing Name

INTERIOR ELEVATIONS

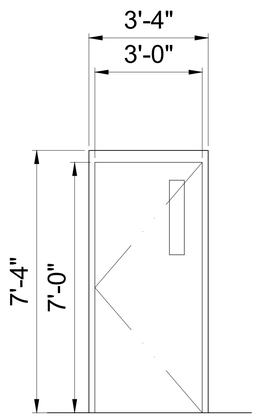
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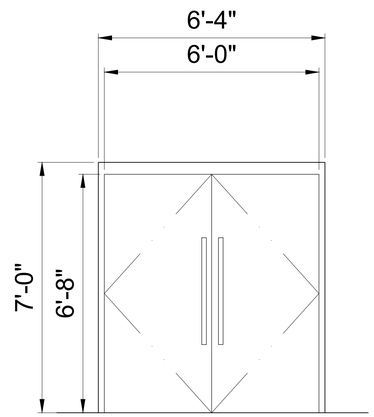
EXTERIOR DOORS



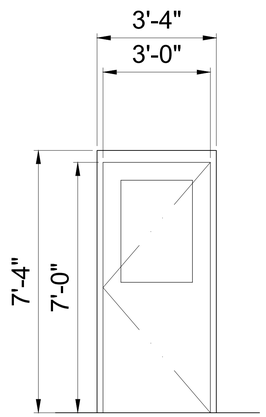
EX-1
TYPE 1
HM STOREFRONT
GLASS DOOR



EX-2, ST-1, ST-2
TYPE 2
SINGLE PANEL
DOOR WITH LIGHT

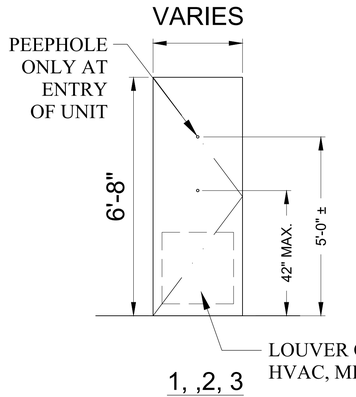


EX-3
TYPE 3
DOUBLE PANEL
DOOR

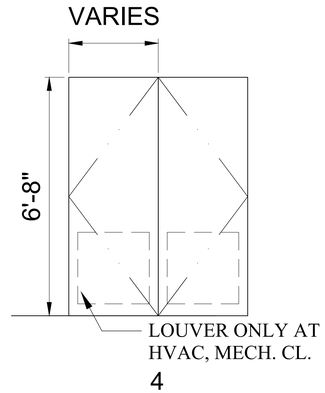


EX-4
TYPE 4
SINGLE PANEL
DOOR WITH $\frac{1}{4}$" TEMP.
SAFETY GLASS

INTERIOR DOORS

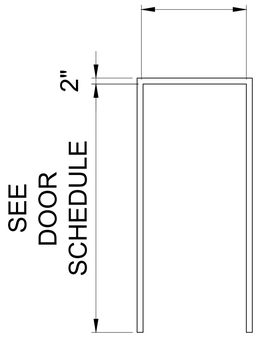


1, ,2, 3
TYPE A
FLUSH



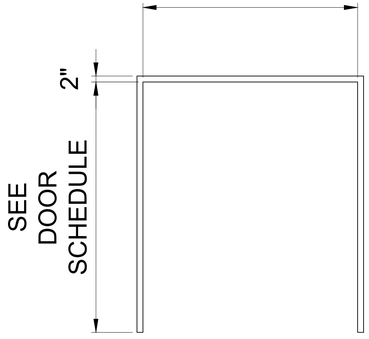
4
TYPE B
DOUBLE FLUSH

SEE DOOR SCHEDULE



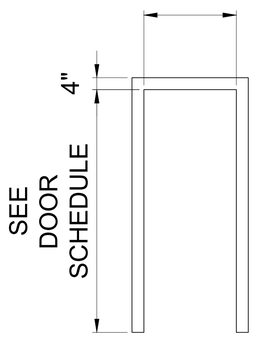
HM1

SEE DOOR SCHEDULE



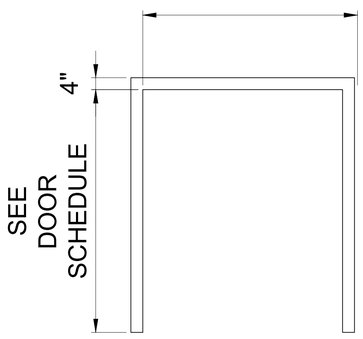
HM2

SEE DOOR SCHEDULE



WD1

SEE DOOR SCHEDULE

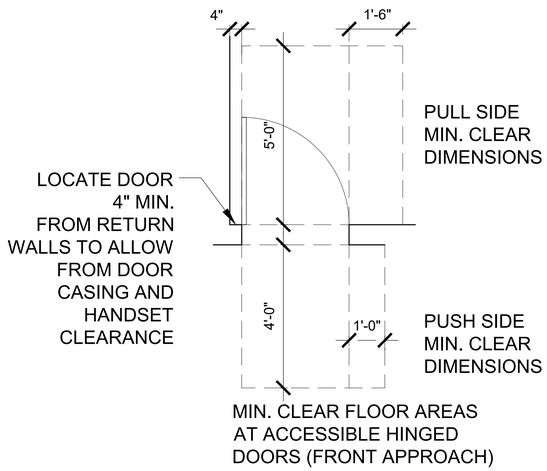


WD2

DOOR SCHEDULE

G.C IS RESPONSIBLE TO CONFIRM WINDOW SIZES & QUANTITY ON PLANS & ELEVATIONS

NO.	MANUFACTURER	MODEL	# NEEDED	SIZE	MATERIALS	REMARKS
EX-1	KAWNEER OR SIMILAR	STANDARD ENTRANCES STOREFRONT DOOR	-	6'-5" X 8'-9 3/4"	ALUM. & INSULATED GLASS	EXTERIOR DOOR WITH 1" INSULATED GLASS PANELS & ANDERSEN 400 SERIES PICTURE WINDOW TRANSOM ABOVE
EX-2	MARVIN OR SIMILAR	SOLID WOOD	-	3'-0" X 7'-0"	WOOD	EXTERIOR DOOR WITH GLASS LITE
EX-3	MARVIN OR SIMILAR	SOLID WOOD	-	6'-0" X 7'-0"	WOOD	SOLID WOOD DOUBLE DOOR WITH GLASS LITE
ST-1	MARVIN OR SIMILAR	SOLID WOOD	-	3'-0" X 7'-0"	WOOD	SOLID WOOD DOOR WITH GLASS LITE
ST-2	MARVIN OR SIMILAR	SOLID WOOD	-	3'-0" X 7'-0"	WOOD	SOLID WOOD DOOR WITH GLASS LITE
1	JELDWEN OR SIMILAR	FLUSH WOOD COMPOSITE	-	3'-0" X 6'-8"	COMPOSITE WOOD	SINGLE FLUSH DOOR
2	JELDWEN OR SIMILAR	FLUSH WOOD COMPOSITE	-	2'-8" X 6'-8"	COMPOSITE WOOD	SINGLE FLUSH DOOR
3	JELDWEN OR SIMILAR	FLUSH WOOD COMPOSITE	-	2'-8" X 6'-8"	COMPOSITE WOOD	SINGLE FLUSH DOOR
3	JELDWEN OR SIMILAR	FLUSH WOOD COMPOSITE	-	3'-0" X 6'-8"	COMPOSITE WOOD	SINGLE FLUSH DOOR
4	JELDWEN OR SIMILAR	FLUSH WOOD COMPOSITE	-	2'-8" X 6'-8"	COMPOSITE WOOD	SINGLE FLUSH DOOR
5	JELDWEN OR SIMILAR	FLUSH WOOD COMPOSITE	-	5'-0" X 6'-8"	COMPOSITE WOOD	SINGLE PANEL DOUBLE FLUSH DOOR
6	JELDWEN OR SIMILAR	FLUSH WOOD COMPOSITE	-	6'-0" X 7'-0"	COMPOSITE WOOD	DOUBLE ACTING/SELF CLOSING 1-HR RATED SEPARATION DOOR
7	MARVIN OR SIMILAR	WOOD	-	3'-0" X 7'-0"	WOOD	SOLID WOOD DOOR WITH GLASS LITE
8	MARVIN OR SIMILAR	WOOD		3'-0" X 7'-0"	WOOD	SOLID WOOD DOOR WITH GLASS LITE



MIN. CLEAR FLOOR AREAS
AT ACCESSIBLE HINGED
DOORS (FRONT APPROACH)

DOOR NOTES:
1. ALL INTERIOR DOORS TO HAVE 5/8" UNDERCUT FOR AIR MOVEMENT

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

REGISTERED ARCHITECT
ARTHUR K.F. CHOO
No. 8919
BOSTON
MA.
COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

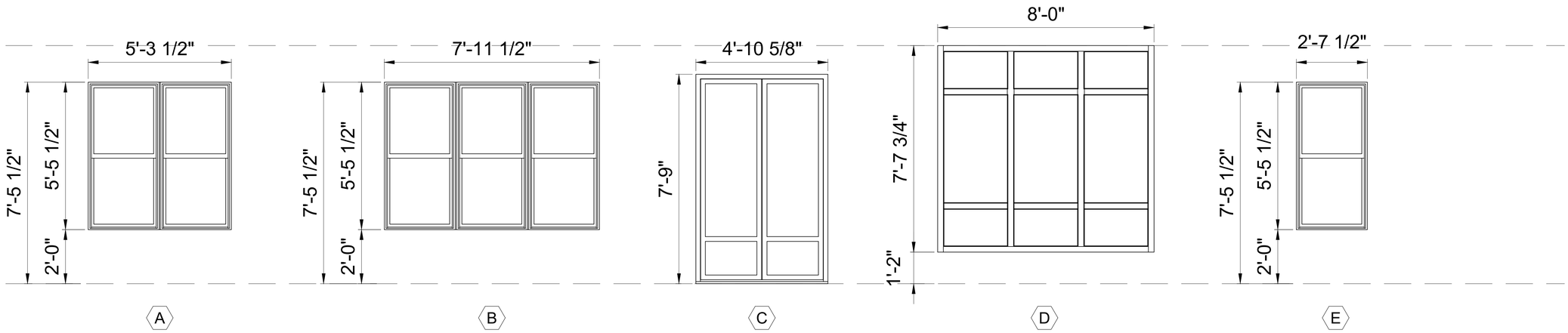
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: DF

Drawing Name

DOOR SCHEDULE & DETAILS

Sheet No.

A-6.02



WINDOW SCHEDULE

G.C IS RESPONSIBLE TO CONFIRM WINDOW SIZES & QUANTITY ON PLANS & ELEVATIONS

NO.	MANUFACTURER	MODEL	SIZE	QUANTITY	REMARKS
A	MARWIN WINDOWS	ESSENTIAL SERIES	5'-3 1/2" X 5'-5 1/2"	92	SINGLE HUNG WINDOWS
B	MARWIN WINDOWS	ESSENTIAL SERIES	7'-11 1/2" X 5'-5 1/2"	15	SINGLE HUNG WINDOWS
C	MARWIN WINDOWS	ULTIMATE SERIES	4'-10 3/8" X 7'-9"	4	CASEMENT WINDOWS WITH FIXED PANELS BELOW (TMPD)
D	MARWIN WINDOWS	COASTLINE SERIES	8'-0" X 7'-7 3/4"	2	D* STOREFRONT FROSTED PANELS
E	MARWIN WINDOWS	ESSENTIAL SERIES	2'-7 1/2" X 5'-5 1/2"	9	SINGLE HUNG WINDOWS

WINDOW NOTES:

1. ALL WINDOWS ARE BASED ON MARVIN WINDOWS
2. GLAZING TO BE LOW-E TYPE W/ ARGON GAS
3. ALL WINDOWS TO INCLUDE HALF INSECT SCREENING PER MANUFACTURER
4. DIMENSIONS SHOWN ARE UNIT SIZE. G.C. TO COORDINATE ROUGH OPENING DIMENSIONS WITH WINDOW MANUFACTURER'S.
5. PROVIDE WINDOW OPENING CONTROL DEVICE THAT COMPLY W/ ASTM F2090 ON ALL BEDROOMS AND LIVING AREA WINDOWS.
6. WINDOW MFR. SUBMIT DETAILED SHOP DRAWINGS FOR APPROVAL.
7. JAMB FLASHING: OVER WINDOW FLANGE AND PAN FLASHING AND EXTEND ABOVE THE HEAD FLANGE
8. BITUM. SELF-ADHERING FLASHING AT ALL WINDOW HEADS FLASHING (TYP.)
9. BACKER ROD & SEALANT AROUND ALL WINDOW EDGES, TYP.
10. PEEL & STICK FLEXIBLE PAN FLASHING, WRAP INTO SILL & JAMB. UPTURN 6" MIN. AT ALL EDGES.
11. FOLLOW WINDOWS INSTALLATION MANUFACTURING SPECS.
12. ALL WINDOWS TO BE SDL W/ SPACER BAR & EXTERIOR MOUNTED MUNTINS, TYP.
13. PROVIDE TEMPERED GLAZING AT ALL SHOWERS, STAIRS, WITHIN 24" OF DOORS, BOTTOM EDGE OF GLAZING IS LESS THAN 18" ABOVE FLOOR, AND BOTTOM STAIR LANDING GLAZING IS LESS THAN 36" ABOVE LANDING AN 60" HORIZONTAL ARE LESS THAN 180 DEGREES.

Location

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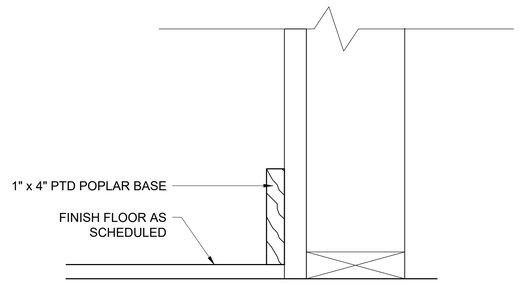
Project No: 2025014
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Drawn By: PM DF

Drawing Name

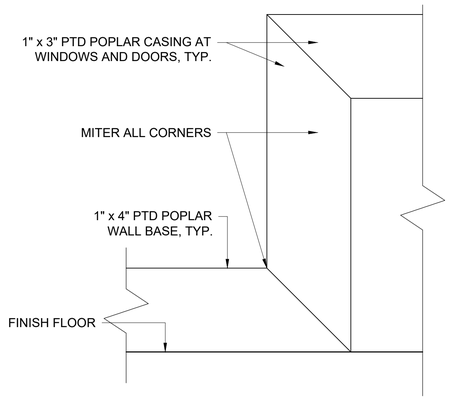
WINDOW SCHEDULE

Sheet No.

A-6.03



1 WOOD BASEBORD
3" = 1'-0"



2 DOOR / WINDOW CASING DETAIL
3" = 1'-0"

ROOM FINISH SCHEDULE

ROOM		WALL	BASE	FLOOR FINISH	CEILING
101	LOBBY	GWB PTD	RBR	CT-2	GWB PTD
102	COMMON ROOM	GWB PTD	RBR	CT-2	GWB PTD
103	HC BATH	GWB PTD	RBR	CT-1	GWB PTD
104	ANTENNA	GWB PTD	RBR	SEALED CONC	GWB PTD
105	ELECTRIC ROOM	GWB PTD	RBR	SEALED CONC	GWB PTD
106	LAUNDRY ROOM	GWB PTD	RBR	CT-2	GWB PTD
107	ELEVATOR MACHINE ROOM	GWB PTD	RBR	SEALED CONC	GWB PTD
108	JANITOR	GWB PTD	RBR	CT-2	GWB PTD
109	FIRE SPRINKLER ROOM	GWB PTD	RBR	SEALED CONC	GWB PTD
110	PACKAGES	GWB PTD	RBR	CT-2	GWB PTD
111	BIKE STORAGE ENCLOSURE	METAL CHAINLINK FENCE, GALV.	-	SEALED CONC	ACT-1, PAINT FIRE RESISTANCE OVER FIREPROOFING
	OPEN PARKING	VENEER CMU, EXPOSED CONC.	-	SEALED CONC	ACT-1, PAINT FIRE RESISTANCE OVER FIREPROOFING
	ELEVATOR CAB	BY ELEVATOR VENDOR	BY ELEVATOR VENDOR	RBR	BY ELEVATOR VENDOR
ST1	STAIR 1	GWB PTD	RBR	1st FL : BRUSHED FINISH CONC. 2nd FL AND UP: CPT-1	GWB PTD
ST2	STAIR 2	GWB PTD	RBR		
212	CORRIDOR	GWB PTD	RBR	LVT	GWB PTD
312	CORRIDOR	GWB PTD	RBR	LVT	GWB PTD
412	CORRIDOR	GWB PTD	RBR	LVT	GWB PTD
512	CORRIDOR	GWB PTD	RBR	LVT	GWB PTD
612	CORRIDOR	GWB PTD	RBR	LVT	GWB PTD

IN-UNIT ROOMS		WALL	BASE	FLOOR FINISH	CEILING
	LIVING / DINING	GWB PTD	RBR	LVT	GWB PTD
	KITCHEN	GWB PTD	RBR	LVT	GWB PTD
	BATHROOM	GWB PTD. CT-1 AT TUB SURROUND.	RBR	CT-1	GWB PTD
	CLOSET	GWB PTD	RBR	LVT	GWB PTD
	MECH / HWH CLOSET	GWB PTD	RBR	LVT	GWB PTD

NOTE: GC TO CONFIRM ALL FINISHES WITH OWNER PRIOR TO ORDERING

ABBREVIATIONS

WALL

CT-1 ACCENT TILE AT TUB SURROUND. INSTALL USING TUB SURROUND RECOMMENDED ADHESIVE.

FLOORING

CPT-1	BROADLOOM CARPET AT STAIR LANDING, TREADS AND RISERS
CPT-2	CARET TILES
LVT	LUXURY VINYL TILE, DIRECT GLUE DOWN
CT-1	LINEN SHADOW II CERAMIC TILE
CT-2	CORTA GRAY CERAMIC TILE
VCT	URBAN ASH 6 MIL X 6 IN. X 48 IN. GLUE DOWN LUXURY VINYL PLANK FLOORING
DWL	DURAWALL 30 IN. X 60 IN. X 58 IN. 3-PIECE EASY UP ADHESIVE ALCOVE BATH TUB SURROUND IN WHITE

WALL BASE

CT-1	6" TALL CERAMIC TILE
RB	4" RESILIENT BASE. STRAIGHT AT CARPET. COVE AT ALL OTHER FLOORING
WB	WOOD BASE, SEE DETAILS
RBR	RUBBER BASE; RUBBER TREADS & LANDINGS

Location

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BOSTON
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COMMONWEALTH OF MASSACHUSETTS

No.	Description	Date

Project No: 2025014
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Drawn By: DF

Drawing Name

FINISH SCHEDULE AND INTERIOR DETAILS

Sheet No.

A-6.04

GENERAL NOTES:

CONTRACTOR RESPONSIBILITY-
CONTRACTOR IS SOLELY RESPONSIBLE FOR:

1. VIEWING SITE AND INCLUDING ANY SPECIAL CONDITIONS NECESSARY TO PERFORM THE WORK AS DESCRIBED IN THE DRAWINGS.
2. ESTABLISHING CONTROL OF THE SITE VIA SURVEY, AND LAYOUT.
3. OBTAINING AND PAYING FOR ALL PERMITS.
4. PAYING FOR ALL TEMPORARY UTILITIES AND FACILITIES.
5. CHECKING AND CONFIRMING ALL DIMENSIONS, AND LAYOUTS.
6. SCHEDULING AND SEQUENCING.
7. CONSTRUCTION MEANS, METHODS AND TECHNIQUES
8. MAINTAINING DRAWINGS AND PERMITS ON SITE.
9. JOB SITE SAFETY
10. COORDINATION BETWEEN TRADES, AND SUPPLIERS.
11. PROVIDE SCHEDULE TO OWNER AND ARCHITECT,
12. PROVIDE A SCHEDULE OF VALUES TO THE OWNER AND ARCHITECT.
13. TEMPORARY HEAT, ICE AND SNOWPLOWING IS THE RESPONSIBILITY OF THE CONTRACTOR.
14. SITE CLEANLINESS AND CONFORMANCE TO NFPA 241 REQUIREMENTS.
15. REPAIRING ANY WORK DAMAGED BY HIS FORCES WHILE PERFORMING THIS CONTRACT.
16. GIVING WARRANTY FOR HIS WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL COMPLETION.

REVIEW OF WORK BY DESIGNERS-

CONTRACTOR SHALL NOTIFY ARCHITECT BEFORE PROJECT STARTS.

CONTRACTOR SHALL NOTIFY ARCHITECT, ONE WEEK PRIOR TO:

17. POURING CONCRETE
18. INSULATING
19. INSTALLING DRYWALL
20. FINAL INSPECTION

SHOP DRAWINGS-

ALL SHOP DRAWINGS SHALL BE SUBMITTED 30 DAYS AFTER CONTRACT AWARD.

GENERAL CONTRACTOR SHALL APPROVE SHOP DRAWINGS, PRIOR TO SUBMITTING TO ARCHITECT OR ENGINEER.

NON SUBMISSION DOES NOT CONSTITUTE APPROVAL OF ANY WORK.

NO EXCEPTIONS TAKEN DOES NOT RELIEVE THE CONTRACTOR OF PERFORMING ANY OTHER WORK ON THE DRAWINGS.

CONTRACTOR SHALL EXPECT A MINIMUM OF 2 WEEKS FOR DESIGNERS' REVIEW TIME.

ANY VARIANCE FROM THE ORIGINAL DESIGN SHALL BE NOTED.

ANY SUBSTITUTION NOT INDICATED SHALL NOT CONSTITUTE APPROVAL OF A CHANGE.

SHOP DRAWINGS ARE NOT COORDINATION DRAWINGS.

DESIGNERS ARE NOT RESPONSIBLE FOR DIMENSIONS.

CONTRACTOR TO ENSURE MATERIALS AND ASSEMBLIES ARE COMPATIBLE AND ACCEPTABLE TO THE MANUFACTURER. ALL ASSEMBLY MATERIALS SHALL BE FROM A SINGLE SOURCE AS MUCH AS POSSIBLE.

REQUEST FOR INFORMATION -

ONLY RFI'S SENT THROUGH BY THE OWNER AND AWARDING CONTRACTOR WILL BE ANSWERED. SUBCONTRACTORS MUST SUBMIT RFI'S THROUGH THE GENERAL CONTRACTOR.

BIDDING PHASE - OWNER AND AWARDING CONTRACTOR ARE RESPONSIBLE FOR COMPILING AND AGGREGATING RFI'S AND SUBMITTING TO THE ARCHITECT OR DESIGNER AT ONE TIME ONLY. ARCHITECT OR DESIGNER HAS ONE WEEK TO RESPOND. QUESTIONS MUST BE COMPLETE , NOT PIECEMEAL AND SHOULD BE SUBMITTED BY CSI DIVISION.

CHANGE ORDERS-

CONTRACTOR SHALL VISIT THE SITE AND BE THOROUGHLY ACQUAINTED WITH THE PROJECT PRIOR TO SUBMITTING A PRICE. ADDITIONAL MONEY WILL NOT BE GRANTED FOR WORK NOT CLARIFIED PRIOR TO BIDDING.

DESIGNER SHALL BE NOTIFIED OF ANY CHANGE TO THE DRAWINGS, UNFORESEEN FIELD CONDITIONS OR DISCREPANCIES PRIOR TO PERFORMING WORK.

ANY PROPOSED CHANGES SHALL BE ACCOMPANIED WITH A WRITTEN DESCRIPTION OR A SKETCH FOR CLARIFICATION.

ALL CHANGE ORDERS SHALL BE APPROVED PRIOR TO PERFORMING WORK.

CHANGE ORDERS SHALL BE PRICED EITHER LUMP SUM OR UNIT PRICE OR TIME AND MATERIALS.

ANY SUBSTITUTION REQUEST SHALL BE MADE VIA CHANGE ORDER, AND NOT VIA SHOP DRAWINGS UNLESS AGREED TO.

ANY CHANGE SHALL STATE THE CREDIT OR COST ADD AND/OR ANY CHANGE TO THE SCHEDULE.

REQUISITIONS-

ANY REQUISITION REQUIRED TO BE SIGNED BY THE ARCHITECT SHALL BE SUBMITTED A MINIMUM OF ONE WEEK PRIOR TO BEING SUBMITTED TO THE BANK FOR REVIEW.

CONTRACTOR SHALL PROVIDE RECEIPTS AND INSURANCE CERTIFICATES FOR ANY MATERIALS FOR PAYMENT FOR ANY UNINSTALLED MATERIALS.

FOUNDATION NOTES:

1. THE FOUNDATION HAS BEEN DESIGNED FOR 4000 PSF ALLOWABLE SOIL BEARING CAPACITY.
2. ALL BACKFILL UNDER STRUCTURAL SLABS, MATS, AND FOOTINGS WILL BE ENGINEERED BACKFILL COMPACTED IN SPECIFIC LIFTS TO 95 PERCENT OF MAXIMUM DRY DENSITY, UNLESS OTHERWISE INDICATED OR SPECIFIED.
3. ALL EMBANKMENTS AND BACKFILL COMPACTED IN SPECIFIED LIFTS TO 90 PERCENT OF MAXIMUM DRY DENSITY, UNLESS OTHERWISE INDICATED OR SPECIFIED.
4. PROVIDE SHEETING, BRACING, AND UNDERPINNING AS REQUIRED TO PRESERVE ADJACENT STRUCTURES.
5. FOUNDATIONS SHALL NOT BE POURED IN WATER OR ON FROZEN GROUND.
6. CONCRETE POURED BELOW 40 DEGREES MUST FOLLOW THE PROCEDURES OF ACI 318. THIS INCLUDES AIR ENTRAINMENT, ADMIXTURES, PROTECTIVE COVERING, AND TEMPORARY HEAT FOR 24 HOURS AFTER THE POUR. TEMPERATURE OF CONCRETE CANNOT GO BELOW 60 DEGREES.
7. VERIFY LOCATIONS AND REQUIREMENTS FOR INSERTS, SLEEVES, CONDUITS, EMBEDMENT AND PENETRATIONS WITH RESPECTIVE TRADES BEFORE PLACING CONCRETE.
8. DOWELS FROM FOUNDATIONS INTO PIERS, COLUMNS, BUTTRESSES OR WALLS SHALL BE THE SAME SIZE AND NUMBER AS REINFORCEMENT IN PIERS, COLUMNS, BUTTRESSES OR WALLS ABOVE, EXCEPT AS OTHERWISE SHOWN.
9. CONTRACTOR SHALL PROVIDE CONTINUOUS DRAINAGE BY MECHANICAL METHODS TO CONTROL SURFACE AND UNDERGROUND WATER, AS REQUIRED DURING CONSTRUCTION.
10. CONTRACTOR SHALL ENSURE THAT GROUND WATER LEVELS UNDER ADJACENT STRUCTURES AND PROPERTIES ARE NOT ALTERED.
11. ALL FOUNDATION UNITS (PIERS) SHALL BE CENTERED SUPPORT MEMBERS, UNLESS OTHERWISE NOTED ON PLANS.
12. COORDINATE UNDER FLOOR AND PERIMETER DRAIN REQUIREMENTS WITH ARCHITECTURAL, CIVIL AND PLUMBING DRAWINGS AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
13. ALL BEARING MATERIALS SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT TESTING AGENCY SHALL DETERMINE THE SUITABILITY OF THE BEARING MATERIAL. FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED.
14. BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 4'-0" BELOW FINAL FINISHED GRADE FOR FROST PROTECTION.
15. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR & SLAB AT TOP AND BOTTOM ARE IN PLACE.
16. WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.
17. ALL FOOTING EXCAVATIONS ARE TO BE FINISHED BY HAND.
18. SEE THE REQUIREMENTS OF THE SPECIFICATIONS FOR BACKFILLING UNDER OR ADJACENT TO ANY PORTION OF THE BUILDING.
19. PROTECT IN-PLACE FOUNDATIONS, SLABS AND ADJACENT STRUCTURES, NEW CONSTRUCTION, STREET UTILITIES FROM FROST PENETRATION OR DAMAGE FROM CONSTRUCTION ACTIVITIES UNTIL THE PROJECT IS COMPLETED.
20. SLAB ON GRADE SHALL BEAR DIRECTLY ON A MIN. 12" THICK LAYER OF COMPACTED STRUCTURAL FILL, OR MIN. 6" THICK LAYER OF CRUSHED STONE, PLACED ABOVE PROOFROLLED AND COMPACTED EXISTING FILL, OR ABOVE UNDISTURBED NATURAL TILL. SHOULD BEDROCK BE ENCOUNTED AT OR WITHIN 12" OF BOTTOM OF SLAB, BEDROCK SHALL BE OVER EXCAVATED A MIN. OF 12" BELOW BOTTOM OF SLAB.
21. WHERE BEDROCK IS ENCOUNTED AT OR WITHIN 12" OF DESIGN FOOTING GRADE, IT SHOULD BE OVER EXCAVATED A MIN. OF 12" BELOW THE BOTTOM OF PROPOSED FOOTING. BEDROCK EXCAVATIONS SHOULD EXTEND A MIN. OF 12" BEYOND FOOTING EDGE. LOOSE ROCK PIECES SHOULD BE REMOVED WITHIN THE FOOTING BEARING ZONE, AND OPEN BEDROCK JOINTS SHOULD BE CHOKED WITH CRUSHED STONE OR FILLED WITH CONCRETE PRIOR TO PLACING THE SOIL CUSHION.

CONCRETE NOTES:

1. ALL CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF:
   - **3000 PSI** FOR FOUNDATION WALL, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE SURFACES EXPOSED TO THE WEATHER.
2. MAXIMUM SLUMP SHALL NOT EXCEED 3"; AND MAXIMUM; COARSE AGGREGATE SIZE SHALL NOT EXCEED 3/4" IN DIAMETER.

REINFORCING NOTES:

1. ALL REINFORCEMENT, EXCEPT FOR TIES AND STIRRUPS, SHALL CONFORM TO ASTM 615-60.
2. ALL REINFORCEMENT FOR TIES AND STIRRUPS SHALL CONFORM TO ASTM 615-40.
3. ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185-70 SPECIFICATIONS.
4. ALL REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE ARCHITECT OR HIS ENGINEER PRIOR TO THE PLACEMENT OF ANY CONCRETE.
5. THE CONTRACTOR SHALL SUBMIT FOUR PRINTS OF SHOP DRAWINGS: SHOWING ALL REINFORCING DETAILS, CHAIR BARS, HIGH CHAIRS, SLAB BOLSTERS, ETC. TO THE ARCHITECT FOR HIS APPROVAL. THE CONTRACTOR SHALL RECEIVE WRITTEN APPROVED SHOP DRAWINGS FROM THE ARCHITECT OR HIS ENGINEER PRIOR TO THE FABRICATION OF REINFORCEMENT.
6. CLEARANCES OF MAIN REINFORCING FROM ADJACENT CONCRETE SURFACES SHALL BE AS FOLLOWS:
   A. FOOTINGS 3 INCHES
   B. SIDES OF FOUNDATIONS WALLS. EXPOSED FACES OF FOUNDATIONS. SIDES OF COLUMNS/PIERS, SLABS ON GRADE FROM TOP SURFACE 2 INCHES
   C. INTERIOR FACES OF FOUNDATIONS, TOP REINFORCING IN SLABS EXPOSED TO THE WEATHER 1-1/2 INCHES
   D. TOP STEEL OF INTERIOR SLABS 1 INCHES
7. MAXIMUM DEVIATION FROM THESE REQUIREMENTS SHALL BE 1/4" OF SECTIONS 10" OR LESS, 1/2" FOR SECTIONS GREATER THAN 10".

STRUCTURAL STEEL NOTES:

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A992 SPECIFICATIONS, EXCEPT SQUARE STEEL TUBE COLUMNS.
2. ALL SQUARE STEEL TUBE COLUMNS SHALL CONFORM TO ASTM A500, WITH A MINIMUM YIELD STRESS OF 46,000 PSI.
3. ALL SHOP CONNECTIONS SHALL BE WELDED.
4. FIELD CONNECTION SHALL BE MADE WITH HIGH STRENGTH FRICTION BOLTS MEETING A325-X SPECIFICATIONS.
5. ALL BOLTS SHALL BE 3/4" IN DIAMETER, OR AS NOTED ON DRAWINGS. HOLES SHALL BE 1/16" LARGER.
6. ALL STRUCTURAL STEEL SHALL RECEIVE ONE SHOP COAT OF RUST INHIBITIVE PAINT; SUCH AS TNEMEC-99, OR RUST INHIBITOR BY "MAINLINE". OR, PAINT, AS NOTED IN THE SPECIFICATIONS.
7. AFTER STRUCTURAL STEEL ERECTION IS IN PLACE, ALL EXPOSED AREAS SHALL BE TOUCHED UP. SEE SPECIFICATIONS ON PAINTING FOR ADDITIONAL REQUIREMENTS.
8. PROVIDE 3/4: GROUT, 3,000 PSI, AND 1/4" THICK LEVELING PLATES UNDER ALL COLUMN BASE PLATES, WITH FOUR (4) 3/4" DIAMETER x 16" LONG ANCHOR BOLTS; OR AS NOTED.
9. PROVIDE A MINIMUM OF 8" BEARING ON EACH SIDE OF LINTELS AND HEADERS OVER DOORS, WINDOWS, LOUVERS, AND OPENINGS, ETC.
10. THE CONTRACTOR SHALL SUBMIT A REPRODUCIBLE SEPIA AND FOUR PRINTS OF SHOP DRAWINGS; SHOWING ALL STRUCTURAL STEEL SIZES, CONNECTIONS AND DETAILS, TO THE ARCHITECT FOR HIS APPROVAL. FABRICATION OF STRUCTURAL STEEL MEMBERS SHALL NOT BEGIN WITHOUT PRIOR WRITTEN APPROVAL BY THE ARCHITECT OR HIS ENGINEER.
11. ALL WORK SHALL BE PERFORMED IN CONFORMANCE WITH THE LATEST COMMONWEALTH OF MASSACHUSETTS BUILDING CODE AND THE STRUCTURAL STEEL INSTITUTE SPECIFICATIONS FOR BUILDINGS AND BRIDGES.

STEEL DECK NOTES:

1. ALL STEEL DECK SHALL BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE STEEL DECK INSTITUTE AND AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
2. PROVIDE WELD WASHERS FOR WELDING. ALL WELDS SHALL BE A MINIMUM OF 1-1/2" IN LENGTH, AND NOT TO EXCEED 12" ON CENTER SPACING.
3. WELD INTERMEDIATE SUPPORTS IN AN X-PATTERN.
4. WELD IN THE VALLEY OF THE SIDE LAP ON EVERY OTHER JOIST; AND, IN THE VALLEY OF THE CENTER CORRUGATION ON THE REMAINING JOIST.
5. SIDE LAPS SHALL BE MADE WITH A MINIMUM OF ONE CORRUGATION.
6. END LAPS SHALL BE MADE ON THE TOP SHEET IN THE VALLEY OF THE SIDE LAP, AND, AGAINST THE MIDDLE OF THE SHEET. END LAPS SHALL BE AT LEAST 2" AND SHALL BE MADE OVER SUPPORTS.
7. PROVIDE DECK ANGLES, AS NECESSARY, TO SUPPORT DECK SPANS WHERE DECK SPAN DIRECTION CHANGES.
8. STEEL DECK MATERIALS:
   ROOF DECKING - 1-1/2" DEEP, TYPE "B", GALVANIZED, 22 GA.
   MINIMUM MOMENT OF INERTIA - 0.20"
   MINIMUM SECTION MODULUS - 0.20"
9. THE CONTRACTOR SHALL SUBMIT ON REPRODUCIBLE SEPIA AND FOUR PRINTS OF SHOP DRAWING; SHOWING LENGTH OF DECKING, OPENINGS THROUGH DECKING, CLOSURE PANELS AT OPENINGS, END CLOSURE PANELS, ALL STRUCTURAL SUPPORTS, AND OTHER DETAILS, AS NECESSARY, TO THE ARCHITECT FOR HIS APPROVAL. FABRICATION OF STEEL DOCKING SHALL NOT BEGIN WITHOUT WRITTEN APPROVED SHOP DRAWINGS FROM THE ARCHITECT OR THIS ENGINEER.

WELDING NOTES:

1. ALL WELDS SHALL BE MADE BY AN APPROVED WELDER, CERTIFIED BY THE COMMONWEALTH OF MASSACHUSETTS.
2. ALL WELDS SHALL DEVELOP THE FULL STRENGTH OF THE MATERIALS BEING WELDED.
3. ALL WELDS AND WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY.
4. ALL ELECTRODES FOR WELDING SHALL CONFORM TO E70XX SPECIFICATIONS.
5. ALL WELDS WHICH WILL BE EXPOSED, SHALL BE GROUND SMOOTH, FREE FROM SLAGS AND FINS.
6. ALL WELDED PARTS SHALL BE STRAIGHT, SMOOTH, AND CONFORM TO THE SHAPES AND ANGLES DENOTED ON THE DRAWINGS.

REBAR SPLICE SCHEDULE

REINFORCING BAR DEVELOPMENT AND LAP SPLICE LENGTHS FOR f'c = 4500 PSI AND Fy = 60 KSI

BAR SIZE	TENSION DEVELOPMENT		TENSION SPLICE (CLASS B)		STANDARD 90° HOOK	COMPRESSION BARS	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	EMBEDMENT Ldh	DEVELOPMENT Ldb	SPLICE LENGTH
#3	18"	14"	23"	18"	7"	8"	12"
#4	24"	18"	31"	24"	9"	10"	15"
#5	30"	23"	38"	30"	12"	12"	19"
#6	35"	27"	46"	35"	14"	14"	24"
#7	41"	32"	54"	41"	16"	16"	27"
#8	47"	36"	61"	47"	18"	18"	30"

Location

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COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31457
REGISTERED
PROFESSIONAL ENGINEER

No.	Revision Date

Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

GENERAL NOTES

Sheet No.

S-0

WOOD NOTES:

1. ALL LUMBER SHALL HAVE A MOISTURE CONTENT OF NOT MORE THAN 19%.
2. ALL FRAMING LUMBER SHALL BE #2 SPF, OR BETTER, HAVING A MINIMUM: FB=875 PSI, FV=135 PSI, E=1,300,000 PSI.
3. ALL LVL LUMBER DENOTED ON PLANS SHALL HAVE A MINIMUM:
   - FB= 2,650 PSI, FV= 285 PSI, E= 1,900,000 PSI - FOR STUDS
   - FB= 3100 PSI, FV= 285 PSI, E= 2,000,000 PSI - FOR BEAMS
4. ALL JOIST SPANS SHALL HAVE ONE ROW OF 1" X 3: CROSS BRIDGING AT MID SPAN AND NOT MORE THAN 8'-O" O.C.
5. ALL STUD BEARING WALLS SHALL HAVE ONE ROW OF 2X HORIZONTAL BLOCKING AT 1/2 STUD HEIGHT, AND NOT MORE THAN 6'-O" O.C. MAXIMUM.
6. PROVIDE AND INSTALL ALL NECESSARY TIMBER CONNECTORS WITH ADEQUATE STRENGTH.
7. PROVIDE DOUBLE JOIST BELOW PARTITIONS PARALLEL TO JOIST FRAMING.
8. PROVIDE SOLID BRIDGING BELOW PARTITIONS PERPENDICULAR TO JOIST FRAMING.
9. PROVIDE SOLID BRIDGING BETWEEN JOIST FRAMING MEMBERS WHEN BEARING ON STUD PARTITIONS OR BEAMS.
10. PROVIDE A CONTINUOUS BAND JOIST AT EXTERIOR STUD WALLS.
11. PROVIDE DIAGONAL METAL STRAP BRACING AT ALL CORNERS AND WALL INTERSECTIONS, AT THE INSIDE FACE OF STUDS, FROM TOP PLATE TO FLOOR PLATE AT A 45 DEGREE ANGLE WITH A SIMPSON TYPE "MST" STRAP, OR EQUAL.
12. ALL BUILT-UP BEAMS SHALL BE BOLTED WITH ½" Ø THRU BOLTS, MEETING A307 STANDARDS, OR, AS NOTED ON DRAWINGS.
13. ALL WOOD FLOOR/ROOF SHEATHING TO BE ¾" PLYWOOD SHEATHING.

WOOD LINTEL SCHEDULE:

Lintels over openings in bearing walls shall be as follows;or as noted on drawings.
(ALL EXTERIOR WALL LINTELS TO BE (2) 14" LVL UNLESS NOTED ON PLAN)

Span of opening:	Size: 2x6 studs	Size: 2x4 studs
less than 4'-0"	3 - 2x10	2 - 2x10
up to 6'-0"	3 - 1 3/4"x9 1/2" LVL	2 - 1 3/4"x9 1/2" LVL
up to 8'-0"	3 - 1 3/4"x9 1/2" LVL	2 - 1 3/4"x9 1/2" LVL
up to 10'-0"	3 - 1 3/4"x11 7/8" LVL	2 - 1 3/4"x11 7/8" LVL

PREFABRICATED WOOD TRUSS NOTES:

1. ALL PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED AND FABRICATED INACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE MASSACHUSETTS STATE BUILDING CODE.
2. ALL TRUSSES SHALL CONFORM TO THE PROVISIONS OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION; AND, THE DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES, PUBLISHED BY THE TRUSS PLATE INSTITUTE.
3. ALL TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH APPLICABLE LIVE LOADS FOR THE TOP AND BOTTOM CHORDS, PLUS THE DEAD LOADS OF MATERIAL AS PER ARCHITECTURAL DRAWINGS.
4. ALL CONNECTOR PLATES SHALL BE A MINIMUM THICKNESS OF 0.036", STEEL, CONFORMING TO ASTM A446 GRADE A, AND GALVANIZED, CONFORMING TO ASTM A525, DESIGNATION G60.
5. ALL WOOD TRUSS MEMBERS SHALL BE ACCURATELY CUT AND FABRICATED TO ASSURE GOOD BEARING AND UNIFORMITY IN THE COMPLETED TRUSS, IN CONFORMANCE TO THE QUALITY CONTROL MANUAL, QCM-77, FOR TOLERANCES AND OTHER SPECIAL REQUIREMENTS.
6. ALL TRUSSES SHALL BE SECURELY BRACED, BOTH DURING ERECTION AND AFTER PERMANENT INSTALLATION, IN ACCORDANCE WITH "BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS". BWT-76, AS PUBLISHED BY THE TRUSS DESIGN DRAWINGS.
7. ALL BRACING SHALL HOLD TRUSSES STRAIGHT AND PLUMB, AND INSTALLED PERMANENTLY BEFORE THE APPLICATION OF ANY LOADING.

DESIGN CRITERIA:

ALL WORK PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE 780 CMR: MASSACHUSETTS STATE BUILDING CODE (MSBC), 10TH EDITION MASSACHUSETTS ADOPTS AND AMENDS THE INTERNATIONAL BUILDING CODE (IBC) 2021 EDITION

DESIGN LIVE LOAD = 40 POUNDS PER SQUARE FOOT
- RESIDENTIAL FLOORS

= 60 POUNDS PER SQUARE FOOT
- BALCONIES

= 100 POUNDS PER SQUARE FOOT
- LOBBIES, STAIRS, MECHANICAL AREA, AND STORAGE AREA

= 50 POUNDS PER SQUARE FOOT
- PARKING AREA

DESIGN SNOW LOAD = 40 POUNDS PER SQUARE FOOT
- WITH SNOW DRIFT WHERE APPLICABLE.

WIND LOAD = 128 MILES PER HOUR

SEISMIC:
Ss = 0.217
S1= 0.069
RISK CATEGORY: ii
IMPORTANCE FACTOR: 1.00
SITE CLASS: C
DESIGN CATEGORY: B
BASIC SEISMIC-FORCE RESISTING SYSTEM: STEEL ORDINARY MOMENT FRAMES
RESPONSE COEFFICIENT: 0.333
MODIFICATION COEFFICIENT: 3.5
ANALYSIS PROCEDURE: ADDITIONAL SEISMIC FORCE-RESISTING SYSTEM FOR SEISMICALLY ISOLATED STRUCTURES.

DEAD LOAD = 15 POUNDS PER SQUARE FOOT
- WOOD STUD PARTITIONS
- METAL STUD PARTITIONS

SPECIAL LOADS: NOT APPLICABLE.

MATERIAL SPECIFICATION: SEE GENERAL NOTES.

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31401
REGISTERED
PROFESSIONAL ENGINEER

No.	Revision Date

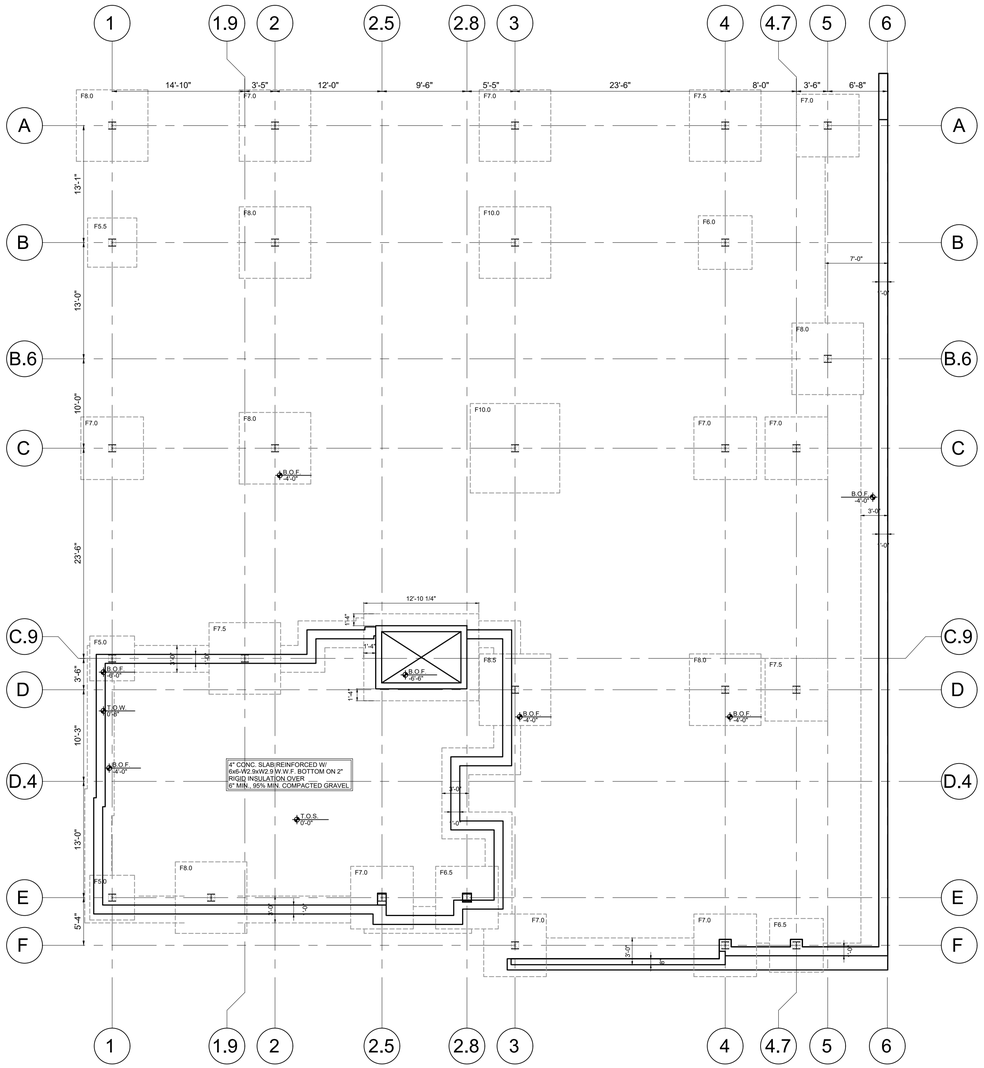
Project No: 2025014
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Date: 01-07-2026
Drawn By: NS

Drawing Name

GENERAL NOTES II

Sheet No.

S-0.1



1 FOUNDATION PLAN
1/8" = 1'-0"

NOTES:

1. T.O.S. = 0'-0" U.N.O.
2. B.O.F. @ INTERIOR COLUMNS = -0'-12" U.N.O.
3. B.O.F. @ EXTERIOR WALLS = -4'-0" U.N.O.
4. B.O.F. @ ELEVATOR PIT = -6'-6' U.N.O.
5. T.O.W @ EXTERIOR WALLS = 0'-8" U.N.O.
6. ALL WIDE FLANGE STEEL COLUMNS TO BE W10x49 U.N.O.
7. SEE GEOTECHNICAL REPORT FOR GROUND IMPROVEMENT RECOMMENDATIONS.

Location

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COMMONWEALTH OF MASSACHUSETTS
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No. 31461
REGISTERED PROFESSIONAL ENGINEER

No.	Revision Date

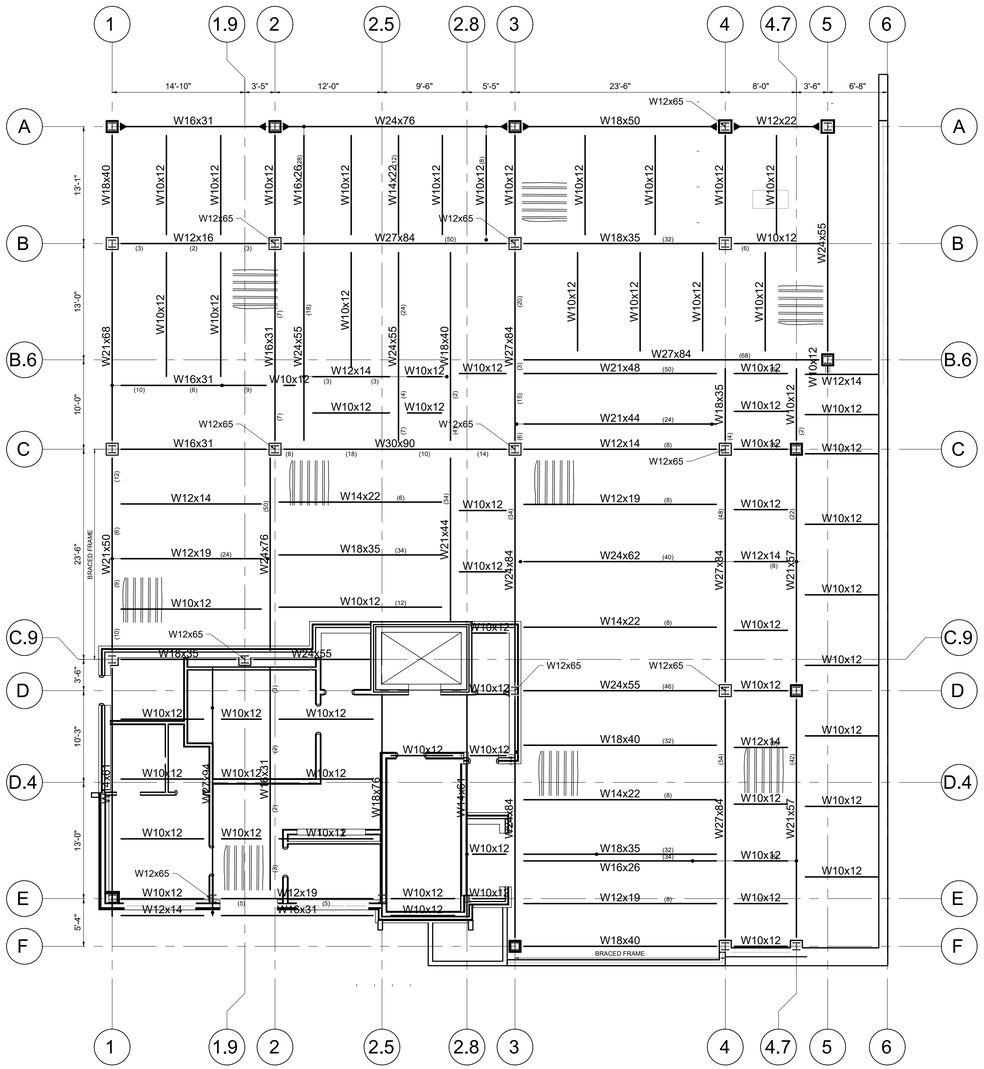
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

FOUNDATION PLAN

Sheet No.

S-1.1



1 SECOND FLOOR FRAMING PLAN
1/8" = 1'-0"

NOTES:

1. TOP OF STEEL ELEVATION = 11'-0 1/4"
2. ALL WIDE FLANGE STEEL COLUMNS TO BE W10x49 U.N.O.
3. ALL STEEL TUBE COLUMNS TO BE 6x6x$\frac{1}{2}$" U.N.O.
4. 2" VLI-36 18 GAUGE METAL DECK OR SIMILAR W/
   31/4" LIGHT WEIGHT CONCRETE COVER. U.L. # = D860*
   5-1/4" TOTAL SLAB THICKNESS
   FLOOR STEEL BEAM SPACING = 8' O.C. MAX. EQUAL SPACES.
4. ALL EXTERIOR STUDS TO BE 2x6 FRT STUD @ 16" O.C. U.N.O.
5. ALL INTERIOR STUDS TO BE 2x4 STUD @ 16" O.C. U.N.O.
6. ▶ INDICATES MOMENT CONNECTION
7. ● INDICATES HOLDOWN

Location

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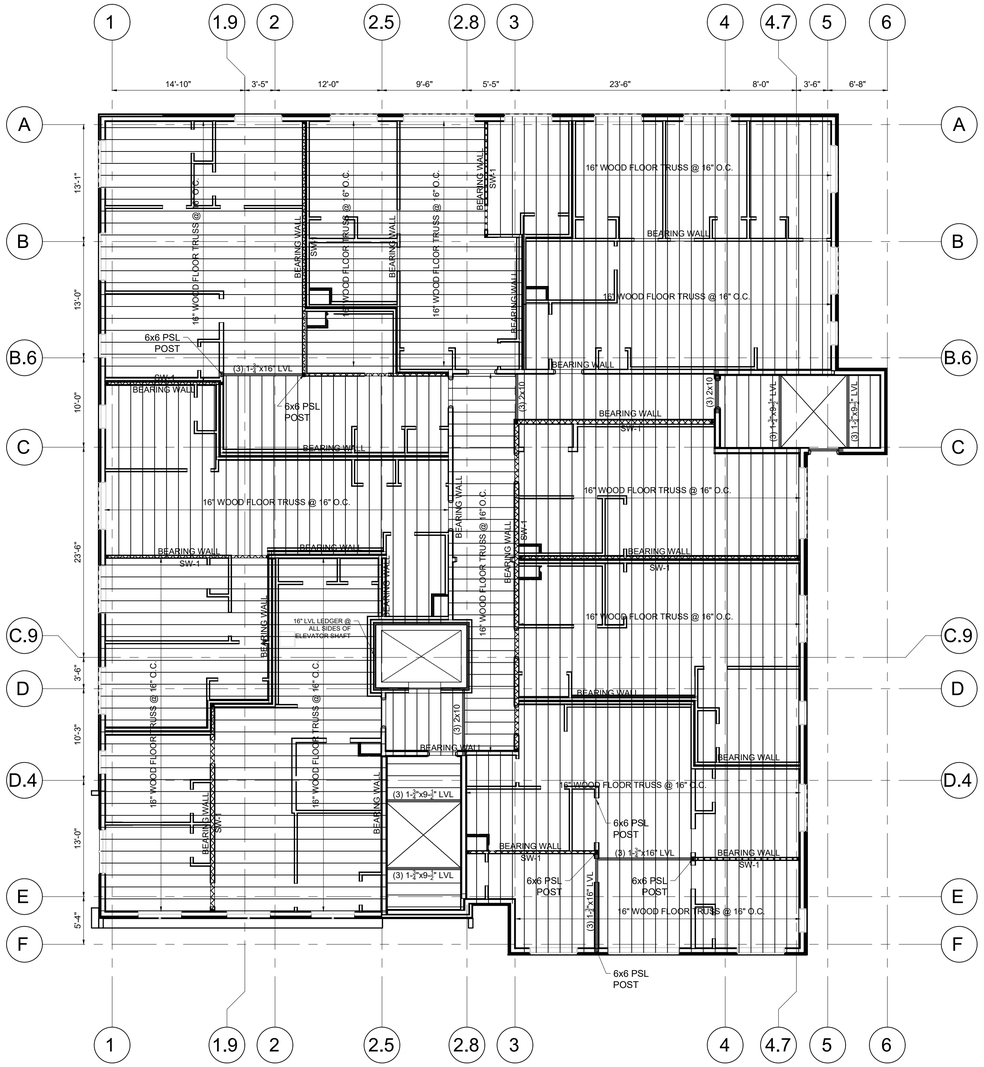
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

SECOND FLOOR FRAMING PLAN

Sheet No.

S-1.2



1 THIRD FLOOR FRAMING PLAN

1/8" = 1'-0"

NOTES:

1. ALL INTERIOR WOOD STUDS TO BE 2x4 @ 16" U.N.O.
2. ALL EXTERIOR WOOD STUDS TO BE 2x6 FRT @ 16" O.C. U.N.O.
3. SEE BEARING WALL SCHEDULE FOR STUD SIZES U.N.O.
4. SEE SHEAR WALL SCHEDULE FOR SHEAR WALLS U.N.O.
5. ▨ INDICATES SHEAR WALL
6. ● INDICATES HOLDOWN

Location

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COMMONWEALTH OF MASSACHUSETTS
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REGISTERED
PROFESSIONAL ENGINEER

No.	Revision Date

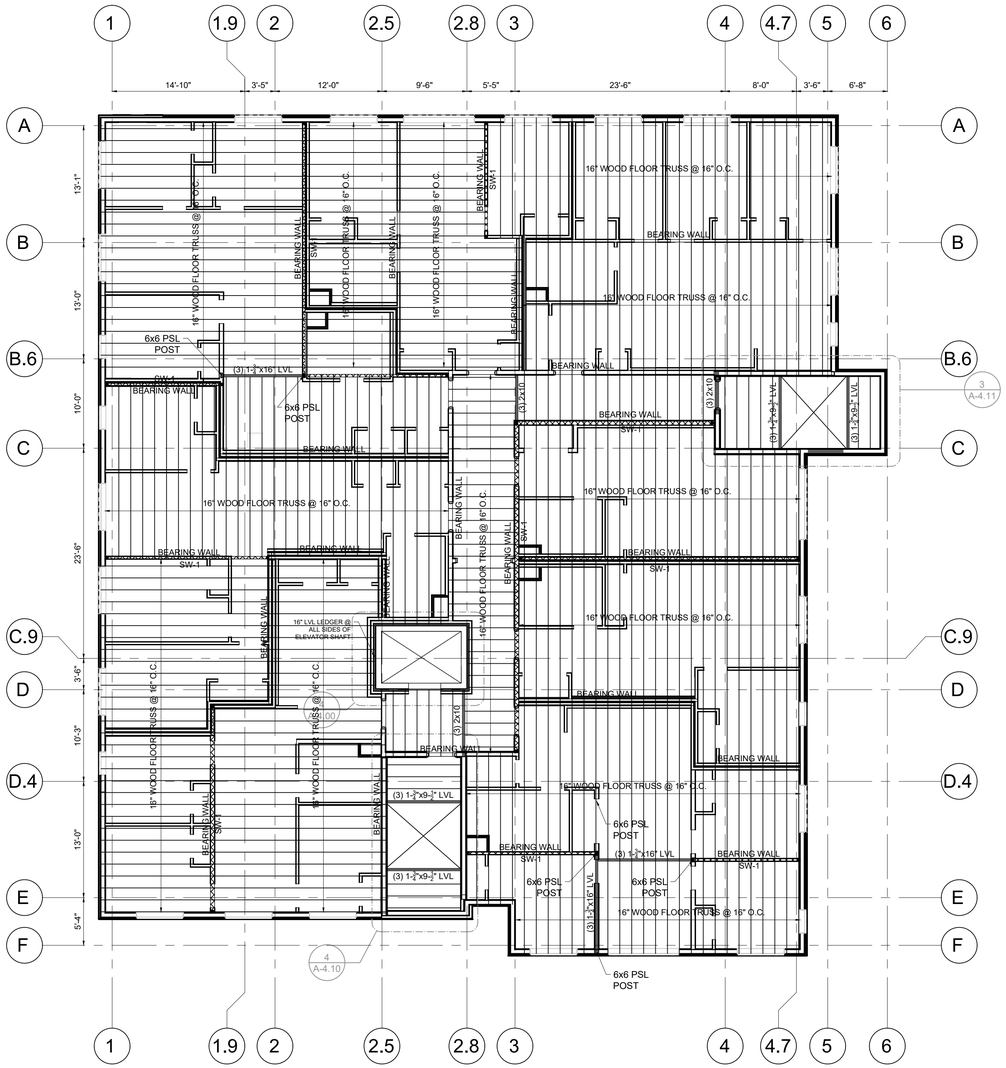
Project No: 2025014
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Drawn By: NS

Drawing Name

THIRD FLOOR FRAMING PLAN

Sheet No.

S-1.3



1 FOURTH FLOOR FRAMING PLAN

1/8" = 1'-0"

NOTES:

1. ALL INTERIOR WOOD STUDS TO BE 2x4 @ 16" U.N.O.
2. ALL EXTERIOR WOOD STUDS TO BE 2x6 FRT @ 16" O.C. U.N.O.
3. SEE BEARING WALL SCHEDULE FOR STUD SIZES U.N.O.
4. SEE SHEAR WALL SCHEDULE FOR SHEAR WALLS U.N.O.
5. ▨ INDICATES SHEAR WALL
6. ● INDICATES HOLDOWN

Location

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COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
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No.	Revision Date

Project No: 2025014

Scale: AS NOTED

Date: 01-07-2026

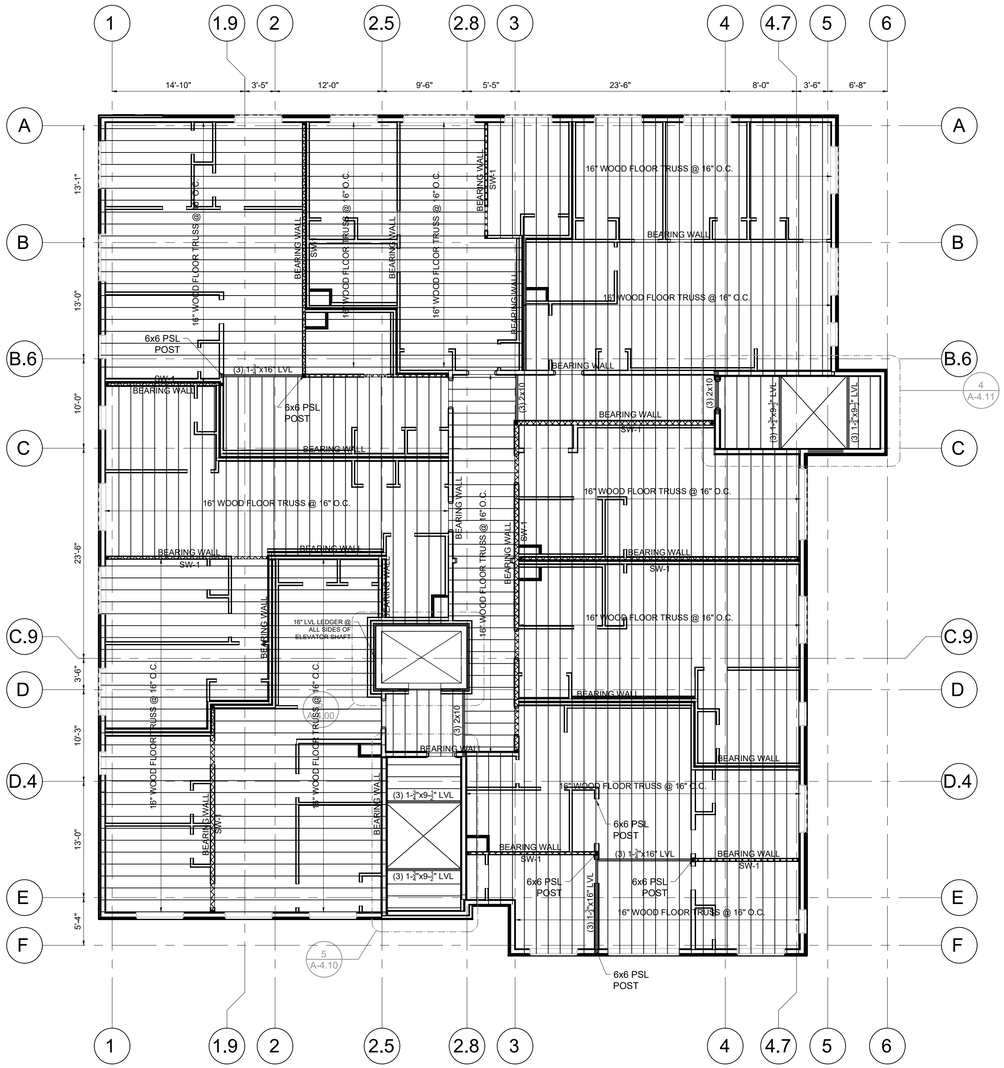
Drawn By: NS

Drawing Name

FOURTH FLOOR FRAMING PLAN

Sheet No.

S-1.4



1 FIFTH FLOOR FRAMING PLAN

1/8" = 1'-0"

NOTES:

1. ALL INTERIOR WOOD STUDS TO BE 2x4 @ 16" U.N.O.
2. ALL EXTERIOR WOOD STUDS TO BE 2x6 FRT @ 16" O.C. U.N.O.
3. SEE BEARING WALL SCHEDULE FOR STUD SIZES U.N.O.
4. SEE SHEAR WALL SCHEDULE FOR SHEAR WALLS U.N.O.
5. ▨ INDICATES SHEAR WALL
6. ● INDICATES HOLDOWN

Location

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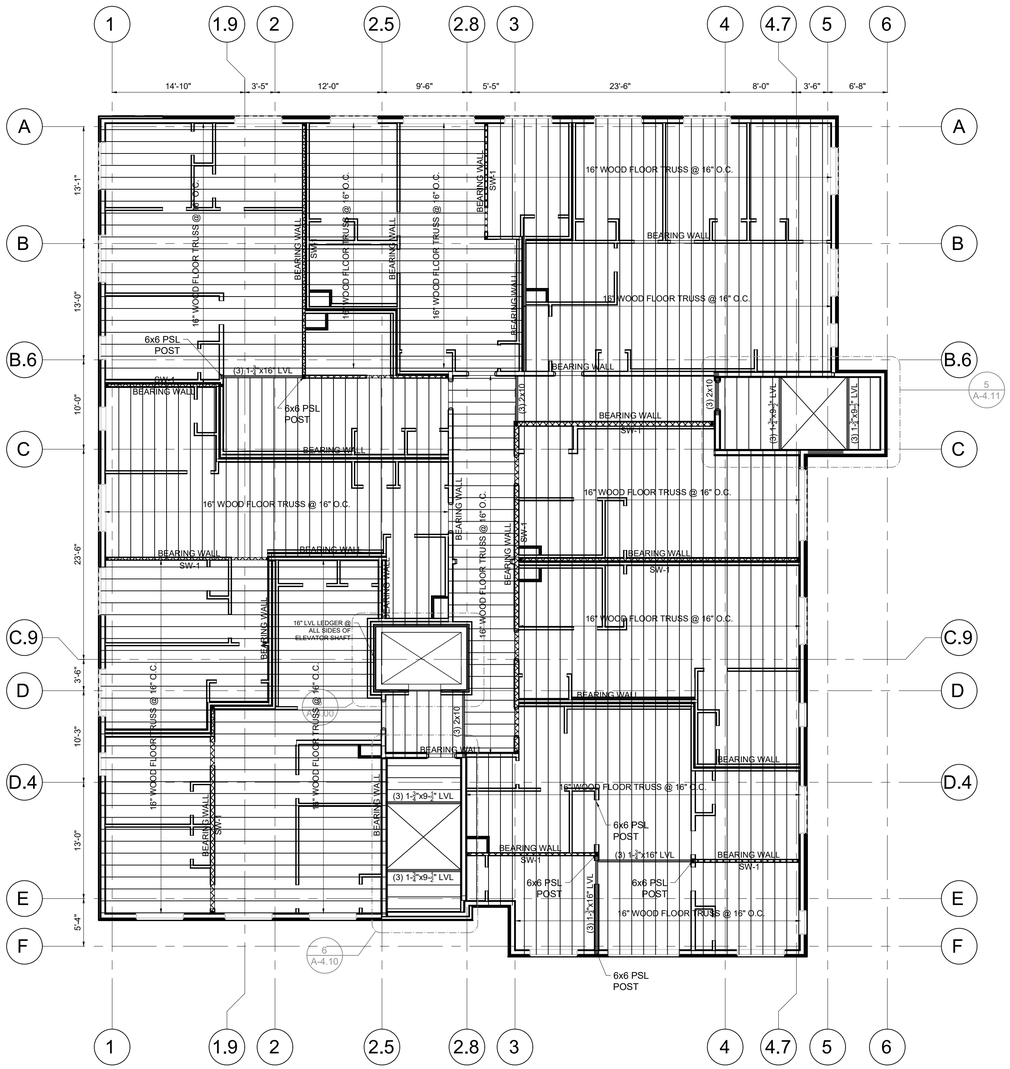
Drawn By: NS

Drawing Name

FIFTH FLOOR FRAMING PLAN

Sheet No.

S-1.5



1 SIXTH FLOOR FRAMING PLAN

1/8" = 1'-0"

NOTES:

1. ALL INTERIOR WOOD STUDS TO BE 2x4 @ 16" U.N.O.
2. ALL EXTERIOR WOOD STUDS TO BE 2x6 FRT @ 16" O.C. U.N.O.
3. SEE BEARING WALL SCHEDULE FOR STUD SIZES U.N.O.
4. SEE SHEAR WALL SCHEDULE FOR SHEAR WALLS U.N.O.
5. ▨ INDICATES SHEAR WALL
6. ● INDICATES HOLDOWN

Location

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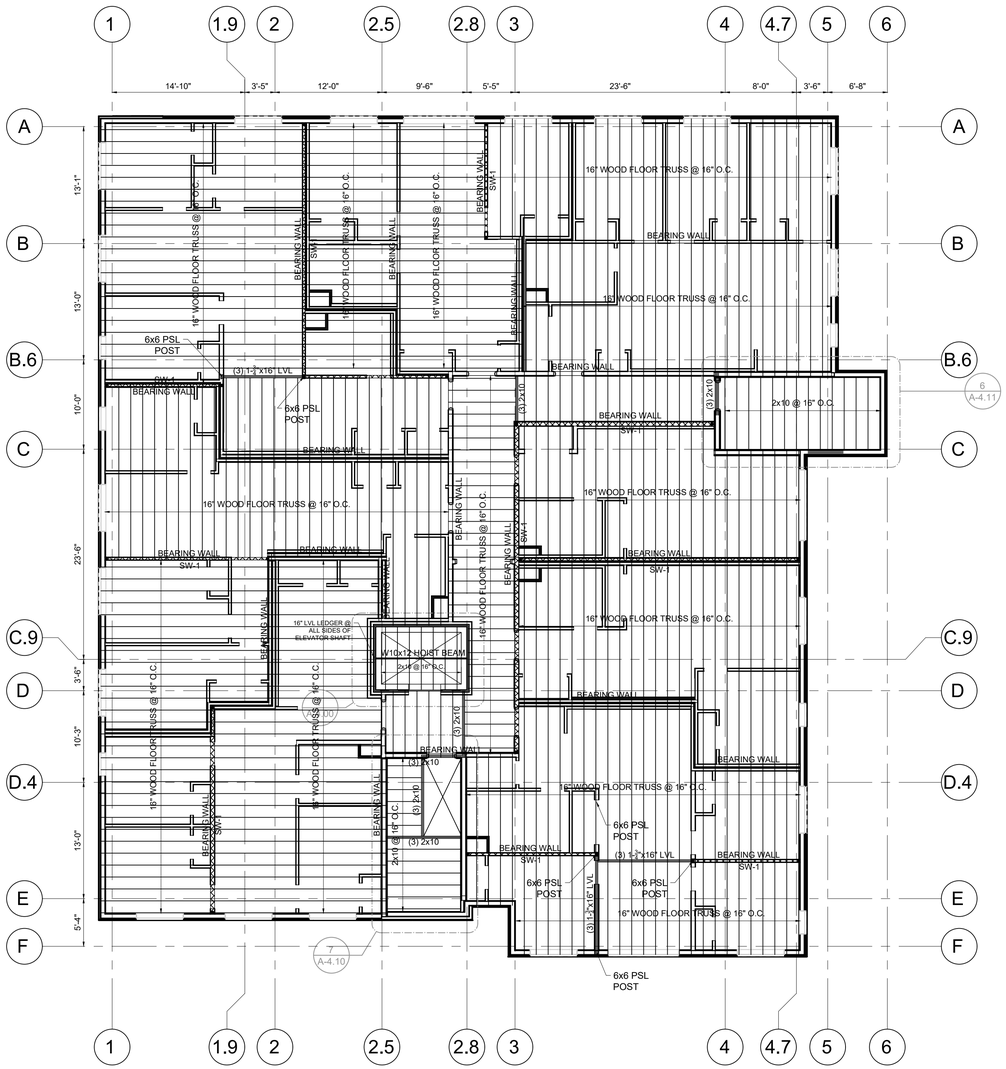
Project No: 2025014
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Date: 01-07-2026
Drawn By: NS

Drawing Name

SIXTH FLOOR FRAMING PLAN

Sheet No.

S-1.6



1 ROOF FRAMING PLAN

1/8" = 1'-0"

NOTES:

1. ALL INTERIOR WOOD STUDS TO BE 2x4 @ 16" U.N.O.
2. ALL EXTERIOR WOOD STUDS TO BE 2x6 FRT @ 16" O.C. U.N.O.
3. SEE BEARING WALL SCHEDULE FOR STUD SIZES U.N.O.
4. SEE SHEAR WALL SCHEDULE FOR SHEAR WALLS U.N.O.
5. ▨ INDICATES SHEAR WALL
6. ● INDICATES HOLDOWN

Location

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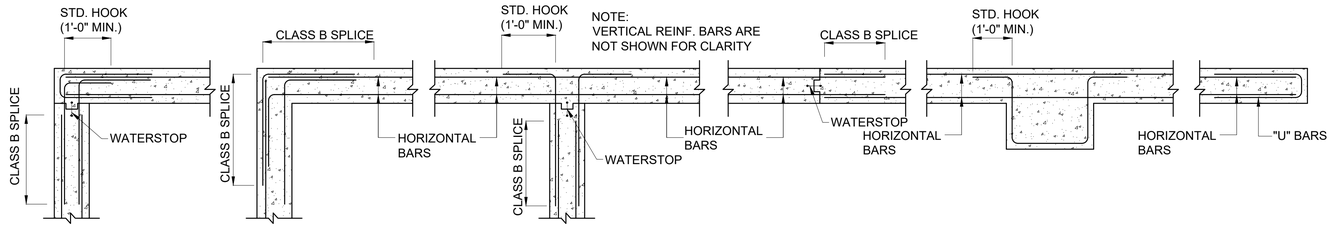
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Drawing Name

ROOF FRAMING PLAN

Sheet No.

S-1.7



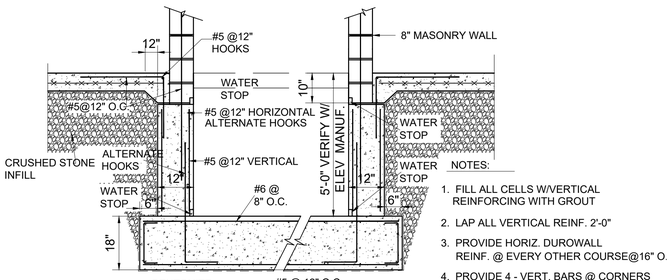
IF CONSTRUCTION JOINT EXISTS AT CORNERS

AT CORNERS

AT INTERSECTIONS

AT CONSTRUCTION JOINTS

AT PILASTERS

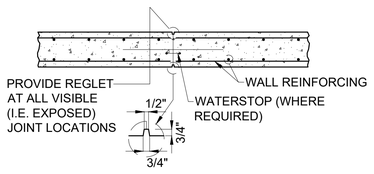


NOTES:

1. FILL ALL CELLS W/VERTICAL REINFORCING WITH GROUT
2. LAP ALL VERTICAL REINF. 2'-0"
3. PROVIDE HORIZ. DUROWALL REINF. @ EVERY OTHER COURSE@16" O.
4. PROVIDE 4 - VERT. BARS @ CORNERS 2 - VERT. BARS @ DOOR JAMBS
5. PROVIDE 2'-8" WIDE VERTICAL SECTION @ ELEVATOR RAIL MOUNTS W/#6 VERT. @8"O.C., FULL HEIGHT

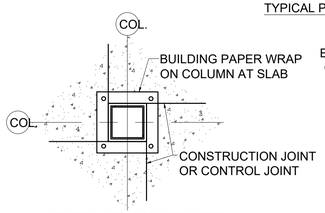
1 ELEVATOR PIT DETAIL
1/2" = 1'-0"

SAME SIZE AND SPACING
AS HORIZONTAL REINFORCING
(2 X ld LONG)

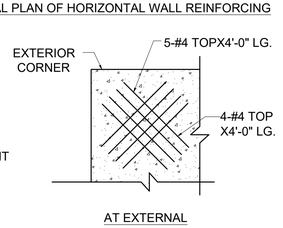


TYPICAL VERTICAL WALL CONTROL JOINT

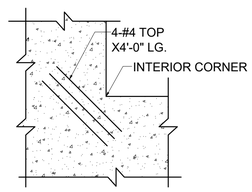
TYPICAL PLAN OF HORIZONTAL WALL REINFORCING



TYPICAL COLUMN ISOLATION JOINT DETAIL
SCALE: 1"=1'-0"

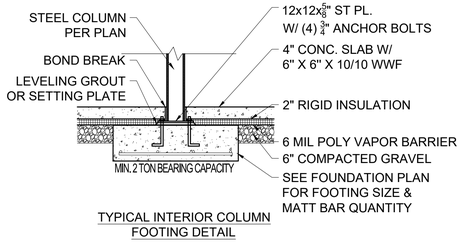


AT EXTERNAL



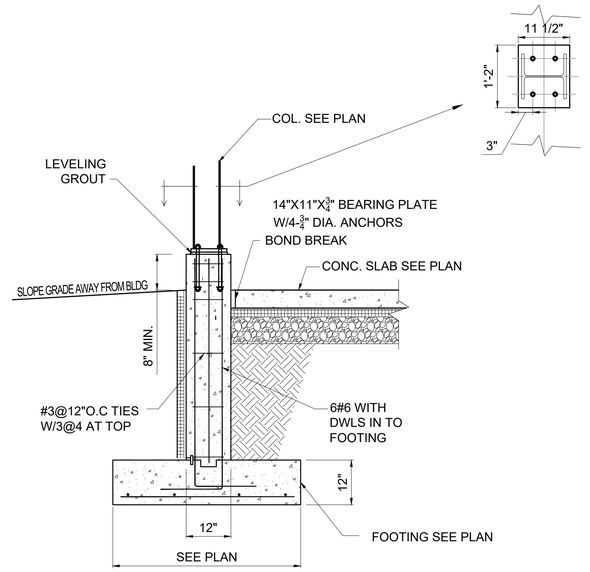
AT INTERNAL

ADDITIONAL REINFORCING AT THE SLAB CORNERS



TYPICAL INTERIOR COLUMN FOOTING DETAIL

TYPICAL CONCRETE DETAILS
1/2" = 1'-0"



2 CONCRETE PIER DETAIL
3/4" = 1'-0"

FOOTING SCHEDULE (2.0 TONS PER SQUARE FOOT BEARING PRESSURE)

MARK	F3.0	F3.5	F4.0	F5.0	F5.5	F6.0	F6.5	F7.0	F7.5	F8.0	F8.5
SIZE	3'-0" x 3'-0" x 1'-6"DP	3'-6" x 3'-6" x 1'-6"DP	4'-0" x 4'-0" x 1'-6"DP	5'-0" x 5'-0" x 1'-6"DP	5'-6" x 5'-6" x 1'-6"DP	6'-0" x 6'-0" x 1'-8"DP	6'-6" x 6'-6" x 1'-8"DP	7'-0" x 7'-0" x 1'-10"DP	7'-6" x 7'-6" x 2'-0"DP	8'-0" x 8'-0" x 2'-0"DP	8'-0" x 8'-0" x 2'-0"DP
REINF. EA. WAY BOTTOM	4 - #5	5 - #5	5 - #5	7 - #5	8 - #5	7 - #6	8 - #6	9 - #6		9 - #6	10 - #6

Location

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HYDE PARK, MA 02136

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One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

DOV KIRSZTAJN STRUCTURAL No. 31407 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

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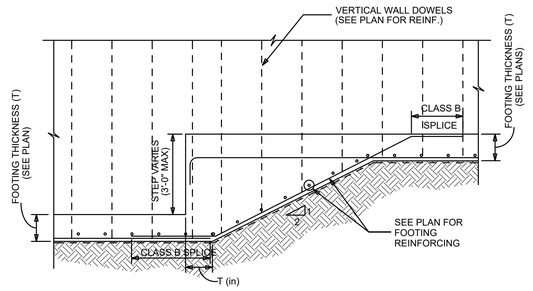
CONCRETE DETAILS I

Sheet No.

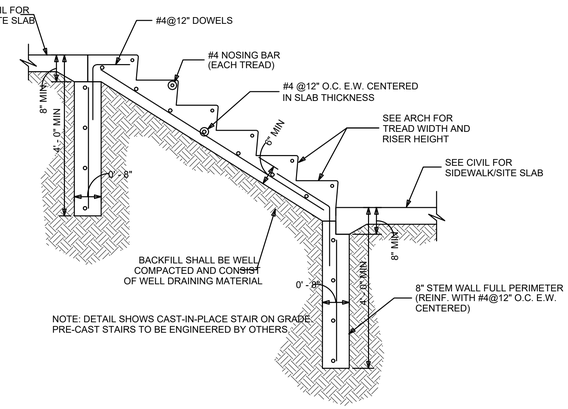
S-2.1

REBAR DEVELOPMENT TABLE																							
1. FOR USE WITH GRADE 60 DEFORMED REBARS 2. TOP BARS ARE BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS (PER ACI) 3. FOR GR 75 KSI REBAR, SPLICES IN TABLE BELOW SHALL BE INCREASE BY 25%.		**f'c=4000 PSI - NWC**																			
		NWC=NORMAL WEIGHT CONCRETE C=BAR CLEAR COVER (in) E=EPOXY COATED REBAR														LWC=LIGHTWEIGHT CONCRETE S=CLEAR BAR SPACING (in) U=UNCOATED REBAR					
REBAR SIZE	CLASS A SPLICE = TENSION DEVELOPMENT LENGTH	C ≥ 0.75 in S ≥ 1.50 in				C ≥ 1.0 in S ≥ 2.0 in				C ≥ 1.25 in S ≥ 2.50 in				C ≥ 1.50 in S ≥ 3.0 in				C ≥ 2.00 in S ≥ 4.0 in				C ≥ 3.00 in S ≥ 6.0 in			
	CLASS B SPLICE = LAP SPLICE LENGTH	U		E		U		E		U		E		U		E		U		E		U		E	
		TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER
#3	A	12	12	15	13	12	12	15	13	12	12	14	12	12	12	14	12	12	12	14	12	12	12	14	12
	B	15	12	19	17	15	12	19	17	15	12	18	14	15	12	18	14	15	12	18	14	15	12	18	14
#4	A	19	15	25	22	15	12	20	18	15	12	20	18	15	12	18	14	15	12	18	14	15	12	18	14
	B	25	19	32	28	20	15	26	23	20	15	26	23	20	15	24	18	20	15	24	18	20	15	24	18
#5	A	28	21	36	32	23	17	29	26	19	15	25	22	19	15	25	22	19	15	23	18	19	15	23	18
	B	36	28	47	41	29	23	38	34	25	19	32	28	25	19	32	28	25	19	29	23	25	19	29	23
#6	A	37	29	49	43	31	24	40	35	26	20	34	30	23	18	30	26	23	18	30	26	23	18	27	21
	B	49	37	63	56	40	31	52	46	34	26	44	39	29	23	38	34	29	23	38	34	29	23	35	27
#7	A	60	46	78	69	50	38	65	57	42	33	55	49	37	29	48	43	33	25	43	38	33	25	39	30
	B	78	60	102	90	65	50	84	74	55	42	72	63	48	37	63	55	43	33	56	49	43	33	51	39
#8	A	74	57	97	86	62	48	81	72	53	41	70	61	47	36	61	54	37	29	49	43	37	29	45	35
	B	97	74	126	111	81	62	105	93	69	53	90	80	61	47	79	70	49	37	63	56	49	37	58	45
#9	A	90	69	118	104	76	58	99	87	65	50	85	75	58	44	75	66	46	36	61	53	42	33	55	49
	B	117	90	153	135	98	76	128	113	85	65	111	98	75	58	97	86	60	46	79	69	55	42	71	63
#10	A	108	83	141	125	92	71	120	106	80	61	104	92	70	54	92	81	57	44	75	66	47	37	62	55
	B	141	108	184	162	119	92	156	137	103	80	135	119	91	70	119	105	74	57	97	85	62	47	80	71
#11	A	127	98	166	146	108	83	142	125	95	73	124	109	84	65	110	97	68	53	89	79	53	41	69	61
	B	165	127	215	190	141	108	184	162	123	95	160	142	109	84	142	126	89	68	116	102	68	53	89	79

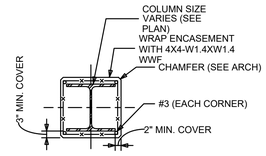
REBAR DEVELOPMENT TABLE																							
1. FOR USE WITH GRADE 60 DEFORMED REBARS 2. TOP BARS ARE BARS WITH MORE THAN 12" OF CONCRETE CAST BELOW THE BARS (PER ACI) 3. FOR GR 75 KSI REBAR, SPLICES IN TABLE BELOW SHALL BE INCREASE BY 25%.		**f'c=4000 PSI - LWC**																			
		NWC=NORMAL WEIGHT CONCRETE C=BAR CLEAR COVER (in) E=EPOXY COATED REBAR														LWC=LIGHTWEIGHT CONCRETE S=CLEAR BAR SPACING (in) U=UNCOATED REBAR					
REBAR SIZE	CLASS A SPLICE = TENSION DEVELOPMENT LENGTH	C ≥ 0.75 in S ≥ 1.50 in				C ≥ 1.0 in S ≥ 2.0 in				C ≥ 1.25 in S ≥ 2.50 in				C ≥ 1.50 in S ≥ 3.0 in				C ≥ 2.00 in S ≥ 4.0 in				C ≥ 3.00 in S ≥ 6.0 in			
	CLASS B SPLICE = LAP SPLICE LENGTH	U		E		U		E		U		E		U		E		U		E		U		E	
		TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER	TOP	OTHER
#3	A	15	12	19	17	15	12	19	17	15	12	18	14	15	12	18	14	15	12	18	14	15	12	18	14
	B	19	15	25	22	19	15	25	22	19	15	23	18	19	15	23	18	19	15	23	18	19	15	23	18
#4	A	25	19	32	28	20	15	26	23	20	15	26	23	20	15	24	18	20	15	24	18	20	15	24	18
	B	32	25	41	37	26	20	33	29	26	20	33	29	26	20	31	24	26	20	31	24	26	20	31	24
#5	A	36	28	47	41	29	23	38	34	25	19	32	28	25	19	32	28	25	19	29	23	25	19	29	23
	B	46	36	61	54	38	29	49	43	32	25	41	37	32	25	41	37	32	25	38	29	32	25	38	29
#6	A	49	37	63	56	40	31	52	46	34	26	44	39	29	23	38	34	29	23	38	34	29	23	35	27
	B	63	49	82	73	52	40	67	60	44	34	57	50	38	29	50	44	38	29	50	44	38	29	46	35
#7	A	78	60	102	90	65	50	84	74	55	42	72	63	48	37	63	55	43	33	56	49	43	33	51	39
	B	101	78	132	117	84	65	109	97	71	55	93	82	62	48	81	72	55	43	72	64	55	43	66	51
#8	A	97	74	126	111	81	62	105	93	69	53	90	80	61	47	79	70	49	37	63	56	49	37	58	45
	B	126	97	164	145	105	81	137	121	90	69	117	104	79	61	103	91	63	49	82	73	63	49	76	58
#9	A	117	90	153	135	98	76	128	113	85	65	111	98	75	58	97	86	60	46	79	69	55	42	71	63
	B	152	117	198	175	128	98	167	147	110	85	144	127	97	75	127	112	78	60	102	90	71	55	93	82
#10	A	141	108	184	162	119	92	156	137	103	80	135	119	91	70	119	105	74	57	97	85	62	47	80	71
	B	183	141	239	211	155	119	202	178	134	103	175	155	119	91	155	137	96	74	126	111	80	62	104	92
#11	A	165	127	215	190	141	108	184	162	123	95	160	142	109	84	142	126	89	68	116	102	68	53	89	79
	B	214	165	280	247	183	141	239	211	159	123	208	184	141	109	185	163	115	89	151	133	89	68	116	102



1 TYPICAL STEPPED FOOTING DETAIL
1" = 1'-0"

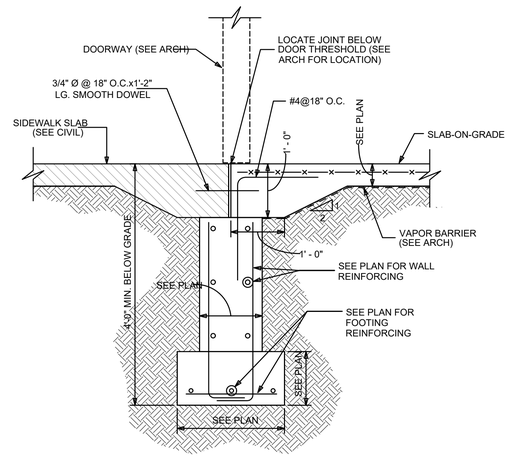


2 TYPICAL EXTERIOR SLAB ON GRADE DETAIL
1" = 1'-0"

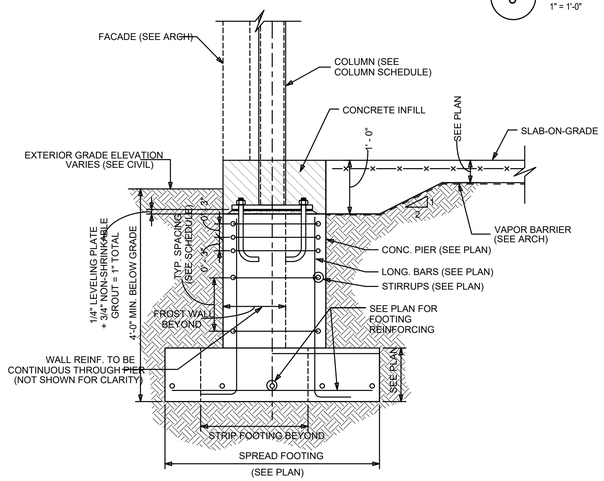


NOTES:
1. SEE ARCH DWGS FOR ENCASEMENT HEIGHT
2. APPLIES TO ALL COLUMNS WITHIN GARAGE THAT ARE SUSCEPTIBLE TO VEHICLE IMPACT AND WHERE SPECIFICALLY SHOWN ON THE ARCH DWGS
3. AT COLUMNS THAT ENGAGE CMU WALLS, PROVIDE FULL HEIGHT ENCASEMENT
4. AT HSS COLUMNS PROVIDE MIN. OF 3" COVER OR GREATER AS REQUIRED TO MEET FIRE RATING REQUIREMENTS.

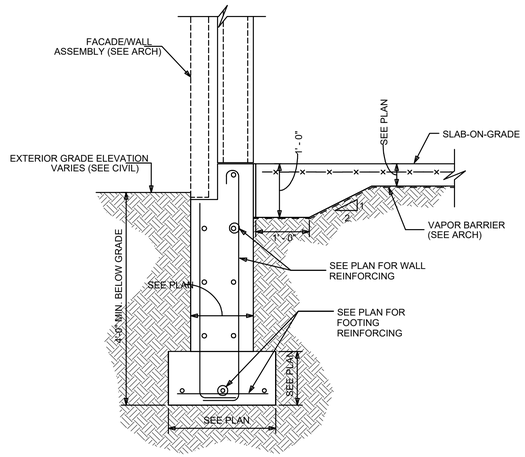
3 TYPICAL COLUMN ENCASEMENT
1" = 1'-0"



4 TYPICAL FROST WALL DETAIL @ DOORWAY
1" = 1'-0"



5 TYPICAL FROST WALL DETAIL @ PIER
1" = 1'-0"



6 TYPICAL FROST WALL DETAIL
1" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31401
REGISTERED
PROFESSIONAL ENGINEER

No.	Revision Date

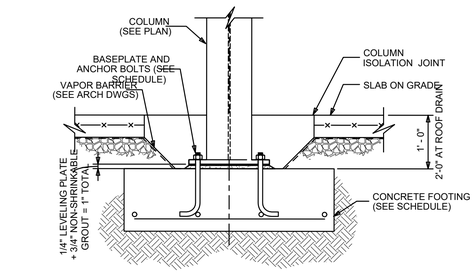
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

CONCRETE DETAILS II

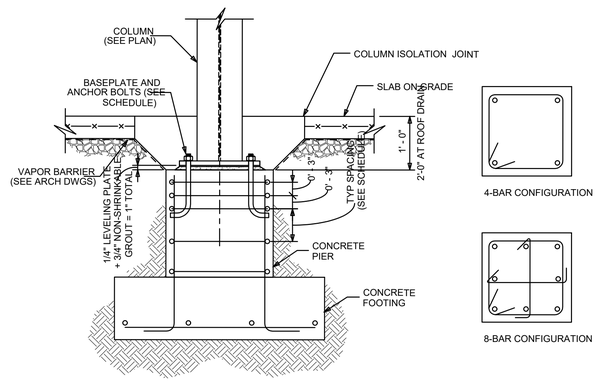
Sheet No.

S-2.2



1 TYPICAL INTERIOR COLUMN FOOTING DETAIL

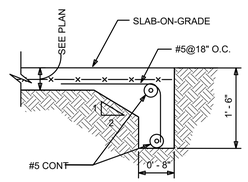
3/4" = 1'-0"



NOTES:
1. SEE PIER AND FOOTING SCHEDULE FOR GEOMETRY AND REINFORCING SIZE/SPACING.
2. AT EXTERIOR CONDITIONS OR WHERE THE FOOTING IS EXPOSED TO FREEZE THAW, THE BOTTOM OF FOOTING SHALL EXTEND A MINIMUMN OF 4'-0" BELOW FINISHED GRADE.
3. REFER TO GEOTECH REPORT FOR SUBGRACE PREPARATION AND OVEREXCAVATE AND REPLACE REQUIREMENTS.

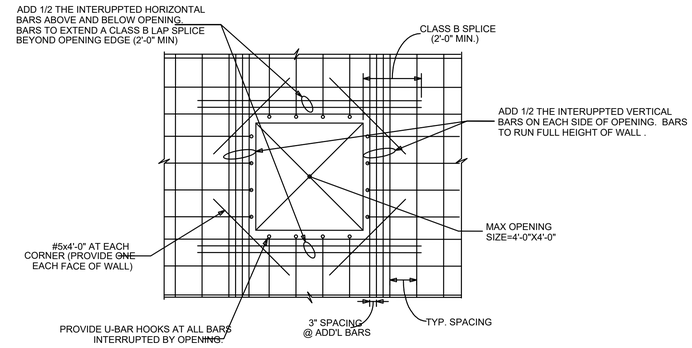
2 TYPICAL INTERIOR COLUMN PIER AND FOOTING DETAIL

3/4" = 1'-0"



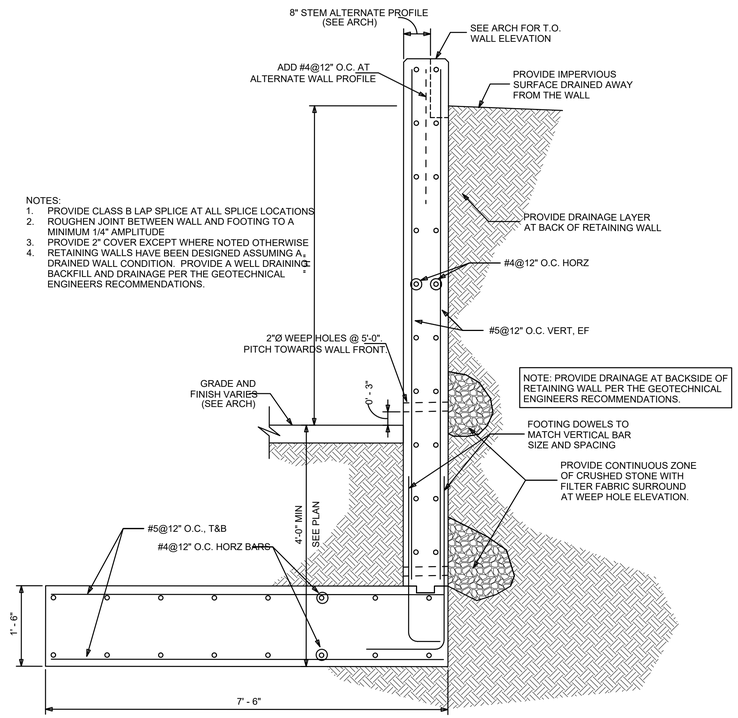
3 TYPICAL SLAB ON GRADE TURN DOWN @ PERIMETER

3/4" = 1'-0"



4 TYPICAL WALL REINFORCING @ OPENINGS

3/4" = 1'-0"



NOTES:
1. PROVIDE CLASS B LAP SPLICE AT ALL SPLICE LOCATIONS
2. ROUGHEN JOINT BETWEEN WALL AND FOOTING TO A MINIMUM 1/4" AMPLITUDE
3. PROVIDE 2" COVER EXCEPT WHERE NOTED OTHERWISE
4. RETAINING WALLS HAVE BEEN DESIGNED ASSUMING A DRAINED WALL CONDITION. PROVIDE A WELL DRAINING BACKFILL AND DRAINAGE PER THE GEOTECHNICAL ENGINEERS RECOMMENDATIONS.

5 TYPICAL RETAINING WALL SECTION

3/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31457
REGISTERED PROFESSIONAL ENGINEER

No.	Revision Date

Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

CONCRETE DETAILS III

Sheet No.

S-2.3

RECOMMENDED FASTENING SCHEDULE

BUILDING ELEMENT	NAIL SIZE AND TYPE	NUMBER AND LOCATION
STUD TO SOLE PLATE	8D COMMON 16D COMMON	4 TOE-NAIL OR 2 DIRECT-NAIL
STUD TO CAP PLATE	16D COMMON	2 TOE-NAIL OR 2 DIRECT-NAIL
DOUBLE STUDS	10D COMMON	12" O.C. DIRECT
CORNER STUDS	16D COMMON	24" O.C. DIRECT
SOLE PLATE TO JOIST OR BLOCKING	16D COMMON	16" O.C.
DOUBLE CAP PLATE	10D COMMON	16" O.C. DIRECT
CAP PLATE LAPS	10D COMMON	2 DIRECT-NAIL
RIBBON STRIP, 6" OR LESS	10D COMMON	2 EACH DIRECT BEARING
RIBBON STRIP, 6" OR MORE	10D COMMON	3 EACH DIRECT BEARING
ROOF RAFTER TO PLATE	8D COMMON	3 TOE-NAIL
JACK RAFTER TO RIDGE	16D COMMON	2 TOE-NAIL OR DIRECT-NAIL
JACK RAFTER TO HIP	10D COMMON 16D COMMON	3 TOE-NAIL OR 2 DIRECT-NAIL
FLOOR JOISTS TO STUDS (NO CEILING JOISTS)	10D COMMON 10D COMMON	5 DIRECT OR 3 DIRECT
FLOOR JOISTS TO STUDS (WITH CEILING JOISTS)	10D COMMON	2 DIRECT
FLOOR JOISTS TO SILL OR GIRDER	3D COMMON	3 TOE-NAIL
LEDGER STRIP	16D COMMON	3 EACH DIRECT
CEILING JOISTS TO PLATE	16D COMMON	3 TOE-NAIL
CEILING JOISTS (LAPS OVER PARTITION)	10D COMMON	3 DIRECT-NAIL
CEILING JOISTS (PARALLEL TO RAFTER)	10D COMMON	3 DIRECT
COLLAR BEAM	10D COMMON	3 DIRECT
BRIDGING TO JOISTS	8D COMMON	2 EACH DIRECT END
DIAGONAL BRACE (TO STUD AND PLATE)	8D COMMON	2 EACH DIRECT BEARING
TAIL BEAMS TO HEADERS (WHEN NAILING PERMITTED)	20D COMMON	1 EACH END 4 SQ. FT. FLOOR AREA
HEADER BEAMS TO TRIMMERS	20D COMMON	1 EACH END 8 SQ. FT. FLOOR AREA
1" ROOF DECKING (OVER 6" IN WIDTH)	8D COMMON 8D COMMON	2 EACH DIRECT RAFTER 3 EACH DIRECT RAFTER
1" SUBFLOORING (6" OR LESS)	8D COMMON	2 EACH DIRECT JOIST
1" SUBFLOORING (8" OR MORE)	8D COMMON	3 EACH DIRECT JOIST
2" SUBFLOORING	16D COMMON	2 EACH DIRECT JOIST
1" WALL SHEATHING (8" OR LESS IN WIDTH)	8D COMMON	2 EACH DIRECT STUD
1" WALL SHEATHING (OVER 8" IN WIDTH)	8D COMMON	3 EACH DIRECT STUD
PLYWOOD ROOF & WALL SHEATHING (1/2" OR LESS) (5/8" OR GREATER) (5/16",3/8", OR 1/2") (OVER 6" IN WIDTH)	6D COMMON 8D COMMON 16 GAUGE GALVANIZED WIRE STAPLES, 3/8" MINIMUM CROWN; LENGTH OF 1" PLUS PLYWOOD THICKNESS SAME AS IMMEDIATELY ABOVE	6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 12" O.C. INTERMEDIATE 4" O.C. EDGES & 8" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 5" O.C. INTERMEDIATE
PLYWOOD SUBFLOORING (1/2") (3/8", 3/4") (1", 1 1/8") (1/2") (3/8")	6D COMMON OR 6D ANNULAR OR SPIRAL THREAD 8D COMMON OR 8D ANNULAR OR SPIRAL THREAD 10D COMMON OR 8D RING SHANK OR 8D ANNULAR OR SPIRAL THREAD 16D GALVANIZED WIRE STAPLES 3/8" MINIMUM CROWN; 1 3/8' LENGTH	6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 10" O.C. INTERMEDIATE 6" O.C. DIRECT EDGES & 6" O.C. INTERMEDIATE 4" O.C. EDGES & 7" O.C. INTERMEDIATE 2 1/2" O.C. EDGES & 4" O.C. INTERMEDIATE
BUILT-UP GIRDERS AND BEAMS	20D COMMON	32" O.C. DIRECT
CONTINUOUS HEADER TO STUD	8D COMMON	4 TOE-NAIL
CONTINUOUS HEADER, TWO PIECES	16D COMMON	16" O.C. DIRECT
1/2" FIBER BOARD SHEATHING	1 1/2" GALVANIZED ROOFING NAIL OR 16 GAUGE STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	3" O.C. EXTERIOR EDGE 6" O.C. INTERMEDIATE
25/32" FIBER BOARD SHEATHING	1 3/4" GALVANIZED ROOFING NAIL OR 8D COMMON NAIL OR 16 GAUGE STAPLE, 1 1/2" LONG WITH MIN. CROWN OF 7/16"	3" O.C. EXTERIOR EDGE 6" O.C. INTERMEDIATE
GYPSUM SHEATHING	12 GAUGE 1 3/4" LARGE HEAD CORROSION-RESISTANT	4" O.C. EDGE 8" O.C. INTERMEDIATE
PARTICLE BOARD UNDERLAYMENT (1/4"-3/4")	6D ANNULAR THREADED	6" O.C. DIRECT EDGES 10" O.C. INTERMEDIATE
PARTICLE BOARD ROOF AND WALL SHEATHING 1/2" OR LESS	6D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
5/8" OR GREATER	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
PARTICLE BOARD SUBFLOORING (5/8" OR GREATER)	8D COMMON	6" O.C. DIRECT EDGES 12" O.C. INTERMEDIATE
SHINGLES, WOOD*	NO. 14 B&S GAGE CORROSION RESISTIVE	2 EACH BEARING
WEATHER BOARDING	8D CORROSION	2 EACH BEARING

NOTE *: SHINGLE NAILS SHALL PENETRATE NOT LESS THAN 3/4" INTO NAILING STRIPS, SHEATHING OR SUPPORTING CONSTRUCTION EXCEPT AS OTHERWISE PROVIDED IN 780 CMR 1225.4.4.

HORIZONTAL WALL REINFORCEMENT LAP SCHEDULE			
DUR-O-WALL DESIGNATION	MILL SIZE	DIAMETER	75d LAP
LIGHT	11ga.	.1205	10"
STANDARD	9ga.	.1483	12"
MEDIUM	8ga.	.1620	13"
EXTRA HEAVY	3/16"	.1875	14"

BLOCK WIDTH	VERTICAL** REINFORCING	HORIZONTAL REINFORCING**	
		WALL	BOND BEAM
8" CMU	#7 @ 32" O.C.	STANDARD DUR-O-WALL * LADUR TYPE @ 16" O.C.	1 - #8
10" CMU	#7 @ 32" O.C.	STANDARD DUR-O-WALL * LADUR TYPE @ 16" O.C.	2 - #7
12" CMU	#7 @ 32" O.C.	STANDARD DUR-O-WALL * LADUR TYPE @ 16" O.C.	2 - #6

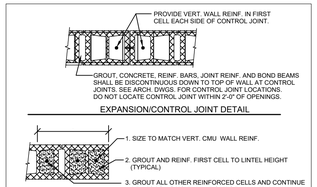
* DUR-O-WALL OR EQUAL MANUFACTURER

** MINIMUM UNLESS OTHERWISE NOTED ON PLANS OR SECTIONS. REFER TO FOUNDATION PLANS FOR SPECIFIC SIZE, SPACING AND LIMITS OF VERTICAL CMU WALL REINFORCING.

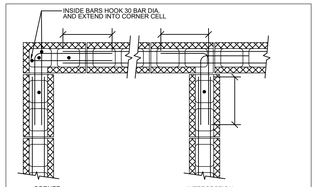
*** BOND BEAM REINFORCEMENT UNLESS OTHERWISE SHOWN ON DETAILS.

REBAR LAP SCHEDULE							
SIZE	#3	#4	#5	#6	#7	#8	#9
LAP	18"	24"	30"	36"	42"	48"	54"

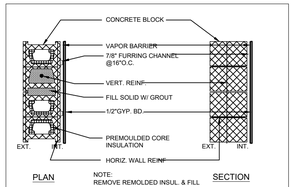
1 CMU WALL REINFORCING SCHEDULE



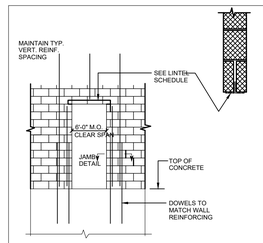
2 TYPICAL WALL DETAILS
SCALE: 3/4"=1'-0"



3 BOND BEAM PLAN DETAILS
SCALE: 3/4"=1'-0"



4 STANARD CMU BLOCK DETAILS



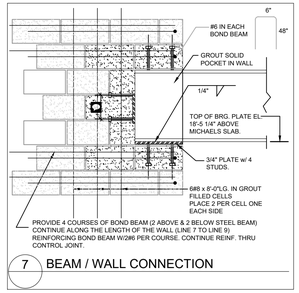
5 CMU WALL OPENING

MAXIMUM OPENING	6" THICK CMU WALL	8" THICK CMU WALL	12" THICK CMU WALL
4'-0"	2-L3 1/2x2 1/2x1/4	2-L3 1/2x3 1/2x1/4	3-L3 1/2x3 1/2x1/4
5'-0"	2-L3 1/2x2 1/2x1/4	2-L4x3 1/2x1/4	3-L4x3 1/2x1/4
6'-0"	2-L3 1/2x2 1/2x1/4	2-L5x3 1/2x1/4	3-L4x3 1/2x1/4
8'-0"	2-L3 1/2x2 1/2x1/4	2-L6x3 1/2x3/8	3-L4x3 1/2x3/8
10'-0"	2-L3 1/2x2 1/2x3/8	2-L6x3 1/2x3/8	3-L4x3 1/2x3/8
12'-0"	2-L3 1/2x2 1/2x3/8	2-L6x3 1/2x1/2	3-L6x3 1/2x1/2

NOTES:

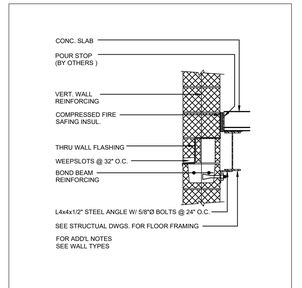
1. PROVIDE AND INSTALL LINTEL ANGLES FOR MASONRY OPENINGS IN ACCORDANCE WITH THE SCHEDULE ABOVE. INSTALL LONG LEG VERTICAL.
2. PROVIDE 6" MINIMUM BEARING AT EACH END BUT NOT LESS THAN 1" PER FOOT OF SPAN. FILL 2 COURSES OF MASONRY BELOW BEARING WITH GROUT.
3. WHERE MINIMUM BEARING CANNOT BE PROVIDED, NOTIFY ARCHITECT.
4. WHERE LINTELS OCCUR IN EXTERIOR WALLS, MIMIMUM THICKNESS SHALL BE 5/16" AND ANGLES SHALL BE HOT DIPPPED GALVINIZED.
5. WHERE WALL THICKNESS EXCEEDS 12" PROVIDE ONE ADDITIONAL ANGLE FOR EACH ADDITIONAL 4" OF WALL.

6 STEEL LINTEL SCHEDULE



PROVIDE 4 COURSES OF BOND BEAM (2 ABOVE & 2 BELOW STEEL BEAM) CONTINUE ALONG THE LENGTH OF THE WALL (LINE 7 TO LINE 9) REINFORCING BOND BEAM W/2#6 PER COURSE. CONTINUE REINF. THRU CONTROL JOINT.

7 BEAM / WALL CONNECTION



8 SECTION AT FLOOR
SCALE: 3/4"=1'-0"

TYPICAL CMU DETAILS
1/2" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31401
REGISTERED PROFESSIONAL ENGINEER

No.	Revision Date

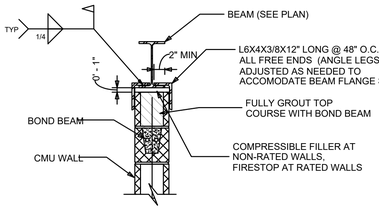
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

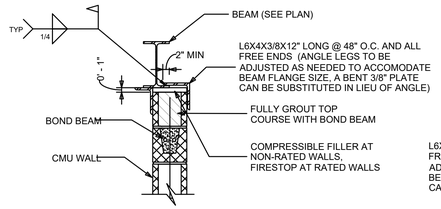
MISC. DETAILS

Sheet No.

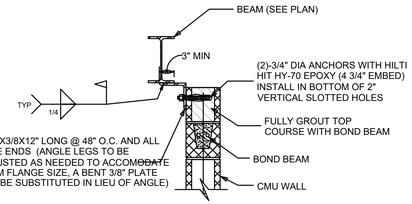
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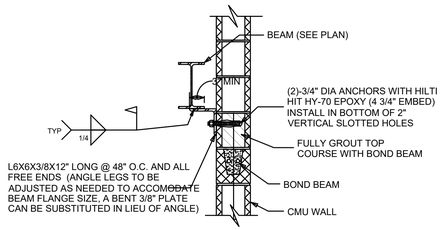
CENTERED ON BEAM



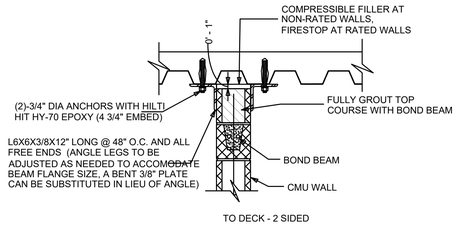
OFFSET FROM BEAM TYPE A



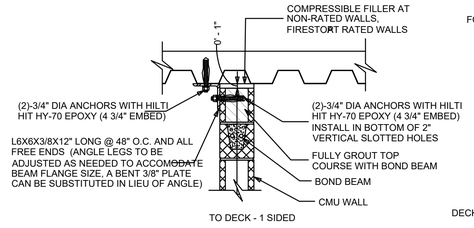
OFFSET FROM BEAM TYPE B



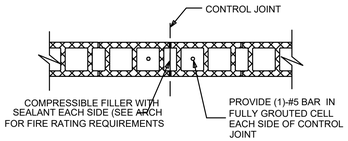
FLY-BY BEAM



TO DECK - 2 SIDED



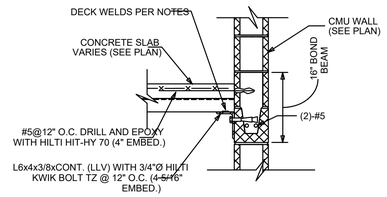
TO DECK - 1 SIDED



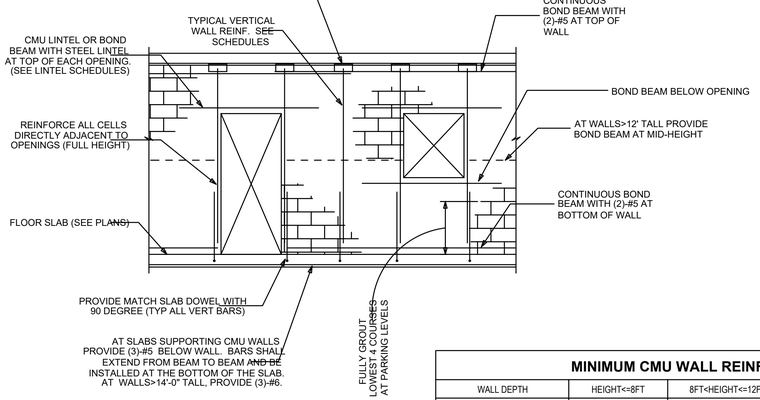
3 TYPICAL CMU CONTROL JOINT
3/4" = 1'-0"

1 CMU WALL CLIPS
3/4" = 1'-0"

NOTE:
1. MAX SPACING OF CLIPS IS 48" O.C. IF WALL REINFORCING IS SPACED LESS THAN 48" THE CLIP SPACING SHALL BE REDUCED TO MATCH THE REBAR SPACING
2. ALL CLIPS SHALL BE LOCATED AT VERTICALLY REINFORCED CELLS.
3. 1" COMPRESSIBLE FILLER SHALL BE MAINTAINED BETWEEN THE CMU WALL AND THE STRUCTURE ABOVE (SLABS, BEAMS, ETC.)



4 TYPICAL DECK SUPPORT ANGLE @ CMU
3/4" = 1'-0"



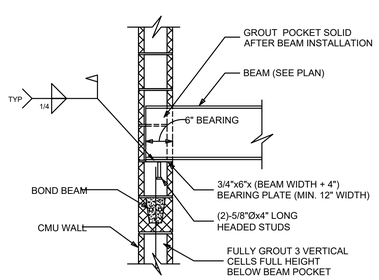
2 TYPICAL CMU REINFORCING LAYOUT
3/4" = 1'-0"

MINIMUM CMU WALL REINFORCING

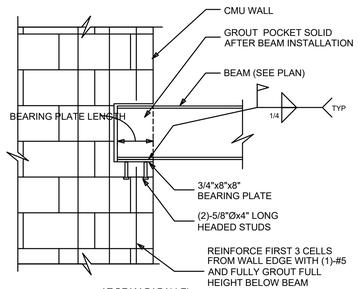
WALL DEPTH	HEIGHT<=8FT	8FT<HEIGHT<=12FT	12FT<HEIGHT<=20FT
6" INTERIOR	#4@48" O.C.	#4@48" O.C.	NOT PERMITTED
8" INTERIOR	#4@48" O.C.	#4@48" O.C.	#5@48" O.C.
8" EXTERIOR	#4@48" O.C.	#5@32" O.C.	NOT PERMITTED
10" EXTERIOR	#4@48" O.C.	#5@32" O.C.	#5@8" O.C.
8" PARKING (W/ POTENTIAL VEHICLE IMPACT)	#6@24" O.C.	#6@24" O.C.	#6@24" O.C. UP TO 16FT TALL

NOTES:

1. REINFORCING APPLIES TO NON-LOAD BEARING CMU WALLS ONLY. FOR STRUCTURAL LOAD BEARING WALLS (SEE PLANS)



AT BEAM PERPENDICULAR



AT BEAM PARALLEL

NOTE:
1. IF THE FACTORED BEAM END REACTIONS EXCEED (43 KIPS WHERE F'M=1500 PSI OR 57 KIPS WHERE F'M=2000 PSI)
THE BEARING PLATES SHALL BE UPSIZED AS FOLLOWS:
a. AT PERPENDICULAR = 1 1/2"x6"x18" (Ru<75 KIPS \WHERE F'M=1500 PSI OR Ru<100 KIPS WHERE F'M=2000 PSI)
b. AT PARALLEL= 3/4"x8"x14" (Ru<75 KIPS \WHERE F'M=1500 PSI OR Ru<100 KIPS WHERE F'M=2000 PSI)

5 TYPICAL CMU BEAM POCKET DETAIL
3/4" = 1'-0"

Location

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COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
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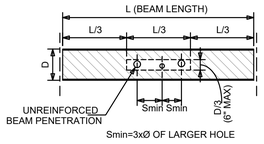
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Drawn By: NS

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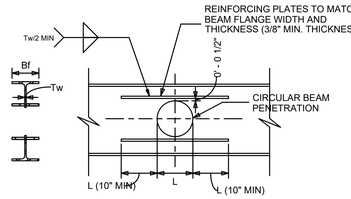
TYPICAL STEEL DETAILS I

Sheet No.

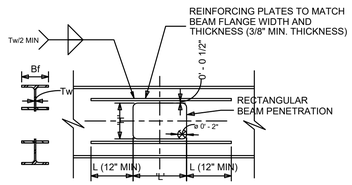
S-3.1



TYPE U - UNREINFORCED



TYPE R - REINFORCED @ CIRCULAR

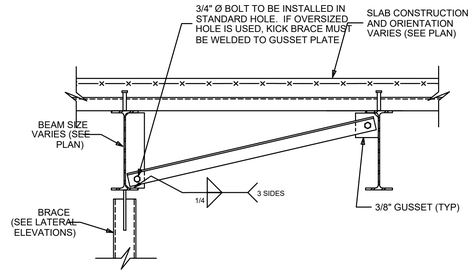


TYPE R - REINFORCED @ RECTANGULAR

1 TYPICAL BEAM PENETRATION DETAILS

3/4" = 1'-0"

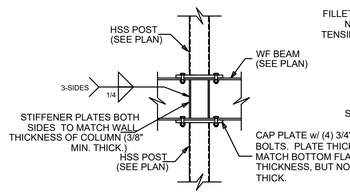
NOTES:
1. UNLESS BEAM PENETRATION SIZE AND LOCATION IS SPECIFICALLY SHOWN ON PLAN, ALL PENETRATIONS SHALL BE SUBMITTED OT THE ARCHITECT/ENGINEER FOR APPROVAL.
2. REINFORCING PLATES TO BE Fy=50 KSI.
3. FINISH LAST 1/8" OF HOLE BY REAMING OR GRINDING.
4. FOR PRICING, THE BASE BID SHALL INCLUDE THE PENETRATIONS SHOWN ON PLAN PLUS THOSE QUANITITIES LISTED BELOW. ADDITIONALLY, THE FABRICATOR SHALL PROVIDE BEAM PENETRATION UNIT COSTS FOR EACH BEAM PENETRATION TYPE, FOR BOTH SHOP INSTALLED AND FIELD INSTALLED.
   * (20) - 6" Ø TYPE R
   * (10) - 6" Ø TYPE U



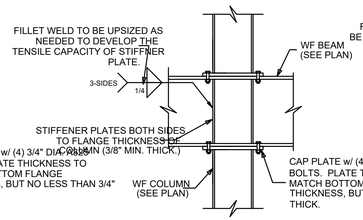
NOTES:
1. KICKER ANGLE SIZING AS FOLLOWS:
   -WHERE KICKER LENGTH <= 6 FT USE L3X3X3/8
   -WHERE KICKER LENGTH <= 12 FT USE L5X5X3/8
2. AT LOCATIONS WHERE THERE IS AN INFRAMING PERPENDICULAR BEAM WITHIN 12" OF THE GUSSET PLATE CENTERLINE, THE KICKER MAY BE OMITTED. THE IN-FRAMING BEAM SHALL UTILIZE A FULL DEPTH STIFFENER CONNECTION TO BRACE THE BOTTOM BEAM FLANGE.

2 TYPICAL BEAM FRAME KICK-BRACE DETAIL

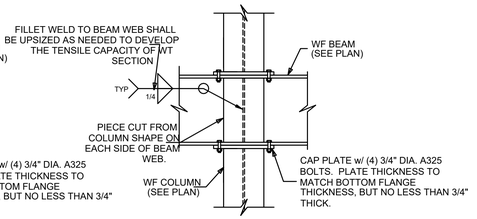
3/4" = 1'-0"



AT HSS COLUMN UP/DOWN



AT WF COLUMN UP/DOWN (PARALLEL)

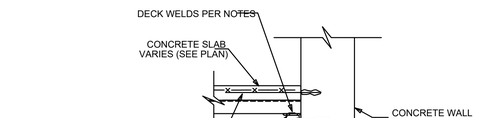


AT WF COLUMN UP/DOWN (PERP.)

3 TYPICAL COLUMN UP/DN DETAILS

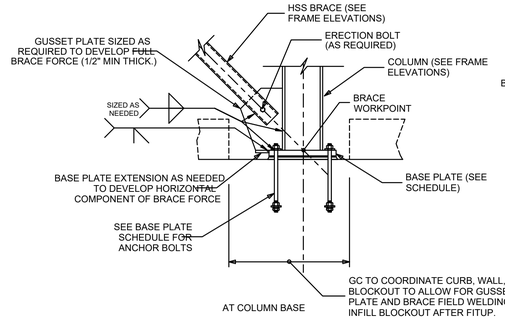
3/4" = 1'-0"

NOTES:
1. SEE PLAN AND COLUMN SCHEDULE FOR COLUMN CONFIGURATIONS. IN SCENARIOS WHERE ONLY A COLUMN UP OR COLUMN DOWN EXISTS, THESE DETAILS SHALL APPLY IN FULL.
2. AT LOCATIONS WHERE THE COLUMN BASE PLATE IS WIDER THAN THE BEAM FLANGE, FLANGE EXTENSION PLATES SHALL BE PROVIDED ON THE BEAM TO PROVIDE FULL SUPPORT TO THE COLUMN BASE PLATE. FLANGE EXTENSION PLATES SHALL MATCH THE BEAM FLANGE THICKNESS AND BE FULL PENETRATION WELDED TO THE FLANGE.

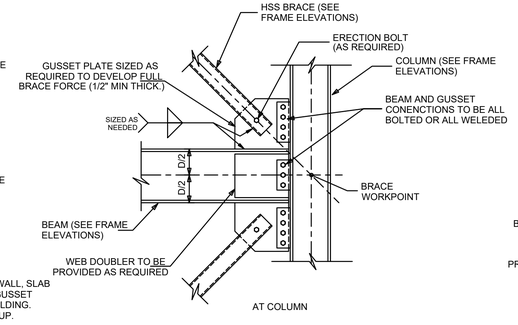


4 TYPICAL DECK SUPPORT ANGLE DETAIL

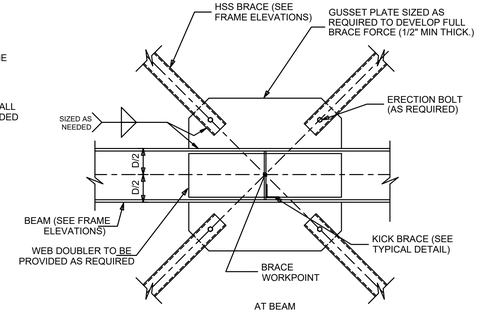
3/4" = 1'-0"



AT COLUMN BASE



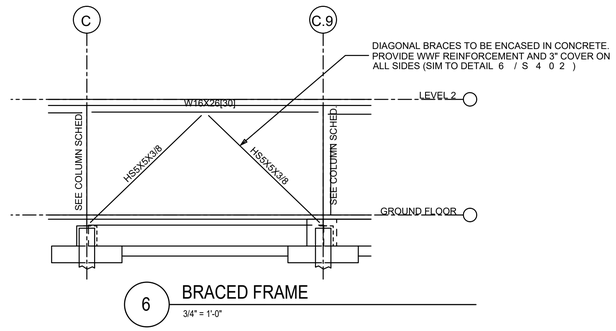
AT COLUMN



AT BEAM

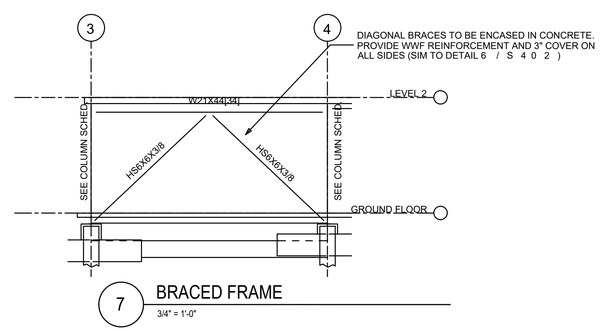
5 TYPICAL HSS BRACE CONNECTIONS

3/4" = 1'-0"



6 BRACED FRAME

3/4" = 1'-0"



7 BRACED FRAME

3/4" = 1'-0"

Location

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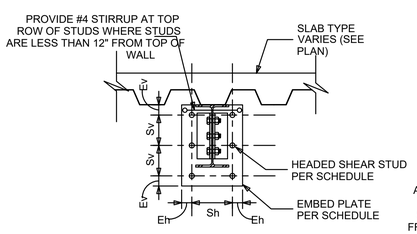
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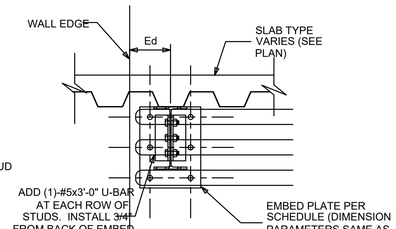
TYPICAL STEEL DETAILS II

Sheet No.

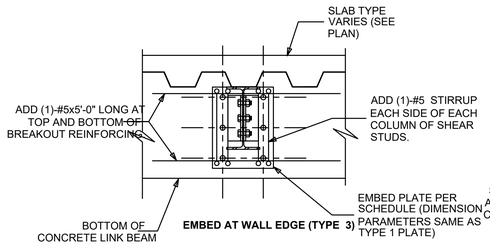
S-3.2



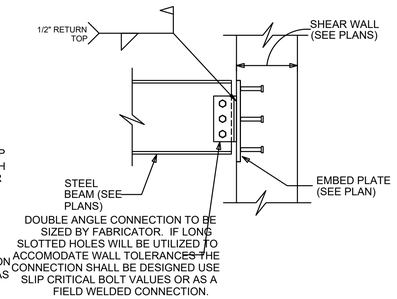
EMBED AT SOLID WALL (TYPE 1)



EMBED AT WALL EDGE (TYPE 2)



EMBED AT WALL EDGE (TYPE 3)



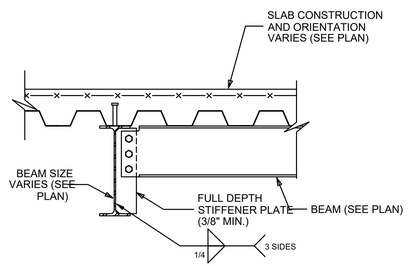
TYPICAL EMBED CONNECTION DETAIL

EMBED PLATE SCHEDULE

EMBED TYPE	STUD SIZE AND QUANTITY	# STUD ROWS	# STUD COLUMNS	EMBED THICKNESS	Sv (in.)	Sh (in.)	Ev (in.)	Eh (in.)	Ed (in.)	COMMENTS
EP-1A	(4)-3/4"Øx6" LG	2	2	3/4"	14"	8"	2"	2"	-	
EP-1B	(9)-3/4"Øx6" LG	3	3	1"	10"	6"	2"	2"	-	
EP-2A	(4)-3/4"Øx6" LG	2	2	3/4"	14"	8"	2"	2"	8"	

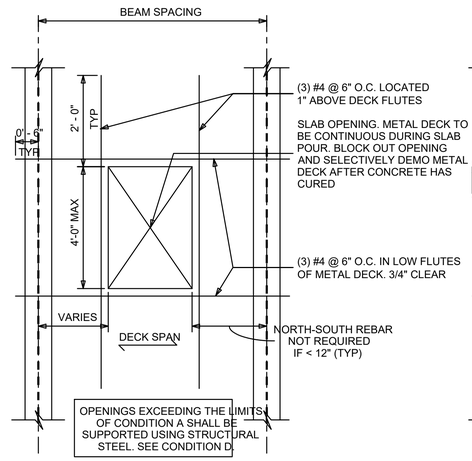
NOTES:
1. ALL EMBEDS SHALL BE Fy=50ksi UNO
2. REFER TO PLANS FOR EMBED TYPE.
3. REFER TO DETAILS THIS SHEET FOR EMBED DETAILS AND ADDITIONAL REINFORCING REQUIREMENTS.

1 TYPICAL EMBED PLATE DETAILS
3/4" = 1'-0"

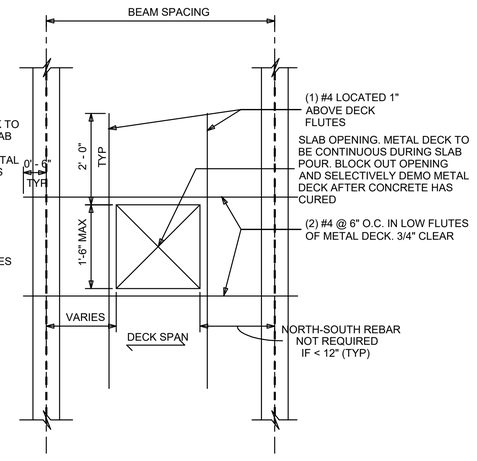


NOTES:
1. INFRAMING BEAM CONNECTION SHALL BE SIZED FOR THE POSTED END REACTION. BOLTS SHALL BE PROVIDED FOR THE FULL DEPTH OF THE INFRAMING BEAM AS SHOWN ABOVE.
2. STIFFENER PLATE SHALL BE 3/8" MIN. THICKNESS OR AS REQUIRED TO MEET END REACTION.
3. BOLT HOLES SHALL BE STANDARD HOLES (I.E. NOT SLOTTED OR OVERSIZED).

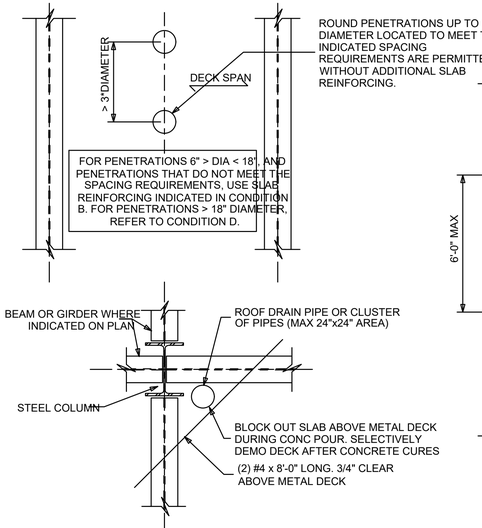
2 TYPICAL FULL DEPTH STIFFENER CONNECTION
3/4" = 1'-0"



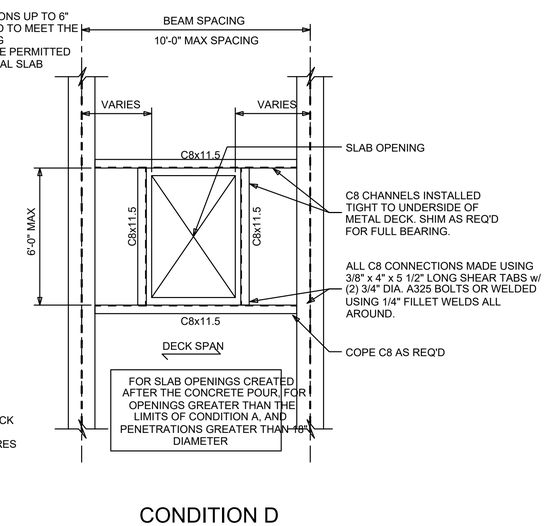
CONDITION A



CONDITION B



CONDITION C



CONDITION D

3 TYPICAL COMPOSITE SLAB OPENING REINFORCEMENT DETAILS
3/4" = 1'-0"

Location

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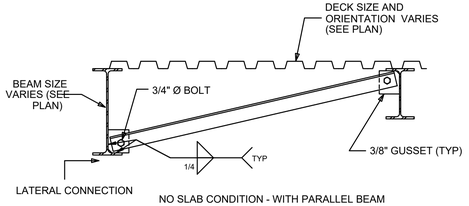
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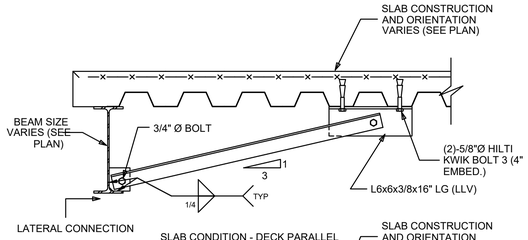
TYPICAL STEEL DETAILS III

Sheet No.

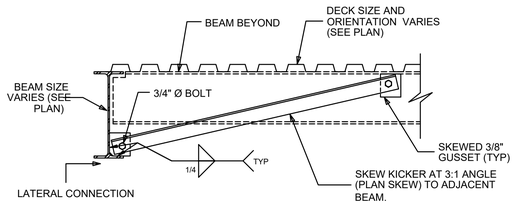
S-3.3



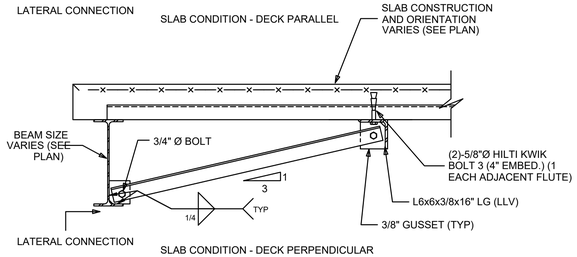
NO SLAB CONDITION - WITH PARALLEL BEAM



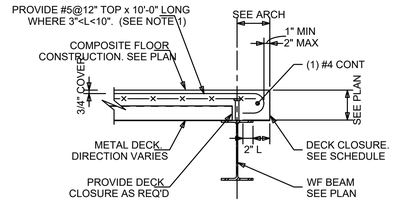
SLAB CONDITION - DECK PARALLEL



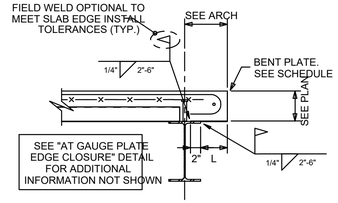
NO SLAB CONDITION - WITH PERPENDICULAR BEAM



SLAB CONDITION - DECK PERPENDICULAR



AT GAUGE PLATE EDGE CLOSURE



AT BENT PLATE EDGE CLOSURE

NOTE 1: IN SLABS WITH TOP REBAR IN LIEU OF WWF, EDGE CLOSURE REBAR SIZE TO BE THE LARGER OF THE TYPICAL SLAB TOP REINF AND THE SIZES SHOWN ABOVE

2 TYPICAL SLAB EDGE DETAIL

3/4" = 1'-0"

SLAB EDGE CLOSURE

	NORMAL WEIGHT CONCRETE			LIGHT WEIGHT CONCRETE		
POUR STOP SIZE	6" NWC	7 1/2" NWC	9" NWC	5 1/4" LWC	6 1/4" LWC	7 1/4" LWC
20 GA.	-	-	-	1"	-	-
18 GA.	1"	-	-	3"	1"	-
16 GA.	3"	-	-	5"	3"	1"
14 GA.	5"	2"	-	7"	5"	3"
12 GA.	8"	6"	3"	9"	9"	7"
10 GA.	10"	9"	6"	11"	11"	10"
1/4" BENT PLATE	15"	14"	13"	16"	15"	15"
5/16" BENT PLATE	17"	16"	15"	19"	18"	17"
3/8" BENT PLATE	20"	19"	18"	21"	21"	20"

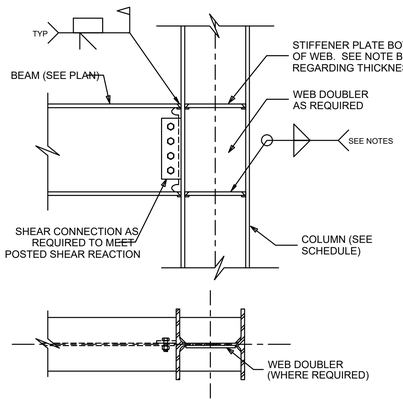
NOTES:

1. THE LENGTHS IN THE TABLE ABOVE INDICATE THE MAXIMUM POUR STOP OVERHANG LENGTH (L) FOR EACH SLAB THICKNESS. REFER TO "TYPICAL SLAB EDGE DETAIL FOR ADDITIONAL INFORMATION"

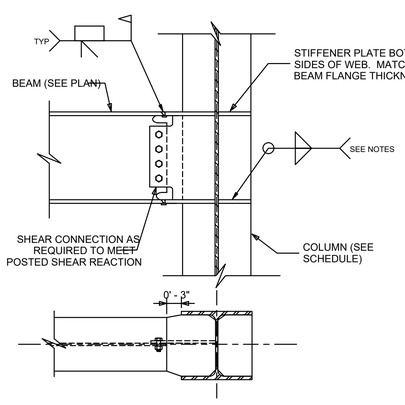
1 TYPICAL KICK-BRACE DETAILS

3/4" = 1'-0"

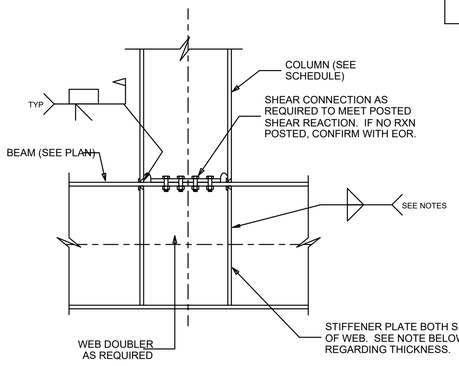
NOTES:
1. KICKER ANGLE SIZING AS FOLLOWS:
   -WHERE KICKER LENGTH <= 6 FT USE L3X3X3/8
   -WHERE KICKER LENGTH <= 12 FT USE L4X4X3/8
2. KICKERS SHALL BE USED AT ALL LOCATIONS WHERE A LATERAL LOAD IS APPLIED TO THE BOTTOM FLANGE OF A BEAM OR THE BOTTOM 2/3 OF THE BEAM WEB. THE FOLLOWING ARE COMMON CASES WHERE THIS OCCURS, HOWEVER THIS IS NOT AN ALL INCLUSIVE LIST:
   a. EXTERIOR WALL LATERAL CLIP
   b. CURTAIN WALL LATERAL TIE-BACK
   c. PRECAST LATERAL TIE
   d. ECCENTRIC STAIR HANGER LOAD
   e. OTHER INSTANCES THAT IMPART A LATERAL OR ECCENTRIC LOAD TO THE BEAM
3. AT LOCATIONS WHERE THERE IS AN INFRAMING PERPENDICULAR BEAM WITHIN 12" OF THE LATERAL LOAD, THE KICKER MAY BE OMITTED. THE IN-FRAMING BEAM SHALL UTILIZE A FULL DEPTH STIFFNER CONNECTION TO BRACE THE BOTTOM BEAM FLANGE.



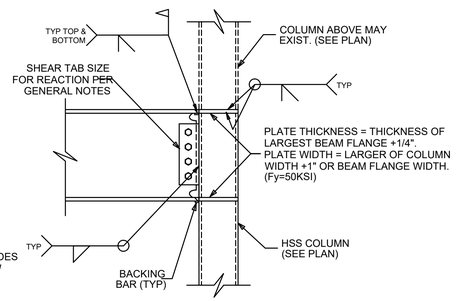
BEAM-COLUMN FLANGE CONNECTION



BEAM-COLUMN WEB CONNECTION



COLUMN -BEAM CONNECTION



HSS COLUMN - WF BEAM CONNECTION

3 TYPICAL LATERAL MOMENT CONNECTIONS (R=3)

3/4" = 1'-0"

NOTES:
1. MOMENT CONNECTIONS SHALL BE DESIGNED BY THE FABRICATORS ENGINEER FOR A MOMENT OF 1.1*Ry*My (LRFD) OF THE BEAM.
2. ALL BOLTS USED IN MOMENT CONNECTIONS SHALL BE DESIGNED AS SLIP-CRITICAL.
3. ALL SHEAR CONNECTIONS SHALL BE DESIGNED BY THE FABRICATORS ENGINEER FOR THE POSTED SHEAR REACTION.
4. STIFFENER PLATE WELDS MUST BE SIZED TO DELIVER THE FULL FLANGE FORCE TO THE COLUMN SECTION.
5. IN GENERAL STIFFENER PLATE THICKNESS SHALL MATCH THE INFRAMING BEAM FLANGE THICKNESS. IN BEAM TO COLUMN WEB TYPE CONNECTIONS, THE STIFFENER PLATES SHALL BE INCREASED IN THICKNESS BY 1/4" TO ACCOMODATE FABRICATION AND ROLLING TOLERANCES AND FIELD FIT-UP. ALIGN THE CENTERLINE OF STIFFENER WITH THE BEAM FLANGE CENTERLINE.
6. AT BEAM-COLUMN WEB CONNECTIONS, THE HORIZONTAL WELDS BETWEEN THE EXTENDED SHEAR PLATE AND THE COLUMN STIFFENERS SHALL BE DESIGNED FOR THE SHEAR STRESS ASSOCIATED WITH THE BOLT GROUP ECCENTRICITY TO THE COLUMN CENTERLINE.
7. WHERE DOUBLER PLATES ARE REQUIRED, THE WELD TO THE COLUMN WEB SHALL DEVELOP THE CAPACITY OF THE DOUBLER PLATE.

Location

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DOV KIRSZTAJN
STRUCTURAL
No. 31471
REGISTERED PROFESSIONAL ENGINEER

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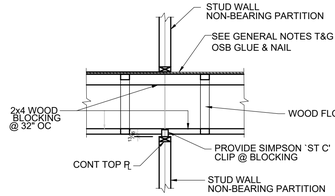
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

TYPICAL STEEL DETAILS IV

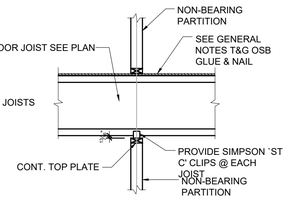
Sheet No.

S-3.4



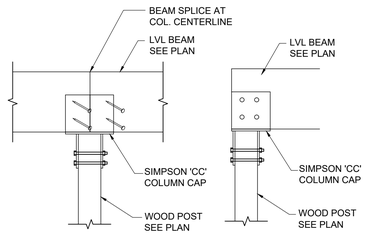
TYPICAL FRAMING AT NON-BEARING PARTITIONS

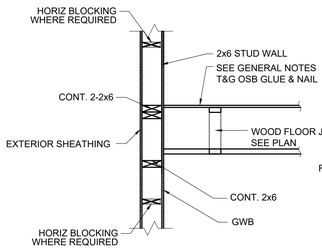
PARALLEL TO FRAMING
(REFER TO ARCH DWGS FOR WALL LOCATIONS)



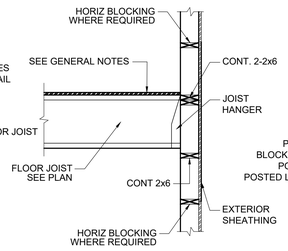
TYPICAL FRAMING
AT NON-BEARING PARTITIONS

PERPENDICULAR TO FRAMING
(REFER TO ARCH DWGS FOR WALL LOCATIONS)

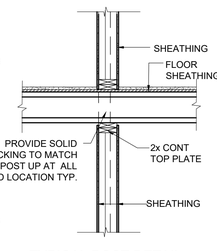




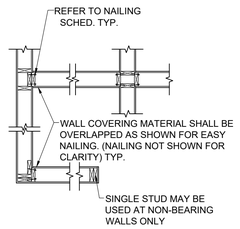
TYPICAL SECTION AT EXTERIOR WALL



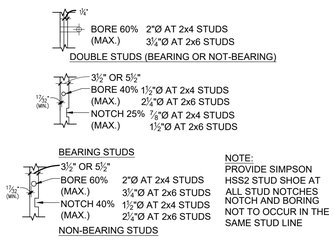
TYPICAL SECTION AT EXTERIOR WALL



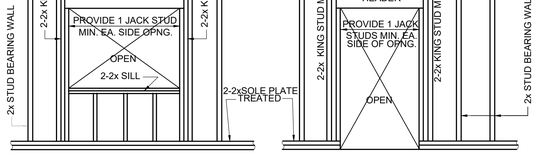
TYPICAL POST DETAIL



TYPICAL PLAN DETAILS



TYPICAL CUTTING AND BORING STUD DETAIL



TYP. WINDOW OPENING

TYPICAL DOOR FRAMING

TYPICAL WOOD DETAILS

1/2" = 1'-0"

POST SCHEDULE (FOR BEAMS AND HEADERS, UNLESS OTHERWISE NOTED ON PLAN)					
FLOOR	3RD FL	4TH FL	5TH FL	6TH FL	7TH FL
INTERIOR POST FOR LVL BEAMS	6x6 VERSA-LAM	6x6 VERSA-LAM	6x6 VERSA-LAM	6x6 VERSA-LAM	6x6 VERSA-LAM
EXTERIOR POST FOR OPENING HEADERS	(3) 2x6	(3) 2x6	(3) 2x6	(3) 2x6	(3) 2x6

BEARING WALL STUD SCHEDULE (INSTALL MIDDLE BLOCKING BETWEEN ALL STUDS)					
FLOOR	3RD FL	4TH FL	5TH FL	6TH FL	7TH FL
INTERIOR WALL STUD SIZES	2x6 @ 12"O.C.	2x6 @ 12"O.C.	2x6 @ 16"O.C.	2x6 @16"O.C.	2x6 @16"O.C.
EXTERIOR WALL STUD SIZES	2x6 @ 12"O.C.	2x6 @16"O.C.	2x6 @16"O.C.	2x6 @16"O.C.	2x6 @16"O.C.

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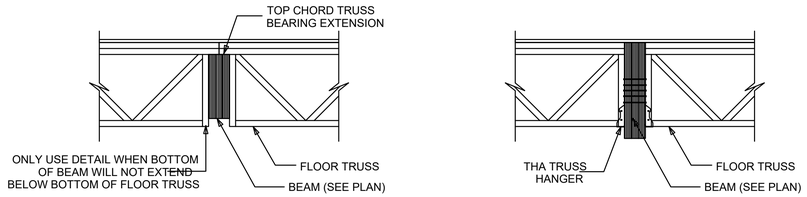
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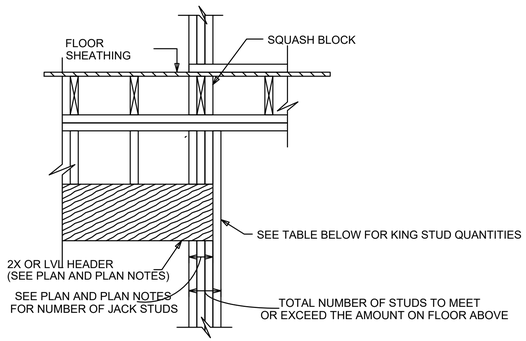
WOOD DETAILS I

Sheet No.

S-4.1



1 TYPICAL TRUSS TO BEAM CONNECTIONS
3/4" = 1'-0"



NOTE 1. JACK STUDS AND HEADERS ARE MARKED ON PLAN LEVEL ABOVE OPENING

KING STUD QUANTITIES	
INTERIOR OPENINGS	1 KING STUD (MIN)
EXTERIOR OPENINGS ≤ 3'-4"	1 KING STUD (MIN)
EXTERIOR OPENINGS > 3'-4" AND	< 8'-0" 2 KING STUD (MIN)
EXTERIOR OPENINGS > 8'-0"	3 KING STUD (MIN)

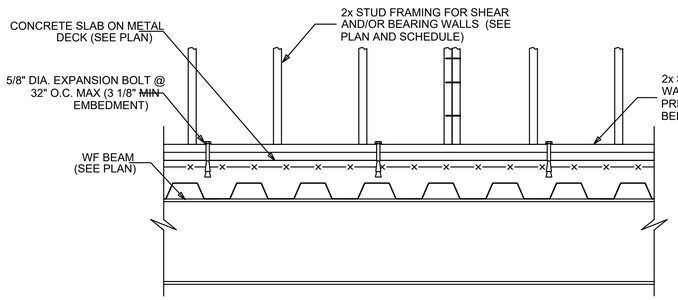
3 TYPICAL WOOD HEADER DETAIL
3/4" = 1'-0"



NOTES:
1. ALL SCREWS ARE STRONG-DRIVE SDW EWP SCREWS SPACED AT 16" O.C.
2. SCREW LENGTHS ARE AS FOLLOWS:
   -2 PLY=3 3/8"
   -3 PLY=5"
   -4 PLY=6 3/4"
3. PROVIDE NUMBER OF FASTENER ROWS AS FOLLOWS:
   -9 1/2" LVL=2 ROWS
   -11 1/2" OR 11 7/8" LVL=3 ROWS
   -14" LVL=3 ROWS
   -16" LVL AND GREATER=4 ROWS

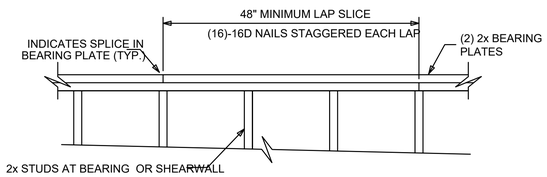
2 TYPICAL ATTACHMENT OF MULTI-PLY LVLS
3/4" = 1'-0"

TYPICAL JOIST AND RAFTER HANGERS		
FRAMING TYPE	SIMPSON FASTENER	NOTES
SINGLE JOIST END HANGER TO WOOD BEAM:		
2X4	LUS24	
2X6	LUS26	
2X8	LUS28	
2X10	LUS210	
2X12	LUS212	
DOUBLE JOIST END HANGER TO WOOD BEAM:		
(2)-2X6	LUS26-2	
(2)-2X8	LUS28-2	
(2)-2X10	LUS210-2	
(2)-2X12	LUS214-2	
TRIPLE JOIST END HANGER TO WOOD BEAM:		
(3)-2X6	LUS26-3	
(3)-2X8	LUS28-3	
(3)-2X10	LUS210-3	
(3)-2X12	LUS210-3	
RAFTER END HANGERS:		
2X6	LRU26Z	
2X8	LRU28Z	
2X10	LRU210Z	
2X12	LRU212Z	
I-JOIST END HANGER TO WOOD BEAM:		
ALL SIZES	IUS SERIES	HANGER SIZE TO MATCH JOIST DEPTH AND WIDTH.
TRI-FORCE TRUSS		
ALL SIZES	IUS SERIES	HANGER SIZE TO MATCH TRUSS DEPTH AND WIDTH.
1. JOIST HANGER NAILING SHALL BE IN ACCORDANCE WITH SIMPSON STRONG-TIE REQUIREMENTS. WHERE THERE ARE MINIMUM AND MAXIMUM NAILING PATTERNS THE MAXIMUM PATTERN SHALL BE USED UNLESS NOTED OTHERWISE.		
2. INSTALLATION SHALL BE PER SIMPSON STRNG-TIE RECOMMENDATIONS.		
3. WHERE JOIST HANGER WILL BE USED IN AN EXTERIOR APPLICATION, THE CONNECTOR SHALL HAVE THE SIMPSON ZMAX FINISH AND UTILIZE COMPATIBLE FASTENERS.		



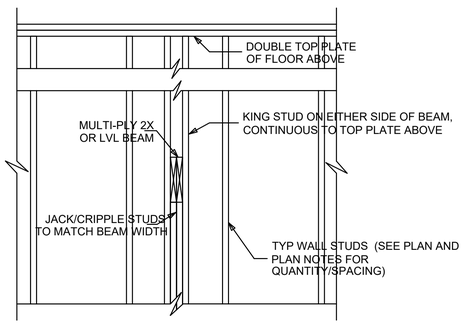
NOTE: 0.177" PAFs @ 24" O.C. MAX (1" MIN EMBEDMENT) MAY BE USED IN LIEU OF 5/8" DIA. EXPANSION BOLTS AT NON-SHEAR WALLS, IN WHICH CASE SINGLE BOTTOM PLATE CAN BE USED.

5 TYPICAL BEARING WALL TO COMPOSITE DECK DETAIL
3/4" = 1'-0"



NOTES:
1. WHERE SHEAR WALL SPACING EXCEEDS 40FT, BUT NOT GREATER THAN 60 FT, THE SPLICE LENGTH SHALL BE INCREASED TO 6FT LONG WITH (24)-16d NAILS STAGGERED.

4 TYPICAL TOP PLATE SPLICE DETAIL
1/4" = 1'-0"



6 TYPICAL WOOD BEAM CONNECTION BETWEEN FLOORS
3/4" = 1'-0"

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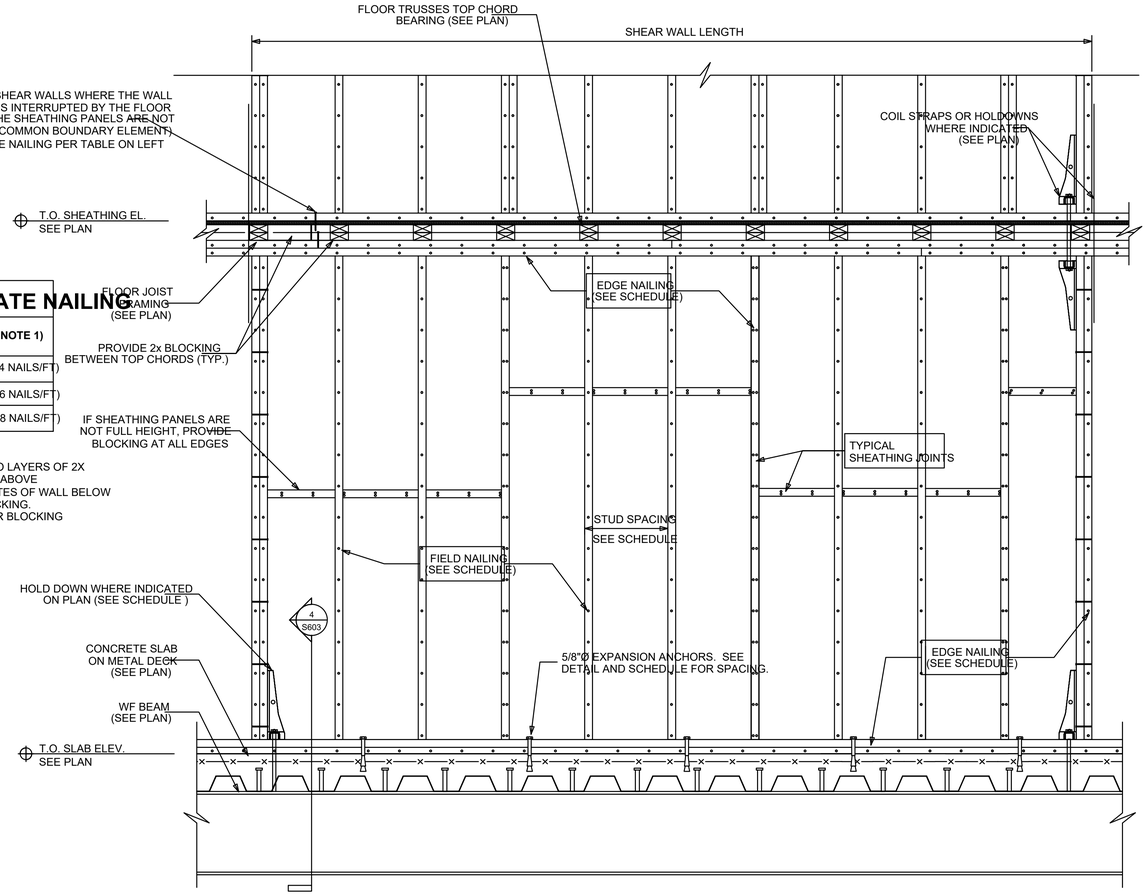
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Drawn By: NS

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WOOD DETAILS II

Sheet No.

S-4.2



1 TYPICAL SHEAR WALL DETAIL
3/4" = 1'-0"

INTERIOR SHEAR WALL PLATE NAILING

SHEAR WALL BOUNDARY NAILING (SEE SCHEDULE)	NAIL SPACING (SEE NOTE 1)
8d@6", 8d@4"	2 ROWS @ 6" O.C. (I.E. 4 NAILS/FT)
8d@3"	2 ROWS @ 4" O.C. (I.E. 6 NAILS/FT)
8d@2"	2 ROWS @ 3" O.C. (I.E. 8 NAILS/FT)

NOTES:
1. ALL NAILS TO BE 0.131"Øx3 1/4"
2. AT TOP-CHORD BEARING CONDITIONS, PROVIDE TWO LAYERS OF 2X BLOCKING BETWEEN TRUSSES, AND PROVIDE NAILING ABOVE
   A. FROM LOWER PIECE OF BLOCKING TO TOP PLATES OF WALL BELOW
   B. FROM THE UPPER BLOCKING INTO LOWER BLOCKING.
   C. FROM SOLE PLATE OF WALL ABOVE INTO UPPER BLOCKING

WOOD SHEAR WALL SCHEDULE

SHEAR WALL TYPE	SHEATHING	EDGE NAILING	FIELD NAILING	MIN END POST (NOTE 4)	MAX BOLT SPACING @ BOTTOM PLATE	NOTES
SW-1	7/16" APA RATED OSB	8d@6" O.C.	8d@12" O.C.	(3)-2x	32" O.C.	
SW-2	7/16" APA RATED OSB	8d@4" O.C.	8d@12" O.C.	(3)-2x	32" O.C.	
SW-3	7/16" APA RATED OSB	8d@3" O.C.	8d@12" O.C.	(3)-2x	24" O.C.	
SW-4	7/16" APA RATED OSB	8d@2" O.C.	8d@12" O.C.	(3)-2x	16" O.C.	SEE NOTE 6
SW-5	7/16"" APA RATED [FRT] OSB	8d@6" O.C	8d@12" O.C	(3)-2x	32" O.C.	
SW-6	7/16" APA RATED [FRT] OSB	8d@4" O.C	8d@12" O.C	(3)-2x	32" O.C.	
SW-7	7/16" APA RATED [FRT] OSB	8d@3" O.C	8d@12" O.C	(3)-2x	24" O.C.	
SW-8	7/16" APA RATED [FRT] OSB	8d@2" O.C	8d@12" O.C	(3)-2x	16" O.C.	SEE NOTE 6

NOTES:

1. ALL STUDS ARE SPF NO. 1/NO. 2 OR BETTER U.N.O.

2. ALL SHEAR WALLS ARE DESIGNED AS BLOCKED. PROVIDE 2x BLOCKING AT ALL SHEATHING PANEL EDGES.

3. ALL NAILS SHALL BE COMMON NAILS. USE HOT DIPPED GALVANIZED NAILS WHEN NAILING INTO PRESSURE TREATED LUMBER.

4. PROVIDE AN END POST AT EACH END OF SHEAR WALL. REFER TO HOLD DOWN REQUIREMENTS ON PLAN. USE THE LARGER OF THE HOLD DOWN POST SIZE OR THE END POST SIZE NOTED ABOVE.

5. SHEATHING SHALL BE INSTALLED ON (1) FACE OF WALL U.N.O. AT EXTERIOR WALLS, SHEATHING SHALL BE ON THE EXTERIOR WALL FACE. AT INTERIOR WALLS, REFER TO THE ARCH DRAWINGS FOR THE PREFERRED SHEATHING SIDE.

6. WHERE NOTED ABOVE, ALL MEMBERS (BOTH STUDS AND BLOCKING) ALONG THE NAILED EDGES OF ADJOINING SHEATHING PANEL EDGES SHALL BE 3" NOMINAL (I.E. 3x) IN WIDTH AND THE NAILING SHALL BE STAGGERED. IN LIEU OF 3x FRAMING, (2)-2x MEMBERS NAILED TOGETHER PER NDS SHALL...

7. ANCHORS TO BE EITHER 5/8" DIA. EXPANSION ANCHOR (3 1/8" MIN EMBEDMENT) OR 5/8" DIA. J-BOLT (8" MIN EMBEDMENT INTO WALL). ALL ANCHORS TO HAVE 3"X3"X1/4" (MIN) PLATE WASHERS.

WOOD HOLD DOWN SCHEDULE

HOLD DOWN CALLOUT	HOLD DOWN TYPE	END POST MIN. SIZE	POST FASTENERS	THRU ROD	ANCHOR BOLT
HD-1	HDU2-SDS2.5	(3)-2x	(6)-SDS SCREWS	5/8"Ø ROD	SB5/8x24
HD-2	HDU4-SDS2.5	(3)-2x	(10)-SDS SCREWS	5/8"Ø ROD	SB5/8x24
HD-3	HDU5-SDS2.5	(3)-2x	(14)-SDS SCREWS	5/8"Ø ROD	SB5/8x24
HD-4	HDU8-SDS2.5	(3)-2x	(20)-SDS SCREWS	7/8"Ø ROD	SB7/8x24
HD-5	HDU11-SDS2.5	(4)-2x	(30)-SDS SCREWS	1"Ø ROD	SB1x30
HD-6	HDU14-SDS2.5	6x6 DF	(36)-SDS SCREWS	1"Ø ROD	SB1x30

NOTES:

1. ALL STUDS ARE SPF NO. 1/NO. 2 OR BETTER U.N.O.

2. REFER TO PLANS FOR HOLD DOWN LOCATIONS. REFER TO HOLD DOWN DETAILS FOR VARIOUS ANCHOR CONDITIONS.

3. HOLD DOWN ANCHOR/THRU ROD SHALL BE FINAL TIGHTENED AS LATE AS POSSIBLE IN THE CONSTRUCTION PROCESS TO ALLOW FOR WOOD MOISTURE SHRINKAGE AND SETTLEMENT TO TAKE PLACE.

WOOD BEARING WALL SCHEDULE

WALL TYPE	WALL CONSTRUCTION
BW-1	2x6@24" O.C
BW-2	(2)-2x6@24" O.C.
BW-3	(3)-2x6@24" O.C.
BW-3A	(4)-2x6@24" O.C.
BW-4	2x4@24" O.C
BW-5	(2)-2x4@24" O.C.
BW-6	(3)-2x4@24" O.C.
BW-7	(4)-2x4@24" O.C.

NOTES:

1. ALL STUDS ARE SPF NO. 1/NO. 2 OR BETTER U.N.O.

2. ALL SILL PLATES AND TOP PLATES ARE SPF NO. 1/NO. 2 U.N.O.

3. ALL BEARING WALLS SHALL BE SHEATHED WITH GYPSUM BOARD OR SHEATHING ON BOTH FACES. WHERE A BEARING WALL WILL BE SHEATHED ON A SINGLE FACE ONLY, PROVIDE BLOCKING AT 48" O.C. MAX. REFER TO SHEAR WALL SCHEDULE FOR BLOCKING REQUIREMENTS.

4. ALL FLOOR JOISTS/TRUSSES WITH A SPAN GREATER THAN 8 FT SHALL HAVE A WALL STUD LOCATED DIRECTLY BELOW THE END BEARING POINT. AT 2x4 BEARING WALLS ALL FLOOR JOISTS/TRUSSES SHALL HAVE A WALL STUD LOCATED DIRECTLY BELOW THE END BEARING POINT. IF THE FLOOR JOIST/FLOOR TRUSS SPACING IS LESS THAN THE BEARING WALL STUD SPACING, THE STUD SPACING SHALL BE REDUCED AS NEEDED.

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

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One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31457
REGISTERED PROFESSIONAL ENGINEER

No.	Revision Date

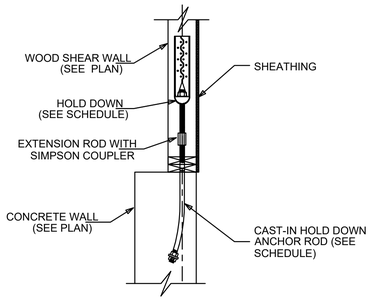
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

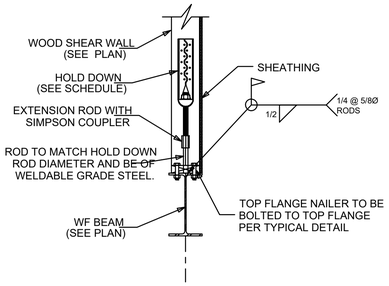
WOOD DETAILS III

Sheet No.

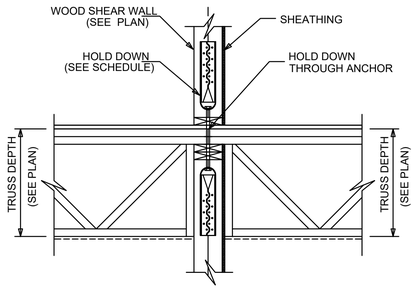
S-4.3



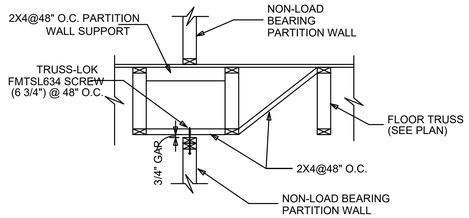
AT CONCRETE WALL



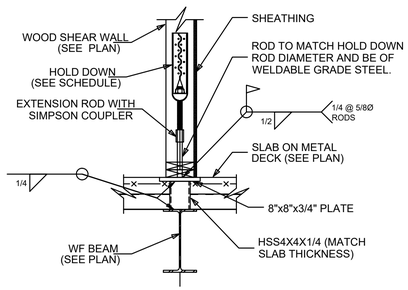
AT STEEL BEAM NO SLAB



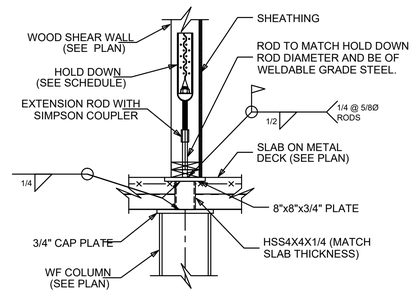
AT THROUGH FLOOR



2 TYPICAL PARTITION WALL ATTACHMENT
3/4" = 1'-0"

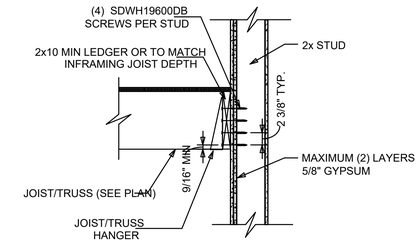


AT STEEL BEAM W/ SLAB



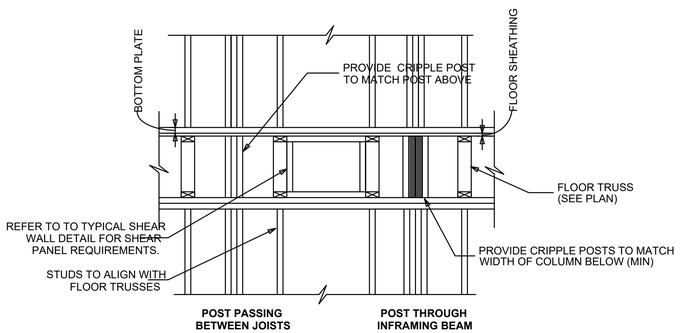
AT STEEL COLUMN W/ SLAB

1 EXISTING HOLDOWN DEATILS
3/4" = 1'-0"

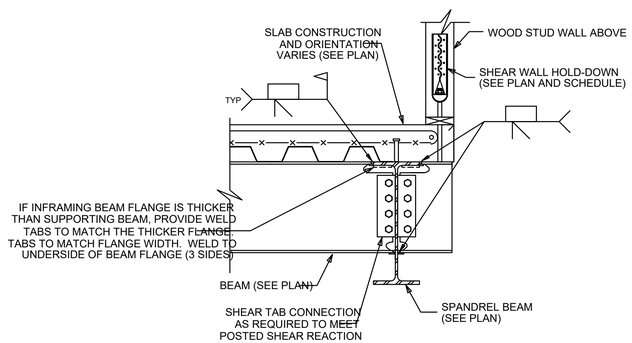


NOTES:
1. SCREWS TO BE CENTERED IN STUD
2. MAX SUPPORTED JOIST SPAN IS 9'-0".

3 TYPICAL SECTION @ INTERIOR WOOD LEDGER
3/4" = 1'-0"



4 TYPICAL POST THROUGH FLOOR TRUSS DETAIL
3/4" = 1'-0"



NOTES:
1. INFRAMING BEAM CONNECTION SHALL BE SIZED FOR THE POSTED END REACTION.
2. BOLT HOLES SHALL BE STANDARD HOLES (I.E. NOT SLOTTED OR OVERSIZED).

5 TYPICAL EXTERIOR WALL HOLDOWN DETAIL
3/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
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COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31467
REGISTERED PROFESSIONAL ENGINEER

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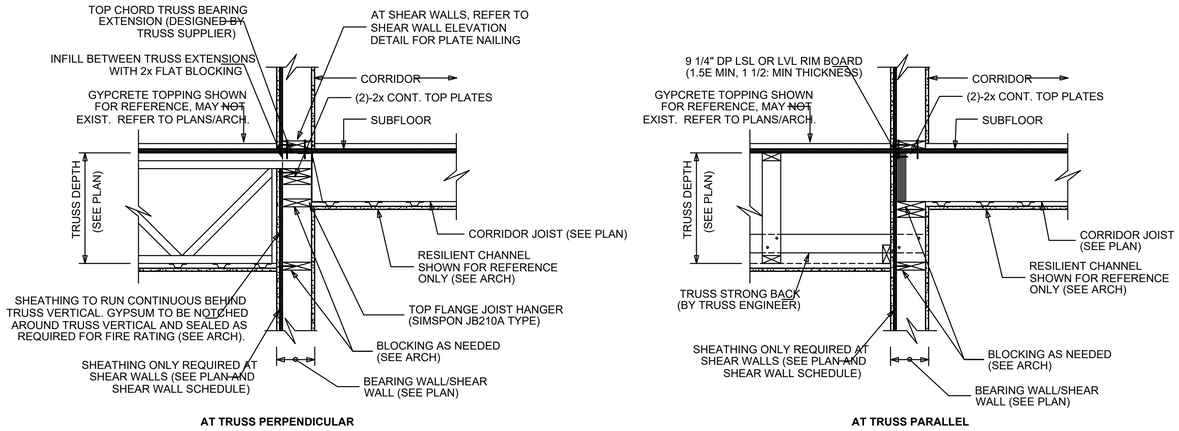
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Drawing Name

WOOD
DETAILS III

Sheet No.

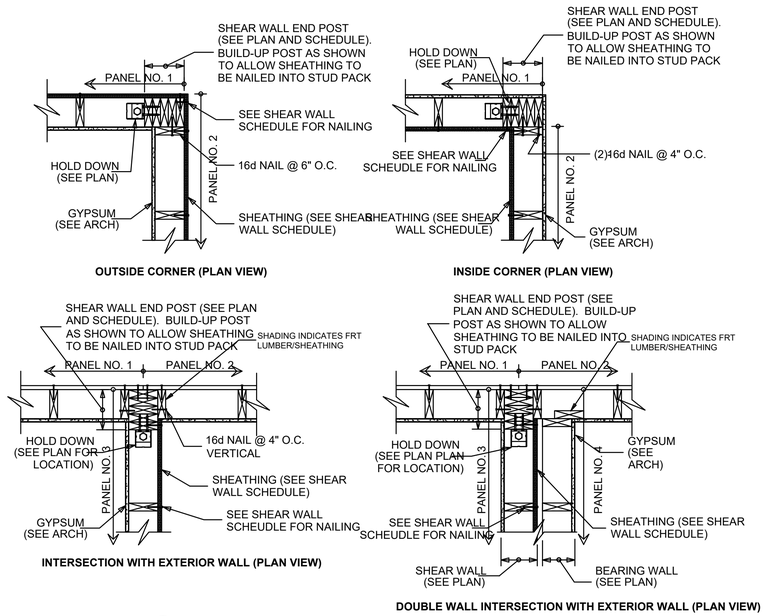
S-4.4



NOTE: DETAILS SHOWN INDICATE TOP CHORD BEARING CONNECTIONS. GC TO COORDINATE WITH TRUSS ENGINEER AND MODIFY TOP OF WALL HEIGHTS AS NEEDED TO ACCOMODATE TRUSS LOCATIONS THAT REQUIRE BOTTOM CHORD BEARING CONNECTIONS.

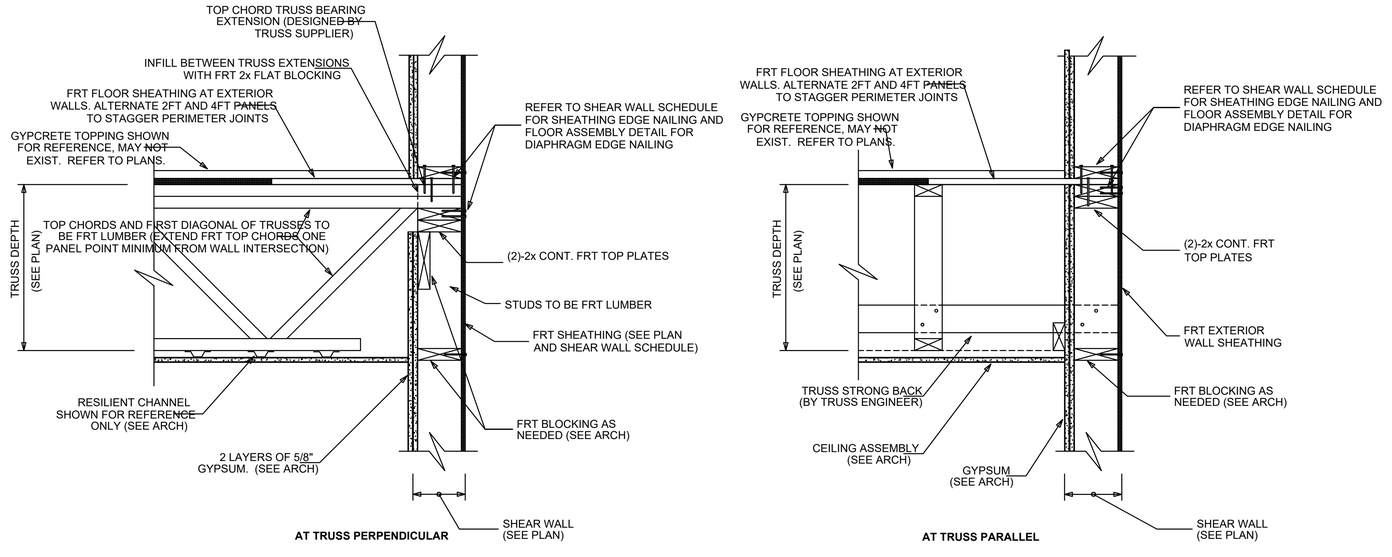
1 TYPICAL WOOD TRUSS @ CORRIDOR DETAIL

3/4" = 1'-0"



2 TYPICAL SHEAR WALL INTERSECTION DETAIL

3/4" = 1'-0"



3 TYPICAL WOOD TRUSS @ EXTERIOR WALL DETAIL

3/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

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One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31617
REGISTERED PROFESSIONAL ENGINEER

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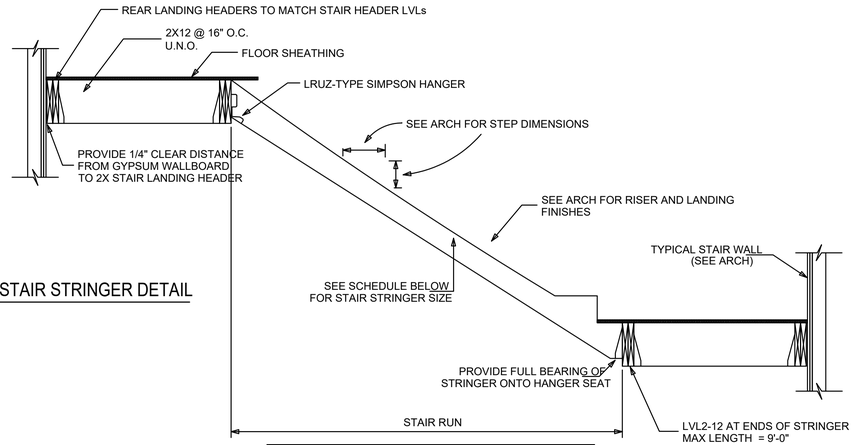
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Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

WOOD DETAILS V

Sheet No.

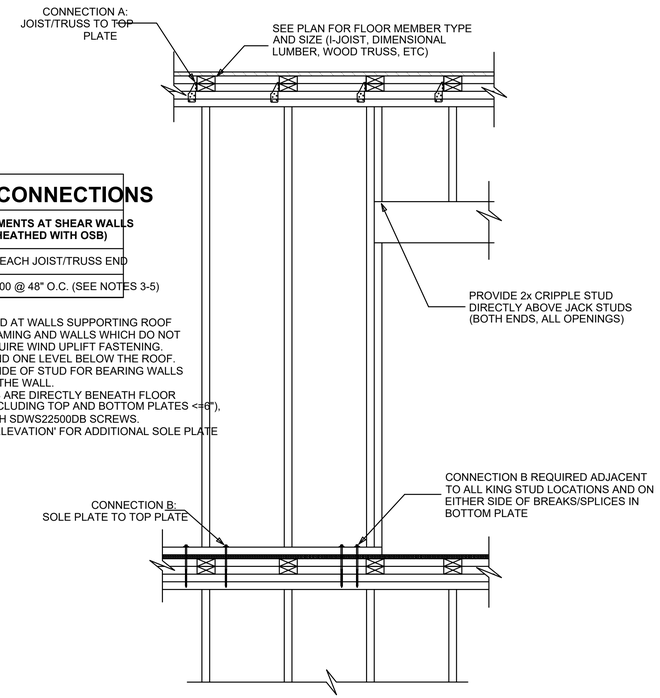
S-4.5



1 TYPICAL STAIR STRINGER DETAIL
3/4" = 1'-0"

STAIR STRINGER SCHEDULE

STAIR RUN	STRINGER SIZE AND SPACING
< 7'-0"	2X12 @ 12" O.C.
7'-0" TO 8'-3"	1 3/4" X 11 7/8" LVL @ 12" O.C.
8'-3" TO 10'-0"	1 3/4" X 14" LVL @ 16" O.C.
10'-0" TO 11'-0"	1 3/4" X 14" LVL @ 12" O.C.

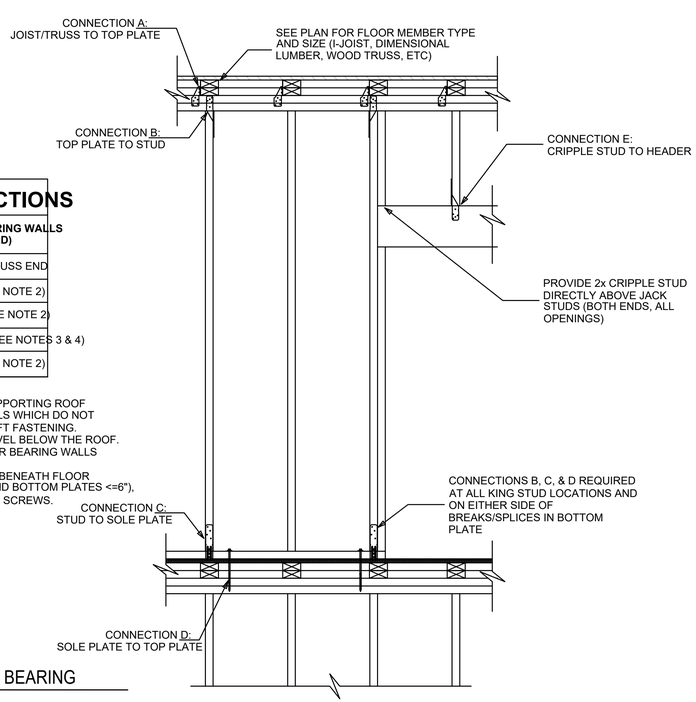


SW WIND UPLIFT CONNECTIONS

CONNECTION LOCATION (SEE DIAGRAM AT RIGHT)	REQUIREMENTS AT SHEAR WALLS (I.E. SHEATHED WITH OSB)
A - JOIST/TRUSS TO TOP PLATE	H2.5a AT EACH JOIST/TRUSS END
B - SOLE PLATE TO TOP PLATE	(2) SDWS22800 @ 48" O.C. (SEE NOTES 3-5)

NOTES:
1. ALL CONNECTIONS ARE ONLY REQUIRED AT WALLS SUPPORTING ROOF FRAMING. WALLS PARALLEL TO ROOF FRAMING AND WALLS WHICH DO NOT EXTEND UP TO ROOF LEVEL DO NOT REQUIRE WIND UPLIFT FASTENING.
2. CONNECTION B IS REQUIRED TO EXTEND ONE LEVEL BELOW THE ROOF.
3. TIES SHALL BE PROVIDED ON EITHER SIDE OF STUD FOR BEARING WALLS SUPPORTING JOISTS ON BOTH SIDES OF THE WALL.
4. FOR "TALL WALLS" WHERE TOP PLATES ARE DIRECTLY BENEATH FLOOR SHEATHING (TOTAL FLOOR ASSEMBLY INCLUDING TOP AND BOTTOM PLATES <=6"), CONNECTION D SHALL BE REPLACED WITH SDWS22500DB SCREWS.
5. REFER TO THE 'TYPICAL SHEAR WALL ELEVATION' FOR ADDITIONAL SOLE PLATE NAILING REQUIREMENTS

2 TYPICAL UPLIFT FASTENING DETAIL @ SHEAR WALLS
3/4" = 1'-0"



BW WIND UPLIFT CONNECTIONS

CONNECTION LOCATION (SEE DIAGRAM AT RIGHT)	REQUIREMENTS AT BEARING WALLS (I.E. NOT SHEATHED)
A - JOIST/TRUSS TO TOP PLATE	H2.5a AT EACH JOIST/TRUSS END
B - TOP PLATE TO STUD	H8 @ 48" O.C. MAX (SEE NOTE 2)
C - STUD TO BOTTOM PLATE	SSP @ 48" O.C. MAX (SEE NOTE 2)
D - SOLE PLATE TO TOP PLATE	(2) SDWS22800 @ 48" O.C. (SEE NOTES 3 & 4)
E - CRIPPLE TO HEADER	H8 @ 48" O.C. MAX (SEE NOTE 2)

NOTES:
1. ALL CONNECTIONS ARE ONLY REQUIRED AT WALLS SUPPORTING ROOF FRAMING, WALLS PARALLEL TO ROOF FRAMING AND WALLS WHICH DO NOT EXTEND UP TO ROOF LEVEL DO NOT REQUIRE WIND UPLIFT FASTENING.
2. CONNECTIONS B-E ARE REQUIRED TO EXTEND ONE LEVEL BELOW THE ROOF.
3. TIES SHALL BE PROVIDED ON EITHER SIDE OF STUD FOR BEARING WALLS SUPPORTING JOISTS ON BOTH SIDES OF THE WALL.
4. FOR "TALL WALLS" WHERE TOP PLATES ARE DIRECTLY BENEATH FLOOR SHEATHING (TOTAL FLOOR ASSEMBLY INCLUDING TOP AND BOTTOM PLATES <=6"), CONNECTION D SHALL BE REPLACED WITH SDWS22500DB SCREWS.

3 TYPICAL UPLIFT FASTENING DETAIL @ BEARING
3/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
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COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
No. 31461
REGISTERED
PROFESSIONAL ENGINEER

No.	Revision Date

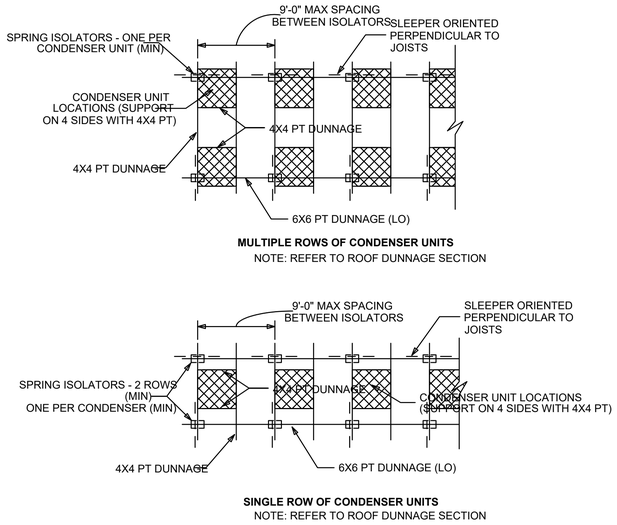
Project No: 2025014
Scale: AS NOTED
Date: 01-07-2026
Drawn By: NS

Drawing Name

TYPICAL WOOD DETAILS VI

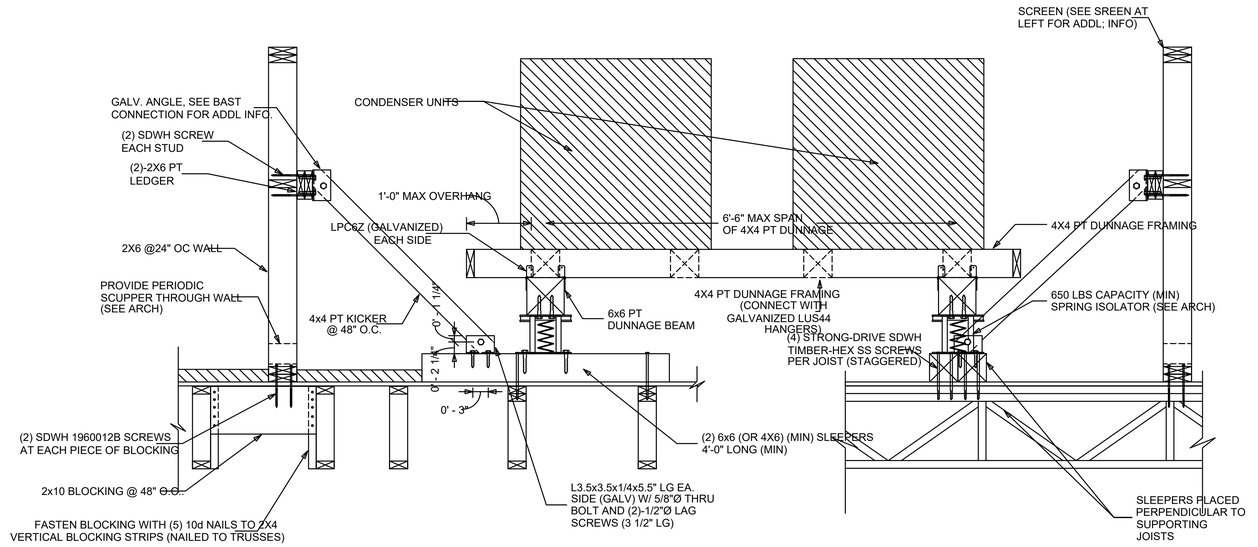
Sheet No.

S-4.6



1 TYPICAL ROOF DUNNAGE FRAMING PLAN

3/4" = 1'-0"



2 TYPICAL ROOF WOOD DUNNAGE SECTION

3/4" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
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COMMONWEALTH OF MASSACHUSETTS
DOV KIRSZTAJN
STRUCTURAL
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PROFESSIONAL ENGINEER

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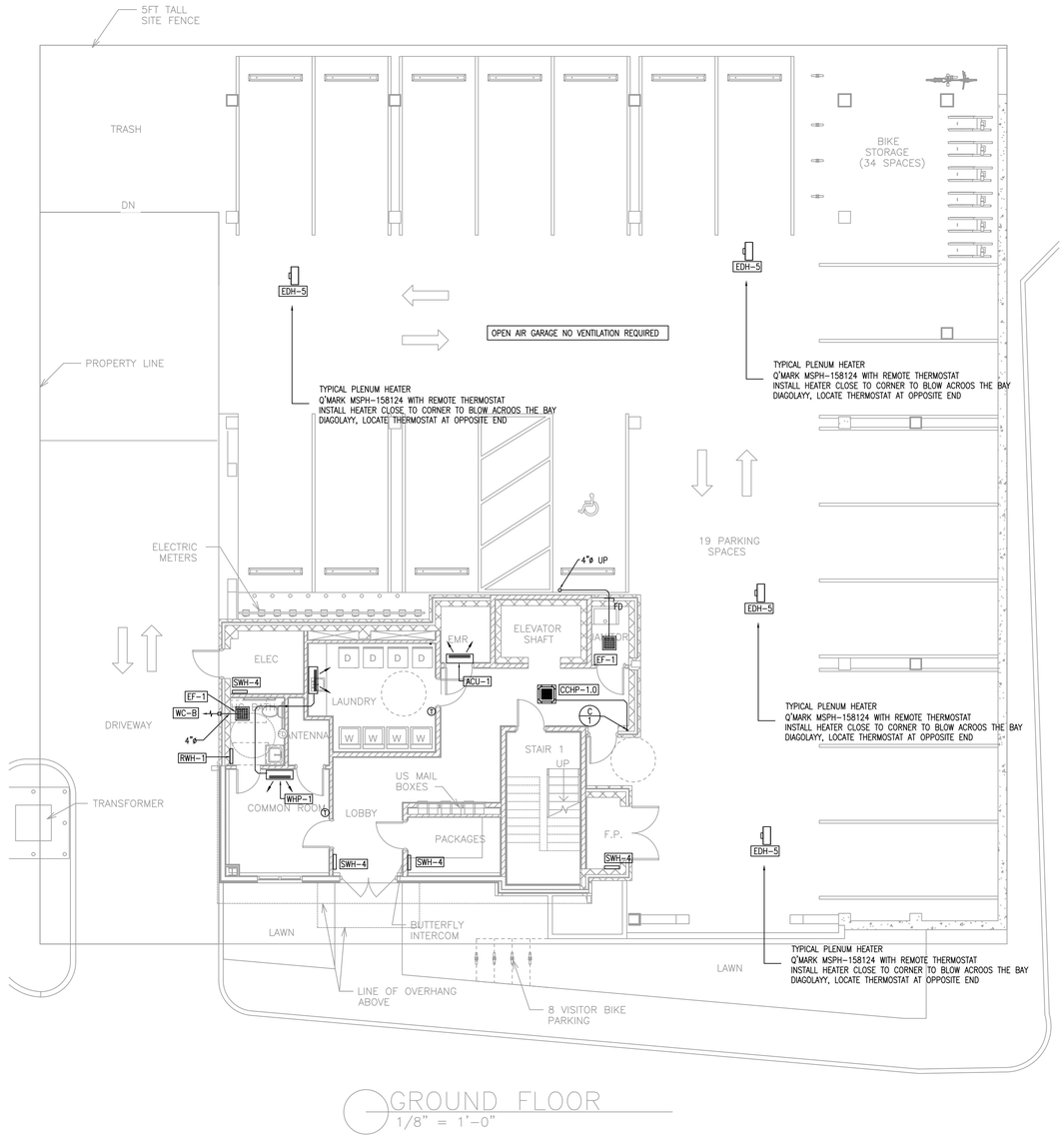
Project No: 2025014
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Date: 01-07-2026
Drawn By: NS

Drawing Name

WOOD DETAILS VII

Sheet No.

S-4.7



GROUND FLOOR
1/8" = 1'-0"

BIKE PARKING COMPLIANCE

	REQUIRED	PROPOSED
RESIDENT BIKE PARKING	1 SPACE PER UNIT (40 SPACES) - 25% MIN. ON-GROUND SPACES - 75% MAX. ON-/OVERHEAD/VERTICAL/STRADDLE SPACES (2 SPACES)	34 SPACES - 10 ON-GROUND (23%) - 24 STRADDLE SPACES - 24 TWO-TIER SPACES
VISITOR BIKE PARKING	1 SPACE PER 5 UNITS (8 SPACES)	8 SPACES (LOCATED AT THE EXTERIOR OF THE BUILDING)

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
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FAX. (617) 451-2540
EMAIL zade@zadeengineering.com

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 01-06-2026
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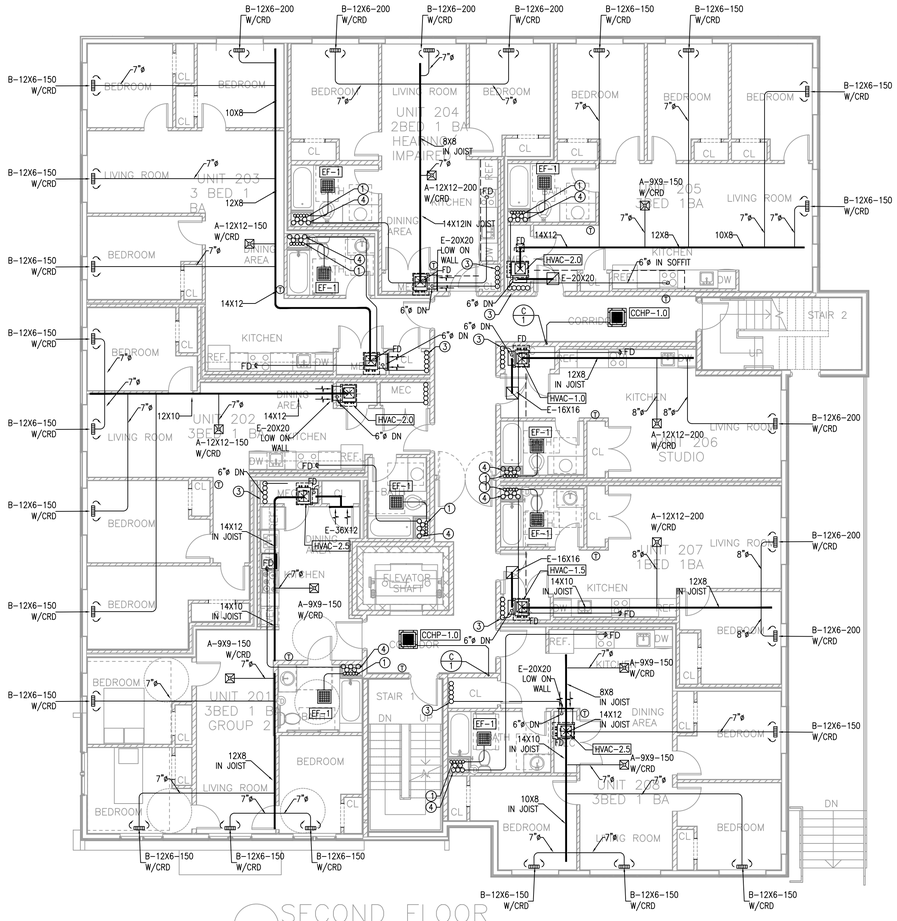
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GROUND FLOOR HVAC PLAN

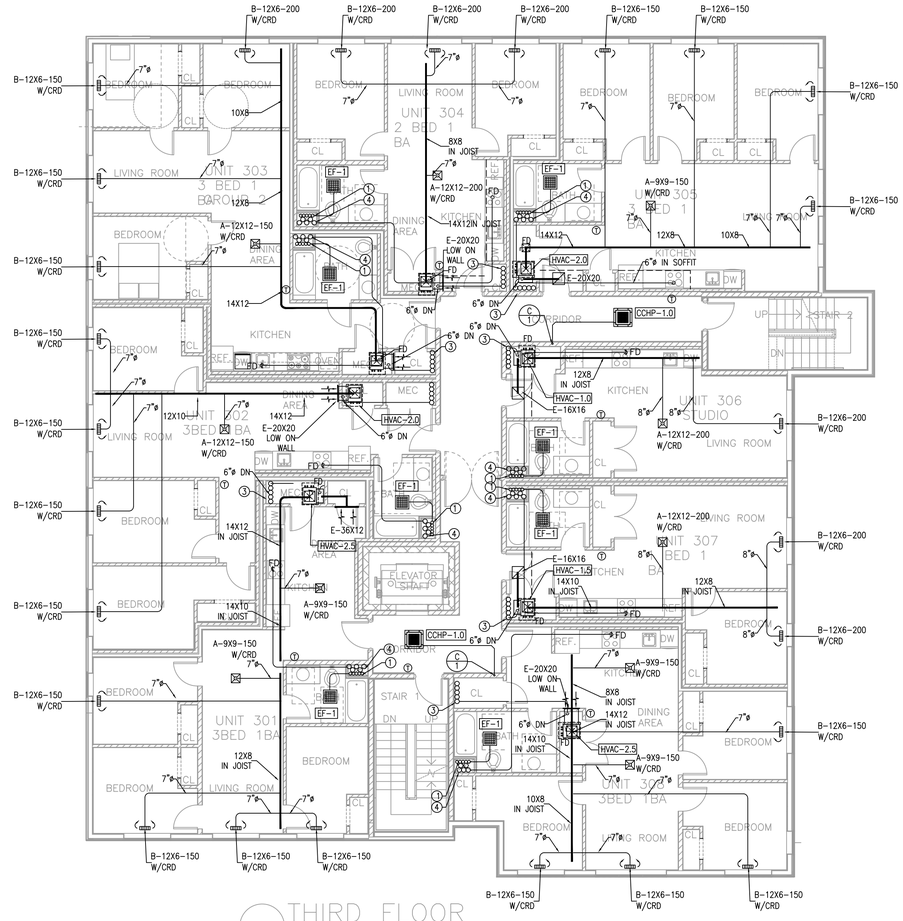
Sheet No.

H-1

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51899
REGISTERED
PROFESSIONAL ENGINEER



SECOND FLOOR
1/8" = 1'-0"



THIRD FLOOR
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
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No.	Description	Date

Project No: 2025014

Scale: AS NOTED

Date: 01-06-2026

Drawn By: ----------

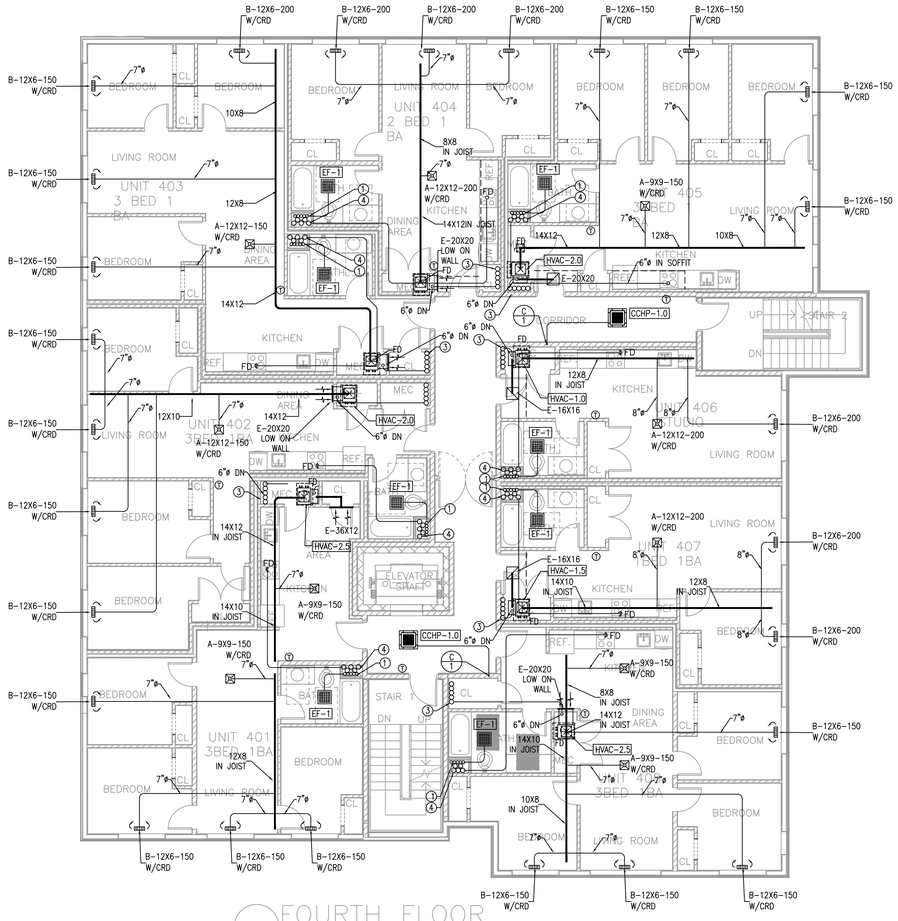
Drawing Name

HVAC FLOOR PLAN

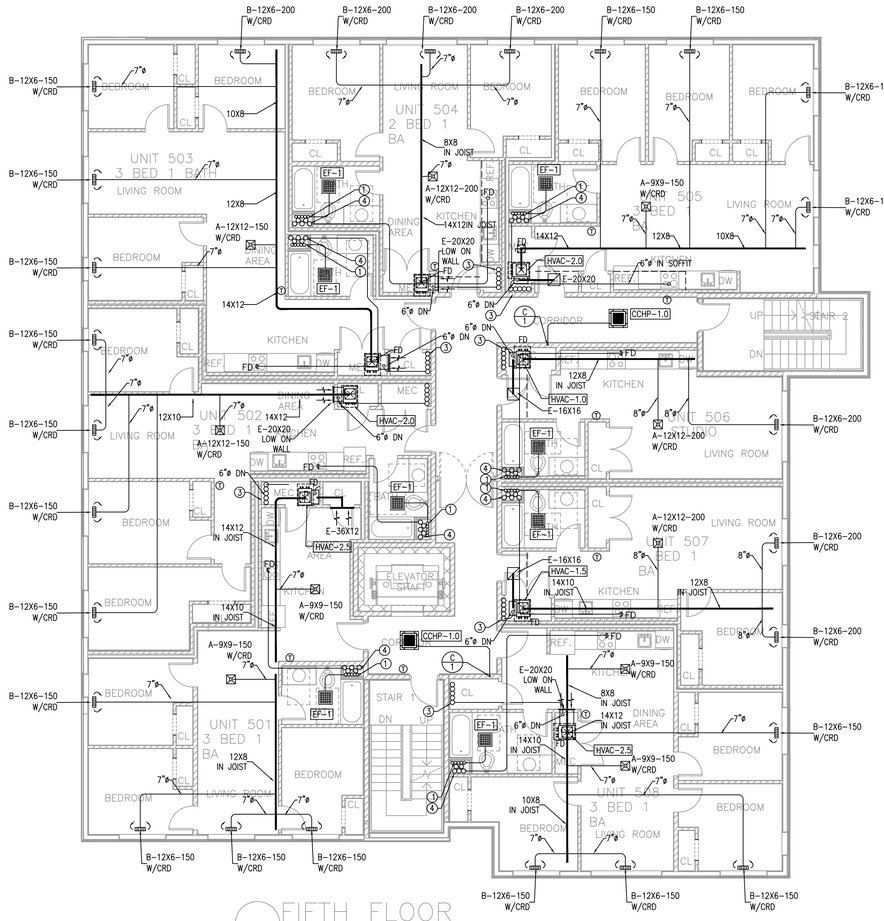
Sheet No.

H-2

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51896
REGISTERED PROFESSIONAL ENGINEER



FOURTH FLOOR
1/8" = 1'-0"



FIFTH FLOOR
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

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FAX (617) 451-2540
EMAIL zade@zadeengineering.com

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 01-06-2026
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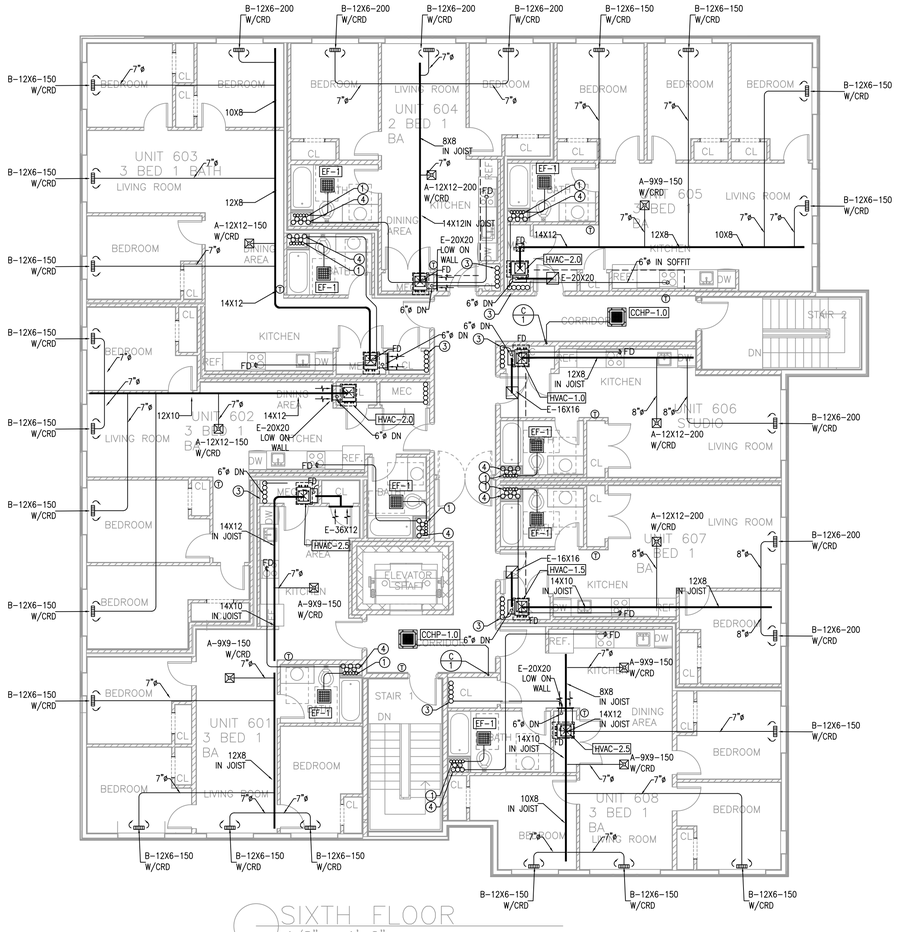
Drawing Name

HVAC FLOOR PLAN

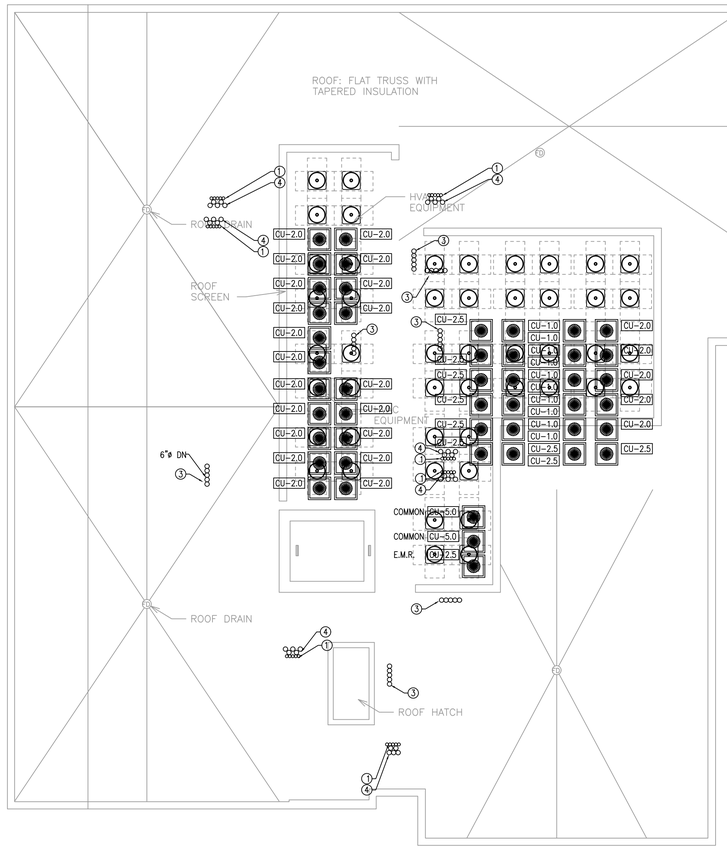
Sheet No.

H-3

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51896
REGISTERED
PROFESSIONAL ENGINEER



SIXTH FLOOR
1/8" = 1'-0"



ROOF PLAN
1/8" = 1'-0"

Location

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No.	Description	Date

Project No: 2025014

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Date: 01-06-2026

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Drawing Name

HVAC FLOOR PLAN

Sheet No.

H-4

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51899
REGISTERED PROFESSIONAL ENGINEER

LEGEND

SUPPLY AIR DUCT UP	HOT WATER RETURN PIPE (HWR)
SUPPLY AIR DUCT DOWN	HOT WATER SUPPLY PIPE (HWS)
RETURN AIR DUCT UP	CONDENSATE DRAIN PIPE (D)
RETURN AIR DUCT DOWN	PIPE UP
VOLUME DAMPER	PIPE DOWN
MOTORIZED DAMPER	BALL VALVE
FIRE DAMPER (FD)	GATE VALVE
1" LINED DUCTWORK	CHECK VALVE
SUPPLY AIR REGISTER	STRAINER
RETURN OR EXHAUST AIR REGISTER	UNION
SUPPLY AIR DIFFUSER	3-WAY CONTROL VALVE
	2-WAY CONTROL VALVE
CEILING TRANSFER GRILL	BALANCING VALVE
ACCESS DOOR (AD)	THERMOMETER
SELF BALANCING AIR VALVE (AV)	PRESSURE GAUGE
CEILING FIRE DAMPER (CFD)	FLEXIBLE PIPE CONNECTION

EQUIPMENT TAG NUMBERS

EF-#	EXHAUST FAN
CU-#	CONDENSING UNIT
AC-#	SPLIT SYSTEM AC UNIT
HVAC-#	AIR HANDLER UNIT
UH-#	UNIT HEATER UNIT

E # — E = EXHAUST RISER; # = REFERS TO RISER DIAGRAM

VS # — VS = SUPPLY VENTILATION RISER; # = REFERS TO RISER DIAGRAM

VR # — VS = RETURN VENTILATION RISER; # = REFERS TO RISER DIAGRAM

R # — R = CONDENSER WATER RISER; # = REFERS TO RISER DIAGRAM

AIR OUTLET + INLET DESIGNATION

EXAMPLE:

TYPE OF GRILLE, DIFFUSER
SEE SCHEDULE FOR SPECIFIC INFORMATION ABOUT THIS OUTLET/INLET TYPE — A-6x6-50 — SIZE OF GRILLE, DIFFUSER / AIRFLOW

NOTE:

THIS DESIGNATION FORMAT IS TYPICAL FOR ALL DIFFUSERS, GRILLES, AND REGISTERS, LAY-IN OR SURFACE MOUNTED, FOR SUPPLY, RETURN OR EXH.

EQUIPMENT SYMBOLS

- ROOFTOP UNIT
- ROOFTOP UPBLAST EXHAUST FAN
- EXHAUST CONTROL VALVE
- ROOFTOP UPBLAST EXHAUST FAN
- CONSTANT AIRFLOW REGULATOR DEVICE
- FIRE AND SMOKE DAMPER
- VD — VOLUME DAMPERS
- CABINET UNIT HEATER IN CEILING
- HORIZONTAL HVAC UNIT
- VERTICAL HVAC UNIT
- ROOF MOUNTED CONDENSING UNIT

CONTROL SYMBOLS

- (T) (TS) — WALL MOUNTED THERMOSTAT/SENSOR
- (H) (HS) — HUMIDISTAT/SENSOR
- LP — LOCAL CONTROL PANEL

GENERAL NOTES

1. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO EXECUTE THE WORK SHOWN AND DESCRIBED. INSTALLATION OF MATERIALS SHALL MEET ALL APPLICABLE STATE, FEDERAL AND MUNICIPAL REQUIREMENTS.
2. OBTAIN PERMITS AND PAY ALL FEES FOR WORK AND REQUIRED INSPECTIONS.
3. MAINTAIN LIABILITY INSURANCE TO PROTECT OWNER AND THE CONTRACTOR FROM ANY AND ALL CLAIMS UNDER THE WORKER'S COMPENSATION ACT.
4. THE DRAWINGS SHALL CONSIDERED DIAGRAMMATIC ONLY. ALL MEASUREMENTS SHALL BE TAKEN FROM BUILDING SITE AND ARCHITECT'S DRAWINGS.
5. PROVIDE TEMPORARY MATERIAL STORAGE AS REQUIRED AND BE RESPONSIBLE FOR ANY LOSS OR DAMAGE THERETO.
6. SUBMIT DIGITAL COPIES OF SHOP DRAWINGS FOR REVIEW COVERING MAJOR MANUFACTURED ITEMS, IE. AIR HANDLING UNITS, REGISTERS & DIFFUSERS, WIRING DIAGRAMS, ETC.
7. KEEP ACCURATE RECORD OF "AS-BUILT" DRAWINGS AND SUBMIT THESE BEFORE FINAL CERTIFICATE OF COMPLETION.
8. ON COMPLETION OF THE WORK, REMOVE FROM THE PREMISES ALL TOOLS, DEBRIS, SURPLUS AND WASTE MATERIALS RESULTING FROM OPERATIONS UNDER THIS SECTION. CLEAN ALL EQUIPMENT AND LEAVE ALL ITEMS IN PERFECT ORDER READY FOR OPERATION.
9. AFTER ACCEPTANCE, INSTRUCT OWNER IN EQUIPMENT OPERATION AND PROVIDE HIM WITH OPERATING AND MAINTENANCE MANUALS STANDARDS AND EXTENDED WARRANTY DOCUMENTS, INSPECTION CERTIFICATES AND COPIES OF SHOP DRAWINGS OF INSTALLED EQUIPMENT.
10. THE CONTRACTOR SHALL, BEFORE FINAL PAYMENT IS MADE, GUARANTEE ALL MATERIALS AND WORKMANSHIP SUPPLIED BY HIM IN THE PERFORMANCE OF THIS CONTRACT FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE AND SHALL, WHEN CALLED UPON, MAKE GOOD WITHOUT FURTHER COST TO THE OWNER SUCH DEFECTS AS MAY APPEAR WITHIN THIS PERIOD.
11. SUPPLY AND INSTALL DUCTWORK AS INDICATED ON DRAWING. DUCTWORK SHALL BE FABRICATED AND INSTALLED IN STRICT ACCORDANCE WITH LATEST ASHRAE & SMACNA STANDARDS AND SHALL BE MANUFACTURED OF GALVANIZED STEEL UNLESS SPECIFICALLY NOTED OTHERWISE.
12. ADJUST ALL FAN SPEEDS TO DELIVER SHOWN AIR QUANTITIES. BALANCE ALL AIR SYSTEMS AND SUPPLY WRITTEN AIR BALANCING REPORTS IN TRIPLICATE. INCLUDE NECESSARY SPARE BELTS AND PULLEYS FOR FIELD ADJUSTMENT.
13. ALL VALVES AND FITTINGS SHALL BE SUITABLE FOR THIS PARTICULAR PIPING APPLICATION AND MINIMUM 150LBS PRESSURE RATING.
14. ALL DUCTWORK SHALL BE: 24 GAUGE UP TO 36 INCHES WIDE, 22 GAUGE 31 INCHES WIDE TO 60 INCHES WIDE, ROUND DUCT SHALL BE 24 GAUGE UO TO 10 INCHES DIAMETER, 22 GAUGE 11 TO 20 INCHES DIAMETER, 20 GAUGE ABOVE 20 INCHJES DIAMETER; ALL GALVINIZED SHEETMETAL. SEAL ALL JOINTS AND SLIPS WITH EC 800 OR OTHER SUITABLE SEALANT. ALL LONGITUDINAL SEAMS SHALL BE PITTSBURG LOCKING TAPE. ALL SLIPS SHALL BE REINFORCED BAR TYPE. FABRICATE AND INSTALL ALL DUCTS IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW PRESURE DUCT CONSTRUCTION.
15. ALL DUCT CONNECTIONS TO FAN DRIVEN UNITS SHALL BE MADE WITH A FIREPROOF FLEXIBLE DUCT CONNECTOR.
16. BEFORE THE H.V.A.C. SYSTEM IS OPERATED, ALL DUCTS SHALL BE BLOWN OUT & THOUGHLY CLEANED. SYSTEM SHALL BE TEST AT FULL PRESSURE & ALL LEAKS & FAULTS CORRECTED.
17. INSTALL ALL PIPING AND VALVES AS HIGH AS POSSIBLE.
18. BALANCE THE AIR SYSTEM AS PER ASSOCIATED AIR BALANCING COUNCILS LATEST STANDARDS. SUBMIT BALANCING REPORT FOR ENGINEERS APPROVAL.
19. THESE DRAWINGS ARE DIAGRAMMATIC. FIELD CONDITIONS SHALL DETERMINE ACTUAL LOCATION OF ALL PIPING AND DUCTWORK.
20. ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS.
21. DUCT CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL MECHANICAL CODE AND THE SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION DUCT CONSTRUCTION STANDARDS UNLESS OTHERWISE INDICATED IN THESE DRAWINGS OR IN THE SPECIFICATIONS.
22. ALL DUCT SUPPORTS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS UNLESS OTHERWISE NOTED.

GENERAL NOTES

SHOULD ANY CONTRADICTION, AMBIGUITY, ERROR, INCONSISTENCY, OMISSION OR INCOMPLETE SYSTEM APPEAR IN OR BETWEEN ANY OF CONTRACT DOCUMENTS THE CONTRACTOR SHALL, BEFORE SUBMITTING THE FINAL BID AND SIGNING THE CONTRACT FOR CONSTRUCTION, NOTIFY THE ARCHITECT AND REQUEST A WRITTEN RESOLUTION AS TO WHICH METHODS OR MATERIALS WILL BE REQUIRED. IN THE EVENT OF CONFLICTING REQUIREMENTS OF STANDARDS , DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR SHALL COMPLY WITH THE MORE STRINGENT REQUIREMENTS. BEFORE SUBMITTING THE FINAL BID AND THE SIGNING THE CONTRACT FOR THE CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A WRITTEN INTERPRETATION FROM THE ARCHITECT, IN NO CASE SHALL THE CONTRACTOR PROCEED WITH THE AFFECTED WORK UNTIL ADVISED BY THE ARCHITECT.

IF THE CONTRACTOR FAILS TO MAKE A REQUEST FOR INTERPRETATION OR RESOLUTION NO EXCUSE WILL BE ACCEPTED FOR FAILURE TO CARRY OUT THE WORK IN A SATISFACTORY MANNER, AS INTERPRETED BY THE ARCHITECT. THIS GENERALLY MEANS THE USE OF THE HIGHEST QUALITY MATERIAL, MOST EXPENSIVE WAY OF PERFORMING WORK AND PROVIDING COMPLETE FUNCTIONING SYSTEM FOR PROPER OPERATION.

EACH AND EVERY TRADE OR SUBCONTRACTOR WILL BE DEEMED TO HAVE FAMILIARIZED THEMSELVES WITH ALL THE CONTRACT DOCUMENTS OF THIS PROJECT, INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND SITE WORK, AND TO HAVE VISITED THE SITE, SO AS TO AVOID ERROR, OMISSIONS AND MISINTERPRETATIONS. RELATED INFORMATION MAY BE PROVIDED ON CONTRACT DOCUMENTS OTHER THAN THOSE ASSOCIATED WITH THE SUBCONTRACTOR'S TRADE. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELATED WORK OF ALL THE CONTRACT DOCUMENTS. NO ADDITIONAL COMPENSATION WILL BE AUTHORIZED FOR ALLEGED ERRORS, OMISSIONS AND MISINTERPRETATIONS WHETHER THEY ARE A RESULT OF FAILURE TO OBSERVE THIS REQUIREMENT OR NOT.

ENERGY CODE 2018 REQUIREMENTS

APPLICABILITY (CONTRACTOR SHALL PROVIDE ALL ITEMS LISTED BELOW)

RESIDENTIAL BUILDING. FOR THIS CODE, INCLUDES DETACHED ONE- AND TWO-FAMILY DWELLINGS AND MULITPLE SINGLE-FAMILY DWELLINGS (TOWNHOUSES) AS WELL AS GROUP R-2, R-3 AND R-4 BUILDINGS THREE STORIES OR LESS IN HEIGHT ABOVE GRADE PLANE.

R401.2 COMPLIANCE.
PROJECTS SHALL COMPLY WITH SECTIONS IDENTIFIED AS "MANDATORY" AND WITH EITHER SECTIONS IDENTIFIED AS "PRESCRIPTIVE" OR THE PERFORMANCE APPROACH IN SECTION R405. (PRESCRIPTIVE METHOD IS CHOSEN)

R403.1.1 PROGRAMMABLE THERMOSTAT.

PROVIDE, AT LEAST ONE THERMOSTAT PER DWELLING UNIT. THERMOSTAT SHALL BE CAPABLE OF CONTROLLING THE HEATING AND COOLING SYSTEM ON A DAILY SCHEDULE TO MAINTAIN DIFFERENT TEMPERATURE SET POINTS AT DIFFERENT TIMES OF THE DAY. THIS THERMOSTAT SHALL INCLUDE THE CAPABILITY TO SET BACK OR TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN ZONE TEMPERATURES DOWN TO 55'F (13'C) OR UP TO 85'F (29'C). THE THERMOSTAT SHALL INITIALLY BE PROGRAMMED WITH A HEATING TEMPERATURE SET POINT NO HIGHER THAN 70'F (21'C) AND A COOLING TEMPERATURE SET POINT NO LOWER THAN 78'F (26'C).

PROVIDE PER R403.2.1 INSULATION (PRESCRIPTIVE).
ANY SUPPLY DUCT IN ATTIC SHALL BE INSULATED TO A MINIMUM OF R-12. ALL OTHER DUCTS SHALL BE INSULATED TO A MINIMUM OF R-6.

PROVIDE PER R403.2.2 SEALING (MANDATORY).
ALL DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH EITHER THE INTERNATIONAL MECHANICAL CODE OR INTERNATIONAL RESIDENTIAL CODE, AS APPLICABLE.

DO NOT USE BUILDING CAVITIES PER R403.2.3. (MANDATORY).
BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS.

PROVIDE VENTILATION R403.5 AS SHOWN (MANDATORY).
THE BUILDING SHALL BE PROVIDED WITH VENTILATION THAT MEETS THE REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE OR INTERNATIONAL MECHANICAL CODE, AS APPLICABLE, OR WITH OTHER APPROVED MEANS OF VENTILATION. OUTDOOR AIR INTAKES AND EXHAUSTS SHALL HAVE AUTOMATIC OR GRAVITY DAMPERS THAT CLOSE WHEN THE VENTILATION SYSTEM IS NOT OPERATING.

R403.2 HOT WATER BOILER OUTDOOR TEMPERATURE SETBACK.
HOT WATER BOILERS THAT SUPPLY HEAT TO THE BUILDING THROUGH ONE- OR TWO-PIPE HEATING SYSTEMS SHALL HAVE AN OUTDOOR SETBACK CONTROLL THAT LOWERS THE BOILER WATER TEMPERATURE BASED ON THE OUTDOOR TEMP.

R403.3.2 SEALING (MANDATORY)
DUCTS, AT HANDLERS AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH EITHER THE INTERNATIONAL MECHANICAL CODE OR IRC, AS APPLICABLE

EXCEPTIONS:
1. AIR-IMPERMEABLE SPRAY FOAM PRODUCTS SHALL BE PERMITTED TO BE APPLIED WITHOUT ADDITONAL JOINT SEALS
2. FOR DUCTS HAVING A STATIC PRESSURE CLASSIFICATION OF LESS THAN 2 INCHES OF WATER COLUMN (500 PA) , ADDITIONAL CLOSURE SYSTEMS SHALL NOT BE REQUIRED TO CONTINUOUSLY WELDED JOINTS AND SEAMS, LOCKING TYPE JOINTS AND SEAMS OF OTHER THAN THE SNAP-LOCK AND BUTTON-LOCK TYPES.

403.3.2.1- SEALED AIR HANDLER
AIR HANDLERS SHALL HAVE A MANUFACTURERS DESIGNATION OF AIR LEAKAGE OF NO MORE THAN 2 PERCENT OF THE DESIGN AIR FLOW RATE WHEN TESTED IN ACCORDANCE WITH ASHRAE 193.

R403.3.3 DUCT TESTING
DUCRS SHALL BE PRESSURE TESTED THROUGH ROUGH IN TEST, POST CONSTRUCTION TEST

EXCEPTION- NOT REQUIRED WHERE DUCTS AND AIR HANDLERS ARE LOCATED ENITRLEY THROUGH THE BUILING THERMAL ENVELOPE

INSULATION NOTES

CONTRACTOR SHALL FOLLOW THE MOST STRINGENT INSULATION REQUIREMENT FOR EACH ITEM

THE FOLLOWING SYSTEMS SHALL BE INSULATED.
DUCT LINER SHALL BE CLOSED CELL TYPE, GERM PROOF

IECC 2015 REQUIREMENTS:

1. HEATING HOT WATER MAINS AND BRANCHES:
   PIPING < 1" REQUIRES 1 1/2" INSULATION
   PIPING > 1½" REQUIRES 2" INSULATION
2. SUPPLY & RETURN DUCTWORK FROM HVAC UNITS:
   1 1/2" INSULATION MIN. R-6

LEED/ASHRAE 2013 REQUIREMENTS:

1. HEATING HOT WATER MAINS AND BRANCHES:
   PIPING < 1 1/2" REQUIRES 1½" INSULATION
   PIPING > 1½" REQUIRES 2" INSULATION
2. SUPPLY & RETURN DUCTWORK FROM HVAC UNITS:
   1" INSULATION MIN. R-6

GENERAL INSULATION REQUIREMENTS:

1: ALL LINED SUPPLY, RETURN AND TRANSFER DUCTWORK SHALL BE 1" DUCT LINER
   -DUCT INSULATION SHALL CONTINUE OVER DUCT AT LINED POINT
   -FIRST 10' OF SUPPLY AND RETURN FOR ALL ERU'S AND HVAC UNITS
2. CONDENSATE DRAIN: 1"
3. ALL DUCTWORK IN CEILING SPACE SHALL HAVE R-6 INSULATION,
4. REFRIGERANT PIPING ⅜" ARAMFLEX

ALL DUCTWORK ON ROOF OR UNCONDITIONED SPACE SHALL BE INSULATED WITH R-12 INSULATION AND COVERED WITH EPDM ROOFING MATERIAL FOR WATER TIGHT INSTALLATION.

APARTMENT EXHAUST NOTES

I) EACH APARTMENT SHALL BE PROVIDED WITH A CONNECTION POINT FOR A CLOTHES WASHER VENT.
II) PROVIDE AND INSTALL THEDRYERBOX ®, SIZED TO THE WALL THICKNESS, SHALL BE PROVIDED AT EACH SCHEDULED DRYER LOCATION
III) DRYER VENT PIPE SHALL BE MINIMUM 28 GAUGE RIGID METAL, WITH NO SCREWS FOR ATTACHMENT, AND CONSTRUCTED AND INSTALLED PER SMACNA STANDARDS.
IV) DRYER VENTING SHALL USE THE DRYER ELL FOR THE FIRST ELBOW, LOCATED AND COORDINATED TO MINIMIZE ANY ADDITIONAL BENDS. DUCTWORK SHALL HAVE THE LAST (5) FEET MINIMUM PITCHED TO THE EXTERIOR EXHAUST POINT.
V) DUCTWORK SHALL EXHAUST TO THE EXTERIOR TO A NON-SCREENED VINYL SIDEWALL HOOD PROVIDED UNDER THIS SCOPE AND COLORED TO MATCH THE ADJACENT EXTERIOR FINISH.
VI)INSULATE WITH R-4 MINIMUM LAST 10' OF EXHAUST SEAL AGAINST EXTERIOR WALL
VII)LAUNDRY VENT DUCT SHALL BE ALUMINUM TYPE TO PREVENT CORROSION AND TAPE SHALL BE IN COMPLIANCE WITH UL FOR DRYER DUCT CONNECTIONS

KITCHEN EXHAUST
I) EACH APARTMENT SHALL BE PROVIDED WITH A CONNECTION POINT FOR EXHAUSTING A RANGE HOOD.
II) COORDINATE SIZE AND CONNECTION POINT WITH THE GENERAL CONTRACTOR, APPLIANCE SUPPLIER AND CABINET SUPPLIER.
III) EXHAUST PIPE SHALL BE MINIMUM 26 GAUGE RIGID METAL, WITH NO SCREWS FOR ATTACHMENT, AND CONSTRUCTED AND INSTALLED PER SMACNA STANDARDS. DUCTWORK SHALL HAVE THE LAST (5) FEET MINIMUM PITCHED TO THE EXTERIOR EXHAUST POINT.
IV) DUCTWORK SHALL EXHAUST TO THE EXTERIOR TO A SCREENED VINYL SIDEWALL HOOD PROVIDED UNDER THIS SCOPE AND COLORED TO MATCH THE ADJACENT EXTERIOR FINISH.
V)INSULATE WITH R-4 MINIMUM LAST 10' OF EXHAUST SEAL AGAINST EXTERIOR WALL

BATHROOM EXHAUST
I) EACH APARTMENT SHALL BE PROVIDED WITH A CONNECTION POINT FOR EXHAUSTING A BATHROOM
II) COORDINATE SIZE AND LOCATION WITH THE GENERAL CONTRACTOR AND ARCHITECT
III) EXHAUST PIPE SHALL BE MINIMUM 26 GAUGE RIGID METAL, CONSTRUCTED AND INSTALLED PER SMACNA STANDARDS. DUCTWORK SHALL HAVE THE LAST (5) FEET MINIMUM PITCHED TO THE EXTERIOR EXHAUST POINT.
IV) DUCTWORK SHALL EXHAUST TO THE EXTERIOR TO A SCREENED VINYL SIDEWALL HOOD PROVIDED UNDER THIS SCOPE AND COLORED TO MATCH THE ADJACENT EXTERIOR FINISH.
V)INSULATE WITH R-4 MINIMUM LAST 10' OF EXHAUST SEAL AGAINST EXTERIOR WALL

MAIN/BRANCH DUCT SCHEDULE

SIZE	MAX. CFM	SIZE	MAX. CFM
6" DIA	100	12x8	350
7" DIA	150	12x8	400
8" DIA	200	12x8	450
9" DIA	300	14x8	500
10" DIA	400	16x8	600
8x6	200	18x8 OR 16x10	700
8x8	250	20x8 OR 18x10	800
10x8	300	24x8 OR 20x10	1000
		30x8 OR 24x10	1200

NOTE: MAXIMUM FLEXIBLE DUCT LENGTH SHALL BE 4'
USE INSULATED SEMI RIGID BUCK DUCT.

MINIMUM RETURN DUCT PER HERS

CAPACITY	RETURN	FILTER
1.5 TON	ø16"	500 INCH2
2.0 TON	ø18"	600 INCH2
2.5 TON	ø20"	500 INCH2

MAXIMUM RETURN DUCT 30FT

COMMONWEALTH OF MASSACHUSETTS — MURAT EKERBICER MECHANICAL No. 51899 — REGISTERED PROFESSIONAL ENGINEER

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

ZADE ENGINEERING LLC
CONSULTING ENGINEERS
1 BILLINGS ROAD STE 306, QUINCY, MA 02171
TEL. (617) 338-4400
FAX. (617) 451-2540
EMAIL zade@zadeengineering.com

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 01-06-2026
Drawn By: ----------

Drawing Name

HVAC DETAILS

Sheet No.

H-5

DIFFUSER/REGISTER SCHEDULE

LEGEND: (N)– ⅈ×ⅈ – ⅈⅈⅈ
- ⅈⅈⅈ — CFM
- ⅈ×ⅈ — DIMENSIONS
- (N)– — TYPE

TYPE	DESCRIPTION	MODEL (BASED ON TITUS)
A	LOUVER FACE CEILING DIFFUSER FOR SHEET ROCK CEILING INSTALLATION. PROVIDE ROUND TO SQUARE ADAPTOR. WITH OPPOSIBLE BLADE DAMPER	TITUS TDCA, BORDER 1
A1	LOUVER FACE CEILING DIFFUSER FOR 2'x2' LAY-IN CEILING INSTALLATION. PROVIDE ROUND TO SQUARE ADAPTOR. WITH OPPOSIBLE BLADE DAMPER	TITUS TDCA, BORDER 3
B	DOUBLE DEFLECTION REGISTER FOR SHEET ROCK INSTALLATION. PROVIDE ROUND TO SQUARE ADAPTOR.	TITUS 272RS
E	DOUBLE DEFLECTION GRILLE FOR SHEET ROCK NSTALLATION. WITH OPPOSIBLE BLADE DAMPER	TITUS 25 RS
E1	DOUBLE DEFLECTION GRILLE FOR SHEET ROCK NSTALLATION. WITH OPPOSIBLE BLADE DAMPER ALUMINUM TYPE	TITUS 25 RS
F	PERFORATED SIGHT PROOF EGGCRATE GRILLE FOR SHEET ROCK CEILING INSTALLATION.	TITUS 45F
G	LINEAR DIFFUSER, LINEAR STYLE 1 1/2" SLOT SPACING WIDTH, 4 SLOT FOR SHEET ROCK CEILING INSTALLATION. 100 CFM/FT WITH DAMPER, INSULATED PLENUM	TITUS MLR-40, BORDER TYPE 22

CEILING RADIATION DAMPERS

CEILING RADIATION DAMPERS SHALL BE AS MANUFACTURED BY GREENHECK
MODEL CRD-1WT FOR SIDE INLET
MODEL CRD-2WT FOR TOP INLET

CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE UL LISTED DAMPER WITH THE UL LISTING OF THE CEILING

APPROVED CEILING RATINGS ARE
L-528,546,558,562,574,576,581,583,585,592
M-501,503,508
P-533,538,545,547,548,554

FIRE SAFE THROUGH FLOORS

TYPE	SIZE	HILTI	MATERIAL	RATING	BOTTOM	TOP	CHASE WALL
STEEL/CAST COPPER/EMT	MAX 4"	FS-ONE	INTUMESCENT SEALANT	2HRS	FIRE STOP	FIRE STOP	REQUIRED
STEEL/CAST 4" EMT/ 2" FLEX	MAX 6"	FS-ONE	INTUMESCENT SEALANT	2HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
STEEL/CAST COPPER/EMT	MAX 4"	CP-620	FIRE FOAM	1HRS	FIRE STOP	FIRE STOP	REQUIRED
PEX	MAX 1"	CP 645	INTUMESCENT STRIP W/COLLAR	1HRS	BOTH SIDES	BOTH SIDES	NOT REQUIRED
PVC PIPE	MAX 2"	FS-ONE	INTUMESCENT SEALANT	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
PVC PIPE	MAX 4"	FS-ONE	INTUMESCENT SEALANT	2HRS	FIRE STOP	FIRE STOP	REQUIRED
PVC PIPE	MAX 4"	CP 645	INTUMESCENT STRIP W/COLLAR	1HRS	COLLAR	FIRE STOP	NOT REQUIRED
REFRIGERANT	–	FS-ONE	INTUMESCENT SEALANT	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
4" DUCT	MAX 4"	FS-ONE	INTUMESCENT SEALANT	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
INSULATED COPPER/STEEL	MAX 2"	FS-ONE	INTUMESCENT SEALANT	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
CABLES	MAX 2"	FS-ONE	INTUMESCENT SEALANT	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED

LOUVER NOTES

LOUVER DIMENSIONS SHALL BE COORDINATED WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS
LOUVERS SHALL BE AMCA CERTIFIED FOR WIND DRIVEN RAINS
BLADES SHALL BE 4" DEEP MOUNTED BETWEEN 35-45 DEGREES WITH DRAINABLE BLADE AND DRAINABLE HEAD
PROVIDE BIRD SCREENS IN COMPLIANCE WITH IMC 401
PROVIDE CLOR ANODIZED LOUVER PER ARCHITECTS DIRECTION
LOUVERS SHALL BE AS MANUFACTURED BY GREENHECK MODEL EHH 401 SERIES

CONSTRUCTION NOTES

-ALL CEILING MOUNTED HVAC UNITS SHALL BE HUNG FROM STRUCTURAL STEEL WITH SPRING ISOLATORS,
-PROVIDE FLEXIBLE DUCT CONNECTIONS AT HVAC UNIT, AND ALL FANS
-PROVIDE ISOLATION VALVES, CONTROL VALVES, DRAIN AND STRAINER FOR ALL WATER BASED HVAC UNITS.
-PROVIDE SECONDARY DRAIN PAN WITH LEAK DETECTOR TO SHUT DOWN HVAC UNIT.
-MAINTAIN ACCESS DOORS AND CODE REQUIRED CLEARANCES FOR ALL FILTER REPLACEMENT, EQUIPMENT REPAIR AND ELECTRICAL CONTROLS,
-PRIOR TO ANY INSTALLATION, COORDINATE CLEARANCES WITH ALL TRADES.
-ALL CONDENSATE DRAINS SHALL RUN TO NEAREST STORM CONNECTION PROVIDED BY P.C. REFER TO PLUMBING DRAWINGS
-ALL CONDENSING UNITS SHALL BE MOUNTED ON CONCRETE PAD ON VIBRATION PADS, OR MOUNTED ON SLEEPERS ANCHORED TO ROOF.
-ALL SPLIT SYSTEM CONDENSER UNITS IF LOCATED AWAY FROM THE BUILDING SHALL BE PIPED UNDERGROUND UP TO BUILDING, PROVIDE MINIMUM 18" COVER.
-PROVIDE MAINTENANCE PADS MINIMUM 4" HIGH FOR ALL FLOOR-MOUNTED EQUIPMENT PUMPS AND BOILERS.
-PROVIDE 13 FILTERS FOR ALL INDOOR UNITS, MERV 8 FOR ESTAR/LEED BUILDINGS
-PROVIDE 11 FILTERS FOR ALL OUTSIDE AIR UNITS, MERV 8 FOR ESTAR/LEED BUILDINGS
-ALL PIPING CONNECTED TO VIBRATION-ISOLATED EQUIPMENT TO BE ISOLATED BY MEANS OF VIBRATION ISOLATORS, RESILIENT LATERAL SUPPORTS AND RESILIENT PENETRATION SLEEVE /SEALS. THIS APPLIES TO FIRST 50 FEET OF TOTAL PIPE LENGTH OR THE ENTIRE PIPE WITHIN MECH. ROOM (WHICHEVER IS LONGER). PIPES THAT ARE 4" DIAMETER OR LARGER TO BE ISOLATED THROUGHT THE BUILDING REFER TO SPEC SECTION 230548 FOR ADDITIONAL INFORMATION
-PROVIDE EXPANSION LOOPS AS REQIRED
-ALL FRESH AIR DUCTS SHALL HAVE MOTORIZED DAMPERS INTERLOCKED WITH UNIT AND HAVE VOLUME DAMPERS

FIRE RATED CEILING NOTES:

WHEN DUCT PENETRATE RATED CEILING:

-ALL RECESSED DIFFUSERS AND REGISTERS SHALL HAVE RADIATION DAMPERS.
-ALL UNITS DUCTED TO PLENUM SPACE SHALL HAVE CEILING FIRE DAMPERS TO MEET UL 555C -ALL RETURN DUCTS SHALL BE BELOW THE RATED CEILING, DROPPED CEILING AREAS SHALL NOT BE RATED CEILING UNLESS SHOWN OTHERWISE
-ALL RETURN AIR GRILLES IN RATED CEILING SHALL HAVE CEILING FIRE DAMPERS
-ALL UNIT DISCHARGES SHALL BE OFFSET TO GET INTO PROPER JOIST SPACES, CARRY TRANSITION PIECE AS NEEDED
-ALL DUCTS LARGER THAN 4"ø DIAMETER SHALL HAVE FIRE DAMPERS AT CEILING PENETRATIONS

FIRE/SMOKE DAMPER REQUIREMENTS

IMC 607.5.5 REQUIRES FIRE/SMOKE DAMPER AT ALL SHAFT PENETRATIONS

IMC 607.6.1. REQUIRES DAMPER EXCEPT
-DUCT CAN PENETRATE UP TO THREE FLOORS IF, 26 GAUGE, OPEN FROM ONE UNIT TO OUTSIDE, 4" ROUND AND SEALED AROUND AND CEILING GRILLES HAVE RADIATION DAMPERS

IMC 6075.3 REQUIRES FIRE PARTITION PENETRATIONS TO HAVE FIRE DAMPERS EXCEPT
-BUILDING IS SPRINKLED OR
-DUCT IS MINIMUM 26 GAUGE, LESS THAN 100 SQ-INCH AND
-DUCT IS ABOVE CEILING AND,
-DUCT IS NOT TERMINATED AT FIRE RATED WALL AND
-MINIMUM 12" SLEEVE IS PROVIDED

STANDARD SPLIT HEAT PUMP SYSTEM SCHEDULE (INDOOR)

UNIT NO.	MITSUBISHI MODEL	RATED CAPACITY (BTU/H)	SEER	POWER SUPPLY	MCA	FAN MOTOR	AIRFLOW (LOW-MEDIUM HIGH)	SOUND LEVEL (LO-M1-M2-HI)	W	D	H	WEIGHT (LBS)	INTAKE AIR TEMP MAX	INTAKE AIR TEMP MIN
ACU-1	PKA-A12HA7	12,000	15.3	208/230V 1 PHASE, 60HZ	1.0 A	0.76 F.L.A	268-328-381 DRY CFM 240-293-342 WET CFM	34-40-45 DB(A)	30-11/16"	8-1/4"	11-3/4"	23	95°DB 71°WB	67°DB 57°WB
HPC-1	PLA-A12HA7	12,000	15.3	208/230V 1 PHASE, 60HZ	1.0 A	0.76 F.L.A	268-328-381 DRY CFM 240-293-342 WET CFM	34-40-45 DB(A)	30-11/16"	8-1/4"	11-3/4"	23	95°DB 71°WB	67°DB 57°WB

PROVIDE ME HVAC CONTROLLER WALL MOUNTED THERMOSTAT, DISCONNECT SWITCH

STANDARD SPLIT HEAT PUMP SYSTEM SCHEDULE (OUTDOOR)

UNIT NO.	MITSUBISHI MODEL	RATED CAPACITY (BTU/H)	SEER	POWER SUPPLY	R.L.A.	MCA	MOCP	SOUND LEVEL	W	D	H	WEIGHT (LBS)	MAX REFRIDGERANT PIPE LENGTH (FT)	MAX REFRIDGERANT PIPE HEIGHT DIFF (FT)	INTAKE AIR TEMP MAX	INTAKE AIR TEMP MIN
CU-1	PUZ-A12NHA4	12,000	16	208/1PHASE	DC	14	20	50 DB(A)	31-1/2"	11-1/4"	21-5/8"	88	100	100	D.B. 115° F	D.B. -13° F
CU-2	PUZ-A12NHA4	12,000	16	208/1PHASE	DC	14	20	50 DB(A)	31-1/2"	11-1/4"	21-5/8"	88	100	100	D.B. 115° F	D.B. -13° F

WITH EACH UNIT PROVIDE
-3R RATED FUSED DISCONNECT SWITCH BY ELECTRICAL CONTRACTOR
-PROVIDE MOUNTING STAND ABOVE SNOW LINE
-PROVIDE WIND BAFFLE KIT FOR LOW AMBIENT OPERATION

WALL CAP SCHEDULE

TAG	BRAND	SIZE	DIMENSIONS	LOCATION	DUCT
WC-B	X-VENT THVB	4" VENT	7.5"X7.5"X1.5"	BATHROOM EXHAUST	ø4"-NO FLEX
WC-K	X-VENT THVB	6" VENT	10"x9"X5"	KITCHEN EXHAUST	ø6" W/FD AT CEILING PENETRATION
WC-D	X-VENT THVB	4" VENT	7.5"X7.5"X1.5"	DRYER EXHAUST-REMOVE SCREEN	ø4" AL WITH HARD ELBOW
WC-FA	X-VENT TEVB	6" VENT	7.5"X7.5"X1.5"	FRESH AIR INTAKE	ø6"-INSULATED

VYNIL COLOR TO MATCH SIDING,
MATCH DUCT SIZE CONNECTED TO UNIT.
ALL EXHAUST DUCTS SHALL HAVE R-6 INSULATION FIRST 10FT FROM EXTERIOR WALL IN
ALL FRESH AIR INTAKE DUCTS SHALL HAVE MOTORIZED DAMPER AT ENVELOPE PENETRATION WITH ACCESS PANEL.
DAMPER SHALL BE INTERLOCKED WITH HVAC UNIT
FOR COMBINED BATHROOMS, USE 6" DUCT AFTER COMBINE AND USE WC-K WALL CAP
COMBINE EXHAUST TO ONE WALL CAP WITH SEPARATE DUCT CONNECTIONS IF LOCATED NEXT TO EACH OTHER COORDINATE WITH ARCHITECT

MULTIZONE HEAT PUMP UNIT SCHEDULE (NON-SIMULTANE HEAT AND COOL)

TAG NO.	TON	REFRIG	OUTDOOR UNIT HEAT	OUTDOOR UNIT COOL	OUTDOOR UNIT VOLT/PHS	DUCTED/NON-DUCTED AMP	MCA	KW	SEER	EER	HSPF	CAP/TYP	MAX # OF INDOOR	NOISE @ 5FT PRESSURE	MITSUBISHI MODEL#	DIMENSIONS	MAX REF LENGHT EACH/TOTAL/HEIGHT	ESTAR
CU-4	4.0	R410A	54,000	48,000	208/1	29.5	40	4.3	15.0 19.0	10.8 13.4	10.1 11.0	2.50 2.85		54 DBA	MXZ-8C48NAHZ2	42"WX13"DX53"H-275 LBS	130 BELOW/164 ABOVE 262/492	YES

WITH EACH UNIT PROVIDE
-3R RATED FUSED DISCONNECT SWITCH
-SEACOST PROTECTION OPTION,
-HEATING VALUES ARE AT SF, USE 95% FACTOR FOR RUNS MORE THAN 50FT
-SIZE AT -13F
-PROVIDE CLEARANCES OF 6" BEHIND, 15" ON THE RIGHT SIDE AND 20" ON THE FRONT AND ABOVE
-PROVIDE BRANCH BOX FOR MORE THAN 3 UNIT CONNECTIONS
---208/1/5A POWER TO EACH BC CONTROLLER,
-PROVIDE COLD TEMPERATURE BAFFLE

MULTIZONE HEAT PUMP UNIT SCHEDULE (NON-SIMULTANE HEAT AND COOL)

TAG NO.	TON	CFM	INDOOR UNIT HEAT	INDOOR UNIT COOL	VOLT/PHS	SP	KW		NOISE	MITSUBISHI MODEL#	DIMENSIONS
HPC-.75	.75	400	10,000	9,000	208/1	0.1"	.6		45 DBA	PLA-A09AA7	39"WX27"DX8"H-150LBS
HPC-1	1	400	15,000	12,000	208/1	0.1"	.6		45 DBA	PLA-A12AA7	39"WX27"DX8"H-150LBS

NOTE
UNITS ARE BASED ON HIGH EXTERNAL STATIC PRESSURE OPTION, STANDARD PRESSURE IS 0.1"
HEATING VALUES ARE AT 82% WHEN OUTDOORS IS -13 DEGREE F
WITH EACH UNIT PROVIDE ME PROGRAMMABLE CONTROLLER

SPLIT SYSTEM WITH WATER COIL VERTICAL HVAC UNIT SCHEDULE(VARIABLE DRIVE)

TAG	INDOOR SECTION NOM. CAP. TON	CFM	ESP IN	FAN HP	TOT. MBH	SENS. MBH	HTG. COIL EAT	LAT	BTUH	V/ø	CONDENSING SECTION TAG	MCA	MOCP	V/ø	EER/SEER	DB IN/OUT	MODEL (ASPEN/ CARRIER)	INDOOR	OUTDOOR	REMARKS
HVAC-1.5	1.5	600	.5	1/3	24	20	70	90	24.0	115/1	CU-1.5	14	20	208/1	13/17	60/74	AFM18/24ACB7-18-3 AND MATCHING COIL	15"WX22"DX44"H+12" COIL	31"LX31WDX40"H-250 LBS	W/HW PUMP/TIMER
HVAC-2	2	800	.5	1/3	24	20	70	90	28.0	115/1	CU-2	14	20	208/1	13/17	60/74	AFM24/24ACB7-24-3 AND MATCHING COIL	15"WX22"DX44"H+12" COIL	31"LX31WDX40"H-250 LBS	W/HW PUMP/TIMER
HVAC- 2.5	2.5	1000	.5	1/2	30	25	70	90	31.0	115/1	CU-2.5	14	20	208/1	13/17	60/74	AFM30/24ACB7-32-3 AND MATCHING COIL	15"WX22"DX44"H+12" COIL	31"LX31WDX40"H-250 LBS	W/HW PUMP/TIMER
HVAC-3	3	1200	.5	1/2	36	35	70	90	33.5	115/1	CU-3	22	30	208/1	13/17	60/74	AFM36/24ACB7-36-3 AND MATCHING COIL	15"WX22"DX44"H+12" COIL	31"LX31WDX40"H-250 LBS	W/HW PUMP/TIMER
HVAC-3.5	3.5	1400	.5	1/2	42	33	70	90	42.0	115/1	CU-3.5	22	30	208/1	13/17	60/74	AFM42/24ACB7-42-3 AND MATCHING COIL	15"WX22"DX44"H+12" COIL	31"LX31WDX40"H-250 LBS	W/HW PUMP/TIMER
HVAC-4	4	1600	.5	1/2	48	41	70	90	44.0	115/1	CU-4	27	40	208/1	13/17	60/74	AFM48/24ACB7-48-3 AND MATCHING COIL	15"WX22"DX44"H+12" COIL	31"LX31WDX40"H-250 LBS	W/HW PUMP/TIMER

NOTE: PROVIDE ESTAR RATED THERMOSTAT, ANTI CYCLING PROTECTION, DISCONNECT SWITCH.
HEATING COILS SUPPLIED W/ 140 DEG. HOT WATER.
CONDENSATE DRAINS SHALL BE TYPE "L" COPPER WITH ½" FIBERGLASS INSULATION RUN TO INDIRECT WASTE DRAIN REFER TO RISER DIAGRAM
PROVIDE ZONE CONTROL AS REQUIRED TO MATCH NUMBER OF MOTORIZED DAMPERS
PROVIDE REFRIGERANT LINES BETWEEN INDOOR AND OUTDOOR UNITS AS REQUIRED PER MANUFACTURER'S RECOMMENDATIONS.
PROVIDE MERV 11 FILTERS
PROVIDE HIGH HEAD PUMP
PROVIDE PUMP RATED FOR MINIMUM OF 3½ GPM AT 30FT OF HEAD

ELECTRIC HEATER SCHEDULE

TYPE	KW	VOLT/PH	DIMENSIONS	MODEL NUMBER-COLOR BY ARCH
RWH-1	1	120/1		Q'MARK#CRA 1512-T2
RWH-2	2	120/1	19"HX16"WX4"D	Q'MARK# MCSSARWH1802/HTWHS1
RWH-4	4	208/1	19"HX16"WX4"D	Q'MARK# MCSSARWH4808/HTWHS1
SWH-4	4	208/1	19"HX16"WX4"D	Q'MARK# MCSSARWH4808/HTWHSM
EBB-2	0.4	120/1		Q'MARK#QMK-2512W-W/T'STAT
EBB-3	0.75	120/1		Q'MARK#QMK-2513W-W/T'STAT
EBB-4	1	120/1		Q'MARK#QMK-2514W-W/T'STAT
EBB-6	1.5	120/1		Q'MARK#QMK-2516W-W/T'STAT
UH-5	5	208/1		Q'MARK#MUH-35-W/T'STAT
CCH-4	4	208/1		Q'MARK#CDF548-W/T'STAT

SOME HEATERS MAY NOT NOTED/USED ON PLANS

CEILING MOUNTED EXHAUST FAN

TAG	LOCATION	TYPE	DRIVE	CFM	V/ø	LAMP	SP	NOISE SONES	DIMENSIONS	PANASONIC MODEL	ESTAR	CONTROLS
EF-1	BATHROOM	CEILING	DIRECT	110	120/1	(2)PL18	0.1"	0.3	14.5"X17"X11.5"H-16LBS-6" DUCT	FV-05-11VKSL1	YES	HIGH/LOW FAN REQUIRES TWO WALL SWITCHES (HAS LIGHT)

PROVIDE PANASONIC FIRE DAMPER ENCLOSURE FOR ALL CEILING BATHROOM FANS.



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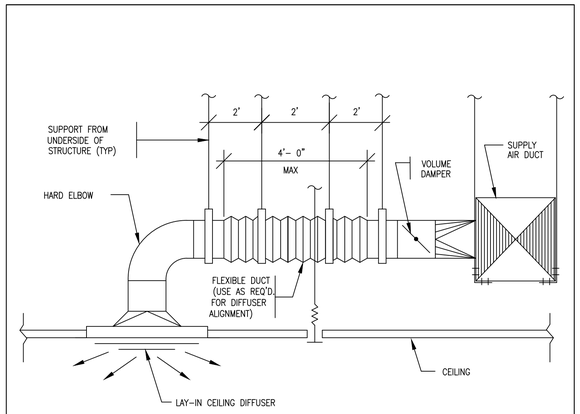
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HVAC DETAILS

Sheet No.

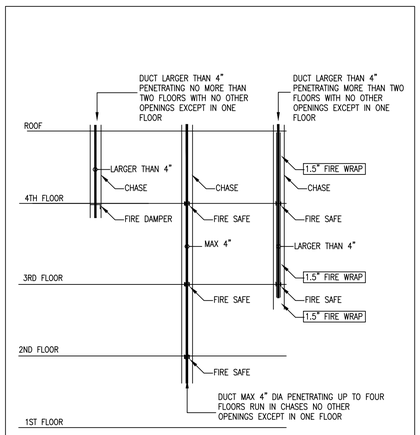
H-6



NOTES:

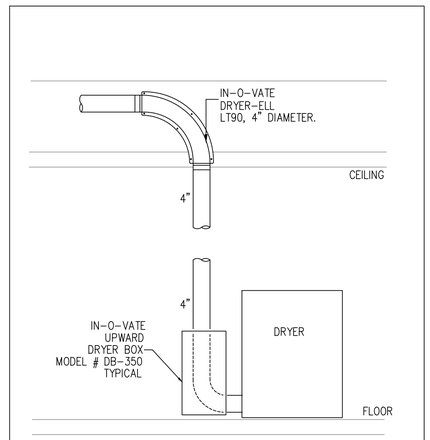
① MAXIMUM SAG 1/2" PER FOOT.

CEILING DIFFUSER BRANCH DUCTS | N.T.S.

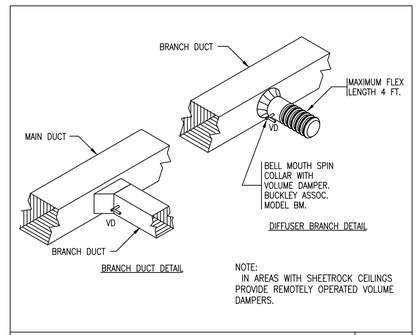


PER IMC 2015 FIGURE 607.6.1(2)

DUCT RISER THROUGH FLOORS | NTS

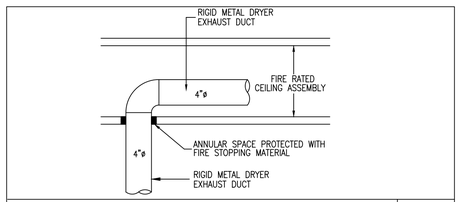


TYPICAL DRYER BOX AND DRYER ELL DETAIL | NTS

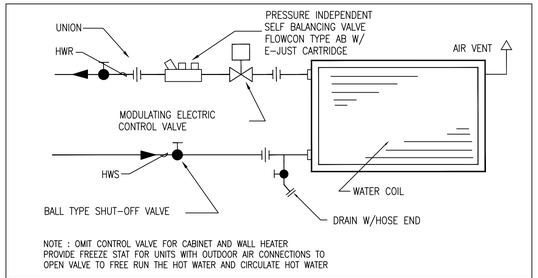


NOTE:
IN AREAS WITH SHEETROCK CEILINGS PROVIDE REMOTELY OPERATED VOLUME DAMPERS.

DUCT DETAILS | NTS

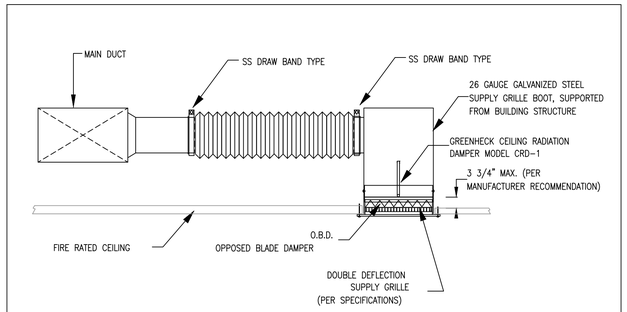


FLOOR/CEILING DUCT PROTECTION DETAIL | NTS

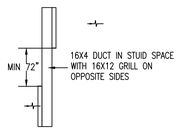


NOTE : OMIT CONTROL VALVE FOR CABINET AND WALL HEATER
PROVIDE FREEZE STAT FOR UNITS WITH OUTDOOR AIR CONNECTIONS TO OPEN VALVE TO FREE RUN THE HOT WATER AND CIRCULATE HOT WATER

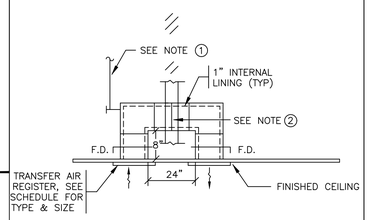
WATER COIL PIPING DETAIL | NTS



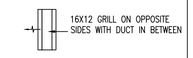
SUPPLY GRILLE/CRD INSTALLATION DETAIL | NTS



BEDROOM WALL TRANSFER GRILL



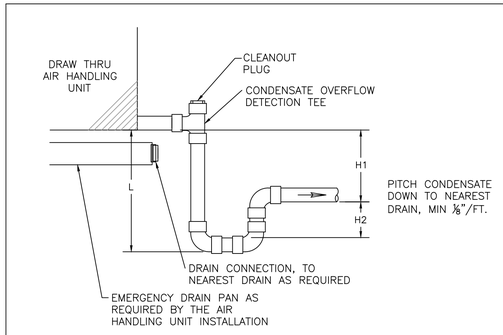
CEILING TRANSFER GRILL



LAUNDRY ROOM WALL TRANSFER GRILL

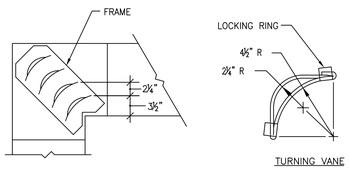
NOTES:
① TRANSFER DUCTS TO BE SUPPORTED FROM STRUCTURE ABOVE.
② FIRE DAMPER WHERE APPLICABLE, SEE PLANS FOR LOCATION.
③ OPEN END DUCT WxH.

CEILING AND WALL TRANSFER DUCT DETAIL | N.T.S.



H1 = MAX NEGATIVE STATIC PRESSURE PLUS 1"
H2 = H1/2
L = H1 + H2 + PIPE DIAMETER + INSULATION THICKNESS

CONDENSATE DRAIN DETAIL | NTS



NOTES:
1. LOCKING LUGS INTEGRAL WITH VANE.
2. MAXIMUM UNSUPPORTED VANE LENGTH 48".
3. FRAMES–BOLTED OR RIVETED TO ELBOW.
4. VANES AND FRAMES–SAME GAUGE AS ELBOW.

DOUBLE THICKNESS TURNING VANES FOR SQUARE ELBOW | N.T.S.

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER MECHANICAL No. 51899
REGISTERED PROFESSIONAL ENGINEER

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

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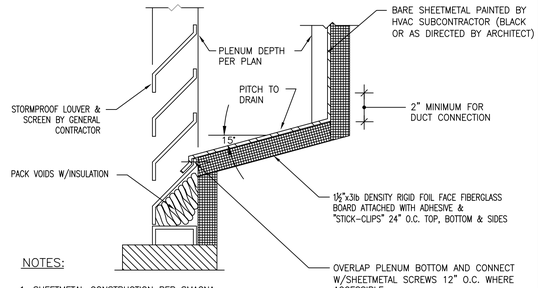
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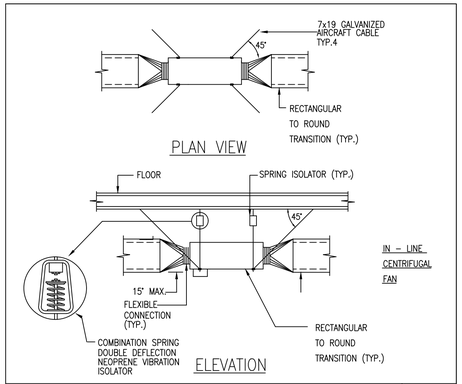
HVAC DETAILS

Sheet No.

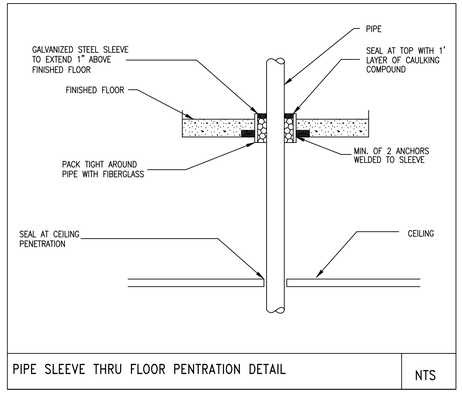
H-7



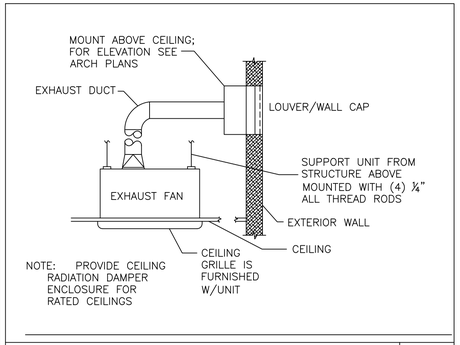
PLENUM AT LOUVER DETAIL | N.T.S.



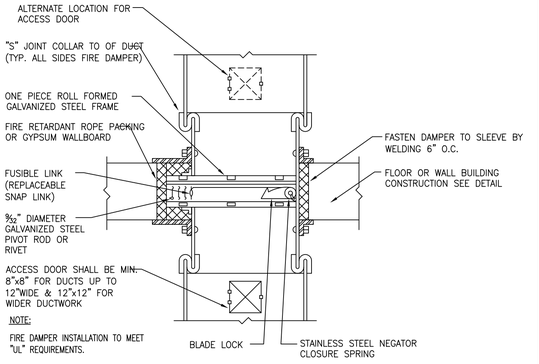
IN LINE FAN HANGER DETAIL | NTS



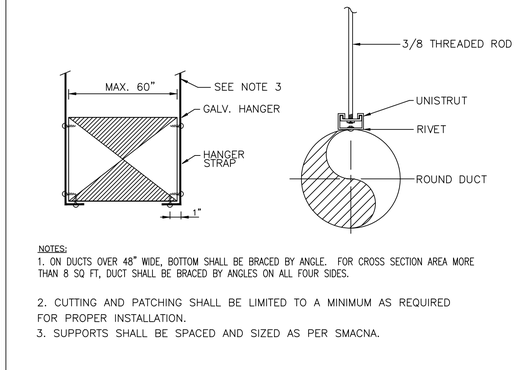
PIPE SLEEVE THRU FLOOR PENTRATION DETAIL | NTS



CEILING EXHAUST FAN DETAIL | NTS



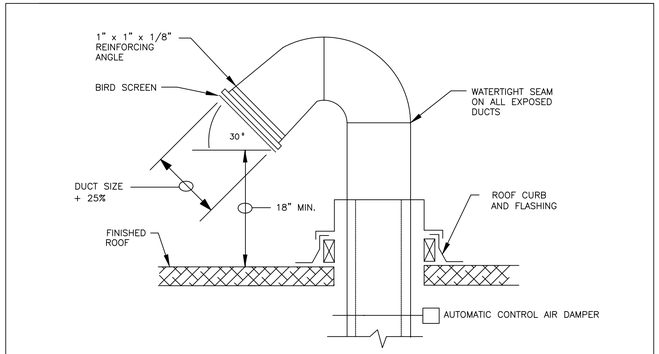
FIRE DAMPER W/BLADES OUTSIDE THE AIR STREAM | N.T.S.



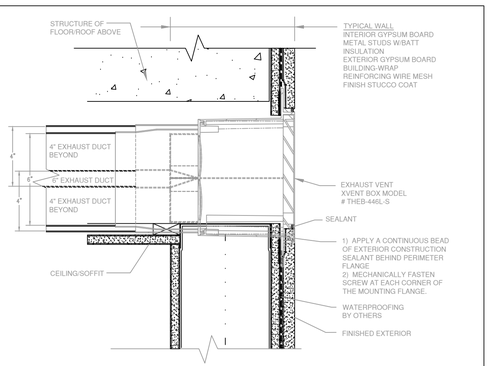
NOTES:
1. ON DUCTS OVER 48" WIDE, BOTTOM SHALL BE BRACED BY ANGLE. FOR CROSS SECTION AREA MORE THAN 8 SQ FT, DUCT SHALL BE BRACED BY ANGLES ON ALL FOUR SIDES.

2. CUTTING AND PATCHING SHALL BE LIMITED TO A MINIMUM AS REQUIRED FOR PROPER INSTALLATION.
3. SUPPORTS SHALL BE SPACED AND SIZED AS PER SMACNA.

DUCT HANGER SUPPORT | NTS



ROOF GOOSENECK DETAIL | NTS



TYPICAL WALL CAP PENETRATION XVENT BOX | NTS



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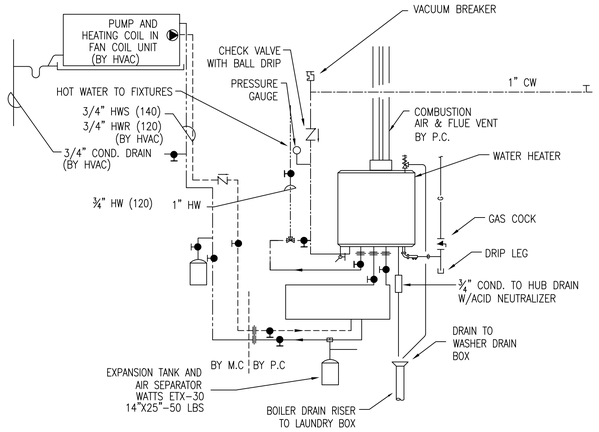
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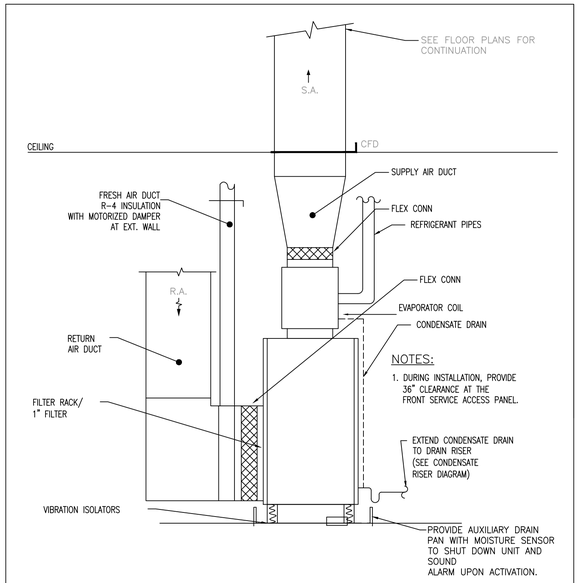
HVAC DETAILS

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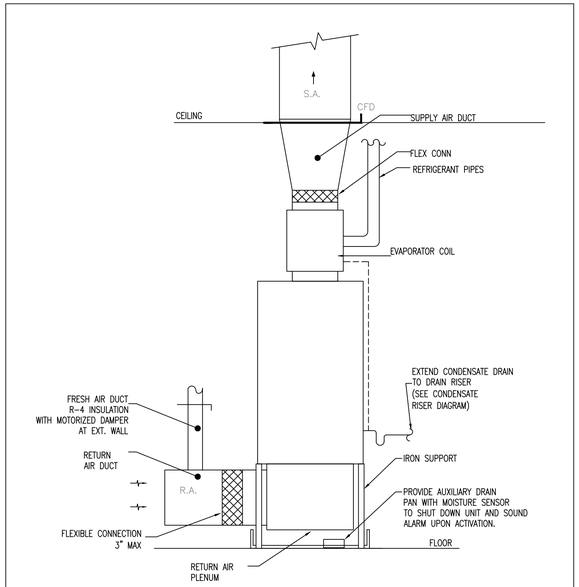
H-8



INSTANTANEOUS WATER HEATER DETAIL | N.T.S.

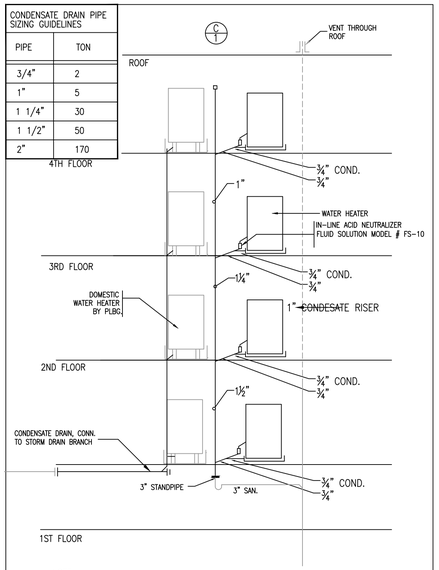


VERTICAL UNIT DETAIL WITH SIDE AIR RETURN | N.T.S.



VERTICAL UNIT DETAIL WITH BOTTOM AIR RETURN | N.T.S.

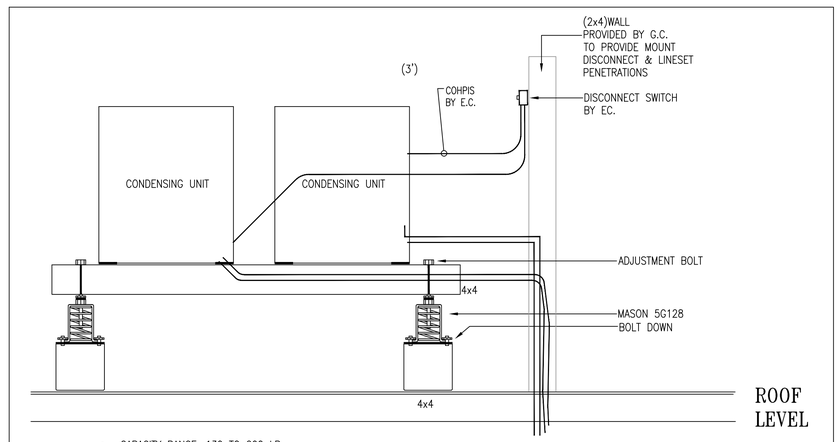
CONDENSATE DRAIN PIPE SIZING GUIDELINES	
PIPE	TON
3/4"	2
1"	5
1 1/4"	30
1 1/2"	50
2"	170



NOTE:
ALL ACID NEUTRALIZERS, DRAIN PIPING FROM FURNACES, AND CONDENSATE DRAIN SHALL BE BY HVAC CONTRACTOR. SANITARY PIPING SHALL BE BY PLUMBING CONTRACTOR.

NOTE:
PROVIDE CONDENSATE RISER IN EACH APARTMENT MECH ROOM AS SHOWN ON THIS DIAGRAM

MECHANICAL ROOM DRAIN RISER DIAGRAM | N.T.S.



- CAPACITY RANGE: 130 TO 200 LB.
- ISOLATOR TYPE: SPRING
- BOLT SIZE: 3/8x4" ←3/8"x10" BOLT

CONDENSING UNIT MOUNTING DETAIL | N.T.S.

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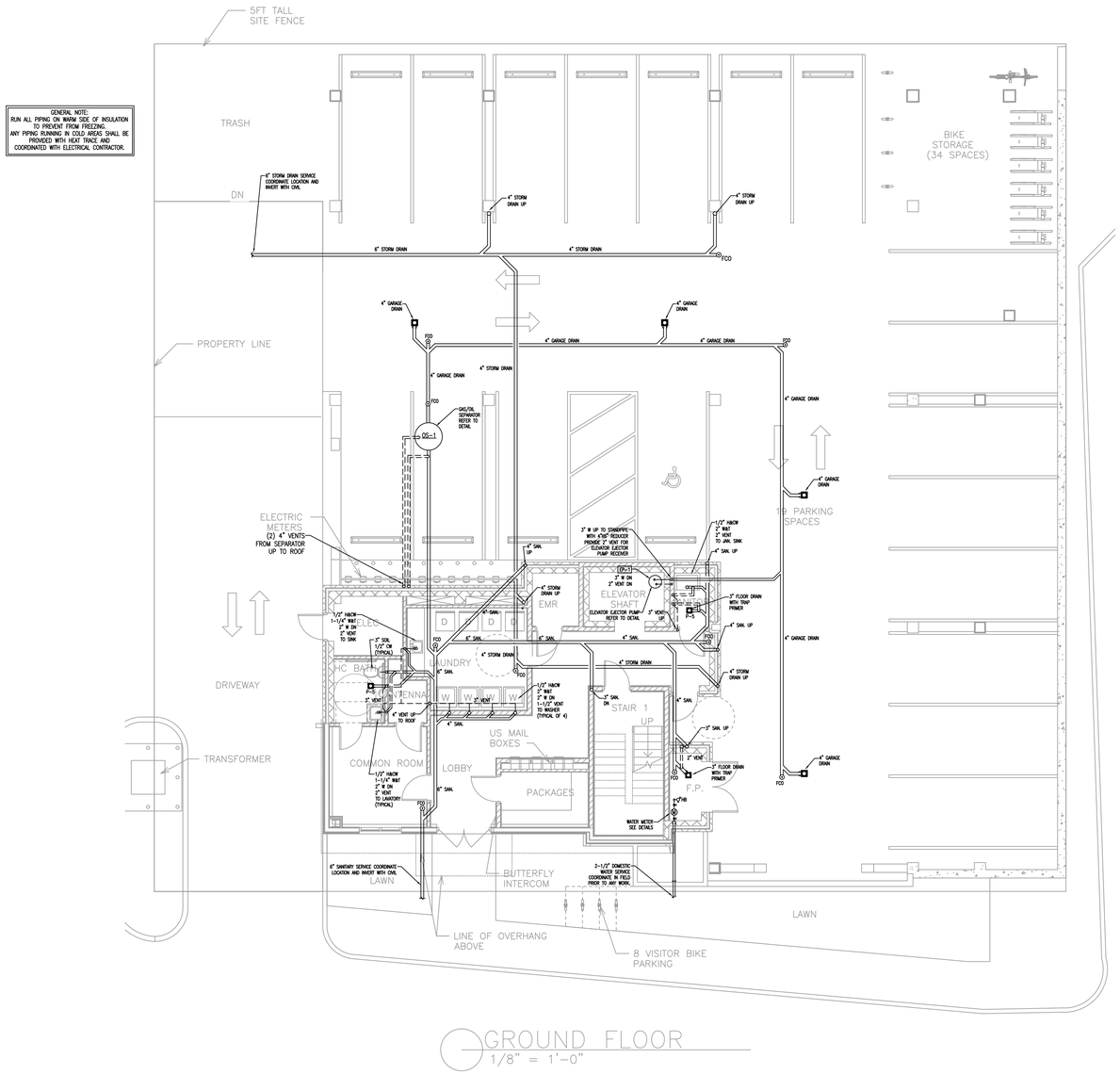
Drawing Name

HVAC DETAILS

Sheet No.

H-8

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER MECHANICAL No. 51899 REGISTERED PROFESSIONAL ENGINEER



GROUND FLOOR
1/8" = 1'-0"

BIKE PARK	
	REQUIRE
RESIDENT BIKE PARKING	1 SPACE PER UNI - 25% MIN. ON-SI - 75% MIN. IN STORAGE ROOMS (2 SPACES)
VISITOR BIKE PARKING	1 SPACE PER 5 UI SPACES)

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

ZADE ENGINEERING LLC
CONSULTING ENGINEERS
1 BILLINGS ROAD STE 306, QUINCY, MA 02171
TEL. (617) 338-4406
FAX. (617) 451-2540
EMAIL zade@zadeengineering.com

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 01-06-2026
Drawn By: ----------

Drawing Name

UNDERGROUND PLUMBING PLAN

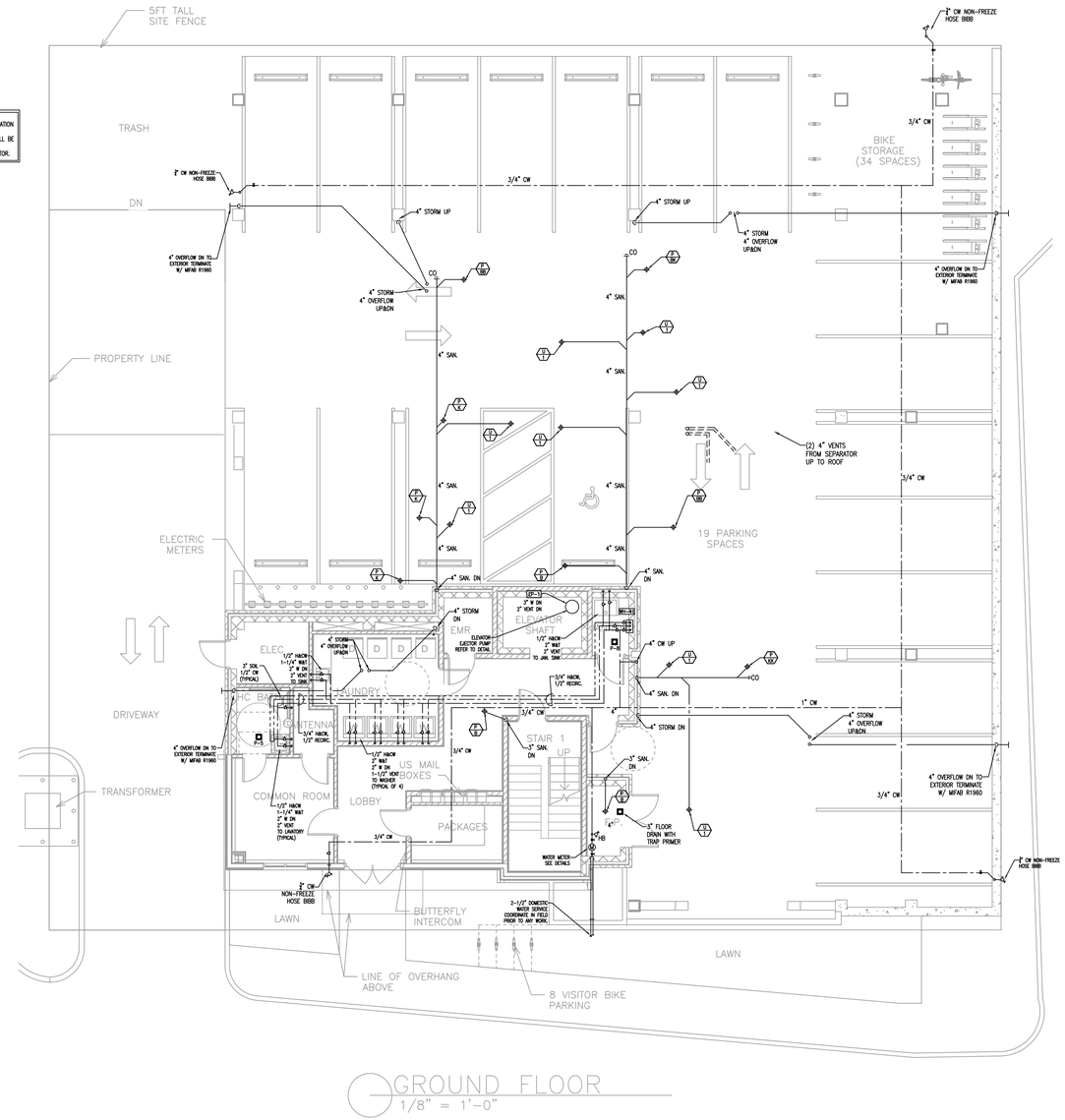
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P-0

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51899
REGISTERED PROFESSIONAL ENGINEER

GENERAL NOTE:
RUN ALL PIPING ON WARM SIDE OF INSULATION TO PREVENT FROM FREEZING.
ANY PIPING RUNNING IN COLD AREAS SHALL BE PROVIDED WITH HEAT TRACE AND COORDINATED WITH ELECTRICAL CONTRACTOR.

RUN 3/4" CW TO ICE MAKERS FROM KITCHEN WATER RISER



GROUND FLOOR
1/8" = 1'-0"

BIKE PARKING COMPLIANCE

	REQUIRED	PROPOSED
RESIDENT BIKE PARKING	1 SPACE PER UNIT (40 SPACES) - 25% MIN. ON-GROUND SPACES - 50% MAX. TWO-TIER SPACES (1% EXTRA-WIDE SPACES (2 SPACES)	34 SPACES - 10 ON-GROUND (29%) - 24 TWO-TIER SPACES - 24 TWO-TIER SPACES
VISITOR BIKE PARKING	1 SPACE PER 5 UNITS (8 SPACES)	8 SPACES (LOCATED AT THE EXTERIOR OF THE BUILDING)

MURAT EKERBICER MECHANICAL No. 51899 REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS

Location

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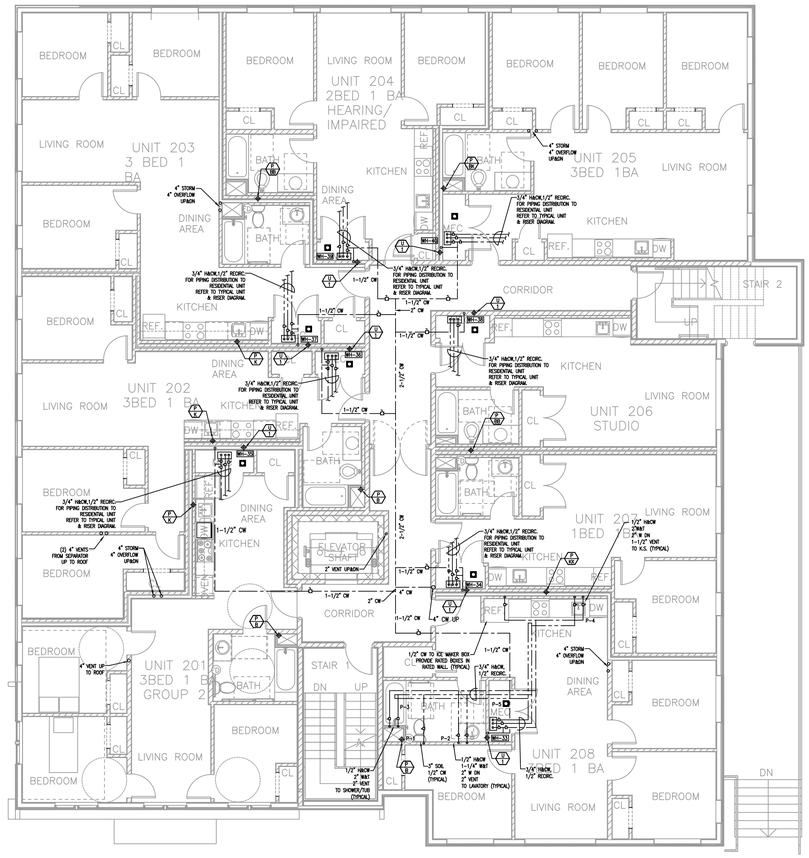
GROUND FLOOR PLUMBING PLAN

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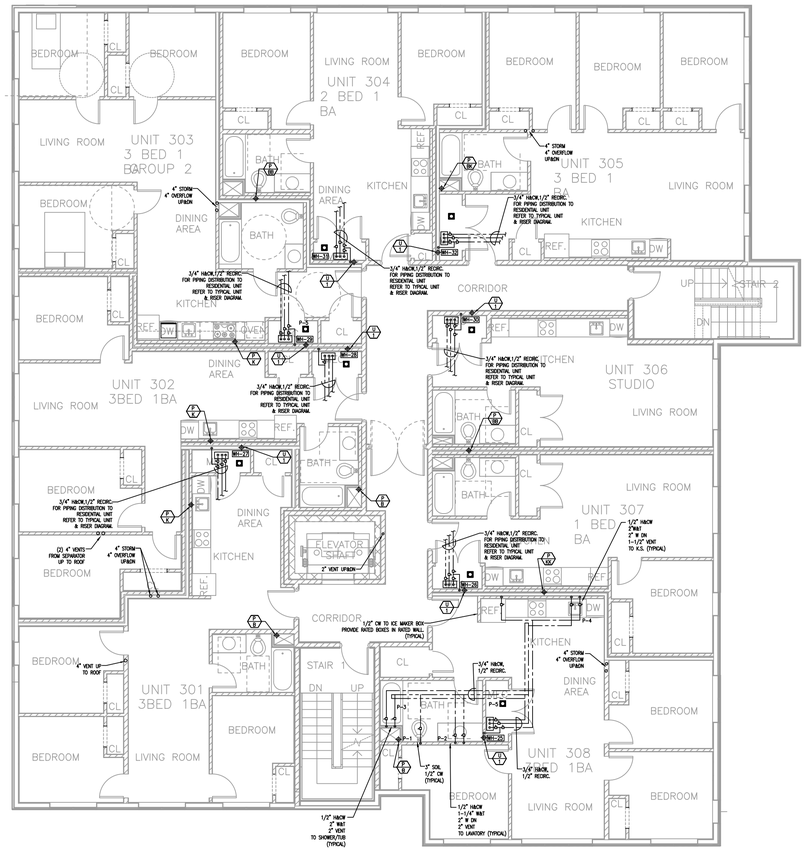
P-1

GENERAL NOTE:
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RUN 3/4" CW TO ICE MAKERS FROM KITCHEN WATER RISER



SECOND FLOOR
1/8" = 1'-0"



THIRD FLOOR
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY
BUILDING
30 THORN STREET
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Drawn By: ----------

Drawing Name

PLUMBING
FLOOR PLAN

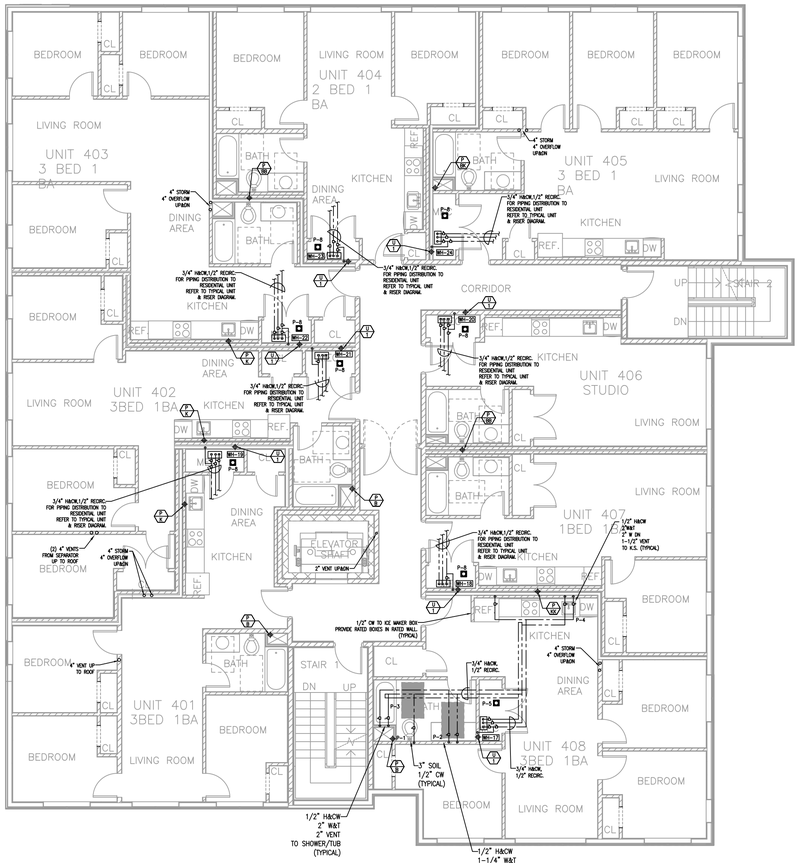
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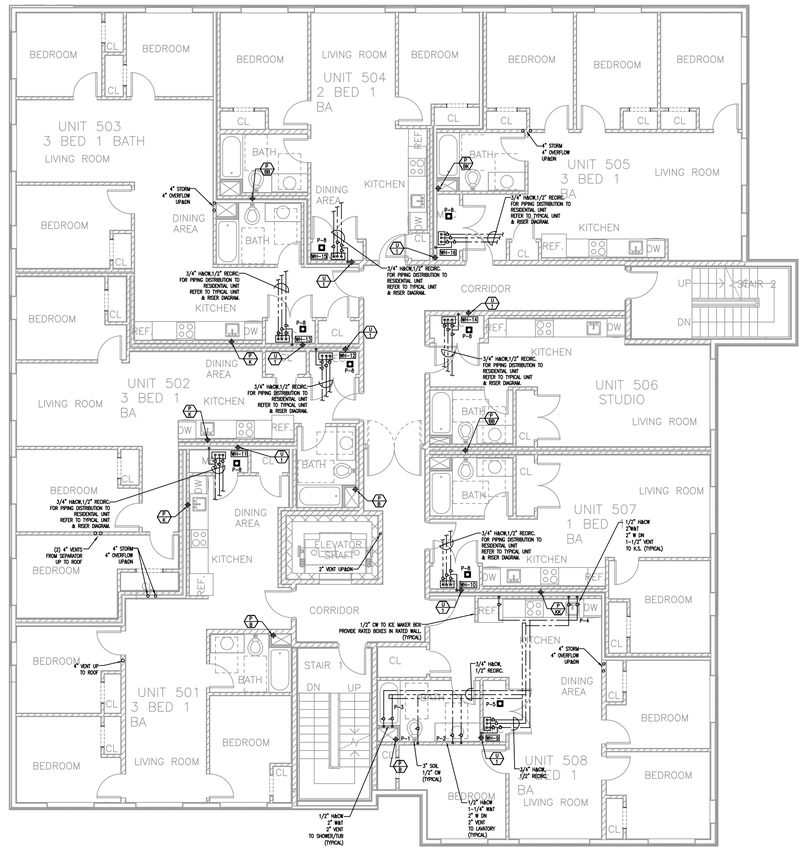
COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51896
REGISTERED
PROFESSIONAL ENGINEER

GENERAL NOTE:
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RUN ½" CW TO ICE MAKERS FROM KITCHEN WATER RISER



FOURTH FLOOR
1/8" = 1'-0"



FIFTH FLOOR
1/8" = 1'-0"

Location

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PLUMBING FLOOR PLAN

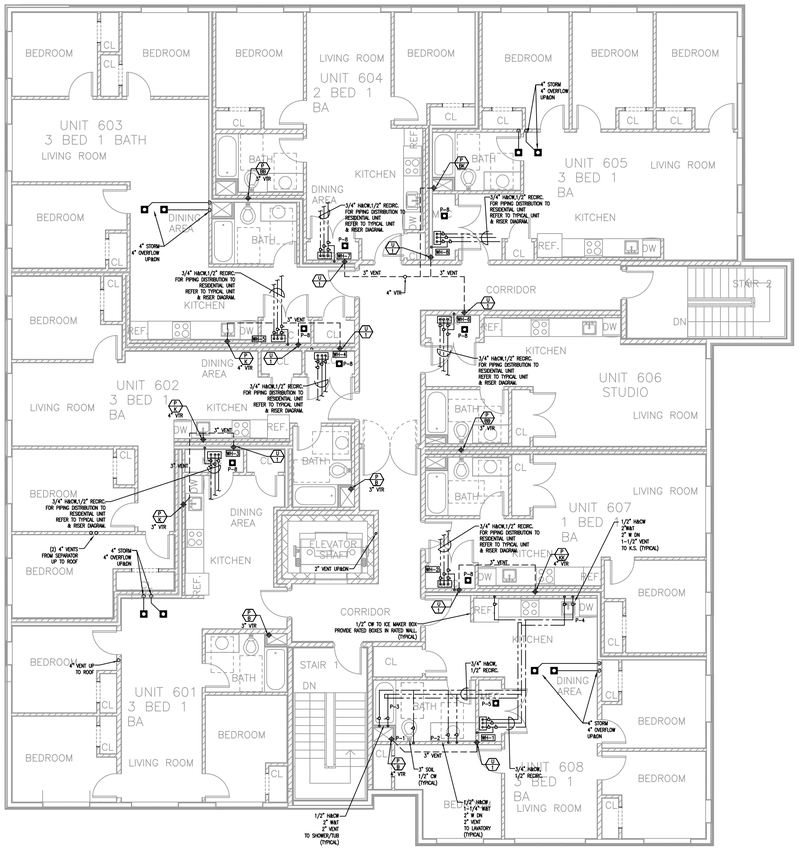
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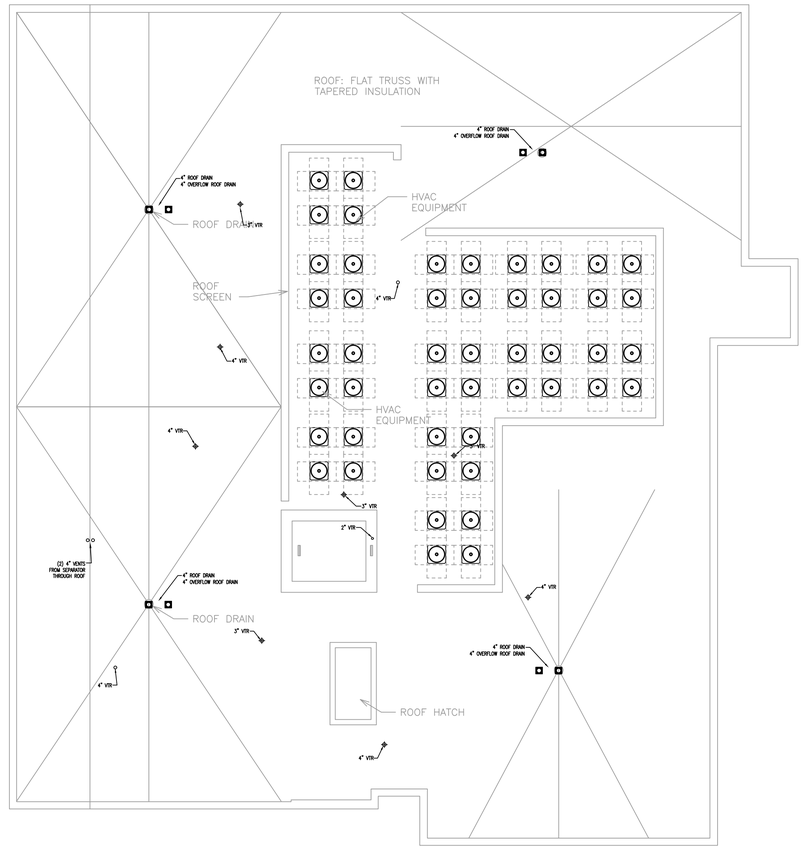
COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
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GENERAL NOTE:
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RUN ½" CW TO ICE MAKERS FROM KITCHEN WATER RISER



SIXTH FLOOR
1/8" = 1'-0"



ROOF PLAN
1/8" = 1'-0"

Location

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Drawing Name

PLUMBING FLOOR PLAN

Sheet No.

P-4

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51899
REGISTERED PROFESSIONAL ENGINEER

BASIC PLUMBING REQUIREMENTS

PART 1. – GENERAL

1.1 RELATED DOCUMENTS

ALL APPLICABLE REQUIREMENTS OF OTHER PORTIONS OF THE CONTRACT DOCUMENTS APPLY TO THE WORK OF THIS SECTION INCLUDING, BUT NOT LIMITED TO, ALL DRAWINGS, ALL SPECIFICATIONS, GENERAL CONDITIONS, AND GENERAL REQUIREMENTS INCLUDING SUBMITTALS.

1.2 APPLICABLE CODES AND STANDARDS

APPLICABLE CODES: ALL LOCAL AND STATE BUILDING CODES, INCLUDING THE INTERNATIONAL PLUMBING CODE MASSACHUSETTS STATE PLUMBING CODE AND THE MASSACHUSETTS STATE BUILDING CODE.
APPLICABILITY OF STANDARDS: EXCEPT WHERE THE CONTRACT DOCUMENTS INCLUDE MORE STRINGENT REQUIREMENTS, APPLICABLE CONSTRUCTION INDUSTRY STANDARDS HAVE THE SAME FORCE AND EFFECT AS IF BOUND OR COPIED DIRECTLY INTO THE CONTRACT DOCUMENTS. SUCH STANDARDS ARE MADE A PART OF THE CONTRACT DOCUMENTS BY REFERENCE.

CONFLICTING REQUIREMENTS: WHERE COMPLIANCE WITH TWO OR MORE STANDARDS IS SPECIFIED, AND THE STANDARDS ESTABLISH DIFFERENT OR CONFLICTING REQUIREMENTS FOR MINIMUM QUANTITIES OR QUALITY LEVELS, REFER REQUIREMENTS THAT ARE DIFFERENT, BUT APPARENTLY EQUAL, AND UNCERTAINTIES TO THE ARCHITECT FOR A DECISION BEFORE PROCEEDING.

PUBLICATION DATES: WHERE THE DATE OF ISSUE OF A REFERENCED STANDARD IS NOT SPECIFIED, COMPLY WITH THE STANDARD IN EFFECT AS OF DATE OF CONTRACT DOCUMENTS.

ABBREVIATIONS AND NAMES: TRADE ASSOCIATION NAMES AND TITLES OF GENERAL STANDARDS ARE FREQUENTLY ABBREVIATED. THE FOLLOWING ACRONYMS OR ABBREVIATIONS AS REFERENCED IN CONTRACT DOCUMENTS ARE DEFINED TO MEAN THE ASSOCIATED NAMES. NAMES AND ADDRESSES ARE SUBJECT TO CHANGE AND ARE BELIEVED TO BE BUT ARE NOT ASSURED TO BE ACCURATE AND UP TO DATE AS OF DATE OF CONTRACT DOCUMENTS.

AGA – AMERICAN GAS ASSOCIATION
ANSI – AMERICAN NATIONAL STANDARDS INSTITUTE
ARI – AIR CONDITIONING AND REFRIGERATION INSTITUTE
ASHRAE – AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS
ASME – AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASSE – AMERICAN SOCIETY OF SANITARY ENGINEERING
ASTM – AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS – AMERICAN WELDING SOCIETY
AWWA – AMERICAN WATER WORKS ASSOCIATION
CISPI – CAST IRON SOIL PIPE INSTITUTE
NEC – NATIONAL ELECTRIC CODE
NFPA – NATIONAL FIRE PROTECTION ASSOCIATION
NSF – NATIONAL SANITATION FOUNDATION
PDI – PLUMBING AND DRAINAGE INSTITUTE
UL – UNDERWRITERS LABORATORIES
DOT – DEPARTMENT OF TRANSPORTATION
EPA – ENVIRONMENTAL PROTECTION AGENCY
OSHA – OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

1.3 SUBMITTALS

PRIOR TO THE PERFORMANCE OF ANY WORK OR INSTALLATION OF ANY MATERIALS, OBTAIN APPROVAL FROM THE ARCHITECT BY SUBMITTING SHOP DRAWINGS AND DATA SHEETS.

SUBMITTAL OF SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES WILL BE ACCEPTED ONLY WHEN SUBMITTED BY THE GENERAL CONTRACTOR. DATA SUBMITTED FROM SUBCONTRACTORS AND MATERIAL SUPPLIERS DIRECTLY TO THE ARCHITECT WILL NOT BE PROCESSED. CERTIFIED DRAWINGS AND CATALOG DATA SHEETS SHALL SHOW:
1. SPECIFICALLY WHAT ITEMS AND FEATURES ARE TO BE PROVIDED.
2. APPLICABLE SPECIFICATION SECTION NUMBER AND EQUIPMENT TAG NUMBER.
3. PRINCIPAL DIMENSIONS AND DETAILS OF CONSTRUCTION.
4. WEIGHTS: INFORMATION REQUIRED FOR THE DESIGN OF SUPPORTS AND FOUNDATIONS.
5. SIZES AND LOCATIONS OF PIPING AND CONNECTIONS.
6. PERFORMANCE DATA CERTIFIED BY THE MANUFACTURER.
7. SUBMIT SCHEDULE OF PROPOSED PIPING, VALVES, SPECIALTIES, ETC.
8. ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE SEPERATLY IDENTIFIED.

PLUMBING SUBMITTALS SHALL BE PROVIDED FOR THE FOLLOWING ITEMS:
1. PIPING AND FITTING MATERIALS.
2. PLUMBING VALVES AND SPECIALTIES.
3. PIPING HANGER AND ATTACHMENT ASSEMBLIES.
4. PIPING INSULATION.
5. ALL SCHEDULED PLUMBING FIXTURES, DRAINS, AND CLEANOUTS.
6. UTILITY CONNECTION DETAILS REQUIRED BY AUTHORITIES HAVING JURISDICTION.

APPROVAL OF SHOP DRAWINGS DOES NOT RELEASE RESPONSIBILITY OF COORDINATING HIS WORK AT JOBSITE AND TAKING FIELD MEASUREMENTS. IN CASES WHERE INTERFERENCES BECOME APPARENT, NOTIFY ARCHITECT SO THAT SUCH INTERFERENCES MAY BE RESOLVED PRIOR TO PROCEEDING WITH SHOP WORK. NO CLAIM WILL BE ALLOWED FOR WORK THAT MIGHT HAVE TO BE MOVED OR REPLACED BASED ON A CLAIM THAT WORK WAS PLACED IN ACCORDANCE WITH DIMENSIONS INDICATED ON AN APPROVED SHOP DRAWING.

1.4 COORDINATION

COORDINATE WITH THE BUILDING TRADES:
1. STRUCTURAL MEMBERS, PADS, AND BUILDING OPENINGS FOR FIXTURES, EQUIPMENT, PIPING, ETC., FOR USE BY THIS INDICATED ON THE ARCHITECTURAL AND STRUCTURAL PLANS ARE THE COORDINATION RESPONSIBILITY OF THIS INSTALLER. PAY FOR ANY CHANGES IN THE ABOVE REQUIREMENTS AFTER LETTING AND ACCEPTING THE CONTRACT.
2. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT, DIRECTIONS AND SIZES OF EQUIPMENT, PIPING, ETC. IT IS NOT INTENDED TO SHOW EVERY OFFSET AND FITTING OF EVERY SITE DIFFICULTY THAT MAY BE ENCOUNTERED. PROVIDE ALL MATERIALS AND PERFORM ALL LABOR NECESSARY TO MAKE COMPLETE WORKING SYSTEMS, READY FOR USE, WITHOUT EXTRA CHARGE. ALL MEASUREMENTS MUST BE VERIFIED ON THE JOBSITE.
3. EXAMINE THE SITE AND ALL DRAWINGS BEFORE PROCEEDING WITH THE LAYOUT AND INSTALLATION OF THIS TO SUIT ACTUAL CONDITIONS. CONFER AND COOPERATE WITH OTHER TRADES ON THE JOB SO THAT ALL WORK WILL BE INSTALLED IN PROPER RELATIONSHIP. COORDINATE PRECISE LOCATION OF PARTS WITH OTHER WORK. ALL SYSTEMS SHALL BE INSTALLED TO PROVIDE MAXIMUM HEADROOM, EXCEPT WHERE DIMENSIONED OTHERWISE ON THE DRAWINGS.

1.5 RECORD DOCUMENTS

RECORD DRAWINGS: MAINTAIN A CLEAN, UNDAMAGED SET OF PRINTS OF CONTRACT DRAWINGS AND SHOP DRAWINGS. MARK THE SET TO SHOW THE ACTUAL INSTALLATION WHERE THE INSTALLATION VARIES SUBSTANTIALLY FROM THE WORK AS ORIGINALLY SHOWN. MARK WHICHEVER DRAWING IS MOST CAPABLE OF SHOWING CONDITIONS FULLY AND ACCURATELY; WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE CONTRACT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD LATER.
1. MARK INFORMATION THAT IS IMPORTANT TO THE OWNER, BUT WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRAWINGS.
2. ORGANIZE RECORD DRAWING SHEETS INTO MANAGEABLE SETS, BIND WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITABLE TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER OF EACH SET.
3. MAINS AND BRANCHES OF PIPING SYSTEMS, WITH VALVES AND CONTROL DEVICES LOCATED AND NUMBERED, CONCEALED UNIONS LOCATED, AND WITH ITEMS REQUIRING MAINTENANCE LOCATED (I.E., TRAPS, STRAINERS, EXPANSION COMPENSATORS, TANKS, ETC.).
4. EQUIPMENT LOCATIONS (EXPOSED AND CONCEALED), DIMENSIONED FROM AT LEAST TWO PROMINENT BUILDING LINES.
5. APPROVED SUBSTITUTIONS, CONTRACT MODIFICATIONS, AND ACTUAL EQUIPMENT AND MATERIALS INSTALLED.
6. INCLUDE ALL "CORRECTED FOR RECORD" SHOP DRAWINGS TO REFLECT APPROVALS RECEIVED.

1.6 MAINTENANCE MANUALS

ORGANIZE OPERATING AND MAINTENANCE DATA INTO SUITABLE SETS OF MANAGEABLE SIZE. BIND PROPERLY INDEXED DATA IN INDIVIDUAL HEAVY-DUTY 2-INCH, 3-RING VINYL-COVERED BINDERS, WITH POCKET FOLDERS FOR FOLDED SHEET INFORMATION. MARK APPROPRIATE IDENTIFICATION ON FRONT AND SPINE OF EACH BINDER. INCLUDE THE FOLLOWING TYPES OF INFORMATION:
1. COPIES OF WARRANTIES.
2. WIRING DIAGRAMS.
3. INSPECTION PROCEDURES.
4. APPROVED SHOP DRAWINGS AND PRODUCT DATA.
5. DESCRIPTION OF FUNCTION, NORMAL OPERATING CHARACTERISTICS AND LIMITATIONS, PERFORMANCE CURVES, ENGINEERING DATA AND TESTS, AND COMPLETE NOMENCLATURE AND COMMERCIAL NUMBERS OF REPLACEMENT PARTS.
6. MANUFACTURER'S PRINTED OPERATING PROCEDURES TO INCLUDE START-UP, BREAK-IN, AND ROUTINE AND NORMAL OPERATING INSTRUCTIONS; REGULATION, CONTROL, STOPPING, SHUTDOWN, AND EMERGENCY INSTRUCTIONS; AND SUMMER AND WINTER OPERATING INSTRUCTIONS.
7. MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING; DISASSEMBLY, REPAIR, AND REASSEMBLY; ALIGNING AND ADJUSTING INSTRUCTIONS.
8. SERVICING INSTRUCTIONS AND LUBRICATION CHARTS AND SCHEDULES.

1.7 REGULATIONS AND PERMITS
PROVIDE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES HAVING JURISDICTION.

PAY FOR AND OBTAIN ALL REQUIRED PERMITS & SCHEDULE INSPECTIONS IN A TIMELY MANNER AS TO NOT DELAY THE PROJECT. OBTAIN ALL NECESSARY PERMITS INCLUDING BUT NOT LIMITED TO ENTERING MANHOLES, USE OF WATER FROM LOW PRESSURE HYDRANTS, DEMOLITION AND NEW WORK, ETC. PRIOR TO COMMENCE OF WORK.

PART 2. – PRODUCTS

2.1 GENERAL PRODUCT REQUIREMENTS

ALL EQUIPMENT AND MATERIALS, EXCEPT AS OTHERWISE SPECIFIED, SHALL BE NEW, OF CURRENT PRODUCTION, FIRST QUALITY AND OF THE BEST OF EACH CLASS SPECIFIED. MATERIALS, PRODUCTS, AND EQUIPMENT SHALL BE DELIVERED TO JOBSITE WITH FACTORY PACKAGING BEARING MANUFACTURER'S NAME OR LABEL, AND UNION LABEL WHENEVER PRACTICAL.

PART 3. – EXECUTION

3.1 PLUMBING INSTALLATIONS
GENERAL: SEQUENCE, COORDINATE, AND INTEGRATE THE VARIOUS ELEMENTS OF PLUMBING SYSTEMS, MATERIALS, AND EQUIPMENT. COMPLY WITH THE FOLLOWING REQUIREMENTS:
1. COORDINATE SYSTEMS, EQUIPMENT, AND MATERIALS INSTALLATION WITH OTHER BUILDING COMPONENTS.
2. VERIFY ALL DIMENSIONS BY FIELD MEASUREMENTS.
3. ARRANGE FOR CHASES, SLOTS, AND OPENINGS IN OTHER BUILDING COMPONENTS DURING PROGRESS OF CONSTRUCTION, TO ALLOW FOR MECHANICAL INSTALLATIONS.
4. COORDINATE THE INSTALLATION OF REQUIRED SUPPORTING DEVICES AND SLEEVES TO BE SET IN POURED-IN-PLACE CONCRETE AND OTHER STRUCTURAL COMPONENTS, AS THEY ARE CONSTRUCTED.
5. INSTALL SYSTEMS, MATERIALS, AND EQUIPMENT LEVEL AND PLUMB, PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, WHERE INSTALLED EXPOSED IN FINISHED SPACES.
6. INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS.
7. PROVIDE ACCESS PANELS OR DOORS WHERE UNITS ARE CONCEALED BEHIND FINISHED SURFACES.
8. COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS, TO THE EXTENT THAT THOSE INSTRUCTIONS AND RECOMMENDATIONS ARE MORE EXPLICIT OR STRINGENT THAN REQUIREMENTS CONTAINED IN CONTRACT DOCUMENTS.
9. INSPECT MATERIALS OR EQUIPMENT IMMEDIATELY UPON DELIVERY AND AGAIN PRIOR TO INSTALLATION. REJECT DAMAGED AND DEFECTIVE ITEMS.

3.2 FINAL INSPECTION
PRIOR TO FINAL ACCEPTANCE, ALL SYSTEMS SHALL BE OPERATED TO TEST PERFORMANCE TO THE SATISFACTION OF THE ARCHITECT.
1. WATER SHALL CIRCULATE THROUGHOUT SYSTEMS WITHOUT NOISE, WATER HAMMER, LEAKS, TRAPPING, OR AIR-BINDING.
2. MOTORS AND OTHER EQUIPMENT SHALL OPERATE WITHOUT EXCESSIVE NOISE OR VIBRATION.
3. DRAINS SHALL FLOW FREELY, WITHOUT EXCESSIVE NOISE, LEAKS OR STOPPAGES.

CORRECT DEFECTS DEMONSTRATED BY INSPECTIONS AND TESTS TO THE SATISFACTION OF THE ARCHITECT.

3.3 CLEANING OF SYSTEMS AND PREMISES

ALL EQUIPMENT AND FIXTURES SHALL BE THOROUGHLY CLEANED OF DIRT AND DEBRIS AT THE COMPLETION OF THE PROJECT AND PRIOR TO ACCEPTANCE BY THE OWNER.

3.4 PROTECTION

GUARDS, BARRICADES, LIGHTS, SERVICES, ETC., NECESSARY FOR THE PROTECTION OF PERSONS AND PROPERTY SHALL BE FURNISHED AND MAINTAINED.

EXISTING WORK SUCH AS PAVEMENTS, LAWNS, SIDEWALKS, FLOORS, CURBS, AND OTHER STRUCTURES AND UTILITIES WHICH ARE DAMAGED OR DISTURBED DUE TO MAKING CONNECTIONS OR ANY PHASE OF OPERATIONS SHALL BE RESTORED TO THE SATISFACTION OF THE OWNER AND THE GOVERNING AUTHORITIES.

GENERAL NOTES:

1. SHOULD ANY CONTRADICTION, AMBIGUITY, ERROR, INCONSISTENCY, OMISSION OR INCOMPLETE SYSTEM APPEAR IN OR BETWEEN ANY OF CONTRACT DOCUMENTS THE CONTRACTOR SHALL, BEFORE SUBMITTING THE FINAL BID AND SIGNING THE CONTRACT FOR CONSTRUCTION, NOTIFY THE ARCHITECT AND REQUEST A WRITTEN RESOLUTION AS TO WHICH METHODS OR MATERIALS WILL BE REQUIRED. IN THE EVENT OF CONFLICTING REQUIREMENTS OF STANDARDS , DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR SHALL COMPLY WITH THE MORE STRINGENT REQUIREMENTS. BEFORE SUBMITTING THE FINAL BID AND THE SIGNING THE CONTRACT FOR THE CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A WRITTEN INTERPRETATION FROM THE ARCHITECT. IN NO CASE SHALL THE CONTRACTOR PROCEED WITH THE AFFECTED WORK UNTIL ADVISED BY THE ARCHITECT.

IF THE CONTRACTOR FAILS TO MAKE A REQUEST FOR INTERPRETATION OR RESOLUTION NO EXCUSE WILL BE ACCEPTED FOR FAILURE TO CARRY OUT THE WORK IN A SATISFACTORY MANNER, AS INTERPRETED BY THE ARCHITECT. THIS GENERALLY MEANS THE USE OF THE HIGHEST QUALITY MATERIAL, MOST EXPENSIVE WAY OF PERFORMING WORK AND PROVIDING COMPLETE FUNCTIONING SYSTEM FOR PROPER OPERATION.

EACH AND EVERY TRADE OR SUBCONTRACTOR WILL BE DEEMED TO HAVE FAMILIARIZED THEMSELVES WITH ALL THE CONTRACT DOCUMENTS OF THIS PROJECT, INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND SITE WORK, AND TO HAVE VISITED THE SITE, SO AS TO AVOID ERROR, OMISSIONS AND MISINTERPRETATIONS. RELATED INFORMATION MAY BE PROVIDED ON CONTRACT DOCUMENTS OTHER THAN THOSE ASSOCIATED WITH THE SUBCONTRACTOR'S TRADE. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELATED WORK OF ALL THE CONTRACT DOCUMENTS. NO ADDITIONAL COMPENSATION WILL BE AUTHORIZED FOR ALLEGED ERRORS, OMISSIONS AND MISINTERPRETATIONS WHETHER THEY ARE A RESULT OF FAILURE TO OBSERVE THIS REQUIREMENT OR NOT.

2. ALL PENETRATIONS OF ASSEMBLIES EXPOSED TO THE EXTERIOR ENVIRONMENT SHALL BE SEALED WITH FOAM SEALANT OR EQUIVALENT SEALER TO PROVIDE ZERO AIR INFILTRATION. COORDINATE WITH FIRE STOPPING REQUIREMENTS.

3. NO COMPONENT OF ANY SYSTEM SHALL RUN THROUGH THE STAIR ENCLOSURE THAT DOES NOT RELATE TO OR SERVE THE STAIR ENCLOSURE.

PLUMBING NOTES:

1.
REFER TO ARCHITECTURAL DRAWINGS FOR TYPE AND LOCATION OF ALL FIRE WALLS.
ANY PENETRATION THROUGH FIRE FLOORS SHALL BE FIRE STOPPED . ANY PENETRATION
2. THROUGH FIRE WALL SHALL BE FIRE CAULKED. REFER TO SECTION 7275 FOR PROCEDURE.

WITHOUT LIMITATION PAY ATTENTION TO THE FOLLOWING ITEMS:

A. CHASES BEHIND BATHROOM (WALL BETWEEN CORRIDOR AND BATHROOM) AND WALLS BETWEEN UNITS ARE FIRE RATED. FIRE CAULK ALL PENETRATIONS.

B. TOP AND BOTTOM WALL PLATES AT CEILING AND AT FLOOR IS PART OF FIRE SEPARATION. FIRE STOP ALL PENETRATIONS THROUGH PLATES.

INSULATION NOTES

THE FOLLOWING SYSTEMS SHALL BE INSULATED.
DUCT LINER SHALL BE CLOSED CELL TYPE, GERM PROOF

ESTAR REQUIREMENTS:

1. DOMESTIC HOT WATER & RECIRCULATION MAINS AND BRANCHES:
PIPING < 1" REQUIRES 1" INSULATION
PIPING > 1¼" REQUIRES 1½" INSULATION

IECC 2018 REQUIREMENTS:

1. DOMESTIC HOT WATER MAINS AND BRANCHES:
PIPING < 1" REQUIRES 1" INSULATION
PIPING > 1¼" REQUIRES 2" INSULATION

GENERAL INSUALTION REQUIREMENTS:

CW PIPING: ½" INSULATION
HORIZONTAL STORM: ½" INSULATION

THIS BUILDING WILL SHALL BE QUALIFIED FOR ESTAR, STRETCH CODE, AND LEED SILVER.
PROVIDE THE MOST STRINGENT LEVELS OF INSULATION FOR QUALIFICATION

1. GENERAL PROVISIONS OF CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND GENERAL REQUIREMENTS, APPLY TO WORK SPECIFIED ON THESE DRAWINGS.
2. COORDINATE WORK WITH THAT OF OTHER TRADES AFFECTING OR AFFECTED BY WORK OF THIS SECTION AND COOPERATE WITH SUCH TRADES TO ASSURE THE STEADY PROGRESS OF THE WORK.
3. ALL WORK AND MATERIALS SHALL COMPLY WITH THE STATE PLUMBING AND GAS CODES AND THE LOCAL CODES.
4. FURNISH AND INSTALL A COMPLETE, SANITARY DRAINAGE AND VENT SYSTEM THROUGHOUT THE BUILDING FOR CONNECTION TO EVERY FIXTURE OR PIECE OF EQUIPMENT REQUIRING DRAINAGE. THE NEW WORK SHALL EXTEND AND CONNECT TO THE EXTERIOR SANITARY SYSTEM AS INDICATED.
5. FURNISH AND INSTALL A COMPLETE HOT WATER AND COLD WATER SYSTEM THROUGHOUT THE BUILDING, CONNECTING TO ALL FIXTURES AND EQUIPMENT REQUIRING HOT AND/OR COLD WATER. THE COLD WATER SYSTEM WORK SHALL EXTEND AND CONNECT TO THE EXTERIOR COLD WATER SYSTEM AS INDICATED. THE HOT WATER SYSTEM WORK SHALL BEGIN AT EACH NEW WATER HEATER WHERE INDICATED.
6. FURNISH TO OWNER A WRITTEN GUARANTEE OF THE GENERAL CONTRACTOR AND THIS SUBCONTRACTOR JOINTLY AND SEVERALLY, AGAINST ANY DEFECTS IN MATERIALS AND WORKMANSHIP IN WORK OF THIS SECTION FOR A PERIOD OF ONE YEAR FROM DATE OF SUBSTANTIAL COMPLETION.
7. SUBMIT SHOP DRAWINGS ON PLUMBING FIXTURES AND VALVES SPECIFIED.
8. FURNISH AND INSTALL ALL PIPE OPENINGS, PIPE HANGERS AND HANGER RODS, AND FIXTURE SUPPORTS. PROPERLY SECURE HANGER RODS TO BUILDING STRUCTURE. SEAL ALL PIPE OPENINGS THROUGH FLOORS AND ROOF WATER TIGHT.
9. BURIED STORM, SANITARY AND VENT PIPING SHALL BE CAST IRON PIPE AND DRAINAGE FITTINGS. ABOVE GROUND SANITARY AND VENT PIPING SHALL BE CAST IRON PIPE AND DRAINAGE FITTINGS/PVC SCHED. 40 SOLID. PROVIDE FIRE STOPPING AND SHEET METAL SLEEVES AS REQUIRED BY CODE WHERE ALL PVC PIPING PASSES THROUGH FIRE RATED WALLS AND FLOORS.
10. HOT AND COLD WATER PIPING SHALL BE TYPE L SEAMLESS COPPER TUBING AND FITTINGS WITH 95–5 SOLDER JOINTS, FLOWGUARD PIPING SYSTEM, SEEK APPROVAL FROM ARCHITECT AND BUILDING OWNER REPRESENTATIVE BEFORE SUBMITTING FOR APPROVAL TO ENGINEER. ALL PIPING SHALL BE INSULATED AND MARKED AS HOT WATER (HW) OR COLD WATER (CW)
11. VALVES FOR HOT AND COLD WATER SHALL BE GATE VALVE, BRONZE BODY AND TRIM, NON-RISING STEM, 200 PSIG, SOLDER END, SIMILAR TO JENKINS 1240 OR APPROVED EQUAL. VALVES FOR GAS SHALL BE IRON BODY, PLUG TYPE, WITH SQUARE KEY AND THREADED ENDS.
12. COLD WATER AND HOT WATER PIPING INSULATION SHALL BE 1/2" THICK, WITH FACTORY APPLIED FIBERGLASS CLOTH WITH INTEGRAL VAPOR BARRIER AND SELF-SEALING LAP. FITTINGS AND VALVES SHALL BE COVERED WITH PRE-CUT FIBERGLASS INSERTS AND PITTED WITH MOULDED PVC COVERS, SECURED WITH GLASS FABRIC TAPE WITH MASTIC. INSULATION SHALL BE FIBERGLASS 25 ASJ OR EQUAL, AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS TO CONFORM TO THE AUL NON-COMBUSTIBLE RATING.
13. PLUMBING FIXTURES:
(TO BE APPROVED BY BUILDING OWNER REPRESENTATIVE BEFORE SUBMISSION FOR APPROVAL TO ENGINEER)
14. HB- HOSE BIBB, WALL HYDRANT – WOODFORD MODEL 25 FREEZE RESISTANT, WITH INTEGRAL VACUUM BREAKER. (PROVIDE EVERY 150', WHERE DIRECTED BY BUILDING OWNER)
15. WATER HEATERS – FURNISH AND INSTALL WATER HEATERS WHERE INDICATED.
(TO BE APPROVED BY BUILDING OWNER REPRESENTATIVE BEFORE SUBMISSION FOR APPROVAL TO ENGINEER)
16. TEST ALL NEW PLUMBING WORK IN ACCORDANCE WITH PLUMBING CODE REQUIREMENTS.
17. PROVIDE HEAT TRACE ON ALL PIPING SUBJECT TO FREEZING.

GENERAL NOTES

NTS

GENERAL NOTES

NOTE FOLLOWING LINE ITEMS ARE LISTED FOR QUALITY PURPOSES AND APPLICABLE WHERE COMPONENTS PRESENT IN THE PROJECT.

REGARDLESS HOW THE DETAILS ARE SHOWN, CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTALLATION RECOMMENDATIONS.

CONTRACTOR SHALL PAY ATTENTION TO GAS FIRED EQUIPMENT DISCHARGE LOCATIONS RELATIVE TO AIR INTAKES BEFORE ANY INSTALLATION AND MAINTAIN CODE REQUIRED OR MANUFACTURER REQUIRED CLERANCES.

1–ALL HOT WATER PIPING SHALL BE INSULATED, INCLUDING TAKE OFFS.

2–ALL HORIZONTAL COLD WATER MAINS OR BRANCH LINES ABOVE CEILINGS SHALL BE INSULATED.

3–ALL TRAPS SHALL HAVE CLEAN OUTS.

4–ALL COMMON AREA FAUCETS SHALL HAVE POINT OF USE MIXING VALVES, ZURN LEAD FREE SERIES LFUSC–B OR EQUAL

5–ALL FIXTURES SHALL HAVE MULTI TURN LEAD FREE WATER STOPS AS MANUFACTURED BY ZURN LF SERIES.

6–ALL VENT THROUGH THE ROOF LOCATIONS SHALL BE FIELD COORDINATED WITH HVAC EQUIPMENT INTAKES AND IF NECESSARY SHALL BE EXTENDED 3FT ABOVE THE EQUIPMENT WITHIN 10FT OF THE VENT.

7–ALL FLOOR DRAINS SHALL HAVE TRAP PRIMERS.

8–ALL FLOOR PENETRATIONS SHALL BE FIRE RATED WITH FIRE STOP MATERIAL OR INTUMESCENT TYPE COLLARS AS REQUIRED.

9–UNLESS NOTED OTHERWISE PVC MAY BE USED FOR RESIDENTIAL TYPE BUILDINGS UP TO TEN FLOORS FOR DRAINAGE. CPVC MAY BE USED FOR DOMESTIC HOT/COLD WATER IN RESIDENTIAL TYPE BUILDINGS UP TO 60 FT, OR 6 STORY BUILDINGS. PROVIDE SOUND INSULATION ON ALL PVC VERTICAL DRAIN LINES

10–PROVIDE DRAIN PAN FOR ALL STORAGE TYPE WATER HEATERS AND WASHING MACHINES W/DRAINS CONNECTED TO SEWER DRAIN, PROVIDE TRAP PRIMERS.

11–PROVIDE COMPLETE PIPING FOR DISHWASHER AND DISPOSAL CONNECTIONS, OBSERVE CLEARANCE REQUIREMENTS UNDER KITCHEN SINKS.

12–ALL DRAINS LOCATED BELOW THE STREET GRADE SHALL HAVE LOCAL OR CENTRAL TYPE BACK WATER VALVES. DRAINS FROM UPPER FLOORS WILL CONNECT AT EXIT.

13–ALL PLUMBING FIXTURES SHALL BE APPROVED TYPE IN THE STATE OF PROJECT BEING USED, SPECIFICATIONS ARE FOR QUALITY, LOOK AND PERFORMANCE PURPOSES ONLY. IF SPECIFIED EQUIPMENT IS NOT THE APPROVED TYPE. CONTRACTOR SHALL PROVIDE SIMILAR APPROVED FIXTURE.

14–ALL FLOOR DRAINS IN BOILER ROOMS SHALL BE COORDINATED WITH BOILER PLACEMENTS SO THAT CONDENSATE DRAINS WILL BE DRAINED TO FLOOR DRAIN.

15–ALL PENETRATIONS THROUGH FIRE RATED WALLS AND CEILINGS SHALL BE FIRE SAFED.
USE FIRE PUDDY WITH FIRE WOOL FILLING FOR 2" AND SMALL PIPES,
USE INTUMESCENT COLLAR FOR LARGER PIPES.

16– PROVIDE BALL TYPE SHUT OFF VALVES FOR ALL RISERS AND WATER BRANCHES OFF THE MAIN PIPES. RISERS SHALL HAVE DRAIN VALVES WITH CAP AND CHAIN

GENERAL NOTES

1) FOR EXACT LOCATION OF PLUMBING FIXTURES SEE ARCHITECTURAL DRAWINGS.
2) EXAMINE ALL CONTRACT DRAWINGS, GERNERAL CONDITIONS AND SPECIFICATIONS WHICH MAY AFFECT THE WORK.
3) ALL PLUMBING WORK MUST BE COORDINATED WITH ALL OTHER TRADES BEFORE PROCEEDING WITH INSTALLATION.
4) CHECK INVERT ELEVATIONS AND EXACT LOCATIONS OF ALL OUTSIDE UTILITIES BEFORE INSTALLING ANY UNDERGROUND.
5) NO CHANGES ARE TO BE MADE IN PLUMBING LAYOUT WITHOUT WRITTEN PERMISSION OF THE ARCHITECT.
6) NO PIPING SHALL RUN EXPOSED IN FINISHED AREAS.
7) ALL PLUMBING SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE LOCAL AND STATE PLUMBING CODES.
8) ROUGHING DIMENSIONS OF TOILET FIXTURES MUST BE COORDINATED WITH GENERAL CONTRACTOR.
9) INSTALL ALL HOT AND COLD WATER PIPING AS PER SPECIFICATIONS.
10) INSTALL SHUTOFF GATE VALVES ON ALL BRANCH SUPPLY LINES AND AT THE BASE OF HOT AND COLD WATER RISERS.
11) PLUMBING CONTRACT SHALL REQUIRES PANELS TO ACCESS THE CONCEALED PLUMBING CLEANOUTS, DRAINS, DEVICES AND CONTROLS. ACCESS PANELS SHALL BE FIRE RATED TO MATCH THE PENETRATING PARTITION OR CEILING TYPE. GENERAL CONTRACTOR SHALL INSTALL THE ACCESS PANELS.
12) INSTALL ALL FLOOR CLEANOUTS TO CLEAR EQUIPMENT.
13) PLUMBING CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, FEES AND CHARGES IN CONNECTION WITH THE WORK.
14) PLUMBING CONTRACTOR SHALL PROVIDE WATERTIGHT SLEEVES FOR ALL PIPES PASSING THRU BASEMENT WALLS.
15) INSTALL CLEANOUTS AT THE BASE OF ALL SANITARY STACKS.
16) INSTALL ALL HORIZONTAL RUNS OF PIPING AS HIGH AS POSSIBLE, PITCH ALL WATER PIPING TO DRAIN, DRAW OFFS AT ALL POINTS.
17) PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO OUTSIDE UTILITIES.
18) FOR PIPE SIZES NOT SHOWN ON PLANS SEE DETAILS & RISER DIAGRAMS.

PIPING MATERIAL NOTES

SANITARY AND VENT: BELOW GROUND: SWCI WITH PUSH ON JOINTS.

ABOVE GROUND:
–SCH.40 PVC WITH SOLVENT JOINTS FOR ALL PLUMBING FIXTURES ONLY SERVING RESIDENTIAL FLOORS, IF SANITARY MAIN CONNECTS TO COMMERICAL FIXTURES FROM THAT POINT AND BEYOND SHALL BE CAST IRON. IF ANY CONNECTION FROM RESIDENTIAL TO COMMERCIAL FIXTURES HAPPENS ON FIRST LEVEL TRANSITION TO CAST IRON IN RESIDENTIAL LEVEL.
–SWCI WITH HUSKY 4–BAND CLAMPS FOR ALL PLUMBING IN CONNECTIONS IN COMMERCIAL AND GARAGE LEVELS.

WATER PIPING: TYPE "L" COPPER WITH 95–5 SOLDER JOINTS FOR SERVICE, CPVC FOR RESIDENTIAL USE AREA.

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51899
REGISTERED
PROFESSIONAL ENGINEER

Location

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PLUMBING NOTES

Sheet No.

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PLUMBING FIXTURE SPECIFICATION SCHEDULE

DESIGNATION	FIXTURE SYMBOL	SYMBOL	MANUFACTURER	FIXTURE			FITTING				CARRIER	LOCATION	REMARKS
				MODEL	TYPE	SIZE	MANUF/MODEL#	TYPE	SUPPLY	TRAP			
RESIDENCE WATER CLOSET	P-1	W.C.	KOHLER	K-4198/K-4468	FLOOR MOUNT	–	–	FLUSH TANK	" C.P. SUPPLIES	INTERGRAL	–	AS SHOWN	ASSOCIATE PIPING TO BE PROTECTED BY 521 CMR ADA HEIGHT COMPLIANCE ON SPECIFIED WATER CLOSETS PROVIDE TOILET SEAT, KOHLER K-4636
RESIDENCE LAVATORY	P-2	LAV.	KOHLER	K-20000	UNDERMOUNT	15"x15	KOHLER/K-10272-4	4" CENTER SET	$\frac{1}{2}$" C.P. SUPPLIES	$1\frac{1}{4}$"	–	AS SHOWN	ASSOCIATE PIPING TO BE PROTECTED BY 521 CMR. MAX
SHOWER	P-3	TUB	AMERICAN STANDARD	2392.202	–	56"x25"X13.25"	KOHLER/ K-TS10274-4	–	$\frac{1}{2}$" C.P. SUPPLIES	$1\frac{1}{2}$"	–	AS SHOWN	PROVIDE KOHLER K-P8304-KS
SINK	P-4	SINK	KOHLER	K-3821-1	UNDERMOUNT	33"x22"x9.5"	KOHLER/ K-10433	SINGLE HOLE	$\frac{1}{2}$" C.P. SUPPLIES	$1\frac{1}{2}$"	–	AS SHOWN	PROVIDE BADGER 1/2 HP FOOD WASTE GRINDER
TRAP PRIMER	P-5	T.P.	PRECISION PLUMBING PRODUCTS	PR-500	–	–	–	–	$\frac{1}{2}$" SUPPLY	–	–	AS SHOWN	PROVIDE DISTRIBUTION UNIT DU-4

SEE ARCHITECT DRAWINGS AND DETAILS FOR MOUNTING HEIGHTS OF ALL FIXTURES
NOTE: ALL WASHER MACHINES TO BE PROVIDED WITH AQUA MANAGERS "FLOODSTOP" (FS 3/4-H) AUTOMATIC FLOOD PROTECTION KIT

DESIGNATION	LOCATION	MANUFACTURER	MODEL NO
FD	AS SHOWN	ZURN	SERIES 415B CAST IRON BODY WITH TYPE "B" STRAINER
FCO	AS SHOWN	ZURN	SERIES ZN-1400-HD
HB	AS SHOWN	ZURN	SERIES Z1321 ECOLTROL CERAMIC DISC WALL HYDRANT. EXPOSED, NON-FREEZE, ANTI-SIPHON, AUTOMATIC DRAINING
WATER HAMMER ARRESTOR	AS SHOWN	SIOUX CHIEF	SERIES 660 SERIERS OR EQUAL BY PRECISION PLUMBING PRODUCTS

SCHEDULE OF WATER HEATER

DESIGNATION	NAME	LOCATION	DESCRIPTION
WH-1 TO WH-40	HOT WATER HEATER	RESIDENTAIL MECH ROOM	RHEEM MODE XE50M12EC55U1, 50 GAL. CAPACITY, 4.5 KW, 208V/1ø, .93 EF, 21 GPH @90'F RISE RECOVERY,
WH-41	HOT WATER HEATER	JANITOR CLOSET	RHEEM MODE XE50M12EC55U1, 50 GAL. CAPACITY, 4.5 KW, 208V/1ø, .93 EF, 21 GPH @90'F RISE RECOVERY,

FIRE SAFE THROUGH WOOD FLOORS

TYPE	SIZE	HILTI	MATERIAL	RATING	BOTTOM	TOP	CHASE WALL
STEEL/CAST COPPER/EMT	MAX 4"	FS-ONE	INTUMESCENT SEALANT	2HRS	FIRE STOP	FIRE STOP	REQUIRED
STEEL/CAST 4" EMT/ 2" FLEX	MAX 6" –	FS-ONE	INTUMESCENT SEALANT	2HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
STEEL/CAST COPPER/EMT	MAX 4"	CP-620	FIRE FOAM	1HRS	FIRE STOP	FIRE STOP	REQUIRED
PEX	MAX 1"	CP 645	INTUMESCENT STRIP W/COLLAR	1HRS	BOTH SIDES	BOTH SIDES	NOT REQUIRED
PVC PIPE	MAX 2"	FS-ONE	INTUMESCENT SEALANT	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
PVC PIPE	MAX 4"	FS-ONE	INTUMESCENT SEALANT	2HRS	FIRE STOP	FIRE STOP	REQUIRED
PVC PIPE	MAX 4"	CP 645	INTUMESCENT STRIP W/COLLAR	1HRS	COLLAR	FIRE STOP	NOT REQUIRED
REFRIGERANT	–	FS-ONE	INTUMESCENT SEALANT –	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
4" DUCT	MAX 4"	FS-ONE	INTUMESCENT SEALANT –	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
INSULATED COPPER/STEEL	MAX 2"	FS-ONE	INTUMESCENT SEALANT –	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED
CABLES	MAX 2"	FS-ONE	INTUMESCENT SEALANT –	1HRS	FIRE STOP	FIRE STOP	NOT REQUIRED

FIXTURE CONNECTIONS

TYPE	FIXTURE	WASTE	VENT	CW	HW	TEMP
P-1	TOILET	3"	2'	1/2"		
P-2	LAVATORY	2"	1 1/2"	1/2"	1/2"	110
P-3	TUB/SHOWER	1-1/2"	1 1/2"	1/2"	1/2"	110
P-4	KITCHEN SINK	2"	1 1/2"	1/2"	1/2"	110

INLET	D	A	B
4"	3'-6"ø	3'-0"	2'-6"
5"	3'-6"ø 3'-6"x3'-6" 4'-0"ø 4'-0"x4'-0" 4'-6"ø	5'-0" 5'-0" 3'-6" 3'-0" 3'-0"	4'-6" 4'-6" 3'-0" 2'-6" 2'-0"
6"	4'-0"ø 3'-0"x4'-0" 4'-6"ø 4'-6"x4'-6" 5'-0"ø 5'-0"x5'-0"	5'-0" 4'-0" 4'-0" 3'-6" 3'-0" 3'-0"	4'-6" 3'-6" 3'-6" 3'-0" 2'-6" 2'-6"
8"	5'-0"ø 5'-6"x5'-0" 6'-0"ø 6'-0"x5'-0" 6'-6"ø 6'-6"x6'-6"	6'-0" 4'-6" 4'-0" 3'-0" 3'-6" 3'-0"	5'-0" 4'-0" 3'-6" 2'-0" 3'-0" 2'-6"

NOTES:
- ALL INLET TRAPS TO BE PROVIDED IN ACCORDANCE WITH 248 CMR 10.00
- FOR INLETS LARGER THAN 10" THE DESIGN AND DIMENSIONS WILL BE DETERMINED FOR EACH PARTICULAR CASE.
- PRE-CAST SEPERATORS ARE TO HAVE ALL SPECIFIED HOLES EITHER CORE-BORED OR CAST IN PLACE.
- CIRCULAR BASINS ARE RECOMMENDED.

GENERAL CONSTRUCTION NOTES:

BASIN TO BE LOCATED OUTSIDE OF BUILDING WHERE POSSIBLE, COVER TO HAVE A CENTER HOLE.

A THIGHT COVER MUST BE USED IF BASIN IS LOCATED INSIDE OF BUILDING.

OPENING SHALL BE NOT LESS THAN 24" DIAMETR.

THE CATCH BASIN SHALL BE SO LOCATED AND CONSTRUCTED THAT SURFACE WATER SHALL BE EXLUDED.

INLET PIPE SHALL BE AT LEAST FOUR INCHES ABOVE NORMAL WATER LINE.

WHERE SUBJECT TO FROST OR CRUSHING CONDITIONS, OUTLET SHALL BE AT LEAST THREE FEET BELOW THE SURFACE.

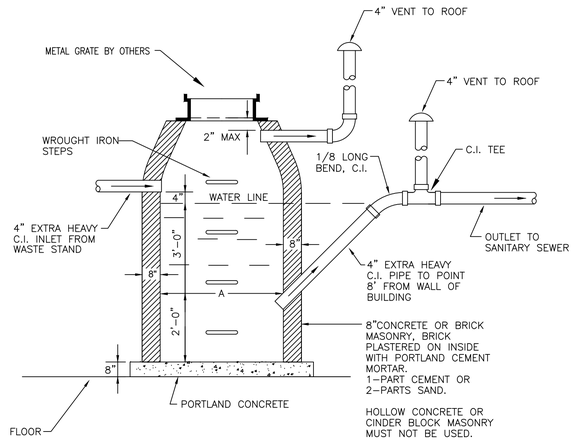
THE NEW CATCH BASIN MUST BE FILLED WITH CLEAN WATER BEFORE USING, AND AFTER BEING EMPTIED FOR PERIODIC CLEANING.

ALL OIL AND GASOLINE MUST BE REMOVED BEFORE CLEANING OUT THE BASIN AND MUST NOT BE DISCHARGED INTO THE SEWER THROUGH OTHER FIXTURES.

SPECIFICATIONS FOR COVERING SPECIAL CASES OR CONDITIONS SHALL BE APPROVED BY THE LOCAL AUTHORITIES.

WROUGHT IRON STEPS SHALL BE SPACED ABOUT 18" APART.

BOTH VENTS SHALL BE EXTENDED INDEPENDENTLY 18" ABOVE THE ROOF, OR AS APPROVED BY THE LOCAL AUTHORITIES.



GASOLINE AND SAND TRAP — N.T.S.

SANITARY ABOVE FLOOR	
SANITARY UNDER FLOOR	
VENT	
VENT BURIED	
COLD WATER	
HOT WATER	
HOT WATER CIRCULATION	
SHUT OFF VALVE	
CHECK VALVE	
FLOOR CLEANOUT	
CLEANOUT	
WCO	WALL CLEANOUT
VR	VENT RISER
VTR	VENT THRU ROOF
HD	HUB DRAIN
FD	FLOOR DRAIN
FCO	FLOOR CLEANOUT
	UNION
HB	HOSE BIBB
RD	ROOF DRAIN
VS	VENT STACK
WB	WASHER BOX
WC	WATER CLOSET
LAV	LAVATORY SINK
SH	SHOWER
KS	KITCHEN SINK

– PLUMBING LEGEND — N.T.S.



Location

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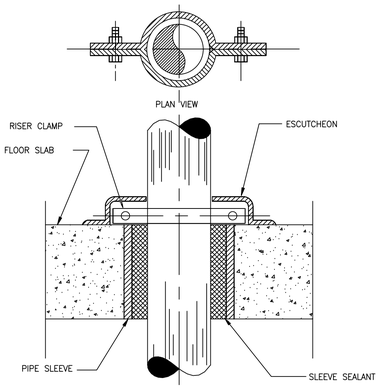
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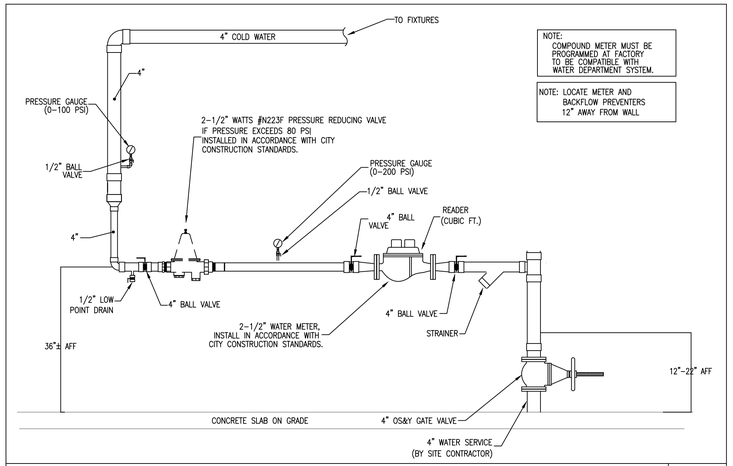
PLUMBING SCHEDULES

Sheet No.

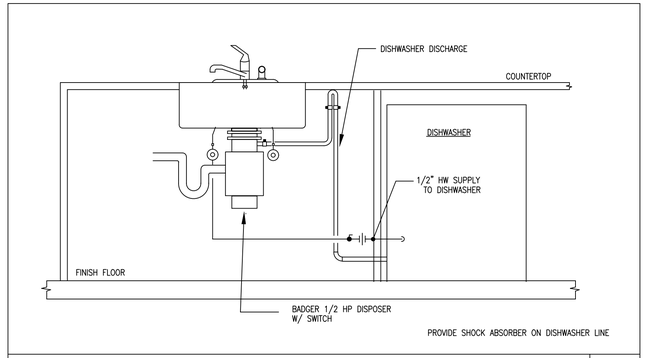
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PIPE SLEEVE THROUGH EXPOSED FLOOR SLAB | N.T.S.

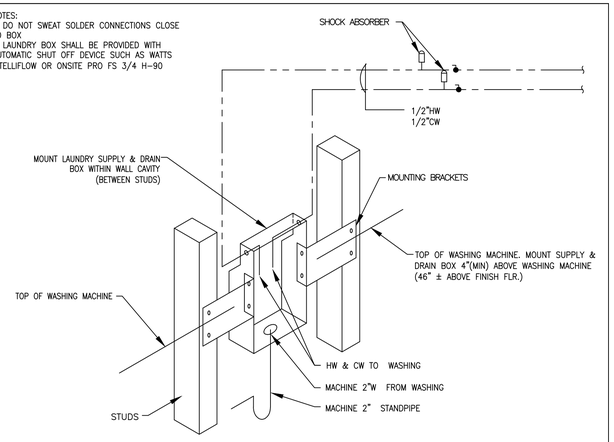


WATER METER WITH 2" WATER SERVICE DETAIL | N.T.S.

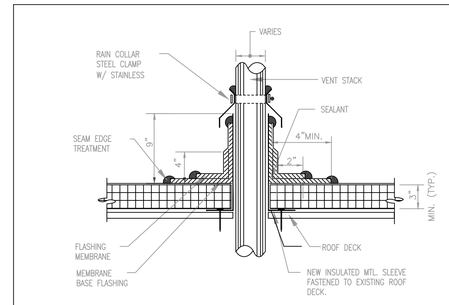


KITCHEN AND DISHWASHER DETAIL | N.T.S.

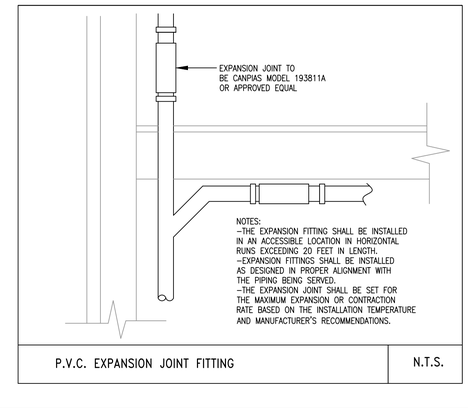
NOTES:
- DO NOT SWEAT SOLDER CONNECTIONS CLOSE TO BOX
- LAUNDRY BOX SHALL BE PROVIDED WITH AUTOMATIC SHUT OFF DEVICE SUCH AS WATTS INTELLIFLOW OR ONSITE PRO FS 3/4 H-90



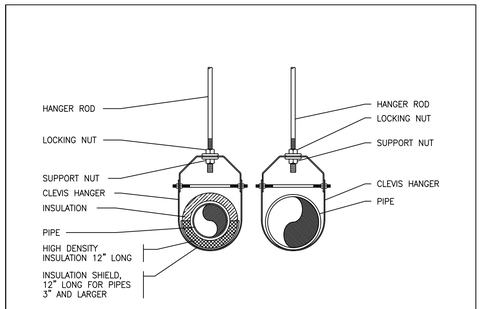
WASHING MACHINE CONNECTION | N.T.S.



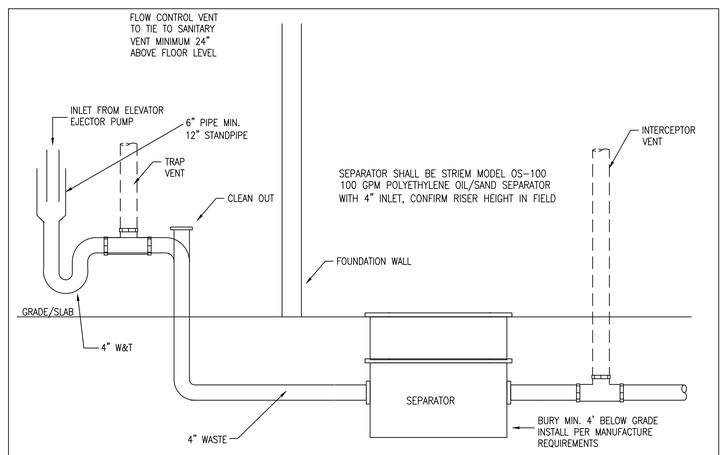
VENT TERMINAL | N.T.S.



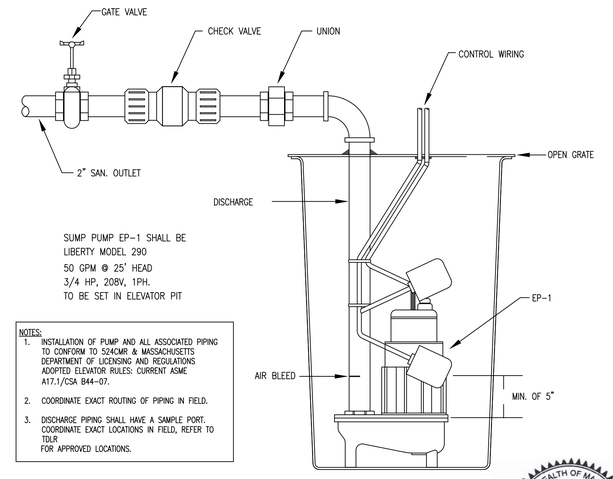
P.V.C. EXPANSION JOINT FITTING | N.T.S.



PIPE HANGER INSTALLATION DETAIL | N.T.S.



ELEVATOR OIL SEPARATOR INSTALLATION | N.T.S.



– | ELEVATOR EJECTOR PUMP

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
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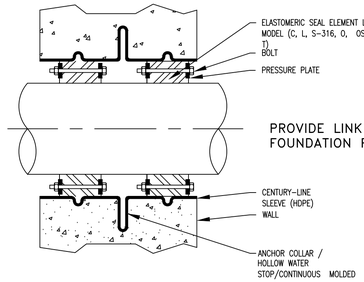
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PLUMBING DETAILS

Sheet No.

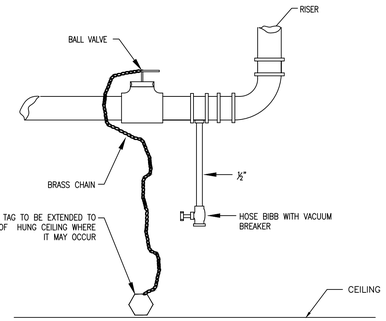
P-7



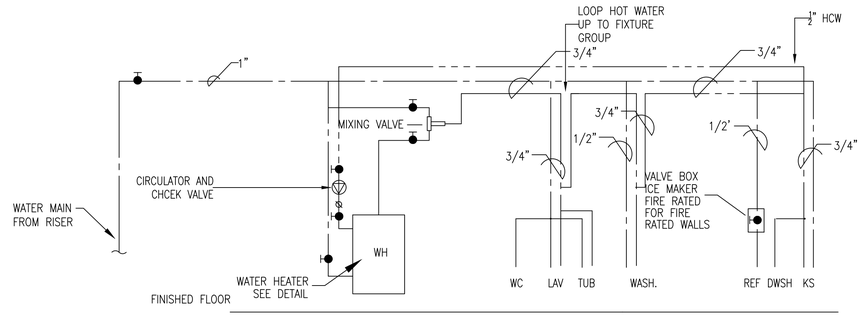
LS Model	Seal Element	Bolts/Nuts	Pressure Plate
C Polymer	EPDM (Block)	Zinc Dichromate/Organic Coated Carbon Steel Bolt	Reinforced Nylon

Sleeve Model	Description	Material
CS	Century-Line Sleeve	HDPE

LINK SEAL DETAIL — N.T.S.



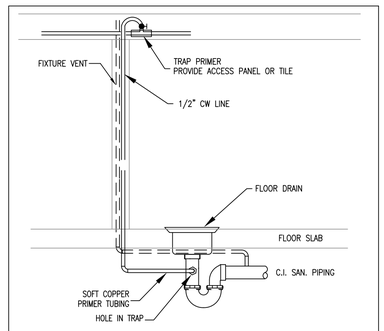
TYPICAL CONNECTION AT BASE OF WATER RISER — N.T.S.



TYPICAL WATER PIPING DIAGRAM

N.T.S.
SEE FLOOR PLANS FOR ACTUAL LOCATION OF FIXTURES

CODE REQUIRES HOT WATER RECIRC. LOOP TO EVERY FIXTURE AT A DISTANCE 20' AND MORE. LOOP HOT WATER THROUGH ALL THE FIXTURES AND THE CHASES AND RETURN ½" HCW TO WATER HEATER FROM THE MOST DISTANT FIXTURE.



TRAP PRIMER DETAIL — N.T.S.

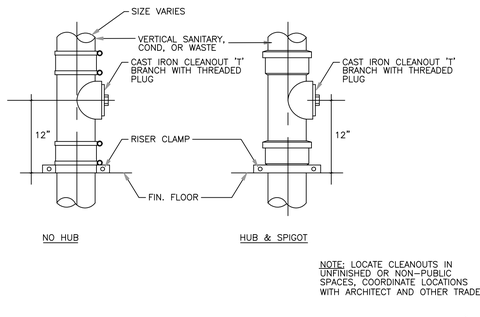
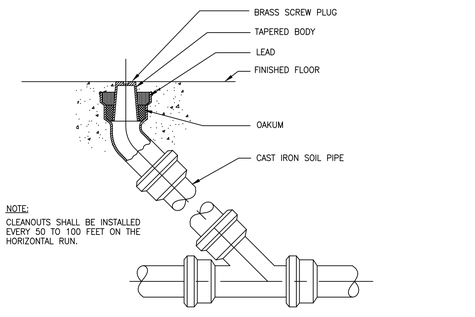
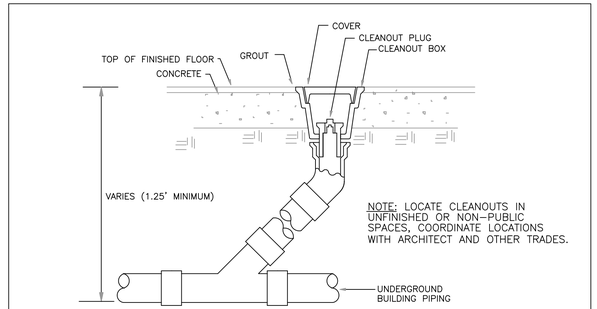


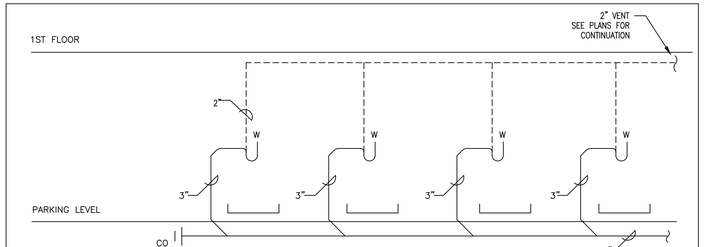
DIAGRAM – DANDY CLEANOUT — N.T.S.



TYPICAL FLOOR CLEANOUT — N.T.S.



FLOOR LEVEL CLEANOUT DETAIL — N.T.S.



NOTES:
1. 40 PIPE DIAMETER (MIN) IF CHANGE IN DIRECTION IS GREATER THAN 45°.
2. LONG SWEEPS & DANDY CLEANOUTS MAY BE USED IN LIEU OF WYE 1/8 BEND.
3. IF THERE ARE MORE THAN TEN BRANCH INTERVALS ON STACK THEN A RELIEF VENT SHALL BE INSTALLED IN ACCORDANCE WITH 248 CHR 2.16(4)(e).
4. IF IDEAL CONDITIONS DO NOT EXIST, THE LOCAL PLUMBING INSPECTOR MAY APPROVE A VARIATION FROM FIGURE 19 TO ACCOMODATE THE INTENT OF 248 CMR 2.15(9)(d).

NOTE: ALL WASHER MACHINES TO BE PROVIDED WITH AQUA MANAGERS "FLOODSTOP" (FS 3/4-H) AUTOMATIC FLOOD PROTECTION KIT

WASHER RISER DIAGRAMS

N.T.S.
RISER DIAGRAMS DO NOT SHOW OFFSETS.



Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

ZADE ENGINEERING LLC
CONSULTING ENGINEERS
1 BILLINGS ROAD STE 306, QUINCY, MA 02171
TEL. (617) 338-4406
FAX. (617) 451-2540
EMAIL zade@zadengineering.com

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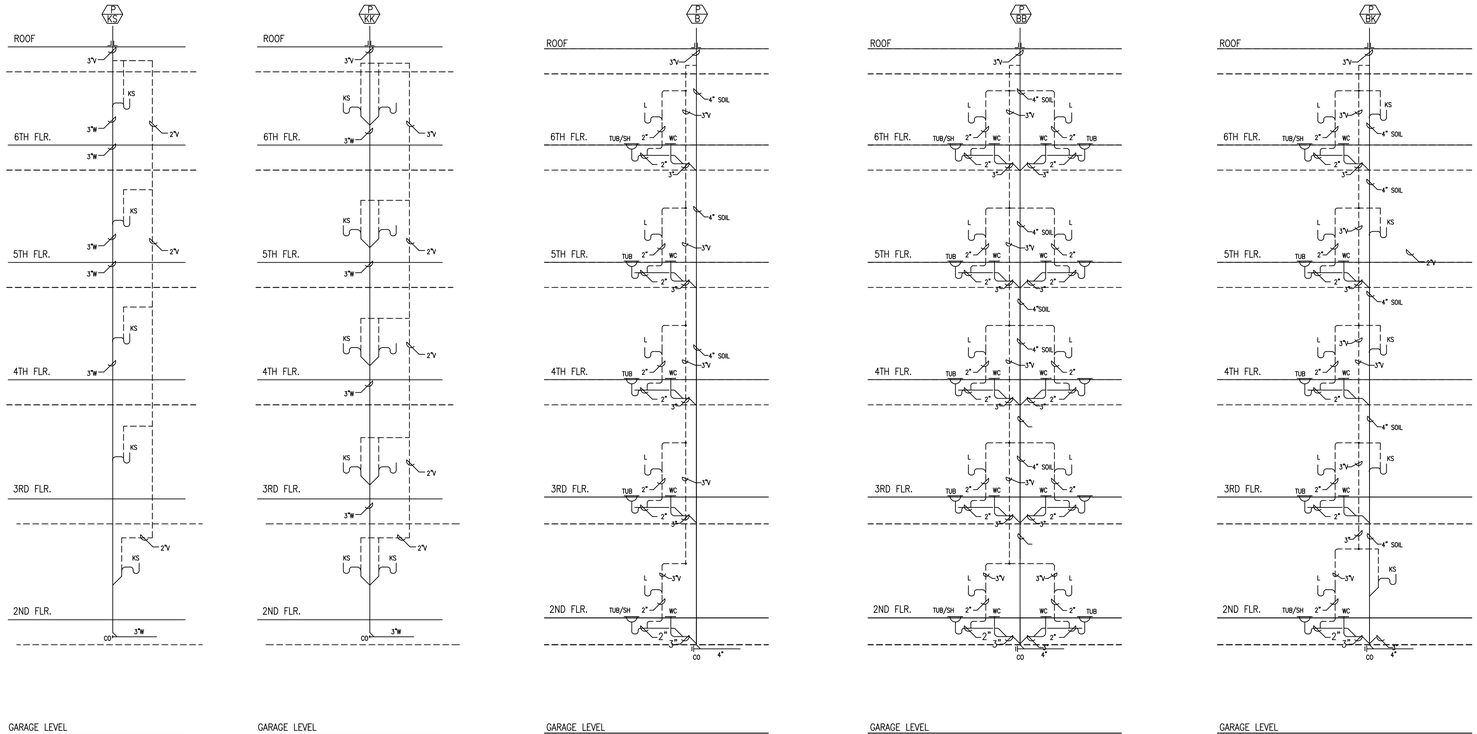
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Scale: AS NOTED
Date: 01-06-2026
Drawn By: ----------

Drawing Name

PLUMBING DETAILS

Sheet No.

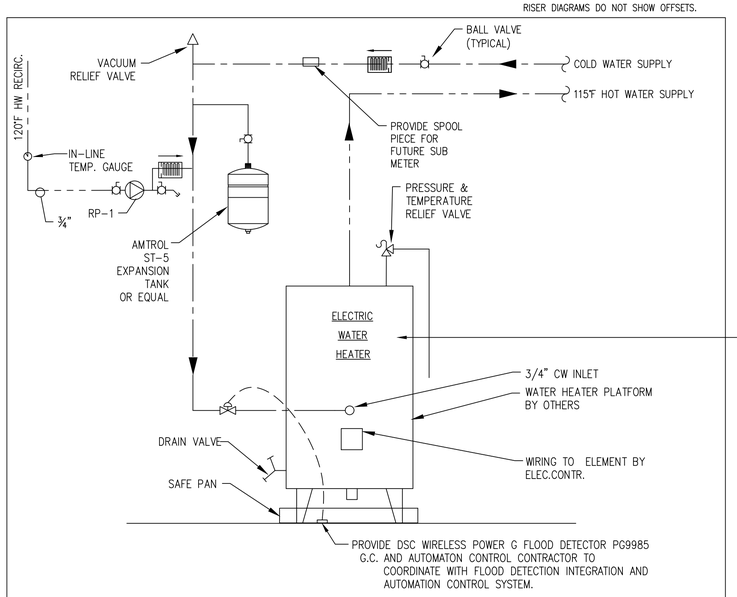
P-8



TYPICAL SANITARY RISER DIAGRAMS

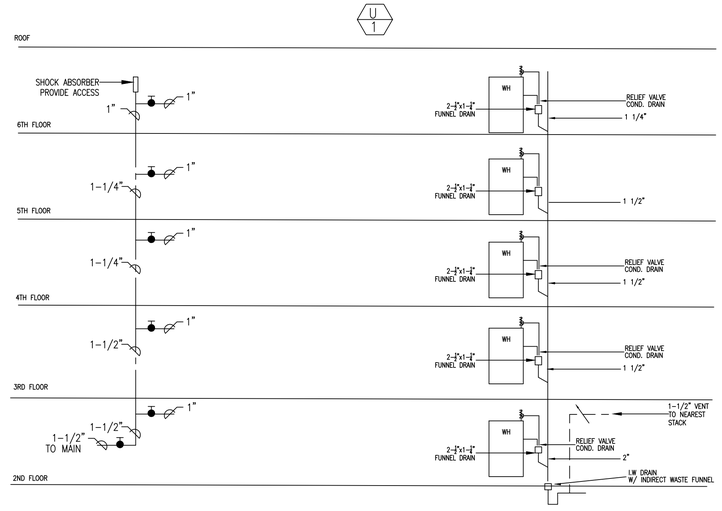
N.T.S.

RISER DIAGRAMS DO NOT SHOW OFFSETS.



PC SHALL PROVIDE ON DEMAND HOT WATER RECIRCULATION PUMP AS MFG BY TACO, MODEL GENIE, STAINLESS STEEL PUMP, COMPLETE WITH ALL COMPONENTS FOR PROPER INSTALLATION AND OPERATION. PROVIDE ROUND MOTION SENSOR AT EACH BATHROOM LOCATION, WIRELESS TRANSMITTER AND HARD WIRED TRANSMITTER AT PUMP LOCATION, LOCATE PUMP AT WATER HEATER.

ELECTRIC WATER HEATING PIPING DETAIL | N.T.S.



WATER RISER DIAGRAMS

N.T.S.

DRAIN RISER DIAGRAMS

N.T.S.

FOR BACK TO BACK UNITS USE ONE RISER

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51896
REGISTERED
PROFESSIONAL ENGINEER

Location

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EMAIL zade@zadeengineering.com

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Drawing Name

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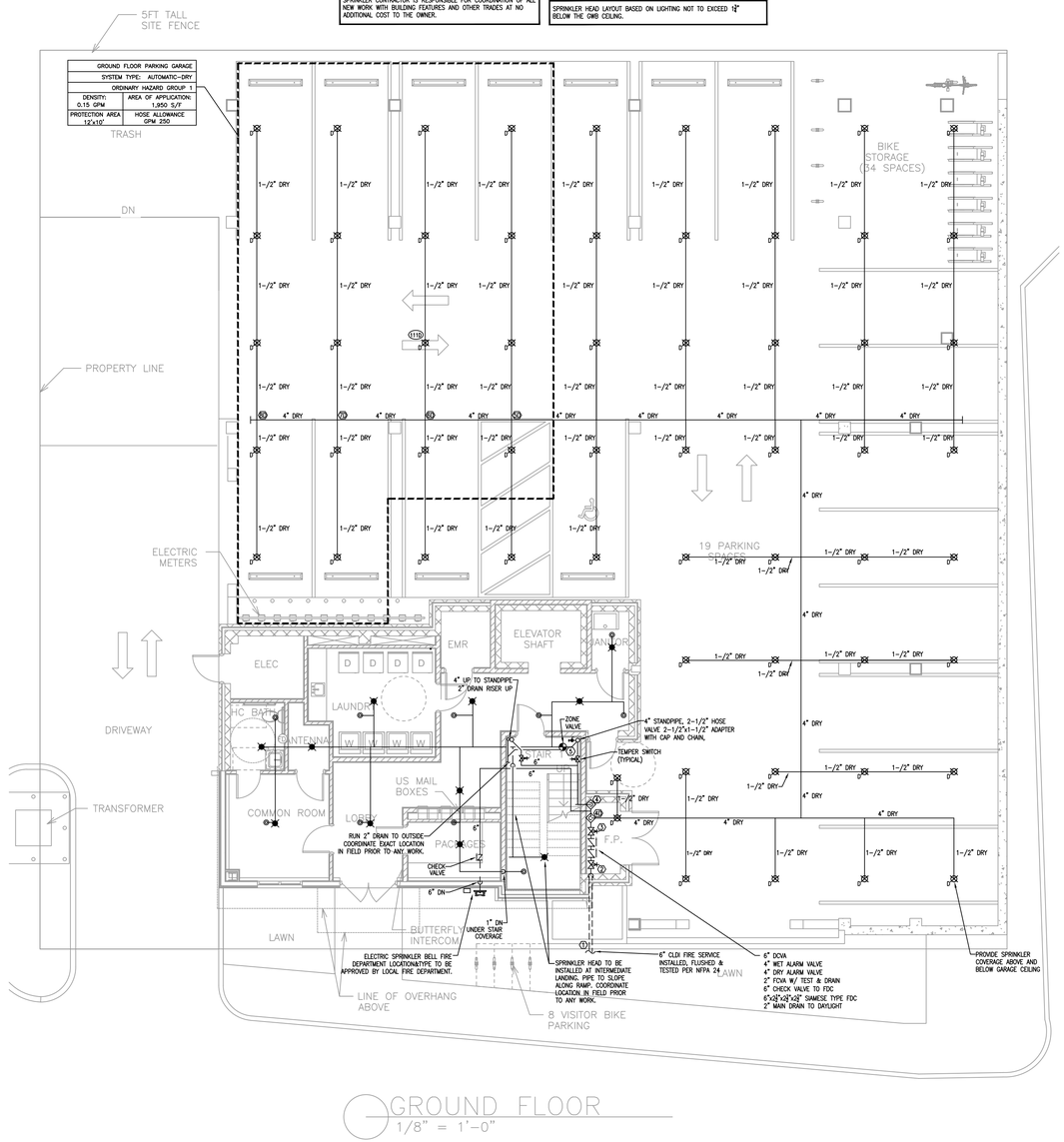
P-9

DRY SIDEWALL SPRINKLER HEADS ARE REQUIRED AT ALL BUILDING OVERHANGS EXCEEDING 4'-FT.

NOTES:
SPRINKLER CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL NEW WORK WITH BUILDING FEATURES AND OTHER TRADES AT NO ADDITIONAL COST TO THE OWNER.

GENERAL NOTES:
PROVIDE COIN TYPE SPRINKLER PROTECTION FOR ALL CONCEALED SPACES CREATED DURING CONSTRUCTION AS REQUIRED BY NFPA-13, INCLUDING OPEN WEB JOIST SPACES NOT COMPLETELY FILL WITH NON-COMBUSTIBLE INSULATION.

SPRINKLER HEAD LAYOUT BASED ON LIGHTING NOT TO EXCEED 12" BELOW THE GWB CEILING.



GROUND FLOOR
1/8" = 1'-0"

BIKE PARKING COMPLIANCE

	REQUIRED	PROPOSED
RESIDENT BIKE PARKING	1 SPACE PER UNIT (40 SPACES) - 25% MIN. ON-GROUND SPACES - 75% MAX. ON-/IN-/EXTRA-WIDE SPACES (7 SPACES)	34 SPACES - 10 ON-GROUND (23%) - 24 TWO-TIER SPACES - 24 TWO-TIER SPACES
VISITOR BIKE PARKING	1 SPACE PER 5 UNITS (8 SPACES)	8 SPACES (LOCATED AT THE EXTERIOR OF THE BUILDING)

Location

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No.	Description	Date

Project No: 2025014
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Drawing Name

GROUND FLOOR FIRE PROTECTION PLAN

Sheet No.

FP-1

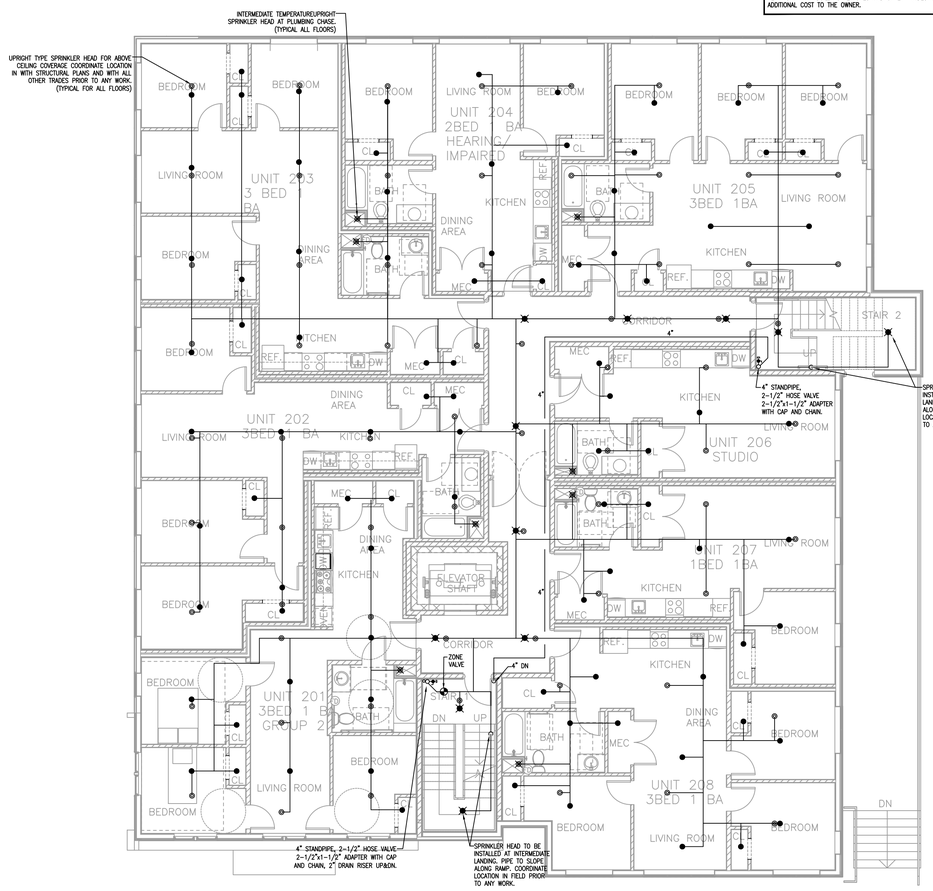
COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51899
REGISTERED
PROFESSIONAL ENGINEER

DRY SIDEWALL SPRINKLER HEADS ARE REQUIRED AT ALL BUILDING OVERHANGS EXCEEDING 4'-FT.

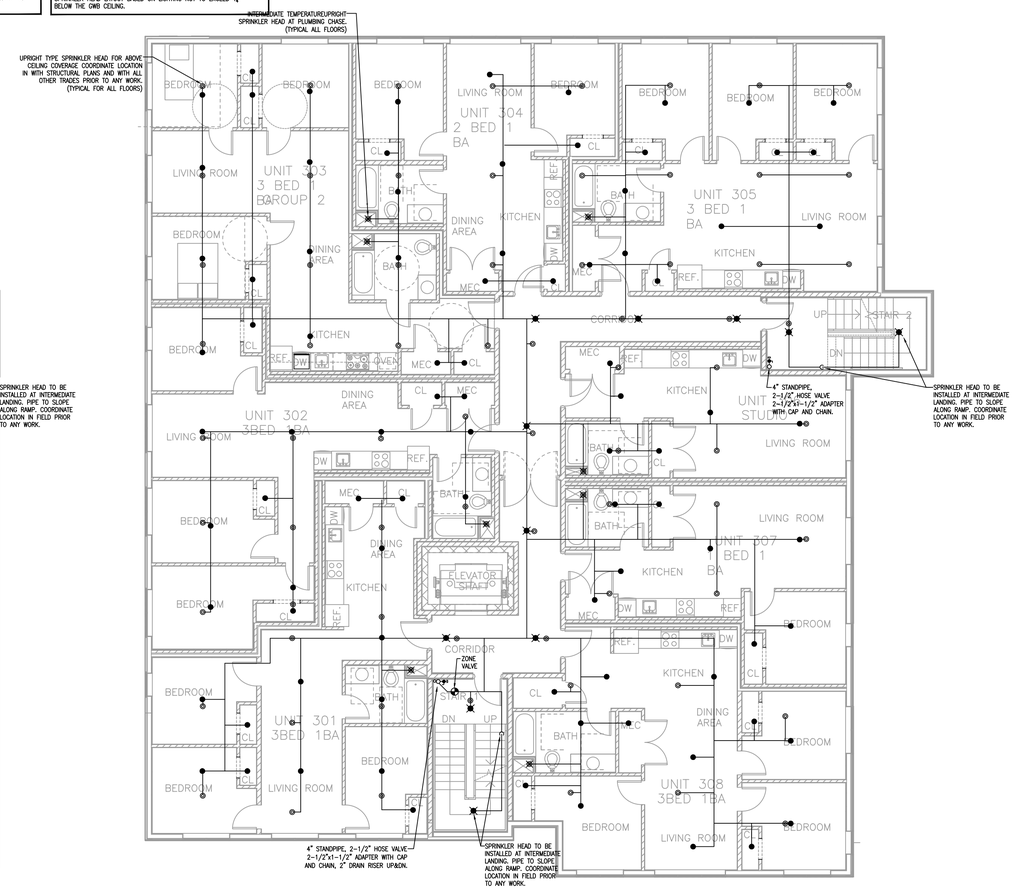
NOTES:
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GENERAL NOTES:
PROVIDE CDN TYPE SPRINKLER PROTECTION FOR ALL CONCEALED SPACES CREATED DURING CONSTRUCTION AS REQUIRED BY NFPA-13, INCLUDING OPEN WEB JOIST SPACES NOT COMPLETELY FILL WITH NON-COMBUSTIBLE INSULATION.

SPRINKLER HEAD LAYOUT BASED ON LIGHTING NOT TO EXCEED 12" BELOW THE OWB CEILING.



SECOND FLOOR
1/8" = 1'-0"



THIRD FLOOR
1/8" = 1'-0"



Location

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EMAIL zade@zadeengineering.com

No.	Description	Date

Project No: 2025014
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Drawn By: ----------

Drawing Name

FIRE PROTECTION FLOOR PLAN

Sheet No.

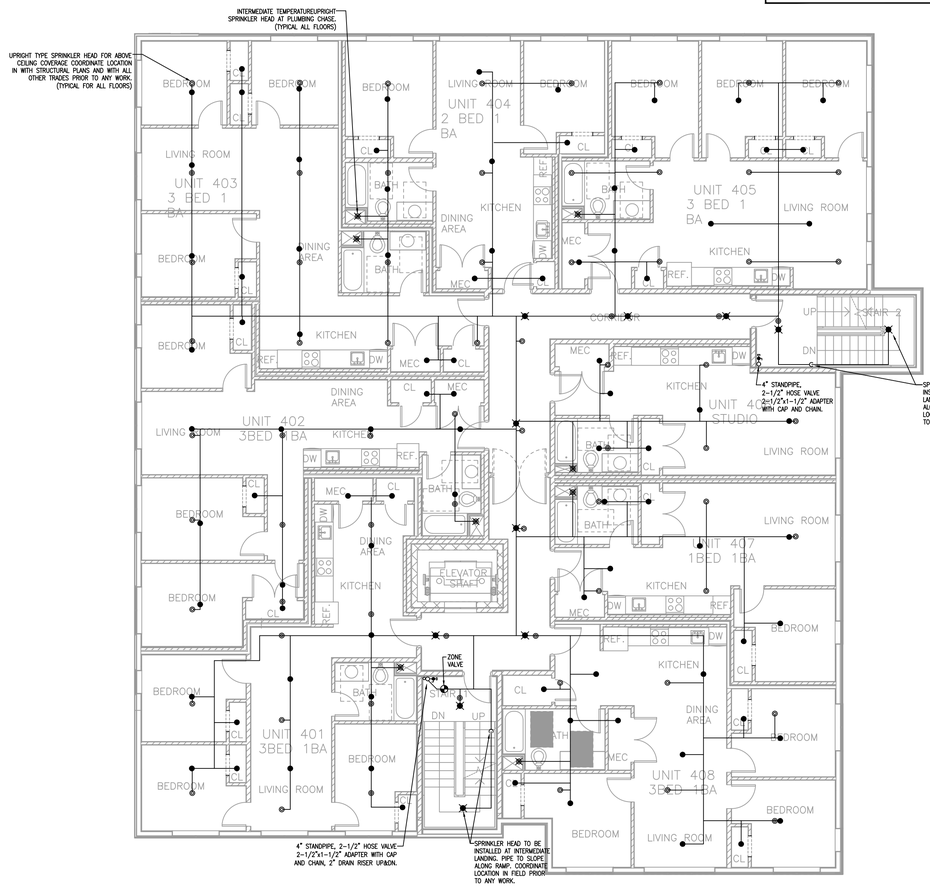
FP-2

DRY SIDEWALL SPRINKLER HEADS ARE REQUIRED AT ALL BUILDING OVERHANGS EXCEEDING 4'-FT.

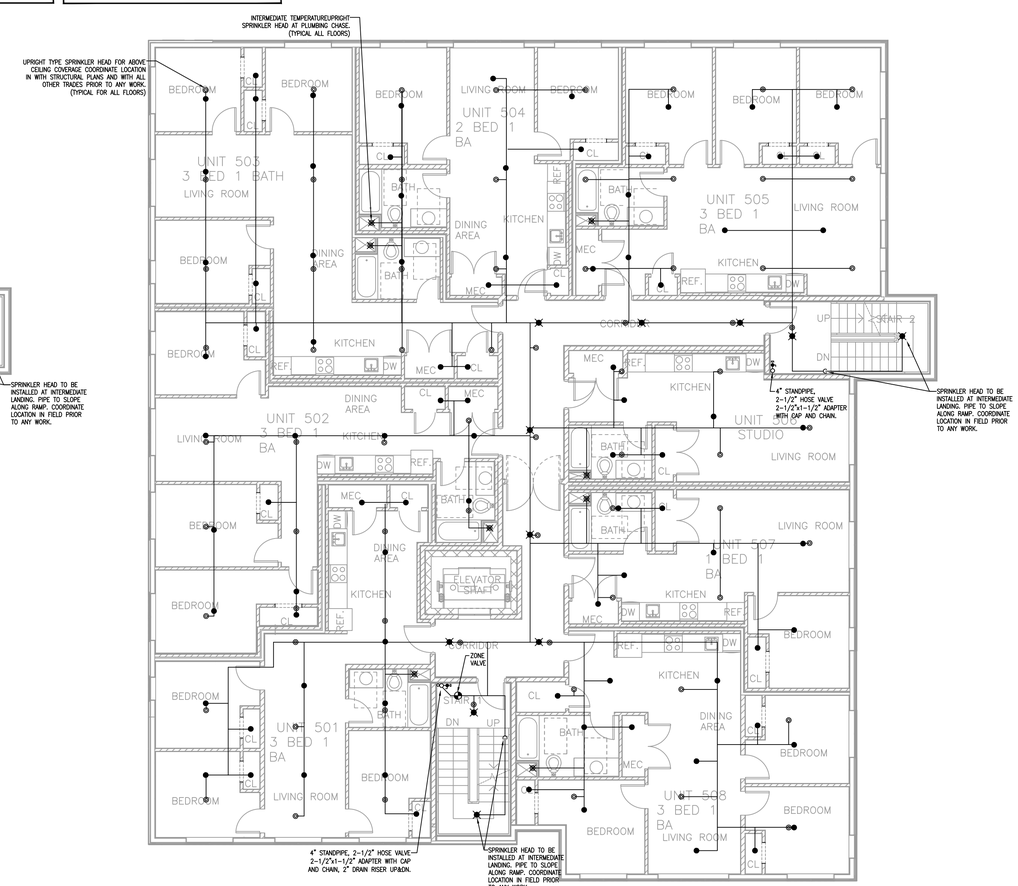
NOTES:
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GENERAL NOTES:
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SPRINKLER HEAD LAYOUT BASED ON LIGHTING NOT TO EXCEED 12" BELOW THE GWB CEILING.



FOURTH FLOOR
1/8" = 1'-0"



FIFTH FLOOR
1/8" = 1'-0"

Location

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HYDE PARK, MA 02136

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Project No: 2025014
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Drawing Name

FIRE PROTECTION FLOOR PLAN

Sheet No.

FP-3

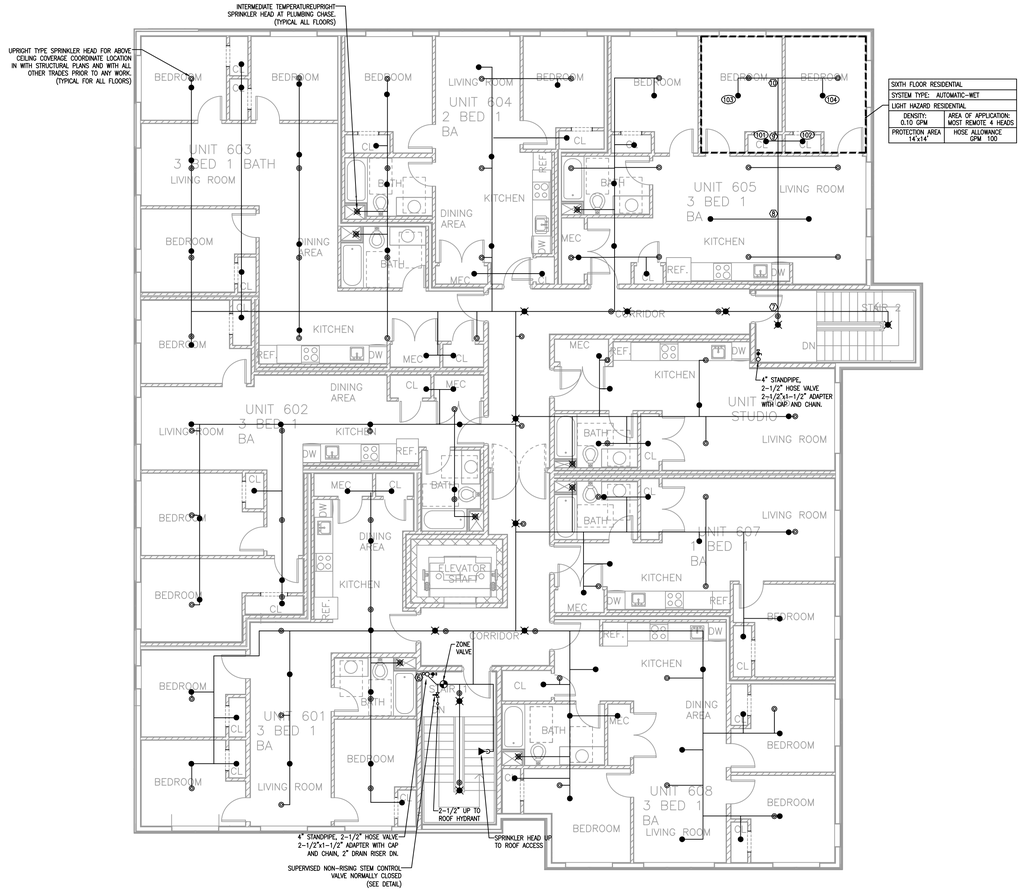
COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51898
REGISTERED PROFESSIONAL ENGINEER

DRY SIDEWALL SPRINKLER HEADS ARE REQUIRED AT ALL BUILDING OVERHANGS EXCEEDING 4'-1".

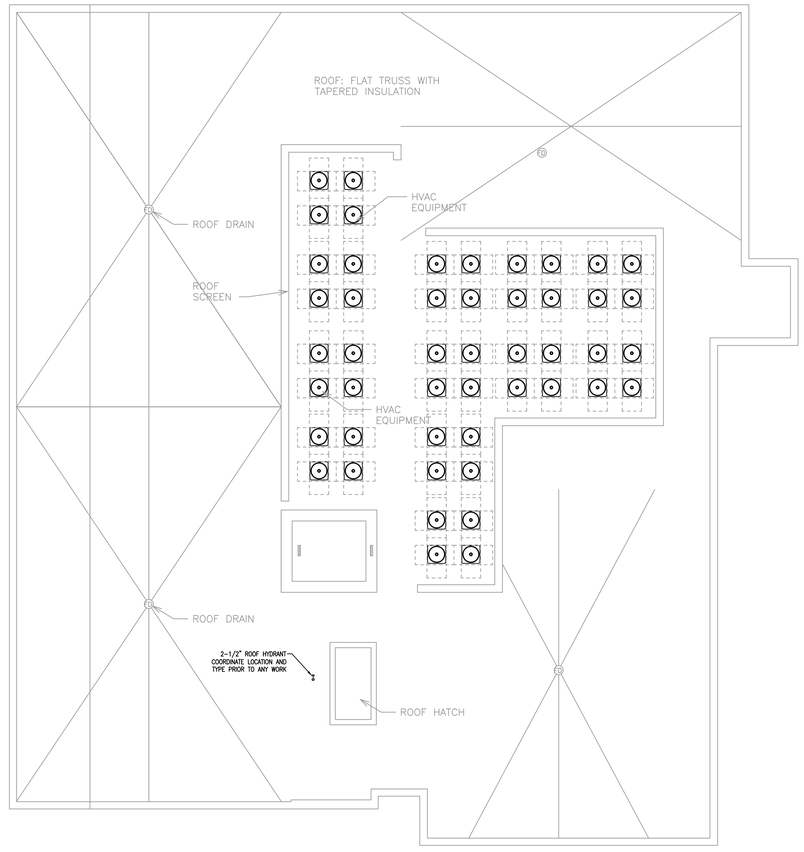
NOTES:
SPRINKLER CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL NEW WORK WITH BUILDING FEATURES AND OTHER TRADES AT NO ADDITIONAL COST TO THE OWNER.

GENERAL NOTES:
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SPRINKLER HEAD LAYOUT BASED ON LIGHTING NOT TO EXCEED 12" BELOW THE GWB CEILING.



SIXTH FLOOR
1/8" = 1'-0"



ROOF PLAN
1/8" = 1'-0"

Location

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No.	Description	Date

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Drawing Name

FIRE PROTECTION FLOOR PLAN

Sheet No.

FP-4

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51899
REGISTERED PROFESSIONAL ENGINEER

DESIGN CRITERIA

THE AUTOMATIC FIRE SUPPRESSION SYSTEM HAS BEEN DESIGNED PER NFPA-13 2013, CMR 780 WITH AMENDMENTS

1. THE DRAWINGS ARE INTENDED TO BE DIAGRAMMATIC IN NATURE AND MAY NOT DEPICT EVERY COMPONENT REQUIRED TO FURNISH A FULLY CODE COMPLIANT SYSTEM. THE FIRE PROTECTION CONTRACTOR IS REQUIRED TO PROVIDE ALL MATERIAL AND LABOR TO FURNISH A FULLY CODE COMPLIANT SYSTEM PER NFPA-13 2013

PIPE, FITTINGS AND JOINTS

1. PIPE AND FITTINGS SHALL CONFORM TO THE LATEST ANSI, ASTM, NFPA AND AWWA STANDARDS INCLUDING LATEST AMENDMENTS AND SHALL BE LISTED FOR USE WITH FIRE SPRINKLER SYSTEMS

2. SEE MATERIAL SCHEDULE ON DETAIL SHEET

HANGERS AND SUPPORTS

1. HANGERS AND SWAY BRACING WHERE REQUIRED , SHALL BE INSTALLED TO MEET NFPA AND LOCAL STATE BUILDING CODE COMPLIANCE AS TO LOCATION, SPACING, AND MAXIMUM LOADS.

2. HANGER MATERIAL SHALL BE COMPATIBLE WITH PIPING MATERIALS WITH WHICH IT COMES INTO CONTACT.

3. HANGERS SHALL BE INSTALLED, IN ADDITION TO THE ABOVE, AT ALL CHANGES OF DIRECTION (HORIZONTAL AND VERTICAL), VALVES AND EQUIPMENT CONNECTIONS. HANGERS SHALL BE LOCATED SO THAT THEIR REMOVAL IS NOT REQUIRED TO SERVICE, ASSEMBLE OR REMOVE EQUIPMENT.

4. HORIZONTAL RUNS MAY USE BAND HANGERS UP TO 4" SIZE. PIPING LARGER THAN 4" SHALL BE PROVIDED WITH CLEVIS TYPE.

5. ALL RODS, CLAMPS, NUTS, WASHERS, SHIELDS AND HANGERS IN ALL AREAS SHALL BE ELECTRO-GALVANIZED COATED STEEL.

VALVES AND SUNDRIES

1. SHUTOFF VALVES ON THE ABOVEGROUND FIRE PROTECTION SYSTEM SHALL BE UL, FM BUTTERFLY OR OS&Y GATE VALVES, AS INDICATED, ON SIZES 2-1/2" AND LARGER, VALVES UP TO 2" SHALL BE UL, FM BALL VALVES. ALL ISOLATION / CONTROL VALVES SHALL BE MONITORED.

2. CHECK VALVES SHALL BE 175-POUND CLASS FOR FIRE PROTECTION.

3. VALVES SHALL BE PROVIDED WITH SEATS SUITABLE FOR THE SERVICE INTENDED.

4. VALVES SHALL BE AS MANUFACTURED BY NIBCO, VICTAULIC, WALLWORTH, MILWAUKEE OR APPROVED EQUAL. MANUFACTURERS MODEL NUMBERS REFERENCED BELOW ARE USED TO INDICATE A TYPE, MATERIAL AND QUALITY TO BE PROVIDED.

5. ALL VALVES SPECIFIED HEREIN SHALL BE UL/FM APPROVED, 175 PSI MINIMUM WORKING PRESSURE. ALL CONTROL VALVES SHALL BE PROVIDED WITH TAMPER SWITCH.

AUTOMATIC SPRINKLERS

1. SPRINKLER HEADS: QUICK RESPONSE, BULB TYPE, AND STYLE AS INDICATED OR REQUIRED BY THE APPLICATION. UNLESS OTHERWISE INDICATED.

2. IN ALL OPEN AREAS, WHERE ELECTRICAL EQUIPMENT IS LOCATED, AN APPROVED TYPE SHIELD, TO KEEP WATER OFF THE ELECTRICAL EQUIPMENT, SHALL BE PROVIDED.

3. PROVIDE ALL SPRINKLER HEADS WITH PROTECTIVE CAGE.

4. PROVIDE IN THE VALVE ROOM, A FINISHED STEEL CABINET SUITABLE FOR WALL MOUNTING, WITH HINGED COVER AND SPACE FOR 6 SPARE SPRINKLER HEADS PLUS SPRINKLER HEAD WRENCH.

SPRINKLER SHOP DRAWINGS

1. PRIOR TO INSTALLATION FIRE PROTECTION CONTRACTOR SHALL FURNISH COMPLETE TIER II SHOP DRAWINGS AND HYDRAULIC CALCULATIONS BASED ON A RECENT HYDRANT FLOW TEST FOR APPROVAL BY THE ENGINEER OF RECORD. FINAL AFFIDAVITS CANNOT BE ISSUED WITHOUT APPROVED SHOP DRAWINGS

FLUSHING AND TESTING

1. ALL LABOR, MATERIALS, INSTRUMENTS, DEVICES AND POWER REQUIRED FOR TESTING SHALL BE PROVIDED BY THIS CONTRACTOR. THE TESTS SHALL BE PERFORMED IN THE PRESENCE AND TO THE SATISFACTION OF THE ENGINEER, GENERAL CONTRACTOR AND THE LOCAL FIRE DEPARTMENT AND SUCH OTHER PARTIES, AS MAY HAVE LEGAL JURISDICTION. NO PIPING IN ANY LOCATION SHALL BE CLOSED UP, FURRED IN, OR COVERED BEFORE TESTING.

2. WHERE PORTIONS OF PIPING SYSTEMS ARE TO BE COVERED OR CONCEALED BEFORE COMPLETION OF THE PROJECT, THOSE PORTIONS SHALL BE TESTED SEPARATELY IN THE MANNER SPECIFIED HEREIN FOR THE RESPECTIVE ENTIRE SYSTEM.

3. ANY PIPING OR EQUIPMENT THAT HAS BEEN LEFT UNPROTECTED AND SUBJECT TO MECHANICAL OR OTHER INJURY IN THE OPINION OF THE GENERAL CONTRACTOR SHALL BE RE TESTED IN PART OR IN WHOLE AS DIRECTED.

4. THE ENGINEER RETAINS THE RIGHT TO REQUEST A RECHECK OR RESETTING OF ANY PUMP OR INSTRUMENT BY THIS CONTRACTOR DURING THE GUARANTEE PERIOD AT NO ADDITIONAL COST TO THE CONTRACTOR.

5. REPAIR, OR IF DIRECTED, REPLACE ANY DEFECTIVE WORK WITH NEW WORK WITHOUT EXTRA CHARGE TO THE CONTRACT. REPEAT TESTS AS DIRECTED, UNTIL THE WORK IS PROVEN TO MEET THE REQUIREMENTS SPECIFIED HEREIN.

6. RESTORE TO ITS FINISHED CONDITION ANY WORK, DAMAGED OR DISTURBED, PROVIDED BY OTHER CONTRACTORS AND ENGAGE THE ORIGINAL CONTRACTOR TO DO THE WORK OF RESTORATION TO THE DAMAGED OR DISTURBED WORK.

7. THIS CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR AND ANY INSPECTORS HAVING JURISDICTION, A MINIMUM OF 48 HOURS IN ADVANCE OF MAKING ANY REQUIRED TESTS SO THAT ARRANGEMENTS MAY BE MADE FOR THEIR PRESENCE TO WITNESS HIS SCHEDULED TESTS.

8. TESTING SHALL BE IN ACCORDANCE WITH NFPA-13 "STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS".

9. EACH SYSTEM SHALL BE TESTED TO A HYDROSTATIC PRESSURE OF 200 PSI FOR TWO HOURS.

10. FLUSHING OF ALL BURIED SUPPLY PIPING SHALL BE PERFORMED AT A MINIMUM RATE OF 880 GPM FOR SYSTEMS WITH A 6" SERVICE.

11. ALL WATER FLOW DETECTING DEVICES AND CIRCUITS SHALL BE FLOW TESTED THROUGH THE INSPECTOR'S TEST CONNECTION AND ACTIVATE WITHIN FIVE MINUTES OF INITIATION.

12. ALL FLOW TESTS ON THE FIRE PROTECTION SYSTEMS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION.

13. SPRINKLER FLOW TEST DISCHARGE AND FLUSHING WATER DISCHARGE SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND THE LOCAL FIRE DEPARTMENT OR PUBLIC WORKS AS TO ACCEPTABLE DISCHARGE POINTS PRIOR TO SCHEDULING OF FLUSHING AND TESTS. THIS CONTRACTOR SHALL PROVIDE ALL HOSE AND EQUIPMENT NECESSARY TO PERFORM THE REQUIRED TESTING AND FLUSHING.

AS BUILT DRAWINGS AND CONTRACTOR CERTIFICATES

1. CONTRACTOR SHALL HAVE, ON HAND, AT TIME OF FINAL INSPECTION BY THE AUTHORITY HAVING JURISDICTION, FOR TEMPORARY / FINAL CERTIFICATE OF OCCUPANCY, ALL COMPLETED CERTIFICATES OF MATERIAL AND TESTING FOR ABOVEGROUND AND UNDERGROUND PIPING AS WELL AS THE AS- BUILT DRAWINGS OF THE FIRE PROTECTION INSTALLATION.

2. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ENGINEER OF RECORD AT SUCH A TIME WHERE THE INSTALLATION HAS PROGRESSED TO 90% AND PRIOR TO WALLS BEING CLOSED FOR INSPECTION.

PATCHING, REPLACEMENT AND MODIFICATION OF EXISTING WORK

1. AFTER INSTALLATION OF PIPELINES, THE CONTRACTOR SHALL NEATLY PATCH, REPAIR, AND/OR REPLACE EXISTING WORK WHERE DAMAGED, REMOVED OR ALTERED FOR PIPE LINE INSTALLATION. THIS WORK SHALL BE SIMILAR AND EQUAL IN QUALITY TO THE WORK REMOVED OR DAMAGED, UNLESS OTHERWISE SHOWN OR SPECIFIED. SUCH WORK SHALL INCLUDE PATCHING AND REPLACEMENT OF EXISTING PIPING AT POINTS OF CONNECTION TO NEW PIPING, PATCHING OF INSULATION, AND WHEREVER ANY SUCH PATCHING WORK IS INDICATED ON THE DRAWINGS OR OTHERWISE REQUIRED.

INSTALLATION

1. GENERAL: INSTALL FIRE PROTECTION SPECIALTY VALVES, FITTINGS, AND SPECIALTIES IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS, NFPA 13 AND 14, AND THE AUTHORITY HAVING JURISDICTION.

2. USE PROPER TOOLS TO PREVENT DAMAGE DURING INSTALLATIONS.

3. ALL PENDENT MOUNTED SPRINKLERS SHALL BE INSTALLED ON RETURN BENDS.

4. ALL SPRINKLERS INSTALLED IN ACOUSTICAL CEILING TILES SHALL BE CENTERED IN TILES WHERE APPLICABLE.

5. COORDINATE AND VERIFY DRAFT CURTAINS ARE INSTALLED AS REQUIRED BY SPRINKLER HEAD SPECIFICATIONS

6. CONTRACTOR IS RESPONSIBLE TO PROVIDE 100% SPRINKLED BUILDING INCLUDING ALL COMBUSTIBLE CONCEALED SPACES WHETHER SHOWN ON THIS PLAN OR NOT

7. NO WORK SHALL COMMENCE BEFORE HAVING FULL APPROVAL FROM THIS OFFICE

FIRE PROTECTION SPECIFICATION

1. BEFORE BIDDING THE JOB, CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY EXISTING CONDITIONS. REPORT ADVERSE CONDITIONS IN WRITING TO ARCHITECT.

2. SPRINKLER PIPING SHALL BE SCH.10/40 BLACK STEEL WITH 125 LB. CAST IRON THREADED/GROOVED JOINTS WHERE EXPOSED. BLAZE-MASTER TYPE CPVC FOR FIRE PROTECTION SHALL BE INSTALLED CONCEALED AND PER MANUFACTURERS INSTRUCTIONS.

3. SPRINKLER HEADS IN COMMON AREAS SHALL BE QUICK RESPONSE CONCEALED TYPE MANUFACTURED BY VIKING OR EQUAL. WITHIN UNITS THEY WILL BE RESIDENTIAL CONCEALED TYPE.

4. APPLY AND OBTAIN PERMIT AND APPROVAL FROM LANDLORD'S INSURANCE COMPANY, FIRE DEPARTMENT AND STATE AND LOCAL AUTHORITIES.

5. COORDINATE WITH ARCHITECT AND ARCHITECTURAL REFLECTED CEILING PLAN FOR THE LOCATION OF SPRINKLER HEADS.

6. COORDINATE SPRINKLER WORK WITH OTHER DISCIPLINES. SINCE PERFORMANCE OF SPRINKLER SYSTEM IS AFFECTED BY OBSTRUCTIONS AND NOT OTHER WAY AROUND, THIS CONTRACTOR SHALL COORDINATE ALL LIGHTING FIXTURE LOCATIONS AND TYPES AND OTHER OBSTRUCTIONS PRIOR TO ANY WORK DONE.

7. THE SYSTEM SHALL BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI PRESSURE FOR 2 HOURS. THERE WILL BE NO VISIBLE LEAKAGE WHEN THE SYSTEM IS SUBJECTED TO THE HYDROSTATIC PRESSURE TEST.

8. GUARANTEE ALL WORK AND MATERIAL FOR ONE YEAR FROM THE DATE OF ACCEPTANCE.

FLOW TEST DATA

STATIC	-----	tbd
RESIDUAL	-----	tbd
FLOW	-----	tbd

NOTE:
INSTALLING CONTRACTOR SHALL PERFORM NEW HYDRANT FLOW TEST FOR USE IN TIER 2 SHOP DRAWING SUBMITTAL-THIS DATA SHALL NOT BE USED

PREPARATION OF SHOP DRAWINGS:

PER 780CMR 901.2.1
SPRINKLER CONTRACTOR SHALL PREPARE TIER ii SHOP DRAWINGS INCLUDING PIPING & HYDRAULIC CALCULATIONS, AND SHALL SUBMIT TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF WORK.
ENGINEER SHALL CERTIFY SYSTEM INSTALLATION FOR CODE COMPLIANCE AT PROJECT COMPLETION.

FIRE SPRINKLER LEGEND

SYM	POSITION	FINISH	TEMP	K	NPT
◎	UPRIGHT	BRASS	155°	5.60	1/2"
⊠	UPRIGHT	BRASS	200°	5.60	1/2"
D⊠	DRY UPRIGHT	BRASS	200°	5.60	1/2"
⊠	PENDENT	CONCEALED	155°	5.60	1/2"
●	RES PENDENT	CONCEALED	155°	4.90	1/2"
⊙	DRY PENDENT	CONCEALED	155°	5.60	1/2"
▶	SIDEWALL	RECESSED	155°	5.60	1/2"
▷	DRY SIDEWALL	CONCEALED	155°	5.60	1/2"

FIRE PROTECTION ABBREVIATIONS

DSW	DRY SIDEWALL
DCVA	DOUBLE CHECK VALVE ASSEMBLY
DIA	DIAMETER
DR	DRAIN
ETR	EXISTING TO REMAIN
FHV	FIRE HOSE VALVE
IT	INTERMEDIATE TEMPERATURE
FP	FIRE PROTECTION
FS	FLOW SWITCH
SP	STANDPIPE
GV	GATE VALVE
GAL	GALLONS
GALV	GALVANIZED
GPM	GALLONS PER MINUTE
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
DN	PIPE DROP
PSI	POUNDS PER SQUARE INCH
PRV	PRESSURE REDUCING VALVE
RV	RELIEF VALVE
SPK	SPRINKLER
TS	TAMPER SWITCH
UP	PIPE RISE
VIF	VERIFY IN FIELD

FIRE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	SUPERVISED BUTTERFLY VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	SUPERVISED OS&Y GATE VALVE
FS	FLOW ALARM SWITCH
	SPRINKLER ZONE CONTROL ASSEMBLY (SEE DETAIL)
	PUMP (FIRE OR JOCKEY)
	DRY ALARM VALVE
	WET ALARM VALVE
	CHECK VALVE
	DRAIN VALVE
	FIRE VALVE ASSEMBLY 2-1/2"W X 2-1/2" X 1-1/2"
	PRESSURE GAUGE
XX	HYDRAULIC JUNCTION POINT
XXX	HYDRAULIC DISCHARGE NODE

FIRE PROTECTION MATERIAL SCHEDULE

SYSTEM	PIPE									FITTINGS						JOINTS			
NOTES: 1. COMPONENT PRESSURE RATING TO MATCH EXISTING 2. ALL MATERIALS SELECTED ON THIS SCHEDULE MUST BE APPROVED BY THE ENGINEER & LOCAL AUTHORITIES 2. ALL MATERIALS SELECTED ON THIS SCHEDULE MUST BE APPROVED BY THE ENGINEER & LOCAL AUTHORITIES	BLAZEMASTER CPVC	DUCTILE IRON	EXTRA HEAVY CAST IRON	STEEL SCHED 10	STEEL SCHED 30	STEEL SCHED 40	STEEL SCHED 80	BLACK	GALVANIZED	CEMENT LINED	MALLEABLE IRON	BLAZEMASTER CPVC	LINED	BLACK	GALVANIZED	VICTAULIC	DUCTILE IRON	THREADED	MECH.JOINT-FLANGED	GROOVED	SLIP
BURIED BUILDING FIRE SERVICE		●						●		●											
RESIDENTIAL CROSS MAINS	●											●								●	
RESIDENTIAL BRANCH LINES	●											●								●	
ARM-OVER & DROPS	●											●								●	
SPRINKLER DRAIN PIPE						●			●						●			●		●	
DRY SPRINKLER SYSTEM						●			●						●			●		●	

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
No. 51899
REGISTERED PROFESSIONAL ENGINEER

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

ZADE ENGINEERING LLC
CONSULTING ENGINEERS
1 BILLINGS ROAD STE 306, QUINCY, MA 02171
TEL. (617) 338-4406
FAX. (617) 451-2540
EMAIL zade@zadeengineering.com

No.	Description	Date

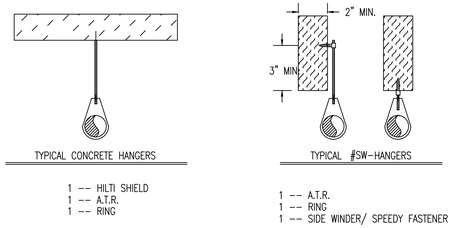
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Date: 01-06-2026
Drawn By: ----------

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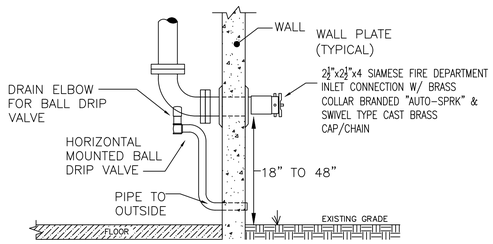
FIRE PROTECTION NOTES

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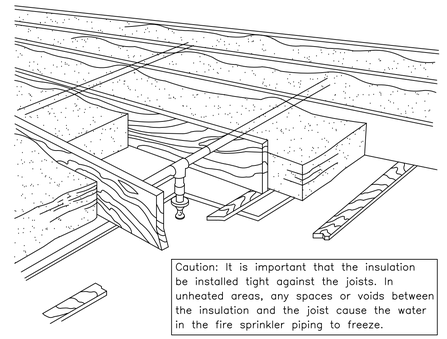
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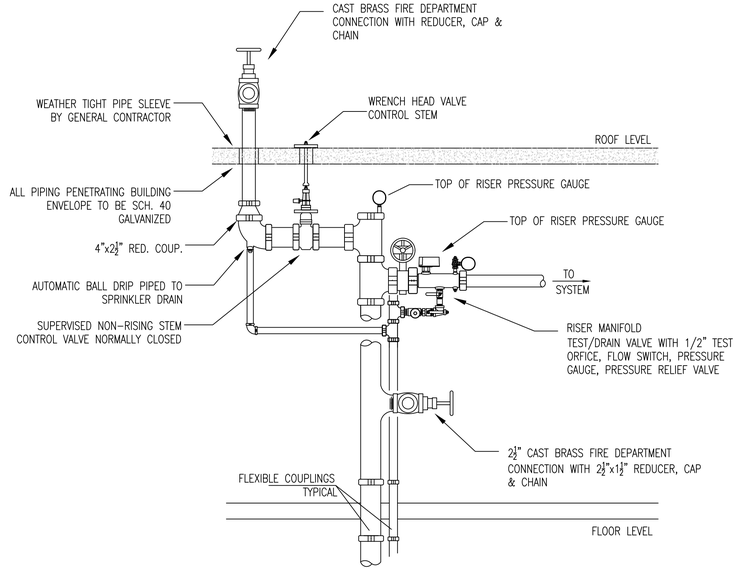
HANGER STRUCTURE ATTACHMENT | NTS



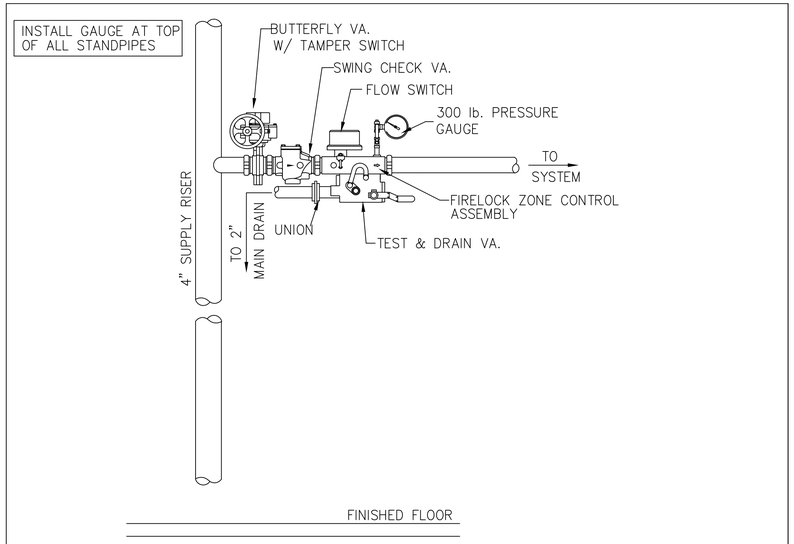
FIRE DEPARTMENT CONNECTION | NTS



PIPE INSULATION | NTS



COMBINATION STANDPIPE RISER WITH ROOF HYDRANT CONNECTION | NTS



FIRE SPRINKLER RISER | NTS

Location

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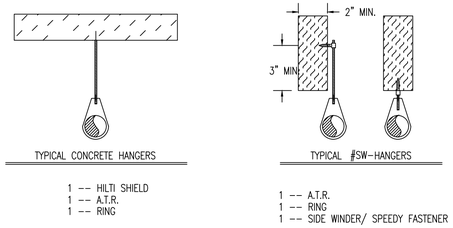
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FIRE PROTECTION DETAILS

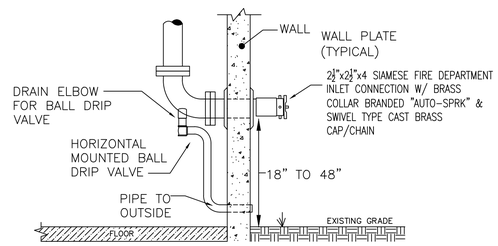
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FP-6

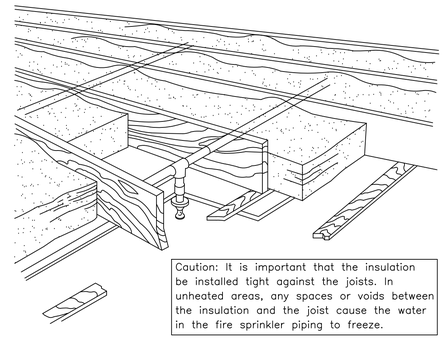
COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
MECHANICAL
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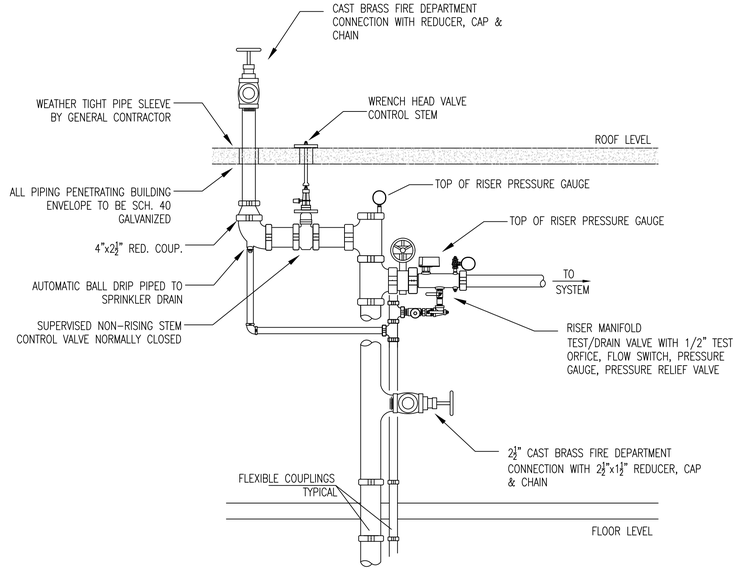
HANGER STRUCTURE ATTACHMENT | NTS



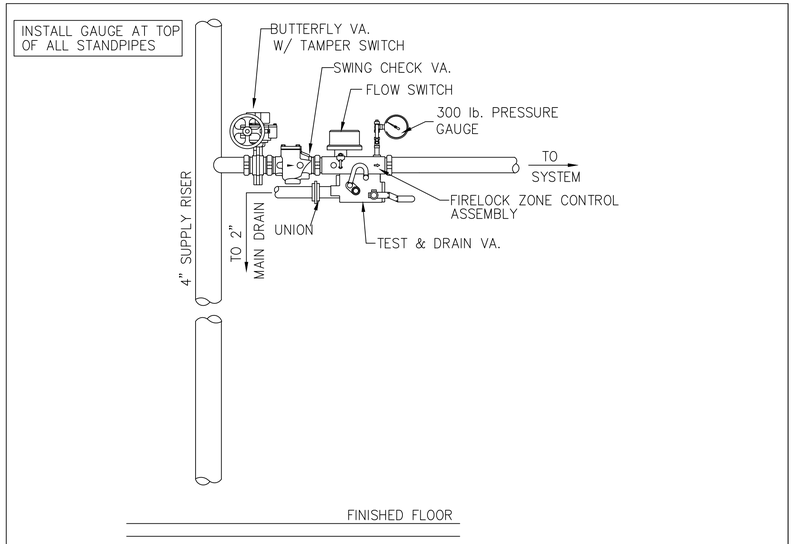
FIRE DEPARTMENT CONNECTION | NTS



PIPE INSULATION | NTS



COMBINATION STANDPIPE RISER WITH ROOF HYDRANT CONNECTION | NTS



FIRE SPRINKLER RISER | NTS

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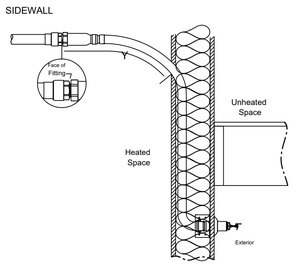
Drawing Name

FIRE PROTECTION DETAILS

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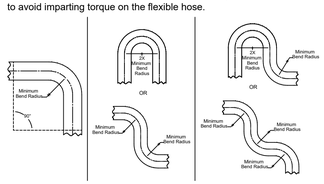
FP-7

COMMONWEALTH OF MASSACHUSETTS
MURAT EKERBICER
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REGISTERED PROFESSIONAL ENGINEER



Flexible Hose Bend Characteristics:

NOTE: For out-of-plane (three-dimensional) bends, care shall be taken to avoid imparting torque on the flexible hose.

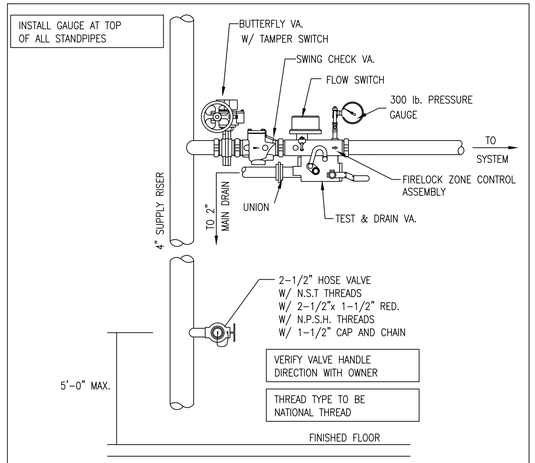


The following table is used when the ambient temperature is maintained between 40°F/4°C and 60°F/16°C around the wet piping system.

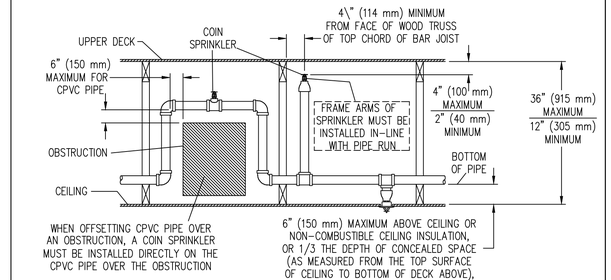
Ambient Temperature Exposed to Discharge End of Sprinkler °F/°C	Exposed Minimum Barrel Length "Y" inches/mm		
	40°F 4°C	50°F 10°C	60°F 16°C
40	0	0	0
4	0	0	0
30	0	0	0
-1	0	0	0
20	4	0	0
-7	100	0	0
10	8		0
-12	200	25	0
0	12	3	0
-18	300	75	0
-10	14	4	
-23	350	100	25
-20	14	6	3
-29	350	150	75
-30	16	8	4
-34	400	200	100
-40	18	8	4
-40	450	200	100
-50	20	10	6
-46	500	250	150
-60	20	10	6
-51	500	250	150

NOTE: Exposed minimum barrel lengths are inclusive up to 30-mph/48-kph wind velocities

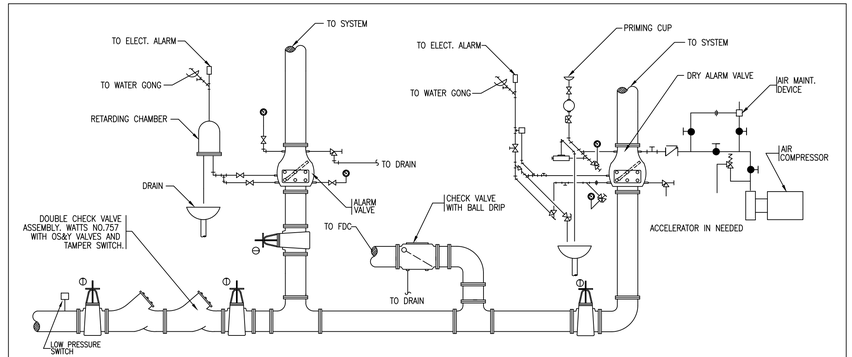
DRY SIDEWALL INSTALLATION DETAIL | NTS

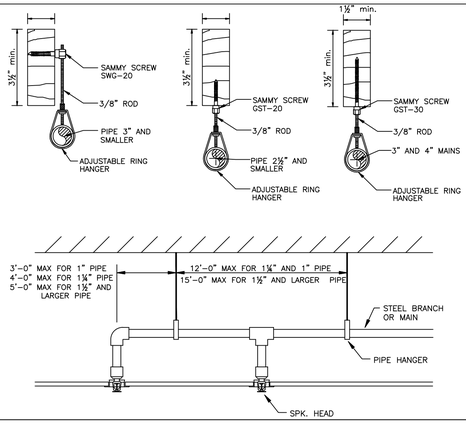


STANDPIPE RISER DETAIL | NTS

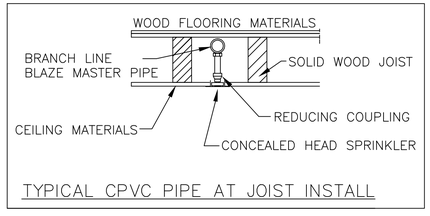


INTERSTITIAL SPRINKLER COVERAGE | NTS





PIPE HANGER SPACING | NTS



TYPICAL CPVC PIPE AT JOIST INSTALL

Location

PROPOSED MULTI-FAMILY BUILDING
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Drawn By: ----------

Drawing Name

FIRE PROTECTION DETAILS

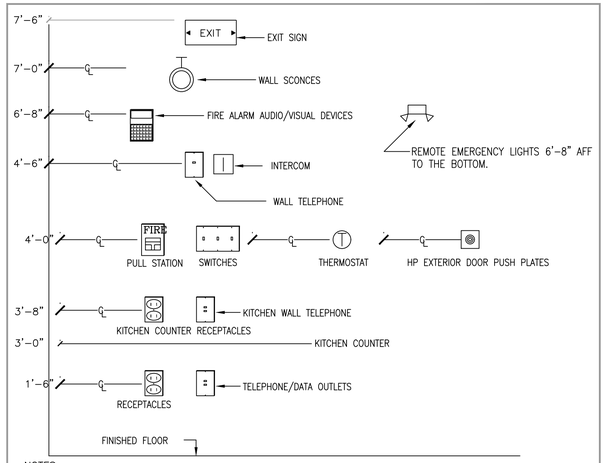
Sheet No.

FP-8

COMMONWEALTH OF MASSACHUSETTS MURAT EKERBICER MECHANICAL No. 51896 REGISTERED PROFESSIONAL ENGINEER

SYMBOL LIST

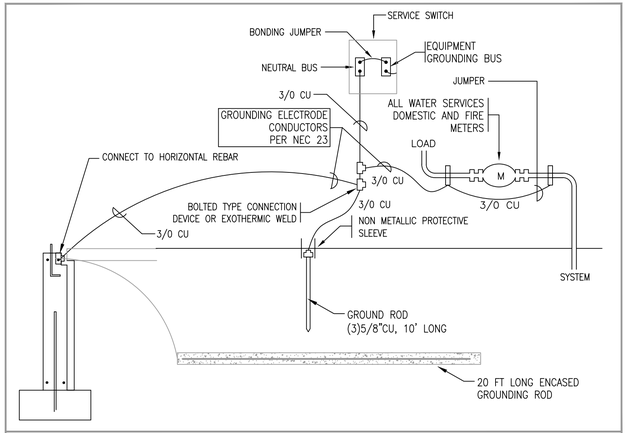
- CEILING MOUNTED LIGHT FIXTURE.
- WALL MOUNTED LIGHT FIXTURE.
- 2'X2' OR 2'X4' LED LIGHT FIXTURE.
- 1'x4' LED WALL/CEILING MOUNTED LIGHT FIXTURE.
- TRACK LIGHT
- S — SINGLE POLE LIGHT SWITCH
- S_3 — THREE-WAY LIGHT SWITCHES
- S_4 — FOUR-WAY LIGHT SWITCHES
- S_D — DIMMER SWITCH MINIMUM 1000W OR AS REQUIRED PER CIRCUIT
- S_{3D} — THREE-WAY DIMMER SWITCHES
- S_{4D} — FOUR-WAY DIMMER SWITCHES
- S_{OS} — SWITCH WITH INTEGRAL OCCUPANCY SENSOR
- DUPLEX RECEPTACLE, 120V, 18" AFF.
- $_{GFI}$ DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER 8" ABOVE COUNTER TO CENTER
- DUPLEX RECEPTACLE, 120V,18" AFF., ONE OUTLET SWITCHED
- 120V DOUBLE DUPLEX CONVENIENCE RECEPTACLE
- DUPLEX RECEPTACLE ABOVE COUNTER, 8" ABOVE COUNTER TO CENTER
- 208V/1P/30A RECEPTACLE
- SIMPLEX RECEPTACLE, 120V/20A, 18" AFF.
- $_{USB}$ DUPLEX RECEPTACLE WITH USB PORT
- 208V/1P/50A RANGE RECEPTACLE
- SPECIALTY NEMA RECEPTACLE; SEE FLOOR PLANS FOR NEMA TYPE, 18" AFF.
- CEILING MOUNTED RECEPTACLE, 120V
- TEL/DATA COMBINATION OUTLET, COMPLETE W/JACK AND COVER, HEIGHT @18" TO C AFF.
- MOTOR
- $_{3R}$ FUSED DISCONNECT SWITCH, (3R RAIN-PROOF).
- HOMERUN TO PANEL WITH CONDUCTOR.(HOT, NEUTRAL, GROUND)
- J — JUNCTION BOX
- LIGHTING & POWER PANEL
- APARTMENT LOAD CENTER, RECESSED
- $_{LV}$ LOW VOLTAGE BOX
- RACEWAY CONCEALED IN CEILING, PLENUM OR WALLS
- RACEWAY CONCEALED IN SLAB (FLOOR)
- TC — TIME SWITCH
- T — DRY TYPE TRANSFORMER
- UNIVERSAL MOUNTING EXIT SIGN (DOUBLE FACED), ARROWS AS INDICATED.
- EMERGENCY BATTERY UNIT WITH MOUNTING BRACKET AND VOLTMETER.
- M.S. — OCCUPANCY SENSOR
- AORC — AREA OF REFUGE CENTRAL BASE UNIT (TWO-WAY COMMUNICATION SYSTEM)
- AOR — AREA OF REFUGE FLOOR ELEVATOR LOBBY UNIT.



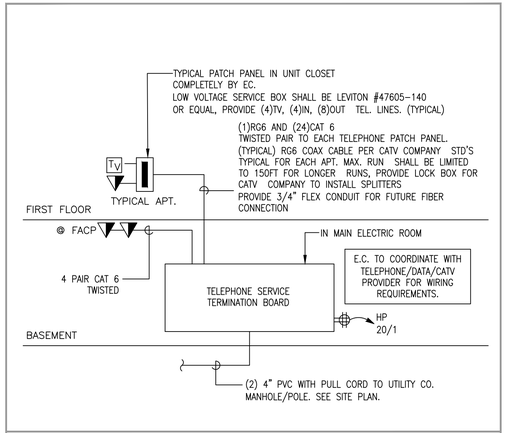
NOTES

1. DEVICES SHALL BE INSTALLED ON A COMMON VERTICAL CENTERLINE WHEREVER POSSIBLE.
2. HOOD AND GARBAGE DISPOSAL CONTROL SWITCHES (LIGHT/FAN) SHALL BE MOUNTED ON CABINET APRON, OR ON COUNTERTOP SURFACE IN A UL RATED ASSEMBLY. KITCHEN COUNTER OUTLETS SHALL BE MOUNTED 2" LOWER THAN STANDARD UNITS.
3. ALL DEVICES SHALL BE INSTALLED AT MOUNTING HEIGHTS AS INDICATED ON THIS DETAIL, U.N.O. IN CONTRACT DOCUMENTS BY ARCHITECT OR BY OWNER.
4. FIRE ALARM PULL STATION MOUNTING HEIGHT SHALL BE COMPLY WITH NFPA 72. (NOT LESS THAN 42 INCHES AND NOT MORE THAN 48 INCHES ABOVE FINISHED FLOOR)
5. FOR FIRE ALARM HORN/STROBES, THE ENTIRE STROBE LENS IS TO BE LOCATED NOT LESS THAN 80 INCHES A.F.F., AND NOT MORE THAN 96 INCHES A.F.F., AND SHALL COMPLY WITH NFPA 72.

TYPICAL DEVICE MOUNTING HEIGHTS DETAIL



SYSTEM GROUNDING DETAIL (NTS)



CATV/TELEPHONE RISER DIAGRAM (NTS)

WP
INDICATES EXTERIOR MOUNTED EMERGENCY LIGHT. CONNECT ALL REMOTE EMERGENCY LIGHTS ON CIRCUITS SO THAT (WATTSXFT) IS LESS THAN 3200 UNITS AND WIRE WITH #10 CU TO REMOTE BATTERY, PROVIDE 12V SEALED CALCIUM BATTERY UNIT AS REQUIRED OR AS SPECIFIED. BATTERY SHALL BE LOCATED IN A WARM ROOM.
BATTERY SHALL BE EMERGI-LITE 12LSM-220
OUTDOOR LIGHTS SHALL BE EMERGI-LITE EF11D

CONNECT ALL EXIT AND WALL PACK EMERGENCY LIGHTS TO THE LOCAL LIGHTING BRANCH CIRCUIT SERVING THE AREA, AHEAD OF ANY SWITCHED LEG(S). BACKUP BATTERIES SHALL BE CAPABLE OF POWERING THE EXIT AND EMERGENCY LIGHTS FOR A MINIMUM OF 90 MINUTES.

M.S. INDICATES CEILING MOUNTED OCCUPANCY SENSOR.
IN EACH SPACE EXCEPT CLOSETS, BATHROOMS, CORRIDORS, AND UTILITY ROOMS, PROVIDE CEILING MOUNTED OCCUPANCY SENSOR SHOWN OR OTHERWISE TO COMPLY WITH MASS ENERGY CODE. UNITS SHALL BE SIZED PER CIRCUIT REQUIREMENTS. EQUIPMENT SHALL BE AS MANUFACTURED BY NOVITAS 01-087 OR 01-077 OR EQUAL, AIR FLOW COMPENSATED TYPE.

IN ALL RESIDENTIAL DWELLING UNITS, UNLESS NOTED OTHERWISE:
- ALL LIGHT FIXTURES WITHIN BATHROOMS SHALL BE FED FROM THE LOCAL BATHROOM BRANCH CIRCUIT.
- LIGHT FIXTURES IN ALL OTHER AREAS WITHIN THE DWELLING UNIT SHALL BE FED FROM THE DEDICATED LIGHTING CIRCUIT.

ALL 120V RECEPTACLES INSTALLED WITHIN A RESIDENTIAL UNIT SHALL BE SHALL BE SAFETY TYPE AS MANUFACTURED BY LEVITON "5262-SG" OR APPROVED EQUAL.

PER NEW DEFINITION OF READILY ACCESSIBLE, ALL APPLIANCE CONNECTION POINTS WILL BE LOCATED IN THE NEXT BAY OF THE KITCHEN COUNTER OR SIMILAR SUCH THAT PLUGGING/UNPLUGGING OF THE APPLIANCES WILL NOT REQUIRE REMOVAL OR PULLING OUT OR TAKING PANELS OF THE FRONT FACE OF THE APPLIANCE.

IN RESIDENTIAL BUILDINGS ALL EXTERIOR WALL MOUNTED OUTLETS SHALL HAVE DRAFT BARRIERS.
- ALL OUTLETS MOUNTED ON FIRE RATED WALLS (UNIT SEPARATION WALLS) SHALL HAVE FIRE BLANKETS ON THEM.

AIR TIGHT ELECTRICAL BOXES SHALL BE "ALLIED MOULDED PRODUCTS, INC" VAPOR SEAL SINGLE GANG 22.5 CU.IN., PART#1099-NV2 TWO GANG 37.0 CU.IN., PART#2302-HNKV2 4" ROUND 22.5 CU.IN., PART#9350-BHKV2 KV2 HN 4" ROUND 22.5 CU.IN., PART#9350-

ALL WIRES IN DWELLING ENCLOSURE WALLS SHALL BE FOAM SEALED TO THE BOXES AND THE BOXES SHALL BE FOAM SEALED TO THE DRYWALL.

UNLESS NOTED OTHERWISE, ALL BRANCH CIRCUITS SHALL BE #12 AWG CU.

NO EXPOSED WIRING IS ALLOWED.
ALL BRANCH CONDUCTOR WIRING WITHIN RESIDENTIAL UNITS SHALL BE CONCEALED NM SHEATHED CABLE.
ALL BRANCH CONDUCTOR WIRING WITHIN COMMON SPACES SHALL BE CONCEALED MC CABLE UNLESS IN TYPE III, IV, OR V CONSTRUCTION, WHEN TYPE NM SHEATHED CABLE MAY BE USED.
ALL RETAIL TENANT SPACING BRANCH CONDUCTORS SHALL BE IN "MC".
ALL WIRING IN BLOCK WALLS SHALL BE CONCEALED, RUN IN CONDUIT.

PRIOR TO CONSTRUCTION, CONTRACTOR SHALL LOCATE BOXES FOR EACH TYPICAL UNIT FOR OWNER/ARCHITECT REVIEW.

OUTLETS AT FOLLOWING LOCATIONS SHALL BE GFI TYPE:
-RESIDENTIAL BATHROOMS, 210.8(A)(1)
-RESIDENTIAL KITCHENS, 210.8(A)
-LAUNDRY, 210.8(A)(10)
-DISHWASHERS, 210.8(D) (THROUGH GFI BREAKER)
-DRINKING FOUNTAIN, 422.52
-VENDING MACHINES, 422.51
-ROOF TOPS, 210.8(B)(2)(WP AS WELL)
-BALCONY/EXTERIOR OUTLETS (WP AS WELL)
-ELEVATOR MACHINE ROOMS AND PITS (WP AS WELL)
-GARAGES
-FINISHED/UNFINISHED BASEMENT OUTLETS

CONDENSING UNIT SHALL BE WIRED TO APARTMENT PANEL UNIT IS SERVING. CONTRACTOR SHALL COORDINATE WITH HVAC SUB CONTRACTOR FOR EXACT UNIT, CORRESPONDING APARTMENT AND ELECTRICAL CHARACTERISTICS PRIOR TO ANY WORK DONE. EC SHALL PROVIDE A GFI/WP PROTECTED RECEPTACLE WITHIN 25' OF ALL CONDENSING UNITS AND EQUIPMENT THAT MAY REQUIRE SERVICING.

LOCATION OF ALL MECHANICAL EQUIPMENTS AND ELECTRICAL CHARACTERISTICS SHALL BE COORDINATED WITH MECHANICAL CONTRACTOR PRIOR TO ANY WORK DONE. ALL EQUIPMENT RELATING TO MECHANICAL COMPONENTS SHALL BE ORDERED ONLY AFTER THE APPROVAL OF MECHANICAL EQUIPMENT SHOP DRAWINGS

WIRING IN ALL EXPOSED AREAS SHALL BE IN METALLIC RACEWAYS AS WIREMOLD OR EQUAL. RACEWAYS SHALL BE PAINTED AS DIRECTED BY THE ARCHITECT. SURFACE RACEWAYS SHALL CLOSELY FOLLOW THE SURFACE AND WRAP AROUND THE BEAMS AS REQUIRED. PRIOR TO ANY INSTALLATION, SUBMIT LAYOUT SKETCH INDICATING PROPOSED ROUTING FOR APPROVAL. ARCHITECT HAS THE RIGHT TO MODIFY OR CHANGE LAYOUT AS NEEDED. ANY CHANGES PRIOR TO ANY INSTALLATION SHALL BE AT NO CHANGE TO CONTRACT PRICE.

CARBON MONOXIDE DETECTORS

PROVIDE CARBON MONOXIDE DETECTORS:
- OUTSIDE EACH BEDROOM.
- ON EVERY HABITABLE LEVEL.
- IN THE ROOM HOUSING THE GAS APPLIANCE.
- FOR ALL GAS FIRED UNITS WITH UNIT SHUT DOWN, INTERLOCK.
- NEAR ALL GAS FIRED FIRE PLACES.

DETECTORS SHALL BE UL LISTED.
DETECTORS SHALL BE HARD WIRED WITH BATTERY BACK-UP.
DETECTORS SHALL BE BRK CO 5120BN, OR EQUAL.

IN RESIDENTIAL BUILDINGS, FOR ALL GAS FIRED VENTILATION/AIR CIRCULATION EQUIPMENT, PROVIDE DUCT MOUNTED CO DETECTOR COMPLETE WITH HOUSING AND SAMPLING TUBE AS MANUFACTURED BY MACURCO CM 15A OR EQUAL, AND CONNECT TO FIRE ALARM PANEL VIA MONITOR MODULE.

ALL CO DETECTORS MUST "LATCH" AT THE PANEL; THE RESPONDER TO A CO DETECTOR SUPERVISORY ALARM MUST BE LEAD TO MITIGATE THE CO ISSUE AT THE DETECTOR AND THEN CLEAR/RESET THE FIRE ALARM PANEL. THE CO SUPERVISORY ALARM CANNOT BE MITIGATED AT THE POINT LOCATION, BUT REQUIRES A COMPETENT RESPONDER TO ADDRESS THE PANEL IN THE FIRE COMMAND CENTER.

ALARM MONITORING SERVICE RECEIVES A SUPERVISORY CARBON MONOXIDE SIGNAL; THE WORDS "CARBON MONOXIDE" MUST BE PRESENT AT ALARM COMPANY, THE LETTERS "CO" ARE NOT ACCEPTABLE.

TELEPHONE SYSTEM

A. FURNISH AND INSTALL A COMPLETE SYSTEM OF CONDUITS AND BACKBOARDS FOR TELEPHONE INSTRUMENTS AS SHOWN ON THE PLANS.

B. TELEPHONE TERMINAL LOCATIONS AS SHOWN ON THE PLANS SHALL BE 30" X 48" X 3/4" PLYWOOD. GROUND CONNECTIONS SHALL BE MADE BY THE TELEPHONE COMPANY. ELECTRICAL CONTRACTOR SHALL PROVIDE PRIMARY ARRRESTER WITH FUSE AND #6CU GROUNDING WIRE AND GROUND BOLT CONNECTED TO SERVICE GROUND

C. A NYLON FISH WIRE SHALL BE LEFT IN ALL CONDUITS TO FACILITATE PULLING-IN TELEPHONE WIRES. FURNISH AND INSTALL ONE NYLON PULL WIRE FOR PULLING IN TELEPHONE SERVICE IN ALL CONDUITS. SEE SITE PLAN FOR SERVICE ENTRANCE.

D. LOCAL TELEPHONE COMPANY SHALL BE RESPONSIBLE FOR TELEPHONE WIRING FROM THEIR OUTDOOR TERMINATION CABINET TO A NETWORK INTERFACE LOCATED IN THE TELEPHONE ROOM.

F. EACH TELEPHONE OUTLET SHALL BE WIRED TO DATA INTERFEACE TERMINATION BOARD WITH PLENUM RATED CAT 6 , #20/8 TWISTED DATA WIRE TERMINATED IN TESTED AND CERTIFIED CAT 6 TERMINATION STYLE AT BOTH ENDS AND CLEARLY RINGED AND TAGGED.

CONSTRUCTION AND TEST REQUIREMENTS (NEC REQUIREMENTS)

800.50 PREVENTS LAYING TELEPHONE WIRES ON CEILING TILES.

800.50 REQUIRES PRIMARY PROTECTOR FOR MOST UNDERGROUND AND ALL OVERHEAD SERVICES

800.30 (2) REQUIRES FUSED TYPE PRIMARY PROTECTOR AT SERVICE ENTRANCE 800.50 REQUIRES ALL METAL SHIELDS TO BE GROUNDED

800.50 REQUIRES INSULATED GROUNDING CONDUCTOR TO BE MINIMUM #14, NO LONGER THAN 20FT AND CONNECTED TO BUILDING GROUND SYSTEM. WITH MINIMUM #6 BONDING CABLE.

800.50 REQUIRES TYPE CMP FOR PLENUM, CMR FOR RISER APPLICATIONS,

800.51 REQUIRES MINIMUM 2" BETWEEN POWER LINES AND COMMUNICATION LINES, RECOMMENDED PRACTICE 6" FROM BALLASTS AND 6FT FROM LIGHTNING WIRES. ALSO KEEP DISTANCE FROM HEAT SOURCES.
KEEP MINIMUM 6" FROM 20A/2KW CIRCUITS
KEEP MINIMUM 12" FROM 30A/5KW CIRCUITS
KEEP MINIMUM 24" FROM ANY FEEDER.
FOR SHIELDED CABLES THESE VALUES MAY BE TAKEN IN 1/3.

CAT 6 INSTALLATION RECOMMENDATIONS INCLUDE

CAT 6 INSTALLATION REQUIRES MINIMUM ½" UNTWIST
MINIMUM 1" BENDING RADIUS FOR FOUR PAIR OR 4X. FOR 25 PAIR 10XDIA.
PROVIDE MINIMUM TWO LINES AT EACH LOCATION ONE FOR TELEPHONE OTHER FOR DATA
WATCH FOR THAT A KINKED CABLE REDUCES 2.5DB; A SINGLE 1" RADIUS BEND REDUCES 2 DB.

- WIRE MAP TEST (TO IDENTIFY INSTALLATION ERRORS)
- LENGTH TEST (TO VERIFY MAXIMUM OPERATIONAL LENGTH IS 300FT)
- ATTENUATION TEST (TO MEASURE MAXIMUM SIGNAL LOSS AT 100MHZ LESS THAN 22)
- NEXT (TO MEASURE SIGNAL COUPLING BETWEEN THE PAIRS AT 100MHZ LESS THAN 32)
- PROPAGATION TEST (TO MEASURE TIME IT TAKES SIGNAL FROM ONE POINT TO OTHER)

CATV INTERNAL UNIT WIRING SPECIFICATIONS

COAXIAL CABLE

ALL COAXIAL CABLE WITHIN THE UNIT, INCLUDING THE DROP CABLES BACK TO THE COMMON DISTRIBUTION ROOM SHOULD MEET OR EXCEED THE FOLLOWING REQUIREMENTS:
- RG-6 QUAD SHIELD FOR DROP LENGTHS OF UP TO 150 FEET.
- RG-11QUAD SHIELD FOR DROP LENGTHS BETWEEN 151 FEET AND 250 FEET. (DROP LENGTHS SHOULD NOT EXCEED 250 FEET.)

INTERNAL UNIT WIRING

EACH APARTMENT SHALL HAVE IT'S OWN SEPARATE HOME-RUN WIRE. PROVIDE A DUAL CABLE TO BE USED FOR ALL DROP WIRING.

EACH APARTMENT THAT HAS MORE THAN ONE OUTLET MUST HAVE AN INTERFACE ENCLOSURE. THE INTERFACE ENCLOSURE SHALL BE PLACED IN A CENTRAL LOCATION IN THE UNIT, TYPICALLY THE CLOSET. THE ENCLOSURE SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE PHONE INTERFACE WITHIN THE UNIT.

NO OUTLET SHOULD BE LOOP-WIRED (NO DAISY CHAIN WIRING.) EVERY OUTLET IN THE UNIT SHOULD BE WIRED BACK TO AN INTERFACE ENCLOSURE WITHIN THE UNIT.

ALL OUTLET LOCATIONS SHOULD HAVE A MINIMUM OF 12" OF EXTRA CABLE BEHIND THE WALLPLATE.

MUD RINGS SHOULD BE USED AS OPPOSED TO CLOSED BOXES.

THE COAXIAL HOME RUN AND TWISTED PAIR HOME RUN SHALL BE WIRED TO THE SAME DISTRIBUTION CLOSET ON EACH FLOOR.

DO NOT KINK, FORM TIGHT NINETY-DEGREE ANGLES, PIERCE THE OUTER JACKET, DAMAGE, OR MISHANDLE THE COAXIAL CABLE IN ANY WAY. USE APPROVED COAXIAL FASTENERS ONLY. METAL STUDS REQUIRE THAT PLASTIC BUSHINGS BE INSTALLED PRIOR TO PULLING THE CABLE.

: INDICATES TEL/DATA COMBINATION OUTLET WITH CAT 6 TEL/DATA JACK.
E.C. SHALL WIRE EACH OUTLET HOME RUN 2 PAIR CAT 6 CLP FOR TELEPHONE TO TELEPHONE TERMINATION BOARDS RESPECTIVELY. TERMINATE AT PUNCH DOWN BLOCKS. ALL WIRING AND TERMINATION'S SHALL BE PER CAT 6 SPECIFICATIONS, ALL WIRES SHALL BE PROPERLY LABELED AND RINGED OUT. KEEP WIRES MINIMUM 18" FROM POWER FEEDS AND FIXTURE BALLASTS

TV: INDICATES CATV JACK COMPLETE.
EC SHALL HOME RUN EACH CATV OUTLETS WITH RG 6 COAX CABLE AND CONNECT TO CATV SPLITTER WITHIN EACH UNIT CLOSET AND CONNECT UNIT WITH DOUBLE COAX TO CATV ENTRANCE BOX LOCATED IN ELECTRIC ROOM.

COMMONWEALTH OF MASSACHUSETTS
AARON MEBERG
ELECTRICAL
No. 59635
PROFESSIONAL ENGINEER

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
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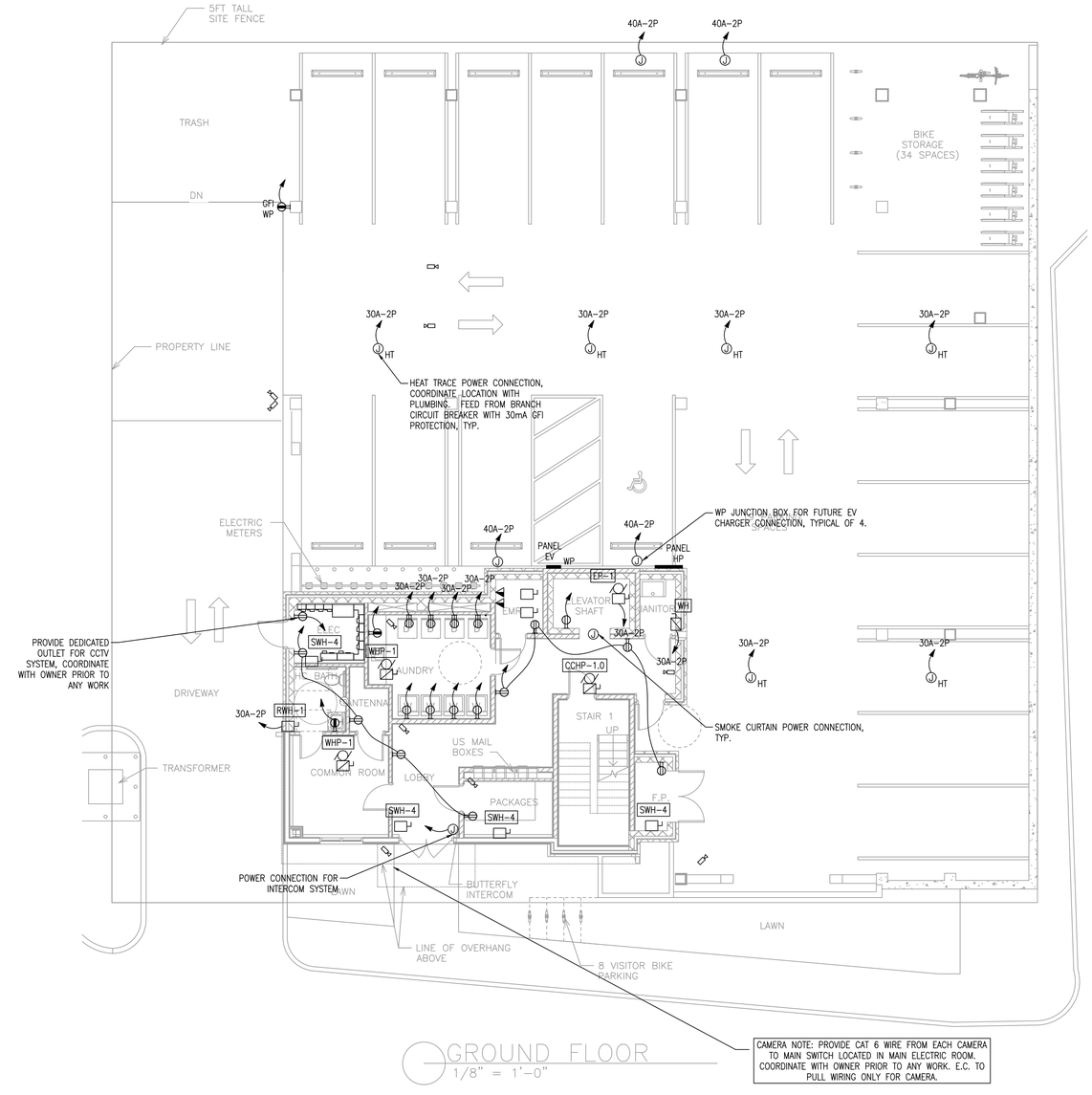
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ELECTRICAL LEGEND

Sheet No.

E0.0



GROUND FLOOR
1/8" = 1'-0"

BIKE PARKING COMPLIANCE

	REQUIRED	PROPOSED
RESIDENT BIKE PARKING	1 SPACE PER UNIT (40 SPACES) - 25% MIN. ON-GROUND SPACES - 50% MAX. TWO-TIER SPACES (1% EXTRA-WIDE SPACES (2 SPACES)	34 SPACES - 10 ON-GROUND (29%) - 24 TWO-TIER SPACES - 24 TWO-TIER SPACES
VISITOR BIKE PARKING	1 SPACE PER 5 UNITS (8 SPACES)	8 SPACES (LOCATED AT THE EXTERIOR OF THE BUILDING)

POWER NOTES

1. EC SHALL COORDINATE LOCATION OF GARBAGE DISPOSAL SWITCH IN FIELD.
2. PROVIDE A 15A/1P TOGGLE DISC. SW. FOR ENERGY RECOVERY UNITS AND BATHROOM HEATERS. SEE "LC" PANEL SCHEDULE FOR CIRCUIT # DESIGNATIONS. COORDINATE WORK WITH MC.
3. INTER-CONNECT LIGHT SWITCH CONTROLLING THE SHOWER LIGHT WITH THE HIGH SETTING OF BATHROOM EXHAUST FAN/ENERGY RECOVERY UNIT. PROVIDE DEDICATED SWITCH FOR LOW SETTING. PROVIDE POWER FOR EXHAUST FAN FROM THE LOCAL BATHROOM BRANCH CIRCUIT. COORDINATE WORK WITH MC.
4. INDOOR HVAC UNITS ARE POWERED BY ASSOCIATED OUTDOOR UNIT. PROVIDE 14/3 INTERCONNECTED WIRING AS REQUIRED. COORDINATE WORK WITH MC.
5. PROVIDE POWER CONNECTION ADJACENT TO DWELLING UNIT WATER HEATER FOR CONNECTION TO HOT WATER RECIRCULATING PUMP. SEE "LC" PANEL SCHEDULE FOR CIRCUIT # DESIGNATION. COORDINATE WORK WITH PC.
6. ALL BASEMENT RECEPTACLES SHALL HAVE GROUND FAULT PROTECTION.
7. PROVIDE (2)1" AND (1)1" EMT CONDUIT FROM TENANT PANEL(S) TO ROOF FOR FUTURE EQUIPMENT WIRING.

COMMONWEALTH OF MASSACHUSETTS
AARON MEBERG
ELECTRICAL
No. 59635
PROFESSIONAL ENGINEER

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GROUND FLOOR POWER PLAN

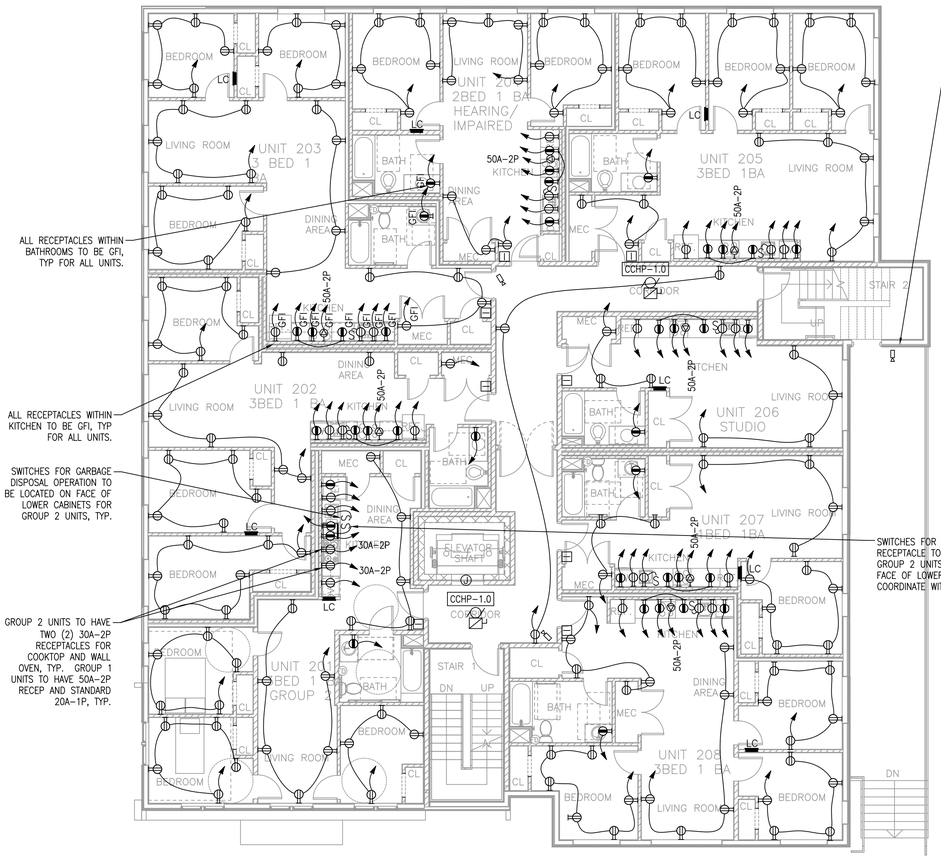
Sheet No.

E1.1

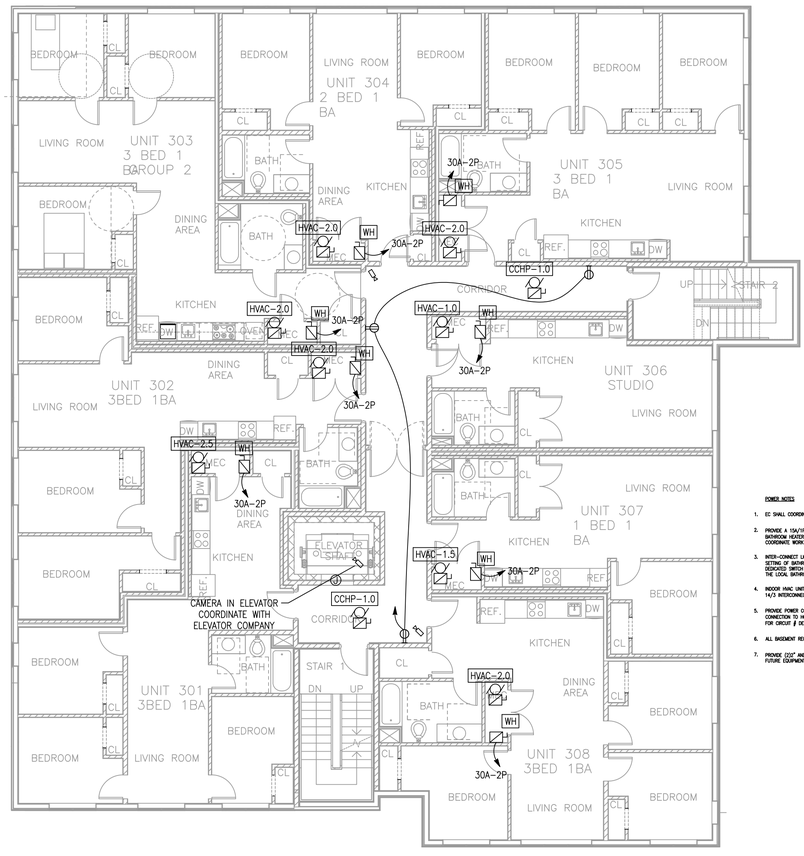
POWER NOTE: REFER TO 3RD FLOOR PLAN FOR TYPICAL UNIT MECHANICAL/PLUMBING POWER CONNECTIONS

CAMERA NOTE: PROVIDE CAT 6 WIRE FROM EACH CAMERA TO MAIN SWITCH LOCATED IN MAIN ELECTRIC ROOM. COORDINATE WITH OWNER PRIOR TO ANY WORK. E.C. TO PULL WIRING ONLY FOR CAMERA.

POWER NOTE: REFER TO 2ND FLOOR PLAN FOR TYPICAL UNIT RECEPTICAL POWER CONNECTIONS



SECOND FLOOR
1/8" = 1'-0"



THIRD FLOOR
1/8" = 1'-0"

POWER NOTES

1. EC SHALL COORDINATE LOCATION OF GARBAGE DISPOSAL SWITCH IN FIELD.
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4. INDOOR HVAC UNITS ARE POWERED BY ASSOCIATED OUTDOOR UNIT. PROVIDE 14/3 INTERCONNECTED WIRING AS REQUIRED. COORDINATE WORK WITH MC.
5. PROVIDE POWER CONNECTION ADJACENT TO DWELLING UNIT WATER HEATER FOR CONNECTION TO HOT WATER RECIRCULATING PUMP. SEE 'LC' PANEL SCHEDULE FOR CIRCUIT # DESIGNATION. COORDINATE WORK WITH PC.
6. ALL BASEMENT RECEPTACLES SHALL HAVE GROUND FAULT PROTECTION.
7. PROVIDE (2)3/4" AND (1)1" EMT CONDUIT FROM TENANT PANEL(S) TO ROOF FOR FUTURE EQUIPMENT WIRING.

COMMONWEALTH OF MASSACHUSETTS
AARON MEBERG
ELECTRICAL
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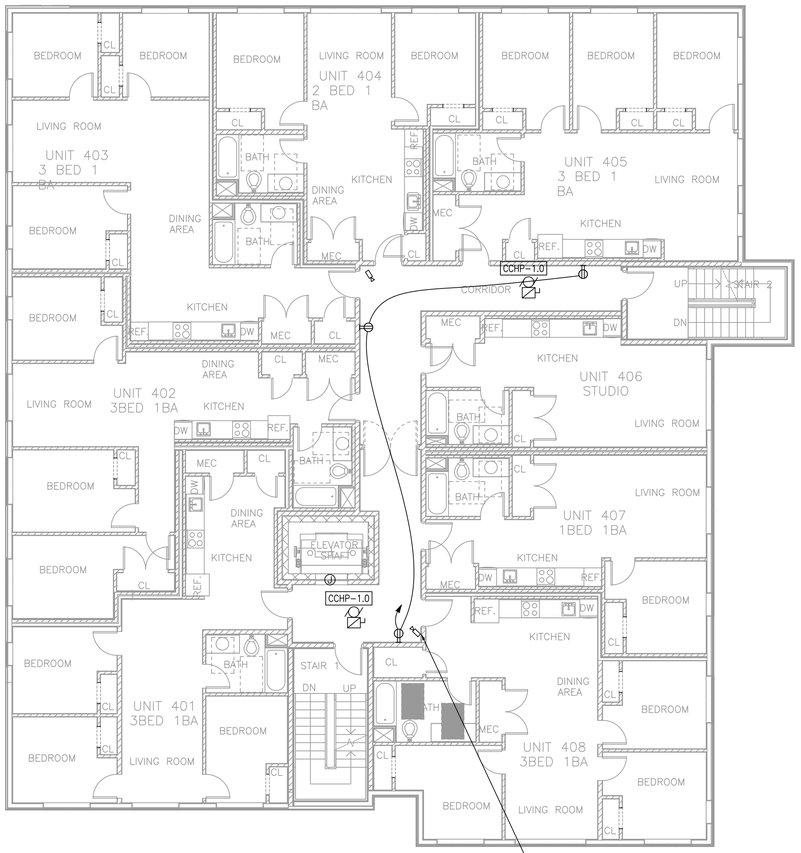
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POWER FLOOR PLAN SECOND AND THIRD FLOOR

Sheet No.

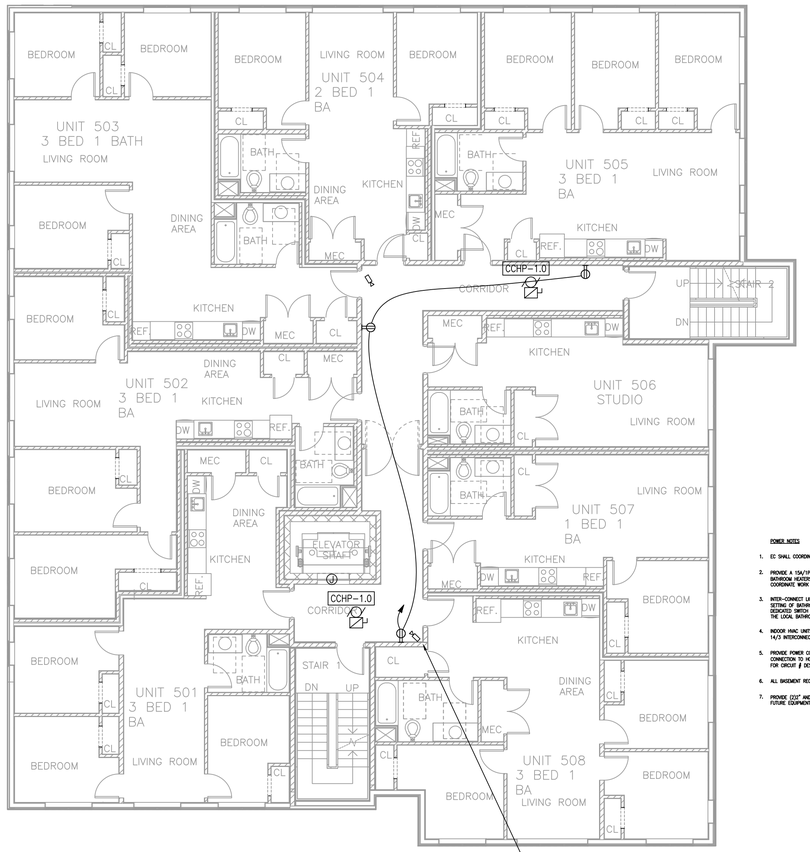
E1.2

POWER NOTE: REFER TO E1.2 FOR TYPICAL UNIT POWER CONNECTIONS.



FOURTH FLOOR
1/8" = 1'-0"

CAMERA NOTE: PROVIDE CAT 6 WIRE FROM EACH CAMERA TO MAIN SWITCH LOCATED IN MAIN ELECTRIC ROOM. COORDINATE WITH OWNER PRIOR TO ANY WORK. E.C. TO PULL WIRING ONLY FOR CAMERA.



FIFTH FLOOR
1/8" = 1'-0"

CAMERA NOTE: PROVIDE CAT 6 WIRE FROM EACH CAMERA TO MAIN SWITCH LOCATED IN MAIN ELECTRIC ROOM. COORDINATE WITH OWNER PRIOR TO ANY WORK. E.C. TO PULL WIRING ONLY FOR CAMERA.

POWER NOTES

1. EC SHALL COORDINATE LOCATION OF GARBAGE DISPOSAL SWITCH IN FIELD.
2. PROVIDE A 15A/1P TOGGLE DISC. SW. FOR ENERGY RECOVERY UNITS AND BATHROOM HEATERS. SEE 'LC' PANEL SCHEDULE FOR CIRCUIT # DESIGNATIONS. COORDINATE WORK WITH MC.
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4. INDOOR HVAC UNITS ARE POWERED BY ASSOCIATED OUTDOOR UNIT. PROVIDE 14/3 INTERCONNECTED WIRING AS REQUIRED. COORDINATE WORK WITH MC.
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6. ALL BASEMENT RECEPTACLES SHALL HAVE GROUND FAULT PROTECTION.
7. PROVIDE (2)3/4" AND (1)1" EMT CONDUIT FROM TENANT PANEL(S) TO ROOF FOR FUTURE EQUIPMENT WIRING.

COMMONWEALTH OF MASSACHUSETTS
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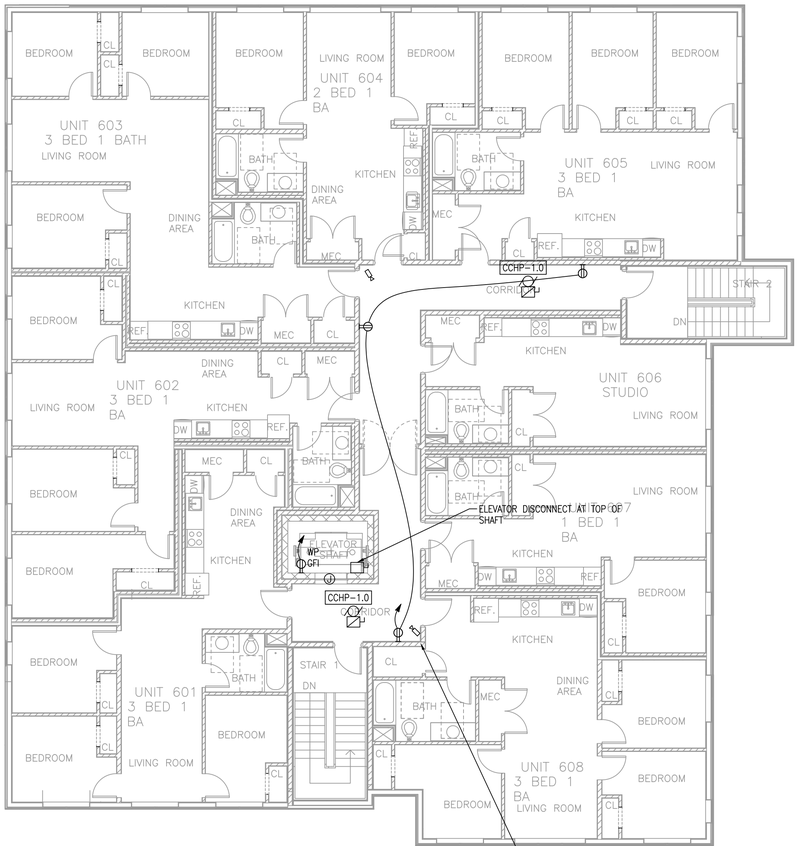
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POWER FLOOR PLAN, FOURTH AND FIFTH FLOOR

Sheet No.

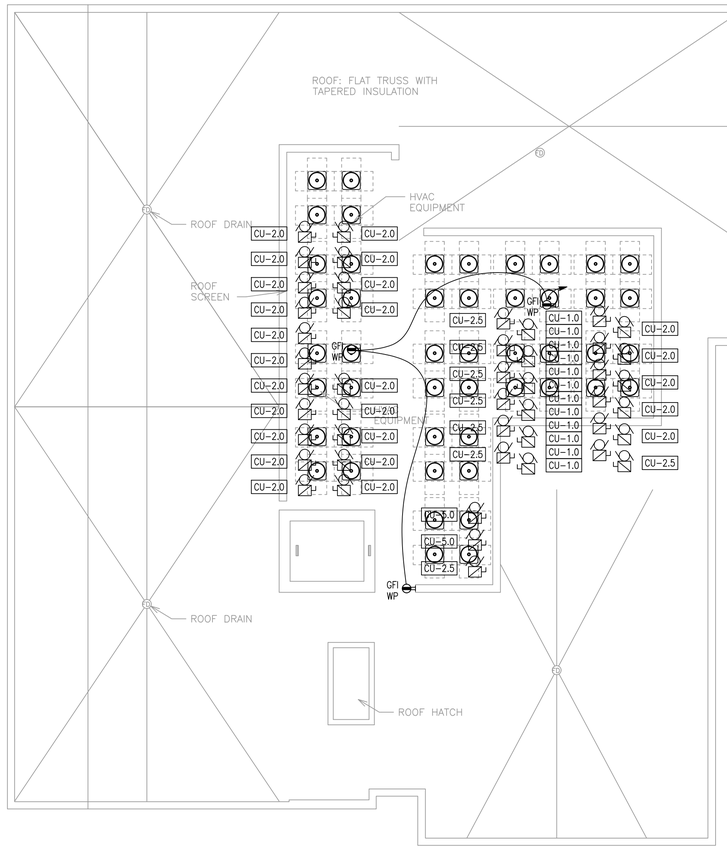
E1.3

POWER NOTE: REFER TO E1.2 FOR TYPICAL UNIT POWER CONNECTIONS.



CAMERA NOTE: PROVIDE CAT 6 WIRE FROM EACH CAMERA TO MAIN SWITCH LOCATED IN MAIN ELECTRIC ROOM. COORDINATE WITH OWNER PRIOR TO ANY WORK. E.C. TO PULL WIRING ONLY FOR CAMERA.

SIXTH FLOOR
1/8" = 1'-0"



ROOF PLAN
1/8" = 1'-0"

POWER NOTES

1. EC SHALL COORDINATE LOCATION OF GARBAGE DISPOSAL SWITCH IN FIELD.
2. PROVIDE A 15A/1P TOGGLE DISC. SW. FOR ENERGY RECOVERY UNITS AND BATHROOM HEATERS. SEE "L" PANEL SCHEDULE FOR CIRCUIT # DESIGNATIONS. COORDINATE WORK WITH MC.
3. INTER-CONNECT LIGHT SWITCH CONTROLLING THE SHOWER LIGHT WITH THE HIGH SETTING OF BATHROOM EXHAUST FAN/ENERGY RECOVERY UNIT. PROVIDE DEDICATED SWITCH FOR LOW SETTING. PROVIDE POWER FOR EXHAUST FAN FROM THE LOCAL BATHROOM BRANCH CIRCUIT. COORDINATE WORK WITH MC.
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6. ALL BASEMENT RECEPTACLES SHALL HAVE GROUND FAULT PROTECTION.
7. PROVIDE (2)3" AND (1)1" EMT CONDUIT FROM TENANT PANEL(S) TO ROOF FOR FUTURE EQUIPMENT WIRING.

COMMONWEALTH OF MASSACHUSETTS
AARON MEBERG
ELECTRICAL
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POWER FLOOR PLAN, SIXTH FLOOR AND ROOF

Sheet No.

E1.4



GROUND FLOOR
1/8" = 1'-0"

BIKE PARKING COMPLIANCE

	REQUIRED	PROPOSED
RESIDENT BIKE PARKING	1 SPACE PER UNIT (40 SPACES) - 25% MIN. ON GROUND (10 SPACES) - 5% EXTRA-WIDE (2 SPACES)	42 SPACES - 25% ON GROUND (25%) - 81% ON RACKS
VISITOR BIKE PARKING	1 SPACE PER 5 UNITS (8 SPACES)	8 SPACES - 100% ON RACKS

LIGHTING NOTES

1. FIXTURES SHALL BE ON 24/7 FOR LIFE-SAFETY IN THE FOLLOWING AREAS: LOBBIES, INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS, AND EXIT PASSAGEWAYS.
2. ALL CORRIDOR AREA LIGHTING FIXTURES SHALL BE CONTROLLED BY MOTION SENSORS. FIXTURES SHALL TURN TO FULL BRIGHTNESS UPON DETECTING OCCUPANCY AND REDUCE THEIR LIGHTING OUTPUT BY AT LEAST 50% WITHIN 20 MINUTES OF NO OCCUPANCY.
3. COMMON AREA EXTERIOR LIGHTING SHALL BE FED FROM A DEDICATED EXTERIOR LIGHTING CIRCUIT U.O.N., AND CONTROLLED BY A DUSK-DAWN PHOTOCELL AND TIME CLOCK U.O.N.
4. LIGHT FIXTURES IN DWELLING UNIT BATHROOMS SHALL BE FED FROM THE LOCAL BATHROOM BRANCH CIRCUIT.
5. LIGHT FIXTURES IN ALL OTHER AREAS WITHIN THE DWELLING UNIT SHALL BE FED FROM THE DEDICATED LIGHTING CIRCUIT.
6. GARAGE MOTION SENSOR ILLUMINATION SHALL BE RESTRICTED TO A MAXIMUM CONTROL AREA OF 3600ft². LOWER-CASE LETTER NEXT TO FIXTURE INDICATES CONTROL AREA.
   LIGHTING POWER OF EACH FIXTURE SHALL BE REDUCED BY A MINIMUM OF 30% WITHIN 20 MINUTES OF NO OCCUPANCY.
   FIXTURES AT GARAGE ENTRANCE/EXITS SHALL BE CONTROLLED SEPARATELY BY A DEVICE THAT AUTOMATICALLY REDUCES LIGHTING POWER BY AT LEAST 50% WHEN DAYLIGHT IS PRESENT.
   FIXTURES WITHIN 20ft OF PERIMETER WALL OPENINGS SHALL AUTOMATICALLY REDUCE IN RESPONSE TO DAYLIGHT BY AT LEAST 50%.
7. IN CONFERENCE, OFFICE, MEETING, MULTIPURPOSE, STORAGE, AND BATHROOMS: PROVIDE LIGHTING CONTROL THAT RESTRICTS FIXTURES TO MANUAL ON OR SCRE ON VIA OCCUPANCY SENSOR, AUTO OFF WITHIN 20 MINUTES OF NO OCCUPANCY, AND A MANUAL LOCAL CONTROL OVERRIDE TO TURN OFF LIGHTS.

COMMONWEALTH OF MASSACHUSETTS
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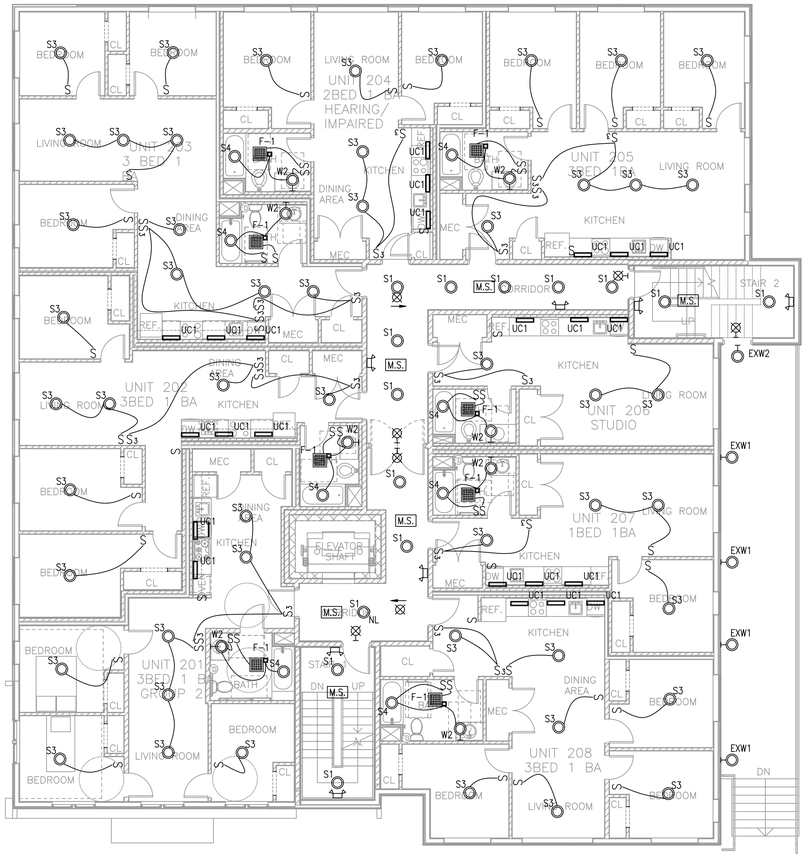
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GROUND FLOOR LIGHTING PLAN

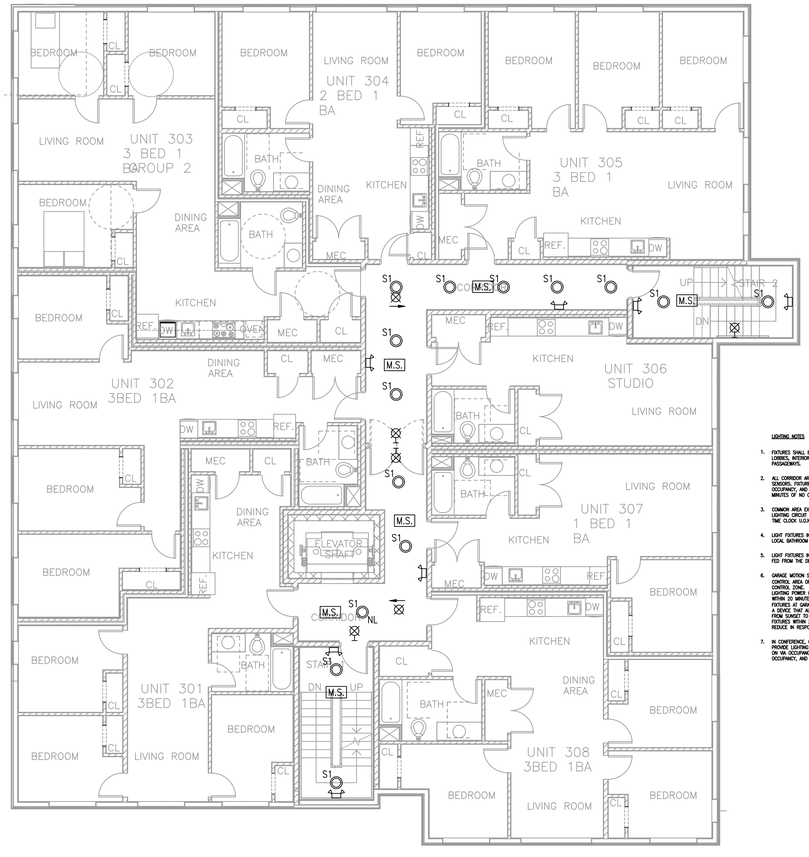
Sheet No.

E2.1

LIGHTING NOTE: REFER TO 2ND FLOOR PLAN FOR TYPICAL UNIT RECEPTICAL LIGHTING CONNECTIONS



SECOND FLOOR
1/8" = 1'-0"



THIRD FLOOR
1/8" = 1'-0"

LIGHTING NOTES

1. FIXTURES SHALL BE ON 24/7 FOR LIFE-SAFETY IN THE FOLLOWING AREAS: LOBBIES, INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS, AND EXIT PASSAGEWAYS.
2. ALL CORRIDOR AREA LIGHTING FIXTURES SHALL BE CONTROLLED BY MOTION SENSORS. FIXTURES SHALL TURN TO FULL BRIGHTNESS UPON DETECTING OCCUPANCY, AND SHALL TURN LIGHTING OUTPUT BY AT LEAST 50% WITHIN 20 MINUTES OF NO OCCUPANCY.
3. COMMON AREA EXTERIOR LIGHTING SHALL BE FED FROM A DEDICATED EXTERIOR LIGHTING CIRCUIT U.O.N., AND CONTROLLED BY A DUSK-DAWN PHOTOCELL AND TIME CLOCK U.O.N.
4. LIGHT FIXTURES IN DWELLING UNIT BATHROOMS SHALL BE FED FROM THE LOCAL BATHROOM BRANCH CIRCUIT.
5. LIGHT FIXTURES IN ALL OTHER AREAS WITHIN THE DWELLING UNIT SHALL BE FED FROM THE DEDICATED LIGHTING CIRCUIT.
6. GARAGE MOTION SENSOR ILLUMINATION SHALL BE RESTRICTED TO A MAXIMUM CONTROL AREA OF 3600SF. LOWER-CASE LETTER NEXT TO FIXTURE INDICATES CONTROL AREA.
LIGHTING POWER OF EACH FIXTURE SHALL BE REDUCED BY A MINIMUM OF 30% WITHIN 20 MINUTES OF NO OCCUPANCY.
FIXTURES AT GARAGE ENTRANCES/EXITS SHALL BE CONTROLLED SEPARATELY BY A DEVICE THAT AUTOMATICALLY REDUCES LIGHTING POWER BY AT LEAST 50% WITHIN 20 MINUTES.
FIXTURES WITHIN 20ft OF PERIMETER WALL OPENINGS SHALL AUTOMATICALLY REDUCE IN RESPONSE TO DAYLIGHT BY AT LEAST 50%.
7. IN CONFERENCE, OFFICE, MEETING, MULTIPURPOSE, STORAGE, AND BATHROOMS: PROVIDE LIGHTING CONTROL THAT RESTRICTS FIXTURES TO MANUAL ON OR SUBON VIA OCCUPANCY SENSOR, AUTO OFF WITHIN 20 MINUTES OF NO OCCUPANCY, AND A MANUAL LOCAL CONTROL OVERRIDE TO TURN OFF LIGHTS.

COMMONWEALTH OF MASSACHUSETTS
AARON MEBERG
ELECTRICAL
No. 59635
PROFESSIONAL ENGINEER

Location

PROPOSED MULTI-FAMILY BUILDING
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HYDE PARK, MA 02136

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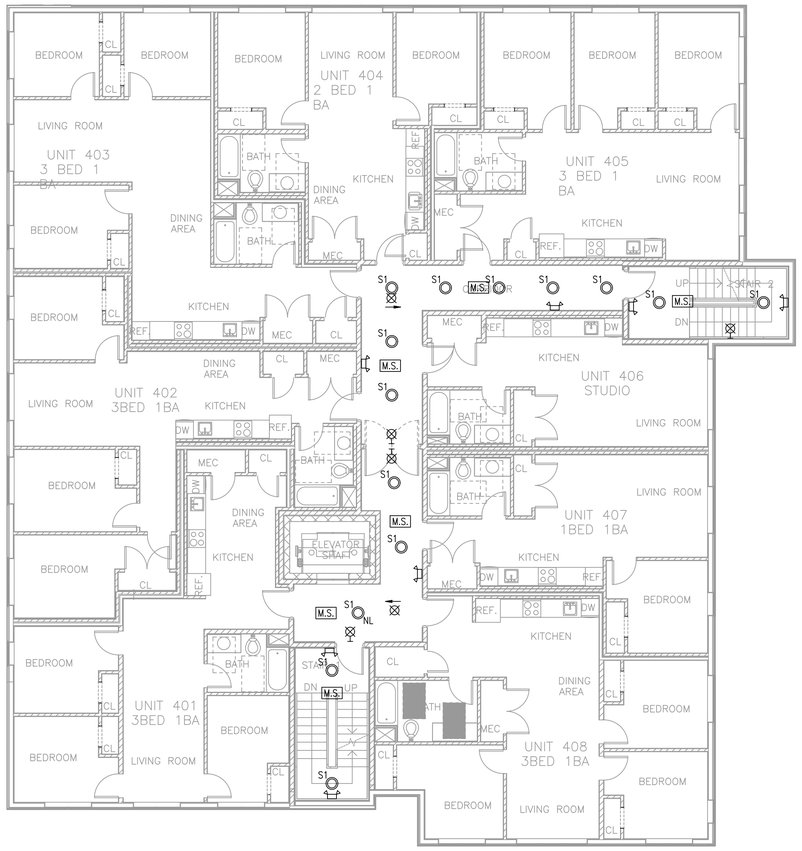
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LIGHTING FLOOR PLAN, SECOND AND THIRD FLOOR

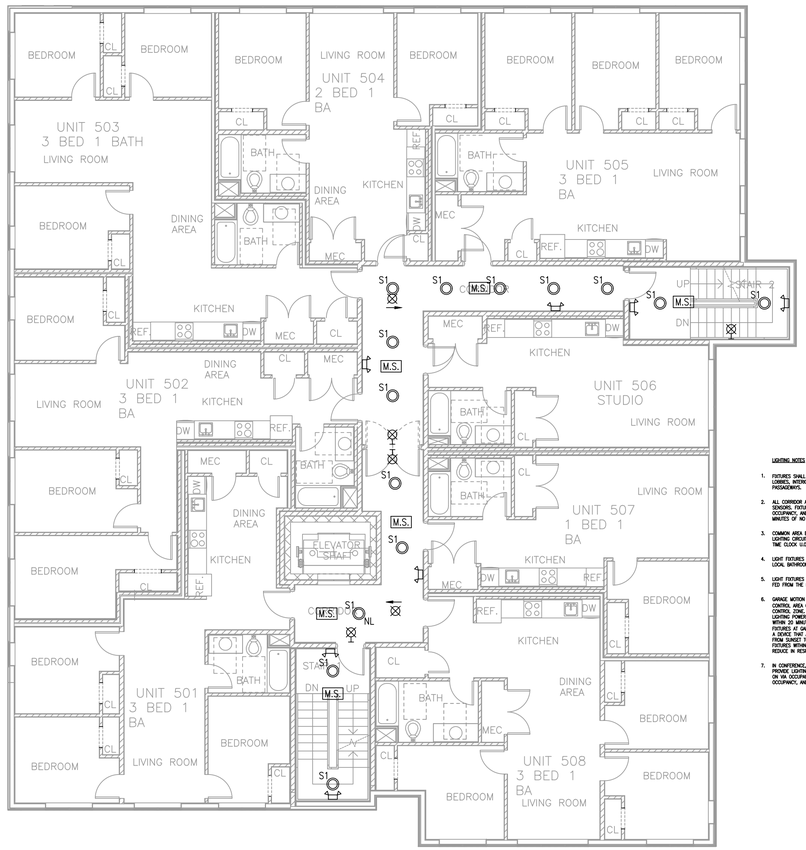
Sheet No.

E2.2

LIGHTING NOTE: REFER TO E1.2 FOR TYPICAL UNIT LIGHTING CONNECTIONS.



FOURTH FLOOR
1/8" = 1'-0"



FIFTH FLOOR
1/8" = 1'-0"

LIGHTING NOTES

1. FIXTURES SHALL BE ON 24/7 FOR LIFE-SAFETY IN THE FOLLOWING AREAS: LOBBIES, INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS, AND EXIT PASSAGEWAYS.
2. ALL CORRIDOR AREA LIGHTING FIXTURES SHALL BE CONTROLLED BY MOTION SENSORS AND SHALL TURN TO FULL BRIGHTNESS UPON DETECTING OCCUPANCY. FUNCTION FOR LIGHTING OUTPUT BY AT LEAST 50% WITHIN 20 MINUTES OF NO OCCUPANCY.
3. COMMON AREA EXTERIOR LIGHTING SHALL BE FED FROM A DEDICATED EXTERIOR LIGHTING CIRCUIT U.O.N., AND CONTROLLED BY A DUSK-DAWN PHOTOCELL AND TIME CLOCK U.O.N.
4. LIGHT FIXTURES IN DWELLING UNIT BATHROOMS SHALL BE FED FROM THE LOCAL BATHROOM BRANCH CIRCUIT.
5. LIGHT FIXTURES IN ALL OTHER AREAS WITHIN THE DWELLING UNIT SHALL BE FED FROM THE DEDICATED LIGHTING CIRCUIT.
6. GARAGE MOTION SENSOR ILLUMINATION SHALL BE RESTRICTED TO A MAXIMUM CONTROL AREA OF 3600ft², LOWER-CASE LETTER NEXT TO FIXTURE INDICATES CONTROL GROUP.
   LIGHTING POWER OF EACH FIXTURE SHALL BE REDUCED BY A MINIMUM OF 50% WITHIN 20 MINUTES OF NO OCCUPANCY.
   FIXTURES AT GARAGE ENTRANCES/EXITS SHALL BE CONTROLLED SEPARATELY BY A DEVICE THAT AUTOMATICALLY REDUCES LIGHTING POWER BY AT LEAST 50% WHEN NO DAYLIGHT IS DETECTED.
   FIXTURES WITHIN 20A OF PERIMETER WALL OPENINGS SHALL AUTOMATICALLY REDUCE IN RESPONSE TO DAYLIGHT BY AT LEAST 50%.
7. IN CONFERENCE, OFFICE, MEETING, MULTIPURPOSE, STORAGE, AND BATHROOMS, PROVIDE LIGHTING CONTROL THAT RESTRICTS FIXTURES TO MANUAL ON OR SCS ON VIA OCCUPANCY SENSOR, AUTO OFF WITHIN 20 MINUTES OF NO OCCUPANCY, AND A MANUAL LOCAL CONTROL OVERRIDE TO TURN OFF LIGHTS.

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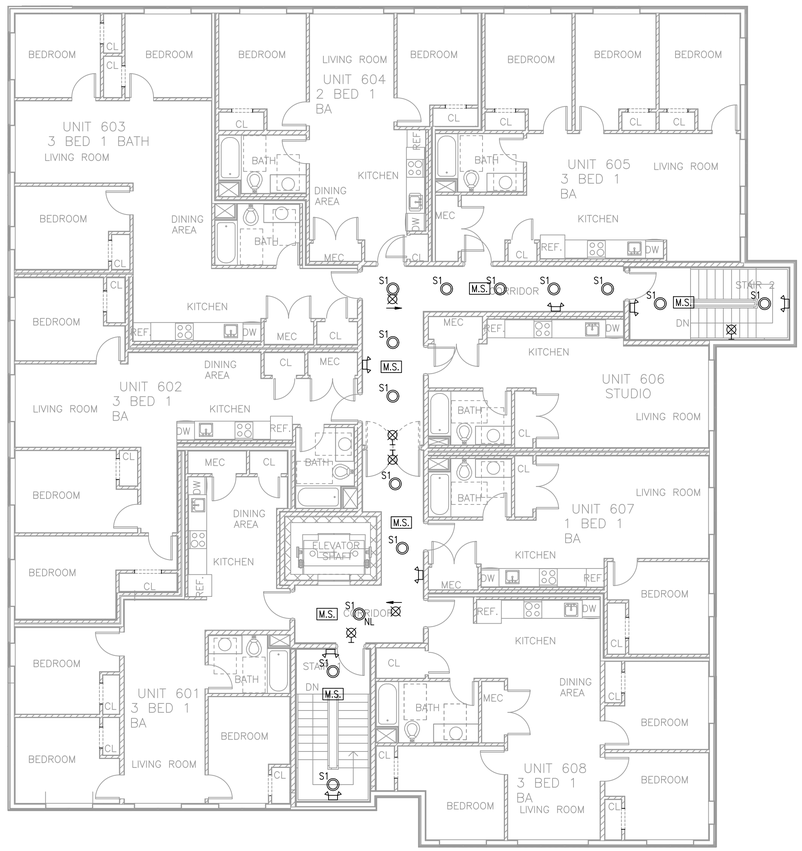
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LIGHTING FLOOR PLAN, FOURTH AND FIFTH FLOOR

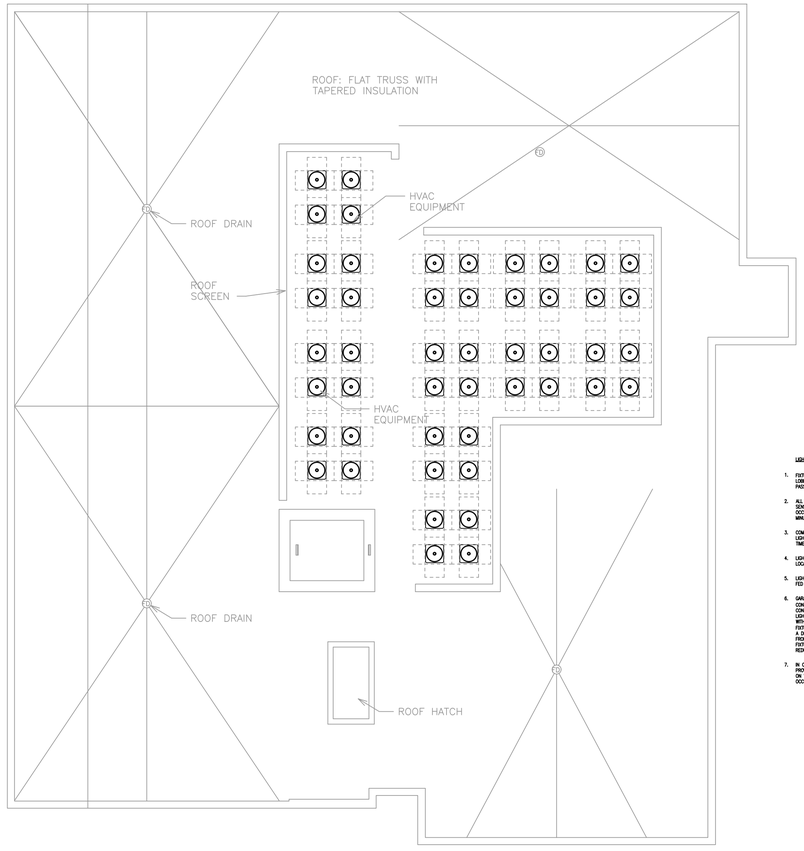
Sheet No.

E2.3

LIGHTING NOTE: REFER TO E1.2 FOR TYPICAL UNIT LIGHTING CONNECTIONS.



SIXTH FLOOR
1/8" = 1'-0"



ROOF PLAN
1/8" = 1'-0"

LIGHTING NOTES

1. FIXTURES SHALL BE ON 24/7 FOR LIFE-SAFETY IN THE FOLLOWING AREAS: LOBBIES, INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS, AND EXIT PASSAGEWAYS.
2. ALL CORRIDOR AREA LIGHTING FIXTURES SHALL BE CONTROLLED BY MOTION SENSORS. FIXTURES SHALL TURN TO FULL BRIGHTNESS UPON DETECTING OCCUPANCY, AND REDUCE THEIR LIGHTING OUTPUT BY AT LEAST 50% WITHIN 20 MINUTES OF NO OCCUPANCY.
3. COMMON AREA EXTERIOR LIGHTING SHALL BE FED FROM A DEDICATED EXTERIOR LIGHTING CIRCUIT U.O.N., AND CONTROLLED BY A DUSK-DAWN PHOTOCELL AND TIME CLOCK U.O.N.
4. LIGHT FIXTURES IN DWELLING UNIT BATHROOMS SHALL BE FED FROM THE LOCAL BATHROOM BRANCH CIRCUIT.
5. LIGHT FIXTURES IN ALL OTHER AREAS WITHIN THE DWELLING UNIT SHALL BE FED FROM THE DEDICATED LIGHTING CIRCUIT.
6. GARAGE MOTION SENSOR ILLUMINATION SHALL BE RESTRICTED TO A MAXIMUM CONTROL AREA OF 3600ft² (LOWER-CASE LETTER NEXT TO FIXTURE INDICATES CONTROL ZONE).
   LIGHTING POWER OF EACH FIXTURE SHALL BE REDUCED BY A MINIMUM OF 30% WITHIN 15 MINUTES OF NO OCCUPANCY.
   FIXTURES AT GARAGE ENTRANCES/EXITS SHALL BE CONTROLLED SEPARATELY BY A DEVICE THAT AUTOMATICALLY REDUCES LIGHTING POWER BY AT LEAST 50% FROM SUNSET TO SUNRISE.
   FIXTURES WITHIN 20ft OF PERIMETER WALL OPENINGS SHALL AUTOMATICALLY REDUCE IN RESPONSE TO DAYLIGHT BY AT LEAST 50%.
7. IN CONFERENCE, OFFICE, MEETING, MULTIPURPOSE, STORAGE, AND BATHROOMS: AUTOMATIC SHUT-OFF SHALL BE PROVIDED BY A MANUAL LOCAL SWITCH OR SUCH OR VIA OCCUPANCY SENSOR. AUTO OFF WITHIN 20 MINUTES OF NO OCCUPANCY, AND A MANUAL LOCAL CONTROL OVERRIDE TO TURN OFF LIGHTS.

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LIGHTING FLOOR PLAN, SIXTH FLOOR AND ROOF

Sheet No.

E2.4

GENERAL POWER DISTRIBUTION NOTES

-BEFORE ORDERING ANY EQUIPMENT AND/OR START ANY CONSTRUCTION OR EXCAVATION ELECTRICAL CONTRACTOR AND/OR GENERAL CONTRACTOR SHALL CONTACT ELECTRIC/TELEPHONE/CATV COMPANIES FOR SERVICE POINT AND ROUTING, SERVICE AVAILABILITY.
THIS ENGINEER HAS MADE APPLICATION TO UTILITY COMPANY BUT YET NO CONFIRMATION HAS BEEN MADE BY THE UTILITY COMPANY. CONTRACTOR SHALL NOT PROCEED WITHOUT SUCH CONFIRMATION.

-FEEDERS ARE SIZED BASED ON %3 VD.
CONTRACTOR SHALL FOLLOW THE FOLLOWING CRITERIA.

50A, UP TO 100FT #6, INCREASE BY ONE SIZE FOR EVERY 30FT.
100A, UP TO 100FT #3, INCREASE BY ONE SIZE FOR EVERY 30FT.
200A, UP TO 150FT #3/0, INCREASE BY ONE SIZE FOR EVERY 50 FT.
400A, UP TO 200FT #500, INCREASE BY ONE SIZE FOR EVERY 50FT.

CONSTRUCTION NOTES

-LOCAL SMOKE DETECTORS SHALL BE WIRED FROM ARC-FAULT CIRCUITS, VERIFY WITH ELECTRICAL INSPECTOR.

-BACK TO BACK OUTLETS ON FIRE RATED WALLS SHALL BE INSTALLED TO MAINTAIN FIRE RATINGS, IF NECESSARY, USE FIRE RATED OUTLET BOXES.

-ALL FLOOR PENETRATIONS BY CABLES AND CONDUITS SHALL BE SEALED TO MAINTAIN FIRE RATINGS.

-RECESSED LIGHT FIXTURES INSTALLED ON FIRE RATED CEILINGS SHALL HAVE FIRE RATED HOODS ON TOP TO MAINTAIN FIRE RATING. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED AREAS.

-ALL WIRING WITHIN UNITS SHALL BE ROMEX. WIRING OUTSIDE UNITS SHALL BE METAL CLAD.

LOAD CALCULATIONS,

-LIGHTING AND POWER: 3W/SFX800SF =2,400W
-KITCHEN =3,000W
-ELECTRIC RANGE : =12,000W
-DISHWASHER/DISPOSAL: =2,000W
-WATER HEATER: =4500W
-WASHER: =1500W
-DRYER: =5000W
-INDOOR A/C: =500W
-OUTDOOR A/C: =3,500W
-MICROWAVE/HOOD: =1,500W

TOTAL: =35,900W

UNIT DEMAND=(35.9-10KW-4)X.4+10+4=22.8KW
110A/125A

BUILDING RESIDENTIAL DEMAND=45X35.9X0.27=437KW

FACTOR TO BE TAKEN FROM TABLE NEC 220.84

FOR EACH APARTMENT PROVIDE DEDICATED CIRCUITS

-(3) 20A/1P KITCHEN COUNTER OUTLETS GFCI AND AFCI PROTECTION
-(1) 20A/1P FOR REFRIGERATOR GFCI AND AFCI PROTECTON
-(1) 20A/1P FOR DISHWASHER AFCI/GFCI PROTECTION
-(1) 20A/1P FOR DISPOSAL RECEPTACLE AFCI/GFCI PROTECTION
-(1) 20A/1P FOR MICROWAVE-HOOD AFCI/GFCI PROTECTION
-(1) 50A/2P FOR ELECTRIC RANGE, GFCI
-(1) 20A/1P FOR DINING ROOM OUTLETS AFCI PROTECTION
IF THEY ARE COMBINED WITH KITCHEN COUNTER OUTLETS GFCI AND AFCI PROTECTION.
-(1) 30A/2P FOR EACH A/C CONDENSER UNIT, GFCI
-(1) 30A/2P FOR DRYER, GFCI
-(1) 30A/2P FOR WATER HEATER, GFCII
-(1) 15A/1P FOR EACH A/C INDOOR UNIT (VERIFY)
-(1) 20A/1P FOR EACH BATHROOM GFCI PROTECTION
-(1) 15A/1P FOR LIGHTING AFCI PROTECTION
-(1) 15A/1P FOR LIVING ROOM AFCI PROTECTION
-(1) 15A/1P FOR EACH BEDROOM AFCI PROTECTION

-RECEPTACLES INSTALLED WITHIN 6 FEET OF SINK SHALL BE GFCI PROTECTED IN ADDITION TO AFCI PROTECTION.

ACCESSIBLE UNIT WIRING NOTES

SEE ARCHITECTURAL PLANS FOR NUMBER OF HC UNITS AND LOCATIONS.
CARRY MINIMUM OF 5% OF UNITS AS ACCESIBLE
IN EACH UNIT PROVIDE
-LOCAL TYPE SMOKE DETECTOR WITH BUILT IN STROBE EACH BEDROOM, OUTSIDE BEDROOM
-SYSTEM TYPE STROBE IN EACH BEDROOM AND LIVING ROOM
-LOCAL TYPE CO DETECTORS OUTSIDE BEDROOMS AND EVERY HABITABLE FLOOR LEVEL, STROBES ARE TO BE LOCATED IN BEDROOMS AND HABITABLE SPACES
-MOUNTING HEIGHTS OF ANY CONTROL SWITCH SHALL BE NO HIGHER THAN 48" AFF.
-HOOD CONTROL SWITCHES (LIGHT/FAN) SHALL BE MOUNTED ON WALL AT COUNTER
-PROVIDE WALL OVEN AND COOK TOP WIRING ON SAME CIRCUIT, 50A/2P
-ALL OUTLETS AND CONTROL SWITCHES SHALL BE MINIMUM 18" AWAY FROM AN INTERIOR CORNER REGARDLESS HOW IT IS SHOWN

-PROVIDE STROBE LIGHT FOR INTERCOM SYSTEM IN LIVING ROOM AND IN EACH BEDROOM

-ALL ELECTRICAL OUTLETS HEIGHTS TO BE A MINIMUM OF 15" TO THE CENTERLINE OF THE LOWEST RECEPTACLE AND MAXIMUM OF 48" TO THE CENTERLINE OF THE HEIGHEST RECEPTACLE.

-ALL ELECTRICAL OUTLETS ARE LOCATED OVER COUNTERTOPS, SHALL BE NO HIGHER THAN 44" TO THE CENTERLINE OF THE HIGHEST RECEPTACLE.

-ALL CIRCUIT BREAKER PANELS MUST BE CENTERED ON A 30" BY 48" CLEAR FLOOR SPACE AND IF A PARALLEL APPROACH IS USED, THE HIGHEST CONTROL CAN BE NO HIGHER THAN 54" A.F.F.
IF A FRONT APPROACH IS USED, THE HIGHEST CONTROL CAN BE NO HIGHER THAN 48" A.F.F.

-PROVIDE STROBE FOR INTERCOM FOR THE HEARING IMPAIRED.

PANEL SCHEDULE

ITEM	VOLT/PHS/W	MLO	MCB	CIRC	E-Flush S-Surf.	P-Plug B-Bolt	BRANCH BREAKERS SPR=SPARE SPC=SPACE
PANEL HP	120-208/3/4	400	–	84	S	B	(1)200/3, (12)30/2, (2)20/2 GFCI, (30)20/1
PANEL EV	120-208/3/4	200	–	42	S	B	(4)40/2
PANEL LC	120-208/1/3	125	–	30	F	P	(1)50/2 GFCI, (1)30/2, (8)20/1 AFI, (6)15/1 AFI, (8)20/1 AFI/GFI

LOAD BREAKDOWN

LOAD	KVA	FACTOR	KVA
RESIDENTIAL	1036	0.28	290
HOUSE	100	1.00	100
EV CHARGERS	29	1.25	36
TOTAL	1265		426

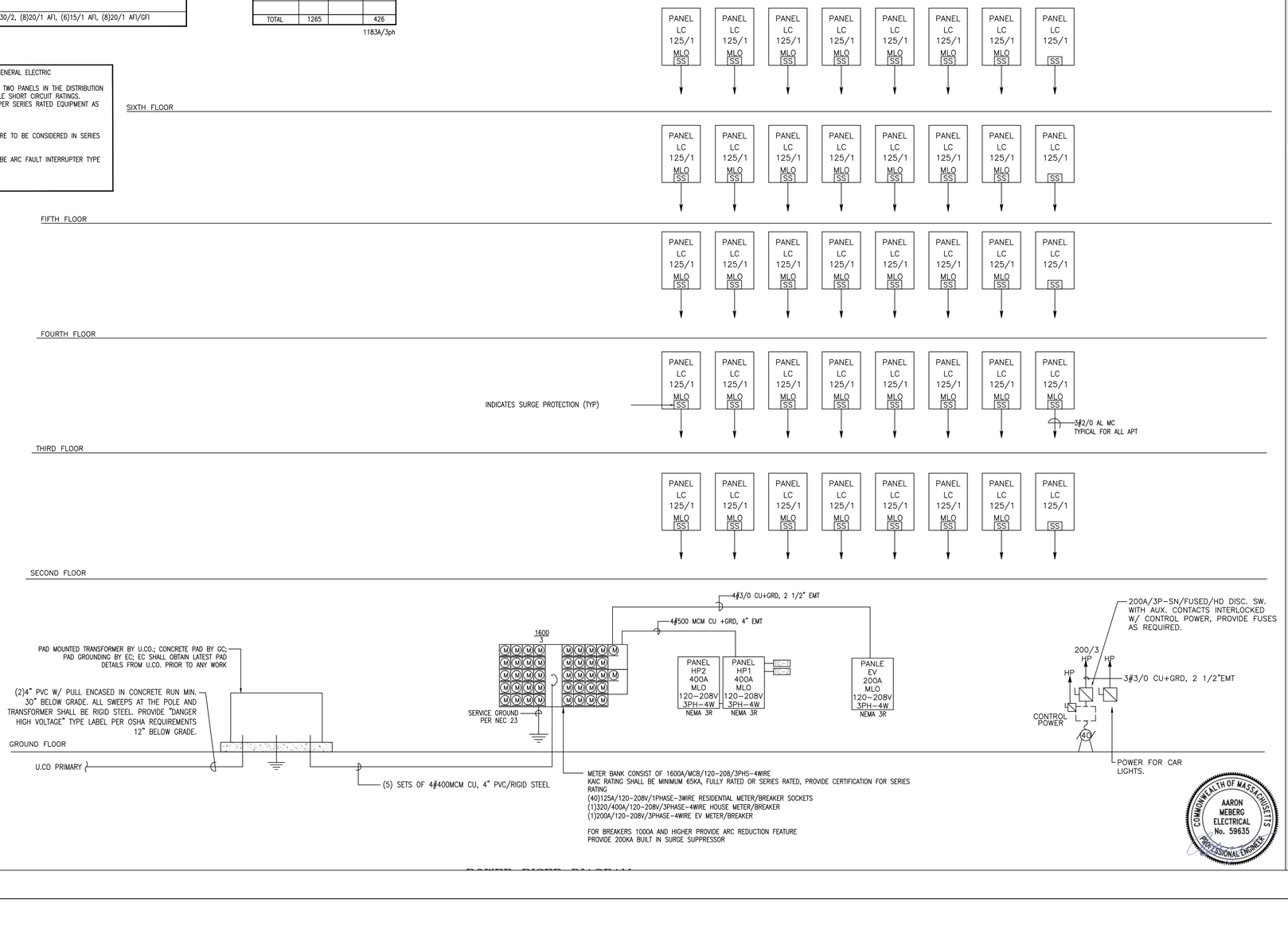
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SWITCHGEAR AND PANELBOARDS SHALL BE MANUFACTURED BY SQUARE D, SIEMENS OR GENERAL ELECTRIC

MAIN SWITCH AND MAIN DISTRIBUTION PANEL AND ALL CONSECUTIVE PANELS UP TO LAST TWO PANELS IN THE DISTRIBUTION GRID SHALL BE FULLY RATED AND LAST TO PANELS MAY BE SERIES RATED FOR AVAILABLE SHORT CIRCUIT RATINGS.
IF SERIES RATINGS ARE APPLIED SUPPLIER SHALL BE RESPONSIBLE FOR PROVIDING PROPER SERIES RATED EQUIPMENT AS REQUIRED.
AVAILABLE SHORT CIRCUIT CURRENT FOR THE MAIN SERVICE IS 65KA.

SEE RISER DIAGRAM FOR CONNECTION DIAGRAM OF THE PANELS. NO LINE IMPEDANCES ARE TO BE CONSIDERED IN SERIES RATING APPLICATIONS.

FOR ALL RESIDENTIAL LOAD CENTERS, 15A AND 20A CIRCUITS SERVING THE UNIT SHALL BE ARC FAULT INTERRUPTER TYPE AS REQUIRED PER NEC 210-12(B)



METER BANK CONSIST OF 1600A/MCB/120-208/3PHS-4WIRE
KAIC RATING SHALL BE MINIMUM 65KA, FULLY RATED OR SERIES RATED, PROVIDE CERTIFICATION FOR SERIES RATING
(40)125A/120-208V/1PHASE-3WIRE RESIDENTIAL METER/BREAKER SOCKETS
(1)320/400A/120-208V/3PHASE-4WIRE HOUSE METER/BREAKER
(1)200A/120-208V/3PHASE-4WIRE EV METER/BREAKER

FOR BREAKERS 1000A AND HIGHER PROVIDE ARC REDUCTION FEATURE
PROVIDE 200KA BUILT IN SURGE SUPPRESSOR

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POWER DETAILS

Sheet No.

E3.0

TYPICAL DWELLING UNIT PANEL 'LC' SCHEDULE

VOLTS		120/240V, 1ø, 3W		AIC	65,000; VERIFY WITH UTILITY		
MAINS		125A MLO		LOCATED	UNIT		
CIR NO	LOAD	DESC	BRKR	BRKR	DESC	LOAD	CIR NO
1	1500	KITCHEN	*20/1	**15/1	REFRIGERATOR	500	2
3	1500	KITCHEN	*20/1	**20/1	LAUNDRY	1500	4
5	1200	DISHWASHER	**20/1	**20/1	MICROWAVE	1000	6
7	1200	GARBAGE DISPOSAL	**20/1	*20/1	DINING ROOM	1500	8
9	500	LIGHTING/FA	*15/1	*15/1	LIVING ROOM		10
11	500	BATHROOM	*20/1	*15/1	BEDROOM	900	12
13				*15/1	BEDROOM	900	14
15	1000	RWH-1	*15/1	*15/1	BEDROOM	900	16
17	172	ENERGY RECOVER UNIT	*15/1	**15/1	RECIRCULATION PUMP	360	18
19	5000	ELECTRIC WALL OVEN	&30/2	SURGE PROTECTION SPACE			20
21							22
23				^30/2	ELECTRIC WATER HEATER	4500	24
25							26
27	12000	ELECTRIC RANGE	&50/2		HVAC SPACE		28
29							30
TOTAL LOAD				36.6 kVA			
DEMAND LOAD							

* - INDICATES AFCI TYPE CIRCUIT BREAKER
** - INDICATES COMBINATION AFCI/GFCI TYPE CIRCUIT BREAKER
& - INDICATES GFCI TYPE CIRCUIT BREAKER
^ - INDICATES LOCKABLE OPEN CIRCUIT BREAKER; TO ACT AS DISCONNECTING MEANS
NOTE: NOT ALL CIRCUITS MAY BE USED IN EVERY UNIT.

HOUSE PANEL 'HP' SCHEDULE

VOLTS		208Y/120V, 3ø, 4W		AIC	65,000; VERIFY WITH UTILITY		
MAINS		400A MLO		LOCATED			
CIR NO	LOAD	DESC	BRKR	BRKR	DESC	LOAD	CIR NO
1	200	FACP	^20/1	20/1	INTERCOM SYSTEM	100	2
3		STAIRWELL LIGHTING	20/1	20/1	EXTERIOR LIGHTING		4
5		GARAGE LIGHTING	20/1	&20/1	TELE-COM QUAD RECEPS	360	6
7		INTERIOR LIGHTING	20/1	&20/1	TELE-COM QUAD RECEPS	360	8
9							10
11							12
13							14
15							16
17							18
19							20
21							22
23							24
25							26
27							28
29							30
31							32
33							34
35							36
37							38
39							40
41							42
43							44
45							46
47							48
49				SOLAR READY SPACE			50
51	3500	GARAGE DOOR OPENER	40/2				52
53							54
55	200	ELEV. CAB	20/1				56
57	200	ELEV. PIT RECEP/LTG	&20/1	200/3	ELEVATOR (40 HP EST.)	43000	58
59	500	ELEV. PIT EJECTOR PUMP	&20/1				60
TOTAL LOAD				48.4 kVA			
DEMAND LOAD							

& - INDICATES GFCI TYPE CIRCUIT BREAKER
^ - INDICATES RED, LOCKABLE CLOSED CIRCUIT BREAKER

COMMON AREA LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	CATALOG NUMBER	VOLTS	LIGHTING SYSTEM	INPUT WATTS	NOTES
EXW1	WATERPROOF IP65 LED MODERN OUTDOOR WALL LIGHTS SPOTLIGHT	CARRY $150	120V	LED	20W MAX	
EXW2	ULINE LED WALL PACK (MODEL - H-9996)	CARRY $150	120V	LED	30W MAX	
EXS1	EXTERIOR AWNING-MOUNTED DOWNLIGHT FLUSH MOUNT (FLUSH MOUNTED - TBD)	CARRY $150	120V	LED	32W	
S1	SURFACE-MOUNTED CORRIDOR AND STAIRWELL FIXTURE	CARRY $150	120V	LED	30W	
S5	1'X4' LED PANEL (SKU: PL-14405W5Cbt-4C-16)	CARRY $150	120V	LED	32W	
Z	ELEVATOR PIT LED VAPORPROOF LIGHT WALL BRACKET WITH CLEAR PRISMATIC POLYCARBONATE LENS. WET LOCATION RATED.	CANLET 68-02-20W-L-W-F-0G-29	120 V	LED	20W	VERIFY MOUNTING LOCATION & HEIGHT WITH ELEVATOR CONTRACTOR
⊠	EXIT SIGN - UNIVERSAL MOUNTING LED TYPE WITH BATTERY BACKUP	CARRY $100	120/12V	LED	1W	
	BATTERY POWERED EMERGENCY LIGHTING UNIT WITH TWO LIGHTING HEADS AND SPARE BATTERY CAPACITY FOR REMOTE LIGHTING HEADS	CARRY $100	120/6V	LED	11W	
WP	TWIN REMOTE LIGHTING HEADS FOR BATTERY POWERED EMERGENCY LIGHTING UNIT, WET LOCATION LISTED	CARRY $100	120/6V	LED	3W	

"EM" INDICATES FIXTURE WITH BUILT IN BATTERY
"MS" INDICATES FIXTURE WITH BUILT IN OCCUPANCY SENSOR
"EM/MS" INDICATES BOTH FEATURES INCLUDED AS ABOVE

NOTE: CEILING IS FIRE RATED, UNLESS RATED FIXTURES ARE USED, ALL RECESSED FIXTURES AND EXHAUST FANS SHALL BE INSTALLED WITH FIRE RATED ENCLOSURES 3" MINIMUM LARGER THAN FIXTURES TO MAINTAIN INTEGRITY OF CEILING FIRE RATING AND COOLING OF THE FIXTURES.

DWELLING UNIT LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	CATALOG NUMBER	VOLTS	LIGHTING SYSTEM	INPUT WATTS	NOTES
S3	GENERAL SURFACE-MOUNTED DOWNLIGHT - ULTRA-LOW PROFILE INTEGRATED LED FLUSH MOUNT 5CCT (MODEL: LC0000155-01/BN)	CARRY $100	120V	LED	13W	
F-1	BATHROOM FAN/LIGHT	CARRY $200	120V	LED	80W	TWO-SPEED FAN AND SEPARATE LIGHT SWITCH CONTROL.
W2	BATHROOM VANITY - HAMPTON BAY WOODBURY 24.6 IN. 1-LIGHT BRUSHED NICKEL INTEGRATED LED BATHROOM VANITY LIGHT BAR WITH FROSTED ACRYLIC SHADE (MODEL: IQP1301LX-07/BN)	CARRY $100	120V	LED	20W	
S4	SHOWER FIXTURE - ELITE SERIES 4 IN. LED DUOBRIGHT (MODEL: 92348)	CARRY $100	120V	LED	13W	

FIXTURE NOTES

ALL LIGHT FIXTURES MODELS, FINISH COLORS SHALL BE VERIFIED BY ARCHITECT.
REGARDLESS HOW MODEL NUMBERS ARE WRITTEN ALL FLUORESCENT & PL FIXTURES SHALL HAVE HPF ENERGY SAVINGS BALLAST/ENERGY STAR LABEL.
LAMPS AND BALLASTS SHALL BE IN COMPLIANCE WITH LOCAL UTILITY COMPANY REBATE PROGRAMS, SPECIFICATIONS ABOVE FOR THE FIXTURE TYPE ONLY.
FLUORESCENT FIXTURES SHALL HAVE ELECTRONIC BALLASTS THD LESS THAN %15.
FIXTURES MOUNTED IN INSULATED CEILINGS, EC SHALL PROVIDE HOODS TO KEEP INSULATION AWAY. FIXTURES MOUNTED IN RATED CEILINGS (SEE ARCHITECTURAL DRAWINGS), EC SHALL PROVIDE HOODS TO MAINTAIN RATINGS.
AN "EM" LABELED FIXTURE INDICATES EMERGENCY LIGHT WITH BUILT IN BODINE BALLAST OR MANUFACTURER BACKUP BATTERY, 700 LUMEN OUTPUT. EMERGENCY LIGHTS SHALL HAVE INTEGRAL TEST SWITCHES BUILT INTO FIXTURE (NOT SEPARATE SWITCH). PROVIDE CONSTANT FEED TO BUILT-IN EMERGENCY BATTERY AS REQUIRED.
EXACT LOCATION AND TYPES OF ALL LIGHTING FIXTURES, MOUNTING HEIGHTS AND MOUNTING DETAILS SHALL BE COORDINATED WITH ARCHITECTURAL REFLECTED CEILING PLANS AND ANY CONFLICTS SHALL BE BROUGHT TO ARCHITECT'S ATTENTION PRIOR TO ANY WORK DONE. OBTAIN LATEST COPY OF THE CEILING PLAN FROM ARCHITECT PRIOR TO ANY WORK DONE.

IN AREAS WHERE FIXTURES ARE MOUNTED INTO INSULATED CEILINGS, THIS CONTRACTOR SHALL PROVIDE HOODS, 3" LARGER THAN FIXTURES TO KEEP INSULATION AWAY FROM THE FIXTURES AND TO MAINTAIN INSULATION INTEGRITY OF THE CEILING, SEE ARCHITECTURAL DRAWINGS FOR AREAS WHERE THESE HOODS MAY BE REQUIRED.

COMMONWEALTH OF MASSACHUSETTS
AARON MEBERG
ELECTRICAL
No. 59635
PROFESSIONAL ENGINEER

Location

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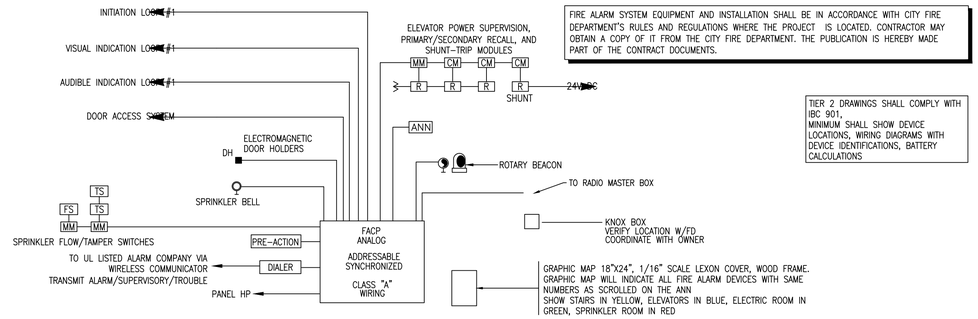
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Drawing Name

ELECTRICAL SCHEDULES

Sheet No.

E3.1



FIRE ALARM SYSTEM EQUIPMENT AND INSTALLATION SHALL BE IN ACCORDANCE WITH CITY FIRE DEPARTMENT'S RULES AND REGULATIONS WHERE THE PROJECT IS LOCATED. CONTRACTOR MAY OBTAIN A COPY OF IT FROM THE CITY FIRE DEPARTMENT. THE PUBLICATION IS HEREBY MADE PART OF THE CONTRACT DOCUMENTS.

TIER 2 DRAWINGS SHALL COMPLY WITH IBC 901, MINIMUM SHALL SHOW DEVICE LOCATIONS, WIRING DIAGRAMS WITH DEVICE IDENTIFICATIONS, BATTERY CALCULATIONS

NOTES

PROVIDE ADDRESS MODULES FOR ALL FLOW & TAMPER SWITCHES
PROVIDE COMPLETE INTERLOCK WIRING FOR ELEVATOR RECALL SYSTEM
SEE FLOOR PLANS FOR DETECTOR TYPES AND LOCATIONS AND QUANTITIES.
SEE SPRINKLER DRAWINGS FOR FLOW/TAMPER SWITCH LOCATIONS AND QUANTITIES.
CARRY MINIMUM OF (1)FLOW AND (4)TAMPER SWITCH AT SPRINKLER SERVICE LOCATION AND (1) FLOW/TAMPER SWITCH PER FLOOR PER STAIR AND TWO TAMPER SWITCH FOR STAND PIPE LOCATION.
PROVIDE MONITOR MODULES AT DRY ALARM VALVE
PROVIDE MONITOR MODULES FOR ALL DETECTORS LOCATED IN COLD AREAS.
FOR ELEVATOR BUILDINGS PROVIDE ACCESSIBLE DEVICES FOR 5% OF THE UNITS
PROVIDE COMPLETE SIGNAL WIRING FOR DOOR RELEASE
PROVIDE COMPLETE SIGNAL WIRING FOR DRY SYSTEM COMPRESSOR AND ALARM
PROVIDE BATTERY CALCULATIONS AND ONE LINE WIRING DIAGRAM
PROVIDE RADIO SIGNAL COVERAGE THROUGHOUT BUILDING AS REQUIRED PER 916.1-2&3
ALL AUDIO DEVICES LOCATED IN SLEEPING AREAS SHALL COMPLY WITH NFPA 72-18.4.5.3 IN REGARDS TO SIGNAL TYPE, PROVIDE LOW FREQUENCY DEVICES
PROVIDE TIER 2 DRAWINGS WITH COMPLETE WIRING DIAGRAMS AND DEVICE ADDRESSES AS REQUIRED FOR FIRE DEPARTMENT APPLICATION
PROVIDE POWER BOOSTERS (NACs) AS REQUIRED; PROVIDE SMOKE DETECTOR AT EACH BOOSTER LOCATION AND FACP LOCATION

SIGNALING LINE CIRCUIT (SLC) AND INITIATING DEVICE CIRCUIT (IDC) WIRING SHALL BE 2#14 FPLP CABLE.
24VDC ACCESSORY WIRING SHALL BE 2#16 FPLP CABLE (VERIFY THAT ALL DC ACCESSORY CIRCUITS ARE POWER LIMITED)
NAC WIRING SHALL BE 2#14 FPLP CABLE.

SEQUENCE OF OPERATION

UPON ACTIVATION OF ANY FIRE DETECTOR, MANUAL PULL STATION OR FLOW SWITCH
-FIRE ALARM PANEL WILL TRIP AND CALL FIRE DEPARTMENT
-ALL AUDIO DEVICES WILL INITIATE ALARM SIGNAL TO ALERT ALL OCCUPANTS FOR ALARM CONDITION IN THE BUILDING FOR FULL EVACUATION.
-ALL VISUAL DEVICES WILL ACTIVATE, THEY SHALL BE SYNCHRONIZED TYPE.
-AIR HANDLER UNITS THAT ARE EQUIPPED WITH DUCT SMOKE DETECTORS SHALL SHUT DOWN UPON ACTIVATION OF THE DUCT SMOKE DETECTOR.

UPON ACTIVATION OF ELEVATOR LOBBY SMOKE DETECTOR OR ELEVATOR MACHINE ROOM SMOKE DETECTOR:
-ELEVATOR RECALL SYSTEM WILL OPERATE. NO OTHER DEVICE WILL ACTIVATE RECALL SYSTEM.
-LOCAL SMOKE DETECTORS SHALL BE ACTIVATED LOCALLY

TYPICAL FIRE ALARM SYSTEM RISER DIAGRAM

FOR EVERY SMOKE DAMPER SHOWN ON MECHANICAL DRAWINGS, PROVIDE DUCT SMOKE DETECTOR IN THE DUCT TO OPERATE SMOKE DAMPER. PROVIDE 120V POWER TO SMOKE DAMPER FOR OPERATION.
IN SITUATIONS WHERE THE AIR SUPPLY FROM THE SHAFT DIRECTLY SERVES A CORRIDOR OR A SPACE WHERE THERE ARE SMOKE DETECTORS FOR COMPLETE COVERAGE, NO DUCT SMOKE DETECTOR IS REQUIRED.
INTERLOCK DAMPERS TO CLOSE UPON DUCT DETECTOR ACTIVATIONS.

ACCESSIBLE UNIT AND HEARING IMPAIRED FIRE ALARM NOTES NOTES

SEE ARCHITECTURAL PLANS FOR NUMBER OF HC AND HEARING IMPAIRED UNITS AND LOCATIONS.
CARRY MINIMUM 5% OF TOTAL UNIT NUMBER
IN EACH UNIT PROVIDE
-LOCAL TYPE SMOKE DETECTOR WITH BUILT IN STROBE/OR SEPARATE 120V STROBE EACH BEDROOM, OUTSIDE BEDROOM FOR LOCAL SMOKE ALARM
-LOCAL TYPE STROBE IN EACH BEDROOM AND LIVING ROOM FOR CO ALARM
-SYSTEM TYPE STROBE IN EACH BEDROOM AND LIVING ROOM
-SYSTEM TYPE STROBE IN EACH BATHROOM
-LOCAL TYPE STROBE IN EACH BATHROOM FOR LOCAL SMOKE ALARM
-LOCAL TYPE STROBE IN EACH BATHROOM FOR CO ALARM
-LOCAL TYPE CO DETECTORS OUTSIDE BEDROOMS AND EVERY HABITABLE FLOOR LEVEL, STROBES ARE TO BE LOCATED IN BEDROOMS AND HABITABLE SPACES

ON TOP OF ELEVATOR SHAFT PROVIDE 20A/120V DEDICATED CIRCUIT TO POWER FAIL SAFE TYPE MOTORIZED DAMPER (VERIFY W/HVAC TO ASSURE FAIL SAFE TYPE DAMPER INSTALLATION) INTERLOCKED VIA 20A RELAY AND CONTROL MODULE TO OPEN UPON FIRE ALARM PANEL ACTIVATION

FIRE ALARM CONSTRUCTION NOTES

-LOCAL SMOKE DETECTORS SHALL BE WIRED FROM ARC-FAULT CIRCUITS, VERIFY WITH ELECTRICAL INSPECTOR.

-BACK TO BACK OUTLETS ON FIRE RATED WALLS SHALL BE INSTALLED TO MAINTAIN FIRE RATINGS, IF NECESSARY, USE FIRE RATED OUTLET BOXES.

-ALL FLOOR PENETRATIONS BY CABLES AND CONDUITS SHALL BE SEALED TO MAINTAIN FIRE RATINGS.

-RECESSED LIGHT FIXTURES INSTALLED ON FIRE RATED CEILINGS SHALL HAVE FIRE RATED HOODS ON TOP TO MAINTAIN FIRE RATING. SEE ARCHITECTURAL DRAWINGS FOR FIRE RATED AREAS.

-ALL WIRING WITHIN UNITS SHALL BE ROMEX. WIRING OUTSIDE UNITS SHALL BE METAL CLAD.

-SLEEPING UNITS SHALL BE PROVIDED WITH THE CAPABILITY TO SUPPORT VISIBLE ALARM NOTIFICATION APPLIANCES.

SMOKE ALARMS AND COMBINATION SMOKE/CO ALARMS IN EACH DWELLING UNIT SHALL BE INTERCONNECTED FOR MULTIPLE-STATION OPERATION WITHIN THAT DWELLING UNIT ONLY. INTERCONNECT WITH 2#16 FPLP CABLE.

-ALL DETECTOR LOCATIONS SHALL BE COORDINATED WITH REFLECTED CEILING PLANS IN FIELD SUCH THAT DETECTORS SHALL BE MINIMUM 3FT AWAY FROM AIR DIFFUSERS AND BATHROOM DOORS, AND MINIMUM 10FT FROM COOKING APPLIANCES.

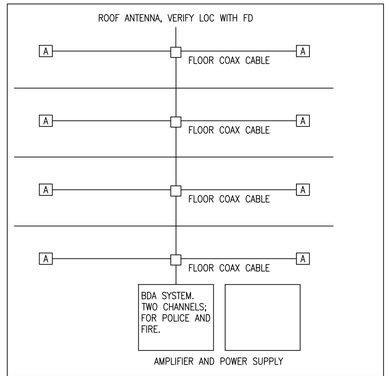
-DUCT SMOKE DETECTORS SHALL BE INSTALLED IN HEATED AREAS AT THE SUPPLY SIDE BEFORE THE FIRST TAKE OFF, MINIMUM 5FT AWAY FROM THE UNIT COIL. REMOTE TEST/INDICATOR LOCATIONS SHALL BE NEXT TO FACP PANEL OR AS DIRECTED BY THE FIRE DEPARTMENT.

-A/V DEVICE LOCATIONS ARE SHOWN BASED ON DISTANCE REQUIREMENTS. CONTRACTOR SHALL COORDINATE PHYSICAL STRUCTURES SO THAT VISIBILITY WILL BE MAINTAINED. PROPOSED CHANGES SHALL BE FORWARDED TO ARCHITECT/ENGINEER FOR APPROVAL.

ALL SYSTEM-TYPE CO DETECTORS MUST "LATCH" AT THE PANEL;
THE RESPONDER TO A CO DETECTOR SUPERVISORY ALARM MUST BE LEAD TO MITIGATE THE CO ISSUE AT THE DETECTOR AND THEN CLEAR/RESET THE FIRE ALARM PANEL. THE CO SUPERVISORY ALARM CANNOT BE MITIGATED AT THE POINT LOCATION, BUT REQUIRES A COMPETENT RESPONDER TO ADDRESS THE PANEL IN THE FIRE COMMAND CENTER.

ALARM MONITORING SERVICE RECEIVES A SUPERVISORY CARBON MONOXIDE SIGNAL; THE WORDS "CARBON MONOXIDE" MUST BE PRESENT AT ALARM COMPANY, THE LETTERS "CO" ARE NOT ACCEPTABLE.

AUDIBLE DEVICES PROVIDED FOR THE SLEEPING AREAS TO AWAKEN OCCUPANTS SHALL PRODUCE A LOW FREQUENCY ALARM SIGNAL THAT COMPLIES WITH THE FOLLOWING:
(1) THE ALARM SIGNAL SHALL BE A SQUARE WAVE OR PROVIDE EQUIVALENT AWAKENING ABILITY.
(2) THE WAVE SHALL HAVE A FUNDAMENTAL FREQUENCY OF 520 HZ +/- 10 PERCENT.



SCHEMATIC BDA SYSTEM DIAGRAM

CARRY THE COST OF THE BDA SYSTEM IN ITS ENTIRETY, WITH ALL NECESSARY STRUCTURES AND RACEWAYS TO INSTALL A BDA SYSTEM PER IBC 916.1.2&3.
UPON COMPLETION OF THE BUILDING, CONDUCT TEST BY THE MANUFACTURER TO SIZE THE REPEATER CAPACITIES AND COVERAGE REQUIREMENTS TO INSTALL BDA SYSTEM HEAD END EQUIPMENT TO MEET EMERGENCY SERVICES COMMUNICATION NEEDS, AS TO BE DETERMINED BY THE FD.
RUN CONDUITS IN 2HR RATED ENCLOSURE.
IF EQUIPMENT IS TO BE INSTALLED, IT WILL BE HOUSED IN A 2HR ENCLOSURE.
OBTAIN LATEST FIRE DEPARTMENT REQUIREMENTS PRIOR TO PRICING.
INSTALLATION SHALL COMPLY CITY FIRE DEPARTMENT REQUIREMENTS.

FIRE ALARM SYMBOL LIST

S	SYSTEM TYPE SMOKE DETECTOR. ANALOG ADDRESSABLE.
SD	SYSTEM TYPE DUCT SMOKE DETECTOR WITH REMOTE TEST SWITCH. TUBE WILL HAVE MINIMUM 10 HOLES.
SE	SYSTEM TYPE SMOKE DETECTOR. ANALOG ADDRESSABLE. SUPERVISED FOR ELEVATOR RECALL.
H	SYSTEM TYPE HEAT DETECTOR. ANALOG ADDRESSABLE.
C F	SYSTEM TYPE CO DETECTOR.
	FIRE ALARM PULL AND A/V DEVICE MOUNTING HEIGHT SHALL BE COMLY WITH NFPA 72.
F	FIRE ALARM PULL STATION MOUNTING HEIGHT SHALL BE COMPLY WITH NFPA 72. (NOT LESS THAN 42 INCHES AND NOT MORE THAN 48 INCHES ABOVE FINISHED FLOOR.)
F	FIRE ALARM HORN/STROBE (SYCHRONIZED). 15 CD IN CORRIDORS, MIN 75 CD IN COMMON AREAS. THE ENTIRE STROBE LENS TO BE LOCATED NOT LESS THAN 80 INCHES ABOVE FINISHED FLOOR AND NOT MORE THAN 96 INCHES ABOVE FINISHED FLOOR AND COMPLY WITH NFPA 72.
L	FIRE ALARM STROBE ONLY (SYCHRONIZED). 15 CD IN CORRIDORS, MIN 75 CD IN COMMON AREAS. THE ENTIRE STROBE LENS TO BE LOCATED NOT LESS THAN 80 INCHES ABOVE FINISHED FLOOR AND NOT MORE THAN 96 INCHES ABOVE FINISHED FLOOR AND COMPLY WITH NFPA 72.
L, (SM)	FIRE ALARM STROBE, 120V FOR LOCAL SMOKE ALARM AT ACCESSIBLE AND HEARING IMPAIRED UNITS THE ENTIRE STROBE LENS TO BE LOCATED NOT LESS THAN 80 INCHES ABOVE FINISHED FLOOR AND NOT MORE THAN 96 INCHES ABOVE FINISHED FLOOR AND COMPLY WITH NFPA 72.
L, (CO)	FIRE ALARM STROBE, 120V FOR LOCAL CO ALARM AT ACCESSIBLE AND HEARING IMPAIRED UNITS THE ENTIRE STROBE LENS TO BE LOCATED NOT LESS THAN 80 INCHES ABOVE FINISHED FLOOR AND NOT MORE THAN 96 INCHES ABOVE FINISHED FLOOR AND COMPLY WITH NFPA 72.
F,110CP,CLG	CEILING MOUNTED A/V DEVICE
H LF	MINI HORN/ TEMPORAL PER NFPA 72-18.4.5.3, LOW FREQUENCY IN BEDROOMS
S L	120V LOCAL TYPE SMOKE DETECTOR W/BATTERY. L-INDICATES BUILT-IN STROBE
CO S	COMBINATION TYPE 120V LOCAL SMOKE/CO DETECTOR WITH BATTERY BACK UP. SMOKE DETECTOR SHALL BE PHOTO ELECTRIC TYPE. TANDEM WIRE ALL COMBINATION TYPE SMOKE/CO AND SMOKE ONLY DETECTORS IN THE SAME UNIT AND FEED FROM LIGHTING/FA CIRCUIT, (TYPICAL FOR ALL DWELLING UNITS).
CO/NO	CARBON MONOXIDE DETECTOR
FACP	FIRE ALARM CONTROL PANEL
DIALER	DIALER BY E.C. WIRED TO UL LISTED ALARM CO.
AORC	AREA OF REFUGE CENTRAL BASE UNIT (TWO-WAY COMMUNICATION SYSTEM)
AOR	AREA OF REFUGE FLOOR ELEVATOR LOBBY UNIT
TS	TAMPER SWITCH
FS	FLOW SWITCH
PS	PRESSURE SWITCH
A	BDA ANTEANNE
MM	ADDRESSABLE MONITOR MODULE
CM	ADDRESSABLE CONTROL MODULE
R	INTERPOSING RELAY
	FIRE ALARM BEACON
EB	ELECTRIC BELL FOR FIRE DEPARTMENT CONNECTION
	END OF LINE DEVICE
	STROBE FOR INTERCOM ACCESSABLE AND HEARING IMPAIRED UNITS

	CONTROL UNIT ANN	NOTIFICATION	FIRE SAFETY SYSTEM CONTROLS	
	ACTUATE COMMON ALARM SIGNAL / ACTUATE AUDIBLE ALARM-GLOBAL / ACTUATE COMMON SUPERVISORY SIGNAL ALARM / ACTUATE AUDIBLE SUPERVISORY ALARM / ACTUATE COMMON TROUBLE SIGNAL / ACTUATE AUDIBLE TROUBLE SIGNAL / ACTUATE APPROPRIATE LOCATION INDICATOR / ACTUATE ALL AUDIBLE EVACUATION SIGNALS / ACTUATE ALL VISIBLE ALARM SIGNALS / DISPLAY CHANGE OF STATUS / TRANSMIT ALARM SIGNAL TO SUPERVISORY STATION / TRANSMIT TROUBLE SIGNAL TO SUPERVISORY STATION / TRANSMIT SUPERVISORY SIGNAL TO SUPERVISORY STATION / MAIN FLOOR ELEVATOR RECALL / ALTERNATE FLOOR ELEVATOR RECALL / ELEVATOR HAT FLASH / CLOSE FIRE/SMOKE DAMPERS / RELEASE DOORS AND SMOKE DOORS		
1	COMMON AREA SMOKE DETECTORS		1
2	COMMON AREA HEAT DETECTORS		2
3	–		3
4	ELEVATOR LOBBY SMOKE DETECTOR (EXC MAIN)		4
5	MAIN FLOOR ELEVATOR LOBBY SMOKE DETECTOR		5
6	ELEVATOR MACHINE ROOM SMOKE DETECTOR		6
7	MANUAL PULL STATIONS		7
8	SPRINKLER MAIN FLOW		8
9	SPRINKLER FLOOR FLOW SWITCH		9
10	DRY ALARM ACTUATION		10
11	SPRINKLER TAMPER SWITCH ACTUATION		11
12	BDA SYSTEM IF PRESENT		12
13	GARAGE CO SYSTEM 50 ppm		13
14	GARAGE CO SYSTEM 100 ppm		14
15	–		15
16	–		16
17	–		17
18	FIRE ALARM AC POWER FAILURE		18
19	FIRE ALARM SYSTEM LOW BATTERY		19
20	OPEN CIRCUIT OR GROUND FAULT		20

COMMONWEALTH OF MASSACHUSETTS
AARON MEDERG
ELECTRICAL
No. 59635
PROFESSIONAL ENGINEER

Location

PROPOSED MULTI-FAMILY BUILDING
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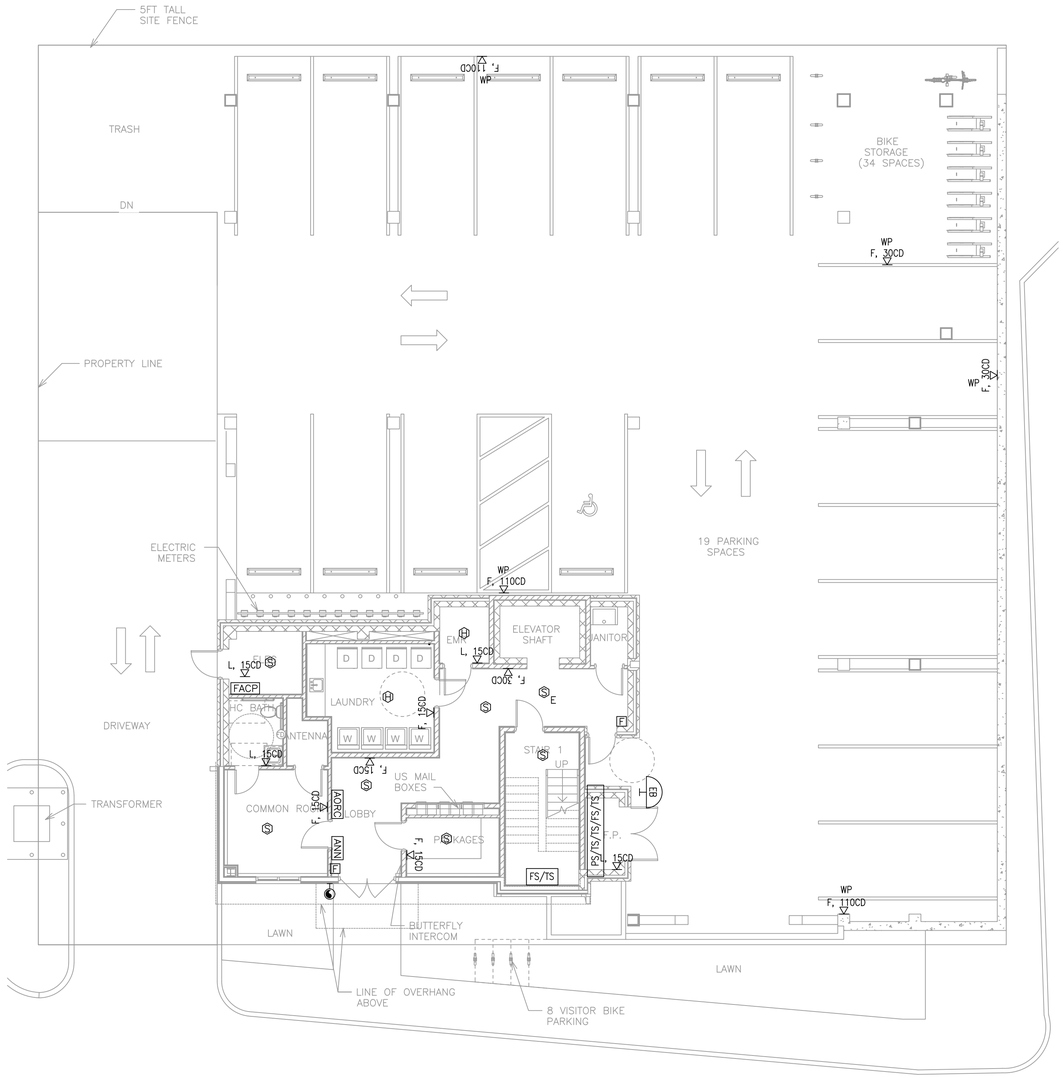
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Drawing Name

FIRE ALARM DETAILS

Sheet No.

FA0.0



GROUND FLOOR
1/8" = 1'-0"

BIKE PARKING COMPLIANCE

	REQUIRED	PROPOSED
RESIDENT BIKE PARKING	1 SPACE PER UNIT (40 SPACES) - 25% MIN. ON-GROUND SPACES (10 SPACES) - 75% EXTRA-WIDE SPACES (2 SPACES)	34 SPACES - 10 ON-GROUND (29%) - 24 EXTRA-WIDE SPACES - 24 TWO-TIER SPACES
VISITOR BIKE PARKING	1 SPACE PER 5 UNITS (8 SPACES)	8 SPACES (LOCATED AT THE EXTERIOR OF THE BUILDING)

FIRE ALARM NOTES

1. 120V FIRE ALARM DEVICES SHALL BE CIRCUITED TO THAT UNITS LIGHTING/RA CIRCUIT. SEE "LC" PANEL SCHEDULE.
2. SMOKE DETECTORS AT FIRE/SMOKE DOORS SHALL BE LISTED FOR THAT PURPOSE.

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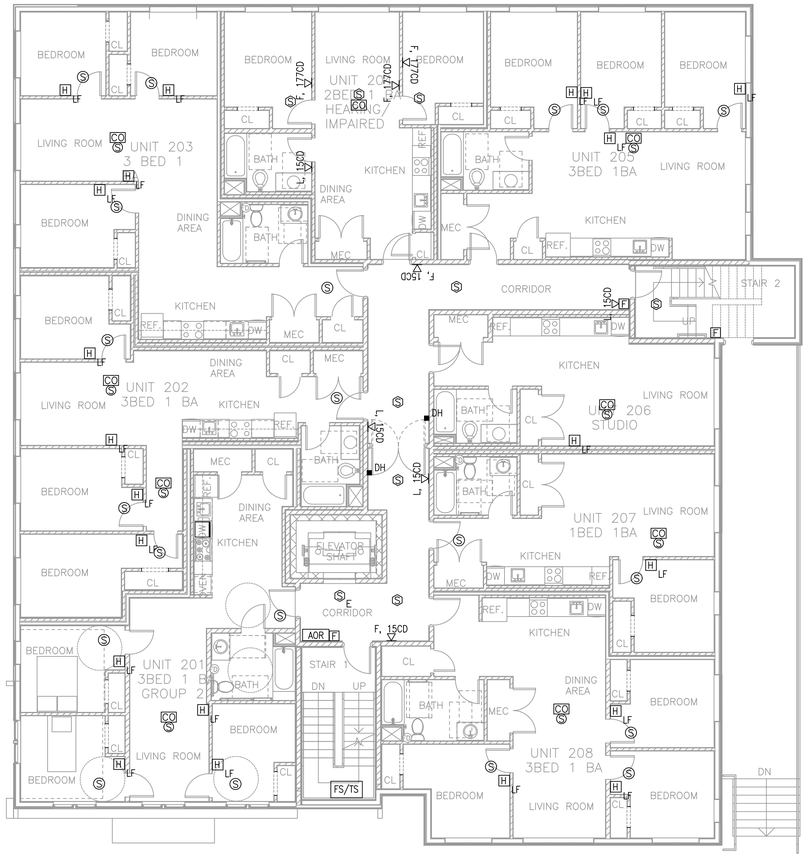
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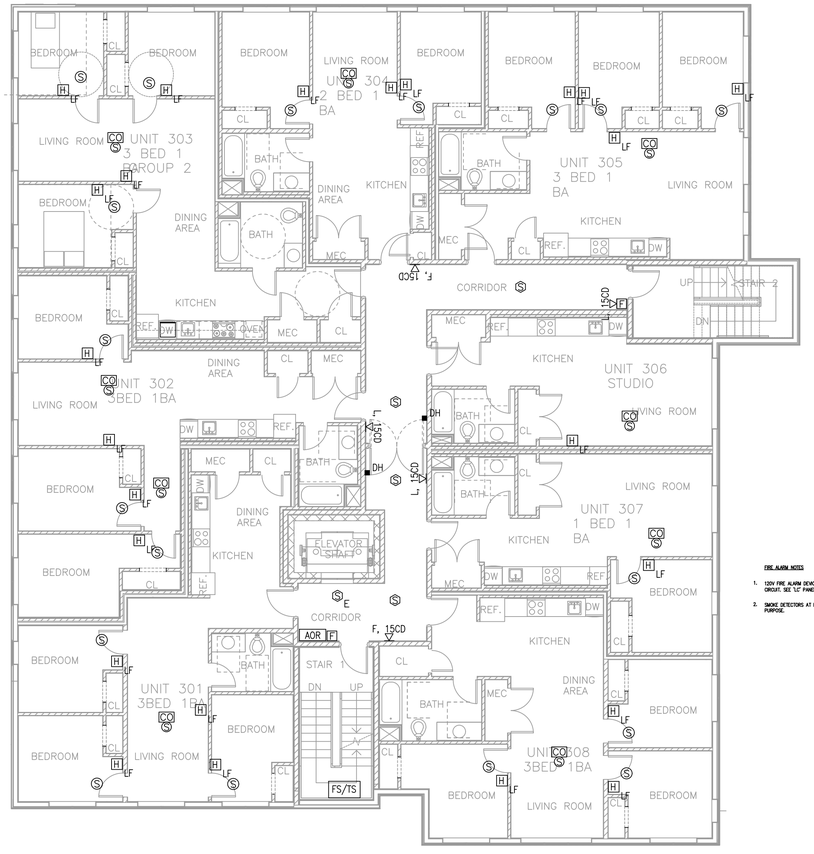
GROUND FLOOR
FIRE ALARM
PLAN

Sheet No.

FA1.1



SECOND FLOOR
1/8" = 1'-0"



THIRD FLOOR
1/8" = 1'-0"

FIRE ALARM NOTES

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2. SMOKE DETECTORS AT FIRE/SMOKE DOORS SHALL BE LISTED FOR THAT PURPOSE.

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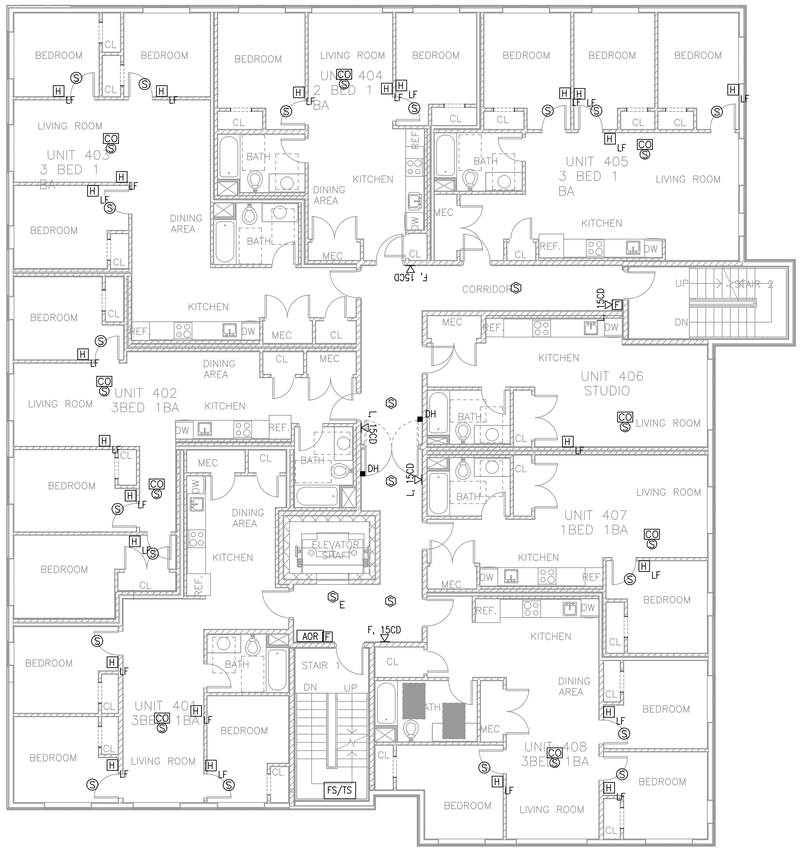
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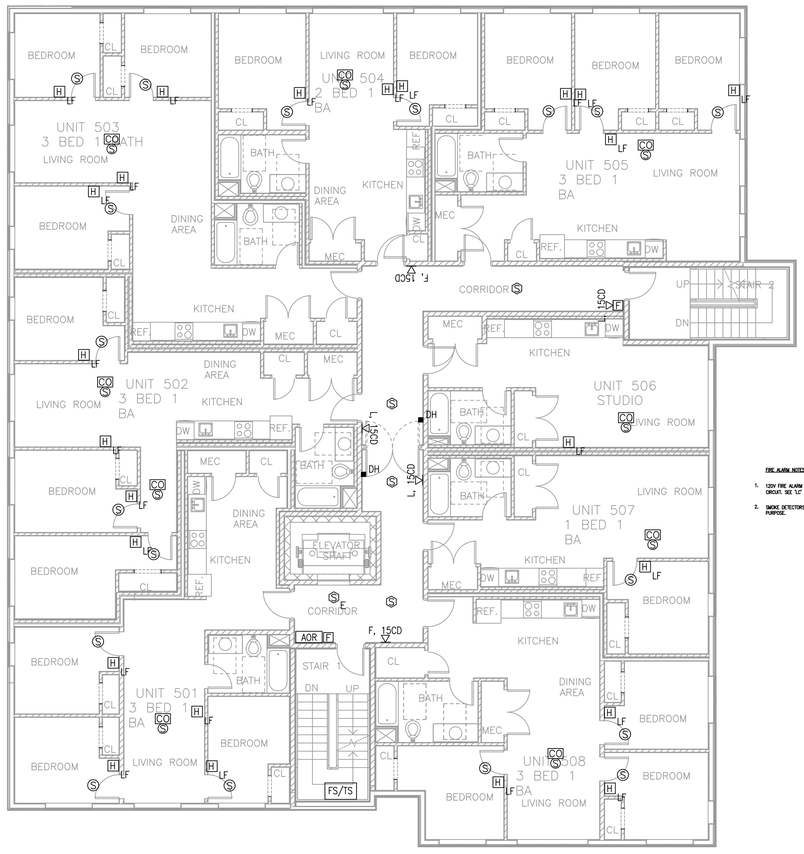
FIRE ALARM
FLOOR PLAN

Sheet No.

FA1.2



FOURTH FLOOR
1/8" = 1'-0"



FIFTH FLOOR
1/8" = 1'-0"

FIRE ALARM NOTES

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2. SMOKE DETECTORS AT FIRE/SMOKE DOORS SHALL BE USTED FOR THAT PURPOSE.

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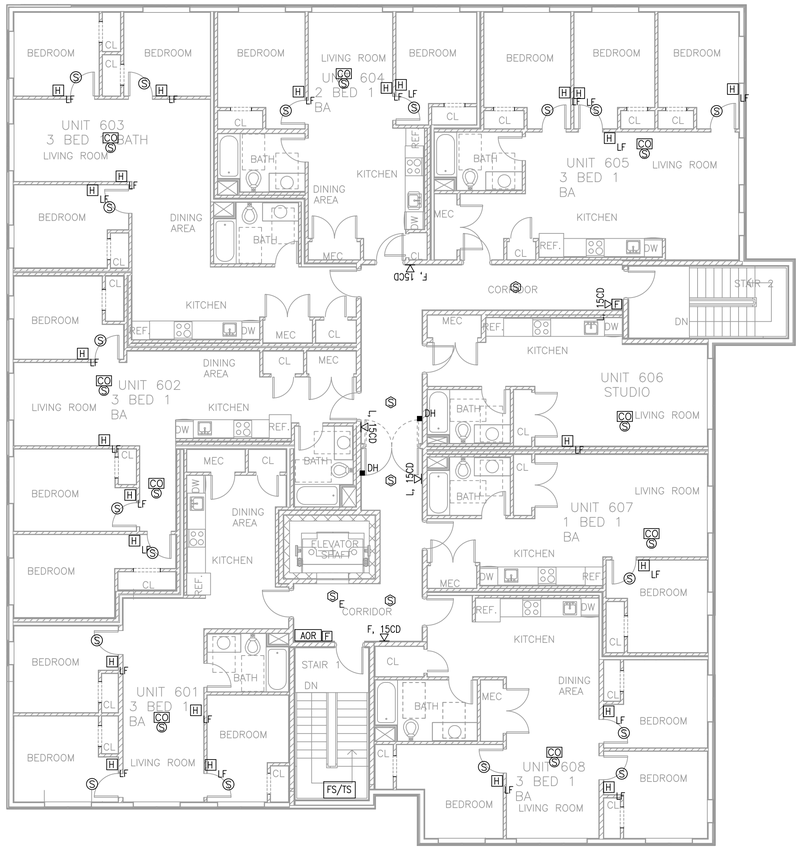
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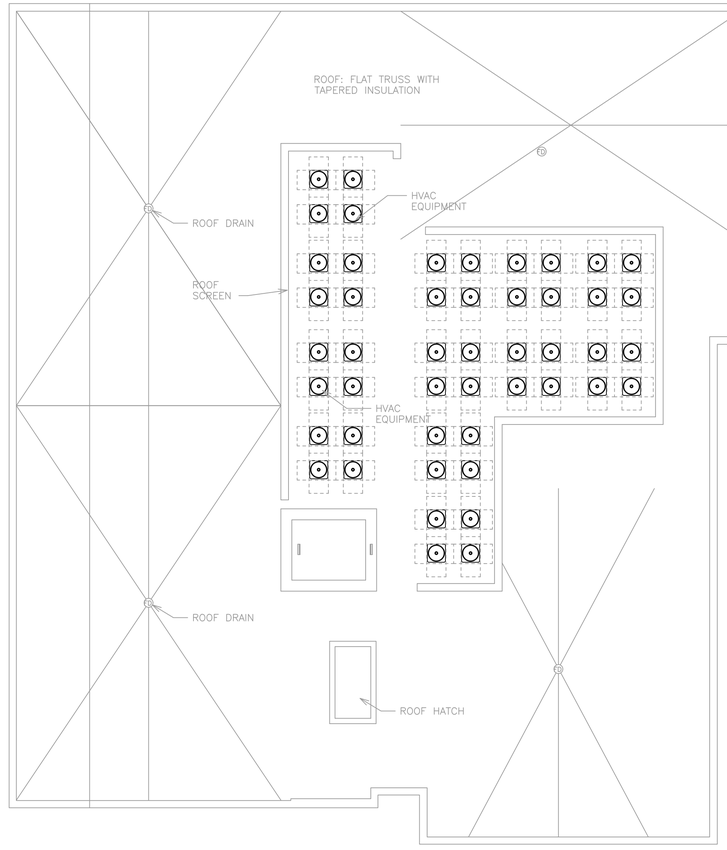
FIRE ALARM FLOOR PLAN

Sheet No.

FA1.3



SIXTH FLOOR
1/8" = 1'-0"



ROOF PLAN
1/8" = 1'-0"

FIRE ALARM NOTES

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2. SMOKE DETECTORS AT FIRE/SMOKE DOORS SHALL BE LISTED FOR THAT PURPOSE.

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30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

ZADE ENGINEERING LLC
CONSULTING ENGINEERS
1 BILLINGS ROAD STE 306, QUINCY, MA 02171
TEL. (617) 338-4406
FAX. (617) 451-2540
EMAIL zade@zadeengineering.com

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 04-11-2025
Drawn By: ----------

Drawing Name

FIRE ALARM FLOOR PLAN, SIXTH FLOOR AND ROOF

Sheet No.

FA1.4

City of Boston
Planning Department

Planning Department Small Project Design Review Provisos
30 Thorn Street, Hyde Park, Boston, Massachusetts
07 November 2025

General

1. All changes to the approved plans shall be submitted to the Planning Department for review and approval.
2. Any/All future changes to the exterior and/or site plans shall be submitted to the Planning Department for review and approval.
3. All building improvements shall be completed prior to issuance of occupancy permit by ISD unless prior approval is granted by the Planning Department.
4. All site improvements including landscaping must be completed prior to issuance of occupancy permit by ISD unless prior approval is granted by the Planning Department for a delay in completing the site improvements.

Mock Up

5. Samples of all exterior materials and finishes shall be reviewed and approved by the Planning Department prior to ordering.
6. A mock-up panel of a sufficient size (4' x 8' for example) demonstrating all exterior materials and finishes as well as construction details of the Project shall be erected on site for review and approval by the Planning Department. A drawing of the mock-up panel showing what will be built shall be submitted to the Planning Department for review and approval prior to construction of the panel. See *A Guide for the Preparation of Materials Samples (Mock-Up Panels) for Article 80 Small Projects below*

Building

7. A cornerstone that is no larger than 2 feet wide by 1 foot high is recommended as part of the front façade indicating year of construction (year the cornerstone was laid) only. Cornerstones must be incorporated into one of the predominant materials and overall building design. It should be part of the Planning Department final design approval. Names of architect/developer/builder or other building information will be considered as signage.
8. All penthouse/rooftop mechanical equipment, utility meters, electrical transformers, and/or HVAC equipment placed on the site and/or attached to the building shall be adequately screened from public view. Equipment and screening shall be indicated on appropriate roof plan and elevation drawings with all materials (and lighting if proposed) clearly indicated. Any changes from the final Planning Department-approved Contract Documents to the location of penthouse equipment or other publicly visible utilities (location, dimension, detail, or materials) must be submitted to the Planning

Department for review and approval prior to execution. All screening must be *completed prior to issuance of occupancy permit by ISD* unless prior approval is granted by the Planning Department for a delay in completing the screening. Any environment issues that arise from the rooftop mechanical unit shall be reported to the Planning Department for review.

9. All mechanical vents shall be through the roof or rear wall and shall not be visible from a public way. Vents located on elevations that directly face a public way should be composed on the facade so as to minimize their appearance. The final design of the vent caps and locations shall be submitted to the Planning Department for review and approval.
10. All building and site signage shall be reviewed and approved separately by the Planning Department after a submittal of a comprehensive signage plan.

A GUIDE FOR THE PREPARATION OF MATERIALS SAMPLES (MOCK-UP PANELS) FOR ARTICLE 80 SMALL PROJECTS

Construction Inspection Stage approval is contingent on Agency review and approval of on-site materials panels that demonstrate the construction details of the project *prior* to ordering of such materials for construction. *The Development Team is responsible* for notifying the Planning Department in a timely manner in writing when the mock-up panel is ready for viewing. Planning Department staff may require changes to the exterior building materials and details after review of the panel(s); staff therefore reserves the right to reject any materials even if ordered and on site if the necessary mock-ups have not been approved.

1. Mock-up panel shall match the drawing of same, previously submitted to and approved by the Planning Department, indicating the proposed size of the mock-up and the exact assembly of materials.
2. The location of the mock-up panel on site must be oriented to match the predominant public façade of the proposed building. All mock-ups must be constructed on the actual building site unless an alternate site is agreed upon with the Planning Department prior to installation. If off-site, the alternate location must be as close as feasible to the actual site and the compass orientation of the mock-up panel must match that of the primary façade so the lighting will be as close as possible to actual conditions at the site.
3. Materials panels shall demonstrate all exterior material selections, including variations in color, finish, and source. Wet and dry conditions should be made available for review; light conditions should ideally vary. The Planning Department reserves the right to withhold final approval of material panels if light conditions at the mock-up site vary

significantly from those at the site.

4. Detailing of dimensional profiles of all exterior trim including: cornices, belting, contrasting, banding, soffit treatment, jambs, returns, copings, and all window walls including frames, subdivisions, and jamb, head and sill details, shall be presented.
5. Brick and all facing material (granite, cast stone, marble, terra cotta, et al) sample panels shall include joint details, patterning out of the norm or as requested, and masonry jamb, head and sill details.
6. For Projects constructing significant amounts of sidewalks or public areas using significant amounts of specialty paving, material samples and sample panels or installations as requested by the Planning Department must be provided. Wet and dry conditions should be represented.
7. All such material panels shall be presented in an assembly large enough to assess the finished construction's façade color, texture, patterning and joint details, in a manner representing actual designed combinations.

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A

PROPOSED MIXED USE BUILDING AT

30 THORN STREET, HYDE PARK, MA 02136



GROSS AREA (FAR)	
Level	Area
GROUND FLOOR	1426 SF
SECOND FLOOR	7435 SF
THIRD FLOOR	7435 SF
FOURTH FLOOR	7435 SF
FIFTH FLOOR	7435 SF
SIXTH FLOOR	7435 SF
Total	38601 SF

DS

APPROVED
DESIGN REVIEW
BOSTON REDEVELOPMENT AUTHORITY
SIGNATURE

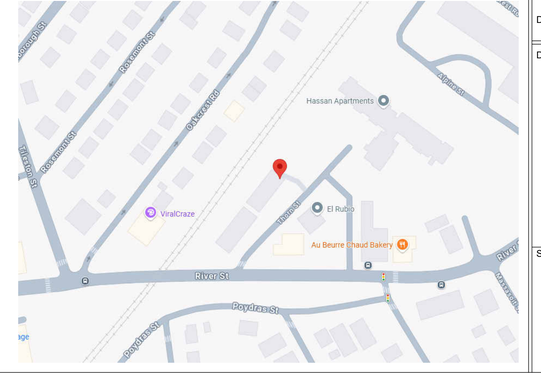
11/06/2025

Unit Area Schedule				
Name	Comments	Area	Count	Level
SECOND FLOOR				
UNIT 201	3 BED 1 BA GROUP 2	834 SF	1	SECOND FLOOR
UNIT 202	3 BED 1 BA	867 SF	1	SECOND FLOOR
UNIT 203	3 BED 1 BA	903 SF	1	SECOND FLOOR
UNIT 204	1 BED 1 BA HEARING/IMPAIRED	636 SF	1	SECOND FLOOR
UNIT 205	3 BED 1 BA	861 SF	1	SECOND FLOOR
UNIT 206	STUDIO	415 SF	1	SECOND FLOOR
UNIT 207	1 BED 1 BA	537 SF	1	SECOND FLOOR
UNIT 208	3 BED 1 BA	829 SF	1	SECOND FLOOR
THIRD FLOOR				
UNIT 301	3 BED 1 BA	834 SF	1	THIRD FLOOR
UNIT 302	3 BED 1 BA	867 SF	1	THIRD FLOOR
UNIT 303	3 BED 1 BA GROUP 2	903 SF	1	THIRD FLOOR
UNIT 304	1 BED 1 BA	636 SF	1	THIRD FLOOR
UNIT 305	3 BED 1 BA	861 SF	1	THIRD FLOOR
UNIT 306	STUDIO	415 SF	1	THIRD FLOOR
UNIT 307	1 BED 1 BA	537 SF	1	THIRD FLOOR
UNIT 308	3 BED 1 BA	829 SF	1	THIRD FLOOR
FOURTH FLOOR				
UNIT 401	3 BED 1 BA	834 SF	1	FOURTH FLOOR
UNIT 402	3 BED 1 BA	867 SF	1	FOURTH FLOOR
UNIT 403	3 BED 1 BA	903 SF	1	FOURTH FLOOR
UNIT 404	1 BED 1 BA	636 SF	1	FOURTH FLOOR
UNIT 405	3 BED 1 BA	861 SF	1	FOURTH FLOOR
UNIT 406	STUDIO	415 SF	1	FOURTH FLOOR
UNIT 407	1 BED 1 BA	537 SF	1	FOURTH FLOOR
UNIT 408	3 BED 1 BA	829 SF	1	FOURTH FLOOR
FIFTH FLOOR				
UNIT 501	3 BED 1 BA	834 SF	1	FIFTH FLOOR
UNIT 502	3 BED 1 BA	867 SF	1	FIFTH FLOOR
UNIT 503	3 BED 1 BA	903 SF	1	FIFTH FLOOR
UNIT 504	1 BED 1 BA	636 SF	1	FIFTH FLOOR
UNIT 505	3 BED 1 BA	861 SF	1	FIFTH FLOOR
UNIT 506	STUDIO	415 SF	1	FIFTH FLOOR
UNIT 507	1 BED 1 BA	537 SF	1	FIFTH FLOOR
UNIT 508	3 BED 1 BA	829 SF	1	FIFTH FLOOR
SIXTH FLOOR				
UNIT 601	3 BED 1 BA	834 SF	1	SIXTH FLOOR
UNIT 602	3 BED 1 BA	867 SF	1	SIXTH FLOOR
UNIT 603	3 BED 1 BA	903 SF	1	SIXTH FLOOR
UNIT 604	1 BED 1 BA	636 SF	1	SIXTH FLOOR
UNIT 605	3 BED 1 BA	861 SF	1	SIXTH FLOOR
UNIT 606	STUDIO	415 SF	1	SIXTH FLOOR
UNIT 607	1 BED 1 BA	537 SF	1	SIXTH FLOOR
UNIT 608	3 BED 1 BA	829 SF	1	SIXTH FLOOR
Grand total: 40				

SOIL TESTING

NOTE: REFER TO THE GEOTECHNICAL REPORT DATED JULY 24, 2018 BY McPHAIL ASSOCIATES, LLC AT 2269 MASSACHUSETTS AVENUE, CAMBRIDGE, MA 02140.
(617) 868-1420

LOCUS MAP



Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7715
fax 617-786-7715

No.	Description	Date

Project No: 2025014
Scale:
Date: 11-04-2025
Drawn By: PM

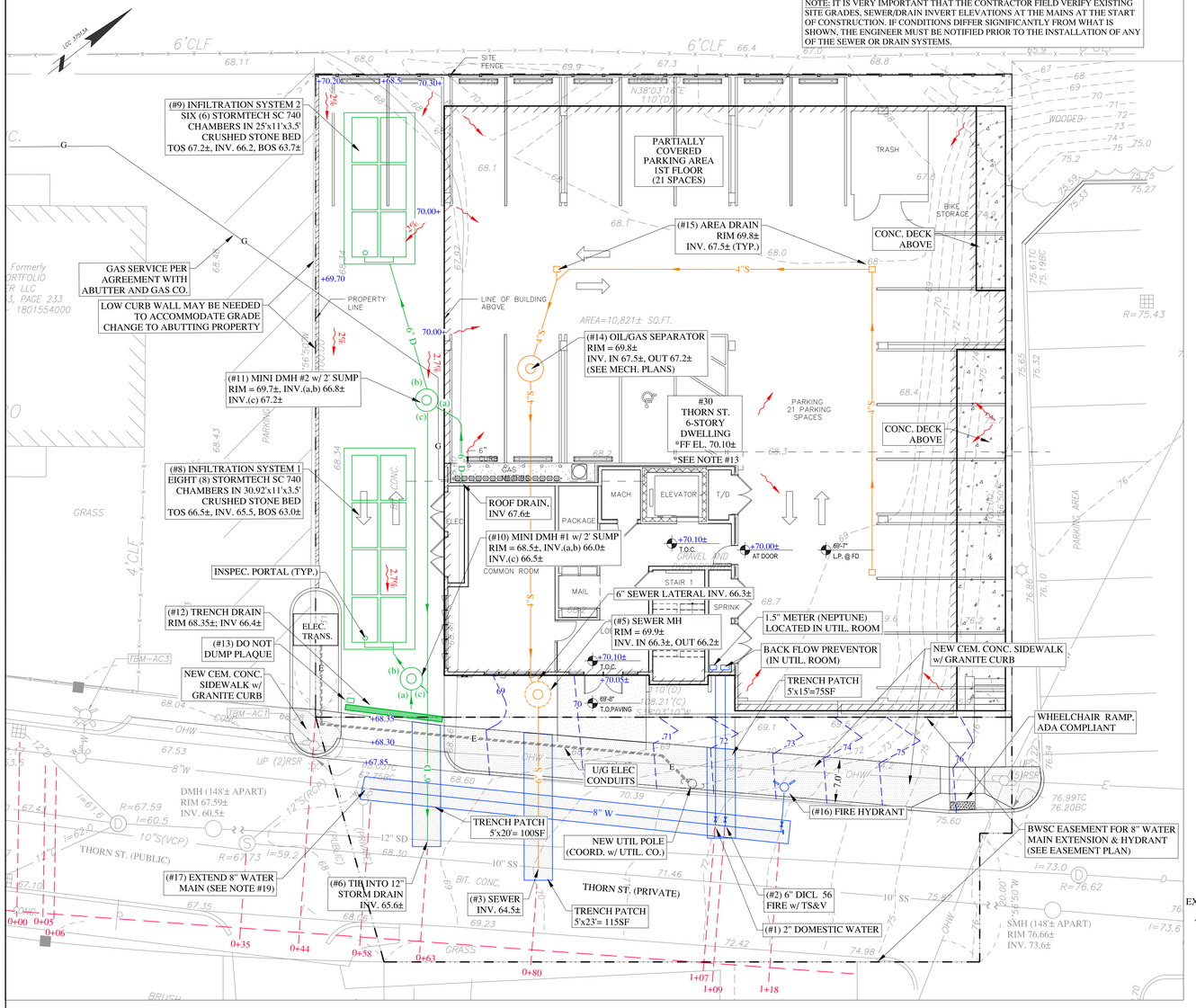
Drawing Name

COVER SHEET

Sheet No.

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GENERAL NOTES

1. THIS PLAN HAS BEEN PREPARED FOR APPROVAL BY THE BWSC FOR THE PROPOSED WATER, FIRE SERVICE, SEWER SERVICE AND DRAIN SERVICES. FOR ADDITIONAL INFORMATION ABOUT THE PROPOSED BUILDING PLEASE SEE THE ARCHITECTURAL DRAWINGS.
2. THE APPLICANT FOR THIS PROPERTY IS:
   OLEG URITSKY, 617.968.6810
   ONE BEACON ST., 15th FLOOR, BOSTON, MA 02108
3. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF BWSC, DPW AND BTD
4. THE CONTRACTOR SHALL OBTAIN ALL PERMITS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS PRIOR TO CONSTRUCTION.
5. THE LOCATION OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES TO EXISTING UTILITIES. ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON RECORD INFORMATION.
6. BOSTON WATER AND SEWER IS NOT PART OF DIG-SAFE. MARKING OF BWSC FACILITIES SHALL BE PERFORMED BY BWSC STAFF. REQUEST FOR MARKINGS CAN BE MADE BY CALLING THE BWSC FIELD SERVICES DEPARTMENT AT 617-989-7248. CONTACT DIG-SAFE AT 1-888-344-7233 AT LEAST 72 HRS PRIOR TO EXCAVATION.
7. ALL EXISTING UTILITIES TO BE ABANDONED SHALL BE CUT AND CAPPED AT THE MAIN. THE CONTRACTOR IS RESPONSIBLE FOR INVESTIGATING AND VERIFYING THE LOCATION OF EACH EXISTING SERVICE CONNECTION, EVEN IF SAID LOCATION IS NOT SHOWN ON THIS PLAN.
8. THE CONTRACTOR SHALL SUPPLY ALL PIPING AND FITTINGS NECESSARY FOR THE UTILITY SERVICE CONNECTIONS, AND SHALL PERFORM ALL WET AND DRY TAPS AS PART OF THE CONTRACT.
9. NEW WATER SERVICES SHALL BE LEFT SHUT OFF AT THE MAIN ON THE STREET UNTIL ACTIVATED BY THE BOSTON WATER AND SEWER COMMISSION.
10. UTILITIES SHOWN ON THIS PLAN ARE TO THE EXTERIOR OF THE BUILDING FOUNDATION ONLY. UTILITIES THROUGH THE FOUNDATION AND INSIDE THE BUILDING ARE THE RESPONSIBILITY OF THE LICENSED PLUMBER OR MECHANICAL ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND RECORDING THE EXACT LOCATION OF EACH UTILITY CONNECTION.
11. THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY BRACING ALL TRENCH AND FOUNDATION EXCAVATIONS TO PROTECT AGAINST CAVE-IN, DURING THE CONSTRUCTION.
12. THE RESPONSIBILITY OF MAINTENANCE OF THE SEWER, DRAIN AND WATER CONNECTION ON PRIVATE PROPERTY AND/OR PRIVATE WAYS SHALL REMAIN THAT OF THE OWNER.
13. FLOOR ELEVATIONS SHOWN ON THIS PLAN ARE APPROXIMATE AND MUST BE CONFIRMED BASED ON FIELD CONDITIONS AND THE ARCHITECTURAL PLANS. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND OR ENGINEER.
14. CONTRACTOR SHALL FILE THE ROUGH CONSTRUCTION SIGN-OFF DOCUMENT FROM THE CITY OF BOSTON'S INSPECTIONAL SERVICES DEPARTMENT, AS A PREREQUISITE FOR FILING A GENERAL SERVICE APPLICATION WITH THE BOSTON WATER & SEWER COMMISSION FOR NEW CONSTRUCTION.
15. THE CONTRACTOR SHALL COORDINATE FIELD INSPECTIONS WITH THE ENGINEER AND PROVIDE AS-BUILT DRAWINGS TO BWSC.
16. THE CONTRACTOR SHALL VERIFY RIM/INV AND EXIST. IT IS THE CONTRACTORS RESPONSIBILITY TO VALIDATE THE GRADES SHOWN, IF EXIST. CONDITIONS ARE SIGNIFICANTLY DIFFERENT FROM WHAT IS SHOWN THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER PRIOR TO INSTALLING SYSTEMS.
17. THE CONTRACTOR SHALL COORDINATE ELECTRICAL, GAS AND COMMUNICATION SERVICES WITH PRIVATE UTILITY COMPANIES FOR FINAL DEMARCATIONS AND DETAILS. PRIVATE UTILITIES SHOWN HERE ARE FOR DESIGN INTENT ONLY.
18. THE FINISHED FLOOR ELEVATIONS (FFE) IS TO BE HIGHER THAN ANY ADJACENT PUBLIC SIDEWALK.
19. THE CONTRACTOR SHALL PERFORM TEST PITS TO DETERMINE EXACT LOCATION OF EXISTING WATER MAIN. THE 8" MAIN SHALL BE EXTENDED APPROX. 65' WITH NEW FIRE HYDRANT. ANY CHANGES MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO COMMENCING WITH THE WORK.

DRAINAGE CALCULATIONS & LAYOUT NOTES:
IMPERVIOUS SURFACES:
7,400(Roof area) + 3,421(paved) = 10,821 SF

DESIGN STORMS: 1" – OVER IMPERVIOUS AREA
STORAGE REQUIRED: (10,821x1"/12) = 902 CF

PROP. STORAGE:
INFILTRATION SYSTEM #1
4 Chambers= 30.92' Base Length
2 Rows = 11.00' Base Width, 3.50' Field Height
8 Chambers 30.0% Voids = 245.2 cf Stone Storage
Chamber Storage + Stone Storage = 610.3 CF

INFILTRATION SYSTEM #2
3 Chambers = Base Length
2 Rows = 11.00' Base Width, 4.00' Field Height
6 Chambers 30.0% Voids
Chamber Storage + Stone Storage = 526.4 CF

TOTAL STORAGE 902+526=1428 CF
NOTE: PROPOSED STORM DRAINAGE SYSTEM COMPLETELY STORES THE 1" (24hr) STORM EVENT.

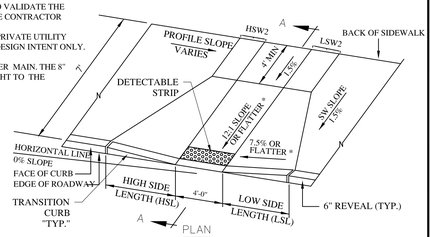
WARD-PARCEL: 18-01553000 LAND USE CODE: A
WATER ACCOUNT: NEW Meter: NEW

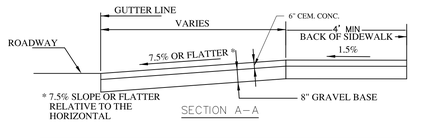
BOSTON WATER AND SEWER COMMISSION
Reviewed and approved as to proposed connections(s) to existing Water and Sewer facilities as shown, for Issue of Building Permit Only. Additional Permits must be obtained from BWSC prior to Connection to BWSC facilities. Site Plans are valid for a period of one (1) year from date of approval.

JOHN P. SULLIVAN, JR. P.E.
Chief Engineer

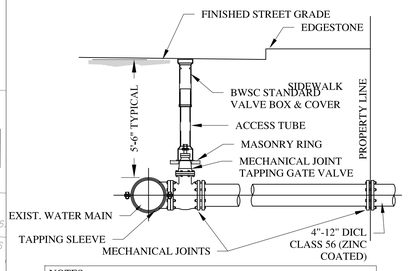
BOSTON WATER AND SEWER COMMISSION
Cross Connection
Approval: _____ Date: _____
Discharge Enforcement
Approval: _____ Date: _____

RESERVED FOR BWSC USE ONLY
PEAK WATER DEMAND = 81 GPM
SEWER: 7,150 GPD (65 BED x 110 GPD)

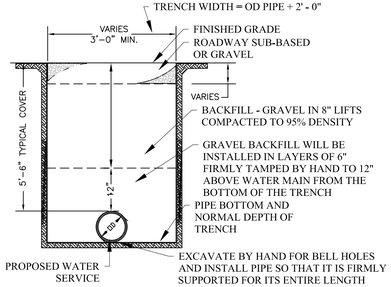




CEMENT CONC. WHEELCHAIR RAMP
NOT TO SCALE



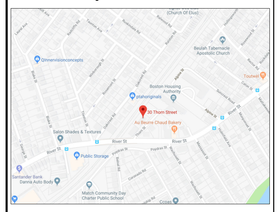
NOTES:
- CONCRETE THRUST BLOCK TO BE USED ONLY WHERE IT WILL BEAR ON UNDISTURBED EARTH.
- USE RESTRAINED JOINT FITTINGS OR TIE RODS WHERE CONCRETE THRUST BLOCK IS UNACCEPTABLE.
- SIZE OF BLOCK OR MEGALUG TO BE DESIGNED FOR SPECIFIC CONDITIONS.



WATER PIPE EXCAVATION IN SOIL
NOT TO SCALE

Civil Site Plan

30 Thorn St.
Hyde Park, MA



ALL WATER, SEWER AND DRAIN SERVICE CONNECTIONS TO BOSTON WATER AND SEWER COMMISSION FACILITIES MUST BE PERFORMED BY A BONDED DRAIN LAYER LICENSED BY THE BOSTON WATER AND SEWER COMMISSION.

MATERIALS:
DRAIN LINES SHALL BE 6" SDR35 w/ 2' MIN. COVER OVER PIPE. 1% SLOPE MIN.
SEWER SERVICE: 6" (SDR 35) 2% SLOPE MIN.
WATER MAIN: 8" DICL (MINIMUM OF 5.5 FEET BELOW GRADE) ZINC COATED
WATER DOMESTIC: 2" COPPER (TYPE K) (MINIMUM OF 5.5 FEET BELOW GRADE)
FIRE: 6" DICL (MINIMUM OF 5.5 FEET BELOW GRADE) ZINC COATED

INSPECTION CHECK LIST

1. 2" DOMESTIC WATER
INSPECTOR: _____ DATE: _____
2. 6" FIRE SERVICE
INSPECTOR: _____ DATE: _____
3. 6" SEWER LATERAL
INSPECTOR: _____ DATE: _____
4. SEWER DYE TEST
INSPECTOR: _____ DATE: _____
5. SEWER MH
INSPECTOR: _____ DATE: _____
6. 6" DRAIN LATERAL
INSPECTOR: _____ DATE: _____
7. DRAIN DYE TEST
INSPECTOR: _____ DATE: _____
8. INFILTRATION SYSTEM #1
INSPECTOR: _____ DATE: _____
9. INFILTRATION SYSTEM #2
INSPECTOR: _____ DATE: _____
10. MINI DMH #1
INSPECTOR: _____ DATE: _____
11. MINI DMH #2
INSPECTOR: _____ DATE: _____
12. TRENCH DRAIN
INSPECTOR: _____ DATE: _____
13. DO NOT DUMP PLAQUE
INSPECTOR: _____ DATE: _____
14. OIL/GAS SEPARATOR
INSPECTOR: _____ DATE: _____
15. FLOOR DRAINS
INSPECTOR: _____ DATE: _____
16. FIRE HYDRANT
INSPECTOR: _____ DATE: _____
17. 8" WATER MAIN (65 LF)
INSPECTOR: _____ DATE: _____
NOTE: 5 DAYS PER DIEM

AS-BUILT PREPARATION FEE IS REQUIRED

REFERENCES:
SURVEY: Feldman Land Surveyors
ARCHITECT: Embare Studio
APPLICANT: OLEG URITSKY, 617.968.6810
ONE BEACON ST., 15th FLOOR, BOSTON, MA 02108

No.	Date	Comment
#1	7-19-19	BWSC Comments
#2	8-07-19	BWSC Comments
#3	5-20-25	BWSC Easement
#4	9-29-25	BWSC Comments & Update Easement

Columbia Design Group, LLC
Consulting Engineers
14 Upham Avenue
Boston, MA 02125
(T) 617.506.1474 (F) 617.507.7740

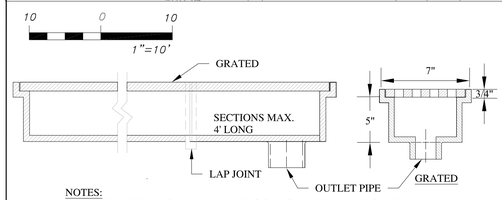
BWSC SITE PLAN
#25217

Date:	Scale:
May 08, 2019	1" = 10'
Project No.: 2019-113	Drawing by: PG

C-1
Sheet 1 of 2

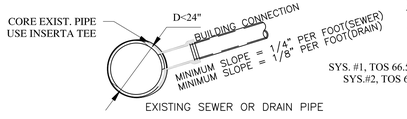


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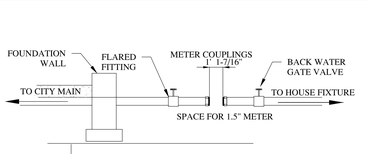


NOTES:
1. HEAVY DUTY
2. CLOSED ENDS
STANDARD 4" PVC SDR OUTLET AT END OF DRAIN
NEENAH R-499-A2 SERIES OR APPROVED EQUIVALENT

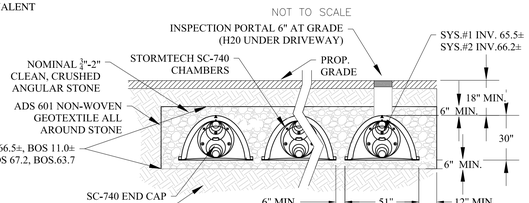
TRENCH DRAIN w/ GRATED FRAME
NOT TO SCALE



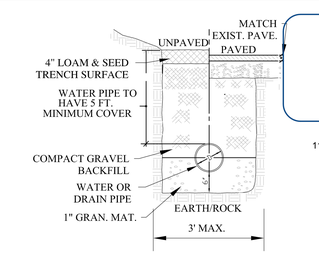
SEWER OR DRAIN SERVICE TO EXISTING MAIN – INSERTA TEE
NOT TO SCALE



1.5" METER SPACING
NOT TO SCALE



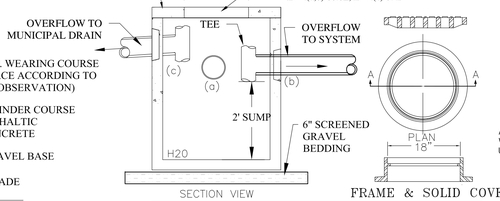
STORMTECH SC 740 SECTION (H–20 LOADING)
NOT TO SCALE



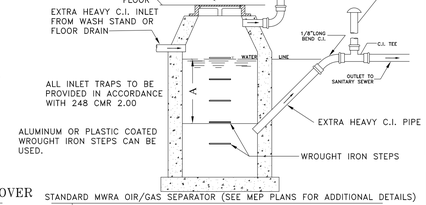
PIPE EXCAVATION & TRENCH PATCH
NOT TO SCALE

DS

APPROVED
DESIGN REVIEW
BOSTON REDEVELOPMENT AUTHORITY
SIGNATURE
DATE
'ICAL WATER PIPE CONNECTION w/ 'LEEVE & GATE VALVE
11/06/2025



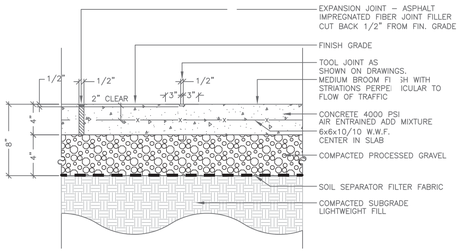
PRECAST CONCRETE MINI MH
NOT TO SCALE



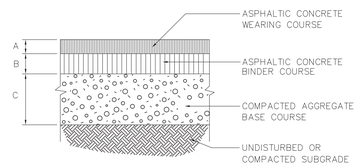
STANDARD MWRA OIR/GAS SEPARATOR (SEE MEP PLANS FOR ADDITIONAL DETAILS)

APPROVED OIL & GREASE SEPARATOR DETAIL
NOT TO SCALE

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



1 Scored Concrete Walk Section



	THICKNESS (INCHES)	
	WALKS	ROADS & DRIVES
A	N/A	1 1/2"
B	N/A	2 1/2"
C	N/A	8"

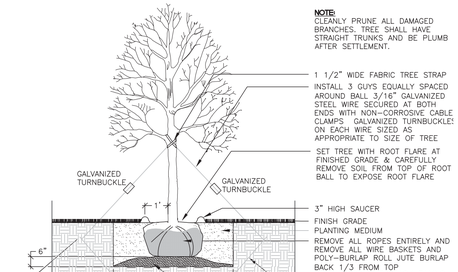
2 Asphalt Drive Section

3 Bike Rack



NOTES:
1. DETECTABLE WARNING PANELS SHALL BE PERMANENTLY APPLIED TO THE PEDESTRIAN RAMP.
2. DETECTABLE WARNING PANELS SHALL MATCH THE WIDTH OF THE PEDESTRIAN RAMP.
3. DETECTABLE WARNING PANELS SHALL BE CAST IRON.
4. DETECTABLE WARNING PANELS SHALL BE FEDERAL YELLOW, CONFORMING TO THE REQUIREMENTS OF FEDERAL NO. 33538, UNLESS OTHERWISE SPECIFIED BY PWD. IF BRICK RED COLOR IS REQUESTED BY PWD, IT SHALL CONFORM WITH RAL 2001.
5. DETECTABLE WARNING PANELS SHALL BE INSTALLED PER THE MANUFACTURERER'S RECOMMENDATIONS.

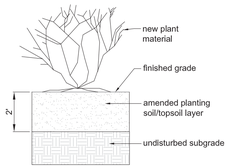
4 Detectable Warning Panels



NOTE:

1. TREE PIT TO BE A MINIMUM OF 24 SQUARE FEET.
2. PROVIDE 10' LONG X 3" SQ WOODEN STAKES EQUALLY SPACED, 3 PER TREE, 7' EXPOSED. DRIVE STAKES AT AN ANGLE AND DRAW VERTICAL WITH NYLON TREE TIE.
3. CONTRACTOR SHALL PERFORM PERCOLATION TEST ON SUB-GRADE PRIOR TO PLANTING. IF TEST IS NOT PASSING, CONTRACTOR SHALL ADJUST SUB-GRADE ACCORDINGLY.

5 Tree Planting Section



6 Plant Bed Section

DS

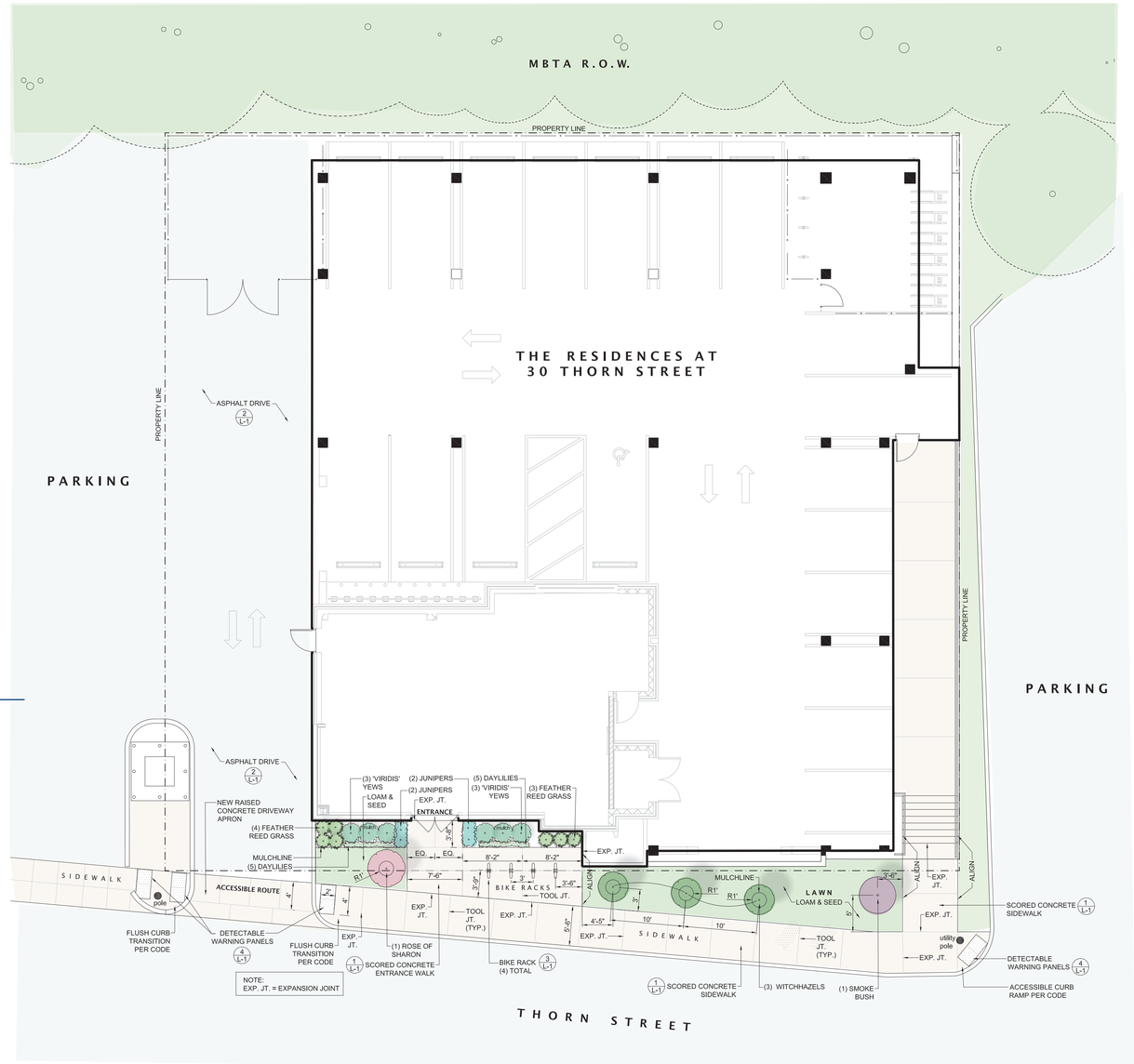
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DESIGN REVIEW
BOSTON REDEVELOPMENT AUTHORITY

SIGNATURE

11/06/2025

1/8"=1'-0"

0' 24'



Plant List

NEW PLANTS

Quantity	Botanical Name	Common Name	Size	Notes
1	Cotinus coggygria 'Royal Purple'	Purple Smoke Bush	4'-5' HT.	B&B
7	Calamagrostis x 'Karl Foerster'	Feather Reed Grass	2"-2 1/2" Caliper	B&B
3	Hamamellis x 'Arnold's Promise'	Arnold's Promise Witchhazel	4'-5' HT.	B&B
10	Hemerocallis x 'Fulva'	Tall Daylily	1 Gallon	
1	Hibiscus syriascus 'Pink'	Pink Rose of Sharon	4'-5' HT.	B&B
4	Juniperus horizontalis 'Blue Chip'	Blue Chip Juniper	3 Gallon	
6	Taxus x 'Viridis'	Viridis Yew	4'-5' HT.	B&B - 'Flushing' variety is an acceptable sub.

Note: Use matched specimens for yews



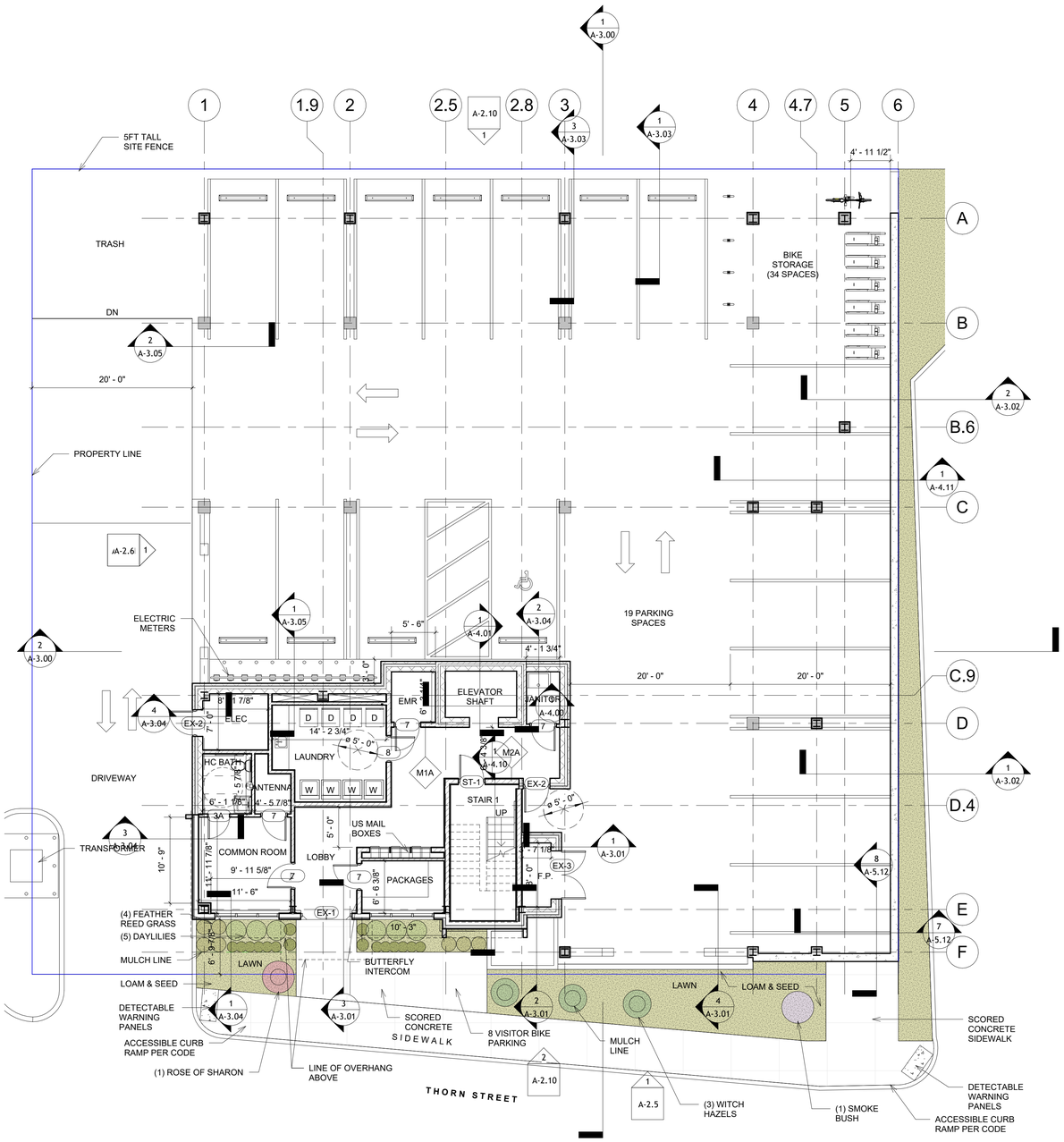
Marc Mazzarelli Associates LLC
Landscape Architecture + Planning
284 Concord Avenue
Cambridge, MA 02138 USA
617-460-7913
www.mmazz.com

30 Thorn Street | Hyde Park, Massachusetts

SITE LANDSCAPE PLAN L-1

July 31, 2025

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



PROPOSED LANDSCAPE PLAN
1/8" = 1'-0"

DS

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DESIGN REVIEW
BOSTON REDEVELOPMENT AUTHORITY
SIGNATURE

11/06/2025

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7700 fax 617-786-7715

No.	Description	Date

Project No: 2025014
Scale: 1/8" = 1'-0"
Date: 11-04-2025
Drawn By: PM DF

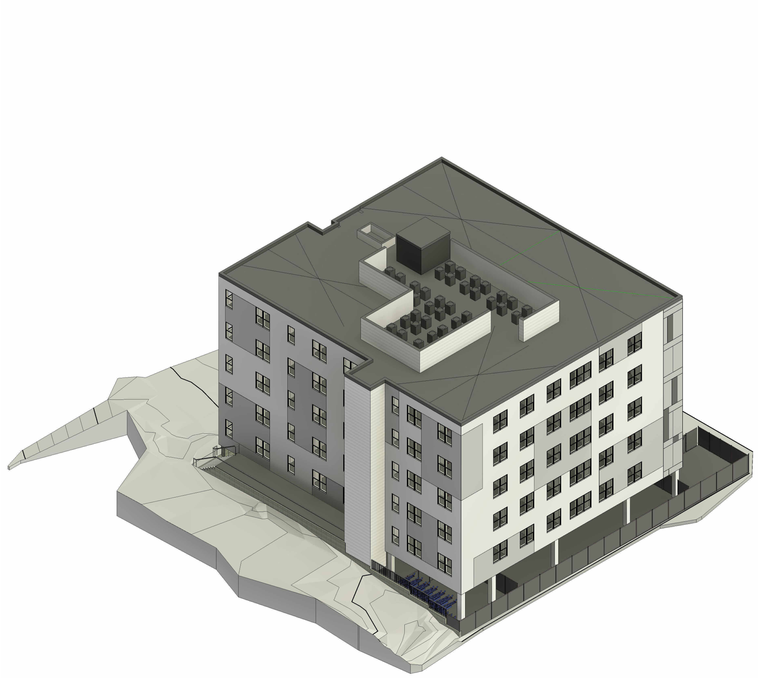
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PROPOSED LANDSCAPE PLAN

Sheet No.

G-1.10

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AXO FROM NORTH
1/8" = 1'-0"



AXO FROM SOUTH
1/4" = 1'-0"

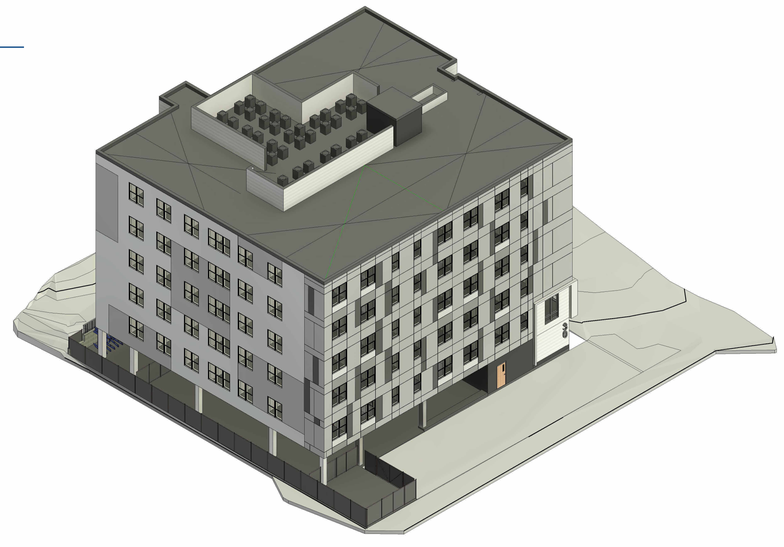
DS

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DESIGN REVIEW
BOSTON REDEVELOPMENT AUTHORITY
SIGNATURE

11/06/2025



AXO FROM EAST
1/4" = 1'-0"



AXO FROM WEST
1/4" = 1'-0"

Location

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617-786-7715 fax

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Drawn By: PM DF

Drawing Name

AXONOMETRIC VIEWS

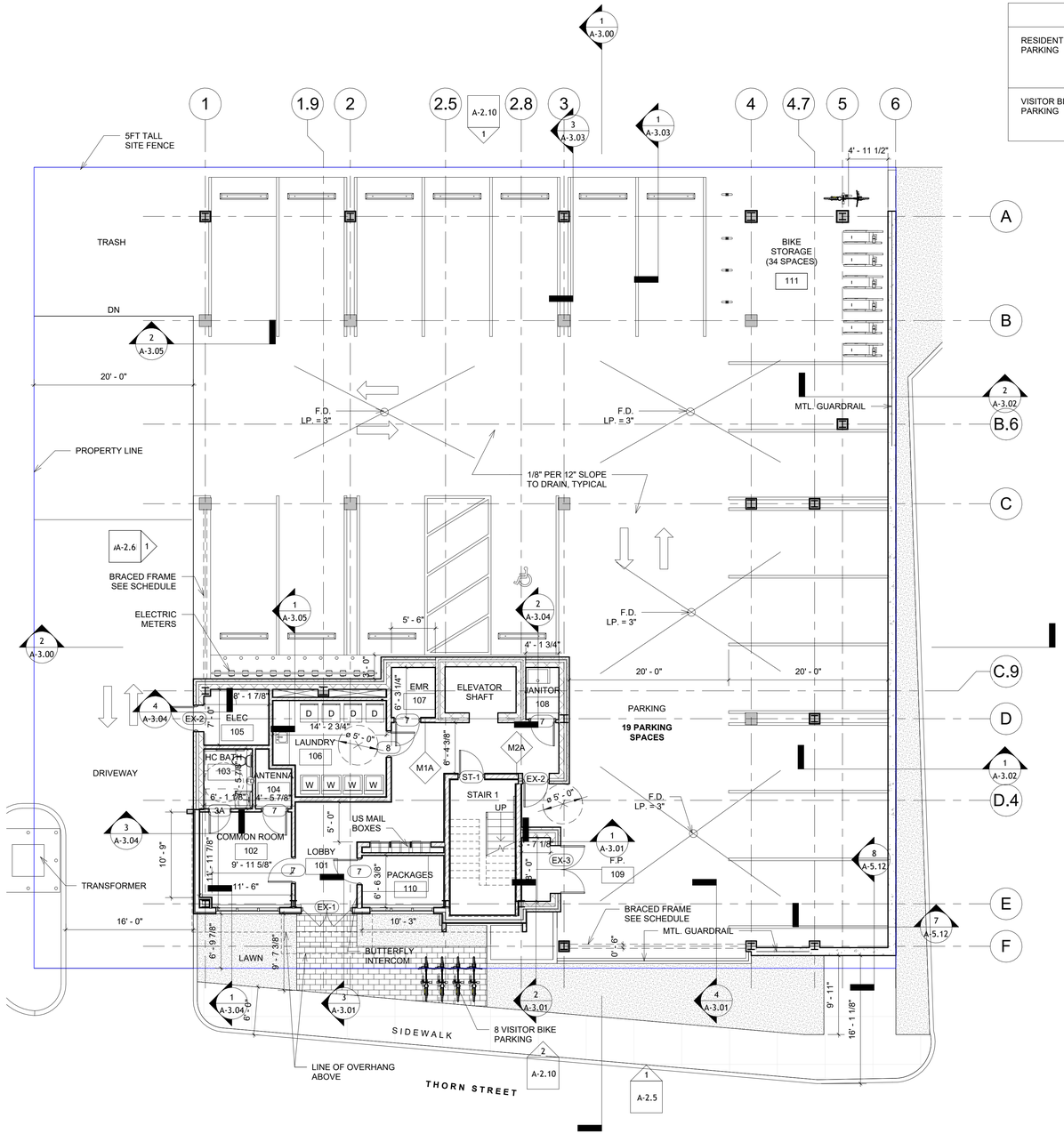
Sheet No.

A-0.04

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A

BIKE PARKING COMPLIANCE

	REQUIRED	PROPOSED
RESIDENT BIKE PARKING	1 SPACE PER UNIT (40 SPACES) - 25% MIN. ON-GROUND SPACES (10 SPACES) - 5% EXTRA-WIDE SPACES (2 SPACES)	34 SPACES - 10 ON-GROUND (25%) - 2 EXTRA-WIDE (5%) - 24 TWO-TIER SPACES
VISITOR BIKE PARKING	1 SPACE PER 5 UNITS (8 SPACES)	8 SPACES (LOCATED AT THE EXTERIOR OF THE BUILDING)



PROPOSED GROUND FLOOR
1/8" = 1'-0"

DS
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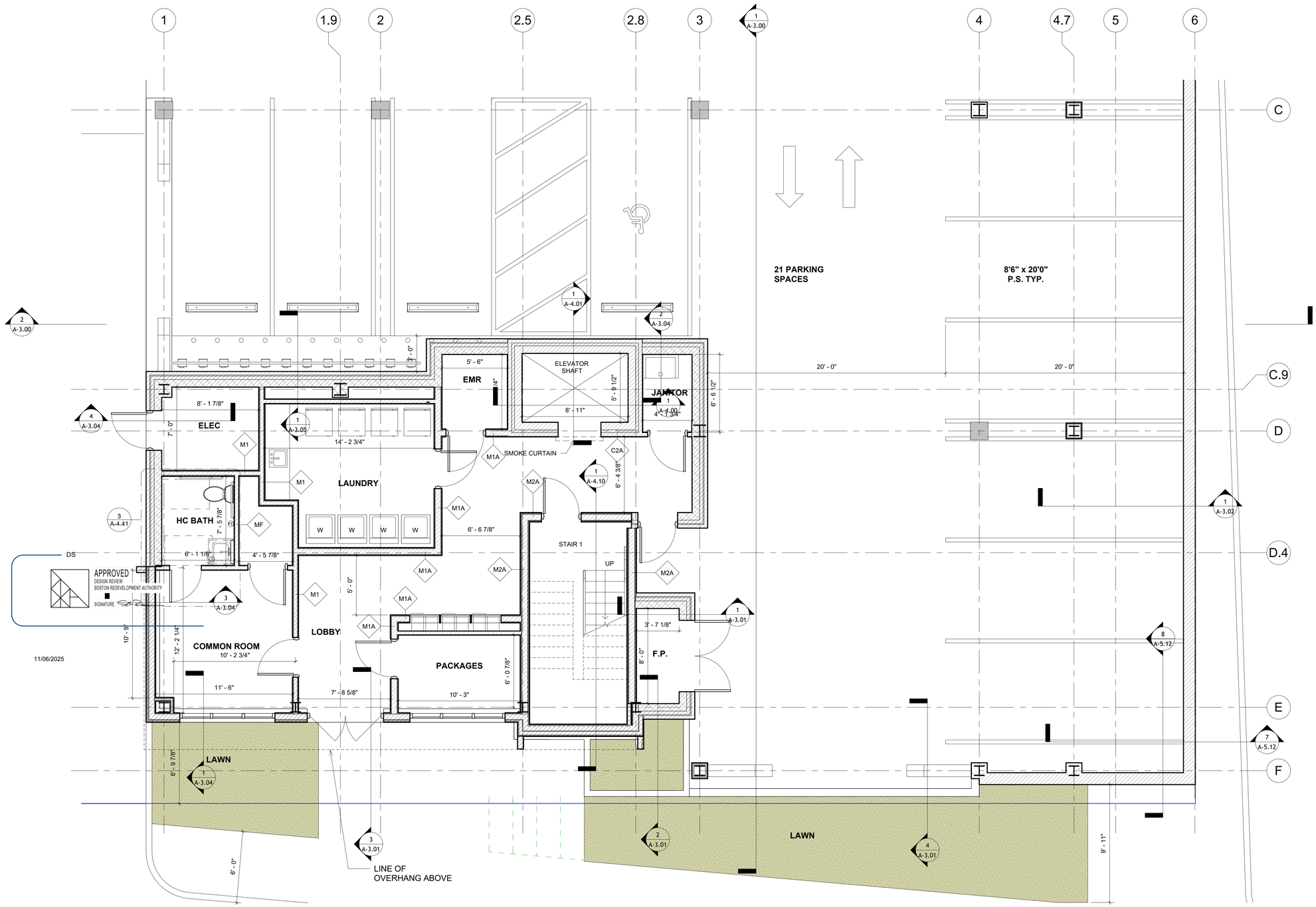
Drawing Name

PROPOSED GROUND FLOOR PLAN

Sheet No.

A-1.10

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



ENLARGED GROUND FLOOR - 02
1/4" = 1'-0"

Location

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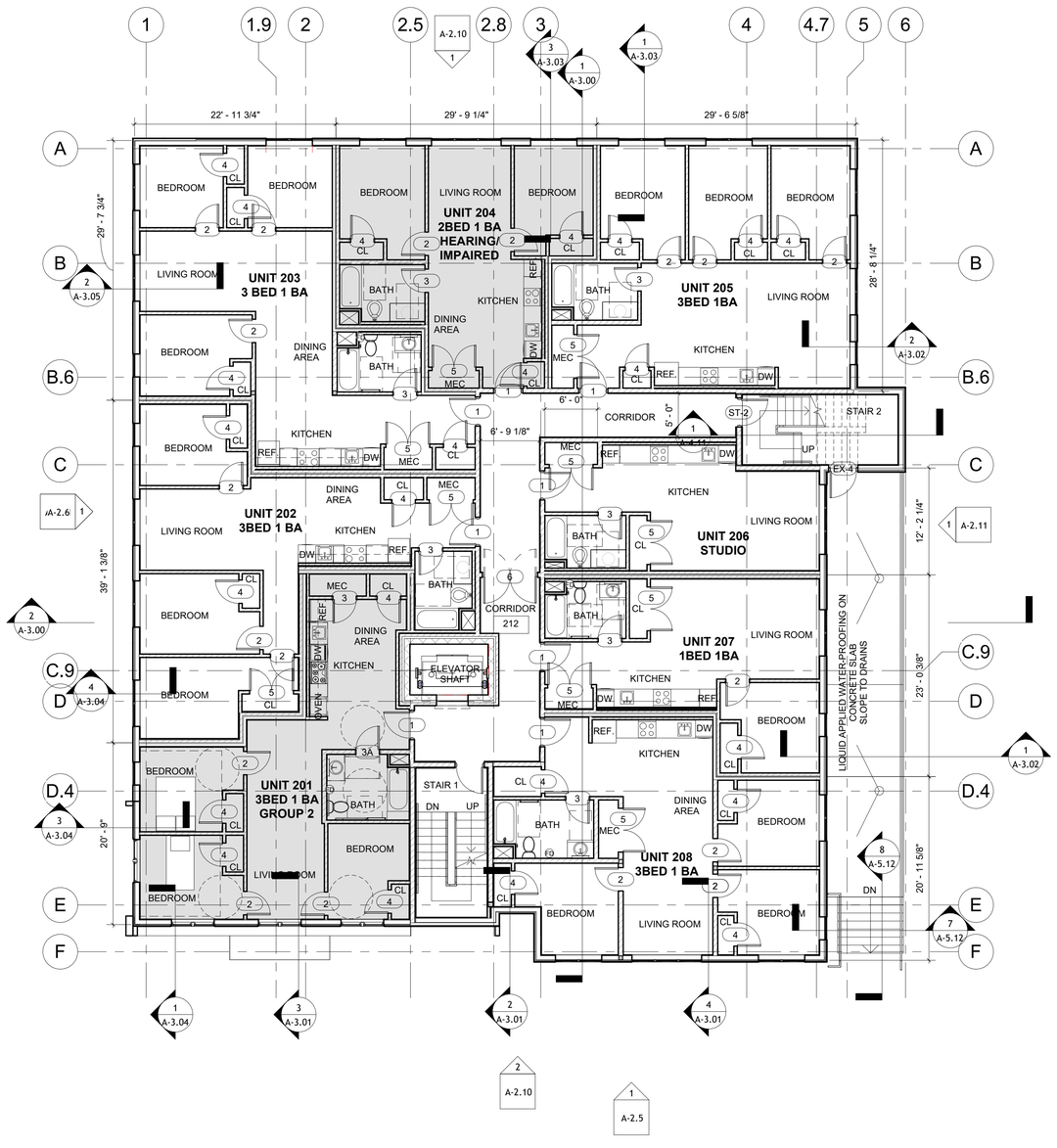
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ENLARGED GROUND FLOOR PLAN - 01

Sheet No.

A-1.10A

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



PROPOSED SECOND FLOOR
1/8" = 1'-0"

DS

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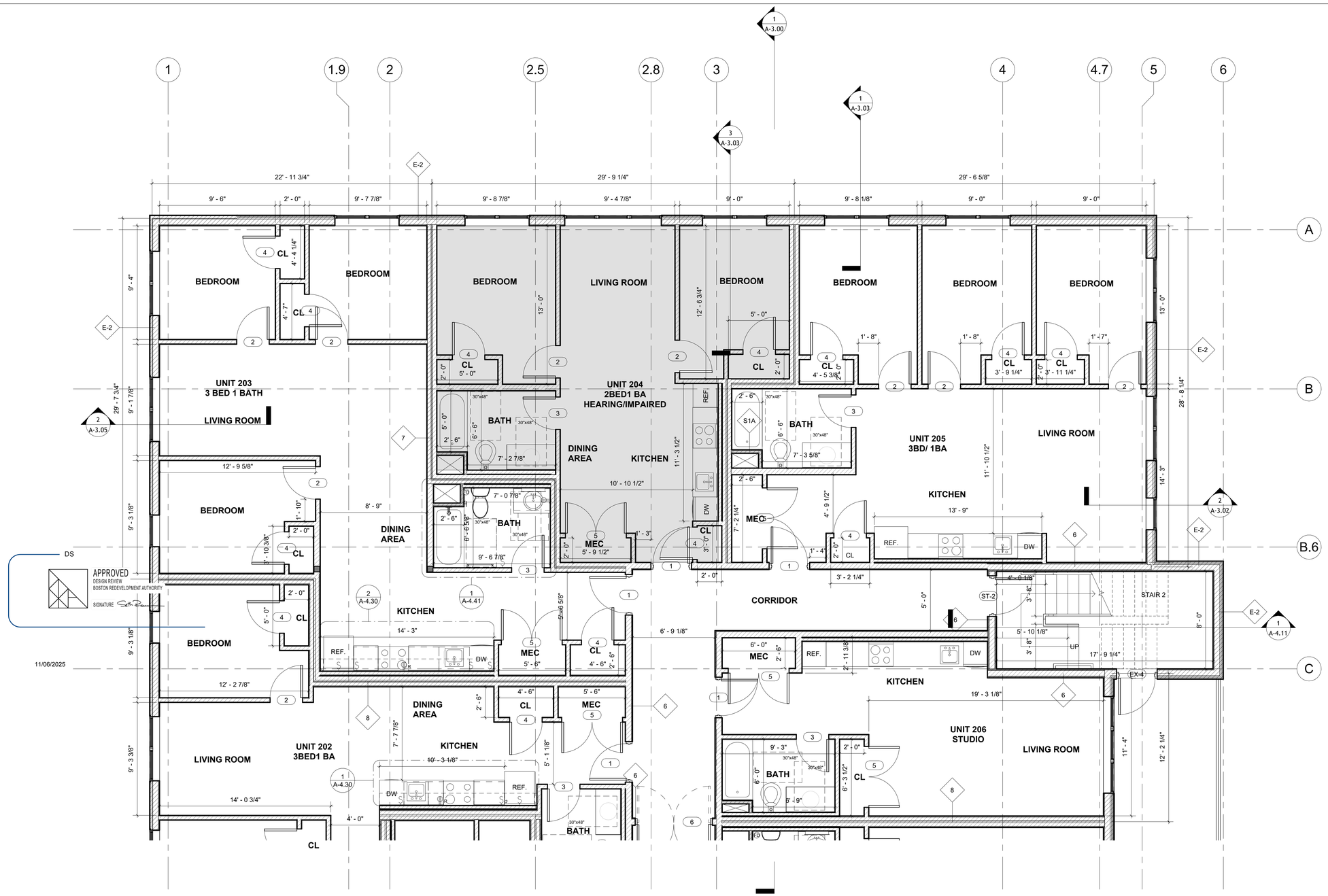
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PROPOSED SECOND FLOOR PLAN

Sheet No.

A-1.11

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



ENLARGED SECOND FLOOR - 01
1/4" = 1'-0"

Location

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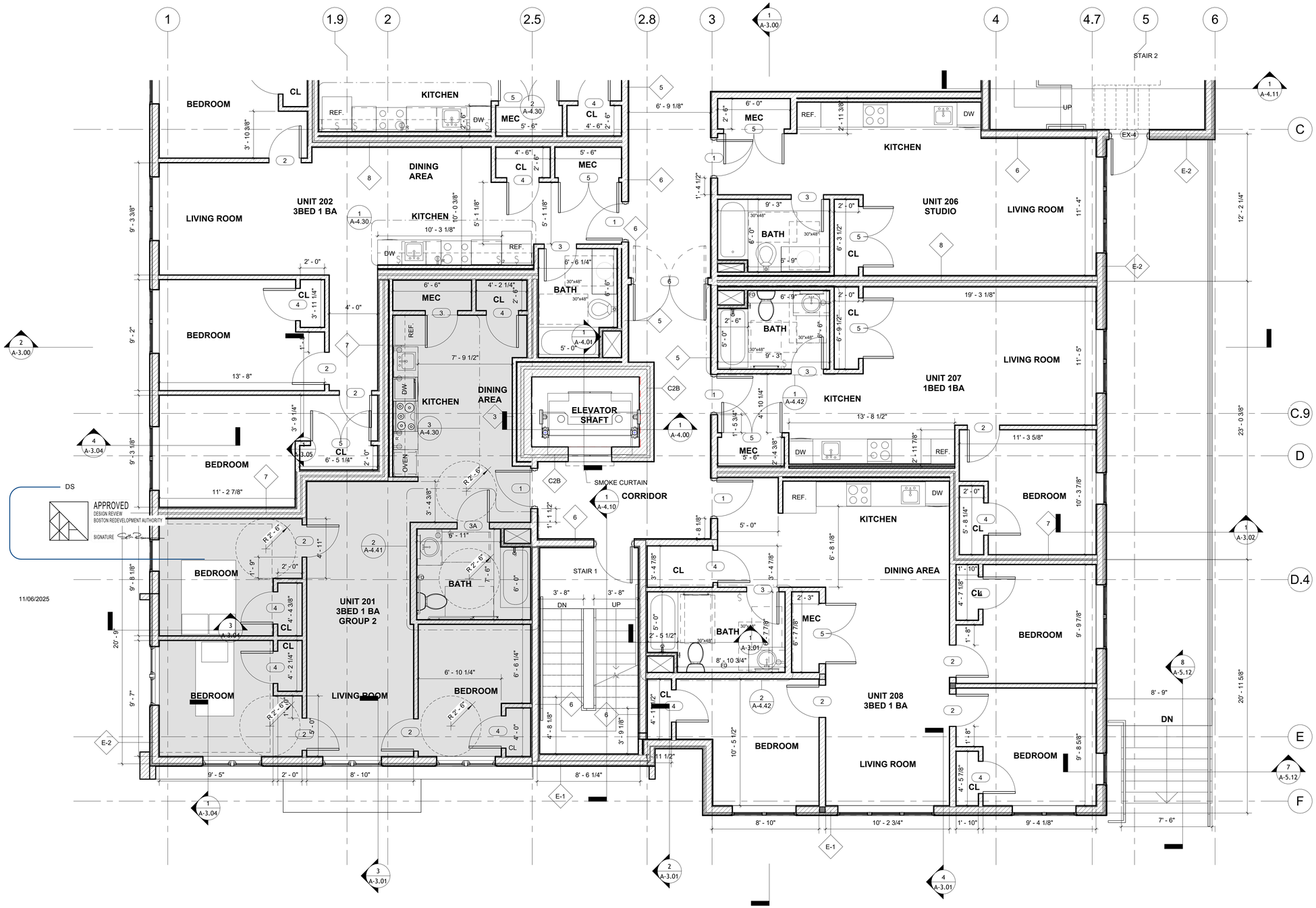
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ENLARGED SECOND FLOOR PLAN - 01

Sheet No.

A-1.11A

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



11/06/2025

ENLARGED SECOND FLOOR - 02
1/4" = 1'-0"

Location

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30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
Tel 617-786-7700 x 27
Fax 617-786-7715

No.	Description	Date

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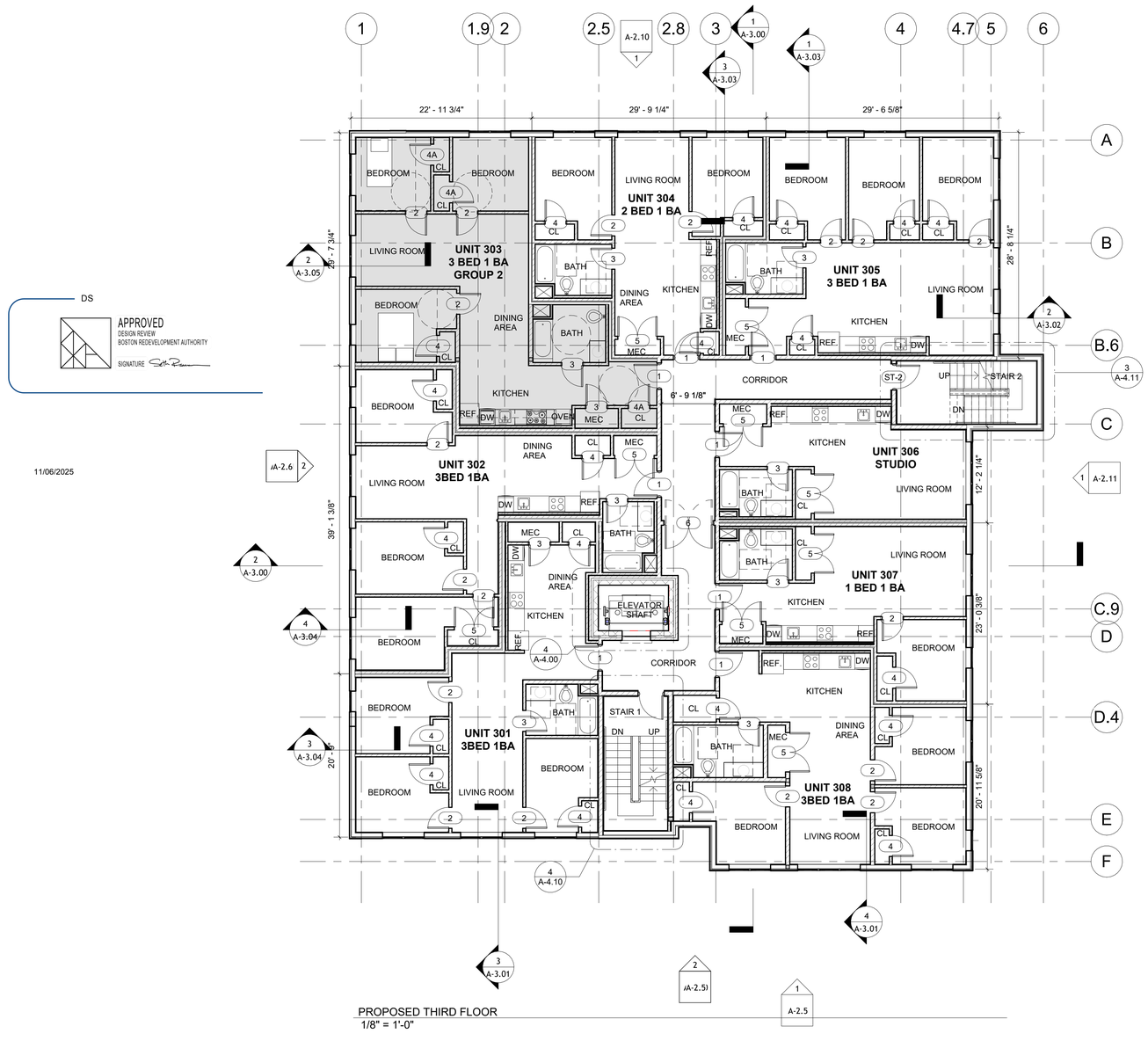
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ENLARGED SECOND FLOOR PLAN - 02

Sheet No.

A-1.11B

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



PROPOSED THIRD FLOOR
1/8" = 1'-0"

DS

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HYDE PARK, MA 02136

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One Billings Road Quincy, MA 02171
617-786-7715 Fax

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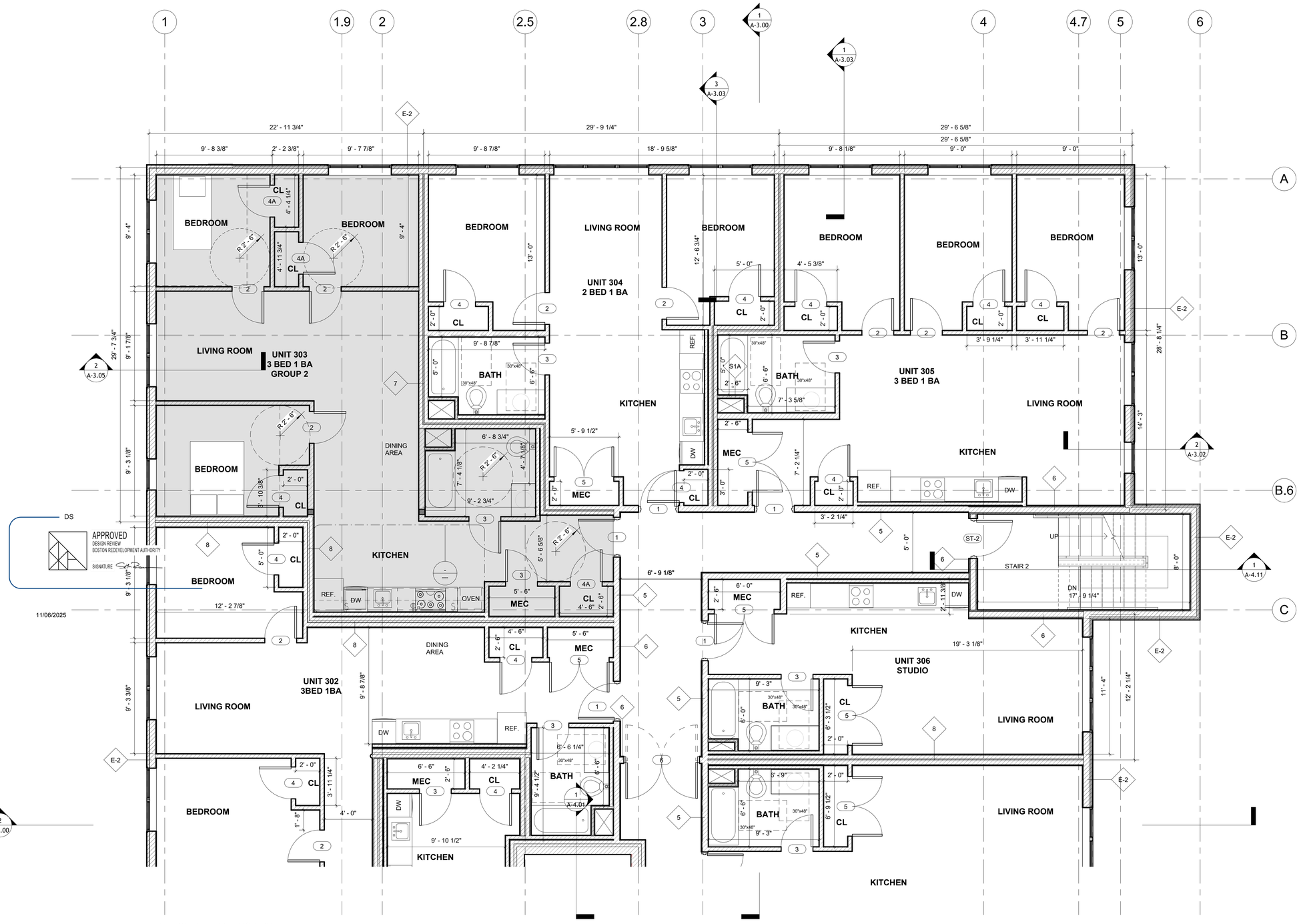
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PROPOSED THIRD FLOOR PLAN

Sheet No.

A-1.12

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ENLARGED THIRD FLOOR - 01
1/4" = 1'-0"

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Location

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7700 Fax 617-786-7715

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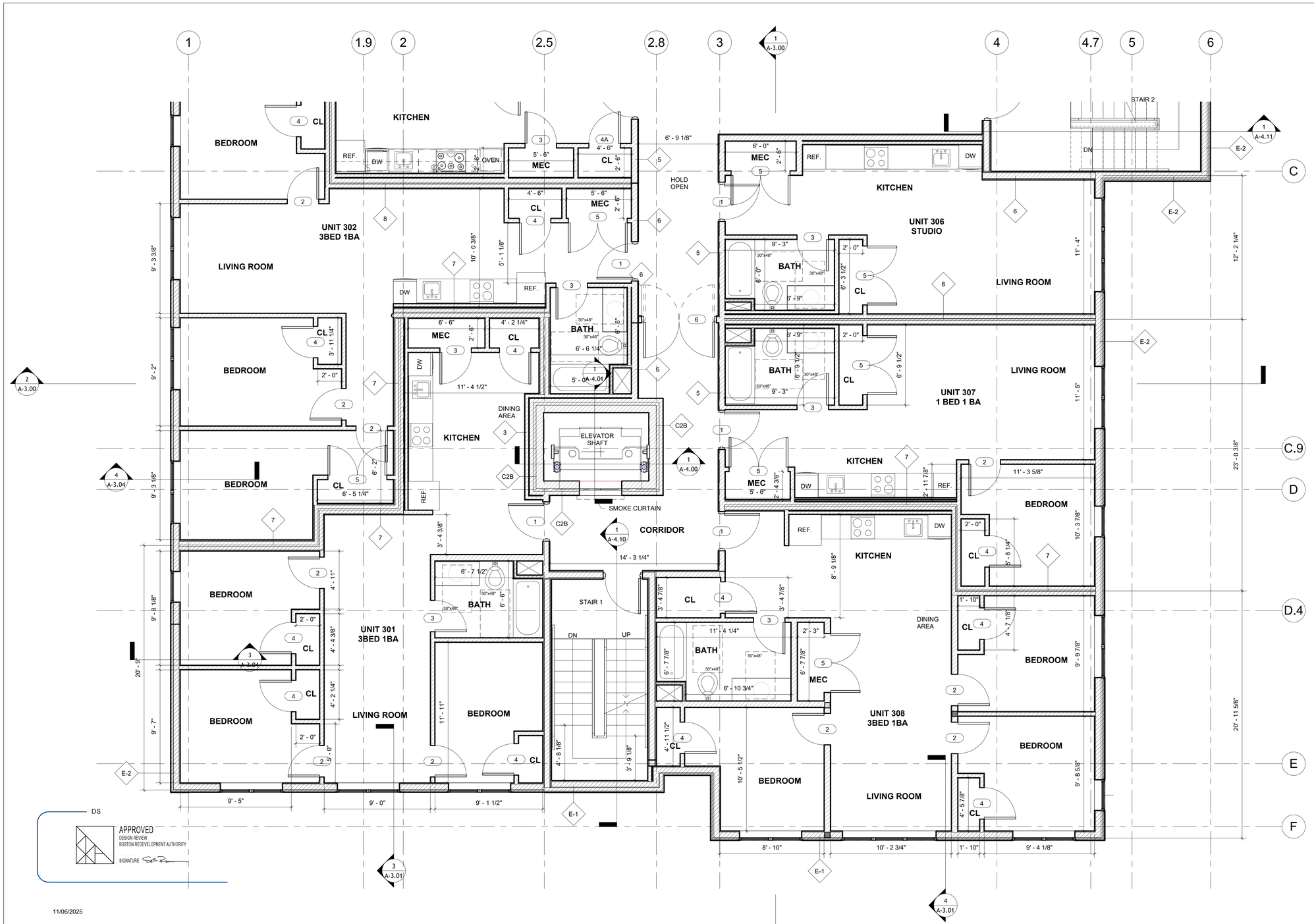
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ENLARGED THIRD FLOOR PLAN - 01

Sheet No.

A-1.12A

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



ENLARGED THIRD FLOOR - 02
1/4" = 1'-0"

Location

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One Billings Road Quincy, MA 02171
617-786-7715 Fax

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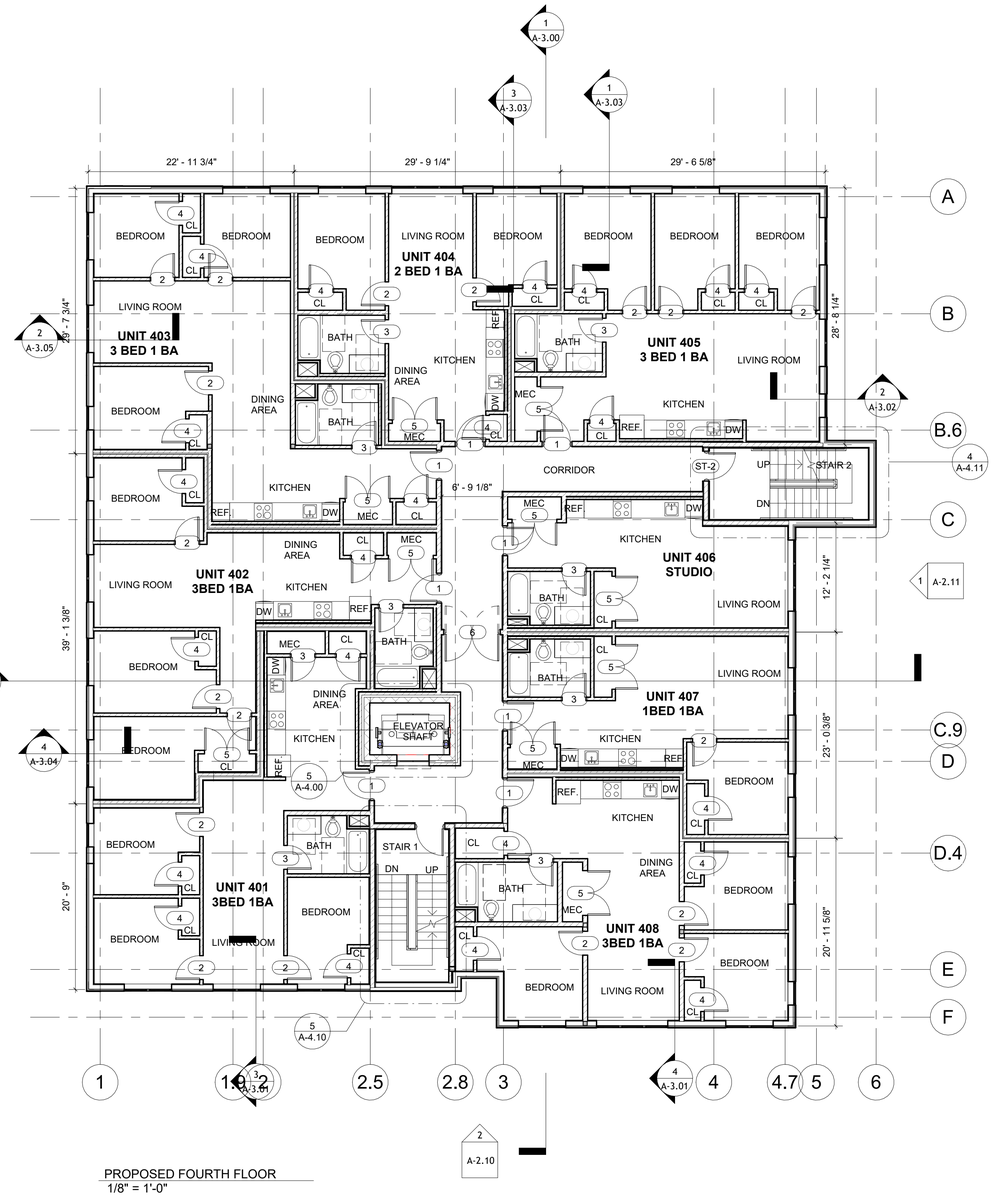
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ENLARGED THIRD FLOOR PLAN - 02

Sheet No.

A-1.12B

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PROPOSED FOURTH FLOOR
1/8" = 1'-0"

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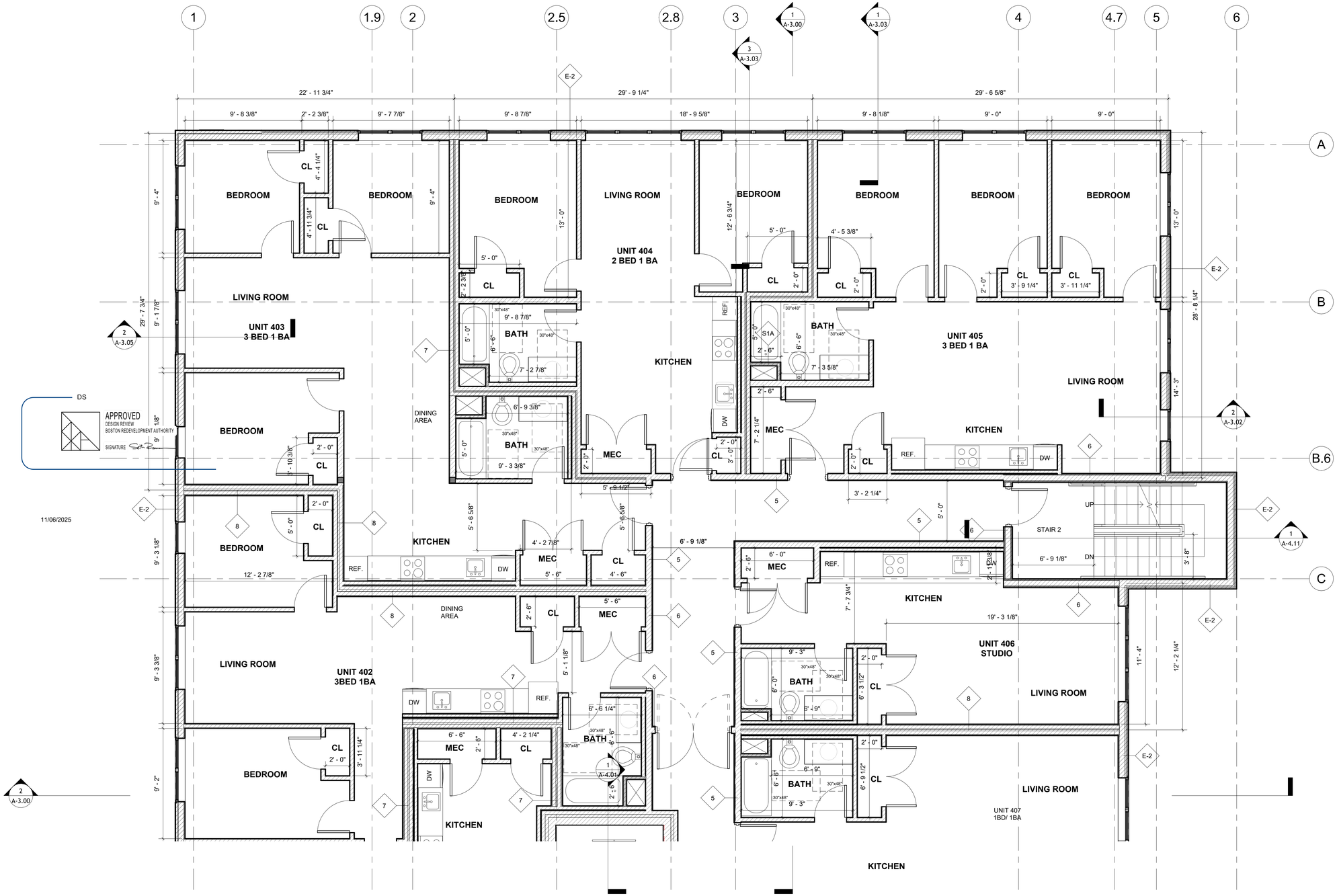
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PROPOSED FOURTH FLOOR PLAN

Sheet No.

A-1.13

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ENLARGED FOURTH FLOOR - 01
1/4" = 1'-0"

Location

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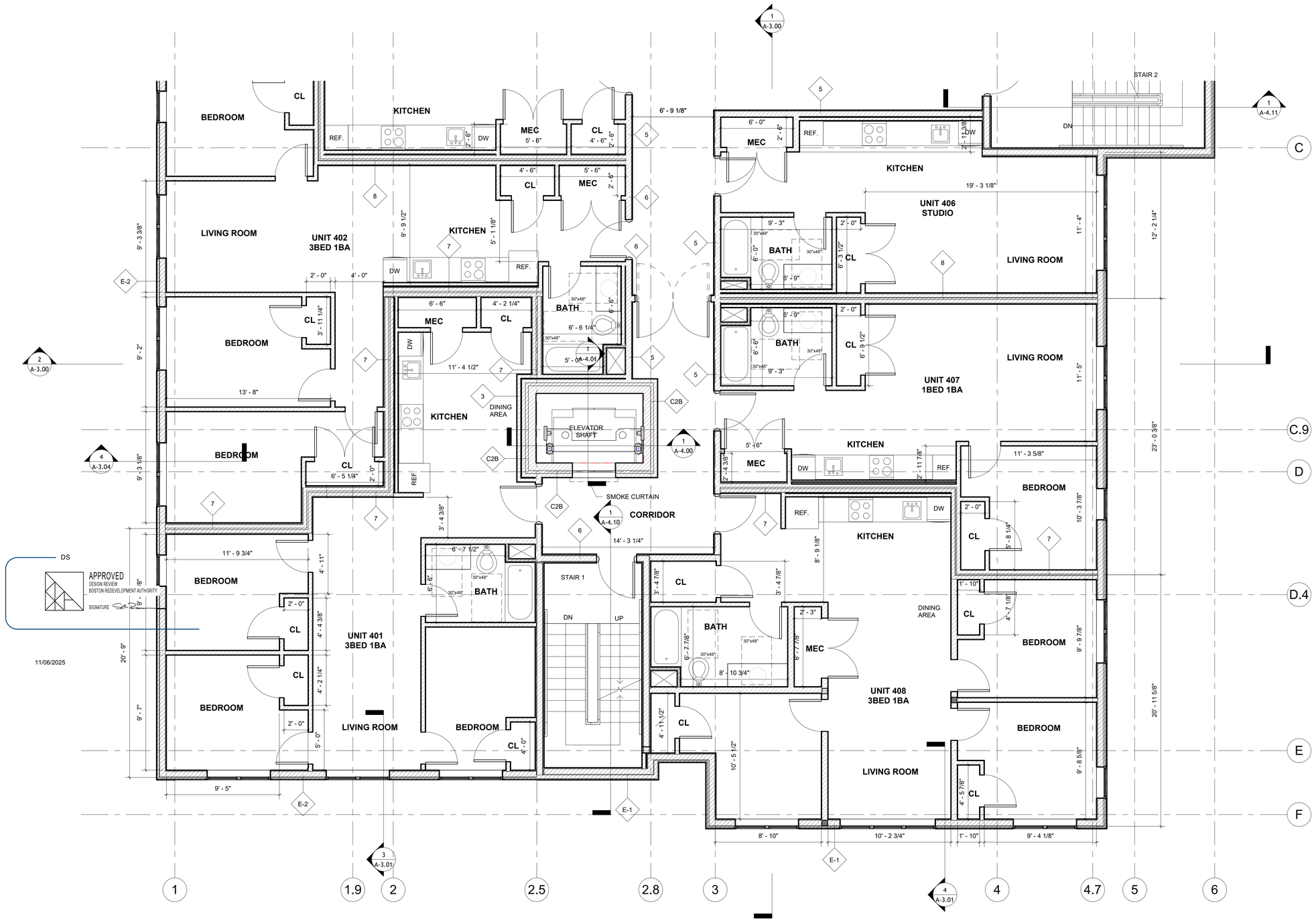
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ENLARGED FOURTH FLOOR PLAN - 01

Sheet No.

A-1.13A

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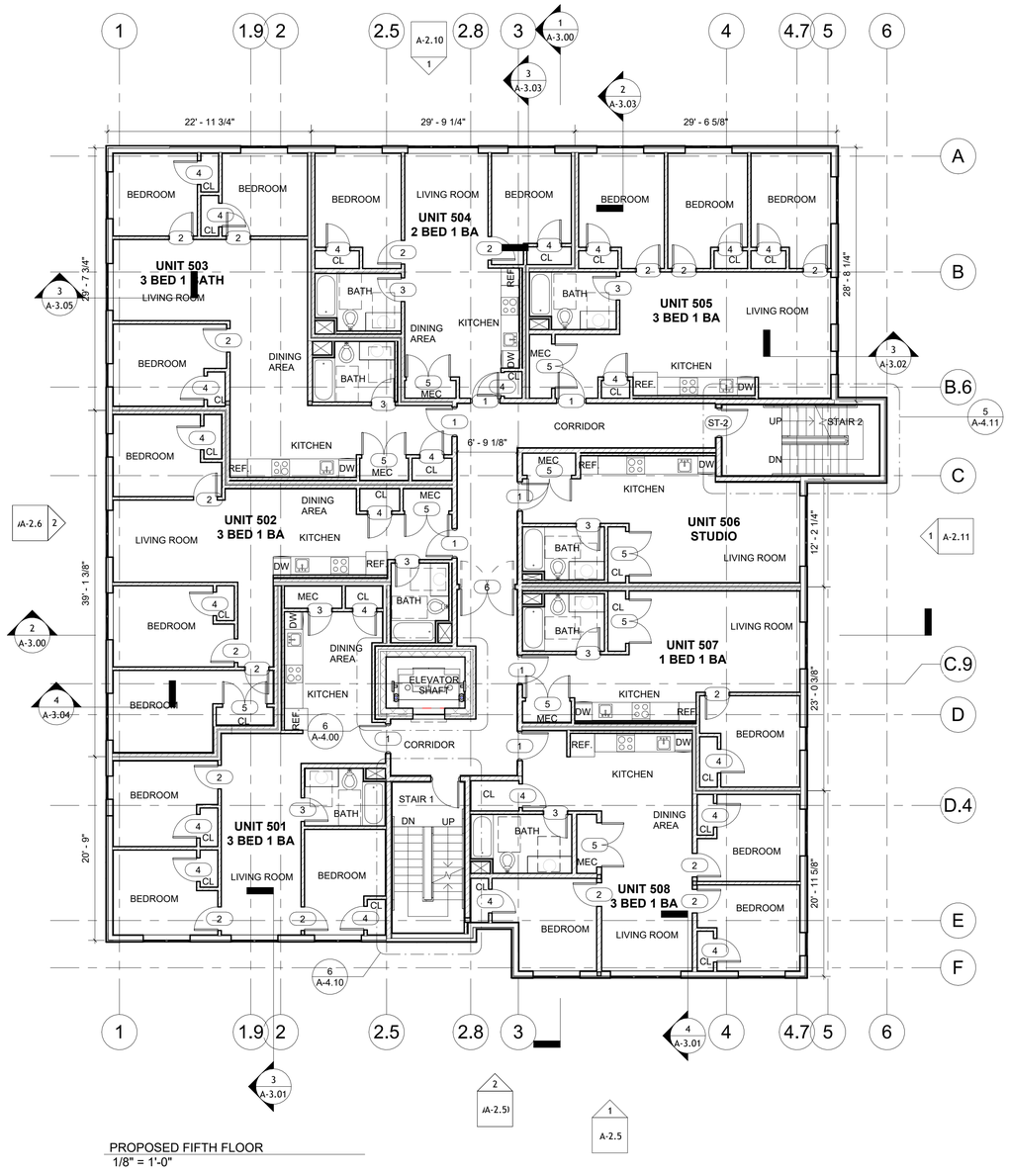
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ENLARGED FOURTH FLOOR PLAN - 02

Sheet No.

A-1.13B

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



PROPOSED FIFTH FLOOR
1/8" = 1'-0"

DS

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11/06/2025

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617-786-7715
fax

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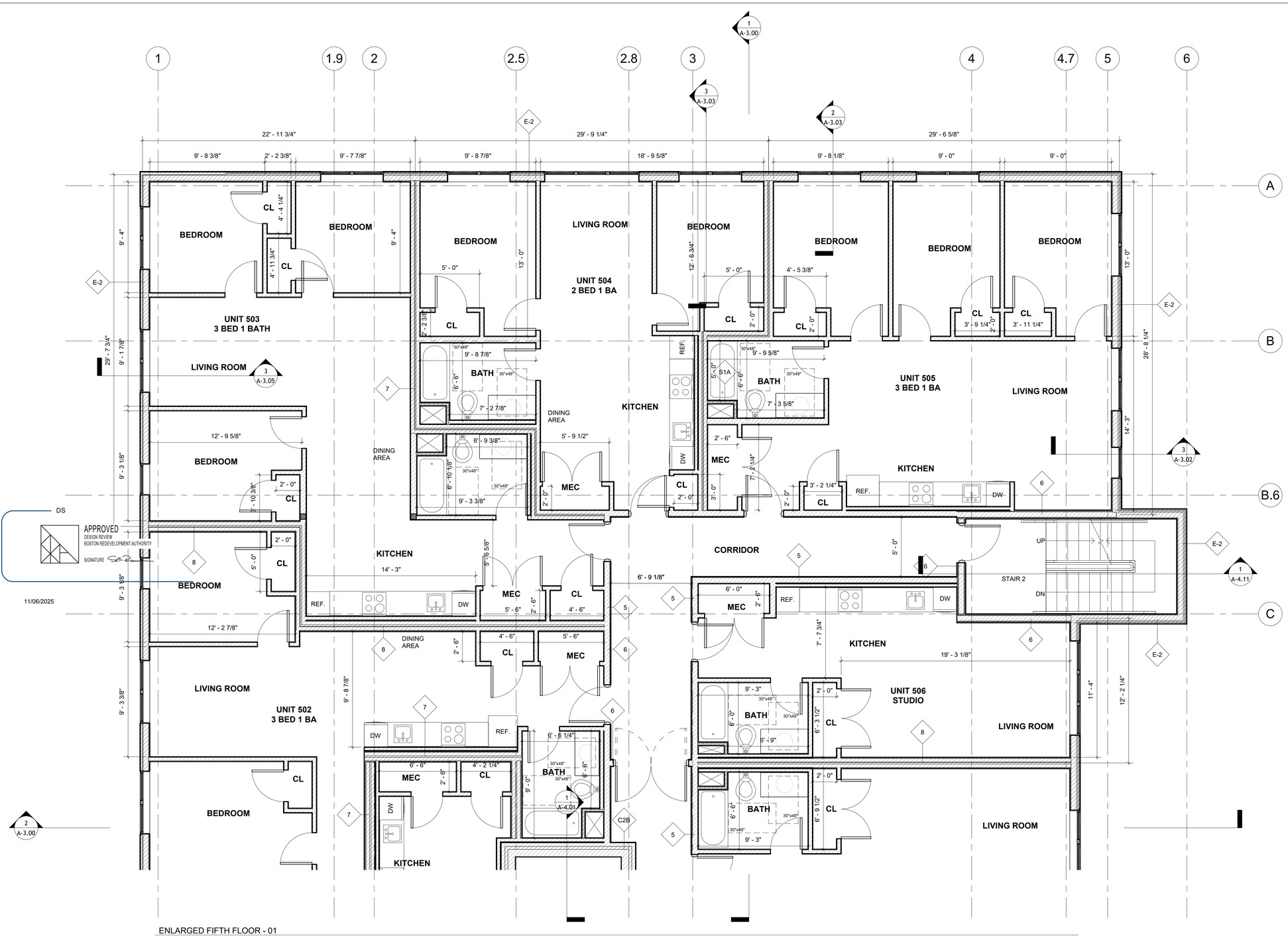
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PROPOSED FIFTH FLOOR PLAN

Sheet No.

A-1.14

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



ENLARGED FIFTH FLOOR - 01
1/4" = 1'-0"

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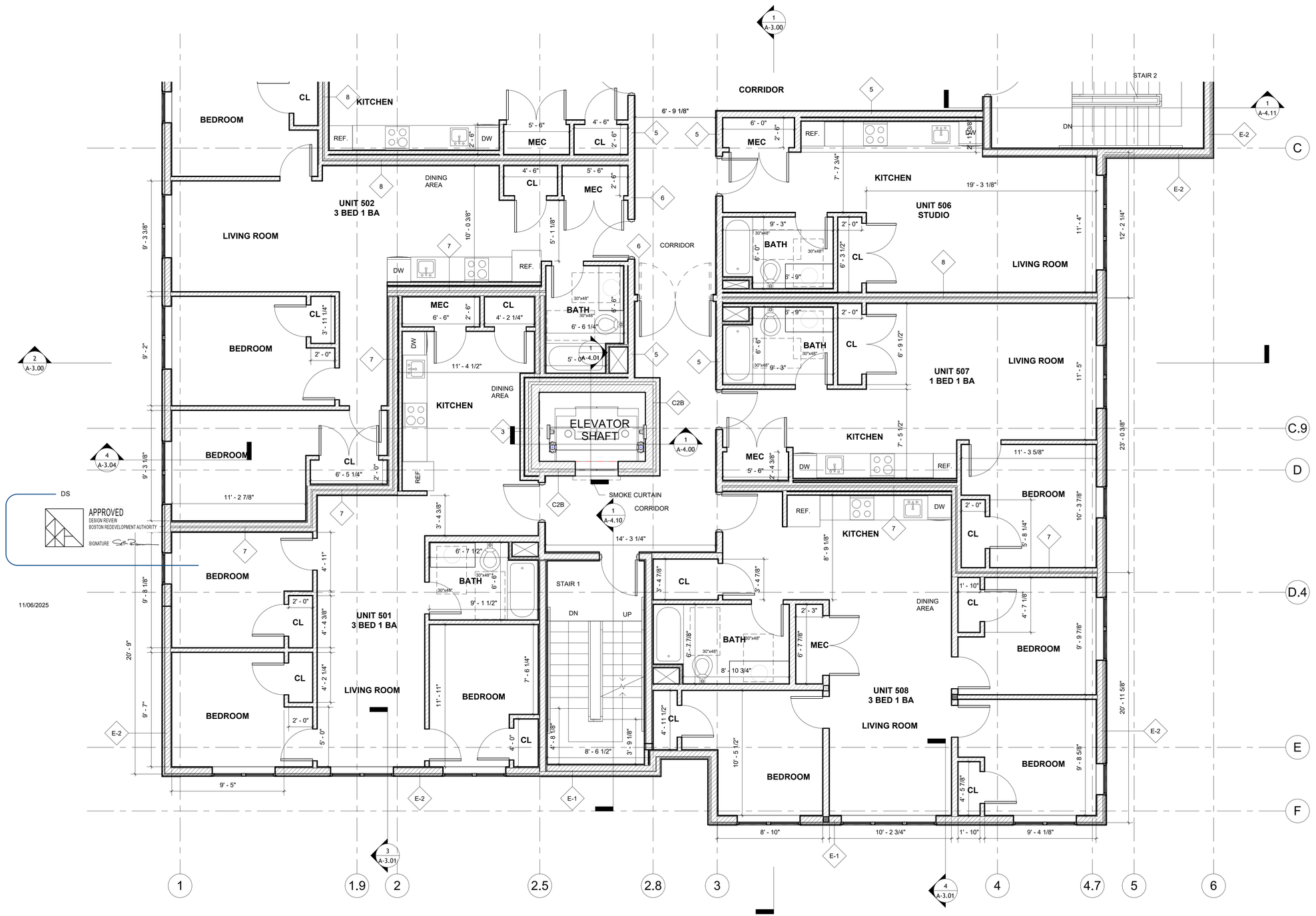
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ENLARGED FIFTH FLOOR PLAN - 01

Sheet No.

A-1.14A

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



ENLARGED FIFTH FLOOR - 02
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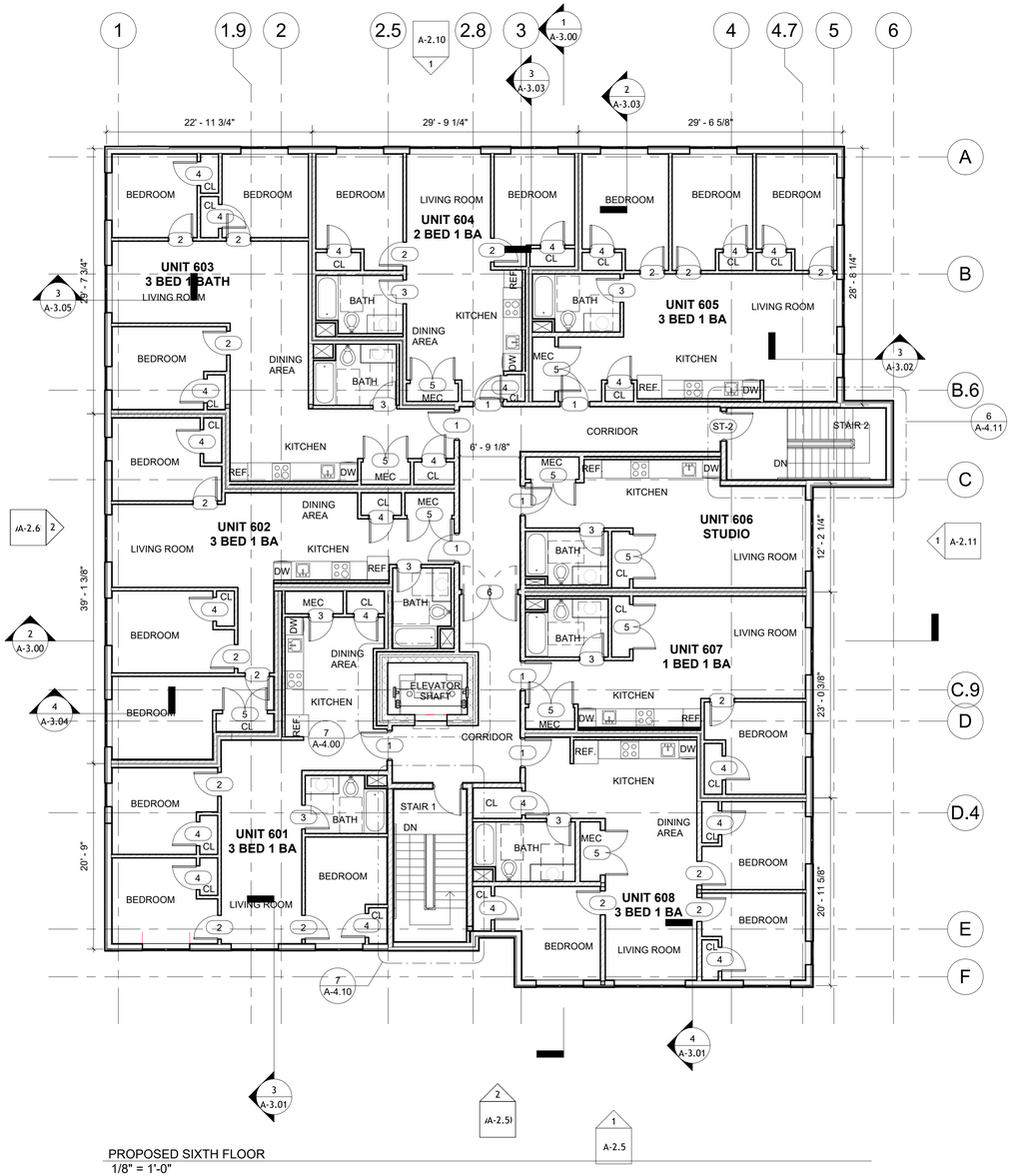
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ENLARGED FIFTH FLOOR PLAN - 02

Sheet No.

A-1.14B

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



PROPOSED SIXTH FLOOR
1/8" = 1'-0"

DS

APPROVED
DESIGN REVIEW
BOSTON REDEVELOPMENT AUTHORITY
SIGNATURE

11/06/2025

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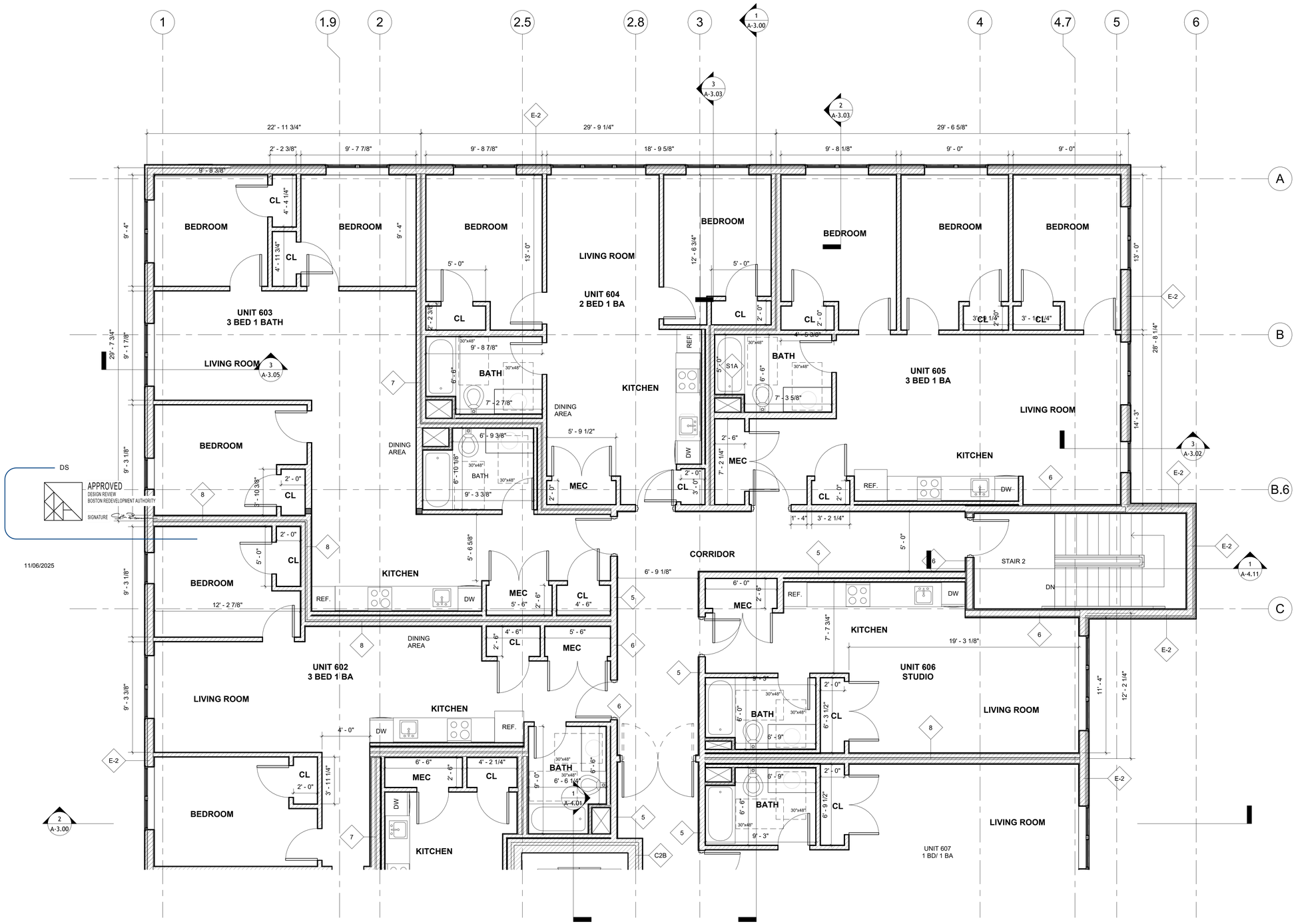
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PROPOSED SIXTH FLOOR PLAN

Sheet No.

A-1.15

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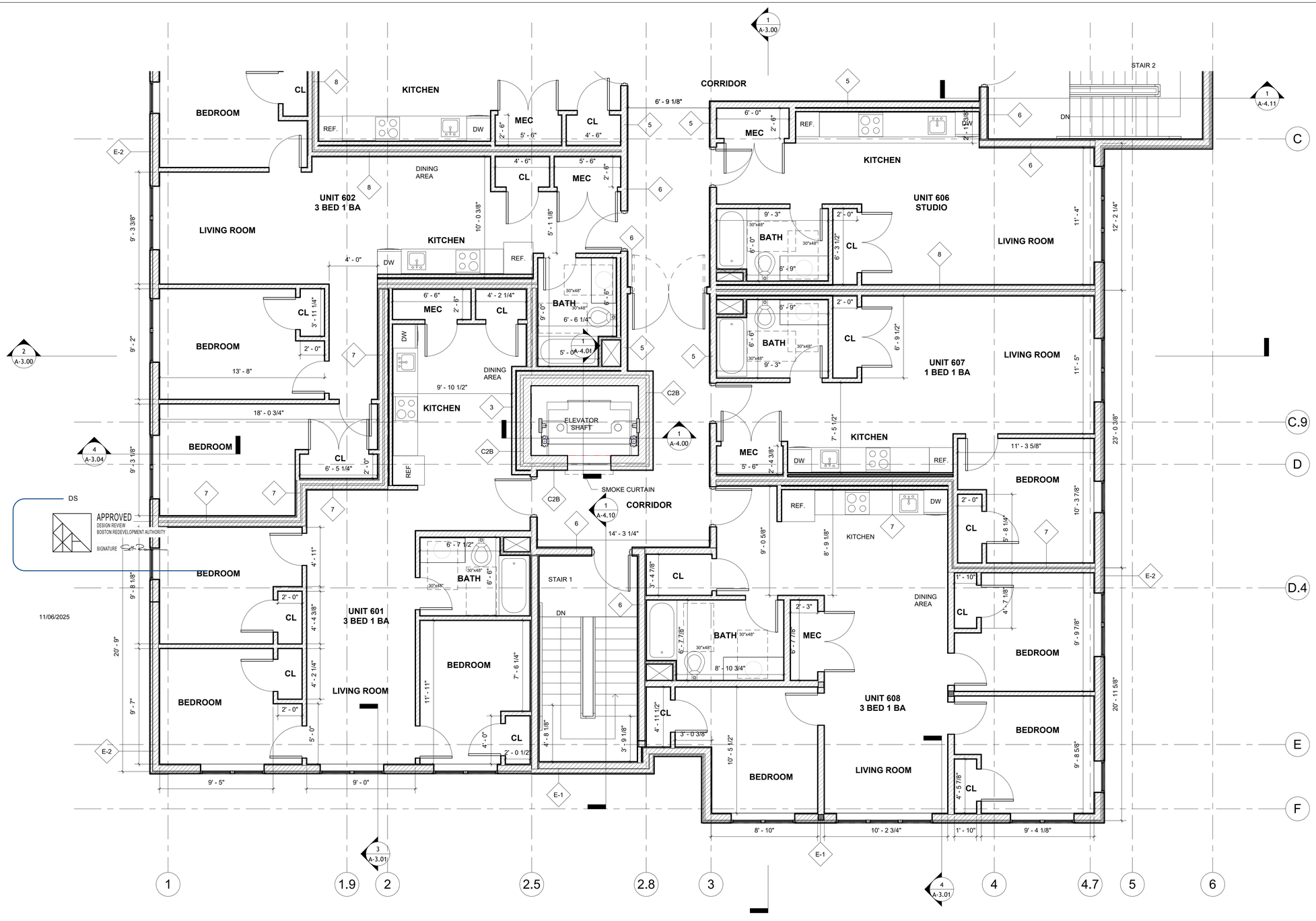
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ENLARGED SIXTH FLOOR PLAN - 01

Sheet No.

A-1.15A

Docusign Envelope ID: 7748BEA7-BE14-4BA4-BD8B-044887BC5E3A



ENLARGED SIXTH FLOOR - 02
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Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715 Fax

No.	Description	Date

Project No: 2025014
Scale: 1/4" = 1'-0"
Date: 11-04-2025
Drawn By: PM

Drawing Name

ENLARGED SIXTH FLOOR PLAN - 02

Sheet No.

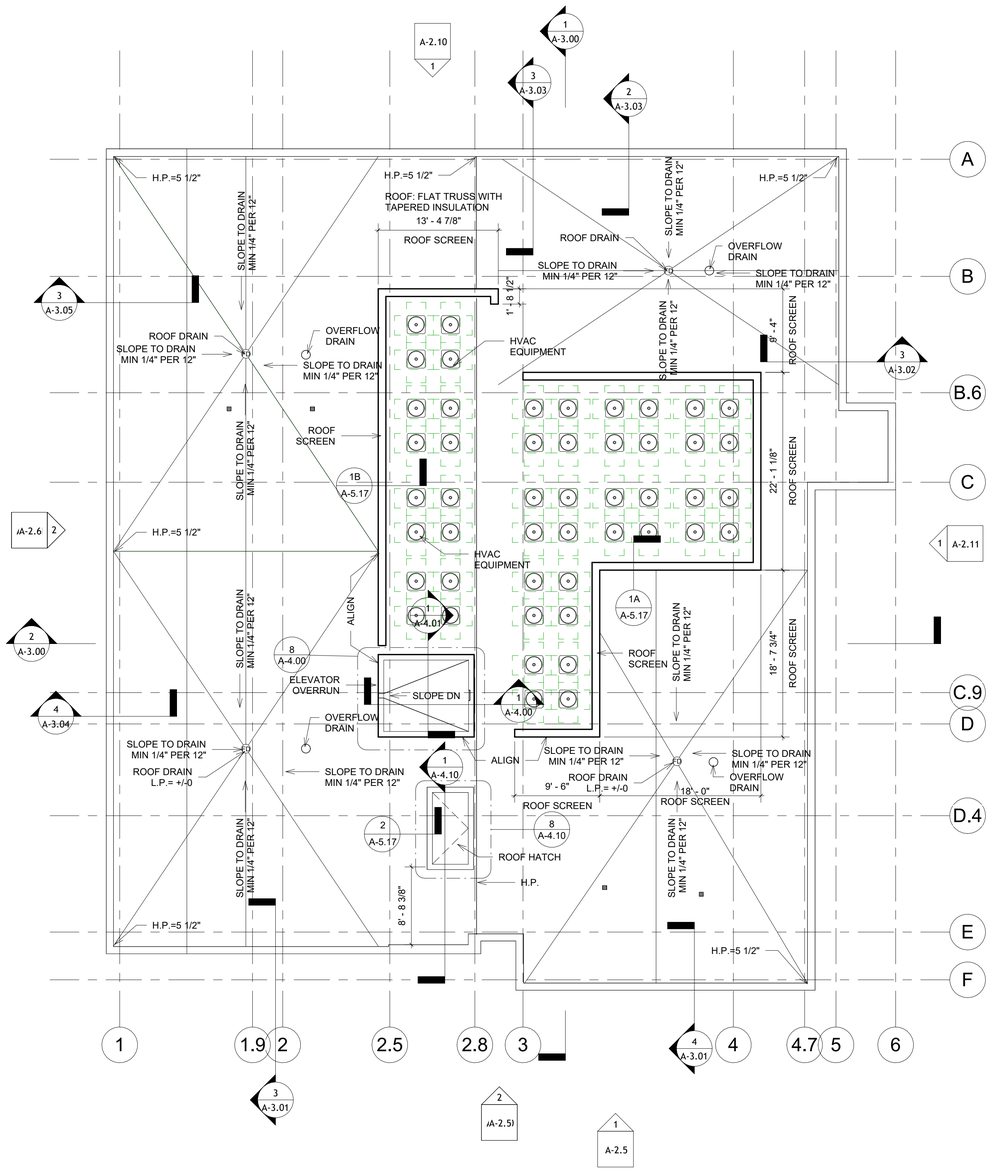
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DS

APPROVED
DESIGN REVIEW
BOSTON REDEVELOPMENT AUTHORITY
SIGNATURE

11/06/2025



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

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7715
fax

No.	Description	Date

Project No: 2025014
Scale: 1/8" = 1'-0"
Date: 11-04-2025
Drawn By: PM DF

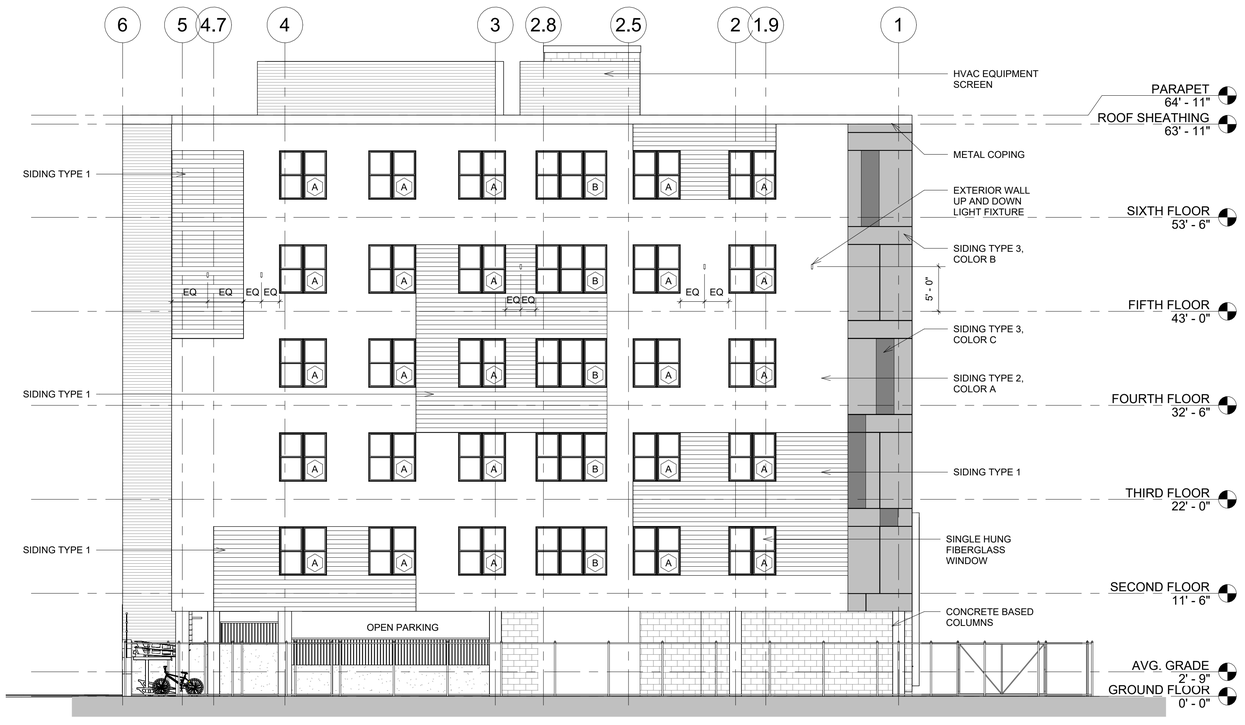
Drawing Name

PROPOSED ROOF PLAN

Sheet No.

A-1.16

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PROPOSED NORTH ELEVATION
1/8" = 1'-0"

EXTERIOR WALL MATERIALS LEGEND

MASONRY VENEER	CONCRETE MASONRY UNITS PRODUCT: A. JANDRIS & SONS ARCHITECTURAL CMU SIZE: 4" x 8" x 16" NOMINAL REGULAR 3 CORE TEXTURE: GROUND FACE COLOR: 2503-2 MIX: MEDIUM WEIGHT	
SIDING TYPE 1	FIBER CEMENT CLAPBOARD SIDING PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING THICKNESS: 5/16" SIZE: 5 1/4" WITH 4" EXPOSURE TO THE WEATHER TEXTURE: SMOOTH FACTORY FINISH: PEARL GRAY	
SIDING TYPE 2	FIBER CEMENT CLAPBOARD SIDING PRODUCT: JAMES HARDIE HARDIEPLANK LAP SIDING THICKNESS: 5/16" SIZE: 9 1/4" WITH 8" EXPOSURE TO THE WEATHER TEXTURE: SMOOTH FACTORY PRIMED; FIELD PAINTED	BENJAMIN MOORE COLOR A = AF-695 ETERNITY COLOR C = AF-705 CINDER
SIDING TYPE 3	FIBER CEMENT PANEL SYSTEM PRODUCT: JAMES HARDIE REVEAL PANEL SYSTEM THICKNESS: 7/16" SIZE: 4' x 8' NOMINAL WITH 1/2" JOINT TEXTURE: SMOOTH FULL RANGE OF FIBER CEMENT PANEL TRIM FACTORY PRIMED; FIELD PAINTED	BENJAMIN MOORE COLOR A = AF-695 ETERNITY COLOR B = AF-700 STORM COLOR C = AF-705 CINDER
SIDING TYPE 4	COMPOSITE METAL PANEL PRODUCT: ALUCOBOND COLOR DUSTY CHARCOAL PVDF 3 / GLOSS 30	
SIDING TYPE 5	CEDAR SIDING NATURAL FINISH	

DS

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EXTERIOR ELEVATIONS NOTES:

1. PROVIDE (1) 8FT X 12FT TALL FULL SCALE MOCK-UP PANEL FOR OWNER AND ARCHITECT'S REVIEW AND APPROVAL.

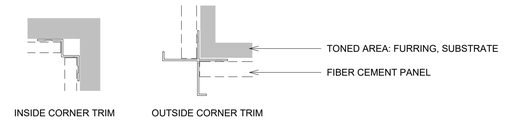
2. ALL GRILLE, LOUVERS, VENTS MOUNTED ON THE FACADE SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR.

3. THERE SHOULD NOT BE ANY VENTS INSTALLED ON FACADE FACING THORN STREET.

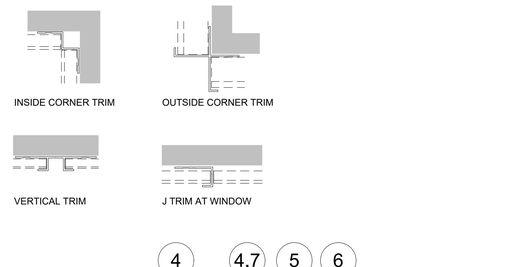


PROPOSED SOUTH ELEVATION
1/8" = 1'-0"

METAL TRIM FOR FIBER CEMENT PANEL SYSTEM



METAL TRIM FOR FIBER CEMENT CLAPBOARD



Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
tel 617-786-7700 fax 617-786-7715

No.	Description	Date

Project No: 2025014
Scale: As indicated
Date: 11-04-2025
Drawn By: PM DF

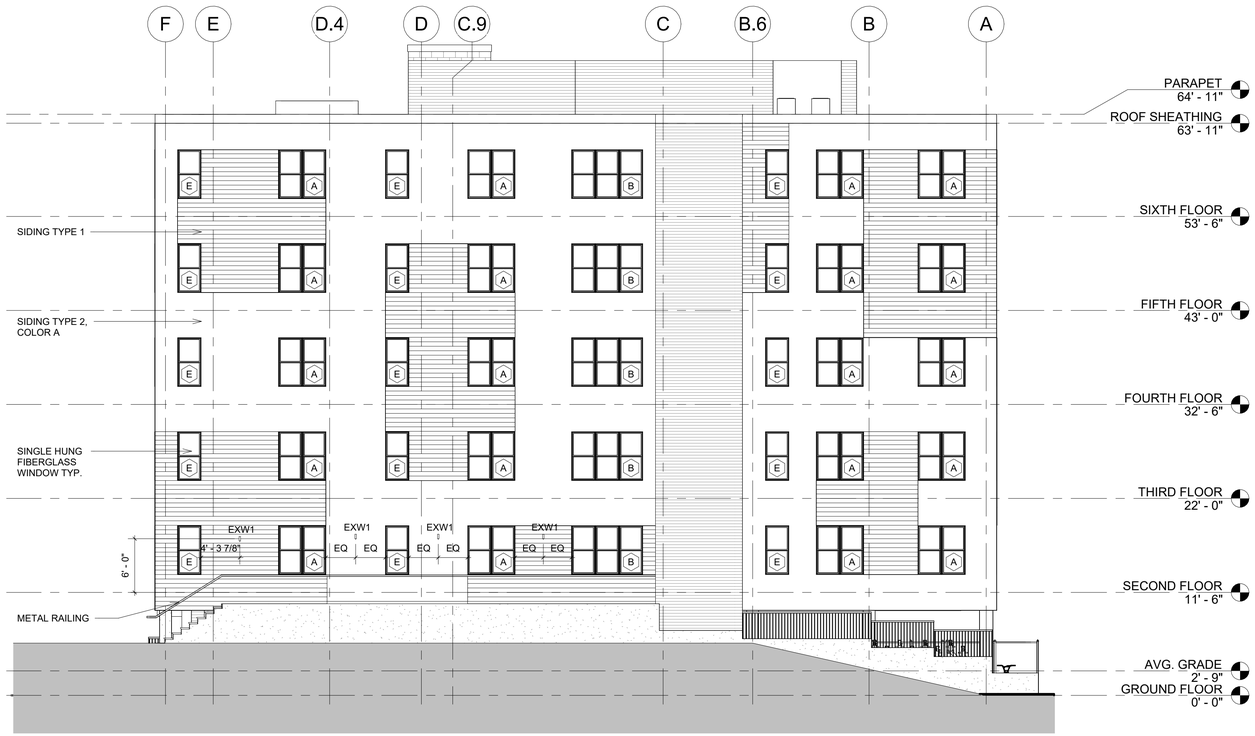
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PROPOSED NORTH & SOUTH ELEVATIONS

Sheet No.

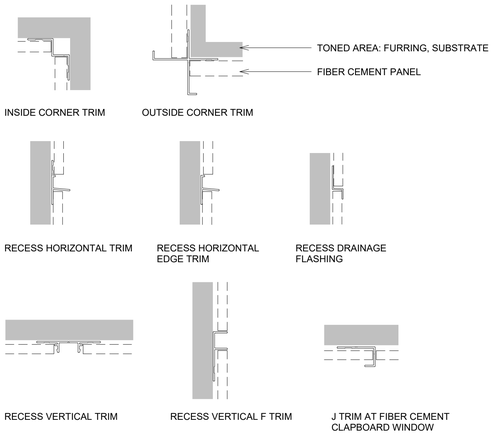
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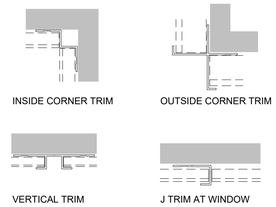


PROPOSED EAST ELEVATION
1/8" = 1'-0"

METAL TRIM FOR FIBER CEMENT PANEL SYSTEM



METAL TRIM FOR FIBER CEMENT CLAPBOARD



EXTERIOR WALL MATERIALS LEGEND

MASONRY VENEER	CONCRETE MASONRY UNITS PRODUCT: A. JANDRIS & SONS ARCHITECTURAL CMU SIZE: 4" x 8" x 16" NOMINAL REGULAR 3 CORE TEXTURE: GROUND FACE COLOR: 2503-2 MIX: MEDIUM WEIGHT	
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SIDING TYPE 4	COMPOSITE METAL PANEL PRODUCT: ALUCOBOND COLOR DUSTY CHARCOAL PVDF 3 / GLOSS 30	
SIDING TYPE 5	CEDAR SIDING NATURAL FINISH	

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BOSTON REDEVELOPMENT AUTHORITY
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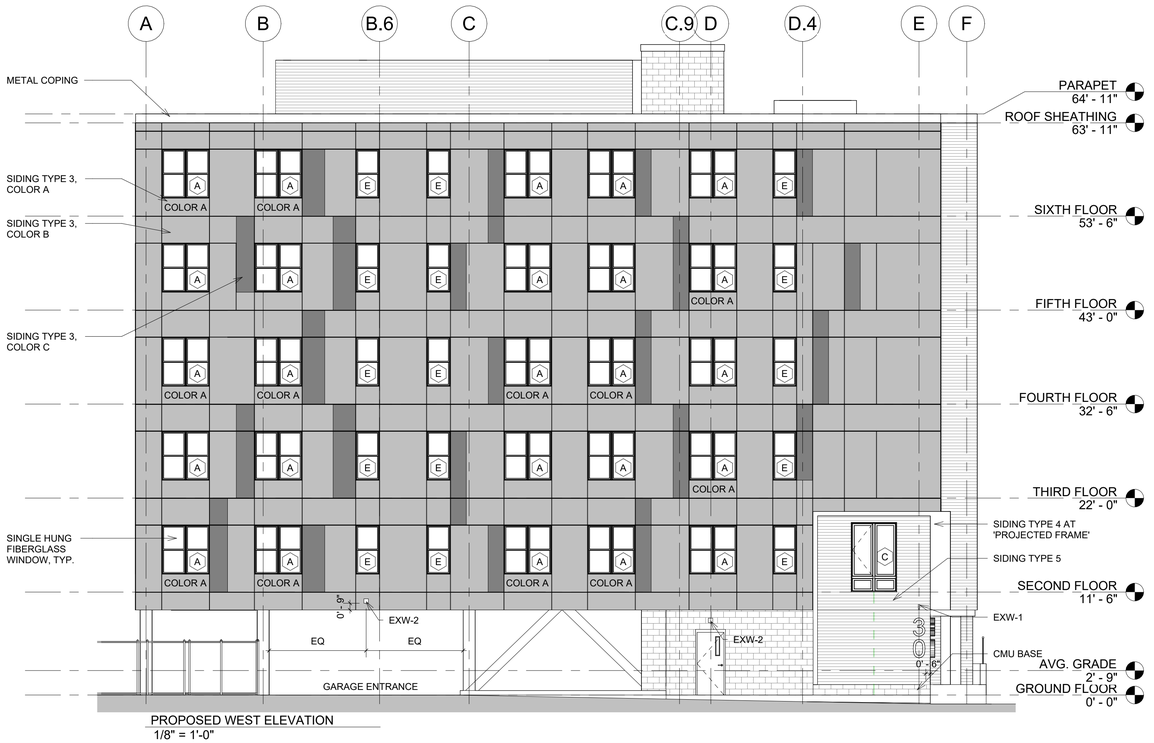
11/06/2025

EXTERIOR ELEVATIONS NOTES:

1. PROVIDE (1) 8FT X 12FT TALL FULL SCALE MOCK-UP PANEL FOR OWNER AND ARCHITECT'S REVIEW AND APPROVAL.

2. ALL GRILLE, LOUVERS, VENTS MOUNTED ON THE FACADE SHALL BE PAINTED TO MATCH ADJACENT WALL COLOR.

3. THERE SHOULD NOT BE ANY VENTS INSTALLED ON FACADE FACING THORN STREET.



PROPOSED WEST ELEVATION
1/8" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
Tel 617-786-7700 x 27
Fax 617-786-7715

No.	Description	Date

Project No: 2025014
Scale: As indicated
Date: 11-04-2025
Drawn By: PM DF

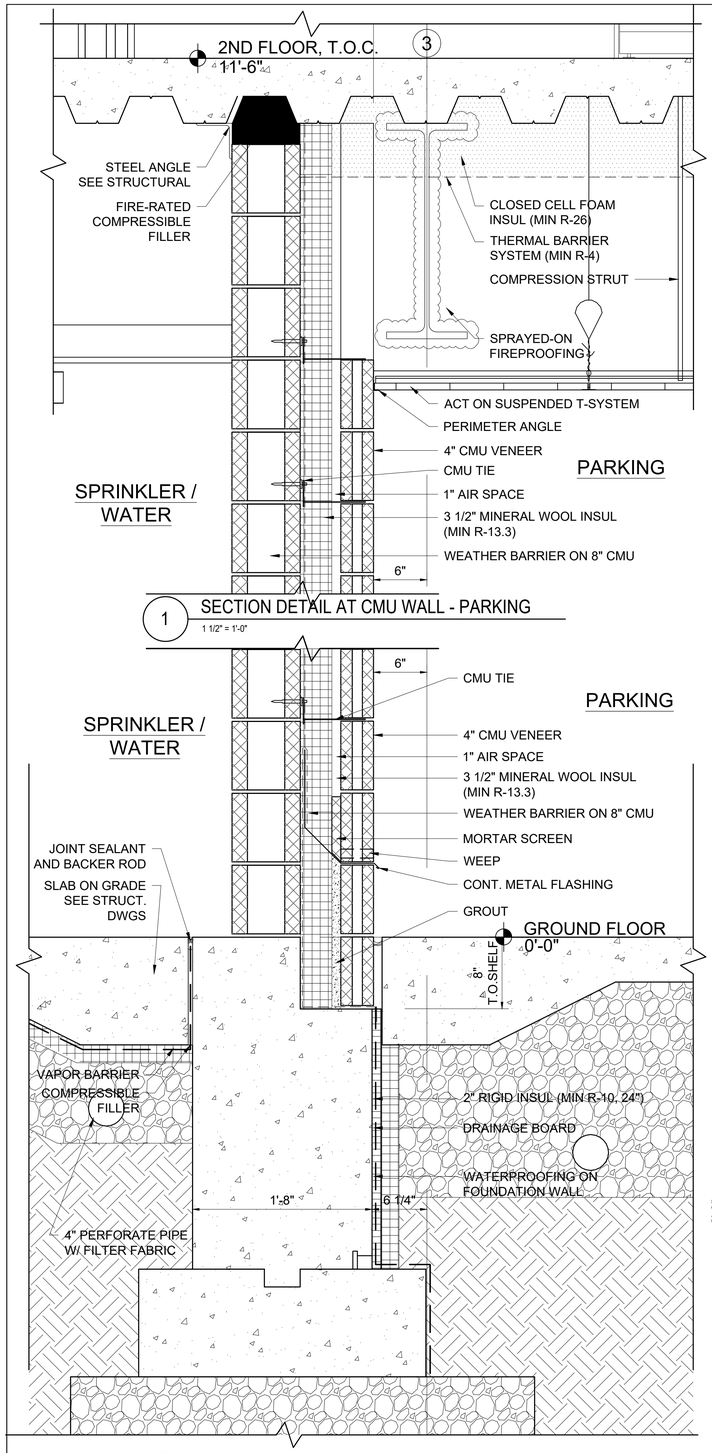
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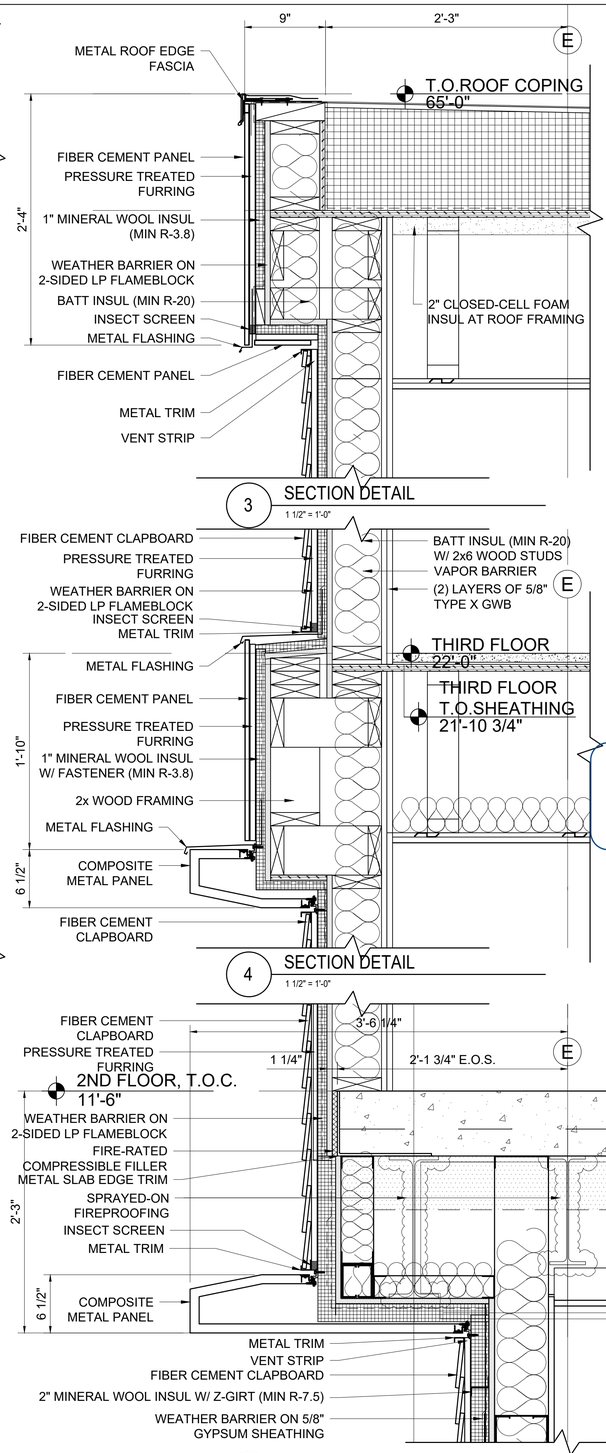
PROPOSED EAST & WEST ELEVATIONS

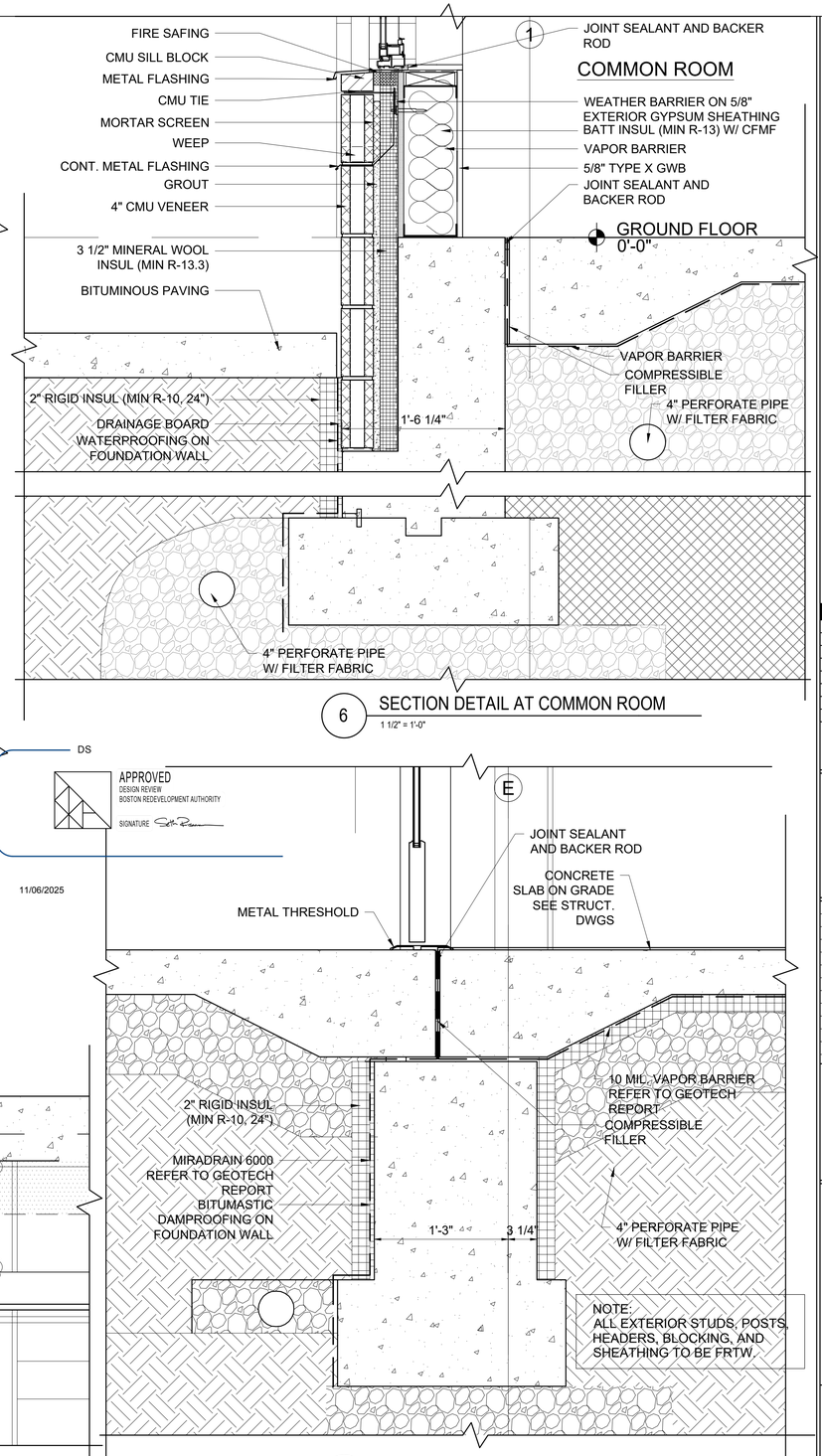
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Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 06-09-2025
Drawn By: DF

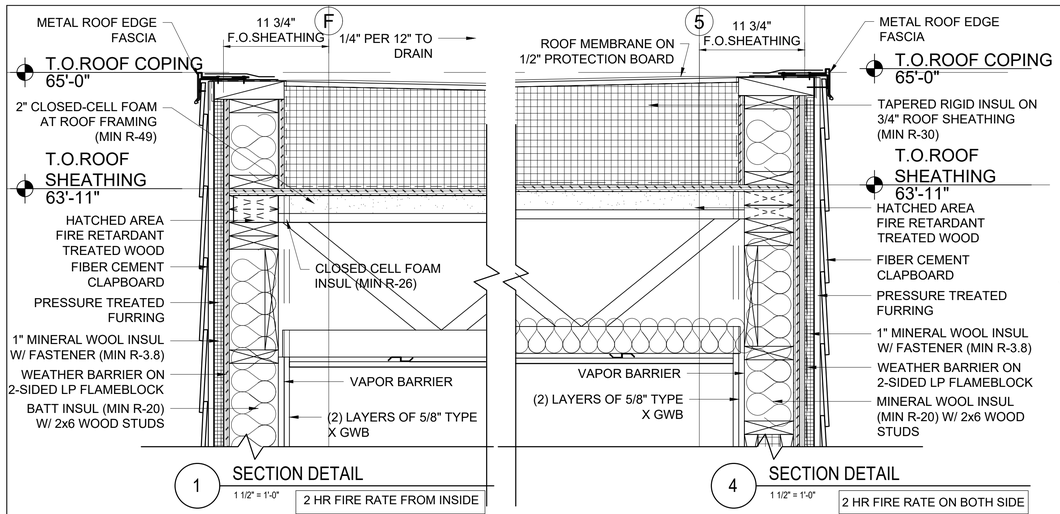
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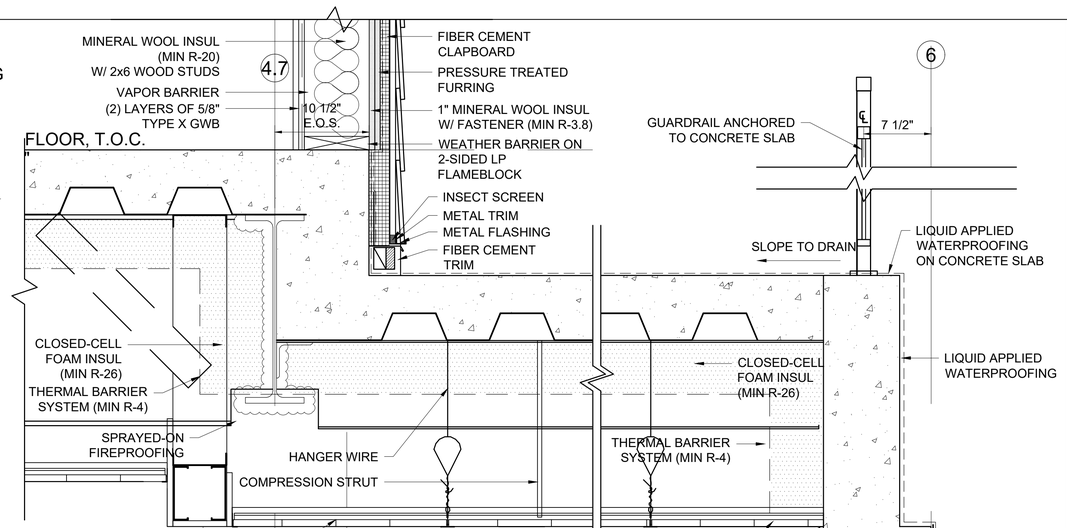
ENLARGED SECTION DETAILS

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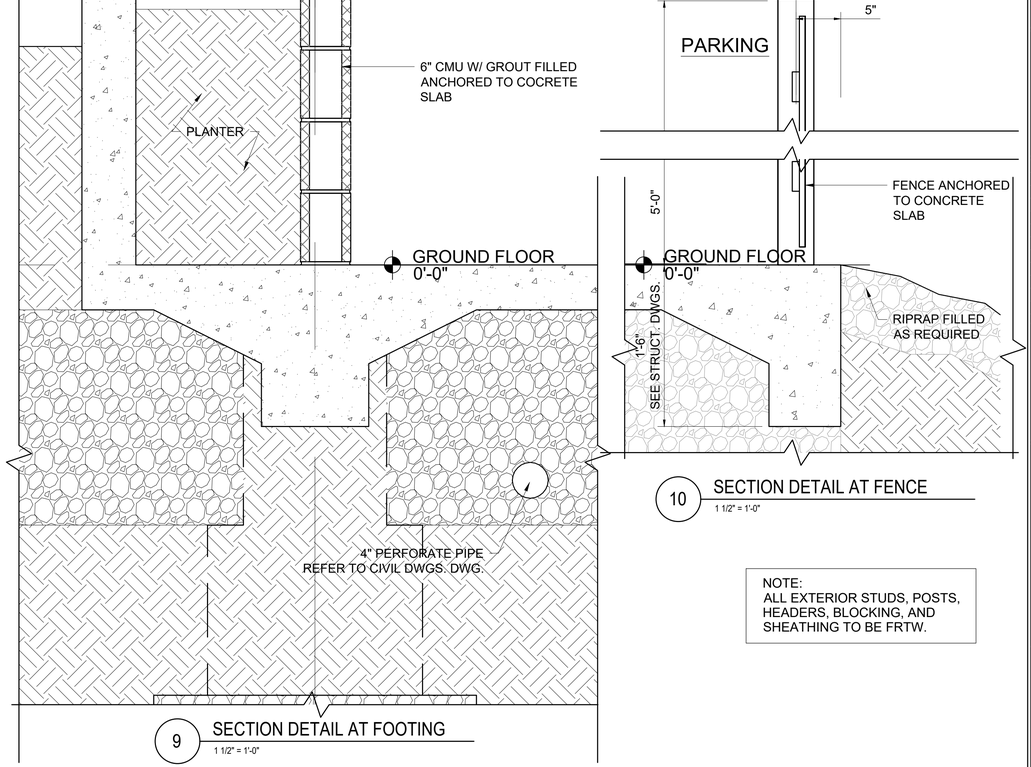
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DESIGN REVIEW
BOSTON REDEVELOPMENT AUTHORITY
SIGNATURE
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NOTE:
ALL EXTERIOR STUDS, POSTS, HEADERS, BLOCKING, AND SHEATHING TO BE FRTW.

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

No.	Description	Date

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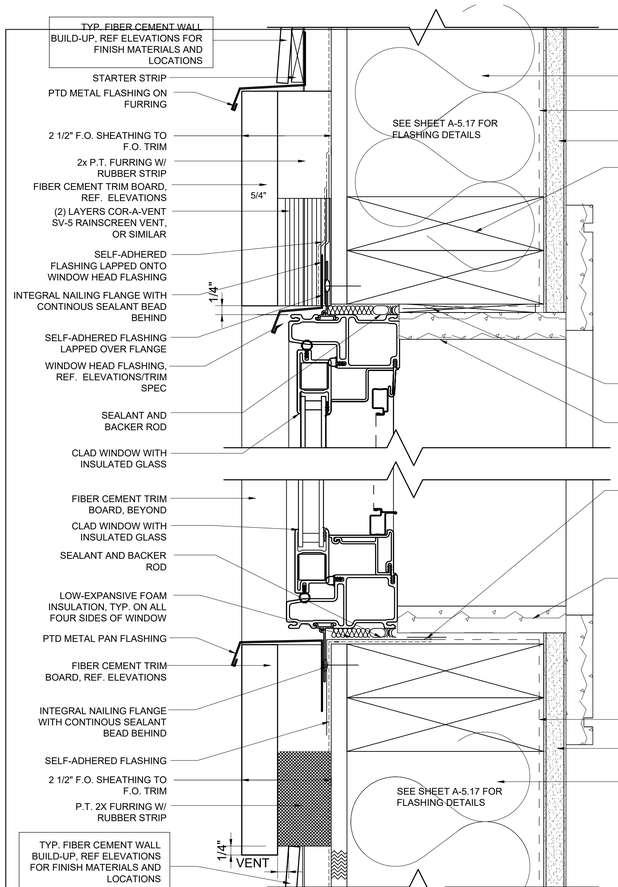
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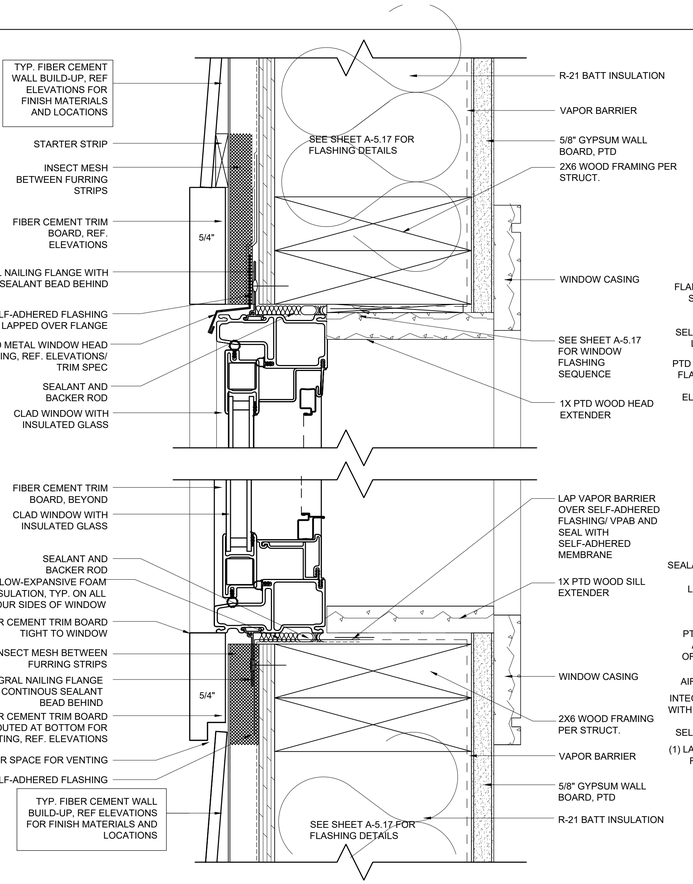
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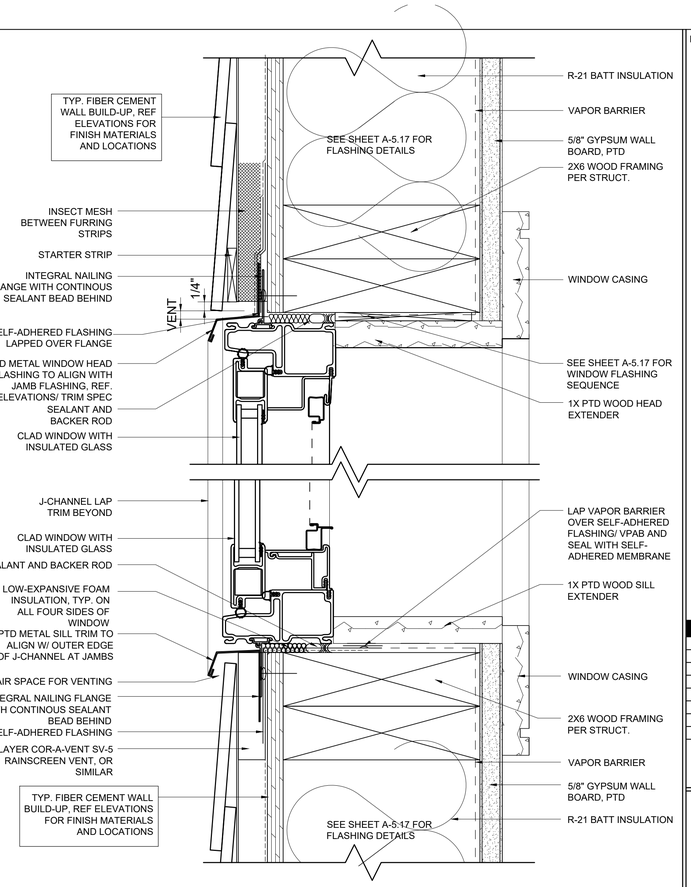
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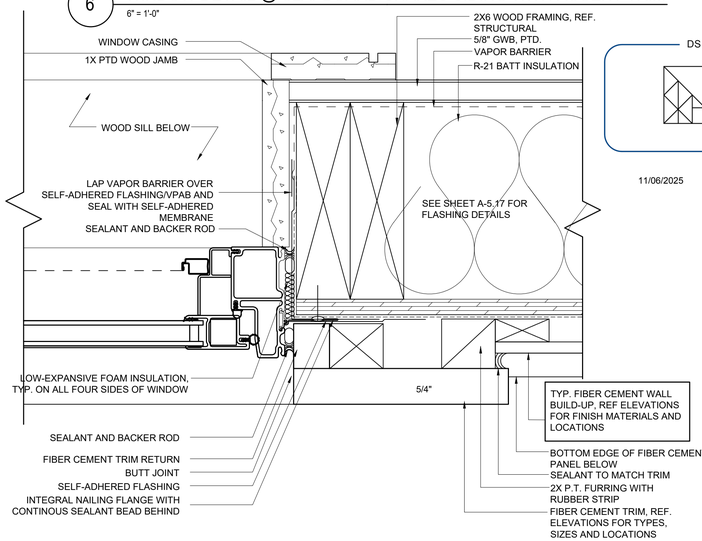






6 WINDOW DETAIL @ CLAPBOARD/SHAKES SIDING WITH ACCENT TRIM

6" = 1'-0"

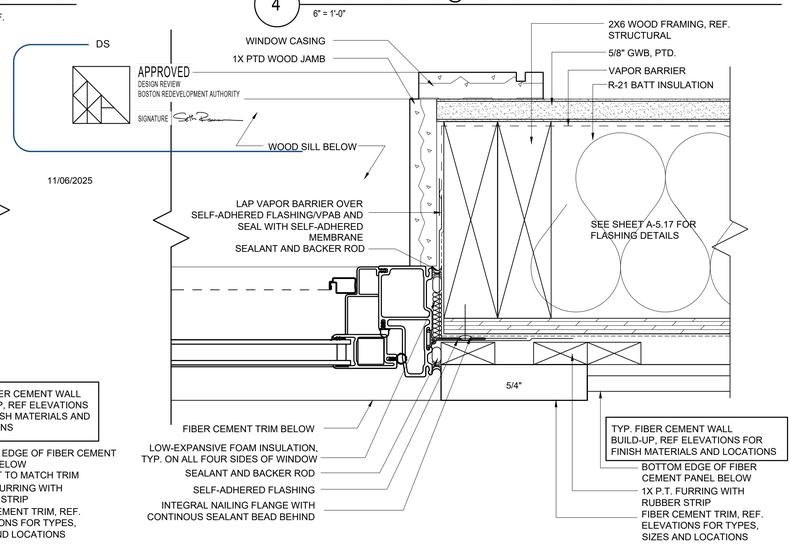


5 WINDOW JAMB DETAIL @ CLAPBOARD/SHAKES SIDING WITH ACCENT TRIM

6" = 1'-0"

4 WINDOW DETAIL @ CLAPBOARD/SHAKES SIDING WITH TRIM

6" = 1'-0"

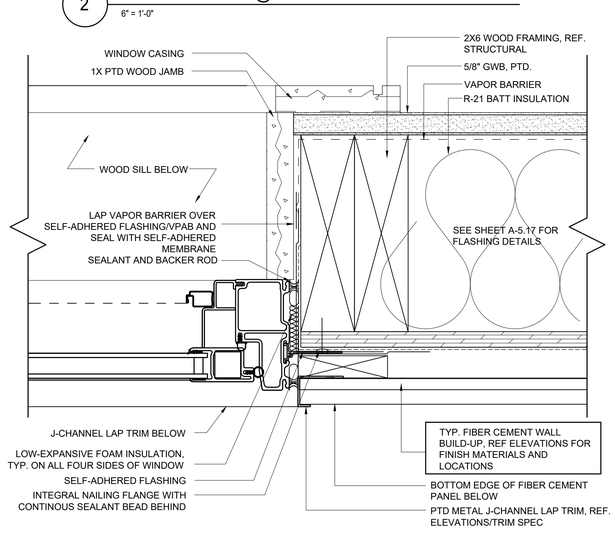


3 WINDOW JAMB DETAIL @ CLAPBOARD/SHAKES SIDING WITH TRIM

6" = 1'-0"

2 WINDOW DETAIL @ CLAPBOARD/SHAKES SIDING

6" = 1'-0"



1 WINDOW JAMB DETAIL @ CLAPBOARD/SHAKES SIDING

6" = 1'-0"

Location

PROPOSED MULTI-FAMILY BUILDING
30 THORN STREET
HYDE PARK, MA 02136

Choo & Company, Inc.
One Billings Road Quincy, MA 02171
617-786-7727 fax 617-786-7715

No.	Description	Date

Project No: 2025014
Scale: AS NOTED
Date: 07-01-2025
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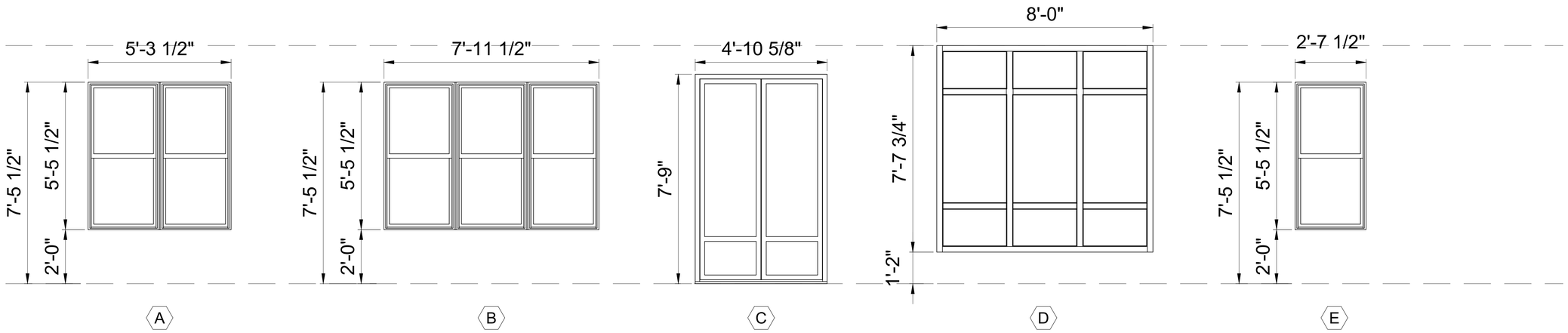
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WINDOW DETAILS

Sheet No.

A-5.20

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WINDOW SCHEDULE

G.C IS RESPONSIBLE TO CONFIRM WINDOW SIZES & QUANTITY ON PLANS & ELEVATIONS

NO.	MANUFACTURER	MODEL	SIZE	QUANTITY	REMARKS
A	MARWIN WINDOWS	ESSENTIAL SERIES	5'-3 1/2" X 5'-5 1/2"	92	SINGLE HUNG WINDOWS
B	MARWIN WINDOWS	ESSENTIAL SERIES	7'-11 1/2" X 5'-5 1/2"	15	SINGLE HUNG WINDOWS
C	MARWIN WINDOWS	ULTIMATE SERIES	4'-10 5/8" X 7'-9"	4	CASEMENT WINDOWS WITH FIXED PANELS BELOW (TMPD)
D	MARWIN WINDOWS	COASTLINE SERIES	8'-0" X 7'-7 3/4"	2	D* STOREFRONT FROSTED PANELS
E	MARWIN WINDOWS	ESSENTIAL SERIES	2'-7 1/2" X 5'-5 1/2"	9	SINGLE HUNG WINDOWS

WINDOW NOTES:

1. ALL WINDOWS ARE BASED ON MARVIN WINDOWS
2. GLAZING TO BE LOW-E TYPE W/ ARGON GAS
3. ALL WINDOWS TO INCLUDE HALF INSECT SCREENING PER MANUFACTURER
4. DIMENSIONS SHOWN ARE UNIT SIZE. G.C. TO COORDINATE ROUGH OPENING DIMENSIONS WITH WINDOW MANUFACTURER'S.
5. PROVIDE WINDOW OPENING CONTROL DEVICE THAT COMPLY W/ ASTM F2090 ON ALL BEDROOMS AND LIVING AREA WINDOWS.
6. WINDOW MFR. SUBMIT DETAILED SHOP DRAWINGS FOR APPROVAL.
7. JAMB FLASHING: OVER WINDOW FLANGE AND PAN FLASHING AND EXTEND ABOVE THE HEAD FLANGE
8. BITUM. SELF-ADHERING FLASHING AT ALL WINDOW HEADS FLASHING (TYP.)
9. BACKER ROD & SEALANT AROUND ALL WINDOW EDGES, TYP.
10. PEEL & STICK FLEXIBLE PAN FLASHING, WRAP INTO SILL & JAMB. UPTURN 6" MIN. AT ALL EDGES.
11. FOLLOW WINDOWS INSTALLATION MANUFACTURING SPECS.
12. ALL WINDOWS TO BE SDL W/ SPACER BAR & EXTERIOR MOUNTED MUNTINS, TYP.
13. PROVIDE TEMPERED GLAZING AT ALL SHOWERS, STAIRS, WITHIN 24" OF DOORS, BOTTOM EDGE OF GLAZING IS LESS THAN 18" ABOVE FLOOR, AND BOTTOM STAIR LANDING GLAZING IS LESS THAN 36" ABOVE LANDING AN 60" HORIZONTAL ARE LESS THAN 180 DEGREES.

DS

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617-786-7727 fax 617-786-7715

No.	Description	Date

Project No: 2025014
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Drawn By: PM DF

Drawing Name

WINDOW SCHEDULE

Sheet No.

A-6.03